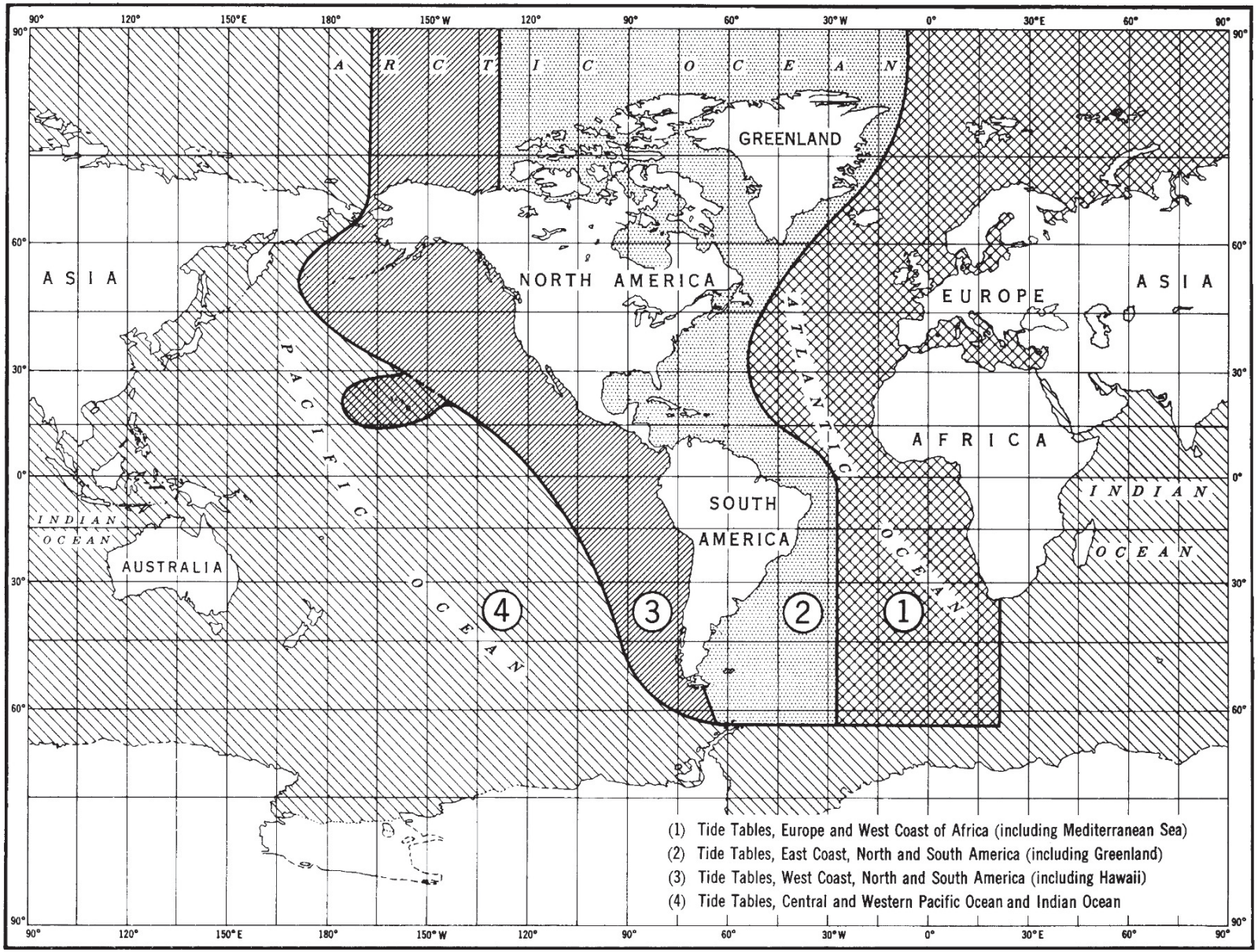
Tide Tables 2015 – West Coast of North and South America including the Hawaiian Islands

Tide Tables 2015 HIGH AND LOW WATER PREDICTIONS

West Coast of North and South America

Including the Hawaiian Islands

INDEX OF TIDE TABLE COVERAGE



Tide Tables 2015 HIGH AND LOW WATER PREDICTIONS

West Coast of North and South America

Including the Hawaiian Islands

Issued 2014

This edition of the Tide Tables and Tidal Current Tables is dedicated in memory of
William "Bill" Michael Stoney
(1949-2014)

Bill Stoney's career as a physical oceanographer spanned more than 30 years with NOAA studying tides and water levels, becoming a recognized expert in tidal datums and their computations. His career culminating as the Chief of CO-OPS Products Services Division. Throughout his career, Mr. Stoney continually strove to improve the techniques, procedures and computer software used in tidal analysis, and the creation of new and improved products and services from tidal data. Mr. Stoney's knowledge and dedication contributed substantially to improvements in the tide and tidal current products, services, information and data available through NOAA's Center for Operational Oceanographic Products and Services (CO-OPS).

"Knowledge of the oceans is more than a matter of curiosity.
Our very survival may hinge upon it"
John F. Kennedy

SOURCES OF ADDITIONAL INFORMATION

THE NATIONAL OCEAN SERVICE IS NO LONGER PRINTING AND DISTRIBUTING THE TIDE AND TIDAL CURRENT TABLES

Tide and Tidal current data continue to be updated, generated and published by the NOAA/ National Ocean Service; however, the printing and distribution in book-form is now done by several private companies working from information provided by NOS.

NOS now offers two vehicles for obtaining predictions. First, the complete set of Tables as camera-ready page-images will be available on CD-ROM. The CD-ROM vehicle is primarily intended for use by federal or private printers who wish to print in book-form the full set of Tables for distribution to resellers and the general public. Second, for domestic tide stations, predictions are available on the NOS, Center for Operational Oceanographic Products and Services (CO-OPS), website, (http://tidesandcurrents.noaa.gov/).

In addition to predictions, the website provides updated information on the status of the Tables as they are finalized each year. Notices concerning the most recent Table updates and publication cut-off dates are included.

For the names of companies printing and distributing the Tables, please call or write to:

National Ocean Service
Oceanographic Division, N/OPS3
1305 East-West Highway
Silver Spring, MD 20910
(301) 713-2815, fax (301) 713-4500

A list of authorized sales agents is published in the Nautical Chart Catalogs or may be obtained on request from the National Ocean Service.

TECHNICAL ASSISTANCE:

Technical questions relating to ***tide and current predictions,*** as well as requests for ***special predictions***, should be addressed to:

National Ocean Service
Oceanographic Division, N/OPS3
1305 East-West Highway
Silver Spring, MD 20910
(301) 713-2815

Technical questions relating to ***actual tide observations, tidal datums, and other information necessary*** for ***engineering projects*** should be addressed to:

National Ocean Service
Oceanographic Division, N/OPS3
1305 East-West Highway
Silver Spring, MD 20910
(301) 713-2877

SOURCES OF ADDITIONAL INFORMATION

Technical questions relating to *other publications and nautical charts* should be addressed to:

National Ocean Service
Navigation Services Division
1315 East-West Highway
Silver Spring, MD 20910
(888) 990-NOAA (6622)

WEBSITES

Center for Operational Oceanographic Products and Services
(PORTS® * Predictions * Observations * Bench Marks * Tides Online * Great Lakes Online)
http://tidesandcurrents.noaa.gov

Coastal Services Center - http://www.csc.noaa.gov

Marine Chart Division - http://www.nauticalcharts.noaa.gov

Ocean Predictions Center - http://www.opc.ncep.noaa.gov

National Centers for Environmental Predictions - http://www.ncep.noaa.gov

National Climatic Data Center - http://www.ncdc.noaa.gov

National Data Buoy Center - http://www.ndbc.noaa.gov

National Geodetic Survey - http://www.ngs.noaa.gov

National Geophysical Data Center - http://www.ngdc.noaa.gov

National Ocean Service - http://www.oceanservice.noaa.gov

National Oceanic and Atmospheric Administration - http://www.noaa.gov

National Oceanographic Data Center - http://www.nodc.noaa.gov

National Weather Service - http://www.weather.gov

U.S. Coast Guard - http://www.uscg.mil

U.S. Geological Survey - http://www.usgs.gov

U.S. Naval Observatory - http://www.usno.navy.mil

U.S. Naval Oceanographic Office - https://oceanography.navy.mil

CORRECTIONS:

Corrections to this publication, after the date of printing, may appear in the Notice to Mariners. They may also appear in the Local Notice to Mariners, published weekly, by the various United States Coast Guard Districts.

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IMPORTANT NOTICES

For the most part, tide predictions for U.S. reference stations are based upon analyses of tide observations for periods of at least one year. Since the extremes of meteorological conditions have been excluded from the analyses and predictions, the predicted tidal heights should be considered as those expected under average weather conditions. During times when weather conditions differ from what is considered average for the area, the mariner must take note of the corresponding differences between predicted levels and those actually observed. Generally, prolonged onshore winds or a low barometric pressure can produce higher levels than predicted, while the opposite can result in lower levels than those predicted.

Exclusive of weather conditions, the astronomical tide is subject to range variations which should be noted. Decreased ranges may be expected near the times when the Moon is in apogee (apogean tides) or in quadrature (neap tides), and increased ranges may be expected when the Moon is in perigee (perigean tides) or in a new or full position (spring tides). A larger diurnal range may also result when the Moon is in its maximum declination (tropic tides). The actual range will depend upon the extent to which combinations of these positions reinforce or detract one from the other. The effect of these astronomical lineups is included in the predictions and may be apparent upon inspection.

The mariner may be kept aware of the times of these astronomical events by referring to the astronomical data listed in this book. He should realize, however, that there is generally a time lag from a few hours to several days from the time of the astronomical event to the time of the resultant tide. During times of storm surges or when extreme weather conditions are imminent, the mariner should closely follow local weather forecasts as they relate to the effects upon the tide levels.

DAYLIGHT-SAVING TIME IS NOT USED IN THIS PUBLICATION. All daily tide predictions and predictions compiled by the use of Table 2 data are based on the standard time meridian indicated for each location. Predicted times may be converted to daylight-saving times, where necessary, by adding 1 hour to these data. In converting times from the Astronomical Data on the inside back cover, it should be remembered that daylight saving time is based on a meridian 15° east of the normal standard meridian for a particular place.

NOS, in partnership with other agencies and institutions, has established a series of Physical Oceanographic Real Time Systems (PORTS®) in selected areas. These PORTS® sites provide constantly updated information on tide and tidal current conditions, water temperature, and weather conditions. This information is updated every six minutes. PORTS® sites are currently in operation at several major harbors with future sites to be added. The information is accessible through a computer data connection or by a voice response system at the following numbers:

PORTS® SITES	VOICE ACCESS	INTERNET ACCESS
CHARLESTON HARBOR	855-216-2137	www.tidesandcurrents.noaa.gov
CHERRY POINT	888-817-7794	“
CHESAPEAKE BAY	866-CH-PORTS (866-247-6787)	“
DELAWARE RIVER & BAY	866-30-PORTS (866-307-6787)	“
HOUSTON/GALVESTON	866-HG-PORTS (866-447-6787)	“
HUMBOLDT BAY	855-876-5015	“
JACKSONVILLE	855-901-1549	“
LAKE CHARLES	888-817-7692	“
LOS ANGELES/LONG BEACH		“
LOWER COLUMBIA RIVER	888-53-PORTS (888-537-6787)	“
LOWER MISSISSIPPI RIVER	888-817-7767	“
MOBILE BAY	877-84-PORTS (877-847-6787)	“
NARRAGANSETT BAY	866-75-PORTS (866-757-6787)	“
NEW HAVEN	888-80-PORTS (888-807-6787)	“
NEW LONDON	855-626-0509	“
NEW YORK/NEW JERSEY	866-21-PORTS (866-217-6787)	“
PASCAGOULA	888-257-1857	“

IMPORTANT NOTICES

PORTS® SITES	VOICE ACCESS	INTERNET ACCESS
PORT OF ANCHORAGE	866-AK-PORTS (866-257-6787)	www.tidesandcurrents.noaa.gov
SABINE NECHES	888-257-1859	“
SAN FRANCISCO BAY	866-SB-PORTS (866-727-6787)	“
SOO LOCKS	301-713-9596	“
TACOMA	888-60-PORTS (888-607-6787)	“
TAMPA BAY	866-TB-PORTS (866-827-6787)	“

PUBLISHED CAUTIONARY NOTICES

Published in Local Notice to Mariners and United States Coast Pilot Notices

QUARTERLY UPDATES TO THE NOAA TIDE PREDICTIONS SERVICE

The NOAA, National Ocean Service’s, Center for Operational Oceanographic Products and Services (CO-OPS) provides electronic tide predictions for more than 3000 locations around the US, Caribbean, and Pacific Islands as part of the NOAA Tide Predictions service of the CO-OPS Tides & Currents website. http://tidesandcurrents.noaa.gov

The NOAA Tide Predictions service uses the most up-to-date information available in order to provide accurate tide predictions. Updates to the predictions provided by the NOAA Tide Predictions service, based on newly obtained or analyzed data, are released quarterly.

The third quarterly update for 2013 to NOAA Tide Predictions service was released the week of July 8th, 2013. Changes this quarter include more than 50 updated stations in Alaska. Five new harmonic stations have been added for the coast of Alaska resulting in subordinate stations being recalculated to use these new harmonic stations as reference for providing tide predictions. These updates will be reflected in the 2014 Tide Table publication for the West Coast of North and South America Including the Hawaiian Islands. A listing of the stations effected by this quarterly update, as well as previous quarterly updates, are available through the NOAA Tide Predictions service of the CO-OPS Tides & Currents website. http://tidesandcurrents.noaa.gov/tide_predictions.shtml

For additional information, please contact CO-OPS via e-mail at Tide.Predictions@noaa.gov or (301) 713-2815.

(Issued: July 10, 2013)

UPDATE TO THE 2012 EDITION OF THE NOS TIDE TABLES

The NOAA National Ocean Service’s Center for Operational Oceanographic Products and Services (CO-OPS) is updating the tide predictions published for the Bristol Bay region of Alaska within the 2012 Tide Tables – West Coast of North and South America. Two new reference stations have been added to this region:

Bethel, Kuskokwim River, AK
Platinum, AK

Secondary stations in this area have been updated to use these new reference stations.

(Issued: October 1, 2011)

THE NARROWS, PUGET SOUND, WASHINGTON

Tidal current speeds at The Narrows, Puget Sound, Washington have been reported by the U.S. Coast Guard and other reliable sources as being significantly higher than predicted. Until such time as new tidal current data can be collected to update predictions at this location, extreme caution should be used while navigating the area.

(Issued October 1, 2008)

IMPORTANT NOTICES

CHANGES TO 2004 AND FUTURE EDITIONS OF THE NOS TIDE TABLES

The National Ocean Service's, Center for Operational Oceanographic Products and Services (CO-OPS) is continuing to work on updating tidal data for the 1983-2001 Tidal Epoch. The updated information will begin to appear in the 2004 edition of the published Tide Tables and is expected to be completed for the 2005 Tide Tables. In conjunction with the 1983-2001 Tidal Epoch update, CO-OPS has started a comprehensive review of the secondary stations listed in the published Tide Tables. As a result of this review, there will be numerous changes to the stations listed in the "Table 2 - Tidal Differences and Other Constants" pages of the published Tide Tables and in the CO-OPS web products. These changes will include the addition of new stations, removal of obsolete stations, and updating information for other existing stations. These changes will begin to appear in the 2004 edition of the published Tide Tables and are expected to continue for several years.

Tables in which U.S. stations will be affected by the 1983-2001 Epoch and Table 2 station review include:

- Tide Tables - East Coast of North and South America, Including Greenland
- Tide Tables - West Coast of North and South America, Including the Hawaii Islands
- Tide Tables - Central and Western Pacific Ocean and Indian Ocean

(Issued October 1, 2003)

TIDAL CURRENT PREDICTIONS INSIDE U.S. ESTUARIES

At present there are several U.S. estuaries with operational Physical Oceanographic Real Time Systems (PORTS) installed. PORTS systems are presently being installed in several additional estuaries. Over the next ten years there are projected to be twenty or more additional systems installed. In the past, the tidal current reference station has always been located at the entrance to each estuary. All tidal current secondary stations both inside and outside (along the coast) have been referred to the reference station at the entrance to the estuary. This will no longer be the case in estuaries with an operational PORTS system.

Estuaries with an operational PORTS system will have at least two reference stations. One will be the historic station at the entrance to the estuary. All secondary stations along the coast will continue to be referred to this station. The second tidal current reference station will be the primary PORTS station within the estuary. All secondary locations within the estuary itself will be referred to this location. Depending on the circulation dynamics of the estuary, daily tidal current predictions may be provided for one or more additional stations within the estuary.

(Issued October 1, 1999)

CHIGNIK, ALASKA

The US Army Corps of Engineers (USACOE) is planning the construction of a Small Boat Harbor in Chignik, AK. The construction will include dredging and the construction of a breakwater. Official published Tide and Tidal Current predictions will be degraded once the project begins. Tidal Currents will be effected the most. From the beginning of the project until a resurvey of the area can be completed, Tide and Tidal Current predictions should be used with caution. Tidal Current predictions should be used only with extreme caution. Therefore, until such time as a resurvey of the area is conducted, the National Oceanic and Atmospheric Administration, National Ocean Service will be unable to provide the accurate Tide and Tidal Current predictions necessary for marine safety and navigation in this area.

(Issued May 30, 1997)

NEPTUNE BEACH, WASHINGTON

Pudget Sound Pilots report that observed tidal currents in the vicinity of Neptune Beach, WA deviate significantly from official published predictions. Reliable sources report that the observed velocities are close to double the predicted values and that the times are up to 1 hour earlier than predicted. Extreme caution should be exercised in this vicinity by all vessels especially tankers passing through the area approaching oil refineries. Funding for a resurvey of the area and/or the installation of a real-time

monitoring system is not presently available. Therefore, until such time as real-time system is installed or a resurvey of the area conducted, the National Oceanic and Atmospheric Administration, National Ocean Service will be unable to provide the accurate Tidal Current predictions necessary for marine safety and navigation in this area.

(Issued May 30, 1997)

GRAYS HARBOR, WASHINGTON

Tidal Currents in Grays Harbor have been significantly altered by dredging and construction activities. Tidal predictions for the Tidal Reference Station at Aberdeen have been updated to reflect these changes. Tidal Current predictions for this area should be considered questionable and potentially dangerous to rely upon. Funding for a real-time system to monitor the Tidal Currents or a resurvey of this area is not available at this time. Therefore, until such time as a real-time system is installed or a resurvey of the area conducted, the National Oceanic and Atmospheric Administration, National Ocean Service will be unable to provide accurate Tidal Current predictions necessary for marine safety and navigation in this area.

(Issued June 5, 1996)

SAN DIEGO, CALIFORNIA

The US Army Corps of Engineers (COE) is planning a dredging project for the US Navy in the area of the North Island Naval Base in San Diego Harbor. This project calls for both deepening and widening the channel to accommodate larger naval vessels. Such actions in the past in other areas have resulted in dramatic changes in the observed Tidal Currents of those areas. Once dredging operations commence, the Tidal Current predictions for this region should be considered questionable and potentially dangerous to rely upon. Tidal predictions will also be affected but to a lesser degree. Funding for a real-time system to monitor the Tidal Currents during the project and a resurvey of the area after COE operations are complete are presently not available. Therefore, once COE operations begin and until such time as a real-time system is installed or a resurvey of the area conducted, the National Oceanic and Atmospheric Administration, National Ocean Service will be unable to provide accurate Tidal Current predictions necessary for marine safety and navigation in this area.

(Issued June 5, 1996)

INTRODUCTION

Tide tables for the use of mariners have been published by the National Ocean Service (formerly the Coast and Geodetic Survey) since 1853. For a number of years these tables appeared as appendixes to the annual reports of the Superintendent of the Survey, and consisted of detailed instructions for enabling the mariner to make his own prediction of tides as the occasion arose.

The first tables to give predictions for each day were those for the year 1867. They gave the times and heights of high waters only and were published in two separate parts, one for the Atlantic coast and the other for the Pacific coast of the United States. Together they contained daily predictions for 19 stations and tidal differences for 124 stations. A few years later predictions for the low waters were also included, and for the year 1896 the tables were extended to include the entire maritime world, with full predictions for 70 ports and tidal differences for about 3,000 stations.

The tidal tables are now issued in four volumes, as follows: *Europe and West Coast of Africa (Including the Mediterranean Sea); East Coast of North and South America (Including Greenland); West Coast of North and South America (Including the Hawaiian Islands); Central and Western Pacific Ocean and Indian Ocean.* Together, they contain daily predictions for more than 250 reference ports and differences and other constants for about 6,500 stations.

This edition of the Tide Tables, *West Coast of North and South America*, contains full daily predictions for more than 60 reference ports and differences and other constants for more than 1,200 stations in North America, South America, and the Hawaiian Islands. It also contains a table for obtaining the approximate height of the tide at any time, a table of local mean time of sunrise and sunset for every 5th day of the year for different latitudes, a table for the reduction of local mean time to standard time, a table of moonrise and moonset for 6 places, a table of the Greenwich mean time of the Moon's phases, apogee, perigee, greatest north and south and zero declination, and the time of the solar equinoxes and solstices, and a glossary of terms.

Up to and including the tide tables for the year 1884, all the tide predictions were computed by means of auxiliary tables and curves constructed from the results of tide observations at the different ports. From 1885 to 1911, inclusively, the predictions were generally made by means of the Ferrel tide-predicting machine. From 1912 to 1965, inclusively, they were made by means of the Coast and Geodetic Survey tide-predicting machine No. 2. Since 1966, predictions have been made by electronic computer.

The information presented in Table 4 - *Local mean time of sunrise and sunset and in Table 6 - Moonrise and Moonset* is computed by the National Ocean Service using the Interactive Computer Ephemeris Program provided by the United States Naval Observatory.

In the preparation of these tables all available observations were used. In some cases, however, the observations were insufficient for obtaining final results. As further information becomes available it will be included in subsequent editions. All persons using these tables are invited to send information or suggestions for increasing their usefulness to the National Ocean Service, Oceanographic Division, 1305 East-West Highway, N/OPS3, Silver Spring, Maryland 20910, U.S.A.

In accordance with cooperative arrangements between the National Ocean Service and the authorities listed below, predictions for the following stations appear in this issue:

Canadian Hydrographic Service.— Victoria and Vancouver, B.C.

Servicio Hidrografico y Oceanografico de la Armada, Chile.—Antofagasta, Cabo de Hornos, Puerto Montt, Punta Arenas, and Valparaiso.

LIST OF REFERENCE STATIONS

Station Name	Page	Datum below mean sea-level	Updated	Data Series
Aberdeen, Washington	120	5.56	1994	one year beginning 6/1/1982
* Alitak, Alaska	196	6.14	2014	1 year (April 2007-Mar 2008)
Anchorage, Alaska	188	16.04	1970	363 days beginning 5/3/1968
Antofagasta, Chile	20	2.62		
Arena Cove, California	96	3.15	2003	4 years (1993-1996)
Astoria, Oregon	112	4.39	2005	5 years (1999-2003)
Balboa, Panama	52	8.43		
Bethel, Kuskokwim River, Alaska.	228	1.62	2012	4 months (June-Oct 2010)
Buenaventura, Columbia	48	6.48		
Cabo de Hornos, Chile	4	4.43		
Callao, Peru	28	1.69		
* Cape Krusenstern, Akaska	240	.23	2014	3 months (July-Sept 2011)
Charleston, Oregon	108	4.08	2003	5 years (1996-2000)
Cherry Point, Washington	136	5.26	1998	12 years (1981-1993)
Cordova, Alaska	168	6.70	2007	5 years (2000-2004)
Crescent City, California	104	3.75	2007	4 years (2001-2004)
* Elfin Cove, Port Althorp, Alaska	160	5.75	2014	6 months (Sep 2005-Feb 2006)
Guayaquil, Ecuador	36	6.35		
Guaymas, Mexico	68	1.52		
Hilo, Hawaii Island, Hawaii	268	1.19	2002	5 years (1994-1998)
Honolulu, Hawaii	256	0.85	2003	5 years (1996-2000)
Humboldt Bay, California	100	3.74	2007	5 years (2000-2004)
Johnston Island	272	1.07	2002	5 years (1994-1998)
Juneau, Alaska	152	8.53	2007	5 years (2000-2004)
Kahului, Maui Island, Hawaii	264	1.16	2002	5 years (1994-1998)
Ketchikan, Alaska	148	8.04	2007	5 years (2000-2004)
Kodiak, Alaska	192	4.48	1994	6 years (1985-1989,1991)
La Libertad, Ecuador	40	3.50		
La Union, El Salvador	60	5.10		
Los Angeles, California	76	2.84	2007	5 years (2000-2004)
Massacre Bay, Alaska	212	1.94	1985	369 days beginning 6/12/1943
Matarani, Peru	24	1.36		
Moku O Loe, Oahu Island, Hawaii	260	1.07	2002	4 years (1993-1996)
Monterey, California	84	2.88	2003	4 years (1993-1996)
Nawiliwili, Kauai Island, Hawaii	252	0.85	2002	4 years (1993-1996)
Neah Bay, Washington	124	4.30	2007	5 years (2000-2004)
Nikiski, Alaska	184	11.21	2007	5 years (2000-2004)
Nome, Alaska	236	0.84	2001	2 years (1993,1998)
Platinum, Alaska.	224	3.85	2012	2 months (June-July 2007)
Port Chicago, California	92	2.55	1998	4 years (1993-1996)
Port Moller, Bristol Bay, Alaska	220	5.84	2009	1 year (10/2006-9/2007)
Port San Luis, California	80	2.83	2003	5 years (1996-2000)
Port Townsend, Washington	128	4.69	2007	5 years (2000-2004)
Prudhoe Bay, Alaska	244	4.50	1998	4 years (1989-1995)
Puerto Montt, Chile	12	11.81		
Punta Arenas, Chile	8	4.00		
Puntarenas, Costa Rica	56	4.57		

LIST OF REFERENCE STATIONS Cont.

Station Name	Page	Datum below mean sea-level	Updated	Data Series
Salina Cruz, Mexico	64	1.93		
San Cristobal, Ecuador	44	3.06		
San Diego, California	72	2.94	2004	5 years (1997-2001)
San Francisco, California	88	3.13	1999	5 years (191-1995)
Sand Island, Midway Islands	248	0.65	2002	5 years (1994-1998)
Sand Point, Alaska	200	3.84	1999	4 years (1993-1996)
Seattle, Washington	132	6.63	2007	5 years (2000-2004)
Seldovia, Alaska	180	9.50	1999	365 days beginning 2/1/1996
* Seward, Alaska	176	5.56	2014	4 years (1992-1996)
Sitka, Alaska	156	5.25	2007	5 years (2000-2004)
Sweeper Cove, Alaska	208	2.22	1990	4 years (1982-1985)
Talara, Peru	32	2.59		
Toke Point, Washington	116	4.79	2005	5 years (1998-2002)
* Unalakleet, Alaska	232	1.78	2014	2 months (July-Aug 2011)
Unalaska, Alaska	204	2.19	2007	5 years (2000-2004)
Valdez, Alaska	172	6.43	2007	5 years (2000-2004)
Valparaiso, Chile	16	2.99		
Vancouver, British Columbia	144	10.0		
Victoria, Bristish Columbia	140	6.1		
* Village Cove, St. Paul Island, Alaska	216	1.96	2014	1 year (Jan-Dec 2007)
* Yakutat, Alaska	164	5.28	2014	5 years (1980-1987)

* New Reference Station.

Each datum figure above represents the difference in elevation between the local mean sea (or river) level and the reference level from which the predicted heights in table 1 were calculated.

Local mean sea level datum should not be confused with the National Geodetic Vertical Datum which is the datum of the geodetic level net of the United States. Relationships between geodetic and local tidal datums are published in connection with the tidal benchmark data of the National Ocean Service.

TABLE 1.— DAILY TIDE PREDICTIONS

EXPLANATION OF TABLE

This table contains the predicted times and heights of the high and low waters for each day of the year at a number of places which are designated as *reference stations*. By using tidal differences from Table 2, one can calculate the approximate times and heights of the tide at many other places which are called *subordinate stations*. Instructions on the use of the tidal differences are found in the explanation of Table 2.

High water is the maximum height reached by each rising tide, and low water is the minimum height reached by each falling tide. High and low waters can be selected from the predictions by the comparison of consecutive heights. Because of diurnal inequality at certain places, however, there may be a difference of only a few tenths of a foot between one high water and low water of a day, but a marked difference in height between the other high water and low water. Therefore, in using the Tide Tables it is essential, to note carefully the heights as well as the times of the tides.

Time.— The kind of time used for the predictions at each reference station is indicated by the time meridian at the bottom of each page. **Daylight-saving time is not used in this publication**. If daylight-saving time is required, add one (1) hour to the predicted time.

Datum.— The datum from which the predicted heights are recorded is the same as that used for the nautical charts of the locality. The datum for the Pacific coast of the United States (including Hawaii and Alaska) is the mean of the lower of the two low waters of each day. For foreign coasts a datum approximating to mean low water springs, Indian spring low water, or the lowest possible low water is generally used. The depression of the datum below mean sea level (MSL) for each of the reference stations of this volume is given on the preceding page.

Depth of water.— The nautical charts published by the United States and other maritime nations show the depth of the water as referred to a low water datum corresponding to that from which the predicted tidal heights are recorded. To find the actual depth of water at any time, the height of the tide should be added to the charted depth. If the height of the tide is negative—that is, if there is a minus sign (—) before the tabular height—the height should be subtracted from the charted depth. For any time between high and low water, the height of the tide may be estimated from the heights of the preceding and the following tides, or Table 3 may be used. The reference stations in Table 1 contain the heights in centimeters as well as in feet.

Variation in sea level.— Changes in winds and barometric conditions cause variations in sea level from day to day. In general, with onshore winds or a low barometer the heights of both the high and low waters will be higher than predicted, while with offshore winds or a high barometer they will be lower. There are also seasonal variations in sea level, but these variations have been included in the predictions for each station. At ocean stations the seasonal variation in sea level is usually less than half a foot.

At stations on tidal rivers the average seasonal variation in river level due to freshets and droughts may be considerably more than a foot. The predictions for these stations include an allowance for this seasonal variation representing average freshet and drought conditions. Unusual freshets or droughts, however, will cause the tides to be higher or lower, respectively, than predicted.

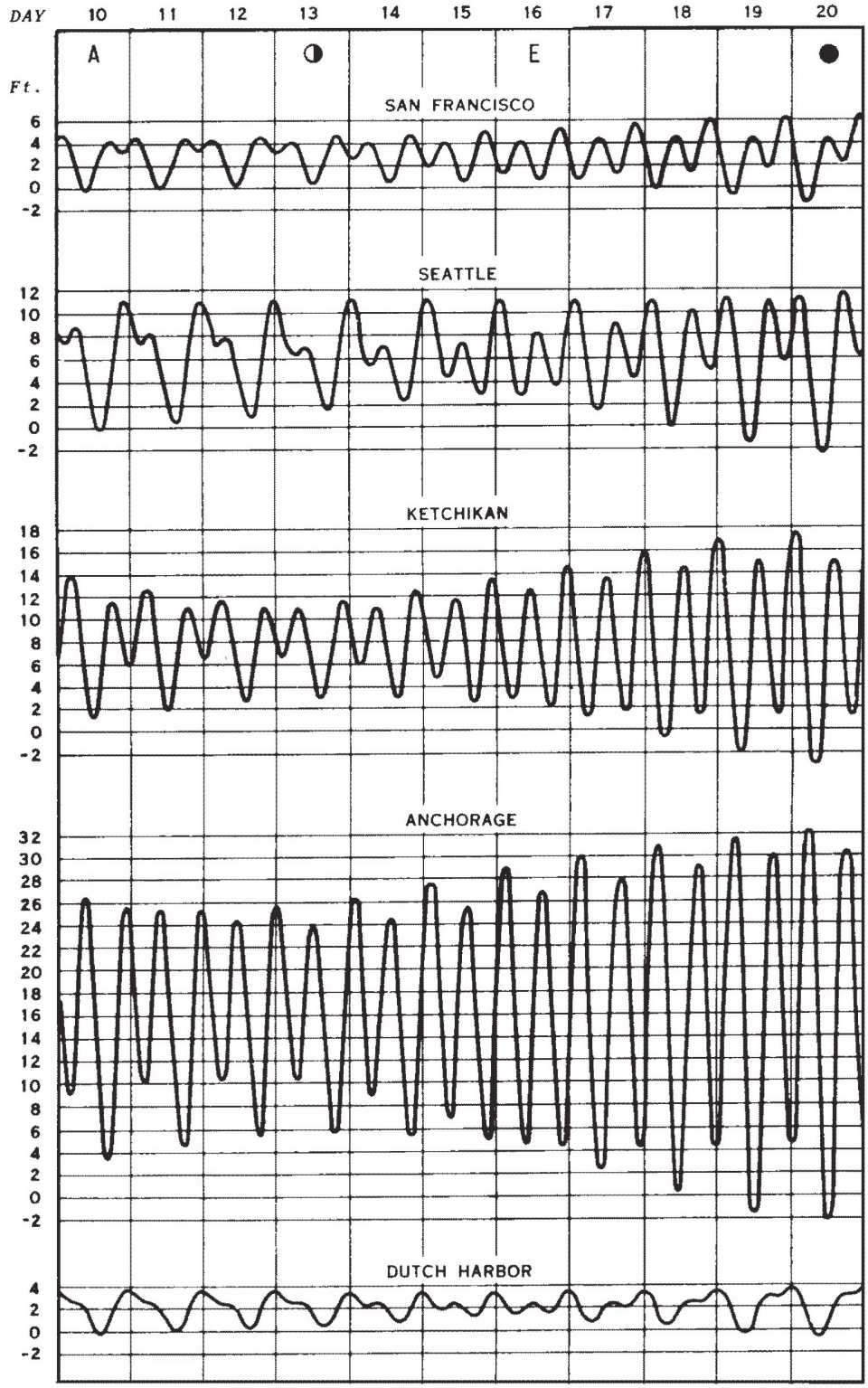
Number of tides.— There are usually two high and two low waters in a day. Tides follow the Moon more closely than they do the Sun, and the lunar or tidal day is about 50 minutes longer than the solar day. This causes the tide to occur later each day, and a tide that has occurred near the end of one calendar day will be followed by a corresponding tide that may skip the next day and occur in the early morning of the third day. Thus, on certain days of each month only a single high or a single low water occurs. At some stations, during portions of each month, the tide becomes diurnal—that is, only one high and one low water will occur during the period of a lunar day.

TABLE 1.—DAILY TIDE PREDICTIONS

Relation of tide to current.— In using these tables of tide predictions bear in mind that they give the times and heights of high and low waters and not the times of turning of the current or slack water. For stations on the outer coast there is usually a small difference between the time of high or low water and the beginning of ebb or flood current, but for places in narrow channels, landlocked harbors, or on tidal rivers, the time of slack water may differ by several hours from the time of high or low water stand. The relation of the times of high and low water to the turning of the current depends upon a number of factors, so no simple or general rule can be given. For the predicted time of slack water, and other current data, reference should be made to the Tidal Current Tables prepared by the National Ocean Service, for the Atlantic and the Pacific coast of North America and Asia.

Typical tide curves.— The variations in the tide from day to day and from place to place are illustrated on the opposite page by the tide curves for representative ports along the Pacific coast of the United States. Note that one of the chief characteristics of the tide in this region is diurnal inequality, i.e., the difference in heights of successive high waters or low waters. The largest inequality is in the low waters although at Seattle there is also considerable difference between the two high waters on certain days. The importance of this inequality at Seattle is brought out by the curve which shows that, at times, the two high waters of a day differ by more than 4 feet and the two low waters differ by more than 8 feet. At Ketchikan and Anchorage the inequality is less pronounced because of the large range of tide. In these localities the principal variations in the tide follow the changes in the Moon’s phase and distance. The tide at Anchorage is one of the largest in the world. At Unalaska and Dutch Harbor the tide is such that it is semidiurnal around the times the Moon is on the Equator but becomes diurnal around the times of maximum north or south declination of the Moon.

TYPICAL TIDE CURVES FOR UNITED STATES PORTS



A discussion of these curves is given on the preceding page.

Lunar data: A - Moon in apogee
◑ - last quarter
E - Moon on Equator
● - new Moon

Cabo de Hornos, Chile, 2015

Times and Heights of High and Low Waters

January

	Time	Height	
	h m	ft	cm
1 Th	0048	7.3	222
	0730	1.9	58
	1332	5.8	178
	1917	2.6	80
2 F	0141	7.4	227
	0831	1.7	51
	1435	5.7	175
	2010	2.8	84
3 Sa	0233	7.5	230
	0926	1.5	46
	1532	5.7	174
	2101	2.9	88
4 Su	0321	7.6	231
	1016	1.4	44
	1624	5.7	174
	2150	3.0	91
5 M ○	0407	7.5	230
	1102	1.4	44
	1711	5.7	174
	2236	3.1	93
6 Tu	0451	7.4	227
	1144	1.5	45
	1755	5.7	174
	2319	3.1	95
7 W	0533	7.3	222
	1224	1.6	49
	1836	5.7	174
8 Th	0002	3.2	98
	0613	7.1	216
	1302	1.8	54
	1916	5.7	175
9 F	0045	3.3	100
	0653	6.9	209
	1338	1.9	59
	1955	5.8	176
10 Sa	0128	3.3	102
	0734	6.6	201
	1414	2.1	65
	2034	5.8	177
11 Su	0214	3.4	103
	0816	6.3	192
	1449	2.4	72
	2113	5.9	180
12 M	0304	3.4	103
	0902	6.0	183
	1526	2.6	78
	2154	6.0	184
13 Tu ◑	0358	3.3	101
	0952	5.7	175
	1605	2.7	83
	2237	6.2	189
14 W	0455	3.1	96
	1048	5.5	168
	1647	2.9	88
	2323	6.4	196
15 Th	0554	3.0	90
	1148	5.4	164
	1733	3.0	91

	Time	Height	
	h m	ft	cm
16 F	0010	6.7	204
	0653	2.7	81
	1249	5.3	162
	1823	3.0	92
17 Sa	0059	7.0	213
	0749	2.3	70
	1348	5.4	164
	1915	3.0	92
18 Su	0149	7.3	223
	0842	1.9	59
	1445	5.5	167
	2009	2.9	89
19 M	0240	7.6	233
	0933	1.6	48
	1538	5.7	173
	2103	2.8	86
20 Tu ●	0331	7.9	242
	1023	1.3	39
	1630	5.9	179
	2157	2.7	81
21 W	0422	8.1	247
	1112	1.1	33
	1720	6.1	186
	2252	2.5	76
22 Th	0515	8.2	249
	1200	1.0	31
	1810	6.3	193
	2348	2.4	72
23 F	0608	8.1	246
	1248	1.1	33
	1900	6.6	200
24 Sa	0047	2.3	69
	0703	7.8	238
	1337	1.2	38
	1951	6.8	206
25 Su	0147	2.2	67
	0800	7.4	226
	1426	1.5	46
	2044	7.0	212
26 M	0251	2.2	66
	0900	7.0	213
	1517	1.8	56
	2137	7.1	217
27 Tu ◐	0357	2.1	65
	1002	6.5	199
	1609	2.2	67
	2232	7.3	221
28 W	0504	2.1	63
	1108	6.1	187
	1703	2.5	76
	2329	7.3	224
29 Th	0611	2.0	61
	1214	5.9	179
	1759	2.8	84
30 F	0024	7.4	226
	0715	1.9	58
	1319	5.7	174
	1855	2.9	89
31 Sa	0119	7.4	227
	0814	1.8	55
	1419	5.7	173
	1949	3.1	93

February

	Time	Height	
	h m	ft	cm
1 Su	0211	7.4	227
	0907	1.8	54
	1513	5.7	173
	2040	3.1	95
2 M	0259	7.4	226
	0954	1.8	54
	1601	5.7	174
	2128	3.1	96
3 Tu ○	0345	7.3	224
	1036	1.8	55
	1644	5.7	175
	2213	3.1	96
4 W	0427	7.2	220
	1115	1.9	57
	1724	5.8	177
	2256	3.2	97
5 Th	0508	7.1	216
	1152	2.0	61
	1801	5.9	179
	2338	3.2	97
6 F	0548	6.9	210
	1226	2.1	65
	1838	5.9	181
7 Sa	0020	3.2	97
	0627	6.7	204
	1300	2.3	70
	1915	6.0	183
8 Su	0102	3.2	98
	0708	6.4	196
	1334	2.5	76
	1951	6.1	185
9 M	0147	3.2	97
	0750	6.2	188
	1407	2.7	82
	2029	6.2	189
10 Tu	0235	3.1	96
	0835	5.9	180
	1443	2.9	87
	2109	6.3	192
11 W ◑	0327	3.1	94
	0925	5.7	173
	1521	3.0	92
	2152	6.5	197
12 Th	0422	3.0	90
	1020	5.5	168
	1604	3.1	95
	2240	6.7	203
13 F	0520	2.8	84
	1120	5.4	165
	1653	3.2	97
	2330	6.9	211
14 Sa	0619	2.5	76
	1220	5.4	165
	1748	3.1	96
15 Su	0024	7.2	220
	0716	2.2	67
	1319	5.5	168
	1845	3.1	93

	Time	Height	
	h m	ft	cm
16 M	0118	7.5	229
	0811	1.9	57
	1415	5.7	174
	1943	2.9	88
17 Tu	0213	7.8	238
	0903	1.6	48
	1509	5.9	181
	2041	2.7	81
18 W ●	0308	8.0	245
	0953	1.3	41
	1600	6.2	190
	2139	2.4	74
19 Th	0402	8.1	248
	1043	1.2	38
	1651	6.6	200
	2237	2.2	67
20 F	0457	8.1	247
	1131	1.3	39
	1741	6.9	209
	2335	2.0	61
21 Sa	0553	7.9	241
	1220	1.4	43
	1831	7.1	216
22 Su	0035	1.9	57
	0649	7.6	232
	1309	1.6	50
	1922	7.3	222
23 M	0136	1.8	56
	0748	7.2	219
	1359	2.0	60
	2015	7.4	225
24 Tu	0238	1.8	56
	0849	6.8	206
	1451	2.3	70
	2110	7.4	227
25 W ◐	0343	1.9	57
	0952	6.4	194
	1545	2.6	80
	2206	7.4	226
26 Th	0448	1.9	59
	1057	6.0	184
	1642	2.9	88
	2303	7.4	225
27 F	0553	2.0	60
	1201	5.9	179
	1739	3.1	94
28 Sa	0000	7.3	223
	0654	2.0	60
	1302	5.8	176
	1836	3.2	97

March

	Time	Height	
	h m	ft	cm
1 Su	0055	7.3	221
	0749	2.0	61
	1357	5.8	176
	1930	3.2	98
2 M	0147	7.2	220
	0838	2.0	62
	1446	5.8	177
	2021	3.2	98
3 Tu	0235	7.2	218
	0922	2.1	64
	1529	5.9	180
	2107	3.1	96
4 W	0319	7.1	216
	1001	2.2	66
	1608	6.0	182
	2151	3.1	95
5 Th ○	0401	7.0	212
	1037	2.3	69
	1645	6.1	185
	2233	3.1	93
6 F	0442	6.8	208
	1112	2.4	72
	1721	6.2	188
	2314	3.0	92
7 Sa	0522	6.7	203
	1145	2.5	77
	1756	6.3	191
	2356	3.0	91
8 Su	0603	6.5	197
	1218	2.7	82
	1831	6.3	193
9 M	0038	3.0	90
	0644	6.2	190
	1251	2.9	87
	1908	6.4	195
10 Tu	0122	2.9	89
	0728	6.0	183
	1325	3.1	93
	1946	6.5	198
11 W	0209	2.9	88
	0815	5.8	176
	1402	3.2	98
	2027	6.6	200
12 Th	0300	2.8	86
	0906	5.6	171
	1443	3.3	101
	2112	6.7	204
13 F ◑	0355	2.7	82
	1002	5.5	168
	1530	3.4	103
	2203	6.9	209
14 Sa	0452	2.5	77
	1100	5.5	167
	1625	3.4	103
	2258	7.1	216
15 Su	0550	2.3	71
	1159	5.6	170
	1725	3.3	100
	2356	7.3	223

	Time	Height	
	h m	ft	cm
16 M	0647	2.1	63
	1256	5.8	176
	1827	3.1	93
17 Tu	0054	7.6	231
	0741	1.8	56
	1350	6.1	185
	1928	2.8	84
18 W	0152	7.8	237
	0833	1.6	50
	1441	6.4	195
	2028	2.4	74
19 Th	0248	7.9	241
	0923	1.5	46
	1531	6.8	207
	2126	2.1	64
20 F ●	0345	7.9	241
	1012	1.5	46
	1621	7.1	217
	2224	1.8	55
21 Sa	0441	7.8	238
	1100	1.6	50
	1710	7.4	226
	2323	1.6	49
22 Su	0538	7.5	230
	1149	1.8	56
	1801	7.6	232
23 M	0021	1.5	46
	0635	7.2	220
	1238	2.1	65
	1852	7.7	234
24 Tu	0121	1.5	46
	0734	6.8	208
	1330	2.5	75
	1945	7.6	233
25 W	0222	1.6	49
	0835	6.5	197
	1423	2.8	85
	2040	7.5	230
26 Th	0324	1.7	53
	0938	6.2	188
	1520	3.1	94
	2136	7.4	225
27 F ◐	0427	1.9	57
	1042	6.0	182
	1619	3.3	100
	2235	7.2	220
28 Sa	0528	2.0	61
	1143	5.9	179
	1719	3.4	103
	2332	7.1	216
29 Su	0625	2.1	64
	1240	5.9	179
	1816	3.4	103
30 M	0027	7.0	213
	0716	2.2	67
	1330	5.9	181
	1910	3.3	101
31 Tu	0119	6.9	210
	0802	2.3	69
	1413	6.0	184
	2000	3.2	98

Time meridian 60° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.
Heights are referred to the chart datum of soundings.

Cabo de Hornos, Chile, 2015

Times and Heights of High and Low Waters

April

	Time	Height		Time	Height
	h m	ft cm		h m	ft cm
1 W	0206	6.8 208	**16** Th	0135	7.5 229
	0842	2.3 71		0804	1.7 53
	1453	6.2 188		1417	6.9 211
	2045	3.1 94		2019	2.2 66
2 Th	0251	6.8 206	**17** F	0233	7.5 229
	0919	2.4 74		0853	1.7 53
	1529	6.3 193		1506	7.3 223
	2129	3.0 90		2118	1.8 55
3 F	0334	6.6 202	**18** Sa	0330	7.4 227
	0954	2.5 77		0941	1.8 56
	1604	6.5 197		1554	7.6 233
	2210	2.8 86	●	2214	1.5 45
4 Sa	0416	6.5 199	**19** Su	0427	7.3 222
	1028	2.7 81		1029	2.0 61
	1639	6.6 200		1643	7.9 240
○	2252	2.7 83		2311	1.3 40
5 Su	0457	6.4 194	**20** M	0523	7.0 214
	1101	2.8 85		1118	2.3 69
	1714	6.7 203		1732	8.0 243
	2333	2.7 81			
6 M	0539	6.2 189	**21** Tu	0007	1.2 38
	1135	3.0 91		0620	6.8 206
	1750	6.7 205		1207	2.6 78
				1822	7.9 241
7 Tu	0016	2.6 79	**22** W	0104	1.3 41
	0623	6.0 183		0718	6.4 196
	1209	3.1 96		1259	2.9 87
	1827	6.8 207		1914	7.7 236
8 W	0100	2.6 78	**23** Th	0201	1.5 46
	0708	5.8 177		0818	6.2 188
	1245	3.3 101		1353	3.1 96
	1906	6.8 208		2007	7.5 228
9 Th	0147	2.5 77	**24** F	0300	1.7 52
	0757	5.6 172		0918	6.0 182
	1324	3.4 105		1450	3.4 103
	1949	6.9 209		2103	7.2 220
10 F	0237	2.5 75	**25** Sa	0358	1.9 59
	0850	5.5 169		1019	5.9 179
	1410	3.5 108		1551	3.5 108
	2038	6.9 211	◐	2200	7.0 212
11 Sa	0332	2.4 73	**26** Su	0455	2.1 64
	0946	5.5 168		1117	5.9 179
	1504	3.5 108		1652	3.6 110
◑	2133	7.0 214		2258	6.7 205
12 Su	0428	2.3 69	**27** M	0548	2.3 69
	1044	5.6 171		1209	5.9 181
	1606	3.5 106		1751	3.5 108
	2232	7.1 217		2353	6.6 201
13 M	0525	2.1 65	**28** Tu	0636	2.4 72
	1141	5.8 177		1256	6.1 185
	1712	3.3 100		1846	3.4 103
	2334	7.3 222			
14 Tu	0621	2.0 60	**29** W	0046	6.5 198
	1235	6.1 186		0719	2.5 75
	1817	3.0 91		1336	6.2 190
				1936	3.2 97
15 W	0035	7.4 226	**30** Th	0135	6.4 195
	0713	1.8 56		0758	2.5 77
	1327	6.5 198		1414	6.4 196
	1919	2.6 79		2022	3.0 91

May

	Time	Height		Time	Height
	h m	ft cm		h m	ft cm
1 F	0222	6.3 193	**16** Sa	0222	7.0 212
	0835	2.6 80		0827	2.0 61
	1450	6.6 202		1444	7.7 235
	2106	2.8 84		2111	1.5 46
2 Sa	0306	6.3 191	**17** Su	0320	6.9 209
	0910	2.7 83		0915	2.1 65
	1526	6.8 208		1532	8.0 243
	2148	2.6 78		2206	1.2 38
3 Su	0350	6.2 188	**18** M	0415	6.7 205
	0945	2.8 86		1003	2.3 71
	1601	7.0 213		1619	8.1 247
○	2230	2.4 72	●	2300	1.1 34
4 M	0433	6.1 185	**19** Tu	0510	6.5 199
	1020	3.0 90		1050	2.5 77
	1637	7.1 216		1707	8.1 247
	2311	2.2 68		2352	1.1 34
5 Tu	0517	5.9 181	**20** W	0604	6.3 193
	1055	3.1 94		1139	2.8 85
	1714	7.2 218		1755	7.9 242
	2354	2.2 66			
6 W	0602	5.8 177	**21** Th	0045	1.3 39
	1131	3.2 98		0659	6.1 187
	1752	7.2 219		1229	3.1 93
				1844	7.7 234
7 Th	0038	2.1 64	**22** F	0137	1.5 45
	0649	5.7 174		0754	5.9 181
	1210	3.3 102		1320	3.3 101
	1833	7.2 220		1934	7.3 223
8 F	0125	2.1 63	**23** Sa	0229	1.7 53
	0739	5.6 171		0849	5.8 177
	1254	3.4 105		1415	3.5 108
	1919	7.2 219		2026	7.0 213
9 Sa	0216	2.1 63	**24** Su	0321	2.0 61
	0832	5.6 170		0945	5.7 175
	1345	3.5 107		1514	3.7 112
	2011	7.2 218		2120	6.7 203
10 Su	0309	2.0 62	**25** M	0413	2.2 68
	0928	5.6 171		1039	5.8 176
	1446	3.5 107		1616	3.7 113
	2109	7.1 217	◐	2216	6.4 194
11 M	0405	2.0 61	**26** Tu	0502	2.4 73
	1025	5.8 176		1129	5.9 180
	1553	3.4 104		1717	3.6 110
◑	2211	7.1 216		2312	6.2 188
12 Tu	0500	2.0 60	**27** W	0548	2.6 78
	1121	6.1 185		1214	6.1 185
	1703	3.2 97		1815	3.4 104
	2316	7.1 215			
13 W	0555	1.9 59	**28** Th	0008	6.0 183
	1215	6.5 197		0631	2.7 81
	1810	2.8 86		1255	6.3 192
				1908	3.1 96
14 Th	0020	7.0 214	**29** F	0101	5.9 181
	0647	1.9 58		0711	2.7 83
	1306	6.9 210		1334	6.6 200
	1914	2.4 72		1957	2.9 87
15 F	0122	7.0 214	**30** Sa	0151	5.9 180
	0738	1.9 59		0750	2.8 85
	1356	7.3 224		1412	6.8 208
	2014	1.9 58		2042	2.6 78
			31 Su	0239	5.9 179
				0828	2.8 86
				1449	7.1 215
				2125	2.3 69

June

	Time	Height		Time	Height
	h m	ft cm		h m	ft cm
1 M	0325	5.8 178	**16** Tu	0406	6.2 190
	0906	2.9 88		0942	2.5 77
	1527	7.3 222		1601	8.1 247
	2207	2.0 62	●	2248	1.1 33
2 Tu	0410	5.8 178	**17** W	0457	6.1 187
	0943	3.0 90		1029	2.7 82
	1605	7.4 226		1647	8.0 244
○	2249	1.8 56		2336	1.1 35
3 W	0455	5.8 177	**18** Th	0547	6.0 184
	1022	3.0 92		1115	2.9 87
	1644	7.5 230		1732	7.8 238
	2332	1.7 52			
4 Th	0540	5.7 175	**19** F	0023	1.3 39
	1102	3.1 94		0635	5.9 180
	1726	7.6 231		1202	3.1 93
				1817	7.5 229
5 F	0017	1.6 50	**20** Sa	0108	1.5 47
	0628	5.7 174		0723	5.8 177
	1145	3.1 96		1249	3.3 100
	1810	7.6 231		1902	7.2 218
6 Sa	0104	1.6 49	**21** Su	0153	1.8 55
	0717	5.7 173		0811	5.7 174
	1233	3.2 98		1338	3.4 105
	1858	7.5 228		1948	6.8 206
7 Su	0153	1.6 50	**22** M	0238	2.1 63
	0809	5.7 174		0900	5.7 173
	1329	3.2 99		1432	3.6 109
	1951	7.3 224		2037	6.4 195
8 M	0245	1.7 52	**23** Tu	0323	2.3 71
	0904	5.8 178		0949	5.7 174
	1432	3.2 99		1531	3.6 111
	2050	7.1 217		2129	6.1 185
9 Tu	0339	1.8 55	**24** W	0408	2.6 78
	1001	6.0 184		1037	5.8 177
	1542	3.1 96		1633	3.6 109
◑	2154	6.9 210	◐	2226	5.8 176
10 W	0434	1.9 58	**25** Th	0453	2.7 83
	1057	6.4 194		1123	6.0 183
	1655	2.9 88		1735	3.4 103
	2301	6.7 204		2325	5.6 170
11 Th	0528	2.0 61	**26** F	0538	2.9 87
	1152	6.8 206		1208	6.2 190
	1805	2.5 77		1834	3.1 95
12 F	0009	6.6 200	**27** Sa	0024	5.5 168
	0622	2.1 64		0622	2.9 89
	1245	7.2 218		1252	6.5 199
	1910	2.1 64		1926	2.8 84
13 Sa	0113	6.4 196	**28** Su	0119	5.5 167
	0714	2.2 67		0706	3.0 90
	1336	7.5 230		1334	6.8 208
	2010	1.7 52		2015	2.4 74
14 Su	0214	6.4 194	**29** M	0211	5.5 168
	0805	2.3 70		0749	2.9 89
	1426	7.8 239		1415	7.1 217
	2106	1.3 41		2100	2.1 63
15 M	0312	6.3 192	**30** Tu	0300	5.6 170
	0854	2.4 73		0831	2.9 88
	1514	8.0 245		1456	7.4 226
	2158	1.1 35		2143	1.7 53

Time meridian 60° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.
Heights are referred to the chart datum of soundings.

Cabo de Hornos, Chile, 2015

Times and Heights of High and Low Waters

July

	Time	Height	
	h m	ft	cm
1 W ○	0346	5.7	173
	0913	2.8	86
	1538	7.6	233
	2227	1.5	46
2 Th	0432	5.7	175
	0956	2.8	85
	1621	7.8	238
	2310	1.3	40
3 F	0517	5.8	177
	1041	2.8	84
	1705	7.9	241
	2355	1.2	38
4 Sa	0604	5.9	179
	1128	2.7	83
	1752	7.9	240
5 Su	0040	1.2	38
	0652	5.9	181
	1220	2.7	83
	1842	7.7	234
6 M	0128	1.3	41
	0742	6.0	184
	1317	2.8	84
	1936	7.4	226
7 Tu	0218	1.5	46
	0836	6.2	189
	1421	2.8	84
	2035	7.1	215
8 W ◑	0310	1.7	53
	0932	6.4	195
	1531	2.7	81
	2140	6.7	203
9 Th	0405	2.0	61
	1029	6.7	203
	1644	2.5	76
	2249	6.3	192
10 F	0501	2.2	67
	1127	7.0	212
	1756	2.2	67
	2359	6.1	185
11 Sa	0558	2.4	73
	1224	7.3	221
	1904	1.9	57
12 Su	0107	6.0	182
	0654	2.5	76
	1318	7.5	229
	2004	1.6	48
13 M	0209	5.9	181
	0748	2.6	78
	1410	7.7	235
	2059	1.3	40
14 Tu	0305	5.9	181
	0839	2.6	79
	1459	7.8	239
	2149	1.2	36
15 W ●	0356	5.9	181
	0927	2.7	81
	1545	7.8	239
	2235	1.2	36

	Time	Height	
	h m	ft	cm
16 Th	0442	5.9	181
	1013	2.7	82
	1629	7.7	235
	2318	1.2	38
17 F	0526	5.9	180
	1057	2.8	85
	1712	7.5	229
	2358	1.4	43
18 Sa	0608	5.9	179
	1139	2.9	89
	1753	7.3	221
19 Su	0037	1.6	50
	0649	5.8	177
	1222	3.1	93
	1833	6.9	211
20 M	0115	1.9	58
	0729	5.8	176
	1306	3.2	97
	1914	6.6	200
21 Tu	0152	2.2	66
	0810	5.7	175
	1353	3.3	100
	1958	6.2	189
22 W	0230	2.4	74
	0853	5.8	176
	1446	3.3	102
	2046	5.8	178
23 Th	0310	2.7	82
	0938	5.8	178
	1545	3.3	102
	2140	5.5	168
24 F ◐	0353	2.9	88
	1026	6.0	182
	1648	3.2	98
	2241	5.3	161
25 Sa	0439	3.1	93
	1115	6.2	188
	1751	3.0	92
	2345	5.2	158
26 Su	0529	3.1	95
	1204	6.4	196
	1850	2.7	82
27 M	0046	5.2	158
	0621	3.1	95
	1253	6.7	205
	1943	2.3	71
28 Tu	0142	5.3	161
	0711	3.0	92
	1341	7.1	216
	2031	1.9	59
29 W	0233	5.4	166
	0800	2.9	88
	1427	7.4	226
	2117	1.6	48
30 Th	0321	5.6	171
	0848	2.7	82
	1514	7.7	235
	2201	1.3	39
31 F ○	0407	5.8	178
	0936	2.5	76
	1600	7.9	242
	2246	1.1	33

August

	Time	Height	
	h m	ft	cm
1 Sa	0452	6.0	184
	1025	2.3	71
	1648	8.0	244
	2330	1.0	31
2 Su	0538	6.2	189
	1116	2.2	67
	1737	7.9	242
3 M	0015	1.0	32
	0625	6.4	195
	1210	2.1	64
	1828	7.7	235
4 Tu	0102	1.2	37
	0714	6.6	200
	1308	2.1	64
	1923	7.3	223
5 W	0150	1.5	46
	0806	6.7	204
	1410	2.1	64
	2022	6.9	209
6 Th ◑	0241	1.8	56
	0901	6.8	208
	1518	2.1	64
	2127	6.4	194
7 F	0336	2.2	66
	0959	6.9	211
	1630	2.1	63
	2237	6.0	182
8 Sa	0434	2.5	75
	1100	7.1	215
	1743	1.9	59
	2349	5.7	175
9 Su	0536	2.7	81
	1201	7.2	219
	1851	1.7	53
10 M	0058	5.7	173
	0637	2.8	84
	1259	7.3	222
	1953	1.6	48
11 Tu	0200	5.7	173
	0735	2.8	85
	1354	7.4	225
	2047	1.4	44
12 W	0254	5.8	176
	0828	2.7	83
	1444	7.4	227
	2134	1.4	42
13 Th	0341	5.8	178
	0916	2.7	82
	1530	7.4	226
	2216	1.4	43
14 F ●	0423	5.9	180
	1000	2.7	81
	1613	7.3	223
	2255	1.5	45
15 Sa	0502	5.9	181
	1042	2.7	81
	1653	7.2	218
	2330	1.6	50

	Time	Height	
	h m	ft	cm
16 Su	0538	6.0	182
	1121	2.7	82
	1731	6.9	211
17 M	0004	1.8	56
	0613	6.0	182
	1201	2.7	83
	1809	6.6	202
18 Tu	0037	2.1	63
	0648	6.0	182
	1241	2.8	85
	1848	6.3	193
19 W	0109	2.3	70
	0724	6.0	182
	1323	2.9	87
	1928	6.0	183
20 Th	0142	2.6	78
	0802	6.0	183
	1410	2.9	89
	2013	5.6	172
21 F	0217	2.8	86
	0842	6.0	183
	1502	3.0	90
	2103	5.3	163
22 Sa ◐	0256	3.0	92
	0928	6.1	185
	1601	2.9	89
	2202	5.1	156
23 Su	0341	3.2	97
	1019	6.2	188
	1705	2.8	85
	2306	5.0	153
24 M	0436	3.3	100
	1114	6.4	194
	1807	2.6	78
25 Tu	0011	5.0	153
	0536	3.2	99
	1210	6.6	202
	1905	2.2	68
26 W	0111	5.2	158
	0636	3.1	94
	1306	7.0	212
	1958	1.9	57
27 Th	0204	5.4	165
	0733	2.9	87
	1359	7.3	223
	2047	1.5	47
28 F	0253	5.7	175
	0827	2.5	77
	1451	7.6	232
	2133	1.2	38
29 Sa ○	0340	6.1	185
	0920	2.2	67
	1541	7.8	239
	2219	1.1	33
30 Su	0425	6.4	195
	1013	1.9	57
	1632	7.9	240
	2303	1.0	31
31 M	0511	6.7	204
	1106	1.6	50
	1724	7.8	237
	2348	1.1	34

September

	Time	Height	
	h m	ft	cm
1 Tu	0558	7.0	212
	1201	1.5	45
	1817	7.5	229
2 W	0035	1.3	41
	0646	7.1	217
	1258	1.4	44
	1912	7.1	216
3 Th	0122	1.7	51
	0737	7.2	220
	1359	1.5	45
	2011	6.6	202
4 F	0213	2.0	62
	0831	7.2	219
	1503	1.6	48
	2115	6.2	188
5 Sa ◑	0308	2.4	74
	0929	7.1	217
	1612	1.7	51
	2223	5.8	177
6 Su	0408	2.7	83
	1030	7.1	215
	1722	1.7	53
	2335	5.6	170
7 M	0513	2.9	89
	1134	7.0	213
	1830	1.7	53
8 Tu	0043	5.5	169
	0619	3.0	91
	1236	7.0	212
	1931	1.7	52
9 W	0144	5.6	171
	0720	3.0	90
	1334	7.0	212
	2024	1.7	51
10 Th	0236	5.7	175
	0815	2.8	86
	1426	6.9	211
	2110	1.7	51
11 F	0319	5.9	179
	0903	2.7	83
	1512	6.9	210
	2150	1.7	52
12 Sa	0358	6.0	183
	0947	2.6	79
	1554	6.8	208
	2225	1.8	55
13 Su ●	0433	6.1	186
	1027	2.5	76
	1634	6.7	204
	2258	1.9	59
14 M	0506	6.2	189
	1105	2.4	74
	1712	6.5	199
	2330	2.1	64
15 Tu	0539	6.3	191
	1144	2.4	73
	1750	6.3	192

	Time	Height	
	h m	ft	cm
16 W	0000	2.3	70
	0611	6.3	192
	1222	2.4	73
	1828	6.1	185
17 Th	0031	2.5	77
	0645	6.3	193
	1302	2.4	74
	1908	5.8	177
18 F	0102	2.7	83
	0719	6.3	192
	1344	2.5	75
	1951	5.5	168
19 Sa	0134	3.0	90
	0757	6.3	192
	1431	2.5	76
	2038	5.3	161
20 Su	0210	3.1	95
	0839	6.3	192
	1524	2.5	77
	2133	5.1	155
21 M ◐	0255	3.3	100
	0929	6.3	193
	1623	2.5	75
	2234	5.0	153
22 Tu	0351	3.3	102
	1027	6.4	196
	1725	2.3	71
	2337	5.1	154
23 W	0456	3.3	101
	1129	6.6	201
	1825	2.1	64
24 Th	0038	5.2	160
	0605	3.1	95
	1231	6.8	208
	1921	1.8	56
25 F	0133	5.6	170
	0709	2.8	85
	1331	7.1	216
	2013	1.6	48
26 Sa	0224	6.0	182
	0810	2.4	72
	1428	7.3	224
	2102	1.4	42
27 Su ○	0312	6.4	196
	0907	1.9	58
	1524	7.5	228
	2149	1.3	39
28 M	0358	6.9	209
	1003	1.5	45
	1618	7.5	229
	2235	1.3	39
29 Tu	0445	7.3	221
	1057	1.1	35
	1712	7.4	225
	2321	1.4	43
30 W	0532	7.5	229
	1152	1.0	29
	1807	7.1	217

Time meridian 60° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.
Heights are referred to the chart datum of soundings.

Cabo de Hornos, Chile, 2015

Times and Heights of High and Low Waters

October

	Time	Height	
	h m	ft	cm
1 Th	0008	1.6	50
	0621	7.6	233
	1248	0.9	28
	1902	6.8	206
2 F	0057	2.0	60
	0711	7.6	233
	1346	1.0	30
	2000	6.4	194
3 Sa	0148	2.3	70
	0804	7.5	228
	1446	1.2	36
	2102	6.0	183
4 Su ◑	0243	2.7	81
	0900	7.3	221
	1549	1.4	43
	2206	5.7	175
5 M	0343	3.0	90
	1000	7.0	213
	1654	1.6	50
	2313	5.6	170
6 Tu	0448	3.1	95
	1102	6.8	206
	1758	1.8	54
7 W	0018	5.6	170
	0555	3.1	96
	1205	6.6	200
	1857	1.9	58
8 Th	0116	5.7	173
	0659	3.1	94
	1305	6.5	197
	1949	2.0	60
9 F	0205	5.8	177
	0755	2.9	89
	1359	6.4	195
	2034	2.0	62
10 Sa	0247	6.0	182
	0845	2.8	84
	1447	6.3	193
	2113	2.1	64
11 Su	0324	6.1	187
	0929	2.6	78
	1531	6.3	191
	2148	2.2	67
12 M ●	0359	6.3	193
	1010	2.4	72
	1613	6.2	189
	2221	2.3	70
13 Tu	0432	6.5	197
	1049	2.2	68
	1653	6.1	186
	2254	2.4	74
14 W	0505	6.6	200
	1127	2.1	64
	1733	6.0	182
	2325	2.6	79
15 Th	0538	6.6	202
	1206	2.0	62
	1813	5.8	177
	2357	2.8	84

	Time	Height	
	h m	ft	cm
16 F	0611	6.7	203
	1245	2.0	62
	1853	5.6	171
17 Sa	0029	2.9	89
	0646	6.7	203
	1326	2.0	62
	1936	5.4	166
18 Su	0102	3.1	94
	0724	6.7	203
	1410	2.1	63
	2022	5.3	161
19 M	0140	3.2	98
	0806	6.6	202
	1458	2.1	64
	2113	5.2	158
20 Tu ◐	0226	3.3	101
	0854	6.6	201
	1551	2.1	64
	2209	5.2	158
21 W	0323	3.3	102
	0951	6.6	201
	1648	2.0	62
	2307	5.3	161
22 Th	0430	3.2	99
	1055	6.6	202
	1747	2.0	60
23 F	0006	5.5	169
	0542	3.1	93
	1201	6.7	204
	1843	1.8	56
24 Sa	0101	5.9	180
	0651	2.7	81
	1306	6.8	207
	1937	1.7	53
25 Su	0153	6.4	194
	0755	2.2	67
	1408	6.9	210
	2029	1.6	50
26 M	0243	6.9	209
	0856	1.7	51
	1508	7.0	212
	2118	1.6	50
27 Tu ○	0332	7.3	223
	0953	1.2	37
	1605	7.0	212
	2207	1.7	51
28 W	0420	7.7	234
	1049	0.9	26
	1701	6.9	209
	2255	1.8	55
29 Th	0509	7.9	241
	1143	0.7	20
	1757	6.7	203
	2343	2.0	62
30 F	0557	8.0	243
	1238	0.7	20
	1852	6.4	196
31 Sa	0033	2.3	70
	0647	7.9	240
	1332	0.8	24
	1948	6.2	189

November

	Time	Height	
	h m	ft	cm
1 Su	0124	2.6	78
	0739	7.6	232
	1428	1.0	31
	2045	5.9	181
2 M	0219	2.9	87
	0832	7.3	222
	1524	1.3	40
	2144	5.8	176
3 Tu ◑	0317	3.1	94
	0928	6.9	210
	1621	1.6	49
	2244	5.7	173
4 W	0420	3.2	99
	1027	6.6	200
	1717	1.9	58
	2342	5.7	173
5 Th	0524	3.3	100
	1127	6.3	191
	1811	2.1	64
6 F	0035	5.8	176
	0628	3.2	98
	1226	6.0	184
	1901	2.3	69
7 Sa	0123	5.9	180
	0727	3.0	92
	1322	5.9	180
	1945	2.4	73
8 Su	0205	6.1	186
	0819	2.8	85
	1415	5.8	178
	2026	2.5	76
9 M	0244	6.3	193
	0906	2.6	78
	1503	5.8	176
	2104	2.6	79
10 Tu	0320	6.5	199
	0949	2.3	70
	1549	5.7	175
	2140	2.7	81
11 W ●	0356	6.7	205
	1030	2.1	63
	1632	5.7	174
	2216	2.8	84
12 Th	0431	6.9	209
	1109	1.9	58
	1715	5.7	173
	2251	2.9	87
13 F	0507	7.0	212
	1149	1.8	54
	1757	5.6	171
	2326	3.0	90
14 Sa	0543	7.0	214
	1229	1.7	52
	1839	5.5	168
15 Su	0001	3.1	93
	0620	7.0	214
	1309	1.7	51
	1922	5.4	166

	Time	Height	
	h m	ft	cm
16 M	0039	3.1	96
	0700	7.0	214
	1352	1.7	52
	2007	5.4	165
17 Tu	0121	3.2	98
	0743	7.0	213
	1438	1.7	52
	2056	5.4	165
18 W	0210	3.2	99
	0832	6.9	210
	1527	1.8	54
	2147	5.5	167
19 Th	0309	3.2	98
	0928	6.8	207
	1619	1.8	55
	2241	5.7	173
20 F	0416	3.1	95
	1031	6.7	203
	1713	1.8	56
	2337	6.0	182
21 Sa	0527	2.9	87
	1137	6.6	200
	1808	1.9	58
22 Su	0031	6.4	194
	0637	2.5	76
	1245	6.5	197
	1903	1.9	59
23 M	0125	6.8	208
	0744	2.0	62
	1351	6.4	196
	1956	2.0	60
24 Tu	0217	7.3	221
	0846	1.5	47
	1454	6.4	196
	2049	2.0	62
25 W ○	0308	7.6	233
	0944	1.1	34
	1554	6.4	195
	2140	2.1	65
26 Th	0358	7.9	242
	1040	0.8	25
	1651	6.4	194
	2231	2.3	69
27 F	0447	8.1	246
	1133	0.7	20
	1746	6.3	191
	2321	2.4	73
28 Sa	0537	8.0	245
	1225	0.7	21
	1839	6.2	188
29 Su	0012	2.6	78
	0626	7.9	240
	1316	0.8	25
	1932	6.1	185
30 M	0103	2.8	85
	0716	7.6	231
	1406	1.1	33
	2024	5.9	181

December

	Time	Height	
	h m	ft	cm
1 Tu	0155	3.0	91
	0806	7.2	220
	1456	1.4	42
	2116	5.8	178
2 W	0250	3.1	96
	0857	6.8	207
	1545	1.7	52
	2208	5.8	177
3 Th ◑	0348	3.3	100
	0949	6.4	195
	1633	2.0	62
	2258	5.8	178
4 F	0448	3.3	101
	1044	6.0	184
	1719	2.3	70
	2347	5.9	181
5 Sa	0550	3.2	99
	1141	5.8	176
	1805	2.5	77
6 Su	0033	6.1	185
	0649	3.1	94
	1239	5.6	170
	1849	2.7	82
7 M	0116	6.3	191
	0744	2.9	87
	1335	5.5	167
	1932	2.8	86
8 Tu	0158	6.5	198
	0835	2.6	78
	1429	5.4	165
	2014	2.9	88
9 W	0239	6.7	205
	0921	2.3	70
	1519	5.4	165
	2055	3.0	90
10 Th	0318	6.9	211
	1005	2.0	62
	1607	5.4	166
	2136	3.0	91
11 F ●	0358	7.1	216
	1047	1.8	55
	1652	5.5	167
	2216	3.0	92
12 Sa	0437	7.3	221
	1128	1.6	50
	1736	5.5	168
	2256	3.1	93
13 Su	0517	7.3	224
	1209	1.5	46
	1820	5.5	169
	2337	3.1	94
14 M	0558	7.4	225
	1251	1.4	44
	1904	5.6	170
15 Tu	0021	3.1	94
	0641	7.3	224
	1333	1.4	44
	1949	5.6	172

	Time	Height	
	h m	ft	cm
16 W	0109	3.1	94
	0728	7.3	222
	1418	1.5	45
	2036	5.8	176
17 Th	0202	3.1	93
	0818	7.1	217
	1504	1.6	48
	2125	5.9	181
18 F ◐	0302	3.0	91
	0914	6.9	210
	1553	1.7	53
	2217	6.2	189
19 Sa	0408	2.8	86
	1016	6.6	202
	1645	1.9	58
	2310	6.5	198
20 Su	0518	2.6	79
	1122	6.4	194
	1738	2.1	63
21 M	0005	6.9	209
	0627	2.3	69
	1230	6.2	188
	1833	2.2	67
22 Tu	0059	7.2	220
	0734	1.9	57
	1338	6.0	184
	1928	2.3	71
23 W	0153	7.5	230
	0836	1.5	45
	1442	6.0	183
	2023	2.4	74
24 Th	0246	7.8	239
	0934	1.2	36
	1542	6.0	183
	2117	2.5	77
25 F ○	0338	8.0	243
	1029	1.0	30
	1639	6.0	184
	2210	2.6	79
26 Sa	0429	8.0	244
	1120	0.9	27
	1732	6.0	184
	2301	2.7	82
27 Su	0518	7.9	242
	1209	1.0	29
	1822	6.0	184
	2352	2.8	85
28 M	0606	7.7	235
	1256	1.1	34
	1910	6.0	183
29 Tu	0041	2.9	89
	0653	7.4	226
	1340	1.4	42
	1957	6.0	182
30 W	0131	3.1	93
	0739	7.1	215
	1424	1.6	50
	2043	6.0	182
31 Th	0222	3.2	97
	0826	6.7	203
	1505	2.0	60
	2128	6.0	182

Time meridian 60° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.
Heights are referred to the chart datum of soundings.

Punta Arenas, Chile, 2015

Times and Heights of High and Low Waters

January

	Time	Height	
	h m	ft	cm
1 Th	0329	3.4	105
	0852	5.0	153
	1550	1.7	52
	2234	6.1	187
2 F	0459	3.3	102
	1024	4.6	140
	1659	1.4	44
	2335	6.5	199
3 Sa	0601	3.1	95
	0836	4.1	124
	0925	3.9	120
	1129	4.4	134
	1753	1.2	36
4 Su	0025	6.8	208
	0650	2.9	88
	0926	3.9	120
	1011	3.8	116
	1220*	4.4	133
5 M ○	0109	7.0	214
	0733	2.7	82
	1302	4.4	135
	1920	0.9	27
6 Tu	0148	7.1	216
	0812	2.5	76
	1338	4.6	141
	1956	0.9	27
7 W	0223	7.1	217
	0847	2.4	72
	1409	4.9	148
	2026	1.0	29
8 Th	0253	7.1	217
	0918	2.2	68
	1437	5.1	156
	2049	1.0	32
9 F	0319	7.1	217
	0944	2.1	65
	1508	5.3	163
	2111	1.2	36
10 Sa	0345	7.1	217
	1007	2.0	62
	1541	5.5	169
	2140	1.4	43
11 Su	0413	7.1	215
	1034	1.9	59
	1618	5.6	171
	2211	1.8	54
12 M	0442	6.9	209
	1105	1.9	58
	1659	5.6	171
	2245	2.2	68
13 Tu ◑	0510	6.6	200
	1142	1.9	57
	1750	5.5	169
	2324	2.8	86
14 W	0535	6.2	188
	1227	1.9	58
	1853	5.4	166
15 Th	0030	3.4	105
	0537	5.7	173
	1322	2.0	60
	2013	5.4	166

	Time	Height	
	h m	ft	cm
16 F	0157	3.9	120
	0559	5.2	158
	1423	1.9	59
	2137	5.7	174
17 Sa	0337	4.2	127
	0657	4.7	143
	1524	1.9	57
	2252	6.1	187
18 Su	0528	4.0	122
	0832	4.4	134
	1629	1.7	53
	2356	6.6	202
19 M	0635	3.7	112
	0914	4.3	130
	1030	4.1	126
	1116	4.2	129
	1745	1.6	48
20 Tu ●	0050	7.1	215
	0723	3.4	104
	0956	4.3	132
	1110	4.2	129
	1232*	4.4	133
21 W	0138	7.4	225
	0807	3.1	96
	1042	4.5	138
	1155	4.4	134
	1328*	4.6	141
22 Th	0222	7.6	231
	0848	3.0	90
	1131	4.8	146
	1237	4.7	142
	1418*	5.0	152
23 F	0303	7.6	233
	0928	2.7	82
	1227	5.1	154
	1311	4.9	149
	1504*	5.4	165
24 Sa	0342	7.6	231
	1007	2.4	72
	1548	5.8	177
	2206	1.5	46
25 Su	0418	7.4	227
	1044	2.1	63
	1632	6.1	186
	2247	1.8	55
26 M	0452	7.2	219
	1122	1.8	55
	1718	6.3	191
	2329	2.2	68
27 Tu ◐	0525	6.8	207
	1201	1.6	50
	1810	6.2	189
28 W	0016	2.8	84
	0556	6.3	191
	1244	1.6	49
	1917	6.0	183
29 Th	0116	3.3	101
	0620	5.6	171
	1335	1.7	52
	2045	5.9	180
30 F	0255	3.7	114
	0638	5.0	151
	1455	1.8	56
	2209	6.0	184
31 Sa	0439	3.7	112
	0712	4.4	133
	1630	1.8	54
	2315	6.3	191

February

	Time	Height	
	h m	ft	cm
1 Su	0544	3.3	102
	0802	4.0	121
	0924	3.8	116
	1110	4.1	126
	1733	1.6	48
2 M	0009	6.5	198
	0634	3.0	92
	1207	4.3	130
	1823	1.4	43
3 Tu ○	0054	6.7	203
	0715	2.7	83
	1251	4.6	139
	1907	1.3	39
4 W	0132	6.8	207
	0752	2.5	76
	1328	4.9	149
	1945	1.2	38
5 Th	0205	6.9	209
	0825	2.3	70
	1359	5.3	161
	2017	1.2	38
6 F	0232	7.0	212
	0854	2.1	65
	1427	5.6	172
	2044	1.3	40
7 Sa	0257	7.0	214
	0918	2.0	61
	1457	5.9	180
	2108	1.4	43
8 Su	0323	7.1	215
	0940	1.8	56
	1530	6.1	187
	2134	1.6	49
9 M	0350	7.0	212
	1005	1.6	50
	1604	6.2	190
	2203	1.8	56
10 Tu	0417	6.8	207
	1032	1.5	46
	1641	6.2	190
	2234	2.2	67
11 W ◑	0437	6.5	197
	1102	1.4	44
	1724	6.1	186
	2309	2.6	80
12 Th	0422	6.1	186
	1135	1.5	45
	1816	5.9	181
13 F	0002	3.1	96
	0441	5.7	173
	1219	1.6	49
	1922	5.7	175
14 Sa	0121	3.6	111
	0514	5.2	157
	1323	1.8	54
	2042	5.7	174
15 Su	0248	4.0	121
	0600	4.6	141
	1429	1.9	58
	2208	5.9	179

	Time	Height	
	h m	ft	cm
16 M	0452	4.0	121
	0736	4.2	129
	1534	1.9	59
	2328	6.2	190
17 Tu	0615	3.6	110
	0845	4.2	127
	1726	1.9	57
18 W ●	0029	6.7	203
	0702	3.3	100
	0938	4.3	132
	1048	4.2	129
	1226*	4.4	135
19 Th	0118	7.0	213
	0744	3.0	90
	1030	4.6	140
	1122	4.5	136
	1321*	5.0	153
20 F	0202	7.2	220
	0824	2.6	80
	1409	5.6	172
	2028	1.4	44
21 Sa	0242	7.3	222
	0903	2.3	70
	1454	6.2	189
	2113	1.5	47
22 Su	0320	7.2	220
	0941	2.0	60
	1537	6.7	203
	2156	1.7	53
23 M	0355	7.1	216
	1017	1.7	51
	1618	6.9	210
	2236	2.1	63
24 Tu	0426	6.9	209
	1051	1.5	45
	1659	6.9	210
	2314	2.5	75
25 W ◐	0452	6.5	198
	1122	1.4	42
	1743	6.7	204
	2353	2.9	89
26 Th	0513	6.1	185
	1151	1.5	45
	1836	6.3	193
27 F	0039	3.4	104
	0532	5.5	167
	1222	1.7	52
	2000	6.0	182
28 Sa	0212	3.9	118
	0600	4.9	149
	1304	2.0	62
	2138	5.9	179

March

	Time	Height	
	h m	ft	cm
1 Su	0417	3.8	116
	0643	4.3	132
	1358	2.3	70
	1449	2.4	73
	1559*	2.2	68
2 M	0524	3.4	105
	0746	3.9	120
	0907	3.8	115
	1059	4.1	126
	1714*	2.2	68
3 Tu	0612	3.1	93
	1157	4.5	137
	1807	2.0	62
4 W	0033	6.3	193
	0652	2.7	83
	1241	5.0	152
	1852	1.9	57
5 Th ○	0110	6.5	197
	0727	2.5	75
	1315	5.4	166
	1930	1.8	55
6 F	0140	6.6	201
	0758	2.3	69
	1344	5.9	180
	2003	1.8	54
7 Sa	0205	6.7	204
	0824	2.1	63
	1412	6.3	191
	2031	1.8	55
8 Su	0230	6.8	207
	0847	1.9	57
	1443	6.6	200
	2058	1.9	57
9 M	0257	6.8	206
	0910	1.6	50
	1515	6.7	205
	2126	2.0	60
10 Tu	0325	6.6	202
	0934	1.4	44
	1550	6.8	208
	2156	2.1	65
11 W	0351	6.4	194
	0958	1.3	39
	1625	6.8	207
	2228	2.4	72
12 Th	0345	6.1	185
	1018	1.2	36
	1704	6.6	202
	2304	2.7	81
13 F ◑	0333	5.8	178
	1028	1.1	35
	1749	6.4	195
	2351	3.0	92
14 Sa	0407	5.5	168
	1055	1.3	40
	1845	6.1	186
15 Su	0057	3.4	104
	0448	5.0	153
	1144	1.6	49
	1957	5.9	179

	Time	Height	
	h m	ft	cm
16 M	0218	3.7	112
	0543	4.5	138
	1325	1.9	59
	2124	5.8	177
17 Tu	0412	3.7	113
	0724	4.2	128
	1445	2.2	66
	2253	6.0	183
18 W	0544	3.4	103
	0835	4.2	128
	0946	4.0	123
	1103	4.2	128
	1719	2.3	69
19 Th	0001	6.3	192
	0633	3.0	90
	1217	4.9	149
	1833	2.0	62
20 F ●	0052	6.6	200
	0716	2.6	78
	1309	5.7	173
	1927	1.8	56
21 Sa	0137	6.7	204
	0756	2.2	66
	1355	6.4	196
	2015	1.8	54
22 Su	0218	6.7	204
	0835	1.8	56
	1439	7.0	213
	2059	1.9	57
23 M	0255	6.6	202
	0913	1.5	46
	1521	7.3	223
	2141	2.1	63
24 Tu	0328	6.5	198
	0948	1.3	40
	1601	7.4	226
	2220	2.4	72
25 W	0356	6.3	192
	1018	1.2	36
	1638	7.3	222
	2256	2.7	81
26 Th	0417	6.1	185
	1041	1.2	37
	1715	7.0	214
	2331	3.0	91
27 F ◐	0437	5.7	175
	1100	1.4	42
	1755	6.6	202
28 Sa	0008	3.3	102
	0503	5.3	161
	1132	1.7	52
	1846	6.2	188
29 Su	0105	3.7	113
	0541	4.8	146
	1216	2.2	67
	2051	5.8	177
30 M	0342	3.7	112
	0635	4.3	132
	1315	2.8	84
	2212	5.8	176
31 Tu	0451	3.4	103
	1041	4.4	134
	1647	2.9	88
	2314	5.9	179

Time meridian 60° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.
Heights are referred to the chart datum of soundings.
* See Page 276 for the remaining tides on this day.

Punta Arenas, Chile, 2015

Times and Heights of High and Low Waters

April

	Time	Height	
	h m	ft	cm
1 W	0541	3.0	91
	1141	5.0	151
	1746	2.8	84
2 Th	0002	6.0	183
	0622	2.7	82
	1224	5.5	168
	1831	2.6	79
3 F	0039	6.1	187
	0656	2.4	74
	1258	6.0	184
	1910	2.5	76
4 Sa ○	0107	6.3	191
	0725	2.2	66
	1326	6.5	197
	1943	2.5	75
5 Su	0131	6.4	194
	0750	1.9	59
	1354	6.8	208
	2014	2.4	74
6 M	0159	6.4	194
	0814	1.7	52
	1426	7.1	217
	2045	2.4	74
7 Tu	0229	6.3	191
	0839	1.5	45
	1500	7.3	221
	2117	2.5	75
8 W	0300	6.0	184
	0904	1.3	40
	1536	7.3	222
	2151	2.6	78
9 Th	0326	5.8	176
	0925	1.1	35
	1613	7.2	219
	2225	2.7	82
10 F	0219	5.6	172
	0926	1.0	31
	1651	7.0	213
	2303	2.8	86
11 Sa ◑	0257	5.5	168
	0943	1.0	30
	1732	6.8	206
	2348	3.0	91
12 Su	0341	5.2	160
	1023	1.1	35
	1822	6.5	197
13 M	0047	3.2	97
	0433	4.9	148
	1115	1.5	46
	1924	6.2	188
14 Tu	0201	3.3	101
	0554	4.4	135
	1235	2.0	62
	2043	5.9	181
15 W	0335	3.2	99
	0727	4.3	130
	1417	2.5	76
	2213	5.8	178

	Time	Height	
	h m	ft	cm
16 Th	0504	3.0	90
	1055	4.7	143
	1708	2.6	80
	2327	5.9	180
17 F	0600	2.5	76
	1201	5.5	168
	1819	2.4	74
18 Sa ●	0022	6.0	183
	0645	2.1	64
	1252	6.3	192
	1912	2.2	68
19 Su	0109	6.0	183
	0727	1.7	52
	1338	7.0	212
	1959	2.2	66
20 M	0150	6.0	182
	0807	1.4	42
	1421	7.4	226
	2042	2.2	68
21 Tu	0228	5.9	180
	0844	1.1	34
	1503	7.6	231
	2124	2.4	73
22 W	0300	5.8	176
	0918	1.0	30
	1541	7.6	231
	2202	2.6	78
23 Th	0325	5.7	173
	0944	1.0	30
	1616	7.4	227
	2238	2.7	83
24 F	0344	5.5	169
	0959	1.0	32
	1648	7.2	219
	2311	2.9	88
25 Sa ◐	0410	5.4	164
	1023	1.3	39
	1721	6.9	209
	2345	3.1	93
26 Su	0447	5.1	156
	1100	1.7	52
	1800	6.5	197
27 M	0031	3.2	99
	0534	4.8	146
	1147	2.3	71
	1849	6.0	184
28 Tu	0238	3.4	103
	0639	4.5	137
	1247	3.0	91
	2101	5.7	173
29 W	0401	3.2	97
	1005	4.7	142
	1602	3.5	106
	2216	5.6	171
30 Th	0457	2.9	89
	1110	5.2	160
	1712	3.4	105
	2309	5.6	172

May

	Time	Height	
	h m	ft	cm
1 F	0540	2.6	79
	1157	5.8	178
	1803	3.3	101
	2349	5.7	175
2 Sa	0615	2.3	70
	1232	6.4	194
	1844	3.2	97
3 Su ○	0020	5.8	177
	0644	2.0	61
	1302	6.8	208
	1920	3.1	93
4 M	0050	5.9	179
	0712	1.7	53
	1333	7.2	219
	1956	3.0	90
5 Tu	0125	5.8	177
	0740	1.5	45
	1408	7.4	227
	2032	2.9	87
6 W	0201	5.6	172
	0811	1.3	40
	1445	7.6	231
	2109	2.9	87
7 Th	0237	5.4	165
	0840	1.2	36
	1524	7.5	230
	2148	2.9	87
8 F	0104	5.2	158
	0207	5.0	153
	0308	5.2	158
	0901	1.1	33
	1603*	7.4	227
9 Sa	0144	5.2	160
	0847	1.0	29
	1643	7.3	222
	2307	2.9	88
10 Su	0231	5.2	158
	0920	1.0	29
	1724	7.1	215
	2352	2.9	88
11 M ◑	0326	5.0	153
	1008	1.2	36
	1809	6.8	207
12 Tu	0044	2.9	87
	0443	4.8	145
	1107	1.7	51
	1901	6.4	196
13 W	0146	2.8	85
	0629	4.6	139
	1231	2.3	69
	2006	6.1	185
14 Th	0300	2.6	80
	0902	4.7	142
	1439	2.8	85
	2128	5.7	174
15 F	0421	2.4	72
	1036	5.2	160
	1651	2.9	89
	2249	5.5	167

	Time	Height	
	h m	ft	cm
16 Sa	0524	2.0	61
	1140	6.0	183
	1801	2.7	83
	2350	5.3	163
17 Su	0614	1.6	49
	1232	6.7	203
	1855	2.6	78
18 M ●	0039	5.2	160
	0659	1.2	38
	1319	7.2	218
	1942	2.5	76
	2244*	4.5	138
19 Tu	0122	5.2	158
	0740	1.0	30
	1403	7.4	226
	2026	2.5	76
20 W	0200	5.1	156
	0818	0.8	25
	1444	7.5	229
	2107	2.5	77
21 Th	0232	5.1	155
	0850	0.8	24
	1522	7.5	228
	2146	2.6	78
22 F	0257	5.1	155
	0912	0.9	26
	1555	7.3	224
	2221	2.6	79
23 Sa	0321	5.1	156
	0926	1.0	30
	1624	7.2	219
	2252	2.6	79
24 Su	0354	5.1	156
	0957	1.3	39
	1653	7.0	212
	2323	2.6	79
25 M ◐	0436	5.1	154
	1038	1.7	52
	1728	6.7	204
26 Tu	0001	2.7	82
	0527	4.9	150
	1125	2.3	71
	1809	6.3	193
27 W	0052	2.8	85
	0630	4.8	146
	1221	3.0	91
	1858	5.9	181
28 Th	0203	2.8	86
	0845	4.9	148
	1334	3.6	110
	1955	5.6	171
29 F	0333	2.7	82
	1013	5.3	161
	1604	3.9	120
	2102	5.4	165
30 Sa	0430	2.4	74
	1112	5.8	178
	1720	3.9	119
	2214	5.3	162
31 Su	0512	2.1	65
	1156	6.4	194
	1813	3.7	113
	2312	5.2	160

June

	Time	Height	
	h m	ft	cm
1 M	0549	1.8	55
	1233	6.9	209
	1857	3.4	105
2 Tu ○	0003	5.2	159
	0627	1.5	46
	1310	7.3	221
	1938	3.2	99
3 W	0051	5.1	156
	0706	1.3	39
	1350	7.5	230
	2019	3.1	94
4 Th	0135	5.0	152
	0746	1.1	35
	1431	7.7	234
	2100	3.0	91
	2355	4.7	144
5 F	0051	4.6	139
	0218	4.9	148
	0826	1.0	32
	1513	7.7	234
	2142	2.9	89
6 Sa	0033	4.8	147
	0149	4.7	143
	0257	4.8	146
	0900	1.0	31
	1554*	7.6	231
7 Su	0120	4.9	150
	0243	4.7	142
	0333	4.8	146
	0828	1.0	32
	1634*	7.4	227
8 M	0216	5.0	151
	0333	4.8	145
	0407	4.9	148
	0912	1.1	35
	1713*	7.3	221
9 Tu ◑	0452	5.0	151
	1011	1.4	43
	1753	7.0	213
10 W	0031	2.3	70
	0555	5.0	152
	1125	1.9	58
	1837	6.6	201
11 Th	0123	2.1	64
	0717	5.1	154
	1300	2.5	75
	1928	6.1	185
12 F	0223	1.9	59
	0849	5.2	160
	1445	3.0	90
	2036	5.5	167
13 Sa	0336	1.8	54
	1013	5.7	173
	1631	3.1	94
	2205	5.0	153
14 Su	0448	1.5	46
	1119	6.2	190
	1743	2.9	89
	2049	4.4	135
	2112*	4.3	132
15 M	0545	1.2	36
	1213	6.7	204
	1838	2.8	84
	2121	4.2	128
	2212	4.1	124

	Time	Height	
	h m	ft	cm
16 Tu ●	0011	4.6	139
	0633	0.9	28
	1301	7.0	214
	1926	2.6	80
	2207*	4.1	126
17 W	0056	4.5	136
	0716	0.8	23
	1345	7.2	219
	2010	2.5	77
18 Th	0137	4.5	137
	0756	0.7	21
	1426	7.2	220
	2051	2.4	74
19 F	0212	4.6	139
	0830	0.7	22
	1503	7.2	219
	2129	2.3	71
20 Sa	0241	4.7	144
	0854	0.9	26
	1534	7.1	217
	2202	2.2	68
21 Su	0311	4.9	150
	0911	1.0	31
	1601	7.1	215
	2231	2.2	66
22 M	0346	5.1	155
	0943	1.3	39
	1628	7.0	212
	2257	2.1	63
23 Tu	0427	5.2	158
	1022	1.6	50
	1700	6.8	207
	2329	2.1	63
24 W ◐	0513	5.2	159
	1104	2.2	66
	1735	6.5	198
25 Th	0010	2.1	63
	0608	5.2	157
	1154	2.8	84
	1814	6.1	187
26 F	0058	2.1	64
	0717	5.2	157
	1255	3.4	103
	1858	5.7	175
27 Sa	0152	2.1	63
	0846	5.3	161
	1410	3.9	118
	1949	5.3	163
28 Su	0248	1.9	59
	1005	5.7	173
	1552	4.1	124
	2044	5.0	152
29 M	0343	1.8	54
	1108	6.1	187
	1735	3.9	119
	2147	4.7	144
30 Tu	0438	1.6	48
	1201	6.6	202
	1835	3.6	109
	2308	4.6	139

Time meridian 60° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.
Heights are referred to the chart datum of soundings.
* See Page 276 for the remaining tides on this day.

Punta Arenas, Chile, 2015

Times and Heights of High and Low Waters

July

	Time	Height	
	h m	ft	cm
1 W ○	0536	1.4	42
	1248	7.1	215
	1922	3.3	100
2 Th	0019	4.5	137
	0635	1.2	37
	1333	7.3	224
	2005	3.1	94
	2250*	4.4	133
3 F	0115	4.5	137
	0729	1.1	33
	1417	7.5	230
	2047	2.9	89
	2327	4.5	136
4 Sa	0036	4.4	133
	0205	4.6	139
	0819	1.0	31
	1500	7.6	232
	2128	2.8	84
5 Su	0012	4.7	142
	0124	4.5	137
	0250	4.7	144
	0905	1.0	32
	1540*	7.6	231
6 M	0105	4.8	147
	0205	4.7	144
	0334	5.0	151
	0948	1.2	36
	1618*	7.4	227
7 Tu	0418	5.2	159
	1028	1.4	42
	1654	7.3	221
	2326	2.0	60
8 W ◑	0506	5.4	166
	1109	1.7	51
	1730	7.0	212
9 Th	0007	1.7	51
	0600	5.6	170
	1159	2.1	64
	1807	6.5	199
10 F	0052	1.5	45
	0705	5.6	171
	1302	2.6	79
	1846	5.9	181
11 Sa	0144	1.4	42
	0827	5.7	173
	1427	3.1	93
	1924	5.2	160
12 Su	0250	1.3	40
	0950	5.9	179
	1610	3.2	98
	1938	4.6	140
13 M	0412	1.2	37
	1058	6.2	189
	1726	3.1	93
	2008	4.1	125
	2118*	3.9	120
14 Tu	0518	1.0	31
	1155	6.5	198
	1823	2.8	86
	2053	3.8	117
	2202*	3.7	114
15 W ●	0612	0.9	26
	1244	6.7	204
	1910	2.6	79
	2147	3.7	114
	2243	3.6	110
16 Th	0038	4.1	124
	0658	0.8	23
	1328	6.8	208
	1953	2.4	73
17 F	0122	4.2	129
	0740	0.7	22
	1408	6.9	209
	2032	2.2	67
18 Sa	0159	4.5	137
	0817	0.8	24
	1443	6.9	210
	2108	2.0	62
19 Su	0232	4.8	146
	0847	0.9	28
	1512	6.9	210
	2139	1.9	57
20 M	0303	5.1	156
	0909	1.1	33
	1537	6.9	210
	2203	1.7	53
21 Tu	0336	5.3	163
	0935	1.3	39
	1603	6.9	209
	2226	1.6	49
22 W	0413	5.5	169
	1008	1.5	47
	1632	6.8	206
	2255	1.5	45
23 Th	0454	5.6	171
	1045	2.0	60
	1703	6.5	198
	2331	1.4	43
24 F ◐	0541	5.5	169
	1128	2.5	76
	1734	6.1	187
25 Sa	0012	1.4	43
	0637	5.5	167
	1222	3.1	93
	1805	5.6	172
26 Su	0101	1.5	45
	0744	5.4	166
	1330	3.5	108
	1842	5.1	156
27 M	0155	1.5	46
	0901	5.6	170
	1449	3.8	117
	1938	4.6	141
28 Tu	0251	1.5	46
	1018	5.8	178
	1646	3.8	117
	2034	4.3	131
29 W	0346	1.5	45
	1129	6.3	191
	1817	3.5	107
	2117	4.1	125
30 Th	0447	1.4	43
	1227	6.7	204
	1906	3.2	97
	2149	4.1	124
	2249*	3.9	120
31 F ○	0615	1.3	40
	1315	7.1	215
	1947	2.9	89
	2226	4.2	128
	2329	4.1	125

August

	Time	Height	
	h m	ft	cm
1 Sa	0105	4.3	132
	0720	1.2	36
	1400	7.3	222
	2027	2.7	83
	2309	4.4	135
2 Su	0012	4.3	132
	0156	4.7	142
	0813	1.1	34
	1441	7.4	225
	2107	2.5	75
3 M	0000	4.7	143
	0051	4.5	138
	0243	5.1	154
	0900	1.2	36
	1520*	7.3	224
4 Tu	0328	5.5	167
	0944	1.3	40
	1557	7.2	220
	2223	1.8	55
5 W	0412	5.8	178
	1027	1.6	48
	1631	7.0	214
	2300	1.5	45
6 Th ◑	0456	6.1	186
	1108	1.9	57
	1703	6.7	205
	2337	1.2	37
7 F	0545	6.1	187
	1152	2.3	69
	1733	6.3	191
8 Sa	0016	1.1	33
	0643	6.0	184
	1245	2.8	84
	1759	5.7	173
9 Su	0101	1.1	33
	0800	5.8	178
	1403	3.2	98
	1823	5.0	152
10 M	0157	1.2	37
	0927	5.8	178
	1553	3.4	103
	1854	4.3	132
11 Tu	0338	1.3	41
	1039	6.0	183
	1710	3.1	96
	1939	3.8	117
	2114*	3.7	113
12 W	0458	1.3	39
	1138	6.2	189
	1807	2.8	86
	2039	3.5	108
	2136*	3.4	104
13 Th	0556	1.1	35
	1228	6.3	193
	1853	2.5	76
14 F ●	0029	4.1	125
	0644	1.0	32
	1311	6.5	197
	1933	2.2	68
15 Sa	0112	4.5	136
	0727	1.0	31
	1349	6.5	199
	2010	2.0	61
16 Su	0148	4.9	149
	0805	1.0	32
	1420	6.6	201
	2042	1.8	55
17 M	0220	5.3	161
	0837	1.1	34
	1447	6.7	203
	2110	1.6	50
18 Tu	0249	5.6	171
	0902	1.2	38
	1511	6.7	204
	2131	1.4	44
19 W	0320	5.9	179
	0925	1.4	43
	1536	6.7	203
	2153	1.2	38
20 Th	0355	6.0	183
	0954	1.6	49
	1604	6.5	199
	2220	1.1	33
21 F	0432	6.1	185
	1028	1.9	58
	1631	6.3	191
	2252	1.0	30
22 Sa ◐	0514	6.0	183
	1106	2.3	70
	1650	5.9	179
	2327	1.0	30
23 Su	0602	5.8	178
	1155	2.8	84
	1632	5.4	166
24 M	0009	1.1	34
	0700	5.6	172
	1259	3.2	98
	1700	5.0	151
25 Tu	0104	1.3	40
	0810	5.6	170
	1414	3.5	108
	1747	4.4	135
26 W	0205	1.5	45
	0931	5.6	172
	1554	3.6	111
	1942	4.0	123
27 Th	0305	1.6	48
	1055	5.9	181
	1753	3.3	102
	2042	3.9	120
28 F	0410	1.6	50
	1202	6.3	193
	1841	3.0	91
	2130	4.0	122
	2223*	3.9	118
29 Sa ○	0610	1.6	48
	1253	6.7	204
	1922	2.7	82
30 Su	0056	4.6	141
	0712	1.4	43
	1337	6.9	211
	2001	2.4	73
31 M	0145	5.2	160
	0803	1.3	41
	1418	7.0	213
	2040	2.1	63

September

	Time	Height	
	h m	ft	cm
1 Tu	0231	5.8	177
	0849	1.4	42
	1457	6.9	211
	2118	1.7	53
2 W	0315	6.3	192
	0933	1.5	47
	1533	6.8	207
	2155	1.4	42
3 Th	0357	6.6	201
	1015	1.8	55
	1606	6.6	201
	2231	1.1	34
4 F	0440	6.7	204
	1055	2.1	65
	1634	6.3	192
	2304	1.0	29
5 Sa ◑	0524	6.6	201
	1136	2.5	76
	1656	5.9	179
	2335	1.0	29
6 Su	0615	6.3	192
	1223	2.9	89
	1717	5.4	164
7 M	0008	1.1	34
	0727	5.9	181
	1338	3.3	102
	1746	4.8	145
8 Tu	0050	1.4	44
	0902	5.7	175
	1535	3.4	104
	1828	4.1	126
9 W	0154	1.7	53
	0227	1.8	56
	0305	1.7	53
	1016	5.8	176
	1652*	3.1	95
10 Th	0441	1.8	56
	1118	5.9	180
	1747	2.7	83
	2330	4.1	126
11 F	0541	1.7	52
	1209	6.0	184
	1830	2.4	73
12 Sa	0020	4.6	141
	0630	1.6	48
	1251	6.2	188
	1908	2.1	64
13 Su ●	0101	5.2	157
	0713	1.5	45
	1326	6.3	191
	1942	1.9	57
14 M	0134	5.6	170
	0750	1.5	45
	1354	6.3	193
	2013	1.7	51
15 Tu	0203	6.0	182
	0822	1.5	47
	1418	6.4	194
	2037	1.5	45
16 W	0231	6.3	191
	0849	1.6	50
	1442	6.4	195
	2057	1.3	39
17 Th	0302	6.5	197
	0913	1.7	53
	1508	6.3	192
	2118	1.1	33
18 F	0335	6.6	200
	0942	1.9	57
	1536	6.1	186
	2144	0.9	28
19 Sa	0411	6.6	200
	1014	2.1	63
	1600	5.8	176
	2210	0.8	25
20 Su	0450	6.4	196
	1051	2.3	70
	1517	5.5	168
	2234	0.8	25
21 M ◐	0533	6.2	189
	1136	2.6	80
	1547	5.2	159
	2255	1.0	30
22 Tu	0624	5.9	181
	1235	3.0	91
	1628	4.8	146
	2342	1.3	39
23 W	0728	5.7	174
	1347	3.3	100
	1724	4.3	131
24 Th	0114	1.6	49
	0847	5.6	171
	1519	3.4	103
	1914	4.0	121
25 F	0227	1.9	57
	1017	5.7	175
	1716	3.1	95
	2030	4.0	121
	2126*	3.8	117
26 Sa	0357	2.1	63
	1131	6.0	183
	1809	2.7	83
	2348	4.6	139
27 Su ○	0603	1.9	59
	1225	6.3	191
	1852	2.4	72
28 M	0043	5.3	162
	0700	1.8	54
	1310	6.4	195
	1931	2.0	61
29 Tu	0130	6.1	185
	0749	1.7	51
	1352	6.4	195
	2011	1.6	50
30 W	0214	6.7	203
	0835	1.7	52
	1431	6.3	193
	2049	1.3	40

Time meridian 60° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.
Heights are referred to the chart datum of soundings.
* See Page 276 for the remaining tides on this day.

Punta Arenas, Chile, 2015

Times and Heights of High and Low Waters

October

	Time	Height	
	h m	ft	cm
1 Th	0258	7.1	215
	0918	1.8	56
	1507	6.2	189
	2126	1.0	32
2 F	0340	7.2	220
	0959	2.1	63
	1539	6.0	183
	2200	0.9	27
3 Sa	0421	7.2	218
	1039	2.4	72
	1603	5.8	176
	2228	0.9	26
4 Su ◑	0501	6.9	210
	1119	2.7	81
	1621	5.5	167
	2248	1.0	30
5 M	0543	6.5	199
	1201	3.0	91
	1646	5.1	155
	2316	1.3	40
6 Tu	0638	6.1	185
	1310	3.3	100
	1726	4.6	141
7 W	0001	1.8	55
	0823	5.7	175
	1506	3.3	101
	1824	4.1	126
8 Th	0104	2.4	73
	0942	5.6	172
	1621	3.0	92
	2212	4.2	128
9 F	0419	2.5	77
	1047	5.7	173
	1716	2.7	81
	2317	4.7	144
10 Sa	0523	2.4	73
	1140	5.8	176
	1800	2.3	71
11 Su	0006	5.3	163
	0613	2.3	69
	1223	5.9	179
	1838	2.0	62
12 M ●	0045	5.9	179
	0656	2.2	66
	1256	6.0	182
	1911	1.8	55
13 Tu	0117	6.3	192
	0732	2.1	65
	1322	6.0	183
	1939	1.6	48
14 W	0145	6.6	202
	0804	2.1	65
	1346	6.0	183
	2002	1.4	42
15 Th	0213	6.9	210
	0834	2.1	65
	1412	5.9	181
	2023	1.2	36

	Time	Height	
	h m	ft	cm
16 F	0244	7.1	215
	0903	2.2	67
	1441	5.8	176
	2046	1.0	31
17 Sa	0318	7.1	216
	0934	2.3	69
	1511	5.5	169
	2110	0.9	27
18 Su	0354	7.0	213
	1008	2.4	72
	1535	5.3	161
	2128	0.8	25
19 M	0432	6.8	208
	1045	2.5	76
	1435	5.2	159
	2130	0.8	25
20 Tu ◐	0513	6.6	201
	1128	2.7	81
	1517	5.0	153
	2201	1.0	30
21 W	0559	6.3	192
	1222	2.9	88
	1607	4.7	143
	2250	1.3	41
22 Th	0655	6.0	183
	1329	3.0	92
	1724	4.3	131
23 F	0004	1.9	57
	0805	5.7	175
	1451	3.1	93
	1908	4.1	125
24 Sa	0154	2.3	71
	0933	5.6	172
	1630	2.8	85
	2219	4.4	135
25 Su	0423	2.6	79
	1054	5.6	172
	1733	2.4	73
	2332	5.2	158
26 M	0550	2.4	73
	1153	5.7	175
	1819	2.0	61
27 Tu ○	0025	6.0	183
	0646	2.2	67
	1242	5.7	175
	1902	1.6	49
28 W	0112	6.7	205
	0734	2.1	63
	1325	5.7	174
	1942	1.2	38
29 Th	0157	7.2	220
	0819	2.1	63
	1405	5.6	172
	2021	1.0	29
30 F	0240	7.5	228
	0902	2.2	66
	1441	5.5	169
	2058	0.8	24
31 Sa	0322	7.5	229
	0944	2.3	71
	1511	5.4	165
	2130	0.8	23

November

	Time	Height	
	h m	ft	cm
1 Su	0401	7.4	225
	1024	2.5	77
	1533	5.3	161
	2149	0.9	27
2 M	0438	7.1	216
	1102	2.7	82
	1552	5.2	157
	2204	1.1	34
3 Tu ◑	0512	6.8	206
	1141	2.9	87
	1628	4.9	150
	2239	1.5	46
4 W	0549	6.4	194
	1234	3.0	92
	1717	4.6	141
	2327	2.1	65
5 Th	0640	5.9	180
	1414	3.1	94
	1827	4.4	133
6 F	0033	2.8	86
	0843	5.6	170
	1533	2.9	89
	2142	4.6	140
7 Sa	0339	3.2	99
	0955	5.5	167
	1633	2.7	81
	2252	5.2	158
8 Su	0453	3.2	97
	1054	5.5	167
	1721	2.3	71
	2344	5.8	177
9 M	0550	3.1	94
	1140	5.5	168
	1801	2.0	62
10 Tu	0023	6.3	193
	0635	3.0	90
	1215	5.5	169
	1834	1.8	54
11 W ●	0056	6.8	206
	0713	2.8	86
	1242	5.6	170
	1901	1.5	46
12 Th	0124	7.1	216
	0747	2.7	83
	1311	5.5	169
	1926	1.3	39
13 F	0155	7.3	224
	0820	2.6	80
	1343	5.4	166
	1952	1.1	34
14 Sa	0228	7.5	228
	0854	2.6	78
	1418	5.3	161
	2020	1.0	30
15 Su	0304	7.5	228
	0930	2.6	79
	1258	4.9	150
	1321	4.8	147
	1452*	5.1	155

	Time	Height	
	h m	ft	cm
16 M	0342	7.4	225
	1007	2.6	80
	1325	5.0	152
	1435	4.8	146
	1522*	4.9	150
17 Tu	0421	7.2	220
	1046	2.7	81
	1407	5.0	153
	2057	0.9	28
18 W	0501	7.0	213
	1128	2.7	82
	1457	4.9	150
	2138	1.1	34
19 Th ◐	0542	6.7	204
	1216	2.7	83
	1601	4.7	143
	2230	1.5	47
20 F	0628	6.4	194
	1312	2.7	82
	1743	4.5	137
	2337	2.1	65
21 Sa	0724	6.0	182
	1420	2.6	79
	2012	4.5	137
22 Su	0135	2.7	83
	0840	5.6	171
	1542	2.4	73
	2202	5.0	152
23 M	0411	3.0	91
	1011	5.3	162
	1653	2.0	62
	2312	5.7	175
24 Tu	0534	2.8	86
	1119	5.2	158
	1747	1.6	49
25 W ○	0006	6.5	197
	0630	2.6	79
	1212	5.1	155
	1834	1.2	38
26 Th	0054	7.0	214
	0719	2.4	74
	1258	5.0	153
	1917	0.9	28
27 F	0140	7.4	225
	0804	2.4	73
	1340	5.0	152
	1957	0.7	22
28 Sa	0223	7.5	230
	0848	2.4	74
	1417	5.0	151
	2035	0.7	20
29 Su	0305	7.5	229
	0930	2.5	75
	1449	4.9	150
	2105	0.8	23
30 M	0343	7.4	225
	1009	2.5	76
	1513	5.0	151
	2118	1.0	29

December

	Time	Height	
	h m	ft	cm
1 Tu	0416	7.2	219
	1046	2.6	78
	1538	5.0	152
	2136	1.2	38
2 W	0445	6.9	211
	1119	2.6	79
	1618	5.0	152
	2216	1.7	52
3 Th ◑	0514	6.7	203
	1154	2.6	80
	1709	4.9	149
	2304	2.3	70
4 F	0552	6.3	192
	1243	2.7	83
	1815	4.8	145
5 Sa	0003	3.0	91
	0639	5.9	179
	1359	2.8	84
	2035	4.8	147
6 Su	0125	3.6	110
	0737	5.5	167
	1519	2.7	81
	2202	5.2	160
7 M	0354	3.9	120
	0852	5.2	159
	1619	2.4	74
	2308	5.8	177
8 Tu	0515	3.9	118
	1010	5.1	155
	1706	2.1	65
	2355	6.3	193
9 W	0611	3.7	112
	1106	5.1	154
	1744	1.8	55
10 Th	0031	6.8	208
	0654	3.4	104
	1153	5.1	154
	1818	1.5	46
11 F ●	0104	7.2	220
	0731	3.2	97
	1236	5.1	154
	1852	1.3	39
12 Sa	0138	7.5	228
	0807	3.0	90
	1318	5.0	153
	1929	1.1	34
13 Su	0215	7.7	234
	0844	2.9	87
	1400	5.0	151
	2007	1.0	31
14 M	0253	7.7	235
	0922	2.8	85
	1221	4.7	144
	1310	4.6	139
	1439*	4.9	149
15 Tu	0333	7.6	233
	1001	2.8	84
	1300	4.9	149
	1408	4.8	145
	1517*	4.9	148

	Time	Height	
	h m	ft	cm
16 W	0411	7.5	228
	1040	2.7	82
	1348	5.0	152
	2042	1.2	36
17 Th	0449	7.3	222
	1119	2.6	79
	1449	5.0	153
	1554	4.9	148
	1623*	5.0	152
18 F ◐	0525	7.0	214
	1201	2.4	74
	1712	5.0	153
	2223	1.8	55
19 Sa	0602	6.7	203
	1248	2.3	69
	1826	5.0	153
	2332	2.4	73
20 Su	0641	6.2	188
	1343	2.1	65
	2000	5.1	156
21 M	0139	3.0	91
	0727	5.6	171
	1453	2.0	60
	2136	5.5	167
22 Tu	0349	3.3	100
	0910	5.0	153
	1613	1.7	52
	2249	6.0	183
23 W	0514	3.1	96
	1043	4.7	143
	1717	1.4	42
	2348	6.6	200
24 Th	0614	2.9	89
	0900	4.2	128
	0943	4.1	124
	1145	4.5	138
	1810	1.0	32
25 F ○	0039	7.0	212
	0705	2.7	83
	0946	4.1	124
	1031	3.9	120
	1235*	4.5	137
26 Sa	0125	7.2	220
	0750	2.6	79
	1040	4.1	124
	1115	4.0	121
	1320*	4.5	138
27 Su	0209	7.3	224
	0834	2.5	76
	1400	4.6	141
	2019	0.7	21
28 M	0249	7.3	223
	0914	2.4	73
	1436	4.8	146
	2054	0.9	26
29 Tu	0326	7.3	221
	0952	2.3	71
	1506	5.0	152
	2116	1.1	34
30 W	0356	7.1	217
	1025	2.3	70
	1535	5.2	158
	2130	1.4	42
31 Th	0420	7.0	214
	1050	2.2	68
	1611	5.3	163
	2204	1.7	53

Time meridian 60° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.
Heights are referred to the chart datum of soundings.
* See Page 276 for the remaining tides on this day.

Puerto Montt, Chile, 2015

Times and Heights of High and Low Waters

January

	Time	Height	
	h m	ft	cm
1 Th	0504	5.6	171
	1112	17.8	542
	1719	5.6	171
	2333	19.8	604
2 F	0600	4.7	142
	1206	18.6	568
	1810	4.9	150
3 Sa	0022	20.7	631
	0646	3.9	120
	1251	19.3	588
	1853	4.5	137
4 Su	0103	21.3	649
	0726	3.6	109
	1330	19.7	599
	1931	4.4	134
5 M ○	0140	21.5	654
	0802	3.6	110
	1405	19.7	599
	2005	4.6	140
6 Tu	0213	21.3	648
	0835	4.0	121
	1437	19.4	590
	2037	5.0	153
7 W	0243	20.8	633
	0905	4.5	138
	1507	18.8	574
	2107	5.6	172
8 Th	0313	20.0	610
	0934	5.2	159
	1538	18.2	554
	2138	6.4	195
9 F	0343	19.1	583
	1003	6.0	183
	1609	17.5	532
	2209	7.2	219
10 Sa	0414	18.1	551
	1034	6.8	208
	1642	16.7	509
	2244	8.0	245
11 Su	0448	17.0	519
	1108	7.6	233
	1721	16.0	487
	2325	8.9	271
12 M	0528	16.0	487
	1148	8.4	256
	1809	15.5	471
13 Tu ◑	0017	9.5	291
	0620	15.1	461
	1239	9.0	274
	1912	15.3	466
14 W	0127	9.9	302
	0731	14.6	446
	1346	9.3	282
	2024	15.6	474
15 Th	0251	9.6	294
	0853	14.7	449
	1502	9.0	274
	2133	16.4	500

	Time	Height	
	h m	ft	cm
16 F	0407	8.7	265
	1007	15.5	471
	1611	8.2	250
	2234	17.7	539
17 Sa	0507	7.3	222
	1108	16.6	507
	1711	7.0	213
	2328	19.3	587
18 Su	0559	5.6	171
	1201	18.0	549
	1803	5.6	171
19 M	0018	20.8	635
	0647	4.0	121
	1250	19.3	589
	1852	4.3	130
20 Tu ●	0106	22.2	677
	0733	2.6	79
	1337	20.4	623
	1939	3.2	97
21 W	0152	23.2	706
	0817	1.7	51
	1422	21.2	645
	2025	2.5	76
22 Th	0236	23.5	715
	0901	1.3	41
	1506	21.4	652
	2111	2.4	73
23 F	0321	23.1	703
	0944	1.6	50
	1550	21.1	643
	2156	2.9	87
24 Sa	0405	22.0	672
	1028	2.5	76
	1635	20.4	622
	2244	3.9	118
25 Su	0452	20.5	625
	1113	3.8	115
	1724	19.4	591
	2336	5.2	159
26 M	0544	18.7	569
	1204	5.3	162
	1822	18.3	557
27 Tu ◐	0039	6.7	204
	0648	16.9	514
	1307	6.8	208
	1935	17.4	531
28 W	0204	7.7	234
	0815	15.7	479
	1431	7.7	236
	2102	17.3	528
29 Th	0343	7.6	231
	0953	15.7	479
	1601	7.6	233
	2224	18.1	551
30 F	0502	6.6	200
	1109	16.7	508
	1710	6.8	208
	2326	19.3	588
31 Sa	0557	5.3	163
	1203	17.8	543
	1801	5.9	179

February

	Time	Height	
	h m	ft	cm
1 Su	0013	20.4	622
	0640	4.3	132
	1245	18.8	572
	1842	5.1	156
2 M	0052	21.2	646
	0717	3.7	113
	1320	19.4	591
	1918	4.7	142
3 Tu ○	0126	21.6	658
	0749	3.5	106
	1351	19.7	599
	1950	4.6	139
4 W	0157	21.6	658
	0819	3.6	109
	1421	19.6	597
	2020	4.7	143
5 Th	0225	21.2	647
	0846	3.9	120
	1448	19.3	588
	2048	5.1	155
6 F	0253	20.6	629
	0912	4.5	137
	1515	18.8	574
	2116	5.6	172
7 Sa	0320	19.8	603
	0937	5.2	158
	1542	18.2	556
	2145	6.4	194
8 Su	0347	18.8	572
	1003	6.0	184
	1609	17.6	536
	2214	7.2	219
9 M	0415	17.7	540
	1030	6.9	210
	1638	16.9	516
	2247	8.1	246
10 Tu	0445	16.7	508
	1100	7.7	236
	1712	16.3	498
	2325	8.9	272
11 W ◑	0522	15.6	477
	1137	8.5	260
	1759	15.9	484
12 Th	0019	9.6	294
	0618	14.8	451
	1232	9.3	282
	1909	15.6	476
13 F	0143	10.0	304
	0748	14.3	435
	1357	9.6	294
	2041	16.0	488
14 Sa	0330	9.4	286
	0933	14.8	450
	1537	9.1	277
	2206	17.2	525
15 Su	0450	7.8	237
	1052	16.1	492
	1654	7.6	233
	2312	19.0	580

	Time	Height	
	h m	ft	cm
16 M	0547	5.8	176
	1150	17.9	546
	1752	5.8	176
17 Tu	0006	21.0	639
	0635	3.7	114
	1239	19.7	601
	1842	3.9	120
18 W ●	0055	22.7	691
	0720	2.0	62
	1324	21.2	646
	1929	2.4	74
19 Th	0140	23.8	725
	0803	0.9	28
	1407	22.2	676
	2013	1.5	46
20 F	0223	24.1	735
	0844	0.6	17
	1449	22.5	685
	2057	1.3	41
21 Sa	0305	23.6	720
	0924	1.0	30
	1530	22.1	675
	2140	2.0	60
22 Su	0347	22.3	681
	1005	2.1	64
	1612	21.2	647
	2224	3.2	98
23 M	0430	20.5	626
	1046	3.7	113
	1657	19.9	607
	2312	4.9	149
24 Tu	0519	18.4	562
	1133	5.6	170
	1750	18.4	562
25 W ◐	0011	6.7	203
	0620	16.4	501
	1232	7.4	225
	1901	17.2	523
26 Th	0135	8.0	244
	0750	15.1	460
	1400	8.6	263
	2034	16.7	508
27 F	0324	8.0	245
	0939	15.2	462
	1543	8.5	260
	2204	17.3	528
28 Sa	0446	7.0	212
	1057	16.3	496
	1655	7.5	228
	2308	18.5	565

March

	Time	Height	
	h m	ft	cm
1 Su	0539	5.6	172
	1147	17.6	536
	1745	6.3	193
	2354	19.7	601
2 M	0619	4.5	138
	1226	18.7	569
	1824	5.3	162
3 Tu	0031	20.6	629
	0654	3.7	114
	1258	19.4	592
	1858	4.6	140
4 W	0103	21.2	645
	0724	3.3	101
	1328	19.9	606
	1929	4.2	128
5 Th ○	0133	21.3	650
	0752	3.2	99
	1355	20.0	610
	1958	4.1	124
6 F	0202	21.1	644
	0818	3.4	105
	1422	19.9	607
	2026	4.2	129
7 Sa	0229	20.6	629
	0843	3.9	119
	1448	19.6	598
	2054	4.6	141
8 Su	0257	19.9	607
	0908	4.6	139
	1513	19.2	584
	2122	5.2	160
9 M	0324	19.0	579
	0933	5.4	164
	1539	18.6	566
	2151	6.0	184
10 Tu	0351	18.0	549
	0959	6.3	191
	1606	17.9	547
	2222	6.9	211
11 W	0421	17.0	518
	1028	7.2	220
	1637	17.3	528
	2258	7.8	238
12 Th	0457	16.0	487
	1103	8.1	248
	1718	16.7	508
	2347	8.7	264
13 F ◑	0550	15.1	459
	1155	9.1	276
	1823	16.1	490
14 Sa	0105	9.3	282
	0719	14.4	440
	1322	9.7	295
	2001	16.0	488
15 Su	0256	8.9	272
	0911	14.9	454
	1515	9.2	280
	2141	17.1	520

	Time	Height	
	h m	ft	cm
16 M	0425	7.3	224
	1034	16.5	502
	1639	7.5	228
	2253	18.9	576
17 Tu	0525	5.2	160
	1132	18.5	563
	1738	5.3	162
	2349	20.9	637
18 W	0614	3.2	98
	1220	20.4	622
	1827	3.2	99
19 Th	0037	22.6	689
	0659	1.6	48
	1304	21.9	669
	1913	1.6	50
20 F ●	0122	23.6	720
	0741	0.6	19
	1346	22.9	698
	1957	0.8	24
21 Sa	0205	23.8	726
	0821	0.5	15
	1427	23.1	705
	2039	0.8	23
22 Su	0247	23.2	706
	0901	1.1	34
	1507	22.6	690
	2121	1.5	46
23 M	0328	21.9	666
	0940	2.4	74
	1547	21.5	656
	2204	2.9	88
24 Tu	0410	20.1	612
	1020	4.1	126
	1629	20.0	611
	2250	4.6	140
25 W	0457	18.1	552
	1104	6.0	184
	1718	18.4	561
	2344	6.4	194
26 Th	0556	16.3	497
	1201	7.8	239
	1823	16.9	516
27 F ◐	0100	7.7	236
	0720	15.1	460
	1326	9.1	276
	1951	16.1	492
28 Sa	0241	8.1	246
	0905	15.1	460
	1512	9.1	276
	2124	16.4	500
29 Su	0406	7.3	222
	1023	16.1	491
	1626	8.0	244
	2232	17.4	531
30 M	0502	6.1	186
	1114	17.4	529
	1716	6.7	205
	2320	18.5	564
31 Tu	0543	5.0	152
	1152	18.5	563
	1756	5.6	170
	2359	19.4	592

Time meridian 60° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.
Heights are referred to the chart datum of soundings.

Puerto Montt, Chile, 2015

Times and Heights of High and Low Waters

April

	Time	Height	
	h m	ft	cm
1 W	0617	4.2	127
	1225	19.4	590
	1830	4.7	142
2 Th	0032	20.0	611
	0648	3.6	111
	1254	19.9	608
	1901	4.0	121
3 F	0103	20.4	621
	0716	3.4	103
	1322	20.3	620
	1931	3.6	109
4 Sa ○	0133	20.4	622
	0743	3.4	104
	1349	20.5	624
	2000	3.5	106
5 Su	0202	20.2	615
	0810	3.7	112
	1416	20.4	621
	2030	3.7	112
6 M	0232	19.7	599
	0837	4.2	128
	1443	20.1	612
	2100	4.1	126
7 Tu	0302	19.0	578
	0905	4.9	150
	1511	19.6	597
	2131	4.8	147
8 W	0333	18.1	552
	0934	5.8	176
	1541	19.0	578
	2205	5.6	171
9 Th	0407	17.2	525
	1007	6.8	206
	1616	18.2	556
	2245	6.5	198
10 F	0449	16.3	497
	1048	7.7	235
	1701	17.5	532
	2337	7.3	224
11 Sa ◑	0548	15.5	472
	1146	8.6	263
	1806	16.7	509
12 Su	0051	7.9	241
	0712	15.1	461
	1312	9.1	278
	1937	16.5	502
13 M	0226	7.7	234
	0849	15.7	478
	1455	8.5	260
	2112	17.2	525
14 Tu	0352	6.4	196
	1006	17.2	525
	1616	6.8	208
	2227	18.8	572
15 W	0455	4.7	144
	1105	19.1	582
	1717	4.8	145
	2325	20.5	624

	Time	Height	
	h m	ft	cm
16 Th	0547	3.0	92
	1155	20.9	636
	1808	2.9	88
17 F	0016	21.9	666
	0633	1.7	53
	1240	22.3	679
	1854	1.5	46
18 Sa ●	0102	22.6	690
	0716	1.1	34
	1323	23.0	702
	1939	0.9	26
19 Su	0145	22.7	692
	0757	1.2	36
	1404	23.1	704
	2021	1.0	30
20 M	0227	22.1	674
	0837	1.9	59
	1444	22.5	687
	2103	1.8	54
21 Tu	0309	21.0	639
	0916	3.2	97
	1523	21.4	653
	2144	3.0	92
22 W	0351	19.5	595
	0955	4.7	144
	1603	20.0	610
	2227	4.5	138
23 Th	0436	18.0	548
	1038	6.4	195
	1648	18.5	564
	2316	6.0	184
24 F	0530	16.5	503
	1130	7.9	242
	1743	17.1	520
25 Sa ◐	0019	7.3	221
	0641	15.5	472
	1242	9.1	276
	1857	16.0	489
26 Su	0141	7.9	240
	0810	15.2	464
	1417	9.3	284
	2023	15.8	481
27 M	0305	7.6	232
	0929	15.9	484
	1539	8.6	262
	2138	16.3	496
28 Tu	0408	6.8	208
	1026	16.9	514
	1635	7.4	227
	2234	17.1	521
29 W	0454	5.9	180
	1108	17.9	547
	1718	6.3	191
	2317	17.9	546
30 Th	0531	5.1	155
	1143	18.9	576
	1754	5.2	159
	2354	18.6	568

May

	Time	Height	
	h m	ft	cm
1 F	0604	4.4	135
	1215	19.7	601
	1828	4.3	132
2 Sa	0028	19.2	584
	0635	4.0	121
	1244	20.3	620
	1859	3.7	113
3 Su ○	0100	19.5	593
	0704	3.8	115
	1314	20.8	633
	1931	3.3	101
4 M	0133	19.5	595
	0735	3.8	115
	1344	20.9	638
	2004	3.2	99
5 Tu	0206	19.4	590
	0806	4.0	123
	1416	20.9	637
	2038	3.4	104
6 W	0240	19.0	578
	0840	4.6	139
	1449	20.6	627
	2114	3.9	118
7 Th	0317	18.4	560
	0915	5.2	160
	1524	20.0	610
	2153	4.5	137
8 F	0358	17.7	539
	0955	6.1	185
	1605	19.3	588
	2238	5.2	159
9 Sa	0446	17.0	518
	1043	6.9	211
	1655	18.4	562
	2332	5.9	180
10 Su	0545	16.4	501
	1143	7.7	234
	1759	17.7	539
11 M ◑	0039	6.4	195
	0659	16.2	495
	1300	8.0	244
	1917	17.3	527
12 Tu	0157	6.4	195
	0820	16.7	509
	1428	7.6	231
	2041	17.6	536
13 W	0315	5.7	174
	0934	17.8	544
	1548	6.4	194
	2156	18.5	564
14 Th	0421	4.6	140
	1035	19.4	590
	1652	4.8	146
	2259	19.7	599
15 F	0517	3.5	106
	1129	20.8	635
	1747	3.3	101
	2353	20.6	629

	Time	Height	
	h m	ft	cm
16 Sa	0607	2.6	79
	1217	21.9	669
	1837	2.3	69
17 Su	0042	21.2	647
	0652	2.2	67
	1302	22.6	688
	1922	1.8	55
18 M ●	0127	21.3	650
	0735	2.3	71
	1344	22.6	690
	2005	1.9	59
19 Tu	0210	20.9	638
	0815	3.0	90
	1424	22.2	676
	2046	2.6	78
20 W	0251	20.1	614
	0854	3.9	120
	1502	21.3	649
	2126	3.5	107
21 Th	0331	19.1	583
	0932	5.2	157
	1540	20.1	614
	2206	4.7	142
22 F	0412	18.0	549
	1012	6.4	196
	1620	18.9	576
	2248	5.8	177
23 Sa	0458	16.9	516
	1056	7.6	233
	1705	17.6	537
	2336	6.8	208
24 Su	0554	16.0	488
	1152	8.7	264
	1801	16.5	504
25 M ◐	0037	7.6	231
	0703	15.5	472
	1304	9.3	283
	1911	15.8	481
26 Tu	0148	7.9	240
	0820	15.6	475
	1428	9.2	280
	2028	15.6	476
27 W	0258	7.6	232
	0925	16.2	495
	1538	8.5	258
	2134	16.0	487
28 Th	0354	7.0	214
	1015	17.1	522
	1630	7.4	227
	2226	16.6	506
29 F	0439	6.3	193
	1056	18.1	552
	1713	6.4	195
	2309	17.3	527
30 Sa	0517	5.6	171
	1132	19.1	582
	1750	5.4	164
	2348	18.0	548
31 Su	0552	5.0	151
	1206	20.0	610
	1826	4.5	137

June

	Time	Height	
	h m	ft	cm
1 M	0025	18.6	566
	0627	4.4	134
	1240	20.8	633
	1902	3.8	115
2 Tu ○	0103	19.0	580
	0703	4.1	124
	1316	21.3	650
	1940	3.3	101
3 W	0141	19.2	586
	0741	4.0	121
	1353	21.6	658
	2019	3.1	94
4 Th	0221	19.2	586
	0820	4.1	125
	1432	21.5	656
	2100	3.2	97
5 F	0303	19.0	579
	0902	4.5	137
	1513	21.2	645
	2143	3.5	106
6 Sa	0348	18.6	567
	0947	5.0	153
	1559	20.5	626
	2230	4.0	122
7 Su	0437	18.1	553
	1037	5.7	173
	1649	19.7	601
	2321	4.6	140
8 M	0532	17.7	540
	1134	6.3	193
	1747	18.9	575
9 Tu ◑	0020	5.2	158
	0637	17.5	532
	1241	6.8	208
	1855	18.1	552
10 W	0127	5.6	170
	0748	17.6	535
	1359	6.9	211
	2011	17.7	541
11 Th	0239	5.6	170
	0901	18.2	554
	1519	6.4	196
	2127	17.9	546
12 F	0350	5.2	158
	1008	19.2	584
	1631	5.4	166
	2236	18.5	565
13 Sa	0452	4.5	138
	1108	20.3	619
	1731	4.4	133
	2336	19.3	587
14 Su	0546	3.9	119
	1200	21.3	650
	1824	3.5	106
15 M	0027	19.8	605
	0635	3.5	107
	1247	22.0	670
	1911	3.0	91

	Time	Height	
	h m	ft	cm
16 Tu ●	0113	20.2	615
	0718	3.4	105
	1329	22.2	676
	1953	3.0	90
17 W	0155	20.1	613
	0758	3.8	115
	1408	21.9	669
	2032	3.3	101
18 Th	0234	19.7	601
	0835	4.4	134
	1444	21.4	651
	2108	4.0	121
19 F	0310	19.1	582
	0911	5.2	160
	1518	20.5	625
	2143	4.8	145
20 Sa	0346	18.3	558
	0946	6.2	188
	1553	19.5	595
	2218	5.6	171
21 Su	0424	17.5	532
	1023	7.1	217
	1630	18.4	561
	2256	6.5	197
22 M	0507	16.6	507
	1105	8.1	246
	1712	17.3	527
	2340	7.3	221
23 Tu	0558	16.0	487
	1158	8.9	270
	1805	16.3	496
24 W ◐	0033	7.9	241
	0702	15.6	476
	1304	9.4	285
	1910	15.6	474
25 Th	0136	8.2	251
	0811	15.7	480
	1421	9.3	284
	2022	15.3	467
26 F	0241	8.1	248
	0912	16.3	498
	1531	8.7	266
	2127	15.6	476
27 Sa	0338	7.7	234
	1004	17.3	526
	1626	7.8	237
	2222	16.2	495
28 Su	0428	7.0	212
	1048	18.4	560
	1713	6.7	203
	2310	17.1	520
29 M	0512	6.1	186
	1130	19.5	595
	1755	5.5	167
	2354	18.0	548
30 Tu	0555	5.2	160
	1211	20.7	630
	1837	4.4	133

Time meridian 60° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.
Heights are referred to the chart datum of soundings.

Puerto Montt, Chile, 2015

Times and Heights of High and Low Waters

July

	Time	Height	
	h m	ft	cm
1 W ○	0038	18.8	573
	0638	4.5	136
	1253	21.6	659
	1920	3.4	103
2 Th	0121	19.5	594
	0722	3.8	117
	1335	22.3	679
	2002	2.7	83
3 F	0205	19.9	608
	0806	3.5	106
	1419	22.6	688
	2046	2.4	72
4 Sa	0249	20.1	613
	0851	3.4	105
	1503	22.4	683
	2130	2.4	74
5 Su	0334	20.0	610
	0938	3.7	113
	1548	21.8	665
	2215	2.9	87
6 M	0422	19.7	599
	1026	4.3	130
	1636	20.9	636
	2303	3.6	109
7 Tu	0512	19.1	582
	1119	5.1	155
	1729	19.7	599
	2355	4.5	137
8 W ◑	0610	18.5	564
	1220	6.0	183
	1830	18.3	559
9 Th	0055	5.4	166
	0717	18.1	551
	1332	6.7	205
	1944	17.3	528
10 F	0206	6.2	188
	0832	18.1	552
	1457	6.9	210
	2106	17.0	517
11 Sa	0324	6.3	193
	0947	18.7	570
	1618	6.3	191
	2224	17.4	529
12 Su	0435	5.9	179
	1053	19.7	600
	1724	5.2	160
	2328	18.2	554
13 M	0534	5.2	158
	1149	20.7	632
	1817	4.3	131
14 Tu	0020	19.0	580
	0623	4.5	138
	1236	21.6	657
	1901	3.6	111
15 W ●	0104	19.7	599
	0706	4.2	128
	1316	22.0	670
	1940	3.4	103

	Time	Height	
	h m	ft	cm
16 Th	0142	19.9	606
	0743	4.2	127
	1352	21.9	669
	2015	3.5	106
17 F	0216	19.8	603
	0817	4.5	136
	1425	21.6	658
	2047	3.9	119
18 Sa	0248	19.4	592
	0849	5.0	152
	1455	20.9	638
	2117	4.5	138
19 Su	0319	18.9	575
	0920	5.7	173
	1526	20.0	611
	2147	5.2	160
20 M	0351	18.2	554
	0952	6.5	197
	1557	19.0	580
	2217	6.0	184
21 Tu	0424	17.4	531
	1027	7.3	224
	1632	17.9	545
	2251	6.9	211
22 W	0503	16.7	509
	1108	8.2	251
	1712	16.7	510
	2331	7.8	237
23 Th	0550	16.1	491
	1158	9.0	275
	1802	15.7	480
24 F ◐	0020	8.5	258
	0650	15.7	480
	1303	9.5	291
	1908	15.1	459
25 Sa	0121	8.9	272
	0759	15.9	484
	1422	9.5	289
	2026	14.9	455
26 Su	0233	8.9	270
	0907	16.5	504
	1538	8.8	267
	2138	15.5	471
27 M	0341	8.3	252
	1006	17.7	538
	1639	7.5	229
	2239	16.5	502
28 Tu	0440	7.2	220
	1059	19.1	581
	1730	6.0	183
	2331	17.7	540
29 W	0532	5.9	181
	1148	20.5	626
	1817	4.4	135
30 Th	0019	19.0	580
	0621	4.6	140
	1235	21.9	668
	1902	3.0	92
31 F ○	0105	20.2	616
	0708	3.4	104
	1320	23.0	700
	1946	1.9	58

August

	Time	Height	
	h m	ft	cm
1 Sa	0150	21.1	643
	0754	2.5	77
	1405	23.5	716
	2029	1.3	40
2 Su	0233	21.6	657
	0839	2.2	66
	1449	23.4	713
	2112	1.3	40
3 M	0317	21.6	657
	0924	2.3	71
	1533	22.7	691
	2155	1.9	58
4 Tu	0401	21.1	643
	1011	3.0	92
	1619	21.4	652
	2239	3.0	90
5 W	0448	20.3	618
	1101	4.2	128
	1708	19.7	601
	2327	4.4	134
6 Th ◑	0542	19.2	586
	1158	5.6	170
	1807	17.9	546
7 F	0024	5.9	180
	0647	18.2	556
	1310	6.8	208
	1922	16.5	502
8 Sa	0137	7.2	218
	0807	17.7	541
	1443	7.3	223
	2056	16.0	487
9 Su	0307	7.5	230
	0932	18.1	551
	1612	6.7	203
	2222	16.6	506
10 M	0426	7.0	212
	1043	19.1	583
	1718	5.5	167
	2325	17.8	542
11 Tu	0526	5.9	181
	1138	20.3	619
	1807	4.3	132
12 W	0012	18.9	577
	0612	5.0	152
	1222	21.3	648
	1847	3.5	107
13 Th	0051	19.7	601
	0652	4.4	133
	1259	21.8	664
	1922	3.1	95
14 F ●	0125	20.2	615
	0726	4.1	124
	1332	21.9	668
	1953	3.1	95
15 Sa	0155	20.2	617
	0757	4.1	125
	1402	21.7	660
	2021	3.4	104

	Time	Height	
	h m	ft	cm
16 Su	0224	20.0	610
	0827	4.4	135
	1431	21.1	643
	2048	3.9	120
17 M	0252	19.6	597
	0856	5.0	151
	1459	20.3	618
	2115	4.7	142
18 Tu	0319	19.0	579
	0925	5.7	173
	1528	19.3	587
	2142	5.5	169
19 W	0348	18.3	557
	0957	6.5	198
	1558	18.1	552
	2211	6.5	198
20 Th	0419	17.5	534
	1031	7.5	228
	1632	17.0	517
	2243	7.5	228
21 F	0455	16.8	512
	1112	8.4	256
	1712	15.8	483
	2322	8.4	257
22 Sa ◐	0542	16.2	494
	1205	9.2	279
	1809	15.0	456
23 Su	0016	9.2	281
	0649	15.8	483
	1322	9.5	290
	1932	14.5	443
24 M	0134	9.6	292
	0811	16.1	491
	1455	9.1	276
	2104	15.0	456
25 Tu	0303	9.1	278
	0930	17.1	522
	1611	7.7	235
	2218	16.2	494
26 W	0418	7.8	238
	1035	18.7	570
	1709	5.9	180
	2314	17.8	544
27 Th	0516	6.0	184
	1129	20.5	625
	1758	4.0	121
28 F	0003	19.6	598
	0607	4.2	128
	1218	22.2	677
	1843	2.2	68
29 Sa ○	0048	21.2	645
	0654	2.6	78
	1304	23.5	715
	1927	1.0	30
30 Su	0131	22.3	680
	0739	1.4	43
	1348	24.0	733
	2009	0.4	12
31 M	0214	22.9	697
	0824	0.9	28
	1431	23.9	727
	2050	0.6	17

September

	Time	Height	
	h m	ft	cm
1 Tu	0256	22.8	695
	0908	1.2	37
	1515	22.9	697
	2132	1.4	43
2 W	0338	22.1	673
	0953	2.2	67
	1559	21.3	648
	2214	2.9	87
3 Th	0423	20.9	637
	1041	3.7	113
	1647	19.3	588
	2300	4.7	143
4 F	0514	19.4	592
	1137	5.4	166
	1745	17.3	527
	2356	6.6	200
5 Sa ◑	0619	18.0	549
	1251	7.0	212
	1906	15.7	480
6 Su	0114	8.0	244
	0744	17.2	524
	1429	7.5	228
	2048	15.5	471
7 M	0254	8.3	254
	0916	17.4	531
	1600	6.7	205
	2215	16.4	500
8 Tu	0417	7.4	226
	1028	18.5	564
	1701	5.4	165
	2312	17.7	541
9 W	0513	6.1	187
	1120	19.7	601
	1746	4.2	128
	2354	19.0	579
10 Th	0555	5.0	152
	1201	20.7	632
	1823	3.3	101
11 F	0029	19.9	607
	0632	4.1	126
	1236	21.4	651
	1856	2.9	87
12 Sa	0101	20.4	623
	0704	3.6	111
	1308	21.6	658
	1925	2.7	83
13 Su ●	0129	20.6	629
	0734	3.5	107
	1337	21.4	653
	1952	3.0	90
14 M	0157	20.5	626
	0803	3.6	111
	1406	21.0	639
	2018	3.4	105
15 Tu	0223	20.2	616
	0832	4.1	124
	1434	20.2	616
	2044	4.1	126

	Time	Height	
	h m	ft	cm
16 W	0250	19.7	600
	0901	4.8	145
	1502	19.3	587
	2111	5.0	153
17 Th	0317	19.0	579
	0931	5.6	171
	1532	18.2	554
	2138	6.0	184
18 F	0345	18.2	556
	1003	6.6	201
	1603	17.0	519
	2208	7.1	217
19 Sa	0417	17.4	531
	1040	7.6	231
	1641	16.0	487
	2244	8.2	249
20 Su	0458	16.7	508
	1129	8.5	258
	1734	15.0	458
	2335	9.1	277
21 M ◐	0600	16.0	489
	1241	9.0	275
	1857	14.5	442
22 Tu	0056	9.6	293
	0730	16.0	487
	1419	8.7	266
	2037	14.9	455
23 W	0237	9.2	280
	0901	16.9	514
	1545	7.4	225
	2156	16.3	498
24 Th	0359	7.6	233
	1013	18.5	565
	1646	5.4	166
	2254	18.2	555
25 F	0500	5.6	170
	1110	20.5	624
	1736	3.4	105
	2342	20.2	615
26 Sa	0550	3.4	105
	1200	22.2	678
	1822	1.7	52
27 Su ○	0027	21.9	666
	0637	1.7	52
	1246	23.5	716
	1905	0.5	16
28 M	0111	23.0	701
	0722	0.6	18
	1330	24.0	730
	1947	0.1	3
29 Tu	0153	23.5	715
	0806	0.3	8
	1413	23.6	720
	2028	0.5	15
30 W	0234	23.2	707
	0850	0.8	24
	1456	22.5	685
	2109	1.6	49

Time meridian 60° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.
Heights are referred to the chart datum of soundings.

Puerto Montt, Chile, 2015

Times and Heights of High and Low Waters

October

	Time	Height	
	h m	ft	cm
1 Th	0316	22.3	679
	0934	2.0	61
	1540	20.8	635
	2151	3.2	98
2 F	0400	20.9	636
	1021	3.6	111
	1628	18.9	575
	2237	5.1	156
3 Sa	0450	19.2	585
	1115	5.5	167
	1726	17.0	517
	2332	7.0	213
4 Su ◑	0553	17.6	536
	1227	7.0	213
	1845	15.6	475
5 M	0051	8.3	254
	0717	16.6	506
	1402	7.6	231
	2025	15.4	468
6 Tu	0233	8.5	260
	0850	16.7	510
	1531	7.0	212
	2148	16.2	495
7 W	0354	7.6	231
	1002	17.7	538
	1632	5.8	176
	2244	17.5	534
8 Th	0448	6.3	191
	1054	18.8	573
	1716	4.6	141
	2325	18.7	570
9 F	0530	5.1	154
	1134	19.8	603
	1753	3.7	113
10 Sa	0000	19.7	599
	0606	4.1	125
	1209	20.4	623
	1825	3.1	96
11 Su	0031	20.3	618
	0638	3.4	105
	1241	20.8	634
	1854	2.9	89
12 M ●	0100	20.6	629
	0709	3.1	95
	1311	20.8	635
	1922	3.0	91
13 Tu	0128	20.7	631
	0738	3.1	95
	1341	20.6	627
	1949	3.3	101
14 W	0155	20.5	626
	0808	3.4	105
	1410	20.0	610
	2016	3.9	119
15 Th	0223	20.1	613
	0838	4.0	122
	1440	19.2	586
	2045	4.7	144

	Time	Height	
	h m	ft	cm
16 F	0251	19.5	595
	0909	4.8	147
	1511	18.3	557
	2114	5.6	172
17 Sa	0321	18.8	572
	0942	5.7	175
	1544	17.3	527
	2147	6.7	203
18 Su	0354	17.9	547
	1020	6.7	204
	1624	16.3	497
	2226	7.6	233
19 M	0437	17.1	522
	1109	7.6	231
	1717	15.5	471
	2319	8.5	260
20 Tu ◐	0538	16.4	500
	1218	8.2	249
	1835	15.0	457
21 W	0038	9.0	274
	0704	16.2	494
	1348	8.0	245
	2008	15.4	469
22 Th	0213	8.5	259
	0835	16.9	516
	1513	6.9	211
	2126	16.7	509
23 F	0335	7.0	214
	0950	18.4	561
	1618	5.2	160
	2227	18.5	563
24 Sa	0438	5.0	153
	1049	20.2	615
	1712	3.5	106
	2319	20.3	619
25 Su	0531	3.1	94
	1141	21.8	663
	1800	2.0	60
26 M	0005	21.9	666
	0619	1.5	47
	1228	22.8	696
	1844	1.0	31
27 Tu ○	0050	22.9	697
	0705	0.7	20
	1313	23.2	707
	1927	0.8	24
28 W	0133	23.2	707
	0750	0.6	17
	1357	22.8	695
	2009	1.2	38
29 Th	0216	22.8	696
	0834	1.2	36
	1441	21.8	665
	2051	2.3	70
30 F	0258	21.9	667
	0918	2.4	73
	1524	20.4	621
	2133	3.8	115
31 Sa	0341	20.5	625
	1003	3.9	120
	1611	18.7	571
	2218	5.4	165

November

	Time	Height	
	h m	ft	cm
1 Su	0429	18.9	577
	1053	5.6	170
	1704	17.2	523
	2311	7.0	213
2 M	0526	17.4	531
	1156	7.0	213
	1812	15.9	485
3 Tu ◑	0021	8.2	250
	0640	16.3	498
	1317	7.7	236
	1938	15.4	470
4 W	0151	8.6	261
	0806	16.1	490
	1442	7.6	231
	2101	15.9	484
5 Th	0314	8.0	243
	0922	16.6	506
	1549	6.8	206
	2202	16.8	513
6 F	0413	6.9	209
	1018	17.5	533
	1638	5.8	177
	2248	17.9	546
7 Sa	0459	5.7	174
	1102	18.4	561
	1718	4.9	150
	2325	18.8	574
8 Su	0537	4.7	144
	1140	19.1	583
	1752	4.3	130
	2358	19.6	598
9 M	0611	4.0	121
	1214	19.7	599
	1822	3.9	118
10 Tu	0029	20.2	615
	0643	3.5	106
	1246	19.9	606
	1852	3.7	112
11 W ●	0059	20.5	625
	0714	3.3	100
	1317	19.9	606
	1922	3.7	114
12 Th	0129	20.6	627
	0746	3.3	102
	1349	19.7	599
	1952	4.1	124
13 F	0200	20.4	622
	0818	3.7	113
	1422	19.2	584
	2024	4.6	140
14 Sa	0231	20.0	610
	0852	4.3	130
	1456	18.5	565
	2058	5.3	161
15 Su	0305	19.4	592
	0929	5.0	153
	1533	17.8	542
	2135	6.1	185

	Time	Height	
	h m	ft	cm
16 M	0343	18.7	569
	1010	5.8	177
	1616	17.0	519
	2219	6.8	208
17 Tu	0429	17.9	546
	1100	6.5	199
	1709	16.4	499
	2313	7.5	229
18 W	0528	17.3	526
	1202	7.1	216
	1816	16.0	487
19 Th ◐	0023	7.9	240
	0643	16.9	515
	1318	7.2	219
	1935	16.2	493
20 F	0145	7.6	233
	0805	17.2	524
	1437	6.6	201
	2052	17.1	520
21 Sa	0306	6.6	202
	0922	18.1	552
	1548	5.5	168
	2158	18.4	562
22 Su	0415	5.2	157
	1027	19.4	591
	1647	4.2	129
	2256	19.9	608
23 M	0513	3.6	111
	1123	20.6	628
	1739	3.1	94
	2347	21.3	648
24 Tu	0606	2.4	74
	1214	21.5	654
	1828	2.3	71
25 W ○	0035	22.2	676
	0654	1.7	53
	1302	21.8	665
	1913	2.1	64
26 Th	0120	22.5	687
	0740	1.6	50
	1347	21.7	661
	1956	2.4	74
27 F	0204	22.3	679
	0824	2.1	65
	1430	21.0	641
	2038	3.2	97
28 Sa	0246	21.6	657
	0907	3.1	94
	1513	20.0	611
	2119	4.3	130
29 Su	0327	20.4	623
	0949	4.3	130
	1555	18.8	574
	2201	5.5	168
30 M	0410	19.2	584
	1032	5.6	170
	1640	17.6	537
	2247	6.8	207

December

	Time	Height	
	h m	ft	cm
1 Tu	0456	17.8	543
	1121	6.8	206
	1733	16.5	503
	2341	7.9	241
2 W	0553	16.6	507
	1221	7.7	235
	1840	15.7	479
3 Th ◑	0050	8.6	263
	0704	15.8	483
	1335	8.1	248
	1958	15.6	474
4 F	0213	8.7	265
	0822	15.7	478
	1449	8.0	243
	2109	16.0	488
5 Sa	0326	8.1	247
	0931	16.1	490
	1550	7.4	226
	2205	16.8	513
6 Su	0422	7.2	219
	1024	16.7	510
	1637	6.7	204
	2249	17.7	540
7 M	0506	6.2	190
	1108	17.5	532
	1716	6.0	183
	2326	18.6	568
8 Tu	0544	5.4	164
	1146	18.1	552
	1751	5.4	165
9 W	0000	19.4	592
	0619	4.7	142
	1221	18.6	568
	1824	4.9	150
10 Th	0034	20.1	612
	0653	4.1	126
	1256	19.0	579
	1857	4.6	140
11 F ●	0107	20.5	626
	0728	3.8	115
	1331	19.2	584
	1932	4.5	136
12 Sa	0142	20.8	633
	0804	3.7	112
	1408	19.2	584
	2008	4.5	138
13 Su	0218	20.7	632
	0842	3.8	116
	1446	18.9	577
	2047	4.8	146
14 M	0256	20.4	623
	0922	4.1	126
	1526	18.6	566
	2128	5.2	158
15 Tu	0338	19.9	608
	1004	4.6	141
	1610	18.1	552
	2213	5.7	174

	Time	Height	
	h m	ft	cm
16 W	0423	19.3	587
	1051	5.2	159
	1659	17.7	538
	2304	6.3	191
17 Th	0516	18.5	564
	1145	5.8	177
	1757	17.3	526
18 F ◐	0005	6.8	206
	0619	17.8	543
	1248	6.3	191
	1905	17.1	521
19 Sa	0116	7.1	215
	0733	17.4	529
	1400	6.5	197
	2019	17.4	530
20 Su	0238	6.9	209
	0853	17.4	531
	1516	6.2	189
	2133	18.2	554
21 M	0356	6.1	185
	1008	18.0	549
	1625	5.5	168
	2239	19.3	589
22 Tu	0504	4.9	150
	1113	18.9	577
	1725	4.7	142
	2337	20.5	626
23 W	0602	3.8	117
	1209	19.8	604
	1818	3.9	118
24 Th	0029	21.5	656
	0652	3.1	93
	1259	20.4	623
	1905	3.4	105
25 F ○	0115	22.1	673
	0738	2.7	83
	1343	20.7	630
	1949	3.4	104
26 Sa	0158	22.1	674
	0820	2.9	88
	1424	20.4	623
	2029	3.8	116
27 Su	0237	21.7	661
	0859	3.4	105
	1502	19.9	606
	2106	4.5	138
28 M	0313	20.9	637
	0935	4.3	130
	1539	19.1	581
	2143	5.4	166
29 Tu	0349	19.8	604
	1011	5.3	161
	1616	18.1	552
	2219	6.5	198
30 W	0425	18.6	568
	1048	6.3	192
	1656	17.1	521
	2300	7.5	230
31 Th	0506	17.4	530
	1129	7.3	222
	1743	16.2	494
	2348	8.5	260

Time meridian 60° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.
Heights are referred to the chart datum of soundings.

Valparaiso, Chile, 2015

Times and Heights of High and Low Waters

January

	Time	Height	
	h m	ft	cm
1 Th	0142	1.7	52
	0723	3.9	119
	1322	1.3	41
	2003	5.2	157
2 F	0240	1.4	44
	0822	3.9	119
	1411	1.3	40
	2050	5.4	164
3 Sa	0329	1.2	37
	0912	3.9	120
	1456	1.3	39
	2133	5.5	169
4 Su	0412	1.0	31
	0956	4.0	121
	1538	1.2	37
	2212	5.6	172
5 M ○	0451	0.9	28
	1036	4.0	122
	1618	1.2	37
	2249	5.6	171
6 Tu	0528	0.9	28
	1114	4.0	121
	1656	1.2	38
	2324	5.5	168
7 W	0604	1.0	29
	1150	3.9	120
	1732	1.3	41
	2358	5.3	163
8 Th	0639	1.0	32
	1227	3.9	118
	1808	1.5	45
9 F	0031	5.1	156
	0713	1.2	37
	1304	3.8	116
	1845	1.7	51
10 Sa	0105	4.8	147
	0748	1.4	42
	1345	3.8	115
	1924	1.9	58
11 Su	0140	4.5	138
	0826	1.6	48
	1433	3.7	114
	2011	2.2	66
12 M	0221	4.2	129
	0909	1.7	53
	1530	3.8	115
	2112	2.4	72
13 Tu ◑	0312	3.9	119
	0958	1.9	57
	1635	3.9	119
	2238	2.5	76
14 W	0419	3.6	111
	1055	1.9	59
	1741	4.1	126
15 Th	0010	2.4	73
	0538	3.5	107
	1153	1.9	58
	1841	4.5	136

	Time	Height	
	h m	ft	cm
16 F	0122	2.1	65
	0653	3.5	108
	1248	1.8	55
	1933	4.8	147
17 Sa	0217	1.8	54
	0753	3.6	111
	1339	1.6	50
	2020	5.2	159
18 Su	0302	1.4	43
	0844	3.8	117
	1427	1.4	43
	2104	5.6	171
19 M	0344	1.0	32
	0930	4.0	123
	1513	1.2	36
	2147	5.9	181
20 Tu ●	0425	0.7	22
	1014	4.2	129
	1600	1.0	29
	2230	6.1	187
21 W	0506	0.5	16
	1058	4.4	135
	1647	0.8	24
	2314	6.2	190
22 Th	0549	0.4	13
	1144	4.6	139
	1736	0.8	23
	2359	6.1	187
23 F	0632	0.4	13
	1231	4.7	142
	1827	0.8	25
24 Sa	0046	5.8	178
	0718	0.6	17
	1322	4.7	142
	1920	1.0	32
25 Su	0134	5.4	165
	0806	0.8	24
	1417	4.6	141
	2020	1.4	42
26 M	0226	4.9	149
	0857	1.0	32
	1520	4.6	140
	2129	1.7	53
27 Tu ◐	0326	4.4	133
	0953	1.3	41
	1630	4.6	140
	2253	2.0	60
28 W	0438	3.9	119
	1056	1.5	47
	1743	4.7	142
29 Th	0021	2.0	60
	0601	3.7	112
	1202	1.7	51
	1851	4.8	146
30 F	0136	1.8	54
	0717	3.6	111
	1305	1.7	51
	1950	5.0	152
31 Sa	0234	1.5	47
	0818	3.7	113
	1359	1.6	48
	2039	5.2	158

February

	Time	Height	
	h m	ft	cm
1 Su	0319	1.3	40
	0905	3.8	117
	1446	1.4	44
	2120	5.3	163
2 M	0357	1.1	34
	0944	4.0	121
	1527	1.3	41
	2157	5.4	166
3 Tu ○	0432	1.0	31
	1019	4.1	124
	1605	1.2	38
	2231	5.5	167
4 W	0504	1.0	30
	1052	4.1	126
	1640	1.2	37
	2303	5.4	165
5 Th	0535	1.0	30
	1124	4.2	127
	1714	1.2	38
	2334	5.3	161
6 F	0604	1.0	32
	1156	4.2	127
	1747	1.3	41
7 Sa	0004	5.1	154
	0633	1.2	36
	1229	4.2	127
	1821	1.5	46
8 Su	0034	4.8	147
	0703	1.3	41
	1305	4.1	126
	1858	1.7	52
9 M	0107	4.5	138
	0735	1.5	46
	1345	4.1	125
	1940	1.9	59
10 Tu	0144	4.2	127
	0810	1.7	52
	1433	4.1	124
	2035	2.2	66
11 W ◑	0229	3.8	117
	0854	1.9	57
	1533	4.1	124
	2152	2.3	71
12 Th	0331	3.5	107
	0951	2.0	61
	1644	4.2	127
	2330	2.3	71
13 F	0459	3.3	102
	1100	2.1	63
	1756	4.4	134
14 Sa	0053	2.1	63
	0627	3.3	102
	1211	2.0	60
	1859	4.7	144
15 Su	0152	1.7	52
	0734	3.5	108
	1314	1.8	54
	1954	5.1	156

	Time	Height	
	h m	ft	cm
16 M	0239	1.3	40
	0826	3.8	117
	1408	1.4	44
	2042	5.5	168
17 Tu	0320	1.0	29
	0912	4.2	128
	1458	1.1	34
	2127	5.9	179
18 W ●	0400	0.6	19
	0955	4.5	138
	1547	0.8	24
	2211	6.1	186
19 Th	0440	0.4	12
	1038	4.8	147
	1634	0.6	18
	2255	6.2	188
20 F	0521	0.3	8
	1122	5.1	154
	1723	0.5	15
	2339	6.0	184
21 Sa	0603	0.3	10
	1207	5.2	158
	1813	0.6	19
22 Su	0024	5.7	174
	0646	0.5	15
	1255	5.2	158
	1906	0.9	27
23 M	0111	5.2	159
	0731	0.8	25
	1347	5.1	154
	2004	1.3	39
24 Tu	0202	4.6	141
	0820	1.2	36
	1446	4.9	148
	2113	1.6	50
25 W ◐	0303	4.1	124
	0916	1.5	47
	1555	4.7	143
	2235	1.9	58
26 Th	0421	3.7	112
	1022	1.8	56
	1711	4.6	140
27 F	0005	1.9	59
	0552	3.5	106
	1138	2.0	60
	1827	4.6	141
28 Sa	0121	1.8	54
	0711	3.6	109
	1250	1.9	59
	1931	4.8	146

March

	Time	Height	
	h m	ft	cm
1 Su	0216	1.5	47
	0807	3.7	114
	1348	1.8	54
	2020	5.0	151
2 M	0257	1.3	41
	0849	3.9	120
	1434	1.6	48
	2101	5.1	155
3 Tu	0332	1.2	37
	0924	4.1	126
	1514	1.4	43
	2136	5.2	158
4 W	0403	1.1	33
	0956	4.3	131
	1549	1.3	39
	2208	5.2	159
5 Th ○	0432	1.0	32
	1027	4.4	135
	1623	1.2	37
	2238	5.2	158
6 F	0459	1.0	32
	1057	4.5	138
	1656	1.2	36
	2307	5.1	154
7 Sa	0526	1.1	33
	1127	4.6	140
	1728	1.2	38
	2337	4.9	149
8 Su	0553	1.2	36
	1158	4.6	140
	1802	1.3	41
9 M	0007	4.7	142
	0621	1.3	40
	1231	4.6	139
	1839	1.5	46
10 Tu	0040	4.4	133
	0651	1.5	45
	1308	4.5	138
	1922	1.7	52
11 W	0117	4.0	123
	0724	1.7	51
	1351	4.4	135
	2015	1.9	58
12 Th	0203	3.7	112
	0805	1.9	58
	1446	4.3	132
	2126	2.1	63
13 F ◑	0307	3.4	103
	0901	2.1	63
	1555	4.3	131
	2257	2.1	64
14 Sa	0439	3.2	98
	1018	2.2	66
	1712	4.4	134
15 Su	0021	1.9	58
	0611	3.3	101
	1142	2.1	64
	1825	4.6	141

	Time	Height	
	h m	ft	cm
16 M	0122	1.6	48
	0717	3.6	111
	1254	1.8	56
	1925	5.0	152
17 Tu	0209	1.2	36
	0807	4.0	123
	1353	1.5	45
	2017	5.3	163
18 W	0250	0.8	25
	0851	4.5	136
	1444	1.0	32
	2104	5.6	172
19 Th	0330	0.5	16
	0933	4.9	149
	1533	0.7	22
	2149	5.8	178
20 F ●	0410	0.3	10
	1015	5.2	160
	1621	0.5	15
	2233	5.8	178
21 Sa	0450	0.3	8
	1059	5.5	168
	1710	0.4	13
	2317	5.7	173
22 Su	0531	0.4	11
	1143	5.6	172
	1800	0.5	16
23 M	0003	5.3	161
	0613	0.6	18
	1229	5.6	170
	1852	0.8	24
24 Tu	0050	4.8	146
	0657	1.0	29
	1318	5.3	163
	1950	1.1	35
25 W	0142	4.3	130
	0744	1.3	41
	1413	5.1	154
	2055	1.5	46
26 Th	0244	3.8	116
	0840	1.7	53
	1516	4.7	144
	2213	1.8	54
27 F ◐	0405	3.5	107
	0948	2.1	63
	1631	4.5	137
	2336	1.8	56
28 Sa	0537	3.4	105
	1110	2.2	67
	1750	4.4	135
29 Su	0048	1.7	53
	0652	3.6	110
	1228	2.1	65
	1858	4.5	137
30 M	0142	1.6	48
	0744	3.8	117
	1329	2.0	60
	1950	4.6	141
31 Tu	0222	1.4	44
	0824	4.1	124
	1416	1.7	53
	2032	4.8	145

Time meridian 60° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.
Heights are referred to the chart datum of soundings.

Valparaiso, Chile, 2015

Times and Heights of High and Low Waters

April

	Time	Height		Time	Height
	h m	ft cm		h m	ft cm
1 W	0256	1.3 40	16 Th	0217	0.8 24
	0858	4.3 132		0828	4.8 145
	1456	1.5 47		1431	1.1 33
	2108	4.8 147		2040	5.3 161
2 Th	0326	1.2 37	17 F	0258	0.6 17
	0929	4.6 139		0911	5.2 159
	1532	1.4 42		1521	0.8 23
	2140	4.9 148		2126	5.3 163
3 F	0354	1.1 35	18 Sa ●	0339	0.4 13
	0959	4.8 145		0954	5.6 171
	1606	1.2 38		1610	0.5 16
	2211	4.8 147		2212	5.3 162
4 Sa ○	0421	1.1 35	19 Su	0419	0.4 13
	1028	4.9 149		1037	5.8 178
	1639	1.2 36		1659	0.5 14
	2241	4.8 145		2258	5.1 155
5 Su	0447	1.1 35	20 M	0500	0.6 17
	1058	5.0 152		1121	5.9 180
	1713	1.2 36		1749	0.5 16
	2312	4.6 140		2344	4.8 145
6 M	0515	1.2 37	21 Tu	0542	0.8 24
	1130	5.1 154		1205	5.8 176
	1748	1.2 37		1840	0.8 23
	2345	4.4 134			
7 Tu	0544	1.3 40	22 W	0032	4.4 134
	1204	5.0 153		0626	1.1 34
	1827	1.3 40		1252	5.5 168
				1935	1.0 32
8 W	0020	4.1 126	23 Th	0124	4.0 122
	0615	1.5 45		0713	1.5 46
	1241	4.9 150		1341	5.2 157
	1912	1.4 44		2034	1.3 41
9 Th	0101	3.8 117	24 F	0225	3.7 112
	0651	1.7 51		0806	1.9 57
	1324	4.8 146		1437	4.8 145
	2005	1.6 49		2141	1.6 49
10 F	0151	3.5 107	25 Sa ◐	0340	3.5 106
	0735	1.9 58		0911	2.2 66
	1415	4.6 141		1543	4.4 135
	2111	1.8 54		2253	1.7 52
11 Sa ◑	0300	3.3 101	26 Su	0504	3.5 106
	0834	2.1 64		1030	2.3 71
	1520	4.5 137		1657	4.3 130
	2230	1.8 54			
12 Su	0429	3.2 99	27 M	0000	1.7 52
	0954	2.2 67		0616	3.6 111
	1636	4.5 136		1151	2.3 71
	2345	1.6 50		1808	4.2 129
13 M	0552	3.5 106	28 Tu	0055	1.6 50
	1121	2.1 65		0709	3.9 119
	1751	4.6 139		1259	2.2 66
				1907	4.3 130
14 Tu	0045	1.4 42	29 W	0138	1.5 47
	0654	3.8 117		0751	4.2 127
	1237	1.9 57		1351	2.0 60
	1855	4.8 146		1954	4.4 133
15 W	0134	1.1 33	30 Th	0213	1.4 44
	0743	4.3 131		0826	4.5 136
	1338	1.5 45		1434	1.7 53
	1950	5.1 154		2033	4.4 135

May

	Time	Height		Time	Height
	h m	ft cm		h m	ft cm
1 F	0245	1.4 42	16 Sa	0228	0.8 23
	0859	4.8 145		0851	5.4 165
	1512	1.5 47		1512	0.9 28
	2109	4.5 136		2107	4.8 145
2 Sa	0314	1.3 40	17 Su	0311	0.7 20
	0930	5.0 152		0935	5.7 175
	1548	1.3 41		1602	0.7 21
	2143	4.5 136		2155	4.7 143
3 Su ○	0342	1.2 38	18 M ●	0352	0.7 21
	1001	5.2 158		1019	5.9 181
	1623	1.2 37		1651	0.6 18
	2216	4.4 134		2242	4.6 139
4 M	0411	1.2 38	19 Tu	0434	0.8 24
	1033	5.3 163		1102	6.0 182
	1659	1.1 34		1739	0.6 19
	2250	4.3 131		2329	4.3 132
5 Tu	0442	1.2 38	20 W	0517	1.0 30
	1107	5.4 165		1145	5.8 178
	1737	1.1 33		1827	0.8 23
	2327	4.1 126			
6 W	0515	1.3 40	21 Th	0016	4.1 125
	1143	5.4 165		0600	1.2 38
	1818	1.1 34		1229	5.5 169
				1916	1.0 29
7 Th	0007	3.9 120	22 F	0105	3.9 118
	0551	1.4 44		0646	1.5 47
	1222	5.3 162		1313	5.2 159
	1904	1.2 36		2007	1.2 37
8 F	0052	3.7 114	23 Sa	0159	3.6 111
	0632	1.6 49		0734	1.8 56
	1306	5.2 157		1401	4.8 147
	1956	1.3 40		2102	1.4 44
9 Sa	0146	3.5 108	24 Su	0301	3.5 107
	0721	1.8 55		0830	2.1 65
	1357	4.9 150		1453	4.5 137
	2056	1.4 43		2200	1.6 49
10 Su	0253	3.4 105	25 M ◐	0412	3.5 107
	0823	2.0 61		0936	2.3 71
	1458	4.7 143		1554	4.2 128
	2202	1.5 45		2301	1.7 52
11 M ◑	0411	3.5 106	26 Tu	0523	3.6 111
	0938	2.1 64		1056	2.4 74
	1607	4.6 139		1702	4.0 123
	2307	1.4 43		2357	1.7 53
12 Tu	0525	3.7 113	27 W	0622	3.9 118
	1102	2.1 63		1215	2.4 73
	1719	4.5 138		1809	4.0 121
13 W	0007	1.2 38	28 Th	0045	1.7 52
	0627	4.1 125		0710	4.2 127
	1219	1.9 57		1318	2.2 67
	1825	4.6 140		1906	4.0 121
14 Th	0058	1.1 33	29 F	0125	1.6 50
	0719	4.5 138		0750	4.5 137
	1324	1.5 47		1408	2.0 60
	1924	4.7 143		1955	4.0 123
15 F	0145	0.9 27	30 Sa	0201	1.5 47
	0806	5.0 152		0827	4.8 147
	1420	1.2 37		1451	1.7 52
	2017	4.8 145		2037	4.1 124
			31 Su	0234	1.5 45
				0901	5.1 156
				1530	1.5 45
				2115	4.1 125

June

	Time	Height		Time	Height
	h m	ft cm		h m	ft cm
1 M	0307	1.4 42	16 Tu ●	0333	1.0 29
	0936	5.4 164		1006	5.9 179
	1607	1.2 38		1644	0.7 22
	2153	4.1 126		2231	4.2 127
2 Tu ○	0341	1.3 40	17 W	0416	1.0 31
	1011	5.6 170		1048	5.9 179
	1646	1.1 33		1728	0.7 22
	2232	4.1 125		2315	4.1 125
3 W	0416	1.2 38	18 Th	0458	1.1 33
	1048	5.7 173		1128	5.8 176
	1725	1.0 29		1811	0.8 24
	2312	4.0 123		2358	4.0 122
4 Th	0455	1.3 39	19 F	0540	1.2 38
	1127	5.7 174		1208	5.5 169
	1808	0.9 28		1853	0.9 28
	2356	3.9 120			
5 F	0536	1.3 40	20 Sa	0041	3.9 118
	1208	5.6 172		0622	1.5 45
	1853	1.0 29		1247	5.2 160
				1935	1.1 34
6 Sa	0042	3.8 117	21 Su	0126	3.7 114
	0622	1.4 44		0704	1.7 52
	1253	5.5 167		1326	4.9 150
	1941	1.0 31		2019	1.3 41
7 Su	0135	3.8 115	22 M	0215	3.6 111
	0714	1.6 48		0749	2.0 60
	1343	5.2 159		1407	4.6 139
	2034	1.1 34		2105	1.5 47
8 M	0236	3.7 114	23 Tu	0311	3.6 110
	0814	1.8 54		0841	2.2 68
	1439	5.0 151		1454	4.3 130
	2131	1.2 37		2155	1.7 52
9 Tu ◑	0343	3.8 116	24 W ◐	0415	3.7 112
	0923	1.9 58		0949	2.4 74
	1541	4.7 143		1550	4.0 121
	2230	1.2 38		2248	1.8 56
10 W	0453	4.0 123	25 Th	0520	3.8 117
	1042	2.0 60		1115	2.5 76
	1648	4.5 136		1659	3.8 115
	2329	1.2 37		2342	1.9 57
11 Th	0558	4.3 132	26 F	0619	4.1 125
	1202	1.9 58		1236	2.4 73
	1757	4.3 132		1811	3.7 112
12 F	0024	1.1 35	27 Sa	0031	1.8 56
	0656	4.7 144		0709	4.4 135
	1313	1.7 51		1339	2.2 66
	1902	4.3 130		1913	3.7 113
13 Sa	0115	1.1 33	28 Su	0116	1.7 53
	0748	5.1 155		0753	4.8 145
	1414	1.4 42		1428	1.9 57
	2001	4.3 130		2006	3.8 115
14 Su	0203	1.0 31	29 M	0157	1.6 50
	0837	5.4 166		0834	5.1 156
	1508	1.1 34		1511	1.6 48
	2055	4.2 129		2051	3.8 117
15 M	0249	1.0 30	30 Tu	0237	1.5 45
	0922	5.7 174		0913	5.4 165
	1558	0.9 27		1551	1.3 39
	2144	4.2 129		2134	3.9 120

Time meridian 60° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.
Heights are referred to the chart datum of soundings.

Valparaiso, Chile, 2015

Times and Heights of High and Low Waters

July

	Time	Height	
	h m	ft	cm
1 W ○	0317	1.3	41
	0951	5.7	173
	1630	1.0	31
	2215	4.0	123
2 Th	0358	1.2	37
	1031	5.9	179
	1710	0.8	25
	2257	4.1	125
3 F	0440	1.1	34
	1112	6.0	182
	1751	0.7	22
	2341	4.2	127
4 Sa	0525	1.1	33
	1154	5.9	180
	1834	0.7	21
5 Su	0027	4.2	127
	0613	1.1	34
	1239	5.7	175
	1919	0.8	23
6 M	0116	4.2	128
	0705	1.2	38
	1327	5.5	167
	2007	0.9	27
7 Tu	0211	4.2	128
	0801	1.5	45
	1418	5.1	155
	2059	1.0	31
8 W ◑	0313	4.2	129
	0907	1.7	53
	1515	4.7	143
	2154	1.2	36
9 Th	0421	4.3	132
	1024	1.9	58
	1621	4.3	131
	2253	1.3	40
10 F	0530	4.5	138
	1149	1.9	59
	1735	4.0	123
	2353	1.4	42
11 Sa	0636	4.8	146
	1307	1.8	54
	1848	3.9	118
12 Su	0052	1.4	42
	0735	5.1	155
	1413	1.5	46
	1954	3.9	118
13 M	0146	1.3	40
	0827	5.3	163
	1506	1.2	38
	2050	3.9	120
14 Tu	0235	1.2	38
	0913	5.5	169
	1552	1.0	31
	2138	4.0	122
15 W ●	0321	1.2	36
	0955	5.7	174
	1634	0.9	26
	2220	4.1	124

	Time	Height	
	h m	ft	cm
16 Th	0403	1.1	34
	1034	5.7	175
	1712	0.8	24
	2259	4.1	125
17 F	0443	1.1	34
	1111	5.6	172
	1749	0.8	25
	2337	4.1	124
18 Sa	0522	1.2	36
	1146	5.5	167
	1824	1.0	29
19 Su	0013	4.0	123
	0559	1.3	41
	1220	5.2	160
	1859	1.1	34
20 M	0050	4.0	121
	0635	1.5	47
	1253	5.0	151
	1933	1.3	39
21 Tu	0130	3.9	119
	0714	1.8	55
	1328	4.6	141
	2009	1.5	46
22 W	0214	3.8	117
	0757	2.1	63
	1406	4.3	131
	2049	1.7	52
23 Th	0306	3.8	117
	0852	2.3	70
	1451	3.9	120
	2135	1.9	57
24 F ◐	0409	3.9	118
	1011	2.5	76
	1553	3.6	111
	2231	2.0	61
25 Sa	0517	4.0	123
	1147	2.5	75
	1714	3.5	106
	2332	2.0	62
26 Su	0622	4.3	131
	1307	2.2	68
	1835	3.4	105
27 M	0031	1.9	59
	0718	4.7	142
	1404	1.9	59
	1940	3.5	108
28 Tu	0124	1.8	55
	0806	5.0	153
	1450	1.6	48
	2031	3.7	114
29 W	0212	1.6	48
	0849	5.4	164
	1530	1.2	37
	2115	3.9	120
30 Th	0257	1.3	41
	0931	5.7	174
	1608	0.9	28
	2157	4.2	127
31 F ○	0342	1.1	33
	1012	5.9	181
	1647	0.7	20
	2239	4.4	133

August

	Time	Height	
	h m	ft	cm
1 Sa	0427	0.9	27
	1054	6.1	186
	1727	0.5	16
	2321	4.6	139
2 Su	0513	0.8	24
	1137	6.1	185
	1808	0.5	15
3 M	0006	4.7	143
	0601	0.8	24
	1221	5.9	180
	1851	0.6	17
4 Tu	0053	4.7	144
	0652	1.0	29
	1307	5.5	169
	1936	0.7	22
5 W	0145	4.7	144
	0748	1.2	38
	1356	5.1	154
	2025	1.0	29
6 Th ◑	0243	4.7	143
	0852	1.6	48
	1452	4.5	138
	2118	1.2	38
7 F	0349	4.6	141
	1010	1.8	56
	1600	4.0	123
	2219	1.5	45
8 Sa	0503	4.7	142
	1138	1.9	59
	1721	3.7	114
	2327	1.6	50
9 Su	0616	4.8	145
	1302	1.8	55
	1845	3.6	111
10 M	0035	1.7	51
	0722	5.0	151
	1408	1.5	47
	1953	3.7	113
11 Tu	0136	1.6	49
	0816	5.2	157
	1458	1.3	39
	2045	3.9	118
12 W	0227	1.4	44
	0902	5.3	163
	1539	1.1	33
	2127	4.0	122
13 Th	0312	1.3	40
	0941	5.5	167
	1615	1.0	29
	2204	4.2	127
14 F ●	0351	1.2	36
	1017	5.5	168
	1648	0.9	27
	2238	4.3	130
15 Sa	0428	1.1	34
	1050	5.4	166
	1719	0.9	28
	2311	4.3	131

	Time	Height	
	h m	ft	cm
16 Su	0503	1.1	35
	1122	5.3	162
	1750	1.0	30
	2343	4.3	132
17 M	0537	1.2	38
	1152	5.1	156
	1819	1.1	34
18 Tu	0016	4.3	131
	0611	1.4	43
	1222	4.9	148
	1848	1.3	39
19 W	0050	4.2	129
	0647	1.6	49
	1254	4.5	138
	1918	1.5	45
20 Th	0127	4.2	127
	0726	1.8	56
	1328	4.2	128
	1951	1.7	51
21 F	0211	4.1	126
	0815	2.1	64
	1410	3.8	117
	2030	1.9	58
22 Sa ◐	0305	4.1	124
	0924	2.3	70
	1506	3.5	107
	2123	2.1	63
23 Su	0414	4.1	125
	1100	2.4	72
	1631	3.3	100
	2232	2.2	66
24 M	0529	4.3	130
	1232	2.2	66
	1807	3.3	100
	2348	2.1	65
25 Tu	0638	4.5	138
	1335	1.8	56
	1919	3.5	106
26 W	0055	1.9	59
	0735	4.9	149
	1422	1.5	45
	2011	3.7	114
27 Th	0151	1.7	51
	0823	5.2	160
	1502	1.1	34
	2055	4.1	124
28 F	0240	1.3	40
	0907	5.6	171
	1540	0.8	24
	2136	4.4	135
29 Sa ○	0327	1.0	30
	0950	5.9	180
	1618	0.5	16
	2216	4.8	146
30 Su	0413	0.7	21
	1032	6.0	184
	1657	0.4	11
	2258	5.1	154
31 M	0500	0.6	17
	1115	6.0	183
	1737	0.4	11
	2342	5.2	160

September

	Time	Height	
	h m	ft	cm
1 Tu	0548	0.6	17
	1200	5.7	175
	1819	0.5	14
2 W	0028	5.3	161
	0639	0.7	22
	1246	5.3	163
	1903	0.7	21
3 Th	0118	5.2	159
	0735	1.0	32
	1336	4.8	147
	1951	1.0	31
4 F	0213	5.1	154
	0840	1.4	43
	1433	4.3	130
	2044	1.4	42
5 Sa ◑	0318	4.9	148
	0957	1.7	52
	1545	3.8	116
	2148	1.7	52
6 Su	0433	4.7	143
	1125	1.8	56
	1716	3.5	108
	2304	1.9	58
7 M	0552	4.7	142
	1247	1.7	53
	1842	3.6	109
8 Tu	0021	1.9	59
	0702	4.8	145
	1350	1.5	47
	1945	3.7	114
9 W	0126	1.8	55
	0758	4.9	149
	1436	1.3	40
	2032	4.0	121
10 Th	0217	1.6	49
	0843	5.1	154
	1513	1.2	36
	2109	4.2	127
11 F	0300	1.4	43
	0920	5.2	157
	1546	1.0	32
	2142	4.4	133
12 Sa	0337	1.2	38
	0954	5.2	158
	1616	1.0	31
	2214	4.5	138
13 Su ●	0412	1.2	36
	1025	5.2	157
	1644	1.0	31
	2244	4.6	141
14 M	0446	1.1	35
	1055	5.0	153
	1712	1.1	33
	2314	4.7	143
15 Tu	0519	1.2	36
	1125	4.9	148
	1738	1.2	36
	2344	4.7	143

	Time	Height	
	h m	ft	cm
16 W	0552	1.3	39
	1155	4.6	141
	1805	1.3	40
17 Th	0016	4.7	142
	0627	1.4	44
	1226	4.3	132
	1833	1.5	45
18 F	0051	4.6	140
	0707	1.6	50
	1301	4.0	122
	1905	1.7	51
19 Sa	0130	4.5	137
	0755	1.8	56
	1344	3.7	112
	1942	1.9	58
20 Su	0219	4.4	133
	0859	2.0	62
	1442	3.4	103
	2032	2.1	64
21 M ◐	0322	4.3	130
	1025	2.1	64
	1609	3.2	97
	2144	2.3	69
22 Tu	0439	4.3	130
	1152	2.0	60
	1747	3.2	99
	2312	2.3	69
23 W	0555	4.4	135
	1258	1.7	52
	1857	3.5	107
24 Th	0030	2.0	62
	0700	4.7	144
	1347	1.3	41
	1948	3.9	119
25 F	0131	1.7	52
	0753	5.1	155
	1428	1.0	31
	2030	4.3	132
26 Sa	0223	1.3	40
	0840	5.4	164
	1507	0.7	22
	2111	4.8	146
27 Su ○	0311	0.9	28
	0925	5.6	172
	1546	0.5	14
	2152	5.2	159
28 M	0359	0.6	19
	1009	5.7	175
	1625	0.3	10
	2235	5.5	169
29 Tu	0446	0.4	13
	1053	5.6	172
	1705	0.4	11
	2319	5.7	175
30 W	0536	0.5	14
	1139	5.3	163
	1747	0.5	15

Time meridian 60° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.
Heights are referred to the chart datum of soundings.

Valparaiso, Chile, 2015

Times and Heights of High and Low Waters

October

	Time	Height	
	h m	ft	cm
1 Th	0004	5.7	175
	0628	0.6	19
	1227	5.0	151
	1831	0.8	24
2 F	0053	5.6	171
	0724	0.9	28
	1318	4.5	136
	1919	1.1	35
3 Sa	0146	5.3	162
	0827	1.2	38
	1418	4.0	121
	2013	1.6	48
4 Su ◑	0247	5.0	152
	0940	1.5	47
	1534	3.6	111
	2119	1.9	58
5 M	0358	4.7	142
	1101	1.7	51
	1704	3.5	107
	2238	2.1	65
6 Tu	0516	4.5	137
	1217	1.6	50
	1825	3.6	111
7 W	0000	2.1	65
	0629	4.5	137
	1316	1.5	47
	1924	3.8	117
8 Th	0108	2.0	61
	0728	4.6	140
	1402	1.4	43
	2007	4.1	125
9 F	0200	1.8	54
	0814	4.7	143
	1438	1.3	39
	2043	4.4	133
10 Sa	0243	1.6	48
	0852	4.8	145
	1510	1.2	37
	2116	4.6	140
11 Su	0320	1.4	43
	0927	4.8	146
	1539	1.1	35
	2146	4.8	146
12 M ●	0356	1.3	39
	0958	4.8	145
	1607	1.1	35
	2216	5.0	151
13 Tu	0429	1.2	37
	1029	4.7	142
	1633	1.2	36
	2246	5.1	154
14 W	0503	1.2	36
	1100	4.5	137
	1700	1.2	38
	2316	5.1	155
15 Th	0537	1.2	37
	1132	4.3	131
	1728	1.3	41
	2349	5.1	154

	Time	Height	
	h m	ft	cm
16 F	0614	1.3	39
	1206	4.1	124
	1758	1.5	46
17 Sa	0024	5.0	152
	0656	1.4	43
	1244	3.8	116
	1831	1.7	51
18 Su	0103	4.8	147
	0744	1.6	48
	1331	3.5	108
	1911	1.9	57
19 M	0150	4.7	142
	0844	1.7	52
	1432	3.3	101
	2003	2.1	64
20 Tu ◐	0248	4.5	137
	0956	1.8	54
	1555	3.2	98
	2115	2.3	69
21 W	0359	4.4	134
	1112	1.7	52
	1722	3.3	102
	2243	2.3	69
22 Th	0515	4.4	135
	1216	1.5	46
	1829	3.7	112
23 F	0005	2.1	63
	0623	4.6	140
	1307	1.2	38
	1919	4.1	126
24 Sa	0111	1.7	53
	0721	4.8	147
	1351	1.0	30
	2004	4.6	140
25 Su	0206	1.3	41
	0812	5.1	154
	1433	0.7	22
	2047	5.1	155
26 M	0257	1.0	29
	0900	5.2	159
	1513	0.5	16
	2130	5.5	169
27 Tu ○	0346	0.7	20
	0947	5.2	159
	1554	0.5	14
	2213	5.9	179
28 W	0436	0.5	14
	1034	5.1	156
	1636	0.5	15
	2258	6.0	184
29 Th	0526	0.4	13
	1122	4.9	148
	1719	0.7	20
	2343	6.0	183
30 F	0618	0.6	17
	1211	4.5	138
	1804	1.0	29
31 Sa	0031	5.8	177
	0713	0.8	24
	1304	4.2	127
	1852	1.3	39

November

	Time	Height	
	h m	ft	cm
1 Su	0121	5.4	166
	0811	1.1	33
	1403	3.8	117
	1946	1.7	51
2 M	0216	5.1	154
	0915	1.3	41
	1514	3.6	110
	2048	2.0	61
3 Tu ◑	0318	4.7	142
	1023	1.5	47
	1634	3.5	108
	2203	2.2	68
4 W	0429	4.4	134
	1131	1.6	49
	1749	3.7	112
	2324	2.3	70
5 Th	0541	4.3	130
	1230	1.6	49
	1848	3.9	119
6 F	0037	2.2	67
	0644	4.2	129
	1317	1.5	47
	1934	4.2	127
7 Sa	0135	2.0	61
	0736	4.3	131
	1356	1.4	44
	2012	4.5	136
8 Su	0221	1.8	55
	0819	4.3	132
	1430	1.4	43
	2046	4.7	144
9 M	0301	1.6	49
	0856	4.4	133
	1500	1.3	41
	2118	5.0	151
10 Tu	0338	1.4	44
	0931	4.3	132
	1529	1.3	40
	2150	5.2	158
11 W ●	0414	1.3	39
	1004	4.3	131
	1558	1.3	40
	2221	5.3	162
12 Th	0449	1.2	36
	1038	4.2	128
	1628	1.3	40
	2254	5.4	164
13 F	0525	1.1	35
	1113	4.1	124
	1659	1.4	42
	2328	5.4	164
14 Sa	0604	1.1	35
	1151	3.9	119
	1734	1.5	45
15 Su	0005	5.3	162
	0647	1.2	36
	1234	3.7	113
	1812	1.6	49

	Time	Height	
	h m	ft	cm
16 M	0046	5.2	157
	0734	1.3	39
	1323	3.5	108
	1857	1.8	55
17 Tu	0132	5.0	151
	0828	1.4	42
	1422	3.4	104
	1951	2.0	60
18 W	0226	4.7	144
	0929	1.5	45
	1534	3.4	104
	2059	2.1	65
19 Th ◐	0329	4.6	139
	1032	1.5	45
	1649	3.6	109
	2219	2.2	66
20 F	0439	4.5	136
	1133	1.4	42
	1754	3.9	119
	2340	2.0	62
21 Sa	0547	4.5	136
	1227	1.2	37
	1850	4.4	133
22 Su	0051	1.8	54
	0650	4.5	138
	1315	1.0	31
	1939	4.8	147
23 M	0152	1.4	44
	0747	4.6	141
	1400	0.9	26
	2026	5.3	161
24 Tu	0246	1.1	33
	0840	4.7	143
	1444	0.7	22
	2111	5.7	174
25 W ○	0338	0.8	24
	0930	4.7	142
	1528	0.7	20
	2156	6.0	182
26 Th	0428	0.6	18
	1019	4.6	140
	1612	0.7	22
	2241	6.1	186
27 F	0518	0.5	15
	1108	4.4	135
	1657	0.9	26
	2326	6.0	184
28 Sa	0607	0.6	17
	1157	4.2	129
	1743	1.0	32
29 Su	0012	5.8	178
	0657	0.8	23
	1248	4.0	122
	1830	1.3	40
30 M	0058	5.5	168
	0748	1.0	30
	1341	3.8	116
	1919	1.6	50

December

	Time	Height	
	h m	ft	cm
1 Tu	0145	5.1	155
	0841	1.2	38
	1440	3.7	112
	2014	1.9	59
2 W	0236	4.7	143
	0937	1.4	44
	1546	3.6	110
	2116	2.2	67
3 Th ◑	0333	4.4	133
	1036	1.6	49
	1656	3.7	112
	2230	2.4	72
4 F	0437	4.1	125
	1133	1.7	52
	1759	3.9	118
	2351	2.4	73
5 Sa	0545	4.0	121
	1224	1.7	52
	1852	4.1	126
6 Su	0100	2.3	69
	0647	3.9	120
	1309	1.7	51
	1936	4.4	135
7 M	0155	2.0	62
	0740	3.9	120
	1347	1.6	49
	2015	4.7	144
8 Tu	0241	1.8	55
	0825	4.0	121
	1422	1.5	47
	2051	5.0	153
9 W	0321	1.6	48
	0905	4.0	122
	1455	1.5	45
	2125	5.3	161
10 Th	0358	1.4	42
	0942	4.0	122
	1528	1.4	42
	2200	5.4	166
11 F ●	0435	1.2	36
	1020	4.0	122
	1603	1.3	41
	2235	5.6	170
12 Sa	0513	1.0	32
	1058	4.0	121
	1639	1.3	40
	2312	5.6	172
13 Su	0552	1.0	30
	1139	3.9	119
	1718	1.3	41
	2351	5.6	171
14 M	0634	1.0	30
	1222	3.8	117
	1801	1.4	43
15 Tu	0032	5.5	167
	0718	1.0	31
	1310	3.8	115
	1848	1.5	47

	Time	Height	
	h m	ft	cm
16 W	0118	5.2	160
	0806	1.1	34
	1404	3.7	114
	1942	1.7	52
17 Th	0208	5.0	152
	0859	1.2	37
	1506	3.8	115
	2044	1.9	58
18 F ◐	0304	4.7	144
	0954	1.3	39
	1613	3.9	119
	2157	2.0	61
19 Sa	0407	4.5	136
	1052	1.3	39
	1720	4.2	127
	2319	2.0	61
20 Su	0516	4.3	131
	1149	1.2	38
	1822	4.5	138
21 M	0036	1.8	56
	0625	4.2	128
	1243	1.2	36
	1918	5.0	151
22 Tu	0144	1.5	47
	0729	4.2	127
	1334	1.1	33
	2010	5.3	163
23 W	0242	1.2	37
	0827	4.2	128
	1423	1.0	30
	2058	5.7	173
24 Th	0334	0.9	28
	0920	4.2	129
	1510	0.9	28
	2144	5.9	180
25 F ○	0423	0.7	22
	1010	4.2	129
	1556	0.9	28
	2229	6.0	183
26 Sa	0509	0.6	18
	1057	4.2	128
	1641	1.0	29
	2312	6.0	182
27 Su	0553	0.6	19
	1142	4.1	126
	1725	1.1	33
	2353	5.8	176
28 M	0636	0.8	23
	1226	4.0	123
	1809	1.2	38
29 Tu	0034	5.5	167
	0719	1.0	29
	1310	3.9	120
	1852	1.5	46
30 W	0114	5.1	156
	0801	1.2	36
	1357	3.8	116
	1937	1.8	55
31 Th	0155	4.8	145
	0846	1.4	43
	1450	3.7	114
	2027	2.1	64

Time meridian 60° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.
Heights are referred to the chart datum of soundings.

Antofagasta, Chile, 2015

Times and Heights of High and Low Waters

January

	Time	Height	
	h m	ft	cm
1 Th	0051	1.8	54
	0622	3.5	107
	1219	1.4	43
	1906	4.7	143
2 F	0151	1.5	47
	0723	3.5	106
	1310	1.3	41
	1954	4.9	149
3 Sa	0241	1.3	41
	0816	3.5	106
	1358	1.3	40
	2038	5.0	152
4 Su	0326	1.2	36
	0903	3.5	108
	1443	1.3	39
	2120	5.1	154
5 M ○	0407	1.1	34
	0946	3.6	109
	1525	1.3	40
	2159	5.1	154
6 Tu	0445	1.1	34
	1027	3.6	110
	1604	1.4	43
	2237	5.0	152
7 W	0523	1.2	36
	1107	3.6	110
	1642	1.5	47
	2314	4.9	148
8 Th	0559	1.3	39
	1147	3.6	110
	1720	1.7	53
	2349	4.7	142
9 F	0636	1.4	43
	1229	3.6	109
	1759	1.9	59
10 Sa	0024	4.5	136
	0713	1.6	48
	1313	3.6	109
	1842	2.2	66
11 Su	0100	4.2	128
	0752	1.7	52
	1403	3.6	109
	1933	2.4	72
12 M	0139	3.9	120
	0833	1.8	56
	1459	3.6	111
	2036	2.5	77
13 Tu ◑	0225	3.7	112
	0919	1.9	58
	1559	3.8	115
	2154	2.6	78
14 W	0325	3.5	106
	1008	2.0	60
	1658	3.9	120
	2314	2.5	76
15 Th	0438	3.3	101
	1058	1.9	59
	1751	4.2	128

	Time	Height	
	h m	ft	cm
16 F	0023	2.3	71
	0550	3.3	100
	1148	1.9	58
	1838	4.5	136
17 Sa	0118	2.1	64
	0649	3.3	102
	1237	1.8	55
	1922	4.8	146
18 Su	0205	1.8	56
	0740	3.4	105
	1324	1.6	50
	2006	5.1	155
19 M	0248	1.6	48
	0826	3.6	111
	1410	1.5	46
	2050	5.3	163
20 Tu ●	0330	1.4	42
	0911	3.8	117
	1457	1.3	41
	2134	5.6	170
21 W	0412	1.2	36
	0957	4.0	122
	1545	1.3	39
	2220	5.7	173
22 Th	0454	1.1	33
	1044	4.2	127
	1634	1.3	39
	2306	5.6	172
23 F	0538	1.0	32
	1133	4.3	131
	1726	1.4	42
	2353	5.4	166
24 Sa	0623	1.1	34
	1226	4.4	133
	1822	1.6	48
25 Su	0041	5.2	157
	0710	1.2	37
	1321	4.4	133
	1924	1.8	56
26 M	0133	4.7	144
	0800	1.4	42
	1423	4.4	133
	2037	2.1	63
27 Tu ◐	0231	4.2	129
	0854	1.6	48
	1532	4.4	134
	2201	2.2	66
28 W	0340	3.8	117
	0954	1.7	52
	1647	4.5	136
	2329	2.1	65
29 Th	0459	3.5	108
	1100	1.8	54
	1756	4.6	140
30 F	0045	2.0	60
	0615	3.4	105
	1203	1.8	54
	1855	4.7	144
31 Sa	0144	1.8	54
	0718	3.5	107
	1300	1.7	52
	1945	4.9	148

February

	Time	Height	
	h m	ft	cm
1 Su	0231	1.6	48
	0807	3.6	110
	1349	1.6	49
	2028	5.0	151
2 M	0311	1.4	44
	0849	3.7	113
	1433	1.5	46
	2107	5.0	153
3 Tu ○	0347	1.3	41
	0928	3.8	116
	1512	1.5	45
	2143	5.0	153
4 W	0421	1.3	40
	1004	3.9	118
	1549	1.5	46
	2218	5.0	151
5 Th	0454	1.3	40
	1040	3.9	119
	1625	1.6	48
	2251	4.9	148
6 F	0526	1.4	42
	1116	3.9	119
	1700	1.7	52
	2323	4.7	142
7 Sa	0557	1.5	45
	1152	3.9	119
	1736	1.8	56
	2354	4.5	136
8 Su	0628	1.6	49
	1230	3.9	118
	1815	2.0	62
9 M	0026	4.2	128
	0700	1.7	53
	1311	3.9	118
	1859	2.2	68
10 Tu	0058	3.9	120
	0734	1.9	57
	1358	3.9	118
	1953	2.4	73
11 W ◑	0136	3.6	111
	0813	2.0	61
	1453	3.9	118
	2101	2.5	76
12 Th	0227	3.4	103
	0901	2.1	64
	1557	4.0	121
	2227	2.5	76
13 F	0343	3.2	98
	1001	2.1	65
	1703	4.1	126
	2349	2.4	72
14 Sa	0516	3.1	96
	1107	2.1	64
	1803	4.4	134
15 Su	0051	2.1	64
	0627	3.3	100
	1209	1.9	59
	1855	4.7	143

	Time	Height	
	h m	ft	cm
16 M	0140	1.8	56
	0721	3.5	106
	1304	1.7	52
	1943	5.0	153
17 Tu	0223	1.5	47
	0807	3.7	114
	1355	1.5	45
	2029	5.3	161
18 W ●	0304	1.3	39
	0851	4.0	122
	1444	1.2	38
	2115	5.5	167
19 Th	0345	1.0	32
	0936	4.3	130
	1533	1.1	33
	2200	5.5	169
20 F	0426	0.9	28
	1022	4.5	137
	1622	1.0	32
	2245	5.5	167
21 Sa	0508	0.9	27
	1110	4.6	141
	1714	1.1	35
	2332	5.2	159
22 Su	0551	1.0	29
	1200	4.7	143
	1810	1.3	41
23 M	0020	4.8	147
	0636	1.1	34
	1253	4.6	141
	1911	1.6	49
24 Tu	0111	4.4	133
	0724	1.3	41
	1352	4.5	138
	2022	1.8	56
25 W ◐	0210	3.9	119
	0818	1.6	49
	1459	4.4	135
	2146	2.0	61
26 Th	0322	3.5	107
	0922	1.8	55
	1617	4.4	133
	2314	2.0	61
27 F	0450	3.3	101
	1036	1.9	58
	1734	4.4	134
28 Sa	0029	1.9	57
	0609	3.3	101
	1147	1.9	58
	1835	4.5	136

March

	Time	Height	
	h m	ft	cm
1 Su	0125	1.7	52
	0707	3.4	104
	1247	1.8	54
	1925	4.6	139
2 M	0208	1.5	47
	0752	3.6	109
	1336	1.6	50
	2007	4.6	141
3 Tu	0245	1.4	42
	0830	3.7	113
	1418	1.5	46
	2044	4.7	142
4 W	0318	1.3	39
	0904	3.8	117
	1456	1.4	44
	2118	4.7	142
5 Th ○	0349	1.2	37
	0938	3.9	120
	1532	1.4	42
	2151	4.6	140
6 F	0419	1.2	36
	1011	4.0	122
	1607	1.4	43
	2223	4.5	136
7 Sa	0447	1.2	37
	1045	4.0	123
	1641	1.4	44
	2253	4.3	131
8 Su	0515	1.3	40
	1118	4.1	124
	1717	1.5	47
	2324	4.1	125
9 M	0543	1.4	43
	1154	4.0	123
	1755	1.7	52
	2355	3.8	117
10 Tu	0611	1.5	47
	1231	4.0	123
	1838	1.8	56
11 W	0027	3.6	109
	0641	1.7	51
	1313	4.0	121
	1928	2.0	61
12 Th	0105	3.3	101
	0717	1.8	56
	1402	3.9	120
	2031	2.1	64
13 F ◑	0156	3.1	94
	0805	2.0	60
	1503	3.9	120
	2153	2.1	65
14 Sa	0315	2.9	89
	0912	2.1	63
	1616	4.0	122
	2316	2.0	61
15 Su	0458	2.9	89
	1034	2.0	62
	1726	4.2	127

	Time	Height	
	h m	ft	cm
16 M	0020	1.8	54
	0611	3.1	95
	1147	1.8	56
	1825	4.4	135
17 Tu	0109	1.5	46
	0703	3.4	104
	1247	1.6	48
	1916	4.7	143
18 W	0152	1.2	37
	0747	3.7	114
	1341	1.3	39
	2004	4.9	149
19 Th	0233	0.9	28
	0831	4.1	124
	1431	1.0	31
	2050	5.0	153
20 F ●	0313	0.7	22
	0915	4.4	133
	1521	0.8	25
	2136	5.0	152
21 Sa	0354	0.6	18
	1001	4.6	141
	1612	0.8	23
	2222	4.8	147
22 Su	0435	0.6	17
	1048	4.8	145
	1705	0.8	25
	2309	4.5	138
23 M	0517	0.7	21
	1136	4.8	145
	1801	1.0	30
	2359	4.2	127
24 Tu	0601	0.9	28
	1228	4.7	142
	1901	1.2	37
25 W	0052	3.7	114
	0648	1.2	36
	1323	4.5	137
	2009	1.4	44
26 Th	0153	3.3	102
	0742	1.5	46
	1426	4.3	130
	2127	1.6	49
27 F ◐	0308	3.1	94
	0848	1.7	53
	1540	4.1	125
	2248	1.6	50
28 Sa	0437	3.0	91
	1007	1.9	57
	1657	4.0	123
	2357	1.6	48
29 Su	0553	3.1	94
	1122	1.9	57
	1800	4.0	123
30 M	0050	1.4	44
	0647	3.2	99
	1224	1.7	53
	1850	4.1	124
31 Tu	0132	1.3	39
	0728	3.4	105
	1314	1.6	49
	1933	4.1	125

Time meridian 60° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.
Heights are referred to the chart datum of soundings.

Antofagasta, Chile, 2015

Times and Heights of High and Low Waters

April

	Time	Height	
	h m	ft	cm
1 W	0207	1.1	35
	0804	3.6	110
	1358	1.4	44
	2010	4.1	125
2 Th	0239	1.0	32
	0837	3.8	115
	1436	1.3	40
	2045	4.1	124
3 F	0309	1.0	29
	0910	3.9	120
	1513	1.2	37
	2118	4.0	122
4 Sa ○	0337	0.9	28
	0942	4.0	123
	1549	1.2	36
	2151	3.9	119
5 Su	0405	1.0	29
	1014	4.1	125
	1625	1.2	36
	2223	3.7	114
6 M	0432	1.0	31
	1048	4.2	127
	1702	1.2	37
	2255	3.5	108
7 Tu	0459	1.1	34
	1123	4.2	127
	1741	1.3	40
	2328	3.3	102
8 W	0527	1.2	38
	1200	4.1	126
	1825	1.4	43
9 Th	0005	3.1	96
	0559	1.4	43
	1241	4.1	124
	1915	1.5	47
10 F	0049	2.9	89
	0638	1.6	48
	1329	4.0	121
	2016	1.6	49
11 Sa ◑	0147	2.8	84
	0730	1.8	54
	1427	3.9	119
	2129	1.6	49
12 Su	0310	2.7	82
	0842	1.9	57
	1537	3.9	119
	2243	1.5	46
13 M	0445	2.8	85
	1010	1.8	56
	1648	4.0	121
	2343	1.3	40
14 Tu	0552	3.1	93
	1128	1.7	51
	1751	4.1	125
15 W	0033	1.1	33
	0642	3.4	103
	1232	1.4	43
	1845	4.2	129

	Time	Height	
	h m	ft	cm
16 Th	0116	0.8	25
	0726	3.7	114
	1328	1.1	33
	1936	4.3	131
17 F	0158	0.6	18
	0810	4.1	125
	1421	0.8	25
	2024	4.3	131
18 Sa ●	0239	0.4	12
	0854	4.4	135
	1512	0.7	20
	2112	4.2	129
19 Su	0320	0.3	10
	0940	4.7	142
	1605	0.6	17
	2200	4.0	123
20 M	0402	0.4	11
	1027	4.8	145
	1658	0.6	17
	2249	3.8	115
21 Tu	0445	0.5	16
	1115	4.8	145
	1753	0.7	21
	2341	3.5	106
22 W	0529	0.8	23
	1204	4.6	140
	1850	0.9	27
23 Th	0035	3.2	97
	0616	1.0	32
	1256	4.4	134
	1952	1.1	33
24 F	0135	3.0	90
	0708	1.4	42
	1352	4.1	126
	2100	1.2	38
25 Sa ◐	0248	2.8	85
	0811	1.6	50
	1456	3.9	119
	2209	1.3	40
26 Su	0411	2.8	85
	0927	1.8	56
	1606	3.7	114
	2311	1.3	40
27 M	0522	2.9	89
	1045	1.9	57
	1710	3.6	111
28 Tu	0002	1.2	38
	0615	3.1	95
	1151	1.8	55
	1803	3.6	110
29 W	0044	1.1	34
	0657	3.3	102
	1246	1.6	50
	1849	3.6	109
30 Th	0120	1.0	31
	0733	3.6	109
	1332	1.5	45
	1930	3.6	109

May

	Time	Height	
	h m	ft	cm
1 F	0153	0.9	28
	0806	3.8	115
	1414	1.3	40
	2008	3.5	108
2 Sa	0224	0.8	25
	0839	4.0	121
	1453	1.2	36
	2044	3.5	106
3 Su ○	0254	0.8	24
	0912	4.1	126
	1531	1.0	32
	2119	3.4	104
4 M	0322	0.8	25
	0945	4.3	130
	1609	1.0	31
	2154	3.3	100
5 Tu	0351	0.9	26
	1020	4.3	132
	1648	1.0	30
	2230	3.2	97
6 W	0421	1.0	29
	1057	4.4	133
	1729	1.0	31
	2308	3.1	93
7 Th	0454	1.1	33
	1136	4.4	133
	1814	1.1	33
	2351	2.9	89
8 F	0532	1.2	38
	1219	4.3	131
	1904	1.2	36
9 Sa	0042	2.8	86
	0617	1.4	44
	1307	4.2	127
	2001	1.2	37
10 Su	0144	2.7	83
	0715	1.6	49
	1403	4.1	124
	2104	1.2	38
11 M ◑	0301	2.8	84
	0828	1.7	53
	1507	3.9	120
	2207	1.1	35
12 Tu	0421	2.9	89
	0953	1.7	53
	1614	3.9	118
	2304	1.0	31
13 W	0525	3.2	97
	1111	1.6	49
	1718	3.8	117
	2354	0.9	26
14 Th	0618	3.5	108
	1218	1.4	42
	1816	3.8	116
15 F	0040	0.7	20
	0705	3.9	119
	1318	1.1	34
	1910	3.8	115

	Time	Height	
	h m	ft	cm
16 Sa	0125	0.5	15
	0751	4.3	130
	1414	0.9	26
	2002	3.7	113
17 Su	0208	0.4	12
	0836	4.5	138
	1508	0.7	20
	2053	3.6	110
18 M ●	0251	0.4	11
	0922	4.7	144
	1559	0.6	17
	2143	3.5	106
19 Tu	0335	0.4	13
	1009	4.8	146
	1651	0.5	16
	2234	3.3	102
20 W	0419	0.6	18
	1055	4.8	145
	1742	0.6	19
	2324	3.2	97
21 Th	0503	0.8	25
	1142	4.6	141
	1833	0.8	23
22 F	0016	3.0	92
	0549	1.1	33
	1229	4.4	134
	1927	1.0	29
23 Sa	0112	2.9	88
	0638	1.4	42
	1318	4.1	126
	2022	1.1	34
24 Su	0215	2.8	86
	0733	1.7	51
	1410	3.9	118
	2119	1.2	37
25 M ◐	0325	2.8	86
	0839	1.9	57
	1508	3.6	111
	2215	1.3	39
26 Tu	0435	3.0	90
	0955	2.0	61
	1609	3.5	106
	2305	1.2	38
27 W	0532	3.1	96
	1108	2.0	60
	1708	3.4	103
	2350	1.2	37
28 Th	0617	3.4	104
	1211	1.8	56
	1800	3.3	101
29 F	0029	1.1	34
	0656	3.6	111
	1304	1.7	51
	1848	3.3	100
30 Sa	0105	1.0	32
	0732	3.9	119
	1350	1.5	45
	1931	3.2	99
31 Su	0139	1.0	30
	0807	4.1	126
	1432	1.3	40
	2011	3.2	98

June

	Time	Height	
	h m	ft	cm
1 M	0212	0.9	28
	0842	4.3	132
	1512	1.1	35
	2050	3.2	98
2 Tu ○	0244	0.9	28
	0918	4.5	138
	1551	1.0	32
	2129	3.2	97
3 W	0318	0.9	28
	0955	4.7	142
	1631	1.0	30
	2209	3.1	96
4 Th	0354	1.0	30
	1035	4.7	144
	1714	1.0	29
	2252	3.1	96
5 F	0434	1.1	33
	1117	4.7	144
	1758	1.0	30
	2340	3.1	95
6 Sa	0518	1.2	37
	1202	4.7	142
	1847	1.0	31
7 Su	0032	3.1	95
	0609	1.4	43
	1251	4.5	138
	1938	1.0	32
8 M	0131	3.1	95
	0708	1.6	48
	1343	4.4	133
	2033	1.1	33
9 Tu ◑	0238	3.2	97
	0818	1.7	52
	1442	4.1	126
	2130	1.1	33
10 W	0349	3.3	101
	0937	1.8	54
	1545	3.9	119
	2225	1.0	31
11 Th	0455	3.6	109
	1057	1.7	52
	1650	3.7	113
	2318	1.0	29
12 F	0554	3.9	118
	1210	1.5	47
	1753	3.6	109
13 Sa	0009	0.9	26
	0646	4.2	128
	1314	1.3	40
	1853	3.5	106
14 Su	0057	0.8	23
	0735	4.5	136
	1412	1.0	32
	1949	3.4	104
15 M	0145	0.7	21
	0822	4.7	143
	1504	0.9	26
	2041	3.4	103

	Time	Height	
	h m	ft	cm
16 Tu ●	0231	0.7	21
	0908	4.9	148
	1553	0.7	22
	2131	3.3	102
17 W	0316	0.7	22
	0954	4.9	149
	1640	0.7	21
	2219	3.3	101
18 Th	0400	0.8	25
	1038	4.9	148
	1725	0.8	23
	2306	3.3	100
19 F	0443	1.0	30
	1121	4.7	144
	1809	0.9	26
	2353	3.2	98
20 Sa	0526	1.2	37
	1202	4.5	138
	1853	1.0	31
21 Su	0041	3.1	96
	0609	1.5	45
	1244	4.3	130
	1938	1.2	36
22 M	0132	3.1	95
	0657	1.7	53
	1326	4.0	122
	2025	1.3	41
23 Tu	0229	3.1	95
	0753	2.0	60
	1412	3.7	114
	2113	1.4	44
24 W ◐	0333	3.2	97
	0900	2.1	65
	1505	3.5	107
	2203	1.5	45
25 Th	0435	3.3	102
	1017	2.2	67
	1606	3.3	101
	2251	1.5	45
26 F	0529	3.5	108
	1130	2.1	64
	1709	3.2	98
	2336	1.4	44
27 Sa	0615	3.8	116
	1232	1.9	59
	1807	3.1	96
28 Su	0018	1.4	42
	0656	4.1	124
	1324	1.7	53
	1858	3.1	96
29 M	0058	1.3	40
	0735	4.3	132
	1409	1.5	47
	1943	3.2	97
30 Tu	0136	1.2	37
	0814	4.6	140
	1451	1.3	41
	2026	3.2	99

Time meridian 60° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.
Heights are referred to the chart datum of soundings.

Antofagasta, Chile, 2015

Times and Heights of High and Low Waters

July

	Time	Height	
	h m	ft	cm
1 W ○	0214	1.1	35
	0853	4.8	147
	1531	1.2	36
	2108	3.3	102
2 Th	0254	1.1	33
	0934	5.0	152
	1611	1.1	33
	2151	3.4	105
3 F	0336	1.1	33
	1016	5.1	156
	1653	1.0	30
	2235	3.5	107
4 Sa	0420	1.1	33
	1100	5.1	156
	1736	1.0	29
	2323	3.6	109
5 Su	0508	1.2	36
	1145	5.1	154
	1822	1.0	30
6 M	0014	3.6	111
	0600	1.3	41
	1233	4.9	149
	1909	1.0	31
7 Tu	0109	3.7	112
	0658	1.5	47
	1323	4.6	141
	2000	1.1	33
8 W ◑	0210	3.7	114
	0806	1.7	53
	1418	4.3	130
	2053	1.2	36
9 Th	0316	3.8	116
	0923	1.8	56
	1520	3.9	119
	2149	1.2	37
10 F	0426	4.0	121
	1047	1.8	56
	1629	3.6	110
	2247	1.2	38
11 Sa	0532	4.2	127
	1206	1.7	52
	1740	3.4	104
	2345	1.2	37
12 Su	0632	4.4	134
	1313	1.5	45
	1846	3.3	102
13 M	0040	1.1	35
	0724	4.6	141
	1409	1.2	38
	1943	3.3	102
14 Tu	0132	1.1	33
	0812	4.8	146
	1458	1.0	32
	2034	3.4	104
15 W ●	0219	1.0	31
	0857	4.9	149
	1541	1.0	29
	2119	3.5	106

	Time	Height	
	h m	ft	cm
16 Th	0304	1.0	30
	0939	4.9	150
	1622	0.9	27
	2202	3.5	108
17 F	0346	1.0	31
	1020	4.9	149
	1701	0.9	28
	2243	3.5	108
18 Sa	0425	1.1	35
	1058	4.8	145
	1738	1.0	31
	2324	3.5	107
19 Su	0504	1.3	40
	1134	4.6	140
	1815	1.1	35
20 M	0005	3.5	106
	0543	1.5	47
	1210	4.3	132
	1852	1.3	39
21 Tu	0048	3.4	105
	0625	1.8	54
	1246	4.1	124
	1930	1.4	44
22 W	0136	3.4	104
	0713	2.0	60
	1324	3.8	116
	2011	1.6	48
23 Th	0229	3.4	105
	0811	2.2	66
	1408	3.5	108
	2057	1.7	51
24 F ◐	0330	3.5	107
	0924	2.3	69
	1505	3.3	100
	2148	1.7	53
25 Sa	0433	3.6	111
	1046	2.2	68
	1617	3.1	95
	2241	1.7	53
26 Su	0530	3.9	118
	1159	2.1	64
	1730	3.1	93
	2333	1.7	52
27 M	0620	4.1	126
	1257	1.9	58
	1831	3.1	95
28 Tu	0022	1.6	49
	0705	4.4	134
	1345	1.7	51
	1921	3.2	98
29 W	0108	1.4	44
	0748	4.7	143
	1427	1.4	44
	2005	3.4	103
30 Th	0152	1.3	39
	0830	5.0	151
	1507	1.2	37
	2048	3.6	109
31 F ○	0237	1.1	34
	0912	5.2	158
	1547	1.0	32
	2131	3.8	115

August

	Time	Height	
	h m	ft	cm
1 Sa	0321	1.0	31
	0956	5.3	162
	1627	0.9	28
	2215	3.9	120
2 Su	0408	1.0	30
	1040	5.3	163
	1709	0.9	26
	2302	4.1	124
3 M	0456	1.0	31
	1125	5.2	159
	1752	0.9	26
	2351	4.1	126
4 Tu	0549	1.2	36
	1211	5.0	151
	1837	0.9	28
5 W	0044	4.2	127
	0647	1.4	42
	1301	4.6	140
	1925	1.0	32
6 Th ◑	0141	4.2	127
	0754	1.6	50
	1356	4.1	126
	2017	1.2	38
7 F	0246	4.1	126
	0912	1.8	55
	1500	3.7	113
	2116	1.4	42
8 Sa	0359	4.2	127
	1040	1.8	56
	1617	3.4	103
	2222	1.5	45
9 Su	0514	4.3	130
	1202	1.7	52
	1737	3.2	99
	2329	1.5	45
10 M	0620	4.4	135
	1308	1.5	46
	1845	3.3	100
11 Tu	0031	1.4	42
	0714	4.6	139
	1400	1.3	39
	1939	3.4	103
12 W	0124	1.3	39
	0801	4.7	143
	1443	1.1	34
	2023	3.5	107
13 Th	0211	1.1	35
	0843	4.8	145
	1521	1.0	31
	2103	3.6	111
14 F ●	0252	1.1	33
	0921	4.8	145
	1556	1.0	29
	2141	3.7	113
15 Sa	0331	1.0	32
	0957	4.7	144
	1630	1.0	29
	2217	3.8	115

	Time	Height	
	h m	ft	cm
16 Su	0408	1.1	34
	1032	4.6	140
	1703	1.0	30
	2253	3.8	115
17 M	0444	1.2	38
	1105	4.4	135
	1735	1.1	34
	2330	3.7	114
18 Tu	0520	1.4	42
	1138	4.2	127
	1806	1.2	38
19 W	0008	3.7	113
	0559	1.6	48
	1210	3.9	119
	1838	1.4	42
20 Th	0049	3.6	111
	0643	1.8	54
	1245	3.6	111
	1913	1.5	47
21 F	0135	3.6	110
	0735	2.0	60
	1324	3.3	102
	1953	1.7	52
22 Sa ◐	0228	3.6	110
	0841	2.1	64
	1415	3.1	94
	2042	1.8	55
23 Su	0332	3.6	111
	1004	2.1	65
	1531	2.9	89
	2145	1.9	57
24 M	0441	3.8	115
	1126	2.0	61
	1703	2.9	88
	2252	1.8	56
25 Tu	0542	4.0	122
	1229	1.8	55
	1812	3.0	91
	2353	1.7	52
26 W	0635	4.3	131
	1317	1.5	47
	1903	3.2	98
27 Th	0047	1.5	45
	0721	4.6	140
	1359	1.3	39
	1946	3.4	105
28 F	0135	1.2	37
	0806	4.9	148
	1438	1.0	31
	2027	3.7	114
29 Sa ○	0221	1.0	30
	0849	5.1	154
	1517	0.8	24
	2109	4.0	122
30 Su	0307	0.8	24
	0932	5.2	158
	1556	0.6	19
	2153	4.3	130
31 M	0355	0.7	21
	1017	5.1	156
	1637	0.6	17
	2239	4.4	135

September

	Time	Height	
	h m	ft	cm
1 Tu	0445	0.7	22
	1102	5.0	151
	1719	0.6	18
	2327	4.5	137
2 W	0538	0.9	27
	1150	4.6	141
	1803	0.7	22
3 Th	0018	4.5	136
	0637	1.1	34
	1240	4.2	128
	1850	1.0	29
4 F	0114	4.4	133
	0744	1.3	41
	1338	3.7	114
	1943	1.2	37
5 Sa ◑	0218	4.2	129
	0903	1.5	47
	1447	3.3	102
	2046	1.4	44
6 Su	0333	4.1	126
	1031	1.6	48
	1613	3.1	95
	2202	1.6	48
7 M	0453	4.1	126
	1150	1.5	45
	1737	3.1	94
	2318	1.6	48
8 Tu	0602	4.2	128
	1251	1.3	40
	1840	3.2	98
9 W	0022	1.4	44
	0657	4.3	130
	1338	1.1	35
	1927	3.4	103
10 Th	0114	1.3	39
	0742	4.3	132
	1417	1.0	31
	2007	3.5	108
11 F	0159	1.1	35
	0821	4.4	133
	1452	0.9	27
	2042	3.7	113
12 Sa	0239	1.0	31
	0857	4.4	133
	1524	0.8	25
	2116	3.8	116
13 Su ●	0316	1.0	29
	0931	4.3	131
	1555	0.8	25
	2150	3.9	118
14 M	0351	1.0	29
	1004	4.2	127
	1624	0.9	26
	2224	3.9	119
15 Tu	0426	1.0	31
	1036	4.0	122
	1653	0.9	28
	2258	3.9	119

	Time	Height	
	h m	ft	cm
16 W	0502	1.1	34
	1108	3.8	115
	1722	1.0	32
	2333	3.9	118
17 Th	0541	1.3	39
	1140	3.5	107
	1750	1.2	37
18 F	0010	3.8	116
	0623	1.4	44
	1214	3.2	99
	1821	1.4	43
19 Sa	0051	3.7	114
	0712	1.6	49
	1254	3.0	92
	1857	1.6	48
20 Su	0139	3.7	112
	0812	1.7	53
	1346	2.8	85
	1946	1.8	54
21 M ◐	0238	3.6	110
	0930	1.8	54
	1507	2.7	81
	2055	1.9	57
22 Tu	0350	3.6	111
	1051	1.7	52
	1647	2.7	82
	2218	1.8	56
23 W	0502	3.8	116
	1154	1.5	46
	1756	2.9	88
	2331	1.7	51
24 Th	0602	4.0	123
	1243	1.2	38
	1844	3.2	97
25 F	0029	1.4	43
	0652	4.3	130
	1325	1.0	30
	1925	3.5	107
26 Sa	0119	1.1	33
	0738	4.5	137
	1404	0.7	22
	2005	3.9	118
27 Su ○	0207	0.8	24
	0823	4.7	142
	1443	0.5	15
	2047	4.2	128
28 M	0255	0.6	17
	0908	4.7	143
	1523	0.3	10
	2130	4.5	136
29 Tu	0344	0.4	13
	0954	4.6	140
	1604	0.3	9
	2216	4.6	141
30 W	0435	0.4	13
	1041	4.4	133
	1646	0.4	11
	2304	4.7	143

Time meridian 60° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.
Heights are referred to the chart datum of soundings.

Antofagasta, Chile, 2015

Times and Heights of High and Low Waters

October

	Time	Height	
	h m	ft	cm
1 Th	0530	0.6	17
	1130	4.0	123
	1730	0.6	18
	2355	4.6	141
2 F	0629	0.8	23
	1224	3.6	111
	1818	0.9	26
3 Sa	0049	4.4	135
	0735	1.0	30
	1325	3.3	100
	1913	1.2	36
4 Su ◑	0150	4.2	128
	0850	1.2	36
	1439	3.0	91
	2020	1.5	45
5 M	0303	4.0	122
	1010	1.3	39
	1607	2.9	89
	2141	1.6	49
6 Tu	0423	3.9	118
	1122	1.2	37
	1726	3.0	92
	2301	1.6	49
7 W	0533	3.8	117
	1219	1.1	34
	1824	3.2	97
8 Th	0007	1.5	45
	0628	3.9	118
	1304	1.0	31
	1907	3.4	104
9 F	0059	1.3	40
	0713	3.9	118
	1342	0.9	27
	1944	3.6	110
10 Sa	0144	1.1	35
	0752	3.9	118
	1415	0.8	24
	2018	3.8	115
11 Su	0223	1.0	31
	0828	3.8	117
	1446	0.7	22
	2050	3.9	119
12 M ●	0300	0.9	28
	0903	3.8	115
	1516	0.7	21
	2123	4.0	122
13 Tu	0336	0.9	26
	0936	3.7	112
	1545	0.8	23
	2155	4.1	124
14 W	0412	0.9	26
	1010	3.5	107
	1613	0.8	25
	2228	4.1	125
15 Th	0449	0.9	27
	1043	3.3	102
	1640	1.0	29
	2303	4.1	124

	Time	Height	
	h m	ft	cm
16 F	0527	1.0	30
	1117	3.1	96
	1709	1.1	34
	2339	4.0	122
17 Sa	0609	1.1	34
	1155	3.0	90
	1740	1.3	40
18 Su	0018	3.9	119
	0656	1.2	38
	1239	2.8	84
	1818	1.5	47
19 M	0104	3.8	116
	0753	1.4	42
	1336	2.6	80
	1909	1.7	53
20 Tu ◐	0159	3.7	113
	0900	1.4	43
	1457	2.6	79
	2022	1.9	57
21 W	0307	3.6	111
	1012	1.4	42
	1629	2.7	82
	2152	1.8	56
22 Th	0420	3.7	112
	1113	1.2	37
	1733	3.0	90
	2310	1.7	51
23 F	0525	3.8	116
	1203	1.0	31
	1820	3.3	101
24 Sa	0012	1.4	42
	0620	3.9	120
	1247	0.8	24
	1902	3.7	112
25 Su	0106	1.0	32
	0710	4.1	124
	1329	0.6	17
	1943	4.1	124
26 M	0157	0.8	23
	0758	4.1	126
	1409	0.4	11
	2026	4.4	135
27 Tu ○	0247	0.5	15
	0846	4.1	125
	1451	0.3	8
	2110	4.7	143
28 W	0338	0.4	11
	0934	4.0	121
	1533	0.3	8
	2156	4.9	148
29 Th	0430	0.3	10
	1024	3.8	115
	1617	0.4	12
	2244	4.9	148
30 F	0524	0.4	12
	1116	3.5	108
	1702	0.6	19
	2334	4.8	145
31 Sa	0621	0.6	17
	1212	3.3	100
	1752	1.0	29

November

	Time	Height	
	h m	ft	cm
1 Su	0027	4.5	138
	0722	0.8	24
	1314	3.1	94
	1847	1.3	39
2 M	0124	4.2	129
	0828	1.0	30
	1425	2.9	89
	1953	1.6	48
3 Tu ◑	0228	4.0	121
	0936	1.1	34
	1546	2.9	89
	2112	1.8	54
4 W	0340	3.7	114
	1041	1.1	35
	1700	3.1	94
	2233	1.8	55
5 Th	0449	3.6	110
	1136	1.1	35
	1756	3.3	100
	2342	1.7	52
6 F	0547	3.5	108
	1221	1.1	33
	1840	3.5	107
7 Sa	0038	1.6	48
	0636	3.5	107
	1259	1.0	30
	1917	3.7	114
8 Su	0125	1.4	42
	0719	3.5	106
	1334	0.9	28
	1951	3.9	120
9 M	0207	1.2	37
	0758	3.4	105
	1407	0.9	26
	2023	4.1	125
10 Tu	0245	1.0	32
	0835	3.4	104
	1437	0.9	26
	2056	4.3	130
11 W ●	0323	1.0	29
	0911	3.3	102
	1507	0.9	27
	2129	4.4	133
12 Th	0359	0.9	27
	0947	3.2	99
	1537	1.0	29
	2203	4.4	134
13 F	0437	0.9	27
	1023	3.1	96
	1606	1.0	32
	2238	4.4	135
14 Sa	0515	0.9	28
	1101	3.1	93
	1638	1.2	37
	2315	4.4	133
15 Su	0557	1.0	31
	1142	3.0	90
	1714	1.4	43
	2356	4.3	131

	Time	Height	
	h m	ft	cm
16 M	0643	1.1	34
	1230	2.9	88
	1757	1.6	49
17 Tu	0041	4.2	127
	0734	1.2	37
	1328	2.8	86
	1852	1.8	55
18 W	0133	4.0	123
	0832	1.2	38
	1439	2.9	87
	2003	1.9	59
19 Th	0234	3.9	119
	0933	1.2	38
	1556	3.0	92
	2128	1.9	59
20 F	0342	3.8	116
	1031	1.1	35
	1700	3.3	100
	2248	1.8	55
21 Sa	0448	3.8	115
	1123	1.0	31
	1752	3.6	111
	2356	1.6	48
22 Su	0549	3.8	115
	1210	0.9	26
	1839	4.0	122
23 M	0055	1.3	39
	0645	3.7	114
	1255	0.7	22
	1923	4.4	134
24 Tu	0151	1.0	30
	0738	3.7	114
	1339	0.6	18
	2008	4.7	144
25 W ○	0243	0.7	22
	0830	3.7	113
	1424	0.5	16
	2054	5.0	151
26 Th	0335	0.6	17
	0921	3.6	111
	1509	0.6	17
	2141	5.1	155
27 F	0426	0.5	15
	1013	3.5	108
	1555	0.7	21
	2229	5.1	155
28 Sa	0518	0.5	16
	1105	3.4	105
	1643	0.9	27
	2318	5.0	151
29 Su	0609	0.7	20
	1159	3.3	102
	1731	1.2	36
30 M	0007	4.7	144
	0702	0.9	26
	1256	3.2	98
	1824	1.5	45

December

	Time	Height	
	h m	ft	cm
1 Tu	0057	4.4	135
	0757	1.0	32
	1358	3.2	97
	1922	1.8	54
2 W	0151	4.1	126
	0854	1.2	37
	1507	3.2	97
	2032	2.0	61
3 Th ◑	0249	3.8	117
	0950	1.3	41
	1616	3.3	100
	2149	2.1	65
4 F	0353	3.6	110
	1043	1.4	42
	1716	3.5	106
	2304	2.1	64
5 Sa	0455	3.4	105
	1131	1.4	42
	1804	3.7	113
6 Su	0008	2.0	61
	0552	3.4	103
	1213	1.3	41
	1845	3.9	120
7 M	0102	1.8	55
	0642	3.3	101
	1252	1.3	39
	1921	4.2	127
8 Tu	0148	1.6	49
	0727	3.3	101
	1328	1.2	38
	1956	4.4	133
9 W	0229	1.4	44
	0809	3.3	101
	1402	1.2	37
	2031	4.6	139
10 Th	0308	1.3	39
	0848	3.3	101
	1435	1.2	37
	2106	4.7	144
11 F ●	0345	1.2	36
	0926	3.3	101
	1508	1.2	38
	2142	4.8	147
12 Sa	0423	1.1	34
	1004	3.3	101
	1542	1.3	40
	2219	4.9	149
13 Su	0501	1.1	34
	1045	3.3	101
	1620	1.4	43
	2259	4.9	148
14 M	0542	1.1	35
	1128	3.3	101
	1701	1.5	47
	2341	4.8	147
15 Tu	0625	1.2	36
	1216	3.3	102
	1748	1.7	52

	Time	Height	
	h m	ft	cm
16 W	0025	4.7	143
	0712	1.2	38
	1310	3.3	102
	1842	1.9	57
17 Th	0114	4.5	138
	0802	1.3	40
	1410	3.4	104
	1948	2.0	62
18 F ◐	0208	4.3	131
	0856	1.3	41
	1517	3.5	108
	2105	2.1	64
19 Sa	0309	4.1	124
	0950	1.3	41
	1623	3.8	115
	2226	2.1	63
20 Su	0415	3.9	118
	1044	1.3	39
	1724	4.1	124
	2342	1.9	58
21 M	0522	3.7	113
	1137	1.2	37
	1818	4.4	134
22 Tu	0050	1.6	50
	0626	3.6	110
	1228	1.1	35
	1909	4.7	143
23 W	0149	1.3	41
	0726	3.6	109
	1318	1.0	32
	1957	5.0	152
24 Th	0243	1.1	34
	0821	3.6	110
	1407	1.0	31
	2045	5.2	158
25 F ○	0333	0.9	28
	0913	3.6	111
	1456	1.0	31
	2132	5.3	161
26 Sa	0420	0.8	25
	1003	3.6	111
	1543	1.0	32
	2218	5.3	161
27 Su	0506	0.9	26
	1052	3.7	112
	1629	1.2	37
	2304	5.2	157
28 M	0551	1.0	29
	1140	3.6	111
	1714	1.4	43
	2347	5.0	151
29 Tu	0636	1.1	34
	1229	3.6	109
	1801	1.7	51
30 W	0030	4.7	143
	0721	1.3	40
	1319	3.5	108
	1850	2.0	60
31 Th	0114	4.4	133
	0806	1.5	45
	1415	3.5	107
	1946	2.2	67

Time meridian 60° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.
Heights are referred to the chart datum of soundings.

Matarani, Peru, 2015

Times and Heights of High and Low Waters

January

	Time	Height	
	h m	ft	cm
1 Th	0442	1.9	58
	1050	−0.1	−3
	1748	3.1	94
2 F	0025	0.5	15
	0545	1.8	55
	1139	−0.1	−3
	1836	3.3	101
3 Sa	0119	0.3	9
	0641	1.8	55
	1225	−0.1	−3
	1920	3.4	104
4 Su ○	0206	0.2	6
	0731	1.8	55
	1309	−0.1	−3
	2001	3.5	107
5 M	0248	0.1	3
	0816	1.8	55
	1350	0.0	0
	2040	3.5	107
6 Tu	0327	0.0	0
	0859	1.8	55
	1431	0.0	0
	2117	3.4	104
7 W	0405	0.0	0
	0941	1.8	55
	1510	0.2	6
	2153	3.3	101
8 Th	0442	0.1	3
	1023	1.8	55
	1549	0.3	9
	2228	3.1	94
9 F	0518	0.1	3
	1107	1.8	55
	1629	0.5	15
	2304	2.9	88
10 Sa	0555	0.2	6
	1153	1.8	55
	1712	0.7	21
	2339	2.6	79
11 Su	0632	0.3	9
	1243	1.8	55
	1801	0.9	27
12 M	0016	2.4	73
	0710	0.3	9
	1340	1.9	58
	1903	1.0	30
13 Tu ◑	0057	2.1	64
	0750	0.4	12
	1440	2.0	61
	2021	1.1	34
14 W	0148	1.9	58
	0833	0.4	12
	1538	2.2	67
	2148	1.1	34
15 Th	0251	1.7	52
	0920	0.4	12
	1631	2.4	73
	2303	0.9	27

	Time	Height	
	h m	ft	cm
16 F	0400	1.6	49
	1009	0.3	9
	1718	2.7	82
17 Sa	0000	0.7	21
	0505	1.6	49
	1058	0.2	6
	1802	3.0	91
18 Su	0047	0.5	15
	0601	1.7	52
	1146	0.0	0
	1844	3.3	101
19 M	0129	0.2	6
	0652	1.8	55
	1234	−0.1	−3
	1927	3.5	107
20 Tu ●	0211	0.0	0
	0741	1.9	58
	1322	−0.2	−6
	2009	3.7	113
21 W	0252	−0.2	−6
	0829	2.1	64
	1410	−0.3	−9
	2052	3.8	116
22 Th	0334	−0.3	−9
	0918	2.2	67
	1500	−0.2	−6
	2136	3.7	113
23 F	0416	−0.4	−12
	1008	2.3	70
	1551	−0.1	−3
	2222	3.5	107
24 Sa	0501	−0.4	−12
	1102	2.4	73
	1646	0.1	3
	2309	3.2	98
25 Su	0547	−0.3	−9
	1200	2.4	73
	1747	0.3	9
26 M ◐	0000	2.8	85
	0636	−0.2	−6
	1304	2.5	76
	1859	0.6	18
27 Tu	0056	2.4	73
	0730	0.0	0
	1414	2.5	76
	2024	0.7	21
28 W	0202	2.1	64
	0829	0.1	3
	1528	2.7	82
	2157	0.7	21
29 Th	0319	1.8	55
	0931	0.1	3
	1636	2.8	85
	2319	0.6	18
30 F	0436	1.7	52
	1031	0.2	6
	1734	3.0	91
31 Sa	0022	0.4	12
	0543	1.7	52
	1126	0.1	3
	1824	3.1	94

February

	Time	Height	
	h m	ft	cm
1 Su	0111	0.3	9
	0637	1.7	52
	1215	0.1	3
	1907	3.2	98
2 M	0152	0.2	6
	0722	1.8	55
	1259	0.1	3
	1945	3.3	101
3 Tu ○	0227	0.1	3
	0802	1.9	58
	1339	0.0	0
	2020	3.3	101
4 W	0300	0.0	0
	0839	2.0	61
	1417	0.1	3
	2054	3.2	98
5 Th	0331	0.0	0
	0915	2.1	64
	1454	0.1	3
	2126	3.1	94
6 F	0402	0.0	0
	0951	2.1	64
	1531	0.2	6
	2158	3.0	91
7 Sa	0432	0.1	3
	1028	2.1	64
	1609	0.4	12
	2229	2.7	82
8 Su	0503	0.2	6
	1107	2.1	64
	1648	0.6	18
	2301	2.5	76
9 M	0535	0.3	9
	1149	2.1	64
	1732	0.8	24
	2334	2.2	67
10 Tu	0607	0.4	12
	1236	2.1	64
	1827	0.9	27
11 W ◑	0012	2.0	61
	0644	0.5	15
	1333	2.1	64
	1939	1.0	30
12 Th	0059	1.7	52
	0728	0.5	15
	1438	2.2	67
	2110	1.0	30
13 F	0208	1.6	49
	0824	0.5	15
	1543	2.4	73
	2234	0.9	27
14 Sa	0331	1.5	46
	0927	0.4	12
	1641	2.7	82
	2334	0.7	21
15 Su	0445	1.6	49
	1029	0.3	9
	1731	3.0	91

	Time	Height	
	h m	ft	cm
16 M	0020	0.4	12
	0544	1.7	52
	1126	0.1	3
	1818	3.2	98
17 Tu	0101	0.1	3
	0635	1.9	58
	1219	−0.1	−3
	1903	3.5	107
18 W ●	0141	−0.1	−3
	0723	2.2	67
	1310	−0.2	−6
	1947	3.6	110
19 Th	0220	−0.3	−9
	0810	2.4	73
	1400	−0.3	−9
	2031	3.6	110
20 F	0301	−0.4	−12
	0857	2.6	79
	1451	−0.3	−9
	2115	3.5	107
21 Sa	0342	−0.5	−15
	0946	2.7	82
	1543	−0.2	−6
	2201	3.3	101
22 Su	0425	−0.4	−12
	1037	2.8	85
	1638	0.0	0
	2248	2.9	88
23 M	0510	−0.3	−9
	1131	2.8	85
	1739	0.2	6
	2340	2.5	76
24 Tu	0558	−0.1	−3
	1232	2.7	82
	1850	0.4	12
25 W ◐	0038	2.2	67
	0652	0.1	3
	1341	2.7	82
	2014	0.6	18
26 Th	0149	1.8	55
	0755	0.3	9
	1456	2.7	82
	2146	0.6	18
27 F	0313	1.7	52
	0905	0.4	12
	1610	2.8	85
	2305	0.5	15
28 Sa	0434	1.6	49
	1015	0.4	12
	1712	2.9	88

March

	Time	Height	
	h m	ft	cm
1 Su	0003	0.4	12
	0538	1.7	52
	1115	0.3	9
	1802	2.9	88
2 M	0047	0.3	9
	0626	1.8	55
	1205	0.3	9
	1844	3.0	91
3 Tu	0122	0.2	6
	0705	2.0	61
	1247	0.2	6
	1920	3.0	91
4 W	0153	0.1	3
	0740	2.1	64
	1326	0.1	3
	1953	3.0	91
5 Th ○	0221	0.1	3
	0813	2.3	70
	1403	0.1	3
	2025	3.0	91
6 F	0249	0.0	0
	0846	2.4	73
	1439	0.1	3
	2056	2.9	88
7 Sa	0317	0.0	0
	0919	2.4	73
	1515	0.2	6
	2127	2.7	82
8 Su	0345	0.1	3
	0953	2.4	73
	1553	0.3	9
	2159	2.5	76
9 M	0414	0.2	6
	1029	2.4	73
	1633	0.5	15
	2231	2.3	70
10 Tu	0443	0.3	9
	1107	2.4	73
	1717	0.6	18
	2305	2.0	61
11 W	0513	0.4	12
	1149	2.4	73
	1810	0.8	24
	2345	1.8	55
12 Th	0548	0.5	15
	1241	2.3	70
	1919	0.9	27
13 F ◑	0037	1.6	49
	0634	0.6	18
	1344	2.4	73
	2043	0.9	27
14 Sa	0153	1.5	46
	0738	0.6	18
	1454	2.5	76
	2200	0.7	21
15 Su	0320	1.5	46
	0854	0.6	18
	1600	2.6	79
	2258	0.5	15

	Time	Height	
	h m	ft	cm
16 M	0432	1.6	49
	1007	0.4	12
	1657	2.9	88
	2344	0.3	9
17 Tu	0528	1.9	58
	1110	0.2	6
	1748	3.1	94
18 W	0026	0.0	0
	0618	2.2	67
	1207	0.0	0
	1835	3.2	98
19 Th	0105	−0.2	−6
	0704	2.5	76
	1300	−0.2	−6
	1922	3.3	101
20 F ●	0145	−0.4	−12
	0750	2.8	85
	1352	−0.3	−9
	2007	3.3	101
21 Sa	0226	−0.5	−15
	0836	3.0	91
	1443	−0.3	−9
	2053	3.1	94
22 Su	0307	−0.5	−15
	0924	3.2	98
	1536	−0.3	−9
	2140	2.9	88
23 M	0349	−0.4	−12
	1013	3.2	98
	1632	−0.1	−3
	2230	2.6	79
24 Tu	0434	−0.2	−6
	1106	3.1	94
	1733	0.1	3
	2324	2.2	67
25 W	0522	0.0	0
	1203	3.0	91
	1842	0.3	9
26 Th	0026	1.9	58
	0617	0.3	9
	1308	2.8	85
	2001	0.4	12
27 F ◐	0142	1.7	52
	0722	0.5	15
	1420	2.7	82
	2123	0.5	15
28 Sa	0307	1.6	49
	0838	0.6	18
	1532	2.7	82
	2233	0.4	12
29 Su	0424	1.7	52
	0953	0.6	18
	1635	2.7	82
	2327	0.3	9
30 M	0521	1.8	55
	1056	0.5	15
	1727	2.7	82
31 Tu	0007	0.3	9
	0605	2.0	61
	1147	0.5	15
	1809	2.7	82

Time meridian 75° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.
Heights are referred to the chart datum of soundings.

Matarani, Peru, 2015

Times and Heights of High and Low Waters

April

	Time	Height	
	h m	ft	cm
1 W	0040	0.2	6
	0641	2.2	67
	1230	0.4	12
	1845	2.7	82
2 Th	0108	0.1	3
	0713	2.4	73
	1309	0.3	9
	1919	2.7	82
3 F	0136	0.1	3
	0745	2.5	76
	1347	0.2	6
	1952	2.6	79
4 Sa ○	0203	0.0	0
	0817	2.7	82
	1424	0.2	6
	2024	2.5	76
5 Su	0231	0.0	0
	0849	2.7	82
	1502	0.2	6
	2058	2.4	73
6 M	0300	0.1	3
	0923	2.8	85
	1542	0.3	9
	2132	2.2	67
7 Tu	0329	0.2	6
	0958	2.8	85
	1624	0.4	12
	2208	2.0	61
8 W	0359	0.3	9
	1036	2.7	82
	1711	0.5	15
	2248	1.8	55
9 Th	0432	0.4	12
	1118	2.7	82
	1805	0.6	18
	2335	1.6	49
10 F	0510	0.5	15
	1207	2.6	79
	1909	0.6	18
11 Sa ◑	0036	1.5	46
	0600	0.6	18
	1306	2.6	79
	2019	0.6	18
12 Su	0154	1.5	46
	0709	0.7	21
	1412	2.6	79
	2124	0.5	15
13 M	0313	1.6	49
	0831	0.7	21
	1519	2.7	82
	2218	0.3	9
14 Tu	0418	1.8	55
	0949	0.6	18
	1620	2.7	82
	2305	0.1	3
15 W	0512	2.1	64
	1057	0.4	12
	1715	2.8	85
	2347	−0.1	−3

	Time	Height	
	h m	ft	cm
16 Th	0600	2.5	76
	1156	0.2	6
	1806	2.9	88
17 F	0029	−0.3	−9
	0646	2.9	88
	1252	0.0	0
	1856	2.9	88
18 Sa ●	0110	−0.4	−12
	0732	3.2	98
	1345	−0.2	−6
	1944	2.8	85
19 Su	0151	−0.4	−12
	0818	3.4	104
	1438	−0.2	−6
	2033	2.6	79
20 M	0233	−0.4	−12
	0904	3.5	107
	1532	−0.2	−6
	2122	2.4	73
21 Tu	0317	−0.3	−9
	0953	3.5	107
	1628	−0.1	−3
	2214	2.2	67
22 W	0402	−0.1	−3
	1043	3.3	101
	1727	0.0	0
	2311	1.9	58
23 Th	0450	0.2	6
	1137	3.2	98
	1831	0.2	6
24 F	0015	1.7	52
	0545	0.4	12
	1236	2.9	88
	1940	0.3	9
25 Sa ◐	0130	1.6	49
	0648	0.6	18
	1339	2.7	82
	2048	0.3	9
26 Su	0248	1.6	49
	0803	0.8	24
	1444	2.6	79
	2148	0.3	9
27 M	0358	1.8	55
	0919	0.8	24
	1545	2.5	76
	2237	0.3	9
28 Tu	0452	1.9	58
	1026	0.8	24
	1637	2.4	73
	2316	0.2	6
29 W	0534	2.1	64
	1121	0.7	21
	1722	2.4	73
	2348	0.2	6
30 Th	0610	2.3	70
	1207	0.6	18
	1801	2.3	70

May

	Time	Height	
	h m	ft	cm
1 F	0018	0.1	3
	0643	2.5	76
	1250	0.5	15
	1839	2.3	70
2 Sa	0047	0.1	3
	0715	2.7	82
	1330	0.4	12
	1915	2.2	67
3 Su ○	0117	0.0	0
	0748	2.9	88
	1410	0.3	9
	1952	2.1	64
4 M	0147	0.0	0
	0822	3.0	91
	1451	0.2	6
	2030	2.0	61
5 Tu	0219	0.1	3
	0858	3.1	94
	1533	0.2	6
	2110	1.9	58
6 W	0251	0.1	3
	0935	3.1	94
	1618	0.2	6
	2152	1.8	55
7 Th	0326	0.2	6
	1014	3.1	94
	1706	0.3	9
	2238	1.7	52
8 F	0404	0.4	12
	1057	3.0	91
	1758	0.3	9
	2331	1.6	49
9 Sa	0448	0.5	15
	1145	2.9	88
	1853	0.3	9
10 Su	0035	1.5	46
	0544	0.6	18
	1239	2.8	85
	1951	0.3	9
11 M ◑	0146	1.6	49
	0653	0.7	21
	1339	2.7	82
	2046	0.2	6
12 Tu	0257	1.8	55
	0814	0.8	24
	1442	2.7	82
	2138	0.1	3
13 W	0359	2.1	64
	0934	0.7	21
	1544	2.6	79
	2225	−0.1	−3
14 Th	0453	2.4	73
	1046	0.5	15
	1643	2.5	76
	2311	−0.2	−6
15 F	0543	2.8	85
	1150	0.3	9
	1739	2.5	76
	2354	−0.3	−9

	Time	Height	
	h m	ft	cm
16 Sa	0630	3.1	94
	1248	0.2	6
	1833	2.4	73
17 Su ●	0038	−0.3	−9
	0716	3.4	104
	1343	0.0	0
	1925	2.3	70
18 M	0121	−0.4	−12
	0802	3.6	110
	1437	−0.1	−3
	2016	2.2	67
19 Tu	0205	−0.3	−9
	0849	3.6	110
	1530	−0.1	−3
	2108	2.0	61
20 W	0249	−0.2	−6
	0936	3.6	110
	1623	−0.1	−3
	2201	1.9	58
21 Th	0335	0.0	0
	1023	3.5	107
	1717	0.0	0
	2257	1.8	55
22 F	0423	0.2	6
	1112	3.3	101
	1813	0.1	3
	2358	1.7	52
23 Sa	0515	0.5	15
	1203	3.0	91
	1908	0.1	3
24 Su	0104	1.7	52
	0613	0.7	21
	1255	2.8	85
	2003	0.2	6
25 M ◐	0212	1.7	52
	0719	0.9	27
	1349	2.5	76
	2054	0.2	6
26 Tu	0317	1.8	55
	0832	1.0	30
	1443	2.4	73
	2139	0.3	9
27 W	0411	2.0	61
	0944	1.0	30
	1536	2.2	67
	2218	0.2	6
28 Th	0456	2.2	67
	1047	0.9	27
	1625	2.1	64
	2253	0.2	6
29 F	0535	2.4	73
	1141	0.8	24
	1712	2.0	61
	2326	0.2	6
30 Sa	0611	2.6	79
	1229	0.6	18
	1756	2.0	61
	2359	0.1	3
31 Su	0646	2.9	88
	1313	0.5	15
	1839	1.9	58

June

	Time	Height	
	h m	ft	cm
1 M	0033	0.1	3
	0721	3.1	94
	1356	0.4	12
	1922	1.9	58
2 Tu ○	0108	0.0	0
	0757	3.2	98
	1438	0.2	6
	2005	1.8	55
3 W	0145	0.0	0
	0835	3.3	101
	1522	0.1	3
	2050	1.8	55
4 Th	0223	0.1	3
	0915	3.4	104
	1606	0.1	3
	2136	1.7	52
5 F	0304	0.1	3
	0956	3.4	104
	1651	0.1	3
	2226	1.7	52
6 Sa	0348	0.2	6
	1039	3.3	101
	1739	0.0	0
	2320	1.7	52
7 Su	0437	0.4	12
	1125	3.2	98
	1828	0.0	0
8 M	0020	1.7	52
	0535	0.5	15
	1215	3.0	91
	1918	0.0	0
9 Tu ◑	0126	1.8	55
	0643	0.7	21
	1310	2.8	85
	2009	0.0	0
10 W	0232	2.0	61
	0801	0.8	24
	1410	2.6	79
	2100	−0.1	−3
11 Th	0336	2.3	70
	0923	0.8	24
	1513	2.4	73
	2150	−0.1	−3
12 F	0435	2.6	79
	1040	0.7	21
	1617	2.2	67
	2238	−0.2	−6
13 Sa	0528	2.9	88
	1149	0.5	15
	1718	2.1	64
	2326	−0.2	−6
14 Su	0618	3.2	98
	1250	0.3	9
	1817	2.0	61
15 M	0013	−0.2	−6
	0705	3.4	104
	1344	0.1	3
	1912	1.9	58

	Time	Height	
	h m	ft	cm
16 Tu ●	0059	−0.2	−6
	0751	3.6	110
	1435	0.0	0
	2005	1.9	58
17 W	0144	−0.2	−6
	0836	3.6	110
	1524	−0.1	−3
	2056	1.8	55
18 Th	0229	−0.1	−3
	0919	3.6	110
	1611	−0.1	−3
	2146	1.8	55
19 F	0315	0.1	3
	1003	3.5	107
	1657	0.0	0
	2237	1.8	55
20 Sa	0400	0.2	6
	1046	3.3	101
	1742	0.0	0
	2329	1.7	52
21 Su	0447	0.5	15
	1128	3.0	91
	1827	0.1	3
22 M	0024	1.7	52
	0537	0.7	21
	1211	2.8	85
	1911	0.2	6
23 Tu	0122	1.8	55
	0634	0.9	27
	1255	2.5	76
	1955	0.2	6
24 W ◐	0222	1.9	58
	0739	1.0	30
	1341	2.3	70
	2037	0.3	9
25 Th	0320	2.0	61
	0853	1.1	34
	1432	2.0	61
	2117	0.3	9
26 F	0411	2.2	67
	1008	1.0	30
	1526	1.9	58
	2157	0.3	9
27 Sa	0456	2.4	73
	1113	0.9	27
	1622	1.8	55
	2236	0.2	6
28 Su	0537	2.6	79
	1208	0.8	24
	1716	1.7	52
	2316	0.2	6
29 M	0616	2.9	88
	1255	0.6	18
	1807	1.7	52
	2357	0.1	3
30 Tu	0655	3.1	94
	1338	0.4	12
	1856	1.7	52

Time meridian 75° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.
Heights are referred to the chart datum of soundings.

Matarani, Peru, 2015

Times and Heights of High and Low Waters

July

	Time	Height		Time	Height
	h m	ft cm		h m	ft cm
1 W ○	0038	0.0 0	16 Th	0132	−0.1 −3
	0734	3.3 101		0821	3.5 107
	1420	0.2 6		1508	0.0 0
	1943	1.8 55		2041	1.9 58
2 Th	0120	0.0 0	17 F	0215	0.0 0
	0813	3.5 107		0901	3.5 107
	1501	0.1 3		1547	0.0 0
	2029	1.8 55		2125	1.9 58
3 F	0204	−0.1 −3	18 Sa	0257	0.1 3
	0854	3.6 110		0939	3.3 101
	1543	−0.1 −3		1625	0.0 0
	2117	1.9 58		2208	1.9 58
4 Sa	0249	0.0 0	19 Su	0339	0.2 6
	0936	3.6 110		1016	3.2 98
	1625	−0.1 −3		1702	0.0 0
	2206	1.9 58		2252	1.9 58
5 Su	0337	0.1 3	20 M	0421	0.4 12
	1019	3.5 107		1052	2.9 88
	1709	−0.2 −6		1739	0.1 3
	2259	2.0 61		2338	1.9 58
6 M	0429	0.2 6	21 Tu	0505	0.6 18
	1105	3.3 101		1129	2.7 82
	1754	−0.2 −6		1816	0.2 6
	2356	2.1 64			
7 Tu	0527	0.4 12	22 W	0027	1.9 58
	1153	3.0 91		0554	0.8 24
	1842	−0.1 −3		1206	2.4 73
				1853	0.3 9
8 W ◑	0058	2.2 67	23 Th ◐	0120	2.0 61
	0633	0.6 18		0652	1.0 30
	1245	2.7 82		1246	2.1 64
	1931	−0.1 −3		1933	0.4 12
9 Th	0204	2.3 70	24 F	0218	2.0 61
	0751	0.7 21		0805	1.1 34
	1344	2.4 73		1334	1.9 58
	2024	−0.1 −3		2015	0.4 12
10 F	0312	2.5 76	25 Sa	0318	2.2 67
	0916	0.8 24		0928	1.1 34
	1451	2.1 64		1434	1.7 52
	2119	0.0 0		2101	0.4 12
11 Sa	0416	2.8 85	26 Su	0413	2.4 73
	1040	0.7 21		1045	1.0 30
	1601	1.9 58		1542	1.6 49
	2214	0.0 0		2150	0.4 12
12 Su	0515	3.0 91	27 M	0501	2.6 79
	1152	0.5 15		1144	0.8 24
	1710	1.8 55		1647	1.6 49
	2307	−0.1 −3		2240	0.3 9
13 M	0607	3.2 98	28 Tu	0545	2.9 88
	1251	0.3 9		1231	0.6 18
	1811	1.8 55		1743	1.6 49
	2358	−0.1 −3		2328	0.2 6
14 Tu	0655	3.4 104	29 W	0627	3.1 94
	1342	0.2 6		1313	0.3 9
	1906	1.8 55		1834	1.7 52
15 W ●	0046	−0.1 −3	30 Th	0015	0.0 0
	0739	3.5 107		0708	3.3 101
	1426	0.1 3		1352	0.1 3
	1955	1.8 55		1921	1.9 58
			31 F ○	0102	−0.1 −3
				0749	3.5 107
				1431	−0.1 −3
				2007	2.0 61

August

	Time	Height		Time	Height
	h m	ft cm		h m	ft cm
1 Sa	0149	−0.2 −6	16 Su	0242	0.1 3
	0831	3.6 110		0911	3.1 94
	1510	−0.2 −6		1543	0.0 0
	2054	2.2 67		2135	2.2 67
2 Su	0237	−0.2 −6	17 M	0320	0.2 6
	0913	3.6 110		0944	2.9 88
	1551	−0.3 −9		1615	0.1 3
	2142	2.3 70		2213	2.2 67
3 M	0327	−0.1 −3	18 Tu	0359	0.3 9
	0957	3.4 104		1017	2.7 82
	1633	−0.3 −9		1646	0.2 6
	2233	2.4 73		2252	2.2 67
4 Tu	0420	0.0 0	19 W	0440	0.5 15
	1042	3.2 98		1050	2.5 76
	1717	−0.3 −9		1718	0.3 9
	2328	2.5 76		2334	2.2 67
5 W	0519	0.2 6	20 Th	0525	0.7 21
	1131	2.9 88		1125	2.2 67
	1804	−0.2 −6		1752	0.4 12
6 Th ◑	0028	2.5 76	21 F	0021	2.1 64
	0625	0.5 15		0619	0.9 27
	1225	2.5 76		1204	1.9 58
	1855	−0.1 −3		1828	0.5 15
7 F	0134	2.6 79	22 Sa ◐	0115	2.1 64
	0744	0.6 18		0729	1.0 30
	1327	2.1 64		1252	1.7 52
	1951	0.1 3		1912	0.6 18
8 Sa	0246	2.7 82	23 Su	0218	2.2 67
	0914	0.7 21		0855	1.0 30
	1441	1.9 58		1359	1.5 46
	2054	0.1 3		2007	0.6 18
9 Su	0357	2.8 85	24 M	0323	2.3 70
	1039	0.6 18		1016	0.9 27
	1600	1.7 52		1518	1.5 46
	2157	0.2 6		2109	0.6 18
10 M	0500	3.0 91	25 Tu	0421	2.6 79
	1148	0.4 12		1115	0.7 21
	1712	1.7 52		1629	1.5 46
	2257	0.1 3		2210	0.4 12
11 Tu	0555	3.1 94	26 W	0511	2.8 85
	1242	0.3 9		1159	0.5 15
	1811	1.8 55		1725	1.7 52
	2351	0.1 3		2306	0.3 9
12 W	0642	3.2 98	27 Th	0556	3.0 91
	1326	0.2 6		1238	0.2 6
	1900	1.9 58		1814	1.9 58
				2358	0.1 3
13 Th	0039	0.0 0	28 F	0639	3.3 101
	0723	3.3 101		1316	0.0 0
	1405	0.1 3		1900	2.2 67
	1942	2.0 61			
14 F ●	0122	0.0 0	29 Sa ○	0047	−0.1 −3
	0801	3.3 101		0722	3.4 104
	1439	0.0 0		1354	−0.2 −6
	2021	2.1 64		1945	2.4 73
15 Sa	0203	0.0 0	30 Su	0137	−0.3 −9
	0837	3.2 98		0805	3.4 104
	1512	0.0 0		1433	−0.3 −9
	2058	2.1 64		2030	2.6 79
			31 M	0226	−0.3 −9
				0849	3.4 104
				1513	−0.4 −12
				2117	2.8 85

September

	Time	Height		Time	Height
	h m	ft cm		h m	ft cm
1 Tu	0318	−0.2 −6	16 W	0342	0.3 9
	0934	3.2 98		0944	2.4 73
	1555	−0.4 −12		1555	0.2 6
	2207	2.9 88		2213	2.5 76
2 W	0412	−0.1 −3	17 Th	0423	0.4 12
	1021	2.9 88		1018	2.2 67
	1639	−0.3 −9		1624	0.3 9
	2300	2.9 88		2251	2.5 76
3 Th	0512	0.1 3	18 F	0508	0.6 18
	1112	2.6 79		1054	2.0 61
	1726	−0.1 −3		1655	0.4 12
	2359	2.9 88		2333	2.4 73
4 F	0620	0.3 9	19 Sa	0601	0.7 21
	1210	2.2 67		1135	1.7 52
	1819	0.1 3		1730	0.6 18
5 Sa ◑	0105	2.8 85	20 Su	0023	2.3 70
	0739	0.5 15		0708	0.8 24
	1319	1.9 58		1229	1.5 46
	1921	0.2 6		1815	0.7 21
6 Su	0218	2.8 85	21 M ◐	0123	2.3 70
	0908	0.5 15		0828	0.8 24
	1442	1.7 52		1345	1.4 43
	2032	0.4 12		1916	0.7 21
7 M	0333	2.8 85	22 Tu	0231	2.4 73
	1028	0.5 15		0942	0.7 21
	1605	1.7 52		1508	1.5 46
	2145	0.4 12		2032	0.7 21
8 Tu	0439	2.9 88	23 W	0335	2.5 76
	1131	0.3 9		1037	0.5 15
	1712	1.8 55		1616	1.6 49
	2249	0.3 9		2144	0.6 18
9 W	0534	3.0 91	24 Th	0431	2.7 82
	1219	0.2 6		1120	0.3 9
	1804	1.9 58		1708	1.9 58
	2343	0.3 9		2247	0.4 12
10 Th	0620	3.0 91	25 F	0521	2.9 88
	1257	0.1 3		1159	0.1 3
	1846	2.1 64		1754	2.2 67
				2342	0.1 3
11 F	0030	0.2 6	26 Sa	0608	3.1 94
	0659	3.0 91		1237	−0.1 −3
	1330	0.1 3		1839	2.5 76
	1922	2.2 67			
12 Sa	0111	0.1 3	27 Su ○	0035	−0.1 −3
	0735	3.0 91		0653	3.1 94
	1400	0.0 0		1315	−0.3 −9
	1956	2.3 70		1923	2.8 85
13 Su ●	0149	0.1 3	28 M	0126	−0.2 −6
	0808	2.9 88		0738	3.1 94
	1429	0.0 0		1355	−0.4 −12
	2030	2.4 73		2008	3.1 94
14 M	0226	0.1 3	29 Tu	0218	−0.3 −9
	0840	2.8 85		0824	3.0 91
	1457	0.0 0		1436	−0.5 −15
	2103	2.5 76		2055	3.2 98
15 Tu	0303	0.2 6	30 W	0310	−0.3 −9
	0912	2.6 79		0912	2.8 85
	1526	0.1 3		1518	−0.4 −12
	2137	2.5 76		2144	3.3 101

Time meridian 75° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.
Heights are referred to the chart datum of soundings.

Matarani, Peru, 2015

Times and Heights of High and Low Waters

October

	Time	Height	
	h m	ft	cm
1 Th	0406	−0.2	−6
	1002	2.5	76
	1603	−0.2	−6
	2236	3.3	101
2 F	0506	0.0	0
	1056	2.2	67
	1651	0.0	0
	2333	3.1	94
3 Sa	0614	0.2	6
	1159	1.9	58
	1746	0.2	6
4 Su	0036	3.0	91
	0731	0.3	9
	1314	1.7	52
◑	1851	0.4	12
5 M	0147	2.9	88
	0851	0.3	9
	1440	1.7	52
	2008	0.6	18
6 Tu	0300	2.8	85
	1002	0.3	9
	1559	1.7	52
	2127	0.6	18
7 W	0406	2.7	82
	1059	0.2	6
	1700	1.9	58
	2235	0.6	18
8 Th	0502	2.7	82
	1143	0.2	6
	1747	2.1	64
	2330	0.5	15
9 F	0547	2.7	82
	1218	0.1	3
	1825	2.3	70
10 Sa	0016	0.4	12
	0626	2.6	79
	1248	0.1	3
	1858	2.4	73
11 Su	0056	0.3	9
	0701	2.6	79
	1316	0.0	0
	1930	2.6	79
12 M	0135	0.2	6
	0734	2.5	76
	1343	0.0	0
●	2002	2.7	82
13 Tu	0212	0.2	6
	0807	2.4	73
	1411	0.0	0
	2034	2.8	85
14 W	0250	0.2	6
	0841	2.3	70
	1440	0.1	3
	2107	2.8	85
15 Th	0330	0.3	9
	0916	2.1	64
	1509	0.2	6
	2142	2.8	85

	Time	Height	
	h m	ft	cm
16 F	0412	0.4	12
	0953	1.9	58
	1539	0.3	9
	2219	2.8	85
17 Sa	0459	0.5	15
	1033	1.7	52
	1611	0.4	12
	2259	2.7	82
18 Su	0551	0.5	15
	1120	1.6	49
	1647	0.6	18
	2346	2.6	79
19 M	0652	0.6	18
	1220	1.4	43
	1733	0.7	21
20 Tu	0041	2.6	79
	0759	0.6	18
	1337	1.4	43
◐	1839	0.8	24
21 W	0143	2.5	76
	0901	0.5	15
	1454	1.5	46
	2000	0.8	24
22 Th	0248	2.6	79
	0953	0.3	9
	1557	1.8	55
	2120	0.7	21
23 F	0349	2.6	79
	1037	0.2	6
	1649	2.1	64
	2229	0.5	15
24 Sa	0444	2.7	82
	1118	0.0	0
	1735	2.5	76
	2330	0.3	9
25 Su	0536	2.8	85
	1159	−0.2	−6
	1820	2.8	85
26 M	0026	0.1	3
	0625	2.8	85
	1239	−0.4	−12
	1905	3.2	98
27 Tu	0119	−0.1	−3
	0714	2.7	82
	1320	−0.5	−15
○	1950	3.4	104
28 W	0212	−0.2	−6
	0803	2.6	79
	1403	−0.5	−15
	2037	3.6	110
29 Th	0306	−0.2	−6
	0853	2.4	73
	1447	−0.4	−12
	2125	3.6	110
30 F	0402	−0.2	−6
	0946	2.2	67
	1533	−0.2	−6
	2216	3.5	107
31 Sa	0501	−0.1	−3
	1043	2.0	61
	1622	0.0	0
	2310	3.4	104

November

	Time	Height	
	h m	ft	cm
1 Su	0604	0.0	0
	1148	1.8	55
	1717	0.3	9
2 M	0008	3.1	94
	0712	0.1	3
	1302	1.7	52
	1821	0.5	15
3 Tu	0111	2.9	88
	0820	0.2	6
	1422	1.7	52
◑	1936	0.7	21
4 W	0217	2.7	82
	0922	0.2	6
	1536	1.8	55
	2056	0.8	24
5 Th	0320	2.6	79
	1014	0.2	6
	1635	2.0	61
	2208	0.8	24
6 F	0416	2.4	73
	1056	0.2	6
	1720	2.2	67
	2307	0.7	21
7 Sa	0504	2.4	73
	1131	0.1	3
	1758	2.4	73
	2357	0.6	18
8 Su	0546	2.3	70
	1202	0.1	3
	1832	2.6	79
9 M	0040	0.5	15
	0624	2.2	67
	1231	0.1	3
	1904	2.8	85
10 Tu	0121	0.4	12
	0700	2.1	64
	1300	0.0	0
	1936	2.9	88
11 W	0200	0.3	9
	0737	2.1	64
	1330	0.0	0
●	2009	3.0	91
12 Th	0240	0.3	9
	0814	2.0	61
	1401	0.1	3
	2043	3.1	94
13 F	0321	0.2	6
	0853	1.9	58
	1433	0.1	3
	2119	3.1	94
14 Sa	0404	0.2	6
	0934	1.7	52
	1507	0.2	6
	2156	3.1	94
15 Su	0449	0.3	9
	1019	1.6	49
	1542	0.4	12
	2236	3.0	91

	Time	Height	
	h m	ft	cm
16 M	0538	0.3	9
	1109	1.5	46
	1623	0.5	15
	2320	2.9	88
17 Tu	0630	0.3	9
	1209	1.5	46
	1712	0.7	21
18 W	0009	2.8	85
	0724	0.3	9
	1317	1.5	46
	1816	0.8	24
19 Th	0105	2.7	82
	0817	0.3	9
	1428	1.7	52
◐	1935	0.9	27
20 F	0205	2.6	79
	0908	0.1	3
	1531	2.0	61
	2059	0.8	24
21 Sa	0308	2.5	76
	0955	0.0	0
	1626	2.3	70
	2215	0.7	21
22 Su	0409	2.4	73
	1040	−0.1	−3
	1716	2.7	82
	2322	0.5	15
23 M	0507	2.4	73
	1124	−0.3	−9
	1804	3.1	94
24 Tu	0022	0.2	6
	0602	2.3	70
	1208	−0.4	−12
	1850	3.4	104
25 W	0117	0.0	0
	0655	2.3	70
	1253	−0.4	−12
○	1936	3.6	110
26 Th	0211	−0.1	−3
	0748	2.2	67
	1338	−0.4	−12
	2023	3.7	113
27 F	0304	−0.2	−6
	0841	2.1	64
	1423	−0.3	−9
	2110	3.8	116
28 Sa	0357	−0.2	−6
	0934	2.0	61
	1510	−0.1	−3
	2159	3.6	110
29 Su	0451	−0.1	−3
	1030	1.8	55
	1559	0.1	3
	2248	3.5	107
30 M	0546	−0.1	−3
	1130	1.7	52
	1651	0.3	9
	2338	3.2	98

December

	Time	Height	
	h m	ft	cm
1 Tu	0641	0.0	0
	1235	1.7	52
	1749	0.6	18
2 W	0031	2.9	88
	0737	0.1	3
	1345	1.7	52
	1855	0.8	24
3 Th	0126	2.6	79
	0831	0.2	6
	1454	1.8	55
◑	2010	0.9	27
4 F	0222	2.4	73
	0919	0.2	6
	1555	2.0	61
	2127	1.0	30
5 Sa	0318	2.2	67
	1002	0.2	6
	1645	2.2	67
	2237	0.9	27
6 Su	0411	2.0	61
	1040	0.2	6
	1727	2.4	73
	2335	0.8	24
7 M	0500	1.9	58
	1114	0.2	6
	1803	2.6	79
8 Tu	0024	0.7	21
	0545	1.9	58
	1148	0.1	3
	1838	2.9	88
9 W	0107	0.5	15
	0628	1.8	55
	1222	0.1	3
	1912	3.0	91
10 Th	0148	0.4	12
	0710	1.8	55
	1256	0.0	0
	1947	3.2	98
11 F	0228	0.3	9
	0752	1.8	55
	1332	0.0	0
●	2022	3.3	101
12 Sa	0308	0.2	6
	0834	1.8	55
	1408	0.1	3
	2059	3.4	104
13 Su	0349	0.1	3
	0918	1.7	52
	1446	0.1	3
	2137	3.4	104
14 M	0431	0.1	3
	1003	1.7	52
	1527	0.2	6
	2217	3.3	101
15 Tu	0514	0.1	3
	1053	1.7	52
	1611	0.4	12
	2258	3.2	98

	Time	Height	
	h m	ft	cm
16 W	0559	0.1	3
	1147	1.7	52
	1702	0.5	15
	2343	3.0	91
17 Th	0645	0.1	3
	1248	1.8	55
	1803	0.7	21
18 F	0033	2.8	85
	0733	0.1	3
	1354	1.9	58
◐	1917	0.8	24
19 Sa	0129	2.5	76
	0824	0.0	0
	1501	2.2	67
	2042	0.9	27
20 Su	0232	2.3	70
	0915	0.0	0
	1603	2.5	76
	2206	0.8	24
21 M	0339	2.1	64
	1006	−0.1	−3
	1659	2.8	85
	2320	0.6	18
22 Tu	0446	2.0	61
	1056	−0.2	−6
	1751	3.2	98
23 W	0023	0.4	12
	0548	2.0	61
	1146	−0.2	−6
	1840	3.4	104
24 Th	0119	0.1	3
	0646	1.9	58
	1234	−0.3	−9
	1927	3.6	110
25 F	0211	0.0	0
	0740	1.9	58
	1322	−0.3	−9
○	2013	3.7	113
26 Sa	0259	−0.1	−3
	0831	1.9	58
	1408	−0.2	−6
	2057	3.7	113
27 Su	0346	−0.2	−6
	0922	1.9	58
	1455	−0.1	−3
	2141	3.6	110
28 M	0431	−0.2	−6
	1012	1.9	58
	1541	0.1	3
	2224	3.4	104
29 Tu	0516	−0.1	−3
	1103	1.9	58
	1628	0.3	9
	2307	3.2	98
30 W	0601	0.0	0
	1157	1.8	55
	1718	0.5	15
	2350	2.9	88
31 Th	0646	0.1	3
	1254	1.8	55
	1813	0.8	24

Time meridian 75° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.
Heights are referred to the chart datum of soundings.

Callao, Peru, 2015

Times and Heights of High and Low Waters

January

	Time	Height	
	h m	ft	cm
1 Th	0221	2.3	70
	0855	0.2	6
	1557	3.0	91
	2208	1.2	37
2 F	0316	2.2	67
	0940	0.2	6
	1644	3.1	94
	2303	1.1	34
3 Sa	0406	2.2	67
	1021	0.1	3
	1726	3.3	101
	2351	1.1	34
4 Su ○	0451	2.1	64
	1101	0.2	6
	1805	3.3	101
5 M	0035	1.0	30
	0534	2.1	64
	1138	0.2	6
	1842	3.3	101
6 Tu	0115	1.0	30
	0614	2.0	61
	1213	0.3	9
	1917	3.3	101
7 W	0154	1.0	30
	0653	2.0	61
	1247	0.5	15
	1951	3.2	98
8 Th	0232	1.0	30
	0733	1.9	58
	1320	0.6	18
	2024	3.0	91
9 F	0310	1.1	34
	0814	1.8	55
	1352	0.8	24
	2054	2.9	88
10 Sa	0348	1.1	34
	0900	1.8	55
	1425	1.0	30
	2124	2.7	82
11 Su	0426	1.1	34
	0956	1.8	55
	1502	1.2	37
	2155	2.5	76
12 M	0506	1.1	34
	1107	1.8	55
	1552	1.4	43
	2229	2.4	73
13 Tu ◑	0548	1.0	30
	1229	1.9	58
	1709	1.6	49
	2311	2.3	70
14 W	0632	0.9	27
	1341	2.1	64
	1850	1.7	52
15 Th	0006	2.2	67
	0717	0.8	24
	1435	2.4	73
	2019	1.6	49

	Time	Height	
	h m	ft	cm
16 F	0110	2.1	64
	0803	0.6	18
	1519	2.7	82
	2124	1.5	46
17 Sa	0213	2.1	64
	0849	0.4	12
	1600	3.0	91
	2215	1.3	40
18 Su	0311	2.2	67
	0935	0.3	9
	1641	3.2	98
	2301	1.1	34
19 M	0405	2.2	67
	1021	0.1	3
	1722	3.5	107
	2345	1.0	30
20 Tu ●	0457	2.3	70
	1106	0.0	0
	1804	3.6	110
21 W	0030	0.8	24
	0548	2.4	73
	1153	0.0	0
	1846	3.7	113
22 Th	0114	0.7	21
	0640	2.4	73
	1241	0.1	3
	1930	3.6	110
23 F	0201	0.6	18
	0734	2.4	73
	1330	0.3	9
	2014	3.5	107
24 Sa	0249	0.6	18
	0832	2.4	73
	1423	0.5	15
	2101	3.3	101
25 Su	0340	0.6	18
	0938	2.4	73
	1522	0.8	24
	2150	3.0	91
26 M ◐	0436	0.6	18
	1053	2.4	73
	1633	1.2	37
	2245	2.7	82
27 Tu	0536	0.6	18
	1218	2.5	76
	1802	1.4	43
	2349	2.5	76
28 W	0639	0.6	18
	1342	2.6	79
	1943	1.5	46
29 Th	0100	2.3	70
	0741	0.6	18
	1452	2.8	85
	2110	1.4	43
30 F	0211	2.2	67
	0838	0.5	15
	1548	3.0	91
	2214	1.3	40
31 Sa	0313	2.1	64
	0927	0.5	15
	1634	3.2	98
	2303	1.2	37

February

	Time	Height	
	h m	ft	cm
1 Su	0404	2.1	64
	1011	0.4	12
	1713	3.3	101
	2342	1.1	34
2 M	0447	2.2	67
	1050	0.4	12
	1748	3.3	101
3 Tu ○	0017	1.1	34
	0526	2.2	67
	1126	0.4	12
	1820	3.3	101
4 W	0048	1.0	30
	0602	2.2	67
	1159	0.5	15
	1850	3.2	98
5 Th	0118	1.0	30
	0637	2.2	67
	1232	0.6	18
	1919	3.1	94
6 F	0147	1.0	30
	0712	2.2	67
	1303	0.7	21
	1946	3.0	91
7 Sa	0215	1.0	30
	0747	2.2	67
	1334	0.9	27
	2011	2.9	88
8 Su	0243	1.1	34
	0824	2.2	67
	1405	1.1	34
	2035	2.7	82
9 M	0312	1.1	34
	0906	2.1	64
	1438	1.3	40
	2059	2.5	76
10 Tu	0342	1.1	34
	0957	2.1	64
	1520	1.5	46
	2125	2.4	73
11 W ◑	0420	1.1	34
	1106	2.2	67
	1624	1.7	52
	2201	2.2	67
12 Th	0509	1.0	30
	1230	2.3	70
	1807	1.8	55
	2259	2.1	64
13 F	0611	1.0	30
	1345	2.5	76
	1954	1.7	52
14 Sa	0026	2.1	64
	0717	0.8	24
	1442	2.7	82
	2104	1.5	46
15 Su	0150	2.1	64
	0818	0.6	18
	1530	3.0	91
	2154	1.3	40

	Time	Height	
	h m	ft	cm
16 M	0258	2.2	67
	0913	0.4	12
	1614	3.3	101
	2237	1.1	34
17 Tu	0356	2.4	73
	1005	0.3	9
	1657	3.5	107
	2319	0.9	27
18 W ●	0449	2.6	79
	1055	0.2	6
	1739	3.6	110
19 Th	0001	0.7	21
	0540	2.7	82
	1144	0.1	3
	1821	3.7	113
20 F	0044	0.5	15
	0631	2.8	85
	1233	0.2	6
	1904	3.6	110
21 Sa	0128	0.5	15
	0723	2.9	88
	1323	0.4	12
	1948	3.4	104
22 Su	0213	0.5	15
	0818	2.9	88
	1417	0.7	21
	2033	3.2	98
23 M	0301	0.5	15
	0918	2.8	85
	1517	1.0	30
	2122	2.8	85
24 Tu	0353	0.6	18
	1027	2.7	82
	1629	1.3	40
	2217	2.5	76
25 W ◐	0452	0.8	24
	1149	2.7	82
	1802	1.5	46
	2326	2.3	70
26 Th	0601	0.8	24
	1315	2.8	85
	1947	1.5	46
27 F	0051	2.1	64
	0713	0.9	27
	1430	2.9	88
	2110	1.4	43
28 Sa	0212	2.1	64
	0819	0.9	27
	1527	3.0	91
	2205	1.3	40

March

	Time	Height	
	h m	ft	cm
1 Su	0315	2.1	64
	0913	0.8	24
	1612	3.1	94
	2245	1.2	37
2 M	0402	2.2	67
	0958	0.7	21
	1648	3.2	98
	2316	1.1	34
3 Tu	0441	2.3	70
	1036	0.7	21
	1720	3.2	98
	2344	1.0	30
4 W	0515	2.4	73
	1111	0.7	21
	1748	3.2	98
5 Th ○	0009	1.0	30
	0547	2.5	76
	1144	0.7	21
	1815	3.1	94
6 F	0034	0.9	27
	0619	2.5	76
	1216	0.8	24
	1841	3.0	91
7 Sa	0059	0.9	27
	0651	2.6	79
	1248	0.9	27
	1906	2.9	88
8 Su	0123	0.9	27
	0723	2.6	79
	1320	1.0	30
	1930	2.7	82
9 M	0147	1.0	30
	0757	2.6	79
	1352	1.2	37
	1952	2.6	79
10 Tu	0212	1.0	30
	0834	2.5	76
	1428	1.4	43
	2014	2.4	73
11 W	0239	1.0	30
	0918	2.5	76
	1513	1.6	49
	2039	2.3	70
12 Th	0313	1.1	34
	1016	2.5	76
	1618	1.7	52
	2116	2.1	64
13 F ◑	0402	1.1	34
	1131	2.5	76
	1757	1.8	55
	2224	2.0	61
14 Sa	0513	1.1	34
	1253	2.7	82
	1936	1.6	49
15 Su	0010	2.0	61
	0636	1.0	30
	1400	2.9	88
	2039	1.4	43

	Time	Height	
	h m	ft	cm
16 M	0143	2.1	64
	0751	0.9	27
	1454	3.1	94
	2126	1.2	37
17 Tu	0252	2.3	70
	0855	0.7	21
	1542	3.3	101
	2208	0.9	27
18 W	0349	2.6	79
	0951	0.5	15
	1626	3.5	107
	2249	0.7	21
19 Th	0441	2.9	88
	1043	0.4	12
	1710	3.5	107
	2330	0.5	15
20 F ●	0531	3.1	94
	1134	0.4	12
	1753	3.5	107
21 Sa	0012	0.3	9
	0620	3.2	98
	1225	0.5	15
	1836	3.4	104
22 Su	0054	0.3	9
	0710	3.3	101
	1317	0.6	18
	1920	3.2	98
23 M	0137	0.4	12
	0803	3.3	101
	1413	0.8	24
	2006	2.9	88
24 Tu	0223	0.5	15
	0859	3.2	98
	1514	1.1	34
	2055	2.6	79
25 W	0312	0.7	21
	1003	3.0	91
	1629	1.3	40
	2153	2.3	70
26 Th	0408	0.9	27
	1117	2.9	88
	1802	1.4	43
	2310	2.1	64
27 F ◐	0517	1.1	34
	1239	2.9	88
	1939	1.4	43
28 Sa	0047	2.0	61
	0637	1.1	34
	1352	2.9	88
	2050	1.3	40
29 Su	0211	2.0	61
	0752	1.2	37
	1450	2.9	88
	2137	1.2	37
30 M	0310	2.2	67
	0850	1.1	34
	1533	3.0	91
	2210	1.1	34
31 Tu	0352	2.3	70
	0937	1.1	34
	1608	3.0	91
	2237	1.0	30

Time meridian 75° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.
Heights are referred to the chart datum of soundings.

Callao, Peru, 2015

Times and Heights of High and Low Waters

April

	Time	Height		Time	Height
	h m	ft / cm		h m	ft / cm
1 W	0426	2.5 / 76	**16** Th	0342	2.8 / 85
	1016	1.0 / 30		0938	0.8 / 24
	1639	3.0 / 91		1553	3.3 / 101
	2301	0.9 / 27		2218	0.5 / 15
2 Th	0458	2.6 / 79	**17** F	0432	3.1 / 94
	1052	1.0 / 30		1033	0.7 / 21
	1706	3.0 / 91		1639	3.3 / 101
	2325	0.9 / 27		2259	0.3 / 9
3 F	0528	2.7 / 82	**18** Sa	0521	3.3 / 101
	1126	1.0 / 30		1127	0.7 / 21
	1733	2.9 / 88		1724	3.2 / 98
	2348	0.8 / 24	●	2340	0.2 / 6
4 Sa	0559	2.8 / 85	**19** Su	0610	3.5 / 107
	1200	1.0 / 30		1220	0.7 / 21
	1800	2.8 / 85		1808	3.0 / 91
○					
5 Su	0012	0.8 / 24	**20** M	0022	0.2 / 6
	0631	2.9 / 88		0659	3.5 / 107
	1235	1.1 / 34		1314	0.8 / 24
	1826	2.7 / 82		1853	2.8 / 85
6 M	0036	0.8 / 24	**21** Tu	0104	0.3 / 9
	0703	2.9 / 88		0749	3.5 / 107
	1310	1.2 / 37		1411	1.0 / 30
	1851	2.6 / 79		1940	2.5 / 76
7 Tu	0101	0.8 / 24	**22** W	0148	0.5 / 15
	0737	2.9 / 88		0842	3.4 / 104
	1348	1.3 / 40		1514	1.2 / 37
	1916	2.4 / 73		2031	2.3 / 70
8 W	0126	0.9 / 27	**23** Th	0234	0.7 / 21
	0815	2.9 / 88		0940	3.2 / 98
	1430	1.4 / 43		1627	1.3 / 40
	1942	2.3 / 70		2132	2.1 / 64
9 Th	0155	0.9 / 27	**24** F	0326	0.9 / 27
	0858	2.9 / 88		1044	3.1 / 94
	1522	1.6 / 49		1751	1.3 / 40
	2014	2.1 / 64		2253	1.9 / 58
10 F	0232	1.0 / 30	**25** Sa	0429	1.2 / 37
	0951	2.8 / 85		1153	2.9 / 88
	1631	1.6 / 49		1912	1.3 / 40
	2103	2.0 / 61	◐		
11 Sa	0322	1.0 / 30	**26** Su	0032	1.9 / 58
	1057	2.8 / 85		0547	1.3 / 40
	1758	1.6 / 49		1259	2.9 / 88
◑	2227	1.9 / 58		2012	1.2 / 37
12 Su	0435	1.1 / 34	**27** M	0155	2.0 / 61
	1210	2.9 / 88		0706	1.4 / 43
	1914	1.4 / 43		1355	2.8 / 85
				2054	1.1 / 34
13 M	0015	2.0 / 61	**28** Tu	0251	2.2 / 67
	0605	1.1 / 34		0812	1.4 / 43
	1317	3.0 / 91		1439	2.8 / 85
	2010	1.2 / 37		2124	1.0 / 30
14 Tu	0142	2.2 / 67	**29** W	0331	2.3 / 70
	0728	1.1 / 34		0904	1.3 / 40
	1415	3.1 / 94		1515	2.8 / 85
	2055	1.0 / 30		2150	0.9 / 27
15 W	0247	2.5 / 76	**30** Th	0405	2.5 / 76
	0837	0.9 / 27		0948	1.3 / 40
	1506	3.2 / 98		1547	2.7 / 82
	2137	0.7 / 21		2214	0.8 / 24

May

	Time	Height		Time	Height
	h m	ft / cm		h m	ft / cm
1 F	0436	2.7 / 82	**16** Sa	0425	3.2 / 98
	1027	1.2 / 37		1027	1.0 / 30
	1617	2.7 / 82		1609	2.9 / 88
	2238	0.7 / 21		2231	0.2 / 6
2 Sa	0506	2.9 / 88	**17** Su	0514	3.4 / 104
	1106	1.2 / 37		1123	1.0 / 30
	1647	2.6 / 79		1656	2.8 / 85
	2303	0.7 / 21	●	2313	0.1 / 3
3 Su	0538	3.0 / 91	**18** M	0601	3.6 / 110
	1144	1.2 / 37		1218	1.0 / 30
	1716	2.6 / 79		1743	2.6 / 79
○	2329	0.6 / 18		2355	0.1 / 3
4 M	0611	3.1 / 94	**19** Tu	0649	3.6 / 110
	1223	1.2 / 37		1313	1.0 / 30
	1746	2.5 / 76		1830	2.5 / 76
	2356	0.6 / 18			
5 Tu	0646	3.2 / 98	**20** W	0037	0.3 / 9
	1304	1.3 / 40		0737	3.6 / 110
	1817	2.3 / 70		1410	1.1 / 34
				1918	2.3 / 70
6 W	0025	0.6 / 18	**21** Th	0120	0.4 / 12
	0722	3.2 / 98		0826	3.5 / 107
	1347	1.3 / 40		1509	1.2 / 37
	1849	2.2 / 67		2010	2.1 / 64
7 Th	0056	0.7 / 21	**22** F	0203	0.7 / 21
	0802	3.2 / 98		0916	3.3 / 101
	1435	1.4 / 43		1614	1.2 / 37
	1925	2.1 / 64		2110	1.9 / 58
8 F	0130	0.7 / 21	**23** Sa	0249	0.9 / 27
	0846	3.2 / 98		1008	3.1 / 94
	1531	1.4 / 43		1722	1.2 / 37
	2010	2.0 / 61		2224	1.8 / 55
9 Sa	0212	0.8 / 24	**24** Su	0341	1.2 / 37
	0936	3.1 / 94		1102	2.9 / 88
	1636	1.4 / 43		1826	1.2 / 37
	2114	1.9 / 58		2353	1.8 / 55
10 Su	0306	1.0 / 30	**25** M	0445	1.4 / 43
	1033	3.1 / 94		1155	2.8 / 85
	1743	1.3 / 40		1919	1.1 / 34
	2242	1.9 / 58	◐		
11 M	0417	1.1 / 34	**26** Tu	0116	1.9 / 58
	1136	3.0 / 91		0601	1.5 / 46
	1845	1.2 / 37		1245	2.7 / 82
◑				1958	1.0 / 30
12 Tu	0018	2.0 / 61	**27** W	0217	2.1 / 64
	0543	1.2 / 37		0716	1.6 / 49
	1238	3.0 / 91		1330	2.6 / 79
	1937	0.9 / 27		2030	0.9 / 27
13 W	0138	2.3 / 70	**28** Th	0301	2.3 / 70
	0708	1.2 / 37		0820	1.6 / 49
	1336	3.0 / 91		1410	2.5 / 76
	2023	0.7 / 21		2057	0.8 / 24
14 Th	0241	2.6 / 79	**29** F	0337	2.5 / 76
	0823	1.2 / 37		0914	1.5 / 46
	1430	3.0 / 91		1447	2.5 / 76
	2107	0.5 / 15		2124	0.7 / 21
15 F	0335	2.9 / 88	**30** Sa	0410	2.7 / 82
	0928	1.1 / 34		1001	1.4 / 43
	1521	3.0 / 91		1523	2.4 / 73
	2149	0.3 / 9		2152	0.6 / 18
			31 Su	0442	2.9 / 88
				1045	1.4 / 43
				1559	2.4 / 73
				2221	0.5 / 15

June

	Time	Height		Time	Height
	h m	ft / cm		h m	ft / cm
1 M	0516	3.1 / 94	**16** Tu	0554	3.5 / 107
	1128	1.3 / 40		1219	1.1 / 34
	1636	2.3 / 70		1725	2.3 / 70
	2252	0.4 / 12	●	2335	0.1 / 3
2 Tu	0552	3.2 / 98	**17** W	0639	3.6 / 110
	1211	1.3 / 40		1310	1.1 / 34
	1713	2.3 / 70		1813	2.2 / 67
○	2325	0.4 / 12			
3 W	0629	3.3 / 101	**18** Th	0017	0.3 / 9
	1255	1.2 / 37		0723	3.5 / 107
	1752	2.2 / 67		1401	1.1 / 34
				1900	2.1 / 64
4 Th	0000	0.4 / 12	**19** F	0057	0.4 / 12
	0707	3.4 / 104		0805	3.4 / 104
	1341	1.2 / 37		1451	1.1 / 34
	1833	2.1 / 64		1949	2.0 / 61
5 F	0038	0.4 / 12	**20** Sa	0137	0.6 / 18
	0748	3.4 / 104		0847	3.2 / 98
	1429	1.2 / 37		1542	1.1 / 34
	1920	2.0 / 61		2042	1.9 / 58
6 Sa	0119	0.5 / 15	**21** Su	0218	0.8 / 24
	0832	3.4 / 104		0929	3.1 / 94
	1521	1.2 / 37		1633	1.1 / 34
	2015	2.0 / 61		2142	1.8 / 55
7 Su	0206	0.7 / 21	**22** M	0300	1.1 / 34
	0919	3.3 / 101		1009	2.9 / 88
	1617	1.1 / 34		1723	1.1 / 34
	2123	1.9 / 58		2252	1.8 / 55
8 M	0301	0.9 / 27	**23** Tu	0347	1.3 / 40
	1011	3.2 / 98		1049	2.7 / 82
	1714	1.0 / 30		1810	1.1 / 34
	2244	2.0 / 61			
9 Tu	0408	1.1 / 34	**24** W	0011	1.8 / 55
	1106	3.1 / 94		0448	1.5 / 46
	1810	0.9 / 27		1130	2.5 / 76
◑			◐	1851	1.0 / 30
10 W	0009	2.1 / 64	**25** Th	0124	2.0 / 61
	0529	1.2 / 37		0605	1.6 / 49
	1204	2.9 / 88		1213	2.4 / 73
	1903	0.7 / 21		1927	0.9 / 27
11 Th	0127	2.4 / 73	**26** F	0219	2.2 / 67
	0655	1.3 / 40		0726	1.7 / 52
	1302	2.8 / 85		1258	2.3 / 70
	1953	0.5 / 15		2001	0.8 / 24
12 F	0233	2.7 / 82	**27** Sa	0302	2.4 / 73
	0815	1.3 / 40		0837	1.6 / 49
	1400	2.7 / 82		1345	2.2 / 67
	2040	0.3 / 9		2034	0.7 / 21
13 Sa	0329	3.0 / 91	**28** Su	0340	2.6 / 79
	0926	1.3 / 40		0934	1.5 / 46
	1454	2.6 / 79		1432	2.2 / 67
	2126	0.2 / 6		2109	0.5 / 15
14 Su	0420	3.2 / 98	**29** M	0416	2.9 / 88
	1029	1.2 / 37		1024	1.4 / 43
	1547	2.5 / 76		1518	2.2 / 67
	2210	0.1 / 3		2145	0.4 / 12
15 M	0508	3.4 / 104	**30** Tu	0452	3.1 / 94
	1126	1.1 / 34		1109	1.3 / 40
	1637	2.4 / 73		1604	2.2 / 67
	2253	0.1 / 3		2223	0.3 / 9

Time meridian 75° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.
Heights are referred to the chart datum of soundings.

Callao, Peru, 2015

Times and Heights of High and Low Waters

July

	Time	Height	
	h m	ft	cm
1 W ○	0530	3.3	101
	1153	1.2	37
	1650	2.2	67
	2303	0.2	6
2 Th	0608	3.4	104
	1236	1.1	34
	1736	2.2	67
	2344	0.2	6
3 F	0648	3.5	107
	1320	1.0	30
	1825	2.2	67
4 Sa	0027	0.2	6
	0730	3.5	107
	1406	0.9	27
	1916	2.1	64
5 Su	0113	0.3	9
	0813	3.4	104
	1454	0.8	24
	2013	2.1	64
6 M	0202	0.5	15
	0858	3.3	101
	1544	0.8	24
	2117	2.1	64
7 Tu	0257	0.7	21
	0946	3.1	94
	1637	0.7	21
	2231	2.1	64
8 W ◑	0402	1.0	30
	1037	2.9	88
	1733	0.6	18
	2352	2.2	67
9 Th	0521	1.2	37
	1134	2.7	82
	1830	0.5	15
10 F	0112	2.4	73
	0650	1.3	40
	1235	2.5	76
	1926	0.4	12
11 Sa	0223	2.7	82
	0818	1.4	43
	1339	2.4	73
	2019	0.3	9
12 Su	0323	2.9	88
	0933	1.3	40
	1440	2.3	70
	2109	0.2	6
13 M	0415	3.1	94
	1035	1.2	37
	1537	2.2	67
	2156	0.2	6
14 Tu	0502	3.3	101
	1127	1.1	34
	1628	2.2	67
	2240	0.2	6
15 W ●	0544	3.4	104
	1214	1.0	30
	1716	2.1	64
	2322	0.2	6

	Time	Height	
	h m	ft	cm
16 Th	0625	3.4	104
	1257	1.0	30
	1801	2.1	64
17 F	0001	0.3	9
	0703	3.3	101
	1337	1.0	30
	1844	2.0	61
18 Sa	0039	0.4	12
	0739	3.2	98
	1417	1.0	30
	1926	2.0	61
19 Su	0116	0.6	18
	0813	3.1	94
	1455	1.0	30
	2010	1.9	58
20 M	0151	0.8	24
	0845	2.9	88
	1532	1.0	30
	2056	1.9	58
21 Tu	0226	1.0	30
	0916	2.7	82
	1610	1.0	30
	2149	1.8	55
22 W	0305	1.2	37
	0947	2.5	76
	1649	1.0	30
	2253	1.8	55
23 Th ◐	0352	1.4	43
	1019	2.3	70
	1729	1.0	30
24 F	0008	1.9	58
	0500	1.6	49
	1056	2.2	67
	1813	0.9	27
25 Sa	0121	2.1	64
	0633	1.6	49
	1146	2.1	64
	1858	0.8	24
26 Su	0219	2.3	70
	0804	1.6	49
	1248	2.0	61
	1945	0.7	21
27 M	0305	2.5	76
	0911	1.5	46
	1352	2.0	61
	2030	0.5	15
28 Tu	0345	2.8	85
	1001	1.3	40
	1451	2.0	61
	2116	0.3	9
29 W	0424	3.0	91
	1045	1.2	37
	1544	2.1	64
	2201	0.2	6
30 Th	0503	3.2	98
	1126	1.0	30
	1635	2.2	67
	2246	0.1	3
31 F ○	0543	3.4	104
	1208	0.8	24
	1725	2.3	70
	2331	0.0	0

August

	Time	Height	
	h m	ft	cm
1 Sa	0623	3.4	104
	1250	0.7	21
	1815	2.3	70
2 Su	0018	0.1	3
	0705	3.4	104
	1333	0.6	18
	1907	2.4	73
3 M	0106	0.2	6
	0747	3.3	101
	1418	0.5	15
	2003	2.4	73
4 Tu	0157	0.4	12
	0832	3.2	98
	1506	0.5	15
	2103	2.4	73
5 W	0253	0.7	21
	0919	2.9	88
	1558	0.5	15
	2212	2.4	73
6 Th ◑	0359	0.9	27
	1011	2.6	79
	1654	0.5	15
	2331	2.4	73
7 F	0520	1.2	37
	1110	2.4	73
	1756	0.5	15
8 Sa	0054	2.5	76
	0656	1.3	40
	1220	2.2	67
	1901	0.5	15
9 Su	0211	2.7	82
	0828	1.3	40
	1334	2.0	61
	2003	0.4	12
10 M	0313	2.9	88
	0940	1.1	34
	1442	2.0	61
	2058	0.3	9
11 Tu	0405	3.0	91
	1034	1.0	30
	1540	2.0	61
	2147	0.3	9
12 W	0448	3.1	94
	1118	0.9	27
	1628	2.0	61
	2231	0.3	9
13 Th	0527	3.2	98
	1155	0.9	27
	1710	2.1	64
	2310	0.3	9
14 F ●	0602	3.1	94
	1229	0.8	24
	1749	2.1	64
	2347	0.3	9
15 Sa	0634	3.1	94
	1300	0.8	24
	1826	2.1	64

	Time	Height	
	h m	ft	cm
16 Su	0022	0.4	12
	0704	3.0	91
	1330	0.8	24
	1903	2.1	64
17 M	0056	0.6	18
	0733	2.8	85
	1359	0.8	24
	1939	2.1	64
18 Tu	0129	0.7	21
	0800	2.6	79
	1428	0.8	24
	2017	2.1	64
19 W	0202	0.9	27
	0825	2.5	76
	1457	0.9	27
	2059	2.0	61
20 Th	0237	1.1	34
	0849	2.3	70
	1528	0.9	27
	2148	2.0	61
21 F	0320	1.3	40
	0915	2.1	64
	1603	0.9	27
	2252	2.0	61
22 Sa ◐	0422	1.5	46
	0948	2.0	61
	1650	0.9	27
23 Su	0011	2.1	64
	0559	1.6	49
	1041	1.8	55
	1749	0.8	24
24 M	0125	2.2	67
	0742	1.5	46
	1205	1.8	55
	1854	0.7	21
25 Tu	0222	2.4	73
	0848	1.3	40
	1330	1.8	55
	1956	0.6	18
26 W	0308	2.7	82
	0934	1.1	34
	1437	1.9	58
	2051	0.4	12
27 Th	0351	2.9	88
	1015	0.9	27
	1533	2.1	64
	2141	0.2	6
28 F	0432	3.1	94
	1054	0.7	21
	1625	2.3	70
	2230	0.1	3
29 Sa ○	0512	3.3	101
	1134	0.5	15
	1715	2.5	76
	2319	0.0	0
30 Su	0554	3.3	101
	1215	0.3	9
	1804	2.6	79
31 M	0007	0.0	0
	0636	3.3	101
	1257	0.2	6
	1855	2.7	82

September

	Time	Height	
	h m	ft	cm
1 Tu	0058	0.2	6
	0719	3.1	94
	1340	0.2	6
	1948	2.7	82
2 W	0151	0.4	12
	0804	2.9	88
	1427	0.2	6
	2046	2.7	82
3 Th	0249	0.6	18
	0852	2.6	79
	1517	0.3	9
	2152	2.6	79
4 F	0359	0.9	27
	0946	2.3	70
	1615	0.4	12
	2308	2.6	79
5 Sa ◑	0526	1.1	34
	1053	2.0	61
	1722	0.5	15
6 Su	0032	2.6	79
	0706	1.1	34
	1217	1.8	55
	1836	0.6	18
7 M	0150	2.7	82
	0833	1.0	30
	1343	1.8	55
	1947	0.6	18
8 Tu	0253	2.8	85
	0933	0.9	27
	1451	1.9	58
	2047	0.5	15
9 W	0343	2.8	85
	1018	0.8	24
	1543	2.0	61
	2137	0.5	15
10 Th	0424	2.9	88
	1053	0.7	21
	1625	2.1	64
	2219	0.4	12
11 F	0458	2.9	88
	1123	0.7	21
	1701	2.2	67
	2257	0.4	12
12 Sa	0529	2.8	85
	1150	0.6	18
	1735	2.3	70
	2332	0.4	12
13 Su ●	0557	2.8	85
	1215	0.6	18
	1807	2.3	70
14 M	0005	0.5	15
	0624	2.7	82
	1240	0.6	18
	1840	2.3	70
15 Tu	0038	0.6	18
	0650	2.5	76
	1305	0.6	18
	1912	2.3	70

	Time	Height	
	h m	ft	cm
16 W	0112	0.8	24
	0714	2.4	73
	1329	0.6	18
	1946	2.3	70
17 Th	0146	0.9	27
	0737	2.2	67
	1354	0.7	21
	2023	2.3	70
18 F	0223	1.1	34
	0759	2.0	61
	1420	0.7	21
	2105	2.2	67
19 Sa	0308	1.3	40
	0823	1.9	58
	1451	0.8	24
	2159	2.2	67
20 Su	0413	1.4	43
	0855	1.7	52
	1535	0.8	24
	2310	2.2	67
21 M ◐	0551	1.4	43
	0959	1.6	49
	1642	0.8	24
22 Tu	0028	2.3	70
	0725	1.3	40
	1148	1.6	49
	1806	0.8	24
23 W	0134	2.4	73
	0821	1.1	34
	1323	1.7	52
	1923	0.7	21
24 Th	0227	2.6	79
	0903	0.9	27
	1430	1.9	58
	2028	0.5	15
25 F	0313	2.8	85
	0941	0.6	18
	1525	2.2	67
	2124	0.3	9
26 Sa	0356	3.0	91
	1020	0.4	12
	1615	2.5	76
	2216	0.2	6
27 Su ○	0439	3.1	94
	1100	0.1	3
	1704	2.7	82
	2307	0.1	3
28 M	0522	3.1	94
	1140	0.0	0
	1752	2.9	88
	2358	0.2	6
29 Tu	0605	3.0	91
	1222	−0.1	−3
	1842	3.0	91
30 W	0050	0.3	9
	0649	2.8	85
	1305	−0.1	−3
	1934	3.0	91

Time meridian 75° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.
Heights are referred to the chart datum of soundings.

Callao, Peru, 2015

Times and Heights of High and Low Waters

October

	Time	Height	
	h m	ft	cm
1 Th	0146	0.5	15
	0736	2.5	76
	1350	0.0	0
	2030	3.0	91
2 F	0248	0.7	21
	0826	2.2	67
	1440	0.2	6
	2132	2.8	85
3 Sa	0401	0.9	27
	0925	1.9	58
	1536	0.4	12
	2243	2.7	82
4 Su ◑	0530	1.0	30
	1042	1.7	52
	1644	0.6	18
5 M	0002	2.6	79
	0705	1.0	30
	1219	1.6	49
	1805	0.7	21
6 Tu	0118	2.6	79
	0819	0.9	27
	1347	1.7	52
	1924	0.8	24
7 W	0220	2.7	82
	0910	0.7	21
	1451	1.8	55
	2028	0.7	21
8 Th	0308	2.7	82
	0948	0.6	18
	1537	2.0	61
	2119	0.7	21
9 F	0347	2.6	79
	1017	0.6	18
	1614	2.1	64
	2202	0.7	21
10 Sa	0419	2.6	79
	1043	0.5	15
	1646	2.3	70
	2239	0.7	21
11 Su	0448	2.6	79
	1107	0.4	12
	1717	2.4	73
	2314	0.7	21
12 M ●	0515	2.5	76
	1130	0.4	12
	1748	2.5	76
	2349	0.7	21
13 Tu	0541	2.4	73
	1154	0.4	12
	1819	2.6	79
14 W	0024	0.8	24
	0607	2.3	70
	1218	0.4	12
	1851	2.6	79
15 Th	0100	0.9	27
	0633	2.1	64
	1242	0.4	12
	1924	2.6	79

	Time	Height	
	h m	ft	cm
16 F	0138	1.0	30
	0657	2.0	61
	1306	0.5	15
	2000	2.5	76
17 Sa	0220	1.1	34
	0721	1.8	55
	1332	0.6	18
	2041	2.5	76
18 Su	0311	1.2	37
	0749	1.7	52
	1404	0.6	18
	2129	2.4	73
19 M	0419	1.3	40
	0832	1.6	49
	1448	0.7	21
	2230	2.4	73
20 Tu ◐	0544	1.2	37
	0951	1.5	46
	1554	0.8	24
	2338	2.4	73
21 W	0656	1.1	34
	1146	1.5	46
	1725	0.9	27
22 Th	0045	2.5	76
	0747	0.9	27
	1318	1.7	52
	1853	0.8	24
23 F	0142	2.6	79
	0828	0.6	18
	1422	2.0	61
	2006	0.7	21
24 Sa	0233	2.7	82
	0908	0.4	12
	1516	2.4	73
	2108	0.6	18
25 Su	0321	2.8	85
	0948	0.1	3
	1606	2.7	82
	2204	0.4	12
26 M	0406	2.8	85
	1028	−0.1	−3
	1654	3.0	91
	2258	0.4	12
27 Tu ○	0451	2.8	85
	1110	−0.2	−6
	1742	3.2	98
	2352	0.4	12
28 W	0537	2.7	82
	1152	−0.3	−9
	1831	3.3	101
29 Th	0046	0.5	15
	0623	2.5	76
	1235	−0.2	−6
	1922	3.3	101
30 F	0144	0.6	18
	0711	2.2	67
	1320	0.0	0
	2015	3.2	98
31 Sa	0247	0.7	21
	0804	2.0	61
	1407	0.2	6
	2112	3.0	91

November

	Time	Height	
	h m	ft	cm
1 Su	0358	0.9	27
	0906	1.7	52
	1500	0.5	15
	2216	2.9	88
2 M	0520	0.9	27
	1026	1.6	49
	1603	0.7	21
	2324	2.7	82
3 Tu ◑	0642	0.9	27
	1205	1.5	46
	1721	0.9	27
4 W	0032	2.6	79
	0747	0.8	24
	1334	1.7	52
	1844	1.0	30
5 Th	0131	2.5	76
	0833	0.7	21
	1437	1.8	55
	1955	1.0	30
6 F	0219	2.5	76
	0908	0.6	18
	1521	2.0	61
	2052	1.0	30
7 Sa	0258	2.4	73
	0936	0.5	15
	1557	2.2	67
	2138	1.0	30
8 Su	0331	2.4	73
	1000	0.4	12
	1628	2.4	73
	2219	1.0	30
9 M	0402	2.3	70
	1024	0.3	9
	1658	2.6	79
	2257	0.9	27
10 Tu	0431	2.3	70
	1049	0.3	9
	1729	2.7	82
	2334	0.9	27
11 W ●	0500	2.2	67
	1114	0.3	9
	1800	2.8	85
12 Th	0013	0.9	27
	0529	2.1	64
	1140	0.2	6
	1833	2.9	88
13 F	0052	1.0	30
	0559	2.0	61
	1208	0.3	9
	1908	2.9	88
14 Sa	0134	1.0	30
	0629	1.8	55
	1236	0.3	9
	1945	2.9	88
15 Su	0220	1.1	34
	0701	1.7	52
	1307	0.4	12
	2025	2.8	85

	Time	Height	
	h m	ft	cm
16 M	0311	1.1	34
	0741	1.6	49
	1343	0.5	15
	2110	2.8	85
17 Tu	0411	1.1	34
	0836	1.5	46
	1429	0.7	21
	2201	2.7	82
18 W	0515	1.1	34
	0959	1.5	46
	1532	0.8	24
	2259	2.7	82
19 Th ◐	0616	0.9	27
	1139	1.6	49
	1655	1.0	30
20 F	0000	2.6	79
	0707	0.7	21
	1306	1.8	55
	1826	1.0	30
21 Sa	0059	2.6	79
	0753	0.5	15
	1412	2.2	67
	1947	1.0	30
22 Su	0155	2.6	79
	0837	0.2	6
	1508	2.5	76
	2056	0.9	27
23 M	0247	2.6	79
	0920	0.0	0
	1558	2.9	88
	2158	0.8	24
24 Tu	0337	2.6	79
	1002	−0.2	−6
	1647	3.2	98
	2255	0.7	21
25 W ○	0426	2.5	76
	1045	−0.3	−9
	1735	3.4	104
	2350	0.7	21
26 Th	0514	2.4	73
	1128	−0.3	−9
	1823	3.5	107
27 F	0045	0.7	21
	0603	2.2	67
	1212	−0.2	−6
	1911	3.5	107
28 Sa	0142	0.7	21
	0653	2.1	64
	1256	0.0	0
	2000	3.4	104
29 Su	0240	0.8	24
	0745	1.9	58
	1341	0.2	6
	2051	3.2	98
30 M	0343	0.9	27
	0845	1.7	52
	1429	0.5	15
	2144	3.0	91

December

	Time	Height	
	h m	ft	cm
1 Tu	0450	0.9	27
	0957	1.6	49
	1522	0.8	24
	2238	2.8	85
2 W	0557	0.9	27
	1125	1.6	49
	1625	1.0	30
	2334	2.6	79
3 Th ◑	0656	0.8	24
	1256	1.7	52
	1742	1.2	37
4 F	0027	2.5	76
	0742	0.7	21
	1406	1.8	55
	1903	1.3	40
5 Sa	0116	2.4	73
	0818	0.7	21
	1456	2.1	64
	2013	1.3	40
6 Su	0158	2.3	70
	0848	0.6	18
	1534	2.3	70
	2110	1.3	40
7 M	0237	2.2	67
	0916	0.5	15
	1606	2.5	76
	2158	1.3	40
8 Tu	0313	2.2	67
	0943	0.4	12
	1638	2.7	82
	2241	1.2	37
9 W	0349	2.1	64
	1012	0.3	9
	1709	2.8	85
	2321	1.1	34
10 Th	0424	2.1	64
	1041	0.2	6
	1742	3.0	91
11 F ●	0002	1.1	34
	0500	2.0	61
	1113	0.2	6
	1817	3.1	94
12 Sa	0042	1.1	34
	0536	2.0	61
	1145	0.2	6
	1852	3.2	98
13 Su	0124	1.0	30
	0614	1.9	58
	1219	0.2	6
	1929	3.2	98
14 M	0207	1.0	30
	0656	1.8	55
	1256	0.3	9
	2008	3.1	94
15 Tu	0253	1.0	30
	0744	1.8	55
	1337	0.5	15
	2050	3.1	94

	Time	Height	
	h m	ft	cm
16 W	0343	1.0	30
	0842	1.7	52
	1424	0.6	18
	2135	3.0	91
17 Th	0436	0.9	27
	0955	1.7	52
	1523	0.9	27
	2225	2.8	85
18 F ◐	0531	0.8	24
	1122	1.8	55
	1638	1.1	34
	2321	2.7	82
19 Sa	0626	0.6	18
	1247	2.1	64
	1807	1.2	37
20 Su	0021	2.6	79
	0718	0.4	12
	1400	2.4	73
	1936	1.2	37
21 M	0122	2.5	76
	0808	0.2	6
	1500	2.7	82
	2054	1.2	37
22 Tu	0221	2.4	73
	0857	0.1	3
	1553	3.0	91
	2200	1.1	34
23 W	0317	2.4	73
	0943	0.0	0
	1643	3.3	101
	2259	1.0	30
24 Th	0411	2.3	70
	1029	−0.1	−3
	1729	3.5	107
	2352	0.9	27
25 F ○	0502	2.2	67
	1113	−0.1	−3
	1815	3.5	107
26 Sa	0043	0.8	24
	0551	2.2	67
	1157	0.0	0
	1859	3.5	107
27 Su	0133	0.8	24
	0640	2.1	64
	1240	0.1	3
	1943	3.4	104
28 M	0222	0.8	24
	0729	2.0	61
	1322	0.3	9
	2025	3.3	101
29 Tu	0312	0.9	27
	0821	1.9	58
	1403	0.6	18
	2107	3.1	94
30 W	0402	0.9	27
	0918	1.8	55
	1446	0.9	27
	2148	2.8	85
31 Th	0454	0.9	27
	1025	1.7	52
	1532	1.1	34
	2229	2.6	79

Time meridian 75° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.
Heights are referred to the chart datum of soundings.

Talara, Peru, 2015

Times and Heights of High and Low Waters

January

	Time	Height	
	h m	ft	cm
1 Th	0029	4.6	140
	0702	0.3	9
	1329	4.5	137
	1926	1.1	34
2 F	0128	4.7	143
	0758	0.1	3
	1426	4.7	143
	2024	1.0	30
3 Sa	0221	4.7	143
	0846	−0.1	−3
	1514	5.0	152
	2114	0.9	27
4 Su ○	0307	4.8	146
	0929	−0.2	−6
	1556	5.1	155
	2157	0.8	24
5 M	0349	4.8	146
	1008	−0.3	−9
	1635	5.3	162
	2237	0.8	24
6 Tu	0428	4.8	146
	1044	−0.2	−6
	1711	5.3	162
	2315	0.7	21
7 W	0505	4.7	143
	1119	−0.1	−3
	1745	5.3	162
	2351	0.8	24
8 Th	0541	4.6	140
	1152	0.0	0
	1818	5.2	158
9 F	0027	0.8	24
	0617	4.4	134
	1225	0.3	9
	1851	5.0	152
10 Sa	0104	0.9	27
	0654	4.2	128
	1259	0.6	18
	1926	4.8	146
11 Su	0142	1.0	30
	0733	4.0	122
	1335	0.9	27
	2002	4.6	140
12 M	0223	1.2	37
	0818	3.8	116
	1415	1.2	37
	2042	4.4	134
13 Tu ◑	0311	1.2	37
	0912	3.6	110
	1505	1.5	46
	2130	4.3	131
14 W	0408	1.3	40
	1019	3.6	110
	1607	1.7	52
	2228	4.2	128
15 Th	0512	1.2	37
	1134	3.7	113
	1722	1.8	55
	2333	4.2	128

	Time	Height	
	h m	ft	cm
16 F	0615	0.9	27
	1245	4.0	122
	1836	1.7	52
17 Sa	0038	4.3	131
	0713	0.6	18
	1344	4.4	134
	1940	1.4	43
18 Su	0137	4.6	140
	0805	0.2	6
	1434	4.9	149
	2035	1.0	30
19 M	0230	4.9	149
	0853	−0.2	−6
	1521	5.3	162
	2124	0.6	18
20 Tu ●	0320	5.2	158
	0939	−0.6	−18
	1605	5.7	174
	2211	0.3	9
21 W	0408	5.5	168
	1025	−0.8	−24
	1649	6.0	183
	2257	0.0	0
22 Th	0455	5.6	171
	1109	−0.9	−27
	1733	6.1	186
	2343	−0.1	−3
23 F	0542	5.6	171
	1155	−0.8	−24
	1817	6.1	186
24 Sa	0030	−0.1	−3
	0631	5.4	165
	1242	−0.5	−15
	1903	5.9	180
25 Su	0119	0.0	0
	0722	5.2	158
	1331	0.0	0
	1952	5.6	171
26 M ◐	0212	0.2	6
	0819	4.8	146
	1424	0.5	15
	2044	5.2	158
27 Tu	0310	0.5	15
	0923	4.5	137
	1525	1.0	30
	2144	4.8	146
28 W	0417	0.7	21
	1038	4.2	128
	1638	1.4	43
	2252	4.5	137
29 Th	0530	0.8	24
	1201	4.2	128
	1800	1.6	49
30 F	0006	4.4	134
	0642	0.7	21
	1316	4.3	131
	1916	1.6	49
31 Sa	0113	4.4	134
	0743	0.5	15
	1415	4.6	140
	2017	1.4	43

February

	Time	Height	
	h m	ft	cm
1 Su	0210	4.5	137
	0833	0.3	9
	1503	4.9	149
	2105	1.2	37
2 M	0257	4.6	140
	0915	0.2	6
	1542	5.1	155
	2146	1.0	30
3 Tu ○	0338	4.8	146
	0952	0.1	3
	1617	5.3	162
	2222	0.8	24
4 W	0414	4.8	146
	1026	0.0	0
	1648	5.4	165
	2255	0.7	21
5 Th	0448	4.9	149
	1058	0.0	0
	1719	5.4	165
	2327	0.6	18
6 F	0521	4.9	149
	1129	0.1	3
	1749	5.4	165
	2358	0.6	18
7 Sa	0554	4.8	146
	1159	0.3	9
	1818	5.2	158
8 Su	0030	0.7	21
	0627	4.6	140
	1230	0.5	15
	1848	5.1	155
9 M	0102	0.8	24
	0701	4.4	134
	1302	0.8	24
	1919	4.9	149
10 Tu	0137	0.9	27
	0739	4.2	128
	1337	1.1	34
	1954	4.6	140
11 W ◑	0218	1.1	34
	0825	4.0	122
	1420	1.5	46
	2036	4.4	134
12 Th	0308	1.2	37
	0924	3.8	116
	1517	1.7	52
	2131	4.2	128
13 F	0412	1.2	37
	1041	3.8	116
	1635	1.9	58
	2244	4.1	125
14 Sa	0527	1.1	34
	1203	4.0	122
	1802	1.8	55
15 Su	0003	4.2	128
	0639	0.8	24
	1313	4.4	134
	1915	1.5	46

	Time	Height	
	h m	ft	cm
16 M	0113	4.5	137
	0740	0.4	12
	1409	5.0	152
	2015	1.0	30
17 Tu	0213	4.9	149
	0833	−0.1	−3
	1458	5.5	168
	2105	0.5	15
18 W ●	0305	5.4	165
	0921	−0.5	−15
	1544	5.9	180
	2152	0.0	0
19 Th	0354	5.7	174
	1008	−0.7	−21
	1628	6.2	189
	2238	−0.3	−9
20 F	0441	5.9	180
	1053	−0.8	−24
	1711	6.3	192
	2323	−0.5	−15
21 Sa	0528	5.9	180
	1138	−0.7	−21
	1754	6.3	192
22 Su	0008	−0.4	−12
	0615	5.8	177
	1223	−0.4	−12
	1839	6.0	183
23 M	0055	−0.3	−9
	0704	5.5	168
	1311	0.1	3
	1925	5.6	171
24 Tu	0144	0.1	3
	0757	5.1	155
	1402	0.6	18
	2015	5.1	155
25 W ◐	0239	0.4	12
	0857	4.6	140
	1501	1.2	37
	2112	4.6	140
26 Th	0343	0.8	24
	1010	4.3	131
	1614	1.6	49
	2222	4.2	128
27 F	0458	1.0	30
	1136	4.1	125
	1742	1.8	55
	2343	4.0	122
28 Sa	0617	1.0	30
	1255	4.3	131
	1903	1.7	52

March

	Time	Height	
	h m	ft	cm
1 Su	0058	4.1	125
	0723	0.9	27
	1355	4.5	137
	2003	1.5	46
2 M	0157	4.3	131
	0814	0.7	21
	1441	4.8	146
	2048	1.2	37
3 Tu	0243	4.5	137
	0855	0.5	15
	1517	5.0	152
	2125	0.9	27
4 W	0321	4.7	143
	0930	0.4	12
	1549	5.2	158
	2158	0.7	21
5 Th ○	0356	4.9	149
	1003	0.3	9
	1619	5.3	162
	2229	0.5	15
6 F	0428	5.0	152
	1034	0.2	6
	1648	5.4	165
	2258	0.4	12
7 Sa	0459	5.0	152
	1104	0.3	9
	1716	5.4	165
	2328	0.4	12
8 Su	0530	5.0	152
	1133	0.4	12
	1744	5.3	162
	2357	0.4	12
9 M	0602	4.9	149
	1204	0.6	18
	1813	5.1	155
10 Tu	0027	0.5	15
	0635	4.7	143
	1235	0.8	24
	1843	4.9	149
11 W	0100	0.6	18
	0711	4.5	137
	1310	1.1	34
	1917	4.7	143
12 Th	0138	0.8	24
	0755	4.3	131
	1353	1.4	43
	1959	4.4	134
13 F ◑	0226	1.0	30
	0850	4.1	125
	1450	1.7	52
	2055	4.2	128
14 Sa	0329	1.1	34
	1004	4.1	125
	1608	1.8	55
	2211	4.0	122
15 Su	0448	1.1	34
	1127	4.2	128
	1737	1.7	52
	2338	4.1	125

	Time	Height	
	h m	ft	cm
16 M	0607	0.9	27
	1241	4.6	140
	1853	1.3	40
17 Tu	0054	4.5	137
	0714	0.5	15
	1341	5.0	152
	1953	0.8	24
18 W	0156	4.9	149
	0811	0.1	3
	1432	5.5	168
	2044	0.2	6
19 Th	0249	5.4	165
	0901	−0.3	−9
	1519	5.9	180
	2131	−0.3	−9
20 F ●	0338	5.8	177
	0948	−0.6	−18
	1603	6.2	189
	2216	−0.6	−18
21 Sa	0425	6.0	183
	1034	−0.6	−18
	1646	6.3	192
	2300	−0.7	−21
22 Su	0511	6.1	186
	1119	−0.5	−15
	1730	6.1	186
	2345	−0.7	−21
23 M	0558	5.9	180
	1204	−0.2	−6
	1813	5.8	177
24 Tu	0030	−0.4	−12
	0645	5.6	171
	1251	0.2	6
	1858	5.4	165
25 W	0117	−0.1	−3
	0736	5.1	155
	1342	0.8	24
	1946	4.9	149
26 Th	0208	0.4	12
	0833	4.7	143
	1440	1.3	40
	2042	4.4	134
27 F ◐	0308	0.8	24
	0942	4.3	131
	1552	1.7	52
	2151	4.0	122
28 Sa	0420	1.2	37
	1102	4.2	128
	1718	1.8	55
	2315	3.8	116
29 Su	0539	1.3	40
	1219	4.2	128
	1838	1.7	52
30 M	0034	3.8	116
	0648	1.2	37
	1319	4.4	134
	1936	1.4	43
31 Tu	0134	4.1	125
	0742	1.0	30
	1404	4.6	140
	2019	1.1	34

Time meridian 75° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.
Heights are referred to the chart datum of soundings.

Talara, Peru, 2015

Times and Heights of High and Low Waters

April

	Time	Height	
	h m	ft	cm
1 W	0219	4.3	131
	0824	0.8	24
	1441	4.8	146
	2055	0.8	24
2 Th	0257	4.6	140
	0900	0.7	21
	1514	5.0	152
	2127	0.5	15
3 F	0331	4.8	146
	0934	0.5	15
	1544	5.2	158
	2157	0.3	9
4 Sa ○	0404	5.0	152
	1006	0.5	15
	1614	5.2	158
	2227	0.2	6
5 Su	0436	5.1	155
	1037	0.5	15
	1643	5.2	158
	2257	0.1	3
6 M	0508	5.1	155
	1109	0.5	15
	1712	5.2	158
	2327	0.1	3
7 Tu	0540	5.0	152
	1141	0.7	21
	1743	5.0	152
	2359	0.2	6
8 W	0615	4.9	149
	1216	0.9	27
	1815	4.8	146
9 Th	0033	0.3	9
	0653	4.8	146
	1254	1.1	34
	1852	4.6	140
10 F	0113	0.5	15
	0738	4.6	140
	1341	1.3	40
	1938	4.3	131
11 Sa ◑	0201	0.7	21
	0833	4.4	134
	1440	1.5	46
	2037	4.1	125
12 Su	0303	0.9	27
	0942	4.3	131
	1556	1.6	49
	2155	4.0	122
13 M	0419	1.0	30
	1058	4.4	134
	1718	1.4	43
	2320	4.1	125
14 Tu	0538	0.9	27
	1210	4.7	143
	1830	1.0	30
15 W	0035	4.4	134
	0647	0.6	18
	1311	5.1	155
	1929	0.5	15

	Time	Height	
	h m	ft	cm
16 Th	0138	4.9	149
	0747	0.2	6
	1403	5.5	168
	2021	0.0	0
17 F	0232	5.3	162
	0839	−0.1	−3
	1452	5.8	177
	2109	−0.5	−15
18 Sa ●	0321	5.7	174
	0928	−0.2	−6
	1537	5.9	180
	2154	−0.7	−21
19 Su	0409	5.9	180
	1015	−0.3	−9
	1621	6.0	183
	2238	−0.8	−24
20 M	0455	5.9	180
	1101	−0.1	−3
	1705	5.8	177
	2322	−0.7	−21
21 Tu	0541	5.8	177
	1147	0.1	3
	1749	5.5	168
22 W	0006	−0.5	−15
	0628	5.5	168
	1234	0.5	15
	1833	5.1	155
23 Th	0052	−0.1	−3
	0717	5.2	158
	1324	0.9	27
	1921	4.6	140
24 F	0140	0.3	9
	0811	4.8	146
	1420	1.3	40
	2014	4.2	128
25 Sa ◐	0234	0.8	24
	0911	4.4	134
	1527	1.6	49
	2119	3.8	116
26 Su	0337	1.1	34
	1018	4.2	128
	1643	1.6	49
	2237	3.6	110
27 M	0448	1.3	40
	1127	4.2	128
	1756	1.5	46
	2353	3.6	110
28 Tu	0557	1.4	43
	1226	4.3	131
	1854	1.3	40
29 W	0056	3.8	116
	0655	1.3	40
	1315	4.5	137
	1939	1.0	30
30 Th	0145	4.1	125
	0742	1.1	34
	1355	4.6	140
	2016	0.7	21

May

	Time	Height	
	h m	ft	cm
1 F	0226	4.4	134
	0823	1.0	30
	1431	4.8	146
	2051	0.4	12
2 Sa	0302	4.6	140
	0900	0.8	24
	1505	4.9	149
	2123	0.2	6
3 Su ○	0337	4.8	146
	0936	0.7	21
	1538	5.0	152
	2155	0.0	0
4 M	0412	5.0	152
	1011	0.7	21
	1610	5.0	152
	2228	−0.1	−3
5 Tu	0447	5.1	155
	1047	0.7	21
	1644	5.0	152
	2301	−0.1	−3
6 W	0522	5.1	155
	1123	0.8	24
	1718	4.9	149
	2336	−0.1	−3
7 Th	0600	5.1	155
	1203	0.9	27
	1756	4.7	143
8 F	0014	0.0	0
	0642	5.0	152
	1246	1.0	30
	1839	4.5	137
9 Sa	0057	0.2	6
	0728	4.9	149
	1336	1.1	34
	1929	4.3	131
10 Su	0148	0.4	12
	0822	4.8	146
	1436	1.2	37
	2030	4.1	125
11 M ◑	0247	0.7	21
	0924	4.7	143
	1545	1.2	37
	2143	4.0	122
12 Tu	0357	0.8	24
	1032	4.7	143
	1658	1.0	30
	2302	4.1	125
13 W	0511	0.8	24
	1139	4.8	146
	1805	0.7	21
14 Th	0015	4.4	134
	0621	0.7	21
	1240	5.1	155
	1905	0.3	9
15 F	0119	4.8	146
	0723	0.5	15
	1335	5.3	162
	1958	−0.1	−3

	Time	Height	
	h m	ft	cm
16 Sa	0215	5.1	155
	0818	0.3	9
	1426	5.5	168
	2048	−0.5	−15
17 Su ●	0307	5.4	165
	0909	0.2	6
	1513	5.6	171
	2134	−0.7	−21
18 M	0355	5.6	171
	0958	0.2	6
	1559	5.5	168
	2219	−0.7	−21
19 Tu	0441	5.7	174
	1045	0.3	9
	1643	5.4	165
	2302	−0.7	−21
20 W	0527	5.6	171
	1131	0.4	12
	1727	5.1	155
	2345	−0.4	−12
21 Th	0612	5.4	165
	1218	0.7	21
	1812	4.8	146
22 F	0029	−0.1	−3
	0658	5.2	158
	1306	0.9	27
	1857	4.4	134
23 Sa	0113	0.3	9
	0745	4.9	149
	1358	1.2	37
	1947	4.1	125
24 Su	0200	0.7	21
	0835	4.6	140
	1454	1.4	43
	2043	3.8	116
25 M ◐	0252	1.0	30
	0929	4.4	134
	1556	1.5	46
	2148	3.6	110
26 Tu	0350	1.3	40
	1026	4.3	131
	1700	1.4	43
	2258	3.5	107
27 W	0453	1.5	46
	1123	4.3	131
	1758	1.2	37
28 Th	0004	3.6	110
	0555	1.5	46
	1215	4.3	131
	1848	1.0	30
29 F	0100	3.8	116
	0651	1.4	43
	1302	4.4	134
	1932	0.7	21
30 Sa	0148	4.1	125
	0740	1.3	40
	1344	4.6	140
	2011	0.5	15
31 Su	0230	4.4	134
	0824	1.1	34
	1424	4.7	143
	2049	0.2	6

June

	Time	Height	
	h m	ft	cm
1 M	0310	4.7	143
	0906	1.0	30
	1503	4.8	146
	2125	0.0	0
2 Tu ○	0348	4.9	149
	0947	0.9	27
	1541	4.9	149
	2202	−0.2	−6
3 W	0427	5.1	155
	1027	0.8	24
	1620	4.9	149
	2240	−0.3	−9
4 Th	0506	5.3	162
	1108	0.7	21
	1701	4.9	149
	2319	−0.3	−9
5 F	0547	5.3	162
	1152	0.7	21
	1744	4.8	146
6 Sa	0001	−0.3	−9
	0630	5.3	162
	1238	0.7	21
	1830	4.7	143
7 Su	0046	−0.1	−3
	0717	5.2	158
	1329	0.8	24
	1922	4.5	137
8 M	0136	0.1	3
	0808	5.1	155
	1425	0.8	24
	2021	4.3	131
9 Tu ◑	0233	0.4	12
	0904	5.0	152
	1527	0.8	24
	2129	4.2	128
10 W	0336	0.6	18
	1005	4.9	149
	1634	0.7	21
	2242	4.2	128
11 Th	0445	0.8	24
	1109	4.9	149
	1740	0.5	15
	2355	4.4	134
12 F	0556	0.9	27
	1212	4.9	149
	1842	0.2	6
13 Sa	0102	4.6	140
	0702	0.8	24
	1310	5.0	152
	1939	−0.1	−3
14 Su	0202	4.9	149
	0801	0.7	21
	1404	5.1	155
	2030	−0.3	−9
15 M	0255	5.1	155
	0856	0.6	18
	1455	5.1	155
	2118	−0.5	−15

	Time	Height	
	h m	ft	cm
16 Tu ●	0344	5.3	162
	0946	0.6	18
	1542	5.1	155
	2203	−0.5	−15
17 W	0430	5.4	165
	1033	0.6	18
	1626	5.0	152
	2245	−0.5	−15
18 Th	0513	5.4	165
	1117	0.6	18
	1709	4.9	149
	2326	−0.3	−9
19 F	0555	5.3	162
	1201	0.7	21
	1752	4.7	143
20 Sa	0006	−0.1	−3
	0635	5.2	158
	1244	0.9	27
	1834	4.4	134
21 Su	0045	0.2	6
	0715	5.0	152
	1328	1.0	30
	1917	4.1	125
22 M	0125	0.5	15
	0756	4.8	146
	1414	1.1	34
	2004	3.9	119
23 Tu	0208	0.9	27
	0839	4.6	140
	1504	1.2	37
	2056	3.7	113
24 W ◐	0254	1.2	37
	0925	4.4	134
	1557	1.3	40
	2156	3.5	107
25 Th	0348	1.4	43
	1016	4.2	128
	1654	1.2	37
	2302	3.5	107
26 F	0449	1.6	49
	1110	4.2	128
	1751	1.1	34
27 Sa	0008	3.6	110
	0554	1.6	49
	1205	4.2	128
	1843	0.8	24
28 Su	0106	3.9	119
	0654	1.5	46
	1257	4.3	131
	1931	0.6	18
29 M	0157	4.2	128
	0749	1.4	43
	1346	4.5	137
	2015	0.2	6
30 Tu	0242	4.6	140
	0838	1.1	34
	1433	4.6	140
	2058	−0.1	−3

Time meridian 75° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.
Heights are referred to the chart datum of soundings.

Talara, Peru, 2015

Times and Heights of High and Low Waters

July

	Time	Height	
	h m	ft	cm
1 W ○	0325	4.9	149
	0924	0.9	27
	1517	4.8	146
	2139	−0.3	−9
2 Th	0407	5.2	158
	1009	0.7	21
	1602	5.0	152
	2221	−0.5	−15
3 F	0448	5.5	168
	1053	0.5	15
	1646	5.0	152
	2303	−0.6	−18
4 Sa	0531	5.6	171
	1138	0.4	12
	1732	5.1	155
	2347	−0.6	−18
5 Su	0614	5.6	171
	1224	0.3	9
	1820	5.0	152
6 M	0033	−0.4	−12
	0700	5.6	171
	1313	0.3	9
	1911	4.8	146
7 Tu	0122	−0.1	−3
	0748	5.4	165
	1406	0.4	12
	2007	4.6	140
8 W ◑	0215	0.2	6
	0840	5.2	158
	1504	0.4	12
	2110	4.4	134
9 Th	0315	0.6	18
	0938	5.0	152
	1608	0.5	15
	2221	4.3	131
10 F	0422	0.9	27
	1041	4.8	146
	1715	0.4	12
	2336	4.2	128
11 Sa	0535	1.1	34
	1147	4.6	140
	1822	0.3	9
12 Su	0049	4.4	134
	0647	1.1	34
	1252	4.6	140
	1923	0.1	3
13 M	0152	4.6	140
	0752	1.0	30
	1350	4.7	143
	2018	−0.1	−3
14 Tu	0247	4.9	149
	0848	0.9	27
	1443	4.8	146
	2106	−0.2	−6
15 W ●	0334	5.1	155
	0936	0.8	24
	1530	4.8	146
	2149	−0.3	−9

	Time	Height	
	h m	ft	cm
16 Th	0417	5.2	158
	1020	0.7	21
	1612	4.8	146
	2229	−0.3	−9
17 F	0455	5.3	162
	1101	0.6	18
	1653	4.8	146
	2306	−0.2	−6
18 Sa	0532	5.3	162
	1139	0.6	18
	1731	4.6	140
	2342	−0.1	−3
19 Su	0607	5.2	158
	1216	0.6	18
	1808	4.5	137
20 M	0017	0.1	3
	0641	5.0	152
	1253	0.7	21
	1846	4.3	131
21 Tu	0051	0.4	12
	0715	4.8	146
	1331	0.8	24
	1925	4.1	125
22 W	0127	0.7	21
	0751	4.6	140
	1412	1.0	30
	2008	3.8	116
23 Th ◐	0206	1.0	30
	0829	4.4	134
	1457	1.1	34
	2058	3.6	110
24 F	0251	1.3	40
	0914	4.2	128
	1549	1.1	34
	2200	3.5	107
25 Sa	0348	1.6	49
	1007	4.0	122
	1649	1.1	34
	2311	3.5	107
26 Su	0458	1.7	52
	1109	4.0	122
	1752	0.9	27
27 M	0022	3.7	113
	0612	1.7	52
	1214	4.0	122
	1851	0.7	21
28 Tu	0123	4.1	125
	0718	1.4	43
	1314	4.2	128
	1944	0.3	9
29 W	0214	4.5	137
	0814	1.1	34
	1408	4.5	137
	2032	−0.1	−3
30 Th	0300	4.9	149
	0903	0.7	21
	1458	4.8	146
	2118	−0.4	−12
31 F ○	0344	5.3	162
	0949	0.4	12
	1545	5.1	155
	2202	−0.7	−21

August

	Time	Height	
	h m	ft	cm
1 Sa	0426	5.6	171
	1034	0.1	3
	1631	5.3	162
	2246	−0.8	−24
2 Su	0509	5.8	177
	1118	−0.2	−6
	1718	5.4	165
	2331	−0.8	−24
3 M	0552	5.9	180
	1204	−0.2	−6
	1805	5.3	162
4 Tu	0016	−0.6	−18
	0637	5.8	177
	1251	−0.2	−6
	1855	5.1	155
5 W	0104	−0.3	−9
	0723	5.5	168
	1342	−0.1	−3
	1949	4.8	146
6 Th ◑	0155	0.1	3
	0814	5.2	158
	1437	0.1	3
	2049	4.5	137
7 F	0254	0.6	18
	0911	4.8	146
	1540	0.4	12
	2159	4.2	128
8 Sa	0402	1.0	30
	1016	4.5	137
	1651	0.5	15
	2319	4.1	125
9 Su	0521	1.3	40
	1129	4.3	131
	1804	0.5	15
10 M	0037	4.2	128
	0639	1.3	40
	1240	4.2	128
	1911	0.3	9
11 Tu	0143	4.4	134
	0746	1.1	34
	1342	4.3	131
	2006	0.2	6
12 W	0236	4.7	143
	0840	0.9	27
	1434	4.5	137
	2053	0.0	0
13 Th	0320	4.9	149
	0925	0.7	21
	1519	4.6	140
	2134	−0.1	−3
14 F ●	0357	5.1	155
	1003	0.5	15
	1558	4.7	143
	2210	−0.2	−6
15 Sa	0431	5.2	158
	1039	0.4	12
	1634	4.7	143
	2243	−0.2	−6

	Time	Height	
	h m	ft	cm
16 Su	0503	5.2	158
	1112	0.3	9
	1708	4.7	143
	2316	−0.1	−3
17 M	0534	5.1	155
	1144	0.3	9
	1742	4.6	140
	2347	0.1	3
18 Tu	0604	5.0	152
	1216	0.4	12
	1815	4.4	134
19 W	0018	0.3	9
	0634	4.8	146
	1249	0.5	15
	1850	4.2	128
20 Th	0051	0.6	18
	0706	4.6	140
	1324	0.6	18
	1928	4.0	122
21 F	0126	0.9	27
	0740	4.3	131
	1403	0.8	24
	2012	3.8	116
22 Sa ◐	0207	1.2	37
	0820	4.1	125
	1450	1.0	30
	2107	3.6	110
23 Su	0301	1.5	46
	0912	3.8	116
	1550	1.0	30
	2219	3.5	107
24 M	0414	1.7	52
	1021	3.7	113
	1702	1.0	30
	2339	3.7	113
25 Tu	0538	1.6	49
	1139	3.8	116
	1814	0.7	21
26 W	0049	4.0	122
	0652	1.3	40
	1249	4.0	122
	1915	0.3	9
27 Th	0145	4.5	137
	0751	0.9	27
	1348	4.4	134
	2008	−0.1	−3
28 F	0233	5.0	152
	0841	0.4	12
	1440	4.9	149
	2056	−0.5	−15
29 Sa ○	0318	5.4	165
	0927	−0.1	−3
	1528	5.2	158
	2142	−0.8	−24
30 Su	0401	5.7	174
	1011	−0.5	−15
	1615	5.5	168
	2226	−1.0	−30
31 M	0444	5.9	180
	1055	−0.7	−21
	1701	5.6	171
	2311	−0.9	−27

September

	Time	Height	
	h m	ft	cm
1 Tu	0527	5.9	180
	1140	−0.8	−24
	1748	5.6	171
	2357	−0.7	−21
2 W	0611	5.7	174
	1226	−0.7	−21
	1837	5.3	162
3 Th	0044	−0.3	−9
	0657	5.4	165
	1315	−0.4	−12
	1929	5.0	152
4 F	0136	0.1	3
	0747	5.0	152
	1409	−0.1	−3
	2028	4.5	137
5 Sa ◑	0234	0.7	21
	0844	4.5	137
	1512	0.3	9
	2139	4.2	128
6 Su	0345	1.1	34
	0952	4.1	125
	1625	0.6	18
	2301	4.0	122
7 M	0510	1.3	40
	1113	3.8	116
	1744	0.6	18
8 Tu	0021	4.1	125
	0632	1.3	40
	1230	3.9	119
	1854	0.5	15
9 W	0126	4.3	131
	0737	1.0	30
	1333	4.0	122
	1950	0.4	12
10 Th	0216	4.5	137
	0826	0.8	24
	1423	4.2	128
	2034	0.2	6
11 F	0256	4.7	143
	0905	0.5	15
	1504	4.4	134
	2112	0.1	3
12 Sa	0330	4.9	149
	0940	0.3	9
	1540	4.6	140
	2146	0.0	0
13 Su ●	0401	5.0	152
	1011	0.1	3
	1613	4.7	143
	2218	0.0	0
14 M	0430	5.0	152
	1041	0.0	0
	1645	4.7	143
	2248	0.0	0
15 Tu	0459	5.0	152
	1111	0.0	0
	1716	4.7	143
	2318	0.1	3

	Time	Height	
	h m	ft	cm
16 W	0528	4.9	149
	1141	0.0	0
	1748	4.6	140
	2349	0.3	9
17 Th	0556	4.7	143
	1211	0.2	6
	1821	4.4	134
18 F	0021	0.6	18
	0626	4.5	137
	1244	0.3	9
	1857	4.2	128
19 Sa	0056	0.9	27
	0659	4.2	128
	1320	0.5	15
	1938	4.0	122
20 Su	0137	1.2	37
	0739	3.9	119
	1405	0.7	21
	2031	3.8	116
21 M ◐	0231	1.4	43
	0832	3.7	113
	1504	0.9	27
	2140	3.7	113
22 Tu	0345	1.6	49
	0945	3.5	107
	1619	0.9	27
	2301	3.8	116
23 W	0512	1.5	46
	1111	3.6	110
	1738	0.7	21
24 Th	0014	4.1	125
	0627	1.1	34
	1227	3.9	119
	1845	0.4	12
25 F	0113	4.5	137
	0726	0.6	18
	1329	4.4	134
	1942	−0.1	−3
26 Sa	0203	5.0	152
	0817	0.0	0
	1422	4.9	149
	2033	−0.5	−15
27 Su ○	0250	5.4	165
	0903	−0.5	−15
	1511	5.3	162
	2120	−0.8	−24
28 M	0334	5.7	174
	0948	−0.9	−27
	1558	5.6	171
	2206	−0.9	−27
29 Tu	0417	5.9	180
	1032	−1.1	−34
	1644	5.7	174
	2252	−0.8	−24
30 W	0501	5.8	177
	1116	−1.1	−34
	1731	5.7	174
	2338	−0.6	−18

Time meridian 75° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.
Heights are referred to the chart datum of soundings.

Talara, Peru, 2015

Times and Heights of High and Low Waters

October

	Time	Height	
	h m	ft	cm
1 Th	0545	5.6	171
	1202	−0.9	−27
	1819	5.4	165
2 F	0026	−0.2	−6
	0632	5.2	158
	1250	−0.6	−18
	1911	5.0	152
3 Sa	0117	0.3	9
	0721	4.7	143
	1342	−0.2	−6
	2008	4.6	140
4 Su ◑	0217	0.7	21
	0818	4.2	128
	1442	0.3	9
	2116	4.2	128
5 M	0328	1.1	34
	0928	3.7	113
	1554	0.6	18
	2234	4.0	122
6 Tu	0453	1.3	40
	1052	3.5	107
	1713	0.8	24
	2352	4.0	122
7 W	0614	1.2	37
	1212	3.6	110
	1825	0.8	24
8 Th	0055	4.2	128
	0715	0.9	27
	1315	3.8	116
	1921	0.6	18
9 F	0143	4.4	134
	0801	0.6	18
	1403	4.0	122
	2006	0.5	15
10 Sa	0222	4.6	140
	0838	0.3	9
	1442	4.3	131
	2044	0.3	9
11 Su	0255	4.7	143
	0910	0.1	3
	1517	4.5	137
	2118	0.2	6
12 M ●	0326	4.8	146
	0941	−0.1	−3
	1549	4.6	140
	2150	0.2	6
13 Tu	0356	4.9	149
	1011	−0.2	−6
	1621	4.7	143
	2221	0.2	6
14 W	0425	4.9	149
	1040	−0.3	−9
	1653	4.7	143
	2253	0.3	9
15 Th	0455	4.8	146
	1110	−0.2	−6
	1725	4.7	143
	2325	0.4	12

	Time	Height	
	h m	ft	cm
16 F	0524	4.6	140
	1141	−0.1	−3
	1759	4.6	140
	2359	0.6	18
17 Sa	0556	4.4	134
	1214	0.0	0
	1836	4.4	134
18 Su	0036	0.9	27
	0631	4.1	125
	1251	0.2	6
	1917	4.2	128
19 M	0120	1.1	34
	0713	3.9	119
	1335	0.4	12
	2009	4.0	122
20 Tu ◐	0215	1.3	40
	0808	3.6	110
	1433	0.7	21
	2112	4.0	122
21 W	0327	1.4	43
	0922	3.5	107
	1545	0.8	24
	2226	4.0	122
22 Th	0448	1.2	37
	1047	3.6	110
	1704	0.7	21
	2338	4.2	128
23 F	0601	0.8	24
	1205	3.9	119
	1815	0.4	12
24 Sa	0039	4.6	140
	0700	0.3	9
	1308	4.4	134
	1916	0.1	3
25 Su	0133	5.0	152
	0752	−0.2	−6
	1403	4.9	149
	2009	−0.2	−6
26 M	0222	5.4	165
	0840	−0.7	−21
	1454	5.3	162
	2059	−0.5	−15
27 Tu ○	0308	5.6	171
	0926	−1.1	−34
	1542	5.6	171
	2147	−0.6	−18
28 W	0353	5.7	174
	1011	−1.2	−37
	1629	5.7	174
	2234	−0.5	−15
29 Th	0438	5.6	171
	1056	−1.2	−37
	1716	5.6	171
	2321	−0.3	−9
30 F	0523	5.4	165
	1141	−1.0	−30
	1804	5.4	165
31 Sa	0010	0.0	0
	0609	5.0	152
	1228	−0.7	−21
	1854	5.1	155

November

	Time	Height	
	h m	ft	cm
1 Su	0101	0.4	12
	0658	4.5	137
	1317	−0.2	−6
	1948	4.7	143
2 M	0159	0.8	24
	0753	4.0	122
	1412	0.3	9
	2048	4.4	134
3 Tu ◑	0305	1.1	34
	0858	3.6	110
	1515	0.7	21
	2156	4.1	125
4 W	0421	1.2	37
	1016	3.4	104
	1627	1.0	30
	2306	4.0	122
5 Th	0536	1.1	34
	1135	3.4	104
	1738	1.0	30
6 F	0008	4.1	125
	0637	0.9	27
	1241	3.6	110
	1839	1.0	30
7 Sa	0058	4.2	128
	0724	0.7	21
	1332	3.8	116
	1928	0.9	27
8 Su	0140	4.4	134
	0803	0.4	12
	1414	4.1	125
	2010	0.8	24
9 M	0216	4.5	137
	0837	0.1	3
	1451	4.3	131
	2047	0.6	18
10 Tu	0250	4.6	140
	0910	−0.1	−3
	1526	4.5	137
	2122	0.6	18
11 W ●	0323	4.7	143
	0941	−0.2	−6
	1559	4.7	143
	2157	0.5	15
12 Th	0355	4.7	143
	1013	−0.3	−9
	1633	4.8	146
	2232	0.5	15
13 F	0427	4.7	143
	1045	−0.4	−12
	1707	4.8	146
	2307	0.6	18
14 Sa	0500	4.6	140
	1118	−0.3	−9
	1743	4.8	146
	2344	0.7	21
15 Su	0536	4.4	134
	1154	−0.2	−6
	1821	4.7	143

	Time	Height	
	h m	ft	cm
16 M	0025	0.8	24
	0615	4.2	128
	1233	0.0	0
	1904	4.6	140
17 Tu	0110	1.0	30
	0700	4.0	122
	1318	0.2	6
	1953	4.5	137
18 W	0205	1.1	34
	0755	3.8	116
	1412	0.5	15
	2050	4.4	134
19 Th ◐	0309	1.1	34
	0904	3.7	113
	1518	0.6	18
	2154	4.4	134
20 F	0421	0.9	27
	1023	3.7	113
	1631	0.7	21
	2302	4.5	137
21 Sa	0531	0.6	18
	1140	4.0	122
	1744	0.6	18
22 Su	0006	4.7	143
	0634	0.2	6
	1247	4.4	134
	1850	0.4	12
23 M	0104	5.0	152
	0729	−0.2	−6
	1346	4.8	146
	1948	0.2	6
24 Tu	0156	5.2	158
	0820	−0.6	−18
	1439	5.2	158
	2042	0.0	0
25 W ○	0246	5.4	165
	0908	−0.9	−27
	1529	5.5	168
	2132	−0.1	−3
26 Th	0333	5.4	165
	0954	−1.1	−34
	1617	5.6	171
	2221	−0.1	−3
27 F	0419	5.4	165
	1039	−1.1	−34
	1704	5.6	171
	2308	0.1	3
28 Sa	0505	5.2	158
	1123	−0.9	−27
	1750	5.5	168
	2356	0.3	9
29 Su	0551	4.9	149
	1208	−0.6	−18
	1836	5.2	158
30 M	0045	0.5	15
	0637	4.5	137
	1253	−0.2	−6
	1924	4.9	149

December

	Time	Height	
	h m	ft	cm
1 Tu	0136	0.8	24
	0727	4.1	125
	1340	0.3	9
	2014	4.6	140
2 W	0232	1.0	30
	0822	3.8	116
	1431	0.7	21
	2108	4.4	134
3 Th ◑	0334	1.2	37
	0926	3.5	107
	1529	1.1	34
	2205	4.2	128
4 F	0439	1.2	37
	1039	3.4	104
	1633	1.3	40
	2304	4.1	125
5 Sa	0542	1.1	34
	1149	3.4	104
	1739	1.4	43
	2359	4.1	125
6 Su	0636	0.9	27
	1250	3.6	110
	1838	1.4	43
7 M	0049	4.2	128
	0722	0.6	18
	1340	3.9	119
	1930	1.3	40
8 Tu	0133	4.3	131
	0802	0.4	12
	1423	4.2	128
	2015	1.1	34
9 W	0214	4.5	137
	0839	0.1	3
	1502	4.5	137
	2056	1.0	30
10 Th	0252	4.6	140
	0915	−0.1	−3
	1539	4.7	143
	2136	0.8	24
11 F ●	0329	4.7	143
	0950	−0.3	−9
	1615	5.0	152
	2214	0.7	21
12 Sa	0406	4.7	143
	1025	−0.4	−12
	1652	5.1	155
	2253	0.7	21
13 Su	0444	4.7	143
	1101	−0.4	−12
	1729	5.2	158
	2332	0.7	21
14 M	0523	4.7	143
	1139	−0.3	−9
	1808	5.2	158
15 Tu	0014	0.7	21
	0605	4.6	140
	1220	−0.2	−6
	1850	5.1	155

	Time	Height	
	h m	ft	cm
16 W	0100	0.7	21
	0651	4.4	134
	1305	0.0	0
	1935	5.0	152
17 Th	0150	0.7	21
	0744	4.3	131
	1355	0.3	9
	2026	4.9	149
18 F ◐	0247	0.8	24
	0846	4.1	125
	1454	0.6	18
	2124	4.8	146
19 Sa	0352	0.7	21
	0958	4.0	122
	1601	0.8	24
	2228	4.7	143
20 Su	0500	0.6	18
	1114	4.1	125
	1715	0.9	27
	2334	4.7	143
21 M	0607	0.3	9
	1228	4.4	134
	1827	0.9	27
22 Tu	0038	4.8	146
	0709	0.0	0
	1333	4.7	143
	1932	0.8	24
23 W	0136	5.0	152
	0804	−0.3	−9
	1430	5.0	152
	2030	0.6	18
24 Th	0230	5.1	155
	0855	−0.6	−18
	1521	5.3	162
	2123	0.5	15
25 F ○	0320	5.2	158
	0942	−0.7	−21
	1608	5.5	168
	2212	0.4	12
26 Sa	0407	5.2	158
	1026	−0.7	−21
	1653	5.6	171
	2257	0.4	12
27 Su	0451	5.1	155
	1108	−0.6	−18
	1735	5.6	171
	2342	0.4	12
28 M	0534	4.9	149
	1149	−0.4	−12
	1816	5.4	165
29 Tu	0025	0.6	18
	0617	4.7	143
	1229	−0.1	−3
	1856	5.2	158
30 W	0108	0.7	21
	0700	4.4	134
	1308	0.3	9
	1936	5.0	152
31 Th	0153	0.9	27
	0744	4.1	125
	1349	0.7	21
	2018	4.7	143

Time meridian 75° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.
Heights are referred to the chart datum of soundings.

Guayaquil, Ecuador, 2015

Times and Heights of High and Low Waters

January

	Time	Height	
	h m	ft	cm
1 Th	0339	11.5	351
	1042	0.4	12
	1617	11.0	335
	2309	1.0	30
2 F	0442	11.4	347
	1139	0.1	3
	1721	11.2	341
3 Sa	0006	0.8	24
	0542	11.4	347
	1232	−0.2	−6
	1819	11.4	347
4 Su ○	0058	0.6	18
	0635	11.5	351
	1322	−0.3	−9
	1909	11.7	357
5 M	0148	0.4	12
	0723	11.5	351
	1410	−0.4	−12
	1953	11.8	360
6 Tu	0235	0.5	15
	0805	11.5	351
	1454	−0.2	−6
	2032	11.9	363
7 W	0318	0.6	18
	0843	11.5	351
	1536	0.0	0
	2107	12.0	366
8 Th	0400	0.8	24
	0919	11.5	351
	1616	0.4	12
	2142	12.1	369
9 F	0441	1.0	30
	0954	11.6	354
	1655	0.7	21
	2217	12.1	369
10 Sa	0520	1.3	40
	1031	11.5	351
	1733	1.1	34
	2254	12.2	372
11 Su	0600	1.5	46
	1109	11.5	351
	1811	1.5	46
	2333	12.1	369
12 M	0642	1.8	55
	1152	11.4	347
	1854	1.9	58
13 Tu ◑	0016	11.9	363
	0731	1.9	58
	1240	11.1	338
	1947	2.2	67
14 W	0105	11.6	354
	0828	2.1	64
	1335	10.8	329
	2051	2.5	76
15 Th	0202	11.3	344
	0928	2.0	61
	1437	10.6	323
	2155	2.5	76

	Time	Height	
	h m	ft	cm
16 F	0304	11.0	335
	1029	1.8	55
	1542	10.6	323
	2257	2.3	70
17 Sa	0408	11.0	335
	1127	1.4	43
	1647	10.8	329
	2355	1.9	58
18 Su	0510	11.1	338
	1221	0.9	27
	1748	11.2	341
19 M	0049	1.3	40
	0608	11.4	347
	1313	0.3	9
	1843	11.8	360
20 Tu ●	0140	0.8	24
	0702	11.8	360
	1402	−0.1	−3
	1934	12.3	375
21 W	0228	0.4	12
	0751	12.2	372
	1448	−0.5	−15
	2021	12.8	390
22 Th	0315	0.1	3
	0838	12.5	381
	1534	−0.6	−18
	2106	13.1	399
23 F	0400	−0.1	−3
	0924	12.7	387
	1619	−0.6	−18
	2150	13.3	405
24 Sa	0446	−0.1	−3
	1009	12.7	387
	1705	−0.3	−9
	2235	13.2	402
25 Su	0534	0.0	0
	1056	12.5	381
	1754	0.0	0
	2322	12.9	393
26 M ◐	0624	0.3	9
	1145	12.2	372
	1846	0.5	15
27 Tu	0011	12.5	381
	0718	0.6	18
	1238	11.7	357
	1943	1.0	30
28 W	0105	11.9	363
	0815	0.9	27
	1337	11.2	341
	2042	1.4	43
29 Th	0204	11.4	347
	0915	1.0	30
	1440	10.8	329
	2144	1.5	46
30 F	0307	11.0	335
	1015	0.9	27
	1547	10.6	323
	2244	1.5	46
31 Sa	0413	10.8	329
	1113	0.7	21
	1654	10.8	329
	2341	1.2	37

February

	Time	Height	
	h m	ft	cm
1 Su	0516	10.9	332
	1207	0.3	9
	1755	11.0	335
2 M	0035	0.9	27
	0613	11.1	338
	1258	0.0	0
	1847	11.4	347
3 Tu ○	0124	0.6	18
	0702	11.3	344
	1346	−0.2	−6
	1930	11.7	357
4 W	0211	0.4	12
	0743	11.4	347
	1430	−0.2	−6
	2008	11.9	363
5 Th	0254	0.4	12
	0821	11.6	354
	1512	0.0	0
	2043	12.1	369
6 F	0335	0.5	15
	0856	11.7	357
	1551	0.3	9
	2116	12.2	372
7 Sa	0413	0.8	24
	0929	11.8	360
	1628	0.7	21
	2149	12.3	375
8 Su	0450	1.0	30
	1003	11.8	360
	1702	1.1	34
	2223	12.3	375
9 M	0525	1.3	40
	1038	11.8	360
	1733	1.5	46
	2258	12.3	375
10 Tu	0559	1.6	49
	1117	11.7	357
	1751	1.8	55
	2338	12.1	369
11 W ◑	0633	1.9	58
	1201	11.5	351
	1810	2.2	67
12 Th	0024	11.8	360
	0732	2.1	64
	1254	11.1	338
	1959	2.6	79
13 F	0119	11.3	344
	0846	2.3	70
	1356	10.8	329
	2118	2.7	82
14 Sa	0224	11.0	335
	0954	2.1	64
	1506	10.7	326
	2226	2.4	73
15 Su	0334	10.8	329
	1057	1.6	49
	1616	10.9	332
	2327	1.9	58

	Time	Height	
	h m	ft	cm
16 M	0443	11.0	335
	1154	0.9	27
	1721	11.3	344
17 Tu	0024	1.2	37
	0546	11.4	347
	1248	0.2	6
	1821	12.0	366
18 W ●	0116	0.4	12
	0643	12.0	366
	1339	−0.4	−12
	1914	12.6	384
19 Th	0206	−0.2	−6
	0734	12.5	381
	1427	−0.8	−24
	2002	13.1	399
20 F	0253	−0.6	−18
	0822	12.9	393
	1513	−1.0	−30
	2048	13.4	408
21 Sa	0339	−0.7	−21
	0907	13.0	396
	1559	−0.9	−27
	2131	13.4	408
22 Su	0424	−0.6	−18
	0952	13.0	396
	1645	−0.6	−18
	2215	13.3	405
23 M	0511	−0.3	−9
	1036	12.7	387
	1732	−0.1	−3
	2259	12.9	393
24 Tu	0559	0.1	3
	1123	12.3	375
	1822	0.5	15
	2346	12.3	375
25 W ◐	0651	0.6	18
	1213	11.7	357
	1917	1.1	34
26 Th	0037	11.7	357
	0747	1.0	30
	1308	11.2	341
	2016	1.6	49
27 F	0133	11.1	338
	0846	1.3	40
	1409	10.7	326
	2116	1.8	55
28 Sa	0235	10.6	323
	0946	1.3	40
	1514	10.5	320
	2216	1.7	52

March

	Time	Height	
	h m	ft	cm
1 Su	0341	10.4	317
	1044	1.1	34
	1621	10.6	323
	2314	1.4	43
2 M	0446	10.5	320
	1139	0.7	21
	1723	10.9	332
3 Tu	0007	1.0	30
	0545	10.8	329
	1231	0.4	12
	1816	11.3	344
4 W	0057	0.6	18
	0635	11.1	338
	1319	0.1	3
	1901	11.6	354
5 Th ○	0143	0.3	9
	0718	11.4	347
	1403	0.0	0
	1940	11.9	363
6 F	0227	0.2	6
	0756	11.6	354
	1445	0.1	3
	2015	12.0	366
7 Sa	0307	0.4	12
	0831	11.8	360
	1525	0.4	12
	2048	12.1	369
8 Su	0346	0.6	18
	0904	11.9	363
	1602	0.8	24
	2121	12.2	372
9 M	0422	0.9	27
	0937	11.9	363
	1635	1.2	37
	2153	12.2	372
10 Tu	0454	1.2	37
	1011	12.0	366
	1703	1.6	49
	2227	12.2	372
11 W	0519	1.5	46
	1048	11.9	363
	1706	1.9	58
	2305	12.1	369
12 Th	0523	1.7	52
	1131	11.7	357
	1732	2.2	67
	2351	11.8	360
13 F ◑	0605	2.0	61
	1223	11.4	347
	1838	2.6	79
14 Sa	0047	11.3	344
	0806	2.2	67
	1325	11.1	338
	2048	2.6	79
15 Su	0154	11.0	335
	0921	2.1	64
	1436	11.0	335
	2158	2.3	70

	Time	Height	
	h m	ft	cm
16 M	0306	10.8	329
	1027	1.6	49
	1547	11.1	338
	2300	1.6	49
17 Tu	0417	11.1	338
	1127	0.9	27
	1655	11.6	354
	2358	0.8	24
18 W	0523	11.6	354
	1223	0.1	3
	1756	12.2	372
19 Th	0051	0.0	0
	0622	12.2	372
	1315	−0.5	−15
	1851	12.8	390
20 F ●	0141	−0.6	−18
	0715	12.7	387
	1404	−0.9	−27
	1940	13.2	402
21 Sa	0229	−1.0	−30
	0803	13.0	396
	1451	−1.0	−30
	2026	13.3	405
22 Su	0316	−1.1	−34
	0849	13.1	399
	1538	−0.9	−27
	2110	13.3	405
23 M	0402	−0.9	−27
	0933	13.0	396
	1624	−0.5	−15
	2153	13.0	396
24 Tu	0448	−0.5	−15
	1016	12.7	387
	1711	0.1	3
	2236	12.6	384
25 W	0535	0.1	3
	1101	12.2	372
	1800	0.7	21
	2320	12.0	366
26 Th	0625	0.6	18
	1148	11.7	357
	1853	1.3	40
27 F ◐	0009	11.4	347
	0719	1.1	34
	1240	11.2	341
	1949	1.7	52
28 Sa	0103	10.9	332
	0816	1.5	46
	1337	10.8	329
	2047	1.9	58
29 Su	0203	10.4	317
	0914	1.5	46
	1439	10.6	323
	2146	1.8	55
30 M	0306	10.3	314
	1012	1.4	43
	1542	10.6	323
	2242	1.5	46
31 Tu	0410	10.4	317
	1107	1.1	34
	1643	10.9	332
	2336	1.0	30

Time meridian 75° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.
Heights are referred to the chart datum of soundings.
Seasonal variations in sea level have not been included in these predictions.

Guayaquil, Ecuador, 2015

Times and Heights of High and Low Waters

April

	Time	Height		Time	Height
	h m	ft / cm		h m	ft / cm
1 W	0509	10.7 / 326	**16** Th	0459	11.7 / 357
	1159	0.7 / 21		1156	0.2 / 6
	1737	11.2 / 341		1729	12.3 / 375
2 Th	0026	0.6 / 18	**17** F	0025	−0.3 / −9
	0601	11.0 / 335		0559	12.2 / 372
	1248	0.5 / 15		1250	−0.4 / −12
	1825	11.5 / 351		1825	12.7 / 387
3 F	0113	0.3 / 9	**18** Sa ●	0117	−0.8 / −24
	0646	11.3 / 344		0653	12.6 / 384
	1334	0.4 / 12		1341	−0.7 / −21
	1906	11.8 / 360		1916	13.0 / 396
4 Sa ○	0158	0.2 / 6	**19** Su	0206	−1.1 / −34
	0727	11.6 / 354		0743	12.9 / 393
	1417	0.4 / 12		1429	−0.7 / −21
	1944	11.9 / 363		2004	13.0 / 396
5 Su	0239	0.3 / 9	**20** M	0253	−1.1 / −34
	0804	11.7 / 357		0829	12.9 / 393
	1458	0.7 / 21		1517	−0.5 / −15
	2019	12.0 / 366		2048	12.8 / 390
6 M	0319	0.6 / 18	**21** Tu	0340	−0.8 / −24
	0838	11.8 / 360		0913	12.7 / 387
	1537	1.0 / 30		1604	−0.1 / −3
	2053	12.0 / 366		2130	12.5 / 381
7 Tu	0355	0.9 / 27	**22** W	0426	−0.4 / −12
	0913	11.9 / 363		0956	12.5 / 381
	1613	1.4 / 43		1651	0.4 / 12
	2126	12.0 / 366		2213	12.1 / 369
8 W	0429	1.2 / 37	**23** Th	0512	0.1 / 3
	0948	12.0 / 366		1039	12.1 / 369
	1645	1.8 / 55		1739	0.9 / 27
	2201	12.0 / 366		2256	11.7 / 357
9 Th	0457	1.5 / 46	**24** F	0600	0.7 / 21
	1026	12.0 / 366		1124	11.7 / 357
	1713	2.0 / 61		1829	1.4 / 43
	2241	11.9 / 363		2342	11.2 / 341
10 F	0511	1.6 / 49	**25** Sa ◐	0651	1.2 / 37
	1110	11.9 / 363		1212	11.4 / 347
	1745	2.2 / 67		1921	1.7 / 52
	2328	11.7 / 357			
11 Sa ◑	0557	1.9 / 58	**26** Su	0033	10.8 / 329
	1202	11.7 / 357		0745	1.5 / 46
	1910	2.4 / 73		1305	11.1 / 338
				2016	1.8 / 55
12 Su	0025	11.3 / 344	**27** M	0129	10.5 / 320
	0740	2.0 / 61		0840	1.6 / 49
	1303	11.5 / 351		1401	10.9 / 332
	2024	2.3 / 70		2112	1.7 / 52
13 M	0132	11.1 / 338	**28** Tu	0228	10.4 / 317
	0853	1.8 / 55		0936	1.6 / 49
	1411	11.4 / 347		1500	10.9 / 332
	2131	1.9 / 58		2208	1.5 / 46
14 Tu	0243	11.0 / 335	**29** W	0329	10.4 / 317
	0959	1.4 / 43		1031	1.4 / 43
	1521	11.5 / 351		1558	11.0 / 335
	2233	1.2 / 37		2301	1.1 / 34
15 W	0353	11.2 / 341	**30** Th	0428	10.6 / 323
	1059	0.8 / 24		1125	1.1 / 34
	1628	11.9 / 363		1654	11.2 / 341
	2331	0.5 / 15		2353	0.7 / 21

May

	Time	Height		Time	Height
	h m	ft / cm		h m	ft / cm
1 F	0522	10.9 / 332	**16** Sa	0000	−0.3 / −9
	1215	0.9 / 27		0535	12.0 / 366
	1744	11.4 / 347		1225	0.0 / 0
				1759	12.5 / 381
2 Sa	0041	0.5 / 15	**17** Su ●	0052	−0.7 / −21
	0611	11.2 / 341		0632	12.3 / 375
	1303	0.8 / 24		1318	−0.3 / −9
	1830	11.6 / 354		1853	12.5 / 381
3 Su ○	0127	0.4 / 12	**18** M	0143	−0.9 / −27
	0655	11.4 / 347		0723	12.5 / 381
	1349	0.9 / 27		1408	−0.3 / −9
	1911	11.7 / 357		1941	12.5 / 381
4 M	0211	0.4 / 12	**19** Tu	0232	−0.9 / −27
	0736	11.6 / 354		0811	12.5 / 381
	1432	1.1 / 34		1457	−0.1 / −3
	1950	11.7 / 357		2027	12.3 / 375
5 Tu	0253	0.6 / 18	**20** W	0319	−0.7 / −21
	0814	11.7 / 357		0855	12.4 / 378
	1514	1.3 / 40		1544	0.2 / 6
	2027	11.7 / 357		2109	12.0 / 366
6 W	0332	0.8 / 24	**21** Th	0404	−0.3 / −9
	0851	11.8 / 360		0937	12.2 / 372
	1553	1.6 / 49		1630	0.6 / 18
	2104	11.7 / 357		2151	11.7 / 357
7 Th	0410	1.1 / 34	**22** F	0450	0.2 / 6
	0929	12.0 / 366		1018	12.0 / 366
	1632	1.8 / 55		1716	1.0 / 30
	2142	11.8 / 360		2232	11.4 / 347
8 F	0446	1.3 / 40	**23** Sa	0535	0.7 / 21
	1010	12.1 / 369		1100	11.8 / 360
	1713	1.9 / 58		1803	1.4 / 43
	2225	11.7 / 357		2316	11.2 / 341
9 Sa	0526	1.4 / 43	**24** Su	0622	1.1 / 34
	1056	12.1 / 369		1144	11.6 / 354
	1801	2.0 / 61		1852	1.6 / 49
	2314	11.6 / 354			
10 Su	0617	1.5 / 46	**25** M ◐	0002	10.9 / 332
	1147	12.0 / 366		0711	1.4 / 43
	1859	2.0 / 61		1231	11.5 / 351
				1943	1.7 / 52
11 M ◑	0010	11.4 / 347	**26** Tu	0053	10.7 / 326
	0721	1.6 / 49		0803	1.6 / 49
	1246	11.9 / 363		1322	11.3 / 344
	2002	1.8 / 55		2036	1.7 / 52
12 Tu	0113	11.3 / 344	**27** W	0148	10.6 / 323
	0827	1.5 / 46		0858	1.7 / 52
	1349	11.9 / 363		1416	11.2 / 341
	2105	1.4 / 43		2130	1.5 / 46
13 W	0220	11.2 / 341	**28** Th	0245	10.6 / 323
	0931	1.2 / 37		0953	1.7 / 52
	1455	11.9 / 363		1512	11.2 / 341
	2206	0.9 / 27		2224	1.3 / 40
14 Th	0328	11.4 / 347	**29** F	0343	10.6 / 323
	1032	0.8 / 24		1047	1.6 / 49
	1600	12.0 / 366		1608	11.2 / 341
	2304	0.3 / 9		2317	1.0 / 30
15 F	0434	11.7 / 357	**30** Sa	0440	10.8 / 329
	1130	0.3 / 9		1141	1.5 / 46
	1702	12.3 / 375		1702	11.3 / 344
			31 Su	0008	0.8 / 24
				0534	11.0 / 335
				1232	1.4 / 43
				1752	11.3 / 344

June

	Time	Height		Time	Height
	h m	ft / cm		h m	ft / cm
1 M	0057	0.6 / 18	**16** Tu ●	0121	−0.6 / −18
	0623	11.2 / 341		0705	12.0 / 366
	1320	1.3 / 40		1347	0.2 / 6
	1839	11.4 / 347		1921	12.0 / 366
2 Tu ○	0143	0.6 / 18	**17** W	0210	−0.6 / −18
	0709	11.4 / 347		0753	12.1 / 369
	1407	1.3 / 40		1436	0.2 / 6
	1923	11.5 / 351		2007	11.9 / 363
3 W	0228	0.6 / 18	**18** Th	0257	−0.5 / −15
	0752	11.6 / 354		0836	12.1 / 369
	1452	1.4 / 43		1523	0.4 / 12
	2005	11.6 / 354		2049	11.7 / 357
4 Th	0310	0.7 / 21	**19** F	0342	−0.2 / −6
	0833	11.8 / 360		0917	12.1 / 369
	1535	1.4 / 43		1608	0.7 / 21
	2046	11.7 / 357		2129	11.5 / 351
5 F	0352	0.8 / 24	**20** Sa	0426	0.2 / 6
	0914	12.1 / 369		0955	12.0 / 366
	1618	1.5 / 46		1652	1.0 / 30
	2128	11.8 / 360		2208	11.4 / 347
6 Sa	0433	0.8 / 24	**21** Su	0508	0.6 / 18
	0957	12.3 / 375		1033	12.0 / 366
	1702	1.5 / 46		1735	1.2 / 37
	2213	11.8 / 360		2248	11.3 / 344
7 Su	0517	0.9 / 27	**22** M	0551	1.0 / 30
	1043	12.4 / 378		1113	11.9 / 363
	1749	1.4 / 43		1820	1.4 / 43
	2302	11.8 / 360		2330	11.2 / 341
8 M	0606	1.0 / 30	**23** Tu	0636	1.3 / 40
	1133	12.4 / 378		1155	11.8 / 360
	1842	1.4 / 43		1906	1.6 / 49
	2355	11.7 / 357			
9 Tu ◑	0702	1.1 / 34	**24** W ◐	0015	11.1 / 338
	1228	12.3 / 375		0724	1.6 / 49
	1939	1.2 / 37		1241	11.7 / 357
				1957	1.7 / 52
10 W	0054	11.6 / 354	**25** Th	0105	10.9 / 332
	0802	1.1 / 34		0816	1.9 / 58
	1327	12.2 / 372		1332	11.5 / 351
	2039	1.0 / 30		2050	1.7 / 52
11 Th	0157	11.4 / 347	**26** F	0200	10.7 / 326
	0904	1.0 / 30		0912	2.0 / 61
	1429	12.1 / 369		1426	11.3 / 344
	2139	0.7 / 21		2145	1.6 / 49
12 F	0302	11.4 / 347	**27** Sa	0258	10.6 / 323
	1005	0.9 / 27		1009	2.1 / 64
	1532	12.0 / 366		1523	11.2 / 341
	2238	0.3 / 9		2241	1.4 / 43
13 Sa	0408	11.5 / 351	**28** Su	0358	10.6 / 323
	1104	0.6 / 18		1106	2.0 / 61
	1635	12.0 / 366		1621	11.1 / 338
	2335	−0.1 / −3		2335	1.2 / 37
14 Su	0511	11.7 / 357	**29** M	0456	10.8 / 329
	1201	0.4 / 12		1201	1.8 / 55
	1735	12.0 / 366		1717	11.1 / 338
15 M	0029	−0.5 / −15	**30** Tu	0027	0.9 / 27
	0611	11.9 / 363		0552	11.0 / 335
	1256	0.2 / 6		1253	1.6 / 49
	1830	12.0 / 366		1810	11.2 / 341

Time meridian 75° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.
Heights are referred to the chart datum of soundings.
Seasonal variations in sea level have not been included in these predictions.

Guayaquil, Ecuador, 2015

Times and Heights of High and Low Waters

July

	Time	Height	
	h m	ft	cm
1 W ○	0117	0.7	21
	0643	11.3	344
	1342	1.4	43
	1859	11.4	347
2 Th	0204	0.5	15
	0731	11.7	357
	1429	1.2	37
	1946	11.6	354
3 F	0249	0.3	9
	0816	12.1	369
	1515	1.0	30
	2030	11.8	360
4 Sa	0333	0.3	9
	0859	12.4	378
	1559	0.9	27
	2115	12.0	366
5 Su	0416	0.2	6
	0943	12.7	387
	1644	0.8	24
	2200	12.2	372
6 M	0500	0.3	9
	1028	12.8	390
	1730	0.8	24
	2247	12.2	372
7 Tu	0548	0.4	12
	1116	12.8	390
	1820	0.8	24
	2338	12.1	369
8 W ◑	0641	0.7	21
	1207	12.6	384
	1915	0.8	24
9 Th	0033	11.8	360
	0738	0.9	27
	1302	12.3	375
	2013	0.8	24
10 F	0133	11.5	351
	0838	1.1	34
	1402	12.0	366
	2113	0.7	21
11 Sa	0236	11.3	344
	0940	1.1	34
	1505	11.7	357
	2212	0.5	15
12 Su	0343	11.2	341
	1040	1.0	30
	1609	11.5	351
	2311	0.2	6
13 M	0448	11.2	341
	1139	0.8	24
	1712	11.5	351
14 Tu	0006	−0.1	−3
	0551	11.4	347
	1234	0.6	18
	1810	11.5	351
15 W ●	0059	−0.3	−9
	0646	11.7	357
	1326	0.4	12
	1902	11.6	354

	Time	Height	
	h m	ft	cm
16 Th	0149	−0.4	−12
	0734	11.9	363
	1414	0.3	9
	1948	11.6	354
17 F	0235	−0.4	−12
	0816	12.0	366
	1500	0.4	12
	2028	11.6	354
18 Sa	0319	−0.2	−6
	0854	12.0	366
	1543	0.5	15
	2106	11.6	354
19 Su	0401	0.1	3
	0930	12.1	369
	1625	0.8	24
	2142	11.6	354
20 M	0441	0.5	15
	1005	12.1	369
	1705	1.0	30
	2219	11.5	351
21 Tu	0520	0.9	27
	1041	12.1	369
	1746	1.3	40
	2257	11.5	351
22 W	0600	1.3	40
	1119	12.1	369
	1828	1.6	49
	2338	11.4	347
23 Th ◐	0642	1.7	52
	1201	11.9	363
	1914	1.8	55
24 F	0024	11.2	341
	0731	2.1	64
	1248	11.7	357
	2007	1.9	58
25 Sa	0116	10.9	332
	0829	2.4	73
	1341	11.3	344
	2105	2.0	61
26 Su	0214	10.7	326
	0932	2.5	76
	1440	11.0	335
	2205	1.9	58
27 M	0317	10.6	323
	1033	2.4	73
	1542	10.9	332
	2303	1.6	49
28 Tu	0421	10.7	326
	1131	2.1	64
	1644	10.9	332
	2358	1.1	34
29 W	0522	11.0	335
	1226	1.6	49
	1743	11.2	341
30 Th	0050	0.7	21
	0618	11.5	351
	1317	1.1	34
	1837	11.5	351
31 F ○	0139	0.2	6
	0709	12.0	366
	1406	0.7	21
	1927	11.9	363

August

	Time	Height	
	h m	ft	cm
1 Sa	0226	−0.1	−3
	0757	12.5	381
	1452	0.4	12
	2014	12.3	375
2 Su	0311	−0.3	−9
	0841	12.8	390
	1537	0.2	6
	2059	12.5	381
3 M	0356	−0.3	−9
	0925	13.1	399
	1622	0.1	3
	2144	12.6	384
4 Tu	0441	−0.2	−6
	1010	13.1	399
	1708	0.1	3
	2230	12.6	384
5 W	0528	0.1	3
	1056	13.0	396
	1757	0.3	9
	2319	12.3	375
6 Th ◑	0619	0.5	15
	1144	12.6	384
	1850	0.6	18
7 F	0011	11.9	363
	0714	0.9	27
	1237	12.2	372
	1947	0.8	24
8 Sa	0108	11.5	351
	0814	1.2	37
	1335	11.6	354
	2047	0.9	27
9 Su	0210	11.1	338
	0916	1.4	43
	1438	11.2	341
	2147	0.8	24
10 M	0317	10.9	332
	1017	1.4	43
	1544	11.0	335
	2246	0.6	18
11 Tu	0425	10.9	332
	1115	1.1	34
	1649	11.0	335
	2343	0.3	9
12 W	0528	11.2	341
	1211	0.8	24
	1749	11.2	341
13 Th	0035	0.0	0
	0624	11.5	351
	1302	0.4	12
	1841	11.4	347
14 F ●	0124	−0.3	−9
	0711	11.8	360
	1350	0.2	6
	1926	11.5	351
15 Sa	0210	−0.3	−9
	0751	12.0	366
	1434	0.2	6
	2005	11.6	354

	Time	Height	
	h m	ft	cm
16 Su	0253	−0.1	−3
	0828	12.1	369
	1517	0.3	9
	2041	11.7	357
17 M	0334	0.2	6
	0901	12.1	369
	1556	0.6	18
	2115	11.7	357
18 Tu	0412	0.6	18
	0935	12.2	372
	1635	0.9	27
	2149	11.7	357
19 W	0449	1.0	30
	1008	12.2	372
	1712	1.2	37
	2224	11.7	357
20 Th	0524	1.4	43
	1043	12.1	369
	1748	1.6	49
	2302	11.6	354
21 F	0558	1.9	58
	1121	12.0	366
	1827	1.9	58
	2344	11.4	347
22 Sa ◐	0638	2.3	70
	1206	11.7	357
	1918	2.1	64
23 Su	0034	11.1	338
	0744	2.6	79
	1258	11.3	344
	2023	2.3	70
24 M	0133	10.8	329
	0855	2.7	82
	1400	10.9	332
	2129	2.2	67
25 Tu	0240	10.7	326
	1001	2.6	79
	1507	10.7	326
	2232	1.8	55
26 W	0348	10.8	329
	1102	2.1	64
	1615	10.9	332
	2329	1.2	37
27 Th	0453	11.2	341
	1159	1.4	43
	1718	11.2	341
28 F	0023	0.6	18
	0552	11.7	357
	1251	0.7	21
	1815	11.8	360
29 Sa ○	0114	0.0	0
	0646	12.3	375
	1341	0.1	3
	1907	12.3	375
30 Su	0202	−0.5	−15
	0735	12.8	390
	1428	−0.3	−9
	1956	12.7	387
31 M	0249	−0.7	−21
	0821	13.2	402
	1514	−0.5	−15
	2041	12.9	393

September

	Time	Height	
	h m	ft	cm
1 Tu	0334	−0.7	−21
	0905	13.3	405
	1559	−0.5	−15
	2126	13.0	396
2 W	0420	−0.5	−15
	0949	13.2	402
	1645	−0.3	−9
	2211	12.8	390
3 Th	0507	0.0	0
	1034	12.9	393
	1734	0.0	0
	2258	12.4	378
4 F	0557	0.5	15
	1121	12.4	378
	1825	0.5	15
	2348	12.0	366
5 Sa ◑	0652	1.0	30
	1212	11.9	363
	1922	0.9	27
6 Su	0043	11.4	347
	0751	1.5	46
	1309	11.2	341
	2021	1.1	34
7 M	0144	10.9	332
	0852	1.6	49
	1411	10.8	329
	2121	1.2	37
8 Tu	0250	10.7	326
	0952	1.6	49
	1517	10.6	323
	2220	1.0	30
9 W	0357	10.7	326
	1050	1.2	37
	1623	10.7	326
	2316	0.6	18
10 Th	0500	11.0	335
	1145	0.8	24
	1723	10.9	332
11 F	0008	0.3	9
	0555	11.4	347
	1235	0.4	12
	1815	11.3	344
12 Sa	0057	0.0	0
	0642	11.7	357
	1323	0.1	3
	1900	11.5	351
13 Su ●	0143	−0.1	−3
	0722	12.0	366
	1407	0.0	0
	1939	11.7	357
14 M	0226	0.0	0
	0758	12.1	369
	1448	0.2	6
	2015	11.8	360
15 Tu	0307	0.3	9
	0832	12.1	369
	1528	0.4	12
	2049	11.8	360

	Time	Height	
	h m	ft	cm
16 W	0345	0.7	21
	0905	12.1	369
	1605	0.8	24
	2122	11.8	360
17 Th	0421	1.2	37
	0937	12.1	369
	1640	1.2	37
	2155	11.8	360
18 F	0454	1.7	52
	1010	12.0	366
	1711	1.6	49
	2231	11.8	360
19 Sa	0520	2.0	61
	1047	11.8	360
	1730	1.9	58
	2312	11.6	354
20 Su	0520	2.4	73
	1130	11.6	354
	1745	2.1	64
21 M ◐	0001	11.4	347
	0619	2.7	82
	1223	11.2	341
	1940	2.4	73
22 Tu	0100	11.1	338
	0823	2.8	85
	1326	10.9	332
	2055	2.3	70
23 W	0207	10.9	332
	0932	2.5	76
	1437	10.7	326
	2200	1.9	58
24 Th	0317	11.0	335
	1034	1.9	58
	1548	10.9	332
	2300	1.2	37
25 F	0424	11.4	347
	1131	1.1	34
	1653	11.4	347
	2356	0.5	15
26 Sa	0526	12.0	366
	1225	0.3	9
	1753	12.0	366
27 Su ○	0048	−0.2	−6
	0621	12.6	384
	1315	−0.4	−12
	1846	12.5	381
28 M	0138	−0.6	−18
	0712	13.1	399
	1404	−0.8	−24
	1936	12.9	393
29 Tu	0226	−0.8	−24
	0759	13.3	405
	1450	−1.0	−30
	2022	13.1	399
30 W	0313	−0.8	−24
	0844	13.3	405
	1537	−0.9	−27
	2107	13.1	399

Time meridian 75° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.
Heights are referred to the chart datum of soundings.
Seasonal variations in sea level have not been included in these predictions.

Guayaquil, Ecuador, 2015

Times and Heights of High and Low Waters

October

	Time	Height	
	h m	ft	cm
1 Th	0359	−0.5	−15
	0928	13.1	399
	1623	−0.6	−18
	2152	12.8	390
2 F	0447	0.0	0
	1012	12.7	387
	1711	−0.1	−3
	2238	12.4	378
3 Sa	0537	0.6	18
	1058	12.1	369
	1802	0.5	15
	2326	11.9	363
4 Su ◑	0630	1.2	37
	1147	11.5	351
	1856	1.0	30
5 M	0018	11.4	347
	0727	1.6	49
	1242	11.0	335
	1953	1.3	40
6 Tu	0116	11.0	335
	0825	1.7	52
	1342	10.5	320
	2052	1.4	43
7 W	0218	10.7	326
	0924	1.6	49
	1446	10.4	317
	2150	1.3	40
8 Th	0321	10.8	329
	1021	1.3	40
	1550	10.5	320
	2245	1.0	30
9 F	0422	11.0	335
	1114	0.9	27
	1650	10.8	329
	2338	0.6	18
10 Sa	0517	11.3	344
	1205	0.4	12
	1743	11.1	338
11 Su	0027	0.4	12
	0606	11.6	354
	1253	0.1	3
	1829	11.4	347
12 M ●	0114	0.2	6
	0648	11.9	363
	1338	0.0	0
	1910	11.6	354
13 Tu	0158	0.3	9
	0727	11.9	363
	1420	0.1	3
	1948	11.8	360
14 W	0240	0.6	18
	0802	11.9	363
	1500	0.4	12
	2023	11.8	360
15 Th	0320	1.0	30
	0836	11.9	363
	1539	0.8	24
	2057	11.8	360

	Time	Height	
	h m	ft	cm
16 F	0357	1.4	43
	0909	11.9	363
	1614	1.2	37
	2131	11.8	360
17 Sa	0432	1.8	55
	0943	11.8	360
	1645	1.5	46
	2207	11.8	360
18 Su	0504	2.2	67
	1020	11.7	357
	1702	1.8	55
	2248	11.8	360
19 M	0532	2.4	73
	1104	11.5	351
	1718	2.0	61
	2336	11.6	354
20 Tu ◐	0640	2.6	79
	1157	11.2	341
	1903	2.2	67
21 W	0034	11.4	347
	0755	2.5	76
	1300	11.0	335
	2022	2.1	64
22 Th	0140	11.3	344
	0903	2.2	67
	1410	10.9	332
	2129	1.8	55
23 F	0248	11.4	347
	1005	1.6	49
	1521	11.0	335
	2231	1.2	37
24 Sa	0355	11.7	357
	1103	0.8	24
	1627	11.5	351
	2328	0.5	15
25 Su	0458	12.2	372
	1158	0.0	0
	1729	12.0	366
26 M	0023	−0.1	−3
	0555	12.6	384
	1250	−0.6	−18
	1825	12.5	381
27 Tu ○	0114	−0.5	−15
	0648	13.0	396
	1340	−1.0	−30
	1916	12.9	393
28 W	0204	−0.7	−21
	0737	13.1	399
	1428	−1.1	−34
	2004	13.0	396
29 Th	0253	−0.6	−18
	0823	13.0	396
	1516	−1.0	−30
	2050	13.0	396
30 F	0340	−0.3	−9
	0908	12.7	387
	1603	−0.6	−18
	2135	12.7	387
31 Sa	0428	0.2	6
	0951	12.3	375
	1650	−0.1	−3
	2219	12.4	378

November

	Time	Height	
	h m	ft	cm
1 Su	0517	0.7	21
	1036	11.8	360
	1738	0.4	12
	2305	12.0	366
2 M	0607	1.2	37
	1123	11.3	344
	1829	0.9	27
	2353	11.6	354
3 Tu ◑	0700	1.5	46
	1213	10.9	332
	1923	1.3	40
4 W	0045	11.2	341
	0755	1.7	52
	1309	10.5	320
	2019	1.5	46
5 Th	0141	11.0	335
	0851	1.7	52
	1408	10.4	317
	2115	1.5	46
6 F	0240	10.9	332
	0947	1.4	43
	1509	10.4	317
	2210	1.4	43
7 Sa	0338	11.0	335
	1040	1.0	30
	1608	10.6	323
	2304	1.1	34
8 Su	0434	11.2	341
	1132	0.7	21
	1704	10.9	332
	2355	0.9	27
9 M	0526	11.4	347
	1221	0.4	12
	1754	11.2	341
10 Tu	0044	0.8	24
	0612	11.6	354
	1308	0.2	6
	1839	11.4	347
11 W ●	0130	0.8	24
	0655	11.7	357
	1353	0.2	6
	1921	11.6	354
12 Th	0214	1.0	30
	0734	11.7	357
	1435	0.4	12
	1959	11.7	357
13 F	0256	1.2	37
	0811	11.7	357
	1515	0.7	21
	2036	11.7	357
14 Sa	0337	1.5	46
	0847	11.6	354
	1553	1.0	30
	2112	11.8	360
15 Su	0416	1.8	55
	0923	11.6	354
	1629	1.3	40
	2150	11.9	363

	Time	Height	
	h m	ft	cm
16 M	0454	2.0	61
	1002	11.6	354
	1703	1.5	46
	2232	12.0	366
17 Tu	0536	2.1	64
	1047	11.6	354
	1742	1.6	49
	2319	12.0	366
18 W	0628	2.1	64
	1139	11.4	347
	1843	1.7	52
19 Th ◐	0014	11.9	363
	0730	2.0	61
	1239	11.2	341
	1952	1.7	52
20 F	0115	11.8	360
	0833	1.7	52
	1345	11.1	338
	2058	1.6	49
21 Sa	0220	11.8	360
	0936	1.3	40
	1453	11.2	341
	2201	1.2	37
22 Su	0325	11.9	363
	1035	0.6	18
	1600	11.5	351
	2301	0.7	21
23 M	0429	12.1	369
	1132	0.0	0
	1704	11.8	360
	2358	0.2	6
24 Tu	0530	12.4	378
	1226	−0.6	−18
	1803	12.2	372
25 W ○	0052	−0.1	−3
	0625	12.6	384
	1318	−0.9	−27
	1858	12.5	381
26 Th	0144	−0.3	−9
	0717	12.6	384
	1408	−1.1	−34
	1948	12.7	387
27 F	0234	−0.3	−9
	0805	12.6	384
	1456	−1.0	−30
	2034	12.7	387
28 Sa	0322	−0.1	−3
	0850	12.3	375
	1543	−0.7	−21
	2118	12.5	381
29 Su	0409	0.3	9
	0933	12.0	366
	1629	−0.2	−6
	2200	12.3	375
30 M	0456	0.7	21
	1015	11.7	357
	1715	0.3	9
	2242	12.1	369

December

	Time	Height	
	h m	ft	cm
1 Tu	0543	1.0	30
	1058	11.4	347
	1801	0.8	24
	2326	11.8	360
2 W	0631	1.4	43
	1144	11.1	338
	1850	1.2	37
3 Th ◑	0012	11.6	354
	0721	1.6	49
	1233	10.8	329
	1942	1.5	46
4 F	0101	11.4	347
	0814	1.6	49
	1326	10.6	323
	2036	1.7	52
5 Sa	0155	11.2	341
	0909	1.6	49
	1424	10.5	320
	2131	1.8	55
6 Su	0251	11.1	338
	1003	1.4	43
	1523	10.5	320
	2227	1.7	52
7 M	0348	11.1	338
	1057	1.1	34
	1621	10.6	323
	2321	1.5	46
8 Tu	0443	11.1	338
	1149	0.8	24
	1716	10.8	329
9 W	0013	1.4	43
	0535	11.2	341
	1239	0.6	18
	1808	11.1	338
10 Th	0102	1.3	40
	0624	11.3	344
	1326	0.5	15
	1854	11.3	344
11 F ●	0150	1.3	40
	0708	11.4	347
	1411	0.5	15
	1937	11.5	351
12 Sa	0234	1.3	40
	0749	11.5	351
	1453	0.6	18
	2017	11.7	357
13 Su	0317	1.4	43
	0829	11.6	354
	1534	0.7	21
	2056	12.0	366
14 M	0359	1.5	46
	0908	11.7	357
	1613	0.8	24
	2136	12.2	372
15 Tu	0439	1.5	46
	0949	11.8	360
	1652	0.9	27
	2218	12.4	378

	Time	Height	
	h m	ft	cm
16 W	0522	1.5	46
	1034	11.8	360
	1734	1.1	34
	2304	12.5	381
17 Th	0610	1.5	46
	1123	11.8	360
	1825	1.2	37
	2354	12.4	378
18 F ◐	0705	1.5	46
	1219	11.6	354
	1925	1.3	40
19 Sa	0050	12.3	375
	0805	1.3	40
	1320	11.4	347
	2029	1.4	43
20 Su	0152	12.0	366
	0907	1.1	34
	1425	11.3	344
	2133	1.3	40
21 M	0256	11.9	363
	1008	0.7	21
	1533	11.3	344
	2235	1.0	30
22 Tu	0402	11.8	360
	1107	0.2	6
	1640	11.5	351
	2335	0.7	21
23 W	0505	11.9	363
	1204	−0.3	−9
	1743	11.8	360
24 Th	0031	0.3	9
	0605	12.0	366
	1258	−0.6	−18
	1841	12.1	369
25 F ○	0124	0.1	3
	0700	12.1	369
	1348	−0.8	−24
	1933	12.3	375
26 Sa	0215	−0.1	−3
	0749	12.1	369
	1437	−0.9	−27
	2019	12.4	378
27 Su	0303	0.0	0
	0833	12.0	366
	1523	−0.7	−21
	2101	12.4	378
28 M	0348	0.2	6
	0914	11.9	363
	1607	−0.3	−9
	2140	12.3	375
29 Tu	0432	0.5	15
	0953	11.7	357
	1650	0.1	3
	2218	12.2	372
30 W	0516	0.8	24
	1032	11.6	354
	1732	0.6	18
	2257	12.1	369
31 Th	0600	1.1	34
	1113	11.4	347
	1816	1.1	34
	2337	12.0	366

Time meridian 75° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.
Heights are referred to the chart datum of soundings.
Seasonal variations in sea level have not been included in these predictions.

La Libertad, Ecuador, 2015

Times and Heights of High and Low Waters

January

	Time	Height	
	h m	ft	cm
1 Th	0027	6.2	189
	0657	0.6	18
	1319	5.9	180
	1920	1.4	43
2 F	0127	6.2	189
	0753	0.4	12
	1416	6.2	189
	2018	1.3	40
3 Sa	0220	6.3	192
	0843	0.2	6
	1505	6.5	198
	2107	1.1	34
4 Su ○	0307	6.4	195
	0926	0.1	3
	1549	6.7	204
	2151	1.0	30
5 M	0349	6.5	198
	1006	0.0	0
	1628	6.8	207
	2232	0.9	27
6 Tu	0429	6.5	198
	1043	0.0	0
	1704	6.9	210
	2310	0.9	27
7 W	0506	6.4	195
	1119	0.1	3
	1740	6.9	210
	2347	0.9	27
8 Th	0543	6.3	192
	1153	0.2	6
	1814	6.8	207
9 F	0023	1.0	30
	0620	6.1	186
	1228	0.5	15
	1849	6.6	201
10 Sa	0101	1.1	34
	0657	5.9	180
	1304	0.8	24
	1925	6.4	195
11 Su	0140	1.3	40
	0737	5.6	171
	1341	1.2	37
	2003	6.2	189
12 M	0222	1.5	46
	0821	5.3	162
	1423	1.5	46
	2045	5.9	180
13 Tu ◑	0309	1.6	49
	0913	5.1	155
	1511	1.9	58
	2133	5.7	174
14 W	0404	1.7	52
	1014	5.0	152
	1610	2.1	64
	2229	5.6	171
15 Th	0505	1.6	49
	1123	5.0	152
	1718	2.2	67
	2332	5.6	171

	Time	Height	
	h m	ft	cm
16 F	0608	1.4	43
	1231	5.3	162
	1828	2.1	64
17 Sa	0036	5.8	177
	0707	1.0	30
	1331	5.8	177
	1931	1.7	52
18 Su	0134	6.1	186
	0800	0.6	18
	1424	6.3	192
	2026	1.3	40
19 M	0228	6.5	198
	0849	0.1	3
	1512	6.9	210
	2117	0.8	24
20 Tu ●	0318	6.9	210
	0936	−0.4	−12
	1558	7.4	226
	2205	0.4	12
21 W	0406	7.2	219
	1022	−0.7	−21
	1643	7.8	238
	2252	0.0	0
22 Th	0454	7.4	226
	1108	−0.8	−24
	1728	8.0	244
	2339	−0.2	−6
23 F	0542	7.5	229
	1155	−0.7	−21
	1814	8.0	244
24 Sa	0027	−0.2	−6
	0632	7.3	223
	1242	−0.5	−15
	1902	7.8	238
25 Su	0117	0.0	0
	0723	7.0	213
	1332	0.0	0
	1952	7.4	226
26 M ◐	0210	0.3	9
	0819	6.6	201
	1426	0.6	18
	2045	6.9	210
27 Tu	0309	0.6	18
	0921	6.1	186
	1526	1.2	37
	2145	6.5	198
28 W	0414	0.9	27
	1032	5.8	177
	1636	1.6	49
	2252	6.1	186
29 Th	0524	1.1	34
	1149	5.6	171
	1751	1.9	58
30 F	0002	5.9	180
	0634	1.1	34
	1302	5.8	177
	1904	1.9	58
31 Sa	0109	5.9	180
	0736	0.9	27
	1403	6.0	183
	2006	1.8	55

February

	Time	Height	
	h m	ft	cm
1 Su	0206	6.0	183
	0828	0.7	21
	1452	6.3	192
	2056	1.5	46
2 M	0254	6.2	189
	0911	0.6	18
	1533	6.6	201
	2138	1.3	40
3 Tu ○	0335	6.3	192
	0949	0.4	12
	1609	6.8	207
	2215	1.1	34
4 W	0413	6.5	198
	1024	0.3	9
	1643	7.0	213
	2250	0.9	27
5 Th	0448	6.5	198
	1057	0.3	9
	1715	7.0	213
	2323	0.8	24
6 F	0522	6.5	198
	1130	0.3	9
	1747	7.0	213
	2357	0.8	24
7 Sa	0556	6.4	195
	1202	0.5	15
	1818	6.9	210
8 Su	0030	0.9	27
	0630	6.3	192
	1235	0.8	24
	1850	6.7	204
9 M	0104	1.0	30
	0706	6.0	183
	1309	1.1	34
	1924	6.5	198
10 Tu	0141	1.2	37
	0745	5.8	177
	1345	1.4	43
	2001	6.2	189
11 W ◑	0222	1.4	43
	0829	5.5	168
	1428	1.8	55
	2043	5.9	180
12 Th	0310	1.6	49
	0923	5.3	162
	1522	2.1	64
	2137	5.7	174
13 F	0410	1.6	49
	1031	5.2	158
	1631	2.3	70
	2243	5.6	171
14 Sa	0519	1.6	49
	1147	5.4	165
	1749	2.2	67
	2357	5.7	174
15 Su	0629	1.3	40
	1258	5.8	177
	1902	1.9	58

	Time	Height	
	h m	ft	cm
16 M	0107	6.0	183
	0732	0.8	24
	1357	6.4	195
	2004	1.3	40
17 Tu	0207	6.5	198
	0827	0.3	9
	1449	7.0	213
	2058	0.7	21
18 W ●	0301	7.0	213
	0917	−0.3	−9
	1537	7.6	232
	2147	0.2	6
19 Th	0351	7.5	229
	1005	−0.6	−18
	1623	8.0	244
	2234	−0.3	−9
20 F	0440	7.7	235
	1051	−0.8	−24
	1708	8.2	250
	2321	−0.5	−15
21 Sa	0528	7.8	238
	1138	−0.7	−21
	1754	8.2	250
22 Su	0008	−0.5	−15
	0616	7.7	235
	1225	−0.5	−15
	1840	8.0	244
23 M	0055	−0.3	−9
	0705	7.3	223
	1313	0.0	0
	1927	7.5	229
24 Tu	0146	0.1	3
	0758	6.8	207
	1404	0.7	21
	2018	7.0	213
25 W ◐	0240	0.5	15
	0856	6.3	192
	1501	1.3	40
	2115	6.4	195
26 Th	0341	1.0	30
	1003	5.8	177
	1609	1.9	58
	2221	5.8	177
27 F	0452	1.4	43
	1121	5.6	171
	1728	2.2	67
	2336	5.6	171
28 Sa	0606	1.5	46
	1237	5.6	171
	1846	2.2	67

March

	Time	Height	
	h m	ft	cm
1 Su	0048	5.5	168
	0713	1.4	43
	1341	5.8	177
	1949	1.9	58
2 M	0149	5.7	174
	0806	1.2	37
	1430	6.1	186
	2038	1.6	49
3 Tu	0237	5.9	180
	0849	0.9	27
	1509	6.4	195
	2118	1.3	40
4 W	0317	6.2	189
	0926	0.7	21
	1544	6.7	204
	2153	1.0	30
5 Th ○	0353	6.4	195
	1000	0.6	18
	1615	6.9	210
	2225	0.8	24
6 F	0427	6.6	201
	1033	0.5	15
	1646	7.0	213
	2257	0.6	18
7 Sa	0459	6.6	201
	1104	0.5	15
	1717	7.1	216
	2328	0.5	15
8 Su	0532	6.6	201
	1136	0.6	18
	1747	7.0	213
9 M	0000	0.5	15
	0605	6.5	198
	1208	0.8	24
	1818	6.8	207
10 Tu	0032	0.7	21
	0639	6.3	192
	1241	1.0	30
	1850	6.6	201
11 W	0107	0.8	24
	0716	6.1	186
	1317	1.3	40
	1926	6.3	192
12 Th	0145	1.1	34
	0758	5.8	177
	1359	1.7	52
	2007	6.0	183
13 F ◑	0231	1.3	40
	0850	5.6	171
	1451	2.0	61
	2100	5.7	174
14 Sa	0329	1.5	46
	0955	5.5	168
	1600	2.2	67
	2209	5.5	168
15 Su	0440	1.5	46
	1112	5.5	168
	1722	2.1	64
	2329	5.6	171

	Time	Height	
	h m	ft	cm
16 M	0556	1.3	40
	1226	5.9	180
	1838	1.7	52
17 Tu	0044	5.9	180
	0705	0.9	27
	1330	6.4	195
	1943	1.1	34
18 W	0149	6.4	195
	0804	0.4	12
	1424	7.1	216
	2037	0.5	15
19 Th	0244	7.0	213
	0857	−0.1	−3
	1514	7.6	232
	2127	−0.1	−3
20 F ●	0335	7.5	229
	0946	−0.5	−15
	1600	8.0	244
	2214	−0.6	−18
21 Sa	0423	7.8	238
	1033	−0.7	−21
	1646	8.2	250
	2300	−0.8	−24
22 Su	0511	7.9	241
	1119	−0.6	−18
	1731	8.1	247
	2346	−0.8	−24
23 M	0558	7.7	235
	1205	−0.3	−9
	1816	7.8	238
24 Tu	0032	−0.5	−15
	0646	7.4	226
	1252	0.2	6
	1902	7.3	223
25 W	0120	−0.1	−3
	0736	6.9	210
	1343	0.8	24
	1951	6.7	204
26 Th	0211	0.5	15
	0831	6.3	192
	1438	1.4	43
	2045	6.1	186
27 F ◐	0309	1.0	30
	0934	5.8	177
	1543	1.9	58
	2149	5.5	168
28 Sa	0415	1.4	43
	1047	5.5	168
	1700	2.2	67
	2304	5.2	158
29 Su	0528	1.7	52
	1202	5.5	168
	1817	2.2	67
30 M	0019	5.2	158
	0637	1.6	49
	1305	5.7	174
	1921	1.9	58
31 Tu	0122	5.3	162
	0733	1.5	46
	1355	5.9	180
	2009	1.6	49

Time meridian 75° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.
Heights are referred to the chart datum of soundings.

La Libertad, Ecuador, 2015

Times and Heights of High and Low Waters

April

	Time	Height	
	h m	ft	cm
1 W	0211	5.6	171
	0818	1.2	37
	1435	6.2	189
	2048	1.2	37
2 Th	0251	5.9	180
	0856	1.0	30
	1510	6.5	198
	2123	0.9	27
3 F	0327	6.2	189
	0931	0.8	24
	1542	6.7	204
	2156	0.6	18
4 Sa ○	0402	6.4	195
	1004	0.6	18
	1614	6.9	210
	2227	0.3	9
5 Su	0435	6.6	201
	1037	0.6	18
	1645	6.9	210
	2259	0.2	6
6 M	0508	6.6	201
	1110	0.6	18
	1717	6.9	210
	2331	0.2	6
7 Tu	0542	6.6	201
	1144	0.8	24
	1749	6.7	204
8 W	0004	0.3	9
	0617	6.5	198
	1219	1.0	30
	1823	6.5	198
9 Th	0040	0.4	12
	0655	6.3	192
	1257	1.2	37
	1901	6.2	189
10 F	0119	0.7	21
	0738	6.1	186
	1342	1.5	46
	1945	5.9	180
11 Sa ◑	0206	0.9	27
	0830	5.8	177
	1436	1.7	52
	2040	5.6	171
12 Su	0304	1.1	34
	0933	5.7	174
	1545	1.9	58
	2149	5.4	165
13 M	0413	1.3	40
	1046	5.7	174
	1703	1.8	55
	2309	5.5	168
14 Tu	0529	1.2	37
	1158	6.0	183
	1817	1.4	43
15 W	0025	5.8	177
	0639	0.9	27
	1302	6.5	198
	1921	0.8	24

	Time	Height	
	h m	ft	cm
16 Th	0130	6.3	192
	0741	0.4	12
	1359	7.0	213
	2016	0.2	6
17 F	0227	6.8	207
	0835	0.0	0
	1449	7.4	226
	2106	−0.4	−12
18 Sa ●	0318	7.3	223
	0925	−0.3	−9
	1537	7.7	235
	2154	−0.8	−24
19 Su	0407	7.5	229
	1013	−0.4	−12
	1623	7.8	238
	2239	−0.9	−27
20 M	0454	7.6	232
	1100	−0.3	−9
	1707	7.7	235
	2324	−0.9	−27
21 Tu	0540	7.5	229
	1146	−0.1	−3
	1752	7.4	226
22 W	0010	−0.6	−18
	0627	7.2	219
	1233	0.3	9
	1838	6.9	210
23 Th	0056	−0.2	−6
	0716	6.8	207
	1322	0.8	24
	1925	6.4	195
24 F	0144	0.3	9
	0807	6.3	192
	1415	1.3	40
	2016	5.8	177
25 Sa ◐	0236	0.9	27
	0904	5.8	177
	1515	1.7	52
	2116	5.3	162
26 Su	0335	1.3	40
	1007	5.5	168
	1625	2.0	61
	2225	4.9	149
27 M	0441	1.6	49
	1114	5.4	165
	1736	2.0	61
	2337	4.9	149
28 Tu	0547	1.7	52
	1215	5.5	168
	1839	1.8	55
29 W	0042	5.0	152
	0646	1.6	49
	1307	5.7	174
	1929	1.4	43
30 Th	0134	5.3	162
	0735	1.4	43
	1351	5.9	180
	2011	1.1	34

May

	Time	Height	
	h m	ft	cm
1 F	0218	5.6	171
	0818	1.2	37
	1429	6.2	189
	2048	0.7	21
2 Sa	0257	5.9	180
	0857	1.0	30
	1505	6.4	195
	2122	0.4	12
3 Su ○	0333	6.2	189
	0933	0.8	24
	1539	6.6	201
	2156	0.1	3
4 M	0409	6.4	195
	1009	0.7	21
	1614	6.7	204
	2230	0.0	0
5 Tu	0445	6.5	198
	1046	0.7	21
	1648	6.7	204
	2305	−0.1	−3
6 W	0521	6.6	201
	1123	0.7	21
	1724	6.6	201
	2341	−0.1	−3
7 Th	0559	6.6	201
	1201	0.8	24
	1802	6.4	195
8 F	0020	0.0	0
	0640	6.4	195
	1244	1.0	30
	1844	6.2	189
9 Sa	0102	0.2	6
	0725	6.3	192
	1332	1.2	37
	1932	5.9	180
10 Su	0151	0.5	15
	0817	6.1	186
	1428	1.3	40
	2029	5.6	171
11 M ◑	0247	0.8	24
	0917	6.0	183
	1533	1.4	43
	2137	5.4	165
12 Tu	0353	0.9	27
	1024	6.0	183
	1645	1.3	40
	2252	5.5	168
13 W	0505	1.0	30
	1132	6.1	186
	1756	0.9	27
14 Th	0005	5.7	174
	0614	0.8	24
	1235	6.4	195
	1859	0.5	15
15 F	0111	6.1	186
	0717	0.6	18
	1333	6.8	207
	1955	0.0	0

	Time	Height	
	h m	ft	cm
16 Sa	0209	6.5	198
	0814	0.3	9
	1426	7.0	213
	2046	−0.4	−12
17 Su ●	0302	6.9	210
	0906	0.1	3
	1514	7.2	219
	2134	−0.7	−21
18 M	0351	7.1	216
	0955	0.0	0
	1601	7.3	223
	2220	−0.9	−27
19 Tu	0438	7.2	219
	1042	0.1	3
	1646	7.2	219
	2304	−0.8	−24
20 W	0524	7.1	216
	1128	0.2	6
	1730	6.9	210
	2348	−0.6	−18
21 Th	0609	6.9	210
	1214	0.5	15
	1815	6.5	198
22 F	0032	−0.2	−6
	0654	6.6	201
	1301	0.8	24
	1900	6.1	186
23 Sa	0116	0.2	6
	0741	6.3	192
	1350	1.2	37
	1948	5.6	171
24 Su	0203	0.7	21
	0830	5.9	180
	1443	1.5	46
	2040	5.2	158
25 M ◐	0253	1.1	34
	0923	5.6	171
	1542	1.7	52
	2139	4.9	149
26 Tu	0348	1.5	46
	1019	5.5	168
	1644	1.7	52
	2244	4.7	143
27 W	0449	1.7	52
	1117	5.4	165
	1745	1.6	49
	2349	4.8	146
28 Th	0549	1.7	52
	1211	5.5	168
	1839	1.4	43
29 F	0048	5.0	152
	0645	1.6	49
	1300	5.7	174
	1926	1.1	34
30 Sa	0138	5.2	158
	0734	1.4	43
	1344	5.9	180
	2008	0.7	21
31 Su	0222	5.6	171
	0819	1.2	37
	1425	6.1	186
	2048	0.4	12

June

	Time	Height	
	h m	ft	cm
1 M	0303	5.9	180
	0901	1.0	30
	1505	6.3	192
	2126	0.1	3
2 Tu ○	0343	6.2	189
	0942	0.8	24
	1544	6.4	195
	2203	−0.2	−6
3 W	0422	6.5	198
	1023	0.7	21
	1623	6.5	198
	2242	−0.3	−9
4 Th	0502	6.6	201
	1104	0.6	18
	1704	6.5	198
	2322	−0.4	−12
5 F	0543	6.7	204
	1147	0.6	18
	1746	6.4	195
6 Sa	0004	−0.3	−9
	0626	6.7	204
	1233	0.6	18
	1832	6.3	192
7 Su	0049	−0.2	−6
	0713	6.6	201
	1323	0.7	21
	1923	6.1	186
8 M	0138	0.1	3
	0804	6.5	198
	1418	0.8	24
	2019	5.8	177
9 Tu ◑	0233	0.4	12
	0900	6.3	192
	1519	0.9	27
	2123	5.6	171
10 W	0335	0.7	21
	1002	6.2	189
	1626	0.8	24
	2234	5.5	168
11 Th	0442	0.8	24
	1106	6.2	189
	1733	0.7	21
	2346	5.6	171
12 F	0551	0.9	27
	1210	6.3	192
	1837	0.4	12
13 Sa	0053	5.8	177
	0657	0.8	24
	1310	6.4	195
	1936	0.0	0
14 Su	0154	6.2	189
	0756	0.7	21
	1405	6.6	201
	2029	−0.3	−9
15 M	0248	6.5	198
	0850	0.5	15
	1456	6.7	204
	2118	−0.5	−15

	Time	Height	
	h m	ft	cm
16 Tu ●	0338	6.7	204
	0940	0.4	12
	1543	6.8	207
	2203	−0.6	−18
17 W	0424	6.8	207
	1027	0.4	12
	1628	6.7	204
	2246	−0.6	−18
18 Th	0507	6.8	207
	1111	0.5	15
	1711	6.5	198
	2328	−0.4	−12
19 F	0549	6.7	204
	1155	0.6	18
	1753	6.3	192
20 Sa	0008	−0.2	−6
	0631	6.6	201
	1238	0.8	24
	1835	6.0	183
21 Su	0048	0.2	6
	0712	6.3	192
	1321	1.0	30
	1918	5.6	171
22 M	0129	0.5	15
	0754	6.1	186
	1407	1.2	37
	2003	5.3	162
23 Tu	0212	0.9	27
	0838	5.8	177
	1456	1.4	43
	2053	5.0	152
24 W ◐	0258	1.3	40
	0925	5.6	171
	1549	1.5	46
	2149	4.8	146
25 Th	0350	1.6	49
	1016	5.4	165
	1645	1.5	46
	2251	4.7	143
26 F	0449	1.7	52
	1111	5.4	165
	1743	1.4	43
	2354	4.8	146
27 Sa	0549	1.8	55
	1206	5.4	165
	1837	1.2	37
28 Su	0053	5.0	152
	0648	1.7	52
	1258	5.6	171
	1927	0.8	24
29 M	0145	5.3	162
	0741	1.5	46
	1347	5.8	177
	2013	0.5	15
30 Tu	0232	5.7	174
	0830	1.2	37
	1433	6.1	186
	2056	0.1	3

Time meridian 75° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.
Heights are referred to the chart datum of soundings.

La Libertad, Ecuador, 2015

Times and Heights of High and Low Waters

July

	Time	Height			Time	Height	
	h m	ft	cm		h m	ft	cm
1 W ○	0316	6.2	189	**16** Th	0409	6.6	201
	0917	0.9	27		1013	0.6	18
	1518	6.3	192		1612	6.4	195
	2139	−0.2	−6		2229	−0.3	−9
2 Th	0359	6.5	198	**17** F	0449	6.7	204
	1002	0.6	18		1054	0.6	18
	1602	6.6	201		1653	6.4	195
	2221	−0.5	−15		2307	−0.2	−6
3 F	0442	6.8	207	**18** Sa	0527	6.7	204
	1046	0.4	12		1133	0.6	18
	1647	6.7	204		1731	6.2	189
	2304	−0.7	−21		2344	−0.1	−3
4 Sa	0525	7.0	213	**19** Su	0603	6.6	201
	1132	0.2	6		1211	0.7	21
	1733	6.7	204		1809	6.1	186
	2348	−0.7	−21				
5 Su	0610	7.1	216	**20** M	0020	0.2	6
	1219	0.2	6		0639	6.5	198
	1820	6.6	201		1249	0.8	24
					1847	5.8	177
6 M	0035	−0.5	−15	**21** Tu	0056	0.4	12
	0657	7.0	213		0716	6.3	192
	1308	0.2	6		1328	1.0	30
	1911	6.4	195		1927	5.5	168
7 Tu	0124	−0.2	−6	**22** W	0133	0.8	24
	0746	6.9	210		0753	6.0	183
	1401	0.3	9		1409	1.1	34
	2006	6.2	189		2009	5.3	162
8 W ◑	0217	0.1	3	**23** Th ◐	0213	1.1	34
	0840	6.6	201		0834	5.7	174
	1459	0.5	15		1455	1.3	40
	2107	5.9	180		2058	5.0	152
9 Th	0316	0.5	15	**24** F	0259	1.5	46
	0938	6.4	195		0920	5.5	168
	1603	0.6	18		1546	1.4	43
	2214	5.6	171		2154	4.8	146
10 F	0421	0.9	27	**25** Sa	0353	1.8	55
	1042	6.2	189		1013	5.3	162
	1710	0.6	18		1644	1.5	46
	2326	5.6	171		2259	4.8	146
11 Sa	0531	1.1	34	**26** Su	0456	1.9	58
	1148	6.1	186		1112	5.3	162
	1817	0.5	15		1746	1.3	40
12 Su	0037	5.7	174	**27** M	0006	4.9	149
	0640	1.2	37		0603	1.9	58
	1252	6.1	186		1214	5.4	165
	1920	0.3	9		1845	1.1	34
13 M	0141	5.9	180	**28** Tu	0107	5.2	158
	0743	1.1	34		0707	1.7	52
	1350	6.2	189		1313	5.6	171
	2015	0.1	3		1939	0.7	21
14 Tu	0237	6.1	186	**29** W	0201	5.7	174
	0839	0.9	27		0803	1.3	40
	1442	6.3	192		1406	6.0	183
	2104	−0.1	−3		2029	0.2	6
15 W ●	0325	6.4	195	**30** Th	0250	6.2	189
	0928	0.8	24		0853	0.8	24
	1529	6.4	195		1456	6.4	195
	2148	−0.2	−6		2115	−0.2	−6
				31 F ○	0336	6.7	204
					0941	0.4	12
					1544	6.7	204
					2201	−0.6	−18

August

	Time	Height			Time	Height	
	h m	ft	cm		h m	ft	cm
1 Sa	0420	7.1	216	**16** Su	0500	6.7	204
	1027	0.0	0		1107	0.5	15
	1630	7.0	213		1708	6.3	192
	2245	−0.8	−24		2317	0.1	3
2 Su	0504	7.4	226	**17** M	0532	6.7	204
	1113	−0.2	−6		1141	0.4	12
	1717	7.1	216		1743	6.2	189
	2331	−0.9	−27		2350	0.2	6
3 M	0549	7.5	229	**18** Tu	0605	6.6	201
	1200	−0.3	−9		1215	0.5	15
	1805	7.1	216		1817	6.1	186
4 Tu	0017	−0.7	−21	**19** W	0024	0.4	12
	0636	7.4	226		0638	6.4	195
	1249	−0.3	−9		1250	0.7	21
	1855	6.9	210		1853	5.8	177
5 W	0106	−0.4	−12	**20** Th	0058	0.7	21
	0724	7.2	219		0712	6.1	186
	1340	−0.1	−3		1326	0.9	27
	1948	6.5	198		1931	5.6	171
6 Th ◑	0158	0.0	0	**21** F	0135	1.1	34
	0816	6.8	207		0748	5.8	177
	1436	0.2	6		1406	1.1	34
	2047	6.1	186		2014	5.3	162
7 F	0255	0.6	18	**22** Sa ◐	0216	1.5	46
	0913	6.4	195		0830	5.5	168
	1538	0.5	15		1453	1.3	40
	2153	5.7	174		2105	5.0	152
8 Sa	0400	1.1	34	**23** Su	0307	1.8	55
	1018	6.0	183		0921	5.3	162
	1646	0.7	21		1549	1.5	46
	2307	5.5	168		2209	4.9	149
9 Su	0513	1.4	43	**24** M	0411	2.0	61
	1128	5.8	177		1024	5.1	155
	1758	0.8	24		1656	1.5	46
					2321	5.0	152
10 M	0022	5.5	168	**25** Tu	0525	2.0	61
	0628	1.5	46		1135	5.2	158
	1237	5.7	174		1805	1.2	37
	1905	0.7	21				
11 Tu	0129	5.7	174	**26** W	0031	5.3	162
	0734	1.3	40		0637	1.7	52
	1339	5.8	177		1244	5.5	168
	2002	0.5	15		1908	0.8	24
12 W	0224	6.0	183	**27** Th	0131	5.8	177
	0829	1.1	34		0738	1.2	37
	1432	6.0	183		1343	6.0	183
	2050	0.3	9		2002	0.3	9
13 Th	0310	6.2	189	**28** F	0223	6.4	195
	0915	0.9	27		0831	0.6	18
	1516	6.1	186		1436	6.5	198
	2132	0.1	3		2052	−0.2	−6
14 F ●	0350	6.4	195	**29** Sa ○	0310	6.9	210
	0956	0.7	21		0920	0.1	3
	1556	6.3	192		1526	7.0	213
	2209	0.0	0		2139	−0.6	−18
15 Sa	0426	6.6	201	**30** Su	0356	7.4	226
	1032	0.5	15		1006	−0.4	−12
	1633	6.3	192		1613	7.3	223
	2244	0.0	0		2226	−0.9	−27
				31 M	0441	7.7	235
					1052	−0.7	−21
					1700	7.5	229
					2312	−1.0	−30

September

	Time	Height			Time	Height	
	h m	ft	cm		h m	ft	cm
1 Tu	0526	7.8	238	**16** W	0531	6.6	201
	1139	−0.8	−24		1142	0.2	6
	1748	7.5	229		1750	6.3	192
	2358	−0.8	−24		2354	0.5	15
2 W	0612	7.6	232	**17** Th	0602	6.4	195
	1226	−0.7	−21		1215	0.4	12
	1837	7.2	219		1824	6.1	186
3 Th	0047	−0.4	−12	**18** F	0027	0.8	24
	0700	7.3	223		0635	6.2	189
	1316	−0.4	−12		1249	0.6	18
	1929	6.8	207		1900	5.8	177
4 F	0138	0.1	3	**19** Sa	0103	1.1	34
	0751	6.8	207		0710	5.9	180
	1410	0.1	3		1326	0.9	27
	2026	6.3	192		1941	5.6	171
5 Sa ◑	0235	0.7	21	**20** Su	0144	1.4	43
	0848	6.2	189		0750	5.5	168
	1511	0.5	15		1410	1.1	34
	2131	5.8	177		2029	5.3	162
6 Su	0341	1.2	37	**21** M ◐	0234	1.7	52
	0954	5.7	174		0841	5.2	158
	1620	0.9	27		1505	1.3	40
	2246	5.5	168		2130	5.1	155
7 M	0457	1.6	49	**22** Tu	0338	1.9	58
	1108	5.4	165		0946	5.0	152
	1736	1.1	34		1613	1.4	43
					2243	5.1	155
8 Tu	0004	5.4	165	**23** W	0456	1.9	58
	0615	1.6	49		1104	5.1	155
	1223	5.4	165		1728	1.3	40
	1846	1.0	30		2357	5.4	165
9 W	0111	5.6	171	**24** Th	0611	1.5	46
	0722	1.4	43		1219	5.4	165
	1327	5.5	168		1837	0.9	27
	1944	0.9	27				
10 Th	0205	5.9	180	**25** F	0100	5.9	180
	0814	1.2	37		0714	1.0	30
	1418	5.7	174		1322	5.9	180
	2030	0.6	18		1937	0.4	12
11 F	0248	6.1	186	**26** Sa	0155	6.5	198
	0857	0.9	27		0808	0.3	9
	1500	6.0	183		1417	6.5	198
	2110	0.5	15		2029	−0.1	−3
12 Sa	0324	6.4	195	**27** Su ○	0244	7.1	216
	0933	0.6	18		0858	−0.3	−9
	1537	6.2	189		1508	7.1	216
	2145	0.3	9		2118	−0.6	−18
13 Su ●	0357	6.5	198	**28** M	0331	7.5	229
	1007	0.4	12		0945	−0.8	−24
	1611	6.3	192		1556	7.5	229
	2218	0.2	6		2205	−0.8	−24
14 M	0429	6.6	201	**29** Tu	0417	7.8	238
	1039	0.3	9		1031	−1.1	−34
	1644	6.4	195		1643	7.7	235
	2250	0.2	6		2252	−0.9	−27
15 Tu	0500	6.7	204	**30** W	0502	7.8	238
	1110	0.2	6		1117	−1.1	−34
	1717	6.4	195		1730	7.6	232
	2322	0.3	9		2339	−0.7	−21

Time meridian 75° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.
Heights are referred to the chart datum of soundings.

La Libertad, Ecuador, 2015

Times and Heights of High and Low Waters

October

	Time	Height	
	h m	ft	cm
1 Th	0548	7.6	232
	1204	−1.0	−30
	1819	7.4	226
2 F	0027	−0.3	−9
	0636	7.2	219
	1252	−0.6	−18
	1910	6.9	210
3 Sa	0118	0.2	6
	0726	6.6	201
	1344	0.0	0
	2005	6.4	195
4 Su ◑	0215	0.8	24
	0822	6.0	183
	1443	0.5	15
	2107	5.9	180
5 M	0320	1.3	40
	0928	5.4	165
	1550	1.0	30
	2219	5.5	168
6 Tu	0436	1.6	49
	1044	5.1	155
	1704	1.3	40
	2335	5.4	165
7 W	0554	1.7	52
	1201	5.1	155
	1816	1.3	40
8 Th	0041	5.5	168
	0659	1.4	43
	1305	5.2	158
	1915	1.2	37
9 F	0134	5.7	174
	0750	1.1	34
	1356	5.5	168
	2002	1.0	30
10 Sa	0216	6.0	183
	0830	0.8	24
	1437	5.8	177
	2041	0.8	24
11 Su	0252	6.2	189
	0906	0.5	15
	1513	6.0	183
	2117	0.6	18
12 M ●	0325	6.4	195
	0938	0.3	9
	1547	6.3	192
	2150	0.5	15
13 Tu	0356	6.5	198
	1010	0.1	3
	1620	6.4	195
	2222	0.4	12
14 W	0428	6.6	201
	1041	0.0	0
	1652	6.5	198
	2255	0.5	15
15 Th	0459	6.5	198
	1113	0.0	0
	1726	6.4	195
	2328	0.6	18

	Time	Height	
	h m	ft	cm
16 F	0531	6.4	195
	1145	0.1	3
	1800	6.3	192
17 Sa	0003	0.8	24
	0605	6.1	186
	1220	0.3	9
	1836	6.1	186
18 Su	0040	1.1	34
	0641	5.9	180
	1257	0.6	18
	1917	5.9	180
19 M	0122	1.3	40
	0723	5.5	168
	1341	0.8	24
	2005	5.6	171
20 Tu ◐	0213	1.6	49
	0814	5.3	162
	1434	1.1	34
	2103	5.5	168
21 W	0317	1.7	52
	0920	5.1	155
	1540	1.3	40
	2212	5.4	165
22 Th	0432	1.6	49
	1038	5.1	155
	1656	1.2	37
	2324	5.7	174
23 F	0546	1.3	40
	1155	5.4	165
	1808	1.0	30
24 Sa	0030	6.1	186
	0650	0.7	21
	1301	5.9	180
	1910	0.5	15
25 Su	0127	6.6	201
	0746	0.1	3
	1358	6.5	198
	2006	0.1	3
26 M	0219	7.0	213
	0836	−0.5	−15
	1450	7.0	213
	2057	−0.3	−9
27 Tu ○	0307	7.4	226
	0924	−0.9	−27
	1539	7.4	226
	2146	−0.5	−15
28 W	0354	7.6	232
	1010	−1.2	−37
	1626	7.6	232
	2233	−0.6	−18
29 Th	0440	7.6	232
	1056	−1.2	−37
	1714	7.6	232
	2321	−0.4	−12
30 F	0526	7.4	226
	1143	−1.0	−30
	1801	7.3	223
31 Sa	0009	−0.1	−3
	0613	7.0	213
	1230	−0.6	−18
	1851	7.0	213

November

	Time	Height	
	h m	ft	cm
1 Su	0100	0.4	12
	0703	6.4	195
	1319	−0.1	−3
	1943	6.5	198
2 M	0154	0.9	27
	0756	5.8	177
	1413	0.5	15
	2040	6.0	183
3 Tu ◑	0255	1.3	40
	0857	5.3	162
	1513	1.1	34
	2144	5.6	171
4 W	0405	1.6	49
	1008	4.9	149
	1621	1.4	43
	2251	5.4	165
5 Th	0517	1.6	49
	1123	4.8	146
	1730	1.6	49
	2356	5.4	165
6 F	0622	1.5	46
	1229	5.0	152
	1832	1.6	49
7 Sa	0050	5.6	171
	0714	1.2	37
	1323	5.2	158
	1923	1.4	43
8 Su	0135	5.8	177
	0756	0.9	27
	1407	5.5	168
	2006	1.2	37
9 M	0214	6.0	183
	0833	0.6	18
	1446	5.8	177
	2045	1.0	30
10 Tu	0250	6.2	189
	0908	0.3	9
	1521	6.1	186
	2121	0.8	24
11 W ●	0324	6.4	195
	0941	0.0	0
	1556	6.3	192
	2156	0.7	21
12 Th	0358	6.4	195
	1014	−0.1	−3
	1630	6.5	198
	2232	0.7	21
13 F	0432	6.4	195
	1047	−0.1	−3
	1705	6.5	198
	2307	0.7	21
14 Sa	0506	6.4	195
	1122	−0.1	−3
	1741	6.5	198
	2344	0.8	24
15 Su	0542	6.2	189
	1158	0.0	0
	1819	6.4	195

	Time	Height	
	h m	ft	cm
16 M	0024	1.0	30
	0622	6.0	183
	1237	0.3	9
	1901	6.2	189
17 Tu	0108	1.1	34
	0706	5.7	174
	1321	0.5	15
	1947	6.1	186
18 W	0159	1.3	40
	0758	5.5	168
	1413	0.8	24
	2042	5.9	180
19 Th ◐	0300	1.4	43
	0902	5.3	162
	1515	1.0	30
	2145	5.9	180
20 F	0409	1.3	40
	1015	5.2	158
	1626	1.1	34
	2253	5.9	180
21 Sa	0520	1.0	30
	1131	5.5	168
	1738	1.1	34
	2359	6.2	189
22 Su	0625	0.6	18
	1240	5.9	180
	1845	0.8	24
23 M	0100	6.5	198
	0724	0.1	3
	1340	6.4	195
	1945	0.5	15
24 Tu	0155	6.9	210
	0817	−0.4	−12
	1434	6.8	207
	2039	0.2	6
25 W ○	0246	7.2	219
	0906	−0.8	−24
	1525	7.2	219
	2130	0.0	0
26 Th	0335	7.3	223
	0953	−1.0	−30
	1613	7.4	226
	2218	−0.1	−3
27 F	0422	7.3	223
	1039	−1.0	−30
	1700	7.4	226
	2306	0.0	0
28 Sa	0508	7.1	216
	1124	−0.9	−27
	1746	7.3	223
	2353	0.2	6
29 Su	0554	6.8	207
	1209	−0.5	−15
	1832	7.0	213
30 M	0041	0.5	15
	0641	6.3	192
	1255	0.0	0
	1919	6.6	201

December

	Time	Height	
	h m	ft	cm
1 Tu	0131	0.9	27
	0729	5.8	177
	1342	0.5	15
	2008	6.2	189
2 W	0224	1.3	40
	0822	5.4	165
	1432	1.0	30
	2101	5.9	180
3 Th ◑	0322	1.5	46
	0922	5.0	152
	1528	1.5	46
	2157	5.6	171
4 F	0425	1.6	49
	1029	4.8	146
	1630	1.8	55
	2256	5.5	168
5 Sa	0528	1.6	49
	1137	4.8	146
	1734	1.9	58
	2353	5.5	168
6 Su	0625	1.4	43
	1238	5.0	152
	1833	1.9	58
7 M	0045	5.6	171
	0714	1.1	34
	1330	5.3	162
	1925	1.7	52
8 Tu	0131	5.8	177
	0757	0.8	24
	1414	5.6	171
	2010	1.5	46
9 W	0213	6.0	183
	0836	0.5	15
	1454	6.0	183
	2052	1.3	40
10 Th	0253	6.2	189
	0913	0.2	6
	1532	6.3	192
	2132	1.1	34
11 F ●	0331	6.3	192
	0949	0.0	0
	1609	6.5	198
	2211	0.9	27
12 Sa	0409	6.4	195
	1026	−0.2	−6
	1647	6.7	204
	2249	0.8	24
13 Su	0447	6.5	198
	1103	−0.2	−6
	1724	6.8	207
	2329	0.7	21
14 M	0526	6.4	195
	1141	−0.2	−6
	1804	6.9	210
15 Tu	0011	0.7	21
	0608	6.3	192
	1222	0.0	0
	1846	6.8	207

	Time	Height	
	h m	ft	cm
16 W	0056	0.8	24
	0654	6.1	186
	1307	0.2	6
	1931	6.7	204
17 Th	0145	0.9	27
	0746	5.9	180
	1357	0.5	15
	2022	6.5	198
18 F ◐	0241	1.0	30
	0845	5.7	174
	1454	0.9	27
	2120	6.3	192
19 Sa	0344	1.0	30
	0953	5.6	171
	1559	1.1	34
	2223	6.2	189
20 Su	0452	0.9	27
	1106	5.6	171
	1711	1.2	37
	2330	6.3	192
21 M	0600	0.7	21
	1219	5.8	177
	1822	1.2	37
22 Tu	0035	6.4	195
	0704	0.3	9
	1324	6.2	189
	1927	1.0	30
23 W	0135	6.6	201
	0801	−0.1	−3
	1422	6.6	201
	2025	0.8	24
24 Th	0230	6.8	207
	0852	−0.4	−12
	1514	7.0	213
	2118	0.5	15
25 F ○	0320	7.0	213
	0940	−0.6	−18
	1602	7.2	219
	2207	0.4	12
26 Sa	0408	7.0	213
	1025	−0.6	−18
	1647	7.3	223
	2253	0.4	12
27 Su	0453	6.9	210
	1108	−0.5	−15
	1730	7.3	223
	2337	0.4	12
28 M	0536	6.7	204
	1150	−0.3	−9
	1812	7.1	216
29 Tu	0021	0.6	18
	0619	6.4	195
	1230	0.1	3
	1853	6.9	210
30 W	0104	0.8	24
	0702	6.1	186
	1311	0.5	15
	1934	6.6	201
31 Th	0148	1.1	34
	0746	5.7	174
	1352	1.0	30
	2016	6.2	189

Time meridian 75° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.
Heights are referred to the chart datum of soundings.

San Cristobal, Galapagos Island, Ecuador, 2015

Times and Heights of High and Low Waters

January

	Time	Height		Time	Height
	h m	ft / cm		h m	ft / cm
1 Th	0015	5.5 / 168	16 F	0554	1.2 / 37
	0643	0.6 / 18		1211	4.6 / 140
	1301	5.2 / 158		1811	1.6 / 49
	1903	1.1 / 34			
2 F	0114	5.6 / 171	17 Sa	0024	5.2 / 158
	0739	0.4 / 12		0653	0.9 / 27
	1358	5.4 / 165		1312	5.0 / 152
	2000	1.0 / 30		1914	1.3 / 40
3 Sa	0207	5.7 / 174	18 Su	0122	5.5 / 168
	0829	0.2 / 6		0747	0.4 / 12
	1448	5.6 / 171		1406	5.5 / 168
	2050	0.9 / 27		2009	0.9 / 27
4 Su ○	0254	5.8 / 177	19 M	0216	5.9 / 180
	0913	0.1 / 3		0837	0.0 / 0
	1532	5.8 / 177		1456	6.0 / 183
	2134	0.7 / 21		2101	0.5 / 15
5 M	0336	5.8 / 177	20 Tu ●	0306	6.2 / 189
	0953	0.0 / 0		0924	−0.4 / −12
	1611	5.9 / 180		1543	6.5 / 198
	2215	0.7 / 21		2150	0.1 / 3
6 Tu	0415	5.8 / 177	21 W	0355	6.5 / 198
	1030	0.0 / 0		1010	−0.7 / −21
	1649	6.0 / 183		1629	6.8 / 207
	2253	0.7 / 21		2237	−0.2 / −6
7 W	0453	5.8 / 177	22 Th	0442	6.7 / 204
	1106	0.0 / 0		1057	−0.8 / −24
	1725	6.0 / 183		1715	7.0 / 213
	2331	0.7 / 21		2325	−0.3 / −9
8 Th	0529	5.6 / 171	23 F	0530	6.7 / 204
	1141	0.2 / 6		1143	−0.8 / −24
	1800	5.9 / 180		1801	7.0 / 213
9 F	0008	0.8 / 24	24 Sa	0013	−0.3 / −9
	0606	5.4 / 165		0619	6.5 / 198
	1216	0.4 / 12		1231	−0.5 / −15
	1836	5.8 / 177		1849	6.8 / 207
10 Sa	0045	0.9 / 27	25 Su	0104	−0.1 / −3
	0643	5.2 / 158		0710	6.2 / 189
	1252	0.6 / 18		1320	−0.2 / −6
	1912	5.6 / 171		1940	6.5 / 198
11 Su	0124	1.1 / 34	26 M ◐	0157	0.2 / 6
	0722	5.0 / 152		0805	5.8 / 177
	1329	0.9 / 27		1414	0.3 / 9
	1950	5.4 / 165		2034	6.1 / 186
12 M	0206	1.3 / 40	27 Tu	0255	0.5 / 15
	0805	4.7 / 143		0906	5.4 / 165
	1410	1.2 / 37		1514	0.8 / 24
	2032	5.2 / 158		2134	5.7 / 174
13 Tu ◑	0253	1.4 / 43	28 W	0400	0.8 / 24
	0855	4.5 / 137		1015	5.0 / 152
	1457	1.5 / 46		1622	1.2 / 37
	2121	5.0 / 152		2241	5.3 / 162
14 W	0348	1.5 / 46	29 Th	0511	1.0 / 30
	0955	4.4 / 134		1130	4.9 / 149
	1555	1.7 / 52		1736	1.5 / 46
	2218	4.9 / 149		2351	5.2 / 158
15 Th	0450	1.4 / 43	30 F	0621	1.0 / 30
	1103	4.4 / 134		1243	5.0 / 152
	1702	1.7 / 52		1847	1.5 / 46
	2321	5.0 / 152			
			31 Sa	0057	5.2 / 158
				0722	0.8 / 24
				1344	5.2 / 158
				1948	1.3 / 40

February

	Time	Height		Time	Height
	h m	ft / cm		h m	ft / cm
1 Su	0153	5.3 / 162	16 M	0056	5.4 / 165
	0814	0.6 / 18		0719	0.6 / 18
	1434	5.4 / 165		1340	5.6 / 171
	2038	1.1 / 34		1948	0.8 / 24
2 M	0240	5.5 / 168	17 Tu	0156	5.8 / 177
	0857	0.4 / 12		0814	0.1 / 3
	1516	5.7 / 174		1433	6.1 / 186
	2120	0.9 / 27		2042	0.3 / 9
3 Tu ○	0321	5.6 / 171	18 W ●	0249	6.3 / 192
	0936	0.3 / 9		0904	−0.4 / −12
	1553	5.9 / 180		1522	6.6 / 201
	2158	0.7 / 21		2132	−0.2 / −6
4 W	0359	5.7 / 174	19 Th	0339	6.6 / 201
	1011	0.2 / 6		0952	−0.7 / −21
	1627	6.0 / 183		1609	7.0 / 213
	2233	0.6 / 18		2219	−0.5 / −15
5 Th	0434	5.8 / 177	20 F	0427	6.9 / 210
	1044	0.1 / 3		1039	−0.9 / −27
	1700	6.1 / 186		1654	7.2 / 219
	2307	0.6 / 18		2306	−0.7 / −21
6 F	0508	5.8 / 177	21 Sa	0514	6.9 / 210
	1117	0.2 / 6		1125	−0.8 / −24
	1732	6.1 / 186		1740	7.2 / 219
	2340	0.6 / 18		2353	−0.6 / −18
7 Sa	0541	5.7 / 174	22 Su	0602	6.7 / 204
	1149	0.3 / 9		1212	−0.6 / −18
	1804	6.0 / 183		1827	6.9 / 210
8 Su	0014	0.7 / 21	23 M	0041	−0.4 / −12
	0615	5.5 / 168		0651	6.4 / 195
	1222	0.5 / 15		1300	−0.2 / −6
	1836	5.8 / 177		1915	6.5 / 198
9 M	0048	0.8 / 24	24 Tu	0132	0.0 / 0
	0650	5.3 / 162		0743	5.9 / 180
	1255	0.8 / 24		1351	0.4 / 12
	1910	5.6 / 171		2006	6.0 / 183
10 Tu	0125	1.0 / 30	25 W ◐	0226	0.4 / 12
	0728	5.0 / 152		0840	5.4 / 165
	1332	1.1 / 34		1448	0.9 / 27
	1948	5.3 / 162		2104	5.5 / 168
11 W ◑	0206	1.2 / 37	26 Th	0328	0.9 / 27
	0812	4.8 / 146		0947	5.0 / 152
	1414	1.4 / 43		1556	1.4 / 43
	2032	5.1 / 155		2211	5.1 / 155
12 Th	0255	1.3 / 40	27 F	0439	1.2 / 37
	0906	4.6 / 140		1103	4.8 / 146
	1508	1.6 / 49		1713	1.7 / 52
	2127	4.9 / 149		2326	4.8 / 146
13 F	0356	1.4 / 43	28 Sa	0553	1.2 / 37
	1013	4.5 / 137		1219	4.8 / 146
	1617	1.8 / 55		1829	1.7 / 52
	2235	4.9 / 149			
14 Sa	0507	1.3 / 40			
	1129	4.7 / 143			
	1735	1.7 / 52			
	2348	5.0 / 152			
15 Su	0617	1.0 / 30			
	1240	5.0 / 152			
	1847	1.3 / 40			

March

	Time	Height		Time	Height
	h m	ft / cm		h m	ft / cm
1 Su	0037	4.8 / 146	16 M	0545	1.1 / 34
	0659	1.1 / 34		1210	5.2 / 158
	1322	5.0 / 152		1824	1.2 / 37
	1931	1.5 / 46			
2 M	0135	5.0 / 152	17 Tu	0034	5.3 / 162
	0752	0.9 / 27		0653	0.7 / 21
	1411	5.3 / 162		1314	5.7 / 174
	2019	1.2 / 37		1927	0.7 / 21
3 Tu	0222	5.2 / 158	18 W	0136	5.7 / 174
	0835	0.7 / 21		0751	0.2 / 6
	1452	5.5 / 168		1409	6.2 / 189
	2100	0.9 / 27		2022	0.1 / 3
4 W	0302	5.4 / 165	19 Th	0231	6.2 / 189
	0912	0.5 / 15		0843	−0.3 / −9
	1527	5.8 / 177		1459	6.7 / 204
	2135	0.7 / 21		2112	−0.4 / −12
5 Th ○	0338	5.6 / 171	20 F ●	0321	6.6 / 201
	0946	0.3 / 9		0932	−0.6 / −18
	1559	6.0 / 183		1546	7.0 / 213
	2208	0.5 / 15		2159	−0.7 / −21
6 F	0412	5.8 / 177	21 Sa	0409	6.9 / 210
	1019	0.3 / 9		1019	−0.8 / −24
	1631	6.1 / 186		1632	7.2 / 219
	2240	0.4 / 12		2246	−0.9 / −27
7 Sa	0444	5.8 / 177	22 Su	0456	6.9 / 210
	1051	0.3 / 9		1105	−0.7 / −21
	1702	6.1 / 186		1717	7.1 / 216
	2312	0.3 / 9		2331	−0.8 / −24
8 Su	0517	5.8 / 177	23 M	0543	6.8 / 207
	1122	0.4 / 12		1151	−0.4 / −12
	1733	6.0 / 183		1803	6.8 / 207
	2344	0.4 / 12			
9 M	0550	5.7 / 174	24 Tu	0018	−0.5 / −15
	1154	0.5 / 15		0631	6.4 / 195
	1804	5.9 / 180		1239	0.0 / 0
				1850	6.4 / 195
10 Tu	0017	0.5 / 15	25 W	0106	−0.1 / −3
	0624	5.5 / 168		0721	6.0 / 183
	1227	0.7 / 21		1329	0.5 / 15
	1837	5.7 / 174		1939	5.8 / 177
11 W	0052	0.7 / 21	26 Th	0158	0.4 / 12
	0700	5.3 / 162		0816	5.5 / 168
	1303	1.0 / 30		1425	1.0 / 30
	1913	5.4 / 165		2035	5.3 / 162
12 Th	0131	0.9 / 27	27 F ◐	0256	0.9 / 27
	0742	5.1 / 155		0918	5.1 / 155
	1346	1.3 / 40		1530	1.5 / 46
	1957	5.2 / 158		2139	4.8 / 146
13 F ◑	0218	1.1 / 34	28 Sa	0403	1.3 / 40
	0834	4.9 / 149		1030	4.8 / 146
	1439	1.5 / 46		1645	1.7 / 52
	2052	4.9 / 149		2254	4.6 / 140
14 Sa	0317	1.3 / 40	29 Su	0516	1.4 / 43
	0940	4.7 / 143		1144	4.8 / 146
	1549	1.7 / 52		1800	1.7 / 52
	2202	4.8 / 146			
15 Su	0430	1.3 / 40	30 M	0007	4.6 / 140
	1056	4.8 / 146		0623	1.4 / 43
	1709	1.6 / 49		1247	4.9 / 149
	2321	4.9 / 149		1902	1.5 / 46
			31 Tu	0107	4.8 / 146
				0718	1.2 / 37
				1337	5.2 / 158
				1950	1.2 / 37

Time meridian 75° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.
Heights are referred to the chart datum of soundings.

San Cristobal, Galapagos Island, Ecuador, 2015

Times and Heights of High and Low Waters

April

	Time	Height		Time	Height
	h m	ft cm		h m	ft cm
1 W	0155	5.0 152	**16** Th	0116	5.7 174
	0802	1.0 30		0727	0.3 9
	1417	5.4 165		1343	6.2 189
	2030	0.9 27		2001	0.0 0
2 Th	0235	5.3 162	**17** F	0212	6.1 186
	0841	0.8 24		0820	−0.1 −3
	1453	5.7 174		1434	6.6 201
	2105	0.6 18		2051	−0.4 −12
3 F	0311	5.5 168	**18** Sa	0303	6.5 198
	0916	0.6 18		0911	−0.3 −9
	1526	5.9 180		1522	6.9 210
	2138	0.4 12	●	2139	−0.7 −21
4 Sa	0346	5.7 174	**19** Su	0351	6.7 204
	0950	0.5 15		0958	−0.4 −12
	1558	6.0 183		1609	7.0 213
○	2211	0.2 6		2225	−0.8 −24
5 Su	0419	5.8 177	**20** M	0438	6.8 207
	1023	0.4 12		1045	−0.4 −12
	1630	6.1 186		1654	6.8 207
	2243	0.1 3		2310	−0.7 −21
6 M	0453	5.9 180	**21** Tu	0525	6.6 201
	1056	0.5 15		1132	−0.1 −3
	1702	6.0 183		1739	6.5 198
	2316	0.2 6		2355	−0.5 −15
7 Tu	0527	5.8 177	**22** W	0612	6.4 195
	1129	0.6 18		1219	0.2 6
	1735	5.9 180		1825	6.1 186
	2350	0.3 9			
8 W	0602	5.7 174	**23** Th	0042	−0.1 −3
	1205	0.8 24		0700	6.0 183
	1810	5.7 174		1308	0.7 21
				1913	5.6 171
9 Th	0026	0.4 12	**24** F	0130	0.4 12
	0640	5.5 168		0752	5.6 171
	1244	1.0 30		1402	1.1 34
	1849	5.5 168		2006	5.1 155
10 F	0107	0.6 18	**25** Sa	0223	0.9 27
	0724	5.3 162		0848	5.2 158
	1329	1.2 37		1502	1.5 46
	1935	5.2 158	◐	2105	4.7 143
11 Sa	0155	0.9 27	**26** Su	0322	1.2 37
	0816	5.1 155		0951	4.9 149
	1425	1.4 43		1610	1.7 52
◑	2032	5.0 152		2213	4.5 137
12 Su	0253	1.0 30	**27** M	0428	1.5 46
	0919	5.0 152		1057	4.8 146
	1534	1.5 46		1719	1.7 52
	2143	4.8 146		2324	4.4 134
13 M	0404	1.1 34	**28** Tu	0533	1.5 46
	1032	5.1 155		1158	4.9 149
	1651	1.4 43		1820	1.5 46
	2300	4.9 149			
14 Tu	0518	1.0 30	**29** W	0026	4.5 137
	1143	5.4 165		0631	1.4 43
	1803	1.0 30		1250	5.1 155
				1910	1.3 40
15 W	0013	5.2 158	**30** Th	0117	4.8 146
	0626	0.7 21		0719	1.3 40
	1247	5.8 177		1333	5.3 162
	1906	0.5 15		1952	0.9 27

May

	Time	Height		Time	Height
	h m	ft cm		h m	ft cm
1 F	0201	5.1 155	**16** Sa	0154	5.9 180
	0802	1.1 34		0759	0.3 9
	1412	5.5 168		1411	6.4 195
	2030	0.6 18		2031	−0.3 −9
2 Sa	0240	5.3 162	**17** Su	0246	6.2 189
	0841	0.9 27		0851	0.1 3
	1449	5.7 174		1500	6.6 201
	2106	0.4 12	●	2119	−0.5 −15
3 Su	0317	5.6 171	**18** M	0335	6.4 195
	0918	0.7 21		0940	0.0 0
	1524	5.9 180		1547	6.6 201
○	2141	0.2 6		2205	−0.6 −18
4 M	0353	5.8 177	**19** Tu	0422	6.5 198
	0954	0.6 18		1027	0.1 3
	1559	6.0 183		1633	6.5 198
	2215	0.0 0		2250	−0.5 −15
5 Tu	0429	5.9 180	**20** W	0508	6.4 195
	1031	0.6 18		1114	0.2 6
	1635	6.0 183		1718	6.2 189
	2251	0.0 0		2334	−0.3 −9
6 W	0506	5.9 180	**21** Th	0553	6.2 189
	1108	0.6 18		1200	0.5 15
	1712	5.9 180		1802	5.9 180
	2328	0.1 3			
7 Th	0544	5.9 180	**22** F	0018	0.0 0
	1148	0.7 21		0639	6.0 183
	1751	5.8 177		1247	0.8 24
				1848	5.5 168
8 F	0007	0.2 6	**23** Sa	0103	0.4 12
	0626	5.8 177		0726	5.7 174
	1231	0.9 27		1336	1.1 34
	1834	5.6 171		1936	5.1 155
9 Sa	0051	0.4 12	**24** Su	0150	0.8 24
	0712	5.6 171		0815	5.4 165
	1320	1.0 30		1429	1.4 43
	1923	5.3 162		2028	4.7 143
10 Su	0140	0.6 18	**25** M	0240	1.1 34
	0804	5.5 168		0908	5.1 155
	1417	1.1 34		1527	1.6 49
	2021	5.1 155	◐	2127	4.5 137
11 M	0237	0.8 24	**26** Tu	0336	1.4 43
	0904	5.4 165		1004	5.0 152
	1523	1.2 37		1628	1.6 49
◑	2128	5.0 152		2230	4.4 134
12 Tu	0343	0.9 27	**27** W	0435	1.6 49
	1011	5.5 168		1101	4.9 149
	1633	1.1 34		1727	1.5 46
	2242	5.0 152		2333	4.4 134
13 W	0453	0.9 27	**28** Th	0534	1.6 49
	1118	5.6 171		1154	5.0 152
	1742	0.8 24		1821	1.3 40
	2352	5.2 158			
14 Th	0601	0.8 24	**29** F	0030	4.6 140
	1221	5.9 180		0628	1.5 46
	1844	0.4 12		1243	5.2 158
				1908	1.1 34
15 F	0056	5.6 171	**30** Sa	0120	4.8 146
	0703	0.5 15		0717	1.4 43
	1318	6.2 189		1328	5.4 165
	1940	0.0 0		1951	0.8 24
			31 Su	0204	5.1 155
				0803	1.2 37
				1410	5.6 171
				2031	0.5 15

June

	Time	Height		Time	Height
	h m	ft cm		h m	ft cm
1 M	0246	5.4 165	**16** Tu	0321	6.1 186
	0845	1.0 30		0925	0.5 15
	1450	5.8 177		1530	6.2 189
	2110	0.2 6	●	2149	−0.3 −9
2 Tu	0326	5.7 174	**17** W	0407	6.2 189
	0927	0.8 24		1012	0.4 12
	1530	5.9 180		1615	6.1 186
○	2149	0.0 0		2232	−0.3 −9
3 W	0406	5.9 180	**18** Th	0452	6.2 189
	1008	0.7 21		1057	0.5 15
	1611	6.0 183		1658	6.0 183
	2229	−0.1 −3		2314	−0.2 −6
4 Th	0447	6.0 183	**19** F	0534	6.1 186
	1050	0.6 18		1140	0.6 18
	1652	6.0 183		1740	5.8 177
	2309	−0.2 −6		2355	0.1 3
5 F	0529	6.1 186	**20** Sa	0616	6.0 183
	1134	0.6 18		1224	0.8 24
	1736	5.9 180		1822	5.5 168
	2352	−0.1 −3			
6 Sa	0613	6.1 186	**21** Su	0035	0.3 9
	1221	0.6 18		0657	5.8 177
	1822	5.8 177		1307	1.0 30
				1905	5.2 158
7 Su	0038	0.0 0	**22** M	0116	0.7 21
	0700	6.0 183		0739	5.5 168
	1311	0.7 21		1352	1.2 37
	1913	5.6 171		1950	4.9 149
8 M	0127	0.3 9	**23** Tu	0159	1.0 30
	0751	5.9 180		0823	5.3 162
	1406	0.8 24		1440	1.4 43
	2010	5.4 165		2039	4.6 140
9 Tu	0222	0.5 15	**24** W	0245	1.3 40
	0848	5.8 177		0910	5.1 155
	1507	0.8 24		1533	1.5 46
◑	2113	5.2 158	◐	2134	4.4 134
10 W	0324	0.7 21	**25** Th	0336	1.5 46
	0949	5.7 174		1001	5.0 152
	1613	0.8 24		1628	1.5 46
	2222	5.1 155		2234	4.4 134
11 Th	0430	0.9 27	**26** F	0433	1.7 52
	1053	5.7 174		1055	4.9 149
	1720	0.7 21		1726	1.4 43
	2332	5.2 158		2336	4.4 134
12 F	0537	0.9 27	**27** Sa	0533	1.7 52
	1157	5.8 177		1150	5.0 152
	1823	0.5 15		1820	1.2 37
13 Sa	0038	5.4 165	**28** Su	0034	4.6 140
	0642	0.8 24		0631	1.6 49
	1256	5.9 180		1243	5.2 158
	1921	0.2 6		1911	0.9 27
14 Su	0137	5.6 171	**29** M	0127	4.9 149
	0741	0.7 21		0725	1.4 43
	1351	6.1 186		1333	5.4 165
	2014	0.0 0		1957	0.6 18
15 M	0231	5.9 180	**30** Tu	0215	5.3 162
	0835	0.5 15		0814	1.1 34
	1442	6.2 189		1420	5.6 171
	2103	−0.2 −6		2042	0.2 6

Time meridian 75° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.
Heights are referred to the chart datum of soundings.

San Cristobal, Galapagos Island, Ecuador, 2015

Times and Heights of High and Low Waters

July

	Time	Height			Time	Height	
	h m	ft	cm		h m	ft	cm
1 W ○	0300	5.6	171	**16** Th	0353	5.9	180
	0901	0.8	24		0957	0.6	18
	1505	5.9	180		1559	5.8	177
	2125	−0.1	−3		2214	−0.1	−3
2 Th	0344	6.0	183	**17** F	0433	6.0	183
	0947	0.6	18		1039	0.6	18
	1550	6.1	186		1639	5.8	177
	2208	−0.3	−9		2253	−0.1	−3
3 F	0427	6.2	189	**18** Sa	0511	6.0	183
	1033	0.3	9		1118	0.6	18
	1635	6.2	189		1718	5.7	174
	2252	−0.4	−12		2330	0.1	3
4 Sa	0511	6.4	195	**19** Su	0548	6.0	183
	1119	0.2	6		1156	0.6	18
	1722	6.2	189		1756	5.5	168
	2336	−0.4	−12				
5 Su	0556	6.5	198	**20** M	0006	0.3	9
	1206	0.2	6		0624	5.8	177
	1809	6.1	186		1234	0.8	24
					1834	5.3	162
6 M	0023	−0.3	−9	**21** Tu	0042	0.5	15
	0643	6.4	195		0701	5.6	171
	1256	0.2	6		1313	0.9	27
	1900	5.9	180		1913	5.0	152
7 Tu	0112	−0.1	−3	**22** W	0119	0.8	24
	0733	6.3	192		0739	5.4	165
	1349	0.4	12		1354	1.1	34
	1954	5.7	174		1955	4.8	146
8 W ◑	0205	0.2	6	**23** Th ◐	0159	1.1	34
	0827	6.1	186		0819	5.2	158
	1447	0.5	15		1439	1.3	40
	2054	5.4	165		2042	4.5	137
9 Th	0303	0.6	18	**24** F	0244	1.4	43
	0926	5.8	177		0905	5.0	152
	1550	0.6	18		1530	1.4	43
	2201	5.2	158		2137	4.4	134
10 F	0408	0.9	27	**25** Sa	0338	1.6	49
	1029	5.7	174		0958	4.8	146
	1657	0.7	21		1628	1.4	43
	2311	5.1	155		2241	4.3	131
11 Sa	0517	1.0	30	**26** Su	0440	1.7	52
	1135	5.6	171		1058	4.8	146
	1803	0.6	18		1730	1.3	40
					2348	4.5	137
12 Su	0021	5.2	158	**27** M	0547	1.7	52
	0625	1.1	34		1200	4.9	149
	1239	5.6	171		1830	1.0	30
	1905	0.4	12				
13 M	0124	5.3	162	**28** Tu	0050	4.8	146
	0728	1.0	30		0651	1.4	43
	1337	5.7	174		1259	5.2	158
	2000	0.3	9		1925	0.7	21
14 Tu	0220	5.6	171	**29** W	0144	5.2	158
	0823	0.9	27		0747	1.1	34
	1429	5.7	174		1353	5.5	168
	2049	0.1	3		2015	0.2	6
15 W ●	0309	5.8	177	**30** Th	0234	5.6	171
	0913	0.7	21		0838	0.7	21
	1516	5.8	177		1444	5.8	177
	2134	0.0	0		2102	−0.2	−6
				31 F ○	0320	6.1	186
					0927	0.3	9
					1531	6.2	189
					2147	−0.5	−15

August

	Time	Height			Time	Height	
	h m	ft	cm		h m	ft	cm
1 Sa	0405	6.5	198	**16** Su	0444	6.0	183
	1013	−0.1	−3		1052	0.4	12
	1618	6.4	195		1654	5.7	174
	2232	−0.7	−21		2303	0.1	3
2 Su	0450	6.7	204	**17** M	0517	5.9	180
	1100	−0.3	−9		1126	0.4	12
	1705	6.5	198		1728	5.6	171
	2318	−0.7	−21		2336	0.2	6
3 M	0536	6.8	207	**18** Tu	0550	5.8	177
	1147	−0.3	−9		1200	0.5	15
	1753	6.4	195		1803	5.4	165
4 Tu	0005	−0.6	−18	**19** W	0009	0.4	12
	0622	6.7	204		0623	5.7	174
	1236	−0.3	−9		1235	0.6	18
	1843	6.2	189		1838	5.2	158
5 W	0053	−0.3	−9	**20** Th	0043	0.7	21
	0711	6.5	198		0657	5.4	165
	1327	−0.1	−3		1311	0.8	24
	1936	5.9	180		1916	4.9	149
6 Th ◑	0145	0.1	3	**21** F	0120	1.0	30
	0804	6.1	186		0734	5.2	158
	1423	0.2	6		1351	1.0	30
	2034	5.5	168		1959	4.7	143
7 F	0242	0.5	15	**22** Sa ◐	0201	1.3	40
	0901	5.7	174		0816	4.9	149
	1525	0.5	15		1438	1.2	37
	2139	5.1	155		2050	4.4	134
8 Sa	0347	0.9	27	**23** Su	0252	1.5	46
	1006	5.4	165		0908	4.7	143
	1633	0.7	21		1536	1.3	40
	2252	4.9	149		2153	4.3	131
9 Su	0500	1.2	37	**24** M	0357	1.7	52
	1116	5.2	158		1012	4.6	140
	1744	0.8	24		1643	1.3	40
					2305	4.4	134
10 M	0006	4.9	149	**25** Tu	0511	1.6	49
	0613	1.3	40		1124	4.7	143
	1225	5.2	158		1752	1.1	34
	1850	0.7	21				
11 Tu	0112	5.1	155	**26** W	0015	4.7	143
	0718	1.1	34		0622	1.4	43
	1326	5.2	158		1231	5.0	152
	1947	0.5	15		1854	0.7	21
12 W	0207	5.3	162	**27** Th	0115	5.2	158
	0813	1.0	30		0723	0.9	27
	1417	5.4	165		1330	5.4	165
	2035	0.3	9		1948	0.2	6
13 Th	0253	5.6	171	**28** F	0207	5.7	174
	0859	0.7	21		0816	0.4	12
	1502	5.5	168		1423	5.8	177
	2116	0.1	3		2038	−0.3	−9
14 F ●	0334	5.8	177	**29** Sa ○	0255	6.2	189
	0940	0.6	18		0905	−0.1	−3
	1542	5.6	171		1512	6.3	192
	2154	0.0	0		2125	−0.6	−18
15 Sa	0410	5.9	180	**30** Su	0341	6.6	201
	1017	0.4	12		0952	−0.5	−15
	1619	5.7	174		1600	6.6	201
	2229	0.0	0		2212	−0.9	−27
				31 M	0427	6.9	210
					1039	−0.8	−24
					1647	6.7	204
					2258	−0.9	−27

September

	Time	Height			Time	Height	
	h m	ft	cm		h m	ft	cm
1 Tu	0512	7.0	213	**16** W	0516	5.8	177
	1126	−0.8	−24		1128	0.2	6
	1735	6.6	201		1735	5.5	168
	2344	−0.8	−24		2339	0.4	12
2 W	0559	6.8	207	**17** Th	0548	5.6	171
	1213	−0.7	−21		1201	0.3	9
	1824	6.4	195		1809	5.3	162
3 Th	0033	−0.4	−12	**18** F	0012	0.6	18
	0647	6.5	198		0620	5.4	165
	1303	−0.4	−12		1235	0.5	15
	1915	6.0	183		1845	5.1	155
4 F	0124	0.0	0	**19** Sa	0048	0.9	27
	0739	6.0	183		0656	5.1	155
	1358	0.1	3		1313	0.7	21
	2012	5.5	168		1926	4.8	146
5 Sa ◑	0222	0.5	15	**20** Su	0129	1.2	37
	0836	5.5	168		0738	4.9	149
	1459	0.5	15		1358	1.0	30
	2117	5.1	155		2015	4.6	140
6 Su	0328	1.0	30	**21** M ◐	0220	1.4	43
	0942	5.1	155		0830	4.6	140
	1608	0.8	24		1454	1.1	34
	2232	4.8	146		2116	4.5	137
7 M	0444	1.3	40	**22** Tu	0326	1.6	49
	1057	4.8	146		0936	4.5	137
	1722	0.9	27		1603	1.2	37
	2348	4.8	146		2230	4.5	137
8 Tu	0600	1.3	40	**23** W	0443	1.5	46
	1210	4.8	146		1054	4.5	137
	1831	0.9	27		1717	1.0	30
					2342	4.8	146
9 W	0055	5.0	152	**24** Th	0557	1.2	37
	0706	1.2	37		1206	4.8	146
	1312	4.9	149		1824	0.7	21
	1928	0.7	21				
10 Th	0148	5.2	158	**25** F	0045	5.3	162
	0758	0.9	27		0700	0.7	21
	1402	5.1	155		1309	5.3	162
	2014	0.5	15		1922	0.2	6
11 F	0231	5.4	165	**26** Sa	0140	5.8	177
	0840	0.7	21		0754	0.1	3
	1444	5.3	162		1403	5.8	177
	2054	0.3	9		2014	−0.3	−9
12 Sa	0308	5.6	171	**27** Su ○	0229	6.3	192
	0917	0.4	12		0844	−0.4	−12
	1521	5.5	168		1453	6.3	192
	2129	0.2	6		2103	−0.6	−18
13 Su ●	0341	5.8	177	**28** M	0317	6.7	204
	0951	0.3	9		0931	−0.8	−24
	1556	5.6	171		1541	6.6	201
	2202	0.1	3		2150	−0.9	−27
14 M	0413	5.9	180	**29** Tu	0403	6.9	210
	1024	0.1	3		1017	−1.1	−34
	1629	5.6	171		1628	6.7	204
	2234	0.1	3		2237	−0.9	−27
15 Tu	0445	5.9	180	**30** W	0448	6.9	210
	1056	0.1	3		1103	−1.1	−34
	1702	5.6	171		1716	6.7	204
	2306	0.2	6		2324	−0.7	−21

Time meridian 75° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.
Heights are referred to the chart datum of soundings.

San Cristobal, Galapagos Island, Ecuador, 2015

Times and Heights of High and Low Waters

October

	Time	Height	
	h m	ft	cm
1 Th	0535	6.7	204
	1151	−0.9	−27
	1804	6.4	195
2 F	0013	−0.4	−12
	0623	6.3	192
	1240	−0.5	−15
	1855	6.0	183
3 Sa	0104	0.1	3
	0714	5.8	177
	1332	0.0	0
	1951	5.5	168
4 Su ◑	0201	0.6	18
	0810	5.3	162
	1431	0.5	15
	2054	5.1	155
5 M	0307	1.1	34
	0916	4.8	146
	1538	0.9	27
	2206	4.8	146
6 Tu	0423	1.3	40
	1031	4.5	137
	1651	1.1	34
	2320	4.8	146
7 W	0539	1.4	43
	1146	4.5	137
	1801	1.1	34
8 Th	0025	4.9	149
	0643	1.2	37
	1249	4.6	140
	1858	0.9	27
9 F	0117	5.1	155
	0733	0.9	27
	1338	4.8	146
	1945	0.8	24
10 Sa	0159	5.3	162
	0814	0.6	18
	1420	5.1	155
	2024	0.6	18
11 Su	0236	5.5	168
	0849	0.4	12
	1456	5.3	162
	2100	0.4	12
12 M ●	0309	5.7	174
	0922	0.2	6
	1530	5.5	168
	2133	0.3	9
13 Tu	0341	5.8	177
	0955	0.0	0
	1604	5.6	171
	2206	0.3	9
14 W	0413	5.8	177
	1027	−0.1	−3
	1637	5.6	171
	2239	0.3	9
15 Th	0445	5.8	177
	1059	0.0	0
	1710	5.6	171
	2313	0.5	15

	Time	Height	
	h m	ft	cm
16 F	0517	5.6	171
	1132	0.1	3
	1745	5.4	165
	2347	0.6	18
17 Sa	0551	5.4	165
	1207	0.3	9
	1822	5.3	162
18 Su	0025	0.9	27
	0628	5.2	158
	1245	0.5	15
	1903	5.1	155
19 M	0108	1.1	34
	0711	4.9	149
	1330	0.7	21
	1952	4.9	149
20 Tu ◐	0200	1.3	40
	0804	4.7	143
	1424	0.9	27
	2051	4.8	146
21 W	0305	1.4	43
	0911	4.5	137
	1531	1.0	30
	2200	4.8	146
22 Th	0420	1.3	40
	1028	4.6	140
	1644	1.0	30
	2311	5.0	152
23 F	0532	1.0	30
	1142	4.8	146
	1754	0.7	21
24 Sa	0016	5.4	165
	0636	0.5	15
	1246	5.3	162
	1855	0.3	9
25 Su	0113	5.9	180
	0732	0.0	0
	1343	5.8	177
	1950	−0.1	−3
26 M	0204	6.3	192
	0822	−0.5	−15
	1434	6.2	189
	2041	−0.4	−12
27 Tu ○	0253	6.7	204
	0910	−0.9	−27
	1523	6.5	198
	2130	−0.6	−18
28 W	0340	6.8	207
	0957	−1.1	−34
	1611	6.7	204
	2218	−0.6	−18
29 Th	0427	6.8	207
	1043	−1.1	−34
	1659	6.6	201
	2306	−0.5	−15
30 F	0513	6.6	201
	1130	−0.9	−27
	1747	6.4	195
	2354	−0.1	−3
31 Sa	0601	6.2	189
	1218	−0.5	−15
	1837	6.1	186

November

	Time	Height	
	h m	ft	cm
1 Su	0045	0.3	9
	0650	5.7	174
	1307	0.0	0
	1929	5.6	171
2 M	0140	0.7	21
	0744	5.2	158
	1401	0.4	12
	2027	5.2	158
3 Tu ◑	0241	1.1	34
	0845	4.7	143
	1501	0.9	27
	2131	4.9	149
4 W	0350	1.4	43
	0954	4.4	134
	1608	1.2	37
	2238	4.8	146
5 Th	0501	1.4	43
	1106	4.3	131
	1715	1.3	40
	2341	4.8	146
6 F	0605	1.3	40
	1211	4.4	134
	1815	1.3	40
7 Sa	0034	5.0	152
	0656	1.0	30
	1304	4.6	140
	1905	1.1	34
8 Su	0119	5.1	155
	0739	0.8	24
	1348	4.9	149
	1948	1.0	30
9 M	0158	5.4	165
	0817	0.5	15
	1427	5.1	155
	2027	0.8	24
10 Tu	0234	5.5	168
	0852	0.2	6
	1504	5.4	165
	2104	0.6	18
11 W ●	0309	5.7	174
	0926	0.0	0
	1539	5.5	168
	2139	0.6	18
12 Th	0344	5.8	177
	1000	−0.1	−3
	1614	5.7	174
	2215	0.5	15
13 F	0418	5.8	177
	1034	−0.1	−3
	1650	5.7	174
	2251	0.6	18
14 Sa	0453	5.7	174
	1110	−0.1	−3
	1726	5.7	174
	2329	0.7	21
15 Su	0530	5.5	168
	1146	0.1	3
	1805	5.6	171

	Time	Height	
	h m	ft	cm
16 M	0010	0.8	24
	0610	5.3	162
	1226	0.2	6
	1848	5.5	168
17 Tu	0055	0.9	27
	0655	5.1	155
	1312	0.5	15
	1936	5.3	162
18 W	0147	1.1	34
	0748	4.9	149
	1404	0.7	21
	2031	5.2	158
19 Th ◐	0248	1.1	34
	0851	4.7	143
	1506	0.8	24
	2134	5.2	158
20 F	0357	1.1	34
	1003	4.7	143
	1615	0.9	27
	2242	5.3	162
21 Sa	0507	0.8	24
	1116	4.9	149
	1725	0.8	24
	2347	5.6	171
22 Su	0612	0.5	15
	1224	5.2	158
	1830	0.5	15
23 M	0047	5.9	180
	0710	0.0	0
	1324	5.6	171
	1929	0.3	9
24 Tu	0142	6.2	189
	0803	−0.4	−12
	1418	6.0	183
	2023	0.0	0
25 W ○	0233	6.5	198
	0853	−0.7	−21
	1509	6.3	192
	2113	−0.2	−6
26 Th	0321	6.6	201
	0940	−0.9	−27
	1557	6.5	198
	2202	−0.2	−6
27 F	0409	6.5	198
	1026	−0.9	−27
	1644	6.5	198
	2250	−0.1	−3
28 Sa	0455	6.4	195
	1112	−0.7	−21
	1731	6.4	195
	2338	0.1	3
29 Su	0541	6.1	186
	1157	−0.4	−12
	1818	6.1	186
30 M	0026	0.4	12
	0628	5.7	174
	1243	0.0	0
	1906	5.8	177

December

	Time	Height	
	h m	ft	cm
1 Tu	0116	0.8	24
	0716	5.2	158
	1330	0.4	12
	1955	5.5	168
2 W	0209	1.1	34
	0809	4.8	146
	1421	0.8	24
	2048	5.2	158
3 Th ◑	0307	1.3	40
	0907	4.5	137
	1516	1.2	37
	2144	5.0	152
4 F	0409	1.5	46
	1011	4.3	131
	1616	1.5	46
	2243	4.9	149
5 Sa	0511	1.4	43
	1117	4.3	131
	1718	1.6	49
	2339	4.9	149
6 Su	0608	1.3	40
	1218	4.4	134
	1815	1.5	46
7 M	0031	5.0	152
	0657	1.0	30
	1310	4.6	140
	1906	1.4	43
8 Tu	0117	5.2	158
	0741	0.8	24
	1355	4.9	149
	1952	1.2	37
9 W	0159	5.4	165
	0821	0.5	15
	1436	5.2	158
	2034	1.0	30
10 Th	0239	5.6	171
	0859	0.2	6
	1515	5.5	168
	2115	0.8	24
11 F ●	0317	5.7	174
	0936	0.0	0
	1553	5.7	174
	2154	0.7	21
12 Sa	0356	5.8	177
	1013	−0.1	−3
	1631	5.9	180
	2234	0.6	18
13 Su	0435	5.8	177
	1051	−0.2	−6
	1710	6.0	183
	2314	0.5	15
14 M	0515	5.8	177
	1130	−0.1	−3
	1750	6.0	183
	2357	0.6	18
15 Tu	0557	5.7	174
	1212	0.0	0
	1833	6.0	183

	Time	Height	
	h m	ft	cm
16 W	0042	0.6	18
	0643	5.5	168
	1257	0.2	6
	1920	5.9	180
17 Th	0133	0.7	21
	0735	5.3	162
	1347	0.4	12
	2011	5.7	174
18 F ◐	0229	0.8	24
	0833	5.1	155
	1444	0.6	18
	2109	5.6	171
19 Sa	0332	0.9	27
	0939	5.0	152
	1548	0.8	24
	2213	5.6	171
20 Su	0440	0.8	24
	1051	5.0	152
	1658	0.9	27
	2319	5.6	171
21 M	0547	0.6	18
	1202	5.2	158
	1807	0.9	27
22 Tu	0024	5.8	177
	0650	0.3	9
	1307	5.5	168
	1911	0.7	21
23 W	0123	5.9	180
	0747	0.0	0
	1405	5.8	177
	2009	0.5	15
24 Th	0217	6.1	186
	0839	−0.3	−9
	1457	6.1	186
	2102	0.3	9
25 F ○	0308	6.3	192
	0927	−0.5	−15
	1546	6.3	192
	2151	0.2	6
26 Sa	0355	6.3	192
	1012	−0.5	−15
	1631	6.4	195
	2237	0.2	6
27 Su	0440	6.2	189
	1055	−0.5	−15
	1715	6.4	195
	2322	0.3	9
28 M	0523	6.0	183
	1137	−0.3	−9
	1757	6.2	189
29 Tu	0005	0.5	15
	0605	5.7	174
	1218	0.0	0
	1838	6.0	183
30 W	0048	0.7	21
	0648	5.4	165
	1258	0.4	12
	1920	5.7	174
31 Th	0132	1.0	30
	0732	5.1	155
	1340	0.8	24
	2003	5.4	165

Time meridian 75° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.
Heights are referred to the chart datum of soundings.

Buenaventura, Colombia, 2015

Times and Heights of High and Low Waters

January

	Time	Height	
	h m	ft	cm
1 Th	0037	11.8	360
	0638	1.5	46
	1315	11.1	338
	1900	2.1	64
2 F	0137	11.9	363
	0741	1.2	37
	1414	11.5	351
	2002	2.0	61
3 Sa	0232	12.1	369
	0836	0.9	27
	1507	11.9	363
	2056	1.7	52
4 Su ○	0322	12.4	378
	0924	0.5	15
	1554	12.2	372
	2143	1.4	43
5 M	0407	12.5	381
	1006	0.3	9
	1637	12.5	381
	2225	1.2	37
6 Tu	0450	12.5	381
	1045	0.1	3
	1718	12.6	384
	2305	1.0	30
7 W	0529	12.4	378
	1122	0.1	3
	1756	12.6	384
	2343	1.0	30
8 Th	0607	12.1	369
	1159	0.2	6
	1833	12.4	378
9 F	0020	1.1	34
	0644	11.8	360
	1235	0.5	15
	1908	12.1	369
10 Sa	0058	1.3	40
	0720	11.3	344
	1312	0.8	24
	1944	11.7	357
11 Su	0137	1.5	46
	0757	10.8	329
	1349	1.3	40
	2021	11.3	344
12 M	0218	1.8	55
	0837	10.3	314
	1430	1.8	55
	2101	10.8	329
13 Tu ◑	0302	2.2	67
	0923	9.8	299
	1515	2.3	70
	2149	10.5	320
14 W	0353	2.4	73
	1020	9.4	287
	1608	2.7	82
	2245	10.2	311
15 Th	0451	2.5	76
	1126	9.4	287
	1710	2.8	85
	2350	10.3	314

	Time	Height	
	h m	ft	cm
16 F	0553	2.3	70
	1235	9.7	296
	1815	2.7	82
17 Sa	0055	10.6	323
	0656	1.8	55
	1338	10.3	314
	1919	2.2	67
18 Su	0156	11.2	341
	0755	1.0	30
	1434	11.2	341
	2018	1.5	46
19 M	0250	12.0	366
	0849	0.2	6
	1526	12.1	369
	2113	0.7	21
20 Tu ●	0341	12.7	387
	0941	−0.7	−21
	1614	13.0	396
	2205	−0.1	−3
21 W	0430	13.4	408
	1029	−1.4	−43
	1701	13.7	418
	2254	−0.8	−24
22 Th	0518	13.8	421
	1116	−1.8	−55
	1747	14.1	430
	2342	−1.2	−37
23 F	0605	13.9	424
	1203	−1.8	−55
	1833	14.2	433
24 Sa	0030	−1.2	−37
	0653	13.6	415
	1250	−1.6	−49
	1920	14.0	427
25 Su	0119	−1.0	−30
	0742	13.1	399
	1338	−1.0	−30
	2010	13.5	411
26 M ◐	0209	−0.4	−12
	0835	12.4	378
	1428	−0.1	−3
	2103	12.7	387
27 Tu	0302	0.3	9
	0933	11.5	351
	1522	0.8	24
	2200	12.0	366
28 W	0359	1.0	30
	1036	10.8	329
	1621	1.6	49
	2304	11.3	344
29 Th	0502	1.5	46
	1143	10.4	317
	1725	2.3	70
30 F	0009	10.9	332
	0609	1.8	55
	1251	10.3	314
	1834	2.5	76
31 Sa	0113	10.9	332
	0716	1.7	52
	1352	10.6	323
	1940	2.4	73

February

	Time	Height	
	h m	ft	cm
1 Su	0211	11.1	338
	0816	1.4	43
	1447	11.0	335
	2038	2.1	64
2 M	0303	11.4	347
	0905	1.0	30
	1534	11.5	351
	2126	1.7	52
3 Tu ○	0349	11.7	357
	0947	0.6	18
	1617	11.9	363
	2207	1.2	37
4 W	0430	11.9	363
	1024	0.3	9
	1656	12.2	372
	2245	0.9	27
5 Th	0509	12.0	366
	1100	0.1	3
	1733	12.3	375
	2321	0.6	18
6 F	0545	11.9	363
	1135	0.0	0
	1807	12.3	375
	2356	0.5	15
7 Sa	0620	11.7	357
	1209	0.1	3
	1840	12.1	369
8 Su	0032	0.6	18
	0653	11.4	347
	1244	0.4	12
	1912	11.8	360
9 M	0107	0.8	24
	0726	11.0	335
	1319	0.7	21
	1945	11.4	347
10 Tu	0145	1.0	30
	0801	10.5	320
	1356	1.2	37
	2020	11.0	335
11 W ◑	0225	1.3	40
	0842	10.0	305
	1438	1.6	49
	2102	10.6	323
12 Th	0311	1.6	49
	0931	9.6	293
	1527	2.1	64
	2154	10.2	311
13 F	0407	1.9	58
	1035	9.4	287
	1627	2.4	73
	2300	10.0	305
14 Sa	0511	1.9	58
	1150	9.5	290
	1737	2.5	76
15 Su	0015	10.2	311
	0619	1.6	49
	1303	10.0	305
	1847	2.1	64

	Time	Height	
	h m	ft	cm
16 M	0125	10.8	329
	0724	1.0	30
	1406	11.0	335
	1953	1.3	40
17 Tu	0227	11.6	354
	0824	0.1	3
	1502	12.0	366
	2052	0.3	9
18 W ●	0321	12.5	381
	0919	−0.9	−27
	1552	13.1	399
	2146	−0.7	−21
19 Th	0412	13.3	405
	1010	−1.6	−49
	1641	13.9	424
	2236	−1.4	−43
20 F	0501	13.9	424
	1058	−2.1	−64
	1727	14.4	439
	2324	−1.9	−58
21 Sa	0548	14.1	430
	1145	−2.2	−67
	1813	14.5	442
22 Su	0012	−2.0	−61
	0636	13.9	424
	1231	−1.9	−58
	1900	14.2	433
23 M	0059	−1.6	−49
	0724	13.3	405
	1318	−1.3	−40
	1948	13.5	411
24 Tu	0147	−1.0	−30
	0814	12.5	381
	1406	−0.4	−12
	2038	12.7	387
25 W ◐	0237	−0.1	−3
	0908	11.5	351
	1457	0.7	21
	2132	11.7	357
26 Th	0330	0.8	24
	1008	10.6	323
	1552	1.7	52
	2233	10.8	329
27 F	0429	1.6	49
	1114	10.0	305
	1655	2.5	76
	2340	10.2	311
28 Sa	0535	2.1	64
	1222	9.8	299
	1804	2.8	85

March

	Time	Height	
	h m	ft	cm
1 Su	0046	10.1	308
	0644	2.2	67
	1326	10.0	305
	1915	2.8	85
2 M	0147	10.2	311
	0747	1.9	58
	1421	10.5	320
	2016	2.4	73
3 Tu	0240	10.6	323
	0839	1.5	46
	1509	11.0	335
	2104	1.8	55
4 W	0326	11.1	338
	0921	1.0	30
	1551	11.5	351
	2144	1.2	37
5 Th ○	0408	11.4	347
	0959	0.6	18
	1630	11.9	363
	2220	0.8	24
6 F	0446	11.7	357
	1034	0.3	9
	1706	12.2	372
	2256	0.4	12
7 Sa	0522	11.8	360
	1109	0.1	3
	1740	12.3	375
	2330	0.2	6
8 Su	0555	11.7	357
	1143	0.1	3
	1811	12.2	372
9 M	0005	0.1	3
	0628	11.5	351
	1217	0.2	6
	1842	11.9	363
10 Tu	0040	0.2	6
	0700	11.2	341
	1252	0.5	15
	1913	11.6	354
11 W	0116	0.4	12
	0734	10.9	332
	1329	0.9	27
	1948	11.2	341
12 Th	0155	0.7	21
	0812	10.4	317
	1409	1.3	40
	2028	10.8	329
13 F ◑	0239	1.1	34
	0900	10.0	305
	1458	1.8	55
	2119	10.4	317
14 Sa	0333	1.5	46
	1000	9.8	299
	1558	2.1	64
	2226	10.1	308
15 Su	0437	1.7	52
	1115	9.8	299
	1708	2.2	67
	2344	10.1	308

	Time	Height	
	h m	ft	cm
16 M	0547	1.5	46
	1231	10.3	314
	1821	1.9	58
17 Tu	0059	10.7	326
	0656	1.0	30
	1339	11.2	341
	1929	1.1	34
18 W	0204	11.5	351
	0759	0.2	6
	1437	12.2	372
	2031	0.1	3
19 Th	0301	12.5	381
	0856	−0.7	−21
	1529	13.3	405
	2126	−0.9	−27
20 F ●	0353	13.4	408
	0949	−1.5	−46
	1619	14.1	430
	2217	−1.7	−52
21 Sa	0443	13.9	424
	1038	−1.9	−58
	1706	14.5	442
	2305	−2.1	−64
22 Su	0530	14.1	430
	1125	−2.0	−61
	1752	14.6	445
	2351	−2.1	−64
23 M	0617	13.9	424
	1211	−1.7	−52
	1838	14.2	433
24 Tu	0037	−1.7	−52
	0704	13.4	408
	1256	−1.0	−30
	1924	13.5	411
25 W	0123	−1.0	−30
	0752	12.6	384
	1343	−0.1	−3
	2012	12.5	381
26 Th	0210	−0.1	−3
	0844	11.6	354
	1431	0.9	27
	2104	11.5	351
27 F ◐	0300	0.9	27
	0940	10.8	329
	1524	1.9	58
	2202	10.6	323
28 Sa	0355	1.7	52
	1042	10.1	308
	1623	2.7	82
	2307	9.9	302
29 Su	0456	2.4	73
	1148	9.8	299
	1730	3.1	94
30 M	0014	9.7	296
	0602	2.6	79
	1252	9.9	302
	1839	3.0	91
31 Tu	0116	9.8	299
	0706	2.5	76
	1348	10.3	314
	1941	2.6	79

Time meridian 75° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.
Heights are referred to the chart datum of soundings.

Buenaventura, Colombia, 2015

Times and Heights of High and Low Waters

April

	Time	Height		Time	Height
	h m	ft / cm		h m	ft / cm
1 W	0210	10.2 / 311	**16** Th	0142	11.7 / 357
	0801	2.1 / 64		0734	0.5 / 15
	1437	10.9 / 332		1412	12.6 / 384
	2031	2.0 / 61		2009	0.1 / 3
2 Th	0258	10.7 / 326	**17** F	0240	12.5 / 381
	0847	1.6 / 49		0833	−0.2 / −6
	1520	11.4 / 347		1506	13.5 / 411
	2113	1.4 / 43		2105	−0.7 / −21
3 F	0340	11.2 / 341	**18** Sa	0334	13.3 / 405
	0927	1.1 / 34		0926	−0.8 / −24
	1559	11.9 / 363		1556	14.1 / 430
	2151	0.8 / 24	●	2156	−1.4 / −43
4 Sa	0419	11.6 / 354	**19** Su	0423	13.8 / 421
	1005	0.7 / 21		1016	−1.2 / −37
	1636	12.2 / 372		1644	14.5 / 442
○	2228	0.4 / 12		2244	−1.7 / −52
5 Su	0456	11.8 / 360	**20** M	0511	14.0 / 427
	1041	0.5 / 15		1103	−1.2 / −37
	1710	12.3 / 375		1730	14.5 / 442
	2303	0.1 / 3		2330	−1.7 / −52
6 M	0531	11.9 / 363	**21** Tu	0558	13.9 / 424
	1117	0.4 / 12		1149	−0.9 / −27
	1743	12.3 / 375		1815	14.1 / 430
	2339	0.0 / 0			
7 Tu	0604	11.8 / 360	**22** W	0015	−1.3 / −40
	1152	0.5 / 15		0644	13.4 / 408
	1815	12.2 / 372		1234	−0.3 / −9
				1901	13.4 / 408
8 W	0014	0.0 / 0	**23** Th	0059	−0.7 / −21
	0638	11.6 / 354		0731	12.7 / 387
	1228	0.6 / 18		1319	0.5 / 15
	1848	11.9 / 363		1947	12.5 / 381
9 Th	0051	0.2 / 6	**24** F	0144	0.2 / 6
	0713	11.4 / 347		0819	11.9 / 363
	1307	0.9 / 27		1406	1.4 / 43
	1924	11.6 / 354		2036	11.5 / 351
10 F	0131	0.5 / 15	**25** Sa	0231	1.1 / 34
	0753	11.0 / 335		0911	11.1 / 338
	1349	1.3 / 40		1456	2.2 / 67
	2007	11.2 / 341	◐	2130	10.6 / 323
11 Sa	0216	0.8 / 24	**26** Su	0321	1.9 / 58
	0841	10.7 / 326		1008	10.5 / 320
	1440	1.7 / 52		1551	2.9 / 88
◑	2059	10.7 / 326		2230	10.0 / 305
12 Su	0310	1.2 / 37	**27** M	0416	2.5 / 76
	0940	10.5 / 320		1109	10.2 / 311
	1539	2.0 / 61		1651	3.2 / 98
	2205	10.4 / 317		2334	9.6 / 293
13 M	0412	1.5 / 46	**28** Tu	0516	2.9 / 88
	1051	10.5 / 320		1210	10.2 / 311
	1648	2.1 / 64		1755	3.3 / 101
	2321	10.4 / 317			
14 Tu	0521	1.5 / 46	**29** W	0036	9.7 / 296
	1205	10.9 / 332		0617	2.9 / 88
	1759	1.7 / 52		1306	10.4 / 317
				1856	2.9 / 88
15 W	0036	10.9 / 332	**30** Th	0133	10.0 / 305
	0630	1.2 / 37		0714	2.7 / 82
	1312	11.7 / 357		1357	10.9 / 332
	1907	1.0 / 30		1950	2.4 / 73

May

	Time	Height		Time	Height
	h m	ft / cm		h m	ft / cm
1 F	0223	10.5 / 320	**16** Sa	0220	12.5 / 381
	0805	2.3 / 70		0809	0.6 / 18
	1443	11.4 / 347		1443	13.5 / 411
	2036	1.8 / 55		2044	−0.2 / −6
2 Sa	0308	11.1 / 338	**17** Su	0314	13.1 / 399
	0850	1.8 / 55		0904	0.2 / 6
	1525	11.9 / 363		1534	14.0 / 427
	2118	1.2 / 37	●	2135	−0.7 / −21
3 Su	0349	11.5 / 351	**18** M	0405	13.5 / 411
	0932	1.4 / 43		0955	−0.1 / −3
	1603	12.2 / 372		1623	14.2 / 433
○	2157	0.7 / 21		2223	−1.0 / −30
4 M	0428	11.9 / 363	**19** Tu	0453	13.7 / 418
	1012	1.1 / 34		1043	−0.1 / −3
	1640	12.5 / 381		1709	14.1 / 430
	2236	0.3 / 9		2309	−0.9 / −27
5 Tu	0505	12.1 / 369	**20** W	0539	13.7 / 418
	1050	0.9 / 27		1128	0.1 / 3
	1716	12.6 / 384		1754	13.8 / 421
	2313	0.1 / 3		2353	−0.7 / −21
6 W	0542	12.2 / 372	**21** Th	0624	13.3 / 405
	1129	0.8 / 24		1212	0.5 / 15
	1751	12.5 / 381		1838	13.2 / 402
	2352	0.0 / 0			
7 Th	0619	12.2 / 372	**22** F	0035	−0.1 / −3
	1208	0.9 / 27		0709	12.8 / 390
	1828	12.4 / 378		1256	1.1 / 34
				1923	12.4 / 378
8 F	0031	0.1 / 3	**23** Sa	0118	0.5 / 15
	0657	12.0 / 366		0754	12.2 / 372
	1250	1.0 / 30		1341	1.7 / 52
	1908	12.1 / 369		2008	11.6 / 354
9 Sa	0114	0.3 / 9	**24** Su	0201	1.2 / 37
	0740	11.8 / 360		0841	11.6 / 354
	1336	1.3 / 40		1427	2.3 / 70
	1954	11.7 / 357		2056	10.9 / 332
10 Su	0200	0.6 / 18	**25** M	0246	1.9 / 58
	0830	11.6 / 354		0931	11.1 / 338
	1427	1.6 / 49		1516	2.8 / 85
	2048	11.3 / 344	◐	2149	10.3 / 314
11 M	0253	1.0 / 30	**26** Tu	0336	2.5 / 76
	0927	11.4 / 347		1025	10.7 / 326
	1526	1.8 / 55		1610	3.2 / 98
◑	2151	11.0 / 335		2248	9.9 / 302
12 Tu	0353	1.4 / 43	**27** W	0429	2.9 / 88
	1033	11.4 / 347		1122	10.5 / 320
	1631	1.9 / 58		1708	3.3 / 101
	2303	10.9 / 332		2349	9.8 / 299
13 W	0458	1.5 / 46	**28** Th	0527	3.1 / 94
	1142	11.7 / 357		1218	10.6 / 323
	1738	1.7 / 52		1807	3.1 / 94
14 Th	0014	11.2 / 341	**29** F	0048	9.9 / 302
	0605	1.4 / 43		0624	3.1 / 94
	1247	12.2 / 372		1312	10.9 / 332
	1845	1.2 / 37		1904	2.7 / 82
15 F	0120	11.8 / 360	**30** Sa	0143	10.3 / 314
	0709	1.0 / 30		0719	2.8 / 85
	1348	12.8 / 390		1402	11.3 / 344
	1947	0.5 / 15		1955	2.2 / 67
			31 Su	0232	10.9 / 332
				0810	2.4 / 73
				1447	11.8 / 360
				2042	1.6 / 49

June

	Time	Height		Time	Height
	h m	ft / cm		h m	ft / cm
1 M	0317	11.4 / 347	**16** Tu	0347	13.0 / 396
	0857	2.0 / 61		0936	0.9 / 27
	1530	12.2 / 372		1603	13.6 / 415
	2126	1.0 / 30	●	2204	−0.1 / −3
2 Tu	0400	11.9 / 363	**17** W	0435	13.3 / 405
	0942	1.6 / 49		1023	0.8 / 24
	1611	12.6 / 384		1650	13.6 / 415
○	2208	0.5 / 15		2249	−0.2 / −6
3 W	0441	12.3 / 375	**18** Th	0520	13.3 / 405
	1025	1.2 / 37		1108	0.8 / 24
	1651	12.8 / 390		1734	13.4 / 408
	2250	0.1 / 3		2331	−0.1 / −3
4 Th	0521	12.6 / 384	**19** F	0603	13.1 / 399
	1108	1.0 / 30		1151	1.0 / 30
	1731	12.9 / 393		1816	13.0 / 396
	2331	−0.1 / −3			
5 F	0601	12.8 / 390	**20** Sa	0011	0.2 / 6
	1151	0.8 / 24		0645	12.8 / 390
	1812	12.9 / 393		1232	1.3 / 40
				1858	12.4 / 378
6 Sa	0014	−0.1 / −3	**21** Su	0051	0.7 / 21
	0643	12.8 / 390		0727	12.4 / 378
	1236	0.8 / 24		1314	1.7 / 52
	1856	12.7 / 387		1939	11.8 / 360
7 Su	0059	0.0 / 0	**22** M	0131	1.2 / 37
	0728	12.7 / 387		0808	11.9 / 363
	1324	1.0 / 30		1356	2.2 / 67
	1944	12.4 / 378		2021	11.2 / 341
8 M	0146	0.3 / 9	**23** Tu	0212	1.7 / 52
	0818	12.6 / 384		0851	11.5 / 351
	1415	1.2 / 37		1440	2.6 / 79
	2037	12.0 / 366		2107	10.6 / 323
9 Tu	0238	0.7 / 21	**24** W	0256	2.3 / 70
	0913	12.4 / 378		0938	11.1 / 338
	1511	1.4 / 43		1529	2.9 / 88
◑	2138	11.6 / 354	◐	2159	10.1 / 308
10 W	0335	1.1 / 34	**25** Th	0344	2.7 / 82
	1014	12.2 / 372		1029	10.8 / 329
	1613	1.6 / 49		1621	3.1 / 94
	2244	11.4 / 347		2256	9.8 / 299
11 Th	0436	1.5 / 46	**26** F	0437	3.1 / 94
	1119	12.2 / 372		1125	10.7 / 326
	1717	1.6 / 49		1718	3.1 / 94
	2353	11.4 / 347		2358	9.8 / 299
12 F	0541	1.7 / 52	**27** Sa	0535	3.2 / 98
	1223	12.4 / 378		1222	10.8 / 329
	1823	1.4 / 43		1816	2.9 / 88
13 Sa	0059	11.7 / 357	**28** Su	0058	10.1 / 308
	0645	1.6 / 49		0633	3.1 / 94
	1325	12.7 / 387		1318	11.1 / 338
	1926	1.0 / 30		1913	2.4 / 73
14 Su	0200	12.1 / 369	**29** M	0153	10.6 / 323
	0747	1.4 / 43		0730	2.8 / 85
	1422	13.1 / 399		1410	11.5 / 351
	2024	0.5 / 15		2006	1.8 / 55
15 M	0256	12.6 / 384	**30** Tu	0244	11.2 / 341
	0844	1.1 / 34		0824	2.3 / 70
	1514	13.4 / 408		1458	12.1 / 369
	2116	0.1 / 3		2055	1.1 / 34

Time meridian 75° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.
Heights are referred to the chart datum of soundings.

Buenaventura, Colombia, 2015

Times and Heights of High and Low Waters

July

	Time	Height	
	h m	ft	cm
1 W ○	0331	11.8	360
	0914	1.7	52
	1544	12.6	384
	2142	0.5	15
2 Th	0416	12.5	381
	1002	1.2	37
	1628	13.0	396
	2227	−0.1	−3
3 F	0459	13.0	396
	1048	0.7	21
	1712	13.4	408
	2312	−0.4	−12
4 Sa	0543	13.4	408
	1134	0.3	9
	1757	13.5	411
	2357	−0.6	−18
5 Su	0627	13.6	415
	1221	0.2	6
	1843	13.4	408
6 M	0043	−0.5	−15
	0713	13.6	415
	1309	0.3	9
	1931	13.1	399
7 Tu	0131	−0.2	−6
	0802	13.4	408
	1400	0.5	15
	2024	12.6	384
8 W ◑	0221	0.3	9
	0855	13.0	396
	1454	0.9	27
	2121	12.1	369
9 Th	0316	0.9	27
	0953	12.6	384
	1552	1.3	40
	2224	11.6	354
10 F	0414	1.5	46
	1056	12.3	375
	1655	1.6	49
	2331	11.4	347
11 Sa	0518	1.9	58
	1201	12.2	372
	1800	1.7	52
12 Su	0038	11.4	347
	0623	2.1	64
	1304	12.2	372
	1905	1.5	46
13 M	0141	11.6	354
	0727	2.1	64
	1403	12.4	378
	2006	1.2	37
14 Tu	0238	12.0	366
	0826	1.8	55
	1457	12.7	387
	2059	0.9	27
15 W ●	0330	12.4	378
	0919	1.6	49
	1546	12.9	393
	2147	0.5	15

	Time	Height	
	h m	ft	cm
16 Th	0417	12.7	387
	1006	1.3	40
	1631	13.0	396
	2229	0.4	12
17 F	0500	12.9	393
	1048	1.2	37
	1713	12.9	393
	2309	0.3	9
18 Sa	0541	12.9	393
	1128	1.2	37
	1753	12.7	387
	2346	0.4	12
19 Su	0620	12.8	390
	1207	1.2	37
	1832	12.4	378
20 M	0023	0.6	18
	0657	12.5	381
	1245	1.4	43
	1909	11.9	363
21 Tu	0100	1.0	30
	0734	12.1	369
	1324	1.7	52
	1947	11.4	347
22 W	0138	1.4	43
	0811	11.7	357
	1404	2.1	64
	2026	10.8	329
23 Th ◐	0218	1.9	58
	0851	11.3	344
	1447	2.4	73
	2110	10.3	314
24 F	0302	2.4	73
	0936	10.9	332
	1536	2.7	82
	2202	9.9	302
25 Sa	0351	2.9	88
	1029	10.6	323
	1630	2.9	88
	2304	9.7	296
26 Su	0448	3.1	94
	1130	10.5	320
	1730	2.9	88
27 M	0010	9.8	299
	0550	3.2	98
	1233	10.7	326
	1831	2.5	76
28 Tu	0114	10.3	314
	0653	2.9	88
	1334	11.2	341
	1931	1.9	58
29 W	0211	11.0	335
	0753	2.3	70
	1428	11.8	360
	2026	1.2	37
30 Th	0303	11.8	360
	0848	1.5	46
	1519	12.6	384
	2117	0.3	9
31 F ○	0351	12.7	387
	0939	0.7	21
	1607	13.2	402
	2206	−0.4	−12

August

	Time	Height	
	h m	ft	cm
1 Sa	0437	13.4	408
	1028	0.0	0
	1654	13.7	418
	2252	−0.9	−27
2 Su	0522	14.0	427
	1116	−0.5	−15
	1740	14.0	427
	2339	−1.2	−37
3 M	0608	14.3	436
	1204	−0.7	−21
	1827	14.0	427
4 Tu	0025	−1.1	−34
	0654	14.2	433
	1252	−0.6	−18
	1915	13.6	415
5 W	0113	−0.8	−24
	0743	13.9	424
	1341	−0.2	−6
	2006	13.1	399
6 Th ◑	0202	−0.1	−3
	0834	13.3	405
	1433	0.3	9
	2102	12.3	375
7 F	0255	0.7	21
	0930	12.7	387
	1529	1.0	30
	2203	11.6	354
8 Sa	0352	1.5	46
	1032	12.0	366
	1630	1.6	49
	2309	11.1	338
9 Su	0455	2.2	67
	1138	11.6	354
	1736	2.0	61
10 M	0017	10.9	332
	0602	2.5	76
	1244	11.5	351
	1844	2.0	61
11 Tu	0122	11.1	338
	0710	2.5	76
	1345	11.7	357
	1948	1.8	55
12 W	0220	11.5	351
	0811	2.3	70
	1439	11.9	363
	2042	1.4	43
13 Th	0311	11.9	363
	0903	1.9	58
	1528	12.3	375
	2128	1.0	30
14 F ●	0356	12.3	375
	0947	1.5	46
	1612	12.5	381
	2208	0.7	21
15 Sa	0437	12.6	384
	1027	1.2	37
	1652	12.6	384
	2245	0.5	15

	Time	Height	
	h m	ft	cm
16 Su	0515	12.8	390
	1104	1.0	30
	1730	12.5	381
	2320	0.5	15
17 M	0552	12.7	387
	1140	0.9	27
	1805	12.3	375
	2355	0.6	18
18 Tu	0626	12.5	381
	1216	1.0	30
	1840	12.0	366
19 W	0030	0.8	24
	0659	12.2	372
	1252	1.2	37
	1914	11.6	354
20 Th	0106	1.2	37
	0733	11.8	360
	1329	1.5	46
	1949	11.1	338
21 F	0143	1.6	49
	0808	11.3	344
	1409	1.9	58
	2028	10.6	323
22 Sa ◐	0223	2.1	64
	0849	10.9	332
	1453	2.3	70
	2115	10.1	308
23 Su	0310	2.6	79
	0938	10.5	320
	1546	2.6	79
	2214	9.8	299
24 M	0407	3.0	91
	1041	10.3	314
	1647	2.7	82
	2325	9.8	299
25 Tu	0512	3.1	94
	1152	10.4	317
	1753	2.5	76
26 W	0036	10.2	311
	0621	2.8	85
	1301	10.9	332
	1858	1.9	58
27 Th	0139	11.0	335
	0725	2.1	64
	1402	11.7	357
	1958	1.1	34
28 F	0235	12.0	366
	0824	1.1	34
	1456	12.6	384
	2052	0.2	6
29 Sa ○	0326	13.0	396
	0918	0.2	6
	1546	13.4	408
	2143	−0.6	−18
30 Su	0414	13.9	424
	1008	−0.7	−21
	1635	14.1	430
	2231	−1.3	−40
31 M	0500	14.5	442
	1056	−1.2	−37
	1722	14.4	439
	2318	−1.5	−46

September

	Time	Height	
	h m	ft	cm
1 Tu	0546	14.7	448
	1144	−1.4	−43
	1809	14.4	439
2 W	0005	−1.5	−46
	0633	14.6	445
	1231	−1.3	−40
	1857	14.0	427
3 Th	0052	−1.0	−30
	0720	14.1	430
	1320	−0.7	−21
	1947	13.3	405
4 F	0141	−0.2	−6
	0811	13.4	408
	1410	0.0	0
	2040	12.5	381
5 Sa ◑	0232	0.7	21
	0906	12.5	381
	1504	0.9	27
	2140	11.6	354
6 Su	0328	1.7	52
	1008	11.6	354
	1603	1.7	52
	2246	11.0	335
7 M	0431	2.5	76
	1115	11.1	338
	1709	2.3	70
	2354	10.7	326
8 Tu	0540	2.9	88
	1222	10.9	332
	1819	2.5	76
9 W	0059	10.8	329
	0650	2.9	88
	1324	11.0	335
	1925	2.3	70
10 Th	0157	11.1	338
	0753	2.6	79
	1419	11.3	344
	2019	2.0	61
11 F	0247	11.6	354
	0844	2.1	64
	1507	11.7	357
	2104	1.5	46
12 Sa	0331	12.1	369
	0925	1.6	49
	1549	12.1	369
	2142	1.1	34
13 Su ●	0411	12.4	378
	1002	1.1	34
	1628	12.4	378
	2218	0.8	24
14 M	0447	12.7	387
	1038	0.8	24
	1705	12.4	378
	2253	0.7	21
15 Tu	0522	12.7	387
	1112	0.6	18
	1739	12.4	378
	2327	0.7	21

	Time	Height	
	h m	ft	cm
16 W	0555	12.6	384
	1147	0.6	18
	1813	12.1	369
17 Th	0001	0.8	24
	0627	12.3	375
	1222	0.8	24
	1845	11.8	360
18 F	0036	1.1	34
	0658	11.9	363
	1258	1.1	34
	1918	11.4	347
19 Sa	0112	1.5	46
	0732	11.5	351
	1336	1.4	43
	1955	10.9	332
20 Su	0152	2.0	61
	0811	11.0	335
	1418	1.9	58
	2039	10.5	320
21 M ◐	0238	2.4	73
	0859	10.6	323
	1509	2.2	67
	2136	10.1	308
22 Tu	0335	2.8	85
	1001	10.3	314
	1610	2.5	76
	2247	10.1	308
23 W	0442	2.9	88
	1117	10.3	314
	1718	2.4	73
24 Th	0002	10.4	317
	0553	2.6	79
	1232	10.8	329
	1827	1.9	58
25 F	0109	11.2	341
	0700	1.8	55
	1337	11.6	354
	1930	1.2	37
26 Sa	0208	12.3	375
	0801	0.8	24
	1434	12.6	384
	2028	0.2	6
27 Su ○	0301	13.3	405
	0856	−0.2	−6
	1526	13.6	415
	2120	−0.6	−18
28 M	0350	14.2	433
	0947	−1.1	−34
	1615	14.3	436
	2210	−1.2	−37
29 Tu	0437	14.8	451
	1036	−1.6	−49
	1702	14.7	448
	2258	−1.5	−46
30 W	0524	15.0	457
	1123	−1.8	−55
	1750	14.6	445
	2344	−1.3	−40

Time meridian 75° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.
Heights are referred to the chart datum of soundings.

Buenaventura, Colombia, 2015

Times and Heights of High and Low Waters

October

	Time	Height	
	h m	ft	cm
1 Th	0610	14.8	451
	1210	−1.5	−46
	1837	14.2	433
2 F	0031	−0.8	−24
	0658	14.2	433
	1257	−0.9	−27
	1927	13.5	411
3 Sa	0119	0.0	0
	0748	13.3	405
	1346	0.0	0
	2019	12.6	384
4 Su ◑	0210	1.0	30
	0841	12.3	375
	1438	1.0	30
	2116	11.7	357
5 M	0304	1.9	58
	0941	11.3	344
	1534	1.9	58
	2219	11.0	335
6 Tu	0404	2.7	82
	1046	10.7	326
	1636	2.6	79
	2325	10.6	323
7 W	0512	3.2	98
	1154	10.4	317
	1743	2.9	88
8 Th	0029	10.6	323
	0622	3.2	98
	1257	10.5	320
	1849	2.9	88
9 F	0127	11.0	335
	0725	2.8	85
	1352	10.9	332
	1945	2.5	76
10 Sa	0217	11.4	347
	0815	2.3	70
	1440	11.3	344
	2031	2.1	64
11 Su	0301	11.9	363
	0857	1.7	52
	1523	11.8	360
	2111	1.7	52
12 M ●	0341	12.3	375
	0934	1.2	37
	1602	12.2	372
	2148	1.3	40
13 Tu	0418	12.6	384
	1010	0.8	24
	1639	12.4	378
	2224	1.1	34
14 W	0453	12.7	387
	1045	0.5	15
	1714	12.4	378
	2300	1.0	30
15 Th	0526	12.6	384
	1120	0.5	15
	1748	12.3	375
	2335	1.0	30

	Time	Height	
	h m	ft	cm
16 F	0558	12.4	378
	1155	0.5	15
	1821	12.1	369
17 Sa	0011	1.2	37
	0630	12.1	369
	1231	0.8	24
	1855	11.7	357
18 Su	0048	1.5	46
	0705	11.7	357
	1309	1.1	34
	1932	11.4	347
19 M	0129	1.9	58
	0744	11.3	344
	1352	1.5	46
	2016	11.0	335
20 Tu ◐	0215	2.3	70
	0833	10.8	329
	1442	1.9	58
	2111	10.7	326
21 W	0312	2.5	76
	0935	10.5	320
	1541	2.2	67
	2218	10.7	326
22 Th	0418	2.6	79
	1050	10.5	320
	1649	2.2	67
	2331	11.0	335
23 F	0528	2.3	70
	1205	10.9	332
	1758	1.9	58
24 Sa	0040	11.7	357
	0636	1.6	49
	1313	11.7	357
	1903	1.3	40
25 Su	0141	12.6	384
	0738	0.7	21
	1412	12.6	384
	2003	0.5	15
26 M	0236	13.5	411
	0835	−0.3	−9
	1505	13.5	411
	2058	−0.2	−6
27 Tu ○	0327	14.3	436
	0927	−1.0	−30
	1556	14.2	433
	2149	−0.7	−21
28 W	0416	14.8	451
	1016	−1.5	−46
	1644	14.6	445
	2237	−1.0	−30
29 Th	0503	14.9	454
	1103	−1.7	−52
	1732	14.6	445
	2324	−0.8	−24
30 F	0550	14.6	445
	1149	−1.4	−43
	1819	14.2	433
31 Sa	0011	−0.4	−12
	0637	14.0	427
	1235	−0.8	−24
	1907	13.6	415

November

	Time	Height	
	h m	ft	cm
1 Su	0058	0.3	9
	0725	13.2	402
	1322	0.1	3
	1956	12.8	390
2 M	0147	1.2	37
	0816	12.2	372
	1410	1.0	30
	2049	11.9	363
3 Tu ◑	0238	2.1	64
	0911	11.2	341
	1502	1.9	58
	2147	11.2	341
4 W	0334	2.8	85
	1012	10.5	320
	1558	2.7	82
	2248	10.8	329
5 Th	0435	3.3	101
	1117	10.1	308
	1658	3.1	94
	2350	10.7	326
6 F	0539	3.3	101
	1220	10.1	308
	1801	3.3	101
7 Sa	0047	10.8	329
	0642	3.1	94
	1317	10.4	317
	1859	3.1	94
8 Su	0139	11.2	341
	0736	2.6	79
	1408	10.9	332
	1951	2.7	82
9 M	0226	11.6	354
	0821	2.0	61
	1453	11.4	347
	2036	2.3	70
10 Tu	0308	12.1	369
	0903	1.4	43
	1534	11.8	360
	2117	1.8	55
11 W ●	0347	12.4	378
	0941	0.9	27
	1613	12.2	372
	2156	1.5	46
12 Th	0424	12.6	384
	1019	0.6	18
	1650	12.4	378
	2234	1.3	40
13 F	0500	12.6	384
	1055	0.4	12
	1726	12.4	378
	2312	1.2	37
14 Sa	0534	12.5	381
	1132	0.3	9
	1801	12.3	375
	2350	1.3	40
15 Su	0609	12.3	375
	1210	0.4	12
	1837	12.2	372

	Time	Height	
	h m	ft	cm
16 M	0029	1.4	43
	0646	12.0	366
	1250	0.7	21
	1916	12.0	366
17 Tu	0112	1.6	49
	0728	11.7	357
	1333	1.0	30
	2001	11.7	357
18 W	0200	1.8	55
	0817	11.3	344
	1422	1.4	43
	2053	11.5	351
19 Th ◐	0255	2.1	64
	0916	10.9	332
	1519	1.7	52
	2155	11.4	347
20 F	0357	2.1	64
	1026	10.8	329
	1622	1.9	58
	2304	11.5	351
21 Sa	0504	2.0	61
	1139	11.0	335
	1730	1.9	58
22 Su	0012	12.0	366
	0611	1.5	46
	1248	11.6	354
	1836	1.5	46
23 M	0115	12.6	384
	0715	0.8	24
	1350	12.3	375
	1939	1.0	30
24 Tu	0213	13.3	405
	0814	0.0	0
	1446	13.1	399
	2036	0.4	12
25 W ○	0306	13.9	424
	0907	−0.7	−21
	1538	13.7	418
	2129	0.0	0
26 Th	0356	14.3	436
	0957	−1.1	−34
	1628	14.1	430
	2219	−0.3	−9
27 F	0444	14.4	439
	1045	−1.2	−37
	1715	14.2	433
	2306	−0.2	−6
28 Sa	0531	14.2	433
	1130	−1.1	−34
	1801	14.0	427
	2352	0.1	3
29 Su	0617	13.7	418
	1214	−0.6	−18
	1847	13.5	411
30 M	0038	0.6	18
	0703	13.0	396
	1258	0.1	3
	1933	12.9	393

December

	Time	Height	
	h m	ft	cm
1 Tu	0123	1.2	37
	0749	12.1	369
	1342	0.9	27
	2021	12.2	372
2 W	0210	1.9	58
	0838	11.3	344
	1428	1.7	52
	2110	11.5	351
3 Th ◑	0259	2.5	76
	0932	10.5	320
	1517	2.4	73
	2204	11.0	335
4 F	0352	3.0	91
	1030	10.0	305
	1610	3.0	91
	2301	10.6	323
5 Sa	0450	3.2	98
	1132	9.8	299
	1707	3.3	101
	2359	10.6	323
6 Su	0550	3.1	94
	1233	9.9	302
	1807	3.3	101
7 M	0055	10.8	329
	0647	2.8	85
	1328	10.2	311
	1904	3.1	94
8 Tu	0146	11.1	338
	0740	2.3	70
	1419	10.7	326
	1956	2.8	85
9 W	0233	11.5	351
	0828	1.7	52
	1505	11.2	341
	2044	2.3	70
10 Th	0316	11.9	363
	0911	1.1	34
	1547	11.7	357
	2128	1.8	55
11 F ●	0357	12.3	375
	0953	0.6	18
	1627	12.2	372
	2210	1.4	43
12 Sa	0436	12.5	381
	1033	0.2	6
	1705	12.5	381
	2251	1.1	34
13 Su	0514	12.6	384
	1112	0.0	0
	1743	12.6	384
	2332	0.9	27
14 M	0553	12.6	384
	1152	−0.1	−3
	1822	12.7	387
15 Tu	0014	0.8	24
	0633	12.5	381
	1234	0.0	0
	1903	12.7	387

	Time	Height	
	h m	ft	cm
16 W	0058	0.9	27
	0716	12.2	372
	1318	0.2	6
	1947	12.5	381
17 Th	0146	1.0	30
	0805	11.8	360
	1406	0.6	18
	2037	12.3	375
18 F ◐	0238	1.2	37
	0900	11.4	347
	1459	1.0	30
	2134	12.0	366
19 Sa	0336	1.4	43
	1004	11.1	338
	1559	1.4	43
	2238	11.9	363
20 Su	0440	1.5	46
	1114	11.0	335
	1703	1.7	52
	2345	12.0	366
21 M	0546	1.3	40
	1224	11.2	341
	1810	1.7	52
22 Tu	0051	12.3	375
	0652	1.0	30
	1330	11.7	357
	1916	1.4	43
23 W	0152	12.7	387
	0754	0.4	12
	1429	12.4	378
	2017	1.0	30
24 Th	0248	13.1	399
	0850	−0.1	−3
	1523	12.9	393
	2112	0.6	18
25 F ○	0340	13.5	411
	0941	−0.6	−18
	1613	13.4	408
	2203	0.3	9
26 Sa	0428	13.6	415
	1028	−0.8	−24
	1659	13.6	415
	2250	0.2	6
27 Su	0514	13.5	411
	1112	−0.7	−21
	1744	13.5	411
	2334	0.3	9
28 M	0558	13.2	402
	1154	−0.5	−15
	1827	13.3	405
29 Tu	0017	0.5	15
	0641	12.7	387
	1234	−0.1	−3
	1908	12.8	390
30 W	0058	0.9	27
	0723	12.0	366
	1314	0.5	15
	1950	12.3	375
31 Th	0140	1.4	43
	0805	11.3	344
	1355	1.2	37
	2032	11.7	357

Time meridian 75° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.
Heights are referred to the chart datum of soundings.

Balboa, Panama, 2015

Times and Heights of High and Low Waters

January

	Time	Height	
	h m	ft	cm
1 Th	0018	14.6	445
	0634	2.0	61
	1259	13.7	418
	1859	2.7	82
2 F	0118	14.8	451
	0736	1.6	49
	1357	14.1	430
	2000	2.3	70
3 Sa	0211	15.0	457
	0830	1.1	34
	1448	14.5	442
	2052	1.9	58
4 Su ○	0259	15.2	463
	0917	0.5	15
	1535	14.8	451
	2138	1.4	43
5 M	0344	15.3	466
	0959	0.1	3
	1619	15.1	460
	2219	1.1	34
6 Tu	0427	15.4	469
	1037	−0.1	−3
	1700	15.3	466
	2257	1.0	30
7 W	0508	15.3	466
	1114	−0.1	−3
	1738	15.3	466
	2335	1.0	30
8 Th	0546	15.1	460
	1151	0.2	6
	1814	15.2	463
9 F	0013	1.3	40
	0623	14.7	448
	1227	0.7	21
	1848	14.9	454
10 Sa	0052	1.8	55
	0659	14.2	433
	1305	1.3	40
	1922	14.5	442
11 Su	0133	2.3	70
	0735	13.6	415
	1346	2.1	64
	1957	14.0	427
12 M	0217	2.8	85
	0813	13.0	396
	1429	2.8	85
	2035	13.4	408
13 Tu ◑	0305	3.3	101
	0856	12.3	375
	1517	3.5	107
	2120	13.0	396
14 W	0358	3.6	110
	0951	11.8	360
	1611	3.9	119
	2216	12.7	387
15 Th	0456	3.6	110
	1058	11.7	357
	1711	4.1	125
	2322	12.7	387

	Time	Height	
	h m	ft	cm
16 F	0557	3.3	101
	1207	12.1	369
	1816	3.8	116
17 Sa	0026	13.2	402
	0700	2.6	79
	1307	12.8	390
	1920	3.1	94
18 Su	0124	14.0	427
	0758	1.5	46
	1401	13.9	424
	2019	2.0	61
19 M	0216	14.9	454
	0850	0.3	9
	1452	15.0	457
	2111	0.8	24
20 Tu ●	0308	15.8	482
	0938	−0.9	−27
	1542	16.0	488
	2158	−0.4	−12
21 W	0359	16.6	506
	1023	−1.9	−58
	1632	16.9	515
	2244	−1.3	−40
22 Th	0450	17.1	521
	1108	−2.4	−73
	1721	17.5	533
	2330	−1.7	−52
23 F	0540	17.3	527
	1153	−2.5	−76
	1810	17.7	539
24 Sa	0017	−1.7	−52
	0630	17.1	521
	1239	−2.0	−61
	1858	17.5	533
25 Su	0106	−1.2	−37
	0720	16.5	503
	1329	−1.1	−34
	1947	16.9	515
26 M ◐	0159	−0.4	−12
	0811	15.5	472
	1422	0.0	0
	2038	15.9	485
27 Tu	0255	0.5	15
	0907	14.4	439
	1520	1.1	34
	2135	14.9	454
28 W	0356	1.3	40
	1012	13.4	408
	1621	2.1	64
	2241	14.0	427
29 Th	0500	2.0	61
	1126	12.7	387
	1727	2.9	88
	2352	13.5	411
30 F	0607	2.3	70
	1239	12.6	384
	1836	3.1	94
31 Sa	0058	13.4	408
	0713	2.2	67
	1341	12.9	393
	1941	2.9	88

February

	Time	Height	
	h m	ft	cm
1 Su	0155	13.6	415
	0811	1.7	52
	1434	13.4	408
	2036	2.3	70
2 M	0245	14.0	427
	0900	1.1	34
	1520	13.9	424
	2121	1.7	52
3 Tu ○	0329	14.3	436
	0941	0.5	15
	1601	14.3	436
	2201	1.1	34
4 W	0409	14.5	442
	1018	0.1	3
	1638	14.7	448
	2238	0.7	21
5 Th	0447	14.7	448
	1053	−0.2	−6
	1713	14.9	454
	2314	0.4	12
6 F	0523	14.7	448
	1127	−0.2	−6
	1747	15.0	457
	2349	0.5	15
7 Sa	0558	14.6	445
	1201	0.1	3
	1819	14.9	454
8 Su	0024	0.7	21
	0631	14.3	436
	1236	0.6	18
	1850	14.6	445
9 M	0101	1.2	37
	0704	13.9	424
	1313	1.3	40
	1921	14.2	433
10 Tu	0140	1.7	52
	0738	13.3	405
	1351	2.0	61
	1954	13.7	418
11 W ◑	0223	2.3	70
	0816	12.7	387
	1435	2.7	82
	2033	13.2	402
12 Th	0312	2.8	85
	0903	12.1	369
	1527	3.3	101
	2123	12.7	387
13 F	0409	3.1	94
	1005	11.7	357
	1627	3.7	113
	2230	12.4	378
14 Sa	0513	3.1	94
	1121	11.8	360
	1736	3.6	110
	2347	12.6	384
15 Su	0622	2.6	79
	1234	12.5	381
	1847	2.9	88

	Time	Height	
	h m	ft	cm
16 M	0055	13.4	408
	0727	1.6	49
	1335	13.6	415
	1953	1.8	55
17 Tu	0155	14.4	439
	0826	0.2	6
	1430	14.9	454
	2049	0.3	9
18 W ●	0250	15.5	472
	0917	−1.1	−34
	1522	16.1	491
	2140	−1.1	−34
19 Th	0342	16.5	503
	1004	−2.3	−70
	1612	17.1	521
	2226	−2.2	−67
20 F	0434	17.2	524
	1049	−2.9	−88
	1702	17.8	543
	2312	−2.7	−82
21 Sa	0524	17.5	533
	1134	−3.0	−91
	1750	18.0	549
	2358	−2.7	−82
22 Su	0613	17.3	527
	1219	−2.6	−79
	1838	17.7	539
23 M	0045	−2.2	−67
	0702	16.6	506
	1307	−1.6	−49
	1925	17.0	518
24 Tu	0135	−1.2	−37
	0751	15.6	475
	1358	−0.3	−9
	2014	15.8	482
25 W ◐	0229	0.0	0
	0843	14.4	439
	1453	1.0	30
	2107	14.5	442
26 Th	0327	1.2	37
	0944	13.1	399
	1554	2.2	67
	2210	13.3	405
27 F	0430	2.1	64
	1056	12.2	372
	1700	3.1	94
	2323	12.6	384
28 Sa	0537	2.7	82
	1214	12.0	366
	1810	3.5	107

March

	Time	Height	
	h m	ft	cm
1 Su	0036	12.4	378
	0645	2.7	82
	1320	12.3	375
	1917	3.3	101
2 M	0136	12.7	387
	0746	2.3	70
	1413	12.8	390
	2014	2.7	82
3 Tu	0225	13.1	399
	0836	1.7	52
	1457	13.4	408
	2100	1.9	58
4 W	0308	13.6	415
	0917	1.0	30
	1535	14.0	427
	2140	1.1	34
5 Th ○	0346	14.0	427
	0954	0.4	12
	1610	14.5	442
	2215	0.5	15
6 F	0423	14.4	439
	1029	0.0	0
	1644	14.8	451
	2250	0.1	3
7 Sa	0458	14.6	445
	1102	−0.2	−6
	1716	15.0	457
	2323	−0.1	−3
8 Su	0531	14.6	445
	1135	−0.1	−3
	1747	15.0	457
	2357	0.0	0
9 M	0604	14.5	442
	1209	0.3	9
	1818	14.9	454
10 Tu	0032	0.4	12
	0637	14.2	433
	1244	0.9	27
	1849	14.5	442
11 W	0109	1.0	30
	0711	13.7	418
	1321	1.6	49
	1923	14.1	430
12 Th	0150	1.6	49
	0748	13.2	402
	1404	2.3	70
	2001	13.5	411
13 F ◑	0237	2.2	67
	0833	12.6	384
	1455	2.9	88
	2049	13.0	396
14 Sa	0333	2.6	79
	0931	12.2	372
	1557	3.3	101
	2155	12.5	381
15 Su	0438	2.8	85
	1047	12.1	369
	1707	3.3	101
	2316	12.5	381

	Time	Height	
	h m	ft	cm
16 M	0549	2.5	76
	1205	12.7	387
	1820	2.7	82
17 Tu	0032	13.2	402
	0658	1.6	49
	1310	13.8	421
	1929	1.6	49
18 W	0135	14.3	436
	0800	0.4	12
	1407	15.1	460
	2028	0.1	3
19 Th	0231	15.5	472
	0854	−0.9	−27
	1459	16.4	500
	2120	−1.3	−40
20 F ●	0324	16.5	503
	0943	−2.0	−61
	1550	17.4	530
	2207	−2.4	−73
21 Sa	0415	17.2	524
	1029	−2.7	−82
	1639	17.9	546
	2253	−3.0	−91
22 Su	0506	17.5	533
	1114	−2.8	−85
	1728	18.1	552
	2338	−3.0	−91
23 M	0554	17.3	527
	1158	−2.3	−70
	1815	17.7	539
24 Tu	0023	−2.3	−70
	0642	16.7	509
	1245	−1.3	−40
	1902	16.9	515
25 W	0111	−1.3	−40
	0730	15.7	479
	1334	0.0	0
	1950	15.7	479
26 Th	0202	0.0	0
	0820	14.5	442
	1427	1.4	43
	2040	14.3	436
27 F ◐	0257	1.3	40
	0916	13.2	402
	1526	2.6	79
	2139	13.1	399
28 Sa	0358	2.4	73
	1024	12.3	375
	1631	3.5	107
	2250	12.2	372
29 Su	0502	3.1	94
	1140	12.0	366
	1739	3.9	119
30 M	0004	11.9	363
	0608	3.3	101
	1248	12.2	372
	1846	3.7	113
31 Tu	0107	12.2	372
	0710	3.1	94
	1341	12.7	387
	1944	3.1	94

Time meridian 75° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.
Heights are referred to the chart datum of soundings.

Balboa, Panama, 2015

Times and Heights of High and Low Waters

April

	Time	Height	
	h m	ft	cm
1 W	0157	12.7	387
	0803	2.5	76
	1423	13.3	405
	2032	2.3	70
2 Th	0239	13.3	405
	0847	1.8	55
	1501	14.0	427
	2112	1.4	43
3 F	0317	13.8	421
	0925	1.1	34
	1535	14.5	442
	2149	0.7	21
4 Sa ○	0353	14.3	436
	1001	0.6	18
	1609	14.9	454
	2223	0.1	3
5 Su	0429	14.7	448
	1036	0.3	9
	1642	15.2	463
	2257	−0.2	−6
6 M	0504	14.8	451
	1110	0.3	9
	1715	15.3	466
	2332	−0.2	−6
7 Tu	0538	14.8	451
	1144	0.5	15
	1749	15.2	463
8 W	0007	0.1	3
	0613	14.7	448
	1219	1.0	30
	1823	15.0	457
9 Th	0044	0.6	18
	0650	14.4	439
	1258	1.6	49
	1859	14.6	445
10 F	0125	1.2	37
	0729	14.0	427
	1343	2.2	67
	1941	14.1	430
11 Sa ◑	0213	1.8	55
	0815	13.5	411
	1435	2.8	85
	2031	13.5	411
12 Su	0309	2.3	70
	0912	13.1	399
	1538	3.1	94
	2135	13.0	396
13 M	0413	2.5	76
	1024	13.0	396
	1646	3.1	94
	2254	12.9	393
14 Tu	0522	2.4	73
	1140	13.5	411
	1757	2.5	76
15 W	0011	13.5	411
	0630	1.8	55
	1247	14.5	442
	1905	1.5	46

	Time	Height	
	h m	ft	cm
16 Th	0116	14.5	442
	0734	0.9	27
	1344	15.6	475
	2005	0.2	6
17 F	0212	15.5	472
	0830	−0.2	−6
	1437	16.7	509
	2059	−1.0	−30
18 Sa ●	0305	16.4	500
	0921	−1.1	−34
	1527	17.5	533
	2147	−2.0	−61
19 Su	0356	17.0	518
	1008	−1.7	−52
	1616	17.9	546
	2233	−2.5	−76
20 M	0446	17.2	524
	1053	−1.8	−55
	1705	17.8	543
	2317	−2.4	−73
21 Tu	0535	17.1	521
	1138	−1.3	−40
	1753	17.4	530
22 W	0001	−1.8	−55
	0623	16.6	506
	1223	−0.5	−15
	1840	16.6	506
23 Th	0047	−0.8	−24
	0710	15.7	479
	1310	0.7	21
	1926	15.6	475
24 F	0135	0.4	12
	0758	14.7	448
	1402	1.9	58
	2014	14.4	439
25 Sa ◐	0227	1.6	49
	0849	13.7	418
	1458	3.0	91
	2107	13.2	402
26 Su	0323	2.7	82
	0948	12.9	393
	1559	3.8	116
	2210	12.3	375
27 M	0423	3.4	104
	1055	12.4	378
	1702	4.2	128
	2321	11.9	363
28 Tu	0524	3.8	116
	1202	12.5	381
	1805	4.1	125
29 W	0026	12.1	369
	0624	3.8	116
	1256	12.9	393
	1903	3.6	110
30 Th	0118	12.5	381
	0720	3.4	104
	1341	13.5	411
	1954	2.9	88

May

	Time	Height	
	h m	ft	cm
1 F	0202	13.1	399
	0808	2.8	85
	1420	14.1	430
	2039	2.0	61
2 Sa	0242	13.7	418
	0851	2.1	64
	1456	14.6	445
	2118	1.2	37
3 Su ○	0320	14.3	436
	0931	1.6	49
	1532	15.1	460
	2155	0.5	15
4 M	0358	14.7	448
	1008	1.1	34
	1608	15.5	472
	2231	0.1	3
5 Tu	0436	15.1	460
	1044	0.9	27
	1645	15.6	475
	2307	−0.1	−3
6 W	0514	15.2	463
	1121	0.9	27
	1723	15.7	479
	2344	0.0	0
7 Th	0553	15.3	466
	1159	1.1	34
	1802	15.5	472
8 F	0023	0.3	9
	0634	15.2	463
	1241	1.5	46
	1843	15.2	463
9 Sa	0106	0.8	24
	0717	14.9	454
	1328	2.0	61
	1929	14.8	451
10 Su	0155	1.4	43
	0805	14.6	445
	1422	2.5	76
	2021	14.3	436
11 M ◑	0251	1.9	58
	0900	14.3	436
	1523	2.8	85
	2123	13.8	421
12 Tu	0353	2.3	70
	1006	14.2	433
	1629	2.7	82
	2236	13.6	415
13 W	0458	2.3	70
	1117	14.5	442
	1735	2.4	73
	2350	13.9	424
14 Th	0604	2.1	64
	1223	15.1	460
	1841	1.6	49
15 F	0056	14.6	445
	0708	1.5	46
	1321	15.9	485
	1943	0.7	21

	Time	Height	
	h m	ft	cm
16 Sa	0153	15.4	469
	0807	0.8	24
	1415	16.7	509
	2038	−0.3	−9
17 Su ●	0247	16.1	491
	0900	0.1	3
	1505	17.2	524
	2128	−1.0	−30
18 M	0338	16.5	503
	0948	−0.3	−9
	1555	17.4	530
	2214	−1.5	−46
19 Tu	0428	16.7	509
	1034	−0.4	−12
	1644	17.3	527
	2257	−1.4	−43
20 W	0517	16.7	509
	1118	−0.2	−6
	1732	17.0	518
	2340	−1.0	−30
21 Th	0605	16.3	497
	1202	0.5	15
	1818	16.3	497
22 F	0024	−0.2	−6
	0650	15.8	482
	1247	1.4	43
	1903	15.5	472
23 Sa	0109	0.8	24
	0735	15.1	460
	1336	2.3	70
	1947	14.5	442
24 Su	0156	1.8	55
	0820	14.3	436
	1427	3.2	98
	2034	13.6	415
25 M ◐	0247	2.8	85
	0909	13.6	415
	1523	3.8	116
	2126	12.8	390
26 Tu	0341	3.5	107
	1004	13.1	399
	1620	4.2	128
	2227	12.2	372
27 W	0436	4.0	122
	1105	12.9	393
	1718	4.3	131
	2332	12.1	369
28 Th	0533	4.2	128
	1202	13.1	399
	1816	4.0	122
29 F	0030	12.4	378
	0630	4.1	125
	1252	13.5	411
	1910	3.5	107
30 Sa	0120	12.9	393
	0724	3.7	113
	1336	14.0	427
	2000	2.7	82
31 Su	0204	13.5	411
	0814	3.1	94
	1416	14.6	445
	2045	1.9	58

June

	Time	Height	
	h m	ft	cm
1 M	0245	14.2	433
	0858	2.4	73
	1456	15.2	463
	2127	1.1	34
2 Tu ○	0326	14.8	451
	0940	1.8	55
	1536	15.6	475
	2206	0.4	12
3 W	0408	15.3	466
	1020	1.3	40
	1618	16.0	488
	2245	0.0	0
4 Th	0451	15.7	479
	1100	1.0	30
	1701	16.2	494
	2324	−0.2	−6
5 F	0535	16.0	488
	1142	1.0	30
	1746	16.2	494
6 Sa	0006	−0.1	−3
	0620	16.1	491
	1226	1.1	34
	1832	16.0	488
7 Su	0051	0.2	6
	0706	16.0	488
	1314	1.4	43
	1920	15.7	479
8 M	0140	0.8	24
	0754	15.8	482
	1408	1.8	55
	2012	15.1	460
9 Tu ◑	0234	1.3	40
	0847	15.5	472
	1507	2.1	64
	2110	14.6	445
10 W	0333	1.8	55
	0948	15.2	463
	1610	2.3	70
	2218	14.2	433
11 Th	0435	2.2	67
	1054	15.2	463
	1714	2.2	67
	2330	14.1	430
12 F	0539	2.3	70
	1200	15.4	469
	1818	1.9	58
13 Sa	0037	14.5	442
	0644	2.2	67
	1301	15.8	482
	1921	1.3	40
14 Su	0136	15.0	457
	0745	1.8	55
	1356	16.2	494
	2019	0.6	18
15 M	0231	15.4	469
	0841	1.3	40
	1447	16.5	503
	2110	0.0	0

	Time	Height	
	h m	ft	cm
16 Tu ●	0323	15.8	482
	0931	0.9	27
	1537	16.7	509
	2156	−0.4	−12
17 W	0413	16.1	491
	1016	0.7	21
	1625	16.6	506
	2239	−0.5	−15
18 Th	0500	16.1	491
	1100	0.7	21
	1712	16.4	500
	2320	−0.3	−9
19 F	0546	16.0	488
	1142	1.1	34
	1756	16.0	488
20 Sa	0001	0.2	6
	0628	15.8	482
	1224	1.6	49
	1838	15.4	469
21 Su	0042	0.9	27
	0709	15.3	466
	1308	2.3	70
	1919	14.7	448
22 M	0125	1.7	52
	0748	14.8	451
	1354	3.0	91
	2000	14.0	427
23 Tu	0210	2.6	79
	0829	14.2	433
	1443	3.6	110
	2044	13.2	402
24 W ◐	0258	3.3	101
	0913	13.7	418
	1535	4.0	122
	2133	12.6	384
25 Th	0349	3.9	119
	1004	13.3	405
	1629	4.2	128
	2232	12.2	372
26 F	0442	4.3	131
	1101	13.1	399
	1725	4.2	128
	2335	12.2	372
27 Sa	0538	4.4	134
	1158	13.3	405
	1823	3.9	119
28 Su	0033	12.6	384
	0637	4.3	131
	1250	13.7	418
	1919	3.3	101
29 M	0124	13.2	402
	0734	3.8	116
	1337	14.3	436
	2011	2.4	73
30 Tu	0211	13.9	424
	0826	3.0	91
	1423	15.0	457
	2058	1.4	43

Time meridian 75° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.
Heights are referred to the chart datum of soundings.

Balboa, Panama, 2015

Times and Heights of High and Low Waters

July

	Time	Height	
	h m	ft	cm
1 W ○	0257	14.7	448
	0913	2.1	64
	1508	15.7	479
	2141	0.5	15
2 Th	0343	15.5	472
	0958	1.3	40
	1554	16.2	494
	2223	−0.2	−6
3 F	0429	16.2	494
	1041	0.6	18
	1642	16.6	506
	2305	−0.7	−21
4 Sa	0516	16.7	509
	1125	0.3	9
	1730	16.9	515
	2348	−0.8	−24
5 Su	0603	17.0	518
	1210	0.2	6
	1819	16.8	512
6 M	0034	−0.6	−18
	0651	17.1	521
	1258	0.4	12
	1908	16.5	503
7 Tu	0122	−0.1	−3
	0739	16.9	515
	1351	0.8	24
	1959	15.9	485
8 W ◑	0215	0.6	18
	0830	16.4	500
	1448	1.3	40
	2055	15.2	463
9 Th	0312	1.4	43
	0927	15.8	482
	1548	1.8	55
	2158	14.5	442
10 F	0413	2.1	64
	1031	15.3	466
	1651	2.1	64
	2309	14.0	427
11 Sa	0516	2.6	79
	1138	15.1	460
	1756	2.2	67
12 Su	0019	14.0	427
	0622	2.8	85
	1243	15.2	463
	1901	2.0	61
13 M	0122	14.3	436
	0726	2.6	79
	1340	15.4	469
	2001	1.5	46
14 Tu	0219	14.7	448
	0825	2.2	67
	1433	15.6	475
	2054	1.0	30
15 W ●	0310	15.1	460
	0915	1.8	55
	1522	15.8	482
	2139	0.5	15

	Time	Height	
	h m	ft	cm
16 Th	0358	15.5	472
	1000	1.4	43
	1608	15.9	485
	2221	0.2	6
17 F	0442	15.7	479
	1041	1.2	37
	1652	15.9	485
	2300	0.2	6
18 Sa	0523	15.8	482
	1120	1.2	37
	1733	15.7	479
	2337	0.4	12
19 Su	0602	15.7	479
	1159	1.4	43
	1812	15.4	469
20 M	0015	0.8	24
	0639	15.5	472
	1238	1.9	58
	1849	14.9	454
21 Tu	0053	1.4	43
	0714	15.1	460
	1319	2.4	73
	1926	14.3	436
22 W	0133	2.2	67
	0749	14.6	445
	1403	3.0	91
	2003	13.7	418
23 Th ◐	0216	3.0	91
	0825	14.1	430
	1450	3.6	110
	2045	13.0	396
24 F	0302	3.7	113
	0907	13.5	411
	1541	4.0	122
	2134	12.4	378
25 Sa	0353	4.2	128
	0959	13.1	399
	1636	4.2	128
	2236	12.1	369
26 Su	0450	4.5	137
	1101	13.0	396
	1735	4.1	125
	2344	12.2	372
27 M	0552	4.5	137
	1205	13.3	405
	1837	3.6	110
28 Tu	0046	12.8	390
	0655	4.1	125
	1303	14.0	427
	1936	2.7	82
29 W	0140	13.7	418
	0755	3.2	98
	1355	14.8	451
	2029	1.6	49
30 Th	0230	14.8	451
	0848	2.0	61
	1445	15.7	479
	2117	0.5	15
31 F ○	0318	15.8	482
	0936	0.9	27
	1534	16.5	503
	2202	−0.6	−18

August

	Time	Height	
	h m	ft	cm
1 Sa	0407	16.7	509
	1021	−0.1	−3
	1624	17.1	521
	2245	−1.3	−40
2 Su	0455	17.4	530
	1106	−0.8	−24
	1713	17.5	533
	2329	−1.6	−49
3 M	0543	17.9	546
	1152	−1.0	−30
	1803	17.5	533
4 Tu	0014	−1.4	−43
	0631	17.9	546
	1239	−0.7	−21
	1852	17.2	524
5 W	0102	−0.8	−24
	0720	17.6	536
	1330	−0.2	−6
	1942	16.5	503
6 Th ◑	0154	0.1	3
	0810	16.9	515
	1425	0.7	21
	2036	15.5	472
7 F	0250	1.2	37
	0904	16.0	488
	1524	1.5	46
	2137	14.5	442
8 Sa	0350	2.2	67
	1007	15.1	460
	1628	2.2	67
	2248	13.8	421
9 Su	0455	2.9	88
	1117	14.5	442
	1734	2.6	79
10 M	0003	13.5	411
	0603	3.3	101
	1227	14.3	436
	1841	2.6	79
11 Tu	0110	13.7	418
	0710	3.3	101
	1328	14.5	442
	1944	2.3	70
12 W	0207	14.2	433
	0809	2.8	85
	1421	14.8	451
	2037	1.7	52
13 Th	0256	14.7	448
	0900	2.2	67
	1508	15.1	460
	2121	1.2	37
14 F ●	0339	15.1	460
	0942	1.7	52
	1550	15.4	469
	2201	0.7	21
15 Sa	0419	15.4	469
	1021	1.2	37
	1630	15.5	472
	2237	0.5	15

	Time	Height	
	h m	ft	cm
16 Su	0456	15.7	479
	1057	1.0	30
	1708	15.5	472
	2312	0.5	15
17 M	0531	15.7	479
	1133	1.0	30
	1744	15.4	469
	2347	0.7	21
18 Tu	0605	15.6	475
	1209	1.3	40
	1818	15.1	460
19 W	0022	1.2	37
	0637	15.3	466
	1246	1.8	55
	1852	14.6	445
20 Th	0058	1.9	58
	0709	14.9	454
	1325	2.4	73
	1927	14.1	430
21 F	0137	2.7	82
	0743	14.3	436
	1407	3.1	94
	2004	13.4	408
22 Sa ◐	0220	3.5	107
	0820	13.8	421
	1455	3.6	110
	2048	12.8	390
23 Su	0310	4.1	125
	0907	13.2	402
	1550	4.0	122
	2145	12.3	375
24 M	0408	4.5	137
	1009	12.9	393
	1652	4.1	125
	2257	12.2	372
25 Tu	0513	4.6	140
	1123	13.0	396
	1757	3.8	116
26 W	0010	12.8	390
	0622	4.1	125
	1232	13.7	418
	1902	2.9	88
27 Th	0111	13.8	421
	0727	3.1	94
	1331	14.7	448
	2000	1.7	52
28 F	0204	15.0	457
	0824	1.7	52
	1424	15.8	482
	2052	0.4	12
29 Sa ○	0254	16.3	497
	0914	0.3	9
	1514	16.8	512
	2139	−0.8	−24
30 Su	0343	17.4	530
	1001	−0.9	−27
	1604	17.6	536
	2224	−1.7	−52
31 M	0432	18.2	555
	1046	−1.7	−52
	1654	18.1	552
	2308	−2.0	−61

September

	Time	Height	
	h m	ft	cm
1 Tu	0521	18.6	567
	1131	−1.9	−58
	1744	18.1	552
	2353	−1.8	−55
2 W	0609	18.5	564
	1218	−1.6	−49
	1833	17.7	539
3 Th	0040	−1.1	−34
	0658	18.0	549
	1307	−0.8	−24
	1923	16.9	515
4 F	0131	0.0	0
	0747	17.0	518
	1401	0.3	9
	2016	15.7	479
5 Sa ◑	0226	1.3	40
	0841	15.9	485
	1459	1.5	46
	2115	14.6	445
6 Su	0327	2.5	76
	0943	14.7	448
	1602	2.5	76
	2225	13.6	415
7 M	0433	3.4	104
	1055	13.9	424
	1710	3.1	94
	2343	13.2	402
8 Tu	0543	3.8	116
	1210	13.6	415
	1818	3.3	101
9 W	0053	13.5	411
	0651	3.7	113
	1313	13.8	421
	1921	3.0	91
10 Th	0149	13.9	424
	0751	3.2	98
	1405	14.3	436
	2015	2.5	76
11 F	0235	14.5	442
	0840	2.5	76
	1449	14.7	448
	2059	1.9	58
12 Sa	0315	15.0	457
	0921	1.8	55
	1528	15.1	460
	2137	1.3	40
13 Su ●	0351	15.4	469
	0958	1.3	40
	1605	15.4	469
	2212	0.9	27
14 M	0425	15.7	479
	1033	0.9	27
	1640	15.5	472
	2246	0.8	24
15 Tu	0458	15.8	482
	1106	0.7	21
	1715	15.5	472
	2319	0.9	27

	Time	Height	
	h m	ft	cm
16 W	0530	15.8	482
	1140	0.9	27
	1748	15.3	466
	2353	1.2	37
17 Th	0602	15.6	475
	1215	1.3	40
	1822	15.0	457
18 F	0028	1.9	58
	0634	15.2	463
	1251	1.9	58
	1855	14.5	442
19 Sa	0105	2.6	79
	0707	14.7	448
	1331	2.6	79
	1932	13.9	424
20 Su	0146	3.4	104
	0744	14.1	430
	1417	3.3	101
	2014	13.3	405
21 M ◐	0235	4.0	122
	0829	13.5	411
	1512	3.8	116
	2108	12.8	390
22 Tu	0335	4.5	137
	0929	13.0	396
	1614	4.0	122
	2219	12.7	387
23 W	0442	4.5	137
	1048	13.0	396
	1722	3.8	116
	2337	13.2	402
24 Th	0553	3.9	119
	1205	13.6	415
	1830	3.1	94
25 F	0043	14.2	433
	0700	2.9	88
	1309	14.7	448
	1932	1.9	58
26 Sa	0139	15.5	472
	0800	1.5	46
	1403	15.9	485
	2027	0.6	18
27 Su ○	0230	16.8	512
	0852	0.0	0
	1455	17.1	521
	2116	−0.6	−18
28 M	0319	17.9	546
	0940	−1.3	−40
	1545	17.9	546
	2202	−1.5	−46
29 Tu	0408	18.6	567
	1026	−2.0	−61
	1635	18.3	558
	2247	−1.9	−58
30 W	0457	18.9	576
	1111	−2.2	−67
	1725	18.3	558
	2333	−1.6	−49

Time meridian 75° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.
Heights are referred to the chart datum of soundings.

Balboa, Panama, 2015

Times and Heights of High and Low Waters

October

	Time	Height	
	h m	ft	cm
1 Th	0546	18.7	570
	1157	−1.8	−55
	1814	17.9	546
2 F	0019	−0.9	−27
	0635	18.0	549
	1244	−0.9	−27
	1904	17.0	518
3 Sa	0109	0.3	9
	0725	17.0	518
	1336	0.3	9
	1956	15.9	485
4 Su ◑	0203	1.6	49
	0817	15.7	479
	1432	1.7	52
	2053	14.7	448
5 M	0303	2.9	88
	0917	14.4	439
	1534	2.8	85
	2159	13.7	418
6 Tu	0409	3.8	116
	1028	13.5	411
	1640	3.6	110
	2316	13.3	405
7 W	0518	4.2	128
	1144	13.1	399
	1747	3.9	119
8 Th	0026	13.4	408
	0625	4.1	125
	1249	13.3	405
	1850	3.7	113
9 F	0122	13.8	421
	0724	3.6	110
	1341	13.8	421
	1944	3.3	101
10 Sa	0206	14.4	439
	0813	2.9	88
	1424	14.3	436
	2029	2.6	79
11 Su	0244	14.9	454
	0855	2.1	64
	1501	14.8	451
	2108	2.0	61
12 M ●	0318	15.4	469
	0932	1.5	46
	1537	15.2	463
	2145	1.5	46
13 Tu	0351	15.7	479
	1006	0.9	27
	1612	15.5	472
	2219	1.3	40
14 W	0424	15.9	485
	1040	0.7	21
	1646	15.6	475
	2253	1.2	37
15 Th	0457	15.9	485
	1114	0.7	21
	1721	15.5	472
	2327	1.5	46

	Time	Height	
	h m	ft	cm
16 F	0530	15.8	482
	1149	1.0	30
	1755	15.3	466
17 Sa	0002	1.9	58
	0604	15.5	472
	1225	1.5	46
	1831	15.0	457
18 Su	0039	2.5	76
	0639	15.0	457
	1304	2.1	64
	1909	14.5	442
19 M	0121	3.2	98
	0719	14.5	442
	1349	2.8	85
	1952	14.1	430
20 Tu ◐	0211	3.8	116
	0805	13.9	424
	1442	3.4	104
	2044	13.7	418
21 W	0311	4.1	125
	0904	13.4	408
	1545	3.7	113
	2151	13.5	411
22 Th	0418	4.1	125
	1020	13.3	405
	1652	3.6	110
	2307	13.8	421
23 F	0527	3.6	110
	1139	13.8	421
	1759	3.0	91
24 Sa	0016	14.7	448
	0634	2.6	79
	1246	14.7	448
	1903	2.1	64
25 Su	0114	15.9	485
	0735	1.4	43
	1343	15.9	485
	2001	1.0	30
26 M	0207	17.1	521
	0830	0.0	0
	1435	16.9	515
	2053	−0.1	−3
27 Tu ○	0257	18.0	549
	0920	−1.2	−37
	1526	17.7	539
	2142	−0.9	−27
28 W	0346	18.6	567
	1006	−1.9	−58
	1616	18.1	552
	2228	−1.2	−37
29 Th	0435	18.7	570
	1052	−2.1	−64
	1706	18.1	552
	2313	−1.1	−34
30 F	0525	18.4	561
	1137	−1.7	−52
	1756	17.7	539
	2359	−0.4	−12
31 Sa	0614	17.7	539
	1223	−0.8	−24
	1846	17.0	518

November

	Time	Height	
	h m	ft	cm
1 Su	0047	0.7	21
	0703	16.7	509
	1312	0.4	12
	1936	16.0	488
2 M	0139	1.9	58
	0754	15.5	472
	1404	1.7	52
	2028	15.0	457
3 Tu ◑	0237	3.1	94
	0848	14.3	436
	1502	2.9	88
	2127	14.0	427
4 W	0339	3.9	119
	0951	13.3	405
	1603	3.7	113
	2235	13.4	408
5 Th	0443	4.4	134
	1103	12.8	390
	1706	4.2	128
	2344	13.3	405
6 F	0547	4.4	134
	1211	12.8	390
	1807	4.3	131
7 Sa	0041	13.6	415
	0646	4.0	122
	1306	13.2	402
	1903	4.0	122
8 Su	0128	14.1	430
	0738	3.4	104
	1351	13.7	418
	1953	3.5	107
9 M	0207	14.6	445
	0823	2.6	79
	1430	14.3	436
	2036	2.9	88
10 Tu	0243	15.1	460
	0903	1.8	55
	1507	14.8	451
	2116	2.3	70
11 W ●	0317	15.5	472
	0940	1.2	37
	1543	15.2	463
	2153	1.8	55
12 Th	0352	15.8	482
	1016	0.7	21
	1620	15.5	472
	2229	1.6	49
13 F	0428	15.9	485
	1051	0.5	15
	1657	15.6	475
	2305	1.6	49
14 Sa	0504	15.9	485
	1126	0.6	18
	1734	15.6	475
	2341	1.8	55
15 Su	0542	15.7	479
	1203	0.9	27
	1813	15.4	469

	Time	Height	
	h m	ft	cm
16 M	0020	2.1	64
	0621	15.4	469
	1243	1.4	43
	1853	15.2	463
17 Tu	0104	2.6	79
	0703	15.0	457
	1328	2.0	61
	1938	14.9	454
18 W	0154	3.0	91
	0751	14.5	442
	1421	2.5	76
	2028	14.6	445
19 Th ◐	0252	3.3	101
	0848	14.0	427
	1520	2.9	88
	2129	14.4	439
20 F	0355	3.4	104
	0957	13.7	418
	1624	3.1	94
	2238	14.5	442
21 Sa	0502	3.0	91
	1113	13.9	424
	1730	2.8	85
	2348	15.1	460
22 Su	0608	2.4	73
	1223	14.5	442
	1835	2.3	70
23 M	0050	15.9	485
	0711	1.4	43
	1323	15.4	469
	1936	1.5	46
24 Tu	0145	16.8	512
	0809	0.3	9
	1418	16.3	497
	2032	0.6	18
25 W ○	0237	17.5	533
	0901	−0.7	−21
	1510	17.0	518
	2123	−0.1	−3
26 Th	0327	17.9	546
	0949	−1.4	−43
	1601	17.3	527
	2210	−0.5	−15
27 F	0417	18.0	549
	1034	−1.6	−49
	1651	17.4	530
	2256	−0.4	−12
28 Sa	0507	17.7	539
	1119	−1.3	−40
	1740	17.2	524
	2341	0.0	0
29 Su	0555	17.2	524
	1203	−0.7	−21
	1828	16.7	509
30 M	0027	0.8	24
	0643	16.3	497
	1248	0.3	9
	1915	16.0	488

December

	Time	Height	
	h m	ft	cm
1 Tu	0115	1.8	55
	0729	15.3	466
	1336	1.4	43
	2001	15.1	460
2 W	0207	2.8	85
	0817	14.3	436
	1427	2.5	76
	2050	14.3	436
3 Th ◑	0302	3.6	110
	0909	13.3	405
	1521	3.4	104
	2144	13.6	415
4 F	0400	4.1	125
	1009	12.6	384
	1617	4.1	125
	2245	13.1	399
5 Sa	0459	4.3	131
	1116	12.2	372
	1715	4.4	134
	2346	13.1	399
6 Su	0558	4.2	128
	1218	12.4	378
	1813	4.4	134
7 M	0040	13.4	408
	0654	3.7	113
	1310	12.8	390
	1909	4.1	125
8 Tu	0125	13.9	424
	0746	3.0	91
	1355	13.4	408
	2000	3.5	107
9 W	0206	14.4	439
	0831	2.2	67
	1436	14.0	427
	2045	2.9	88
10 Th	0245	14.9	454
	0913	1.4	43
	1515	14.6	445
	2127	2.2	67
11 F ●	0323	15.3	466
	0952	0.7	21
	1555	15.1	460
	2206	1.7	52
12 Sa	0403	15.7	479
	1029	0.2	6
	1635	15.5	472
	2245	1.3	40
13 Su	0443	15.9	485
	1107	0.0	0
	1716	15.8	482
	2324	1.1	34
14 M	0525	15.9	485
	1146	0.0	0
	1757	15.9	485
15 Tu	0004	1.1	34
	0608	15.8	482
	1227	0.3	9
	1840	15.9	485

	Time	Height	
	h m	ft	cm
16 W	0049	1.4	43
	0652	15.5	472
	1311	0.7	21
	1924	15.8	482
17 Th	0138	1.7	52
	0740	15.1	460
	1401	1.3	40
	2013	15.5	472
18 F ◐	0233	2.0	61
	0833	14.5	442
	1457	1.9	58
	2108	15.1	460
19 Sa	0333	2.3	70
	0935	14.0	427
	1558	2.3	70
	2211	14.9	454
20 Su	0437	2.3	70
	1047	13.8	421
	1702	2.5	76
	2321	14.9	454
21 M	0542	2.0	61
	1200	14.0	427
	1809	2.4	73
22 Tu	0027	15.3	466
	0648	1.5	46
	1305	14.5	442
	1914	2.0	61
23 W	0126	15.8	482
	0749	0.7	21
	1403	15.2	463
	2014	1.3	40
24 Th	0221	16.3	497
	0845	−0.1	−3
	1457	15.8	482
	2108	0.7	21
25 F ○	0313	16.7	509
	0934	−0.8	−24
	1549	16.2	494
	2156	0.2	6
26 Sa	0403	16.8	512
	1019	−1.1	−34
	1638	16.5	503
	2241	0.0	0
27 Su	0451	16.7	509
	1102	−1.1	−34
	1725	16.5	503
	2324	0.1	3
28 M	0538	16.4	500
	1143	−0.7	−21
	1809	16.3	497
29 Tu	0006	0.5	15
	0622	15.8	482
	1224	0.0	0
	1851	15.8	482
30 W	0050	1.2	37
	0703	15.1	460
	1306	0.8	24
	1931	15.2	463
31 Th	0135	2.0	61
	0744	14.2	433
	1350	1.8	55
	2011	14.4	439

Time meridian 75° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.
Heights are referred to the chart datum of soundings.

Puntarenas, Costa Rica, 2015

Times and Heights of High and Low Waters

January

	Time	Height	
	h m	ft	cm
1 Th	0528	1.0	30
	1145	7.8	238
	1743	1.3	40
2 F	0008	8.7	265
	0630	0.8	24
	1246	7.9	241
	1844	1.3	40
3 Sa	0104	8.8	268
	0725	0.6	18
	1340	8.2	250
	1939	1.1	34
4 Su ○	0155	8.9	271
	0813	0.3	9
	1429	8.4	256
	2027	1.0	30
5 M	0241	9.0	274
	0857	0.1	3
	1513	8.7	265
	2111	0.8	24
6 Tu	0324	9.1	277
	0937	0.0	0
	1554	8.8	268
	2153	0.8	24
7 W	0404	9.0	274
	1015	0.0	0
	1634	8.9	271
	2232	0.8	24
8 Th	0443	8.9	271
	1051	0.1	3
	1712	8.8	268
	2311	0.8	24
9 F	0522	8.6	262
	1128	0.3	9
	1750	8.7	265
	2349	1.0	30
10 Sa	0601	8.3	253
	1204	0.6	18
	1828	8.5	259
11 Su	0029	1.2	37
	0641	7.9	241
	1242	0.9	27
	1908	8.2	250
12 M	0111	1.4	43
	0723	7.5	229
	1322	1.3	40
	1950	8.0	244
13 Tu ◑	0157	1.7	52
	0809	7.2	219
	1406	1.6	49
	2037	7.8	238
14 W	0247	1.8	55
	0902	6.9	210
	1456	1.9	58
	2129	7.7	235
15 Th	0344	1.9	58
	1002	6.7	204
	1552	2.0	61
	2227	7.7	235

	Time	Height	
	h m	ft	cm
16 F	0444	1.7	52
	1104	6.9	210
	1654	1.9	58
	2326	7.9	241
17 Sa	0544	1.4	43
	1205	7.2	219
	1756	1.6	49
18 Su	0024	8.3	253
	0641	0.9	27
	1301	7.8	238
	1855	1.1	34
19 M	0118	8.8	268
	0733	0.3	9
	1353	8.5	259
	1950	0.5	15
20 Tu ●	0209	9.3	283
	0822	−0.3	−9
	1442	9.1	277
	2041	0.0	0
21 W	0258	9.8	299
	0910	−0.9	−27
	1529	9.7	296
	2131	−0.5	−15
22 Th	0347	10.1	308
	0957	−1.2	−37
	1617	10.1	308
	2221	−0.8	−24
23 F	0435	10.2	311
	1044	−1.3	−40
	1704	10.3	314
	2310	−0.9	−27
24 Sa	0524	10.0	305
	1131	−1.2	−37
	1753	10.3	314
25 Su	0000	−0.7	−21
	0614	9.6	293
	1220	−0.8	−24
	1843	10.0	305
26 M ◐	0053	−0.3	−9
	0707	9.1	277
	1311	−0.3	−9
	1937	9.5	290
27 Tu	0148	0.2	6
	0803	8.5	259
	1406	0.3	9
	2034	9.0	274
28 W	0249	0.7	21
	0906	7.9	241
	1506	1.0	30
	2136	8.5	259
29 Th	0355	1.0	30
	1013	7.5	229
	1613	1.4	43
	2242	8.2	250
30 F	0505	1.2	37
	1123	7.3	223
	1723	1.7	52
	2348	8.1	247
31 Sa	0611	1.2	37
	1228	7.4	226
	1829	1.6	49

February

	Time	Height	
	h m	ft	cm
1 Su	0047	8.1	247
	0709	1.0	30
	1325	7.7	235
	1926	1.4	43
2 M	0139	8.3	253
	0757	0.7	21
	1413	8.0	244
	2014	1.2	37
3 Tu ○	0225	8.5	259
	0839	0.4	12
	1455	8.4	256
	2056	0.9	27
4 W	0306	8.6	262
	0917	0.2	6
	1534	8.6	262
	2134	0.7	21
5 Th	0344	8.7	265
	0952	0.1	3
	1610	8.8	268
	2210	0.5	15
6 F	0421	8.7	265
	1026	0.0	0
	1645	8.9	271
	2246	0.5	15
7 Sa	0457	8.6	262
	1100	0.1	3
	1720	8.8	268
	2322	0.5	15
8 Su	0533	8.4	256
	1134	0.3	9
	1755	8.7	265
	2358	0.6	18
9 M	0609	8.1	247
	1208	0.6	18
	1831	8.4	256
10 Tu	0036	0.9	27
	0647	7.7	235
	1245	0.9	27
	1909	8.2	250
11 W ◑	0117	1.1	34
	0729	7.3	223
	1325	1.3	40
	1951	7.9	241
12 Th	0203	1.4	43
	0817	7.0	213
	1412	1.6	49
	2041	7.7	235
13 F	0256	1.6	49
	0914	6.8	207
	1509	1.8	55
	2141	7.5	229
14 Sa	0358	1.6	49
	1021	6.8	207
	1615	1.8	55
	2247	7.6	232
15 Su	0505	1.4	43
	1129	7.1	216
	1724	1.5	46
	2353	8.0	244

	Time	Height	
	h m	ft	cm
16 M	0608	0.9	27
	1231	7.7	235
	1830	1.0	30
17 Tu	0053	8.5	259
	0706	0.2	6
	1327	8.5	259
	1929	0.3	9
18 W ●	0148	9.1	277
	0759	−0.4	−12
	1419	9.3	283
	2023	−0.4	−12
19 Th	0240	9.7	296
	0849	−1.0	−30
	1508	9.9	302
	2114	−1.0	−30
20 F	0329	10.1	308
	0937	−1.5	−46
	1556	10.4	317
	2203	−1.3	−40
21 Sa	0417	10.2	311
	1024	−1.6	−49
	1643	10.6	323
	2252	−1.4	−43
22 Su	0506	10.1	308
	1111	−1.5	−46
	1731	10.5	320
	2341	−1.2	−37
23 M	0555	9.7	296
	1159	−1.1	−34
	1820	10.1	308
24 Tu	0031	−0.8	−24
	0646	9.1	277
	1248	−0.4	−12
	1912	9.5	290
25 W ◐	0124	−0.1	−3
	0740	8.4	256
	1342	0.3	9
	2007	8.8	268
26 Th	0221	0.5	15
	0840	7.8	238
	1441	1.0	30
	2109	8.1	247
27 F	0326	1.1	34
	0948	7.3	223
	1548	1.6	49
	2216	7.6	232
28 Sa	0436	1.4	43
	1059	7.0	213
	1702	1.9	58
	2324	7.4	226

March

	Time	Height	
	h m	ft	cm
1 Su	0546	1.4	43
	1206	7.1	216
	1811	1.8	55
2 M	0026	7.5	229
	0646	1.2	37
	1302	7.4	226
	1908	1.5	46
3 Tu	0119	7.7	235
	0734	0.9	27
	1350	7.8	238
	1955	1.2	37
4 W	0204	8.0	244
	0815	0.6	18
	1430	8.2	250
	2035	0.8	24
5 Th ○	0244	8.3	253
	0851	0.3	9
	1507	8.5	259
	2111	0.5	15
6 F	0321	8.5	259
	0925	0.1	3
	1542	8.7	265
	2145	0.2	6
7 Sa	0357	8.6	262
	0958	0.0	0
	1615	8.9	271
	2219	0.1	3
8 Su	0432	8.5	259
	1031	0.0	0
	1649	8.9	271
	2254	0.1	3
9 M	0506	8.4	256
	1104	0.2	6
	1723	8.8	268
	2328	0.2	6
10 Tu	0541	8.1	247
	1138	0.4	12
	1757	8.6	262
11 W	0005	0.4	12
	0618	7.8	238
	1214	0.7	21
	1834	8.3	253
12 Th	0044	0.7	21
	0658	7.5	229
	1255	1.0	30
	1916	8.0	244
13 F ◑	0129	1.0	30
	0745	7.2	219
	1342	1.3	40
	2006	7.7	235
14 Sa	0221	1.2	37
	0841	7.0	213
	1439	1.5	46
	2107	7.5	229
15 Su	0323	1.3	40
	0948	7.0	213
	1547	1.6	49
	2217	7.5	229

	Time	Height	
	h m	ft	cm
16 M	0431	1.2	37
	1058	7.3	223
	1700	1.3	40
	2327	7.8	238
17 Tu	0538	0.8	24
	1204	7.9	241
	1808	0.7	21
18 W	0030	8.3	253
	0640	0.2	6
	1302	8.6	262
	1909	0.0	0
19 Th	0127	8.9	271
	0735	−0.5	−15
	1355	9.4	287
	2004	−0.7	−21
20 F ●	0220	9.5	290
	0826	−1.0	−30
	1445	10.1	308
	2055	−1.3	−40
21 Sa	0310	9.9	302
	0915	−1.4	−43
	1533	10.5	320
	2144	−1.6	−49
22 Su	0358	10.1	308
	1002	−1.5	−46
	1621	10.6	323
	2231	−1.6	−49
23 M	0446	10.0	305
	1049	−1.4	−43
	1708	10.4	317
	2319	−1.4	−43
24 Tu	0535	9.6	293
	1137	−0.9	−27
	1756	9.9	302
25 W	0008	−0.9	−27
	0625	9.0	274
	1226	−0.3	−9
	1847	9.2	280
26 Th	0059	−0.2	−6
	0718	8.4	256
	1318	0.5	15
	1940	8.5	259
27 F ◐	0153	0.5	15
	0816	7.7	235
	1416	1.2	37
	2040	7.8	238
28 Sa	0254	1.1	34
	0920	7.2	219
	1522	1.7	52
	2146	7.3	223
29 Su	0402	1.5	46
	1029	7.0	213
	1634	2.0	61
	2254	7.0	213
30 M	0510	1.6	49
	1134	7.1	216
	1743	1.9	58
	2357	7.1	216
31 Tu	0610	1.5	46
	1230	7.3	223
	1840	1.6	49

Time meridian 90° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.
Heights are referred to the chart datum of soundings.

Puntarenas, Costa Rica, 2015

Times and Heights of High and Low Waters

April

	Time	Height	
	h m	ft	cm
1 W	0050	7.3	223
	0700	1.2	37
	1317	7.7	235
	1926	1.2	37
2 Th	0136	7.6	232
	0741	0.9	27
	1357	8.1	247
	2006	0.8	24
3 F	0216	8.0	244
	0818	0.6	18
	1434	8.4	256
	2042	0.4	12
4 Sa ○	0254	8.2	250
	0853	0.4	12
	1509	8.7	265
	2117	0.1	3
5 Su	0330	8.4	256
	0927	0.2	6
	1544	8.9	271
	2151	−0.1	−3
6 M	0405	8.5	259
	1001	0.2	6
	1618	9.0	274
	2226	−0.2	−6
7 Tu	0441	8.4	256
	1036	0.2	6
	1653	8.9	271
	2302	−0.1	−3
8 W	0517	8.3	253
	1112	0.4	12
	1729	8.7	265
	2339	0.1	3
9 Th	0555	8.0	244
	1150	0.6	18
	1808	8.4	256
10 F	0019	0.3	9
	0636	7.8	238
	1233	0.9	27
	1852	8.1	247
11 Sa ◑	0104	0.6	18
	0724	7.6	232
	1323	1.1	34
	1944	7.8	238
12 Su	0156	0.9	27
	0820	7.4	226
	1422	1.3	40
	2045	7.6	232
13 M	0257	1.1	34
	0925	7.4	226
	1529	1.3	40
	2154	7.5	229
14 Tu	0403	1.0	30
	1033	7.7	235
	1641	1.1	34
	2304	7.8	238
15 W	0511	0.7	21
	1138	8.3	253
	1748	0.6	18

	Time	Height	
	h m	ft	cm
16 Th	0008	8.2	250
	0613	0.3	9
	1237	8.9	271
	1849	−0.1	−3
17 F	0106	8.7	265
	0710	−0.2	−6
	1331	9.5	290
	1944	−0.7	−21
18 Sa ●	0200	9.2	280
	0803	−0.7	−21
	1422	10.1	308
	2035	−1.2	−37
19 Su	0250	9.6	293
	0852	−1.0	−30
	1511	10.4	317
	2124	−1.4	−43
20 M	0339	9.8	299
	0941	−1.0	−30
	1559	10.4	317
	2211	−1.4	−43
21 Tu	0427	9.7	296
	1028	−0.9	−27
	1646	10.1	308
	2258	−1.2	−37
22 W	0515	9.4	287
	1116	−0.5	−15
	1733	9.7	296
	2345	−0.7	−21
23 Th	0604	9.0	274
	1204	0.1	3
	1822	9.0	274
24 F	0034	−0.1	−3
	0655	8.4	256
	1256	0.7	21
	1914	8.3	253
25 Sa ◐	0125	0.5	15
	0750	7.9	241
	1351	1.3	40
	2010	7.7	235
26 Su	0221	1.1	34
	0849	7.5	229
	1452	1.8	55
	2111	7.2	219
27 M	0321	1.5	46
	0952	7.2	219
	1558	2.0	61
	2215	6.9	210
28 Tu	0423	1.7	52
	1052	7.2	219
	1703	2.0	61
	2317	6.9	210
29 W	0522	1.7	52
	1147	7.4	226
	1800	1.7	52
30 Th	0012	7.1	216
	0614	1.6	49
	1235	7.7	235
	1848	1.4	43

May

	Time	Height	
	h m	ft	cm
1 F	0100	7.4	226
	0659	1.3	40
	1318	8.1	247
	1930	0.9	27
2 Sa	0143	7.7	235
	0739	1.1	34
	1357	8.4	256
	2009	0.5	15
3 Su ○	0223	8.0	244
	0818	0.8	24
	1435	8.8	268
	2046	0.2	6
4 M	0301	8.3	253
	0855	0.6	18
	1512	9.0	274
	2123	0.0	0
5 Tu	0338	8.4	256
	0932	0.5	15
	1549	9.1	277
	2200	−0.2	−6
6 W	0416	8.5	259
	1010	0.4	12
	1627	9.1	277
	2238	−0.2	−6
7 Th	0455	8.5	259
	1050	0.5	15
	1706	9.0	274
	2317	−0.1	−3
8 F	0536	8.4	256
	1132	0.6	18
	1749	8.8	268
9 Sa	0000	0.1	3
	0620	8.3	253
	1219	0.8	24
	1836	8.5	259
10 Su	0047	0.4	12
	0710	8.2	250
	1311	1.0	30
	1929	8.2	250
11 M ◑	0139	0.6	18
	0805	8.1	247
	1410	1.1	34
	2029	7.9	241
12 Tu	0237	0.8	24
	0906	8.2	250
	1515	1.1	34
	2134	7.8	238
13 W	0340	0.9	27
	1011	8.3	253
	1622	0.9	27
	2242	7.9	241
14 Th	0445	0.8	24
	1114	8.7	265
	1728	0.6	18
	2346	8.2	250
15 F	0547	0.5	15
	1213	9.1	277
	1829	0.1	3

	Time	Height	
	h m	ft	cm
16 Sa	0045	8.6	262
	0646	0.2	6
	1309	9.6	293
	1924	−0.3	−9
17 Su ●	0140	9.0	274
	0740	−0.1	−3
	1401	9.9	302
	2016	−0.7	−21
18 M	0232	9.3	283
	0832	−0.3	−9
	1450	10.1	308
	2105	−0.9	−27
19 Tu	0321	9.4	287
	0921	−0.3	−9
	1538	10.1	308
	2152	−0.9	−27
20 W	0409	9.4	287
	1009	−0.1	−3
	1625	9.8	299
	2238	−0.7	−21
21 Th	0457	9.3	283
	1056	0.1	3
	1711	9.4	287
	2324	−0.4	−12
22 F	0544	9.0	274
	1144	0.6	18
	1758	8.9	271
23 Sa	0009	0.1	3
	0632	8.6	262
	1232	1.0	30
	1847	8.4	256
24 Su	0056	0.6	18
	0722	8.2	250
	1323	1.5	46
	1937	7.8	238
25 M ◐	0145	1.1	34
	0814	7.9	241
	1417	1.8	55
	2032	7.4	226
26 Tu	0236	1.5	46
	0909	7.6	232
	1515	2.0	61
	2130	7.1	216
27 W	0331	1.8	55
	1004	7.6	232
	1614	2.1	64
	2229	6.9	210
28 Th	0426	2.0	61
	1057	7.6	232
	1711	1.9	58
	2325	7.0	213
29 F	0520	1.9	58
	1148	7.8	238
	1803	1.6	49
30 Sa	0017	7.2	219
	0610	1.8	55
	1234	8.1	247
	1849	1.3	40
31 Su	0105	7.5	229
	0657	1.6	49
	1318	8.5	259
	1933	0.9	27

June

	Time	Height	
	h m	ft	cm
1 M	0149	7.9	241
	0740	1.3	40
	1400	8.8	268
	2014	0.5	15
2 Tu ○	0231	8.2	250
	0823	1.0	30
	1441	9.1	277
	2054	0.1	3
3 W	0312	8.5	259
	0905	0.7	21
	1522	9.3	283
	2135	−0.1	−3
4 Th	0353	8.8	268
	0948	0.6	18
	1604	9.4	287
	2216	−0.2	−6
5 F	0435	8.9	271
	1032	0.4	12
	1647	9.4	287
	2259	−0.2	−6
6 Sa	0519	9.0	274
	1118	0.4	12
	1733	9.2	280
	2343	−0.1	−3
7 Su	0605	9.0	274
	1207	0.5	15
	1822	9.0	274
8 M	0031	0.0	0
	0655	9.0	274
	1259	0.7	21
	1914	8.7	265
9 Tu ◑	0122	0.3	9
	0749	8.9	271
	1356	0.8	24
	2012	8.4	256
10 W	0217	0.6	18
	0847	8.9	271
	1458	0.9	27
	2115	8.1	247
11 Th	0318	0.8	24
	0948	8.9	271
	1603	0.9	27
	2220	8.0	244
12 F	0421	0.9	27
	1051	9.0	274
	1708	0.8	24
	2325	8.1	247
13 Sa	0524	0.9	27
	1151	9.2	280
	1810	0.5	15
14 Su	0026	8.3	253
	0625	0.8	24
	1249	9.4	287
	1907	0.2	6
15 M	0123	8.6	262
	0722	0.6	18
	1342	9.6	293
	2000	−0.1	−3

	Time	Height	
	h m	ft	cm
16 Tu ●	0216	8.9	271
	0815	0.5	15
	1432	9.7	296
	2049	−0.2	−6
17 W	0306	9.1	277
	0905	0.4	12
	1520	9.7	296
	2135	−0.3	−9
18 Th	0353	9.2	280
	0952	0.5	15
	1606	9.5	290
	2219	−0.2	−6
19 F	0438	9.2	280
	1037	0.6	18
	1650	9.3	283
	2301	0.0	0
20 Sa	0522	9.0	274
	1122	0.8	24
	1734	8.9	271
	2343	0.3	9
21 Su	0606	8.8	268
	1206	1.1	34
	1818	8.5	259
22 M	0025	0.6	18
	0650	8.5	259
	1252	1.4	43
	1903	8.0	244
23 Tu	0108	1.0	30
	0736	8.3	253
	1339	1.7	52
	1951	7.6	232
24 W ◐	0152	1.5	46
	0823	8.0	244
	1428	1.9	58
	2042	7.3	223
25 Th	0240	1.8	55
	0912	7.8	238
	1522	2.1	64
	2137	7.0	213
26 F	0331	2.1	64
	1004	7.8	238
	1617	2.0	61
	2234	7.0	213
27 Sa	0425	2.2	67
	1057	7.9	241
	1713	1.9	58
	2331	7.1	216
28 Su	0520	2.1	64
	1149	8.1	247
	1806	1.6	49
29 M	0024	7.3	223
	0613	1.9	58
	1239	8.4	256
	1856	1.2	37
30 Tu	0114	7.7	235
	0704	1.6	49
	1326	8.7	265
	1942	0.7	21

Time meridian 90° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.
Heights are referred to the chart datum of soundings.

Puntarenas, Costa Rica, 2015

Times and Heights of High and Low Waters

July

	Time	Height	
	h m	ft	cm
1 W ○	0201	8.2	250
	0753	1.2	37
	1413	9.1	277
	2027	0.3	9
2 Th	0246	8.7	265
	0840	0.8	24
	1458	9.4	287
	2111	−0.1	−3
3 F	0330	9.1	277
	0927	0.4	12
	1544	9.7	296
	2155	−0.4	−12
4 Sa	0415	9.5	290
	1014	0.1	3
	1630	9.8	299
	2240	−0.5	−15
5 Su	0500	9.7	296
	1102	0.0	0
	1717	9.7	296
	2325	−0.5	−15
6 M	0548	9.8	299
	1152	0.0	0
	1806	9.5	290
7 Tu	0013	−0.3	−9
	0637	9.7	296
	1244	0.2	6
	1858	9.1	277
8 W ◑	0103	0.0	0
	0729	9.6	293
	1339	0.4	12
	1954	8.7	265
9 Th	0157	0.4	12
	0826	9.3	283
	1438	0.7	21
	2054	8.3	253
10 F	0256	0.8	24
	0926	9.1	277
	1542	0.9	27
	2159	8.1	247
11 Sa	0359	1.1	34
	1029	8.9	271
	1648	1.0	30
	2306	8.0	244
12 Su	0504	1.3	40
	1132	8.9	271
	1753	0.9	27
13 M	0010	8.1	247
	0609	1.3	40
	1232	8.9	271
	1853	0.7	21
14 Tu	0109	8.3	253
	0709	1.2	37
	1327	9.1	277
	1946	0.5	15
15 W ●	0203	8.6	262
	0802	1.0	30
	1418	9.2	280
	2034	0.3	9

	Time	Height	
	h m	ft	cm
16 Th	0251	8.8	268
	0851	0.9	27
	1504	9.2	280
	2118	0.1	3
17 F	0336	9.0	274
	0936	0.8	24
	1547	9.2	280
	2159	0.1	3
18 Sa	0417	9.1	277
	1017	0.8	24
	1629	9.1	277
	2237	0.2	6
19 Su	0457	9.1	277
	1058	0.8	24
	1709	8.9	271
	2315	0.3	9
20 M	0537	9.0	274
	1138	1.0	30
	1749	8.6	262
	2352	0.6	18
21 Tu	0616	8.8	268
	1218	1.2	37
	1829	8.2	250
22 W	0030	0.9	27
	0656	8.5	259
	1259	1.4	43
	1911	7.8	238
23 Th ◐	0110	1.3	40
	0737	8.3	253
	1343	1.7	52
	1956	7.4	226
24 F	0152	1.7	52
	0822	8.0	244
	1432	1.9	58
	2047	7.1	216
25 Sa	0240	2.0	61
	0912	7.8	238
	1525	2.0	61
	2143	6.9	210
26 Su	0333	2.2	67
	1007	7.8	238
	1623	2.0	61
	2244	6.9	210
27 M	0433	2.2	67
	1105	7.9	241
	1723	1.8	55
	2344	7.2	219
28 Tu	0534	2.0	61
	1202	8.2	250
	1819	1.4	43
29 W	0040	7.6	232
	0632	1.6	49
	1256	8.6	262
	1911	0.8	24
30 Th	0131	8.2	250
	0727	1.1	34
	1347	9.1	277
	2000	0.3	9
31 F ○	0220	8.9	271
	0818	0.5	15
	1436	9.5	290
	2047	−0.3	−9

August

	Time	Height	
	h m	ft	cm
1 Sa	0306	9.5	290
	0908	0.0	0
	1523	9.9	302
	2133	−0.7	−21
2 Su	0352	10.0	305
	0956	−0.4	−12
	1611	10.1	308
	2219	−0.9	−27
3 M	0439	10.3	314
	1044	−0.6	−18
	1658	10.1	308
	2305	−0.9	−27
4 Tu	0526	10.4	317
	1133	−0.6	−18
	1747	9.9	302
	2353	−0.7	−21
5 W	0615	10.2	311
	1224	−0.3	−9
	1839	9.5	290
6 Th ◑	0043	−0.3	−9
	0707	9.9	302
	1318	0.1	3
	1933	8.9	271
7 F	0136	0.2	6
	0803	9.4	287
	1416	0.5	15
	2033	8.4	256
8 Sa	0234	0.8	24
	0903	9.0	274
	1520	0.9	27
	2139	7.9	241
9 Su	0339	1.3	40
	1008	8.6	262
	1628	1.2	37
	2248	7.7	235
10 M	0448	1.6	49
	1115	8.4	256
	1737	1.2	37
	2356	7.8	238
11 Tu	0557	1.7	52
	1218	8.4	256
	1839	1.1	34
12 W	0056	8.0	244
	0659	1.5	46
	1314	8.5	259
	1932	0.8	24
13 Th	0148	8.3	253
	0751	1.3	40
	1403	8.7	265
	2018	0.6	18
14 F ●	0234	8.6	262
	0836	1.0	30
	1447	8.8	268
	2058	0.4	12
15 Sa	0315	8.9	271
	0917	0.8	24
	1527	8.9	271
	2135	0.3	9

	Time	Height	
	h m	ft	cm
16 Su	0353	9.0	274
	0955	0.7	21
	1605	8.9	271
	2210	0.2	6
17 M	0429	9.1	277
	1031	0.6	18
	1642	8.8	268
	2245	0.3	9
18 Tu	0505	9.1	277
	1107	0.6	18
	1719	8.6	262
	2320	0.5	15
19 W	0540	8.9	271
	1144	0.8	24
	1756	8.3	253
	2355	0.8	24
20 Th	0616	8.7	265
	1222	1.0	30
	1835	7.9	241
21 F	0031	1.1	34
	0655	8.4	256
	1302	1.3	40
	1916	7.5	229
22 Sa ◐	0111	1.5	46
	0737	8.0	244
	1347	1.6	49
	2003	7.2	219
23 Su	0157	1.9	58
	0825	7.8	238
	1438	1.8	55
	2058	6.9	210
24 M	0251	2.1	64
	0922	7.6	232
	1538	1.9	58
	2201	6.9	210
25 Tu	0353	2.2	67
	1025	7.6	232
	1641	1.8	55
	2306	7.1	216
26 W	0501	2.0	61
	1130	7.9	241
	1744	1.4	43
27 Th	0008	7.7	235
	0605	1.5	46
	1229	8.4	256
	1841	0.8	24
28 F	0103	8.4	256
	0704	0.8	24
	1323	9.0	274
	1933	0.2	6
29 Sa ○	0153	9.1	277
	0757	0.1	3
	1414	9.5	290
	2022	−0.5	−15
30 Su	0242	9.8	299
	0847	−0.5	−15
	1503	10.0	305
	2109	−1.0	−30
31 M	0329	10.4	317
	0936	−1.0	−30
	1551	10.3	314
	2156	−1.2	−37

September

	Time	Height	
	h m	ft	cm
1 Tu	0416	10.7	326
	1024	−1.2	−37
	1638	10.3	314
	2243	−1.2	−37
2 W	0503	10.7	326
	1113	−1.1	−34
	1727	10.0	305
	2331	−0.9	−27
3 Th	0552	10.4	317
	1203	−0.8	−24
	1818	9.6	293
4 F	0021	−0.4	−12
	0643	9.9	302
	1255	−0.2	−6
	1912	8.9	271
5 Sa ◑	0114	0.2	6
	0739	9.3	283
	1352	0.4	12
	2012	8.3	253
6 Su	0213	0.9	27
	0840	8.6	262
	1456	1.0	30
	2118	7.8	238
7 M	0320	1.5	46
	0947	8.1	247
	1606	1.3	40
	2229	7.5	229
8 Tu	0433	1.8	55
	1056	7.9	241
	1716	1.4	43
	2338	7.6	232
9 W	0545	1.8	55
	1201	7.9	241
	1819	1.3	40
10 Th	0037	7.8	238
	0645	1.6	49
	1257	8.0	244
	1912	1.1	34
11 F	0127	8.2	250
	0735	1.3	40
	1344	8.3	253
	1955	0.8	24
12 Sa	0210	8.5	259
	0817	1.0	30
	1426	8.5	259
	2033	0.6	18
13 Su ●	0248	8.8	268
	0854	0.7	21
	1504	8.7	265
	2108	0.4	12
14 M	0324	9.0	274
	0929	0.4	12
	1540	8.8	268
	2141	0.3	9
15 Tu	0358	9.1	277
	1003	0.3	9
	1615	8.7	265
	2214	0.3	9

	Time	Height	
	h m	ft	cm
16 W	0432	9.1	277
	1037	0.3	9
	1651	8.6	262
	2248	0.5	15
17 Th	0506	9.0	274
	1112	0.4	12
	1726	8.3	253
	2322	0.7	21
18 F	0541	8.7	265
	1149	0.7	21
	1803	8.0	244
	2358	1.0	30
19 Sa	0618	8.4	256
	1227	1.0	30
	1843	7.6	232
20 Su	0038	1.4	43
	0659	8.1	247
	1310	1.3	40
	1928	7.3	223
21 M ◐	0124	1.7	52
	0747	7.7	235
	1400	1.6	49
	2022	7.1	216
22 Tu	0218	2.0	61
	0845	7.5	229
	1459	1.7	52
	2125	7.1	216
23 W	0324	2.0	61
	0952	7.5	229
	1605	1.6	49
	2233	7.3	223
24 Th	0434	1.8	55
	1100	7.7	235
	1711	1.3	40
	2337	7.9	241
25 F	0541	1.2	37
	1203	8.2	250
	1811	0.7	21
26 Sa	0035	8.6	262
	0641	0.5	15
	1300	8.8	268
	1906	0.1	3
27 Su ○	0127	9.4	287
	0736	−0.2	−6
	1352	9.4	287
	1957	−0.5	−15
28 M	0217	10.1	308
	0826	−0.9	−27
	1442	9.9	302
	2046	−1.0	−30
29 Tu	0305	10.6	323
	0915	−1.3	−40
	1530	10.2	311
	2133	−1.2	−37
30 W	0352	10.8	329
	1003	−1.5	−46
	1618	10.2	311
	2221	−1.2	−37

Time meridian 90° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.
Heights are referred to the chart datum of soundings.

Puntarenas, Costa Rica, 2015

Times and Heights of High and Low Waters

October

	Time	Height	
	h m	ft	cm
1 Th	0440	10.7	326
	1051	−1.3	−40
	1707	10.0	305
	2310	−0.9	−27
2 F	0529	10.4	317
	1141	−0.9	−27
	1758	9.5	290
3 Sa	0000	−0.3	−9
	0620	9.8	299
	1232	−0.3	−9
	1852	8.9	271
4 Su ◑	0053	0.4	12
	0715	9.0	274
	1328	0.4	12
	1950	8.3	253
5 M	0152	1.1	34
	0815	8.3	253
	1429	1.0	30
	2055	7.8	238
6 Tu	0259	1.7	52
	0922	7.7	235
	1537	1.4	43
	2204	7.5	229
7 W	0412	1.9	58
	1031	7.5	229
	1646	1.6	49
	2311	7.5	229
8 Th	0523	1.9	58
	1136	7.5	229
	1749	1.6	49
9 F	0009	7.8	238
	0622	1.7	52
	1232	7.6	232
	1841	1.4	43
10 Sa	0058	8.1	247
	0710	1.3	40
	1319	7.9	241
	1924	1.1	34
11 Su	0140	8.4	256
	0750	1.0	30
	1400	8.2	250
	2002	0.9	27
12 M ●	0217	8.7	265
	0827	0.6	18
	1438	8.4	256
	2037	0.7	21
13 Tu	0252	8.9	271
	0901	0.3	9
	1514	8.6	262
	2111	0.6	18
14 W	0327	9.1	277
	0935	0.2	6
	1549	8.6	262
	2145	0.5	15
15 Th	0401	9.1	277
	1009	0.1	3
	1624	8.6	262
	2219	0.6	18

	Time	Height	
	h m	ft	cm
16 F	0436	9.0	274
	1044	0.2	6
	1700	8.4	256
	2254	0.8	24
17 Sa	0511	8.8	268
	1121	0.4	12
	1738	8.2	250
	2332	1.0	30
18 Su	0549	8.5	259
	1200	0.6	18
	1818	7.9	241
19 M	0013	1.3	40
	0631	8.2	250
	1243	0.9	27
	1903	7.7	235
20 Tu ◐	0100	1.5	46
	0719	7.9	241
	1332	1.2	37
	1956	7.5	229
21 W	0156	1.7	52
	0817	7.6	232
	1429	1.4	43
	2058	7.5	229
22 Th	0301	1.8	55
	0924	7.5	229
	1533	1.4	43
	2204	7.8	238
23 F	0411	1.5	46
	1033	7.7	235
	1639	1.2	37
	2308	8.2	250
24 Sa	0518	1.0	30
	1138	8.1	247
	1742	0.7	21
25 Su	0007	8.9	271
	0619	0.4	12
	1237	8.7	265
	1839	0.2	6
26 M	0102	9.6	293
	0715	−0.3	−9
	1331	9.2	280
	1933	−0.3	−9
27 Tu ○	0153	10.2	311
	0806	−0.9	−27
	1422	9.7	296
	2023	−0.7	−21
28 W	0242	10.6	323
	0856	−1.3	−40
	1511	10.0	305
	2112	−0.9	−27
29 Th	0331	10.7	326
	0944	−1.4	−43
	1600	10.1	308
	2201	−0.8	−24
30 F	0419	10.6	323
	1032	−1.2	−37
	1649	9.9	302
	2250	−0.5	−15
31 Sa	0507	10.2	311
	1120	−0.9	−27
	1739	9.5	290
	2340	0.0	0

November

	Time	Height	
	h m	ft	cm
1 Su	0558	9.6	293
	1210	−0.3	−9
	1831	9.0	274
2 M	0033	0.6	18
	0650	8.9	271
	1302	0.4	12
	1927	8.4	256
3 Tu ◑	0129	1.2	37
	0747	8.2	250
	1358	1.0	30
	2027	8.0	244
4 W	0232	1.7	52
	0849	7.6	232
	1500	1.5	46
	2130	7.7	235
5 Th	0339	2.0	61
	0955	7.2	219
	1603	1.8	55
	2233	7.6	232
6 F	0446	2.0	61
	1059	7.2	219
	1705	1.8	55
	2330	7.7	235
7 Sa	0545	1.8	55
	1156	7.3	223
	1758	1.7	52
8 Su	0020	8.0	244
	0635	1.5	46
	1245	7.5	229
	1845	1.5	46
9 M	0103	8.3	253
	0717	1.1	34
	1329	7.8	238
	1926	1.3	40
10 Tu	0143	8.6	262
	0756	0.8	24
	1409	8.1	247
	2004	1.1	34
11 W ●	0220	8.9	271
	0832	0.4	12
	1447	8.3	253
	2040	0.9	27
12 Th	0257	9.1	277
	0908	0.2	6
	1524	8.5	259
	2117	0.8	24
13 F	0333	9.2	280
	0944	0.1	3
	1601	8.6	262
	2154	0.7	21
14 Sa	0410	9.1	277
	1021	0.0	0
	1638	8.6	262
	2232	0.8	24
15 Su	0448	9.0	274
	1059	0.1	3
	1717	8.5	259
	2312	0.9	27

	Time	Height	
	h m	ft	cm
16 M	0528	8.8	268
	1138	0.3	9
	1759	8.4	256
	2356	1.0	30
17 Tu	0611	8.5	259
	1222	0.6	18
	1845	8.2	250
18 W	0044	1.2	37
	0700	8.2	250
	1310	0.8	24
	1936	8.1	247
19 Th ◐	0139	1.4	43
	0756	7.9	241
	1404	1.0	30
	2034	8.2	250
20 F	0241	1.4	43
	0859	7.7	235
	1505	1.1	34
	2137	8.3	253
21 Sa	0348	1.3	40
	1007	7.8	238
	1609	1.1	34
	2240	8.6	262
22 Su	0454	0.9	27
	1113	8.0	244
	1713	0.8	24
	2341	9.1	277
23 M	0557	0.4	12
	1214	8.5	259
	1814	0.5	15
24 Tu	0038	9.6	293
	0655	−0.1	−3
	1311	8.9	271
	1911	0.1	3
25 W ○	0132	10.0	305
	0748	−0.6	−18
	1404	9.3	283
	2004	−0.2	−6
26 Th	0223	10.3	314
	0839	−0.9	−27
	1455	9.6	293
	2055	−0.4	−12
27 F	0312	10.4	317
	0927	−1.0	−30
	1544	9.7	296
	2144	−0.3	−9
28 Sa	0401	10.2	311
	1014	−0.9	−27
	1633	9.7	296
	2233	−0.1	−3
29 Su	0448	9.9	302
	1101	−0.7	−21
	1721	9.4	287
	2322	0.2	6
30 M	0536	9.4	287
	1148	−0.2	−6
	1810	9.1	277

December

	Time	Height	
	h m	ft	cm
1 Tu	0011	0.7	21
	0625	8.8	268
	1235	0.3	9
	1901	8.7	265
2 W	0103	1.2	37
	0717	8.2	250
	1324	0.9	27
	1953	8.2	250
3 Th ◑	0157	1.7	52
	0811	7.6	232
	1416	1.4	43
	2048	7.9	241
4 F	0255	2.0	61
	0909	7.2	219
	1511	1.8	55
	2144	7.7	235
5 Sa	0356	2.1	64
	1010	7.0	213
	1609	2.0	61
	2240	7.7	235
6 Su	0456	2.0	61
	1109	7.0	213
	1705	2.1	64
	2333	7.8	238
7 M	0550	1.8	55
	1204	7.1	216
	1757	2.0	61
8 Tu	0021	8.0	244
	0639	1.5	46
	1253	7.4	226
	1845	1.8	55
9 W	0106	8.3	253
	0722	1.1	34
	1338	7.7	235
	1929	1.5	46
10 Th	0148	8.6	262
	0803	0.7	21
	1419	8.1	247
	2011	1.2	37
11 F ●	0228	8.9	271
	0842	0.3	9
	1459	8.4	256
	2052	1.0	30
12 Sa	0308	9.1	277
	0921	0.1	3
	1539	8.6	262
	2132	0.7	21
13 Su	0348	9.3	283
	0959	−0.1	−3
	1618	8.8	268
	2214	0.6	18
14 M	0428	9.3	283
	1039	−0.1	−3
	1659	8.9	271
	2256	0.5	15
15 Tu	0511	9.2	280
	1120	−0.1	−3
	1742	9.0	274
	2341	0.6	18

	Time	Height	
	h m	ft	cm
16 W	0555	8.9	271
	1204	0.1	3
	1827	9.0	274
17 Th	0030	0.7	21
	0644	8.7	265
	1251	0.3	9
	1917	8.9	271
18 F ◐	0123	0.8	24
	0737	8.3	253
	1342	0.6	18
	2011	8.8	268
19 Sa	0221	1.0	30
	0836	8.0	244
	1439	0.8	24
	2111	8.7	265
20 Su	0324	1.0	30
	0941	7.9	241
	1542	1.0	30
	2214	8.8	268
21 M	0431	0.9	27
	1048	7.9	241
	1647	1.0	30
	2317	9.0	274
22 Tu	0536	0.7	21
	1154	8.1	247
	1752	0.9	27
23 W	0018	9.2	280
	0637	0.3	9
	1254	8.5	259
	1853	0.6	18
24 Th	0115	9.5	290
	0733	−0.1	−3
	1350	8.8	268
	1949	0.4	12
25 F ○	0208	9.7	296
	0825	−0.4	−12
	1442	9.2	280
	2042	0.2	6
26 Sa	0258	9.8	299
	0913	−0.6	−18
	1531	9.4	287
	2131	0.1	3
27 Su	0345	9.8	299
	0959	−0.6	−18
	1617	9.5	290
	2218	0.2	6
28 M	0431	9.6	293
	1042	−0.5	−15
	1702	9.4	287
	2303	0.4	12
29 Tu	0515	9.3	283
	1125	−0.2	−6
	1747	9.2	280
	2348	0.6	18
30 W	0600	8.8	268
	1207	0.2	6
	1831	8.9	271
31 Th	0033	1.0	30
	0644	8.3	253
	1249	0.7	21
	1915	8.5	259

Time meridian 90° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.
Heights are referred to the chart datum of soundings.

La Union, El Salvador, 2015

Times and Heights of High and Low Waters

January

	Time	Height	
	h m	ft	cm
1 Th	0528	1.1	34
	1157	8.1	247
	1744	1.5	46
2 F	0026	9.2	280
	0631	1.0	30
	1304	8.2	250
	1847	1.4	43
3 Sa	0125	9.3	283
	0726	0.8	24
	1403	8.4	256
	1943	1.2	37
4 Su ○	0217	9.4	287
	0816	0.5	15
	1454	8.7	265
	2032	1.0	30
5 M	0303	9.5	290
	0900	0.3	9
	1538	8.9	271
	2117	0.9	27
6 Tu	0344	9.6	293
	0940	0.1	3
	1617	9.1	277
	2159	0.8	24
7 W	0422	9.5	290
	1018	0.1	3
	1653	9.2	280
	2238	0.8	24
8 Th	0458	9.4	287
	1055	0.2	6
	1728	9.2	280
	2316	0.8	24
9 F	0534	9.2	280
	1131	0.4	12
	1803	9.1	277
	2354	1.0	30
10 Sa	0610	9.0	274
	1206	0.6	18
	1839	9.0	274
11 Su	0032	1.2	37
	0648	8.6	262
	1243	1.0	30
	1917	8.9	271
12 M	0112	1.5	46
	0729	8.3	253
	1321	1.3	40
	1958	8.7	265
13 Tu ◑	0155	1.7	52
	0812	7.9	241
	1403	1.6	49
	2043	8.5	259
14 W	0244	1.9	58
	0901	7.6	232
	1451	1.9	58
	2133	8.5	259
15 Th	0338	2.0	61
	0956	7.4	226
	1547	2.1	64
	2228	8.5	259

	Time	Height	
	h m	ft	cm
16 F	0439	1.8	55
	1056	7.5	229
	1651	2.1	64
	2327	8.7	265
17 Sa	0541	1.5	46
	1201	7.7	235
	1756	1.8	55
18 Su	0028	9.1	277
	0641	0.9	27
	1305	8.2	250
	1859	1.2	37
19 M	0128	9.5	290
	0736	0.3	9
	1405	8.9	271
	1956	0.6	18
20 Tu ●	0224	10.0	305
	0827	−0.4	−12
	1500	9.6	293
	2049	−0.1	−3
21 W	0317	10.5	320
	0916	−1.0	−30
	1551	10.2	311
	2140	−0.7	−21
22 Th	0408	10.8	329
	1004	−1.4	−43
	1641	10.7	326
	2230	−1.0	−30
23 F	0458	10.9	332
	1051	−1.5	−46
	1730	10.9	332
	2319	−1.1	−34
24 Sa	0547	10.7	326
	1138	−1.4	−43
	1819	10.9	332
25 Su	0009	−0.9	−27
	0636	10.3	314
	1226	−1.0	−30
	1908	10.7	326
26 M ◐	0100	−0.5	−15
	0727	9.7	296
	1316	−0.4	−12
	2000	10.3	314
27 Tu	0153	0.1	3
	0820	9.1	277
	1408	0.3	9
	2054	9.8	299
28 W	0250	0.7	21
	0917	8.4	256
	1506	1.0	30
	2152	9.2	280
29 Th	0353	1.2	37
	1021	7.9	241
	1610	1.6	49
	2255	8.8	268
30 F	0501	1.5	46
	1133	7.7	235
	1720	1.9	58
31 Sa	0001	8.6	262
	0608	1.5	46
	1245	7.7	235
	1828	1.9	58

February

	Time	Height	
	h m	ft	cm
1 Su	0103	8.6	262
	0707	1.3	40
	1347	7.9	241
	1927	1.7	52
2 M	0157	8.7	265
	0757	1.0	30
	1438	8.3	253
	2016	1.4	43
3 Tu ○	0244	8.9	271
	0840	0.7	21
	1520	8.6	262
	2100	1.1	34
4 W	0324	9.1	277
	0920	0.5	15
	1556	8.9	271
	2140	0.8	24
5 Th	0400	9.2	280
	0956	0.3	9
	1630	9.2	280
	2217	0.7	21
6 F	0435	9.2	280
	1030	0.2	6
	1703	9.3	283
	2252	0.6	18
7 Sa	0509	9.2	280
	1104	0.3	9
	1736	9.3	283
	2328	0.6	18
8 Su	0544	9.0	274
	1138	0.4	12
	1809	9.3	283
9 M	0003	0.7	21
	0620	8.7	265
	1212	0.6	18
	1845	9.2	280
10 Tu	0040	0.9	27
	0657	8.4	256
	1248	0.9	27
	1923	9.0	274
11 W ◑	0121	1.1	34
	0737	8.1	247
	1328	1.2	37
	2005	8.8	268
12 Th	0205	1.4	43
	0823	7.7	235
	1414	1.5	46
	2053	8.6	262
13 F	0257	1.5	46
	0916	7.5	229
	1509	1.8	55
	2148	8.5	259
14 Sa	0356	1.6	49
	1018	7.5	229
	1614	1.9	58
	2250	8.6	262
15 Su	0502	1.4	43
	1126	7.7	235
	1724	1.6	49
	2356	8.9	271

	Time	Height	
	h m	ft	cm
16 M	0607	0.9	27
	1235	8.2	250
	1833	1.1	34
17 Tu	0101	9.3	283
	0708	0.2	6
	1340	9.0	274
	1935	0.4	12
18 W ●	0201	9.9	302
	0803	−0.5	−15
	1438	9.8	299
	2031	−0.4	−12
19 Th	0258	10.4	317
	0855	−1.1	−34
	1532	10.5	320
	2123	−1.0	−30
20 F	0350	10.7	326
	0944	−1.6	−49
	1622	11.0	335
	2213	−1.4	−43
21 Sa	0440	10.8	329
	1032	−1.7	−52
	1710	11.3	344
	2302	−1.5	−46
22 Su	0529	10.7	326
	1119	−1.6	−49
	1758	11.2	341
	2350	−1.3	−40
23 M	0617	10.3	314
	1206	−1.2	−37
	1846	10.9	332
24 Tu	0039	−0.8	−24
	0706	9.7	296
	1254	−0.5	−15
	1936	10.3	314
25 W ◐	0130	−0.2	−6
	0757	9.0	274
	1345	0.3	9
	2027	9.6	293
26 Th	0223	0.6	18
	0852	8.3	253
	1440	1.1	34
	2122	8.9	271
27 F	0322	1.2	37
	0954	7.7	235
	1543	1.8	55
	2223	8.4	256
28 Sa	0429	1.7	52
	1105	7.4	226
	1655	2.2	67
	2329	8.1	247

March

	Time	Height	
	h m	ft	cm
1 Su	0538	1.8	55
	1219	7.4	226
	1806	2.2	67
2 M	0034	8.0	244
	0641	1.7	52
	1322	7.7	235
	1907	2.0	61
3 Tu	0131	8.2	250
	0733	1.4	43
	1412	8.1	247
	1957	1.6	49
4 W	0218	8.4	256
	0816	1.1	34
	1453	8.5	259
	2039	1.2	37
5 Th ○	0258	8.7	265
	0854	0.7	21
	1528	8.9	271
	2117	0.8	24
6 F	0335	8.9	271
	0929	0.5	15
	1601	9.2	280
	2152	0.5	15
7 Sa	0410	9.0	274
	1003	0.3	9
	1634	9.4	287
	2227	0.3	9
8 Su	0444	9.1	277
	1036	0.3	9
	1707	9.5	290
	2301	0.3	9
9 M	0519	9.0	274
	1109	0.3	9
	1740	9.5	290
	2336	0.3	9
10 Tu	0554	8.8	268
	1144	0.5	15
	1815	9.4	287
11 W	0012	0.4	12
	0630	8.5	259
	1220	0.7	21
	1852	9.2	280
12 Th	0052	0.6	18
	0710	8.2	250
	1301	1.0	30
	1934	9.0	274
13 F ◑	0135	0.9	27
	0755	7.9	241
	1347	1.3	40
	2021	8.8	268
14 Sa	0226	1.1	34
	0848	7.8	238
	1442	1.5	46
	2117	8.6	262
15 Su	0324	1.2	37
	0950	7.7	235
	1548	1.6	49
	2221	8.5	259

	Time	Height	
	h m	ft	cm
16 M	0429	1.2	37
	1059	8.0	244
	1700	1.4	43
	2329	8.7	265
17 Tu	0537	0.8	24
	1210	8.5	259
	1810	0.9	27
18 W	0036	9.1	277
	0641	0.2	6
	1316	9.2	280
	1915	0.2	6
19 Th	0139	9.6	293
	0739	−0.4	−12
	1416	10.0	305
	2012	−0.6	−18
20 F ●	0237	10.1	308
	0832	−1.1	−34
	1510	10.7	326
	2104	−1.2	−37
21 Sa	0331	10.5	320
	0923	−1.5	−46
	1600	11.2	341
	2154	−1.6	−49
22 Su	0421	10.6	323
	1011	−1.6	−49
	1649	11.4	347
	2242	−1.7	−52
23 M	0510	10.5	320
	1058	−1.4	−43
	1736	11.2	341
	2329	−1.4	−43
24 Tu	0558	10.1	308
	1145	−1.0	−30
	1823	10.8	329
25 W	0017	−0.9	−27
	0646	9.6	293
	1232	−0.3	−9
	1910	10.2	311
26 Th	0105	−0.2	−6
	0735	8.9	271
	1321	0.5	15
	1959	9.4	287
27 F ◐	0155	0.5	15
	0827	8.3	253
	1414	1.3	40
	2050	8.7	265
28 Sa	0250	1.3	40
	0925	7.7	235
	1514	2.0	61
	2147	8.1	247
29 Su	0351	1.8	55
	1031	7.4	226
	1624	2.4	73
	2249	7.7	235
30 M	0459	2.0	61
	1140	7.4	226
	1736	2.4	73
	2353	7.6	232
31 Tu	0604	2.0	61
	1242	7.6	232
	1839	2.2	67

Time meridian 90° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.
Heights are referred to the chart datum of soundings.

La Union, El Salvador, 2015

Times and Heights of High and Low Waters

April

	Time	Height	
	h m	ft	cm
1 W	0052	7.8	238
	0658	1.7	52
	1333	8.0	244
	1929	1.8	55
2 Th	0141	8.0	244
	0743	1.4	43
	1415	8.4	256
	2011	1.3	40
3 F	0225	8.3	253
	0822	1.1	34
	1452	8.9	271
	2049	0.9	27
4 Sa ○	0304	8.6	262
	0858	0.8	24
	1528	9.3	283
	2125	0.5	15
5 Su	0341	8.8	268
	0933	0.5	15
	1602	9.5	290
	2159	0.2	6
6 M	0418	8.9	271
	1007	0.4	12
	1637	9.7	296
	2234	0.1	3
7 Tu	0454	8.9	271
	1042	0.4	12
	1712	9.7	296
	2310	0.0	0
8 W	0531	8.8	268
	1118	0.5	15
	1749	9.6	293
	2348	0.1	3
9 Th	0609	8.6	262
	1157	0.6	18
	1828	9.4	287
10 F	0028	0.3	9
	0650	8.4	256
	1240	0.8	24
	1911	9.2	280
11 Sa ◑	0112	0.5	15
	0737	8.3	253
	1329	1.1	34
	1959	8.9	271
12 Su	0202	0.7	21
	0831	8.2	250
	1425	1.3	40
	2056	8.7	265
13 M	0259	0.9	27
	0932	8.2	250
	1529	1.4	43
	2158	8.6	262
14 Tu	0402	0.9	27
	1039	8.4	256
	1640	1.3	40
	2306	8.7	265
15 W	0509	0.7	21
	1148	8.9	271
	1750	0.8	24

	Time	Height	
	h m	ft	cm
16 Th	0013	8.9	271
	0615	0.3	9
	1253	9.6	293
	1855	0.1	3
17 F	0117	9.3	283
	0715	−0.2	−6
	1353	10.2	311
	1952	−0.5	−15
18 Sa ●	0216	9.8	299
	0809	−0.7	−21
	1447	10.8	329
	2045	−1.1	−34
19 Su	0311	10.1	308
	0901	−1.0	−30
	1538	11.1	338
	2134	−1.4	−43
20 M	0402	10.2	311
	0949	−1.1	−34
	1626	11.2	341
	2222	−1.4	−43
21 Tu	0451	10.1	308
	1037	−0.9	−27
	1713	11.0	335
	2308	−1.2	−37
22 W	0538	9.9	302
	1123	−0.5	−15
	1758	10.6	323
	2354	−0.7	−21
23 Th	0625	9.4	287
	1210	0.1	3
	1844	10.0	305
24 F	0039	−0.1	−3
	0713	8.9	271
	1258	0.8	24
	1929	9.3	283
25 Sa ◐	0126	0.6	18
	0802	8.4	256
	1348	1.5	46
	2017	8.6	262
26 Su	0216	1.2	37
	0854	8.0	244
	1444	2.1	64
	2108	8.1	247
27 M	0311	1.8	55
	0951	7.7	235
	1546	2.5	76
	2204	7.7	235
28 Tu	0411	2.1	64
	1051	7.6	232
	1654	2.5	76
	2302	7.5	229
29 W	0513	2.2	67
	1149	7.8	238
	1757	2.3	70
30 Th	0001	7.6	232
	0610	2.0	61
	1242	8.1	247
	1850	2.0	61

May

	Time	Height	
	h m	ft	cm
1 F	0055	7.8	238
	0659	1.8	55
	1328	8.5	259
	1935	1.5	46
2 Sa	0144	8.1	247
	0742	1.4	43
	1410	9.0	274
	2015	1.0	30
3 Su ○	0229	8.4	256
	0822	1.1	34
	1450	9.4	287
	2053	0.6	18
4 M	0311	8.6	262
	0900	0.8	24
	1529	9.7	296
	2131	0.3	9
5 Tu	0351	8.8	268
	0938	0.6	18
	1608	9.9	302
	2208	0.0	0
6 W	0431	8.9	271
	1016	0.5	15
	1647	10.0	305
	2246	−0.1	−3
7 Th	0511	8.9	271
	1057	0.5	15
	1727	9.9	302
	2326	−0.1	−3
8 F	0553	8.9	271
	1139	0.5	15
	1809	9.8	299
9 Sa	0008	0.0	0
	0637	8.8	268
	1225	0.7	21
	1854	9.5	290
10 Su	0054	0.2	6
	0726	8.8	268
	1315	0.9	27
	1944	9.2	280
11 M ◑	0143	0.4	12
	0820	8.8	268
	1411	1.1	34
	2040	9.0	274
12 Tu	0239	0.6	18
	0919	8.8	268
	1514	1.2	37
	2140	8.8	268
13 W	0340	0.7	21
	1023	9.0	274
	1622	1.1	34
	2245	8.7	265
14 Th	0445	0.7	21
	1128	9.4	287
	1731	0.8	24
	2351	8.8	268
15 F	0550	0.5	15
	1231	9.8	299
	1834	0.4	12

	Time	Height	
	h m	ft	cm
16 Sa	0056	9.0	274
	0651	0.2	6
	1330	10.3	314
	1932	−0.1	−3
17 Su ●	0156	9.3	283
	0747	−0.1	−3
	1425	10.6	323
	2025	−0.6	−18
18 M	0252	9.6	293
	0839	−0.3	−9
	1516	10.9	332
	2114	−0.8	−24
19 Tu	0344	9.7	296
	0929	−0.4	−12
	1604	10.9	332
	2201	−0.9	−27
20 W	0433	9.7	296
	1016	−0.3	−9
	1650	10.7	326
	2246	−0.7	−21
21 Th	0520	9.6	293
	1102	0.1	3
	1734	10.3	314
	2330	−0.3	−9
22 F	0605	9.3	283
	1148	0.5	15
	1817	9.8	299
23 Sa	0014	0.1	3
	0649	9.0	274
	1233	1.1	34
	1900	9.3	283
24 Su	0057	0.7	21
	0734	8.6	262
	1320	1.6	49
	1943	8.7	265
25 M ◐	0142	1.2	37
	0821	8.3	253
	1410	2.1	64
	2029	8.2	250
26 Tu	0230	1.7	52
	0909	8.1	247
	1504	2.4	73
	2118	7.9	241
27 W	0321	2.0	61
	1001	8.0	244
	1604	2.6	79
	2211	7.6	232
28 Th	0417	2.2	67
	1054	8.1	247
	1705	2.5	76
	2307	7.6	232
29 F	0514	2.2	67
	1147	8.3	253
	1802	2.2	67
30 Sa	0004	7.7	235
	0608	2.1	64
	1238	8.7	265
	1852	1.8	55
31 Su	0058	7.9	241
	0658	1.8	55
	1327	9.1	277
	1938	1.3	40

June

	Time	Height	
	h m	ft	cm
1 M	0150	8.2	250
	0744	1.5	46
	1413	9.5	290
	2020	0.8	24
2 Tu ○	0238	8.5	259
	0827	1.1	34
	1457	9.8	299
	2101	0.4	12
3 W	0324	8.8	268
	0910	0.8	24
	1541	10.1	308
	2142	0.0	0
4 Th	0409	9.1	277
	0954	0.5	15
	1624	10.3	314
	2224	−0.2	−6
5 F	0453	9.3	283
	1038	0.4	12
	1708	10.3	314
	2306	−0.4	−12
6 Sa	0539	9.4	287
	1124	0.3	9
	1753	10.2	311
	2351	−0.3	−9
7 Su	0626	9.5	290
	1212	0.4	12
	1841	10.0	305
8 M	0037	−0.2	−6
	0716	9.5	290
	1303	0.6	18
	1931	9.6	293
9 Tu ◑	0127	0.1	3
	0808	9.5	290
	1358	0.8	24
	2025	9.3	283
10 W	0220	0.4	12
	0905	9.5	290
	1459	1.0	30
	2123	9.0	274
11 Th	0319	0.6	18
	1005	9.6	293
	1603	1.1	34
	2225	8.7	265
12 F	0422	0.8	24
	1107	9.7	296
	1710	1.0	30
	2331	8.7	265
13 Sa	0527	0.9	27
	1210	9.8	299
	1814	0.8	24
14 Su	0036	8.7	265
	0629	0.7	21
	1310	10.1	308
	1913	0.4	12
15 M	0139	8.9	271
	0727	0.6	18
	1406	10.3	314
	2007	0.1	3

	Time	Height	
	h m	ft	cm
16 Tu ●	0237	9.1	277
	0821	0.4	12
	1458	10.4	317
	2056	−0.1	−3
17 W	0329	9.3	283
	0910	0.3	9
	1545	10.4	317
	2142	−0.2	−6
18 Th	0417	9.4	287
	0957	0.4	12
	1629	10.3	314
	2225	−0.1	−3
19 F	0501	9.4	287
	1042	0.6	18
	1710	10.1	308
	2307	0.0	0
20 Sa	0543	9.3	283
	1125	0.8	24
	1750	9.7	296
	2348	0.3	9
21 Su	0623	9.1	277
	1207	1.2	37
	1829	9.4	287
22 M	0027	0.7	21
	0703	8.9	271
	1250	1.6	49
	1909	8.9	271
23 Tu	0108	1.1	34
	0744	8.7	265
	1334	1.9	58
	1951	8.5	259
24 W ◐	0149	1.5	46
	0828	8.5	259
	1421	2.3	70
	2036	8.1	247
25 Th	0234	1.9	58
	0914	8.4	256
	1512	2.5	76
	2125	7.8	238
26 F	0323	2.2	67
	1004	8.4	256
	1609	2.5	76
	2218	7.7	235
27 Sa	0418	2.3	70
	1057	8.5	259
	1708	2.4	73
	2315	7.6	232
28 Su	0515	2.3	70
	1151	8.7	265
	1805	2.1	64
29 M	0013	7.8	238
	0612	2.1	64
	1245	9.1	277
	1857	1.6	49
30 Tu	0111	8.1	247
	0706	1.7	52
	1337	9.5	290
	1946	1.0	30

Time meridian 90° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.
Heights are referred to the chart datum of soundings.

La Union, El Salvador, 2015

Times and Heights of High and Low Waters

July

	Time	Height	
	h m	ft	cm
1 W ○	0206	8.5	259
	0757	1.2	37
	1427	9.9	302
	2033	0.5	15
2 Th	0258	9.0	274
	0846	0.7	21
	1516	10.3	314
	2118	0.0	0
3 F	0347	9.4	287
	0933	0.3	9
	1603	10.6	323
	2202	−0.4	−12
4 Sa	0435	9.8	299
	1021	0.0	0
	1650	10.7	326
	2247	−0.7	−21
5 Su	0523	10.1	308
	1109	−0.1	−3
	1738	10.6	323
	2333	−0.7	−21
6 M	0611	10.3	314
	1158	−0.1	−3
	1826	10.4	317
7 Tu	0020	−0.6	−18
	0701	10.3	314
	1249	0.1	3
	1916	10.0	305
8 W ◑	0109	−0.2	−6
	0753	10.2	311
	1342	0.4	12
	2009	9.6	293
9 Th	0202	0.2	6
	0848	10.0	305
	1440	0.8	24
	2105	9.1	277
10 F	0258	0.7	21
	0946	9.8	299
	1542	1.1	34
	2206	8.7	265
11 Sa	0400	1.0	30
	1047	9.7	296
	1648	1.3	40
	2312	8.4	256
12 Su	0506	1.3	40
	1151	9.6	293
	1754	1.3	40
13 M	0020	8.4	256
	0611	1.3	40
	1253	9.7	296
	1855	1.1	34
14 Tu	0126	8.5	259
	0711	1.2	37
	1350	9.8	299
	1950	0.8	24
15 W ●	0224	8.7	265
	0805	1.0	30
	1441	9.9	302
	2038	0.6	18

	Time	Height	
	h m	ft	cm
16 Th	0315	9.0	274
	0854	0.9	27
	1527	10.0	305
	2123	0.4	12
17 F	0400	9.2	280
	0939	0.8	24
	1608	10.0	305
	2204	0.3	9
18 Sa	0440	9.3	283
	1021	0.8	24
	1646	9.9	302
	2243	0.3	9
19 Su	0517	9.4	287
	1101	0.9	27
	1723	9.7	296
	2320	0.5	15
20 M	0553	9.3	283
	1140	1.1	34
	1759	9.4	287
	2357	0.7	21
21 Tu	0630	9.2	280
	1219	1.3	40
	1836	9.1	277
22 W	0033	1.0	30
	0707	9.0	274
	1258	1.6	49
	1915	8.7	265
23 Th ◐	0111	1.4	43
	0747	8.9	271
	1340	1.9	58
	1957	8.3	253
24 F	0152	1.7	52
	0831	8.7	265
	1426	2.2	67
	2042	8.0	244
25 Sa	0237	2.0	61
	0918	8.6	262
	1518	2.4	73
	2134	7.7	235
26 Su	0329	2.2	67
	1011	8.6	262
	1616	2.4	73
	2231	7.6	232
27 M	0428	2.3	70
	1108	8.7	265
	1717	2.2	67
	2332	7.7	235
28 Tu	0532	2.1	64
	1206	9.0	274
	1817	1.7	52
29 W	0035	8.1	247
	0633	1.7	52
	1304	9.4	287
	1913	1.1	34
30 Th	0136	8.6	262
	0730	1.1	34
	1400	9.9	302
	2005	0.5	15
31 F ○	0232	9.2	280
	0824	0.5	15
	1453	10.4	317
	2053	−0.2	−6

August

	Time	Height	
	h m	ft	cm
1 Sa	0324	9.9	302
	0914	−0.1	−3
	1543	10.8	329
	2140	−0.7	−21
2 Su	0414	10.4	317
	1003	−0.5	−15
	1632	11.0	335
	2227	−1.0	−30
3 M	0503	10.8	329
	1052	−0.7	−21
	1720	11.0	335
	2314	−1.1	−34
4 Tu	0552	10.9	332
	1141	−0.7	−21
	1809	10.7	326
5 W	0001	−0.9	−27
	0642	10.9	332
	1231	−0.4	−12
	1859	10.3	314
6 Th ◑	0050	−0.5	−15
	0733	10.6	323
	1323	0.1	3
	1950	9.7	296
7 F	0142	0.1	3
	0826	10.2	311
	1419	0.7	21
	2046	9.1	277
8 Sa	0237	0.7	21
	0924	9.7	296
	1519	1.2	37
	2147	8.6	262
9 Su	0339	1.3	40
	1026	9.4	287
	1625	1.6	49
	2254	8.2	250
10 M	0447	1.7	52
	1132	9.1	277
	1734	1.7	52
11 Tu	0006	8.1	247
	0556	1.8	55
	1236	9.1	277
	1838	1.6	49
12 W	0114	8.2	250
	0658	1.7	52
	1334	9.2	280
	1933	1.3	40
13 Th	0210	8.5	259
	0752	1.4	43
	1424	9.4	287
	2020	1.0	30
14 F ●	0257	8.8	268
	0838	1.2	37
	1507	9.5	290
	2102	0.8	24
15 Sa	0338	9.1	277
	0920	0.9	27
	1546	9.6	293
	2141	0.6	18

	Time	Height	
	h m	ft	cm
16 Su	0414	9.3	283
	0959	0.8	24
	1621	9.6	293
	2217	0.5	15
17 M	0448	9.4	287
	1036	0.7	21
	1655	9.6	293
	2252	0.5	15
18 Tu	0521	9.5	290
	1112	0.8	24
	1729	9.4	287
	2326	0.7	21
19 W	0555	9.4	287
	1148	1.0	30
	1805	9.2	280
20 Th	0000	0.9	27
	0631	9.2	280
	1225	1.2	37
	1842	8.8	268
21 F	0036	1.2	37
	0709	9.0	274
	1304	1.5	46
	1921	8.4	256
22 Sa ◐	0115	1.5	46
	0751	8.8	268
	1347	1.8	55
	2005	8.1	247
23 Su	0159	1.8	55
	0838	8.6	262
	1435	2.0	61
	2055	7.8	238
24 M	0250	2.1	64
	0931	8.5	259
	1532	2.2	67
	2153	7.7	235
25 Tu	0351	2.2	67
	1030	8.6	262
	1635	2.1	64
	2257	7.8	238
26 W	0458	2.0	61
	1133	8.8	268
	1740	1.7	52
27 Th	0004	8.2	250
	0605	1.5	46
	1236	9.3	283
	1841	1.1	34
28 F	0108	8.9	271
	0707	0.9	27
	1335	9.8	299
	1937	0.4	12
29 Sa ○	0207	9.6	293
	0803	0.1	3
	1430	10.4	317
	2029	−0.3	−9
30 Su	0301	10.3	314
	0855	−0.6	−18
	1522	10.8	329
	2118	−0.9	−27
31 M	0352	10.9	332
	0945	−1.1	−34
	1612	11.1	338
	2206	−1.3	−40

September

	Time	Height	
	h m	ft	cm
1 Tu	0441	11.3	344
	1033	−1.3	−40
	1701	11.1	338
	2253	−1.3	−40
2 W	0530	11.4	347
	1122	−1.2	−37
	1750	10.8	329
	2341	−1.1	−34
3 Th	0619	11.1	338
	1211	−0.8	−24
	1839	10.3	314
4 F	0030	−0.5	−15
	0710	10.7	326
	1301	−0.2	−6
	1931	9.7	296
5 Sa ◑	0121	0.2	6
	0803	10.1	308
	1355	0.5	15
	2026	9.0	274
6 Su	0216	0.9	27
	0900	9.5	290
	1453	1.2	37
	2127	8.4	256
7 M	0318	1.6	49
	1002	8.9	271
	1559	1.8	55
	2236	8.0	244
8 Tu	0428	2.0	61
	1109	8.6	262
	1709	2.0	61
	2348	7.9	241
9 W	0540	2.1	64
	1215	8.5	259
	1816	2.0	61
10 Th	0054	8.1	247
	0643	1.9	58
	1313	8.6	262
	1911	1.7	52
11 F	0148	8.4	256
	0735	1.6	49
	1402	8.8	268
	1958	1.4	43
12 Sa	0232	8.7	265
	0819	1.2	37
	1443	9.1	277
	2038	1.1	34
13 Su ●	0309	9.0	274
	0858	0.9	27
	1520	9.3	283
	2114	0.8	24
14 M	0343	9.3	283
	0934	0.7	21
	1554	9.4	287
	2149	0.7	21
15 Tu	0416	9.5	290
	1009	0.5	15
	1628	9.4	287
	2222	0.6	18

	Time	Height	
	h m	ft	cm
16 W	0449	9.6	293
	1044	0.5	15
	1702	9.3	283
	2256	0.7	21
17 Th	0523	9.5	290
	1118	0.6	18
	1737	9.1	277
	2330	0.9	27
18 F	0558	9.4	287
	1154	0.8	24
	1813	8.8	268
19 Sa	0006	1.1	34
	0635	9.2	280
	1232	1.1	34
	1852	8.5	259
20 Su	0045	1.4	43
	0716	8.9	271
	1314	1.3	40
	1935	8.2	250
21 M ◐	0129	1.6	49
	0803	8.7	265
	1401	1.6	49
	2025	8.0	244
22 Tu	0220	1.9	58
	0857	8.5	259
	1456	1.8	55
	2123	7.9	241
23 W	0322	2.0	61
	0958	8.5	259
	1559	1.8	55
	2229	8.1	247
24 Th	0431	1.8	55
	1103	8.7	265
	1706	1.5	46
	2337	8.5	259
25 F	0541	1.3	40
	1209	9.1	277
	1811	1.0	30
26 Sa	0042	9.2	280
	0645	0.6	18
	1311	9.6	293
	1910	0.3	9
27 Su ○	0142	10.0	305
	0742	−0.2	−6
	1408	10.2	311
	2004	−0.4	−12
28 M	0237	10.7	326
	0835	−0.9	−27
	1501	10.7	326
	2055	−1.0	−30
29 Tu	0328	11.2	341
	0925	−1.4	−43
	1552	10.9	332
	2144	−1.3	−40
30 W	0418	11.5	351
	1014	−1.6	−49
	1641	10.9	332
	2232	−1.3	−40

Time meridian 90° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.
Heights are referred to the chart datum of soundings.

La Union, El Salvador, 2015

Times and Heights of High and Low Waters

October

	Time	Height	
	h m	ft	cm
1 Th	0507	11.5	351
	1101	−1.5	−46
	1730	10.7	326
	2320	−1.0	−30
2 F	0556	11.1	338
	1149	−1.0	−30
	1820	10.2	311
3 Sa	0009	−0.4	−12
	0646	10.6	323
	1238	−0.3	−9
	1911	9.6	293
4 Su ◑	0059	0.3	9
	0737	9.9	302
	1329	0.5	15
	2005	9.0	274
5 M	0154	1.1	34
	0833	9.1	277
	1425	1.2	37
	2104	8.4	256
6 Tu	0254	1.8	55
	0932	8.5	259
	1527	1.8	55
	2210	8.0	244
7 W	0404	2.2	67
	1037	8.1	247
	1636	2.2	67
	2318	7.9	241
8 Th	0516	2.3	70
	1142	8.0	244
	1743	2.2	67
9 F	0021	8.0	244
	0619	2.1	64
	1241	8.1	247
	1840	2.0	61
10 Sa	0113	8.3	253
	0711	1.7	52
	1330	8.3	253
	1927	1.7	52
11 Su	0156	8.6	262
	0753	1.3	40
	1412	8.6	262
	2008	1.4	43
12 M ●	0234	9.0	274
	0832	0.9	27
	1450	8.9	271
	2044	1.1	34
13 Tu	0309	9.3	283
	0907	0.6	18
	1526	9.1	277
	2119	0.9	27
14 W	0343	9.5	290
	0942	0.4	12
	1601	9.2	280
	2153	0.8	24
15 Th	0418	9.7	296
	1016	0.3	9
	1637	9.2	280
	2228	0.8	24
16 F	0453	9.7	296
	1051	0.3	9
	1713	9.1	277
	2303	0.8	24
17 Sa	0530	9.5	290
	1128	0.4	12
	1750	8.9	271
	2340	1.0	30
18 Su	0608	9.3	283
	1206	0.6	18
	1830	8.6	262
19 M	0021	1.2	37
	0650	9.1	277
	1248	0.9	27
	1913	8.4	256
20 Tu ◐	0107	1.4	43
	0737	8.8	268
	1335	1.1	34
	2004	8.3	253
21 W	0159	1.6	49
	0830	8.6	262
	1428	1.4	43
	2102	8.3	253
22 Th	0300	1.7	52
	0931	8.5	259
	1529	1.4	43
	2206	8.5	259
23 F	0408	1.5	46
	1037	8.6	262
	1636	1.3	40
	2313	8.9	271
24 Sa	0518	1.1	34
	1143	8.9	271
	1742	0.9	27
25 Su	0017	9.5	290
	0623	0.4	12
	1247	9.3	283
	1844	0.3	9
26 M	0118	10.2	311
	0722	−0.3	−9
	1346	9.8	299
	1940	−0.3	−9
27 Tu ○	0214	10.8	329
	0815	−1.0	−30
	1441	10.3	314
	2033	−0.7	−21
28 W	0306	11.2	341
	0906	−1.4	−43
	1533	10.6	323
	2123	−1.0	−30
29 Th	0356	11.4	347
	0954	−1.5	−46
	1624	10.6	323
	2212	−1.0	−30
30 F	0445	11.3	344
	1041	−1.4	−43
	1713	10.4	317
	2300	−0.7	−21
31 Sa	0533	10.9	332
	1128	−1.0	−30
	1802	10.1	308
	2349	−0.2	−6

November

	Time	Height	
	h m	ft	cm
1 Su	0622	10.3	314
	1215	−0.3	−9
	1851	9.6	293
2 M	0038	0.5	15
	0711	9.6	293
	1303	0.4	12
	1942	9.0	274
3 Tu ◑	0130	1.2	37
	0802	8.9	271
	1354	1.1	34
	2036	8.5	259
4 W	0226	1.8	55
	0856	8.3	253
	1449	1.8	55
	2133	8.1	247
5 Th	0329	2.2	67
	0953	7.9	241
	1550	2.2	67
	2234	8.0	244
6 F	0438	2.4	73
	1054	7.6	232
	1655	2.4	73
	2332	8.0	244
7 Sa	0542	2.3	70
	1153	7.7	235
	1756	2.3	70
8 Su	0025	8.2	250
	0636	1.9	58
	1247	7.9	241
	1847	2.1	64
9 M	0112	8.5	259
	0721	1.5	46
	1334	8.1	247
	1931	1.8	55
10 Tu	0154	8.9	271
	0801	1.1	34
	1417	8.4	256
	2011	1.5	46
11 W ●	0233	9.3	283
	0839	0.7	21
	1457	8.7	265
	2048	1.2	37
12 Th	0312	9.5	290
	0915	0.4	12
	1536	8.9	271
	2125	1.0	30
13 F	0350	9.7	296
	0951	0.2	6
	1615	9.0	274
	2202	0.8	24
14 Sa	0428	9.8	299
	1027	0.1	3
	1653	9.1	277
	2240	0.8	24
15 Su	0507	9.7	296
	1105	0.1	3
	1732	9.0	274
	2320	0.8	24
16 M	0547	9.5	290
	1145	0.2	6
	1814	9.0	274
17 Tu	0003	0.9	27
	0630	9.3	283
	1227	0.4	12
	1859	8.9	271
18 W	0050	1.0	30
	0717	9.0	274
	1314	0.6	18
	1948	8.9	271
19 Th ◐	0143	1.2	37
	0810	8.8	268
	1406	0.9	27
	2044	8.9	271
20 F	0242	1.3	40
	0909	8.6	262
	1504	1.0	30
	2145	9.0	274
21 Sa	0347	1.2	37
	1012	8.5	259
	1608	1.1	34
	2249	9.3	283
22 Su	0455	0.9	27
	1118	8.7	265
	1714	0.9	27
	2353	9.7	296
23 M	0601	0.5	15
	1224	9.0	274
	1819	0.5	15
24 Tu	0055	10.2	311
	0701	−0.1	−3
	1326	9.4	287
	1918	0.1	3
25 W ○	0153	10.6	323
	0756	−0.6	−18
	1424	9.7	296
	2013	−0.2	−6
26 Th	0247	10.9	332
	0847	−1.0	−30
	1518	10.0	305
	2105	−0.5	−15
27 F	0338	11.0	335
	0936	−1.2	−37
	1609	10.2	311
	2154	−0.5	−15
28 Sa	0426	10.9	332
	1022	−1.1	−34
	1657	10.1	308
	2242	−0.3	−9
29 Su	0513	10.6	323
	1108	−0.8	−24
	1744	9.9	302
	2329	0.1	3
30 M	0558	10.1	308
	1152	−0.3	−9
	1830	9.6	293

December

	Time	Height	
	h m	ft	cm
1 Tu	0016	0.6	18
	0643	9.5	290
	1237	0.3	9
	1916	9.1	277
2 W	0104	1.2	37
	0728	8.9	271
	1322	1.0	30
	2002	8.7	265
3 Th ◑	0154	1.7	52
	0815	8.3	253
	1409	1.6	49
	2050	8.4	256
4 F	0248	2.1	64
	0904	7.8	238
	1500	2.0	61
	2141	8.2	250
5 Sa	0347	2.4	73
	0958	7.5	229
	1557	2.4	73
	2235	8.1	247
6 Su	0449	2.4	73
	1055	7.4	226
	1657	2.5	76
	2329	8.2	250
7 M	0548	2.2	67
	1153	7.5	229
	1755	2.4	73
8 Tu	0021	8.4	256
	0640	1.8	55
	1249	7.7	235
	1847	2.2	67
9 W	0111	8.7	265
	0725	1.4	43
	1341	8.0	244
	1934	1.8	55
10 Th	0157	9.1	277
	0807	0.9	27
	1428	8.4	256
	2017	1.4	43
11 F ●	0241	9.4	287
	0847	0.5	15
	1512	8.7	265
	2058	1.1	34
12 Sa	0324	9.7	296
	0926	0.1	3
	1554	9.0	274
	2139	0.8	24
13 Su	0406	9.9	302
	1005	−0.1	−3
	1636	9.3	283
	2221	0.5	15
14 M	0447	9.9	302
	1045	−0.3	−9
	1717	9.4	287
	2304	0.4	12
15 Tu	0530	9.9	302
	1126	−0.3	−9
	1800	9.5	290
	2349	0.4	12
16 W	0614	9.7	296
	1209	−0.2	−6
	1845	9.6	293
17 Th	0036	0.5	15
	0701	9.4	287
	1256	0.0	0
	1934	9.5	290
18 F ◐	0128	0.6	18
	0752	9.1	277
	1346	0.3	9
	2027	9.5	290
19 Sa	0224	0.8	24
	0848	8.8	268
	1441	0.6	18
	2125	9.5	290
20 Su	0326	0.9	27
	0949	8.5	259
	1543	0.9	27
	2226	9.5	290
21 M	0432	0.9	27
	1055	8.4	256
	1649	1.0	30
	2331	9.6	293
22 Tu	0539	0.7	21
	1203	8.5	259
	1756	0.9	27
23 W	0035	9.8	299
	0642	0.3	9
	1310	8.8	268
	1859	0.7	21
24 Th	0135	10.1	308
	0739	−0.1	−3
	1412	9.2	280
	1957	0.4	12
25 F ○	0231	10.3	314
	0831	−0.4	−12
	1507	9.5	290
	2049	0.1	3
26 Sa	0322	10.4	317
	0919	−0.6	−18
	1557	9.7	296
	2139	0.0	0
27 Su	0409	10.4	317
	1004	−0.7	−21
	1643	9.8	299
	2225	0.0	0
28 M	0453	10.2	311
	1047	−0.5	−15
	1726	9.8	299
	2310	0.2	6
29 Tu	0535	9.8	299
	1129	−0.2	−6
	1807	9.6	293
	2353	0.6	18
30 W	0615	9.4	287
	1209	0.2	6
	1846	9.3	283
31 Th	0036	1.0	30
	0654	8.9	271
	1249	0.7	21
	1926	9.0	274

Time meridian 90° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.
Heights are referred to the chart datum of soundings.

Salina Cruz, Mexico, 2015

Times and Heights of High and Low Waters

January

	Time	Height	
	h m	ft	cm
1 Th	0520	0.0	0
	1108	2.6	79
	1711	−0.3	−9
	2351	3.7	113
2 F	0624	0.0	0
	1213	2.6	79
	1810	−0.2	−6
3 Sa	0049	3.7	113
	0723	−0.1	−3
	1315	2.6	79
	1909	−0.1	−3
4 Su ○	0143	3.7	113
	0817	−0.2	−6
	1412	2.7	82
	2005	−0.1	−3
5 M	0234	3.7	113
	0905	−0.3	−9
	1505	2.8	85
	2057	−0.1	−3
6 Tu	0320	3.7	113
	0950	−0.4	−12
	1553	2.9	88
	2146	−0.1	−3
7 W	0404	3.7	113
	1031	−0.4	−12
	1637	3.0	91
	2232	−0.1	−3
8 Th	0446	3.6	110
	1110	−0.4	−12
	1719	3.1	94
	2316	−0.1	−3
9 F	0526	3.5	107
	1148	−0.4	−12
	1800	3.1	94
	2359	0.0	0
10 Sa	0605	3.3	101
	1224	−0.4	−12
	1840	3.2	98
11 Su	0042	0.1	3
	0644	3.2	98
	1300	−0.3	−9
	1920	3.2	98
12 M	0125	0.2	6
	0723	2.9	88
	1335	−0.2	−6
	2000	3.2	98
13 Tu ◑	0211	0.3	9
	0802	2.7	82
	1411	−0.1	−3
	2042	3.2	98
14 W	0258	0.4	12
	0844	2.5	76
	1450	0.0	0
	2126	3.3	101
15 Th	0350	0.4	12
	0931	2.4	73
	1532	0.0	0
	2215	3.3	101

	Time	Height	
	h m	ft	cm
16 F	0445	0.4	12
	1024	2.3	70
	1622	0.0	0
	2307	3.4	104
17 Sa	0542	0.3	9
	1122	2.3	70
	1717	0.0	0
18 Su	0002	3.6	110
	0638	0.2	6
	1223	2.4	73
	1817	−0.1	−3
19 M	0058	3.7	113
	0732	0.0	0
	1324	2.6	79
	1919	−0.2	−6
20 Tu ●	0152	3.8	116
	0824	−0.3	−9
	1422	2.9	88
	2019	−0.3	−9
21 W	0246	4.0	122
	0913	−0.5	−15
	1517	3.2	98
	2117	−0.5	−15
22 Th	0338	4.0	122
	1002	−0.8	−24
	1611	3.6	110
	2214	−0.6	−18
23 F	0429	4.0	122
	1049	−0.9	−27
	1703	3.8	116
	2310	−0.6	−18
24 Sa	0519	4.0	122
	1137	−1.0	−30
	1755	4.0	122
25 Su	0005	−0.6	−18
	0610	3.8	116
	1225	−1.0	−30
	1847	4.1	125
26 M ◐	0100	−0.5	−15
	0700	3.6	110
	1313	−0.9	−27
	1940	4.1	125
27 Tu	0156	−0.4	−12
	0752	3.4	104
	1403	−0.8	−24
	2034	4.0	122
28 W	0254	−0.2	−6
	0847	3.1	94
	1455	−0.6	−18
	2130	3.9	119
29 Th	0354	0.0	0
	0944	2.8	85
	1550	−0.3	−9
	2228	3.7	113
30 F	0456	0.1	3
	1046	2.7	82
	1648	−0.1	−3
	2327	3.6	110
31 Sa	0559	0.2	6
	1150	2.6	79
	1748	0.0	0

February

	Time	Height	
	h m	ft	cm
1 Su	0025	3.5	107
	0658	0.1	3
	1253	2.6	79
	1849	0.1	3
2 M	0121	3.5	107
	0753	0.1	3
	1351	2.6	79
	1946	0.1	3
3 Tu ○	0212	3.5	107
	0841	0.0	0
	1443	2.8	85
	2039	0.1	3
4 W	0259	3.5	107
	0925	−0.1	−3
	1530	2.9	88
	2127	0.1	3
5 Th	0343	3.5	107
	1005	−0.2	−6
	1613	3.1	94
	2212	0.0	0
6 F	0424	3.4	104
	1043	−0.3	−9
	1653	3.2	98
	2255	0.0	0
7 Sa	0503	3.4	104
	1119	−0.3	−9
	1732	3.3	101
	2337	0.0	0
8 Su	0541	3.3	101
	1153	−0.3	−9
	1810	3.4	104
9 M	0018	0.0	0
	0618	3.2	98
	1227	−0.2	−6
	1847	3.5	107
10 Tu	0059	0.1	3
	0654	3.0	91
	1300	−0.2	−6
	1925	3.5	107
11 W ◑	0141	0.2	6
	0731	2.8	85
	1335	−0.1	−3
	2004	3.5	107
12 Th	0224	0.3	9
	0810	2.7	82
	1412	0.0	0
	2047	3.5	107
13 F	0311	0.4	12
	0853	2.6	79
	1455	0.0	0
	2134	3.5	107
14 Sa	0402	0.4	12
	0944	2.5	76
	1545	0.0	0
	2227	3.5	107
15 Su	0457	0.4	12
	1043	2.5	76
	1644	0.0	0
	2324	3.6	110

	Time	Height	
	h m	ft	cm
16 M	0555	0.2	6
	1147	2.7	82
	1749	0.0	0
17 Tu	0024	3.6	110
	0653	0.1	3
	1253	2.9	88
	1856	−0.1	−3
18 W ●	0124	3.7	113
	0749	−0.2	−6
	1355	3.2	98
	2001	−0.3	−9
19 Th	0222	3.8	116
	0843	−0.5	−15
	1454	3.6	110
	2103	−0.5	−15
20 F	0317	3.9	119
	0934	−0.7	−21
	1550	3.9	119
	2201	−0.6	−18
21 Sa	0410	4.0	122
	1024	−0.9	−27
	1643	4.2	128
	2256	−0.7	−21
22 Su	0502	3.9	119
	1114	−1.0	−30
	1735	4.4	134
	2350	−0.7	−21
23 M	0553	3.8	116
	1203	−1.0	−30
	1827	4.4	134
24 Tu	0044	−0.6	−18
	0643	3.7	113
	1252	−0.9	−27
	1918	4.3	131
25 W ◐	0137	−0.4	−12
	0735	3.5	107
	1342	−0.7	−21
	2010	4.2	128
26 Th	0232	−0.2	−6
	0828	3.2	98
	1433	−0.4	−12
	2104	3.9	119
27 F	0328	0.0	0
	0923	3.0	91
	1527	−0.1	−3
	2200	3.7	113
28 Sa	0427	0.2	6
	1023	2.8	85
	1625	0.1	3
	2258	3.5	107

March

	Time	Height	
	h m	ft	cm
1 Su	0527	0.3	9
	1125	2.7	82
	1726	0.3	9
	2356	3.3	101
2 M	0626	0.3	9
	1227	2.7	82
	1828	0.4	12
3 Tu	0053	3.2	98
	0720	0.3	9
	1325	2.8	85
	1926	0.4	12
4 W	0146	3.2	98
	0809	0.2	6
	1417	2.9	88
	2019	0.3	9
5 Th ○	0234	3.3	101
	0853	0.1	3
	1502	3.1	94
	2107	0.2	6
6 F	0318	3.3	101
	0932	0.0	0
	1544	3.3	101
	2152	0.1	3
7 Sa	0359	3.3	101
	1010	0.0	0
	1623	3.5	107
	2234	0.0	0
8 Su	0439	3.3	101
	1045	−0.1	−3
	1701	3.6	110
	2315	0.0	0
9 M	0516	3.2	98
	1120	−0.1	−3
	1738	3.7	113
	2355	0.0	0
10 Tu	0553	3.2	98
	1154	−0.1	−3
	1815	3.8	116
11 W	0034	0.0	0
	0628	3.0	91
	1227	−0.1	−3
	1852	3.8	116
12 Th	0113	0.1	3
	0705	2.9	88
	1303	0.0	0
	1931	3.8	116
13 F ◑	0154	0.2	6
	0743	2.9	88
	1342	0.0	0
	2013	3.7	113
14 Sa	0237	0.3	9
	0827	2.8	85
	1427	0.1	3
	2100	3.6	110
15 Su	0325	0.3	9
	0917	2.8	85
	1520	0.1	3
	2153	3.6	110

	Time	Height	
	h m	ft	cm
16 M	0419	0.3	9
	1016	2.9	88
	1622	0.2	6
	2252	3.5	107
17 Tu	0517	0.2	6
	1122	3.0	91
	1730	0.1	3
	2355	3.5	107
18 W	0617	0.1	3
	1228	3.3	101
	1840	0.0	0
19 Th	0058	3.6	110
	0716	−0.1	−3
	1332	3.6	110
	1947	−0.2	−6
20 F ●	0159	3.7	113
	0813	−0.4	−12
	1432	4.0	122
	2049	−0.4	−12
21 Sa	0256	3.8	116
	0907	−0.6	−18
	1528	4.3	131
	2147	−0.5	−15
22 Su	0351	3.9	119
	0959	−0.8	−24
	1622	4.5	137
	2241	−0.6	−18
23 M	0443	3.9	119
	1049	−0.8	−24
	1713	4.6	140
	2333	−0.7	−21
24 Tu	0534	3.8	116
	1139	−0.8	−24
	1804	4.6	140
25 W	0025	−0.6	−18
	0625	3.7	113
	1229	−0.6	−18
	1854	4.5	137
26 Th	0116	−0.4	−12
	0716	3.5	107
	1319	−0.4	−12
	1944	4.2	128
27 F ◐	0207	−0.2	−6
	0807	3.3	101
	1410	−0.1	−3
	2035	3.9	119
28 Sa	0259	0.0	0
	0901	3.1	94
	1503	0.2	6
	2128	3.6	110
29 Su	0353	0.3	9
	0958	3.0	91
	1600	0.4	12
	2223	3.4	104
30 M	0449	0.4	12
	1057	2.9	88
	1701	0.6	18
	2321	3.2	98
31 Tu	0545	0.5	15
	1157	2.9	88
	1803	0.6	18

Time meridian 90° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.
Heights are referred to the chart datum of soundings.

Salina Cruz, Mexico, 2015

Times and Heights of High and Low Waters

April

	Time	Height	
	h m	ft	cm
1 W	0018	3.1	94
	0638	0.5	15
	1253	3.0	91
	1902	0.6	18
2 Th	0113	3.1	94
	0727	0.5	15
	1343	3.2	98
	1956	0.5	15
3 F	0203	3.1	94
	0812	0.4	12
	1428	3.4	104
	2044	0.4	12
4 Sa ○	0249	3.2	98
	0853	0.3	9
	1510	3.6	110
	2129	0.2	6
5 Su	0331	3.2	98
	0931	0.2	6
	1550	3.8	116
	2211	0.1	3
6 M	0411	3.2	98
	1009	0.1	3
	1629	3.9	119
	2252	0.0	0
7 Tu	0450	3.2	98
	1045	0.1	3
	1707	4.0	122
	2331	0.0	0
8 W	0527	3.2	98
	1121	0.1	3
	1744	4.1	125
9 Th	0010	0.0	0
	0604	3.2	98
	1158	0.1	3
	1823	4.1	125
10 F	0048	0.1	3
	0642	3.1	94
	1237	0.1	3
	1903	4.0	122
11 Sa ◑	0128	0.2	6
	0723	3.1	94
	1320	0.2	6
	1945	3.9	119
12 Su	0210	0.2	6
	0809	3.1	94
	1408	0.2	6
	2032	3.8	116
13 M	0257	0.3	9
	0901	3.2	98
	1505	0.3	9
	2126	3.6	110
14 Tu	0348	0.3	9
	1000	3.3	101
	1609	0.4	12
	2225	3.5	107
15 W	0445	0.2	6
	1104	3.5	107
	1719	0.3	9
	2329	3.5	107

	Time	Height	
	h m	ft	cm
16 Th	0545	0.1	3
	1210	3.8	116
	1829	0.2	6
17 F	0034	3.5	107
	0645	0.0	0
	1313	4.1	125
	1934	0.0	0
18 Sa ●	0136	3.5	107
	0744	−0.2	−6
	1412	4.4	134
	2035	−0.2	−6
19 Su	0235	3.7	113
	0840	−0.4	−12
	1507	4.6	140
	2131	−0.3	−9
20 M	0331	3.8	116
	0933	−0.5	−15
	1600	4.8	146
	2224	−0.4	−12
21 Tu	0424	3.8	116
	1025	−0.5	−15
	1650	4.8	146
	2315	−0.5	−15
22 W	0515	3.8	116
	1116	−0.4	−12
	1739	4.7	143
23 Th	0004	−0.4	−12
	0606	3.8	116
	1205	−0.3	−9
	1828	4.5	137
24 F	0052	−0.3	−9
	0656	3.7	113
	1255	0.0	0
	1916	4.3	131
25 Sa ◐	0140	−0.1	−3
	0746	3.5	107
	1346	0.2	6
	2004	4.0	122
26 Su	0228	0.2	6
	0838	3.4	104
	1438	0.5	15
	2053	3.7	113
27 M	0317	0.4	12
	0931	3.3	101
	1533	0.7	21
	2145	3.4	104
28 Tu	0408	0.5	15
	1026	3.2	98
	1632	0.9	27
	2239	3.2	98
29 W	0458	0.6	18
	1121	3.2	98
	1732	0.9	27
	2336	3.1	94
30 Th	0549	0.7	21
	1214	3.3	101
	1831	0.9	27

May

	Time	Height	
	h m	ft	cm
1 F	0031	3.0	91
	0638	0.7	21
	1304	3.5	107
	1926	0.7	21
2 Sa	0124	3.0	91
	0724	0.6	18
	1350	3.7	113
	2015	0.6	18
3 Su ○	0212	3.1	94
	0807	0.5	15
	1433	3.9	119
	2101	0.4	12
4 M	0257	3.1	94
	0849	0.4	12
	1515	4.1	125
	2144	0.3	9
5 Tu	0340	3.2	98
	0930	0.4	12
	1556	4.3	131
	2226	0.2	6
6 W	0421	3.3	101
	1010	0.3	9
	1636	4.4	134
	2306	0.1	3
7 Th	0501	3.3	101
	1051	0.3	9
	1716	4.4	134
	2345	0.1	3
8 F	0542	3.4	104
	1133	0.3	9
	1757	4.4	134
9 Sa	0024	0.1	3
	0623	3.4	104
	1217	0.3	9
	1839	4.3	131
10 Su	0105	0.1	3
	0708	3.5	107
	1305	0.4	12
	1923	4.1	125
11 M ◑	0148	0.2	6
	0757	3.6	110
	1358	0.5	15
	2012	3.9	119
12 Tu	0234	0.2	6
	0850	3.7	113
	1457	0.5	15
	2105	3.7	113
13 W	0325	0.2	6
	0949	3.8	116
	1601	0.6	18
	2204	3.6	110
14 Th	0420	0.2	6
	1051	4.0	122
	1709	0.6	18
	2307	3.5	107
15 F	0519	0.2	6
	1153	4.2	128
	1817	0.5	15

	Time	Height	
	h m	ft	cm
16 Sa	0012	3.5	107
	0619	0.1	3
	1254	4.5	137
	1921	0.3	9
17 Su ●	0115	3.5	107
	0718	0.0	0
	1352	4.7	143
	2020	0.2	6
18 M	0215	3.6	110
	0815	0.0	0
	1446	4.8	146
	2115	0.0	0
19 Tu	0311	3.7	113
	0909	−0.1	−3
	1538	4.9	149
	2206	−0.1	−3
20 W	0405	3.8	116
	1002	−0.1	−3
	1628	4.9	149
	2255	−0.1	−3
21 Th	0456	3.8	116
	1053	0.0	0
	1715	4.8	146
	2342	−0.1	−3
22 F	0546	3.8	116
	1142	0.2	6
	1802	4.6	140
23 Sa	0028	0.0	0
	0635	3.8	116
	1231	0.4	12
	1847	4.3	131
24 Su	0112	0.1	3
	0723	3.7	113
	1320	0.6	18
	1932	4.1	125
25 M ◐	0157	0.3	9
	0811	3.6	110
	1410	0.8	24
	2018	3.8	116
26 Tu	0241	0.5	15
	0900	3.6	110
	1502	1.0	30
	2105	3.5	107
27 W	0325	0.7	21
	0950	3.6	110
	1558	1.1	34
	2155	3.3	101
28 Th	0411	0.8	24
	1040	3.6	110
	1655	1.2	37
	2248	3.2	98
29 F	0457	0.8	24
	1131	3.7	113
	1754	1.1	34
	2343	3.1	94
30 Sa	0545	0.9	27
	1221	3.9	119
	1849	1.0	30
31 Su	0037	3.1	94
	0632	0.8	24
	1309	4.1	125
	1941	0.9	27

June

	Time	Height	
	h m	ft	cm
1 M	0129	3.1	94
	0719	0.8	24
	1355	4.3	131
	2029	0.7	21
2 Tu ○	0218	3.2	98
	0806	0.7	21
	1440	4.4	134
	2114	0.5	15
3 W	0305	3.3	101
	0852	0.6	18
	1523	4.6	140
	2157	0.4	12
4 Th	0350	3.4	104
	0938	0.5	15
	1607	4.7	143
	2238	0.3	9
5 F	0434	3.6	110
	1025	0.4	12
	1650	4.7	143
	2319	0.2	6
6 Sa	0519	3.7	113
	1113	0.4	12
	1734	4.7	143
7 Su	0001	0.2	6
	0606	3.9	119
	1202	0.4	12
	1819	4.5	137
8 M	0043	0.1	3
	0654	4.0	122
	1254	0.5	15
	1906	4.4	134
9 Tu ◑	0128	0.2	6
	0745	4.1	125
	1350	0.6	18
	1955	4.1	125
10 W	0215	0.2	6
	0839	4.3	131
	1449	0.7	21
	2048	3.9	119
11 Th	0305	0.2	6
	0936	4.4	134
	1552	0.8	24
	2146	3.7	113
12 F	0359	0.3	9
	1036	4.5	137
	1658	0.8	24
	2248	3.6	110
13 Sa	0457	0.3	9
	1137	4.6	140
	1804	0.8	24
	2352	3.5	107
14 Su	0556	0.3	9
	1236	4.7	143
	1906	0.7	21
15 M	0055	3.5	107
	0655	0.3	9
	1333	4.8	146
	2004	0.5	15

	Time	Height	
	h m	ft	cm
16 Tu ●	0156	3.6	110
	0753	0.3	9
	1427	4.9	149
	2058	0.4	12
17 W	0252	3.7	113
	0848	0.3	9
	1518	4.9	149
	2148	0.3	9
18 Th	0346	3.8	116
	0941	0.4	12
	1606	4.8	146
	2235	0.2	6
19 F	0436	3.9	119
	1031	0.5	15
	1652	4.7	143
	2319	0.2	6
20 Sa	0525	3.9	119
	1120	0.6	18
	1736	4.6	140
21 Su	0002	0.3	9
	0611	4.0	122
	1207	0.7	21
	1819	4.4	134
22 M	0044	0.4	12
	0656	3.9	119
	1254	0.9	27
	1902	4.2	128
23 Tu	0124	0.5	15
	0741	3.9	119
	1341	1.0	30
	1944	3.9	119
24 W ◐	0204	0.6	18
	0825	3.9	119
	1429	1.2	37
	2027	3.7	113
25 Th	0244	0.8	24
	0911	3.9	119
	1520	1.3	40
	2112	3.5	107
26 F	0324	0.9	27
	0958	3.9	119
	1614	1.3	40
	2200	3.3	101
27 Sa	0408	0.9	27
	1046	4.0	122
	1710	1.3	40
	2252	3.2	98
28 Su	0454	1.0	30
	1136	4.1	125
	1807	1.3	40
	2347	3.1	94
29 M	0543	0.9	27
	1226	4.3	131
	1901	1.1	34
30 Tu	0042	3.2	98
	0634	0.9	27
	1316	4.5	137
	1951	1.0	30

Time meridian 90° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.
Heights are referred to the chart datum of soundings.

Salina Cruz, Mexico, 2015

Times and Heights of High and Low Waters

July

	Time	Height	
	h m	ft	cm
1 W ○	0136	3.3	101
	0727	0.8	24
	1405	4.6	140
	2039	0.8	24
2 Th	0228	3.5	107
	0819	0.7	21
	1453	4.8	146
	2125	0.6	18
3 F	0319	3.7	113
	0912	0.6	18
	1540	4.8	146
	2209	0.4	12
4 Sa	0408	3.9	119
	1004	0.5	15
	1627	4.9	149
	2253	0.3	9
5 Su	0458	4.2	128
	1057	0.4	12
	1714	4.8	146
	2337	0.1	3
6 M	0547	4.4	134
	1150	0.4	12
	1801	4.7	143
7 Tu	0021	0.1	3
	0638	4.5	137
	1244	0.5	15
	1850	4.5	137
8 W ◑	0108	0.1	3
	0730	4.6	140
	1340	0.6	18
	1940	4.3	131
9 Th	0156	0.1	3
	0824	4.7	143
	1438	0.7	21
	2033	4.1	125
10 F	0246	0.2	6
	0921	4.7	143
	1539	0.9	27
	2129	3.8	116
11 Sa	0340	0.3	9
	1019	4.7	143
	1642	0.9	27
	2230	3.7	113
12 Su	0437	0.4	12
	1119	4.7	143
	1746	1.0	30
	2333	3.6	110
13 M	0537	0.5	15
	1218	4.7	143
	1848	0.9	27
14 Tu	0036	3.6	110
	0637	0.6	18
	1315	4.7	143
	1946	0.8	24
15 W ●	0138	3.6	110
	0735	0.7	21
	1409	4.7	143
	2039	0.7	21

	Time	Height	
	h m	ft	cm
16 Th	0234	3.7	113
	0831	0.7	21
	1459	4.7	143
	2127	0.6	18
17 F	0327	3.8	116
	0923	0.7	21
	1546	4.6	140
	2212	0.5	15
18 Sa	0415	3.9	119
	1012	0.7	21
	1630	4.6	140
	2254	0.5	15
19 Su	0501	4.0	122
	1058	0.8	24
	1712	4.5	137
	2334	0.5	15
20 M	0544	4.1	125
	1143	0.8	24
	1753	4.3	131
21 Tu	0013	0.5	15
	0626	4.1	125
	1227	0.9	27
	1832	4.2	128
22 W	0050	0.6	18
	0707	4.1	125
	1311	1.0	30
	1912	4.0	122
23 Th ◐	0126	0.7	21
	0748	4.1	125
	1356	1.1	34
	1951	3.8	116
24 F	0203	0.8	24
	0830	4.1	125
	1443	1.2	37
	2032	3.6	110
25 Sa	0241	0.9	27
	0914	4.1	125
	1532	1.3	40
	2116	3.4	104
26 Su	0322	0.9	27
	1001	4.2	128
	1625	1.4	43
	2205	3.3	101
27 M	0408	0.9	27
	1051	4.2	128
	1720	1.3	40
	2259	3.2	98
28 Tu	0500	0.9	27
	1144	4.3	131
	1816	1.2	37
	2357	3.3	101
29 W	0556	0.9	27
	1238	4.4	134
	1910	1.1	34
30 Th	0057	3.4	104
	0655	0.8	24
	1332	4.5	137
	2001	0.9	27
31 F ○	0154	3.6	110
	0754	0.6	18
	1424	4.7	143
	2050	0.6	18

August

	Time	Height	
	h m	ft	cm
1 Sa	0250	3.9	119
	0851	0.5	15
	1515	4.8	146
	2138	0.4	12
2 Su	0343	4.2	128
	0947	0.4	12
	1605	4.8	146
	2225	0.2	6
3 M	0435	4.5	137
	1042	0.3	9
	1654	4.8	146
	2311	0.0	0
4 Tu	0527	4.7	143
	1136	0.3	9
	1743	4.7	143
	2359	−0.1	−3
5 W	0619	4.9	149
	1230	0.3	9
	1833	4.5	137
6 Th ◑	0047	−0.1	−3
	0711	4.9	149
	1325	0.4	12
	1924	4.3	131
7 F	0136	0.0	0
	0805	4.9	149
	1422	0.6	18
	2017	4.1	125
8 Sa	0228	0.2	6
	0900	4.8	146
	1520	0.7	21
	2113	3.9	119
9 Su	0322	0.3	9
	0958	4.6	140
	1622	0.9	27
	2212	3.7	113
10 M	0420	0.5	15
	1058	4.5	137
	1724	1.0	30
	2315	3.5	107
11 Tu	0520	0.7	21
	1158	4.4	134
	1826	1.0	30
12 W	0019	3.5	107
	0622	0.8	24
	1256	4.3	131
	1924	0.9	27
13 Th	0120	3.5	107
	0721	0.8	24
	1350	4.3	131
	2016	0.8	24
14 F ●	0216	3.6	110
	0816	0.8	24
	1440	4.3	131
	2103	0.7	21
15 Sa	0306	3.8	116
	0907	0.8	24
	1526	4.3	131
	2146	0.6	18

	Time	Height	
	h m	ft	cm
16 Su	0352	3.9	119
	0954	0.7	21
	1608	4.3	131
	2226	0.6	18
17 M	0434	4.0	122
	1038	0.7	21
	1648	4.2	128
	2304	0.5	15
18 Tu	0514	4.1	125
	1120	0.7	21
	1727	4.1	125
	2340	0.5	15
19 W	0553	4.1	125
	1201	0.7	21
	1805	4.0	122
20 Th	0015	0.6	18
	0632	4.2	128
	1243	0.8	24
	1842	3.8	116
21 F	0050	0.6	18
	0710	4.2	128
	1324	0.9	27
	1919	3.6	110
22 Sa ◐	0125	0.7	21
	0750	4.1	125
	1407	1.0	30
	1957	3.5	107
23 Su	0202	0.7	21
	0832	4.1	125
	1452	1.1	34
	2039	3.3	101
24 M	0243	0.8	24
	0918	4.1	125
	1541	1.2	37
	2126	3.3	101
25 Tu	0330	0.8	24
	1009	4.1	125
	1634	1.2	37
	2220	3.2	98
26 W	0425	0.8	24
	1104	4.1	125
	1730	1.1	34
	2320	3.3	101
27 Th	0527	0.7	21
	1202	4.1	125
	1827	0.9	27
28 F	0024	3.5	107
	0631	0.6	18
	1300	4.2	128
	1922	0.7	21
29 Sa ○	0125	3.8	116
	0734	0.4	12
	1357	4.3	131
	2015	0.4	12
30 Su	0224	4.1	125
	0835	0.2	6
	1451	4.4	134
	2106	0.2	6
31 M	0319	4.5	137
	0932	0.1	3
	1544	4.5	137
	2156	−0.1	−3

September

	Time	Height	
	h m	ft	cm
1 Tu	0413	4.7	143
	1027	−0.1	−3
	1635	4.5	137
	2246	−0.3	−9
2 W	0505	4.9	149
	1121	−0.1	−3
	1725	4.5	137
	2335	−0.3	−9
3 Th	0557	5.0	152
	1214	−0.1	−3
	1816	4.4	134
4 F	0024	−0.3	−9
	0649	4.9	149
	1307	0.1	3
	1907	4.2	128
5 Sa ◑	0115	−0.2	−6
	0742	4.8	146
	1401	0.2	6
	2000	3.9	119
6 Su	0208	0.0	0
	0836	4.6	140
	1458	0.5	15
	2055	3.7	113
7 M	0303	0.3	9
	0933	4.3	131
	1556	0.6	18
	2154	3.5	107
8 Tu	0402	0.5	15
	1033	4.1	125
	1657	0.8	24
	2257	3.4	104
9 W	0504	0.7	21
	1134	3.9	119
	1758	0.8	24
10 Th	0000	3.4	104
	0607	0.8	24
	1233	3.8	116
	1855	0.8	24
11 F	0059	3.4	104
	0707	0.8	24
	1328	3.7	113
	1947	0.8	24
12 Sa	0153	3.5	107
	0801	0.7	21
	1418	3.7	113
	2033	0.7	21
13 Su ●	0241	3.6	110
	0850	0.6	18
	1503	3.8	116
	2114	0.6	18
14 M	0324	3.8	116
	0935	0.5	15
	1545	3.8	116
	2153	0.5	15
15 Tu	0404	3.9	119
	1017	0.4	12
	1624	3.8	116
	2230	0.4	12

	Time	Height	
	h m	ft	cm
16 W	0443	4.0	122
	1057	0.4	12
	1702	3.7	113
	2305	0.4	12
17 Th	0520	4.1	125
	1137	0.4	12
	1739	3.6	110
	2340	0.4	12
18 F	0557	4.1	125
	1216	0.4	12
	1815	3.5	107
19 Sa	0014	0.4	12
	0635	4.1	125
	1255	0.5	15
	1851	3.4	104
20 Su	0050	0.4	12
	0714	4.0	122
	1335	0.6	18
	1928	3.3	101
21 M ◐	0128	0.5	15
	0755	3.9	119
	1416	0.7	21
	2009	3.2	98
22 Tu	0211	0.5	15
	0840	3.8	116
	1502	0.7	21
	2056	3.2	98
23 W	0301	0.6	18
	0930	3.7	113
	1552	0.8	24
	2151	3.2	98
24 Th	0400	0.6	18
	1027	3.7	113
	1648	0.7	21
	2253	3.3	101
25 F	0506	0.5	15
	1129	3.7	113
	1746	0.6	18
	2358	3.6	110
26 Sa	0613	0.4	12
	1231	3.7	113
	1845	0.3	9
27 Su ○	0101	3.9	119
	0719	0.2	6
	1331	3.8	116
	1942	0.1	3
28 M	0200	4.2	128
	0820	−0.1	−3
	1428	3.9	119
	2036	−0.2	−6
29 Tu	0257	4.5	137
	0917	−0.3	−9
	1523	4.0	122
	2129	−0.4	−12
30 W	0350	4.7	143
	1012	−0.4	−12
	1615	4.1	125
	2220	−0.5	−15

Time meridian 90° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.
Heights are referred to the chart datum of soundings.

Salina Cruz, Mexico, 2015

Times and Heights of High and Low Waters

October

	Time	Height	
	h m	ft	cm
1 Th	0443	4.9	149
	1104	−0.5	−15
	1707	4.1	125
	2311	−0.6	−18
2 F	0534	4.9	149
	1156	−0.5	−15
	1758	4.0	122
3 Sa	0002	−0.5	−15
	0625	4.7	143
	1247	−0.3	−9
	1849	3.9	119
4 Su ◑	0054	−0.3	−9
	0717	4.5	137
	1339	−0.2	−6
	1942	3.7	113
5 M	0147	−0.1	−3
	0810	4.2	128
	1432	0.1	3
	2037	3.5	107
6 Tu	0243	0.2	6
	0905	3.8	116
	1527	0.3	9
	2134	3.3	101
7 W	0342	0.4	12
	1002	3.5	107
	1624	0.5	15
	2235	3.2	98
8 Th	0445	0.6	18
	1103	3.3	101
	1721	0.6	18
	2335	3.2	98
9 F	0548	0.6	18
	1202	3.2	98
	1817	0.6	18
10 Sa	0032	3.2	98
	0648	0.6	18
	1259	3.1	94
	1908	0.6	18
11 Su	0124	3.3	101
	0741	0.5	15
	1349	3.2	98
	1954	0.5	15
12 M ●	0210	3.5	107
	0829	0.4	12
	1435	3.2	98
	2036	0.4	12
13 Tu	0252	3.6	110
	0913	0.2	6
	1517	3.2	98
	2115	0.3	9
14 W	0332	3.8	116
	0954	0.1	3
	1557	3.3	101
	2153	0.2	6
15 Th	0410	3.9	119
	1034	0.0	0
	1636	3.3	101
	2230	0.2	6

	Time	Height	
	h m	ft	cm
16 F	0448	4.0	122
	1113	0.0	0
	1713	3.2	98
	2306	0.2	6
17 Sa	0526	4.0	122
	1151	0.0	0
	1750	3.2	98
	2343	0.2	6
18 Su	0603	3.9	119
	1228	0.0	0
	1827	3.1	94
19 M	0021	0.2	6
	0642	3.8	116
	1306	0.1	3
	1905	3.1	94
20 Tu ◐	0102	0.2	6
	0723	3.7	113
	1346	0.2	6
	1948	3.1	94
21 W	0148	0.3	9
	0808	3.5	107
	1430	0.3	9
	2036	3.1	94
22 Th	0242	0.3	9
	0859	3.4	104
	1518	0.3	9
	2132	3.2	98
23 F	0343	0.3	9
	0956	3.3	101
	1612	0.2	6
	2233	3.4	104
24 Sa	0450	0.3	9
	1059	3.2	98
	1711	0.1	3
	2337	3.6	110
25 Su	0559	0.1	3
	1203	3.2	98
	1811	0.0	0
26 M	0039	3.9	119
	0705	−0.1	−3
	1306	3.3	101
	1911	−0.2	−6
27 Tu ○	0139	4.2	128
	0805	−0.3	−9
	1406	3.4	104
	2008	−0.4	−12
28 W	0235	4.4	134
	0902	−0.5	−15
	1502	3.5	107
	2103	−0.6	−18
29 Th	0329	4.6	140
	0955	−0.7	−21
	1556	3.6	110
	2156	−0.7	−21
30 F	0421	4.7	143
	1046	−0.8	−24
	1649	3.7	113
	2249	−0.7	−21
31 Sa	0511	4.6	140
	1136	−0.8	−24
	1740	3.7	113
	2341	−0.6	−18

November

	Time	Height	
	h m	ft	cm
1 Su	0601	4.4	134
	1225	−0.7	−21
	1831	3.6	110
2 M	0032	−0.4	−12
	0651	4.1	125
	1314	−0.5	−15
	1923	3.5	107
3 Tu ◑	0125	−0.2	−6
	0741	3.8	116
	1404	−0.3	−9
	2016	3.3	101
4 W	0220	0.1	3
	0833	3.4	104
	1454	0.0	0
	2110	3.2	98
5 Th	0318	0.3	9
	0927	3.1	94
	1546	0.2	6
	2206	3.1	94
6 F	0418	0.5	15
	1024	2.9	88
	1638	0.3	9
	2303	3.1	94
7 Sa	0520	0.5	15
	1122	2.7	82
	1731	0.4	12
	2357	3.1	94
8 Su	0619	0.5	15
	1219	2.6	79
	1821	0.4	12
9 M	0047	3.2	98
	0713	0.3	9
	1312	2.6	79
	1908	0.3	9
10 Tu	0133	3.4	104
	0802	0.2	6
	1401	2.7	82
	1953	0.3	9
11 W ●	0217	3.5	107
	0847	0.0	0
	1445	2.7	82
	2035	0.2	6
12 Th	0258	3.7	113
	0929	−0.1	−3
	1527	2.8	85
	2115	0.1	3
13 F	0338	3.8	116
	1009	−0.2	−6
	1608	2.9	88
	2155	0.0	0
14 Sa	0418	3.9	119
	1048	−0.3	−9
	1647	2.9	88
	2235	0.0	0
15 Su	0457	3.9	119
	1126	−0.3	−9
	1726	3.0	91
	2316	−0.1	−3

	Time	Height	
	h m	ft	cm
16 M	0536	3.8	116
	1204	−0.3	−9
	1805	3.0	91
	2359	−0.1	−3
17 Tu	0617	3.7	113
	1242	−0.3	−9
	1847	3.1	94
18 W	0044	0.0	0
	0659	3.5	107
	1321	−0.2	−6
	1932	3.1	94
19 Th ◐	0134	0.1	3
	0744	3.3	101
	1404	−0.2	−6
	2022	3.2	98
20 F	0229	0.1	3
	0835	3.1	94
	1451	−0.2	−6
	2116	3.4	104
21 Sa	0331	0.1	3
	0931	3.0	91
	1544	−0.2	−6
	2216	3.5	107
22 Su	0437	0.1	3
	1033	2.9	88
	1642	−0.3	−9
	2318	3.7	113
23 M	0545	0.0	0
	1138	2.8	85
	1742	−0.3	−9
24 Tu	0019	3.9	119
	0650	−0.2	−6
	1243	2.9	88
	1843	−0.4	−12
25 W ○	0119	4.1	125
	0750	−0.4	−12
	1345	3.0	91
	1943	−0.5	−15
26 Th	0215	4.3	131
	0846	−0.6	−18
	1443	3.1	94
	2040	−0.6	−18
27 F	0309	4.4	134
	0938	−0.8	−24
	1538	3.3	101
	2135	−0.7	−21
28 Sa	0400	4.4	134
	1028	−0.8	−24
	1631	3.4	104
	2229	−0.6	−18
29 Su	0450	4.3	131
	1116	−0.9	−27
	1722	3.4	104
	2320	−0.5	−15
30 M	0538	4.1	125
	1203	−0.8	−24
	1812	3.4	104

December

	Time	Height	
	h m	ft	cm
1 Tu	0012	−0.4	−12
	0626	3.8	116
	1249	−0.6	−18
	1902	3.3	101
2 W	0103	−0.2	−6
	0713	3.5	107
	1334	−0.5	−15
	1951	3.2	98
3 Th ◑	0155	0.1	3
	0800	3.2	98
	1420	−0.3	−9
	2041	3.1	94
4 F	0248	0.2	6
	0849	2.9	88
	1505	−0.1	−3
	2131	3.1	94
5 Sa	0344	0.4	12
	0940	2.7	82
	1551	0.1	3
	2222	3.0	91
6 Su	0442	0.4	12
	1034	2.5	76
	1639	0.2	6
	2314	3.1	94
7 M	0540	0.4	12
	1130	2.3	70
	1728	0.3	9
8 Tu	0004	3.2	98
	0636	0.3	9
	1226	2.3	70
	1817	0.2	6
9 W	0052	3.3	101
	0728	0.2	6
	1318	2.3	70
	1905	0.2	6
10 Th	0139	3.5	107
	0815	0.0	0
	1408	2.4	73
	1952	0.1	3
11 F ●	0223	3.6	110
	0859	−0.2	−6
	1454	2.5	76
	2039	0.0	0
12 Sa	0307	3.7	113
	0941	−0.3	−9
	1537	2.7	82
	2124	−0.1	−3
13 Su	0349	3.8	116
	1021	−0.4	−12
	1620	2.8	85
	2209	−0.2	−6
14 M	0431	3.8	116
	1100	−0.5	−15
	1703	3.0	91
	2255	−0.2	−6
15 Tu	0513	3.8	116
	1139	−0.5	−15
	1746	3.1	94
	2342	−0.2	−6

	Time	Height	
	h m	ft	cm
16 W	0556	3.7	113
	1218	−0.6	−18
	1830	3.3	101
17 Th	0031	−0.2	−6
	0640	3.5	107
	1259	−0.6	−18
	1917	3.4	104
18 F ◐	0123	−0.1	−3
	0726	3.3	101
	1343	−0.6	−18
	2008	3.5	107
19 Sa	0219	−0.1	−3
	0816	3.1	94
	1430	−0.5	−15
	2102	3.6	110
20 Su	0319	0.0	0
	0911	2.9	88
	1522	−0.5	−15
	2159	3.7	113
21 M	0423	0.0	0
	1011	2.7	82
	1618	−0.4	−12
	2259	3.8	116
22 Tu	0529	0.0	0
	1116	2.7	82
	1719	−0.4	−12
23 W	0000	3.9	119
	0633	−0.1	−3
	1222	2.7	82
	1821	−0.4	−12
24 Th	0100	4.0	122
	0733	−0.3	−9
	1326	2.8	85
	1922	−0.4	−12
25 F ○	0157	4.1	125
	0829	−0.5	−15
	1426	2.9	88
	2021	−0.5	−15
26 Sa	0251	4.1	125
	0921	−0.6	−18
	1522	3.1	94
	2118	−0.5	−15
27 Su	0341	4.1	125
	1010	−0.7	−21
	1614	3.2	98
	2211	−0.5	−15
28 M	0430	4.0	122
	1056	−0.7	−21
	1704	3.3	101
	2302	−0.4	−12
29 Tu	0516	3.8	116
	1140	−0.7	−21
	1752	3.3	101
	2351	−0.3	−9
30 W	0601	3.6	110
	1223	−0.6	−18
	1838	3.3	101
31 Th	0039	−0.1	−3
	0645	3.4	104
	1304	−0.5	−15
	1923	3.3	101

Time meridian 90° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.
Heights are referred to the chart datum of soundings.

Guaymas, Mexico, 2015

Times and Heights of High and Low Waters

January

	Time	Height	
	h m	ft	cm
1 Th	0008	1.7	52
	0647	2.1	64
	1453	−1.1	−34
	2252	1.8	55
2 F	0115	1.7	52
	0713	2.2	67
	1515	−1.3	−40
	2311	1.8	55
3 Sa	0155	1.7	52
	0740	2.2	67
	1537	−1.3	−40
	2335	1.8	55
4 Su ○	0231	1.7	52
	0804	2.2	67
	1601	−1.3	−40
5 M	0002	1.8	55
	0305	1.6	49
	0824	2.2	67
	1625	−1.2	−37
6 Tu	0032	1.8	55
	0339	1.5	46
	0839	2.1	64
	1650	−1.1	−34
7 W	0105	1.7	52
	0414	1.5	46
	0851	2.0	61
	1714	−0.9	−27
8 Th	0139	1.6	49
	0452	1.4	43
	0904	1.8	55
	1737	−0.6	−18
9 F	0214	1.6	49
	0537	1.3	40
	0917	1.6	49
	1757	−0.3	−9
10 Sa	0248	1.5	46
	0636	1.3	40
	0930	1.4	43
	1814	0.0	0
11 Su	0318	1.5	46
	1817	0.3	9
12 M	0344	1.5	46
	1459	0.4	12
13 Tu ◑	0407	1.5	46
	1413	0.1	3
14 W	0440	1.6	49
	1340	−0.2	−6
15 Th	0521	1.8	55
	1341	−0.6	−18

	Time	Height	
	h m	ft	cm
16 F	0605	2.0	61
	1405	−1.1	−34
	2200	1.8	55
17 Sa	0111	1.5	46
	0648	2.1	64
	1437	−1.4	−43
	2228	2.0	61
18 Su	0207	1.5	46
	0729	2.3	70
	1512	−1.7	−52
	2301	2.1	64
19 M	0253	1.5	46
	0811	2.3	70
	1549	−1.7	−52
	2336	2.1	64
20 Tu ●	0337	1.4	43
	0851	2.3	70
	1626	−1.7	−52
21 W	0012	2.1	64
	0421	1.3	40
	0930	2.2	67
	1702	−1.4	−43
22 Th	0049	2.0	61
	0509	1.2	37
	1007	1.9	58
	1736	−1.0	−30
23 F	0125	1.9	58
	0604	1.1	34
	1040	1.5	46
	1804	−0.5	−15
24 Sa	0201	1.7	52
	0717	0.9	27
	1045	1.0	30
	1824	0.1	3
25 Su	0236	1.7	52
	1251	0.5	15
	1541	0.6	18
	1809	0.5	15
26 M ◐	0313	1.6	49
	1304	0.1	3
27 Tu	0356	1.6	49
	1332	−0.4	−12
	2356	1.7	52
28 W	0247	1.6	49
	0449	1.7	52
	1400	−0.7	−21
	2348	1.8	55
29 Th	0322	1.6	49
	0543	1.7	52
	1426	−0.9	−27
	2323	1.8	55
30 F	0332	1.7	52
	0630	1.8	55
	1448	−1.0	−30
	2249	1.8	55
31 Sa	0313	1.7	52
	0711	1.9	58
	1508	−1.1	−34
	2248	1.8	55

February

	Time	Height	
	h m	ft	cm
1 Su	0242	1.6	49
	0748	2.0	61
	1526	−1.1	−34
	2259	1.8	55
2 M	0251	1.4	43
	0821	2.0	61
	1545	−1.1	−34
	2316	1.8	55
3 Tu ○	0315	1.2	37
	0850	2.0	61
	1605	−1.0	−30
	2336	1.7	52
4 W	0344	1.1	34
	0916	1.9	58
	1625	−0.8	−24
	2357	1.7	52
5 Th	0414	1.0	30
	0937	1.8	55
	1646	−0.6	−18
6 F	0015	1.6	49
	0447	0.9	27
	0953	1.6	49
	1705	−0.4	−12
7 Sa	0028	1.5	46
	0522	0.8	24
	1008	1.4	43
	1722	−0.1	−3
8 Su	0026	1.5	46
	0604	0.7	21
	1025	1.2	37
	1734	0.2	6
9 M	0006	1.5	46
	0658	0.6	18
	1046	0.9	27
	1724	0.5	15
	2358	1.6	49
10 Tu	0820	0.5	15
	1105	0.6	18
	1414	0.5	15
11 W ◑	0008	1.7	52
	1312	0.2	6
12 Th	0028	1.7	52
	1245	−0.2	−6
13 F	0057	1.7	52
	1311	−0.6	−18
	2135	1.8	55
14 Sa	0050	1.7	52
	0534	1.8	55
	1344	−1.0	−30
	2138	2.0	61
15 Su	0146	1.6	49
	0645	2.0	61
	1420	−1.3	−40
	2158	2.1	64

	Time	Height	
	h m	ft	cm
16 M	0223	1.4	43
	0739	2.1	64
	1456	−1.4	−43
	2224	2.1	64
17 Tu	0259	1.2	37
	0828	2.2	67
	1532	−1.4	−43
	2252	2.1	64
18 W ●	0337	0.9	27
	0916	2.2	67
	1607	−1.2	−37
	2319	2.1	64
19 Th	0417	0.7	21
	1004	2.1	64
	1640	−0.8	−24
	2346	2.0	61
20 F	0459	0.5	15
	1055	1.8	55
	1709	−0.4	−12
21 Sa	0010	1.9	58
	0545	0.4	12
	1154	1.4	43
	1730	0.2	6
22 Su	0026	1.8	55
	0639	0.3	9
	1325	1.1	34
	1736	0.6	18
23 M	0021	1.7	52
	0752	0.2	6
	2314	1.8	55
24 Tu	1145	0.0	0
	2245	1.9	58
25 W ◐	1253	−0.3	−9
	2241	2.0	61
26 Th	1334	−0.5	−15
	2237	2.0	61
27 F	1406	−0.6	−18
	2217	2.0	61
28 Sa	0352	1.4	43
	0633	1.6	49
	1430	−0.7	−21
	2159	1.9	58

March

	Time	Height	
	h m	ft	cm
1 Su	0339	1.4	43
	0720	1.7	52
	1447	−0.7	−21
	2159	1.9	58
2 M	0314	1.3	40
	0800	1.8	55
	1502	−0.6	−18
	2207	1.9	58
3 Tu	0302	1.1	34
	0835	1.9	58
	1518	−0.6	−18
	2221	1.9	58
4 W	0314	0.8	24
	0907	1.9	58
	1535	−0.5	−15
	2236	1.8	55
5 Th ○	0337	0.6	18
	0938	1.9	58
	1554	−0.3	−9
	2249	1.8	55
6 F	0403	0.5	15
	1008	1.8	55
	1613	−0.1	−3
	2258	1.8	55
7 Sa	0432	0.3	9
	1036	1.6	49
	1632	0.1	3
	2257	1.8	55
8 Su	0504	0.2	6
	1104	1.4	43
	1648	0.4	12
	2247	1.8	55
9 M	0540	0.2	6
	1137	1.2	37
	1658	0.7	21
	2242	1.9	58
10 Tu	0623	0.1	3
	1304	0.9	27
	1626	0.8	24
	2248	1.9	58
11 W	0723	0.1	3
	2300	2.0	61
12 Th	0856	0.1	3
	2310	2.0	61
13 F ◑	1105	−0.2	−6
	2226	1.9	58
14 Sa	1223	−0.5	−15
	2047	2.1	64
15 Su	1311	−0.7	−21
	2056	2.2	67

	Time	Height	
	h m	ft	cm
16 M	0224	1.4	43
	0652	1.8	55
	1353	−0.8	−24
	2115	2.2	67
17 Tu	0231	1.1	34
	0751	2.0	61
	1431	−0.8	−24
	2137	2.3	70
18 W	0257	0.7	21
	0844	2.2	67
	1507	−0.7	−21
	2200	2.3	70
19 Th	0330	0.4	12
	0936	2.2	67
	1541	−0.4	−12
	2222	2.2	67
20 F ●	0406	0.1	3
	1029	2.1	64
	1611	0.1	3
	2241	2.2	67
21 Sa	0445	−0.2	−6
	1127	1.9	58
	1636	0.5	15
	2254	2.1	64
22 Su	0526	−0.3	−9
	1236	1.6	49
	1652	1.0	30
	2250	2.0	61
23 M	0610	−0.3	−9
	1421	1.4	43
	1643	1.3	40
	2217	2.1	64
24 Tu	0702	−0.2	−6
	2150	2.1	64
25 W	0816	0.0	0
	2144	2.2	67
26 Th	1138	0.0	0
	2143	2.2	67
27 F ◐	1247	−0.1	−3
	2130	2.2	67
28 Sa	1326	−0.1	−3
	2106	2.1	64
29 Su	0341	1.2	37
	0633	1.4	43
	1352	−0.1	−3
	2057	2.0	61
30 M	0328	1.1	34
	0724	1.6	49
	1409	−0.1	−3
	2101	2.0	61
31 Tu	0308	1.0	30
	0805	1.7	52
	1422	0.0	0
	2110	2.0	61

Time meridian 105° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.
Heights are referred to the chart datum of soundings.
* Neither a high or low water but an intermediate value to show the period of an approximate stand.

Guaymas, Mexico, 2015

Times and Heights of High and Low Waters

April

	Time	Height	
	h m	ft	cm
1 W	0256	0.7	21
	0842	1.8	55
	1437	0.1	3
	2122	2.0	61
2 Th	0304	0.5	15
	0918	1.9	58
	1456	0.3	9
	2134	2.1	64
3 F	0324	0.2	6
	0954	1.9	58
	1516	0.4	12
	2143	2.1	64
4 Sa ○	0349	0.0	0
	1032	1.8	55
	1537	0.6	18
	2146	2.1	64
5 Su	0417	−0.1	−3
	1113	1.7	52
	1558	0.8	24
	2143	2.1	64
6 M	0448	−0.2	−6
	1204	1.6	49
	1616	1.1	34
	2141	2.2	67
7 Tu	0524	−0.3	−9
	1323	1.5	46
	1625	1.3	40
	2145	2.3	70
8 W	0605	−0.3	−9
	2155	2.3	70
9 Th	0658	−0.2	−6
	2204	2.3	70
10 F	0811	−0.1	−3
	2156	2.3	70
11 Sa ◑	0948	−0.1	−3
	1954	2.2	67
12 Su	1121	−0.2	−6
	1951	2.3	70
13 M	0321	1.4	43
	0540	1.5	46
	1226	−0.2	−6
	2005	2.4	73
14 Tu	0229	1.1	34
	0703	1.7	52
	1315	−0.1	−3
	2024	2.4	73
15 W	0229	0.7	21
	0805	1.9	58
	1357	0.1	3
	2044	2.5	76

	Time	Height	
	h m	ft	cm
16 Th	0251	0.3	9
	0901	2.1	64
	1433	0.3	9
	2104	2.5	76
17 F	0321	−0.1	−3
	0957	2.2	67
	1506	0.7	21
	2122	2.5	76
18 Sa ●	0355	−0.4	−12
	1053	2.1	64
	1535	1.0	30
	2136	2.5	76
19 Su	0431	−0.6	−18
	1155	2.0	61
	1557	1.4	43
	2141	2.5	76
20 M	0508	−0.7	−21
	1309	1.9	58
	1609	1.7	52
	2129	2.5	76
21 Tu	0548	−0.6	−18
	2108	2.5	76
22 W	0630	−0.4	−12
	2059	2.5	76
23 Th	0718	−0.1	−3
	2057	2.5	76
24 F	0823	0.1	3
	2048	2.4	73
25 Sa ◐	1021	0.3	9
	2012	2.3	70
26 Su	1158	0.4	12
	1952	2.3	70
27 M	0328	1.1	34
	0623	1.3	40
	1236	0.5	15
	1952	2.3	70
28 Tu	0312	1.0	30
	0722	1.5	46
	1259	0.7	21
	2000	2.3	70
29 W	0254	0.8	24
	0808	1.6	49
	1320	0.8	24
	2010	2.3	70
30 Th	0243	0.5	15
	0849	1.8	55
	1342	0.9	27
	2022	2.4	73

May

	Time	Height	
	h m	ft	cm
1 F	0250	0.2	6
	0929	1.9	58
	1407	1.0	30
	2032	2.4	73
2 Sa	0309	0.0	0
	1011	2.0	61
	1433	1.2	37
	2040	2.5	76
3 Su ○	0335	−0.3	−9
	1055	2.0	61
	1500	1.4	43
	2045	2.5	76
4 M	0405	−0.4	−12
	1146	2.0	61
	1526	1.6	49
	2048	2.6	79
5 Tu	0438	−0.5	−15
	1249	2.0	61
	1550	1.8	55
	2055	2.7	82
6 W	0515	−0.5	−15
	2105	2.7	82
7 Th	0557	−0.5	−15
	2115	2.7	82
8 F	0646	−0.4	−12
	2118	2.6	79
9 Sa	0744	−0.2	−6
	1841	2.5	76
10 Su	0855	0.1	3
	1837	2.6	79
11 M ◑	1015	0.3	9
	1852	2.6	79
12 Tu	0248	1.2	37
	0557	1.4	43
	1127	0.5	15
	1911	2.7	82
13 W	0219	0.9	27
	0723	1.7	52
	1225	0.8	24
	1930	2.7	82
14 Th	0224	0.4	12
	0829	1.9	58
	1312	1.1	34
	1950	2.8	85
15 F	0245	0.0	0
	0927	2.2	67
	1351	1.4	43
	2009	2.8	85

	Time	Height	
	h m	ft	cm
16 Sa	0313	−0.4	−12
	1023	2.3	70
	1424	1.7	52
	2026	2.9	88
17 Su ●	0346	−0.6	−18
	1120	2.4	73
	1453	1.9	58
	2039	2.9	88
18 M	0419	−0.7	−21
	1220	2.4	73
	1516	2.1	64
	2043	2.9	88
19 Tu	0454	−0.7	−21
	1331	2.4	73
	1532	2.3	70
	2037	2.9	88
20 W	0529	−0.5	−15
	2030	2.8	85
21 Th	0605	−0.3	−9
	2029	2.8	85
22 F	0641	0.0	0
	2028	2.7	82
23 Sa	0719	0.3	9
	1956	2.6	79
24 Su	0801	0.6	18
	1838	2.5	76
25 M ◐	0853	0.8	24
	1838	2.5	76
26 Tu	0320	1.2	37
	0603	1.3	40
	0955	1.1	34
	1847	2.5	76
27 W	0258	1.1	34
	0725	1.5	46
	1057	1.3	40
	1858	2.6	79
28 Th	0238	0.8	24
	0819	1.7	52
	1149	1.5	46
	1910	2.6	79
29 F	0227	0.5	15
	0903	2.0	61
	1234	1.6	49
	1923	2.7	82
30 Sa	0234	0.2	6
	0945	2.1	64
	1314	1.8	55
	1936	2.8	85
31 Su	0256	−0.1	−3
	1028	2.3	70
	1352	1.9	58
	1949	3.0	91

June

	Time	Height	
	h m	ft	cm
1 M	0324	−0.3	−9
	1114	2.4	73
	1429	2.1	64
	2003	3.0	91
2 Tu ○	0356	−0.5	−15
	1204	2.5	76
	1505	2.3	70
	2018	3.1	94
3 W	0432	−0.6	−18
	1301	2.6	79
	1542	2.4	73
	2034	3.1	94
4 Th	0510	−0.6	−18
	1406	2.6	79
	1620	2.5	76
	2049	3.1	94
5 F	0551	−0.5	−15
	2101	2.9	88
6 Sa	0634	−0.2	−6
	1617	2.8	85
	1842	2.7	82
	2055	2.8	85
7 Su	0720	0.1	3
	1657	2.8	85
8 M	0810	0.5	15
	1727	2.8	85
9 Tu ◑	0905	0.9	27
	1752	2.9	88
10 W	0212	1.2	37
	0631	1.6	49
	1008	1.4	43
	1816	2.9	88
11 Th	0206	0.8	24
	0805	1.9	58
	1114	1.7	52
	1838	3.0	91
12 F	0219	0.3	9
	0913	2.2	67
	1212	2.1	64
	1900	3.1	94
13 Sa	0242	−0.1	−3
	1007	2.5	76
	1300	2.3	70
	1923	3.2	98
14 Su	0309	−0.3	−9
	1056	2.6	79
	1340	2.5	76
	1944	3.3	101
15 M	0339	−0.5	−15
	1142	2.7	82
	1415	2.6	79
	2003	3.3	101

	Time	Height	
	h m	ft	cm
16 Tu ●	0410	−0.5	−15
	1227	2.8	85
	1448	2.7	82
	2017	3.3	101
17 W	0440	−0.4	−12
	1315	2.8	85
	1520	2.7	82
	2024	3.2	98
18 Th	0511	−0.3	−9
	2028	3.1	94
19 F	0540	0.0	0
	2034	3.0	91
20 Sa	0608	0.3	9
	2040	2.8	85
21 Su	0635	0.6	18
	1631	2.7	82
22 M	0700	0.9	27
	1657	2.7	82
23 Tu	0724	1.2	37
	1718	2.7	82
24 W ◐	0320	1.4	43
	1736	2.7	82
25 Th	0243	1.3	40
	1753	2.8	85
26 F	0220	1.0	30
	1810	2.9	88
27 Sa	0207	0.7	21
	1830	3.1	94
28 Su	0218	0.4	12
	1001	2.5	76
	1230	2.4	73
	1853	3.2	98
29 M	0242	0.0	0
	1034	2.7	82
	1327	2.5	76
	1920	3.4	104
30 Tu	0313	−0.2	−6
	1111	2.9	88
	1417	2.6	79
	1949	3.5	107

Time meridian 105° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.
Heights are referred to the chart datum of soundings.
* Neither a high or low water but an intermediate value to show the period of an approximate stand.

Guaymas, Mexico, 2015

Times and Heights of High and Low Waters

July

	Time	Height			Time	Height	
	h m	ft	cm		h m	ft	cm
1 W ○	0347	−0.4	−12	**16** Th	0423	0.0	0
	1152	3.0	91		1222	3.0	91
	1503	2.7	82		1528	2.8	85
	2018	3.5	107		2050	3.4	104
2 Th	0423	−0.4	−12	**17** F	0447	0.2	6
	1235	3.1	94		1252	3.0	91
	1550	2.7	82		1605	2.7	82
	2047	3.4	104		2106	3.2	98
3 F	0501	−0.4	−12	**18** Sa	0511	0.4	12
	1320	3.1	94		1323	2.9	88
	1639	2.8	85		1644	2.6	79
	2113	3.3	101		2117	3.1	94
4 Sa	0539	−0.1	−3	**19** Su	0534	0.7	21
	1407	3.1	94		1355	2.8	85
	1737	2.7	82		1727	2.6	79
	2134	3.1	94		2127	2.9	88
5 Su	0616	0.2	6	**20** M	0555	1.0	30
	1452	3.0	91		1426	2.8	85
	1856	2.6	79		1819	2.5	76
	2138	2.7	82		2138	2.7	82
6 M	0651	0.7	21	**21** Tu	0612	1.3	40
	1534	3.0	91		1455	2.8	85
					1935	2.3	70
					2143	2.4	73
7 Tu	0723	1.2	37	**22** W	0621	1.6	49
	1612	3.0	91		1519	2.8	85
8 W ◑	0142	1.7	52	**23** Th ◐	0304	1.8	55
	0452	1.8	55		1540	2.8	85
	0743	1.7	52				
	1647	3.0	91				
9 Th	0134	1.2	37	**24** F	0216	1.6	49
	1719	3.1	94		1610	2.9	88
10 F	0151	0.8	24	**25** Sa	0149	1.3	40
	1751	3.2	98		1658	3.0	91
11 Sa	0214	0.4	12	**26** Su	0139	0.9	27
	1823	3.3	101		1746	3.2	98
12 Su	0240	0.2	6	**27** M	0156	0.6	18
	1856	3.4	104		0953	3.0	91
					1226	2.8	85
					1832	3.4	104
13 M	0306	0.0	0	**28** Tu	0224	0.2	6
	1109	3.0	91		1013	3.1	94
	1328	2.9	88		1333	2.8	85
	1929	3.5	107		1915	3.6	110
14 Tu	0332	−0.1	−3	**29** W	0257	0.0	0
	1130	3.0	91		1042	3.3	101
	1412	2.9	88		1423	2.8	85
	2000	3.5	107		1957	3.7	113
15 W ●	0357	−0.1	−3	**30** Th	0332	−0.1	−3
	1155	3.0	91		1113	3.3	101
	1450	2.8	85		1509	2.7	82
	2028	3.5	107		2039	3.7	113
				31 F ○	0408	−0.1	−3
					1147	3.3	101
					1554	2.6	79
					2121	3.6	110

August

	Time	Height			Time	Height	
	h m	ft	cm		h m	ft	cm
1 Sa	0444	0.1	3	**16** Su	0437	0.9	27
	1221	3.3	101		1156	3.0	91
	1640	2.5	76		1631	2.2	67
	2203	3.4	104		2205	3.1	94
2 Su	0519	0.4	12	**17** M	0457	1.2	37
	1255	3.2	98		1210	2.9	88
	1731	2.3	70		1705	2.1	64
	2248	3.1	94		2221	2.9	88
3 M	0551	0.9	27	**18** Tu	0515	1.4	43
	1328	3.1	94		1209	2.8	85
	1833	2.2	67		1743	2.0	61
	2341	2.6	79		2234	2.6	79
4 Tu	0617	1.4	43	**19** W	0528	1.7	52
	1401	3.0	91		1144	2.9	88
	2000	2.0	61		1831	2.0	61
					2248	2.4	73
5 W	0213	2.2	67	**20** Th	0526	2.0	61
	0628	1.9	58		1131	2.9	88
	1433	3.0	91		1939	1.9	58
					2306	2.1	64
6 Th ◑	0004	1.7	52	**21** F	0159	2.0	61
	1511	3.0	91		1139	3.0	91
7 F	0053	1.2	37	**22** Sa ◐	0110	1.7	52
	1157	3.1	94		1158	3.1	94
8 Sa	0130	0.9	27	**23** Su	0035	1.4	43
	1138	3.2	98		1227	3.1	94
	1502	3.0	91				
	1715	3.1	94				
9 Su	0203	0.6	18	**24** M	0054	1.0	30
	1110	3.2	98		0918	3.0	91
	1512	3.1	94		1151	2.9	88
	1811	3.2	98		1719	3.0	91
10 M	0231	0.5	15	**25** Tu	0124	0.7	21
	1032	3.2	98		0914	3.2	98
	1459	3.0	91		1314	2.9	88
	1858	3.3	101		1830	3.2	98
11 Tu	0255	0.4	12	**26** W	0159	0.4	12
	1031	3.2	98		0932	3.3	101
	1430	2.9	88		1352	2.7	82
	1939	3.4	104		1923	3.4	104
12 W	0316	0.4	12	**27** Th	0234	0.2	6
	1042	3.2	98		0956	3.4	104
	1437	2.8	85		1430	2.4	73
	2015	3.5	107		2012	3.6	110
13 Th	0336	0.4	12	**28** F	0310	0.2	6
	1058	3.1	94		1022	3.4	104
	1500	2.6	79		1508	2.2	67
	2048	3.4	104		2100	3.6	110
14 F ●	0356	0.5	15	**29** Sa ○	0346	0.3	9
	1117	3.1	94		1049	3.3	101
	1528	2.4	73		1548	1.9	58
	2118	3.4	104		2149	3.5	107
15 Sa	0417	0.7	21	**30** Su	0420	0.6	18
	1137	3.0	91		1115	3.3	101
	1558	2.3	70		1630	1.7	52
	2144	3.2	98		2241	3.3	101
				31 M	0452	1.1	34
					1138	3.2	98
					1715	1.5	46
					2341	3.0	91

September

	Time	Height			Time	Height	
	h m	ft	cm		h m	ft	cm
1 Tu	0518	1.6	49	**16** W	0435	1.7	52
	1156	3.1	94		1016	2.9	88
	1806	1.4	43		1717	1.3	40
					2349	2.4	73
2 W	0105	2.6	79	**17** Th	0445	2.0	61
	0535	2.0	61		1010	3.0	91
	1154	3.0	91		1756	1.2	37
	1909	1.4	43				
3 Th	1057	3.0	91	**18** F	0157	2.2	67
	2057	1.4	43		0426	2.1	64
					1015	3.0	91
					1848	1.3	40
4 F	1020	3.2	98	**19** Sa	1027	3.1	94
					2007	1.3	40
5 Sa ◑	0000	1.1	34	**20** Su	1038	3.0	91
	1009	3.3	101		2209	1.1	34
6 Su	0059	0.9	27	**21** M ◐	0952	3.0	91
	0958	3.3	101		2348	0.9	27
7 M	0139	0.7	21	**22** Tu	0816	3.0	91
	0939	3.2	98				
	1528	2.7	82				
	1819	2.8	85				
8 Tu	0209	0.7	21	**23** W	0042	0.6	18
	0930	3.2	98		0825	3.1	94
	1519	2.6	79		1403	2.4	73
	1910	3.0	91		1835	2.8	85
9 W	0232	0.7	21	**24** Th	0125	0.5	15
	0933	3.1	94		0843	3.2	98
	1459	2.4	73		1403	2.0	61
	1951	3.1	94		1933	3.0	91
10 Th	0249	0.8	24	**25** F	0204	0.4	12
	0943	3.1	94		0904	3.2	98
	1448	2.2	67		1429	1.6	49
	2027	3.1	94		2025	3.2	98
11 F	0304	0.8	24	**26** Sa	0241	0.5	15
	0956	3.0	91		0927	3.2	98
	1459	2.0	61		1502	1.3	40
	2102	3.2	98		2117	3.2	98
12 Sa ●	0321	1.0	30	**27** Su ○	0316	0.8	24
	1010	3.0	91		0949	3.2	98
	1519	1.7	52		1538	0.9	27
	2135	3.1	94		2211	3.2	98
13 Su	0340	1.1	34	**28** M	0349	1.2	37
	1024	3.0	91		1008	3.1	94
	1545	1.5	46		1617	0.6	18
	2207	3.0	91		2309	3.0	91
14 M	0359	1.3	40	**29** Tu	0418	1.6	49
	1031	2.9	88		1021	3.1	94
	1613	1.4	43		1658	0.5	15
	2238	2.8	85				
15 Tu	0418	1.5	46	**30** W	0017	2.8	85
	1029	2.9	88		0440	2.0	61
	1643	1.3	40		1020	3.0	91
	2311	2.7	82		1743	0.5	15

Time meridian 105° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.
Heights are referred to the chart datum of soundings.
* Neither a high or low water but an intermediate value to show the period of an approximate stand.

Guaymas, Mexico, 2015

Times and Heights of High and Low Waters

October

	Time	Height	
	h m	ft	cm
1 Th	0153	2.5	76
	0446	2.4	73
	0951	3.0	91
	1833	0.6	18
2 F	0922	3.1	94
	1940	0.7	21
3 Sa	0909	3.1	94
	2209	0.9	27
4 Su ◑	0900	3.1	94
5 M	0008	0.8	24
	0844	3.0	91
6 Tu	0059	0.8	24
	0829	3.0	91
	1516	1.9	58
	1825	2.2	67
7 W	0131	0.8	24
	0828	2.9	88
	1508	1.8	55
	1917	2.3	70
8 Th	0152	0.9	27
	0834	2.8	85
	1455	1.6	49
	1959	2.5	76
9 F	0207	1.0	30
	0844	2.8	85
	1445	1.4	43
	2036	2.6	79
10 Sa	0221	1.1	34
	0855	2.8	85
	1450	1.1	34
	2112	2.6	79
11 Su	0238	1.2	37
	0906	2.8	85
	1508	0.8	24
	2148	2.6	79
12 M ●	0258	1.3	40
	0914	2.8	85
	1531	0.6	18
	2226	2.6	79
13 Tu	0319	1.5	46
	0916	2.8	85
	1558	0.5	15
	2307	2.5	76
14 W	0340	1.7	52
	0912	2.8	85
	1627	0.4	12
	2356	2.3	70
15 Th	0358	1.9	58
	0909	2.8	85
	1700	0.3	9

	Time	Height	
	h m	ft	cm
16 F	0109	2.2	67
	0409	2.1	64
	0914	2.9	88
	1737	0.3	9
17 Sa	0925	2.9	88
	1823	0.4	12
18 Su	0935	2.9	88
	1926	0.5	15
19 M	0929	2.8	85
	2054	0.6	18
20 Tu ◐	0722	2.8	85
	2233	0.6	18
21 W	0720	2.8	85
	1519	1.7	52
	1719	1.8	55
	2348	0.5	15
22 Th	0734	2.9	88
	1411	1.6	49
	1845	2.1	64
23 F	0043	0.6	18
	0752	2.9	88
	1404	1.1	34
	1947	2.3	70
24 Sa	0127	0.7	21
	0812	2.9	88
	1424	0.6	18
	2042	2.5	76
25 Su	0207	0.9	27
	0832	2.9	88
	1454	0.2	6
	2137	2.7	82
26 M	0243	1.2	37
	0851	2.9	88
	1529	−0.2	−6
	2234	2.7	82
27 Tu ○	0315	1.5	46
	0906	2.9	88
	1606	−0.4	−12
	2335	2.6	79
28 W	0342	1.9	58
	0914	2.9	88
	1644	−0.5	−15
29 Th	0046	2.5	76
	0401	2.2	67
	0906	2.9	88
	1725	−0.4	−12
30 F	0846	2.8	85
	1807	−0.2	−6
31 Sa	0832	2.8	85
	1854	0.0	0

November

	Time	Height	
	h m	ft	cm
1 Su	0824	2.8	85
	1953	0.3	9
2 M	0805	2.7	82
	2130	0.6	18
3 Tu ◑	0733	2.6	79
	2332	0.7	21
4 W	0724	2.5	76
	1505	1.2	37
	1824	1.4	43
5 Th	0022	0.9	27
	0728	2.5	76
	1455	1.0	30
	1923	1.6	49
6 F	0048	1.0	30
	0737	2.5	76
	1446	0.8	24
	2008	1.8	55
7 Sa	0107	1.1	34
	0748	2.5	76
	1437	0.5	15
	2047	1.9	58
8 Su	0127	1.2	37
	0759	2.5	76
	1440	0.2	6
	2126	2.0	61
9 M	0151	1.3	40
	0809	2.5	76
	1456	0.0	0
	2205	2.1	64
10 Tu	0216	1.4	43
	0816	2.6	79
	1519	−0.3	−9
	2246	2.1	64
11 W ●	0242	1.6	49
	0820	2.6	79
	1547	−0.4	−12
	2332	2.1	64
12 Th	0308	1.7	52
	0823	2.6	79
	1617	−0.5	−15
13 F	0028	2.1	64
	0333	1.9	58
	0831	2.7	82
	1651	−0.6	−18
14 Sa	0141	2.1	64
	0353	2.0	61
	0842	2.7	82
	1728	−0.5	−15
15 Su	0855	2.6	79
	1811	−0.4	−12

	Time	Height	
	h m	ft	cm
16 M	0903	2.5	76
	1901	−0.2	−6
17 Tu	0615	2.3	70
	2004	0.0	0
18 W ◐	0606	2.4	73
	2120	0.3	9
19 Th	0622	2.4	73
	1449	1.1	34
	1733	1.2	37
	2241	0.5	15
20 F	0641	2.5	76
	1403	0.7	21
	1906	1.5	46
	2350	0.7	21
21 Sa	0701	2.5	76
	1401	0.2	6
	2012	1.7	52
22 Su	0045	1.0	30
	0722	2.6	79
	1421	−0.3	−9
	2110	2.0	61
23 M	0130	1.3	40
	0742	2.6	79
	1450	−0.8	−24
	2204	2.2	67
24 Tu	0209	1.5	46
	0801	2.7	82
	1523	−1.1	−34
	2259	2.2	67
25 W ○	0242	1.8	55
	0818	2.7	82
	1558	−1.2	−37
	2356	2.3	70
26 Th	0311	1.9	58
	0828	2.7	82
	1634	−1.2	−37
27 F	0059	2.2	67
	0334	2.1	64
	0828	2.6	79
	1709	−1.1	−34
28 Sa	0820	2.5	76
	1745	−0.8	−24
29 Su	0815	2.4	73
	1819	−0.5	−15
30 M	0808	2.3	70
	1853	−0.2	−6

December

	Time	Height	
	h m	ft	cm
1 Tu	0714	2.1	64
	1928	0.2	6
2 W	0609	2.1	64
	2006	0.5	15
3 Th ◑	0616	2.0	61
	1500	0.6	18
	1825	0.8	24
	2100	0.7	21
4 F	0627	2.0	61
	1446	0.4	12
	1949	1.1	34
	2218	1.0	30
5 Sa	0640	2.1	64
	1436	0.2	6
	2035	1.3	40
	2328	1.2	37
6 Su	0653	2.1	64
	1428	−0.1	−3
	2111	1.5	46
7 M	0020	1.3	40
	0707	2.2	67
	1431	−0.4	−12
	2146	1.6	49
8 Tu	0102	1.4	43
	0720	2.3	70
	1447	−0.7	−21
	2222	1.8	55
9 W	0140	1.5	46
	0734	2.3	70
	1511	−0.9	−27
	2300	1.9	58
10 Th	0217	1.6	49
	0748	2.4	73
	1539	−1.1	−34
	2342	1.9	58
11 F ●	0253	1.6	49
	0803	2.4	73
	1611	−1.2	−37
12 Sa	0029	2.0	61
	0329	1.7	52
	0820	2.4	73
	1645	−1.2	−37
13 Su	0121	2.0	61
	0407	1.8	55
	0838	2.4	73
	1721	−1.1	−34
14 M	0220	2.0	61
	0452	1.9	58
	0855	2.2	67
	1759	−0.9	−27
15 Tu	0320	2.0	61
	0559	1.9	58
	0905	2.0	61
	1839	−0.6	−18

	Time	Height	
	h m	ft	cm
16 W	0409	2.0	61
	1922	−0.2	−6
17 Th	0447	2.0	61
	2009	0.2	6
18 F ◐	0517	2.0	61
	1408	0.5	15
	1813	0.8	24
	2109	0.6	18
19 Sa	0544	2.1	64
	1349	0.0	0
	1959	1.1	34
	2229	1.0	30
20 Su	0610	2.1	64
	1358	−0.5	−15
	2103	1.5	46
	2354	1.4	43
21 M	0635	2.2	67
	1421	−0.9	−27
	2152	1.8	55
22 Tu	0058	1.6	49
	0701	2.3	70
	1449	−1.3	−40
	2235	1.9	58
23 W	0146	1.7	52
	0728	2.4	73
	1520	−1.5	−46
	2316	2.0	61
24 Th	0225	1.8	55
	0753	2.4	73
	1552	−1.6	−49
	2357	2.0	61
25 F ○	0259	1.8	55
	0815	2.4	73
	1623	−1.5	−46
26 Sa	0037	2.0	61
	0332	1.8	55
	0831	2.3	70
	1653	−1.3	−40
27 Su	0120	1.9	58
	0406	1.7	52
	0838	2.2	67
	1721	−1.1	−34
28 M	0204	1.8	55
	0444	1.7	52
	0840	2.0	61
	1747	−0.8	−24
29 Tu	0250	1.7	52
	0530	1.6	49
	0841	1.8	55
	1810	−0.4	−12
30 W	0335	1.7	52
	1829	−0.1	−3
31 Th	0415	1.6	49
	1837	0.2	6

Time meridian 105° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.
Heights are referred to the chart datum of soundings.
* Neither a high or low water but an intermediate value to show the period of an approximate stand.

San Diego, California, 2015

Times and Heights of High and Low Waters

January

	Time	Height	
	h m	ft	cm
1 Th	0610	6.4	195
	1318	−0.5	−15
	1935	4.0	122
2 F	0032	1.7	52
	0651	6.5	198
	1358	−0.8	−24
	2019	4.1	125
3 Sa	0115	1.7	52
	0729	6.6	201
	1434	−0.9	−27
	2056	4.2	128
4 Su ○	0154	1.7	52
	0805	6.6	201
	1507	−1.0	−30
	2131	4.3	131
5 M	0231	1.8	55
	0839	6.4	195
	1539	−0.9	−27
	2204	4.3	131
6 Tu	0307	1.8	55
	0912	6.2	189
	1611	−0.7	−21
	2237	4.3	131
7 W	0343	1.9	58
	0945	5.9	180
	1642	−0.4	−12
	2311	4.2	128
8 Th	0421	2.1	64
	1018	5.5	168
	1714	−0.1	−3
	2348	4.2	128
9 F	0503	2.2	67
	1052	5.0	152
	1746	0.3	9
10 Sa	0028	4.2	128
	0554	2.4	73
	1130	4.4	134
	1820	0.7	21
11 Su	0113	4.2	128
	0701	2.4	73
	1218	3.8	116
	1858	1.2	37
12 M	0205	4.3	131
	0829	2.3	70
	1335	3.2	98
	1945	1.6	49
13 Tu ◑	0302	4.5	137
	1003	1.9	58
	1524	2.9	88
	2047	1.9	58
14 W	0357	4.8	146
	1115	1.3	40
	1703	3.0	91
	2156	2.0	61
15 Th	0448	5.2	158
	1205	0.6	18
	1813	3.3	101
	2258	2.0	61

	Time	Height	
	h m	ft	cm
16 F	0534	5.7	174
	1247	−0.1	−3
	1903	3.6	110
	2352	1.9	58
17 Sa	0618	6.2	189
	1326	−0.7	−21
	1944	4.0	122
18 Su	0041	1.7	52
	0701	6.7	204
	1404	−1.2	−37
	2023	4.3	131
19 M	0127	1.5	46
	0743	7.0	213
	1443	−1.6	−49
	2102	4.6	140
20 Tu ●	0213	1.2	37
	0826	7.2	219
	1522	−1.7	−52
	2142	4.8	146
21 W	0259	1.1	34
	0910	7.0	213
	1602	−1.6	−49
	2223	5.0	152
22 Th	0349	1.0	30
	0956	6.7	204
	1643	−1.3	−40
	2306	5.1	155
23 F	0442	1.1	34
	1045	6.0	183
	1726	−0.8	−24
	2353	5.2	158
24 Sa	0542	1.2	37
	1139	5.2	158
	1811	−0.1	−3
25 Su	0045	5.2	158
	0654	1.3	40
	1244	4.3	131
	1901	0.6	18
26 M ◐	0144	5.2	158
	0822	1.3	40
	1409	3.6	110
	2000	1.2	37
27 Tu	0251	5.3	162
	1001	1.0	30
	1559	3.2	98
	2111	1.7	52
28 W	0400	5.4	165
	1126	0.5	15
	1744	3.3	101
	2228	2.0	61
29 Th	0503	5.6	171
	1226	0.0	0
	1852	3.6	110
	2335	2.0	61
30 F	0556	5.8	177
	1311	−0.4	−12
	1937	3.9	119
31 Sa	0028	1.9	58
	0641	6.0	183
	1348	−0.7	−21
	2012	4.1	125

February

	Time	Height	
	h m	ft	cm
1 Su	0111	1.7	52
	0720	6.1	186
	1420	−0.8	−24
	2041	4.3	131
2 M	0148	1.6	49
	0755	6.2	189
	1448	−0.8	−24
	2108	4.4	134
3 Tu ○	0222	1.4	43
	0827	6.1	186
	1515	−0.7	−21
	2134	4.5	137
4 W	0255	1.3	40
	0858	6.0	183
	1542	−0.6	−18
	2200	4.5	137
5 Th	0328	1.3	40
	0929	5.7	174
	1608	−0.3	−9
	2227	4.6	140
6 F	0402	1.4	43
	1000	5.3	162
	1634	0.0	0
	2256	4.6	140
7 Sa	0438	1.4	43
	1031	4.9	149
	1700	0.4	12
	2326	4.5	137
8 Su	0519	1.6	49
	1105	4.3	131
	1726	0.8	24
9 M	0000	4.5	137
	0610	1.7	52
	1147	3.7	113
	1752	1.2	37
10 Tu	0041	4.4	134
	0721	1.8	55
	1248	3.2	98
	1824	1.7	52
11 W ◑	0136	4.5	137
	0856	1.6	49
	1439	2.7	82
	1916	2.1	64
12 Th	0248	4.6	140
	1029	1.2	37
	1644	2.8	85
	2059	2.3	70
13 F	0401	4.9	149
	1134	0.5	15
	1802	3.2	98
	2232	2.3	70
14 Sa	0504	5.4	165
	1222	−0.2	−6
	1847	3.6	110
	2338	2.0	61
15 Su	0557	5.9	180
	1303	−0.8	−24
	1924	4.1	125

	Time	Height	
	h m	ft	cm
16 M	0031	1.5	46
	0646	6.4	195
	1342	−1.3	−40
	2000	4.6	140
17 Tu	0119	1.1	34
	0732	6.8	207
	1420	−1.5	−46
	2036	5.0	152
18 W ●	0206	0.6	18
	0817	6.9	210
	1458	−1.6	−49
	2113	5.3	162
19 Th	0253	0.3	9
	0902	6.8	207
	1536	−1.4	−43
	2151	5.6	171
20 F	0341	0.1	3
	0948	6.3	192
	1615	−1.0	−30
	2231	5.7	174
21 Sa	0432	0.1	3
	1037	5.7	174
	1654	−0.4	−12
	2314	5.7	174
22 Su	0528	0.3	9
	1130	4.8	146
	1736	0.3	9
23 M	0001	5.5	168
	0632	0.6	18
	1233	4.0	122
	1822	1.1	34
24 Tu	0056	5.3	162
	0752	0.8	24
	1359	3.3	101
	1920	1.7	52
25 W ◐	0203	5.0	152
	0930	0.7	21
	1602	3.1	94
	2043	2.2	67
26 Th	0323	4.9	149
	1103	0.4	12
	1749	3.4	104
	2219	2.3	70
27 F	0440	5.0	152
	1206	0.1	3
	1845	3.7	113
	2334	2.1	64
28 Sa	0541	5.2	158
	1251	−0.2	−6
	1921	4.0	122

March

	Time	Height	
	h m	ft	cm
1 Su	0026	1.8	55
	0629	5.4	165
	1325	−0.3	−9
	1949	4.3	131
2 M	0105	1.5	46
	0707	5.6	171
	1354	−0.4	−12
	2012	4.5	137
3 Tu	0139	1.2	37
	0741	5.7	174
	1419	−0.4	−12
	2034	4.6	140
4 W	0210	1.0	30
	0813	5.7	174
	1444	−0.3	−9
	2057	4.8	146
5 Th ○	0241	0.8	24
	0843	5.5	168
	1508	−0.2	−6
	2120	4.9	149
6 F	0312	0.7	21
	0914	5.3	162
	1532	0.0	0
	2144	5.0	152
7 Sa	0344	0.6	18
	0945	5.0	152
	1555	0.3	9
	2210	5.0	152
8 Su	0418	0.7	21
	1017	4.6	140
	1619	0.7	21
	2236	5.0	152
9 M	0456	0.8	24
	1053	4.2	128
	1642	1.1	34
	2304	4.9	149
10 Tu	0541	0.9	27
	1136	3.6	110
	1705	1.5	46
	2339	4.8	146
11 W	0641	1.1	34
	1239	3.1	94
	1732	1.9	58
12 Th	0026	4.6	140
	0804	1.1	34
	1423	2.8	85
	1819	2.3	70
13 F ◑	0142	4.6	140
	0938	0.9	27
	1628	2.9	88
	2028	2.6	79
14 Sa	0316	4.7	143
	1053	0.4	12
	1739	3.4	104
	2218	2.4	73
15 Su	0435	5.1	155
	1148	−0.2	−6
	1820	3.9	119
	2329	1.9	58

	Time	Height	
	h m	ft	cm
16 M	0537	5.5	168
	1232	−0.6	−18
	1855	4.5	137
17 Tu	0023	1.2	37
	0631	6.0	183
	1313	−1.0	−30
	1930	5.0	152
18 W	0112	0.6	18
	0720	6.3	192
	1351	−1.1	−34
	2005	5.5	168
19 Th	0158	0.0	0
	0807	6.3	192
	1429	−1.0	−30
	2041	5.9	180
20 F ●	0244	−0.4	−12
	0854	6.2	189
	1506	−0.8	−24
	2118	6.2	189
21 Sa	0331	−0.7	−21
	0941	5.7	174
	1544	−0.3	−9
	2157	6.2	189
22 Su	0420	−0.6	−18
	1030	5.1	155
	1622	0.3	9
	2237	6.1	186
23 M	0512	−0.4	−12
	1124	4.5	137
	1703	0.9	27
	2321	5.8	177
24 Tu	0611	−0.1	−3
	1228	3.8	116
	1748	1.6	49
25 W	0012	5.3	162
	0722	0.3	9
	1354	3.3	101
	1849	2.2	67
26 Th ◐	0115	4.9	149
	0849	0.5	15
	1555	3.3	101
	2021	2.6	79
27 F	0238	4.5	137
	1019	0.5	15
	1729	3.6	110
	2209	2.5	76
28 Sa	0406	4.5	137
	1126	0.4	12
	1816	3.9	119
	2326	2.2	67
29 Su	0515	4.6	140
	1212	0.2	6
	1847	4.2	128
30 M	0015	1.7	52
	0607	4.8	146
	1247	0.1	3
	1912	4.5	137
31 Tu	0052	1.3	40
	0647	5.0	152
	1315	0.1	3
	1933	4.8	146

Time meridian 120° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.
Heights are referred to mean lower low water which is the chart datum of soundings.

San Diego, California, 2015

Times and Heights of High and Low Waters

April

	Time	Height			Time	Height		
	h m	ft	cm		h m	ft	cm	
1 W	0124	0.9	27	**16** Th	0104	0.1	3	
	0723	5.1	155		0709	5.5	168	
	1341	0.1	3		1318	−0.4	−12	
	1955	5.0	152		1933	6.1	186	
2 Th	0155	0.6	18	**17** F	0151	−0.5	−15	
	0755	5.1	155		0758	5.5	168	
	1405	0.2	6		1357	−0.2	−6	
	2017	5.2	158		2010	6.5	198	
3 F	0225	0.3	9	**18** Sa	0236	−1.0	−30	
	0827	5.0	152		0847	5.4	165	
	1429	0.3	9		1435	0.1	3	
	2040	5.4	165	●	2047	6.7	204	
4 Sa	0256	0.1	3	**19** Su	0322	−1.2	−37	
	0900	4.9	149		0935	5.1	155	
	1454	0.5	15		1514	0.5	15	
○	2105	5.5	168		2126	6.6	201	
5 Su	0329	0.0	0	**20** M	0409	−1.1	−34	
	0934	4.6	140		1026	4.7	143	
	1518	0.8	24		1553	1.0	30	
	2130	5.5	168		2205	6.4	195	
6 M	0403	0.0	0	**21** Tu	0458	−0.9	−27	
	1010	4.3	131		1120	4.2	128	
	1543	1.1	34		1635	1.5	46	
	2156	5.5	168		2247	5.9	180	
7 Tu	0441	0.1	3	**22** W	0551	−0.5	−15	
	1050	3.9	119		1222	3.8	116	
	1608	1.5	46		1722	2.1	64	
	2226	5.4	165		2334	5.4	165	
8 W	0526	0.2	6	**23** Th	0651	0.0	0	
	1140	3.6	110		1341	3.5	107	
	1635	1.9	58		1824	2.5	76	
	2301	5.2	158					
9 Th	0621	0.4	12	**24** F	0031	4.8	146	
	1247	3.2	98		0801	0.3	9	
	1711	2.2	67		1518	3.6	110	
	2348	4.9	149		1954	2.8	85	
10 F	0732	0.5	15	**25** Sa	0145	4.3	131	
	1420	3.1	94		0916	0.6	18	
	1817	2.6	79		1640	3.8	116	
				◐	2141	2.7	82	
11 Sa	0100	4.7	143	**26** Su	0313	4.1	125	
	0853	0.5	15		1023	0.6	18	
	1557	3.4	104		1727	4.1	125	
◑	2027	2.7	82		2301	2.2	67	
12 Su	0238	4.6	140	**27** M	0432	4.1	125	
	1007	0.2	6		1114	0.7	21	
	1700	3.8	116		1759	4.4	134	
	2210	2.4	73		2353	1.8	55	
13 M	0407	4.7	143	**28** Tu	0532	4.2	128	
	1106	0.0	0		1153	0.7	21	
	1744	4.4	134		1825	4.8	146	
	2320	1.7	52					
14 Tu	0517	5.1	155	**29** W	0031	1.3	40	
	1155	−0.3	−9		0619	4.3	131	
	1821	5.0	152		1225	0.7	21	
					1849	5.1	155	
15 W	0016	0.9	27	**30** Th	0105	0.8	24	
	0616	5.3	162		0659	4.4	134	
	1238	−0.4	−12		1254	0.8	24	
	1857	5.6	171		1913	5.4	165	

May

	Time	Height			Time	Height		
	h m	ft	cm		h m	ft	cm	
1 F	0137	0.4	12	**16** Sa	0145	−0.8	−24	
	0736	4.5	137		0754	4.8	146	
	1322	0.9	27		1327	0.7	21	
	1937	5.6	171		1943	6.8	207	
2 Sa	0208	0.0	0	**17** Su	0230	−1.2	−37	
	0812	4.5	137		0844	4.7	143	
	1350	1.0	30		1408	0.9	27	
	2003	5.8	177	●	2022	6.9	210	
3 Su	0241	−0.3	−9	**18** M	0314	−1.3	−40	
	0849	4.4	134		0933	4.6	140	
	1417	1.1	34		1448	1.2	37	
○	2030	6.0	183		2101	6.8	207	
4 M	0315	−0.5	−15	**19** Tu	0358	−1.3	−40	
	0927	4.3	131		1022	4.4	134	
	1446	1.3	40		1529	1.6	49	
	2059	6.0	183		2140	6.5	198	
5 Tu	0352	−0.6	−18	**20** W	0443	−1.0	−30	
	1007	4.1	125		1113	4.2	128	
	1515	1.6	49		1612	2.0	61	
	2129	6.0	183		2220	6.1	186	
6 W	0432	−0.5	−15	**21** Th	0530	−0.6	−18	
	1052	3.9	119		1208	4.0	122	
	1547	1.9	58		1700	2.3	70	
	2203	5.9	180		2303	5.5	168	
7 Th	0516	−0.4	−12	**22** F	0619	−0.2	−6	
	1145	3.7	113		1311	3.8	116	
	1624	2.2	67		1758	2.6	79	
	2243	5.6	171		2352	4.9	149	
8 F	0608	−0.2	−6	**23** Sa	0712	0.2	6	
	1249	3.6	110		1420	3.9	119	
	1716	2.5	76		1915	2.8	85	
	2333	5.3	162					
9 Sa	0708	0.0	0	**24** Su	0051	4.4	134	
	1403	3.6	110		0809	0.6	18	
	1838	2.7	82		1527	4.0	122	
					2048	2.8	85	
10 Su	0042	4.9	149	**25** M	0207	3.9	119	
	0815	0.1	3		0907	0.9	27	
	1517	3.9	119		1620	4.3	131	
	2025	2.6	79	◐	2215	2.4	73	
11 M	0211	4.5	137	**26** Tu	0329	3.7	113	
	0922	0.2	6		1001	1.1	34	
	1616	4.4	134		1700	4.6	140	
◑	2159	2.2	67		2319	1.9	58	
12 Tu	0341	4.4	134	**27** W	0444	3.6	110	
	1022	0.2	6		1048	1.2	37	
	1704	5.0	152		1732	4.9	149	
	2311	1.4	43					
13 W	0459	4.5	137	**28** Th	0004	1.4	43	
	1114	0.2	6		0545	3.7	113	
	1746	5.6	171		1128	1.3	40	
					1802	5.3	162	
14 Th	0008	0.6	18	**29** F	0042	0.8	24	
	0604	4.6	140		0635	3.8	116	
	1202	0.3	9		1204	1.4	43	
	1826	6.1	186		1831	5.6	171	
15 F	0059	−0.2	−6	**30** Sa	0117	0.3	9	
	0702	4.7	143		0718	3.9	119	
	1245	0.5	15		1238	1.5	46	
	1905	6.5	198		1900	5.9	180	
				31 Su	0151	−0.1	−3	
					0759	4.1	125	
					1312	1.5	46	
					1931	6.2	189	

June

	Time	Height			Time	Height		
	h m	ft	cm		h m	ft	cm	
1 M	0226	−0.5	−15	**16** Tu	0306	−1.2	−37	
	0839	4.1	125		0929	4.4	134	
	1346	1.6	49		1430	1.7	52	
	2003	6.4	195	●	2042	6.8	207	
2 Tu	0302	−0.8	−24	**17** W	0346	−1.1	−34	
	0920	4.2	128		1013	4.3	131	
	1420	1.7	52		1512	1.9	58	
○	2036	6.5	198		2121	6.5	198	
3 W	0341	−0.9	−27	**18** Th	0425	−0.9	−27	
	1002	4.1	125		1056	4.3	131	
	1457	1.9	58		1554	2.1	64	
	2112	6.5	198		2159	6.1	186	
4 Th	0421	−1.0	−30	**19** F	0504	−0.6	−18	
	1048	4.1	125		1140	4.2	128	
	1538	2.0	61		1639	2.3	70	
	2151	6.3	192		2238	5.7	174	
5 F	0505	−0.9	−27	**20** Sa	0543	−0.2	−6	
	1137	4.1	125		1226	4.2	128	
	1626	2.2	67		1728	2.5	76	
	2236	6.0	183		2318	5.1	155	
6 Sa	0552	−0.7	−21	**21** Su	0624	0.2	6	
	1232	4.1	125		1315	4.2	128	
	1725	2.4	73		1829	2.7	82	
	2327	5.6	171					
7 Su	0644	−0.3	−9	**22** M	0005	4.5	137	
	1332	4.3	131		0707	0.7	21	
	1842	2.5	76		1408	4.2	128	
					1944	2.7	82	
8 M	0031	5.0	152	**23** Tu	0103	4.0	122	
	0740	0.0	0		0753	1.1	34	
	1434	4.6	140		1501	4.4	134	
	2014	2.3	70		2110	2.5	76	
9 Tu	0151	4.5	137	**24** W	0220	3.5	107	
	0839	0.3	9		0843	1.4	43	
	1533	5.0	152		1550	4.7	143	
◑	2144	1.9	58	◐	2230	2.1	64	
10 W	0321	4.1	125	**25** Th	0348	3.3	101	
	0939	0.6	18		0936	1.7	52	
	1626	5.5	168		1634	5.0	152	
	2301	1.2	37		2331	1.5	46	
11 Th	0446	4.0	122	**26** F	0508	3.3	101	
	1036	0.9	27		1027	1.8	55	
	1714	6.0	183		1714	5.3	162	
12 F	0003	0.4	12	**27** Sa	0017	0.9	27	
	0600	4.0	122		0612	3.5	107	
	1129	1.1	34		1115	1.9	58	
	1759	6.4	195		1751	5.7	174	
13 Sa	0055	−0.3	−9	**28** Su	0056	0.4	12	
	0702	4.2	128		0703	3.7	113	
	1218	1.3	40		1200	2.0	61	
	1842	6.7	204		1828	6.1	186	
14 Su	0142	−0.8	−24	**29** M	0133	−0.2	−6	
	0756	4.3	131		0746	3.9	119	
	1304	1.4	43		1242	1.9	58	
	1923	6.9	210		1904	6.4	195	
15 M	0225	−1.1	−34	**30** Tu	0209	−0.6	−18	
	0844	4.3	131		0826	4.1	125	
	1348	1.6	49		1323	1.9	58	
	2003	6.9	210		1942	6.7	204	

Time meridian 120° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.
Heights are referred to mean lower low water which is the chart datum of soundings.

San Diego, California, 2015

Times and Heights of High and Low Waters

July

	Time	Height	
	h m	ft	cm
1 W ○	0247	−0.9	−27
	0906	4.3	131
	1404	1.8	55
	2020	6.9	210
2 Th	0325	−1.2	−37
	0946	4.4	134
	1447	1.8	55
	2101	6.9	210
3 F	0404	−1.2	−37
	1028	4.6	140
	1533	1.8	55
	2144	6.7	204
4 Sa	0446	−1.1	−34
	1113	4.7	143
	1625	1.9	58
	2230	6.3	192
5 Su	0529	−0.7	−21
	1201	4.8	146
	1723	1.9	58
	2321	5.7	174
6 M	0615	−0.3	−9
	1253	5.0	152
	1834	2.0	61
7 Tu	0022	5.0	152
	0705	0.2	6
	1350	5.2	158
	1957	1.9	58
8 W ◑	0138	4.3	131
	0800	0.8	24
	1450	5.4	165
	2128	1.6	49
9 Th	0309	3.8	116
	0901	1.2	37
	1550	5.7	174
	2251	1.0	30
10 F	0445	3.6	110
	1006	1.6	49
	1647	6.1	186
	2358	0.3	9
11 Sa	0607	3.8	116
	1108	1.8	55
	1740	6.4	195
12 Su	0052	−0.2	−6
	0709	4.0	122
	1204	1.9	58
	1827	6.6	201
13 M	0137	−0.6	−18
	0758	4.2	128
	1253	1.9	58
	1910	6.8	207
14 Tu	0217	−0.8	−24
	0839	4.4	134
	1338	1.9	58
	1950	6.8	207
15 W ●	0253	−0.9	−27
	0916	4.5	137
	1419	1.8	55
	2028	6.7	204

	Time	Height	
	h m	ft	cm
16 Th	0327	−0.8	−24
	0951	4.5	137
	1458	1.9	58
	2104	6.5	198
17 F	0400	−0.6	−18
	1024	4.6	140
	1536	1.9	58
	2139	6.1	186
18 Sa	0432	−0.3	−9
	1058	4.6	140
	1615	2.0	61
	2214	5.7	174
19 Su	0504	0.1	3
	1133	4.5	137
	1657	2.1	64
	2250	5.2	158
20 M	0536	0.5	15
	1211	4.5	137
	1745	2.3	70
	2328	4.7	143
21 Tu	0608	0.9	27
	1252	4.5	137
	1845	2.4	73
22 W	0015	4.1	125
	0644	1.3	40
	1339	4.6	140
	2001	2.4	73
23 Th ◐	0120	3.6	110
	0726	1.8	55
	1433	4.7	143
	2130	2.1	64
24 F	0255	3.2	98
	0820	2.1	64
	1531	4.9	149
	2249	1.7	52
25 Sa	0438	3.2	98
	0929	2.4	73
	1625	5.2	158
	2346	1.1	34
26 Su	0555	3.4	104
	1035	2.4	73
	1715	5.6	171
27 M	0031	0.5	15
	0647	3.7	113
	1133	2.3	70
	1800	6.1	186
28 Tu	0110	−0.1	−3
	0728	4.0	122
	1222	2.1	64
	1843	6.5	198
29 W	0147	−0.6	−18
	0805	4.4	134
	1308	1.8	55
	1925	6.9	210
30 Th	0224	−0.9	−27
	0842	4.7	143
	1353	1.6	49
	2007	7.1	216
31 F ○	0302	−1.1	−34
	0919	5.0	152
	1438	1.4	43
	2050	7.1	216

August

	Time	Height	
	h m	ft	cm
1 Sa	0340	−1.1	−34
	0958	5.2	158
	1526	1.2	37
	2135	6.9	210
2 Su	0419	−0.9	−27
	1039	5.4	165
	1617	1.2	37
	2222	6.4	195
3 M	0500	−0.5	−15
	1123	5.5	168
	1713	1.2	37
	2314	5.7	174
4 Tu	0543	0.1	3
	1211	5.6	171
	1819	1.3	40
5 W	0014	4.9	149
	0630	0.8	24
	1306	5.6	171
	1937	1.4	43
6 Th ◑	0131	4.1	125
	0724	1.4	43
	1409	5.6	171
	2109	1.2	37
7 F	0309	3.6	110
	0832	1.9	58
	1518	5.7	174
	2239	0.8	24
8 Sa	0456	3.6	110
	0949	2.2	67
	1626	5.9	180
	2349	0.4	12
9 Su	0616	3.9	119
	1102	2.3	70
	1726	6.1	186
10 M	0042	0.0	0
	0709	4.2	128
	1202	2.2	67
	1817	6.3	192
11 Tu	0124	−0.3	−9
	0749	4.5	137
	1251	2.0	61
	1901	6.4	195
12 W	0200	−0.4	−12
	0821	4.6	140
	1332	1.8	55
	1939	6.5	198
13 Th	0231	−0.4	−12
	0850	4.8	146
	1409	1.6	49
	2015	6.4	195
14 F ●	0300	−0.3	−9
	0917	4.9	149
	1443	1.5	46
	2048	6.3	192
15 Sa	0328	−0.1	−3
	0944	5.0	152
	1517	1.5	46
	2120	6.0	183

	Time	Height	
	h m	ft	cm
16 Su	0355	0.1	3
	1011	5.0	152
	1552	1.5	46
	2152	5.6	171
17 M	0421	0.5	15
	1040	5.0	152
	1629	1.6	49
	2226	5.2	158
18 Tu	0448	0.9	27
	1110	4.9	149
	1709	1.7	52
	2301	4.7	143
19 W	0514	1.3	40
	1142	4.9	149
	1758	1.9	58
	2344	4.1	125
20 Th	0541	1.7	52
	1221	4.8	146
	1902	2.0	61
21 F	0043	3.6	110
	0613	2.2	67
	1312	4.8	146
	2028	2.0	61
22 Sa ◐	0221	3.2	98
	0702	2.6	79
	1421	4.8	146
	2159	1.6	49
23 Su	0420	3.2	98
	0839	2.8	85
	1536	5.1	155
	2309	1.1	34
24 M	0540	3.5	107
	1011	2.8	85
	1641	5.5	168
	2358	0.5	15
25 Tu	0626	4.0	122
	1118	2.5	76
	1735	6.0	183
26 W	0040	0.0	0
	0701	4.4	134
	1210	2.0	61
	1824	6.4	195
27 Th	0118	−0.5	−15
	0735	4.8	146
	1257	1.6	49
	1909	6.8	207
28 F	0155	−0.8	−24
	0810	5.3	162
	1343	1.1	34
	1954	7.0	213
29 Sa ○	0232	−0.9	−27
	0846	5.7	174
	1429	0.7	21
	2039	7.0	213
30 Su	0310	−0.7	−21
	0923	6.0	183
	1516	0.4	12
	2125	6.7	204
31 M	0348	−0.4	−12
	1002	6.2	189
	1606	0.4	12
	2214	6.1	186

September

	Time	Height	
	h m	ft	cm
1 Tu	0427	0.1	3
	1044	6.2	189
	1700	0.4	12
	2307	5.4	165
2 W	0509	0.8	24
	1130	6.1	186
	1802	0.6	18
3 Th	0009	4.6	140
	0555	1.4	43
	1223	5.9	180
	1916	0.9	27
4 F	0130	4.0	122
	0653	2.1	64
	1328	5.6	171
	2046	0.9	27
5 Sa ◑	0318	3.7	113
	0813	2.6	79
	1445	5.5	168
	2217	0.8	24
6 Su	0505	3.9	119
	0947	2.7	82
	1605	5.5	168
	2329	0.5	15
7 M	0610	4.3	131
	1107	2.5	76
	1713	5.7	174
8 Tu	0020	0.2	6
	0652	4.6	140
	1204	2.2	67
	1806	5.8	177
9 W	0059	0.1	3
	0724	4.8	146
	1247	1.8	55
	1849	6.0	183
10 Th	0131	0.1	3
	0750	5.0	152
	1324	1.5	46
	1926	6.0	183
11 F	0159	0.1	3
	0814	5.2	158
	1356	1.3	40
	1959	6.0	183
12 Sa	0225	0.2	6
	0837	5.3	162
	1428	1.1	34
●	2031	5.8	177
13 Su	0250	0.4	12
	0901	5.4	165
	1459	1.0	30
	2102	5.6	171
14 M	0314	0.7	21
	0925	5.5	168
	1531	0.9	27
	2134	5.3	162
15 Tu	0338	1.0	30
	0950	5.5	168
	1605	1.0	30
	2208	5.0	152

	Time	Height	
	h m	ft	cm
16 W	0402	1.3	40
	1016	5.4	165
	1643	1.1	34
	2245	4.5	137
17 Th	0425	1.7	52
	1044	5.3	162
	1726	1.3	40
	2329	4.0	122
18 F	0448	2.1	64
	1116	5.2	158
	1822	1.4	43
19 Sa	0031	3.6	110
	0515	2.5	76
	1200	5.0	152
	1939	1.5	46
20 Su	0210	3.3	101
	0601	2.9	88
	1311	4.8	146
	2108	1.4	43
21 M ◐	0407	3.5	107
	0810	3.2	98
	1446	4.9	149
	2224	1.0	30
22 Tu	0515	3.9	119
	0959	3.0	91
	1608	5.2	158
	2319	0.5	15
23 W	0555	4.4	134
	1108	2.4	73
	1711	5.6	171
24 Th	0004	0.1	3
	0628	4.9	149
	1200	1.8	55
	1805	6.1	186
25 F	0044	−0.2	−6
	0702	5.4	165
	1248	1.1	34
	1854	6.4	195
26 Sa	0122	−0.4	−12
	0736	6.0	183
	1333	0.5	15
	1941	6.5	198
27 Su ○	0159	−0.3	−9
	0812	6.4	195
	1419	0.0	0
	2028	6.4	195
28 M	0237	−0.1	−3
	0848	6.7	204
	1506	−0.4	−12
	2116	6.1	186
29 Tu	0315	0.3	9
	0927	6.8	207
	1554	−0.4	−12
	2207	5.6	171
30 W	0355	0.8	24
	1008	6.7	204
	1647	−0.3	−9
	2302	5.0	152

Time meridian 120° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.
Heights are referred to mean lower low water which is the chart datum of soundings.

San Diego, California, 2015

Times and Heights of High and Low Waters

October

	Time	Height	
	h m	ft	cm
1 Th	0437	1.4	43
	1052	6.4	195
	1745	0.0	0
2 F	0006	4.4	134
	0525	2.1	64
	1144	6.0	183
	1853	0.4	12
3 Sa	0130	4.0	122
	0627	2.6	79
	1247	5.5	168
	2015	0.7	21
4 Su ◑	0318	3.9	119
	0759	3.0	91
	1408	5.1	155
	2141	0.7	21
5 M	0451	4.2	128
	0944	2.9	88
	1536	5.0	152
	2252	0.6	18
6 Tu	0545	4.6	140
	1104	2.5	76
	1651	5.1	155
	2343	0.6	18
7 W	0621	4.9	149
	1157	2.1	64
	1747	5.2	158
8 Th	0022	0.5	15
	0649	5.2	158
	1237	1.6	49
	1831	5.3	162
9 F	0053	0.6	18
	0712	5.4	165
	1311	1.2	37
	1908	5.4	165
10 Sa	0120	0.7	21
	0735	5.6	171
	1342	0.9	27
	1942	5.3	162
11 Su	0145	0.8	24
	0757	5.8	177
	1412	0.6	18
	2014	5.3	162
12 M ●	0209	1.0	30
	0821	5.9	180
	1442	0.4	12
	2047	5.1	155
13 Tu	0234	1.2	37
	0844	6.0	183
	1514	0.3	9
	2121	4.9	149
14 W	0258	1.4	43
	0909	6.0	183
	1548	0.3	9
	2157	4.6	140
15 Th	0322	1.8	55
	0935	5.9	180
	1625	0.4	12
	2237	4.3	131

	Time	Height	
	h m	ft	cm
16 F	0346	2.1	64
	1002	5.7	174
	1707	0.6	18
	2326	3.9	119
17 Sa	0412	2.4	73
	1034	5.5	168
	1759	0.8	24
18 Su	0031	3.6	110
	0445	2.8	85
	1117	5.3	162
	1904	0.9	27
19 M	0201	3.6	110
	0545	3.1	94
	1222	5.0	152
	2022	0.9	27
20 Tu ◐	0335	3.8	116
	0759	3.3	101
	1400	4.8	146
	2134	0.8	24
21 W	0436	4.2	128
	0946	2.9	88
	1534	4.9	149
	2234	0.5	15
22 Th	0517	4.8	146
	1057	2.2	67
	1647	5.1	155
	2323	0.3	9
23 F	0553	5.4	165
	1151	1.4	43
	1748	5.4	165
24 Sa	0007	0.2	6
	0628	6.0	183
	1239	0.6	18
	1841	5.7	174
25 Su	0047	0.2	6
	0704	6.5	198
	1325	−0.1	−3
	1932	5.7	174
26 M	0127	0.3	9
	0741	7.0	213
	1411	−0.7	−21
	2021	5.7	174
27 Tu ○	0206	0.5	15
	0819	7.2	219
	1457	−1.0	−30
	2111	5.4	165
28 W	0245	0.9	27
	0858	7.2	219
	1544	−1.0	−30
	2202	5.1	155
29 Th	0326	1.4	43
	0939	7.0	213
	1634	−0.8	−24
	2258	4.7	143
30 F	0410	1.9	58
	1022	6.6	201
	1728	−0.5	−15
31 Sa	0001	4.3	131
	0459	2.4	73
	1110	6.0	183
	1827	0.0	0

November

	Time	Height	
	h m	ft	cm
1 Su	0118	4.1	125
	0604	2.9	88
	1208	5.4	165
	1935	0.4	12
2 M	0250	4.1	125
	0734	3.1	94
	1322	4.8	146
	2049	0.7	21
3 Tu ◑	0411	4.4	134
	0921	3.0	91
	1450	4.5	137
	2157	0.8	24
4 W	0503	4.7	143
	1046	2.5	76
	1612	4.4	134
	2251	0.9	27
5 Th	0539	5.0	152
	1140	2.0	61
	1716	4.4	134
	2332	1.0	30
6 F	0607	5.3	162
	1221	1.5	46
	1806	4.5	137
7 Sa	0006	1.1	34
	0632	5.6	171
	1255	1.0	30
	1848	4.6	140
8 Su	0036	1.2	37
	0656	5.8	177
	1326	0.6	18
	1925	4.6	140
9 M	0104	1.3	40
	0721	6.0	183
	1357	0.2	6
	2001	4.6	140
10 Tu	0131	1.4	43
	0746	6.2	189
	1428	0.0	0
	2036	4.6	140
11 W ●	0158	1.6	49
	0812	6.3	192
	1501	−0.2	−6
	2113	4.5	137
12 Th	0226	1.8	55
	0839	6.3	192
	1535	−0.3	−9
	2152	4.3	131
13 F	0254	2.0	61
	0908	6.3	192
	1613	−0.2	−6
	2234	4.1	125
14 Sa	0324	2.3	70
	0939	6.1	186
	1654	−0.1	−3
	2324	4.0	122
15 Su	0358	2.5	76
	1015	5.9	180
	1742	0.1	3

	Time	Height	
	h m	ft	cm
16 M	0023	3.8	116
	0443	2.8	85
	1059	5.5	168
	1837	0.3	9
17 Tu	0134	3.9	119
	0557	3.1	94
	1159	5.1	155
	1940	0.4	12
18 W ◐	0246	4.1	125
	0746	3.1	94
	1325	4.7	143
	2045	0.5	15
19 Th	0347	4.6	140
	0927	2.6	79
	1501	4.5	137
	2146	0.6	18
20 F	0435	5.1	155
	1044	1.9	58
	1625	4.5	137
	2241	0.6	18
21 Sa	0518	5.7	174
	1143	1.0	30
	1735	4.6	140
	2330	0.7	21
22 Su	0558	6.3	192
	1233	0.2	6
	1834	4.8	146
23 M	0015	0.8	24
	0637	6.8	207
	1321	−0.5	−15
	1929	4.9	149
24 Tu	0058	0.9	27
	0716	7.2	219
	1406	−1.1	−34
	2020	4.9	149
25 W ○	0141	1.1	34
	0756	7.4	226
	1451	−1.3	−40
	2109	4.8	146
26 Th	0223	1.4	43
	0836	7.3	223
	1536	−1.3	−40
	2159	4.7	143
27 F	0306	1.7	52
	0917	7.1	216
	1621	−1.1	−34
	2250	4.5	137
28 Sa	0350	2.0	61
	0959	6.6	201
	1708	−0.8	−24
	2345	4.3	131
29 Su	0439	2.4	73
	1044	6.0	183
	1757	−0.3	−9
30 M	0046	4.2	128
	0538	2.7	82
	1133	5.4	165
	1850	0.2	6

December

	Time	Height	
	h m	ft	cm
1 Tu	0154	4.2	128
	0653	2.9	88
	1231	4.7	143
	1947	0.6	18
2 W ◑	0303	4.3	131
	0828	2.9	88
	1346	4.1	125
	2046	1.0	30
3 Th	0401	4.6	140
	1003	2.5	76
	1512	3.8	116
	2142	1.2	37
4 F	0445	4.8	146
	1112	2.0	61
	1633	3.7	113
	2231	1.4	43
5 Sa	0519	5.2	158
	1159	1.5	46
	1738	3.7	113
	2313	1.5	46
6 Su	0550	5.5	168
	1237	0.9	27
	1829	3.8	116
	2351	1.6	49
7 M	0619	5.8	177
	1310	0.4	12
	1912	4.0	122
8 Tu	0025	1.7	52
	0648	6.1	186
	1343	0.0	0
	1951	4.1	125
9 W	0058	1.8	55
	0718	6.3	192
	1415	−0.4	−12
	2028	4.2	128
10 Th	0131	1.8	55
	0748	6.5	198
	1449	−0.6	−18
	2106	4.2	128
11 F ●	0204	1.9	58
	0820	6.6	201
	1524	−0.8	−24
	2144	4.2	128
12 Sa	0239	2.0	61
	0853	6.6	201
	1601	−0.8	−24
	2225	4.2	128
13 Su	0316	2.1	64
	0929	6.4	195
	1640	−0.7	−21
	2310	4.2	128
14 M	0358	2.3	70
	1008	6.1	186
	1723	−0.5	−15
	2359	4.2	128
15 Tu	0450	2.4	73
	1053	5.7	174
	1809	−0.3	−9

	Time	Height	
	h m	ft	cm
16 W	0055	4.3	131
	0558	2.6	79
	1148	5.1	155
	1901	0.1	3
17 Th	0155	4.5	137
	0727	2.5	76
	1302	4.5	137
	1958	0.5	15
18 F ◐	0255	4.9	149
	0904	2.2	67
	1434	4.0	122
	2059	0.8	24
19 Sa	0352	5.3	162
	1029	1.5	46
	1609	3.8	116
	2200	1.1	34
20 Su	0444	5.8	177
	1136	0.7	21
	1731	3.9	119
	2258	1.2	37
21 M	0532	6.4	195
	1231	−0.1	−3
	1837	4.1	125
	2351	1.3	40
22 Tu	0617	6.8	207
	1319	−0.8	−24
	1933	4.3	131
23 W	0040	1.4	43
	0700	7.1	216
	1403	−1.2	−37
	2022	4.4	134
24 Th	0126	1.5	46
	0742	7.2	219
	1445	−1.4	−43
	2107	4.5	137
25 F ○	0210	1.6	49
	0823	7.1	216
	1525	−1.4	−43
	2150	4.5	137
26 Sa	0253	1.7	52
	0903	6.9	210
	1605	−1.2	−37
	2232	4.5	137
27 Su	0337	1.8	55
	0942	6.5	198
	1644	−0.9	−27
	2315	4.4	134
28 M	0421	2.0	61
	1022	5.9	180
	1723	−0.5	−15
29 Tu	0000	4.3	131
	0510	2.3	70
	1102	5.3	162
	1802	0.0	0
30 W	0048	4.3	131
	0607	2.5	76
	1146	4.6	140
	1843	0.5	15
31 Th	0140	4.3	131
	0719	2.6	79
	1241	4.0	122
	1928	1.0	30

Time meridian 120° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.
Heights are referred to mean lower low water which is the chart datum of soundings.

Los Angeles (Outer Harbor), California, 2015

Times and Heights of High and Low Waters

January

	Time	Height	
	h m	ft	cm
1 Th	0611	6.1	186
	1322	−0.4	−12
	1941	3.8	116
2 F	0033	1.8	55
	0652	6.2	189
	1402	−0.7	−21
	2026	3.9	119
3 Sa	0116	1.8	55
	0730	6.3	192
	1439	−0.9	−27
	2105	4.0	122
4 Su ○	0155	1.9	58
	0805	6.2	189
	1513	−0.9	−27
	2140	4.0	122
5 M	0232	1.9	58
	0839	6.1	186
	1545	−0.8	−24
	2214	4.0	122
6 Tu	0308	2.0	61
	0912	5.9	180
	1617	−0.6	−18
	2248	4.0	122
7 W	0344	2.0	61
	0945	5.5	168
	1648	−0.3	−9
	2322	4.0	122
8 Th	0423	2.1	64
	1018	5.2	158
	1719	0.0	0
	2359	4.0	122
9 F	0506	2.3	70
	1053	4.7	143
	1751	0.4	12
10 Sa	0039	4.0	122
	0600	2.4	73
	1132	4.1	125
	1824	0.8	24
11 Su	0125	4.0	122
	0712	2.4	73
	1222	3.6	110
	1901	1.2	37
12 M	0216	4.2	128
	0848	2.3	70
	1340	3.1	94
	1947	1.6	49
13 Tu ◑	0310	4.4	134
	1023	1.8	55
	1536	2.8	85
	2045	1.9	58
14 W	0403	4.7	143
	1128	1.2	37
	1720	2.8	85
	2152	2.1	64
15 Th	0450	5.0	152
	1215	0.6	18
	1827	3.1	94
	2255	2.1	64

	Time	Height	
	h m	ft	cm
16 F	0535	5.5	168
	1255	−0.1	−3
	1914	3.4	104
	2350	2.0	61
17 Sa	0618	5.9	180
	1332	−0.6	−18
	1954	3.7	113
18 Su	0039	1.8	55
	0700	6.3	192
	1410	−1.1	−34
	2032	4.0	122
19 M	0126	1.6	49
	0742	6.6	201
	1448	−1.4	−43
	2110	4.3	131
20 Tu ●	0212	1.4	43
	0826	6.8	207
	1527	−1.5	−46
	2149	4.5	137
21 W	0300	1.3	40
	0911	6.6	201
	1607	−1.4	−43
	2230	4.7	143
22 Th	0350	1.2	37
	0957	6.3	192
	1648	−1.1	−34
	2313	4.8	146
23 F	0445	1.2	37
	1046	5.7	174
	1730	−0.6	−18
24 Sa	0000	4.9	149
	0548	1.3	40
	1142	4.9	149
	1815	0.0	0
25 Su	0052	5.0	152
	0702	1.3	40
	1248	4.1	125
	1904	0.6	18
26 M ◐	0151	5.0	152
	0833	1.3	40
	1417	3.4	104
	2003	1.2	37
27 Tu	0257	5.1	155
	1009	0.9	27
	1610	3.1	94
	2115	1.7	52
28 W	0404	5.2	158
	1128	0.4	12
	1748	3.2	98
	2231	2.0	61
29 Th	0505	5.4	165
	1227	0.0	0
	1855	3.5	107
	2337	2.0	61
30 F	0558	5.6	171
	1313	−0.4	−12
	1942	3.7	113
31 Sa	0030	1.9	58
	0642	5.7	174
	1352	−0.6	−18
	2018	3.9	119

February

	Time	Height	
	h m	ft	cm
1 Su	0114	1.8	55
	0721	5.8	177
	1425	−0.7	−21
	2049	4.0	122
2 M	0151	1.7	52
	0756	5.8	177
	1454	−0.7	−21
	2117	4.1	125
3 Tu ○	0225	1.6	49
	0828	5.7	174
	1521	−0.6	−18
	2143	4.2	128
4 W	0257	1.5	46
	0859	5.6	171
	1547	−0.4	−12
	2209	4.2	128
5 Th	0330	1.5	46
	0930	5.3	162
	1613	−0.2	−6
	2235	4.3	131
6 F	0405	1.5	46
	1001	5.0	152
	1638	0.1	3
	2303	4.3	131
7 Sa	0442	1.5	46
	1034	4.6	140
	1704	0.5	15
	2333	4.3	131
8 Su	0526	1.6	49
	1110	4.0	122
	1730	0.9	27
9 M	0007	4.3	131
	0620	1.7	52
	1154	3.5	107
	1758	1.3	40
10 Tu	0048	4.3	131
	0734	1.8	55
	1258	2.9	88
	1831	1.7	52
11 W ◑	0142	4.3	131
	0914	1.6	49
	1455	2.6	79
	1923	2.1	64
12 Th	0251	4.4	134
	1044	1.1	34
	1708	2.7	82
	2055	2.3	70
13 F	0402	4.7	143
	1143	0.5	15
	1816	3.0	91
	2228	2.3	70
14 Sa	0504	5.2	158
	1229	−0.1	−3
	1858	3.4	104
	2336	2.0	61
15 Su	0557	5.7	174
	1309	−0.7	−21
	1933	3.8	116

	Time	Height	
	h m	ft	cm
16 M	0030	1.6	49
	0645	6.1	186
	1347	−1.1	−34
	2007	4.3	131
17 Tu	0119	1.2	37
	0732	6.4	195
	1424	−1.4	−43
	2042	4.6	140
18 W ●	0207	0.8	24
	0817	6.5	198
	1502	−1.4	−43
	2118	5.0	152
19 Th	0254	0.5	15
	0903	6.3	192
	1540	−1.2	−37
	2156	5.2	158
20 F	0343	0.3	9
	0950	5.9	180
	1618	−0.8	−24
	2236	5.4	165
21 Sa	0435	0.3	9
	1040	5.3	162
	1658	−0.3	−9
	2318	5.4	165
22 Su	0533	0.4	12
	1134	4.6	140
	1739	0.4	12
23 M	0006	5.3	162
	0640	0.6	18
	1241	3.8	116
	1825	1.1	34
24 Tu	0101	5.1	155
	0802	0.7	21
	1412	3.2	98
	1924	1.7	52
25 W ◐	0208	4.9	149
	0938	0.6	18
	1612	3.0	91
	2048	2.2	67
26 Th	0327	4.8	146
	1104	0.4	12
	1749	3.3	101
	2224	2.3	70
27 F	0442	4.8	146
	1206	0.1	3
	1846	3.6	110
	2337	2.1	64
28 Sa	0543	5.0	152
	1252	−0.2	−6
	1925	3.8	116

March

	Time	Height	
	h m	ft	cm
1 Su	0030	1.9	58
	0631	5.2	158
	1329	−0.3	−9
	1955	4.0	122
2 M	0110	1.6	49
	0710	5.3	162
	1359	−0.3	−9
	2020	4.2	128
3 Tu	0143	1.3	40
	0744	5.3	162
	1425	−0.3	−9
	2042	4.3	131
4 W	0215	1.1	34
	0816	5.3	162
	1449	−0.2	−6
	2104	4.5	137
5 Th ○	0245	0.9	27
	0846	5.2	158
	1512	−0.1	−3
	2126	4.6	140
6 F	0316	0.8	24
	0916	5.0	152
	1536	0.2	6
	2150	4.7	143
7 Sa	0348	0.8	24
	0948	4.7	143
	1559	0.4	12
	2214	4.7	143
8 Su	0423	0.8	24
	1022	4.3	131
	1622	0.8	24
	2240	4.7	143
9 M	0503	0.9	27
	1059	3.8	116
	1646	1.1	34
	2310	4.6	140
10 Tu	0550	1.0	30
	1145	3.4	104
	1712	1.5	46
	2346	4.5	137
11 W	0652	1.1	34
	1251	2.9	88
	1742	1.9	58
12 Th	0034	4.4	134
	0817	1.1	34
	1446	2.7	82
	1833	2.3	70
13 F ◑	0146	4.4	134
	0951	0.8	24
	1653	2.9	88
	2026	2.6	79
14 Sa	0315	4.5	137
	1102	0.3	9
	1751	3.3	101
	2218	2.4	73
15 Su	0434	4.8	146
	1153	−0.1	−3
	1828	3.7	113
	2330	1.9	58

	Time	Height	
	h m	ft	cm
16 M	0537	5.3	162
	1237	−0.5	−15
	1902	4.2	128
17 Tu	0025	1.3	40
	0631	5.6	171
	1316	−0.8	−24
	1935	4.7	143
18 W	0114	0.7	21
	0721	5.9	180
	1354	−0.9	−27
	2009	5.2	158
19 Th	0200	0.1	3
	0809	5.9	180
	1432	−0.9	−27
	2044	5.6	171
20 F ●	0247	−0.3	−9
	0856	5.8	177
	1509	−0.6	−18
	2121	5.8	177
21 Sa	0335	−0.5	−15
	0944	5.4	165
	1546	−0.2	−6
	2159	5.9	180
22 Su	0424	−0.5	−15
	1035	4.8	146
	1625	0.4	12
	2240	5.8	177
23 M	0518	−0.3	−9
	1130	4.2	128
	1706	1.0	30
	2324	5.5	168
24 Tu	0618	0.0	0
	1238	3.6	110
	1752	1.6	49
25 W	0014	5.1	155
	0730	0.3	9
	1409	3.2	98
	1852	2.2	67
26 Th ◐	0118	4.7	143
	0857	0.4	12
	1603	3.2	98
	2029	2.5	76
27 F	0241	4.4	134
	1022	0.4	12
	1728	3.5	107
	2217	2.5	76
28 Sa	0409	4.3	131
	1127	0.3	9
	1817	3.8	116
	2331	2.1	64
29 Su	0518	4.4	134
	1215	0.2	6
	1851	4.0	122
30 M	0020	1.8	55
	0610	4.5	137
	1251	0.2	6
	1918	4.3	131
31 Tu	0058	1.4	43
	0652	4.6	140
	1320	0.2	6
	1940	4.5	137

Time meridian 120° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.
Heights are referred to mean lower low water which is the chart datum of soundings.

Los Angeles (Outer Harbor), California, 2015

Times and Heights of High and Low Waters

April

	Time	Height			Time	Height	
	h m	ft	cm		h m	ft	cm
1 W	0130	1.0	30	**16** Th	0108	0.2	6
	0727	4.7	143		0711	5.2	158
	1346	0.2	6		1320	−0.2	−6
	2001	4.7	143		1936	5.7	174
2 Th	0201	0.7	21	**17** F	0154	−0.4	−12
	0800	4.7	143		0802	5.2	158
	1410	0.4	12		1359	−0.1	−3
	2022	4.9	149		2012	6.1	186
3 F	0231	0.4	12	**18** Sa ●	0240	−0.8	−24
	0832	4.6	140		0851	5.0	152
	1433	0.5	15		1437	0.2	6
	2044	5.0	152		2049	6.3	192
4 Sa ○	0302	0.2	6	**19** Su	0326	−1.0	−30
	0905	4.5	137		0941	4.7	143
	1456	0.7	21		1516	0.6	18
	2108	5.1	155		2127	6.2	189
5 Su	0334	0.1	3	**20** M	0414	−1.0	−30
	0939	4.3	131		1032	4.4	134
	1520	0.9	27		1555	1.1	34
	2132	5.2	158		2207	6.0	183
6 M	0409	0.1	3	**21** Tu	0503	−0.8	−24
	1016	4.0	122		1129	4.0	122
	1545	1.2	37		1637	1.6	49
	2159	5.1	155		2248	5.6	171
7 Tu	0448	0.1	3	**22** W	0557	−0.5	−15
	1059	3.7	113		1234	3.6	110
	1612	1.6	49		1724	2.1	64
	2230	5.1	155		2335	5.1	155
8 W	0534	0.2	6	**23** Th	0658	−0.1	−3
	1151	3.3	101		1356	3.4	104
	1641	1.9	58		1827	2.5	76
	2306	4.9	149				
9 Th	0630	0.4	12	**24** F	0031	4.6	140
	1302	3.0	91		0809	0.3	9
	1720	2.3	70		1529	3.5	107
	2355	4.7	143		2004	2.7	82
10 F	0742	0.5	15	**25** Sa ◐	0146	4.1	125
	1443	3.0	91		0923	0.5	15
	1828	2.6	79		1643	3.7	113
					2153	2.6	79
11 Sa ◑	0104	4.5	137	**26** Su	0316	3.9	119
	0902	0.4	12		1029	0.6	18
	1617	3.2	98		1731	4.0	122
	2029	2.7	82		2309	2.2	67
12 Su	0238	4.4	134	**27** M	0436	3.8	116
	1014	0.2	6		1119	0.6	18
	1711	3.7	113		1805	4.3	131
	2214	2.3	70				
13 M	0407	4.5	137	**28** Tu	0000	1.7	52
	1111	0.0	0		0538	3.9	119
	1751	4.2	128		1158	0.7	21
	2325	1.7	52		1832	4.5	137
14 Tu	0518	4.8	146	**29** W	0039	1.3	40
	1158	−0.2	−6		0626	4.0	122
	1826	4.7	143		1231	0.8	24
					1855	4.8	146
15 W	0019	0.9	27	**30** Th	0113	0.8	24
	0618	5.0	152		0706	4.1	125
	1240	−0.3	−9		1259	0.9	27
	1901	5.3	162		1918	5.0	152

May

	Time	Height			Time	Height	
	h m	ft	cm		h m	ft	cm
1 F	0144	0.4	12	**16** Sa	0150	−0.7	−21
	0744	4.1	125		0800	4.4	134
	1325	1.0	30		1328	0.8	24
	1941	5.3	162		1944	6.4	195
2 Sa	0216	0.1	3	**17** Su ●	0235	−1.1	−34
	0820	4.1	125		0851	4.4	134
	1351	1.1	34		1409	1.0	30
	2005	5.5	168		2022	6.5	198
3 Su ○	0248	−0.2	−6	**18** M	0319	−1.2	−37
	0857	4.1	125		0940	4.3	131
	1418	1.3	40		1449	1.3	40
	2031	5.6	171		2101	6.4	195
4 M	0322	−0.4	−12	**19** Tu	0403	−1.2	−37
	0935	4.0	122		1031	4.1	125
	1446	1.5	46		1530	1.7	52
	2059	5.7	174		2140	6.2	189
5 Tu	0358	−0.5	−15	**20** W	0449	−1.0	−30
	1017	3.8	116		1123	3.9	119
	1516	1.7	52		1614	2.0	61
	2130	5.6	171		2220	5.7	174
6 W	0438	−0.5	−15	**21** Th	0535	−0.6	−18
	1103	3.6	110		1221	3.8	116
	1549	2.0	61		1702	2.3	70
	2205	5.5	168		2303	5.2	158
7 Th	0524	−0.4	−12	**22** F	0625	−0.2	−6
	1158	3.5	107		1325	3.7	113
	1628	2.2	67		1802	2.6	79
	2246	5.3	162		2351	4.7	143
8 F	0616	−0.2	−6	**23** Sa	0719	0.2	6
	1305	3.4	104		1435	3.7	113
	1722	2.5	76		1923	2.8	85
	2336	5.0	152				
9 Sa	0716	−0.1	−3	**24** Su	0050	4.1	125
	1421	3.5	107		0816	0.5	15
	1843	2.7	82		1540	3.9	119
					2103	2.7	82
10 Su	0044	4.6	140	**25** M ◐	0207	3.7	113
	0822	0.1	3		0914	0.8	24
	1531	3.8	116		1630	4.1	125
	2031	2.6	79		2230	2.3	70
11 M ◑	0211	4.3	131	**26** Tu	0335	3.4	104
	0927	0.2	6		1007	1.0	30
	1626	4.2	128		1708	4.4	134
	2207	2.1	64		2330	1.8	55
12 Tu	0343	4.2	128	**27** W	0452	3.4	104
	1025	0.2	6		1052	1.2	37
	1710	4.7	143		1740	4.7	143
	2317	1.4	43				
13 W	0502	4.2	128	**28** Th	0015	1.3	40
	1117	0.3	9		0554	3.4	104
	1750	5.3	162		1131	1.3	40
					1808	5.0	152
14 Th	0014	0.6	18	**29** F	0052	0.8	24
	0608	4.3	131		0645	3.5	107
	1203	0.4	12		1206	1.5	46
	1829	5.8	177		1835	5.3	162
15 F	0103	−0.1	−3	**30** Sa	0126	0.3	9
	0707	4.4	134		0729	3.6	110
	1247	0.6	18		1239	1.5	46
	1906	6.2	189		1902	5.6	171
				31 Su	0200	−0.1	−3
					0810	3.7	113
					1312	1.6	49
					1932	5.8	177

June

	Time	Height			Time	Height	
	h m	ft	cm		h m	ft	cm
1 M	0234	−0.4	−12	**16** Tu ●	0311	−1.1	−34
	0850	3.8	116		0938	4.1	125
	1345	1.7	52		1431	1.8	55
	2003	6.0	183		2042	6.4	195
2 Tu ○	0309	−0.7	−21	**17** W	0351	−1.1	−34
	0931	3.8	116		1022	4.1	125
	1420	1.8	55		1512	2.0	61
	2036	6.1	186		2120	6.2	189
3 W	0347	−0.9	−27	**18** Th	0430	−0.9	−27
	1013	3.8	116		1106	4.0	122
	1457	2.0	61		1555	2.1	64
	2112	6.1	186		2158	5.8	177
4 Th	0427	−0.9	−27	**19** F	0509	−0.6	−18
	1059	3.8	116		1151	4.0	122
	1539	2.1	64		1640	2.3	70
	2152	6.0	183		2237	5.3	162
5 F	0511	−0.8	−24	**20** Sa	0549	−0.2	−6
	1149	3.8	116		1239	4.0	122
	1628	2.3	70		1731	2.5	76
	2237	5.7	174		2317	4.8	146
6 Sa	0558	−0.6	−18	**21** Su	0629	0.2	6
	1245	3.9	119		1329	4.0	122
	1729	2.4	73		1835	2.6	79
	2329	5.2	158				
7 Su	0649	−0.3	−9	**22** M	0003	4.3	131
	1344	4.1	125		0711	0.6	18
	1847	2.5	76		1422	4.1	125
					1956	2.6	79
8 M	0032	4.7	143	**23** Tu	0102	3.7	113
	0744	0.0	0		0756	1.0	30
	1444	4.4	134		1514	4.2	128
	2022	2.3	70		2129	2.4	73
9 Tu ◑	0152	4.2	128	**24** W ◐	0222	3.3	101
	0843	0.3	9		0845	1.4	43
	1541	4.8	146		1601	4.5	137
	2154	1.8	55		2248	2.0	61
10 W	0324	3.8	116	**25** Th	0358	3.1	94
	0941	0.6	18		0936	1.7	52
	1631	5.2	158		1642	4.7	143
	2309	1.1	34		2345	1.4	43
11 Th	0452	3.7	113	**26** F	0522	3.1	94
	1038	0.9	27		1027	1.9	58
	1718	5.7	174		1719	5.1	155
12 F	0009	0.4	12	**27** Sa	0028	0.9	27
	0607	3.8	116		0626	3.2	98
	1130	1.1	34		1114	2.0	61
	1802	6.1	186		1754	5.4	165
13 Sa	0100	−0.2	−6	**28** Su	0106	0.4	12
	0709	3.9	119		0716	3.4	104
	1219	1.3	40		1158	2.0	61
	1843	6.4	195		1829	5.8	177
14 Su	0147	−0.7	−21	**29** M	0141	−0.1	−3
	0803	4.0	122		0759	3.6	110
	1305	1.5	46		1240	2.0	61
	1924	6.5	198		1904	6.1	186
15 M	0230	−1.0	−30	**30** Tu	0217	−0.6	−18
	0852	4.1	125		0838	3.8	116
	1348	1.6	49		1321	2.0	61
	2003	6.6	201		1941	6.3	192

Time meridian 120° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.
Heights are referred to mean lower low water which is the chart datum of soundings.

Los Angeles (Outer Harbor), California, 2015

Times and Heights of High and Low Waters

July

	Time	Height	
	h m	ft	cm
1 W ○	0253	−0.9	−27
	0917	4.0	122
	1403	1.9	58
	2020	6.5	198
2 Th	0331	−1.1	−34
	0957	4.1	125
	1447	1.9	58
	2101	6.5	198
3 F	0410	−1.1	−34
	1038	4.3	131
	1534	1.9	58
	2144	6.3	192
4 Sa	0451	−1.0	−30
	1122	4.4	134
	1626	1.9	58
	2230	6.0	183
5 Su	0534	−0.7	−21
	1210	4.5	137
	1727	2.0	61
	2322	5.4	165
6 M	0619	−0.3	−9
	1302	4.7	143
	1839	2.0	61
7 Tu	0024	4.7	143
	0708	0.2	6
	1358	4.9	149
	2006	1.9	58
8 W ◑	0141	4.0	122
	0803	0.8	24
	1457	5.2	158
	2138	1.5	46
9 Th	0316	3.6	110
	0903	1.2	37
	1555	5.5	168
	2259	0.9	27
10 F	0454	3.4	104
	1007	1.6	49
	1651	5.8	177
11 Sa	0004	0.3	9
	0614	3.6	110
	1109	1.8	55
	1742	6.1	186
12 Su	0056	−0.2	−6
	0716	3.8	116
	1205	1.9	58
	1828	6.3	192
13 M	0141	−0.6	−18
	0805	4.0	122
	1255	1.9	58
	1911	6.4	195
14 Tu	0222	−0.8	−24
	0847	4.1	125
	1339	1.9	58
	1951	6.4	195
15 W ●	0258	−0.8	−24
	0925	4.2	128
	1420	1.9	58
	2029	6.3	192

	Time	Height	
	h m	ft	cm
16 Th	0333	−0.7	−21
	1000	4.3	131
	1459	1.9	58
	2104	6.1	186
17 F	0406	−0.5	−15
	1034	4.3	131
	1538	2.0	61
	2139	5.8	177
18 Sa	0437	−0.3	−9
	1108	4.3	131
	1617	2.1	64
	2214	5.4	165
19 Su	0508	0.1	3
	1143	4.3	131
	1700	2.2	67
	2250	4.9	149
20 M	0539	0.5	15
	1220	4.3	131
	1750	2.3	70
	2329	4.4	134
21 Tu	0611	0.9	27
	1301	4.3	131
	1853	2.4	73
22 W	0015	3.8	116
	0645	1.3	40
	1348	4.4	134
	2015	2.3	70
23 Th ◐	0122	3.3	101
	0725	1.7	52
	1441	4.5	137
	2150	2.0	61
24 F	0306	3.0	91
	0817	2.1	64
	1537	4.7	143
	2306	1.6	49
25 Sa	0458	3.0	91
	0925	2.3	70
	1629	5.0	152
	2359	1.0	30
26 Su	0613	3.2	98
	1033	2.4	73
	1717	5.4	165
27 M	0041	0.4	12
	0702	3.5	107
	1131	2.3	70
	1801	5.8	177
28 Tu	0118	−0.1	−3
	0740	3.8	116
	1221	2.2	67
	1843	6.2	189
29 W	0154	−0.5	−15
	0816	4.1	125
	1307	1.9	58
	1925	6.5	198
30 Th	0230	−0.9	−27
	0851	4.3	131
	1353	1.7	52
	2007	6.7	204
31 F ○	0307	−1.0	−30
	0927	4.6	140
	1439	1.5	46
	2050	6.7	204

August

	Time	Height	
	h m	ft	cm
1 Sa	0345	−1.0	−30
	1005	4.9	149
	1527	1.3	40
	2135	6.5	198
2 Su	0423	−0.8	−24
	1045	5.0	152
	1619	1.3	40
	2223	6.0	183
3 M	0504	−0.4	−12
	1129	5.2	158
	1717	1.3	40
	2316	5.3	162
4 Tu	0546	0.2	6
	1217	5.3	162
	1825	1.4	43
5 W	0017	4.6	140
	0632	0.8	24
	1311	5.3	162
	1946	1.3	40
6 Th ◑	0136	3.9	119
	0727	1.4	43
	1414	5.4	165
	2119	1.1	34
7 F	0320	3.5	107
	0834	1.9	58
	1522	5.5	168
	2245	0.8	24
8 Sa	0505	3.5	107
	0952	2.2	67
	1629	5.6	171
	2353	0.3	9
9 Su	0621	3.7	113
	1106	2.3	70
	1729	5.8	177
10 M	0045	−0.1	−3
	0714	4.0	122
	1205	2.2	67
	1819	6.0	183
11 Tu	0128	−0.3	−9
	0755	4.2	128
	1254	2.0	61
	1903	6.1	186
12 W	0205	−0.4	−12
	0828	4.4	134
	1335	1.9	58
	1941	6.1	186
13 Th	0237	−0.4	−12
	0858	4.5	137
	1412	1.7	52
	2016	6.0	183
14 F ●	0306	−0.2	−6
	0925	4.6	140
	1446	1.6	49
	2049	5.9	180
15 Sa	0333	0.0	0
	0952	4.6	140
	1520	1.6	49
	2121	5.6	171

	Time	Height	
	h m	ft	cm
16 Su	0359	0.2	6
	1018	4.7	143
	1555	1.6	49
	2154	5.3	162
17 M	0425	0.5	15
	1046	4.7	143
	1632	1.7	52
	2227	4.9	149
18 Tu	0451	0.9	27
	1115	4.7	143
	1714	1.8	55
	2304	4.4	134
19 W	0517	1.3	40
	1148	4.6	140
	1805	1.9	58
	2348	3.8	116
20 Th	0544	1.7	52
	1227	4.6	140
	1913	2.0	61
21 F	0050	3.3	101
	0617	2.1	64
	1317	4.5	137
	2045	1.9	58
22 Sa ◐	0237	3.0	91
	0705	2.5	76
	1424	4.6	140
	2217	1.5	46
23 Su	0449	3.1	94
	0834	2.8	85
	1538	4.8	146
	2321	1.0	30
24 M	0559	3.4	104
	1010	2.7	82
	1642	5.2	158
25 Tu	0008	0.5	15
	0639	3.7	113
	1118	2.5	76
	1736	5.7	174
26 W	0047	0.0	0
	0712	4.1	125
	1211	2.1	64
	1824	6.1	186
27 Th	0124	−0.4	−12
	0743	4.5	137
	1258	1.7	52
	1910	6.4	195
28 F	0200	−0.6	−18
	0816	4.9	149
	1344	1.2	37
	1955	6.6	201
29 Sa ○	0236	−0.7	−21
	0851	5.3	162
	1430	0.8	24
	2040	6.5	198
30 Su	0313	−0.6	−18
	0927	5.6	171
	1518	0.6	18
	2127	6.3	192
31 M	0351	−0.3	−9
	1006	5.8	177
	1609	0.5	15
	2216	5.7	174

September

	Time	Height	
	h m	ft	cm
1 Tu	0430	0.2	6
	1047	5.8	177
	1704	0.5	15
	2310	5.1	155
2 W	0511	0.8	24
	1133	5.8	177
	1808	0.7	21
3 Th	0015	4.4	134
	0558	1.4	43
	1226	5.6	171
	1924	0.8	24
4 F	0139	3.8	116
	0655	2.1	64
	1331	5.4	165
	2055	0.9	27
5 Sa ◑	0330	3.6	110
	0816	2.5	76
	1449	5.2	158
	2223	0.7	21
6 Su	0509	3.8	116
	0953	2.6	79
	1609	5.3	162
	2331	0.4	12
7 M	0613	4.1	125
	1111	2.5	76
	1716	5.4	165
8 Tu	0023	0.2	6
	0656	4.4	134
	1208	2.2	67
	1809	5.5	168
9 W	0103	0.1	3
	0729	4.6	140
	1252	1.9	58
	1852	5.6	171
10 Th	0137	0.1	3
	0757	4.7	143
	1328	1.6	49
	1929	5.7	174
11 F	0205	0.2	6
	0821	4.9	149
	1401	1.4	43
	2002	5.6	171
12 Sa ●	0231	0.3	9
	0844	5.0	152
	1432	1.2	37
	2034	5.5	168
13 Su	0254	0.5	15
	0906	5.1	155
	1503	1.1	34
	2105	5.3	162
14 M	0318	0.8	24
	0929	5.1	155
	1535	1.0	30
	2137	5.0	152
15 Tu	0341	1.1	34
	0953	5.2	158
	1610	1.1	34
	2211	4.6	140

	Time	Height	
	h m	ft	cm
16 W	0404	1.4	43
	1019	5.1	155
	1648	1.2	37
	2249	4.2	128
17 Th	0428	1.8	55
	1048	5.0	152
	1733	1.3	40
	2336	3.8	116
18 F	0453	2.1	64
	1122	4.9	149
	1832	1.4	43
19 Sa	0042	3.4	104
	0523	2.5	76
	1207	4.7	143
	1951	1.5	46
20 Su	0235	3.2	98
	0612	2.9	88
	1315	4.6	140
	2123	1.3	40
21 M ◐	0437	3.4	104
	0808	3.1	94
	1447	4.7	143
	2235	0.9	27
22 Tu	0532	3.7	113
	1002	2.9	88
	1609	5.0	152
	2327	0.5	15
23 W	0606	4.1	125
	1111	2.4	73
	1713	5.4	165
24 Th	0009	0.2	6
	0636	4.6	140
	1203	1.8	55
	1806	5.7	174
25 F	0048	−0.1	−3
	0708	5.1	155
	1250	1.2	37
	1856	6.0	183
26 Sa	0125	−0.2	−6
	0740	5.6	171
	1336	0.6	18
	1943	6.1	186
27 Su	0202	−0.2	−6
	0815	6.0	183
	1422	0.1	3
	2031	6.0	183
28 M	0239	0.0	0
	0851	6.3	192
	1509	−0.2	−6
	2119	5.7	174
29 Tu	0317	0.4	12
	0929	6.4	195
	1558	−0.3	−9
	2211	5.3	162
30 W	0356	0.9	27
	1010	6.4	195
	1651	−0.2	−6
	2307	4.7	143

Time meridian 120° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.
Heights are referred to mean lower low water which is the chart datum of soundings.

Los Angeles (Outer Harbor), California, 2015

Times and Heights of High and Low Waters

October

	Time	Height	
	h m	ft	cm
1 Th	0439	1.5	46
	1054	6.1	186
	1751	0.1	3
2 F	0015	4.2	128
	0527	2.1	64
	1145	5.7	174
	1900	0.4	12
3 Sa	0142	3.8	116
	0630	2.6	79
	1249	5.3	162
	2023	0.6	18
4 Su ◑	0328	3.8	116
	0805	2.9	88
	1411	4.9	149
	2147	0.6	18
5 M	0453	4.1	125
	0952	2.8	85
	1540	4.8	146
	2255	0.6	18
6 Tu	0547	4.4	134
	1110	2.5	76
	1654	4.8	146
	2347	0.5	15
7 W	0624	4.7	143
	1202	2.1	64
	1751	4.9	149
8 Th	0026	0.6	18
	0654	4.9	149
	1243	1.7	52
	1835	5.0	152
9 F	0058	0.6	18
	0719	5.1	155
	1317	1.3	40
	1913	5.0	152
10 Sa	0125	0.8	24
	0741	5.3	162
	1348	1.0	30
	1947	5.0	152
11 Su	0150	0.9	27
	0802	5.4	165
	1418	0.7	21
	2020	4.9	149
12 M ●	0213	1.1	34
	0824	5.5	168
	1448	0.6	18
	2052	4.8	146
13 Tu	0236	1.3	40
	0847	5.6	171
	1519	0.5	15
	2126	4.6	140
14 W	0259	1.6	49
	0911	5.6	171
	1553	0.4	12
	2203	4.3	131
15 Th	0324	1.8	55
	0937	5.6	171
	1631	0.5	15
	2245	4.0	122

	Time	Height	
	h m	ft	cm
16 F	0349	2.2	67
	1005	5.4	165
	1714	0.6	18
	2337	3.7	113
17 Sa	0417	2.5	76
	1039	5.2	158
	1807	0.8	24
18 Su	0047	3.4	104
	0453	2.8	85
	1123	5.0	152
	1914	0.9	27
19 M	0228	3.4	104
	0557	3.1	94
	1227	4.7	143
	2032	0.9	27
20 Tu ◐	0359	3.7	113
	0803	3.2	98
	1401	4.6	140
	2143	0.7	21
21 W	0450	4.1	125
	0953	2.9	88
	1535	4.6	140
	2240	0.5	15
22 Th	0526	4.6	140
	1103	2.2	67
	1649	4.9	149
	2327	0.4	12
23 F	0559	5.1	155
	1156	1.5	46
	1750	5.1	155
24 Sa	0010	0.3	9
	0632	5.7	174
	1243	0.7	21
	1844	5.3	162
25 Su	0049	0.3	9
	0707	6.2	189
	1329	0.0	0
	1935	5.4	165
26 M	0128	0.4	12
	0742	6.6	201
	1415	−0.5	−15
	2025	5.3	162
27 Tu ○	0207	0.7	21
	0820	6.8	207
	1501	−0.8	−24
	2116	5.1	155
28 W	0246	1.0	30
	0859	6.9	210
	1548	−0.9	−27
	2208	4.8	146
29 Th	0327	1.5	46
	0939	6.7	204
	1639	−0.7	−21
	2305	4.4	134
30 F	0411	1.9	58
	1023	6.3	192
	1733	−0.4	−12
31 Sa	0011	4.1	125
	0501	2.4	73
	1111	5.8	177
	1834	0.0	0

November

	Time	Height	
	h m	ft	cm
1 Su	0131	3.9	119
	0607	2.8	85
	1208	5.2	158
	1943	0.4	12
2 M	0300	4.0	122
	0743	3.0	91
	1323	4.6	140
	2056	0.6	18
3 Tu ◑	0415	4.2	128
	0933	2.9	88
	1454	4.3	131
	2203	0.8	24
4 W	0506	4.5	137
	1053	2.5	76
	1618	4.2	128
	2256	0.9	27
5 Th	0544	4.8	146
	1147	2.0	61
	1722	4.2	128
	2338	1.0	30
6 F	0613	5.1	155
	1228	1.5	46
	1813	4.3	131
7 Sa	0012	1.1	34
	0638	5.3	162
	1302	1.0	30
	1855	4.3	131
8 Su	0041	1.3	40
	0701	5.5	168
	1333	0.7	21
	1933	4.3	131
9 M	0107	1.4	43
	0724	5.7	174
	1404	0.3	9
	2009	4.3	131
10 Tu	0133	1.6	49
	0748	5.8	177
	1435	0.1	3
	2044	4.3	131
11 W ●	0159	1.7	52
	0813	6.0	183
	1507	−0.1	−3
	2121	4.2	128
12 Th	0225	1.9	58
	0839	6.0	183
	1542	−0.1	−3
	2201	4.0	122
13 F	0254	2.1	64
	0909	5.9	180
	1619	−0.1	−3
	2245	3.9	119
14 Sa	0325	2.3	70
	0941	5.8	177
	1701	0.0	0
	2337	3.7	113
15 Su	0401	2.6	79
	1018	5.6	171
	1749	0.1	3

	Time	Height	
	h m	ft	cm
16 M	0040	3.7	113
	0449	2.9	88
	1103	5.2	158
	1844	0.3	9
17 Tu	0154	3.7	113
	0603	3.1	94
	1203	4.8	146
	1947	0.4	12
18 W ◐	0304	4.0	122
	0753	3.0	91
	1327	4.5	137
	2051	0.6	18
19 Th	0359	4.4	134
	0937	2.6	79
	1503	4.2	128
	2151	0.6	18
20 F	0443	4.9	149
	1051	1.9	58
	1629	4.3	131
	2244	0.7	21
21 Sa	0522	5.5	168
	1149	1.0	30
	1739	4.4	134
	2331	0.8	24
22 Su	0600	6.0	183
	1238	0.2	6
	1839	4.5	137
23 M	0016	0.9	27
	0639	6.5	198
	1325	−0.4	−12
	1934	4.6	140
24 Tu	0059	1.0	30
	0717	6.8	207
	1410	−0.9	−27
	2025	4.6	140
25 W ○	0141	1.2	37
	0756	7.0	213
	1455	−1.2	−37
	2116	4.5	137
26 Th	0223	1.5	46
	0836	7.0	213
	1540	−1.2	−37
	2206	4.4	134
27 F	0306	1.8	55
	0917	6.7	204
	1626	−1.0	−30
	2259	4.3	131
28 Sa	0351	2.1	64
	0959	6.3	192
	1713	−0.7	−21
	2356	4.1	125
29 Su	0441	2.4	73
	1044	5.7	174
	1803	−0.3	−9
30 M	0059	4.0	122
	0541	2.7	82
	1133	5.1	155
	1856	0.2	6

December

	Time	Height	
	h m	ft	cm
1 Tu	0208	4.1	125
	0701	2.9	88
	1231	4.5	137
	1954	0.6	18
2 W ◑	0315	4.2	128
	0843	2.8	85
	1348	3.9	119
	2053	1.0	30
3 Th	0410	4.4	134
	1016	2.5	76
	1519	3.6	110
	2148	1.2	37
4 F	0452	4.7	143
	1121	2.0	61
	1642	3.5	107
	2237	1.4	43
5 Sa	0526	5.0	152
	1207	1.4	43
	1748	3.5	107
	2318	1.6	49
6 Su	0555	5.2	158
	1245	0.9	27
	1839	3.6	110
	2353	1.7	52
7 M	0623	5.5	168
	1319	0.5	15
	1923	3.7	113
8 Tu	0026	1.8	55
	0650	5.7	174
	1350	0.1	3
	2002	3.8	116
9 W	0058	1.9	58
	0718	6.0	183
	1423	−0.3	−9
	2039	3.9	119
10 Th	0130	1.9	58
	0748	6.1	186
	1456	−0.5	−15
	2116	3.9	119
11 F ●	0203	2.0	61
	0819	6.2	189
	1530	−0.7	−21
	2155	3.9	119
12 Sa	0238	2.1	64
	0853	6.2	189
	1607	−0.7	−21
	2237	3.9	119
13 Su	0316	2.2	67
	0929	6.1	186
	1646	−0.6	−18
	2322	3.9	119
14 M	0400	2.4	73
	1009	5.8	177
	1729	−0.5	−15
15 Tu	0012	4.0	122
	0454	2.5	76
	1055	5.4	165
	1815	−0.2	−6

	Time	Height	
	h m	ft	cm
16 W	0108	4.1	125
	0604	2.6	79
	1151	4.8	146
	1906	0.1	3
17 Th	0207	4.3	131
	0735	2.5	76
	1305	4.3	131
	2002	0.5	15
18 F ◐	0304	4.7	143
	0914	2.1	64
	1438	3.8	116
	2102	0.8	24
19 Sa	0358	5.1	155
	1038	1.4	43
	1615	3.6	110
	2202	1.1	34
20 Su	0448	5.6	171
	1143	0.6	18
	1738	3.7	113
	2258	1.3	40
21 M	0534	6.1	186
	1236	−0.1	−3
	1844	3.8	116
	2351	1.4	43
22 Tu	0618	6.5	198
	1323	−0.7	−21
	1939	4.0	122
23 W	0040	1.5	46
	0700	6.7	204
	1407	−1.1	−34
	2029	4.2	128
24 Th	0126	1.6	49
	0742	6.8	207
	1449	−1.3	−40
	2114	4.2	128
25 F ○	0210	1.7	52
	0823	6.8	207
	1530	−1.3	−40
	2158	4.3	131
26 Sa	0254	1.8	55
	0903	6.5	198
	1610	−1.1	−34
	2242	4.2	128
27 Su	0338	1.9	58
	0942	6.1	186
	1649	−0.8	−24
	2325	4.2	128
28 M	0423	2.1	64
	1022	5.6	171
	1728	−0.4	−12
29 Tu	0011	4.1	125
	0513	2.3	70
	1102	5.0	152
	1807	0.1	3
30 W	0100	4.1	125
	0613	2.5	76
	1147	4.4	134
	1848	0.6	18
31 Th	0153	4.1	125
	0731	2.5	76
	1242	3.8	116
	1932	1.0	30

Time meridian 120° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.
Heights are referred to mean lower low water which is the chart datum of soundings.

Port San Luis, California, 2015

Times and Heights of High and Low Waters

January

	Time	Height	
	h m	ft	cm
1 Th	0019	1.9	58
	0647	6.1	186
	1403	−0.4	−12
	2029	3.7	113
2 F	0109	2.1	64
	0729	6.1	186
	1446	−0.7	−21
	2118	3.9	119
3 Sa	0156	2.2	67
	0808	6.1	186
	1524	−0.8	−24
	2200	4.0	122
4 Su ○	0238	2.3	70
	0846	6.1	186
	1600	−0.8	−24
	2238	4.0	122
5 M	0318	2.3	70
	0921	5.9	180
	1635	−0.7	−21
	2314	4.0	122
6 Tu	0357	2.4	73
	0956	5.7	174
	1708	−0.5	−15
	2350	4.1	125
7 W	0437	2.4	73
	1031	5.4	165
	1741	−0.3	−9
8 Th	0026	4.1	125
	0520	2.5	76
	1107	5.0	152
	1814	0.0	0
9 F	0103	4.1	125
	0609	2.5	76
	1146	4.5	137
	1847	0.4	12
10 Sa	0143	4.2	128
	0708	2.5	76
	1230	4.1	125
	1922	0.8	24
11 Su	0225	4.3	131
	0821	2.4	73
	1327	3.6	110
	2000	1.2	37
12 M	0308	4.4	134
	0944	2.2	67
	1446	3.1	94
	2042	1.6	49
13 Tu ◑	0353	4.6	140
	1101	1.7	52
	1627	2.9	88
	2133	1.9	58
14 W	0438	4.9	149
	1202	1.2	37
	1800	3.0	91
	2230	2.1	64
15 Th	0522	5.2	158
	1250	0.6	18
	1908	3.2	98
	2328	2.3	70

	Time	Height	
	h m	ft	cm
16 F	0606	5.6	171
	1332	0.0	0
	2000	3.4	104
17 Sa	0023	2.3	70
	0650	6.0	183
	1412	−0.6	−18
	2043	3.7	113
18 Su	0114	2.2	67
	0734	6.3	192
	1452	−1.0	−30
	2123	4.0	122
19 M	0204	2.1	64
	0818	6.5	198
	1531	−1.3	−40
	2203	4.2	128
20 Tu ●	0254	1.9	58
	0904	6.6	201
	1612	−1.4	−43
	2243	4.4	134
21 W	0345	1.7	52
	0951	6.4	195
	1653	−1.3	−40
	2325	4.7	143
22 Th	0440	1.6	49
	1040	6.1	186
	1735	−1.0	−30
23 F	0009	4.8	146
	0539	1.6	49
	1133	5.5	168
	1819	−0.5	−15
24 Sa	0056	5.0	152
	0645	1.5	46
	1233	4.8	146
	1904	0.1	3
25 Su	0147	5.1	155
	0801	1.4	43
	1343	4.1	125
	1954	0.7	21
26 M ◐	0242	5.3	162
	0926	1.2	37
	1511	3.5	107
	2050	1.3	40
27 Tu	0341	5.4	165
	1051	0.8	24
	1653	3.3	101
	2154	1.8	55
28 W	0441	5.5	168
	1204	0.4	12
	1826	3.4	104
	2304	2.1	64
29 Th	0539	5.6	171
	1303	0.0	0
	1935	3.6	110
30 F	0009	2.3	70
	0631	5.7	174
	1351	−0.3	−9
	2026	3.8	116
31 Sa	0105	2.3	70
	0717	5.8	177
	1432	−0.5	−15
	2106	3.9	119

February

	Time	Height	
	h m	ft	cm
1 Su	0151	2.2	67
	0758	5.8	177
	1507	−0.5	−15
	2140	4.0	122
2 M	0232	2.1	64
	0835	5.7	174
	1540	−0.5	−15
	2210	4.1	125
3 Tu ○	0309	2.0	61
	0910	5.6	171
	1609	−0.4	−12
	2238	4.2	128
4 W	0345	1.9	58
	0943	5.4	165
	1638	−0.2	−6
	2306	4.2	128
5 Th	0421	1.9	58
	1016	5.2	158
	1705	0.0	0
	2334	4.3	131
6 F	0459	1.9	58
	1051	4.9	149
	1733	0.3	9
7 Sa	0004	4.3	131
	0541	1.9	58
	1128	4.5	137
	1801	0.7	21
8 Su	0035	4.4	134
	0629	1.9	58
	1209	4.0	122
	1830	1.1	34
9 M	0110	4.4	134
	0727	1.8	55
	1301	3.5	107
	1902	1.5	46
10 Tu	0151	4.5	137
	0839	1.7	52
	1414	3.1	94
	1940	1.9	58
11 W ◑	0239	4.6	140
	1001	1.4	43
	1558	2.9	88
	2031	2.2	67
12 Th	0335	4.8	146
	1115	1.0	30
	1742	2.9	88
	2144	2.4	73
13 F	0435	5.0	152
	1214	0.5	15
	1852	3.2	98
	2301	2.5	76
14 Sa	0533	5.4	165
	1302	−0.1	−3
	1938	3.5	107
15 Su	0007	2.3	70
	0626	5.7	174
	1345	−0.6	−18
	2017	3.9	119

	Time	Height	
	h m	ft	cm
16 M	0105	2.0	61
	0717	6.1	186
	1426	−0.9	−27
	2054	4.2	128
17 Tu	0157	1.7	52
	0807	6.3	192
	1506	−1.1	−34
	2130	4.5	137
18 W ●	0248	1.3	40
	0856	6.3	192
	1546	−1.1	−34
	2208	4.9	149
19 Th	0340	1.0	30
	0945	6.1	186
	1625	−0.9	−27
	2247	5.1	155
20 F	0433	0.7	21
	1036	5.7	174
	1706	−0.5	−15
	2328	5.3	162
21 Sa	0529	0.6	18
	1130	5.2	158
	1747	0.0	0
22 Su	0012	5.4	165
	0630	0.6	18
	1230	4.5	137
	1831	0.7	21
23 M	0100	5.4	165
	0739	0.6	18
	1341	3.9	119
	1920	1.3	40
24 Tu	0154	5.3	162
	0857	0.6	18
	1510	3.4	104
	2019	1.9	58
25 W ◐	0257	5.1	155
	1021	0.5	15
	1653	3.3	101
	2134	2.2	67
26 Th	0406	5.0	152
	1136	0.3	9
	1821	3.5	107
	2257	2.4	73
27 F	0514	5.0	152
	1238	0.1	3
	1921	3.7	113
28 Sa	0008	2.3	70
	0614	5.1	155
	1326	−0.1	−3
	2004	3.9	119

March

	Time	Height	
	h m	ft	cm
1 Su	0103	2.1	64
	0703	5.2	158
	1406	−0.2	−6
	2037	4.0	122
2 M	0147	1.9	58
	0746	5.2	158
	1439	−0.2	−6
	2105	4.1	125
3 Tu	0224	1.7	52
	0823	5.2	158
	1509	−0.1	−3
	2130	4.3	131
4 W	0259	1.5	46
	0858	5.1	155
	1536	0.0	0
	2154	4.4	134
5 Th ○	0332	1.3	40
	0931	5.0	152
	1601	0.2	6
	2218	4.5	137
6 F	0405	1.2	37
	1005	4.8	146
	1627	0.4	12
	2243	4.5	137
7 Sa	0441	1.1	34
	1040	4.5	137
	1652	0.7	21
	2309	4.6	140
8 Su	0519	1.0	30
	1118	4.2	128
	1719	1.1	34
	2337	4.6	140
9 M	0602	1.0	30
	1202	3.8	116
	1746	1.4	43
10 Tu	0009	4.6	140
	0653	1.0	30
	1256	3.4	104
	1817	1.8	55
11 W	0047	4.6	140
	0755	1.0	30
	1409	3.1	94
	1856	2.1	64
12 Th	0135	4.6	140
	0909	0.9	27
	1548	3.0	91
	1954	2.4	73
13 F ◑	0238	4.6	140
	1026	0.6	18
	1723	3.1	94
	2122	2.6	79
14 Sa	0351	4.7	143
	1131	0.2	6
	1824	3.4	104
	2252	2.5	76
15 Su	0503	5.0	152
	1225	−0.2	−6
	1906	3.8	116

	Time	Height	
	h m	ft	cm
16 M	0002	2.1	64
	0606	5.2	158
	1311	−0.5	−15
	1943	4.2	128
17 Tu	0101	1.6	49
	0704	5.5	168
	1354	−0.7	−21
	2018	4.6	140
18 W	0153	1.0	30
	0757	5.7	174
	1435	−0.7	−21
	2054	5.0	152
19 Th	0244	0.5	15
	0849	5.6	171
	1514	−0.6	−18
	2131	5.3	162
20 F ●	0334	0.1	3
	0941	5.5	168
	1554	−0.2	−6
	2209	5.6	171
21 Sa	0425	−0.2	−6
	1033	5.1	155
	1634	0.2	6
	2248	5.7	174
22 Su	0517	−0.3	−9
	1129	4.6	140
	1715	0.7	21
	2331	5.6	171
23 M	0614	−0.3	−9
	1230	4.1	125
	1800	1.3	40
24 Tu	0017	5.4	165
	0716	−0.1	−3
	1342	3.7	113
	1850	1.8	55
25 W	0109	5.1	155
	0826	0.1	3
	1508	3.4	104
	1955	2.2	67
26 Th ◐	0211	4.8	146
	0941	0.2	6
	1641	3.4	104
	2120	2.5	76
27 F	0325	4.5	137
	1055	0.2	6
	1756	3.6	110
	2251	2.4	73
28 Sa	0442	4.4	134
	1157	0.2	6
	1848	3.8	116
29 Su	0002	2.2	67
	0548	4.4	134
	1246	0.2	6
	1926	4.0	122
30 M	0055	1.9	58
	0643	4.4	134
	1326	0.2	6
	1956	4.2	128
31 Tu	0136	1.5	46
	0728	4.5	137
	1359	0.3	9
	2022	4.3	131

Time meridian 120° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.
Heights are referred to mean lower low water which is the chart datum of soundings.

Port San Luis, California, 2015

Times and Heights of High and Low Waters

April

	Time	Height	
	h m	ft	cm
1 W	0212	1.2	37
	0808	4.5	137
	1428	0.4	12
	2045	4.5	137
2 Th	0245	0.9	27
	0844	4.5	137
	1454	0.5	15
	2108	4.6	140
3 F	0318	0.7	21
	0920	4.4	134
	1520	0.7	21
	2131	4.8	146
4 Sa ○	0351	0.4	12
	0957	4.2	128
	1546	0.9	27
	2156	4.9	149
5 Su	0425	0.3	9
	1035	4.1	125
	1612	1.2	37
	2222	4.9	149
6 M	0503	0.2	6
	1117	3.8	116
	1640	1.5	46
	2251	4.9	149
7 Tu	0544	0.1	3
	1205	3.6	110
	1711	1.8	55
	2324	4.9	149
8 W	0632	0.2	6
	1303	3.3	101
	1746	2.1	64
9 Th	0003	4.8	146
	0727	0.2	6
	1415	3.2	98
	1833	2.4	73
10 F	0052	4.7	143
	0832	0.2	6
	1540	3.2	98
	1945	2.6	79
11 Sa ◑	0157	4.5	137
	0941	0.1	3
	1653	3.4	104
	2122	2.6	79
12 Su	0316	4.4	134
	1046	0.0	0
	1746	3.7	113
	2251	2.3	70
13 M	0437	4.5	137
	1142	−0.2	−6
	1828	4.1	125
14 Tu	0000	1.7	52
	0549	4.6	140
	1232	−0.2	−6
	1905	4.6	140
15 W	0058	1.1	34
	0653	4.7	143
	1317	−0.2	−6
	1942	5.0	152

	Time	Height	
	h m	ft	cm
16 Th	0150	0.4	12
	0751	4.8	146
	1359	−0.1	−3
	2018	5.4	165
17 F	0239	−0.2	−6
	0846	4.8	146
	1441	0.2	6
	2055	5.8	177
18 Sa ●	0328	−0.7	−21
	0940	4.7	143
	1521	0.5	15
	2134	5.9	180
19 Su	0416	−0.9	−27
	1034	4.4	134
	1603	0.9	27
	2213	5.9	180
20 M	0506	−1.0	−30
	1131	4.2	128
	1645	1.4	43
	2255	5.7	174
21 Tu	0558	−0.9	−27
	1231	3.9	119
	1732	1.8	55
	2339	5.4	165
22 W	0653	−0.7	−21
	1339	3.7	113
	1825	2.2	67
23 Th	0028	5.0	152
	0753	−0.4	−12
	1455	3.6	110
	1933	2.5	76
24 F	0126	4.5	137
	0857	−0.1	−3
	1611	3.6	110
	2101	2.6	79
25 Sa ◐	0236	4.1	125
	1002	0.2	6
	1715	3.8	116
	2232	2.4	73
26 Su	0355	3.9	119
	1101	0.3	9
	1802	4.0	122
	2343	2.1	64
27 M	0509	3.7	113
	1151	0.5	15
	1838	4.2	128
28 Tu	0036	1.7	52
	0611	3.7	113
	1232	0.6	18
	1908	4.4	134
29 W	0118	1.3	40
	0703	3.8	116
	1307	0.7	21
	1933	4.6	140
30 Th	0155	0.8	24
	0749	3.8	116
	1338	0.9	27
	1958	4.8	146

May

	Time	Height	
	h m	ft	cm
1 F	0229	0.5	15
	0831	3.8	116
	1407	1.1	34
	2022	5.0	152
2 Sa	0302	0.1	3
	0911	3.8	116
	1436	1.3	40
	2048	5.2	158
3 Su ○	0336	−0.2	−6
	0951	3.8	116
	1505	1.5	46
	2115	5.3	162
4 M	0411	−0.4	−12
	1033	3.7	113
	1535	1.7	52
	2144	5.3	162
5 Tu	0449	−0.5	−15
	1119	3.6	110
	1608	1.9	58
	2217	5.3	162
6 W	0531	−0.6	−18
	1209	3.5	107
	1645	2.2	67
	2254	5.3	162
7 Th	0616	−0.6	−18
	1306	3.5	107
	1730	2.4	73
	2336	5.1	155
8 F	0707	−0.5	−15
	1410	3.5	107
	1829	2.6	79
9 Sa	0028	4.8	146
	0804	−0.4	−12
	1516	3.6	110
	1949	2.6	79
10 Su	0133	4.5	137
	0903	−0.3	−9
	1616	3.9	119
	2122	2.4	73
11 M ◑	0252	4.2	128
	1003	−0.1	−3
	1705	4.2	128
	2247	2.0	61
12 Tu	0417	4.0	122
	1059	0.0	0
	1749	4.7	143
	2357	1.3	40
13 W	0536	4.0	122
	1151	0.2	6
	1829	5.1	155
14 Th	0055	0.6	18
	0646	4.0	122
	1239	0.4	12
	1908	5.5	168
15 F	0147	−0.1	−3
	0749	4.1	125
	1324	0.7	21
	1946	5.9	180

	Time	Height	
	h m	ft	cm
16 Sa	0235	−0.7	−21
	0848	4.1	125
	1408	1.0	30
	2025	6.1	186
17 Su ●	0322	−1.1	−34
	0943	4.1	125
	1451	1.3	40
	2104	6.2	189
18 M	0408	−1.3	−40
	1037	4.0	122
	1535	1.6	49
	2144	6.1	186
19 Tu	0454	−1.3	−40
	1131	3.9	119
	1620	1.9	58
	2226	5.8	177
20 W	0541	−1.1	−34
	1226	3.8	116
	1708	2.2	67
	2308	5.4	165
21 Th	0629	−0.9	−27
	1325	3.8	116
	1802	2.4	73
	2354	5.0	152
22 F	0719	−0.5	−15
	1426	3.8	116
	1907	2.6	79
23 Sa	0044	4.5	137
	0810	−0.1	−3
	1526	3.8	116
	2026	2.6	79
24 Su	0144	4.0	122
	0903	0.2	6
	1621	4.0	122
	2153	2.5	76
25 M ◐	0256	3.6	110
	0955	0.5	15
	1706	4.2	128
	2309	2.1	64
26 Tu	0416	3.4	104
	1044	0.8	24
	1743	4.4	134
27 W	0008	1.7	52
	0530	3.3	101
	1127	1.1	34
	1814	4.6	140
28 Th	0054	1.2	37
	0634	3.3	101
	1207	1.3	40
	1843	4.9	149
29 F	0133	0.7	21
	0729	3.3	101
	1243	1.5	46
	1911	5.1	155
30 Sa	0209	0.3	9
	0817	3.4	104
	1318	1.6	49
	1940	5.4	165
31 Su	0244	−0.1	−3
	0902	3.5	107
	1352	1.8	55
	2010	5.6	171

June

	Time	Height	
	h m	ft	cm
1 M	0320	−0.5	−15
	0945	3.6	110
	1428	1.9	58
	2042	5.7	174
2 Tu ○	0356	−0.8	−24
	1029	3.6	110
	1505	2.1	64
	2117	5.8	177
3 W	0435	−0.9	−27
	1114	3.7	113
	1545	2.2	67
	2155	5.8	177
4 Th	0516	−1.0	−30
	1202	3.7	113
	1631	2.3	70
	2236	5.7	174
5 F	0600	−1.0	−30
	1252	3.8	116
	1724	2.4	73
	2323	5.4	165
6 Sa	0647	−0.8	−24
	1346	3.9	119
	1829	2.5	76
7 Su	0016	5.0	152
	0736	−0.6	−18
	1440	4.2	128
	1947	2.5	76
8 M	0120	4.5	137
	0829	−0.3	−9
	1534	4.5	137
	2115	2.2	67
9 Tu ◑	0237	4.1	125
	0923	0.1	3
	1624	4.8	146
	2239	1.7	52
10 W	0404	3.7	113
	1018	0.5	15
	1711	5.2	158
	2350	1.0	30
11 Th	0531	3.6	110
	1112	0.9	27
	1756	5.6	171
12 F	0050	0.3	9
	0648	3.6	110
	1205	1.2	37
	1839	5.9	180
13 Sa	0143	−0.3	−9
	0755	3.7	113
	1255	1.5	46
	1921	6.2	189
14 Su	0231	−0.8	−24
	0853	3.8	116
	1343	1.7	52
	2003	6.3	192
15 M	0316	−1.1	−34
	0946	3.9	119
	1430	1.9	58
	2043	6.3	192

	Time	Height	
	h m	ft	cm
16 Tu ●	0359	−1.2	−37
	1035	3.9	119
	1515	2.1	64
	2124	6.1	186
17 W	0441	−1.1	−34
	1122	4.0	122
	1600	2.3	70
	2204	5.9	180
18 Th	0522	−1.0	−30
	1208	4.0	122
	1647	2.4	73
	2244	5.5	168
19 F	0602	−0.7	−21
	1254	4.0	122
	1737	2.5	76
	2325	5.1	155
20 Sa	0643	−0.3	−9
	1341	4.0	122
	1834	2.6	79
21 Su	0009	4.6	140
	0723	0.0	0
	1429	4.1	125
	1940	2.6	79
22 M	0059	4.1	125
	0805	0.4	12
	1516	4.2	128
	2058	2.5	76
23 Tu	0200	3.6	110
	0848	0.8	24
	1600	4.4	134
	2218	2.2	67
24 W ◐	0317	3.3	101
	0933	1.2	37
	1640	4.6	140
	2327	1.8	55
25 Th	0443	3.1	94
	1018	1.5	46
	1718	4.8	146
26 F	0022	1.3	40
	0603	3.0	91
	1104	1.8	55
	1753	5.1	155
27 Sa	0106	0.8	24
	0709	3.1	94
	1150	2.0	61
	1828	5.4	165
28 Su	0146	0.3	9
	0803	3.3	101
	1234	2.1	64
	1903	5.7	174
29 M	0223	−0.2	−6
	0849	3.5	107
	1317	2.2	67
	1940	5.9	180
30 Tu	0300	−0.6	−18
	0931	3.7	113
	1400	2.2	67
	2018	6.2	189

Time meridian 120° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.
Heights are referred to mean lower low water which is the chart datum of soundings.

Port San Luis, California, 2015

Times and Heights of High and Low Waters

July

	Time	Height	
	h m	ft	cm
1 W ○	0338	−0.9	−27
	1012	3.8	116
	1445	2.2	67
	2058	6.3	192
2 Th	0417	−1.1	−34
	1053	4.0	122
	1531	2.2	67
	2141	6.3	192
3 F	0457	−1.1	−34
	1136	4.2	128
	1622	2.2	67
	2226	6.1	186
4 Sa	0539	−1.0	−30
	1221	4.3	131
	1719	2.2	67
	2315	5.7	174
5 Su	0622	−0.7	−21
	1308	4.5	137
	1823	2.2	67
6 M	0010	5.2	158
	0707	−0.3	−9
	1357	4.8	146
	1938	2.1	64
7 Tu	0113	4.6	140
	0756	0.2	6
	1449	5.0	152
	2101	1.8	55
8 W ◑	0230	4.0	122
	0847	0.7	21
	1543	5.3	162
	2225	1.3	40
9 Th	0401	3.6	110
	0943	1.2	37
	1636	5.6	171
	2340	0.8	24
10 F	0535	3.4	104
	1043	1.6	49
	1728	5.9	180
11 Sa	0043	0.2	6
	0656	3.5	107
	1143	1.9	58
	1818	6.1	186
12 Su	0136	−0.3	−9
	0801	3.7	113
	1239	2.1	64
	1904	6.2	189
13 M	0223	−0.6	−18
	0854	3.9	119
	1331	2.2	67
	1948	6.3	192
14 Tu	0305	−0.8	−24
	0939	4.0	122
	1419	2.2	67
	2030	6.2	189
15 W ●	0344	−0.8	−24
	1020	4.1	125
	1503	2.3	70
	2110	6.1	186

	Time	Height	
	h m	ft	cm
16 Th	0421	−0.7	−21
	1057	4.2	128
	1546	2.3	70
	2148	5.9	180
17 F	0456	−0.5	−15
	1133	4.2	128
	1628	2.3	70
	2225	5.6	171
18 Sa	0530	−0.2	−6
	1209	4.2	128
	1712	2.4	73
	2302	5.2	158
19 Su	0603	0.1	3
	1246	4.3	131
	1800	2.4	73
	2342	4.7	143
20 M	0636	0.5	15
	1323	4.3	131
	1854	2.4	73
21 Tu	0026	4.3	131
	0710	0.9	27
	1403	4.4	134
	2000	2.4	73
22 W	0119	3.8	116
	0746	1.3	40
	1446	4.5	137
	2116	2.2	67
23 Th ◐	0230	3.4	104
	0827	1.7	52
	1531	4.7	143
	2234	1.9	58
24 F	0403	3.1	94
	0914	2.0	61
	1617	4.9	149
	2340	1.4	43
25 Sa	0538	3.1	94
	1009	2.3	70
	1704	5.1	155
26 Su	0032	0.9	27
	0651	3.2	98
	1108	2.4	73
	1749	5.5	168
27 M	0116	0.4	12
	0744	3.5	107
	1203	2.5	76
	1833	5.8	177
28 Tu	0156	−0.1	−3
	0826	3.7	113
	1255	2.4	73
	1916	6.1	186
29 W	0234	−0.5	−15
	0904	4.0	122
	1344	2.2	67
	2000	6.4	195
30 Th	0313	−0.8	−24
	0941	4.2	128
	1433	2.1	64
	2044	6.5	198
31 F ○	0351	−0.9	−27
	1019	4.5	137
	1522	1.9	58
	2130	6.5	198

August

	Time	Height	
	h m	ft	cm
1 Sa	0431	−0.9	−27
	1058	4.7	143
	1615	1.7	52
	2218	6.2	189
2 Su	0511	−0.6	−18
	1140	4.9	149
	1711	1.6	49
	2310	5.8	177
3 M	0552	−0.3	−9
	1224	5.1	155
	1813	1.5	46
4 Tu	0006	5.2	158
	0636	0.3	9
	1312	5.3	162
	1923	1.4	43
5 W	0112	4.5	137
	0723	0.8	24
	1404	5.4	165
	2042	1.3	40
6 Th ◑	0232	3.9	119
	0816	1.4	43
	1502	5.6	171
	2205	1.0	30
7 F	0408	3.6	110
	0919	1.9	58
	1603	5.7	174
	2323	0.6	18
8 Sa	0543	3.6	110
	1029	2.3	70
	1705	5.8	177
9 Su	0028	0.2	6
	0659	3.8	116
	1138	2.4	73
	1802	5.9	180
10 M	0122	−0.1	−3
	0755	4.0	122
	1239	2.4	73
	1853	6.0	183
11 Tu	0207	−0.3	−9
	0839	4.1	125
	1330	2.3	70
	1939	6.0	183
12 W	0247	−0.3	−9
	0916	4.3	131
	1415	2.2	67
	2020	5.9	180
13 Th	0322	−0.3	−9
	0949	4.4	134
	1455	2.1	64
	2058	5.8	177
14 F ●	0354	−0.1	−3
	1019	4.4	134
	1533	2.0	61
	2134	5.7	174
15 Sa	0423	0.1	3
	1047	4.5	137
	1610	1.9	58
	2209	5.4	165

	Time	Height	
	h m	ft	cm
16 Su	0452	0.4	12
	1116	4.5	137
	1648	1.9	58
	2244	5.1	155
17 M	0521	0.7	21
	1145	4.6	140
	1730	1.9	58
	2322	4.7	143
18 Tu	0549	1.0	30
	1216	4.6	140
	1816	1.9	58
19 W	0005	4.3	131
	0619	1.4	43
	1251	4.6	140
	1911	1.9	58
20 Th	0057	3.8	116
	0651	1.8	55
	1330	4.7	143
	2018	1.9	58
21 F	0206	3.4	104
	0729	2.2	67
	1418	4.7	143
	2135	1.7	52
22 Sa ◐	0341	3.2	98
	0820	2.5	76
	1513	4.8	146
	2250	1.4	43
23 Su	0520	3.3	101
	0930	2.7	82
	1614	5.0	152
	2350	0.9	27
24 M	0629	3.5	107
	1044	2.7	82
	1712	5.3	162
25 Tu	0039	0.5	15
	0715	3.7	113
	1149	2.6	79
	1806	5.7	174
26 W	0122	0.0	0
	0753	4.0	122
	1244	2.3	70
	1856	6.0	183
27 Th	0202	−0.3	−9
	0828	4.4	134
	1335	1.9	58
	1945	6.2	189
28 F	0241	−0.5	−15
	0903	4.7	143
	1425	1.5	46
	2033	6.3	192
29 Sa ○	0320	−0.5	−15
	0939	5.0	152
	1514	1.2	37
	2122	6.2	189
30 Su	0359	−0.4	−12
	1017	5.3	162
	1606	0.9	27
	2212	6.0	183
31 M	0439	0.0	0
	1057	5.6	171
	1701	0.7	21
	2306	5.5	168

September

	Time	Height	
	h m	ft	cm
1 Tu	0520	0.4	12
	1140	5.7	174
	1800	0.6	18
2 W	0005	4.9	149
	0604	1.0	30
	1227	5.7	174
	1905	0.7	21
3 Th	0114	4.3	131
	0653	1.6	49
	1320	5.6	171
	2019	0.7	21
4 F	0238	3.9	119
	0751	2.1	64
	1421	5.5	168
	2140	0.6	18
5 Sa ◑	0414	3.8	116
	0905	2.5	76
	1531	5.4	165
	2257	0.5	15
6 Su	0542	3.9	119
	1029	2.6	79
	1643	5.4	165
7 M	0003	0.3	9
	0646	4.1	125
	1143	2.5	76
	1747	5.4	165
8 Tu	0056	0.2	6
	0733	4.3	131
	1242	2.3	70
	1842	5.4	165
9 W	0140	0.1	3
	0810	4.4	134
	1329	2.1	64
	1928	5.5	168
10 Th	0217	0.2	6
	0841	4.6	140
	1409	1.8	55
	2009	5.4	165
11 F	0249	0.3	9
	0908	4.7	143
	1445	1.6	49
	2046	5.3	162
12 Sa ●	0317	0.5	15
	0933	4.8	146
	1519	1.5	46
	2121	5.2	158
13 Su	0344	0.7	21
	0957	4.8	146
	1553	1.3	40
	2156	5.0	152
14 M	0410	1.0	30
	1022	4.9	149
	1628	1.2	37
	2232	4.7	143
15 Tu	0436	1.3	40
	1048	4.9	149
	1706	1.2	37
	2311	4.4	134

	Time	Height	
	h m	ft	cm
16 W	0503	1.6	49
	1116	4.9	149
	1747	1.2	37
	2355	4.1	125
17 Th	0532	1.9	58
	1147	4.9	149
	1836	1.2	37
18 F	0049	3.8	116
	0603	2.3	70
	1224	4.8	146
	1934	1.3	40
19 Sa	0201	3.5	107
	0643	2.6	79
	1311	4.7	143
	2044	1.2	37
20 Su	0334	3.4	104
	0742	2.9	88
	1412	4.7	143
	2157	1.0	30
21 M ◐	0502	3.5	107
	0909	3.0	91
	1525	4.8	146
	2303	0.7	21
22 Tu	0559	3.8	116
	1035	2.8	85
	1637	5.0	152
	2356	0.4	12
23 W	0640	4.1	125
	1143	2.5	76
	1741	5.3	162
24 Th	0043	0.1	3
	0715	4.5	137
	1238	1.9	58
	1839	5.5	168
25 F	0125	−0.1	−3
	0749	4.9	149
	1329	1.4	43
	1932	5.7	174
26 Sa	0205	−0.1	−3
	0823	5.3	162
	1418	0.8	24
	2024	5.8	177
27 Su ○	0244	0.0	0
	0859	5.6	171
	1507	0.3	9
	2116	5.7	174
28 M	0324	0.3	9
	0937	5.9	180
	1558	0.0	0
	2209	5.4	165
29 Tu	0405	0.7	21
	1017	6.1	186
	1650	−0.2	−6
	2305	5.0	152
30 W	0447	1.2	37
	1059	6.1	186
	1746	−0.2	−6

Time meridian 120° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.
Heights are referred to mean lower low water which is the chart datum of soundings.

Port San Luis, California, 2015

Times and Heights of High and Low Waters

October

	Time	Height	
	h m	ft	cm
1 Th	0007	4.6	140
	0533	1.7	52
	1146	5.9	180
	1847	−0.1	−3
2 F	0117	4.2	128
	0625	2.2	67
	1238	5.6	171
	1954	0.1	3
3 Sa	0240	4.0	122
	0731	2.6	79
	1341	5.2	158
	2108	0.2	6
4 Su ◑	0408	4.0	122
	0857	2.8	85
	1455	4.9	149
	2221	0.3	9
5 M	0523	4.1	125
	1028	2.7	82
	1614	4.8	146
	2325	0.4	12
6 Tu	0618	4.3	131
	1142	2.4	73
	1725	4.7	143
7 W	0018	0.4	12
	0659	4.5	137
	1238	2.1	64
	1824	4.7	143
8 Th	0101	0.5	15
	0732	4.7	143
	1322	1.7	52
	1913	4.7	143
9 F	0137	0.6	18
	0759	4.8	146
	1359	1.4	43
	1955	4.7	143
10 Sa	0207	0.8	24
	0824	5.0	152
	1433	1.1	34
	2034	4.7	143
11 Su	0235	1.0	30
	0847	5.1	155
	1505	0.8	24
	2110	4.6	140
12 M ●	0301	1.3	40
	0910	5.2	158
	1538	0.6	18
	2147	4.4	134
13 Tu	0327	1.5	46
	0934	5.3	162
	1612	0.5	15
	2225	4.3	131
14 W	0353	1.8	55
	1000	5.3	162
	1648	0.4	12
	2307	4.1	125
15 Th	0421	2.0	61
	1028	5.2	158
	1727	0.4	12
	2354	3.9	119

	Time	Height	
	h m	ft	cm
16 F	0451	2.3	70
	1059	5.2	158
	1812	0.5	15
17 Sa	0051	3.7	113
	0526	2.6	79
	1136	5.0	152
	1904	0.5	15
18 Su	0201	3.6	110
	0613	2.9	88
	1223	4.8	146
	2005	0.5	15
19 M	0321	3.6	110
	0724	3.1	94
	1324	4.7	143
	2111	0.5	15
20 Tu ◐	0431	3.8	116
	0901	3.0	91
	1443	4.5	137
	2214	0.4	12
21 W	0521	4.1	125
	1029	2.7	82
	1605	4.5	137
	2310	0.3	9
22 Th	0601	4.5	137
	1137	2.1	64
	1719	4.7	143
23 F	0000	0.3	9
	0636	4.9	149
	1234	1.5	46
	1825	4.8	146
24 Sa	0045	0.3	9
	0711	5.4	165
	1324	0.7	21
	1924	4.9	149
25 Su	0127	0.4	12
	0747	5.8	177
	1413	0.1	3
	2020	5.0	152
26 M	0209	0.7	21
	0824	6.2	189
	1501	−0.5	−15
	2114	4.9	149
27 Tu ○	0250	1.0	30
	0903	6.4	195
	1550	−0.8	−24
	2210	4.8	146
28 W	0333	1.3	40
	0943	6.4	195
	1640	−1.0	−30
	2307	4.5	137
29 Th	0417	1.7	52
	1026	6.3	192
	1732	−0.9	−27
30 F	0008	4.3	131
	0505	2.1	64
	1111	6.0	183
	1827	−0.7	−21
31 Sa	0115	4.1	125
	0601	2.5	76
	1202	5.5	168
	1926	−0.4	−12

November

	Time	Height	
	h m	ft	cm
1 Su	0229	4.0	122
	0711	2.8	85
	1301	5.0	152
	2030	0.0	0
2 M	0343	4.1	125
	0840	2.9	88
	1412	4.5	137
	2134	0.3	9
3 Tu ◑	0448	4.3	131
	1013	2.7	82
	1533	4.2	128
	2235	0.5	15
4 W	0538	4.5	137
	1128	2.3	70
	1651	4.0	122
	2327	0.7	21
5 Th	0616	4.7	143
	1223	1.8	55
	1757	4.0	122
6 F	0011	0.9	27
	0648	4.9	149
	1307	1.4	43
	1852	4.0	122
7 Sa	0048	1.1	34
	0715	5.0	152
	1345	1.0	30
	1940	4.0	122
8 Su	0120	1.3	40
	0740	5.2	158
	1419	0.6	18
	2022	4.0	122
9 M	0149	1.5	46
	0805	5.4	165
	1451	0.3	9
	2102	4.0	122
10 Tu	0218	1.7	52
	0830	5.5	168
	1524	0.1	3
	2142	4.0	122
11 W ●	0246	1.9	58
	0856	5.6	171
	1557	−0.1	−3
	2222	3.9	119
12 Th	0316	2.1	64
	0924	5.6	171
	1633	−0.2	−6
	2306	3.9	119
13 F	0348	2.3	70
	0955	5.6	171
	1712	−0.3	−9
	2353	3.8	116
14 Sa	0423	2.5	76
	1029	5.5	168
	1754	−0.3	−9
15 Su	0047	3.7	113
	0505	2.7	82
	1108	5.3	162
	1841	−0.2	−6

	Time	Height	
	h m	ft	cm
16 M	0147	3.7	113
	0600	2.9	88
	1156	5.0	152
	1933	−0.1	−3
17 Tu	0250	3.9	119
	0716	3.0	91
	1255	4.7	143
	2029	0.1	3
18 W ◐	0348	4.1	125
	0850	2.9	88
	1412	4.3	131
	2127	0.2	6
19 Th	0437	4.5	137
	1019	2.4	73
	1539	4.1	125
	2223	0.4	12
20 F	0519	4.9	149
	1130	1.7	52
	1702	4.0	122
	2316	0.6	18
21 Sa	0559	5.4	165
	1229	1.0	30
	1817	4.1	125
22 Su	0005	0.8	24
	0638	5.8	177
	1321	0.2	6
	1922	4.2	128
23 M	0052	1.1	34
	0717	6.2	189
	1409	−0.5	−15
	2022	4.3	131
24 Tu	0138	1.3	40
	0757	6.5	198
	1457	−1.0	−30
	2118	4.3	131
25 W ○	0222	1.6	49
	0837	6.6	201
	1543	−1.3	−40
	2212	4.3	131
26 Th	0308	1.8	55
	0919	6.6	201
	1630	−1.3	−40
	2306	4.3	131
27 F	0354	2.1	64
	1001	6.4	195
	1717	−1.2	−37
28 Sa	0001	4.2	128
	0444	2.4	73
	1046	6.0	183
	1806	−0.9	−27
29 Su	0059	4.1	125
	0540	2.6	79
	1133	5.5	168
	1855	−0.5	−15
30 M	0159	4.1	125
	0645	2.8	85
	1224	4.9	149
	1947	−0.1	−3

December

	Time	Height	
	h m	ft	cm
1 Tu	0259	4.2	128
	0805	2.8	85
	1324	4.3	131
	2040	0.3	9
2 W ◑	0356	4.3	131
	0934	2.6	79
	1438	3.8	116
	2133	0.7	21
3 Th	0445	4.5	137
	1056	2.3	70
	1601	3.5	107
	2224	1.0	30
4 F	0525	4.7	143
	1158	1.8	55
	1721	3.4	104
	2310	1.3	40
5 Sa	0559	4.9	149
	1246	1.3	40
	1828	3.4	104
	2352	1.6	49
6 Su	0630	5.1	155
	1326	0.8	24
	1925	3.5	107
7 M	0029	1.8	55
	0659	5.4	165
	1402	0.4	12
	2012	3.6	110
8 Tu	0105	2.0	61
	0727	5.6	171
	1435	0.0	0
	2055	3.6	110
9 W	0139	2.1	64
	0756	5.7	174
	1509	−0.3	−9
	2136	3.7	113
10 Th	0213	2.2	67
	0827	5.9	180
	1543	−0.5	−15
	2216	3.8	116
11 F ●	0249	2.3	70
	0900	5.9	180
	1618	−0.7	−21
	2257	3.8	116
12 Sa	0327	2.4	73
	0935	5.9	180
	1656	−0.8	−24
	2340	3.9	119
13 Su	0409	2.5	76
	1013	5.8	177
	1736	−0.7	−21
14 M	0026	4.0	122
	0457	2.6	79
	1055	5.6	171
	1818	−0.6	−18
15 Tu	0115	4.1	125
	0556	2.7	82
	1143	5.2	158
	1903	−0.4	−12

	Time	Height	
	h m	ft	cm
16 W	0206	4.2	128
	0708	2.6	79
	1241	4.7	143
	1952	0.0	0
17 Th	0258	4.5	137
	0834	2.4	73
	1353	4.2	128
	2044	0.3	9
18 F ◐	0349	4.8	146
	1002	2.0	61
	1521	3.7	113
	2139	0.7	21
19 Sa	0438	5.2	158
	1119	1.3	40
	1654	3.5	107
	2236	1.1	34
20 Su	0524	5.7	174
	1223	0.6	18
	1818	3.6	110
	2331	1.4	43
21 M	0610	6.0	183
	1317	−0.1	−3
	1929	3.7	113
22 Tu	0025	1.7	52
	0654	6.3	192
	1406	−0.7	−21
	2029	3.9	119
23 W	0117	1.9	58
	0738	6.5	198
	1452	−1.1	−34
	2122	4.0	122
24 Th	0206	2.0	61
	0821	6.6	201
	1536	−1.3	−40
	2210	4.1	125
25 F ○	0253	2.1	64
	0903	6.5	198
	1618	−1.3	−40
	2256	4.2	128
26 Sa	0341	2.2	67
	0945	6.3	192
	1700	−1.1	−34
	2342	4.2	128
27 Su	0429	2.3	70
	1027	5.9	180
	1740	−0.8	−24
28 M	0027	4.2	128
	0519	2.4	73
	1109	5.4	165
	1821	−0.5	−15
29 Tu	0113	4.2	128
	0614	2.5	76
	1154	4.9	149
	1901	0.0	0
30 W	0201	4.3	131
	0719	2.6	79
	1243	4.3	131
	1943	0.5	15
31 Th	0249	4.3	131
	0836	2.5	76
	1342	3.7	113
	2026	0.9	27

Time meridian 120° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.
Heights are referred to mean lower low water which is the chart datum of soundings.

Monterey, California, 2015

Times and Heights of High and Low Waters

January

	Time	Height	
	h m	ft	cm
1 Th	0039	2.0	61
	0707	6.0	183
	1426	−0.4	−12
	2056	3.7	113
2 F	0131	2.3	70
	0750	6.1	186
	1510	−0.6	−18
	2147	3.9	119
3 Sa	0219	2.4	73
	0830	6.1	186
	1550	−0.8	−24
	2231	4.0	122
4 Su ○	0304	2.5	76
	0909	6.0	183
	1627	−0.7	−21
	2311	4.1	125
5 M	0346	2.5	76
	0945	5.8	177
	1702	−0.6	−18
	2348	4.1	125
6 Tu	0427	2.6	79
	1021	5.6	171
	1736	−0.4	−12
7 W	0024	4.1	125
	0509	2.6	79
	1058	5.3	162
	1809	−0.2	−6
8 Th	0100	4.2	128
	0555	2.6	79
	1135	4.9	149
	1843	0.1	3
9 F	0137	4.2	128
	0646	2.6	79
	1215	4.5	137
	1916	0.5	15
10 Sa	0215	4.3	131
	0746	2.6	79
	1301	4.0	122
	1951	0.9	27
11 Su	0255	4.4	134
	0857	2.5	76
	1359	3.6	110
	2028	1.2	37
12 M	0336	4.5	137
	1015	2.2	67
	1518	3.2	98
	2109	1.6	49
13 Tu ◑	0419	4.7	143
	1127	1.7	52
	1655	3.0	91
	2158	2.0	61
14 W	0502	5.0	152
	1226	1.2	37
	1827	3.0	91
	2253	2.2	67
15 Th	0545	5.3	162
	1314	0.6	18
	1937	3.2	98
	2351	2.4	73

	Time	Height	
	h m	ft	cm
16 F	0629	5.6	171
	1357	0.0	0
	2030	3.5	107
17 Sa	0046	2.4	73
	0713	5.9	180
	1438	−0.5	−15
	2114	3.7	113
18 Su	0139	2.4	73
	0757	6.2	189
	1518	−0.9	−27
	2155	4.0	122
19 M	0230	2.3	70
	0843	6.4	195
	1559	−1.2	−37
	2235	4.2	128
20 Tu ●	0322	2.1	64
	0929	6.5	198
	1640	−1.2	−37
	2315	4.5	137
21 W	0414	2.0	61
	1017	6.4	195
	1721	−1.1	−34
	2356	4.7	143
22 Th	0510	1.8	55
	1108	6.0	183
	1803	−0.9	−27
23 F	0039	4.9	149
	0610	1.7	52
	1202	5.5	168
	1847	−0.4	−12
24 Sa	0125	5.1	155
	0716	1.6	49
	1302	4.8	146
	1932	0.2	6
25 Su	0214	5.3	162
	0830	1.4	43
	1412	4.2	128
	2020	0.8	24
26 M ◐	0307	5.4	165
	0951	1.2	37
	1537	3.6	110
	2114	1.4	43
27 Tu	0403	5.5	168
	1112	0.8	24
	1714	3.4	104
	2215	1.9	58
28 W	0500	5.6	171
	1223	0.4	12
	1846	3.4	104
	2322	2.2	67
29 Th	0556	5.6	171
	1322	0.0	0
	1958	3.6	110
30 F	0027	2.4	73
	0648	5.7	174
	1412	−0.3	−9
	2052	3.8	116
31 Sa	0125	2.4	73
	0736	5.7	174
	1455	−0.4	−12
	2134	3.9	119

February

	Time	Height	
	h m	ft	cm
1 Su	0214	2.4	73
	0818	5.7	174
	1532	−0.5	−15
	2210	4.1	125
2 M	0257	2.3	70
	0857	5.7	174
	1606	−0.4	−12
	2242	4.1	125
3 Tu ○	0336	2.3	70
	0934	5.5	168
	1637	−0.3	−9
	2311	4.2	128
4 W	0414	2.2	67
	1009	5.4	165
	1706	−0.1	−3
	2339	4.3	131
5 Th	0452	2.1	64
	1044	5.1	155
	1735	0.1	3
6 F	0008	4.3	131
	0533	2.1	64
	1120	4.8	146
	1803	0.4	12
7 Sa	0038	4.4	134
	0617	2.0	61
	1159	4.4	134
	1832	0.8	24
8 Su	0109	4.5	137
	0706	2.0	61
	1243	4.0	122
	1902	1.1	34
9 M	0144	4.5	137
	0805	1.9	58
	1337	3.5	107
	1934	1.5	46
10 Tu	0223	4.6	140
	0915	1.7	52
	1450	3.1	94
	2012	1.9	58
11 W ◑	0309	4.7	143
	1030	1.4	43
	1628	2.9	88
	2101	2.2	67
12 Th	0401	4.9	149
	1139	1.0	30
	1807	3.0	91
	2208	2.5	76
13 F	0457	5.1	155
	1237	0.5	15
	1917	3.3	101
	2322	2.5	76
14 Sa	0554	5.4	165
	1326	0.0	0
	2005	3.6	110
15 Su	0029	2.5	76
	0648	5.7	174
	1410	−0.5	−15
	2046	3.9	119

	Time	Height	
	h m	ft	cm
16 M	0128	2.2	67
	0740	6.0	183
	1452	−0.8	−24
	2123	4.2	128
17 Tu	0222	1.9	58
	0830	6.2	189
	1532	−1.0	−30
	2200	4.5	137
18 W ●	0315	1.5	46
	0921	6.2	189
	1613	−0.9	−27
	2237	4.9	149
19 Th	0408	1.2	37
	1011	6.1	186
	1653	−0.7	−21
	2317	5.1	155
20 F	0502	0.9	27
	1104	5.7	174
	1734	−0.3	−9
	2358	5.3	162
21 Sa	0559	0.8	24
	1159	5.1	155
	1816	0.2	6
22 Su	0041	5.4	165
	0700	0.7	21
	1300	4.5	137
	1900	0.8	24
23 M	0129	5.4	165
	0808	0.6	18
	1410	3.9	119
	1948	1.3	40
24 Tu	0221	5.4	165
	0923	0.6	18
	1536	3.5	107
	2045	1.9	58
25 W ◐	0320	5.3	162
	1041	0.5	15
	1712	3.4	104
	2154	2.3	70
26 Th	0425	5.2	158
	1154	0.3	9
	1839	3.5	107
	2313	2.5	76
27 F	0530	5.1	155
	1256	0.1	3
	1942	3.7	113
28 Sa	0025	2.5	76
	0630	5.1	155
	1346	0.0	0
	2028	3.9	119

March

	Time	Height	
	h m	ft	cm
1 Su	0123	2.3	70
	0722	5.2	158
	1428	−0.1	−3
	2104	4.1	125
2 M	0210	2.1	64
	0806	5.2	158
	1504	−0.1	−3
	2134	4.2	128
3 Tu	0250	1.9	58
	0846	5.1	155
	1535	0.0	0
	2201	4.3	131
4 W	0327	1.7	52
	0923	5.1	155
	1604	0.2	6
	2226	4.4	134
5 Th ○	0402	1.6	49
	0959	4.9	149
	1631	0.4	12
	2250	4.5	137
6 F	0437	1.4	43
	1034	4.7	143
	1657	0.6	18
	2316	4.6	140
7 Sa	0514	1.3	40
	1111	4.4	134
	1724	0.9	27
	2342	4.6	140
8 Su	0554	1.2	37
	1152	4.1	125
	1751	1.2	37
9 M	0011	4.7	143
	0638	1.1	34
	1237	3.8	116
	1819	1.5	46
10 Tu	0043	4.7	143
	0729	1.1	34
	1333	3.4	104
	1851	1.9	58
11 W	0121	4.7	143
	0829	1.0	30
	1445	3.2	98
	1931	2.2	67
12 Th	0207	4.7	143
	0939	0.9	27
	1617	3.1	94
	2027	2.5	76
13 F ◑	0306	4.7	143
	1050	0.6	18
	1745	3.2	98
	2147	2.6	79
14 Sa	0414	4.8	146
	1153	0.3	9
	1846	3.5	107
	2312	2.5	76
15 Su	0523	5.0	152
	1247	−0.1	−3
	1931	3.8	116

	Time	Height	
	h m	ft	cm
16 M	0023	2.2	67
	0627	5.3	162
	1335	−0.4	−12
	2009	4.2	128
17 Tu	0123	1.8	55
	0726	5.5	168
	1419	−0.5	−15
	2045	4.6	140
18 W	0218	1.3	40
	0821	5.6	171
	1500	−0.5	−15
	2121	4.9	149
19 Th	0310	0.7	21
	0915	5.6	171
	1541	−0.4	−12
	2158	5.3	162
20 F ●	0401	0.3	9
	1008	5.4	165
	1621	−0.1	−3
	2237	5.5	168
21 Sa	0453	0.0	0
	1102	5.1	155
	1702	0.4	12
	2317	5.6	171
22 Su	0547	−0.2	−6
	1159	4.6	140
	1744	0.8	24
	2359	5.6	171
23 M	0643	−0.2	−6
	1301	4.2	128
	1829	1.4	43
24 Tu	0045	5.5	168
	0744	−0.1	−3
	1411	3.8	116
	1920	1.9	58
25 W	0136	5.2	158
	0851	0.0	0
	1533	3.6	110
	2022	2.3	70
26 Th ◐	0236	4.9	149
	1003	0.2	6
	1700	3.5	107
	2141	2.5	76
27 F	0344	4.6	140
	1113	0.2	6
	1815	3.7	113
	2307	2.5	76
28 Sa	0457	4.5	137
	1215	0.2	6
	1909	3.9	119
29 Su	0020	2.3	70
	0605	4.4	134
	1306	0.2	6
	1950	4.0	122
30 M	0116	2.0	61
	0702	4.5	137
	1348	0.3	9
	2022	4.2	128
31 Tu	0200	1.7	52
	0750	4.5	137
	1424	0.4	12
	2049	4.3	131

Time meridian 120° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.
Heights are referred to mean lower low water which is the chart datum of soundings.

Monterey, California, 2015

Times and Heights of High and Low Waters

April

	Time	Height	
	h m	ft	cm
1 W	0238	1.4	43
	0832	4.5	137
	1454	0.5	15
	2114	4.5	137
2 Th	0314	1.1	34
	0912	4.4	134
	1523	0.7	21
	2138	4.6	140
3 F	0348	0.9	27
	0950	4.3	131
	1550	0.9	27
	2202	4.7	143
4 Sa ○	0422	0.6	18
	1028	4.2	128
	1617	1.1	34
	2227	4.8	146
5 Su	0458	0.4	12
	1108	4.0	122
	1644	1.4	43
	2254	4.9	149
6 M	0536	0.3	9
	1152	3.8	116
	1713	1.7	52
	2323	4.9	149
7 Tu	0618	0.2	6
	1241	3.6	110
	1744	1.9	58
	2356	4.9	149
8 W	0705	0.2	6
	1339	3.4	104
	1821	2.2	67
9 Th	0035	4.8	146
	0800	0.2	6
	1449	3.3	101
	1909	2.5	76
10 F	0123	4.7	143
	0901	0.2	6
	1607	3.3	101
	2017	2.7	82
11 Sa ◑	0225	4.6	140
	1006	0.1	3
	1716	3.5	107
	2145	2.6	79
12 Su	0340	4.5	137
	1109	0.0	0
	1808	3.8	116
	2311	2.4	73
13 M	0458	4.6	140
	1205	−0.1	−3
	1851	4.2	128
14 Tu	0021	1.9	58
	0610	4.6	140
	1255	−0.1	−3
	1930	4.6	140
15 W	0121	1.2	37
	0715	4.7	143
	1341	0.0	0
	2007	5.0	152

	Time	Height	
	h m	ft	cm
16 Th	0214	0.6	18
	0815	4.8	146
	1425	0.1	3
	2044	5.4	165
17 F	0305	0.0	0
	0912	4.8	146
	1507	0.4	12
	2121	5.7	174
18 Sa ●	0355	−0.5	−15
	1008	4.6	140
	1548	0.7	21
	2200	5.9	180
19 Su	0444	−0.8	−24
	1103	4.4	134
	1631	1.1	34
	2240	5.9	180
20 M	0534	−0.9	−27
	1201	4.2	128
	1715	1.5	46
	2322	5.7	174
21 Tu	0626	−0.8	−24
	1302	4.0	122
	1802	1.9	58
22 W	0007	5.4	165
	0721	−0.6	−18
	1408	3.8	116
	1856	2.3	70
23 Th	0055	5.0	152
	0818	−0.4	−12
	1520	3.7	113
	2002	2.5	76
24 F	0151	4.6	140
	0920	−0.1	−3
	1633	3.7	113
	2124	2.6	79
25 Sa ◐	0258	4.2	128
	1022	0.2	6
	1735	3.9	119
	2251	2.5	76
26 Su	0413	3.9	119
	1120	0.4	12
	1824	4.0	122
27 M	0004	2.2	67
	0527	3.8	116
	1211	0.5	15
	1902	4.2	128
28 Tu	0059	1.8	55
	0632	3.8	116
	1254	0.7	21
	1933	4.4	134
29 W	0144	1.4	43
	0727	3.8	116
	1332	0.9	27
	2000	4.6	140
30 Th	0222	1.0	30
	0816	3.8	116
	1404	1.0	30
	2025	4.8	146

May

	Time	Height	
	h m	ft	cm
1 F	0258	0.6	18
	0900	3.8	116
	1435	1.2	37
	2050	4.9	149
2 Sa	0332	0.3	9
	0942	3.8	116
	1505	1.4	43
	2117	5.1	155
3 Su ○	0407	0.0	0
	1024	3.8	116
	1535	1.6	49
	2144	5.2	158
4 M	0443	−0.3	−9
	1108	3.7	113
	1607	1.8	55
	2214	5.3	162
5 Tu	0521	−0.4	−12
	1154	3.6	110
	1641	2.1	64
	2247	5.3	162
6 W	0602	−0.5	−15
	1245	3.6	110
	1718	2.3	70
	2324	5.2	158
7 Th	0648	−0.5	−15
	1341	3.5	107
	1804	2.5	76
8 F	0006	5.1	155
	0737	−0.5	−15
	1442	3.6	110
	1902	2.6	79
9 Sa	0057	4.9	149
	0831	−0.4	−12
	1543	3.7	113
	2019	2.7	82
10 Su	0200	4.6	140
	0929	−0.2	−6
	1639	4.0	122
	2146	2.5	76
11 M ◑	0316	4.3	131
	1026	−0.1	−3
	1728	4.3	131
	2309	2.0	61
12 Tu	0439	4.1	125
	1121	0.1	3
	1811	4.7	143
13 W	0019	1.4	43
	0558	4.0	122
	1213	0.3	9
	1852	5.1	155
14 Th	0118	0.7	21
	0710	4.0	122
	1302	0.6	18
	1931	5.5	168
15 F	0211	0.0	0
	0815	4.0	122
	1348	0.9	27
	2010	5.8	177

	Time	Height	
	h m	ft	cm
16 Sa	0301	−0.6	−18
	0915	4.1	125
	1433	1.2	37
	2050	6.0	183
17 Su ●	0349	−1.0	−30
	1011	4.1	125
	1518	1.5	46
	2130	6.1	186
18 M	0435	−1.2	−37
	1106	4.0	122
	1602	1.8	55
	2210	6.0	183
19 Tu	0522	−1.2	−37
	1201	4.0	122
	1648	2.0	61
	2252	5.8	177
20 W	0608	−1.1	−34
	1257	3.9	119
	1737	2.3	70
	2335	5.4	165
21 Th	0656	−0.8	−24
	1354	3.9	119
	1832	2.5	76
22 F	0020	5.0	152
	0745	−0.5	−15
	1453	3.9	119
	1937	2.7	82
23 Sa	0110	4.5	137
	0835	−0.1	−3
	1551	3.9	119
	2054	2.7	82
24 Su	0209	4.0	122
	0927	0.2	6
	1644	4.1	125
	2218	2.5	76
25 M ◐	0319	3.6	110
	1017	0.5	15
	1729	4.2	128
	2333	2.2	67
26 Tu	0437	3.4	104
	1106	0.8	24
	1806	4.4	134
27 W	0032	1.7	52
	0553	3.3	101
	1150	1.1	34
	1839	4.6	140
28 Th	0120	1.3	40
	0700	3.2	98
	1231	1.3	40
	1909	4.8	146
29 F	0201	0.8	24
	0757	3.3	101
	1309	1.6	49
	1938	5.1	155
30 Sa	0238	0.3	9
	0848	3.4	104
	1345	1.7	52
	2007	5.3	162
31 Su	0314	−0.1	−3
	0934	3.5	107
	1421	1.9	58
	2038	5.5	168

June

	Time	Height	
	h m	ft	cm
1 M	0350	−0.4	−12
	1019	3.6	110
	1457	2.1	64
	2110	5.6	171
2 Tu ○	0427	−0.7	−21
	1103	3.6	110
	1535	2.2	67
	2145	5.7	174
3 W	0505	−0.9	−27
	1149	3.7	113
	1616	2.3	70
	2223	5.7	174
4 Th	0546	−1.0	−30
	1236	3.8	116
	1702	2.4	73
	2304	5.6	171
5 F	0630	−1.0	−30
	1325	3.9	119
	1756	2.5	76
	2351	5.4	165
6 Sa	0715	−0.8	−24
	1416	4.0	122
	1900	2.6	79
7 Su	0044	5.0	152
	0804	−0.6	−18
	1508	4.2	128
	2016	2.5	76
8 M	0147	4.6	140
	0855	−0.2	−6
	1558	4.5	137
	2140	2.2	67
9 Tu ◑	0303	4.1	125
	0947	0.1	3
	1647	4.8	146
	2301	1.7	52
10 W	0428	3.7	113
	1041	0.5	15
	1733	5.2	158
11 Th	0013	1.0	30
	0553	3.5	107
	1135	0.9	27
	1818	5.6	171
12 F	0113	0.3	9
	0712	3.5	107
	1227	1.3	40
	1901	5.9	180
13 Sa	0207	−0.3	−9
	0820	3.6	110
	1318	1.6	49
	1944	6.1	186
14 Su	0256	−0.8	−24
	0920	3.7	113
	1407	1.8	55
	2026	6.2	189
15 M	0341	−1.1	−34
	1015	3.8	116
	1455	2.0	61
	2107	6.2	189

	Time	Height	
	h m	ft	cm
16 Tu ●	0425	−1.2	−37
	1105	3.9	119
	1541	2.2	67
	2148	6.0	183
17 W	0507	−1.1	−34
	1152	4.0	122
	1628	2.4	73
	2229	5.8	177
18 Th	0548	−1.0	−30
	1239	4.0	122
	1716	2.5	76
	2310	5.4	165
19 F	0629	−0.7	−21
	1325	4.0	122
	1808	2.6	79
	2352	5.0	152
20 Sa	0710	−0.3	−9
	1412	4.1	125
	1905	2.7	82
21 Su	0036	4.6	140
	0750	0.0	0
	1458	4.1	125
	2012	2.6	79
22 M	0127	4.1	125
	0832	0.4	12
	1543	4.2	128
	2128	2.5	76
23 Tu	0228	3.6	110
	0914	0.8	24
	1625	4.4	134
	2246	2.2	67
24 W ◐	0344	3.2	98
	0958	1.2	37
	1705	4.6	140
	2354	1.8	55
25 Th	0509	3.0	91
	1043	1.5	46
	1742	4.8	146
26 F	0048	1.3	40
	0630	3.0	91
	1129	1.8	55
	1818	5.0	152
27 Sa	0133	0.8	24
	0738	3.1	94
	1215	2.0	61
	1853	5.3	162
28 Su	0213	0.3	9
	0834	3.3	101
	1300	2.2	67
	1929	5.6	171
29 M	0251	−0.2	−6
	0921	3.5	107
	1344	2.3	70
	2006	5.8	177
30 Tu	0329	−0.5	−15
	1004	3.6	110
	1428	2.3	70
	2044	6.0	183

Time meridian 120° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.
Heights are referred to mean lower low water which is the chart datum of soundings.

Monterey, California, 2015

Times and Heights of High and Low Waters

July

	Time	Height	
	h m	ft	cm
1 W ○	0406	−0.9	−27
	1045	3.8	116
	1513	2.3	70
	2125	6.1	186
2 Th	0445	−1.0	−30
	1127	4.0	122
	1601	2.3	70
	2208	6.1	186
3 F	0526	−1.1	−34
	1209	4.1	125
	1652	2.3	70
	2253	6.0	183
4 Sa	0607	−1.0	−30
	1252	4.3	131
	1749	2.3	70
	2343	5.6	171
5 Su	0650	−0.7	−21
	1338	4.5	137
	1854	2.2	67
6 M	0038	5.1	155
	0735	−0.3	−9
	1425	4.8	146
	2006	2.0	61
7 Tu	0141	4.6	140
	0822	0.1	3
	1515	5.0	152
	2127	1.7	52
8 W ◑	0257	4.0	122
	0913	0.7	21
	1606	5.3	162
	2248	1.3	40
9 Th	0425	3.6	110
	1007	1.2	37
	1658	5.6	171
10 F	0001	0.7	21
	0557	3.4	104
	1104	1.6	49
	1749	5.8	177
11 Sa	0104	0.2	6
	0718	3.4	104
	1203	1.9	58
	1838	6.0	183
12 Su	0159	−0.3	−9
	0826	3.6	110
	1300	2.1	64
	1926	6.1	186
13 M	0247	−0.6	−18
	0921	3.8	116
	1354	2.3	70
	2010	6.1	186
14 Tu	0330	−0.8	−24
	1008	3.9	119
	1443	2.3	70
	2053	6.1	186
15 W ●	0410	−0.8	−24
	1050	4.1	125
	1529	2.4	73
	2133	6.0	183

	Time	Height	
	h m	ft	cm
16 Th	0448	−0.7	−21
	1128	4.1	125
	1613	2.4	73
	2212	5.7	174
17 F	0524	−0.5	−15
	1205	4.2	128
	1657	2.4	73
	2251	5.4	165
18 Sa	0558	−0.2	−6
	1241	4.2	128
	1743	2.4	73
	2330	5.1	155
19 Su	0632	0.1	3
	1318	4.3	131
	1832	2.4	73
20 M	0011	4.6	140
	0705	0.5	15
	1355	4.3	131
	1928	2.4	73
21 Tu	0056	4.2	128
	0740	0.9	27
	1434	4.4	134
	2033	2.3	70
22 W	0151	3.7	113
	0815	1.3	40
	1515	4.5	137
	2147	2.1	64
23 Th ◐	0301	3.3	101
	0855	1.7	52
	1558	4.7	143
	2301	1.8	55
24 F	0431	3.1	94
	0941	2.0	61
	1643	4.9	149
25 Sa	0005	1.4	43
	0604	3.0	91
	1034	2.3	70
	1728	5.1	155
26 Su	0058	0.9	27
	0718	3.2	98
	1131	2.4	73
	1812	5.4	165
27 M	0142	0.4	12
	0813	3.4	104
	1227	2.5	76
	1857	5.7	174
28 Tu	0223	−0.1	−3
	0857	3.6	110
	1320	2.5	76
	1941	6.0	183
29 W	0302	−0.5	−15
	0935	3.9	119
	1410	2.3	70
	2025	6.2	189
30 Th	0341	−0.7	−21
	1013	4.1	125
	1500	2.2	67
	2110	6.4	195
31 F ○	0420	−0.9	−27
	1051	4.4	134
	1551	2.0	61
	2157	6.3	192

August

	Time	Height	
	h m	ft	cm
1 Sa	0459	−0.8	−24
	1130	4.6	140
	1644	1.8	55
	2246	6.1	186
2 Su	0540	−0.6	−18
	1210	4.9	149
	1740	1.7	52
	2338	5.7	174
3 M	0621	−0.2	−6
	1254	5.1	155
	1842	1.5	46
4 Tu	0035	5.1	155
	0705	0.2	6
	1340	5.3	162
	1951	1.4	43
5 W	0141	4.5	137
	0751	0.8	24
	1431	5.4	165
	2107	1.2	37
6 Th ◑	0258	3.9	119
	0843	1.4	43
	1526	5.5	168
	2227	0.9	27
7 F	0430	3.6	110
	0942	1.9	58
	1624	5.6	171
	2343	0.5	15
8 Sa	0602	3.5	107
	1048	2.2	67
	1724	5.7	174
9 Su	0048	0.2	6
	0720	3.7	113
	1156	2.4	73
	1821	5.8	177
10 M	0143	−0.1	−3
	0819	3.9	119
	1259	2.4	73
	1913	5.9	180
11 Tu	0230	−0.2	−6
	0906	4.1	125
	1352	2.4	73
	2000	5.9	180
12 W	0311	−0.3	−9
	0945	4.2	128
	1439	2.3	70
	2043	5.8	177
13 Th	0348	−0.2	−6
	1019	4.3	131
	1521	2.2	67
	2122	5.7	174
14 F ●	0421	−0.1	−3
	1050	4.4	134
	1601	2.1	64
	2200	5.5	168
15 Sa	0452	0.1	3
	1119	4.4	134
	1640	2.0	61
	2237	5.3	162

	Time	Height	
	h m	ft	cm
16 Su	0522	0.4	12
	1148	4.5	137
	1720	2.0	61
	2314	4.9	149
17 M	0551	0.7	21
	1218	4.5	137
	1803	1.9	58
	2354	4.6	140
18 Tu	0620	1.1	34
	1249	4.6	140
	1851	1.9	58
19 W	0038	4.2	128
	0651	1.4	43
	1324	4.6	140
	1946	1.9	58
20 Th	0131	3.8	116
	0723	1.8	55
	1403	4.6	140
	2050	1.8	55
21 F	0239	3.4	104
	0802	2.2	67
	1448	4.7	143
	2203	1.6	49
22 Sa ◐	0409	3.2	98
	0850	2.5	76
	1540	4.8	146
	2314	1.3	40
23 Su	0543	3.2	98
	0955	2.7	82
	1637	5.0	152
24 M	0014	0.9	27
	0653	3.4	104
	1106	2.7	82
	1734	5.3	162
25 Tu	0104	0.5	15
	0742	3.7	113
	1211	2.6	79
	1828	5.6	171
26 W	0148	0.1	3
	0821	4.0	122
	1308	2.4	73
	1920	5.9	180
27 Th	0229	−0.2	−6
	0857	4.3	131
	1400	2.0	61
	2010	6.1	186
28 F	0309	−0.4	−12
	0932	4.6	140
	1451	1.7	52
	2059	6.2	189
29 Sa ○	0348	−0.4	−12
	1009	4.9	149
	1542	1.3	40
	2149	6.1	186
30 Su	0428	−0.3	−9
	1046	5.2	158
	1635	1.0	30
	2241	5.8	177
31 M	0508	0.0	0
	1126	5.5	168
	1730	0.8	24
	2336	5.4	165

September

	Time	Height	
	h m	ft	cm
1 Tu	0549	0.5	15
	1209	5.6	171
	1829	0.6	18
2 W	0035	4.9	149
	0634	1.0	30
	1255	5.7	174
	1933	0.6	18
3 Th	0143	4.4	134
	0722	1.5	46
	1347	5.6	171
	2044	0.6	18
4 F	0303	4.0	122
	0818	2.0	61
	1446	5.5	168
	2201	0.5	15
5 Sa ◑	0433	3.8	116
	0927	2.4	73
	1551	5.4	165
	2315	0.4	12
6 Su	0559	3.8	116
	1046	2.6	79
	1700	5.3	162
7 M	0021	0.3	9
	0706	4.0	122
	1200	2.6	79
	1805	5.3	162
8 Tu	0116	0.2	6
	0756	4.2	128
	1302	2.4	73
	1901	5.3	162
9 W	0202	0.2	6
	0836	4.4	134
	1352	2.2	67
	1950	5.4	165
10 Th	0241	0.2	6
	0909	4.5	137
	1435	2.0	61
	2033	5.3	162
11 F	0315	0.4	12
	0937	4.6	140
	1513	1.8	55
	2112	5.2	158
12 Sa ●	0346	0.6	18
	1003	4.7	143
	1549	1.6	49
	2150	5.1	155
13 Su	0414	0.8	24
	1029	4.7	143
	1624	1.4	43
	2226	4.9	149
14 M	0441	1.0	30
	1054	4.8	146
	1700	1.3	40
	2304	4.6	140
15 Tu	0508	1.3	40
	1120	4.8	146
	1739	1.2	37
	2345	4.3	131

	Time	Height	
	h m	ft	cm
16 W	0536	1.6	49
	1149	4.8	146
	1822	1.2	37
17 Th	0031	4.0	122
	0606	2.0	61
	1221	4.8	146
	1910	1.2	37
18 F	0125	3.7	113
	0639	2.3	70
	1258	4.8	146
	2006	1.2	37
19 Sa	0235	3.5	107
	0719	2.6	79
	1343	4.7	143
	2112	1.1	34
20 Su	0400	3.4	104
	0816	2.8	85
	1441	4.7	143
	2221	1.0	30
21 M ◐	0522	3.5	107
	0935	2.9	88
	1549	4.8	146
	2325	0.7	21
22 Tu	0621	3.8	116
	1056	2.8	85
	1659	5.0	152
23 W	0019	0.4	12
	0704	4.1	125
	1204	2.5	76
	1803	5.2	158
24 Th	0107	0.2	6
	0741	4.4	134
	1302	2.1	64
	1902	5.4	165
25 F	0150	0.1	3
	0816	4.8	146
	1354	1.5	46
	1957	5.6	171
26 Sa	0232	0.0	0
	0851	5.1	155
	1445	1.0	30
	2051	5.7	174
27 Su ○	0312	0.2	6
	0927	5.5	168
	1535	0.4	12
	2144	5.6	171
28 M	0353	0.4	12
	1005	5.8	177
	1626	0.1	3
	2239	5.3	162
29 Tu	0434	0.8	24
	1045	6.0	183
	1719	−0.2	−6
	2336	5.0	152
30 W	0517	1.2	37
	1128	6.0	183
	1814	−0.2	−6

Time meridian 120° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.
Heights are referred to mean lower low water which is the chart datum of soundings.

Monterey, California, 2015

Times and Heights of High and Low Waters

October

	Time	Height	
	h m	ft	cm
1 Th	0037	4.6	140
	0603	1.7	52
	1214	5.9	180
	1914	−0.1	−3
2 F	0146	4.3	131
	0656	2.2	67
	1306	5.6	171
	2019	0.0	0
3 Sa	0304	4.1	125
	0759	2.5	76
	1406	5.3	162
	2129	0.2	6
4 Su ◑	0427	4.0	122
	0919	2.7	82
	1515	5.0	152
	2239	0.3	9
5 M	0540	4.1	125
	1045	2.7	82
	1631	4.8	146
	2343	0.4	12
6 Tu	0637	4.3	131
	1200	2.5	76
	1743	4.7	143
7 W	0037	0.5	15
	0721	4.5	137
	1259	2.2	67
	1844	4.7	143
8 Th	0123	0.6	18
	0756	4.6	140
	1346	1.8	55
	1936	4.7	143
9 F	0201	0.8	24
	0826	4.8	146
	1425	1.5	46
	2021	4.7	143
10 Sa	0234	1.0	30
	0852	4.9	149
	1501	1.2	37
	2102	4.6	140
11 Su	0304	1.2	37
	0916	5.0	152
	1535	0.9	27
	2141	4.5	137
12 M ●	0331	1.4	43
	0940	5.1	155
	1609	0.7	21
	2220	4.4	134
13 Tu	0358	1.6	49
	1005	5.1	155
	1644	0.6	18
	2300	4.2	128
14 W	0426	1.9	58
	1031	5.2	158
	1720	0.5	15
	2343	4.1	125
15 Th	0455	2.2	67
	1100	5.2	158
	1800	0.4	12

	Time	Height	
	h m	ft	cm
16 F	0031	3.9	119
	0527	2.4	73
	1132	5.1	155
	1845	0.5	15
17 Sa	0127	3.7	113
	0604	2.7	82
	1209	5.0	152
	1935	0.5	15
18 Su	0234	3.7	113
	0651	2.9	88
	1254	4.8	146
	2033	0.5	15
19 M	0346	3.7	113
	0759	3.1	94
	1354	4.7	143
	2135	0.5	15
20 Tu ◐	0452	3.9	119
	0926	3.0	91
	1507	4.6	140
	2236	0.5	15
21 W	0542	4.1	125
	1050	2.7	82
	1627	4.6	140
	2332	0.4	12
22 Th	0623	4.5	137
	1159	2.2	67
	1741	4.7	143
23 F	0023	0.4	12
	0700	4.9	149
	1257	1.6	49
	1848	4.8	146
24 Sa	0109	0.5	15
	0736	5.3	162
	1349	0.9	27
	1950	4.9	149
25 Su	0153	0.6	18
	0813	5.7	174
	1439	0.2	6
	2047	4.9	149
26 M	0236	0.8	24
	0850	6.0	183
	1529	−0.4	−12
	2144	4.9	149
27 Tu ○	0318	1.1	34
	0929	6.3	192
	1618	−0.7	−21
	2240	4.7	143
28 W	0402	1.5	46
	1010	6.3	192
	1708	−0.9	−27
	2337	4.6	140
29 Th	0447	1.9	58
	1053	6.2	189
	1800	−0.9	−27
30 F	0038	4.4	134
	0536	2.2	67
	1139	5.9	180
	1854	−0.7	−21
31 Sa	0143	4.2	128
	0632	2.6	79
	1229	5.5	168
	1951	−0.4	−12

November

	Time	Height	
	h m	ft	cm
1 Su	0253	4.2	128
	0741	2.8	85
	1326	5.0	152
	2052	0.0	0
2 M	0403	4.2	128
	0904	2.9	88
	1434	4.6	140
	2154	0.3	9
3 Tu ◑	0506	4.4	134
	1032	2.7	82
	1551	4.2	128
	2253	0.5	15
4 W	0557	4.5	137
	1147	2.4	73
	1709	4.0	122
	2346	0.8	24
5 Th	0638	4.7	143
	1246	1.9	58
	1818	4.0	122
6 F	0032	1.0	30
	0711	4.9	149
	1332	1.5	46
	1917	4.0	122
7 Sa	0111	1.3	40
	0740	5.0	152
	1411	1.1	34
	2008	4.0	122
8 Su	0146	1.5	46
	0806	5.2	158
	1447	0.7	21
	2053	4.0	122
9 M	0217	1.7	52
	0832	5.3	162
	1521	0.4	12
	2135	4.0	122
10 Tu	0247	1.9	58
	0858	5.4	165
	1554	0.1	3
	2217	4.0	122
11 W ●	0317	2.1	64
	0925	5.5	168
	1629	−0.1	−3
	2259	3.9	119
12 Th	0349	2.3	70
	0954	5.5	168
	1705	−0.2	−6
	2343	3.9	119
13 F	0422	2.5	76
	1025	5.5	168
	1743	−0.2	−6
14 Sa	0031	3.9	119
	0458	2.7	82
	1059	5.4	165
	1825	−0.2	−6
15 Su	0123	3.8	116
	0542	2.9	88
	1139	5.3	162
	1911	−0.2	−6

	Time	Height	
	h m	ft	cm
16 M	0219	3.9	119
	0637	3.0	91
	1226	5.0	152
	2001	0.0	0
17 Tu	0317	4.0	122
	0750	3.0	91
	1324	4.7	143
	2055	0.1	3
18 W ◐	0411	4.2	128
	0917	2.9	88
	1438	4.4	134
	2150	0.3	9
19 Th	0458	4.5	137
	1041	2.4	73
	1602	4.2	128
	2245	0.5	15
20 F	0541	4.9	149
	1152	1.8	55
	1725	4.1	125
	2338	0.7	21
21 Sa	0621	5.3	162
	1252	1.0	30
	1841	4.1	125
22 Su	0028	1.0	30
	0700	5.8	177
	1345	0.3	9
	1948	4.2	128
23 M	0116	1.2	37
	0740	6.1	186
	1435	−0.4	−12
	2050	4.2	128
24 Tu	0203	1.5	46
	0821	6.4	195
	1523	−0.9	−27
	2147	4.3	131
25 W ○	0249	1.8	55
	0902	6.5	198
	1610	−1.2	−37
	2242	4.3	131
26 Th	0336	2.0	61
	0944	6.5	198
	1657	−1.3	−40
	2337	4.3	131
27 F	0424	2.3	70
	1027	6.3	192
	1744	−1.2	−37
28 Sa	0032	4.3	131
	0515	2.5	76
	1112	5.9	180
	1832	−0.9	−27
29 Su	0128	4.3	131
	0611	2.7	82
	1159	5.5	168
	1921	−0.5	−15
30 M	0226	4.3	131
	0717	2.8	85
	1251	4.9	149
	2011	−0.1	−3

December

	Time	Height	
	h m	ft	cm
1 Tu	0323	4.3	131
	0834	2.8	85
	1350	4.4	134
	2102	0.3	9
2 W ◑	0417	4.5	137
	0959	2.7	82
	1501	3.9	119
	2154	0.7	21
3 Th	0505	4.6	140
	1118	2.3	70
	1622	3.6	110
	2244	1.1	34
4 F	0546	4.8	146
	1221	1.9	58
	1743	3.4	104
	2331	1.4	43
5 Sa	0621	5.0	152
	1311	1.4	43
	1854	3.4	104
6 Su	0014	1.7	52
	0653	5.1	155
	1352	0.9	27
	1953	3.5	107
7 M	0054	1.9	58
	0723	5.3	162
	1429	0.5	15
	2044	3.6	110
8 Tu	0131	2.1	64
	0752	5.5	168
	1504	0.1	3
	2129	3.7	113
9 W	0207	2.3	70
	0822	5.7	174
	1538	−0.2	−6
	2211	3.8	116
10 Th	0243	2.4	73
	0854	5.8	177
	1613	−0.5	−15
	2252	3.8	116
11 F ●	0320	2.5	76
	0927	5.9	180
	1648	−0.6	−18
	2333	3.9	119
12 Sa	0359	2.6	79
	1003	5.8	177
	1726	−0.7	−21
13 Su	0016	4.0	122
	0442	2.7	82
	1041	5.7	174
	1805	−0.7	−21
14 M	0101	4.1	125
	0531	2.8	85
	1124	5.5	168
	1847	−0.5	−15
15 Tu	0147	4.2	128
	0630	2.8	85
	1213	5.2	158
	1932	−0.3	−9

	Time	Height	
	h m	ft	cm
16 W	0235	4.4	134
	0741	2.7	82
	1310	4.7	143
	2019	0.0	0
17 Th	0324	4.6	140
	0903	2.5	76
	1421	4.2	128
	2109	0.4	12
18 F ◐	0412	4.9	149
	1026	2.0	61
	1547	3.8	116
	2202	0.8	24
19 Sa	0459	5.3	162
	1141	1.3	40
	1718	3.6	110
	2257	1.2	37
20 Su	0545	5.7	174
	1245	0.6	18
	1842	3.6	110
	2352	1.5	46
21 M	0630	6.0	183
	1340	−0.1	−3
	1954	3.7	113
22 Tu	0047	1.8	55
	0715	6.3	192
	1430	−0.6	−18
	2056	3.9	119
23 W	0139	2.0	61
	0800	6.5	198
	1517	−1.0	−30
	2151	4.1	125
24 Th	0230	2.2	67
	0843	6.5	198
	1601	−1.2	−37
	2240	4.2	128
25 F ○	0320	2.3	70
	0927	6.4	195
	1644	−1.2	−37
	2327	4.3	131
26 Sa	0409	2.4	73
	1010	6.2	189
	1726	−1.1	−34
27 Su	0013	4.3	131
	0458	2.5	76
	1052	5.8	177
	1807	−0.8	−24
28 M	0058	4.4	134
	0551	2.6	79
	1136	5.4	165
	1848	−0.4	−12
29 Tu	0144	4.4	134
	0648	2.6	79
	1221	4.8	146
	1928	0.1	3
30 W	0229	4.4	134
	0753	2.6	79
	1311	4.3	131
	2009	0.5	15
31 Th	0315	4.5	137
	0908	2.5	76
	1411	3.8	116
	2051	1.0	30

Time meridian 120° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.
Heights are referred to mean lower low water which is the chart datum of soundings.

San Francisco (Golden Gate), California, 2015

Times and Heights of High and Low Waters

January

	Time	Height	
	h m	ft	cm
1 Th	0143	2.2	67
	0814	6.5	198
	1508	−0.3	−9
	2203	4.7	143
2 F	0238	2.4	73
	0859	6.5	198
	1552	−0.5	−15
	2254	4.9	149
3 Sa	0328	2.5	76
	0941	6.5	198
	1632	−0.7	−21
	2339	5.0	152
4 Su ○	0415	2.6	79
	1021	6.4	195
	1709	−0.7	−21
5 M	0020	5.0	152
	0459	2.6	79
	1059	6.2	189
	1743	−0.6	−18
6 Tu	0057	5.1	155
	0541	2.7	82
	1136	6.0	183
	1817	−0.4	−12
7 W	0132	5.1	155
	0623	2.7	82
	1213	5.7	174
	1851	−0.2	−6
8 Th	0206	5.1	155
	0707	2.7	82
	1251	5.4	165
	1926	0.1	3
9 F	0239	5.1	155
	0755	2.6	79
	1333	5.0	152
	2001	0.5	15
10 Sa	0313	5.1	155
	0848	2.5	76
	1420	4.6	140
	2039	0.9	27
11 Su	0350	5.2	158
	0948	2.4	73
	1516	4.2	128
	2121	1.4	43
12 M	0430	5.3	162
	1053	2.1	64
	1626	3.8	116
	2208	1.8	55
13 Tu ◑	0513	5.4	165
	1156	1.7	52
	1755	3.6	110
	2304	2.2	67
14 W	0559	5.6	171
	1254	1.2	37
	1928	3.7	113
15 Th	0005	2.5	76
	0646	5.8	177
	1345	0.7	21
	2042	3.9	119

	Time	Height	
	h m	ft	cm
16 F	0105	2.7	82
	0735	6.1	186
	1431	0.1	3
	2138	4.3	131
17 Sa	0201	2.7	82
	0822	6.4	195
	1515	−0.4	−12
	2225	4.6	140
18 Su	0253	2.7	82
	0910	6.7	204
	1557	−0.9	−27
	2307	4.9	149
19 M	0342	2.5	76
	0958	6.8	207
	1640	−1.1	−34
	2347	5.2	158
20 Tu ●	0432	2.3	70
	1046	6.9	210
	1722	−1.2	−37
21 W	0027	5.4	165
	0522	2.1	64
	1136	6.8	207
	1805	−1.2	−37
22 Th	0108	5.6	171
	0615	1.9	58
	1227	6.5	198
	1850	−0.9	−27
23 F	0150	5.8	177
	0711	1.7	52
	1322	6.1	186
	1935	−0.4	−12
24 Sa	0234	6.0	183
	0813	1.6	49
	1421	5.5	168
	2023	0.2	6
25 Su	0321	6.1	186
	0921	1.4	43
	1530	4.9	149
	2115	0.9	27
26 M ◐	0411	6.1	186
	1034	1.2	37
	1650	4.4	134
	2213	1.5	46
27 Tu	0504	6.1	186
	1150	0.9	27
	1821	4.2	128
	2318	2.0	61
28 W	0601	6.2	189
	1300	0.5	15
	1948	4.2	128
29 Th	0027	2.4	73
	0658	6.2	189
	1402	0.2	6
	2058	4.5	137
30 F	0132	2.6	79
	0752	6.2	189
	1454	−0.1	−3
	2153	4.7	143
31 Sa	0230	2.6	79
	0842	6.2	189
	1538	−0.2	−6
	2239	4.9	149

February

	Time	Height	
	h m	ft	cm
1 Su	0321	2.5	76
	0927	6.2	189
	1616	−0.3	−9
	2318	5.1	155
2 M	0405	2.5	76
	1008	6.1	186
	1650	−0.3	−9
	2352	5.1	155
3 Tu ○	0446	2.4	73
	1046	6.0	183
	1721	−0.2	−6
4 W	0023	5.2	158
	0524	2.3	70
	1123	5.9	180
	1752	0.0	0
5 Th	0051	5.2	158
	0601	2.2	67
	1159	5.6	171
	1822	0.2	6
6 F	0118	5.2	158
	0639	2.1	64
	1236	5.4	165
	1852	0.5	15
7 Sa	0146	5.2	158
	0719	2.0	61
	1315	5.0	152
	1924	0.9	27
8 Su	0216	5.3	162
	0802	1.9	58
	1359	4.6	140
	1957	1.3	40
9 M	0250	5.3	162
	0852	1.8	55
	1451	4.2	128
	2034	1.7	52
10 Tu	0328	5.4	165
	0950	1.6	49
	1558	3.9	119
	2118	2.1	64
11 W ◑	0413	5.4	165
	1055	1.4	43
	1725	3.7	113
	2215	2.5	76
12 Th	0504	5.5	168
	1201	1.0	30
	1902	3.7	113
	2326	2.8	85
13 F	0601	5.7	174
	1302	0.6	18
	2018	4.0	122
14 Sa	0038	2.9	88
	0700	5.9	180
	1357	0.1	3
	2112	4.4	134
15 Su	0142	2.7	82
	0758	6.2	189
	1446	−0.3	−9
	2156	4.7	143

	Time	Height	
	h m	ft	cm
16 M	0238	2.5	76
	0853	6.5	198
	1532	−0.7	−21
	2236	5.1	155
17 Tu	0330	2.1	64
	0946	6.7	204
	1616	−0.9	−27
	2314	5.4	165
18 W ●	0420	1.7	52
	1038	6.8	207
	1659	−0.9	−27
	2352	5.7	174
19 Th	0510	1.3	40
	1129	6.6	201
	1742	−0.7	−21
20 F	0031	6.0	183
	0601	1.0	30
	1222	6.3	192
	1825	−0.3	−9
21 Sa	0111	6.1	186
	0654	0.8	24
	1318	5.9	180
	1910	0.2	6
22 Su	0153	6.2	189
	0751	0.6	18
	1417	5.3	162
	1957	0.8	24
23 M	0238	6.2	189
	0853	0.6	18
	1525	4.8	146
	2050	1.5	46
24 Tu	0327	6.1	186
	1001	0.6	18
	1644	4.4	134
	2150	2.0	61
25 W ◐	0422	5.9	180
	1115	0.6	18
	1812	4.2	128
	2302	2.4	73
26 Th	0524	5.7	174
	1228	0.5	15
	1934	4.4	134
27 F	0017	2.6	79
	0628	5.7	174
	1333	0.3	9
	2038	4.6	140
28 Sa	0125	2.6	79
	0730	5.6	171
	1427	0.2	6
	2129	4.8	146

March

	Time	Height	
	h m	ft	cm
1 Su	0223	2.4	73
	0825	5.7	174
	1512	0.2	6
	2209	5.0	152
2 M	0311	2.2	67
	0913	5.7	174
	1549	0.2	6
	2244	5.1	155
3 Tu	0353	2.0	61
	0956	5.7	174
	1622	0.2	6
	2313	5.2	158
4 W	0430	1.8	55
	1035	5.6	171
	1653	0.3	9
	2340	5.2	158
5 Th ○	0505	1.6	49
	1113	5.5	168
	1722	0.5	15
6 F	0005	5.3	162
	0539	1.4	43
	1149	5.3	162
	1750	0.7	21
7 Sa	0029	5.3	162
	0613	1.3	40
	1227	5.1	155
	1819	1.0	30
8 Su	0056	5.4	165
	0648	1.1	34
	1307	4.8	146
	1849	1.3	40
9 M	0125	5.4	165
	0727	1.0	30
	1351	4.5	137
	1922	1.7	52
10 Tu	0158	5.4	165
	0812	0.9	27
	1444	4.2	128
	1959	2.1	64
11 W	0237	5.4	165
	0904	0.9	27
	1549	3.9	119
	2045	2.4	73
12 Th	0323	5.3	162
	1004	0.8	24
	1710	3.8	116
	2147	2.7	82
13 F ◑	0419	5.3	162
	1112	0.6	18
	1836	3.9	119
	2306	2.9	88
14 Sa	0523	5.4	165
	1219	0.3	9
	1945	4.2	128
15 Su	0024	2.8	85
	0632	5.5	168
	1320	0.0	0
	2037	4.6	140

	Time	Height	
	h m	ft	cm
16 M	0131	2.4	73
	0738	5.8	177
	1414	−0.2	−6
	2119	5.0	152
17 Tu	0228	1.9	58
	0840	6.0	183
	1502	−0.4	−12
	2159	5.3	162
18 W	0319	1.4	43
	0937	6.2	189
	1548	−0.4	−12
	2236	5.7	174
19 Th	0409	0.8	24
	1032	6.2	189
	1632	−0.3	−9
	2314	6.0	183
20 F ●	0458	0.3	9
	1126	6.1	186
	1715	0.0	0
	2352	6.2	189
21 Sa	0547	0.0	0
	1220	5.8	177
	1759	0.4	12
22 Su	0032	6.3	192
	0637	−0.2	−6
	1316	5.5	168
	1844	0.9	27
23 M	0113	6.3	192
	0729	−0.3	−9
	1416	5.1	155
	1933	1.5	46
24 Tu	0157	6.1	186
	0825	−0.2	−6
	1521	4.7	143
	2028	2.0	61
25 W	0246	5.8	177
	0927	0.0	0
	1635	4.4	134
	2132	2.4	73
26 Th ◐	0341	5.5	168
	1034	0.2	6
	1754	4.4	134
	2248	2.6	79
27 F	0444	5.2	158
	1144	0.4	12
	1906	4.5	137
28 Sa	0006	2.6	79
	0553	5.0	152
	1249	0.5	15
	2005	4.7	143
29 Su	0114	2.4	73
	0702	4.9	149
	1345	0.5	15
	2050	4.8	146
30 M	0209	2.1	64
	0803	4.9	149
	1431	0.5	15
	2128	5.0	152
31 Tu	0256	1.7	52
	0856	5.0	152
	1511	0.6	18
	2159	5.1	155

Time meridian 120° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.
Heights are referred to mean lower low water which is the chart datum of soundings.

San Francisco (Golden Gate), California, 2015

Times and Heights of High and Low Waters

April

	Time	Height	
	h m	ft	cm
1 W	0336	1.4	43
	0942	5.0	152
	1545	0.7	21
	2226	5.2	158
2 Th	0411	1.1	34
	1024	5.0	152
	1617	0.8	24
	2252	5.3	162
3 F	0445	0.8	24
	1104	5.0	152
	1647	1.0	30
	2316	5.4	165
4 Sa ○	0517	0.6	18
	1143	4.9	149
	1717	1.3	40
	2342	5.5	168
5 Su	0549	0.4	12
	1224	4.7	143
	1747	1.5	46
6 M	0010	5.5	168
	0624	0.2	6
	1306	4.6	140
	1819	1.8	55
7 Tu	0041	5.5	168
	0701	0.1	3
	1353	4.4	134
	1854	2.1	64
8 W	0116	5.4	165
	0744	0.0	0
	1446	4.2	128
	1935	2.4	73
9 Th	0156	5.4	165
	0833	0.0	0
	1548	4.1	125
	2027	2.7	82
10 F	0245	5.2	158
	0930	0.0	0
	1657	4.1	125
	2136	2.8	85
11 Sa ◑	0344	5.1	155
	1033	0.1	3
	1807	4.2	128
	2259	2.8	85
12 Su	0454	5.0	152
	1139	0.0	0
	1906	4.5	137
13 M	0016	2.4	73
	0610	5.0	152
	1241	0.0	0
	1956	4.9	149
14 Tu	0122	1.9	58
	0723	5.1	155
	1338	0.0	0
	2039	5.3	162
15 W	0218	1.2	37
	0831	5.3	162
	1429	0.1	3
	2119	5.7	174

	Time	Height	
	h m	ft	cm
16 Th	0310	0.5	15
	0932	5.4	165
	1517	0.2	6
	2158	6.0	183
17 F	0358	−0.1	−3
	1030	5.4	165
	1603	0.5	15
	2237	6.2	189
18 Sa ●	0446	−0.6	−18
	1126	5.4	165
	1648	0.8	24
	2315	6.4	195
19 Su	0533	−0.9	−27
	1221	5.3	162
	1733	1.2	37
	2355	6.4	195
20 M	0620	−1.0	−30
	1316	5.1	155
	1821	1.6	49
21 Tu	0036	6.2	189
	0708	−0.9	−27
	1413	4.9	149
	1911	2.0	61
22 W	0120	5.9	180
	0759	−0.7	−21
	1514	4.7	143
	2008	2.3	70
23 Th	0207	5.5	168
	0853	−0.4	−12
	1618	4.5	137
	2114	2.6	79
24 F	0300	5.1	155
	0952	−0.1	−3
	1724	4.5	137
	2230	2.6	79
25 Sa ◐	0401	4.7	143
	1053	0.3	9
	1826	4.6	140
	2346	2.5	76
26 Su	0510	4.4	134
	1154	0.5	15
	1918	4.7	143
27 M	0052	2.1	64
	0624	4.2	128
	1250	0.7	21
	2000	4.9	149
28 Tu	0147	1.7	52
	0733	4.2	128
	1339	0.9	27
	2036	5.0	152
29 W	0233	1.3	40
	0833	4.3	131
	1421	1.0	30
	2107	5.2	158
30 Th	0313	0.9	27
	0925	4.3	131
	1500	1.2	37
	2135	5.3	162

May

	Time	Height	
	h m	ft	cm
1 F	0349	0.5	15
	1013	4.4	134
	1535	1.4	43
	2202	5.5	168
2 Sa	0422	0.2	6
	1057	4.5	137
	1609	1.6	49
	2231	5.6	171
3 Su ○	0455	−0.2	−6
	1139	4.5	137
	1642	1.8	55
	2300	5.7	174
4 M	0528	−0.4	−12
	1222	4.5	137
	1716	2.0	61
	2332	5.7	174
5 Tu	0603	−0.6	−18
	1307	4.4	134
	1752	2.2	67
6 W	0007	5.7	174
	0641	−0.7	−21
	1354	4.4	134
	1833	2.4	73
7 Th	0045	5.6	171
	0724	−0.8	−24
	1445	4.4	134
	1921	2.6	79
8 F	0129	5.5	168
	0812	−0.7	−21
	1539	4.4	134
	2020	2.7	82
9 Sa	0221	5.2	158
	0905	−0.5	−15
	1637	4.5	137
	2132	2.7	82
10 Su	0322	5.0	152
	1003	−0.3	−9
	1733	4.7	143
	2252	2.5	76
11 M ◑	0434	4.7	143
	1104	−0.1	−3
	1826	5.0	152
12 Tu	0007	2.0	61
	0553	4.5	137
	1204	0.1	3
	1915	5.3	162
13 W	0112	1.3	40
	0713	4.5	137
	1301	0.4	12
	1959	5.7	174
14 Th	0209	0.6	18
	0826	4.6	140
	1355	0.7	21
	2042	6.0	183
15 F	0300	−0.1	−3
	0932	4.7	143
	1446	1.0	30
	2123	6.3	192

	Time	Height	
	h m	ft	cm
16 Sa	0348	−0.7	−21
	1032	4.8	146
	1535	1.3	40
	2203	6.4	195
17 Su ●	0435	−1.1	−34
	1128	4.9	149
	1623	1.6	49
	2244	6.5	198
18 M	0520	−1.3	−40
	1222	4.9	149
	1711	1.8	55
	2325	6.4	195
19 Tu	0604	−1.3	−40
	1314	4.9	149
	1800	2.1	64
20 W	0006	6.1	186
	0649	−1.2	−37
	1406	4.8	146
	1851	2.4	73
21 Th	0049	5.8	177
	0734	−0.9	−27
	1458	4.8	146
	1947	2.5	76
22 F	0134	5.4	165
	0821	−0.6	−18
	1551	4.7	143
	2050	2.6	79
23 Sa	0223	4.9	149
	0910	−0.2	−6
	1643	4.7	143
	2200	2.6	79
24 Su	0318	4.5	137
	1002	0.2	6
	1734	4.8	146
	2312	2.4	73
25 M ◐	0422	4.1	125
	1056	0.6	18
	1820	4.9	149
26 Tu	0017	2.1	64
	0536	3.8	116
	1149	0.9	27
	1900	5.0	152
27 W	0114	1.6	49
	0653	3.7	113
	1239	1.2	37
	1937	5.2	158
28 Th	0202	1.1	34
	0805	3.7	113
	1327	1.5	46
	2011	5.4	165
29 F	0244	0.7	21
	0907	3.8	116
	1411	1.7	52
	2043	5.6	171
30 Sa	0322	0.2	6
	1000	4.0	122
	1452	1.9	58
	2116	5.7	174
31 Su	0357	−0.2	−6
	1048	4.2	128
	1531	2.1	64
	2150	5.9	180

June

	Time	Height	
	h m	ft	cm
1 M	0432	−0.6	−18
	1133	4.3	131
	1609	2.3	70
	2225	6.0	183
2 Tu ○	0507	−0.9	−27
	1216	4.4	134
	1649	2.4	73
	2302	6.1	186
3 W	0544	−1.1	−34
	1300	4.6	140
	1731	2.5	76
	2342	6.0	183
4 Th	0624	−1.2	−37
	1344	4.6	140
	1817	2.6	79
5 F	0025	5.9	180
	0707	−1.2	−37
	1430	4.7	143
	1910	2.6	79
6 Sa	0113	5.7	174
	0754	−1.0	−30
	1518	4.9	149
	2012	2.6	79
7 Su	0207	5.4	165
	0843	−0.7	−21
	1607	5.0	152
	2122	2.4	73
8 M	0309	4.9	149
	0936	−0.3	−9
	1657	5.3	162
	2239	2.1	64
9 Tu ◑	0421	4.5	137
	1033	0.1	3
	1747	5.5	168
	2352	1.5	46
10 W	0543	4.2	128
	1131	0.6	18
	1836	5.8	177
11 Th	0059	0.9	27
	0708	4.1	125
	1229	1.0	30
	1923	6.1	186
12 F	0158	0.2	6
	0827	4.2	128
	1326	1.4	43
	2009	6.3	192
13 Sa	0251	−0.4	−12
	0935	4.4	134
	1421	1.7	52
	2054	6.5	198
14 Su	0339	−0.8	−24
	1035	4.6	140
	1514	2.0	61
	2138	6.6	201
15 M	0424	−1.1	−34
	1128	4.8	146
	1604	2.2	67
	2220	6.5	198

	Time	Height	
	h m	ft	cm
16 Tu ●	0507	−1.2	−37
	1217	4.9	149
	1653	2.3	70
	2302	6.4	195
17 W	0548	−1.2	−37
	1304	4.9	149
	1742	2.4	73
	2343	6.1	186
18 Th	0629	−1.0	−30
	1348	4.9	149
	1831	2.5	76
19 F	0024	5.8	177
	0709	−0.8	−24
	1430	4.9	149
	1922	2.6	79
20 Sa	0106	5.4	165
	0749	−0.4	−12
	1512	4.9	149
	2018	2.6	79
21 Su	0151	5.0	152
	0830	0.0	0
	1553	4.9	149
	2119	2.5	76
22 M	0240	4.5	137
	0914	0.4	12
	1634	5.0	152
	2224	2.4	73
23 Tu	0338	4.1	125
	0959	0.8	24
	1715	5.1	155
	2329	2.1	64
24 W ◐	0447	3.7	113
	1048	1.3	40
	1755	5.2	158
25 Th	0029	1.7	52
	0609	3.5	107
	1140	1.7	52
	1835	5.4	165
26 F	0123	1.2	37
	0734	3.5	107
	1232	2.0	61
	1916	5.6	171
27 Sa	0209	0.7	21
	0846	3.7	113
	1323	2.3	70
	1956	5.8	177
28 Su	0251	0.2	6
	0944	3.9	119
	1412	2.4	73
	2036	6.0	183
29 M	0329	−0.2	−6
	1033	4.2	128
	1457	2.5	76
	2117	6.2	189
30 Tu	0407	−0.6	−18
	1117	4.4	134
	1542	2.6	79
	2158	6.4	195

Time meridian 120° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.
Heights are referred to mean lower low water which is the chart datum of soundings.

San Francisco (Golden Gate), California, 2015

Times and Heights of High and Low Waters

July

	Time	Height	
	h m	ft	cm
1 W ○	0446	−1.0	−30
	1158	4.6	140
	1627	2.6	79
	2241	6.5	198
2 Th	0525	−1.2	−37
	1239	4.8	146
	1714	2.5	76
	2326	6.5	198
3 F	0606	−1.2	−37
	1320	5.0	152
	1803	2.4	73
4 Sa	0013	6.3	192
	0649	−1.1	−34
	1401	5.2	158
	1858	2.3	70
5 Su	0103	6.0	183
	0733	−0.9	−27
	1445	5.4	165
	1958	2.2	67
6 M	0159	5.5	168
	0821	−0.5	−15
	1530	5.6	171
	2106	1.9	58
7 Tu	0302	5.0	152
	0911	0.1	3
	1618	5.8	177
	2219	1.6	49
8 W ◑	0415	4.5	137
	1005	0.7	21
	1708	6.0	183
	2333	1.2	37
9 Th	0540	4.1	125
	1104	1.2	37
	1800	6.2	189
10 F	0042	0.6	18
	0708	4.1	125
	1205	1.7	52
	1852	6.3	192
11 Sa	0145	0.1	3
	0828	4.2	128
	1307	2.1	64
	1943	6.5	198
12 Su	0240	−0.3	−9
	0935	4.4	134
	1406	2.3	70
	2033	6.5	198
13 M	0329	−0.6	−18
	1030	4.7	143
	1501	2.4	73
	2120	6.5	198
14 Tu	0413	−0.7	−21
	1118	4.9	149
	1552	2.5	76
	2204	6.5	198
15 W ●	0453	−0.8	−24
	1201	5.0	152
	1640	2.5	76
	2246	6.3	192

	Time	Height	
	h m	ft	cm
16 Th	0530	−0.7	−21
	1240	5.1	155
	1725	2.5	76
	2326	6.1	186
17 F	0606	−0.5	−15
	1317	5.1	155
	1809	2.5	76
18 Sa	0005	5.8	177
	0641	−0.3	−9
	1351	5.1	155
	1854	2.4	73
19 Su	0044	5.5	168
	0716	0.0	0
	1424	5.1	155
	1941	2.4	73
20 M	0125	5.1	155
	0751	0.4	12
	1457	5.1	155
	2032	2.3	70
21 Tu	0211	4.7	143
	0829	0.8	24
	1532	5.2	158
	2128	2.2	67
22 W	0303	4.2	128
	0909	1.3	40
	1610	5.3	162
	2230	2.0	61
23 Th ◐	0408	3.8	116
	0954	1.7	52
	1652	5.4	165
	2333	1.7	52
24 F	0530	3.6	110
	1046	2.2	67
	1737	5.5	168
25 Sa	0033	1.3	40
	0703	3.6	110
	1145	2.5	76
	1825	5.7	174
26 Su	0127	0.8	24
	0822	3.8	116
	1245	2.7	82
	1914	5.9	180
27 M	0214	0.4	12
	0921	4.1	125
	1341	2.8	85
	2002	6.1	186
28 Tu	0258	−0.1	−3
	1008	4.4	134
	1433	2.7	82
	2050	6.4	195
29 W	0340	−0.5	−15
	1049	4.7	143
	1522	2.6	79
	2138	6.6	201
30 Th	0421	−0.8	−24
	1127	5.0	152
	1610	2.4	73
	2226	6.7	204
31 F ○	0502	−0.9	−27
	1205	5.2	158
	1658	2.1	64
	2314	6.7	204

August

	Time	Height	
	h m	ft	cm
1 Sa	0543	−0.9	−27
	1244	5.5	168
	1749	1.9	58
2 Su	0004	6.5	198
	0626	−0.7	−21
	1324	5.7	174
	1843	1.7	52
3 M	0057	6.1	186
	0710	−0.3	−9
	1405	5.9	180
	1941	1.5	46
4 Tu	0155	5.6	171
	0756	0.2	6
	1450	6.1	186
	2044	1.3	40
5 W	0259	5.1	155
	0846	0.8	24
	1538	6.2	189
	2154	1.1	34
6 Th ◑	0414	4.6	140
	0942	1.4	43
	1630	6.2	189
	2308	0.8	24
7 F	0540	4.3	131
	1044	1.9	58
	1726	6.2	189
8 Sa	0020	0.5	15
	0707	4.3	131
	1153	2.3	70
	1825	6.3	192
9 Su	0126	0.2	6
	0823	4.5	137
	1300	2.5	76
	1923	6.3	192
10 M	0224	0.0	0
	0923	4.7	143
	1402	2.5	76
	2017	6.3	192
11 Tu	0312	−0.2	−6
	1012	4.9	149
	1456	2.5	76
	2107	6.3	192
12 W	0355	−0.2	−6
	1055	5.1	155
	1544	2.4	73
	2152	6.2	189
13 Th	0432	−0.2	−6
	1131	5.2	158
	1627	2.3	70
	2234	6.1	186
14 F ●	0506	−0.1	−3
	1204	5.2	158
	1708	2.2	67
	2312	5.9	180
15 Sa	0538	0.1	3
	1234	5.2	158
	1746	2.1	64
	2350	5.7	174

	Time	Height	
	h m	ft	cm
16 Su	0610	0.4	12
	1302	5.3	162
	1825	2.0	61
17 M	0028	5.4	165
	0641	0.7	21
	1330	5.3	162
	1905	1.9	58
18 Tu	0108	5.1	155
	0713	1.0	30
	1400	5.3	162
	1948	1.8	55
19 W	0151	4.7	143
	0747	1.4	43
	1433	5.3	162
	2035	1.7	52
20 Th	0242	4.3	131
	0824	1.8	55
	1510	5.3	162
	2130	1.6	49
21 F	0344	4.0	122
	0908	2.3	70
	1554	5.4	165
	2232	1.5	46
22 Sa ◐	0504	3.8	116
	1003	2.6	79
	1644	5.4	165
	2337	1.2	37
23 Su	0636	3.8	116
	1110	2.9	88
	1739	5.6	171
24 M	0039	0.9	27
	0752	4.0	122
	1220	2.9	88
	1838	5.8	177
25 Tu	0134	0.5	15
	0848	4.3	131
	1322	2.8	85
	1935	6.0	183
26 W	0223	0.1	3
	0932	4.7	143
	1416	2.6	79
	2030	6.3	192
27 Th	0309	−0.3	−9
	1011	5.0	152
	1507	2.2	67
	2123	6.5	198
28 F	0352	−0.5	−15
	1048	5.3	162
	1555	1.8	55
	2214	6.6	201
29 Sa ○	0434	−0.5	−15
	1125	5.7	174
	1644	1.4	43
	2306	6.6	201
30 Su	0516	−0.4	−12
	1203	5.9	180
	1734	1.0	30
	2359	6.4	195
31 M	0559	−0.1	−3
	1242	6.1	186
	1826	0.7	21

September

	Time	Height	
	h m	ft	cm
1 Tu	0054	6.0	183
	0644	0.4	12
	1324	6.3	192
	1921	0.6	18
2 W	0153	5.5	168
	0731	0.9	27
	1409	6.3	192
	2021	0.5	15
3 Th	0259	5.1	155
	0823	1.5	46
	1458	6.2	189
	2126	0.5	15
4 F	0413	4.7	143
	0923	2.0	61
	1553	6.1	186
	2238	0.5	15
5 Sa ◑	0536	4.5	137
	1033	2.4	73
	1654	5.9	180
	2352	0.5	15
6 Su	0657	4.6	140
	1148	2.6	79
	1759	5.8	177
7 M	0059	0.4	12
	0805	4.8	146
	1258	2.6	79
	1904	5.8	177
8 Tu	0157	0.3	9
	0858	5.0	152
	1359	2.4	73
	2003	5.8	177
9 W	0246	0.3	9
	0942	5.2	158
	1449	2.2	67
	2055	5.8	177
10 Th	0327	0.3	9
	1019	5.3	162
	1533	1.9	58
	2141	5.8	177
11 F	0403	0.4	12
	1051	5.3	162
	1613	1.7	52
	2223	5.7	174
12 Sa ●	0435	0.6	18
	1120	5.4	165
	1649	1.5	46
	2302	5.6	171
13 Su	0506	0.8	24
	1145	5.4	165
	1723	1.4	43
	2340	5.4	165
14 M	0535	1.0	30
	1210	5.4	165
	1758	1.2	37
15 Tu	0018	5.2	158
	0605	1.3	40
	1237	5.4	165
	1833	1.1	34

	Time	Height	
	h m	ft	cm
16 W	0058	4.9	149
	0636	1.7	52
	1306	5.4	165
	1911	1.1	34
17 Th	0142	4.6	140
	0709	2.0	61
	1339	5.4	165
	1954	1.0	30
18 F	0233	4.4	134
	0747	2.4	73
	1417	5.4	165
	2043	1.0	30
19 Sa	0335	4.2	128
	0832	2.7	82
	1502	5.3	162
	2141	1.0	30
20 Su	0450	4.0	122
	0934	3.0	91
	1557	5.3	162
	2246	0.9	27
21 M ◐	0610	4.1	125
	1051	3.1	94
	1659	5.3	162
	2351	0.7	21
22 Tu	0717	4.4	134
	1206	2.9	88
	1806	5.4	165
23 W	0052	0.4	12
	0807	4.7	143
	1309	2.6	79
	1912	5.6	171
24 Th	0145	0.2	6
	0850	5.0	152
	1404	2.1	64
	2013	5.9	180
25 F	0234	0.0	0
	0928	5.4	165
	1454	1.5	46
	2111	6.1	186
26 Sa	0319	0.0	0
	1006	5.8	177
	1542	0.9	27
	2207	6.2	189
27 Su ○	0403	0.1	3
	1043	6.1	186
	1630	0.4	12
	2301	6.1	186
28 M	0447	0.3	9
	1122	6.3	192
	1719	0.0	0
	2356	6.0	183
29 Tu	0531	0.7	21
	1201	6.5	198
	1809	−0.3	−9
30 W	0053	5.7	174
	0617	1.2	37
	1244	6.5	198
	1901	−0.3	−9

Time meridian 120° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.
Heights are referred to mean lower low water which is the chart datum of soundings.

San Francisco (Golden Gate), California, 2015

Times and Heights of High and Low Waters

October

	Time	Height	
	h m	ft	cm
1 Th	0152	5.4	165
	0707	1.7	52
	1329	6.3	192
	1957	−0.3	−9
2 F	0257	5.0	152
	0802	2.1	64
	1419	6.1	186
	2058	−0.1	−3
3 Sa	0408	4.8	146
	0908	2.5	76
	1516	5.8	177
	2204	0.2	6
4 Su ◑	0524	4.8	146
	1024	2.7	82
	1620	5.5	168
	2314	0.4	12
5 M	0635	4.8	146
	1143	2.7	82
	1730	5.2	158
6 Tu	0021	0.5	15
	0734	5.0	152
	1252	2.4	73
	1840	5.1	155
7 W	0119	0.6	18
	0822	5.2	158
	1349	2.1	64
	1944	5.1	155
8 Th	0207	0.7	21
	0902	5.3	162
	1437	1.7	52
	2040	5.2	158
9 F	0249	0.8	24
	0936	5.4	165
	1518	1.4	43
	2129	5.2	158
10 Sa	0325	1.0	30
	1005	5.5	168
	1555	1.1	34
	2213	5.1	155
11 Su	0358	1.2	37
	1031	5.6	171
	1629	0.8	24
	2254	5.1	155
12 M ●	0430	1.4	43
	1056	5.6	171
	1701	0.6	18
	2333	5.0	152
13 Tu	0500	1.7	52
	1122	5.6	171
	1734	0.4	12
14 W	0013	4.9	149
	0531	1.9	58
	1149	5.6	171
	1807	0.3	9
15 Th	0055	4.7	143
	0603	2.2	67
	1220	5.6	171
	1843	0.2	6

	Time	Height	
	h m	ft	cm
16 F	0141	4.6	140
	0638	2.5	76
	1254	5.5	168
	1924	0.2	6
17 Sa	0232	4.4	134
	0718	2.8	85
	1333	5.4	165
	2010	0.3	9
18 Su	0330	4.3	131
	0809	3.0	91
	1421	5.3	162
	2104	0.3	9
19 M	0435	4.3	131
	0916	3.1	94
	1518	5.1	155
	2204	0.4	12
20 Tu ◐	0540	4.5	137
	1037	3.0	91
	1626	5.0	152
	2308	0.4	12
21 W	0637	4.7	143
	1154	2.7	82
	1740	5.0	152
22 Th	0010	0.4	12
	0725	5.1	155
	1257	2.2	67
	1853	5.1	155
23 F	0106	0.4	12
	0807	5.4	165
	1352	1.5	46
	2002	5.3	162
24 Sa	0158	0.4	12
	0847	5.8	177
	1443	0.8	24
	2105	5.4	165
25 Su	0246	0.6	18
	0926	6.2	189
	1531	0.1	3
	2204	5.5	168
26 M	0333	0.8	24
	1005	6.5	198
	1618	−0.5	−15
	2300	5.6	171
27 Tu ○	0419	1.1	34
	1045	6.7	204
	1705	−0.8	−24
	2356	5.5	168
28 W	0505	1.5	46
	1126	6.7	204
	1753	−1.0	−30
29 Th	0052	5.4	165
	0553	1.8	55
	1209	6.6	201
	1842	−1.0	−30
30 F	0150	5.2	158
	0645	2.2	67
	1255	6.3	192
	1934	−0.8	−24
31 Sa	0250	5.1	155
	0743	2.5	76
	1344	5.9	180
	2028	−0.4	−12

November

	Time	Height	
	h m	ft	cm
1 Su	0354	5.0	152
	0850	2.7	82
	1439	5.5	168
	2127	−0.1	−3
2 M	0458	4.9	149
	1007	2.8	85
	1542	5.0	152
	2230	0.3	9
3 Tu ◑	0559	5.0	152
	1125	2.6	79
	1653	4.7	143
	2332	0.6	18
4 W	0652	5.1	155
	1233	2.3	70
	1807	4.5	137
5 Th	0028	0.9	27
	0737	5.3	162
	1330	1.8	55
	1918	4.4	134
6 F	0119	1.1	34
	0814	5.4	165
	1417	1.4	43
	2021	4.5	137
7 Sa	0203	1.3	40
	0847	5.6	171
	1458	1.0	30
	2115	4.5	137
8 Su	0242	1.5	46
	0916	5.7	174
	1535	0.6	18
	2203	4.6	140
9 M	0319	1.7	52
	0944	5.8	177
	1608	0.3	9
	2247	4.6	140
10 Tu	0353	2.0	61
	1012	5.8	177
	1640	0.0	0
	2329	4.7	143
11 W ●	0427	2.2	67
	1041	5.9	180
	1713	−0.2	−6
12 Th	0011	4.7	143
	0500	2.4	73
	1112	5.9	180
	1746	−0.3	−9
13 F	0053	4.6	140
	0535	2.6	79
	1145	5.8	177
	1822	−0.4	−12
14 Sa	0137	4.6	140
	0614	2.8	85
	1222	5.7	174
	1902	−0.4	−12
15 Su	0225	4.6	140
	0658	3.0	91
	1304	5.6	171
	1946	−0.3	−9

	Time	Height	
	h m	ft	cm
16 M	0316	4.6	140
	0753	3.1	94
	1353	5.4	165
	2036	−0.2	−6
17 Tu	0410	4.7	143
	0902	3.0	91
	1451	5.1	155
	2131	0.0	0
18 W ◐	0504	4.9	149
	1021	2.8	85
	1600	4.8	146
	2230	0.2	6
19 Th	0555	5.2	158
	1137	2.3	70
	1719	4.6	140
	2330	0.5	15
20 F	0642	5.5	168
	1243	1.7	52
	1839	4.6	140
21 Sa	0028	0.7	21
	0727	5.9	180
	1340	0.9	27
	1955	4.7	143
22 Su	0123	1.0	30
	0810	6.2	189
	1432	0.2	6
	2104	4.8	146
23 M	0216	1.3	40
	0852	6.6	201
	1521	−0.5	−15
	2206	5.0	152
24 Tu	0306	1.5	46
	0934	6.8	207
	1608	−1.0	−30
	2303	5.1	155
25 W ○	0355	1.8	55
	1016	6.9	210
	1654	−1.2	−37
	2357	5.2	158
26 Th	0444	2.1	64
	1059	6.8	207
	1739	−1.3	−40
27 F	0049	5.2	158
	0534	2.3	70
	1142	6.6	201
	1825	−1.2	−37
28 Sa	0141	5.2	158
	0626	2.5	76
	1227	6.3	192
	1911	−0.9	−27
29 Su	0234	5.1	155
	0723	2.7	82
	1315	5.8	177
	1959	−0.6	−18
30 M	0326	5.1	155
	0826	2.8	85
	1405	5.3	162
	2049	−0.1	−3

December

	Time	Height	
	h m	ft	cm
1 Tu	0419	5.1	155
	0937	2.7	82
	1502	4.8	146
	2141	0.4	12
2 W ◑	0510	5.1	155
	1050	2.5	76
	1608	4.4	134
	2236	0.8	24
3 Th	0558	5.2	158
	1159	2.2	67
	1723	4.0	122
	2331	1.2	37
4 F	0641	5.4	165
	1259	1.8	55
	1843	3.9	119
5 Sa	0023	1.5	46
	0719	5.5	168
	1349	1.3	40
	1957	3.9	119
6 Su	0113	1.8	55
	0754	5.7	174
	1432	0.8	24
	2100	4.1	125
7 M	0158	2.1	64
	0828	5.8	177
	1510	0.4	12
	2153	4.2	128
8 Tu	0240	2.3	70
	0901	6.0	183
	1546	0.0	0
	2239	4.4	134
9 W	0320	2.5	76
	0934	6.1	186
	1619	−0.3	−9
	2322	4.5	137
10 Th	0358	2.6	79
	1009	6.2	189
	1653	−0.5	−15
11 F ●	0002	4.6	140
	0435	2.7	82
	1044	6.2	189
	1727	−0.7	−21
12 Sa	0042	4.7	143
	0514	2.8	85
	1122	6.2	189
	1804	−0.8	−24
13 Su	0123	4.8	146
	0557	2.8	85
	1203	6.1	186
	1844	−0.8	−24
14 M	0205	4.9	149
	0644	2.9	88
	1247	5.9	180
	1926	−0.7	−21
15 Tu	0249	5.0	152
	0740	2.8	85
	1337	5.5	168
	2012	−0.4	−12

	Time	Height	
	h m	ft	cm
16 W	0335	5.2	158
	0846	2.7	82
	1435	5.1	155
	2102	−0.1	−3
17 Th	0423	5.4	165
	1000	2.4	73
	1544	4.7	143
	2157	0.4	12
18 F ◐	0512	5.6	171
	1116	1.9	58
	1705	4.4	134
	2255	0.8	24
19 Sa	0601	5.9	180
	1225	1.3	40
	1833	4.2	128
	2355	1.3	40
20 Su	0650	6.2	189
	1327	0.6	18
	1956	4.3	131
21 M	0055	1.7	52
	0738	6.5	198
	1422	−0.1	−3
	2107	4.5	137
22 Tu	0152	1.9	58
	0825	6.7	204
	1512	−0.6	−18
	2209	4.8	146
23 W	0247	2.2	67
	0911	6.9	210
	1559	−1.0	−30
	2303	5.0	152
24 Th	0340	2.3	70
	0956	6.9	210
	1643	−1.2	−37
	2352	5.2	158
25 F ○	0430	2.4	73
	1041	6.8	207
	1726	−1.2	−37
26 Sa	0038	5.2	158
	0520	2.5	76
	1124	6.6	201
	1807	−1.0	−30
27 Su	0122	5.3	162
	0609	2.5	76
	1207	6.2	189
	1848	−0.7	−21
28 M	0205	5.3	162
	0700	2.6	79
	1251	5.8	177
	1929	−0.4	−12
29 Tu	0247	5.2	158
	0755	2.6	79
	1336	5.3	162
	2010	0.1	3
30 W	0329	5.2	158
	0855	2.6	79
	1426	4.8	146
	2054	0.6	18
31 Th	0411	5.2	158
	1000	2.4	73
	1523	4.3	131
	2140	1.1	34

Time meridian 120° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.
Heights are referred to mean lower low water which is the chart datum of soundings.

Port Chicago, Suisun Bay, California, 2015

Times and Heights of High and Low Waters

January

	Time	Height	
	h m	ft	cm
1 Th	0434	1.3	40
	1048	5.3	162
	1812	−0.3	−9
2 F	0011	4.0	122
	0527	1.5	46
	1130	5.4	165
	1901	−0.4	−12
3 Sa	0104	4.2	128
	0618	1.7	52
	1209	5.4	165
	1946	−0.4	−12
4 Su ○	0153	4.3	131
	0706	1.9	58
	1246	5.3	162
	2026	−0.4	−12
5 M	0239	4.4	134
	0753	2.0	61
	1322	5.2	158
	2104	−0.3	−9
6 Tu	0322	4.4	134
	0837	2.0	61
	1358	5.1	155
	2137	−0.1	−3
7 W	0402	4.4	134
	0921	1.9	58
	1436	4.9	149
	2207	0.0	0
8 Th	0439	4.4	134
	1004	1.9	58
	1516	4.6	140
	2234	0.1	3
9 F	0514	4.3	131
	1050	1.7	52
	1559	4.3	131
	2301	0.2	6
10 Sa	0547	4.3	131
	1139	1.6	49
	1649	3.9	119
	2331	0.4	12
11 Su	0620	4.3	131
	1237	1.5	46
	1750	3.5	107
12 M	0007	0.7	21
	0654	4.3	131
	1344	1.4	43
	1914	3.2	98
13 Tu ◑	0051	1.0	30
	0734	4.5	137
	1456	1.1	34
	2046	3.1	94
14 W	0143	1.3	40
	0818	4.7	143
	1603	0.8	24
	2202	3.2	98
15 Th	0243	1.6	49
	0904	4.9	149
	1702	0.5	15
	2306	3.5	107

	Time	Height	
	h m	ft	cm
16 F	0344	1.8	55
	0952	5.2	158
	1753	0.2	6
17 Sa	0001	3.7	113
	0445	2.0	61
	1040	5.5	168
	1839	−0.1	−3
18 Su	0051	4.0	122
	0542	2.0	61
	1129	5.7	174
	1922	−0.3	−9
19 M	0136	4.2	128
	0638	1.9	58
	1218	5.8	177
	2004	−0.4	−12
20 Tu ●	0220	4.4	134
	0732	1.8	55
	1309	5.9	180
	2045	−0.5	−15
21 W	0301	4.6	140
	0825	1.6	49
	1400	5.8	177
	2125	−0.5	−15
22 Th	0342	4.7	143
	0920	1.3	40
	1454	5.5	168
	2204	−0.4	−12
23 F	0424	4.8	146
	1016	1.1	34
	1550	5.2	158
	2245	−0.2	−6
24 Sa	0506	4.9	149
	1115	1.0	30
	1651	4.7	143
	2327	0.1	3
25 Su	0552	4.9	149
	1220	0.9	27
	1802	4.2	128
26 M ◐	0014	0.5	15
	0642	4.9	149
	1333	0.7	21
	1922	3.8	116
27 Tu	0107	0.9	27
	0738	5.0	152
	1448	0.6	18
	2044	3.7	113
28 W	0207	1.3	40
	0836	5.0	152
	1559	0.3	9
	2157	3.7	113
29 Th	0313	1.6	49
	0934	5.1	155
	1702	0.1	3
	2302	4.0	122
30 F	0417	1.7	52
	1027	5.2	158
	1756	−0.1	−3
	2358	4.2	128
31 Sa	0516	1.8	55
	1115	5.2	158
	1843	−0.2	−6

February

	Time	Height	
	h m	ft	cm
1 Su	0047	4.4	134
	0609	1.9	58
	1158	5.2	158
	1925	−0.2	−6
2 M	0132	4.6	140
	0657	1.9	58
	1238	5.2	158
	2003	−0.1	−3
3 Tu ○	0213	4.6	140
	0741	1.8	55
	1315	5.1	155
	2036	0.0	0
4 W	0250	4.7	143
	0823	1.8	55
	1351	5.0	152
	2104	0.2	6
5 Th	0323	4.6	140
	0903	1.7	52
	1428	4.8	146
	2129	0.3	9
6 F	0351	4.6	140
	0941	1.6	49
	1505	4.6	140
	2152	0.4	12
7 Sa	0415	4.6	140
	1021	1.4	43
	1546	4.3	131
	2216	0.6	18
8 Su	0435	4.6	140
	1102	1.4	43
	1632	4.0	122
	2245	0.8	24
9 M	0459	4.6	140
	1150	1.3	40
	1729	3.7	113
	2321	1.0	30
10 Tu	0532	4.7	143
	1250	1.2	37
	1846	3.4	104
11 W ◑	0005	1.4	43
	0615	4.7	143
	1404	1.1	34
	2019	3.3	101
12 Th	0100	1.7	52
	0708	4.8	146
	1521	0.9	27
	2138	3.4	104
13 F	0207	1.9	58
	0810	4.9	149
	1627	0.6	18
	2243	3.6	110
14 Sa	0320	2.1	64
	0915	5.1	155
	1722	0.3	9
	2336	3.9	119
15 Su	0430	2.0	61
	1018	5.3	162
	1811	0.0	0

	Time	Height	
	h m	ft	cm
16 M	0023	4.2	128
	0532	1.8	55
	1116	5.5	168
	1855	−0.1	−3
17 Tu	0106	4.4	134
	0628	1.6	49
	1211	5.7	174
	1936	−0.2	−6
18 W ●	0146	4.7	143
	0722	1.3	40
	1305	5.7	174
	2016	−0.2	−6
19 Th	0225	4.9	149
	0815	1.0	30
	1358	5.6	171
	2055	−0.2	−6
20 F	0303	5.0	152
	0908	0.8	24
	1452	5.4	165
	2134	0.0	0
21 Sa	0341	5.1	155
	1002	0.6	18
	1548	5.0	152
	2213	0.3	9
22 Su	0420	5.2	158
	1059	0.5	15
	1649	4.6	140
	2255	0.6	18
23 M	0503	5.2	158
	1200	0.5	15
	1758	4.2	128
	2342	1.0	30
24 Tu	0551	5.0	152
	1309	0.5	15
	1914	3.9	119
25 W ◐	0037	1.4	43
	0648	4.9	149
	1423	0.5	15
	2031	3.8	116
26 Th	0143	1.7	52
	0755	4.8	146
	1534	0.4	12
	2141	3.9	119
27 F	0255	1.8	55
	0905	4.7	143
	1637	0.2	6
	2243	4.1	125
28 Sa	0405	1.8	55
	1007	4.7	143
	1731	0.1	3
	2336	4.4	134

March

	Time	Height	
	h m	ft	cm
1 Su	0506	1.7	52
	1101	4.8	146
	1816	0.0	0
2 M	0022	4.6	140
	0558	1.6	49
	1148	4.8	146
	1855	0.1	3
3 Tu	0102	4.7	143
	0645	1.5	46
	1230	4.8	146
	1930	0.2	6
4 W	0139	4.7	143
	0728	1.3	40
	1308	4.8	146
	2000	0.3	9
5 Th ○	0210	4.7	143
	0807	1.2	37
	1346	4.7	143
	2026	0.5	15
6 F	0237	4.7	143
	0845	1.1	34
	1423	4.6	140
	2049	0.7	21
7 Sa	0257	4.7	143
	0921	1.0	30
	1501	4.4	134
	2112	0.8	24
8 Su	0313	4.8	146
	0956	0.9	27
	1542	4.2	128
	2138	1.0	30
9 M	0334	4.9	149
	1033	0.8	24
	1628	3.9	119
	2210	1.1	34
10 Tu	0402	4.9	149
	1114	0.8	24
	1723	3.7	113
	2248	1.4	43
11 W	0439	4.9	149
	1205	0.8	24
	1836	3.5	107
	2336	1.6	49
12 Th	0525	4.9	149
	1314	0.8	24
	1959	3.4	104
13 F ◑	0035	1.9	58
	0621	4.8	146
	1434	0.7	21
	2113	3.5	107
14 Sa	0149	2.0	61
	0731	4.7	143
	1546	0.5	15
	2215	3.7	113
15 Su	0309	1.9	58
	0849	4.7	143
	1645	0.2	6
	2306	4.0	122

	Time	Height	
	h m	ft	cm
16 M	0421	1.7	52
	1003	4.9	149
	1735	0.0	0
	2350	4.3	131
17 Tu	0524	1.4	43
	1108	5.1	155
	1820	−0.1	−3
18 W	0030	4.6	140
	0620	1.0	30
	1206	5.2	158
	1902	0.0	0
19 Th	0108	4.9	149
	0713	0.6	18
	1301	5.2	158
	1942	0.1	3
20 F ●	0144	5.1	155
	0805	0.3	9
	1356	5.1	155
	2021	0.2	6
21 Sa	0220	5.2	158
	0856	0.1	3
	1450	4.9	149
	2101	0.5	15
22 Su	0257	5.3	162
	0948	0.0	0
	1547	4.7	143
	2142	0.8	24
23 M	0335	5.3	162
	1042	0.0	0
	1647	4.4	134
	2226	1.1	34
24 Tu	0416	5.2	158
	1139	0.1	3
	1752	4.1	125
	2315	1.4	43
25 W	0502	4.9	149
	1242	0.2	6
	1902	3.9	119
26 Th ◐	0013	1.6	49
	0557	4.6	140
	1350	0.2	6
	2012	3.9	119
27 F	0123	1.8	55
	0708	4.3	131
	1458	0.2	6
	2118	4.0	122
28 Sa	0239	1.8	55
	0830	4.1	125
	1559	0.2	6
	2215	4.2	128
29 Su	0350	1.7	52
	0942	4.1	125
	1652	0.1	3
	2305	4.4	134
30 M	0451	1.4	43
	1041	4.1	125
	1737	0.2	6
	2348	4.6	140
31 Tu	0543	1.1	34
	1131	4.2	128
	1815	0.3	9

Time meridian 120° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.
Heights are referred to mean lower low water which is the chart datum of soundings.

Port Chicago, Suisun Bay, California, 2015

Times and Heights of High and Low Waters

April

	Time	Height		Time	Height
	h m	ft / cm		h m	ft / cm
1 W	0025	4.7 / 143	**16** Th	0612	0.3 / 9
	0629	0.9 / 27		1201	4.5 / 137
	1216	4.2 / 128		1823	0.2 / 6
	1848	0.4 / 12			
2 Th	0057	4.7 / 143	**17** F	0029	5.0 / 152
	0711	0.7 / 21		0705	−0.1 / −3
	1258	4.2 / 128		1258	4.6 / 140
	1917	0.6 / 18		1905	0.4 / 12
3 F	0124	4.7 / 143	**18** Sa	0105	5.2 / 158
	0751	0.6 / 18		0756	−0.3 / −9
	1339	4.2 / 128		1353	4.5 / 137
	1943	0.8 / 24	●	1947	0.7 / 21
4 Sa	0145	4.8 / 146	**19** Su	0141	5.4 / 165
	0828	0.5 / 15		0846	−0.5 / −15
	1419	4.2 / 128		1449	4.4 / 134
○	2008	1.0 / 30		2029	0.9 / 27
5 Su	0202	4.9 / 149	**20** M	0217	5.4 / 165
	0903	0.4 / 12		0936	−0.5 / −15
	1500	4.1 / 125		1545	4.3 / 131
	2035	1.2 / 37		2113	1.2 / 37
6 M	0221	5.0 / 152	**21** Tu	0255	5.3 / 162
	0938	0.3 / 9		1026	−0.5 / −15
	1544	3.9 / 119		1642	4.2 / 128
	2107	1.3 / 40		2201	1.4 / 43
7 Tu	0248	5.1 / 155	**22** W	0335	5.1 / 155
	1013	0.2 / 6		1118	−0.3 / −9
	1631	3.8 / 116		1742	4.1 / 125
	2143	1.5 / 46		2253	1.6 / 49
8 W	0322	5.1 / 155	**23** Th	0419	4.7 / 143
	1052	0.2 / 6		1212	−0.2 / −6
	1726	3.7 / 113		1845	4.0 / 122
	2227	1.6 / 49		2353	1.8 / 55
9 Th	0404	5.0 / 152	**24** F	0511	4.3 / 131
	1139	0.2 / 6		1310	0.0 / 0
	1831	3.5 / 107		1947	4.0 / 122
	2320	1.8 / 55			
10 F	0452	4.8 / 146	**25** Sa	0102	1.8 / 55
	1239	0.2 / 6		0619	3.9 / 119
	1940	3.5 / 107		1410	0.1 / 3
			◐	2046	4.0 / 122
11 Sa	0024	1.9 / 58	**26** Su	0216	1.7 / 52
	0552	4.5 / 137		0745	3.6 / 110
	1351	0.2 / 6		1507	0.2 / 6
◑	2045	3.6 / 110		2139	4.2 / 128
12 Su	0142	1.8 / 55	**27** M	0327	1.4 / 43
	0706	4.3 / 131		0906	3.5 / 107
	1500	0.1 / 3		1559	0.2 / 6
	2142	3.9 / 119		2226	4.3 / 131
13 M	0303	1.6 / 49	**28** Tu	0429	1.1 / 34
	0833	4.2 / 128		1012	3.5 / 107
	1601	0.0 / 0		1643	0.3 / 9
	2230	4.1 / 125		2306	4.5 / 137
14 Tu	0415	1.2 / 37	**29** W	0522	0.7 / 21
	0953	4.3 / 131		1108	3.6 / 110
	1653	0.0 / 0		1722	0.5 / 15
	2313	4.5 / 137		2341	4.6 / 140
15 W	0516	0.7 / 21	**30** Th	0609	0.4 / 12
	1101	4.4 / 134		1158	3.7 / 113
	1740	0.1 / 3		1756	0.7 / 21
	2352	4.8 / 146			

May

	Time	Height		Time	Height
	h m	ft / cm		h m	ft / cm
1 F	0010	4.7 / 143	**16** Sa	0658	−0.5 / −15
	0652	0.2 / 6		1255	4.1 / 125
	1245	3.7 / 113		1831	0.9 / 27
	1828	1.0 / 30			
2 Sa	0034	4.8 / 146	**17** Su	0030	5.4 / 165
	0733	0.0 / 0		0748	−0.7 / −21
	1330	3.8 / 116		1351	4.1 / 125
	1858	1.2 / 37	●	1916	1.2 / 37
3 Su	0053	4.9 / 149	**18** M	0107	5.5 / 168
	0811	−0.1 / −3		0837	−0.8 / −24
	1414	3.8 / 116		1445	4.2 / 128
○	1929	1.4 / 43		2003	1.4 / 43
4 M	0114	5.1 / 155	**19** Tu	0144	5.4 / 165
	0848	−0.2 / −6		0924	−0.7 / −21
	1459	3.8 / 116		1539	4.2 / 128
	2004	1.5 / 46		2051	1.6 / 49
5 Tu	0141	5.2 / 158	**20** W	0222	5.2 / 158
	0924	−0.2 / −6		1010	−0.7 / −21
	1544	3.8 / 116		1633	4.2 / 128
	2043	1.6 / 49		2141	1.7 / 52
6 W	0215	5.2 / 158	**21** Th	0303	5.0 / 152
	1000	−0.3 / −9		1054	−0.5 / −15
	1632	3.8 / 116		1726	4.1 / 125
	2126	1.7 / 52		2234	1.8 / 55
7 Th	0255	5.2 / 158	**22** F	0347	4.6 / 140
	1039	−0.3 / −9		1139	−0.4 / −12
	1723	3.7 / 113		1819	4.1 / 125
	2216	1.7 / 52		2332	1.8 / 55
8 F	0341	5.0 / 152	**23** Sa	0436	4.2 / 128
	1124	−0.3 / −9		1225	−0.2 / −6
	1818	3.7 / 113		1913	4.1 / 125
	2313	1.8 / 55			
9 Sa	0433	4.7 / 143	**24** Su	0036	1.8 / 55
	1216	−0.3 / −9		0536	3.7 / 113
	1916	3.7 / 113		1313	0.0 / 0
				2005	4.1 / 125
10 Su	0021	1.7 / 52	**25** M	0145	1.6 / 49
	0535	4.3 / 131		0655	3.3 / 101
	1315	−0.2 / −6		1401	0.2 / 6
	2012	3.9 / 119	◐	2054	4.2 / 128
11 M	0138	1.5 / 46	**26** Tu	0255	1.3 / 40
	0652	4.0 / 122		0822	3.1 / 94
	1416	−0.1 / −3		1450	0.4 / 12
◑	2105	4.1 / 125		2138	4.3 / 131
12 Tu	0256	1.2 / 37	**27** W	0400	0.9 / 27
	0822	3.8 / 116		0937	3.1 / 94
	1515	0.0 / 0		1536	0.6 / 18
	2152	4.4 / 134		2217	4.5 / 137
13 W	0406	0.7 / 21	**28** Th	0456	0.6 / 18
	0945	3.7 / 113		1040	3.2 / 98
	1609	0.1 / 3		1618	0.9 / 27
	2236	4.7 / 143		2250	4.6 / 140
14 Th	0509	0.2 / 6	**29** F	0546	0.2 / 6
	1055	3.8 / 116		1137	3.3 / 101
	1659	0.3 / 9		1658	1.1 / 34
	2315	5.0 / 152		2318	4.8 / 146
15 F	0605	−0.2 / −6	**30** Sa	0631	0.0 / 0
	1157	4.0 / 122		1228	3.4 / 104
	1745	0.6 / 18		1736	1.4 / 43
	2353	5.2 / 158		2342	5.0 / 152
			31 Su	0713	−0.2 / −6
				1317	3.6 / 110
				1815	1.6 / 49

June

	Time	Height		Time	Height
	h m	ft / cm		h m	ft / cm
1 M	0007	5.2 / 158	**16** Tu	0042	5.5 / 168
	0753	−0.3 / −9		0826	−0.7 / −21
	1405	3.7 / 113		1437	4.2 / 128
	1855	1.8 / 55	●	1945	1.8 / 55
2 Tu	0037	5.3 / 162	**17** W	0121	5.4 / 165
	0832	−0.4 / −12		0909	−0.6 / −18
	1451	3.8 / 116		1527	4.3 / 131
○	1939	1.9 / 58		2035	1.9 / 58
3 W	0113	5.5 / 168	**18** Th	0200	5.2 / 158
	0910	−0.5 / −15		0950	−0.5 / −15
	1536	3.9 / 119		1614	4.3 / 131
	2026	1.9 / 58		2124	2.0 / 61
4 Th	0154	5.5 / 168	**19** F	0241	5.0 / 152
	0948	−0.6 / −18		1028	−0.4 / −12
	1622	4.0 / 122		1700	4.3 / 131
	2116	1.9 / 58		2215	1.9 / 58
5 F	0239	5.3 / 162	**20** Sa	0324	4.7 / 143
	1027	−0.6 / −18		1103	−0.3 / −9
	1707	4.0 / 122		1745	4.3 / 131
	2209	1.8 / 55		2307	1.9 / 58
6 Sa	0329	5.1 / 155	**21** Su	0410	4.3 / 131
	1108	−0.6 / −18		1138	−0.1 / −3
	1755	4.0 / 122		1829	4.2 / 128
	2309	1.6 / 49			
7 Su	0424	4.7 / 143	**22** M	0004	1.7 / 52
	1153	−0.5 / −15		0504	3.8 / 116
	1844	4.1 / 125		1213	0.1 / 3
				1913	4.2 / 128
8 M	0015	1.5 / 46	**23** Tu	0107	1.6 / 49
	0528	4.3 / 131		0611	3.4 / 104
	1243	−0.3 / −9		1251	0.4 / 12
	1935	4.3 / 131		1956	4.3 / 131
9 Tu	0129	1.2 / 37	**24** W	0215	1.4 / 43
	0646	3.8 / 116		0736	3.1 / 94
	1336	−0.1 / −3		1334	0.7 / 21
◑	2025	4.5 / 137	◐	2037	4.4 / 134
10 W	0245	0.9 / 27	**25** Th	0322	1.1 / 34
	0816	3.5 / 107		0859	3.0 / 91
	1432	0.2 / 6		1421	1.0 / 30
	2114	4.7 / 143		2115	4.6 / 140
11 Th	0356	0.5 / 15	**26** F	0424	0.7 / 21
	0938	3.5 / 107		1011	3.1 / 94
	1528	0.5 / 15		1510	1.3 / 40
	2200	5.0 / 152		2150	4.8 / 146
12 F	0500	0.0 / 0	**27** Sa	0518	0.4 / 12
	1049	3.6 / 110		1113	3.2 / 98
	1622	0.8 / 24		1600	1.6 / 49
	2243	5.3 / 162		2222	5.0 / 152
13 Sa	0558	−0.3 / −9	**28** Su	0607	0.1 / 3
	1152	3.7 / 113		1209	3.5 / 107
	1714	1.1 / 34		1650	1.8 / 55
	2324	5.5 / 168		2256	5.3 / 162
14 Su	0650	−0.6 / −18	**29** M	0651	−0.1 / −3
	1250	3.9 / 119		1259	3.7 / 113
	1805	1.4 / 43		1740	2.0 / 61
				2332	5.5 / 168
15 M	0004	5.5 / 168	**30** Tu	0732	−0.3 / −9
	0740	−0.7 / −21		1347	3.9 / 119
	1345	4.1 / 125		1830	2.0 / 61
	1855	1.6 / 49			

Time meridian 120° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.
Heights are referred to mean lower low water which is the chart datum of soundings.

Port Chicago, Suisun Bay, California, 2015

Times and Heights of High and Low Waters

July

	Time	Height	
	h m	ft	cm
1 W ○	0012	5.6	171
	0812	−0.4	−12
	1432	4.0	122
	1921	2.0	61
2 Th	0055	5.7	174
	0851	−0.5	−15
	1515	4.2	128
	2013	2.0	61
3 F	0142	5.7	174
	0929	−0.6	−18
	1557	4.3	131
	2106	1.8	55
4 Sa	0231	5.5	168
	1007	−0.6	−18
	1638	4.4	134
	2201	1.6	49
5 Su	0324	5.2	158
	1046	−0.5	−15
	1721	4.5	137
	2300	1.4	43
6 M	0421	4.8	146
	1128	−0.4	−12
	1805	4.6	140
7 Tu	0005	1.2	37
	0527	4.3	131
	1213	−0.1	−3
	1853	4.7	143
8 W ◑	0115	1.0	30
	0645	3.9	119
	1302	0.3	9
	1944	4.9	149
9 Th	0230	0.7	21
	0811	3.6	110
	1357	0.6	18
	2036	5.1	155
10 F	0343	0.4	12
	0932	3.5	107
	1456	1.0	30
	2127	5.3	162
11 Sa	0449	0.1	3
	1042	3.6	110
	1556	1.3	40
	2217	5.4	165
12 Su	0547	−0.2	−6
	1144	3.9	119
	1654	1.6	49
	2303	5.5	168
13 M	0639	−0.4	−12
	1240	4.1	125
	1750	1.8	55
	2347	5.5	168
14 Tu	0726	−0.4	−12
	1332	4.3	131
	1843	1.9	58
15 W ●	0028	5.5	168
	0809	−0.4	−12
	1420	4.4	134
	1933	2.0	61

	Time	Height	
	h m	ft	cm
16 Th	0108	5.4	165
	0848	−0.3	−9
	1504	4.5	137
	2021	2.0	61
17 F	0148	5.2	158
	0924	−0.2	−6
	1546	4.5	137
	2108	1.9	58
18 Sa	0227	5.0	152
	0956	−0.1	−3
	1624	4.5	137
	2153	1.9	58
19 Su	0308	4.7	143
	1024	0.1	3
	1700	4.5	137
	2239	1.8	55
20 M	0352	4.4	134
	1051	0.2	6
	1733	4.4	134
	2329	1.7	52
21 Tu	0441	4.0	122
	1120	0.4	12
	1805	4.4	134
22 W	0024	1.5	46
	0540	3.6	110
	1153	0.7	21
	1838	4.5	137
23 Th ◐	0127	1.4	43
	0657	3.3	101
	1233	1.0	30
	1914	4.6	140
24 F	0237	1.2	37
	0825	3.1	94
	1321	1.4	43
	1956	4.7	143
25 Sa	0345	0.9	27
	0942	3.2	98
	1417	1.7	52
	2043	4.9	149
26 Su	0445	0.6	18
	1048	3.4	104
	1518	1.9	58
	2131	5.1	155
27 M	0536	0.3	9
	1144	3.6	110
	1619	2.1	64
	2219	5.4	165
28 Tu	0623	0.1	3
	1234	3.9	119
	1718	2.1	64
	2307	5.6	171
29 W	0705	−0.1	−3
	1319	4.1	125
	1814	2.0	61
	2356	5.7	174
30 Th	0746	−0.2	−6
	1401	4.3	131
	1908	1.9	58
31 F ○	0045	5.8	177
	0825	−0.3	−9
	1441	4.4	134
	2001	1.7	52

August

	Time	Height	
	h m	ft	cm
1 Sa	0136	5.7	174
	0903	−0.4	−12
	1520	4.6	140
	2055	1.5	46
2 Su	0229	5.6	171
	0941	−0.3	−9
	1559	4.8	146
	2150	1.2	37
3 M	0323	5.2	158
	1019	−0.2	−6
	1639	4.9	149
	2248	1.0	30
4 Tu	0422	4.8	146
	1100	0.1	3
	1721	5.0	152
	2350	0.9	27
5 W	0529	4.3	131
	1144	0.4	12
	1808	5.1	155
6 Th ◑	0059	0.8	24
	0645	3.9	119
	1233	0.8	24
	1901	5.1	155
7 F	0213	0.6	18
	0807	3.7	113
	1331	1.1	34
	1959	5.2	158
8 Sa	0326	0.4	12
	0923	3.7	113
	1435	1.4	43
	2059	5.2	158
9 Su	0432	0.1	3
	1031	3.9	119
	1542	1.7	52
	2157	5.3	162
10 M	0530	−0.1	−3
	1130	4.1	125
	1645	1.8	55
	2249	5.3	162
11 Tu	0620	−0.2	−6
	1222	4.3	131
	1742	1.8	55
	2337	5.3	162
12 W	0705	−0.2	−6
	1309	4.5	137
	1834	1.8	55
13 Th	0021	5.3	162
	0744	−0.1	−3
	1352	4.6	140
	1922	1.8	55
14 F ●	0101	5.2	158
	0820	0.0	0
	1431	4.6	140
	2007	1.7	52
15 Sa	0140	5.0	152
	0851	0.2	6
	1507	4.6	140
	2050	1.6	49

	Time	Height	
	h m	ft	cm
16 Su	0219	4.8	146
	0918	0.3	9
	1537	4.6	140
	2131	1.5	46
17 M	0259	4.6	140
	0943	0.5	15
	1603	4.6	140
	2212	1.4	43
18 Tu	0340	4.3	131
	1007	0.7	21
	1625	4.6	140
	2254	1.3	40
19 W	0427	4.0	122
	1035	0.8	24
	1647	4.6	140
	2341	1.3	40
20 Th	0522	3.7	113
	1109	1.1	34
	1717	4.7	143
21 F	0037	1.2	37
	0634	3.4	104
	1150	1.4	43
	1756	4.7	143
22 Sa ◐	0145	1.1	34
	0758	3.3	101
	1242	1.7	52
	1846	4.8	146
23 Su	0257	0.9	27
	0915	3.3	101
	1343	1.9	58
	1945	4.9	149
24 M	0403	0.7	21
	1020	3.5	107
	1452	2.0	61
	2049	5.0	152
25 Tu	0459	0.4	12
	1114	3.8	116
	1601	2.0	61
	2152	5.2	158
26 W	0547	0.2	6
	1201	4.0	122
	1704	1.9	58
	2250	5.4	165
27 Th	0631	0.0	0
	1243	4.3	131
	1801	1.7	52
	2345	5.5	168
28 F	0712	−0.1	−3
	1322	4.5	137
	1856	1.4	43
29 Sa ○	0039	5.6	171
	0751	−0.1	−3
	1400	4.7	143
	1949	1.1	34
30 Su	0133	5.5	168
	0830	−0.1	−3
	1436	4.9	149
	2043	0.9	27
31 M	0227	5.3	162
	0909	0.1	3
	1514	5.1	155
	2137	0.6	18

September

	Time	Height	
	h m	ft	cm
1 Tu	0324	5.0	152
	0948	0.3	9
	1553	5.2	158
	2234	0.5	15
2 W	0424	4.7	143
	1031	0.5	15
	1635	5.2	158
	2334	0.4	12
3 Th	0530	4.3	131
	1117	0.9	27
	1722	5.2	158
4 F	0040	0.4	12
	0643	4.0	122
	1210	1.2	37
	1817	5.0	152
5 Sa ◑	0151	0.4	12
	0758	3.9	119
	1313	1.5	46
	1922	4.9	149
6 Su	0302	0.3	9
	0910	3.9	119
	1423	1.6	49
	2033	4.8	146
7 M	0407	0.1	3
	1013	4.1	125
	1533	1.7	52
	2139	4.8	146
8 Tu	0503	0.0	0
	1108	4.3	131
	1637	1.6	49
	2237	4.8	146
9 W	0552	0.0	0
	1156	4.5	137
	1734	1.4	43
	2327	4.8	146
10 Th	0633	0.0	0
	1239	4.6	140
	1824	1.3	40
11 F	0012	4.8	146
	0710	0.1	3
	1317	4.7	143
	1909	1.2	37
12 Sa ●	0054	4.7	143
	0743	0.3	9
	1351	4.7	143
	1952	1.1	34
13 Su	0134	4.6	140
	0811	0.5	15
	1420	4.6	140
	2032	1.0	30
14 M	0213	4.5	137
	0836	0.7	21
	1442	4.6	140
	2110	1.0	30
15 Tu	0254	4.3	131
	0901	0.9	27
	1500	4.7	143
	2147	0.9	27

	Time	Height	
	h m	ft	cm
16 W	0336	4.1	125
	0927	1.1	34
	1519	4.8	146
	2225	0.8	24
17 Th	0422	3.9	119
	0958	1.2	37
	1546	4.8	146
	2305	0.8	24
18 F	0517	3.7	113
	1035	1.4	43
	1621	4.8	146
	2353	0.8	24
19 Sa	0623	3.5	107
	1121	1.6	49
	1705	4.8	146
20 Su	0054	0.7	21
	0738	3.4	104
	1217	1.8	55
	1758	4.7	143
21 M ◐	0206	0.6	18
	0848	3.4	104
	1324	1.9	58
	1903	4.6	140
22 Tu	0315	0.5	15
	0948	3.6	110
	1439	1.9	58
	2018	4.6	140
23 W	0414	0.3	9
	1039	3.9	119
	1551	1.7	52
	2133	4.7	143
24 Th	0505	0.1	3
	1123	4.1	125
	1654	1.4	43
	2238	4.9	149
25 F	0550	0.0	0
	1202	4.4	134
	1751	1.0	30
	2338	5.0	152
26 Sa	0632	0.0	0
	1239	4.7	143
	1845	0.7	21
27 Su ○	0034	5.0	152
	0713	0.1	3
	1315	4.9	149
	1938	0.3	9
28 M	0130	5.0	152
	0753	0.3	9
	1352	5.1	155
	2031	0.1	3
29 Tu	0226	4.8	146
	0835	0.5	15
	1429	5.3	162
	2125	0.0	0
30 W	0323	4.6	140
	0917	0.7	21
	1509	5.3	162
	2219	−0.1	−3

Time meridian 120° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.
Heights are referred to mean lower low water which is the chart datum of soundings.

Port Chicago, Suisun Bay, California, 2015

Times and Heights of High and Low Waters

October

	Time	Height			Time	Height	
	h m	ft	cm		h m	ft	cm
1 Th	0424	4.4	134	16 F	0422	3.7	113
	1003	1.0	30		0929	1.5	46
	1552	5.2	158		1503	4.9	149
	2317	−0.1	−3		2240	0.2	6
2 F	0528	4.2	128	17 Sa	0514	3.6	110
	1054	1.2	37		1012	1.7	52
	1639	5.0	152		1543	4.9	149
					2323	0.2	6
3 Sa	0018	0.0	0	18 Su	0613	3.5	107
	0635	4.0	122		1102	1.7	52
	1152	1.5	46		1630	4.7	143
	1736	4.7	143				
4 Su ◑	0123	0.1	3	19 M	0016	0.2	6
	0744	3.9	119		0716	3.5	107
	1258	1.6	49		1202	1.8	55
	1845	4.4	134		1727	4.5	137
5 M	0229	0.1	3	20 Tu ◐	0119	0.2	6
	0848	4.0	122		0817	3.6	110
	1411	1.6	49		1314	1.7	52
	2003	4.2	128		1835	4.2	128
6 Tu	0331	0.1	3	21 W	0224	0.1	3
	0947	4.2	128		0912	3.7	113
	1522	1.4	43		1430	1.5	46
	2116	4.1	125		1957	4.1	125
7 W	0425	0.0	0	22 Th	0325	0.1	3
	1038	4.3	131		1000	4.0	122
	1625	1.2	37		1542	1.2	37
	2218	4.1	125		2119	4.1	125
8 Th	0512	0.1	3	23 F	0418	0.0	0
	1123	4.5	137		1043	4.3	131
	1720	0.9	27		1645	0.8	24
	2311	4.2	128		2229	4.2	128
9 F	0552	0.2	6	24 Sa	0506	0.1	3
	1202	4.6	140		1122	4.6	140
	1809	0.7	21		1743	0.3	9
	2359	4.2	128		2332	4.4	134
10 Sa	0628	0.4	12	25 Su	0551	0.2	6
	1236	4.6	140		1158	4.9	149
	1854	0.6	18		1837	0.0	0
11 Su	0043	4.2	128	26 M	0030	4.4	134
	0659	0.6	18		0634	0.4	12
	1305	4.7	143		1235	5.1	155
	1935	0.5	15		1929	−0.3	−9
12 M ●	0126	4.1	125	27 Tu ○	0127	4.4	134
	0727	0.9	27		0718	0.7	21
	1328	4.7	143		1312	5.3	162
	2014	0.4	12		2021	−0.5	−15
13 Tu	0208	4.1	125	28 W	0224	4.4	134
	0754	1.1	34		0803	0.9	27
	1346	4.7	143		1351	5.4	165
	2052	0.3	9		2113	−0.6	−18
14 W	0251	4.0	122	29 Th	0321	4.3	131
	0821	1.3	40		0850	1.2	37
	1405	4.8	146		1431	5.4	165
	2128	0.3	9		2205	−0.6	−18
15 Th	0335	3.9	119	30 F	0420	4.2	128
	0853	1.4	43		0940	1.4	43
	1430	4.9	149		1515	5.2	158
	2203	0.2	6		2258	−0.5	−15
				31 Sa	0519	4.1	125
					1034	1.5	46
					1603	4.9	149
					2352	−0.3	−9

November

	Time	Height			Time	Height	
	h m	ft	cm		h m	ft	cm
1 Su	0620	4.0	122	16 M	0555	3.7	113
	1134	1.6	49		1051	1.8	55
	1658	4.5	137		1609	4.7	143
					2349	−0.2	−6
2 M	0048	−0.2	−6	17 Tu	0647	3.7	113
	0720	4.0	122		1152	1.7	52
	1240	1.6	49		1707	4.4	134
	1806	4.0	122				
3 Tu ◑	0146	−0.1	−3	18 W ◐	0041	−0.2	−6
	0819	4.1	125		0741	3.8	116
	1352	1.5	46		1303	1.5	46
	1927	3.7	113		1817	4.0	122
4 W	0242	0.0	0	19 Th	0138	−0.1	−3
	0913	4.2	128		0832	4.0	122
	1502	1.2	37		1419	1.2	37
	2045	3.6	110		1943	3.8	116
5 Th	0334	0.1	3	20 F	0236	0.0	0
	1001	4.3	131		0919	4.2	128
	1606	0.9	27		1531	0.8	24
	2152	3.5	107		2109	3.7	113
6 F	0421	0.3	9	21 Sa	0332	0.2	6
	1043	4.5	137		1003	4.6	140
	1702	0.6	18		1636	0.4	12
	2250	3.6	110		2223	3.8	116
7 Sa	0502	0.5	15	22 Su	0423	0.4	12
	1120	4.6	140		1044	4.9	149
	1751	0.3	9		1735	−0.1	−3
	2342	3.6	110		2328	3.9	119
8 Su	0538	0.7	21	23 M	0513	0.6	18
	1152	4.7	143		1123	5.2	158
	1836	0.1	3		1830	−0.4	−12
9 M	0030	3.7	113	24 Tu	0027	4.0	122
	0611	1.0	30		0601	0.9	27
	1217	4.7	143		1202	5.4	165
	1918	0.0	0		1922	−0.6	−18
10 Tu	0116	3.8	116	25 W ○	0125	4.1	125
	0643	1.2	37		0649	1.2	37
	1238	4.8	146		1241	5.5	168
	1958	−0.1	−3		2013	−0.7	−21
11 W ●	0202	3.8	116	26 Th	0220	4.2	128
	0715	1.5	46		0738	1.4	43
	1258	4.9	149		1322	5.5	168
	2035	−0.1	−3		2102	−0.7	−21
12 Th	0247	3.8	116	27 F	0315	4.2	128
	0749	1.6	49		0829	1.5	46
	1324	5.0	152		1404	5.4	165
	2111	−0.2	−6		2149	−0.7	−21
13 F	0332	3.8	116	28 Sa	0409	4.2	128
	0827	1.7	52		0921	1.6	49
	1357	5.1	155		1448	5.1	155
	2147	−0.2	−6		2236	−0.6	−18
14 Sa	0418	3.8	116	29 Su	0502	4.2	128
	0910	1.8	55		1016	1.7	52
	1435	5.1	155		1535	4.8	146
	2223	−0.2	−6		2321	−0.4	−12
15 Su	0505	3.7	113	30 M	0554	4.2	128
	0957	1.8	55		1113	1.7	52
	1519	4.9	149		1627	4.4	134
	2303	−0.3	−9				

December

	Time	Height			Time	Height	
	h m	ft	cm		h m	ft	cm
1 Tu	0007	−0.2	−6	16 W	0610	4.1	125
	0647	4.2	128		1141	1.5	46
	1215	1.6	49		1657	4.4	134
	1728	3.9	119				
2 W ◑	0054	0.0	0	17 Th	0008	−0.2	−6
	0739	4.2	128		0657	4.2	128
	1323	1.5	46		1250	1.3	40
	1843	3.5	107		1808	4.0	122
3 Th	0142	0.2	6	18 F ◐	0058	0.0	0
	0829	4.2	128		0746	4.4	134
	1432	1.2	37		1405	1.0	30
	2005	3.2	98		1935	3.6	110
4 F	0230	0.4	12	19 Sa	0153	0.3	9
	0915	4.3	131		0836	4.6	140
	1538	0.9	27		1519	0.6	18
	2120	3.2	98		2102	3.5	107
5 Sa	0318	0.7	21	20 Su	0251	0.6	18
	0956	4.4	134		0924	4.9	149
	1637	0.5	15		1628	0.2	6
	2225	3.2	98		2218	3.6	110
6 Su	0402	0.9	27	21 M	0348	0.9	27
	1033	4.6	140		1011	5.2	158
	1729	0.2	6		1728	−0.2	−6
	2322	3.4	104		2324	3.8	116
7 M	0444	1.2	37	22 Tu	0445	1.1	34
	1103	4.8	146		1055	5.4	165
	1816	0.0	0		1824	−0.4	−12
8 Tu	0015	3.5	107	23 W	0024	4.0	122
	0524	1.4	43		0539	1.4	43
	1130	4.9	149		1139	5.6	171
	1859	−0.1	−3		1915	−0.6	−18
9 W	0104	3.7	113	24 Th	0119	4.1	125
	0603	1.7	52		0632	1.6	49
	1155	5.1	155		1222	5.6	171
	1940	−0.2	−6		2002	−0.6	−18
10 Th	0150	3.8	116	25 F ○	0211	4.3	131
	0644	1.8	55		0724	1.7	52
	1223	5.2	158		1304	5.6	171
	2018	−0.3	−9		2047	−0.6	−18
11 F ●	0235	3.9	119	26 Sa	0301	4.4	134
	0726	1.9	58		0815	1.8	55
	1257	5.3	162		1347	5.4	165
	2054	−0.3	−9		2130	−0.5	−15
12 Sa	0319	3.9	119	27 Su	0348	4.4	134
	0810	2.0	61		0906	1.8	55
	1336	5.3	162		1431	5.2	158
	2130	−0.4	−12		2209	−0.4	−12
13 Su	0401	4.0	122	28 M	0434	4.4	134
	0857	1.9	58		0957	1.7	52
	1419	5.3	162		1516	4.8	146
	2205	−0.4	−12		2246	−0.2	−6
14 M	0443	4.0	122	29 Tu	0518	4.4	134
	0947	1.8	55		1049	1.7	52
	1506	5.1	155		1603	4.5	137
	2242	−0.4	−12		2321	0.0	0
15 Tu	0525	4.0	122	30 W	0602	4.4	134
	1041	1.7	52		1144	1.6	49
	1558	4.8	146		1657	4.0	122
	2323	−0.4	−12		2357	0.2	6
				31 Th	0646	4.3	131
					1244	1.5	46
					1802	3.6	110

Time meridian 120° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.
Heights are referred to mean lower low water which is the chart datum of soundings.

Arena Cove, California, 2015

Times and Heights of High and Low Waters

January

	Time	Height	
	h m	ft	cm
1 Th	0112	2.5	76
	0735	6.8	207
	1450	−0.1	−3
	2123	4.6	140
2 F	0208	2.7	82
	0821	6.8	207
	1536	−0.4	−12
	2214	4.8	146
3 Sa	0259	2.8	85
	0903	6.8	207
	1617	−0.5	−15
	2258	4.9	149
4 Su ○	0345	2.9	88
	0943	6.7	204
	1655	−0.5	−15
	2338	5.0	152
5 M	0429	2.9	88
	1022	6.6	201
	1731	−0.4	−12
6 Tu	0015	5.1	155
	0511	2.9	88
	1100	6.3	192
	1805	−0.2	−6
7 W	0050	5.1	155
	0554	2.9	88
	1137	6.1	186
	1839	0.0	0
8 Th	0126	5.2	158
	0638	2.9	88
	1216	5.7	174
	1913	0.4	12
9 F	0201	5.2	158
	0726	2.9	88
	1257	5.3	162
	1946	0.7	21
10 Sa	0238	5.3	162
	0821	2.9	88
	1343	4.8	146
	2021	1.2	37
11 Su	0316	5.3	162
	0923	2.7	82
	1439	4.4	134
	2058	1.6	49
12 M	0356	5.4	165
	1031	2.5	76
	1550	4.0	122
	2140	2.0	61
13 Tu ◑	0439	5.6	171
	1139	2.1	64
	1717	3.8	116
	2228	2.4	73
14 W	0523	5.8	177
	1241	1.6	49
	1845	3.8	116
	2324	2.7	82
15 Th	0609	6.0	183
	1333	1.0	30
	1957	4.0	122

	Time	Height	
	h m	ft	cm
16 F	0024	2.9	88
	0655	6.4	195
	1420	0.4	12
	2054	4.3	131
17 Sa	0123	3.0	91
	0742	6.7	204
	1503	−0.2	−6
	2141	4.6	140
18 Su	0218	2.9	88
	0829	7.0	213
	1545	−0.6	−18
	2223	5.0	152
19 M	0311	2.8	85
	0916	7.2	219
	1627	−0.9	−27
	2304	5.3	162
20 Tu ●	0403	2.6	79
	1004	7.3	223
	1709	−1.0	−30
	2345	5.5	168
21 W	0455	2.4	73
	1053	7.2	219
	1751	−0.9	−27
22 Th	0026	5.8	177
	0550	2.2	67
	1145	6.9	210
	1834	−0.6	−18
23 F	0109	6.0	183
	0648	2.0	61
	1239	6.4	195
	1917	−0.2	−6
24 Sa	0154	6.2	189
	0750	1.8	55
	1338	5.7	174
	2003	0.4	12
25 Su	0241	6.3	192
	0858	1.7	52
	1445	5.1	155
	2051	1.1	34
26 M ◐	0332	6.4	195
	1013	1.4	43
	1604	4.5	137
	2144	1.8	55
27 Tu	0426	6.4	195
	1129	1.1	34
	1734	4.2	128
	2244	2.3	70
28 W	0523	6.4	195
	1240	0.8	24
	1904	4.2	128
	2351	2.7	82
29 Th	0620	6.4	195
	1342	0.4	12
	2018	4.4	134
30 F	0058	2.9	88
	0715	6.5	198
	1435	0.1	3
	2115	4.6	140
31 Sa	0159	3.0	91
	0805	6.5	198
	1520	0.0	0
	2200	4.8	146

February

	Time	Height	
	h m	ft	cm
1 Su	0251	2.9	88
	0850	6.5	198
	1559	−0.1	−3
	2238	5.0	152
2 M	0336	2.8	85
	0932	6.4	195
	1635	−0.1	−3
	2311	5.1	155
3 Tu ○	0417	2.7	82
	1010	6.3	192
	1707	0.0	0
	2341	5.2	158
4 W	0456	2.6	79
	1047	6.2	189
	1738	0.2	6
5 Th	0010	5.3	162
	0534	2.5	76
	1123	5.9	180
	1807	0.4	12
6 F	0040	5.4	165
	0614	2.4	73
	1201	5.6	171
	1837	0.7	21
7 Sa	0109	5.4	165
	0656	2.3	70
	1240	5.2	158
	1907	1.1	34
8 Su	0141	5.4	165
	0743	2.2	67
	1324	4.8	146
	1938	1.5	46
9 M	0214	5.5	168
	0835	2.2	67
	1416	4.4	134
	2011	1.9	58
10 Tu	0251	5.5	168
	0936	2.0	61
	1522	4.0	122
	2049	2.3	70
11 W ◑	0334	5.6	171
	1044	1.7	52
	1645	3.8	116
	2138	2.7	82
12 Th	0425	5.7	174
	1152	1.3	40
	1816	3.8	116
	2241	2.9	88
13 F	0521	5.9	180
	1253	0.9	27
	1931	4.0	122
	2353	3.1	94
14 Sa	0619	6.2	189
	1346	0.3	9
	2026	4.4	134
15 Su	0102	3.0	91
	0716	6.5	198
	1434	−0.1	−3
	2111	4.7	143

	Time	Height	
	h m	ft	cm
16 M	0203	2.7	82
	0811	6.8	207
	1519	−0.5	−15
	2151	5.1	155
17 Tu	0300	2.3	70
	0904	7.0	213
	1602	−0.7	−21
	2230	5.5	168
18 W ●	0353	1.9	58
	0955	7.0	213
	1644	−0.7	−21
	2309	5.9	180
19 Th	0446	1.5	46
	1047	6.9	210
	1725	−0.5	−15
	2349	6.1	186
20 F	0539	1.2	37
	1140	6.6	201
	1807	−0.2	−6
21 Sa	0030	6.3	192
	0634	1.0	30
	1235	6.1	186
	1850	0.4	12
22 Su	0113	6.4	195
	0733	0.8	24
	1334	5.5	168
	1934	1.0	30
23 M	0159	6.4	195
	0836	0.8	24
	1441	4.9	149
	2022	1.6	49
24 Tu	0250	6.3	192
	0944	0.8	24
	1558	4.4	134
	2117	2.2	67
25 W ◐	0346	6.1	186
	1057	0.7	21
	1726	4.2	128
	2223	2.6	79
26 Th	0448	5.9	180
	1210	0.6	18
	1851	4.2	128
	2339	2.9	88
27 F	0553	5.8	177
	1314	0.5	15
	2000	4.4	134
28 Sa	0052	2.9	88
	0655	5.8	177
	1408	0.3	9
	2051	4.6	140

March

	Time	Height	
	h m	ft	cm
1 Su	0153	2.8	85
	0750	5.8	177
	1453	0.3	9
	2130	4.8	146
2 M	0243	2.6	79
	0838	5.8	177
	1532	0.3	9
	2203	5.0	152
3 Tu	0326	2.3	70
	0920	5.8	177
	1605	0.3	9
	2232	5.1	155
4 W	0404	2.1	64
	0959	5.7	174
	1636	0.4	12
	2258	5.2	158
5 Th ○	0440	1.8	55
	1036	5.6	171
	1705	0.6	18
	2324	5.3	162
6 F	0516	1.7	52
	1113	5.5	168
	1733	0.8	24
	2351	5.4	165
7 Sa	0553	1.5	46
	1151	5.2	158
	1801	1.1	34
8 Su	0018	5.5	168
	0631	1.4	43
	1231	4.9	149
	1830	1.4	43
9 M	0047	5.5	168
	0713	1.3	40
	1315	4.6	140
	1900	1.8	55
10 Tu	0119	5.5	168
	0800	1.2	37
	1407	4.3	131
	1934	2.1	64
11 W	0156	5.5	168
	0854	1.1	34
	1511	4.0	122
	2015	2.5	76
12 Th	0240	5.4	165
	0957	1.0	30
	1628	3.8	116
	2108	2.8	85
13 F ◑	0334	5.5	168
	1104	0.8	24
	1751	3.9	119
	2220	2.9	88
14 Sa	0440	5.5	168
	1210	0.5	15
	1859	4.1	125
	2340	2.9	88
15 Su	0549	5.7	174
	1308	0.2	6
	1951	4.5	137

	Time	Height	
	h m	ft	cm
16 M	0053	2.6	79
	0655	5.9	180
	1400	−0.1	−3
	2034	4.9	149
17 Tu	0156	2.1	64
	0757	6.1	186
	1447	−0.3	−9
	2114	5.3	162
18 W	0252	1.5	46
	0854	6.2	189
	1531	−0.4	−12
	2153	5.7	174
19 Th	0345	0.9	27
	0949	6.3	192
	1614	−0.2	−6
	2232	6.1	186
20 F ●	0436	0.4	12
	1043	6.1	186
	1656	0.0	0
	2311	6.3	192
21 Sa	0528	0.0	0
	1137	5.9	180
	1738	0.4	12
	2352	6.5	198
22 Su	0620	−0.2	−6
	1233	5.5	168
	1822	0.9	27
23 M	0034	6.4	195
	0714	−0.2	−6
	1332	5.0	152
	1907	1.5	46
24 Tu	0119	6.2	189
	0811	−0.1	−3
	1437	4.6	140
	1958	2.0	61
25 W	0209	5.9	180
	0913	0.0	0
	1550	4.3	131
	2056	2.4	73
26 Th ◐	0305	5.6	171
	1020	0.2	6
	1709	4.2	128
	2208	2.7	82
27 F	0409	5.2	158
	1129	0.4	12
	1825	4.2	128
	2328	2.8	85
28 Sa	0520	5.0	152
	1233	0.4	12
	1925	4.4	134
29 Su	0043	2.6	79
	0629	4.9	149
	1328	0.5	15
	2011	4.6	140
30 M	0142	2.3	70
	0729	4.9	149
	1413	0.5	15
	2047	4.7	143
31 Tu	0230	2.0	61
	0820	5.0	152
	1452	0.6	18
	2118	4.9	149

Time meridian 120° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.
Heights are referred to mean lower low water which is the chart datum of soundings.

Arena Cove, California, 2015

Times and Heights of High and Low Waters

April

	Time	Height		Time	Height
	h m	ft / cm		h m	ft / cm
1 W	0311	1.6 / 49	**16** Th	0246	0.6 / 18
	0905	5.0 / 152		0848	5.3 / 162
	1526	0.7 / 21		1457	0.2 / 6
	2145	5.1 / 155		2116	5.9 / 180
2 Th	0348	1.3 / 40	**17** F	0337	−0.1 / −3
	0947	5.0 / 152		0946	5.3 / 162
	1557	0.8 / 24		1541	0.4 / 12
	2211	5.2 / 158		2155	6.3 / 192
3 F	0423	0.9 / 27	**18** Sa	0427	−0.6 / −18
	1026	4.9 / 149		1042	5.2 / 158
	1626	1.0 / 30		1625	0.7 / 21
	2237	5.3 / 162	●	2235	6.4 / 195
4 Sa	0457	0.7 / 21	**19** Su	0516	−1.0 / −30
	1105	4.8 / 146		1136	5.1 / 155
	1655	1.2 / 37		1709	1.1 / 34
○	2304	5.4 / 165		2316	6.4 / 195
5 Su	0533	0.4 / 12	**20** M	0605	−1.1 / −34
	1145	4.7 / 143		1232	4.9 / 149
	1725	1.5 / 46		1755	1.5 / 46
	2331	5.5 / 168		2358	6.3 / 192
6 M	0610	0.3 / 9	**21** Tu	0655	−1.1 / −34
	1227	4.5 / 137		1329	4.6 / 140
	1756	1.7 / 52		1843	1.9 / 58
7 Tu	0001	5.5 / 168	**22** W	0043	6.0 / 183
	0650	0.2 / 6		0747	−0.8 / −24
	1314	4.3 / 131		1430	4.4 / 134
	1829	2.0 / 61		1935	2.2 / 67
8 W	0035	5.5 / 168	**23** Th	0131	5.5 / 168
	0735	0.1 / 3		0842	−0.5 / −15
	1407	4.1 / 125		1535	4.3 / 131
	1907	2.3 / 70		2037	2.5 / 76
9 Th	0113	5.4 / 165	**24** F	0225	5.1 / 155
	0825	0.1 / 3		0940	−0.2 / −6
	1508	3.9 / 119		1642	4.2 / 128
	1955	2.6 / 79		2150	2.6 / 79
10 F	0200	5.3 / 162	**25** Sa	0327	4.7 / 143
	0922	0.1 / 3		1040	0.1 / 3
	1616	3.9 / 119		1745	4.3 / 131
	2057	2.7 / 82	◐	2310	2.5 / 76
11 Sa	0258	5.1 / 155	**26** Su	0438	4.3 / 131
	1025	0.1 / 3		1139	0.4 / 12
	1724	4.0 / 122		1838	4.4 / 134
◑	2215	2.7 / 82			
12 Su	0408	5.0 / 152	**27** M	0023	2.3 / 70
	1128	0.1 / 3		0552	4.1 / 125
	1823	4.3 / 131		1233	0.6 / 18
	2337	2.5 / 76		1921	4.6 / 140
13 M	0525	5.0 / 152	**28** Tu	0122	1.9 / 58
	1227	0.0 / 0		0659	4.1 / 125
	1912	4.7 / 143		1320	0.8 / 24
				1957	4.8 / 146
14 Tu	0049	2.0 / 61	**29** W	0210	1.4 / 43
	0639	5.1 / 155		0757	4.1 / 125
	1321	0.0 / 0		1400	0.9 / 27
	1955	5.1 / 155		2027	5.0 / 152
15 W	0151	1.3 / 40	**30** Th	0251	1.0 / 30
	0746	5.2 / 158		0847	4.2 / 128
	1410	0.0 / 0		1437	1.1 / 34
	2036	5.5 / 168		2056	5.2 / 158

May

	Time	Height		Time	Height
	h m	ft / cm		h m	ft / cm
1 F	0328	0.6 / 18	**16** Sa	0330	−0.8 / −24
	0933	4.2 / 128		0946	4.5 / 137
	1511	1.3 / 40		1510	1.1 / 34
	2124	5.3 / 162		2123	6.4 / 195
2 Sa	0403	0.2 / 6	**17** Su	0418	−1.2 / −37
	1016	4.3 / 131		1042	4.6 / 140
	1543	1.5 / 46		1557	1.4 / 43
	2152	5.5 / 168	●	2205	6.5 / 198
3 Su	0438	−0.2 / −6	**18** M	0505	−1.5 / −46
	1058	4.3 / 131		1136	4.6 / 140
	1616	1.6 / 49		1643	1.7 / 52
○	2221	5.6 / 171		2246	6.4 / 195
4 M	0514	−0.4 / −12	**19** Tu	0551	−1.5 / −46
	1141	4.3 / 131		1229	4.6 / 140
	1650	1.8 / 55		1731	2.0 / 61
	2252	5.7 / 174		2329	6.2 / 189
5 Tu	0552	−0.6 / −18	**20** W	0637	−1.4 / −43
	1225	4.2 / 128		1322	4.5 / 137
	1726	2.1 / 64		1820	2.2 / 67
	2325	5.7 / 174			
6 W	0632	−0.7 / −21	**21** Th	0012	5.8 / 177
	1312	4.2 / 128		0723	−1.1 / −34
	1805	2.3 / 70		1415	4.4 / 134
				1913	2.4 / 73
7 Th	0003	5.6 / 171	**22** F	0058	5.4 / 165
	0716	−0.7 / −21		0811	−0.7 / −21
	1404	4.1 / 125		1509	4.4 / 134
	1850	2.4 / 73		2013	2.5 / 76
8 F	0045	5.5 / 168	**23** Sa	0147	4.9 / 149
	0804	−0.7 / −21		0859	−0.3 / −9
	1459	4.1 / 125		1604	4.4 / 134
	1946	2.6 / 79		2121	2.6 / 79
9 Sa	0135	5.3 / 162	**24** Su	0244	4.4 / 134
	0856	−0.6 / −18		0949	0.1 / 3
	1557	4.2 / 128		1656	4.4 / 134
	2054	2.6 / 79		2236	2.4 / 73
10 Su	0235	5.0 / 152	**25** M	0350	4.0 / 122
	0951	−0.4 / −12		1039	0.5 / 15
	1654	4.4 / 134		1744	4.6 / 140
	2214	2.4 / 73	◐	2349	2.1 / 64
11 M	0348	4.7 / 143	**26** Tu	0504	3.7 / 113
	1049	−0.2 / −6		1129	0.8 / 24
	1746	4.7 / 143		1825	4.7 / 143
◑	2333	2.0 / 61			
12 Tu	0508	4.4 / 134	**27** W	0051	1.7 / 52
	1146	0.1 / 3		0619	3.5 / 107
	1834	5.1 / 155		1216	1.1 / 34
				1902	4.9 / 149
13 W	0044	1.3 / 40	**28** Th	0142	1.2 / 37
	0627	4.3 / 131		0726	3.5 / 107
	1241	0.3 / 9		1301	1.4 / 43
	1918	5.5 / 168		1935	5.2 / 158
14 Th	0145	0.6 / 18	**29** F	0225	0.7 / 21
	0740	4.4 / 134		0825	3.6 / 110
	1333	0.6 / 18		1342	1.6 / 49
	2000	5.9 / 180		2007	5.4 / 165
15 F	0240	−0.1 / −3	**30** Sa	0304	0.2 / 6
	0846	4.5 / 137		0917	3.8 / 116
	1422	0.8 / 24		1422	1.8 / 55
	2042	6.2 / 189		2039	5.6 / 171
			31 Su	0341	−0.2 / −6
				1004	3.9 / 119
				1501	1.9 / 58
				2112	5.8 / 177

June

	Time	Height		Time	Height
	h m	ft / cm		h m	ft / cm
1 M	0418	−0.6 / −18	**16** Tu	0453	−1.4 / −43
	1048	4.0 / 122		1132	4.5 / 137
	1539	2.1 / 64		1623	2.2 / 67
	2146	6.0 / 183	●	2224	6.4 / 195
2 Tu	0455	−0.9 / −27	**17** W	0535	−1.4 / −43
	1132	4.1 / 125		1218	4.5 / 137
	1619	2.2 / 67		1711	2.3 / 70
○	2222	6.1 / 186		2306	6.2 / 189
3 W	0534	−1.1 / −34	**18** Th	0617	−1.2 / −37
	1216	4.2 / 128		1303	4.6 / 140
	1701	2.3 / 70		1759	2.4 / 73
	2300	6.1 / 186		2348	5.8 / 177
4 Th	0615	−1.2 / −37	**19** F	0657	−0.9 / −27
	1301	4.3 / 131		1348	4.6 / 140
	1747	2.4 / 73		1849	2.5 / 76
	2342	6.0 / 183			
5 F	0658	−1.2 / −37	**20** Sa	0031	5.4 / 165
	1348	4.4 / 134		0738	−0.5 / −15
	1839	2.4 / 73		1432	4.6 / 140
				1943	2.5 / 76
6 Sa	0029	5.8 / 177	**21** Su	0116	5.0 / 152
	0743	−1.1 / −34		0818	−0.1 / −3
	1437	4.5 / 137		1516	4.6 / 140
	1940	2.4 / 73		2043	2.5 / 76
7 Su	0122	5.4 / 165	**22** M	0206	4.5 / 137
	0831	−0.8 / −24		0859	0.3 / 9
	1527	4.7 / 143		1600	4.7 / 143
	2049	2.3 / 70		2151	2.4 / 73
8 M	0223	4.9 / 149	**23** Tu	0304	4.0 / 122
	0921	−0.4 / −12		0941	0.8 / 24
	1618	5.0 / 152		1643	4.8 / 146
	2207	2.0 / 61		2301	2.1 / 64
9 Tu	0335	4.5 / 137	**24** W	0414	3.6 / 110
	1014	0.0 / 0		1025	1.2 / 37
	1708	5.3 / 162		1724	5.0 / 152
◑	2324	1.5 / 46	◐		
10 W	0457	4.1 / 125	**25** Th	0008	1.8 / 55
	1108	0.5 / 15		0534	3.4 / 104
	1757	5.6 / 171		1111	1.6 / 49
				1805	5.2 / 158
11 Th	0035	0.9 / 27	**26** F	0105	1.3 / 40
	0621	3.9 / 119		0653	3.4 / 104
	1204	0.9 / 27		1200	1.9 / 58
	1844	6.0 / 183		1843	5.4 / 165
12 F	0137	0.2 / 6	**27** Sa	0153	0.8 / 24
	0739	3.9 / 119		0801	3.5 / 107
	1300	1.3 / 40		1249	2.1 / 64
	1930	6.2 / 189		1921	5.6 / 171
13 Sa	0232	−0.4 / −12	**28** Su	0236	0.2 / 6
	0848	4.0 / 122		0858	3.7 / 113
	1353	1.6 / 49		1337	2.3 / 70
	2015	6.5 / 198		2000	5.9 / 180
14 Su	0322	−0.9 / −27	**29** M	0316	−0.2 / −6
	0948	4.2 / 128		0947	3.9 / 119
	1445	1.8 / 55		1423	2.3 / 70
	2059	6.6 / 201		2038	6.2 / 189
15 M	0409	−1.2 / −37	**30** Tu	0355	−0.7 / −21
	1042	4.4 / 134		1031	4.1 / 125
	1535	2.0 / 61		1509	2.4 / 73
	2142	6.5 / 198		2119	6.4 / 195

Time meridian 120° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.
Heights are referred to mean lower low water which is the chart datum of soundings.

Arena Cove, California, 2015

Times and Heights of High and Low Waters

July

	Time	Height	
	h m	ft	cm
1 W ○	0434	−1.0	−30
	1113	4.3	131
	1556	2.4	73
	2200	6.5	198
2 Th	0514	−1.2	−37
	1154	4.5	137
	1643	2.3	70
	2244	6.5	198
3 F	0555	−1.3	−40
	1236	4.7	143
	1734	2.3	70
	2330	6.4	195
4 Sa	0636	−1.2	−37
	1319	4.9	149
	1829	2.2	67
5 Su	0020	6.1	186
	0720	−0.9	−27
	1403	5.1	155
	1930	2.1	64
6 M	0115	5.6	171
	0805	−0.5	−15
	1450	5.4	165
	2038	1.9	58
7 Tu	0217	5.0	152
	0852	0.0	0
	1539	5.6	171
	2152	1.6	49
8 W ◑	0329	4.4	134
	0942	0.6	18
	1630	5.8	177
	2308	1.2	37
9 Th	0453	4.0	122
	1037	1.1	34
	1722	6.0	183
10 F	0021	0.6	18
	0620	3.8	116
	1136	1.6	49
	1815	6.2	189
11 Sa	0125	0.1	3
	0741	3.9	119
	1237	2.0	61
	1906	6.4	195
12 Su	0222	−0.3	−9
	0849	4.1	125
	1336	2.2	67
	1956	6.5	198
13 M	0311	−0.7	−21
	0946	4.3	131
	1431	2.3	70
	2043	6.5	198
14 Tu	0356	−0.9	−27
	1034	4.5	137
	1522	2.4	73
	2127	6.5	198
15 W ●	0438	−0.9	−27
	1116	4.6	140
	1610	2.4	73
	2209	6.4	195

	Time	Height	
	h m	ft	cm
16 Th	0517	−0.8	−24
	1155	4.7	143
	1655	2.4	73
	2250	6.1	186
17 F	0553	−0.6	−18
	1232	4.8	146
	1739	2.4	73
	2329	5.9	180
18 Sa	0628	−0.4	−12
	1308	4.8	146
	1823	2.4	73
19 Su	0009	5.5	168
	0703	0.0	0
	1344	4.9	149
	1911	2.4	73
20 M	0051	5.1	155
	0737	0.4	12
	1420	4.9	149
	2003	2.3	70
21 Tu	0136	4.6	140
	0811	0.8	24
	1458	5.0	152
	2101	2.2	67
22 W	0229	4.2	128
	0848	1.2	37
	1538	5.0	152
	2206	2.1	64
23 Th ◐	0334	3.8	116
	0928	1.7	52
	1620	5.1	155
	2314	1.8	55
24 F	0454	3.5	107
	1014	2.0	61
	1706	5.3	162
25 Sa	0018	1.4	43
	0619	3.5	107
	1107	2.3	70
	1752	5.5	168
26 Su	0114	0.9	27
	0734	3.6	110
	1206	2.5	76
	1839	5.8	177
27 M	0203	0.4	12
	0833	3.8	116
	1303	2.6	79
	1926	6.1	186
28 Tu	0246	−0.1	−3
	0920	4.1	125
	1358	2.6	79
	2012	6.4	195
29 W	0328	−0.5	−15
	1002	4.4	134
	1449	2.4	73
	2058	6.6	201
30 Th	0409	−0.8	−24
	1041	4.7	143
	1539	2.2	67
	2145	6.8	207
31 F ○	0449	−1.0	−30
	1120	5.0	152
	1630	2.0	61
	2233	6.8	207

August

	Time	Height	
	h m	ft	cm
1 Sa	0530	−1.0	−30
	1159	5.3	162
	1722	1.8	55
	2322	6.6	201
2 Su	0611	−0.8	−24
	1240	5.5	168
	1818	1.5	46
3 M	0015	6.2	189
	0653	−0.4	−12
	1323	5.7	174
	1917	1.4	43
4 Tu	0111	5.7	174
	0737	0.1	3
	1409	5.9	180
	2021	1.2	37
5 W	0215	5.0	152
	0824	0.7	21
	1458	6.0	183
	2132	1.0	30
6 Th ◑	0328	4.5	137
	0915	1.3	40
	1552	6.1	186
	2246	0.8	24
7 F	0452	4.1	125
	1013	1.9	58
	1650	6.1	186
8 Sa	0000	0.5	15
	0620	4.0	122
	1119	2.3	70
	1749	6.1	186
9 Su	0107	0.2	6
	0738	4.1	125
	1228	2.5	76
	1848	6.2	189
10 M	0205	−0.1	−3
	0840	4.3	131
	1332	2.5	76
	1943	6.2	189
11 Tu	0254	−0.2	−6
	0930	4.5	137
	1427	2.5	76
	2032	6.2	189
12 W	0338	−0.3	−9
	1011	4.7	143
	1516	2.3	70
	2117	6.2	189
13 Th	0416	−0.3	−9
	1047	4.8	146
	1559	2.2	67
	2158	6.1	186
14 F ●	0451	−0.2	−6
	1119	4.9	149
	1640	2.1	64
	2237	6.0	183
15 Sa	0524	0.0	0
	1150	5.0	152
	1719	2.0	61
	2315	5.7	174

	Time	Height	
	h m	ft	cm
16 Su	0555	0.3	9
	1220	5.1	155
	1759	1.9	58
	2353	5.4	165
17 M	0625	0.6	18
	1250	5.1	155
	1840	1.8	55
18 Tu	0033	5.1	155
	0656	1.0	30
	1321	5.1	155
	1925	1.8	55
19 W	0117	4.7	143
	0728	1.4	43
	1355	5.1	155
	2015	1.8	55
20 Th	0208	4.3	131
	0802	1.8	55
	1433	5.1	155
	2113	1.7	52
21 F	0309	3.9	119
	0841	2.2	67
	1516	5.2	158
	2218	1.5	46
22 Sa ◐	0426	3.7	113
	0929	2.5	76
	1606	5.2	158
	2326	1.3	40
23 Su	0551	3.7	113
	1030	2.7	82
	1702	5.4	165
24 M	0029	0.9	27
	0705	3.8	116
	1138	2.8	85
	1801	5.6	171
25 Tu	0123	0.5	15
	0800	4.1	125
	1244	2.7	82
	1857	5.9	180
26 W	0211	0.1	3
	0845	4.4	134
	1343	2.4	73
	1951	6.2	189
27 Th	0256	−0.3	−9
	0924	4.8	146
	1436	2.1	64
	2043	6.5	198
28 F	0338	−0.5	−15
	1002	5.1	155
	1528	1.7	52
	2134	6.6	201
29 Sa ○	0419	−0.5	−15
	1040	5.5	168
	1619	1.2	37
	2225	6.6	201
30 Su	0500	−0.4	−12
	1119	5.8	177
	1711	0.9	27
	2317	6.4	195
31 M	0541	−0.1	−3
	1159	6.1	186
	1804	0.6	18

September

	Time	Height	
	h m	ft	cm
1 Tu	0011	6.0	183
	0624	0.3	9
	1242	6.2	189
	1901	0.4	12
2 W	0109	5.5	168
	0709	0.9	27
	1327	6.2	189
	2002	0.4	12
3 Th	0214	5.0	152
	0757	1.4	43
	1418	6.1	186
	2108	0.4	12
4 F	0327	4.5	137
	0853	2.0	61
	1514	6.0	183
	2219	0.4	12
5 Sa ◑	0449	4.3	131
	0959	2.4	73
	1617	5.8	177
	2332	0.4	12
6 Su	0612	4.3	131
	1114	2.6	79
	1725	5.7	174
7 M	0040	0.3	9
	0722	4.4	134
	1228	2.6	79
	1831	5.7	174
8 Tu	0138	0.2	6
	0817	4.6	140
	1331	2.4	73
	1930	5.7	174
9 W	0228	0.2	6
	0900	4.8	146
	1424	2.2	67
	2022	5.7	174
10 Th	0309	0.3	9
	0936	4.9	149
	1508	2.0	61
	2107	5.7	174
11 F	0346	0.4	12
	1007	5.0	152
	1548	1.7	52
	2148	5.6	171
12 Sa ●	0418	0.5	15
	1035	5.1	155
	1625	1.5	46
	2227	5.5	168
13 Su	0448	0.7	21
	1102	5.2	158
	1700	1.3	40
	2304	5.4	165
14 M	0517	1.0	30
	1129	5.3	162
	1737	1.2	37
	2343	5.1	155
15 Tu	0546	1.3	40
	1156	5.3	162
	1814	1.1	34

	Time	Height	
	h m	ft	cm
16 W	0023	4.9	149
	0616	1.6	49
	1226	5.3	162
	1855	1.0	30
17 Th	0107	4.6	140
	0648	1.9	58
	1257	5.3	162
	1939	1.0	30
18 F	0157	4.3	131
	0723	2.3	70
	1334	5.2	158
	2031	1.0	30
19 Sa	0257	4.1	125
	0804	2.6	79
	1417	5.2	158
	2130	1.0	30
20 Su	0410	3.9	119
	0858	2.8	85
	1511	5.1	155
	2236	0.9	27
21 M ◐	0526	4.0	122
	1008	2.9	88
	1616	5.2	158
	2341	0.7	21
22 Tu	0632	4.1	125
	1125	2.9	88
	1726	5.3	162
23 W	0039	0.5	15
	0723	4.4	134
	1234	2.5	76
	1832	5.5	168
24 Th	0131	0.2	6
	0805	4.8	146
	1334	2.1	64
	1934	5.8	177
25 F	0218	0.0	0
	0844	5.2	158
	1428	1.5	46
	2031	6.0	183
26 Sa	0302	0.0	0
	0921	5.6	171
	1519	0.8	24
	2126	6.1	186
27 Su ○	0345	0.1	3
	1000	6.0	183
	1609	0.3	9
	2220	6.1	186
28 M	0428	0.3	9
	1039	6.3	192
	1659	−0.2	−6
	2314	5.9	180
29 Tu	0510	0.7	21
	1120	6.5	198
	1751	−0.4	−12
30 W	0009	5.6	171
	0555	1.1	34
	1202	6.5	198
	1844	−0.5	−15

Time meridian 120° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.
Heights are referred to mean lower low water which is the chart datum of soundings.

Arena Cove, California, 2015

Times and Heights of High and Low Waters

October

	Time	Height	
	h m	ft	cm
1 Th	0108	5.3	162
	0642	1.6	49
	1248	6.4	195
	1941	−0.4	−12
2 F	0212	4.9	149
	0734	2.1	64
	1339	6.1	186
	2042	−0.2	−6
3 Sa	0323	4.6	140
	0835	2.5	76
	1436	5.7	174
	2148	0.1	3
4 Su ◑	0439	4.5	137
	0948	2.7	82
	1543	5.4	165
	2256	0.3	9
5 M	0552	4.6	140
	1109	2.7	82
	1656	5.1	155
6 Tu	0002	0.4	12
	0653	4.7	143
	1224	2.5	76
	1809	5.0	152
7 W	0100	0.6	18
	0742	4.9	149
	1325	2.2	67
	1913	5.0	152
8 Th	0149	0.7	21
	0821	5.0	152
	1415	1.8	55
	2008	5.0	152
9 F	0230	0.8	24
	0853	5.2	158
	1456	1.5	46
	2055	5.0	152
10 Sa	0306	1.0	30
	0922	5.3	162
	1534	1.1	34
	2137	5.0	152
11 Su	0338	1.2	37
	0949	5.4	165
	1608	0.8	24
	2217	5.0	152
12 M ●	0409	1.4	43
	1015	5.5	168
	1642	0.6	18
	2256	4.9	149
13 Tu	0438	1.6	49
	1041	5.6	171
	1717	0.4	12
	2336	4.8	146
14 W	0508	1.9	58
	1109	5.6	171
	1753	0.3	9
15 Th	0018	4.7	143
	0540	2.1	64
	1138	5.6	171
	1831	0.3	9

	Time	Height	
	h m	ft	cm
16 F	0103	4.5	137
	0614	2.4	73
	1211	5.5	168
	1913	0.3	9
17 Sa	0153	4.3	131
	0652	2.7	82
	1248	5.4	165
	2000	0.3	9
18 Su	0250	4.2	128
	0739	2.9	88
	1332	5.3	162
	2054	0.4	12
19 M	0354	4.2	128
	0840	3.0	91
	1428	5.1	155
	2153	0.4	12
20 Tu ◐	0458	4.3	131
	0956	3.0	91
	1538	5.0	152
	2255	0.5	15
21 W	0555	4.6	140
	1116	2.7	82
	1655	4.9	149
	2354	0.4	12
22 Th	0642	4.9	149
	1226	2.2	67
	1811	5.0	152
23 F	0048	0.5	15
	0724	5.3	162
	1326	1.5	46
	1920	5.2	158
24 Sa	0138	0.5	15
	0804	5.8	177
	1420	0.8	24
	2023	5.3	162
25 Su	0225	0.6	18
	0844	6.2	189
	1511	0.1	3
	2121	5.4	165
26 M	0311	0.9	27
	0923	6.6	201
	1600	−0.5	−15
	2218	5.5	168
27 Tu ○	0356	1.1	34
	1004	6.8	207
	1649	−0.9	−27
	2313	5.4	165
28 W	0441	1.5	46
	1046	6.8	207
	1738	−1.1	−34
29 Th	0008	5.3	162
	0528	1.8	55
	1129	6.7	204
	1828	−1.1	−34
30 F	0106	5.1	155
	0618	2.2	67
	1215	6.4	195
	1920	−0.9	−27
31 Sa	0206	4.9	149
	0713	2.5	76
	1305	6.0	183
	2015	−0.5	−15

November

	Time	Height	
	h m	ft	cm
1 Su	0309	4.8	146
	0817	2.8	85
	1400	5.5	168
	2112	−0.1	−3
2 M	0415	4.8	146
	0931	2.9	88
	1504	5.0	152
	2213	0.3	9
3 Tu ◑	0517	4.8	146
	1053	2.7	82
	1618	4.6	140
	2312	0.6	18
4 W	0612	5.0	152
	1207	2.4	73
	1735	4.4	134
5 Th	0008	0.9	27
	0657	5.1	155
	1309	2.0	61
	1846	4.3	131
6 F	0058	1.2	37
	0734	5.3	162
	1358	1.6	49
	1947	4.4	134
7 Sa	0141	1.4	43
	0807	5.5	168
	1439	1.1	34
	2040	4.4	134
8 Su	0219	1.6	49
	0836	5.6	171
	1516	0.7	21
	2126	4.5	137
9 M	0254	1.8	55
	0904	5.8	177
	1551	0.4	12
	2209	4.6	140
10 Tu	0327	2.0	61
	0932	5.9	180
	1625	0.1	3
	2250	4.6	140
11 W ●	0400	2.2	67
	1001	6.0	183
	1659	−0.1	−3
	2331	4.6	140
12 Th	0434	2.4	73
	1031	6.0	183
	1735	−0.3	−9
13 F	0013	4.6	140
	0509	2.6	79
	1103	6.0	183
	1812	−0.3	−9
14 Sa	0057	4.6	140
	0547	2.8	85
	1139	5.9	180
	1853	−0.3	−9
15 Su	0145	4.6	140
	0631	3.0	91
	1218	5.7	174
	1937	−0.2	−6

	Time	Height	
	h m	ft	cm
16 M	0236	4.6	140
	0723	3.1	94
	1305	5.5	168
	2025	−0.1	−3
17 Tu	0330	4.7	143
	0829	3.1	94
	1402	5.2	158
	2117	0.1	3
18 W ◐	0423	4.8	146
	0946	2.9	88
	1511	4.9	149
	2213	0.4	12
19 Th	0514	5.1	155
	1105	2.5	76
	1632	4.6	140
	2309	0.6	18
20 F	0601	5.5	168
	1216	1.9	58
	1755	4.5	137
21 Sa	0005	0.9	27
	0645	5.9	180
	1318	1.1	34
	1912	4.6	140
22 Su	0059	1.2	37
	0728	6.3	192
	1413	0.3	9
	2020	4.7	143
23 M	0150	1.4	43
	0811	6.7	204
	1503	−0.4	−12
	2122	4.9	149
24 Tu	0240	1.7	52
	0853	7.0	213
	1552	−0.9	−27
	2219	5.1	155
25 W ○	0329	1.9	58
	0936	7.1	216
	1639	−1.3	−40
	2313	5.1	155
26 Th	0417	2.2	67
	1020	7.1	216
	1726	−1.4	−43
27 F	0005	5.2	158
	0507	2.4	73
	1104	6.9	210
	1812	−1.2	−37
28 Sa	0057	5.1	155
	0558	2.6	79
	1149	6.5	198
	1859	−1.0	−30
29 Su	0150	5.1	155
	0653	2.8	85
	1237	6.0	183
	1946	−0.5	−15
30 M	0244	5.1	155
	0754	2.9	88
	1328	5.5	168
	2035	−0.1	−3

December

	Time	Height	
	h m	ft	cm
1 Tu	0338	5.1	155
	0903	2.9	88
	1425	5.0	152
	2125	0.4	12
2 W ◑	0430	5.1	155
	1019	2.8	85
	1532	4.5	137
	2215	0.9	27
3 Th	0520	5.2	158
	1134	2.5	76
	1650	4.1	125
	2306	1.4	43
4 F	0603	5.4	165
	1239	2.1	64
	1809	3.9	119
	2356	1.7	52
5 Sa	0642	5.5	168
	1332	1.6	49
	1921	3.9	119
6 Su	0043	2.0	61
	0718	5.7	174
	1416	1.1	34
	2022	4.1	125
7 M	0127	2.3	70
	0751	5.9	180
	1454	0.6	18
	2114	4.2	128
8 Tu	0208	2.5	76
	0823	6.1	186
	1531	0.2	6
	2159	4.4	134
9 W	0248	2.6	79
	0856	6.2	189
	1606	−0.1	−3
	2241	4.5	137
10 Th	0326	2.7	82
	0929	6.4	195
	1641	−0.4	−12
	2321	4.7	143
11 F ●	0405	2.8	85
	1004	6.5	198
	1717	−0.6	−18
12 Sa	0001	4.8	146
	0445	2.9	88
	1040	6.5	198
	1754	−0.6	−18
13 Su	0042	4.9	149
	0529	3.0	91
	1120	6.4	195
	1834	−0.6	−18
14 M	0125	5.0	152
	0617	3.0	91
	1203	6.2	189
	1915	−0.5	−15
15 Tu	0209	5.1	155
	0713	3.0	91
	1251	5.8	177
	1959	−0.2	−6

	Time	Height	
	h m	ft	cm
16 W	0255	5.3	162
	0817	2.9	88
	1348	5.4	165
	2045	0.2	6
17 Th	0343	5.5	168
	0931	2.6	79
	1457	4.9	149
	2135	0.6	18
18 F ◐	0432	5.8	177
	1049	2.2	67
	1618	4.5	137
	2229	1.1	34
19 Sa	0521	6.1	186
	1202	1.5	46
	1746	4.3	131
	2326	1.5	46
20 Su	0609	6.4	195
	1307	0.8	24
	1909	4.3	131
21 M	0024	1.9	58
	0658	6.8	207
	1404	0.1	3
	2022	4.5	137
22 Tu	0122	2.2	67
	0745	7.0	213
	1456	−0.5	−15
	2125	4.7	143
23 W	0217	2.4	73
	0831	7.2	219
	1544	−0.9	−27
	2219	4.9	149
24 Th	0311	2.6	79
	0917	7.2	219
	1629	−1.1	−34
	2309	5.1	155
25 F ○	0402	2.7	82
	1002	7.1	216
	1712	−1.1	−34
	2355	5.2	158
26 Sa	0452	2.7	82
	1046	6.9	210
	1754	−0.9	−27
27 Su	0039	5.3	162
	0541	2.8	85
	1130	6.6	201
	1836	−0.6	−18
28 M	0123	5.3	162
	0632	2.8	85
	1214	6.1	186
	1916	−0.2	−6
29 Tu	0206	5.3	162
	0726	2.9	88
	1300	5.6	171
	1956	0.3	9
30 W	0250	5.4	165
	0826	2.9	88
	1350	5.0	152
	2036	0.8	24
31 Th	0334	5.4	165
	0932	2.8	85
	1448	4.5	137
	2117	1.3	40

Time meridian 120° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.
Heights are referred to mean lower low water which is the chart datum of soundings.

Humboldt Bay, California, 2015

Times and Heights of High and Low Waters

January

	Time	Height	
	h m	ft	cm
1 Th	0154	2.7	82
	0822	7.8	238
	1523	0.0	0
	2201	5.4	165
2 F	0251	2.9	88
	0909	7.9	241
	1609	−0.4	−12
	2254	5.6	171
3 Sa	0344	3.0	91
	0953	7.9	241
	1651	−0.6	−18
	2339	5.8	177
4 Su ○	0431	3.0	91
	1035	7.8	238
	1730	−0.7	−21
5 M	0019	6.0	183
	0516	3.0	91
	1114	7.6	232
	1807	−0.6	−18
6 Tu	0055	6.0	183
	0558	3.0	91
	1152	7.4	226
	1843	−0.5	−15
7 W	0130	6.1	186
	0640	3.0	91
	1230	7.1	216
	1917	−0.2	−6
8 Th	0204	6.1	186
	0722	3.0	91
	1308	6.7	204
	1951	0.2	6
9 F	0239	6.1	186
	0807	3.0	91
	1348	6.2	189
	2025	0.6	18
10 Sa	0315	6.2	189
	0856	3.0	91
	1432	5.7	174
	2100	1.1	34
11 Su	0353	6.3	192
	0951	2.9	88
	1524	5.2	158
	2136	1.6	49
12 M	0433	6.4	195
	1054	2.7	82
	1628	4.8	146
	2217	2.1	64
13 Tu ◑	0517	6.5	198
	1200	2.3	70
	1744	4.5	137
	2306	2.6	79
14 W	0603	6.7	204
	1303	1.8	55
	1906	4.4	134
15 Th	0005	2.9	88
	0652	7.0	213
	1401	1.1	34
	2022	4.6	140

	Time	Height	
	h m	ft	cm
16 F	0109	3.2	98
	0742	7.3	223
	1452	0.5	15
	2126	5.0	152
17 Sa	0211	3.2	98
	0831	7.6	232
	1539	−0.2	−6
	2219	5.4	165
18 Su	0308	3.1	94
	0921	8.0	244
	1623	−0.8	−24
	2305	5.8	177
19 M	0402	2.9	88
	1009	8.2	250
	1706	−1.2	−37
	2348	6.2	189
20 Tu ●	0453	2.6	79
	1058	8.4	256
	1749	−1.4	−43
21 W	0030	6.5	198
	0544	2.3	70
	1147	8.3	253
	1832	−1.3	−40
22 Th	0112	6.8	207
	0637	2.0	61
	1238	8.0	244
	1915	−1.1	−34
23 F	0155	7.1	216
	0731	1.8	55
	1330	7.5	229
	1959	−0.6	−18
24 Sa	0240	7.2	219
	0829	1.7	52
	1427	6.8	207
	2044	0.1	3
25 Su	0326	7.3	223
	0932	1.6	49
	1529	6.1	186
	2131	0.9	27
26 M ◐	0416	7.4	226
	1040	1.4	43
	1640	5.4	165
	2223	1.7	52
27 Tu	0509	7.4	226
	1153	1.2	37
	1801	5.0	152
	2323	2.3	70
28 W	0605	7.4	226
	1305	0.9	27
	1929	4.9	149
29 Th	0029	2.8	85
	0703	7.3	223
	1410	0.6	18
	2050	5.0	152
30 F	0136	3.1	94
	0759	7.4	226
	1505	0.2	6
	2153	5.3	162
31 Sa	0238	3.1	94
	0851	7.4	226
	1553	0.0	0
	2241	5.6	171

February

	Time	Height	
	h m	ft	cm
1 Su	0332	3.1	94
	0939	7.4	226
	1634	−0.2	−6
	2320	5.8	177
2 M	0419	2.9	88
	1021	7.4	226
	1710	−0.2	−6
	2353	5.9	180
3 Tu ○	0502	2.7	82
	1101	7.3	223
	1745	−0.2	−6
4 W	0024	6.1	186
	0542	2.6	79
	1139	7.1	216
	1817	−0.1	−3
5 Th	0054	6.2	189
	0620	2.4	73
	1215	6.9	210
	1848	0.2	6
6 F	0123	6.3	192
	0659	2.3	70
	1252	6.6	201
	1919	0.5	15
7 Sa	0154	6.3	192
	0739	2.2	67
	1331	6.2	189
	1949	0.9	27
8 Su	0225	6.4	195
	0822	2.2	67
	1413	5.8	177
	2020	1.3	40
9 M	0258	6.4	195
	0909	2.1	64
	1500	5.3	162
	2052	1.8	55
10 Tu	0335	6.5	198
	1003	2.0	61
	1559	4.9	149
	2129	2.3	70
11 W ◑	0417	6.5	198
	1106	1.8	55
	1711	4.5	137
	2216	2.8	85
12 Th	0507	6.6	201
	1213	1.5	46
	1833	4.5	137
	2320	3.1	94
13 F	0604	6.8	207
	1319	1.0	30
	1953	4.6	140
14 Sa	0036	3.3	101
	0705	7.0	213
	1417	0.4	12
	2058	5.0	152
15 Su	0148	3.2	98
	0805	7.3	223
	1509	−0.2	−6
	2151	5.4	165

	Time	Height	
	h m	ft	cm
16 M	0251	2.8	85
	0902	7.7	235
	1557	−0.6	−18
	2236	5.9	180
17 Tu	0348	2.3	70
	0956	7.9	241
	1642	−1.0	−30
	2317	6.4	195
18 W ●	0441	1.8	55
	1048	8.1	247
	1725	−1.1	−34
	2358	6.8	207
19 Th	0533	1.3	40
	1140	8.0	244
	1808	−0.9	−27
20 F	0038	7.2	219
	0624	0.9	27
	1232	7.7	235
	1850	−0.5	−15
21 Sa	0120	7.4	226
	0717	0.7	21
	1325	7.2	219
	1933	0.0	0
22 Su	0202	7.5	229
	0811	0.6	18
	1421	6.6	201
	2017	0.7	21
23 M	0247	7.5	229
	0909	0.6	18
	1521	5.9	180
	2104	1.4	43
24 Tu	0336	7.3	223
	1012	0.7	21
	1629	5.3	162
	2157	2.1	64
25 W ◐	0429	7.1	216
	1120	0.8	24
	1747	5.0	152
	2259	2.7	82
26 Th	0529	6.9	210
	1232	0.8	24
	1913	4.9	149
27 F	0011	3.1	94
	0632	6.7	204
	1339	0.7	21
	2031	5.0	152
28 Sa	0124	3.1	94
	0736	6.6	201
	1438	0.5	15
	2129	5.3	162

March

	Time	Height	
	h m	ft	cm
1 Su	0228	3.0	91
	0833	6.6	201
	1526	0.4	12
	2212	5.5	168
2 M	0321	2.7	82
	0923	6.7	204
	1607	0.3	9
	2246	5.7	174
3 Tu	0406	2.4	73
	1007	6.7	204
	1642	0.2	6
	2316	5.9	180
4 W	0446	2.1	64
	1048	6.7	204
	1715	0.3	9
	2344	6.1	186
5 Th ○	0524	1.8	55
	1126	6.6	201
	1746	0.4	12
6 F	0011	6.2	189
	0600	1.5	46
	1203	6.4	195
	1816	0.7	21
7 Sa	0039	6.4	195
	0636	1.4	43
	1241	6.2	189
	1846	1.0	30
8 Su	0108	6.4	195
	0713	1.2	37
	1320	5.9	180
	1915	1.3	40
9 M	0137	6.5	198
	0753	1.1	34
	1401	5.6	171
	1946	1.7	52
10 Tu	0208	6.5	198
	0836	1.1	34
	1449	5.2	158
	2018	2.1	64
11 W	0243	6.5	198
	0925	1.1	34
	1545	4.9	149
	2057	2.5	76
12 Th	0325	6.4	195
	1023	1.0	30
	1653	4.6	140
	2148	2.9	88
13 F ◑	0418	6.4	195
	1129	0.9	27
	1809	4.6	140
	2258	3.1	94
14 Sa	0524	6.4	195
	1236	0.6	18
	1923	4.8	146
15 Su	0020	3.1	94
	0635	6.5	198
	1340	0.3	9
	2025	5.1	155

	Time	Height	
	h m	ft	cm
16 M	0136	2.8	85
	0743	6.7	204
	1436	−0.1	−3
	2116	5.6	171
17 Tu	0240	2.2	67
	0846	7.0	213
	1526	−0.4	−12
	2200	6.1	186
18 W	0337	1.5	46
	0945	7.2	219
	1613	−0.5	−15
	2241	6.7	204
19 Th	0430	0.8	24
	1040	7.3	223
	1657	−0.5	−15
	2322	7.1	216
20 F ●	0521	0.2	6
	1134	7.3	223
	1740	−0.2	−6
21 Sa	0002	7.4	226
	0610	−0.3	−9
	1226	7.0	213
	1823	0.2	6
22 Su	0043	7.6	232
	0700	−0.5	−15
	1320	6.7	204
	1907	0.7	21
23 M	0125	7.6	232
	0752	−0.5	−15
	1415	6.2	189
	1952	1.3	40
24 Tu	0210	7.4	226
	0845	−0.3	−9
	1513	5.7	174
	2040	1.9	58
25 W	0257	7.0	213
	0942	0.0	0
	1617	5.3	162
	2135	2.5	76
26 Th ◐	0351	6.6	201
	1044	0.3	9
	1729	5.0	152
	2240	2.9	88
27 F	0451	6.2	189
	1151	0.6	18
	1845	4.9	149
	2355	3.0	91
28 Sa	0558	5.9	180
	1257	0.7	21
	1954	5.1	155
29 Su	0110	2.9	88
	0706	5.7	174
	1356	0.7	21
	2046	5.3	162
30 M	0214	2.6	79
	0808	5.7	174
	1446	0.7	21
	2127	5.5	168
31 Tu	0305	2.1	64
	0902	5.8	177
	1528	0.7	21
	2200	5.7	174

Time meridian 120° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.
Heights are referred to mean lower low water which is the chart datum of soundings.

Humboldt Bay, California, 2015

Times and Heights of High and Low Waters

April

	Time	Height			Time	Height	
	h m	ft	cm		h m	ft	cm
1 W	0348	1.7	52	**16** Th	0327	0.6	18
	0949	5.9	180		0936	6.3	192
	1604	0.8	24		1540	0.1	3
	2229	6.0	183		2205	7.0	213
2 Th	0427	1.3	40	**17** F	0419	−0.2	−6
	1032	5.9	180		1034	6.4	195
	1638	0.9	27		1627	0.3	9
	2258	6.2	189		2246	7.4	226
3 F	0504	0.9	27	**18** Sa ●	0508	−0.8	−24
	1112	5.9	180		1129	6.4	195
	1710	1.0	30		1712	0.6	18
	2326	6.4	195		2327	7.6	232
4 Sa ○	0539	0.6	18	**19** Su	0556	−1.2	−37
	1152	5.9	180		1222	6.3	192
	1741	1.2	37		1757	1.0	30
	2355	6.5	198				
5 Su	0614	0.3	9	**20** M	0008	7.6	232
	1231	5.8	177		0644	−1.3	−40
	1812	1.5	46		1315	6.1	186
					1842	1.5	46
6 M	0024	6.6	201	**21** Tu	0051	7.5	229
	0651	0.2	6		0732	−1.2	−37
	1312	5.6	171		1408	5.8	177
	1844	1.8	55		1929	1.9	58
7 Tu	0053	6.6	201	**22** W	0135	7.1	216
	0729	0.1	3		0821	−0.9	−27
	1356	5.4	165		1503	5.6	171
	1917	2.1	64		2019	2.3	70
8 W	0125	6.5	198	**23** Th	0221	6.7	204
	0811	0.0	0		0912	−0.5	−15
	1444	5.1	155		1602	5.3	162
	1955	2.4	73		2115	2.7	82
9 Th	0202	6.5	198	**24** F	0313	6.1	186
	0858	0.1	3		1007	−0.1	−3
	1539	4.9	149		1704	5.1	155
	2039	2.7	82		2220	2.9	88
10 F	0247	6.3	192	**25** Sa ◐	0411	5.6	171
	0952	0.1	3		1105	0.3	9
	1642	4.8	146		1806	5.1	155
	2138	2.9	88		2334	2.9	88
11 Sa ◑	0344	6.1	186	**26** Su	0517	5.2	158
	1053	0.2	6		1205	0.7	21
	1748	4.9	149		1904	5.2	158
	2252	3.0	91				
12 Su	0455	6.0	183	**27** M	0047	2.6	79
	1158	0.2	6		0627	5.0	152
	1852	5.1	155		1302	0.9	27
					1952	5.4	165
13 M	0013	2.7	82	**28** Tu	0150	2.2	67
	0611	5.9	180		0734	4.9	149
	1301	0.1	3		1353	1.1	34
	1949	5.5	168		2032	5.6	171
14 Tu	0127	2.2	67	**29** W	0241	1.7	52
	0726	6.0	183		0834	5.0	152
	1359	0.1	3		1438	1.2	37
	2038	6.0	183		2107	5.9	180
15 W	0230	1.4	43	**30** Th	0325	1.2	37
	0834	6.2	189		0927	5.1	155
	1452	0.1	3		1518	1.3	40
	2122	6.5	198		2140	6.1	186

May

	Time	Height			Time	Height	
	h m	ft	cm		h m	ft	cm
1 F	0404	0.7	21	**16** Sa	0407	−0.8	−24
	1014	5.2	158		1031	5.7	174
	1555	1.5	46		1557	1.2	37
	2211	6.4	195		2214	7.6	232
2 Sa	0441	0.2	6	**17** Su ●	0455	−1.3	−40
	1058	5.3	162		1126	5.8	177
	1630	1.7	52		1645	1.5	46
	2242	6.6	201		2256	7.7	235
3 Su ○	0517	−0.2	−6	**18** M	0542	−1.6	−49
	1141	5.4	165		1219	5.8	177
	1705	1.8	55		1732	1.8	55
	2313	6.7	204		2339	7.6	232
4 M	0553	−0.5	−15	**19** Tu	0627	−1.6	−49
	1223	5.4	165		1309	5.8	177
	1740	2.1	64		1819	2.1	64
	2345	6.8	207				
5 Tu	0631	−0.7	−21	**20** W	0021	7.3	223
	1306	5.4	165		0712	−1.5	−46
	1817	2.3	70		1358	5.7	174
					1907	2.4	73
6 W	0018	6.8	207	**21** Th	0105	7.0	213
	0710	−0.8	−24		0757	−1.1	−34
	1351	5.3	162		1448	5.5	168
	1855	2.5	76		1957	2.6	79
7 Th	0055	6.7	204	**22** F	0150	6.5	198
	0752	−0.8	−24		0843	−0.7	−21
	1440	5.2	158		1538	5.4	165
	1939	2.7	82		2052	2.8	85
8 F	0136	6.6	201	**23** Sa	0238	5.9	180
	0838	−0.7	−21		0930	−0.2	−6
	1532	5.2	158		1629	5.4	165
	2031	2.8	85		2153	2.8	85
9 Sa	0225	6.3	192	**24** Su	0332	5.4	165
	0929	−0.6	−18		1018	0.3	9
	1627	5.2	158		1720	5.4	165
	2135	2.8	85		2301	2.8	85
10 Su	0325	6.0	183	**25** M ◐	0433	4.9	149
	1024	−0.3	−9		1109	0.7	21
	1724	5.4	165		1809	5.5	168
	2249	2.7	82				
11 M ◑	0436	5.6	171	**26** Tu	0011	2.5	76
	1123	0.0	0		0541	4.6	140
	1820	5.7	174		1201	1.1	34
					1854	5.6	171
12 Tu	0006	2.2	67	**27** W	0115	2.0	61
	0554	5.4	165		0651	4.4	134
	1223	0.2	6		1252	1.4	43
	1912	6.1	186		1935	5.9	180
13 W	0118	1.5	46	**28** Th	0209	1.5	46
	0712	5.3	162		0759	4.4	134
	1321	0.5	15		1340	1.7	52
	2001	6.5	198		2014	6.1	186
14 Th	0220	0.7	21	**29** F	0255	0.9	27
	0824	5.4	165		0900	4.5	137
	1416	0.7	21		1426	1.9	58
	2047	7.0	213		2050	6.4	195
15 F	0316	−0.1	−3	**30** Sa	0337	0.4	12
	0930	5.5	168		0954	4.7	143
	1508	1.0	30		1509	2.1	64
	2131	7.4	226		2126	6.7	204
				31 Su	0416	−0.2	−6
					1043	4.9	149
					1551	2.3	70
					2202	6.9	210

June

	Time	Height			Time	Height	
	h m	ft	cm		h m	ft	cm
1 M	0454	−0.6	−18	**16** Tu ●	0527	−1.5	−46
	1128	5.1	155		1212	5.6	171
	1631	2.4	73		1713	2.4	73
	2238	7.1	216		2316	7.5	229
2 Tu ○	0532	−1.0	−30	**17** W	0610	−1.4	−43
	1212	5.3	162		1258	5.7	174
	1712	2.5	76		1800	2.5	76
	2315	7.2	219		2359	7.3	223
3 W	0611	−1.2	−37	**18** Th	0651	−1.3	−40
	1256	5.4	165		1341	5.7	174
	1754	2.5	76		1847	2.6	79
	2354	7.2	219				
4 Th	0652	−1.3	−40	**19** F	0041	6.9	210
	1340	5.5	168		0732	−1.0	−30
	1839	2.6	79		1423	5.7	174
					1934	2.6	79
5 F	0036	7.1	216	**20** Sa	0123	6.5	198
	0734	−1.3	−40		0812	−0.6	−18
	1426	5.6	171		1505	5.6	171
	1929	2.6	79		2025	2.7	82
6 Sa	0122	6.8	207	**21** Su	0208	5.9	180
	0819	−1.2	−37		0852	−0.1	−3
	1514	5.7	174		1546	5.6	171
	2025	2.6	79		2119	2.7	82
7 Su	0214	6.5	198	**22** M	0256	5.4	165
	0907	−0.8	−24		0933	0.4	12
	1604	5.8	177		1629	5.7	174
	2129	2.5	76		2219	2.6	79
8 M	0315	6.0	183	**23** Tu	0351	4.9	149
	0957	−0.4	−12		1015	0.9	27
	1655	6.0	183		1712	5.8	177
	2241	2.2	67		2324	2.4	73
9 Tu ◑	0425	5.5	168	**24** W ◐	0455	4.5	137
	1051	0.1	3		1100	1.4	43
	1746	6.3	192		1755	5.9	180
	2354	1.7	52				
10 W	0542	5.1	155	**25** Th	0029	2.0	61
	1148	0.6	18		0606	4.2	128
	1837	6.7	204		1149	1.9	58
					1838	6.1	186
11 Th	0105	1.0	30	**26** F	0128	1.5	46
	0702	4.9	149		0720	4.2	128
	1246	1.1	34		1242	2.2	67
	1927	7.0	213		1921	6.4	195
12 F	0208	0.3	9	**27** Sa	0220	1.0	30
	0818	4.9	149		0830	4.3	131
	1344	1.5	46		1335	2.5	76
	2016	7.3	223		2004	6.6	201
13 Sa	0305	−0.4	−12	**28** Su	0306	0.4	12
	0928	5.1	155		0931	4.6	140
	1440	1.8	55		1426	2.6	79
	2103	7.6	232		2046	6.9	210
14 Su	0356	−0.9	−27	**29** M	0348	−0.2	−6
	1029	5.3	162		1023	4.9	149
	1533	2.1	64		1515	2.7	82
	2149	7.7	235		2128	7.2	219
15 M	0443	−1.3	−40	**30** Tu	0429	−0.7	−21
	1123	5.5	168		1109	5.1	155
	1624	2.2	67		1603	2.7	82
	2233	7.7	235		2210	7.4	226

Time meridian 120° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.
Heights are referred to mean lower low water which is the chart datum of soundings.

Humboldt Bay, California, 2015

Times and Heights of High and Low Waters

July

	Time	Height	
	h m	ft	cm
1 W ○	0510	−1.1	−34
	1153	5.4	165
	1649	2.6	79
	2253	7.6	232
2 Th	0551	−1.4	−43
	1236	5.7	174
	1736	2.5	76
	2337	7.6	232
3 F	0632	−1.5	−46
	1318	5.9	180
	1825	2.4	73
4 Sa	0024	7.4	226
	0714	−1.4	−43
	1401	6.1	186
	1918	2.2	67
5 Su	0114	7.1	216
	0758	−1.1	−34
	1446	6.3	192
	2015	2.1	64
6 M	0208	6.6	201
	0843	−0.6	−18
	1532	6.5	198
	2117	1.9	58
7 Tu	0308	6.0	183
	0930	0.0	0
	1620	6.7	204
	2225	1.6	49
8 W ◑	0417	5.4	165
	1022	0.6	18
	1711	6.9	210
	2337	1.2	37
9 Th	0533	5.0	152
	1117	1.3	40
	1803	7.1	216
10 F	0048	0.8	24
	0655	4.7	143
	1218	1.8	55
	1857	7.3	223
11 Sa	0153	0.2	6
	0816	4.8	146
	1320	2.2	67
	1950	7.4	226
12 Su	0251	−0.3	−9
	0927	5.0	152
	1421	2.5	76
	2042	7.5	229
13 M	0342	−0.6	−18
	1025	5.2	158
	1518	2.6	79
	2131	7.6	232
14 Tu	0429	−0.9	−27
	1115	5.5	168
	1610	2.6	79
	2217	7.5	229
15 W ●	0511	−1.0	−30
	1157	5.6	171
	1658	2.5	76
	2300	7.4	226

	Time	Height	
	h m	ft	cm
16 Th	0551	−0.9	−27
	1236	5.8	177
	1743	2.5	76
	2341	7.2	219
17 F	0628	−0.8	−24
	1312	5.8	177
	1826	2.4	73
18 Sa	0021	6.9	210
	0704	−0.5	−15
	1347	5.9	180
	1910	2.4	73
19 Su	0101	6.5	198
	0739	−0.1	−3
	1422	5.9	180
	1955	2.4	73
20 M	0143	6.0	183
	0814	0.3	9
	1457	5.9	180
	2042	2.4	73
21 Tu	0227	5.6	171
	0849	0.8	24
	1534	6.0	183
	2134	2.3	70
22 W	0317	5.1	155
	0925	1.3	40
	1613	6.0	183
	2232	2.2	67
23 Th ◐	0416	4.6	140
	1005	1.9	58
	1656	6.1	186
	2335	1.9	58
24 F	0526	4.3	131
	1051	2.3	70
	1742	6.2	189
25 Sa	0039	1.6	49
	0643	4.2	128
	1148	2.7	82
	1831	6.4	195
26 Su	0138	1.1	34
	0759	4.3	131
	1250	2.9	88
	1921	6.7	204
27 M	0230	0.5	15
	0903	4.6	140
	1352	3.0	91
	2012	7.0	213
28 Tu	0318	0.0	0
	0957	5.0	152
	1449	2.9	88
	2101	7.3	223
29 W	0402	−0.6	−18
	1042	5.4	165
	1541	2.6	79
	2149	7.6	232
30 Th	0445	−1.0	−30
	1124	5.7	174
	1632	2.3	70
	2238	7.8	238
31 F ○	0527	−1.2	−37
	1205	6.1	186
	1721	2.0	61
	2326	7.8	238

August

	Time	Height	
	h m	ft	cm
1 Sa	0609	−1.2	−37
	1246	6.4	195
	1812	1.7	52
2 Su	0016	7.6	232
	0651	−1.0	−30
	1327	6.7	204
	1904	1.4	43
3 M	0107	7.2	219
	0733	−0.6	−18
	1410	6.9	210
	2000	1.2	37
4 Tu	0202	6.7	204
	0817	−0.1	−3
	1455	7.0	213
	2059	1.1	34
5 W	0303	6.1	186
	0904	0.6	18
	1543	7.1	216
	2204	0.9	27
6 Th ◑	0410	5.5	168
	0955	1.4	43
	1635	7.1	216
	2313	0.8	24
7 F	0527	5.0	152
	1053	2.0	61
	1731	7.1	216
8 Sa	0025	0.6	18
	0650	4.8	146
	1159	2.5	76
	1830	7.1	216
9 Su	0133	0.3	9
	0811	4.9	149
	1308	2.8	85
	1930	7.1	216
10 M	0233	0.0	0
	0918	5.2	158
	1413	2.8	85
	2027	7.1	216
11 Tu	0325	−0.2	−6
	1011	5.4	165
	1510	2.7	82
	2118	7.2	219
12 W	0410	−0.3	−9
	1053	5.6	171
	1600	2.5	76
	2205	7.1	216
13 Th	0450	−0.3	−9
	1130	5.8	177
	1645	2.3	70
	2247	7.1	216
14 F ●	0526	−0.3	−9
	1202	5.9	180
	1726	2.1	64
	2327	6.9	210
15 Sa	0600	−0.1	−3
	1233	6.0	183
	1806	2.0	61

	Time	Height	
	h m	ft	cm
16 Su	0006	6.7	204
	0633	0.2	6
	1303	6.1	186
	1845	1.9	58
17 M	0044	6.4	195
	0704	0.5	15
	1334	6.2	189
	1925	1.8	55
18 Tu	0123	6.0	183
	0736	0.9	27
	1405	6.2	189
	2007	1.7	52
19 W	0206	5.6	171
	0807	1.4	43
	1438	6.2	189
	2052	1.7	52
20 Th	0253	5.2	158
	0841	1.9	58
	1514	6.2	189
	2144	1.7	52
21 F	0349	4.8	146
	0918	2.4	73
	1556	6.2	189
	2243	1.6	49
22 Sa ◐	0456	4.5	137
	1004	2.8	85
	1645	6.2	189
	2347	1.4	43
23 Su	0613	4.4	134
	1106	3.1	94
	1742	6.3	192
24 M	0052	1.1	34
	0728	4.6	140
	1220	3.2	98
	1843	6.5	198
25 Tu	0151	0.6	18
	0832	4.9	149
	1330	3.1	94
	1943	6.8	207
26 W	0244	0.1	3
	0924	5.3	162
	1431	2.7	82
	2039	7.1	216
27 Th	0331	−0.3	−9
	1008	5.7	174
	1526	2.2	67
	2133	7.4	226
28 F	0416	−0.6	−18
	1049	6.2	189
	1618	1.7	52
	2225	7.6	232
29 Sa ○	0459	−0.8	−24
	1128	6.6	201
	1708	1.1	34
	2317	7.7	235
30 Su	0541	−0.7	−21
	1208	7.0	213
	1758	0.7	21
31 M	0008	7.5	229
	0623	−0.4	−12
	1249	7.3	223
	1849	0.3	9

September

	Time	Height	
	h m	ft	cm
1 Tu	0101	7.1	216
	0706	0.1	3
	1331	7.4	226
	1943	0.2	6
2 W	0157	6.6	201
	0751	0.7	21
	1416	7.4	226
	2039	0.2	6
3 Th	0257	6.0	183
	0839	1.4	43
	1504	7.3	223
	2140	0.3	9
4 F	0404	5.5	168
	0932	2.1	64
	1558	7.1	216
	2246	0.4	12
5 Sa ◑	0519	5.2	158
	1035	2.6	79
	1659	6.8	207
	2356	0.5	15
6 Su	0640	5.1	155
	1147	2.9	88
	1804	6.6	201
7 M	0105	0.5	15
	0756	5.2	158
	1302	3.0	91
	1910	6.5	198
8 Tu	0207	0.4	12
	0856	5.4	165
	1408	2.8	85
	2012	6.5	198
9 W	0258	0.3	9
	0942	5.7	174
	1503	2.4	73
	2105	6.6	201
10 Th	0342	0.3	9
	1020	5.9	180
	1550	2.1	64
	2152	6.6	201
11 F	0420	0.3	9
	1051	6.1	186
	1631	1.8	55
	2235	6.6	201
12 Sa ●	0455	0.5	15
	1121	6.2	189
	1709	1.5	46
	2314	6.5	198
13 Su	0527	0.7	21
	1149	6.3	192
	1745	1.2	37
	2352	6.4	195
14 M	0558	0.9	27
	1217	6.4	195
	1821	1.1	34
15 Tu	0030	6.2	189
	0629	1.3	40
	1245	6.4	195
	1858	1.0	30

	Time	Height	
	h m	ft	cm
16 W	0110	5.9	180
	0659	1.6	49
	1314	6.4	195
	1936	0.9	27
17 Th	0152	5.6	171
	0730	2.0	61
	1345	6.4	195
	2018	1.0	30
18 F	0239	5.3	162
	0803	2.5	76
	1419	6.3	192
	2104	1.0	30
19 Sa	0333	5.0	152
	0842	2.8	85
	1500	6.2	189
	2158	1.0	30
20 Su	0437	4.8	146
	0933	3.2	98
	1552	6.1	186
	2301	1.0	30
21 M ◐	0549	4.7	143
	1042	3.3	101
	1657	6.1	186
22 Tu	0007	0.8	24
	0658	4.9	149
	1202	3.3	101
	1808	6.2	189
23 W	0109	0.6	18
	0757	5.3	162
	1316	2.9	88
	1917	6.4	195
24 Th	0206	0.3	9
	0846	5.7	174
	1418	2.3	70
	2021	6.7	204
25 F	0256	0.0	0
	0930	6.2	189
	1514	1.6	49
	2120	7.0	213
26 Sa	0343	−0.1	−3
	1010	6.7	204
	1605	0.8	24
	2215	7.1	216
27 Su ○	0428	−0.1	−3
	1050	7.2	219
	1655	0.1	3
	2309	7.2	219
28 M	0511	0.2	6
	1130	7.6	232
	1744	−0.4	−12
29 Tu	0002	7.1	216
	0555	0.5	15
	1211	7.8	238
	1834	−0.7	−21
30 W	0056	6.8	207
	0639	1.0	30
	1254	7.8	238
	1924	−0.8	−24

Time meridian 120° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.
Heights are referred to mean lower low water which is the chart datum of soundings.

Humboldt Bay, California, 2015

Times and Heights of High and Low Waters

October

	Time	Height	
	h m	ft	cm
1 Th	0152	6.4	195
	0725	1.6	49
	1339	7.6	232
	2017	−0.6	−18
2 F	0251	6.0	183
	0815	2.1	64
	1427	7.3	223
	2114	−0.3	−9
3 Sa	0356	5.7	174
	0912	2.7	82
	1522	6.8	207
	2215	0.1	3
4 Su ◑	0506	5.4	165
	1019	3.0	91
	1624	6.4	195
	2321	0.4	12
5 M	0619	5.4	165
	1137	3.1	94
	1734	6.0	183
6 Tu	0027	0.6	18
	0726	5.5	168
	1254	2.9	88
	1845	5.8	177
7 W	0128	0.8	24
	0820	5.7	174
	1359	2.6	79
	1951	5.8	177
8 Th	0220	0.9	27
	0902	5.9	180
	1452	2.1	64
	2048	5.9	180
9 F	0304	0.9	27
	0937	6.2	189
	1535	1.6	49
	2137	5.9	180
10 Sa	0343	1.1	34
	1007	6.4	195
	1614	1.2	37
	2221	6.0	183
11 Su	0418	1.2	37
	1036	6.5	198
	1650	0.8	24
	2301	6.0	183
12 M ●	0451	1.5	46
	1104	6.7	204
	1725	0.5	15
	2341	6.0	183
13 Tu	0522	1.7	52
	1132	6.8	207
	1759	0.3	9
14 W	0020	5.9	180
	0554	2.0	61
	1201	6.8	207
	1835	0.2	6
15 Th	0101	5.7	174
	0626	2.3	70
	1230	6.8	207
	1911	0.1	3

	Time	Height	
	h m	ft	cm
16 F	0144	5.6	171
	0659	2.6	79
	1301	6.7	204
	1951	0.2	6
17 Sa	0231	5.4	165
	0735	2.9	88
	1335	6.5	198
	2035	0.3	9
18 Su	0323	5.2	158
	0819	3.2	98
	1417	6.4	195
	2125	0.4	12
19 M	0422	5.1	155
	0916	3.4	104
	1511	6.1	186
	2222	0.5	15
20 Tu ◐	0525	5.2	158
	1029	3.4	104
	1620	5.9	180
	2324	0.5	15
21 W	0626	5.4	165
	1150	3.2	98
	1739	5.8	177
22 Th	0027	0.6	18
	0720	5.8	177
	1304	2.6	79
	1856	5.9	180
23 F	0125	0.5	15
	0808	6.3	192
	1407	1.8	55
	2006	6.1	186
24 Sa	0219	0.6	18
	0852	6.8	207
	1502	0.9	27
	2109	6.3	192
25 Su	0309	0.7	21
	0934	7.4	226
	1553	0.0	0
	2208	6.5	198
26 M	0356	0.8	24
	1015	7.8	238
	1642	−0.7	−21
	2304	6.6	201
27 Tu ○	0442	1.1	34
	1056	8.1	247
	1731	−1.2	−37
	2358	6.6	201
28 W	0528	1.5	46
	1138	8.2	250
	1818	−1.4	−43
29 Th	0052	6.5	198
	0614	1.9	58
	1221	8.0	244
	1907	−1.3	−40
30 F	0146	6.3	192
	0703	2.3	70
	1307	7.7	235
	1956	−1.1	−34
31 Sa	0242	6.1	186
	0755	2.7	82
	1355	7.2	219
	2048	−0.6	−18

November

	Time	Height	
	h m	ft	cm
1 Su	0341	5.9	180
	0853	3.0	91
	1448	6.6	201
	2142	−0.1	−3
2 M	0443	5.7	174
	1000	3.2	98
	1548	6.1	186
	2240	0.4	12
3 Tu ◑	0545	5.7	174
	1116	3.2	98
	1656	5.6	171
	2339	0.8	24
4 W	0643	5.8	177
	1233	2.9	88
	1808	5.3	162
5 Th	0037	1.1	34
	0732	6.0	183
	1339	2.4	73
	1919	5.1	155
6 F	0130	1.4	43
	0813	6.2	189
	1431	1.9	58
	2022	5.2	158
7 Sa	0217	1.6	49
	0849	6.5	198
	1515	1.3	40
	2117	5.3	162
8 Su	0258	1.8	55
	0921	6.7	204
	1553	0.8	24
	2205	5.4	165
9 M	0336	2.0	61
	0952	6.9	210
	1629	0.4	12
	2249	5.5	168
10 Tu	0413	2.2	67
	1023	7.1	216
	1704	0.0	0
	2331	5.6	171
11 W ●	0448	2.4	73
	1053	7.2	219
	1739	−0.2	−6
12 Th	0012	5.7	174
	0522	2.6	79
	1124	7.2	219
	1815	−0.4	−12
13 F	0053	5.7	174
	0558	2.9	88
	1156	7.2	219
	1852	−0.5	−15
14 Sa	0136	5.7	174
	0635	3.1	94
	1230	7.1	216
	1931	−0.5	−15
15 Su	0222	5.6	171
	0717	3.2	98
	1308	6.9	210
	2013	−0.4	−12

	Time	Height	
	h m	ft	cm
16 M	0311	5.6	171
	0806	3.4	104
	1352	6.6	201
	2100	−0.2	−6
17 Tu	0403	5.6	171
	0906	3.4	104
	1448	6.2	189
	2151	0.1	3
18 W ◐	0457	5.8	177
	1019	3.3	101
	1557	5.9	180
	2247	0.4	12
19 Th	0550	6.1	186
	1137	2.8	85
	1716	5.6	171
	2346	0.7	21
20 F	0642	6.5	198
	1250	2.2	67
	1837	5.4	165
21 Sa	0045	1.0	30
	0730	7.0	213
	1354	1.3	40
	1953	5.5	168
22 Su	0141	1.3	40
	0816	7.4	226
	1451	0.4	12
	2103	5.7	174
23 M	0235	1.5	46
	0901	7.9	241
	1542	−0.4	−12
	2205	5.9	180
24 Tu	0327	1.8	55
	0945	8.2	250
	1631	−1.0	−30
	2302	6.1	186
25 W ○	0417	2.0	61
	1029	8.4	256
	1718	−1.4	−43
	2356	6.3	192
26 Th	0505	2.3	70
	1112	8.4	256
	1804	−1.6	−49
27 F	0047	6.3	192
	0554	2.5	76
	1157	8.1	247
	1850	−1.5	−46
28 Sa	0137	6.3	192
	0643	2.7	82
	1241	7.7	235
	1935	−1.1	−34
29 Su	0227	6.2	189
	0735	2.9	88
	1328	7.2	219
	2021	−0.7	−21
30 M	0317	6.1	186
	0831	3.1	94
	1417	6.6	201
	2108	−0.1	−3

December

	Time	Height	
	h m	ft	cm
1 Tu	0409	6.0	183
	0933	3.2	98
	1511	6.0	183
	2156	0.4	12
2 W ◑	0500	6.0	183
	1042	3.1	94
	1612	5.4	165
	2246	1.0	30
3 Th	0549	6.1	186
	1155	2.9	88
	1722	4.9	149
	2338	1.5	46
4 F	0636	6.3	192
	1303	2.4	73
	1836	4.7	143
5 Sa	0030	1.9	58
	0718	6.5	198
	1400	1.9	58
	1948	4.7	143
6 Su	0121	2.3	70
	0758	6.7	204
	1447	1.3	40
	2052	4.8	146
7 M	0209	2.5	76
	0835	6.9	210
	1528	0.8	24
	2147	5.0	152
8 Tu	0253	2.7	82
	0911	7.2	219
	1606	0.3	9
	2235	5.3	162
9 W	0336	2.9	88
	0946	7.4	226
	1643	−0.1	−3
	2319	5.5	168
10 Th	0416	3.0	91
	1022	7.5	229
	1719	−0.5	−15
11 F ●	0000	5.7	174
	0456	3.1	94
	1057	7.6	232
	1756	−0.7	−21
12 Sa	0041	5.8	177
	0536	3.1	94
	1134	7.6	232
	1833	−0.8	−24
13 Su	0122	5.9	180
	0619	3.1	94
	1213	7.5	229
	1912	−0.8	−24
14 M	0205	6.0	183
	0705	3.2	98
	1255	7.3	223
	1953	−0.7	−21
15 Tu	0248	6.1	186
	0757	3.1	94
	1342	6.9	210
	2037	−0.4	−12

	Time	Height	
	h m	ft	cm
16 W	0334	6.2	189
	0856	3.0	91
	1437	6.4	195
	2123	0.0	0
17 Th	0422	6.5	198
	1005	2.8	85
	1544	5.9	180
	2213	0.5	15
18 F ◐	0512	6.7	204
	1119	2.4	73
	1700	5.4	165
	2308	1.1	34
19 Sa	0603	7.1	216
	1232	1.7	52
	1823	5.1	155
20 Su	0007	1.6	49
	0654	7.4	226
	1339	1.0	30
	1945	5.1	155
21 M	0108	2.0	61
	0745	7.8	238
	1438	0.2	6
	2100	5.3	162
22 Tu	0208	2.4	73
	0834	8.1	247
	1531	−0.5	−15
	2205	5.6	171
23 W	0305	2.6	79
	0922	8.3	253
	1620	−1.0	−30
	2301	5.9	180
24 Th	0358	2.7	82
	1009	8.4	256
	1706	−1.3	−40
	2351	6.1	186
25 F ○	0449	2.7	82
	1055	8.3	253
	1750	−1.3	−40
26 Sa	0037	6.3	192
	0539	2.8	85
	1139	8.1	247
	1832	−1.2	−37
27 Su	0120	6.3	192
	0627	2.8	85
	1223	7.7	235
	1913	−0.9	−27
28 M	0202	6.3	192
	0715	2.9	88
	1306	7.2	219
	1953	−0.5	−15
29 Tu	0244	6.3	192
	0806	2.9	88
	1350	6.6	201
	2032	0.1	3
30 W	0325	6.3	192
	0859	3.0	91
	1438	6.0	183
	2112	0.7	21
31 Th	0407	6.3	192
	0959	2.9	88
	1531	5.4	165
	2153	1.3	40

Time meridian 120° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.
Heights are referred to mean lower low water which is the chart datum of soundings.

Crescent City, California, 2015

Times and Heights of High and Low Waters

January

	Time	Height	
	h m	ft	cm
1 Th	0152	2.8	85
	0811	7.8	238
	1519	−0.1	−3
	2150	5.6	171
2 F	0250	3.0	91
	0858	7.8	238
	1605	−0.4	−12
	2241	5.9	180
3 Sa	0342	3.1	94
	0943	7.8	238
	1647	−0.6	−18
	2325	6.1	186
4 Su ○	0429	3.1	94
	1024	7.8	238
	1726	−0.6	−18
5 M	0004	6.2	189
	0513	3.1	94
	1103	7.6	232
	1802	−0.6	−18
6 Tu	0041	6.3	192
	0554	3.0	91
	1141	7.4	226
	1837	−0.4	−12
7 W	0116	6.3	192
	0635	3.0	91
	1219	7.1	216
	1910	−0.1	−3
8 Th	0151	6.3	192
	0717	3.0	91
	1257	6.7	204
	1944	0.2	6
9 F	0226	6.3	192
	0802	3.0	91
	1337	6.2	189
	2017	0.7	21
10 Sa	0302	6.3	192
	0851	2.9	88
	1421	5.8	177
	2052	1.2	37
11 Su	0339	6.4	195
	0946	2.8	85
	1513	5.3	162
	2129	1.7	52
12 M	0419	6.4	195
	1048	2.6	79
	1618	4.8	146
	2210	2.2	67
13 Tu ◑	0502	6.5	198
	1155	2.3	70
	1738	4.5	137
	2300	2.7	82
14 W	0548	6.7	204
	1259	1.8	55
	1905	4.6	140
	2359	3.1	94
15 Th	0638	6.9	210
	1356	1.2	37
	2020	4.8	146

	Time	Height	
	h m	ft	cm
16 F	0103	3.3	101
	0728	7.3	223
	1446	0.5	15
	2119	5.2	158
17 Sa	0205	3.3	101
	0818	7.6	232
	1532	−0.2	−6
	2208	5.6	171
18 Su	0302	3.2	98
	0908	8.0	244
	1616	−0.7	−21
	2252	6.1	186
19 M	0355	2.9	88
	0956	8.3	253
	1659	−1.1	−34
	2333	6.5	198
20 Tu ●	0447	2.6	79
	1045	8.4	256
	1741	−1.4	−43
21 W	0015	6.8	207
	0538	2.3	70
	1134	8.3	253
	1824	−1.3	−40
22 Th	0056	7.1	216
	0630	2.0	61
	1225	8.1	247
	1907	−1.0	−30
23 F	0139	7.3	223
	0725	1.8	55
	1318	7.6	232
	1951	−0.5	−15
24 Sa	0223	7.5	229
	0823	1.6	49
	1414	6.9	210
	2036	0.2	6
25 Su	0310	7.5	229
	0926	1.5	46
	1518	6.2	189
	2124	1.0	30
26 M ◐	0400	7.5	229
	1035	1.4	43
	1631	5.5	168
	2217	1.8	55
27 Tu	0454	7.4	226
	1149	1.2	37
	1756	5.1	155
	2317	2.5	76
28 W	0552	7.3	223
	1302	0.9	27
	1925	5.0	152
29 Th	0026	3.0	91
	0652	7.3	223
	1407	0.5	15
	2041	5.2	158
30 F	0137	3.2	98
	0750	7.3	223
	1503	0.2	6
	2141	5.5	168
31 Sa	0240	3.2	98
	0843	7.3	223
	1550	0.0	0
	2228	5.8	177

February

	Time	Height	
	h m	ft	cm
1 Su	0333	3.1	94
	0930	7.4	226
	1631	−0.2	−6
	2306	6.0	183
2 M	0419	3.0	91
	1012	7.3	223
	1707	−0.2	−6
	2340	6.2	189
3 Tu ○	0500	2.8	85
	1051	7.3	223
	1740	−0.2	−6
4 W	0011	6.3	192
	0538	2.6	79
	1128	7.1	216
	1811	0.0	0
5 Th	0041	6.4	195
	0615	2.4	73
	1205	6.9	210
	1841	0.2	6
6 F	0110	6.5	198
	0653	2.3	70
	1241	6.6	201
	1911	0.5	15
7 Sa	0140	6.5	198
	0732	2.2	67
	1320	6.2	189
	1941	0.9	27
8 Su	0210	6.5	198
	0814	2.2	67
	1401	5.8	177
	2012	1.4	43
9 M	0243	6.5	198
	0901	2.1	64
	1449	5.4	165
	2045	1.9	58
10 Tu	0319	6.5	198
	0955	2.0	61
	1547	4.9	149
	2123	2.4	73
11 W ◑	0400	6.5	198
	1058	1.8	55
	1701	4.6	140
	2211	2.9	88
12 Th	0450	6.6	201
	1207	1.5	46
	1829	4.6	140
	2314	3.2	98
13 F	0548	6.7	204
	1313	1.0	30
	1949	4.8	146
14 Sa	0029	3.4	104
	0651	7.0	213
	1412	0.5	15
	2050	5.2	158
15 Su	0142	3.2	98
	0752	7.3	223
	1504	−0.1	−3
	2139	5.7	174

	Time	Height	
	h m	ft	cm
16 M	0245	2.9	88
	0849	7.7	235
	1551	−0.6	−18
	2222	6.2	189
17 Tu	0342	2.4	73
	0944	8.0	244
	1635	−1.0	−30
	2303	6.7	204
18 W ●	0435	1.8	55
	1036	8.1	247
	1718	−1.1	−34
	2343	7.1	216
19 Th	0526	1.3	40
	1127	8.1	247
	1800	−0.9	−27
20 F	0023	7.4	226
	0617	0.9	27
	1219	7.8	238
	1843	−0.5	−15
21 Sa	0104	7.6	232
	0709	0.6	18
	1312	7.3	223
	1925	0.0	0
22 Su	0146	7.7	235
	0804	0.5	15
	1408	6.7	204
	2010	0.8	24
23 M	0231	7.6	232
	0902	0.6	18
	1509	6.0	183
	2057	1.5	46
24 Tu	0320	7.4	226
	1006	0.7	21
	1620	5.5	168
	2151	2.3	70
25 W ◐	0414	7.1	216
	1116	0.8	24
	1742	5.1	155
	2255	2.8	85
26 Th	0516	6.8	207
	1230	0.8	24
	1908	5.0	152
27 F	0010	3.2	98
	0623	6.6	201
	1338	0.7	21
	2021	5.2	158
28 Sa	0127	3.2	98
	0729	6.5	198
	1437	0.5	15
	2117	5.5	168

March

	Time	Height	
	h m	ft	cm
1 Su	0232	3.0	91
	0828	6.6	201
	1525	0.4	12
	2159	5.7	174
2 M	0323	2.7	82
	0917	6.6	201
	1605	0.3	9
	2234	5.9	180
3 Tu	0406	2.4	73
	1000	6.7	204
	1640	0.3	9
	2304	6.1	186
4 W	0444	2.1	64
	1040	6.7	204
	1711	0.3	9
	2332	6.3	192
5 Th ○	0520	1.8	55
	1116	6.6	201
	1741	0.5	15
	2359	6.4	195
6 F	0554	1.5	46
	1153	6.5	198
	1809	0.7	21
7 Sa	0026	6.5	198
	0629	1.3	40
	1229	6.3	192
	1838	1.0	30
8 Su	0053	6.6	201
	0705	1.2	37
	1307	6.0	183
	1908	1.3	40
9 M	0122	6.6	201
	0744	1.1	34
	1349	5.7	174
	1938	1.8	55
10 Tu	0153	6.6	201
	0827	1.1	34
	1435	5.3	162
	2012	2.2	67
11 W	0228	6.5	198
	0916	1.1	34
	1531	5.0	152
	2052	2.6	79
12 Th	0310	6.4	195
	1014	1.1	34
	1640	4.7	143
	2143	3.0	91
13 F ◑	0403	6.4	195
	1121	0.9	27
	1801	4.7	143
	2252	3.2	98
14 Sa	0508	6.3	192
	1230	0.7	21
	1916	4.9	149
15 Su	0014	3.2	98
	0621	6.5	198
	1334	0.3	9
	2016	5.3	162

	Time	Height	
	h m	ft	cm
16 M	0131	2.8	85
	0731	6.7	204
	1430	−0.1	−3
	2104	5.8	177
17 Tu	0235	2.2	67
	0835	7.0	213
	1520	−0.4	−12
	2147	6.4	195
18 W	0332	1.5	46
	0934	7.3	223
	1606	−0.5	−15
	2228	6.9	210
19 Th	0424	0.8	24
	1028	7.4	226
	1650	−0.5	−15
	2307	7.3	223
20 F ●	0514	0.1	3
	1121	7.4	226
	1733	−0.2	−6
	2347	7.6	232
21 Sa	0603	−0.3	−9
	1214	7.2	219
	1816	0.2	6
22 Su	0028	7.8	238
	0653	−0.5	−15
	1307	6.8	207
	1900	0.7	21
23 M	0110	7.7	235
	0744	−0.5	−15
	1402	6.4	195
	1945	1.4	43
24 Tu	0154	7.4	226
	0838	−0.3	−9
	1501	5.9	180
	2034	2.0	61
25 W	0242	7.0	213
	0936	0.0	0
	1607	5.4	165
	2130	2.5	76
26 Th ◐	0336	6.6	201
	1040	0.3	9
	1722	5.1	155
	2237	2.9	88
27 F	0439	6.1	186
	1149	0.6	18
	1839	5.1	155
	2357	3.1	94
28 Sa	0551	5.8	177
	1257	0.7	21
	1946	5.2	158
29 Su	0114	2.9	88
	0703	5.7	174
	1356	0.7	21
	2038	5.4	165
30 M	0217	2.6	79
	0806	5.7	174
	1446	0.7	21
	2118	5.6	171
31 Tu	0307	2.1	64
	0859	5.8	177
	1527	0.7	21
	2151	5.9	180

Time meridian 120° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.
Heights are referred to mean lower low water which is the chart datum of soundings.

Crescent City, California, 2015

Times and Heights of High and Low Waters

April

	Time	Height	
	h m	ft	cm
1 W	0348	1.7	52
	0945	5.9	180
	1602	0.8	24
	2220	6.1	186
2 Th	0425	1.3	40
	1026	6.0	183
	1634	0.9	27
	2247	6.3	192
3 F	0459	0.9	27
	1104	6.0	183
	1705	1.0	30
	2314	6.5	198
4 Sa ○	0533	0.6	18
	1142	6.0	183
	1735	1.2	37
	2341	6.6	201
5 Su	0607	0.3	9
	1220	5.9	180
	1805	1.5	46
6 M	0009	6.7	204
	0642	0.1	3
	1259	5.7	174
	1837	1.8	55
7 Tu	0039	6.7	204
	0720	0.1	3
	1342	5.5	168
	1910	2.1	64
8 W	0112	6.6	201
	0801	0.1	3
	1430	5.3	162
	1948	2.5	76
9 Th	0149	6.5	198
	0849	0.1	3
	1524	5.1	155
	2034	2.8	85
10 F	0234	6.3	192
	0943	0.2	6
	1628	4.9	149
	2132	3.0	91
11 Sa ◑	0331	6.1	186
	1045	0.2	6
	1737	5.0	152
	2247	3.0	91
12 Su	0440	5.9	180
	1151	0.2	6
	1842	5.2	158
13 M	0009	2.7	82
	0559	5.8	177
	1255	0.2	6
	1938	5.6	171
14 Tu	0123	2.2	67
	0715	6.0	183
	1353	0.1	3
	2026	6.1	186
15 W	0226	1.4	43
	0824	6.2	189
	1446	0.1	3
	2110	6.7	204

	Time	Height	
	h m	ft	cm
16 Th	0322	0.5	15
	0926	6.4	195
	1534	0.1	3
	2151	7.1	216
17 F	0412	−0.2	−6
	1023	6.6	201
	1621	0.3	9
	2232	7.5	229
18 Sa ●	0501	−0.9	−27
	1117	6.6	201
	1705	0.6	18
	2313	7.7	235
19 Su	0549	−1.3	−40
	1209	6.5	198
	1750	1.0	30
	2354	7.7	235
20 M	0636	−1.4	−43
	1302	6.3	192
	1835	1.5	46
21 Tu	0036	7.5	229
	0724	−1.3	−40
	1355	6.1	186
	1922	1.9	58
22 W	0120	7.2	219
	0813	−0.9	−27
	1451	5.7	174
	2013	2.3	70
23 Th	0207	6.7	204
	0906	−0.5	−15
	1550	5.4	165
	2110	2.7	82
24 F	0259	6.1	186
	1002	0.0	0
	1655	5.3	162
	2218	2.9	88
25 Sa ◐	0359	5.6	171
	1102	0.4	12
	1800	5.2	158
	2336	2.9	88
26 Su	0510	5.1	155
	1203	0.7	21
	1858	5.3	162
27 M	0051	2.6	79
	0625	4.9	149
	1301	0.9	27
	1947	5.5	168
28 Tu	0153	2.2	67
	0734	4.9	149
	1352	1.1	34
	2026	5.7	174
29 W	0242	1.6	49
	0834	5.0	152
	1436	1.2	37
	2100	5.9	180
30 Th	0324	1.1	34
	0924	5.1	155
	1515	1.4	43
	2131	6.2	189

May

	Time	Height	
	h m	ft	cm
1 F	0401	0.6	18
	1009	5.3	162
	1551	1.5	46
	2200	6.4	195
2 Sa	0436	0.2	6
	1051	5.4	165
	1625	1.7	52
	2230	6.6	201
3 Su ○	0510	−0.2	−6
	1131	5.5	168
	1659	1.8	55
	2300	6.8	207
4 M	0545	−0.5	−15
	1211	5.6	171
	1733	2.0	61
	2331	6.8	207
5 Tu	0622	−0.7	−21
	1253	5.5	168
	1810	2.2	67
6 W	0005	6.9	210
	0701	−0.8	−24
	1337	5.5	168
	1849	2.4	73
7 Th	0042	6.8	207
	0743	−0.8	−24
	1424	5.4	165
	1933	2.6	79
8 F	0124	6.6	201
	0829	−0.7	−21
	1516	5.3	162
	2025	2.8	85
9 Sa	0213	6.3	192
	0920	−0.5	−15
	1613	5.3	162
	2129	2.8	85
10 Su	0312	5.9	180
	1016	−0.3	−9
	1711	5.5	168
	2245	2.6	79
11 M ◑	0423	5.6	171
	1115	0.0	0
	1808	5.8	177
12 Tu	0003	2.2	67
	0543	5.3	162
	1216	0.3	9
	1900	6.2	189
13 W	0115	1.5	46
	0703	5.3	162
	1315	0.5	15
	1949	6.6	201
14 Th	0217	0.7	21
	0816	5.4	165
	1410	0.8	24
	2034	7.0	213
15 F	0311	−0.2	−6
	0921	5.6	171
	1502	1.0	30
	2118	7.4	226

	Time	Height	
	h m	ft	cm
16 Sa	0402	−0.9	−27
	1020	5.8	177
	1552	1.3	40
	2201	7.7	235
17 Su ●	0449	−1.4	−43
	1114	6.0	183
	1640	1.5	46
	2243	7.7	235
18 M	0535	−1.7	−52
	1205	6.0	183
	1727	1.8	55
	2325	7.6	232
19 Tu	0620	−1.7	−52
	1255	6.0	183
	1814	2.1	64
20 W	0008	7.4	226
	0705	−1.5	−46
	1345	5.9	180
	1902	2.3	70
21 Th	0051	7.0	213
	0750	−1.2	−37
	1435	5.7	174
	1952	2.6	79
22 F	0136	6.4	195
	0836	−0.7	−21
	1526	5.6	171
	2048	2.7	82
23 Sa	0225	5.9	180
	0923	−0.2	−6
	1619	5.5	168
	2151	2.8	85
24 Su	0320	5.3	162
	1013	0.3	9
	1712	5.5	168
	2301	2.7	82
25 M ◐	0424	4.8	146
	1104	0.8	24
	1802	5.5	168
26 Tu	0012	2.4	73
	0537	4.5	137
	1157	1.2	37
	1848	5.7	174
27 W	0116	2.0	61
	0652	4.4	134
	1248	1.5	46
	1929	5.9	180
28 Th	0209	1.4	43
	0800	4.4	134
	1336	1.8	55
	2006	6.1	186
29 F	0253	0.9	27
	0859	4.6	140
	1421	2.0	61
	2041	6.4	195
30 Sa	0333	0.3	9
	0949	4.8	146
	1504	2.1	64
	2115	6.7	204
31 Su	0411	−0.2	−6
	1035	5.1	155
	1544	2.3	70
	2149	6.9	210

June

	Time	Height	
	h m	ft	cm
1 M	0448	−0.6	−18
	1118	5.3	162
	1624	2.4	73
	2224	7.1	216
2 Tu ○	0525	−1.0	−30
	1200	5.4	165
	1705	2.5	76
	2301	7.2	219
3 W	0603	−1.2	−37
	1242	5.6	171
	1747	2.5	76
	2341	7.2	219
4 Th	0644	−1.4	−43
	1325	5.7	174
	1832	2.6	79
5 F	0023	7.1	216
	0726	−1.3	−40
	1411	5.7	174
	1922	2.6	79
6 Sa	0109	6.8	207
	0811	−1.2	−37
	1458	5.8	177
	2019	2.6	79
7 Su	0201	6.4	195
	0858	−0.8	−24
	1548	6.0	183
	2124	2.4	73
8 M	0301	5.9	180
	0949	−0.4	−12
	1640	6.1	186
	2236	2.1	64
9 Tu ◑	0412	5.4	165
	1043	0.1	3
	1732	6.4	195
	2351	1.6	49
10 W	0532	5.0	152
	1140	0.7	21
	1824	6.7	204
11 Th	0102	1.0	30
	0655	4.9	149
	1239	1.2	37
	1915	7.0	213
12 F	0205	0.2	6
	0812	5.0	152
	1338	1.6	49
	2003	7.3	223
13 Sa	0300	−0.4	−12
	0920	5.2	158
	1435	1.9	58
	2051	7.6	232
14 Su	0351	−1.0	−30
	1018	5.4	165
	1529	2.1	64
	2136	7.7	235
15 M	0438	−1.4	−43
	1111	5.7	174
	1620	2.2	67
	2221	7.7	235

	Time	Height	
	h m	ft	cm
16 Tu ●	0522	−1.5	−46
	1159	5.8	177
	1708	2.4	73
	2304	7.5	229
17 W	0604	−1.5	−46
	1244	5.9	180
	1755	2.4	73
	2346	7.3	223
18 Th	0645	−1.3	−40
	1327	5.9	180
	1842	2.5	76
19 F	0028	6.9	210
	0726	−1.0	−30
	1410	5.9	180
	1930	2.6	79
20 Sa	0111	6.4	195
	0805	−0.6	−18
	1452	5.8	177
	2020	2.7	82
21 Su	0155	5.9	180
	0845	−0.1	−3
	1535	5.8	177
	2115	2.7	82
22 M	0244	5.4	165
	0926	0.4	12
	1618	5.8	177
	2216	2.6	79
23 Tu	0340	4.9	149
	1008	1.0	30
	1702	5.8	177
	2322	2.3	70
24 W ◐	0447	4.4	134
	1053	1.5	46
	1746	5.9	180
25 Th	0027	2.0	61
	0604	4.2	128
	1142	1.9	58
	1829	6.1	186
26 F	0126	1.5	46
	0721	4.2	128
	1234	2.3	70
	1911	6.3	192
27 Sa	0217	0.9	27
	0830	4.4	134
	1327	2.5	76
	1953	6.6	201
28 Su	0302	0.4	12
	0927	4.7	143
	1419	2.7	82
	2034	6.9	210
29 M	0343	−0.2	−6
	1015	5.0	152
	1508	2.7	82
	2115	7.2	219
30 Tu	0424	−0.7	−21
	1059	5.3	162
	1555	2.7	82
	2157	7.4	226

Time meridian 120° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.
Heights are referred to mean lower low water which is the chart datum of soundings.

Crescent City, California, 2015

Times and Heights of High and Low Waters

July

	Time	Height	
	h m	ft	cm
1 W ○	0503	−1.1	−34
	1140	5.6	171
	1642	2.6	79
	2240	7.6	232
2 Th	0544	−1.4	−43
	1221	5.8	177
	1729	2.5	76
	2324	7.6	232
3 F	0625	−1.5	−46
	1303	6.1	186
	1819	2.3	70
4 Sa	0011	7.5	229
	0706	−1.4	−43
	1345	6.3	192
	1911	2.2	67
5 Su	0100	7.1	216
	0750	−1.1	−34
	1429	6.5	198
	2008	2.0	61
6 M	0154	6.6	201
	0835	−0.7	−21
	1516	6.6	201
	2111	1.8	55
7 Tu	0255	6.0	183
	0922	0.0	0
	1604	6.8	207
	2220	1.5	46
8 W ◑	0404	5.4	165
	1013	0.7	21
	1656	6.9	210
	2333	1.2	37
9 Th	0524	5.0	152
	1110	1.3	40
	1750	7.1	216
10 F	0044	0.7	21
	0649	4.8	146
	1211	1.9	58
	1845	7.2	219
11 Sa	0150	0.2	6
	0809	4.9	149
	1316	2.3	70
	1939	7.4	226
12 Su	0248	−0.3	−9
	0917	5.1	155
	1418	2.5	76
	2031	7.5	229
13 M	0339	−0.7	−21
	1014	5.4	165
	1515	2.6	79
	2120	7.5	229
14 Tu	0425	−0.9	−27
	1101	5.6	171
	1607	2.6	79
	2206	7.5	229
15 W ●	0507	−1.0	−30
	1144	5.8	177
	1655	2.5	76
	2249	7.3	223

	Time	Height	
	h m	ft	cm
16 Th	0546	−1.0	−30
	1223	5.9	180
	1739	2.5	76
	2330	7.1	216
17 F	0623	−0.8	−24
	1259	6.0	183
	1822	2.4	73
18 Sa	0010	6.8	207
	0658	−0.5	−15
	1335	6.0	183
	1905	2.4	73
19 Su	0050	6.5	198
	0733	−0.2	−6
	1410	6.0	183
	1949	2.3	70
20 M	0131	6.0	183
	0807	0.3	9
	1445	6.0	183
	2036	2.3	70
21 Tu	0215	5.5	168
	0841	0.8	24
	1521	6.0	183
	2128	2.3	70
22 W	0305	5.1	155
	0917	1.3	40
	1600	6.0	183
	2227	2.1	64
23 Th ◐	0405	4.6	140
	0957	1.9	58
	1642	6.1	186
	2331	1.9	58
24 F	0519	4.3	131
	1044	2.4	73
	1728	6.2	189
25 Sa	0035	1.5	46
	0641	4.2	128
	1139	2.7	82
	1817	6.4	195
26 Su	0134	1.1	34
	0758	4.4	134
	1242	3.0	91
	1908	6.6	201
27 M	0227	0.5	15
	0859	4.7	143
	1344	3.0	91
	1959	6.9	210
28 Tu	0313	−0.1	−3
	0948	5.1	155
	1441	2.9	88
	2048	7.3	223
29 W	0357	−0.6	−18
	1031	5.5	168
	1534	2.6	79
	2137	7.6	232
30 Th	0439	−1.0	−30
	1111	5.9	180
	1624	2.3	70
	2225	7.8	238
31 F ○	0520	−1.3	−40
	1151	6.3	192
	1714	2.0	61
	2313	7.8	238

August

	Time	Height	
	h m	ft	cm
1 Sa	0601	−1.3	−40
	1231	6.6	201
	1805	1.6	49
2 Su	0002	7.7	235
	0643	−1.1	−34
	1311	6.9	210
	1857	1.4	43
3 M	0054	7.3	223
	0725	−0.7	−21
	1354	7.1	216
	1953	1.1	34
4 Tu	0149	6.8	207
	0809	−0.1	−3
	1438	7.2	219
	2053	1.0	30
5 W	0249	6.1	186
	0856	0.6	18
	1527	7.2	219
	2158	0.9	27
6 Th ◑	0358	5.5	168
	0947	1.4	43
	1619	7.2	219
	2309	0.7	21
7 F	0517	5.1	155
	1046	2.0	61
	1717	7.1	216
8 Sa	0022	0.5	15
	0643	4.9	149
	1153	2.5	76
	1819	7.0	213
9 Su	0131	0.3	9
	0803	5.0	152
	1305	2.8	85
	1920	7.0	213
10 M	0231	0.0	0
	0908	5.3	162
	1412	2.8	85
	2018	7.1	216
11 Tu	0323	−0.2	−6
	0959	5.5	168
	1510	2.7	82
	2110	7.1	216
12 W	0408	−0.4	−12
	1041	5.8	177
	1559	2.5	76
	2156	7.1	216
13 Th	0447	−0.4	−12
	1117	5.9	180
	1643	2.3	70
	2238	7.0	213
14 F ●	0523	−0.3	−9
	1150	6.1	186
	1723	2.1	64
	2317	6.9	210
15 Sa	0556	−0.1	−3
	1221	6.2	189
	1801	1.9	58
	2355	6.7	204

	Time	Height	
	h m	ft	cm
16 Su	0627	0.1	3
	1251	6.2	189
	1839	1.8	55
17 M	0033	6.4	195
	0658	0.5	15
	1321	6.3	192
	1918	1.7	52
18 Tu	0112	6.1	186
	0729	0.9	27
	1352	6.3	192
	1959	1.7	52
19 W	0153	5.7	174
	0800	1.4	43
	1424	6.2	189
	2044	1.7	52
20 Th	0240	5.2	158
	0834	1.9	58
	1500	6.2	189
	2136	1.7	52
21 F	0336	4.8	146
	0912	2.3	70
	1540	6.2	189
	2235	1.6	49
22 Sa ◐	0445	4.5	137
	0959	2.8	85
	1629	6.2	189
	2342	1.4	43
23 Su	0607	4.5	137
	1059	3.1	94
	1727	6.2	189
24 M	0048	1.1	34
	0725	4.6	140
	1212	3.2	98
	1829	6.4	195
25 Tu	0147	0.6	18
	0826	4.9	149
	1322	3.1	94
	1930	6.7	204
26 W	0239	0.1	3
	0914	5.4	165
	1424	2.7	82
	2027	7.1	216
27 Th	0326	−0.4	−12
	0956	5.8	177
	1519	2.2	67
	2121	7.4	226
28 F	0410	−0.7	−21
	1035	6.3	192
	1610	1.7	52
	2213	7.7	235
29 Sa ○	0452	−0.8	−24
	1114	6.8	207
	1700	1.1	34
	2304	7.7	235
30 Su	0534	−0.7	−21
	1153	7.1	216
	1750	0.6	18
	2355	7.6	232
31 M	0616	−0.4	−12
	1234	7.4	226
	1841	0.3	9

September

	Time	Height	
	h m	ft	cm
1 Tu	0048	7.2	219
	0659	0.1	3
	1316	7.6	232
	1935	0.1	3
2 W	0143	6.7	204
	0743	0.7	21
	1400	7.5	229
	2031	0.1	3
3 Th	0244	6.2	189
	0831	1.4	43
	1449	7.3	223
	2133	0.2	6
4 F	0352	5.6	171
	0925	2.1	64
	1543	7.1	216
	2241	0.4	12
5 Sa ◑	0509	5.3	162
	1029	2.6	79
	1645	6.8	207
	2353	0.5	15
6 Su	0632	5.2	158
	1145	2.9	88
	1754	6.5	198
7 M	0104	0.4	12
	0747	5.3	162
	1302	2.9	88
	1903	6.5	198
8 Tu	0206	0.4	12
	0845	5.5	168
	1410	2.7	82
	2006	6.5	198
9 W	0258	0.3	9
	0931	5.8	177
	1504	2.4	73
	2059	6.5	198
10 Th	0341	0.3	9
	1009	6.0	183
	1549	2.1	64
	2146	6.6	201
11 F	0419	0.3	9
	1041	6.1	186
	1629	1.8	55
	2227	6.6	201
12 Sa ●	0452	0.4	12
	1110	6.3	192
	1705	1.5	46
	2305	6.5	198
13 Su	0523	0.6	18
	1138	6.4	195
	1739	1.2	37
	2342	6.4	195
14 M	0553	0.9	27
	1205	6.5	198
	1814	1.1	34
15 Tu	0019	6.2	189
	0622	1.2	37
	1232	6.5	198
	1850	1.0	30

	Time	Height	
	h m	ft	cm
16 W	0058	6.0	183
	0652	1.6	49
	1301	6.5	198
	1927	0.9	27
17 Th	0139	5.7	174
	0724	2.0	61
	1332	6.4	195
	2008	1.0	30
18 F	0225	5.4	165
	0758	2.4	73
	1406	6.3	192
	2055	1.0	30
19 Sa	0319	5.0	152
	0837	2.8	85
	1447	6.2	189
	2150	1.1	34
20 Su	0424	4.8	146
	0928	3.1	94
	1538	6.1	186
	2253	1.0	30
21 M ◐	0539	4.8	146
	1036	3.3	101
	1642	6.0	183
22 Tu	0001	0.9	27
	0651	5.0	152
	1156	3.3	101
	1755	6.1	186
23 W	0105	0.6	18
	0749	5.3	162
	1310	2.9	88
	1906	6.3	192
24 Th	0201	0.3	9
	0836	5.8	177
	1412	2.3	70
	2010	6.7	204
25 F	0251	0.0	0
	0918	6.3	192
	1507	1.5	46
	2109	7.0	213
26 Sa	0337	−0.1	−3
	0957	6.9	210
	1558	0.8	24
	2204	7.2	219
27 Su ○	0421	−0.1	−3
	1036	7.3	223
	1647	0.1	3
	2257	7.3	223
28 M	0504	0.1	3
	1116	7.7	235
	1736	−0.5	−15
	2349	7.2	219
29 Tu	0548	0.5	15
	1157	7.9	241
	1825	−0.8	−24
30 W	0043	7.0	213
	0632	0.9	27
	1239	7.9	241
	1916	−0.8	−24

Time meridian 120° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.
Heights are referred to mean lower low water which is the chart datum of soundings.

Crescent City, California, 2015

Times and Heights of High and Low Waters

October

	Time	Height	
	h m	ft	cm
1 Th	0138	6.6	201
	0719	1.5	46
	1324	7.7	235
	2009	−0.6	−18
2 F	0237	6.2	189
	0809	2.1	64
	1413	7.3	223
	2107	−0.3	−9
3 Sa	0343	5.8	177
	0907	2.6	79
	1508	6.8	207
	2210	0.1	3
4 Su ◑	0455	5.5	168
	1016	3.0	91
	1612	6.3	192
	2318	0.4	12
5 M	0610	5.5	168
	1137	3.1	94
	1725	5.9	180
6 Tu	0026	0.6	18
	0717	5.6	171
	1255	2.9	88
	1841	5.8	177
7 W	0128	0.8	24
	0810	5.8	177
	1400	2.5	76
	1948	5.8	177
8 Th	0220	0.8	24
	0853	6.0	183
	1451	2.0	61
	2044	5.9	180
9 F	0304	0.9	27
	0928	6.2	189
	1534	1.6	49
	2132	5.9	180
10 Sa	0342	1.1	34
	0958	6.4	195
	1611	1.2	37
	2214	6.0	183
11 Su	0415	1.2	37
	1026	6.6	201
	1645	0.8	24
	2253	6.1	186
12 M ●	0446	1.4	43
	1053	6.7	204
	1718	0.5	15
	2331	6.0	183
13 Tu	0517	1.7	52
	1120	6.8	207
	1752	0.3	9
14 W	0009	6.0	183
	0548	1.9	58
	1148	6.8	207
	1826	0.2	6
15 Th	0048	5.9	180
	0619	2.3	70
	1217	6.8	207
	1902	0.2	6

	Time	Height	
	h m	ft	cm
16 F	0130	5.7	174
	0653	2.6	79
	1249	6.7	204
	1941	0.2	6
17 Sa	0216	5.5	168
	0730	2.9	88
	1325	6.5	198
	2026	0.3	9
18 Su	0308	5.3	162
	0814	3.2	98
	1407	6.3	192
	2116	0.4	12
19 M	0408	5.2	158
	0911	3.4	104
	1500	6.1	186
	2214	0.6	18
20 Tu ◐	0513	5.3	162
	1024	3.4	104
	1608	5.9	180
	2318	0.6	18
21 W	0615	5.5	168
	1146	3.1	94
	1726	5.8	177
22 Th	0021	0.6	18
	0709	5.9	180
	1259	2.5	76
	1845	5.9	180
23 F	0120	0.6	18
	0756	6.4	195
	1401	1.7	52
	1956	6.1	186
24 Sa	0213	0.6	18
	0839	6.9	210
	1456	0.8	24
	2059	6.4	195
25 Su	0303	0.7	21
	0920	7.4	226
	1546	0.0	0
	2157	6.6	201
26 M	0350	0.8	24
	1001	7.9	241
	1635	−0.7	−21
	2252	6.8	207
27 Tu ○	0436	1.1	34
	1043	8.2	250
	1722	−1.2	−37
	2345	6.8	207
28 W	0521	1.4	43
	1125	8.2	250
	1810	−1.4	−43
29 Th	0038	6.7	204
	0608	1.8	55
	1208	8.1	247
	1858	−1.4	−43
30 F	0132	6.5	198
	0657	2.2	67
	1253	7.7	235
	1948	−1.1	−34
31 Sa	0228	6.3	192
	0749	2.6	79
	1341	7.2	219
	2041	−0.6	−18

November

	Time	Height	
	h m	ft	cm
1 Su	0328	6.0	183
	0849	3.0	91
	1435	6.6	201
	2137	−0.1	−3
2 M	0431	5.9	180
	0959	3.1	94
	1536	6.0	183
	2236	0.4	12
3 Tu ◑	0535	5.8	177
	1117	3.1	94
	1648	5.5	168
	2338	0.9	27
4 W	0634	5.9	180
	1235	2.8	85
	1806	5.2	158
5 Th	0037	1.2	37
	0725	6.1	186
	1339	2.3	70
	1920	5.1	155
6 F	0130	1.5	46
	0806	6.3	192
	1430	1.8	55
	2022	5.2	158
7 Sa	0216	1.7	52
	0841	6.5	198
	1512	1.3	40
	2114	5.4	165
8 Su	0256	1.9	58
	0913	6.7	204
	1549	0.8	24
	2200	5.5	168
9 M	0333	2.1	64
	0942	6.9	210
	1624	0.4	12
	2242	5.7	174
10 Tu	0408	2.2	67
	1011	7.0	213
	1657	0.1	3
	2321	5.8	177
11 W ●	0442	2.4	73
	1041	7.2	219
	1731	−0.2	−6
12 Th	0000	5.9	180
	0516	2.6	79
	1112	7.2	219
	1806	−0.4	−12
13 F	0040	5.9	180
	0552	2.8	85
	1144	7.2	219
	1842	−0.4	−12
14 Sa	0121	5.8	177
	0629	3.0	91
	1219	7.1	216
	1922	−0.4	−12
15 Su	0206	5.8	177
	0711	3.2	98
	1258	6.9	210
	2004	−0.3	−9

	Time	Height	
	h m	ft	cm
16 M	0254	5.7	174
	0801	3.3	101
	1343	6.6	201
	2051	−0.1	−3
17 Tu	0347	5.8	177
	0902	3.4	104
	1438	6.2	189
	2143	0.2	6
18 W ◐	0442	5.9	180
	1014	3.2	98
	1545	5.8	177
	2239	0.5	15
19 Th	0537	6.2	189
	1133	2.8	85
	1705	5.5	168
	2339	0.8	24
20 F	0629	6.5	198
	1245	2.1	64
	1828	5.5	168
21 Sa	0038	1.1	34
	0717	7.0	213
	1349	1.2	37
	1945	5.6	171
22 Su	0135	1.3	40
	0803	7.5	229
	1445	0.3	9
	2054	5.9	180
23 M	0230	1.6	49
	0848	7.9	241
	1535	−0.5	−15
	2154	6.1	186
24 Tu	0321	1.8	55
	0932	8.2	250
	1624	−1.1	−34
	2250	6.4	195
25 W ○	0411	2.0	61
	1015	8.4	256
	1710	−1.5	−46
	2342	6.5	198
26 Th	0500	2.3	70
	1059	8.4	256
	1756	−1.6	−49
27 F	0032	6.6	201
	0548	2.5	76
	1144	8.2	250
	1842	−1.4	−43
28 Sa	0122	6.5	198
	0638	2.7	82
	1229	7.8	238
	1928	−1.1	−34
29 Su	0212	6.4	195
	0731	2.9	88
	1315	7.2	219
	2014	−0.6	−18
30 M	0303	6.3	192
	0827	3.1	94
	1405	6.6	201
	2102	−0.1	−3

December

	Time	Height	
	h m	ft	cm
1 Tu	0356	6.2	189
	0931	3.2	98
	1500	5.9	180
	2151	0.5	15
2 W ◑	0449	6.2	189
	1042	3.1	94
	1604	5.3	162
	2242	1.1	34
3 Th	0541	6.2	189
	1156	2.8	85
	1719	4.9	149
	2334	1.6	49
4 F	0628	6.3	192
	1303	2.4	73
	1838	4.7	143
5 Sa	0027	2.0	61
	0711	6.5	198
	1358	1.8	55
	1951	4.8	146
6 Su	0118	2.4	73
	0750	6.7	204
	1444	1.3	40
	2052	5.0	152
7 M	0205	2.6	79
	0826	6.9	210
	1524	0.8	24
	2143	5.2	158
8 Tu	0249	2.8	85
	0900	7.1	216
	1601	0.3	9
	2228	5.4	165
9 W	0331	2.9	88
	0935	7.3	223
	1636	−0.1	−3
	2309	5.7	174
10 Th	0410	3.0	91
	1009	7.5	229
	1712	−0.4	−12
	2348	5.9	180
11 F ●	0450	3.1	94
	1045	7.6	232
	1748	−0.7	−21
12 Sa	0027	6.0	183
	0530	3.1	94
	1122	7.6	232
	1825	−0.8	−24
13 Su	0107	6.1	186
	0612	3.1	94
	1201	7.5	229
	1904	−0.8	−24
14 M	0148	6.2	189
	0659	3.1	94
	1244	7.3	223
	1945	−0.6	−18
15 Tu	0232	6.3	192
	0751	3.1	94
	1331	6.9	210
	2028	−0.3	−9

	Time	Height	
	h m	ft	cm
16 W	0318	6.4	195
	0851	3.0	91
	1426	6.4	195
	2114	0.1	3
17 Th	0406	6.6	201
	1000	2.8	85
	1532	5.9	180
	2205	0.6	18
18 F ◐	0457	6.8	207
	1114	2.3	70
	1650	5.4	165
	2300	1.2	37
19 Sa	0548	7.1	216
	1227	1.7	52
	1816	5.2	158
20 Su	0000	1.7	52
	0640	7.5	229
	1334	0.9	27
	1939	5.3	162
21 M	0102	2.2	67
	0731	7.8	238
	1433	0.2	6
	2052	5.5	168
22 Tu	0203	2.5	76
	0821	8.1	247
	1525	−0.5	−15
	2153	5.9	180
23 W	0300	2.6	79
	0910	8.3	253
	1614	−1.0	−30
	2247	6.2	189
24 Th	0354	2.7	82
	0957	8.4	256
	1700	−1.3	−40
	2336	6.4	195
25 F ○	0445	2.8	85
	1042	8.3	253
	1743	−1.3	−40
26 Sa	0022	6.5	198
	0534	2.8	85
	1127	8.1	247
	1825	−1.2	−37
27 Su	0105	6.6	201
	0622	2.8	85
	1211	7.7	235
	1906	−0.8	−24
28 M	0148	6.6	201
	0711	2.9	88
	1255	7.2	219
	1946	−0.4	−12
29 Tu	0230	6.5	198
	0801	2.9	88
	1339	6.6	201
	2025	0.2	6
30 W	0312	6.5	198
	0856	2.9	88
	1427	6.0	183
	2105	0.8	24
31 Th	0355	6.4	195
	0956	2.9	88
	1522	5.4	165
	2146	1.4	43

Time meridian 120° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.
Heights are referred to mean lower low water which is the chart datum of soundings.

Charleston, Oregon, 2015

Times and Heights of High and Low Waters

January

	Time	Height	
	h m	ft	cm
1 Th	0224	2.9	88
	0846	8.5	259
	1544	0.0	0
	2217	6.3	192
2 F	0322	3.1	94
	0935	8.6	262
	1631	−0.4	−12
	2309	6.6	201
3 Sa	0414	3.1	94
	1020	8.7	265
	1713	−0.6	−18
	2353	6.8	207
4 Su ○	0502	3.1	94
	1102	8.6	262
	1752	−0.7	−21
5 M	0033	7.0	213
	0545	3.1	94
	1142	8.4	256
	1829	−0.6	−18
6 Tu	0109	7.1	216
	0626	3.0	91
	1220	8.2	250
	1904	−0.4	−12
7 W	0144	7.1	216
	0707	3.0	91
	1257	7.9	241
	1938	−0.2	−6
8 Th	0219	7.1	216
	0747	3.0	91
	1335	7.5	229
	2012	0.2	6
9 F	0254	7.1	216
	0830	3.0	91
	1414	7.0	213
	2046	0.7	21
10 Sa	0329	7.1	216
	0916	3.0	91
	1457	6.5	198
	2120	1.2	37
11 Su	0407	7.1	216
	1008	2.9	88
	1548	6.0	183
	2158	1.7	52
12 M	0448	7.1	216
	1108	2.8	85
	1649	5.5	168
	2240	2.3	70
13 Tu ◑	0532	7.2	219
	1213	2.4	73
	1803	5.2	158
	2331	2.8	85
14 W	0620	7.4	226
	1318	2.0	61
	1925	5.2	158
15 Th	0032	3.2	98
	0712	7.6	232
	1417	1.3	40
	2040	5.4	165

	Time	Height	
	h m	ft	cm
16 F	0138	3.4	104
	0804	7.9	241
	1510	0.6	18
	2143	5.8	177
17 Sa	0240	3.4	104
	0856	8.3	253
	1558	−0.1	−3
	2235	6.3	192
18 Su	0337	3.2	98
	0946	8.7	265
	1643	−0.8	−24
	2321	6.8	207
19 M	0430	2.9	88
	1035	9.1	277
	1727	−1.2	−37
20 Tu ●	0004	7.3	223
	0521	2.6	79
	1123	9.2	280
	1810	−1.5	−46
21 W	0046	7.6	232
	0611	2.2	67
	1212	9.2	280
	1853	−1.5	−46
22 Th	0128	8.0	244
	0702	1.9	58
	1302	8.9	271
	1936	−1.2	−37
23 F	0211	8.2	250
	0755	1.7	52
	1354	8.4	256
	2019	−0.6	−18
24 Sa	0256	8.3	253
	0851	1.5	46
	1450	7.7	235
	2105	0.1	3
25 Su	0342	8.3	253
	0952	1.5	46
	1551	6.9	210
	2153	1.0	30
26 M ◐	0432	8.3	253
	1058	1.4	43
	1700	6.2	189
	2246	1.8	55
27 Tu	0526	8.2	250
	1210	1.3	40
	1820	5.8	177
	2347	2.6	79
28 W	0624	8.1	247
	1322	1.0	30
	1946	5.6	171
29 Th	0056	3.1	94
	0725	8.0	244
	1429	0.7	21
	2104	5.8	177
30 F	0206	3.3	101
	0823	8.0	244
	1526	0.3	9
	2207	6.1	186
31 Sa	0309	3.3	101
	0918	8.1	247
	1615	0.1	3
	2255	6.4	195

February

	Time	Height	
	h m	ft	cm
1 Su	0403	3.2	98
	1006	8.1	247
	1656	−0.1	−3
	2334	6.7	204
2 M	0450	3.0	91
	1049	8.1	247
	1734	−0.2	−6
3 Tu ○	0009	6.9	210
	0531	2.7	82
	1129	8.1	247
	1808	−0.2	−6
4 W	0041	7.1	216
	0609	2.5	76
	1206	8.0	244
	1840	−0.1	−3
5 Th	0111	7.2	219
	0646	2.4	73
	1242	7.7	235
	1911	0.2	6
6 F	0141	7.2	219
	0723	2.3	70
	1318	7.4	226
	1941	0.5	15
7 Sa	0211	7.3	223
	0801	2.2	67
	1356	7.1	216
	2011	0.9	27
8 Su	0242	7.3	223
	0841	2.1	64
	1436	6.6	201
	2042	1.4	43
9 M	0315	7.3	223
	0926	2.1	64
	1521	6.1	186
	2115	2.0	61
10 Tu	0351	7.2	219
	1017	2.1	64
	1616	5.7	174
	2153	2.5	76
11 W ◑	0432	7.2	219
	1118	1.9	58
	1726	5.3	162
	2241	3.0	91
12 Th	0523	7.3	223
	1226	1.7	52
	1848	5.2	158
	2346	3.4	104
13 F	0622	7.4	226
	1334	1.2	37
	2008	5.4	165
14 Sa	0103	3.6	110
	0726	7.6	232
	1435	0.6	18
	2114	5.8	177
15 Su	0216	3.4	104
	0829	8.0	244
	1529	0.0	0
	2207	6.4	195

	Time	Height	
	h m	ft	cm
16 M	0320	3.0	91
	0927	8.4	256
	1618	−0.6	−18
	2253	6.9	210
17 Tu	0416	2.4	73
	1021	8.8	268
	1704	−1.0	−30
	2335	7.5	229
18 W ●	0508	1.8	55
	1114	9.0	274
	1747	−1.2	−37
19 Th	0016	8.0	244
	0559	1.2	37
	1205	9.0	274
	1830	−1.0	−30
20 F	0057	8.4	256
	0649	0.7	21
	1255	8.7	265
	1912	−0.7	−21
21 Sa	0138	8.6	262
	0739	0.5	15
	1347	8.2	250
	1955	−0.1	−3
22 Su	0221	8.6	262
	0832	0.4	12
	1442	7.6	232
	2040	0.7	21
23 M	0306	8.5	259
	0928	0.5	15
	1540	6.9	210
	2127	1.5	46
24 Tu	0354	8.3	253
	1029	0.7	21
	1647	6.2	189
	2220	2.3	70
25 W ◐	0447	7.9	241
	1137	0.9	27
	1803	5.8	177
	2323	3.0	91
26 Th	0548	7.6	232
	1249	1.0	30
	1926	5.6	171
27 F	0037	3.4	104
	0655	7.3	223
	1359	0.9	27
	2043	5.8	177
28 Sa	0153	3.4	104
	0801	7.3	223
	1459	0.7	21
	2142	6.1	186

March

	Time	Height	
	h m	ft	cm
1 Su	0258	3.2	98
	0900	7.3	223
	1549	0.6	18
	2227	6.4	195
2 M	0351	2.8	85
	0951	7.4	226
	1631	0.4	12
	2303	6.7	204
3 Tu	0435	2.5	76
	1035	7.5	229
	1707	0.3	9
	2334	6.9	210
4 W	0514	2.1	64
	1115	7.6	232
	1740	0.4	12
5 Th ○	0003	7.1	216
	0550	1.8	55
	1152	7.5	229
	1810	0.5	15
6 F	0032	7.3	223
	0625	1.5	46
	1228	7.4	226
	1840	0.7	21
7 Sa	0100	7.4	226
	0659	1.3	40
	1304	7.2	219
	1909	1.0	30
8 Su	0128	7.4	226
	0734	1.2	37
	1342	6.9	210
	1939	1.4	43
9 M	0157	7.4	226
	0812	1.1	34
	1421	6.6	201
	2009	1.8	55
10 Tu	0227	7.4	226
	0852	1.1	34
	1506	6.2	189
	2042	2.3	70
11 W	0302	7.3	223
	0939	1.2	37
	1559	5.8	177
	2121	2.8	85
12 Th	0343	7.2	219
	1035	1.2	37
	1704	5.5	168
	2212	3.2	98
13 F ◑	0436	7.1	216
	1141	1.1	34
	1820	5.4	165
	2321	3.5	107
14 Sa	0542	7.1	216
	1251	0.9	27
	1937	5.6	171
15 Su	0045	3.4	104
	0656	7.2	219
	1358	0.5	15
	2041	6.0	183

	Time	Height	
	h m	ft	cm
16 M	0202	3.0	91
	0807	7.5	229
	1457	0.1	3
	2134	6.6	201
17 Tu	0307	2.4	73
	0912	7.8	238
	1549	−0.3	−9
	2219	7.2	219
18 W	0404	1.6	49
	1010	8.2	250
	1636	−0.5	−15
	2302	7.8	238
19 Th	0456	0.8	24
	1105	8.4	256
	1721	−0.5	−15
	2343	8.3	253
20 F ●	0545	0.1	3
	1157	8.4	256
	1804	−0.2	−6
21 Sa	0023	8.6	262
	0634	−0.4	−12
	1249	8.2	250
	1847	0.2	6
22 Su	0104	8.8	268
	0722	−0.6	−18
	1340	7.8	238
	1931	0.7	21
23 M	0146	8.7	265
	0812	−0.6	−18
	1433	7.3	223
	2016	1.4	43
24 Tu	0230	8.4	256
	0904	−0.3	−9
	1530	6.8	207
	2104	2.1	64
25 W	0317	8.0	244
	0959	0.1	3
	1632	6.3	192
	2158	2.7	82
26 Th ◐	0410	7.4	226
	1101	0.5	15
	1742	5.9	180
	2303	3.2	98
27 F	0511	6.9	210
	1208	0.9	27
	1857	5.8	177
28 Sa	0020	3.3	101
	0621	6.6	201
	1317	1.0	30
	2006	5.9	180
29 Su	0137	3.2	98
	0732	6.4	195
	1419	1.1	34
	2102	6.1	186
30 M	0241	2.8	85
	0836	6.5	198
	1510	1.0	30
	2144	6.4	195
31 Tu	0332	2.3	70
	0930	6.6	201
	1553	1.0	30
	2220	6.7	204

Time meridian 120° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.
Heights are referred to mean lower low water which is the chart datum of soundings.

Charleston, Oregon, 2015

Times and Heights of High and Low Waters

April

	Time	Height		Time	Height
	h m	ft / cm		h m	ft / cm
1 W	0415	1.8 / 55	**16** Th	0352	0.6 / 18
	1017	6.8 / 207		1001	7.3 / 223
	1630	1.0 / 30		1605	0.3 / 9
	2251	7.0 / 213		2227	8.1 / 247
2 Th	0453	1.4 / 43	**17** F	0443	−0.2 / −6
	1058	6.9 / 210		1058	7.5 / 229
	1704	1.0 / 30		1652	0.4 / 12
	2320	7.2 / 219		2309	8.5 / 259
3 F	0528	0.9 / 27	**18** Sa ●	0531	−0.9 / −27
	1137	7.0 / 213		1151	7.6 / 232
	1736	1.1 / 34		1738	0.7 / 21
	2349	7.4 / 226		2350	8.8 / 268
4 Sa ○	0602	0.6 / 18	**19** Su	0618	−1.3 / −40
	1215	7.0 / 213		1243	7.6 / 232
	1807	1.3 / 40		1822	1.1 / 34
5 Su	0017	7.5 / 229	**20** M	0031	8.8 / 268
	0636	0.3 / 9		0705	−1.4 / −43
	1253	6.9 / 210		1333	7.3 / 223
	1838	1.6 / 49		1907	1.5 / 46
6 M	0046	7.6 / 232	**21** Tu	0114	8.6 / 262
	0711	0.2 / 6		0751	−1.3 / −40
	1331	6.7 / 204		1425	7.0 / 213
	1909	1.9 / 58		1953	2.0 / 61
7 Tu	0116	7.6 / 232	**22** W	0157	8.2 / 250
	0747	0.1 / 3		0839	−0.9 / −27
	1413	6.5 / 198		1518	6.7 / 204
	1942	2.3 / 70		2043	2.5 / 76
8 W	0148	7.5 / 229	**23** Th	0243	7.6 / 232
	0828	0.1 / 3		0930	−0.4 / −12
	1458	6.2 / 189		1614	6.3 / 192
	2019	2.6 / 79		2138	2.9 / 88
9 Th	0224	7.4 / 226	**24** F	0334	7.0 / 213
	0913	0.2 / 6		1024	0.2 / 6
	1550	6.0 / 183		1715	6.1 / 186
	2103	3.0 / 91		2243	3.1 / 94
10 F	0308	7.2 / 219	**25** Sa ◐	0433	6.4 / 195
	1005	0.3 / 9		1123	0.7 / 21
	1651	5.8 / 177		1818	6.0 / 183
	2200	3.2 / 98		2356	3.2 / 98
11 Sa ◑	0404	6.9 / 210	**26** Su	0541	5.9 / 180
	1107	0.5 / 15		1224	1.0 / 30
	1759	5.8 / 177		1918	6.0 / 183
	2314	3.3 / 101			
12 Su	0514	6.7 / 204	**27** M	0110	2.9 / 88
	1214	0.5 / 15		0653	5.7 / 174
	1906	6.0 / 183		1324	1.3 / 40
				2009	6.2 / 189
13 M	0037	3.0 / 91	**28** Tu	0214	2.4 / 73
	0634	6.6 / 201		0802	5.7 / 174
	1320	0.5 / 15		1418	1.4 / 43
	2006	6.4 / 195		2052	6.5 / 198
14 Tu	0152	2.4 / 73	**29** W	0305	1.9 / 58
	0750	6.7 / 204		0902	5.8 / 177
	1421	0.4 / 12		1504	1.5 / 46
	2057	7.0 / 213		2129	6.8 / 207
15 W	0256	1.6 / 49	**30** Th	0349	1.3 / 40
	0859	7.0 / 213		0953	6.0 / 183
	1515	0.3 / 9		1545	1.6 / 49
	2144	7.6 / 232		2203	7.1 / 216

May

	Time	Height		Time	Height
	h m	ft / cm		h m	ft / cm
1 F	0427	0.7 / 21	**16** Sa	0430	−0.9 / −27
	1039	6.2 / 189		1053	6.7 / 204
	1623	1.7 / 52		1625	1.3 / 40
	2235	7.3 / 223		2238	8.6 / 262
2 Sa	0503	0.2 / 6	**17** Su ●	0518	−1.4 / −43
	1121	6.4 / 195		1146	6.9 / 210
	1658	1.8 / 55		1713	1.6 / 49
	2306	7.5 / 229		2321	8.7 / 265
3 Su ○	0538	−0.2 / −6	**18** M	0603	−1.7 / −52
	1201	6.5 / 198		1237	6.9 / 210
	1733	2.0 / 61		1800	1.8 / 55
	2337	7.7 / 235			
4 M	0614	−0.5 / −15	**19** Tu	0003	8.6 / 262
	1242	6.5 / 198		0648	−1.8 / −55
	1807	2.2 / 67		1325	6.9 / 210
				1846	2.1 / 64
5 Tu	0009	7.8 / 238	**20** W	0046	8.3 / 253
	0650	−0.7 / −21		0732	−1.6 / −49
	1323	6.5 / 198		1413	6.8 / 207
	1843	2.4 / 73		1933	2.4 / 73
6 W	0043	7.8 / 238	**21** Th	0129	7.8 / 238
	0728	−0.8 / −24		0816	−1.2 / −37
	1406	6.4 / 195		1501	6.6 / 201
	1921	2.6 / 79		2022	2.6 / 79
7 Th	0119	7.7 / 235	**22** F	0214	7.3 / 223
	0809	−0.8 / −24		0901	−0.7 / −21
	1452	6.3 / 192		1550	6.4 / 195
	2004	2.8 / 85		2116	2.8 / 85
8 F	0200	7.5 / 229	**23** Sa	0301	6.7 / 204
	0854	−0.7 / −21		0948	−0.1 / −3
	1542	6.2 / 189		1641	6.2 / 189
	2055	2.9 / 88		2215	2.9 / 88
9 Sa	0248	7.1 / 216	**24** Su	0355	6.0 / 183
	0944	−0.4 / −12		1037	0.4 / 12
	1637	6.2 / 189		1732	6.2 / 189
	2157	3.0 / 91		2322	2.9 / 88
10 Su	0347	6.7 / 204	**25** M ◐	0456	5.5 / 168
	1039	−0.1 / −3		1128	0.9 / 27
	1736	6.3 / 192		1823	6.2 / 189
	2311	2.9 / 88			
11 M ◑	0457	6.3 / 192	**26** Tu	0031	2.6 / 79
	1140	0.2 / 6		0606	5.2 / 158
	1834	6.5 / 198		1222	1.3 / 40
				1911	6.3 / 192
12 Tu	0029	2.4 / 73	**27** W	0135	2.1 / 64
	0617	6.1 / 186		0718	5.0 / 152
	1243	0.5 / 15		1316	1.7 / 52
	1930	6.9 / 210		1955	6.6 / 201
13 W	0141	1.7 / 52	**28** Th	0230	1.6 / 49
	0736	6.0 / 183		0825	5.1 / 155
	1344	0.7 / 21		1407	1.9 / 58
	2021	7.4 / 226		2036	6.8 / 207
14 Th	0244	0.8 / 24	**29** F	0316	1.0 / 30
	0849	6.2 / 189		0924	5.3 / 162
	1441	0.9 / 27		1454	2.1 / 64
	2109	7.9 / 241		2114	7.1 / 216
15 F	0339	−0.1 / −3	**30** Sa	0358	0.3 / 9
	0954	6.4 / 195		1016	5.6 / 171
	1535	1.1 / 34		1538	2.2 / 67
	2154	8.3 / 253		2150	7.4 / 226
			31 Su	0437	−0.2 / −6
				1102	5.8 / 177
				1620	2.3 / 70
				2226	7.7 / 235

June

	Time	Height		Time	Height
	h m	ft / cm		h m	ft / cm
1 M	0514	−0.7 / −21	**16** Tu ●	0549	−1.7 / −52
	1146	6.1 / 186		1229	6.5 / 198
	1700	2.4 / 73		1741	2.3 / 70
	2303	7.9 / 241		2342	8.2 / 250
2 Tu ○	0552	−1.1 / −34	**17** W	0631	−1.7 / −52
	1228	6.3 / 192		1313	6.6 / 201
	1740	2.5 / 76		1828	2.3 / 70
	2340	8.0 / 244			
3 W	0631	−1.4 / −43	**18** Th	0024	8.0 / 244
	1311	6.4 / 195		0712	−1.5 / −46
	1822	2.5 / 76		1356	6.6 / 201
				1914	2.4 / 73
4 Th	0019	8.0 / 244	**19** F	0106	7.5 / 229
	0711	−1.5 / −46		0752	−1.2 / −37
	1354	6.5 / 198		1437	6.5 / 198
	1906	2.5 / 76		2000	2.5 / 76
5 F	0100	7.8 / 238	**20** Sa	0148	7.1 / 216
	0752	−1.5 / −46		0832	−0.7 / −21
	1439	6.5 / 198		1518	6.4 / 195
	1954	2.6 / 79		2049	2.5 / 76
6 Sa	0146	7.6 / 232	**21** Su	0232	6.5 / 198
	0837	−1.3 / −40		0911	−0.2 / −6
	1526	6.6 / 201		1600	6.4 / 195
	2049	2.5 / 76		2141	2.6 / 79
7 Su	0238	7.1 / 216	**22** M	0320	5.9 / 180
	0924	−0.9 / −27		0952	0.3 / 9
	1616	6.7 / 204		1643	6.3 / 192
	2151	2.4 / 73		2239	2.5 / 76
8 M	0337	6.6 / 201	**23** Tu	0414	5.4 / 165
	1014	−0.4 / −12		1034	0.9 / 27
	1708	6.8 / 207		1727	6.4 / 195
	2301	2.1 / 64		2342	2.3 / 70
9 Tu ◑	0446	6.0 / 183	**24** W ◐	0517	4.9 / 149
	1109	0.1 / 3		1121	1.4 / 43
	1801	7.1 / 216		1812	6.4 / 195
10 W	0015	1.7 / 52	**25** Th	0046	1.9 / 58
	0604	5.6 / 171		0629	4.7 / 143
	1208	0.7 / 21		1212	1.9 / 58
	1855	7.4 / 226		1857	6.6 / 201
11 Th	0126	1.0 / 30	**26** F	0145	1.4 / 43
	0725	5.5 / 168		0743	4.6 / 140
	1310	1.2 / 37		1307	2.3 / 70
	1947	7.7 / 235		1942	6.8 / 207
12 F	0230	0.2 / 6	**27** Sa	0238	0.9 / 27
	0842	5.5 / 168		0851	4.8 / 146
	1410	1.6 / 49		1402	2.5 / 76
	2038	8.0 / 244		2027	7.1 / 216
13 Sa	0326	−0.5 / −15	**28** Su	0325	0.2 / 6
	0949	5.8 / 177		0950	5.1 / 155
	1508	1.9 / 58		1455	2.6 / 79
	2127	8.3 / 253		2110	7.4 / 226
14 Su	0418	−1.1 / −34	**29** M	0408	−0.4 / −12
	1049	6.1 / 186		1041	5.5 / 168
	1602	2.1 / 64		1544	2.6 / 79
	2213	8.4 / 256		2153	7.7 / 235
15 M	0505	−1.5 / −46	**30** Tu	0450	−0.9 / −27
	1141	6.3 / 192		1126	5.9 / 180
	1653	2.2 / 67		1631	2.6 / 79
	2258	8.4 / 256		2235	8.0 / 244

Time meridian 120° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.
Heights are referred to mean lower low water which is the chart datum of soundings.

Charleston, Oregon, 2015

Times and Heights of High and Low Waters

July

	Time	Height	
	h m	ft	cm
1 W ○	0530	−1.4	−43
	1209	6.2	189
	1717	2.4	73
	2318	8.2	250
2 Th	0611	−1.7	−52
	1251	6.5	198
	1804	2.3	70
3 F	0002	8.2	250
	0652	−1.9	−58
	1333	6.7	204
	1852	2.1	64
4 Sa	0049	8.0	244
	0734	−1.8	−55
	1416	6.9	210
	1943	1.9	58
5 Su	0138	7.7	235
	0817	−1.5	−46
	1500	7.1	216
	2038	1.7	52
6 M	0231	7.2	219
	0902	−1.0	−30
	1546	7.2	219
	2138	1.6	49
7 Tu	0330	6.5	198
	0950	−0.3	−9
	1635	7.4	226
	2245	1.3	40
8 W ◑	0437	5.9	180
	1041	0.4	12
	1727	7.5	229
	2356	1.0	30
9 Th	0554	5.4	165
	1139	1.2	37
	1821	7.6	232
10 F	0107	0.5	15
	0716	5.2	158
	1242	1.8	55
	1917	7.7	235
11 Sa	0213	0.0	0
	0835	5.2	158
	1347	2.2	67
	2013	7.9	241
12 Su	0312	−0.6	−18
	0945	5.5	168
	1450	2.4	73
	2106	8.0	244
13 M	0405	−1.0	−30
	1042	5.8	177
	1548	2.4	73
	2156	8.0	244
14 Tu	0451	−1.2	−37
	1131	6.1	186
	1640	2.4	73
	2243	8.0	244
15 W ●	0534	−1.3	−40
	1213	6.3	192
	1727	2.3	70
	2326	7.9	241

	Time	Height	
	h m	ft	cm
16 Th	0613	−1.3	−40
	1252	6.5	198
	1811	2.2	67
17 F	0008	7.7	235
	0650	−1.2	−37
	1329	6.5	198
	1854	2.1	64
18 Sa	0047	7.4	226
	0726	−0.9	−27
	1404	6.5	198
	1936	2.1	64
19 Su	0127	7.0	213
	0800	−0.5	−15
	1438	6.5	198
	2018	2.1	64
20 M	0207	6.5	198
	0835	0.0	0
	1514	6.5	198
	2104	2.0	61
21 Tu	0250	6.0	183
	0909	0.5	15
	1550	6.5	198
	2153	2.0	61
22 W	0339	5.5	168
	0946	1.1	34
	1629	6.5	198
	2248	1.9	58
23 Th ◐	0436	5.0	152
	1026	1.7	52
	1712	6.5	198
	2350	1.7	52
24 F	0544	4.7	143
	1114	2.2	67
	1759	6.6	201
25 Sa	0054	1.4	43
	0701	4.6	140
	1211	2.6	79
	1850	6.8	207
26 Su	0155	0.9	27
	0817	4.7	143
	1316	2.9	88
	1943	7.0	213
27 M	0249	0.3	9
	0921	5.0	152
	1419	2.9	88
	2035	7.3	223
28 Tu	0338	−0.3	−9
	1014	5.5	168
	1517	2.7	82
	2125	7.7	235
29 W	0423	−0.9	−27
	1100	5.9	180
	1609	2.4	73
	2214	8.0	244
30 Th	0506	−1.4	−43
	1142	6.4	195
	1659	2.0	61
	2302	8.3	253
31 F ○	0548	−1.7	−52
	1223	6.8	207
	1748	1.6	49
	2351	8.3	253

August

	Time	Height	
	h m	ft	cm
1 Sa	0630	−1.7	−52
	1303	7.2	219
	1838	1.2	37
2 Su	0040	8.2	250
	0711	−1.6	−49
	1344	7.5	229
	1929	0.9	27
3 M	0130	7.8	238
	0754	−1.1	−34
	1427	7.7	235
	2022	0.7	21
4 Tu	0224	7.3	223
	0838	−0.5	−15
	1511	7.8	238
	2120	0.6	18
5 W	0323	6.6	201
	0925	0.3	9
	1559	7.8	238
	2223	0.5	15
6 Th ◑	0429	5.9	180
	1016	1.1	34
	1652	7.7	235
	2331	0.5	15
7 F	0544	5.4	165
	1115	1.8	55
	1749	7.6	232
8 Sa	0043	0.3	9
	0707	5.2	158
	1222	2.4	73
	1851	7.5	229
9 Su	0153	0.1	3
	0827	5.3	162
	1334	2.7	82
	1953	7.5	229
10 M	0255	−0.2	−6
	0934	5.6	171
	1442	2.7	82
	2051	7.5	229
11 Tu	0348	−0.5	−15
	1027	5.9	180
	1540	2.5	76
	2144	7.6	232
12 W	0433	−0.6	−18
	1110	6.2	189
	1630	2.3	70
	2231	7.6	232
13 Th	0514	−0.7	−21
	1148	6.4	195
	1714	2.0	61
	2314	7.5	229
14 F ●	0550	−0.7	−21
	1221	6.6	201
	1754	1.8	55
	2353	7.4	226
15 Sa	0624	−0.5	−15
	1253	6.7	204
	1832	1.6	49

	Time	Height	
	h m	ft	cm
16 Su	0031	7.2	219
	0656	−0.2	−6
	1323	6.8	207
	1910	1.5	46
17 M	0109	6.9	210
	0727	0.1	3
	1353	6.8	207
	1948	1.4	43
18 Tu	0147	6.6	201
	0758	0.6	18
	1424	6.8	207
	2027	1.4	43
19 W	0227	6.1	186
	0830	1.1	34
	1457	6.7	204
	2110	1.4	43
20 Th	0312	5.7	174
	0903	1.6	49
	1532	6.7	204
	2159	1.4	43
21 F	0405	5.3	162
	0940	2.1	64
	1613	6.6	201
	2256	1.4	43
22 Sa ◐	0510	4.9	149
	1027	2.6	79
	1702	6.6	201
23 Su	0001	1.3	40
	0626	4.8	146
	1128	3.0	91
	1800	6.6	201
24 M	0108	0.9	27
	0744	4.9	149
	1243	3.1	94
	1903	6.8	207
25 Tu	0210	0.5	15
	0849	5.3	162
	1355	3.0	91
	2005	7.2	219
26 W	0304	−0.1	−3
	0942	5.8	177
	1458	2.6	79
	2104	7.6	232
27 Th	0353	−0.6	−18
	1027	6.3	192
	1553	2.0	61
	2158	7.9	241
28 F	0438	−1.0	−30
	1108	6.9	210
	1644	1.4	43
	2250	8.2	250
29 Sa ○	0521	−1.2	−37
	1148	7.4	226
	1733	0.8	24
	2341	8.3	253
30 Su	0604	−1.1	−34
	1228	7.8	238
	1822	0.2	6
31 M	0031	8.2	250
	0646	−0.8	−24
	1309	8.1	247
	1912	−0.1	−3

September

	Time	Height	
	h m	ft	cm
1 Tu	0123	7.8	238
	0729	−0.3	−9
	1351	8.2	250
	2004	−0.3	−9
2 W	0217	7.3	223
	0813	0.4	12
	1435	8.2	250
	2059	−0.2	−6
3 Th	0315	6.7	204
	0900	1.1	34
	1523	8.0	244
	2158	−0.1	−3
4 F	0420	6.1	186
	0954	1.9	58
	1617	7.7	235
	2303	0.2	6
5 Sa ◑	0534	5.7	174
	1056	2.5	76
	1718	7.3	223
6 Su	0014	0.3	9
	0654	5.6	171
	1211	2.9	88
	1825	7.1	216
7 M	0125	0.4	12
	0810	5.7	174
	1328	2.9	88
	1934	7.0	213
8 Tu	0229	0.3	9
	0912	5.9	180
	1436	2.7	82
	2037	7.0	213
9 W	0323	0.2	6
	1000	6.2	189
	1532	2.3	70
	2132	7.1	216
10 Th	0407	0.1	3
	1039	6.5	198
	1618	1.9	58
	2219	7.1	216
11 F	0446	0.1	3
	1112	6.7	204
	1658	1.6	49
	2301	7.2	219
12 Sa ●	0520	0.2	6
	1142	6.9	210
	1735	1.2	37
	2339	7.2	219
13 Su	0552	0.4	12
	1211	7.1	216
	1810	1.0	30
14 M	0016	7.1	216
	0623	0.7	21
	1239	7.1	216
	1844	0.8	24
15 Tu	0053	6.9	210
	0653	1.0	30
	1308	7.2	219
	1919	0.7	21

	Time	Height	
	h m	ft	cm
16 W	0131	6.6	201
	0723	1.4	43
	1337	7.1	216
	1956	0.7	21
17 Th	0210	6.3	192
	0754	1.8	55
	1407	7.1	216
	2035	0.8	24
18 F	0254	6.0	183
	0827	2.3	70
	1441	6.9	210
	2120	0.9	27
19 Sa	0345	5.6	171
	0906	2.7	82
	1521	6.8	207
	2212	1.0	30
20 Su	0447	5.4	165
	0955	3.1	94
	1611	6.7	204
	2314	1.0	30
21 M ◐	0559	5.3	162
	1102	3.4	104
	1716	6.6	201
22 Tu	0022	0.9	27
	0712	5.4	165
	1224	3.3	101
	1829	6.6	201
23 W	0128	0.6	18
	0814	5.8	177
	1340	3.0	91
	1941	6.9	210
24 Th	0227	0.3	9
	0905	6.4	195
	1444	2.3	70
	2046	7.3	223
25 F	0319	−0.1	−3
	0950	7.0	213
	1539	1.5	46
	2144	7.7	235
26 Sa	0407	−0.3	−9
	1032	7.6	232
	1630	0.6	18
	2239	7.9	241
27 Su ○	0452	−0.3	−9
	1112	8.1	247
	1719	−0.1	−3
	2332	8.1	247
28 M	0535	−0.1	−3
	1153	8.5	259
	1807	−0.7	−21
29 Tu	0024	8.0	244
	0619	0.2	6
	1234	8.8	268
	1855	−1.0	−30
30 W	0116	7.8	238
	0703	0.8	24
	1316	8.8	268
	1945	−1.1	−34

Time meridian 120° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.
Heights are referred to mean lower low water which is the chart datum of soundings.

Charleston, Oregon, 2015

Times and Heights of High and Low Waters

October

	Time	Height	
	h m	ft	cm
1 Th	0210	7.4	226
	0749	1.4	43
	1401	8.5	259
	2037	−0.8	−24
2 F	0307	6.9	210
	0838	2.0	61
	1449	8.1	247
	2132	−0.4	−12
3 Sa	0409	6.5	198
	0934	2.6	79
	1543	7.6	232
	2233	0.1	3
4 Su ◑	0518	6.1	186
	1041	3.1	94
	1645	7.0	213
	2339	0.5	15
5 M	0631	6.0	183
	1159	3.2	98
	1756	6.6	201
6 Tu	0048	0.8	24
	0740	6.1	186
	1317	3.1	94
	1910	6.4	195
7 W	0152	0.9	27
	0836	6.4	195
	1424	2.6	79
	2017	6.4	195
8 Th	0246	1.0	30
	0921	6.6	201
	1517	2.1	64
	2114	6.5	198
9 F	0331	1.0	30
	0958	6.9	210
	1600	1.6	49
	2203	6.7	204
10 Sa	0410	1.1	34
	1030	7.2	219
	1638	1.2	37
	2245	6.8	207
11 Su	0445	1.2	37
	1100	7.4	226
	1714	0.8	24
	2325	6.9	210
12 M ●	0518	1.4	43
	1129	7.5	229
	1747	0.5	15
13 Tu	0003	6.9	210
	0549	1.6	49
	1157	7.6	232
	1821	0.2	6
14 W	0040	6.8	207
	0620	1.9	58
	1226	7.7	235
	1855	0.1	3
15 Th	0119	6.7	204
	0652	2.3	70
	1255	7.6	232
	1930	0.1	3

	Time	Height	
	h m	ft	cm
16 F	0159	6.5	198
	0724	2.6	79
	1326	7.5	229
	2008	0.2	6
17 Sa	0243	6.3	192
	0800	2.9	88
	1400	7.3	223
	2051	0.3	9
18 Su	0333	6.1	186
	0843	3.3	101
	1442	7.1	216
	2140	0.5	15
19 M	0430	5.9	180
	0937	3.5	107
	1534	6.8	207
	2237	0.7	21
20 Tu ◐	0534	5.9	180
	1049	3.6	110
	1642	6.6	201
	2341	0.8	24
21 W	0639	6.1	186
	1211	3.3	101
	1801	6.5	198
22 Th	0046	0.8	24
	0737	6.6	201
	1326	2.7	82
	1919	6.6	201
23 F	0147	0.7	21
	0827	7.1	216
	1430	1.9	58
	2030	6.8	207
24 Sa	0243	0.7	21
	0913	7.7	235
	1526	0.9	27
	2133	7.2	219
25 Su	0334	0.7	21
	0956	8.3	253
	1617	0.0	0
	2231	7.5	229
26 M	0422	0.8	24
	1038	8.8	268
	1705	−0.8	−24
	2325	7.7	235
27 Tu ○	0508	1.1	34
	1120	9.1	277
	1752	−1.3	−40
28 W	0018	7.7	235
	0554	1.4	43
	1202	9.2	280
	1839	−1.5	−46
29 Th	0110	7.6	232
	0640	1.8	55
	1246	9.1	277
	1927	−1.5	−46
30 F	0202	7.4	226
	0728	2.3	70
	1331	8.7	265
	2015	−1.1	−34
31 Sa	0256	7.1	216
	0819	2.7	82
	1418	8.2	250
	2106	−0.6	−18

November

	Time	Height	
	h m	ft	cm
1 Su	0353	6.8	207
	0916	3.1	94
	1511	7.5	229
	2201	0.0	0
2 M	0454	6.6	201
	1022	3.4	104
	1610	6.8	207
	2259	0.6	18
3 Tu ◑	0557	6.5	198
	1137	3.4	104
	1719	6.3	192
4 W	0001	1.1	34
	0657	6.6	201
	1254	3.1	94
	1834	6.0	183
5 Th	0101	1.4	43
	0749	6.8	207
	1400	2.6	79
	1945	5.9	180
6 F	0156	1.7	52
	0834	7.0	213
	1453	2.1	64
	2048	6.0	183
7 Sa	0244	1.9	58
	0911	7.3	223
	1537	1.5	46
	2141	6.2	189
8 Su	0327	2.0	61
	0945	7.5	229
	1615	0.9	27
	2228	6.4	195
9 M	0405	2.2	67
	1017	7.8	238
	1651	0.5	15
	2310	6.6	201
10 Tu	0441	2.3	70
	1049	8.0	244
	1725	0.1	3
	2350	6.7	204
11 W ●	0516	2.5	76
	1119	8.1	247
	1759	−0.2	−6
12 Th	0029	6.8	207
	0550	2.7	82
	1151	8.1	247
	1834	−0.3	−9
13 F	0108	6.8	207
	0625	2.9	88
	1223	8.1	247
	1910	−0.4	−12
14 Sa	0149	6.7	204
	0702	3.1	94
	1257	8.0	244
	1948	−0.4	−12
15 Su	0233	6.6	201
	0742	3.3	101
	1335	7.8	238
	2030	−0.2	−6

	Time	Height	
	h m	ft	cm
16 M	0320	6.6	201
	0830	3.5	107
	1419	7.4	226
	2116	0.0	0
17 Tu	0412	6.6	201
	0928	3.5	107
	1513	7.0	213
	2207	0.3	9
18 W ◐	0507	6.7	204
	1038	3.4	104
	1620	6.6	201
	2304	0.7	21
19 Th	0603	6.9	210
	1156	3.0	91
	1739	6.3	192
20 F	0005	1.0	30
	0658	7.3	223
	1310	2.3	70
	1901	6.2	189
21 Sa	0107	1.3	40
	0749	7.8	238
	1415	1.4	43
	2017	6.4	195
22 Su	0207	1.5	46
	0838	8.4	256
	1512	0.5	15
	2125	6.7	204
23 M	0302	1.7	52
	0924	8.8	268
	1604	−0.4	−12
	2226	7.0	213
24 Tu	0354	1.9	58
	1009	9.2	280
	1652	−1.1	−34
	2321	7.3	223
25 W ○	0444	2.1	64
	1054	9.4	287
	1739	−1.5	−46
26 Th	0013	7.4	226
	0533	2.3	70
	1138	9.4	287
	1825	−1.6	−49
27 F	0102	7.5	229
	0621	2.5	76
	1222	9.1	277
	1910	−1.5	−46
28 Sa	0151	7.4	226
	0710	2.8	85
	1307	8.7	265
	1955	−1.1	−34
29 Su	0240	7.3	223
	0800	3.0	91
	1353	8.1	247
	2040	−0.6	−18
30 M	0329	7.1	216
	0855	3.2	98
	1442	7.5	229
	2127	0.0	0

December

	Time	Height	
	h m	ft	cm
1 Tu	0420	7.0	213
	0955	3.3	101
	1535	6.8	207
	2216	0.7	21
2 W ◑	0512	6.9	210
	1102	3.3	101
	1637	6.1	186
	2307	1.3	40
3 Th	0604	6.9	210
	1213	3.1	94
	1747	5.7	174
4 F	0001	1.8	55
	0653	7.0	213
	1320	2.7	82
	1901	5.5	168
5 Sa	0056	2.3	70
	0739	7.2	219
	1418	2.1	64
	2013	5.5	168
6 Su	0149	2.6	79
	0820	7.5	229
	1506	1.5	46
	2114	5.7	174
7 M	0238	2.8	85
	0859	7.7	235
	1548	0.9	27
	2207	6.0	183
8 Tu	0323	3.0	91
	0936	8.0	244
	1626	0.4	12
	2253	6.3	192
9 W	0406	3.1	94
	1012	8.2	250
	1703	0.0	0
	2335	6.5	198
10 Th	0446	3.1	94
	1048	8.4	256
	1739	−0.4	−12
11 F ●	0015	6.7	204
	0525	3.2	98
	1124	8.5	259
	1815	−0.7	−21
12 Sa	0055	6.9	210
	0604	3.2	98
	1201	8.5	259
	1852	−0.8	−24
13 Su	0135	7.0	213
	0645	3.2	98
	1239	8.4	256
	1931	−0.8	−24
14 M	0216	7.1	216
	0730	3.2	98
	1321	8.1	247
	2011	−0.6	−18
15 Tu	0300	7.1	216
	0820	3.2	98
	1408	7.8	238
	2055	−0.3	−9

	Time	Height	
	h m	ft	cm
16 W	0346	7.2	219
	0918	3.1	94
	1502	7.2	219
	2141	0.2	6
17 Th	0434	7.4	226
	1024	2.9	88
	1607	6.7	204
	2232	0.7	21
18 F ◐	0526	7.6	232
	1137	2.5	76
	1722	6.2	189
	2329	1.3	40
19 Sa	0619	7.9	241
	1250	1.8	55
	1846	5.9	180
20 Su	0030	1.9	58
	0713	8.3	253
	1358	1.1	34
	2007	6.0	183
21 M	0134	2.3	70
	0806	8.6	262
	1458	0.3	9
	2120	6.2	189
22 Tu	0236	2.6	79
	0858	8.9	271
	1552	−0.5	−15
	2223	6.6	201
23 W	0334	2.7	82
	0947	9.2	280
	1641	−1.0	−30
	2317	7.0	213
24 Th	0428	2.8	85
	1035	9.3	283
	1727	−1.3	−40
25 F ○	0006	7.2	219
	0518	2.8	85
	1121	9.2	280
	1811	−1.4	−43
26 Sa	0051	7.4	226
	0607	2.8	85
	1205	9.0	274
	1853	−1.2	−37
27 Su	0135	7.4	226
	0654	2.8	85
	1249	8.6	262
	1934	−0.9	−27
28 M	0216	7.4	226
	0741	2.9	88
	1332	8.1	247
	2013	−0.4	−12
29 Tu	0258	7.3	223
	0830	2.9	88
	1416	7.5	229
	2053	0.2	6
30 W	0339	7.2	219
	0921	3.0	91
	1503	6.8	207
	2133	0.8	24
31 Th	0421	7.2	219
	1018	3.0	91
	1555	6.2	189
	2214	1.5	46

Time meridian 120° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.
Heights are referred to mean lower low water which is the chart datum of soundings.

Astoria (Tongue Pt.), Oregon, 2015

Times and Heights of High and Low Waters

January

	Time	Height	
	h m	ft	cm
1 Th	0346	2.5	76
	1001	9.5	290
	1705	−0.1	−3
	2316	7.4	226
2 F	0442	2.7	82
	1050	9.6	293
	1754	−0.4	−12
3 Sa	0009	7.8	238
	0534	2.8	85
	1135	9.6	293
	1839	−0.6	−18
4 Su ○	0057	8.1	247
	0623	2.9	88
	1217	9.6	293
	1920	−0.5	−15
5 M	0140	8.2	250
	0708	3.0	91
	1257	9.4	287
	1957	−0.4	−12
6 Tu	0221	8.3	253
	0750	3.0	91
	1336	9.2	280
	2032	−0.2	−6
7 W	0258	8.3	253
	0831	3.0	91
	1413	8.9	271
	2104	0.0	0
8 Th	0334	8.3	253
	0910	2.9	88
	1450	8.6	262
	2134	0.3	9
9 F	0407	8.3	253
	0951	2.8	85
	1528	8.1	247
	2204	0.7	21
10 Sa	0440	8.2	250
	1033	2.7	82
	1610	7.6	232
	2236	1.1	34
11 Su	0514	8.1	247
	1120	2.7	82
	1659	7.0	213
	2313	1.5	46
12 M	0551	8.1	247
	1216	2.5	76
	1802	6.4	195
	2357	2.1	64
13 Tu ◑	0635	8.1	247
	1320	2.3	70
	1921	6.1	186
14 W	0053	2.6	79
	0726	8.3	253
	1429	1.9	58
	2043	6.1	186
15 Th	0157	3.0	91
	0820	8.5	259
	1534	1.3	40
	2155	6.4	195

	Time	Height	
	h m	ft	cm
16 F	0305	3.3	101
	0915	8.9	271
	1631	0.6	18
	2256	6.9	210
17 Sa	0408	3.3	101
	1008	9.3	283
	1722	0.0	0
	2349	7.4	226
18 Su	0505	3.2	98
	1100	9.8	299
	1810	−0.5	−15
19 M	0037	7.9	241
	0559	2.9	88
	1151	10.1	308
	1856	−0.9	−27
20 Tu ●	0122	8.4	256
	0651	2.6	79
	1241	10.3	314
	1939	−1.1	−34
21 W	0205	8.8	268
	0742	2.2	67
	1331	10.3	314
	2022	−1.1	−34
22 Th	0248	9.1	277
	0833	1.9	58
	1422	10.1	308
	2104	−0.9	−27
23 F	0329	9.3	283
	0924	1.6	49
	1514	9.6	293
	2147	−0.5	−15
24 Sa	0412	9.4	287
	1017	1.4	43
	1608	8.9	271
	2230	0.1	3
25 Su	0456	9.4	287
	1115	1.3	40
	1708	8.1	247
	2317	0.8	24
26 M ◐	0545	9.3	283
	1218	1.3	40
	1815	7.3	223
27 Tu	0009	1.6	49
	0638	9.1	277
	1327	1.2	37
	1931	6.8	207
28 W	0109	2.3	70
	0736	8.9	271
	1440	1.0	30
	2048	6.7	204
29 Th	0216	2.8	85
	0837	8.9	271
	1548	0.6	18
	2200	6.9	210
30 F	0324	3.0	91
	0936	8.9	271
	1647	0.3	9
	2301	7.3	223
31 Sa	0425	3.1	94
	1030	9.0	274
	1737	0.0	0
	2352	7.7	235

February

	Time	Height	
	h m	ft	cm
1 Su	0520	3.0	91
	1119	9.1	277
	1820	−0.1	−3
2 M	0037	8.1	247
	0608	2.8	85
	1203	9.2	280
	1859	−0.1	−3
3 Tu ○	0117	8.3	253
	0652	2.7	82
	1244	9.1	277
	1934	0.0	0
4 W	0153	8.5	259
	0733	2.6	79
	1323	9.0	274
	2005	0.2	6
5 Th	0227	8.5	259
	0811	2.4	73
	1400	8.8	268
	2035	0.4	12
6 F	0257	8.6	262
	0848	2.3	70
	1436	8.6	262
	2103	0.6	18
7 Sa	0325	8.6	262
	0924	2.1	64
	1512	8.2	250
	2131	0.9	27
8 Su	0352	8.6	262
	1000	2.0	61
	1551	7.8	238
	2200	1.3	40
9 M	0419	8.6	262
	1040	2.0	61
	1635	7.2	219
	2233	1.8	55
10 Tu	0451	8.5	259
	1127	1.9	58
	1730	6.7	204
	2314	2.3	70
11 W ◑	0531	8.5	259
	1226	1.9	58
	1842	6.2	189
12 Th	0006	2.8	85
	0622	8.4	256
	1336	1.7	52
	2006	6.1	186
13 F	0113	3.3	101
	0726	8.5	259
	1451	1.3	40
	2124	6.4	195
14 Sa	0230	3.5	107
	0835	8.7	265
	1557	0.7	21
	2228	6.9	210
15 Su	0343	3.3	101
	0941	9.1	277
	1654	0.1	3
	2322	7.5	229

	Time	Height	
	h m	ft	cm
16 M	0446	2.9	88
	1042	9.5	290
	1745	−0.4	−12
17 Tu	0009	8.1	247
	0544	2.4	73
	1138	9.9	302
	1832	−0.7	−21
18 W ●	0053	8.7	265
	0637	1.8	55
	1232	10.1	308
	1916	−0.8	−24
19 Th	0136	9.2	280
	0728	1.3	40
	1324	10.2	311
	1959	−0.7	−21
20 F	0217	9.5	290
	0819	0.9	27
	1415	9.9	302
	2041	−0.4	−12
21 Sa	0257	9.8	299
	0909	0.6	18
	1507	9.5	290
	2123	0.1	3
22 Su	0338	9.8	299
	0959	0.5	15
	1600	8.9	271
	2205	0.7	21
23 M	0420	9.7	296
	1053	0.6	18
	1657	8.1	247
	2250	1.4	43
24 Tu	0506	9.4	287
	1151	0.8	24
	1801	7.4	226
	2341	2.2	67
25 W ◐	0557	8.9	271
	1257	1.0	30
	1912	6.9	210
26 Th	0042	2.8	85
	0657	8.5	259
	1409	1.1	34
	2027	6.8	207
27 F	0152	3.2	98
	0804	8.2	250
	1519	0.9	27
	2137	7.0	213
28 Sa	0304	3.2	98
	0911	8.2	250
	1620	0.7	21
	2236	7.3	223

March

	Time	Height	
	h m	ft	cm
1 Su	0409	3.0	91
	1010	8.3	253
	1710	0.5	15
	2325	7.7	235
2 M	0504	2.7	82
	1102	8.5	259
	1753	0.3	9
3 Tu	0007	8.1	247
	0551	2.4	73
	1148	8.6	262
	1830	0.4	12
4 W	0044	8.4	256
	0634	2.1	64
	1230	8.7	265
	1903	0.5	15
5 Th ○	0118	8.6	262
	0713	1.8	55
	1309	8.7	265
	1934	0.7	21
6 F	0148	8.7	265
	0750	1.6	49
	1347	8.6	262
	2004	0.9	27
7 Sa	0216	8.8	268
	0825	1.4	43
	1424	8.4	256
	2032	1.2	37
8 Su	0241	8.8	268
	0859	1.3	40
	1500	8.2	250
	2100	1.5	46
9 M	0306	8.9	271
	0932	1.2	37
	1539	7.8	238
	2131	1.8	55
10 Tu	0333	8.9	271
	1009	1.1	34
	1621	7.4	226
	2204	2.2	67
11 W	0404	8.8	268
	1051	1.1	34
	1713	6.9	210
	2245	2.6	79
12 Th	0445	8.7	265
	1144	1.2	37
	1819	6.5	198
	2338	3.0	91
13 F ◑	0538	8.4	256
	1252	1.2	37
	1937	6.3	192
14 Sa	0048	3.3	101
	0646	8.2	250
	1409	1.0	30
	2052	6.6	201
15 Su	0210	3.3	101
	0805	8.2	250
	1521	0.7	21
	2156	7.1	216

	Time	Height	
	h m	ft	cm
16 M	0326	2.9	88
	0921	8.5	259
	1622	0.3	9
	2249	7.7	235
17 Tu	0431	2.3	70
	1027	8.9	271
	1715	−0.1	−3
	2336	8.4	256
18 W	0529	1.6	49
	1127	9.3	283
	1803	−0.2	−6
19 Th	0020	9.0	274
	0623	0.9	27
	1222	9.6	293
	1848	−0.2	−6
20 F ●	0102	9.5	290
	0713	0.3	9
	1315	9.6	293
	1932	0.0	0
21 Sa	0142	9.9	302
	0803	−0.1	−3
	1407	9.5	290
	2015	0.4	12
22 Su	0223	10.0	305
	0851	−0.3	−9
	1459	9.1	277
	2057	0.9	27
23 M	0303	10.0	305
	0940	−0.3	−9
	1551	8.6	262
	2141	1.4	43
24 Tu	0345	9.7	296
	1030	0.0	0
	1646	8.1	247
	2227	2.0	61
25 W	0429	9.2	280
	1123	0.3	9
	1745	7.5	229
	2318	2.6	79
26 Th ◐	0519	8.5	259
	1223	0.7	21
	1851	7.1	216
27 F	0019	3.0	91
	0618	7.9	241
	1329	1.0	30
	2000	6.9	210
28 Sa	0129	3.2	98
	0729	7.5	229
	1438	1.1	34
	2105	7.1	216
29 Su	0242	3.1	94
	0841	7.4	226
	1539	1.0	30
	2201	7.4	226
30 M	0348	2.7	82
	0945	7.5	229
	1630	0.9	27
	2248	7.8	238
31 Tu	0443	2.2	67
	1040	7.7	235
	1713	0.9	27
	2329	8.1	247

Time meridian 120° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.
Heights are referred to mean lower low water which is the chart datum of soundings.

Astoria (Tongue Pt.), Oregon, 2015

Times and Heights of High and Low Waters

April

	Time	Height	
	h m	ft	cm
1 W	0530	1.7	52
	1129	7.9	241
	1751	0.9	27
2 Th	0004	8.4	256
	0612	1.3	40
	1213	8.1	247
	1826	1.1	34
3 F	0037	8.6	262
	0650	1.0	30
	1254	8.2	250
	1859	1.3	40
4 Sa ○	0106	8.8	268
	0727	0.8	24
	1334	8.2	250
	1930	1.5	46
5 Su	0133	8.9	271
	0802	0.6	18
	1413	8.1	247
	2002	1.8	55
6 M	0159	9.0	274
	0836	0.4	12
	1451	7.9	241
	2034	2.1	64
7 Tu	0226	9.1	277
	0910	0.3	9
	1531	7.7	235
	2107	2.3	70
8 W	0256	9.1	277
	0947	0.2	6
	1615	7.4	226
	2145	2.6	79
9 Th	0332	8.9	271
	1028	0.3	9
	1705	7.1	216
	2229	2.8	85
10 F	0415	8.7	265
	1119	0.4	12
	1805	6.8	207
	2326	3.1	94
11 Sa ◑	0511	8.3	253
	1221	0.5	15
	1913	6.7	204
12 Su	0037	3.1	94
	0622	7.9	241
	1333	0.6	18
	2021	6.9	210
13 M	0157	2.9	88
	0745	7.7	235
	1443	0.5	15
	2121	7.4	226
14 Tu	0312	2.3	70
	0905	7.9	241
	1546	0.4	12
	2214	8.1	247
15 W	0417	1.5	46
	1014	8.2	250
	1641	0.3	9
	2301	8.7	265

	Time	Height	
	h m	ft	cm
16 Th	0515	0.6	18
	1116	8.5	259
	1731	0.4	12
	2345	9.3	283
17 F	0608	−0.1	−3
	1212	8.8	268
	1818	0.6	18
18 Sa ●	0027	9.7	296
	0659	−0.6	−18
	1306	8.9	271
	1904	0.9	27
19 Su	0109	10.0	305
	0747	−0.9	−27
	1359	8.8	268
	1948	1.2	37
20 M	0149	10.0	305
	0834	−1.0	−30
	1450	8.6	262
	2033	1.7	52
21 Tu	0230	9.8	299
	0921	−0.8	−24
	1541	8.3	253
	2118	2.1	64
22 W	0312	9.4	287
	1007	−0.5	−15
	1633	7.9	241
	2205	2.5	76
23 Th	0355	8.8	268
	1056	−0.1	−3
	1727	7.5	229
	2257	2.8	85
24 F	0443	8.1	247
	1147	0.4	12
	1824	7.2	219
	2355	3.0	91
25 Sa ◐	0540	7.4	226
	1244	0.8	24
	1925	7.1	216
26 Su	0102	3.1	94
	0649	6.9	210
	1345	1.1	34
	2023	7.1	216
27 M	0213	2.8	85
	0803	6.6	201
	1444	1.2	37
	2117	7.4	226
28 Tu	0318	2.3	70
	0912	6.6	201
	1537	1.3	40
	2203	7.7	235
29 W	0414	1.7	52
	1012	6.8	207
	1623	1.3	40
	2243	8.1	247
30 Th	0502	1.2	37
	1104	7.1	216
	1705	1.5	46
	2319	8.4	256

May

	Time	Height	
	h m	ft	cm
1 F	0546	0.7	21
	1152	7.4	226
	1744	1.6	49
	2352	8.6	262
2 Sa	0625	0.3	9
	1236	7.5	229
	1821	1.9	58
3 Su ○	0023	8.8	268
	0703	0.0	0
	1319	7.7	235
	1857	2.1	64
4 M	0052	9.0	274
	0740	−0.2	−6
	1401	7.7	235
	1934	2.3	70
5 Tu	0122	9.1	277
	0816	−0.4	−12
	1443	7.7	235
	2011	2.5	76
6 W	0155	9.2	280
	0853	−0.5	−15
	1525	7.6	232
	2050	2.6	79
7 Th	0230	9.1	277
	0932	−0.6	−18
	1609	7.4	226
	2133	2.7	82
8 F	0311	8.9	271
	1014	−0.5	−15
	1657	7.3	223
	2222	2.8	85
9 Sa	0359	8.5	259
	1103	−0.3	−9
	1750	7.2	219
	2321	2.8	85
10 Su	0457	8.0	244
	1159	−0.1	−3
	1849	7.2	219
11 M ◑	0030	2.6	79
	0609	7.5	229
	1301	0.2	6
	1949	7.4	226
12 Tu	0146	2.2	67
	0731	7.2	219
	1407	0.4	12
	2046	7.9	241
13 W	0258	1.5	46
	0851	7.1	216
	1509	0.6	18
	2138	8.4	256
14 Th	0403	0.7	21
	1002	7.3	223
	1606	0.8	24
	2226	9.0	274
15 F	0501	−0.1	−3
	1105	7.6	232
	1659	1.0	30
	2312	9.4	287

	Time	Height	
	h m	ft	cm
16 Sa	0555	−0.8	−24
	1203	7.9	241
	1749	1.3	40
	2355	9.7	296
17 Su ●	0644	−1.2	−37
	1258	8.1	247
	1837	1.6	49
18 M	0038	9.8	299
	0732	−1.3	−40
	1349	8.1	247
	1925	1.9	58
19 Tu	0120	9.7	296
	0818	−1.3	−40
	1439	8.1	247
	2011	2.2	67
20 W	0202	9.4	287
	0902	−1.1	−34
	1528	8.0	244
	2058	2.4	73
21 Th	0244	8.9	271
	0945	−0.8	−24
	1615	7.8	238
	2145	2.6	79
22 F	0327	8.4	256
	1027	−0.4	−12
	1703	7.5	229
	2234	2.7	82
23 Sa	0412	7.7	235
	1111	0.0	0
	1752	7.3	223
	2328	2.8	85
24 Su	0504	7.1	216
	1157	0.5	15
	1842	7.2	219
25 M ◐	0028	2.7	82
	0606	6.5	198
	1247	0.9	27
	1933	7.2	219
26 Tu	0134	2.5	76
	0718	6.1	186
	1341	1.2	37
	2023	7.4	226
27 W	0239	2.0	61
	0831	5.9	180
	1435	1.5	46
	2109	7.6	232
28 Th	0338	1.4	43
	0937	6.1	186
	1527	1.7	52
	2151	7.9	241
29 F	0430	0.8	24
	1035	6.3	192
	1615	1.9	58
	2230	8.3	253
30 Sa	0516	0.3	9
	1128	6.7	204
	1700	2.1	64
	2306	8.6	262
31 Su	0559	−0.2	−6
	1217	7.0	213
	1743	2.3	70
	2341	8.8	268

June

	Time	Height	
	h m	ft	cm
1 M	0640	−0.5	−15
	1303	7.2	219
	1826	2.5	76
2 Tu ○	0017	9.0	274
	0719	−0.8	−24
	1347	7.4	226
	1909	2.6	79
3 W	0054	9.2	280
	0759	−1.1	−34
	1430	7.5	229
	1952	2.6	79
4 Th	0133	9.2	280
	0838	−1.2	−37
	1513	7.6	232
	2037	2.5	76
5 F	0215	9.1	277
	0919	−1.2	−37
	1556	7.6	232
	2124	2.4	73
6 Sa	0301	8.9	271
	1001	−1.1	−34
	1641	7.6	232
	2216	2.3	70
7 Su	0352	8.4	256
	1047	−0.9	−27
	1729	7.6	232
	2314	2.1	64
8 M	0451	7.8	238
	1137	−0.5	−15
	1820	7.7	235
9 Tu ◑	0020	1.8	55
	0601	7.1	216
	1232	0.0	0
	1915	7.9	241
10 W	0131	1.4	43
	0719	6.7	204
	1333	0.5	15
	2010	8.2	250
11 Th	0243	0.8	24
	0838	6.5	198
	1434	0.9	27
	2104	8.6	262
12 F	0349	0.1	3
	0951	6.6	201
	1535	1.3	40
	2155	9.0	274
13 Sa	0448	−0.6	−18
	1056	6.9	210
	1632	1.6	49
	2243	9.3	283
14 Su	0542	−1.1	−34
	1154	7.2	219
	1725	1.8	55
	2330	9.4	287
15 M	0631	−1.4	−43
	1248	7.5	229
	1816	2.0	61

	Time	Height	
	h m	ft	cm
16 Tu ●	0015	9.4	287
	0718	−1.5	−46
	1338	7.7	235
	1905	2.2	67
17 W	0058	9.2	280
	0801	−1.4	−43
	1425	7.8	238
	1953	2.3	70
18 Th	0141	8.9	271
	0842	−1.2	−37
	1509	7.7	235
	2038	2.4	73
19 F	0222	8.6	262
	0921	−0.9	−27
	1551	7.7	235
	2123	2.4	73
20 Sa	0303	8.1	247
	0957	−0.6	−18
	1631	7.5	229
	2208	2.4	73
21 Su	0346	7.5	229
	1033	−0.2	−6
	1712	7.4	226
	2256	2.3	70
22 M	0432	6.9	210
	1110	0.2	6
	1753	7.3	223
	2349	2.2	67
23 Tu	0526	6.3	192
	1151	0.7	21
	1836	7.3	223
24 W ◐	0048	2.1	64
	0632	5.8	177
	1238	1.2	37
	1922	7.3	223
25 Th	0151	1.7	52
	0745	5.5	168
	1331	1.6	49
	2009	7.5	229
26 F	0254	1.3	40
	0858	5.5	168
	1428	2.0	61
	2055	7.7	235
27 Sa	0352	0.7	21
	1004	5.8	177
	1525	2.3	70
	2140	8.1	247
28 Su	0444	0.1	3
	1102	6.1	186
	1619	2.4	73
	2224	8.4	256
29 M	0531	−0.4	−12
	1154	6.6	201
	1710	2.5	76
	2306	8.7	265
30 Tu	0615	−0.9	−27
	1242	6.9	210
	1800	2.5	76
	2349	9.0	274

Time meridian 120° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.
Heights are referred to mean lower low water which is the chart datum of soundings.

Astoria (Tongue Pt.), Oregon, 2015

Times and Heights of High and Low Waters

July

	Time	Height	
	h m	ft	cm
1 W ○	0658	−1.2	−37
	1327	7.2	219
	1848	2.4	73
2 Th	0034	9.2	280
	0740	−1.5	−46
	1410	7.5	229
	1936	2.2	67
3 F	0119	9.3	283
	0821	−1.6	−49
	1452	7.7	235
	2024	2.0	61
4 Sa	0206	9.2	280
	0902	−1.6	−49
	1534	7.9	241
	2113	1.7	52
5 Su	0256	8.9	271
	0944	−1.4	−43
	1616	8.1	247
	2205	1.4	43
6 M	0348	8.3	253
	1027	−1.1	−34
	1700	8.2	250
	2302	1.2	37
7 Tu	0446	7.7	235
	1113	−0.5	−15
	1747	8.2	250
8 W ◑	0004	1.0	30
	0553	6.9	210
	1205	0.1	3
	1839	8.3	253
9 Th	0113	0.7	21
	0708	6.3	192
	1302	0.8	24
	1935	8.4	256
10 F	0224	0.3	9
	0826	6.1	186
	1405	1.4	43
	2032	8.5	259
11 Sa	0333	−0.2	−6
	0940	6.2	189
	1510	1.7	52
	2128	8.7	265
12 Su	0434	−0.7	−21
	1046	6.5	198
	1612	2.0	61
	2221	8.8	268
13 M	0529	−1.1	−34
	1143	6.9	210
	1709	2.1	64
	2311	8.9	271
14 Tu	0617	−1.3	−40
	1234	7.2	219
	1801	2.1	64
	2358	8.9	271
15 W ●	0701	−1.3	−40
	1320	7.5	229
	1850	2.1	64

	Time	Height	
	h m	ft	cm
16 Th	0042	8.8	268
	0742	−1.2	−37
	1403	7.6	232
	1935	2.0	61
17 F	0124	8.6	262
	0819	−1.0	−30
	1442	7.7	235
	2018	2.0	61
18 Sa	0205	8.3	253
	0853	−0.8	−24
	1518	7.7	235
	2059	1.9	58
19 Su	0244	7.9	241
	0924	−0.4	−12
	1552	7.6	232
	2140	1.8	55
20 M	0323	7.5	229
	0955	−0.1	−3
	1625	7.5	229
	2221	1.7	52
21 Tu	0405	6.9	210
	1027	0.3	9
	1658	7.5	229
	2306	1.7	52
22 W	0452	6.4	195
	1101	0.8	24
	1733	7.4	226
	2357	1.6	49
23 Th ◐	0550	5.8	177
	1143	1.3	40
	1814	7.4	226
24 F	0057	1.5	46
	0702	5.4	165
	1233	1.8	55
	1902	7.4	226
25 Sa	0203	1.2	37
	0820	5.3	162
	1335	2.3	70
	1956	7.5	229
26 Su	0309	0.7	21
	0932	5.5	168
	1442	2.5	76
	2052	7.8	238
27 M	0409	0.2	6
	1035	5.9	180
	1546	2.6	79
	2147	8.1	247
28 Tu	0501	−0.4	−12
	1128	6.4	195
	1644	2.5	76
	2239	8.5	259
29 W	0549	−0.9	−27
	1216	6.9	210
	1738	2.2	67
	2330	8.9	271
30 Th	0634	−1.3	−40
	1300	7.4	226
	1829	1.9	58
31 F ○	0020	9.2	280
	0717	−1.5	−46
	1342	7.8	238
	1919	1.5	46

August

	Time	Height	
	h m	ft	cm
1 Sa	0109	9.3	283
	0759	−1.6	−49
	1423	8.1	247
	2009	1.1	34
2 Su	0159	9.2	280
	0840	−1.5	−46
	1503	8.4	256
	2059	0.7	21
3 M	0250	8.9	271
	0922	−1.2	−37
	1543	8.6	262
	2150	0.5	15
4 Tu	0343	8.3	253
	1004	−0.7	−21
	1626	8.7	265
	2244	0.3	9
5 W	0440	7.6	232
	1049	−0.1	−3
	1712	8.6	262
	2344	0.3	9
6 Th ◑	0544	6.9	210
	1139	0.7	21
	1803	8.4	256
7 F	0051	0.3	9
	0657	6.3	192
	1237	1.4	43
	1901	8.2	250
8 Sa	0203	0.1	3
	0814	6.0	183
	1343	1.9	58
	2003	8.1	247
9 Su	0314	−0.2	−6
	0928	6.2	189
	1453	2.1	64
	2106	8.1	247
10 M	0417	−0.5	−15
	1032	6.5	198
	1559	2.1	64
	2205	8.2	250
11 Tu	0511	−0.8	−24
	1126	6.9	210
	1657	2.0	61
	2258	8.3	253
12 W	0558	−0.9	−27
	1213	7.3	223
	1748	1.8	55
	2345	8.4	256
13 Th	0639	−0.9	−27
	1255	7.6	232
	1834	1.6	49
14 F ●	0029	8.4	256
	0716	−0.8	−24
	1333	7.7	235
	1917	1.5	46
15 Sa	0110	8.3	253
	0750	−0.6	−18
	1407	7.8	238
	1957	1.4	43

	Time	Height	
	h m	ft	cm
16 Su	0149	8.1	247
	0821	−0.3	−9
	1439	7.8	238
	2034	1.3	40
17 M	0227	7.8	238
	0850	0.0	0
	1508	7.8	238
	2111	1.2	37
18 Tu	0304	7.5	229
	0918	0.4	12
	1535	7.8	238
	2147	1.1	34
19 W	0343	7.0	213
	0948	0.8	24
	1602	7.8	238
	2225	1.1	34
20 Th	0426	6.5	198
	1020	1.2	37
	1632	7.7	235
	2309	1.1	34
21 F	0518	6.0	183
	1059	1.7	52
	1710	7.6	232
22 Sa ◐	0003	1.1	34
	0625	5.6	171
	1149	2.2	67
	1758	7.4	226
23 Su	0109	1.0	30
	0744	5.4	165
	1253	2.6	79
	1859	7.4	226
24 M	0223	0.7	21
	0900	5.6	171
	1409	2.8	85
	2009	7.5	229
25 Tu	0330	0.3	9
	1004	6.0	183
	1521	2.6	79
	2117	7.9	241
26 W	0428	−0.3	−9
	1058	6.6	201
	1624	2.2	67
	2218	8.3	253
27 Th	0519	−0.7	−21
	1144	7.2	219
	1720	1.7	52
	2315	8.8	268
28 F	0605	−1.1	−34
	1227	7.8	238
	1813	1.1	34
29 Sa ○	0008	9.1	277
	0649	−1.2	−37
	1308	8.3	253
	1903	0.5	15
30 Su	0100	9.2	280
	0732	−1.2	−37
	1348	8.7	265
	1952	0.1	3
31 M	0151	9.1	277
	0814	−0.9	−27
	1428	9.0	274
	2042	−0.3	−9

September

	Time	Height	
	h m	ft	cm
1 Tu	0243	8.8	268
	0856	−0.5	−15
	1508	9.2	280
	2132	−0.4	−12
2 W	0336	8.3	253
	0939	0.1	3
	1550	9.1	277
	2224	−0.4	−12
3 Th	0432	7.7	235
	1025	0.7	21
	1635	8.8	268
	2321	−0.2	−6
4 F	0534	7.0	213
	1116	1.4	43
	1726	8.4	256
5 Sa ◑	0025	0.0	0
	0644	6.5	198
	1216	2.0	61
	1827	7.9	241
6 Su	0136	0.2	6
	0758	6.3	192
	1326	2.4	73
	1935	7.6	232
7 M	0248	0.1	3
	0909	6.4	195
	1440	2.4	73
	2045	7.5	229
8 Tu	0352	−0.1	−3
	1010	6.8	207
	1547	2.2	67
	2149	7.6	232
9 W	0446	−0.3	−9
	1101	7.2	219
	1645	1.8	55
	2244	7.8	238
10 Th	0530	−0.3	−9
	1144	7.6	232
	1734	1.4	43
	2332	8.0	244
11 F	0609	−0.3	−9
	1222	7.9	241
	1817	1.1	34
12 Sa ●	0015	8.0	244
	0644	−0.1	−3
	1256	8.0	244
	1857	0.9	27
13 Su	0056	8.0	244
	0716	0.2	6
	1328	8.2	250
	1934	0.7	21
14 M	0135	7.9	241
	0746	0.5	15
	1356	8.2	250
	2009	0.6	18
15 Tu	0212	7.8	238
	0816	0.8	24
	1422	8.2	250
	2043	0.5	15

	Time	Height	
	h m	ft	cm
16 W	0250	7.5	229
	0845	1.2	37
	1447	8.2	250
	2116	0.5	15
17 Th	0328	7.2	219
	0915	1.5	46
	1512	8.2	250
	2151	0.5	15
18 F	0409	6.8	207
	0948	1.9	58
	1542	8.1	247
	2231	0.5	15
19 Sa	0458	6.3	192
	1027	2.3	70
	1620	7.9	241
	2319	0.6	18
20 Su	0600	6.0	183
	1118	2.7	82
	1709	7.6	232
21 M ◐	0022	0.7	21
	0714	5.8	177
	1226	2.9	88
	1815	7.4	226
22 Tu	0137	0.7	21
	0828	6.0	183
	1347	2.9	88
	1935	7.3	223
23 W	0250	0.4	12
	0931	6.5	198
	1503	2.5	76
	2054	7.6	232
24 Th	0352	0.0	0
	1023	7.1	216
	1607	1.8	55
	2201	8.0	244
25 F	0445	−0.3	−9
	1108	7.8	238
	1704	1.0	30
	2301	8.5	259
26 Sa	0533	−0.5	−15
	1151	8.4	256
	1757	0.3	9
	2357	8.8	268
27 Su ○	0619	−0.5	−15
	1232	9.0	274
	1847	−0.3	−9
28 M	0050	9.0	274
	0703	−0.3	−9
	1312	9.4	287
	1936	−0.8	−24
29 Tu	0142	8.9	271
	0746	0.1	3
	1352	9.6	293
	2024	−1.0	−30
30 W	0234	8.7	265
	0830	0.5	15
	1433	9.7	296
	2113	−1.0	−30

Time meridian 120° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.
Heights are referred to mean lower low water which is the chart datum of soundings.

Astoria (Tongue Pt.), Oregon, 2015

Times and Heights of High and Low Waters

October

	Time	Height	
	h m	ft	cm
1 Th	0327	8.3	253
	0915	1.1	34
	1515	9.4	287
	2204	−0.8	−24
2 F	0422	7.8	238
	1002	1.6	49
	1601	8.9	271
	2258	−0.5	−15
3 Sa	0522	7.3	223
	1055	2.2	67
	1652	8.3	253
	2357	0.0	0
4 Su ◑	0627	6.9	210
	1157	2.6	79
	1753	7.7	235
5 M	0103	0.3	9
	0736	6.8	207
	1309	2.8	85
	1905	7.1	216
6 Tu	0211	0.5	15
	0842	6.9	210
	1423	2.6	79
	2020	7.0	213
7 W	0315	0.5	15
	0939	7.2	219
	1531	2.1	64
	2127	7.0	213
8 Th	0408	0.5	15
	1027	7.6	232
	1627	1.6	49
	2225	7.3	223
9 F	0453	0.5	15
	1108	8.0	244
	1714	1.1	34
	2314	7.5	229
10 Sa	0532	0.6	18
	1144	8.3	253
	1756	0.7	21
	2358	7.7	235
11 Su	0607	0.8	24
	1216	8.5	259
	1835	0.4	12
12 M ●	0040	7.8	238
	0640	1.1	34
	1246	8.6	262
	1911	0.2	6
13 Tu	0120	7.8	238
	0712	1.4	43
	1314	8.7	265
	1946	0.1	3
14 W	0159	7.7	235
	0744	1.7	52
	1339	8.7	265
	2019	0.0	0
15 Th	0238	7.6	232
	0815	2.0	61
	1405	8.7	265
	2052	0.0	0

	Time	Height	
	h m	ft	cm
16 F	0317	7.4	226
	0849	2.3	70
	1433	8.7	265
	2127	0.0	0
17 Sa	0359	7.1	216
	0925	2.6	79
	1506	8.5	259
	2205	0.1	3
18 Su	0446	6.8	207
	1007	2.8	85
	1547	8.3	253
	2251	0.2	6
19 M	0542	6.6	201
	1101	3.0	91
	1638	7.9	241
	2348	0.4	12
20 Tu ◐	0647	6.5	198
	1210	3.1	94
	1746	7.4	226
21 W	0057	0.5	15
	0753	6.7	204
	1330	2.9	88
	1910	7.2	219
22 Th	0208	0.5	15
	0853	7.2	219
	1446	2.3	70
	2034	7.3	223
23 F	0312	0.4	12
	0945	7.8	238
	1551	1.4	43
	2146	7.6	232
24 Sa	0409	0.3	9
	1032	8.5	259
	1649	0.5	15
	2249	8.1	247
25 Su	0500	0.4	12
	1115	9.2	280
	1742	−0.3	−9
	2346	8.4	256
26 M	0548	0.5	15
	1157	9.7	296
	1832	−0.9	−27
27 Tu ○	0041	8.6	262
	0634	0.8	24
	1239	10.0	305
	1921	−1.3	−40
28 W	0134	8.7	265
	0720	1.2	37
	1320	10.1	308
	2009	−1.4	−43
29 Th	0226	8.6	262
	0806	1.6	49
	1402	10.0	305
	2056	−1.3	−40
30 F	0318	8.4	256
	0853	2.0	61
	1446	9.6	293
	2144	−1.0	−30
31 Sa	0410	8.0	244
	0942	2.4	73
	1531	9.0	274
	2233	−0.5	−15

November

	Time	Height	
	h m	ft	cm
1 Su	0505	7.7	235
	1036	2.7	82
	1621	8.3	253
	2325	0.0	0
2 M	0603	7.4	226
	1136	3.0	91
	1719	7.5	229
3 Tu ◑	0022	0.5	15
	0703	7.3	223
	1244	3.0	91
	1828	6.9	210
4 W	0123	0.9	27
	0803	7.3	223
	1356	2.7	82
	1944	6.6	201
5 Th	0223	1.1	34
	0857	7.6	232
	1503	2.2	67
	2056	6.5	198
6 F	0317	1.2	37
	0944	7.9	241
	1601	1.6	49
	2158	6.8	207
7 Sa	0405	1.4	43
	1025	8.3	253
	1650	1.0	30
	2251	7.1	216
8 Su	0447	1.5	46
	1101	8.6	262
	1732	0.5	15
	2339	7.3	223
9 M	0526	1.8	55
	1134	8.8	268
	1812	0.1	3
10 Tu	0023	7.6	232
	0603	2.0	61
	1205	9.0	274
	1849	−0.1	−3
11 W ●	0106	7.7	235
	0640	2.3	70
	1235	9.1	277
	1925	−0.3	−9
12 Th	0147	7.8	238
	0716	2.6	79
	1304	9.2	280
	2000	−0.3	−9
13 F	0227	7.7	235
	0752	2.8	85
	1334	9.2	280
	2034	−0.4	−12
14 Sa	0308	7.7	235
	0830	2.9	88
	1407	9.1	277
	2110	−0.4	−12
15 Su	0349	7.5	229
	0910	3.0	91
	1445	9.0	274
	2149	−0.3	−9

	Time	Height	
	h m	ft	cm
16 M	0433	7.4	226
	0956	3.1	94
	1529	8.6	262
	2232	−0.2	−6
17 Tu	0523	7.3	223
	1051	3.1	94
	1623	8.1	247
	2324	0.1	3
18 W ◐	0618	7.3	223
	1158	3.0	91
	1729	7.5	229
19 Th	0023	0.4	12
	0716	7.5	229
	1313	2.6	79
	1852	7.1	216
20 F	0128	0.7	21
	0813	8.0	244
	1428	1.9	58
	2016	7.0	213
21 Sa	0232	0.9	27
	0907	8.5	259
	1535	1.1	34
	2132	7.2	219
22 Su	0332	1.1	34
	0956	9.2	280
	1634	0.2	6
	2238	7.6	232
23 M	0428	1.3	40
	1042	9.7	296
	1729	−0.6	−18
	2337	8.0	244
24 Tu	0520	1.6	49
	1127	10.1	308
	1819	−1.1	−34
25 W ○	0033	8.3	253
	0610	1.8	55
	1211	10.3	314
	1908	−1.4	−43
26 Th	0125	8.5	259
	0658	2.1	64
	1255	10.3	314
	1954	−1.4	−43
27 F	0216	8.5	259
	0747	2.4	73
	1339	10.1	308
	2040	−1.2	−37
28 Sa	0305	8.5	259
	0835	2.6	79
	1422	9.6	293
	2124	−0.9	−27
29 Su	0354	8.3	253
	0924	2.8	85
	1507	9.0	274
	2208	−0.4	−12
30 M	0442	8.1	247
	1015	2.9	88
	1554	8.4	256
	2251	0.1	3

December

	Time	Height	
	h m	ft	cm
1 Tu	0531	7.9	241
	1109	3.0	91
	1646	7.6	232
	2337	0.6	18
2 W ◑	0621	7.7	235
	1210	3.0	91
	1748	6.9	210
3 Th	0027	1.1	34
	0713	7.7	235
	1317	2.8	85
	1900	6.4	195
4 F	0120	1.6	49
	0804	7.8	238
	1424	2.4	73
	2014	6.2	189
5 Sa	0216	1.9	58
	0852	8.1	247
	1525	1.8	55
	2123	6.3	192
6 Su	0309	2.2	67
	0935	8.4	256
	1618	1.2	37
	2224	6.6	201
7 M	0359	2.4	73
	1015	8.7	265
	1705	0.6	18
	2317	7.0	213
8 Tu	0445	2.6	79
	1052	9.0	274
	1747	0.2	6
9 W	0005	7.3	223
	0529	2.8	85
	1128	9.2	280
	1827	−0.1	−3
10 Th	0050	7.6	232
	0611	3.0	91
	1202	9.4	287
	1905	−0.4	−12
11 F ●	0132	7.8	238
	0652	3.1	94
	1237	9.5	290
	1942	−0.5	−15
12 Sa	0214	7.9	241
	0734	3.1	94
	1314	9.6	293
	2019	−0.6	−18
13 Su	0254	8.0	244
	0816	3.1	94
	1353	9.5	290
	2056	−0.7	−21
14 M	0333	8.1	247
	0900	3.0	91
	1436	9.3	283
	2135	−0.6	−18
15 Tu	0414	8.1	247
	0948	2.9	88
	1523	8.9	271
	2216	−0.4	−12

	Time	Height	
	h m	ft	cm
16 W	0458	8.1	247
	1042	2.7	82
	1616	8.4	256
	2302	0.0	0
17 Th	0545	8.2	250
	1144	2.5	76
	1721	7.7	235
	2353	0.5	15
18 F ◐	0637	8.4	256
	1254	2.2	67
	1838	7.1	216
19 Sa	0052	1.1	34
	0733	8.7	265
	1407	1.6	49
	2001	6.8	207
20 Su	0155	1.6	49
	0829	9.0	274
	1517	0.9	27
	2119	6.9	210
21 M	0300	1.9	58
	0923	9.5	290
	1620	0.1	3
	2228	7.3	223
22 Tu	0401	2.2	67
	1015	9.9	302
	1716	−0.5	−15
	2329	7.7	235
23 W	0458	2.4	73
	1104	10.1	308
	1808	−0.9	−27
24 Th	0024	8.1	247
	0552	2.5	76
	1151	10.2	311
	1856	−1.1	−34
25 F ○	0115	8.3	253
	0643	2.6	79
	1237	10.1	308
	1941	−1.1	−34
26 Sa	0203	8.5	259
	0732	2.7	82
	1322	9.9	302
	2023	−0.9	−27
27 Su	0248	8.6	262
	0819	2.8	85
	1406	9.5	290
	2102	−0.6	−18
28 M	0330	8.5	259
	0905	2.8	85
	1448	9.1	277
	2140	−0.2	−6
29 Tu	0411	8.4	256
	0951	2.8	85
	1532	8.5	259
	2216	0.2	6
30 W	0451	8.3	253
	1038	2.8	85
	1617	7.8	238
	2253	0.8	24
31 Th	0532	8.1	247
	1130	2.8	85
	1710	7.1	216
	2332	1.3	40

Time meridian 120° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.
Heights are referred to mean lower low water which is the chart datum of soundings.

Toke Point, Willapa Bay, Washington, 2015

Times and Heights of High and Low Waters

January

	Time	Height	
	h m	ft	cm
1 Th	0328	3.3	101
	0942	10.1	308
	1645	0.2	6
	2307	7.6	232
2 F	0427	3.5	107
	1032	10.2	311
	1733	−0.2	−6
3 Sa	0000	7.9	241
	0520	3.5	107
	1118	10.2	311
	1816	−0.5	−15
4 Su ○	0045	8.2	250
	0607	3.4	104
	1200	10.2	311
	1856	−0.6	−18
5 M	0124	8.4	256
	0650	3.4	104
	1240	10.0	305
	1932	−0.5	−15
6 Tu	0201	8.5	259
	0731	3.3	101
	1318	9.8	299
	2007	−0.4	−12
7 W	0236	8.5	259
	0811	3.3	101
	1356	9.4	287
	2041	−0.1	−3
8 Th	0311	8.5	259
	0850	3.3	101
	1433	9.0	274
	2114	0.3	9
9 F	0346	8.5	259
	0931	3.3	101
	1513	8.5	259
	2147	0.8	24
10 Sa	0421	8.5	259
	1015	3.3	101
	1555	7.9	241
	2222	1.4	43
11 Su	0459	8.5	259
	1105	3.3	101
	1645	7.3	223
	2259	2.0	61
12 M	0540	8.5	259
	1201	3.2	98
	1746	6.8	207
	2342	2.6	79
13 Tu ◑	0625	8.6	262
	1305	2.9	88
	1858	6.4	195
14 W	0033	3.2	98
	0714	8.8	268
	1411	2.4	73
	2016	6.4	195
15 Th	0135	3.7	113
	0807	9.1	277
	1513	1.7	52
	2129	6.6	201

	Time	Height	
	h m	ft	cm
16 F	0242	3.9	119
	0900	9.4	287
	1609	0.9	27
	2232	7.1	216
17 Sa	0346	3.9	119
	0953	9.9	302
	1700	0.1	3
	2326	7.7	235
18 Su	0444	3.7	113
	1044	10.3	314
	1746	−0.7	−21
19 M	0013	8.2	250
	0538	3.3	101
	1133	10.7	326
	1831	−1.3	−40
20 Tu ●	0058	8.7	265
	0629	2.8	85
	1222	10.9	332
	1915	−1.6	−49
21 W	0140	9.1	277
	0718	2.4	73
	1311	10.9	332
	1958	−1.6	−49
22 Th	0223	9.5	290
	0808	2.0	61
	1400	10.6	323
	2041	−1.3	−40
23 F	0305	9.7	296
	0900	1.8	55
	1452	10.0	305
	2124	−0.7	−21
24 Sa	0350	9.8	299
	0954	1.7	52
	1547	9.3	283
	2209	0.1	3
25 Su	0436	9.9	302
	1053	1.6	49
	1647	8.4	256
	2257	1.1	34
26 M ◐	0526	9.8	299
	1157	1.7	52
	1754	7.6	232
	2349	2.1	64
27 Tu	0620	9.7	296
	1307	1.6	49
	1911	7.0	213
28 W	0049	2.9	88
	0718	9.5	290
	1420	1.4	43
	2033	6.8	207
29 Th	0157	3.6	110
	0819	9.5	290
	1528	1.0	30
	2151	7.0	213
30 F	0307	3.8	116
	0919	9.5	290
	1627	0.6	18
	2256	7.4	226
31 Sa	0412	3.8	116
	1014	9.5	290
	1717	0.3	9
	2346	7.7	235

February

	Time	Height	
	h m	ft	cm
1 Su	0507	3.6	110
	1103	9.6	293
	1759	0.0	0
2 M	0027	8.1	247
	0554	3.3	101
	1147	9.6	293
	1837	−0.1	−3
3 Tu ○	0102	8.3	253
	0636	3.1	94
	1228	9.6	293
	1911	−0.1	−3
4 W	0135	8.5	259
	0714	2.8	85
	1305	9.5	290
	1943	0.0	0
5 Th	0205	8.6	262
	0751	2.6	79
	1341	9.2	280
	2014	0.2	6
6 F	0235	8.7	265
	0827	2.5	76
	1417	8.9	271
	2044	0.6	18
7 Sa	0305	8.8	268
	0904	2.4	73
	1454	8.5	259
	2114	1.0	30
8 Su	0336	8.8	268
	0943	2.4	73
	1534	8.0	244
	2145	1.6	49
9 M	0408	8.8	268
	1026	2.4	73
	1618	7.5	229
	2219	2.2	67
10 Tu	0443	8.8	268
	1116	2.4	73
	1712	7.0	213
	2258	2.8	85
11 W ◑	0524	8.7	265
	1214	2.3	70
	1819	6.6	201
	2346	3.4	104
12 Th	0615	8.7	265
	1321	2.1	64
	1937	6.4	195
13 F	0050	3.9	119
	0716	8.8	268
	1430	1.6	49
	2055	6.6	201
14 Sa	0206	4.1	125
	0822	9.1	277
	1534	0.9	27
	2203	7.0	213
15 Su	0321	3.9	119
	0926	9.5	290
	1631	0.2	6
	2258	7.6	232

	Time	Height	
	h m	ft	cm
16 M	0426	3.4	104
	1025	9.9	302
	1721	−0.5	−15
	2346	8.3	253
17 Tu	0522	2.7	82
	1120	10.3	314
	1808	−1.0	−30
18 W ●	0030	8.9	271
	0615	2.0	61
	1212	10.6	323
	1852	−1.3	−40
19 Th	0111	9.5	290
	0705	1.3	40
	1303	10.6	323
	1935	−1.2	−37
20 F	0152	9.9	302
	0754	0.8	24
	1353	10.4	317
	2018	−0.8	−24
21 Sa	0234	10.2	311
	0844	0.5	15
	1444	9.8	299
	2100	−0.1	−3
22 Su	0316	10.2	311
	0935	0.4	12
	1537	9.1	277
	2144	0.7	21
23 M	0400	10.1	308
	1029	0.6	18
	1634	8.3	253
	2230	1.7	52
24 Tu	0448	9.8	299
	1128	0.9	27
	1738	7.6	232
	2322	2.6	79
25 W ◐	0541	9.4	287
	1234	1.2	37
	1850	7.0	213
26 Th	0022	3.4	104
	0641	9.0	274
	1345	1.3	40
	2010	6.8	207
27 F	0134	3.8	116
	0748	8.7	265
	1457	1.2	37
	2128	6.9	210
28 Sa	0250	3.9	119
	0855	8.6	262
	1559	1.0	30
	2231	7.3	223

March

	Time	Height	
	h m	ft	cm
1 Su	0358	3.7	113
	0956	8.7	265
	1651	0.8	24
	2319	7.6	232
2 M	0453	3.3	101
	1048	8.8	268
	1733	0.6	18
	2356	8.0	244
3 Tu	0539	2.8	85
	1133	8.9	271
	1810	0.4	12
4 W	0029	8.3	253
	0619	2.3	70
	1214	9.0	274
	1843	0.4	12
5 Th ○	0059	8.5	259
	0655	2.0	61
	1252	9.0	274
	1914	0.5	15
6 F	0128	8.7	265
	0730	1.7	52
	1328	8.9	271
	1944	0.8	24
7 Sa	0156	8.9	271
	0804	1.4	43
	1404	8.6	262
	2014	1.1	34
8 Su	0224	8.9	271
	0839	1.3	40
	1440	8.3	253
	2043	1.5	46
9 M	0252	9.0	274
	0916	1.3	40
	1518	8.0	244
	2114	2.0	61
10 Tu	0321	8.9	271
	0956	1.3	40
	1601	7.5	229
	2148	2.5	76
11 W	0355	8.9	271
	1041	1.4	43
	1652	7.1	216
	2227	3.0	91
12 Th	0435	8.7	265
	1134	1.4	43
	1754	6.7	204
	2317	3.5	107
13 F ◑	0528	8.6	262
	1238	1.4	43
	1908	6.6	201
14 Sa	0025	3.9	119
	0635	8.4	256
	1349	1.2	37
	2024	6.7	204
15 Su	0146	3.9	119
	0751	8.5	259
	1458	0.8	24
	2130	7.2	219

	Time	Height	
	h m	ft	cm
16 M	0304	3.5	107
	0904	8.8	268
	1559	0.3	9
	2226	7.8	238
17 Tu	0411	2.7	82
	1009	9.2	280
	1652	−0.2	−6
	2314	8.5	259
18 W	0509	1.8	55
	1108	9.6	293
	1741	−0.5	−15
	2357	9.2	280
19 Th	0601	0.8	24
	1202	9.9	302
	1826	−0.6	−18
20 F ●	0039	9.8	299
	0651	0.0	0
	1254	9.9	302
	1910	−0.4	−12
21 Sa	0120	10.2	311
	0739	−0.5	−15
	1345	9.8	299
	1953	0.0	0
22 Su	0200	10.4	317
	0827	−0.8	−24
	1435	9.4	287
	2036	0.7	21
23 M	0242	10.3	314
	0915	−0.7	−21
	1527	8.8	268
	2120	1.4	43
24 Tu	0325	10.0	305
	1005	−0.3	−9
	1622	8.2	250
	2206	2.2	67
25 W	0411	9.5	290
	1059	0.2	6
	1721	7.6	232
	2258	2.9	88
26 Th ◐	0504	8.9	271
	1158	0.7	21
	1828	7.1	216
	2359	3.5	107
27 F	0604	8.3	253
	1304	1.1	34
	1940	6.9	210
28 Sa	0112	3.8	116
	0713	7.8	238
	1413	1.3	40
	2051	7.0	213
29 Su	0230	3.7	113
	0825	7.6	232
	1517	1.3	40
	2150	7.2	219
30 M	0338	3.3	101
	0930	7.7	235
	1611	1.2	37
	2236	7.6	232
31 Tu	0433	2.7	82
	1026	7.8	238
	1655	1.1	34
	2314	7.9	241

Time meridian 120° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.
Heights are referred to mean lower low water which is the chart datum of soundings.

Toke Point, Willapa Bay, Washington, 2015

Times and Heights of High and Low Waters

April

	Time	Height	
	h m	ft	cm
1 W	0517	2.1	64
	1114	8.0	244
	1734	1.1	34
	2347	8.3	253
2 Th	0556	1.5	46
	1156	8.2	250
	1808	1.1	34
3 F	0018	8.6	262
	0633	1.0	30
	1236	8.3	253
	1840	1.2	37
4 Sa ○	0047	8.8	268
	0707	0.6	18
	1314	8.3	253
	1912	1.4	43
5 Su	0116	9.0	274
	0742	0.3	9
	1351	8.2	250
	1943	1.7	52
6 M	0144	9.1	277
	0816	0.2	6
	1428	8.0	244
	2015	2.0	61
7 Tu	0212	9.1	277
	0853	0.1	3
	1508	7.8	238
	2049	2.4	73
8 W	0243	9.0	274
	0932	0.1	3
	1552	7.5	229
	2126	2.8	85
9 Th	0319	8.9	271
	1016	0.3	9
	1641	7.2	219
	2210	3.2	98
10 F	0402	8.6	262
	1107	0.4	12
	1740	6.9	210
	2305	3.5	107
11 Sa ◑	0458	8.3	253
	1207	0.6	18
	1847	6.9	210
12 Su	0016	3.6	110
	0609	8.0	244
	1314	0.7	21
	1955	7.1	216
13 M	0136	3.4	104
	0729	7.8	238
	1421	0.6	18
	2057	7.6	232
14 Tu	0252	2.7	82
	0846	8.0	244
	1524	0.4	12
	2151	8.2	250
15 W	0358	1.8	55
	0955	8.3	253
	1620	0.3	9
	2239	8.9	271

	Time	Height	
	h m	ft	cm
16 Th	0456	0.7	21
	1057	8.6	262
	1711	0.2	6
	2323	9.5	290
17 F	0548	−0.3	−9
	1153	8.9	271
	1758	0.3	9
18 Sa ●	0006	10.0	305
	0636	−1.0	−30
	1246	9.0	274
	1844	0.6	18
19 Su	0047	10.3	314
	0723	−1.5	−46
	1337	9.0	274
	1928	1.0	30
20 M	0128	10.3	314
	0809	−1.6	−49
	1427	8.7	265
	2012	1.5	46
21 Tu	0210	10.1	308
	0855	−1.4	−43
	1517	8.4	256
	2057	2.0	61
22 W	0253	9.6	293
	0942	−1.0	−30
	1608	7.9	241
	2145	2.6	79
23 Th	0338	9.0	274
	1030	−0.4	−12
	1703	7.5	229
	2237	3.1	94
24 F	0429	8.3	253
	1122	0.2	6
	1801	7.2	219
	2336	3.4	104
25 Sa ◐	0527	7.6	232
	1219	0.8	24
	1903	7.0	213
26 Su	0046	3.5	107
	0634	7.1	216
	1320	1.2	37
	2004	7.1	216
27 M	0200	3.3	101
	0746	6.8	207
	1421	1.5	46
	2058	7.3	223
28 Tu	0308	2.8	85
	0854	6.7	204
	1517	1.6	49
	2144	7.6	232
29 W	0403	2.1	64
	0955	6.9	210
	1605	1.6	49
	2224	7.9	241
30 Th	0449	1.4	43
	1048	7.1	216
	1648	1.7	52
	2300	8.3	253

May

	Time	Height	
	h m	ft	cm
1 F	0530	0.8	24
	1135	7.3	223
	1726	1.8	55
	2333	8.6	262
2 Sa	0607	0.2	6
	1218	7.5	229
	1803	1.9	58
3 Su ○	0005	8.9	271
	0643	−0.3	−9
	1258	7.7	235
	1839	2.1	64
4 M	0036	9.1	277
	0719	−0.6	−18
	1338	7.7	235
	1914	2.2	67
5 Tu	0108	9.2	280
	0756	−0.9	−27
	1418	7.7	235
	1951	2.5	76
6 W	0140	9.2	280
	0834	−1.0	−30
	1500	7.6	232
	2030	2.7	82
7 Th	0216	9.1	277
	0914	−0.9	−27
	1544	7.5	229
	2112	2.9	88
8 F	0256	8.8	268
	0958	−0.8	−24
	1633	7.3	223
	2202	3.1	94
9 Sa	0344	8.4	256
	1047	−0.5	−15
	1727	7.3	223
	2301	3.2	98
10 Su	0442	8.0	244
	1142	−0.1	−3
	1826	7.3	223
11 M ◑	0010	3.0	91
	0554	7.5	229
	1242	0.2	6
	1925	7.6	232
12 Tu	0126	2.6	79
	0713	7.2	219
	1346	0.5	15
	2023	8.1	247
13 W	0240	1.8	55
	0831	7.1	216
	1448	0.7	21
	2116	8.6	262
14 Th	0345	0.8	24
	0943	7.3	223
	1546	0.9	27
	2205	9.2	280
15 F	0442	−0.2	−6
	1048	7.6	232
	1640	1.1	34
	2251	9.7	296

	Time	Height	
	h m	ft	cm
16 Sa	0534	−1.0	−30
	1146	7.9	241
	1731	1.3	40
	2335	10.0	305
17 Su ●	0622	−1.7	−52
	1239	8.1	247
	1819	1.5	46
18 M	0018	10.1	308
	0708	−2.0	−61
	1329	8.1	247
	1906	1.8	55
19 Tu	0101	10.0	305
	0752	−2.0	−61
	1417	8.1	247
	1951	2.1	64
20 W	0143	9.7	296
	0835	−1.8	−55
	1504	7.9	241
	2037	2.4	73
21 Th	0226	9.2	280
	0919	−1.4	−43
	1551	7.7	235
	2124	2.7	82
22 F	0310	8.5	259
	1002	−0.8	−24
	1639	7.5	229
	2214	3.0	91
23 Sa	0358	7.9	241
	1047	−0.2	−6
	1729	7.3	223
	2310	3.1	94
24 Su	0451	7.2	219
	1135	0.4	12
	1820	7.2	219
25 M ◐	0012	3.1	94
	0552	6.6	201
	1225	0.9	27
	1912	7.2	219
26 Tu	0119	2.9	88
	0700	6.2	189
	1319	1.4	43
	2002	7.4	226
27 W	0225	2.4	73
	0810	6.0	183
	1413	1.8	55
	2048	7.6	232
28 Th	0324	1.8	55
	0916	6.0	183
	1506	2.0	61
	2131	8.0	244
29 F	0414	1.0	30
	1016	6.3	192
	1556	2.2	67
	2211	8.3	253
30 Sa	0458	0.3	9
	1109	6.6	201
	1642	2.3	70
	2249	8.6	262
31 Su	0539	−0.3	−9
	1156	6.9	210
	1725	2.4	73
	2325	8.9	271

June

	Time	Height	
	h m	ft	cm
1 M	0618	−0.9	−27
	1241	7.1	216
	1807	2.5	76
2 Tu ○	0002	9.2	280
	0657	−1.3	−40
	1323	7.3	223
	1848	2.5	76
3 W	0039	9.3	283
	0736	−1.6	−49
	1405	7.5	229
	1930	2.5	76
4 Th	0117	9.3	283
	0816	−1.8	−55
	1447	7.6	232
	2014	2.6	79
5 F	0158	9.2	280
	0858	−1.7	−52
	1532	7.6	232
	2102	2.6	79
6 Sa	0244	8.8	268
	0942	−1.5	−46
	1618	7.6	232
	2154	2.5	76
7 Su	0335	8.4	256
	1029	−1.1	−34
	1708	7.7	235
	2254	2.4	73
8 M	0434	7.7	235
	1119	−0.6	−18
	1800	7.9	241
9 Tu ◑	0001	2.2	67
	0543	7.1	216
	1214	0.0	0
	1854	8.2	250
10 W	0113	1.7	52
	0700	6.6	201
	1312	0.6	18
	1949	8.5	259
11 Th	0224	1.0	30
	0818	6.4	195
	1414	1.2	37
	2042	8.9	271
12 F	0330	0.2	6
	0933	6.5	198
	1515	1.6	49
	2134	9.3	283
13 Sa	0428	−0.7	−21
	1040	6.8	207
	1614	1.8	55
	2223	9.5	290
14 Su	0521	−1.3	−40
	1140	7.1	216
	1708	2.0	61
	2311	9.7	296
15 M	0608	−1.8	−55
	1232	7.4	226
	1759	2.1	64
	2356	9.7	296

	Time	Height	
	h m	ft	cm
16 Tu ●	0653	−2.0	−61
	1320	7.6	232
	1847	2.2	67
17 W	0040	9.5	290
	0735	−2.0	−61
	1405	7.7	235
	1933	2.3	70
18 Th	0122	9.2	280
	0816	−1.8	−55
	1447	7.6	232
	2018	2.4	73
19 F	0204	8.8	268
	0855	−1.4	−43
	1528	7.6	232
	2103	2.5	76
20 Sa	0246	8.2	250
	0934	−1.0	−30
	1609	7.5	229
	2149	2.6	79
21 Su	0330	7.6	232
	1012	−0.4	−12
	1651	7.4	226
	2238	2.6	79
22 M	0418	7.0	213
	1052	0.2	6
	1734	7.3	223
	2332	2.6	79
23 Tu	0512	6.4	195
	1134	0.8	24
	1818	7.4	226
24 W ◐	0032	2.4	73
	0614	5.9	180
	1220	1.4	43
	1904	7.5	229
25 Th	0135	2.1	64
	0723	5.6	171
	1311	1.9	58
	1951	7.7	235
26 F	0237	1.6	49
	0834	5.5	168
	1406	2.4	73
	2037	7.9	241
27 Sa	0333	0.9	27
	0940	5.7	174
	1503	2.6	79
	2123	8.2	250
28 Su	0424	0.2	6
	1040	6.0	183
	1558	2.8	85
	2207	8.6	262
29 M	0509	−0.5	−15
	1132	6.4	195
	1650	2.7	82
	2251	8.9	271
30 Tu	0553	−1.2	−37
	1219	6.8	207
	1738	2.6	79
	2334	9.2	280

Time meridian 120° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.
Heights are referred to mean lower low water which is the chart datum of soundings.

Toke Point, Willapa Bay, Washington, 2015

Times and Heights of High and Low Waters

July

	Time	Height	
	h m	ft	cm
1 W ○	0634	−1.7	−52
	1303	7.2	219
	1825	2.4	73
2 Th	0017	9.4	287
	0716	−2.1	−64
	1345	7.5	229
	1912	2.2	67
3 F	0101	9.5	290
	0757	−2.2	−67
	1427	7.8	238
	2000	2.0	61
4 Sa	0147	9.3	283
	0839	−2.2	−67
	1510	8.0	244
	2050	1.8	55
5 Su	0236	8.9	271
	0923	−1.8	−55
	1554	8.1	247
	2143	1.6	49
6 M	0329	8.4	256
	1007	−1.3	−40
	1640	8.3	253
	2241	1.4	43
7 Tu	0428	7.7	235
	1055	−0.6	−18
	1729	8.5	259
	2345	1.2	37
8 W ◑	0534	6.9	210
	1146	0.3	9
	1821	8.6	262
9 Th	0054	0.9	27
	0648	6.4	195
	1243	1.1	34
	1916	8.7	265
10 F	0204	0.5	15
	0806	6.1	186
	1345	1.7	52
	2013	8.9	271
11 Sa	0312	−0.1	−3
	0924	6.1	186
	1451	2.2	67
	2109	9.0	274
12 Su	0413	−0.7	−21
	1033	6.4	195
	1554	2.4	73
	2203	9.2	280
13 M	0507	−1.1	−34
	1132	6.7	204
	1653	2.4	73
	2253	9.2	280
14 Tu	0554	−1.5	−46
	1222	7.1	216
	1745	2.4	73
	2341	9.2	280
15 W ●	0637	−1.6	−49
	1305	7.3	223
	1832	2.2	67

	Time	Height	
	h m	ft	cm
16 Th	0025	9.1	277
	0717	−1.6	−49
	1345	7.5	229
	1916	2.1	64
17 F	0106	8.8	268
	0754	−1.4	−43
	1421	7.6	232
	1958	2.1	64
18 Sa	0146	8.5	259
	0829	−1.1	−34
	1456	7.6	232
	2039	2.0	61
19 Su	0226	8.1	247
	0903	−0.7	−21
	1531	7.6	232
	2120	2.0	61
20 M	0306	7.6	232
	0937	−0.2	−6
	1607	7.6	232
	2204	2.0	61
21 Tu	0349	7.0	213
	1011	0.3	9
	1643	7.6	232
	2251	2.0	61
22 W	0437	6.5	198
	1047	1.0	30
	1722	7.5	229
	2343	1.9	58
23 Th ◐	0533	6.0	183
	1128	1.6	49
	1805	7.6	232
24 F	0042	1.8	55
	0639	5.6	171
	1215	2.2	67
	1853	7.7	235
25 Sa	0145	1.5	46
	0752	5.4	165
	1312	2.7	82
	1944	7.8	238
26 Su	0248	0.9	27
	0904	5.6	171
	1417	3.0	91
	2038	8.1	247
27 M	0346	0.3	9
	1008	5.9	180
	1522	3.0	91
	2131	8.5	259
28 Tu	0438	−0.4	−12
	1104	6.4	195
	1622	2.8	85
	2223	8.9	271
29 W	0525	−1.1	−34
	1152	6.9	210
	1716	2.4	73
	2313	9.2	280
30 Th	0610	−1.7	−52
	1235	7.4	226
	1806	2.0	61
31 F ○	0001	9.5	290
	0653	−2.0	−61
	1317	7.8	238
	1856	1.5	46

August

	Time	Height	
	h m	ft	cm
1 Sa	0049	9.6	293
	0735	−2.2	−67
	1358	8.2	250
	1945	1.1	34
2 Su	0138	9.5	290
	0817	−2.0	−61
	1439	8.6	262
	2035	0.7	21
3 M	0229	9.1	277
	0900	−1.5	−46
	1522	8.8	268
	2127	0.5	15
4 Tu	0322	8.5	259
	0944	−0.9	−27
	1606	8.9	271
	2223	0.4	12
5 W	0420	7.7	235
	1030	0.0	0
	1654	8.9	271
	2324	0.4	12
6 Th ◑	0524	7.0	213
	1121	0.9	27
	1747	8.8	268
7 F	0030	0.4	12
	0636	6.4	195
	1218	1.8	55
	1844	8.7	265
8 Sa	0141	0.3	9
	0755	6.1	186
	1324	2.4	73
	1946	8.6	262
9 Su	0251	0.0	0
	0913	6.2	189
	1435	2.7	82
	2048	8.6	262
10 M	0355	−0.3	−9
	1022	6.5	198
	1543	2.8	85
	2147	8.6	262
11 Tu	0449	−0.6	−18
	1117	6.8	207
	1643	2.5	76
	2241	8.7	265
12 W	0536	−0.8	−24
	1202	7.2	219
	1734	2.2	67
	2329	8.7	265
13 Th	0617	−0.9	−27
	1241	7.4	226
	1818	1.9	58
14 F ●	0012	8.7	265
	0654	−0.9	−27
	1315	7.6	232
	1859	1.7	52
15 Sa	0052	8.6	262
	0727	−0.8	−24
	1347	7.8	238
	1937	1.5	46

	Time	Height	
	h m	ft	cm
16 Su	0130	8.3	253
	0800	−0.5	−15
	1418	7.9	241
	2014	1.4	43
17 M	0207	8.0	244
	0831	−0.1	−3
	1448	7.9	241
	2051	1.3	40
18 Tu	0245	7.7	235
	0902	0.4	12
	1519	7.9	241
	2130	1.3	40
19 W	0325	7.2	219
	0933	0.9	27
	1551	7.9	241
	2212	1.4	43
20 Th	0409	6.7	204
	1007	1.5	46
	1626	7.8	238
	2258	1.4	43
21 F	0501	6.3	192
	1045	2.1	64
	1706	7.7	235
	2352	1.4	43
22 Sa ◐	0603	5.9	180
	1131	2.7	82
	1755	7.7	235
23 Su	0055	1.3	40
	0715	5.7	174
	1231	3.1	94
	1854	7.7	235
24 M	0202	1.0	30
	0829	5.8	177
	1344	3.3	101
	1958	7.9	241
25 Tu	0307	0.5	15
	0936	6.2	189
	1457	3.2	98
	2102	8.2	250
26 W	0404	−0.1	−3
	1031	6.7	204
	1601	2.7	82
	2201	8.7	265
27 Th	0455	−0.8	−24
	1119	7.3	223
	1658	2.0	61
	2256	9.2	280
28 F	0542	−1.3	−40
	1202	8.0	244
	1750	1.3	40
	2348	9.5	290
29 Sa ○	0626	−1.5	−46
	1243	8.5	259
	1840	0.6	18
30 Su	0039	9.6	293
	0709	−1.5	−46
	1324	9.0	274
	1928	0.0	0
31 M	0129	9.5	290
	0752	−1.2	−37
	1404	9.4	287
	2018	−0.4	−12

September

	Time	Height	
	h m	ft	cm
1 Tu	0220	9.2	280
	0834	−0.7	−21
	1446	9.5	290
	2108	−0.6	−18
2 W	0313	8.6	262
	0919	0.1	3
	1530	9.5	290
	2202	−0.5	−15
3 Th	0410	7.9	241
	1006	1.0	30
	1618	9.3	283
	2259	−0.2	−6
4 F	0513	7.2	219
	1057	1.8	55
	1712	8.9	271
5 Sa ◑	0002	0.1	3
	0623	6.7	204
	1158	2.6	79
	1812	8.5	259
6 Su	0112	0.4	12
	0740	6.5	198
	1308	3.0	91
	1920	8.2	250
7 M	0223	0.4	12
	0856	6.6	201
	1424	3.1	94
	2029	8.0	244
8 Tu	0328	0.3	9
	1000	6.9	210
	1534	2.9	88
	2133	8.1	247
9 W	0424	0.2	6
	1051	7.2	219
	1632	2.4	73
	2228	8.2	250
10 Th	0510	0.0	0
	1131	7.5	229
	1720	2.0	61
	2316	8.3	253
11 F	0549	0.0	0
	1206	7.8	238
	1802	1.5	46
	2359	8.4	256
12 Sa ●	0624	0.1	3
	1238	8.1	247
	1839	1.2	37
13 Su	0038	8.3	253
	0656	0.2	6
	1307	8.2	250
	1915	0.9	27
14 M	0115	8.2	250
	0727	0.5	15
	1336	8.4	256
	1949	0.7	21
15 Tu	0151	8.0	244
	0757	0.9	27
	1404	8.4	256
	2024	0.6	18

	Time	Height	
	h m	ft	cm
16 W	0229	7.8	238
	0828	1.3	40
	1433	8.4	256
	2100	0.6	18
17 Th	0307	7.4	226
	0859	1.8	55
	1502	8.3	253
	2138	0.7	21
18 F	0350	7.1	216
	0933	2.3	70
	1534	8.2	250
	2222	0.9	27
19 Sa	0439	6.7	204
	1012	2.8	85
	1613	8.0	244
	2312	1.0	30
20 Su	0538	6.4	195
	1101	3.3	101
	1704	7.8	238
21 M ◐	0012	1.1	34
	0647	6.2	189
	1206	3.6	110
	1809	7.7	235
22 Tu	0119	1.0	30
	0758	6.4	195
	1323	3.6	110
	1924	7.7	235
23 W	0227	0.7	21
	0902	6.8	207
	1440	3.2	98
	2037	8.0	244
24 Th	0328	0.3	9
	0957	7.4	226
	1546	2.4	73
	2143	8.4	256
25 F	0422	−0.1	−3
	1044	8.1	247
	1643	1.5	46
	2242	8.9	271
26 Sa	0511	−0.4	−12
	1127	8.8	268
	1735	0.5	15
	2336	9.3	283
27 Su ○	0557	−0.5	−15
	1208	9.4	287
	1824	−0.3	−9
28 M	0029	9.4	287
	0641	−0.4	−12
	1249	9.9	302
	1912	−1.0	−30
29 Tu	0120	9.4	287
	0725	0.0	0
	1330	10.2	311
	2000	−1.3	−40
30 W	0211	9.1	277
	0809	0.6	18
	1412	10.2	311
	2049	−1.3	−40

Time meridian 120° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.
Heights are referred to mean lower low water which is the chart datum of soundings.

Toke Point, Willapa Bay, Washington, 2015

Times and Heights of High and Low Waters

October

	Time	Height			Time	Height	
	h m	ft	cm		h m	ft	cm
1 Th	0304	8.7	265	**16** F	0254	7.7	235
	0854	1.3	40		0831	2.7	82
	1456	9.9	302		1422	8.9	271
	2140	−1.0	−30		2113	0.2	6
2 F	0359	8.1	247	**17** Sa	0336	7.5	229
	0943	2.0	61		0908	3.1	94
	1544	9.5	290		1455	8.7	265
	2234	−0.5	−15		2154	0.3	9
3 Sa	0500	7.6	232	**18** Su	0424	7.2	219
	1036	2.7	82		0950	3.5	107
	1638	8.8	268		1535	8.4	256
	2332	0.0	0		2242	0.5	15
4 Su ◑	0606	7.2	219	**19** M	0520	7.0	213
	1139	3.2	98		1043	3.8	116
	1740	8.2	250		1628	8.1	247
					2338	0.8	24
5 M	0037	0.6	18	**20** Tu ◐	0623	7.0	213
	0717	7.0	213		1151	3.9	119
	1252	3.5	107		1736	7.8	238
	1850	7.7	235				
6 Tu	0145	0.9	27	**21** W	0041	0.9	27
	0826	7.1	216		0728	7.2	219
	1410	3.4	104		1309	3.6	110
	2004	7.5	229		1857	7.6	232
7 W	0250	1.0	30	**22** Th	0147	0.9	27
	0925	7.4	226		0828	7.7	235
	1520	2.9	88		1425	3.0	91
	2111	7.5	229		2016	7.7	235
8 Th	0346	1.0	30	**23** F	0250	0.8	24
	1012	7.7	235		0920	8.3	253
	1616	2.3	70		1531	2.0	61
	2209	7.7	235		2126	8.1	247
9 F	0433	1.0	30	**24** Sa	0347	0.7	21
	1051	8.1	247		1008	9.0	274
	1702	1.7	52		1628	1.0	30
	2258	7.9	241		2229	8.5	259
10 Sa	0513	1.1	34	**25** Su	0439	0.7	21
	1125	8.4	256		1052	9.7	296
	1741	1.2	37		1720	−0.1	−3
	2342	8.0	244		2326	8.8	268
11 Su	0548	1.2	37	**26** M	0528	0.7	21
	1157	8.7	265		1135	10.3	314
	1817	0.7	21		1809	−1.0	−30
12 M ●	0022	8.1	247	**27** Tu ○	0020	9.1	277
	0622	1.4	43		0614	1.0	30
	1226	8.9	271		1217	10.7	326
	1852	0.4	12		1857	−1.5	−46
13 Tu	0100	8.1	247	**28** W	0112	9.1	277
	0654	1.7	52		0700	1.3	40
	1255	9.0	274		1259	10.8	329
	1926	0.1	3		1943	−1.8	−55
14 W	0137	8.1	247	**29** Th	0203	9.0	274
	0725	2.0	61		0746	1.8	55
	1323	9.0	274		1342	10.6	323
	2000	0.0	0		2030	−1.6	−49
15 Th	0215	7.9	241	**30** F	0254	8.8	268
	0758	2.4	73		0833	2.3	70
	1352	9.0	274		1427	10.2	311
	2035	0.1	3		2118	−1.2	−37
				31 Sa	0347	8.4	256
					0922	2.8	85
					1514	9.6	293
					2208	−0.6	−18

November

	Time	Height			Time	Height	
	h m	ft	cm		h m	ft	cm
1 Su	0442	8.1	247	**16** M	0411	7.8	238
	1016	3.3	101		0937	3.8	116
	1606	8.8	268		1514	8.9	271
	2301	0.1	3		2220	0.1	3
2 M	0542	7.8	238	**17** Tu	0501	7.8	238
	1118	3.7	113		1033	3.9	119
	1705	8.1	247		1608	8.4	256
	2357	0.7	21		2311	0.4	12
3 Tu ◑	0644	7.6	232	**18** W ◐	0557	7.9	241
	1229	3.7	113		1140	3.8	116
	1814	7.5	229		1716	7.9	241
4 W	0058	1.3	40	**19** Th	0007	0.8	24
	0745	7.7	235		0655	8.1	247
	1344	3.5	107		1254	3.4	104
	1928	7.1	216		1836	7.5	229
5 Th	0159	1.7	52	**20** F	0109	1.2	37
	0839	7.9	241		0751	8.6	262
	1453	3.0	91		1408	2.7	82
	2038	7.0	213		1957	7.4	226
6 F	0256	1.9	58	**21** Sa	0212	1.5	46
	0925	8.2	250		0844	9.2	280
	1550	2.3	70		1515	1.7	52
	2141	7.1	216		2112	7.6	232
7 Sa	0345	2.1	64	**22** Su	0312	1.7	52
	1005	8.6	262		0934	9.8	299
	1636	1.7	52		1614	0.6	18
	2235	7.4	226		2219	8.0	244
8 Su	0429	2.2	67	**23** M	0408	1.9	58
	1041	8.9	271		1021	10.4	317
	1717	1.0	30		1707	−0.4	−12
	2322	7.6	232		2319	8.3	253
9 M	0509	2.4	73	**24** Tu	0501	2.0	61
	1115	9.2	280		1106	10.8	329
	1754	0.5	15		1756	−1.2	−37
10 Tu	0005	7.9	241	**25** W ○	0014	8.7	265
	0546	2.5	76		0551	2.2	67
	1147	9.4	287		1151	11.0	335
	1829	0.1	3		1843	−1.6	−49
11 W ●	0045	8.0	244	**26** Th	0105	8.9	271
	0621	2.7	82		0639	2.4	73
	1218	9.6	293		1235	11.0	335
	1904	−0.2	−6		1929	−1.7	−52
12 Th	0124	8.1	247	**27** F	0154	8.9	271
	0656	2.9	88		0727	2.7	82
	1249	9.6	293		1319	10.8	329
	1939	−0.4	−12		2013	−1.6	−49
13 F	0203	8.1	247	**28** Sa	0242	8.8	268
	0732	3.2	98		0814	3.0	91
	1320	9.6	293		1403	10.3	314
	2015	−0.4	−12		2057	−1.2	−37
14 Sa	0243	8.0	244	**29** Su	0330	8.7	265
	0810	3.4	104		0903	3.2	98
	1354	9.5	290		1449	9.6	293
	2053	−0.4	−12		2142	−0.6	−18
15 Su	0325	7.9	241	**30** M	0419	8.4	256
	0850	3.6	110		0955	3.5	107
	1431	9.2	280		1538	8.9	271
	2134	−0.2	−6		2228	0.1	3

December

	Time	Height			Time	Height	
	h m	ft	cm		h m	ft	cm
1 Tu	0509	8.3	253	**16** W	0437	8.6	262
	1051	3.7	113		1022	3.4	104
	1631	8.1	247		1559	8.7	265
	2315	0.9	27		2246	0.3	9
2 W ◑	0601	8.2	250	**17** Th	0526	8.7	265
	1154	3.8	116		1125	3.2	98
	1733	7.4	226		1704	8.0	244
					2337	0.9	27
3 Th	0005	1.5	46	**18** F ◐	0619	9.0	274
	0653	8.2	250		1236	2.8	85
	1303	3.6	110		1819	7.4	226
	1842	6.9	210				
4 F	0059	2.1	64	**19** Sa	0034	1.6	49
	0744	8.3	253		0714	9.3	283
	1411	3.1	94		1348	2.2	67
	1954	6.6	201		1940	7.2	219
5 Sa	0154	2.6	79	**20** Su	0136	2.2	67
	0831	8.5	259		0809	9.7	296
	1512	2.5	76		1458	1.4	43
	2103	6.7	204		2059	7.2	219
6 Su	0248	3.0	91	**21** M	0240	2.6	79
	0915	8.8	268		0903	10.1	308
	1604	1.8	55		1600	0.5	15
	2205	6.9	210		2211	7.5	229
7 M	0339	3.2	98	**22** Tu	0342	2.9	88
	0956	9.2	280		0955	10.5	320
	1648	1.1	34		1655	−0.3	−9
	2259	7.2	219		2314	7.9	241
8 Tu	0426	3.3	101	**23** W	0440	3.0	91
	1034	9.5	290		1045	10.8	329
	1728	0.5	15		1745	−1.0	−30
	2346	7.6	232				
9 W	0510	3.4	104	**24** Th	0009	8.3	253
	1111	9.7	296		0534	3.1	94
	1806	0.0	0		1133	10.9	332
					1831	−1.3	−40
10 Th	0029	7.9	241	**25** F ○	0058	8.6	262
	0551	3.5	107		0624	3.0	91
	1147	9.9	302		1219	10.8	329
	1843	−0.4	−12		1914	−1.4	−43
11 F ●	0109	8.1	247	**26** Sa	0143	8.8	268
	0632	3.5	107		0712	3.0	91
	1223	10.0	305		1303	10.6	323
	1920	−0.7	−21		1956	−1.2	−37
12 Sa	0149	8.3	253	**27** Su	0226	8.9	271
	0712	3.5	107		0758	3.1	94
	1259	10.1	308		1346	10.2	311
	1957	−0.8	−24		2036	−0.9	−27
13 Su	0228	8.3	253	**28** M	0307	8.8	268
	0753	3.5	107		0844	3.2	98
	1337	9.9	302		1429	9.6	293
	2036	−0.8	−24		2115	−0.4	−12
14 M	0309	8.4	256	**29** Tu	0348	8.7	265
	0838	3.5	107		0930	3.3	101
	1419	9.7	296		1513	8.9	271
	2116	−0.6	−18		2154	0.3	9
15 Tu	0352	8.5	259	**30** W	0430	8.6	262
	0927	3.5	107		1019	3.4	104
	1505	9.2	280		1600	8.2	250
	2159	−0.2	−6		2233	1.0	30
				31 Th	0512	8.5	259
					1112	3.4	104
					1652	7.5	229
					2314	1.7	52

Time meridian 120° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.
Heights are referred to mean lower low water which is the chart datum of soundings.

Aberdeen, Washington, 2015

Times and Heights of High and Low Waters

January

	Time	Height	
	h m	ft	cm
1 Th	0319	3.0	91
	0946	10.9	332
	1622	0.2	6
	2301	8.5	259
2 F	0416	3.3	101
	1037	11.0	335
	1713	−0.3	−9
	2358	8.9	271
3 Sa	0509	3.3	101
	1124	11.0	335
	1759	−0.5	−15
4 Su ○	0048	9.3	283
	0559	3.3	101
	1208	10.9	332
	1841	−0.6	−18
5 M	0131	9.5	290
	0644	3.3	101
	1250	10.8	329
	1921	−0.6	−18
6 Tu	0210	9.6	293
	0728	3.3	101
	1329	10.5	320
	1959	−0.4	−12
7 W	0246	9.6	293
	0809	3.2	98
	1407	10.2	311
	2035	−0.1	−3
8 Th	0320	9.6	293
	0850	3.2	98
	1444	9.8	299
	2111	0.3	9
9 F	0353	9.6	293
	0931	3.2	98
	1523	9.4	287
	2147	0.8	24
10 Sa	0426	9.5	290
	1015	3.2	98
	1605	8.9	271
	2224	1.4	43
11 Su	0502	9.5	290
	1103	3.2	98
	1653	8.3	253
	2303	2.0	61
12 M	0542	9.5	290
	1158	3.1	94
	1750	7.8	238
	2349	2.7	82
13 Tu ◑	0627	9.5	290
	1258	2.8	85
	1857	7.4	226
14 W	0046	3.3	101
	0718	9.7	296
	1401	2.4	73
	2010	7.4	226
15 Th	0150	3.8	116
	0813	10.0	305
	1501	1.7	52
	2123	7.6	232

	Time	Height	
	h m	ft	cm
16 F	0253	3.9	119
	0909	10.4	317
	1557	0.9	27
	2230	8.1	247
17 Sa	0354	3.9	119
	1004	10.9	332
	1650	0.1	3
	2329	8.7	265
18 Su	0450	3.6	110
	1056	11.3	344
	1739	−0.7	−21
19 M	0022	9.4	287
	0543	3.1	94
	1148	11.7	357
	1826	−1.3	−40
20 Tu ●	0110	9.9	302
	0633	2.6	79
	1238	11.9	363
	1911	−1.7	−52
21 W	0156	10.4	317
	0722	2.1	64
	1328	11.9	363
	1955	−1.8	−55
22 Th	0240	10.7	326
	0811	1.7	52
	1419	11.7	357
	2039	−1.6	−49
23 F	0322	11.0	335
	0901	1.4	43
	1509	11.2	341
	2123	−1.1	−34
24 Sa	0404	11.0	335
	0952	1.2	37
	1601	10.4	317
	2209	−0.3	−9
25 Su	0447	11.0	335
	1047	1.3	40
	1657	9.6	293
	2257	0.7	21
26 M ◐	0533	10.8	329
	1146	1.3	40
	1758	8.7	265
	2350	1.7	52
27 Tu	0623	10.5	320
	1249	1.4	43
	1906	8.0	244
28 W	0048	2.7	82
	0719	10.3	314
	1355	1.3	40
	2022	7.7	235
29 Th	0151	3.3	101
	0820	10.2	311
	1500	1.0	30
	2138	7.8	238
30 F	0255	3.7	113
	0920	10.1	308
	1600	0.7	21
	2246	8.2	250
31 Sa	0355	3.7	113
	1016	10.2	311
	1652	0.3	9
	2342	8.6	262

February

	Time	Height	
	h m	ft	cm
1 Su	0451	3.5	107
	1107	10.3	314
	1738	0.1	3
2 M	0027	9.0	274
	0540	3.3	101
	1152	10.4	317
	1819	−0.1	−3
3 Tu ○	0106	9.3	283
	0625	3.0	91
	1234	10.4	317
	1857	−0.1	−3
4 W	0141	9.6	293
	0707	2.7	82
	1313	10.3	314
	1933	0.0	0
5 Th	0214	9.7	296
	0747	2.5	76
	1351	10.1	308
	2008	0.2	6
6 F	0246	9.8	299
	0826	2.3	70
	1428	9.9	302
	2043	0.5	15
7 Sa	0316	9.8	299
	0905	2.2	67
	1505	9.5	290
	2116	0.9	27
8 Su	0346	9.8	299
	0945	2.1	64
	1544	9.0	274
	2150	1.5	46
9 M	0417	9.8	299
	1029	2.2	67
	1627	8.5	259
	2224	2.1	64
10 Tu	0451	9.7	296
	1118	2.2	67
	1718	8.0	244
	2304	2.8	85
11 W ◑	0531	9.6	293
	1215	2.2	67
	1820	7.5	229
	2357	3.5	107
12 Th	0622	9.6	293
	1318	2.0	61
	1933	7.3	223
13 F	0107	4.0	122
	0724	9.7	296
	1423	1.6	49
	2051	7.4	226
14 Sa	0220	4.1	125
	0830	9.9	302
	1524	0.9	27
	2201	7.9	241
15 Su	0327	3.8	116
	0935	10.4	317
	1621	0.2	6
	2302	8.6	262

	Time	Height	
	h m	ft	cm
16 M	0427	3.3	101
	1036	10.9	332
	1713	−0.6	−18
	2355	9.4	287
17 Tu	0523	2.5	76
	1132	11.4	347
	1801	−1.2	−37
18 W ●	0042	10.1	308
	0615	1.7	52
	1226	11.7	357
	1848	−1.5	−46
19 Th	0127	10.7	326
	0705	0.9	27
	1319	11.7	357
	1932	−1.5	−46
20 F	0210	11.1	338
	0754	0.4	12
	1410	11.5	351
	2016	−1.2	−37
21 Sa	0251	11.4	347
	0843	0.0	0
	1500	11.0	335
	2100	−0.6	−18
22 Su	0332	11.4	347
	0933	0.0	0
	1551	10.3	314
	2145	0.2	6
23 M	0414	11.1	338
	1024	0.2	6
	1644	9.5	290
	2232	1.2	37
24 Tu	0458	10.7	326
	1119	0.6	18
	1741	8.6	262
	2323	2.3	70
25 W ◐	0547	10.2	311
	1219	1.0	30
	1846	7.9	241
26 Th	0021	3.1	94
	0643	9.7	296
	1323	1.3	40
	1958	7.6	232
27 F	0125	3.7	113
	0746	9.3	283
	1429	1.3	40
	2113	7.6	232
28 Sa	0232	3.9	119
	0852	9.2	280
	1530	1.2	37
	2219	8.0	244

March

	Time	Height	
	h m	ft	cm
1 Su	0336	3.7	113
	0953	9.3	283
	1624	0.9	27
	2311	8.5	259
2 M	0432	3.3	101
	1047	9.5	290
	1710	0.7	21
	2353	8.9	271
3 Tu	0521	2.8	85
	1134	9.7	296
	1751	0.5	15
4 W	0030	9.3	283
	0604	2.3	70
	1216	9.9	302
	1828	0.4	12
5 Th ○	0104	9.6	293
	0645	1.8	55
	1257	9.9	302
	1905	0.5	15
6 F	0136	9.9	302
	0724	1.4	43
	1335	9.9	302
	1940	0.6	18
7 Sa	0207	10.0	305
	0802	1.2	37
	1413	9.7	296
	2014	0.9	27
8 Su	0237	10.0	305
	0840	1.0	30
	1451	9.5	290
	2048	1.4	43
9 M	0305	10.0	305
	0919	1.0	30
	1530	9.1	277
	2121	1.9	58
10 Tu	0334	9.9	302
	0959	1.1	34
	1611	8.6	262
	2155	2.4	73
11 W	0405	9.8	299
	1045	1.2	37
	1658	8.1	247
	2234	3.0	91
12 Th	0443	9.6	293
	1138	1.4	43
	1756	7.6	232
	2327	3.6	110
13 F ◑	0535	9.4	287
	1240	1.4	43
	1906	7.4	226
14 Sa	0039	4.0	122
	0643	9.3	283
	1346	1.3	40
	2021	7.5	229
15 Su	0155	3.9	119
	0759	9.4	287
	1450	0.8	24
	2131	8.1	247

	Time	Height	
	h m	ft	cm
16 M	0305	3.4	104
	0912	9.8	299
	1550	0.3	9
	2230	8.8	268
17 Tu	0408	2.6	79
	1018	10.3	314
	1644	−0.3	−9
	2322	9.6	293
18 W	0505	1.5	46
	1118	10.7	326
	1734	−0.7	−21
19 Th	0009	10.4	317
	0558	0.5	15
	1214	11.1	338
	1822	−0.9	−27
20 F ●	0053	11.0	335
	0648	−0.3	−9
	1308	11.2	341
	1907	−0.7	−21
21 Sa	0136	11.4	347
	0736	−0.9	−27
	1400	11.0	335
	1952	−0.4	−12
22 Su	0218	11.5	351
	0824	−1.1	−34
	1451	10.6	323
	2036	0.3	9
23 M	0259	11.4	347
	0912	−1.0	−30
	1541	10.0	305
	2121	1.0	30
24 Tu	0341	11.0	335
	1001	−0.6	−18
	1631	9.3	283
	2208	1.9	58
25 W	0424	10.4	317
	1052	0.0	0
	1725	8.6	262
	2259	2.8	85
26 Th ◐	0512	9.6	293
	1147	0.6	18
	1824	8.0	244
	2356	3.5	107
27 F	0607	8.9	271
	1247	1.2	37
	1929	7.7	235
28 Sa	0101	3.8	116
	0711	8.4	256
	1350	1.5	46
	2036	7.7	235
29 Su	0208	3.8	116
	0819	8.2	250
	1451	1.5	46
	2137	8.0	244
30 M	0312	3.4	104
	0924	8.3	253
	1545	1.4	43
	2227	8.4	256
31 Tu	0408	2.8	85
	1020	8.6	262
	1633	1.2	37
	2308	8.9	271

Time meridian 120° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.
Heights are referred to mean lower low water which is the chart datum of soundings.

Aberdeen, Washington, 2015

Times and Heights of High and Low Waters

April

	Time	Height	
	h m	ft	cm
1 W	0456	2.1	64
	1109	9.0	274
	1715	1.1	34
	2346	9.4	287
2 Th	0540	1.5	46
	1155	9.3	283
	1755	1.1	34
3 F	0021	9.8	299
	0621	0.9	27
	1238	9.5	290
	1833	1.1	34
4 Sa ○	0055	10.0	305
	0700	0.4	12
	1319	9.6	293
	1910	1.3	40
5 Su	0128	10.2	311
	0738	0.1	3
	1400	9.5	290
	1946	1.6	49
6 M	0158	10.2	311
	0817	0.0	0
	1439	9.3	283
	2022	2.0	61
7 Tu	0228	10.2	311
	0855	−0.1	−3
	1520	9.0	274
	2057	2.4	73
8 W	0257	10.0	305
	0935	0.0	0
	1602	8.6	262
	2135	2.8	85
9 Th	0330	9.8	299
	1020	0.2	6
	1648	8.2	250
	2218	3.2	98
10 F	0410	9.6	293
	1110	0.5	15
	1743	7.9	241
	2314	3.6	110
11 Sa ◑	0505	9.2	280
	1209	0.7	21
	1846	7.8	238
12 Su	0024	3.7	113
	0617	8.9	271
	1313	0.8	24
	1954	8.0	244
13 M	0137	3.4	104
	0736	8.9	271
	1417	0.7	21
	2058	8.5	259
14 Tu	0246	2.7	82
	0853	9.1	277
	1517	0.4	12
	2155	9.2	280
15 W	0349	1.7	52
	1002	9.5	290
	1613	0.2	6
	2246	10.0	305

	Time	Height	
	h m	ft	cm
16 Th	0447	0.6	18
	1104	9.9	302
	1705	0.1	3
	2333	10.7	326
17 F	0540	−0.5	−15
	1202	10.2	311
	1754	0.1	3
18 Sa ●	0018	11.2	341
	0630	−1.3	−40
	1257	10.4	317
	1842	0.3	9
19 Su	0102	11.5	351
	0718	−1.7	−52
	1350	10.3	314
	1928	0.7	21
20 M	0145	11.4	347
	0804	−1.8	−55
	1440	10.1	308
	2013	1.2	37
21 Tu	0227	11.1	338
	0850	−1.6	−49
	1529	9.7	296
	2058	1.9	58
22 W	0309	10.6	323
	0937	−1.1	−34
	1618	9.2	280
	2145	2.5	76
23 Th	0352	9.9	302
	1024	−0.4	−12
	1707	8.6	262
	2235	3.1	94
24 F	0438	9.1	277
	1114	0.4	12
	1759	8.2	250
	2331	3.6	110
25 Sa ◐	0531	8.4	256
	1208	1.0	30
	1854	7.9	241
26 Su	0033	3.7	113
	0632	7.8	238
	1305	1.5	46
	1952	7.9	241
27 M	0139	3.6	110
	0739	7.5	229
	1403	1.8	55
	2047	8.2	250
28 Tu	0242	3.1	94
	0845	7.6	232
	1458	1.8	55
	2136	8.6	262
29 W	0338	2.3	70
	0946	7.9	241
	1549	1.8	55
	2219	9.1	277
30 Th	0427	1.6	49
	1040	8.3	253
	1635	1.8	55
	2259	9.6	293

May

	Time	Height	
	h m	ft	cm
1 F	0512	0.8	24
	1130	8.7	265
	1718	1.8	55
	2337	10.0	305
2 Sa	0554	0.2	6
	1217	9.0	274
	1800	1.9	58
3 Su ○	0014	10.3	314
	0635	−0.3	−9
	1302	9.2	280
	1840	2.1	64
4 M	0049	10.4	317
	0715	−0.7	−21
	1346	9.2	280
	1919	2.3	70
5 Tu	0123	10.4	317
	0754	−0.9	−27
	1429	9.2	280
	1958	2.5	76
6 W	0156	10.4	317
	0834	−0.9	−27
	1512	9.0	274
	2038	2.8	85
7 Th	0231	10.2	311
	0916	−0.8	−24
	1555	8.8	268
	2120	3.0	91
8 F	0309	9.9	302
	1000	−0.6	−18
	1641	8.6	262
	2208	3.2	98
9 Sa	0354	9.6	293
	1048	−0.3	−9
	1732	8.4	256
	2305	3.3	101
10 Su	0452	9.1	277
	1143	0.1	3
	1827	8.4	256
11 M ◑	0011	3.2	98
	0602	8.7	265
	1242	0.4	12
	1926	8.7	265
12 Tu	0120	2.7	82
	0719	8.4	256
	1344	0.6	18
	2025	9.2	280
13 W	0228	1.9	58
	0835	8.4	256
	1444	0.8	24
	2120	9.8	299
14 Th	0331	0.9	27
	0946	8.7	265
	1542	0.9	27
	2211	10.4	317
15 F	0428	−0.2	−6
	1051	9.1	277
	1636	1.0	30
	2259	11.0	335

	Time	Height	
	h m	ft	cm
16 Sa	0522	−1.1	−34
	1151	9.4	287
	1727	1.2	37
	2346	11.3	344
17 Su ●	0611	−1.7	−52
	1247	9.6	293
	1817	1.4	43
18 M	0031	11.3	344
	0659	−2.0	−61
	1340	9.7	296
	1904	1.7	52
19 Tu	0115	11.2	341
	0744	−2.0	−61
	1429	9.6	293
	1951	2.1	64
20 W	0158	10.8	329
	0829	−1.7	−52
	1516	9.4	287
	2037	2.5	76
21 Th	0240	10.2	311
	0912	−1.2	−37
	1601	9.1	277
	2123	2.9	88
22 F	0323	9.5	290
	0956	−0.5	−15
	1645	8.7	265
	2211	3.2	98
23 Sa	0407	8.8	268
	1041	0.2	6
	1729	8.5	259
	2303	3.4	104
24 Su	0455	8.1	247
	1128	0.8	24
	1815	8.3	253
25 M ◐	0001	3.5	107
	0551	7.6	232
	1219	1.4	43
	1904	8.3	253
26 Tu	0103	3.3	101
	0655	7.2	219
	1313	1.9	58
	1954	8.5	259
27 W	0204	2.8	85
	0802	7.1	216
	1408	2.2	67
	2043	8.8	268
28 Th	0302	2.1	64
	0907	7.3	223
	1501	2.4	73
	2129	9.3	283
29 F	0354	1.3	40
	1007	7.7	235
	1552	2.5	76
	2213	9.8	299
30 Sa	0442	0.5	15
	1102	8.1	247
	1640	2.6	79
	2255	10.2	311
31 Su	0526	−0.1	−3
	1154	8.5	259
	1726	2.6	79
	2336	10.4	317

June

	Time	Height	
	h m	ft	cm
1 M	0610	−0.7	−21
	1244	8.8	268
	1811	2.7	82
2 Tu ○	0015	10.6	323
	0652	−1.1	−34
	1331	9.0	274
	1854	2.7	82
3 W	0054	10.7	326
	0733	−1.4	−43
	1417	9.1	277
	1938	2.8	85
4 Th	0134	10.6	323
	0815	−1.6	−49
	1501	9.2	280
	2021	2.8	85
5 F	0215	10.5	320
	0857	−1.5	−46
	1544	9.1	277
	2107	2.8	85
6 Sa	0259	10.1	308
	0941	−1.3	−40
	1628	9.1	277
	2157	2.7	82
7 Su	0348	9.7	296
	1028	−0.9	−27
	1714	9.1	277
	2253	2.7	82
8 M	0445	9.1	277
	1118	−0.3	−9
	1804	9.2	280
	2356	2.4	73
9 Tu ◑	0551	8.5	259
	1214	0.3	9
	1857	9.4	287
10 W	0102	2.0	61
	0704	8.1	247
	1313	0.8	24
	1952	9.8	299
11 Th	0208	1.2	37
	0819	7.9	241
	1413	1.3	40
	2047	10.2	311
12 F	0312	0.4	12
	0932	8.0	244
	1512	1.6	49
	2140	10.6	323
13 Sa	0410	−0.5	−15
	1039	8.4	256
	1609	1.9	58
	2231	10.9	332
14 Su	0504	−1.2	−37
	1141	8.7	265
	1703	2.1	64
	2319	11.1	338
15 M	0554	−1.6	−49
	1237	9.0	274
	1755	2.2	67

	Time	Height	
	h m	ft	cm
16 Tu ●	0006	11.0	335
	0640	−1.8	−55
	1328	9.2	280
	1844	2.4	73
17 W	0052	10.8	329
	0724	−1.7	−52
	1415	9.3	283
	1930	2.5	76
18 Th	0135	10.4	317
	0807	−1.5	−46
	1458	9.2	280
	2016	2.7	82
19 F	0217	9.9	302
	0847	−1.0	−30
	1538	9.1	277
	2100	2.8	85
20 Sa	0257	9.3	283
	0927	−0.5	−15
	1615	8.9	271
	2145	2.9	88
21 Su	0338	8.8	268
	1007	0.1	3
	1653	8.7	265
	2233	3.0	91
22 M	0423	8.2	250
	1048	0.7	21
	1732	8.6	262
	2324	3.0	91
23 Tu	0514	7.6	232
	1132	1.4	43
	1814	8.6	262
24 W ◐	0021	2.9	88
	0612	7.2	219
	1222	2.0	61
	1900	8.8	268
25 Th	0121	2.5	76
	0718	6.9	210
	1316	2.5	76
	1950	9.0	274
26 F	0221	2.0	61
	0826	6.9	210
	1413	2.9	88
	2040	9.4	287
27 Sa	0317	1.3	40
	0933	7.2	219
	1510	3.1	94
	2129	9.8	299
28 Su	0409	0.5	15
	1034	7.7	235
	1604	3.1	94
	2217	10.2	311
29 M	0458	−0.2	−6
	1130	8.2	250
	1655	3.1	94
	2303	10.5	320
30 Tu	0544	−0.8	−24
	1223	8.6	262
	1744	2.9	88
	2348	10.8	329

Time meridian 120° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.
Heights are referred to mean lower low water which is the chart datum of soundings.

Aberdeen, Washington, 2015

Times and Heights of High and Low Waters

July

	Time	Height	
	h m	ft	cm
1 W ○	0628	−1.4	−43
	1312	9.0	274
	1832	2.7	82
2 Th	0033	10.9	332
	0711	−1.7	−52
	1358	9.3	283
	1918	2.5	76
3 F	0118	10.9	332
	0754	−1.9	−58
	1442	9.5	290
	2005	2.2	67
4 Sa	0204	10.8	329
	0837	−1.9	−58
	1524	9.7	296
	2053	2.0	61
5 Su	0252	10.4	317
	0921	−1.6	−49
	1606	9.8	299
	2143	1.8	55
6 M	0343	9.9	302
	1006	−1.1	−34
	1649	9.8	299
	2237	1.7	52
7 Tu	0439	9.2	280
	1054	−0.3	−9
	1735	9.9	302
	2337	1.5	46
8 W ◑	0541	8.5	259
	1147	0.5	15
	1825	10.0	305
9 Th	0041	1.2	37
	0650	7.9	241
	1244	1.3	40
	1919	10.1	308
10 F	0147	0.8	24
	0804	7.6	232
	1345	2.0	61
	2017	10.2	311
11 Sa	0251	0.2	6
	0919	7.6	232
	1447	2.4	73
	2114	10.4	317
12 Su	0351	−0.3	−9
	1028	7.9	241
	1547	2.6	79
	2209	10.5	320
13 M	0446	−0.8	−24
	1130	8.3	253
	1644	2.6	79
	2300	10.6	323
14 Tu	0535	−1.1	−34
	1224	8.7	265
	1736	2.6	79
	2349	10.5	320
15 W ●	0621	−1.3	−40
	1311	9.0	274
	1825	2.5	76

	Time	Height	
	h m	ft	cm
16 Th	0034	10.4	317
	0703	−1.2	−37
	1353	9.1	277
	1911	2.4	73
17 F	0116	10.1	308
	0743	−1.0	−30
	1431	9.2	280
	1954	2.4	73
18 Sa	0156	9.7	296
	0820	−0.7	−21
	1506	9.2	280
	2036	2.4	73
19 Su	0235	9.3	283
	0857	−0.3	−9
	1539	9.1	277
	2117	2.4	73
20 M	0314	8.9	271
	0933	0.3	9
	1611	9.0	274
	2200	2.4	73
21 Tu	0355	8.4	256
	1010	0.9	27
	1645	8.9	271
	2247	2.4	73
22 W	0441	7.8	238
	1048	1.5	46
	1723	8.9	271
	2339	2.4	73
23 Th ◐	0534	7.3	223
	1132	2.2	67
	1806	8.9	271
24 F	0036	2.2	67
	0637	7.0	213
	1225	2.9	88
	1856	9.0	274
25 Sa	0137	1.9	58
	0748	6.8	207
	1327	3.3	101
	1951	9.2	280
26 Su	0238	1.4	43
	0859	7.0	213
	1431	3.5	107
	2048	9.5	290
27 M	0335	0.7	21
	1006	7.5	229
	1532	3.5	107
	2143	10.0	305
28 Tu	0428	0.0	0
	1105	8.0	244
	1628	3.2	98
	2236	10.4	317
29 W	0517	−0.7	−21
	1157	8.6	262
	1721	2.8	85
	2326	10.8	329
30 Th	0603	−1.3	−40
	1246	9.2	280
	1811	2.3	70
31 F ○	0016	11.1	338
	0648	−1.7	−52
	1331	9.6	293
	1900	1.7	52

August

	Time	Height	
	h m	ft	cm
1 Sa	0105	11.1	338
	0732	−1.9	−58
	1414	10.0	305
	1947	1.2	37
2 Su	0154	11.0	335
	0815	−1.8	−55
	1455	10.3	314
	2036	0.8	24
3 M	0244	10.7	326
	0858	−1.4	−43
	1536	10.4	317
	2126	0.6	18
4 Tu	0336	10.1	308
	0943	−0.7	−21
	1618	10.5	320
	2218	0.5	15
5 W	0430	9.3	283
	1030	0.1	3
	1703	10.4	317
	2315	0.6	18
6 Th ◑	0530	8.5	259
	1121	1.1	34
	1752	10.2	311
7 F	0017	0.7	21
	0636	7.8	238
	1219	2.0	61
	1848	10.0	305
8 Sa	0122	0.6	18
	0750	7.5	229
	1322	2.7	82
	1949	9.8	299
9 Su	0228	0.4	12
	0905	7.5	229
	1427	3.0	91
	2052	9.8	299
10 M	0330	0.1	3
	1015	7.8	238
	1530	3.0	91
	2152	9.8	299
11 Tu	0426	−0.2	−6
	1114	8.3	253
	1628	2.8	85
	2246	9.9	302
12 W	0515	−0.4	−12
	1202	8.7	265
	1720	2.5	76
	2334	10.0	305
13 Th	0558	−0.6	−18
	1244	9.0	274
	1807	2.2	67
14 F ●	0018	10.0	305
	0638	−0.5	−15
	1321	9.2	280
	1850	2.0	61
15 Sa	0059	9.8	299
	0716	−0.4	−12
	1355	9.3	283
	1931	1.7	52

	Time	Height	
	h m	ft	cm
16 Su	0137	9.7	296
	0752	−0.1	−3
	1427	9.4	287
	2010	1.6	49
17 M	0215	9.4	287
	0826	0.3	9
	1457	9.4	287
	2049	1.5	46
18 Tu	0253	9.0	274
	0901	0.8	24
	1527	9.3	283
	2129	1.5	46
19 W	0332	8.6	262
	0934	1.3	40
	1557	9.3	283
	2211	1.6	49
20 Th	0415	8.1	247
	1009	2.0	61
	1631	9.2	280
	2258	1.7	52
21 F	0504	7.6	232
	1048	2.6	79
	1711	9.0	274
	2353	1.8	55
22 Sa ◐	0604	7.2	219
	1139	3.3	101
	1802	8.9	271
23 Su	0054	1.8	55
	0713	7.0	213
	1247	3.7	113
	1903	9.0	274
24 M	0158	1.4	43
	0828	7.1	216
	1358	3.8	116
	2009	9.2	280
25 Tu	0259	0.9	27
	0936	7.5	229
	1505	3.6	110
	2114	9.6	293
26 W	0356	0.2	6
	1035	8.2	250
	1605	3.0	91
	2213	10.2	311
27 Th	0448	−0.5	−15
	1127	8.9	271
	1700	2.3	70
	2308	10.7	326
28 F	0536	−1.0	−30
	1213	9.6	293
	1751	1.4	43
29 Sa ○	0001	11.0	335
	0622	−1.4	−43
	1257	10.2	311
	1841	0.7	21
30 Su	0053	11.2	341
	0707	−1.5	−46
	1339	10.7	326
	1929	0.0	0
31 M	0144	11.1	338
	0750	−1.2	−37
	1421	11.0	335
	2017	−0.4	−12

September

	Time	Height	
	h m	ft	cm
1 Tu	0235	10.7	326
	0834	−0.7	−21
	1502	11.0	335
	2106	−0.6	−18
2 W	0326	10.1	308
	0919	0.0	0
	1545	10.9	332
	2157	−0.4	−12
3 Th	0420	9.4	287
	1006	0.9	27
	1630	10.6	323
	2252	−0.1	−3
4 F	0518	8.6	262
	1057	1.9	58
	1720	10.1	308
	2351	0.3	9
5 Sa ◑	0622	8.0	244
	1156	2.7	82
	1817	9.6	293
6 Su	0054	0.7	21
	0733	7.6	232
	1301	3.3	101
	1922	9.2	280
7 M	0200	0.8	24
	0846	7.7	235
	1409	3.4	104
	2030	9.0	274
8 Tu	0304	0.7	21
	0953	8.0	244
	1514	3.2	98
	2134	9.1	277
9 W	0400	0.5	15
	1047	8.5	259
	1612	2.7	82
	2229	9.3	283
10 Th	0448	0.4	12
	1130	8.9	271
	1702	2.2	67
	2317	9.4	287
11 F	0530	0.3	9
	1207	9.2	280
	1747	1.7	52
12 Sa ●	0000	9.6	293
	0609	0.3	9
	1241	9.5	290
	1828	1.3	40
13 Su	0040	9.6	293
	0646	0.4	12
	1314	9.7	296
	1907	1.0	30
14 M	0119	9.6	293
	0721	0.7	21
	1344	9.8	299
	1945	0.8	24
15 Tu	0158	9.4	287
	0756	1.1	34
	1414	9.8	299
	2023	0.7	21

	Time	Height	
	h m	ft	cm
16 W	0236	9.2	280
	0830	1.5	46
	1443	9.7	296
	2101	0.7	21
17 Th	0315	8.8	268
	0904	2.0	61
	1512	9.6	293
	2141	0.8	24
18 F	0357	8.4	256
	0938	2.6	79
	1543	9.4	287
	2224	1.0	30
19 Sa	0444	7.9	241
	1016	3.2	98
	1620	9.2	280
	2315	1.3	40
20 Su	0540	7.5	229
	1107	3.7	113
	1711	9.0	274
21 M ◐	0014	1.4	43
	0646	7.3	223
	1217	4.0	122
	1819	8.8	268
22 Tu	0119	1.4	43
	0758	7.5	229
	1332	4.0	122
	1935	8.9	271
23 W	0223	1.0	30
	0905	8.0	244
	1442	3.5	107
	2047	9.2	280
24 Th	0322	0.5	15
	1002	8.7	265
	1544	2.6	79
	2152	9.8	299
25 F	0416	0.0	0
	1052	9.5	290
	1640	1.6	49
	2251	10.3	314
26 Sa	0507	−0.4	−12
	1138	10.3	314
	1732	0.5	15
	2347	10.7	326
27 Su ○	0554	−0.6	−18
	1221	10.9	332
	1822	−0.4	−12
28 M	0040	10.9	332
	0640	−0.5	−15
	1304	11.3	344
	1910	−1.1	−34
29 Tu	0133	10.9	332
	0725	−0.2	−6
	1346	11.6	354
	1958	−1.4	−43
30 W	0225	10.6	323
	0810	0.3	9
	1428	11.5	351
	2046	−1.4	−43

Time meridian 120° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.
Heights are referred to mean lower low water which is the chart datum of soundings.

Aberdeen, Washington, 2015

Times and Heights of High and Low Waters

October

	Time	Height	
	h m	ft	cm
1 Th	0317	10.2	311
	0856	1.0	30
	1512	11.2	341
	2136	−1.1	−34
2 F	0410	9.5	290
	0944	1.9	58
	1558	10.6	323
	2227	−0.5	−15
3 Sa	0505	8.9	271
	1036	2.7	82
	1648	9.9	302
	2322	0.2	6
4 Su ◑	0605	8.4	256
	1134	3.3	101
	1746	9.1	277
5 M	0022	0.8	24
	0710	8.0	244
	1240	3.7	113
	1852	8.6	262
6 Tu	0125	1.2	37
	0817	8.1	247
	1349	3.7	113
	2002	8.3	253
7 W	0227	1.4	43
	0918	8.3	253
	1455	3.2	98
	2108	8.3	253
8 Th	0323	1.4	43
	1007	8.8	268
	1552	2.6	79
	2205	8.6	262
9 F	0412	1.3	40
	1048	9.2	280
	1640	1.9	58
	2254	8.9	271
10 Sa	0455	1.2	37
	1125	9.6	293
	1724	1.3	40
	2339	9.2	280
11 Su	0535	1.3	40
	1159	10.0	305
	1804	0.7	21
12 M ●	0021	9.4	287
	0614	1.4	43
	1232	10.2	311
	1843	0.3	9
13 Tu	0102	9.5	290
	0651	1.7	52
	1304	10.3	314
	1921	0.1	3
14 W	0142	9.5	290
	0727	2.0	61
	1335	10.3	314
	1959	0.0	0
15 Th	0223	9.3	283
	0803	2.4	73
	1404	10.2	311
	2037	0.0	0

	Time	Height	
	h m	ft	cm
16 F	0303	9.1	277
	0839	2.8	85
	1434	10.1	308
	2116	0.1	3
17 Sa	0345	8.7	265
	0916	3.2	98
	1505	9.8	299
	2158	0.4	12
18 Su	0431	8.4	256
	0957	3.6	110
	1543	9.5	290
	2245	0.7	21
19 M	0523	8.1	247
	1050	4.0	122
	1635	9.1	277
	2340	1.0	30
20 Tu ◐	0623	8.0	244
	1157	4.1	125
	1745	8.8	268
21 W	0042	1.1	34
	0728	8.2	250
	1311	3.9	119
	1905	8.7	265
22 Th	0146	1.1	34
	0830	8.7	265
	1420	3.2	98
	2023	8.9	271
23 F	0247	0.9	27
	0926	9.4	287
	1523	2.1	64
	2133	9.3	283
24 Sa	0343	0.7	21
	1016	10.2	311
	1620	0.9	27
	2235	9.8	299
25 Su	0436	0.5	15
	1102	11.0	335
	1713	−0.2	−6
	2334	10.2	311
26 M	0526	0.5	15
	1146	11.6	354
	1804	−1.1	−34
27 Tu ○	0029	10.5	320
	0614	0.7	21
	1230	11.9	363
	1852	−1.7	−52
28 W	0123	10.6	323
	0701	1.0	30
	1314	12.0	366
	1940	−1.9	−58
29 Th	0216	10.4	317
	0748	1.5	46
	1358	11.7	357
	2027	−1.8	−55
30 F	0307	10.1	308
	0835	2.0	61
	1443	11.2	341
	2114	−1.3	−40
31 Sa	0358	9.7	296
	0923	2.6	79
	1529	10.5	320
	2202	−0.6	−18

November

	Time	Height	
	h m	ft	cm
1 Su	0449	9.2	280
	1014	3.2	98
	1618	9.7	296
	2253	0.2	6
2 M	0543	8.8	268
	1111	3.7	113
	1713	8.9	271
	2346	0.9	27
3 Tu ◑	0638	8.6	262
	1214	3.9	119
	1815	8.2	250
4 W	0044	1.5	46
	0735	8.5	259
	1321	3.8	116
	1922	7.8	238
5 Th	0142	1.9	58
	0830	8.7	265
	1426	3.3	101
	2030	7.8	238
6 F	0238	2.1	64
	0918	9.1	277
	1523	2.6	79
	2131	8.0	244
7 Sa	0329	2.2	67
	1001	9.6	293
	1613	1.8	55
	2225	8.4	256
8 Su	0415	2.3	70
	1040	10.0	305
	1657	1.1	34
	2314	8.8	268
9 M	0459	2.4	73
	1117	10.4	317
	1738	0.5	15
10 Tu	0000	9.1	277
	0541	2.5	76
	1153	10.7	326
	1818	0.0	0
11 W ●	0045	9.3	283
	0621	2.7	82
	1228	10.8	329
	1858	−0.3	−9
12 Th	0129	9.5	290
	0701	2.9	88
	1302	10.8	329
	1937	−0.5	−15
13 F	0212	9.4	287
	0740	3.1	94
	1336	10.7	326
	2016	−0.5	−15
14 Sa	0254	9.3	283
	0819	3.4	104
	1409	10.5	320
	2055	−0.4	−12
15 Su	0337	9.1	277
	0900	3.6	110
	1444	10.2	311
	2137	−0.2	−6

	Time	Height	
	h m	ft	cm
16 M	0421	9.0	274
	0945	3.8	116
	1526	9.9	302
	2222	0.1	3
17 Tu	0508	8.8	268
	1038	3.9	119
	1619	9.4	287
	2313	0.5	15
18 W ◐	0600	8.8	268
	1141	3.8	116
	1725	8.9	271
19 Th	0009	0.9	27
	0656	9.0	274
	1250	3.5	107
	1842	8.6	262
20 F	0110	1.2	37
	0753	9.5	290
	1358	2.7	82
	2000	8.5	259
21 Sa	0211	1.4	43
	0848	10.1	308
	1502	1.6	49
	2114	8.8	268
22 Su	0310	1.5	46
	0940	10.8	329
	1601	0.5	15
	2221	9.2	280
23 M	0406	1.6	49
	1029	11.5	351
	1655	−0.5	−15
	2322	9.6	293
24 Tu	0459	1.7	52
	1116	11.9	363
	1746	−1.3	−40
25 W ○	0020	10.0	305
	0550	1.9	58
	1203	12.1	369
	1835	−1.8	−55
26 Th	0115	10.2	311
	0640	2.1	64
	1249	12.0	366
	1922	−1.9	−58
27 F	0207	10.2	311
	0728	2.4	73
	1335	11.7	357
	2008	−1.7	−52
28 Sa	0256	10.1	308
	0816	2.7	82
	1420	11.2	341
	2052	−1.3	−40
29 Su	0343	9.9	302
	0903	3.1	94
	1505	10.5	320
	2137	−0.6	−18
30 M	0428	9.6	293
	0952	3.4	104
	1551	9.7	296
	2222	0.2	6

December

	Time	Height	
	h m	ft	cm
1 Tu	0513	9.3	283
	1045	3.7	113
	1640	8.9	271
	2308	1.0	30
2 W ◑	0559	9.1	277
	1142	3.8	116
	1734	8.2	250
	2358	1.7	52
3 Th	0646	9.0	274
	1243	3.7	113
	1836	7.6	232
4 F	0051	2.3	70
	0735	9.1	277
	1345	3.3	101
	1942	7.4	226
5 Sa	0146	2.7	82
	0824	9.4	287
	1445	2.7	82
	2049	7.5	229
6 Su	0240	3.0	91
	0910	9.8	299
	1538	1.9	58
	2151	7.9	241
7 M	0332	3.2	98
	0955	10.2	311
	1626	1.2	37
	2247	8.3	253
8 Tu	0422	3.3	101
	1037	10.6	323
	1711	0.5	15
	2339	8.8	268
9 W	0508	3.4	104
	1118	10.9	332
	1754	−0.1	−3
10 Th	0028	9.1	277
	0553	3.4	104
	1158	11.1	338
	1835	−0.5	−15
11 F ●	0115	9.4	287
	0637	3.4	104
	1237	11.1	338
	1916	−0.8	−24
12 Sa	0159	9.6	293
	0720	3.4	104
	1316	11.1	338
	1956	−0.9	−27
13 Su	0242	9.7	296
	0802	3.4	104
	1355	10.9	332
	2036	−0.9	−27
14 M	0324	9.7	296
	0846	3.4	104
	1436	10.7	326
	2118	−0.7	−21
15 Tu	0405	9.7	296
	0933	3.3	101
	1521	10.3	314
	2201	−0.4	−12

	Time	Height	
	h m	ft	cm
16 W	0447	9.7	296
	1024	3.3	101
	1612	9.7	296
	2248	0.1	3
17 Th	0532	9.7	296
	1123	3.1	94
	1713	9.1	277
	2340	0.8	24
18 F ◐	0622	9.9	302
	1228	2.7	82
	1823	8.6	262
19 Sa	0037	1.4	43
	0715	10.2	311
	1334	2.1	64
	1939	8.3	253
20 Su	0138	2.0	61
	0811	10.6	323
	1440	1.3	40
	2056	8.3	253
21 M	0239	2.4	73
	0907	11.1	338
	1541	0.4	12
	2208	8.6	262
22 Tu	0339	2.6	79
	1001	11.5	351
	1638	−0.5	−15
	2313	9.1	277
23 W	0436	2.7	82
	1053	11.8	360
	1730	−1.1	−34
24 Th	0012	9.5	290
	0530	2.8	85
	1143	11.8	360
	1819	−1.4	−43
25 F ○	0106	9.8	299
	0622	2.8	85
	1232	11.7	357
	1905	−1.5	−46
26 Sa	0155	10.0	305
	0710	2.8	85
	1318	11.4	347
	1948	−1.3	−40
27 Su	0240	10.1	308
	0757	2.9	88
	1402	10.9	332
	2030	−0.9	−27
28 M	0321	10.0	305
	0843	3.0	91
	1445	10.3	314
	2110	−0.4	−12
29 Tu	0359	9.8	299
	0929	3.1	94
	1526	9.7	296
	2150	0.3	9
30 W	0436	9.6	293
	1015	3.2	98
	1609	9.0	274
	2230	1.0	30
31 Th	0514	9.4	287
	1105	3.3	101
	1656	8.3	253
	2313	1.8	55

Time meridian 120° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.
Heights are referred to mean lower low water which is the chart datum of soundings.

Neah Bay, Washington, 2015

Times and Heights of High and Low Waters

January

	Time	Height	
	h m	ft	cm
1 Th	0301	3.7	113
	0925	9.0	274
	1646	0.0	0
	2306	6.2	189
2 F	0403	4.0	122
	1012	9.2	280
	1731	−0.5	−15
	2356	6.5	198
3 Sa	0457	4.1	125
	1055	9.2	280
	1812	−0.7	−21
4 Su ○	0040	6.8	207
	0545	4.1	125
	1136	9.1	277
	1850	−0.8	−24
5 M	0119	7.0	213
	0627	4.0	122
	1214	9.0	274
	1925	−0.7	−21
6 Tu	0155	7.2	219
	0706	3.9	119
	1250	8.7	265
	1959	−0.5	−15
7 W	0230	7.2	219
	0745	3.9	119
	1326	8.4	256
	2030	−0.2	−6
8 Th	0305	7.3	223
	0826	3.8	116
	1402	7.9	241
	2100	0.3	9
9 F	0339	7.3	223
	0909	3.8	116
	1439	7.3	223
	2129	0.8	24
10 Sa	0413	7.3	223
	0958	3.7	113
	1520	6.7	204
	2158	1.4	43
11 Su	0448	7.3	223
	1055	3.6	110
	1609	6.1	186
	2229	2.0	61
12 M	0525	7.4	226
	1203	3.4	104
	1712	5.5	168
	2304	2.6	79
13 Tu ◑	0607	7.5	229
	1318	2.9	88
	1837	5.1	155
	2347	3.2	98
14 W	0653	7.7	235
	1427	2.3	70
	2016	5.0	152
15 Th	0041	3.7	113
	0744	8.0	244
	1525	1.5	46
	2137	5.3	162

	Time	Height	
	h m	ft	cm
16 F	0147	4.1	125
	0836	8.4	256
	1614	0.6	18
	2238	5.8	177
17 Sa	0259	4.2	128
	0927	8.9	271
	1700	−0.2	−6
	2326	6.3	192
18 Su	0405	4.1	125
	1017	9.4	287
	1742	−0.9	−27
19 M	0008	6.8	207
	0504	3.8	116
	1106	9.7	296
	1824	−1.4	−43
20 Tu ●	0049	7.3	223
	0559	3.5	107
	1154	9.9	302
	1905	−1.6	−49
21 W	0129	7.7	235
	0652	3.1	94
	1243	9.8	299
	1946	−1.6	−49
22 Th	0210	8.1	247
	0745	2.7	82
	1333	9.5	290
	2027	−1.2	−37
23 F	0251	8.3	253
	0840	2.4	73
	1424	8.8	268
	2108	−0.5	−15
24 Sa	0334	8.5	259
	0940	2.2	67
	1519	8.0	244
	2149	0.3	9
25 Su	0420	8.6	262
	1045	2.1	64
	1621	7.0	213
	2231	1.3	40
26 M ◐	0509	8.6	262
	1157	1.9	58
	1734	6.2	189
	2317	2.3	70
27 Tu	0603	8.5	259
	1314	1.6	49
	1904	5.6	171
28 W	0010	3.2	98
	0703	8.5	259
	1428	1.2	37
	2038	5.5	168
29 Th	0120	3.9	119
	0804	8.4	256
	1533	0.7	21
	2157	5.7	174
30 F	0243	4.3	131
	0904	8.5	259
	1628	0.3	9
	2258	6.1	186
31 Sa	0357	4.3	131
	0957	8.5	259
	1714	0.0	0
	2344	6.4	195

February

	Time	Height	
	h m	ft	cm
1 Su	0453	4.1	125
	1044	8.6	262
	1755	−0.2	−6
2 M	0022	6.7	204
	0539	3.9	119
	1126	8.6	262
	1831	−0.3	−9
3 Tu ○	0055	7.0	213
	0619	3.6	110
	1204	8.5	259
	1903	−0.2	−6
4 W	0126	7.2	219
	0655	3.4	104
	1240	8.4	256
	1933	0.0	0
5 Th	0156	7.3	223
	0731	3.1	94
	1314	8.1	247
	2000	0.3	9
6 F	0224	7.4	226
	0808	3.0	91
	1349	7.8	238
	2027	0.7	21
7 Sa	0251	7.5	229
	0846	2.8	85
	1425	7.3	223
	2052	1.1	34
8 Su	0319	7.5	229
	0927	2.7	82
	1504	6.8	207
	2118	1.7	52
9 M	0348	7.6	232
	1014	2.7	82
	1549	6.2	189
	2146	2.3	70
10 Tu	0420	7.6	232
	1109	2.6	79
	1644	5.7	174
	2219	2.9	88
11 W ◑	0458	7.6	232
	1216	2.4	73
	1758	5.2	158
	2259	3.4	104
12 Th	0547	7.7	235
	1330	2.0	61
	1935	5.1	155
	2353	3.9	119
13 F	0647	7.8	238
	1440	1.4	43
	2106	5.3	162
14 Sa	0108	4.2	128
	0755	8.1	247
	1540	0.6	18
	2210	5.8	177
15 Su	0237	4.2	128
	0900	8.5	259
	1631	−0.1	−3
	2258	6.4	195

	Time	Height	
	h m	ft	cm
16 M	0355	3.9	119
	1000	9.0	274
	1717	−0.7	−21
	2339	7.0	213
17 Tu	0458	3.3	101
	1055	9.3	283
	1800	−1.1	−34
18 W ●	0019	7.6	232
	0553	2.6	79
	1147	9.5	290
	1842	−1.2	−37
19 Th	0057	8.1	247
	0645	1.9	58
	1238	9.5	290
	1922	−1.0	−30
20 F	0136	8.6	262
	0737	1.4	43
	1329	9.1	277
	2002	−0.5	−15
21 Sa	0216	8.8	268
	0829	1.0	30
	1421	8.5	259
	2041	0.2	6
22 Su	0257	9.0	274
	0924	0.9	27
	1515	7.8	238
	2121	1.1	34
23 M	0340	8.9	271
	1022	0.9	27
	1615	6.9	210
	2202	2.0	61
24 Tu	0427	8.6	262
	1127	1.0	30
	1725	6.2	189
	2246	2.9	88
25 W ◐	0519	8.3	253
	1238	1.1	34
	1849	5.7	174
	2340	3.7	113
26 Th	0622	7.9	241
	1353	1.1	34
	2020	5.6	171
27 F	0101	4.2	128
	0733	7.7	235
	1502	1.0	30
	2137	5.8	177
28 Sa	0241	4.4	134
	0843	7.6	232
	1600	0.8	24
	2234	6.1	186

March

	Time	Height	
	h m	ft	cm
1 Su	0355	4.1	125
	0943	7.7	235
	1648	0.6	18
	2316	6.4	195
2 M	0448	3.7	113
	1033	7.8	238
	1728	0.5	15
	2350	6.7	204
3 Tu	0530	3.3	101
	1116	7.8	238
	1803	0.4	12
4 W	0020	7.0	213
	0607	2.8	85
	1154	7.9	241
	1833	0.5	15
5 Th ○	0048	7.3	223
	0641	2.4	73
	1230	7.8	238
	1901	0.7	21
6 F	0114	7.5	229
	0715	2.1	64
	1304	7.7	235
	1927	1.0	30
7 Sa	0139	7.6	232
	0748	1.8	55
	1339	7.4	226
	1952	1.3	40
8 Su	0203	7.7	235
	0824	1.6	49
	1415	7.1	216
	2017	1.8	55
9 M	0228	7.8	238
	0902	1.5	46
	1454	6.7	204
	2043	2.2	67
10 Tu	0256	7.8	238
	0943	1.5	46
	1538	6.3	192
	2113	2.7	82
11 W	0328	7.8	238
	1032	1.5	46
	1631	5.8	177
	2147	3.2	98
12 Th	0407	7.7	235
	1130	1.5	46
	1739	5.5	168
	2230	3.7	113
13 F ◑	0457	7.6	232
	1240	1.3	40
	1907	5.3	162
	2331	4.1	125
14 Sa	0603	7.5	229
	1353	1.0	30
	2032	5.6	171
15 Su	0057	4.2	128
	0722	7.6	232
	1500	0.6	18
	2134	6.1	186

	Time	Height	
	h m	ft	cm
16 M	0236	3.9	119
	0840	7.8	238
	1556	0.1	3
	2222	6.7	204
17 Tu	0353	3.2	98
	0947	8.2	250
	1646	−0.2	−6
	2304	7.3	223
18 W	0454	2.3	70
	1047	8.6	262
	1731	−0.4	−12
	2343	8.0	244
19 Th	0547	1.4	43
	1142	8.7	265
	1813	−0.3	−9
20 F ●	0022	8.5	259
	0637	0.5	15
	1234	8.7	265
	1854	0.0	0
21 Sa	0100	9.0	274
	0726	0.0	0
	1325	8.5	259
	1934	0.6	18
22 Su	0139	9.2	280
	0815	−0.4	−12
	1417	8.0	244
	2014	1.2	37
23 M	0219	9.1	277
	0905	−0.4	−12
	1511	7.4	226
	2054	2.0	61
24 Tu	0301	8.9	271
	0958	−0.2	−6
	1609	6.8	207
	2136	2.7	82
25 W	0346	8.4	256
	1055	0.2	6
	1714	6.2	189
	2222	3.4	104
26 Th ◐	0437	7.8	238
	1159	0.7	21
	1831	5.8	177
	2323	4.0	122
27 F	0539	7.2	219
	1309	1.0	30
	1952	5.8	177
28 Sa	0057	4.3	131
	0657	6.8	207
	1418	1.2	37
	2101	5.9	180
29 Su	0236	4.1	125
	0816	6.6	201
	1519	1.2	37
	2154	6.2	189
30 M	0345	3.6	110
	0922	6.7	204
	1609	1.2	37
	2234	6.5	198
31 Tu	0434	3.1	94
	1016	6.8	207
	1650	1.2	37
	2307	6.8	207

Time meridian 120° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.
Heights are referred to mean lower low water which is the chart datum of soundings.

Neah Bay, Washington, 2015

Times and Heights of High and Low Waters

April

	Time	Height	
	h m	ft	cm
1 W	0514	2.5	76
	1101	6.9	210
	1724	1.2	37
	2336	7.1	216
2 Th	0549	1.9	58
	1141	7.0	213
	1755	1.3	40
3 F	0003	7.4	226
	0623	1.4	43
	1219	7.1	216
	1823	1.5	46
4 Sa ○	0028	7.7	235
	0656	0.9	27
	1255	7.1	216
	1850	1.8	55
5 Su	0052	7.9	241
	0729	0.6	18
	1331	7.0	213
	1917	2.1	64
6 M	0117	8.0	244
	0803	0.4	12
	1409	6.8	207
	1944	2.4	73
7 Tu	0145	8.0	244
	0840	0.3	9
	1449	6.6	201
	2014	2.8	85
8 W	0215	8.0	244
	0921	0.3	9
	1535	6.3	192
	2047	3.2	98
9 Th	0250	7.9	241
	1007	0.3	9
	1628	6.0	183
	2127	3.6	110
10 F	0332	7.7	235
	1100	0.5	15
	1732	5.7	174
	2219	3.9	119
11 Sa ◑	0425	7.4	226
	1201	0.6	18
	1846	5.7	174
	2331	4.1	125
12 Su	0535	7.1	216
	1309	0.6	18
	1958	6.0	183
13 M	0108	3.9	119
	0700	6.9	210
	1416	0.6	18
	2055	6.5	198
14 Tu	0242	3.2	98
	0824	7.0	213
	1516	0.5	15
	2143	7.1	216
15 W	0351	2.2	67
	0938	7.2	219
	1609	0.5	15
	2226	7.8	238

	Time	Height	
	h m	ft	cm
16 Th	0448	1.1	34
	1041	7.5	229
	1656	0.6	18
	2306	8.4	256
17 F	0539	0.1	3
	1137	7.7	235
	1741	0.8	24
	2346	8.9	271
18 Sa ●	0627	−0.7	−21
	1231	7.7	235
	1824	1.2	37
19 Su	0025	9.2	280
	0714	−1.2	−37
	1322	7.6	232
	1906	1.7	52
20 M	0105	9.3	283
	0800	−1.4	−43
	1413	7.4	226
	1947	2.2	67
21 Tu	0145	9.1	277
	0847	−1.3	−40
	1505	7.1	216
	2029	2.7	82
22 W	0226	8.6	262
	0935	−0.9	−27
	1600	6.7	204
	2114	3.3	101
23 Th	0310	8.0	244
	1025	−0.4	−12
	1700	6.3	192
	2205	3.7	113
24 F	0357	7.3	223
	1119	0.2	6
	1805	6.1	186
	2311	4.0	122
25 Sa ◐	0455	6.6	201
	1218	0.7	21
	1913	6.0	183
26 Su	0044	4.0	122
	0610	6.0	183
	1320	1.2	37
	2014	6.1	186
27 M	0215	3.7	113
	0736	5.7	174
	1419	1.5	46
	2104	6.3	192
28 Tu	0321	3.1	94
	0850	5.7	174
	1512	1.7	52
	2144	6.6	201
29 W	0410	2.4	73
	0950	5.8	177
	1556	1.8	55
	2217	7.0	213
30 Th	0451	1.7	52
	1041	6.0	183
	1634	2.0	61
	2247	7.3	223

May

	Time	Height	
	h m	ft	cm
1 F	0527	1.1	34
	1125	6.2	189
	1707	2.2	67
	2315	7.6	232
2 Sa	0601	0.4	12
	1206	6.3	192
	1739	2.3	70
	2342	7.9	241
3 Su ○	0635	−0.1	−3
	1245	6.5	198
	1810	2.5	76
4 M	0009	8.1	247
	0709	−0.5	−15
	1324	6.5	198
	1842	2.8	85
5 Tu	0038	8.2	250
	0745	−0.7	−21
	1404	6.5	198
	1915	3.0	91
6 W	0110	8.3	253
	0823	−0.9	−27
	1446	6.4	195
	1951	3.2	98
7 Th	0145	8.2	250
	0904	−0.9	−27
	1532	6.3	192
	2032	3.5	107
8 F	0225	8.0	244
	0948	−0.7	−21
	1623	6.2	189
	2121	3.7	113
9 Sa	0311	7.6	232
	1037	−0.5	−15
	1721	6.1	186
	2223	3.8	116
10 Su	0408	7.1	216
	1131	−0.1	−3
	1822	6.3	192
	2344	3.7	113
11 M ◑	0519	6.6	201
	1230	0.3	9
	1922	6.6	201
12 Tu	0118	3.2	98
	0645	6.2	189
	1331	0.6	18
	2016	7.1	216
13 W	0240	2.3	70
	0813	6.0	183
	1432	1.0	30
	2104	7.6	232
14 Th	0345	1.2	37
	0930	6.2	189
	1528	1.3	40
	2149	8.2	250
15 F	0440	0.1	3
	1037	6.4	195
	1620	1.6	49
	2232	8.7	265

	Time	Height	
	h m	ft	cm
16 Sa	0529	−0.8	−24
	1135	6.7	204
	1709	1.9	58
	2314	9.0	274
17 Su ●	0616	−1.5	−46
	1228	6.8	207
	1755	2.2	67
	2355	9.2	280
18 M	0701	−1.9	−58
	1319	6.9	210
	1840	2.5	76
19 Tu	0036	9.1	277
	0745	−1.9	−58
	1408	6.9	210
	1924	2.9	88
20 W	0116	8.8	268
	0828	−1.8	−55
	1456	6.7	204
	2008	3.2	98
21 Th	0157	8.3	253
	0911	−1.3	−40
	1546	6.5	198
	2055	3.4	104
22 F	0239	7.7	235
	0955	−0.8	−24
	1638	6.4	195
	2148	3.6	110
23 Sa	0324	7.0	213
	1039	−0.2	−6
	1731	6.2	189
	2251	3.8	116
24 Su	0415	6.2	189
	1125	0.5	15
	1826	6.2	189
25 M ◐	0011	3.7	113
	0518	5.6	171
	1213	1.1	34
	1919	6.3	192
26 Tu	0135	3.3	101
	0640	5.1	155
	1303	1.6	49
	2006	6.5	198
27 W	0244	2.7	82
	0804	4.9	149
	1354	2.0	61
	2047	6.7	204
28 Th	0337	2.0	61
	0916	4.9	149
	1443	2.3	70
	2123	7.1	216
29 F	0421	1.2	37
	1016	5.1	155
	1529	2.6	79
	2156	7.4	226
30 Sa	0500	0.5	15
	1106	5.4	165
	1611	2.8	85
	2228	7.7	235
31 Su	0537	−0.2	−6
	1151	5.7	174
	1652	2.9	88
	2259	8.1	247

June

	Time	Height	
	h m	ft	cm
1 M	0613	−0.8	−24
	1233	6.0	183
	1731	3.0	91
	2333	8.3	253
2 Tu ○	0650	−1.3	−40
	1313	6.2	189
	1811	3.1	94
3 W	0008	8.5	259
	0727	−1.6	−49
	1355	6.3	192
	1853	3.2	98
4 Th	0046	8.5	259
	0806	−1.7	−52
	1437	6.4	195
	1937	3.3	101
5 F	0127	8.4	256
	0847	−1.7	−52
	1521	6.5	198
	2026	3.3	101
6 Sa	0212	8.1	247
	0930	−1.4	−43
	1608	6.5	198
	2122	3.3	101
7 Su	0302	7.6	232
	1015	−1.0	−30
	1659	6.6	201
	2229	3.2	98
8 M	0400	6.9	210
	1103	−0.4	−12
	1751	6.8	207
	2348	2.9	88
9 Tu ◑	0510	6.1	186
	1154	0.2	6
	1845	7.2	219
10 W	0113	2.2	67
	0635	5.6	171
	1249	0.9	27
	1938	7.5	229
11 Th	0229	1.4	43
	0805	5.3	162
	1348	1.5	46
	2029	8.0	244
12 F	0334	0.4	12
	0926	5.4	165
	1449	2.1	64
	2118	8.4	256
13 Sa	0429	−0.5	−15
	1035	5.6	171
	1548	2.5	76
	2204	8.7	265
14 Su	0519	−1.2	−37
	1134	5.9	180
	1643	2.7	82
	2249	8.9	271
15 M	0605	−1.7	−52
	1225	6.2	189
	1734	2.9	88
	2332	8.9	271

	Time	Height	
	h m	ft	cm
16 Tu ●	0648	−2.0	−61
	1313	6.4	195
	1821	3.0	91
17 W	0014	8.7	265
	0729	−2.0	−61
	1357	6.5	198
	1907	3.1	94
18 Th	0055	8.4	256
	0809	−1.8	−55
	1440	6.5	198
	1951	3.2	98
19 F	0135	8.0	244
	0847	−1.4	−43
	1522	6.5	198
	2037	3.2	98
20 Sa	0215	7.4	226
	0924	−0.9	−27
	1605	6.4	195
	2126	3.3	101
21 Su	0257	6.8	207
	1000	−0.3	−9
	1648	6.4	195
	2221	3.3	101
22 M	0342	6.1	186
	1035	0.4	12
	1732	6.3	192
	2325	3.2	98
23 Tu	0435	5.4	165
	1111	1.0	30
	1816	6.4	195
24 W ◐	0039	2.9	88
	0543	4.8	146
	1149	1.6	49
	1900	6.5	198
25 Th	0152	2.4	73
	0709	4.4	134
	1233	2.2	67
	1943	6.7	204
26 F	0254	1.7	52
	0835	4.4	134
	1323	2.6	79
	2024	7.0	213
27 Sa	0345	1.0	30
	0946	4.6	140
	1419	3.0	91
	2105	7.4	226
28 Su	0429	0.3	9
	1044	5.0	152
	1516	3.2	98
	2144	7.8	238
29 M	0510	−0.5	−15
	1132	5.3	162
	1610	3.3	101
	2225	8.1	247
30 Tu	0550	−1.1	−34
	1215	5.7	174
	1701	3.2	98
	2306	8.5	259

Time meridian 120° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.
Heights are referred to mean lower low water which is the chart datum of soundings.

Neah Bay, Washington, 2015

Times and Heights of High and Low Waters

July

	Time	Height	
	h m	ft	cm
1 W ○	0629	−1.7	−52
	1255	6.1	186
	1749	3.1	94
	2348	8.7	265
2 Th	0708	−2.0	−61
	1335	6.4	195
	1838	2.9	88
3 F	0031	8.7	265
	0748	−2.1	−64
	1416	6.6	201
	1928	2.8	85
4 Sa	0117	8.6	262
	0828	−2.0	−61
	1457	6.8	207
	2021	2.6	79
5 Su	0205	8.1	247
	0909	−1.6	−49
	1540	7.0	213
	2120	2.4	73
6 M	0258	7.5	229
	0951	−1.0	−30
	1626	7.2	219
	2225	2.2	67
7 Tu	0356	6.7	204
	1034	−0.2	−6
	1714	7.4	226
	2338	1.8	55
8 W ◑	0505	5.9	180
	1121	0.6	18
	1806	7.6	232
9 Th	0056	1.4	43
	0628	5.2	158
	1212	1.5	46
	1901	7.8	238
10 F	0211	0.7	21
	0800	4.9	149
	1311	2.2	67
	1957	8.0	244
11 Sa	0318	0.0	0
	0924	5.0	152
	1419	2.8	85
	2052	8.2	250
12 Su	0416	−0.7	−21
	1033	5.3	162
	1528	3.1	94
	2145	8.3	253
13 M	0506	−1.2	−37
	1129	5.6	171
	1630	3.2	98
	2233	8.4	256
14 Tu	0551	−1.5	−46
	1216	5.9	180
	1724	3.1	94
	2318	8.4	256
15 W ●	0632	−1.6	−49
	1258	6.2	189
	1811	3.0	91

	Time	Height	
	h m	ft	cm
16 Th	0001	8.3	253
	0710	−1.6	−49
	1336	6.4	195
	1854	2.9	88
17 F	0041	8.0	244
	0746	−1.3	−40
	1413	6.5	198
	1936	2.8	85
18 Sa	0119	7.7	235
	0819	−1.0	−30
	1448	6.5	198
	2017	2.7	82
19 Su	0157	7.2	219
	0850	−0.5	−15
	1522	6.5	198
	2100	2.6	79
20 M	0235	6.7	204
	0920	0.0	0
	1556	6.5	198
	2146	2.6	79
21 Tu	0317	6.1	186
	0949	0.6	18
	1630	6.5	198
	2239	2.5	76
22 W	0404	5.5	168
	1018	1.2	37
	1707	6.5	198
	2340	2.4	73
23 Th ◐	0501	4.9	149
	1051	1.9	58
	1746	6.6	201
24 F	0049	2.1	64
	0617	4.4	134
	1130	2.4	73
	1832	6.7	204
25 Sa	0200	1.6	49
	0751	4.3	131
	1220	2.9	88
	1923	6.9	210
26 Su	0302	1.0	30
	0914	4.5	137
	1323	3.3	101
	2016	7.2	219
27 M	0354	0.3	9
	1017	4.9	149
	1435	3.4	104
	2108	7.6	232
28 Tu	0440	−0.5	−15
	1106	5.3	162
	1543	3.3	101
	2158	8.1	247
29 W	0523	−1.1	−34
	1148	5.8	177
	1643	3.1	94
	2247	8.5	259
30 Th	0604	−1.6	−49
	1227	6.3	192
	1737	2.7	82
	2334	8.7	265
31 F ○	0644	−1.9	−58
	1305	6.7	204
	1828	2.2	67

August

	Time	Height	
	h m	ft	cm
1 Sa	0022	8.8	268
	0724	−1.9	−58
	1343	7.1	216
	1920	1.8	55
2 Su	0111	8.6	262
	0804	−1.7	−52
	1423	7.4	226
	2013	1.5	46
3 M	0201	8.1	247
	0843	−1.2	−37
	1504	7.7	235
	2109	1.2	37
4 Tu	0255	7.5	229
	0924	−0.4	−12
	1547	7.8	238
	2210	1.0	30
5 W	0354	6.6	201
	1005	0.5	15
	1634	7.8	238
	2318	0.9	27
6 Th ◑	0502	5.8	177
	1050	1.4	43
	1727	7.8	238
7 F	0031	0.7	21
	0624	5.2	158
	1142	2.3	70
	1825	7.7	235
8 Sa	0147	0.4	12
	0755	4.9	149
	1248	3.0	91
	1929	7.7	235
9 Su	0257	0.0	0
	0918	5.1	155
	1410	3.4	104
	2034	7.7	235
10 M	0357	−0.3	−9
	1024	5.4	165
	1529	3.4	104
	2132	7.8	238
11 Tu	0448	−0.6	−18
	1115	5.7	174
	1631	3.2	98
	2224	7.8	238
12 W	0532	−0.8	−24
	1156	6.0	183
	1721	2.9	88
	2310	7.9	241
13 Th	0611	−0.9	−27
	1232	6.3	192
	1804	2.6	79
	2352	7.8	238
14 F ●	0646	−0.8	−24
	1304	6.5	198
	1842	2.3	70
15 Sa	0030	7.7	235
	0718	−0.5	−15
	1335	6.7	204
	1919	2.1	64

	Time	Height	
	h m	ft	cm
16 Su	0106	7.4	226
	0747	−0.2	−6
	1404	6.8	207
	1955	1.9	58
17 M	0142	7.1	216
	0814	0.2	6
	1432	6.8	207
	2033	1.8	55
18 Tu	0219	6.7	204
	0840	0.7	21
	1500	6.8	207
	2113	1.8	55
19 W	0258	6.2	189
	0906	1.3	40
	1528	6.8	207
	2157	1.7	52
20 Th	0342	5.7	174
	0934	1.8	55
	1600	6.8	207
	2249	1.7	52
21 F	0435	5.2	158
	1006	2.4	73
	1637	6.7	204
	2350	1.7	52
22 Sa ◐	0543	4.7	143
	1045	2.9	88
	1724	6.7	204
23 Su	0101	1.4	43
	0713	4.6	140
	1138	3.4	104
	1823	6.8	207
24 M	0212	1.0	30
	0841	4.8	146
	1250	3.7	113
	1931	7.0	213
25 Tu	0314	0.4	12
	0945	5.2	158
	1417	3.6	110
	2038	7.4	226
26 W	0406	−0.2	−6
	1032	5.7	174
	1533	3.2	98
	2138	7.8	238
27 Th	0452	−0.7	−21
	1113	6.2	189
	1635	2.6	79
	2233	8.3	253
28 F	0535	−1.1	−34
	1151	6.8	207
	1729	1.9	58
	2325	8.6	262
29 Sa ○	0616	−1.3	−40
	1228	7.4	226
	1820	1.2	37
30 Su	0015	8.7	265
	0656	−1.1	−34
	1306	7.8	238
	1910	0.6	18
31 M	0106	8.5	259
	0735	−0.7	−21
	1345	8.2	250
	2001	0.2	6

September

	Time	Height	
	h m	ft	cm
1 Tu	0157	8.0	244
	0815	−0.1	−3
	1425	8.4	256
	2054	−0.1	−3
2 W	0252	7.4	226
	0855	0.7	21
	1508	8.4	256
	2151	−0.1	−3
3 Th	0350	6.7	204
	0938	1.5	46
	1554	8.2	250
	2253	0.1	3
4 F	0458	6.0	183
	1024	2.4	73
	1647	7.9	241
5 Sa ◑	0002	0.3	9
	0618	5.5	168
	1122	3.1	94
	1749	7.5	229
6 Su	0116	0.4	12
	0745	5.4	165
	1243	3.6	110
	1903	7.2	219
7 M	0227	0.4	12
	0903	5.5	168
	1419	3.7	113
	2017	7.1	216
8 Tu	0330	0.3	9
	1002	5.8	177
	1534	3.4	104
	2122	7.1	216
9 W	0422	0.2	6
	1047	6.1	186
	1630	3.0	91
	2216	7.2	219
10 Th	0505	0.1	3
	1124	6.4	195
	1715	2.5	76
	2302	7.3	223
11 F	0542	0.2	6
	1155	6.7	204
	1753	2.0	61
	2342	7.3	223
12 Sa ●	0615	0.3	9
	1224	6.9	210
	1827	1.6	49
13 Su	0019	7.3	223
	0644	0.6	18
	1251	7.1	216
	1900	1.3	40
14 M	0055	7.2	219
	0710	0.9	27
	1316	7.3	223
	1934	1.1	34
15 Tu	0130	7.0	213
	0735	1.3	40
	1341	7.3	223
	2008	0.9	27

	Time	Height	
	h m	ft	cm
16 W	0207	6.7	204
	0801	1.7	52
	1407	7.3	223
	2045	0.9	27
17 Th	0245	6.4	195
	0827	2.2	67
	1434	7.3	223
	2125	0.9	27
18 F	0328	6.0	183
	0857	2.7	82
	1504	7.2	219
	2210	1.0	30
19 Sa	0419	5.6	171
	0931	3.2	98
	1541	7.1	216
	2304	1.1	34
20 Su	0524	5.3	162
	1014	3.6	110
	1629	6.9	210
21 M ◐	0009	1.1	34
	0647	5.2	158
	1114	3.9	119
	1733	6.8	207
22 Tu	0121	1.0	30
	0808	5.4	165
	1241	4.0	122
	1853	6.8	207
23 W	0228	0.6	18
	0908	5.8	177
	1417	3.6	110
	2014	7.0	213
24 Th	0325	0.3	9
	0954	6.4	195
	1531	2.9	88
	2123	7.5	229
25 F	0415	0.0	0
	1034	7.0	213
	1630	2.0	61
	2222	7.9	241
26 Sa	0500	−0.2	−6
	1112	7.7	235
	1721	1.0	30
	2317	8.2	250
27 Su ○	0543	−0.1	−3
	1150	8.3	253
	1810	0.1	3
28 M	0010	8.3	253
	0624	0.1	3
	1228	8.8	268
	1859	−0.5	−15
29 Tu	0102	8.2	250
	0705	0.6	18
	1307	9.0	274
	1948	−0.9	−27
30 W	0154	7.9	241
	0746	1.2	37
	1348	9.1	277
	2038	−1.0	−30

Time meridian 120° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.
Heights are referred to mean lower low water which is the chart datum of soundings.

Neah Bay, Washington, 2015

Times and Heights of High and Low Waters

October

	Time	Height	
	h m	ft	cm
1 Th	0248	7.4	226
	0828	1.9	58
	1430	8.9	271
	2130	−0.8	−24
2 F	0346	6.9	210
	0913	2.6	79
	1516	8.4	256
	2227	−0.4	−12
3 Sa	0451	6.4	195
	1004	3.3	101
	1608	7.8	238
	2329	0.1	3
4 Su ◑	0606	6.0	183
	1111	3.8	116
	1711	7.2	219
5 M	0037	0.5	15
	0724	6.0	183
	1245	4.0	122
	1831	6.7	204
6 Tu	0147	0.8	24
	0833	6.1	186
	1420	3.8	116
	1955	6.4	195
7 W	0250	1.0	30
	0927	6.4	195
	1529	3.3	101
	2105	6.5	198
8 Th	0343	1.1	34
	1009	6.7	204
	1620	2.7	82
	2201	6.6	201
9 F	0427	1.2	37
	1043	7.0	213
	1701	2.1	64
	2249	6.7	204
10 Sa	0504	1.4	43
	1113	7.3	223
	1736	1.5	46
	2330	6.8	207
11 Su	0535	1.6	49
	1141	7.5	229
	1809	1.0	30
12 M ●	0009	6.9	210
	0604	1.8	55
	1206	7.7	235
	1841	0.6	18
13 Tu	0045	6.9	210
	0631	2.1	64
	1231	7.9	241
	1914	0.3	9
14 W	0121	6.9	210
	0657	2.4	73
	1255	8.0	244
	1947	0.2	6
15 Th	0159	6.7	204
	0725	2.8	85
	1322	8.0	244
	2022	0.1	3

	Time	Height	
	h m	ft	cm
16 F	0238	6.5	198
	0755	3.2	98
	1351	7.9	241
	2100	0.2	6
17 Sa	0321	6.3	192
	0828	3.5	107
	1424	7.7	235
	2143	0.3	9
18 Su	0412	6.1	186
	0907	3.9	119
	1503	7.5	229
	2232	0.5	15
19 M	0512	5.9	180
	0958	4.2	128
	1553	7.2	219
	2329	0.7	21
20 Tu ◐	0623	5.9	180
	1109	4.3	131
	1659	6.8	207
21 W	0033	0.8	24
	0731	6.2	189
	1246	4.1	125
	1824	6.6	201
22 Th	0139	0.9	27
	0827	6.6	201
	1419	3.4	104
	1953	6.6	201
23 F	0240	0.9	27
	0913	7.3	223
	1527	2.4	73
	2110	6.9	210
24 Sa	0334	0.9	27
	0955	7.9	241
	1623	1.3	40
	2214	7.3	223
25 Su	0423	1.0	30
	1035	8.6	262
	1713	0.2	6
	2312	7.6	232
26 M	0509	1.3	40
	1114	9.2	280
	1801	−0.7	−21
27 Tu ○	0006	7.8	238
	0553	1.6	49
	1154	9.6	293
	1847	−1.4	−43
28 W	0058	7.8	238
	0636	2.0	61
	1235	9.7	296
	1934	−1.6	−49
29 Th	0150	7.7	235
	0719	2.5	76
	1316	9.6	293
	2021	−1.6	−49
30 F	0243	7.4	226
	0804	3.0	91
	1359	9.2	280
	2110	−1.2	−37
31 Sa	0338	7.1	216
	0852	3.5	107
	1444	8.5	259
	2200	−0.7	−21

November

	Time	Height	
	h m	ft	cm
1 Su	0438	6.8	207
	0948	3.9	119
	1533	7.8	238
	2254	0.0	0
2 M	0543	6.6	201
	1059	4.2	128
	1632	7.0	213
	2352	0.7	21
3 Tu ◑	0650	6.6	201
	1232	4.2	128
	1748	6.3	192
4 W	0054	1.2	37
	0751	6.7	204
	1402	3.8	116
	1917	5.9	180
5 Th	0154	1.7	52
	0842	6.9	210
	1509	3.2	98
	2036	5.8	177
6 F	0249	2.0	61
	0923	7.2	219
	1559	2.5	76
	2139	5.9	180
7 Sa	0335	2.3	70
	0958	7.5	229
	1640	1.8	55
	2231	6.1	186
8 Su	0414	2.5	76
	1029	7.8	238
	1716	1.1	34
	2316	6.3	192
9 M	0449	2.7	82
	1057	8.1	247
	1749	0.6	18
	2357	6.5	198
10 Tu	0521	3.0	91
	1123	8.3	253
	1822	0.1	3
11 W ●	0036	6.7	204
	0551	3.2	98
	1150	8.5	259
	1855	−0.2	−6
12 Th	0114	6.8	207
	0623	3.4	104
	1218	8.6	262
	1929	−0.4	−12
13 F	0152	6.8	207
	0655	3.6	110
	1249	8.6	262
	2004	−0.5	−15
14 Sa	0232	6.8	207
	0731	3.8	116
	1322	8.5	259
	2042	−0.5	−15
15 Su	0315	6.7	204
	0810	4.1	125
	1359	8.3	253
	2122	−0.3	−9

	Time	Height	
	h m	ft	cm
16 M	0402	6.6	201
	0857	4.2	128
	1441	7.9	241
	2207	0.0	0
17 Tu	0455	6.6	201
	0956	4.3	131
	1533	7.4	226
	2257	0.3	9
18 W ◐	0553	6.7	204
	1113	4.3	131
	1639	6.9	210
	2351	0.8	24
19 Th	0650	7.0	213
	1247	3.8	116
	1803	6.4	195
20 F	0050	1.2	37
	0744	7.5	229
	1412	2.9	88
	1936	6.2	189
21 Sa	0151	1.6	49
	0832	8.1	247
	1518	1.8	55
	2059	6.3	192
22 Su	0250	2.0	61
	0918	8.7	265
	1614	0.7	21
	2209	6.6	201
23 M	0345	2.3	70
	1002	9.3	283
	1704	−0.4	−12
	2310	7.0	213
24 Tu	0436	2.6	79
	1044	9.7	296
	1751	−1.2	−37
25 W ○	0005	7.3	223
	0525	2.9	88
	1127	10.0	305
	1837	−1.7	−52
26 Th	0056	7.5	229
	0612	3.1	94
	1210	10.0	305
	1921	−1.8	−55
27 F	0145	7.5	229
	0659	3.4	104
	1252	9.7	296
	2005	−1.7	−52
28 Sa	0235	7.5	229
	0747	3.7	113
	1335	9.3	283
	2049	−1.3	−40
29 Su	0324	7.4	226
	0836	3.9	119
	1419	8.6	262
	2133	−0.7	−21
30 M	0416	7.2	219
	0932	4.1	125
	1505	7.8	238
	2218	0.0	0

December

	Time	Height	
	h m	ft	cm
1 Tu	0509	7.1	216
	1037	4.2	128
	1556	7.0	213
	2303	0.8	24
2 W ◑	0604	7.1	216
	1156	4.2	128
	1659	6.2	189
	2351	1.5	46
3 Th	0657	7.1	216
	1321	3.8	116
	1822	5.6	171
4 F	0040	2.2	67
	0746	7.3	223
	1432	3.2	98
	1951	5.3	162
5 Sa	0132	2.7	82
	0829	7.5	229
	1528	2.5	76
	2107	5.4	165
6 Su	0223	3.1	94
	0907	7.8	238
	1612	1.8	55
	2209	5.6	171
7 M	0311	3.5	107
	0942	8.1	247
	1651	1.1	34
	2300	5.9	180
8 Tu	0355	3.7	113
	1014	8.4	256
	1727	0.4	12
	2344	6.2	189
9 W	0437	3.8	116
	1046	8.7	265
	1802	−0.1	−3
10 Th	0025	6.5	198
	0516	3.9	119
	1118	8.9	271
	1836	−0.5	−15
11 F ●	0103	6.8	207
	0555	4.0	122
	1151	9.0	274
	1911	−0.8	−24
12 Sa	0141	6.9	210
	0635	4.0	122
	1227	9.1	277
	1947	−1.0	−30
13 Su	0220	7.1	216
	0717	4.0	122
	1305	9.0	274
	2025	−0.9	−27
14 M	0300	7.1	216
	0803	4.1	125
	1346	8.7	265
	2104	−0.7	−21
15 Tu	0342	7.2	219
	0855	4.0	122
	1432	8.3	253
	2144	−0.3	−9

	Time	Height	
	h m	ft	cm
16 W	0428	7.4	226
	0956	3.9	119
	1525	7.6	232
	2228	0.2	6
17 Th	0516	7.6	232
	1110	3.7	113
	1629	6.9	210
	2314	0.9	27
18 F ◐	0607	7.8	238
	1234	3.2	98
	1749	6.2	189
19 Sa	0006	1.6	49
	0700	8.2	250
	1355	2.3	70
	1923	5.8	177
20 Su	0104	2.3	70
	0753	8.7	265
	1504	1.3	40
	2053	5.8	177
21 M	0207	2.9	88
	0845	9.1	277
	1602	0.3	9
	2208	6.1	186
22 Tu	0311	3.3	101
	0934	9.5	290
	1654	−0.5	−15
	2310	6.5	198
23 W	0412	3.6	110
	1022	9.8	299
	1741	−1.1	−34
24 Th	0003	6.9	210
	0508	3.7	113
	1108	9.9	302
	1826	−1.5	−46
25 F ○	0051	7.2	219
	0559	3.7	113
	1153	9.8	299
	1908	−1.6	−49
26 Sa	0136	7.4	226
	0648	3.7	113
	1236	9.6	293
	1949	−1.4	−43
27 Su	0219	7.5	229
	0735	3.7	113
	1318	9.1	277
	2028	−1.0	−30
28 M	0301	7.5	229
	0822	3.8	116
	1400	8.5	259
	2105	−0.5	−15
29 Tu	0343	7.5	229
	0911	3.8	116
	1442	7.8	238
	2141	0.2	6
30 W	0425	7.4	226
	1005	3.8	116
	1527	7.0	213
	2215	1.0	30
31 Th	0508	7.4	226
	1107	3.8	116
	1618	6.3	192
	2249	1.7	52

Time meridian 120° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.
Heights are referred to mean lower low water which is the chart datum of soundings.

Port Townsend, Washington, 2015

Times and Heights of High and Low Waters

January

	Time	Height	
	h m	ft	cm
1 Th	0247	7.5	229
	0625	6.0	183
	1220	8.9	271
	1936	−0.5	−15
2 F	0340	8.3	253
	0732	6.5	198
	1303	8.7	265
	2014	−0.9	−27
3 Sa	0425	8.9	271
	0832	6.6	201
	1344	8.5	259
	2051	−1.1	−34
4 Su ○	0504	9.2	280
	0925	6.6	201
	1425	8.3	253
	2126	−1.1	−34
5 M	0540	9.3	283
	1012	6.5	198
	1506	8.0	244
	2202	−0.9	−27
6 Tu	0613	9.3	283
	1057	6.3	192
	1548	7.7	235
	2238	−0.6	−18
7 W	0643	9.3	283
	1144	6.0	183
	1632	7.3	223
	2315	−0.2	−6
8 Th	0710	9.2	280
	1232	5.6	171
	1718	6.9	210
	2352	0.4	12
9 F	0736	9.1	277
	1323	5.1	155
	1810	6.5	198
10 Sa	0029	1.2	37
	0803	9.1	277
	1415	4.6	140
	1907	6.0	183
11 Su	0106	2.1	64
	0832	9.0	274
	1508	3.9	119
	2013	5.5	168
12 M	0145	3.1	94
	0903	8.9	271
	1600	3.2	98
	2137	5.3	162
13 Tu ◑	0227	4.1	125
	0936	8.7	265
	1648	2.5	76
	2358	5.4	165
14 W	0322	5.1	155
	1011	8.6	262
	1732	1.6	49
15 Th	0206	6.2	189
	0435	6.0	183
	1049	8.6	262
	1815	0.7	21

	Time	Height	
	h m	ft	cm
16 F	0256	7.1	216
	0549	6.5	198
	1131	8.6	262
	1857	−0.2	−6
17 Sa	0332	7.8	238
	0654	6.8	207
	1217	8.6	262
	1939	−1.0	−30
18 Su	0403	8.3	253
	0750	6.8	207
	1307	8.7	265
	2021	−1.6	−49
19 M	0434	8.8	268
	0841	6.6	201
	1400	8.8	268
	2104	−2.0	−61
20 Tu ●	0506	9.1	277
	0931	6.2	189
	1455	8.7	265
	2148	−2.1	−64
21 W	0540	9.4	287
	1022	5.7	174
	1552	8.5	259
	2232	−1.8	−55
22 Th	0614	9.6	293
	1115	5.0	152
	1652	8.1	247
	2317	−1.2	−37
23 F	0650	9.7	296
	1212	4.3	131
	1755	7.6	232
24 Sa	0003	−0.1	−3
	0727	9.7	296
	1312	3.5	107
	1903	7.0	213
25 Su	0050	1.1	34
	0804	9.6	293
	1416	2.7	82
	2021	6.4	195
26 M ◐	0140	2.5	76
	0843	9.5	290
	1522	2.0	61
	2159	6.1	186
27 Tu	0236	3.9	119
	0925	9.2	280
	1628	1.3	40
28 W	0000	6.4	195
	0342	5.2	158
	1009	8.9	271
	1731	0.7	21
29 Th	0134	7.1	216
	0502	6.0	183
	1057	8.6	262
	1827	0.3	9
30 F	0238	7.9	241
	0626	6.5	198
	1150	8.3	253
	1916	0.0	0
31 Sa	0326	8.4	256
	0742	6.5	198
	1244	8.1	247
	1958	−0.2	−6

February

	Time	Height	
	h m	ft	cm
1 Su	0406	8.8	268
	0839	6.4	195
	1335	7.9	241
	2036	−0.2	−6
2 M	0441	8.9	271
	0922	6.1	186
	1422	7.8	238
	2111	−0.2	−6
3 Tu ○	0511	8.9	271
	0958	5.8	177
	1506	7.7	235
	2145	0.0	0
4 W	0536	8.9	271
	1032	5.4	165
	1549	7.5	229
	2219	0.3	9
5 Th	0559	8.9	271
	1108	4.9	149
	1633	7.3	223
	2253	0.7	21
6 F	0620	8.8	268
	1146	4.5	137
	1719	7.1	216
	2328	1.3	40
7 Sa	0643	8.8	268
	1227	4.0	122
	1808	6.8	207
8 Su	0003	2.0	61
	0709	8.8	268
	1309	3.4	104
	1901	6.5	198
9 M	0038	2.9	88
	0737	8.7	265
	1355	2.9	88
	2002	6.2	189
10 Tu	0115	3.8	116
	0808	8.6	262
	1443	2.4	73
	2116	6.0	183
11 W ◑	0156	4.7	143
	0841	8.4	256
	1536	1.9	58
	2303	6.0	183
12 Th	0249	5.6	171
	0918	8.3	253
	1630	1.3	40
13 F	0122	6.5	198
	0407	6.2	189
	1000	8.2	250
	1726	0.6	18
14 Sa	0218	7.2	219
	0528	6.6	201
	1052	8.1	247
	1819	−0.1	−3
15 Su	0255	7.8	238
	0637	6.5	198
	1153	8.2	250
	1910	−0.7	−21

	Time	Height	
	h m	ft	cm
16 M	0325	8.2	250
	0734	6.2	189
	1257	8.3	253
	1958	−1.1	−34
17 Tu	0355	8.6	262
	0824	5.6	171
	1400	8.4	256
	2044	−1.3	−40
18 W ●	0426	8.9	271
	0913	4.9	149
	1501	8.5	259
	2129	−1.1	−34
19 Th	0457	9.1	277
	1001	4.0	122
	1602	8.4	256
	2214	−0.6	−18
20 F	0530	9.3	283
	1051	3.2	98
	1703	8.2	250
	2259	0.3	9
21 Sa	0605	9.4	287
	1143	2.4	73
	1805	7.9	241
	2345	1.4	43
22 Su	0640	9.4	287
	1237	1.7	52
	1912	7.4	226
23 M	0033	2.6	79
	0717	9.2	280
	1333	1.3	40
	2027	7.1	216
24 Tu	0125	3.8	116
	0757	8.9	271
	1433	1.0	30
	2158	6.9	210
25 W ◐	0226	4.9	149
	0839	8.6	262
	1537	0.9	27
	2343	7.1	216
26 Th	0341	5.7	174
	0927	8.1	247
	1644	0.8	24
27 F	0108	7.6	232
	0515	6.1	186
	1024	7.7	235
	1749	0.8	24
28 Sa	0208	8.0	244
	0648	6.1	186
	1130	7.4	226
	1847	0.8	24

March

	Time	Height	
	h m	ft	cm
1 Su	0254	8.3	253
	0755	5.8	177
	1239	7.2	219
	1935	0.8	24
2 M	0331	8.5	259
	0838	5.4	165
	1340	7.2	219
	2016	0.9	27
3 Tu	0401	8.5	259
	0908	5.0	152
	1431	7.3	223
	2052	1.0	30
4 W	0426	8.4	256
	0935	4.5	137
	1515	7.3	223
	2125	1.2	37
5 Th ○	0445	8.4	256
	1002	4.0	122
	1558	7.4	226
	2158	1.6	49
6 F	0503	8.4	256
	1033	3.4	104
	1640	7.4	226
	2231	2.0	61
7 Sa	0523	8.4	256
	1105	2.9	88
	1724	7.3	223
	2306	2.6	79
8 Su	0547	8.4	256
	1141	2.4	73
	1811	7.2	219
	2341	3.2	98
9 M	0615	8.3	253
	1219	1.9	58
	1902	7.1	216
10 Tu	0018	4.0	122
	0645	8.2	250
	1300	1.5	46
	1958	7.0	213
11 W	0058	4.7	143
	0716	8.0	244
	1347	1.2	37
	2105	6.8	207
12 Th	0145	5.4	165
	0751	7.8	238
	1439	1.0	30
	2228	6.8	207
13 F ◑	0247	5.9	180
	0831	7.6	232
	1537	0.7	21
14 Sa	0008	7.1	216
	0406	6.2	189
	0922	7.5	229
	1639	0.5	15
15 Su	0115	7.4	226
	0526	6.2	189
	1029	7.4	226
	1741	0.2	6

	Time	Height	
	h m	ft	cm
16 M	0158	7.8	238
	0630	5.7	174
	1145	7.4	226
	1838	0.0	0
17 Tu	0233	8.1	247
	0723	5.0	152
	1300	7.6	232
	1931	−0.1	−3
18 W	0305	8.4	256
	0810	4.0	122
	1410	7.9	241
	2020	0.1	3
19 Th	0336	8.7	265
	0855	3.0	91
	1514	8.1	247
	2108	0.6	18
20 F ●	0408	8.9	271
	0941	1.9	58
	1615	8.3	253
	2154	1.3	40
21 Sa	0441	9.0	274
	1027	1.0	30
	1715	8.3	253
	2241	2.2	67
22 Su	0515	9.0	274
	1114	0.4	12
	1816	8.2	250
	2329	3.1	94
23 M	0552	8.9	271
	1203	0.0	0
	1919	8.1	247
24 Tu	0021	4.1	125
	0630	8.6	262
	1254	0.0	0
	2028	7.9	241
25 W	0118	4.9	149
	0710	8.2	250
	1348	0.2	6
	2146	7.8	238
26 Th ◐	0228	5.5	168
	0755	7.7	235
	1447	0.5	15
	2309	7.8	238
27 F	0358	5.8	177
	0848	7.1	216
	1551	1.0	30
28 Sa	0023	7.9	241
	0542	5.6	171
	0954	6.6	201
	1658	1.3	40
29 Su	0121	8.0	244
	0657	5.2	158
	1116	6.4	195
	1802	1.6	49
30 M	0205	8.1	247
	0746	4.7	143
	1241	6.4	195
	1857	1.9	58
31 Tu	0239	8.1	247
	0818	4.2	128
	1349	6.5	198
	1943	2.1	64

Time meridian 120° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.
Heights are referred to mean lower low water which is the chart datum of soundings.

Port Townsend, Washington, 2015

Times and Heights of High and Low Waters

April

	Time	Height		Time	Height		Time	Height		Time	Height
	h m	ft cm		h m	ft cm		h m	ft cm		h m	ft cm
1 W	0305	8.0 244	**16** Th	0208	8.5 259	**1** F	0211	7.8 238	**16** Sa	0150	8.7 265
	0843	3.6 110		0756	2.1 64		0832	1.5 46		0821	−0.6 −18
	1443	6.8 207		1427	7.3 223		1540	6.9 210		1552	7.8 238
	2022	2.4 73		1954	1.9 58		2023	4.1 125		2021	4.4 134
2 Th	0324	8.0 244	**17** F	0242	8.6 262	**2** Sa	0233	7.9 241	**17** Su	0226	8.7 265
	0905	3.0 91		0838	1.0 30		0858	0.8 24		0902	−1.4 −43
	1528	7.1 216		1532	7.8 238		1621	7.3 223		1647	8.3 253
	2058	2.7 82		2044	2.6 79		2102	4.6 140		2114	4.9 149
3 F	0341	8.0 244	**18** Sa	0316	8.7 265	**3** Su	0258	7.9 241	**18** M	0303	8.6 262
	0930	2.3 70		0921	0.0 0		0926	0.2 6		0943	−1.9 −58
	1609	7.3 223		1631	8.2 250		1700	7.7 235		1738	8.7 265
	2133	3.1 94		2133	3.3 101		2141	5.0 152		2207	5.4 165
4 Sa	0401	8.0 244	**19** Su	0350	8.8 268	**4** M	0326	7.9 241	**19** Tu	0340	8.3 253
	0958	1.7 52		1004	−0.8 −24		0957	−0.4 −12		1024	−2.0 −61
	1650	7.5 229		1729	8.5 259		1740	8.0 244		1827	8.9 271
	2208	3.6 110		2223	4.0 122		2221	5.3 162		2303	5.7 174
5 Su	0424	8.0 244	**20** M	0426	8.6 262	**5** Tu	0356	7.8 238	**20** W	0420	7.9 241
	1029	1.1 34		1048	−1.2 −37		1032	−0.9 −27		1107	−1.8 −55
	1733	7.7 235		1825	8.7 265		1822	8.3 253		1916	9.0 274
	2244	4.0 122		2315	4.7 143		2304	5.6 171			
6 M	0451	8.0 244	**21** Tu	0503	8.4 256	**6** W	0429	7.7 235	**21** Th	0003	5.8 177
	1103	0.7 21		1133	−1.2 −37		1110	−1.2 −37		0502	7.5 229
	1818	7.8 238		1922	8.7 265		1906	8.4 256		1151	−1.4 −43
	2322	4.6 140					2351	5.9 180		2004	8.9 271
7 Tu	0521	7.9 241	**22** W	0011	5.2 158	**7** Th	0504	7.5 229	**22** F	0113	5.8 177
	1140	0.3 9		0543	8.0 244		1152	−1.2 −37		0548	6.9 210
	1906	7.8 238		1220	−0.9 −27		1954	8.5 259		1236	−0.7 −21
				2021	8.6 262					2051	8.8 268
8 W	0004	5.1 155	**23** Th	0117	5.6 171	**8** F	0045	6.0 183	**23** Sa	0238	5.5 168
	0552	7.7 235		0626	7.4 226		0543	7.2 219		0639	6.3 192
	1221	0.0 0		1309	−0.4 −12		1238	−1.1 −34		1323	0.1 3
	1958	7.8 238		2123	8.4 256		2043	8.5 259		2137	8.6 262
9 Th	0051	5.5 168	**24** F	0238	5.7 174	**9** Sa	0149	6.0 183	**24** Su	0405	5.0 152
	0626	7.5 229		0714	6.8 207		0632	6.8 207		0738	5.7 174
	1306	−0.1 −3		1402	0.2 6		1328	−0.8 −24		1413	0.9 27
	2057	7.7 235		2226	8.3 253		2135	8.4 256		2220	8.4 256
10 F	0147	5.9 180	**25** Sa	0420	5.4 165	**10** Su	0305	5.6 171	**25** M	0511	4.3 131
	0704	7.2 219		0811	6.2 189		0734	6.3 192		0851	5.1 155
	1357	0.0 0		1459	1.0 30		1423	−0.2 −6		1506	1.8 55
	2202	7.7 235		2326	8.2 250		2225	8.4 256		2259	8.2 250
11 Sa	0257	6.0 183	**26** Su	0543	4.9 149	**11** M	0422	5.0 152	**26** Tu	0559	3.6 110
	0753	7.0 213		0923	5.7 174		0853	5.9 180		1024	4.8 146
	1455	0.1 3		1601	1.7 52		1522	0.5 15		1604	2.7 82
	2310	7.8 238					2313	8.4 256		2332	8.1 247
12 Su	0418	5.8 177	**27** M	0017	8.1 247	**12** Tu	0525	4.0 122	**27** W	0636	2.8 85
	0858	6.6 201		0639	4.3 131		1025	5.6 171		1231	5.0 152
	1558	0.4 12		1055	5.4 165		1625	1.3 40		1703	3.5 107
				1705	2.3 70		2356	8.5 259			
13 M	0008	7.9 241	**28** Tu	0057	8.0 244	**13** W	0614	2.9 88	**28** Th	0002	8.0 244
	0530	5.3 162		0718	3.7 113		1206	5.7 174		0705	2.1 64
	1021	6.4 195		1240	5.6 171		1728	2.1 64		1402	5.6 171
	1702	0.6 18		1804	2.8 85					1801	4.2 128
14 Tu	0055	8.1 247	**29** W	0128	7.9 241	**14** Th	0036	8.6 262	**29** F	0030	8.0 244
	0626	4.4 134		0746	3.0 91		0658	1.6 49		0731	1.3 40
	1150	6.5 198		1358	6.0 183		1337	6.3 192		1501	6.3 192
	1804	0.9 27		1856	3.3 101		1829	2.9 88		1855	4.8 146
15 W	0133	8.3 253	**30** Th	0150	7.9 241	**15** F	0114	8.7 265	**30** Sa	0059	8.0 244
	0712	3.3 101		0810	2.3 70		0740	0.4 12		0757	0.5 15
	1314	6.8 207		1454	6.4 195		1451	7.0 213		1546	6.9 210
	1901	1.4 43		1942	3.7 113		1926	3.7 113		1944	5.3 162
									31 Su	0129	8.0 244
										0825	−0.3 −9
										1626	7.4 226
										2029	5.7 174

June

	Time	Height		Time	Height
	h m	ft cm		h m	ft cm
1 M	0200	8.0 244	**16** Tu	0226	8.3 253
	0856	−1.0 −30		0925	−2.1 −64
	1702	7.9 241		1736	8.8 268
	2113	5.9 180		2155	6.0 183
2 Tu	0234	7.9 241	**17** W	0308	8.0 244
	0930	−1.5 −46		1005	−2.1 −64
	1739	8.3 253		1818	8.9 271
	2157	6.1 186		2251	6.0 183
3 W	0309	7.9 241	**18** Th	0350	7.6 232
	1008	−1.9 −58		1045	−1.8 −55
	1816	8.6 262		1858	8.9 271
	2244	6.2 189		2348	5.8 177
4 Th	0348	7.7 235	**19** F	0435	7.1 216
	1048	−2.1 −64		1126	−1.3 −40
	1856	8.8 268		1935	8.9 271
	2335	6.1 186			
5 F	0432	7.4 226	**20** Sa	0050	5.5 168
	1131	−2.0 −61		0523	6.6 201
	1937	8.9 271		1207	−0.6 −18
				2011	8.8 268
6 Sa	0033	5.9 180	**21** Su	0156	5.1 155
	0523	7.0 213		0616	6.0 183
	1217	−1.7 −52		1250	0.2 6
	2019	8.9 271		2044	8.6 262
7 Su	0138	5.5 168	**22** M	0304	4.5 137
	0624	6.5 198		0715	5.5 168
	1305	−1.0 −30		1333	1.1 34
	2101	8.9 271		2115	8.5 259
8 M	0250	4.8 146	**23** Tu	0404	3.9 119
	0735	5.9 180		0823	5.0 152
	1356	−0.1 −3		1418	2.1 64
	2143	8.9 271		2146	8.3 253
9 Tu	0401	3.9 119	**24** W	0454	3.1 94
	0858	5.4 165		0950	4.7 143
	1452	1.0 30		1508	3.1 94
	2224	8.9 271		2217	8.2 250
10 W	0502	2.7 82	**25** Th	0535	2.3 70
	1038	5.1 155		1208	4.8 146
	1552	2.2 67		1604	4.1 125
	2305	8.8 268		2250	8.1 247
11 Th	0554	1.5 46	**26** F	0612	1.5 46
	1230	5.5 168		1400	5.5 168
	1656	3.3 101		1707	4.9 149
	2346	8.8 268		2324	8.0 244
12 F	0640	0.3 9	**27** Sa	0645	0.7 21
	1402	6.3 192		1459	6.3 192
	1801	4.3 131		1809	5.5 168
				2359	8.0 244
13 Sa	0026	8.8 268	**28** Su	0718	−0.1 −3
	0723	−0.7 −21		1541	7.0 213
	1510	7.2 219		1907	5.9 180
	1904	5.1 155			
14 Su	0106	8.7 265	**29** M	0037	8.0 244
	0804	−1.4 −43		0752	−0.8 −24
	1604	7.9 241		1616	7.5 229
	2004	5.6 171		1958	6.2 189
15 M	0146	8.5 259	**30** Tu	0116	8.0 244
	0845	−1.9 −58		0828	−1.5 −46
	1652	8.5 259		1649	8.0 244
	2101	5.9 180		2045	6.3 192

Time meridian 120° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.
Heights are referred to mean lower low water which is the chart datum of soundings.

Port Townsend, Washington, 2015

Times and Heights of High and Low Waters

July

	Time	Height	
	h m	ft	cm
1 W ○	0157	8.0	244
	0907	−2.0	−61
	1721	8.3	253
	2131	6.2	189
2 Th	0242	8.0	244
	0947	−2.4	−73
	1754	8.6	262
	2220	6.0	183
3 F	0331	7.8	238
	1029	−2.4	−73
	1829	8.8	268
	2312	5.6	171
4 Sa	0425	7.5	229
	1113	−2.1	−64
	1906	8.9	271
5 Su	0008	5.1	155
	0524	7.0	213
	1158	−1.5	−46
	1943	9.0	274
6 M	0110	4.4	134
	0630	6.5	198
	1245	−0.6	−18
	2021	9.1	277
7 Tu	0215	3.6	110
	0742	5.9	180
	1334	0.6	18
	2059	9.0	274
8 W ◑	0322	2.6	79
	0908	5.4	165
	1427	2.0	61
	2139	9.0	274
9 Th	0426	1.6	49
	1055	5.3	162
	1527	3.3	101
	2220	8.8	268
10 F	0524	0.6	18
	1250	5.8	177
	1634	4.5	137
	2303	8.7	265
11 Sa	0617	−0.3	−9
	1412	6.7	204
	1746	5.3	162
	2349	8.5	259
12 Su	0705	−0.9	−27
	1512	7.5	229
	1856	5.8	177
13 M	0036	8.3	253
	0749	−1.4	−43
	1600	8.1	247
	2000	6.0	183
14 Tu	0123	8.1	247
	0830	−1.6	−49
	1642	8.4	256
	2056	6.0	183
15 W ●	0209	7.9	241
	0909	−1.6	−49
	1720	8.6	262
	2146	5.8	177

	Time	Height	
	h m	ft	cm
16 Th	0255	7.6	232
	0947	−1.4	−43
	1754	8.6	262
	2233	5.5	168
17 F	0340	7.3	223
	1025	−1.1	−34
	1825	8.6	262
	2320	5.2	158
18 Sa	0426	7.0	213
	1103	−0.6	−18
	1854	8.5	259
19 Su	0007	4.8	146
	0513	6.6	201
	1141	0.0	0
	1921	8.5	259
20 M	0057	4.3	131
	0605	6.2	189
	1220	0.8	24
	1947	8.4	256
21 Tu	0147	3.8	116
	0700	5.7	174
	1259	1.7	52
	2015	8.3	253
22 W	0239	3.3	101
	0804	5.3	162
	1339	2.7	82
	2045	8.2	250
23 Th ◐	0331	2.6	79
	0921	5.1	155
	1424	3.7	113
	2117	8.1	247
24 F	0421	2.0	61
	1120	5.1	155
	1518	4.6	140
	2152	7.9	241
25 Sa	0509	1.3	40
	1339	5.7	174
	1625	5.4	165
	2230	7.8	238
26 Su	0554	0.6	18
	1437	6.4	195
	1736	5.9	180
	2313	7.8	238
27 M	0638	−0.1	−3
	1516	7.0	213
	1840	6.1	186
	2359	7.8	238
28 Tu	0720	−0.8	−24
	1547	7.5	229
	1933	6.1	186
29 W	0049	7.9	241
	0802	−1.4	−43
	1616	7.9	241
	2021	5.9	180
30 Th	0142	8.0	244
	0844	−1.9	−58
	1646	8.2	250
	2108	5.5	168
31 F ○	0236	8.0	244
	0927	−2.0	−61
	1716	8.5	259
	2155	5.0	152

August

	Time	Height	
	h m	ft	cm
1 Sa	0332	7.9	241
	1010	−1.9	−58
	1749	8.7	265
	2246	4.3	131
2 Su	0431	7.7	235
	1054	−1.3	−40
	1823	8.8	268
	2339	3.6	110
3 M	0533	7.3	223
	1140	−0.5	−15
	1858	8.9	271
4 Tu	0035	2.8	85
	0639	6.8	207
	1226	0.6	18
	1935	8.9	271
5 W	0135	2.0	61
	0752	6.3	192
	1316	1.9	58
	2014	8.8	268
6 Th ◑	0238	1.3	40
	0918	6.0	183
	1411	3.2	98
	2055	8.7	265
7 F	0343	0.7	21
	1105	6.0	183
	1515	4.4	134
	2140	8.4	256
8 Sa	0448	0.2	6
	1248	6.6	201
	1631	5.3	162
	2229	8.1	247
9 Su	0549	−0.2	−6
	1400	7.2	219
	1753	5.7	174
	2325	7.8	238
10 M	0644	−0.5	−15
	1454	7.8	238
	1909	5.8	177
11 Tu	0023	7.6	232
	0733	−0.6	−18
	1537	8.1	247
	2009	5.6	171
12 W	0120	7.5	229
	0815	−0.6	−18
	1615	8.3	253
	2055	5.3	162
13 Th	0212	7.4	226
	0854	−0.5	−15
	1647	8.3	253
	2133	4.9	149
14 F ●	0259	7.3	223
	0930	−0.2	−6
	1714	8.2	250
	2209	4.5	137
15 Sa	0344	7.2	219
	1005	0.1	3
	1738	8.2	250
	2245	4.1	125

	Time	Height	
	h m	ft	cm
16 Su	0428	7.0	213
	1041	0.6	18
	1800	8.1	247
	2323	3.6	110
17 M	0513	6.8	207
	1116	1.2	37
	1823	8.1	247
18 Tu	0003	3.2	98
	0602	6.5	198
	1153	1.9	58
	1848	8.0	244
19 W	0045	2.7	82
	0654	6.3	192
	1231	2.7	82
	1917	7.9	241
20 Th	0129	2.3	70
	0752	6.1	186
	1311	3.6	110
	1948	7.8	238
21 F	0217	1.9	58
	0901	5.9	180
	1356	4.4	134
	2022	7.6	232
22 Sa ◐	0309	1.5	46
	1035	5.9	180
	1454	5.2	158
	2100	7.5	229
23 Su	0404	1.1	34
	1242	6.2	189
	1608	5.7	174
	2144	7.4	226
24 M	0501	0.6	18
	1348	6.7	204
	1723	6.0	183
	2236	7.3	223
25 Tu	0555	0.1	3
	1428	7.2	219
	1827	5.9	180
	2336	7.4	226
26 W	0646	−0.4	−12
	1459	7.6	232
	1918	5.5	168
27 Th	0039	7.6	232
	0734	−0.8	−24
	1528	7.9	241
	2003	5.0	152
28 F	0141	7.8	238
	0820	−1.0	−30
	1557	8.2	250
	2048	4.2	128
29 Sa ○	0241	7.9	241
	0905	−0.9	−27
	1627	8.4	256
	2133	3.3	101
30 Su	0341	8.0	244
	0950	−0.5	−15
	1659	8.6	262
	2221	2.5	76
31 M	0441	7.9	241
	1035	0.3	9
	1733	8.7	265
	2310	1.6	49

September

	Time	Height	
	h m	ft	cm
1 Tu	0543	7.7	235
	1121	1.3	40
	1809	8.7	265
2 W	0002	1.0	30
	0648	7.4	226
	1210	2.4	73
	1847	8.6	262
3 Th	0057	0.5	15
	0800	7.2	219
	1303	3.5	107
	1927	8.4	256
4 F	0155	0.3	9
	0922	7.0	213
	1404	4.5	137
	2012	8.1	247
5 Sa ◑	0258	0.2	6
	1057	7.0	213
	1520	5.2	158
	2102	7.7	235
6 Su	0405	0.3	9
	1224	7.4	226
	1652	5.6	171
	2202	7.3	223
7 M	0513	0.4	12
	1329	7.7	235
	1824	5.5	168
	2312	7.0	213
8 Tu	0616	0.5	15
	1419	8.0	244
	1929	5.1	155
9 W	0026	6.9	210
	0710	0.6	18
	1459	8.1	247
	2014	4.7	143
10 Th	0131	6.9	210
	0755	0.8	24
	1533	8.1	247
	2046	4.2	128
11 F	0225	7.0	213
	0833	1.0	30
	1559	8.0	244
	2114	3.7	113
12 Sa ●	0312	7.1	216
	0909	1.3	40
	1620	7.9	241
	2142	3.2	98
13 Su	0355	7.2	219
	0943	1.7	52
	1639	7.9	241
	2212	2.7	82
14 M	0436	7.2	219
	1017	2.2	67
	1659	7.8	238
	2244	2.2	67
15 Tu	0519	7.2	219
	1053	2.8	85
	1722	7.8	238
	2318	1.7	52

	Time	Height	
	h m	ft	cm
16 W	0604	7.2	219
	1130	3.4	104
	1749	7.7	235
	2356	1.4	43
17 Th	0653	7.1	216
	1209	4.1	125
	1820	7.6	232
18 F	0036	1.1	34
	0747	7.0	213
	1253	4.7	143
	1853	7.4	226
19 Sa	0120	0.9	27
	0849	6.9	210
	1344	5.3	162
	1928	7.2	219
20 Su	0210	0.8	24
	1003	6.9	210
	1450	5.8	177
	2010	7.0	213
21 M ◐	0307	0.7	21
	1130	7.0	213
	1610	5.9	180
	2103	6.8	207
22 Tu	0409	0.6	18
	1238	7.3	223
	1725	5.7	174
	2210	6.7	204
23 W	0511	0.5	15
	1324	7.6	232
	1821	5.3	162
	2325	6.8	207
24 Th	0610	0.3	9
	1359	7.9	241
	1906	4.5	137
25 F	0040	7.0	213
	0703	0.3	9
	1431	8.1	247
	1948	3.5	107
26 Sa	0149	7.4	226
	0753	0.5	15
	1502	8.3	253
	2030	2.5	76
27 Su ○	0253	7.8	238
	0840	0.9	27
	1533	8.5	259
	2113	1.4	43
28 M	0354	8.1	247
	0927	1.5	46
	1606	8.7	265
	2158	0.4	12
29 Tu	0454	8.3	253
	1014	2.4	73
	1641	8.7	265
	2244	−0.3	−9
30 W	0554	8.3	253
	1103	3.3	101
	1718	8.6	262
	2332	−0.7	−21

Time meridian 120° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.
Heights are referred to mean lower low water which is the chart datum of soundings.

Port Townsend, Washington, 2015

Times and Heights of High and Low Waters

October

	Time	Height	
	h m	ft	cm
1 Th	0656	8.3	253
	1155	4.1	125
	1758	8.4	256
2 F	0022	−0.7	−21
	0803	8.2	250
	1255	4.9	149
	1841	8.0	244
3 Sa	0116	−0.5	−15
	0915	8.1	247
	1407	5.4	165
	1929	7.5	229
4 Su ◑	0215	0.0	0
	1033	8.0	244
	1543	5.6	171
	2026	6.9	210
5 M	0318	0.6	18
	1145	8.1	247
	1728	5.3	162
	2136	6.4	195
6 Tu	0427	1.1	34
	1245	8.2	250
	1840	4.8	146
	2303	6.1	186
7 W	0534	1.5	46
	1331	8.2	250
	1928	4.2	128
8 Th	0034	6.2	189
	0633	1.9	58
	1408	8.2	250
	2002	3.6	110
9 F	0146	6.4	195
	0722	2.3	70
	1437	8.1	247
	2027	3.0	91
10 Sa	0242	6.8	207
	0804	2.7	82
	1458	8.0	244
	2050	2.4	73
11 Su	0328	7.1	216
	0842	3.1	94
	1516	7.9	241
	2114	1.8	55
12 M ●	0409	7.4	226
	0917	3.5	107
	1535	7.9	241
	2141	1.2	37
13 Tu	0448	7.6	232
	0953	4.0	122
	1557	7.9	241
	2210	0.7	21
14 W	0528	7.8	238
	1030	4.5	137
	1623	7.8	238
	2242	0.3	9
15 Th	0610	7.9	241
	1110	5.0	152
	1652	7.7	235
	2318	0.1	3

	Time	Height	
	h m	ft	cm
16 F	0655	8.0	244
	1152	5.4	165
	1723	7.5	229
	2356	−0.1	−3
17 Sa	0744	8.0	244
	1241	5.8	177
	1757	7.2	219
18 Su	0039	−0.1	−3
	0838	8.0	244
	1340	6.0	183
	1834	6.9	210
19 M	0128	0.1	3
	0937	8.0	244
	1455	6.1	186
	1922	6.6	201
20 Tu ◐	0222	0.3	9
	1037	8.0	244
	1621	5.8	177
	2030	6.3	192
21 W	0323	0.6	18
	1133	8.1	247
	1728	5.2	158
	2154	6.1	186
22 Th	0428	1.0	30
	1218	8.2	250
	1813	4.3	131
	2324	6.1	186
23 F	0531	1.4	43
	1257	8.4	256
	1853	3.2	98
24 Sa	0051	6.5	198
	0629	1.8	55
	1333	8.6	262
	1933	2.0	61
25 Su	0206	7.1	216
	0723	2.4	73
	1406	8.8	268
	2013	0.7	21
26 M	0311	7.8	238
	0815	3.0	91
	1440	8.9	271
	2054	−0.4	−12
27 Tu ○	0410	8.3	253
	0905	3.7	113
	1515	8.9	271
	2137	−1.2	−37
28 W	0507	8.8	268
	0955	4.4	134
	1552	8.9	271
	2221	−1.7	−52
29 Th	0603	9.0	274
	1047	5.0	152
	1631	8.6	262
	2306	−1.8	−55
30 F	0659	9.1	277
	1144	5.5	168
	1712	8.2	250
	2353	−1.5	−46
31 Sa	0757	9.0	274
	1250	5.8	177
	1757	7.6	232

November

	Time	Height	
	h m	ft	cm
1 Su	0042	−0.9	−27
	0856	8.9	271
	1414	5.9	180
	1849	7.0	213
2 M	0135	−0.1	−3
	0957	8.8	268
	1606	5.6	171
	1950	6.3	192
3 Tu ◑	0232	0.8	24
	1055	8.7	265
	1731	4.9	149
	2106	5.7	174
4 W	0334	1.7	52
	1147	8.6	262
	1826	4.2	128
	2247	5.4	165
5 Th	0438	2.5	76
	1229	8.4	256
	1906	3.5	107
6 F	0039	5.6	171
	0541	3.2	98
	1302	8.3	253
	1936	2.7	82
7 Sa	0158	6.1	186
	0637	3.8	116
	1327	8.2	250
	1959	2.0	61
8 Su	0255	6.7	204
	0726	4.3	131
	1348	8.2	250
	2021	1.3	40
9 M	0341	7.2	219
	0810	4.8	146
	1409	8.1	247
	2045	0.7	21
10 Tu	0421	7.7	235
	0850	5.2	158
	1433	8.1	247
	2112	0.1	3
11 W ●	0458	8.1	247
	0929	5.6	171
	1500	8.1	247
	2141	−0.4	−12
12 Th	0535	8.4	256
	1009	5.9	180
	1530	8.0	244
	2214	−0.8	−24
13 F	0612	8.6	262
	1051	6.2	189
	1601	7.8	238
	2250	−1.0	−30
14 Sa	0652	8.8	268
	1137	6.4	195
	1634	7.6	232
	2329	−1.0	−30
15 Su	0735	8.8	268
	1230	6.4	195
	1710	7.3	223

	Time	Height	
	h m	ft	cm
16 M	0011	−0.9	−27
	0820	8.9	271
	1333	6.3	192
	1754	6.9	210
17 Tu	0057	−0.5	−15
	0907	8.9	271
	1449	6.0	183
	1856	6.4	195
18 W ◐	0148	0.1	3
	0953	8.8	268
	1609	5.3	162
	2016	5.9	180
19 Th	0245	0.8	24
	1038	8.9	271
	1708	4.4	134
	2150	5.6	171
20 F	0347	1.7	52
	1120	8.9	271
	1753	3.2	98
	2333	5.7	174
21 Sa	0451	2.6	79
	1200	9.0	274
	1835	1.9	58
22 Su	0112	6.3	192
	0554	3.5	107
	1239	9.1	277
	1916	0.6	18
23 M	0229	7.1	216
	0655	4.3	131
	1316	9.2	280
	1956	−0.6	−18
24 Tu	0331	8.0	244
	0751	4.9	149
	1353	9.2	280
	2037	−1.5	−46
25 W ○	0425	8.7	265
	0846	5.5	168
	1432	9.1	277
	2119	−2.1	−64
26 Th	0516	9.2	280
	0940	5.9	180
	1511	8.9	271
	2201	−2.3	−70
27 F	0605	9.5	290
	1035	6.2	189
	1553	8.6	262
	2244	−2.1	−64
28 Sa	0653	9.6	293
	1135	6.3	192
	1637	8.1	247
	2328	−1.6	−49
29 Su	0740	9.5	290
	1242	6.2	189
	1725	7.4	226
30 M	0013	−0.9	−27
	0827	9.4	287
	1404	5.9	180
	1818	6.7	204

December

	Time	Height	
	h m	ft	cm
1 Tu	0100	0.0	0
	0912	9.2	280
	1540	5.3	162
	1919	6.0	183
2 W ◑	0149	1.1	34
	0956	9.0	274
	1653	4.6	140
	2034	5.4	165
3 Th	0241	2.1	64
	1035	8.8	268
	1746	3.8	116
	2215	5.1	155
4 F	0338	3.2	98
	1110	8.7	265
	1825	3.0	91
5 Sa	0036	5.3	162
	0440	4.1	125
	1141	8.5	259
	1856	2.2	67
6 Su	0205	6.0	183
	0543	4.9	149
	1210	8.4	256
	1923	1.5	46
7 M	0303	6.8	207
	0642	5.5	168
	1239	8.4	256
	1948	0.7	21
8 Tu	0347	7.5	229
	0735	6.0	183
	1309	8.4	256
	2015	0.1	3
9 W	0425	8.0	244
	0822	6.4	195
	1341	8.4	256
	2044	−0.5	−15
10 Th	0458	8.4	256
	0906	6.6	201
	1414	8.3	253
	2116	−1.0	−30
11 F ●	0531	8.8	268
	0948	6.7	204
	1449	8.2	250
	2151	−1.4	−43
12 Sa	0603	9.0	274
	1031	6.7	204
	1526	8.1	247
	2228	−1.6	−49
13 Su	0638	9.2	280
	1117	6.6	201
	1607	7.8	238
	2308	−1.5	−46
14 M	0714	9.3	283
	1210	6.4	195
	1654	7.4	226
	2350	−1.2	−37
15 Tu	0752	9.4	287
	1309	6.0	183
	1750	6.9	210

	Time	Height	
	h m	ft	cm
16 W	0035	−0.6	−18
	0831	9.4	287
	1416	5.4	165
	1858	6.3	192
17 Th	0122	0.3	9
	0910	9.4	287
	1524	4.5	137
	2019	5.8	177
18 F ◐	0214	1.4	43
	0949	9.4	287
	1627	3.4	104
	2155	5.4	165
19 Sa	0311	2.6	79
	1029	9.4	287
	1722	2.1	64
	2352	5.6	171
20 Su	0416	3.9	119
	1110	9.3	283
	1811	0.9	27
21 M	0137	6.5	198
	0524	4.9	149
	1152	9.3	283
	1857	−0.2	−6
22 Tu	0248	7.5	229
	0632	5.7	174
	1234	9.3	283
	1940	−1.1	−34
23 W	0343	8.3	253
	0736	6.2	189
	1318	9.2	280
	2022	−1.7	−52
24 Th	0431	9.0	274
	0835	6.5	198
	1402	9.0	274
	2104	−2.0	−61
25 F ○	0514	9.4	287
	0931	6.5	198
	1447	8.7	265
	2145	−2.0	−61
26 Sa	0555	9.6	293
	1026	6.4	195
	1532	8.4	256
	2226	−1.7	−52
27 Su	0634	9.6	293
	1121	6.2	189
	1619	7.9	241
	2307	−1.2	−37
28 M	0712	9.6	293
	1219	5.9	180
	1708	7.3	223
	2348	−0.5	−15
29 Tu	0747	9.5	290
	1322	5.5	168
	1801	6.7	204
30 W	0030	0.4	12
	0821	9.3	283
	1427	4.9	149
	1859	6.1	186
31 Th	0112	1.5	46
	0852	9.1	277
	1532	4.3	131
	2006	5.5	168

Time meridian 120° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.
Heights are referred to mean lower low water which is the chart datum of soundings.

Seattle, Washington, 2015

Times and Heights of High and Low Waters

January

	Time	Height	
	h m	ft	cm
1 Th	0305	10.2	311
	0752	6.8	207
	1315	11.8	360
	2026	−0.6	−18
2 F	0403	11.1	338
	0859	7.0	213
	1402	11.5	351
	2108	−1.1	−34
3 Sa	0448	11.7	357
	0955	7.1	216
	1446	11.2	341
	2147	−1.3	−40
4 Su ○	0527	12.0	366
	1044	7.0	213
	1529	10.9	332
	2224	−1.3	−40
5 M	0600	12.2	372
	1126	6.8	207
	1610	10.6	323
	2300	−1.1	−34
6 Tu	0628	12.2	372
	1206	6.6	201
	1652	10.3	314
	2336	−0.8	−24
7 W	0655	12.2	372
	1244	6.3	192
	1735	9.9	302
8 Th	0012	−0.2	−6
	0722	12.2	372
	1323	5.9	180
	1819	9.5	290
9 F	0048	0.5	15
	0752	12.2	372
	1404	5.4	165
	1908	9.0	274
10 Sa	0125	1.4	43
	0824	12.1	369
	1448	4.9	149
	2001	8.5	259
11 Su	0203	2.5	76
	0859	11.9	363
	1535	4.3	131
	2103	8.1	247
12 M	0244	3.7	113
	0936	11.7	357
	1626	3.7	113
	2217	7.9	241
13 Tu ◑	0331	5.0	152
	1017	11.4	347
	1719	2.9	88
	2344	8.0	244
14 W	0430	6.2	189
	1100	11.2	341
	1812	2.0	61
15 Th	0120	8.6	262
	0545	7.2	219
	1146	11.1	338
	1902	1.0	30

	Time	Height	
	h m	ft	cm
16 F	0237	9.5	290
	0705	7.7	235
	1233	11.0	335
	1949	0.0	0
17 Sa	0328	10.4	317
	0813	7.8	238
	1322	11.2	341
	2034	−1.0	−30
18 Su	0408	11.1	338
	0909	7.6	232
	1411	11.4	347
	2118	−1.8	−55
19 M	0443	11.8	360
	0958	7.2	219
	1500	11.5	351
	2203	−2.3	−70
20 Tu ●	0519	12.3	375
	1044	6.6	201
	1551	11.6	354
	2247	−2.5	−76
21 W	0555	12.7	387
	1132	5.9	180
	1644	11.5	351
	2332	−2.2	−67
22 Th	0632	13.0	396
	1220	5.1	155
	1739	11.2	341
23 F	0018	−1.4	−43
	0710	13.2	402
	1311	4.3	131
	1838	10.7	326
24 Sa	0104	−0.3	−9
	0750	13.2	402
	1405	3.5	107
	1942	10.1	308
25 Su	0152	1.2	37
	0832	13.0	396
	1502	2.7	82
	2053	9.4	287
26 M ◐	0244	2.9	88
	0917	12.7	387
	1603	2.1	64
	2218	9.0	274
27 Tu	0343	4.7	143
	1005	12.2	372
	1707	1.5	46
28 W	0002	9.0	274
	0457	6.1	186
	1059	11.7	357
	1811	0.9	27
29 Th	0146	9.6	293
	0628	7.0	213
	1156	11.2	341
	1911	0.4	12
30 F	0300	10.5	320
	0755	7.2	219
	1254	10.9	332
	2004	0.0	0
31 Sa	0353	11.1	338
	0902	7.0	213
	1350	10.7	326
	2050	−0.3	−9

February

	Time	Height	
	h m	ft	cm
1 Su	0434	11.5	351
	0953	6.7	204
	1439	10.5	320
	2131	−0.4	−12
2 M	0507	11.7	357
	1034	6.3	192
	1524	10.4	317
	2208	−0.3	−9
3 Tu ○	0533	11.8	360
	1109	6.0	183
	1606	10.3	314
	2243	−0.1	−3
4 W	0555	11.8	360
	1140	5.6	171
	1646	10.2	311
	2316	0.2	6
5 Th	0616	11.8	360
	1211	5.1	155
	1726	10.0	305
	2350	0.7	21
6 F	0640	11.9	363
	1243	4.6	140
	1808	9.8	299
7 Sa	0024	1.4	43
	0706	11.9	363
	1318	4.1	125
	1853	9.6	293
8 Su	0059	2.2	67
	0736	11.8	360
	1356	3.6	110
	1941	9.3	283
9 M	0135	3.2	98
	0808	11.6	354
	1438	3.1	94
	2035	8.9	271
10 Tu	0214	4.3	131
	0843	11.4	347
	1525	2.6	79
	2139	8.7	265
11 W ◑	0258	5.5	168
	0921	11.0	335
	1617	2.1	64
	2256	8.6	262
12 Th	0354	6.6	201
	1005	10.7	326
	1715	1.6	49
13 F	0027	8.9	271
	0511	7.4	226
	1058	10.5	320
	1814	0.9	27
14 Sa	0153	9.6	293
	0640	7.7	235
	1158	10.5	320
	1912	0.1	3
15 Su	0251	10.3	314
	0754	7.5	229
	1259	10.6	323
	2006	−0.6	−18

	Time	Height	
	h m	ft	cm
16 M	0332	11.0	335
	0851	6.9	210
	1358	11.0	335
	2055	−1.3	−40
17 Tu	0408	11.6	354
	0939	6.1	186
	1454	11.3	344
	2143	−1.6	−49
18 W ●	0442	12.2	372
	1024	5.1	155
	1549	11.6	354
	2229	−1.5	−46
19 Th	0517	12.6	384
	1109	4.0	122
	1644	11.6	354
	2315	−1.0	−30
20 F	0553	12.8	390
	1156	3.0	91
	1740	11.5	351
21 Sa	0001	0.0	0
	0631	12.9	393
	1243	2.1	64
	1838	11.1	338
22 Su	0048	1.2	37
	0710	12.8	390
	1333	1.5	46
	1940	10.6	323
23 M	0136	2.7	82
	0752	12.5	381
	1425	1.1	34
	2047	10.1	308
24 Tu	0229	4.2	128
	0837	12.0	366
	1521	0.9	27
	2206	9.7	296
25 W ◐	0331	5.5	168
	0927	11.3	344
	1622	1.0	30
	2343	9.6	293
26 Th	0452	6.6	201
	1025	10.6	323
	1729	1.0	30
27 F	0120	9.9	302
	0632	6.9	210
	1131	10.0	305
	1835	1.0	30
28 Sa	0231	10.5	320
	0757	6.6	201
	1241	9.7	296
	1936	0.9	27

March

	Time	Height	
	h m	ft	cm
1 Su	0321	10.9	332
	0856	6.1	186
	1345	9.7	296
	2027	0.8	24
2 M	0359	11.1	338
	0939	5.6	171
	1438	9.8	299
	2110	0.8	24
3 Tu	0427	11.2	341
	1013	5.0	152
	1524	9.9	302
	2148	0.9	27
4 W	0449	11.2	341
	1042	4.5	137
	1605	10.0	305
	2223	1.2	37
5 Th ○	0508	11.2	341
	1108	4.0	122
	1643	10.1	308
	2256	1.5	46
6 F	0528	11.3	344
	1135	3.4	104
	1721	10.2	311
	2328	2.0	61
7 Sa	0552	11.3	344
	1204	2.8	85
	1801	10.2	311
8 Su	0002	2.7	82
	0618	11.3	344
	1237	2.3	70
	1843	10.1	308
9 M	0037	3.4	104
	0647	11.2	341
	1313	1.8	55
	1927	10.0	305
10 Tu	0114	4.2	128
	0719	11.0	335
	1353	1.4	43
	2017	9.8	299
11 W	0155	5.1	155
	0752	10.7	326
	1438	1.2	37
	2114	9.6	293
12 Th	0241	6.0	183
	0831	10.3	314
	1529	1.1	34
	2222	9.5	290
13 F ◑	0341	6.8	207
	0919	9.9	302
	1627	0.9	27
	2341	9.5	290
14 Sa	0501	7.2	219
	1022	9.7	296
	1731	0.7	21
15 Su	0059	9.9	302
	0629	7.1	216
	1135	9.6	293
	1836	0.4	12

	Time	Height	
	h m	ft	cm
16 M	0159	10.4	317
	0739	6.4	195
	1247	9.9	302
	1936	0.0	0
17 Tu	0244	11.0	335
	0832	5.4	165
	1354	10.3	314
	2031	−0.2	−6
18 W	0322	11.5	351
	0918	4.2	128
	1454	10.8	329
	2122	−0.1	−3
19 Th	0358	12.0	366
	1002	2.9	88
	1551	11.3	344
	2210	0.2	6
20 F ●	0434	12.3	375
	1046	1.7	52
	1647	11.5	351
	2257	0.9	27
21 Sa	0510	12.4	378
	1130	0.7	21
	1742	11.6	354
	2344	1.9	58
22 Su	0548	12.4	378
	1215	−0.1	−3
	1839	11.5	351
23 M	0033	3.0	91
	0628	12.1	369
	1301	−0.4	−12
	1937	11.2	341
24 Tu	0124	4.1	125
	0711	11.6	354
	1350	−0.4	−12
	2039	10.8	329
25 W	0220	5.2	158
	0757	10.9	332
	1442	0.0	0
	2149	10.4	317
26 Th ◐	0327	6.0	183
	0850	10.1	308
	1538	0.6	18
	2310	10.2	311
27 F	0454	6.4	195
	0953	9.3	283
	1641	1.2	37
28 Sa	0033	10.2	311
	0631	6.2	189
	1108	8.8	268
	1749	1.6	49
29 Su	0140	10.4	317
	0744	5.6	171
	1227	8.6	262
	1856	1.9	58
30 M	0228	10.6	323
	0834	4.9	149
	1337	8.7	265
	1953	2.0	61
31 Tu	0304	10.7	326
	0912	4.2	128
	1435	9.1	277
	2041	2.2	67

Time meridian 120° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.
Heights are referred to mean lower low water which is the chart datum of soundings.

Seattle, Washington, 2015

Times and Heights of High and Low Waters

April

	Time	Height		Time	Height
	h m	ft / cm		h m	ft / cm
1 W	0330	10.7 / 326	**16** Th	0233	11.6 / 354
	0942	3.5 / 107		0858	2.0 / 61
	1522	9.4 / 287		1459	10.3 / 314
	2121	2.4 / 73		2059	1.8 / 55
2 Th	0351	10.7 / 326	**17** F	0312	11.9 / 363
	1008	2.9 / 88		0940	0.7 / 21
	1603	9.8 / 299		1557	10.9 / 332
	2158	2.8 / 85		2150	2.4 / 73
3 F	0412	10.8 / 329	**18** Sa	0349	12.0 / 366
	1033	2.2 / 67		1022	−0.5 / −15
	1641	10.1 / 308		1653	11.4 / 347
	2232	3.2 / 98	●	2240	3.2 / 98
4 Sa	0436	10.8 / 329	**19** Su	0427	12.0 / 366
	1059	1.5 / 46		1105	−1.3 / −40
	1718	10.3 / 314		1747	11.7 / 357
○	2307	3.7 / 113		2330	3.9 / 119
5 Su	0501	10.8 / 329	**20** M	0507	11.8 / 360
	1129	0.9 / 27		1148	−1.7 / −52
	1756	10.5 / 320		1840	11.7 / 357
	2342	4.2 / 128			
6 M	0529	10.7 / 326	**21** Tu	0021	4.7 / 143
	1201	0.4 / 12		0549	11.3 / 344
	1836	10.7 / 326		1232	−1.7 / −52
				1934	11.6 / 354
7 Tu	0020	4.8 / 146	**22** W	0115	5.3 / 162
	0600	10.6 / 323		0633	10.7 / 326
	1238	0.0 / 0		1318	−1.3 / −40
	1919	10.7 / 326		2029	11.4 / 347
8 W	0100	5.4 / 165	**23** Th	0215	5.8 / 177
	0632	10.3 / 314		0721	9.9 / 302
	1318	−0.2 / −6		1405	−0.6 / −18
	2007	10.7 / 326		2127	11.1 / 338
9 Th	0145	5.9 / 180	**24** F	0324	6.1 / 186
	0708	10.0 / 305		0817	9.1 / 277
	1402	−0.2 / −6		1456	0.3 / 9
	2100	10.5 / 320		2229	10.8 / 329
10 F	0237	6.4 / 195	**25** Sa	0447	6.0 / 183
	0751	9.6 / 293		0922	8.3 / 253
	1453	0.0 / 0		1553	1.2 / 37
	2200	10.4 / 317	◐	2332	10.6 / 323
11 Sa	0342	6.7 / 204	**26** Su	0610	5.5 / 168
	0847	9.2 / 280		1039	7.8 / 238
	1550	0.3 / 9		1656	2.1 / 64
◑	2306	10.4 / 317			
12 Su	0500	6.6 / 201	**27** M	0029	10.5 / 320
	1000	8.8 / 268		0713	4.7 / 143
	1654	0.6 / 18		1203	7.7 / 235
				1802	2.7 / 82
13 M	0011	10.6 / 323	**28** Tu	0116	10.5 / 320
	0619	5.9 / 180		0800	3.9 / 119
	1123	8.7 / 265		1321	8.0 / 244
	1801	0.9 / 27		1905	3.3 / 101
14 Tu	0106	10.9 / 332	**29** W	0152	10.5 / 320
	0722	4.8 / 146		0835	3.0 / 91
	1243	9.0 / 274		1425	8.5 / 259
	1905	1.1 / 34		2000	3.7 / 113
15 W	0153	11.3 / 344	**30** Th	0222	10.5 / 320
	0813	3.5 / 107		0904	2.2 / 67
	1355	9.6 / 293		1516	9.0 / 274
	2005	1.4 / 43		2047	4.1 / 125

May

	Time	Height		Time	Height
	h m	ft / cm		h m	ft / cm
1 F	0249	10.6 / 323	**16** Sa	0230	11.9 / 363
	0930	1.4 / 43		0919	−1.0 / −30
	1559	9.6 / 293		1609	10.7 / 326
	2128	4.5 / 137		2134	4.6 / 140
2 Sa	0316	10.6 / 323	**17** Su	0310	11.8 / 360
	0957	0.6 / 18		1001	−1.9 / −58
	1638	10.1 / 308		1702	11.3 / 344
	2207	4.9 / 149	●	2228	5.1 / 155
3 Su	0343	10.6 / 323	**18** M	0350	11.6 / 354
	1025	−0.1 / −3		1042	−2.4 / −73
	1715	10.5 / 320		1752	11.7 / 357
○	2245	5.3 / 162		2320	5.6 / 171
4 M	0412	10.5 / 320	**19** Tu	0432	11.2 / 341
	1057	−0.7 / −21		1124	−2.5 / −76
	1752	10.9 / 332		1840	11.9 / 363
	2324	5.7 / 174			
5 Tu	0443	10.4 / 317	**20** W	0013	5.9 / 180
	1132	−1.2 / −37		0515	10.7 / 326
	1832	11.2 / 341		1206	−2.2 / −67
				1927	11.9 / 363
6 W	0005	6.0 / 183	**21** Th	0107	6.1 / 186
	0516	10.3 / 314		0601	10.0 / 305
	1210	−1.5 / −46		1249	−1.7 / −52
	1913	11.3 / 344		2013	11.8 / 360
7 Th	0050	6.3 / 192	**22** F	0205	6.1 / 186
	0553	10.0 / 305		0651	9.3 / 283
	1251	−1.5 / −46		1333	−0.9 / −27
	1959	11.4 / 347		2059	11.5 / 351
8 F	0139	6.4 / 195	**23** Sa	0308	5.9 / 180
	0636	9.7 / 296		0746	8.5 / 259
	1337	−1.3 / −40		1419	0.1 / 3
	2048	11.4 / 347		2145	11.3 / 344
9 Sa	0235	6.4 / 195	**24** Su	0416	5.5 / 168
	0727	9.2 / 280		0849	7.8 / 238
	1426	−0.8 / −24		1508	1.2 / 37
	2140	11.3 / 344		2232	11.1 / 338
10 Su	0340	6.2 / 189	**25** M	0525	4.9 / 149
	0831	8.7 / 265		1003	7.3 / 223
	1521	−0.1 / −3		1602	2.3 / 70
	2235	11.3 / 344	◐	2318	10.9 / 332
11 M	0452	5.5 / 168	**26** Tu	0624	4.1 / 125
	0950	8.2 / 250		1126	7.2 / 219
	1622	0.8 / 24		1701	3.4 / 104
◑	2329	11.4 / 347			
12 Tu	0602	4.5 / 137	**27** W	0001	10.8 / 329
	1117	8.1 / 247		0711	3.2 / 98
	1727	1.7 / 52		1252	7.4 / 226
				1805	4.3 / 131
13 W	0019	11.5 / 351	**28** Th	0040	10.7 / 326
	0701	3.1 / 94		0748	2.3 / 70
	1244	8.4 / 256		1406	8.0 / 244
	1834	2.5 / 76		1909	5.0 / 152
14 Th	0106	11.7 / 357	**29** F	0117	10.6 / 323
	0752	1.7 / 52		0820	1.4 / 43
	1402	9.1 / 277		1505	8.8 / 268
	1939	3.3 / 101		2006	5.6 / 171
15 F	0149	11.8 / 360	**30** Sa	0151	10.6 / 323
	0837	0.2 / 6		0851	0.5 / 15
	1510	10.0 / 305		1553	9.5 / 290
	2038	3.9 / 119		2056	6.0 / 183
			31 Su	0223	10.6 / 323
				0921	−0.4 / −12
				1633	10.2 / 311
				2141	6.3 / 192

June

	Time	Height		Time	Height
	h m	ft / cm		h m	ft / cm
1 M	0256	10.6 / 323	**16** Tu	0323	11.2 / 341
	0954	−1.1 / −34		1023	−2.5 / −76
	1710	10.7 / 326		1754	11.7 / 357
	2223	6.5 / 198	●	2313	6.4 / 195
2 Tu	0330	10.5 / 320	**17** W	0407	10.8 / 329
	1029	−1.8 / −55		1104	−2.4 / −73
	1746	11.2 / 341		1834	11.9 / 363
○	2306	6.7 / 204			
3 W	0406	10.5 / 320	**18** Th	0003	6.3 / 192
	1107	−2.2 / −67		0452	10.3 / 314
	1824	11.5 / 351		1144	−2.0 / −61
	2350	6.7 / 204		1911	11.9 / 363
4 Th	0445	10.3 / 314	**19** F	0052	6.1 / 186
	1148	−2.4 / −73		0538	9.7 / 296
	1904	11.8 / 360		1224	−1.4 / −43
				1947	11.8 / 360
5 F	0037	6.6 / 201	**20** Sa	0142	5.9 / 180
	0529	10.1 / 308		0627	9.1 / 277
	1231	−2.3 / −70		1304	−0.6 / −18
	1946	12.0 / 366		2022	11.7 / 357
6 Sa	0128	6.3 / 192	**21** Su	0232	5.5 / 168
	0619	9.7 / 296		0719	8.5 / 259
	1317	−1.8 / −55		1346	0.3 / 9
	2030	12.1 / 369		2059	11.6 / 354
7 Su	0224	5.9 / 180	**22** M	0325	5.0 / 152
	0718	9.1 / 277		0818	7.9 / 241
	1405	−1.0 / −30		1428	1.4 / 43
	2115	12.1 / 369		2137	11.4 / 347
8 M	0326	5.2 / 158	**23** Tu	0420	4.4 / 134
	0826	8.5 / 259		0924	7.4 / 226
	1457	0.1 / 3		1514	2.7 / 82
	2202	12.1 / 369		2216	11.2 / 341
9 Tu	0431	4.3 / 131	**24** W	0515	3.7 / 113
	0946	8.0 / 244		1041	7.2 / 219
	1554	1.4 / 43		1605	3.9 / 119
◑	2250	12.0 / 366	◐	2257	11.0 / 335
10 W	0536	3.1 / 94	**25** Th	0605	2.9 / 88
	1115	7.9 / 241		1208	7.3 / 223
	1658	2.8 / 85		1705	5.1 / 155
	2338	12.0 / 366		2338	10.8 / 329
11 Th	0635	1.7 / 52	**26** F	0651	2.0 / 61
	1249	8.3 / 253		1336	7.9 / 241
	1807	4.1 / 125		1814	6.0 / 183
12 F	0025	11.9 / 363	**27** Sa	0019	10.6 / 323
	0728	0.4 / 12		0731	1.0 / 30
	1414	9.1 / 277		1447	8.7 / 265
	1918	5.0 / 152		1923	6.6 / 201
13 Sa	0111	11.9 / 363	**28** Su	0100	10.6 / 323
	0816	−0.8 / −24		0810	0.1 / 3
	1524	10.0 / 305		1538	9.5 / 290
	2025	5.7 / 174		2023	6.9 / 210
14 Su	0156	11.7 / 357	**29** M	0139	10.6 / 323
	0900	−1.7 / −52		0847	−0.8 / −24
	1621	10.8 / 329		1619	10.2 / 311
	2126	6.1 / 186		2115	7.1 / 216
15 M	0240	11.5 / 351	**30** Tu	0219	10.6 / 323
	0942	−2.3 / −70		0925	−1.6 / −49
	1710	11.4 / 347		1655	10.8 / 329
	2221	6.3 / 192		2201	7.0 / 213

Time meridian 120° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.
Heights are referred to mean lower low water which is the chart datum of soundings.

Seattle, Washington, 2015

Times and Heights of High and Low Waters

July

	Time	Height		Time	Height
	h m	ft cm		h m	ft cm
1 W ○	0259	10.7 326	**16** Th	0355	10.4 317
	1005	−2.2 −67		1046	−1.6 −49
	1729	11.3 344		1813	11.6 354
	2245	6.9 210		2346	5.9 180
2 Th	0342	10.7 326	**17** F	0439	10.0 305
	1046	−2.6 −79		1123	−1.2 −37
	1805	11.7 357		1841	11.6 354
	2331	6.5 198			
3 F	0429	10.6 323	**18** Sa	0026	5.5 168
	1129	−2.6 −79		0524	9.7 296
	1842	12.0 366		1201	−0.7 −21
				1909	11.6 354
4 Sa	0018	6.0 183	**19** Su	0106	5.1 155
	0519	10.4 317		0610	9.3 283
	1213	−2.3 −70		1238	0.1 3
	1920	12.3 375		1938	11.5 351
5 Su	0108	5.4 165	**20** M	0146	4.7 143
	0614	10.0 305		0658	8.8 268
	1258	−1.6 −49		1315	1.0 30
	2001	12.4 378		2009	11.4 347
6 M	0202	4.7 143	**21** Tu	0228	4.2 128
	0715	9.4 287		0751	8.4 256
	1346	−0.5 −15		1354	2.0 61
	2042	12.5 381		2043	11.3 344
7 Tu	0259	3.8 116	**22** W	0314	3.6 110
	0824	8.8 268		0850	8.0 244
	1436	0.9 27		1435	3.2 98
	2126	12.4 378		2120	11.0 335
8 W ◑	0400	2.8 85	**23** Th ◐	0403	3.1 94
	0943	8.3 253		0958	7.7 235
	1531	2.5 76		1520	4.5 137
	2212	12.2 372		2159	10.8 329
9 Th	0503	1.8 55	**24** F	0455	2.5 76
	1114	8.2 250		1118	7.7 235
	1635	4.1 125		1616	5.6 171
	2301	12.0 366		2242	10.5 320
10 F	0605	0.8 24	**25** Sa	0548	1.8 55
	1255	8.5 259		1250	8.1 247
	1750	5.4 165		1727	6.6 201
	2352	11.7 357		2328	10.3 314
11 Sa	0703	−0.2 −6	**26** Su	0640	1.0 30
	1425	9.4 287		1413	8.8 268
	1910	6.2 189		1847	7.1 216
12 Su	0044	11.4 347	**27** M	0017	10.2 311
	0755	−1.0 −30		0728	0.1 3
	1531	10.2 311		1509	9.6 293
	2024	6.5 198		1956	7.2 219
13 M	0135	11.2 341	**28** Tu	0106	10.3 314
	0843	−1.5 −46		0814	−0.7 −21
	1623	10.9 332		1550	10.2 311
	2126	6.5 198		2051	7.0 213
14 Tu	0224	10.9 332	**29** W	0154	10.5 320
	0926	−1.8 −55		0859	−1.5 −46
	1705	11.3 344		1624	10.8 329
	2218	6.4 195		2138	6.7 204
15 W ●	0310	10.6 323	**30** Th	0243	10.7 326
	1007	−1.8 −55		0942	−2.0 −61
	1741	11.5 351		1657	11.3 344
	2304	6.2 189		2222	6.1 186
			31 F ○	0332	10.9 332
				1026	−2.3 −70
				1731	11.7 357
				2307	5.4 165

August

	Time	Height		Time	Height
	h m	ft cm		h m	ft cm
1 Sa	0423	10.9 332	**16** Su	0516	9.8 299
	1110	−2.1 −64		1138	0.6 18
	1806	12.1 369		1821	11.1 338
	2353	4.6 140			
2 Su	0516	10.8 329	**17** M	0024	3.8 116
	1155	−1.6 −49		0558	9.6 293
	1843	12.3 375		1213	1.3 40
				1848	11.1 338
3 M	0041	3.7 113	**18** Tu	0059	3.3 101
	0613	10.5 320		0642	9.4 287
	1241	−0.6 −18		1248	2.1 64
	1922	12.4 378		1917	11.0 335
4 Tu	0133	2.8 85	**19** W	0136	2.8 85
	0714	10.0 305		0730	9.1 277
	1328	0.7 21		1325	3.1 94
	2003	12.4 378		1950	10.8 329
5 W	0227	2.1 64	**20** Th	0217	2.4 73
	0822	9.4 287		0822	8.9 271
	1419	2.2 67		1405	4.1 125
	2047	12.1 369		2025	10.5 320
6 Th ◑	0325	1.4 43	**21** F	0302	2.1 64
	0939	8.9 271		0923	8.6 262
	1515	3.8 116		1450	5.2 158
	2135	11.8 360		2104	10.2 311
7 F	0427	0.9 27	**22** Sa ◐	0353	1.8 55
	1111	8.8 268		1034	8.5 259
	1624	5.2 158		1546	6.1 186
	2228	11.3 344		2149	9.8 299
8 Sa	0531	0.4 12	**23** Su	0449	1.4 43
	1254	9.1 277		1157	8.6 262
	1748	6.2 189		1700	6.8 207
	2326	10.8 329		2243	9.6 293
9 Su	0635	0.0 0	**24** M	0549	1.0 30
	1418	9.8 299		1321	9.1 277
	1917	6.5 198		1826	7.1 216
				2343	9.6 293
10 M	0027	10.5 320	**25** Tu	0647	0.3 9
	0734	−0.4 −12		1421	9.7 296
	1519	10.5 320		1937	6.8 207
	2030	6.3 192			
11 Tu	0127	10.3 314	**26** W	0043	9.8 299
	0825	−0.6 −18		0742	−0.3 −9
	1605	10.9 332		1504	10.3 314
	2125	6.0 183		2030	6.2 189
12 W	0221	10.2 311	**27** Th	0141	10.1 308
	0910	−0.7 −21		0832	−0.9 −27
	1641	11.1 338		1539	10.9 332
	2209	5.6 171		2115	5.4 165
13 Th	0309	10.1 308	**28** F	0235	10.6 323
	0951	−0.7 −21		0919	−1.2 −37
	1710	11.2 341		1613	11.3 344
	2247	5.1 155		2158	4.5 137
14 F ●	0353	10.0 305	**29** Sa ○	0328	10.9 332
	1028	−0.4 −12		1005	−1.2 −37
	1735	11.2 341		1647	11.7 357
	2320	4.7 143		2241	3.4 104
15 Sa	0435	9.9 302	**30** Su	0422	11.2 341
	1103	0.0 0		1051	−0.8 −24
	1757	11.1 338		1723	12.0 366
	2352	4.3 131		2326	2.4 73
			31 M	0516	11.2 341
				1136	0.0 0
				1800	12.2 372

September

	Time	Height		Time	Height
	h m	ft cm		h m	ft cm
1 Tu	0013	1.5 46	**16** W	0016	1.6 49
	0613	11.0 335		0631	10.1 308
	1223	1.1 34		1225	3.6 110
	1839	12.2 372		1825	10.5 320
2 W	0101	0.8 24	**17** Th	0051	1.3 40
	0713	10.7 326		0715	10.0 305
	1312	2.4 73		1303	4.4 134
	1921	11.9 363		1857	10.3 314
3 Th	0153	0.3 9	**18** F	0130	1.0 30
	0819	10.2 311		0803	9.8 299
	1406	3.7 113		1344	5.2 158
	2007	11.5 351		1931	9.9 302
4 F	0248	0.2 6	**19** Sa	0214	0.9 27
	0933	9.8 299		0857	9.7 296
	1507	5.0 152		1432	5.9 180
	2058	10.9 332		2010	9.5 290
5 Sa ◑	0348	0.3 9	**20** Su	0303	0.9 27
	1100	9.6 293		1001	9.5 290
	1624	5.9 180		1532	6.5 198
	2157	10.2 311		2059	9.1 277
6 Su	0453	0.4 12	**21** M ◐	0359	1.0 30
	1234	9.8 299		1113	9.5 290
	1759	6.3 192		1650	6.8 207
	2306	9.7 296		2203	8.9 271
7 M	0602	0.6 18	**22** Tu	0502	0.9 27
	1351	10.2 311		1226	9.8 299
	1925	6.0 183		1814	6.6 201
				2316	8.8 268
8 Tu	0019	9.4 287	**23** W	0607	0.7 21
	0707	0.6 18		1325	10.2 311
	1446	10.6 323		1920	5.9 180
	2027	5.4 165			
9 W	0126	9.4 287	**24** Th	0028	9.1 277
	0803	0.6 18		0708	0.5 15
	1528	10.8 329		1411	10.7 326
	2114	4.8 146		2010	4.9 149
10 Th	0224	9.5 290	**25** F	0134	9.7 296
	0850	0.7 21		0804	0.3 9
	1559	10.9 332		1449	11.1 338
	2151	4.2 128		2053	3.7 113
11 F	0312	9.7 296	**26** Sa	0233	10.3 314
	0931	0.9 27		0855	0.3 9
	1624	10.8 329		1525	11.6 354
	2221	3.7 113		2135	2.4 73
12 Sa	0355	9.9 302	**27** Su	0329	10.9 332
	1008	1.2 37		0943	0.6 18
	1644	10.8 329		1601	11.9 363
●	2249	3.2 98	○	2217	1.2 37
13 Su	0434	10.0 305	**28** M	0424	11.3 344
	1042	1.7 52		1031	1.3 40
	1705	10.8 329		1637	12.1 369
	2316	2.6 79		2300	0.1 3
14 M	0512	10.0 305	**29** Tu	0518	11.6 354
	1115	2.2 67		1118	2.1 64
	1729	10.8 329		1716	12.1 369
	2345	2.1 64		2345	−0.7 −21
15 Tu	0550	10.1 308	**30** W	0614	11.6 354
	1150	2.9 88		1208	3.1 94
	1755	10.7 326		1756	11.8 360

Time meridian 120° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.
Heights are referred to mean lower low water which is the chart datum of soundings.

Seattle, Washington, 2015

Times and Heights of High and Low Waters

October

	Time	Height	
	h m	ft	cm
1 Th	0032	−1.1	−34
	0712	11.4	347
	1300	4.1	125
	1840	11.4	347
2 F	0120	−1.1	−34
	0814	11.1	338
	1357	5.1	155
	1928	10.7	326
3 Sa	0212	−0.7	−21
	0922	10.8	329
	1505	5.8	177
	2023	9.9	302
4 Su ◑	0309	0.0	0
	1038	10.5	320
	1630	6.1	186
	2128	9.1	277
5 M	0411	0.7	21
	1157	10.5	320
	1804	5.9	180
	2246	8.6	262
6 Tu	0520	1.3	40
	1304	10.6	323
	1918	5.2	158
7 W	0009	8.4	256
	0629	1.8	55
	1356	10.7	326
	2011	4.3	131
8 Th	0124	8.6	262
	0731	2.1	64
	1435	10.8	329
	2051	3.6	110
9 F	0225	9.0	274
	0822	2.4	73
	1504	10.8	329
	2124	2.9	88
10 Sa	0314	9.4	287
	0906	2.7	82
	1527	10.7	326
	2151	2.2	67
11 Su	0356	9.8	299
	0944	3.1	94
	1549	10.7	326
	2216	1.6	49
12 M ●	0434	10.1	308
	1019	3.6	110
	1612	10.7	326
	2242	1.0	30
13 Tu	0510	10.4	317
	1054	4.1	125
	1638	10.6	323
	2310	0.5	15
14 W	0546	10.6	323
	1129	4.7	143
	1705	10.5	320
	2341	0.1	3
15 Th	0624	10.8	329
	1207	5.2	158
	1735	10.2	311

	Time	Height	
	h m	ft	cm
16 F	0016	−0.2	−6
	0705	10.9	332
	1247	5.7	174
	1807	9.9	302
17 Sa	0054	−0.3	−9
	0750	10.8	329
	1331	6.2	189
	1843	9.6	293
18 Su	0137	−0.2	−6
	0840	10.7	326
	1423	6.5	198
	1924	9.2	280
19 M	0225	0.1	3
	0936	10.6	323
	1526	6.7	204
	2019	8.7	265
20 Tu ◐	0319	0.5	15
	1037	10.6	323
	1642	6.5	198
	2132	8.3	253
21 W	0421	0.9	27
	1138	10.7	326
	1759	5.9	180
	2257	8.3	253
22 Th	0527	1.3	40
	1233	11.0	335
	1859	4.8	146
23 F	0018	8.6	262
	0632	1.6	49
	1319	11.3	344
	1948	3.4	104
24 Sa	0132	9.3	283
	0734	2.0	61
	1400	11.7	357
	2031	1.9	58
25 Su	0236	10.1	308
	0830	2.4	73
	1439	12.0	366
	2113	0.5	15
26 M	0334	10.9	332
	0922	3.0	91
	1517	12.2	372
	2155	−0.8	−24
27 Tu ○	0429	11.5	351
	1013	3.6	110
	1555	12.2	372
	2237	−1.7	−52
28 W	0523	11.9	363
	1104	4.3	131
	1636	12.0	366
	2321	−2.2	−67
29 Th	0616	12.1	369
	1156	5.0	152
	1718	11.6	354
30 F	0005	−2.2	−67
	0710	12.1	369
	1251	5.6	171
	1804	11.0	335
31 Sa	0052	−1.8	−55
	0806	11.9	363
	1351	6.0	183
	1853	10.2	311

November

	Time	Height	
	h m	ft	cm
1 Su	0140	−1.1	−34
	0904	11.7	357
	1500	6.2	189
	1950	9.3	283
2 M	0232	−0.1	−3
	1005	11.4	347
	1622	6.0	183
	2058	8.4	256
3 Tu ◑	0328	1.0	30
	1106	11.2	341
	1745	5.4	165
	2219	7.9	241
4 W	0431	2.1	64
	1203	11.0	335
	1852	4.6	140
	2348	7.7	235
5 Th	0539	2.9	88
	1251	11.0	335
	1941	3.6	110
6 F	0111	8.1	247
	0645	3.6	110
	1330	10.9	332
	2019	2.7	82
7 Sa	0219	8.7	265
	0744	4.2	128
	1401	10.9	332
	2050	1.9	58
8 Su	0312	9.3	283
	0834	4.6	140
	1429	10.8	329
	2117	1.2	37
9 M	0356	9.9	302
	0918	5.1	155
	1456	10.8	329
	2143	0.5	15
10 Tu	0434	10.4	317
	0957	5.5	168
	1523	10.7	326
	2210	−0.2	−6
11 W ●	0509	10.8	329
	1035	5.9	180
	1552	10.6	323
	2240	−0.7	−21
12 Th	0543	11.2	341
	1112	6.3	192
	1622	10.5	320
	2313	−1.0	−30
13 F	0619	11.5	351
	1152	6.5	198
	1654	10.3	314
	2349	−1.2	−37
14 Sa	0657	11.6	354
	1234	6.7	204
	1729	10.0	305
15 Su	0028	−1.2	−37
	0739	11.7	357
	1321	6.8	207
	1808	9.7	296

	Time	Height	
	h m	ft	cm
16 M	0111	−1.0	−30
	0824	11.7	357
	1414	6.8	207
	1856	9.2	280
17 Tu	0157	−0.5	−15
	0913	11.7	357
	1516	6.5	198
	1957	8.7	265
18 W ◐	0248	0.2	6
	1004	11.7	357
	1624	5.9	180
	2114	8.2	250
19 Th	0346	1.2	37
	1055	11.7	357
	1732	4.9	149
	2243	8.0	244
20 F	0449	2.2	67
	1145	11.9	363
	1832	3.6	110
21 Sa	0012	8.3	253
	0557	3.1	94
	1232	12.0	366
	1923	2.0	61
22 Su	0135	9.1	277
	0704	3.9	119
	1316	12.2	372
	2009	0.5	15
23 M	0245	10.0	305
	0807	4.6	140
	1358	12.3	375
	2053	−0.9	−27
24 Tu	0345	11.0	335
	0906	5.2	158
	1440	12.4	378
	2135	−1.9	−58
25 W ○	0439	11.7	357
	1001	5.7	174
	1522	12.2	372
	2218	−2.6	−79
26 Th	0529	12.2	372
	1054	6.1	186
	1605	11.9	363
	2300	−2.7	−82
27 F	0618	12.5	381
	1147	6.3	192
	1649	11.4	347
	2343	−2.5	−76
28 Sa	0704	12.6	384
	1242	6.4	195
	1736	10.7	326
29 Su	0027	−1.9	−58
	0751	12.5	381
	1340	6.4	195
	1827	9.9	302
30 M	0112	−1.0	−30
	0837	12.3	375
	1442	6.2	189
	1923	9.1	277

December

	Time	Height	
	h m	ft	cm
1 Tu	0158	0.1	3
	0923	12.0	366
	1550	5.8	177
	2027	8.3	253
2 W ◑	0247	1.3	40
	1009	11.8	360
	1700	5.1	155
	2142	7.7	235
3 Th	0339	2.6	79
	1055	11.5	351
	1803	4.3	131
	2310	7.5	229
4 F	0439	3.9	119
	1139	11.3	344
	1854	3.4	104
5 Sa	0043	7.7	235
	0546	5.0	152
	1221	11.2	341
	1935	2.5	76
6 Su	0205	8.4	256
	0655	5.8	177
	1259	11.0	335
	2009	1.6	49
7 M	0306	9.3	283
	0757	6.3	192
	1334	11.0	335
	2040	0.7	21
8 Tu	0353	10.0	305
	0850	6.7	204
	1408	10.9	332
	2110	0.0	0
9 W	0431	10.7	326
	0936	7.0	213
	1441	10.8	329
	2141	−0.7	−21
10 Th	0505	11.2	341
	1017	7.2	219
	1515	10.8	329
	2214	−1.2	−37
11 F ●	0537	11.6	354
	1056	7.2	219
	1550	10.7	326
	2250	−1.6	−49
12 Sa	0610	12.0	366
	1137	7.2	219
	1627	10.6	323
	2328	−1.8	−55
13 Su	0645	12.2	372
	1219	7.1	216
	1708	10.3	314
14 M	0008	−1.7	−52
	0723	12.4	378
	1306	6.8	207
	1754	10.0	305
15 Tu	0051	−1.3	−40
	0802	12.5	381
	1357	6.3	192
	1847	9.5	290

	Time	Height	
	h m	ft	cm
16 W	0136	−0.6	−18
	0844	12.6	384
	1453	5.7	174
	1950	9.0	274
17 Th	0224	0.5	15
	0928	12.6	384
	1555	4.8	146
	2106	8.4	256
18 F ◐	0317	1.8	55
	1014	12.5	381
	1658	3.7	113
	2233	8.2	250
19 Sa	0417	3.3	101
	1102	12.5	381
	1800	2.4	73
20 Su	0010	8.4	256
	0526	4.7	143
	1150	12.4	378
	1856	1.0	30
21 M	0143	9.2	280
	0641	5.7	174
	1238	12.4	378
	1947	−0.3	−9
22 Tu	0259	10.2	311
	0753	6.4	195
	1326	12.3	375
	2034	−1.3	−40
23 W	0359	11.2	341
	0859	6.8	207
	1413	12.1	369
	2119	−2.0	−61
24 Th	0448	11.9	363
	0957	6.9	210
	1500	11.9	363
	2202	−2.4	−73
25 F ○	0532	12.4	378
	1050	6.8	207
	1546	11.6	354
	2243	−2.4	−73
26 Sa	0612	12.6	384
	1140	6.6	201
	1633	11.1	338
	2325	−2.0	−61
27 Su	0649	12.7	387
	1229	6.4	195
	1720	10.6	323
28 M	0006	−1.4	−43
	0725	12.6	384
	1318	6.1	186
	1809	10.0	305
29 Tu	0047	−0.5	−15
	0801	12.5	381
	1408	5.7	174
	1901	9.3	283
30 W	0128	0.5	15
	0837	12.3	375
	1459	5.2	158
	1958	8.6	262
31 Th	0209	1.8	55
	0913	12.0	366
	1554	4.7	143
	2104	8.0	244

Time meridian 120° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.
Heights are referred to mean lower low water which is the chart datum of soundings.

Cherry Point, Washington, 2015

Times and Heights of High and Low Waters

January

	Time	Height		Time	Height		Time	Height		Time	Height		Time	Height		Time	Height
	h m	ft	cm	h m	ft	cm	h m	ft	cm	h m	ft	cm	h m	ft	cm	h m	ft	cm
1 Th	0346	8.1	247	**16** F	0336	7.6	232	**1** Su	0504	9.3	283	**16** M	0419	9.0	274	**1** Su	0348	8.7	265	**16** M	0248	8.5	259
	0756	6.5	198		0711	6.9	210		1013	6.5	198		0913	6.5	198		0915	5.9	180		0805	5.9	180
	1315	9.2	280		1217	8.8	268		1433	8.0	244		1351	8.4	256		1340	7.3	223		1239	7.5	229
	2056	−0.8	−24		2018	−0.3	−9		2157	−0.5	−15		2120	−1.2	−37		2051	0.5	15		1959	−0.1	−3
2 F	0440	8.9	271	**17** Sa	0419	8.4	256	**2** M	0537	9.4	287	**17** Tu	0453	9.4	287	**2** M	0424	8.8	268	**17** Tu	0327	8.8	268
	0910	6.8	207		0826	7.1	216		1058	6.2	189		1006	5.9	180		1000	5.4	165		0859	5.1	155
	1358	8.9	271		1305	8.8	268		1522	7.8	238		1457	8.5	259		1440	7.3	223		1359	7.7	235
	2136	−1.2	−37		2101	−1.1	−34		2233	−0.4	−12		2207	−1.3	−40		2134	0.6	18		2053	−0.1	−3
3 Sa	0524	9.4	287	**18** Su	0457	9.1	277	**3** Tu ○	0606	9.5	290	**18** W ●	0526	9.7	296	**3** Tu	0454	8.8	268	**18** W	0402	9.1	277
	1014	6.9	210		0930	7.1	216		1135	5.8	177		1054	5.1	155		1035	4.9	149		0947	4.1	125
	1440	8.6	262		1358	8.9	271		1608	7.7	235		1600	8.6	262		1532	7.3	223		1510	8.0	244
	2214	−1.3	−40		2144	−1.7	−52		2306	−0.2	−6		2252	−1.1	−34		2211	0.8	24		2144	0.1	3
4 Su ○	0602	9.8	299	**19** M	0532	9.6	293	**4** W	0632	9.4	287	**19** Th	0559	9.9	302	**4** W	0519	8.8	268	**19** Th	0435	9.3	283
	1108	6.8	207		1024	6.9	210		1209	5.3	162		1141	4.2	128		1105	4.4	134		1032	3.1	94
	1522	8.3	253		1453	8.9	271		1653	7.5	229		1702	8.6	262		1619	7.4	226		1616	8.3	253
	2250	−1.3	−40		2227	−2.1	−64		2339	0.2	6		2337	−0.5	−15		2245	1.1	34		2232	0.6	18
5 M	0636	9.9	302	**20** Tu ●	0607	10.0	305	**5** Th	0656	9.4	287	**20** F	0632	10.0	305	**5** Th ○	0542	8.8	268	**20** F ●	0508	9.5	290
	1155	6.6	201		1116	6.5	198		1243	4.9	149		1229	3.2	98		1134	3.9	119		1116	2.0	61
	1604	8.0	244		1550	8.8	268		1737	7.3	223		1805	8.4	256		1703	7.5	229		1718	8.6	262
	2324	−1.1	−34		2310	−2.1	−64										2318	1.5	46		2320	1.4	43
6 Tu	0707	10.0	305	**21** W	0641	10.3	314	**6** F	0011	0.7	21	**21** Sa	0022	0.4	12	**6** F	0603	8.7	265	**21** Sa	0541	9.5	290
	1239	6.3	192		1206	5.9	180		0719	9.3	283		0705	10.0	305		1204	3.4	104		1201	1.1	34
	1646	7.6	232		1648	8.6	262		1318	4.4	134		1319	2.4	73		1747	7.5	229		1818	8.7	265
	2358	−0.7	−21		2354	−1.8	−55		1824	7.1	216		1909	8.1	247		2350	2.0	61				
7 W	0737	9.9	302	**22** Th	0716	10.5	320	**7** Sa	0043	1.3	40	**22** Su	0108	1.5	46	**7** Sa	0624	8.7	265	**22** Su	0007	2.3	70
	1321	5.9	180		1258	5.1	155		0743	9.3	283		0740	9.9	302		1235	2.8	85		0615	9.4	287
	1730	7.3	223		1750	8.2	250		1355	3.9	119		1409	1.6	49		1832	7.5	229		1246	0.3	9
									1913	6.9	210		2017	7.8	238						1919	8.7	265
8 Th	0032	−0.2	−6	**23** F	0038	−1.1	−34	**8** Su	0115	2.1	64	**23** M	0155	2.8	85	**8** Su	0023	2.6	79	**23** M	0055	3.3	101
	0806	9.8	299		0751	10.5	320		0806	9.2	280		0815	9.7	296		0645	8.6	262		0650	9.2	280
	1404	5.5	168		1351	4.3	131		1434	3.4	104		1503	1.1	34		1307	2.3	70		1333	−0.1	−3
	1817	6.9	210		1855	7.7	235		2008	6.6	201		2131	7.5	229		1918	7.5	229		2022	8.6	262
9 F	0105	0.4	12	**24** Sa	0122	0.0	0	**9** M	0149	2.9	88	**24** Tu	0246	4.1	125	**9** M	0057	3.3	101	**24** Tu	0147	4.2	128
	0834	9.7	296		0827	10.4	317		0831	9.0	274		0853	9.3	283		0708	8.5	259		0726	8.8	268
	1449	5.0	152		1447	3.4	104		1516	2.9	88		1600	0.8	24		1342	1.9	58		1422	−0.2	−6
	1910	6.4	195		2007	7.2	219		2113	6.4	195		2255	7.4	226		2009	7.4	226		2127	8.5	259
10 Sa	0139	1.2	37	**25** Su	0208	1.4	43	**10** Tu	0224	3.9	119	**25** W ◐	0346	5.2	158	**10** Tu	0134	4.0	122	**25** W	0244	5.0	152
	0902	9.5	290		0903	10.3	314		0856	8.9	271		0934	8.8	268		0731	8.4	256		0805	8.3	253
	1536	4.4	134		1546	2.5	76		1603	2.3	70		1701	0.6	18		1421	1.5	46		1514	0.0	0
	2011	6.0	183		2128	6.7	204		2231	6.3	192						2106	7.4	226		2238	8.3	253
11 Su	0213	2.2	67	**26** M ◐	0256	2.9	88	**11** W ◑	0305	4.9	149	**26** Th	0029	7.6	232	**11** W	0213	4.8	146	**26** Th ◐	0351	5.6	171
	0930	9.4	287		0941	10.0	305		0924	8.7	265		0503	6.0	183		0756	8.3	253		0849	7.7	235
	1625	3.8	116		1647	1.7	52		1654	1.8	55		1023	8.3	253		1505	1.2	37		1610	0.4	12
	2126	5.6	171		2303	6.5	198						1804	0.6	18		2212	7.3	223		2353	8.3	253
12 M	0249	3.2	98	**27** Tu	0351	4.3	131	**12** Th	0006	6.5	198	**27** F	0156	8.0	244	**12** Th	0301	5.5	168	**27** F	0516	5.9	180
	0959	9.2	280		1021	9.7	296		0359	5.8	177		0638	6.4	195		0826	8.1	247		0943	7.1	216
	1714	3.1	94		1749	1.0	30		0957	8.6	262		1122	7.8	238		1556	0.9	27		1712	0.8	24
	2301	5.6	171						1750	1.2	37		1906	0.5	15		2329	7.4	226				
13 Tu ◑	0330	4.3	131	**28** W	0052	6.9	210	**13** F	0145	7.1	216	**28** Sa	0301	8.4	256	**13** F ◑	0403	6.1	186	**28** Sa	0105	8.3	253
	1028	9.1	277		0501	5.6	171		0520	6.5	198		0810	6.2	189		0904	7.9	241		0651	5.7	174
	1803	2.3	70		1105	9.3	283		1039	8.4	256		1231	7.4	226		1654	0.7	21		1056	6.6	201
					1848	0.4	12		1846	0.5	15		2002	0.5	15						1816	1.1	34
14 W	0051	5.9	180	**29** Th	0229	7.6	232	**14** Sa	0255	7.8	238					**14** Sa	0050	7.7	235	**29** Su	0205	8.4	256
	0425	5.4	165		0628	6.5	198		0653	6.9	210						0527	6.4	195		0808	5.2	158
	1100	8.9	271		1153	8.8	268		1135	8.4	256						0957	7.7	235		1222	6.3	192
	1850	1.5	46		1943	−0.1	−3		1940	−0.2	−6						1757	0.4	12		1918	1.4	43
15 Th	0232	6.7	204	**30** F	0337	8.3	253	**15** Su	0342	8.4	256					**15** Su	0158	8.1	247	**30** M	0251	8.4	256
	0544	6.3	192		0759	6.8	207		0812	6.8	207						0654	6.4	195		0858	4.7	143
	1135	8.8	268		1246	8.5	259		1242	8.3	253						1113	7.5	229		1342	6.4	195
	1935	0.6	18		2033	−0.4	−12		2031	−0.8	−24						1900	0.2	6		2013	1.7	52
				31 Sa	0425	8.9	271													**31** Tu	0326	8.4	256
					0916	6.7	204														0934	4.0	122
					1341	8.2	250														1447	6.6	201
					2117	−0.5	−15														2100	1.9	58

Time meridian 120° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.
Heights are referred to mean lower low water which is the chart datum of soundings.

Cherry Point, Washington, 2015

Times and Heights of High and Low Waters

April

	Time	Height	
	h m	ft	cm
1 W	0355	8.4	256
	1004	3.4	104
	1541	6.9	210
	2141	2.2	67
2 Th	0418	8.3	253
	1031	2.8	85
	1628	7.2	219
	2218	2.6	79
3 F	0440	8.2	250
	1058	2.2	67
	1712	7.5	229
	2254	3.1	94
4 Sa ○	0501	8.2	250
	1126	1.6	49
	1755	7.8	238
	2330	3.5	107
5 Su	0522	8.2	250
	1156	1.1	34
	1838	8.1	247
6 M	0006	4.1	125
	0544	8.1	247
	1228	0.6	18
	1923	8.2	250
7 Tu	0045	4.6	140
	0608	8.1	247
	1302	0.3	9
	2010	8.3	253
8 W	0127	5.1	155
	0633	7.9	241
	1340	0.0	0
	2101	8.3	253
9 Th	0214	5.6	171
	0703	7.8	238
	1423	−0.1	−3
	2158	8.3	253
10 F	0310	5.9	180
	0738	7.5	229
	1513	0.0	0
	2301	8.3	253
11 Sa ◑	0420	6.1	186
	0826	7.2	219
	1610	0.2	6
12 Su	0004	8.4	256
	0542	5.9	180
	0936	6.8	207
	1713	0.4	12
13 M	0101	8.5	259
	0657	5.3	162
	1113	6.5	198
	1819	0.7	21
14 Tu	0149	8.7	265
	0756	4.4	134
	1251	6.6	201
	1923	1.0	30
15 W	0229	8.9	271
	0844	3.3	101
	1416	7.0	213
	2023	1.5	46

	Time	Height	
	h m	ft	cm
16 Th	0306	9.1	277
	0928	2.1	64
	1528	7.6	232
	2118	2.1	64
17 F	0340	9.2	280
	1011	0.9	27
	1633	8.2	250
	2211	2.8	85
18 Sa ●	0414	9.2	280
	1052	−0.1	−3
	1733	8.7	265
	2303	3.5	107
19 Su	0448	9.1	277
	1135	−0.8	−24
	1830	9.1	277
	2354	4.2	128
20 M	0523	8.9	271
	1217	−1.2	−37
	1925	9.3	283
21 Tu	0047	4.9	149
	0600	8.6	262
	1300	−1.3	−40
	2021	9.3	283
22 W	0144	5.3	162
	0638	8.1	247
	1345	−1.0	−30
	2116	9.2	280
23 Th	0246	5.6	171
	0718	7.5	229
	1432	−0.5	−15
	2214	9.0	274
24 F	0358	5.7	174
	0805	6.8	207
	1522	0.1	3
	2312	8.8	268
25 Sa ◐	0522	5.5	168
	0906	6.2	189
	1616	0.9	27
26 Su	0008	8.7	265
	0645	5.0	152
	1030	5.7	174
	1716	1.6	49
27 M	0059	8.5	259
	0745	4.3	131
	1209	5.5	168
	1818	2.3	70
28 Tu	0141	8.4	256
	0827	3.6	110
	1338	5.7	174
	1918	2.8	85
29 W	0216	8.3	253
	0900	2.8	85
	1450	6.1	186
	2012	3.3	101
30 Th	0244	8.2	250
	0928	2.1	64
	1546	6.7	204
	2100	3.8	116

May

	Time	Height	
	h m	ft	cm
1 F	0309	8.1	247
	0956	1.4	43
	1635	7.3	223
	2144	4.2	128
2 Sa	0332	8.1	247
	1023	0.7	21
	1718	7.8	238
	2227	4.7	143
3 Su ○	0355	8.1	247
	1052	0.1	3
	1800	8.3	253
	2308	5.1	155
4 M	0419	8.0	244
	1123	−0.4	−12
	1842	8.6	262
	2351	5.4	165
5 Tu	0444	8.0	244
	1156	−0.8	−24
	1924	8.9	271
6 W	0036	5.7	174
	0513	7.9	241
	1232	−1.1	−34
	2008	9.1	277
7 Th	0124	6.0	183
	0545	7.7	235
	1311	−1.2	−37
	2054	9.2	280
8 F	0217	6.1	186
	0623	7.5	229
	1355	−1.1	−34
	2143	9.2	280
9 Sa	0319	6.0	183
	0709	7.1	216
	1443	−0.7	−21
	2233	9.2	280
10 Su	0430	5.7	174
	0811	6.6	201
	1536	−0.1	−3
	2323	9.2	280
11 M ◑	0543	5.0	152
	0940	6.0	183
	1635	0.7	21
12 Tu	0010	9.2	280
	0647	4.1	125
	1127	5.8	177
	1740	1.5	46
13 W	0053	9.2	280
	0740	2.9	88
	1310	6.0	183
	1846	2.4	73
14 Th	0133	9.2	280
	0826	1.6	49
	1437	6.7	204
	1951	3.3	101
15 F	0211	9.2	280
	0909	0.3	9
	1549	7.5	229
	2053	4.1	125

	Time	Height	
	h m	ft	cm
16 Sa	0247	9.2	280
	0950	−0.7	−21
	1651	8.3	253
	2152	4.8	146
17 Su ●	0323	9.1	277
	1031	−1.5	−46
	1746	9.0	274
	2249	5.3	162
18 M	0400	8.9	271
	1111	−1.9	−58
	1837	9.4	287
	2345	5.7	174
19 Tu	0437	8.5	259
	1152	−2.0	−61
	1925	9.7	296
20 W	0042	5.9	180
	0516	8.1	247
	1233	−1.8	−55
	2012	9.7	296
21 Th	0141	5.9	180
	0556	7.6	232
	1314	−1.4	−43
	2058	9.7	296
22 F	0243	5.8	177
	0640	7.0	213
	1356	−0.7	−21
	2144	9.5	290
23 Sa	0351	5.5	168
	0731	6.3	192
	1439	0.1	3
	2228	9.2	280
24 Su	0503	5.0	152
	0835	5.7	174
	1525	1.0	30
	2311	9.0	274
25 M ◐	0610	4.4	134
	1001	5.2	158
	1615	1.9	58
	2352	8.8	268
26 Tu	0703	3.6	110
	1143	5.0	152
	1710	2.9	88
27 W	0028	8.6	262
	0743	2.8	85
	1324	5.3	162
	1810	3.7	113
28 Th	0101	8.5	259
	0817	2.0	61
	1446	5.9	180
	1912	4.5	137
29 F	0131	8.4	256
	0848	1.2	37
	1547	6.7	204
	2011	5.1	155
30 Sa	0158	8.3	253
	0918	0.4	12
	1636	7.4	226
	2106	5.6	171
31 Su	0225	8.3	253
	0949	−0.3	−9
	1719	8.1	247
	2157	6.0	183

June

	Time	Height	
	h m	ft	cm
1 M	0253	8.2	250
	1021	−0.9	−27
	1758	8.7	265
	2246	6.2	189
2 Tu ○	0323	8.2	250
	1055	−1.5	−46
	1838	9.1	277
	2335	6.4	195
3 W	0357	8.2	250
	1131	−1.8	−55
	1917	9.4	287
4 Th	0024	6.4	195
	0435	8.0	244
	1210	−2.0	−61
	1957	9.7	296
5 F	0116	6.4	195
	0518	7.8	238
	1251	−1.9	−58
	2038	9.8	299
6 Sa	0212	6.1	186
	0608	7.4	226
	1334	−1.5	−46
	2119	9.8	299
7 Su	0313	5.6	171
	0707	6.8	207
	1421	−0.8	−24
	2201	9.8	299
8 M	0418	4.9	149
	0823	6.2	189
	1510	0.2	6
	2242	9.7	296
9 Tu ◑	0523	3.9	119
	0957	5.7	174
	1604	1.4	43
	2323	9.7	296
10 W	0623	2.8	85
	1144	5.5	168
	1705	2.7	82
11 Th	0003	9.6	293
	0716	1.5	46
	1329	6.0	183
	1813	3.9	119
12 F	0043	9.5	290
	0804	0.3	9
	1458	6.9	210
	1924	4.9	149
13 Sa	0123	9.3	283
	0849	−0.7	−21
	1607	7.8	238
	2034	5.7	174
14 Su	0202	9.2	280
	0931	−1.5	−46
	1703	8.6	262
	2140	6.1	186
15 M	0242	8.9	271
	1012	−2.0	−61
	1751	9.2	280
	2241	6.4	195

	Time	Height	
	h m	ft	cm
16 Tu ●	0323	8.6	262
	1052	−2.1	−64
	1835	9.6	293
	2339	6.4	195
17 W	0404	8.3	253
	1131	−2.0	−61
	1915	9.7	296
18 Th	0034	6.2	189
	0447	7.8	238
	1209	−1.7	−52
	1954	9.8	299
19 F	0128	6.0	183
	0531	7.3	223
	1248	−1.2	−37
	2031	9.7	296
20 Sa	0222	5.6	171
	0619	6.8	207
	1325	−0.5	−15
	2107	9.5	290
21 Su	0317	5.2	158
	0712	6.2	189
	1403	0.3	9
	2141	9.3	283
22 M	0414	4.6	140
	0816	5.6	171
	1442	1.2	37
	2215	9.1	277
23 Tu	0509	4.0	122
	0935	5.2	158
	1523	2.3	70
	2247	8.9	271
24 W ◐	0600	3.2	98
	1110	5.0	152
	1609	3.4	104
	2319	8.7	265
25 Th	0646	2.4	73
	1256	5.3	162
	1705	4.4	134
	2351	8.6	262
26 F	0726	1.6	49
	1431	6.0	183
	1812	5.3	162
27 Sa	0022	8.5	259
	0804	0.8	24
	1538	6.8	207
	1923	6.0	183
28 Su	0054	8.4	256
	0840	0.0	0
	1627	7.6	232
	2029	6.4	195
29 M	0129	8.4	256
	0916	−0.7	−21
	1707	8.3	253
	2129	6.6	201
30 Tu	0206	8.4	256
	0952	−1.4	−43
	1744	8.9	271
	2222	6.7	204

Time meridian 120° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.
Heights are referred to mean lower low water which is the chart datum of soundings.

Cherry Point, Washington, 2015

Times and Heights of High and Low Waters

July

	Time	Height	
	h m	ft	cm
1 W ○	0247	8.4	256
	1031	−1.9	−58
	1820	9.3	283
	2313	6.6	201
2 Th	0333	8.4	256
	1110	−2.2	−67
	1856	9.6	293
3 F	0003	6.4	195
	0422	8.2	250
	1152	−2.2	−67
	1932	9.8	299
4 Sa	0055	6.0	183
	0516	7.9	241
	1234	−1.9	−58
	2008	10.0	305
5 Su	0149	5.4	165
	0616	7.5	229
	1318	−1.2	−37
	2045	10.0	305
6 M	0247	4.7	143
	0723	6.9	210
	1402	−0.2	−6
	2121	10.0	305
7 Tu	0347	3.7	113
	0841	6.3	192
	1450	1.0	30
	2159	9.9	302
8 W ◑	0448	2.7	82
	1013	5.9	180
	1541	2.5	76
	2238	9.7	296
9 Th	0549	1.6	49
	1157	5.9	180
	1641	3.9	119
	2318	9.5	290
10 F	0646	0.6	18
	1342	6.5	198
	1753	5.1	155
11 Sa	0001	9.3	283
	0739	−0.3	−9
	1508	7.4	226
	1912	6.0	183
12 Su	0046	9.1	277
	0828	−1.0	−30
	1610	8.2	250
	2030	6.4	195
13 M	0133	8.8	268
	0913	−1.4	−43
	1659	8.8	268
	2138	6.5	198
14 Tu	0220	8.5	259
	0955	−1.6	−49
	1740	9.2	280
	2237	6.4	195
15 W ●	0307	8.2	250
	1035	−1.6	−49
	1817	9.4	287
	2328	6.2	189

	Time	Height	
	h m	ft	cm
16 Th	0353	7.9	241
	1113	−1.4	−43
	1851	9.4	287
17 F	0015	5.8	177
	0440	7.6	232
	1149	−1.0	−30
	1922	9.4	287
18 Sa	0058	5.5	168
	0526	7.2	219
	1224	−0.5	−15
	1952	9.3	283
19 Su	0142	5.0	152
	0615	6.9	210
	1259	0.2	6
	2020	9.2	280
20 M	0226	4.5	137
	0707	6.4	195
	1334	1.0	30
	2048	9.1	277
21 Tu	0311	4.0	122
	0806	6.0	183
	1409	1.9	58
	2116	8.9	271
22 W	0358	3.4	104
	0915	5.7	174
	1446	2.9	88
	2144	8.7	265
23 Th ◐	0447	2.8	85
	1037	5.6	171
	1528	3.9	119
	2214	8.5	259
24 F	0537	2.2	67
	1215	5.8	177
	1619	4.9	149
	2245	8.4	256
25 Sa	0627	1.5	46
	1355	6.3	192
	1729	5.8	177
	2321	8.3	253
26 Su	0714	0.8	24
	1509	7.1	216
	1849	6.3	192
27 M	0002	8.2	250
	0759	0.0	0
	1558	7.8	238
	2003	6.6	201
28 Tu	0049	8.3	253
	0843	−0.7	−21
	1637	8.3	253
	2105	6.6	201
29 W	0141	8.3	253
	0925	−1.3	−40
	1712	8.8	268
	2159	6.4	195
30 Th	0235	8.4	256
	1008	−1.7	−52
	1745	9.2	280
	2248	6.0	183
31 F ○	0331	8.4	256
	1051	−1.8	−55
	1819	9.5	290
	2337	5.5	168

August

	Time	Height	
	h m	ft	cm
1 Sa	0428	8.3	253
	1134	−1.6	−49
	1852	9.6	293
2 Su	0026	4.8	146
	0528	8.1	247
	1217	−1.1	−34
	1926	9.8	299
3 M	0117	4.0	122
	0632	7.8	238
	1301	−0.2	−6
	2000	9.8	299
4 Tu	0211	3.1	94
	0740	7.3	223
	1347	1.0	30
	2035	9.7	296
5 W	0307	2.3	70
	0855	6.9	210
	1435	2.4	73
	2113	9.6	293
6 Th ◑	0406	1.5	46
	1021	6.7	204
	1529	3.7	113
	2153	9.3	283
7 F	0508	0.8	24
	1158	6.8	207
	1634	5.0	152
	2237	9.0	274
8 Sa	0610	0.3	9
	1337	7.3	223
	1754	5.8	177
	2327	8.6	262
9 Su	0710	−0.2	−6
	1454	7.9	241
	1921	6.2	189
10 M	0024	8.3	253
	0804	−0.5	−15
	1550	8.4	256
	2039	6.2	189
11 Tu	0122	8.0	244
	0854	−0.6	−18
	1634	8.7	265
	2140	6.0	183
12 W	0219	7.9	241
	0938	−0.6	−18
	1711	8.9	271
	2228	5.6	171
13 Th	0312	7.7	235
	1017	−0.5	−15
	1742	8.9	271
	2308	5.2	158
14 F ●	0400	7.6	232
	1054	−0.2	−6
	1810	8.9	271
	2345	4.8	146
15 Sa	0447	7.5	229
	1128	0.2	6
	1836	8.8	268

	Time	Height	
	h m	ft	cm
16 Su	0020	4.3	131
	0532	7.3	223
	1202	0.7	21
	1900	8.7	265
17 M	0055	3.9	119
	0619	7.2	219
	1235	1.4	43
	1924	8.6	262
18 Tu	0131	3.4	104
	0708	7.0	213
	1309	2.1	64
	1948	8.5	259
19 W	0209	2.9	88
	0801	6.8	207
	1344	2.9	88
	2013	8.4	256
20 Th	0251	2.5	76
	0901	6.6	201
	1422	3.8	116
	2040	8.2	250
21 F	0336	2.1	64
	1011	6.5	198
	1506	4.7	143
	2108	8.0	244
22 Sa ◐	0427	1.8	55
	1134	6.6	201
	1601	5.4	165
	2142	7.9	241
23 Su	0522	1.3	40
	1304	6.9	210
	1715	6.0	183
	2225	7.8	238
24 M	0620	0.8	24
	1418	7.4	226
	1839	6.3	192
	2322	7.7	235
25 Tu	0716	0.3	9
	1510	7.9	241
	1951	6.2	189
26 W	0028	7.7	235
	0808	−0.3	−9
	1549	8.3	253
	2049	5.9	180
27 Th	0135	7.9	241
	0857	−0.7	−21
	1624	8.7	265
	2138	5.3	162
28 F	0239	8.1	247
	0944	−0.8	−24
	1657	9.0	274
	2224	4.6	140
29 Sa ○	0341	8.3	253
	1029	−0.7	−21
	1729	9.2	280
	2310	3.7	113
30 Su	0442	8.4	256
	1114	−0.2	−6
	1801	9.3	283
	2356	2.8	85
31 M	0543	8.4	256
	1200	0.5	15
	1834	9.4	287

September

	Time	Height	
	h m	ft	cm
1 Tu	0044	2.0	61
	0646	8.3	253
	1246	1.6	49
	1909	9.4	287
2 W	0134	1.2	37
	0751	8.1	247
	1334	2.7	82
	1945	9.2	280
3 Th	0227	0.7	21
	0902	7.9	241
	1427	3.8	116
	2024	8.9	271
4 F	0323	0.4	12
	1020	7.7	235
	1528	4.9	149
	2108	8.5	259
5 Sa ◑	0424	0.3	9
	1145	7.8	238
	1643	5.6	171
	2159	8.0	244
6 Su	0528	0.3	9
	1309	8.0	244
	1812	5.9	180
	2302	7.5	229
7 M	0633	0.4	12
	1418	8.3	253
	1939	5.7	174
8 Tu	0015	7.2	219
	0734	0.4	12
	1510	8.5	259
	2044	5.3	162
9 W	0127	7.1	216
	0828	0.5	15
	1551	8.6	262
	2132	4.8	146
10 Th	0231	7.2	219
	0915	0.7	21
	1624	8.6	262
	2210	4.3	131
11 F	0325	7.3	223
	0955	1.0	30
	1652	8.5	259
	2242	3.8	116
12 Sa ●	0413	7.4	226
	1031	1.3	40
	1716	8.4	256
	2312	3.3	101
13 Su	0457	7.5	229
	1106	1.8	55
	1738	8.3	253
	2341	2.8	85
14 M	0541	7.6	232
	1139	2.3	70
	1759	8.2	250
15 Tu	0011	2.3	70
	0625	7.7	235
	1214	2.9	88
	1821	8.1	247

	Time	Height	
	h m	ft	cm
16 W	0043	1.9	58
	0710	7.7	235
	1250	3.5	107
	1844	8.0	244
17 Th	0117	1.6	49
	0758	7.7	235
	1328	4.2	128
	1908	7.8	238
18 F	0155	1.3	40
	0852	7.6	232
	1410	4.8	146
	1934	7.7	235
19 Sa	0237	1.1	34
	0952	7.6	232
	1500	5.4	165
	2004	7.5	229
20 Su	0326	1.0	30
	1101	7.6	232
	1604	5.9	180
	2042	7.3	223
21 M ◐	0423	0.9	27
	1214	7.7	235
	1723	6.1	186
	2137	7.1	216
22 Tu	0526	0.8	24
	1320	8.0	244
	1842	5.9	180
	2256	6.9	210
23 W	0630	0.7	21
	1411	8.2	250
	1945	5.4	165
24 Th	0023	7.0	213
	0730	0.5	15
	1452	8.5	259
	2035	4.7	143
25 F	0142	7.3	223
	0825	0.5	15
	1527	8.8	268
	2119	3.7	113
26 Sa	0251	7.8	238
	0917	0.7	21
	1601	9.0	274
	2202	2.7	82
27 Su ○	0355	8.2	250
	1006	1.1	34
	1633	9.1	277
	2245	1.6	49
28 M	0456	8.6	262
	1054	1.8	55
	1706	9.2	280
	2329	0.6	18
29 Tu	0556	8.9	271
	1143	2.6	79
	1740	9.1	277
30 W	0014	−0.1	−3
	0656	9.0	274
	1233	3.5	107
	1816	9.0	274

Time meridian 120° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.
Heights are referred to mean lower low water which is the chart datum of soundings.

Cherry Point, Washington, 2015

Times and Heights of High and Low Waters

October

	Time	Height	
	h m	ft	cm
1 Th	0101	−0.5	−15
	0757	9.1	277
	1326	4.4	134
	1854	8.6	262
2 F	0149	−0.6	−18
	0901	9.0	274
	1426	5.1	155
	1935	8.2	250
3 Sa	0242	−0.4	−12
	1009	8.8	268
	1535	5.6	171
	2023	7.6	232
4 Su ◑	0338	0.0	0
	1119	8.7	265
	1659	5.7	174
	2122	7.0	213
5 M	0440	0.6	18
	1228	8.6	262
	1830	5.4	165
	2241	6.5	198
6 Tu	0547	1.1	34
	1328	8.6	262
	1944	4.8	146
7 W	0012	6.2	189
	0652	1.5	46
	1416	8.6	262
	2035	4.2	128
8 Th	0135	6.4	195
	0751	1.9	58
	1455	8.5	259
	2113	3.5	107
9 F	0242	6.7	204
	0841	2.3	70
	1525	8.4	256
	2144	2.9	88
10 Sa	0337	7.1	216
	0925	2.7	82
	1551	8.3	253
	2212	2.3	70
11 Su	0424	7.4	226
	1004	3.1	94
	1613	8.2	250
	2239	1.7	52
12 M ●	0507	7.8	238
	1042	3.6	110
	1634	8.1	247
	2306	1.2	37
13 Tu	0549	8.1	247
	1118	4.1	125
	1655	8.0	244
	2334	0.8	24
14 W	0630	8.4	256
	1156	4.6	140
	1717	7.9	241
15 Th	0005	0.4	12
	0712	8.6	262
	1236	5.0	152
	1740	7.8	238

	Time	Height	
	h m	ft	cm
16 F	0037	0.2	6
	0756	8.7	265
	1319	5.4	165
	1805	7.6	232
17 Sa	0114	0.1	3
	0844	8.7	265
	1407	5.8	177
	1833	7.4	226
18 Su	0154	0.1	3
	0936	8.6	262
	1504	6.0	183
	1907	7.2	219
19 M	0241	0.2	6
	1033	8.6	262
	1614	6.1	186
	1953	6.8	207
20 Tu ◐	0335	0.5	15
	1131	8.6	262
	1731	5.8	177
	2105	6.4	195
21 W	0436	0.8	24
	1225	8.7	265
	1841	5.2	158
	2247	6.2	189
22 Th	0543	1.2	37
	1312	8.8	268
	1934	4.3	131
23 F	0029	6.3	192
	0649	1.6	49
	1353	9.0	274
	2019	3.2	98
24 Sa	0155	6.8	207
	0751	2.1	64
	1429	9.1	277
	2101	1.9	58
25 Su	0308	7.5	229
	0848	2.7	82
	1504	9.2	280
	2142	0.7	21
26 M	0412	8.3	253
	0943	3.3	101
	1538	9.3	283
	2223	−0.4	−12
27 Tu ○	0511	9.0	274
	1036	4.0	122
	1613	9.2	280
	2305	−1.2	−37
28 W	0608	9.5	290
	1129	4.7	143
	1649	9.1	277
	2348	−1.6	−49
29 Th	0703	9.8	299
	1224	5.3	162
	1727	8.7	265
30 F	0032	−1.7	−52
	0757	9.9	302
	1322	5.7	174
	1807	8.3	253
31 Sa	0117	−1.4	−43
	0852	9.8	299
	1427	5.9	180
	1851	7.6	232

November

	Time	Height	
	h m	ft	cm
1 Su	0205	−0.8	−24
	0948	9.6	293
	1541	5.8	177
	1942	6.9	210
2 M	0255	0.0	0
	1045	9.4	287
	1705	5.5	168
	2048	6.2	189
3 Tu ◑	0350	0.8	24
	1140	9.2	280
	1826	4.9	149
	2218	5.7	174
4 W	0450	1.7	52
	1230	9.0	274
	1927	4.1	125
5 Th	0001	5.5	168
	0554	2.6	79
	1313	8.8	268
	2010	3.3	101
6 F	0135	5.8	177
	0657	3.3	101
	1349	8.6	262
	2044	2.5	76
7 Sa	0248	6.4	195
	0755	3.9	119
	1419	8.5	259
	2113	1.8	55
8 Su	0345	7.0	213
	0846	4.4	134
	1444	8.4	256
	2140	1.1	34
9 M	0432	7.7	235
	0933	4.9	149
	1508	8.3	253
	2207	0.5	15
10 Tu	0514	8.2	250
	1016	5.3	162
	1530	8.2	250
	2234	0.0	0
11 W ●	0553	8.7	265
	1059	5.7	174
	1553	8.1	247
	2304	−0.4	−12
12 Th	0632	9.1	277
	1141	6.0	183
	1618	8.0	244
	2335	−0.8	−24
13 F	0711	9.3	283
	1225	6.2	189
	1645	7.9	241
14 Sa	0009	−0.9	−27
	0751	9.5	290
	1312	6.3	192
	1716	7.7	235
15 Su	0046	−0.9	−27
	0834	9.6	293
	1405	6.4	195
	1751	7.4	226

	Time	Height	
	h m	ft	cm
16 M	0126	−0.8	−24
	0918	9.6	293
	1504	6.3	192
	1835	7.1	216
17 Tu	0210	−0.4	−12
	1004	9.5	290
	1612	5.9	180
	1934	6.5	198
18 W ◐	0300	0.2	6
	1050	9.5	290
	1722	5.2	158
	2102	6.0	183
19 Th	0356	1.1	34
	1135	9.5	290
	1823	4.3	131
	2253	5.7	174
20 F	0459	2.0	61
	1217	9.5	290
	1914	3.1	94
21 Sa	0042	5.9	180
	0607	3.0	91
	1257	9.5	290
	1959	1.7	52
22 Su	0214	6.7	204
	0715	3.9	119
	1335	9.5	290
	2041	0.4	12
23 M	0327	7.7	235
	0821	4.7	143
	1412	9.5	290
	2122	−0.7	−21
24 Tu	0429	8.6	262
	0923	5.4	165
	1450	9.5	290
	2204	−1.6	−49
25 W ○	0524	9.4	287
	1023	5.9	180
	1528	9.3	283
	2245	−2.1	−64
26 Th	0614	10.0	305
	1121	6.2	189
	1608	9.0	274
	2327	−2.3	−70
27 F	0703	10.3	314
	1219	6.3	192
	1649	8.6	262
28 Sa	0008	−2.1	−64
	0749	10.4	317
	1318	6.3	192
	1732	8.0	244
29 Su	0051	−1.6	−49
	0835	10.3	314
	1421	6.1	186
	1820	7.4	226
30 M	0133	−0.9	−27
	0920	10.1	308
	1529	5.7	174
	1913	6.6	201

December

	Time	Height	
	h m	ft	cm
1 Tu	0217	0.1	3
	1004	9.9	302
	1641	5.2	158
	2021	5.9	180
2 W ◑	0302	1.1	34
	1046	9.6	293
	1749	4.5	137
	2149	5.4	165
3 Th	0351	2.2	67
	1127	9.3	283
	1845	3.6	110
	2335	5.2	158
4 F	0446	3.3	101
	1204	9.1	277
	1928	2.8	85
5 Sa	0123	5.6	171
	0549	4.3	131
	1238	8.8	268
	2004	2.0	61
6 Su	0248	6.3	192
	0656	5.2	158
	1309	8.7	265
	2035	1.2	37
7 M	0349	7.2	219
	0801	5.8	177
	1337	8.5	259
	2106	0.5	15
8 Tu	0435	7.9	241
	0859	6.2	189
	1405	8.5	259
	2135	−0.2	−6
9 W	0514	8.6	262
	0951	6.6	201
	1433	8.4	256
	2206	−0.7	−21
10 Th	0551	9.1	277
	1040	6.7	204
	1503	8.3	253
	2238	−1.1	−34
11 F ●	0626	9.5	290
	1126	6.8	207
	1536	8.3	253
	2312	−1.4	−43
12 Sa	0701	9.8	299
	1212	6.8	207
	1612	8.1	247
	2348	−1.6	−49
13 Su	0737	10.0	305
	1300	6.7	204
	1653	7.9	241
14 M	0026	−1.5	−46
	0814	10.1	308
	1351	6.4	195
	1740	7.6	232
15 Tu	0106	−1.1	−34
	0851	10.2	311
	1447	5.9	180
	1837	7.1	216

	Time	Height	
	h m	ft	cm
16 W	0149	−0.5	−15
	0929	10.1	308
	1547	5.2	158
	1947	6.5	198
17 Th	0234	0.5	15
	1008	10.1	308
	1649	4.3	131
	2117	5.9	180
18 F ◐	0324	1.7	52
	1046	10.0	305
	1749	3.2	98
	2305	5.7	174
19 Sa	0422	3.0	91
	1126	9.9	302
	1844	1.9	58
20 Su	0057	6.1	186
	0530	4.4	134
	1206	9.8	299
	1934	0.7	21
21 M	0233	7.0	213
	0646	5.5	168
	1247	9.7	296
	2020	−0.5	−15
22 Tu	0345	8.1	247
	0803	6.2	189
	1329	9.6	293
	2104	−1.3	−40
23 W	0441	9.0	274
	0914	6.7	204
	1413	9.4	287
	2147	−1.9	−58
24 Th	0529	9.7	296
	1018	6.8	207
	1457	9.1	277
	2229	−2.2	−67
25 F ○	0612	10.1	308
	1117	6.8	207
	1543	8.8	268
	2309	−2.1	−64
26 Sa	0652	10.4	317
	1212	6.5	198
	1629	8.3	253
	2349	−1.8	−55
27 Su	0731	10.4	317
	1305	6.2	189
	1717	7.8	238
28 M	0028	−1.2	−37
	0807	10.3	314
	1359	5.8	177
	1807	7.3	223
29 Tu	0107	−0.5	−15
	0843	10.1	308
	1453	5.3	162
	1902	6.7	204
30 W	0145	0.5	15
	0917	9.9	302
	1548	4.7	143
	2005	6.1	186
31 Th	0222	1.6	49
	0950	9.6	293
	1644	4.1	125
	2122	5.6	171

Time meridian 120° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.
Heights are referred to mean lower low water which is the chart datum of soundings.

Victoria, British Columbia, 2015

Times and Heights of High and Low Waters

January

	Time	Height	
	h m	ft	cm
1 Th	1049	9.5	290
	1855	2.3	70
2 F	0446	8.2	250
	0607	7.9	240
	1125	9.5	290
	1934	1.6	50
3 Sa	0527	8.5	260
	0708	8.2	250
	1159	9.2	280
	2013	1.6	50
4 Su ○	0607	8.5	260
	0802	8.2	250
	1228	9.2	280
	2051	1.6	50
5 M	0644	8.5	260
	0854	8.2	250
	1233	8.9	270
	2128	1.6	50
6 Tu	0717	8.5	260
	0944	8.2	250
	1256	8.9	270
	2203	2.0	60
7 W	0745	8.5	260
	1035	7.9	240
	1327	8.2	250
	2236	2.3	70
8 Th	0803	8.5	260
	1128	7.5	230
	1401	7.9	240
	2306	3.0	90
9 F	0808	8.5	260
	1230	7.2	220
	1433	7.5	230
	2332	3.6	110
10 Sa	0749	8.5	260
	2353	4.3	130
11 Su	0751	8.5	260
12 M	0010	4.9	150
	0806	8.5	260
	1630	5.6	170
	2015	5.6	170
13 Tu ◑	0014	5.6	170
	0827	8.9	270
	1658	4.6	140
14 W	0850	8.9	270
	1728	3.9	120
15 Th	0914	9.2	280
	1759	3.3	100

	Time	Height	
	h m	ft	cm
16 F	0940	9.2	280
	1834	2.6	80
17 Sa	1010	9.5	290
	1911	2.0	60
18 Su	1050	9.5	290
	1950	1.3	40
19 M	0601	8.2	250
	0706	8.2	250
	1141	9.8	300
	2029	1.0	30
20 Tu ●	0615	8.2	250
	0815	7.9	240
	1243	9.5	290
	2109	1.0	30
21 W	0633	8.2	250
	0913	7.5	230
	1358	9.2	280
	2150	1.3	40
22 Th	0509	8.2	250
	1010	7.2	220
	1508	8.9	270
	2231	1.6	50
23 F	0537	8.5	260
	1108	6.6	200
	1613	8.2	250
	2312	2.6	80
24 Sa	0614	8.9	270
	1211	5.9	180
	1721	7.2	220
	2353	3.6	110
25 Su	0652	9.2	280
	1322	5.2	160
	1845	6.6	200
26 M ◐	0033	4.6	140
	0732	9.2	280
	1440	4.6	140
	2058	6.2	190
27 Tu	0108	5.9	180
	0812	9.2	280
	1557	3.9	120
28 W	0852	9.2	280
	1702	3.3	100
29 Th	0933	9.2	280
	1755	3.0	90
30 F	1015	8.9	270
	1840	2.6	80
31 Sa	0426	8.2	250
	0606	8.2	250
	1103	8.9	270
	1920	2.3	70

February

	Time	Height	
	h m	ft	cm
1 Su	0503	8.2	250
	0705	8.2	250
	1157	8.9	270
	1959	2.3	70
2 M	0538	8.2	250
	0754	7.9	240
	1248	8.5	260
	2035	2.3	70
3 Tu ○	0608	8.2	250
	0840	7.5	230
	1333	8.5	260
	2109	2.3	70
4 W	0631	8.2	250
	0922	7.2	220
	1415	8.2	250
	2141	2.6	80
5 Th	0642	7.9	240
	1003	6.9	210
	1455	7.9	240
	2211	3.3	100
6 F	0525	7.9	240
	1044	6.6	200
	1537	7.5	230
	2237	3.6	110
7 Sa	0540	8.2	250
	1127	6.2	190
	1623	7.2	220
	2300	4.3	130
8 Su	0601	8.2	250
	1214	5.9	180
	1717	6.6	200
	2322	4.9	150
9 M	0625	8.2	250
	1307	5.2	160
	1827	6.2	190
	2340	5.6	170
10 Tu	0650	8.5	260
	1407	4.9	150
	2048	5.9	180
	2335	5.9	180
11 W ◑	0715	8.5	260
	1511	4.3	130
12 Th	0741	8.5	260
	1611	3.6	110
13 F	0809	8.9	270
	1707	3.3	100
14 Sa	0845	8.9	270
	1757	2.6	80
15 Su	0935	9.2	280
	1843	2.0	60

	Time	Height	
	h m	ft	cm
16 M	0438	7.9	240
	0606	7.9	240
	1039	9.2	280
	1925	1.6	50
17 Tu	0448	7.9	240
	0715	7.5	230
	1203	9.2	280
	2007	1.6	50
18 W ●	0318	7.9	240
	0810	6.9	210
	1324	8.9	270
	2047	1.6	50
19 Th	0333	8.2	250
	0903	6.2	190
	1429	8.9	270
	2127	2.3	70
20 F	0403	8.5	260
	0954	5.6	170
	1530	8.2	250
	2208	3.0	90
21 Sa	0438	8.5	260
	1047	4.9	150
	1632	7.9	240
	2248	3.9	120
22 Su	0516	8.9	270
	1142	4.3	130
	1741	7.2	220
	2329	4.9	150
23 M	0555	8.9	270
	1243	3.9	120
	1914	6.6	200
24 Tu	0010	5.9	180
	0635	8.9	270
	1352	3.6	110
	2305	6.9	210
25 W ◐	0053	6.6	200
	0716	8.9	270
	1504	3.3	100
26 Th	0756	8.5	260
	1615	3.3	100
27 F	0213	7.9	240
	0355	7.5	230
	0839	8.2	250
	1718	3.0	90
28 Sa	0255	7.9	240
	0516	7.9	240
	0940	8.2	250
	1811	3.0	90

March

	Time	Height	
	h m	ft	cm
1 Su	0335	7.9	240
	0617	7.5	230
	1106	7.9	240
	1856	3.0	90
2 M	0409	7.9	240
	0705	7.2	220
	1211	7.9	240
	1935	3.0	90
3 Tu	0437	7.9	240
	0747	6.9	210
	1303	7.9	240
	2010	3.3	100
4 W	0448	7.5	230
	0824	6.6	200
	1349	7.9	240
	2043	3.6	110
5 Th ○	0323	7.5	230
	0900	5.9	180
	1432	7.5	230
	2113	3.9	120
6 F	0340	7.5	230
	0935	5.6	170
	1515	7.5	230
	2140	4.3	130
7 Sa	0402	7.9	240
	1010	5.2	160
	1559	7.2	220
	2205	4.9	150
8 Su	0426	7.9	240
	1047	4.6	140
	1647	7.2	220
	2229	5.2	160
9 M	0451	8.2	250
	1127	4.3	130
	1743	6.9	210
	2254	5.9	180
10 Tu	0516	8.2	250
	1211	3.9	120
	1859	6.6	200
	2318	6.2	190
11 W	0540	8.2	250
	1302	3.6	110
12 Th	0602	8.2	250
	1359	3.6	110
13 F ◑	0622	8.2	250
	1501	3.3	100
14 Sa	0654	8.2	250
	1607	3.0	90
15 Su	0225	7.9	240
	0348	7.5	230
	0752	8.2	250
	1710	2.6	80

	Time	Height	
	h m	ft	cm
16 M	0237	7.9	240
	0520	7.5	230
	0914	8.2	250
	1806	2.6	80
17 Tu	0237	7.5	230
	0622	6.9	210
	1107	8.2	250
	1854	2.6	80
18 W	0147	7.9	240
	0713	6.2	190
	1236	8.2	250
	1938	2.6	80
19 Th	0207	7.9	240
	0802	5.2	160
	1343	8.2	250
	2020	3.3	100
20 F ●	0237	8.2	250
	0849	4.3	130
	1444	7.9	240
	2101	3.6	110
21 Sa	0310	8.5	260
	0936	3.6	110
	1544	7.9	240
	2142	4.6	140
22 Su	0346	8.9	270
	1024	3.0	90
	1648	7.5	230
	2224	5.2	160
23 M	0423	8.9	270
	1115	2.6	80
	1808	7.2	220
	2309	6.2	190
24 Tu	0500	8.9	270
	1208	2.6	80
	2103	7.2	220
25 W	0001	6.9	210
	0536	8.5	260
	1307	2.6	80
	2251	7.5	230
26 Th ◐	0116	7.2	220
	0606	8.2	250
	1412	3.0	90
27 F	0014	7.9	240
	0302	7.5	230
	0616	7.9	240
	1519	3.3	100
28 Sa	0106	7.9	240
	0433	7.2	220
	0620	7.5	230
	1625	3.3	100
29 Su	0146	7.9	240
	0543	7.2	220
	0703	7.2	220
	1725	3.6	110
30 M	0215	7.9	240
	0627	6.6	200
	1111	6.9	210
	1815	3.9	120
31 Tu	0211	7.5	230
	0702	6.2	190
	1218	6.9	210
	1858	3.9	120

Time meridian 120° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.
Heights are referred to the Canadian chart datum of soundings. Subtract 2.5 feet (76 centimeters) to refer these levels to the datum of N.O.S. charts.

Victoria, British Columbia, 2015

Times and Heights of High and Low Waters

April

	Time	Height	
	h m	ft	cm
1 W	0139	7.5	230
	0734	5.6	170
	1311	6.9	210
	1935	4.3	130
2 Th	0152	7.5	230
	0806	4.9	150
	1359	6.9	210
	2008	4.6	140
3 F	0212	7.5	230
	0837	4.6	140
	1445	7.2	220
	2037	5.2	160
4 Sa ○	0234	7.9	240
	0908	3.9	120
	1530	7.2	220
	2104	5.6	170
5 Su	0258	7.9	240
	0941	3.3	100
	1617	7.2	220
	2130	5.9	180
6 M	0322	7.9	240
	1016	3.0	90
	1710	7.2	220
	2159	6.2	190
7 Tu	0346	8.2	250
	1054	2.6	80
	1821	7.2	220
	2230	6.9	210
8 W	0408	8.2	250
	1136	2.6	80
	2105	7.2	220
	2307	7.2	220
9 Th	0422	8.2	250
	1222	2.6	80
	2230	7.5	230
	2357	7.5	230
10 F	0423	8.2	250
	1315	2.6	80
	2335	7.5	230
11 Sa ◑	0125	7.5	230
	0447	7.9	240
	1413	2.6	80
12 Su	0016	7.9	240
	0313	7.5	230
	0540	7.5	230
	1515	2.6	80
13 M	0042	7.9	240
	0433	7.2	220
	0710	7.2	220
	1620	3.0	90
14 Tu	0028	7.9	240
	0531	6.2	190
	0951	6.9	210
	1722	3.3	100
15 W	0020	7.9	240
	0619	5.6	170
	1140	6.9	210
	1816	3.6	110

	Time	Height	
	h m	ft	cm
16 Th	0043	8.2	250
	0705	4.6	140
	1254	7.2	220
	1905	4.3	130
17 F	0113	8.5	260
	0750	3.3	100
	1358	7.2	220
	1949	4.6	140
18 Sa ●	0146	8.5	260
	0834	2.6	80
	1459	7.2	220
	2033	5.2	160
19 Su	0221	8.9	270
	0918	1.6	50
	1603	7.5	230
	2117	5.9	180
20 M	0257	8.9	270
	1003	1.3	40
	1724	7.5	230
	2204	6.6	200
21 Tu	0333	8.9	270
	1049	1.3	40
	1959	7.5	230
	2257	7.2	220
22 W	0406	8.5	260
	1137	1.6	50
	2110	7.9	240
23 Th	0005	7.5	230
	0432	8.2	250
	1229	2.0	60
	2217	7.9	240
24 F	0144	7.5	230
	0431	7.5	230
	1323	2.6	80
	2312	8.2	250
25 Sa ◐	1420	3.0	90
	2351	7.9	240
26 Su	1519	3.6	110
27 M	0009	7.9	240
	1619	3.9	120
28 Tu	0001	7.9	240
	0629	5.6	170
	1107	5.9	180
	1716	4.6	140
29 W	0008	7.9	240
	0648	4.9	150
	1221	6.2	190
	1806	4.9	150
30 Th	0025	7.9	240
	0715	4.3	130
	1322	6.2	190
	1847	5.2	160

May

	Time	Height	
	h m	ft	cm
1 F	0045	7.9	240
	0743	3.6	110
	1418	6.6	200
	1921	5.9	180
2 Sa	0107	7.9	240
	0812	3.3	100
	1513	6.9	210
	1951	6.2	190
3 Su ○	0130	8.2	250
	0842	2.6	80
	1618	6.9	210
	2021	6.6	200
4 M	0153	8.2	250
	0915	2.0	60
	1812	7.2	220
	2054	6.9	210
5 Tu	0216	8.2	250
	0950	1.6	50
	1911	7.5	230
	2131	7.2	220
6 W	0235	8.2	250
	1028	1.3	40
	2007	7.5	230
	2215	7.5	230
7 Th	0239	8.2	250
	1110	1.3	40
	2102	7.9	240
	2310	7.5	230
8 F	0252	8.2	250
	1155	1.6	50
	2151	7.9	240
9 Sa	0024	7.5	230
	0325	7.9	240
	1245	2.0	60
	2232	7.9	240
10 Su	0154	7.5	230
	0409	7.5	230
	1337	2.3	70
	2258	7.9	240
11 M ◑	0322	6.9	210
	0511	6.9	210
	1434	3.0	90
	2243	7.9	240
12 Tu	0430	6.2	190
	0804	6.2	190
	1533	3.6	110
	2253	8.2	250
13 W	0522	5.2	160
	1029	6.2	190
	1635	4.3	130
	2319	8.2	250
14 Th	0608	3.9	120
	1200	6.2	190
	1735	4.9	150
	2350	8.5	260
15 F	0652	3.0	90
	1315	6.6	200
	1829	5.6	170

	Time	Height	
	h m	ft	cm
16 Sa	0023	8.9	270
	0735	2.0	60
	1427	6.9	210
	1919	5.9	180
17 Su ●	0059	8.9	270
	0817	1.3	40
	1719	7.2	220
	2007	6.6	200
18 M	0135	8.9	270
	0859	1.0	30
	1818	7.5	230
	2056	6.9	210
19 Tu	0212	8.9	270
	0943	0.7	20
	1912	7.9	240
	2148	7.2	220
20 W	0247	8.5	260
	1027	1.0	30
	2004	7.9	240
	2247	7.5	230
21 Th	0316	8.2	250
	1111	1.3	40
	2053	8.2	250
	2359	7.5	230
22 F	0323	7.9	240
	1156	1.6	50
	2136	8.2	250
23 Sa	0134	7.2	220
	0323	7.5	230
	1240	2.3	70
	2207	8.2	250
24 Su	1323	3.0	90
	2221	7.9	240
25 M ◐	1402	3.6	110
	2225	7.9	240
26 Tu	1435	4.3	130
	2238	7.9	240
27 W	0559	4.9	150
	1058	5.6	170
	1452	4.9	150
	2256	7.9	240
28 Th	0621	4.3	130
	1232	5.6	170
	1445	5.6	170
	2316	8.2	250
29 F	0648	3.6	110
	2336	8.2	250
30 Sa	0716	3.0	90
	2358	8.2	250
31 Su	0746	2.3	70
	1735	6.9	210
	1845	6.9	210

June

	Time	Height	
	h m	ft	cm
1 M	0021	8.5	260
	0817	1.6	50
	1804	7.2	220
	1931	7.2	220
2 Tu ○	0043	8.5	260
	0851	1.3	40
	1840	7.5	230
	2019	7.5	230
3 W	0105	8.9	270
	0928	1.0	30
	1918	7.5	230
	2109	7.5	230
4 Th	0130	8.9	270
	1008	0.7	20
	1956	7.9	240
	2205	7.5	230
5 F	0204	8.5	260
	1050	1.0	30
	2032	7.9	240
	2307	7.5	230
6 Sa	0245	8.2	250
	1134	1.0	30
	2102	7.9	240
7 Su	0017	7.2	220
	0331	7.9	240
	1221	1.6	50
	2112	7.9	240
8 M	0135	6.9	210
	0426	7.2	220
	1309	2.3	70
	2100	8.2	250
9 Tu ◑	0255	5.9	180
	0638	6.2	190
	1358	3.3	100
	2126	8.2	250
10 W	0406	5.2	160
	0859	5.9	180
	1451	4.3	130
	2157	8.5	260
11 Th	0503	3.9	120
	1054	5.6	170
	1548	4.9	150
	2230	8.5	260
12 F	0552	3.0	90
	1429	6.2	190
	1653	5.9	180
	2304	8.9	270
13 Sa	0637	2.3	70
	1555	6.6	200
	1755	6.6	200
	2340	8.9	270
14 Su	0720	1.3	40
	1652	7.2	220
	1853	6.9	210
15 M	0018	9.2	280
	0802	1.0	30
	1741	7.5	230
	1946	7.2	220

	Time	Height	
	h m	ft	cm
16 Tu ●	0058	8.9	270
	0844	0.7	20
	1827	7.9	240
	2039	7.5	230
17 W	0138	8.9	270
	0926	0.7	20
	1909	7.9	240
	2133	7.5	230
18 Th	0215	8.5	260
	1007	1.0	30
	1949	7.9	240
	2230	7.5	230
19 F	0244	8.2	250
	1047	1.3	40
	2022	7.9	240
	2331	7.2	220
20 Sa	0300	7.9	240
	1126	2.0	60
	2045	7.9	240
21 Su	0042	6.9	210
	0322	7.2	220
	1202	2.6	80
	2052	7.9	240
22 M	0208	6.6	200
	0356	6.6	200
	1234	3.3	100
	2052	7.9	240
23 Tu	0335	5.9	180
	0455	5.9	180
	1257	3.9	120
	2105	7.9	240
24 W ◐	0430	5.2	160
	0755	5.6	170
	1313	4.6	140
	2123	8.2	250
25 Th	0508	4.6	140
	1047	5.2	160
	1318	5.2	160
	2143	8.2	250
26 F	0542	3.9	120
	2205	8.2	250
27 Sa	0615	3.3	100
	2228	8.5	260
28 Su	0646	2.6	80
	2254	8.5	260
29 M	0719	2.0	60
	2322	8.9	270
30 Tu	0754	1.3	40
	2356	8.9	270

Time meridian 120° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.
Heights are referred to the Canadian chart datum of soundings. Subtract 2.5 feet (76 centimeters) to refer these levels to the datum of N.O.S. charts.

Victoria, British Columbia, 2015

Times and Heights of High and Low Waters

July

	Time	Height	
	h m	ft	cm
1 W ○	0830	1.0	30
	1830	7.5	230
	1956	7.5	230
2 Th	0038	9.2	280
	0909	0.7	20
	1854	7.5	230
	2056	7.5	230
3 F	0128	8.9	270
	0949	0.7	20
	1919	7.5	230
	2154	7.2	220
4 Sa	0227	8.5	260
	1031	0.7	20
	1844	7.9	240
	2253	6.9	210
5 Su	0330	8.2	250
	1114	1.3	40
	1839	7.9	240
	2356	6.6	200
6 M	0435	7.5	230
	1157	2.0	60
	1915	8.2	250
7 Tu	0105	5.9	180
	0551	6.9	210
	1241	3.0	90
	1953	8.5	260
8 W ◑	0220	4.9	150
	0726	5.9	180
	1326	3.9	120
	2031	8.5	260
9 Th	0334	4.3	130
	0924	5.6	170
	1412	4.9	150
	2109	8.9	270
10 F	0438	3.3	100
	1339	5.9	180
	1504	5.9	180
	2147	8.9	270
11 Sa	0533	2.6	80
	1514	6.6	200
	1617	6.6	200
	2226	8.9	270
12 Su	0621	2.0	60
	1606	7.2	220
	1733	7.2	220
	2308	8.9	270
13 M	0706	1.6	50
	1651	7.5	230
	1837	7.2	220
	2353	8.9	270
14 Tu	0748	1.3	40
	1733	7.5	230
	1933	7.2	220
15 W ●	0040	8.9	270
	0829	1.0	30
	1812	7.9	240
	2026	7.2	220

	Time	Height	
	h m	ft	cm
16 Th	0126	8.5	260
	0909	1.3	40
	1846	7.9	240
	2116	7.2	220
17 F	0210	8.5	260
	0947	1.6	50
	1913	7.5	230
	2205	6.9	210
18 Sa	0249	7.9	240
	1023	2.0	60
	1929	7.5	230
	2255	6.9	210
19 Su	0327	7.5	230
	1057	2.3	70
	1840	7.5	230
	2347	6.6	200
20 M	0408	7.2	220
	1127	3.0	90
	1855	7.9	240
21 Tu	0045	5.9	180
	0458	6.6	200
	1152	3.6	110
	1918	7.9	240
22 W	0150	5.6	170
	0604	5.9	180
	1212	4.3	130
	1943	7.9	240
23 Th ◐	0259	4.9	150
	0753	5.6	170
	1228	4.9	150
	2007	8.2	250
24 F	0359	4.3	130
	1053	5.6	170
	1226	5.6	170
	2033	8.2	250
25 Sa	0448	3.6	110
	2101	8.2	250
26 Su	0532	3.0	90
	2132	8.5	260
27 M	0612	2.6	80
	2207	8.9	270
28 Tu	0651	2.0	60
	2249	8.9	270
29 W	0730	1.3	40
	1729	7.5	230
	1842	7.2	220
	2341	8.9	270
30 Th	0809	1.0	30
	1740	7.5	230
	1949	7.2	220
31 F ○	0044	9.2	280
	0849	1.0	30
	1602	7.5	230
	2046	6.9	210

August

	Time	Height	
	h m	ft	cm
1 Sa	0151	8.9	270
	0929	1.0	30
	1626	7.5	230
	2140	6.2	190
2 Su	0254	8.5	260
	1009	1.3	40
	1659	7.9	240
	2235	5.9	180
3 M	0355	8.2	250
	1050	2.0	60
	1737	8.2	250
	2333	5.2	160
4 Tu	0459	7.2	220
	1131	3.0	90
	1817	8.5	260
5 W	0035	4.6	140
	0612	6.6	200
	1214	3.9	120
	1858	8.5	260
6 Th ◑	0145	3.9	120
	0748	6.2	190
	1257	5.2	160
	1940	8.5	260
7 F	0257	3.6	110
	1132	6.2	190
	1343	5.9	180
	2023	8.5	260
8 Sa	0407	3.0	90
	2108	8.5	260
9 Su	0510	2.6	80
	1455	7.2	220
	1620	7.2	220
	2156	8.5	260
10 M	0604	2.3	70
	1540	7.5	230
	1735	7.2	220
	2251	8.5	260
11 Tu	0651	2.0	60
	1621	7.5	230
	1835	7.2	220
	2349	8.5	260
12 W	0733	2.0	60
	1659	7.5	230
	1926	6.9	210
13 Th	0043	8.5	260
	0812	2.0	60
	1731	7.5	230
	2013	6.9	210
14 F ●	0131	8.2	250
	0849	2.0	60
	1753	7.2	220
	2057	6.6	200
15 Sa	0215	8.2	250
	0924	2.3	70
	1613	7.5	230
	2139	6.2	190

	Time	Height	
	h m	ft	cm
16 Su	0257	7.9	240
	0957	3.0	90
	1639	7.5	230
	2221	5.9	180
17 M	0340	7.5	230
	1026	3.3	100
	1706	7.5	230
	2302	5.6	170
18 Tu	0425	6.9	210
	1053	3.9	120
	1734	7.9	240
	2347	5.2	160
19 W	0516	6.6	200
	1116	4.6	140
	1801	7.9	240
20 Th	0036	4.9	150
	0620	6.2	190
	1137	5.2	160
	1829	7.9	240
21 F	0132	4.3	130
	0802	5.9	180
	1156	5.9	180
	1857	7.9	240
22 Sa ◐	0233	3.9	120
	1927	8.2	250
23 Su	0336	3.6	110
	2000	8.2	250
24 M	0436	3.0	90
	2040	8.2	250
25 Tu	0530	2.6	80
	2131	8.5	260
26 W	0618	2.3	70
	1543	7.2	220
	1745	7.2	220
	2234	8.5	260
27 Th	0702	2.0	60
	1533	7.2	220
	1850	6.9	210
	2351	8.5	260
28 F	0744	1.6	50
	1437	7.5	230
	1945	6.2	190
29 Sa ○	0104	8.5	260
	0824	1.6	50
	1501	7.5	230
	2035	5.6	170
30 Su	0208	8.5	260
	0904	2.0	60
	1532	7.9	240
	2125	4.9	150
31 M	0307	8.2	250
	0944	2.6	80
	1607	8.2	250
	2216	4.3	130

September

	Time	Height	
	h m	ft	cm
1 Tu	0407	7.9	240
	1025	3.6	110
	1644	8.5	260
	2308	3.6	110
2 W	0512	7.2	220
	1106	4.6	140
	1724	8.5	260
3 Th	0005	3.3	100
	0629	6.9	210
	1150	5.2	160
	1805	8.5	260
4 F	0108	3.0	90
	0847	6.6	200
	1240	6.2	190
	1848	8.5	260
5 Sa ◑	0218	3.0	90
	1149	6.9	210
	1350	6.9	210
	1934	8.2	250
6 Su	0329	3.0	90
	1312	7.2	220
	1524	7.2	220
	2028	8.2	250
7 M	0437	3.0	90
	1403	7.5	230
	1644	7.2	220
	2136	7.9	240
8 Tu	0537	3.0	90
	1446	7.5	230
	1746	6.9	210
	2252	7.9	240
9 W	0627	3.0	90
	1522	7.5	230
	1837	6.6	200
	2357	7.9	240
10 Th	0710	3.0	90
	1545	7.2	220
	1921	6.2	190
11 F	0050	7.9	240
	0748	3.0	90
	1427	7.2	220
	2001	5.9	180
12 Sa ●	0137	7.5	230
	0824	3.3	100
	1445	7.5	230
	2038	5.6	170
13 Su	0221	7.5	230
	0857	3.6	110
	1510	7.5	230
	2115	4.9	150
14 M	0305	7.5	230
	0927	4.3	130
	1536	7.5	230
	2150	4.6	140
15 Tu	0349	7.2	220
	0954	4.6	140
	1602	7.9	240
	2227	4.3	130

	Time	Height	
	h m	ft	cm
16 W	0436	7.2	220
	1019	5.2	160
	1628	7.9	240
	2305	3.9	120
17 Th	0530	6.9	210
	1044	5.9	180
	1654	7.9	240
	2347	3.6	110
18 F	0639	6.9	210
	1110	6.2	190
	1720	7.9	240
19 Sa	0035	3.6	110
	0926	6.9	210
	1138	6.6	200
	1746	7.9	240
20 Su	0129	3.3	100
	1812	7.9	240
21 M ◐	0229	3.3	100
	1847	7.9	240
22 Tu	0334	3.0	90
	1320	7.5	230
	1544	7.2	220
	1945	7.9	240
23 W	0438	3.0	90
	1339	7.5	230
	1702	7.2	220
	2107	7.9	240
24 Th	0537	2.6	80
	1319	7.5	230
	1759	6.6	200
	2250	7.9	240
25 F	0628	2.6	80
	1315	7.5	230
	1849	5.9	180
26 Sa	0014	7.9	240
	0713	3.0	90
	1338	7.9	240
	1936	4.9	150
27 Su ○	0120	7.9	240
	0755	3.3	100
	1408	8.2	250
	2023	3.9	120
28 M	0220	7.9	240
	0836	3.6	110
	1441	8.5	260
	2109	3.3	100
29 Tu	0318	7.9	240
	0918	4.6	140
	1517	8.9	270
	2156	2.6	80
30 W	0420	7.5	230
	1000	5.2	160
	1554	8.9	270
	2245	2.3	70

Time meridian 120° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.
Heights are referred to the Canadian chart datum of soundings. Subtract 2.5 feet (76 centimeters) to refer these levels to the datum of N.O.S. charts.

Victoria, British Columbia, 2015

Times and Heights of High and Low Waters

October

	Time	Height	
	h m	ft	cm
1 Th	0529	7.5	230
	1045	5.9	180
	1632	8.9	270
	2336	2.0	60
2 F	0720	7.2	220
	1137	6.6	200
	1711	8.5	260
3 Sa	0033	2.3	70
	0952	7.5	230
	1248	7.2	220
	1749	8.2	250
4 Su ◑	0136	2.6	80
	1117	7.9	240
	1427	7.2	220
	1826	7.9	240
5 M	0243	3.0	90
	1216	7.9	240
	1559	7.2	220
	1909	7.2	220
6 Tu	0351	3.3	100
	1258	7.9	240
	1711	6.9	210
	2124	6.9	210
7 W	0454	3.6	110
	1324	7.9	240
	1759	6.2	190
	2258	6.9	210
8 Th	0549	3.9	120
	1307	7.5	230
	1838	5.9	180
9 F	0005	6.9	210
	0636	4.3	130
	1305	7.5	230
	1913	5.2	160
10 Sa	0059	6.9	210
	0716	4.6	140
	1323	7.5	230
	1947	4.6	140
11 Su	0148	7.2	220
	0752	4.9	150
	1347	7.9	240
	2019	4.3	130
12 M ●	0234	7.2	220
	0824	5.2	160
	1411	7.9	240
	2051	3.6	110
13 Tu	0320	7.2	220
	0853	5.9	180
	1435	7.9	240
	2124	3.3	100
14 W	0407	7.2	220
	0919	6.2	190
	1459	8.2	250
	2157	3.0	90
15 Th	0459	7.2	220
	0947	6.6	200
	1522	8.2	250
	2233	2.6	80

	Time	Height	
	h m	ft	cm
16 F	0605	7.5	230
	1018	6.9	210
	1542	8.2	250
	2313	2.6	80
17 Sa	0832	7.5	230
	1056	7.2	220
	1552	8.2	250
	2356	2.6	80
18 Su	0949	7.5	230
	1149	7.5	230
	1536	7.9	240
19 M	0045	2.6	80
	1051	7.9	240
	1317	7.5	230
	1556	7.9	240
20 Tu ◐	0140	3.0	90
	1135	7.9	240
	1513	7.5	230
	1646	7.5	230
21 W	0240	3.0	90
	1201	7.9	240
	1627	7.2	220
	1829	7.2	220
22 Th	0344	3.3	100
	1152	7.9	240
	1715	6.6	200
	2122	6.9	210
23 F	0448	3.6	110
	1152	8.2	250
	1759	5.6	170
	2316	6.9	210
24 Sa	0546	3.9	120
	1215	8.2	250
	1842	4.6	140
25 Su	0031	7.2	220
	0637	4.3	130
	1245	8.5	260
	1925	3.6	110
26 M	0135	7.5	230
	0723	4.9	150
	1317	8.9	270
	2009	2.6	80
27 Tu ○	0236	7.5	230
	0808	5.6	170
	1352	9.2	280
	2053	1.6	50
28 W	0337	7.9	240
	0852	6.2	190
	1428	9.2	280
	2137	1.3	40
29 Th	0446	7.9	240
	0939	6.9	210
	1504	9.2	280
	2223	1.3	40
30 F	0725	7.9	240
	1032	7.2	220
	1540	8.9	270
	2311	1.3	40
31 Sa	0837	8.2	250
	1137	7.5	230
	1610	8.5	260

November

	Time	Height	
	h m	ft	cm
1 Su	0001	2.0	60
	0940	8.2	250
	1308	7.5	230
	1616	7.9	240
2 M	0055	2.3	70
	1034	8.5	260
3 Tu ◑	0152	3.0	90
	1115	8.5	260
4 W	0251	3.6	110
	1137	8.2	250
	1952	6.2	190
	2108	6.2	190
5 Th	0352	4.3	130
	1136	8.2	250
	1831	5.6	170
	2302	6.2	190
6 F	0452	4.9	150
	1144	8.2	250
	1837	4.9	150
7 Sa	0020	6.2	190
	0546	5.6	170
	1202	8.2	250
	1903	4.3	130
8 Su	0126	6.6	200
	0631	5.9	180
	1224	8.2	250
	1931	3.6	110
9 M	0230	6.9	210
	0709	6.2	190
	1245	8.2	250
	2000	3.3	100
10 Tu	0436	7.2	220
	0742	6.9	210
	1307	8.5	260
	2030	2.6	80
11 W ●	0532	7.5	230
	0811	7.2	220
	1326	8.5	260
	2101	2.3	70
12 Th	0620	7.9	240
	0841	7.5	230
	1343	8.5	260
	2134	2.0	60
13 F	0708	7.9	240
	0916	7.9	240
	1342	8.5	260
	2209	1.6	50
14 Sa	0758	8.2	250
	0959	7.9	240
	1336	8.5	260
	2248	1.6	50
15 Su	0846	8.2	250
	1054	8.2	250
	1358	8.5	260
	2330	2.0	60

	Time	Height	
	h m	ft	cm
16 M	0930	8.5	260
	1207	8.2	250
	1428	8.2	250
17 Tu	0015	2.3	70
	1008	8.5	260
	1342	7.9	240
	1501	7.9	240
18 W ◐	0104	2.6	80
	1035	8.5	260
19 Th	0156	3.3	100
	1027	8.5	260
20 F	0253	3.9	120
	1029	8.5	260
	1712	5.6	170
	2155	6.2	190
21 Sa	0353	4.6	140
	1054	8.9	270
	1751	4.6	140
	2339	6.2	190
22 Su	0456	5.2	160
	1123	8.9	270
	1832	3.3	100
23 M	0102	6.6	200
	0555	5.9	180
	1155	9.2	280
	1914	2.3	70
24 Tu	0229	7.2	220
	0649	6.6	200
	1229	9.5	290
	1955	1.6	50
25 W ○	0505	7.5	230
	0740	7.2	220
	1304	9.5	290
	2038	1.0	30
26 Th	0601	8.2	250
	0831	7.5	230
	1341	9.5	290
	2121	0.7	20
27 F	0654	8.5	260
	0924	7.9	240
	1416	9.2	280
	2205	0.7	20
28 Sa	0744	8.5	260
	1023	7.9	240
	1443	8.9	270
	2249	1.3	40
29 Su	0831	8.9	270
	1133	8.2	250
	1441	8.5	260
	2334	1.6	50
30 M	0913	8.9	270
	1306	7.9	240
	1438	7.9	240

December

	Time	Height	
	h m	ft	cm
1 Tu	0018	2.6	80
	0947	8.9	270
2 W ◑	0101	3.3	100
	1008	8.9	270
3 Th	0140	3.9	120
	1014	8.5	260
4 F	0208	4.9	150
	1024	8.5	260
	1849	5.2	160
	2309	5.6	170
5 Sa	0135	5.6	170
	1041	8.5	260
	1827	4.6	140
6 Su	1059	8.5	260
	1848	3.9	120
7 M	1118	8.9	270
	1913	3.3	100
8 Tu	1135	8.9	270
	1941	2.6	80
9 W	1151	8.9	270
	2010	2.0	60
10 Th	1202	9.2	280
	2041	1.6	50
11 F ●	0657	8.2	250
	0758	8.2	250
	1215	9.2	280
	2114	1.3	40
12 Sa	0723	8.5	260
	0851	8.2	250
	1238	9.2	280
	2150	1.3	40
13 Su	0753	8.5	260
	0947	8.2	250
	1310	9.2	280
	2229	1.3	40
14 M	0825	8.5	260
	1047	8.2	250
	1347	8.9	270
	2309	1.6	50
15 Tu	0854	8.5	260
	1155	7.9	240
	1428	8.2	250
	2352	2.0	60

	Time	Height	
	h m	ft	cm
16 W	0915	8.5	260
	1311	7.5	230
	1510	7.5	230
17 Th	0036	2.6	80
	0850	8.9	270
	1438	6.9	210
	1559	6.9	210
18 F ◐	0121	3.6	110
	0904	8.9	270
	1559	5.9	180
	2001	5.9	180
19 Sa	0206	4.6	140
	0932	9.2	280
	1653	4.9	150
	2223	5.9	180
20 Su	0255	5.6	170
	1004	9.2	280
	1738	3.6	110
21 M	0246	6.6	200
	0354	6.6	200
	1037	9.5	290
	1820	2.6	80
22 Tu	0357	7.2	220
	0510	7.2	220
	1111	9.5	290
	1902	2.0	60
23 W	0446	7.9	240
	0619	7.5	230
	1147	9.8	300
	1944	1.3	40
24 Th	0530	8.2	250
	0719	7.9	240
	1225	9.8	300
	2026	1.0	30
25 F ○	0613	8.5	260
	0816	8.2	250
	1305	9.5	290
	2107	1.0	30
26 Sa	0653	8.5	260
	0912	8.2	250
	1343	9.2	280
	2149	1.0	30
27 Su	0732	8.9	270
	1010	8.2	250
	1407	8.9	270
	2230	1.3	40
28 M	0806	8.9	270
	1112	7.9	240
	1409	8.2	250
	2309	2.0	60
29 Tu	0834	8.9	270
	1223	7.5	230
	1426	7.9	240
	2346	3.0	90
30 W	0851	8.9	270
31 Th	0017	3.6	110
	0851	8.9	270

Time meridian 120° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.
Heights are referred to the Canadian chart datum of soundings. Subtract 2.5 feet (76 centimeters) to refer these levels to the datum of N.O.S. charts.

Vancouver, British Columbia, 2015

Times and Heights of High and Low Waters

January

	Time	Height	
	h m	ft	cm
1 Th	0351	13.5	410
	0838	10.8	330
	1348	14.4	440
	2121	2.6	80
2 F	0445	14.4	440
	0944	11.2	340
	1436	14.1	430
	2206	2.3	70
3 Sa	0529	14.8	450
	1039	11.2	340
	1523	14.1	430
	2249	2.3	70
4 Su ○	0608	15.1	460
	1127	10.8	330
	1608	13.8	420
	2328	2.3	70
5 M	0643	15.4	470
	1212	10.8	330
	1651	13.5	410
6 Tu	0005	2.3	70
	0716	15.4	470
	1254	10.5	320
	1732	13.1	400
7 W	0038	3.0	90
	0747	15.4	470
	1337	10.2	310
	1813	12.8	390
8 Th	0110	3.6	110
	0817	15.4	470
	1421	9.5	290
	1857	12.1	370
9 F	0140	4.3	130
	0845	15.4	470
	1507	9.2	280
	1946	11.8	360
10 Sa	0210	5.2	160
	0913	15.1	460
	1554	8.5	260
	2041	11.2	340
11 Su	0242	6.6	200
	0942	15.1	460
	1644	7.9	240
	2149	10.8	330
12 M	0318	7.5	230
	1013	14.8	450
	1734	6.9	210
	2319	10.5	320
13 Tu ◑	0402	8.9	270
	1047	14.4	440
	1824	6.2	190
14 W	0114	11.2	340
	0459	9.8	300
	1125	14.4	440
	1913	5.2	160
15 Th	0239	11.8	360
	0617	10.8	330
	1208	14.1	430
	2002	4.6	140

	Time	Height	
	h m	ft	cm
16 F	0338	12.8	390
	0746	11.5	350
	1255	14.1	430
	2049	3.6	110
17 Sa	0425	13.8	420
	0901	11.5	350
	1347	14.4	440
	2136	2.6	80
18 Su	0506	14.4	440
	1001	11.5	350
	1442	14.4	440
	2222	1.6	50
19 M	0543	15.1	460
	1053	11.2	340
	1538	14.4	440
	2307	1.3	40
20 Tu ●	0620	15.4	470
	1142	10.5	320
	1636	14.8	450
	2351	1.3	40
21 W	0655	15.7	480
	1232	9.8	300
	1733	14.4	440
22 Th	0034	1.6	50
	0731	16.1	490
	1323	8.9	270
	1831	14.1	430
23 F	0117	2.3	70
	0807	16.4	500
	1416	7.9	240
	1932	13.5	410
24 Sa	0159	3.6	110
	0844	16.4	500
	1511	6.9	210
	2037	12.8	390
25 Su	0244	5.2	160
	0923	16.1	490
	1609	6.2	190
	2153	12.1	370
26 M ◐	0333	6.9	210
	1003	15.7	480
	1708	5.2	160
	2325	11.8	360
27 Tu	0431	8.5	260
	1045	15.1	460
	1807	4.6	140
28 W	0103	12.5	380
	0544	10.2	310
	1132	14.4	440
	1906	4.3	130
29 Th	0228	13.1	400
	0712	10.8	330
	1224	14.1	430
	2004	3.6	110
30 F	0335	13.8	420
	0835	11.2	340
	1321	13.5	410
	2058	3.3	100
31 Sa	0427	14.4	440
	0940	10.8	330
	1420	13.5	410
	2147	3.3	100

February

	Time	Height	
	h m	ft	cm
1 Su	0508	14.8	450
	1031	10.8	330
	1515	13.5	410
	2231	3.0	90
2 M	0542	14.8	450
	1114	10.2	310
	1605	13.5	410
	2309	3.3	100
3 Tu ○	0614	15.1	460
	1152	9.8	300
	1649	13.1	400
	2344	3.3	100
4 W	0642	15.1	460
	1229	9.5	290
	1731	13.1	400
5 Th	0017	3.6	110
	0708	15.1	460
	1306	8.9	270
	1812	12.8	390
6 F	0047	4.3	130
	0733	15.1	460
	1342	8.5	260
	1854	12.8	390
7 Sa	0116	5.2	160
	0757	14.8	450
	1419	7.9	240
	1940	12.5	380
8 Su	0146	5.9	180
	0822	14.8	450
	1458	7.2	220
	2030	12.1	370
9 M	0219	7.2	220
	0849	14.4	440
	1540	6.9	210
	2129	11.8	360
10 Tu	0255	8.2	250
	0918	14.4	440
	1626	6.2	190
	2243	11.5	350
11 W ◑	0339	9.2	280
	0952	14.1	430
	1717	5.6	170
12 Th	0017	11.8	360
	0436	10.2	310
	1031	13.8	420
	1813	5.2	160
13 F	0148	12.5	380
	0554	11.2	340
	1120	13.8	420
	1911	4.6	140
14 Sa	0255	13.1	400
	0729	11.5	350
	1218	13.5	410
	2010	3.6	110
15 Su	0346	13.8	420
	0847	11.2	340
	1324	13.8	420
	2106	3.0	90

	Time	Height	
	h m	ft	cm
16 M	0429	14.4	440
	0946	10.5	320
	1432	13.8	420
	2157	2.3	70
17 Tu	0506	14.8	450
	1037	9.8	300
	1538	14.1	430
	2246	2.0	60
18 W ●	0542	15.4	470
	1125	8.9	270
	1640	14.4	440
	2331	2.3	70
19 Th	0616	15.7	480
	1212	7.9	240
	1739	14.4	440
20 F	0015	3.0	90
	0651	15.7	480
	1300	6.9	210
	1837	14.1	430
21 Sa	0058	3.9	120
	0726	16.1	490
	1349	5.9	180
	1935	13.8	420
22 Su	0142	5.2	160
	0802	15.7	480
	1439	4.9	150
	2039	13.5	410
23 M	0228	6.6	200
	0839	15.4	470
	1531	4.6	140
	2151	13.1	400
24 Tu	0319	8.2	250
	0919	14.8	450
	1625	4.3	130
	2313	13.1	400
25 W ◐	0422	9.5	290
	1002	14.1	430
	1723	4.3	130
26 Th	0038	13.1	400
	0543	10.5	320
	1052	13.5	410
	1825	4.3	130
27 F	0154	13.5	410
	0716	10.8	330
	1153	12.8	390
	1927	4.6	140
28 Sa	0258	13.8	420
	0835	10.5	320
	1306	12.5	380
	2027	4.6	140

March

	Time	Height	
	h m	ft	cm
1 Su	0348	14.1	430
	0932	10.2	310
	1420	12.5	380
	2120	4.3	130
2 M	0428	14.4	440
	1016	9.5	290
	1520	12.5	380
	2206	4.3	130
3 Tu	0501	14.4	440
	1053	8.9	270
	1610	12.8	390
	2245	4.6	140
4 W	0530	14.4	440
	1128	8.2	250
	1653	12.8	390
	2320	4.9	150
5 Th ○	0556	14.4	440
	1200	7.9	240
	1734	13.1	400
	2353	5.2	160
6 F	0620	14.4	440
	1232	7.2	220
	1813	13.1	400
7 Sa	0023	5.9	180
	0643	14.4	440
	1305	6.6	200
	1854	13.1	400
8 Su	0054	6.6	200
	0706	14.1	430
	1338	5.9	180
	1937	13.1	400
9 M	0127	7.2	220
	0731	14.1	430
	1413	5.6	170
	2025	13.1	400
10 Tu	0202	8.2	250
	0758	13.8	420
	1451	5.2	160
	2119	12.8	390
11 W	0242	9.2	280
	0827	13.8	420
	1533	4.9	150
	2223	12.8	390
12 Th	0331	9.8	300
	0901	13.5	410
	1622	4.9	150
	2337	12.8	390
13 F ◑	0434	10.5	320
	0945	12.8	390
	1718	4.6	140
14 Sa	0055	13.1	400
	0601	10.8	330
	1043	12.5	380
	1822	4.3	130
15 Su	0201	13.5	410
	0731	10.5	320
	1157	12.5	380
	1928	4.3	130

	Time	Height	
	h m	ft	cm
16 M	0255	14.1	430
	0839	9.8	300
	1317	12.5	380
	2032	3.9	120
17 Tu	0340	14.4	440
	0932	9.2	280
	1436	13.1	400
	2129	3.6	110
18 W	0419	14.8	450
	1020	7.9	240
	1546	13.5	410
	2221	3.6	110
19 Th	0455	15.1	460
	1105	6.6	200
	1648	14.1	430
	2309	4.3	130
20 F ●	0531	15.4	470
	1150	5.6	170
	1745	14.4	440
	2354	4.9	150
21 Sa	0606	15.4	470
	1235	4.3	130
	1841	14.4	440
22 Su	0039	5.9	180
	0641	15.4	470
	1320	3.6	110
	1939	14.4	440
23 M	0126	6.9	210
	0718	15.1	460
	1407	3.3	100
	2039	14.1	430
24 Tu	0215	8.2	250
	0755	14.4	440
	1454	3.3	100
	2144	14.1	430
25 W	0312	9.2	280
	0835	13.8	420
	1544	3.6	110
	2253	14.1	430
26 Th ◐	0422	9.8	300
	0920	12.8	390
	1637	4.3	130
27 F	0002	13.8	420
	0549	10.2	310
	1015	12.1	370
	1736	4.9	150
28 Sa	0107	13.8	420
	0717	9.8	300
	1129	11.5	350
	1840	5.2	160
29 Su	0205	14.1	430
	0825	9.5	290
	1301	11.2	340
	1944	5.6	170
30 M	0254	14.1	430
	0914	8.5	260
	1423	11.2	340
	2042	5.9	180
31 Tu	0333	14.1	430
	0952	7.9	240
	1524	11.8	360
	2132	6.2	190

Time meridian 120° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.
Heights are referred to the Canadian chart datum of soundings. Subtract 3.8 feet (116 centimeters) to refer these levels to the datum of N.O.S. charts.

Vancouver, British Columbia, 2015

Times and Heights of High and Low Waters

April

	Time	Height			Time	Height	
	h m	ft	cm		h m	ft	cm
1 W	0407	13.8	420	16 Th	0328	14.8	450
	1026	7.2	220		0959	5.6	170
	1613	12.1	370		1555	13.1	400
	2214	6.2	190		2155	5.9	180
2 Th	0436	13.8	420	17 F	0407	15.1	460
	1058	6.6	200		1043	4.3	130
	1656	12.8	390		1655	13.8	420
	2252	6.6	200		2246	6.6	200
3 F	0501	13.8	420	18 Sa ●	0444	15.1	460
	1128	5.9	180		1127	3.3	100
	1736	13.1	400		1751	14.4	440
	2326	6.9	210		2335	7.2	220
4 Sa ○	0525	13.8	420	19 Su	0521	15.1	460
	1159	5.2	160		1210	2.6	80
	1815	13.5	410		1845	14.8	450
	2359	7.5	230				
5 Su	0549	13.8	420	20 M	0023	7.9	240
	1230	4.6	140		0558	14.8	450
	1855	13.8	420		1253	2.0	60
					1939	14.8	450
6 M	0034	8.2	250	21 Tu	0113	8.5	260
	0614	13.8	420		0636	14.1	430
	1303	4.3	130		1337	2.3	70
	1937	13.8	420		2034	14.8	450
7 Tu	0110	8.5	260	22 W	0206	9.2	280
	0641	13.5	410		0715	13.5	410
	1337	3.9	120		1421	2.6	80
	2022	13.8	420		2129	14.8	450
8 W	0150	9.2	280	23 Th	0308	9.8	300
	0710	13.5	410		0756	12.8	390
	1414	3.6	110		1506	3.3	100
	2112	13.8	420		2225	14.8	450
9 Th	0236	9.8	300	24 F	0421	9.8	300
	0742	13.1	400		0843	11.8	360
	1455	3.6	110		1553	4.3	130
	2208	13.8	420		2321	14.4	440
10 F	0333	10.2	310	25 Sa ◐	0543	9.5	290
	0820	12.5	380		0942	10.8	330
	1542	3.9	120		1644	4.9	150
	2309	14.1	430				
11 Sa ◑	0446	10.5	320	26 Su	0015	14.4	440
	0913	12.1	370		0659	9.2	280
	1637	4.3	130		1105	10.5	320
					1741	5.9	180
12 Su	0011	14.1	430	27 M	0106	14.1	430
	0612	10.2	310		0757	8.2	250
	1026	11.5	350		1251	10.2	310
	1740	4.6	140		1845	6.6	200
13 M	0109	14.1	430	28 Tu	0150	13.8	420
	0726	9.5	290		0841	7.5	230
	1153	11.5	350		1417	10.5	320
	1849	4.6	140		1949	7.2	220
14 Tu	0201	14.4	440	29 W	0229	13.8	420
	0824	8.2	250		0918	6.6	200
	1325	11.8	360		1520	11.2	340
	1957	4.9	150		2047	7.9	240
15 W	0247	14.8	450	30 Th	0303	13.8	420
	0914	7.2	220		0952	5.9	180
	1447	12.5	380		1610	12.1	370
	2059	5.2	160		2136	8.2	250

May

	Time	Height			Time	Height	
	h m	ft	cm		h m	ft	cm
1 F	0333	13.8	420	16 Sa	0320	14.8	450
	1024	4.9	150		1021	3.0	90
	1654	12.8	390		1703	13.8	420
	2219	8.5	260		2228	8.5	260
2 Sa	0401	13.5	410	17 Su ●	0400	14.8	450
	1055	4.3	130		1105	2.0	60
	1734	13.5	410		1756	14.4	440
	2258	8.9	270		2320	9.2	280
3 Su ○	0429	13.5	410	18 M	0440	14.4	440
	1127	3.6	110		1147	1.6	50
	1814	13.8	420		1846	15.1	460
	2336	9.2	280				
4 M	0457	13.5	410	19 Tu	0011	9.5	290
	1159	3.3	100		0520	14.1	430
	1853	14.1	430		1230	1.6	50
					1934	15.1	460
5 Tu	0015	9.5	290	20 W	0102	9.8	300
	0526	13.5	410		0601	13.8	420
	1234	2.6	80		1311	2.0	60
	1934	14.4	440		2021	15.1	460
6 W	0056	9.8	300	21 Th	0157	9.8	300
	0557	13.5	410		0642	13.1	400
	1310	2.6	80		1352	2.3	70
	2017	14.8	450		2107	15.1	460
7 Th	0141	10.2	310	22 F	0256	9.8	300
	0632	13.1	400		0725	12.1	370
	1348	2.6	80		1433	3.3	100
	2103	14.8	450		2153	15.1	460
8 F	0233	10.2	310	23 Sa	0403	9.5	290
	0711	12.8	390		0814	11.5	350
	1430	3.0	90		1513	4.3	130
	2151	14.8	450		2237	14.8	450
9 Sa	0336	10.2	310	24 Su	0512	9.2	280
	0800	12.1	370		0915	10.5	320
	1517	3.3	100		1555	5.2	160
	2242	14.8	450		2321	14.4	440
10 Su	0449	9.8	300	25 M ◐	0618	8.5	260
	0905	11.5	350		1036	10.2	310
	1609	3.9	120		1641	6.2	190
	2333	14.8	450				
11 M ◑	0602	9.2	280	26 Tu	0002	14.1	430
	1027	11.2	340		0712	7.5	230
	1709	4.9	150		1223	9.8	300
					1735	7.5	230
12 Tu	0023	14.8	450	27 W	0041	14.1	430
	0707	7.9	240		0757	6.9	210
	1201	10.8	330		1358	10.5	320
	1815	5.6	170		1841	8.5	260
13 W	0111	14.8	450	28 Th	0118	13.8	420
	0801	6.6	200		0837	5.9	180
	1336	11.2	340		1506	11.2	340
	1924	6.6	200		1950	9.2	280
14 Th	0156	14.8	450	29 F	0153	13.8	420
	0850	5.2	160		0913	4.9	150
	1457	12.1	370		1600	12.1	370
	2031	7.2	220		2051	9.5	290
15 F	0239	14.8	450	30 Sa	0227	13.8	420
	0936	3.9	120		0947	4.3	130
	1604	13.1	400		1646	12.8	390
	2132	7.9	240		2143	9.8	300
				31 Su	0301	13.8	420
					1022	3.6	110
					1727	13.5	410
					2229	10.2	310

June

	Time	Height			Time	Height	
	h m	ft	cm		h m	ft	cm
1 M	0335	13.8	420	16 Tu ●	0409	14.1	430
	1057	2.6	80		1128	1.6	50
	1807	14.1	430		1839	14.8	450
	2312	10.2	310		2359	10.2	310
2 Tu ○	0410	13.8	420	17 W	0453	13.8	420
	1133	2.3	70		1210	1.6	50
	1846	14.4	440		1921	15.1	460
	2355	10.5	320				
3 W	0447	13.8	420	18 Th	0050	10.2	310
	1211	2.0	60		0537	13.5	410
	1925	14.8	450		1249	2.0	60
					2000	15.1	460
4 Th	0041	10.5	320	19 F	0140	9.8	300
	0527	13.5	410		0620	12.8	390
	1250	1.6	50		1327	2.6	80
	2005	15.1	460		2038	15.1	460
5 F	0130	10.2	310	20 Sa	0232	9.5	290
	0611	13.1	400		0705	12.1	370
	1331	2.0	60		1403	3.6	110
	2046	15.1	460		2115	15.1	460
6 Sa	0225	10.2	310	21 Su	0328	9.2	280
	0701	12.8	390		0754	11.5	350
	1413	2.3	70		1438	4.6	140
	2129	15.1	460		2151	14.8	450
7 Su	0326	9.5	290	22 M	0425	8.9	270
	0800	12.1	370		0852	10.8	330
	1459	3.3	100		1513	5.6	170
	2212	15.4	470		2225	14.4	440
8 M	0432	8.9	270	23 Tu	0522	8.2	250
	0911	11.5	350		1003	10.2	310
	1549	4.3	130		1551	6.9	210
	2257	15.4	470		2259	14.4	440
9 Tu ◑	0538	7.9	240	24 W ◐	0615	7.2	220
	1034	10.8	330		1138	10.2	310
	1644	5.6	170		1636	7.9	240
	2341	15.1	460		2333	14.1	430
10 W	0638	6.6	200	25 Th	0703	6.6	200
	1209	10.8	330		1323	10.5	320
	1746	6.9	210		1733	8.9	270
11 Th	0026	15.1	460	26 F	0009	13.8	420
	0734	5.2	160		0747	5.6	170
	1345	11.5	350		1442	11.2	340
	1857	7.9	240		1846	9.8	300
12 F	0111	14.8	450	27 Sa	0047	13.8	420
	0825	3.9	120		0829	4.9	150
	1505	12.5	380		1540	12.1	370
	2009	8.9	270		2001	10.5	320
13 Sa	0155	14.8	450	28 Su	0127	13.8	420
	0913	3.0	90		0909	3.9	120
	1611	13.1	400		1629	12.8	390
	2115	9.5	290		2106	10.8	330
14 Su	0240	14.4	440	29 M	0209	13.8	420
	1000	2.3	70		0949	3.0	90
	1706	14.1	430		1711	13.5	410
	2215	9.8	300		2159	10.8	330
15 M	0325	14.4	440	30 Tu	0252	13.8	420
	1045	1.6	50		1029	2.3	70
	1755	14.4	440		1750	14.1	430
	2309	10.2	310		2249	10.8	330

Time meridian 120° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.
Heights are referred to the Canadian chart datum of soundings. Subtract 3.8 feet (116 centimeters) to refer these levels to the datum of N.O.S. charts.

Vancouver, British Columbia, 2015

Times and Heights of High and Low Waters

July

	Time	Height	
	h m	ft	cm
1 W ○	0336	14.1	430
	1110	1.6	50
	1828	14.4	440
	2336	10.5	320
2 Th	0423	14.1	430
	1151	1.3	40
	1905	14.8	450
3 F	0023	10.5	320
	0513	13.8	420
	1233	1.3	40
	1942	15.1	460
4 Sa	0114	9.8	300
	0606	13.5	410
	1315	1.6	50
	2019	15.4	470
5 Su	0208	9.2	280
	0703	13.1	400
	1358	2.6	80
	2058	15.4	470
6 M	0305	8.5	260
	0805	12.5	380
	1442	3.6	110
	2138	15.4	470
7 Tu	0405	7.5	230
	0915	11.8	360
	1530	4.9	150
	2219	15.4	470
8 W ◑	0506	6.6	200
	1037	11.5	350
	1623	6.6	200
	2301	15.1	460
9 Th	0606	5.6	170
	1214	11.5	350
	1725	8.2	250
	2345	14.8	450
10 F	0704	4.6	140
	1349	11.8	360
	1839	9.2	280
11 Sa	0032	14.4	440
	0759	3.6	110
	1507	12.8	390
	1957	10.2	310
12 Su	0121	14.1	430
	0852	3.0	90
	1609	13.5	410
	2108	10.5	320
13 M	0212	14.1	430
	0942	2.3	70
	1700	14.1	430
	2208	10.5	320
14 Tu	0303	13.8	420
	1028	2.3	70
	1744	14.4	440
	2300	10.5	320
15 W ●	0353	13.8	420
	1112	2.0	60
	1822	14.8	450
	2347	10.2	310

	Time	Height	
	h m	ft	cm
16 Th	0440	13.5	410
	1152	2.3	70
	1858	14.8	450
17 F	0032	9.8	300
	0524	13.1	400
	1229	2.6	80
	1931	14.8	450
18 Sa	0116	9.5	290
	0608	12.8	390
	1303	3.3	100
	2002	14.8	450
19 Su	0159	9.2	280
	0652	12.5	380
	1335	3.9	120
	2032	14.8	450
20 M	0245	8.5	260
	0739	11.8	360
	1407	4.9	150
	2101	14.4	440
21 Tu	0331	8.2	250
	0832	11.2	340
	1439	6.2	190
	2130	14.4	440
22 W	0420	7.5	230
	0935	10.8	330
	1514	7.2	220
	2159	14.1	430
23 Th ◐	0509	6.9	210
	1055	10.8	330
	1555	8.5	260
	2232	13.8	420
24 F	0559	6.2	190
	1237	10.8	330
	1647	9.5	290
	2309	13.8	420
25 Sa	0650	5.6	170
	1405	11.5	350
	1757	10.2	310
	2351	13.5	410
26 Su	0740	4.9	150
	1510	12.1	370
	1921	10.8	330
27 M	0038	13.5	410
	0829	3.9	120
	1601	13.1	400
	2037	10.8	330
28 Tu	0129	13.5	410
	0916	3.3	100
	1644	13.8	420
	2137	10.8	330
29 W	0222	13.8	420
	1003	2.3	70
	1722	14.1	430
	2229	10.5	320
30 Th	0318	14.1	430
	1047	2.0	60
	1758	14.4	440
	2317	10.2	310
31 F ○	0414	14.1	430
	1131	1.6	50
	1833	14.8	450

August

	Time	Height	
	h m	ft	cm
1 Sa	0005	9.5	290
	0510	14.1	430
	1214	1.6	50
	1908	15.1	460
2 Su	0054	8.9	270
	0607	13.8	420
	1256	2.3	70
	1944	15.4	470
3 M	0145	7.9	240
	0706	13.5	410
	1339	3.3	100
	2020	15.4	470
4 Tu	0239	6.9	210
	0808	12.8	390
	1424	4.6	140
	2058	15.4	470
5 W	0334	6.2	190
	0917	12.5	380
	1511	6.2	190
	2138	15.1	460
6 Th ◑	0432	5.2	160
	1039	12.1	370
	1606	7.9	240
	2221	14.8	450
7 F	0532	4.6	140
	1213	12.1	370
	1713	9.2	280
	2307	14.4	440
8 Sa	0632	4.3	130
	1341	12.8	390
	1835	10.2	310
	2359	13.8	420
9 Su	0732	3.6	110
	1454	13.1	400
	1958	10.5	320
10 M	0058	13.5	410
	0830	3.3	100
	1552	13.8	420
	2108	10.5	320
11 Tu	0159	13.1	400
	0923	3.3	100
	1639	14.1	430
	2203	10.2	310
12 W	0259	13.1	400
	1011	3.0	90
	1719	14.4	440
	2249	9.8	300
13 Th	0352	13.1	400
	1053	3.0	90
	1753	14.4	440
	2331	9.5	290
14 F ●	0439	13.1	400
	1131	3.3	100
	1823	14.4	440
15 Sa	0010	8.9	270
	0522	13.1	400
	1206	3.6	110
	1852	14.4	440

	Time	Height	
	h m	ft	cm
16 Su	0047	8.5	260
	0603	12.8	390
	1238	4.3	130
	1918	14.4	440
17 M	0124	7.9	240
	0645	12.8	390
	1308	4.9	150
	1943	14.1	430
18 Tu	0202	7.5	230
	0730	12.5	380
	1339	5.9	180
	2008	14.1	430
19 W	0240	7.2	220
	0818	12.1	370
	1411	6.9	210
	2035	13.8	420
20 Th	0321	6.6	200
	0915	11.8	360
	1447	7.9	240
	2104	13.8	420
21 F	0406	6.2	190
	1024	11.5	350
	1529	8.9	270
	2137	13.5	410
22 Sa ◐	0455	5.9	180
	1151	11.8	360
	1623	9.8	300
	2216	13.1	400
23 Su	0549	5.2	160
	1318	12.1	370
	1736	10.5	320
	2303	13.1	400
24 M	0647	4.9	150
	1427	12.8	390
	1907	10.8	330
25 Tu	0000	12.8	390
	0745	4.3	130
	1520	13.1	400
	2024	10.8	330
26 W	0103	13.1	400
	0842	3.6	110
	1604	13.8	420
	2122	10.2	310
27 Th	0209	13.5	410
	0934	3.0	90
	1642	14.1	430
	2212	9.5	290
28 F	0314	13.8	420
	1023	2.6	80
	1717	14.4	440
	2259	8.9	270
29 Sa ○	0415	14.1	430
	1109	2.6	80
	1752	14.8	450
	2345	7.9	240
30 Su	0514	14.1	430
	1153	3.0	90
	1826	15.1	460
31 M	0032	6.9	210
	0611	14.1	430
	1236	3.6	110
	1901	15.4	470

September

	Time	Height	
	h m	ft	cm
1 Tu	0120	5.9	180
	0709	13.8	420
	1320	4.9	150
	1937	15.4	470
2 W	0210	4.9	150
	0810	13.5	410
	1406	6.2	190
	2015	15.1	460
3 Th	0301	4.6	140
	0918	13.1	400
	1457	7.5	230
	2055	14.8	450
4 F	0356	4.3	130
	1037	13.1	400
	1558	8.9	270
	2140	14.1	430
5 Sa ◑	0454	4.3	130
	1200	13.1	400
	1715	9.8	300
	2232	13.1	400
6 Su	0555	4.3	130
	1317	13.5	410
	1844	10.2	310
	2336	12.8	390
7 M	0659	4.3	130
	1424	13.8	420
	2004	10.2	310
8 Tu	0050	12.5	380
	0802	4.3	130
	1518	13.8	420
	2106	9.5	290
9 W	0204	12.1	370
	0859	4.3	130
	1602	14.1	430
	2153	9.2	280
10 Th	0306	12.5	380
	0948	4.6	140
	1638	14.1	430
	2233	8.5	260
11 F	0358	12.8	390
	1030	4.6	140
	1710	14.1	430
	2309	7.9	240
12 Sa ●	0442	12.8	390
	1107	4.9	150
	1738	14.1	430
	2343	7.5	230
13 Su	0523	13.1	400
	1141	5.2	160
	1803	14.1	430
14 M	0016	6.9	210
	0603	13.1	400
	1213	5.9	180
	1827	13.8	420
15 Tu	0048	6.6	200
	0643	13.1	400
	1244	6.6	200
	1850	13.8	420

	Time	Height	
	h m	ft	cm
16 W	0121	5.9	180
	0725	13.1	400
	1316	7.5	230
	1915	13.8	420
17 Th	0156	5.6	170
	0811	13.1	400
	1350	8.2	250
	1941	13.5	410
18 F	0232	5.2	160
	0903	12.8	390
	1430	8.9	270
	2010	13.1	400
19 Sa	0313	5.2	160
	1004	12.8	390
	1517	9.8	300
	2044	12.8	390
20 Su	0359	5.2	160
	1115	12.8	390
	1619	10.2	310
	2126	12.5	380
21 M ◐	0453	4.9	150
	1228	13.1	400
	1743	10.5	320
	2224	12.1	370
22 Tu	0555	4.9	150
	1333	13.5	410
	1910	10.5	320
	2336	12.1	370
23 W	0700	4.6	140
	1427	13.8	420
	2016	9.8	300
24 Th	0054	12.1	370
	0804	4.3	130
	1512	14.1	430
	2108	8.9	270
25 F	0211	12.8	390
	0903	4.3	130
	1552	14.4	440
	2154	7.9	240
26 Sa	0320	13.5	410
	0956	3.9	120
	1629	14.8	450
	2239	6.9	210
27 Su ○	0422	13.8	420
	1044	4.3	130
	1704	15.1	460
	2323	5.6	170
28 M	0519	14.4	440
	1130	4.9	150
	1740	15.1	460
29 Tu	0008	4.6	140
	0616	14.4	440
	1216	5.9	180
	1816	15.1	460
30 W	0054	3.6	110
	0712	14.4	440
	1303	6.9	210
	1853	15.1	460

Time meridian 120° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.
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Vancouver, British Columbia, 2015

Times and Heights of High and Low Waters

October

	Time	Height		Time	Height
	h m	ft cm		h m	ft cm
1 Th	0140	3.3 100	16 F	0119	4.3 130
	0812	14.4 440		0808	14.1 430
	1353	8.2 250		1337	9.5 290
	1932	14.4 440		1850	13.1 400
2 F	0228	3.3 100	17 Sa	0154	3.9 120
	0916	14.4 440		0855	14.1 430
	1449	8.9 270		1422	9.8 300
	2014	13.8 420		1920	12.8 390
3 Sa	0319	3.3 100	18 Su	0233	3.9 120
	1025	14.1 430		0948	14.1 430
	1559	9.8 300		1517	10.2 310
	2101	12.8 390		1957	12.1 370
4 Su ◑	0413	3.9 120	19 M	0317	4.3 130
	1134	14.1 430		1045	14.1 430
	1723	9.8 300		1629	10.5 320
	2201	12.1 370		2047	11.8 360
5 M	0513	4.6 140	20 Tu ◐	0409	4.6 140
	1239	14.1 430		1143	14.1 430
	1850	9.5 290		1752	10.2 310
	2319	11.5 350		2159	11.5 350
6 Tu	0617	5.2 160	21 W	0509	4.9 150
	1338	14.1 430		1240	14.4 440
	2000	9.2 280		1905	9.5 290
				2327	11.2 340
7 W	0051	11.2 340	22 Th	0616	5.2 160
	0723	5.6 170		1331	14.4 440
	1429	14.1 430		2001	8.5 260
	2052	8.2 250			
8 Th	0212	11.5 350	23 F	0058	11.5 350
	0824	5.9 180		0725	5.6 170
	1511	14.1 430		1417	14.8 450
	2133	7.5 230		2049	7.2 220
9 F	0313	11.8 360	24 Sa	0221	12.1 370
	0916	6.2 190		0830	5.9 180
	1546	14.1 430		1459	14.8 450
	2208	6.9 210		2134	5.9 180
10 Sa	0403	12.5 380	25 Su	0330	13.1 400
	1001	6.6 200		0928	6.2 190
	1617	13.8 420		1538	15.1 460
	2241	6.2 190		2218	4.6 140
11 Su	0447	12.8 390	26 M	0431	13.8 420
	1040	6.9 210		1021	6.9 210
	1643	13.8 420		1616	15.1 460
	2313	5.6 170		2301	3.3 100
12 M ●	0527	13.5 410	27 Tu ○	0527	14.4 440
	1116	7.5 230		1110	7.5 230
	1708	13.8 420		1654	15.1 460
	2344	5.2 160		2345	2.3 70
13 Tu	0606	13.8 420	28 W	0622	15.1 460
	1149	7.9 240		1159	8.2 250
	1732	13.8 420		1732	15.1 460
14 W	0015	4.6 140	29 Th	0028	2.0 60
	0644	13.8 420		0716	15.4 470
	1223	8.5 260		1250	8.9 270
	1757	13.5 410		1811	14.4 440
15 Th	0046	4.3 130	30 F	0113	2.0 60
	0725	14.1 430		0810	15.4 470
	1258	8.9 270		1344	9.5 290
	1822	13.5 410		1852	13.8 420
			31 Sa	0158	2.3 70
				0906	15.4 470
				1446	9.8 300
				1936	13.1 400

November

	Time	Height		Time	Height
	h m	ft cm		h m	ft cm
1 Su	0244	3.0 90	16 M	0206	3.3 100
	1002	15.1 460		0929	15.1 460
	1559	9.8 300		1517	10.5 320
	2027	12.1 370		1930	12.1 370
2 M	0333	3.9 120	17 Tu	0249	3.6 110
	1058	15.1 460		1016	15.1 460
	1720	9.5 290		1627	10.2 310
	2131	11.2 340		2032	11.5 350
3 Tu ◑	0425	4.9 150	18 W ◐	0337	4.3 130
	1152	14.8 450		1104	15.1 460
	1838	8.9 270		1739	9.5 290
	2259	10.5 320		2153	10.8 330
4 W	0523	5.9 180	19 Th	0433	5.2 160
	1243	14.8 450		1153	15.1 460
	1939	8.2 250		1843	8.5 260
				2327	10.8 330
5 Th	0045	10.5 320	20 F	0537	6.2 190
	0628	6.9 210		1240	15.1 460
	1329	14.4 440		1937	7.2 220
	2025	7.2 220			
6 F	0210	10.8 330	21 Sa	0106	11.2 340
	0734	7.9 240		0647	6.9 210
	1409	14.1 430		1325	15.1 460
	2104	6.6 200		2026	5.6 170
7 Sa	0314	11.5 350	22 Su	0232	12.1 370
	0834	8.2 250		0757	7.9 240
	1445	14.1 430		1408	15.1 460
	2138	5.6 170		2111	4.3 130
8 Su	0405	12.5 380	23 M	0342	13.1 400
	0926	8.5 260		0902	8.5 260
	1515	13.8 420		1450	15.1 460
	2210	4.9 150		2156	3.0 90
9 M	0449	13.1 400	24 Tu	0441	14.1 430
	1010	9.2 280		1001	9.2 280
	1544	13.8 420		1531	15.1 460
	2242	4.3 130		2240	2.0 60
10 Tu	0529	13.8 420	25 W ○	0535	15.1 460
	1050	9.2 280		1056	9.5 290
	1611	13.8 420		1613	15.1 460
	2313	3.6 110		2324	1.3 40
11 W ●	0607	14.1 430	26 Th	0625	15.4 470
	1128	9.5 290		1148	9.8 300
	1638	13.8 420		1655	14.8 450
	2345	3.3 100			
12 Th	0645	14.4 440	27 F	0007	1.3 40
	1205	9.8 300		0714	15.7 480
	1707	13.5 410		1241	10.2 310
				1738	14.1 430
13 F	0017	3.0 90	28 Sa	0050	1.3 40
	0723	14.8 450		0801	16.1 490
	1244	10.2 310		1337	10.2 310
	1737	13.5 410		1821	13.5 410
14 Sa	0051	3.0 90	29 Su	0132	2.0 60
	0803	15.1 460		0847	16.1 490
	1328	10.5 320		1436	10.2 310
	1809	13.1 400		1908	12.8 390
15 Su	0127	3.0 90	30 M	0214	3.0 90
	0845	15.1 460		0932	15.7 480
	1418	10.5 320		1542	9.8 300
	1845	12.8 390		1959	11.8 360

December

	Time	Height		Time	Height
	h m	ft cm		h m	ft cm
1 Tu	0255	3.9 120	16 W	0230	3.3 100
	1017	15.4 470		0945	15.7 480
	1653	9.2 280		1605	9.5 290
	2102	10.8 330		2034	11.8 360
2 W ◑	0337	5.2 160	17 Th	0315	4.3 130
	1101	15.4 470		1027	15.7 480
	1800	8.5 260		1709	8.5 260
	2226	10.2 310		2154	11.2 340
3 Th	0423	6.6 200	18 F ◐	0406	5.6 170
	1142	15.1 460		1110	15.7 480
	1858	7.5 230		1810	7.2 220
				2328	10.8 330
4 F	0017	10.2 310	19 Sa	0505	7.2 220
	0516	7.9 240		1153	15.7 480
	1222	14.8 450		1906	5.9 180
	1945	6.6 200			
5 Sa	0155	10.8 330	20 Su	0111	11.5 350
	0623	8.9 270		0614	8.5 260
	1259	14.4 440		1238	15.4 470
	2025	5.9 180		1959	4.6 140
6 Su	0306	11.5 350	21 M	0241	12.5 380
	0737	9.8 300		0731	9.5 290
	1335	14.1 430		1323	15.4 470
	2102	4.9 150		2048	3.3 100
7 M	0359	12.5 380	22 Tu	0350	13.5 410
	0842	10.2 310		0844	10.2 310
	1409	14.1 430		1409	15.1 460
	2137	4.3 130		2136	2.3 70
8 Tu	0445	13.5 410	23 W	0447	14.4 440
	0937	10.5 320		0949	10.5 320
	1443	13.8 420		1456	14.8 450
	2211	3.6 110		2222	1.6 50
9 W	0525	14.1 430	24 Th	0537	15.1 460
	1023	10.8 330		1047	10.8 330
	1517	13.8 420		1544	14.8 450
	2245	3.0 90		2307	1.3 40
10 Th	0602	14.8 450	25 F ○	0621	15.7 480
	1106	10.8 330		1140	10.8 330
	1552	13.8 420		1631	14.4 440
	2319	2.6 80		2350	1.3 40
11 F ●	0638	15.1 460	26 Sa	0702	15.7 480
	1147	10.8 330		1231	10.5 320
	1628	13.8 420		1718	14.1 430
	2354	2.3 70			
12 Sa	0714	15.4 470	27 Su	0031	1.6 50
	1230	10.8 330		0742	16.1 490
	1705	13.8 420		1322	10.2 310
				1804	13.5 410
13 Su	0030	2.0 60	28 M	0110	2.3 70
	0749	15.4 470		0820	16.1 490
	1315	10.8 330		1415	9.8 300
	1747	13.5 410		1851	12.8 390
14 M	0108	2.3 70	29 Tu	0147	3.3 100
	0826	15.7 480		0856	15.7 480
	1406	10.5 320		1509	9.5 290
	1833	12.8 390		1941	11.8 360
15 Tu	0148	2.6 80	30 W	0222	4.3 130
	0905	15.7 480		0932	15.7 480
	1503	10.2 310		1606	8.9 270
	1928	12.5 380		2038	11.2 340
			31 Th	0257	5.6 170
				1006	15.4 470
				1704	8.2 250
				2149	10.5 320

Time meridian 120° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.
Heights are referred to the Canadian chart datum of soundings. Subtract 3.8 feet (116 centimeters) to refer these levels to the datum of N.O.S. charts.

Ketchikan, Alaska, 2015

Times and Heights of High and Low Waters

January

	Time	Height	
	h m	ft	cm
1 Th	0315	4.1	125
	0937	16.4	500
	1615	0.1	3
	2237	13.6	415
2 F	0413	4.0	122
	1028	16.8	512
	1703	−0.7	−21
	2327	14.3	436
3 Sa	0503	3.8	116
	1114	17.1	521
	1746	−1.3	−40
4 Su ○	0011	14.8	451
	0547	3.5	107
	1155	17.2	524
	1825	−1.6	−49
5 M	0050	15.2	463
	0627	3.3	101
	1234	17.1	521
	1901	−1.6	−49
6 Tu	0126	15.4	469
	0704	3.2	98
	1310	16.9	515
	1935	−1.4	−43
7 W	0200	15.4	469
	0741	3.2	98
	1345	16.4	500
	2009	−0.9	−27
8 Th	0233	15.2	463
	0817	3.4	104
	1420	15.7	479
	2042	−0.2	−6
9 F	0307	15.0	457
	0854	3.7	113
	1456	14.8	451
	2115	0.7	21
10 Sa	0341	14.6	445
	0935	4.0	122
	1534	13.7	418
	2150	1.7	52
11 Su	0418	14.3	436
	1020	4.4	134
	1618	12.6	384
	2228	2.8	85
12 M	0500	14.0	427
	1115	4.6	140
	1712	11.6	354
	2314	3.9	119
13 Tu ◑	0549	13.7	418
	1221	4.6	140
	1823	10.9	332
14 W	0011	4.8	146
	0646	13.8	421
	1335	4.1	125
	1946	10.7	326
15 Th	0119	5.3	162
	0749	14.2	433
	1445	3.0	91
	2104	11.3	344

	Time	Height	
	h m	ft	cm
16 F	0231	5.3	162
	0850	14.9	454
	1543	1.6	49
	2207	12.4	378
17 Sa	0334	4.8	146
	0946	16.0	488
	1632	0.1	3
	2258	13.6	415
18 Su	0429	3.9	119
	1037	17.1	521
	1718	−1.4	−43
	2344	14.8	451
19 M	0519	2.9	88
	1126	18.1	552
	1801	−2.6	−79
20 Tu ●	0028	15.9	485
	0606	1.9	58
	1213	18.8	573
	1843	−3.4	−104
21 W	0110	16.8	512
	0652	1.0	30
	1259	19.1	582
	1924	−3.6	−110
22 Th	0152	17.4	530
	0739	0.5	15
	1346	18.8	573
	2007	−3.3	−101
23 F	0234	17.7	539
	0827	0.4	12
	1433	18.0	549
	2050	−2.4	−73
24 Sa	0318	17.5	533
	0918	0.6	18
	1523	16.7	509
	2135	−1.0	−30
25 Su	0405	17.1	521
	1013	1.1	34
	1617	15.1	460
	2223	0.7	21
26 M ◐	0455	16.4	500
	1116	1.7	52
	1720	13.4	408
	2318	2.4	73
27 Tu	0553	15.6	475
	1227	2.2	67
	1835	12.2	372
28 W	0023	4.0	122
	0700	15.0	457
	1345	2.2	67
	2002	11.7	357
29 Th	0140	4.9	149
	0812	14.9	454
	1459	1.7	52
	2123	12.0	366
30 F	0257	5.1	155
	0918	15.1	460
	1600	0.9	27
	2227	12.8	390
31 Sa	0402	4.8	146
	1015	15.5	472
	1650	0.2	6
	2316	13.6	415

February

	Time	Height	
	h m	ft	cm
1 Su	0453	4.2	128
	1102	15.9	485
	1732	−0.5	−15
	2357	14.3	436
2 M	0536	3.5	107
	1143	16.3	497
	1809	−0.9	−27
3 Tu ○	0032	14.8	451
	0614	2.9	88
	1220	16.5	503
	1842	−1.1	−34
4 W	0104	15.2	463
	0648	2.5	76
	1255	16.4	500
	1913	−1.1	−34
5 Th	0134	15.5	472
	0722	2.2	67
	1328	16.2	494
	1943	−0.8	−24
6 F	0203	15.6	475
	0754	2.1	64
	1400	15.7	479
	2013	−0.3	−9
7 Sa	0232	15.5	472
	0828	2.1	64
	1433	15.0	457
	2042	0.5	15
8 Su	0302	15.3	466
	0903	2.4	73
	1508	14.2	433
	2113	1.4	43
9 M	0334	15.0	457
	0941	2.8	85
	1546	13.1	399
	2146	2.5	76
10 Tu	0409	14.5	442
	1027	3.2	98
	1632	12.0	366
	2226	3.6	110
11 W ◑	0452	14.1	430
	1123	3.6	110
	1734	11.1	338
	2317	4.7	143
12 Th	0547	13.8	421
	1236	3.6	110
	1856	10.6	323
13 F	0027	5.5	168
	0656	13.7	418
	1357	3.0	91
	2027	10.9	332
14 Sa	0151	5.6	171
	0812	14.2	433
	1509	1.8	55
	2139	12.0	366
15 Su	0308	4.9	149
	0920	15.2	463
	1606	0.2	6
	2234	13.4	408

	Time	Height	
	h m	ft	cm
16 M	0410	3.6	110
	1018	16.5	503
	1655	−1.3	−40
	2321	14.9	454
17 Tu	0503	2.1	64
	1111	17.7	539
	1740	−2.5	−76
18 W ●	0005	16.3	497
	0551	0.6	18
	1200	18.5	564
	1823	−3.3	−101
19 Th	0046	17.4	530
	0638	−0.6	−18
	1248	18.9	576
	1904	−3.5	−107
20 F	0127	18.2	555
	0724	−1.4	−43
	1334	18.7	570
	1946	−3.1	−94
21 Sa	0208	18.5	564
	0811	−1.6	−49
	1421	17.9	546
	2027	−2.1	−64
22 Su	0250	18.2	555
	0859	−1.2	−37
	1509	16.7	509
	2110	−0.6	−18
23 M	0334	17.5	533
	0950	−0.4	−12
	1600	15.0	457
	2156	1.1	34
24 Tu	0421	16.4	500
	1047	0.6	18
	1658	13.3	405
	2248	3.0	91
25 W ◐	0516	15.2	463
	1154	1.7	52
	1809	12.0	366
	2352	4.5	137
26 Th	0623	14.1	430
	1312	2.3	70
	1937	11.3	344
27 F	0115	5.5	168
	0742	13.6	415
	1431	2.2	67
	2103	11.6	354
28 Sa	0242	5.5	168
	0858	13.7	418
	1537	1.7	52
	2208	12.3	375

March

	Time	Height	
	h m	ft	cm
1 Su	0350	4.8	146
	0959	14.2	433
	1629	1.0	30
	2255	13.2	402
2 M	0441	3.9	119
	1047	14.7	448
	1710	0.3	9
	2332	14.0	427
3 Tu	0521	3.0	91
	1128	15.3	466
	1745	−0.2	−6
4 W	0004	14.7	448
	0556	2.1	64
	1204	15.7	479
	1817	−0.5	−15
5 Th ○	0034	15.2	463
	0629	1.4	43
	1237	15.8	482
	1846	−0.5	−15
6 F	0102	15.6	475
	0700	0.9	27
	1309	15.8	482
	1915	−0.3	−9
7 Sa	0130	15.9	485
	0731	0.7	21
	1341	15.5	472
	1943	0.1	3
8 Su	0157	15.9	485
	0802	0.6	18
	1413	15.0	457
	2012	0.7	21
9 M	0226	15.8	482
	0835	0.8	24
	1447	14.3	436
	2042	1.6	49
10 Tu	0256	15.4	469
	0911	1.2	37
	1524	13.4	408
	2115	2.6	79
11 W	0330	15.0	457
	0953	1.7	52
	1608	12.4	378
	2154	3.6	110
12 Th	0411	14.4	439
	1045	2.3	70
	1705	11.4	347
	2244	4.7	143
13 F ◑	0504	13.8	421
	1152	2.7	82
	1823	10.9	332
	2356	5.4	165
14 Sa	0617	13.4	408
	1314	2.5	76
	1953	11.1	338
15 Su	0126	5.4	165
	0741	13.6	415
	1433	1.7	52
	2108	12.2	372

	Time	Height	
	h m	ft	cm
16 M	0248	4.4	134
	0857	14.5	442
	1536	0.4	12
	2206	13.7	418
17 Tu	0353	2.8	85
	1001	15.7	479
	1629	−0.9	−27
	2253	15.3	466
18 W	0447	0.9	27
	1056	16.9	515
	1715	−1.9	−58
	2337	16.8	512
19 Th	0536	−0.8	−24
	1146	17.8	543
	1759	−2.5	−76
20 F ●	0019	17.9	546
	0622	−2.1	−64
	1234	18.2	555
	1841	−2.6	−79
21 Sa	0100	18.6	567
	0707	−2.9	−88
	1321	18.1	552
	1922	−2.1	−64
22 Su	0141	18.8	573
	0752	−3.0	−91
	1407	17.4	530
	2004	−1.1	−34
23 M	0222	18.4	561
	0838	−2.5	−76
	1454	16.3	497
	2047	0.3	9
24 Tu	0304	17.4	530
	0927	−1.5	−46
	1543	14.8	451
	2132	1.9	58
25 W	0350	16.1	491
	1019	−0.1	−3
	1638	13.3	405
	2223	3.5	107
26 Th ◐	0441	14.6	445
	1120	1.2	37
	1744	12.1	369
	2326	4.9	149
27 F	0546	13.3	405
	1233	2.2	67
	1905	11.4	347
28 Sa	0050	5.6	171
	0706	12.5	381
	1351	2.6	79
	2028	11.5	351
29 Su	0219	5.5	168
	0828	12.4	378
	1500	2.3	70
	2132	12.2	372
30 M	0328	4.6	140
	0933	12.9	393
	1554	1.8	55
	2219	13.0	396
31 Tu	0418	3.5	107
	1023	13.5	411
	1636	1.3	40
	2256	13.8	421

Time meridian 135° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.
Heights are referred to mean lower low water which is the chart datum of soundings.

Ketchikan, Alaska, 2015

Times and Heights of High and Low Waters

April

	Time	Height		Time	Height
	h m	ft / cm		h m	ft / cm
1 W	0458	2.4 / 73	**16** Th	0430	−0.1 / −3
	1105	14.2 / 433		1040	15.8 / 482
	1712	0.8 / 24		1648	−0.8 / −24
	2328	14.6 / 445		2308	17.1 / 521
2 Th	0532	1.4 / 43	**17** F	0519	−1.8 / −55
	1142	14.7 / 448		1132	16.6 / 506
	1744	0.6 / 18		1733	−1.1 / −34
	2357	15.3 / 466		2351	18.1 / 552
3 F	0605	0.5 / 15	**18** Sa ●	0605	−3.0 / −91
	1216	15.0 / 457		1221	17.1 / 521
	1815	0.5 / 15		1817	−1.0 / −30
4 Sa ○	0026	15.8 / 482	**19** Su	0033	18.6 / 567
	0636	−0.1 / −3		0650	−3.6 / −110
	1249	15.2 / 463		1308	17.0 / 518
	1845	0.6 / 18		1859	−0.6 / −18
5 Su	0055	16.1 / 491	**20** M	0114	18.6 / 567
	0707	−0.5 / −15		0734	−3.6 / −110
	1323	15.1 / 460		1354	16.6 / 506
	1914	0.9 / 27		1942	0.2 / 6
6 M	0124	16.2 / 494	**21** Tu	0155	18.0 / 549
	0739	−0.6 / −18		0819	−3.0 / −91
	1356	14.8 / 451		1440	15.7 / 479
	1945	1.4 / 43		2025	1.4 / 43
7 Tu	0154	16.1 / 491	**22** W	0238	17.0 / 518
	0812	−0.5 / −15		0904	−2.0 / −61
	1432	14.3 / 436		1527	14.6 / 445
	2017	2.1 / 64		2110	2.6 / 79
8 W	0226	15.8 / 482	**23** Th	0322	15.7 / 479
	0849	−0.2 / −6		0953	−0.6 / −18
	1511	13.6 / 415		1618	13.5 / 411
	2052	2.9 / 88		2201	3.9 / 119
9 Th	0301	15.3 / 466	**24** F	0411	14.2 / 433
	0931	0.3 / 9		1047	0.8 / 24
	1556	12.8 / 390		1717	12.5 / 381
	2135	3.8 / 116		2302	4.9 / 149
10 F	0344	14.6 / 445	**25** Sa ◐	0509	12.8 / 390
	1021	1.0 / 30		1150	1.9 / 58
	1652	12.0 / 366		1825	11.8 / 360
	2229	4.6 / 140			
11 Sa ◑	0439	13.8 / 421	**26** Su	0019	5.4 / 165
	1125	1.6 / 49		0622	11.8 / 360
	1804	11.7 / 357		1259	2.6 / 79
	2343	5.1 / 155		1937	11.8 / 360
12 Su	0552	13.2 / 402	**27** M	0142	5.2 / 158
	1240	1.8 / 55		0743	11.5 / 351
	1924	12.0 / 366		1407	2.8 / 85
				2040	12.3 / 375
13 M	0110	4.8 / 146	**28** Tu	0252	4.4 / 134
	0717	13.1 / 399		0853	11.8 / 360
	1357	1.4 / 43		1504	2.7 / 82
	2035	13.0 / 396		2130	13.0 / 396
14 Tu	0230	3.6 / 110	**29** W	0345	3.3 / 101
	0836	13.8 / 421		0949	12.3 / 375
	1503	0.7 / 21		1551	2.4 / 73
	2133	14.4 / 439		2209	13.8 / 421
15 W	0335	1.8 / 55	**30** Th	0427	2.1 / 64
	0943	14.8 / 451		1035	13.0 / 396
	1559	−0.1 / −3		1631	2.1 / 64
	2223	15.8 / 482		2244	14.6 / 445

May

	Time	Height		Time	Height
	h m	ft / cm		h m	ft / cm
1 F	0504	1.0 / 30	**16** Sa	0503	−2.1 / −64
	1115	13.6 / 415		1119	15.3 / 466
	1707	1.8 / 55		1709	0.6 / 18
	2317	15.3 / 466		2325	17.9 / 546
2 Sa	0538	0.0 / 0	**17** Su ●	0550	−3.1 / −94
	1153	14.1 / 430		1209	15.7 / 479
	1741	1.7 / 52		1755	0.7 / 21
	2349	15.9 / 485			
3 Su ○	0611	−0.7 / −21	**18** M	0008	18.2 / 555
	1229	14.5 / 442		0634	−3.6 / −110
	1814	1.7 / 52		1256	15.9 / 485
				1839	1.0 / 30
4 M	0021	16.3 / 497	**19** Tu	0051	18.0 / 549
	0644	−1.3 / −40		0718	−3.5 / −107
	1305	14.6 / 445		1341	15.7 / 479
	1847	1.8 / 55		1922	1.5 / 46
5 Tu	0053	16.5 / 503	**20** W	0133	17.5 / 533
	0718	−1.6 / −49		0800	−3.0 / −91
	1342	14.6 / 445		1426	15.2 / 463
	1921	2.1 / 64		2006	2.2 / 67
6 W	0127	16.5 / 503	**21** Th	0215	16.6 / 506
	0754	−1.6 / −49		0844	−2.1 / −64
	1421	14.3 / 436		1510	14.5 / 442
	1958	2.5 / 76		2050	3.0 / 91
7 Th	0203	16.2 / 494	**22** F	0257	15.4 / 469
	0833	−1.3 / −40		0928	−0.9 / −27
	1502	13.9 / 424		1556	13.8 / 421
	2038	3.1 / 94		2139	3.8 / 116
8 F	0244	15.7 / 479	**23** Sa	0343	14.1 / 430
	0916	−0.9 / −27		1015	0.3 / 9
	1549	13.4 / 408		1645	13.0 / 396
	2126	3.6 / 110		2233	4.6 / 140
9 Sa	0330	14.9 / 454	**24** Su	0433	12.8 / 390
	1006	−0.2 / −6		1106	1.4 / 43
	1643	13.0 / 396		1740	12.5 / 381
	2224	4.1 / 125		2338	5.0 / 152
10 Su	0426	14.0 / 427	**25** M ◐	0534	11.7 / 357
	1104	0.5 / 15		1202	2.4 / 73
	1746	12.9 / 393		1838	12.3 / 375
	2335	4.3 / 131			
11 M ◑	0536	13.2 / 402	**26** Tu	0051	4.9 / 149
	1211	1.1 / 34		0645	11.0 / 335
	1855	13.2 / 402		1303	3.0 / 91
				1937	12.5 / 381
12 Tu	0055	3.8 / 116	**27** W	0202	4.3 / 131
	0656	12.8 / 390		0759	10.9 / 332
	1321	1.3 / 40		1402	3.4 / 104
	2001	13.9 / 424		2030	13.0 / 396
13 W	0212	2.6 / 79	**28** Th	0301	3.3 / 101
	0815	13.1 / 399		0904	11.2 / 341
	1428	1.2 / 37		1456	3.4 / 104
	2100	15.0 / 457		2116	13.7 / 418
14 Th	0317	1.0 / 30	**29** F	0350	2.2 / 67
	0925	13.8 / 421		0959	11.8 / 360
	1527	1.0 / 30		1543	3.3 / 101
	2152	16.2 / 494		2158	14.4 / 439
15 F	0413	−0.7 / −21	**30** Sa	0431	1.0 / 30
	1025	14.6 / 445		1046	12.5 / 381
	1620	0.7 / 21		1626	3.0 / 91
	2239	17.2 / 524		2236	15.2 / 463
			31 Su	0510	0.0 / 0
				1128	13.2 / 402
				1706	2.8 / 85
				2313	15.8 / 482

June

	Time	Height		Time	Height
	h m	ft / cm		h m	ft / cm
1 M	0546	−1.0 / −30	**16** Tu ●	0620	−3.0 / −91
	1209	13.8 / 421		1245	14.9 / 454
	1745	2.6 / 79		1823	2.0 / 61
	2351	16.4 / 500			
2 Tu ○	0623	−1.7 / −52	**17** W	0033	17.3 / 527
	1248	14.3 / 436		0702	−3.0 / −91
	1823	2.4 / 73		1328	15.0 / 457
				1906	2.2 / 67
3 W	0028	16.8 / 512	**18** Th	0115	16.9 / 515
	0700	−2.3 / −70		0743	−2.7 / −82
	1328	14.5 / 442		1409	14.9 / 454
	1902	2.4 / 73		1948	2.5 / 76
4 Th	0107	16.9 / 515	**19** F	0155	16.2 / 494
	0739	−2.5 / −76		0822	−2.0 / −61
	1409	14.6 / 445		1449	14.6 / 445
	1944	2.4 / 73		2030	2.9 / 88
5 F	0148	16.7 / 509	**20** Sa	0235	15.3 / 466
	0820	−2.4 / −73		0901	−1.1 / −34
	1452	14.6 / 445		1528	14.1 / 430
	2029	2.6 / 79		2113	3.3 / 101
6 Sa	0232	16.2 / 494	**21** Su	0315	14.2 / 433
	0903	−1.9 / −58		0941	−0.1 / −3
	1538	14.4 / 439		1609	13.6 / 415
	2119	2.8 / 85		2200	3.8 / 116
7 Su	0321	15.4 / 469	**22** M	0359	13.1 / 399
	0951	−1.2 / −37		1022	1.0 / 30
	1628	14.3 / 436		1652	13.2 / 402
	2216	3.1 / 94		2252	4.2 / 128
8 M	0416	14.4 / 439	**23** Tu	0448	11.9 / 363
	1044	−0.3 / −9		1107	2.1 / 64
	1723	14.2 / 433		1739	12.9 / 393
	2323	3.1 / 94		2353	4.3 / 131
9 Tu ◑	0521	13.4 / 408	**24** W ◐	0548	11.0 / 335
	1143	0.6 / 18		1157	3.0 / 91
	1824	14.3 / 436		1831	12.8 / 390
10 W	0037	2.7 / 82	**25** Th	0101	4.1 / 125
	0636	12.6 / 384		0658	10.4 / 317
	1247	1.5 / 46		1254	3.8 / 116
	1927	14.7 / 448		1926	13.0 / 396
11 Th	0151	1.8 / 55	**26** F	0208	3.5 / 107
	0755	12.4 / 378		0812	10.4 / 317
	1354	2.0 / 61		1355	4.2 / 128
	2028	15.4 / 469		2020	13.4 / 408
12 F	0258	0.6 / 18	**27** Sa	0307	2.5 / 76
	0909	12.8 / 390		0919	10.9 / 332
	1458	2.2 / 67		1453	4.2 / 128
	2124	16.1 / 491		2111	14.1 / 430
13 Sa	0357	−0.7 / −21	**28** Su	0357	1.3 / 40
	1013	13.4 / 408		1015	11.6 / 354
	1556	2.2 / 67		1546	4.0 / 122
	2216	16.7 / 509		2158	14.9 / 454
14 Su	0449	−1.8 / −55	**29** M	0441	0.1 / 3
	1109	14.1 / 430		1103	12.5 / 381
	1649	2.1 / 64		1634	3.5 / 107
	2304	17.2 / 524		2242	15.7 / 479
15 M	0536	−2.6 / −79	**30** Tu	0523	−1.0 / −30
	1159	14.6 / 445		1148	13.4 / 408
	1737	2.0 / 61		1719	3.0 / 91
	2350	17.4 / 530		2326	16.5 / 503

Time meridian 135° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.
Heights are referred to mean lower low water which is the chart datum of soundings.

Ketchikan, Alaska, 2015

Times and Heights of High and Low Waters

July

	Time	Height	
	h m	ft	cm
1 W ○	0603	−2.1	−64
	1230	14.2	433
	1803	2.4	73
2 Th	0009	17.1	521
	0642	−2.8	−85
	1311	14.8	451
	1846	1.9	58
3 F	0052	17.4	530
	0723	−3.2	−98
	1352	15.3	466
	1931	1.5	46
4 Sa	0136	17.3	527
	0804	−3.2	−98
	1434	15.6	475
	2017	1.3	40
5 Su	0222	16.9	515
	0847	−2.7	−82
	1518	15.7	479
	2107	1.3	40
6 M	0311	16.0	488
	0932	−1.9	−58
	1604	15.5	472
	2203	1.5	46
7 Tu	0405	14.8	451
	1021	−0.6	−18
	1655	15.3	466
	2305	1.7	52
8 W ◑	0506	13.5	411
	1115	0.7	21
	1752	15.1	460
9 Th	0014	1.7	52
	0617	12.4	378
	1216	2.0	61
	1854	15.0	457
10 F	0128	1.4	43
	0737	11.8	360
	1325	2.9	88
	1959	15.1	460
11 Sa	0239	0.7	21
	0855	11.9	363
	1435	3.4	104
	2102	15.4	469
12 Su	0343	−0.3	−9
	1004	12.5	381
	1540	3.4	104
	2159	15.9	485
13 M	0437	−1.1	−34
	1101	13.3	405
	1637	3.1	94
	2250	16.3	497
14 Tu	0524	−1.8	−55
	1149	13.9	424
	1726	2.7	82
	2337	16.5	503
15 W ●	0607	−2.2	−67
	1232	14.4	439
	1810	2.4	73

	Time	Height	
	h m	ft	cm
16 Th	0019	16.5	503
	0646	−2.4	−73
	1310	14.7	448
	1851	2.1	64
17 F	0059	16.4	500
	0722	−2.2	−67
	1346	14.8	451
	1929	2.1	64
18 Sa	0136	15.9	485
	0757	−1.8	−55
	1421	14.7	448
	2007	2.1	64
19 Su	0212	15.3	466
	0831	−1.1	−34
	1454	14.5	442
	2044	2.4	73
20 M	0249	14.4	439
	0905	−0.2	−6
	1528	14.2	433
	2124	2.7	82
21 Tu	0327	13.4	408
	0940	0.8	24
	1604	13.8	421
	2207	3.1	94
22 W	0408	12.4	378
	1017	1.9	58
	1643	13.4	408
	2257	3.5	107
23 Th ◐	0458	11.3	344
	1059	3.1	94
	1728	13.1	399
	2357	3.7	113
24 F	0601	10.4	317
	1151	4.1	125
	1822	12.9	393
25 Sa	0108	3.5	107
	0719	10.1	308
	1255	4.7	143
	1924	13.1	399
26 Su	0219	2.8	85
	0838	10.4	317
	1406	4.9	149
	2026	13.6	415
27 M	0321	1.7	52
	0944	11.2	341
	1512	4.5	137
	2124	14.4	439
28 Tu	0413	0.4	12
	1038	12.3	375
	1608	3.7	113
	2217	15.5	472
29 W	0458	−1.0	−30
	1124	13.4	408
	1658	2.7	82
	2306	16.5	503
30 Th	0541	−2.2	−67
	1206	14.6	445
	1745	1.6	49
	2352	17.3	527
31 F ○	0622	−3.1	−94
	1248	15.6	475
	1830	0.7	21

August

	Time	Height	
	h m	ft	cm
1 Sa	0038	17.9	546
	0703	−3.6	−110
	1328	16.3	497
	1916	−0.1	−3
2 Su	0124	17.9	546
	0744	−3.5	−107
	1409	16.8	512
	2002	−0.5	−15
3 M	0210	17.4	530
	0825	−2.9	−88
	1452	16.9	515
	2051	−0.5	−15
4 Tu	0259	16.5	503
	0909	−1.8	−55
	1536	16.6	506
	2143	−0.1	−3
5 W	0350	15.1	460
	0956	−0.3	−9
	1624	16.1	491
	2242	0.4	12
6 Th ◑	0449	13.6	415
	1048	1.3	40
	1719	15.4	469
	2349	1.0	30
7 F	0558	12.3	375
	1149	2.8	85
	1822	14.7	448
8 Sa	0104	1.3	40
	0720	11.5	351
	1303	3.9	119
	1934	14.4	439
9 Su	0220	1.1	34
	0844	11.6	354
	1422	4.3	131
	2045	14.5	442
10 M	0328	0.4	12
	0954	12.2	372
	1533	4.0	122
	2148	14.9	454
11 Tu	0424	−0.3	−9
	1049	13.0	396
	1630	3.4	104
	2240	15.3	466
12 W	0510	−0.9	−27
	1134	13.8	421
	1716	2.7	82
	2326	15.7	479
13 Th	0549	−1.4	−43
	1212	14.4	439
	1757	2.0	61
14 F ●	0005	16.0	488
	0625	−1.6	−49
	1245	14.8	451
	1833	1.5	46
15 Sa	0042	16.0	488
	0658	−1.5	−46
	1317	15.0	457
	1908	1.2	37

	Time	Height	
	h m	ft	cm
16 Su	0116	15.8	482
	0729	−1.2	−37
	1347	15.1	460
	1941	1.1	34
17 M	0150	15.3	466
	0759	−0.6	−18
	1417	15.0	457
	2015	1.2	37
18 Tu	0223	14.7	448
	0830	0.2	6
	1447	14.8	451
	2049	1.5	46
19 W	0258	13.8	421
	0900	1.1	34
	1518	14.4	439
	2127	2.0	61
20 Th	0336	12.8	390
	0933	2.2	67
	1552	13.9	424
	2209	2.5	76
21 F	0420	11.8	360
	1012	3.3	101
	1633	13.4	408
	2302	3.0	91
22 Sa ◐	0516	10.8	329
	1100	4.4	134
	1725	12.9	393
23 Su	0010	3.3	101
	0633	10.2	311
	1206	5.2	158
	1832	12.8	390
24 M	0130	3.0	91
	0800	10.4	317
	1328	5.4	165
	1947	13.1	399
25 Tu	0243	2.0	61
	0914	11.3	344
	1446	4.7	143
	2056	14.0	427
26 W	0342	0.7	21
	1010	12.6	384
	1548	3.5	107
	2155	15.2	463
27 Th	0431	−0.7	−21
	1056	14.0	427
	1640	2.0	61
	2248	16.4	500
28 F	0516	−2.0	−61
	1139	15.4	469
	1728	0.5	15
	2336	17.5	533
29 Sa ○	0558	−2.9	−88
	1219	16.6	506
	1813	−0.8	−24
30 Su	0023	18.1	552
	0639	−3.3	−101
	1300	17.5	533
	1858	−1.8	−55
31 M	0110	18.2	555
	0720	−3.1	−94
	1340	17.9	546
	1944	−2.2	−67

September

	Time	Height	
	h m	ft	cm
1 Tu	0156	17.7	539
	0801	−2.3	−70
	1422	17.9	546
	2031	−2.1	−64
2 W	0244	16.7	509
	0844	−1.0	−30
	1506	17.4	530
	2122	−1.5	−46
3 Th	0335	15.3	466
	0930	0.5	15
	1553	16.5	503
	2217	−0.4	−12
4 F	0432	13.7	418
	1022	2.3	70
	1647	15.3	466
	2321	0.7	21
5 Sa ◑	0540	12.4	378
	1126	3.8	116
	1752	14.2	433
6 Su	0037	1.5	46
	0703	11.6	354
	1246	4.8	146
	1911	13.5	411
7 M	0157	1.7	52
	0829	11.7	357
	1414	4.9	149
	2030	13.5	411
8 Tu	0307	1.3	40
	0938	12.4	378
	1526	4.2	128
	2136	13.9	424
9 W	0403	0.7	21
	1029	13.2	402
	1620	3.3	101
	2228	14.5	442
10 Th	0448	0.1	3
	1109	14.0	427
	1703	2.3	70
	2311	15.0	457
11 F	0525	−0.3	−9
	1143	14.7	448
	1739	1.5	46
	2348	15.4	469
12 Sa ●	0558	−0.5	−15
	1214	15.2	463
	1813	0.8	24
13 Su	0023	15.6	475
	0629	−0.4	−12
	1243	15.5	472
	1844	0.4	12
14 M	0056	15.5	472
	0658	−0.2	−6
	1311	15.7	479
	1915	0.1	3
15 Tu	0128	15.3	466
	0727	0.3	9
	1339	15.7	479
	1946	0.2	6

	Time	Height	
	h m	ft	cm
16 W	0200	14.8	451
	0756	1.0	30
	1407	15.5	472
	2019	0.4	12
17 Th	0234	14.1	430
	0826	1.9	58
	1437	15.1	460
	2053	0.9	27
18 F	0311	13.3	405
	0858	2.8	85
	1510	14.5	442
	2133	1.5	46
19 Sa	0353	12.3	375
	0936	3.9	119
	1549	13.9	424
	2221	2.2	67
20 Su ◐	0447	11.4	347
	1025	4.9	149
	1640	13.2	402
	2325	2.7	82
21 M	0600	10.8	329
	1133	5.6	171
	1749	12.7	387
22 Tu	0044	2.8	85
	0727	11.0	335
	1302	5.6	171
	1913	12.8	390
23 W	0203	2.2	67
	0841	12.0	366
	1425	4.7	143
	2031	13.7	418
24 Th	0308	1.1	34
	0938	13.4	408
	1529	3.0	91
	2135	14.9	454
25 F	0401	−0.2	−6
	1025	14.9	454
	1622	1.2	37
	2230	16.2	494
26 Sa	0448	−1.2	−37
	1108	16.4	500
	1710	−0.6	−18
	2320	17.3	527
27 Su ○	0531	−1.9	−58
	1150	17.7	539
	1756	−2.1	−64
28 M	0008	17.9	546
	0613	−2.1	−64
	1230	18.6	567
	1840	−3.1	−94
29 Tu	0055	18.0	549
	0655	−1.8	−55
	1312	18.9	576
	1925	−3.4	−104
30 W	0142	17.6	536
	0737	−1.0	−30
	1353	18.7	570
	2012	−3.1	−94

Time meridian 135° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.
Heights are referred to mean lower low water which is the chart datum of soundings.

Ketchikan, Alaska, 2015

Times and Heights of High and Low Waters

October

	Time	Height	
	h m	ft	cm
1 Th	0230	16.7	509
	0821	0.2	6
	1437	17.9	546
	2100	−2.2	−67
2 F	0320	15.4	469
	0907	1.7	52
	1523	16.6	506
	2153	−0.9	−27
3 Sa	0415	14.0	427
	1000	3.3	101
	1616	15.2	463
	2253	0.6	18
4 Su ◑	0521	12.8	390
	1105	4.7	143
	1721	13.7	418
5 M	0004	1.7	52
	0639	12.1	369
	1229	5.4	165
	1842	12.8	390
6 Tu	0123	2.3	70
	0801	12.2	372
	1359	5.2	158
	2006	12.6	384
7 W	0234	2.2	67
	0907	12.8	390
	1510	4.3	131
	2114	13.1	399
8 Th	0331	1.9	58
	0956	13.6	415
	1601	3.2	98
	2207	13.7	418
9 F	0416	1.5	46
	1035	14.4	439
	1642	2.1	64
	2250	14.3	436
10 Sa	0453	1.1	34
	1108	15.1	460
	1717	1.2	37
	2327	14.8	451
11 Su	0526	1.0	30
	1138	15.6	475
	1749	0.4	12
12 M ●	0002	15.1	460
	0557	1.0	30
	1207	16.1	491
	1820	−0.2	−6
13 Tu	0035	15.2	463
	0627	1.2	37
	1235	16.3	497
	1851	−0.5	−15
14 W	0108	15.2	463
	0657	1.5	46
	1304	16.3	497
	1922	−0.6	−18
15 Th	0142	14.9	454
	0727	2.1	64
	1333	16.2	494
	1954	−0.4	−12

	Time	Height	
	h m	ft	cm
16 F	0216	14.4	439
	0758	2.8	85
	1404	15.8	482
	2029	0.0	0
17 Sa	0254	13.7	418
	0833	3.6	110
	1438	15.2	463
	2108	0.6	18
18 Su	0337	13.0	396
	0913	4.4	134
	1519	14.5	442
	2155	1.4	43
19 M	0430	12.3	375
	1005	5.2	158
	1610	13.7	418
	2253	2.0	61
20 Tu ◐	0537	11.9	363
	1115	5.7	174
	1719	13.0	396
21 W	0005	2.4	73
	0654	12.1	369
	1242	5.5	168
	1844	12.8	390
22 Th	0122	2.2	67
	0805	13.1	399
	1404	4.3	131
	2006	13.4	408
23 F	0230	1.6	49
	0903	14.4	439
	1509	2.5	76
	2115	14.4	439
24 Sa	0328	0.8	24
	0953	16.0	488
	1604	0.5	15
	2213	15.6	475
25 Su	0418	0.1	3
	1038	17.4	530
	1653	−1.3	−40
	2305	16.6	506
26 M	0504	−0.4	−12
	1121	18.5	564
	1739	−2.8	−85
	2355	17.3	527
27 Tu ○	0549	−0.4	−12
	1203	19.2	585
	1824	−3.6	−110
28 W	0042	17.5	533
	0632	−0.1	−3
	1246	19.4	591
	1909	−3.9	−119
29 Th	0129	17.2	524
	0716	0.5	15
	1328	19.0	579
	1954	−3.4	−104
30 F	0217	16.6	506
	0800	1.5	46
	1412	18.1	552
	2040	−2.4	−73
31 Sa	0305	15.6	475
	0847	2.7	82
	1458	16.7	509
	2130	−1.0	−30

November

	Time	Height	
	h m	ft	cm
1 Su	0358	14.5	442
	0940	4.0	122
	1549	15.2	463
	2224	0.4	12
2 M	0456	13.5	411
	1042	5.1	155
	1648	13.6	415
	2326	1.8	55
3 Tu ◑	0604	12.9	393
	1200	5.6	171
	1802	12.5	381
4 W	0035	2.7	82
	0716	12.8	390
	1326	5.4	165
	1924	12.0	366
5 Th	0145	3.1	94
	0821	13.2	402
	1438	4.6	140
	2038	12.2	372
6 F	0244	3.1	94
	0912	13.8	421
	1532	3.5	107
	2136	12.7	387
7 Sa	0333	3.0	91
	0953	14.6	445
	1615	2.3	70
	2223	13.3	405
8 Su	0414	2.8	85
	1028	15.3	466
	1651	1.3	40
	2303	13.9	424
9 M	0451	2.6	79
	1100	15.9	485
	1725	0.4	12
	2340	14.4	439
10 Tu	0525	2.5	76
	1132	16.4	500
	1757	−0.3	−9
11 W ●	0016	14.8	451
	0558	2.6	79
	1203	16.8	512
	1829	−0.8	−24
12 Th	0051	15.0	457
	0630	2.7	82
	1235	16.9	515
	1902	−1.0	−30
13 F	0127	15.0	457
	0703	3.0	91
	1307	16.8	512
	1936	−1.0	−30
14 Sa	0203	14.8	451
	0738	3.4	104
	1342	16.5	503
	2012	−0.7	−21
15 Su	0242	14.4	439
	0816	3.9	119
	1419	16.0	488
	2052	−0.3	−9

	Time	Height	
	h m	ft	cm
16 M	0326	14.0	427
	0900	4.4	134
	1502	15.3	466
	2137	0.4	12
17 Tu	0415	13.6	415
	0954	4.9	149
	1553	14.4	439
	2230	1.1	34
18 W ◐	0514	13.4	408
	1101	5.2	158
	1658	13.5	411
	2332	1.8	55
19 Th	0620	13.6	415
	1220	4.8	146
	1817	13.0	396
20 F	0042	2.2	67
	0727	14.3	436
	1340	3.7	113
	1940	13.1	399
21 Sa	0151	2.3	70
	0827	15.4	469
	1448	2.1	64
	2054	13.8	421
22 Su	0254	2.1	64
	0921	16.6	506
	1546	0.3	9
	2157	14.7	448
23 M	0350	1.7	52
	1010	17.8	543
	1637	−1.4	−43
	2253	15.6	475
24 Tu	0440	1.5	46
	1056	18.7	570
	1725	−2.7	−82
	2344	16.3	497
25 W ○	0528	1.4	43
	1142	19.2	585
	1810	−3.4	−104
26 Th	0032	16.7	509
	0614	1.5	46
	1226	19.3	588
	1854	−3.6	−110
27 F	0119	16.7	509
	0659	1.8	55
	1309	18.8	573
	1938	−3.2	−98
28 Sa	0204	16.4	500
	0744	2.4	73
	1353	18.0	549
	2022	−2.3	−70
29 Su	0250	15.8	482
	0830	3.2	98
	1437	16.8	512
	2107	−1.2	−37
30 M	0336	15.1	460
	0919	4.0	122
	1523	15.4	469
	2153	0.2	6

December

	Time	Height	
	h m	ft	cm
1 Tu	0426	14.3	436
	1014	4.8	146
	1614	13.9	424
	2244	1.6	49
2 W ◑	0519	13.7	418
	1119	5.4	165
	1714	12.6	384
	2339	2.8	85
3 Th	0618	13.4	408
	1233	5.4	165
	1826	11.6	354
4 F	0040	3.7	113
	0718	13.4	408
	1347	4.9	149
	1944	11.4	347
5 Sa	0142	4.2	128
	0814	13.8	421
	1450	4.0	122
	2053	11.6	354
6 Su	0240	4.4	134
	0902	14.4	439
	1540	2.9	88
	2150	12.2	372
7 M	0330	4.3	131
	0944	15.0	457
	1622	1.8	55
	2237	12.9	393
8 Tu	0414	4.1	125
	1023	15.7	479
	1700	0.7	21
	2319	13.6	415
9 W	0454	3.9	119
	1100	16.4	500
	1735	−0.2	−6
	2358	14.3	436
10 Th	0531	3.6	110
	1136	16.9	515
	1810	−0.9	−27
11 F ●	0035	14.8	451
	0608	3.4	104
	1212	17.3	527
	1845	−1.4	−43
12 Sa	0113	15.1	460
	0646	3.3	101
	1249	17.4	530
	1921	−1.6	−49
13 Su	0151	15.3	466
	0724	3.3	101
	1327	17.3	527
	1958	−1.6	−49
14 M	0230	15.3	466
	0806	3.4	104
	1408	16.9	515
	2037	−1.3	−40
15 Tu	0311	15.2	463
	0851	3.6	110
	1452	16.2	494
	2120	−0.6	−18

	Time	Height	
	h m	ft	cm
16 W	0357	15.0	457
	0944	3.8	116
	1542	15.2	463
	2208	0.3	9
17 Th	0448	14.9	454
	1045	3.9	119
	1642	14.1	430
	2302	1.3	40
18 F ◐	0545	14.9	454
	1156	3.7	113
	1754	13.1	399
19 Sa	0004	2.3	70
	0648	15.2	463
	1313	3.0	91
	1915	12.7	387
20 Su	0113	3.0	91
	0751	15.8	482
	1425	1.8	55
	2035	12.9	393
21 M	0222	3.3	101
	0852	16.6	506
	1529	0.4	12
	2145	13.7	418
22 Tu	0326	3.3	101
	0947	17.4	530
	1624	−1.0	−30
	2244	14.6	445
23 W	0423	3.0	91
	1039	18.1	552
	1713	−2.0	−61
	2336	15.4	469
24 Th	0514	2.7	82
	1127	18.5	564
	1759	−2.7	−82
25 F ○	0024	15.9	485
	0602	2.5	76
	1212	18.6	567
	1842	−3.0	−91
26 Sa	0108	16.2	494
	0647	2.4	73
	1255	18.3	558
	1923	−2.8	−85
27 Su	0150	16.3	497
	0730	2.6	79
	1337	17.7	539
	2003	−2.1	−64
28 M	0230	16.0	488
	0813	2.9	88
	1418	16.8	512
	2042	−1.2	−37
29 Tu	0310	15.6	475
	0856	3.4	104
	1459	15.6	475
	2121	−0.1	−3
30 W	0349	15.0	457
	0942	4.0	122
	1541	14.3	436
	2201	1.2	37
31 Th	0431	14.4	439
	1032	4.5	137
	1628	12.9	393
	2244	2.5	76

Time meridian 135° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.
Heights are referred to mean lower low water which is the chart datum of soundings.

Juneau, Alaska, 2015

Times and Heights of High and Low Waters

January

	Time	Height	
	h m	ft	cm
1 Th	0346	4.0	122
	1002	17.0	518
	1639	0.0	0
	2308	14.2	433
2 F	0444	3.8	116
	1053	17.4	530
	1727	−0.9	−27
	2359	14.9	454
3 Sa	0534	3.4	104
	1138	17.7	539
	1810	−1.5	−46
4 Su ○	0042	15.5	472
	0618	3.1	94
	1219	17.9	546
	1849	−1.8	−55
5 M	0121	15.8	482
	0659	2.8	85
	1258	17.9	546
	1925	−1.9	−58
6 Tu	0156	16.0	488
	0737	2.8	85
	1334	17.6	536
	1959	−1.6	−49
7 W	0229	16.0	488
	0813	2.8	85
	1409	17.1	521
	2033	−1.1	−34
8 Th	0301	15.8	482
	0849	3.1	94
	1444	16.4	500
	2105	−0.4	−12
9 F	0332	15.6	475
	0925	3.4	104
	1519	15.5	472
	2138	0.6	18
10 Sa	0405	15.2	463
	1003	3.8	116
	1557	14.4	439
	2213	1.7	52
11 Su	0441	14.8	451
	1047	4.2	128
	1639	13.2	402
	2252	2.8	85
12 M	0522	14.5	442
	1138	4.6	140
	1732	12.1	369
	2338	4.0	122
13 Tu ◑	0612	14.2	433
	1241	4.6	140
	1844	11.3	344
14 W	0036	5.0	152
	0711	14.3	436
	1354	4.1	125
	2012	11.1	338
15 Th	0149	5.6	171
	0815	14.7	448
	1504	3.1	94
	2133	11.8	360

	Time	Height	
	h m	ft	cm
16 F	0304	5.5	168
	0917	15.5	472
	1604	1.6	49
	2236	12.9	393
17 Sa	0408	4.8	146
	1012	16.6	506
	1655	0.0	0
	2328	14.2	433
18 Su	0503	3.8	116
	1103	17.8	543
	1741	−1.6	−49
19 M	0014	15.5	472
	0552	2.6	79
	1152	18.9	576
	1825	−2.9	−88
20 Tu ●	0057	16.6	506
	0638	1.5	46
	1239	19.6	597
	1907	−3.8	−116
21 W	0138	17.6	536
	0724	0.6	18
	1325	19.9	607
	1950	−4.1	−125
22 Th	0219	18.2	555
	0809	0.0	0
	1412	19.6	597
	2032	−3.7	−113
23 F	0301	18.4	561
	0856	−0.1	−3
	1459	18.8	573
	2115	−2.8	−85
24 Sa	0344	18.3	558
	0946	0.2	6
	1548	17.4	530
	2201	−1.3	−40
25 Su	0429	17.8	543
	1039	0.8	24
	1642	15.7	479
	2250	0.5	15
26 M ◐	0520	17.0	518
	1140	1.5	46
	1745	14.0	427
	2346	2.4	73
27 Tu	0618	16.2	494
	1249	2.1	64
	1904	12.7	387
28 W	0053	4.0	122
	0725	15.6	475
	1406	2.2	67
	2035	12.2	372
29 Th	0212	5.0	152
	0836	15.4	469
	1520	1.8	55
	2157	12.6	384
30 F	0329	5.1	155
	0942	15.7	479
	1623	1.0	30
	2300	13.5	411
31 Sa	0432	4.6	140
	1038	16.1	491
	1714	0.2	6
	2349	14.3	436

February

	Time	Height	
	h m	ft	cm
1 Su	0524	3.9	119
	1126	16.6	506
	1756	−0.5	−15
2 M	0029	15.0	457
	0607	3.2	98
	1208	17.0	518
	1833	−1.0	−30
3 Tu ○	0103	15.6	475
	0645	2.5	76
	1245	17.3	527
	1907	−1.3	−40
4 W	0133	16.0	488
	0719	2.1	64
	1319	17.3	527
	1938	−1.3	−40
5 Th	0202	16.3	497
	0752	1.8	55
	1352	17.1	521
	2008	−1.0	−30
6 F	0230	16.3	497
	0824	1.8	55
	1425	16.6	506
	2038	−0.4	−12
7 Sa	0258	16.3	497
	0856	1.9	58
	1457	15.9	485
	2108	0.4	12
8 Su	0326	16.0	488
	0930	2.2	67
	1530	14.9	454
	2138	1.4	43
9 M	0356	15.7	479
	1006	2.6	79
	1606	13.8	421
	2212	2.6	79
10 Tu	0431	15.2	463
	1049	3.1	94
	1650	12.7	387
	2252	3.8	116
11 W ◑	0514	14.8	451
	1143	3.5	107
	1750	11.6	354
	2344	5.0	152
12 Th	0610	14.4	439
	1253	3.7	113
	1918	11.0	335
13 F	0057	5.9	180
	0722	14.3	436
	1414	3.1	94
	2057	11.4	347
14 Sa	0226	5.9	180
	0839	14.9	454
	1529	1.9	58
	2210	12.6	384
15 Su	0343	5.0	152
	0946	16.0	488
	1629	0.3	9
	2305	14.1	430

	Time	Height	
	h m	ft	cm
16 M	0444	3.5	107
	1045	17.3	527
	1720	−1.4	−43
	2351	15.7	479
17 Tu	0536	1.9	58
	1138	18.6	567
	1805	−2.7	−82
18 W ●	0034	17.2	524
	0623	0.2	6
	1227	19.5	594
	1848	−3.6	−110
19 Th	0114	18.4	561
	0708	−1.1	−34
	1314	19.9	607
	1930	−3.9	−119
20 F	0154	19.1	582
	0753	−1.9	−58
	1400	19.7	600
	2012	−3.5	−107
21 Sa	0235	19.4	591
	0838	−2.1	−64
	1447	18.9	576
	2055	−2.4	−73
22 Su	0315	19.1	582
	0925	−1.6	−49
	1534	17.5	533
	2138	−0.8	−24
23 M	0358	18.4	561
	1015	−0.7	−21
	1625	15.8	482
	2225	1.1	34
24 Tu	0445	17.2	524
	1110	0.5	15
	1723	14.0	427
	2319	3.0	91
25 W ◐	0539	15.9	485
	1214	1.8	55
	1838	12.5	381
26 Th	0025	4.7	143
	0646	14.8	451
	1331	2.5	76
	2011	11.9	363
27 F	0149	5.7	174
	0805	14.2	433
	1452	2.6	79
	2139	12.3	375
28 Sa	0313	5.6	171
	0921	14.3	436
	1600	2.0	61
	2242	13.1	399

March

	Time	Height	
	h m	ft	cm
1 Su	0419	4.8	146
	1022	14.8	451
	1653	1.2	37
	2327	14.0	427
2 M	0509	3.8	116
	1111	15.5	472
	1735	0.5	15
3 Tu	0003	14.8	451
	0550	2.7	82
	1152	16.1	491
	1810	−0.1	−3
4 W	0034	15.5	472
	0625	1.8	55
	1228	16.6	506
	1842	−0.5	−15
5 Th ○	0103	16.1	491
	0658	1.1	34
	1302	16.8	512
	1913	−0.6	−18
6 F	0129	16.5	503
	0729	0.6	18
	1334	16.7	509
	1942	−0.4	−12
7 Sa	0156	16.8	512
	0759	0.4	12
	1406	16.5	503
	2010	0.0	0
8 Su	0222	16.8	512
	0829	0.4	12
	1437	15.9	485
	2039	0.7	21
9 M	0249	16.7	509
	0900	0.6	18
	1509	15.1	460
	2109	1.7	52
10 Tu	0319	16.3	497
	0935	1.0	30
	1543	14.2	433
	2142	2.7	82
11 W	0352	15.8	482
	1015	1.6	49
	1624	13.1	399
	2222	3.9	119
12 Th	0433	15.1	460
	1105	2.3	70
	1720	12.0	366
	2313	5.0	152
13 F ◑	0527	14.5	442
	1210	2.8	85
	1843	11.4	347
14 Sa	0028	5.8	177
	0642	14.0	427
	1331	2.7	82
	2024	11.7	357
15 Su	0201	5.7	174
	0808	14.3	436
	1453	1.9	58
	2140	12.9	393

	Time	Height	
	h m	ft	cm
16 M	0322	4.6	140
	0924	15.3	466
	1600	0.6	18
	2236	14.5	442
17 Tu	0425	2.7	82
	1028	16.6	506
	1654	−0.9	−27
	2323	16.2	494
18 W	0518	0.7	21
	1123	17.9	546
	1741	−2.1	−64
19 Th	0005	17.7	539
	0605	−1.1	−34
	1213	18.8	573
	1826	−2.8	−85
20 F ●	0046	19.0	579
	0651	−2.5	−76
	1301	19.3	588
	1908	−2.9	−88
21 Sa	0126	19.7	600
	0735	−3.4	−104
	1347	19.1	582
	1951	−2.4	−73
22 Su	0206	19.8	604
	0819	−3.4	−104
	1433	18.4	561
	2033	−1.4	−43
23 M	0246	19.4	591
	0903	−2.8	−85
	1520	17.2	524
	2116	0.1	3
24 Tu	0328	18.4	561
	0950	−1.7	−52
	1609	15.6	475
	2202	1.9	58
25 W	0413	17.0	518
	1041	−0.1	−3
	1704	14.0	427
	2255	3.6	110
26 Th ◐	0504	15.4	469
	1140	1.4	43
	1813	12.6	384
27 F	0001	5.1	155
	0608	14.0	427
	1251	2.6	79
	1940	12.0	366
28 Sa	0124	5.8	177
	0729	13.1	399
	1412	3.0	91
	2104	12.2	372
29 Su	0250	5.6	171
	0851	13.1	399
	1524	2.8	85
	2206	13.0	396
30 M	0356	4.6	140
	0956	13.6	415
	1619	2.2	67
	2250	13.9	424
31 Tu	0446	3.4	104
	1047	14.3	436
	1702	1.5	46
	2326	14.7	448

Time meridian 135° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.
Heights are referred to mean lower low water which is the chart datum of soundings.

Juneau, Alaska, 2015

Times and Heights of High and Low Waters

April

	Time	Height			Time	Height	
	h m	ft	cm		h m	ft	cm
1 W	0526	2.2	67	**16** Th	0459	−0.3	−9
	1129	15.0	457		1108	16.8	512
	1739	1.0	30		1715	−0.9	−27
	2356	15.5	472		2335	18.1	552
2 Th	0600	1.2	37	**17** F	0547	−2.1	−64
	1207	15.6	475		1159	17.6	536
	1812	0.6	18		1802	−1.3	−40
3 F	0025	16.2	494	**18** Sa ●	0017	19.2	585
	0633	0.3	9		0632	−3.4	−104
	1241	16.0	488		1248	18.1	552
	1843	0.4	12		1846	−1.3	−40
4 Sa ○	0053	16.7	509	**19** Su	0058	19.7	600
	0703	−0.4	−12		0716	−4.1	−125
	1315	16.1	491		1335	18.0	549
	1913	0.5	15		1929	−0.9	−27
5 Su	0120	17.1	521	**20** M	0139	19.6	597
	0733	−0.8	−24		0759	−4.0	−122
	1347	16.0	488		1421	17.5	533
	1943	0.9	27		2012	0.0	0
6 M	0148	17.2	524	**21** Tu	0220	19.0	579
	0804	−0.9	−27		0843	−3.3	−101
	1420	15.7	479		1507	16.6	506
	2014	1.4	43		2056	1.2	37
7 Tu	0217	17.1	521	**22** W	0301	18.0	549
	0836	−0.8	−24		0927	−2.1	−64
	1454	15.1	460		1554	15.4	469
	2046	2.2	67		2142	2.6	79
8 W	0249	16.7	509	**23** Th	0345	16.6	506
	0912	−0.4	−12		1015	−0.6	−18
	1530	14.3	436		1646	14.1	430
	2122	3.1	94		2234	4.0	122
9 Th	0324	16.2	494	**24** F	0433	15.0	457
	0953	0.2	6		1107	0.9	27
	1614	13.5	411		1746	13.1	399
	2205	4.1	125		2336	5.1	155
10 F	0407	15.4	469	**25** Sa ◐	0532	13.5	411
	1042	1.0	30		1209	2.3	70
	1710	12.6	384		1858	12.4	378
	2300	4.9	149				
11 Sa ◑	0502	14.5	442	**26** Su	0052	5.6	171
	1144	1.7	52		0646	12.5	381
	1826	12.2	372		1320	3.1	94
					2012	12.5	381
12 Su	0015	5.4	165	**27** M	0213	5.4	165
	0617	13.9	424		0806	12.1	369
	1259	2.0	61		1430	3.3	101
	1954	12.5	381		2113	13.0	396
13 M	0143	5.0	152	**28** Tu	0320	4.5	137
	0744	13.8	421		0917	12.4	378
	1418	1.7	52		1530	3.1	94
	2106	13.7	418		2200	13.8	421
14 Tu	0302	3.7	113	**29** W	0412	3.3	101
	0904	14.5	442		1013	13.1	399
	1527	0.9	27		1618	2.6	79
	2202	15.2	463		2238	14.6	445
15 W	0405	1.7	52	**30** Th	0454	2.0	61
	1010	15.7	479		1100	13.8	421
	1625	−0.1	−3		1659	2.2	67
	2250	16.8	512		2311	15.4	469

May

	Time	Height			Time	Height	
	h m	ft	cm		h m	ft	cm
1 F	0530	0.9	27	**16** Sa	0529	−2.4	−73
	1141	14.5	442		1147	16.2	494
	1736	1.9	58		1739	0.4	12
	2343	16.2	494		2350	18.9	576
2 Sa	0604	−0.1	−3	**17** Su ●	0615	−3.5	−107
	1219	15.0	457		1237	16.7	509
	1810	1.7	52		1825	0.4	12
3 Su ○	0015	16.8	512	**18** M	0033	19.2	585
	0637	−1.0	−30		0659	−3.9	−119
	1255	15.3	466		1324	16.8	512
	1844	1.7	52		1910	0.7	21
4 M	0046	17.2	524	**19** Tu	0115	19.0	579
	0709	−1.5	−46		0742	−3.8	−116
	1331	15.5	472		1410	16.6	506
	1918	1.8	55		1954	1.3	40
5 Tu	0118	17.4	530	**20** W	0157	18.4	561
	0743	−1.8	−55		0824	−3.2	−98
	1407	15.4	469		1454	16.0	488
	1952	2.1	64		2038	2.0	61
6 W	0151	17.4	530	**21** Th	0238	17.5	533
	0818	−1.9	−58		0906	−2.2	−67
	1444	15.1	460		1538	15.3	466
	2029	2.6	79		2123	3.0	91
7 Th	0227	17.1	521	**22** F	0321	16.2	494
	0856	−1.6	−49		0950	−1.0	−30
	1524	14.6	445		1624	14.4	439
	2110	3.2	98		2212	3.9	119
8 F	0307	16.5	503	**23** Sa	0406	14.9	454
	0939	−1.0	−30		1035	0.4	12
	1610	14.1	430		1714	13.7	418
	2157	3.8	116		2306	4.7	143
9 Sa	0353	15.7	479	**24** Su	0457	13.5	411
	1028	−0.3	−9		1126	1.7	52
	1705	13.6	415		1809	13.1	399
	2255	4.4	134				
10 Su	0450	14.7	448	**25** M ◐	0010	5.1	155
	1125	0.6	18		0558	12.4	378
	1811	13.4	408		1223	2.7	82
					1909	12.9	393
11 M ◑	0006	4.5	137	**26** Tu	0121	5.1	155
	0601	13.9	424		0710	11.6	354
	1232	1.2	37		1325	3.5	107
	1923	13.8	421		2007	13.2	402
12 Tu	0125	3.9	119	**27** W	0229	4.4	134
	0723	13.5	411		0824	11.5	351
	1344	1.5	46		1428	3.7	113
	2030	14.7	448		2059	13.7	418
13 W	0240	2.6	79	**28** Th	0327	3.4	104
	0843	13.8	421		0930	11.9	363
	1453	1.4	43		1524	3.7	113
	2127	15.9	485		2143	14.5	442
14 Th	0344	0.9	27	**29** F	0415	2.2	67
	0953	14.6	445		1025	12.6	384
	1555	1.0	30		1614	3.5	107
	2218	17.1	521		2224	15.3	466
15 F	0439	−0.9	−27	**30** Sa	0457	1.0	30
	1053	15.4	469		1112	13.3	405
	1649	0.6	18		1657	3.2	98
	2305	18.1	552		2302	16.1	491
				31 Su	0535	−0.1	−3
					1155	14.0	427
					1738	2.9	88
					2339	16.8	512

June

	Time	Height			Time	Height	
	h m	ft	cm		h m	ft	cm
1 M	0611	−1.2	−37	**16** Tu ●	0014	18.3	558
	1236	14.6	445		0644	−3.2	−98
	1817	2.6	79		1315	15.8	482
					1855	1.8	55
2 Tu ○	0016	17.3	527	**17** W	0057	18.2	555
	0647	−2.0	−61		0726	−3.2	−98
	1316	15.0	457		1358	15.9	485
	1856	2.4	73		1938	2.0	61
3 W	0054	17.7	539	**18** Th	0139	17.8	543
	0724	−2.5	−76		0806	−2.8	−85
	1355	15.3	466		1439	15.7	479
	1935	2.4	73		2021	2.3	70
4 Th	0132	17.8	543	**19** F	0219	17.1	521
	0802	−2.7	−82		0845	−2.1	−64
	1435	15.4	469		1518	15.4	469
	2016	2.4	73		2102	2.8	85
5 F	0213	17.6	536	**20** Sa	0258	16.2	494
	0843	−2.6	−79		0924	−1.1	−34
	1517	15.3	466		1556	14.9	454
	2100	2.6	79		2145	3.3	101
6 Sa	0257	17.1	521	**21** Su	0339	15.1	460
	0926	−2.1	−64		1003	0.0	0
	1602	15.2	463		1636	14.4	439
	2150	2.9	88		2231	3.9	119
7 Su	0345	16.2	494	**22** M	0422	13.9	424
	1014	−1.3	−40		1044	1.2	37
	1652	15.0	457		1718	13.9	424
	2247	3.1	94		2322	4.3	131
8 M	0440	15.1	460	**23** Tu	0511	12.7	387
	1107	−0.3	−9		1128	2.4	73
	1749	14.9	454		1805	13.6	415
	2352	3.2	98				
9 Tu ◑	0546	14.0	427	**24** W ◐	0020	4.5	137
	1206	0.8	24		0611	11.7	357
	1851	15.1	460		1220	3.4	104
					1857	13.5	411
10 W	0104	2.8	85	**25** Th	0125	4.3	131
	0703	13.3	405		0723	11.1	338
	1313	1.6	49		1319	4.2	128
	1954	15.5	472		1952	13.7	418
11 Th	0216	1.9	58	**26** F	0231	3.7	113
	0824	13.1	399		0838	11.1	338
	1421	2.2	67		1423	4.6	140
	2054	16.2	494		2046	14.2	433
12 F	0323	0.6	18	**27** Sa	0329	2.7	82
	0938	13.5	411		0946	11.6	354
	1527	2.3	70		1525	4.6	140
	2149	17.0	518		2136	15.0	457
13 Sa	0421	−0.8	−24	**28** Su	0420	1.5	46
	1042	14.2	433		1043	12.4	378
	1627	2.2	67		1620	4.3	131
	2240	17.7	539		2223	15.8	482
14 Su	0513	−1.9	−58	**29** M	0505	0.2	6
	1139	14.9	454		1132	13.3	405
	1720	2.0	61		1708	3.7	113
	2328	18.1	552		2308	16.7	509
15 M	0600	−2.8	−85	**30** Tu	0546	−1.1	−34
	1229	15.5	472		1217	14.2	433
	1809	1.9	58		1753	3.1	94
					2351	17.5	533

Time meridian 135° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.
Heights are referred to mean lower low water which is the chart datum of soundings.

Juneau, Alaska, 2015

Times and Heights of High and Low Waters

July

	Time	Height	
	h m	ft	cm
1 W ○	0626	−2.2	−67
	1259	15.0	457
	1836	2.4	73
2 Th	0034	18.1	552
	0706	−3.0	−91
	1339	15.7	479
	1919	1.9	58
3 F	0118	18.4	561
	0747	−3.4	−104
	1420	16.2	494
	2003	1.5	46
4 Sa	0202	18.3	558
	0828	−3.4	−104
	1501	16.5	503
	2048	1.3	40
5 Su	0247	17.8	543
	0911	−2.9	−88
	1544	16.6	506
	2137	1.3	40
6 M	0336	16.9	515
	0956	−1.9	−58
	1630	16.5	503
	2231	1.5	46
7 Tu	0429	15.6	475
	1046	−0.6	−18
	1720	16.2	494
	2331	1.7	52
8 W ◑	0531	14.3	436
	1141	0.9	27
	1817	16.0	488
9 Th	0039	1.8	55
	0644	13.1	399
	1244	2.2	67
	1919	15.9	485
10 F	0151	1.5	46
	0806	12.6	384
	1354	3.2	98
	2024	16.0	488
11 Sa	0302	0.8	24
	0926	12.7	387
	1506	3.6	110
	2126	16.4	500
12 Su	0405	−0.1	−3
	1035	13.4	408
	1612	3.5	107
	2223	16.8	512
13 M	0500	−1.0	−30
	1132	14.2	433
	1708	3.1	94
	2314	17.2	524
14 Tu	0548	−1.7	−52
	1221	14.9	454
	1758	2.6	79
15 W ●	0001	17.5	533
	0631	−2.2	−67
	1303	15.4	469
	1842	2.2	67

	Time	Height	
	h m	ft	cm
16 Th	0043	17.6	536
	0710	−2.4	−73
	1341	15.7	479
	1923	2.0	61
17 F	0123	17.4	530
	0747	−2.2	−67
	1416	15.8	482
	2001	2.0	61
18 Sa	0200	17.0	518
	0822	−1.7	−52
	1449	15.7	479
	2038	2.1	64
19 Su	0236	16.3	497
	0856	−1.0	−30
	1522	15.5	472
	2115	2.4	73
20 M	0312	15.4	469
	0929	−0.1	−3
	1554	15.1	460
	2153	2.8	85
21 Tu	0349	14.4	439
	1004	1.0	30
	1628	14.7	448
	2234	3.3	101
22 W	0430	13.2	402
	1041	2.3	70
	1707	14.3	436
	2322	3.7	113
23 Th ◐	0519	12.1	369
	1123	3.5	107
	1752	14.0	427
24 F	0018	4.0	122
	0622	11.2	341
	1216	4.6	140
	1847	13.8	421
25 Sa	0126	3.9	119
	0743	10.8	329
	1323	5.3	162
	1949	14.0	427
26 Su	0238	3.2	98
	0907	11.1	338
	1439	5.5	168
	2052	14.5	442
27 M	0341	2.1	64
	1014	12.0	366
	1546	5.0	152
	2150	15.4	469
28 Tu	0435	0.7	21
	1108	13.1	399
	1643	4.1	125
	2243	16.5	503
29 W	0522	−0.8	−24
	1154	14.4	439
	1732	2.9	88
	2332	17.6	536
30 Th	0605	−2.2	−67
	1236	15.6	475
	1818	1.7	52
31 F ○	0018	18.5	564
	0647	−3.2	−98
	1316	16.6	506
	1902	0.7	21

August

	Time	Height	
	h m	ft	cm
1 Sa	0104	19.0	579
	0728	−3.7	−113
	1356	17.4	530
	1947	−0.1	−3
2 Su	0150	19.0	579
	0809	−3.7	−113
	1436	17.9	546
	2032	−0.6	−18
3 M	0236	18.5	564
	0851	−3.0	−91
	1518	18.0	549
	2119	−0.6	−18
4 Tu	0324	17.5	533
	0935	−1.8	−55
	1601	17.8	543
	2210	−0.2	−6
5 W	0415	16.1	491
	1023	−0.2	−6
	1649	17.2	524
	2307	0.5	15
6 Th ◑	0514	14.5	442
	1116	1.5	46
	1743	16.4	500
7 F	0011	1.2	37
	0625	13.0	396
	1218	3.2	98
	1847	15.7	479
8 Sa	0124	1.6	49
	0751	12.3	375
	1334	4.3	131
	1958	15.3	466
9 Su	0241	1.5	46
	0918	12.4	378
	1453	4.7	143
	2109	15.4	469
10 M	0350	0.9	27
	1028	13.2	402
	1603	4.3	131
	2211	15.8	482
11 Tu	0447	0.1	3
	1122	14.0	427
	1700	3.5	107
	2304	16.3	497
12 W	0534	−0.6	−18
	1206	14.8	451
	1746	2.7	82
	2349	16.8	512
13 Th	0614	−1.1	−34
	1243	15.4	469
	1827	2.0	61
14 F ●	0030	17.0	518
	0650	−1.4	−43
	1316	15.9	485
	1904	1.5	46
15 Sa	0106	17.1	521
	0723	−1.4	−43
	1346	16.1	491
	1938	1.2	37

	Time	Height	
	h m	ft	cm
16 Su	0141	16.9	515
	0755	−1.1	−34
	1415	16.2	494
	2011	1.1	34
17 M	0214	16.4	500
	0825	−0.5	−15
	1443	16.2	494
	2044	1.3	40
18 Tu	0247	15.7	479
	0856	0.3	9
	1511	15.9	485
	2117	1.6	49
19 W	0320	14.8	451
	0927	1.4	43
	1542	15.5	472
	2152	2.1	64
20 Th	0356	13.8	421
	1000	2.6	79
	1615	15.0	457
	2233	2.7	82
21 F	0438	12.7	387
	1038	3.8	116
	1656	14.4	439
	2322	3.3	101
22 Sa ◐	0533	11.6	354
	1126	5.0	152
	1748	13.9	424
23 Su	0027	3.6	110
	0653	10.9	332
	1235	5.8	177
	1857	13.7	418
24 M	0145	3.4	104
	0830	11.1	338
	1401	6.0	183
	2013	14.1	430
25 Tu	0302	2.5	76
	0945	12.1	369
	1520	5.3	162
	2122	15.0	457
26 W	0404	1.1	34
	1041	13.5	411
	1621	3.9	119
	2222	16.3	497
27 Th	0455	−0.5	−15
	1126	15.0	457
	1713	2.2	67
	2314	17.6	536
28 F	0541	−1.9	−58
	1208	16.5	503
	1759	0.6	18
29 Sa ○	0003	18.6	567
	0624	−2.9	−88
	1248	17.8	543
	1844	−0.9	−27
30 Su	0050	19.3	588
	0705	−3.4	−104
	1327	18.7	570
	1928	−1.9	−58
31 M	0136	19.4	591
	0747	−3.2	−98
	1407	19.2	585
	2012	−2.4	−73

September

	Time	Height	
	h m	ft	cm
1 Tu	0222	18.9	576
	0829	−2.4	−73
	1448	19.2	585
	2058	−2.2	−67
2 W	0310	17.8	543
	0913	−1.1	−34
	1530	18.6	567
	2147	−1.5	−46
3 Th	0400	16.3	497
	1000	0.7	21
	1617	17.6	536
	2241	−0.4	−12
4 F	0457	14.6	445
	1052	2.5	76
	1710	16.4	500
	2343	0.9	27
5 Sa ◑	0608	13.2	402
	1157	4.2	128
	1815	15.2	463
6 Su	0056	1.9	58
	0736	12.4	378
	1318	5.2	158
	1934	14.4	439
7 M	0216	2.2	67
	0904	12.6	384
	1443	5.2	158
	2053	14.4	439
8 Tu	0329	1.9	58
	1012	13.4	408
	1554	4.5	137
	2158	14.9	454
9 W	0427	1.2	37
	1102	14.3	436
	1648	3.4	104
	2251	15.5	472
10 Th	0512	0.5	15
	1141	15.1	460
	1731	2.4	73
	2335	16.1	491
11 F	0551	0.0	0
	1214	15.7	479
	1808	1.5	46
12 Sa ●	0013	16.5	503
	0625	−0.3	−9
	1243	16.3	497
	1842	0.8	24
13 Su	0048	16.7	509
	0656	−0.3	−9
	1311	16.6	506
	1914	0.3	9
14 M	0120	16.7	509
	0726	−0.1	−3
	1337	16.8	512
	1944	0.1	3
15 Tu	0152	16.4	500
	0755	0.4	12
	1404	16.8	512
	2014	0.2	6

	Time	Height	
	h m	ft	cm
16 W	0224	15.9	485
	0824	1.2	37
	1432	16.6	506
	2045	0.5	15
17 Th	0256	15.1	460
	0854	2.1	64
	1501	16.2	494
	2118	1.0	30
18 F	0330	14.2	433
	0927	3.2	98
	1533	15.6	475
	2156	1.6	49
19 Sa	0410	13.2	402
	1004	4.3	131
	1612	14.9	454
	2242	2.4	73
20 Su ◐	0501	12.2	372
	1053	5.4	165
	1703	14.2	433
	2343	3.0	91
21 M	0618	11.5	351
	1203	6.2	189
	1813	13.6	415
22 Tu	0100	3.2	98
	0756	11.7	357
	1334	6.2	189
	1939	13.7	418
23 W	0222	2.6	79
	0913	12.7	387
	1457	5.1	155
	2058	14.6	445
24 Th	0330	1.4	43
	1009	14.3	436
	1600	3.3	101
	2202	15.9	485
25 F	0426	0.1	3
	1054	15.9	485
	1653	1.3	40
	2257	17.3	527
26 Sa	0514	−1.1	−34
	1136	17.5	533
	1740	−0.7	−21
	2347	18.4	561
27 Su ○	0558	−2.0	−61
	1217	18.9	576
	1825	−2.3	−70
28 M	0035	19.0	579
	0641	−2.3	−70
	1257	19.8	604
	1909	−3.4	−104
29 Tu	0122	19.2	585
	0724	−2.0	−61
	1337	20.1	613
	1953	−3.7	−113
30 W	0208	18.7	570
	0807	−1.2	−37
	1419	19.9	607
	2038	−3.3	−101

Time meridian 135° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.
Heights are referred to mean lower low water which is the chart datum of soundings.

Juneau, Alaska, 2015

Times and Heights of High and Low Waters

October

	Time	Height	
	h m	ft	cm
1 Th	0256	17.7	539
	0851	0.1	3
	1501	19.1	582
	2125	−2.3	−70
2 F	0346	16.4	500
	0938	1.8	55
	1547	17.7	539
	2216	−0.9	−27
3 Sa	0442	14.9	454
	1032	3.5	107
	1639	16.2	494
	2314	0.7	21
4 Su ◑	0550	13.5	411
	1137	4.9	149
	1744	14.6	445
5 M	0023	2.1	64
	0713	12.8	390
	1300	5.7	174
	1905	13.6	415
6 Tu	0142	2.8	85
	0837	13.0	396
	1426	5.5	168
	2028	13.4	408
7 W	0257	2.8	85
	0941	13.7	418
	1535	4.5	137
	2137	13.9	424
8 Th	0356	2.3	70
	1028	14.5	442
	1627	3.3	101
	2230	14.5	442
9 F	0442	1.8	55
	1105	15.3	466
	1709	2.1	64
	2314	15.2	463
10 Sa	0520	1.4	43
	1137	16.0	488
	1745	1.1	34
	2352	15.7	479
11 Su	0554	1.1	34
	1206	16.6	506
	1817	0.3	9
12 M ●	0027	16.1	491
	0626	1.0	30
	1234	17.1	521
	1848	−0.3	−9
13 Tu	0101	16.2	494
	0657	1.2	37
	1301	17.3	527
	1918	−0.6	−18
14 W	0133	16.1	491
	0727	1.5	46
	1329	17.4	530
	1948	−0.7	−21
15 Th	0206	15.8	482
	0757	2.1	64
	1358	17.2	524
	2019	−0.5	−15

	Time	Height	
	h m	ft	cm
16 F	0239	15.2	463
	0829	2.9	88
	1428	16.8	512
	2053	−0.1	−3
17 Sa	0314	14.5	442
	0903	3.8	116
	1502	16.2	494
	2131	0.6	18
18 Su	0354	13.7	418
	0943	4.7	143
	1542	15.4	469
	2216	1.3	40
19 M	0446	12.9	393
	1035	5.5	168
	1633	14.5	442
	2313	2.1	64
20 Tu ◐	0557	12.5	381
	1146	6.1	186
	1743	13.8	421
21 W	0024	2.6	79
	0722	12.7	387
	1312	5.8	177
	1910	13.5	411
22 Th	0142	2.5	76
	0835	13.7	418
	1433	4.5	137
	2033	14.2	433
23 F	0254	1.8	55
	0933	15.2	463
	1538	2.6	79
	2142	15.3	466
24 Sa	0354	0.9	27
	1021	16.8	512
	1632	0.5	15
	2240	16.5	503
25 Su	0446	0.1	3
	1105	18.3	558
	1721	−1.5	−46
	2332	17.6	536
26 M	0533	−0.5	−15
	1147	19.5	594
	1806	−3.1	−94
27 Tu ○	0022	18.2	555
	0619	−0.7	−21
	1229	20.3	619
	1851	−4.0	−122
28 W	0110	18.4	561
	0703	−0.5	−15
	1311	20.4	622
	1935	−4.3	−131
29 Th	0157	18.2	555
	0747	0.2	6
	1353	20.0	610
	2019	−3.8	−116
30 F	0244	17.4	530
	0832	1.3	40
	1437	19.1	582
	2104	−2.7	−82
31 Sa	0333	16.4	500
	0920	2.6	79
	1522	17.7	539
	2152	−1.2	−37

November

	Time	Height	
	h m	ft	cm
1 Su	0425	15.2	463
	1012	3.9	119
	1612	16.0	488
	2245	0.5	15
2 M	0526	14.1	430
	1115	5.1	155
	1711	14.4	439
	2346	2.0	61
3 Tu ◑	0636	13.4	408
	1231	5.7	174
	1825	13.1	399
4 W	0055	3.0	91
	0750	13.4	408
	1352	5.5	168
	1947	12.6	384
5 Th	0207	3.5	107
	0853	13.8	421
	1503	4.7	143
	2101	12.8	390
6 F	0310	3.5	107
	0942	14.5	442
	1557	3.5	107
	2200	13.4	408
7 Sa	0401	3.2	98
	1021	15.3	466
	1640	2.3	70
	2247	14.0	427
8 Su	0443	2.9	88
	1055	16.0	488
	1717	1.2	37
	2329	14.7	448
9 M	0521	2.6	79
	1127	16.7	509
	1751	0.2	6
10 Tu	0006	15.2	463
	0556	2.5	76
	1158	17.3	527
	1823	−0.5	−15
11 W ●	0042	15.6	475
	0629	2.4	73
	1229	17.6	536
	1855	−1.1	−34
12 Th	0117	15.7	479
	0702	2.6	79
	1300	17.8	543
	1927	−1.3	−40
13 F	0152	15.7	479
	0736	2.9	88
	1333	17.7	539
	2000	−1.3	−40
14 Sa	0227	15.4	469
	0810	3.3	101
	1406	17.4	530
	2036	−1.0	−30
15 Su	0305	15.0	457
	0848	3.9	119
	1443	16.8	512
	2115	−0.5	−15

	Time	Height	
	h m	ft	cm
16 M	0347	14.5	442
	0932	4.5	137
	1526	16.0	488
	2159	0.2	6
17 Tu	0436	14.1	430
	1025	5.0	152
	1617	15.1	460
	2252	1.0	30
18 W ◐	0536	13.8	421
	1131	5.2	158
	1722	14.1	430
	2354	1.8	55
19 Th	0646	14.1	430
	1249	4.9	149
	1842	13.5	411
20 F	0104	2.3	70
	0754	14.8	451
	1406	3.7	113
	2007	13.6	415
21 Sa	0216	2.3	70
	0855	16.0	488
	1514	2.0	61
	2122	14.4	439
22 Su	0321	2.0	61
	0948	17.3	527
	1612	0.1	3
	2225	15.4	469
23 M	0419	1.6	49
	1036	18.5	564
	1703	−1.7	−52
	2321	16.4	500
24 Tu	0511	1.2	37
	1122	19.5	594
	1750	−3.1	−94
25 W ○	0012	17.1	521
	0600	1.0	30
	1207	20.0	610
	1835	−3.9	−119
26 Th	0101	17.5	533
	0646	1.0	30
	1251	20.1	613
	1919	−4.0	−122
27 F	0147	17.5	533
	0731	1.4	43
	1334	19.7	600
	2003	−3.6	−110
28 Sa	0233	17.1	521
	0816	2.0	61
	1417	18.8	573
	2046	−2.7	−82
29 Su	0318	16.5	503
	0903	2.9	88
	1501	17.6	536
	2130	−1.4	−43
30 M	0405	15.6	475
	0951	3.8	116
	1547	16.1	491
	2215	0.1	3

December

	Time	Height	
	h m	ft	cm
1 Tu	0454	14.8	451
	1046	4.7	143
	1637	14.5	442
	2305	1.6	49
2 W ◑	0548	14.1	430
	1148	5.3	162
	1737	13.1	399
3 Th	0001	2.9	88
	0647	13.8	421
	1300	5.4	165
	1849	12.1	369
4 F	0103	3.9	119
	0748	13.8	421
	1412	4.9	149
	2008	11.8	360
5 Sa	0208	4.4	134
	0842	14.3	436
	1514	4.0	122
	2118	12.1	369
6 Su	0308	4.5	137
	0929	14.9	454
	1604	2.9	88
	2215	12.8	390
7 M	0400	4.4	134
	1011	15.6	475
	1647	1.7	52
	2304	13.5	411
8 Tu	0446	4.1	125
	1049	16.4	500
	1725	0.6	18
	2346	14.2	433
9 W	0526	3.8	116
	1126	17.1	521
	1800	−0.4	−12
10 Th	0026	14.9	454
	0605	3.4	104
	1202	17.6	536
	1835	−1.2	−37
11 F ●	0103	15.4	469
	0642	3.2	98
	1238	18.0	549
	1909	−1.7	−52
12 Sa	0140	15.7	479
	0719	3.1	94
	1315	18.2	555
	1945	−2.0	−61
13 Su	0217	15.8	482
	0757	3.1	94
	1353	18.0	549
	2022	−2.0	−61
14 M	0255	15.8	482
	0837	3.2	98
	1433	17.6	536
	2101	−1.6	−49
15 Tu	0336	15.7	479
	0922	3.4	104
	1516	16.8	512
	2144	−0.9	−27

	Time	Height	
	h m	ft	cm
16 W	0420	15.6	475
	1013	3.6	110
	1606	15.8	482
	2232	0.0	0
17 Th	0511	15.4	469
	1113	3.8	116
	1705	14.6	445
	2327	1.2	37
18 F ◐	0609	15.4	469
	1222	3.6	110
	1818	13.6	415
19 Sa	0030	2.2	67
	0713	15.7	479
	1337	2.9	88
	1942	13.1	399
20 Su	0140	3.0	91
	0817	16.3	497
	1449	1.7	52
	2103	13.4	408
21 M	0252	3.3	101
	0917	17.2	524
	1552	0.2	6
	2214	14.2	433
22 Tu	0357	3.1	94
	1013	18.0	549
	1648	−1.2	−37
	2314	15.2	463
23 W	0455	2.7	82
	1104	18.8	573
	1738	−2.4	−73
24 Th	0007	16.0	488
	0546	2.3	70
	1151	19.2	585
	1823	−3.1	−94
25 F ○	0054	16.6	506
	0634	2.0	61
	1237	19.4	591
	1906	−3.4	−104
26 Sa	0138	16.9	515
	0719	1.9	58
	1320	19.1	582
	1948	−3.2	−98
27 Su	0220	16.9	515
	0802	2.1	64
	1402	18.5	564
	2027	−2.5	−76
28 M	0259	16.6	506
	0845	2.5	76
	1442	17.5	533
	2106	−1.5	−46
29 Tu	0338	16.1	491
	0927	3.0	91
	1523	16.3	497
	2145	−0.3	−9
30 W	0416	15.5	472
	1012	3.7	113
	1605	14.9	454
	2225	1.1	34
31 Th	0457	14.9	454
	1101	4.3	131
	1651	13.5	411
	2307	2.5	76

Time meridian 135° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.
Heights are referred to mean lower low water which is the chart datum of soundings.

Sitka, Alaska, 2015

Times and Heights of High and Low Waters

January

	Time	Height	
	h m	ft	cm
1 Th	0316	3.6	110
	0932	10.8	329
	1631	0.1	3
	2258	8.4	256
2 F	0415	3.7	113
	1022	11.0	335
	1718	−0.4	−12
	2347	8.9	271
3 Sa	0507	3.7	113
	1107	11.1	338
	1759	−0.8	−24
4 Su ○	0029	9.2	280
	0553	3.5	107
	1149	11.2	341
	1837	−0.9	−27
5 M	0107	9.5	290
	0634	3.4	104
	1227	11.1	338
	1912	−0.9	−27
6 Tu	0142	9.6	293
	0712	3.3	101
	1304	10.8	329
	1946	−0.7	−21
7 W	0216	9.6	293
	0750	3.3	101
	1340	10.5	320
	2019	−0.4	−12
8 Th	0249	9.6	293
	0828	3.3	101
	1416	10.0	305
	2051	0.1	3
9 F	0322	9.5	290
	0907	3.3	101
	1453	9.3	283
	2123	0.7	21
10 Sa	0356	9.3	283
	0950	3.4	104
	1532	8.6	262
	2156	1.4	43
11 Su	0432	9.2	280
	1039	3.5	107
	1618	7.9	241
	2232	2.2	67
12 M	0512	9.1	277
	1136	3.4	104
	1716	7.2	219
	2313	2.9	88
13 Tu ◑	0558	9.1	277
	1243	3.2	98
	1831	6.7	204
14 W	0005	3.6	110
	0651	9.2	280
	1355	2.7	82
	2001	6.6	201
15 Th	0111	4.2	128
	0748	9.5	290
	1500	1.9	58
	2122	7.0	213

	Time	Height	
	h m	ft	cm
16 F	0224	4.4	134
	0847	10.0	305
	1556	1.0	30
	2225	7.7	235
17 Sa	0331	4.2	128
	0941	10.6	323
	1644	0.0	0
	2315	8.4	256
18 Su	0429	3.8	116
	1033	11.2	341
	1729	−1.0	−30
	2359	9.2	280
19 M	0521	3.3	101
	1122	11.8	360
	1812	−1.7	−52
20 Tu ●	0040	9.9	302
	0610	2.7	82
	1209	12.1	369
	1854	−2.1	−64
21 W	0121	10.4	317
	0658	2.1	64
	1257	12.2	372
	1935	−2.2	−67
22 Th	0202	10.9	332
	0747	1.7	52
	1345	11.9	363
	2017	−1.8	−55
23 F	0243	11.1	338
	0837	1.4	43
	1434	11.2	341
	2100	−1.1	−34
24 Sa	0327	11.1	338
	0930	1.4	43
	1526	10.3	314
	2144	−0.2	−6
25 Su	0412	11.0	335
	1028	1.5	46
	1624	9.2	280
	2231	1.0	30
26 M ◐	0502	10.7	326
	1132	1.6	49
	1731	8.2	250
	2323	2.2	67
27 Tu	0557	10.4	317
	1246	1.7	52
	1853	7.4	226
28 W	0025	3.3	101
	0659	10.1	308
	1404	1.5	46
	2025	7.2	219
29 Th	0140	4.0	122
	0806	10.0	305
	1516	1.1	34
	2148	7.5	229
30 F	0258	4.3	131
	0911	10.0	305
	1616	0.6	18
	2249	8.1	247
31 Sa	0405	4.1	125
	1007	10.2	311
	1704	0.2	6
	2336	8.6	262

February

	Time	Height	
	h m	ft	cm
1 Su	0459	3.8	116
	1056	10.4	317
	1745	−0.2	−6
2 M	0014	9.0	274
	0543	3.4	104
	1138	10.5	320
	1821	−0.4	−12
3 Tu ○	0047	9.3	283
	0621	3.0	91
	1216	10.6	323
	1853	−0.5	−15
4 W	0117	9.6	293
	0657	2.7	82
	1251	10.5	320
	1923	−0.4	−12
5 Th	0146	9.7	296
	0731	2.5	76
	1325	10.3	314
	1953	−0.1	−3
6 F	0215	9.8	299
	0805	2.3	70
	1359	9.9	302
	2021	0.3	9
7 Sa	0243	9.8	299
	0840	2.2	67
	1433	9.4	287
	2050	0.8	24
8 Su	0312	9.8	299
	0917	2.3	70
	1510	8.8	268
	2119	1.5	46
9 M	0343	9.6	293
	0958	2.4	73
	1551	8.2	250
	2150	2.2	67
10 Tu	0417	9.5	290
	1046	2.5	76
	1640	7.5	229
	2226	3.0	91
11 W ◑	0458	9.3	283
	1145	2.5	76
	1746	6.9	210
	2313	3.7	113
12 Th	0549	9.2	280
	1257	2.4	73
	1914	6.6	201
13 F	0019	4.3	131
	0654	9.3	283
	1414	1.9	58
	2046	6.8	207
14 Sa	0144	4.6	140
	0807	9.5	290
	1522	1.0	30
	2157	7.5	229
15 Su	0306	4.3	131
	0915	10.1	308
	1617	0.1	3
	2249	8.4	256

	Time	Height	
	h m	ft	cm
16 M	0412	3.5	107
	1015	10.8	329
	1706	−0.8	−24
	2333	9.3	283
17 Tu	0507	2.6	79
	1109	11.4	347
	1750	−1.5	−46
18 W ●	0014	10.1	308
	0557	1.7	52
	1159	11.8	360
	1833	−1.8	−55
19 Th	0054	10.9	332
	0646	0.9	27
	1248	11.9	363
	1914	−1.8	−55
20 F	0134	11.4	347
	0733	0.3	9
	1336	11.7	357
	1955	−1.4	−43
21 Sa	0214	11.6	354
	0821	0.0	0
	1425	11.1	338
	2037	−0.6	−18
22 Su	0255	11.6	354
	0911	0.0	0
	1516	10.2	311
	2119	0.4	12
23 M	0338	11.3	344
	1004	0.3	9
	1611	9.2	280
	2204	1.6	49
24 Tu	0425	10.7	326
	1103	0.8	24
	1713	8.2	250
	2254	2.7	82
25 W ◐	0517	10.1	308
	1211	1.3	40
	1831	7.4	226
	2357	3.7	113
26 Th	0620	9.5	290
	1329	1.5	46
	2004	7.1	216
27 F	0118	4.4	134
	0735	9.1	277
	1447	1.5	46
	2128	7.4	226
28 Sa	0246	4.4	134
	0850	9.0	274
	1551	1.1	34
	2228	7.9	241

March

	Time	Height	
	h m	ft	cm
1 Su	0356	4.0	122
	0953	9.2	280
	1641	0.8	24
	2312	8.4	256
2 M	0448	3.5	107
	1043	9.5	290
	1722	0.5	15
	2347	8.9	271
3 Tu	0529	2.9	88
	1125	9.7	296
	1756	0.2	6
4 W	0016	9.2	280
	0605	2.3	70
	1202	9.9	302
	1827	0.1	3
5 Th ○	0044	9.6	293
	0638	1.8	55
	1237	10.0	305
	1855	0.2	6
6 F	0111	9.8	299
	0710	1.4	43
	1310	9.9	302
	1923	0.4	12
7 Sa	0137	10.0	305
	0742	1.1	34
	1344	9.7	296
	1951	0.8	24
8 Su	0204	10.1	308
	0814	1.0	30
	1418	9.3	283
	2019	1.2	37
9 M	0231	10.0	305
	0849	1.0	30
	1453	8.9	271
	2048	1.8	55
10 Tu	0300	9.9	302
	0926	1.2	37
	1533	8.3	253
	2119	2.5	76
11 W	0333	9.7	296
	1010	1.4	43
	1620	7.7	235
	2155	3.2	98
12 Th	0413	9.4	287
	1104	1.6	49
	1721	7.1	216
	2243	3.8	116
13 F ◑	0504	9.1	277
	1211	1.7	52
	1843	6.8	207
	2352	4.3	131
14 Sa	0613	8.9	271
	1330	1.5	46
	2012	7.1	216
15 Su	0124	4.4	134
	0736	9.0	274
	1444	1.0	30
	2123	7.7	235

	Time	Height	
	h m	ft	cm
16 M	0251	3.8	116
	0854	9.4	287
	1546	0.3	9
	2217	8.6	262
17 Tu	0358	2.8	85
	1000	10.0	305
	1638	−0.4	−12
	2302	9.6	293
18 W	0454	1.6	49
	1057	10.7	326
	1724	−0.9	−27
	2343	10.5	320
19 Th	0544	0.5	15
	1150	11.1	338
	1808	−1.1	−34
20 F ●	0023	11.2	341
	0631	−0.5	−15
	1239	11.3	344
	1850	−0.9	−27
21 Sa	0103	11.7	357
	0717	−1.1	−34
	1327	11.1	338
	1931	−0.5	−15
22 Su	0142	11.9	363
	0803	−1.3	−40
	1416	10.6	323
	2013	0.3	9
23 M	0223	11.7	357
	0850	−1.1	−34
	1505	9.9	302
	2055	1.2	37
24 Tu	0305	11.2	341
	0940	−0.6	−18
	1558	9.1	277
	2140	2.2	67
25 W	0350	10.4	317
	1033	0.1	3
	1657	8.2	250
	2231	3.2	98
26 Th ◐	0440	9.6	293
	1134	0.9	27
	1808	7.5	229
	2335	4.0	122
27 F	0542	8.7	265
	1246	1.4	43
	1932	7.3	223
28 Sa	0059	4.4	134
	0659	8.2	250
	1403	1.7	52
	2051	7.4	226
29 Su	0228	4.2	128
	0821	8.0	244
	1511	1.6	49
	2150	7.8	238
30 M	0337	3.6	110
	0930	8.2	250
	1604	1.4	43
	2233	8.3	253
31 Tu	0428	2.9	88
	1023	8.5	259
	1646	1.2	37
	2307	8.8	268

Time meridian 135° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.
Heights are referred to mean lower low water which is the chart datum of soundings.

Sitka, Alaska, 2015

Times and Heights of High and Low Waters

April

	Time	Height	
	h m	ft	cm
1 W	0507	2.2	67
	1107	8.8	268
	1721	1.0	30
	2336	9.2	280
2 Th	0542	1.5	46
	1145	9.1	277
	1753	0.9	27
3 F	0004	9.6	293
	0615	0.9	27
	1220	9.3	283
	1822	1.0	30
4 Sa ○	0031	9.9	302
	0646	0.4	12
	1255	9.4	287
	1852	1.2	37
5 Su	0058	10.1	308
	0718	0.0	0
	1329	9.3	283
	1921	1.5	46
6 M	0126	10.2	311
	0751	−0.1	−3
	1405	9.1	277
	1951	1.9	58
7 Tu	0154	10.2	311
	0825	−0.1	−3
	1442	8.8	268
	2022	2.3	70
8 W	0226	10.1	308
	0903	0.0	0
	1523	8.4	256
	2057	2.9	88
9 Th	0301	9.8	299
	0946	0.2	6
	1612	7.9	241
	2138	3.4	104
10 F	0343	9.4	287
	1038	0.5	15
	1711	7.5	229
	2232	3.8	116
11 Sa ◑	0437	9.0	274
	1140	0.8	24
	1823	7.3	223
	2346	4.1	125
12 Su	0548	8.5	259
	1252	0.9	27
	1940	7.6	232
13 M	0117	3.8	116
	0713	8.4	256
	1405	0.8	24
	2046	8.2	250
14 Tu	0239	3.0	91
	0836	8.6	262
	1510	0.5	15
	2140	9.1	277
15 W	0345	1.8	55
	0946	9.1	277
	1605	0.2	6
	2227	10.0	305

	Time	Height	
	h m	ft	cm
16 Th	0440	0.5	15
	1046	9.7	296
	1654	0.0	0
	2310	10.8	329
17 F	0529	−0.6	−18
	1140	10.1	308
	1740	0.0	0
	2351	11.4	347
18 Sa ●	0616	−1.5	−46
	1230	10.3	314
	1824	0.3	9
19 Su	0032	11.7	357
	0701	−2.0	−61
	1318	10.3	314
	1907	0.7	21
20 M	0112	11.8	360
	0746	−2.1	−64
	1406	10.0	305
	1950	1.3	40
21 Tu	0153	11.4	347
	0831	−1.8	−55
	1454	9.5	290
	2034	2.0	61
22 W	0235	10.8	329
	0917	−1.2	−37
	1544	8.9	271
	2120	2.7	82
23 Th	0319	10.0	305
	1005	−0.5	−15
	1639	8.3	253
	2211	3.4	104
24 F	0407	9.1	277
	1059	0.4	12
	1741	7.8	238
	2314	3.9	119
25 Sa ◐	0504	8.2	250
	1200	1.1	34
	1850	7.5	229
26 Su	0032	4.1	125
	0616	7.5	229
	1307	1.6	49
	1959	7.6	232
27 M	0156	3.8	116
	0738	7.1	216
	1413	1.9	58
	2056	7.8	238
28 Tu	0305	3.2	98
	0853	7.2	219
	1510	1.9	58
	2141	8.3	253
29 W	0357	2.4	73
	0953	7.5	229
	1556	1.9	58
	2217	8.7	265
30 Th	0439	1.6	49
	1042	7.8	238
	1636	1.8	55
	2250	9.2	280

May

	Time	Height	
	h m	ft	cm
1 F	0515	0.8	24
	1123	8.2	250
	1712	1.8	55
	2320	9.6	293
2 Sa	0549	0.1	3
	1202	8.5	259
	1746	1.9	58
	2350	10.0	305
3 Su ○	0622	−0.4	−12
	1239	8.7	265
	1819	2.0	61
4 M	0020	10.2	311
	0656	−0.8	−24
	1316	8.8	268
	1852	2.2	67
5 Tu	0052	10.4	317
	0731	−1.1	−34
	1354	8.8	268
	1926	2.4	73
6 W	0125	10.4	317
	0807	−1.2	−37
	1434	8.7	265
	2003	2.7	82
7 Th	0200	10.2	311
	0847	−1.1	−34
	1517	8.5	259
	2044	3.0	91
8 F	0240	9.9	302
	0931	−0.8	−24
	1605	8.2	250
	2132	3.3	101
9 Sa	0326	9.4	287
	1020	−0.4	−12
	1701	8.1	247
	2231	3.5	107
10 Su	0423	8.8	268
	1116	0.0	0
	1803	8.1	247
	2345	3.5	107
11 M ◑	0533	8.2	250
	1220	0.5	15
	1907	8.3	253
12 Tu	0108	3.0	91
	0656	7.8	238
	1327	0.8	24
	2008	8.9	271
13 W	0225	2.1	64
	0820	7.8	238
	1432	0.9	27
	2103	9.5	290
14 Th	0330	0.9	27
	0933	8.2	250
	1531	1.0	30
	2153	10.2	311
15 F	0426	−0.3	−9
	1037	8.7	265
	1624	1.1	34
	2238	10.9	332

	Time	Height	
	h m	ft	cm
16 Sa	0515	−1.3	−40
	1132	9.1	277
	1714	1.2	37
	2322	11.3	344
17 Su ●	0602	−2.0	−61
	1223	9.4	287
	1800	1.4	43
18 M	0005	11.5	351
	0646	−2.4	−73
	1310	9.5	290
	1846	1.7	52
19 Tu	0046	11.4	347
	0729	−2.4	−73
	1357	9.4	287
	1930	2.1	64
20 W	0128	11.0	335
	0812	−2.1	−64
	1442	9.2	280
	2015	2.5	76
21 Th	0209	10.4	317
	0855	−1.5	−46
	1529	8.8	268
	2101	2.9	88
22 F	0252	9.6	293
	0939	−0.8	−24
	1617	8.4	256
	2151	3.3	101
23 Sa	0337	8.8	268
	1024	0.0	0
	1708	8.1	247
	2248	3.6	110
24 Su	0429	7.9	241
	1113	0.7	21
	1802	7.8	238
	2355	3.6	110
25 M ◐	0530	7.1	216
	1207	1.4	43
	1858	7.8	238
26 Tu	0109	3.4	104
	0644	6.6	201
	1304	1.9	58
	1952	8.0	244
27 W	0219	2.9	88
	0803	6.4	195
	1402	2.3	70
	2039	8.3	253
28 Th	0316	2.1	64
	0913	6.6	201
	1455	2.5	76
	2122	8.7	265
29 F	0403	1.3	40
	1010	6.9	210
	1544	2.6	79
	2200	9.1	277
30 Sa	0444	0.5	15
	1059	7.4	226
	1627	2.6	79
	2236	9.6	293
31 Su	0522	−0.2	−6
	1142	7.8	238
	1708	2.6	79
	2312	10.0	305

June

	Time	Height	
	h m	ft	cm
1 M	0558	−0.9	−27
	1222	8.2	250
	1747	2.6	79
	2348	10.3	314
2 Tu ○	0635	−1.4	−43
	1302	8.5	259
	1826	2.6	79
3 W	0024	10.6	323
	0713	−1.8	−55
	1342	8.7	265
	1906	2.6	79
4 Th	0103	10.6	323
	0752	−1.9	−58
	1423	8.8	268
	1949	2.7	82
5 F	0144	10.5	320
	0833	−1.9	−58
	1506	8.8	268
	2035	2.7	82
6 Sa	0228	10.1	308
	0916	−1.6	−49
	1552	8.8	268
	2127	2.8	85
7 Su	0317	9.5	290
	1003	−1.1	−34
	1643	8.8	268
	2228	2.7	82
8 M	0415	8.7	265
	1054	−0.5	−15
	1737	8.9	271
	2337	2.5	76
9 Tu ◑	0522	8.0	244
	1150	0.3	9
	1834	9.1	277
10 W	0053	2.1	64
	0641	7.4	226
	1252	1.0	30
	1932	9.4	287
11 Th	0207	1.3	40
	0805	7.2	219
	1356	1.5	46
	2028	9.8	299
12 F	0314	0.3	9
	0923	7.4	226
	1459	1.9	58
	2122	10.3	314
13 Sa	0411	−0.6	−18
	1029	7.8	238
	1558	2.1	64
	2212	10.7	326
14 Su	0503	−1.4	−43
	1126	8.3	253
	1652	2.2	67
	2259	10.9	332
15 M	0549	−1.9	−58
	1216	8.7	265
	1742	2.3	70
	2344	11.0	335

	Time	Height	
	h m	ft	cm
16 Tu ●	0633	−2.2	−67
	1302	8.9	271
	1829	2.4	73
17 W	0027	10.9	332
	0714	−2.2	−67
	1345	9.0	274
	1913	2.4	73
18 Th	0108	10.6	323
	0754	−2.0	−61
	1426	8.9	271
	1957	2.6	79
19 F	0149	10.1	308
	0833	−1.5	−46
	1506	8.8	268
	2041	2.7	82
20 Sa	0229	9.4	287
	0911	−0.9	−27
	1547	8.6	262
	2126	2.9	88
21 Su	0311	8.7	265
	0950	−0.3	−9
	1628	8.4	256
	2215	3.0	91
22 M	0356	7.9	241
	1029	0.5	15
	1711	8.2	250
	2310	3.1	94
23 Tu	0447	7.1	216
	1111	1.2	37
	1756	8.1	247
24 W ◐	0013	3.0	91
	0549	6.5	198
	1158	2.0	61
	1844	8.2	250
25 Th	0121	2.6	79
	0704	6.1	186
	1251	2.6	79
	1934	8.3	253
26 F	0226	2.1	64
	0824	6.0	183
	1349	3.0	91
	2023	8.6	262
27 Sa	0322	1.4	43
	0934	6.3	192
	1448	3.2	98
	2110	9.0	274
28 Su	0410	0.5	15
	1032	6.8	207
	1543	3.3	101
	2155	9.5	290
29 M	0454	−0.3	−9
	1120	7.4	226
	1633	3.1	94
	2239	10.0	305
30 Tu	0534	−1.0	−30
	1203	7.9	241
	1720	2.9	88
	2321	10.5	320

Time meridian 135° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.
Heights are referred to mean lower low water which is the chart datum of soundings.

Sitka, Alaska, 2015

Times and Heights of High and Low Waters

July

	Time	Height	
	h m	ft	cm
1 W ○	0614	−1.7	−52
	1243	8.4	256
	1805	2.6	79
2 Th	0004	10.8	329
	0654	−2.2	−67
	1324	8.9	271
	1850	2.3	70
3 F	0047	10.9	332
	0735	−2.4	−73
	1404	9.2	280
	1937	2.1	64
4 Sa	0132	10.8	329
	0816	−2.3	−70
	1446	9.4	287
	2025	1.9	58
5 Su	0220	10.4	317
	0858	−1.9	−58
	1530	9.6	293
	2118	1.7	52
6 M	0310	9.7	296
	0942	−1.3	−40
	1616	9.6	293
	2216	1.6	49
7 Tu	0407	8.8	268
	1030	−0.4	−12
	1705	9.6	293
	2320	1.5	46
8 W ◑	0511	7.9	241
	1122	0.6	18
	1759	9.7	296
9 Th	0032	1.3	40
	0628	7.2	219
	1220	1.5	46
	1857	9.7	296
10 F	0146	0.8	24
	0753	6.9	210
	1326	2.3	70
	1957	9.8	299
11 Sa	0256	0.2	6
	0915	7.0	213
	1436	2.8	85
	2057	10.0	305
12 Su	0358	−0.4	−12
	1024	7.4	226
	1542	2.9	88
	2153	10.2	311
13 M	0451	−1.0	−30
	1120	7.9	241
	1640	2.9	88
	2244	10.4	317
14 Tu	0537	−1.4	−43
	1207	8.3	253
	1731	2.7	82
	2330	10.5	320
15 W ●	0619	−1.6	−49
	1248	8.7	265
	1816	2.5	76

	Time	Height	
	h m	ft	cm
16 Th	0013	10.4	317
	0658	−1.7	−52
	1326	8.9	271
	1858	2.3	70
17 F	0053	10.2	311
	0734	−1.5	−46
	1401	8.9	271
	1938	2.2	67
18 Sa	0131	9.9	302
	0808	−1.2	−37
	1435	8.9	271
	2017	2.2	67
19 Su	0209	9.4	287
	0841	−0.7	−21
	1509	8.9	271
	2057	2.2	67
20 M	0247	8.8	268
	0914	−0.1	−3
	1543	8.7	265
	2139	2.3	70
21 Tu	0326	8.1	247
	0947	0.6	18
	1618	8.6	262
	2225	2.4	73
22 W	0411	7.4	226
	1022	1.4	43
	1656	8.5	259
	2317	2.5	76
23 Th ◐	0503	6.7	204
	1101	2.2	67
	1739	8.4	256
24 F	0019	2.4	73
	0610	6.2	189
	1148	2.9	88
	1828	8.4	256
25 Sa	0128	2.1	64
	0733	5.9	180
	1248	3.4	104
	1925	8.5	259
26 Su	0235	1.5	46
	0856	6.1	186
	1359	3.7	113
	2024	8.9	271
27 M	0334	0.8	24
	1002	6.7	204
	1507	3.7	113
	2120	9.4	287
28 Tu	0424	−0.1	−3
	1054	7.3	223
	1607	3.3	101
	2212	9.9	302
29 W	0509	−0.9	−27
	1138	8.1	247
	1659	2.8	85
	2302	10.5	320
30 Th	0552	−1.7	−52
	1218	8.7	265
	1748	2.2	67
	2349	11.0	335
31 F ○	0633	−2.1	−64
	1258	9.4	287
	1835	1.6	49

August

	Time	Height	
	h m	ft	cm
1 Sa	0035	11.2	341
	0713	−2.3	−70
	1337	9.9	302
	1923	1.0	30
2 Su	0123	11.1	338
	0754	−2.2	−67
	1418	10.2	311
	2011	0.7	21
3 M	0211	10.6	323
	0836	−1.7	−52
	1459	10.4	317
	2102	0.5	15
4 Tu	0302	9.9	302
	0919	−0.9	−27
	1543	10.4	317
	2157	0.5	15
5 W	0357	9.0	274
	1004	0.2	6
	1631	10.2	311
	2258	0.6	18
6 Th ◑	0500	8.0	244
	1055	1.3	40
	1723	9.9	302
7 F	0006	0.7	21
	0615	7.2	219
	1154	2.3	70
	1823	9.6	293
8 Sa	0122	0.7	21
	0741	6.9	210
	1305	3.1	94
	1930	9.4	287
9 Su	0237	0.5	15
	0907	7.0	213
	1424	3.5	107
	2039	9.4	287
10 M	0342	0.1	3
	1015	7.5	229
	1535	3.4	104
	2141	9.6	293
11 Tu	0437	−0.3	−9
	1108	8.0	244
	1634	3.1	94
	2234	9.8	299
12 W	0522	−0.7	−21
	1150	8.4	256
	1722	2.6	79
	2320	9.9	302
13 Th	0601	−0.9	−27
	1226	8.8	268
	1804	2.2	67
14 F ●	0001	10.0	305
	0636	−0.9	−27
	1258	9.0	274
	1841	1.9	58
15 Sa	0039	10.0	305
	0708	−0.8	−24
	1328	9.2	280
	1917	1.6	49

	Time	Height	
	h m	ft	cm
16 Su	0114	9.8	299
	0739	−0.5	−15
	1358	9.3	283
	1952	1.5	46
17 M	0149	9.4	287
	0808	−0.1	−3
	1427	9.3	283
	2027	1.4	43
18 Tu	0225	9.0	274
	0838	0.5	15
	1456	9.2	280
	2103	1.5	46
19 W	0302	8.4	256
	0908	1.2	37
	1527	9.0	274
	2143	1.6	49
20 Th	0342	7.8	238
	0939	1.9	58
	1600	8.8	268
	2228	1.8	55
21 F	0429	7.1	216
	1015	2.6	79
	1640	8.6	262
	2323	2.0	61
22 Sa ◐	0530	6.5	198
	1100	3.3	101
	1729	8.5	259
23 Su	0031	2.0	61
	0650	6.2	189
	1202	3.9	119
	1831	8.4	256
24 M	0146	1.7	52
	0819	6.4	195
	1323	4.1	125
	1943	8.6	262
25 Tu	0255	1.0	30
	0930	6.9	210
	1443	3.9	119
	2051	9.1	277
26 W	0352	0.2	6
	1023	7.7	235
	1548	3.2	98
	2152	9.8	299
27 Th	0441	−0.6	−18
	1107	8.6	262
	1643	2.3	70
	2246	10.4	317
28 F	0525	−1.2	−37
	1147	9.4	287
	1733	1.4	43
	2336	11.0	335
29 Sa ○	0607	−1.6	−49
	1226	10.1	308
	1820	0.5	15
30 Su	0024	11.2	341
	0648	−1.7	−52
	1305	10.7	326
	1907	−0.2	−6
31 M	0112	11.2	341
	0729	−1.4	−43
	1345	11.1	338
	1954	−0.6	−18

September

	Time	Height	
	h m	ft	cm
1 Tu	0201	10.8	329
	0811	−0.8	−24
	1426	11.2	341
	2043	−0.7	−21
2 W	0252	10.1	308
	0854	0.1	3
	1509	11.0	335
	2135	−0.5	−15
3 Th	0346	9.2	280
	0940	1.1	34
	1556	10.6	323
	2232	0.0	0
4 F	0448	8.3	253
	1031	2.2	67
	1648	10.0	305
	2338	0.5	15
5 Sa ◑	0601	7.5	229
	1133	3.2	98
	1751	9.3	283
6 Su	0053	0.9	27
	0727	7.2	219
	1252	3.8	116
	1905	8.9	271
7 M	0211	1.0	30
	0851	7.4	226
	1419	3.9	119
	2022	8.8	268
8 Tu	0319	0.8	24
	0956	7.8	238
	1531	3.5	107
	2130	8.9	271
9 W	0414	0.5	15
	1044	8.3	253
	1626	2.9	88
	2224	9.2	280
10 Th	0458	0.3	9
	1122	8.7	265
	1710	2.3	70
	2309	9.4	287
11 F	0535	0.1	3
	1154	9.1	277
	1748	1.7	52
	2348	9.6	293
12 Sa ●	0608	0.1	3
	1223	9.4	287
	1821	1.3	40
13 Su	0024	9.7	296
	0638	0.3	9
	1250	9.6	293
	1854	0.9	27
14 M	0058	9.6	293
	0707	0.5	15
	1317	9.8	299
	1926	0.7	21
15 Tu	0132	9.4	287
	0735	0.9	27
	1344	9.8	299
	1958	0.6	18

	Time	Height	
	h m	ft	cm
16 W	0206	9.1	277
	0804	1.4	43
	1412	9.7	296
	2032	0.7	21
17 Th	0242	8.7	265
	0833	2.0	61
	1441	9.6	293
	2109	0.9	27
18 F	0321	8.2	250
	0904	2.6	79
	1513	9.3	283
	2150	1.2	37
19 Sa	0407	7.6	232
	0941	3.3	101
	1551	9.0	274
	2241	1.5	46
20 Su ◐	0505	7.1	216
	1027	3.9	119
	1640	8.7	265
	2344	1.7	52
21 M	0620	6.8	207
	1134	4.3	131
	1746	8.4	256
22 Tu	0059	1.6	49
	0745	7.0	213
	1303	4.4	134
	1908	8.4	256
23 W	0213	1.3	40
	0855	7.6	232
	1428	3.8	116
	2027	8.8	268
24 Th	0316	0.7	21
	0948	8.4	256
	1534	2.8	85
	2134	9.5	290
25 F	0408	0.1	3
	1032	9.3	283
	1628	1.6	49
	2232	10.2	311
26 Sa	0455	−0.4	−12
	1113	10.3	314
	1717	0.4	12
	2324	10.7	326
27 Su ○	0539	−0.6	−18
	1153	11.1	338
	1804	−0.6	−18
28 M	0014	11.0	335
	0621	−0.6	−18
	1232	11.6	354
	1850	−1.3	−40
29 Tu	0102	11.0	335
	0703	−0.2	−6
	1312	11.9	363
	1936	−1.7	−52
30 W	0151	10.7	326
	0746	0.4	12
	1354	11.8	360
	2023	−1.6	−49

Time meridian 135° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.
Heights are referred to mean lower low water which is the chart datum of soundings.

Sitka, Alaska, 2015

Times and Heights of High and Low Waters

October

	Time	Height	
	h m	ft	cm
1 Th	0242	10.2	311
	0830	1.3	40
	1437	11.4	347
	2113	−1.1	−34
2 F	0335	9.4	287
	0917	2.2	67
	1523	10.7	326
	2207	−0.4	−12
3 Sa	0435	8.7	265
	1010	3.1	94
	1615	9.9	302
	2307	0.4	12
4 Su ◑	0544	8.0	244
	1116	3.9	119
	1718	9.0	274
5 M	0018	1.1	34
	0704	7.8	238
	1240	4.2	128
	1836	8.3	253
6 Tu	0133	1.5	46
	0822	7.9	241
	1408	4.0	122
	1959	8.1	247
7 W	0243	1.5	46
	0922	8.3	253
	1519	3.4	104
	2111	8.3	253
8 Th	0339	1.5	46
	1008	8.7	265
	1610	2.7	82
	2207	8.6	262
9 F	0424	1.4	43
	1044	9.1	277
	1652	2.0	61
	2252	8.9	271
10 Sa	0501	1.3	40
	1115	9.5	290
	1727	1.3	40
	2332	9.1	277
11 Su	0534	1.3	40
	1143	9.9	302
	1759	0.7	21
12 M ●	0008	9.3	283
	0604	1.5	46
	1210	10.1	308
	1831	0.3	9
13 Tu	0042	9.4	287
	0634	1.7	52
	1238	10.3	314
	1902	0.0	0
14 W	0116	9.4	287
	0703	2.0	61
	1305	10.4	317
	1934	−0.1	−3
15 Th	0151	9.2	280
	0733	2.4	73
	1333	10.3	314
	2007	0.0	0

	Time	Height	
	h m	ft	cm
16 F	0228	8.9	271
	0804	2.9	88
	1404	10.1	308
	2043	0.2	6
17 Sa	0308	8.5	259
	0838	3.4	104
	1437	9.8	299
	2124	0.5	15
18 Su	0353	8.1	247
	0918	3.9	119
	1517	9.4	287
	2212	0.8	24
19 M	0449	7.8	238
	1010	4.3	131
	1607	8.9	271
	2310	1.2	37
20 Tu ◐	0557	7.7	235
	1122	4.5	137
	1715	8.5	259
21 W	0018	1.4	43
	0710	7.9	241
	1250	4.3	131
	1840	8.2	250
22 Th	0130	1.4	43
	0815	8.5	259
	1413	3.5	107
	2005	8.4	256
23 F	0236	1.2	37
	0909	9.3	283
	1518	2.3	70
	2118	9.0	274
24 Sa	0333	0.9	27
	0956	10.2	311
	1613	1.0	30
	2219	9.6	293
25 Su	0423	0.7	21
	1039	11.1	338
	1703	−0.3	−9
	2314	10.2	311
26 M	0510	0.7	21
	1121	11.8	360
	1749	−1.3	−40
27 Tu ○	0005	10.6	323
	0555	0.8	24
	1202	12.2	372
	1835	−2.0	−61
28 W	0054	10.7	326
	0639	1.2	37
	1244	12.4	378
	1920	−2.2	−67
29 Th	0142	10.5	320
	0724	1.7	52
	1326	12.2	372
	2006	−2.0	−61
30 F	0232	10.2	311
	0809	2.3	70
	1409	11.6	354
	2053	−1.4	−43
31 Sa	0323	9.6	293
	0858	3.0	91
	1455	10.8	329
	2142	−0.6	−18

November

	Time	Height	
	h m	ft	cm
1 Su	0418	9.1	277
	0952	3.7	113
	1545	9.8	299
	2236	0.3	9
2 M	0520	8.6	262
	1057	4.2	128
	1644	8.8	268
	2336	1.1	34
3 Tu ◑	0628	8.4	256
	1216	4.4	134
	1757	8.0	244
4 W	0043	1.8	55
	0736	8.4	256
	1341	4.1	125
	1921	7.6	232
5 Th	0149	2.2	67
	0834	8.6	262
	1451	3.4	104
	2039	7.6	232
6 F	0248	2.4	73
	0921	9.0	274
	1544	2.6	79
	2141	7.8	238
7 Sa	0337	2.5	76
	0959	9.4	287
	1626	1.8	55
	2231	8.2	250
8 Su	0419	2.5	76
	1032	9.8	299
	1703	1.1	34
	2313	8.6	262
9 M	0455	2.6	79
	1103	10.2	311
	1736	0.5	15
	2351	8.9	271
10 Tu	0529	2.7	82
	1133	10.5	320
	1808	0.0	0
11 W ●	0027	9.1	277
	0602	2.8	85
	1202	10.7	326
	1841	−0.4	−12
12 Th	0103	9.2	280
	0635	3.0	91
	1233	10.8	329
	1914	−0.6	−18
13 F	0139	9.3	283
	0709	3.2	98
	1304	10.8	329
	1949	−0.6	−18
14 Sa	0217	9.2	280
	0744	3.5	107
	1338	10.6	323
	2026	−0.5	−15
15 Su	0258	9.0	274
	0822	3.8	116
	1415	10.3	314
	2106	−0.2	−6

	Time	Height	
	h m	ft	cm
16 M	0342	8.8	268
	0907	4.0	122
	1458	9.8	299
	2151	0.2	6
17 Tu	0433	8.6	262
	1003	4.2	128
	1549	9.2	280
	2243	0.6	18
18 W ◐	0531	8.6	262
	1113	4.2	128
	1655	8.6	262
	2342	1.1	34
19 Th	0633	8.9	271
	1234	3.8	116
	1817	8.1	247
20 F	0048	1.5	46
	0734	9.4	287
	1354	3.0	91
	1944	8.1	247
21 Sa	0154	1.8	55
	0830	10.0	305
	1501	1.8	55
	2102	8.4	256
22 Su	0256	1.9	58
	0921	10.8	329
	1558	0.5	15
	2209	8.9	271
23 M	0352	2.0	61
	1008	11.5	351
	1649	−0.7	−21
	2306	9.5	290
24 Tu	0444	2.1	64
	1054	12.1	369
	1736	−1.5	−46
	2358	10.0	305
25 W ○	0533	2.2	67
	1138	12.4	378
	1822	−2.1	−64
26 Th	0047	10.2	311
	0620	2.3	70
	1221	12.4	378
	1906	−2.2	−67
27 F	0134	10.3	314
	0706	2.6	79
	1304	12.1	369
	1950	−2.0	−61
28 Sa	0221	10.1	308
	0753	2.9	88
	1348	11.6	354
	2034	−1.4	−43
29 Su	0307	9.9	302
	0840	3.3	101
	1432	10.7	326
	2118	−0.7	−21
30 M	0356	9.5	290
	0932	3.7	113
	1518	9.8	299
	2204	0.2	6

December

	Time	Height	
	h m	ft	cm
1 Tu	0446	9.1	277
	1029	4.0	122
	1610	8.8	268
	2252	1.1	34
2 W ◑	0540	8.9	271
	1136	4.2	128
	1711	7.9	241
	2344	1.9	58
3 Th	0637	8.8	268
	1252	4.0	122
	1825	7.2	219
4 F	0042	2.6	79
	0732	8.9	271
	1405	3.5	107
	1948	7.0	213
5 Sa	0141	3.1	94
	0822	9.1	277
	1506	2.8	85
	2103	7.1	216
6 Su	0238	3.4	104
	0906	9.4	287
	1554	2.0	61
	2203	7.5	229
7 M	0329	3.6	110
	0946	9.8	299
	1635	1.2	37
	2252	7.9	241
8 Tu	0414	3.6	110
	1023	10.3	314
	1712	0.5	15
	2334	8.4	256
9 W	0455	3.6	110
	1058	10.6	323
	1747	−0.1	−3
10 Th	0013	8.8	268
	0534	3.6	110
	1133	10.9	332
	1822	−0.6	−18
11 F ●	0050	9.1	277
	0612	3.6	110
	1208	11.2	341
	1857	−0.9	−27
12 Sa	0127	9.4	287
	0650	3.5	107
	1244	11.2	341
	1933	−1.1	−34
13 Su	0205	9.5	290
	0730	3.5	107
	1322	11.1	338
	2011	−1.1	−34
14 M	0244	9.6	293
	0812	3.5	107
	1403	10.8	329
	2050	−0.8	−24
15 Tu	0326	9.6	293
	0900	3.5	107
	1448	10.3	314
	2132	−0.4	−12

	Time	Height	
	h m	ft	cm
16 W	0411	9.6	293
	0955	3.5	107
	1540	9.5	290
	2219	0.2	6
17 Th	0501	9.7	296
	1059	3.4	104
	1642	8.7	265
	2310	1.0	30
18 F ◐	0555	9.8	299
	1213	3.0	91
	1758	8.0	244
19 Sa	0009	1.8	55
	0653	10.1	308
	1330	2.4	73
	1924	7.7	235
20 Su	0115	2.5	76
	0752	10.5	320
	1441	1.4	43
	2049	7.8	238
21 M	0222	2.9	88
	0849	11.0	335
	1543	0.4	12
	2202	8.3	253
22 Tu	0327	3.1	94
	0943	11.4	347
	1638	−0.6	−18
	2302	8.9	271
23 W	0425	3.2	98
	1033	11.8	360
	1726	−1.3	−40
	2354	9.5	290
24 Th	0519	3.1	94
	1121	12.0	366
	1812	−1.7	−52
25 F ○	0041	9.9	302
	0608	3.0	91
	1206	12.0	366
	1854	−1.9	−58
26 Sa	0124	10.1	308
	0654	3.0	91
	1250	11.8	360
	1935	−1.7	−52
27 Su	0206	10.1	308
	0739	3.0	91
	1332	11.3	344
	2014	−1.3	−40
28 M	0246	10.0	305
	0823	3.1	94
	1413	10.7	326
	2053	−0.6	−18
29 Tu	0326	9.8	299
	0908	3.3	101
	1455	9.9	302
	2130	0.1	3
30 W	0406	9.6	293
	0956	3.5	107
	1539	9.0	274
	2209	1.0	30
31 Th	0448	9.3	283
	1050	3.6	110
	1628	8.1	247
	2249	1.9	58

Time meridian 135° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.
Heights are referred to mean lower low water which is the chart datum of soundings.

Elfin Cove, Port Althorp, Alaska, 2015

Times and Heights of High and Low Waters

January

	Time	Height	
	h m	ft	cm
1 Th	0323	3.3	101
	0940	11.5	351
	1636	−0.3	−9
	2258	8.7	265
2 F	0421	3.3	101
	1030	11.8	360
	1723	−0.9	−27
	2348	9.2	280
3 Sa	0512	3.3	101
	1116	11.9	363
	1804	−1.3	−40
4 Su ○	0030	9.6	293
	0557	3.1	94
	1157	12.0	366
	1842	−1.5	−46
5 M	0107	9.9	302
	0638	3.0	91
	1236	12.0	366
	1917	−1.5	−46
6 Tu	0142	10.1	308
	0716	2.9	88
	1312	11.7	357
	1950	−1.3	−40
7 W	0216	10.1	308
	0754	2.9	88
	1348	11.4	347
	2023	−0.9	−27
8 Th	0249	10.1	308
	0832	3.0	91
	1423	10.8	329
	2056	−0.4	−12
9 F	0323	10.0	305
	0911	3.1	94
	1500	10.1	308
	2129	0.3	9
10 Sa	0358	9.9	302
	0954	3.2	98
	1539	9.3	283
	2203	1.0	30
11 Su	0435	9.7	296
	1042	3.3	101
	1625	8.4	256
	2240	1.8	55
12 M	0517	9.6	293
	1139	3.3	101
	1721	7.6	232
	2323	2.7	82
13 Tu ◑	0605	9.6	293
	1248	3.2	98
	1837	7.0	213
14 W	0017	3.4	104
	0701	9.7	296
	1402	2.6	79
	2006	6.9	210
15 Th	0126	3.9	119
	0801	10.0	305
	1508	1.7	52
	2125	7.3	223

	Time	Height	
	h m	ft	cm
16 F	0238	4.0	122
	0859	10.6	323
	1603	0.6	18
	2227	8.0	244
17 Sa	0342	3.8	116
	0953	11.3	344
	1651	−0.5	−15
	2317	8.9	271
18 Su	0437	3.3	101
	1044	12.1	369
	1735	−1.5	−46
19 M	0001	9.8	299
	0528	2.8	85
	1132	12.8	390
	1817	−2.3	−70
20 Tu ●	0043	10.6	323
	0616	2.1	64
	1219	13.2	402
	1859	−2.7	−82
21 W	0123	11.2	341
	0703	1.6	49
	1305	13.3	405
	1941	−2.8	−85
22 Th	0204	11.7	357
	0752	1.2	37
	1352	13.0	396
	2022	−2.4	−73
23 F	0246	11.9	363
	0842	1.0	30
	1440	12.3	375
	2105	−1.7	−52
24 Sa	0330	12.0	366
	0934	1.0	30
	1531	11.2	341
	2149	−0.6	−18
25 Su	0417	11.8	360
	1031	1.2	37
	1628	10.0	305
	2235	0.6	18
26 M ◐	0507	11.5	351
	1135	1.4	43
	1733	8.7	265
	2327	1.9	58
27 Tu	0604	11.0	335
	1248	1.5	46
	1853	7.8	238
28 W	0030	3.0	91
	0708	10.7	326
	1408	1.4	43
	2023	7.5	229
29 Th	0147	3.8	116
	0815	10.6	323
	1521	0.9	27
	2146	7.8	238
30 F	0305	4.0	122
	0918	10.7	326
	1621	0.3	9
	2250	8.3	253
31 Sa	0410	3.9	119
	1014	11.0	335
	1709	−0.2	−6
	2337	8.9	271

February

	Time	Height	
	h m	ft	cm
1 Su	0502	3.5	107
	1103	11.2	341
	1749	−0.6	−18
2 M	0015	9.4	287
	0546	3.1	94
	1145	11.5	351
	1825	−0.8	−24
3 Tu ○	0048	9.8	299
	0624	2.7	82
	1223	11.6	354
	1857	−0.9	−27
4 W	0118	10.2	311
	0700	2.4	73
	1258	11.5	351
	1928	−0.8	−24
5 Th	0147	10.4	317
	0734	2.2	67
	1332	11.3	344
	1958	−0.5	−15
6 F	0217	10.5	320
	0809	2.1	64
	1406	10.9	332
	2027	−0.1	−3
7 Sa	0246	10.5	320
	0844	2.0	61
	1440	10.3	314
	2057	0.5	15
8 Su	0316	10.5	320
	0922	2.1	64
	1516	9.6	293
	2127	1.1	34
9 M	0349	10.3	314
	1002	2.3	70
	1556	8.8	268
	2200	1.9	58
10 Tu	0424	10.1	308
	1050	2.4	73
	1644	8.0	244
	2236	2.7	82
11 W ◑	0507	9.9	302
	1149	2.5	76
	1750	7.3	223
	2324	3.5	107
12 Th	0601	9.8	299
	1303	2.4	73
	1919	6.9	210
13 F	0032	4.2	128
	0709	9.8	299
	1422	1.8	55
	2048	7.2	219
14 Sa	0159	4.3	131
	0821	10.2	311
	1529	0.8	24
	2158	8.0	244
15 Su	0316	4.0	122
	0926	11.0	335
	1623	−0.2	−6
	2251	9.0	274

	Time	Height	
	h m	ft	cm
16 M	0418	3.2	98
	1024	11.8	360
	1711	−1.2	−37
	2336	10.0	305
17 Tu	0512	2.2	67
	1117	12.6	384
	1756	−1.9	−58
18 W ●	0017	11.0	335
	0602	1.3	40
	1207	13.1	399
	1838	−2.3	−70
19 Th	0058	11.8	360
	0650	0.4	12
	1255	13.2	402
	1919	−2.2	−67
20 F	0138	12.4	378
	0737	−0.1	−3
	1342	12.9	393
	2001	−1.8	−55
21 Sa	0218	12.7	387
	0825	−0.4	−12
	1430	12.2	372
	2042	−1.0	−30
22 Su	0300	12.6	384
	0915	−0.3	−9
	1520	11.2	341
	2125	0.1	3
23 M	0344	12.2	372
	1008	0.1	3
	1614	10.0	305
	2210	1.3	40
24 Tu	0432	11.6	354
	1106	0.7	21
	1715	8.8	268
	2300	2.5	76
25 W ◐	0526	10.8	329
	1213	1.2	37
	1831	7.9	241
26 Th	0002	3.6	110
	0631	10.2	311
	1332	1.5	46
	2001	7.5	229
27 F	0124	4.3	131
	0744	9.8	299
	1451	1.4	43
	2125	7.8	238
28 Sa	0249	4.3	131
	0856	9.8	299
	1555	1.0	30
	2228	8.3	253

March

	Time	Height	
	h m	ft	cm
1 Su	0357	3.9	119
	0957	10.1	308
	1645	0.6	18
	2312	8.9	271
2 M	0448	3.3	101
	1047	10.5	320
	1725	0.3	9
	2347	9.4	287
3 Tu	0530	2.7	82
	1130	10.9	332
	1759	0.1	3
4 W	0017	9.9	302
	0606	2.1	64
	1207	11.1	338
	1830	0.0	0
5 Th ○	0045	10.4	317
	0640	1.6	49
	1242	11.2	341
	1900	0.0	0
6 F	0113	10.7	326
	0713	1.3	40
	1316	11.1	338
	1929	0.2	6
7 Sa	0141	10.9	332
	0745	1.0	30
	1349	10.8	329
	1958	0.6	18
8 Su	0209	11.0	335
	0819	1.0	30
	1423	10.4	317
	2027	1.1	34
9 M	0237	10.9	332
	0854	1.0	30
	1459	9.8	299
	2057	1.7	52
10 Tu	0308	10.7	326
	0932	1.2	37
	1538	9.1	277
	2129	2.4	73
11 W	0343	10.5	320
	1015	1.4	43
	1625	8.4	256
	2206	3.1	94
12 Th	0424	10.2	311
	1109	1.7	52
	1726	7.7	235
	2255	3.8	116
13 F ◑	0518	9.9	302
	1217	1.8	55
	1847	7.4	226
14 Sa	0005	4.3	131
	0629	9.7	296
	1337	1.6	49
	2014	7.7	235
15 Su	0136	4.3	131
	0749	9.9	302
	1451	1.0	30
	2123	8.4	256

	Time	Height	
	h m	ft	cm
16 M	0258	3.7	113
	0903	10.5	320
	1551	0.2	6
	2218	9.4	287
17 Tu	0403	2.6	79
	1007	11.2	341
	1642	−0.5	−15
	2304	10.5	320
18 W	0457	1.4	43
	1103	12.0	366
	1729	−1.0	−30
	2347	11.6	354
19 Th	0547	0.2	6
	1155	12.5	381
	1812	−1.2	−37
20 F ●	0028	12.4	378
	0635	−0.7	−21
	1244	12.6	384
	1855	−1.1	−34
21 Sa	0108	12.9	393
	0721	−1.3	−40
	1331	12.4	378
	1936	−0.6	−18
22 Su	0148	13.0	396
	0808	−1.5	−46
	1419	11.8	360
	2019	0.2	6
23 M	0230	12.8	390
	0855	−1.3	−40
	1508	11.0	335
	2102	1.1	34
24 Tu	0313	12.2	372
	0945	−0.7	−21
	1601	10.0	305
	2148	2.1	64
25 W	0359	11.4	347
	1038	0.1	3
	1659	9.0	274
	2239	3.2	98
26 Th ◐	0452	10.5	320
	1139	0.9	27
	1808	8.2	250
	2342	4.0	122
27 F	0555	9.6	293
	1250	1.5	46
	1929	7.9	241
28 Sa	0103	4.4	134
	0710	9.1	277
	1406	1.8	55
	2047	8.0	244
29 Su	0229	4.3	131
	0826	9.0	274
	1513	1.7	52
	2146	8.5	259
30 M	0335	3.7	113
	0931	9.3	283
	1605	1.5	46
	2230	9.0	274
31 Tu	0425	3.0	91
	1024	9.7	296
	1647	1.3	40
	2305	9.6	293

Time meridian 135° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.
Heights are referred to mean lower low water which is the chart datum of soundings.

Elfin Cove, Port Althorp, Alaska, 2015

Times and Heights of High and Low Waters

April

	Time	Height		Time	Height
	h m	ft / cm		h m	ft / cm
1 W	0506	2.2 / 67	**16** Th	0442	0.6 / 18
	1109	10.1 / 308		1049	11.1 / 338
	1723	1.1 / 34		1658	0.2 / 6
	2337	10.2 / 311		2314	12.1 / 369
2 Th	0542	1.5 / 46	**17** F	0532	−0.6 / −18
	1148	10.4 / 317		1143	11.5 / 351
	1755	1.0 / 30		1744	0.2 / 6
				2357	12.7 / 387
3 F	0006	10.6 / 323	**18** Sa ●	0619	−1.5 / −46
	0616	0.9 / 27		1233	11.7 / 357
	1224	10.6 / 323		1829	0.4 / 12
	1827	1.0 / 30			
4 Sa ○	0035	11.0 / 335	**19** Su	0038	13.1 / 399
	0649	0.4 / 12		0705	−2.0 / −61
	1259	10.6 / 323		1321	11.6 / 354
	1857	1.2 / 37		1912	0.8 / 24
5 Su	0104	11.2 / 341	**20** M	0120	13.0 / 396
	0722	0.1 / 3		0750	−2.1 / −64
	1334	10.5 / 320		1409	11.2 / 341
	1928	1.5 / 46		1956	1.4 / 43
6 M	0133	11.3 / 344	**21** Tu	0201	12.7 / 387
	0756	0.0 / 0		0836	−1.8 / −55
	1409	10.2 / 311		1458	10.6 / 323
	1959	1.9 / 58		2042	2.2 / 67
7 Tu	0203	11.3 / 344	**22** W	0244	12.0 / 366
	0831	0.0 / 0		0923	−1.1 / −34
	1447	9.8 / 299		1548	9.9 / 302
	2032	2.4 / 73		2129	2.9 / 88
8 W	0236	11.1 / 338	**23** Th	0330	11.1 / 338
	0910	0.1 / 3		1012	−0.3 / −9
	1529	9.3 / 283		1643	9.3 / 283
	2108	2.9 / 88		2222	3.6 / 110
9 Th	0312	10.8 / 329	**24** F	0420	10.2 / 311
	0953	0.4 / 12		1105	0.6 / 18
	1617	8.8 / 268		1743	8.7 / 265
	2151	3.5 / 107		2323	4.1 / 125
10 F	0357	10.4 / 317	**25** Sa ◐	0519	9.3 / 283
	1045	0.7 / 21		1205	1.4 / 43
	1716	8.4 / 256		1849	8.5 / 259
	2246	4.0 / 122			
11 Sa ◑	0452	10.0 / 305	**26** Su	0037	4.3 / 131
	1146	1.0 / 30		0629	8.6 / 262
	1827	8.3 / 253		1310	1.9 / 58
	2358	4.2 / 128		1955	8.5 / 259
12 Su	0603	9.6 / 293	**27** M	0155	4.1 / 125
	1258	1.2 / 37		0745	8.4 / 256
	1941	8.6 / 262		1414	2.2 / 67
				2051	8.8 / 268
13 M	0125	3.9 / 119	**28** Tu	0301	3.5 / 107
	0725	9.5 / 290		0854	8.5 / 259
	1410	1.0 / 30		1509	2.3 / 70
	2046	9.3 / 283		2136	9.3 / 283
14 Tu	0243	3.1 / 94	**29** W	0353	2.7 / 82
	0843	9.9 / 302		0952	8.8 / 268
	1514	0.7 / 21		1556	2.2 / 67
	2141	10.2 / 311		2215	9.8 / 299
15 W	0347	1.9 / 58	**30** Th	0436	1.8 / 55
	0950	10.5 / 320		1041	9.1 / 277
	1608	0.4 / 12		1637	2.2 / 67
	2229	11.2 / 341		2250	10.4 / 317

May

	Time	Height		Time	Height
	h m	ft / cm		h m	ft / cm
1 F	0514	1.0 / 30	**16** Sa	0517	−1.1 / −34
	1124	9.5 / 290		1133	10.4 / 317
	1714	2.1 / 64		1717	1.6 / 49
	2323	10.8 / 329		2328	12.7 / 387
2 Sa	0550	0.4 / 12	**17** Su ●	0604	−1.8 / −55
	1204	9.8 / 299		1225	10.6 / 323
	1750	2.1 / 64		1805	1.8 / 55
	2355	11.2 / 341			
3 Su ○	0625	−0.2 / −6	**18** M	0012	12.9 / 393
	1242	10.0 / 305		0650	−2.2 / −67
	1825	2.2 / 67		1313	10.7 / 326
				1851	2.1 / 64
4 M	0028	11.5 / 351	**19** Tu	0055	12.7 / 387
	0700	−0.6 / −18		0734	−2.2 / −67
	1320	10.1 / 308		1400	10.6 / 323
	1900	2.4 / 73		1937	2.5 / 76
5 Tu	0101	11.6 / 354	**20** W	0137	12.3 / 375
	0736	−0.9 / −27		0818	−1.8 / −55
	1358	10.0 / 305		1446	10.3 / 314
	1936	2.7 / 82		2024	2.9 / 88
6 W	0135	11.6 / 354	**21** Th	0220	11.7 / 357
	0813	−0.9 / −27		0902	−1.3 / −40
	1439	9.8 / 299		1533	10.0 / 305
	2014	3.0 / 91		2111	3.3 / 101
7 Th	0212	11.4 / 347	**22** F	0304	10.9 / 332
	0854	−0.8 / −24		0947	−0.6 / −18
	1523	9.6 / 293		1621	9.6 / 293
	2056	3.3 / 101		2202	3.7 / 113
8 F	0253	11.1 / 338	**23** Sa	0351	10.1 / 308
	0938	−0.6 / −18		1032	0.2 / 6
	1612	9.4 / 287		1711	9.3 / 283
	2146	3.6 / 110		2258	4.0 / 122
9 Sa	0341	10.6 / 323	**24** Su	0444	9.2 / 280
	1028	−0.2 / −6		1120	1.1 / 34
	1706	9.3 / 283		1804	9.1 / 277
	2245	3.8 / 116			
10 Su	0438	10.1 / 308	**25** M ◐	0000	4.0 / 122
	1123	0.3 / 9		0544	8.5 / 259
	1807	9.3 / 283		1212	1.8 / 55
	2355	3.7 / 113		1857	9.1 / 277
11 M ◑	0547	9.5 / 290	**26** Tu	0109	3.8 / 116
	1225	0.8 / 24		0653	8.0 / 244
	1909	9.7 / 296		1308	2.4 / 73
				1949	9.3 / 283
12 Tu	0113	3.2 / 98	**27** W	0215	3.3 / 101
	0706	9.2 / 280		0805	7.8 / 238
	1331	1.1 / 34		1404	2.7 / 82
	2009	10.2 / 311		2037	9.6 / 293
13 W	0227	2.3 / 70	**28** Th	0312	2.5 / 76
	0824	9.2 / 280		0911	7.9 / 241
	1435	1.3 / 40		1457	2.9 / 88
	2104	11.0 / 335		2120	10.0 / 305
14 Th	0330	1.1 / 34	**29** F	0400	1.7 / 52
	0934	9.6 / 293		1008	8.2 / 250
	1533	1.4 / 43		1545	3.0 / 91
	2155	11.7 / 357		2201	10.5 / 320
15 F	0426	−0.1 / −3	**30** Sa	0443	0.9 / 27
	1037	10.0 / 305		1058	8.6 / 262
	1627	1.5 / 46		1630	3.1 / 94
	2242	12.3 / 375		2240	11.0 / 335
			31 Su	0523	0.1 / 3
				1143	9.0 / 274
				1712	3.1 / 94
				2318	11.4 / 347

June

	Time	Height		Time	Height
	h m	ft / cm		h m	ft / cm
1 M	0601	−0.6 / −18	**16** Tu ●	0637	−1.9 / −58
	1225	9.4 / 287		1304	10.1 / 308
	1753	3.0 / 91		1835	2.9 / 88
	2356	11.7 / 357			
2 Tu ○	0640	−1.1 / −34	**17** W	0035	12.3 / 375
	1306	9.7 / 296		0720	−1.9 / −58
	1834	3.0 / 91		1348	10.2 / 311
				1921	3.0 / 91
3 W	0034	11.9 / 363	**18** Th	0118	12.0 / 366
	0718	−1.5 / −46		0801	−1.6 / −49
	1346	10.0 / 305		1430	10.2 / 311
	1916	3.1 / 94		2006	3.1 / 94
4 Th	0114	12.0 / 366	**19** F	0159	11.5 / 351
	0758	−1.7 / −52		0840	−1.2 / −37
	1428	10.1 / 308		1511	10.1 / 308
	2000	3.1 / 94		2051	3.3 / 101
5 F	0155	11.9 / 363	**20** Sa	0241	10.9 / 332
	0840	−1.6 / −49		0919	−0.6 / −18
	1512	10.2 / 311		1552	9.9 / 302
	2048	3.1 / 94		2137	3.4 / 104
6 Sa	0240	11.5 / 351	**21** Su	0323	10.1 / 308
	0924	−1.3 / −40		0958	0.1 / 3
	1559	10.2 / 311		1632	9.8 / 299
	2140	3.1 / 94		2225	3.5 / 107
7 Su	0331	11.0 / 335	**22** M	0409	9.3 / 283
	1011	−0.8 / −24		1038	0.8 / 24
	1648	10.3 / 314		1714	9.6 / 293
	2239	3.1 / 94		2318	3.5 / 107
8 M	0428	10.2 / 311	**23** Tu	0500	8.5 / 259
	1100	−0.1 / −3		1119	1.6 / 49
	1741	10.5 / 320		1759	9.6 / 293
	2344	2.8 / 85			
9 Tu ◑	0533	9.5 / 290	**24** W ◐	0016	3.4 / 104
	1155	0.6 / 18		0600	7.8 / 238
	1837	10.7 / 326		1205	2.4 / 73
				1846	9.6 / 293
10 W	0056	2.4 / 73	**25** Th	0121	3.1 / 94
	0647	8.8 / 268		0709	7.4 / 226
	1255	1.4 / 43		1257	3.0 / 91
	1934	11.0 / 335		1936	9.8 / 299
11 Th	0208	1.6 / 49	**26** F	0224	2.5 / 76
	0806	8.6 / 262		0823	7.3 / 223
	1358	2.0 / 61		1355	3.5 / 107
	2030	11.4 / 347		2025	10.0 / 305
12 F	0313	0.7 / 21	**27** Sa	0321	1.8 / 55
	0920	8.7 / 265		0931	7.5 / 229
	1501	2.4 / 73		1453	3.7 / 113
	2124	11.8 / 360		2114	10.4 / 317
13 Sa	0412	−0.2 / −6	**28** Su	0410	1.0 / 30
	1027	9.0 / 274		1030	7.9 / 241
	1600	2.7 / 82		1548	3.7 / 113
	2216	12.1 / 369		2200	10.9 / 332
14 Su	0504	−1.0 / −30	**29** M	0456	0.1 / 3
	1126	9.4 / 287		1121	8.5 / 259
	1655	2.8 / 85		1639	3.6 / 110
	2305	12.4 / 378		2246	11.4 / 347
15 M	0552	−1.6 / −49	**30** Tu	0538	−0.7 / −21
	1218	9.8 / 299		1206	9.1 / 277
	1747	2.9 / 88		1727	3.4 / 104
	2351	12.4 / 378		2330	11.9 / 363

Time meridian 135° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.
Heights are referred to mean lower low water which is the chart datum of soundings.

Elfin Cove, Port Althorp, Alaska, 2015

Times and Heights of High and Low Waters

July

	Time	Height	
	h m	ft	cm
1 W ○	0620	−1.4	−43
	1248	9.7	296
	1813	3.1	94
2 Th	0014	12.3	375
	0700	−1.9	−58
	1328	10.2	311
	1859	2.8	85
3 F	0058	12.5	381
	0741	−2.1	−64
	1410	10.6	323
	1946	2.5	76
4 Sa	0143	12.4	378
	0823	−2.1	−64
	1452	11.0	335
	2036	2.3	70
5 Su	0230	12.0	366
	0906	−1.7	−52
	1535	11.2	341
	2128	2.1	64
6 M	0321	11.3	344
	0950	−1.0	−30
	1621	11.3	344
	2224	1.9	58
7 Tu	0416	10.4	317
	1036	−0.2	−6
	1710	11.3	344
	2326	1.8	55
8 W ◑	0518	9.4	287
	1126	0.9	27
	1803	11.3	344
9 Th	0034	1.6	49
	0630	8.5	259
	1223	1.9	58
	1901	11.3	344
10 F	0146	1.2	37
	0751	8.1	247
	1328	2.8	85
	2001	11.3	344
11 Sa	0256	0.6	18
	0910	8.1	247
	1437	3.3	101
	2100	11.4	347
12 Su	0359	0.0	0
	1021	8.4	256
	1543	3.5	107
	2157	11.6	354
13 M	0453	−0.6	−18
	1121	8.9	271
	1643	3.5	107
	2249	11.8	360
14 Tu	0541	−1.1	−34
	1210	9.4	287
	1736	3.3	101
	2337	11.9	363
15 W ●	0624	−1.3	−40
	1252	9.8	299
	1822	3.1	94

	Time	Height	
	h m	ft	cm
16 Th	0021	11.9	363
	0703	−1.4	−43
	1330	10.1	308
	1905	2.9	88
17 F	0102	11.7	357
	0740	−1.2	−37
	1405	10.2	311
	1946	2.8	85
18 Sa	0140	11.4	347
	0815	−0.9	−27
	1440	10.3	314
	2026	2.7	82
19 Su	0218	10.9	332
	0849	−0.4	−12
	1514	10.2	311
	2106	2.7	82
20 M	0257	10.3	314
	0922	0.2	6
	1548	10.2	311
	2148	2.7	82
21 Tu	0337	9.5	290
	0956	0.9	27
	1624	10.0	305
	2233	2.8	85
22 W	0421	8.7	265
	1031	1.7	52
	1702	9.9	302
	2323	2.9	88
23 Th ◐	0511	7.9	241
	1110	2.5	76
	1745	9.8	299
24 F	0022	2.8	85
	0615	7.3	223
	1157	3.2	98
	1834	9.7	296
25 Sa	0130	2.6	79
	0734	7.0	213
	1257	3.9	119
	1931	9.8	299
26 Su	0237	2.0	61
	0854	7.1	216
	1407	4.2	128
	2030	10.2	311
27 M	0337	1.2	37
	1002	7.6	232
	1514	4.1	125
	2127	10.7	326
28 Tu	0428	0.2	6
	1056	8.4	256
	1613	3.7	113
	2220	11.3	344
29 W	0514	−0.7	−21
	1142	9.2	280
	1706	3.2	98
	2311	12.0	366
30 Th	0557	−1.4	−43
	1223	10.0	305
	1756	2.5	76
	2358	12.5	381
31 F ○	0639	−2.0	−61
	1303	10.8	329
	1843	1.9	58

August

	Time	Height	
	h m	ft	cm
1 Sa	0045	12.8	390
	0720	−2.2	−67
	1343	11.4	347
	1931	1.3	40
2 Su	0131	12.7	387
	0801	−2.1	−64
	1423	11.8	360
	2019	0.9	27
3 M	0219	12.3	375
	0843	−1.6	−49
	1505	12.1	369
	2110	0.7	21
4 Tu	0309	11.5	351
	0925	−0.7	−21
	1550	12.1	369
	2204	0.7	21
5 W	0403	10.5	320
	1010	0.3	9
	1637	11.8	360
	2302	0.8	24
6 Th ◑	0504	9.3	283
	1059	1.5	46
	1729	11.5	351
7 F	0008	1.0	30
	0615	8.4	256
	1156	2.6	79
	1829	11.1	338
8 Sa	0122	1.1	34
	0738	7.8	238
	1306	3.5	107
	1935	10.8	329
9 Su	0238	0.8	24
	0903	7.8	238
	1425	3.9	119
	2042	10.7	326
10 M	0345	0.4	12
	1015	8.3	253
	1538	3.9	119
	2145	10.9	332
11 Tu	0440	−0.1	−3
	1110	8.9	271
	1638	3.5	107
	2239	11.1	338
12 W	0526	−0.4	−12
	1153	9.4	287
	1727	3.1	94
	2326	11.3	344
13 Th	0606	−0.6	−18
	1229	9.9	302
	1809	2.7	82
14 F ●	0008	11.4	347
	0641	−0.7	−21
	1302	10.2	311
	1847	2.3	70
15 Sa	0046	11.4	347
	0714	−0.6	−18
	1333	10.5	320
	1923	2.0	61

	Time	Height	
	h m	ft	cm
16 Su	0122	11.2	341
	0745	−0.3	−9
	1402	10.6	323
	1958	1.8	55
17 M	0157	10.9	332
	0815	0.1	3
	1432	10.6	323
	2034	1.7	52
18 Tu	0232	10.3	314
	0846	0.6	18
	1502	10.6	323
	2111	1.8	55
19 W	0309	9.7	296
	0916	1.3	40
	1534	10.4	317
	2150	1.9	58
20 Th	0348	8.9	271
	0949	2.1	64
	1608	10.1	308
	2235	2.2	67
21 F	0434	8.2	250
	1024	2.8	85
	1648	9.9	302
	2328	2.3	70
22 Sa ◐	0533	7.5	229
	1108	3.6	110
	1737	9.6	293
23 Su	0035	2.4	73
	0652	7.0	213
	1209	4.2	128
	1840	9.5	290
24 M	0151	2.0	61
	0820	7.1	216
	1332	4.5	137
	1952	9.8	299
25 Tu	0301	1.3	40
	0932	7.8	238
	1452	4.2	128
	2100	10.3	314
26 W	0358	0.5	15
	1027	8.6	262
	1556	3.5	107
	2200	11.1	338
27 Th	0447	−0.4	−12
	1112	9.6	293
	1650	2.5	76
	2254	11.9	363
28 F	0531	−1.2	−37
	1153	10.6	323
	1739	1.5	46
	2344	12.5	381
29 Sa ○	0613	−1.6	−49
	1232	11.5	351
	1826	0.5	15
30 Su	0032	12.8	390
	0654	−1.7	−52
	1312	12.2	372
	1913	−0.2	−6
31 M	0119	12.8	390
	0735	−1.5	−46
	1351	12.7	387
	2000	−0.7	−21

September

	Time	Height	
	h m	ft	cm
1 Tu	0207	12.3	375
	0817	−0.9	−27
	1433	12.8	390
	2049	−0.8	−24
2 W	0256	11.5	351
	0900	0.0	0
	1516	12.5	381
	2141	−0.5	−15
3 Th	0349	10.4	317
	0945	1.1	34
	1603	12.0	366
	2237	0.0	0
4 F	0449	9.3	283
	1035	2.3	70
	1656	11.2	341
	2340	0.6	18
5 Sa ◑	0600	8.4	256
	1135	3.4	104
	1758	10.5	320
6 Su	0054	1.1	34
	0724	7.9	241
	1253	4.1	125
	1911	10.0	305
7 M	0214	1.2	37
	0850	8.0	244
	1421	4.2	128
	2026	9.8	299
8 Tu	0324	1.0	30
	0958	8.5	259
	1534	3.8	116
	2133	10.0	305
9 W	0419	0.7	21
	1047	9.1	277
	1630	3.2	98
	2228	10.4	317
10 Th	0503	0.4	12
	1125	9.6	293
	1714	2.5	76
	2314	10.7	326
11 F	0540	0.2	6
	1158	10.1	308
	1752	1.9	58
	2353	10.9	332
12 Sa ●	0612	0.2	6
	1227	10.5	320
	1826	1.4	43
13 Su	0030	11.0	335
	0643	0.2	6
	1255	10.8	329
	1859	1.0	30
14 M	0104	10.9	332
	0712	0.5	15
	1323	11.0	335
	1931	0.8	24
15 Tu	0138	10.7	326
	0741	0.8	24
	1351	11.0	335
	2004	0.7	21

	Time	Height	
	h m	ft	cm
16 W	0211	10.3	314
	0811	1.3	40
	1419	10.9	332
	2038	0.8	24
17 Th	0246	9.7	296
	0841	1.9	58
	1449	10.7	326
	2115	1.0	30
18 F	0325	9.1	277
	0912	2.6	79
	1522	10.4	317
	2156	1.3	40
19 Sa	0409	8.4	256
	0948	3.3	101
	1600	10.0	305
	2245	1.6	49
20 Su ◐	0506	7.8	238
	1034	4.0	122
	1650	9.6	293
	2348	1.9	58
21 M	0622	7.4	226
	1140	4.5	137
	1757	9.3	283
22 Tu	0105	1.9	58
	0748	7.6	232
	1312	4.6	140
	1919	9.3	283
23 W	0221	1.4	43
	0858	8.3	253
	1436	4.0	122
	2037	9.8	299
24 Th	0323	0.7	21
	0952	9.3	283
	1541	2.9	88
	2142	10.6	323
25 F	0415	0.0	0
	1038	10.4	317
	1635	1.6	49
	2239	11.4	347
26 Sa	0501	−0.5	−15
	1120	11.4	347
	1723	0.3	9
	2331	12.1	369
27 Su ○	0545	−0.8	−24
	1200	12.4	378
	1810	−0.8	−24
28 M	0020	12.4	378
	0627	−0.8	−24
	1240	13.0	396
	1855	−1.6	−49
29 Tu	0107	12.4	378
	0709	−0.5	−15
	1320	13.3	405
	1941	−1.9	−58
30 W	0155	12.0	366
	0751	0.2	6
	1401	13.2	402
	2028	−1.9	−58

Time meridian 135° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.
Heights are referred to mean lower low water which is the chart datum of soundings.

Elfin Cove, Port Althorp, Alaska, 2015

Times and Heights of High and Low Waters

October

	Time	Height	
	h m	ft	cm
1 Th	0244	11.3	344
	0835	1.0	30
	1444	12.7	387
	2118	−1.4	−43
2 F	0336	10.3	314
	0922	2.0	61
	1531	11.9	363
	2211	−0.6	−18
3 Sa	0434	9.4	287
	1014	3.0	91
	1623	10.9	332
	2310	0.3	9
4 Su ◑	0542	8.6	262
	1118	3.9	119
	1725	9.9	302
5 M	0019	1.1	34
	0703	8.2	250
	1240	4.4	134
	1842	9.2	280
6 Tu	0137	1.5	46
	0823	8.4	256
	1411	4.2	128
	2004	9.0	274
7 W	0248	1.6	49
	0925	8.8	268
	1521	3.6	110
	2114	9.2	280
8 Th	0344	1.5	46
	1011	9.4	287
	1613	2.8	85
	2210	9.5	290
9 F	0428	1.3	40
	1048	9.9	302
	1655	2.0	61
	2256	9.9	302
10 Sa	0505	1.2	37
	1119	10.4	317
	1731	1.2	37
	2336	10.2	311
11 Su	0538	1.2	37
	1149	10.9	332
	1804	0.6	18
12 M ●	0012	10.4	317
	0609	1.2	37
	1217	11.2	341
	1835	0.1	3
13 Tu	0046	10.5	320
	0639	1.4	43
	1245	11.4	347
	1907	−0.2	−6
14 W	0120	10.4	317
	0710	1.7	52
	1313	11.5	351
	1939	−0.3	−9
15 Th	0155	10.1	308
	0740	2.1	64
	1342	11.3	344
	2012	−0.2	−6

	Time	Height	
	h m	ft	cm
16 F	0230	9.7	296
	0811	2.6	79
	1413	11.1	338
	2048	0.0	0
17 Sa	0310	9.3	283
	0846	3.2	98
	1447	10.7	326
	2129	0.3	9
18 Su	0355	8.8	268
	0925	3.7	113
	1527	10.2	311
	2216	0.8	24
19 M	0450	8.3	253
	1016	4.2	128
	1617	9.7	296
	2313	1.2	37
20 Tu ◐	0558	8.1	247
	1127	4.6	140
	1725	9.2	280
21 W	0023	1.4	43
	0713	8.4	256
	1257	4.4	134
	1850	9.0	274
22 Th	0137	1.4	43
	0820	9.1	277
	1420	3.5	107
	2014	9.3	283
23 F	0244	1.1	34
	0915	10.0	305
	1525	2.2	67
	2124	9.9	302
24 Sa	0340	0.8	24
	1003	11.1	338
	1619	0.7	21
	2225	10.6	323
25 Su	0430	0.5	15
	1047	12.1	369
	1708	−0.6	−18
	2319	11.2	341
26 M	0516	0.4	12
	1129	12.9	393
	1754	−1.8	−55
27 Tu ○	0009	11.6	354
	0601	0.4	12
	1211	13.4	408
	1839	−2.5	−76
28 W	0057	11.7	357
	0644	0.8	24
	1252	13.6	415
	1924	−2.7	−82
29 Th	0144	11.5	351
	0728	1.3	40
	1334	13.3	405
	2010	−2.5	−76
30 F	0233	11.0	335
	0814	2.0	61
	1417	12.6	384
	2057	−1.9	−58
31 Sa	0323	10.3	314
	0902	2.7	82
	1503	11.7	357
	2146	−1.0	−30

November

	Time	Height	
	h m	ft	cm
1 Su	0418	9.6	293
	0955	3.5	107
	1553	10.6	323
	2239	0.0	0
2 M	0518	9.0	274
	1058	4.1	125
	1651	9.5	290
	2339	1.0	30
3 Tu ◑	0627	8.7	265
	1216	4.4	134
	1803	8.6	262
4 W	0046	1.7	52
	0737	8.7	265
	1342	4.2	128
	1926	8.2	250
5 Th	0154	2.1	64
	0837	9.1	277
	1453	3.5	107
	2041	8.2	250
6 F	0254	2.3	70
	0924	9.6	293
	1547	2.6	79
	2143	8.6	262
7 Sa	0342	2.3	70
	1003	10.1	308
	1629	1.7	52
	2233	9.0	274
8 Su	0424	2.3	70
	1037	10.6	323
	1706	0.8	24
	2316	9.4	287
9 M	0501	2.2	67
	1110	11.1	338
	1740	0.1	3
	2354	9.7	296
10 Tu	0535	2.2	67
	1141	11.5	351
	1813	−0.4	−12
11 W ●	0030	9.9	302
	0609	2.3	70
	1212	11.7	357
	1846	−0.8	−24
12 Th	0106	10.0	305
	0642	2.5	76
	1243	11.8	360
	1919	−1.0	−30
13 F	0142	10.0	305
	0716	2.7	82
	1315	11.7	357
	1954	−1.0	−30
14 Sa	0219	9.8	299
	0751	3.0	91
	1348	11.5	351
	2030	−0.9	−27
15 Su	0259	9.6	293
	0829	3.4	104
	1425	11.2	341
	2111	−0.6	−18

	Time	Height	
	h m	ft	cm
16 M	0344	9.3	283
	0913	3.7	113
	1507	10.6	323
	2155	−0.1	−3
17 Tu	0435	9.1	277
	1008	4.0	122
	1559	9.9	302
	2247	0.4	12
18 W ◐	0533	9.1	277
	1117	4.1	125
	1704	9.2	280
	2346	1.0	30
19 Th	0637	9.4	287
	1239	3.7	113
	1825	8.7	265
20 F	0053	1.4	43
	0740	9.9	302
	1359	2.8	85
	1951	8.7	265
21 Sa	0202	1.6	49
	0837	10.7	326
	1507	1.5	46
	2107	9.0	274
22 Su	0304	1.7	52
	0929	11.6	354
	1603	0.1	3
	2212	9.6	293
23 M	0359	1.6	49
	1017	12.4	378
	1654	−1.1	−34
	2309	10.2	311
24 Tu	0451	1.6	49
	1103	13.0	396
	1741	−2.1	−64
25 W ○	0001	10.7	326
	0539	1.7	52
	1147	13.4	408
	1827	−2.7	−82
26 Th	0049	10.9	332
	0625	1.8	55
	1230	13.4	408
	1911	−2.8	−85
27 F	0135	10.9	332
	0711	2.1	64
	1313	13.1	399
	1954	−2.6	−79
28 Sa	0221	10.7	326
	0757	2.5	76
	1356	12.5	381
	2038	−2.0	−61
29 Su	0308	10.3	314
	0844	3.0	91
	1439	11.6	354
	2122	−1.2	−37
30 M	0356	9.9	302
	0935	3.5	107
	1526	10.5	320
	2208	−0.2	−6

December

	Time	Height	
	h m	ft	cm
1 Tu	0446	9.5	290
	1031	3.9	119
	1617	9.5	290
	2255	0.8	24
2 W ◑	0540	9.2	280
	1136	4.1	125
	1717	8.5	259
	2348	1.7	52
3 Th	0637	9.1	277
	1251	4.0	122
	1831	7.7	235
4 F	0046	2.4	73
	0735	9.2	280
	1407	3.5	107
	1952	7.4	226
5 Sa	0148	2.9	88
	0826	9.6	293
	1508	2.7	82
	2105	7.6	232
6 Su	0246	3.2	98
	0912	10.0	305
	1558	1.8	55
	2205	8.0	244
7 M	0337	3.2	98
	0953	10.5	320
	1639	0.9	27
	2254	8.5	259
8 Tu	0421	3.2	98
	1032	11.0	335
	1717	0.1	3
	2336	8.9	271
9 W	0503	3.1	94
	1108	11.4	347
	1753	−0.6	−18
10 Th	0015	9.4	287
	0542	3.0	91
	1144	11.8	360
	1828	−1.2	−37
11 F ●	0052	9.7	296
	0619	3.0	91
	1219	12.0	366
	1903	−1.5	−46
12 Sa	0129	9.9	302
	0657	3.0	91
	1255	12.1	369
	1939	−1.7	−52
13 Su	0206	10.1	308
	0736	3.0	91
	1333	12.0	366
	2016	−1.6	−49
14 M	0246	10.1	308
	0818	3.1	94
	1412	11.7	357
	2055	−1.4	−43
15 Tu	0328	10.2	311
	0906	3.1	94
	1457	11.1	338
	2137	−0.9	−27

	Time	Height	
	h m	ft	cm
16 W	0413	10.2	311
	1000	3.2	98
	1548	10.3	314
	2223	−0.1	−3
17 Th	0504	10.2	311
	1102	3.1	94
	1649	9.4	287
	2314	0.7	21
18 F ◐	0559	10.4	317
	1215	2.8	85
	1803	8.6	262
19 Sa	0013	1.5	46
	0659	10.7	326
	1334	2.2	67
	1928	8.1	247
20 Su	0121	2.2	67
	0800	11.1	338
	1447	1.1	34
	2051	8.3	253
21 M	0230	2.6	79
	0858	11.7	357
	1549	0.0	0
	2203	8.7	265
22 Tu	0334	2.8	85
	0952	12.2	372
	1643	−1.1	−34
	2304	9.4	287
23 W	0432	2.7	82
	1043	12.7	387
	1732	−1.9	−58
	2356	9.9	302
24 Th	0524	2.6	79
	1130	12.9	393
	1817	−2.4	−73
25 F ○	0042	10.4	317
	0613	2.5	76
	1215	13.0	396
	1859	−2.5	−76
26 Sa	0125	10.6	323
	0659	2.5	76
	1258	12.7	387
	1940	−2.3	−70
27 Su	0206	10.6	323
	0743	2.6	79
	1339	12.2	372
	2019	−1.9	−58
28 M	0247	10.5	320
	0827	2.8	85
	1420	11.5	351
	2057	−1.2	−37
29 Tu	0327	10.3	314
	0912	3.0	91
	1502	10.6	323
	2135	−0.3	−9
30 W	0407	10.0	305
	0959	3.3	101
	1545	9.6	293
	2214	0.6	18
31 Th	0449	9.7	296
	1051	3.5	107
	1634	8.6	262
	2254	1.6	49

Time meridian 135° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.
Heights are referred to mean lower low water which is the chart datum of soundings.

Yakutat, Alaska, 2015

Times and Heights of High and Low Waters

January

	Time	Height	
	h m	ft	cm
1 Th	0332	3.5	107
	0950	10.9	332
	1648	0.1	3
	2312	8.3	253
2 F	0431	3.5	107
	1040	11.1	338
	1735	−0.4	−12
3 Sa	0002	8.7	265
	0522	3.5	107
	1125	11.3	344
	1816	−0.8	−24
4 Su ○	0044	9.1	277
	0607	3.3	101
	1206	11.4	347
	1854	−0.9	−27
5 M	0121	9.3	283
	0648	3.2	98
	1245	11.3	344
	1929	−0.9	−27
6 Tu	0156	9.5	290
	0726	3.1	94
	1322	11.0	335
	2003	−0.8	−24
7 W	0230	9.5	290
	0804	3.1	94
	1357	10.7	326
	2035	−0.4	−12
8 Th	0303	9.5	290
	0841	3.1	94
	1433	10.1	308
	2107	0.0	0
9 F	0336	9.4	287
	0921	3.2	98
	1510	9.5	290
	2139	0.6	18
10 Sa	0410	9.3	283
	1003	3.3	101
	1549	8.8	268
	2213	1.3	40
11 Su	0447	9.2	280
	1052	3.4	104
	1635	8.0	244
	2249	2.1	64
12 M	0528	9.1	277
	1150	3.4	104
	1731	7.3	223
	2331	2.8	85
13 Tu ◑	0614	9.1	277
	1259	3.2	98
	1846	6.7	204
14 W	0023	3.5	107
	0708	9.2	280
	1412	2.7	82
	2014	6.6	201
15 Th	0128	4.0	122
	0807	9.5	290
	1519	1.9	58
	2136	7.0	213

	Time	Height	
	h m	ft	cm
16 F	0240	4.2	128
	0906	10.0	305
	1614	0.9	27
	2238	7.6	232
17 Sa	0346	4.0	122
	1001	10.7	326
	1703	−0.1	−3
	2329	8.4	256
18 Su	0444	3.6	110
	1052	11.4	347
	1747	−1.0	−30
19 M	0013	9.1	277
	0536	3.0	91
	1140	11.9	363
	1830	−1.7	−52
20 Tu ●	0054	9.8	299
	0624	2.4	73
	1227	12.3	375
	1911	−2.2	−67
21 W	0135	10.4	317
	0712	1.8	55
	1314	12.4	378
	1953	−2.2	−67
22 Th	0216	10.8	329
	0801	1.4	43
	1401	12.0	366
	2034	−1.9	−58
23 F	0258	11.1	338
	0851	1.2	37
	1450	11.4	347
	2116	−1.2	−37
24 Sa	0342	11.1	338
	0944	1.2	37
	1541	10.4	317
	2200	−0.3	−9
25 Su	0428	11.0	335
	1042	1.4	43
	1638	9.3	283
	2246	0.9	27
26 M ◐	0517	10.7	326
	1147	1.6	49
	1745	8.2	250
	2338	2.1	64
27 Tu	0613	10.4	317
	1301	1.7	52
	1906	7.4	226
28 W	0041	3.1	94
	0716	10.1	308
	1420	1.5	46
	2039	7.1	216
29 Th	0156	3.8	116
	0824	10.0	305
	1533	1.1	34
	2202	7.4	226
30 F	0314	4.1	125
	0929	10.1	308
	1633	0.6	18
	2305	7.9	241
31 Sa	0420	3.9	119
	1026	10.3	314
	1722	0.1	3
	2351	8.4	256

February

	Time	Height	
	h m	ft	cm
1 Su	0514	3.6	110
	1114	10.5	320
	1802	−0.2	−6
2 M	0029	8.9	271
	0558	3.2	98
	1156	10.7	326
	1838	−0.5	−15
3 Tu ○	0102	9.2	280
	0636	2.8	85
	1233	10.7	326
	1910	−0.5	−15
4 W	0132	9.5	290
	0712	2.5	76
	1308	10.7	326
	1940	−0.5	−15
5 Th	0201	9.6	293
	0746	2.3	70
	1342	10.4	317
	2009	−0.2	−6
6 F	0229	9.7	296
	0820	2.1	64
	1416	10.1	308
	2038	0.1	3
7 Sa	0258	9.8	299
	0855	2.1	64
	1450	9.6	293
	2106	0.7	21
8 Su	0327	9.7	296
	0932	2.2	67
	1526	8.9	271
	2135	1.3	40
9 M	0358	9.6	293
	1013	2.3	70
	1607	8.2	250
	2207	2.0	61
10 Tu	0433	9.5	290
	1101	2.4	73
	1655	7.5	229
	2243	2.8	85
11 W ◑	0514	9.3	283
	1201	2.5	76
	1800	6.8	207
	2330	3.5	107
12 Th	0607	9.2	280
	1314	2.4	73
	1927	6.5	198
13 F	0035	4.1	125
	0713	9.3	283
	1433	1.8	55
	2100	6.7	204
14 Sa	0200	4.3	131
	0826	9.6	293
	1541	1.0	30
	2211	7.4	226
15 Su	0321	4.0	122
	0934	10.2	311
	1636	0.0	0
	2304	8.3	253

	Time	Height	
	h m	ft	cm
16 M	0427	3.3	101
	1033	10.9	332
	1724	−0.9	−27
	2348	9.2	280
17 Tu	0522	2.4	73
	1127	11.5	351
	1808	−1.5	−46
18 W ●	0029	10.1	308
	0612	1.4	43
	1217	12.0	366
	1850	−1.9	−58
19 Th	0109	10.8	329
	0701	0.6	18
	1305	12.1	369
	1931	−1.9	−58
20 F	0149	11.4	347
	0748	0.0	0
	1352	11.8	360
	2011	−1.5	−46
21 Sa	0229	11.7	357
	0836	−0.2	−6
	1441	11.1	338
	2052	−0.8	−24
22 Su	0310	11.7	357
	0926	−0.2	−6
	1531	10.2	311
	2134	0.2	6
23 M	0354	11.3	344
	1018	0.2	6
	1624	9.1	277
	2219	1.4	43
24 Tu	0440	10.8	329
	1117	0.7	21
	1727	8.1	247
	2309	2.6	79
25 W ◐	0534	10.1	308
	1226	1.3	40
	1844	7.3	223
26 Th	0011	3.6	110
	0637	9.5	290
	1345	1.5	46
	2017	7.0	213
27 F	0132	4.2	128
	0753	9.1	277
	1504	1.4	43
	2143	7.2	219
28 Sa	0300	4.2	128
	0908	9.1	277
	1609	1.1	34
	2244	7.7	235

March

	Time	Height	
	h m	ft	cm
1 Su	0411	3.9	119
	1010	9.3	283
	1659	0.7	21
	2328	8.3	253
2 M	0503	3.3	101
	1101	9.6	293
	1739	0.4	12
3 Tu	0002	8.7	265
	0544	2.7	82
	1142	9.9	302
	1813	0.1	3
4 W	0032	9.2	280
	0620	2.1	64
	1219	10.0	305
	1843	0.0	0
5 Th ○	0100	9.5	290
	0653	1.6	49
	1254	10.1	308
	1912	0.1	3
6 F	0126	9.8	299
	0725	1.2	37
	1327	10.0	305
	1940	0.3	9
7 Sa	0152	10.0	305
	0757	1.0	30
	1400	9.8	299
	2007	0.6	18
8 Su	0219	10.1	308
	0830	0.9	27
	1433	9.4	287
	2035	1.1	34
9 M	0247	10.1	308
	0904	0.9	27
	1509	8.9	271
	2103	1.6	49
10 Tu	0316	10.0	305
	0942	1.1	34
	1548	8.3	253
	2135	2.3	70
11 W	0350	9.8	299
	1026	1.3	40
	1635	7.7	235
	2211	3.0	91
12 Th	0430	9.5	290
	1120	1.5	46
	1735	7.1	216
	2258	3.6	110
13 F ◑	0522	9.2	280
	1229	1.7	52
	1856	6.7	204
14 Sa	0007	4.1	125
	0632	9.0	274
	1349	1.5	46
	2026	6.9	210
15 Su	0138	4.2	128
	0754	9.0	274
	1503	0.9	27
	2138	7.6	232

	Time	Height	
	h m	ft	cm
16 M	0305	3.6	110
	0912	9.5	290
	1604	0.2	6
	2232	8.5	259
17 Tu	0413	2.6	79
	1018	10.1	308
	1656	−0.5	−15
	2317	9.5	290
18 W	0509	1.4	43
	1115	10.8	329
	1741	−1.0	−30
	2359	10.5	320
19 Th	0559	0.3	9
	1206	11.2	341
	1824	−1.2	−37
20 F ●	0039	11.3	344
	0647	−0.7	−21
	1255	11.3	344
	1906	−1.1	−34
21 Sa	0118	11.8	360
	0733	−1.3	−40
	1343	11.1	338
	1947	−0.6	−18
22 Su	0158	12.0	366
	0819	−1.5	−46
	1430	10.6	323
	2028	0.1	3
23 M	0239	11.8	360
	0906	−1.3	−40
	1519	9.9	302
	2110	1.0	30
24 Tu	0321	11.3	344
	0955	−0.7	−21
	1611	9.0	274
	2154	2.0	61
25 W	0406	10.5	320
	1049	0.0	0
	1710	8.1	247
	2245	3.0	91
26 Th ◐	0457	9.7	296
	1150	0.8	24
	1820	7.4	226
	2348	3.8	116
27 F	0559	8.8	268
	1303	1.4	43
	1945	7.1	216
28 Sa	0111	4.2	128
	0716	8.2	250
	1421	1.6	49
	2107	7.3	223
29 Su	0242	4.1	125
	0838	8.1	247
	1529	1.5	46
	2206	7.7	235
30 M	0352	3.5	107
	0947	8.2	250
	1621	1.3	40
	2249	8.2	250
31 Tu	0443	2.8	85
	1040	8.6	262
	1703	1.0	30
	2323	8.7	265

Time meridian 135° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.
Heights are referred to mean lower low water which is the chart datum of soundings.

Yakutat, Alaska, 2015

Times and Heights of High and Low Waters

April

	Time	Height	
	h m	ft	cm
1 W	0523	2.0	61
	1123	8.9	271
	1738	0.9	27
	2353	9.2	280
2 Th	0558	1.3	40
	1201	9.2	280
	1809	0.8	24
3 F	0020	9.6	293
	0631	0.7	21
	1236	9.4	287
	1838	0.8	24
4 Sa ○	0047	9.9	302
	0703	0.2	6
	1311	9.4	287
	1907	1.0	30
5 Su	0114	10.2	311
	0735	−0.1	−3
	1345	9.3	283
	1936	1.3	40
6 M	0142	10.3	314
	0807	−0.2	−6
	1420	9.1	277
	2006	1.7	52
7 Tu	0211	10.3	314
	0842	−0.2	−6
	1457	8.8	268
	2037	2.1	64
8 W	0242	10.2	311
	0920	−0.1	−3
	1538	8.3	253
	2112	2.6	79
9 Th	0318	9.9	302
	1004	0.2	6
	1626	7.8	238
	2153	3.1	94
10 F	0400	9.5	290
	1055	0.5	15
	1725	7.4	226
	2246	3.6	110
11 Sa ◑	0454	9.1	277
	1158	0.8	24
	1837	7.2	219
	2359	3.9	119
12 Su	0605	8.6	262
	1311	0.9	27
	1955	7.5	229
13 M	0130	3.7	113
	0731	8.4	256
	1424	0.8	24
	2102	8.1	247
14 Tu	0253	2.9	88
	0853	8.7	265
	1528	0.4	12
	2156	9.0	274
15 W	0400	1.7	52
	1003	9.2	280
	1622	0.1	3
	2243	10.0	305

	Time	Height	
	h m	ft	cm
16 Th	0456	0.4	12
	1103	9.7	296
	1711	−0.1	−3
	2326	10.8	329
17 F	0546	−0.8	−24
	1156	10.1	308
	1756	−0.1	−3
18 Sa ●	0008	11.5	351
	0632	−1.6	−49
	1246	10.3	314
	1840	0.1	3
19 Su	0048	11.9	363
	0717	−2.1	−64
	1333	10.2	311
	1922	0.5	15
20 M	0129	11.9	363
	0802	−2.2	−67
	1421	9.9	302
	2004	1.1	34
21 Tu	0209	11.6	354
	0847	−1.9	−58
	1508	9.4	287
	2047	1.7	52
22 W	0251	11.0	335
	0933	−1.3	−40
	1558	8.8	268
	2133	2.5	76
23 Th	0335	10.2	311
	1022	−0.5	−15
	1652	8.1	247
	2224	3.2	98
24 F	0424	9.2	280
	1115	0.3	9
	1754	7.6	232
	2326	3.7	113
25 Sa ◐	0521	8.3	253
	1216	1.1	34
	1904	7.4	226
26 Su	0044	4.0	122
	0633	7.6	232
	1324	1.6	49
	2014	7.4	226
27 M	0209	3.7	113
	0755	7.2	219
	1430	1.8	55
	2112	7.7	235
28 Tu	0320	3.1	94
	0909	7.3	223
	1526	1.8	55
	2158	8.2	250
29 W	0413	2.3	70
	1008	7.5	229
	1613	1.7	52
	2234	8.7	265
30 Th	0455	1.5	46
	1057	7.9	241
	1652	1.7	52
	2307	9.2	280

May

	Time	Height	
	h m	ft	cm
1 F	0532	0.7	21
	1139	8.2	250
	1728	1.7	52
	2337	9.7	296
2 Sa	0606	0.1	3
	1217	8.5	259
	1801	1.7	52
3 Su ○	0007	10.1	308
	0639	−0.5	−15
	1254	8.7	265
	1834	1.8	55
4 M	0038	10.4	317
	0713	−0.9	−27
	1331	8.8	268
	1907	1.9	58
5 Tu	0109	10.5	320
	0748	−1.2	−37
	1408	8.8	268
	1941	2.2	67
6 W	0142	10.6	323
	0825	−1.2	−37
	1448	8.6	262
	2017	2.5	76
7 Th	0217	10.4	317
	0904	−1.1	−34
	1531	8.4	256
	2058	2.8	85
8 F	0257	10.1	308
	0948	−0.9	−27
	1620	8.1	247
	2145	3.1	94
9 Sa	0344	9.6	293
	1038	−0.5	−15
	1715	7.9	241
	2244	3.3	101
10 Su	0440	8.9	271
	1135	0.0	0
	1817	7.9	241
	2358	3.3	101
11 M ◑	0550	8.3	253
	1238	0.4	12
	1923	8.2	250
12 Tu	0121	2.9	88
	0712	7.9	241
	1345	0.7	21
	2025	8.8	268
13 W	0240	2.0	61
	0836	7.9	241
	1449	0.9	27
	2120	9.6	293
14 Th	0346	0.9	27
	0949	8.2	250
	1548	0.9	27
	2210	10.3	314
15 F	0442	−0.3	−9
	1052	8.6	262
	1640	1.0	30
	2256	11.0	335

	Time	Height	
	h m	ft	cm
16 Sa	0532	−1.3	−40
	1147	9.0	274
	1729	1.1	34
	2339	11.5	351
17 Su ●	0618	−2.1	−64
	1238	9.3	283
	1815	1.3	40
18 M	0022	11.7	357
	0703	−2.4	−73
	1325	9.4	287
	1900	1.5	46
19 Tu	0103	11.6	354
	0746	−2.4	−73
	1411	9.3	283
	1944	1.9	58
20 W	0145	11.2	341
	0829	−2.1	−64
	1456	9.0	274
	2028	2.3	70
21 Th	0226	10.6	323
	0912	−1.6	−49
	1542	8.7	265
	2114	2.7	82
22 F	0309	9.8	299
	0955	−0.9	−27
	1630	8.3	253
	2203	3.1	94
23 Sa	0354	8.9	271
	1041	−0.1	−3
	1721	7.9	241
	2300	3.4	104
24 Su	0445	8.1	247
	1130	0.7	21
	1816	7.7	235
25 M ◐	0007	3.6	110
	0546	7.3	223
	1224	1.3	40
	1914	7.7	235
26 Tu	0122	3.4	104
	0700	6.7	204
	1321	1.8	55
	2008	7.9	241
27 W	0233	2.9	88
	0817	6.5	198
	1418	2.2	67
	2057	8.3	253
28 Th	0332	2.1	64
	0927	6.6	201
	1512	2.4	73
	2139	8.7	265
29 F	0420	1.3	40
	1024	7.0	213
	1559	2.5	76
	2218	9.2	280
30 Sa	0501	0.5	15
	1113	7.4	226
	1643	2.5	76
	2254	9.7	296
31 Su	0539	−0.2	−6
	1156	7.8	238
	1723	2.4	73
	2330	10.2	311

June

	Time	Height	
	h m	ft	cm
1 M	0616	−0.9	−27
	1236	8.2	250
	1802	2.4	73
2 Tu ○	0005	10.5	320
	0653	−1.4	−43
	1316	8.5	259
	1841	2.4	73
3 W	0042	10.8	329
	0730	−1.8	−55
	1356	8.6	262
	1921	2.4	73
4 Th	0120	10.8	329
	0809	−2.0	−61
	1437	8.7	265
	2003	2.4	73
5 F	0201	10.7	326
	0850	−1.9	−58
	1521	8.7	265
	2049	2.5	76
6 Sa	0245	10.3	314
	0934	−1.6	−49
	1607	8.7	265
	2141	2.6	79
7 Su	0334	9.7	296
	1020	−1.1	−34
	1657	8.7	265
	2241	2.6	79
8 M	0431	8.9	271
	1111	−0.5	−15
	1752	8.8	268
	2350	2.5	76
9 Tu ◑	0538	8.1	247
	1207	0.2	6
	1850	9.1	277
10 W	0107	2.1	64
	0656	7.5	229
	1309	0.9	27
	1949	9.5	290
11 Th	0222	1.3	40
	0820	7.2	219
	1413	1.5	46
	2046	9.9	302
12 F	0330	0.4	12
	0938	7.4	226
	1516	1.8	55
	2139	10.4	317
13 Sa	0428	−0.6	−18
	1044	7.8	238
	1614	2.0	61
	2230	10.8	329
14 Su	0520	−1.4	−43
	1141	8.2	250
	1708	2.1	64
	2317	11.1	338
15 M	0606	−1.9	−58
	1231	8.6	262
	1757	2.1	64

	Time	Height	
	h m	ft	cm
16 Tu ●	0001	11.2	341
	0650	−2.2	−67
	1316	8.8	268
	1843	2.2	67
17 W	0044	11.1	338
	0731	−2.2	−67
	1359	8.9	271
	1927	2.3	70
18 Th	0125	10.8	329
	0811	−2.0	−61
	1440	8.8	268
	2010	2.4	73
19 F	0206	10.3	314
	0850	−1.5	−46
	1520	8.7	265
	2054	2.6	79
20 Sa	0246	9.7	296
	0928	−1.0	−30
	1601	8.5	259
	2139	2.8	85
21 Su	0328	8.9	271
	1006	−0.3	−9
	1642	8.3	253
	2228	2.9	88
22 M	0412	8.1	247
	1046	0.4	12
	1725	8.2	250
	2323	3.0	91
23 Tu	0503	7.3	223
	1128	1.2	37
	1812	8.1	247
24 W ◐	0027	3.0	91
	0605	6.6	201
	1214	1.9	58
	1901	8.2	250
25 Th	0136	2.7	82
	0719	6.2	189
	1308	2.5	76
	1951	8.4	256
26 F	0242	2.1	64
	0837	6.1	186
	1406	2.9	88
	2041	8.7	265
27 Sa	0339	1.4	43
	0947	6.4	195
	1504	3.1	94
	2129	9.2	280
28 Su	0428	0.6	18
	1045	6.8	207
	1559	3.1	94
	2214	9.7	296
29 M	0512	−0.2	−6
	1133	7.4	226
	1648	2.9	88
	2257	10.2	311
30 Tu	0553	−1.0	−30
	1217	7.9	241
	1735	2.7	82
	2340	10.7	326

Time meridian 135° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.
Heights are referred to mean lower low water which is the chart datum of soundings.

Yakutat, Alaska, 2015

Times and Heights of High and Low Waters

July

	Time	Height	
	h m	ft	cm
1 W ○	0632	−1.7	−52
	1258	8.4	256
	1820	2.4	73
2 Th	0022	11.0	335
	0712	−2.2	−67
	1338	8.8	268
	1904	2.1	64
3 F	0105	11.2	341
	0752	−2.4	−73
	1419	9.1	277
	1951	1.9	58
4 Sa	0150	11.0	335
	0833	−2.3	−70
	1501	9.4	287
	2039	1.7	52
5 Su	0236	10.6	323
	0915	−2.0	−61
	1545	9.5	290
	2132	1.6	49
6 M	0327	9.9	302
	1000	−1.3	−40
	1631	9.6	293
	2229	1.6	49
7 Tu	0422	9.0	274
	1046	−0.5	−15
	1721	9.7	296
	2334	1.5	46
8 W ◑	0526	8.0	244
	1138	0.5	15
	1815	9.7	296
9 Th	0046	1.3	40
	0642	7.2	219
	1236	1.5	46
	1914	9.8	299
10 F	0202	0.9	27
	0807	6.9	210
	1342	2.2	67
	2015	9.9	302
11 Sa	0313	0.3	9
	0929	7.0	213
	1451	2.7	82
	2115	10.2	311
12 Su	0415	−0.4	−12
	1039	7.3	223
	1557	2.8	85
	2211	10.4	317
13 M	0508	−1.0	−30
	1135	7.8	238
	1655	2.8	85
	2302	10.6	323
14 Tu	0555	−1.4	−43
	1222	8.2	250
	1745	2.6	79
	2348	10.7	326
15 W ●	0637	−1.6	−49
	1303	8.6	262
	1831	2.4	73

	Time	Height	
	h m	ft	cm
16 Th	0030	10.7	326
	0715	−1.7	−52
	1341	8.8	268
	1912	2.2	67
17 F	0110	10.5	320
	0751	−1.5	−46
	1416	8.9	271
	1952	2.1	64
18 Sa	0148	10.1	308
	0825	−1.2	−37
	1450	8.9	271
	2031	2.1	64
19 Su	0225	9.6	293
	0858	−0.7	−21
	1523	8.8	268
	2111	2.2	67
20 M	0303	9.0	274
	0930	−0.1	−3
	1557	8.7	265
	2153	2.3	70
21 Tu	0343	8.3	253
	1003	0.6	18
	1633	8.6	262
	2239	2.4	73
22 W	0427	7.6	232
	1038	1.3	40
	1712	8.5	259
	2332	2.5	76
23 Th ◐	0519	6.8	207
	1118	2.1	64
	1755	8.5	259
24 F	0035	2.5	76
	0625	6.3	192
	1205	2.8	85
	1846	8.5	259
25 Sa	0145	2.2	67
	0746	6.0	183
	1305	3.3	101
	1944	8.6	262
26 Su	0254	1.6	49
	0909	6.2	189
	1415	3.6	110
	2043	9.0	274
27 M	0353	0.8	24
	1015	6.7	204
	1522	3.5	107
	2139	9.5	290
28 Tu	0443	0.0	0
	1108	7.3	223
	1621	3.1	94
	2231	10.2	311
29 W	0528	−0.9	−27
	1152	8.0	244
	1714	2.6	79
	2320	10.8	329
30 Th	0610	−1.6	−49
	1233	8.7	265
	1803	2.0	61
31 F ○	0006	11.2	341
	0650	−2.1	−64
	1313	9.4	287
	1850	1.4	43

August

	Time	Height	
	h m	ft	cm
1 Sa	0053	11.4	347
	0731	−2.3	−70
	1352	9.9	302
	1937	0.9	27
2 Su	0139	11.3	344
	0811	−2.2	−67
	1433	10.3	314
	2026	0.5	15
3 M	0227	10.9	332
	0852	−1.7	−52
	1515	10.5	320
	2117	0.4	12
4 Tu	0317	10.1	308
	0935	−0.9	−27
	1559	10.5	320
	2211	0.5	15
5 W	0412	9.1	277
	1020	0.1	3
	1647	10.4	317
	2312	0.6	18
6 Th ◑	0514	8.1	247
	1110	1.2	37
	1740	10.1	308
7 F	0021	0.8	24
	0628	7.3	223
	1209	2.3	70
	1841	9.8	299
8 Sa	0138	0.8	24
	0755	6.8	207
	1320	3.0	91
	1948	9.6	293
9 Su	0254	0.6	18
	0921	7.0	213
	1438	3.4	104
	2057	9.6	293
10 M	0400	0.2	6
	1030	7.4	226
	1550	3.3	101
	2159	9.8	299
11 Tu	0454	−0.3	−9
	1123	7.9	241
	1649	3.0	91
	2252	10.0	305
12 W	0540	−0.6	−18
	1205	8.4	256
	1737	2.5	76
	2338	10.2	311
13 Th	0618	−0.8	−24
	1241	8.7	265
	1818	2.1	64
14 F ●	0018	10.3	314
	0653	−0.9	−27
	1313	9.0	274
	1856	1.8	55
15 Sa	0055	10.2	311
	0725	−0.8	−24
	1343	9.2	280
	1932	1.5	46

	Time	Height	
	h m	ft	cm
16 Su	0131	10.0	305
	0755	−0.5	−15
	1413	9.3	283
	2006	1.4	43
17 M	0206	9.6	293
	0825	−0.1	−3
	1442	9.3	283
	2041	1.4	43
18 Tu	0241	9.2	280
	0854	0.5	15
	1511	9.3	283
	2118	1.5	46
19 W	0317	8.6	262
	0924	1.1	34
	1542	9.2	280
	2158	1.7	52
20 Th	0357	7.9	241
	0955	1.8	55
	1616	9.0	274
	2244	1.9	58
21 F	0444	7.2	219
	1031	2.6	79
	1657	8.8	268
	2340	2.1	64
22 Sa ◐	0544	6.6	201
	1116	3.2	98
	1747	8.6	262
23 Su	0049	2.1	64
	0704	6.3	192
	1218	3.8	116
	1850	8.6	262
24 M	0205	1.8	55
	0832	6.4	195
	1338	4.0	122
	2002	8.8	268
25 Tu	0314	1.1	34
	0944	6.9	210
	1457	3.7	113
	2110	9.3	283
26 W	0411	0.3	9
	1038	7.7	235
	1603	3.1	94
	2210	10.0	305
27 Th	0459	−0.5	−15
	1122	8.6	262
	1658	2.2	67
	2303	10.7	326
28 F	0543	−1.2	−37
	1202	9.4	287
	1747	1.2	37
	2353	11.2	341
29 Sa ○	0624	−1.6	−49
	1242	10.2	311
	1835	0.4	12
30 Su	0041	11.5	351
	0705	−1.7	−52
	1321	10.9	332
	1922	−0.3	−9
31 M	0128	11.4	347
	0746	−1.5	−46
	1401	11.3	344
	2009	−0.7	−21

September

	Time	Height	
	h m	ft	cm
1 Tu	0217	10.9	332
	0827	−0.8	−24
	1442	11.4	347
	2058	−0.7	−21
2 W	0307	10.2	311
	0909	0.0	0
	1525	11.2	341
	2150	−0.5	−15
3 Th	0400	9.3	283
	0954	1.1	34
	1612	10.8	329
	2248	0.0	0
4 F	0501	8.3	253
	1045	2.2	67
	1705	10.1	308
	2353	0.6	18
5 Sa ◑	0614	7.5	229
	1147	3.1	94
	1808	9.5	290
6 Su	0109	1.0	30
	0741	7.2	219
	1306	3.7	113
	1923	9.1	277
7 M	0228	1.0	30
	0906	7.3	223
	1433	3.8	116
	2040	9.0	274
8 Tu	0337	0.8	24
	1012	7.8	238
	1546	3.4	104
	2147	9.1	277
9 W	0432	0.5	15
	1100	8.3	253
	1641	2.9	88
	2241	9.4	287
10 Th	0515	0.3	9
	1138	8.7	265
	1725	2.2	67
	2325	9.7	296
11 F	0552	0.1	3
	1210	9.1	277
	1803	1.7	52
12 Sa ●	0004	9.8	299
	0624	0.1	3
	1239	9.5	290
	1837	1.2	37
13 Su	0040	9.9	302
	0654	0.2	6
	1306	9.7	296
	1909	0.9	27
14 M	0114	9.8	299
	0723	0.5	15
	1333	9.9	302
	1941	0.7	21
15 Tu	0147	9.6	293
	0751	0.9	27
	1400	9.9	302
	2014	0.6	18

	Time	Height	
	h m	ft	cm
16 W	0221	9.3	283
	0819	1.3	40
	1427	9.9	302
	2048	0.7	21
17 Th	0257	8.8	268
	0848	1.9	58
	1457	9.7	296
	2125	0.9	27
18 F	0336	8.3	253
	0919	2.5	76
	1530	9.5	290
	2207	1.2	37
19 Sa	0421	7.7	235
	0956	3.2	98
	1608	9.2	280
	2258	1.6	49
20 Su ◐	0518	7.1	216
	1042	3.8	116
	1658	8.8	268
21 M	0003	1.8	55
	0634	6.8	207
	1148	4.2	128
	1805	8.6	262
22 Tu	0119	1.7	52
	0759	7.0	213
	1317	4.3	131
	1927	8.6	262
23 W	0233	1.3	40
	0910	7.6	232
	1441	3.7	113
	2046	9.0	274
24 Th	0335	0.7	21
	1003	8.4	256
	1548	2.7	82
	2152	9.7	296
25 F	0426	0.1	3
	1048	9.4	287
	1643	1.6	49
	2249	10.4	317
26 Sa	0512	−0.4	−12
	1129	10.4	317
	1733	0.4	12
	2340	10.9	332
27 Su ○	0555	−0.7	−21
	1209	11.2	341
	1820	−0.7	−21
28 M	0030	11.2	341
	0637	−0.6	−18
	1248	11.8	360
	1906	−1.4	−43
29 Tu	0118	11.2	341
	0719	−0.3	−9
	1329	12.1	369
	1952	−1.7	−52
30 W	0206	10.8	329
	0801	0.3	9
	1410	12.1	369
	2039	−1.6	−49

Time meridian 135° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.
Heights are referred to mean lower low water which is the chart datum of soundings.

Yakutat, Alaska, 2015

Times and Heights of High and Low Waters

October

	Time	Height	
	h m	ft	cm
1 Th	0256	10.2	311
	0844	1.2	37
	1453	11.7	357
	2129	−1.1	−34
2 F	0349	9.4	287
	0931	2.1	64
	1539	11.0	335
	2223	−0.4	−12
3 Sa	0448	8.6	262
	1024	3.0	91
	1632	10.1	308
	2324	0.5	15
4 Su ◑	0557	8.0	244
	1129	3.8	116
	1735	9.2	280
5 M	0034	1.1	34
	0719	7.7	235
	1253	4.2	128
	1853	8.5	259
6 Tu	0151	1.5	46
	0838	7.8	238
	1422	4.0	122
	2016	8.3	253
7 W	0301	1.6	49
	0939	8.2	250
	1533	3.4	104
	2127	8.4	256
8 Th	0356	1.4	43
	1025	8.7	265
	1626	2.7	82
	2223	8.7	265
9 F	0440	1.3	40
	1101	9.2	280
	1707	1.9	58
	2308	9.1	277
10 Sa	0517	1.3	40
	1132	9.6	293
	1743	1.3	40
	2347	9.3	283
11 Su	0550	1.3	40
	1200	10.0	305
	1816	0.7	21
12 M ●	0023	9.5	290
	0620	1.4	43
	1227	10.3	314
	1847	0.3	9
13 Tu	0057	9.6	293
	0649	1.6	49
	1254	10.5	320
	1918	0.1	3
14 W	0131	9.5	290
	0718	1.9	58
	1322	10.5	320
	1950	0.0	0
15 Th	0206	9.3	283
	0748	2.3	70
	1350	10.5	320
	2024	0.0	0

	Time	Height	
	h m	ft	cm
16 F	0242	9.0	274
	0819	2.7	82
	1421	10.3	314
	2100	0.2	6
17 Sa	0322	8.6	262
	0853	3.2	98
	1455	10.0	305
	2141	0.5	15
18 Su	0407	8.1	247
	0932	3.7	113
	1535	9.6	293
	2230	0.9	27
19 M	0503	7.8	238
	1023	4.2	128
	1625	9.1	277
	2328	1.3	40
20 Tu ◐	0611	7.6	232
	1134	4.4	134
	1733	8.6	262
21 W	0038	1.5	46
	0725	7.8	238
	1303	4.2	128
	1858	8.4	256
22 Th	0150	1.4	43
	0832	8.4	256
	1426	3.4	104
	2022	8.6	262
23 F	0255	1.2	37
	0926	9.3	283
	1533	2.3	70
	2134	9.1	277
24 Sa	0350	0.9	27
	1013	10.3	314
	1629	0.9	27
	2235	9.8	299
25 Su	0440	0.7	21
	1056	11.2	341
	1718	−0.3	−9
	2329	10.3	314
26 M	0526	0.6	18
	1138	12.0	366
	1805	−1.3	−40
27 Tu ○	0020	10.6	323
	0610	0.7	21
	1219	12.5	381
	1851	−2.0	−61
28 W	0108	10.7	326
	0654	1.0	30
	1300	12.6	384
	1936	−2.2	−67
29 Th	0157	10.5	320
	0738	1.5	46
	1342	12.4	378
	2022	−2.0	−61
30 F	0245	10.1	308
	0823	2.2	67
	1426	11.9	363
	2109	−1.4	−43
31 Sa	0336	9.6	293
	0911	2.9	88
	1511	11.0	335
	2158	−0.6	−18

November

	Time	Height	
	h m	ft	cm
1 Su	0431	9.0	274
	1004	3.5	107
	1602	10.0	305
	2252	0.3	9
2 M	0533	8.5	259
	1108	4.1	125
	1701	9.0	274
	2353	1.2	37
3 Tu ◑	0642	8.2	250
	1228	4.3	131
	1813	8.2	250
4 W	0100	1.8	55
	0752	8.3	253
	1354	4.1	125
	1937	7.7	235
5 Th	0207	2.2	67
	0851	8.6	262
	1506	3.4	104
	2054	7.7	235
6 F	0306	2.3	70
	0938	9.0	274
	1600	2.7	82
	2156	8.0	244
7 Sa	0354	2.4	73
	1016	9.5	290
	1642	1.9	58
	2245	8.3	253
8 Su	0435	2.4	73
	1049	9.9	302
	1719	1.1	34
	2327	8.7	265
9 M	0511	2.5	76
	1120	10.3	314
	1753	0.5	15
10 Tu	0006	9.0	274
	0545	2.5	76
	1150	10.7	326
	1825	0.0	0
11 W ●	0042	9.2	280
	0617	2.6	79
	1220	10.9	332
	1858	−0.4	−12
12 Th	0117	9.3	283
	0650	2.8	85
	1250	11.0	335
	1931	−0.6	−18
13 F	0153	9.3	283
	0723	3.0	91
	1322	11.0	335
	2006	−0.6	−18
14 Sa	0231	9.2	280
	0758	3.3	101
	1356	10.9	332
	2043	−0.5	−15
15 Su	0311	9.0	274
	0836	3.6	110
	1433	10.5	320
	2124	−0.2	−6

	Time	Height	
	h m	ft	cm
16 M	0356	8.7	265
	0920	3.8	116
	1515	10.1	308
	2209	0.2	6
17 Tu	0448	8.6	262
	1015	4.1	125
	1607	9.4	287
	2301	0.7	21
18 W ◐	0546	8.6	262
	1125	4.1	125
	1712	8.8	268
19 Th	0001	1.2	37
	0649	8.8	268
	1247	3.8	116
	1833	8.3	253
20 F	0107	1.5	46
	0751	9.4	287
	1408	3.0	91
	2000	8.2	250
21 Sa	0212	1.8	55
	0847	10.1	308
	1516	1.8	55
	2118	8.5	259
22 Su	0313	1.9	58
	0938	10.9	332
	1614	0.5	15
	2224	9.0	274
23 M	0409	1.9	58
	1026	11.7	357
	1706	−0.6	−18
	2321	9.5	290
24 Tu	0500	1.9	58
	1111	12.3	375
	1753	−1.5	−46
25 W ○	0013	9.9	302
	0548	2.0	61
	1155	12.6	384
	1839	−2.1	−64
26 Th	0101	10.2	311
	0635	2.2	67
	1238	12.7	387
	1923	−2.2	−67
27 F	0148	10.2	311
	0720	2.4	73
	1321	12.4	378
	2006	−2.0	−61
28 Sa	0234	10.0	305
	0806	2.7	82
	1405	11.8	360
	2050	−1.4	−43
29 Su	0321	9.7	296
	0853	3.2	98
	1449	11.0	335
	2134	−0.7	−21
30 M	0409	9.4	287
	0944	3.6	110
	1535	10.0	305
	2220	0.2	6

December

	Time	Height	
	h m	ft	cm
1 Tu	0500	9.0	274
	1041	3.9	119
	1626	9.0	274
	2309	1.1	34
2 W ◑	0555	8.8	268
	1148	4.1	125
	1727	8.1	247
3 Th	0001	1.9	58
	0652	8.7	265
	1305	4.0	122
	1841	7.4	226
4 F	0059	2.6	79
	0749	8.8	268
	1420	3.5	107
	2003	7.1	216
5 Sa	0158	3.0	91
	0840	9.1	277
	1521	2.8	85
	2117	7.2	219
6 Su	0255	3.3	101
	0925	9.5	290
	1611	2.0	61
	2217	7.5	229
7 M	0345	3.4	104
	1004	9.9	302
	1652	1.3	40
	2306	8.0	244
8 Tu	0430	3.5	107
	1041	10.4	317
	1729	0.5	15
	2348	8.4	256
9 W	0511	3.4	104
	1116	10.8	329
	1805	−0.1	−3
10 Th	0026	8.8	268
	0549	3.4	104
	1151	11.1	338
	1840	−0.6	−18
11 F ●	0104	9.1	277
	0626	3.3	101
	1226	11.4	347
	1915	−0.9	−27
12 Sa	0141	9.3	283
	0704	3.3	101
	1302	11.4	347
	1951	−1.1	−34
13 Su	0218	9.4	287
	0743	3.2	98
	1340	11.3	344
	2028	−1.1	−34
14 M	0258	9.5	290
	0826	3.3	101
	1421	11.0	335
	2108	−0.9	−27
15 Tu	0340	9.5	290
	0913	3.3	101
	1505	10.5	320
	2150	−0.4	−12

	Time	Height	
	h m	ft	cm
16 W	0426	9.5	290
	1008	3.4	104
	1557	9.7	296
	2236	0.2	6
17 Th	0516	9.6	293
	1112	3.3	101
	1658	8.9	271
	2328	1.0	30
18 F ◐	0611	9.8	299
	1226	3.0	91
	1813	8.1	247
19 Sa	0027	1.7	52
	0710	10.1	308
	1345	2.4	73
	1939	7.7	235
20 Su	0132	2.4	73
	0809	10.5	320
	1457	1.4	43
	2104	7.8	238
21 M	0239	2.8	85
	0907	11.1	338
	1600	0.4	12
	2217	8.3	253
22 Tu	0343	3.0	91
	1001	11.6	354
	1655	−0.6	−18
	2317	8.8	268
23 W	0441	3.0	91
	1051	12.0	366
	1743	−1.3	−40
24 Th	0009	9.3	283
	0533	2.9	88
	1139	12.2	372
	1829	−1.7	−52
25 F ○	0055	9.7	296
	0622	2.8	85
	1224	12.3	375
	1911	−1.9	−58
26 Sa	0138	9.9	302
	0708	2.7	82
	1307	12.0	366
	1952	−1.7	−52
27 Su	0220	10.0	305
	0752	2.8	85
	1349	11.5	351
	2031	−1.3	−40
28 M	0300	9.9	302
	0836	2.9	88
	1430	10.9	332
	2109	−0.7	−21
29 Tu	0340	9.7	296
	0921	3.1	94
	1511	10.0	305
	2147	0.1	3
30 W	0420	9.5	290
	1009	3.3	101
	1555	9.1	277
	2225	0.9	27
31 Th	0502	9.2	280
	1102	3.5	107
	1644	8.2	250
	2305	1.8	55

Time meridian 135° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.
Heights are referred to mean lower low water which is the chart datum of soundings.

Cordova, Alaska, 2015

Times and Heights of High and Low Waters

January

	Time	Height	
	h m	ft	cm
1 Th	0348	3.9	119
	1012	13.6	415
	1659	0.3	9
	2329	10.6	323
2 F	0449	3.8	116
	1101	13.9	424
	1745	−0.5	−15
3 Sa	0023	11.2	341
	0539	3.6	110
	1147	14.0	427
	1826	−1.0	−30
4 Su ○	0107	11.6	354
	0623	3.4	104
	1230	14.1	430
	1903	−1.3	−40
5 M	0145	11.9	363
	0703	3.2	98
	1308	14.0	427
	1939	−1.3	−40
6 Tu	0219	12.0	366
	0742	3.1	94
	1344	13.8	421
	2014	−1.1	−34
7 W	0251	12.1	369
	0821	3.1	94
	1418	13.3	405
	2049	−0.8	−24
8 Th	0322	12.0	366
	0900	3.2	98
	1451	12.7	387
	2123	−0.2	−6
9 F	0352	11.8	360
	0940	3.4	104
	1525	12.0	366
	2158	0.5	15
10 Sa	0425	11.6	354
	1022	3.6	110
	1602	11.1	338
	2234	1.3	40
11 Su	0502	11.4	347
	1107	3.8	116
	1647	10.1	308
	2311	2.3	70
12 M	0546	11.2	341
	1158	4.0	122
	1750	9.1	277
	2353	3.2	98
13 Tu ◑	0639	11.2	341
	1258	4.0	122
	1916	8.6	262
14 W	0043	4.1	125
	0738	11.4	347
	1410	3.6	110
	2039	8.5	259
15 Th	0147	4.7	143
	0835	11.8	360
	1526	2.7	82
	2149	9.0	274

	Time	Height	
	h m	ft	cm
16 F	0302	4.9	149
	0929	12.5	381
	1628	1.4	43
	2250	9.8	299
17 Sa	0410	4.5	137
	1021	13.3	405
	1717	0.0	0
	2344	10.7	326
18 Su	0507	3.8	116
	1112	14.1	430
	1800	−1.2	−37
19 M	0033	11.6	354
	0557	3.0	91
	1202	14.8	451
	1842	−2.3	−70
20 Tu ●	0117	12.5	381
	0644	2.2	67
	1250	15.3	466
	1924	−2.9	−88
21 W	0159	13.2	402
	0730	1.5	46
	1338	15.4	469
	2006	−3.1	−94
22 Th	0239	13.7	418
	0818	1.0	30
	1424	15.1	460
	2049	−2.8	−85
23 F	0320	13.9	424
	0907	0.8	24
	1511	14.3	436
	2133	−2.0	−61
24 Sa	0403	13.9	424
	0958	0.9	27
	1601	13.1	399
	2217	−0.8	−24
25 Su	0449	13.6	415
	1052	1.2	37
	1658	11.7	357
	2304	0.6	18
26 M ◐	0542	13.2	402
	1150	1.6	49
	1810	10.3	314
	2355	2.0	61
27 Tu	0642	12.7	387
	1256	2.1	64
	1936	9.4	287
28 W	0053	3.4	104
	0748	12.5	381
	1416	2.2	67
	2100	9.2	280
29 Th	0205	4.4	134
	0852	12.4	378
	1542	1.7	52
	2217	9.5	290
30 F	0327	4.7	143
	0952	12.6	384
	1647	1.0	30
	2322	10.1	308
31 Sa	0438	4.4	134
	1047	12.8	390
	1734	0.2	6

February

	Time	Height	
	h m	ft	cm
1 Su	0013	10.7	326
	0530	3.9	119
	1136	13.1	399
	1813	−0.3	−9
2 M	0053	11.3	344
	0612	3.3	101
	1218	13.3	405
	1847	−0.7	−21
3 Tu ○	0126	11.7	357
	0650	2.8	85
	1256	13.4	408
	1920	−0.9	−27
4 W	0155	12.0	366
	0726	2.4	73
	1331	13.3	405
	1951	−0.9	−27
5 Th	0223	12.2	372
	0801	2.2	67
	1404	13.1	399
	2023	−0.7	−21
6 F	0249	12.3	375
	0837	2.1	64
	1435	12.7	387
	2054	−0.2	−6
7 Sa	0315	12.3	375
	0913	2.1	64
	1507	12.1	369
	2126	0.4	12
8 Su	0342	12.2	372
	0951	2.2	67
	1540	11.3	344
	2159	1.2	37
9 M	0410	12.0	366
	1031	2.5	76
	1617	10.4	317
	2233	2.1	64
10 Tu	0444	11.7	357
	1116	2.8	85
	1706	9.4	287
	2311	3.1	94
11 W ◑	0528	11.4	347
	1209	3.0	91
	1821	8.6	262
	2357	4.0	122
12 Th	0629	11.3	344
	1315	3.0	91
	1957	8.3	253
13 F	0059	4.8	146
	0744	11.4	347
	1435	2.6	79
	2119	8.7	265
14 Sa	0220	5.1	155
	0854	11.9	363
	1552	1.5	46
	2225	9.5	290
15 Su	0342	4.6	140
	0957	12.7	387
	1650	0.2	6
	2320	10.6	323

	Time	Height	
	h m	ft	cm
16 M	0448	3.6	110
	1055	13.5	411
	1738	−1.1	−34
17 Tu	0008	11.7	357
	0541	2.3	70
	1149	14.3	436
	1821	−2.1	−64
18 W ●	0052	12.8	390
	0629	1.0	30
	1240	14.9	454
	1903	−2.7	−82
19 Th	0133	13.7	418
	0716	0.0	0
	1329	15.1	460
	1945	−2.9	−88
20 F	0213	14.4	439
	0803	−0.7	−21
	1416	14.8	451
	2027	−2.5	−76
21 Sa	0252	14.6	445
	0850	−0.9	−27
	1502	14.1	430
	2109	−1.6	−49
22 Su	0332	14.5	442
	0939	−0.7	−21
	1550	12.9	393
	2153	−0.4	−12
23 M	0414	14.0	427
	1029	−0.2	−6
	1643	11.5	351
	2238	1.0	30
24 Tu	0501	13.2	402
	1124	0.6	18
	1749	10.2	311
	2327	2.5	76
25 W ◐	0559	12.4	378
	1224	1.5	46
	1913	9.2	280
26 Th	0024	3.9	119
	0710	11.6	354
	1338	2.1	64
	2041	9.0	274
27 F	0136	4.9	149
	0824	11.3	344
	1510	2.2	67
	2159	9.3	283
28 Sa	0309	5.1	155
	0932	11.4	347
	1625	1.6	49
	2302	9.9	302

March

	Time	Height	
	h m	ft	cm
1 Su	0428	4.5	137
	1031	11.6	354
	1714	0.9	27
	2349	10.5	320
2 M	0519	3.7	113
	1121	12.0	366
	1752	0.4	12
3 Tu	0025	11.1	338
	0559	2.8	85
	1203	12.4	378
	1824	−0.1	−3
4 W	0055	11.6	354
	0634	2.1	64
	1241	12.6	384
	1854	−0.3	−9
5 Th ○	0122	12.0	366
	0707	1.4	43
	1315	12.7	387
	1924	−0.3	−9
6 F	0148	12.4	378
	0740	1.0	30
	1348	12.7	387
	1954	−0.2	−6
7 Sa	0213	12.6	384
	0813	0.7	21
	1419	12.4	378
	2024	0.2	6
8 Su	0237	12.7	387
	0847	0.7	21
	1451	12.0	366
	2056	0.8	24
9 M	0302	12.6	384
	0923	0.8	24
	1523	11.3	344
	2128	1.5	46
10 Tu	0329	12.5	381
	1001	1.0	30
	1559	10.5	320
	2202	2.3	70
11 W	0359	12.1	369
	1044	1.4	43
	1643	9.6	293
	2241	3.2	98
12 Th	0437	11.7	357
	1135	1.8	55
	1751	8.8	268
	2328	4.1	125
13 F ◑	0534	11.2	341
	1236	2.1	64
	1928	8.5	259
14 Sa	0031	4.7	143
	0700	10.9	332
	1351	2.1	64
	2051	8.9	271
15 Su	0154	4.9	149
	0826	11.2	341
	1512	1.4	43
	2156	9.7	296

	Time	Height	
	h m	ft	cm
16 M	0321	4.2	128
	0938	11.9	363
	1619	0.3	9
	2250	10.9	332
17 Tu	0431	2.8	85
	1040	12.8	390
	1711	−0.7	−21
	2338	12.1	369
18 W	0526	1.2	37
	1136	13.5	411
	1756	−1.6	−49
19 Th	0021	13.2	402
	0614	−0.3	−9
	1229	14.1	430
	1839	−2.0	−61
20 F ●	0103	14.2	433
	0700	−1.4	−43
	1318	14.3	436
	1921	−2.0	−61
21 Sa	0143	14.8	451
	0746	−2.1	−64
	1406	14.1	430
	2003	−1.6	−49
22 Su	0222	15.0	457
	0832	−2.3	−70
	1452	13.5	411
	2045	−0.7	−21
23 M	0301	14.7	448
	0918	−1.9	−58
	1539	12.5	381
	2129	0.4	12
24 Tu	0341	14.0	427
	1006	−1.2	−37
	1630	11.3	344
	2214	1.7	52
25 W	0425	13.0	396
	1057	−0.1	−3
	1731	10.1	308
	2303	3.0	91
26 Th ◐	0517	11.8	360
	1153	1.0	30
	1848	9.3	283
27 F	0000	4.2	128
	0629	10.8	329
	1258	1.9	58
	2013	9.0	274
28 Sa	0110	5.0	152
	0751	10.2	311
	1420	2.4	73
	2126	9.3	283
29 Su	0245	5.0	152
	0905	10.2	311
	1543	2.2	67
	2223	9.8	299
30 M	0410	4.2	128
	1006	10.5	320
	1639	1.7	52
	2307	10.4	317
31 Tu	0501	3.2	98
	1057	10.9	332
	1719	1.2	37
	2342	11.0	335

Time meridian 135° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.
Heights are referred to mean lower low water which is the chart datum of soundings.

Cordova, Alaska, 2015

Times and Heights of High and Low Waters

April

	Time	Height	
	h m	ft	cm
1 W	0539	2.2	67
	1141	11.3	344
	1752	0.8	24
2 Th	0012	11.6	354
	0612	1.3	40
	1220	11.7	357
	1823	0.6	18
3 F	0041	12.1	369
	0644	0.5	15
	1256	11.9	363
	1853	0.5	15
4 Sa ○	0108	12.5	381
	0716	−0.1	−3
	1330	12.0	366
	1923	0.6	18
5 Su	0135	12.8	390
	0749	−0.4	−12
	1404	11.9	363
	1955	0.9	27
6 M	0202	13.0	396
	0823	−0.6	−18
	1437	11.6	354
	2027	1.4	43
7 Tu	0228	13.0	396
	0859	−0.5	−15
	1512	11.1	338
	2102	2.0	61
8 W	0257	12.8	390
	0938	−0.3	−9
	1550	10.5	320
	2139	2.7	82
9 Th	0329	12.4	378
	1022	0.1	3
	1636	9.8	299
	2222	3.4	104
10 F	0408	11.8	360
	1111	0.6	18
	1742	9.2	280
	2314	4.0	122
11 Sa ◑	0504	11.1	338
	1209	1.0	30
	1907	9.0	274
12 Su	0019	4.4	134
	0631	10.6	323
	1317	1.3	40
	2024	9.5	290
13 M	0138	4.3	131
	0805	10.6	323
	1432	1.1	34
	2125	10.4	317
14 Tu	0303	3.4	104
	0920	11.1	338
	1542	0.6	18
	2217	11.5	351
15 W	0414	1.9	58
	1024	11.8	360
	1640	−0.1	−3
	2304	12.6	384

	Time	Height	
	h m	ft	cm
16 Th	0510	0.2	6
	1123	12.4	378
	1728	−0.6	−18
	2349	13.6	415
17 F	0559	−1.3	−40
	1217	12.9	393
	1813	−0.8	−24
18 Sa ●	0031	14.4	439
	0644	−2.4	−73
	1308	13.2	402
	1856	−0.7	−21
19 Su	0113	14.8	451
	0729	−3.0	−91
	1356	13.1	399
	1939	−0.3	−9
20 M	0153	14.9	454
	0813	−3.0	−91
	1442	12.7	387
	2022	0.4	12
21 Tu	0232	14.5	442
	0858	−2.6	−79
	1528	12.0	366
	2106	1.4	43
22 W	0312	13.7	418
	0944	−1.8	−55
	1617	11.1	338
	2152	2.4	73
23 Th	0354	12.6	384
	1032	−0.7	−21
	1712	10.2	311
	2242	3.3	101
24 F	0442	11.4	347
	1123	0.4	12
	1819	9.5	290
	2337	4.2	128
25 Sa ◐	0545	10.2	311
	1218	1.4	43
	1933	9.3	283
26 Su	0043	4.7	143
	0707	9.5	290
	1323	2.2	67
	2038	9.4	287
27 M	0206	4.7	143
	0824	9.2	280
	1436	2.5	76
	2131	9.9	302
28 Tu	0333	4.0	122
	0928	9.4	287
	1542	2.4	73
	2213	10.4	317
29 W	0430	2.9	88
	1022	9.8	299
	1631	2.1	64
	2250	11.0	335
30 Th	0511	1.8	55
	1110	10.2	311
	1710	1.8	55
	2323	11.6	354

May

	Time	Height	
	h m	ft	cm
1 F	0546	0.8	24
	1153	10.6	323
	1745	1.6	49
	2356	12.2	372
2 Sa	0619	−0.1	−3
	1234	11.0	335
	1819	1.5	46
3 Su ○	0027	12.7	387
	0652	−0.8	−24
	1312	11.2	341
	1852	1.6	49
4 M	0058	13.0	396
	0726	−1.3	−40
	1350	11.3	344
	1927	1.7	52
5 Tu	0129	13.2	402
	0802	−1.5	−46
	1427	11.3	344
	2003	2.0	61
6 W	0201	13.2	402
	0840	−1.6	−49
	1505	11.0	335
	2041	2.4	73
7 Th	0234	13.0	396
	0921	−1.4	−43
	1546	10.6	323
	2124	2.8	85
8 F	0311	12.6	384
	1005	−1.1	−34
	1635	10.2	311
	2211	3.2	98
9 Sa	0355	12.0	366
	1054	−0.5	−15
	1735	9.9	302
	2306	3.6	110
10 Su	0453	11.1	338
	1148	0.0	0
	1846	9.9	302
11 M ◑	0010	3.7	113
	0616	10.3	314
	1248	0.6	18
	1953	10.4	317
12 Tu	0124	3.4	104
	0746	10.1	308
	1355	0.9	27
	2051	11.2	341
13 W	0244	2.5	76
	0903	10.3	314
	1504	1.0	30
	2143	12.1	369
14 Th	0356	1.1	34
	1009	10.7	326
	1606	0.9	27
	2231	13.0	396
15 F	0454	−0.4	−12
	1110	11.2	341
	1700	0.7	21
	2317	13.8	421

	Time	Height	
	h m	ft	cm
16 Sa	0543	−1.7	−52
	1207	11.7	357
	1748	0.6	18
17 Su ●	0002	14.3	436
	0629	−2.7	−82
	1259	12.0	366
	1833	0.7	21
18 M	0046	14.5	442
	0713	−3.1	−94
	1347	12.1	369
	1917	1.0	30
19 Tu	0128	14.4	439
	0756	−3.1	−94
	1433	11.9	363
	2001	1.5	46
20 W	0208	14.0	427
	0839	−2.7	−82
	1517	11.6	354
	2046	2.0	61
21 Th	0248	13.3	405
	0923	−2.0	−61
	1601	11.0	335
	2132	2.7	82
22 F	0328	12.3	375
	1007	−1.1	−34
	1649	10.5	320
	2220	3.3	101
23 Sa	0412	11.2	341
	1052	−0.1	−3
	1743	10.0	305
	2312	3.9	119
24 Su	0505	10.1	308
	1139	0.9	27
	1842	9.7	296
25 M ◐	0009	4.2	128
	0614	9.2	280
	1230	1.7	52
	1940	9.7	296
26 Tu	0116	4.2	128
	0732	8.7	265
	1327	2.4	73
	2031	10.0	305
27 W	0234	3.8	116
	0841	8.6	262
	1429	2.8	85
	2116	10.5	320
28 Th	0345	2.9	88
	0941	8.8	268
	1529	2.9	88
	2156	11.0	335
29 F	0436	1.8	55
	1035	9.2	280
	1621	2.9	88
	2234	11.6	354
30 Sa	0516	0.7	21
	1124	9.7	296
	1705	2.7	82
	2312	12.2	372
31 Su	0553	−0.3	−9
	1211	10.2	311
	1744	2.5	76
	2349	12.7	387

June

	Time	Height	
	h m	ft	cm
1 M	0628	−1.1	−34
	1254	10.6	323
	1823	2.4	73
2 Tu ○	0026	13.2	402
	0705	−1.8	−55
	1336	10.9	332
	1902	2.3	70
3 W	0104	13.5	411
	0743	−2.2	−67
	1416	11.1	338
	1942	2.3	70
4 Th	0142	13.6	415
	0823	−2.4	−73
	1457	11.2	341
	2025	2.3	70
5 F	0221	13.4	408
	0905	−2.3	−70
	1539	11.2	341
	2111	2.5	76
6 Sa	0303	13.0	396
	0950	−2.0	−61
	1626	11.0	335
	2202	2.6	79
7 Su	0350	12.2	372
	1037	−1.4	−43
	1718	10.9	332
	2257	2.7	82
8 M	0448	11.2	341
	1127	−0.6	−18
	1818	11.0	335
	2358	2.7	82
9 Tu ◑	0604	10.3	314
	1221	0.2	6
	1920	11.3	344
10 W	0107	2.4	73
	0729	9.7	296
	1321	1.1	34
	2018	11.9	363
11 Th	0222	1.8	55
	0847	9.6	293
	1427	1.7	52
	2111	12.5	381
12 F	0337	0.7	21
	0956	9.8	299
	1534	2.0	61
	2202	13.1	399
13 Sa	0439	−0.5	−15
	1100	10.2	311
	1634	2.0	61
	2251	13.6	415
14 Su	0530	−1.5	−46
	1159	10.7	326
	1727	1.9	58
	2339	13.9	424
15 M	0616	−2.3	−70
	1252	11.1	338
	1815	1.9	58

	Time	Height	
	h m	ft	cm
16 Tu ●	0025	14.0	427
	0659	−2.7	−82
	1339	11.4	347
	1900	1.9	58
17 W	0109	13.9	424
	0740	−2.7	−82
	1422	11.5	351
	1943	2.0	61
18 Th	0150	13.5	411
	0821	−2.4	−73
	1502	11.4	347
	2027	2.3	70
19 F	0229	13.0	396
	0901	−1.9	−58
	1540	11.1	338
	2111	2.6	79
20 Sa	0307	12.2	372
	0941	−1.2	−37
	1618	10.8	329
	2156	2.9	88
21 Su	0346	11.3	344
	1021	−0.4	−12
	1659	10.5	320
	2242	3.3	101
22 M	0429	10.3	314
	1101	0.5	15
	1745	10.2	311
	2332	3.5	107
23 Tu	0523	9.3	283
	1143	1.5	46
	1835	10.1	308
24 W ◐	0027	3.6	110
	0633	8.6	262
	1229	2.3	70
	1927	10.2	311
25 Th	0131	3.5	107
	0748	8.2	250
	1321	3.1	94
	2017	10.5	320
26 F	0243	3.0	91
	0856	8.2	250
	1422	3.6	110
	2104	11.0	335
27 Sa	0350	2.1	64
	0958	8.5	259
	1526	3.8	116
	2149	11.6	354
28 Su	0442	1.0	30
	1054	9.0	274
	1624	3.6	110
	2233	12.2	372
29 M	0525	−0.1	−3
	1146	9.7	296
	1713	3.2	98
	2317	12.8	390
30 Tu	0605	−1.1	−34
	1234	10.3	314
	1758	2.8	85

Time meridian 135° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.
Heights are referred to mean lower low water which is the chart datum of soundings.

Cordova, Alaska, 2015

Times and Heights of High and Low Waters

July

	Time	Height	
	h m	ft	cm
1 W ○	0001	13.4	408
	0645	−1.9	−58
	1318	10.9	332
	1841	2.4	73
2 Th	0045	13.8	421
	0724	−2.6	−79
	1400	11.4	347
	1925	2.0	61
3 F	0128	14.0	427
	0805	−2.9	−88
	1440	11.8	360
	2010	1.7	52
4 Sa	0212	13.9	424
	0848	−2.9	−88
	1521	12.1	369
	2058	1.5	46
5 Su	0257	13.4	408
	0931	−2.5	−76
	1604	12.1	369
	2149	1.4	43
6 M	0345	12.6	384
	1016	−1.7	−52
	1651	12.1	369
	2243	1.5	46
7 Tu	0441	11.5	351
	1104	−0.7	−21
	1744	12.1	369
	2341	1.5	46
8 W ◑	0551	10.3	314
	1154	0.4	12
	1843	12.1	369
9 Th	0045	1.6	49
	0712	9.5	290
	1250	1.6	49
	1944	12.2	372
10 F	0158	1.4	43
	0833	9.2	280
	1355	2.6	79
	2043	12.5	381
11 Sa	0317	0.8	24
	0947	9.3	283
	1508	3.1	94
	2140	12.8	390
12 Su	0425	0.0	0
	1054	9.7	296
	1616	3.1	94
	2233	13.0	396
13 M	0519	−0.9	−27
	1153	10.3	314
	1713	2.9	88
	2324	13.3	405
14 Tu	0604	−1.5	−46
	1244	10.8	329
	1802	2.6	79
15 W ●	0012	13.4	408
	0645	−1.9	−58
	1327	11.2	341
	1846	2.3	70

	Time	Height	
	h m	ft	cm
16 Th	0055	13.4	408
	0723	−2.0	−61
	1404	11.4	347
	1927	2.1	64
17 F	0135	13.2	402
	0800	−1.8	−55
	1438	11.5	351
	2008	2.0	61
18 Sa	0211	12.8	390
	0836	−1.5	−46
	1510	11.5	351
	2047	2.1	64
19 Su	0246	12.3	375
	0912	−0.9	−27
	1541	11.3	344
	2128	2.2	67
20 M	0321	11.6	354
	0947	−0.2	−6
	1612	11.1	338
	2209	2.5	76
21 Tu	0358	10.7	326
	1023	0.6	18
	1647	10.9	332
	2253	2.7	82
22 W	0441	9.8	299
	1100	1.6	49
	1727	10.7	326
	2341	3.0	91
23 Th ◐	0537	8.9	271
	1140	2.5	76
	1816	10.5	320
24 F	0035	3.1	94
	0653	8.2	250
	1226	3.4	104
	1914	10.6	323
25 Sa	0141	3.0	91
	0813	8.0	244
	1324	4.1	125
	2012	10.8	329
26 Su	0257	2.5	76
	0924	8.3	253
	1435	4.5	137
	2108	11.4	347
27 M	0404	1.5	46
	1026	8.9	271
	1547	4.3	131
	2201	12.0	366
28 Tu	0457	0.3	9
	1121	9.7	296
	1646	3.6	110
	2252	12.8	390
29 W	0541	−0.8	−24
	1210	10.5	320
	1736	2.8	85
	2342	13.5	411
30 Th	0622	−1.9	−58
	1254	11.4	347
	1823	1.9	58
31 F ○	0030	14.1	430
	0703	−2.6	−79
	1335	12.2	372
	1908	1.1	34

August

	Time	Height	
	h m	ft	cm
1 Sa	0117	14.4	439
	0744	−2.9	−88
	1415	12.8	390
	1955	0.5	15
2 Su	0203	14.3	436
	0826	−2.8	−85
	1455	13.2	402
	2042	0.1	3
3 M	0249	13.8	421
	0909	−2.3	−70
	1535	13.3	405
	2132	0.0	0
4 Tu	0337	12.9	393
	0953	−1.4	−43
	1619	13.2	402
	2224	0.2	6
5 W	0431	11.7	357
	1039	−0.2	−6
	1708	12.9	393
	2319	0.6	18
6 Th ◑	0537	10.5	320
	1128	1.2	37
	1805	12.5	381
7 F	0021	1.0	30
	0657	9.5	290
	1224	2.5	76
	1911	12.1	369
8 Sa	0132	1.4	43
	0821	9.1	277
	1330	3.6	110
	2019	12.0	366
9 Su	0255	1.3	40
	0939	9.3	283
	1450	4.1	125
	2123	12.1	369
10 M	0411	0.7	21
	1046	9.8	299
	1607	3.9	119
	2221	12.4	378
11 Tu	0507	0.0	0
	1142	10.4	317
	1706	3.3	101
	2314	12.6	384
12 W	0551	−0.5	−15
	1227	10.9	332
	1753	2.7	82
13 Th	0001	12.9	393
	0628	−0.9	−27
	1305	11.4	347
	1833	2.1	64
14 F ●	0042	13.0	396
	0702	−1.1	−34
	1337	11.7	357
	1910	1.7	52
15 Sa	0119	13.0	396
	0735	−1.0	−30
	1405	11.9	363
	1946	1.4	43

	Time	Height	
	h m	ft	cm
16 Su	0154	12.8	390
	0808	−0.8	−24
	1433	12.0	366
	2022	1.3	40
17 M	0226	12.4	378
	0840	−0.3	−9
	1459	12.0	366
	2059	1.4	43
18 Tu	0259	11.8	360
	0913	0.4	12
	1526	11.9	363
	2136	1.6	49
19 W	0332	11.1	338
	0946	1.2	37
	1554	11.6	354
	2216	1.9	58
20 Th	0409	10.3	314
	1021	2.1	64
	1626	11.3	344
	2259	2.2	67
21 F	0456	9.4	287
	1058	3.0	91
	1706	11.0	335
	2349	2.6	79
22 Sa ◐	0604	8.6	262
	1143	3.9	119
	1804	10.7	326
23 Su	0049	2.8	85
	0735	8.2	250
	1240	4.7	143
	1920	10.7	326
24 M	0204	2.7	82
	0854	8.5	259
	1356	5.0	152
	2032	11.1	338
25 Tu	0322	1.9	58
	0959	9.2	280
	1518	4.6	140
	2135	11.8	360
26 W	0425	0.8	24
	1053	10.1	308
	1625	3.6	110
	2232	12.7	387
27 Th	0514	−0.4	−12
	1140	11.2	341
	1718	2.4	73
	2325	13.5	411
28 F	0557	−1.5	−46
	1223	12.2	372
	1806	1.1	34
29 Sa ○	0016	14.2	433
	0639	−2.1	−64
	1304	13.2	402
	1852	−0.1	−3
30 Su	0105	14.5	442
	0720	−2.4	−73
	1344	13.9	424
	1937	−0.9	−27
31 M	0152	14.5	442
	0801	−2.2	−67
	1423	14.4	439
	2024	−1.3	−40

September

	Time	Height	
	h m	ft	cm
1 Tu	0239	14.0	427
	0844	−1.5	−46
	1503	14.4	439
	2112	−1.3	−40
2 W	0327	13.1	399
	0928	−0.4	−12
	1545	14.1	430
	2203	−0.9	−27
3 Th	0420	12.0	366
	1014	0.9	27
	1631	13.4	408
	2256	−0.1	−3
4 F	0523	10.7	326
	1104	2.2	67
	1727	12.6	384
	2355	0.8	24
5 Sa ◑	0642	9.8	299
	1201	3.5	107
	1838	11.8	360
6 Su	0103	1.5	46
	0809	9.4	287
	1310	4.5	137
	1956	11.4	347
7 M	0227	1.9	58
	0926	9.7	296
	1438	4.8	146
	2108	11.4	347
8 Tu	0349	1.6	49
	1029	10.2	311
	1602	4.2	128
	2209	11.6	354
9 W	0447	1.0	30
	1119	10.8	329
	1659	3.4	104
	2302	12.0	366
10 Th	0529	0.5	15
	1158	11.3	344
	1741	2.5	76
	2347	12.3	375
11 F	0604	0.2	6
	1231	11.8	360
	1817	1.7	52
12 Sa ●	0026	12.5	381
	0636	0.0	0
	1300	12.2	372
	1851	1.1	34
13 Su	0102	12.6	384
	0706	0.1	3
	1327	12.5	381
	1924	0.7	21
14 M	0135	12.6	384
	0737	0.3	9
	1352	12.7	387
	1957	0.5	15
15 Tu	0207	12.4	378
	0808	0.7	21
	1418	12.7	387
	2031	0.5	15

	Time	Height	
	h m	ft	cm
16 W	0239	12.0	366
	0839	1.3	40
	1443	12.6	384
	2106	0.7	21
17 Th	0312	11.4	347
	0912	2.1	64
	1509	12.4	378
	2144	1.0	30
18 F	0347	10.7	326
	0947	2.9	88
	1538	12.0	366
	2225	1.5	46
19 Sa	0430	9.9	302
	1025	3.7	113
	1614	11.5	351
	2313	2.0	61
20 Su ◐	0533	9.1	277
	1112	4.5	137
	1705	11.0	335
21 M	0010	2.4	73
	0705	8.8	268
	1212	5.1	155
	1829	10.6	323
22 Tu	0120	2.5	76
	0827	9.1	277
	1330	5.2	158
	2001	10.8	329
23 W	0238	2.1	64
	0930	9.9	302
	1455	4.6	140
	2113	11.5	351
24 Th	0348	1.2	37
	1021	11.0	335
	1606	3.3	101
	2214	12.3	375
25 F	0442	0.2	6
	1107	12.2	372
	1701	1.7	52
	2310	13.2	402
26 Sa	0529	−0.6	−18
	1150	13.3	405
	1749	0.1	3
27 Su ○	0002	13.9	424
	0612	−1.2	−37
	1231	14.3	436
	1835	−1.2	−37
28 M	0052	14.3	436
	0654	−1.3	−40
	1312	15.0	457
	1920	−2.1	−64
29 Tu	0141	14.3	436
	0736	−0.9	−27
	1352	15.3	466
	2006	−2.4	−73
30 W	0228	13.9	424
	0819	−0.2	−6
	1432	15.2	463
	2052	−2.2	−67

Time meridian 135° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.
Heights are referred to mean lower low water which is the chart datum of soundings.

Cordova, Alaska, 2015

Times and Heights of High and Low Waters

October

	Time	Height	
	h m	ft	cm
1 Th	0316	13.1	399
	0904	0.8	24
	1513	14.6	445
	2141	−1.6	−49
2 F	0408	12.1	369
	0951	2.0	61
	1558	13.7	418
	2233	−0.5	−15
3 Sa	0509	11.0	335
	1042	3.2	98
	1651	12.5	381
	2328	0.6	18
4 Su ◑	0625	10.2	311
	1141	4.3	131
	1802	11.4	347
5 M	0031	1.6	49
	0748	9.9	302
	1251	5.1	155
	1928	10.7	326
6 Tu	0147	2.3	70
	0900	10.2	311
	1422	5.1	155
	2045	10.6	323
7 W	0309	2.4	73
	0958	10.7	326
	1549	4.3	131
	2149	10.9	332
8 Th	0413	2.1	64
	1043	11.2	341
	1644	3.3	101
	2241	11.2	341
9 F	0457	1.7	52
	1119	11.8	360
	1724	2.3	70
	2326	11.6	354
10 Sa	0532	1.5	46
	1150	12.3	375
	1757	1.4	43
11 Su	0006	11.9	363
	0604	1.3	40
	1219	12.7	387
	1829	0.6	18
12 M ●	0042	12.2	372
	0635	1.3	40
	1246	13.1	399
	1901	0.1	3
13 Tu	0117	12.3	375
	0706	1.5	46
	1313	13.3	405
	1933	−0.2	−6
14 W	0151	12.2	372
	0737	1.9	58
	1340	13.4	408
	2006	−0.3	−9
15 Th	0224	12.0	366
	0809	2.4	73
	1407	13.3	405
	2041	−0.1	−3

	Time	Height	
	h m	ft	cm
16 F	0258	11.5	351
	0844	3.0	91
	1435	13.1	399
	2119	0.2	6
17 Sa	0335	11.0	335
	0921	3.6	110
	1505	12.7	387
	2200	0.6	18
18 Su	0419	10.4	317
	1002	4.3	131
	1541	12.1	369
	2247	1.2	37
19 M	0519	9.8	299
	1053	4.9	149
	1630	11.4	347
	2341	1.6	49
20 Tu ◐	0640	9.6	293
	1155	5.2	158
	1750	10.7	326
21 W	0044	2.0	61
	0757	10.0	305
	1310	5.1	155
	1932	10.5	320
22 Th	0156	2.0	61
	0857	10.9	332
	1433	4.3	131
	2052	11.0	335
23 F	0307	1.6	49
	0947	12.0	366
	1546	2.8	85
	2157	11.8	360
24 Sa	0407	1.1	34
	1033	13.1	399
	1644	1.0	30
	2255	12.6	384
25 Su	0458	0.5	15
	1117	14.2	433
	1733	−0.6	−18
	2349	13.2	402
26 M	0544	0.2	6
	1200	15.1	460
	1819	−1.9	−58
27 Tu ○	0041	13.6	415
	0629	0.2	6
	1242	15.7	479
	1904	−2.7	−82
28 W	0131	13.7	418
	0712	0.5	15
	1323	15.8	482
	1948	−2.9	−88
29 Th	0219	13.5	411
	0756	1.1	34
	1405	15.5	472
	2034	−2.6	−79
30 F	0306	13.0	396
	0842	1.9	58
	1447	14.8	451
	2121	−1.9	−58
31 Sa	0356	12.2	372
	0930	2.9	88
	1530	13.7	418
	2210	−0.8	−24

November

	Time	Height	
	h m	ft	cm
1 Su	0452	11.4	347
	1022	3.8	116
	1620	12.5	381
	2301	0.4	12
2 M	0559	10.8	329
	1119	4.7	143
	1723	11.2	341
	2356	1.5	46
3 Tu ◑	0712	10.5	320
	1226	5.2	158
	1847	10.2	311
4 W	0058	2.4	73
	0819	10.6	323
	1348	5.2	158
	2008	9.9	302
5 Th	0209	3.0	91
	0912	11.0	335
	1517	4.5	137
	2115	10.0	305
6 F	0317	3.1	94
	0956	11.5	351
	1618	3.4	104
	2211	10.3	314
7 Sa	0411	3.0	91
	1032	12.0	366
	1659	2.3	70
	2259	10.7	326
8 Su	0453	2.8	85
	1105	12.6	384
	1734	1.3	40
	2342	11.1	338
9 M	0529	2.7	82
	1137	13.1	399
	1807	0.5	15
10 Tu	0022	11.5	351
	0603	2.6	79
	1208	13.5	411
	1839	−0.2	−6
11 W ●	0100	11.8	360
	0636	2.7	82
	1239	13.8	421
	1911	−0.6	−18
12 Th	0136	11.9	363
	0710	2.9	88
	1310	13.9	424
	1946	−0.8	−24
13 F	0212	11.9	363
	0745	3.1	94
	1341	13.9	424
	2022	−0.8	−24
14 Sa	0249	11.7	357
	0822	3.5	107
	1412	13.7	418
	2100	−0.6	−18
15 Su	0328	11.4	347
	0902	3.9	119
	1447	13.3	405
	2142	−0.3	−9

	Time	Height	
	h m	ft	cm
16 M	0412	11.0	335
	0948	4.3	131
	1526	12.6	384
	2227	0.2	6
17 Tu	0506	10.7	326
	1040	4.6	140
	1615	11.8	360
	2317	0.8	24
18 W ◐	0612	10.7	326
	1141	4.7	143
	1728	10.9	332
19 Th	0014	1.4	43
	0720	11.1	338
	1251	4.5	137
	1906	10.4	317
20 F	0117	1.9	58
	0820	11.8	360
	1409	3.7	113
	2030	10.5	320
21 Sa	0225	2.1	64
	0912	12.8	390
	1525	2.3	70
	2140	11.0	335
22 Su	0330	2.1	64
	1001	13.8	421
	1626	0.7	21
	2242	11.6	354
23 M	0429	1.9	58
	1047	14.7	448
	1718	−0.9	−27
	2340	12.2	372
24 Tu	0520	1.7	52
	1133	15.3	466
	1805	−2.0	−61
25 W ○	0034	12.7	387
	0607	1.7	52
	1218	15.7	479
	1850	−2.7	−82
26 Th	0124	13.0	396
	0653	1.8	55
	1302	15.8	482
	1934	−2.9	−88
27 F	0211	13.0	396
	0738	2.1	64
	1345	15.4	469
	2018	−2.6	−79
28 Sa	0257	12.8	390
	0824	2.6	79
	1427	14.7	448
	2102	−1.9	−58
29 Su	0342	12.4	378
	0911	3.2	98
	1509	13.7	418
	2147	−1.0	−30
30 M	0430	11.8	360
	1001	3.8	116
	1553	12.5	381
	2232	0.1	3

December

	Time	Height	
	h m	ft	cm
1 Tu	0522	11.3	344
	1054	4.4	134
	1645	11.2	341
	2319	1.2	37
2 W ◑	0621	11.0	335
	1152	4.8	146
	1752	10.1	308
3 Th	0008	2.3	70
	0720	10.9	332
	1258	4.9	149
	1913	9.4	287
4 F	0103	3.2	98
	0814	11.1	338
	1418	4.6	140
	2027	9.2	280
5 Sa	0205	3.8	116
	0900	11.5	351
	1534	3.7	113
	2131	9.3	283
6 Su	0309	4.1	125
	0942	12.0	366
	1627	2.7	82
	2226	9.7	296
7 M	0404	4.1	125
	1020	12.5	381
	1708	1.6	49
	2316	10.2	311
8 Tu	0451	3.9	119
	1057	13.0	396
	1743	0.7	21
9 W	0001	10.8	329
	0531	3.7	113
	1134	13.5	411
	1818	−0.2	−6
10 Th	0043	11.2	341
	0609	3.6	110
	1211	13.9	424
	1852	−0.8	−24
11 F ●	0123	11.6	354
	0647	3.4	104
	1247	14.2	433
	1928	−1.2	−37
12 Sa	0201	11.9	363
	0725	3.4	104
	1323	14.3	436
	2005	−1.5	−46
13 Su	0239	12.0	366
	0806	3.4	104
	1400	14.1	430
	2044	−1.5	−46
14 M	0318	12.0	366
	0849	3.4	104
	1438	13.8	421
	2125	−1.2	−37
15 Tu	0359	12.0	366
	0936	3.5	107
	1520	13.1	399
	2208	−0.7	−21

	Time	Height	
	h m	ft	cm
16 W	0445	11.9	363
	1028	3.6	110
	1610	12.2	372
	2255	0.1	3
17 Th	0539	11.9	363
	1125	3.6	110
	1715	11.1	338
	2345	1.0	30
18 F ◐	0639	12.1	369
	1230	3.4	104
	1842	10.2	311
19 Sa	0042	1.9	58
	0740	12.5	381
	1343	2.9	88
	2009	10.0	305
20 Su	0146	2.7	82
	0838	13.1	399
	1501	1.9	58
	2125	10.2	311
21 M	0255	3.1	94
	0932	13.8	421
	1610	0.7	21
	2233	10.7	326
22 Tu	0402	3.2	98
	1023	14.4	439
	1706	−0.6	−18
	2334	11.3	344
23 W	0501	3.0	91
	1113	14.9	454
	1754	−1.6	−49
24 Th	0029	11.9	363
	0552	2.8	85
	1202	15.2	463
	1838	−2.2	−67
25 F ○	0118	12.4	378
	0639	2.6	79
	1248	15.2	463
	1921	−2.4	−73
26 Sa	0203	12.7	387
	0724	2.6	79
	1331	14.9	454
	2002	−2.3	−70
27 Su	0243	12.7	387
	0808	2.7	82
	1412	14.4	439
	2042	−1.8	−55
28 M	0322	12.5	381
	0853	2.9	88
	1451	13.6	415
	2122	−1.1	−34
29 Tu	0400	12.2	372
	0938	3.2	98
	1530	12.6	384
	2202	−0.1	−3
30 W	0439	11.8	360
	1024	3.6	110
	1611	11.5	351
	2241	0.9	27
31 Th	0521	11.5	351
	1113	4.0	122
	1700	10.3	314
	2322	2.0	61

Time meridian 135° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.
Heights are referred to mean lower low water which is the chart datum of soundings.

Valdez, Alaska, 2015

Times and Heights of High and Low Waters

January

	Time	Height	
	h m	ft	cm
1 Th	0350	3.7	113
	1007	13.0	396
	1657	0.1	3
	2325	10.1	308
2 F	0449	3.7	113
	1056	13.3	405
	1743	−0.6	−18
3 Sa	0017	10.6	323
	0539	3.5	107
	1141	13.5	411
	1824	−1.1	−34
4 Su ○	0101	11.0	335
	0623	3.2	98
	1223	13.5	411
	1902	−1.4	−43
5 M	0139	11.3	344
	0703	3.1	94
	1301	13.4	408
	1939	−1.4	−43
6 Tu	0213	11.5	351
	0742	3.0	91
	1336	13.2	402
	2014	−1.2	−37
7 W	0245	11.5	351
	0820	3.0	91
	1410	12.8	390
	2048	−0.8	−24
8 Th	0316	11.4	347
	0858	3.1	94
	1443	12.2	372
	2121	−0.3	−9
9 F	0347	11.2	341
	0937	3.3	101
	1518	11.4	347
	2155	0.4	12
10 Sa	0420	11.0	335
	1018	3.5	107
	1555	10.5	320
	2229	1.3	40
11 Su	0457	10.8	329
	1102	3.7	113
	1639	9.5	290
	2304	2.2	67
12 M	0542	10.7	326
	1153	3.8	116
	1743	8.6	262
	2344	3.1	94
13 Tu ◑	0635	10.6	323
	1256	3.8	116
	1911	8.1	247
14 W	0033	3.9	119
	0733	10.8	329
	1414	3.4	104
	2035	8.1	247
15 Th	0138	4.6	140
	0830	11.3	344
	1530	2.5	76
	2146	8.5	259

	Time	Height	
	h m	ft	cm
16 F	0258	4.8	146
	0924	11.9	363
	1629	1.2	37
	2247	9.2	280
17 Sa	0408	4.4	134
	1016	12.7	387
	1717	−0.1	−3
	2340	10.1	308
18 Su	0505	3.7	113
	1106	13.5	411
	1800	−1.3	−40
19 M	0026	11.0	335
	0555	2.9	88
	1154	14.2	433
	1842	−2.3	−70
20 Tu ●	0110	11.8	360
	0642	2.1	64
	1242	14.6	445
	1923	−2.9	−88
21 W	0151	12.5	381
	0728	1.4	43
	1329	14.7	448
	2005	−3.0	−91
22 Th	0231	13.0	396
	0815	1.0	30
	1415	14.4	439
	2047	−2.7	−82
23 F	0313	13.3	405
	0904	0.7	21
	1502	13.6	415
	2130	−1.9	−58
24 Sa	0356	13.2	402
	0955	0.8	24
	1553	12.5	381
	2214	−0.8	−24
25 Su	0443	13.0	396
	1049	1.1	34
	1652	11.1	338
	2300	0.6	18
26 M ◐	0536	12.6	384
	1148	1.5	46
	1805	9.8	299
	2351	2.0	61
27 Tu	0637	12.2	372
	1257	1.9	58
	1931	8.9	271
28 W	0051	3.4	104
	0743	11.9	363
	1419	2.0	61
	2056	8.7	265
29 Th	0207	4.3	131
	0848	11.9	363
	1540	1.5	46
	2213	9.1	277
30 F	0331	4.5	137
	0948	12.0	366
	1643	0.8	24
	2317	9.6	293
31 Sa	0438	4.2	128
	1043	12.2	372
	1731	0.1	3

February

	Time	Height	
	h m	ft	cm
1 Su	0007	10.2	311
	0529	3.7	113
	1131	12.5	381
	1810	−0.4	−12
2 M	0046	10.7	326
	0612	3.2	98
	1213	12.7	387
	1846	−0.8	−24
3 Tu ○	0120	11.1	338
	0650	2.7	82
	1250	12.8	390
	1919	−1.0	−30
4 W	0149	11.4	347
	0726	2.3	70
	1324	12.7	387
	1951	−0.9	−27
5 Th	0216	11.6	354
	0801	2.1	64
	1356	12.5	381
	2022	−0.7	−21
6 F	0242	11.7	357
	0835	1.9	58
	1428	12.1	369
	2053	−0.2	−6
7 Sa	0309	11.7	357
	0910	2.0	61
	1459	11.5	351
	2123	0.4	12
8 Su	0335	11.6	354
	0947	2.1	64
	1532	10.8	329
	2153	1.2	37
9 M	0404	11.4	347
	1026	2.3	70
	1609	9.9	302
	2226	2.1	64
10 Tu	0437	11.2	341
	1110	2.6	79
	1658	8.9	271
	2302	3.0	91
11 W ◑	0520	10.9	332
	1203	2.9	88
	1814	8.1	247
	2346	3.9	119
12 Th	0621	10.7	326
	1312	2.9	88
	1952	7.9	241
13 F	0047	4.6	140
	0736	10.8	329
	1438	2.4	73
	2115	8.2	250
14 Sa	0213	5.0	152
	0848	11.3	344
	1554	1.4	43
	2221	9.0	274
15 Su	0341	4.5	137
	0951	12.1	369
	1650	0.1	3
	2316	10.1	308

	Time	Height	
	h m	ft	cm
16 M	0447	3.5	107
	1049	12.9	393
	1738	−1.2	−37
17 Tu	0002	11.1	338
	0540	2.2	67
	1142	13.7	418
	1821	−2.1	−64
18 W ●	0045	12.2	372
	0628	1.0	30
	1233	14.3	436
	1903	−2.7	−82
19 Th	0125	13.1	399
	0715	0.0	0
	1321	14.4	439
	1944	−2.8	−85
20 F	0205	13.7	418
	0801	−0.7	−21
	1408	14.2	433
	2025	−2.4	−73
21 Sa	0244	14.0	427
	0848	−1.0	−30
	1454	13.4	408
	2107	−1.5	−46
22 Su	0324	13.9	424
	0936	−0.8	−24
	1543	12.3	375
	2150	−0.3	−9
23 M	0407	13.4	408
	1027	−0.3	−9
	1637	11.0	335
	2235	1.1	34
24 Tu	0455	12.7	387
	1121	0.5	15
	1744	9.7	296
	2323	2.5	76
25 W ◐	0553	11.8	360
	1224	1.4	43
	1908	8.8	268
26 Th	0021	3.8	116
	0704	11.1	338
	1340	2.0	61
	2036	8.5	259
27 F	0139	4.7	143
	0820	10.8	329
	1509	2.0	61
	2154	8.8	268
28 Sa	0314	4.8	146
	0928	10.8	329
	1620	1.4	43
	2256	9.4	287

March

	Time	Height	
	h m	ft	cm
1 Su	0427	4.3	131
	1027	11.1	338
	1710	0.8	24
	2342	10.0	305
2 M	0518	3.5	107
	1117	11.5	351
	1749	0.3	9
3 Tu	0018	10.6	323
	0558	2.6	79
	1159	11.8	360
	1823	−0.1	−3
4 W	0049	11.1	338
	0633	1.9	58
	1236	12.0	366
	1854	−0.3	−9
5 Th ○	0116	11.5	351
	0707	1.3	40
	1309	12.1	369
	1924	−0.3	−9
6 F	0141	11.8	360
	0739	0.9	27
	1341	12.1	369
	1954	−0.1	−3
7 Sa	0205	12.0	366
	0812	0.7	21
	1412	11.8	360
	2023	0.3	9
8 Su	0230	12.1	369
	0845	0.6	18
	1443	11.4	347
	2052	0.8	24
9 M	0255	12.1	369
	0919	0.7	21
	1516	10.8	329
	2123	1.5	46
10 Tu	0321	11.9	363
	0957	0.9	27
	1552	10.0	305
	2155	2.3	70
11 W	0351	11.6	354
	1038	1.3	40
	1636	9.2	280
	2232	3.1	94
12 Th	0429	11.2	341
	1128	1.7	52
	1744	8.4	256
	2318	3.9	119
13 F ◑	0524	10.7	326
	1230	2.0	61
	1921	8.1	247
14 Sa	0020	4.6	140
	0649	10.4	317
	1350	1.9	58
	2047	8.4	256
15 Su	0148	4.8	146
	0818	10.6	323
	1514	1.3	40
	2152	9.3	283

	Time	Height	
	h m	ft	cm
16 M	0321	4.1	125
	0931	11.3	344
	1619	0.3	9
	2245	10.4	317
17 Tu	0431	2.7	82
	1034	12.1	369
	1710	−0.7	−21
	2332	11.6	354
18 W	0525	1.2	37
	1130	12.9	393
	1756	−1.5	−46
19 Th	0014	12.7	387
	0613	−0.3	−9
	1222	13.5	411
	1838	−1.9	−58
20 F ●	0055	13.6	415
	0659	−1.4	−43
	1311	13.7	418
	1920	−1.8	−55
21 Sa	0134	14.2	433
	0745	−2.1	−64
	1358	13.5	411
	2001	−1.4	−43
22 Su	0213	14.4	439
	0830	−2.3	−70
	1445	12.9	393
	2043	−0.6	−18
23 M	0253	14.1	430
	0917	−2.0	−61
	1532	12.0	366
	2126	0.5	15
24 Tu	0333	13.4	408
	1004	−1.3	−40
	1624	10.9	332
	2211	1.8	55
25 W	0417	12.4	378
	1055	−0.2	−6
	1727	9.7	296
	2300	3.0	91
26 Th ◐	0511	11.3	344
	1151	0.9	27
	1845	8.9	271
	2357	4.1	125
27 F	0623	10.3	314
	1258	1.8	55
	2008	8.7	265
28 Sa	0113	4.8	146
	0746	9.7	296
	1421	2.2	67
	2120	8.9	271
29 Su	0251	4.8	146
	0901	9.7	296
	1540	2.0	61
	2217	9.4	287
30 M	0408	4.0	122
	1003	10.0	305
	1635	1.6	49
	2302	10.0	305
31 Tu	0459	3.0	91
	1054	10.4	317
	1716	1.2	37
	2337	10.5	320

Time meridian 135° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.
Heights are referred to mean lower low water which is the chart datum of soundings.

Valdez, Alaska, 2015

Times and Heights of High and Low Waters

April

	Time	Height	
	h m	ft	cm
1 W	0537	2.1	64
	1138	10.8	329
	1751	0.8	24
2 Th	0007	11.1	338
	0612	1.2	37
	1216	11.1	338
	1822	0.6	18
3 F	0035	11.6	354
	0644	0.4	12
	1251	11.3	344
	1853	0.6	18
4 Sa ○	0101	12.0	366
	0716	−0.1	−3
	1325	11.4	347
	1923	0.7	21
5 Su	0127	12.3	375
	0748	−0.5	−15
	1358	11.4	347
	1953	1.1	34
6 M	0153	12.5	381
	0822	−0.6	−18
	1431	11.1	338
	2024	1.5	46
7 Tu	0219	12.4	378
	0857	−0.6	−18
	1505	10.7	326
	2057	2.1	64
8 W	0247	12.3	375
	0934	−0.4	−12
	1543	10.1	308
	2133	2.7	82
9 Th	0319	11.9	363
	1017	0.0	0
	1631	9.4	287
	2215	3.3	101
10 F	0359	11.4	347
	1105	0.5	15
	1737	8.8	268
	2305	3.9	119
11 Sa ◑	0454	10.7	326
	1203	1.0	30
	1902	8.7	265
12 Su	0010	4.4	134
	0620	10.1	308
	1313	1.2	37
	2018	9.1	277
13 M	0135	4.3	131
	0756	10.0	305
	1432	1.1	34
	2119	10.0	305
14 Tu	0305	3.4	104
	0914	10.5	320
	1542	0.6	18
	2211	11.0	335
15 W	0415	1.8	55
	1019	11.2	341
	1639	0.0	0
	2258	12.1	369

	Time	Height	
	h m	ft	cm
16 Th	0510	0.2	6
	1118	11.8	360
	1727	−0.4	−12
	2342	13.1	399
17 F	0558	−1.3	−40
	1212	12.3	375
	1812	−0.6	−18
18 Sa ●	0023	13.9	424
	0644	−2.4	−73
	1302	12.6	384
	1855	−0.5	−15
19 Su	0104	14.3	436
	0728	−3.0	−91
	1349	12.5	381
	1938	−0.1	−3
20 M	0144	14.3	436
	0813	−3.0	−91
	1436	12.2	372
	2021	0.6	18
21 Tu	0224	13.9	424
	0857	−2.6	−79
	1522	11.5	351
	2105	1.5	46
22 W	0304	13.2	402
	0943	−1.8	−55
	1612	10.7	326
	2150	2.4	73
23 Th	0346	12.1	369
	1030	−0.8	−24
	1709	9.9	302
	2239	3.3	101
24 F	0434	10.9	332
	1120	0.3	9
	1817	9.3	283
	2335	4.1	125
25 Sa ◐	0539	9.8	299
	1216	1.3	40
	1929	9.0	274
26 Su	0044	4.6	140
	0702	9.0	274
	1323	2.1	64
	2033	9.2	280
27 M	0212	4.5	137
	0820	8.8	268
	1437	2.4	73
	2126	9.5	290
28 Tu	0334	3.8	116
	0926	8.9	271
	1541	2.3	70
	2209	10.0	305
29 W	0429	2.8	85
	1021	9.2	280
	1630	2.1	64
	2246	10.6	323
30 Th	0510	1.7	52
	1109	9.7	296
	1710	1.9	58
	2319	11.2	341

May

	Time	Height	
	h m	ft	cm
1 F	0546	0.7	21
	1151	10.1	308
	1745	1.8	55
	2350	11.7	357
2 Sa	0619	−0.1	−3
	1231	10.5	320
	1818	1.7	52
3 Su ○	0021	12.2	372
	0653	−0.8	−24
	1308	10.7	326
	1851	1.8	55
4 M	0050	12.6	384
	0726	−1.3	−40
	1345	10.8	329
	1925	1.9	58
5 Tu	0121	12.8	390
	0801	−1.5	−46
	1421	10.8	329
	2000	2.2	67
6 W	0152	12.8	390
	0838	−1.6	−49
	1459	10.6	323
	2037	2.5	76
7 Th	0224	12.6	384
	0918	−1.5	−46
	1541	10.3	314
	2119	2.9	88
8 F	0301	12.2	372
	1001	−1.1	−34
	1630	9.9	302
	2205	3.3	101
9 Sa	0345	11.5	351
	1049	−0.6	−18
	1731	9.6	293
	2300	3.6	110
10 Su	0442	10.7	326
	1142	0.0	0
	1841	9.7	296
11 M ◑	0005	3.7	113
	0604	9.9	302
	1243	0.6	18
	1947	10.1	308
12 Tu	0123	3.4	104
	0737	9.6	293
	1352	1.0	30
	2045	10.8	329
13 W	0246	2.5	76
	0857	9.7	296
	1502	1.1	34
	2137	11.7	357
14 Th	0357	1.1	34
	1005	10.2	311
	1605	1.0	30
	2225	12.6	384
15 F	0454	−0.4	−12
	1106	10.7	326
	1659	0.9	27
	2311	13.3	405

	Time	Height	
	h m	ft	cm
16 Sa	0543	−1.7	−52
	1202	11.1	338
	1747	0.9	27
	2355	13.9	424
17 Su ●	0629	−2.6	−79
	1254	11.5	351
	1832	1.0	30
18 M	0038	14.1	430
	0713	−3.1	−94
	1342	11.6	354
	1917	1.2	37
19 Tu	0119	14.0	427
	0756	−3.1	−94
	1427	11.5	351
	2001	1.6	49
20 W	0159	13.6	415
	0839	−2.7	−82
	1512	11.2	341
	2045	2.2	67
21 Th	0239	12.8	390
	0922	−2.0	−61
	1558	10.7	326
	2131	2.8	85
22 F	0320	11.9	363
	1005	−1.1	−34
	1646	10.2	311
	2218	3.4	104
23 Sa	0404	10.8	329
	1050	−0.2	−6
	1741	9.7	296
	2310	3.9	119
24 Su	0457	9.7	296
	1136	0.8	24
	1840	9.5	290
25 M ◐	0009	4.2	128
	0608	8.8	268
	1226	1.7	52
	1937	9.5	290
26 Tu	0120	4.2	128
	0727	8.2	250
	1324	2.4	73
	2027	9.8	299
27 W	0240	3.7	113
	0838	8.1	247
	1428	2.9	88
	2112	10.2	311
28 Th	0347	2.8	85
	0939	8.3	253
	1529	3.0	91
	2152	10.7	326
29 F	0436	1.8	55
	1034	8.7	265
	1620	3.0	91
	2230	11.3	344
30 Sa	0517	0.7	21
	1123	9.2	280
	1703	2.9	88
	2306	11.8	360
31 Su	0553	−0.2	−6
	1208	9.7	296
	1743	2.7	82
	2342	12.4	378

June

	Time	Height	
	h m	ft	cm
1 M	0629	−1.1	−34
	1251	10.1	308
	1821	2.6	79
2 Tu ○	0018	12.8	390
	0706	−1.7	−52
	1331	10.5	320
	1900	2.5	76
3 W	0055	13.1	399
	0743	−2.2	−67
	1411	10.7	326
	1940	2.5	76
4 Th	0132	13.2	402
	0822	−2.4	−73
	1451	10.8	329
	2022	2.5	76
5 F	0211	13.0	396
	0903	−2.3	−70
	1534	10.8	329
	2108	2.6	79
6 Sa	0252	12.6	384
	0947	−2.0	−61
	1621	10.7	326
	2157	2.7	82
7 Su	0340	11.8	360
	1033	−1.4	−43
	1714	10.7	326
	2253	2.8	85
8 M	0438	10.8	329
	1122	−0.6	−18
	1813	10.8	329
	2355	2.8	85
9 Tu ◑	0554	9.8	299
	1215	0.3	9
	1913	11.1	338
10 W	0106	2.5	76
	0720	9.2	280
	1316	1.2	37
	2011	11.6	354
11 Th	0225	1.8	55
	0841	9.1	277
	1424	1.8	55
	2105	12.1	369
12 F	0338	0.7	21
	0952	9.3	283
	1533	2.2	67
	2156	12.7	387
13 Sa	0439	−0.5	−15
	1057	9.7	296
	1633	2.2	67
	2245	13.2	402
14 Su	0530	−1.5	−46
	1156	10.2	311
	1726	2.2	67
	2332	13.5	411
15 M	0616	−2.2	−67
	1248	10.7	326
	1814	2.1	64

	Time	Height	
	h m	ft	cm
16 Tu ●	0018	13.6	415
	0659	−2.6	−79
	1335	10.9	332
	1900	2.1	64
17 W	0101	13.5	411
	0741	−2.7	−82
	1417	11.1	338
	1944	2.2	67
18 Th	0141	13.2	402
	0821	−2.4	−73
	1457	11.0	335
	2027	2.4	73
19 F	0220	12.6	384
	0901	−1.9	−58
	1536	10.8	329
	2110	2.7	82
20 Sa	0258	11.8	360
	0940	−1.2	−37
	1616	10.5	320
	2154	3.0	91
21 Su	0337	10.9	332
	1018	−0.4	−12
	1657	10.3	314
	2240	3.3	101
22 M	0421	10.0	305
	1057	0.5	15
	1743	10.0	305
	2330	3.6	110
23 Tu	0515	9.0	274
	1137	1.5	46
	1832	9.9	302
24 W ◐	0026	3.7	113
	0625	8.2	250
	1221	2.4	73
	1923	10.0	305
25 Th	0134	3.5	107
	0743	7.8	238
	1313	3.1	94
	2012	10.3	314
26 F	0249	3.0	91
	0853	7.8	238
	1416	3.7	113
	2059	10.7	326
27 Sa	0354	2.1	64
	0957	8.1	247
	1523	3.9	119
	2143	11.2	341
28 Su	0444	1.0	30
	1054	8.6	262
	1621	3.8	116
	2227	11.8	360
29 M	0527	0.0	0
	1145	9.2	280
	1710	3.5	107
	2310	12.4	378
30 Tu	0606	−1.0	−30
	1231	9.9	302
	1756	3.1	94
	2353	13.0	396

Time meridian 135° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.
Heights are referred to mean lower low water which is the chart datum of soundings.

Valdez, Alaska, 2015

Times and Heights of High and Low Waters

July

	Time	Height	
	h m	ft	cm
1 W ○	0645	−1.9	−58
	1314	10.5	320
	1839	2.6	79
2 Th	0036	13.4	408
	0725	−2.5	−76
	1354	11.0	335
	1923	2.2	67
3 F	0119	13.6	415
	0805	−2.8	−85
	1435	11.4	347
	2008	1.9	58
4 Sa	0202	13.5	411
	0846	−2.8	−85
	1516	11.7	357
	2056	1.7	52
5 Su	0247	13.0	396
	0929	−2.4	−73
	1559	11.8	360
	2146	1.6	49
6 M	0336	12.2	372
	1013	−1.7	−52
	1646	11.8	360
	2240	1.6	49
7 Tu	0432	11.1	338
	1059	−0.7	−21
	1739	11.8	360
	2338	1.7	52
8 W ◑	0542	9.9	302
	1149	0.5	15
	1837	11.8	360
9 Th	0045	1.7	52
	0704	9.1	277
	1245	1.7	52
	1937	11.9	363
10 F	0201	1.5	46
	0827	8.7	265
	1352	2.7	82
	2036	12.2	372
11 Sa	0319	0.8	24
	0943	8.8	268
	1507	3.3	101
	2133	12.4	378
12 Su	0425	0.0	0
	1051	9.3	283
	1616	3.3	101
	2227	12.7	387
13 M	0518	−0.8	−24
	1150	9.8	299
	1713	3.1	94
	2318	12.9	393
14 Tu	0604	−1.5	−46
	1240	10.3	314
	1802	2.8	85
15 W ●	0005	13.0	396
	0645	−1.8	−55
	1323	10.8	329
	1846	2.5	76

	Time	Height	
	h m	ft	cm
16 Th	0048	13.0	396
	0724	−1.9	−58
	1400	11.0	335
	1928	2.3	70
17 F	0127	12.8	390
	0801	−1.8	−55
	1434	11.1	338
	2008	2.2	67
18 Sa	0203	12.5	381
	0836	−1.5	−46
	1506	11.1	338
	2047	2.2	67
19 Su	0238	11.9	363
	0911	−0.9	−27
	1537	11.0	335
	2127	2.4	73
20 M	0313	11.2	341
	0945	−0.2	−6
	1609	10.8	329
	2207	2.6	79
21 Tu	0350	10.4	317
	1018	0.6	18
	1644	10.6	323
	2250	2.8	85
22 W	0433	9.4	287
	1053	1.6	49
	1724	10.4	317
	2337	3.1	94
23 Th ◐	0528	8.5	259
	1130	2.5	76
	1812	10.3	314
24 F	0033	3.2	98
	0645	7.8	238
	1213	3.4	104
	1908	10.3	314
25 Sa	0143	3.1	94
	0808	7.6	232
	1310	4.2	128
	2006	10.6	323
26 Su	0302	2.5	76
	0921	7.8	238
	1426	4.5	137
	2102	11.1	338
27 M	0408	1.5	46
	1025	8.4	256
	1543	4.4	134
	2154	11.7	357
28 Tu	0458	0.4	12
	1119	9.2	280
	1644	3.8	116
	2245	12.4	378
29 W	0542	−0.8	−24
	1206	10.1	308
	1735	3.0	91
	2334	13.1	399
30 Th	0623	−1.8	−55
	1249	10.9	332
	1821	2.2	67
31 F ○	0021	13.7	418
	0703	−2.5	−76
	1329	11.7	357
	1907	1.4	43

August

	Time	Height	
	h m	ft	cm
1 Sa	0108	14.0	427
	0744	−2.8	−85
	1409	12.4	378
	1953	0.7	21
2 Su	0153	13.9	424
	0825	−2.7	−82
	1448	12.8	390
	2040	0.3	9
3 M	0240	13.4	408
	0907	−2.2	−67
	1529	13.0	396
	2129	0.2	6
4 Tu	0329	12.5	381
	0950	−1.3	−40
	1613	12.9	393
	2221	0.3	9
5 W	0423	11.3	344
	1035	−0.1	−3
	1702	12.6	384
	2317	0.7	21
6 Th ◑	0529	10.1	308
	1123	1.3	40
	1759	12.2	372
7 F	0020	1.2	37
	0650	9.1	277
	1218	2.6	79
	1905	11.9	363
8 Sa	0134	1.4	43
	0816	8.7	265
	1327	3.7	113
	2013	11.7	357
9 Su	0257	1.3	40
	0935	8.8	268
	1450	4.2	128
	2117	11.8	360
10 M	0410	0.7	21
	1043	9.3	283
	1607	4.0	122
	2216	12.0	366
11 Tu	0505	0.0	0
	1138	9.9	302
	1705	3.4	104
	2309	12.3	375
12 W	0549	−0.5	−15
	1223	10.5	320
	1752	2.8	85
	2355	12.5	381
13 Th	0628	−0.9	−27
	1300	10.9	332
	1833	2.3	70
14 F ●	0036	12.6	384
	0703	−1.0	−30
	1332	11.3	344
	1910	1.9	58
15 Sa	0112	12.6	384
	0736	−1.0	−30
	1401	11.5	351
	1946	1.6	49

	Time	Height	
	h m	ft	cm
16 Su	0146	12.4	378
	0808	−0.7	−21
	1428	11.6	354
	2022	1.5	46
17 M	0219	12.0	366
	0839	−0.2	−6
	1454	11.6	354
	2057	1.5	46
18 Tu	0251	11.5	351
	0910	0.4	12
	1521	11.5	351
	2134	1.7	52
19 W	0324	10.7	326
	0941	1.2	37
	1549	11.3	344
	2212	2.0	61
20 Th	0401	9.9	302
	1013	2.1	64
	1620	11.0	335
	2254	2.3	70
21 F	0446	9.0	274
	1048	3.0	91
	1700	10.7	326
	2344	2.7	82
22 Sa ◐	0555	8.2	250
	1130	3.9	119
	1757	10.4	317
23 Su	0046	2.9	88
	0728	7.8	238
	1225	4.6	140
	1911	10.4	317
24 M	0206	2.7	82
	0851	8.1	247
	1344	5.0	152
	2025	10.7	326
25 Tu	0327	1.9	58
	0957	8.8	268
	1514	4.7	143
	2129	11.4	347
26 W	0427	0.8	24
	1050	9.7	296
	1623	3.8	116
	2226	12.3	375
27 Th	0515	−0.4	−12
	1136	10.7	326
	1717	2.5	76
	2318	13.1	399
28 F	0557	−1.4	−43
	1218	11.8	360
	1804	1.3	40
29 Sa ○	0008	13.8	421
	0638	−2.0	−61
	1258	12.7	387
	1850	0.2	6
30 Su	0056	14.1	430
	0719	−2.2	−67
	1337	13.5	411
	1936	−0.7	−21
31 M	0143	14.1	430
	0800	−2.0	−61
	1416	13.9	424
	2022	−1.1	−34

September

	Time	Height	
	h m	ft	cm
1 Tu	0230	13.6	415
	0842	−1.4	−43
	1456	14.0	427
	2110	−1.1	−34
2 W	0319	12.7	387
	0925	−0.3	−9
	1538	13.7	418
	2200	−0.7	−21
3 Th	0412	11.5	351
	1010	0.9	27
	1625	13.1	399
	2254	0.0	0
4 F	0516	10.3	314
	1059	2.3	70
	1721	12.2	372
	2354	0.9	27
5 Sa ◑	0636	9.4	287
	1156	3.6	110
	1832	11.5	351
6 Su	0105	1.6	49
	0803	9.0	274
	1309	4.5	137
	1950	11.1	338
7 M	0230	1.8	55
	0921	9.2	280
	1440	4.7	143
	2103	11.0	335
8 Tu	0348	1.5	46
	1024	9.8	299
	1601	4.2	128
	2205	11.3	344
9 W	0444	1.0	30
	1115	10.3	314
	1656	3.4	104
	2257	11.6	354
10 Th	0527	0.5	15
	1154	10.9	332
	1739	2.6	79
	2342	11.9	363
11 F	0603	0.2	6
	1227	11.4	347
	1816	1.8	55
12 Sa ●	0021	12.2	372
	0636	0.1	3
	1255	11.8	360
	1850	1.2	37
13 Su	0056	12.2	372
	0707	0.1	3
	1322	12.0	366
	1924	0.8	24
14 M	0128	12.2	372
	0737	0.4	12
	1347	12.2	372
	1956	0.6	18
15 Tu	0200	12.0	366
	0807	0.8	24
	1411	12.3	375
	2029	0.6	18

	Time	Height	
	h m	ft	cm
16 W	0231	11.6	354
	0837	1.4	43
	1436	12.2	372
	2104	0.8	24
17 Th	0304	11.0	335
	0907	2.1	64
	1502	12.0	366
	2140	1.1	34
18 F	0339	10.3	314
	0940	2.9	88
	1531	11.7	357
	2220	1.5	46
19 Sa	0422	9.5	290
	1016	3.7	113
	1606	11.2	341
	2307	2.0	61
20 Su ◐	0524	8.7	265
	1100	4.4	134
	1656	10.7	326
21 M	0005	2.4	73
	0659	8.4	256
	1159	5.0	152
	1818	10.3	314
22 Tu	0119	2.5	76
	0823	8.7	265
	1321	5.2	158
	1952	10.4	317
23 W	0241	2.1	64
	0927	9.5	290
	1453	4.6	140
	2107	11.1	338
24 Th	0350	1.2	37
	1018	10.5	320
	1605	3.4	104
	2208	11.9	363
25 F	0443	0.3	9
	1103	11.7	357
	1700	1.8	55
	2304	12.7	387
26 Sa	0528	−0.5	−15
	1144	12.8	390
	1748	0.2	6
	2355	13.4	408
27 Su ○	0611	−1.0	−30
	1225	13.8	421
	1833	−1.0	−30
28 M	0045	13.8	421
	0653	−1.1	−34
	1304	14.5	442
	1919	−1.9	−58
29 Tu	0132	13.8	421
	0734	−0.8	−24
	1344	14.8	451
	2004	−2.3	−70
30 W	0220	13.4	408
	0817	−0.1	−3
	1424	14.7	448
	2051	−2.1	−64

Time meridian 135° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.
Heights are referred to mean lower low water which is the chart datum of soundings.

Valdez, Alaska, 2015

Times and Heights of High and Low Waters

October

	Time	Height	
	h m	ft	cm
1 Th	0308	12.6	384
	0901	0.9	27
	1505	14.2	433
	2139	−1.4	−43
2 F	0401	11.6	354
	0947	2.0	61
	1551	13.3	405
	2231	−0.5	−15
3 Sa	0503	10.6	323
	1038	3.2	98
	1645	12.1	369
	2327	0.7	21
4 Su ◑	0620	9.8	299
	1137	4.3	131
	1757	11.0	335
5 M	0032	1.7	52
	0743	9.5	290
	1251	5.0	152
	1923	10.4	317
6 Tu	0150	2.3	70
	0855	9.8	299
	1425	5.0	152
	2041	10.2	311
7 W	0310	2.3	70
	0953	10.2	311
	1546	4.2	128
	2145	10.5	320
8 Th	0411	2.0	61
	1038	10.8	329
	1640	3.2	98
	2238	10.8	329
9 F	0455	1.7	52
	1115	11.3	344
	1721	2.2	67
	2322	11.2	341
10 Sa	0532	1.4	43
	1146	11.8	360
	1756	1.4	43
11 Su	0001	11.5	351
	0604	1.3	40
	1214	12.2	372
	1829	0.7	21
12 M ●	0037	11.7	357
	0635	1.4	43
	1241	12.6	384
	1900	0.2	6
13 Tu	0111	11.8	360
	0705	1.6	49
	1307	12.8	390
	1932	−0.1	−3
14 W	0143	11.7	357
	0735	1.9	58
	1333	12.9	393
	2005	−0.2	−6
15 Th	0216	11.5	351
	0806	2.4	73
	1359	12.9	393
	2039	0.0	0

	Time	Height	
	h m	ft	cm
16 F	0250	11.1	338
	0839	2.9	88
	1427	12.6	384
	2115	0.2	6
17 Sa	0327	10.5	320
	0914	3.5	107
	1457	12.3	375
	2156	0.7	21
18 Su	0411	9.9	302
	0954	4.2	128
	1532	11.7	357
	2242	1.2	37
19 M	0511	9.4	287
	1043	4.7	143
	1621	11.0	335
	2336	1.6	49
20 Tu ◐	0635	9.2	280
	1145	5.1	155
	1739	10.3	314
21 W	0041	2.0	61
	0752	9.6	293
	1305	5.0	152
	1924	10.1	308
22 Th	0156	2.0	61
	0853	10.4	317
	1434	4.2	128
	2045	10.6	323
23 F	0308	1.6	49
	0943	11.5	351
	1547	2.8	85
	2151	11.3	344
24 Sa	0408	1.1	34
	1028	12.6	384
	1643	1.0	30
	2250	12.0	366
25 Su	0458	0.6	18
	1111	13.7	418
	1732	−0.6	−18
	2343	12.7	387
26 M	0544	0.3	9
	1153	14.6	445
	1818	−1.8	−55
27 Tu ○	0034	13.1	399
	0627	0.3	9
	1234	15.1	460
	1902	−2.6	−79
28 W	0123	13.2	402
	0711	0.6	18
	1315	15.3	466
	1947	−2.8	−85
29 Th	0211	13.0	396
	0755	1.2	37
	1357	15.0	457
	2033	−2.5	−76
30 F	0259	12.4	378
	0840	1.9	58
	1438	14.3	436
	2119	−1.8	−55
31 Sa	0350	11.7	357
	0927	2.8	85
	1522	13.3	405
	2208	−0.8	−24

November

	Time	Height	
	h m	ft	cm
1 Su	0447	10.9	332
	1019	3.8	116
	1612	12.0	366
	2259	0.4	12
2 M	0555	10.3	314
	1116	4.5	137
	1717	10.7	326
	2355	1.5	46
3 Tu ◑	0708	10.1	308
	1226	5.0	152
	1843	9.8	299
4 W	0100	2.4	73
	0814	10.2	311
	1352	5.0	152
	2005	9.5	290
5 Th	0212	2.9	88
	0908	10.6	323
	1516	4.3	131
	2112	9.6	293
6 F	0319	3.0	91
	0952	11.0	335
	1614	3.2	98
	2209	9.9	302
7 Sa	0411	2.9	88
	1030	11.6	354
	1657	2.2	67
	2257	10.3	314
8 Su	0453	2.7	82
	1102	12.1	369
	1733	1.2	37
	2339	10.7	326
9 M	0529	2.6	79
	1133	12.5	381
	1806	0.5	15
10 Tu	0018	11.0	335
	0602	2.6	79
	1203	12.9	393
	1838	−0.2	−6
11 W ●	0054	11.3	344
	0635	2.7	82
	1232	13.2	402
	1911	−0.6	−18
12 Th	0130	11.4	347
	0708	2.9	88
	1302	13.4	408
	1945	−0.8	−24
13 F	0205	11.3	344
	0741	3.1	94
	1332	13.4	408
	2020	−0.8	−24
14 Sa	0241	11.2	341
	0817	3.4	104
	1403	13.2	402
	2057	−0.6	−18
15 Su	0320	10.9	332
	0856	3.8	116
	1437	12.8	390
	2138	−0.3	−9

	Time	Height	
	h m	ft	cm
16 M	0404	10.5	320
	0941	4.2	128
	1516	12.1	369
	2222	0.2	6
17 Tu	0459	10.3	314
	1033	4.5	137
	1605	11.3	344
	2312	0.8	24
18 W ◐	0607	10.2	311
	1134	4.6	140
	1718	10.4	317
19 Th	0009	1.4	43
	0715	10.6	323
	1248	4.4	134
	1857	9.9	302
20 F	0114	1.9	58
	0815	11.3	344
	1411	3.6	110
	2024	10.0	305
21 Sa	0224	2.1	64
	0907	12.2	372
	1526	2.2	67
	2135	10.5	320
22 Su	0331	2.1	64
	0955	13.2	402
	1626	0.6	18
	2238	11.1	338
23 M	0428	1.9	58
	1041	14.1	430
	1717	−0.9	−27
	2335	11.7	357
24 Tu	0519	1.8	55
	1126	14.8	451
	1804	−2.0	−61
25 W ○	0027	12.2	372
	0606	1.7	52
	1210	15.2	463
	1849	−2.7	−82
26 Th	0117	12.4	378
	0652	1.8	55
	1254	15.2	463
	1933	−2.9	−88
27 F	0204	12.4	378
	0737	2.1	64
	1336	14.8	451
	2017	−2.6	−79
28 Sa	0249	12.2	372
	0823	2.6	79
	1418	14.2	433
	2101	−1.9	−58
29 Su	0336	11.8	360
	0909	3.1	94
	1501	13.2	402
	2145	−1.0	−30
30 M	0424	11.3	344
	0958	3.7	113
	1546	12.0	366
	2230	0.1	3

December

	Time	Height	
	h m	ft	cm
1 Tu	0518	10.8	329
	1051	4.3	131
	1638	10.7	326
	2317	1.2	37
2 W ◑	0618	10.5	320
	1150	4.7	143
	1748	9.6	293
3 Th	0007	2.2	67
	0718	10.4	317
	1301	4.7	143
	1910	8.9	271
4 F	0103	3.1	94
	0811	10.6	323
	1422	4.3	131
	2025	8.7	265
5 Sa	0208	3.7	113
	0858	11.0	335
	1534	3.5	107
	2130	8.9	271
6 Su	0312	3.9	119
	0939	11.4	347
	1626	2.5	76
	2225	9.3	283
7 M	0406	3.9	119
	1017	12.0	366
	1706	1.5	46
	2314	9.7	296
8 Tu	0451	3.8	116
	1054	12.5	381
	1743	0.6	18
	2358	10.2	311
9 W	0531	3.7	113
	1129	13.0	396
	1817	−0.2	−6
10 Th	0039	10.7	326
	0608	3.5	107
	1204	13.3	405
	1852	−0.8	−24
11 F ●	0117	11.1	338
	0645	3.4	104
	1239	13.6	415
	1927	−1.3	−40
12 Sa	0154	11.3	344
	0722	3.3	101
	1314	13.7	418
	2004	−1.5	−46
13 Su	0231	11.4	347
	0802	3.3	101
	1350	13.6	415
	2042	−1.5	−46
14 M	0310	11.4	347
	0844	3.3	101
	1428	13.2	402
	2122	−1.2	−37
15 Tu	0351	11.4	347
	0931	3.4	104
	1510	12.6	384
	2204	−0.7	−21

	Time	Height	
	h m	ft	cm
16 W	0438	11.3	344
	1022	3.5	107
	1600	11.6	354
	2250	0.0	0
17 Th	0533	11.3	344
	1120	3.5	107
	1706	10.6	323
	2340	0.9	27
18 F ◐	0634	11.5	351
	1227	3.3	101
	1834	9.7	296
19 Sa	0037	1.9	58
	0735	12.0	366
	1344	2.8	85
	2003	9.4	287
20 Su	0143	2.7	82
	0832	12.6	384
	1503	1.8	55
	2121	9.7	296
21 M	0255	3.1	94
	0926	13.2	402
	1610	0.5	15
	2229	10.2	311
22 Tu	0403	3.1	94
	1017	13.8	421
	1705	−0.7	−21
	2330	10.8	329
23 W	0500	2.9	88
	1107	14.3	436
	1753	−1.7	−52
24 Th	0024	11.4	347
	0551	2.7	82
	1155	14.6	445
	1838	−2.3	−70
25 F ○	0112	11.8	360
	0638	2.5	76
	1240	14.6	445
	1920	−2.5	−76
26 Sa	0155	12.1	369
	0723	2.5	76
	1323	14.3	436
	2001	−2.3	−70
27 Su	0236	12.1	369
	0807	2.6	79
	1404	13.8	421
	2041	−1.8	−55
28 M	0315	11.9	363
	0851	2.8	85
	1443	13.0	396
	2121	−1.1	−34
29 Tu	0354	11.6	354
	0936	3.1	94
	1522	12.0	366
	2159	−0.2	−6
30 W	0435	11.3	344
	1021	3.5	107
	1604	10.9	332
	2238	0.8	24
31 Th	0518	10.9	332
	1110	3.8	116
	1655	9.8	299
	2318	1.9	58

Time meridian 135° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.
Heights are referred to mean lower low water which is the chart datum of soundings.

Seward, Alaska, 2015

Times and Heights of High and Low Waters

January

	Time	Height	
	h m	ft	cm
1 Th	0346	3.5	107
	1006	11.4	347
	1703	0.1	3
	2329	8.7	265
2 F	0446	3.5	107
	1056	11.7	357
	1749	−0.5	−15
3 Sa	0018	9.2	280
	0537	3.4	104
	1141	11.9	363
	1830	−0.9	−27
4 Su ○	0059	9.6	293
	0621	3.2	98
	1221	11.9	363
	1907	−1.1	−34
5 M	0136	9.8	299
	0702	3.1	94
	1259	11.9	363
	1942	−1.1	−34
6 Tu	0210	9.9	302
	0739	3.0	91
	1334	11.6	354
	2015	−1.0	−30
7 W	0242	10.0	305
	0816	2.9	88
	1409	11.2	341
	2047	−0.6	−18
8 Th	0314	9.9	302
	0853	3.0	91
	1444	10.7	326
	2119	−0.1	−3
9 F	0346	9.8	299
	0931	3.1	94
	1521	10.0	305
	2151	0.5	15
10 Sa	0420	9.7	296
	1013	3.3	101
	1600	9.2	280
	2224	1.2	37
11 Su	0457	9.6	293
	1100	3.4	104
	1645	8.4	256
	2300	2.0	61
12 M	0538	9.5	290
	1157	3.5	107
	1741	7.6	232
	2342	2.8	85
13 Tu ◑	0625	9.4	287
	1305	3.4	104
	1855	7.0	213
14 W	0034	3.6	110
	0721	9.6	293
	1422	2.9	88
	2026	6.8	207
15 Th	0140	4.1	125
	0821	9.9	302
	1533	2.1	64
	2150	7.2	219

	Time	Height	
	h m	ft	cm
16 F	0253	4.3	131
	0920	10.4	317
	1630	1.0	30
	2254	7.9	241
17 Sa	0401	4.1	125
	1015	11.1	338
	1718	−0.1	−3
	2343	8.7	265
18 Su	0458	3.5	107
	1106	11.9	363
	1801	−1.1	−34
19 M	0027	9.5	290
	0550	2.9	88
	1154	12.5	381
	1843	−1.9	−58
20 Tu ●	0108	10.3	314
	0638	2.2	67
	1241	13.0	396
	1924	−2.4	−73
21 W	0148	10.9	332
	0725	1.6	49
	1327	13.1	399
	2005	−2.5	−76
22 Th	0228	11.3	344
	0813	1.1	34
	1414	12.7	387
	2046	−2.2	−67
23 F	0310	11.6	354
	0902	0.9	27
	1502	12.0	366
	2128	−1.5	−46
24 Sa	0353	11.6	354
	0953	1.0	30
	1553	11.0	335
	2211	−0.5	−15
25 Su	0439	11.5	351
	1050	1.2	37
	1649	9.8	299
	2257	0.7	21
26 M ◐	0529	11.2	341
	1153	1.6	49
	1754	8.6	262
	2349	2.0	61
27 Tu	0625	10.8	329
	1308	1.8	55
	1917	7.7	235
28 W	0050	3.1	94
	0730	10.5	320
	1431	1.7	52
	2054	7.4	226
29 Th	0206	3.9	119
	0840	10.4	317
	1548	1.2	37
	2220	7.7	235
30 F	0328	4.1	125
	0946	10.5	320
	1649	0.6	18
	2322	8.3	253
31 Sa	0436	4.0	122
	1043	10.7	326
	1737	0.1	3

February

	Time	Height	
	h m	ft	cm
1 Su	0009	8.8	268
	0529	3.6	110
	1130	11.0	335
	1817	−0.4	−12
2 M	0046	9.3	283
	0612	3.1	94
	1211	11.2	341
	1851	−0.6	−18
3 Tu ○	0117	9.6	293
	0650	2.7	82
	1247	11.3	344
	1923	−0.8	−24
4 W	0146	9.9	302
	0724	2.3	70
	1321	11.2	341
	1952	−0.7	−21
5 Th	0213	10.1	308
	0758	2.1	64
	1354	11.0	335
	2021	−0.5	−15
6 F	0240	10.2	311
	0831	1.9	58
	1427	10.6	323
	2049	−0.1	−3
7 Sa	0308	10.3	314
	0906	1.9	58
	1501	10.1	308
	2118	0.5	15
8 Su	0337	10.2	311
	0942	2.0	61
	1536	9.4	287
	2148	1.2	37
9 M	0408	10.1	308
	1023	2.2	67
	1616	8.6	262
	2220	1.9	58
10 Tu	0443	9.9	302
	1110	2.5	76
	1704	7.8	238
	2256	2.8	85
11 W ◑	0525	9.7	296
	1208	2.6	79
	1808	7.1	216
	2343	3.6	110
12 Th	0619	9.5	290
	1322	2.5	76
	1937	6.7	204
13 F	0048	4.2	128
	0727	9.6	293
	1445	2.0	61
	2115	6.9	210
14 Sa	0213	4.4	134
	0841	9.9	302
	1556	1.1	34
	2228	7.7	235
15 Su	0335	4.1	125
	0949	10.6	323
	1652	0.0	0
	2320	8.6	262

	Time	Height	
	h m	ft	cm
16 M	0441	3.3	101
	1048	11.4	347
	1739	−1.0	−30
17 Tu	0003	9.6	293
	0536	2.2	67
	1141	12.1	369
	1822	−1.8	−55
18 W ●	0043	10.6	323
	0626	1.2	37
	1230	12.6	384
	1903	−2.2	−67
19 Th	0122	11.4	347
	0713	0.3	9
	1318	12.7	387
	1944	−2.3	−70
20 F	0202	11.9	363
	0800	−0.3	−9
	1405	12.5	381
	2024	−1.9	−58
21 Sa	0241	12.2	372
	0847	−0.6	−18
	1452	11.8	360
	2104	−1.1	−34
22 Su	0322	12.2	372
	0936	−0.4	−12
	1541	10.8	329
	2146	−0.1	−3
23 M	0405	11.9	363
	1027	0.0	0
	1634	9.6	293
	2230	1.2	37
24 Tu	0452	11.3	344
	1125	0.7	21
	1736	8.4	256
	2319	2.4	73
25 W ◐	0545	10.5	320
	1233	1.3	40
	1854	7.5	229
26 Th	0019	3.5	107
	0650	9.8	299
	1355	1.7	52
	2033	7.2	219
27 F	0141	4.3	131
	0808	9.4	287
	1520	1.5	46
	2202	7.5	229
28 Sa	0314	4.3	131
	0925	9.4	287
	1626	1.1	34
	2303	8.1	247

March

	Time	Height	
	h m	ft	cm
1 Su	0427	3.9	119
	1028	9.7	296
	1715	0.7	21
	2346	8.6	262
2 M	0519	3.3	101
	1117	10.0	305
	1754	0.3	9
3 Tu	0019	9.1	277
	0559	2.6	79
	1158	10.3	314
	1827	0.0	0
4 W	0047	9.6	293
	0634	2.0	61
	1233	10.5	320
	1856	−0.2	−6
5 Th ○	0113	10.0	305
	0706	1.4	43
	1306	10.6	323
	1924	−0.2	−6
6 F	0138	10.3	314
	0737	1.0	30
	1338	10.5	320
	1951	0.0	0
7 Sa	0203	10.5	320
	0809	0.8	24
	1410	10.3	314
	2019	0.3	9
8 Su	0230	10.6	323
	0841	0.7	21
	1443	9.9	302
	2047	0.8	24
9 M	0257	10.6	323
	0915	0.8	24
	1518	9.4	287
	2116	1.4	43
10 Tu	0327	10.4	317
	0953	1.0	30
	1557	8.7	265
	2148	2.1	64
11 W	0401	10.2	311
	1037	1.3	40
	1643	8.0	244
	2225	2.9	88
12 Th	0441	9.9	302
	1130	1.6	49
	1744	7.3	223
	2312	3.6	110
13 F ◑	0534	9.5	290
	1238	1.8	55
	1906	6.9	210
14 Sa	0019	4.2	128
	0645	9.2	280
	1359	1.6	49
	2041	7.1	216
15 Su	0150	4.3	131
	0809	9.3	283
	1518	1.0	30
	2155	7.8	238

	Time	Height	
	h m	ft	cm
16 M	0318	3.7	113
	0928	9.9	302
	1620	0.2	6
	2248	8.8	268
17 Tu	0427	2.6	79
	1033	10.6	323
	1711	−0.6	−18
	2333	9.9	302
18 W	0523	1.3	40
	1129	11.3	344
	1756	−1.2	−37
19 Th	0013	11.0	335
	0612	0.0	0
	1220	11.8	360
	1838	−1.5	−46
20 F ●	0053	11.8	360
	0659	−1.0	−30
	1308	12.0	366
	1919	−1.4	−43
21 Sa	0132	12.4	378
	0745	−1.6	−49
	1355	11.8	360
	2000	−1.0	−30
22 Su	0211	12.6	384
	0830	−1.8	−55
	1442	11.2	341
	2040	−0.3	−9
23 M	0251	12.4	378
	0917	−1.5	−46
	1530	10.4	317
	2122	0.7	21
24 Tu	0333	11.9	363
	1005	−0.9	−27
	1621	9.4	287
	2205	1.8	55
25 W	0418	11.0	335
	1058	−0.1	−3
	1720	8.4	256
	2254	2.8	85
26 Th ◐	0509	10.1	308
	1158	0.8	24
	1832	7.6	232
	2355	3.8	116
27 F	0611	9.2	280
	1312	1.5	46
	2002	7.3	223
28 Sa	0118	4.3	131
	0730	8.5	259
	1435	1.7	52
	2126	7.5	229
29 Su	0256	4.2	128
	0855	8.4	256
	1545	1.6	49
	2225	8.0	244
30 M	0409	3.6	110
	1004	8.6	262
	1638	1.3	40
	2307	8.5	259
31 Tu	0459	2.8	85
	1056	9.0	274
	1718	1.0	30
	2340	9.1	277

Time meridian 135° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.
Heights are referred to mean lower low water which is the chart datum of soundings.

Seward, Alaska, 2015

Times and Heights of High and Low Waters

April

	Time	Height	
	h m	ft	cm
1 W	0538	2.0	61
	1138	9.3	283
	1752	0.8	24
2 Th	0007	9.6	293
	0612	1.2	37
	1215	9.6	293
	1822	0.7	21
3 F	0033	10.1	308
	0644	0.6	18
	1249	9.8	299
	1851	0.7	21
4 Sa ○	0059	10.5	320
	0715	0.1	3
	1322	9.9	302
	1919	0.8	24
5 Su	0125	10.7	326
	0746	−0.3	−9
	1355	9.8	299
	1948	1.0	30
6 M	0153	10.9	332
	0819	−0.4	−12
	1429	9.6	293
	2018	1.4	43
7 Tu	0222	10.9	332
	0853	−0.4	−12
	1506	9.2	280
	2050	1.9	58
8 W	0254	10.7	326
	0931	−0.2	−6
	1547	8.7	265
	2125	2.5	76
9 Th	0329	10.4	317
	1015	0.1	3
	1634	8.1	247
	2207	3.1	94
10 F	0412	10.0	305
	1106	0.5	15
	1733	7.6	232
	2259	3.6	110
11 Sa ◑	0506	9.4	287
	1208	0.8	24
	1848	7.4	226
12 Su	0010	3.9	119
	0618	8.9	271
	1321	1.0	30
	2008	7.7	235
13 M	0139	3.8	116
	0745	8.8	268
	1437	0.8	24
	2117	8.4	256
14 Tu	0305	2.9	88
	0908	9.1	277
	1542	0.4	12
	2212	9.4	287
15 W	0413	1.7	52
	1018	9.7	296
	1637	0.0	0
	2259	10.4	317

	Time	Height	
	h m	ft	cm
16 Th	0509	0.3	9
	1117	10.3	314
	1726	−0.3	−9
	2341	11.3	344
17 F	0559	−1.0	−30
	1210	10.7	326
	1811	−0.4	−12
18 Sa ●	0022	12.1	369
	0645	−1.9	−58
	1259	10.9	332
	1853	−0.2	−6
19 Su	0102	12.5	381
	0730	−2.4	−73
	1346	10.8	329
	1935	0.2	6
20 M	0142	12.6	384
	0814	−2.5	−76
	1433	10.5	320
	2017	0.8	24
21 Tu	0223	12.2	372
	0858	−2.2	−67
	1520	9.9	302
	2100	1.5	46
22 W	0304	11.6	354
	0944	−1.5	−46
	1609	9.2	280
	2144	2.3	70
23 Th	0348	10.7	326
	1032	−0.6	−18
	1703	8.5	259
	2234	3.1	94
24 F	0436	9.7	296
	1124	0.3	9
	1806	7.9	241
	2333	3.8	116
25 Sa ◐	0533	8.7	265
	1225	1.1	34
	1919	7.6	232
26 Su	0051	4.1	125
	0645	7.9	241
	1334	1.7	52
	2032	7.7	235
27 M	0221	3.9	119
	0809	7.5	229
	1444	1.9	58
	2130	8.1	247
28 Tu	0335	3.3	101
	0924	7.6	232
	1542	1.9	58
	2214	8.5	259
29 W	0428	2.4	73
	1024	7.9	241
	1628	1.8	55
	2250	9.1	277
30 Th	0510	1.6	49
	1111	8.3	253
	1706	1.7	52
	2321	9.6	293

May

	Time	Height	
	h m	ft	cm
1 F	0546	0.7	21
	1152	8.7	265
	1741	1.6	49
	2350	10.2	311
2 Sa	0619	0.0	0
	1229	9.0	274
	1814	1.6	49
3 Su ○	0019	10.6	323
	0652	−0.6	−18
	1305	9.2	280
	1846	1.6	49
4 M	0049	10.9	332
	0725	−1.0	−30
	1341	9.3	283
	1919	1.8	55
5 Tu	0121	11.1	338
	0759	−1.3	−40
	1418	9.2	280
	1954	2.0	61
6 W	0154	11.2	341
	0836	−1.4	−43
	1457	9.0	274
	2030	2.3	70
7 Th	0229	11.0	335
	0916	−1.3	−40
	1540	8.8	268
	2111	2.6	79
8 F	0309	10.6	323
	0959	−1.0	−30
	1629	8.5	259
	2158	3.0	91
9 Sa	0356	10.1	308
	1049	−0.5	−15
	1725	8.2	250
	2255	3.3	101
10 Su	0452	9.4	287
	1145	0.0	0
	1829	8.2	250
11 M ◑	0006	3.4	104
	0602	8.7	265
	1249	0.4	12
	1936	8.5	259
12 Tu	0129	3.0	91
	0725	8.3	253
	1357	0.7	21
	2039	9.2	280
13 W	0250	2.1	64
	0849	8.3	253
	1503	0.9	27
	2135	10.0	305
14 Th	0358	0.9	27
	1003	8.7	265
	1602	0.9	27
	2225	10.8	329
15 F	0455	−0.4	−12
	1106	9.1	277
	1655	0.9	27
	2310	11.5	351

	Time	Height	
	h m	ft	cm
16 Sa	0545	−1.4	−43
	1201	9.6	293
	1744	0.9	27
	2354	12.1	369
17 Su ●	0632	−2.2	−67
	1251	9.8	299
	1830	1.0	30
18 M	0036	12.3	375
	0716	−2.6	−79
	1338	9.9	302
	1914	1.3	40
19 Tu	0117	12.2	372
	0759	−2.6	−79
	1424	9.8	299
	1957	1.6	49
20 W	0158	11.9	363
	0841	−2.3	−70
	1509	9.5	290
	2041	2.1	64
21 Th	0239	11.2	341
	0923	−1.7	−52
	1555	9.1	277
	2125	2.6	79
22 F	0322	10.4	317
	1006	−1.0	−30
	1642	8.7	265
	2213	3.1	94
23 Sa	0407	9.4	287
	1051	−0.1	−3
	1734	8.3	253
	2308	3.5	107
24 Su	0457	8.5	259
	1140	0.7	21
	1829	8.1	247
25 M ◐	0013	3.7	113
	0558	7.6	232
	1233	1.4	43
	1927	8.1	247
26 Tu	0130	3.6	110
	0711	7.0	213
	1331	2.0	61
	2023	8.3	253
27 W	0246	3.1	94
	0830	6.8	207
	1430	2.3	70
	2111	8.6	262
28 Th	0347	2.3	70
	0940	7.0	213
	1524	2.5	76
	2153	9.1	277
29 F	0435	1.5	46
	1038	7.3	223
	1613	2.5	76
	2231	9.7	296
30 Sa	0515	0.6	18
	1126	7.8	238
	1656	2.5	76
	2307	10.2	311
31 Su	0553	−0.2	−6
	1208	8.2	250
	1736	2.4	73
	2342	10.7	326

June

	Time	Height	
	h m	ft	cm
1 M	0629	−0.9	−27
	1248	8.6	262
	1815	2.3	70
2 Tu ○	0018	11.1	338
	0705	−1.5	−46
	1327	8.9	271
	1854	2.3	70
3 W	0054	11.4	347
	0742	−1.9	−58
	1407	9.1	277
	1934	2.3	70
4 Th	0133	11.5	351
	0821	−2.1	−64
	1448	9.2	280
	2016	2.3	70
5 F	0213	11.3	344
	0902	−2.1	−64
	1531	9.2	280
	2101	2.4	73
6 Sa	0257	10.9	332
	0945	−1.8	−55
	1617	9.1	277
	2152	2.5	76
7 Su	0346	10.3	314
	1032	−1.2	−37
	1708	9.1	277
	2250	2.6	79
8 M	0443	9.5	290
	1122	−0.5	−15
	1803	9.2	280
	2357	2.5	76
9 Tu ◑	0550	8.6	262
	1218	0.2	6
	1902	9.5	290
10 W	0113	2.2	67
	0708	8.0	244
	1320	0.9	27
	2002	9.9	302
11 Th	0232	1.4	43
	0833	7.7	235
	1425	1.5	46
	2100	10.4	317
12 F	0342	0.5	15
	0951	7.8	238
	1529	1.8	55
	2154	10.9	332
13 Sa	0442	−0.5	−15
	1059	8.2	250
	1628	2.0	61
	2245	11.4	347
14 Su	0534	−1.4	−43
	1156	8.7	265
	1722	2.0	61
	2332	11.8	360
15 M	0620	−2.0	−61
	1246	9.1	277
	1811	2.0	61

	Time	Height	
	h m	ft	cm
16 Tu ●	0016	11.9	363
	0703	−2.3	−70
	1331	9.3	283
	1857	2.1	64
17 W	0058	11.8	360
	0744	−2.3	−70
	1413	9.4	287
	1940	2.1	64
18 Th	0139	11.5	351
	0824	−2.1	−64
	1453	9.3	283
	2023	2.3	70
19 F	0219	10.9	332
	0902	−1.7	−52
	1533	9.2	280
	2105	2.5	76
20 Sa	0259	10.3	314
	0939	−1.1	−34
	1613	9.0	274
	2149	2.8	85
21 Su	0340	9.5	290
	1017	−0.3	−9
	1654	8.8	268
	2237	3.0	91
22 M	0424	8.6	262
	1056	0.4	12
	1737	8.6	262
	2330	3.2	98
23 Tu	0514	7.8	238
	1138	1.2	37
	1823	8.5	259
24 W ◐	0033	3.2	98
	0615	7.0	213
	1224	2.0	61
	1912	8.6	262
25 Th	0144	3.0	91
	0728	6.5	198
	1317	2.6	79
	2004	8.8	268
26 F	0254	2.4	73
	0848	6.4	195
	1416	3.1	94
	2054	9.1	277
27 Sa	0354	1.6	49
	1000	6.7	204
	1516	3.2	98
	2142	9.6	293
28 Su	0443	0.8	24
	1058	7.2	219
	1612	3.2	98
	2227	10.2	311
29 M	0526	−0.1	−3
	1147	7.8	238
	1702	3.0	91
	2310	10.8	329
30 Tu	0606	−1.0	−30
	1229	8.4	256
	1748	2.7	82
	2353	11.3	344

Time meridian 135° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.
Heights are referred to mean lower low water which is the chart datum of soundings.

Seward, Alaska, 2015

Times and Heights of High and Low Waters

July

	Time	Height	
	h m	ft	cm
1 W ○	0645	−1.7	−52
	1310	8.9	271
	1833	2.4	73
2 Th	0035	11.7	357
	0725	−2.3	−70
	1350	9.3	283
	1917	2.0	61
3 F	0118	11.9	363
	0804	−2.5	−76
	1430	9.7	296
	2003	1.8	55
4 Sa	0202	11.8	360
	0845	−2.5	−76
	1512	9.9	302
	2051	1.6	49
5 Su	0248	11.3	344
	0927	−2.1	−64
	1556	10.1	308
	2142	1.5	46
6 M	0338	10.6	323
	1011	−1.4	−43
	1642	10.2	311
	2238	1.5	46
7 Tu	0433	9.6	293
	1058	−0.5	−15
	1732	10.2	311
	2341	1.5	46
8 W ◑	0537	8.6	262
	1149	0.5	15
	1827	10.2	311
9 Th	0053	1.4	43
	0652	7.8	238
	1247	1.5	46
	1927	10.3	314
10 F	0210	1.1	34
	0818	7.3	223
	1353	2.3	70
	2030	10.5	320
11 Sa	0325	0.5	15
	0943	7.4	226
	1504	2.8	85
	2130	10.7	326
12 Su	0429	−0.2	−6
	1054	7.8	238
	1611	2.9	88
	2227	11.0	335
13 M	0523	−0.9	−27
	1151	8.3	253
	1709	2.8	85
	2317	11.2	341
14 Tu	0609	−1.4	−43
	1238	8.8	268
	1800	2.6	79
15 W ●	0003	11.4	347
	0650	−1.7	−52
	1318	9.1	277
	1844	2.3	70

	Time	Height	
	h m	ft	cm
16 Th	0045	11.3	344
	0728	−1.7	−52
	1355	9.3	283
	1925	2.2	67
17 F	0124	11.1	338
	0803	−1.6	−49
	1429	9.4	287
	2004	2.1	64
18 Sa	0201	10.8	329
	0837	−1.3	−40
	1502	9.4	287
	2043	2.1	64
19 Su	0237	10.3	314
	0909	−0.8	−24
	1535	9.4	287
	2122	2.2	67
20 M	0314	9.6	293
	0942	−0.2	−6
	1608	9.3	283
	2203	2.3	70
21 Tu	0354	8.9	271
	1015	0.6	18
	1643	9.1	277
	2247	2.5	76
22 W	0437	8.1	247
	1050	1.4	43
	1722	9.0	274
	2339	2.7	82
23 Th ◐	0528	7.3	223
	1129	2.2	67
	1807	8.9	271
24 F	0041	2.7	82
	0634	6.7	204
	1216	2.9	88
	1858	8.9	271
25 Sa	0153	2.5	76
	0756	6.3	192
	1316	3.5	107
	1957	9.1	277
26 Su	0306	1.9	58
	0922	6.5	198
	1426	3.8	116
	2057	9.5	290
27 M	0408	1.1	34
	1030	7.0	213
	1535	3.7	113
	2154	10.1	308
28 Tu	0458	0.1	3
	1122	7.8	238
	1635	3.3	101
	2245	10.8	329
29 W	0542	−0.8	−24
	1206	8.5	259
	1728	2.7	82
	2333	11.4	347
30 Th	0623	−1.6	−49
	1246	9.3	283
	1816	2.0	61
31 F ○	0020	11.9	363
	0703	−2.2	−67
	1325	10.0	305
	1902	1.3	40

August

	Time	Height	
	h m	ft	cm
1 Sa	0106	12.2	372
	0743	−2.5	−76
	1404	10.5	320
	1949	0.7	21
2 Su	0152	12.1	369
	0824	−2.4	−73
	1444	10.9	332
	2037	0.4	12
3 M	0239	11.7	357
	0905	−1.9	−58
	1526	11.1	338
	2127	0.3	9
4 Tu	0328	10.9	332
	0947	−1.0	−30
	1610	11.1	338
	2220	0.4	12
5 W	0422	9.8	299
	1032	0.0	0
	1658	11.0	335
	2320	0.7	21
6 Th ◑	0524	8.7	265
	1121	1.2	37
	1752	10.6	323
7 F	0028	1.0	30
	0638	7.8	238
	1219	2.3	70
	1854	10.3	314
8 Sa	0147	1.1	34
	0807	7.3	223
	1330	3.2	98
	2003	10.1	308
9 Su	0307	0.8	24
	0937	7.4	226
	1450	3.6	110
	2113	10.2	311
10 M	0415	0.4	12
	1047	7.9	241
	1604	3.4	104
	2216	10.4	317
11 Tu	0510	−0.2	−6
	1140	8.4	256
	1703	3.1	94
	2308	10.6	323
12 W	0554	−0.6	−18
	1221	8.9	271
	1751	2.6	79
	2353	10.8	329
13 Th	0632	−0.8	−24
	1257	9.3	283
	1832	2.1	64
14 F ●	0033	10.9	332
	0706	−0.9	−27
	1328	9.6	293
	1909	1.8	55
15 Sa	0109	10.9	332
	0737	−0.8	−24
	1356	9.8	299
	1944	1.5	46

	Time	Height	
	h m	ft	cm
16 Su	0143	10.7	326
	0807	−0.6	−18
	1424	9.9	302
	2018	1.4	43
17 M	0217	10.3	314
	0836	−0.2	−6
	1452	10.0	305
	2053	1.4	43
18 Tu	0251	9.8	299
	0906	0.4	12
	1522	9.9	302
	2129	1.5	46
19 W	0327	9.2	280
	0936	1.1	34
	1553	9.7	296
	2208	1.8	55
20 Th	0407	8.5	259
	1008	1.9	58
	1627	9.5	290
	2253	2.1	64
21 F	0453	7.7	235
	1044	2.7	82
	1708	9.3	283
	2348	2.3	70
22 Sa ◐	0553	7.0	213
	1129	3.4	104
	1759	9.1	277
23 Su	0056	2.4	73
	0713	6.6	201
	1230	4.0	122
	1904	9.0	274
24 M	0216	2.1	64
	0846	6.7	204
	1349	4.3	131
	2017	9.3	283
25 Tu	0329	1.4	43
	1000	7.3	223
	1510	4.0	122
	2126	9.9	302
26 W	0426	0.5	15
	1053	8.2	250
	1617	3.2	98
	2225	10.6	323
27 Th	0514	−0.4	−12
	1137	9.1	277
	1711	2.3	70
	2318	11.4	347
28 F	0557	−1.2	−37
	1216	10.0	305
	1801	1.2	37
29 Sa ○	0006	12.0	366
	0638	−1.7	−52
	1255	10.9	332
	1847	0.3	9
30 Su	0054	12.3	375
	0718	−1.9	−58
	1333	11.6	354
	1934	−0.5	−15
31 M	0141	12.2	372
	0758	−1.6	−49
	1413	12.0	366
	2020	−0.9	−27

September

	Time	Height	
	h m	ft	cm
1 Tu	0228	11.8	360
	0839	−1.0	−30
	1454	12.1	369
	2109	−0.9	−27
2 W	0317	11.0	335
	0921	−0.1	−3
	1537	11.9	363
	2200	−0.5	−15
3 Th	0410	10.0	305
	1006	1.0	30
	1624	11.4	347
	2256	0.1	3
4 F	0511	8.9	271
	1056	2.2	67
	1717	10.8	329
5 Sa ◑	0001	0.8	24
	0625	8.0	244
	1156	3.2	98
	1821	10.1	308
6 Su	0118	1.2	37
	0755	7.6	232
	1314	3.9	119
	1938	9.6	293
7 M	0242	1.3	40
	0924	7.8	238
	1445	4.0	122
	2057	9.5	290
8 Tu	0353	1.1	34
	1029	8.3	253
	1601	3.6	110
	2205	9.7	296
9 W	0448	0.7	21
	1117	8.8	268
	1656	3.0	91
	2258	10.0	305
10 Th	0531	0.4	12
	1154	9.3	283
	1740	2.3	70
	2341	10.3	314
11 F	0606	0.2	6
	1225	9.7	296
	1816	1.7	52
12 Sa ●	0018	10.5	320
	0638	0.1	3
	1252	10.1	308
	1850	1.2	37
13 Su	0053	10.6	323
	0707	0.2	6
	1318	10.4	317
	1921	0.9	27
14 M	0125	10.5	320
	0735	0.4	12
	1344	10.5	320
	1953	0.7	21
15 Tu	0158	10.3	314
	0803	0.8	24
	1410	10.6	323
	2025	0.6	18

	Time	Height	
	h m	ft	cm
16 W	0231	9.9	302
	0831	1.3	40
	1438	10.6	323
	2059	0.7	21
17 Th	0306	9.4	287
	0901	1.9	58
	1508	10.4	317
	2136	1.0	30
18 F	0345	8.8	268
	0933	2.6	79
	1541	10.1	308
	2218	1.4	43
19 Sa	0430	8.1	247
	1010	3.3	101
	1620	9.7	296
	2308	1.8	55
20 Su ◐	0527	7.5	229
	1056	4.0	122
	1710	9.3	283
21 M	0011	2.1	64
	0644	7.2	219
	1201	4.5	137
	1819	9.0	274
22 Tu	0129	2.0	61
	0813	7.3	223
	1327	4.5	137
	1942	9.1	277
23 W	0246	1.6	49
	0926	8.0	244
	1453	4.0	122
	2101	9.5	290
24 Th	0350	0.9	27
	1019	8.9	271
	1602	2.9	88
	2207	10.3	314
25 F	0441	0.2	6
	1103	10.0	305
	1657	1.6	49
	2303	11.1	338
26 Sa	0527	−0.4	−12
	1143	11.0	335
	1746	0.3	9
	2354	11.7	357
27 Su ○	0609	−0.8	−24
	1222	11.9	363
	1832	−0.8	−24
28 M	0042	12.0	366
	0651	−0.8	−24
	1301	12.6	384
	1918	−1.5	−46
29 Tu	0130	12.0	366
	0732	−0.5	−15
	1341	12.9	393
	2003	−1.8	−55
30 W	0217	11.6	354
	0814	0.2	6
	1422	12.9	393
	2050	−1.7	−52

Time meridian 135° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.
Heights are referred to mean lower low water which is the chart datum of soundings.

Seward, Alaska, 2015

Times and Heights of High and Low Waters

October

	Time	Height	
	h m	ft	cm
1 Th	0307	10.9	332
	0857	1.0	30
	1505	12.4	378
	2139	−1.2	−37
2 F	0359	10.0	305
	0943	2.0	61
	1552	11.6	354
	2232	−0.3	−9
3 Sa	0458	9.1	277
	1034	3.0	91
	1644	10.7	326
	2332	0.6	18
4 Su ◑	0609	8.4	256
	1137	3.9	119
	1748	9.7	296
5 M	0043	1.4	43
	0734	8.1	247
	1300	4.4	134
	1908	9.0	274
6 Tu	0204	1.8	55
	0855	8.3	253
	1435	4.3	131
	2034	8.8	268
7 W	0316	1.8	55
	0957	8.7	265
	1549	3.6	110
	2145	9.0	274
8 Th	0413	1.6	49
	1042	9.2	280
	1641	2.8	85
	2240	9.3	283
9 F	0456	1.4	43
	1117	9.7	296
	1722	2.0	61
	2323	9.6	293
10 Sa	0532	1.3	40
	1146	10.2	311
	1756	1.3	40
11 Su	0001	9.9	302
	0603	1.3	40
	1213	10.6	323
	1828	0.8	24
12 M ●	0035	10.1	308
	0632	1.4	43
	1239	10.9	332
	1859	0.3	9
13 Tu	0108	10.2	311
	0701	1.6	49
	1305	11.2	341
	1930	0.0	0
14 W	0141	10.1	308
	0730	1.9	58
	1332	11.2	341
	2002	−0.1	−3
15 Th	0215	9.9	302
	0800	2.2	67
	1401	11.2	341
	2035	0.0	0

	Time	Height	
	h m	ft	cm
16 F	0251	9.5	290
	0832	2.7	82
	1432	11.0	335
	2112	0.2	6
17 Sa	0330	9.1	277
	0907	3.3	101
	1506	10.6	323
	2152	0.6	18
18 Su	0416	8.6	262
	0947	3.8	116
	1546	10.2	311
	2240	1.0	30
19 M	0512	8.2	250
	1037	4.3	131
	1637	9.6	293
	2338	1.5	46
20 Tu ◐	0621	8.0	244
	1145	4.6	140
	1746	9.1	277
21 W	0048	1.7	52
	0739	8.2	250
	1311	4.5	137
	1912	8.9	271
22 Th	0202	1.6	49
	0847	8.8	268
	1437	3.7	113
	2037	9.1	277
23 F	0309	1.3	40
	0941	9.8	299
	1546	2.4	73
	2149	9.7	296
24 Sa	0405	1.0	30
	1028	10.8	329
	1642	1.0	30
	2249	10.4	317
25 Su	0455	0.7	21
	1110	11.8	360
	1731	−0.4	−12
	2343	11.0	335
26 M	0541	0.5	15
	1152	12.7	387
	1818	−1.5	−46
27 Tu ○	0033	11.4	347
	0625	0.6	18
	1233	13.2	402
	1903	−2.1	−64
28 W	0121	11.4	347
	0708	0.9	27
	1314	13.4	408
	1948	−2.4	−73
29 Th	0208	11.2	341
	0751	1.4	43
	1356	13.2	402
	2033	−2.1	−64
30 F	0257	10.8	329
	0836	2.0	61
	1439	12.6	384
	2120	−1.5	−46
31 Sa	0347	10.1	308
	0923	2.8	85
	1524	11.7	357
	2209	−0.6	−18

November

	Time	Height	
	h m	ft	cm
1 Su	0443	9.5	290
	1015	3.5	107
	1614	10.6	323
	2302	0.4	12
2 M	0546	8.9	271
	1116	4.2	128
	1713	9.5	290
3 Tu ◑	0002	1.3	40
	0657	8.6	262
	1235	4.5	137
	1827	8.6	262
4 W	0110	2.0	61
	0809	8.7	265
	1405	4.3	131
	1952	8.1	247
5 Th	0220	2.4	73
	0909	9.0	274
	1521	3.7	113
	2111	8.2	250
6 F	0321	2.5	76
	0955	9.5	290
	1615	2.8	85
	2212	8.4	256
7 Sa	0409	2.5	76
	1032	10.0	305
	1657	2.0	61
	2300	8.8	268
8 Su	0449	2.5	76
	1103	10.5	320
	1733	1.2	37
	2341	9.2	280
9 M	0524	2.5	76
	1133	10.9	332
	1806	0.5	15
10 Tu	0018	9.5	290
	0557	2.5	76
	1202	11.3	344
	1838	0.0	0
11 W ●	0053	9.7	296
	0630	2.6	79
	1231	11.6	354
	1910	−0.4	−12
12 Th	0128	9.8	299
	0702	2.7	82
	1302	11.7	357
	1943	−0.6	−18
13 F	0203	9.8	299
	0736	3.0	91
	1333	11.7	357
	2017	−0.6	−18
14 Sa	0240	9.7	296
	0811	3.2	98
	1407	11.5	351
	2054	−0.5	−15
15 Su	0320	9.4	287
	0849	3.5	107
	1445	11.2	341
	2135	−0.2	−6

	Time	Height	
	h m	ft	cm
16 M	0405	9.2	280
	0934	3.9	119
	1527	10.6	323
	2220	0.2	6
17 Tu	0457	9.0	274
	1027	4.1	125
	1619	10.0	305
	2312	0.8	24
18 W ◐	0556	8.9	271
	1134	4.2	128
	1725	9.2	280
19 Th	0012	1.3	40
	0701	9.2	280
	1254	4.0	122
	1846	8.7	265
20 F	0118	1.7	52
	0805	9.7	296
	1417	3.1	94
	2014	8.6	262
21 Sa	0225	1.9	58
	0902	10.5	320
	1528	1.9	58
	2132	9.0	274
22 Su	0328	1.9	58
	0953	11.4	347
	1627	0.6	18
	2238	9.6	293
23 M	0424	1.9	58
	1041	12.3	375
	1719	−0.7	−21
	2335	10.1	308
24 Tu	0515	1.8	55
	1126	13.0	396
	1806	−1.6	−49
25 W ○	0027	10.5	320
	0603	1.9	58
	1209	13.3	405
	1851	−2.2	−67
26 Th	0115	10.8	329
	0649	2.0	61
	1252	13.4	408
	1935	−2.4	−73
27 F	0201	10.8	329
	0734	2.2	67
	1335	13.1	399
	2019	−2.1	−64
28 Sa	0247	10.6	323
	0819	2.6	79
	1418	12.5	381
	2102	−1.6	−49
29 Su	0333	10.3	314
	0905	3.0	91
	1502	11.6	354
	2146	−0.8	−24
30 M	0421	9.8	299
	0955	3.5	107
	1547	10.6	323
	2230	0.1	3

December

	Time	Height	
	h m	ft	cm
1 Tu	0512	9.4	287
	1050	4.0	122
	1638	9.5	290
	2318	1.1	34
2 W ◑	0607	9.2	280
	1155	4.3	131
	1738	8.5	259
3 Th	0010	2.0	61
	0706	9.1	277
	1313	4.2	128
	1853	7.7	235
4 F	0108	2.7	82
	0803	9.2	280
	1432	3.8	116
	2016	7.4	226
5 Sa	0209	3.2	98
	0855	9.5	290
	1537	3.0	91
	2132	7.5	229
6 Su	0308	3.5	107
	0939	9.9	302
	1626	2.2	67
	2232	7.9	241
7 M	0359	3.6	110
	1018	10.4	317
	1707	1.3	40
	2320	8.4	256
8 Tu	0444	3.6	110
	1054	10.9	332
	1743	0.6	18
9 W	0001	8.8	268
	0524	3.5	107
	1129	11.4	347
	1818	−0.1	−3
10 Th	0039	9.2	280
	0602	3.4	104
	1203	11.7	357
	1852	−0.7	−21
11 F ●	0115	9.6	293
	0639	3.2	98
	1238	12.0	366
	1927	−1.0	−30
12 Sa	0151	9.8	299
	0717	3.2	98
	1314	12.1	369
	2002	−1.2	−37
13 Su	0229	9.9	302
	0756	3.1	94
	1352	12.0	366
	2040	−1.2	−37
14 M	0308	10.0	305
	0838	3.2	98
	1433	11.7	357
	2119	−1.0	−30
15 Tu	0350	10.0	305
	0925	3.2	98
	1517	11.1	338
	2202	−0.5	−15

	Time	Height	
	h m	ft	cm
16 W	0436	9.9	302
	1018	3.3	101
	1608	10.3	314
	2248	0.2	6
17 Th	0526	10.0	305
	1120	3.3	101
	1709	9.4	287
	2339	1.0	30
18 F ◐	0623	10.2	311
	1232	3.1	94
	1824	8.6	262
19 Sa	0038	1.8	55
	0723	10.5	320
	1352	2.5	76
	1951	8.1	247
20 Su	0144	2.4	73
	0824	11.0	335
	1509	1.5	46
	2118	8.2	250
21 M	0252	2.8	85
	0922	11.5	351
	1614	0.4	12
	2232	8.7	265
22 Tu	0357	3.0	91
	1016	12.1	369
	1709	−0.6	−18
	2332	9.3	283
23 W	0456	2.9	88
	1107	12.6	384
	1757	−1.4	−43
24 Th	0024	9.8	299
	0548	2.8	85
	1154	12.9	393
	1842	−1.9	−58
25 F ○	0110	10.2	311
	0636	2.6	79
	1238	12.9	393
	1924	−2.1	−64
26 Sa	0153	10.5	320
	0722	2.6	79
	1321	12.7	387
	2004	−1.9	−58
27 Su	0233	10.5	320
	0805	2.6	79
	1402	12.2	372
	2043	−1.5	−46
28 M	0313	10.4	317
	0848	2.8	85
	1443	11.5	351
	2121	−0.9	−27
29 Tu	0352	10.2	311
	0932	3.0	91
	1523	10.6	323
	2158	−0.1	−3
30 W	0431	9.9	302
	1019	3.3	101
	1606	9.6	293
	2235	0.9	27
31 Th	0513	9.6	293
	1110	3.6	110
	1654	8.6	262
	2315	1.8	55

Time meridian 135° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.
Heights are referred to mean lower low water which is the chart datum of soundings.

Seldovia, Alaska, 2015

Times and Heights of High and Low Waters

January

	Time	Height	
	h m	ft	cm
1 Th	0508	5.0	152
	1124	18.3	558
	1807	0.2	6
2 F	0035	16.2	494
	0606	4.6	140
	1216	18.9	576
	1854	−0.9	−27
3 Sa	0124	17.1	521
	0656	4.1	125
	1302	19.3	588
	1935	−1.6	−49
4 Su ○	0206	17.9	546
	0739	3.5	107
	1343	19.6	597
	2013	−2.1	−64
5 M	0244	18.4	561
	0819	3.1	94
	1421	19.7	600
	2048	−2.2	−67
6 Tu	0319	18.7	570
	0857	2.8	85
	1458	19.6	597
	2122	−2.0	−61
7 W	0352	18.7	570
	0934	2.8	85
	1533	19.1	582
	2155	−1.4	−43
8 Th	0425	18.4	561
	1010	3.1	94
	1609	18.3	558
	2228	−0.5	−15
9 F	0457	17.9	546
	1048	3.5	107
	1646	17.2	524
	2302	0.7	21
10 Sa	0530	17.3	527
	1128	4.1	125
	1725	15.9	485
	2337	2.0	61
11 Su	0606	16.6	506
	1213	4.8	146
	1810	14.6	445
12 M	0016	3.5	107
	0645	16.0	488
	1305	5.3	162
	1905	13.3	405
13 Tu ◑	0102	4.9	149
	0732	15.6	475
	1409	5.4	165
	2018	12.5	381
14 W	0201	6.1	186
	0829	15.4	469
	1522	4.9	149
	2143	12.5	381
15 Th	0313	6.7	204
	0933	15.8	482
	1634	3.7	113
	2301	13.3	405

	Time	Height	
	h m	ft	cm
16 F	0426	6.6	201
	1036	16.6	506
	1733	2.0	61
17 Sa	0003	14.7	448
	0530	5.7	174
	1134	17.9	546
	1823	0.0	0
18 Su	0053	16.4	500
	0625	4.4	134
	1227	19.3	588
	1908	−1.9	−58
19 M	0138	18.1	552
	0714	2.9	88
	1316	20.7	631
	1950	−3.5	−107
20 Tu ●	0220	19.5	594
	0800	1.4	43
	1403	21.7	661
	2032	−4.6	−140
21 W	0301	20.7	631
	0846	0.3	9
	1450	22.2	677
	2114	−5.0	−152
22 Th	0342	21.3	649
	0931	−0.4	−12
	1536	22.1	674
	2156	−4.6	−140
23 F	0424	21.5	655
	1017	−0.6	−18
	1624	21.2	646
	2239	−3.4	−104
24 Sa	0506	21.1	643
	1106	−0.2	−6
	1713	19.6	597
	2323	−1.5	−46
25 Su	0551	20.3	619
	1159	0.7	21
	1808	17.7	539
26 M ◐	0012	0.7	21
	0640	19.1	582
	1259	1.7	52
	1911	15.7	479
27 Tu	0106	2.9	88
	0735	17.9	546
	1409	2.5	76
	2028	14.2	433
28 W	0211	4.9	149
	0841	17.0	518
	1530	2.8	85
	2200	13.7	418
29 Th	0329	6.1	186
	0955	16.5	503
	1651	2.3	70
	2324	14.2	433
30 F	0450	6.2	189
	1105	16.7	509
	1756	1.3	40
31 Sa	0028	15.2	463
	0557	5.6	171
	1204	17.3	527
	1845	0.3	9

February

	Time	Height	
	h m	ft	cm
1 Su	0115	16.3	497
	0648	4.7	143
	1252	17.9	546
	1924	−0.5	−15
2 M	0154	17.2	524
	0729	3.7	113
	1333	18.6	567
	1959	−1.2	−37
3 Tu ○	0227	18.0	549
	0806	2.8	85
	1409	19.0	579
	2030	−1.6	−49
4 W	0257	18.5	564
	0840	2.1	64
	1444	19.3	588
	2100	−1.7	−52
5 Th	0326	18.8	573
	0913	1.6	49
	1517	19.2	585
	2130	−1.4	−43
6 F	0354	18.9	576
	0947	1.5	46
	1550	18.7	570
	2201	−0.8	−24
7 Sa	0422	18.7	570
	1021	1.7	52
	1624	17.9	546
	2231	0.2	6
8 Su	0451	18.2	555
	1055	2.2	67
	1700	16.7	509
	2303	1.5	46
9 M	0521	17.6	536
	1133	2.9	88
	1739	15.4	469
	2338	3.0	91
10 Tu	0554	16.8	512
	1216	3.6	110
	1826	14.0	427
11 W ◑	0017	4.5	137
	0634	16.1	491
	1310	4.2	128
	1928	12.8	390
12 Th	0109	5.9	180
	0728	15.5	472
	1422	4.4	134
	2054	12.3	375
13 F	0223	6.9	210
	0838	15.3	466
	1545	3.8	116
	2226	12.8	390
14 Sa	0349	7.0	213
	0958	15.8	482
	1700	2.3	70
	2337	14.3	436
15 Su	0505	5.9	180
	1109	17.0	518
	1758	0.4	12

	Time	Height	
	h m	ft	cm
16 M	0031	16.2	494
	0606	4.1	125
	1210	18.7	570
	1847	−1.6	−49
17 Tu	0116	18.1	552
	0658	2.0	61
	1303	20.3	619
	1931	−3.3	−101
18 W ●	0158	19.9	607
	0745	0.0	0
	1352	21.7	661
	2013	−4.5	−137
19 Th	0238	21.3	649
	0830	−1.6	−49
	1439	22.4	683
	2054	−4.9	−149
20 F	0317	22.1	674
	0915	−2.6	−79
	1525	22.3	680
	2135	−4.4	−134
21 Sa	0357	22.3	680
	0959	−2.8	−85
	1611	21.5	655
	2217	−3.1	−94
22 Su	0438	21.9	668
	1046	−2.2	−67
	1659	19.9	607
	2300	−1.2	−37
23 M	0520	20.8	634
	1135	−1.1	−34
	1750	17.9	546
	2346	1.0	30
24 Tu	0605	19.2	585
	1229	0.5	15
	1849	15.8	482
25 W ◐	0037	3.4	104
	0657	17.5	533
	1334	2.1	64
	2002	14.0	427
26 Th	0141	5.5	168
	0801	15.9	485
	1455	3.1	94
	2135	13.2	402
27 F	0303	6.7	204
	0924	15.0	457
	1626	3.1	94
	2306	13.6	415
28 Sa	0436	6.7	204
	1047	15.1	460
	1738	2.4	73

March

	Time	Height	
	h m	ft	cm
1 Su	0011	14.7	448
	0548	5.8	177
	1152	15.8	482
	1828	1.5	46
2 M	0055	15.7	479
	0636	4.5	137
	1240	16.7	509
	1905	0.6	18
3 Tu	0130	16.7	509
	0714	3.2	98
	1319	17.6	536
	1937	−0.2	−6
4 W	0159	17.6	536
	0748	2.0	61
	1353	18.3	558
	2006	−0.7	−21
5 Th ○	0227	18.3	558
	0819	1.0	30
	1426	18.8	573
	2034	−1.0	−30
6 F	0253	18.9	576
	0850	0.3	9
	1459	19.0	579
	2103	−0.9	−27
7 Sa	0320	19.1	582
	0922	−0.1	−3
	1531	18.8	573
	2133	−0.5	−15
8 Su	0346	19.1	582
	0954	0.0	0
	1604	18.1	552
	2203	0.3	9
9 M	0414	18.7	570
	1027	0.3	9
	1639	17.2	524
	2235	1.5	46
10 Tu	0443	18.1	552
	1102	1.0	30
	1717	16.0	488
	2309	2.9	88
11 W	0515	17.4	530
	1142	1.9	58
	1801	14.6	445
	2348	4.4	134
12 Th	0554	16.5	503
	1231	2.8	85
	1859	13.4	408
13 F ◑	0039	5.8	177
	0646	15.5	472
	1338	3.4	104
	2020	12.7	387
14 Sa	0153	6.7	204
	0759	14.9	454
	1502	3.4	104
	2152	13.1	399
15 Su	0323	6.7	204
	0928	15.1	460
	1624	2.4	73
	2306	14.5	442

	Time	Height	
	h m	ft	cm
16 M	0444	5.3	162
	1049	16.2	494
	1729	0.7	21
17 Tu	0002	16.4	500
	0548	3.2	98
	1154	17.9	546
	1822	−1.1	−34
18 W	0048	18.3	558
	0641	0.8	24
	1249	19.7	600
	1907	−2.5	−76
19 Th	0130	20.2	616
	0728	−1.5	−46
	1339	21.0	640
	1950	−3.5	−107
20 F ●	0210	21.6	658
	0813	−3.2	−98
	1426	21.8	664
	2032	−3.8	−116
21 Sa	0249	22.4	683
	0856	−4.2	−128
	1512	21.8	664
	2113	−3.3	−101
22 Su	0329	22.5	686
	0940	−4.4	−134
	1558	21.1	643
	2155	−2.1	−64
23 M	0409	21.9	668
	1024	−3.6	−110
	1644	19.7	600
	2237	−0.3	−9
24 Tu	0450	20.6	628
	1111	−2.2	−67
	1734	17.9	546
	2322	1.8	55
25 W	0533	18.8	573
	1201	−0.3	−9
	1829	15.9	485
26 Th ◐	0013	3.9	119
	0622	16.8	512
	1300	1.7	52
	1936	14.2	433
27 F	0115	5.8	177
	0725	15.0	457
	1414	3.1	94
	2102	13.3	405
28 Sa	0237	6.8	207
	0848	13.8	421
	1544	3.7	113
	2231	13.5	411
29 Su	0415	6.6	201
	1019	13.8	421
	1702	3.3	101
	2335	14.3	436
30 M	0527	5.5	168
	1128	14.5	442
	1755	2.6	79
31 Tu	0019	15.3	466
	0615	4.1	125
	1217	15.4	469
	1833	1.8	55

Time meridian 135° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.
Heights are referred to mean lower low water which is the chart datum of soundings.

Seldovia, Alaska, 2015

Times and Heights of High and Low Waters

April

	Time	Height	
	h m	ft	cm
1 W	0053	16.3	497
	0651	2.6	79
	1257	16.4	500
	1905	1.1	34
2 Th	0122	17.2	524
	0724	1.3	40
	1332	17.3	527
	1934	0.5	15
3 F	0149	18.1	552
	0754	0.1	3
	1406	18.0	549
	2004	0.2	6
4 Sa ○	0216	18.7	570
	0825	−0.8	−24
	1439	18.4	561
	2034	0.1	3
5 Su	0244	19.2	585
	0857	−1.4	−43
	1513	18.4	561
	2105	0.3	9
6 M	0312	19.3	588
	0929	−1.5	−46
	1547	18.1	552
	2138	1.0	30
7 Tu	0341	19.0	579
	1002	−1.2	−37
	1623	17.4	530
	2212	1.9	58
8 W	0413	18.5	564
	1038	−0.6	−18
	1703	16.4	500
	2248	3.1	94
9 Th	0447	17.7	539
	1119	0.2	6
	1749	15.2	463
	2331	4.3	131
10 F	0529	16.7	509
	1208	1.3	40
	1846	14.2	433
11 Sa ◑	0026	5.5	168
	0623	15.6	475
	1311	2.2	67
	1959	13.7	418
12 Su	0139	6.1	186
	0738	14.7	448
	1428	2.5	76
	2120	14.0	427
13 M	0304	5.8	177
	0907	14.6	445
	1548	2.1	64
	2230	15.2	463
14 Tu	0424	4.3	131
	1030	15.6	475
	1656	1.1	34
	2327	16.9	515
15 W	0528	2.0	61
	1137	17.0	518
	1752	−0.1	−3

	Time	Height	
	h m	ft	cm
16 Th	0015	18.6	567
	0622	−0.4	−12
	1234	18.6	567
	1841	−1.1	−34
17 F	0059	20.2	616
	0710	−2.5	−76
	1326	19.8	604
	1926	−1.8	−55
18 Sa ●	0140	21.4	652
	0755	−4.2	−128
	1413	20.6	628
	2009	−2.0	−61
19 Su	0221	22.0	671
	0838	−5.0	−152
	1500	20.7	631
	2051	−1.6	−49
20 M	0302	22.0	671
	0921	−5.0	−152
	1545	20.2	616
	2133	−0.6	−18
21 Tu	0342	21.3	649
	1004	−4.2	−128
	1631	19.1	582
	2216	0.8	24
22 W	0423	19.9	607
	1049	−2.7	−82
	1718	17.7	539
	2302	2.4	73
23 Th	0506	18.2	555
	1136	−0.8	−24
	1810	16.1	491
	2352	4.1	125
24 F	0554	16.3	497
	1228	1.1	34
	1909	14.7	448
25 Sa ◐	0051	5.6	171
	0651	14.5	442
	1331	2.7	82
	2020	13.8	421
26 Su	0206	6.4	195
	0806	13.2	402
	1445	3.8	116
	2136	13.7	418
27 M	0335	6.2	189
	0932	12.8	390
	1601	4.0	122
	2240	14.1	430
28 Tu	0450	5.2	158
	1047	13.2	402
	1701	3.7	113
	2327	14.9	454
29 W	0541	3.8	116
	1143	14.1	430
	1746	3.2	98
30 Th	0004	15.8	482
	0620	2.3	70
	1227	15.1	460
	1823	2.6	79

May

	Time	Height	
	h m	ft	cm
1 F	0036	16.8	512
	0654	0.9	27
	1306	16.1	491
	1857	2.0	61
2 Sa	0107	17.7	539
	0727	−0.4	−12
	1343	17.0	518
	1931	1.6	49
3 Su ○	0138	18.5	564
	0800	−1.5	−46
	1419	17.6	536
	2005	1.3	40
4 M	0209	19.1	582
	0833	−2.2	−67
	1456	17.9	546
	2040	1.4	43
5 Tu	0241	19.3	588
	0907	−2.6	−79
	1533	17.9	546
	2116	1.7	52
6 W	0315	19.2	585
	0943	−2.5	−76
	1612	17.5	533
	2154	2.2	67
7 Th	0351	18.8	573
	1022	−2.1	−64
	1654	16.9	515
	2235	3.0	91
8 F	0431	18.1	552
	1105	−1.3	−40
	1741	16.1	491
	2322	3.9	119
9 Sa	0517	17.0	518
	1154	−0.2	−6
	1835	15.5	472
10 Su	0019	4.6	140
	0613	15.8	482
	1252	0.8	24
	1938	15.1	460
11 M ◑	0128	4.9	149
	0725	14.8	451
	1359	1.6	49
	2047	15.3	466
12 Tu	0246	4.4	134
	0848	14.5	442
	1511	1.9	58
	2152	16.2	494
13 W	0402	3.0	91
	1010	14.9	454
	1620	1.7	52
	2250	17.4	530
14 Th	0508	1.1	34
	1120	16.0	488
	1720	1.2	37
	2342	18.7	570
15 F	0603	−1.0	−30
	1220	17.2	524
	1813	0.7	21

	Time	Height	
	h m	ft	cm
16 Sa	0029	19.9	607
	0652	−2.8	−85
	1313	18.3	558
	1902	0.3	9
17 Su ●	0113	20.7	631
	0738	−4.1	−125
	1402	19.1	582
	1947	0.1	3
18 M	0156	21.1	643
	0822	−4.8	−146
	1449	19.4	591
	2031	0.3	9
19 Tu	0238	21.0	640
	0904	−4.7	−143
	1533	19.2	585
	2114	0.8	24
20 W	0319	20.4	622
	0946	−4.0	−122
	1617	18.6	567
	2158	1.7	52
21 Th	0401	19.3	588
	1028	−2.8	−85
	1702	17.6	536
	2243	2.8	85
22 F	0443	17.8	543
	1111	−1.2	−37
	1748	16.5	503
	2330	4.0	122
23 Sa	0528	16.2	494
	1157	0.5	15
	1838	15.4	469
24 Su	0024	5.0	152
	0619	14.5	442
	1248	2.1	64
	1932	14.6	445
25 M ◐	0127	5.7	174
	0721	13.2	402
	1345	3.4	104
	2032	14.2	433
26 Tu	0240	5.7	174
	0835	12.4	378
	1448	4.2	128
	2131	14.2	433
27 W	0355	5.1	155
	0951	12.4	378
	1551	4.6	140
	2223	14.7	448
28 Th	0455	3.9	119
	1058	12.9	393
	1647	4.5	137
	2307	15.4	469
29 F	0542	2.5	76
	1152	13.8	421
	1735	4.1	125
	2347	16.3	497
30 Sa	0622	1.1	34
	1238	14.9	454
	1818	3.6	110
31 Su	0024	17.3	527
	0659	−0.3	−9
	1320	15.9	485
	1858	3.0	91

June

	Time	Height	
	h m	ft	cm
1 M	0101	18.2	555
	0735	−1.6	−49
	1400	16.8	512
	1938	2.5	76
2 Tu ○	0138	19.0	579
	0811	−2.6	−79
	1440	17.5	533
	2017	2.1	64
3 W	0216	19.5	594
	0849	−3.3	−101
	1519	17.9	546
	2057	1.9	58
4 Th	0256	19.6	597
	0927	−3.5	−107
	1600	18.0	549
	2139	2.0	61
5 F	0337	19.4	591
	1008	−3.3	−101
	1643	17.9	546
	2224	2.3	70
6 Sa	0421	18.8	573
	1052	−2.6	−79
	1728	17.5	533
	2313	2.7	82
7 Su	0510	17.7	539
	1139	−1.5	−46
	1818	17.1	521
8 M	0008	3.2	98
	0606	16.4	500
	1232	−0.2	−6
	1913	16.7	509
9 Tu ◑	0112	3.4	104
	0712	15.2	463
	1332	1.0	30
	2012	16.7	509
10 W	0224	3.1	94
	0830	14.4	439
	1437	2.1	64
	2115	17.0	518
11 Th	0338	2.1	64
	0950	14.4	439
	1546	2.7	82
	2215	17.6	536
12 F	0447	0.7	21
	1105	15.0	457
	1651	2.8	85
	2311	18.3	558
13 Sa	0546	−0.8	−24
	1209	15.9	485
	1750	2.6	79
14 Su	0003	19.1	582
	0638	−2.2	−67
	1304	16.9	515
	1842	2.2	67
15 M	0052	19.7	600
	0725	−3.3	−101
	1354	17.8	543
	1930	1.9	58

	Time	Height	
	h m	ft	cm
16 Tu ●	0137	20.0	610
	0808	−3.9	−119
	1439	18.3	558
	2015	1.7	52
17 W	0220	20.0	610
	0849	−3.9	−119
	1521	18.4	561
	2058	1.7	52
18 Th	0302	19.6	597
	0928	−3.5	−107
	1601	18.3	558
	2140	2.0	61
19 F	0342	18.9	576
	1007	−2.7	−82
	1641	17.8	543
	2222	2.6	79
20 Sa	0422	17.8	543
	1046	−1.5	−46
	1720	17.0	518
	2305	3.3	101
21 Su	0503	16.5	503
	1125	−0.1	−3
	1800	16.2	494
	2352	4.1	125
22 M	0548	15.1	460
	1206	1.4	43
	1842	15.5	472
23 Tu	0043	4.7	143
	0638	13.7	418
	1251	2.9	88
	1928	14.9	454
24 W ◐	0142	5.1	155
	0739	12.6	384
	1342	4.1	125
	2019	14.6	445
25 Th	0249	5.0	152
	0851	12.0	366
	1441	5.0	152
	2113	14.7	448
26 F	0357	4.3	131
	1006	12.1	369
	1544	5.5	168
	2206	15.1	460
27 Sa	0458	3.1	94
	1113	12.9	393
	1645	5.4	165
	2257	15.9	485
28 Su	0547	1.7	52
	1209	14.0	427
	1740	4.9	149
	2345	16.9	515
29 M	0631	0.1	3
	1257	15.2	463
	1829	4.1	125
30 Tu	0030	17.9	546
	0712	−1.4	−43
	1340	16.4	500
	1914	3.1	94

Time meridian 135° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.
Heights are referred to mean lower low water which is the chart datum of soundings.

Seldovia, Alaska, 2015

Times and Heights of High and Low Waters

July

	Time	Height	
	h m	ft	cm
1 W ○	0114	19.0	579
	0751	−2.8	−85
	1422	17.6	536
	1958	2.2	67
2 Th	0158	19.8	604
	0831	−3.8	−116
	1502	18.4	561
	2041	1.5	46
3 F	0241	20.3	619
	0911	−4.3	−131
	1543	19.0	579
	2125	1.0	30
4 Sa	0326	20.3	619
	0952	−4.3	−131
	1624	19.2	585
	2210	0.8	24
5 Su	0412	19.8	604
	1035	−3.6	−110
	1707	19.1	582
	2259	1.0	30
6 M	0501	18.7	570
	1120	−2.3	−70
	1753	18.7	570
	2352	1.3	40
7 Tu	0555	17.3	527
	1209	−0.7	−21
	1842	18.2	555
8 W ◑	0051	1.8	55
	0657	15.7	479
	1304	1.1	34
	1937	17.7	539
9 Th	0159	2.0	61
	0810	14.5	442
	1406	2.7	82
	2038	17.3	527
10 F	0313	1.8	55
	0932	13.9	424
	1516	3.9	119
	2144	17.2	524
11 Sa	0427	1.1	34
	1053	14.2	433
	1628	4.3	131
	2247	17.5	533
12 Su	0533	0.0	0
	1202	15.1	460
	1734	4.2	128
	2346	18.0	549
13 M	0628	−1.1	−34
	1258	16.1	491
	1830	3.6	110
14 Tu	0038	18.6	567
	0714	−2.0	−61
	1345	17.0	518
	1919	2.9	88
15 W ●	0125	19.0	579
	0756	−2.6	−79
	1426	17.7	539
	2002	2.3	70

	Time	Height	
	h m	ft	cm
16 Th	0207	19.3	588
	0833	−2.9	−88
	1504	18.2	555
	2042	1.9	58
17 F	0246	19.2	585
	0909	−2.8	−85
	1539	18.3	558
	2121	1.7	52
18 Sa	0324	18.9	576
	0943	−2.3	−70
	1612	18.1	552
	2159	1.9	58
19 Su	0401	18.2	555
	1017	−1.4	−43
	1645	17.7	539
	2237	2.3	70
20 M	0438	17.2	524
	1052	−0.2	−6
	1718	17.1	521
	2316	2.9	88
21 Tu	0517	15.9	485
	1127	1.1	34
	1752	16.4	500
	2359	3.6	110
22 W	0600	14.6	445
	1204	2.6	79
	1830	15.7	479
23 Th ◐	0047	4.2	128
	0650	13.3	405
	1247	4.1	125
	1913	15.1	460
24 F	0145	4.6	140
	0755	12.3	375
	1341	5.4	165
	2005	14.7	448
25 Sa	0254	4.6	140
	0915	11.9	363
	1447	6.2	189
	2107	14.8	451
26 Su	0408	3.8	116
	1035	12.4	378
	1600	6.4	195
	2212	15.4	469
27 M	0512	2.4	73
	1141	13.5	411
	1707	5.7	174
	2312	16.4	500
28 Tu	0604	0.7	21
	1233	15.0	457
	1804	4.6	140
29 W	0006	17.8	543
	0649	−1.1	−34
	1318	16.6	506
	1854	3.1	94
30 Th	0055	19.2	585
	0731	−2.7	−82
	1359	18.1	552
	1939	1.6	49
31 F ○	0143	20.4	622
	0811	−3.9	−119
	1439	19.4	591
	2024	0.2	6

August

	Time	Height	
	h m	ft	cm
1 Sa	0228	21.2	646
	0852	−4.6	−140
	1519	20.3	619
	2108	−0.7	−21
2 Su	0314	21.4	652
	0933	−4.6	−140
	1559	20.7	631
	2153	−1.2	−37
3 M	0401	20.9	637
	1015	−3.8	−116
	1640	20.7	631
	2240	−1.1	−34
4 Tu	0449	19.7	600
	1058	−2.3	−70
	1723	20.1	613
	2331	−0.5	−15
5 W	0541	18.1	552
	1145	−0.4	−12
	1810	19.2	585
6 Th ◑	0027	0.4	12
	0640	16.2	494
	1237	1.8	55
	1902	18.1	552
7 F	0131	1.4	43
	0751	14.6	445
	1339	3.8	116
	2005	17.0	518
8 Sa	0247	2.0	61
	0916	13.8	421
	1452	5.2	158
	2117	16.4	500
9 Su	0409	1.9	58
	1043	13.9	424
	1613	5.6	171
	2231	16.4	500
10 M	0522	1.1	34
	1154	14.8	451
	1726	5.1	155
	2337	16.9	515
11 Tu	0618	0.2	6
	1248	15.9	485
	1823	4.2	128
12 W	0030	17.6	536
	0703	−0.7	−21
	1331	16.9	515
	1909	3.1	94
13 Th	0115	18.3	558
	0740	−1.3	−40
	1407	17.7	539
	1948	2.2	67
14 F ●	0154	18.8	573
	0814	−1.7	−52
	1439	18.2	555
	2024	1.4	43
15 Sa	0230	19.1	582
	0845	−1.8	−55
	1509	18.6	567
	2059	1.0	30

	Time	Height	
	h m	ft	cm
16 Su	0305	19.0	579
	0916	−1.5	−46
	1538	18.6	567
	2132	0.8	24
17 M	0339	18.6	567
	0947	−0.9	−27
	1606	18.4	561
	2206	1.0	30
18 Tu	0413	17.8	543
	1018	0.1	3
	1635	17.9	546
	2241	1.6	49
19 W	0449	16.7	509
	1051	1.4	43
	1705	17.3	527
	2318	2.3	70
20 Th	0527	15.4	469
	1125	2.9	88
	1738	16.5	503
	2359	3.2	98
21 F	0612	14.1	430
	1204	4.4	134
	1817	15.6	475
22 Sa ◐	0050	4.0	122
	0711	12.8	390
	1253	5.8	177
	1907	14.9	454
23 Su	0156	4.5	137
	0830	12.2	372
	1401	6.8	207
	2014	14.6	445
24 M	0318	4.2	128
	1000	12.5	381
	1525	7.0	213
	2133	14.9	454
25 Tu	0435	3.1	94
	1113	13.7	418
	1642	6.1	186
	2246	16.0	488
26 W	0535	1.3	40
	1206	15.4	469
	1743	4.5	137
	2346	17.6	536
27 Th	0623	−0.5	−15
	1251	17.2	524
	1835	2.4	73
28 F	0039	19.3	588
	0707	−2.2	−67
	1332	19.0	579
	1921	0.4	12
29 Sa ○	0128	20.8	634
	0748	−3.5	−107
	1411	20.5	625
	2005	−1.4	−43
30 Su	0215	21.7	661
	0829	−4.2	−128
	1450	21.6	658
	2049	−2.6	−79
31 M	0301	22.0	671
	0910	−4.0	−122
	1530	22.0	671
	2134	−3.1	−94

September

	Time	Height	
	h m	ft	cm
1 Tu	0347	21.6	658
	0952	−3.1	−94
	1610	21.9	668
	2219	−2.9	−88
2 W	0435	20.4	622
	1035	−1.5	−46
	1652	21.0	640
	2308	−1.9	−58
3 Th	0525	18.6	567
	1121	0.6	18
	1737	19.7	600
4 F	0001	−0.4	−12
	0623	16.7	509
	1213	2.8	85
	1829	18.0	549
5 Sa ◑	0103	1.2	37
	0733	14.9	454
	1315	4.9	149
	1933	16.4	500
6 Su	0219	2.4	73
	0900	14.0	427
	1434	6.2	189
	2053	15.4	469
7 M	0348	2.8	85
	1030	14.1	430
	1605	6.3	192
	2219	15.4	469
8 Tu	0506	2.3	70
	1139	15.0	457
	1721	5.4	165
	2328	16.0	488
9 W	0601	1.5	46
	1228	16.1	491
	1815	4.1	125
10 Th	0020	16.9	515
	0643	0.7	21
	1306	17.0	518
	1855	2.9	88
11 F	0102	17.7	539
	0717	0.1	3
	1338	17.8	543
	1930	1.7	52
12 Sa ●	0138	18.4	561
	0748	−0.3	−9
	1407	18.5	564
	2003	0.7	21
13 Su	0212	18.8	573
	0817	−0.5	−15
	1434	18.9	576
	2034	0.1	3
14 M	0244	19.0	579
	0847	−0.4	−12
	1500	19.1	582
	2105	−0.2	−6
15 Tu	0317	18.8	573
	0917	0.1	3
	1527	19.1	582
	2137	−0.1	−3

	Time	Height	
	h m	ft	cm
16 W	0350	18.3	558
	0947	0.9	27
	1555	18.7	570
	2210	0.3	9
17 Th	0425	17.4	530
	1019	2.1	64
	1624	18.0	549
	2244	1.1	34
18 F	0502	16.2	494
	1053	3.5	107
	1656	17.2	524
	2322	2.1	64
19 Sa	0546	14.9	454
	1131	4.9	149
	1733	16.2	494
20 Su ◐	0009	3.1	94
	0641	13.7	418
	1221	6.2	189
	1822	15.2	463
21 M	0111	3.9	119
	0757	12.9	393
	1331	7.2	219
	1933	14.5	442
22 Tu	0232	4.1	125
	0926	13.2	402
	1459	7.2	219
	2102	14.6	445
23 W	0355	3.4	104
	1039	14.4	439
	1620	5.9	180
	2223	15.7	479
24 Th	0501	1.9	58
	1134	16.2	494
	1723	3.9	119
	2328	17.4	530
25 F	0554	0.2	6
	1219	18.1	552
	1815	1.5	46
26 Sa	0023	19.2	585
	0640	−1.3	−40
	1300	19.9	607
	1902	−0.9	−27
27 Su ○	0113	20.7	631
	0723	−2.4	−73
	1340	21.5	655
	1946	−2.8	−85
28 M	0200	21.7	661
	0805	−2.9	−88
	1420	22.5	686
	2030	−4.1	−125
29 Tu	0247	22.1	674
	0847	−2.7	−82
	1500	22.9	698
	2114	−4.5	−137
30 W	0333	21.7	661
	0929	−1.7	−52
	1541	22.5	686
	2158	−4.0	−122

Time meridian 135° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.
Heights are referred to mean lower low water which is the chart datum of soundings.

Seldovia, Alaska, 2015

Times and Heights of High and Low Waters

October

	Time	Height	
	h m	ft	cm
1 Th	0420	20.6	628
	1013	−0.2	−6
	1623	21.4	652
	2245	−2.7	−82
2 F	0510	18.9	576
	1059	1.7	52
	1708	19.7	600
	2336	−0.9	−27
3 Sa	0606	17.1	521
	1151	3.8	116
	1759	17.8	543
4 Su ◑	0034	1.1	34
	0713	15.4	469
	1254	5.6	171
	1902	15.9	485
5 M	0146	2.8	85
	0835	14.5	442
	1416	6.7	204
	2026	14.6	445
6 Tu	0313	3.6	110
	1001	14.6	445
	1552	6.5	198
	2157	14.4	439
7 W	0433	3.5	107
	1108	15.3	466
	1707	5.4	165
	2309	15.1	460
8 Th	0531	2.9	88
	1156	16.2	494
	1757	4.0	122
9 F	0001	16.0	488
	0613	2.3	70
	1232	17.1	521
	1835	2.6	79
10 Sa	0042	16.9	515
	0646	1.8	55
	1302	17.9	546
	1908	1.3	40
11 Su	0118	17.7	539
	0717	1.4	43
	1329	18.6	567
	1939	0.3	9
12 M ●	0151	18.3	558
	0747	1.1	34
	1356	19.2	585
	2009	−0.5	−15
13 Tu	0224	18.7	570
	0817	1.1	34
	1424	19.5	594
	2040	−1.0	−30
14 W	0257	18.8	573
	0848	1.4	43
	1452	19.6	597
	2111	−1.1	−34
15 Th	0331	18.5	564
	0920	2.0	61
	1521	19.3	588
	2144	−0.7	−21

	Time	Height	
	h m	ft	cm
16 F	0407	17.8	543
	0954	2.9	88
	1552	18.7	570
	2219	−0.1	−3
17 Sa	0445	16.9	515
	1030	4.0	122
	1625	17.9	546
	2257	0.9	27
18 Su	0529	15.8	482
	1111	5.2	158
	1705	16.8	512
	2343	1.9	58
19 M	0623	14.8	451
	1203	6.3	192
	1755	15.7	479
20 Tu ◐	0041	2.9	88
	0732	14.2	433
	1312	7.0	213
	1906	14.7	448
21 W	0154	3.5	107
	0850	14.4	439
	1436	6.7	204
	2035	14.5	442
22 Th	0313	3.3	101
	1000	15.5	472
	1556	5.3	162
	2200	15.4	469
23 F	0423	2.5	76
	1057	17.1	521
	1701	3.1	94
	2309	16.9	515
24 Sa	0521	1.3	40
	1145	18.9	576
	1755	0.6	18
25 Su	0007	18.5	564
	0611	0.2	6
	1228	20.6	628
	1843	−1.7	−52
26 M	0059	20.0	610
	0657	−0.6	−18
	1311	21.9	668
	1928	−3.6	−110
27 Tu ○	0147	21.0	640
	0742	−1.0	−30
	1352	22.8	695
	2012	−4.7	−143
28 W	0234	21.4	652
	0825	−0.8	−24
	1434	23.0	701
	2056	−5.0	−152
29 Th	0321	21.2	646
	0909	−0.1	−3
	1515	22.5	686
	2140	−4.4	−134
30 F	0408	20.4	622
	0953	1.1	34
	1558	21.3	649
	2225	−3.1	−94
31 Sa	0456	19.1	582
	1040	2.6	79
	1643	19.6	597
	2313	−1.2	−37

November

	Time	Height	
	h m	ft	cm
1 Su	0549	17.6	536
	1131	4.3	131
	1733	17.6	536
2 M	0006	0.8	24
	0648	16.2	494
	1232	5.8	177
	1832	15.7	479
3 Tu ◑	0108	2.7	82
	0758	15.2	463
	1347	6.7	204
	1947	14.2	433
4 W	0221	4.0	122
	0913	15.0	457
	1517	6.5	198
	2115	13.6	415
5 Th	0338	4.5	137
	1019	15.3	466
	1634	5.5	168
	2233	14.0	427
6 F	0441	4.4	134
	1109	16.0	488
	1728	4.2	128
	2331	14.8	451
7 Sa	0529	4.1	125
	1147	16.8	512
	1808	2.8	85
8 Su	0016	15.7	479
	0608	3.7	113
	1220	17.6	536
	1842	1.4	43
9 M	0054	16.6	506
	0642	3.2	98
	1250	18.4	561
	1914	0.2	6
10 Tu	0130	17.5	533
	0715	2.8	85
	1320	19.1	582
	1945	−0.7	−21
11 W ●	0205	18.1	552
	0749	2.6	79
	1351	19.6	597
	2017	−1.4	−43
12 Th	0241	18.4	561
	0823	2.6	79
	1422	19.8	604
	2050	−1.7	−52
13 F	0317	18.5	564
	0858	2.8	85
	1455	19.8	604
	2125	−1.7	−52
14 Sa	0354	18.2	555
	0935	3.3	101
	1530	19.3	588
	2201	−1.2	−37
15 Su	0434	17.6	536
	1014	4.0	122
	1607	18.6	567
	2241	−0.5	−15

	Time	Height	
	h m	ft	cm
16 M	0517	16.9	515
	1058	4.8	146
	1650	17.6	536
	2326	0.5	15
17 Tu	0607	16.3	497
	1151	5.6	171
	1742	16.4	500
18 W ◐	0019	1.6	49
	0706	15.8	482
	1255	6.0	183
	1848	15.3	466
19 Th	0122	2.6	79
	0811	15.9	485
	1411	5.6	171
	2010	14.7	448
20 F	0233	3.1	94
	0917	16.6	506
	1529	4.4	134
	2135	15.0	457
21 Sa	0344	3.1	94
	1017	17.8	543
	1638	2.5	76
	2250	16.1	491
22 Su	0447	2.7	82
	1110	19.2	585
	1735	0.2	6
	2352	17.4	530
23 M	0544	2.1	64
	1159	20.5	625
	1826	−1.8	−55
24 Tu	0047	18.8	573
	0634	1.5	46
	1245	21.6	658
	1913	−3.5	−107
25 W ○	0137	19.8	604
	0722	1.1	34
	1329	22.3	680
	1958	−4.5	−137
26 Th	0225	20.4	622
	0807	1.0	30
	1413	22.4	683
	2041	−4.7	−143
27 F	0311	20.5	625
	0852	1.2	37
	1457	22.0	671
	2124	−4.2	−128
28 Sa	0356	20.1	613
	0937	1.9	58
	1540	21.0	640
	2207	−3.1	−94
29 Su	0441	19.3	588
	1022	2.9	88
	1624	19.5	594
	2251	−1.5	−46
30 M	0528	18.2	555
	1111	4.1	125
	1710	17.8	543
	2337	0.3	9

December

	Time	Height	
	h m	ft	cm
1 Tu	0617	17.0	518
	1204	5.2	158
	1801	15.9	485
2 W ◑	0026	2.1	64
	0711	16.1	491
	1306	6.0	183
	1901	14.3	436
3 Th	0122	3.8	116
	0810	15.4	469
	1420	6.3	192
	2015	13.2	402
4 F	0225	5.0	152
	0910	15.3	466
	1539	5.8	177
	2136	13.0	396
5 Sa	0331	5.6	171
	1006	15.6	475
	1644	4.7	143
	2248	13.4	408
6 Su	0431	5.7	174
	1053	16.1	491
	1733	3.4	104
	2344	14.3	436
7 M	0522	5.4	165
	1134	16.9	515
	1813	2.1	64
8 Tu	0030	15.3	466
	0606	5.0	152
	1211	17.8	543
	1849	0.7	21
9 W	0110	16.4	500
	0646	4.4	134
	1247	18.7	570
	1924	−0.5	−15
10 Th	0149	17.3	527
	0724	3.8	116
	1324	19.4	591
	1958	−1.5	−46
11 F ●	0226	18.1	552
	0802	3.3	101
	1400	19.9	607
	2033	−2.2	−67
12 Sa	0304	18.6	567
	0841	3.0	91
	1438	20.2	616
	2109	−2.5	−76
13 Su	0342	18.8	573
	0920	3.0	91
	1516	20.1	613
	2147	−2.4	−73
14 M	0421	18.7	570
	1002	3.1	94
	1557	19.5	594
	2227	−1.9	−58
15 Tu	0502	18.4	561
	1047	3.5	107
	1642	18.6	567
	2310	−0.9	−27

	Time	Height	
	h m	ft	cm
16 W	0547	18.0	549
	1137	3.9	119
	1733	17.4	530
	2358	0.3	9
17 Th	0636	17.6	536
	1236	4.2	128
	1833	16.1	491
18 F ◐	0052	1.7	52
	0732	17.4	530
	1344	4.1	125
	1946	15.0	457
19 Sa	0155	3.0	91
	0834	17.5	533
	1459	3.4	104
	2110	14.6	445
20 Su	0305	3.9	119
	0937	18.0	549
	1612	2.1	64
	2231	15.1	460
21 M	0415	4.1	125
	1038	18.8	573
	1717	0.5	15
	2341	16.2	494
22 Tu	0520	3.9	119
	1134	19.7	600
	1813	−1.2	−37
23 W	0040	17.4	530
	0617	3.3	101
	1226	20.5	625
	1902	−2.6	−79
24 Th	0132	18.6	567
	0708	2.7	82
	1314	21.1	643
	1947	−3.5	−107
25 F ○	0218	19.4	591
	0755	2.2	67
	1400	21.4	652
	2030	−3.9	−119
26 Sa	0301	19.8	604
	0839	1.9	58
	1444	21.2	646
	2110	−3.7	−113
27 Su	0342	19.8	604
	0922	2.0	61
	1525	20.6	628
	2149	−3.0	−91
28 M	0422	19.5	594
	1005	2.4	73
	1606	19.5	594
	2228	−1.8	−55
29 Tu	0501	18.8	573
	1048	3.1	94
	1647	18.1	552
	2307	−0.3	−9
30 W	0540	17.9	546
	1133	4.0	122
	1730	16.5	503
	2346	1.4	43
31 Th	0620	16.9	515
	1222	4.8	146
	1818	14.9	454

Time meridian 135° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.
Heights are referred to mean lower low water which is the chart datum of soundings.

Nikiski, Alaska, 2015

Times and Heights of High and Low Waters

January

	Time	Height	
	h m	ft	cm
1 Th	0145	18.2	555
	0740	5.3	162
	1342	21.1	643
	2027	−0.4	−12
2 F	0240	19.2	585
	0835	5.0	152
	1430	21.5	655
	2115	−1.4	−43
3 Sa	0328	20.0	610
	0923	4.6	140
	1513	21.8	664
	2158	−2.1	−64
4 Su ○	0409	20.7	631
	1007	4.1	125
	1553	21.9	668
	2237	−2.4	−73
5 M	0448	21.1	643
	1048	3.8	116
	1631	21.8	664
	2315	−2.4	−73
6 Tu	0525	21.4	652
	1128	3.5	107
	1709	21.6	658
	2352	−2.1	−64
7 W	0603	21.4	652
	1206	3.4	104
	1748	21.1	643
8 Th	0028	−1.4	−43
	0640	21.3	649
	1246	3.5	107
	1828	20.3	619
9 F	0103	−0.4	−12
	0719	20.8	634
	1326	3.9	119
	1911	19.3	588
10 Sa	0140	0.9	27
	0759	20.2	616
	1410	4.5	137
	1959	18.0	549
11 Su	0217	2.6	79
	0842	19.4	591
	1459	5.1	155
	2055	16.7	509
12 M	0300	4.3	131
	0928	18.6	567
	1558	5.5	168
	2202	15.6	475
13 Tu ◑	0353	6.1	186
	1020	18.0	549
	1706	5.5	168
	2316	15.1	460
14 W	0500	7.4	226
	1119	17.8	543
	1813	4.7	143
15 Th	0028	15.4	469
	0611	7.9	241
	1217	18.1	552
	1914	3.3	101

	Time	Height	
	h m	ft	cm
16 F	0131	16.4	500
	0715	7.6	232
	1310	18.9	576
	2007	1.5	46
17 Sa	0223	17.8	543
	0810	6.6	201
	1358	20.1	613
	2054	−0.4	−12
18 Su	0308	19.3	588
	0900	5.3	162
	1443	21.5	655
	2138	−2.2	−67
19 M	0349	20.7	631
	0947	3.8	116
	1527	22.8	695
	2220	−3.6	−110
20 Tu ●	0429	22.0	671
	1032	2.3	70
	1611	23.7	722
	2302	−4.6	−140
21 W	0510	23.0	701
	1117	1.0	30
	1657	24.2	738
	2345	−4.9	−149
22 Th	0552	23.7	722
	1203	0.1	3
	1745	24.1	735
23 F	0027	−4.4	−134
	0635	23.8	725
	1250	−0.2	−6
	1836	23.2	707
24 Sa	0112	−3.2	−98
	0721	23.6	719
	1340	0.1	3
	1931	21.8	664
25 Su	0158	−1.2	−37
	0810	22.8	695
	1435	0.8	24
	2031	20.0	610
26 M ◐	0250	1.2	37
	0903	21.7	661
	1537	1.8	55
	2140	18.2	555
27 Tu	0349	3.6	110
	1004	20.5	625
	1647	2.4	73
	2257	17.0	518
28 W	0458	5.6	171
	1111	19.6	597
	1801	2.4	73
29 Th	0017	16.7	509
	0612	6.6	201
	1221	19.2	585
	1911	1.7	52
30 F	0131	17.3	527
	0722	6.6	201
	1325	19.4	591
	2011	0.7	21
31 Sa	0231	18.3	558
	0822	6.0	183
	1419	19.9	607
	2100	−0.3	−9

February

	Time	Height	
	h m	ft	cm
1 Su	0317	19.3	588
	0911	5.1	155
	1505	20.4	622
	2143	−1.0	−30
2 M	0356	20.1	613
	0954	4.1	125
	1544	20.8	634
	2220	−1.5	−46
3 Tu ○	0431	20.8	634
	1032	3.3	101
	1620	21.2	646
	2255	−1.7	−52
4 W	0503	21.2	646
	1109	2.6	79
	1656	21.3	649
	2329	−1.7	−52
5 Th	0536	21.5	655
	1145	2.1	64
	1732	21.2	646
6 F	0002	−1.3	−40
	0608	21.6	658
	1221	1.9	58
	1808	20.8	634
7 Sa	0034	−0.5	−15
	0641	21.3	649
	1257	2.0	61
	1847	20.1	613
8 Su	0107	0.6	18
	0713	20.8	634
	1335	2.4	73
	1928	19.0	579
9 M	0139	2.1	64
	0746	20.1	613
	1416	3.1	94
	2015	17.6	536
10 Tu	0214	3.9	119
	0821	19.2	585
	1506	4.0	122
	2114	16.3	497
11 W ◑	0257	5.7	174
	0903	18.2	555
	1610	4.6	140
	2227	15.3	466
12 Th	0359	7.4	226
	1004	17.4	530
	1725	4.5	137
	2346	15.2	463
13 F	0525	8.3	253
	1122	17.3	527
	1836	3.5	107
14 Sa	0058	16.0	488
	0642	8.0	244
	1235	18.0	549
	1937	1.9	58
15 Su	0156	17.5	533
	0746	6.6	201
	1335	19.3	588
	2029	−0.1	−3

	Time	Height	
	h m	ft	cm
16 M	0244	19.2	585
	0840	4.7	143
	1427	21.0	640
	2115	−2.0	−61
17 Tu	0326	20.9	637
	0929	2.6	79
	1515	22.6	689
	2159	−3.5	−107
18 W ●	0406	22.4	683
	1015	0.6	18
	1601	23.8	725
	2242	−4.5	−137
19 Th	0445	23.7	722
	1100	−1.1	−34
	1647	24.5	747
	2324	−4.7	−143
20 F	0526	24.4	744
	1145	−2.2	−67
	1734	24.4	744
21 Sa	0006	−4.1	−125
	0607	24.6	750
	1231	−2.5	−76
	1823	23.6	719
22 Su	0049	−2.8	−85
	0650	24.2	738
	1319	−2.0	−61
	1916	22.2	677
23 M	0134	−0.8	−24
	0736	23.1	704
	1410	−0.9	−27
	2013	20.3	619
24 Tu	0223	1.7	52
	0827	21.6	658
	1509	0.6	18
	2117	18.4	561
25 W ◐	0320	4.3	131
	0927	19.8	604
	1616	2.1	64
	2231	16.9	515
26 Th	0429	6.4	195
	1037	18.3	558
	1731	2.8	85
	2352	16.4	500
27 F	0548	7.4	226
	1156	17.6	536
	1845	2.6	79
28 Sa	0110	16.9	515
	0704	7.1	216
	1309	17.8	543
	1950	1.8	55

March

	Time	Height	
	h m	ft	cm
1 Su	0212	17.9	546
	0807	6.0	183
	1408	18.4	561
	2040	0.9	27
2 M	0257	18.9	576
	0856	4.7	143
	1453	19.2	585
	2121	0.2	6
3 Tu	0333	19.8	604
	0936	3.5	107
	1531	20.0	610
	2157	−0.4	−12
4 W	0405	20.5	625
	1013	2.3	70
	1606	20.6	628
	2231	−0.7	−21
5 Th ○	0435	21.1	643
	1047	1.3	40
	1640	21.0	640
	2303	−0.7	−21
6 F	0504	21.5	655
	1121	0.6	18
	1713	21.1	643
	2334	−0.5	−15
7 Sa	0533	21.6	658
	1155	0.2	6
	1748	21.0	640
8 Su	0006	0.1	3
	0602	21.5	655
	1230	0.2	6
	1825	20.4	622
9 M	0037	1.0	30
	0630	21.2	646
	1305	0.5	15
	1904	19.6	597
10 Tu	0109	2.3	70
	0657	20.6	628
	1343	1.2	37
	1947	18.4	561
11 W	0144	3.9	119
	0727	19.7	600
	1427	2.2	67
	2041	17.1	521
12 Th	0225	5.6	171
	0805	18.6	567
	1525	3.2	98
	2150	16.0	488
13 F ◑	0324	7.1	216
	0902	17.5	533
	1640	3.7	113
	2309	15.6	475
14 Sa	0452	8.0	244
	1036	16.8	512
	1757	3.3	101
15 Su	0024	16.3	497
	0615	7.5	229
	1206	17.3	527
	1904	2.0	61

	Time	Height	
	h m	ft	cm
16 M	0125	17.7	539
	0723	5.8	177
	1315	18.7	570
	2000	0.3	9
17 Tu	0215	19.4	591
	0819	3.5	107
	1412	20.4	622
	2050	−1.3	−40
18 W	0258	21.2	646
	0909	1.0	30
	1502	22.1	674
	2135	−2.6	−79
19 Th	0338	22.8	695
	0956	−1.2	−37
	1548	23.4	713
	2219	−3.4	−104
20 F ●	0417	24.0	732
	1041	−2.9	−88
	1634	24.1	735
	2301	−3.5	−107
21 Sa	0457	24.7	753
	1126	−4.0	−122
	1721	24.1	735
	2343	−2.8	−85
22 Su	0537	24.8	756
	1211	−4.2	−128
	1809	23.4	713
23 M	0026	−1.5	−46
	0620	24.1	735
	1257	−3.5	−107
	1900	22.1	674
24 Tu	0111	0.3	9
	0705	22.8	695
	1347	−2.1	−64
	1955	20.4	622
25 W	0159	2.5	76
	0754	21.0	640
	1441	−0.2	−6
	2056	18.7	570
26 Th ◐	0255	4.8	146
	0853	19.0	579
	1544	1.7	52
	2205	17.3	527
27 F	0403	6.6	201
	1005	17.2	524
	1655	3.0	91
	2322	16.6	506
28 Sa	0521	7.4	226
	1127	16.3	497
	1810	3.3	101
29 Su	0037	16.8	512
	0640	6.9	210
	1244	16.5	503
	1916	2.9	88
30 M	0138	17.7	539
	0744	5.6	171
	1346	17.2	524
	2009	2.3	70
31 Tu	0224	18.6	567
	0833	4.1	125
	1433	18.2	555
	2051	1.6	49

Time meridian 135° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.
Heights are referred to mean lower low water which is the chart datum of soundings.

Nikiski, Alaska, 2015

Times and Heights of High and Low Waters

April

	Time	Height	
	h m	ft	cm
1 W	0301	19.5	594
	0913	2.7	82
	1512	19.1	582
	2128	1.2	37
2 Th	0332	20.2	616
	0948	1.4	43
	1546	19.8	604
	2201	0.9	27
3 F	0401	20.8	634
	1023	0.3	9
	1620	20.4	622
	2234	0.8	24
4 Sa ○	0429	21.2	646
	1056	−0.6	−18
	1654	20.7	631
	2306	0.9	27
5 Su	0456	21.5	655
	1130	−1.1	−34
	1729	20.7	631
	2339	1.3	40
6 M	0524	21.5	655
	1205	−1.3	−40
	1806	20.5	625
7 Tu	0012	1.9	58
	0551	21.3	649
	1240	−1.1	−34
	1845	19.9	607
8 W	0046	2.9	88
	0620	20.8	634
	1319	−0.5	−15
	1929	19.0	579
9 Th	0124	4.1	125
	0653	20.0	610
	1402	0.5	15
	2022	17.9	546
10 F	0210	5.4	165
	0736	18.9	576
	1457	1.6	49
	2125	17.0	518
11 Sa ◑	0312	6.5	198
	0838	17.6	536
	1606	2.4	73
	2238	16.7	509
12 Su	0432	7.0	213
	1012	16.7	509
	1721	2.6	79
	2348	17.2	524
13 M	0551	6.2	189
	1143	17.0	518
	1830	2.0	61
14 Tu	0050	18.4	561
	0700	4.4	134
	1256	18.2	555
	1929	0.9	27
15 W	0142	20.0	610
	0758	2.0	61
	1355	19.8	604
	2022	−0.2	−6

	Time	Height	
	h m	ft	cm
16 Th	0227	21.6	658
	0849	−0.4	−12
	1447	21.3	649
	2109	−1.1	−34
17 F	0308	23.0	701
	0937	−2.5	−76
	1535	22.4	683
	2154	−1.5	−46
18 Sa ●	0348	23.9	728
	1023	−4.1	−125
	1621	23.0	701
	2238	−1.4	−43
19 Su	0428	24.4	744
	1107	−4.9	−149
	1707	23.1	704
	2322	−0.9	−27
20 M	0509	24.2	738
	1152	−4.9	−149
	1755	22.6	689
21 Tu	0005	0.2	6
	0552	23.4	713
	1237	−4.1	−125
	1844	21.7	661
22 W	0050	1.6	49
	0637	22.0	671
	1324	−2.7	−82
	1937	20.4	622
23 Th	0138	3.3	101
	0726	20.3	619
	1414	−0.8	−24
	2035	19.1	582
24 F	0232	4.9	149
	0824	18.3	558
	1511	1.1	34
	2137	17.9	546
25 Sa ◐	0336	6.3	192
	0933	16.6	506
	1615	2.7	82
	2245	17.2	524
26 Su	0449	6.9	210
	1050	15.6	475
	1724	3.7	113
	2352	17.1	521
27 M	0604	6.5	198
	1206	15.5	472
	1829	3.9	119
28 Tu	0052	17.6	536
	0709	5.3	162
	1311	16.1	491
	1925	3.7	113
29 W	0140	18.3	558
	0800	3.7	113
	1403	17.0	518
	2012	3.3	101
30 Th	0220	19.1	582
	0843	2.2	67
	1445	18.0	549
	2052	3.0	91

May

	Time	Height	
	h m	ft	cm
1 F	0254	19.7	600
	0920	0.9	27
	1523	18.8	573
	2128	2.7	82
2 Sa	0324	20.3	619
	0956	−0.3	−9
	1559	19.5	594
	2203	2.5	76
3 Su ○	0353	20.8	634
	1031	−1.3	−40
	1635	20.0	610
	2238	2.5	76
4 M	0421	21.2	646
	1107	−2.0	−61
	1711	20.3	619
	2314	2.6	79
5 Tu	0450	21.4	652
	1143	−2.4	−73
	1749	20.3	619
	2351	2.8	85
6 W	0521	21.4	652
	1221	−2.4	−73
	1831	20.1	613
7 Th	0029	3.3	101
	0555	21.0	640
	1301	−1.9	−58
	1916	19.6	597
8 F	0112	4.0	122
	0636	20.3	619
	1345	−1.1	−34
	2007	19.0	579
9 Sa	0202	4.7	143
	0726	19.2	585
	1437	0.0	0
	2105	18.4	561
10 Su	0302	5.4	165
	0833	18.0	549
	1538	1.1	34
	2208	18.2	555
11 M ◑	0414	5.5	168
	0957	17.0	518
	1647	1.8	55
	2313	18.5	564
12 Tu	0528	4.7	143
	1121	17.0	518
	1755	2.0	61
13 W	0014	19.3	588
	0636	3.0	91
	1235	17.7	539
	1857	1.8	55
14 Th	0108	20.4	622
	0736	0.9	27
	1338	18.9	576
	1953	1.4	43
15 F	0156	21.6	658
	0830	−1.2	−37
	1432	20.1	613
	2044	1.0	30

	Time	Height	
	h m	ft	cm
16 Sa	0240	22.7	692
	0919	−3.0	−91
	1522	21.1	643
	2132	0.8	24
17 Su ●	0322	23.3	710
	1005	−4.2	−128
	1609	21.7	661
	2218	0.8	24
18 M	0404	23.5	716
	1050	−4.8	−146
	1655	21.9	668
	2302	1.1	34
19 Tu	0445	23.2	707
	1134	−4.8	−146
	1741	21.7	661
	2347	1.7	52
20 W	0528	22.5	686
	1218	−4.1	−125
	1829	21.2	646
21 Th	0032	2.5	76
	0614	21.3	649
	1302	−2.9	−88
	1918	20.5	625
22 F	0119	3.5	107
	0702	19.8	604
	1348	−1.3	−40
	2010	19.6	597
23 Sa	0209	4.6	140
	0757	18.2	555
	1437	0.5	15
	2105	18.7	570
24 Su	0305	5.5	168
	0859	16.7	509
	1532	2.2	67
	2202	18.0	549
25 M ◐	0410	6.1	186
	1008	15.6	475
	1631	3.6	110
	2301	17.6	536
26 Tu	0518	5.9	180
	1120	15.1	460
	1734	4.6	140
	2359	17.6	536
27 W	0624	5.1	155
	1227	15.3	466
	1833	5.0	152
28 Th	0050	18.0	549
	0721	3.8	116
	1326	16.0	488
	1925	5.0	152
29 F	0134	18.5	564
	0808	2.3	70
	1415	16.9	515
	2012	4.8	146
30 Sa	0213	19.1	582
	0850	0.9	27
	1458	17.8	543
	2054	4.6	140
31 Su	0247	19.8	604
	0929	−0.4	−12
	1537	18.7	570
	2134	4.2	128

June

	Time	Height	
	h m	ft	cm
1 M	0319	20.4	622
	1007	−1.6	−49
	1615	19.5	594
	2213	3.8	116
2 Tu ○	0351	21.0	640
	1045	−2.5	−76
	1654	20.0	610
	2252	3.5	107
3 W	0424	21.4	652
	1123	−3.2	−98
	1733	20.4	622
	2332	3.2	98
4 Th	0501	21.6	658
	1203	−3.4	−104
	1815	20.6	628
5 F	0015	3.0	91
	0542	21.5	655
	1245	−3.2	−98
	1900	20.6	628
6 Sa	0100	3.1	94
	0629	20.9	637
	1329	−2.5	−76
	1949	20.4	622
7 Su	0150	3.3	101
	0723	19.9	607
	1418	−1.4	−43
	2041	20.0	610
8 M	0248	3.6	110
	0828	18.7	570
	1513	0.0	0
	2138	19.8	604
9 Tu ◑	0353	3.7	113
	0942	17.6	536
	1615	1.4	43
	2238	19.7	600
10 W	0503	3.1	94
	1100	17.1	521
	1721	2.5	76
	2338	20.0	610
11 Th	0612	2.0	61
	1215	17.2	524
	1826	3.1	94
12 F	0036	20.5	625
	0715	0.4	12
	1321	18.0	549
	1926	3.2	98
13 Sa	0129	21.2	646
	0812	−1.2	−37
	1420	18.9	576
	2022	3.1	94
14 Su	0217	21.9	668
	0903	−2.6	−79
	1511	19.8	604
	2113	2.8	85
15 M	0303	22.3	680
	0950	−3.6	−110
	1558	20.5	625
	2201	2.6	79

	Time	Height	
	h m	ft	cm
16 Tu ●	0346	22.4	683
	1035	−4.1	−125
	1643	21.0	640
	2246	2.5	76
17 W	0428	22.2	677
	1117	−4.1	−125
	1727	21.1	643
	2330	2.6	79
18 Th	0511	21.7	661
	1159	−3.6	−110
	1811	21.0	640
19 F	0013	2.8	85
	0554	20.9	637
	1239	−2.7	−82
	1855	20.7	631
20 Sa	0057	3.2	98
	0640	19.9	607
	1320	−1.5	−46
	1940	20.1	613
21 Su	0142	3.8	116
	0729	18.7	570
	1403	0.1	3
	2026	19.5	594
22 M	0231	4.4	134
	0823	17.3	527
	1447	1.8	55
	2115	18.7	570
23 Tu	0326	5.0	152
	0924	16.1	491
	1537	3.5	107
	2207	18.1	552
24 W ◐	0428	5.3	162
	1030	15.2	463
	1634	5.0	152
	2301	17.6	536
25 Th	0533	5.0	152
	1140	14.9	454
	1735	6.0	183
	2355	17.6	536
26 F	0636	4.1	125
	1245	15.2	463
	1836	6.5	198
27 Sa	0046	17.9	546
	0731	2.8	85
	1343	16.1	491
	1931	6.5	198
28 Su	0131	18.4	561
	0819	1.4	43
	1432	17.1	521
	2021	6.0	183
29 M	0212	19.2	585
	0903	−0.1	−3
	1515	18.2	555
	2106	5.3	162
30 Tu	0250	20.1	613
	0944	−1.5	−46
	1555	19.2	585
	2149	4.4	134

Time meridian 135° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.
Heights are referred to mean lower low water which is the chart datum of soundings.

Nikiski, Alaska, 2015

Times and Heights of High and Low Waters

July

	Time	Height	
	h m	ft	cm
1 W ○	0327	21.0	640
	1024	−2.8	−85
	1634	20.2	616
	2232	3.5	107
2 Th	0406	21.8	664
	1104	−3.7	−113
	1714	21.0	640
	2315	2.6	79
3 F	0448	22.3	680
	1145	−4.2	−128
	1755	21.5	655
	2359	1.9	58
4 Sa	0533	22.4	683
	1226	−4.1	−125
	1838	21.8	664
5 Su	0045	1.5	46
	0622	21.9	668
	1310	−3.4	−104
	1923	21.8	664
6 M	0134	1.4	43
	0716	21.0	640
	1356	−2.1	−64
	2012	21.6	658
7 Tu	0228	1.6	49
	0817	19.6	597
	1447	−0.3	−9
	2105	21.1	643
8 W ◑	0330	2.0	61
	0925	18.2	555
	1544	1.7	52
	2202	20.5	625
9 Th	0437	2.1	64
	1039	17.2	524
	1650	3.4	104
	2304	20.1	613
10 F	0548	1.6	49
	1156	16.9	515
	1758	4.5	137
11 Sa	0008	20.1	613
	0656	0.7	21
	1308	17.3	527
	1905	4.9	149
12 Su	0108	20.3	619
	0756	−0.5	−15
	1410	18.2	555
	2006	4.7	143
13 M	0202	20.7	631
	0849	−1.7	−52
	1503	19.1	582
	2059	4.2	128
14 Tu	0251	21.1	643
	0936	−2.5	−76
	1549	20.0	610
	2147	3.6	110
15 W ●	0335	21.4	652
	1019	−3.0	−91
	1630	20.6	628
	2231	3.0	91

	Time	Height	
	h m	ft	cm
16 Th	0416	21.5	655
	1059	−3.1	−94
	1709	20.9	637
	2312	2.6	79
17 F	0456	21.3	649
	1137	−2.8	−85
	1747	21.1	643
	2352	2.4	73
18 Sa	0536	20.9	637
	1214	−2.2	−67
	1825	21.0	640
19 Su	0032	2.4	73
	0618	20.3	619
	1251	−1.3	−40
	1903	20.7	631
20 M	0113	2.7	82
	0701	19.4	591
	1327	0.1	3
	1943	20.1	613
21 Tu	0155	3.2	98
	0748	18.2	555
	1405	1.7	52
	2024	19.4	591
22 W	0242	3.9	119
	0841	16.9	515
	1446	3.5	107
	2108	18.5	564
23 Th ◐	0336	4.5	137
	0942	15.7	479
	1534	5.3	162
	2158	17.7	539
24 F	0440	4.8	146
	1053	14.9	454
	1636	6.8	207
	2255	17.1	521
25 Sa	0548	4.5	137
	1205	14.9	454
	1747	7.7	235
	2356	17.1	521
26 Su	0652	3.5	107
	1310	15.6	475
	1853	7.6	232
27 M	0052	17.7	539
	0747	2.1	64
	1405	16.8	512
	1951	6.9	210
28 Tu	0142	18.7	570
	0836	0.4	12
	1451	18.2	555
	2042	5.7	174
29 W	0227	20.0	610
	0919	−1.3	−40
	1532	19.5	594
	2128	4.2	128
30 Th	0310	21.3	649
	1001	−2.8	−85
	1610	20.8	634
	2212	2.6	79
31 F ○	0353	22.4	683
	1042	−3.9	−119
	1649	21.9	668
	2256	1.1	34

August

	Time	Height	
	h m	ft	cm
1 Sa	0436	23.2	707
	1123	−4.4	−134
	1728	22.8	695
	2340	0.0	0
2 Su	0522	23.4	713
	1205	−4.3	−131
	1810	23.2	707
3 M	0026	−0.6	−18
	0611	23.0	701
	1247	−3.5	−107
	1853	23.3	710
4 Tu	0114	−0.7	−21
	0703	22.0	671
	1332	−1.9	−58
	1939	22.8	695
5 W	0206	−0.2	−6
	0801	20.5	625
	1421	0.2	6
	2030	21.9	668
6 Th ◑	0305	0.6	18
	0906	18.8	573
	1517	2.6	79
	2127	20.7	631
7 F	0411	1.5	46
	1020	17.4	530
	1623	4.7	143
	2233	19.7	600
8 Sa	0524	1.8	55
	1139	16.8	512
	1736	6.0	183
	2345	19.1	582
9 Su	0636	1.4	43
	1255	17.1	521
	1849	6.2	189
10 M	0054	19.2	585
	0741	0.6	18
	1401	18.0	549
	1954	5.6	171
11 Tu	0154	19.6	597
	0835	−0.4	−12
	1452	19.1	582
	2048	4.6	140
12 W	0244	20.2	616
	0921	−1.2	−37
	1534	20.0	610
	2134	3.6	110
13 Th	0326	20.7	631
	1001	−1.7	−52
	1611	20.6	628
	2214	2.7	82
14 F ●	0404	21.1	643
	1038	−1.9	−58
	1645	21.1	643
	2252	2.0	61
15 Sa	0441	21.3	649
	1113	−1.7	−52
	1717	21.4	652
	2329	1.5	46

	Time	Height	
	h m	ft	cm
16 Su	0517	21.2	646
	1147	−1.3	−40
	1750	21.4	652
17 M	0005	1.3	40
	0555	20.8	634
	1220	−0.5	−15
	1823	21.2	646
18 Tu	0042	1.4	43
	0634	20.1	613
	1253	0.7	21
	1856	20.7	631
19 W	0120	1.9	58
	0716	19.1	582
	1326	2.1	64
	1929	19.9	607
20 Th	0200	2.6	79
	0803	17.8	543
	1402	3.9	119
	2005	18.9	576
21 F	0248	3.6	110
	0900	16.5	503
	1443	5.7	174
	2046	17.9	546
22 Sa ◐	0347	4.4	134
	1009	15.5	472
	1542	7.4	226
	2145	17.0	518
23 Su	0500	4.7	143
	1126	15.2	463
	1703	8.4	256
	2303	16.6	506
24 M	0612	4.0	122
	1238	15.8	482
	1821	8.2	250
25 Tu	0017	17.1	521
	0714	2.7	82
	1336	17.1	521
	1925	7.0	213
26 W	0118	18.4	561
	0807	0.9	27
	1424	18.6	567
	2019	5.2	158
27 Th	0209	20.0	610
	0853	−0.8	−24
	1504	20.3	619
	2107	3.1	94
28 F	0255	21.6	658
	0936	−2.3	−70
	1542	21.8	664
	2152	1.1	34
29 Sa ○	0339	23.0	701
	1018	−3.4	−104
	1620	23.1	704
	2236	−0.7	−21
30 Su	0423	24.0	732
	1059	−3.9	−119
	1658	24.1	735
	2320	−2.1	−64
31 M	0509	24.2	738
	1141	−3.6	−110
	1738	24.5	747

September

	Time	Height	
	h m	ft	cm
1 Tu	0005	−2.7	−82
	0557	23.8	725
	1223	−2.6	−79
	1820	24.3	741
2 W	0052	−2.5	−76
	0648	22.7	692
	1308	−0.9	−27
	1905	23.5	716
3 Th	0143	−1.6	−49
	0744	21.1	643
	1356	1.4	43
	1956	22.1	674
4 F	0239	−0.2	−6
	0848	19.3	588
	1452	3.8	116
	2054	20.4	622
5 Sa ◑	0344	1.3	40
	1001	17.8	543
	1559	5.8	177
	2205	18.9	576
6 Su	0457	2.3	70
	1120	17.1	521
	1717	7.0	213
	2325	18.0	549
7 M	0613	2.4	73
	1239	17.4	530
	1835	6.8	207
8 Tu	0042	18.1	552
	0721	1.8	55
	1344	18.3	558
	1942	5.7	174
9 W	0145	18.8	573
	0815	1.0	30
	1433	19.4	591
	2034	4.4	134
10 Th	0234	19.6	597
	0900	0.3	9
	1511	20.3	619
	2117	3.1	94
11 F	0314	20.3	619
	0938	−0.1	−3
	1544	20.9	637
	2155	2.0	61
12 Sa ●	0350	20.9	637
	1012	−0.3	−9
	1615	21.4	652
	2230	1.1	34
13 Su	0423	21.2	646
	1045	−0.2	−6
	1644	21.7	661
	2304	0.5	15
14 M	0457	21.3	649
	1117	0.2	6
	1713	21.8	664
	2339	0.2	6
15 Tu	0532	21.2	646
	1149	0.8	24
	1741	21.6	658

	Time	Height	
	h m	ft	cm
16 W	0013	0.2	6
	0609	20.7	631
	1221	1.8	55
	1810	21.2	646
17 Th	0048	0.6	18
	0649	19.8	604
	1253	3.0	91
	1838	20.5	625
18 F	0125	1.4	43
	0733	18.7	570
	1328	4.5	137
	1907	19.6	597
19 Sa	0208	2.4	73
	0826	17.4	530
	1409	6.2	189
	1942	18.4	561
20 Su ◐	0302	3.5	107
	0933	16.3	497
	1507	7.7	235
	2035	17.2	524
21 M	0414	4.3	131
	1050	16.0	488
	1631	8.5	259
	2213	16.4	500
22 Tu	0531	4.1	125
	1203	16.5	503
	1753	8.1	247
	2346	16.8	512
23 W	0639	3.1	94
	1303	17.8	543
	1901	6.5	198
24 Th	0055	18.2	555
	0735	1.6	49
	1352	19.4	591
	1956	4.2	128
25 F	0150	20.0	610
	0824	0.0	0
	1433	21.2	646
	2045	1.8	55
26 Sa	0239	21.8	664
	0909	−1.3	−40
	1512	22.8	695
	2131	−0.6	−18
27 Su ○	0324	23.2	707
	0952	−2.2	−67
	1549	24.2	738
	2216	−2.5	−76
28 M	0409	24.2	738
	1035	−2.5	−76
	1628	25.1	765
	2300	−3.7	−113
29 Tu	0455	24.4	744
	1117	−2.1	−64
	1707	25.3	771
	2345	−4.2	−128
30 W	0542	24.0	732
	1200	−1.0	−30
	1749	24.8	756

Time meridian 135° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.
Heights are referred to mean lower low water which is the chart datum of soundings.

Nikiski, Alaska, 2015

Times and Heights of High and Low Waters

October

	Time	Height	
	h m	ft	cm
1 Th	0031	−3.7	−113
	0633	22.9	698
	1245	0.6	18
	1834	23.7	722
2 F	0121	−2.5	−76
	0728	21.4	652
	1334	2.6	79
	1924	22.0	671
3 Sa	0214	−0.7	−21
	0830	19.8	604
	1430	4.8	146
	2024	19.9	607
4 Su ◑	0316	1.2	37
	0939	18.4	561
	1537	6.5	198
	2137	18.1	552
5 M	0427	2.7	82
	1056	17.7	539
	1655	7.3	223
	2301	17.1	521
6 Tu	0541	3.3	101
	1211	17.9	546
	1815	6.9	210
7 W	0021	17.2	524
	0650	3.1	94
	1314	18.7	570
	1922	5.6	171
8 Th	0126	17.9	546
	0746	2.6	79
	1402	19.6	597
	2014	4.0	122
9 F	0216	18.9	576
	0831	2.1	64
	1440	20.4	622
	2055	2.6	79
10 Sa	0256	19.7	600
	0909	1.7	52
	1513	21.1	643
	2132	1.4	43
11 Su	0331	20.4	622
	0943	1.6	49
	1542	21.5	655
	2206	0.4	12
12 M ●	0404	20.9	637
	1016	1.7	52
	1610	21.9	668
	2240	−0.3	−9
13 Tu	0438	21.2	646
	1049	1.9	58
	1637	22.0	671
	2313	−0.7	−21
14 W	0513	21.2	646
	1121	2.4	73
	1704	21.9	668
	2347	−0.8	−24
15 Th	0549	20.9	637
	1154	3.1	94
	1730	21.6	658

	Time	Height	
	h m	ft	cm
16 F	0022	−0.5	−15
	0628	20.3	619
	1228	4.0	122
	1758	21.0	640
17 Sa	0059	0.2	6
	0711	19.4	591
	1306	5.1	155
	1829	20.2	616
18 Su	0140	1.2	37
	0802	18.4	561
	1350	6.3	192
	1907	19.1	582
19 M	0231	2.3	70
	0904	17.6	536
	1448	7.4	226
	2003	17.7	539
20 Tu ◐	0336	3.3	101
	1014	17.2	524
	1606	7.9	241
	2139	16.7	509
21 W	0450	3.7	113
	1124	17.6	536
	1726	7.3	223
	2316	16.8	512
22 Th	0600	3.2	98
	1225	18.7	570
	1835	5.5	168
23 F	0031	18.0	549
	0701	2.3	70
	1316	20.3	619
	1933	3.1	94
24 Sa	0131	19.6	597
	0754	1.2	37
	1401	21.9	668
	2024	0.6	18
25 Su	0222	21.3	649
	0842	0.3	9
	1441	23.5	716
	2111	−1.7	−52
26 M	0310	22.7	692
	0927	−0.3	−9
	1521	24.7	753
	2157	−3.5	−107
27 Tu ○	0355	23.6	719
	1012	−0.4	−12
	1600	25.3	771
	2242	−4.6	−140
28 W	0441	23.9	728
	1056	−0.1	−3
	1641	25.4	774
	2327	−4.9	−149
29 Th	0529	23.6	719
	1140	0.7	21
	1723	24.7	753
30 F	0013	−4.3	−131
	0618	22.8	695
	1226	2.0	61
	1808	23.5	716
31 Sa	0100	−3.0	−91
	0712	21.7	661
	1315	3.5	107
	1858	21.7	661

November

	Time	Height	
	h m	ft	cm
1 Su	0151	−1.1	−34
	0810	20.4	622
	1409	5.1	155
	1957	19.6	597
2 M	0246	0.9	27
	0913	19.2	585
	1513	6.5	198
	2107	17.8	543
3 Tu ◑	0350	2.7	82
	1021	18.5	564
	1626	7.1	216
	2227	16.6	506
4 W	0459	3.9	119
	1130	18.3	558
	1742	6.8	207
	2346	16.4	500
5 Th	0606	4.3	131
	1231	18.8	573
	1850	5.6	171
6 F	0054	16.9	515
	0705	4.3	131
	1322	19.4	591
	1944	4.0	122
7 Sa	0148	17.8	543
	0754	4.1	125
	1403	20.1	613
	2028	2.6	79
8 Su	0232	18.7	570
	0835	3.9	119
	1437	20.7	631
	2106	1.2	37
9 M	0310	19.6	597
	0912	3.7	113
	1508	21.2	646
	2141	0.2	6
10 Tu	0345	20.2	616
	0947	3.7	113
	1537	21.6	658
	2216	−0.7	−21
11 W ●	0420	20.7	631
	1022	3.7	113
	1605	21.9	668
	2251	−1.3	−40
12 Th	0456	20.9	637
	1057	3.8	116
	1633	22.0	671
	2326	−1.5	−46
13 F	0533	20.9	637
	1133	4.0	122
	1702	21.9	668
14 Sa	0002	−1.5	−46
	0612	20.7	631
	1210	4.5	137
	1733	21.5	655
15 Su	0040	−1.0	−30
	0655	20.3	619
	1251	5.0	152
	1810	20.8	634

	Time	Height	
	h m	ft	cm
16 M	0121	−0.3	−9
	0743	19.7	600
	1337	5.7	174
	1855	19.8	604
17 Tu	0208	0.8	24
	0837	19.1	582
	1434	6.4	195
	1955	18.5	564
18 W ◐	0305	2.0	61
	0939	18.8	573
	1542	6.6	201
	2118	17.4	530
19 Th	0412	2.9	88
	1043	19.0	579
	1657	5.9	180
	2247	17.1	521
20 F	0521	3.3	101
	1144	19.7	600
	1807	4.4	134
21 Sa	0005	17.7	539
	0625	3.2	98
	1239	20.8	634
	1909	2.2	67
22 Su	0111	19.0	579
	0723	2.8	85
	1329	22.1	674
	2004	−0.1	−3
23 M	0207	20.4	622
	0816	2.3	70
	1414	23.4	713
	2054	−2.1	−64
24 Tu	0257	21.6	658
	0905	1.9	58
	1456	24.3	741
	2141	−3.7	−113
25 W ○	0345	22.5	686
	0952	1.6	49
	1538	24.8	756
	2226	−4.6	−140
26 Th	0431	23.0	701
	1038	1.7	52
	1620	24.7	753
	2311	−4.8	−146
27 F	0517	23.0	701
	1123	2.1	64
	1704	24.1	735
	2355	−4.3	−131
28 Sa	0605	22.6	689
	1209	2.7	82
	1749	23.0	701
29 Su	0040	−3.1	−94
	0654	21.9	668
	1257	3.6	110
	1838	21.5	655
30 M	0126	−1.5	−46
	0746	21.0	640
	1347	4.7	143
	1932	19.8	604

December

	Time	Height	
	h m	ft	cm
1 Tu	0215	0.4	12
	0841	20.0	610
	1443	5.7	174
	2034	18.0	549
2 W ◑	0308	2.3	70
	0938	19.2	585
	1547	6.4	195
	2144	16.6	506
3 Th	0408	4.0	122
	1038	18.7	570
	1656	6.4	195
	2258	15.9	485
4 F	0511	5.2	158
	1138	18.6	567
	1805	5.7	174
5 Sa	0009	15.9	485
	0613	5.9	180
	1232	18.8	573
	1906	4.5	137
6 Su	0111	16.6	506
	0709	6.1	186
	1319	19.3	588
	1956	3.1	94
7 M	0203	17.5	533
	0757	6.0	183
	1400	19.8	604
	2038	1.7	52
8 Tu	0247	18.4	561
	0840	5.7	174
	1435	20.4	622
	2117	0.4	12
9 W	0326	19.3	588
	0920	5.4	165
	1508	21.0	640
	2154	−0.6	−18
10 Th	0403	20.1	613
	0958	5.0	152
	1539	21.5	655
	2230	−1.5	−46
11 F ●	0440	20.6	628
	1036	4.6	140
	1611	21.9	668
	2307	−2.1	−64
12 Sa	0517	21.0	640
	1115	4.2	128
	1644	22.1	674
	2344	−2.4	−73
13 Su	0556	21.3	649
	1155	4.0	122
	1721	22.0	671
14 M	0023	−2.3	−70
	0637	21.3	649
	1238	4.0	122
	1803	21.6	658
15 Tu	0104	−1.8	−55
	0721	21.1	643
	1324	4.1	125
	1851	20.7	631

	Time	Height	
	h m	ft	cm
16 W	0148	−0.7	−21
	0809	20.8	634
	1416	4.4	134
	1950	19.5	594
17 Th	0238	0.7	21
	0902	20.4	622
	1518	4.5	137
	2100	18.3	558
18 F ◐	0336	2.2	67
	1000	20.2	616
	1627	4.3	131
	2220	17.4	530
19 Sa	0442	3.5	107
	1102	20.4	622
	1738	3.4	104
	2339	17.4	530
20 Su	0550	4.3	131
	1202	20.8	634
	1845	1.8	55
21 M	0051	18.1	552
	0655	4.5	137
	1259	21.6	658
	1945	0.0	0
22 Tu	0154	19.2	585
	0754	4.2	128
	1351	22.4	683
	2038	−1.7	−52
23 W	0248	20.4	622
	0848	3.7	113
	1439	23.1	704
	2127	−3.1	−94
24 Th	0337	21.3	649
	0938	3.2	98
	1524	23.6	719
	2213	−3.9	−119
25 F ○	0422	22.0	671
	1024	2.8	85
	1608	23.6	719
	2257	−4.2	−128
26 Sa	0506	22.4	683
	1109	2.6	79
	1651	23.3	710
	2339	−3.9	−119
27 Su	0549	22.4	683
	1153	2.7	82
	1735	22.6	689
28 M	0020	−3.1	−94
	0633	22.1	674
	1237	3.0	91
	1821	21.5	655
29 Tu	0101	−1.8	−55
	0717	21.5	655
	1322	3.6	110
	1908	20.2	616
30 W	0143	−0.1	−3
	0802	20.8	634
	1410	4.3	131
	2001	18.7	570
31 Th	0226	1.8	55
	0850	19.9	607
	1503	5.1	155
	2059	17.2	524

Time meridian 135° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.
Heights are referred to mean lower low water which is the chart datum of soundings.

Anchorage, Alaska, 2015

Times and Heights of High and Low Waters

January

	Time	Height	
	h m	ft	cm
1 Th	0433	27.0	823
	1048	5.6	171
	1627	29.1	887
	2337	−1.5	−46
2 F	0533	28.0	853
	1151	5.1	155
	1719	29.3	893
3 Sa	0028	−2.2	−67
	0621	28.7	875
	1240	4.7	143
	1803	29.5	899
4 Su ○	0113	−2.3	−70
	0701	29.1	887
	1323	4.5	137
	1842	29.8	908
5 M	0152	−1.8	−55
	0736	29.3	893
	1401	4.5	137
	1919	30.0	914
6 Tu	0226	−1.3	−40
	0806	29.4	896
	1434	4.4	134
	1954	29.9	911
7 W	0257	−0.8	−24
	0836	29.6	902
	1504	4.2	128
	2029	29.5	899
8 Th	0327	−0.4	−12
	0907	29.6	902
	1536	3.9	119
	2103	28.7	875
9 F	0358	0.0	0
	0940	29.5	899
	1611	3.6	110
	2138	27.8	847
10 Sa	0431	0.8	24
	1016	29.1	887
	1649	3.4	104
	2216	26.6	811
11 Su	0505	2.0	61
	1054	28.4	866
	1732	3.5	107
	2301	25.3	771
12 M	0542	3.7	113
	1137	27.5	838
	1820	3.8	116
	2357	23.8	725
13 Tu ◑	0625	5.8	177
	1231	26.4	805
	1918	4.2	128
14 W	0110	22.7	692
	0720	7.9	241
	1339	25.7	783
	2033	4.0	122
15 Th	0238	22.7	692
	0843	9.1	277
	1445	25.8	786
	2147	2.8	85

	Time	Height	
	h m	ft	cm
16 F	0402	23.9	728
	1002	8.5	259
	1545	26.7	814
	2249	1.2	37
17 Sa	0501	25.7	783
	1100	7.3	223
	1639	28.2	860
	2346	−0.5	−15
18 Su	0549	27.5	838
	1155	5.8	177
	1728	29.8	908
19 M	0038	−2.1	−64
	0631	29.0	884
	1247	4.2	128
	1816	31.3	954
20 Tu ●	0127	−3.6	−110
	0712	30.2	920
	1337	2.6	79
	1902	32.5	991
21 W	0212	−4.6	−140
	0753	31.1	948
	1425	1.2	37
	1948	33.1	1009
22 Th	0255	−5.1	−155
	0832	31.8	969
	1511	0.0	0
	2034	33.2	1012
23 F	0338	−4.9	−149
	0913	32.4	988
	1557	−0.8	−24
	2120	32.7	997
24 Sa	0419	−4.0	−122
	0955	32.7	997
	1643	−1.1	−34
	2208	31.6	963
25 Su	0502	−2.3	−70
	1041	32.4	988
	1732	−0.7	−21
	2301	29.9	911
26 M ◐	0546	0.1	3
	1132	31.4	957
	1825	0.1	3
27 Tu	0004	27.8	847
	0637	3.0	91
	1232	29.8	908
	1928	1.2	37
28 W	0128	26.0	792
	0743	5.8	177
	1342	28.2	860
	2043	1.9	58
29 Th	0300	25.4	774
	0905	7.4	226
	1456	27.1	826
	2210	1.4	43
30 F	0419	26.2	799
	1031	7.2	219
	1606	27.0	823
	2318	0.1	3
31 Sa	0520	27.3	832
	1134	6.0	183
	1702	27.4	835

February

	Time	Height	
	h m	ft	cm
1 Su	0010	−0.9	−27
	0608	28.2	860
	1224	4.8	146
	1749	28.1	856
2 M	0053	−1.4	−43
	0646	28.6	872
	1305	4.1	125
	1828	28.9	881
3 Tu ○	0131	−1.3	−40
	0717	29.0	884
	1342	3.6	110
	1904	29.5	899
4 W	0204	−1.1	−34
	0743	29.3	893
	1415	3.2	98
	1938	30.0	914
5 Th	0234	−0.9	−27
	0810	29.8	908
	1445	2.7	82
	2012	30.0	914
6 F	0304	−0.6	−18
	0839	30.1	917
	1516	2.0	61
	2046	29.6	902
7 Sa	0334	−0.1	−3
	0911	30.2	920
	1550	1.5	46
	2120	29.0	884
8 Su	0405	0.7	21
	0942	29.9	911
	1626	1.3	40
	2155	28.0	853
9 M	0435	1.9	58
	1013	29.3	893
	1706	1.4	43
	2235	26.7	814
10 Tu	0509	3.5	107
	1048	28.3	863
	1749	2.0	61
	2322	25.1	765
11 W ◑	0548	5.5	168
	1130	27.0	823
	1838	2.9	88
12 Th	0023	23.6	719
	0637	7.7	235
	1226	25.7	783
	1937	3.6	110
13 F	0144	22.9	698
	0740	9.4	287
	1339	25.1	765
	2053	3.4	104
14 Sa	0320	23.8	725
	0910	9.4	287
	1456	25.8	786
	2207	2.0	61
15 Su	0431	25.6	780
	1025	7.7	235
	1606	27.6	841
	2314	0.2	6

	Time	Height	
	h m	ft	cm
16 M	0524	27.7	844
	1130	5.5	168
	1707	29.6	902
17 Tu	0014	−1.7	−52
	0609	29.5	899
	1229	3.2	98
	1759	31.6	963
18 W ●	0105	−3.4	−104
	0650	30.9	942
	1322	1.0	30
	1848	33.0	1006
19 Th	0152	−4.6	−140
	0730	32.0	975
	1410	−1.0	−30
	1934	33.8	1030
20 F	0236	−5.0	−152
	0809	32.9	1003
	1456	−2.4	−73
	2020	34.0	1036
21 Sa	0318	−4.6	−140
	0848	33.6	1024
	1541	−3.2	−98
	2106	33.6	1024
22 Su	0359	−3.5	−107
	0929	33.7	1027
	1626	−3.1	−94
	2154	32.4	988
23 M	0440	−1.5	−46
	1012	33.1	1009
	1711	−2.3	−70
	2245	30.6	933
24 Tu	0522	1.2	37
	1059	31.5	960
	1759	−0.6	−18
	2345	28.3	863
25 W ◐	0608	4.4	134
	1154	29.1	887
	1853	1.4	43
26 Th	0102	26.2	799
	0711	7.4	226
	1304	26.7	814
	2001	3.1	94
27 F	0230	25.2	768
	0841	8.8	268
	1423	25.2	768
	2130	3.6	110
28 Sa	0354	25.7	783
	1010	8.1	247
	1543	25.1	765
	2251	2.4	73

March

	Time	Height	
	h m	ft	cm
1 Su	0457	26.9	820
	1113	6.1	186
	1644	26.0	792
	2343	1.0	30
2 M	0544	27.9	850
	1202	4.4	134
	1731	27.2	829
3 Tu	0026	0.1	3
	0621	28.6	872
	1243	3.2	98
	1811	28.3	863
4 W	0102	−0.3	−9
	0650	29.1	887
	1319	2.4	73
	1846	29.3	893
5 Th ○	0136	−0.4	−12
	0714	29.6	902
	1352	1.7	52
	1920	30.0	914
6 F	0208	−0.3	−9
	0741	30.2	920
	1423	1.1	34
	1954	30.4	927
7 Sa	0239	0.0	0
	0810	30.7	936
	1455	0.4	12
	2028	30.3	924
8 Su	0310	0.6	18
	0841	30.8	939
	1529	−0.1	−3
	2102	29.8	908
9 M	0339	1.5	46
	0910	30.4	927
	1604	−0.2	−6
	2136	28.9	881
10 Tu	0408	2.6	79
	0939	29.8	908
	1642	0.1	3
	2214	27.7	844
11 W	0441	4.0	122
	1011	28.8	878
	1722	0.8	24
	2258	26.3	802
12 Th	0520	5.7	174
	1052	27.5	838
	1808	1.8	55
	2353	24.9	759
13 F ◑	0608	7.6	232
	1147	26.1	796
	1901	2.8	85
14 Sa	0104	24.1	735
	0709	9.0	274
	1255	25.3	771
	2009	3.3	101
15 Su	0237	24.6	750
	0833	8.9	271
	1415	25.7	783
	2128	2.5	76

	Time	Height	
	h m	ft	cm
16 M	0356	26.3	802
	0958	7.0	213
	1537	27.4	835
	2240	0.9	27
17 Tu	0454	28.4	866
	1109	4.4	134
	1647	29.6	902
	2346	−0.9	−27
18 W	0542	30.3	924
	1212	1.7	52
	1742	31.6	963
19 Th	0041	−2.4	−73
	0625	31.7	966
	1305	−0.8	−24
	1832	32.9	1003
20 F ●	0129	−3.3	−101
	0704	32.8	1000
	1354	−2.7	−82
	1920	33.7	1027
21 Sa	0214	−3.5	−107
	0743	33.6	1024
	1440	−3.9	−119
	2006	33.9	1033
22 Su	0257	−2.9	−88
	0822	34.1	1039
	1523	−4.3	−131
	2052	33.5	1021
23 M	0338	−1.6	−49
	0902	33.9	1033
	1606	−3.8	−116
	2139	32.5	991
24 Tu	0418	0.3	9
	0943	32.8	1000
	1648	−2.5	−76
	2229	30.8	939
25 W	0457	2.8	85
	1027	30.8	939
	1731	−0.6	−18
	2325	28.8	878
26 Th ◐	0540	5.6	171
	1117	28.1	856
	1818	1.8	55
27 F	0031	26.8	817
	0636	8.3	253
	1223	25.4	774
	1915	3.9	119
28 Sa	0146	25.5	777
	0809	9.5	290
	1344	23.7	722
	2028	5.0	152
29 Su	0313	25.4	774
	0937	8.4	256
	1511	23.6	719
	2155	4.7	143
30 M	0420	26.5	808
	1043	6.1	186
	1620	24.8	756
	2302	3.2	98
31 Tu	0508	27.6	841
	1133	3.9	119
	1710	26.4	805
	2348	1.9	58

Time meridian 135° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.
Heights are referred to mean lower low water which is the chart datum of soundings.

Anchorage, Alaska, 2015

Times and Heights of High and Low Waters

April

	Time	Height	
	h m	ft	cm
1 W	0545	28.5	869
	1215	2.2	67
	1750	27.7	844
2 Th	0027	1.1	34
	0614	29.1	887
	1252	1.2	37
	1825	28.8	878
3 F	0104	0.8	24
	0640	29.8	908
	1327	0.4	12
	1859	29.6	902
4 Sa ○	0139	0.9	27
	0709	30.5	930
	1400	−0.2	−6
	1934	30.2	920
5 Su	0212	1.4	43
	0740	30.9	942
	1433	−0.7	−21
	2010	30.3	924
6 M	0244	2.0	61
	0811	30.9	942
	1508	−1.1	−34
	2046	30.0	914
7 Tu	0314	2.8	85
	0840	30.5	930
	1543	−1.1	−34
	2121	29.2	890
8 W	0345	3.7	113
	0910	29.9	911
	1621	−0.7	−21
	2159	28.2	860
9 Th	0420	4.7	143
	0944	28.9	881
	1700	0.0	0
	2242	27.2	829
10 F	0500	5.9	180
	1028	27.7	844
	1744	1.0	30
	2333	26.2	799
11 Sa ◑	0549	7.2	219
	1123	26.5	808
	1835	2.0	61
12 Su	0037	25.7	783
	0650	8.0	244
	1230	25.7	783
	1938	2.7	82
13 M	0159	26.1	796
	0810	7.6	232
	1347	25.9	789
	2054	2.4	73
14 Tu	0319	27.6	841
	0936	5.4	165
	1514	27.3	832
	2206	1.4	43
15 W	0421	29.4	896
	1050	2.7	82
	1628	29.2	890
	2316	0.3	9

	Time	Height	
	h m	ft	cm
16 Th	0512	31.0	945
	1154	0.0	0
	1727	30.9	942
17 F	0015	−0.7	−21
	0557	32.2	981
	1249	−2.2	−67
	1819	32.0	975
18 Sa ●	0106	−1.1	−34
	0638	33.0	1006
	1337	−3.6	−110
	1907	32.6	994
19 Su	0152	−1.0	−30
	0717	33.5	1021
	1423	−4.3	−131
	1953	32.7	997
20 M	0236	−0.4	−12
	0756	33.6	1024
	1505	−4.2	−128
	2038	32.5	991
21 Tu	0317	0.8	24
	0836	33.1	1009
	1546	−3.4	−104
	2124	31.7	966
22 W	0356	2.4	73
	0917	31.8	969
	1625	−2.0	−61
	2211	30.5	930
23 Th	0434	4.3	131
	0959	29.8	908
	1703	−0.2	−6
	2301	28.9	881
24 F	0514	6.3	192
	1044	27.2	829
	1744	1.8	55
	2355	27.3	832
25 Sa ◐	0601	8.1	247
	1141	24.7	753
	1832	3.7	113
26 Su	0056	26.1	796
	0718	9.1	277
	1258	23.0	701
	1935	5.1	155
27 M	0203	25.6	780
	0848	8.2	250
	1419	22.7	692
	2047	5.4	165
28 Tu	0319	26.1	796
	0958	5.9	180
	1544	23.7	722
	2156	4.7	143
29 W	0416	27.1	826
	1053	3.6	110
	1642	25.3	771
	2257	3.7	113
30 Th	0458	28.1	856
	1140	1.6	49
	1726	26.7	814
	2347	2.9	88

May

	Time	Height	
	h m	ft	cm
1 F	0532	28.9	881
	1221	0.3	9
	1803	27.8	847
2 Sa	0030	2.6	79
	0604	29.6	902
	1259	−0.5	−15
	1838	28.7	875
3 Su ○	0109	2.7	82
	0637	30.3	924
	1335	−1.0	−30
	1914	29.4	896
4 M	0145	3.1	94
	0710	30.6	933
	1412	−1.5	−46
	1952	29.7	905
5 Tu	0219	3.5	107
	0743	30.7	936
	1448	−1.7	−52
	2030	29.6	902
6 W	0253	4.0	122
	0814	30.4	927
	1525	−1.7	−52
	2108	29.2	890
7 Th	0327	4.4	134
	0848	29.8	908
	1603	−1.4	−43
	2147	28.6	872
8 F	0405	5.0	152
	0927	29.0	884
	1643	−0.8	−24
	2230	28.0	853
9 Sa	0449	5.6	171
	1013	28.0	853
	1726	0.0	0
	2318	27.6	841
10 Su	0538	6.1	186
	1109	27.0	823
	1815	0.9	27
11 M ◑	0016	27.5	838
	0638	6.2	189
	1212	26.3	802
	1914	1.8	55
12 Tu	0128	27.8	847
	0755	5.4	165
	1327	26.2	799
	2025	2.2	67
13 W	0242	28.8	878
	0916	3.4	104
	1455	27.0	823
	2135	2.0	61
14 Th	0347	30.1	917
	1031	1.0	30
	1614	28.3	863
	2245	1.8	55
15 F	0442	31.2	951
	1137	−1.2	−37
	1716	29.6	902
	2351	1.6	49

	Time	Height	
	h m	ft	cm
16 Sa	0530	31.9	972
	1233	−2.9	−88
	1809	30.5	930
17 Su ●	0045	1.4	43
	0613	32.3	985
	1322	−3.8	−116
	1858	31.0	945
18 M	0133	1.6	49
	0654	32.5	991
	1407	−3.9	−119
	1943	31.1	948
19 Tu	0217	2.1	64
	0734	32.3	985
	1448	−3.5	−107
	2026	31.0	945
20 W	0257	2.8	85
	0814	31.7	966
	1527	−2.5	−76
	2108	30.6	933
21 Th	0336	3.8	116
	0854	30.5	930
	1603	−1.3	−40
	2150	29.9	911
22 F	0413	4.9	149
	0935	28.8	878
	1638	0.0	0
	2232	28.9	881
23 Sa	0449	6.0	183
	1017	26.8	817
	1714	1.4	43
	2317	27.8	847
24 Su	0531	6.9	210
	1105	24.8	756
	1755	2.8	85
25 M ◐	0008	26.9	820
	0623	7.4	226
	1207	23.2	707
	1847	4.3	131
26 Tu	0104	26.4	805
	0741	7.1	216
	1321	22.5	686
	1954	5.4	165
27 W	0204	26.3	802
	0900	5.5	168
	1439	22.8	695
	2106	5.6	171
28 Th	0305	26.7	814
	1003	3.4	104
	1603	23.9	728
	2209	5.2	158
29 F	0401	27.4	835
	1058	1.5	46
	1658	25.4	774
	2305	4.8	146
30 Sa	0448	28.2	860
	1146	0.1	3
	1740	26.6	811
	2354	4.6	140
31 Su	0528	28.9	881
	1229	−0.8	−24
	1818	27.6	841

June

	Time	Height	
	h m	ft	cm
1 M	0038	4.5	137
	0606	29.6	902
	1310	−1.4	−43
	1856	28.4	866
2 Tu ○	0118	4.5	137
	0642	30.1	917
	1350	−1.9	−58
	1935	29.0	884
3 W	0156	4.4	134
	0718	30.5	930
	1429	−2.3	−70
	2014	29.3	893
4 Th	0235	4.3	131
	0755	30.4	927
	1508	−2.5	−76
	2054	29.3	893
5 F	0314	4.2	128
	0835	30.0	914
	1548	−2.3	−70
	2133	29.2	890
6 Sa	0356	4.2	128
	0918	29.5	899
	1628	−1.9	−58
	2215	29.1	887
7 Su	0442	4.1	125
	1005	28.7	875
	1711	−1.3	−40
	2301	29.1	887
8 M	0531	4.0	122
	1058	27.9	850
	1758	−0.3	−9
	2354	29.2	890
9 Tu ◑	0629	3.7	113
	1158	27.0	823
	1852	1.0	30
10 W	0057	29.3	893
	0739	3.0	91
	1311	26.4	805
	1957	2.3	70
11 Th	0208	29.6	902
	0855	1.6	49
	1442	26.4	805
	2107	3.1	94
12 F	0314	30.1	917
	1011	0.0	0
	1603	27.3	832
	2218	3.6	110
13 Sa	0414	30.5	930
	1121	−1.7	−52
	1709	28.3	863
	2331	3.7	113
14 Su	0507	30.8	939
	1218	−2.9	−88
	1804	29.1	887
15 M	0028	3.5	107
	0554	30.9	942
	1308	−3.4	−104
	1851	29.5	899

	Time	Height	
	h m	ft	cm
16 Tu ●	0117	3.5	107
	0636	31.0	945
	1352	−3.2	−98
	1933	29.7	905
17 W	0201	3.6	110
	0717	30.9	942
	1432	−2.6	−79
	2012	29.8	908
18 Th	0240	3.9	119
	0757	30.5	930
	1508	−1.7	−52
	2049	29.7	905
19 F	0317	4.2	128
	0836	29.7	905
	1541	−0.9	−27
	2124	29.4	896
20 Sa	0351	4.6	140
	0915	28.5	869
	1612	−0.1	−3
	2200	28.9	881
21 Su	0425	4.8	146
	0953	27.1	826
	1646	0.8	24
	2238	28.4	866
22 M	0503	5.0	152
	1034	25.7	783
	1723	1.9	58
	2321	27.8	847
23 Tu	0546	5.1	155
	1123	24.3	741
	1805	3.4	104
24 W ◐	0012	27.1	826
	0639	5.1	155
	1226	23.1	704
	1856	5.2	158
25 Th	0111	26.5	808
	0750	4.7	143
	1341	22.6	689
	2009	6.7	204
26 F	0212	26.3	802
	0908	3.5	107
	1503	23.0	701
	2125	7.1	216
27 Sa	0311	26.5	808
	1012	2.0	61
	1623	24.2	738
	2226	6.9	210
28 Su	0405	27.1	826
	1108	0.7	21
	1715	25.6	780
	2319	6.4	195
29 M	0453	27.9	850
	1158	−0.4	−12
	1756	26.8	817
30 Tu	0007	5.8	177
	0536	28.9	881
	1245	−1.4	−43
	1836	27.9	850

Time meridian 135° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.
Heights are referred to mean lower low water which is the chart datum of soundings.

Anchorage, Alaska, 2015

Times and Heights of High and Low Waters

July

	Time	Height	
	h m	ft	cm
1 W ○	0052	5.2	158
	0617	29.9	911
	1328	−2.2	−67
	1915	28.8	878
2 Th	0136	4.4	134
	0659	30.6	933
	1411	−2.9	−88
	1955	29.4	896
3 F	0219	3.6	110
	0741	31.0	945
	1452	−3.4	−104
	2034	29.9	911
4 Sa	0303	2.8	85
	0825	31.0	945
	1533	−3.4	−104
	2114	30.2	920
5 Su	0347	2.2	67
	0910	30.7	936
	1614	−3.1	−94
	2155	30.6	933
6 M	0433	1.6	49
	0957	30.1	917
	1655	−2.3	−70
	2239	30.8	939
7 Tu	0521	1.3	40
	1047	29.2	890
	1740	−0.9	−27
	2328	30.7	936
8 W ◑	0615	1.1	34
	1145	27.9	850
	1830	1.0	30
9 Th	0026	30.3	924
	0718	1.1	34
	1258	26.6	811
	1931	3.1	94
10 F	0134	29.7	905
	0831	0.7	21
	1431	26.0	792
	2043	4.7	143
11 Sa	0244	29.3	893
	0950	0.0	0
	1554	26.6	811
	2200	5.5	168
12 Su	0351	29.1	887
	1105	−1.2	−37
	1702	27.6	841
	2317	5.3	162
13 M	0449	29.2	890
	1204	−2.3	−70
	1757	28.4	866
14 Tu	0015	4.6	140
	0539	29.5	899
	1253	−2.7	−82
	1842	28.8	878
15 W ●	0103	4.1	125
	0623	29.7	905
	1336	−2.5	−76
	1920	29.0	884

	Time	Height	
	h m	ft	cm
16 Th	0146	3.8	116
	0703	30.0	914
	1414	−1.9	−58
	1954	29.2	890
17 F	0223	3.8	116
	0742	30.0	914
	1447	−1.2	−37
	2024	29.3	893
18 Sa	0257	3.7	113
	0819	29.7	905
	1517	−0.6	−18
	2055	29.4	896
19 Su	0329	3.6	110
	0855	29.0	884
	1547	−0.1	−3
	2126	29.3	893
20 M	0401	3.3	101
	0930	28.0	853
	1619	0.6	18
	2200	29.1	887
21 Tu	0437	3.0	91
	1007	26.9	820
	1652	1.6	49
	2237	28.6	872
22 W	0516	2.9	88
	1049	25.7	783
	1728	3.2	98
	2317	27.7	844
23 Th ◐	0601	3.1	94
	1140	24.3	741
	1809	5.2	158
24 F	0007	26.6	811
	0653	3.5	107
	1250	23.1	704
	1859	7.4	226
25 Sa	0112	25.6	780
	0801	3.7	113
	1413	22.7	692
	2016	9.0	274
26 Su	0220	25.3	771
	0920	3.0	91
	1539	23.6	719
	2144	8.8	268
27 M	0323	25.8	786
	1026	1.8	55
	1644	25.1	765
	2244	7.8	238
28 Tu	0419	27.0	823
	1124	0.4	12
	1731	26.7	814
	2337	6.4	195
29 W	0509	28.6	872
	1217	−1.0	−30
	1813	28.1	856
30 Th	0028	5.0	152
	0556	30.1	917
	1305	−2.3	−70
	1853	29.3	893
31 F ○	0116	3.4	104
	0641	31.4	957
	1350	−3.4	−104
	1932	30.3	924

August

	Time	Height	
	h m	ft	cm
1 Sa	0204	1.9	58
	0727	32.2	981
	1433	−4.0	−122
	2010	31.1	948
2 Su	0249	0.6	18
	0812	32.5	991
	1515	−4.1	−125
	2049	31.7	966
3 M	0334	−0.5	−15
	0858	32.3	985
	1556	−3.6	−110
	2130	32.2	981
4 Tu	0420	−1.1	−34
	0944	31.6	963
	1637	−2.5	−76
	2213	32.3	985
5 W	0506	−1.2	−37
	1034	30.4	927
	1720	−0.6	−18
	2300	31.8	969
6 Th ◑	0556	−0.7	−21
	1131	28.7	875
	1807	1.9	58
	2355	30.6	933
7 F	0654	0.2	6
	1247	26.9	820
	1907	4.6	140
8 Sa	0102	29.1	887
	0803	1.0	30
	1417	26.0	792
	2024	6.6	201
9 Su	0218	27.9	850
	0925	1.2	37
	1541	26.4	805
	2149	6.9	210
10 M	0331	27.5	838
	1047	0.2	6
	1650	27.5	838
	2305	5.9	180
11 Tu	0435	27.8	847
	1146	−1.0	−30
	1743	28.4	866
12 W	0001	4.5	137
	0526	28.4	866
	1234	−1.6	−49
	1826	28.9	881
13 Th	0047	3.6	110
	0610	29.1	887
	1315	−1.5	−46
	1901	29.1	887
14 F ●	0128	3.1	94
	0648	29.7	905
	1350	−1.1	−34
	1929	29.3	893
15 Sa	0203	2.9	88
	0724	30.1	917
	1422	−0.5	−15
	1955	29.6	902

	Time	Height	
	h m	ft	cm
16 Su	0235	2.6	79
	0759	30.1	917
	1451	−0.1	−3
	2023	29.9	911
17 M	0306	2.2	67
	0834	29.8	908
	1521	0.3	9
	2053	30.1	917
18 Tu	0337	1.7	52
	0908	29.2	890
	1551	1.1	34
	2124	29.9	911
19 W	0411	1.4	43
	0943	28.3	863
	1622	2.2	67
	2156	29.3	893
20 Th	0449	1.3	40
	1021	27.1	826
	1655	3.7	113
	2230	28.3	863
21 F	0530	1.7	52
	1106	25.6	780
	1732	5.6	171
	2310	27.0	823
22 Sa ◐	0616	2.6	79
	1205	24.0	732
	1817	7.8	238
23 Su	0003	25.5	777
	0710	3.5	107
	1328	23.2	707
	1915	9.6	293
24 M	0115	24.6	750
	0821	3.8	116
	1456	23.8	725
	2047	10.0	305
25 Tu	0235	25.0	762
	0940	2.9	88
	1609	25.4	774
	2208	8.4	256
26 W	0344	26.5	808
	1047	1.3	40
	1702	27.3	832
	2308	6.2	189
27 Th	0444	28.6	872
	1146	−0.4	−12
	1746	29.0	884
28 F	0005	4.0	122
	0536	30.7	936
	1239	−2.0	−61
	1827	30.5	930
29 Sa ○	0057	1.8	55
	0624	32.3	985
	1326	−3.1	−94
	1905	31.7	966
30 Su	0146	−0.2	−6
	0711	33.3	1015
	1411	−3.7	−113
	1944	32.6	994
31 M	0233	−1.7	−52
	0757	33.6	1024
	1454	−3.7	−113
	2022	33.3	1015

September

	Time	Height	
	h m	ft	cm
1 Tu	0318	−2.7	−82
	0843	33.4	1018
	1535	−2.9	−88
	2103	33.7	1027
2 W	0403	−3.1	−94
	0930	32.7	997
	1617	−1.4	−43
	2145	33.4	1018
3 Th	0448	−2.7	−82
	1020	31.3	954
	1659	0.7	21
	2231	32.3	985
4 F	0534	−1.5	−46
	1117	29.4	896
	1745	3.5	107
	2323	30.3	924
5 Sa ◑	0627	0.3	9
	1231	27.5	838
	1843	6.3	192
6 Su	0030	27.9	850
	0731	2.1	64
	1354	26.4	805
	2006	8.1	247
7 M	0152	26.3	802
	0851	3.0	91
	1519	26.6	811
	2135	7.7	235
8 Tu	0312	25.9	789
	1020	2.4	73
	1628	27.6	841
	2247	5.8	177
9 W	0419	26.6	811
	1121	1.0	30
	1720	28.6	872
	2341	4.0	122
10 Th	0511	27.7	844
	1208	0.1	3
	1801	29.2	890
11 F	0026	2.7	82
	0554	28.7	875
	1247	−0.1	−3
	1833	29.5	899
12 Sa ●	0105	2.0	61
	0631	29.6	902
	1321	0.1	3
	1859	29.8	908
13 Su	0140	1.6	49
	0705	30.2	920
	1353	0.4	12
	1923	30.3	924
14 M	0211	1.3	40
	0738	30.5	930
	1423	0.8	24
	1951	30.7	936
15 Tu	0242	0.9	27
	0813	30.5	930
	1454	1.4	43
	2021	30.8	939

	Time	Height	
	h m	ft	cm
16 W	0314	0.5	15
	0847	30.0	914
	1524	2.2	67
	2051	30.5	930
17 Th	0348	0.3	9
	0922	29.2	890
	1554	3.3	101
	2120	29.8	908
18 F	0424	0.4	12
	0959	28.0	853
	1626	4.7	143
	2152	28.8	878
19 Sa	0503	1.1	34
	1041	26.6	811
	1702	6.3	192
	2231	27.3	832
20 Su ◐	0546	2.1	64
	1134	25.2	768
	1747	8.1	247
	2322	25.7	783
21 M	0635	3.2	98
	1244	24.3	741
	1844	9.5	290
22 Tu	0029	24.6	750
	0737	3.9	119
	1414	24.6	750
	2000	9.8	299
23 W	0148	24.8	756
	0854	3.5	107
	1530	26.2	799
	2133	7.9	241
24 Th	0310	26.4	805
	1007	2.1	64
	1628	28.2	860
	2242	5.2	158
25 F	0419	28.8	878
	1112	0.4	12
	1715	30.2	920
	2343	2.4	73
26 Sa	0516	31.0	945
	1210	−1.1	−34
	1758	31.8	969
27 Su ○	0038	0.0	0
	0607	32.6	994
	1301	−2.1	−64
	1838	33.0	1006
28 M	0129	−2.1	−64
	0655	33.6	1024
	1347	−2.4	−73
	1916	33.9	1033
29 Tu	0216	−3.5	−107
	0741	33.9	1033
	1432	−2.1	−64
	1955	34.4	1049
30 W	0301	−4.1	−125
	0828	33.7	1027
	1514	−1.2	−37
	2036	34.4	1049

Time meridian 135° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.
Heights are referred to mean lower low water which is the chart datum of soundings.

Anchorage, Alaska, 2015

Times and Heights of High and Low Waters

October

	Time	Height	
	h m	ft	cm
1 Th	0344	−4.0	−122
	0915	32.9	1003
	1556	0.3	9
	2118	33.6	1024
2 F	0428	−3.0	−91
	1005	31.6	963
	1638	2.5	76
	2203	32.0	975
3 Sa	0511	−1.3	−40
	1101	29.9	911
	1724	5.0	152
	2253	29.5	899
4 Su ◑	0559	0.9	27
	1207	28.1	856
	1820	7.5	229
	2357	26.8	817
5 M	0654	3.1	94
	1321	26.8	817
	1942	8.8	268
6 Tu	0120	24.8	756
	0804	4.6	140
	1442	26.5	808
	2108	8.0	244
7 W	0246	24.5	747
	0929	4.7	143
	1553	27.3	832
	2219	5.8	177
8 Th	0358	25.4	774
	1042	3.6	110
	1647	28.4	866
	2314	3.6	110
9 F	0452	26.8	817
	1132	2.5	76
	1727	29.1	887
	2359	1.9	58
10 Sa	0536	28.1	856
	1212	1.8	55
	1759	29.7	905
11 Su	0038	0.9	27
	0612	29.1	887
	1248	1.7	52
	1825	30.2	920
12 M ●	0113	0.4	12
	0645	29.9	911
	1322	1.8	55
	1851	30.7	936
13 Tu	0147	0.0	0
	0719	30.4	927
	1355	2.1	64
	1920	31.1	948
14 W	0219	−0.3	−9
	0754	30.5	930
	1427	2.8	85
	1951	31.2	951
15 Th	0252	−0.5	−15
	0830	30.2	920
	1459	3.6	110
	2021	30.8	939

	Time	Height	
	h m	ft	cm
16 F	0326	−0.5	−15
	0906	29.6	902
	1530	4.5	137
	2050	30.0	914
17 Sa	0402	−0.1	−3
	0942	28.6	872
	1603	5.5	168
	2123	28.9	881
18 Su	0440	0.6	18
	1022	27.4	835
	1641	6.7	204
	2204	27.5	838
19 M	0521	1.5	46
	1111	26.3	802
	1727	7.9	241
	2256	26.1	796
20 Tu ◐	0609	2.6	79
	1210	25.7	783
	1823	8.7	265
21 W	0001	25.1	765
	0705	3.4	104
	1327	25.9	789
	1934	8.5	259
22 Th	0115	25.1	765
	0816	3.5	107
	1447	27.2	829
	2103	6.6	201
23 F	0238	26.4	805
	0929	2.6	79
	1550	29.1	887
	2217	3.6	110
24 Sa	0356	28.5	869
	1036	1.4	43
	1642	31.0	945
	2322	0.8	24
25 Su	0459	30.5	930
	1139	0.4	12
	1728	32.5	991
26 M	0020	−1.6	−49
	0552	32.0	975
	1235	−0.2	−6
	1810	33.5	1021
27 Tu ○	0111	−3.3	−101
	0642	32.8	1000
	1325	−0.4	−12
	1850	34.2	1042
28 W	0159	−4.3	−131
	0729	33.1	1009
	1411	0.0	0
	1931	34.4	1049
29 Th	0244	−4.5	−137
	0815	32.9	1003
	1454	0.8	24
	2012	34.1	1039
30 F	0326	−4.0	−122
	0901	32.4	988
	1537	2.1	64
	2054	33.0	1006
31 Sa	0408	−2.7	−82
	0949	31.4	957
	1619	3.8	116
	2139	31.2	951

November

	Time	Height	
	h m	ft	cm
1 Su	0448	−1.0	−30
	1040	30.0	914
	1703	5.7	174
	2227	28.7	875
2 M	0530	1.1	34
	1136	28.5	869
	1753	7.5	229
	2324	26.1	796
3 Tu ◑	0616	3.3	101
	1237	27.2	829
	1902	8.7	265
4 W	0038	24.0	732
	0714	5.0	152
	1344	26.5	808
	2025	8.1	247
5 Th	0200	23.2	707
	0822	5.8	177
	1457	26.6	811
	2137	6.1	186
6 F	0325	23.9	728
	0932	5.5	168
	1558	27.5	838
	2236	3.7	113
7 Sa	0428	25.5	777
	1036	4.7	143
	1643	28.4	866
	2325	1.7	52
8 Su	0515	27.0	823
	1128	3.8	116
	1718	29.2	890
9 M	0007	0.3	9
	0554	28.1	856
	1211	3.4	104
	1749	29.9	911
10 Tu	0045	−0.5	−15
	0628	28.9	881
	1251	3.3	101
	1820	30.5	930
11 W ●	0122	−0.9	−27
	0701	29.6	902
	1328	3.6	110
	1853	30.9	942
12 Th	0157	−1.1	−34
	0737	30.0	914
	1403	4.0	122
	1925	31.0	945
13 F	0232	−1.2	−37
	0814	30.0	914
	1437	4.5	137
	1956	30.7	936
14 Sa	0307	−1.1	−34
	0852	29.6	902
	1511	5.0	152
	2029	30.0	914
15 Su	0343	−0.8	−24
	0929	28.9	881
	1547	5.6	171
	2105	29.0	884

	Time	Height	
	h m	ft	cm
16 M	0421	−0.2	−6
	1008	28.2	860
	1628	6.2	189
	2148	27.9	850
17 Tu	0502	0.6	18
	1052	27.6	841
	1714	6.7	204
	2240	26.8	817
18 W ◐	0547	1.5	46
	1143	27.3	832
	1809	6.8	207
	2341	26.0	792
19 Th	0640	2.4	73
	1246	27.5	838
	1915	6.3	192
20 F	0049	25.7	783
	0744	3.0	91
	1400	28.3	863
	2037	4.6	140
21 Sa	0210	26.2	799
	0855	3.0	91
	1510	29.7	905
	2153	2.1	64
22 Su	0338	27.6	841
	1003	2.6	79
	1609	31.1	948
	2302	−0.4	−12
23 M	0447	29.3	893
	1110	2.3	70
	1701	32.2	981
24 Tu	0003	−2.4	−73
	0544	30.6	933
	1212	2.0	61
	1747	33.0	1006
25 W ○	0056	−3.8	−116
	0634	31.4	957
	1305	1.8	55
	1829	33.4	1018
26 Th	0144	−4.4	−134
	0721	31.7	966
	1353	1.9	58
	1911	33.4	1018
27 F	0228	−4.3	−131
	0805	31.7	966
	1437	2.4	73
	1953	33.0	1006
28 Sa	0310	−3.5	−107
	0848	31.5	960
	1520	3.1	94
	2036	32.1	978
29 Su	0349	−2.3	−70
	0931	30.9	942
	1600	4.1	125
	2119	30.4	927
30 M	0425	−0.8	−24
	1014	30.0	914
	1641	5.3	162
	2204	28.4	866

December

	Time	Height	
	h m	ft	cm
1 Tu	0501	0.9	27
	1059	28.8	878
	1723	6.4	195
	2251	26.1	796
2 W ◑	0540	2.6	79
	1148	27.7	844
	1812	7.2	219
	2348	24.1	735
3 Th	0627	4.3	131
	1242	26.8	817
	1919	7.3	223
4 F	0059	22.9	698
	0726	5.8	177
	1341	26.4	805
	2036	6.1	186
5 Sa	0219	22.7	692
	0836	6.5	198
	1443	26.5	808
	2143	4.2	128
6 Su	0353	23.8	725
	0943	6.3	192
	1542	27.2	829
	2241	2.1	64
7 M	0452	25.4	774
	1043	5.7	174
	1631	28.0	853
	2331	0.5	15
8 Tu	0535	26.8	817
	1136	5.2	158
	1713	28.8	878
9 W	0016	−0.6	−18
	0611	27.8	847
	1221	4.9	149
	1751	29.5	899
10 Th	0057	−1.2	−37
	0645	28.6	872
	1302	4.8	146
	1828	30.1	917
11 F ●	0135	−1.6	−49
	0721	29.2	890
	1341	4.7	143
	1904	30.5	930
12 Sa	0213	−1.8	−55
	0759	29.6	902
	1419	4.6	140
	1940	30.6	933
13 Su	0250	−1.9	−58
	0836	29.6	902
	1457	4.5	137
	2017	30.3	924
14 M	0328	−1.8	−55
	0914	29.5	899
	1537	4.5	137
	2057	29.6	902
15 Tu	0406	−1.4	−43
	0951	29.3	893
	1619	4.5	137
	2141	28.9	881

	Time	Height	
	h m	ft	cm
16 W	0446	−0.8	−24
	1032	29.1	887
	1705	4.4	134
	2230	28.0	853
17 Th	0529	0.1	3
	1118	29.1	887
	1757	4.2	128
	2324	27.1	826
18 F ◐	0618	1.3	40
	1212	29.1	887
	1858	3.7	113
19 Sa	0028	26.3	802
	0716	2.7	82
	1318	29.3	893
	2012	2.7	82
20 Su	0148	25.9	789
	0825	3.8	116
	1431	29.7	905
	2128	1.0	30
21 M	0325	26.6	811
	0935	4.2	128
	1538	30.3	924
	2243	−0.7	−21
22 Tu	0439	28.0	853
	1048	4.3	131
	1637	31.0	945
	2349	−2.4	−73
23 W	0539	29.2	890
	1157	3.9	119
	1729	31.5	960
24 Th	0043	−3.6	−110
	0630	30.0	914
	1252	3.4	104
	1815	31.8	969
25 F ○	0131	−4.0	−122
	0714	30.4	927
	1340	3.0	91
	1858	32.0	975
26 Sa	0214	−3.7	−113
	0755	30.6	933
	1423	3.0	91
	1940	31.9	972
27 Su	0253	−2.9	−88
	0832	30.6	933
	1503	3.2	98
	2021	31.3	954
28 M	0329	−1.9	−58
	0909	30.4	927
	1541	3.6	110
	2102	30.1	917
29 Tu	0401	−0.8	−24
	0944	29.9	911
	1617	4.1	125
	2142	28.6	872
30 W	0433	0.4	12
	1021	29.3	893
	1653	4.5	137
	2222	26.9	820
31 Th	0507	1.7	52
	1059	28.4	866
	1732	4.9	149
	2306	25.2	768

Time meridian 135° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.
Heights are referred to mean lower low water which is the chart datum of soundings.

Kodiak, Alaska, 2015

Times and Heights of High and Low Waters

January

	Time	Height	
	h m	ft	cm
1 Th	0420	2.7	82
	1048	9.4	287
	1748	0.0	0
2 F	0016	6.8	207
	0520	2.8	85
	1138	9.7	296
	1835	−0.4	−12
3 Sa	0106	7.2	219
	0611	2.7	82
	1223	9.9	302
	1915	−0.7	−21
4 Su ○	0148	7.5	229
	0656	2.6	79
	1303	10.0	305
	1952	−0.8	−24
5 M	0225	7.8	238
	0737	2.6	79
	1341	9.9	302
	2026	−0.8	−24
6 Tu	0258	7.9	241
	0815	2.5	76
	1416	9.7	296
	2058	−0.7	−21
7 W	0329	7.9	241
	0852	2.5	76
	1451	9.4	287
	2129	−0.4	−12
8 Th	0400	7.9	241
	0929	2.6	79
	1526	9.0	274
	2200	0.0	0
9 F	0430	7.9	241
	1007	2.7	82
	1602	8.4	256
	2232	0.4	12
10 Sa	0503	7.8	238
	1049	2.8	85
	1641	7.7	235
	2305	1.0	30
11 Su	0539	7.8	238
	1136	2.9	88
	1725	6.9	210
	2341	1.6	49
12 M	0619	7.7	235
	1232	2.9	88
	1818	6.2	189
13 Tu ◑	0022	2.2	67
	0706	7.8	238
	1340	2.8	85
	1926	5.6	171
14 W	0113	2.7	82
	0800	7.9	241
	1458	2.4	73
	2053	5.4	165
15 Th	0216	3.1	94
	0859	8.2	250
	1611	1.7	52
	2225	5.6	171

	Time	Height	
	h m	ft	cm
16 F	0327	3.3	101
	0958	8.7	265
	1709	0.8	24
	2336	6.1	186
17 Sa	0433	3.1	94
	1054	9.3	283
	1758	−0.1	−3
18 Su	0028	6.7	204
	0532	2.8	85
	1147	9.9	302
	1842	−1.0	−30
19 M	0112	7.4	226
	0625	2.3	70
	1236	10.4	317
	1925	−1.6	−49
20 Tu ●	0153	8.0	244
	0714	1.8	55
	1323	10.8	329
	2006	−2.0	−61
21 W	0233	8.5	259
	0802	1.3	40
	1410	10.8	329
	2047	−2.1	−64
22 Th	0313	8.9	271
	0851	1.0	30
	1457	10.5	320
	2128	−1.9	−58
23 F	0354	9.1	277
	0940	0.8	24
	1546	9.8	299
	2209	−1.3	−40
24 Sa	0437	9.2	280
	1033	0.8	24
	1636	8.9	271
	2252	−0.5	−15
25 Su	0523	9.2	280
	1130	1.0	30
	1731	7.8	238
	2337	0.4	12
26 M ◐	0612	9.0	274
	1235	1.3	40
	1835	6.8	207
27 Tu	0028	1.4	43
	0707	8.8	268
	1352	1.4	43
	1957	6.0	183
28 W	0127	2.3	70
	0811	8.6	262
	1519	1.3	40
	2139	5.7	174
29 Th	0240	3.0	91
	0920	8.5	259
	1636	0.9	27
	2307	6.0	183
30 F	0400	3.2	98
	1027	8.7	265
	1736	0.4	12
31 Sa	0010	6.4	195
	0509	3.1	94
	1125	8.9	271
	1823	0.0	0

February

	Time	Height	
	h m	ft	cm
1 Su	0056	6.9	210
	0603	2.9	88
	1212	9.1	277
	1902	−0.3	−9
2 M	0133	7.3	223
	0648	2.5	76
	1253	9.3	283
	1936	−0.5	−15
3 Tu ○	0205	7.7	235
	0726	2.3	70
	1329	9.4	287
	2006	−0.5	−15
4 W	0233	7.9	241
	0801	2.0	61
	1403	9.3	283
	2035	−0.5	−15
5 Th	0259	8.1	247
	0835	1.8	55
	1436	9.2	280
	2103	−0.3	−9
6 F	0325	8.2	250
	0908	1.7	52
	1509	8.8	268
	2130	0.0	0
7 Sa	0352	8.3	253
	0943	1.7	52
	1542	8.3	253
	2159	0.4	12
8 Su	0420	8.3	253
	1020	1.8	55
	1618	7.7	235
	2228	0.9	27
9 M	0452	8.2	250
	1100	1.9	58
	1657	7.0	213
	2300	1.5	46
10 Tu	0528	8.1	247
	1148	2.0	61
	1743	6.3	192
	2337	2.1	64
11 W ◑	0611	8.0	244
	1246	2.1	64
	1844	5.7	174
12 Th	0022	2.7	82
	0703	7.9	241
	1359	2.0	61
	2006	5.2	158
13 F	0125	3.2	98
	0808	8.0	244
	1522	1.5	46
	2148	5.3	162
14 Sa	0246	3.4	104
	0919	8.3	253
	1635	0.8	24
	2309	5.9	180
15 Su	0407	3.1	94
	1028	8.8	268
	1732	−0.1	−3

	Time	Height	
	h m	ft	cm
16 M	0004	6.6	201
	0515	2.5	76
	1128	9.4	287
	1820	−0.9	−27
17 Tu	0047	7.4	226
	0612	1.7	52
	1223	10.0	305
	1903	−1.5	−46
18 W ●	0128	8.2	250
	0703	0.9	27
	1313	10.4	317
	1944	−1.8	−55
19 Th	0207	8.9	271
	0751	0.2	6
	1401	10.4	317
	2025	−1.9	−58
20 F	0245	9.5	290
	0839	−0.3	−9
	1449	10.1	308
	2104	−1.5	−46
21 Sa	0325	9.8	299
	0927	−0.4	−12
	1536	9.5	290
	2145	−0.9	−27
22 Su	0406	9.8	299
	1016	−0.3	−9
	1625	8.6	262
	2226	−0.1	−3
23 M	0449	9.6	293
	1109	0.0	0
	1717	7.6	232
	2309	0.9	27
24 Tu	0535	9.2	280
	1207	0.6	18
	1818	6.6	201
	2357	1.8	55
25 W ◐	0627	8.6	262
	1317	1.1	34
	1936	5.8	177
26 Th	0055	2.7	82
	0730	8.1	247
	1443	1.3	40
	2120	5.6	171
27 F	0214	3.3	101
	0846	7.8	238
	1608	1.2	37
	2250	5.8	177
28 Sa	0347	3.4	104
	1005	7.8	238
	1713	0.8	24
	2350	6.3	192

March

	Time	Height	
	h m	ft	cm
1 Su	0501	3.1	94
	1110	8.0	244
	1801	0.5	15
2 M	0032	6.8	207
	0554	2.6	79
	1200	8.3	253
	1839	0.2	6
3 Tu	0106	7.3	223
	0636	2.1	64
	1240	8.6	262
	1911	0.0	0
4 W	0134	7.7	235
	0711	1.7	52
	1316	8.7	265
	1939	−0.1	−3
5 Th ○	0159	8.0	244
	0744	1.3	40
	1349	8.8	268
	2006	0.0	0
6 F	0223	8.3	253
	0815	1.0	30
	1421	8.7	265
	2032	0.1	3
7 Sa	0247	8.5	259
	0847	0.8	24
	1453	8.5	259
	2059	0.4	12
8 Su	0313	8.7	265
	0919	0.7	21
	1526	8.1	247
	2127	0.7	21
9 M	0341	8.7	265
	0954	0.7	21
	1600	7.6	232
	2156	1.2	37
10 Tu	0412	8.6	262
	1032	0.8	24
	1639	7.0	213
	2228	1.7	52
11 W	0447	8.4	256
	1116	1.0	30
	1724	6.4	195
	2304	2.2	67
12 Th	0528	8.2	250
	1209	1.2	37
	1821	5.8	177
	2351	2.8	85
13 F ◑	0621	7.9	241
	1317	1.3	40
	1939	5.4	165
14 Sa	0057	3.2	98
	0728	7.7	235
	1437	1.2	37
	2115	5.4	165
15 Su	0224	3.3	101
	0848	7.8	238
	1556	0.7	21
	2236	6.0	183

	Time	Height	
	h m	ft	cm
16 M	0351	2.8	85
	1005	8.2	250
	1659	0.0	0
	2331	6.9	210
17 Tu	0502	2.0	61
	1113	8.7	265
	1751	−0.6	−18
18 W	0016	7.8	238
	0600	0.9	27
	1211	9.3	283
	1836	−1.0	−30
19 Th	0057	8.7	265
	0651	0.0	0
	1303	9.6	293
	1918	−1.2	−37
20 F ●	0136	9.4	287
	0739	−0.8	−24
	1352	9.7	296
	1959	−1.1	−34
21 Sa	0215	10.0	305
	0825	−1.3	−40
	1439	9.5	290
	2039	−0.8	−24
22 Su	0254	10.2	311
	0911	−1.4	−43
	1526	9.0	274
	2119	−0.2	−6
23 M	0334	10.1	308
	0958	−1.2	−37
	1614	8.3	253
	2200	0.6	18
24 Tu	0416	9.7	296
	1046	−0.7	−21
	1705	7.4	226
	2243	1.4	43
25 W	0500	9.1	277
	1139	0.0	0
	1802	6.6	201
	2331	2.3	70
26 Th ◐	0550	8.4	256
	1241	0.7	21
	1915	6.0	183
27 F	0030	3.0	91
	0650	7.6	232
	1357	1.2	37
	2048	5.7	174
28 Sa	0151	3.4	104
	0806	7.1	216
	1522	1.4	43
	2214	5.9	180
29 Su	0330	3.4	104
	0933	6.9	210
	1632	1.3	40
	2312	6.4	195
30 M	0444	2.9	88
	1044	7.1	216
	1722	1.0	30
	2353	6.8	207
31 Tu	0536	2.3	70
	1138	7.4	226
	1801	0.8	24

Time meridian 135° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.
Heights are referred to mean lower low water which is the chart datum of soundings.

Kodiak, Alaska, 2015

Times and Heights of High and Low Waters

April

	Time	Height	
	h m	ft	cm
1 W	0025	7.3	223
	0616	1.7	52
	1221	7.7	235
	1834	0.7	21
2 Th	0052	7.8	238
	0651	1.1	34
	1258	8.0	244
	1903	0.6	18
3 F	0117	8.2	250
	0723	0.6	18
	1332	8.1	247
	1931	0.6	18
4 Sa ○	0142	8.6	262
	0754	0.2	6
	1405	8.1	247
	1959	0.8	24
5 Su	0209	8.9	271
	0826	−0.1	−3
	1438	8.0	244
	2028	1.0	30
6 M	0237	9.0	274
	0858	−0.2	−6
	1512	7.8	238
	2058	1.3	40
7 Tu	0307	9.0	274
	0933	−0.2	−6
	1549	7.4	226
	2129	1.6	49
8 W	0339	8.9	271
	1011	−0.1	−3
	1629	6.9	210
	2204	2.0	61
9 Th	0416	8.7	265
	1055	0.1	3
	1715	6.4	195
	2245	2.5	76
10 F	0459	8.3	253
	1146	0.3	9
	1813	6.0	183
	2337	2.8	85
11 Sa ◑	0553	7.9	241
	1248	0.6	18
	1925	5.8	177
12 Su	0046	3.1	94
	0702	7.5	229
	1401	0.7	21
	2046	6.0	183
13 M	0214	3.0	91
	0823	7.3	223
	1516	0.5	15
	2158	6.6	201
14 Tu	0340	2.3	70
	0946	7.5	229
	1621	0.2	6
	2254	7.4	226
15 W	0451	1.3	40
	1058	7.9	241
	1716	0.0	0
	2341	8.3	253

	Time	Height	
	h m	ft	cm
16 Th	0548	0.2	6
	1159	8.3	253
	1804	−0.2	−6
17 F	0024	9.1	277
	0638	−0.8	−24
	1253	8.6	262
	1849	−0.3	−9
18 Sa ●	0104	9.8	299
	0725	−1.5	−46
	1343	8.8	268
	1931	−0.1	−3
19 Su	0145	10.3	314
	0811	−1.9	−58
	1431	8.7	265
	2013	0.2	6
20 M	0225	10.4	317
	0855	−1.9	−58
	1518	8.4	256
	2055	0.7	21
21 Tu	0305	10.2	311
	0940	−1.6	−49
	1605	7.9	241
	2137	1.3	40
22 W	0346	9.7	296
	1025	−1.1	−34
	1654	7.3	223
	2221	2.0	61
23 Th	0430	9.0	274
	1113	−0.4	−12
	1747	6.7	204
	2309	2.6	79
24 F	0517	8.1	247
	1206	0.4	12
	1849	6.3	192
25 Sa ◐	0008	3.1	94
	0612	7.3	223
	1308	1.0	30
	2003	6.1	186
26 Su	0124	3.4	104
	0720	6.7	204
	1418	1.4	43
	2117	6.2	189
27 M	0256	3.3	101
	0842	6.3	192
	1527	1.6	49
	2216	6.5	198
28 Tu	0412	2.8	85
	1002	6.3	192
	1624	1.6	49
	2259	6.9	210
29 W	0507	2.1	64
	1104	6.5	198
	1709	1.5	46
	2333	7.5	229
30 Th	0549	1.4	43
	1154	6.8	207
	1746	1.4	43

May

	Time	Height	
	h m	ft	cm
1 F	0003	8.0	244
	0625	0.7	21
	1235	7.1	216
	1820	1.4	43
2 Sa	0032	8.5	259
	0659	0.1	3
	1313	7.4	226
	1853	1.4	43
3 Su ○	0102	8.9	271
	0732	−0.3	−9
	1349	7.5	229
	1925	1.5	46
4 M	0132	9.2	280
	0805	−0.7	−21
	1425	7.5	229
	1958	1.6	49
5 Tu	0204	9.4	287
	0840	−0.9	−27
	1502	7.4	226
	2032	1.8	55
6 W	0238	9.4	287
	0917	−1.0	−30
	1541	7.3	223
	2109	2.0	61
7 Th	0315	9.3	283
	0956	−0.9	−27
	1624	7.0	213
	2149	2.2	67
8 F	0355	8.9	271
	1040	−0.7	−21
	1711	6.7	204
	2235	2.5	76
9 Sa	0442	8.5	259
	1129	−0.4	−12
	1806	6.5	198
	2332	2.7	82
10 Su	0537	7.9	241
	1225	−0.1	−3
	1909	6.5	198
11 M ◑	0043	2.7	82
	0645	7.3	223
	1329	0.3	9
	2016	6.8	207
12 Tu	0206	2.4	73
	0804	6.9	210
	1436	0.5	15
	2120	7.3	223
13 W	0328	1.7	52
	0928	6.8	207
	1541	0.6	18
	2216	8.0	244
14 Th	0438	0.7	21
	1045	7.0	213
	1640	0.7	21
	2306	8.8	268
15 F	0536	−0.3	−9
	1150	7.3	223
	1732	0.7	21
	2352	9.5	290

	Time	Height	
	h m	ft	cm
16 Sa	0627	−1.1	−34
	1246	7.7	235
	1821	0.8	24
17 Su ●	0036	10.0	305
	0714	−1.7	−52
	1337	7.9	241
	1906	0.9	27
18 M	0118	10.2	311
	0758	−2.0	−61
	1425	7.9	241
	1950	1.2	37
19 Tu	0200	10.2	311
	0841	−2.0	−61
	1510	7.8	238
	2033	1.5	46
20 W	0241	10.0	305
	0923	−1.7	−52
	1555	7.6	232
	2116	1.9	58
21 Th	0321	9.5	290
	1005	−1.2	−37
	1640	7.3	223
	2201	2.3	70
22 F	0403	8.8	268
	1048	−0.6	−18
	1726	7.0	213
	2248	2.7	82
23 Sa	0447	8.0	244
	1132	0.1	3
	1816	6.7	204
	2342	3.0	91
24 Su	0536	7.2	219
	1220	0.7	21
	1910	6.5	198
25 M ◐	0047	3.2	98
	0634	6.5	198
	1313	1.2	37
	2007	6.5	198
26 Tu	0204	3.1	94
	0743	6.0	183
	1410	1.7	52
	2102	6.7	204
27 W	0323	2.7	82
	0902	5.7	174
	1509	1.9	58
	2150	7.1	216
28 Th	0426	2.0	61
	1017	5.7	174
	1602	2.1	64
	2233	7.6	232
29 F	0514	1.3	40
	1119	6.0	183
	1650	2.1	64
	2311	8.1	247
30 Sa	0556	0.6	18
	1209	6.3	192
	1733	2.1	64
	2348	8.6	262
31 Su	0633	0.0	0
	1253	6.7	204
	1813	2.1	64

June

	Time	Height	
	h m	ft	cm
1 M	0024	9.1	277
	0710	−0.6	−18
	1333	7.0	213
	1852	2.0	61
2 Tu ○	0101	9.4	287
	0746	−1.1	−34
	1412	7.2	219
	1931	2.0	61
3 W	0138	9.7	296
	0823	−1.4	−43
	1452	7.3	223
	2011	2.0	61
4 Th	0217	9.7	296
	0902	−1.6	−49
	1532	7.3	223
	2053	2.0	61
5 F	0258	9.6	293
	0943	−1.6	−49
	1615	7.3	223
	2139	2.1	64
6 Sa	0343	9.2	280
	1026	−1.4	−43
	1701	7.3	223
	2229	2.1	64
7 Su	0431	8.6	262
	1113	−1.0	−30
	1751	7.3	223
	2327	2.2	67
8 M	0527	7.9	241
	1203	−0.5	−15
	1845	7.4	226
9 Tu ◑	0035	2.1	64
	0631	7.1	216
	1258	0.1	3
	1943	7.6	232
10 W	0153	1.8	55
	0747	6.5	198
	1359	0.7	21
	2043	8.0	244
11 Th	0313	1.2	37
	0912	6.2	189
	1503	1.1	34
	2141	8.5	259
12 F	0425	0.4	12
	1034	6.2	189
	1606	1.4	43
	2236	9.0	274
13 Sa	0525	−0.4	−12
	1144	6.5	198
	1704	1.6	49
	2326	9.4	287
14 Su	0617	−1.1	−34
	1243	6.9	210
	1758	1.7	52
15 M	0014	9.8	299
	0704	−1.5	−46
	1333	7.2	219
	1847	1.7	52

	Time	Height	
	h m	ft	cm
16 Tu ●	0058	9.9	302
	0747	−1.7	−52
	1418	7.4	226
	1933	1.8	55
17 W	0141	9.9	302
	0827	−1.7	−52
	1500	7.5	229
	2016	1.9	58
18 Th	0221	9.7	296
	0906	−1.5	−46
	1540	7.5	229
	2059	2.0	61
19 F	0301	9.3	283
	0944	−1.1	−34
	1618	7.4	226
	2141	2.2	67
20 Sa	0340	8.7	265
	1021	−0.7	−21
	1657	7.2	219
	2224	2.4	73
21 Su	0421	8.0	244
	1058	−0.1	−3
	1735	7.1	216
	2311	2.6	79
22 M	0504	7.3	223
	1136	0.5	15
	1816	7.0	213
23 Tu	0005	2.7	82
	0552	6.6	201
	1217	1.1	34
	1901	7.0	213
24 W ◐	0107	2.7	82
	0649	5.9	180
	1303	1.6	49
	1949	7.1	216
25 Th	0219	2.5	76
	0759	5.4	165
	1355	2.1	64
	2040	7.3	223
26 F	0331	2.1	64
	0920	5.2	158
	1453	2.5	76
	2131	7.6	232
27 Sa	0433	1.4	43
	1038	5.4	165
	1552	2.6	79
	2220	8.1	247
28 Su	0523	0.7	21
	1141	5.7	174
	1647	2.6	79
	2307	8.6	262
29 M	0607	0.0	0
	1231	6.2	189
	1738	2.5	76
	2352	9.1	277
30 Tu	0647	−0.7	−21
	1315	6.6	201
	1825	2.2	67

Time meridian 135° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.
Heights are referred to mean lower low water which is the chart datum of soundings.

Kodiak, Alaska, 2015

Times and Heights of High and Low Waters

July

	Time	Height	
	h m	ft	cm
1 W ○	0035	9.5	290
	0727	−1.3	−40
	1355	7.0	213
	1910	2.0	61
2 Th	0118	9.8	299
	0806	−1.8	−55
	1435	7.4	226
	1955	1.7	52
3 F	0202	10.0	305
	0846	−2.0	−61
	1515	7.7	235
	2041	1.5	46
4 Sa	0247	9.8	299
	0926	−2.0	−61
	1556	7.9	241
	2129	1.3	40
5 Su	0333	9.4	287
	1008	−1.7	−52
	1639	8.0	244
	2220	1.3	40
6 M	0423	8.8	268
	1052	−1.2	−37
	1725	8.1	247
	2317	1.3	40
7 Tu	0517	7.9	241
	1138	−0.5	−15
	1815	8.2	250
8 W ◑	0021	1.3	40
	0619	7.0	213
	1229	0.3	9
	1909	8.3	253
9 Th	0134	1.2	37
	0732	6.2	189
	1326	1.1	34
	2007	8.4	256
10 F	0254	0.9	27
	0859	5.7	174
	1430	1.7	52
	2110	8.5	259
11 Sa	0410	0.4	12
	1029	5.7	174
	1539	2.1	64
	2211	8.8	268
12 Su	0515	−0.2	−6
	1142	6.1	186
	1646	2.3	70
	2308	9.1	277
13 M	0608	−0.7	−21
	1239	6.5	198
	1744	2.2	67
14 Tu	0000	9.3	283
	0654	−1.1	−34
	1326	6.9	210
	1835	2.1	64
15 W ●	0046	9.5	290
	0735	−1.3	−40
	1406	7.2	219
	1920	1.9	58

	Time	Height	
	h m	ft	cm
16 Th	0127	9.5	290
	0812	−1.3	−40
	1443	7.5	229
	2002	1.8	55
17 F	0206	9.3	283
	0846	−1.2	−37
	1516	7.6	232
	2041	1.8	55
18 Sa	0243	9.0	274
	0919	−0.9	−27
	1547	7.6	232
	2119	1.8	55
19 Su	0319	8.6	262
	0950	−0.5	−15
	1618	7.6	232
	2158	1.9	58
20 M	0356	8.1	247
	1022	0.0	0
	1650	7.5	229
	2238	2.0	61
21 Tu	0434	7.4	226
	1055	0.5	15
	1724	7.5	229
	2323	2.1	64
22 W	0516	6.7	204
	1129	1.1	34
	1802	7.4	226
23 Th ◐	0014	2.2	67
	0605	6.0	183
	1208	1.7	52
	1846	7.4	226
24 F	0116	2.2	67
	0706	5.4	165
	1255	2.3	70
	1936	7.4	226
25 Sa	0228	2.0	61
	0825	5.0	152
	1353	2.7	82
	2034	7.6	232
26 Su	0343	1.6	49
	0955	5.1	155
	1501	3.0	91
	2134	7.9	241
27 M	0446	0.9	27
	1112	5.5	168
	1610	2.9	88
	2232	8.4	256
28 Tu	0538	0.1	3
	1207	6.0	183
	1710	2.6	79
	2326	9.0	274
29 W	0623	−0.7	−21
	1251	6.6	201
	1804	2.1	64
30 Th	0015	9.5	290
	0704	−1.4	−43
	1331	7.3	223
	1853	1.5	46
31 F ○	0103	9.9	302
	0744	−1.8	−55
	1410	7.8	238
	1940	1.0	30

August

	Time	Height	
	h m	ft	cm
1 Sa	0149	10.1	308
	0824	−2.0	−61
	1449	8.3	253
	2028	0.6	18
2 Su	0236	10.0	305
	0904	−1.9	−58
	1528	8.7	265
	2116	0.3	9
3 M	0323	9.5	290
	0945	−1.5	−46
	1610	8.9	271
	2206	0.2	6
4 Tu	0413	8.8	268
	1027	−0.9	−27
	1653	8.9	271
	2300	0.3	9
5 W	0506	7.9	241
	1111	−0.1	−3
	1741	8.8	268
6 Th ◑	0001	0.5	15
	0606	6.9	210
	1200	0.8	24
	1833	8.6	262
7 F	0110	0.7	21
	0719	6.0	183
	1257	1.7	52
	1934	8.4	256
8 Sa	0231	0.8	24
	0851	5.6	171
	1405	2.4	73
	2042	8.3	253
9 Su	0354	0.6	18
	1025	5.7	174
	1525	2.7	82
	2153	8.3	253
10 M	0502	0.2	6
	1135	6.1	186
	1639	2.7	82
	2257	8.5	259
11 Tu	0556	−0.2	−6
	1228	6.6	201
	1739	2.4	73
	2351	8.7	265
12 W	0639	−0.5	−15
	1309	7.0	213
	1828	2.0	61
13 Th	0036	8.9	271
	0717	−0.7	−21
	1344	7.4	226
	1910	1.7	52
14 F ●	0116	9.0	274
	0750	−0.7	−21
	1414	7.7	235
	1947	1.5	46
15 Sa	0152	9.0	274
	0820	−0.6	−18
	1442	7.9	241
	2022	1.3	40

	Time	Height	
	h m	ft	cm
16 Su	0226	8.8	268
	0849	−0.4	−12
	1509	8.0	244
	2056	1.2	37
17 M	0259	8.5	259
	0917	0.0	0
	1535	8.0	244
	2130	1.2	37
18 Tu	0333	8.1	247
	0946	0.4	12
	1604	8.0	244
	2206	1.3	40
19 W	0409	7.5	229
	1016	0.9	27
	1635	8.0	244
	2246	1.4	43
20 Th	0448	6.9	210
	1048	1.5	46
	1710	7.8	238
	2331	1.6	49
21 F	0532	6.2	189
	1123	2.1	64
	1751	7.7	235
22 Sa ◐	0025	1.8	55
	0628	5.6	171
	1207	2.6	79
	1841	7.5	229
23 Su	0132	1.8	55
	0743	5.2	158
	1306	3.1	94
	1943	7.5	229
24 M	0251	1.6	49
	0918	5.2	158
	1424	3.3	101
	2054	7.7	235
25 Tu	0406	1.0	30
	1040	5.6	171
	1544	3.0	91
	2203	8.1	247
26 W	0505	0.2	6
	1136	6.3	192
	1651	2.5	76
	2304	8.7	265
27 Th	0554	−0.5	−15
	1220	7.0	213
	1748	1.7	52
	2359	9.3	283
28 F	0637	−1.1	−34
	1300	7.8	238
	1838	0.8	24
29 Sa ○	0049	9.8	299
	0718	−1.5	−46
	1338	8.6	262
	1926	0.1	3
30 Su	0137	10.0	305
	0758	−1.6	−49
	1417	9.2	280
	2013	−0.5	−15
31 M	0225	9.8	299
	0838	−1.4	−43
	1456	9.6	293
	2101	−0.8	−24

September

	Time	Height	
	h m	ft	cm
1 Tu	0313	9.4	287
	0919	−0.9	−27
	1537	9.7	296
	2149	−0.8	−24
2 W	0402	8.7	265
	1001	−0.2	−6
	1620	9.6	293
	2241	−0.5	−15
3 Th	0455	7.8	238
	1045	0.7	21
	1706	9.3	283
	2338	−0.1	−3
4 F	0554	6.9	210
	1134	1.6	49
	1759	8.7	265
5 Sa ◑	0044	0.5	15
	0708	6.1	186
	1233	2.4	73
	1901	8.2	250
6 Su	0203	0.9	27
	0842	5.8	177
	1349	3.0	91
	2015	7.8	238
7 M	0329	0.9	27
	1012	6.0	183
	1520	3.1	94
	2136	7.7	235
8 Tu	0439	0.7	21
	1117	6.4	195
	1637	2.8	85
	2246	7.9	241
9 W	0533	0.4	12
	1204	6.9	210
	1734	2.3	70
	2340	8.1	247
10 Th	0615	0.2	6
	1241	7.4	226
	1818	1.8	55
11 F	0024	8.4	256
	0649	0.1	3
	1311	7.8	238
	1855	1.3	40
12 Sa ●	0102	8.6	262
	0720	0.1	3
	1338	8.1	247
	1929	1.0	30
13 Su	0136	8.6	262
	0748	0.2	6
	1403	8.4	256
	2001	0.7	21
14 M	0209	8.5	259
	0815	0.4	12
	1427	8.5	259
	2032	0.5	15
15 Tu	0241	8.3	253
	0843	0.7	21
	1453	8.6	262
	2104	0.5	15

	Time	Height	
	h m	ft	cm
16 W	0314	8.0	244
	0911	1.1	34
	1521	8.6	262
	2138	0.6	18
17 Th	0349	7.5	229
	0940	1.6	49
	1552	8.5	259
	2215	0.7	21
18 F	0427	7.0	213
	1012	2.0	61
	1626	8.3	253
	2257	1.0	30
19 Sa	0510	6.4	195
	1048	2.6	79
	1706	8.0	244
	2347	1.2	37
20 Su ◐	0605	5.9	180
	1133	3.0	91
	1756	7.7	235
21 M	0049	1.4	43
	0718	5.5	168
	1236	3.4	104
	1901	7.5	229
22 Tu	0205	1.4	43
	0847	5.6	171
	1400	3.5	107
	2019	7.4	226
23 W	0323	1.0	30
	1005	6.1	186
	1527	3.0	91
	2137	7.8	238
24 Th	0427	0.5	15
	1100	6.9	210
	1637	2.2	67
	2245	8.3	253
25 F	0520	−0.1	−3
	1145	7.8	238
	1734	1.1	34
	2344	8.9	271
26 Sa	0606	−0.5	−15
	1225	8.7	265
	1825	0.1	3
27 Su ○	0037	9.3	283
	0648	−0.7	−21
	1305	9.5	290
	1912	−0.8	−24
28 M	0126	9.6	293
	0730	−0.7	−21
	1344	10.1	308
	1958	−1.4	−43
29 Tu	0215	9.5	290
	0811	−0.4	−12
	1424	10.4	317
	2045	−1.6	−49
30 W	0303	9.1	277
	0852	0.1	3
	1505	10.4	317
	2132	−1.5	−46

Time meridian 135° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.
Heights are referred to mean lower low water which is the chart datum of soundings.

Kodiak, Alaska, 2015

Times and Heights of High and Low Waters

October

	Time	Height	
	h m	ft	cm
1 Th	0352	8.5	259
	0935	0.8	24
	1548	10.1	308
	2221	−1.0	−30
2 F	0444	7.8	238
	1020	1.6	49
	1634	9.5	290
	2314	−0.4	−12
3 Sa	0543	7.1	216
	1111	2.4	73
	1725	8.8	268
4 Su ◑	0015	0.4	12
	0654	6.5	198
	1212	3.1	94
	1827	8.0	244
5 M	0127	1.0	30
	0821	6.3	192
	1334	3.5	107
	1943	7.4	226
6 Tu	0249	1.3	40
	0943	6.4	195
	1511	3.4	104
	2110	7.1	216
7 W	0401	1.3	40
	1044	6.9	210
	1627	2.9	88
	2225	7.2	219
8 Th	0456	1.2	37
	1128	7.3	223
	1720	2.2	67
	2322	7.5	229
9 F	0538	1.1	34
	1202	7.8	238
	1801	1.6	49
10 Sa	0007	7.8	238
	0613	1.0	30
	1231	8.2	250
	1837	1.0	30
11 Su	0045	8.0	244
	0643	1.0	30
	1257	8.6	262
	1909	0.6	18
12 M ●	0120	8.1	247
	0712	1.1	34
	1322	8.9	271
	1940	0.2	6
13 Tu	0153	8.2	250
	0741	1.3	40
	1348	9.2	280
	2010	0.0	0
14 W	0226	8.1	247
	0810	1.6	49
	1416	9.3	283
	2042	−0.1	−3
15 Th	0259	7.9	241
	0839	1.9	58
	1445	9.2	280
	2116	0.0	0

	Time	Height	
	h m	ft	cm
16 F	0335	7.6	232
	0911	2.2	67
	1517	9.1	277
	2152	0.1	3
17 Sa	0413	7.2	219
	0945	2.6	79
	1552	8.8	268
	2233	0.4	12
18 Su	0458	6.7	204
	1024	3.0	91
	1633	8.4	256
	2321	0.7	21
19 M	0552	6.4	195
	1114	3.4	104
	1724	8.0	244
20 Tu ◐	0018	0.9	27
	0659	6.2	189
	1221	3.6	110
	1830	7.5	229
21 W	0126	1.1	34
	0816	6.3	192
	1346	3.5	107
	1950	7.3	223
22 Th	0239	1.1	34
	0926	6.9	210
	1512	2.8	85
	2113	7.4	226
23 F	0345	0.8	24
	1021	7.7	235
	1624	1.8	55
	2227	7.8	238
24 Sa	0442	0.6	18
	1109	8.6	262
	1721	0.6	18
	2330	8.3	253
25 Su	0532	0.4	12
	1152	9.5	290
	1812	−0.4	−12
26 M	0026	8.7	265
	0618	0.3	9
	1233	10.2	311
	1859	−1.3	−40
27 Tu ○	0117	8.9	271
	0702	0.4	12
	1315	10.8	329
	1945	−1.8	−55
28 W	0206	9.0	274
	0745	0.7	21
	1356	11.0	335
	2030	−2.0	−61
29 Th	0254	8.8	268
	0828	1.1	34
	1438	10.8	329
	2116	−1.8	−55
30 F	0343	8.4	256
	0913	1.7	52
	1521	10.4	317
	2202	−1.2	−37
31 Sa	0434	7.9	241
	0959	2.3	70
	1606	9.7	296
	2251	−0.5	−15

November

	Time	Height	
	h m	ft	cm
1 Su	0529	7.4	226
	1050	2.9	88
	1655	8.8	268
	2344	0.3	9
2 M	0631	7.0	213
	1151	3.4	104
	1752	7.9	241
3 Tu ◑	0044	1.0	30
	0743	6.8	207
	1309	3.7	113
	1901	7.1	216
4 W	0153	1.5	46
	0855	6.9	210
	1443	3.5	107
	2025	6.6	201
5 Th	0302	1.8	55
	0954	7.2	219
	1600	3.0	91
	2148	6.6	201
6 F	0401	1.9	58
	1039	7.6	232
	1655	2.3	70
	2253	6.8	207
7 Sa	0448	2.0	61
	1115	8.1	247
	1738	1.6	49
	2343	7.1	216
8 Su	0528	2.0	61
	1146	8.5	259
	1814	1.0	30
9 M	0026	7.3	223
	0603	2.0	61
	1215	9.0	274
	1847	0.4	12
10 Tu	0103	7.6	232
	0635	2.1	64
	1244	9.4	287
	1919	0.0	0
11 W ●	0138	7.7	235
	0708	2.2	67
	1314	9.6	293
	1951	−0.3	−9
12 Th	0213	7.8	238
	0740	2.3	70
	1345	9.8	299
	2024	−0.5	−15
13 F	0248	7.8	238
	0814	2.5	76
	1418	9.8	299
	2059	−0.5	−15
14 Sa	0325	7.6	232
	0849	2.7	82
	1453	9.6	293
	2136	−0.5	−15
15 Su	0405	7.4	226
	0927	2.9	88
	1531	9.3	283
	2216	−0.3	−9

	Time	Height	
	h m	ft	cm
16 M	0449	7.2	219
	1011	3.1	94
	1614	8.8	268
	2301	0.0	0
17 Tu	0540	7.0	213
	1104	3.3	101
	1705	8.2	250
	2353	0.4	12
18 W ◐	0638	7.0	213
	1210	3.4	104
	1808	7.6	232
19 Th	0051	0.8	24
	0741	7.2	219
	1330	3.1	94
	1924	7.1	216
20 F	0156	1.1	34
	0844	7.7	235
	1455	2.5	76
	2049	6.9	210
21 Sa	0302	1.3	40
	0942	8.4	256
	1608	1.4	43
	2211	7.1	216
22 Su	0404	1.3	40
	1034	9.2	280
	1708	0.3	9
	2320	7.5	229
23 M	0500	1.4	43
	1121	10.0	305
	1801	−0.7	−21
24 Tu	0020	7.9	241
	0551	1.4	43
	1207	10.6	323
	1849	−1.4	−43
25 W ○	0112	8.2	250
	0638	1.5	46
	1251	11.0	335
	1934	−1.8	−55
26 Th	0201	8.4	256
	0725	1.6	49
	1334	11.1	338
	2018	−1.9	−58
27 F	0248	8.4	256
	0810	1.9	58
	1417	10.9	332
	2102	−1.7	−52
28 Sa	0334	8.3	253
	0855	2.2	67
	1500	10.4	317
	2145	−1.3	−40
29 Su	0420	8.0	244
	0941	2.6	79
	1543	9.7	296
	2228	−0.6	−18
30 M	0507	7.8	238
	1030	3.0	91
	1628	8.8	268
	2312	0.1	3

December

	Time	Height	
	h m	ft	cm
1 Tu	0557	7.5	229
	1125	3.3	101
	1717	7.9	241
	2359	0.9	27
2 W ◑	0651	7.3	223
	1230	3.5	107
	1814	7.0	213
3 Th	0051	1.5	46
	0748	7.3	223
	1349	3.5	107
	1924	6.4	195
4 F	0147	2.1	64
	0844	7.4	226
	1512	3.1	94
	2047	6.0	183
5 Sa	0247	2.5	76
	0935	7.7	235
	1618	2.5	76
	2209	6.0	183
6 Su	0344	2.7	82
	1019	8.1	247
	1708	1.8	55
	2314	6.3	192
7 M	0434	2.8	85
	1058	8.6	262
	1749	1.1	34
8 Tu	0004	6.6	201
	0519	2.9	88
	1134	9.1	277
	1825	0.5	15
9 W	0047	7.0	213
	0600	2.8	85
	1210	9.5	290
	1900	0.0	0
10 Th	0125	7.3	223
	0638	2.8	85
	1246	9.8	299
	1934	−0.5	−15
11 F ●	0201	7.6	232
	0716	2.7	82
	1322	10.1	308
	2008	−0.8	−24
12 Sa	0237	7.7	235
	0754	2.7	82
	1359	10.1	308
	2044	−1.0	−30
13 Su	0314	7.8	238
	0834	2.6	79
	1437	10.0	305
	2121	−1.0	−30
14 M	0353	7.8	238
	0916	2.6	79
	1518	9.7	296
	2201	−0.9	−27
15 Tu	0435	7.8	238
	1002	2.7	82
	1602	9.2	280
	2243	−0.5	−15

	Time	Height	
	h m	ft	cm
16 W	0520	7.8	238
	1055	2.7	82
	1653	8.5	259
	2329	−0.1	−3
17 Th	0610	7.9	241
	1158	2.7	82
	1752	7.7	235
18 F ◐	0020	0.5	15
	0704	8.1	247
	1311	2.5	76
	1903	6.9	210
19 Sa	0117	1.2	37
	0803	8.4	256
	1433	2.0	61
	2028	6.4	195
20 Su	0221	1.7	52
	0903	8.9	271
	1551	1.2	37
	2157	6.4	195
21 M	0328	2.1	64
	1002	9.4	287
	1657	0.3	9
	2316	6.7	204
22 Tu	0432	2.2	67
	1057	9.9	302
	1752	−0.6	−18
23 W	0018	7.2	219
	0530	2.3	70
	1148	10.4	317
	1841	−1.2	−37
24 Th	0111	7.6	232
	0623	2.2	67
	1235	10.7	326
	1926	−1.5	−46
25 F ○	0158	8.0	244
	0711	2.2	67
	1320	10.7	326
	2008	−1.6	−49
26 Sa	0240	8.2	250
	0757	2.2	67
	1403	10.6	323
	2048	−1.5	−46
27 Su	0321	8.3	253
	0841	2.2	67
	1444	10.2	311
	2126	−1.1	−34
28 M	0359	8.2	250
	0924	2.4	73
	1524	9.6	293
	2203	−0.6	−18
29 Tu	0438	8.1	247
	1008	2.6	79
	1604	8.8	268
	2239	0.0	0
30 W	0516	7.9	241
	1054	2.8	85
	1646	8.0	244
	2316	0.7	21
31 Th	0555	7.8	238
	1146	3.0	91
	1732	7.2	219
	2355	1.4	43

Time meridian 135° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.
Heights are referred to mean lower low water which is the chart datum of soundings.

Alitak, Alaska, 2015

Times and Heights of High and Low Waters

January

	Time	Height	
	h m	ft	cm
1 Th	0446	3.8	116
	1056	12.1	369
	1803	−0.4	−12
2 F	0012	9.5	290
	0547	3.8	116
	1147	12.4	378
	1850	−1.1	−34
3 Sa	0100	10.2	311
	0639	3.6	110
	1233	12.7	387
	1932	−1.5	−46
4 Su ○	0141	10.7	326
	0724	3.4	104
	1315	12.9	393
	2010	−1.7	−52
5 M	0219	11.1	338
	0805	3.1	94
	1353	12.8	390
	2045	−1.7	−52
6 Tu	0254	11.3	344
	0842	3.0	91
	1428	12.6	384
	2117	−1.4	−43
7 W	0327	11.3	344
	0916	3.0	91
	1502	12.2	372
	2147	−0.9	−27
8 Th	0358	11.2	341
	0951	3.0	91
	1535	11.6	354
	2216	−0.3	−9
9 F	0430	11.0	335
	1026	3.2	98
	1609	10.9	332
	2245	0.5	15
10 Sa	0502	10.8	329
	1105	3.4	104
	1646	10.1	308
	2315	1.4	43
11 Su	0537	10.6	323
	1150	3.6	110
	1729	9.2	280
	2349	2.3	70
12 M	0616	10.4	317
	1246	3.7	113
	1823	8.3	253
13 Tu ◑	0030	3.2	98
	0703	10.3	314
	1354	3.6	110
	1935	7.7	235
14 W	0122	4.0	122
	0759	10.4	317
	1511	3.0	91
	2107	7.6	232
15 Th	0230	4.6	140
	0903	10.7	326
	1624	2.0	61
	2237	8.1	247

	Time	Height	
	h m	ft	cm
16 F	0345	4.7	143
	1008	11.3	344
	1723	0.8	24
	2341	9.0	274
17 Sa	0456	4.4	134
	1108	12.1	369
	1813	−0.5	−15
18 Su	0031	10.0	305
	0557	3.8	116
	1201	13.0	396
	1859	−1.7	−52
19 M	0114	11.0	335
	0651	3.0	91
	1249	13.8	421
	1943	−2.6	−79
20 Tu ●	0155	11.9	363
	0741	2.2	67
	1336	14.3	436
	2026	−3.1	−94
21 W	0236	12.6	384
	0829	1.5	46
	1421	14.4	439
	2107	−3.2	−98
22 Th	0315	13.0	396
	0917	1.0	30
	1506	14.1	430
	2148	−2.8	−85
23 F	0356	13.2	402
	1005	0.8	24
	1553	13.3	405
	2228	−1.9	−58
24 Sa	0438	13.1	399
	1055	0.9	27
	1641	12.1	369
	2309	−0.6	−18
25 Su	0522	12.7	387
	1150	1.2	37
	1735	10.7	326
	2352	0.8	24
26 M ◐	0611	12.2	372
	1253	1.5	46
	1839	9.3	283
27 Tu	0041	2.3	70
	0706	11.6	354
	1410	1.7	52
	2001	8.3	253
28 W	0141	3.6	110
	0812	11.1	338
	1535	1.5	46
	2138	8.0	244
29 Th	0300	4.4	134
	0926	10.9	332
	1650	1.0	30
	2303	8.4	256
30 F	0430	4.6	140
	1037	11.1	338
	1749	0.3	9
31 Sa	0003	9.1	277
	0541	4.3	131
	1135	11.4	347
	1837	−0.3	−9

February

	Time	Height	
	h m	ft	cm
1 Su	0049	9.8	299
	0634	3.8	116
	1224	11.8	360
	1918	−0.8	−24
2 M	0126	10.4	317
	0717	3.3	101
	1305	12.2	372
	1954	−1.0	−30
3 Tu ○	0200	10.9	332
	0754	2.8	85
	1342	12.4	378
	2026	−1.1	−34
4 W	0231	11.3	344
	0827	2.4	73
	1415	12.4	378
	2054	−1.0	−30
5 Th	0300	11.6	354
	0858	2.1	64
	1447	12.2	372
	2121	−0.6	−18
6 F	0328	11.7	357
	0929	2.0	61
	1518	11.8	360
	2147	−0.1	−3
7 Sa	0354	11.7	357
	1002	2.0	61
	1549	11.3	344
	2212	0.6	18
8 Su	0421	11.5	351
	1036	2.2	67
	1623	10.6	323
	2239	1.5	46
9 M	0451	11.3	344
	1114	2.5	76
	1702	9.8	299
	2308	2.4	73
10 Tu	0524	11.1	338
	1200	2.7	82
	1748	8.9	271
	2342	3.3	101
11 W ◑	0606	10.8	329
	1300	2.9	88
	1850	8.1	247
12 Th	0028	4.1	125
	0659	10.5	320
	1415	2.7	82
	2014	7.6	232
13 F	0137	4.8	146
	0807	10.5	320
	1539	2.1	64
	2156	7.9	241
14 Sa	0305	5.0	152
	0926	10.8	329
	1651	1.0	30
	2314	8.8	268
15 Su	0432	4.6	140
	1042	11.5	351
	1749	−0.3	−9

	Time	Height	
	h m	ft	cm
16 M	0007	10.0	305
	0541	3.6	110
	1143	12.5	381
	1838	−1.4	−43
17 Tu	0051	11.1	338
	0638	2.4	73
	1236	13.4	408
	1922	−2.3	−70
18 W ●	0132	12.3	375
	0729	1.2	37
	1325	14.1	430
	2005	−2.8	−85
19 Th	0211	13.2	402
	0817	0.2	6
	1412	14.3	436
	2046	−2.8	−85
20 F	0250	13.8	421
	0904	−0.5	−15
	1457	14.1	430
	2125	−2.2	−67
21 Sa	0329	14.0	427
	0950	−0.8	−24
	1543	13.3	405
	2204	−1.3	−40
22 Su	0409	13.8	421
	1037	−0.6	−18
	1630	12.2	372
	2243	0.0	0
23 M	0450	13.3	405
	1127	−0.1	−3
	1720	10.8	329
	2324	1.5	46
24 Tu	0535	12.4	378
	1224	0.7	21
	1819	9.4	287
25 W ◐	0009	2.9	88
	0626	11.4	347
	1333	1.4	43
	1935	8.3	253
26 Th	0107	4.2	128
	0731	10.5	320
	1459	1.7	52
	2113	7.9	241
27 F	0232	5.0	152
	0854	10.0	305
	1623	1.5	46
	2243	8.3	253
28 Sa	0422	4.9	149
	1019	10.0	305
	1726	1.0	30
	2343	8.9	271

March

	Time	Height	
	h m	ft	cm
1 Su	0535	4.3	131
	1123	10.5	320
	1815	0.5	15
2 M	0026	9.7	296
	0624	3.6	110
	1212	11.0	335
	1855	0.1	3
3 Tu	0101	10.4	317
	0703	2.8	85
	1252	11.5	351
	1928	−0.1	−3
4 W	0132	11.0	335
	0736	2.1	64
	1327	11.8	360
	1958	−0.2	−6
5 Th ○	0201	11.5	351
	0807	1.6	49
	1400	12.0	366
	2025	−0.1	−3
6 F	0227	11.9	363
	0837	1.2	37
	1431	12.0	366
	2051	0.1	3
7 Sa	0253	12.1	369
	0907	0.9	27
	1501	11.9	363
	2116	0.6	18
8 Su	0318	12.2	372
	0938	0.8	24
	1532	11.5	351
	2142	1.2	37
9 M	0344	12.1	369
	1010	1.0	30
	1605	10.9	332
	2208	2.0	61
10 Tu	0412	11.9	363
	1046	1.2	37
	1642	10.2	311
	2237	2.7	82
11 W	0445	11.6	354
	1129	1.6	49
	1727	9.3	283
	2311	3.6	110
12 Th	0525	11.1	338
	1222	1.9	58
	1825	8.5	259
	2357	4.3	131
13 F ◑	0617	10.6	323
	1333	2.1	64
	1942	8.0	244
14 Sa	0108	5.0	152
	0728	10.2	311
	1456	1.9	58
	2119	8.2	250
15 Su	0244	5.0	152
	0854	10.3	314
	1616	1.1	34
	2241	9.0	274

	Time	Height	
	h m	ft	cm
16 M	0418	4.2	128
	1020	10.9	332
	1718	0.1	3
	2336	10.2	311
17 Tu	0529	2.9	88
	1128	11.8	360
	1810	−0.8	−24
18 W	0022	11.5	351
	0625	1.4	43
	1224	12.8	390
	1856	−1.4	−43
19 Th	0103	12.7	387
	0715	0.0	0
	1314	13.5	411
	1939	−1.7	−52
20 F ●	0143	13.7	418
	0803	−1.2	−37
	1401	13.8	421
	2021	−1.6	−49
21 Sa	0222	14.3	436
	0848	−1.9	−58
	1446	13.6	415
	2101	−1.0	−30
22 Su	0301	14.4	439
	0933	−2.1	−64
	1531	13.0	396
	2140	−0.2	−6
23 M	0339	14.1	430
	1018	−1.7	−52
	1617	12.0	366
	2219	1.0	30
24 Tu	0419	13.4	408
	1105	−1.0	−30
	1706	10.8	329
	2259	2.2	67
25 W	0502	12.3	375
	1156	0.0	0
	1801	9.6	293
	2344	3.5	107
26 Th ◐	0550	11.1	338
	1257	1.1	34
	1911	8.7	265
27 F	0043	4.5	137
	0652	9.9	302
	1413	1.8	55
	2040	8.2	250
28 Sa	0211	5.1	155
	0817	9.2	280
	1539	2.0	61
	2206	8.4	256
29 Su	0405	4.9	149
	0952	9.1	277
	1648	1.8	55
	2307	9.0	274
30 M	0516	4.1	125
	1101	9.5	290
	1739	1.5	46
	2350	9.7	296
31 Tu	0602	3.2	98
	1151	10.1	308
	1818	1.2	37

Time meridian 135° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.
Heights are referred to mean lower low water which is the chart datum of soundings.

Alitak, Alaska, 2015

Times and Heights of High and Low Waters

April

	Time	Height	
	h m	ft	cm
1 W	0025	10.4	317
	0639	2.3	70
	1232	10.6	323
	1852	1.0	30
2 Th	0055	11.1	338
	0711	1.5	46
	1308	11.1	338
	1922	0.9	27
3 F	0124	11.7	357
	0742	0.8	24
	1341	11.5	351
	1950	1.0	30
4 Sa ○	0151	12.2	372
	0813	0.2	6
	1413	11.6	354
	2018	1.2	37
5 Su	0217	12.5	381
	0844	−0.1	−3
	1445	11.6	354
	2046	1.5	46
6 M	0243	12.6	384
	0916	−0.3	−9
	1517	11.4	347
	2114	2.0	61
7 Tu	0311	12.6	384
	0950	−0.2	−6
	1552	11.0	335
	2144	2.6	79
8 W	0342	12.3	375
	1027	0.0	0
	1630	10.4	317
	2216	3.2	98
9 Th	0416	11.9	363
	1109	0.4	12
	1716	9.7	296
	2255	3.9	119
10 F	0458	11.3	344
	1200	0.9	27
	1812	9.0	274
	2347	4.5	137
11 Sa ◑	0552	10.6	323
	1304	1.3	40
	1924	8.7	265
12 Su	0102	4.8	146
	0703	10.0	305
	1420	1.4	43
	2047	8.9	271
13 M	0237	4.6	140
	0831	9.8	299
	1536	1.1	34
	2203	9.7	296
14 Tu	0407	3.5	107
	1000	10.2	311
	1642	0.6	18
	2301	10.8	329
15 W	0516	2.0	61
	1112	10.9	332
	1737	0.1	3
	2348	12.0	366

	Time	Height	
	h m	ft	cm
16 Th	0611	0.4	12
	1210	11.8	360
	1826	−0.2	−6
17 F	0032	13.1	399
	0701	−1.0	−30
	1302	12.4	378
	1911	−0.2	−6
18 Sa ●	0113	13.9	424
	0747	−2.1	−64
	1349	12.8	390
	1955	0.0	0
19 Su	0153	14.3	436
	0833	−2.7	−82
	1435	12.8	390
	2036	0.4	12
20 M	0233	14.4	439
	0917	−2.8	−85
	1520	12.4	378
	2117	1.1	34
21 Tu	0312	13.9	424
	1000	−2.3	−70
	1605	11.7	357
	2158	2.0	61
22 W	0352	13.1	399
	1044	−1.5	−46
	1651	10.8	329
	2239	2.9	88
23 Th	0433	12.0	366
	1130	−0.5	−15
	1743	9.9	302
	2326	3.8	116
24 F	0519	10.7	326
	1222	0.7	21
	1844	9.1	277
25 Sa ◐	0023	4.5	137
	0615	9.5	290
	1324	1.6	49
	1958	8.7	265
26 Su	0143	4.9	149
	0732	8.6	262
	1435	2.2	67
	2113	8.8	268
27 M	0325	4.6	140
	0905	8.3	253
	1546	2.4	73
	2215	9.2	280
28 Tu	0439	3.9	119
	1023	8.6	262
	1642	2.4	73
	2301	9.8	299
29 W	0528	2.9	88
	1120	9.1	277
	1727	2.3	70
	2339	10.5	320
30 Th	0607	1.9	58
	1205	9.7	296
	1804	2.2	67

May

	Time	Height	
	h m	ft	cm
1 F	0012	11.2	341
	0641	1.0	30
	1244	10.2	311
	1838	2.1	64
2 Sa	0043	11.8	360
	0715	0.2	6
	1320	10.7	326
	1911	2.1	64
3 Su ○	0112	12.3	375
	0748	−0.5	−15
	1355	11.1	338
	1944	2.2	67
4 M	0142	12.7	387
	0823	−0.9	−27
	1429	11.2	341
	2017	2.4	73
5 Tu	0213	12.9	393
	0858	−1.2	−37
	1505	11.2	341
	2051	2.7	82
6 W	0245	12.9	393
	0935	−1.3	−40
	1542	11.0	335
	2127	3.0	91
7 Th	0320	12.6	384
	1014	−1.1	−34
	1622	10.6	323
	2206	3.4	104
8 F	0358	12.2	372
	1056	−0.7	−21
	1708	10.1	308
	2251	3.8	116
9 Sa	0443	11.4	347
	1145	−0.1	−3
	1803	9.7	296
	2348	4.2	128
10 Su	0539	10.6	323
	1242	0.5	15
	1907	9.6	293
11 M ◑	0103	4.2	128
	0649	9.8	299
	1347	0.9	27
	2016	9.8	299
12 Tu	0230	3.7	113
	0813	9.3	283
	1456	1.2	37
	2124	10.4	317
13 W	0353	2.6	79
	0941	9.4	287
	1602	1.3	40
	2223	11.3	344
14 Th	0501	1.1	34
	1056	9.9	302
	1701	1.3	40
	2314	12.2	372
15 F	0556	−0.3	−9
	1158	10.6	323
	1754	1.3	40

	Time	Height	
	h m	ft	cm
16 Sa	0001	13.1	399
	0647	−1.6	−49
	1251	11.2	341
	1843	1.3	40
17 Su ●	0045	13.7	418
	0734	−2.4	−73
	1339	11.6	354
	1930	1.5	46
18 M	0128	14.0	427
	0819	−2.9	−88
	1425	11.8	360
	2015	1.7	52
19 Tu	0209	13.9	424
	0902	−2.9	−88
	1509	11.7	357
	2058	2.1	64
20 W	0249	13.4	408
	0943	−2.5	−76
	1552	11.3	344
	2140	2.6	79
21 Th	0329	12.7	387
	1024	−1.8	−55
	1636	10.8	329
	2223	3.1	94
22 F	0410	11.7	357
	1106	−0.8	−24
	1722	10.1	308
	2308	3.7	113
23 Sa	0452	10.6	323
	1148	0.2	6
	1813	9.6	293
24 Su	0000	4.2	128
	0541	9.4	287
	1235	1.2	37
	1909	9.2	280
25 M ◐	0104	4.4	134
	0643	8.5	259
	1327	2.0	61
	2010	9.2	280
26 Tu	0223	4.3	131
	0800	7.9	241
	1425	2.7	82
	2109	9.4	287
27 W	0342	3.7	113
	0925	7.8	238
	1523	3.0	91
	2200	9.8	299
28 Th	0442	2.8	85
	1036	8.1	247
	1618	3.2	98
	2244	10.4	317
29 F	0528	1.8	55
	1131	8.7	265
	1706	3.2	98
	2324	11.1	338
30 Sa	0608	0.9	27
	1217	9.3	283
	1749	3.2	98
31 Su	0000	11.7	357
	0647	−0.1	−3
	1258	10.0	305
	1831	3.1	94

June

	Time	Height	
	h m	ft	cm
1 M	0036	12.3	375
	0725	−0.9	−27
	1336	10.5	320
	1912	3.0	91
2 Tu ○	0112	12.8	390
	0803	−1.6	−49
	1414	10.9	332
	1953	2.9	88
3 W	0148	13.1	399
	0842	−2.0	−61
	1452	11.1	338
	2034	2.9	88
4 Th	0226	13.1	399
	0922	−2.2	−67
	1532	11.1	338
	2116	2.9	88
5 F	0305	12.9	393
	1002	−2.0	−61
	1613	11.0	335
	2201	3.0	91
6 Sa	0348	12.4	378
	1044	−1.6	−49
	1658	10.8	329
	2250	3.1	94
7 Su	0435	11.6	354
	1129	−1.0	−30
	1748	10.7	326
	2348	3.2	98
8 M	0530	10.7	326
	1219	−0.1	−3
	1843	10.6	323
9 Tu ◑	0057	3.1	94
	0637	9.7	296
	1315	0.7	21
	1944	10.7	326
10 W	0215	2.7	82
	0756	8.9	271
	1417	1.5	46
	2046	11.1	338
11 Th	0335	1.7	52
	0922	8.7	265
	1522	2.1	64
	2147	11.6	354
12 F	0444	0.6	18
	1042	9.0	274
	1627	2.4	73
	2243	12.2	372
13 Sa	0543	−0.6	−18
	1147	9.5	290
	1727	2.5	76
	2335	12.7	387
14 Su	0634	−1.6	−49
	1242	10.1	308
	1822	2.6	79
15 M	0023	13.1	399
	0722	−2.3	−70
	1330	10.6	323
	1912	2.5	76

	Time	Height	
	h m	ft	cm
16 Tu ●	0108	13.3	405
	0806	−2.6	−79
	1414	11.0	335
	1959	2.5	76
17 W	0151	13.2	402
	0848	−2.6	−79
	1456	11.1	338
	2043	2.5	76
18 Th	0232	12.9	393
	0927	−2.3	−70
	1536	11.0	335
	2125	2.7	82
19 F	0311	12.3	375
	1004	−1.7	−52
	1615	10.8	329
	2205	2.9	88
20 Sa	0349	11.5	351
	1039	−1.0	−30
	1654	10.5	320
	2245	3.2	98
21 Su	0428	10.6	323
	1114	−0.1	−3
	1734	10.1	308
	2330	3.5	107
22 M	0510	9.6	293
	1150	0.9	27
	1817	9.8	299
23 Tu	0021	3.7	113
	0558	8.7	265
	1229	1.8	55
	1904	9.6	293
24 W ◐	0122	3.8	116
	0659	7.9	241
	1314	2.7	82
	1954	9.7	296
25 Th	0232	3.5	107
	0814	7.5	229
	1406	3.3	101
	2047	9.9	302
26 F	0343	2.9	88
	0938	7.5	229
	1505	3.8	116
	2141	10.3	314
27 Sa	0443	2.0	61
	1051	7.9	241
	1606	4.0	122
	2232	10.8	329
28 Su	0534	0.9	27
	1147	8.6	262
	1704	3.9	119
	2320	11.5	351
29 M	0619	−0.1	−3
	1234	9.4	287
	1757	3.6	110
30 Tu	0004	12.2	372
	0702	−1.1	−34
	1316	10.1	308
	1846	3.3	101

Time meridian 135° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.
Heights are referred to mean lower low water which is the chart datum of soundings.

Alitak, Alaska, 2015

Times and Heights of High and Low Waters

July

	Time	Height	
	h m	ft	cm
1 W ○	0047	12.8	390
	0744	−1.9	−58
	1357	10.8	329
	1934	2.9	88
2 Th	0130	13.2	402
	0825	−2.5	−76
	1436	11.3	344
	2020	2.5	76
3 F	0212	13.5	411
	0906	−2.8	−85
	1516	11.6	354
	2106	2.1	64
4 Sa	0255	13.3	405
	0946	−2.7	−82
	1556	11.8	360
	2153	1.9	58
5 Su	0340	12.8	390
	1027	−2.2	−67
	1639	11.8	360
	2243	1.9	58
6 M	0428	12.0	366
	1109	−1.3	−40
	1724	11.7	357
	2338	1.9	58
7 Tu	0521	10.8	329
	1154	−0.2	−6
	1814	11.5	351
8 W ◑	0041	1.9	58
	0624	9.6	293
	1244	1.0	30
	1909	11.4	347
9 Th	0154	1.7	52
	0739	8.7	265
	1341	2.1	64
	2010	11.3	344
10 F	0313	1.2	37
	0905	8.2	250
	1448	2.9	88
	2114	11.4	347
11 Sa	0428	0.5	15
	1031	8.3	253
	1600	3.4	104
	2219	11.6	354
12 Su	0530	−0.4	−12
	1139	8.9	271
	1710	3.5	107
	2317	12.0	366
13 M	0624	−1.1	−34
	1233	9.5	290
	1811	3.3	101
14 Tu	0009	12.3	375
	0711	−1.7	−52
	1319	10.1	308
	1903	3.0	91
15 W ●	0056	12.5	381
	0753	−2.0	−61
	1400	10.6	323
	1948	2.7	82

	Time	Height	
	h m	ft	cm
16 Th	0138	12.6	384
	0832	−2.0	−61
	1438	10.9	332
	2029	2.4	73
17 F	0217	12.4	378
	0907	−1.8	−55
	1513	11.1	338
	2107	2.3	70
18 Sa	0254	12.1	369
	0939	−1.4	−43
	1546	11.0	335
	2143	2.3	70
19 Su	0329	11.6	354
	1009	−0.7	−21
	1619	10.9	332
	2219	2.4	73
20 M	0404	10.9	332
	1038	0.1	3
	1651	10.7	326
	2256	2.7	82
21 Tu	0440	10.0	305
	1108	1.0	30
	1725	10.4	317
	2339	2.9	88
22 W	0521	9.2	280
	1140	1.9	58
	1802	10.2	311
23 Th ◐	0029	3.1	94
	0611	8.3	253
	1217	2.8	85
	1845	10.0	305
24 F	0130	3.2	98
	0714	7.7	235
	1304	3.6	110
	1936	9.9	302
25 Sa	0241	2.9	88
	0836	7.4	226
	1404	4.2	128
	2037	10.1	308
26 Su	0355	2.2	67
	1007	7.6	232
	1515	4.5	137
	2142	10.5	320
27 M	0459	1.2	37
	1117	8.3	253
	1628	4.3	131
	2245	11.1	338
28 Tu	0551	0.1	3
	1209	9.2	280
	1731	3.8	116
	2339	12.0	366
29 W	0638	−1.0	−30
	1253	10.1	308
	1827	3.1	94
30 Th	0029	12.8	390
	0722	−2.0	−61
	1334	11.0	335
	1918	2.2	67
31 F ○	0115	13.4	408
	0804	−2.6	−79
	1413	11.8	360
	2006	1.5	46

August

	Time	Height	
	h m	ft	cm
1 Sa	0200	13.8	421
	0845	−2.9	−88
	1452	12.4	378
	2053	0.8	24
2 Su	0245	13.7	418
	0926	−2.7	−82
	1531	12.8	390
	2140	0.4	12
3 M	0331	13.2	402
	1005	−2.0	−61
	1612	12.8	390
	2229	0.3	9
4 Tu	0418	12.3	375
	1046	−1.0	−30
	1654	12.6	384
	2321	0.5	15
5 W	0510	11.1	338
	1128	0.3	9
	1741	12.2	372
6 Th ◑	0020	0.8	24
	0609	9.8	299
	1215	1.7	52
	1833	11.7	357
7 F	0129	1.1	34
	0722	8.6	262
	1311	2.9	88
	1935	11.2	341
8 Sa	0249	1.1	34
	0851	8.1	247
	1422	3.8	116
	2047	10.8	329
9 Su	0410	0.8	24
	1021	8.2	250
	1549	4.2	128
	2202	10.9	332
10 M	0516	0.2	6
	1130	8.8	268
	1709	4.0	122
	2308	11.1	338
11 Tu	0610	−0.4	−12
	1221	9.4	287
	1808	3.4	104
12 W	0001	11.5	351
	0655	−0.9	−27
	1303	10.1	308
	1856	2.8	85
13 Th	0047	11.9	363
	0735	−1.1	−34
	1339	10.6	323
	1936	2.3	70
14 F ●	0127	12.1	369
	0810	−1.2	−37
	1412	11.1	338
	2012	1.9	58
15 Sa	0203	12.2	372
	0841	−1.0	−30
	1443	11.4	347
	2046	1.6	49

	Time	Height	
	h m	ft	cm
16 Su	0237	12.0	366
	0909	−0.6	−18
	1512	11.5	351
	2118	1.5	46
17 M	0309	11.7	357
	0936	−0.1	−3
	1540	11.4	347
	2150	1.5	46
18 Tu	0341	11.2	341
	1002	0.7	21
	1607	11.3	344
	2224	1.7	52
19 W	0415	10.5	320
	1028	1.5	46
	1636	11.0	335
	2301	2.0	61
20 Th	0452	9.7	296
	1057	2.4	73
	1708	10.7	326
	2344	2.4	73
21 F	0536	8.9	271
	1130	3.2	98
	1747	10.4	317
22 Sa ◐	0038	2.6	79
	0632	8.1	247
	1214	4.1	125
	1837	10.1	308
23 Su	0147	2.7	82
	0748	7.6	232
	1317	4.7	143
	1941	9.9	302
24 M	0307	2.3	70
	0924	7.7	235
	1440	4.9	149
	2059	10.1	308
25 Tu	0422	1.5	46
	1045	8.4	256
	1605	4.5	137
	2216	10.7	326
26 W	0521	0.4	12
	1140	9.5	290
	1715	3.6	110
	2319	11.7	357
27 Th	0611	−0.7	−21
	1225	10.6	323
	1812	2.4	73
28 F	0013	12.6	384
	0656	−1.6	−49
	1305	11.7	357
	1903	1.2	37
29 Sa ○	0102	13.4	408
	0739	−2.1	−64
	1345	12.7	387
	1951	0.1	3
30 Su	0148	13.9	424
	0820	−2.3	−70
	1423	13.4	408
	2038	−0.7	−21
31 M	0234	13.9	424
	0900	−1.9	−58
	1502	13.8	421
	2124	−1.1	−34

September

	Time	Height	
	h m	ft	cm
1 Tu	0320	13.4	408
	0940	−1.2	−37
	1542	13.8	421
	2211	−1.1	−34
2 W	0407	12.5	381
	1020	−0.1	−3
	1623	13.4	408
	2301	−0.7	−21
3 Th	0457	11.3	344
	1102	1.2	37
	1707	12.6	384
	2356	0.0	0
4 F	0555	10.0	305
	1149	2.6	79
	1758	11.7	357
5 Sa ◑	0101	0.7	21
	0706	8.9	271
	1247	3.8	116
	1901	10.7	326
6 Su	0220	1.2	37
	0835	8.3	253
	1408	4.5	137
	2022	10.1	308
7 M	0345	1.3	40
	1005	8.5	259
	1551	4.6	140
	2149	10.0	305
8 Tu	0454	0.9	27
	1111	9.0	274
	1709	4.0	122
	2259	10.3	314
9 W	0548	0.5	15
	1159	9.7	296
	1802	3.2	98
	2352	10.8	329
10 Th	0631	0.2	6
	1237	10.4	317
	1843	2.4	73
11 F	0035	11.3	344
	0708	0.0	0
	1310	11.0	335
	1919	1.7	52
12 Sa ●	0112	11.7	357
	0740	0.0	0
	1340	11.5	351
	1951	1.2	37
13 Su	0146	11.9	363
	0808	0.1	3
	1408	11.8	360
	2021	0.8	24
14 M	0219	11.9	363
	0835	0.5	15
	1435	12.0	366
	2052	0.6	18
15 Tu	0250	11.7	357
	0901	1.0	30
	1501	12.1	369
	2123	0.6	18

	Time	Height	
	h m	ft	cm
16 W	0321	11.4	347
	0927	1.6	49
	1527	11.9	363
	2155	0.8	24
17 Th	0353	10.8	329
	0954	2.3	70
	1554	11.7	357
	2230	1.1	34
18 F	0429	10.2	311
	1023	3.1	94
	1625	11.3	344
	2310	1.5	46
19 Sa	0512	9.4	287
	1056	3.8	116
	1703	10.8	329
	2359	2.0	61
20 Su ◐	0605	8.7	265
	1140	4.5	137
	1752	10.3	314
21 M	0104	2.3	70
	0717	8.2	250
	1247	5.1	155
	1859	9.8	299
22 Tu	0223	2.2	67
	0848	8.2	250
	1419	5.1	155
	2024	9.8	299
23 W	0342	1.6	49
	1009	9.0	274
	1551	4.4	134
	2151	10.3	314
24 Th	0447	0.8	24
	1107	10.1	308
	1702	3.1	94
	2301	11.3	344
25 F	0539	−0.1	−3
	1152	11.3	344
	1758	1.6	49
	2358	12.3	375
26 Sa	0626	−0.7	−21
	1234	12.5	381
	1847	0.1	3
27 Su ○	0048	13.1	399
	0710	−1.1	−34
	1314	13.5	411
	1935	−1.1	−34
28 M	0136	13.6	415
	0752	−1.1	−34
	1353	14.3	436
	2021	−2.0	−61
29 Tu	0222	13.6	415
	0834	−0.7	−21
	1433	14.6	445
	2107	−2.4	−73
30 W	0308	13.2	402
	0915	0.1	3
	1512	14.4	439
	2153	−2.2	−67

Time meridian 135° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.
Heights are referred to mean lower low water which is the chart datum of soundings.

Alitak, Alaska, 2015

Times and Heights of High and Low Waters

October

	Time	Height	
	h m	ft	cm
1 Th	0355	12.5	381
	0956	1.1	34
	1553	13.8	421
	2240	−1.6	−49
2 F	0444	11.4	347
	1039	2.2	67
	1637	12.7	387
	2332	−0.6	−18
3 Sa	0539	10.3	314
	1127	3.4	104
	1726	11.5	351
4 Su ◑	0032	0.5	15
	0647	9.3	283
	1228	4.4	134
	1828	10.3	314
5 M	0144	1.4	43
	0812	8.8	268
	1357	4.9	149
	1952	9.4	287
6 Tu	0307	1.8	55
	0935	8.9	271
	1543	4.6	140
	2127	9.2	280
7 W	0419	1.8	55
	1039	9.4	287
	1655	3.8	116
	2241	9.5	290
8 Th	0514	1.6	49
	1125	10.1	308
	1744	2.9	88
	2334	10.1	308
9 F	0557	1.4	43
	1202	10.7	326
	1823	2.0	61
10 Sa	0017	10.6	323
	0632	1.3	40
	1234	11.4	347
	1856	1.3	40
11 Su	0054	11.1	338
	0703	1.3	40
	1304	11.9	363
	1927	0.6	18
12 M ●	0128	11.4	347
	0732	1.5	46
	1331	12.3	375
	1957	0.1	3
13 Tu	0200	11.6	354
	0800	1.7	52
	1358	12.5	381
	2028	−0.2	−6
14 W	0232	11.6	354
	0828	2.1	64
	1425	12.6	384
	2100	−0.2	−6
15 Th	0304	11.4	347
	0857	2.6	79
	1452	12.5	381
	2132	−0.1	−3

	Time	Height	
	h m	ft	cm
16 F	0337	11.0	335
	0926	3.1	94
	1522	12.2	372
	2207	0.2	6
17 Sa	0414	10.5	320
	0958	3.7	113
	1554	11.8	360
	2247	0.6	18
18 Su	0456	9.9	302
	1035	4.3	131
	1633	11.2	341
	2333	1.1	34
19 M	0548	9.3	283
	1124	4.8	146
	1722	10.5	320
20 Tu ◐	0032	1.6	49
	0655	8.9	271
	1235	5.1	155
	1830	9.8	299
21 W	0144	1.8	55
	0814	9.1	277
	1408	4.9	149
	1956	9.5	290
22 Th	0259	1.7	52
	0929	9.8	299
	1538	3.9	119
	2127	9.8	299
23 F	0407	1.3	40
	1028	10.8	329
	1647	2.4	73
	2243	10.6	323
24 Sa	0504	0.9	27
	1117	12.0	366
	1743	0.8	24
	2343	11.5	351
25 Su	0554	0.5	15
	1202	13.2	402
	1833	−0.8	−24
26 M	0036	12.3	375
	0640	0.4	12
	1244	14.1	430
	1920	−2.0	−61
27 Tu ○	0125	12.8	390
	0725	0.5	15
	1325	14.7	448
	2006	−2.8	−85
28 W	0211	13.0	396
	0809	0.8	24
	1406	14.9	454
	2051	−3.0	−91
29 Th	0257	12.8	390
	0852	1.4	43
	1447	14.5	442
	2136	−2.8	−85
30 F	0343	12.3	375
	0936	2.1	64
	1528	13.8	421
	2222	−2.0	−61
31 Sa	0431	11.5	351
	1020	2.9	88
	1611	12.7	387
	2309	−1.0	−30

November

	Time	Height	
	h m	ft	cm
1 Su	0523	10.6	323
	1109	3.8	116
	1658	11.3	344
2 M	0001	0.2	6
	0623	9.8	299
	1209	4.5	137
	1755	10.0	305
3 Tu ◑	0101	1.3	40
	0735	9.4	287
	1331	4.9	149
	1911	9.0	274
4 W	0211	2.1	64
	0849	9.4	287
	1511	4.6	140
	2045	8.5	259
5 Th	0322	2.5	76
	0952	9.7	296
	1625	3.8	116
	2207	8.7	265
6 F	0422	2.7	82
	1041	10.3	314
	1716	2.8	85
	2307	9.1	277
7 Sa	0509	2.7	82
	1121	10.9	332
	1756	1.9	58
	2353	9.7	296
8 Su	0548	2.7	82
	1155	11.5	351
	1830	1.1	34
9 M	0033	10.3	314
	0622	2.7	82
	1226	12.1	369
	1902	0.3	9
10 Tu	0109	10.8	329
	0654	2.7	82
	1256	12.5	381
	1934	−0.3	−9
11 W ●	0143	11.1	338
	0727	2.8	85
	1325	12.8	390
	2007	−0.7	−21
12 Th	0217	11.3	344
	0800	3.0	91
	1355	13.0	396
	2041	−0.9	−27
13 F	0251	11.4	347
	0833	3.2	98
	1426	12.9	393
	2116	−1.0	−30
14 Sa	0325	11.2	341
	0908	3.5	107
	1459	12.7	387
	2152	−0.8	−24
15 Su	0403	10.9	332
	0945	3.9	119
	1535	12.3	375
	2232	−0.4	−12

	Time	Height	
	h m	ft	cm
16 M	0445	10.5	320
	1027	4.2	128
	1616	11.6	354
	2316	0.2	6
17 Tu	0534	10.1	308
	1120	4.5	137
	1706	10.8	329
18 W ◐	0007	0.8	24
	0632	9.9	302
	1228	4.6	140
	1811	9.9	302
19 Th	0108	1.4	43
	0739	10.1	308
	1353	4.3	131
	1932	9.3	283
20 F	0215	1.8	55
	0846	10.6	323
	1519	3.2	98
	2102	9.2	280
21 Sa	0323	2.0	61
	0948	11.4	347
	1630	1.8	55
	2224	9.7	296
22 Su	0426	2.0	61
	1042	12.4	378
	1729	0.2	6
	2330	10.5	320
23 M	0522	1.9	58
	1132	13.3	405
	1820	−1.2	−37
24 Tu	0026	11.3	344
	0614	1.9	58
	1218	14.1	430
	1908	−2.3	−70
25 W ○	0116	11.9	363
	0703	1.9	58
	1302	14.5	442
	1954	−3.0	−91
26 Th	0202	12.2	372
	0750	2.0	61
	1345	14.6	445
	2039	−3.2	−98
27 F	0247	12.3	375
	0836	2.2	67
	1427	14.3	436
	2122	−2.9	−88
28 Sa	0331	12.0	366
	0920	2.6	79
	1509	13.6	415
	2204	−2.2	−67
29 Su	0415	11.6	354
	1005	3.1	94
	1551	12.5	381
	2246	−1.2	−37
30 M	0501	11.0	335
	1051	3.6	110
	1634	11.3	344
	2329	−0.1	−3

December

	Time	Height	
	h m	ft	cm
1 Tu	0551	10.4	317
	1144	4.1	125
	1723	10.1	308
2 W ◑	0014	1.1	34
	0646	10.0	305
	1248	4.5	137
	1822	8.9	271
3 Th	0105	2.1	64
	0747	9.8	299
	1409	4.4	134
	1940	8.1	247
4 F	0202	3.0	91
	0847	9.9	302
	1532	3.9	119
	2110	7.9	241
5 Sa	0303	3.5	107
	0943	10.2	311
	1635	3.1	94
	2227	8.2	250
6 Su	0402	3.8	116
	1030	10.7	326
	1722	2.1	64
	2324	8.7	265
7 M	0453	3.9	119
	1111	11.3	344
	1801	1.2	37
8 Tu	0010	9.4	287
	0537	3.9	119
	1148	11.9	363
	1838	0.3	9
9 W	0050	10.0	305
	0619	3.8	116
	1223	12.4	378
	1914	−0.5	−15
10 Th	0127	10.6	323
	0658	3.6	110
	1258	12.8	390
	1950	−1.1	−34
11 F ●	0203	11.1	338
	0738	3.5	107
	1333	13.1	399
	2026	−1.5	−46
12 Sa	0238	11.3	344
	0817	3.4	104
	1408	13.3	405
	2102	−1.7	−52
13 Su	0314	11.5	351
	0857	3.3	101
	1445	13.2	402
	2140	−1.6	−49
14 M	0351	11.5	351
	0938	3.4	104
	1525	12.8	390
	2218	−1.3	−40
15 Tu	0431	11.3	344
	1023	3.4	104
	1608	12.1	369
	2259	−0.7	−21

	Time	Height	
	h m	ft	cm
16 W	0516	11.2	341
	1115	3.5	107
	1657	11.2	341
	2343	0.1	3
17 Th	0606	11.1	338
	1217	3.5	107
	1757	10.1	308
18 F ◐	0034	1.1	34
	0702	11.1	338
	1332	3.2	98
	1910	9.2	280
19 Sa	0133	2.0	61
	0804	11.3	344
	1455	2.5	76
	2038	8.7	265
20 Su	0239	2.7	82
	0908	11.7	357
	1612	1.3	40
	2208	8.9	271
21 M	0349	3.1	94
	1010	12.3	375
	1715	0.0	0
	2321	9.5	290
22 Tu	0455	3.2	98
	1107	13.0	396
	1810	−1.2	−37
23 W	0019	10.3	314
	0555	3.1	94
	1158	13.5	411
	1859	−2.1	−64
24 Th	0109	11.0	335
	0649	2.9	88
	1246	13.9	424
	1945	−2.7	−82
25 F ○	0154	11.5	351
	0739	2.7	82
	1331	14.0	427
	2028	−2.9	−88
26 Sa	0237	11.8	360
	0825	2.5	76
	1414	13.7	418
	2108	−2.7	−82
27 Su	0317	11.9	363
	0908	2.5	76
	1454	13.2	402
	2146	−2.1	−64
28 M	0356	11.7	357
	0949	2.7	82
	1534	12.4	378
	2221	−1.3	−40
29 Tu	0434	11.4	347
	1030	3.0	91
	1613	11.4	347
	2255	−0.3	−9
30 W	0513	11.0	335
	1113	3.3	101
	1653	10.3	314
	2330	0.9	27
31 Th	0554	10.6	323
	1202	3.7	113
	1739	9.2	280

Time meridian 135° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.
Heights are referred to mean lower low water which is the chart datum of soundings.

Sand Point, Popof Island, Alaska, 2015

Times and Heights of High and Low Waters

January

	Time	Height	
	h m	ft	cm
1 Th	0455	3.2	98
	1111	8.1	247
	1820	−0.1	−3
2 F	0052	5.9	180
	0554	3.3	101
	1158	8.2	250
	1905	−0.5	−15
3 Sa	0140	6.3	192
	0645	3.3	101
	1242	8.3	253
	1945	−0.7	−21
4 Su ○	0222	6.5	198
	0730	3.3	101
	1321	8.3	253
	2023	−0.8	−24
5 M	0259	6.7	204
	0810	3.2	98
	1358	8.1	247
	2057	−0.7	−21
6 Tu	0334	6.7	204
	0848	3.2	98
	1433	7.9	241
	2129	−0.5	−15
7 W	0407	6.8	207
	0924	3.2	98
	1506	7.6	232
	2200	−0.1	−3
8 Th	0439	6.8	207
	1001	3.1	94
	1540	7.2	219
	2229	0.3	9
9 F	0511	6.7	204
	1041	3.1	94
	1615	6.7	204
	2257	0.8	24
10 Sa	0542	6.7	204
	1126	3.1	94
	1654	6.2	189
	2326	1.3	40
11 Su	0615	6.7	204
	1219	3.1	94
	1741	5.5	168
	2357	1.9	58
12 M	0651	6.7	204
	1326	3.0	91
	1842	5.0	152
13 Tu ◑	0034	2.5	76
	0734	6.7	204
	1446	2.6	79
	2018	4.5	137
14 W	0122	3.0	91
	0825	6.9	210
	1600	2.0	61
	2213	4.6	140
15 Th	0226	3.5	107
	0922	7.1	216
	1700	1.3	40
	2332	4.9	149

	Time	Height	
	h m	ft	cm
16 F	0346	3.7	113
	1019	7.5	229
	1749	0.5	15
17 Sa	0027	5.4	165
	0500	3.7	113
	1113	7.9	241
	1834	−0.2	−6
18 Su	0113	6.0	183
	0601	3.4	104
	1204	8.4	256
	1916	−0.9	−27
19 M	0153	6.5	198
	0654	3.1	94
	1252	8.8	268
	1957	−1.3	−40
20 Tu ●	0232	6.9	210
	0743	2.7	82
	1340	9.0	274
	2038	−1.5	−46
21 W	0310	7.3	223
	0832	2.3	70
	1428	8.9	271
	2118	−1.5	−46
22 Th	0349	7.6	232
	0922	2.0	61
	1516	8.6	262
	2158	−1.1	−34
23 F	0429	7.8	238
	1015	1.8	55
	1607	8.0	244
	2239	−0.5	−15
24 Sa	0511	7.9	241
	1111	1.6	49
	1701	7.2	219
	2321	0.3	9
25 Su	0556	7.9	241
	1215	1.6	49
	1803	6.3	192
26 M ◐	0005	1.2	37
	0645	7.8	238
	1327	1.5	46
	1920	5.5	168
27 Tu	0056	2.1	64
	0740	7.6	232
	1446	1.4	43
	2056	5.1	155
28 W	0159	2.9	88
	0843	7.5	229
	1603	1.0	30
	2231	5.0	152
29 Th	0320	3.5	107
	0949	7.4	226
	1710	0.6	18
	2348	5.3	162
30 F	0441	3.6	110
	1051	7.5	229
	1805	0.2	6
31 Sa	0044	5.7	174
	0546	3.6	110
	1145	7.6	232
	1851	−0.1	−3

February

	Time	Height	
	h m	ft	cm
1 Su	0128	6.1	186
	0638	3.4	104
	1232	7.7	235
	1930	−0.3	−9
2 M	0204	6.4	195
	0722	3.1	94
	1313	7.8	238
	2005	−0.4	−12
3 Tu ○	0236	6.6	201
	0800	2.9	88
	1349	7.7	235
	2037	−0.3	−9
4 W	0306	6.7	204
	0834	2.6	79
	1423	7.6	232
	2106	−0.1	−3
5 Th	0334	6.9	210
	0908	2.4	73
	1456	7.4	226
	2132	0.1	3
6 F	0400	6.9	210
	0941	2.3	70
	1528	7.1	216
	2158	0.5	15
7 Sa	0425	6.9	210
	1015	2.2	67
	1601	6.7	204
	2222	0.9	27
8 Su	0450	6.9	210
	1052	2.2	67
	1637	6.2	189
	2247	1.4	43
9 M	0516	6.9	210
	1135	2.2	67
	1719	5.6	171
	2314	2.0	61
10 Tu	0548	6.9	210
	1227	2.1	64
	1811	5.1	155
	2347	2.5	76
11 W ◑	0627	6.8	207
	1334	2.1	64
	1928	4.6	140
12 Th	0029	3.1	94
	0717	6.8	207
	1458	1.8	55
	2129	4.4	134
13 F	0131	3.5	107
	0822	6.9	210
	1615	1.2	37
	2302	4.8	146
14 Sa	0303	3.8	116
	0937	7.1	216
	1717	0.5	15
15 Su	0001	5.3	162
	0438	3.6	110
	1048	7.5	229
	1808	−0.2	−6

	Time	Height	
	h m	ft	cm
16 M	0046	5.9	180
	0548	3.1	94
	1149	8.0	244
	1853	−0.7	−21
17 Tu	0125	6.6	201
	0644	2.5	76
	1243	8.4	256
	1935	−1.1	−34
18 W ●	0203	7.1	216
	0735	1.8	55
	1334	8.7	265
	2016	−1.2	−37
19 Th	0240	7.6	232
	0823	1.2	37
	1424	8.6	262
	2056	−1.0	−30
20 F	0317	8.0	244
	0912	0.7	21
	1513	8.3	253
	2135	−0.6	−18
21 Sa	0355	8.2	250
	1002	0.5	15
	1604	7.8	238
	2214	0.0	0
22 Su	0435	8.2	250
	1054	0.4	12
	1657	7.0	213
	2255	0.8	24
23 M	0516	8.1	247
	1151	0.6	18
	1756	6.2	189
	2337	1.7	52
24 Tu	0602	7.7	235
	1255	0.8	24
	1908	5.4	165
25 W ◐	0025	2.5	76
	0655	7.3	223
	1410	1.0	30
	2038	5.0	152
26 Th	0130	3.2	98
	0801	6.9	210
	1529	1.0	30
	2212	5.0	152
27 F	0303	3.7	113
	0918	6.7	204
	1641	0.8	24
	2328	5.3	162
28 Sa	0432	3.6	110
	1031	6.7	204
	1740	0.6	18

March

	Time	Height	
	h m	ft	cm
1 Su	0021	5.6	171
	0538	3.4	104
	1132	6.8	207
	1827	0.4	12
2 M	0101	6.0	183
	0628	3.0	91
	1221	7.0	213
	1906	0.3	9
3 Tu	0134	6.3	192
	0709	2.5	76
	1303	7.1	216
	1939	0.2	6
4 W	0203	6.6	201
	0745	2.1	64
	1340	7.2	219
	2009	0.3	9
5 Th ○	0229	6.8	207
	0817	1.8	55
	1414	7.2	219
	2037	0.4	12
6 F	0253	6.9	210
	0849	1.5	46
	1446	7.0	213
	2102	0.6	18
7 Sa	0317	7.0	213
	0919	1.3	40
	1519	6.8	207
	2126	1.0	30
8 Su	0339	7.1	216
	0951	1.1	34
	1552	6.5	198
	2149	1.3	40
9 M	0402	7.1	216
	1025	1.1	34
	1627	6.1	186
	2214	1.8	55
10 Tu	0428	7.1	216
	1103	1.1	34
	1708	5.6	171
	2242	2.2	67
11 W	0500	7.0	213
	1149	1.1	34
	1759	5.1	155
	2316	2.7	82
12 Th	0539	6.9	210
	1247	1.2	37
	1911	4.7	143
13 F ◑	0001	3.2	98
	0630	6.7	204
	1403	1.2	37
	2056	4.6	140
14 Sa	0108	3.5	107
	0739	6.6	201
	1527	1.0	30
	2226	4.9	149
15 Su	0251	3.6	110
	0906	6.6	201
	1638	0.5	15
	2325	5.5	168

	Time	Height	
	h m	ft	cm
16 M	0431	3.2	98
	1030	6.9	210
	1735	0.1	3
17 Tu	0010	6.1	186
	0540	2.5	76
	1138	7.4	226
	1824	−0.3	−9
18 W	0050	6.8	207
	0635	1.6	49
	1236	7.8	238
	1908	−0.5	−15
19 Th	0128	7.4	226
	0724	0.7	21
	1329	8.0	244
	1949	−0.5	−15
20 F ●	0205	7.9	241
	0812	0.0	0
	1420	8.0	244
	2030	−0.2	−6
21 Sa	0242	8.3	253
	0859	−0.5	−15
	1510	7.8	238
	2109	0.2	6
22 Su	0320	8.4	256
	0946	−0.7	−21
	1600	7.3	223
	2149	0.8	24
23 M	0358	8.3	253
	1035	−0.7	−21
	1652	6.7	204
	2229	1.5	46
24 Tu	0439	8.0	244
	1126	−0.3	−9
	1749	6.0	183
	2312	2.2	67
25 W	0522	7.5	229
	1223	0.1	3
	1855	5.5	168
26 Th ◐	0002	2.9	88
	0612	6.9	210
	1330	0.6	18
	2016	5.1	155
27 F	0112	3.4	104
	0717	6.3	192
	1445	0.9	27
	2140	5.1	155
28 Sa	0251	3.6	110
	0841	5.9	180
	1558	1.0	30
	2250	5.3	162
29 Su	0419	3.4	104
	1005	5.8	177
	1700	1.0	30
	2341	5.6	171
30 M	0523	2.9	88
	1111	5.9	180
	1749	0.9	27
31 Tu	0020	5.9	180
	0611	2.4	73
	1204	6.1	186
	1829	0.9	27

Time meridian 135° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.
Heights are referred to mean lower low water which is the chart datum of soundings.

Sand Point, Popof Island, Alaska, 2015

Times and Heights of High and Low Waters

April

	Time	Height	
	h m	ft	cm
1 W	0052	6.3	192
	0650	1.8	55
	1248	6.3	192
	1904	0.9	27
2 Th	0120	6.5	198
	0725	1.3	40
	1326	6.5	198
	1934	0.9	27
3 F	0145	6.8	207
	0757	0.9	27
	1402	6.5	198
	2002	1.1	34
4 Sa ○	0209	7.0	213
	0828	0.5	15
	1437	6.5	198
	2028	1.3	40
5 Su	0232	7.1	216
	0858	0.2	6
	1511	6.4	195
	2053	1.5	46
6 M	0256	7.2	219
	0930	0.0	0
	1546	6.2	189
	2119	1.8	55
7 Tu	0322	7.2	219
	1004	0.0	0
	1624	5.9	180
	2147	2.2	67
8 W	0351	7.2	219
	1041	0.0	0
	1707	5.6	171
	2220	2.5	76
9 Th	0425	7.1	216
	1126	0.1	3
	1800	5.2	158
	2300	2.9	88
10 F	0507	6.8	207
	1220	0.3	9
	1907	5.0	152
	2353	3.2	98
11 Sa ◑	0601	6.5	198
	1326	0.5	15
	2030	5.0	152
12 Su	0111	3.4	104
	0713	6.2	189
	1443	0.6	18
	2145	5.3	162
13 M	0258	3.2	98
	0846	6.0	183
	1555	0.5	15
	2243	5.8	177
14 Tu	0426	2.5	76
	1016	6.2	189
	1657	0.4	12
	2330	6.5	198
15 W	0531	1.6	49
	1129	6.5	198
	1749	0.3	9

	Time	Height	
	h m	ft	cm
16 Th	0011	7.1	216
	0624	0.6	18
	1230	6.9	210
	1836	0.3	9
17 F	0051	7.7	235
	0713	−0.4	−12
	1325	7.1	216
	1920	0.5	15
18 Sa ●	0130	8.1	247
	0800	−1.1	−34
	1416	7.2	219
	2002	0.7	21
19 Su	0208	8.4	256
	0845	−1.5	−46
	1506	7.0	213
	2044	1.1	34
20 M	0247	8.4	256
	0930	−1.6	−49
	1555	6.8	207
	2125	1.5	46
21 Tu	0325	8.1	247
	1016	−1.4	−43
	1646	6.4	195
	2207	2.0	61
22 W	0405	7.7	235
	1103	−1.0	−30
	1740	5.9	180
	2253	2.5	76
23 Th	0447	7.1	216
	1153	−0.4	−12
	1839	5.5	168
	2346	3.0	91
24 F	0534	6.4	195
	1249	0.2	6
	1946	5.3	162
25 Sa ◐	0056	3.3	101
	0632	5.8	177
	1353	0.7	21
	2056	5.3	162
26 Su	0228	3.4	104
	0753	5.2	158
	1500	1.1	34
	2158	5.4	165
27 M	0352	3.0	91
	0924	5.0	152
	1603	1.3	40
	2248	5.6	171
28 Tu	0456	2.5	76
	1040	5.1	155
	1656	1.4	43
	2328	5.9	180
29 W	0544	1.9	58
	1139	5.3	162
	1740	1.5	46
30 Th	0001	6.3	192
	0625	1.2	37
	1228	5.5	168
	1818	1.6	49

May

	Time	Height	
	h m	ft	cm
1 F	0031	6.6	201
	0700	0.6	18
	1310	5.7	174
	1852	1.7	52
2 Sa	0058	6.8	207
	0734	0.1	3
	1350	5.9	180
	1923	1.8	55
3 Su ○	0124	7.1	216
	0806	−0.3	−9
	1427	5.9	180
	1953	1.9	58
4 M	0151	7.3	223
	0839	−0.7	−21
	1505	6.0	183
	2022	2.1	64
5 Tu	0219	7.4	226
	0912	−0.9	−27
	1543	5.9	180
	2054	2.3	70
6 W	0250	7.4	226
	0948	−1.0	−30
	1624	5.8	177
	2128	2.5	76
7 Th	0324	7.3	223
	1027	−0.9	−27
	1709	5.6	171
	2208	2.7	82
8 F	0403	7.1	216
	1111	−0.7	−21
	1800	5.5	168
	2256	2.9	88
9 Sa	0450	6.8	207
	1201	−0.4	−12
	1858	5.4	165
	2359	3.1	94
10 Su	0546	6.3	192
	1259	−0.1	−3
	2002	5.6	171
11 M ◑	0124	3.0	91
	0700	5.8	177
	1404	0.3	9
	2104	5.9	180
12 Tu	0259	2.5	76
	0833	5.5	168
	1511	0.6	18
	2159	6.3	192
13 W	0417	1.7	52
	1006	5.4	165
	1615	0.8	24
	2249	6.9	210
14 Th	0520	0.7	21
	1122	5.7	174
	1712	1.0	30
	2334	7.4	226
15 F	0613	−0.3	−9
	1226	6.0	183
	1804	1.2	37

	Time	Height	
	h m	ft	cm
16 Sa	0017	7.8	238
	0702	−1.1	−34
	1322	6.2	189
	1852	1.4	43
17 Su ●	0058	8.1	247
	0748	−1.7	−52
	1413	6.4	195
	1937	1.6	49
18 M	0139	8.2	250
	0832	−1.9	−58
	1502	6.4	195
	2021	1.8	55
19 Tu	0219	8.1	247
	0915	−1.9	−58
	1549	6.3	192
	2105	2.1	64
20 W	0258	7.8	238
	0958	−1.7	−52
	1637	6.1	186
	2149	2.4	73
21 Th	0338	7.4	226
	1041	−1.3	−40
	1725	5.9	180
	2235	2.7	82
22 F	0418	6.8	207
	1124	−0.7	−21
	1815	5.7	174
	2328	2.9	88
23 Sa	0502	6.1	186
	1209	−0.1	−3
	1908	5.5	168
24 Su	0031	3.1	94
	0552	5.5	168
	1258	0.5	15
	2003	5.5	168
25 M ◐	0150	3.0	91
	0658	4.9	149
	1351	1.0	30
	2057	5.6	171
26 Tu	0309	2.7	82
	0826	4.5	137
	1448	1.5	46
	2145	5.7	174
27 W	0416	2.2	67
	0954	4.4	134
	1545	1.8	55
	2228	6.0	183
28 Th	0510	1.5	46
	1106	4.5	137
	1636	2.0	61
	2305	6.3	192
29 F	0554	0.9	27
	1203	4.7	143
	1722	2.2	67
	2339	6.6	201
30 Sa	0633	0.2	6
	1252	5.0	152
	1803	2.3	70
31 Su	0011	6.9	210
	0709	−0.4	−12
	1335	5.3	162
	1841	2.3	70

June

	Time	Height	
	h m	ft	cm
1 M	0043	7.2	219
	0744	−0.9	−27
	1416	5.5	168
	1918	2.4	73
2 Tu ○	0116	7.4	226
	0820	−1.3	−40
	1455	5.7	174
	1956	2.4	73
3 W	0151	7.6	232
	0856	−1.6	−49
	1535	5.8	177
	2034	2.5	76
4 Th	0228	7.6	232
	0934	−1.7	−52
	1616	5.9	180
	2116	2.5	76
5 F	0308	7.5	229
	1014	−1.6	−49
	1700	5.9	180
	2204	2.6	79
6 Sa	0353	7.2	219
	1057	−1.3	−40
	1746	5.9	180
	2258	2.6	79
7 Su	0443	6.7	204
	1143	−0.9	−27
	1836	6.0	183
8 M	0004	2.5	76
	0541	6.1	186
	1233	−0.3	−9
	1929	6.2	189
9 Tu ◑	0124	2.2	67
	0654	5.5	168
	1329	0.3	9
	2024	6.4	195
10 W	0247	1.7	52
	0825	5.0	152
	1430	0.9	27
	2119	6.8	207
11 Th	0402	1.0	30
	0958	4.8	146
	1535	1.4	43
	2211	7.1	216
12 F	0506	0.1	3
	1118	5.0	152
	1638	1.7	52
	2302	7.5	229
13 Sa	0602	−0.7	−21
	1224	5.3	162
	1736	2.0	61
	2349	7.7	235
14 Su	0651	−1.3	−40
	1320	5.6	171
	1829	2.1	64
15 M	0034	7.9	241
	0737	−1.7	−52
	1410	5.8	177
	1919	2.2	67

	Time	Height	
	h m	ft	cm
16 Tu ●	0117	7.9	241
	0820	−1.9	−58
	1455	6.0	183
	2005	2.3	70
17 W	0158	7.8	238
	0900	−1.9	−58
	1538	6.0	183
	2049	2.4	73
18 Th	0238	7.5	229
	0940	−1.6	−49
	1620	6.0	183
	2132	2.5	76
19 F	0317	7.1	216
	1017	−1.3	−40
	1700	5.9	180
	2216	2.5	76
20 Sa	0355	6.6	201
	1054	−0.8	−24
	1741	5.8	177
	2303	2.6	79
21 Su	0435	6.1	186
	1130	−0.2	−6
	1822	5.8	177
	2356	2.7	82
22 M	0519	5.4	165
	1206	0.4	12
	1904	5.7	174
23 Tu	0059	2.6	79
	0611	4.8	146
	1244	1.0	30
	1948	5.7	174
24 W ◐	0212	2.4	73
	0722	4.3	131
	1327	1.6	49
	2033	5.8	177
25 Th	0324	2.0	61
	0856	4.0	122
	1418	2.0	61
	2118	6.0	183
26 F	0426	1.4	43
	1026	4.0	122
	1517	2.4	73
	2203	6.2	189
27 Sa	0518	0.8	24
	1136	4.2	128
	1618	2.6	79
	2246	6.5	198
28 Su	0603	0.1	3
	1231	4.6	140
	1714	2.7	82
	2328	6.9	210
29 M	0643	−0.5	−15
	1317	5.0	152
	1804	2.7	82
30 Tu	0009	7.2	219
	0722	−1.1	−34
	1359	5.3	162
	1850	2.6	79

Time meridian 135° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.
Heights are referred to mean lower low water which is the chart datum of soundings.

Sand Point, Popof Island, Alaska, 2015

Times and Heights of High and Low Waters

July

	Time	Height	
	h m	ft	cm
1 W ○	0050	7.6	232
	0800	−1.6	−49
	1438	5.7	174
	1935	2.4	73
2 Th	0132	7.8	238
	0839	−1.9	−58
	1517	6.0	183
	2021	2.3	70
3 F	0215	7.9	241
	0918	−1.9	−58
	1556	6.2	189
	2108	2.1	64
4 Sa	0300	7.7	235
	0957	−1.8	−55
	1636	6.4	195
	2159	1.9	58
5 Su	0348	7.4	226
	1039	−1.4	−43
	1718	6.5	198
	2254	1.8	55
6 M	0440	6.8	207
	1121	−0.9	−27
	1803	6.7	204
	2358	1.6	49
7 Tu	0539	6.0	183
	1207	−0.1	−3
	1851	6.8	207
8 W ◑	0110	1.4	43
	0650	5.3	162
	1257	0.6	18
	1944	6.9	210
9 Th	0228	1.0	30
	0819	4.7	143
	1355	1.4	43
	2041	7.0	213
10 F	0344	0.5	15
	0953	4.5	137
	1502	2.0	61
	2139	7.1	216
11 Sa	0451	−0.1	−3
	1115	4.7	143
	1614	2.4	73
	2237	7.3	223
12 Su	0549	−0.7	−21
	1221	5.0	152
	1720	2.6	79
	2330	7.4	226
13 M	0640	−1.1	−34
	1315	5.3	162
	1818	2.5	76
14 Tu	0019	7.5	229
	0725	−1.4	−43
	1400	5.6	171
	1908	2.5	76
15 W ●	0104	7.5	229
	0805	−1.5	−46
	1440	5.9	180
	1954	2.3	70

	Time	Height	
	h m	ft	cm
16 Th	0146	7.5	229
	0843	−1.4	−43
	1518	6.0	183
	2035	2.2	67
17 F	0224	7.3	223
	0918	−1.2	−37
	1552	6.1	186
	2115	2.2	67
18 Sa	0301	7.0	213
	0951	−0.9	−27
	1625	6.1	186
	2153	2.1	64
19 Su	0337	6.6	201
	1021	−0.5	−15
	1657	6.1	186
	2233	2.1	64
20 M	0413	6.1	186
	1051	0.1	3
	1729	6.0	183
	2317	2.1	64
21 Tu	0452	5.6	171
	1119	0.6	18
	1801	6.0	183
22 W	0006	2.1	64
	0537	5.0	152
	1149	1.2	37
	1835	6.0	183
23 Th ◐	0106	2.0	61
	0634	4.4	134
	1223	1.7	52
	1915	6.0	183
24 F	0218	1.8	55
	0755	4.0	122
	1306	2.3	70
	2003	6.0	183
25 Sa	0332	1.5	46
	0942	3.9	119
	1403	2.7	82
	2058	6.2	189
26 Su	0436	0.9	27
	1107	4.1	125
	1519	3.0	91
	2157	6.5	198
27 M	0529	0.2	6
	1206	4.5	137
	1635	3.0	91
	2252	6.8	207
28 Tu	0615	−0.4	−12
	1253	5.0	152
	1738	2.8	85
	2344	7.3	223
29 W	0657	−1.0	−30
	1333	5.5	168
	1832	2.5	76
30 Th	0032	7.7	235
	0737	−1.5	−46
	1410	5.9	180
	1921	2.1	64
31 F ○	0120	7.9	241
	0817	−1.7	−52
	1447	6.4	195
	2009	1.7	52

August

	Time	Height	
	h m	ft	cm
1 Sa	0207	8.0	244
	0856	−1.7	−52
	1524	6.7	204
	2058	1.3	40
2 Su	0255	7.9	241
	0935	−1.5	−46
	1603	7.0	213
	2148	1.0	30
3 M	0344	7.5	229
	1015	−1.0	−30
	1642	7.2	219
	2242	0.8	24
4 Tu	0437	6.8	207
	1056	−0.3	−9
	1725	7.3	223
	2341	0.7	21
5 W	0536	6.1	186
	1140	0.5	15
	1812	7.2	219
6 Th ◑	0048	0.7	21
	0646	5.3	162
	1228	1.3	40
	1904	7.1	216
7 F	0203	0.6	18
	0813	4.7	143
	1327	2.1	64
	2005	7.0	213
8 Sa	0321	0.4	12
	0946	4.6	140
	1443	2.7	82
	2112	6.9	210
9 Su	0432	0.0	0
	1108	4.8	146
	1606	2.9	88
	2219	6.9	210
10 M	0533	−0.3	−9
	1211	5.1	155
	1717	2.8	85
	2319	7.0	213
11 Tu	0624	−0.6	−18
	1300	5.5	168
	1814	2.6	79
12 W	0011	7.1	216
	0708	−0.7	−21
	1340	5.8	177
	1901	2.4	73
13 Th	0056	7.2	219
	0746	−0.8	−24
	1414	6.0	183
	1943	2.1	64
14 F ●	0137	7.2	219
	0820	−0.7	−21
	1446	6.2	189
	2020	1.8	55
15 Sa	0213	7.1	216
	0851	−0.5	−15
	1515	6.3	192
	2055	1.7	52

	Time	Height	
	h m	ft	cm
16 Su	0248	6.9	210
	0920	−0.2	−6
	1542	6.4	195
	2129	1.5	46
17 M	0322	6.6	201
	0946	0.2	6
	1608	6.4	195
	2203	1.5	46
18 Tu	0356	6.2	189
	1012	0.6	18
	1633	6.4	195
	2240	1.5	46
19 W	0432	5.7	174
	1037	1.1	34
	1700	6.3	192
	2320	1.5	46
20 Th	0513	5.2	158
	1104	1.7	52
	1730	6.3	192
21 F	0009	1.5	46
	0604	4.7	143
	1136	2.2	67
	1808	6.2	189
22 Sa ◐	0111	1.6	49
	0715	4.3	131
	1217	2.7	82
	1856	6.1	186
23 Su	0229	1.4	43
	0903	4.1	125
	1315	3.1	94
	1958	6.1	186
24 M	0347	1.0	30
	1035	4.3	131
	1443	3.3	101
	2113	6.3	192
25 Tu	0451	0.5	15
	1135	4.8	146
	1616	3.2	98
	2224	6.7	204
26 W	0543	−0.1	−3
	1220	5.4	165
	1725	2.7	82
	2326	7.2	219
27 Th	0628	−0.6	−18
	1259	5.9	180
	1820	2.1	64
28 F	0020	7.6	232
	0710	−1.0	−30
	1335	6.5	198
	1909	1.4	43
29 Sa ○	0111	8.0	244
	0750	−1.1	−34
	1411	7.0	213
	1957	0.8	24
30 Su	0201	8.1	247
	0830	−1.0	−30
	1447	7.5	229
	2045	0.2	6
31 M	0250	7.9	241
	0909	−0.7	−21
	1525	7.8	238
	2134	−0.1	−3

September

	Time	Height	
	h m	ft	cm
1 Tu	0340	7.5	229
	0949	−0.1	−3
	1604	7.9	241
	2225	−0.2	−6
2 W	0434	6.9	210
	1030	0.6	18
	1646	7.8	238
	2320	−0.1	−3
3 Th	0532	6.2	189
	1114	1.4	43
	1732	7.5	229
4 F	0022	0.1	3
	0641	5.5	168
	1204	2.1	64
	1825	7.1	216
5 Sa ◑	0133	0.4	12
	0805	5.0	152
	1309	2.8	85
	1930	6.7	204
6 Su	0251	0.5	15
	0934	5.0	152
	1438	3.2	98
	2048	6.5	198
7 M	0406	0.5	15
	1051	5.2	158
	1606	3.2	98
	2205	6.4	195
8 Tu	0509	0.3	9
	1149	5.5	168
	1715	2.9	88
	2310	6.5	198
9 W	0600	0.2	6
	1232	5.9	180
	1808	2.5	76
10 Th	0003	6.7	204
	0642	0.1	3
	1308	6.2	189
	1851	2.0	61
11 F	0047	6.8	207
	0718	0.2	6
	1339	6.4	195
	1928	1.6	49
12 Sa ●	0127	6.9	210
	0750	0.3	9
	1406	6.6	201
	2002	1.3	40
13 Su	0203	6.9	210
	0819	0.5	15
	1432	6.8	207
	2034	1.0	30
14 M	0237	6.8	207
	0846	0.7	21
	1455	6.8	207
	2104	0.9	27
15 Tu	0310	6.6	201
	0910	1.1	34
	1518	6.9	210
	2136	0.8	24

	Time	Height	
	h m	ft	cm
16 W	0343	6.3	192
	0934	1.5	46
	1542	6.9	210
	2209	0.8	24
17 Th	0419	5.9	180
	0959	1.9	58
	1608	6.8	207
	2245	0.8	24
18 F	0459	5.5	168
	1027	2.4	73
	1638	6.7	204
	2328	1.0	30
19 Sa	0548	5.1	155
	1101	2.8	85
	1715	6.5	198
20 Su ◐	0022	1.1	34
	0656	4.7	143
	1145	3.2	98
	1804	6.3	192
21 M	0133	1.2	37
	0833	4.6	140
	1251	3.6	110
	1911	6.2	189
22 Tu	0255	1.1	34
	0959	4.9	149
	1433	3.6	110
	2037	6.2	189
23 W	0407	0.8	24
	1057	5.4	165
	1610	3.2	98
	2203	6.5	198
24 Th	0505	0.4	12
	1141	6.0	183
	1716	2.4	73
	2312	6.9	210
25 F	0554	0.1	3
	1220	6.6	201
	1809	1.6	49
26 Sa	0011	7.4	226
	0638	−0.1	−3
	1256	7.3	223
	1858	0.7	21
27 Su ○	0104	7.7	235
	0720	−0.1	−3
	1333	7.9	241
	1945	−0.1	−3
28 M	0155	7.8	238
	0801	0.1	3
	1410	8.3	253
	2031	−0.7	−21
29 Tu	0245	7.7	235
	0841	0.4	12
	1448	8.5	259
	2118	−1.0	−30
30 W	0336	7.4	226
	0922	1.0	30
	1528	8.5	259
	2207	−1.0	−30

Time meridian 135° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.
Heights are referred to mean lower low water which is the chart datum of soundings.

Sand Point, Popof Island, Alaska, 2015

Times and Heights of High and Low Waters

October

	Time	Height	
	h m	ft	cm
1 Th	0429	6.9	210
	1004	1.6	49
	1610	8.2	250
	2259	−0.7	−21
2 F	0527	6.4	195
	1050	2.3	70
	1655	7.7	235
	2356	−0.2	−6
3 Sa	0633	5.9	180
	1144	2.9	88
	1747	7.1	216
4 Su ◑	0101	0.3	9
	0750	5.5	168
	1258	3.4	104
	1852	6.5	198
5 M	0214	0.7	21
	0910	5.5	168
	1433	3.6	110
	2018	6.0	183
6 Tu	0328	1.0	30
	1020	5.7	174
	1600	3.3	101
	2144	5.9	180
7 W	0432	1.1	34
	1113	6.0	183
	1705	2.8	85
	2253	6.0	183
8 Th	0524	1.1	34
	1154	6.3	192
	1754	2.3	70
	2348	6.2	189
9 F	0606	1.1	34
	1228	6.6	201
	1834	1.7	52
10 Sa	0034	6.4	195
	0643	1.2	37
	1257	6.9	210
	1909	1.2	37
11 Su	0114	6.6	201
	0714	1.4	43
	1323	7.1	216
	1942	0.8	24
12 M ●	0151	6.6	201
	0743	1.5	46
	1348	7.3	223
	2013	0.5	15
13 Tu	0226	6.6	201
	0810	1.8	55
	1411	7.4	226
	2043	0.2	6
14 W	0301	6.5	198
	0836	2.1	64
	1434	7.4	226
	2113	0.1	3
15 Th	0336	6.3	192
	0901	2.4	73
	1459	7.4	226
	2146	0.1	3

	Time	Height	
	h m	ft	cm
16 F	0412	6.1	186
	0929	2.7	82
	1527	7.3	223
	2221	0.2	6
17 Sa	0454	5.8	177
	1001	3.0	91
	1600	7.1	216
	2302	0.4	12
18 Su	0543	5.5	168
	1039	3.4	104
	1639	6.9	210
	2351	0.7	21
19 M	0647	5.4	165
	1130	3.7	113
	1730	6.6	201
20 Tu ◐	0052	0.9	27
	0804	5.4	165
	1246	3.9	119
	1838	6.2	189
21 W	0205	1.1	34
	0916	5.7	174
	1433	3.6	110
	2009	6.0	183
22 Th	0318	1.1	34
	1013	6.1	186
	1602	3.0	91
	2145	6.2	189
23 F	0422	1.0	30
	1059	6.8	207
	1706	2.0	61
	2301	6.5	198
24 Sa	0516	1.0	30
	1140	7.4	226
	1758	0.9	27
25 Su	0004	6.9	210
	0604	1.0	30
	1219	8.0	244
	1847	0.0	0
26 M	0100	7.3	223
	0649	1.1	34
	1258	8.6	262
	1933	−0.8	−24
27 Tu ○	0152	7.4	226
	0732	1.3	40
	1337	8.9	271
	2018	−1.4	−43
28 W	0242	7.4	226
	0815	1.6	49
	1417	9.0	274
	2104	−1.5	−46
29 Th	0332	7.3	223
	0858	2.0	61
	1457	8.8	268
	2150	−1.4	−43
30 F	0424	7.0	213
	0943	2.5	76
	1539	8.4	256
	2238	−1.0	−30
31 Sa	0518	6.6	201
	1031	3.0	91
	1623	7.8	238
	2329	−0.4	−12

November

	Time	Height	
	h m	ft	cm
1 Su	0617	6.3	192
	1128	3.4	104
	1712	7.1	216
2 M	0025	0.3	9
	0723	6.1	186
	1242	3.7	113
	1813	6.3	192
3 Tu ◑	0127	0.9	27
	0832	6.0	183
	1413	3.7	113
	1935	5.7	174
4 W	0234	1.4	43
	0934	6.2	189
	1537	3.4	104
	2108	5.4	165
5 Th	0338	1.7	52
	1026	6.4	195
	1642	2.8	85
	2226	5.5	168
6 F	0434	2.0	61
	1107	6.7	204
	1732	2.2	67
	2327	5.7	174
7 Sa	0520	2.1	64
	1142	7.0	213
	1812	1.5	46
8 Su	0017	5.9	180
	0559	2.3	70
	1212	7.2	219
	1848	1.0	30
9 M	0101	6.1	186
	0634	2.4	73
	1240	7.5	229
	1921	0.5	15
10 Tu	0140	6.3	192
	0706	2.5	76
	1306	7.7	235
	1953	0.1	3
11 W ●	0217	6.4	195
	0736	2.7	82
	1332	7.8	238
	2024	−0.2	−6
12 Th	0253	6.4	195
	0805	2.9	88
	1359	7.9	241
	2056	−0.4	−12
13 F	0330	6.4	195
	0835	3.1	94
	1428	7.9	241
	2129	−0.4	−12
14 Sa	0408	6.3	192
	0908	3.3	101
	1501	7.8	238
	2205	−0.3	−9
15 Su	0450	6.2	189
	0945	3.5	107
	1537	7.6	232
	2245	−0.1	−3

	Time	Height	
	h m	ft	cm
16 M	0536	6.1	186
	1031	3.7	113
	1620	7.3	223
	2330	0.2	6
17 Tu	0630	6.1	186
	1129	3.8	116
	1711	6.8	207
18 W ◐	0022	0.6	18
	0730	6.2	189
	1248	3.7	113
	1819	6.3	192
19 Th	0122	1.0	30
	0830	6.5	198
	1425	3.3	101
	1949	5.8	177
20 F	0229	1.4	43
	0926	6.9	210
	1548	2.5	76
	2129	5.8	177
21 Sa	0335	1.7	52
	1016	7.4	226
	1652	1.5	46
	2253	6.0	183
22 Su	0436	1.9	58
	1102	8.0	244
	1747	0.4	12
23 M	0000	6.4	195
	0531	2.0	61
	1146	8.5	259
	1836	−0.5	−15
24 Tu	0057	6.7	204
	0621	2.2	67
	1229	8.9	271
	1923	−1.2	−37
25 W ○	0150	7.0	213
	0709	2.4	73
	1311	9.1	277
	2008	−1.6	−49
26 Th	0239	7.1	216
	0755	2.5	76
	1353	9.1	277
	2052	−1.7	−52
27 F	0327	7.1	216
	0841	2.7	82
	1435	8.9	271
	2135	−1.5	−46
28 Sa	0414	7.0	213
	0927	3.0	91
	1516	8.4	256
	2219	−1.0	−30
29 Su	0503	6.9	210
	1016	3.3	101
	1559	7.8	238
	2303	−0.4	−12
30 M	0553	6.7	204
	1110	3.5	107
	1644	7.1	216
	2348	0.3	9

December

	Time	Height	
	h m	ft	cm
1 Tu	0645	6.5	198
	1214	3.7	113
	1735	6.3	192
2 W ◑	0036	1.0	30
	0740	6.4	195
	1332	3.7	113
	1840	5.6	171
3 Th	0128	1.7	52
	0835	6.5	198
	1454	3.4	104
	2010	5.1	155
4 F	0225	2.2	67
	0925	6.6	201
	1604	2.8	85
	2143	4.9	149
5 Sa	0324	2.6	79
	1010	6.8	207
	1700	2.2	67
	2258	5.1	155
6 Su	0419	2.9	88
	1050	7.1	216
	1745	1.5	46
	2357	5.3	162
7 M	0508	3.1	94
	1125	7.3	223
	1824	0.9	27
8 Tu	0046	5.7	174
	0551	3.2	98
	1158	7.6	232
	1900	0.4	12
9 W	0128	6.0	183
	0630	3.3	101
	1230	7.9	241
	1934	−0.1	−3
10 Th	0207	6.2	189
	0706	3.3	101
	1302	8.1	247
	2007	−0.5	−15
11 F ●	0244	6.4	195
	0742	3.3	101
	1334	8.2	250
	2041	−0.7	−21
12 Sa	0321	6.5	198
	0818	3.3	101
	1409	8.3	253
	2115	−0.8	−24
13 Su	0358	6.6	201
	0857	3.4	104
	1446	8.2	250
	2151	−0.8	−24
14 M	0436	6.7	204
	0939	3.4	104
	1527	8.0	244
	2229	−0.5	−15
15 Tu	0517	6.7	204
	1029	3.4	104
	1612	7.5	229
	2310	−0.1	−3

	Time	Height	
	h m	ft	cm
16 W	0602	6.8	207
	1128	3.3	101
	1705	6.9	210
	2355	0.4	12
17 Th	0651	6.9	210
	1241	3.1	94
	1810	6.3	192
18 F ◐	0046	1.1	34
	0743	7.2	219
	1406	2.7	82
	1935	5.6	171
19 Sa	0144	1.7	52
	0839	7.5	229
	1527	2.0	61
	2117	5.4	165
20 Su	0250	2.3	70
	0935	7.8	238
	1637	1.1	34
	2247	5.5	168
21 M	0359	2.7	82
	1029	8.2	250
	1735	0.2	6
	2359	5.9	180
22 Tu	0504	2.9	88
	1120	8.6	262
	1827	−0.6	−18
23 W	0057	6.3	192
	0602	3.0	91
	1208	8.8	268
	1914	−1.1	−34
24 Th	0148	6.6	201
	0655	3.0	91
	1254	8.9	271
	1958	−1.4	−43
25 F ○	0234	6.9	210
	0744	3.0	91
	1338	8.9	271
	2040	−1.4	−43
26 Sa	0317	7.0	213
	0830	3.0	91
	1421	8.7	265
	2120	−1.2	−37
27 Su	0358	7.1	216
	0915	3.0	91
	1501	8.3	253
	2158	−0.8	−24
28 M	0439	7.0	213
	1000	3.1	94
	1541	7.7	235
	2235	−0.3	−9
29 Tu	0518	6.9	210
	1046	3.2	98
	1621	7.1	216
	2311	0.3	9
30 W	0558	6.8	207
	1138	3.2	98
	1704	6.4	195
	2346	1.0	30
31 Th	0639	6.7	204
	1238	3.3	101
	1753	5.7	174

Time meridian 135° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.
Heights are referred to mean lower low water which is the chart datum of soundings.

Unalaska, Alaska, 2015

Times and Heights of High and Low Waters

January

	Time	Height		Time	Height	
	h m	ft	cm	h m	ft	cm
1 Th	0421	3.4	104	**16** F	0421	3.0	91
	0816	2.8	85		0628	2.9	88
	1404	4.5	137		1246	4.3	131
	2148	−0.3	−9		2100	0.1	3
2 F	0536	3.6	110	**17** Sa	1319	4.5	137
	0918	3.1	94		2138	−0.1	−3
	1441	4.3	131				
	2236	−0.3	−9				
3 Sa	0645	3.7	113	**18** Su	0559	3.3	101
	1027	3.4	104		0751	3.2	98
	1516	4.1	125		1400	4.6	140
	2321	−0.2	−6		2219	−0.3	−9
4 Su ○	0745	3.9	119	**19** M	0631	3.4	104
	1145	3.5	107		0902	3.3	101
	1550	3.9	119		1451	4.6	140
					2305	−0.4	−12
5 M	0005	0.0	0	**20** Tu ●	0703	3.5	107
	0835	3.9	119		1023	3.2	98
	1311	3.5	107		1549	4.4	134
	1625	3.6	110		2353	−0.4	−12
6 Tu	0047	0.2	6	**21** W	0737	3.7	113
	0916	4.0	122		1149	3.0	91
	1438	3.3	101		1658	4.1	125
	1705	3.4	104				
7 W	0127	0.4	12	**22** Th	0044	−0.2	−6
	0949	4.0	122		0813	3.8	116
	1550	3.0	91		1316	2.6	79
	1802	3.1	94		1817	3.8	116
8 Th	0207	0.6	18	**23** F	0137	0.1	3
	1015	3.9	119		0852	4.0	122
	1641	2.8	85		1437	2.1	64
	1920	2.9	88		1946	3.5	107
9 F	0246	0.8	24	**24** Sa	0232	0.5	15
	1038	3.9	119		0933	4.2	128
	1719	2.4	73		1551	1.5	46
	2048	2.7	82		2121	3.2	98
10 Sa	0325	1.1	34	**25** Su	0329	0.9	27
	1059	3.9	119		1016	4.4	134
	1752	2.1	64		1657	0.9	27
	2214	2.6	79		2255	3.1	94
11 Su	0403	1.4	43	**26** M ◐	0427	1.4	43
	1118	3.8	116		1059	4.5	137
	1824	1.7	52		1759	0.4	12
	2336	2.5	76				
12 M	0439	1.8	55	**27** Tu	0023	3.2	98
	1134	3.8	116		0527	1.8	55
	1854	1.4	43		1144	4.5	137
					1856	0.0	0
13 Tu ◑	0054	2.6	79	**28** W	0145	3.3	101
	0512	2.1	64		0626	2.2	67
	1149	3.9	119		1228	4.5	137
	1925	1.0	30		1950	−0.2	−6
14 W	0207	2.7	82	**29** Th	0259	3.4	104
	0540	2.4	73		0726	2.5	76
	1204	4.0	122		1312	4.4	134
	1955	0.7	21		2042	−0.3	−9
15 Th	0316	2.9	88	**30** F	0407	3.5	107
	0604	2.7	82		0825	2.8	85
	1222	4.1	125		1354	4.3	131
	2026	0.4	12		2131	−0.2	−6
				31 Sa	0511	3.6	110
					0924	3.0	91
					1433	4.1	125
					2217	−0.1	−3

February

	Time	Height		Time	Height	
	h m	ft	cm	h m	ft	cm
1 Su	0611	3.6	110	**16** M	0437	3.1	94
	1023	3.1	94		0802	2.8	85
	1510	3.8	116		1353	4.3	131
	2300	0.1	3		2146	−0.3	−9
2 M	0704	3.6	110	**17** Tu	0510	3.2	98
	1124	3.1	94		0908	2.6	79
	1546	3.6	110		1452	4.2	128
	2341	0.3	9		2234	−0.2	−6
3 Tu ○	0750	3.5	107	**18** W ●	0546	3.3	101
	1227	3.0	91		1020	2.3	70
	1623	3.4	104		1559	4.0	122
					2325	−0.1	−3
4 W	0019	0.5	15	**19** Th	0625	3.4	104
	0826	3.5	107		1137	2.0	61
	1332	2.9	88		1715	3.7	113
	1709	3.1	94				
5 Th	0056	0.7	21	**20** F	0019	0.2	6
	0852	3.4	104		0708	3.6	110
	1431	2.7	82		1255	1.5	46
	1811	2.9	88		1840	3.5	107
6 F	0133	1.0	30	**21** Sa	0116	0.6	18
	0914	3.4	104		0754	3.7	113
	1522	2.4	73		1411	1.0	30
	1928	2.7	82		2012	3.3	101
7 Sa	0212	1.2	37	**22** Su	0217	1.0	30
	0933	3.3	101		0843	3.9	119
	1606	2.0	61		1522	0.5	15
	2053	2.6	79		2143	3.2	98
8 Su	0252	1.5	46	**23** M	0321	1.4	43
	0953	3.4	104		0934	4.0	122
	1646	1.7	52		1629	0.1	3
	2217	2.6	79		2308	3.3	101
9 M	0333	1.8	55	**24** Tu	0427	1.7	52
	1012	3.4	104		1026	4.1	125
	1723	1.4	43		1731	−0.2	−6
	2335	2.6	79				
10 Tu	0412	2.1	64	**25** W ◐	0025	3.4	104
	1031	3.5	107		0532	2.0	61
	1758	1.0	30		1118	4.1	125
					1829	−0.3	−9
11 W ◑	0045	2.7	82	**26** Th	0133	3.5	107
	0448	2.3	70		0635	2.2	67
	1050	3.6	110		1209	4.0	122
	1832	0.7	21		1924	−0.4	−12
12 Th	0147	2.9	88	**27** F	0236	3.5	107
	0519	2.6	79		0734	2.3	70
	1112	3.8	116		1259	3.9	119
	1907	0.4	12		2015	−0.3	−9
13 F	0241	3.0	91	**28** Sa	0333	3.5	107
	0548	2.8	85		0830	2.4	73
	1140	3.9	119		1346	3.7	113
	1942	0.2	6		2104	−0.1	−3
14 Sa	0326	3.0	91				
	0622	2.8	85				
	1217	4.1	125				
	2021	−0.1	−3				
15 Su	0403	3.1	94				
	0706	2.8	85				
	1301	4.3	131				
	2102	−0.2	−6				

March

	Time	Height		Time	Height	
	h m	ft	cm	h m	ft	cm
1 Su	0426	3.4	104	**16** M	0257	3.0	91
	0923	2.4	73		0719	2.3	70
	1430	3.5	107		1253	3.7	113
	2149	0.1	3		2024	−0.2	−6
2 M	0514	3.3	101	**17** Tu	0328	3.0	91
	1013	2.4	73		0815	2.0	61
	1512	3.3	101		1355	3.7	113
	2230	0.4	12		2111	−0.1	−3
3 Tu	0556	3.1	94	**18** W	0401	3.1	94
	1100	2.3	70		0916	1.6	49
	1555	3.1	94		1504	3.5	107
	2308	0.6	18		2201	0.2	6
4 W	0630	3.0	91	**19** Th	0439	3.2	98
	1145	2.2	67		1022	1.2	37
	1642	2.9	88		1620	3.4	104
	2345	0.9	27		2255	0.5	15
5 Th ○	0655	2.9	88	**20** F ●	0521	3.3	101
	1230	2.1	64		1131	0.7	21
	1738	2.7	82		1743	3.2	98
					2353	0.9	27
6 F	0021	1.1	34	**21** Sa	0607	3.4	104
	0716	2.8	85		1240	0.3	9
	1317	1.8	55		1910	3.2	98
	1845	2.6	79				
7 Sa	0100	1.4	43	**22** Su	0058	1.2	37
	0736	2.8	85		0658	3.5	107
	1403	1.6	49		1348	0.0	0
	2000	2.5	76		2037	3.2	98
8 Su	0144	1.6	49	**23** M	0208	1.6	49
	0757	2.8	85		0753	3.5	107
	1449	1.3	40		1454	−0.3	−9
	2117	2.6	79		2157	3.3	101
9 M	0230	1.9	58	**24** Tu	0320	1.8	55
	0821	2.8	85		0851	3.5	107
	1533	1.0	30		1557	−0.5	−15
	2230	2.7	82		2309	3.5	107
10 Tu	0318	2.1	64	**25** W	0431	1.9	58
	0846	2.9	88		0951	3.5	107
	1615	0.8	24		1658	−0.6	−18
	2334	2.8	85				
11 W	0402	2.3	70	**26** Th ◐	0013	3.6	110
	0913	3.0	91		0538	1.9	58
	1656	0.5	15		1050	3.4	104
					1755	−0.5	−15
12 Th	0029	2.9	88	**27** F	0110	3.6	110
	0441	2.5	76		0639	1.9	58
	0945	3.2	98		1148	3.3	101
	1736	0.3	9		1848	−0.4	−12
13 F ◑	0116	3.0	91	**28** Sa	0202	3.5	107
	0515	2.6	79		0736	1.9	58
	1022	3.4	104		1243	3.2	98
	1816	0.1	3		1938	−0.1	−3
14 Sa	0155	3.0	91	**29** Su	0249	3.4	104
	0550	2.6	79		0827	1.8	55
	1105	3.5	107		1335	3.0	91
	1857	−0.1	−3		2025	0.1	3
15 Su	0227	3.0	91	**30** M	0330	3.2	98
	0631	2.5	76		0914	1.7	52
	1156	3.7	113		1426	2.9	88
	1939	−0.2	−6		2108	0.4	12
				31 Tu	0406	3.0	91
					0957	1.6	49
					1517	2.7	82
					2148	0.7	21

Time meridian 135° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.
Heights are referred to mean lower low water which is the chart datum of soundings.
* Neither a high or low water but an intermediate value to show the period of an approximate stand.

Unalaska, Alaska, 2015

Times and Heights of High and Low Waters

April

	Time	Height			Time	Height	
	h m	ft	cm		h m	ft	cm
1 W	0433	2.8	85	**16** Th	0306	3.2	98
	1035	1.5	46		0924	0.6	18
	1611	2.6	79		1529	2.9	88
	2225	1.0	30		2127	0.8	24
2 Th	0453	2.7	82	**17** F	0343	3.3	101
	1112	1.3	40		1024	0.1	3
	1710	2.5	76		1653	2.8	85
	2301	1.3	40		2225	1.2	37
3 F	0508	2.6	79	**18** Sa ●	0426	3.4	104
	1148	1.1	34		1125	−0.3	−9
	1815	2.4	73		1818	2.9	88
	2340	1.6	49		2331	1.6	49
4 Sa ○	0523	2.6	79	**19** Su	0513	3.4	104
	1226	0.9	27		1226	−0.6	−18
	1924	2.5	76		1941	3.1	94
5 Su	0025	1.9	58	**20** M	0045	1.9	58
	0541	2.6	79		0606	3.3	101
	1307	0.7	21		1327	−0.8	−24
	2034	2.6	79		2056	3.3	101
6 M	0117	2.1	64	**21** Tu	0204	2.1	64
	0604	2.6	79		0705	3.3	101
	1350	0.5	15		1427	−0.9	−27
	2138	2.7	82		2202	3.5	107
7 Tu	0214	2.3	70	**22** W	0323	2.1	64
	0633	2.7	82		0807	3.1	94
	1433	0.3	9		1526	−0.8	−24
	2235	2.9	88		2300	3.6	110
8 W	0309	2.4	73	**23** Th	0435	2.0	61
	0708	2.7	82		0912	3.0	91
	1517	0.1	3		1622	−0.7	−21
	2323	3.0	91		2353	3.7	113
9 Th	0358	2.5	76	**24** F	0540	1.9	58
	0751	2.8	85		1017	2.9	88
	1601	−0.1	−3		1715	−0.5	−15
10 F	0004	3.1	94	**25** Sa ◐	0040	3.6	110
	0439	2.5	76		0638	1.7	52
	0843	2.9	88		1120	2.7	82
	1645	−0.2	−6		1805	−0.2	−6
11 Sa ◑	0038	3.1	94	**26** Su	0123	3.5	107
	0518	2.5	76		0729	1.5	46
	0940	3.0	91		1221	2.6	79
	1729	−0.3	−9		1852	0.1	3
12 Su	0107	3.1	94	**27** M	0200	3.4	104
	0558	2.3	70		0816	1.3	40
	1042	3.1	94		1321	2.4	73
	1813	−0.2	−6		1935	0.4	12
13 M	0135	3.1	94	**28** Tu	0231	3.2	98
	0643	1.9	58		0858	1.1	34
	1147	3.1	94		1422	2.3	70
	1859	−0.1	−3		2015	0.8	24
14 Tu	0202	3.1	94	**29** W	0255	3.0	91
	0733	1.5	46		0935	0.9	27
	1257	3.0	91		1524	2.3	70
	1945	0.1	3		2052	1.2	37
15 W	0232	3.2	98	**30** Th	0312	2.8	85
	0827	1.1	34		1009	0.7	21
	1411	2.9	88		1630	2.3	70
	2034	0.4	12		2127	1.5	46

May

	Time	Height			Time	Height	
	h m	ft	cm		h m	ft	cm
1 F	0324	2.8	85	**16** Sa	0301	3.6	110
	1041	0.5	15		1023	−0.7	−21
	1738	2.3	70		1734	2.7	82
	2202	1.8	55		2159	2.0	61
2 Sa	0335	2.7	82	**17** Su ●	0343	3.6	110
	1114	0.3	9		1118	−0.9	−27
	1848	2.5	76		1854	3.0	91
	2243	2.1	64		2313	2.3	70
3 Su ○	0347	2.8	85	**18** M	0429	3.5	107
	1149	0.1	3		1213	−1.1	−34
	1956	2.6	79		2004	3.2	98
	2333	2.4	73				
4 M	0405	2.8	85	**19** Tu	0037	2.5	76
	1227	−0.1	−3		0521	3.3	101
	2055	2.8	85		1308	−1.1	−34
					2105	3.4	104
5 Tu	0034	2.6	79	**20** W	0203	2.5	76
	0430	2.9	88		0619	3.1	94
	1308	−0.2	−6		1402	−1.0	−30
	2144	3.0	91		2158	3.6	110
6 W	0141	2.7	82	**21** Th	0324	2.4	73
	0505	2.9	88		0723	2.9	88
	1350	−0.4	−12		1455	−0.8	−24
	2225	3.1	94		2245	3.7	113
7 Th	0245	2.8	85	**22** F	0435	2.2	67
	0553	2.9	88		0830	2.7	82
	1434	−0.5	−15		1545	−0.6	−18
	2259	3.2	98		2328	3.7	113
8 F	0340	2.7	82	**23** Sa	0535	1.9	58
	0654	2.9	88		0939	2.5	76
	1519	−0.5	−15		1633	−0.3	−9
	2329	3.3	101				
9 Sa	0429	2.5	76	**24** Su	0006	3.6	110
	0804	2.8	85		0628	1.6	49
	1605	−0.5	−15		1048	2.3	70
	2356	3.3	101		1719	0.0	0
10 Su	0516	2.2	67	**25** M ◐	0040	3.5	107
	0919	2.7	82		0714	1.3	40
	1650	−0.4	−12		1157	2.2	67
					1801	0.4	12
11 M ◑	0022	3.3	101	**26** Tu	0109	3.4	104
	0603	1.8	55		0755	1.0	30
	1037	2.6	79		1306	2.1	64
	1736	−0.1	−3		1839	0.8	24
12 Tu	0049	3.4	104	**27** W	0132	3.2	98
	0652	1.3	40		0832	0.8	24
	1156	2.5	76		1416	2.1	64
	1822	0.2	6		1915	1.2	37
13 W	0117	3.4	104	**28** Th	0149	3.1	94
	0743	0.8	24		0906	0.5	15
	1318	2.4	73		1529	2.1	64
	1910	0.6	18		1947	1.6	49
14 Th	0149	3.5	107	**29** F	0202	3.1	94
	0835	0.2	6		0938	0.2	6
	1443	2.4	73		1643	2.2	67
	2000	1.1	34		2017	2.0	61
15 F	0223	3.6	110	**30** Sa	0213	3.1	94
	0929	−0.3	−9		1009	0.0	0
	1609	2.5	76		1759	2.4	73
	2055	1.5	46		2047	2.3	70
				31 Su	0226	3.1	94
					1042	−0.2	−6
					1913	2.6	79
					2121	2.5	76

June

	Time	Height			Time	Height	
	h m	ft	cm		h m	ft	cm
1 M	0243	3.2	98	**16** Tu ●	0359	3.6	110
	1116	−0.4	−12		1200	−1.1	−34
					2011	3.3	101
2 Tu ○	0308	3.3	101	**17** W	0030	2.8	85
	1154	−0.5	−15		0448	3.3	101
	2056	3.0	91		1250	−0.9	−27
	2318	2.9	88		2101	3.5	107
3 W	0343	3.3	101	**18** Th	0157	2.7	82
	1235	−0.7	−21		0542	3.1	94
	2127	3.2	98		1338	−0.8	−24
					2144	3.6	110
4 Th	0037	3.0	91	**19** F	0316	2.5	76
	0429	3.3	101		0643	2.8	85
	1318	−0.8	−24		1425	−0.5	−15
	2153	3.3	101		2223	3.6	110
5 F	0153	2.9	88	**20** Sa	0423	2.2	67
	0527	3.2	98		0750	2.5	76
	1402	−0.8	−24		1510	−0.3	−9
	2219	3.4	104		2257	3.6	110
6 Sa	0303	2.7	82	**21** Su	0518	1.9	58
	0638	3.0	91		0903	2.3	70
	1448	−0.7	−21		1553	0.0	0
	2244	3.4	104		2328	3.5	107
7 Su	0405	2.3	70	**22** M	0604	1.5	46
	0759	2.8	85		1019	2.1	64
	1535	−0.5	−15		1634	0.4	12
	2311	3.5	107		2354	3.4	104
8 M	0502	1.8	55	**23** Tu	0644	1.2	37
	0925	2.5	76		1135	2.0	61
	1621	−0.2	−6		1712	0.8	24
	2340	3.6	110				
9 Tu ◑	0557	1.3	40	**24** W ◐	0016	3.4	104
	1053	2.4	73		0721	0.9	27
	1708	0.2	6		1251	2.0	61
					1748	1.2	37
10 W	0010	3.7	113	**25** Th	0035	3.3	101
	0650	0.7	21		0755	0.6	18
	1223	2.3	70		1407	2.1	64
	1756	0.7	21		1820	1.6	49
11 Th	0042	3.8	116	**26** F	0050	3.3	101
	0743	0.1	3		0828	0.3	9
	1352	2.3	70		1523	2.2	67
	1845	1.2	37		1849	1.9	58
12 F	0116	3.9	119	**27** Sa	0104	3.3	101
	0835	−0.4	−12		0900	0.0	0
	1521	2.4	73		1640	2.3	70
	1937	1.7	52		1912	2.2	67
13 Sa	0153	3.9	119	**28** Su	0119	3.4	104
	0927	−0.8	−24		0932	−0.2	−6
	1646	2.6	79				
	2036	2.1	64				
14 Su	0232	3.8	116	**29** M	0139	3.5	107
	1018	−1.0	−30		1006	−0.4	−12
	1805	2.9	88				
	2144	2.5	76				
15 M	0314	3.7	113	**30** Tu	0206	3.6	110
	1110	−1.1	−34		1042	−0.6	−18
	1913	3.1	94				
	2303	2.7	82				

Time meridian 135° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.
Heights are referred to mean lower low water which is the chart datum of soundings.
* Neither a high or low water but an intermediate value to show the period of an approximate stand.

Unalaska, Alaska, 2015

Times and Heights of High and Low Waters

July

	Time	Height	
	h m	ft	cm
1 W ○	0242	3.7	113
	1122	−0.7	−21
2 Th	0328	3.6	110
	1204	−0.8	−24
	2034	3.1	94
	2341	2.9	88
3 F	0424	3.5	107
	1249	−0.8	−24
	2057	3.2	98
4 Sa	0106	2.7	82
	0532	3.3	101
	1335	−0.7	−21
	2123	3.3	101
5 Su	0225	2.3	70
	0650	3.0	91
	1423	−0.5	−15
	2153	3.5	107
6 M	0336	1.8	55
	0817	2.7	82
	1512	−0.2	−6
	2225	3.6	110
7 Tu	0440	1.2	37
	0948	2.5	76
	1602	0.3	9
	2300	3.8	116
8 W ◑	0540	0.6	18
	1121	2.4	73
	1653	0.8	24
	2336	3.9	119
9 Th	0637	0.0	0
	1251	2.4	73
	1745	1.2	37
10 F	0015	4.0	122
	0732	−0.4	−12
	1417	2.5	76
	1840	1.7	52
11 Sa	0055	4.0	122
	0825	−0.7	−21
	1539	2.7	82
	1937	2.1	64
12 Su	0136	4.0	122
	0917	−0.9	−27
	1654	2.9	88
	2039	2.4	73
13 M	0218	3.9	119
	1008	−0.9	−27
	1803	3.0	91
	2146	2.6	79
14 Tu	0301	3.7	113
	1057	−0.9	−27
	1903	3.2	98
	2300	2.7	82
15 W ●	0345	3.5	107
	1145	−0.7	−21
	1955	3.2	98

	Time	Height	
	h m	ft	cm
16 Th	0019	2.7	82
	0431	3.2	98
	1230	−0.5	−15
	2039	3.3	101
17 F	0137	2.6	79
	0522	2.9	88
	1314	−0.3	−9
	2116	3.3	101
18 Sa	0248	2.4	73
	0622	2.6	79
	1357	−0.1	−3
	2148	3.3	101
19 Su	0348	2.1	64
	0731	2.4	73
	1438	0.2	6
	2215	3.2	98
20 M	0436	1.7	52
	0848	2.2	67
	1518	0.5	15
	2239	3.2	98
21 Tu	0518	1.4	43
	1007	2.1	64
	1558	0.8	24
	2301	3.2	98
22 W	0556	1.1	34
	1124	2.1	64
	1636	1.2	37
	2321	3.2	98
23 Th ◐	0632	0.8	24
	1238	2.2	67
	1713	1.5	46
	2339	3.2	98
24 F	0707	0.5	15
	1349	2.2	67
	1745	1.9	58
	2356	3.3	101
25 Sa	0741	0.2	6
	1457	2.4	73
	1812	2.1	64
26 Su	0015	3.4	104
	0814	0.0	0
	1602	2.5	76
	1835	2.4	73
27 M	0037	3.5	107
	0849	−0.2	−6
	1701	2.6	79
	1900	2.5	76
28 Tu	0106	3.7	113
	0925	−0.4	−12
29 W	0144	3.8	116
	1004	−0.6	−18
	1819	2.7	82
	2039	2.6	79
30 Th	0231	3.8	116
	1046	−0.6	−18
	1845	2.8	85
	2153	2.6	79
31 F ○	0327	3.7	113
	1132	−0.6	−18
	1913	2.9	88
	2314	2.4	73

August

	Time	Height	
	h m	ft	cm
1 Sa	0433	3.5	107
	1220	−0.5	−15
	1944	3.0	91
2 Su	0036	2.0	61
	0549	3.2	98
	1310	−0.3	−9
	2019	3.2	98
3 M	0154	1.6	49
	0714	3.0	91
	1403	0.0	0
	2057	3.4	104
4 Tu	0307	1.0	30
	0844	2.8	85
	1458	0.4	12
	2138	3.6	110
5 W	0414	0.4	12
	1015	2.7	82
	1554	0.9	27
	2222	3.8	116
6 Th ◑	0517	−0.1	−3
	1142	2.7	82
	1652	1.3	40
	2307	3.9	119
7 F	0616	−0.5	−15
	1302	2.8	85
	1752	1.6	49
	2354	3.9	119
8 Sa	0712	−0.7	−21
	1416	2.9	88
	1851	1.9	58
9 Su	0041	3.9	119
	0807	−0.8	−24
	1524	3.0	91
	1951	2.1	64
10 M	0128	3.8	116
	0900	−0.8	−24
	1628	3.0	91
	2051	2.3	70
11 Tu	0214	3.6	110
	0950	−0.6	−18
	1727	3.0	91
	2153	2.4	73
12 W	0300	3.4	104
	1038	−0.4	−12
	1822	3.0	91
	2255	2.4	73
13 Th	0346	3.2	98
	1124	−0.2	−6
	1910	3.0	91
	2358	2.3	70
14 F ●	0434	2.9	88
	1207	0.1	3
	1950	2.9	88
15 Sa	0101	2.2	67
	0528	2.7	82
	1248	0.3	9
	2022	2.8	85

	Time	Height	
	h m	ft	cm
16 Su	0158	2.0	61
	0631	2.5	76
	1329	0.6	18
	2048	2.8	85
17 M	0248	1.7	52
	0743	2.3	70
	1411	0.8	24
	2110	2.8	85
18 Tu	0334	1.4	43
	0859	2.3	70
	1454	1.1	34
	2132	2.8	85
19 W	0415	1.1	34
	1013	2.3	70
	1537	1.4	43
	2155	2.8	85
20 Th	0455	0.8	24
	1122	2.4	73
	1619	1.6	49
	2217	2.9	88
21 F	0533	0.6	18
	1225	2.5	76
	1658	1.9	58
	2239	3.0	91
22 Sa ◐	0610	0.3	9
	1323	2.6	79
	1731	2.1	64
	2302	3.1	94
23 Su	0647	0.1	3
	1415	2.6	79
	1759	2.3	70
	2329	3.3	101
24 M	0723	0.0	0
	1501	2.6	79
	1827	2.4	73
25 Tu	0002	3.4	104
	0800	−0.2	−6
	1539	2.6	79
	1901	2.4	73
26 W	0043	3.6	110
	0840	−0.3	−9
	1611	2.6	79
	1946	2.3	70
27 Th	0132	3.6	110
	0922	−0.3	−9
	1641	2.7	82
	2044	2.1	64
28 F	0229	3.6	110
	1007	−0.3	−9
	1713	2.7	82
	2150	1.8	55
29 Sa ○	0335	3.5	107
	1056	−0.1	−3
	1749	2.8	85
	2303	1.5	46
30 Su	0450	3.3	101
	1149	0.1	3
	1829	3.0	91
31 M	0017	1.1	34
	0614	3.1	94
	1245	0.5	15
	1914	3.2	98

September

	Time	Height	
	h m	ft	cm
1 Tu	0130	0.6	18
	0743	3.0	91
	1346	0.8	24
	2002	3.4	104
2 W	0240	0.1	3
	0911	3.0	91
	1450	1.2	37
	2053	3.5	107
3 Th	0347	−0.3	−9
	1033	3.1	94
	1555	1.4	43
	2146	3.6	110
4 F	0449	−0.6	−18
	1147	3.2	98
	1700	1.7	52
	2241	3.7	113
5 Sa ◑	0549	−0.7	−21
	1254	3.3	101
	1803	1.8	55
	2336	3.7	113
6 Su	0646	−0.7	−21
	1355	3.3	101
	1904	1.9	58
7 M	0030	3.6	110
	0740	−0.6	−18
	1452	3.3	101
	2002	1.9	58
8 Tu	0123	3.4	104
	0833	−0.4	−12
	1545	3.2	98
	2058	1.9	58
9 W	0215	3.2	98
	0922	−0.1	−3
	1634	3.0	91
	2152	1.9	58
10 Th	0306	3.0	91
	1009	0.2	6
	1718	2.9	88
	2243	1.8	55
11 F	0358	2.8	85
	1053	0.5	15
	1755	2.7	82
	2332	1.7	52
12 Sa ●	0453	2.6	79
	1135	0.8	24
	1825	2.6	79
13 Su	0018	1.6	49
	0555	2.5	76
	1217	1.1	34
	1849	2.5	76
14 M	0102	1.4	43
	0703	2.4	73
	1302	1.3	40
	1910	2.5	76
15 Tu	0145	1.1	34
	0814	2.5	76
	1350	1.6	49
	1933	2.5	76

	Time	Height	
	h m	ft	cm
16 W	0228	0.9	27
	0922	2.6	79
	1442	1.8	55
	1959	2.5	76
17 Th	0311	0.7	21
	1025	2.7	82
	1533	2.0	61
	2028	2.6	79
18 F	0353	0.5	15
	1120	2.8	85
	1619	2.1	64
	2058	2.7	82
19 Sa	0433	0.3	9
	1210	2.9	88
	1658	2.3	70
	2130	2.8	85
20 Su ◐	0513	0.2	6
	1253	3.0	91
	1730	2.4	73
	2206	3.0	91
21 M	0552	0.1	3
	1330	3.0	91
	1758	2.4	73
	2247	3.1	94
22 Tu	0631	0.0	0
	1401	2.9	88
	1829	2.3	70
	2334	3.2	98
23 W	0710	−0.1	−3
	1428	2.9	88
	1907	2.1	64
24 Th	0028	3.3	101
	0752	0.0	0
	1455	2.9	88
	1954	1.8	55
25 F	0129	3.3	101
	0837	0.1	3
	1524	2.9	88
	2050	1.4	43
26 Sa	0237	3.2	98
	0925	0.3	9
	1557	3.0	91
	2151	1.0	30
27 Su ○	0353	3.1	94
	1017	0.7	21
	1637	3.1	94
	2256	0.6	18
28 M	0517	3.1	94
	1116	1.0	30
	1721	3.3	101
29 Tu	0003	0.1	3
	0644	3.1	94
	1222	1.4	43
	1812	3.4	104
30 W	0110	−0.3	−9
	0810	3.2	98
	1334	1.7	52
	1908	3.4	104

Time meridian 135° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.
Heights are referred to mean lower low water which is the chart datum of soundings.
* Neither a high or low water but an intermediate value to show the period of an approximate stand.

Unalaska, Alaska, 2015

Times and Heights of High and Low Waters

October

	Time	Height	
	h m	ft	cm
1 Th	0216	−0.5	−15
	0928	3.4	104
	1448	1.9	58
	2009	3.5	107
2 F	0319	−0.7	−21
	1038	3.6	110
	1601	2.0	61
	2112	3.5	107
3 Sa	0420	−0.8	−24
	1139	3.7	113
	1708	2.0	61
	2215	3.4	104
4 Su ◑	0519	−0.7	−21
	1235	3.8	116
	1811	1.9	58
	2317	3.4	104
5 M	0614	−0.5	−15
	1326	3.7	113
	1909	1.8	55
6 Tu	0018	3.2	98
	0706	−0.2	−6
	1413	3.6	110
	2004	1.6	49
7 W	0117	3.1	94
	0756	0.1	3
	1455	3.4	104
	2054	1.5	46
8 Th	0215	2.9	88
	0842	0.5	15
	1532	3.2	98
	2141	1.4	43
9 F	0314	2.7	82
	0926	0.9	27
	1603	3.0	91
	2224	1.3	40
10 Sa	0416	2.6	79
	1008	1.3	40
	1625	2.8	85
	2303	1.1	34
11 Su	0521	2.6	79
	1049	1.6	49
	1640	2.7	82
	2339	1.0	30
12 M ●	0631	2.6	79
	1134	1.9	58
	1652	2.6	79
13 Tu	0016	0.8	24
	0741	2.7	82
	1228	2.2	67
	1707	2.6	79
14 W	0054	0.6	18
	0846	2.9	88
	1331	2.4	73
	1728	2.7	82
15 Th	0135	0.5	15
	0942	3.0	91
	1439	2.6	79
	1756	2.7	82

	Time	Height	
	h m	ft	cm
16 F	0216	0.3	9
	1031	3.2	98
	1540	2.6	79
	1834	2.8	85
17 Sa	0259	0.2	6
	1113	3.3	101
	1628	2.7	82
	1921	2.8	85
18 Su	0340	0.1	3
	1149	3.4	104
	1702	2.7	82
	2015	2.9	88
19 M	0421	0.1	3
	1220	3.4	104
	1730	2.6	79
	2113	2.9	88
20 Tu ◐	0502	0.0	0
	1247	3.4	104
	1800	2.4	73
	2215	3.0	91
21 W	0542	0.1	3
	1309	3.4	104
	1834	2.1	64
	2319	3.0	91
22 Th	0624	0.2	6
	1332	3.4	104
	1915	1.7	52
23 F	0028	3.0	91
	0707	0.5	15
	1357	3.4	104
	2002	1.3	40
24 Sa	0141	3.0	91
	0752	0.8	24
	1426	3.5	107
	2054	0.7	21
25 Su	0300	2.9	88
	0842	1.2	37
	1500	3.6	110
	2151	0.3	9
26 M	0424	3.0	91
	0938	1.6	49
	1540	3.7	113
	2250	−0.2	−6
27 Tu ○	0550	3.1	94
	1044	2.1	64
	1626	3.8	116
	2350	−0.5	−15
28 W	0714	3.4	104
	1200	2.4	73
	1719	3.7	113
29 Th	0052	−0.7	−21
	0829	3.6	110
	1324	2.6	79
	1820	3.7	113
30 F	0153	−0.8	−24
	0935	3.9	119
	1448	2.6	79
	1926	3.5	107
31 Sa	0253	−0.8	−24
	1032	4.1	125
	1605	2.4	73
	2036	3.4	104

November

	Time	Height	
	h m	ft	cm
1 Su	0350	−0.6	−18
	1123	4.2	128
	1712	2.2	67
	2147	3.2	98
2 M	0445	−0.4	−12
	1210	4.2	128
	1812	2.0	61
	2256	3.1	94
3 Tu ◑	0537	−0.1	−3
	1253	4.1	125
	1907	1.7	52
4 W	0003	2.9	88
	0626	0.3	9
	1332	3.9	119
	1956	1.5	46
5 Th	0109	2.8	85
	0712	0.7	21
	1405	3.7	113
	2041	1.2	37
6 F	0215	2.7	82
	0754	1.2	37
	1431	3.5	107
	2122	1.0	30
7 Sa	0322	2.7	82
	0832	1.6	49
	1450	3.4	104
	2159	0.9	27
8 Su	0433	2.7	82
	0909	2.1	64
	1502	3.2	98
	2232	0.7	21
9 M	0548	2.8	85
	0945	2.4	73
	1510	3.2	98
	2305	0.5	15
10 Tu	0703	2.9	88
	1028	2.7	82
	1517	3.2	98
	2339	0.4	12
11 W ●	0811	3.1	94
	1125	3.0	91
	1528	3.3	101
12 Th	0015	0.3	9
	0906	3.4	104
	1242	3.2	98
	1543	3.3	101
13 F	0053	0.2	6
	0949	3.5	107
14 Sa	0134	0.1	3
	1023	3.7	113
15 Su	0215	0.0	0
	1053	3.8	116

	Time	Height	
	h m	ft	cm
16 M	0257	0.0	0
	1119	3.8	116
	1648	3.0	91
	1919	3.1	94
17 Tu	0339	0.1	3
	1142	3.9	119
	1720	2.7	82
	2042	3.0	91
18 W ◐	0421	0.2	6
	1203	3.9	119
	1755	2.3	70
	2203	2.9	88
19 Th	0503	0.4	12
	1224	3.9	119
	1835	1.9	58
	2324	2.8	85
20 F	0545	0.7	21
	1247	4.0	122
	1919	1.3	40
21 Sa	0046	2.8	85
	0628	1.1	34
	1314	4.1	125
	2006	0.7	21
22 Su	0209	2.8	85
	0715	1.6	49
	1344	4.2	128
	2056	0.2	6
23 M	0335	2.9	88
	0806	2.1	64
	1420	4.3	131
	2149	−0.2	−6
24 Tu	0501	3.1	94
	0905	2.5	76
	1501	4.3	131
	2243	−0.6	−18
25 W ○	0622	3.4	104
	1017	2.9	88
	1547	4.3	131
	2339	−0.7	−21
26 Th	0735	3.7	113
	1142	3.1	94
	1640	4.1	125
27 F	0035	−0.8	−24
	0837	4.0	122
	1316	3.2	98
	1740	3.9	119
28 Sa	0131	−0.7	−21
	0930	4.2	128
	1445	3.0	91
	1847	3.6	110
29 Su	0226	−0.5	−15
	1018	4.3	131
	1602	2.8	85
	2001	3.3	101
30 M	0320	−0.2	−6
	1102	4.4	134
	1708	2.4	73
	2117	3.1	94

December

	Time	Height	
	h m	ft	cm
1 Tu	0411	0.1	3
	1142	4.4	134
	1805	2.1	64
	2232	2.9	88
2 W ◑	0459	0.5	15
	1218	4.3	131
	1855	1.7	52
	2346	2.8	85
3 Th	0543	0.9	27
	1249	4.2	128
	1939	1.4	43
4 F	0059	2.7	82
	0625	1.3	40
	1315	4.0	122
	2018	1.1	34
5 Sa	0212	2.7	82
	0703	1.8	55
	1334	3.9	119
	2054	0.9	27
6 Su	0325	2.8	85
	0736	2.2	67
	1349	3.8	116
	2127	0.7	21
7 M	0441	2.9	88
	0806	2.6	79
	1400	3.8	116
	2159	0.5	15
8 Tu	0559	3.1	94
	0833	3.0	91
	1410	3.8	116
	2231	0.3	9
9 W	1423	3.8	116
	2305	0.2	6
10 Th	1441	3.9	119
	2340	0.1	3
11 F ●	1507	3.9	119
12 Sa	0018	0.0	0
	0933	3.8	116
	1225	3.7	113
	1543	3.8	116
13 Su	0058	0.0	0
	0954	3.9	119
	1352	3.6	110
	1634	3.7	113
14 M	0140	0.0	0
	1013	4.0	122
	1504	3.4	104
	1745	3.5	107
15 Tu	0222	0.1	3
	1033	4.0	122
	1601	3.0	91
	1912	3.3	101

	Time	Height	
	h m	ft	cm
16 W	0306	0.3	9
	1054	4.1	125
	1651	2.6	79
	2045	3.0	91
17 Th	0349	0.5	15
	1117	4.2	128
	1738	2.0	61
	2218	2.8	85
18 F ◐	0434	0.9	27
	1142	4.3	131
	1826	1.4	43
	2349	2.8	85
19 Sa	0518	1.4	43
	1211	4.4	134
	1914	0.8	24
20 Su	0118	2.8	85
	0605	1.8	55
	1242	4.6	140
	2003	0.2	6
21 M	0244	3.0	91
	0654	2.3	70
	1318	4.6	140
	2053	−0.2	−6
22 Tu	0408	3.2	98
	0748	2.7	82
	1356	4.7	143
	2144	−0.5	−15
23 W	0525	3.4	104
	0850	3.1	94
	1439	4.6	140
	2235	−0.6	−18
24 Th	0635	3.7	113
	1005	3.3	101
	1525	4.5	137
	2327	−0.6	−18
25 F ○	0735	3.9	119
	1131	3.4	104
	1616	4.2	128
26 Sa	0019	−0.5	−15
	0828	4.1	125
	1304	3.4	104
	1713	3.9	119
27 Su	0110	−0.3	−9
	0914	4.2	128
	1432	3.2	98
	1818	3.6	110
28 M	0200	0.0	0
	0955	4.3	131
	1549	2.8	85
	1931	3.2	98
29 Tu	0249	0.3	9
	1033	4.3	131
	1651	2.5	76
	2051	3.0	91
30 W	0336	0.6	18
	1107	4.2	128
	1743	2.1	64
	2213	2.8	85
31 Th	0421	1.0	30
	1137	4.2	128
	1828	1.7	52
	2332	2.7	82

Time meridian 135° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.
Heights are referred to mean lower low water which is the chart datum of soundings.
* Neither a high or low water but an intermediate value to show the period of an approximate stand.

Sweeper Cove, Adak Island, Alaska, 2015

Times and Heights of High and Low Waters

January

	Time	Height	
	h m	ft	cm
1 Th	1239	4.6	140
	2114	−0.3	−9
2 F	1304	4.5	137
	2201	−0.4	−12
3 Sa	1326	4.4	134
	2246	−0.4	−12
4 Su ○	1342	4.3	131
	2328	−0.3	−9
5 M	1340	4.1	125
6 Tu	0008	−0.2	−6
	1055	4.0	122
7 W	0045	0.0	0
	1040	3.9	119
8 Th	0119	0.2	6
	1039	3.9	119
9 F	0151	0.5	15
	1040	3.8	116
10 Sa	0221	0.8	24
	1042	3.7	113
11 Su	0248	1.1	34
	1045	3.7	113
	1811	2.1	64
	2130	2.2	67
12 M ◑	0308	1.5	46
	1049	3.8	116
	1833	1.6	49
	2329	2.1	64
13 Tu	0318	1.9	58
	1054	3.9	119
	1900	1.2	37
14 W	1101	4.1	125
	1930	0.8	24
15 Th	1112	4.3	131
	2003	0.4	12

	Time	Height	
	h m	ft	cm
16 F	1130	4.5	137
	2039	0.0	0
17 Sa	1157	4.7	143
	2117	−0.3	−9
18 Su	1233	4.8	146
	2159	−0.5	−15
19 M	1316	4.8	146
	2242	−0.6	−18
20 Tu ●	1409	4.6	140
	2327	−0.6	−18
21 W	1511	4.3	131
22 Th	0013	−0.4	−12
	0856	3.5	107
	1148	3.4	104
	1629	3.9	119
23 F	0059	−0.1	−3
	0854	3.6	110
	1346	2.9	88
	1804	3.4	104
24 Sa	0144	0.4	12
	0911	3.8	116
	1510	2.2	67
	1950	2.9	88
25 Su	0227	0.9	27
	0935	4.0	122
	1619	1.5	46
	2139	2.6	79
26 M ◐	0309	1.4	43
	1005	4.2	128
	1719	0.9	27
	2327	2.5	76
27 Tu	0348	1.9	58
	1037	4.4	134
	1816	0.4	12
28 W	0116	2.6	79
	0421	2.4	73
	1110	4.5	137
	1909	0.0	0
29 Th	1144	4.5	137
	2001	−0.2	−6
30 F	1216	4.4	134
	2051	−0.3	−9
31 Sa	1245	4.3	131
	2138	−0.2	−6

February

	Time	Height	
	h m	ft	cm
1 Su	1311	4.1	125
	2222	−0.1	−3
2 M	1332	3.9	119
	2304	0.0	0
3 Tu ○	1347	3.7	113
	2342	0.2	6
4 W	1022	3.5	107
5 Th	0017	0.5	15
	0949	3.4	104
6 F	0050	0.7	21
	0937	3.3	101
7 Sa	0121	1.0	30
	0930	3.3	101
	1556	2.4	73
	1847	2.5	76
8 Su	0149	1.3	40
	0928	3.3	101
	1622	2.0	61
	2039	2.3	70
9 M	0215	1.6	49
	0930	3.4	104
	1652	1.6	49
	2223	2.3	70
10 Tu	0234	1.9	58
	0936	3.5	107
	1724	1.2	37
11 W ◑	0008	2.3	70
	0239	2.2	67
	0945	3.7	113
	1758	0.8	24
12 Th	1001	3.9	119
	1834	0.4	12
13 F	1023	4.1	125
	1912	0.1	3
14 Sa	1054	4.3	131
	1953	−0.2	−6
15 Su	1134	4.5	137
	2036	−0.3	−9

	Time	Height	
	h m	ft	cm
16 M	1222	4.5	137
	2121	−0.4	−12
17 Tu	1319	4.3	131
	2208	−0.3	−9
18 W ●	1426	4.1	125
	2256	0.0	0
19 Th	0651	2.9	88
	1006	2.7	82
	1546	3.7	113
	2344	0.3	9
20 F	0703	3.1	94
	1157	2.3	70
	1721	3.3	101
21 Sa	0033	0.7	21
	0728	3.3	101
	1326	1.7	52
	1904	3.0	91
22 Su	0123	1.2	37
	0800	3.5	107
	1440	1.1	34
	2047	2.8	85
23 M	0212	1.6	49
	0836	3.8	116
	1544	0.5	15
	2223	2.8	85
24 Tu	0301	2.0	61
	0915	3.9	119
	1644	0.1	3
	2351	2.8	85
25 W ◐	0349	2.3	70
	0956	4.0	122
	1740	−0.1	−3
26 Th	0114	2.8	85
	0436	2.6	79
	1037	4.0	122
	1833	−0.2	−6
27 F	0233	2.9	88
	0521	2.7	82
	1118	4.0	122
	1925	−0.2	−6
28 Sa	0353	2.9	88
	0603	2.8	85
	1157	3.8	116
	2014	−0.1	−3

March

	Time	Height	
	h m	ft	cm
1 Su	1234	3.7	113
	2102	0.1	3
2 M	1309	3.5	107
	2146	0.3	9
3 Tu	1347	3.2	98
	2227	0.6	18
4 W	0741	2.8	85
	1004	2.7	82
	1435	3.0	91
	2306	0.8	24
5 Th ○	0740	2.7	82
	1134	2.6	79
	1541	2.8	85
	2341	1.1	34
6 F	0734	2.7	82
	1243	2.3	70
	1710	2.6	79
7 Sa	0016	1.4	43
	0730	2.7	82
	1336	2.0	61
	1848	2.4	73
8 Su	0049	1.7	52
	0730	2.7	82
	1419	1.6	49
	2023	2.4	73
9 M	0122	1.9	58
	0736	2.9	88
	1459	1.2	37
	2151	2.5	76
10 Tu	0151	2.2	67
	0746	3.0	91
	1538	0.8	24
	2314	2.6	79
11 W	0213	2.4	73
	0803	3.2	98
	1617	0.5	15
12 Th	0826	3.4	104
	1656	0.2	6
13 F ◑	0857	3.6	110
	1737	0.0	0
14 Sa	0936	3.8	116
	1819	−0.2	−6
15 Su	1023	3.9	119
	1903	−0.2	−6

	Time	Height	
	h m	ft	cm
16 M	1118	3.9	119
	1948	−0.1	−3
17 Tu	1222	3.7	113
	2036	0.1	3
18 W	0407	2.6	79
	0737	2.3	70
	1336	3.5	107
	2125	0.4	12
19 Th ●	0426	2.7	82
	0909	1.9	58
	1503	3.2	98
	2215	0.8	24
20 F	0452	2.8	85
	1036	1.5	46
	1642	3.0	91
	2308	1.2	37
21 Sa	0525	3.0	91
	1155	1.0	30
	1826	2.8	85
22 Su	0004	1.6	49
	0604	3.2	98
	1306	0.4	12
	2006	2.9	88
23 M	0103	2.0	61
	0646	3.4	104
	1410	0.0	0
	2133	3.0	91
24 Tu	0204	2.3	70
	0733	3.5	107
	1509	−0.3	−9
	2247	3.0	91
25 W	0305	2.5	76
	0821	3.5	107
	1605	−0.4	−12
	2352	3.1	94
26 Th ◐	0404	2.6	79
	0910	3.5	107
	1658	−0.4	−12
27 F	0051	3.1	94
	0502	2.6	79
	0959	3.4	104
	1749	−0.3	−9
28 Sa	0144	3.0	91
	0557	2.6	79
	1048	3.3	101
	1838	−0.1	−3
29 Su	0234	3.0	91
	0651	2.5	76
	1137	3.1	94
	1925	0.2	6
30 M	0319	2.8	85
	0745	2.4	73
	1226	2.9	88
	2008	0.5	15
31 Tu	0355	2.7	82
	0838	2.3	70
	1321	2.7	82
	2049	0.8	24

Time meridian 150° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.
Heights are referred to mean lower low water which is the chart datum of soundings.
* Neither a high or low water but an intermediate value to show the period of an approximate stand.

Sweeper Cove, Adak Island, Alaska, 2015

Times and Heights of High and Low Waters

April

	Time	Height	
	h m	ft	cm
1 W	0420	2.6	79
	0932	2.1	64
	1427	2.5	76
	2127	1.2	37
2 Th	0433	2.5	76
	1023	1.8	55
	1547	2.4	73
	2204	1.5	46
3 F	0437	2.5	76
	1112	1.5	46
	1722	2.3	70
	2239	1.8	55
4 Sa ○	0439	2.5	76
	1157	1.2	37
	1901	2.4	73
	2317	2.1	64
5 Su	0443	2.6	79
	1239	0.9	27
	2034	2.5	76
	2359	2.4	73
6 M	0453	2.7	82
	1320	0.6	18
	2154	2.7	82
7 Tu	0043	2.6	79
	0511	2.9	88
	1400	0.3	9
	2259	2.9	88
8 W	0126	2.8	85
	0537	3.0	91
	1441	0.0	0
	2353	3.0	91
9 Th	0203	2.9	88
	0613	3.2	98
	1521	−0.2	−6
10 F	0036	3.0	91
	0237	2.9	88
	0700	3.3	101
	1603	−0.3	−9
11 Sa ◑	0107	3.0	91
	0317	2.9	88
	0754	3.4	104
	1645	−0.4	−12
12 Su	0126	3.0	91
	0407	2.9	88
	0855	3.4	104
	1728	−0.3	−9
13 M	0139	2.9	88
	0506	2.6	79
	1002	3.3	101
	1812	−0.1	−3
14 Tu	0152	2.8	85
	0612	2.3	70
	1118	3.1	94
	1856	0.3	9
15 W	0208	2.8	85
	0721	1.9	58
	1243	2.8	85
	1941	0.7	21

	Time	Height	
	h m	ft	cm
16 Th	0229	2.9	88
	0831	1.3	40
	1421	2.6	79
	2029	1.2	37
17 F	0255	3.0	91
	0940	0.8	24
	1610	2.5	76
	2119	1.7	52
18 Sa ●	0326	3.2	98
	1045	0.3	9
	1802	2.6	79
	2217	2.1	64
19 Su	0402	3.3	101
	1148	−0.2	−6
	1943	2.8	85
	2325	2.5	76
20 M	0444	3.4	104
	1246	−0.5	−15
	2103	3.1	94
21 Tu	0044	2.7	82
	0531	3.4	104
	1342	−0.7	−21
	2205	3.2	98
22 W	0205	2.8	85
	0622	3.3	101
	1436	−0.8	−24
	2256	3.3	101
23 Th	0320	2.8	85
	0717	3.2	98
	1526	−0.7	−21
	2341	3.4	104
24 F	0428	2.7	82
	0813	3.1	94
	1615	−0.5	−15
25 Sa ◐	0022	3.3	101
	0529	2.5	76
	0911	2.9	88
	1700	−0.2	−6
26 Su	0059	3.2	98
	0626	2.3	70
	1011	2.7	82
	1743	0.1	3
27 M	0131	3.1	94
	0718	2.1	64
	1114	2.5	76
	1822	0.5	15
28 Tu	0157	3.0	91
	0807	1.9	58
	1225	2.3	70
	1857	0.9	27
29 W	0214	2.9	88
	0851	1.6	49
	1348	2.1	64
	1926	1.3	40
30 Th	0222	2.8	85
	0932	1.3	40
	1527	2.1	64
	1949	1.7	52

May

	Time	Height	
	h m	ft	cm
1 F	0224	2.8	85
	1010	0.9	27
	1731	2.1	64
	1957	2.0	61
2 Sa	0224	2.9	88
	1047	0.6	18
3 Su ○	0226	3.0	91
	1124	0.3	9
4 M	0233	3.1	94
	1202	0.0	0
5 Tu	0246	3.2	98
	1240	−0.3	−9
6 W	0308	3.3	101
	1319	−0.5	−15
7 Th	0343	3.4	104
	1359	−0.6	−18
8 F	0437	3.4	104
	1440	−0.7	−21
9 Sa	0007	3.3	101
	0308	3.2	98
	0547	3.3	101
	1521	−0.6	−18
10 Su	0012	3.3	101
	0408	3.0	91
	0707	3.1	94
	1602	−0.5	−15
11 M ◑	0020	3.2	98
	0505	2.6	79
	0833	2.9	88
	1643	−0.1	−3
12 Tu	0031	3.2	98
	0602	2.1	64
	1006	2.6	79
	1723	0.3	9
13 W	0046	3.2	98
	0659	1.6	49
	1147	2.3	70
	1801	0.8	24
14 Th	0104	3.3	101
	0757	1.0	30
	1339	2.1	64
	1838	1.4	43
15 F	0127	3.5	107
	0853	0.4	12
	1546	2.1	64
	1912	1.9	58

	Time	Height	
	h m	ft	cm
16 Sa	0153	3.6	110
	0949	−0.2	−6
17 Su ●	0224	3.7	113
	1044	−0.6	−18
18 M	0258	3.7	113
	1136	−0.9	−27
19 Tu	0336	3.7	113
	1228	−1.0	−30
	2155	3.3	101
20 W	0021	3.2	98
	0417	3.5	107
	1317	−1.0	−30
	2224	3.5	107
21 Th	0216	3.2	98
	0502	3.3	101
	1404	−0.9	−27
	2255	3.5	107
22 F	0350	3.0	91
	0555	3.1	94
	1449	−0.7	−21
	2325	3.5	107
23 Sa	1531	−0.4	−12
	2352	3.5	107
24 Su	0559	2.4	73
	0810	2.5	76
	1610	0.0	0
25 M ◐	0016	3.4	104
	0645	2.1	64
	0930	2.2	67
	1645	0.4	12
26 Tu	0035	3.3	101
	0725	1.7	52
	1058	2.0	61
	1714	0.8	24
27 W	0048	3.2	98
	0802	1.4	43
	1235	1.8	55
	1736	1.2	37
28 Th	0056	3.2	98
	0836	1.0	30
	1431	1.8	55
	1741	1.7	52
29 F	0100	3.2	98
	0910	0.6	18
30 Sa	0103	3.3	101
	0944	0.3	9
31 Su	0108	3.4	104
	1018	−0.1	−3

June

	Time	Height	
	h m	ft	cm
1 M	0118	3.6	110
	1053	−0.4	−12
2 Tu ○	0135	3.7	113
	1130	−0.6	−18
3 W	0159	3.8	116
	1208	−0.8	−24
4 Th	0232	3.8	116
	1247	−0.9	−27
5 F	0314	3.7	113
	1328	−0.9	−27
6 Sa	0410	3.5	107
	1408	−0.8	−24
	2313	3.4	104
7 Su	0316	3.1	94
	0530	3.2	98
	1449	−0.6	−18
	2313	3.4	104
8 M	0427	2.7	82
	0709	2.8	85
	1528	−0.2	−6
	2322	3.4	104
9 Tu ◑	0525	2.1	64
	0856	2.4	73
	1606	0.3	9
	2337	3.5	107
10 W	0619	1.4	43
	1050	2.0	61
	1640	0.8	24
	2356	3.7	113
11 Th	0712	0.8	24
	1251	1.9	58
	1709	1.4	43
12 F	0019	3.8	116
	0804	0.2	6
	1513	2.0	61
	1722	1.9	58
13 Sa	0045	4.0	122
	0855	−0.4	−12
14 Su	0113	4.0	122
	0945	−0.7	−21
15 M	0143	4.0	122
	1035	−1.0	−30

	Time	Height	
	h m	ft	cm
16 Tu ●	0214	4.0	122
	1123	−1.1	−34
17 W	0245	3.8	116
	1209	−1.0	−30
18 Th	0314	3.6	110
	1254	−0.9	−27
	2231	3.5	107
19 F	1336	−0.7	−21
	2244	3.5	107
20 Sa	1415	−0.4	−12
	2300	3.5	107
21 Su	1451	−0.1	−3
	2315	3.4	104
22 M	1524	0.3	9
	2328	3.4	104
23 Tu	0631	1.9	58
	0913	2.0	61
	1552	0.7	21
	2338	3.3	101
24 W ◐	0659	1.5	46
	1100	1.8	55
	1613	1.1	34
	2346	3.3	101
25 Th	0729	1.0	30
	1256	1.7	52
	1620	1.5	46
	2352	3.4	104
26 F	0801	0.6	18
	2358	3.5	107
27 Sa	0834	0.3	9
28 Su	0007	3.7	113
	0908	−0.1	−3
29 M	0021	3.8	116
	0943	−0.4	−12
30 Tu	0042	4.0	122
	1020	−0.7	−21

Time meridian 150° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.
Heights are referred to mean lower low water which is the chart datum of soundings.
* Neither a high or low water but an intermediate value to show the period of an approximate stand.

Sweeper Cove, Adak Island, Alaska, 2015

Times and Heights of High and Low Waters

July

	Time	Height	
	h m	ft	cm
1 W ○	0111	4.1	125
	1058	−0.8	−24
2 Th	0148	4.1	125
	1138	−1.0	−30
3 F	0233	4.0	122
	1219	−0.9	−27
4 Sa	0330	3.7	113
	1301	−0.8	−24
	2212	3.3	101
5 Su	0102	3.1	94
	0443	3.4	104
	1343	−0.6	−18
	2200	3.3	101
6 M	0250	2.7	82
	0616	2.9	88
	1423	−0.2	−6
	2208	3.4	104
7 Tu	0405	2.0	61
	0803	2.4	73
	1502	0.3	9
	2226	3.6	110
8 W ◑	0507	1.3	40
	0955	2.1	64
	1539	0.9	27
	2248	3.8	116
9 Th	0604	0.7	21
	1152	2.0	61
	1610	1.4	43
	2315	4.0	122
10 F	0658	0.1	3
	1358	2.0	61
	1631	1.9	58
	2344	4.1	125
11 Sa	0750	−0.4	−12
12 Su	0016	4.2	128
	0842	−0.7	−21
13 M	0048	4.1	125
	0932	−0.8	−24
14 Tu	0120	4.0	122
	1020	−0.9	−27
15 W ●	0151	3.9	119
	1107	−0.8	−24

	Time	Height	
	h m	ft	cm
16 Th	0220	3.7	113
	1150	−0.7	−21
17 F	0246	3.4	104
	1231	−0.4	−12
	2211	3.3	101
18 Sa	1309	−0.2	−6
	2212	3.2	98
19 Su	1345	0.1	3
	2217	3.2	98
20 M	1417	0.4	12
	2222	3.1	94
21 Tu	0500	2.0	61
	0753	2.1	64
	1446	0.8	24
	2227	3.1	94
22 W	0529	1.6	49
	0938	1.9	58
	1511	1.2	37
	2234	3.2	98
23 Th ◐	0601	1.2	37
	1122	1.9	58
	1527	1.5	46
	2241	3.3	101
24 F	0635	0.8	24
	1319	1.9	58
	1523	1.8	55
	2250	3.4	104
25 Sa	0710	0.4	12
	2303	3.6	110
26 Su	0746	0.1	3
	2321	3.8	116
27 M	0823	−0.2	−6
	2346	4.0	122
28 Tu	0901	−0.5	−15
29 W	0019	4.1	125
	0941	−0.6	−18
30 Th	0100	4.1	125
	1023	−0.7	−21
31 F ○	0151	4.0	122
	1106	−0.7	−21

August

	Time	Height	
	h m	ft	cm
1 Sa	0252	3.8	116
	1150	−0.5	−15
	2038	2.8	85
	2246	2.7	82
2 Su	0408	3.4	104
	1235	−0.2	−6
	2025	2.9	88
3 M	0052	2.4	73
	0539	3.0	91
	1319	0.2	6
	2038	3.1	94
4 Tu	0221	1.8	55
	0721	2.6	79
	1402	0.6	18
	2101	3.4	104
5 W	0333	1.1	34
	0907	2.4	73
	1445	1.1	34
	2129	3.6	110
6 Th ◑	0436	0.5	15
	1050	2.3	70
	1525	1.6	49
	2203	3.8	116
7 F	0534	0.0	0
	1231	2.3	70
	1604	2.0	61
	2239	4.0	122
8 Sa	0630	−0.3	−9
	1413	2.4	73
	1638	2.3	70
	2316	4.0	122
9 Su	0724	−0.5	−15
	2355	4.0	122
10 M	0817	−0.6	−18
11 Tu	0033	3.9	119
	0908	−0.5	−15
12 W	0111	3.7	113
	0957	−0.4	−12
13 Th	0148	3.5	107
	1044	−0.2	−6
14 F ●	0226	3.2	98
	1127	0.0	0
	2101	2.9	88
	2323	2.8	85
15 Sa	0313	3.0	91
	1207	0.3	9
	2057	2.8	85

	Time	Height	
	h m	ft	cm
16 Su	0104	2.6	79
	0419	2.7	82
	1243	0.6	18
	2056	2.8	85
17 M	0209	2.3	70
	0546	2.5	76
	1318	0.9	27
	2056	2.7	82
18 Tu	0255	1.9	58
	0721	2.3	70
	1350	1.2	37
	2058	2.8	85
19 W	0335	1.6	49
	0853	2.2	67
	1420	1.5	46
	2104	2.9	88
20 Th	0413	1.2	37
	1021	2.2	67
	1446	1.8	55
	2113	3.0	91
21 F	0451	0.8	24
	1148	2.2	67
	1503	2.1	64
	2126	3.2	98
22 Sa ◐	0529	0.5	15
	2143	3.4	104
23 Su	0608	0.2	6
	2206	3.6	110
24 M	0648	0.0	0
	2236	3.7	113
25 Tu	0728	−0.2	−6
	2315	3.9	119
26 W	0811	−0.3	−9
27 Th	0002	3.9	119
	0855	−0.3	−9
28 F	0059	3.8	116
	0941	−0.1	−3
29 Sa ○	0207	3.6	110
	1028	0.1	3
	1804	2.5	76
	2134	2.2	67
30 Su	0328	3.3	101
	1116	0.4	12
	1817	2.7	82
	2316	1.8	55
31 M	0503	3.0	91
	1205	0.8	24
	1842	2.9	88

September

	Time	Height	
	h m	ft	cm
1 Tu	0041	1.3	40
	0644	2.8	85
	1255	1.2	37
	1914	3.1	94
2 W	0155	0.7	21
	0824	2.7	82
	1346	1.6	49
	1952	3.4	104
3 Th	0300	0.2	6
	0955	2.7	82
	1437	1.9	58
	2033	3.6	110
4 F ◑	0401	−0.2	−6
	1118	2.8	85
	1529	2.2	67
	2118	3.7	113
5 Sa	0459	−0.4	−12
	1233	2.8	85
	1621	2.4	73
	2204	3.8	116
6 Su	0554	−0.5	−15
	1343	2.9	88
	1714	2.5	76
	2251	3.7	113
7 M	0648	−0.4	−12
	1448	2.8	85
	1808	2.6	79
	2339	3.6	110
8 Tu	0741	−0.2	−6
	1550	2.8	85
	1903	2.6	79
9 W	0026	3.4	104
	0831	0.0	0
	1647	2.7	82
	2003	2.6	79
10 Th	0115	3.2	98
	0920	0.3	9
	1734	2.7	82
	2109	2.5	76
11 F	0207	3.0	91
	1007	0.6	18
	1809	2.6	79
	2218	2.3	70
12 Sa ●	0309	2.7	82
	1050	0.9	27
	1828	2.5	76
	2322	2.1	64
13 Su	0424	2.6	79
	1132	1.3	40
	1836	2.5	76
14 M	0016	1.9	58
	0550	2.5	76
	1212	1.6	49
	1839	2.5	76
15 Tu	0103	1.6	49
	0718	2.5	76
	1252	1.8	55
	1843	2.5	76

	Time	Height	
	h m	ft	cm
16 W	0145	1.3	40
	0840	2.5	76
	1330	2.1	64
	1852	2.7	82
17 Th	0226	0.9	27
	0954	2.6	79
	1407	2.3	70
	1906	2.8	85
18 F	0306	0.7	21
	1102	2.7	82
	1439	2.5	76
	1927	3.0	91
19 Sa	0345	0.4	12
	1205	2.8	85
	1504	2.7	82
	1953	3.1	94
20 Su ◐	0425	0.2	6
	1306	2.9	88
	1520	2.8	85
	2025	3.3	101
21 M	0506	0.1	3
	2106	3.4	104
22 Tu	0547	0.0	0
	2154	3.5	107
23 W	0629	0.0	0
	2251	3.5	107
24 Th	0713	0.1	3
	1508	2.6	79
	1808	2.5	76
	2357	3.4	104
25 F	0759	0.4	12
	1519	2.6	79
	1928	2.2	67
26 Sa	0114	3.2	98
	0846	0.7	21
	1536	2.7	82
	2048	1.8	55
27 Su ○	0245	3.0	91
	0936	1.1	34
	1601	2.8	85
	2207	1.3	40
28 M	0427	2.9	88
	1029	1.5	46
	1632	3.0	91
	2320	0.7	21
29 Tu	0613	2.9	88
	1127	2.0	61
	1710	3.2	98
30 W	0028	0.2	6
	0750	3.0	91
	1229	2.3	70
	1754	3.4	104

Time meridian 150° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.
Heights are referred to mean lower low water which is the chart datum of soundings.
* Neither a high or low water but an intermediate value to show the period of an approximate stand.

Sweeper Cove, Adak Island, Alaska, 2015

Times and Heights of High and Low Waters

October

	Time	Height	
	h m	ft	cm
1 Th	0131	−0.2	−6
	0913	3.2	98
	1335	2.6	79
	1843	3.6	110
2 F	0230	−0.5	−15
	1023	3.3	101
	1441	2.7	82
	1936	3.6	110
3 Sa	0327	−0.6	−18
	1123	3.4	104
	1545	2.8	85
	2031	3.6	110
4 Su ◑	0421	−0.5	−15
	1216	3.4	104
	1648	2.7	82
	2127	3.5	107
5 M	0513	−0.3	−9
	1305	3.3	101
	1748	2.6	79
	2224	3.3	101
6 Tu	0604	−0.1	−3
	1350	3.2	98
	1848	2.5	76
	2322	3.1	94
7 W	0652	0.3	9
	1431	3.1	94
	1946	2.3	70
8 Th	0024	2.9	88
	0738	0.7	21
	1505	3.0	91
	2043	2.1	64
9 F	0132	2.7	82
	0821	1.1	34
	1531	2.8	85
	2135	1.9	58
10 Sa	0251	2.5	76
	0902	1.5	46
	1546	2.8	85
	2222	1.6	49
11 Su	0423	2.5	76
	0941	1.9	58
	1550	2.7	82
	2304	1.4	43
12 M ●	0604	2.5	76
	1020	2.3	70
	1548	2.7	82
	2343	1.1	34
13 Tu	0743	2.7	82
	1106	2.6	79
	1547	2.8	85
14 W	0021	0.8	24
	0905	2.9	88
	1204	2.8	85
	1551	3.0	91
15 Th	0058	0.6	18
	1006	3.1	94
	1312	3.0	91
	1602	3.1	94

	Time	Height	
	h m	ft	cm
16 F	0136	0.3	9
	1053	3.3	101
	1418	3.1	94
	1622	3.2	98
17 Sa	0214	0.1	3
	1133	3.4	104
18 Su	0253	0.0	0
	1208	3.4	104
	1536	3.2	98
	1754	3.3	101
19 M	0332	−0.1	−3
	1236	3.4	104
	1603	3.3	101
	1858	3.4	104
20 Tu ◐	0412	−0.1	−3
	1256	3.3	101
	1636	3.1	94
	2007	3.3	101
21 W	0452	0.1	3
	1309	3.3	101
	1719	2.9	88
	2121	3.2	98
22 Th	0532	0.3	9
	1320	3.2	98
	1812	2.5	76
	2242	3.0	91
23 F	0613	0.6	18
	1332	3.2	98
	1911	2.0	61
24 Sa	0014	2.8	85
	0654	1.1	34
	1348	3.3	101
	2013	1.5	46
25 Su	0158	2.7	82
	0737	1.6	49
	1410	3.4	104
	2115	0.9	27
26 M	0355	2.7	82
	0822	2.1	64
	1438	3.6	110
	2216	0.3	9
27 Tu ○	0556	2.8	85
	0916	2.6	79
	1513	3.8	116
	2315	−0.2	−6
28 W	0740	3.2	98
	1026	3.0	91
	1554	3.9	119
29 Th	0013	−0.5	−15
	0854	3.5	107
	1155	3.3	101
	1641	3.9	119
30 F	0109	−0.7	−21
	0948	3.7	113
	1328	3.4	104
	1735	3.8	116
31 Sa	0202	−0.8	−24
	1033	3.8	116
	1453	3.3	101
	1834	3.6	110

November

	Time	Height	
	h m	ft	cm
1 Su	0254	−0.7	−21
	1114	3.9	119
	1608	3.1	94
	1938	3.4	104
2 M	0343	−0.4	−12
	1152	3.8	116
	1715	2.9	88
	2044	3.2	98
3 Tu ◑	0430	−0.1	−3
	1227	3.8	116
	1816	2.6	79
	2152	2.9	88
4 W	0513	0.4	12
	1259	3.7	113
	1911	2.3	70
	2306	2.7	82
5 Th	0553	0.8	24
	1325	3.5	107
	2002	2.0	61
6 F	0028	2.5	76
	0627	1.3	40
	1344	3.4	104
	2048	1.7	52
7 Sa	0203	2.3	70
	0655	1.8	55
	1354	3.3	101
	2128	1.3	40
8 Su	0401	2.4	73
	0707	2.2	67
	1356	3.3	101
	2205	1.0	30
9 M	1353	3.4	104
	2239	0.7	21
10 Tu	1349	3.5	107
	2313	0.5	15
11 W ●	1349	3.6	110
	2348	0.2	6
12 Th	1350	3.7	113
13 F	0023	0.0	0
	1349	3.8	116
14 Sa	0059	−0.2	−6
	1220	3.9	119
15 Su	0136	−0.3	−9
	1152	3.9	119

	Time	Height	
	h m	ft	cm
16 M	0214	−0.3	−9
	1152	3.9	119
17 Tu	0252	−0.2	−6
	1155	3.8	116
18 W ◐	0329	0.0	0
	1200	3.8	116
	1725	3.0	91
	1929	3.1	94
19 Th	0406	0.3	9
	1206	3.7	113
	1802	2.6	79
	2117	2.8	85
20 F	0441	0.7	21
	1216	3.8	116
	1848	2.0	61
	2308	2.5	76
21 Sa	0514	1.2	37
	1230	3.9	119
	1937	1.4	43
22 Su	0109	2.4	73
	0544	1.8	55
	1250	4.1	125
	2028	0.7	21
23 M	0329	2.4	73
	0603	2.3	70
	1314	4.2	128
	2121	0.1	3
24 Tu	1344	4.4	134
	2214	−0.4	−12
25 W ○	1418	4.5	137
	2306	−0.7	−21
26 Th	1457	4.4	134
	2358	−0.9	−27
27 F	1541	4.2	128
28 Sa	0048	−0.9	−27
	1008	4.0	122
	1327	3.9	119
	1630	4.0	122
29 Su	0137	−0.7	−21
	1031	4.1	125
	1515	3.6	110
	1726	3.7	113
30 M	0223	−0.5	−15
	1058	4.1	125

December

	Time	Height	
	h m	ft	cm
1 Tu	0307	−0.1	−3
	1124	4.1	125
	1739	2.8	85
	1955	2.9	88
2 W ◑	0347	0.3	9
	1149	4.0	122
	1829	2.5	76
	2123	2.6	79
3 Th	0422	0.8	24
	1210	3.9	119
	1913	2.1	64
	2257	2.4	73
4 F	0451	1.3	40
	1226	3.9	119
	1952	1.7	52
5 Sa	0042	2.2	67
	0511	1.8	55
	1236	3.8	116
	2028	1.3	40
6 Su	0253	2.3	70
	0504	2.2	67
	1242	3.8	116
	2102	0.9	27
7 M	1244	3.9	119
	2135	0.6	18
8 Tu	1248	4.0	122
	2209	0.3	9
9 W	1254	4.2	128
	2242	0.0	0
10 Th	1306	4.3	131
	2317	−0.2	−6
11 F ●	1324	4.3	131
	2352	−0.3	−9
12 Sa	1345	4.3	131
13 Su	0029	−0.4	−12
	1407	4.2	128
14 M	0106	−0.4	−12
	1151	4.1	125
15 Tu	0143	−0.3	−9
	1106	4.0	122

	Time	Height	
	h m	ft	cm
16 W	0220	0.0	0
	1058	3.9	119
17 Th	0256	0.3	9
	1101	4.0	122
	1721	2.7	82
	2003	2.8	85
18 F ◐	0329	0.8	24
	1111	4.1	125
	1803	2.0	61
	2207	2.4	73
19 Sa	0359	1.3	40
	1126	4.2	128
	1848	1.3	40
20 Su	0015	2.3	70
	0423	1.8	55
	1146	4.4	134
	1936	0.6	18
21 M	1210	4.6	140
	2025	0.1	3
22 Tu	1239	4.8	146
	2115	−0.4	−12
23 W	1311	4.8	146
	2205	−0.6	−18
24 Th	1346	4.7	143
	2254	−0.8	−24
25 F ○	1423	4.6	140
	2342	−0.8	−24
26 Sa	1500	4.3	131
27 Su	0029	−0.6	−18
	1010	4.0	122
	1327	3.8	116
	1536	3.9	119
28 M	0113	−0.4	−12
	1016	4.0	122
29 Tu	0154	0.0	0
	1032	4.0	122
30 W	0233	0.3	9
	1049	4.0	122
31 Th	0307	0.8	24
	1105	4.0	122
	1809	2.2	67
	2118	2.4	73

Time meridian 150° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.
Heights are referred to mean lower low water which is the chart datum of soundings.
* Neither a high or low water but an intermediate value to show the period of an approximate stand.

Massacre Bay, Attu Island, Alaska, 2015

Times and Heights of High and Low Waters

January

	Time	Height	
	h m	ft	cm
1 Th	1311	4.4	134
	2135	0.0	0
2 F	1351	4.3	131
	2226	−0.2	−6
3 Sa	1434	4.2	128
	2314	−0.2	−6
4 Su ○	0808	3.7	113
	1047	3.6	110
	1518	4.0	122
	2358	−0.2	−6
5 M	0838	3.8	116
	1221	3.5	107
	1603	3.8	116
6 Tu	0039	−0.1	−3
	0906	3.8	116
	1337	3.4	104
	1650	3.6	110
7 W	0117	0.1	3
	0932	3.8	116
	1439	3.2	98
	1741	3.3	101
8 Th	0151	0.3	9
	0954	3.8	116
	1531	2.9	88
	1835	3.1	94
9 F	0222	0.6	18
	1013	3.8	116
	1614	2.7	82
	1936	2.9	88
10 Sa	0250	0.9	27
	1028	3.8	116
	1655	2.3	70
	2043	2.7	82
11 Su	0316	1.2	37
	1042	3.8	116
	1733	2.0	61
	2158	2.5	76
12 M ◑	0338	1.5	46
	1055	3.8	116
	1813	1.6	49
	2326	2.3	70
13 Tu	0355	1.9	58
	1109	3.9	119
	1853	1.3	40
14 W	0116	2.3	70
	0400	2.2	67
	1126	3.9	119
	1935	0.9	27
15 Th	1147	4.0	122
	2019	0.6	18

	Time	Height	
	h m	ft	cm
16 F	1213	4.2	128
	2104	0.2	6
17 Sa	1247	4.2	128
	2150	0.0	0
18 Su	1330	4.3	131
	2236	−0.2	−6
19 M	1424	4.2	128
	2321	−0.3	−9
20 Tu ●	1528	4.1	125
21 W	0005	−0.3	−9
	0822	3.5	107
	1151	3.2	98
	1640	3.9	119
22 Th	0047	−0.2	−6
	0832	3.5	107
	1310	2.8	85
	1757	3.6	110
23 F	0129	0.1	3
	0849	3.7	113
	1418	2.3	70
	1915	3.3	101
24 Sa	0209	0.5	15
	0912	3.8	116
	1520	1.8	55
	2035	3.0	91
25 Su	0247	0.9	27
	0939	4.0	122
	1620	1.2	37
	2158	2.8	85
26 M ◐	0325	1.3	40
	1010	4.1	125
	1720	0.8	24
	2325	2.6	79
27 Tu	0403	1.8	55
	1045	4.2	128
	1818	0.4	12
28 W	0100	2.5	76
	0439	2.2	67
	1122	4.3	131
	1917	0.2	6
29 Th	0246	2.6	79
	0516	2.5	76
	1203	4.2	128
	2015	0.0	0
30 F	1247	4.1	125
	2111	−0.1	−3
31 Sa	1333	3.9	119
	2205	−0.1	−3

February

	Time	Height	
	h m	ft	cm
1 Su	0657	3.1	94
	0857	3.0	91
	1422	3.7	113
	2255	−0.1	−3
2 M	0729	3.2	98
	1041	3.1	94
	1514	3.5	107
	2340	0.0	0
3 Tu ○	0758	3.3	101
	1204	2.9	88
	1610	3.3	101
4 W	0021	0.1	3
	0823	3.3	101
	1308	2.7	82
	1707	3.1	94
5 Th	0058	0.3	9
	0843	3.3	101
	1359	2.5	76
	1805	2.9	88
6 F	0131	0.5	15
	0900	3.3	101
	1441	2.2	67
	1903	2.7	82
7 Sa	0200	0.8	24
	0914	3.3	101
	1518	2.0	61
	2003	2.6	79
8 Su	0227	1.1	34
	0926	3.3	101
	1554	1.6	49
	2106	2.5	76
9 M	0251	1.4	43
	0938	3.3	101
	1631	1.3	40
	2212	2.3	70
10 Tu	0311	1.7	52
	0952	3.4	104
	1711	1.0	30
	2328	2.3	70
11 W ◑	0327	1.9	58
	1008	3.5	107
	1753	0.7	21
12 Th	0100	2.2	67
	0333	2.1	64
	1030	3.6	110
	1838	0.4	12
13 F	1057	3.7	113
	1927	0.2	6
14 Sa	1134	3.8	116
	2019	0.0	0
15 Su	1220	3.8	116
	2111	−0.2	−6

	Time	Height	
	h m	ft	cm
16 M	1319	3.8	116
	2202	−0.2	−6
17 Tu	1430	3.6	110
	2252	−0.2	−6
18 W ●	0644	2.8	85
	1020	2.5	76
	1550	3.4	104
	2339	0.0	0
19 Th	0656	2.9	88
	1143	2.1	64
	1711	3.3	101
20 F	0024	0.2	6
	0717	3.0	91
	1252	1.6	49
	1831	3.1	94
21 Sa	0108	0.5	15
	0743	3.2	98
	1354	1.0	30
	1948	2.9	88
22 Su	0150	0.9	27
	0814	3.4	104
	1452	0.6	18
	2103	2.8	85
23 M	0232	1.2	37
	0848	3.6	110
	1549	0.2	6
	2217	2.6	79
24 Tu	0313	1.5	46
	0926	3.7	113
	1645	0.0	0
	2332	2.5	76
25 W ◐	0356	1.8	55
	1006	3.7	113
	1742	−0.2	−6
26 Th	0049	2.5	76
	0441	2.0	61
	1050	3.7	113
	1840	−0.2	−6
27 F	0211	2.5	76
	0531	2.2	67
	1137	3.5	107
	1939	−0.2	−6
28 Sa	0331	2.5	76
	0633	2.3	70
	1227	3.3	101
	2037	−0.1	−3

March

	Time	Height	
	h m	ft	cm
1 Su	0441	2.6	79
	0751	2.4	73
	1323	3.1	94
	2133	0.0	0
2 M	0533	2.6	79
	0919	2.3	70
	1425	2.9	88
	2226	0.1	3
3 Tu	0613	2.6	79
	1038	2.2	67
	1531	2.8	85
	2314	0.3	9
4 W	0644	2.7	82
	1142	2.0	61
	1637	2.6	79
	2357	0.4	12
5 Th ○	0708	2.6	79
	1232	1.8	55
	1741	2.5	76
6 F	0035	0.6	18
	0727	2.6	79
	1313	1.5	46
	1842	2.5	76
7 Sa	0109	0.9	27
	0743	2.6	79
	1350	1.2	37
	1939	2.4	73
8 Su	0140	1.1	34
	0757	2.6	79
	1424	1.0	30
	2035	2.4	73
9 M	0208	1.3	40
	0810	2.7	82
	1459	0.7	21
	2131	2.3	70
10 Tu	0233	1.6	49
	0825	2.8	85
	1535	0.4	12
	2229	2.3	70
11 W	0255	1.8	55
	0842	2.9	88
	1614	0.2	6
	2331	2.3	70
12 Th	0314	2.0	61
	0905	3.0	91
	1657	0.0	0
13 F ◑	0041	2.2	67
	0332	2.1	64
	0935	3.1	94
	1743	−0.1	−3
14 Sa	1014	3.2	98
	1834	−0.2	−6
15 Su	1104	3.2	98
	1929	−0.2	−6

	Time	Height	
	h m	ft	cm
16 M	0351	2.2	67
	0555	2.1	64
	1208	3.1	94
	2024	−0.1	−3
17 Tu	0414	2.3	70
	0738	2.0	61
	1327	3.0	91
	2120	0.0	0
18 W	0436	2.3	70
	0912	1.7	52
	1456	2.8	85
	2215	0.2	6
19 Th ●	0501	2.4	73
	1029	1.3	40
	1626	2.7	82
	2307	0.5	15
20 F	0530	2.6	79
	1136	0.8	24
	1750	2.7	82
	2357	0.8	24
21 Sa	0602	2.8	85
	1235	0.2	6
	1907	2.7	82
22 Su	0046	1.1	34
	0637	3.0	91
	1330	−0.2	−6
	2017	2.7	82
23 M	0133	1.4	43
	0716	3.1	94
	1424	−0.5	−15
	2123	2.7	82
24 Tu	0220	1.6	49
	0757	3.2	98
	1517	−0.6	−18
	2225	2.7	82
25 W	0308	1.7	52
	0841	3.2	98
	1609	−0.7	−21
	2327	2.6	79
26 Th ◐	0359	1.8	55
	0927	3.1	94
	1702	−0.6	−18
27 F	0027	2.5	76
	0453	1.9	58
	1016	3.0	91
	1756	−0.4	−12
28 Sa	0128	2.5	76
	0553	1.9	58
	1109	2.8	85
	1852	−0.2	−6
29 Su	0226	2.4	73
	0702	1.9	58
	1210	2.6	79
	1948	0.0	0
30 M	0319	2.4	73
	0816	1.8	55
	1319	2.4	73
	2045	0.3	9
31 Tu	0403	2.3	70
	0926	1.6	49
	1437	2.2	67
	2139	0.5	15

Time meridian 150° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.
Heights are referred to mean lower low water which is the chart datum of soundings.
* Neither a high or low water but an intermediate value to show the period of an approximate stand.

Massacre Bay, Attu Island, Alaska, 2015

Times and Heights of High and Low Waters

April

	Time	Height	
	h m	ft	cm
1 W	0439	2.3	70
	1026	1.3	40
	1557	2.2	67
	2231	0.7	21
2 Th	0508	2.3	70
	1115	1.1	34
	1711	2.2	67
	2319	1.0	30
3 F	0532	2.3	70
	1156	0.8	24
	1818	2.2	67
4 Sa ○	0003	1.2	37
	0551	2.3	70
	1232	0.5	15
	1917	2.3	70
5 Su	0043	1.4	43
	0609	2.3	70
	1307	0.3	9
	2011	2.4	73
6 M	0119	1.6	49
	0626	2.4	73
	1340	0.0	0
	2103	2.4	73
7 Tu	0152	1.8	55
	0644	2.5	76
	1415	−0.2	−6
	2152	2.5	76
8 W	0221	2.0	61
	0704	2.6	79
	1451	−0.3	−9
	2242	2.5	76
9 Th	0247	2.1	64
	0731	2.7	82
	1529	−0.4	−12
	2331	2.5	76
10 F	0316	2.2	67
	0804	2.8	85
	1611	−0.5	−15
11 Sa ◑	0017	2.4	73
	0351	2.2	67
	0847	2.8	85
	1656	−0.5	−15
12 Su	0059	2.4	73
	0441	2.1	64
	0942	2.7	82
	1745	−0.3	−9
13 M	0133	2.4	73
	0548	1.9	58
	1050	2.6	79
	1836	−0.1	−3
14 Tu	0204	2.3	70
	0704	1.7	52
	1216	2.4	73
	1931	0.2	6
15 W	0233	2.4	73
	0820	1.2	37
	1357	2.3	70
	2028	0.6	18

	Time	Height	
	h m	ft	cm
16 Th	0304	2.5	76
	0928	0.7	21
	1539	2.3	70
	2127	1.0	30
17 F	0338	2.6	79
	1030	0.2	6
	1712	2.4	73
	2226	1.3	40
18 Sa ●	0414	2.8	85
	1126	−0.3	−9
	1831	2.5	76
	2325	1.6	49
19 Su	0454	2.9	88
	1219	−0.7	−21
	1939	2.7	82
20 M	0022	1.8	55
	0537	3.0	91
	1309	−0.9	−27
	2040	2.8	85
21 Tu	0118	2.0	61
	0622	3.0	91
	1359	−1.1	−34
	2135	2.9	88
22 W	0214	2.0	61
	0708	3.0	91
	1447	−1.0	−30
	2226	2.9	88
23 Th	0310	2.0	61
	0756	2.9	88
	1535	−0.9	−27
	2315	2.8	85
24 F	0407	2.0	61
	0846	2.7	82
	1622	−0.6	−18
25 Sa ◐	0002	2.8	85
	0508	1.9	58
	0939	2.5	76
	1710	−0.3	−9
26 Su	0046	2.7	82
	0612	1.8	55
	1039	2.3	70
	1757	0.0	0
27 M	0127	2.6	79
	0718	1.6	49
	1151	2.1	64
	1846	0.4	12
28 Tu	0204	2.6	79
	0821	1.3	40
	1317	1.9	58
	1935	0.7	21
29 W	0236	2.5	76
	0916	1.0	30
	1453	1.9	58
	2027	1.1	34
30 Th	0303	2.5	76
	1003	0.7	21
	1626	1.9	58
	2121	1.4	43

May

	Time	Height	
	h m	ft	cm
1 F	0328	2.5	76
	1044	0.4	12
	1747	2.1	64
	2215	1.7	52
2 Sa	0350	2.5	76
	1121	0.1	3
	1854	2.3	70
	2309	1.9	58
3 Su ○	0410	2.5	76
	1157	−0.1	−3
	1950	2.5	76
4 M	0000	2.1	64
	0431	2.6	79
	1231	−0.3	−9
	2040	2.6	79
5 Tu	0046	2.3	70
	0454	2.7	82
	1306	−0.5	−15
	2125	2.8	85
6 W	0127	2.4	73
	0520	2.7	82
	1341	−0.7	−21
	2206	2.8	85
7 Th	0204	2.5	76
	0552	2.8	85
	1418	−0.8	−24
	2243	2.9	88
8 F	0242	2.5	76
	0632	2.8	85
	1456	−0.7	−21
	2315	2.8	85
9 Sa	0326	2.4	73
	0721	2.8	85
	1536	−0.6	−18
	2343	2.8	85
10 Su	0418	2.3	70
	0820	2.6	79
	1618	−0.4	−12
11 M ◑	0007	2.8	85
	0519	2.0	61
	0933	2.4	73
	1701	−0.1	−3
12 Tu	0031	2.8	85
	0624	1.6	49
	1102	2.2	67
	1747	0.3	9
13 W	0057	2.9	88
	0729	1.1	34
	1248	2.0	61
	1835	0.8	24
14 Th	0126	3.0	91
	0831	0.6	18
	1442	2.0	61
	1927	1.3	40
15 F	0159	3.1	94
	0929	0.0	0
	1631	2.2	67
	2027	1.8	55

	Time	Height	
	h m	ft	cm
16 Sa	0235	3.2	98
	1023	−0.5	−15
	1800	2.4	73
	2135	2.1	64
17 Su ●	0316	3.3	101
	1114	−0.8	−24
	1910	2.7	82
	2247	2.4	73
18 M	0400	3.3	101
	1204	−1.1	−34
	2006	2.9	88
	2358	2.5	76
19 Tu	0447	3.3	101
	1251	−1.2	−37
	2055	3.1	94
20 W	0106	2.5	76
	0535	3.2	98
	1337	−1.1	−34
	2138	3.1	94
21 Th	0211	2.5	76
	0624	3.0	91
	1422	−1.0	−30
	2219	3.2	98
22 F	0314	2.4	73
	0714	2.8	85
	1504	−0.7	−21
	2257	3.2	98
23 Sa	0415	2.2	67
	0807	2.6	79
	1545	−0.4	−12
	2332	3.1	94
24 Su	0516	2.0	61
	0904	2.3	70
	1625	0.0	0
25 M ◐	0004	3.1	94
	0616	1.7	52
	1011	2.1	64
	1702	0.4	12
26 Tu	0032	3.0	91
	0712	1.4	43
	1134	1.9	58
	1739	0.8	24
27 W	0057	3.0	91
	0803	1.1	34
	1314	1.8	55
	1814	1.2	37
28 Th	0120	3.0	91
	0848	0.8	24
	1507	1.8	55
	1849	1.6	49
29 F	0141	3.0	91
	0930	0.4	12
	1704	2.0	61
	1926	1.9	58
30 Sa	0201	3.0	91
	1009	0.1	3
31 Su	0223	3.0	91
	1047	−0.2	−6

June

	Time	Height	
	h m	ft	cm
1 M	0246	3.1	94
	1124	−0.4	−12
2 Tu ○	0312	3.1	94
	1201	−0.6	−18
	2109	3.0	91
	2339	2.9	88
3 W	0345	3.2	98
	1238	−0.8	−24
	2137	3.1	94
4 Th	0039	3.0	91
	0424	3.2	98
	1315	−0.8	−24
	2201	3.1	94
5 F	0135	2.9	88
	0512	3.2	98
	1353	−0.8	−24
	2221	3.2	98
6 Sa	0230	2.8	85
	0609	3.0	91
	1431	−0.7	−21
	2239	3.2	98
7 Su	0327	2.5	76
	0714	2.8	85
	1509	−0.4	−12
	2257	3.2	98
8 M	0426	2.1	64
	0828	2.6	79
	1548	0.0	0
	2317	3.2	98
9 Tu ◑	0526	1.7	52
	0954	2.3	70
	1626	0.4	12
	2340	3.3	101
10 W	0627	1.1	34
	1134	2.0	61
	1704	0.9	27
11 Th	0007	3.5	107
	0726	0.6	18
	1328	1.9	58
	1743	1.4	43
12 F	0038	3.6	110
	0823	0.1	3
	1530	2.1	64
	1825	1.9	58
13 Sa	0113	3.7	113
	0918	−0.4	−12
14 Su	0153	3.7	113
	1011	−0.7	−21
15 M	0236	3.7	113
	1102	−0.9	−27
	1939	2.9	88
	2209	2.8	85

	Time	Height	
	h m	ft	cm
16 Tu ●	0323	3.6	110
	1150	−1.0	−30
	2019	3.1	94
	2339	2.9	88
17 W	0412	3.4	104
	1236	−1.0	−30
	2056	3.2	98
18 Th	0058	2.8	85
	0503	3.2	98
	1319	−0.8	−24
	2130	3.3	101
19 F	0208	2.7	82
	0555	3.0	91
	1400	−0.6	−18
	2202	3.3	101
20 Sa	0311	2.5	76
	0648	2.8	85
	1438	−0.3	−9
	2230	3.3	101
21 Su	0408	2.2	67
	0744	2.5	76
	1513	0.0	0
	2256	3.3	101
22 M	0501	2.0	61
	0846	2.3	70
	1546	0.4	12
	2318	3.2	98
23 Tu	0551	1.7	52
	0957	2.1	64
	1615	0.7	21
	2337	3.2	98
24 W ◐	0637	1.3	40
	1122	1.9	58
	1641	1.1	34
	2356	3.2	98
25 Th	0722	1.0	30
	1304	1.8	55
	1701	1.5	46
26 F	0014	3.3	101
	0806	0.7	21
27 Sa	0033	3.3	101
	0848	0.3	9
28 Su	0055	3.4	104
	0930	0.0	0
29 M	0120	3.4	104
	1012	−0.3	−9
30 Tu	0150	3.5	107
	1053	−0.5	−15

Time meridian 150° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.
Heights are referred to mean lower low water which is the chart datum of soundings.
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Massacre Bay, Attu Island, Alaska, 2015

Times and Heights of High and Low Waters

July

	Time	Height	
	h m	ft	cm
1 W ○	0228	3.5	107
	1133	−0.7	−21
2 Th	0315	3.5	107
	1213	−0.8	−24
	2117	3.1	94
	2344	3.0	91
3 F	0410	3.4	104
	1253	−0.7	−21
	2121	3.1	94
4 Sa	0101	2.8	85
	0514	3.3	101
	1332	−0.6	−18
	2131	3.2	98
5 Su	0207	2.5	76
	0624	3.0	91
	1410	−0.3	−9
	2145	3.2	98
6 M	0309	2.1	64
	0739	2.8	85
	1447	0.0	0
	2204	3.3	101
7 Tu	0409	1.6	49
	0900	2.5	76
	1524	0.5	15
	2227	3.5	107
8 W ◑	0508	1.1	34
	1028	2.2	67
	1600	0.9	27
	2254	3.6	110
9 Th	0607	0.6	18
	1205	2.1	64
	1635	1.4	43
	2326	3.8	116
10 F	0705	0.1	3
	1353	2.1	64
	1710	1.8	55
11 Sa	0002	3.9	119
	0804	−0.2	−6
12 Su	0042	3.9	119
	0900	−0.5	−15
13 M	0127	3.8	116
	0955	−0.7	−21
14 Tu	0215	3.7	113
	1047	−0.7	−21
	1931	2.9	88
	2155	2.8	85
15 W ●	0307	3.5	107
	1136	−0.7	−21
	2003	3.0	91
	2332	2.8	85

	Time	Height	
	h m	ft	cm
16 Th	0401	3.3	101
	1221	−0.6	−18
	2033	3.1	94
17 F	0050	2.7	82
	0456	3.1	94
	1303	−0.4	−12
	2102	3.2	98
18 Sa	0154	2.5	76
	0553	2.9	88
	1341	−0.2	−6
	2127	3.1	94
19 Su	0248	2.2	67
	0650	2.6	79
	1415	0.1	3
	2148	3.1	94
20 M	0335	2.0	61
	0750	2.4	73
	1447	0.4	12
	2207	3.1	94
21 Tu	0419	1.7	52
	0852	2.2	67
	1515	0.7	21
	2223	3.1	94
22 W	0500	1.4	43
	1000	2.1	64
	1540	1.1	34
	2238	3.1	94
23 Th ◐	0542	1.1	34
	1116	2.0	61
	1601	1.4	43
	2255	3.2	98
24 F	0625	0.8	24
	1247	1.9	58
	1615	1.7	52
	2313	3.3	101
25 Sa	0710	0.5	15
	2335	3.3	101
26 Su	0756	0.2	6
27 M	0002	3.4	104
	0844	−0.1	−3
28 Tu	0036	3.5	107
	0931	−0.3	−9
29 W	0118	3.5	107
	1018	−0.4	−12
30 Th	0211	3.5	107
	1103	−0.5	−15
31 F ○	0315	3.4	104
	1147	−0.5	−15
	2000	2.8	85
	2321	2.5	76

August

	Time	Height	
	h m	ft	cm
1 Sa	0426	3.2	98
	1229	−0.4	−12
	2007	2.8	85
2 Su	0037	2.2	67
	0541	3.1	94
	1310	−0.2	−6
	2021	2.9	88
3 M	0142	1.7	52
	0658	2.9	88
	1350	0.2	6
	2042	3.1	94
4 Tu	0242	1.2	37
	0814	2.7	82
	1428	0.6	18
	2107	3.3	101
5 W	0340	0.7	21
	0932	2.5	76
	1506	1.0	30
	2137	3.5	107
6 Th ◑	0438	0.3	9
	1053	2.3	70
	1544	1.3	40
	2212	3.6	110
7 F	0536	−0.1	−3
	1218	2.2	67
	1623	1.7	52
	2250	3.7	113
8 Sa	0635	−0.3	−9
	1349	2.2	67
	1705	2.0	61
	2333	3.7	113
9 Su	0735	−0.4	−12
	1525	2.3	70
	1754	2.2	67
10 M	0021	3.6	110
	0834	−0.5	−15
	1651	2.4	73
	1902	2.3	70
11 Tu	0113	3.4	104
	0932	−0.4	−12
	1752	2.5	76
	2034	2.4	73
12 W	0210	3.2	98
	1027	−0.4	−12
	1836	2.7	82
	2209	2.4	73
13 Th	0311	3.0	91
	1118	−0.3	−9
	1912	2.7	82
	2329	2.3	70
14 F ●	0414	2.9	88
	1204	−0.1	−3
	1942	2.7	82
15 Sa	0034	2.1	64
	0517	2.7	82
	1245	0.1	3
	2008	2.8	85

	Time	Height	
	h m	ft	cm
16 Su	0125	1.8	55
	0618	2.6	79
	1323	0.3	9
	2029	2.7	82
17 M	0209	1.6	49
	0716	2.4	73
	1356	0.6	18
	2047	2.7	82
18 Tu	0248	1.3	40
	0814	2.3	70
	1426	0.9	27
	2102	2.7	82
19 W	0325	1.1	34
	0911	2.2	67
	1453	1.1	34
	2117	2.8	85
20 Th	0402	0.8	24
	1011	2.2	67
	1517	1.4	43
	2132	2.8	85
21 F	0441	0.6	18
	1116	2.1	64
	1538	1.6	49
	2150	2.9	88
22 Sa ◐	0523	0.4	12
	1230	2.1	64
	1554	1.9	58
	2212	3.0	91
23 Su	0609	0.2	6
	2241	3.1	94
24 M	0658	0.0	0
	2317	3.2	98
25 Tu	0750	−0.1	−3
26 W	0003	3.2	98
	0843	−0.2	−6
27 Th	0103	3.2	98
	0936	−0.2	−6
	1800	2.3	70
	2016	2.2	67
28 F	0215	3.1	94
	1027	−0.2	−6
	1805	2.3	70
	2157	2.0	61
29 Sa ○	0336	3.0	91
	1115	0.0	0
	1820	2.4	73
	2314	1.6	49
30 Su	0458	2.9	88
	1202	0.2	6
	1840	2.6	79
31 M	0020	1.1	34
	0617	2.8	85
	1246	0.5	15
	1905	2.8	85

September

	Time	Height	
	h m	ft	cm
1 Tu	0119	0.6	18
	0733	2.7	82
	1329	0.9	27
	1935	3.0	91
2 W	0215	0.2	6
	0844	2.7	82
	1412	1.2	37
	2010	3.2	98
3 Th	0310	−0.2	−6
	0954	2.6	79
	1455	1.5	46
	2049	3.3	101
4 F ◑	0405	−0.4	−12
	1103	2.5	76
	1540	1.7	52
	2131	3.4	104
5 Sa	0501	−0.5	−15
	1213	2.5	76
	1628	1.9	58
	2218	3.3	101
6 Su	0559	−0.5	−15
	1323	2.4	73
	1722	2.0	61
	2309	3.2	98
7 M	0658	−0.4	−12
	1433	2.4	73
	1827	2.0	61
8 Tu	0005	3.1	94
	0758	−0.2	−6
	1538	2.4	73
	1943	2.0	61
9 W	0108	2.9	88
	0858	0.0	0
	1633	2.4	73
	2104	1.9	58
10 Th	0219	2.7	82
	0956	0.1	3
	1718	2.5	76
	2218	1.8	55
11 F	0333	2.5	76
	1049	0.3	9
	1755	2.5	76
	2319	1.6	49
12 Sa ●	0445	2.5	76
	1138	0.5	15
	1825	2.5	76
13 Su	0009	1.3	40
	0552	2.4	73
	1223	0.8	24
	1849	2.4	73
14 M	0050	1.1	34
	0653	2.4	73
	1302	1.0	30
	1909	2.4	73
15 Tu	0127	0.9	27
	0749	2.4	73
	1338	1.2	37
	1926	2.4	73

	Time	Height	
	h m	ft	cm
16 W	0201	0.6	18
	0841	2.5	76
	1411	1.5	46
	1941	2.5	76
17 Th	0235	0.4	12
	0933	2.5	76
	1440	1.7	52
	1958	2.5	76
18 F	0310	0.3	9
	1024	2.5	76
	1506	1.9	58
	2016	2.6	79
19 Sa	0347	0.1	3
	1118	2.4	73
	1530	2.0	61
	2040	2.7	82
20 Su ◐	0427	0.0	0
	1215	2.4	73
	1554	2.2	67
	2109	2.8	85
21 M	0511	−0.1	−3
	1315	2.4	73
	1623	2.2	67
	2148	2.9	88
22 Tu	0559	−0.1	−3
	1410	2.3	70
	1707	2.2	67
	2238	2.9	88
23 W	0651	0.0	0
	1453	2.3	70
	1814	2.1	64
	2344	2.8	85
24 Th	0746	0.1	3
	1524	2.3	70
	1936	1.9	58
25 F	0106	2.7	82
	0843	0.3	9
	1550	2.3	70
	2056	1.6	49
26 Sa	0239	2.6	79
	0939	0.6	18
	1616	2.4	73
	2205	1.1	34
27 Su ○	0412	2.6	79
	1034	0.9	27
	1644	2.6	79
	2307	0.6	18
28 M	0538	2.7	82
	1127	1.2	37
	1717	2.8	85
29 Tu	0004	0.1	3
	0654	2.8	85
	1219	1.5	46
	1753	3.0	91
30 W	0058	−0.3	−9
	0803	2.9	88
	1309	1.7	52
	1832	3.1	94

Time meridian 150° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.
Heights are referred to mean lower low water which is the chart datum of soundings.
* Neither a high or low water but an intermediate value to show the period of an approximate stand.

Massacre Bay, Attu Island, Alaska, 2015

Times and Heights of High and Low Waters

October

	Time	Height	
	h m	ft	cm
1 Th	0150	−0.6	−18
	0906	3.0	91
	1359	1.9	58
	1916	3.2	98
2 F	0242	−0.8	−24
	1005	3.0	91
	1450	2.0	61
	2002	3.3	101
3 Sa	0334	−0.8	−24
	1101	3.0	91
	1543	2.1	64
	2052	3.2	98
4 Su ◑	0426	−0.6	−18
	1157	2.9	88
	1642	2.1	64
	2145	3.0	91
5 M	0519	−0.4	−12
	1250	2.8	85
	1746	2.0	61
	2244	2.8	85
6 Tu	0614	−0.1	−3
	1342	2.8	85
	1856	1.9	58
	2351	2.6	79
7 W	0710	0.2	6
	1431	2.7	82
	2008	1.7	52
8 Th	0109	2.4	73
	0807	0.6	18
	1515	2.7	82
	2115	1.5	46
9 F	0236	2.3	70
	0905	0.9	27
	1552	2.6	79
	2212	1.2	37
10 Sa	0403	2.3	70
	1002	1.2	37
	1624	2.6	79
	2259	1.0	30
11 Su	0521	2.4	73
	1057	1.4	43
	1651	2.6	79
	2340	0.7	21
12 M ●	0629	2.5	76
	1148	1.7	52
	1713	2.6	79
13 Tu	0016	0.5	15
	0727	2.7	82
	1236	1.9	58
	1733	2.6	79
14 W	0049	0.3	9
	0819	2.8	85
	1318	2.1	64
	1751	2.6	79
15 Th	0122	0.1	3
	0907	2.9	88
	1357	2.3	70
	1809	2.7	82

	Time	Height	
	h m	ft	cm
16 F	0155	0.0	0
	0952	2.9	88
	1432	2.4	73
	1830	2.8	85
17 Sa	0229	−0.1	−3
	1036	3.0	91
	1504	2.5	76
	1856	2.8	85
18 Su	0304	−0.2	−6
	1118	3.0	91
	1535	2.6	79
	1928	2.9	88
19 M	0343	−0.2	−6
	1157	2.9	88
	1611	2.6	79
	2011	2.9	88
20 Tu ◐	0424	−0.1	−3
	1232	2.9	88
	1657	2.5	76
	2105	2.8	85
21 W	0508	0.1	3
	1302	2.9	88
	1755	2.3	70
	2215	2.7	82
22 Th	0555	0.3	9
	1328	2.8	85
	1900	2.0	61
	2345	2.5	76
23 F	0645	0.7	21
	1353	2.9	88
	2005	1.5	46
24 Sa	0131	2.4	73
	0739	1.1	34
	1421	3.0	91
	2106	1.0	30
25 Su	0321	2.4	73
	0838	1.5	46
	1452	3.1	94
	2203	0.4	12
26 M	0459	2.6	79
	0939	1.9	58
	1527	3.3	101
	2257	−0.1	−3
27 Tu ○	0621	2.9	88
	1043	2.3	70
	1607	3.4	104
	2349	−0.5	−15
28 W	0729	3.1	94
	1146	2.5	76
	1650	3.5	107
29 Th	0039	−0.8	−24
	0827	3.3	101
	1248	2.6	79
	1737	3.6	110
30 F	0129	−0.9	−27
	0919	3.4	104
	1349	2.7	82
	1827	3.5	107
31 Sa	0217	−0.9	−27
	1006	3.5	107
	1450	2.6	79
	1919	3.4	104

November

	Time	Height	
	h m	ft	cm
1 Su	0305	−0.7	−21
	1052	3.5	107
	1552	2.5	76
	2014	3.2	98
2 M	0352	−0.4	−12
	1135	3.5	107
	1657	2.4	73
	2113	2.9	88
3 Tu ◑	0439	0.0	0
	1216	3.4	104
	1804	2.2	67
	2219	2.7	82
4 W	0525	0.4	12
	1254	3.4	104
	1910	1.9	58
	2338	2.4	73
5 Th	0611	0.8	24
	1330	3.3	101
	2011	1.6	49
6 F	0112	2.3	70
	0659	1.3	40
	1402	3.2	98
	2105	1.3	40
7 Sa	0256	2.3	70
	0749	1.7	52
	1430	3.2	98
	2151	1.0	30
8 Su	0436	2.4	73
	0843	2.1	64
	1454	3.2	98
	2232	0.7	21
9 M	0602	2.6	79
	0943	2.4	73
	1516	3.2	98
	2309	0.4	12
10 Tu	0709	2.9	88
	1046	2.7	82
	1536	3.2	98
	2344	0.2	6
11 W ●	0803	3.1	94
	1148	2.9	88
	1556	3.2	98
12 Th	0018	0.0	0
	0848	3.3	101
	1245	3.0	91
	1617	3.2	98
13 F	0051	−0.1	−3
	0928	3.4	104
	1336	3.1	94
	1640	3.3	101
14 Sa	0124	−0.2	−6
	1004	3.5	107
	1421	3.2	98
	1709	3.3	101
15 Su	0158	−0.2	−6
	1037	3.6	110
	1503	3.2	98
	1747	3.3	101

	Time	Height	
	h m	ft	cm
16 M	0233	−0.2	−6
	1104	3.6	110
	1544	3.1	94
	1835	3.2	98
17 Tu	0309	−0.1	−3
	1127	3.5	107
	1631	2.9	88
	1936	3.1	94
18 W ◐	0347	0.2	6
	1147	3.5	107
	1722	2.6	79
	2050	2.8	85
19 Th	0425	0.5	15
	1206	3.5	107
	1817	2.2	67
	2222	2.6	79
20 F	0505	0.9	27
	1226	3.6	110
	1913	1.7	52
21 Sa	0012	2.4	73
	0546	1.4	43
	1250	3.7	113
	2008	1.1	34
22 Su	0215	2.4	73
	0630	1.9	58
	1319	3.8	116
	2102	0.5	15
23 M	0416	2.6	79
	0721	2.4	73
	1353	4.0	122
	2155	0.0	0
24 Tu	0556	3.0	91
	0826	2.8	85
	1432	4.1	125
	2246	−0.4	−12
25 W ○	0707	3.3	101
	0946	3.2	98
	1516	4.1	125
	2335	−0.7	−21
26 Th	0758	3.6	110
	1110	3.3	101
	1604	4.1	125
27 F	0024	−0.8	−24
	0842	3.7	113
	1229	3.3	101
	1656	4.0	122
28 Sa	0111	−0.7	−21
	0921	3.9	119
	1343	3.3	101
	1749	3.8	116
29 Su	0156	−0.6	−18
	0959	3.9	119
	1452	3.1	94
	1845	3.5	107
30 M	0239	−0.3	−9
	1034	3.9	119
	1558	2.8	85
	1943	3.2	98

December

	Time	Height	
	h m	ft	cm
1 Tu	0321	0.1	3
	1108	3.9	119
	1703	2.6	79
	2047	2.9	88
2 W ◑	0400	0.5	15
	1139	3.9	119
	1804	2.3	70
	2159	2.6	79
3 Th	0437	0.9	27
	1207	3.9	119
	1900	1.9	58
	2325	2.4	73
4 F	0512	1.4	43
	1233	3.8	116
	1951	1.6	49
5 Sa	0110	2.3	70
	0543	1.8	55
	1256	3.8	116
	2037	1.2	37
6 Su	0312	2.4	73
	0609	2.3	70
	1318	3.8	116
	2119	0.9	27
7 M	1338	3.8	116
	2159	0.6	18
8 Tu	1358	3.8	116
	2236	0.4	12
9 W	1420	3.8	116
	2313	0.1	3
10 Th	1443	3.8	116
	2349	0.0	0
11 F ●	0923	3.7	113
	1126	3.6	110
	1511	3.8	116
12 Sa	0024	−0.1	−3
	0940	3.8	116
	1243	3.7	113
	1545	3.8	116
13 Su	0059	−0.2	−6
	0958	3.9	119
	1346	3.6	110
	1630	3.7	113
14 M	0134	−0.2	−6
	1014	3.9	119
	1439	3.5	107
	1726	3.6	110
15 Tu	0209	0.0	0
	1028	3.9	119
	1530	3.2	98
	1832	3.4	104

	Time	Height	
	h m	ft	cm
16 W	0244	0.2	6
	1041	3.9	119
	1621	2.8	85
	1949	3.1	94
17 Th	0318	0.6	18
	1056	3.9	119
	1713	2.4	73
	2116	2.8	85
18 F ◐	0352	1.0	30
	1114	4.0	122
	1806	1.8	55
	2256	2.5	76
19 Sa	0425	1.5	46
	1136	4.2	128
	1900	1.2	37
20 Su	0051	2.4	73
	0457	2.0	61
	1204	4.3	131
	1955	0.7	21
21 M	0302	2.6	79
	0524	2.5	76
	1236	4.4	134
	2048	0.2	6
22 Tu	1314	4.5	137
	2141	−0.2	−6
23 W	1357	4.5	137
	2233	−0.4	−12
24 Th	1445	4.4	134
	2323	−0.5	−15
25 F ○	0810	3.7	113
	1044	3.6	110
	1537	4.2	128
26 Sa	0010	−0.5	−15
	0838	3.9	119
	1219	3.5	107
	1633	4.0	122
27 Su	0055	−0.4	−12
	0908	4.0	122
	1339	3.4	104
	1730	3.7	113
28 M	0137	−0.2	−6
	0938	4.0	122
	1448	3.1	94
	1830	3.5	107
29 Tu	0217	0.1	3
	1006	4.0	122
	1549	2.8	85
	1932	3.2	98
30 W	0254	0.5	15
	1032	4.0	122
	1645	2.5	76
	2038	2.9	88
31 Th	0327	0.9	27
	1056	4.0	122
	1736	2.1	64
	2152	2.6	79

Time meridian 150° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.
Heights are referred to mean lower low water which is the chart datum of soundings.
* Neither a high or low water but an intermediate value to show the period of an approximate stand.

Village Cove, St. Paul Island, Alaska, 2015

Times and Heights of High and Low Waters

January

	Time	Height			Time	Height	
	h m	ft	cm		h m	ft	cm
1 Th	0456	2.8	85	16 F	0436	2.4	73
	0903	2.3	70		0647	2.3	70
	1440	3.6	110		1310	3.5	107
	2223	−0.6	−18		2139	−0.2	−6
2 F	0609	2.9	88	17 Sa	0535	2.6	79
	1007	2.5	76		0747	2.5	76
	1516	3.4	104		1349	3.6	110
	2310	−0.6	−18		2220	−0.4	−12
3 Sa	0709	3.1	94	18 Su	0620	2.7	82
	1114	2.6	79		0856	2.6	79
	1549	3.3	101		1435	3.7	113
	2356	−0.5	−15		2304	−0.6	−18
4 Su ○	0758	3.2	98	19 M	0657	2.9	88
	1221	2.7	82		1011	2.6	79
	1623	3.1	94		1528	3.6	110
					2350	−0.7	−21
5 M	0038	−0.4	−12	20 Tu ●	0732	3.1	94
	0842	3.2	98		1135	2.5	76
	1322	2.6	79		1630	3.5	107
	1701	2.9	88				
6 Tu	0118	−0.3	−9	21 W	0037	−0.6	−18
	0919	3.2	98		0808	3.2	98
	1422	2.6	79		1252	2.3	70
	1748	2.8	85		1743	3.3	101
7 W	0157	−0.1	−3	22 Th	0126	−0.5	−15
	0950	3.2	98		0846	3.4	104
	1521	2.4	73		1405	2.0	61
	1841	2.6	79		1903	3.1	94
8 Th	0234	0.1	3	23 F	0217	−0.2	−6
	1017	3.2	98		0925	3.5	107
	1613	2.2	67		1518	1.5	46
	1938	2.4	73		2026	2.9	88
9 F	0311	0.4	12	24 Sa	0310	0.1	3
	1042	3.2	98		1005	3.6	110
	1658	1.9	58		1625	1.0	30
	2048	2.3	70		2157	2.7	82
10 Sa	0347	0.7	21	25 Su	0404	0.6	18
	1106	3.2	98		1046	3.7	113
	1740	1.6	49		1726	0.6	18
	2210	2.1	64		2325	2.6	79
11 Su	0420	1.0	30	26 M ◐	0458	1.0	30
	1128	3.2	98		1128	3.8	116
	1822	1.3	40		1826	0.2	6
	2331	2.0	61				
12 M	0450	1.3	40	27 Tu	0052	2.6	79
	1147	3.2	98		0554	1.4	43
	1904	1.0	30		1211	3.8	116
					1925	−0.1	−3
13 Tu ◑	0057	2.0	61	28 W	0217	2.7	82
	0515	1.6	49		0654	1.8	55
	1203	3.2	98		1257	3.7	113
	1945	0.7	21		2021	−0.3	−9
14 W	0220	2.1	64	29 Th	0331	2.8	85
	0539	1.9	58		0757	2.1	64
	1218	3.3	101		1342	3.6	110
	2024	0.4	12		2113	−0.4	−12
15 Th	0331	2.2	67	30 F	0440	2.9	88
	0607	2.1	64		0859	2.3	70
	1240	3.4	104		1425	3.4	104
	2101	0.1	3		2202	−0.4	−12
				31 Sa	0546	2.9	88
					0958	2.4	73
					1505	3.3	101
					2249	−0.4	−12

February

	Time	Height			Time	Height	
	h m	ft	cm		h m	ft	cm
1 Su	0641	3.0	91	16 M	0519	2.7	82
	1058	2.5	76		0858	2.4	73
	1541	3.1	94		1428	3.6	110
	2334	−0.2	−6		2233	−0.4	−12
2 M	0725	3.0	91	17 Tu	0558	2.9	88
	1155	2.5	76		1009	2.2	67
	1618	3.0	91		1532	3.5	107
					2323	−0.3	−9
3 Tu ○	0015	−0.1	−3	18 W ●	0635	3.0	91
	0801	3.0	91		1124	2.0	61
	1247	2.4	73		1644	3.4	104
	1700	2.8	85				
4 W	0052	0.1	3	19 Th	0014	−0.2	−6
	0831	2.9	88		0713	3.1	94
	1336	2.3	70		1236	1.6	49
	1752	2.7	82		1807	3.2	98
5 Th	0128	0.3	9	20 F	0105	0.1	3
	0857	2.9	88		0752	3.3	101
	1426	2.1	64		1344	1.2	37
	1849	2.5	76		1928	3.1	94
6 F	0203	0.6	18	21 Sa	0158	0.4	12
	0921	2.9	88		0834	3.4	104
	1517	1.9	58		1451	0.8	24
	1949	2.4	73		2051	3.0	91
7 Sa	0238	0.8	24	22 Su	0255	0.8	24
	0945	2.9	88		0918	3.5	107
	1605	1.6	49		1557	0.4	12
	2058	2.3	70		2213	2.9	88
8 Su	0313	1.1	34	23 M	0354	1.1	34
	1007	2.9	88		1005	3.6	110
	1649	1.4	43		1658	0.1	3
	2213	2.2	67		2331	2.9	88
9 M	0347	1.3	40	24 Tu	0452	1.5	46
	1026	3.0	91		1052	3.6	110
	1730	1.1	34		1756	−0.2	−6
	2326	2.2	67				
10 Tu	0418	1.6	49	25 W ◐	0048	2.9	88
	1042	3.0	91		0551	1.7	52
	1812	0.8	24		1141	3.5	107
					1854	−0.3	−9
11 W ◑	0042	2.2	67	26 Th	0201	2.9	88
	0447	1.8	55		0653	1.9	58
	1059	3.1	94		1232	3.4	104
	1854	0.6	18		1951	−0.3	−9
12 Th	0157	2.3	70	27 F	0305	3.0	91
	0516	2.1	64		0755	2.1	64
	1123	3.2	98		1324	3.3	101
	1937	0.3	9		2044	−0.2	−6
13 F	0259	2.4	73	28 Sa	0403	3.0	91
	0552	2.2	67		0854	2.1	64
	1156	3.4	104		1414	3.2	98
	2019	0.0	0		2134	−0.1	−3
14 Sa	0350	2.5	76				
	0643	2.4	73				
	1239	3.5	107				
	2102	−0.2	−6				
15 Su	0436	2.6	79				
	0749	2.4	73				
	1331	3.5	107				
	2146	−0.3	−9				

March

	Time	Height			Time	Height	
	h m	ft	cm		h m	ft	cm
1 Su	0458	2.9	88	16 M	0339	2.8	85
	0948	2.2	67		0806	2.1	64
	1500	3.0	91		1325	3.3	101
	2220	0.1	3		2111	0.0	0
2 M	0546	2.9	88	17 Tu	0416	2.9	88
	1039	2.1	64		0909	1.9	58
	1544	2.9	88		1436	3.3	101
	2304	0.3	9		2201	0.1	3
3 Tu	0625	2.8	85	18 W	0454	2.9	88
	1127	2.1	64		1013	1.6	49
	1629	2.8	85		1551	3.2	98
	2344	0.5	15		2254	0.3	9
4 W	0656	2.7	82	19 Th	0534	3.1	94
	1212	2.0	61		1119	1.2	37
	1722	2.7	82		1713	3.1	94
					2349	0.5	15
5 Th ○	0022	0.7	21	20 F ●	0615	3.2	98
	0721	2.7	82		1223	0.8	24
	1255	1.8	55		1836	3.1	94
	1818	2.6	79				
6 F	0058	0.9	27	21 Sa	0044	0.8	24
	0744	2.7	82		0657	3.3	101
	1337	1.6	49		1325	0.4	12
	1914	2.5	76		1953	3.1	94
7 Sa	0133	1.1	34	22 Su	0142	1.2	37
	0806	2.7	82		0742	3.4	104
	1422	1.4	43		1427	0.1	3
	2013	2.5	76		2108	3.1	94
8 Su	0208	1.4	43	23 M	0243	1.4	43
	0827	2.7	82		0830	3.4	104
	1508	1.2	37		1528	−0.2	−6
	2117	2.5	76		2220	3.2	98
9 M	0246	1.6	49	24 Tu	0347	1.7	52
	0846	2.7	82		0921	3.4	104
	1554	1.0	30		1627	−0.3	−9
	2222	2.5	76		2327	3.2	98
10 Tu	0325	1.8	55	25 W	0450	1.8	55
	0904	2.8	85		1015	3.3	101
	1636	0.7	21		1723	−0.3	−9
	2324	2.5	76				
11 W	0404	2.0	61	26 Th ◐	0031	3.2	98
	0927	2.9	88		0550	1.9	58
	1718	0.5	15		1109	3.2	98
					1818	−0.2	−6
12 Th	0026	2.5	76	27 F	0133	3.2	98
	0441	2.1	64		0650	1.9	58
	0957	3.0	91		1205	3.0	91
	1801	0.3	9		1913	−0.1	−3
13 F ◑	0127	2.6	79	28 Sa	0228	3.1	94
	0519	2.3	70		0750	1.9	58
	1035	3.1	94		1304	2.9	88
	1846	0.2	6		2006	0.1	3
14 Sa	0218	2.7	82	29 Su	0316	3.0	91
	0604	2.3	70		0845	1.9	58
	1122	3.2	98		1401	2.8	85
	1934	0.0	0		2055	0.3	9
15 Su	0301	2.7	82	30 M	0358	2.9	88
	0702	2.3	70		0933	1.8	55
	1218	3.3	101		1455	2.7	82
	2022	0.0	0		2140	0.6	18
				31 Tu	0435	2.8	85
					1018	1.7	52
					1547	2.6	79
					2222	0.8	24

Time meridian 135° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.
Heights are referred to mean lower low water which is the chart datum of soundings.

Village Cove, St. Paul Island, Alaska, 2015

Times and Heights of High and Low Waters

April

	Time	Height	
	h m	ft	cm
1 W	0507	2.7	82
	1100	1.6	49
	1642	2.6	79
	2304	1.1	34
2 Th	0534	2.7	82
	1141	1.4	43
	1742	2.5	76
	2343	1.3	40
3 F	0557	2.6	79
	1220	1.2	37
	1840	2.6	79
4 Sa ○	0022	1.5	46
	0617	2.6	79
	1259	1.0	30
	1936	2.6	79
5 Su	0101	1.7	52
	0635	2.6	79
	1339	0.8	24
	2033	2.6	79
6 M	0141	1.9	58
	0653	2.7	82
	1420	0.6	18
	2130	2.7	82
7 Tu	0224	2.1	64
	0714	2.7	82
	1503	0.5	15
	2225	2.8	85
8 W	0313	2.2	67
	0742	2.8	85
	1547	0.3	9
	2316	2.9	88
9 Th	0402	2.3	70
	0818	2.9	88
	1630	0.2	6
10 F	0005	2.9	88
	0447	2.4	73
	0904	2.9	88
	1714	0.1	3
11 Sa ◑	0052	3.0	91
	0533	2.3	70
	0959	3.0	91
	1801	0.1	3
12 Su	0135	3.0	91
	0624	2.2	67
	1101	2.9	88
	1850	0.1	3
13 M	0212	3.0	91
	0722	2.0	61
	1213	2.9	88
	1942	0.2	6
14 Tu	0247	3.1	94
	0821	1.7	52
	1337	2.9	88
	2035	0.4	12
15 W	0321	3.1	94
	0918	1.3	40
	1501	2.9	88
	2128	0.7	21

	Time	Height	
	h m	ft	cm
16 Th	0356	3.2	98
	1016	0.8	24
	1624	2.9	88
	2224	1.0	30
17 F	0435	3.3	101
	1114	0.4	12
	1747	3.0	91
	2324	1.4	43
18 Sa ●	0518	3.3	101
	1212	0.0	0
	1903	3.1	94
19 Su	0026	1.6	49
	0604	3.3	101
	1308	−0.3	−9
	2012	3.2	98
20 M	0129	1.9	58
	0652	3.3	101
	1404	−0.5	−15
	2118	3.3	101
21 Tu	0235	2.0	61
	0742	3.2	98
	1500	−0.5	−15
	2219	3.4	104
22 W	0343	2.1	64
	0836	3.1	94
	1555	−0.5	−15
	2315	3.4	104
23 Th	0446	2.1	64
	0933	3.0	91
	1648	−0.3	−9
24 F	0008	3.4	104
	0545	2.0	61
	1032	2.8	85
	1738	−0.1	−3
25 Sa ◐	0058	3.3	101
	0642	1.9	58
	1132	2.7	82
	1828	0.2	6
26 Su	0145	3.3	101
	0738	1.8	55
	1236	2.5	76
	1917	0.5	15
27 M	0224	3.1	94
	0828	1.6	49
	1343	2.5	76
	2004	0.8	24
28 Tu	0257	3.0	91
	0913	1.5	46
	1447	2.4	73
	2048	1.1	34
29 W	0325	2.9	88
	0953	1.3	40
	1547	2.4	73
	2128	1.4	43
30 Th	0347	2.8	85
	1033	1.1	34
	1652	2.4	73
	2208	1.6	49

May

	Time	Height	
	h m	ft	cm
1 F	0405	2.8	85
	1111	0.8	24
	1757	2.5	76
	2249	1.9	58
2 Sa	0418	2.8	85
	1149	0.6	18
	1856	2.6	79
	2333	2.1	64
3 Su ○	0432	2.8	85
	1227	0.4	12
	1950	2.7	82
4 M	0019	2.3	70
	0454	2.9	88
	1304	0.2	6
	2042	2.9	88
5 Tu	0107	2.4	73
	0524	2.9	88
	1343	0.1	3
	2132	3.0	91
6 W	0159	2.5	76
	0602	2.9	88
	1424	−0.1	−3
	2217	3.1	94
7 Th	0257	2.6	79
	0646	2.9	88
	1507	−0.1	−3
	2259	3.2	98
8 F	0356	2.5	76
	0735	2.9	88
	1553	−0.2	−6
	2338	3.2	98
9 Sa	0448	2.4	73
	0833	2.9	88
	1638	−0.1	−3
10 Su	0015	3.3	101
	0539	2.2	67
	0943	2.8	85
	1725	0.0	0
11 M ◑	0052	3.3	101
	0633	1.9	58
	1101	2.7	82
	1813	0.3	9
12 Tu	0127	3.3	101
	0730	1.5	46
	1232	2.6	79
	1906	0.6	18
13 W	0200	3.4	104
	0826	1.1	34
	1409	2.5	76
	2001	1.0	30
14 Th	0234	3.4	104
	0920	0.6	18
	1535	2.6	79
	2057	1.4	43
15 F	0309	3.5	107
	1013	0.1	3
	1658	2.7	82
	2156	1.7	52

	Time	Height	
	h m	ft	cm
16 Sa	0347	3.5	107
	1107	−0.2	−6
	1816	2.9	88
	2301	2.0	61
17 Su ●	0428	3.5	107
	1201	−0.5	−15
	1923	3.1	94
18 M	0010	2.3	70
	0515	3.4	104
	1253	−0.7	−21
	2024	3.3	101
19 Tu	0118	2.4	73
	0606	3.3	101
	1343	−0.7	−21
	2120	3.4	104
20 W	0226	2.4	73
	0658	3.1	94
	1434	−0.6	−18
	2212	3.5	107
21 Th	0335	2.3	70
	0751	2.9	88
	1524	−0.5	−15
	2258	3.5	107
22 F	0437	2.2	67
	0849	2.7	82
	1613	−0.2	−6
	2340	3.5	107
23 Sa	0532	2.0	61
	0951	2.6	79
	1658	0.1	3
24 Su	0020	3.4	104
	0624	1.8	55
	1055	2.4	73
	1741	0.4	12
25 M ◐	0057	3.3	101
	0716	1.6	49
	1204	2.3	70
	1823	0.7	21
26 Tu	0129	3.2	98
	0803	1.4	43
	1320	2.2	67
	1904	1.1	34
27 W	0157	3.1	94
	0845	1.2	37
	1434	2.2	67
	1943	1.4	43
28 Th	0218	3.1	94
	0925	0.9	27
	1543	2.2	67
	2021	1.7	52
29 F	0235	3.0	91
	1002	0.6	18
	1654	2.3	70
	2056	2.0	61
30 Sa	0246	3.1	94
	1040	0.4	12
	1805	2.5	76
	2131	2.3	70
31 Su	0300	3.1	94
	1118	0.2	6
	1903	2.7	82
	2215	2.5	76

June

	Time	Height	
	h m	ft	cm
1 M	0321	3.1	94
	1155	0.0	0
	1952	2.8	85
	2314	2.6	79
2 Tu ○	0351	3.2	98
	1234	−0.2	−6
	2036	3.0	91
3 W	0019	2.7	82
	0430	3.2	98
	1313	−0.3	−9
	2117	3.1	94
4 Th	0122	2.8	85
	0521	3.1	94
	1354	−0.4	−12
	2154	3.2	98
5 F	0228	2.7	82
	0619	3.1	94
	1438	−0.4	−12
	2229	3.3	101
6 Sa	0335	2.5	76
	0720	3.0	91
	1524	−0.3	−9
	2303	3.4	104
7 Su	0435	2.2	67
	0831	2.8	85
	1611	−0.1	−3
	2336	3.5	107
8 M	0531	1.9	58
	0954	2.6	79
	1658	0.2	6
9 Tu ◑	0010	3.5	107
	0627	1.4	43
	1126	2.4	73
	1746	0.6	18
10 W	0045	3.6	110
	0725	0.9	27
	1305	2.4	73
	1837	1.0	30
11 Th	0121	3.6	110
	0821	0.4	12
	1439	2.4	73
	1934	1.5	46
12 F	0157	3.7	113
	0914	0.0	0
	1602	2.6	79
	2034	1.9	58
13 Sa	0234	3.7	113
	1006	−0.4	−12
	1723	2.8	85
	2137	2.2	67
14 Su	0313	3.6	110
	1058	−0.6	−18
	1834	3.0	91
	2245	2.4	73
15 M	0354	3.5	107
	1148	−0.7	−21
	1933	3.2	98
	2358	2.6	79

	Time	Height	
	h m	ft	cm
16 Tu ●	0439	3.4	104
	1237	−0.7	−21
	2025	3.3	101
17 W	0106	2.6	79
	0530	3.2	98
	1324	−0.6	−18
	2113	3.4	104
18 Th	0213	2.5	76
	0623	3.0	91
	1410	−0.5	−15
	2155	3.4	104
19 F	0318	2.4	73
	0716	2.8	85
	1455	−0.3	−9
	2233	3.4	104
20 Sa	0417	2.2	67
	0812	2.6	79
	1538	0.0	0
	2307	3.4	104
21 Su	0508	2.0	61
	0915	2.4	73
	1619	0.3	9
	2338	3.3	101
22 M	0554	1.7	52
	1024	2.3	70
	1657	0.6	18
23 Tu	0006	3.3	101
	0640	1.5	46
	1136	2.2	67
	1731	1.0	30
24 W ◐	0032	3.2	98
	0726	1.2	37
	1256	2.1	64
	1804	1.3	40
25 Th	0054	3.2	98
	0809	0.9	27
	1417	2.1	64
	1833	1.7	52
26 F	0112	3.2	98
	0849	0.7	21
	1530	2.2	67
	1901	2.0	61
27 Sa	0127	3.2	98
	0927	0.4	12
	1643	2.3	70
	1931	2.2	67
28 Su	0145	3.3	101
	1004	0.2	6
	1757	2.5	76
	2009	2.4	73
29 M	0209	3.3	101
	1043	−0.1	−3
	1852	2.7	82
	2059	2.6	79
30 Tu	0241	3.4	104
	1123	−0.3	−9
	1931	2.8	85
	2205	2.7	82

Time meridian 135° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.
Heights are referred to mean lower low water which is the chart datum of soundings.

Village Cove, St. Paul Island, Alaska, 2015

Times and Heights of High and Low Waters

July

	Time	Height	
	h m	ft	cm
1 W ○	0320	3.4	104
	1203	−0.4	−12
	2006	3.0	91
	2328	2.8	85
2 Th	0409	3.4	104
	1245	−0.5	−15
	2040	3.1	94
3 F	0044	2.7	82
	0509	3.3	101
	1329	−0.5	−15
	2113	3.2	98
4 Sa	0155	2.5	76
	0619	3.1	94
	1414	−0.4	−12
	2147	3.4	104
5 Su	0306	2.2	67
	0732	3.0	91
	1502	−0.2	−6
	2221	3.5	107
6 M	0412	1.8	55
	0854	2.7	82
	1551	0.1	3
	2255	3.6	110
7 Tu	0511	1.3	40
	1024	2.6	79
	1640	0.5	15
	2331	3.7	113
8 W ◑	0609	0.8	24
	1155	2.5	76
	1730	1.0	30
9 Th	0008	3.7	113
	0708	0.3	9
	1328	2.5	76
	1823	1.4	43
10 F	0048	3.7	113
	0805	0.0	0
	1453	2.6	79
	1922	1.8	55
11 Sa	0130	3.7	113
	0900	−0.3	−9
	1611	2.7	82
	2025	2.1	64
12 Su	0212	3.7	113
	0952	−0.5	−15
	1726	2.9	88
	2129	2.4	73
13 M	0254	3.5	107
	1043	−0.6	−18
	1831	3.0	91
	2237	2.5	76
14 Tu	0337	3.4	104
	1133	−0.6	−18
	1924	3.1	94
	2346	2.6	79
15 W ●	0422	3.2	98
	1220	−0.5	−15
	2010	3.2	98

	Time	Height	
	h m	ft	cm
16 Th	0050	2.5	76
	0512	3.0	91
	1304	−0.3	−9
	2050	3.2	98
17 F	0149	2.4	73
	0607	2.9	88
	1346	−0.1	−3
	2125	3.2	98
18 Sa	0247	2.3	70
	0701	2.7	82
	1427	0.1	3
	2156	3.2	98
19 Su	0341	2.1	64
	0757	2.5	76
	1506	0.4	12
	2224	3.1	94
20 M	0428	1.8	55
	0901	2.4	73
	1544	0.7	21
	2249	3.1	94
21 Tu	0512	1.6	49
	1010	2.3	70
	1620	1.0	30
	2312	3.1	94
22 W	0554	1.3	40
	1120	2.2	67
	1652	1.3	40
	2333	3.1	94
23 Th ◐	0637	1.0	30
	1235	2.2	67
	1721	1.6	49
	2351	3.1	94
24 F	0721	0.8	24
	1353	2.2	67
	1746	1.8	55
25 Sa	0008	3.2	98
	0804	0.5	15
	1503	2.3	70
	1810	2.1	64
26 Su	0028	3.2	98
	0844	0.3	9
	1607	2.4	73
	1842	2.3	70
27 M	0056	3.3	101
	0924	0.1	3
	1709	2.5	76
	1930	2.4	73
28 Tu	0133	3.4	104
	1004	−0.1	−3
	1800	2.6	79
	2032	2.5	76
29 W	0217	3.5	107
	1047	−0.3	−9
	1838	2.7	82
	2141	2.5	76
30 Th	0308	3.5	107
	1131	−0.3	−9
	1912	2.9	88
	2300	2.5	76
31 F ○	0407	3.4	104
	1217	−0.3	−9
	1945	3.0	91

August

	Time	Height	
	h m	ft	cm
1 Sa	0018	2.2	67
	0519	3.3	101
	1304	−0.2	−6
	2019	3.1	94
2 Su	0129	1.9	58
	0638	3.1	94
	1353	0.0	0
	2054	3.3	101
3 M	0238	1.5	46
	0759	3.0	91
	1444	0.3	9
	2132	3.4	104
4 Tu	0345	1.1	34
	0924	2.8	85
	1537	0.6	18
	2212	3.5	107
5 W	0446	0.6	18
	1048	2.7	82
	1631	1.0	30
	2253	3.6	110
6 Th ◑	0545	0.2	6
	1209	2.7	82
	1725	1.4	43
	2336	3.7	113
7 F	0644	−0.1	−3
	1331	2.7	82
	1822	1.7	52
8 Sa	0022	3.6	110
	0742	−0.3	−9
	1446	2.8	85
	1924	2.0	61
9 Su	0111	3.6	110
	0839	−0.4	−12
	1554	2.9	88
	2028	2.2	67
10 M	0201	3.5	107
	0932	−0.4	−12
	1659	2.9	88
	2129	2.3	70
11 Tu	0249	3.3	101
	1023	−0.3	−9
	1759	2.9	88
	2230	2.3	70
12 W	0336	3.2	98
	1113	−0.2	−6
	1849	2.9	88
	2331	2.3	70
13 Th	0425	3.0	91
	1159	0.0	0
	1930	2.9	88
14 F ●	0027	2.2	67
	0518	2.8	85
	1242	0.2	6
	2004	2.9	88
15 Sa	0116	2.1	64
	0614	2.7	82
	1321	0.4	12
	2033	2.9	88

	Time	Height	
	h m	ft	cm
16 Su	0204	1.9	58
	0709	2.6	79
	1400	0.7	21
	2100	2.8	85
17 M	0252	1.7	52
	0806	2.5	76
	1438	0.9	27
	2124	2.8	85
18 Tu	0338	1.5	46
	0907	2.5	76
	1516	1.2	37
	2148	2.8	85
19 W	0422	1.3	40
	1011	2.4	73
	1553	1.4	43
	2209	2.9	88
20 Th	0503	1.0	30
	1114	2.4	73
	1628	1.6	49
	2228	2.9	88
21 F	0545	0.8	24
	1218	2.4	73
	1659	1.8	55
	2247	3.0	91
22 Sa ◐	0627	0.6	18
	1325	2.4	73
	1728	2.0	61
	2309	3.0	91
23 Su	0711	0.4	12
	1426	2.5	76
	1759	2.2	67
	2339	3.1	94
24 M	0754	0.3	9
	1518	2.5	76
	1839	2.3	70
25 Tu	0019	3.2	98
	0838	0.1	3
	1604	2.6	79
	1933	2.3	70
26 W	0109	3.3	101
	0922	0.0	0
	1646	2.6	79
	2035	2.3	70
27 Th	0206	3.3	101
	1008	0.0	0
	1726	2.7	82
	2141	2.1	64
28 F	0309	3.3	101
	1057	0.0	0
	1803	2.8	85
	2251	1.9	58
29 Sa ○	0421	3.2	98
	1148	0.1	3
	1840	2.9	88
30 Su	0002	1.5	46
	0544	3.2	98
	1239	0.3	9
	1917	3.1	94
31 M	0108	1.1	34
	0706	3.1	94
	1332	0.6	18
	1957	3.2	98

September

	Time	Height	
	h m	ft	cm
1 Tu	0213	0.7	21
	0826	3.1	94
	1428	0.9	27
	2040	3.4	104
2 W	0317	0.3	9
	0944	3.1	94
	1528	1.2	37
	2127	3.5	107
3 Th	0419	0.0	0
	1058	3.1	94
	1627	1.5	46
	2215	3.5	107
4 F	0517	−0.2	−6
	1209	3.1	94
	1726	1.7	52
	2306	3.5	107
5 Sa ◑	0615	−0.3	−9
	1318	3.1	94
	1826	1.8	55
	2359	3.4	104
6 Su	0713	−0.3	−9
	1423	3.1	94
	1928	1.9	58
7 M	0056	3.3	101
	0810	−0.2	−6
	1521	3.0	91
	2030	2.0	61
8 Tu	0154	3.1	94
	0903	0.0	0
	1614	3.0	91
	2126	2.0	61
9 W	0249	3.0	91
	0954	0.2	6
	1705	2.9	88
	2220	1.9	58
10 Th	0342	2.9	88
	1043	0.4	12
	1749	2.8	85
	2312	1.8	55
11 F	0437	2.7	82
	1129	0.6	18
	1826	2.7	82
	2359	1.7	52
12 Sa ●	0535	2.7	82
	1213	0.9	27
	1856	2.7	82
13 Su	0042	1.6	49
	0632	2.6	79
	1253	1.1	34
	1921	2.6	79
14 M	0123	1.4	43
	0727	2.6	79
	1332	1.3	40
	1943	2.6	79
15 Tu	0203	1.2	37
	0822	2.6	79
	1413	1.5	46
	2004	2.6	79

	Time	Height	
	h m	ft	cm
16 W	0246	1.0	30
	0920	2.6	79
	1455	1.7	52
	2024	2.6	79
17 Th	0330	0.8	24
	1016	2.7	82
	1538	1.9	58
	2044	2.7	82
18 F	0412	0.7	21
	1110	2.7	82
	1618	2.0	61
	2108	2.7	82
19 Sa	0453	0.5	15
	1203	2.7	82
	1655	2.1	64
	2137	2.8	85
20 Su ◐	0533	0.4	12
	1256	2.7	82
	1729	2.2	67
	2214	2.9	88
21 M	0616	0.3	9
	1345	2.8	85
	1807	2.2	67
	2259	3.0	91
22 Tu	0701	0.2	6
	1428	2.8	85
	1853	2.2	67
	2352	3.0	91
23 W	0749	0.2	6
	1504	2.8	85
	1948	2.1	64
24 Th	0056	3.0	91
	0837	0.3	9
	1538	2.8	85
	2046	1.8	55
25 F	0209	3.0	91
	0927	0.4	12
	1613	2.9	88
	2145	1.5	46
26 Sa	0326	3.0	91
	1019	0.6	18
	1650	3.0	91
	2247	1.1	34
27 Su ○	0450	3.0	91
	1115	0.8	24
	1731	3.1	94
	2350	0.7	21
28 M	0615	3.1	94
	1214	1.1	34
	1814	3.2	98
29 Tu	0051	0.3	9
	0732	3.2	98
	1313	1.4	43
	1900	3.3	101
30 W	0151	−0.1	−3
	0844	3.3	101
	1416	1.6	49
	1949	3.3	101

Time meridian 135° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.
Heights are referred to mean lower low water which is the chart datum of soundings.

Village Cove, St. Paul Island, Alaska, 2015

Times and Heights of High and Low Waters

October

	Time	Height	
	h m	ft	cm
1 Th	0251	−0.3	−9
	0954	3.4	104
	1522	1.8	55
	2041	3.3	101
2 F	0351	−0.5	−15
	1057	3.4	104
	1626	1.9	58
	2138	3.3	101
3 Sa	0448	−0.5	−15
	1158	3.4	104
	1727	1.9	58
	2237	3.2	98
4 Su ◑	0543	−0.4	−12
	1256	3.4	104
	1827	1.9	58
	2337	3.0	91
5 M	0638	−0.2	−6
	1351	3.3	101
	1928	1.8	55
6 Tu	0041	2.9	88
	0733	0.1	3
	1440	3.2	98
	2026	1.7	52
7 W	0146	2.8	85
	0826	0.4	12
	1523	3.1	94
	2118	1.6	49
8 Th	0248	2.7	82
	0915	0.7	21
	1602	3.0	91
	2205	1.5	46
9 F	0348	2.6	79
	1002	1.0	30
	1635	2.8	85
	2249	1.3	40
10 Sa	0449	2.5	76
	1047	1.3	40
	1704	2.7	82
	2331	1.2	37
11 Su	0552	2.6	79
	1133	1.5	46
	1727	2.6	79
12 M ●	0009	1.0	30
	0650	2.6	79
	1217	1.8	55
	1746	2.6	79
13 Tu	0046	0.8	24
	0744	2.7	82
	1301	2.0	61
	1803	2.6	79
14 W	0124	0.6	18
	0837	2.8	85
	1346	2.1	64
	1821	2.6	79
15 Th	0202	0.5	15
	0929	2.9	88
	1436	2.2	67
	1844	2.6	79

	Time	Height	
	h m	ft	cm
16 F	0242	0.4	12
	1017	3.0	91
	1528	2.3	70
	1914	2.7	82
17 Sa	0324	0.3	9
	1102	3.0	91
	1615	2.4	73
	1950	2.7	82
18 Su	0405	0.2	6
	1145	3.1	94
	1656	2.4	73
	2034	2.7	82
19 M	0446	0.1	3
	1227	3.1	94
	1736	2.3	70
	2128	2.7	82
20 Tu ◐	0528	0.2	6
	1305	3.1	94
	1818	2.2	67
	2230	2.7	82
21 W	0612	0.2	6
	1340	3.1	94
	1907	2.0	61
	2340	2.7	82
22 Th	0701	0.4	12
	1411	3.1	94
	2000	1.6	49
23 F	0103	2.7	82
	0752	0.6	18
	1442	3.1	94
	2052	1.2	37
24 Sa	0232	2.7	82
	0846	0.9	27
	1513	3.2	98
	2146	0.8	24
25 Su	0357	2.7	82
	0941	1.2	37
	1548	3.3	101
	2242	0.3	9
26 M	0523	2.9	88
	1042	1.6	49
	1629	3.3	101
	2340	−0.1	−3
27 Tu ○	0641	3.1	94
	1149	1.9	58
	1715	3.4	104
28 W	0036	−0.5	−15
	0750	3.3	101
	1256	2.1	64
	1807	3.4	104
29 Th	0131	−0.7	−21
	0854	3.4	104
	1405	2.2	67
	1901	3.3	101
30 F	0227	−0.8	−24
	0954	3.6	110
	1516	2.2	67
	1958	3.2	98
31 Sa	0323	−0.7	−21
	1049	3.6	110
	1623	2.1	64
	2100	3.0	91

November

	Time	Height	
	h m	ft	cm
1 Su	0418	−0.6	−18
	1139	3.6	110
	1724	2.0	61
	2206	2.8	85
2 M	0509	−0.3	−9
	1228	3.6	110
	1822	1.8	55
	2312	2.7	82
3 Tu ◑	0600	0.0	0
	1314	3.5	107
	1920	1.6	49
4 W	0021	2.5	76
	0649	0.4	12
	1356	3.4	104
	2014	1.4	43
5 Th	0134	2.4	73
	0738	0.8	24
	1431	3.2	98
	2101	1.2	37
6 F	0243	2.4	73
	0825	1.1	34
	1500	3.1	94
	2143	1.0	30
7 Sa	0349	2.4	73
	0908	1.5	46
	1523	3.0	91
	2223	0.8	24
8 Su	0458	2.4	73
	0950	1.8	55
	1539	2.9	88
	2301	0.6	18
9 M	0605	2.5	76
	1034	2.1	64
	1549	2.8	85
	2338	0.5	15
10 Tu	0704	2.7	82
	1123	2.3	70
	1558	2.8	85
11 W ●	0014	0.3	9
	0755	2.8	85
	1215	2.5	76
	1615	2.9	88
12 Th	0050	0.1	3
	0843	2.9	88
	1308	2.6	79
	1644	2.9	88
13 F	0127	0.0	0
	0928	3.1	94
	1405	2.7	82
	1722	2.9	88
14 Sa	0204	−0.1	−3
	1009	3.2	98
	1506	2.7	82
	1808	2.8	85
15 Su	0244	−0.1	−3
	1046	3.3	101
	1602	2.6	79
	1858	2.8	85

	Time	Height	
	h m	ft	cm
16 M	0326	−0.1	−3
	1121	3.3	101
	1649	2.5	76
	1954	2.7	82
17 Tu	0408	0.0	0
	1153	3.3	101
	1733	2.3	70
	2102	2.6	79
18 W ◐	0450	0.1	3
	1225	3.3	101
	1819	1.9	58
	2223	2.5	76
19 Th	0534	0.3	9
	1255	3.4	104
	1910	1.5	46
	2352	2.4	73
20 F	0621	0.7	21
	1324	3.4	104
	2001	1.1	34
21 Sa	0134	2.4	73
	0713	1.0	30
	1355	3.5	107
	2052	0.6	18
22 Su	0306	2.5	76
	0809	1.5	46
	1428	3.6	110
	2143	0.1	3
23 M	0430	2.6	79
	0909	1.8	55
	1503	3.6	110
	2235	−0.4	−12
24 Tu	0550	2.9	88
	1014	2.2	67
	1543	3.6	110
	2329	−0.7	−21
25 W ○	0659	3.1	94
	1127	2.4	73
	1629	3.5	107
26 Th	0021	−0.9	−27
	0759	3.3	101
	1241	2.5	76
	1723	3.4	104
27 F	0113	−0.9	−27
	0855	3.5	107
	1353	2.5	76
	1821	3.2	98
28 Sa	0205	−0.9	−27
	0946	3.6	110
	1506	2.4	73
	1921	3.0	91
29 Su	0256	−0.7	−21
	1033	3.7	113
	1614	2.2	67
	2024	2.8	85
30 M	0347	−0.4	−12
	1116	3.7	113
	1713	2.0	61
	2133	2.6	79

December

	Time	Height	
	h m	ft	cm
1 Tu	0435	−0.1	−3
	1156	3.6	110
	1808	1.7	52
	2244	2.4	73
2 W ◑	0520	0.3	9
	1234	3.5	107
	1902	1.5	46
	2357	2.2	67
3 Th	0602	0.7	21
	1308	3.4	104
	1951	1.2	37
4 F	0116	2.2	67
	0644	1.1	34
	1337	3.3	101
	2035	1.0	30
5 Sa	0233	2.2	67
	0726	1.5	46
	1401	3.2	98
	2115	0.7	21
6 Su	0345	2.2	67
	0805	1.8	55
	1418	3.2	98
	2152	0.5	15
7 M	0459	2.4	73
	0841	2.1	64
	1429	3.1	94
	2229	0.3	9
8 Tu	0612	2.5	76
	0916	2.4	73
	1440	3.1	94
	2306	0.1	3
9 W	0709	2.7	82
	0957	2.6	79
	1458	3.2	98
	2342	−0.1	−3
10 Th	0754	2.9	88
	1057	2.8	85
	1523	3.2	98
11 F ●	0019	−0.2	−6
	0834	3.0	91
	1208	2.8	85
	1557	3.2	98
12 Sa	0055	−0.3	−9
	0910	3.1	94
	1312	2.8	85
	1641	3.1	94
13 Su	0133	−0.3	−9
	0943	3.2	98
	1418	2.8	85
	1737	3.0	91
14 M	0212	−0.3	−9
	1015	3.3	101
	1525	2.6	79
	1840	2.9	88
15 Tu	0254	−0.2	−6
	1045	3.4	104
	1623	2.3	70
	1948	2.7	82

	Time	Height	
	h m	ft	cm
16 W	0338	0.0	0
	1114	3.5	107
	1714	2.0	61
	2110	2.5	76
17 Th	0422	0.3	9
	1143	3.5	107
	1805	1.5	46
	2246	2.3	70
18 F ◐	0507	0.6	18
	1213	3.6	110
	1859	1.0	30
19 Sa	0027	2.2	67
	0554	1.0	30
	1244	3.7	113
	1952	0.5	15
20 Su	0208	2.3	70
	0646	1.5	46
	1319	3.7	113
	2044	0.0	0
21 M	0332	2.5	76
	0746	1.9	58
	1356	3.8	116
	2135	−0.4	−12
22 Tu	0451	2.7	82
	0850	2.2	67
	1435	3.8	116
	2226	−0.7	−21
23 W	0604	2.9	88
	0958	2.5	76
	1517	3.7	113
	2317	−0.9	−27
24 Th	0704	3.2	98
	1113	2.6	79
	1603	3.6	110
25 F ○	0007	−0.9	−27
	0756	3.3	101
	1228	2.6	79
	1655	3.4	104
26 Sa	0056	−0.8	−24
	0843	3.4	104
	1337	2.6	79
	1754	3.1	94
27 Su	0143	−0.7	−21
	0928	3.5	107
	1447	2.4	73
	1855	2.9	88
28 M	0230	−0.4	−12
	1008	3.5	107
	1553	2.2	67
	1957	2.7	82
29 Tu	0316	−0.1	−3
	1044	3.5	107
	1650	1.9	58
	2105	2.4	73
30 W	0400	0.2	6
	1118	3.4	104
	1741	1.6	49
	2220	2.3	70
31 Th	0441	0.6	18
	1148	3.4	104
	1828	1.4	43
	2334	2.1	64

Time meridian 135° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.
Heights are referred to mean lower low water which is the chart datum of soundings.

Port Moller, Bristol Bay, Alaska, 2015

Times and Heights of High and Low Waters

January

	Time	Height		Time	Height
	h m	ft / cm		h m	ft / cm
1 Th	0106	−1.5 / −46	**16** F	0017	0.2 / 6
	0800	10.3 / 314		0729	8.9 / 271
	1327	4.5 / 137		1231	5.9 / 180
	1854	10.2 / 311		1721	9.5 / 290
2 F	0155	−1.6 / −49	**17** Sa	0056	−0.4 / −12
	0859	10.6 / 323		0816	9.3 / 283
	1427	4.9 / 149		1324	6.1 / 186
	1939	9.6 / 293		1801	9.6 / 293
3 Sa	0242	−1.5 / −46	**18** Su	0138	−1.0 / −30
	0955	10.8 / 329		0903	9.8 / 299
	1524	5.1 / 155		1417	6.1 / 186
	2025	9.0 / 274		1849	9.7 / 296
4 Su ○	0328	−1.3 / −40	**19** M	0225	−1.4 / −43
	1045	10.9 / 332		0950	10.3 / 314
	1620	5.2 / 158		1513	5.8 / 177
	2114	8.5 / 259		1945	9.6 / 293
5 M	0413	−0.9 / −27	**20** Tu ●	0315	−1.7 / −52
	1131	11.0 / 335		1036	10.7 / 326
	1714	5.2 / 158		1611	5.3 / 162
	2204	8.0 / 244		2050	9.5 / 290
6 Tu	0457	−0.4 / −12	**21** W	0409	−1.7 / −52
	1213	10.9 / 332		1123	11.1 / 338
	1806	5.0 / 152		1710	4.6 / 140
	2258	7.7 / 235		2205	9.3 / 283
7 W	0540	0.1 / 3	**22** Th	0505	−1.4 / −43
	1252	10.9 / 332		1209	11.5 / 351
	1856	4.6 / 140		1810	3.6 / 110
	2354	7.4 / 226		2325	9.1 / 277
8 Th	0622	0.6 / 18	**23** F	0603	−0.8 / −24
	1328	10.8 / 329		1257	11.8 / 360
	1944	4.2 / 128		1909	2.5 / 76
9 F	0053	7.3 / 223	**24** Sa	0045	9.1 / 277
	0705	1.2 / 37		0702	−0.1 / −3
	1402	10.7 / 326		1345	11.9 / 363
	2029	3.7 / 113		2008	1.4 / 43
10 Sa	0153	7.2 / 219	**25** Su	0204	9.2 / 280
	0749	1.9 / 58		0804	0.8 / 24
	1435	10.5 / 320		1433	11.9 / 363
	2111	3.1 / 94		2106	0.4 / 12
11 Su	0253	7.3 / 223	**26** M ◐	0319	9.5 / 290
	0833	2.7 / 82		0906	1.8 / 55
	1506	10.2 / 311		1522	11.7 / 357
	2151	2.6 / 79		2202	−0.5 / −15
12 M	0352	7.4 / 226	**27** Tu	0430	9.8 / 299
	0917	3.5 / 107		1008	2.7 / 82
	1535	9.9 / 302		1612	11.3 / 344
	2229	2.0 / 61		2258	−1.1 / −34
13 Tu ◑	0450	7.7 / 235	**28** W	0538	10.1 / 308
	1002	4.2 / 128		1111	3.4 / 104
	1601	9.7 / 296		1702	10.9 / 332
	2305	1.4 / 43		2353	−1.4 / −43
14 W	0546	8.0 / 244	**29** Th	0643	10.4 / 317
	1050	4.9 / 149		1214	4.0 / 122
	1624	9.5 / 290		1752	10.4 / 317
	2341	0.9 / 27			
15 Th	0639	8.4 / 256	**30** F	0046	−1.5 / −46
	1140	5.5 / 168		0743	10.6 / 323
	1649	9.5 / 290		1314	4.4 / 134
				1842	9.9 / 302
			31 Sa	0136	−1.3 / −40
				0840	10.6 / 323
				1412	4.7 / 143
				1930	9.3 / 283

February

	Time	Height		Time	Height
	h m	ft / cm		h m	ft / cm
1 Su	0224	−1.0 / −30	**16** M	0111	−0.9 / −27
	0932	10.6 / 323		0821	9.9 / 302
	1506	4.8 / 146		1350	5.3 / 162
	2017	8.8 / 268		1842	9.8 / 299
2 M	0309	−0.6 / −18	**17** Tu	0202	−1.1 / −34
	1020	10.5 / 320		0907	10.2 / 311
	1558	4.9 / 149		1445	4.8 / 146
	2105	8.4 / 256		1946	9.8 / 299
3 Tu ○	0352	−0.1 / −3	**18** W ●	0256	−1.1 / −34
	1102	10.4 / 317		0954	10.6 / 323
	1647	4.8 / 146		1543	4.0 / 122
	2154	8.0 / 244		2056	9.8 / 299
4 W	0434	0.4 / 12	**19** Th	0352	−0.9 / −27
	1139	10.2 / 311		1041	10.8 / 329
	1734	4.6 / 140		1641	3.1 / 94
	2246	7.8 / 238		2213	9.7 / 296
5 Th	0515	0.9 / 27	**20** F	0450	−0.4 / −12
	1213	10.1 / 308		1129	11.1 / 338
	1818	4.3 / 131		1740	2.1 / 64
	2339	7.6 / 232		2330	9.8 / 299
6 F	0555	1.5 / 46	**21** Sa	0549	0.3 / 9
	1245	9.9 / 302		1218	11.2 / 341
	1901	3.9 / 119		1839	1.1 / 34
7 Sa	0034	7.6 / 232	**22** Su	0045	9.9 / 302
	0637	2.1 / 64		0650	1.0 / 30
	1315	9.7 / 296		1308	11.3 / 344
	1942	3.4 / 104		1938	0.2 / 6
8 Su	0130	7.6 / 232	**23** M	0158	10.2 / 311
	0719	2.8 / 85		0752	1.7 / 52
	1345	9.6 / 293		1401	11.2 / 341
	2022	2.9 / 88		2036	−0.5 / −15
9 M	0227	7.7 / 235	**24** Tu	0307	10.4 / 317
	0803	3.4 / 104		0855	2.4 / 73
	1414	9.4 / 287		1454	10.9 / 332
	2059	2.3 / 70		2134	−0.9 / −27
10 Tu	0323	7.9 / 241	**25** W ◐	0413	10.6 / 323
	0848	4.1 / 125		0957	3.0 / 91
	1441	9.3 / 283		1548	10.6 / 323
	2136	1.8 / 55		2230	−1.1 / −34
11 W ◑	0417	8.2 / 250	**26** Th	0517	10.7 / 326
	0933	4.6 / 140		1058	3.4 / 104
	1508	9.2 / 280		1643	10.2 / 311
	2213	1.2 / 37		2326	−1.1 / −34
12 Th	0510	8.5 / 259	**27** F	0618	10.8 / 329
	1021	5.1 / 155		1159	3.7 / 113
	1536	9.2 / 280		1738	9.9 / 302
	2252	0.6 / 18			
13 F	0601	8.8 / 268	**28** Sa	0021	−0.9 / −27
	1111	5.5 / 168		0715	10.7 / 326
	1611	9.3 / 283		1258	3.9 / 119
	2335	0.1 / 3		1831	9.5 / 290
14 Sa	0649	9.2 / 280			
	1203	5.7 / 174			
	1654	9.5 / 290			
15 Su	0022	−0.5 / −15			
	0736	9.5 / 290			
	1256	5.6 / 171			
	1745	9.7 / 296			

March

	Time	Height		Time	Height
	h m	ft / cm		h m	ft / cm
1 Su	0112	−0.5 / −15	**16** M	0654	9.9 / 302
	0807	10.5 / 320		1238	4.6 / 140
	1352	4.1 / 125		1743	9.4 / 287
	1922	9.1 / 277			
2 M	0201	−0.1 / −3	**17** Tu	0047	−0.2 / −6
	0856	10.3 / 314		0738	10.1 / 308
	1443	4.1 / 125		1331	4.0 / 122
	2012	8.7 / 265		1849	9.6 / 293
3 Tu	0246	0.4 / 12	**18** W	0142	−0.2 / −6
	0940	10.0 / 305		0823	10.2 / 311
	1530	4.1 / 125		1425	3.2 / 98
	2101	8.4 / 256		1957	9.8 / 299
4 W	0329	1.0 / 30	**19** Th	0239	0.1 / 3
	1018	9.7 / 296		0909	10.4 / 317
	1614	4.0 / 122		1520	2.3 / 70
	2150	8.2 / 250		2109	10.0 / 305
5 Th ○	0411	1.6 / 49	**20** F ●	0337	0.6 / 18
	1052	9.4 / 287		0956	10.5 / 320
	1655	3.8 / 116		1616	1.4 / 43
	2241	8.1 / 247		2222	10.2 / 311
6 F	0451	2.2 / 67	**21** Sa	0437	1.2 / 37
	1122	9.1 / 277		1046	10.5 / 320
	1734	3.5 / 107		1713	0.5 / 15
	2331	8.1 / 247		2333	10.5 / 320
7 Sa	0532	2.7 / 82	**22** Su	0537	1.7 / 52
	1151	8.9 / 271		1138	10.5 / 320
	1812	3.1 / 94		1810	−0.2 / −6
8 Su	0022	8.2 / 250	**23** M	0041	10.8 / 329
	0614	3.3 / 101		0639	2.2 / 67
	1219	8.8 / 268		1232	10.4 / 317
	1848	2.7 / 82		1907	−0.7 / −21
9 M	0113	8.4 / 256	**24** Tu	0147	11.1 / 338
	0658	3.7 / 113		0741	2.6 / 79
	1247	8.6 / 262		1328	10.2 / 311
	1925	2.3 / 70		2005	−1.0 / −30
10 Tu	0205	8.6 / 262	**25** W	0250	11.2 / 341
	0743	4.2 / 128		0843	2.9 / 88
	1315	8.6 / 262		1426	10.0 / 305
	2002	1.8 / 55		2102	−1.0 / −30
11 W	0255	8.8 / 268	**26** Th ◐	0350	11.3 / 344
	0829	4.6 / 140		0943	3.1 / 94
	1345	8.6 / 262		1524	9.7 / 296
	2041	1.3 / 40		2158	−0.8 / −24
12 Th	0345	9.1 / 277	**27** F	0448	11.2 / 341
	0916	4.9 / 149		1043	3.3 / 101
	1419	8.6 / 262		1622	9.4 / 287
	2123	0.9 / 27		2254	−0.4 / −12
13 F ◑	0434	9.3 / 283	**28** Sa	0544	11.0 / 335
	1003	5.1 / 155		1141	3.3 / 101
	1459	8.8 / 268		1720	9.2 / 280
	2208	0.4 / 12		2349	0.0 / 0
14 Sa	0522	9.5 / 290	**29** Su	0636	10.7 / 326
	1053	5.2 / 158		1236	3.3 / 101
	1547	9.0 / 274		1817	9.0 / 274
	2258	0.1 / 3			
15 Su	0609	9.7 / 296	**30** M	0041	0.6 / 18
	1145	5.0 / 152		0724	10.4 / 317
	1642	9.2 / 280		1328	3.3 / 101
	2352	−0.1 / −3		1911	8.8 / 268
			31 Tu	0131	1.1 / 34
				0808	9.9 / 302
				1414	3.2 / 98
				2004	8.6 / 262

Time meridian 135° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.
Heights are referred to mean lower low water which is the chart datum of soundings.

Port Moller, Bristol Bay, Alaska, 2015

Times and Heights of High and Low Waters

April

	Time	Height			Time	Height	
	h m	ft	cm		h m	ft	cm
1 W	0217	1.8	55	**16** Th	0125	1.3	40
	0846	9.5	290		0741	10.4	317
	1457	3.1	94		1409	1.4	43
	2055	8.5	259		2013	9.7	296
2 Th	0302	2.4	73	**17** F	0224	1.8	55
	0920	9.1	277		0826	10.3	314
	1537	2.9	88		1501	0.5	15
	2146	8.5	259		2122	10.2	311
3 F	0345	3.0	91	**18** Sa	0325	2.4	73
	0950	8.7	265		0914	10.2	311
	1613	2.7	82		1555	−0.3	−9
	2235	8.6	262	●	2230	10.7	326
4 Sa	0427	3.6	110	**19** Su	0426	2.8	85
	1018	8.4	256		1005	10.0	305
	1648	2.4	73		1648	−0.8	−24
○	2323	8.8	268		2334	11.1	338
5 Su	0510	4.0	122	**20** M	0527	3.2	98
	1045	8.2	250		1100	9.8	299
	1721	2.1	64		1743	−1.2	−37
6 M	0010	9.0	274	**21** Tu	0035	11.5	351
	0554	4.4	134		0628	3.4	104
	1112	8.0	244		1157	9.5	290
	1755	1.7	52		1838	−1.2	−37
7 Tu	0057	9.3	283	**22** W	0134	11.7	357
	0640	4.7	143		0729	3.4	104
	1141	8.0	244		1256	9.3	283
	1831	1.3	40		1933	−1.1	−34
8 W	0144	9.6	293	**23** Th	0230	11.8	360
	0727	4.9	149		0829	3.4	104
	1214	8.0	244		1357	9.0	274
	1911	0.9	27		2028	−0.8	−24
9 Th	0230	9.8	299	**24** F	0324	11.7	357
	0815	5.0	152		0927	3.2	98
	1254	8.1	247		1458	8.8	268
	1955	0.6	18		2123	−0.3	−9
10 F	0316	10.0	305	**25** Sa	0415	11.5	351
	0903	5.0	152		1023	3.1	94
	1342	8.2	250		1558	8.6	262
	2043	0.4	12	◐	2217	0.3	9
11 Sa	0402	10.2	311	**26** Su	0504	11.2	341
	0951	4.8	146		1117	2.9	88
	1437	8.3	253		1658	8.5	259
◑	2134	0.3	9		2310	1.0	30
12 Su	0447	10.3	314	**27** M	0551	10.7	326
	1041	4.5	137		1209	2.7	82
	1539	8.5	259		1758	8.4	256
	2229	0.3	9				
13 M	0531	10.3	314	**28** Tu	0003	1.7	52
	1133	4.0	122		0633	10.3	314
	1645	8.7	265		1258	2.5	76
	2326	0.5	15		1856	8.4	256
14 Tu	0615	10.4	317	**29** W	0053	2.5	76
	1225	3.3	101		0711	9.7	296
	1755	9.0	274		1341	2.3	70
					1951	8.5	259
15 W	0026	0.8	24	**30** Th	0142	3.2	98
	0658	10.4	317		0744	9.2	280
	1317	2.4	73		1421	2.0	61
	1904	9.3	283		2044	8.6	262

May

	Time	Height			Time	Height	
	h m	ft	cm		h m	ft	cm
1 F	0228	3.8	116	**16** Sa	0213	3.4	104
	0813	8.8	268		0750	10.2	311
	1457	1.8	55		1445	−0.9	−27
	2136	8.8	268		2132	10.5	320
2 Sa	0314	4.4	134	**17** Su	0315	3.9	119
	0839	8.4	256		0838	9.9	302
	1530	1.5	46		1536	−1.3	−40
	2225	9.1	277	●	2234	11.0	335
3 Su	0359	4.9	149	**18** M	0416	4.2	128
	0902	8.1	247		0931	9.5	290
	1602	1.2	37		1628	−1.6	−49
○	2311	9.4	287		2331	11.4	347
4 M	0445	5.2	158	**19** Tu	0516	4.3	131
	0927	8.0	244		1027	9.2	280
	1634	0.9	27		1719	−1.5	−46
	2355	9.8	299				
5 Tu	0532	5.4	165	**20** W	0026	11.7	357
	0957	7.9	241		0616	4.2	128
	1710	0.5	15		1126	8.8	268
					1811	−1.3	−40
6 W	0038	10.1	308	**21** Th	0118	11.9	363
	0620	5.4	165		0715	4.0	122
	1037	7.9	241		1226	8.5	259
	1750	0.2	6		1903	−0.9	−27
7 Th	0122	10.5	320	**22** F	0207	11.9	363
	0709	5.3	162		0812	3.7	113
	1125	7.9	241		1328	8.3	253
	1835	0.0	0		1955	−0.4	−12
8 F	0206	10.7	326	**23** Sa	0255	11.8	360
	0758	5.1	155		0906	3.4	104
	1220	7.9	241		1430	8.1	247
	1924	−0.1	−3		2046	0.2	6
9 Sa	0249	10.9	332	**24** Su	0339	11.5	351
	0848	4.7	143		0958	3.0	91
	1323	8.0	244		1531	8.0	244
	2016	−0.1	−3		2137	1.0	30
10 Su	0332	11.0	335	**25** M	0422	11.2	341
	0938	4.2	128		1048	2.7	82
	1433	8.0	244		1632	7.9	241
	2110	0.2	6	◐	2227	1.9	58
11 M	0415	11.0	335	**26** Tu	0502	10.7	326
	1029	3.5	107		1137	2.3	70
	1545	8.2	250		1733	8.0	244
◑	2207	0.7	21		2318	2.7	82
12 Tu	0457	11.0	335	**27** W	0538	10.2	311
	1121	2.7	82		1222	1.9	58
	1658	8.4	256		1833	8.1	247
	2307	1.4	43				
13 W	0540	10.9	332	**28** Th	0010	3.6	110
	1213	1.7	52		0612	9.7	296
	1810	8.8	268		1302	1.6	49
					1930	8.4	256
14 Th	0009	2.1	64	**29** F	0100	4.3	131
	0622	10.7	326		0640	9.2	280
	1304	0.7	21		1340	1.3	40
	1920	9.3	283		2025	8.7	265
15 F	0111	2.8	85	**30** Sa	0149	5.0	152
	0705	10.5	320		0705	8.8	268
	1355	−0.2	−6		1413	0.9	27
	2027	9.9	302		2116	9.0	274
				31 Su	0237	5.5	168
					0725	8.5	259
					1446	0.6	18
					2204	9.4	287

June

	Time	Height			Time	Height	
	h m	ft	cm		h m	ft	cm
1 M	0325	5.8	177	**16** Tu	0405	4.9	149
	0747	8.4	256		0906	9.2	280
	1519	0.2	6		1610	−1.6	−49
	2249	9.8	299	●	2324	11.3	344
2 Tu	0413	6.0	183	**17** W	0504	4.9	149
	0818	8.3	253		1003	8.7	265
	1555	−0.1	−3		1659	−1.4	−43
○	2332	10.2	311				
3 W	0502	6.0	183	**18** Th	0012	11.5	351
	0901	8.2	250		0601	4.7	143
	1635	−0.5	−15		1101	8.4	256
					1747	−1.0	−30
4 Th	0014	10.6	323	**19** F	0058	11.6	354
	0552	5.8	177		0656	4.3	131
	0955	8.2	250		1201	8.1	247
	1721	−0.7	−21		1836	−0.5	−15
5 F	0056	11.0	335	**20** Sa	0141	11.5	351
	0644	5.4	165		0749	3.9	119
	1058	8.1	247		1301	7.9	241
	1810	−0.8	−24		1924	0.1	3
6 Sa	0138	11.3	344	**21** Su	0222	11.4	347
	0736	4.8	146		0840	3.5	107
	1207	8.0	244		1402	7.7	235
	1902	−0.6	−18		2011	0.9	27
7 Su	0221	11.5	351	**22** M	0301	11.2	341
	0828	4.1	125		0928	3.0	91
	1322	8.0	244		1503	7.7	235
	1957	−0.2	−6		2059	1.7	52
8 M	0303	11.6	354	**23** Tu	0338	10.9	332
	0920	3.2	98		1013	2.5	76
	1439	8.1	247		1603	7.7	235
	2054	0.5	15		2146	2.6	79
9 Tu	0345	11.6	354	**24** W	0412	10.4	317
	1012	2.2	67		1057	2.0	61
	1554	8.3	253		1704	7.8	238
◑	2152	1.3	40	◐	2234	3.5	107
10 W	0427	11.4	347	**25** Th	0444	10.0	305
	1105	1.2	37		1138	1.6	49
	1708	8.6	262		1803	8.1	247
	2254	2.3	70		2324	4.3	131
11 Th	0510	11.2	341	**26** F	0513	9.6	293
	1158	0.2	6		1217	1.2	37
	1820	9.1	277		1900	8.3	253
	2357	3.2	98				
12 F	0554	10.9	332	**27** Sa	0014	5.1	155
	1250	−0.6	−18		0538	9.2	280
	1928	9.7	296		1254	0.8	24
					1953	8.7	265
13 Sa	0101	3.9	119	**28** Su	0105	5.7	174
	0639	10.5	320		0601	9.0	274
	1341	−1.2	−37		1328	0.4	12
	2033	10.2	311		2043	9.0	274
14 Su	0204	4.5	137	**29** M	0154	6.1	186
	0725	10.1	308		0625	8.9	271
	1431	−1.6	−49		1402	0.0	0
	2134	10.7	326		2131	9.4	287
15 M	0305	4.8	146	**30** Tu	0243	6.3	192
	0814	9.6	293		0657	8.9	271
	1520	−1.7	−52		1440	−0.4	−12
	2231	11.0	335		2216	9.9	302

Time meridian 135° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.
Heights are referred to mean lower low water which is the chart datum of soundings.

Port Moller, Bristol Bay, Alaska, 2015

Times and Heights of High and Low Waters

July

	Time	Height	
	h m	ft	cm
1 W ○	0333	6.3	192
	0739	8.8	268
	1522	−0.8	−24
	2259	10.3	314
2 Th	0425	6.1	186
	0833	8.8	268
	1608	−1.0	−30
	2341	10.7	326
3 F	0518	5.6	171
	0937	8.6	262
	1658	−1.1	−34
4 Sa	0023	11.1	338
	0612	5.0	152
	1051	8.5	259
	1751	−0.9	−27
5 Su	0105	11.4	347
	0708	4.0	122
	1209	8.5	259
	1847	−0.5	−15
6 M	0149	11.7	357
	0803	3.0	91
	1327	8.5	259
	1944	0.2	6
7 Tu	0232	11.8	360
	0857	1.9	58
	1444	8.7	265
	2043	1.0	30
8 W ◑	0316	11.7	357
	0951	0.8	24
	1558	9.0	274
	2143	2.0	61
9 Th	0401	11.5	351
	1045	−0.1	−3
	1710	9.3	283
	2245	2.9	88
10 F	0447	11.2	341
	1140	−0.8	−24
	1819	9.7	296
	2349	3.7	113
11 Sa	0534	10.8	329
	1233	−1.3	−40
	1924	10.1	308
12 Su	0053	4.4	134
	0623	10.3	314
	1325	−1.6	−49
	2026	10.5	320
13 M	0154	4.8	146
	0712	9.8	299
	1416	−1.6	−49
	2125	10.7	326
14 Tu	0254	5.0	152
	0802	9.4	287
	1505	−1.4	−43
	2218	10.8	329
15 W ●	0351	5.0	152
	0854	8.9	271
	1553	−1.1	−34
	2307	10.9	332

	Time	Height	
	h m	ft	cm
16 Th	0447	4.9	149
	0949	8.5	259
	1640	−0.7	−21
	2352	10.9	332
17 F	0540	4.7	143
	1046	8.2	250
	1725	−0.2	−6
18 Sa	0032	10.9	332
	0631	4.3	131
	1143	7.9	241
	1811	0.4	12
19 Su	0110	10.8	329
	0719	3.9	119
	1241	7.8	238
	1856	1.0	30
20 M	0145	10.6	323
	0806	3.4	104
	1339	7.8	238
	1941	1.7	52
21 Tu	0219	10.4	317
	0849	2.9	88
	1438	7.8	238
	2026	2.4	73
22 W	0252	10.2	311
	0931	2.4	73
	1535	7.9	241
	2111	3.2	98
23 Th ◐	0323	9.9	302
	1010	1.9	58
	1631	8.1	247
	2157	4.0	122
24 F	0352	9.5	290
	1049	1.5	46
	1727	8.3	253
	2244	4.7	143
25 Sa	0418	9.3	283
	1126	1.1	34
	1820	8.5	259
	2332	5.3	162
26 Su	0443	9.1	277
	1203	0.7	21
	1911	8.8	268
27 M	0021	5.8	177
	0511	9.1	277
	1241	0.2	6
	1959	9.1	277
28 Tu	0110	6.0	183
	0545	9.2	280
	1321	−0.2	−6
	2045	9.4	287
29 W	0159	6.1	186
	0629	9.2	280
	1405	−0.6	−18
	2130	9.7	296
30 Th	0251	5.9	180
	0722	9.3	283
	1453	−0.9	−27
	2214	10.1	308
31 F ○	0346	5.4	165
	0824	9.2	280
	1545	−0.9	−27
	2258	10.5	320

August

	Time	Height	
	h m	ft	cm
1 Sa	0442	4.7	143
	0937	9.1	277
	1639	−0.8	−24
	2342	10.9	332
2 Su	0539	3.8	116
	1056	9.1	277
	1736	−0.4	−12
3 M	0027	11.2	341
	0636	2.7	82
	1214	9.2	280
	1834	0.2	6
4 Tu	0113	11.4	347
	0734	1.6	49
	1330	9.4	287
	1934	0.9	27
5 W	0200	11.5	351
	0830	0.5	15
	1443	9.7	296
	2035	1.7	52
6 Th ◑	0248	11.4	347
	0926	−0.3	−9
	1553	10.0	305
	2136	2.5	76
7 F	0338	11.2	341
	1022	−1.0	−30
	1700	10.2	311
	2238	3.2	98
8 Sa	0429	10.9	332
	1118	−1.3	−40
	1805	10.4	317
	2340	3.8	116
9 Su	0521	10.5	320
	1213	−1.4	−43
	1907	10.6	323
10 M	0042	4.2	128
	0614	10.0	305
	1307	−1.3	−40
	2006	10.6	323
11 Tu	0141	4.4	134
	0706	9.6	293
	1358	−1.0	−30
	2101	10.5	320
12 W	0238	4.5	137
	0758	9.1	277
	1448	−0.6	−18
	2152	10.4	317
13 Th	0332	4.5	137
	0851	8.7	265
	1535	−0.1	−3
	2239	10.3	314
14 F ●	0423	4.4	134
	0945	8.4	256
	1620	0.4	12
	2319	10.1	308
15 Sa	0511	4.2	128
	1039	8.2	250
	1705	1.0	30
	2355	9.9	302

	Time	Height	
	h m	ft	cm
16 Su	0557	3.9	119
	1134	8.1	247
	1748	1.6	49
17 M	0029	9.7	296
	0641	3.5	107
	1228	8.1	247
	1832	2.1	64
18 Tu	0101	9.6	293
	0723	3.1	94
	1322	8.2	250
	1917	2.7	82
19 W	0133	9.4	287
	0803	2.6	79
	1416	8.4	256
	2001	3.3	101
20 Th	0204	9.2	280
	0841	2.2	67
	1508	8.5	259
	2046	3.9	119
21 F	0233	9.0	274
	0918	1.8	55
	1559	8.7	265
	2130	4.4	134
22 Sa ◐	0302	8.9	271
	0955	1.4	43
	1648	8.8	268
	2215	4.9	149
23 Su	0330	8.8	268
	1032	1.0	30
	1737	9.0	274
	2300	5.3	162
24 M	0401	8.9	271
	1113	0.6	18
	1824	9.1	277
	2347	5.5	168
25 Tu	0438	9.0	274
	1157	0.3	9
	1909	9.3	283
26 W	0035	5.5	168
	0524	9.2	280
	1244	−0.1	−3
	1953	9.5	290
27 Th	0125	5.2	158
	0618	9.3	283
	1335	−0.2	−6
	2036	9.7	296
28 F	0217	4.8	146
	0719	9.4	287
	1428	−0.3	−9
	2121	10.0	305
29 Sa ○	0312	4.1	125
	0829	9.5	290
	1524	−0.1	−3
	2207	10.2	311
30 Su	0409	3.2	98
	0945	9.6	293
	1622	0.3	9
	2255	10.5	320
31 M	0507	2.2	67
	1102	9.8	299
	1722	0.8	24
	2344	10.7	326

September

	Time	Height	
	h m	ft	cm
1 Tu	0605	1.1	34
	1216	10.1	308
	1823	1.3	40
2 W	0034	10.8	329
	0703	0.2	6
	1328	10.5	320
	1925	1.9	58
3 Th	0127	10.8	329
	0801	−0.6	−18
	1436	10.8	329
	2027	2.4	73
4 F	0221	10.7	326
	0859	−1.1	−34
	1540	11.0	335
	2128	2.8	85
5 Sa ◑	0317	10.6	323
	0956	−1.3	−40
	1642	11.1	338
	2229	3.1	94
6 Su	0413	10.3	314
	1053	−1.2	−37
	1742	11.1	338
	2329	3.4	104
7 M	0510	10.0	305
	1149	−0.9	−27
	1840	10.9	332
8 Tu	0028	3.5	107
	0606	9.6	293
	1244	−0.5	−15
	1934	10.7	326
9 W	0124	3.6	110
	0702	9.3	283
	1336	0.0	0
	2025	10.3	314
10 Th	0217	3.6	110
	0756	9.0	274
	1425	0.6	18
	2112	10.0	305
11 F	0307	3.6	110
	0850	8.7	265
	1513	1.2	37
	2154	9.6	293
12 Sa ●	0353	3.5	107
	0944	8.5	259
	1558	1.8	55
	2231	9.2	280
13 Su	0437	3.3	101
	1037	8.5	259
	1643	2.4	73
	2304	8.9	271
14 M	0517	3.1	94
	1128	8.5	259
	1727	3.0	91
	2336	8.6	262
15 Tu	0556	2.8	85
	1218	8.7	265
	1812	3.4	104

	Time	Height	
	h m	ft	cm
16 W	0006	8.4	256
	0633	2.4	73
	1308	8.9	271
	1858	3.8	116
17 Th	0037	8.3	253
	0710	2.1	64
	1356	9.1	277
	1943	4.2	128
18 F	0108	8.2	250
	0747	1.7	52
	1443	9.3	283
	2028	4.5	137
19 Sa	0140	8.1	247
	0824	1.4	43
	1528	9.5	290
	2112	4.7	143
20 Su ◐	0212	8.2	250
	0902	1.1	34
	1613	9.6	293
	2155	4.9	149
21 M	0249	8.3	253
	0943	0.8	24
	1656	9.7	296
	2239	5.0	152
22 Tu	0331	8.4	256
	1029	0.6	18
	1739	9.7	296
	2325	4.8	146
23 W	0421	8.7	265
	1119	0.5	15
	1821	9.8	299
24 Th	0012	4.5	137
	0518	8.9	271
	1212	0.5	15
	1902	9.9	302
25 F	0102	3.9	119
	0621	9.2	280
	1308	0.6	18
	1944	9.9	302
26 Sa	0153	3.1	94
	0729	9.4	287
	1405	0.9	27
	2027	10.0	305
27 Su ○	0246	2.2	67
	0840	9.7	296
	1505	1.3	40
	2115	10.1	308
28 M	0342	1.3	40
	0954	10.1	308
	1607	1.8	55
	2206	10.1	308
29 Tu	0438	0.3	9
	1106	10.6	323
	1709	2.3	70
	2300	10.1	308
30 W	0536	−0.4	−12
	1215	11.0	335
	1812	2.6	79
	2356	10.1	308

Time meridian 135° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.
Heights are referred to mean lower low water which is the chart datum of soundings.

Port Moller, Bristol Bay, Alaska, 2015

Times and Heights of High and Low Waters

October

	Time	Height	
	h m	ft	cm
1 Th	0634	−1.0	−30
	1320	11.4	347
	1916	2.8	85
2 F	0055	10.0	305
	0732	−1.3	−40
	1422	11.7	357
	2018	2.9	88
3 Sa	0155	9.9	302
	0830	−1.4	−43
	1521	11.8	360
	2118	2.9	88
4 Su ◑	0256	9.7	296
	0927	−1.2	−37
	1618	11.8	360
	2217	2.9	88
5 M	0356	9.5	290
	1024	−0.7	−21
	1713	11.5	351
	2314	2.8	85
6 Tu	0456	9.3	283
	1120	−0.2	−6
	1805	11.2	341
7 W	0010	2.8	85
	0556	9.1	277
	1214	0.5	15
	1854	10.7	326
8 Th	0103	2.7	82
	0654	9.0	274
	1307	1.2	37
	1939	10.2	311
9 F	0152	2.6	79
	0750	8.8	268
	1357	1.9	58
	2019	9.6	293
10 Sa	0237	2.5	76
	0846	8.8	268
	1445	2.6	79
	2055	9.1	277
11 Su	0319	2.3	70
	0940	8.8	268
	1533	3.3	101
	2128	8.6	262
12 M ●	0357	2.2	67
	1032	8.9	271
	1619	3.9	119
	2159	8.2	250
13 Tu	0434	2.0	61
	1120	9.1	277
	1706	4.4	134
	2228	7.9	241
14 W	0508	1.8	55
	1207	9.4	287
	1753	4.7	143
	2258	7.6	232
15 Th	0542	1.6	49
	1252	9.7	296
	1840	4.9	149
	2329	7.5	229

	Time	Height	
	h m	ft	cm
16 F	0617	1.3	40
	1336	9.9	302
	1926	5.0	152
17 Sa	0003	7.5	229
	0654	1.0	30
	1418	10.1	308
	2012	5.0	152
18 Su	0041	7.5	229
	0735	0.8	24
	1500	10.3	314
	2056	4.9	149
19 M	0127	7.6	232
	0818	0.6	18
	1541	10.4	317
	2140	4.7	143
20 Tu ◐	0218	7.8	238
	0905	0.6	18
	1621	10.4	317
	2224	4.4	134
21 W	0316	8.0	244
	0955	0.7	21
	1700	10.4	317
	2309	3.9	119
22 Th	0418	8.2	250
	1049	0.9	27
	1739	10.4	317
	2357	3.2	98
23 F	0525	8.6	262
	1146	1.3	40
	1818	10.4	317
24 Sa	0046	2.3	70
	0634	9.0	274
	1246	1.8	55
	1858	10.3	314
25 Su	0136	1.3	40
	0743	9.4	287
	1347	2.4	73
	1941	10.3	314
26 M	0227	0.3	9
	0852	10.0	305
	1449	3.0	91
	2028	10.1	308
27 Tu ○	0320	−0.5	−15
	1001	10.6	323
	1553	3.4	104
	2121	9.9	302
28 W	0414	−1.2	−37
	1107	11.1	338
	1657	3.7	113
	2218	9.7	296
29 Th	0510	−1.6	−49
	1209	11.7	357
	1801	3.7	113
	2320	9.5	290
30 F	0607	−1.7	−52
	1309	12.0	366
	1904	3.6	110
31 Sa	0023	9.2	280
	0704	−1.6	−49
	1405	12.2	372
	2005	3.4	104

November

	Time	Height	
	h m	ft	cm
1 Su	0128	9.0	274
	0800	−1.3	−40
	1459	12.3	375
	2104	3.1	94
2 M	0233	8.9	271
	0856	−0.8	−24
	1550	12.1	369
	2200	2.7	82
3 Tu ◑	0336	8.8	268
	0951	−0.1	−3
	1639	11.8	360
	2255	2.4	73
4 W	0439	8.7	265
	1046	0.7	21
	1725	11.3	344
	2348	2.1	64
5 Th	0541	8.6	262
	1140	1.6	49
	1808	10.8	329
6 F	0037	1.9	58
	0641	8.6	262
	1232	2.4	73
	1848	10.1	308
7 Sa	0122	1.6	49
	0739	8.7	265
	1324	3.3	101
	1922	9.5	290
8 Su	0204	1.4	43
	0835	8.9	271
	1413	4.0	122
	1953	8.9	271
9 M	0242	1.3	40
	0928	9.1	277
	1502	4.7	143
	2020	8.4	256
10 Tu	0317	1.1	34
	1019	9.3	283
	1551	5.2	158
	2043	8.0	244
11 W ●	0350	1.0	30
	1106	9.6	293
	1639	5.5	168
	2106	7.7	235
12 Th	0422	0.8	24
	1149	9.9	302
	1728	5.7	174
	2133	7.5	229
13 F	0456	0.6	18
	1231	10.2	311
	1816	5.7	174
	2211	7.4	226
14 Sa	0532	0.4	12
	1312	10.5	320
	1903	5.6	171
	2258	7.4	226
15 Su	0613	0.2	6
	1352	10.8	329
	1950	5.3	162
	2353	7.4	226

	Time	Height	
	h m	ft	cm
16 M	0658	0.2	6
	1432	10.9	332
	2036	4.9	149
17 Tu	0056	7.4	226
	0747	0.2	6
	1510	11.1	338
	2122	4.3	131
18 W ◐	0205	7.5	229
	0838	0.5	15
	1548	11.1	338
	2207	3.6	110
19 Th	0316	7.7	235
	0931	1.0	30
	1625	11.1	338
	2254	2.7	82
20 F	0427	8.0	244
	1028	1.6	49
	1703	11.0	335
	2343	1.7	52
21 Sa	0539	8.5	259
	1128	2.4	73
	1743	10.9	332
22 Su	0032	0.6	18
	0648	9.0	274
	1231	3.1	94
	1823	10.7	326
23 M	0121	−0.3	−9
	0755	9.7	296
	1335	3.8	116
	1907	10.5	320
24 Tu	0212	−1.1	−34
	0901	10.3	314
	1438	4.3	131
	1954	10.2	311
25 W ○	0303	−1.7	−52
	1004	10.9	332
	1542	4.6	140
	2047	9.8	299
26 Th	0355	−2.0	−61
	1104	11.4	347
	1645	4.6	140
	2145	9.4	287
27 F	0449	−2.0	−61
	1200	11.8	360
	1747	4.5	137
	2249	9.0	274
28 Sa	0542	−1.8	−55
	1253	12.1	369
	1848	4.2	128
	2355	8.7	265
29 Su	0637	−1.5	−46
	1344	12.2	372
	1948	3.7	113
30 M	0102	8.4	256
	0731	−0.9	−27
	1433	12.2	372
	2045	3.2	98

December

	Time	Height	
	h m	ft	cm
1 Tu	0208	8.2	250
	0824	−0.2	−6
	1519	12.0	366
	2138	2.7	82
2 W ◑	0313	8.2	250
	0917	0.6	18
	1602	11.7	357
	2230	2.2	67
3 Th	0417	8.1	247
	1009	1.6	49
	1643	11.2	341
	2319	1.7	52
4 F	0520	8.2	250
	1101	2.5	76
	1721	10.6	323
5 Sa	0005	1.3	40
	0621	8.4	256
	1154	3.5	107
	1756	10.0	305
6 Su	0048	1.0	30
	0719	8.7	265
	1246	4.3	131
	1827	9.5	290
7 M	0127	0.8	24
	0815	8.9	271
	1337	5.0	152
	1853	8.9	271
8 Tu	0203	0.6	18
	0907	9.2	280
	1427	5.6	171
	1915	8.5	259
9 W	0236	0.4	12
	0956	9.5	290
	1516	6.0	183
	1935	8.3	253
10 Th	0308	0.2	6
	1041	9.8	299
	1604	6.2	189
	1958	8.1	247
11 F ●	0341	0.0	0
	1122	10.2	311
	1652	6.3	192
	2033	8.0	244
12 Sa	0417	−0.2	−6
	1202	10.5	320
	1741	6.1	186
	2121	7.8	238
13 Su	0458	−0.4	−12
	1241	10.8	329
	1830	5.8	177
	2222	7.7	235
14 M	0543	−0.4	−12
	1320	11.1	338
	1919	5.2	158
	2331	7.6	232
15 Tu	0632	−0.2	−6
	1359	11.3	344
	2009	4.4	134

	Time	Height	
	h m	ft	cm
16 W	0047	7.5	229
	0725	0.2	6
	1437	11.4	347
	2058	3.5	107
17 Th	0206	7.6	232
	0819	0.8	24
	1516	11.5	351
	2147	2.4	73
18 F ◐	0323	7.9	241
	0916	1.5	46
	1555	11.4	347
	2236	1.3	40
19 Sa	0437	8.3	253
	1016	2.4	73
	1635	11.3	344
	2327	0.3	9
20 Su	0548	8.8	268
	1119	3.3	101
	1717	11.1	338
21 M	0018	−0.7	−21
	0656	9.5	290
	1223	4.1	125
	1800	10.8	329
22 Tu	0108	−1.4	−43
	0800	10.1	308
	1327	4.6	140
	1846	10.4	317
23 W	0159	−1.9	−58
	0902	10.6	323
	1429	5.0	152
	1935	10.0	305
24 Th	0249	−2.1	−64
	1000	11.0	335
	1531	5.1	155
	2028	9.6	293
25 F ○	0340	−2.1	−64
	1054	11.4	347
	1631	5.0	152
	2126	9.1	277
26 Sa	0430	−1.9	−58
	1145	11.6	354
	1731	4.8	146
	2228	8.7	265
27 Su	0521	−1.4	−43
	1233	11.7	357
	1828	4.4	134
	2333	8.3	253
28 M	0611	−0.9	−27
	1319	11.7	357
	1925	3.9	119
29 Tu	0038	8.1	247
	0702	−0.2	−6
	1402	11.7	357
	2018	3.3	101
30 W	0143	7.9	241
	0753	0.6	18
	1443	11.5	351
	2109	2.7	82
31 Th	0248	7.9	241
	0843	1.5	46
	1521	11.1	338
	2157	2.1	64

Time meridian 135° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.
Heights are referred to mean lower low water which is the chart datum of soundings.

Platinum, Alaska, 2015

Times and Heights of High and Low Waters

January

	Time	Height	
	h m	ft	cm
1 Th	0511	5.1	155
	1057	−0.7	−21
	1815	9.7	296
2 F	0103	1.6	49
	0611	4.5	137
	1145	−0.5	−15
	1908	10.0	305
3 Sa	0209	1.3	40
	0713	4.0	122
	1235	−0.1	−3
	1959	10.0	305
4 Su ○	0311	1.1	34
	0814	3.8	116
	1325	0.3	9
	2050	10.0	305
5 M	0408	0.8	24
	0914	3.8	116
	1415	0.6	18
	2139	9.8	299
6 Tu	0457	0.6	18
	1011	3.9	119
	1507	1.0	30
	2225	9.6	293
7 W	0540	0.4	12
	1105	4.2	128
	1601	1.4	43
	2310	9.3	283
8 Th	0617	0.3	9
	1156	4.5	137
	1655	1.7	52
	2353	8.8	268
9 F	0651	0.3	9
	1244	4.9	149
	1749	1.9	58
10 Sa	0036	8.3	253
	0723	0.3	9
	1332	5.4	165
	1843	2.2	67
11 Su	0119	7.7	235
	0753	0.3	9
	1419	5.9	180
	1938	2.3	70
12 M	0202	7.0	213
	0822	0.3	9
	1503	6.5	198
	2035	2.5	76
13 Tu ◑	0245	6.3	192
	0851	0.4	12
	1546	7.0	213
	2134	2.5	76
14 W	0327	5.6	171
	0919	0.4	12
	1629	7.6	232
	2235	2.5	76
15 Th	0410	4.9	149
	0947	0.4	12
	1713	8.1	247
	2339	2.4	73

	Time	Height	
	h m	ft	cm
16 F	0456	4.2	128
	1018	0.3	9
	1758	8.7	265
17 Sa	0041	2.1	64
	0546	3.7	113
	1054	0.2	6
	1844	9.1	277
18 Su	0139	1.9	58
	0641	3.4	104
	1137	0.2	6
	1931	9.6	293
19 M	0232	1.5	46
	0739	3.2	98
	1227	0.1	3
	2019	9.9	302
20 Tu ●	0321	1.2	37
	0838	3.4	104
	1323	0.2	6
	2109	10.0	305
21 W	0407	0.8	24
	0936	3.8	116
	1424	0.3	9
	2159	10.0	305
22 Th	0450	0.5	15
	1034	4.4	134
	1532	0.5	15
	2248	9.7	296
23 F	0531	0.1	3
	1129	5.3	162
	1643	0.7	21
	2338	9.2	280
24 Sa	0611	−0.3	−9
	1224	6.3	192
	1753	0.9	27
25 Su	0028	8.5	259
	0652	−0.6	−18
	1320	7.2	219
	1902	1.1	34
26 M ◐	0120	7.8	238
	0734	−0.8	−24
	1416	8.1	247
	2011	1.2	37
27 Tu	0212	7.0	213
	0817	−1.0	−30
	1510	8.9	271
	2119	1.4	43
28 W	0306	6.2	189
	0901	−1.0	−30
	1604	9.4	287
	2227	1.5	46
29 Th	0400	5.5	168
	0947	−0.8	−24
	1657	9.6	293
	2336	1.5	46
30 F	0455	4.9	149
	1035	−0.5	−15
	1751	9.7	296
31 Sa	0043	1.5	46
	0553	4.5	137
	1125	−0.2	−6
	1844	9.6	293

February

	Time	Height	
	h m	ft	cm
1 Su	0146	1.4	43
	0652	4.2	128
	1217	0.2	6
	1936	9.5	290
2 M	0244	1.3	40
	0751	4.1	125
	1309	0.6	18
	2026	9.2	280
3 Tu ○	0337	1.2	37
	0849	4.1	125
	1401	1.0	30
	2115	9.0	274
4 W	0424	1.1	34
	0945	4.3	131
	1454	1.3	40
	2202	8.7	265
5 Th	0504	1.0	30
	1037	4.6	140
	1550	1.6	49
	2247	8.3	253
6 F	0538	0.9	27
	1126	5.0	152
	1645	1.7	52
	2330	7.9	241
7 Sa	0610	0.8	24
	1212	5.5	168
	1740	1.9	58
8 Su	0013	7.4	226
	0640	0.8	24
	1257	6.0	183
	1833	1.9	58
9 M	0056	6.9	210
	0709	0.7	21
	1341	6.5	198
	1926	2.0	61
10 Tu	0139	6.3	192
	0738	0.7	21
	1425	7.0	213
	2019	2.0	61
11 W ◑	0222	5.7	174
	0806	0.7	21
	1507	7.5	229
	2113	2.0	61
12 Th	0304	5.1	155
	0835	0.6	18
	1550	8.0	244
	2207	2.0	61
13 F	0346	4.6	140
	0905	0.5	15
	1633	8.4	256
	2303	2.0	61
14 Sa	0428	4.1	125
	0939	0.4	12
	1718	8.8	268
	2359	1.9	58
15 Su	0514	3.8	116
	1020	0.2	6
	1806	9.1	277

	Time	Height	
	h m	ft	cm
16 M	0053	1.7	52
	0607	3.7	113
	1110	0.2	6
	1856	9.3	283
17 Tu	0142	1.6	49
	0705	3.9	119
	1210	0.2	6
	1948	9.3	283
18 W ●	0229	1.3	40
	0806	4.3	131
	1315	0.2	6
	2041	9.2	280
19 Th	0315	1.0	30
	0906	4.9	149
	1424	0.3	9
	2134	8.9	271
20 F	0400	0.6	18
	1005	5.8	177
	1536	0.4	12
	2227	8.5	259
21 Sa	0445	0.3	9
	1102	6.8	207
	1648	0.5	15
	2319	8.0	244
22 Su	0529	−0.1	−3
	1157	7.8	238
	1756	0.5	15
23 M	0011	7.4	226
	0614	−0.4	−12
	1253	8.6	262
	1902	0.6	18
24 Tu	0104	6.8	207
	0700	−0.6	−18
	1348	9.2	280
	2006	0.7	21
25 W ◐	0158	6.3	192
	0747	−0.7	−21
	1442	9.5	290
	2108	0.8	24
26 Th	0252	5.8	177
	0835	−0.6	−18
	1536	9.6	293
	2208	0.9	27
27 F	0346	5.4	165
	0924	−0.3	−9
	1629	9.5	290
	2310	1.1	34
28 Sa	0440	5.1	155
	1015	0.0	0
	1722	9.3	283

March

	Time	Height	
	h m	ft	cm
1 Su	0010	1.3	40
	0535	4.8	146
	1108	0.4	12
	1815	8.9	271
2 M	0107	1.4	43
	0632	4.7	143
	1203	0.8	24
	1907	8.6	262
3 Tu	0159	1.4	43
	0728	4.7	143
	1258	1.1	34
	1958	8.2	250
4 W	0247	1.5	46
	0823	4.9	149
	1353	1.4	43
	2048	7.8	238
5 Th ○	0330	1.5	46
	0916	5.2	158
	1449	1.5	46
	2136	7.5	229
6 F	0409	1.4	43
	1006	5.6	171
	1547	1.6	49
	2223	7.1	216
7 Sa	0444	1.4	43
	1052	6.0	183
	1643	1.6	49
	2308	6.7	204
8 Su	0517	1.3	40
	1136	6.5	198
	1737	1.6	49
	2352	6.3	192
9 M	0549	1.3	40
	1219	6.9	210
	1827	1.5	46
10 Tu	0036	5.9	180
	0619	1.2	37
	1302	7.4	226
	1916	1.4	43
11 W	0120	5.5	168
	0650	1.2	37
	1344	7.8	238
	2005	1.3	40
12 Th	0204	5.1	155
	0720	1.1	34
	1427	8.1	247
	2053	1.3	40
13 F ◑	0246	4.7	143
	0752	0.9	27
	1510	8.4	256
	2140	1.3	40
14 Sa	0328	4.4	134
	0827	0.8	24
	1554	8.6	262
	2228	1.4	43
15 Su	0411	4.2	128
	0909	0.7	21
	1640	8.7	265
	2317	1.4	43

	Time	Height	
	h m	ft	cm
16 M	0457	4.3	131
	0958	0.6	18
	1729	8.7	265
17 Tu	0005	1.4	43
	0549	4.5	137
	1058	0.6	18
	1822	8.5	259
18 W	0051	1.3	40
	0646	5.0	152
	1207	0.6	18
	1917	8.2	250
19 Th	0136	1.1	34
	0744	5.7	174
	1319	0.6	18
	2013	7.9	241
20 F ●	0222	0.8	24
	0843	6.6	201
	1431	0.6	18
	2110	7.4	226
21 Sa	0308	0.6	18
	0941	7.5	229
	1543	0.5	15
	2206	7.0	213
22 Su	0357	0.3	9
	1037	8.4	256
	1653	0.3	9
	2301	6.6	201
23 M	0446	0.0	0
	1131	9.2	280
	1757	0.1	3
	2355	6.2	189
24 Tu	0536	−0.1	−3
	1225	9.7	296
	1858	0.1	3
25 W	0050	5.9	180
	0626	−0.2	−6
	1319	9.9	302
	1955	0.1	3
26 Th ◐	0144	5.7	174
	0717	−0.1	−3
	1412	9.8	299
	2051	0.2	6
27 F	0239	5.5	168
	0808	0.1	3
	1505	9.6	293
	2144	0.4	12
28 Sa	0332	5.4	165
	0900	0.4	12
	1557	9.2	280
	2237	0.7	21
29 Su	0425	5.3	162
	0954	0.8	24
	1648	8.6	262
	2329	0.9	27
30 M	0518	5.3	162
	1050	1.1	34
	1740	8.1	247
31 Tu	0019	1.2	37
	0612	5.4	165
	1149	1.4	43
	1832	7.5	229

Time meridian 135° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.
Heights are referred to mean lower low water which is the chart datum of soundings.

Platinum, Alaska, 2015

Times and Heights of High and Low Waters

April

	Time	Height	
	h m	ft	cm
1 W	0105	1.3	40
	0705	5.6	171
	1249	1.6	49
	1924	7.0	213
2 Th	0146	1.5	46
	0756	5.9	180
	1349	1.7	52
	2015	6.5	198
3 F	0225	1.6	49
	0845	6.3	192
	1448	1.7	52
	2106	6.1	186
4 Sa ○	0302	1.6	49
	0933	6.7	204
	1546	1.6	49
	2156	5.8	177
5 Su	0338	1.6	49
	1017	7.2	219
	1642	1.4	43
	2244	5.5	168
6 M	0415	1.6	49
	1100	7.6	232
	1733	1.1	34
	2330	5.2	158
7 Tu	0450	1.6	49
	1142	8.0	244
	1820	0.9	27
8 W	0016	4.9	149
	0524	1.6	49
	1223	8.3	253
	1905	0.8	24
9 Th	0101	4.7	143
	0558	1.5	46
	1305	8.6	262
	1949	0.7	21
10 F	0146	4.5	137
	0634	1.4	43
	1348	8.8	268
	2032	0.6	18
11 Sa ◑	0230	4.4	134
	0713	1.3	40
	1432	8.8	268
	2114	0.7	21
12 Su	0314	4.4	134
	0758	1.2	37
	1517	8.7	265
	2156	0.7	21
13 M	0358	4.6	140
	0850	1.1	34
	1604	8.5	259
	2237	0.8	24
14 Tu	0446	5.0	152
	0950	1.2	37
	1655	8.1	247
	2320	0.7	21
15 W	0538	5.6	171
	1100	1.2	37
	1749	7.5	229

	Time	Height	
	h m	ft	cm
16 Th	0004	0.7	21
	0633	6.4	195
	1215	1.2	37
	1847	7.0	213
17 F	0048	0.5	15
	0729	7.3	223
	1329	1.0	30
	1946	6.4	195
18 Sa ●	0133	0.4	12
	0825	8.3	253
	1441	0.8	24
	2046	5.9	180
19 Su	0221	0.2	6
	0920	9.1	277
	1550	0.5	15
	2145	5.5	168
20 M	0312	0.1	3
	1014	9.8	299
	1655	0.1	3
	2243	5.3	162
21 Tu	0405	0.1	3
	1107	10.2	311
	1754	−0.1	−3
	2339	5.2	158
22 W	0459	0.2	6
	1159	10.3	314
	1849	−0.3	−9
23 Th	0034	5.1	155
	0552	0.3	9
	1250	10.2	311
	1941	−0.3	−9
24 F	0129	5.2	158
	0646	0.6	18
	1342	9.8	299
	2030	−0.2	−6
25 Sa ◐	0223	5.3	162
	0740	0.9	27
	1433	9.3	283
	2117	0.0	0
26 Su	0316	5.4	165
	0835	1.2	37
	1522	8.7	265
	2202	0.3	9
27 M	0407	5.6	171
	0931	1.6	49
	1612	8.0	244
	2246	0.5	15
28 Tu	0458	5.8	177
	1030	1.9	58
	1701	7.3	223
	2328	0.8	24
29 W	0549	6.1	186
	1134	2.1	64
	1752	6.6	201
30 Th	0007	1.0	30
	0639	6.5	198
	1239	2.1	64
	1844	5.9	180

May

	Time	Height	
	h m	ft	cm
1 F	0045	1.2	37
	0727	6.9	210
	1342	2.0	61
	1937	5.4	165
2 Sa	0120	1.3	40
	0813	7.4	226
	1442	1.8	55
	2030	4.9	149
3 Su ○	0155	1.4	43
	0858	7.9	241
	1541	1.5	46
	2123	4.6	140
4 M	0231	1.5	46
	0942	8.3	253
	1635	1.1	34
	2215	4.3	131
5 Tu	0308	1.5	46
	1025	8.7	265
	1723	0.8	24
	2304	4.2	128
6 W	0347	1.5	46
	1107	9.0	274
	1808	0.5	15
	2351	4.1	125
7 Th	0427	1.5	46
	1148	9.2	280
	1850	0.3	9
8 F	0038	4.0	122
	0509	1.5	46
	1230	9.3	283
	1930	0.2	6
9 Sa	0124	4.1	125
	0554	1.5	46
	1314	9.3	283
	2009	0.1	3
10 Su	0211	4.3	131
	0644	1.5	46
	1359	9.1	277
	2047	0.1	3
11 M ◑	0258	4.8	146
	0741	1.5	46
	1446	8.6	262
	2124	0.1	3
12 Tu	0345	5.4	165
	0844	1.6	49
	1534	8.1	247
	2202	0.0	0
13 W	0435	6.1	186
	0953	1.7	52
	1625	7.3	223
	2241	0.0	0
14 Th	0526	7.0	213
	1109	1.8	55
	1720	6.5	198
	2323	−0.1	−3
15 F	0620	7.9	241
	1226	1.6	49
	1819	5.7	174

	Time	Height	
	h m	ft	cm
16 Sa	0007	−0.1	−3
	0714	8.8	268
	1339	1.3	40
	1920	5.1	155
17 Su ●	0054	−0.1	−3
	0807	9.6	293
	1448	0.9	27
	2023	4.6	140
18 M	0143	−0.1	−3
	0901	10.2	311
	1554	0.5	15
	2124	4.4	134
19 Tu	0234	0.0	0
	0953	10.5	320
	1654	0.1	3
	2224	4.4	134
20 W	0329	0.2	6
	1044	10.6	323
	1747	−0.2	−6
	2321	4.5	137
21 Th	0425	0.5	15
	1134	10.5	320
	1837	−0.3	−9
22 F	0016	4.6	140
	0521	0.8	24
	1223	10.1	308
	1923	−0.4	−12
23 Sa	0111	4.9	149
	0616	1.1	34
	1312	9.6	293
	2007	−0.3	−9
24 Su	0205	5.2	158
	0712	1.5	46
	1400	8.9	271
	2048	−0.2	−6
25 M ◐	0257	5.5	168
	0809	1.9	58
	1448	8.2	250
	2126	0.0	0
26 Tu	0346	5.9	180
	0907	2.2	67
	1535	7.4	226
	2203	0.2	6
27 W	0434	6.3	192
	1009	2.4	73
	1621	6.6	201
	2238	0.4	12
28 Th	0522	6.8	207
	1115	2.5	76
	1710	5.8	177
	2312	0.6	18
29 F	0609	7.3	223
	1223	2.4	73
	1801	5.1	155
	2346	0.8	24
30 Sa	0655	7.8	238
	1328	2.2	67
	1855	4.5	137
31 Su	0020	0.9	27
	0739	8.3	253
	1428	1.9	58
	1949	4.0	122

June

	Time	Height	
	h m	ft	cm
1 M	0055	1.0	30
	0824	8.7	265
	1525	1.5	46
	2044	3.7	113
2 Tu ○	0131	1.0	30
	0908	9.1	277
	1618	1.1	34
	2139	3.5	107
3 W	0209	1.1	34
	0952	9.5	290
	1705	0.7	21
	2231	3.4	104
4 Th	0251	1.1	34
	1035	9.7	296
	1747	0.4	12
	2320	3.5	107
5 F	0340	1.2	37
	1118	9.8	299
	1826	0.1	3
6 Sa	0009	3.8	116
	0434	1.3	40
	1201	9.8	299
	1904	−0.1	−3
7 Su	0058	4.2	128
	0531	1.4	43
	1246	9.5	290
	1940	−0.2	−6
8 M	0148	4.8	146
	0632	1.5	46
	1333	8.9	271
	2016	−0.3	−9
9 Tu ◑	0238	5.5	168
	0738	1.7	52
	1421	8.3	253
	2052	−0.5	−15
10 W	0328	6.4	195
	0848	1.9	58
	1510	7.4	226
	2129	−0.6	−18
11 Th	0419	7.4	226
	1000	2.0	61
	1602	6.5	198
	2208	−0.6	−18
12 F	0511	8.3	253
	1116	1.9	58
	1657	5.7	174
	2250	−0.6	−18
13 Sa	0604	9.1	277
	1232	1.7	52
	1756	4.9	149
	2336	−0.6	−18
14 Su	0657	9.8	299
	1342	1.4	43
	1858	4.3	131
15 M	0025	−0.5	−15
	0750	10.3	314
	1448	1.0	30
	2001	4.0	122

	Time	Height	
	h m	ft	cm
16 Tu ●	0115	−0.2	−6
	0842	10.5	320
	1550	0.6	18
	2103	3.9	119
17 W	0207	0.1	3
	0933	10.6	323
	1645	0.3	9
	2204	3.9	119
18 Th	0302	0.4	12
	1023	10.4	317
	1735	0.1	3
	2301	4.2	128
19 F	0358	0.8	24
	1111	10.1	308
	1819	−0.1	−3
	2356	4.4	134
20 Sa	0455	1.2	37
	1158	9.7	296
	1901	−0.2	−6
21 Su	0049	4.8	146
	0551	1.6	49
	1244	9.1	277
	1939	−0.2	−6
22 M	0141	5.2	158
	0647	1.9	58
	1330	8.4	256
	2015	−0.1	−3
23 Tu	0231	5.7	174
	0745	2.2	67
	1415	7.7	235
	2048	0.0	0
24 W ◐	0319	6.2	189
	0844	2.4	73
	1500	6.9	210
	2120	0.2	6
25 Th	0404	6.7	204
	0945	2.6	79
	1545	6.1	186
	2151	0.3	9
26 F	0449	7.2	219
	1050	2.6	79
	1631	5.3	162
	2222	0.4	12
27 Sa	0534	7.8	238
	1157	2.5	76
	1719	4.6	140
	2253	0.5	15
28 Su	0619	8.3	253
	1301	2.3	70
	1811	4.0	122
	2327	0.5	15
29 M	0704	8.7	265
	1400	1.9	58
	1906	3.6	110
30 Tu	0003	0.6	18
	0749	9.2	280
	1455	1.6	49
	2001	3.3	101

Time meridian 135° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.
Heights are referred to mean lower low water which is the chart datum of soundings.

Platinum, Alaska, 2015

Times and Heights of High and Low Waters

July

	Time	Height	
	h m	ft	cm
1 W ○	0043	0.6	18
	0834	9.5	290
	1546	1.2	37
	2057	3.2	98
2 Th	0127	0.6	18
	0920	9.8	299
	1632	0.9	27
	2152	3.3	101
3 F	0217	0.7	21
	1005	9.9	302
	1713	0.5	15
	2245	3.6	110
4 Sa	0314	0.8	24
	1051	9.9	302
	1751	0.2	6
	2336	4.1	125
5 Su	0418	1.0	30
	1136	9.6	293
	1828	−0.1	−3
6 M	0028	4.8	146
	0524	1.2	37
	1223	9.1	277
	1904	−0.3	−9
7 Tu	0120	5.7	174
	0632	1.4	43
	1311	8.4	256
	1941	−0.5	−15
8 W ◑	0214	6.7	204
	0741	1.6	49
	1401	7.6	232
	2019	−0.7	−21
9 Th	0306	7.7	235
	0851	1.7	52
	1453	6.7	204
	2059	−0.9	−27
10 F	0359	8.6	262
	1002	1.8	55
	1545	5.9	180
	2141	−0.9	−27
11 Sa	0451	9.3	283
	1115	1.8	55
	1640	5.2	158
	2226	−0.9	−27
12 Su	0545	9.8	299
	1227	1.6	49
	1739	4.6	140
	2314	−0.7	−21
13 M	0638	10.1	308
	1334	1.4	43
	1840	4.1	125
14 Tu	0005	−0.4	−12
	0731	10.2	311
	1435	1.1	34
	1942	3.9	119
15 W ●	0057	−0.1	−3
	0823	10.2	311
	1534	0.9	27
	2043	3.9	119

	Time	Height	
	h m	ft	cm
16 Th	0150	0.3	9
	0914	10.0	305
	1626	0.7	21
	2142	4.1	125
17 F	0245	0.7	21
	1003	9.7	296
	1712	0.5	15
	2239	4.3	131
18 Sa	0342	1.1	34
	1050	9.3	283
	1753	0.4	12
	2332	4.7	143
19 Su	0439	1.5	46
	1135	8.9	271
	1830	0.3	9
20 M	0022	5.1	155
	0535	1.8	55
	1219	8.3	253
	1904	0.3	9
21 Tu	0111	5.6	171
	0631	2.0	61
	1303	7.7	235
	1936	0.3	9
22 W	0159	6.1	186
	0727	2.2	67
	1347	7.0	213
	2007	0.3	9
23 Th ◐	0244	6.6	201
	0824	2.3	70
	1432	6.3	192
	2037	0.4	12
24 F	0328	7.1	216
	0921	2.4	73
	1515	5.6	171
	2106	0.4	12
25 Sa	0412	7.6	232
	1020	2.4	73
	1559	5.0	152
	2136	0.4	12
26 Su	0455	8.1	247
	1121	2.3	70
	1644	4.4	134
	2207	0.4	12
27 M	0540	8.5	259
	1222	2.2	67
	1732	3.9	119
	2242	0.4	12
28 Tu	0626	8.9	271
	1319	1.9	58
	1825	3.5	107
	2322	0.4	12
29 W	0713	9.2	280
	1410	1.7	52
	1920	3.4	104
30 Th	0010	0.4	12
	0800	9.4	287
	1458	1.4	43
	2016	3.5	107
31 F ○	0103	0.4	12
	0848	9.5	290
	1544	1.1	34
	2113	3.8	116

August

	Time	Height	
	h m	ft	cm
1 Sa	0202	0.5	15
	0937	9.5	290
	1626	0.8	24
	2209	4.4	134
2 Su	0307	0.6	18
	1026	9.3	283
	1705	0.5	15
	2303	5.2	158
3 M	0417	0.8	24
	1114	8.8	268
	1744	0.1	3
	2357	6.1	186
4 Tu	0527	0.9	27
	1203	8.3	253
	1824	−0.3	−9
5 W	0051	7.1	216
	0635	1.0	30
	1254	7.6	232
	1904	−0.6	−18
6 Th ◑	0146	8.0	244
	0742	1.1	34
	1346	6.8	207
	1947	−0.8	−24
7 F	0240	8.8	268
	0849	1.2	37
	1439	6.1	186
	2031	−0.9	−27
8 Sa	0334	9.4	287
	0955	1.3	40
	1533	5.5	168
	2117	−0.8	−24
9 Su	0427	9.7	296
	1101	1.4	43
	1627	5.0	152
	2206	−0.6	−18
10 M	0521	9.8	299
	1208	1.4	43
	1725	4.7	143
	2258	−0.3	−9
11 Tu	0615	9.8	299
	1310	1.3	40
	1824	4.4	134
	2352	0.0	0
12 W	0709	9.6	293
	1408	1.2	37
	1924	4.4	134
13 Th	0047	0.4	12
	0801	9.3	283
	1502	1.1	34
	2023	4.4	134
14 F ●	0142	0.8	24
	0852	9.0	274
	1551	1.1	34
	2120	4.6	140
15 Sa	0238	1.1	34
	0941	8.6	262
	1635	1.0	30
	2214	5.0	152

	Time	Height	
	h m	ft	cm
16 Su	0336	1.4	43
	1028	8.2	250
	1713	0.9	27
	2304	5.3	162
17 M	0433	1.6	49
	1113	7.8	238
	1748	0.9	27
	2350	5.8	177
18 Tu	0529	1.7	52
	1157	7.3	223
	1820	0.9	27
19 W	0036	6.2	189
	0622	1.8	55
	1241	6.8	207
	1850	0.9	27
20 Th	0120	6.7	204
	0715	1.8	55
	1325	6.2	189
	1921	0.8	24
21 F	0205	7.1	216
	0807	1.8	55
	1409	5.7	174
	1951	0.8	24
22 Sa ◐	0248	7.5	229
	0858	1.8	55
	1452	5.2	158
	2021	0.8	24
23 Su	0331	7.9	241
	0950	1.9	58
	1535	4.7	143
	2052	0.7	21
24 M	0414	8.2	250
	1043	1.9	58
	1618	4.3	131
	2126	0.7	21
25 Tu	0459	8.5	259
	1137	1.9	58
	1703	4.0	122
	2205	0.6	18
26 W	0546	8.7	265
	1230	1.8	55
	1753	3.9	119
	2253	0.5	15
27 Th	0635	8.8	268
	1318	1.7	52
	1847	4.0	122
	2350	0.5	15
28 F	0726	8.8	268
	1403	1.5	46
	1944	4.4	134
29 Sa ○	0054	0.5	15
	0817	8.7	265
	1446	1.2	37
	2041	5.0	152
30 Su	0201	0.6	18
	0909	8.4	256
	1529	0.9	27
	2138	5.9	180
31 M	0311	0.6	18
	1002	8.1	247
	1613	0.6	18
	2234	6.8	207

September

	Time	Height	
	h m	ft	cm
1 Tu	0422	0.6	18
	1054	7.6	232
	1657	0.2	6
	2328	7.8	238
2 W	0530	0.5	15
	1145	7.1	216
	1741	−0.2	−6
3 Th	0022	8.6	262
	0635	0.5	15
	1238	6.6	201
	1827	−0.4	−12
4 F	0117	9.3	283
	0738	0.5	15
	1332	6.1	186
	1914	−0.5	−15
5 Sa ◑	0212	9.7	296
	0839	0.5	15
	1426	5.7	174
	2004	−0.5	−15
6 Su	0306	9.8	299
	0939	0.7	21
	1521	5.4	165
	2055	−0.4	−12
7 M	0400	9.7	296
	1038	0.8	24
	1615	5.2	158
	2148	−0.1	−3
8 Tu	0453	9.5	290
	1138	1.0	30
	1711	5.1	155
	2244	0.3	9
9 W	0548	9.1	277
	1235	1.1	34
	1809	5.0	152
	2342	0.7	21
10 Th	0642	8.6	262
	1328	1.2	37
	1906	5.1	155
11 F	0042	1.0	30
	0734	8.1	247
	1416	1.3	40
	2002	5.3	162
12 Sa ●	0140	1.3	40
	0826	7.7	235
	1500	1.3	40
	2055	5.6	171
13 Su	0238	1.5	46
	0916	7.3	223
	1541	1.4	43
	2146	5.9	180
14 M	0337	1.5	46
	1005	6.9	210
	1619	1.4	43
	2232	6.4	195
15 Tu	0434	1.5	46
	1051	6.5	198
	1654	1.4	43
	2316	6.8	207

	Time	Height	
	h m	ft	cm
16 W	0527	1.4	43
	1136	6.1	186
	1727	1.4	43
	2359	7.2	219
17 Th	0616	1.3	40
	1221	5.7	174
	1759	1.4	43
18 F	0041	7.5	229
	0704	1.2	37
	1305	5.4	165
	1831	1.3	40
19 Sa	0124	7.8	238
	0751	1.2	37
	1350	5.0	152
	1903	1.3	40
20 Su ◐	0206	8.1	247
	0837	1.2	37
	1434	4.7	143
	1935	1.2	37
21 M	0249	8.3	253
	0922	1.2	37
	1516	4.5	137
	2011	1.1	34
22 Tu	0333	8.4	256
	1008	1.3	40
	1559	4.3	131
	2051	1.0	30
23 W	0418	8.4	256
	1054	1.3	40
	1644	4.3	131
	2139	1.0	30
24 Th	0505	8.3	253
	1139	1.4	43
	1732	4.6	140
	2236	1.0	30
25 F	0556	8.1	247
	1224	1.3	40
	1826	5.0	152
	2344	1.0	30
26 Sa	0650	7.8	238
	1307	1.2	37
	1921	5.8	177
27 Su ○	0056	0.9	27
	0745	7.4	226
	1349	0.9	27
	2017	6.6	201
28 M	0207	0.8	24
	0841	7.0	213
	1434	0.7	21
	2113	7.6	232
29 Tu	0318	0.6	18
	0938	6.5	198
	1520	0.4	12
	2208	8.6	262
30 W	0427	0.3	9
	1034	6.2	189
	1610	0.1	3
	2302	9.4	287

Time meridian 135° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.
Heights are referred to mean lower low water which is the chart datum of soundings.

Platinum, Alaska, 2015

Times and Heights of High and Low Waters

October

	Time	Height	
	h m	ft	cm
1 Th	0532	0.1	3
	1128	5.9	180
	1700	−0.1	−3
	2355	9.9	302
2 F	0632	−0.1	−3
	1222	5.6	171
	1751	−0.2	−6
3 Sa	0048	10.2	311
	0729	−0.1	−3
	1317	5.5	168
	1844	−0.1	−3
4 Su ◑	0143	10.2	311
	0824	−0.1	−3
	1413	5.4	165
	1938	0.1	3
5 M	0236	9.9	302
	0917	0.1	3
	1508	5.4	165
	2033	0.4	12
6 Tu	0329	9.4	287
	1010	0.3	9
	1602	5.5	168
	2130	0.7	21
7 W	0422	8.9	271
	1102	0.6	18
	1657	5.6	171
	2229	1.1	34
8 Th	0515	8.2	250
	1152	0.8	24
	1752	5.7	174
	2333	1.4	43
9 F	0608	7.5	229
	1239	1.0	30
	1846	6.0	183
10 Sa	0037	1.7	52
	0702	6.9	210
	1322	1.2	37
	1939	6.3	192
11 Su	0139	1.7	52
	0754	6.4	195
	1401	1.4	43
	2028	6.7	204
12 M ●	0240	1.7	52
	0846	5.9	180
	1439	1.5	46
	2115	7.1	216
13 Tu	0338	1.5	46
	0938	5.5	168
	1516	1.6	49
	2159	7.5	229
14 W	0433	1.3	40
	1027	5.2	158
	1552	1.6	49
	2242	7.9	241
15 Th	0523	1.1	34
	1114	5.0	152
	1628	1.6	49
	2323	8.2	250

	Time	Height	
	h m	ft	cm
16 F	0609	0.8	24
	1200	4.8	146
	1704	1.6	49
17 Sa	0004	8.4	256
	0652	0.7	21
	1245	4.6	140
	1739	1.6	49
18 Su	0045	8.6	262
	0734	0.6	18
	1330	4.4	134
	1814	1.6	49
19 M	0127	8.7	265
	0816	0.6	18
	1415	4.3	131
	1852	1.5	46
20 Tu ◐	0210	8.7	265
	0856	0.6	18
	1459	4.4	134
	1936	1.5	46
21 W	0254	8.5	259
	0935	0.6	18
	1543	4.6	140
	2026	1.5	46
22 Th	0339	8.2	250
	1014	0.7	21
	1629	5.0	152
	2125	1.5	46
23 F	0427	7.8	238
	1053	0.7	21
	1717	5.6	171
	2233	1.6	49
24 Sa	0518	7.3	223
	1133	0.7	21
	1809	6.4	195
	2348	1.5	46
25 Su	0615	6.6	201
	1215	0.5	15
	1903	7.3	223
26 M	0103	1.3	40
	0714	6.0	183
	1259	0.4	12
	1957	8.3	253
27 Tu ○	0215	1.0	30
	0814	5.5	168
	1345	0.2	6
	2051	9.2	280
28 W	0324	0.6	18
	0914	5.1	155
	1435	0.1	3
	2145	10.0	305
29 Th	0429	0.2	6
	1013	4.9	149
	1528	0.0	0
	2238	10.5	320
30 F	0529	−0.2	−6
	1110	4.9	149
	1623	0.0	0
	2330	10.7	326
31 Sa	0624	−0.4	−12
	1206	4.9	149
	1719	0.1	3

November

	Time	Height	
	h m	ft	cm
1 Su	0022	10.6	323
	0715	−0.5	−15
	1302	5.1	155
	1815	0.4	12
2 M	0114	10.3	314
	0805	−0.5	−15
	1358	5.3	162
	1912	0.7	21
3 Tu ◑	0206	9.7	296
	0853	−0.3	−9
	1453	5.5	168
	2011	1.1	34
4 W	0258	9.0	274
	0939	−0.1	−3
	1547	5.8	177
	2110	1.5	46
5 Th	0348	8.2	250
	1023	0.2	6
	1639	6.1	186
	2213	1.9	58
6 F	0439	7.4	226
	1106	0.4	12
	1731	6.4	195
	2320	2.1	64
7 Sa	0530	6.6	201
	1147	0.7	21
	1822	6.8	207
8 Su	0028	2.2	67
	0623	5.9	180
	1225	0.9	27
	1911	7.2	219
9 M	0134	2.1	64
	0717	5.2	158
	1302	1.1	34
	1958	7.7	235
10 Tu	0235	1.8	55
	0811	4.7	143
	1337	1.3	40
	2042	8.1	247
11 W ●	0334	1.5	46
	0904	4.4	134
	1413	1.4	43
	2126	8.5	259
12 Th	0427	1.2	37
	0957	4.2	128
	1449	1.5	46
	2209	8.8	268
13 F	0514	0.8	24
	1047	4.0	122
	1528	1.5	46
	2250	9.1	277
14 Sa	0556	0.5	15
	1135	4.0	122
	1608	1.6	49
	2331	9.2	280
15 Su	0636	0.3	9
	1221	3.9	119
	1649	1.6	49

	Time	Height	
	h m	ft	cm
16 M	0012	9.3	283
	0715	0.2	6
	1308	4.0	122
	1733	1.7	52
17 Tu	0053	9.2	280
	0752	0.1	3
	1354	4.2	128
	1821	1.7	52
18 W ◐	0136	8.9	271
	0828	0.1	3
	1440	4.6	140
	1915	1.8	55
19 Th	0221	8.5	259
	0902	0.1	3
	1526	5.2	158
	2016	1.9	58
20 F	0306	7.9	241
	0937	0.1	3
	1613	6.0	183
	2124	2.0	61
21 Sa	0354	7.2	219
	1012	0.0	0
	1702	6.9	210
	2238	2.0	61
22 Su	0446	6.4	195
	1051	−0.1	−3
	1753	7.8	238
	2355	1.9	58
23 M	0544	5.6	171
	1133	−0.2	−6
	1846	8.8	268
24 Tu	0110	1.5	46
	0645	4.9	149
	1218	−0.3	−9
	1939	9.6	293
25 W ○	0219	1.1	34
	0748	4.4	134
	1307	−0.3	−9
	2032	10.3	314
26 Th	0325	0.6	18
	0851	4.2	128
	1359	−0.2	−6
	2125	10.8	329
27 F	0426	0.2	6
	0953	4.1	125
	1455	−0.1	−3
	2217	10.9	332
28 Sa	0521	−0.2	−6
	1052	4.3	131
	1553	0.2	6
	2308	10.9	332
29 Su	0611	−0.4	−12
	1148	4.5	137
	1652	0.5	15
	2358	10.5	320
30 M	0658	−0.5	−15
	1244	4.9	149
	1751	0.9	27

December

	Time	Height	
	h m	ft	cm
1 Tu	0048	10.0	305
	0743	−0.5	−15
	1340	5.2	158
	1849	1.3	40
2 W ◑	0137	9.3	283
	0826	−0.5	−15
	1434	5.6	171
	1949	1.7	52
3 Th	0226	8.5	259
	0906	−0.3	−9
	1526	6.1	186
	2050	2.1	64
4 F	0314	7.6	232
	0944	−0.1	−3
	1616	6.5	198
	2153	2.3	70
5 Sa	0402	6.7	204
	1020	0.2	6
	1704	7.0	213
	2300	2.5	76
6 Su	0451	5.9	180
	1055	0.4	12
	1752	7.5	229
7 M	0011	2.4	73
	0542	5.1	155
	1130	0.6	18
	1839	7.9	241
8 Tu	0117	2.2	67
	0635	4.5	137
	1205	0.8	24
	1924	8.3	253
9 W	0218	1.9	58
	0730	4.0	122
	1240	0.9	27
	2009	8.7	265
10 Th	0316	1.6	49
	0825	3.6	110
	1316	1.0	30
	2053	9.1	277
11 F ●	0408	1.2	37
	0920	3.5	107
	1354	1.1	34
	2136	9.4	287
12 Sa	0454	0.9	27
	1013	3.4	104
	1435	1.2	37
	2219	9.6	293
13 Su	0535	0.5	15
	1103	3.5	107
	1522	1.3	40
	2301	9.6	293
14 M	0612	0.3	9
	1152	3.7	113
	1613	1.4	43
	2343	9.6	293
15 Tu	0647	0.1	3
	1239	4.1	125
	1709	1.5	46

	Time	Height	
	h m	ft	cm
16 W	0026	9.3	283
	0722	−0.1	−3
	1328	4.6	140
	1807	1.7	52
17 Th	0109	8.8	268
	0755	−0.2	−6
	1416	5.3	162
	1910	1.9	58
18 F ◐	0155	8.1	247
	0828	−0.3	−9
	1505	6.2	189
	2018	2.0	61
19 Sa	0242	7.4	226
	0902	−0.4	−12
	1553	7.2	219
	2128	2.1	64
20 Su	0331	6.5	198
	0938	−0.6	−18
	1643	8.1	247
	2242	2.1	64
21 M	0423	5.6	171
	1018	−0.7	−21
	1735	9.0	274
	2358	1.9	58
22 Tu	0520	4.9	149
	1101	−0.7	−21
	1827	9.7	296
23 W	0110	1.6	49
	0622	4.3	131
	1150	−0.6	−18
	1921	10.3	314
24 Th	0216	1.2	37
	0726	3.9	119
	1242	−0.5	−15
	2014	10.6	323
25 F ○	0318	0.8	24
	0830	3.8	116
	1336	−0.3	−9
	2106	10.7	326
26 Sa	0415	0.4	12
	0932	3.9	119
	1432	0.1	3
	2158	10.7	326
27 Su	0507	0.1	3
	1032	4.1	125
	1532	0.5	15
	2248	10.4	317
28 M	0553	−0.1	−3
	1129	4.5	137
	1632	0.9	27
	2336	9.9	302
29 Tu	0636	−0.3	−9
	1224	4.9	149
	1732	1.3	40
30 W	0023	9.3	283
	0716	−0.3	−9
	1317	5.4	165
	1831	1.6	49
31 Th	0110	8.6	262
	0754	−0.2	−6
	1409	5.9	180
	1930	2.0	61

Time meridian 135° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.
Heights are referred to mean lower low water which is the chart datum of soundings.

Bethel, Kuskokwim River, Alaska, 2015

Times and Heights of High and Low Waters

January

	Time	Height	
	h m	ft	cm
1 Th	0129	3.2	98
	0935	0.8	24
	1338	2.2	67
	2057	−0.4	−12
2 F	0218	3.4	104
	1041	0.8	24
	1431	2.0	61
	2137	−0.4	−12
3 Sa	0304	3.6	110
	1147	0.9	27
	1523	1.8	55
	2217	−0.4	−12
4 Su ○	0350	3.7	113
	1256	0.9	27
	1616	1.7	52
	2255	−0.3	−9
5 M	0438	3.7	113
	1401	0.9	27
	1711	1.6	49
	2334	−0.2	−6
6 Tu	0526	3.7	113
	1459	0.8	24
	1805	1.5	46
7 W	0013	−0.1	−3
	0615	3.7	113
	1547	0.8	24
	1859	1.5	46
8 Th	0057	0.0	0
	0705	3.7	113
	1628	0.7	21
	1951	1.6	49
9 F	0147	0.2	6
	0754	3.6	110
	1702	0.7	21
	2044	1.7	52
10 Sa	0244	0.4	12
	0844	3.4	104
	1731	0.6	18
	2137	1.9	58
11 Su	0348	0.6	18
	0935	3.1	94
	1759	0.5	15
	2231	2.1	64
12 M	0456	0.8	24
	1028	2.9	88
	1828	0.3	9
	2322	2.4	73
13 Tu ◑	0606	1.0	30
	1120	2.6	79
	1859	0.2	6
14 W	0009	2.7	82
	0715	1.1	34
	1209	2.3	70
	1931	0.0	0
15 Th	0051	3.1	94
	0821	1.1	34
	1250	2.0	61
	2003	−0.1	−3

	Time	Height	
	h m	ft	cm
16 F	0130	3.4	104
	0921	1.2	37
	1323	1.7	52
	2035	−0.2	−6
17 Sa	0209	3.7	113
	1018	1.3	40
	1348	1.5	46
	2108	−0.3	−9
18 Su	0250	4.0	122
	1113	1.3	40
	1401	1.4	43
	2142	−0.4	−12
19 M	0333	4.2	128
	2218	−0.4	−12
20 Tu ●	0419	4.3	131
	2259	−0.4	−12
21 W	0508	4.3	131
	1355	1.3	40
	1632	1.4	43
	2349	−0.3	−9
22 Th	0559	4.2	128
	1436	1.2	37
	1751	1.6	49
23 F	0050	−0.1	−3
	0651	4.0	122
	1516	1.1	34
	1858	1.8	55
24 Sa	0207	0.1	3
	0743	3.7	113
	1558	0.9	27
	2002	2.1	64
25 Su	0328	0.4	12
	0837	3.3	101
	1642	0.7	21
	2104	2.4	73
26 M ◐	0447	0.6	18
	0933	2.9	88
	1727	0.4	12
	2205	2.6	79
27 Tu	0604	0.7	21
	1032	2.6	79
	1814	0.2	6
	2306	2.8	85
28 W	0719	0.7	21
	1133	2.3	70
	1901	0.0	0
29 Th	0003	3.1	94
	0830	0.7	21
	1233	2.1	64
	1947	−0.2	−6
30 F	0056	3.2	98
	0934	0.8	24
	1330	2.0	61
	2032	−0.3	−9
31 Sa	0146	3.3	101
	1035	0.8	24
	1422	1.9	58
	2115	−0.4	−12

February

	Time	Height	
	h m	ft	cm
1 Su	0234	3.4	104
	1133	0.9	27
	1512	1.9	58
	2156	−0.3	−9
2 M	0322	3.4	104
	1231	0.9	27
	1603	1.8	55
	2236	−0.3	−9
3 Tu ○	0412	3.4	104
	1327	1.0	30
	1654	1.8	55
	2317	−0.2	−6
4 W	0503	3.3	101
	1417	1.0	30
	1745	1.8	55
5 Th	0000	0.0	0
	0555	3.3	101
	1500	1.0	30
	1835	1.9	58
6 F	0047	0.1	3
	0647	3.2	98
	1535	0.9	27
	1923	2.0	61
7 Sa	0139	0.3	9
	0737	3.0	91
	1603	0.9	27
	2010	2.2	67
8 Su	0239	0.5	15
	0827	2.8	85
	1631	0.8	24
	2057	2.4	73
9 M	0343	0.7	21
	0917	2.6	79
	1700	0.6	18
	2143	2.6	79
10 Tu	0450	0.9	27
	1008	2.3	70
	1732	0.5	15
	2230	2.8	85
11 W ◑	0558	1.0	30
	1058	2.1	64
	1807	0.3	9
	2315	3.1	94
12 Th	0705	1.0	30
	1145	1.9	58
	1843	0.2	6
13 F	0000	3.4	104
	0806	1.0	30
	1224	1.7	52
	1920	0.0	0
14 Sa	0044	3.7	113
	0859	1.1	34
	1258	1.6	49
	1958	−0.2	−6
15 Su	0129	4.0	122
	0943	1.1	34
	1331	1.6	49
	2038	−0.3	−9

	Time	Height	
	h m	ft	cm
16 M	0214	4.1	125
	1024	1.1	34
	1407	1.6	49
	2121	−0.4	−12
17 Tu	0301	4.2	128
	1105	1.2	37
	1451	1.7	52
	2207	−0.4	−12
18 W ●	0351	4.1	125
	1148	1.2	37
	1545	1.9	58
	2258	−0.4	−12
19 Th	0443	3.9	119
	1234	1.2	37
	1645	2.1	64
	2357	−0.2	−6
20 F	0536	3.6	110
	1323	1.1	34
	1746	2.4	73
21 Sa	0106	0.0	0
	0631	3.3	101
	1413	1.0	30
	1845	2.6	79
22 Su	0222	0.2	6
	0725	2.9	88
	1503	0.9	27
	1942	2.9	88
23 M	0339	0.4	12
	0820	2.6	79
	1554	0.7	21
	2038	3.0	91
24 Tu	0455	0.5	15
	0918	2.3	70
	1645	0.5	15
	2134	3.1	94
25 W ◐	0609	0.6	18
	1020	2.0	61
	1736	0.3	9
	2230	3.2	98
26 Th	0721	0.6	18
	1125	1.9	58
	1828	0.2	6
	2325	3.2	98
27 F	0826	0.6	18
	1229	1.9	58
	1918	0.0	0
28 Sa	0020	3.2	98
	0923	0.7	21
	1327	2.0	61
	2006	−0.1	−3

March

	Time	Height	
	h m	ft	cm
1 Su	0112	3.2	98
	1015	0.7	21
	1418	2.0	61
	2052	−0.1	−3
2 M	0203	3.2	98
	1103	0.8	24
	1505	2.1	64
	2137	−0.1	−3
3 Tu	0254	3.1	94
	1149	0.9	27
	1551	2.1	64
	2221	−0.1	−3
4 W	0345	3.0	91
	1233	1.0	30
	1638	2.2	67
	2306	0.0	0
5 Th ○	0439	2.9	88
	1314	1.0	30
	1725	2.3	70
	2354	0.2	6
6 F	0534	2.7	82
	1350	1.0	30
	1810	2.4	73
7 Sa	0047	0.3	9
	0629	2.6	79
	1422	1.0	30
	1854	2.6	79
8 Su	0146	0.5	15
	0721	2.4	73
	1453	1.0	30
	1935	2.8	85
9 M	0250	0.7	21
	0811	2.1	64
	1524	0.9	27
	2017	2.9	88
10 Tu	0355	0.8	24
	0859	1.9	58
	1557	0.8	24
	2058	3.2	98
11 W	0500	0.8	24
	0947	1.7	52
	1634	0.7	21
	2142	3.4	104
12 Th	0603	0.9	27
	1034	1.5	46
	1713	0.5	15
	2227	3.6	110
13 F ◑	0701	0.9	27
	1119	1.4	43
	1755	0.4	12
	2315	3.8	116
14 Sa	0749	0.8	24
	1200	1.4	43
	1840	0.2	6
15 Su	0003	4.0	122
	0829	0.8	24
	1240	1.5	46
	1927	0.0	0

	Time	Height	
	h m	ft	cm
16 M	0052	4.1	125
	0906	0.8	24
	1321	1.7	52
	2017	−0.1	−3
17 Tu	0142	4.1	125
	0942	0.8	24
	1405	2.0	61
	2108	−0.2	−6
18 W	0232	3.9	119
	1019	0.8	24
	1454	2.3	70
	2203	−0.2	−6
19 Th	0324	3.6	110
	1057	0.8	24
	1546	2.6	79
	2302	−0.1	−3
20 F ●	0418	3.3	101
	1139	0.8	24
	1640	2.9	88
21 Sa	0007	0.0	0
	0513	2.9	88
	1225	0.8	24
	1735	3.2	98
22 Su	0119	0.2	6
	0610	2.5	76
	1316	0.7	21
	1828	3.4	104
23 M	0235	0.3	9
	0707	2.2	67
	1409	0.7	21
	1920	3.6	110
24 Tu	0351	0.4	12
	0804	1.9	58
	1505	0.6	18
	2011	3.6	110
25 W	0503	0.4	12
	0904	1.7	52
	1600	0.5	15
	2103	3.5	107
26 Th ◐	0612	0.5	15
	1008	1.7	52
	1656	0.5	15
	2155	3.4	104
27 F	0715	0.5	15
	1118	1.7	52
	1751	0.4	12
	2249	3.3	101
28 Sa	0811	0.5	15
	1229	1.8	55
	1846	0.3	9
	2344	3.2	98
29 Su	0900	0.5	15
	1326	2.0	61
	1938	0.3	9
30 M	0038	3.1	94
	0943	0.5	15
	1412	2.2	67
	2029	0.2	6
31 Tu	0132	3.0	91
	1022	0.6	18
	1455	2.3	70
	2119	0.2	6

Time meridian 135° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.
Heights are referred to mean lower low water which is the chart datum of soundings.

Bethel, Kuskokwim River, Alaska, 2015

Times and Heights of High and Low Waters

April

	Time	Height	
	h m	ft	cm
1 W	0224	2.9	88
	1057	0.7	21
	1538	2.5	76
	2208	0.3	9
2 Th	0318	2.7	82
	1130	0.8	24
	1620	2.6	79
	2259	0.4	12
3 F	0413	2.4	73
	1202	0.8	24
	1702	2.8	85
	2354	0.5	15
4 Sa ○	0510	2.2	67
	1233	0.9	27
	1743	3.0	91
5 Su	0056	0.6	18
	0607	1.9	58
	1305	0.9	27
	1822	3.2	98
6 M	0206	0.7	21
	0702	1.7	52
	1337	0.9	27
	1859	3.3	101
7 Tu	0321	0.8	24
	0751	1.4	43
	1411	0.9	27
	1938	3.5	107
8 W	0434	0.8	24
	1105	1.2	37
	1448	0.8	24
	2018	3.7	113
9 Th	0536	0.7	21
	1208	1.1	34
	1529	0.8	24
	2100	3.9	119
10 F	0621	0.7	21
	1259	1.1	34
	1616	0.7	21
	2147	4.1	125
11 Sa ◑	0654	0.7	21
	1044	1.1	34
	1708	0.5	15
	2237	4.1	125
12 Su	0724	0.6	18
	1134	1.3	40
	1805	0.4	12
	2328	4.1	125
13 M	0756	0.6	18
	1223	1.6	49
	1903	0.3	9
14 Tu	0021	4.0	122
	0830	0.5	15
	1311	2.0	61
	2003	0.1	3
15 W	0113	3.8	116
	0905	0.4	12
	1359	2.4	73
	2103	0.1	3

	Time	Height	
	h m	ft	cm
16 Th	0206	3.5	107
	0942	0.4	12
	1447	2.9	88
	2204	0.1	3
17 F	0259	3.1	94
	1019	0.3	9
	1537	3.3	101
	2308	0.1	3
18 Sa ●	0353	2.6	79
	1059	0.3	9
	1628	3.6	110
19 Su	0017	0.3	9
	0450	2.2	67
	1141	0.3	9
	1719	3.9	119
20 M	0132	0.3	9
	0548	1.8	55
	1227	0.3	9
	1808	4.0	122
21 Tu	0249	0.4	12
	0647	1.6	49
	1319	0.4	12
	1857	4.0	122
22 W	0402	0.4	12
	0747	1.4	43
	1415	0.5	15
	1945	4.0	122
23 Th	0507	0.4	12
	0847	1.4	43
	1513	0.5	15
	2034	3.8	116
24 F	0605	0.4	12
	0952	1.4	43
	1612	0.6	18
	2124	3.6	110
25 Sa ◐	0658	0.3	9
	1103	1.5	46
	1711	0.6	18
	2217	3.4	104
26 Su	0745	0.3	9
	1216	1.8	55
	1810	0.6	18
	2312	3.3	101
27 M	0827	0.3	9
	1312	2.0	61
	1909	0.6	18
28 Tu	0007	3.1	94
	0903	0.3	9
	1357	2.3	70
	2006	0.6	18
29 W	0102	2.9	88
	0934	0.3	9
	1438	2.6	79
	2102	0.6	18
30 Th	0156	2.6	79
	1004	0.4	12
	1518	2.8	85
	2158	0.6	18

May

	Time	Height	
	h m	ft	cm
1 F	0249	2.3	70
	1032	0.4	12
	1556	3.1	94
	2256	0.7	21
2 Sa	0341	2.0	61
	1100	0.5	15
	1634	3.3	101
3 Su ○	0001	0.8	24
	0435	1.6	49
	1128	0.5	15
	1710	3.5	107
4 M	0124	0.9	27
	0530	1.3	40
	1155	0.6	18
	1746	3.7	113
5 Tu	0326	0.8	24
	0620	1.0	30
	1222	0.6	18
	1823	3.9	119
6 W	0444	0.7	21
	0956	0.8	24
	1250	0.6	18
	1901	4.1	125
7 Th	0541	0.6	18
	0736	0.7	21
	0911	0.6	18
	1109	0.7	21
	1323*	0.6	18
8 F	0619	0.6	18
	0815	0.7	21
	1003	0.6	18
	1212	0.7	21
	1411*	0.6	18
9 Sa	0624	0.6	18
	0905	0.8	24
	1058	0.6	18
	1259	0.8	24
	1516*	0.6	18
10 Su	0626	0.5	15
	1005	1.0	30
	1627	0.6	18
	2205	4.3	131
11 M ◑	0650	0.4	12
	1106	1.3	40
	1739	0.6	18
	2259	4.0	122
12 Tu	0722	0.3	9
	1204	1.8	55
	1849	0.5	15
	2354	3.8	116
13 W	0757	0.2	6
	1256	2.4	73
	1957	0.5	15
14 Th	0048	3.4	104
	0834	0.0	0
	1346	2.9	88
	2103	0.4	12
15 F	0142	3.0	91
	0911	−0.1	−3
	1435	3.4	104
	2208	0.4	12

	Time	Height	
	h m	ft	cm
16 Sa	0235	2.5	76
	0950	−0.2	−6
	1523	3.8	116
	2316	0.4	12
17 Su ●	0330	2.1	64
	1029	−0.2	−6
	1611	4.1	125
18 M	0028	0.5	15
	0427	1.7	52
	1110	−0.1	−3
	1659	4.2	128
19 Tu	0145	0.5	15
	0526	1.4	43
	1152	0.0	0
	1747	4.2	128
20 W	0300	0.4	12
	0626	1.3	40
	1238	0.1	3
	1834	4.2	128
21 Th	0404	0.4	12
	0725	1.2	37
	1329	0.3	9
	1921	4.1	125
22 F	0459	0.3	9
	0825	1.2	37
	1425	0.4	12
	2008	3.9	119
23 Sa	0547	0.3	9
	0926	1.3	40
	1526	0.6	18
	2058	3.7	113
24 Su	0631	0.3	9
	1031	1.5	46
	1629	0.7	21
	2150	3.5	107
25 M ◐	0710	0.3	9
	1137	1.8	55
	1734	0.8	24
	2244	3.3	101
26 Tu	0744	0.2	6
	1237	2.1	64
	1840	0.8	24
	2340	3.0	91
27 W	0816	0.1	3
	1326	2.5	76
	1945	0.9	27
28 Th	0036	2.7	82
	0845	0.1	3
	1408	2.8	85
	2048	0.9	27
29 F	0129	2.4	73
	0913	0.0	0
	1446	3.1	94
	2151	0.9	27
30 Sa	0219	2.0	61
	0941	0.0	0
	1522	3.4	104
	2257	1.0	30
31 Su	0305	1.7	52
	1009	0.1	3
	1558	3.6	110

June

	Time	Height	
	h m	ft	cm
1 M	0024	1.0	30
	0347	1.3	40
	1036	0.1	3
	1633	3.8	116
2 Tu ○	1101	0.2	6
	1709	4.0	122
3 W	1124	0.3	9
	1748	4.2	128
4 Th	1147	0.3	9
	1828	4.4	134
5 F	0908	0.3	9
	1912	4.5	137
6 Sa	1004	0.4	12
	1958	4.5	137
7 Su	0530	0.6	18
	0824	0.9	27
	1429	0.6	18
	2047	4.3	131
8 M	0541	0.5	15
	0931	1.2	37
	1605	0.7	21
	2139	4.1	125
9 Tu ◑	0611	0.4	12
	1037	1.6	49
	1728	0.8	24
	2234	3.7	113
10 W	0646	0.1	3
	1139	2.2	67
	1845	0.8	24
	2330	3.3	101
11 Th	0725	−0.1	−3
	1236	2.8	85
	1957	0.7	21
12 F	0027	2.9	88
	0805	−0.3	−9
	1327	3.3	101
	2107	0.6	18
13 Sa	0122	2.5	76
	0846	−0.4	−12
	1416	3.7	113
	2215	0.6	18
14 Su	0216	2.1	64
	0926	−0.5	−15
	1503	4.0	122
	2323	0.6	18
15 M	0311	1.8	55
	1007	−0.5	−15
	1550	4.1	125

	Time	Height	
	h m	ft	cm
16 Tu ●	0036	0.6	18
	0407	1.5	46
	1047	−0.4	−12
	1637	4.2	128
17 W	0149	0.6	18
	0505	1.3	40
	1128	−0.2	−6
	1724	4.2	128
18 Th	0255	0.6	18
	0604	1.2	37
	1209	0.0	0
	1811	4.1	125
19 F	0350	0.5	15
	0702	1.2	37
	1254	0.1	3
	1858	4.0	122
20 Sa	0436	0.4	12
	0758	1.3	40
	1344	0.3	9
	1946	3.9	119
21 Su	0517	0.4	12
	0854	1.5	46
	1445	0.5	15
	2036	3.7	113
22 M	0552	0.4	12
	0952	1.7	52
	1553	0.7	21
	2127	3.4	104
23 Tu	0625	0.3	9
	1052	2.0	61
	1704	0.9	27
	2221	3.1	94
24 W ◐	0655	0.2	6
	1150	2.3	70
	1815	1.0	30
	2317	2.8	85
25 Th	0725	0.1	3
	1241	2.7	82
	1927	1.1	34
26 F	0012	2.5	76
	0756	−0.1	−3
	1326	3.0	91
	2037	1.1	34
27 Sa	0104	2.1	64
	0827	−0.1	−3
	1405	3.4	104
	2146	1.1	34
28 Su	0150	1.8	55
	0857	−0.2	−6
	1441	3.6	110
	2301	1.1	34
29 M	0227	1.4	43
	0927	−0.2	−6
	1517	3.9	119
30 Tu	0956	−0.1	−3
	1554	4.1	125

Time meridian 135° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.
Heights are referred to mean lower low water which is the chart datum of soundings.
* See Page 276 for the remaining tides on this day.

Bethel, Kuskokwim River, Alaska, 2015

Times and Heights of High and Low Waters

July

	Time	Height	
	h m	ft	cm
1 W ○	1023	−0.1	−3
	1633	4.2	128
2 Th	1050	0.0	0
	1714	4.4	134
3 F	1120	0.0	0
	1759	4.4	134
4 Sa	1158	0.1	3
	1845	4.4	134
5 Su	0413	0.9	27
	0648	1.0	30
	1255	0.3	9
	1933	4.2	128
6 M	0421	0.8	24
	0757	1.3	40
	1430	0.6	18
	2024	3.9	119
7 Tu	0451	0.6	18
	0903	1.7	52
	1605	0.7	21
	2117	3.6	110
8 W ◑	0529	0.3	9
	1007	2.2	67
	1729	0.8	24
	2213	3.1	94
9 Th	0610	0.1	3
	1109	2.7	82
	1847	0.9	27
	2311	2.7	82
10 F	0654	−0.2	−6
	1208	3.1	94
	2002	0.8	24
11 Sa	0010	2.4	73
	0738	−0.4	−12
	1302	3.5	107
	2112	0.7	21
12 Su	0107	2.1	64
	0822	−0.5	−15
	1352	3.8	116
	2219	0.7	21
13 M	0203	1.8	55
	0906	−0.6	−18
	1439	3.9	119
	2324	0.7	21
14 Tu	0256	1.7	52
	0948	−0.5	−15
	1526	3.9	119
15 W ●	0030	0.7	21
	0351	1.5	46
	1030	−0.4	−12
	1613	3.9	119

	Time	Height	
	h m	ft	cm
16 Th	0134	0.7	21
	0447	1.4	43
	1110	−0.2	−6
	1700	3.9	119
17 F	0231	0.7	21
	0543	1.4	43
	1151	−0.1	−3
	1749	3.8	116
18 Sa	0319	0.7	21
	0637	1.5	46
	1234	0.1	3
	1838	3.7	113
19 Su	0359	0.6	18
	0730	1.6	49
	1323	0.3	9
	1927	3.5	107
20 M	0433	0.6	18
	0822	1.8	55
	1424	0.5	15
	2017	3.3	101
21 Tu	0502	0.5	15
	0914	2.0	61
	1533	0.7	21
	2108	3.1	94
22 W	0531	0.4	12
	1008	2.3	70
	1646	0.9	27
	2202	2.8	85
23 Th ◐	0602	0.2	6
	1101	2.6	79
	1801	1.0	30
	2257	2.5	76
24 F	0634	0.1	3
	1151	2.9	88
	1916	1.1	34
	2352	2.1	64
25 Sa	0708	0.0	0
	1236	3.2	98
	2029	1.1	34
26 Su	0042	1.8	55
	0743	−0.2	−6
	1317	3.5	107
	2140	1.1	34
27 M	0123	1.6	49
	0817	−0.2	−6
	1356	3.8	116
	2248	1.1	34
28 Tu	0153	1.3	40
	0850	−0.3	−9
	1435	4.0	122
29 W	0923	−0.3	−9
	1515	4.2	128
30 Th	0957	−0.2	−6
	1558	4.3	131
31 F ○	1033	−0.2	−6
	1643	4.3	131

August

	Time	Height	
	h m	ft	cm
1 Sa	0144	1.1	34
	0404	1.2	37
	1115	−0.1	−3
	1731	4.2	128
2 Su	0207	1.1	34
	0528	1.4	43
	1208	0.1	3
	1821	4.0	122
3 M	0240	1.0	30
	0635	1.7	52
	1322	0.4	12
	1912	3.7	113
4 Tu	0319	0.8	24
	0737	2.1	64
	1451	0.6	18
	2004	3.3	101
5 W	0401	0.6	18
	0838	2.5	76
	1616	0.8	24
	2058	2.9	88
6 Th ◑	0446	0.3	9
	0938	2.8	85
	1736	0.8	24
	2156	2.5	76
7 F	0534	0.1	3
	1037	3.1	94
	1854	0.8	24
	2256	2.2	67
8 Sa	0623	−0.1	−3
	1136	3.3	101
	2008	0.8	24
	2359	2.0	61
9 Su	0712	−0.3	−9
	1231	3.5	107
	2115	0.7	21
10 M	0059	1.8	55
	0800	−0.4	−12
	1322	3.6	110
	2215	0.7	21
11 Tu	0155	1.8	55
	0846	−0.4	−12
	1411	3.6	110
	2311	0.7	21
12 W	0248	1.7	52
	0931	−0.4	−12
	1458	3.6	110
13 Th	0006	0.8	24
	0339	1.7	52
	1014	−0.3	−9
	1547	3.5	107
14 F ●	0059	0.8	24
	0431	1.7	52
	1056	−0.1	−3
	1636	3.5	107
15 Sa	0147	0.8	24
	0523	1.8	55
	1139	0.1	3
	1727	3.3	101

	Time	Height	
	h m	ft	cm
16 Su	0229	0.8	24
	0614	1.9	58
	1226	0.3	9
	1819	3.2	98
17 M	0304	0.8	24
	0703	2.1	64
	1320	0.5	15
	1910	3.0	91
18 Tu	0334	0.7	21
	0751	2.3	70
	1424	0.6	18
	2001	2.8	85
19 W	0403	0.6	18
	0838	2.5	76
	1534	0.8	24
	2052	2.5	76
20 Th	0434	0.5	15
	0926	2.8	85
	1646	0.9	27
	2145	2.3	70
21 F	0507	0.4	12
	1014	3.0	91
	1800	1.0	30
	2240	2.0	61
22 Sa ◐	0543	0.2	6
	1101	3.3	101
	1915	1.0	30
	2334	1.7	52
23 Su	0621	0.1	3
	1146	3.5	107
	2025	1.0	30
24 M	0021	1.5	46
	0659	0.0	0
	1230	3.7	113
	2121	1.0	30
25 Tu	0057	1.4	43
	0738	−0.1	−3
	1313	4.0	122
	2159	1.0	30
26 W	0127	1.3	40
	0817	−0.2	−6
	1356	4.1	125
	2229	1.0	30
27 Th	0158	1.4	43
	0857	−0.2	−6
	1440	4.2	128
	2258	1.1	34
28 F	0236	1.5	46
	0940	−0.2	−6
	1526	4.1	125
	2331	1.1	34
29 Sa ○	0325	1.7	52
	1027	−0.1	−3
	1614	3.9	119
30 Su	0007	1.0	30
	0423	1.9	58
	1121	0.0	0
	1705	3.6	110
31 M	0047	0.9	27
	0522	2.3	70
	1228	0.2	6
	1758	3.3	101

September

	Time	Height	
	h m	ft	cm
1 Tu	0132	0.8	24
	0621	2.6	79
	1346	0.5	15
	1851	2.9	88
2 W	0220	0.6	18
	0718	3.0	91
	1508	0.6	18
	1945	2.5	76
3 Th	0311	0.5	15
	0813	3.2	98
	1628	0.7	21
	2041	2.2	67
4 F	0403	0.3	9
	0909	3.4	104
	1745	0.7	21
	2141	1.9	58
5 Sa ◑	0457	0.2	6
	1005	3.4	104
	1900	0.7	21
	2245	1.7	52
6 Su	0551	0.0	0
	1101	3.5	107
	2007	0.6	18
	2352	1.7	52
7 M	0645	−0.1	−3
	1156	3.4	104
	2106	0.6	18
8 Tu	0055	1.7	52
	0737	−0.1	−3
	1249	3.4	104
	2157	0.6	18
9 W	0152	1.8	55
	0826	−0.1	−3
	1340	3.4	104
	2244	0.6	18
10 Th	0242	1.9	58
	0914	−0.1	−3
	1430	3.3	101
	2328	0.7	21
11 F	0329	2.0	61
	1000	0.0	0
	1520	3.2	98
12 Sa ●	0009	0.8	24
	0416	2.1	64
	1046	0.2	6
	1612	3.0	91
13 Su	0047	0.8	24
	0504	2.3	70
	1134	0.3	9
	1705	2.8	85
14 M	0122	0.8	24
	0550	2.4	73
	1228	0.5	15
	1800	2.6	79
15 Tu	0155	0.8	24
	0636	2.6	79
	1330	0.7	21
	1854	2.4	73

	Time	Height	
	h m	ft	cm
16 W	0227	0.7	21
	0720	2.9	88
	1440	0.8	24
	1946	2.2	67
17 Th	0259	0.7	21
	0803	3.1	94
	1553	0.9	27
	2037	1.9	58
18 F	0334	0.6	18
	0846	3.3	101
	1706	0.9	27
	2129	1.7	52
19 Sa	0411	0.5	15
	0929	3.5	107
	1820	0.9	27
	2222	1.4	43
20 Su ◐	0450	0.4	12
	1014	3.6	110
	1928	0.9	27
	2313	1.3	40
21 M	0532	0.3	9
	1100	3.8	116
	2015	0.8	24
	2355	1.2	37
22 Tu	0616	0.2	6
	1147	4.0	122
	2042	0.8	24
23 W	0031	1.3	40
	0702	0.1	3
	1234	4.1	125
	2106	0.8	24
24 Th	0108	1.4	43
	0750	0.0	0
	1320	4.1	125
	2132	0.8	24
25 F	0148	1.7	52
	0839	0.0	0
	1408	4.0	122
	2202	0.7	21
26 Sa	0233	2.0	61
	0932	0.0	0
	1456	3.8	116
	2235	0.7	21
27 Su ○	0323	2.4	73
	1029	0.1	3
	1547	3.4	104
	2311	0.6	18
28 M	0416	2.8	85
	1132	0.2	6
	1640	3.0	91
	2351	0.5	15
29 Tu	0510	3.2	98
	1244	0.4	12
	1734	2.6	79
30 W	0036	0.4	12
	0604	3.5	107
	1403	0.5	15
	1830	2.2	67

Time meridian 135° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.
Heights are referred to mean lower low water which is the chart datum of soundings.

Bethel, Kuskokwim River, Alaska, 2015

Times and Heights of High and Low Waters

October

	Time	Height	
	h m	ft	cm
1 Th	0128	0.3	9
	0657	3.7	113
	1523	0.6	18
	1927	1.9	58
2 F	0223	0.3	9
	0749	3.8	116
	1641	0.6	18
	2025	1.7	52
3 Sa	0321	0.2	6
	0841	3.8	116
	1752	0.6	18
	2126	1.5	46
4 Su ◑	0419	0.2	6
	0934	3.7	113
	1858	0.5	15
	2233	1.5	46
5 M	0517	0.2	6
	1028	3.5	107
	1955	0.5	15
	2344	1.5	46
6 Tu	0615	0.2	6
	1122	3.4	104
	2045	0.5	15
7 W	0052	1.7	52
	0711	0.2	6
	1216	3.3	101
	2128	0.4	12
8 Th	0146	1.9	58
	0805	0.2	6
	1309	3.1	94
	2206	0.5	15
9 F	0232	2.1	64
	0856	0.3	9
	1402	3.0	91
	2241	0.5	15
10 Sa	0315	2.3	70
	0947	0.4	12
	1453	2.8	85
	2313	0.6	18
11 Su	0359	2.5	76
	1039	0.5	15
	1547	2.6	79
	2344	0.6	18
12 M ●	0442	2.7	82
	1134	0.6	18
	1642	2.3	70
13 Tu	0015	0.6	18
	0525	3.0	91
	1238	0.8	24
	1739	2.0	61
14 W	0047	0.6	18
	0607	3.2	98
	1354	0.9	27
	1835	1.8	55
15 Th	0120	0.6	18
	0648	3.4	104
	1524	0.9	27
	1928	1.5	46

	Time	Height	
	h m	ft	cm
16 F	0154	0.6	18
	0728	3.6	110
	1649	0.8	24
	2016	1.3	40
17 Sa	0231	0.6	18
	0808	3.7	113
	1758	0.8	24
	2316	1.1	34
18 Su	0311	0.5	15
	0849	3.9	119
	1855	0.7	21
19 M	0024	1.0	30
	0354	0.5	15
	0933	4.0	122
	1931	0.7	21
20 Tu ◐	0115	1.0	30
	0442	0.5	15
	1020	4.1	125
	1940	0.7	21
21 W	0151	1.0	30
	0534	0.4	12
	1109	4.1	125
	1954	0.6	18
22 Th	0002	1.3	40
	0631	0.4	12
	1159	4.1	125
	2019	0.5	15
23 F	0048	1.7	52
	0730	0.3	9
	1249	3.9	119
	2048	0.4	12
24 Sa	0134	2.2	67
	0829	0.3	9
	1340	3.7	113
	2121	0.3	9
25 Su	0222	2.7	82
	0930	0.3	9
	1430	3.3	101
	2155	0.1	3
26 M	0312	3.1	94
	1034	0.4	12
	1521	2.8	85
	2232	0.1	3
27 Tu ○	0403	3.5	107
	1142	0.5	15
	1615	2.4	73
	2313	0.0	0
28 W	0454	3.9	119
	1257	0.6	18
	1711	2.0	61
	2357	0.0	0
29 Th	0546	4.1	125
	1418	0.6	18
	1809	1.7	52
30 F	0047	0.0	0
	0636	4.1	125
	1537	0.6	18
	1907	1.5	46
31 Sa	0142	0.1	3
	0726	4.1	125
	1647	0.5	15
	2006	1.3	40

November

	Time	Height	
	h m	ft	cm
1 Su	0240	0.2	6
	0815	4.0	122
	1748	0.5	15
	2107	1.3	40
2 M	0341	0.3	9
	0905	3.8	116
	1842	0.4	12
	2213	1.4	43
3 Tu ◑	0441	0.4	12
	0957	3.6	110
	1931	0.4	12
	2323	1.5	46
4 W	0542	0.5	15
	1051	3.4	104
	2013	0.3	9
5 Th	0031	1.8	55
	0642	0.5	15
	1147	3.2	98
	2049	0.3	9
6 F	0125	2.0	61
	0742	0.6	18
	1242	3.0	91
	2122	0.3	9
7 Sa	0211	2.4	73
	0839	0.6	18
	1336	2.8	85
	2151	0.2	6
8 Su	0253	2.7	82
	0936	0.7	21
	1428	2.5	76
	2220	0.2	6
9 M	0334	2.9	88
	1035	0.8	24
	1521	2.2	67
	2249	0.2	6
10 Tu	0415	3.2	98
	1140	0.9	27
	1615	1.9	58
	2318	0.3	9
11 W ●	0456	3.4	104
	1304	1.0	30
	1710	1.5	46
	2349	0.3	9
12 Th	0535	3.6	110
	1504	0.9	27
	1805	1.2	37
13 F	0020	0.3	9
	0614	3.7	113
	1626	0.8	24
	1851	1.0	30
14 Sa	0052	0.4	12
	0653	3.9	119
	1729	0.7	21
	2202	0.8	24
15 Su	0125	0.4	12
	0732	4.1	125
	1822	0.6	18
	1959	0.7	21

	Time	Height	
	h m	ft	cm
16 M	0203	0.5	15
	0814	4.2	128
	1858	0.6	18
	2039	0.7	21
	2240	0.6	18
17 Tu	0021	0.7	21
	0252	0.5	15
	0858	4.2	128
	1853	0.7	21
	2132*	0.8	24
18 W ◐	0107	0.8	24
	0352	0.5	15
	0946	4.2	128
	1847	0.6	18
	2231	1.1	34
19 Th	0500	0.6	18
	1037	4.1	125
	1908	0.5	15
	2330	1.5	46
20 F	0610	0.6	18
	1130	3.8	116
	1938	0.3	9
21 Sa	0025	2.1	64
	0720	0.5	15
	1223	3.5	107
	2012	0.1	3
22 Su	0116	2.7	82
	0827	0.5	15
	1316	3.2	98
	2048	−0.1	−3
23 M	0206	3.2	98
	0933	0.5	15
	1407	2.8	85
	2126	−0.3	−9
24 Tu	0255	3.7	113
	1040	0.6	18
	1459	2.4	73
	2206	−0.4	−12
25 W ○	0345	4.0	122
	1150	0.7	21
	1553	2.0	61
	2247	−0.4	−12
26 Th	0435	4.2	128
	1308	0.7	21
	1649	1.6	49
	2331	−0.4	−12
27 F	0525	4.2	128
	1428	0.7	21
	1747	1.4	43
28 Sa	0018	−0.3	−9
	0614	4.2	128
	1540	0.6	18
	1846	1.3	40
29 Su	0109	−0.1	−3
	0703	4.1	125
	1639	0.6	18
	1943	1.3	40
30 M	0204	0.1	3
	0751	3.9	119
	1729	0.5	15
	2042	1.3	40

December

	Time	Height	
	h m	ft	cm
1 Tu	0303	0.3	9
	0840	3.8	116
	1815	0.5	15
	2143	1.4	43
2 W ◑	0404	0.5	15
	0932	3.5	107
	1855	0.4	12
	2247	1.6	49
3 Th	0508	0.6	18
	1026	3.3	101
	1931	0.3	9
	2350	1.9	58
4 F	0613	0.7	21
	1122	3.1	94
	2003	0.2	6
5 Sa	0046	2.2	67
	0719	0.8	24
	1218	2.8	85
	2033	0.1	3
6 Su	0136	2.6	79
	0824	0.9	27
	1313	2.6	79
	2102	0.0	0
7 M	0220	2.9	88
	0928	0.9	27
	1406	2.3	70
	2132	0.0	0
8 Tu	0301	3.2	98
	1034	1.0	30
	1456	1.9	58
	2203	−0.1	−3
9 W	0342	3.4	104
	1153	1.1	34
	1543	1.6	49
	2233	0.0	0
10 Th	0421	3.6	110
	1359	1.1	34
	1627	1.2	37
	2303	0.0	0
11 F ●	0459	3.8	116
	2332	0.1	3
12 Sa	0538	3.9	119
13 Su	0001	0.2	6
	0618	4.1	125
14 M	0030	0.2	6
	0659	4.2	128
15 Tu	0105	0.3	9
	0743	4.2	128
	2257	0.5	15
	2344	0.5	15

	Time	Height	
	h m	ft	cm
16 W	0200	0.4	12
	0829	4.2	128
	1734	0.8	24
	2050	1.1	34
17 Th	0320	0.6	18
	0918	4.0	122
	1752	0.6	18
	2155	1.5	46
18 F ◐	0445	0.7	21
	1011	3.7	113
	1823	0.4	12
	2258	2.0	61
19 Sa	0604	0.7	21
	1106	3.4	104
	1900	0.1	3
	2358	2.6	79
20 Su	0719	0.7	21
	1202	3.0	91
	1939	−0.2	−6
21 M	0053	3.1	94
	0829	0.7	21
	1257	2.7	82
	2021	−0.4	−12
22 Tu	0145	3.6	110
	0937	0.7	21
	1350	2.4	73
	2103	−0.6	−18
23 W	0235	3.9	119
	1045	0.7	21
	1442	2.0	61
	2146	−0.7	−21
24 Th	0324	4.1	125
	1155	0.8	24
	1535	1.8	55
	2229	−0.6	−18
25 F ○	0413	4.1	125
	1309	0.8	24
	1631	1.6	49
	2313	−0.5	−15
26 Sa	0503	4.1	125
	1422	0.8	24
	1727	1.5	46
	2359	−0.4	−12
27 Su	0552	4.0	122
	1523	0.8	24
	1824	1.4	43
28 M	0046	−0.2	−6
	0641	3.9	119
	1613	0.7	21
	1919	1.4	43
29 Tu	0136	0.1	3
	0730	3.7	113
	1657	0.7	21
	2013	1.5	46
30 W	0231	0.3	9
	0819	3.6	110
	1734	0.6	18
	2109	1.7	52
31 Th	0333	0.5	15
	0911	3.3	101
	1808	0.5	15
	2207	1.9	58

Time meridian 135° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.
Heights are referred to mean lower low water which is the chart datum of soundings.
* See Page 276 for the remaining tides on this day.

Unalakleet, Alaska, 2015

Times and Heights of High and Low Waters

January

	Time	Height	
	h m	ft	cm
1 Th	1052	0.4	12
	2005	4.2	128
2 F	0546	0.3	9
	2047	4.4	134
3 Sa	0626	−0.1	−3
	2130	4.5	137
4 Su ○	0706	−0.3	−9
	2213	4.5	137
5 M	0742	−0.5	−15
	2254	4.4	134
6 Tu	0816	−0.5	−15
	2332	4.3	131
7 W	0846	−0.5	−15
8 Th	0006	4.1	125
	0912	−0.4	−12
9 F	0038	3.8	116
	0932	−0.2	−6
10 Sa	0108	3.6	110
	0946	−0.1	−3
11 Su	0135	3.2	98
	0953	0.1	3
12 M	0158	2.8	85
	0959	0.3	9
	1809	2.5	76
	2212	2.2	67
13 Tu ◑	0208	2.4	73
	1004	0.4	12
	1811	2.8	85
14 W	1006	0.5	15
	1824	3.1	94
15 Th	1000	0.6	18
	1846	3.5	107

	Time	Height	
	h m	ft	cm
16 F	0943	0.5	15
	1915	3.8	116
17 Sa	0908	0.4	12
	1951	4.2	128
18 Su	0641	0.1	3
	2033	4.4	134
19 M	0655	−0.2	−6
	2120	4.6	140
20 Tu ●	0719	−0.4	−12
	2211	4.7	143
21 W	0743	−0.5	−15
	2303	4.6	140
22 Th	0806	−0.5	−15
	2354	4.4	134
23 F	0826	−0.4	−12
24 Sa	0043	4.0	122
	0846	−0.2	−6
	1539	1.9	58
	1854	1.7	52
25 Su	0130	3.5	107
	0905	−0.1	−3
	1602	2.5	76
	2050	1.7	52
26 M ◐	0217	2.8	85
	0924	0.1	3
	1637	3.0	91
	2233	1.6	49
27 Tu	0304	2.2	67
	0943	0.3	9
	1718	3.5	107
28 W	0035	1.3	40
	0357	1.5	46
	0959	0.4	12
	1802	3.8	116
29 Th	0250	0.9	27
	0506	1.0	30
	1008	0.5	15
	1846	4.1	125
30 F	0416	0.5	15
	0658	0.6	18
	0951	0.5	15
	1931	4.2	128
31 Sa	0513	0.2	6
	2017	4.2	128

February

	Time	Height	
	h m	ft	cm
1 Su	0600	0.0	0
	2104	4.2	128
2 M	0641	−0.1	−3
	2151	4.1	125
3 Tu ○	0718	−0.1	−3
	2237	3.9	119
4 W	0750	−0.1	−3
	2318	3.7	113
5 Th	0817	0.0	0
	2356	3.5	107
6 F	0838	0.1	3
7 Sa	0031	3.3	101
	0851	0.3	9
8 Su	0103	3.0	91
	0856	0.5	15
	1601	2.1	64
	1947	1.9	58
9 M	0134	2.7	82
	0858	0.6	18
	1603	2.4	73
	2111	1.8	55
10 Tu	0205	2.3	70
	0903	0.7	21
	1615	2.7	82
	2225	1.6	49
11 W ◑	0235	1.9	58
	0906	0.8	24
	1636	3.0	91
	2353	1.4	43
12 Th	0300	1.5	46
	0906	0.8	24
	1705	3.3	101
13 F	0901	0.7	21
	1740	3.6	110
14 Sa	0850	0.6	18
	1821	3.9	119
15 Su	0823	0.5	15
	1906	4.1	125

	Time	Height	
	h m	ft	cm
16 M	0532	0.2	6
	1956	4.3	131
17 Tu	0559	0.1	3
	2051	4.3	131
18 W ●	0623	0.0	0
	2152	4.1	125
19 Th	0646	0.1	3
	2254	3.9	119
20 F	0706	0.2	6
	1327	1.6	49
	1633	1.4	43
	2354	3.6	110
21 Sa	0725	0.3	9
	1343	2.1	64
	1821	1.3	40
22 Su	0050	3.1	94
	0746	0.4	12
	1413	2.6	79
	2001	1.2	37
23 M	0144	2.6	79
	0808	0.6	18
	1451	3.1	94
	2129	1.0	30
24 Tu	0238	2.1	64
	0831	0.6	18
	1534	3.5	107
	2248	0.8	24
25 W ◐	0337	1.6	49
	0853	0.7	21
	1621	3.8	116
26 Th	0012	0.7	21
	0449	1.2	37
	0912	0.8	24
	1710	3.9	119
27 F	0146	0.6	18
	0622	1.0	30
	0922	0.8	24
	1800	4.0	122
28 Sa	0309	0.4	12
	1850	3.9	119

March

	Time	Height	
	h m	ft	cm
1 Su	0414	0.3	9
	1939	3.8	116
2 M	0505	0.3	9
	2031	3.6	110
3 Tu	0549	0.3	9
	2125	3.4	104
4 W	0626	0.4	12
	2221	3.2	98
5 Th ○	0657	0.5	15
	2314	3.0	91
6 F	0720	0.7	21
	1354	1.8	55
	1654	1.7	52
7 Sa	0000	2.8	85
	0733	0.8	24
	1351	2.0	61
	1816	1.6	49
8 Su	0041	2.6	79
	0734	1.0	30
	1355	2.3	70
	1933	1.4	43
9 M	0120	2.3	70
	0735	1.1	34
	1405	2.5	76
	2037	1.3	40
10 Tu	0158	2.1	64
	0740	1.2	37
	1422	2.8	85
	2131	1.1	34
11 W	0238	1.8	55
	0744	1.2	37
	1446	3.1	94
	2222	0.9	27
12 Th	0323	1.5	46
	0745	1.2	37
	1516	3.4	104
	2317	0.8	24
13 F ◑	0419	1.2	37
	0739	1.1	34
	1553	3.6	110
14 Sa	0025	0.7	21
	1637	3.8	116
15 Su	0154	0.5	15
	1726	3.9	119

	Time	Height	
	h m	ft	cm
16 M	0307	0.4	12
	1821	3.9	119
17 Tu	0352	0.4	12
	1919	3.8	116
18 W	0424	0.4	12
	2023	3.5	107
19 Th	0450	0.5	15
	1122	1.5	46
	1413	1.4	43
	2136	3.2	98
20 F ●	0512	0.7	21
	1132	2.0	61
	1616	1.3	40
	2255	2.9	88
21 Sa	0535	0.8	24
	1202	2.5	76
	1752	1.0	30
22 Su	0009	2.5	76
	0600	1.0	30
	1237	3.0	91
	1921	0.7	21
23 M	0114	2.2	67
	0626	1.0	30
	1316	3.5	107
	2037	0.4	12
24 Tu	0217	1.9	58
	0653	1.1	34
	1357	3.8	116
	2142	0.2	6
25 W	0323	1.6	49
	0721	1.1	34
	1440	4.0	122
	2241	0.1	3
26 Th ◐	0441	1.4	43
	0748	1.2	37
	1525	4.0	122
	2340	0.1	3
27 F	1613	3.9	119
28 Sa	0045	0.2	6
	1703	3.7	113
29 Su	0154	0.3	9
	1755	3.5	107
30 M	0256	0.5	15
	1847	3.2	98
31 Tu	0347	0.6	18
	1941	2.9	88

Time meridian 135° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.
Heights are referred to mean lower low water which is the chart datum of soundings.

Unalakleet, Alaska, 2015

Times and Heights of High and Low Waters

April

	Time	Height		Time	Height
	h m	ft cm		h m	ft cm
1 W	0427 2044	0.8 24 2.6 79	16 Th	0230 0918 1356 1954	0.6 18 2.0 61 1.7 52 2.6 79
2 Th	0456 1158 1604 2203	0.9 27 2.0 61 1.7 52 2.4 73	17 F	0301 0949 1606 2127	0.8 24 2.5 76 1.3 40 2.1 64
3 F	0513 1158 1730 2325	1.1 34 2.2 67 1.5 46 2.2 67	18 Sa ●	0329 1028 1738 2319	1.0 30 3.0 91 0.8 24 1.8 55
4 Sa ○	0518 1205 1837	1.3 40 2.4 73 1.3 40	19 Su	0355 1109 1854	1.1 34 3.5 107 0.4 12
5 Su	0029 0520 1215 1932	2.0 61 1.4 43 2.7 82 1.0 30	20 M	0052 0419 1151 1957	1.6 49 1.2 37 3.9 119 0.0 0
6 M	0123 0525 1231 2017	1.9 58 1.5 46 2.9 88 0.7 21	21 Tu	0211 0441 1232 2051	1.4 43 1.3 40 4.2 128 −0.3 −9
7 Tu	0216 0528 1251 2058	1.7 52 1.5 46 3.2 98 0.5 15	22 W	1313 2140	4.3 131 −0.4 −12
8 W	1316 2135	3.5 107 0.3 9	23 Th	1354 2225	4.3 131 −0.4 −12
9 Th	1345 2213	3.7 113 0.2 6	24 F	1434 2310	4.1 125 −0.3 −9
10 F	1419 2253	3.8 116 0.1 3	25 Sa ◐	1515 2353	3.8 116 −0.1 −3
11 Sa ◑	1457 2337	3.9 119 0.1 3	26 Su	1558	3.5 107
12 Su	1542	3.9 119	27 M	0037 1643	0.2 6 3.1 94
13 M	0023 1635	0.2 6 3.7 113	28 Tu	0118 1731	0.4 12 2.7 82
14 Tu	0110 1734	0.3 9 3.4 104	29 W	0152 0952 1331 1826	0.7 21 2.2 67 2.1 64 2.3 70
15 W	0154 1840	0.5 15 3.0 91	30 Th	0214 0957 1640 1932	0.9 27 2.4 73 1.8 55 1.9 58

May

	Time	Height		Time	Height
	h m	ft cm		h m	ft cm
1 F	0226 1008 1744 2129	1.1 34 2.6 79 1.4 43 1.5 46	16 Sa	0115 0909 1733 2142	0.8 24 3.5 107 0.8 24 1.1 34
2 Sa	0232 1023 1834	1.3 40 2.9 88 1.0 30	17 Su ●	0127 0950 1831	0.9 27 4.0 122 0.2 6
3 Su ○	1041 1916	3.1 94 0.6 18	18 M	1033 1923	4.3 131 −0.2 −6
4 M	1104 1953	3.4 104 0.3 9	19 Tu	1116 2010	4.6 140 −0.5 −15
5 Tu	1130 2027	3.7 113 0.1 3	20 W	1158 2052	4.6 140 −0.7 −21
6 W	1159 2059	3.9 119 −0.2 −6	21 Th	1238 2131	4.6 140 −0.7 −21
7 Th	1231 2130	4.1 125 −0.3 −9	22 F	1316 2207	4.4 134 −0.6 −18
8 F	1304 2201	4.2 128 −0.4 −12	23 Sa	1352 2240	4.1 125 −0.4 −12
9 Sa	1340 2232	4.2 128 −0.4 −12	24 Su	1426 2310	3.7 113 −0.2 −6
10 Su	1419 2303	4.1 125 −0.3 −9	25 M ◐	1458 2333	3.3 101 0.0 0
11 M ◑	1501 2333	3.8 116 −0.1 −3	26 Tu	1525 2351	2.8 85 0.3 9
12 Tu	1549	3.4 104	27 W	0828 1131 1529	2.4 73 2.3 70 2.4 73
13 W	0002 0805 1033 1647	0.1 3 2.1 64 2.0 61 2.8 85	28 Th	0003 0830	0.6 18 2.7 82
14 Th	0029 0809 1330 1758	0.3 9 2.5 76 1.9 58 2.2 67	29 F	0008 0840 2358	0.8 24 2.9 88 0.9 27
15 F	0053 0834 1618 1925	0.6 18 3.0 91 1.4 43 1.6 49	30 Sa	0855 2227	3.2 98 0.9 27
			31 Su	0916 1857	3.5 107 0.5 15

June

	Time	Height		Time	Height
	h m	ft cm		h m	ft cm
1 M	0942 1924	3.8 116 0.2 6	16 Tu ●	1007 1929	4.7 143 −0.5 −15
2 Tu ○	1012 1953	4.1 125 −0.1 −3	17 W	1051 2008	4.7 143 −0.7 −21
3 W	1046 2022	4.3 131 −0.4 −12	18 Th	1133 2045	4.7 143 −0.7 −21
4 Th	1123 2050	4.5 137 −0.6 −18	19 F	1212 2117	4.5 137 −0.7 −21
5 F	1200 2117	4.6 140 −0.7 −21	20 Sa	1247 2146	4.2 128 −0.6 −18
6 Sa	1238 2142	4.5 137 −0.7 −21	21 Su	1320 2210	3.9 119 −0.4 −12
7 Su	1317 2206	4.4 134 −0.6 −18	22 M	1350 2228	3.5 107 −0.1 −3
8 M	1356 2228	4.0 122 −0.4 −12	23 Tu	1415 2240	3.1 94 0.1 3
9 Tu ◑	1437 2249	3.5 107 −0.2 −6	24 W ◐	0722 0953 1429 2249	2.4 73 2.3 70 2.6 79 0.3 9
10 W	0700 0957 1518 2309	2.4 73 2.2 67 2.9 88 0.0 0	25 Th	0717 2254	2.7 82 0.5 15
11 Th	0706 1233 1603 2326	2.8 85 2.1 64 2.2 67 0.2 6	26 F	0724 2251	2.9 88 0.6 18
12 F	0730 2337	3.3 101 0.4 12	27 Sa	0737 2232	3.3 101 0.6 18
13 Sa	0803 2331	3.8 116 0.5 15	28 Su	0757 2137	3.6 110 0.5 15
14 Su	0841 1803	4.2 128 0.2 6	29 M	0824 1904	3.9 119 0.3 9
15 M	0923 1847	4.5 137 −0.2 −6	30 Tu	0856 1915	4.2 128 −0.1 −3

Time meridian 135° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.
Heights are referred to mean lower low water which is the chart datum of soundings.

Unalakleet, Alaska, 2015

Times and Heights of High and Low Waters

July

	Time	Height			Time	Height	
	h m	ft	cm		h m	ft	cm
1 W ○	0933	4.4	134	16 Th	1032	4.5	137
	1939	−0.3	−9		1954	−0.5	−15
2 Th	1014	4.6	140	17 F	1115	4.3	131
	2004	−0.5	−15		2026	−0.4	−12
3 F	1057	4.6	140	18 Sa	1154	4.1	125
	2029	−0.6	−18		2054	−0.3	−9
4 Sa	1141	4.6	140	19 Su	1229	3.8	116
	2051	−0.6	−18		2117	−0.2	−6
5 Su	1224	4.4	134	20 M	1302	3.5	107
	2111	−0.5	−15		2133	0.0	0
6 M	1307	4.1	125	21 Tu	1332	3.1	94
	2129	−0.4	−12		2142	0.2	6
7 Tu	1349	3.5	107	22 W	0546	2.2	67
	2147	−0.2	−6		0838	2.1	64
					1359	2.7	82
					2148	0.4	12
8 W ◑	0525	2.4	73	23 Th ◐	0543	2.5	76
	0910	2.0	61		1017	2.0	61
	1431	2.9	88		1420	2.3	70
	2205	0.0	0		2153	0.5	15
9 Th	0544	2.9	88	24 F	0551	2.8	85
	1111	1.9	58		2156	0.6	18
	1514	2.2	67				
	2221	0.2	6				
10 F	0615	3.4	104	25 Sa	0608	3.1	94
	2234	0.3	9		2151	0.6	18
11 Sa	0652	3.9	119	26 Su	0631	3.4	104
	2237	0.4	12		2134	0.6	18
12 Su	0732	4.2	128	27 M	0700	3.7	113
	1713	0.3	9		2100	0.5	15
	1941	0.4	12				
	2156	0.3	9				
13 M	0815	4.5	137	28 Tu	0734	4.0	122
	1757	0.0	0		1827	0.2	6
14 Tu	0900	4.6	140	29 W	0814	4.2	128
	1839	−0.3	−9		1842	0.0	0
15 W ●	0946	4.6	140	30 Th	0858	4.4	134
	1918	−0.4	−12		1905	−0.2	−6
				31 F ○	0947	4.4	134
					1927	−0.2	−6

August

	Time	Height			Time	Height	
	h m	ft	cm		h m	ft	cm
1 Sa	1039	4.4	134	16 Su	1147	3.4	104
	1947	−0.2	−6		2015	0.3	9
2 Su	1131	4.2	128	17 M	1225	3.2	98
	2005	−0.1	−3		2031	0.4	12
3 M	1221	3.9	119	18 Tu	0318	1.9	58
	2021	0.0	0		0622	1.8	55
					1301	2.9	88
					2038	0.6	18
4 Tu	0301	1.9	58	19 W	0320	2.2	67
	0624	1.6	49		0755	1.7	52
	1309	3.4	104		1335	2.5	76
	2039	0.1	3		2041	0.8	24
5 W	0323	2.4	73	20 Th	0330	2.4	73
	0820	1.6	49		0912	1.6	49
	1357	2.8	85		1408	2.2	67
	2057	0.3	9		2045	0.9	27
6 Th ◑	0357	2.9	88	21 F	0347	2.7	82
	1000	1.4	43		1021	1.5	46
	1447	2.2	67		1442	1.8	55
	2116	0.4	12		2050	0.9	27
7 F	0438	3.4	104	22 Sa ◐	0411	3.0	91
	1143	1.2	37		1136	1.3	40
	1542	1.6	49		1519	1.5	46
	2134	0.5	15		2050	0.9	27
8 Sa	0524	3.8	116	23 Su	0442	3.2	98
	1346	0.9	27		1353	1.0	30
	1653	1.1	34		1603	1.1	34
	2147	0.5	15		2043	0.9	27
9 Su	0611	4.1	125	24 M	0518	3.5	107
	1524	0.5	15		2027	0.8	24
	1836	0.7	21				
	2146	0.6	18				
10 M	0658	4.2	128	25 Tu	0558	3.7	113
	1629	0.2	6		1628	0.6	18
11 Tu	0747	4.3	131	26 W	0643	3.9	119
	1721	0.1	3		1702	0.4	12
12 W	0836	4.2	128	27 Th	0731	4.0	122
	1805	0.0	0		1731	0.3	9
13 Th	0927	4.1	125	28 F	0824	4.0	122
	1845	0.0	0		1755	0.2	6
14 F ●	1017	3.9	119	29 Sa ○	0924	3.9	119
	1921	0.0	0		1814	0.3	9
15 Sa	1105	3.7	113	30 Su	1027	3.7	113
	1951	0.1	3		1831	0.4	12
				31 M	0048	1.6	49
					0417	1.3	40
					1130	3.4	104
					1849	0.5	15

September

	Time	Height			Time	Height	
	h m	ft	cm		h m	ft	cm
1 Tu	0104	2.1	64	16 W	0126	2.4	73
	0558	1.2	37		0742	1.3	40
	1229	3.0	91		1325	2.2	67
	1909	0.7	21		1904	1.3	40
2 W	0134	2.7	82	17 Th	0139	2.7	82
	0735	1.1	34		0838	1.1	34
	1326	2.5	76		1406	1.9	58
	1931	0.7	21		1909	1.3	40
3 Th	0211	3.2	98	18 F	0157	2.9	88
	0901	0.8	24		0926	0.9	27
	1422	2.0	61		1449	1.7	52
	1955	0.8	24		1913	1.4	43
4 F	0253	3.6	110	19 Sa	0221	3.1	94
	1018	0.6	18		1012	0.8	24
	1524	1.6	49		1540	1.5	46
	2019	0.8	24		1908	1.3	40
5 Sa ◑	0340	3.9	119	20 Su ◐	0250	3.4	104
	1133	0.5	15		1100	0.7	21
	1639	1.2	37				
	2041	0.9	27				
6 Su	0431	4.0	122	21 M	0324	3.5	107
	1256	0.4	12		1155	0.6	18
	1815	1.0	30				
	2057	0.9	27				
7 M	0524	4.0	122	22 Tu	0405	3.6	110
	1420	0.3	9		1305	0.5	15
8 Tu	0617	3.9	119	23 W	0453	3.7	113
	1528	0.3	9		1419	0.5	15
9 W	0711	3.8	116	24 Th	0547	3.7	113
	1623	0.3	9		1510	0.5	15
10 Th	0805	3.5	107	25 F	0645	3.5	107
	1708	0.4	12		1543	0.6	18
11 F	0903	3.3	101	26 Sa	0749	3.3	101
	1746	0.5	15		1607	0.7	21
					2236	1.6	49
12 Sa ●	1004	3.0	91	27 Su ○	0159	1.5	46
	1819	0.6	18		0901	3.0	91
					1629	0.8	24
					2251	2.1	64
13 Su	0113	1.8	55	28 M	0402	1.3	40
	0355	1.7	52		1024	2.6	79
	1104	2.8	85		1651	0.9	27
	1843	0.8	24		2323	2.6	79
14 M	0112	2.0	61	29 Tu	0535	1.0	30
	0519	1.6	49		1145	2.3	70
	1157	2.6	79		1715	1.1	34
	1857	1.0	30				
15 Tu	0118	2.2	67	30 W	0000	3.1	94
	0635	1.5	46		0659	0.6	18
	1243	2.4	73		1256	2.0	61
	1901	1.1	34		1740	1.1	34

Time meridian 135° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.
Heights are referred to mean lower low water which is the chart datum of soundings.

Unalakleet, Alaska, 2015

Times and Heights of High and Low Waters

October

	Time	Height			Time	Height	
	h m	ft	cm		h m	ft	cm
1 Th	0040	3.6	110	16 F	0031	3.3	101
	0813	0.2	6		0853	0.4	12
	1402	1.7	52				
	1806	1.2	37				
2 F	0121	4.0	122	17 Sa	0056	3.6	110
	0917	0.0	0		0927	0.2	6
	1512	1.5	46				
	1833	1.2	37				
3 Sa	0204	4.2	128	18 Su	0123	3.7	113
	1015	−0.1	−3		1001	0.1	3
	1636	1.3	40				
	1858	1.2	37				
4 Su ◑	0250	4.2	128	19 M	0153	3.8	116
	1111	−0.1	−3		1036	0.0	0
5 M	0338	4.1	125	20 Tu ◐	0227	3.9	119
	1209	0.0	0		1113	0.0	0
6 Tu	0429	3.8	116	21 W	0307	3.8	116
	1311	0.2	6		1151	0.1	3
7 W	0523	3.5	107	22 Th	0353	3.6	110
	1412	0.3	9		1231	0.3	9
8 Th	0619	3.2	98	23 F	0449	3.3	101
	1505	0.5	15		1309	0.4	12
9 F	0717	2.8	85	24 Sa	0555	2.9	88
	1546	0.7	21		1343	0.6	18
	2313	2.0	61		2052	2.2	67
10 Sa	0241	1.9	58	25 Su	0132	1.8	55
	0823	2.5	76		0710	2.4	73
	1615	0.9	27		1414	0.8	24
	2318	2.2	67		2116	2.6	79
11 Su	0441	1.7	52	26 M	0355	1.4	43
	0949	2.2	67		0841	1.9	58
	1632	1.1	34		1441	1.0	30
	2328	2.4	73		2153	3.2	98
12 M ●	0551	1.4	43	27 Tu ○	0525	0.8	24
	1124	2.0	61		1044	1.5	46
	1639	1.3	40		1506	1.1	34
	2340	2.6	79		2234	3.7	113
13 Tu	0648	1.1	34	28 W	0635	0.3	9
	1236	1.8	55		1237	1.4	43
	1643	1.4	43		1529	1.2	37
	2354	2.9	88		2317	4.1	125
14 W	0736	0.8	24	29 Th	0736	−0.1	−3
	1336	1.7	52				
	1646	1.5	46				
15 Th	0011	3.1	94	30 F	0001	4.4	134
	0817	0.6	18		0829	−0.4	−12
	1439	1.6	49				
	1640	1.5	46				
				31 Sa	0044	4.6	140
					0918	−0.6	−18

November

	Time	Height			Time	Height	
	h m	ft	cm		h m	ft	cm
1 Su	0126	4.6	140	16 M	0044	4.2	128
	1003	−0.6	−18		0948	−0.4	−12
2 M	0208	4.4	134	17 Tu	0116	4.2	128
	1046	−0.5	−15		1015	−0.4	−12
3 Tu ◑	0250	4.0	122	18 W ◐	0151	4.1	125
	1127	−0.3	−9		1040	−0.3	−9
4 W	0332	3.6	110	19 Th	0227	3.8	116
	1208	0.0	0		1106	−0.2	−6
5 Th	0416	3.2	98	20 F	0307	3.4	104
	1245	0.3	9		1130	0.0	0
6 F	0503	2.7	82	21 Sa	0354	2.9	88
	1316	0.6	18		1153	0.3	9
	2120	2.4	73		1948	2.6	79
7 Sa	0313	2.1	64	22 Su	0043	2.1	64
	0556	2.2	67		0456	2.2	67
	1337	0.8	24		1213	0.5	15
	2135	2.6	79		2007	3.1	94
8 Su	0453	1.6	49	23 M	0419	1.4	43
	0705	1.7	52		0627	1.5	46
	1349	1.0	30		1229	0.7	21
	2152	2.8	85		2039	3.6	110
9 M	0551	1.3	40	24 Tu	0523	0.8	24
	0918	1.4	43		0828	1.0	30
	1352	1.2	37		1232	0.8	24
	2209	3.1	94		2118	4.1	125
10 Tu	0636	0.9	27	25 W ○	0615	0.2	6
	2228	3.3	101		2202	4.5	137
11 W ●	0715	0.5	15	26 Th	0703	−0.3	−9
	2250	3.6	110		2247	4.7	143
12 Th	0750	0.2	6	27 F	0749	−0.6	−18
	2316	3.8	116		2332	4.9	149
13 F	0822	0.0	0	28 Sa	0831	−0.8	−24
	2343	4.0	122				
14 Sa	0852	−0.2	−6	29 Su	0015	4.8	146
					0911	−0.9	−27
15 Su	0013	4.1	125	30 M	0056	4.6	140
	0921	−0.3	−9		0947	−0.8	−24

December

	Time	Height			Time	Height	
	h m	ft	cm		h m	ft	cm
1 Tu	0135	4.3	131	16 W	0055	4.3	131
	1020	−0.6	−18		0948	−0.5	−15
2 W ◑	0210	3.9	119	17 Th	0132	4.0	122
	1049	−0.4	−12		1006	−0.4	−12
3 Th	0243	3.4	104	18 F ◐	0208	3.5	107
	1113	−0.1	−3		1024	−0.2	−6
					1843	2.3	70
					2114	2.2	67
4 F	0310	2.9	88	19 Sa	0244	3.0	91
	1131	0.2	6		1041	0.0	0
	2002	2.5	76		1838	2.7	82
	2343	2.3	70		2332	2.1	64
5 Sa	0307	2.4	73	20 Su	0315	2.3	70
	1143	0.5	15		1056	0.2	6
	2012	2.8	85		1859	3.3	101
6 Su	1147	0.7	21	21 M	1106	0.3	9
	2027	3.0	91		1931	3.8	116
7 M	1135	0.8	24	22 Tu	1103	0.4	12
	2045	3.3	101		2009	4.2	128
8 Tu	0959	0.8	24	23 W	0549	0.3	9
	2107	3.6	110		2052	4.6	140
9 W	0659	0.5	15	24 Th	0628	−0.2	−6
	2132	3.8	116		2138	4.8	146
10 Th	0721	0.1	3	25 F ○	0708	−0.5	−15
	2202	4.0	122		2225	4.9	149
11 F ●	0748	−0.1	−3	26 Sa	0747	−0.7	−21
	2234	4.2	128		2312	4.8	146
12 Sa	0816	−0.4	−12	27 Su	0823	−0.8	−24
	2309	4.4	134		2355	4.6	140
13 Su	0842	−0.5	−15	28 M	0857	−0.7	−21
	2344	4.5	137				
14 M	0906	−0.6	−18	29 Tu	0035	4.4	134
					0926	−0.6	−18
15 Tu	0019	4.4	134	30 W	0111	4.0	122
	0928	−0.6	−18		0951	−0.4	−12
				31 Th	0143	3.6	110
					1011	−0.2	−6

Time meridian 135° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.
Heights are referred to mean lower low water which is the chart datum of soundings.

Nome, Alaska, 2015

Times and Heights of High and Low Waters

January

	Time	Height	
	h m	ft	cm
1 Th	0057	1.4	43
	0743	0.2	6
	1418	1.2	37
	1931	0.6	18
2 F	0145	1.4	43
	0843	0.1	3
	1532	1.2	37
	2028	0.7	21
3 Sa	0234	1.3	40
	0937	0.1	3
	1637	1.3	40
	2124	0.8	24
4 Su ○	0323	1.3	40
	1027	0.0	0
	1734	1.3	40
	2217	0.8	24
5 M	0411	1.3	40
	1113	0.0	0
	1821	1.3	40
	2306	0.8	24
6 Tu	0500	1.3	40
	1155	0.0	0
	1900	1.2	37
	2352	0.8	24
7 W	0547	1.3	40
	1236	0.1	3
	1936	1.2	37
8 Th	0038	0.8	24
	0635	1.3	40
	1317	0.1	3
	2009	1.2	37
9 F	0125	0.7	21
	0724	1.3	40
	1357	0.1	3
	2044	1.3	40
10 Sa	0213	0.7	21
	0814	1.2	37
	1437	0.2	6
	2119	1.3	40
11 Su	0303	0.6	18
	0906	1.2	37
	1517	0.3	9
	2154	1.3	40
12 M	0354	0.6	18
	1000	1.1	34
	1556	0.4	12
	2227	1.2	37
13 Tu ◑	0445	0.5	15
	1057	1.1	34
	1636	0.5	15
	2259	1.2	37
14 W	0534	0.5	15
	1156	1.0	30
	1715	0.6	18
	2328	1.2	37
15 Th	0622	0.4	12
	1257	1.0	30
	1755	0.7	21
	2355	1.2	37

	Time	Height	
	h m	ft	cm
16 F	0708	0.3	9
	1356	1.0	30
	1837	0.8	24
17 Sa	0023	1.2	37
	0755	0.3	9
	1450	1.0	30
	1923	0.8	24
18 Su	0100	1.3	40
	0842	0.2	6
	1540	1.1	34
	2015	0.8	24
19 M	0152	1.3	40
	0930	0.1	3
	1627	1.2	37
	2111	0.8	24
20 Tu ●	0253	1.4	43
	1020	0.0	0
	1713	1.2	37
	2208	0.8	24
21 W	0357	1.4	43
	1110	−0.1	−3
	1759	1.3	40
	2307	0.7	21
22 Th	0501	1.5	46
	1201	−0.2	−6
	1845	1.4	43
23 F	0006	0.6	18
	0604	1.5	46
	1252	−0.2	−6
	1932	1.4	43
24 Sa	0106	0.5	15
	0708	1.5	46
	1342	−0.2	−6
	2018	1.5	46
25 Su	0206	0.4	12
	0812	1.5	46
	1434	−0.1	−3
	2105	1.5	46
26 M ◐	0308	0.4	12
	0919	1.4	43
	1526	0.1	3
	2153	1.5	46
27 Tu	0410	0.3	9
	1028	1.4	43
	1619	0.3	9
	2242	1.4	43
28 W	0513	0.2	6
	1140	1.3	40
	1715	0.4	12
	2333	1.4	43
29 Th	0617	0.2	6
	1256	1.3	40
	1814	0.6	18
30 F	0027	1.3	40
	0721	0.1	3
	1413	1.3	40
	1917	0.7	21
31 Sa	0124	1.3	40
	0823	0.1	3
	1525	1.3	40
	2021	0.8	24

February

	Time	Height	
	h m	ft	cm
1 Su	0222	1.2	37
	0920	0.1	3
	1628	1.3	40
	2124	0.8	24
2 M	0318	1.2	37
	1011	0.1	3
	1718	1.2	37
	2217	0.8	24
3 Tu ○	0410	1.2	37
	1055	0.1	3
	1759	1.2	37
	2300	0.8	24
4 W	0457	1.2	37
	1134	0.1	3
	1830	1.2	37
	2339	0.7	21
5 Th	0542	1.3	40
	1211	0.1	3
	1858	1.2	37
6 F	0019	0.7	21
	0626	1.3	40
	1248	0.2	6
	1925	1.2	37
7 Sa	0100	0.6	18
	0711	1.3	40
	1324	0.2	6
	1954	1.2	37
8 Su	0143	0.5	15
	0757	1.2	37
	1401	0.3	9
	2023	1.2	37
9 M	0226	0.5	15
	0846	1.2	37
	1438	0.4	12
	2052	1.2	37
10 Tu	0310	0.4	12
	0936	1.2	37
	1515	0.5	15
	2119	1.2	37
11 W ◑	0355	0.4	12
	1029	1.1	34
	1552	0.6	18
	2144	1.2	37
12 Th	0441	0.4	12
	1124	1.1	34
	1630	0.7	21
	2206	1.2	37
13 F	0529	0.3	9
	1221	1.1	34
	1711	0.8	24
	2230	1.2	37
14 Sa	0620	0.3	9
	1318	1.1	34
	1759	0.8	24
	2313	1.2	37
15 Su	0713	0.2	6
	1413	1.1	34
	1855	0.8	24

	Time	Height	
	h m	ft	cm
16 M	0022	1.2	37
	0808	0.1	3
	1504	1.1	34
	1955	0.8	24
17 Tu	0140	1.3	40
	0902	0.0	0
	1552	1.2	37
	2057	0.8	24
18 W ●	0253	1.4	43
	0955	0.0	0
	1638	1.3	40
	2157	0.7	21
19 Th	0359	1.4	43
	1046	−0.1	−3
	1723	1.4	43
	2256	0.5	15
20 F	0503	1.5	46
	1137	−0.1	−3
	1808	1.4	43
	2354	0.4	12
21 Sa	0605	1.5	46
	1227	−0.1	−3
	1853	1.5	46
22 Su	0052	0.3	9
	0707	1.5	46
	1317	0.0	0
	1938	1.5	46
23 M	0149	0.2	6
	0810	1.5	46
	1409	0.2	6
	2024	1.5	46
24 Tu	0246	0.1	3
	0915	1.4	43
	1502	0.3	9
	2112	1.4	43
25 W ◐	0345	0.1	3
	1022	1.4	43
	1557	0.5	15
	2203	1.4	43
26 Th	0445	0.1	3
	1132	1.3	40
	1657	0.6	18
	2259	1.3	40
27 F	0548	0.1	3
	1245	1.3	40
	1803	0.7	21
28 Sa	0002	1.2	37
	0651	0.1	3
	1357	1.3	40
	1916	0.8	24

March

	Time	Height	
	h m	ft	cm
1 Su	0110	1.2	37
	0754	0.2	6
	1503	1.3	40
	2033	0.8	24
2 M	0216	1.2	37
	0851	0.2	6
	1557	1.3	40
	2137	0.7	21
3 Tu	0316	1.2	37
	0941	0.2	6
	1641	1.3	40
	2219	0.7	21
4 W	0406	1.2	37
	1024	0.2	6
	1714	1.2	37
	2251	0.7	21
5 Th ○	0451	1.2	37
	1102	0.2	6
	1741	1.2	37
	2323	0.6	18
6 F	0533	1.2	37
	1137	0.3	9
	1805	1.2	37
	2357	0.5	15
7 Sa	0616	1.3	40
	1212	0.3	9
	1830	1.2	37
8 Su	0033	0.4	12
	0659	1.3	40
	1248	0.4	12
	1855	1.2	37
9 M	0110	0.4	12
	0744	1.2	37
	1323	0.5	15
	1919	1.2	37
10 Tu	0149	0.3	9
	0831	1.2	37
	1359	0.6	18
	1942	1.2	37
11 W	0229	0.3	9
	0919	1.2	37
	1436	0.7	21
	2001	1.2	37
12 Th	0311	0.2	6
	1009	1.2	37
	1515	0.8	24
	2015	1.2	37
13 F ◑	0356	0.2	6
	1101	1.2	37
	1557	0.8	24
	2038	1.2	37
14 Sa	0446	0.2	6
	1154	1.2	37
	1647	0.9	27
	2124	1.2	37
15 Su	0541	0.2	6
	1248	1.2	37
	1744	0.9	27
	2242	1.2	37

	Time	Height	
	h m	ft	cm
16 M	0639	0.1	3
	1340	1.2	37
	1846	0.8	24
17 Tu	0019	1.2	37
	0737	0.1	3
	1429	1.2	37
	1950	0.7	21
18 W	0142	1.3	40
	0833	0.1	3
	1515	1.3	40
	2051	0.6	18
19 Th	0254	1.3	40
	0926	0.0	0
	1559	1.4	43
	2150	0.5	15
20 F ●	0401	1.4	43
	1018	0.1	3
	1643	1.4	43
	2246	0.3	9
21 Sa	0504	1.4	43
	1109	0.1	3
	1726	1.5	46
	2341	0.2	6
22 Su	0605	1.5	46
	1159	0.2	6
	1810	1.5	46
23 M	0035	0.0	0
	0707	1.5	46
	1251	0.3	9
	1854	1.5	46
24 Tu	0129	0.0	0
	0808	1.5	46
	1344	0.4	12
	1941	1.4	43
25 W	0223	−0.1	−3
	0911	1.4	43
	1440	0.6	18
	2031	1.4	43
26 Th ◐	0319	0.0	0
	1015	1.4	43
	1540	0.7	21
	2127	1.3	40
27 F	0416	0.0	0
	1120	1.4	43
	1647	0.7	21
	2229	1.2	37
28 Sa	0515	0.1	3
	1226	1.4	43
	1802	0.8	24
	2340	1.1	34
29 Su	0615	0.1	3
	1329	1.4	43
	1928	0.7	21
30 M	0053	1.1	34
	0714	0.2	6
	1424	1.3	40
	2044	0.7	21
31 Tu	0201	1.1	34
	0807	0.2	6
	1510	1.3	40
	2131	0.6	18

Time meridian 135° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.
Heights are referred to mean low water which is the chart datum of soundings.

Nome, Alaska, 2015

Times and Heights of High and Low Waters

April

	Time	Height			Time	Height	
	h m	ft	cm		h m	ft	cm
1 W	0300	1.1	34	**16** Th	0143	1.2	37
	0855	0.3	9		0801	0.1	3
	1547	1.3	40		1438	1.4	43
	2204	0.6	18		2047	0.4	12
2 Th	0352	1.1	34	**17** F	0255	1.3	40
	0938	0.3	9		0854	0.2	6
	1616	1.3	40		1520	1.5	46
	2231	0.5	15		2142	0.2	6
3 F	0438	1.2	37	**18** Sa	0402	1.3	40
	1017	0.4	12		0946	0.3	9
	1641	1.3	40		1602	1.5	46
	2300	0.4	12	●	2236	0.1	3
4 Sa	0523	1.2	37	**19** Su	0506	1.4	43
	1054	0.5	15		1038	0.4	12
	1705	1.2	37		1644	1.5	46
○	2331	0.3	9		2328	0.0	0
5 Su	0607	1.2	37	**20** M	0608	1.4	43
	1130	0.6	18		1130	0.5	15
	1728	1.2	37		1727	1.5	46
6 M	0004	0.3	9	**21** Tu	0019	−0.1	−3
	0651	1.2	37		0708	1.4	43
	1207	0.7	21		1224	0.6	18
	1749	1.2	37		1812	1.5	46
7 Tu	0038	0.2	6	**22** W	0110	−0.2	−6
	0735	1.2	37		0808	1.4	43
	1243	0.7	21		1320	0.7	21
	1807	1.2	37		1901	1.4	43
8 W	0115	0.1	3	**23** Th	0201	−0.1	−3
	0820	1.2	37		0907	1.4	43
	1322	0.8	24		1421	0.8	24
	1820	1.2	37		1954	1.3	40
9 Th	0154	0.1	3	**24** F	0254	−0.1	−3
	0906	1.2	37		1006	1.4	43
	1403	0.9	27		1526	0.8	24
	1835	1.2	37		2054	1.2	37
10 F	0237	0.1	3	**25** Sa	0347	0.0	0
	0954	1.2	37		1104	1.4	43
	1448	0.9	27		1639	0.8	24
	1904	1.2	37	◐	2201	1.1	34
11 Sa	0325	0.0	0	**26** Su	0441	0.1	3
	1043	1.3	40		1200	1.4	43
	1539	0.9	27		1801	0.8	24
◑	1953	1.2	37		2313	1.1	34
12 Su	0418	0.0	0	**27** M	0535	0.1	3
	1133	1.3	40		1250	1.4	43
	1638	0.9	27		1922	0.7	21
	2107	1.2	37				
13 M	0513	0.0	0	**28** Tu	0024	1.0	30
	1222	1.3	40		0626	0.2	6
	1741	0.8	24		1336	1.4	43
	2254	1.2	37		2020	0.6	18
14 Tu	0610	0.0	0	**29** W	0131	1.0	30
	1309	1.3	40		0715	0.3	9
	1846	0.7	21		1414	1.4	43
					2102	0.5	15
15 W	0025	1.2	37	**30** Th	0233	1.0	30
	0707	0.1	3		0801	0.4	12
	1354	1.4	43		1447	1.4	43
	1948	0.6	18		2134	0.4	12

May

	Time	Height			Time	Height	
	h m	ft	cm		h m	ft	cm
1 F	0330	1.1	34	**16** Sa	0255	1.2	37
	0843	0.5	15		0821	0.4	12
	1515	1.3	40		1442	1.6	49
	2202	0.4	12		2133	0.1	3
2 Sa	0422	1.1	34	**17** Su	0405	1.2	37
	0924	0.6	18		0914	0.5	15
	1539	1.3	40		1523	1.6	49
	2231	0.3	9	●	2225	−0.1	−3
3 Su	0512	1.1	34	**18** M	0512	1.3	40
	1003	0.7	21		1007	0.7	21
	1601	1.3	40		1606	1.5	46
○	2301	0.2	6		2315	−0.2	−6
4 M	0559	1.2	37	**19** Tu	0615	1.3	40
	1042	0.8	24		1102	0.8	24
	1620	1.3	40		1650	1.5	46
	2333	0.1	3				
5 Tu	0644	1.2	37	**20** W	0004	−0.2	−6
	1121	0.9	27		0715	1.4	43
	1635	1.3	40		1200	0.8	24
					1737	1.4	43
6 W	0008	0.0	0	**21** Th	0053	−0.2	−6
	0727	1.2	37		0811	1.4	43
	1202	0.9	27		1300	0.9	27
	1646	1.3	40		1829	1.3	40
7 Th	0046	0.0	0	**22** F	0142	−0.2	−6
	0810	1.3	40		0903	1.4	43
	1246	1.0	30		1404	0.9	27
	1708	1.3	40		1926	1.2	37
8 F	0128	−0.1	−3	**23** Sa	0230	−0.1	−3
	0854	1.3	40		0953	1.4	43
	1335	1.0	30		1511	0.9	27
	1746	1.3	40		2028	1.2	37
9 Sa	0214	−0.1	−3	**24** Su	0319	0.0	0
	0939	1.3	40		1040	1.4	43
	1430	1.0	30		1623	0.8	24
	1841	1.3	40		2133	1.1	34
10 Su	0304	−0.1	−3	**25** M	0406	0.0	0
	1025	1.4	43		1124	1.5	46
	1530	0.9	27		1736	0.7	21
	1957	1.2	37	◐	2239	1.0	30
11 M	0356	−0.1	−3	**26** Tu	0453	0.1	3
	1110	1.4	43		1205	1.5	46
	1634	0.9	27		1842	0.7	21
◑	2135	1.2	37		2346	1.0	30
12 Tu	0450	−0.1	−3	**27** W	0538	0.2	6
	1155	1.4	43		1243	1.5	46
	1739	0.8	24		1935	0.6	18
	2305	1.1	34				
13 W	0543	0.0	0	**28** Th	0053	1.0	30
	1238	1.5	46		0622	0.3	9
	1843	0.6	18		1317	1.4	43
					2018	0.5	15
14 Th	0026	1.1	34	**29** F	0158	1.0	30
	0636	0.1	3		0704	0.5	15
	1321	1.5	46		1347	1.4	43
	1943	0.4	12		2054	0.4	12
15 F	0143	1.2	37	**30** Sa	0303	1.0	30
	0729	0.2	6		0746	0.6	18
	1402	1.6	49		1414	1.4	43
	2040	0.2	6		2126	0.3	9
				31 Su	0405	1.0	30
					0826	0.7	21
					1437	1.3	40
					2157	0.2	6

June

	Time	Height			Time	Height	
	h m	ft	cm		h m	ft	cm
1 M	0502	1.1	34	**16** Tu	0525	1.2	37
	0906	0.8	24		0942	0.9	27
	1456	1.3	40		1538	1.5	46
	2229	0.1	3	●	2306	−0.2	−6
2 Tu	0553	1.1	34	**17** W	0629	1.3	40
	0948	0.9	27		1040	0.9	27
	1509	1.3	40		1626	1.4	43
○	2304	0.0	0		2353	−0.2	−6
3 W	0637	1.2	37	**18** Th	0723	1.3	40
	1032	1.0	30		1141	1.0	30
	1524	1.3	40		1717	1.4	43
	2342	−0.1	−3				
4 Th	0716	1.2	37	**19** F	0039	−0.2	−6
	1121	1.0	30		0810	1.3	40
	1555	1.4	43		1242	1.0	30
					1811	1.3	40
5 F	0023	−0.1	−3	**20** Sa	0123	−0.1	−3
	0755	1.3	40		0851	1.4	43
	1215	1.0	30		1345	0.9	27
	1644	1.4	43		1908	1.2	37
6 Sa	0108	−0.2	−6	**21** Su	0206	−0.1	−3
	0835	1.3	40		0929	1.4	43
	1314	1.0	30		1447	0.9	27
	1749	1.3	40		2005	1.2	37
7 Su	0156	−0.2	−6	**22** M	0248	0.0	0
	0916	1.4	43		1005	1.4	43
	1416	1.0	30		1549	0.8	24
	1906	1.3	40		2104	1.1	34
8 M	0245	−0.2	−6	**23** Tu	0330	0.0	0
	0959	1.5	46		1040	1.5	46
	1521	0.9	27		1648	0.7	21
	2028	1.3	40		2205	1.0	30
9 Tu	0335	−0.2	−6	**24** W	0411	0.1	3
	1042	1.5	46		1115	1.5	46
	1626	0.7	21		1745	0.6	18
◑	2148	1.2	37	◐	2307	1.0	30
10 W	0426	−0.1	−3	**25** Th	0451	0.3	9
	1124	1.6	49		1148	1.5	46
	1730	0.6	18		1838	0.5	15
	2306	1.2	37				
11 Th	0517	0.0	0	**26** F	0012	0.9	27
	1206	1.6	49		0531	0.4	12
	1833	0.4	12		1219	1.4	43
					1925	0.4	12
12 F	0024	1.1	34	**27** Sa	0120	0.9	27
	0608	0.2	6		0610	0.6	18
	1247	1.6	49		1248	1.4	43
	1933	0.2	6		2006	0.3	9
13 Sa	0141	1.1	34	**28** Su	0231	0.9	27
	0659	0.4	12		0648	0.7	21
	1328	1.6	49		1313	1.4	43
	2030	0.1	3		2044	0.2	6
14 Su	0259	1.1	34	**29** M	0343	0.9	27
	0752	0.6	18		0727	0.8	24
	1410	1.6	49		1334	1.4	43
	2124	−0.1	−3		2120	0.2	6
15 M	0414	1.2	37	**30** Tu	0450	1.0	30
	0846	0.7	21		0807	0.9	27
	1453	1.5	46		1351	1.4	43
	2216	−0.1	−3		2157	0.1	3

Time meridian 135° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.
Heights are referred to mean low water which is the chart datum of soundings.

Nome, Alaska, 2015

Times and Heights of High and Low Waters

July

	Time	Height	
	h m	ft	cm
1 W ○	0540	1.1	34
	0855	1.0	30
	1414	1.4	43
	2236	0.0	0
2 Th	0615	1.1	34
	0950	1.0	30
	1456	1.4	43
	2318	−0.1	−3
3 F	0648	1.2	37
	1050	1.0	30
	1555	1.4	43
4 Sa	0002	−0.2	−6
	0724	1.3	40
	1154	1.0	30
	1704	1.4	43
5 Su	0049	−0.3	−9
	0802	1.4	43
	1257	0.9	27
	1815	1.4	43
6 M	0136	−0.3	−9
	0843	1.5	46
	1401	0.8	24
	1926	1.4	43
7 Tu	0224	−0.3	−9
	0924	1.5	46
	1505	0.7	21
	2037	1.3	40
8 W ◑	0313	−0.2	−6
	1007	1.6	49
	1609	0.5	15
	2149	1.2	37
9 Th	0402	0.0	0
	1049	1.6	49
	1712	0.4	12
	2303	1.2	37
10 F	0451	0.2	6
	1132	1.6	49
	1815	0.2	6
11 Sa	0020	1.1	34
	0542	0.4	12
	1216	1.6	49
	1917	0.1	3
12 Su	0141	1.1	34
	0635	0.6	18
	1301	1.6	49
	2018	0.0	0
13 M	0305	1.1	34
	0730	0.7	21
	1348	1.5	46
	2116	−0.1	−3
14 Tu	0426	1.1	34
	0828	0.9	27
	1437	1.5	46
	2209	−0.1	−3
15 W ●	0537	1.2	37
	0928	0.9	27
	1528	1.4	43
	2258	−0.1	−3

	Time	Height	
	h m	ft	cm
16 Th	0633	1.2	37
	1029	1.0	30
	1620	1.4	43
	2343	−0.1	−3
17 F	0717	1.3	40
	1129	1.0	30
	1712	1.3	40
18 Sa	0023	−0.1	−3
	0752	1.3	40
	1226	0.9	27
	1804	1.3	40
19 Su	0101	−0.1	−3
	0821	1.3	40
	1320	0.9	27
	1855	1.3	40
20 M	0139	0.0	0
	0849	1.4	43
	1413	0.8	24
	1946	1.2	37
21 Tu	0216	0.0	0
	0918	1.4	43
	1505	0.7	21
	2039	1.1	34
22 W	0253	0.1	3
	0948	1.4	43
	1557	0.6	18
	2135	1.1	34
23 Th ◐	0330	0.2	6
	1020	1.4	43
	1648	0.5	15
	2233	1.0	30
24 F	0407	0.4	12
	1050	1.4	43
	1738	0.5	15
	2335	0.9	27
25 Sa	0444	0.5	15
	1120	1.4	43
	1827	0.4	12
26 Su	0041	0.9	27
	0519	0.7	21
	1147	1.3	40
	1913	0.3	9
27 M	0152	0.9	27
	0553	0.8	24
	1210	1.3	40
	1957	0.2	6
28 Tu	0307	0.9	27
	0630	0.8	24
	1233	1.3	40
	2041	0.2	6
29 W	0412	1.0	30
	0718	0.9	27
	1306	1.4	43
	2124	0.1	3
30 Th	0453	1.0	30
	0820	0.9	27
	1359	1.4	43
	2208	−0.1	−3
31 F ○	0527	1.1	34
	0927	1.0	30
	1506	1.4	43
	2253	−0.2	−6

August

	Time	Height	
	h m	ft	cm
1 Sa	0603	1.2	37
	1034	0.9	27
	1614	1.5	46
	2339	−0.2	−6
2 Su	0641	1.3	40
	1138	0.8	24
	1720	1.5	46
3 M	0026	−0.3	−9
	0720	1.4	43
	1241	0.7	21
	1825	1.5	46
4 Tu	0113	−0.3	−9
	0802	1.5	46
	1343	0.6	18
	1931	1.4	43
5 W	0200	−0.2	−6
	0844	1.6	49
	1444	0.4	12
	2037	1.4	43
6 Th ◑	0249	0.0	0
	0928	1.6	49
	1546	0.3	9
	2146	1.3	40
7 F	0338	0.1	3
	1013	1.6	49
	1649	0.2	6
	2258	1.2	37
8 Sa	0429	0.3	9
	1100	1.6	49
	1753	0.1	3
9 Su	0015	1.2	37
	0523	0.5	15
	1150	1.5	46
	1858	0.1	3
10 M	0138	1.1	34
	0620	0.7	21
	1243	1.5	46
	2003	0.0	0
11 Tu	0305	1.1	34
	0721	0.8	24
	1340	1.4	43
	2104	0.0	0
12 W	0423	1.2	37
	0825	0.9	27
	1437	1.4	43
	2159	0.0	0
13 Th	0524	1.2	37
	0929	0.9	27
	1532	1.3	40
	2245	0.0	0
14 F ●	0611	1.2	37
	1028	0.9	27
	1623	1.3	40
	2324	0.0	0
15 Sa	0646	1.2	37
	1120	0.9	27
	1711	1.3	40
	2359	0.0	0

	Time	Height	
	h m	ft	cm
16 Su	0711	1.2	37
	1206	0.8	24
	1757	1.3	40
17 M	0033	0.0	0
	0732	1.3	40
	1251	0.7	21
	1843	1.3	40
18 Tu	0107	0.1	3
	0756	1.3	40
	1336	0.6	18
	1930	1.2	37
19 W	0141	0.2	6
	0822	1.3	40
	1421	0.6	18
	2020	1.2	37
20 Th	0217	0.3	9
	0851	1.3	40
	1508	0.5	15
	2111	1.1	34
21 F	0252	0.4	12
	0920	1.3	40
	1555	0.4	12
	2205	1.0	30
22 Sa ◐	0327	0.5	15
	0948	1.3	40
	1642	0.4	12
	2303	1.0	30
23 Su	0401	0.6	18
	1015	1.3	40
	1731	0.3	9
24 M	0004	0.9	27
	0434	0.7	21
	1039	1.3	40
	1821	0.3	9
25 Tu	0109	0.9	27
	0510	0.8	24
	1106	1.3	40
	1911	0.2	6
26 W	0214	0.9	27
	0557	0.8	24
	1150	1.3	40
	2001	0.1	3
27 Th	0309	1.0	30
	0700	0.9	27
	1256	1.3	40
	2050	0.1	3
28 F	0353	1.1	34
	0810	0.9	27
	1408	1.4	43
	2138	0.0	0
29 Sa ○	0433	1.2	37
	0919	0.8	24
	1517	1.4	43
	2225	−0.1	−3
30 Su	0513	1.3	40
	1023	0.7	21
	1622	1.5	46
	2312	−0.2	−6
31 M	0553	1.4	43
	1124	0.6	18
	1725	1.5	46
	2359	−0.1	−3

September

	Time	Height	
	h m	ft	cm
1 Tu	0635	1.5	46
	1224	0.4	12
	1827	1.5	46
2 W	0047	−0.1	−3
	0718	1.5	46
	1323	0.3	9
	1930	1.4	43
3 Th	0135	0.0	0
	0802	1.6	49
	1421	0.2	6
	2034	1.4	43
4 F	0225	0.2	6
	0848	1.6	49
	1521	0.1	3
	2141	1.3	40
5 Sa ◑	0317	0.4	12
	0938	1.5	46
	1623	0.1	3
	2251	1.3	40
6 Su	0412	0.5	15
	1031	1.5	46
	1727	0.1	3
7 M	0007	1.2	37
	0510	0.7	21
	1130	1.4	43
	1834	0.1	3
8 Tu	0129	1.2	37
	0615	0.8	24
	1233	1.3	40
	1941	0.1	3
9 W	0248	1.2	37
	0724	0.8	24
	1338	1.3	40
	2042	0.1	3
10 Th	0355	1.2	37
	0835	0.8	24
	1439	1.3	40
	2134	0.1	3
11 F	0446	1.2	37
	0937	0.8	24
	1533	1.3	40
	2217	0.1	3
12 Sa ●	0525	1.2	37
	1025	0.8	24
	1621	1.3	40
	2254	0.1	3
13 Su	0552	1.2	37
	1105	0.7	21
	1705	1.3	40
	2327	0.2	6
14 M	0612	1.2	37
	1143	0.6	18
	1748	1.3	40
	2359	0.2	6
15 Tu	0633	1.2	37
	1221	0.5	15
	1832	1.3	40

	Time	Height	
	h m	ft	cm
16 W	0032	0.3	9
	0656	1.2	37
	1300	0.5	15
	1918	1.2	37
17 Th	0106	0.4	12
	0722	1.2	37
	1341	0.4	12
	2004	1.2	37
18 F	0141	0.5	15
	0749	1.2	37
	1423	0.3	9
	2052	1.1	34
19 Sa	0216	0.6	18
	0815	1.2	37
	1507	0.3	9
	2143	1.1	34
20 Su ◐	0250	0.7	21
	0839	1.2	37
	1554	0.3	9
	2236	1.0	30
21 M	0325	0.8	24
	0901	1.2	37
	1643	0.3	9
	2332	1.0	30
22 Tu	0403	0.8	24
	0930	1.2	37
	1736	0.2	6
23 W	0030	1.0	30
	0451	0.9	27
	1023	1.3	40
	1830	0.2	6
24 Th	0126	1.0	30
	0552	0.9	27
	1142	1.3	40
	1923	0.1	3
25 F	0216	1.1	34
	0701	0.8	24
	1302	1.3	40
	2015	0.1	3
26 Sa	0301	1.2	37
	0809	0.7	21
	1414	1.4	43
	2105	0.0	0
27 Su	0343	1.3	40
	0913	0.6	18
	1521	1.4	43
	2154	0.0	0
28 M	0425	1.4	43
	1013	0.5	15
	1624	1.4	43
	2242	0.0	0
29 Tu	0507	1.4	43
	1110	0.3	9
	1726	1.5	46
	2331	0.1	3
30 W	0550	1.5	46
	1207	0.2	6
	1827	1.5	46

Time meridian 135° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.
Heights are referred to mean low water which is the chart datum of soundings.

Nome, Alaska, 2015

Times and Heights of High and Low Waters

October

	Time	Height	
	h m	ft	cm
1 Th	0020	0.2	6
	0635	1.5	46
	1302	0.1	3
	1928	1.4	43
2 F	0111	0.3	9
	0722	1.5	46
	1359	0.0	0
	2030	1.4	43
3 Sa	0203	0.4	12
	0812	1.5	46
	1456	0.0	0
	2134	1.4	43
4 Su ◑	0258	0.5	15
	0906	1.4	43
	1557	0.0	0
	2241	1.3	40
5 M	0358	0.6	18
	1007	1.4	43
	1700	0.1	3
	2353	1.3	40
6 Tu	0503	0.7	21
	1113	1.3	40
	1804	0.1	3
7 W	0105	1.2	37
	0614	0.8	24
	1222	1.3	40
	1906	0.1	3
8 Th	0213	1.2	37
	0730	0.7	21
	1329	1.2	37
	2003	0.2	6
9 F	0308	1.2	37
	0838	0.7	21
	1429	1.2	37
	2053	0.2	6
10 Sa	0351	1.2	37
	0929	0.7	21
	1522	1.2	37
	2135	0.2	6
11 Su	0423	1.2	37
	1008	0.6	18
	1610	1.2	37
	2212	0.3	9
12 M ●	0447	1.2	37
	1042	0.5	15
	1655	1.3	40
	2247	0.4	12
13 Tu	0510	1.2	37
	1116	0.4	12
	1739	1.3	40
	2321	0.5	15
14 W	0532	1.2	37
	1151	0.4	12
	1823	1.3	40
	2356	0.5	15
15 Th	0556	1.2	37
	1227	0.3	9
	1907	1.2	37

	Time	Height	
	h m	ft	cm
16 F	0031	0.6	18
	0621	1.2	37
	1306	0.2	6
	1951	1.2	37
17 Sa	0106	0.7	21
	0644	1.2	37
	1346	0.2	6
	2037	1.2	37
18 Su	0142	0.8	24
	0706	1.2	37
	1429	0.2	6
	2124	1.1	34
19 M	0219	0.8	24
	0729	1.2	37
	1516	0.2	6
	2213	1.1	34
20 Tu ◐	0300	0.8	24
	0803	1.2	37
	1606	0.2	6
	2304	1.1	34
21 W	0349	0.9	27
	0859	1.2	37
	1659	0.1	3
	2356	1.1	34
22 Th	0448	0.8	24
	1021	1.2	37
	1754	0.1	3
23 F	0045	1.2	37
	0554	0.8	24
	1146	1.2	37
	1847	0.1	3
24 Sa	0131	1.2	37
	0701	0.7	21
	1304	1.3	40
	1940	0.1	3
25 Su	0215	1.3	40
	0805	0.5	15
	1415	1.3	40
	2031	0.2	6
26 M	0258	1.4	43
	0905	0.4	12
	1522	1.3	40
	2122	0.2	6
27 Tu ○	0341	1.4	43
	1002	0.2	6
	1625	1.4	43
	2213	0.3	9
28 W	0425	1.5	46
	1057	0.1	3
	1726	1.4	43
	2303	0.4	12
29 Th	0510	1.5	46
	1150	0.0	0
	1826	1.4	43
	2355	0.5	15
30 F	0557	1.5	46
	1244	−0.1	−3
	1925	1.4	43
31 Sa	0048	0.5	15
	0648	1.5	46
	1339	−0.1	−3
	2024	1.4	43

November

	Time	Height	
	h m	ft	cm
1 Su	0144	0.6	18
	0742	1.4	43
	1434	−0.1	−3
	2124	1.4	43
2 M	0242	0.7	21
	0841	1.3	40
	1531	0.0	0
	2226	1.3	40
3 Tu ◑	0344	0.7	21
	0944	1.3	40
	1629	0.1	3
	2328	1.3	40
4 W	0452	0.7	21
	1051	1.2	37
	1726	0.1	3
5 Th	0028	1.3	40
	0604	0.7	21
	1159	1.2	37
	1821	0.2	6
6 F	0123	1.3	40
	0715	0.7	21
	1304	1.2	37
	1913	0.3	9
7 Sa	0209	1.3	40
	0815	0.6	18
	1406	1.2	37
	2000	0.3	9
8 Su	0246	1.3	40
	0901	0.5	15
	1502	1.2	37
	2044	0.4	12
9 M	0317	1.2	37
	0939	0.4	12
	1555	1.2	37
	2125	0.5	15
10 Tu	0345	1.2	37
	1013	0.4	12
	1644	1.2	37
	2204	0.6	18
11 W ●	0410	1.2	37
	1047	0.3	9
	1730	1.2	37
	2242	0.7	21
12 Th	0435	1.2	37
	1121	0.2	6
	1814	1.2	37
	2319	0.7	21
13 F	0459	1.2	37
	1157	0.2	6
	1856	1.2	37
	2355	0.8	24
14 Sa	0522	1.2	37
	1236	0.1	3
	1938	1.2	37
15 Su	0032	0.8	24
	0545	1.2	37
	1317	0.1	3
	2020	1.2	37

	Time	Height	
	h m	ft	cm
16 M	0111	0.9	27
	0614	1.2	37
	1401	0.1	3
	2104	1.2	37
17 Tu	0155	0.9	27
	0657	1.3	40
	1448	0.0	0
	2149	1.2	37
18 W ◐	0244	0.9	27
	0755	1.3	40
	1538	0.0	0
	2235	1.2	37
19 Th	0342	0.8	24
	0909	1.2	37
	1629	0.0	0
	2321	1.2	37
20 F	0445	0.8	24
	1029	1.2	37
	1721	0.1	3
21 Sa	0006	1.3	40
	0550	0.6	18
	1148	1.2	37
	1814	0.1	3
22 Su	0050	1.3	40
	0655	0.5	15
	1303	1.2	37
	1907	0.2	6
23 M	0134	1.4	43
	0756	0.3	9
	1415	1.3	40
	2000	0.3	9
24 Tu	0218	1.4	43
	0855	0.2	6
	1523	1.3	40
	2053	0.4	12
25 W ○	0304	1.5	46
	0950	0.0	0
	1627	1.3	40
	2146	0.5	15
26 Th	0350	1.5	46
	1044	−0.1	−3
	1729	1.3	40
	2240	0.6	18
27 F	0439	1.5	46
	1137	−0.1	−3
	1827	1.4	43
	2334	0.7	21
28 Sa	0531	1.5	46
	1230	−0.1	−3
	1922	1.4	43
29 Su	0029	0.7	21
	0625	1.4	43
	1322	−0.1	−3
	2016	1.4	43
30 M	0126	0.7	21
	0721	1.4	43
	1413	−0.1	−3
	2109	1.3	40

December

	Time	Height	
	h m	ft	cm
1 Tu	0224	0.7	21
	0820	1.3	40
	1504	0.0	0
	2201	1.3	40
2 W ◑	0325	0.7	21
	0920	1.3	40
	1554	0.1	3
	2251	1.3	40
3 Th	0428	0.7	21
	1023	1.2	37
	1644	0.2	6
	2339	1.3	40
4 F	0533	0.6	18
	1126	1.2	37
	1732	0.2	6
5 Sa	0024	1.3	40
	0635	0.6	18
	1231	1.1	34
	1819	0.3	9
6 Su	0105	1.3	40
	0731	0.5	15
	1335	1.1	34
	1906	0.5	15
7 M	0142	1.3	40
	0819	0.4	12
	1437	1.1	34
	1952	0.6	18
8 Tu	0215	1.2	37
	0901	0.4	12
	1536	1.1	34
	2037	0.7	21
9 W	0246	1.2	37
	0939	0.3	9
	1630	1.2	37
	2120	0.7	21
10 Th	0314	1.2	37
	1016	0.2	6
	1719	1.2	37
	2201	0.8	24
11 F ●	0341	1.2	37
	1052	0.2	6
	1801	1.2	37
	2241	0.9	27
12 Sa	0408	1.2	37
	1130	0.1	3
	1840	1.2	37
	2321	0.9	27
13 Su	0438	1.2	37
	1210	0.0	0
	1917	1.2	37
14 M	0002	0.9	27
	0516	1.3	40
	1252	0.0	0
	1956	1.2	37
15 Tu	0047	0.9	27
	0605	1.3	40
	1337	0.0	0
	2036	1.3	40

	Time	Height	
	h m	ft	cm
16 W	0137	0.8	24
	0704	1.3	40
	1424	−0.1	−3
	2117	1.3	40
17 Th	0232	0.8	24
	0809	1.3	40
	1512	0.0	0
	2200	1.3	40
18 F ◐	0332	0.7	21
	0919	1.3	40
	1601	0.0	0
	2243	1.4	43
19 Sa	0435	0.6	18
	1032	1.3	40
	1652	0.1	3
	2327	1.4	43
20 Su	0538	0.4	12
	1146	1.2	37
	1745	0.2	6
21 M	0012	1.4	43
	0642	0.3	9
	1301	1.2	37
	1839	0.4	12
22 Tu	0058	1.4	43
	0744	0.2	6
	1415	1.2	37
	1934	0.5	15
23 W	0146	1.5	46
	0843	0.0	0
	1526	1.2	37
	2031	0.6	18
24 Th	0237	1.4	43
	0941	0.0	0
	1632	1.3	40
	2128	0.7	21
25 F ○	0329	1.4	43
	1035	−0.1	−3
	1732	1.3	40
	2225	0.8	24
26 Sa	0423	1.4	43
	1127	−0.1	−3
	1826	1.3	40
	2320	0.8	24
27 Su	0518	1.4	43
	1217	−0.1	−3
	1915	1.3	40
28 M	0015	0.8	24
	0613	1.4	43
	1304	−0.1	−3
	1959	1.3	40
29 Tu	0108	0.7	21
	0707	1.3	40
	1350	0.0	0
	2042	1.3	40
30 W	0202	0.7	21
	0801	1.3	40
	1434	0.1	3
	2123	1.3	40
31 Th	0257	0.7	21
	0856	1.3	40
	1517	0.1	3
	2203	1.3	40

Time meridian 135° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.
Heights are referred to mean low water which is the chart datum of soundings.

Cape Krusenstern, Alaska, 2015

Times and Heights of High and Low Waters

January

	Time	Height	
	h m	ft	cm
1 Th	0139	0.0	0
	0750	0.2	6
	1015	0.1	3
	1849	0.5	15
2 F	0216	0.0	0
	0856	0.2	6
	1148	0.1	3
	1920	0.5	15
3 Sa	0255	0.0	0
	0954	0.3	9
	1321	0.2	6
	1936	0.4	12
4 Su ○	0331	0.0	0
	1041	0.4	12
	1530	0.3	9
	2008	0.4	12
5 M	0403	−0.1	−3
	1123	0.4	12
	1656	0.2	6
	2056	0.3	9
6 Tu	0432	−0.1	−3
	1206	0.5	15
	1759	0.2	6
	2143	0.3	9
7 W	0500	−0.1	−3
	1250	0.5	15
	1912	0.2	6
	2220	0.3	9
8 Th	0527	−0.1	−3
	1333	0.6	18
	2016	0.1	3
	2253	0.2	6
9 F	0553	−0.1	−3
	1413	0.6	18
	2106	0.1	3
	2328	0.2	6
10 Sa	0619	−0.1	−3
	1450	0.6	18
	2159	0.1	3
11 Su	0008	0.2	6
	0647	0.0	0
	1524	0.6	18
12 M	0718	0.0	0
	1558	0.6	18
13 Tu ◑	0752	0.0	0
	1626	0.5	15
14 W	0429	0.1	3
	0613	0.1	3
	0828	0.0	0
	1618	0.5	15
15 Th	0120	0.0	0
	0716	0.1	3
	0907	0.1	3
	1646	0.5	15

	Time	Height	
	h m	ft	cm
16 F	0143	0.1	3
	1728	0.4	12
17 Sa	0202	0.0	0
	0914	0.2	6
	1127	0.1	3
	1810	0.4	12
18 Su	0225	0.0	0
	1001	0.3	9
	1311	0.2	6
	1851	0.4	12
19 M	0255	0.0	0
	1040	0.4	12
	1537	0.2	6
	1933	0.3	9
20 Tu ●	0328	0.0	0
	1117	0.5	15
	1658	0.2	6
	2022	0.3	9
21 W	0401	−0.1	−3
	1156	0.5	15
	1754	0.2	6
	2119	0.3	9
22 Th	0433	−0.1	−3
	1237	0.6	18
	1856	0.1	3
	2210	0.2	6
23 F	0506	−0.1	−3
	1320	0.6	18
	1953	0.1	3
	2255	0.2	6
24 Sa	0540	−0.1	−3
	1401	0.6	18
	2038	0.1	3
	2342	0.2	6
25 Su	0619	−0.1	−3
	1438	0.6	18
	2118	0.1	3
26 M ◐	0037	0.2	6
	0702	−0.1	−3
	1513	0.6	18
	2203	0.1	3
27 Tu	0143	0.2	6
	0747	0.0	0
	1545	0.6	18
	2300	0.1	3
28 W	0243	0.2	6
	0831	0.0	0
	1616	0.5	15
	2355	0.1	3
29 Th	0609	0.2	6
	0916	0.1	3
	1655	0.5	15
30 F	0038	0.1	3
	0717	0.2	6
	1014	0.1	3
	1815	0.4	12
31 Sa	0117	0.0	0
	0821	0.3	9
	1203	0.2	6
	1900	0.4	12

February

	Time	Height	
	h m	ft	cm
1 Su	0158	0.0	0
	0923	0.4	12
	1341	0.3	9
	1911	0.4	12
2 M	0245	0.0	0
	1014	0.4	12
	1609	0.2	6
	2120	0.3	9
3 Tu ○	0329	0.0	0
	1057	0.5	15
	1711	0.2	6
	2216	0.3	9
4 W	0406	0.0	0
	1138	0.5	15
	1801	0.2	6
	2301	0.3	9
5 Th	0438	0.0	0
	1219	0.5	15
	1855	0.1	3
	2343	0.2	6
6 F	0506	0.0	0
	1301	0.6	18
	1946	0.1	3
7 Sa	0030	0.2	6
	0534	0.0	0
	1341	0.6	18
	2028	0.1	3
	2341	0.2	6
8 Su	0601	0.0	0
	1419	0.6	18
	2104	0.1	3
9 M	0214	0.2	6
	0631	0.0	0
	1451	0.6	18
	2139	0.1	3
10 Tu	0109	0.2	6
	0704	0.0	0
	1516	0.5	15
	2216	0.1	3
11 W ◑	0158	0.2	6
	0742	0.1	3
	1511	0.5	15
	2259	0.1	3
12 Th	0520	0.2	6
	0822	0.1	3
	1523	0.5	15
	2338	0.1	3
13 F	0631	0.2	6
	0905	0.1	3
	1550	0.4	12
14 Sa	0008	0.1	3
	0727	0.2	6
	1002	0.1	3
	1628	0.4	12
15 Su	0037	0.1	3
	0822	0.3	9
	1155	0.2	6
	1718	0.3	9

	Time	Height	
	h m	ft	cm
16 M	0108	0.1	3
	0916	0.4	12
	1343	0.2	6
	1814	0.3	9
17 Tu	0144	0.0	0
	1002	0.4	12
	1617	0.2	6
	1906	0.3	9
18 W ●	0230	0.0	0
	1043	0.5	15
	1704	0.1	3
	2004	0.2	6
19 Th	0322	0.0	0
	1122	0.5	15
	1742	0.1	3
	2120	0.2	6
20 F	0408	0.0	0
	1202	0.6	18
	1822	0.1	3
	2223	0.2	6
21 Sa	0448	−0.1	−3
	1244	0.6	18
	1904	0.1	3
	2309	0.2	6
22 Su	0528	−0.1	−3
	1326	0.6	18
	1945	0.1	3
	2359	0.2	6
23 M	0611	0.0	0
	1405	0.6	18
	2023	0.1	3
24 Tu	0110	0.2	6
	0658	0.0	0
	1439	0.5	15
	2100	0.1	3
25 W ◐	0233	0.3	9
	0748	0.0	0
	1505	0.5	15
	2138	0.1	3
26 Th	0353	0.3	9
	0837	0.1	3
	1520	0.5	15
	2224	0.1	3
27 F	0533	0.3	9
	0929	0.1	3
	1544	0.4	12
	2319	0.1	3
28 Sa	0643	0.3	9
	1051	0.2	6
	1620	0.3	9

March

	Time	Height	
	h m	ft	cm
1 Su	0012	0.1	3
	0743	0.4	12
	1240	0.2	6
	1912	0.3	9
2 M	0059	0.0	0
	0842	0.4	12
	1446	0.2	6
	2019	0.3	9
3 Tu	0145	0.0	0
	0936	0.4	12
	1619	0.2	6
	2126	0.3	9
4 W	0239	0.0	0
	1022	0.5	15
	1704	0.2	6
	2220	0.3	9
5 Th ○	0331	0.0	0
	1103	0.5	15
	1742	0.1	3
	2306	0.3	9
6 F	0412	0.0	0
	1142	0.5	15
	1819	0.1	3
	2351	0.3	9
7 Sa	0445	0.0	0
	1222	0.5	15
	1857	0.1	3
8 Su	0038	0.2	6
	0516	0.0	0
	1302	0.5	15
	1933	0.1	3
9 M	0127	0.2	6
	0547	0.0	0
	1340	0.5	15
	2002	0.1	3
10 Tu	0210	0.2	6
	0621	0.1	3
	1412	0.5	15
	2028	0.1	3
11 W	0248	0.2	6
	0702	0.1	3
	1421	0.5	15
	2052	0.1	3
12 Th	0320	0.3	9
	0747	0.1	3
	1417	0.4	12
	2115	0.1	3
13 F ◑	0252	0.3	9
	0833	0.1	3
	1439	0.4	12
	2140	0.1	3
14 Sa	0540	0.3	9
	0925	0.2	6
	1506	0.3	9
	2210	0.1	3
15 Su	0640	0.3	9
	1057	0.2	6
	1538	0.3	9
	2253	0.1	3

	Time	Height	
	h m	ft	cm
16 M	0732	0.4	12
	1253	0.1	3
	1622	0.2	6
	2347	0.1	3
17 Tu	0824	0.4	12
	1530	0.1	3
	1741	0.2	6
18 W	0038	0.1	3
	0917	0.5	15
	1622	0.1	3
	2123	0.2	6
19 Th	0131	0.0	0
	1003	0.5	15
	1651	0.1	3
	2214	0.2	6
20 F ●	0235	0.0	0
	1044	0.5	15
	1717	0.1	3
	2256	0.2	6
21 Sa	0341	0.0	0
	1122	0.5	15
	1744	0.1	3
	2336	0.3	9
22 Su	0432	0.0	0
	1200	0.5	15
	1816	0.1	3
23 M	0023	0.3	9
	0518	0.0	0
	1240	0.5	15
	1851	0.0	0
24 Tu	0117	0.3	9
	0606	0.0	0
	1320	0.5	15
	1929	0.0	0
25 W	0208	0.3	9
	0700	0.1	3
	1353	0.5	15
	2006	0.0	0
26 Th ◐	0257	0.4	12
	0758	0.1	3
	1412	0.4	12
	2041	0.0	0
27 F	0350	0.4	12
	0854	0.1	3
	1432	0.4	12
	2117	0.0	0
28 Sa	0459	0.4	12
	1000	0.2	6
	1500	0.3	9
	2156	0.0	0
29 Su	0607	0.4	12
	1152	0.2	6
	1758	0.2	6
	2246	0.1	3
30 M	0704	0.4	12
	1331	0.1	3
	1912	0.2	6
	2347	0.1	3
31 Tu	0757	0.5	15
	1509	0.1	3
	2019	0.2	6

Time meridian 135° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.
Heights are referred to mean lower low water which is the chart datum of soundings.

Cape Krusenstern, Alaska, 2015

Times and Heights of High and Low Waters

April

	Time	Height	
	h m	ft	cm
1 W	0041	0.1	3
	0850	0.5	15
	1608	0.1	3
	2123	0.2	6
2 Th	0132	0.1	3
	0939	0.5	15
	1644	0.1	3
	2217	0.2	6
3 F	0232	0.1	3
	1022	0.5	15
	1714	0.1	3
	2302	0.3	9
4 Sa ○	0334	0.1	3
	1100	0.5	15
	1741	0.0	0
	2345	0.3	9
5 Su	0421	0.1	3
	1137	0.5	15
	1806	0.0	0
6 M	0030	0.3	9
	0459	0.1	3
	1211	0.5	15
	1831	0.0	0
7 Tu	0115	0.3	9
	0537	0.1	3
	1241	0.4	12
	1857	0.0	0
8 W	0158	0.3	9
	0620	0.1	3
	1232	0.4	12
	1922	0.0	0
9 Th	0237	0.3	9
	0713	0.1	3
	1249	0.4	12
	1946	0.0	0
10 F	0313	0.4	12
	0810	0.2	6
	1319	0.3	9
	2008	0.0	0
11 Sa ◑	0349	0.4	12
	0906	0.2	6
	1352	0.3	9
	2031	0.0	0
12 Su	0447	0.4	12
	1023	0.1	3
	1424	0.2	6
	2059	0.0	0
13 M	0554	0.4	12
	1244	0.1	3
	1456	0.2	6
	2135	0.1	3
14 Tu	0647	0.5	15
	1817	0.1	3
	1915	0.1	3
	2224	0.0	0
15 W	0735	0.5	15
	1836	0.1	3
	2021	0.1	3
	2333	0.0	0

	Time	Height	
	h m	ft	cm
16 Th	0825	0.5	15
	1603	0.1	3
	2123	0.2	6
17 F	0040	0.1	3
	0915	0.5	15
	1626	0.1	3
	2213	0.2	6
18 Sa ●	0148	0.1	3
	1001	0.5	15
	1647	0.0	0
	2257	0.3	9
19 Su	0310	0.1	3
	1039	0.5	15
	1710	0.0	0
	2339	0.3	9
20 M	0418	0.1	3
	1112	0.5	15
	1736	0.0	0
21 Tu	0026	0.3	9
	0511	0.1	3
	1138	0.5	15
	1807	0.0	0
22 W	0116	0.4	12
	0605	0.1	3
	1158	0.4	12
	1840	0.0	0
23 Th	0205	0.4	12
	0709	0.1	3
	1226	0.4	12
	1916	0.0	0
24 F	0250	0.5	15
	0816	0.2	6
	1302	0.3	9
	1951	0.0	0
25 Sa ◐	0337	0.5	15
	0920	0.2	6
	1341	0.3	9
	2024	0.0	0
26 Su	0430	0.5	15
	1058	0.1	3
	1418	0.2	6
	2055	0.0	0
27 M	0531	0.5	15
	1243	0.1	3
	1749	0.2	6
	2127	0.1	3
28 Tu	0625	0.5	15
	1658	0.1	3
	1904	0.2	6
	2207	0.1	3
29 W	0714	0.5	15
	1456	0.1	3
	2010	0.2	6
	2307	0.1	3
30 Th	0801	0.5	15
	1545	0.1	3
	2115	0.2	6

May

	Time	Height	
	h m	ft	cm
1 F	0016	0.1	3
	0849	0.5	15
	1618	0.0	0
	2209	0.2	6
2 Sa	0115	0.1	3
	0934	0.5	15
	1644	0.0	0
	2253	0.3	9
3 Su ○	0230	0.2	6
	1014	0.5	15
	1704	0.0	0
	2334	0.3	9
4 M	0349	0.2	6
	1046	0.5	15
	1723	0.0	0
5 Tu	0016	0.3	9
	0443	0.2	6
	1100	0.4	12
	1742	0.0	0
6 W	0059	0.4	12
	0531	0.2	6
	1058	0.4	12
	1803	0.0	0
7 Th	0142	0.4	12
	0626	0.2	6
	1120	0.3	9
	1825	0.0	0
8 F	0221	0.4	12
	0735	0.2	6
	1149	0.3	9
	1848	0.0	0
9 Sa	0257	0.5	15
	0842	0.2	6
	1222	0.3	9
	1913	0.0	0
10 Su	0333	0.5	15
	0953	0.1	3
	1300	0.2	6
	1943	0.0	0
11 M ◑	0414	0.5	15
	2017	0.0	0
12 Tu	0510	0.5	15
	2054	0.0	0
13 W	0605	0.5	15
	1740	0.1	3
	1905	0.1	3
	2138	0.0	0
14 Th	0651	0.5	15
	1455	0.0	0
	2009	0.1	3
	2238	0.0	0
15 F	0734	0.5	15
	1527	0.0	0
	2112	0.2	6
	2356	0.1	3

	Time	Height	
	h m	ft	cm
16 Sa	0818	0.5	15
	1552	0.0	0
	2204	0.2	6
17 Su ●	0110	0.1	3
	0906	0.5	15
	1614	0.0	0
	2249	0.3	9
18 M	0239	0.2	6
	0947	0.5	15
	1638	0.0	0
	2333	0.4	12
19 Tu	0408	0.2	6
	1013	0.4	12
	1704	−0.1	−3
20 W	0019	0.4	12
	0510	0.2	6
	1032	0.4	12
	1732	−0.1	−3
21 Th	0107	0.5	15
	0612	0.2	6
	1058	0.4	12
	1802	−0.1	−3
22 F	0154	0.5	15
	0730	0.2	6
	1129	0.3	9
	1834	−0.1	−3
23 Sa	0238	0.5	15
	0844	0.2	6
	1204	0.3	9
	1907	−0.1	−3
24 Su	0320	0.6	18
	0958	0.1	3
	1247	0.2	6
	1939	0.0	0
25 M ◐	0404	0.6	18
	2010	0.0	0
26 Tu	0454	0.6	18
	1626	0.1	3
	1728	0.1	3
	2040	0.0	0
27 W	0546	0.6	18
	1638	0.0	0
	1847	0.1	3
	2111	0.0	0
28 Th	0633	0.5	15
	1426	0.0	0
29 F	0714	0.5	15
	1511	0.0	0
30 Sa	0753	0.5	15
	1544	0.0	0
	2156	0.2	6
31 Su	0009	0.1	3
	0832	0.5	15
	1608	0.0	0
	2238	0.3	9

June

	Time	Height	
	h m	ft	cm
1 M	0121	0.2	6
	0903	0.5	15
	1626	0.0	0
	2317	0.3	9
2 Tu ○	0312	0.2	6
	0855	0.4	12
	1642	0.0	0
	2356	0.4	12
3 W	0432	0.2	6
	0928	0.4	12
	1701	−0.1	−3
4 Th	0037	0.4	12
	0531	0.2	6
	1001	0.3	9
	1721	−0.1	−3
5 F	0119	0.5	15
	0640	0.2	6
	1034	0.3	9
	1742	−0.1	−3
6 Sa	0200	0.5	15
	0806	0.2	6
	1106	0.3	9
	1807	−0.1	−3
7 Su	0237	0.6	18
	0914	0.1	3
	1138	0.2	6
	1836	−0.1	−3
8 M	0313	0.6	18
	1911	−0.1	−3
9 Tu ◑	0350	0.6	18
	1950	0.0	0
10 W	0432	0.6	18
	2030	0.0	0
11 Th	0524	0.6	18
	1711	0.1	3
	1842	0.1	3
	2113	0.0	0
12 F	0612	0.6	18
	1402	0.0	0
	1946	0.1	3
	2205	0.0	0
13 Sa	0650	0.5	15
	1435	0.0	0
	2051	0.2	6
	2322	0.1	3
14 Su	0718	0.5	15
	1508	0.0	0
	2149	0.3	9
15 M	0046	0.2	6
	0741	0.5	15
	1538	0.0	0
	2236	0.3	9

	Time	Height	
	h m	ft	cm
16 Tu	0221	0.2	6
	0815	0.4	12
	1607	−0.1	−3
●	2320	0.4	12
17 W	0410	0.2	6
	0858	0.4	12
	1635	−0.1	−3
18 Th	0004	0.5	15
	0520	0.2	6
	0942	0.3	9
	1704	−0.1	−3
19 F	0051	0.5	15
	0632	0.2	6
	1019	0.3	9
	1733	−0.1	−3
20 Sa	0136	0.6	18
	0758	0.2	6
	1054	0.3	9
	1802	−0.1	−3
21 Su	0219	0.6	18
	0902	0.1	3
	1129	0.2	6
	1832	−0.1	−3
22 M	0258	0.6	18
	1005	0.1	3
	1209	0.2	6
	1904	0.0	0
23 Tu	0338	0.6	18
	1935	0.0	0
24 W ◐	0419	0.6	18
	1606	0.1	3
	1652	0.1	3
	2007	0.0	0
25 Th	0504	0.6	18
	1621	0.1	3
	1820	0.1	3
	2040	0.0	0
26 F	0550	0.5	15
	1345	0.0	0
27 Sa	0629	0.5	15
	1421	0.0	0
28 Su	0650	0.5	15
	1454	0.0	0
29 M	0645	0.5	15
	1518	0.0	0
	2214	0.3	9
30 Tu	0050	0.2	6
	0713	0.4	12
	1537	0.0	0
	2253	0.3	9

Time meridian 135° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.
Heights are referred to mean lower low water which is the chart datum of soundings.

Cape Krusenstern, Alaska, 2015

Times and Heights of High and Low Waters

July

	Time	Height	
	h m	ft	cm
1 W ○	0248	0.3	9
	0748	0.4	12
	1558	0.0	0
	2330	0.4	12
2 Th	0434	0.2	6
	0831	0.3	9
	1621	−0.1	−3
3 F	0009	0.5	15
	0539	0.2	6
	0918	0.3	9
	1646	−0.1	−3
4 Sa	0051	0.5	15
	0655	0.2	6
	1002	0.3	9
	1711	−0.1	−3
5 Su	0132	0.6	18
	0812	0.1	3
	1042	0.2	6
	1740	−0.1	−3
6 M	0212	0.6	18
	0903	0.1	3
	1122	0.2	6
	1813	−0.1	−3
7 Tu	0249	0.6	18
	0955	0.1	3
	1208	0.2	6
	1852	−0.1	−3
8 W ◑	0324	0.6	18
	1101	0.0	0
	1311	0.1	3
	1935	0.0	0
9 Th	0358	0.6	18
	1157	0.0	0
	1416	0.1	3
	2018	0.0	0
10 F	0437	0.6	18
	1234	0.0	0
	1809	0.1	3
	2102	0.0	0
11 Sa	0526	0.5	15
	1306	0.1	3
	1917	0.2	6
	2152	0.1	3
12 Su	0609	0.5	15
	1337	0.0	0
	2021	0.2	6
	2309	0.1	3
13 M	0633	0.5	15
	1414	0.0	0
	2123	0.3	9
14 Tu	0047	0.2	6
	0658	0.4	12
	1454	0.0	0
	2215	0.4	12
15 W ●	0235	0.3	9
	0733	0.4	12
	1533	−0.1	−3
	2300	0.4	12

	Time	Height	
	h m	ft	cm
16 Th	0432	0.2	6
	0817	0.3	9
	1608	−0.1	−3
	2343	0.5	15
17 F	0537	0.2	6
	0913	0.3	9
	1640	−0.1	−3
18 Sa	0026	0.5	15
	0645	0.2	6
	1003	0.3	9
	1710	−0.1	−3
19 Su	0111	0.6	18
	0753	0.1	3
	1042	0.2	6
	1739	−0.1	−3
20 M	0153	0.6	18
	0844	0.1	3
	1119	0.2	6
	1808	−0.1	−3
21 Tu	0232	0.6	18
	0931	0.1	3
	1201	0.2	6
	1838	0.0	0
22 W	0308	0.6	18
	1025	0.0	0
	1255	0.1	3
	1911	0.0	0
23 Th ◐	0343	0.6	18
	1129	0.0	0
	1354	0.1	3
	1946	0.0	0
24 F	0415	0.5	15
	1216	0.0	0
	1741	0.1	3
	2021	0.0	0
25 Sa	0421	0.5	15
	1250	0.1	3
	1848	0.2	6
	2100	0.1	3
26 Su	0429	0.5	15
	1314	0.1	3
	1946	0.2	6
	2147	0.1	3
27 M	0505	0.4	12
	1335	0.1	3
	2044	0.2	6
	2308	0.1	3
28 Tu	0549	0.4	12
	1358	0.0	0
	2136	0.3	9
29 W	0055	0.2	6
	0631	0.4	12
	1428	0.0	0
	2219	0.4	12
30 Th	0309	0.2	6
	0712	0.3	9
	1503	0.0	0
	2258	0.4	12
31 F ○	0448	0.2	6
	0757	0.3	9
	1539	0.0	0
	2336	0.5	15

August

	Time	Height	
	h m	ft	cm
1 Sa	0541	0.2	6
	0853	0.3	9
	1614	−0.1	−3
2 Su	0016	0.5	15
	0635	0.1	3
	0950	0.2	6
	1647	−0.1	−3
3 M	0058	0.6	18
	0732	0.1	3
	1038	0.2	6
	1721	−0.1	−3
4 Tu	0140	0.6	18
	0816	0.1	3
	1124	0.2	6
	1759	−0.1	−3
5 W	0218	0.6	18
	0854	0.1	3
	1216	0.2	6
	1841	−0.1	−3
6 Th ◑	0253	0.6	18
	0931	0.1	3
	1322	0.2	6
	1928	0.0	0
7 F	0323	0.6	18
	1015	0.1	3
	1425	0.2	6
	2015	0.0	0
8 Sa	0345	0.5	15
	1108	0.1	3
	1557	0.2	6
	2102	0.1	3
9 Su	0408	0.5	15
	1158	0.1	3
	1845	0.2	6
	2158	0.1	3
10 M	0447	0.4	12
	1240	0.0	0
	1947	0.3	9
	2339	0.2	6
11 Tu	0550	0.4	12
	1320	0.0	0
	2048	0.4	12
12 W	0115	0.2	6
	0643	0.3	9
	1404	0.0	0
	2144	0.4	12
13 Th	0335	0.2	6
	0852	0.3	9
	1453	0.0	0
	2231	0.5	15
14 F ●	0449	0.2	6
	0956	0.3	9
	1539	0.0	0
	2313	0.5	15
15 Sa	0537	0.2	6
	1046	0.3	9
	1617	0.0	0
	2355	0.5	15

	Time	Height	
	h m	ft	cm
16 Su	0626	0.1	3
	1130	0.2	6
	1650	0.0	0
17 M	0037	0.6	18
	0716	0.1	3
	1218	0.2	6
	1720	0.0	0
18 Tu	0119	0.6	18
	0801	0.1	3
	1315	0.2	6
	1750	0.0	0
19 W	0159	0.6	18
	0838	0.1	3
	1406	0.2	6
	1821	0.0	0
20 Th	0234	0.5	15
	0911	0.1	3
	1450	0.2	6
	1856	0.0	0
21 F	0304	0.5	15
	0943	0.1	3
	1534	0.2	6
	1935	0.1	3
22 Sa ◐	0311	0.5	15
	1018	0.1	3
	1650	0.2	6
	2016	0.1	3
23 Su	0310	0.4	12
	1058	0.1	3
	1805	0.2	6
	2100	0.1	3
24 M	0333	0.4	12
	1137	0.1	3
	1902	0.3	9
	2156	0.2	6
25 Tu	0406	0.4	12
	1210	0.1	3
	1954	0.3	9
	2355	0.2	6
26 W	0452	0.3	9
	1242	0.1	3
	2047	0.4	12
27 Th	0133	0.2	6
	0552	0.3	9
	1317	0.1	3
	2136	0.4	12
28 F	0405	0.1	3
	0649	0.2	6
	1358	0.0	0
	2219	0.5	15
29 Sa ○	0451	0.1	3
	0745	0.2	6
	1450	0.0	0
	2258	0.5	15
30 Su	0525	0.1	3
	0901	0.2	6
	1542	0.0	0
	2337	0.5	15
31 M	0558	0.1	3
	1019	0.2	6
	1626	0.0	0

September

	Time	Height	
	h m	ft	cm
1 Tu	0016	0.6	18
	0634	0.1	3
	1059	0.2	6
	1707	0.0	0
2 W	0058	0.6	18
	0714	0.1	3
	1144	0.3	9
	1749	0.0	0
3 Th	0138	0.5	15
	0753	0.1	3
	1249	0.3	9
	1836	0.0	0
4 F	0214	0.5	15
	0829	0.1	3
	1424	0.3	9
	1929	0.0	0
5 Sa ◑	0239	0.5	15
	0906	0.1	3
	1524	0.3	9
	2023	0.1	3
6 Su	0256	0.4	12
	0945	0.1	3
	1655	0.3	9
	2118	0.1	3
7 M	0320	0.4	12
	1033	0.1	3
	1812	0.3	9
	2237	0.2	6
8 Tu	0354	0.3	9
	1131	0.1	3
	1912	0.4	12
9 W	0028	0.2	6
	0652	0.3	9
	1224	0.1	3
	2009	0.4	12
10 Th	0211	0.2	6
	0757	0.3	9
	1311	0.1	3
	2105	0.4	12
11 F	0354	0.2	6
	0904	0.3	9
	1402	0.1	3
	2154	0.5	15
12 Sa ●	0443	0.1	3
	1002	0.3	9
	1459	0.1	3
	2238	0.5	15
13 Su	0520	0.1	3
	1050	0.3	9
	1549	0.0	0
	2317	0.5	15
14 M	0554	0.1	3
	1135	0.3	9
	1629	0.0	0
	2356	0.5	15
15 Tu	0628	0.1	3
	1221	0.3	9
	1703	0.1	3

	Time	Height	
	h m	ft	cm
16 W	0036	0.5	15
	0702	0.1	3
	1310	0.3	9
	1736	0.1	3
17 Th	0116	0.5	15
	0734	0.1	3
	1357	0.3	9
	1811	0.1	3
18 F	0151	0.5	15
	0803	0.1	3
	1439	0.3	9
	1852	0.1	3
19 Sa	0208	0.4	12
	0828	0.1	3
	1519	0.3	9
	1941	0.1	3
20 Su ◐	0157	0.4	12
	0852	0.1	3
	1605	0.3	9
	2030	0.2	6
21 M	0219	0.4	12
	0914	0.1	3
	1715	0.3	9
	2125	0.2	6
22 Tu	0246	0.3	9
	0939	0.1	3
	1817	0.3	9
	2305	0.2	6
23 W	0317	0.3	9
	1013	0.1	3
	1908	0.4	12
24 Th	0104	0.1	3
	0354	0.2	6
	1105	0.1	3
	1957	0.4	12
25 F	0702	0.2	6
	0808	0.2	6
	1204	0.1	3
	2047	0.5	15
26 Sa	0409	0.1	3
	0912	0.2	6
	1258	0.1	3
	2135	0.5	15
27 Su ○	0436	0.1	3
	1002	0.2	6
	1356	0.1	3
	2217	0.5	15
28 M	0459	0.1	3
	1044	0.2	6
	1506	0.0	0
	2255	0.5	15
29 Tu	0522	0.1	3
	1123	0.3	9
	1606	0.0	0
	2330	0.5	15
30 W	0549	0.0	0
	1205	0.3	9
	1655	0.0	0

Time meridian 135° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.
Heights are referred to mean lower low water which is the chart datum of soundings.

Cape Krusenstern, Alaska, 2015

Times and Heights of High and Low Waters

October

	Time	Height	
	h m	ft	cm
1 Th	0003	0.5	15
	0620	0.0	0
	1255	0.3	9
	1743	0.1	3
2 F	0034	0.5	15
	0656	0.0	0
	1348	0.4	12
	1837	0.1	3
3 Sa	0103	0.4	12
	0733	0.0	0
	1437	0.4	12
	1939	0.1	3
4 Su ◑	0132	0.4	12
	0810	0.0	0
	1527	0.4	12
	2041	0.1	3
5 M	0203	0.3	9
	0846	0.0	0
	1628	0.4	12
	2148	0.2	6
6 Tu	0235	0.3	9
	0922	0.0	0
	1737	0.4	12
	2343	0.1	3
7 W	0311	0.2	6
	1005	0.1	3
	1837	0.5	15
8 Th	0119	0.1	3
	0651	0.2	6
	1104	0.1	3
	1929	0.5	15
9 F	0241	0.1	3
	0757	0.2	6
	1209	0.1	3
	2021	0.5	15
10 Sa	0345	0.1	3
	0902	0.2	6
	1304	0.1	3
	2111	0.5	15
11 Su	0424	0.1	3
	0959	0.2	6
	1401	0.1	3
	2157	0.5	15
12 M ●	0455	0.0	0
	1046	0.3	9
	1508	0.1	3
	2237	0.5	15
13 Tu	0521	0.0	0
	1129	0.3	9
	1603	0.1	3
	2313	0.5	15
14 W	0545	0.0	0
	1213	0.3	9
	1646	0.1	3
	2345	0.5	15
15 Th	0608	0.0	0
	1258	0.3	9
	1725	0.1	3

	Time	Height	
	h m	ft	cm
16 F	0007	0.4	12
	0632	0.0	0
	1343	0.3	9
	1808	0.2	6
	2357	0.4	12
17 Sa	0657	0.0	0
	1424	0.4	12
	1902	0.2	6
18 Su	0018	0.4	12
	0721	0.0	0
	1502	0.4	12
	2004	0.2	6
19 M	0049	0.3	9
	0743	0.0	0
	1540	0.4	12
	2103	0.2	6
20 Tu ◐	0123	0.3	9
	0806	0.0	0
	1627	0.4	12
	2227	0.1	3
21 W	0158	0.2	6
	0833	0.0	0
	1730	0.5	15
22 Th	0905	0.0	0
	1824	0.5	15
23 F	0551	0.1	3
	0705	0.1	3
	0947	0.0	0
	1910	0.5	15
24 Sa	1048	0.1	3
	1955	0.5	15
25 Su	0351	0.1	3
	0907	0.2	6
	1203	0.1	3
	2043	0.5	15
26 M	0411	0.1	3
	0958	0.2	6
	1311	0.1	3
	2129	0.5	15
27 Tu ○	0429	0.0	0
	1041	0.2	6
	1427	0.1	3
	2209	0.5	15
28 W	0449	0.0	0
	1122	0.3	9
	1548	0.1	3
	2238	0.5	15
29 Th	0513	0.0	0
	1205	0.4	12
	1648	0.1	3
	2258	0.5	15
30 F	0540	0.0	0
	1253	0.4	12
	1742	0.1	3
	2320	0.4	12
31 Sa	0611	−0.1	−3
	1343	0.4	12
	1844	0.2	6
	2349	0.4	12

November

	Time	Height	
	h m	ft	cm
1 Su	0645	−0.1	−3
	1429	0.5	15
	1956	0.2	6
2 M	0025	0.3	9
	0721	0.0	0
	1515	0.5	15
	2105	0.2	6
3 Tu ◑	0107	0.3	9
	0756	0.0	0
	1604	0.5	15
	2237	0.1	3
4 W	0151	0.2	6
	0830	0.0	0
	1702	0.5	15
5 Th	0029	0.1	3
	0233	0.2	6
	0903	0.0	0
	1800	0.5	15
6 F	0446	0.1	3
	0641	0.1	3
	0939	0.0	0
	1850	0.5	15
7 Sa	0232	0.1	3
	0748	0.2	6
	1030	0.1	3
	1937	0.5	15
8 Su	0323	0.0	0
	0854	0.2	6
	1148	0.1	3
	2023	0.5	15
9 M	0359	0.0	0
	0952	0.2	6
	1254	0.1	3
	2110	0.5	15
10 Tu	0427	0.0	0
	1038	0.3	9
	1403	0.2	6
	2152	0.5	15
11 W ●	0449	0.0	0
	1119	0.3	9
	1530	0.2	6
	2226	0.5	15
12 Th	0507	0.0	0
	1159	0.3	9
	1631	0.2	6
	2243	0.4	12
13 F	0526	0.0	0
	1242	0.4	12
	1720	0.2	6
	2237	0.4	12
14 Sa	0545	0.0	0
	1325	0.4	12
	1813	0.2	6
	2257	0.3	9
15 Su	0606	0.0	0
	1406	0.5	15
	1924	0.2	6
	2324	0.3	9

	Time	Height	
	h m	ft	cm
16 M	0626	0.0	0
	1443	0.5	15
	2036	0.2	6
	2353	0.3	9
17 Tu	0649	0.0	0
	1519	0.5	15
	2151	0.1	3
18 W ◐	0023	0.2	6
	0717	0.0	0
	1556	0.5	15
19 Th	0751	0.0	0
	1642	0.5	15
20 F	0827	0.0	0
	1738	0.5	15
21 Sa	0908	0.0	0
	1827	0.5	15
22 Su	0537	0.0	0
	0750	0.1	3
	0958	0.0	0
	1907	0.5	15
23 M	0312	0.0	0
	0852	0.1	3
	1112	0.0	0
	1943	0.5	15
24 Tu	0334	0.0	0
	0946	0.2	6
	1234	0.1	3
	2017	0.5	15
25 W ○	0355	0.0	0
	1031	0.3	9
	1354	0.2	6
	2055	0.5	15
26 Th	0417	0.0	0
	1113	0.3	9
	1537	0.2	6
	2130	0.4	12
27 F	0442	−0.1	−3
	1157	0.4	12
	1648	0.2	6
	2201	0.4	12
28 Sa	0509	−0.1	−3
	1243	0.5	15
	1749	0.2	6
	2233	0.4	12
29 Su	0539	−0.1	−3
	1331	0.5	15
	1903	0.2	6
	2305	0.3	9
30 M	0609	−0.1	−3
	1416	0.6	18
	2022	0.2	6
	2340	0.3	9

December

	Time	Height	
	h m	ft	cm
1 Tu	0642	−0.1	−3
	1458	0.6	18
	2132	0.1	3
2 W ◑	0019	0.2	6
	0716	−0.1	−3
	1541	0.6	18
3 Th	0750	0.0	0
	1628	0.6	18
4 F	0822	0.0	0
	1721	0.6	18
5 Sa	0426	0.1	3
	0620	0.1	3
	0854	0.0	0
	1811	0.6	18
6 Su	0203	0.0	0
	0728	0.1	3
	0930	0.0	0
	1855	0.5	15
7 M	0248	0.0	0
	1935	0.5	15
8 Tu	0325	0.0	0
	0938	0.2	6
	1142	0.1	3
	2014	0.5	15
9 W	0353	0.0	0
	1024	0.3	9
	1303	0.2	6
	2051	0.5	15
10 Th	0414	0.0	0
	1102	0.3	9
	1451	0.2	6
	2036	0.4	12
11 F ●	0431	−0.1	−3
	1141	0.4	12
	1624	0.3	9
	2107	0.4	12
12 Sa	0449	−0.1	−3
	1220	0.4	12
	1723	0.2	6
	2142	0.3	9
13 Su	0508	−0.1	−3
	1302	0.5	15
	1829	0.2	6
	2216	0.3	9
14 M	0528	−0.1	−3
	1342	0.5	15
	1955	0.2	6
	2248	0.3	9
15 Tu	0550	−0.1	−3
	1420	0.6	18
	2101	0.1	3
	2319	0.2	6

	Time	Height	
	h m	ft	cm
16 W	0616	−0.1	−3
	1456	0.6	18
17 Th	0648	−0.1	−3
	1530	0.6	18
18 F ◐	0725	−0.1	−3
	1604	0.6	18
19 Sa	0805	0.0	0
	1644	0.6	18
20 Su	0509	0.1	3
	0614	0.1	3
	0847	0.0	0
	1736	0.6	18
21 M	0144	0.0	0
	0722	0.1	3
	0933	0.0	0
	1817	0.5	15
22 Tu	0212	0.0	0
	0825	0.2	6
	1038	0.1	3
	1842	0.5	15
23 W	0241	0.0	0
	0926	0.2	6
	1210	0.1	3
	1908	0.5	15
24 Th	0312	0.0	0
	1016	0.3	9
	1340	0.2	6
	1943	0.4	12
25 F ○	0344	−0.1	−3
	1059	0.4	12
	1542	0.3	9
	2026	0.4	12
26 Sa	0414	−0.1	−3
	1142	0.5	15
	1700	0.2	6
	2116	0.3	9
27 Su	0444	−0.1	−3
	1227	0.5	15
	1806	0.2	6
	2200	0.3	9
28 M	0514	−0.1	−3
	1312	0.6	18
	1926	0.2	6
	2239	0.3	9
29 Tu	0544	−0.1	−3
	1356	0.6	18
	2033	0.1	3
	2316	0.2	6
30 W	0615	−0.1	−3
	1437	0.6	18
	2129	0.1	3
	2356	0.2	6
31 Th	0648	−0.1	−3
	1516	0.6	18
	2237	0.1	3

Time meridian 135° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.
Heights are referred to mean lower low water which is the chart datum of soundings.

Prudhoe Bay, Alaska, 2015

Times and Heights of High and Low Waters

January

	Time	Height	
	h m	ft	cm
1 Th	0447	0.0	0
	0924	0.1	3
	1541	−0.2	−6
	2303	0.4	12
2 F	0537	−0.1	−3
	1028	0.1	3
	1640	−0.3	−9
	2350	0.4	12
3 Sa	0615	−0.1	−3
	1119	0.2	6
	1730	−0.3	−9
4 Su ○	0030	0.4	12
	0647	−0.1	−3
	1201	0.2	6
	1813	−0.3	−9
5 M	0105	0.4	12
	0717	−0.1	−3
	1240	0.3	9
	1852	−0.3	−9
6 Tu	0136	0.4	12
	0744	−0.1	−3
	1315	0.3	9
	1928	−0.3	−9
7 W	0205	0.4	12
	0811	−0.1	−3
	1351	0.3	9
	2002	−0.2	−6
8 Th	0232	0.4	12
	0839	−0.1	−3
	1426	0.3	9
	2037	−0.2	−6
9 F	0300	0.4	12
	0907	−0.1	−3
	1503	0.3	9
	2112	−0.2	−6
10 Sa	0327	0.3	9
	0936	−0.1	−3
	1543	0.3	9
	2151	−0.1	−3
11 Su	0356	0.3	9
	1009	−0.1	−3
	1628	0.3	9
	2235	−0.1	−3
12 M	0428	0.2	6
	1045	−0.1	−3
	1723	0.3	9
	2331	0.0	0
13 Tu ◑	0505	0.2	6
	1129	−0.1	−3
	1834	0.3	9
14 W	0054	0.0	0
	0553	0.2	6
	1228	−0.1	−3
	2003	0.3	9
15 Th	0250	0.0	0
	0707	0.1	3
	1342	−0.1	−3
	2128	0.4	12

	Time	Height	
	h m	ft	cm
16 F	0426	0.0	0
	0841	0.1	3
	1500	−0.1	−3
	2233	0.4	12
17 Sa	0522	0.0	0
	0957	0.1	3
	1607	−0.2	−6
	2324	0.5	15
18 Su	0601	0.0	0
	1054	0.2	6
	1703	−0.2	−6
19 M	0008	0.5	15
	0635	−0.1	−3
	1142	0.2	6
	1754	−0.3	−9
20 Tu ●	0047	0.5	15
	0706	−0.1	−3
	1228	0.3	9
	1842	−0.3	−9
21 W	0124	0.5	15
	0736	−0.2	−6
	1312	0.3	9
	1928	−0.4	−12
22 Th	0200	0.4	12
	0807	−0.2	−6
	1357	0.3	9
	2014	−0.4	−12
23 F	0234	0.4	12
	0840	−0.3	−9
	1444	0.3	9
	2100	−0.3	−9
24 Sa	0307	0.3	9
	0915	−0.3	−9
	1533	0.3	9
	2147	−0.3	−9
25 Su	0341	0.2	6
	0952	−0.3	−9
	1626	0.3	9
	2239	−0.2	−6
26 M ◐	0415	0.1	3
	1035	−0.3	−9
	1728	0.3	9
	2339	−0.1	−3
27 Tu	0453	0.1	3
	1126	−0.3	−9
	1844	0.2	6
28 W	0102	−0.1	−3
	0541	0.0	0
	1232	−0.3	−9
	2019	0.2	6
29 Th	0259	−0.1	−3
	0700	0.0	0
	1359	−0.3	−9
	2151	0.2	6
30 F	0434	−0.1	−3
	0850	0.0	0
	1527	−0.3	−9
	2257	0.3	9
31 Sa	0526	−0.1	−3
	1014	0.1	3
	1636	−0.3	−9
	2344	0.3	9

February

	Time	Height	
	h m	ft	cm
1 Su	0601	−0.1	−3
	1110	0.1	3
	1728	−0.3	−9
2 M	0020	0.3	9
	0630	−0.1	−3
	1154	0.2	6
	1810	−0.3	−9
3 Tu ○	0051	0.3	9
	0656	−0.2	−6
	1231	0.2	6
	1847	−0.3	−9
4 W	0118	0.3	9
	0721	−0.2	−6
	1305	0.2	6
	1920	−0.4	−12
5 Th	0144	0.3	9
	0745	−0.3	−9
	1338	0.2	6
	1951	−0.3	−9
6 F	0208	0.3	9
	0809	−0.3	−9
	1410	0.3	9
	2022	−0.3	−9
7 Sa	0233	0.2	6
	0834	−0.3	−9
	1442	0.3	9
	2054	−0.3	−9
8 Su	0257	0.2	6
	0900	−0.3	−9
	1517	0.3	9
	2128	−0.2	−6
9 M	0323	0.2	6
	0927	−0.3	−9
	1555	0.3	9
	2205	−0.2	−6
10 Tu	0349	0.2	6
	0958	−0.2	−6
	1640	0.3	9
	2251	−0.1	−3
11 W ◑	0417	0.1	3
	1036	−0.2	−6
	1739	0.2	6
	2355	0.0	0
12 Th	0450	0.1	3
	1127	−0.2	−6
	1904	0.2	6
13 F	0146	0.0	0
	0543	0.1	3
	1245	−0.2	−6
	2049	0.2	6
14 Sa	0359	−0.1	−3
	0738	0.0	0
	1426	−0.2	−6
	2210	0.3	9
15 Su	0459	−0.1	−3
	0929	0.0	0
	1552	−0.3	−9
	2307	0.3	9

	Time	Height	
	h m	ft	cm
16 M	0535	−0.1	−3
	1039	0.1	3
	1658	−0.4	−12
	2351	0.3	9
17 Tu	0606	−0.2	−6
	1132	0.1	3
	1752	−0.4	−12
18 W ●	0029	0.3	9
	0636	−0.3	−9
	1220	0.2	6
	1840	−0.5	−15
19 Th	0104	0.2	6
	0706	−0.4	−12
	1304	0.2	6
	1925	−0.5	−15
20 F	0137	0.2	6
	0737	−0.5	−15
	1348	0.3	9
	2009	−0.5	−15
21 Sa	0209	0.2	6
	0810	−0.5	−15
	1432	0.3	9
	2051	−0.5	−15
22 Su	0240	0.1	3
	0844	−0.5	−15
	1517	0.3	9
	2133	−0.4	−12
23 M	0312	0.1	3
	0921	−0.5	−15
	1605	0.2	6
	2216	−0.3	−9
24 Tu	0343	0.0	0
	1002	−0.5	−15
	1658	0.2	6
	2305	−0.2	−6
25 W ◐	0417	0.0	0
	1049	−0.4	−12
	1804	0.1	3
26 Th	0010	−0.1	−3
	0459	0.0	0
	1154	−0.4	−12
	1939	0.1	3
27 F	0201	−0.2	−6
	0612	−0.1	−3
	1331	−0.3	−9
	2128	0.1	3
28 Sa	0401	−0.2	−6
	0827	−0.1	−3
	1518	−0.3	−9
	2240	0.1	3

March

	Time	Height	
	h m	ft	cm
1 Su	0457	−0.2	−6
	1003	0.0	0
	1632	−0.3	−9
	2325	0.1	3
2 M	0531	−0.2	−6
	1100	0.0	0
	1723	−0.4	−12
	2359	0.1	3
3 Tu	0559	−0.3	−9
	1142	0.1	3
	1803	−0.4	−12
4 W	0027	0.1	3
	0625	−0.3	−9
	1218	0.1	3
	1837	−0.5	−15
5 Th ○	0052	0.1	3
	0649	−0.4	−12
	1250	0.1	3
	1907	−0.5	−15
6 F	0117	0.1	3
	0712	−0.4	−12
	1320	0.2	6
	1937	−0.5	−15
7 Sa	0140	0.1	3
	0736	−0.4	−12
	1350	0.2	6
	2006	−0.4	−12
8 Su	0204	0.1	3
	0759	−0.4	−12
	1420	0.2	6
	2036	−0.4	−12
9 M	0228	0.1	3
	0824	−0.4	−12
	1452	0.2	6
	2108	−0.3	−9
10 Tu	0252	0.1	3
	0851	−0.4	−12
	1528	0.2	6
	2144	−0.3	−9
11 W	0317	0.1	3
	0922	−0.4	−12
	1610	0.2	6
	2226	−0.2	−6
12 Th	0344	0.1	3
	1000	−0.3	−9
	1705	0.2	6
	2323	−0.1	−3
13 F ◑	0417	0.0	0
	1051	−0.3	−9
	1821	0.2	6
14 Sa	0057	−0.1	−3
	0511	0.0	0
	1212	−0.3	−9
	2006	0.1	3
15 Su	0303	−0.2	−6
	0714	−0.1	−3
	1407	−0.3	−9
	2138	0.1	3

	Time	Height	
	h m	ft	cm
16 M	0412	−0.2	−6
	0914	0.0	0
	1545	−0.4	−12
	2238	0.1	3
17 Tu	0452	−0.3	−9
	1027	0.0	0
	1654	−0.5	−15
	2324	0.1	3
18 W	0526	−0.4	−12
	1122	0.1	3
	1748	−0.5	−15
19 Th	0002	0.1	3
	0558	−0.5	−15
	1209	0.2	6
	1835	−0.6	−18
20 F ●	0037	0.0	0
	0631	−0.6	−18
	1253	0.2	6
	1918	−0.6	−18
21 Sa	0110	0.0	0
	0705	−0.6	−18
	1335	0.2	6
	1959	−0.6	−18
22 Su	0142	0.0	0
	0740	−0.6	−18
	1417	0.2	6
	2038	−0.5	−15
23 M	0213	0.0	0
	0816	−0.6	−18
	1459	0.2	6
	2115	−0.4	−12
24 Tu	0245	0.0	0
	0853	−0.6	−18
	1543	0.2	6
	2154	−0.3	−9
25 W	0317	0.0	0
	0934	−0.5	−15
	1630	0.1	3
	2236	−0.3	−9
26 Th ◐	0353	0.0	0
	1021	−0.4	−12
	1727	0.1	3
	2329	−0.2	−6
27 F	0438	0.0	0
	1123	−0.4	−12
	1848	0.0	0
28 Sa	0055	−0.2	−6
	0555	−0.1	−3
	1301	−0.3	−9
	2035	0.0	0
29 Su	0252	−0.2	−6
	0807	−0.1	−3
	1457	−0.3	−9
	2157	0.0	0
30 M	0402	−0.2	−6
	0943	0.0	0
	1616	−0.3	−9
	2246	0.0	0
31 Tu	0444	−0.3	−9
	1041	0.0	0
	1707	−0.4	−12
	2322	0.0	0

Time meridian 135° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.
Heights are referred to mean lower low water which is the chart datum of soundings.

Prudhoe Bay, Alaska, 2015

Times and Heights of High and Low Waters

April

	Time	Height	
	h m	ft	cm
1 W	0516	−0.3	−9
	1122	0.1	3
	1746	−0.4	−12
	2352	0.0	0
2 Th	0544	−0.4	−12
	1157	0.1	3
	1820	−0.4	−12
3 F	0019	0.0	0
	0610	−0.4	−12
	1229	0.2	6
	1851	−0.4	−12
4 Sa ○	0045	0.0	0
	0635	−0.4	−12
	1259	0.2	6
	1920	−0.4	−12
5 Su	0110	0.1	3
	0700	−0.4	−12
	1329	0.3	9
	1950	−0.4	−12
6 M	0135	0.1	3
	0726	−0.4	−12
	1400	0.3	9
	2021	−0.3	−9
7 Tu	0200	0.1	3
	0753	−0.4	−12
	1433	0.3	9
	2054	−0.3	−9
8 W	0225	0.1	3
	0822	−0.4	−12
	1510	0.3	9
	2131	−0.2	−6
9 Th	0252	0.1	3
	0857	−0.3	−9
	1553	0.3	9
	2214	−0.2	−6
10 F	0324	0.1	3
	0939	−0.3	−9
	1645	0.3	9
	2308	−0.1	−3
11 Sa ◑	0408	0.1	3
	1036	−0.3	−9
	1753	0.2	6
12 Su	0024	−0.1	−3
	0520	0.0	0
	1201	−0.2	−6
	1921	0.1	3
13 M	0157	−0.1	−3
	0718	0.0	0
	1357	−0.3	−9
	2050	0.1	3
14 Tu	0309	−0.2	−6
	0903	0.1	3
	1536	−0.3	−9
	2157	0.1	3
15 W	0359	−0.3	−9
	1014	0.1	3
	1646	−0.4	−12
	2247	0.0	0

	Time	Height	
	h m	ft	cm
16 Th	0441	−0.4	−12
	1108	0.2	6
	1740	−0.4	−12
	2328	0.0	0
17 F	0520	−0.5	−15
	1156	0.3	9
	1826	−0.5	−15
18 Sa ●	0006	0.0	0
	0558	−0.5	−15
	1240	0.3	9
	1908	−0.4	−12
19 Su	0041	0.0	0
	0636	−0.6	−18
	1321	0.4	12
	1946	−0.4	−12
20 M	0115	0.1	3
	0713	−0.5	−15
	1402	0.4	12
	2022	−0.3	−9
21 Tu	0148	0.1	3
	0752	−0.5	−15
	1442	0.4	12
	2058	−0.3	−9
22 W	0222	0.1	3
	0831	−0.4	−12
	1523	0.3	9
	2134	−0.2	−6
23 Th	0258	0.1	3
	0913	−0.3	−9
	1606	0.3	9
	2213	−0.1	−3
24 F	0338	0.1	3
	1000	−0.3	−9
	1654	0.2	6
	2300	−0.1	−3
25 Sa ◐	0430	0.1	3
	1059	−0.2	−6
	1755	0.2	6
26 Su	0004	0.0	0
	0546	0.1	3
	1224	−0.1	−3
	1915	0.1	3
27 M	0129	−0.1	−3
	0735	0.1	3
	1414	−0.1	−3
	2040	0.1	3
28 Tu	0246	−0.1	−3
	0909	0.2	6
	1541	−0.1	−3
	2143	0.1	3
29 W	0341	−0.1	−3
	1010	0.2	6
	1639	−0.2	−6
	2230	0.1	3
30 Th	0422	−0.2	−6
	1055	0.3	9
	1722	−0.2	−6
	2307	0.1	3

May

	Time	Height	
	h m	ft	cm
1 F	0457	−0.2	−6
	1132	0.3	9
	1758	−0.2	−6
	2340	0.2	6
2 Sa	0528	−0.2	−6
	1206	0.4	12
	1832	−0.2	−6
3 Su ○	0010	0.2	6
	0558	−0.2	−6
	1238	0.5	15
	1904	−0.2	−6
4 M	0039	0.2	6
	0627	−0.2	−6
	1311	0.5	15
	1936	−0.1	−3
5 Tu	0106	0.3	9
	0657	−0.2	−6
	1345	0.6	18
	2010	−0.1	−3
6 W	0134	0.3	9
	0729	−0.2	−6
	1420	0.6	18
	2045	0.0	0
7 Th	0204	0.3	9
	0804	−0.2	−6
	1459	0.6	18
	2123	0.0	0
8 F	0238	0.3	9
	0845	−0.1	−3
	1542	0.6	18
	2205	0.1	3
9 Sa	0320	0.3	9
	0933	−0.1	−3
	1630	0.5	15
	2254	0.1	3
10 Su	0416	0.3	9
	1034	0.0	0
	1727	0.4	12
	2353	0.1	3
11 M ◑	0535	0.3	9
	1158	0.0	0
	1836	0.4	12
12 Tu	0101	0.0	0
	0715	0.3	9
	1345	0.0	0
	1953	0.3	9
13 W	0208	0.0	0
	0847	0.4	12
	1523	0.0	0
	2104	0.2	6
14 Th	0307	−0.1	−3
	0958	0.4	12
	1635	−0.1	−3
	2202	0.2	6
15 F	0359	−0.2	−6
	1054	0.5	15
	1730	−0.1	−3
	2251	0.2	6

	Time	Height	
	h m	ft	cm
16 Sa	0446	−0.2	−6
	1143	0.6	18
	1816	−0.1	−3
	2334	0.3	9
17 Su ●	0530	−0.2	−6
	1228	0.6	18
	1856	−0.1	−3
18 M	0013	0.3	9
	0613	−0.2	−6
	1310	0.7	21
	1933	0.0	0
19 Tu	0051	0.4	12
	0654	−0.2	−6
	1349	0.7	21
	2007	0.0	0
20 W	0128	0.4	12
	0735	−0.1	−3
	1428	0.7	21
	2041	0.1	3
21 Th	0205	0.5	15
	0815	−0.1	−3
	1506	0.7	21
	2116	0.2	6
22 F	0244	0.5	15
	0857	0.0	0
	1544	0.6	18
	2152	0.2	6
23 Sa	0328	0.5	15
	0942	0.1	3
	1623	0.6	18
	2233	0.2	6
24 Su	0420	0.5	15
	1035	0.2	6
	1707	0.5	15
	2321	0.2	6
25 M ◐	0526	0.5	15
	1141	0.2	6
	1800	0.5	15
26 Tu	0019	0.2	6
	0650	0.5	15
	1309	0.3	9
	1906	0.5	15
27 W	0126	0.2	6
	0817	0.5	15
	1444	0.3	9
	2019	0.4	12
28 Th	0229	0.2	6
	0927	0.6	18
	1558	0.3	9
	2122	0.5	15
29 F	0322	0.2	6
	1020	0.7	21
	1652	0.3	9
	2214	0.5	15
30 Sa	0407	0.2	6
	1104	0.7	21
	1736	0.3	9
	2257	0.5	15
31 Su	0447	0.2	6
	1143	0.8	24
	1814	0.3	9
	2334	0.6	18

June

	Time	Height	
	h m	ft	cm
1 M	0524	0.2	6
	1220	0.9	27
	1850	0.3	9
2 Tu ○	0008	0.6	18
	0600	0.2	6
	1257	0.9	27
	1925	0.3	9
3 W	0041	0.7	21
	0637	0.2	6
	1333	1.0	30
	1959	0.4	12
4 Th	0115	0.7	21
	0716	0.2	6
	1411	1.0	30
	2034	0.4	12
5 F	0152	0.7	21
	0757	0.2	6
	1450	1.0	30
	2110	0.4	12
6 Sa	0234	0.7	21
	0843	0.2	6
	1530	0.9	27
	2149	0.4	12
7 Su	0323	0.8	24
	0934	0.3	9
	1612	0.9	27
	2231	0.4	12
8 M	0423	0.8	24
	1035	0.3	9
	1658	0.8	24
	2318	0.4	12
9 Tu ◑	0535	0.8	24
	1151	0.4	12
	1751	0.7	21
10 W	0014	0.3	9
	0700	0.8	24
	1325	0.4	12
	1854	0.6	18
11 Th	0117	0.3	9
	0826	0.8	24
	1503	0.4	12
	2006	0.6	18
12 F	0222	0.3	9
	0941	0.9	27
	1622	0.4	12
	2116	0.6	18
13 Sa	0325	0.2	6
	1042	0.9	27
	1720	0.4	12
	2216	0.6	18
14 Su	0421	0.2	6
	1134	1.0	30
	1806	0.4	12
	2307	0.7	21
15 M	0513	0.2	6
	1219	1.0	30
	1844	0.4	12
	2353	0.7	21

	Time	Height	
	h m	ft	cm
16 Tu ●	0600	0.2	6
	1300	1.0	30
	1919	0.5	15
17 W	0034	0.8	24
	0643	0.3	9
	1338	1.1	34
	1952	0.5	15
18 Th	0114	0.9	27
	0724	0.3	9
	1413	1.1	34
	2023	0.5	15
19 F	0152	0.9	27
	0804	0.4	12
	1446	1.0	30
	2054	0.5	15
20 Sa	0232	0.9	27
	0844	0.4	12
	1519	1.0	30
	2126	0.5	15
21 Su	0314	0.9	27
	0925	0.5	15
	1551	1.0	30
	2200	0.6	18
22 M	0400	0.9	27
	1009	0.5	15
	1625	0.9	27
	2238	0.6	18
23 Tu	0453	0.9	27
	1100	0.6	18
	1703	0.9	27
	2322	0.6	18
24 W ◐	0557	0.9	27
	1204	0.7	21
	1749	0.9	27
25 Th	0013	0.6	18
	0713	0.9	27
	1329	0.7	21
	1848	0.9	27
26 F	0114	0.6	18
	0833	1.0	30
	1504	0.7	21
	2002	0.9	27
27 Sa	0218	0.6	18
	0941	1.1	34
	1620	0.7	21
	2113	0.9	27
28 Su	0318	0.6	18
	1037	1.1	34
	1715	0.7	21
	2212	0.9	27
29 M	0411	0.6	18
	1123	1.2	37
	1759	0.7	21
	2300	0.9	27
30 Tu	0459	0.6	18
	1205	1.3	40
	1836	0.7	21
	2342	1.0	30

Time meridian 135° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.
Heights are referred to mean lower low water which is the chart datum of soundings.

Prudhoe Bay, Alaska, 2015

Times and Heights of High and Low Waters

July

	Time	Height			Time	Height	
	h m	ft	cm		h m	ft	cm
1 W ○	0543	0.5	15	**16** Th	0024	1.1	34
	1244	1.3	40		0638	0.6	18
	1910	0.7	21		1324	1.3	40
					1931	0.8	24
2 Th	0022	1.0	30	**17** F	0103	1.2	37
	0627	0.5	15		0717	0.6	18
	1322	1.3	40		1354	1.3	40
	1943	0.7	21		1959	0.8	24
3 F	0102	1.1	34	**18** Sa	0140	1.2	37
	0711	0.5	15		0753	0.6	18
	1358	1.3	40		1422	1.3	40
	2015	0.7	21		2026	0.7	21
4 Sa	0145	1.1	34	**19** Su	0216	1.2	37
	0756	0.5	15		0829	0.7	21
	1435	1.3	40		1450	1.2	37
	2048	0.7	21		2054	0.7	21
5 Su	0230	1.1	34	**20** M	0254	1.2	37
	0843	0.6	18		0904	0.7	21
	1511	1.2	37		1517	1.2	37
	2122	0.6	18		2123	0.7	21
6 M	0320	1.1	34	**21** Tu	0333	1.2	37
	0933	0.6	18		0941	0.8	24
	1548	1.1	34		1545	1.2	37
	2200	0.6	18		2154	0.8	24
7 Tu	0416	1.1	34	**22** W	0416	1.2	37
	1029	0.7	21		1022	0.8	24
	1626	1.1	34		1616	1.2	37
	2243	0.6	18		2229	0.8	24
8 W ◑	0521	1.1	34	**23** Th ◐	0506	1.2	37
	1135	0.7	21		1112	0.9	27
	1708	1.0	30		1650	1.1	34
	2333	0.6	18		2311	0.8	24
9 Th	0636	1.1	34	**24** F	0609	1.2	37
	1258	0.8	24		1220	1.0	30
	1800	1.0	30		1733	1.1	34
10 F	0034	0.6	18	**25** Sa	0005	0.8	24
	0802	1.1	34		0731	1.2	37
	1438	0.8	24		1402	1.0	30
	1910	0.9	27		1836	1.1	34
11 Sa	0146	0.6	18	**26** Su	0115	0.9	27
	0925	1.2	37		0900	1.3	40
	1608	0.8	24		1550	1.0	30
	2034	0.9	27		2008	1.1	34
12 Su	0302	0.6	18	**27** M	0235	0.8	24
	1034	1.2	37		1011	1.3	40
	1711	0.8	24		1657	1.0	30
	2151	1.0	30		2131	1.1	34
13 M	0409	0.6	18	**28** Tu	0345	0.8	24
	1128	1.3	40		1105	1.4	43
	1755	0.8	24		1741	0.9	27
	2252	1.0	30		2233	1.1	34
14 Tu	0507	0.6	18	**29** W	0444	0.8	24
	1212	1.3	40		1149	1.4	43
	1831	0.8	24		1815	0.9	27
	2341	1.1	34		2323	1.2	37
15 W ●	0555	0.6	18	**30** Th	0535	0.7	21
	1250	1.3	40		1228	1.4	43
	1902	0.8	24		1845	0.9	27
				31 F ○	0008	1.2	37
					0622	0.6	18
					1304	1.4	43
					1915	0.8	24

August

	Time	Height			Time	Height	
	h m	ft	cm		h m	ft	cm
1 Sa	0052	1.3	40	**16** Su	0124	1.2	37
	0708	0.6	18		0740	0.6	18
	1339	1.4	43		1353	1.2	37
	1945	0.7	21		1952	0.7	21
2 Su	0136	1.3	40	**17** M	0156	1.2	37
	0753	0.6	18		0811	0.6	18
	1412	1.3	40		1418	1.2	37
	2017	0.7	21		2017	0.7	21
3 M	0221	1.3	40	**18** Tu	0229	1.2	37
	0839	0.6	18		0842	0.7	21
	1445	1.3	40		1443	1.2	37
	2050	0.6	18		2043	0.7	21
4 Tu	0309	1.3	40	**19** W	0302	1.2	37
	0925	0.7	21		0915	0.7	21
	1518	1.2	37		1508	1.2	37
	2127	0.6	18		2111	0.7	21
5 W	0400	1.3	40	**20** Th	0339	1.2	37
	1015	0.8	24		0950	0.8	24
	1552	1.1	34		1535	1.1	34
	2208	0.6	18		2142	0.7	21
6 Th ◑	0458	1.3	40	**21** F	0422	1.2	37
	1112	0.8	24		1032	0.9	27
	1629	1.1	34		1603	1.1	34
	2256	0.6	18		2219	0.8	24
7 F	0608	1.2	37	**22** Sa ◐	0516	1.2	37
	1224	0.9	27		1130	0.9	27
	1714	1.0	30		1637	1.1	34
	2358	0.7	21		2308	0.8	24
8 Sa	0735	1.2	37	**23** Su	0633	1.2	37
	1407	0.9	27		1305	0.9	27
	1822	1.0	30		1727	1.0	30
9 Su	0120	0.7	21	**24** M	0021	0.8	24
	0911	1.2	37		0816	1.2	37
	1553	0.9	27		1518	0.9	27
	2006	1.0	30		1911	1.0	30
10 M	0252	0.7	21	**25** Tu	0201	0.8	24
	1026	1.2	37		0943	1.2	37
	1657	0.9	27		1631	0.9	27
	2141	1.0	30		2104	1.0	30
11 Tu	0409	0.7	21	**26** W	0330	0.7	21
	1120	1.3	40		1042	1.2	37
	1737	0.9	27		1710	0.8	24
	2245	1.1	34		2216	1.1	34
12 W	0507	0.7	21	**27** Th	0436	0.6	18
	1200	1.3	40		1126	1.2	37
	1809	0.8	24		1741	0.8	24
	2334	1.1	34		2310	1.1	34
13 Th	0553	0.6	18	**28** F	0530	0.6	18
	1233	1.3	40		1205	1.2	37
	1837	0.8	24		1810	0.7	21
					2356	1.2	37
14 F ●	0014	1.2	37	**29** Sa ○	0618	0.5	15
	0632	0.6	18		1240	1.2	37
	1302	1.2	37		1840	0.6	18
	1902	0.7	21				
15 Sa	0050	1.2	37	**30** Su	0041	1.2	37
	0707	0.6	18		0703	0.4	12
	1328	1.2	37		1313	1.1	34
	1927	0.7	21		1911	0.5	15
				31 M	0124	1.2	37
					0747	0.4	12
					1345	1.1	34
					1943	0.4	12

September

	Time	Height			Time	Height	
	h m	ft	cm		h m	ft	cm
1 Tu	0208	1.2	37	**16** W	0204	1.1	34
	0829	0.5	15		0821	0.4	12
	1416	1.0	30		1410	0.9	27
	2018	0.4	12		2006	0.4	12
2 W	0253	1.2	37	**17** Th	0235	1.1	34
	0912	0.5	15		0852	0.5	15
	1448	1.0	30		1435	0.9	27
	2055	0.4	12		2033	0.4	12
3 Th	0340	1.2	37	**18** F	0309	1.1	34
	0956	0.6	18		0926	0.6	18
	1521	1.0	30		1500	0.9	27
	2136	0.4	12		2103	0.5	15
4 F	0433	1.1	34	**19** Sa	0349	1.0	30
	1045	0.7	21		1006	0.6	18
	1556	0.9	27		1527	0.9	27
	2225	0.5	15		2140	0.5	15
5 Sa ◑	0536	1.1	34	**20** Su ◐	0439	1.0	30
	1148	0.8	24		1100	0.7	21
	1640	0.9	27		1559	0.8	24
	2327	0.5	15		2228	0.5	15
6 Su	0703	1.0	30	**21** M	0550	1.0	30
	1327	0.8	24		1225	0.7	21
	1751	0.9	27		1652	0.8	24
					2344	0.5	15
7 M	0100	0.6	18	**22** Tu	0729	0.9	27
	0849	1.0	30		1427	0.6	18
	1523	0.7	21		1848	0.7	21
	1957	0.8	24				
8 Tu	0248	0.6	18	**23** W	0138	0.5	15
	1008	1.0	30		0904	0.9	27
	1627	0.7	21		1542	0.6	18
	2137	0.9	27		2049	0.8	24
9 W	0409	0.5	15	**24** Th	0319	0.4	12
	1059	1.0	30		1008	0.9	27
	1706	0.7	21		1624	0.5	15
	2238	0.9	27		2203	0.8	24
10 Th	0504	0.5	15	**25** F	0429	0.3	9
	1136	1.0	30		1055	0.8	24
	1736	0.6	18		1658	0.4	12
	2323	1.0	30		2257	0.9	27
11 F	0546	0.4	12	**26** Sa	0524	0.3	9
	1206	1.0	30		1134	0.8	24
	1803	0.5	15		1730	0.3	9
					2343	0.9	27
12 Sa ●	0000	1.0	30	**27** Su ○	0612	0.2	6
	0622	0.4	12		1209	0.8	24
	1233	1.0	30		1803	0.2	6
	1828	0.5	15				
13 Su	0033	1.0	30	**28** M	0027	1.0	30
	0653	0.4	12		0655	0.2	6
	1258	0.9	27		1243	0.7	21
	1852	0.4	12		1837	0.1	3
14 M	0104	1.0	30	**29** Tu	0110	1.0	30
	0723	0.4	12		0736	0.2	6
	1322	0.9	27		1315	0.7	21
	1916	0.4	12		1913	0.1	3
15 Tu	0134	1.0	30	**30** W	0153	1.0	30
	0752	0.4	12		0816	0.2	6
	1346	0.9	27		1348	0.7	21
	1941	0.4	12		1950	0.1	3

Time meridian 135° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.
Heights are referred to mean lower low water which is the chart datum of soundings.

Prudhoe Bay, Alaska, 2015

Times and Heights of High and Low Waters

October

	Time	Height	
	h m	ft	cm
1 Th	0236	1.0	30
	0855	0.3	9
	1420	0.7	21
	2029	0.1	3
2 F	0320	0.9	27
	0936	0.3	9
	1455	0.7	21
	2111	0.2	6
3 Sa	0408	0.8	24
	1020	0.4	12
	1533	0.7	21
	2159	0.2	6
4 Su ◑	0505	0.8	24
	1115	0.5	15
	1621	0.6	18
	2302	0.3	9
5 M	0621	0.7	21
	1238	0.5	15
	1739	0.6	18
6 Tu	0037	0.3	9
	0802	0.6	18
	1425	0.5	15
	1946	0.6	18
7 W	0234	0.3	9
	0926	0.6	18
	1536	0.4	12
	2123	0.6	18
8 Th	0357	0.3	9
	1020	0.6	18
	1620	0.3	9
	2222	0.6	18
9 F	0451	0.2	6
	1059	0.6	18
	1654	0.2	6
	2305	0.7	21
10 Sa	0531	0.2	6
	1130	0.6	18
	1723	0.2	6
	2341	0.7	21
11 Su	0605	0.1	3
	1158	0.6	18
	1750	0.1	3
12 M ●	0013	0.7	21
	0636	0.1	3
	1225	0.6	18
	1816	0.1	3
13 Tu	0043	0.8	24
	0705	0.1	3
	1251	0.6	18
	1842	0.1	3
14 W	0113	0.8	24
	0734	0.2	6
	1316	0.6	18
	1908	0.1	3
15 Th	0143	0.8	24
	0804	0.2	6
	1341	0.6	18
	1935	0.1	3

	Time	Height	
	h m	ft	cm
16 F	0214	0.8	24
	0836	0.2	6
	1406	0.6	18
	2004	0.2	6
17 Sa	0249	0.8	24
	0911	0.3	9
	1433	0.6	18
	2036	0.2	6
18 Su	0329	0.8	24
	0951	0.3	9
	1504	0.6	18
	2116	0.2	6
19 M	0417	0.8	24
	1042	0.4	12
	1545	0.5	15
	2208	0.2	6
20 Tu ◐	0518	0.7	21
	1152	0.4	12
	1651	0.5	15
	2327	0.2	6
21 W	0641	0.6	18
	1322	0.3	9
	1844	0.5	15
22 Th	0121	0.2	6
	0811	0.5	15
	1436	0.3	9
	2033	0.5	15
23 F	0307	0.2	6
	0922	0.5	15
	1529	0.2	6
	2147	0.6	18
24 Sa	0421	0.1	3
	1015	0.5	15
	1612	0.0	0
	2242	0.6	18
25 Su	0516	0.0	0
	1058	0.4	12
	1652	−0.1	−3
	2330	0.7	21
26 M	0603	0.0	0
	1137	0.4	12
	1730	−0.1	−3
27 Tu ○	0015	0.7	21
	0646	−0.1	−3
	1213	0.4	12
	1809	−0.2	−6
28 W	0058	0.7	21
	0725	0.0	0
	1248	0.4	12
	1849	−0.2	−6
29 Th	0140	0.7	21
	0802	0.0	0
	1323	0.4	12
	1928	−0.2	−6
30 F	0221	0.7	21
	0839	0.1	3
	1359	0.4	12
	2009	−0.1	−3
31 Sa	0303	0.7	21
	0917	0.1	3
	1437	0.4	12
	2053	−0.1	−3

November

	Time	Height	
	h m	ft	cm
1 Su	0347	0.6	18
	0958	0.2	6
	1519	0.4	12
	2141	0.0	0
2 M	0434	0.5	15
	1045	0.2	6
	1611	0.4	12
	2239	0.1	3
3 Tu ◑	0532	0.4	12
	1147	0.2	6
	1727	0.4	12
4 W	0002	0.1	3
	0647	0.4	12
	1307	0.2	6
	1915	0.4	12
5 Th	0153	0.1	3
	0811	0.3	9
	1424	0.1	3
	2050	0.4	12
6 F	0325	0.1	3
	0919	0.3	9
	1521	0.1	3
	2154	0.4	12
7 Sa	0425	0.1	3
	1008	0.3	9
	1604	0.0	0
	2240	0.5	15
8 Su	0509	0.0	0
	1047	0.3	9
	1640	0.0	0
	2318	0.5	15
9 M	0545	0.0	0
	1121	0.3	9
	1713	−0.1	−3
	2352	0.6	18
10 Tu	0618	0.0	0
	1152	0.4	12
	1743	−0.1	−3
11 W ●	0024	0.6	18
	0649	0.0	0
	1221	0.4	12
	1813	−0.1	−3
12 Th	0056	0.6	18
	0720	0.0	0
	1249	0.4	12
	1842	−0.1	−3
13 F	0128	0.7	21
	0752	0.1	3
	1317	0.4	12
	1913	−0.1	−3
14 Sa	0202	0.7	21
	0826	0.1	3
	1346	0.4	12
	1946	0.0	0
15 Su	0238	0.7	21
	0901	0.1	3
	1418	0.4	12
	2024	0.0	0

	Time	Height	
	h m	ft	cm
16 M	0317	0.6	18
	0940	0.1	3
	1457	0.4	12
	2108	0.0	0
17 Tu	0400	0.6	18
	1025	0.1	3
	1547	0.4	12
	2203	0.0	0
18 W ◐	0451	0.5	15
	1118	0.1	3
	1658	0.4	12
	2319	0.0	0
19 Th	0553	0.4	12
	1222	0.1	3
	1834	0.3	9
20 F	0102	0.0	0
	0707	0.3	9
	1330	0.0	0
	2011	0.4	12
21 Sa	0248	0.0	0
	0823	0.2	6
	1433	−0.1	−3
	2128	0.4	12
22 Su	0409	0.0	0
	0928	0.2	6
	1528	−0.2	−6
	2228	0.5	15
23 M	0508	−0.1	−3
	1021	0.2	6
	1618	−0.2	−6
	2319	0.5	15
24 Tu	0555	−0.1	−3
	1106	0.2	6
	1705	−0.3	−9
25 W ○	0006	0.6	18
	0637	−0.1	−3
	1148	0.2	6
	1750	−0.3	−9
26 Th	0049	0.6	18
	0714	−0.1	−3
	1228	0.3	9
	1833	−0.3	−9
27 F	0130	0.6	18
	0750	−0.1	−3
	1306	0.3	9
	1916	−0.3	−9
28 Sa	0209	0.6	18
	0825	0.0	0
	1345	0.3	9
	1958	−0.2	−6
29 Su	0248	0.5	15
	0859	0.0	0
	1426	0.3	9
	2041	−0.2	−6
30 M	0326	0.5	15
	0935	0.0	0
	1510	0.3	9
	2126	−0.1	−3

December

	Time	Height	
	h m	ft	cm
1 Tu	0404	0.4	12
	1015	0.0	0
	1600	0.3	9
	2216	−0.1	−3
2 W ◑	0445	0.3	9
	1100	0.0	0
	1703	0.3	9
	2319	0.0	0
3 Th	0533	0.3	9
	1154	0.0	0
	1823	0.3	9
4 F	0043	0.0	0
	0634	0.2	6
	1259	0.0	0
	1954	0.3	9
5 Sa	0223	0.0	0
	0748	0.2	6
	1406	0.0	0
	2111	0.3	9
6 Su	0345	0.0	0
	0859	0.2	6
	1506	−0.1	−3
	2209	0.4	12
7 M	0442	0.0	0
	0956	0.2	6
	1555	−0.1	−3
	2254	0.4	12
8 Tu	0525	0.0	0
	1042	0.2	6
	1637	−0.1	−3
	2333	0.5	15
9 W	0603	0.0	0
	1120	0.3	9
	1715	−0.1	−3
10 Th	0009	0.5	15
	0637	0.0	0
	1155	0.3	9
	1751	−0.1	−3
11 F ●	0044	0.6	18
	0711	0.0	0
	1228	0.3	9
	1826	−0.2	−6
12 Sa	0118	0.6	18
	0743	0.0	0
	1301	0.3	9
	1902	−0.2	−6
13 Su	0153	0.6	18
	0816	0.0	0
	1335	0.4	12
	1940	−0.2	−6
14 M	0228	0.6	18
	0849	0.0	0
	1414	0.4	12
	2022	−0.2	−6
15 Tu	0305	0.5	15
	0923	0.0	0
	1458	0.4	12
	2108	−0.1	−3

	Time	Height	
	h m	ft	cm
16 W	0343	0.5	15
	1001	0.0	0
	1550	0.3	9
	2202	−0.1	−3
17 Th	0424	0.4	12
	1043	−0.1	−3
	1654	0.3	9
	2309	−0.1	−3
18 F ◐	0509	0.3	9
	1132	−0.1	−3
	1813	0.3	9
19 Sa	0036	0.0	0
	0605	0.2	6
	1232	−0.2	−6
	1943	0.3	9
20 Su	0221	0.0	0
	0715	0.1	3
	1341	−0.2	−6
	2107	0.4	12
21 M	0354	0.0	0
	0834	0.1	3
	1451	−0.2	−6
	2216	0.4	12
22 Tu	0500	−0.1	−3
	0944	0.1	3
	1554	−0.3	−9
	2312	0.5	15
23 W	0549	−0.1	−3
	1042	0.1	3
	1651	−0.3	−9
24 Th	0001	0.5	15
	0629	−0.1	−3
	1132	0.2	6
	1741	−0.3	−9
25 F ○	0043	0.5	15
	0704	−0.1	−3
	1216	0.2	6
	1828	−0.3	−9
26 Sa	0122	0.5	15
	0737	−0.1	−3
	1258	0.3	9
	1911	−0.3	−9
27 Su	0158	0.5	15
	0808	−0.1	−3
	1338	0.3	9
	1951	−0.3	−9
28 M	0231	0.4	12
	0839	−0.1	−3
	1417	0.3	9
	2031	−0.2	−6
29 Tu	0302	0.4	12
	0909	−0.1	−3
	1458	0.3	9
	2111	−0.2	−6
30 W	0333	0.3	9
	0941	−0.1	−3
	1542	0.3	9
	2152	−0.1	−3
31 Th	0404	0.3	9
	1016	−0.1	−3
	1630	0.3	9
	2238	−0.1	−3

Time meridian 135° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.
Heights are referred to mean lower low water which is the chart datum of soundings.

Sand Island, Midway Islands, 2015

Times and Heights of High and Low Waters

January

	Time	Height	
	h m	ft	cm
1 Th	0157	1.3	40
	0804	0.7	21
	1248	1.0	30
	1935	0.0	0
2 F	0256	1.4	43
	0916	0.7	21
	1348	0.9	27
	2027	0.0	0
3 Sa	0348	1.4	43
	1017	0.6	18
	1448	0.9	27
	2116	0.0	0
4 Su ○	0435	1.4	43
	1108	0.6	18
	1544	0.9	27
	2203	0.0	0
5 M	0517	1.5	46
	1152	0.6	18
	1636	0.9	27
	2248	0.1	3
6 Tu	0555	1.5	46
	1230	0.5	15
	1726	0.9	27
	2331	0.1	3
7 W	0630	1.4	43
	1304	0.5	15
	1814	0.9	27
8 Th	0013	0.2	6
	0702	1.4	43
	1336	0.4	12
	1902	1.0	30
9 F	0055	0.2	6
	0733	1.4	43
	1407	0.4	12
	1951	1.0	30
10 Sa	0138	0.3	9
	0803	1.3	40
	1439	0.3	9
	2043	1.0	30
11 Su	0223	0.4	12
	0834	1.3	40
	1512	0.3	9
	2137	1.1	34
12 M ◑	0312	0.5	15
	0905	1.2	37
	1548	0.2	6
	2234	1.1	34
13 Tu	0407	0.6	18
	0938	1.1	34
	1626	0.2	6
	2333	1.2	37
14 W	0508	0.7	21
	1015	1.1	34
	1708	0.1	3
15 Th	0034	1.2	37
	0617	0.7	21
	1057	1.0	30
	1755	0.1	3

	Time	Height	
	h m	ft	cm
16 F	0134	1.3	40
	0729	0.8	24
	1145	1.0	30
	1845	0.0	0
17 Sa	0231	1.4	43
	0837	0.7	21
	1242	1.0	30
	1939	0.0	0
18 Su	0323	1.5	46
	0936	0.7	21
	1345	1.0	30
	2034	0.0	0
19 M	0411	1.5	46
	1026	0.6	18
	1452	1.0	30
	2130	0.0	0
20 Tu ●	0456	1.5	46
	1111	0.6	18
	1558	1.0	30
	2225	0.0	0
21 W	0538	1.5	46
	1153	0.5	15
	1702	1.1	34
	2320	0.0	0
22 Th	0618	1.5	46
	1235	0.4	12
	1805	1.2	37
23 F	0014	0.1	3
	0657	1.5	46
	1318	0.2	6
	1908	1.2	37
24 Sa	0108	0.2	6
	0736	1.4	43
	1402	0.1	3
	2010	1.3	40
25 Su	0204	0.3	9
	0816	1.4	43
	1448	0.1	3
	2112	1.3	40
26 M ◐	0301	0.5	15
	0857	1.3	40
	1536	0.0	0
	2216	1.3	40
27 Tu	0402	0.6	18
	0941	1.2	37
	1626	0.0	0
	2320	1.3	40
28 W	0509	0.7	21
	1029	1.1	34
	1719	0.0	0
29 Th	0026	1.3	40
	0623	0.7	21
	1123	1.1	34
	1814	0.0	0
30 F	0131	1.3	40
	0740	0.7	21
	1223	1.0	30
	1910	0.1	3
31 Sa	0231	1.3	40
	0853	0.7	21
	1328	1.0	30
	2005	0.1	3

February

	Time	Height	
	h m	ft	cm
1 Su	0325	1.4	43
	0954	0.7	21
	1432	0.9	27
	2059	0.1	3
2 M	0413	1.4	43
	1043	0.6	18
	1532	0.9	27
	2149	0.2	6
3 Tu ○	0454	1.4	43
	1124	0.6	18
	1626	1.0	30
	2235	0.2	6
4 W	0530	1.4	43
	1158	0.5	15
	1716	1.0	30
	2319	0.2	6
5 Th	0602	1.3	40
	1228	0.5	15
	1803	1.0	30
6 F	0001	0.3	9
	0632	1.3	40
	1257	0.4	12
	1848	1.1	34
7 Sa	0043	0.3	9
	0700	1.3	40
	1325	0.3	9
	1933	1.1	34
8 Su	0124	0.4	12
	0728	1.2	37
	1354	0.3	9
	2018	1.1	34
9 M	0207	0.5	15
	0756	1.2	37
	1426	0.2	6
	2105	1.2	37
10 Tu	0252	0.5	15
	0827	1.2	37
	1500	0.2	6
	2155	1.2	37
11 W ◑	0341	0.6	18
	0859	1.1	34
	1538	0.1	3
	2249	1.2	37
12 Th	0436	0.7	21
	0935	1.1	34
	1622	0.1	3
	2348	1.3	40
13 F	0538	0.7	21
	1018	1.0	30
	1712	0.1	3
14 Sa	0049	1.3	40
	0645	0.7	21
	1111	1.0	30
	1808	0.0	0
15 Su	0150	1.3	40
	0752	0.7	21
	1216	1.0	30
	1910	0.0	0

	Time	Height	
	h m	ft	cm
16 M	0246	1.4	43
	0852	0.7	21
	1330	1.0	30
	2014	0.0	0
17 Tu	0337	1.4	43
	0944	0.6	18
	1444	1.0	30
	2117	0.0	0
18 W ●	0423	1.4	43
	1031	0.4	12
	1555	1.1	34
	2218	0.1	3
19 Th	0506	1.4	43
	1116	0.3	9
	1701	1.2	37
	2316	0.1	3
20 F	0547	1.4	43
	1200	0.2	6
	1802	1.3	40
21 Sa	0011	0.2	6
	0627	1.3	40
	1245	0.1	3
	1901	1.3	40
22 Su	0105	0.3	9
	0707	1.3	40
	1330	0.0	0
	1958	1.4	43
23 M	0159	0.3	9
	0749	1.2	37
	1416	−0.1	−3
	2054	1.4	43
24 Tu	0253	0.4	12
	0832	1.2	37
	1504	−0.1	−3
	2150	1.3	40
25 W ◐	0350	0.5	15
	0918	1.1	34
	1554	0.0	0
	2249	1.3	40
26 Th	0450	0.6	18
	1008	1.0	30
	1648	0.0	0
	2350	1.3	40
27 F	0557	0.6	18
	1104	1.0	30
	1744	0.1	3
28 Sa	0053	1.2	37
	0709	0.6	18
	1208	0.9	27
	1844	0.1	3

March

	Time	Height	
	h m	ft	cm
1 Su	0154	1.2	37
	0817	0.6	18
	1316	0.9	27
	1944	0.2	6
2 M	0250	1.2	37
	0916	0.5	15
	1424	0.9	27
	2042	0.2	6
3 Tu	0339	1.2	37
	1002	0.5	15
	1525	0.9	27
	2136	0.2	6
4 W	0419	1.2	37
	1040	0.4	12
	1619	1.0	30
	2226	0.2	6
5 Th ○	0455	1.1	34
	1113	0.4	12
	1707	1.0	30
	2311	0.2	6
6 F	0526	1.1	34
	1142	0.3	9
	1751	1.1	34
	2353	0.3	9
7 Sa	0555	1.1	34
	1211	0.2	6
	1832	1.1	34
8 Su	0034	0.3	9
	0624	1.1	34
	1239	0.2	6
	1912	1.2	37
9 M	0114	0.3	9
	0652	1.0	30
	1309	0.1	3
	1953	1.2	37
10 Tu	0155	0.4	12
	0721	1.0	30
	1341	0.1	3
	2035	1.2	37
11 W	0237	0.4	12
	0752	1.0	30
	1416	0.0	0
	2120	1.2	37
12 Th	0323	0.5	15
	0827	0.9	27
	1456	0.0	0
	2210	1.2	37
13 F ◑	0413	0.5	15
	0907	0.9	27
	1542	0.0	0
	2305	1.2	37
14 Sa	0509	0.5	15
	0955	0.9	27
	1637	0.0	0
15 Su	0004	1.2	37
	0609	0.5	15
	1057	0.9	27
	1739	0.0	0

	Time	Height	
	h m	ft	cm
16 M	0104	1.2	37
	0711	0.5	15
	1211	0.9	27
	1849	0.0	0
17 Tu	0201	1.2	37
	0808	0.4	12
	1331	0.9	27
	2001	0.1	3
18 W	0254	1.1	34
	0902	0.3	9
	1447	1.0	30
	2110	0.1	3
19 Th ●	0342	1.1	34
	0951	0.1	3
	1556	1.1	34
	2214	0.1	3
20 F	0428	1.1	34
	1038	0.0	0
	1658	1.2	37
	2313	0.1	3
21 Sa	0512	1.1	34
	1125	−0.1	−3
	1755	1.3	40
22 Su	0008	0.2	6
	0555	1.1	34
	1211	−0.2	−6
	1848	1.3	40
23 M	0101	0.2	6
	0639	1.0	30
	1257	−0.2	−6
	1939	1.3	40
24 Tu	0152	0.2	6
	0723	1.0	30
	1343	−0.2	−6
	2030	1.3	40
25 W	0242	0.3	9
	0809	1.0	30
	1431	−0.2	−6
	2121	1.3	40
26 Th ◐	0335	0.3	9
	0857	0.9	27
	1521	−0.1	−3
	2213	1.2	37
27 F	0430	0.4	12
	0950	0.8	24
	1614	0.0	0
	2309	1.1	34
28 Sa	0530	0.4	12
	1050	0.8	24
	1711	0.0	0
29 Su	0006	1.0	30
	0632	0.4	12
	1157	0.8	24
	1814	0.1	3
30 M	0104	1.0	30
	0732	0.4	12
	1308	0.8	24
	1919	0.1	3
31 Tu	0158	0.9	27
	0825	0.3	9
	1417	0.8	24
	2023	0.2	6

Time meridian 165° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.
Heights are referred to mean lower low water which is the chart datum of soundings.

Sand Island, Midway Islands, 2015

Times and Heights of High and Low Waters

April

	Time	Height		Time	Height
	h m	ft / cm		h m	ft / cm
1 W	0247	0.9 / 27	**16** Th	0206	0.9 / 27
	0909	0.2 / 6		0824	−0.1 / −3
	1516	0.9 / 27		1451	1.0 / 30
	2122	0.2 / 6		2105	0.1 / 3
2 Th	0329	0.9 / 27	**17** F	0257	0.9 / 27
	0947	0.2 / 6		0915	−0.2 / −6
	1608	0.9 / 27		1554	1.1 / 34
	2214	0.2 / 6		2211	0.1 / 3
3 F	0406	0.9 / 27	**18** Sa	0347	0.8 / 24
	1021	0.1 / 3		1004	−0.3 / −9
	1653	1.0 / 30		1651	1.2 / 37
	2301	0.2 / 6	●	2309	0.1 / 3
4 Sa	0440	0.8 / 24	**19** Su	0435	0.8 / 24
	1052	0.0 / 0		1052	−0.4 / −12
	1734	1.1 / 34		1743	1.3 / 40
○	2345	0.2 / 6			
5 Su	0512	0.8 / 24	**20** M	0003	0.1 / 3
	1123	0.0 / 0		0523	0.8 / 24
	1813	1.1 / 34		1139	−0.4 / −12
				1832	1.3 / 40
6 M	0026	0.2 / 6	**21** Tu	0053	0.1 / 3
	0543	0.8 / 24		0610	0.8 / 24
	1154	−0.1 / −3		1225	−0.4 / −12
	1851	1.1 / 34		1919	1.3 / 40
7 Tu	0105	0.2 / 6	**22** W	0142	0.1 / 3
	0615	0.8 / 24		0658	0.8 / 24
	1226	−0.1 / −3		1311	−0.3 / −9
	1929	1.2 / 37		2005	1.2 / 37
8 W	0145	0.2 / 6	**23** Th	0230	0.1 / 3
	0647	0.7 / 21		0746	0.7 / 21
	1300	−0.1 / −3		1358	−0.3 / −9
	2009	1.2 / 37		2051	1.1 / 34
9 Th	0226	0.3 / 9	**24** F	0318	0.2 / 6
	0722	0.7 / 21		0837	0.7 / 21
	1339	−0.2 / −6		1447	−0.2 / −6
	2052	1.2 / 37		2138	1.1 / 34
10 F	0310	0.3 / 9	**25** Sa	0408	0.2 / 6
	0802	0.7 / 21		0933	0.7 / 21
	1422	−0.2 / −6		1539	−0.1 / −3
	2139	1.1 / 34	◐	2226	1.0 / 30
11 Sa	0356	0.3 / 9	**26** Su	0500	0.2 / 6
	0850	0.7 / 21		1035	0.6 / 18
	1512	−0.1 / −3		1636	0.0 / 0
◑	2229	1.1 / 34		2315	0.9 / 27
12 Su	0447	0.3 / 9	**27** M	0551	0.1 / 3
	0949	0.7 / 21		1145	0.6 / 18
	1611	−0.1 / −3		1740	0.1 / 3
	2322	1.0 / 30			
13 M	0541	0.2 / 6	**28** Tu	0004	0.8 / 24
	1100	0.7 / 21		0642	0.1 / 3
	1719	0.0 / 0		1256	0.7 / 21
				1848	0.1 / 3
14 Tu	0017	1.0 / 30	**29** W	0054	0.8 / 24
	0636	0.2 / 6		0729	0.1 / 3
	1219	0.8 / 24		1402	0.8 / 24
	1834	0.0 / 0		1957	0.2 / 6
15 W	0112	0.9 / 27	**30** Th	0141	0.7 / 21
	0731	0.1 / 3		0812	0.0 / 0
	1339	0.9 / 27		1459	0.8 / 24
	1952	0.1 / 3		2100	0.2 / 6

May

	Time	Height		Time	Height
	h m	ft / cm		h m	ft / cm
1 F	0225	0.7 / 21	**16** Sa	0213	0.7 / 21
	0851	−0.1 / −3		0844	−0.4 / −12
	1549	0.9 / 27		1547	1.1 / 34
	2157	0.2 / 6		2205	0.2 / 6
2 Sa	0307	0.6 / 18	**17** Su	0308	0.7 / 21
	0928	−0.1 / −3		0934	−0.4 / −12
	1633	1.0 / 30		1640	1.2 / 37
	2247	0.2 / 6	●	2303	0.2 / 6
3 Su	0346	0.6 / 18	**18** M	0401	0.7 / 21
	1003	−0.2 / −6		1023	−0.4 / −12
	1713	1.1 / 34		1728	1.2 / 37
○	2332	0.2 / 6		2355	0.1 / 3
4 M	0424	0.6 / 18	**19** Tu	0453	0.7 / 21
	1038	−0.2 / −6		1110	−0.4 / −12
	1752	1.1 / 34		1814	1.2 / 37
5 Tu	0014	0.2 / 6	**20** W	0044	0.1 / 3
	0500	0.6 / 18		0544	0.6 / 18
	1113	−0.3 / −9		1156	−0.4 / −12
	1830	1.1 / 34		1858	1.2 / 37
6 W	0054	0.2 / 6	**21** Th	0130	0.1 / 3
	0537	0.6 / 18		0634	0.6 / 18
	1149	−0.3 / −9		1242	−0.3 / −9
	1908	1.2 / 37		1940	1.2 / 37
7 Th	0134	0.2 / 6	**22** F	0214	0.1 / 3
	0616	0.6 / 18		0725	0.6 / 18
	1228	−0.3 / −9		1328	−0.2 / −6
	1948	1.2 / 37		2022	1.1 / 34
8 F	0214	0.2 / 6	**23** Sa	0258	0.1 / 3
	0700	0.6 / 18		0818	0.6 / 18
	1311	−0.3 / −9		1415	−0.1 / −3
	2029	1.1 / 34		2102	1.0 / 30
9 Sa	0256	0.1 / 3	**24** Su	0341	0.1 / 3
	0749	0.6 / 18		0915	0.6 / 18
	1359	−0.2 / −6		1505	0.0 / 0
	2112	1.1 / 34		2143	1.0 / 30
10 Su	0339	0.1 / 3	**25** M	0424	0.1 / 3
	0847	0.6 / 18		1018	0.6 / 18
	1453	−0.2 / −6		1601	0.1 / 3
◑	2157	1.0 / 30	◐	2223	0.9 / 27
11 M	0426	0.1 / 3	**26** Tu	0507	0.0 / 0
	0955	0.7 / 21		1125	0.7 / 21
	1554	−0.1 / −3		1702	0.2 / 6
	2243	0.9 / 27		2305	0.8 / 24
12 Tu	0516	0.0 / 0	**27** W	0551	0.0 / 0
	1110	0.7 / 21		1233	0.7 / 21
	1705	0.0 / 0		1811	0.2 / 6
	2333	0.9 / 27		2347	0.7 / 21
13 W	0607	−0.1 / −3	**28** Th	0634	−0.1 / −3
	1229	0.8 / 24		1336	0.8 / 24
	1824	0.1 / 3		1922	0.3 / 9
14 Th	0025	0.8 / 24	**29** F	0031	0.7 / 21
	0700	−0.2 / −6		0717	−0.1 / −3
	1343	0.9 / 27		1433	0.9 / 27
	1945	0.2 / 6		2030	0.3 / 9
15 F	0118	0.8 / 24	**30** Sa	0117	0.6 / 18
	0753	−0.3 / −9		0759	−0.2 / −6
	1449	1.0 / 30		1522	1.0 / 30
	2100	0.2 / 6		2131	0.3 / 9
			31 Su	0204	0.6 / 18
				0839	−0.2 / −6
				1607	1.1 / 34
				2225	0.3 / 9

June

	Time	Height		Time	Height
	h m	ft / cm		h m	ft / cm
1 M	0249	0.6 / 18	**16** Tu	0334	0.7 / 21
	0919	−0.3 / −9		0959	−0.3 / −9
	1649	1.1 / 34		1713	1.3 / 40
	2313	0.3 / 9	●	2345	0.3 / 9
2 Tu	0334	0.6 / 18	**17** W	0430	0.7 / 21
	0959	−0.3 / −9		1047	−0.3 / −9
	1729	1.2 / 37		1756	1.3 / 40
○	2356	0.2 / 6			
3 W	0419	0.6 / 18	**18** Th	0030	0.2 / 6
	1040	−0.3 / −9		0523	0.7 / 21
	1808	1.2 / 37		1133	−0.2 / −6
				1837	1.3 / 40
4 Th	0037	0.2 / 6	**19** F	0113	0.2 / 6
	0505	0.6 / 18		0614	0.7 / 21
	1122	−0.3 / −9		1218	−0.2 / −6
	1847	1.2 / 37		1915	1.2 / 37
5 F	0116	0.2 / 6	**20** Sa	0152	0.2 / 6
	0554	0.6 / 18		0706	0.7 / 21
	1207	−0.3 / −9		1302	−0.1 / −3
	1927	1.2 / 37		1952	1.2 / 37
6 Sa	0155	0.2 / 6	**21** Su	0230	0.2 / 6
	0648	0.6 / 18		0759	0.7 / 21
	1255	−0.2 / −6		1348	0.0 / 0
	2006	1.2 / 37		2027	1.1 / 34
7 Su	0235	0.1 / 3	**22** M	0306	0.1 / 3
	0747	0.7 / 21		0854	0.7 / 21
	1346	−0.2 / −6		1436	0.1 / 3
	2045	1.1 / 34		2101	1.0 / 30
8 M	0317	0.0 / 0	**23** Tu	0343	0.1 / 3
	0851	0.7 / 21		0953	0.8 / 24
	1443	0.0 / 0		1528	0.2 / 6
	2126	1.1 / 34		2136	1.0 / 30
9 Tu	0402	−0.1 / −3	**24** W	0421	0.0 / 0
	1002	0.8 / 24		1055	0.8 / 24
	1546	0.1 / 3		1626	0.3 / 9
◑	2209	1.0 / 30	◐	2211	0.9 / 27
10 W	0450	−0.2 / −6	**25** Th	0500	0.0 / 0
	1115	0.9 / 27		1158	0.9 / 27
	1657	0.2 / 6		1730	0.4 / 12
	2254	0.9 / 27		2249	0.9 / 27
11 Th	0541	−0.2 / −6	**26** F	0542	0.0 / 0
	1229	0.9 / 27		1259	1.0 / 30
	1815	0.3 / 9		1839	0.5 / 15
	2344	0.8 / 24		2330	0.8 / 24
12 F	0633	−0.3 / −9	**27** Sa	0625	−0.1 / −3
	1338	1.0 / 30		1356	1.0 / 30
	1935	0.4 / 12		1949	0.5 / 15
13 Sa	0038	0.8 / 24	**28** Su	0016	0.8 / 24
	0726	−0.3 / −9		0710	−0.1 / −3
	1440	1.1 / 34		1449	1.1 / 34
	2051	0.4 / 12		2055	0.5 / 15
14 Su	0136	0.7 / 21	**29** M	0106	0.7 / 21
	0819	−0.4 / −12		0756	−0.1 / −3
	1536	1.2 / 37		1537	1.2 / 37
	2157	0.4 / 12		2153	0.5 / 15
15 M	0236	0.7 / 21	**30** Tu	0158	0.7 / 21
	0910	−0.4 / −12		0842	−0.2 / −6
	1626	1.2 / 37		1622	1.3 / 40
	2254	0.3 / 9		2243	0.4 / 12

Time meridian 165° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.
Heights are referred to mean lower low water which is the chart datum of soundings.

Sand Island, Midway Islands, 2015

Times and Heights of High and Low Waters

July

	Time	Height	
	h m	ft	cm
1 W ○	0253	0.7	21
	0929	−0.2	−6
	1704	1.3	40
	2327	0.4	12
2 Th	0349	0.7	21
	1016	−0.2	−6
	1745	1.4	43
3 F	0008	0.4	12
	0445	0.8	24
	1105	−0.2	−6
	1824	1.4	43
4 Sa	0047	0.3	9
	0544	0.8	24
	1155	−0.1	−3
	1902	1.3	40
5 Su	0126	0.2	6
	0644	0.9	27
	1247	0.0	0
	1940	1.3	40
6 M	0207	0.1	3
	0747	0.9	27
	1341	0.1	3
	2018	1.2	37
7 Tu	0249	0.0	0
	0852	1.0	30
	1438	0.2	6
	2057	1.2	37
8 W ◑	0335	−0.1	−3
	0959	1.0	30
	1541	0.3	9
	2138	1.1	34
9 Th	0423	−0.1	−3
	1108	1.1	34
	1649	0.5	15
	2224	1.0	30
10 F	0515	−0.2	−6
	1216	1.2	37
	1803	0.5	15
	2314	1.0	30
11 Sa	0608	−0.2	−6
	1322	1.2	37
	1921	0.6	18
12 Su	0010	0.9	27
	0703	−0.2	−6
	1424	1.3	40
	2036	0.6	18
13 M	0112	0.9	27
	0758	−0.2	−6
	1519	1.3	40
	2142	0.5	15
14 Tu	0216	0.8	24
	0851	−0.1	−3
	1610	1.3	40
	2238	0.5	15
15 W ●	0317	0.8	24
	0942	−0.1	−3
	1655	1.3	40
	2327	0.4	12

	Time	Height	
	h m	ft	cm
16 Th	0415	0.8	24
	1030	−0.1	−3
	1736	1.3	40
17 F	0008	0.4	12
	0509	0.8	24
	1116	0.0	0
	1813	1.3	40
18 Sa	0045	0.4	12
	0600	0.9	27
	1200	0.1	3
	1848	1.3	40
19 Su	0119	0.3	9
	0649	0.9	27
	1244	0.1	3
	1920	1.3	40
20 M	0151	0.3	9
	0739	0.9	27
	1328	0.2	6
	1951	1.2	37
21 Tu	0223	0.2	6
	0830	1.0	30
	1413	0.3	9
	2021	1.2	37
22 W	0256	0.2	6
	0922	1.0	30
	1501	0.4	12
	2052	1.1	34
23 Th ◐	0331	0.1	3
	1017	1.0	30
	1553	0.5	15
	2125	1.1	34
24 F	0410	0.1	3
	1114	1.1	34
	1651	0.6	18
	2201	1.0	30
25 Sa	0451	0.1	3
	1213	1.1	34
	1756	0.6	18
	2241	1.0	30
26 Su	0537	0.0	0
	1312	1.2	37
	1904	0.7	21
	2328	0.9	27
27 M	0626	0.0	0
	1409	1.3	40
	2012	0.7	21
28 Tu	0022	0.9	27
	0718	0.0	0
	1502	1.3	40
	2112	0.6	18
29 W	0123	0.9	27
	0812	0.0	0
	1550	1.4	43
	2203	0.6	18
30 Th ○	0229	0.9	27
	0907	0.0	0
	1634	1.4	43
	2248	0.5	15
31 F	0334	0.9	27
	1002	0.0	0
	1715	1.4	43
	2329	0.4	12

August

	Time	Height	
	h m	ft	cm
1 Sa	0438	1.0	30
	1056	0.0	0
	1754	1.4	43
2 Su	0009	0.3	9
	0540	1.1	34
	1150	0.1	3
	1832	1.4	43
3 M	0050	0.2	6
	0641	1.2	37
	1244	0.2	6
	1910	1.4	43
4 Tu	0133	0.1	3
	0742	1.2	37
	1339	0.3	9
	1949	1.3	40
5 W	0218	0.0	0
	0843	1.3	40
	1435	0.4	12
	2029	1.3	40
6 Th ◑	0305	0.0	0
	0945	1.3	40
	1534	0.5	15
	2113	1.2	37
7 F	0355	−0.1	−3
	1048	1.3	40
	1638	0.6	18
	2200	1.1	34
8 Sa	0448	0.0	0
	1152	1.3	40
	1747	0.7	21
	2254	1.1	34
9 Su	0544	0.0	0
	1257	1.3	40
	1902	0.7	21
	2354	1.0	30
10 M	0642	0.0	0
	1359	1.3	40
	2015	0.7	21
11 Tu	0101	1.0	30
	0740	0.1	3
	1456	1.3	40
	2119	0.6	18
12 W	0208	1.0	30
	0836	0.1	3
	1547	1.3	40
	2213	0.6	18
13 Th	0312	1.0	30
	0930	0.1	3
	1631	1.3	40
	2257	0.5	15
14 F ●	0409	1.0	30
	1019	0.2	6
	1710	1.3	40
	2334	0.5	15
15 Sa	0501	1.0	30
	1105	0.2	6
	1744	1.3	40

	Time	Height	
	h m	ft	cm
16 Su	0006	0.4	12
	0548	1.1	34
	1149	0.3	9
	1815	1.3	40
17 M	0036	0.4	12
	0634	1.1	34
	1232	0.3	9
	1844	1.2	37
18 Tu	0106	0.3	9
	0718	1.2	37
	1314	0.4	12
	1913	1.2	37
19 W	0136	0.3	9
	0803	1.2	37
	1356	0.5	15
	1942	1.2	37
20 Th	0207	0.2	6
	0848	1.2	37
	1440	0.5	15
	2012	1.1	34
21 F	0242	0.2	6
	0937	1.2	37
	1527	0.6	18
	2045	1.1	34
22 Sa ◐	0320	0.2	6
	1029	1.2	37
	1620	0.7	21
	2121	1.1	34
23 Su	0403	0.2	6
	1125	1.3	40
	1718	0.7	21
	2204	1.0	30
24 M	0451	0.1	3
	1224	1.3	40
	1822	0.7	21
	2255	1.0	30
25 Tu	0546	0.1	3
	1324	1.3	40
	1927	0.7	21
	2357	1.0	30
26 W	0646	0.1	3
	1420	1.3	40
	2026	0.7	21
27 Th	0108	1.0	30
	0749	0.1	3
	1510	1.4	43
	2117	0.6	18
28 F	0221	1.1	34
	0852	0.1	3
	1556	1.4	43
	2203	0.5	15
29 Sa ○	0331	1.1	34
	0953	0.2	6
	1638	1.4	43
	2247	0.4	12
30 Su	0435	1.2	37
	1051	0.2	6
	1719	1.4	43
	2330	0.2	6
31 M	0536	1.3	40
	1147	0.2	6
	1758	1.3	40

September

	Time	Height	
	h m	ft	cm
1 Tu	0014	0.1	3
	0634	1.4	43
	1241	0.3	9
	1839	1.3	40
2 W	0059	0.0	0
	0730	1.4	43
	1335	0.4	12
	1920	1.3	40
3 Th	0145	0.0	0
	0826	1.5	46
	1428	0.5	15
	2004	1.2	37
4 F ◑	0234	0.0	0
	0922	1.4	43
	1524	0.5	15
	2051	1.2	37
5 Sa	0325	0.0	0
	1020	1.4	43
	1624	0.6	18
	2143	1.1	34
6 Su	0420	0.1	3
	1120	1.4	43
	1729	0.6	18
	2241	1.1	34
7 M	0518	0.1	3
	1222	1.3	40
	1838	0.6	18
	2347	1.0	30
8 Tu	0619	0.2	6
	1324	1.3	40
	1946	0.6	18
9 W	0058	1.0	30
	0722	0.2	6
	1422	1.3	40
	2046	0.6	18
10 Th	0208	1.0	30
	0823	0.3	9
	1512	1.2	37
	2135	0.5	15
11 F	0310	1.0	30
	0919	0.3	9
	1556	1.2	37
	2215	0.5	15
12 Sa ●	0404	1.1	34
	1011	0.3	9
	1633	1.2	37
	2249	0.4	12
13 Su	0452	1.2	37
	1058	0.3	9
	1706	1.2	37
	2320	0.4	12
14 M	0536	1.2	37
	1141	0.4	12
	1737	1.1	34
	2349	0.3	9
15 Tu	0617	1.3	40
	1222	0.4	12
	1806	1.1	34

	Time	Height	
	h m	ft	cm
16 W	0018	0.3	9
	0656	1.3	40
	1302	0.4	12
	1834	1.1	34
17 Th	0048	0.2	6
	0736	1.3	40
	1342	0.5	15
	1904	1.1	34
18 F	0120	0.2	6
	0817	1.3	40
	1424	0.5	15
	1936	1.0	30
19 Sa	0155	0.2	6
	0900	1.3	40
	1508	0.6	18
	2010	1.0	30
20 Su ◐	0234	0.1	3
	0948	1.3	40
	1556	0.6	18
	2050	1.0	30
21 M	0319	0.1	3
	1040	1.3	40
	1649	0.6	18
	2138	1.0	30
22 Tu	0411	0.2	6
	1136	1.3	40
	1747	0.6	18
	2238	1.0	30
23 W	0512	0.2	6
	1234	1.3	40
	1846	0.6	18
	2350	1.0	30
24 Th	0621	0.2	6
	1331	1.2	37
	1941	0.5	15
25 F	0108	1.0	30
	0733	0.2	6
	1423	1.2	37
	2032	0.4	12
26 Sa	0223	1.1	34
	0843	0.3	9
	1511	1.2	37
	2120	0.3	9
27 Su	0330	1.3	40
	0948	0.3	9
	1556	1.2	37
	2207	0.1	3
28 M	0432	1.4	43
	1048	0.3	9
	1640	1.2	37
	2253	0.0	0
29 Tu	0528	1.5	46
	1143	0.3	9
	1723	1.2	37
	2339	−0.1	−3
30 W	0622	1.5	46
	1236	0.4	12
	1807	1.2	37

Time meridian 165° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.
Heights are referred to mean lower low water which is the chart datum of soundings.

Sand Island, Midway Islands, 2015

Times and Heights of High and Low Waters

October

	Time	Height	
	h m	ft	cm
1 Th	0026	−0.1	−3
	0713	1.5	46
	1327	0.4	12
	1853	1.1	34
2 F	0114	−0.1	−3
	0804	1.5	46
	1419	0.4	12
	1941	1.1	34
3 Sa	0203	−0.1	−3
	0855	1.5	46
	1512	0.5	15
	2032	1.0	30
4 Su ◑	0254	0.0	0
	0948	1.4	43
	1608	0.5	15
	2128	1.0	30
5 M	0349	0.1	3
	1043	1.3	40
	1707	0.5	15
	2231	1.0	30
6 Tu	0448	0.2	6
	1140	1.2	37
	1810	0.5	15
	2342	0.9	27
7 W	0553	0.3	9
	1238	1.2	37
	1909	0.5	15
8 Th	0056	1.0	30
	0700	0.3	9
	1333	1.1	34
	2002	0.4	12
9 F	0204	1.0	30
	0806	0.4	12
	1423	1.1	34
	2047	0.4	12
10 Sa	0303	1.1	34
	0907	0.4	12
	1506	1.0	30
	2126	0.3	9
11 Su	0354	1.1	34
	1001	0.4	12
	1545	1.0	30
	2200	0.3	9
12 M ●	0439	1.2	37
	1048	0.4	12
	1620	1.0	30
	2232	0.2	6
13 Tu	0520	1.3	40
	1132	0.4	12
	1653	1.0	30
	2303	0.2	6
14 W	0558	1.3	40
	1213	0.4	12
	1724	0.9	27
	2334	0.1	3
15 Th	0635	1.3	40
	1252	0.4	12
	1756	0.9	27

	Time	Height	
	h m	ft	cm
16 F	0006	0.1	3
	0712	1.4	43
	1331	0.4	12
	1829	0.9	27
17 Sa	0039	0.1	3
	0750	1.4	43
	1411	0.5	15
	1903	0.9	27
18 Su	0116	0.1	3
	0831	1.3	40
	1453	0.5	15
	1943	0.9	27
19 M	0157	0.1	3
	0914	1.3	40
	1537	0.5	15
	2029	0.9	27
20 Tu ◐	0244	0.1	3
	1001	1.3	40
	1626	0.5	15
	2126	0.9	27
21 W	0340	0.1	3
	1052	1.2	37
	1717	0.4	12
	2236	0.9	27
22 Th	0446	0.2	6
	1144	1.2	37
	1809	0.4	12
	2354	1.0	30
23 F	0601	0.3	9
	1238	1.1	34
	1902	0.3	9
24 Sa	0112	1.1	34
	0720	0.3	9
	1330	1.1	34
	1953	0.1	3
25 Su	0224	1.2	37
	0836	0.4	12
	1422	1.0	30
	2043	0.0	0
26 M	0328	1.3	40
	0943	0.4	12
	1512	1.0	30
	2132	−0.1	−3
27 Tu ○	0425	1.4	43
	1043	0.4	12
	1601	1.0	30
	2221	−0.2	−6
28 W	0517	1.5	46
	1138	0.4	12
	1650	1.0	30
	2309	−0.2	−6
29 Th	0607	1.5	46
	1229	0.4	12
	1739	1.0	30
	2357	−0.2	−6
30 F	0655	1.5	46
	1318	0.4	12
	1829	1.0	30
31 Sa	0045	−0.2	−6
	0741	1.5	46
	1407	0.4	12
	1921	1.0	30

November

	Time	Height	
	h m	ft	cm
1 Su	0133	−0.1	−3
	0828	1.4	43
	1457	0.4	12
	2015	0.9	27
2 M	0224	0.0	0
	0915	1.3	40
	1548	0.4	12
	2114	0.9	27
3 Tu ◑	0317	0.1	3
	1003	1.2	37
	1641	0.4	12
	2219	0.9	27
4 W	0415	0.2	6
	1052	1.2	37
	1733	0.3	9
	2331	0.9	27
5 Th	0520	0.3	9
	1142	1.1	34
	1824	0.3	9
6 F	0043	0.9	27
	0630	0.4	12
	1232	1.0	30
	1912	0.3	9
7 Sa	0150	1.0	30
	0741	0.4	12
	1319	0.9	27
	1955	0.2	6
8 Su	0247	1.1	34
	0846	0.5	15
	1405	0.9	27
	2034	0.2	6
9 M	0336	1.2	37
	0944	0.5	15
	1447	0.9	27
	2111	0.1	3
10 Tu	0420	1.3	40
	1034	0.4	12
	1527	0.8	24
	2147	0.1	3
11 W ●	0500	1.3	40
	1119	0.4	12
	1605	0.8	24
	2221	0.0	0
12 Th	0538	1.4	43
	1200	0.4	12
	1642	0.8	24
	2255	0.0	0
13 F	0614	1.4	43
	1240	0.4	12
	1719	0.8	24
	2330	0.0	0
14 Sa	0651	1.4	43
	1318	0.4	12
	1757	0.8	24
15 Su	0007	0.0	0
	0728	1.4	43
	1357	0.4	12
	1839	0.8	24

	Time	Height	
	h m	ft	cm
16 M	0047	0.0	0
	0806	1.4	43
	1436	0.4	12
	1926	0.8	24
17 Tu	0132	0.0	0
	0846	1.3	40
	1518	0.4	12
	2022	0.8	24
18 W ◐	0222	0.1	3
	0928	1.3	40
	1601	0.3	9
	2127	0.9	27
19 Th	0321	0.2	6
	1012	1.2	37
	1648	0.2	6
	2240	0.9	27
20 F	0429	0.3	9
	1058	1.1	34
	1737	0.1	3
	2358	1.0	30
21 Sa	0547	0.4	12
	1147	1.1	34
	1828	0.0	0
22 Su	0113	1.1	34
	0709	0.5	15
	1240	1.0	30
	1920	−0.1	−3
23 M	0220	1.3	40
	0827	0.5	15
	1335	1.0	30
	2013	−0.1	−3
24 Tu	0320	1.4	43
	0936	0.5	15
	1431	0.9	27
	2104	−0.2	−6
25 W ○	0415	1.5	46
	1036	0.5	15
	1527	0.9	27
	2155	−0.2	−6
26 Th	0504	1.5	46
	1129	0.4	12
	1622	0.9	27
	2244	−0.2	−6
27 F	0551	1.5	46
	1219	0.4	12
	1716	0.9	27
	2332	−0.2	−6
28 Sa	0636	1.5	46
	1306	0.4	12
	1809	0.9	27
29 Su	0020	−0.1	−3
	0719	1.5	46
	1352	0.3	9
	1903	0.9	27
30 M	0107	0.0	0
	0802	1.4	43
	1437	0.3	9
	1959	0.9	27

December

	Time	Height	
	h m	ft	cm
1 Tu	0156	0.1	3
	0843	1.3	40
	1522	0.3	9
	2057	0.9	27
2 W ◑	0247	0.2	6
	0924	1.3	40
	1606	0.3	9
	2201	0.9	27
3 Th	0342	0.3	9
	1004	1.2	37
	1650	0.3	9
	2309	0.9	27
4 F	0444	0.4	12
	1045	1.1	34
	1734	0.2	6
5 Sa	0017	1.0	30
	0552	0.5	15
	1127	1.0	30
	1817	0.2	6
6 Su	0121	1.1	34
	0704	0.6	18
	1211	0.9	27
	1901	0.1	3
7 M	0219	1.2	37
	0814	0.6	18
	1257	0.9	27
	1943	0.1	3
8 Tu	0310	1.2	37
	0917	0.6	18
	1345	0.8	24
	2025	0.1	3
9 W	0355	1.3	40
	1011	0.6	18
	1432	0.8	24
	2105	0.0	0
10 Th ●	0436	1.4	43
	1059	0.5	15
	1518	0.8	24
	2145	0.0	0
11 F	0516	1.4	43
	1142	0.5	15
	1603	0.8	24
	2224	0.0	0
12 Sa	0553	1.5	46
	1222	0.5	15
	1648	0.8	24
	2304	0.0	0
13 Su	0630	1.5	46
	1259	0.5	15
	1736	0.8	24
	2346	0.0	0
14 M	0707	1.5	46
	1336	0.4	12
	1826	0.9	27
15 Tu	0031	0.0	0
	0743	1.4	43
	1413	0.4	12
	1921	0.9	27

	Time	Height	
	h m	ft	cm
16 W	0119	0.1	3
	0820	1.4	43
	1452	0.3	9
	2022	1.0	30
17 Th	0212	0.2	6
	0857	1.3	40
	1534	0.2	6
	2129	1.0	30
18 F ◐	0312	0.3	9
	0936	1.2	37
	1619	0.1	3
	2240	1.1	34
19 Sa	0419	0.5	15
	1019	1.2	37
	1707	0.0	0
	2353	1.2	37
20 Su	0535	0.6	18
	1106	1.1	34
	1759	−0.1	−3
21 M	0104	1.3	40
	0656	0.6	18
	1158	1.0	30
	1853	−0.1	−3
22 Tu	0209	1.4	43
	0815	0.7	21
	1257	1.0	30
	1948	−0.1	−3
23 W	0308	1.4	43
	0925	0.6	18
	1400	1.0	30
	2042	−0.2	−6
24 Th	0401	1.5	46
	1025	0.6	18
	1502	0.9	27
	2134	−0.1	−3
25 F ○	0450	1.5	46
	1118	0.5	15
	1603	0.9	27
	2225	−0.1	−3
26 Sa	0535	1.5	46
	1206	0.5	15
	1700	0.9	27
	2314	−0.1	−3
27 Su	0617	1.5	46
	1250	0.4	12
	1755	0.9	27
28 M	0001	0.0	0
	0657	1.5	46
	1331	0.4	12
	1849	1.0	30
29 Tu	0047	0.1	3
	0734	1.4	43
	1410	0.4	12
	1942	1.0	30
30 W	0133	0.2	6
	0810	1.4	43
	1447	0.3	9
	2037	1.0	30
31 Th	0221	0.3	9
	0845	1.3	40
	1524	0.3	9
	2135	1.0	30

Time meridian 165° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.
Heights are referred to mean lower low water which is the chart datum of soundings.

Nawiliwili, Kauai Island, Hawaii, 2015

Times and Heights of High and Low Waters

January

	Time	Height	
	h m	ft	cm
1 Th	0153	2.0	61
	0852	0.6	18
	1253	0.8	24
	1850	−0.2	−6
2 F	0231	2.1	64
	0933	0.5	15
	1343	0.8	24
	1929	−0.2	−6
3 Sa	0306	2.1	64
	1006	0.4	12
	1427	0.8	24
	2006	−0.2	−6
4 Su ○	0340	2.1	64
	1037	0.4	12
	1507	0.8	24
	2043	−0.1	−3
5 M	0412	2.1	64
	1106	0.3	9
	1546	0.8	24
	2118	−0.1	−3
6 Tu	0444	2.1	64
	1136	0.3	9
	1625	0.8	24
	2154	0.0	0
7 W	0515	2.0	61
	1207	0.3	9
	1707	0.8	24
	2231	0.1	3
8 Th	0545	1.9	58
	1239	0.3	9
	1755	0.8	24
	2309	0.2	6
9 F	0614	1.7	52
	1313	0.3	9
	1854	0.8	24
	2351	0.4	12
10 Sa	0642	1.5	46
	1349	0.3	9
	2010	0.9	27
11 Su	0042	0.6	18
	0709	1.4	43
	1428	0.2	6
	2143	1.0	30
12 M ◑	0158	0.8	24
	0737	1.2	37
	1511	0.2	6
	2304	1.2	37
13 Tu	0356	0.9	27
	0811	1.0	30
	1556	0.1	3
14 W	0003	1.4	43
	0622	0.8	24
	0915	0.9	27
	1644	0.0	0
15 Th	0048	1.6	49
	0746	0.7	21
	1053	0.8	24
	1732	−0.1	−3

	Time	Height	
	h m	ft	cm
16 F	0127	1.8	55
	0827	0.6	18
	1210	0.7	21
	1819	−0.2	−6
17 Sa	0205	2.0	61
	0901	0.5	15
	1310	0.8	24
	1906	−0.3	−9
18 Su	0243	2.2	67
	0935	0.4	12
	1402	0.8	24
	1952	−0.3	−9
19 M	0321	2.3	70
	1009	0.3	9
	1451	0.8	24
	2037	−0.4	−12
20 Tu ●	0400	2.3	70
	1045	0.2	6
	1541	0.9	27
	2123	−0.3	−9
21 W	0438	2.2	67
	1122	0.1	3
	1633	0.9	27
	2211	−0.2	−6
22 Th	0517	2.1	64
	1200	0.1	3
	1730	1.0	30
	2300	0.0	0
23 F	0556	1.9	58
	1240	0.0	0
	1835	1.0	30
	2355	0.2	6
24 Sa	0635	1.7	52
	1323	0.0	0
	1950	1.1	34
25 Su	0100	0.5	15
	0714	1.4	43
	1408	0.0	0
	2117	1.2	37
26 M ◐	0228	0.7	21
	0757	1.2	37
	1458	0.0	0
	2243	1.4	43
27 Tu	0443	0.8	24
	0854	0.9	27
	1553	0.0	0
	2355	1.6	49
28 W	0711	0.7	21
	1021	0.8	24
	1650	0.0	0
29 Th	0050	1.7	52
	0817	0.6	18
	1148	0.7	21
	1744	−0.1	−3
30 F	0136	1.8	55
	0854	0.5	15
	1253	0.7	21
	1834	−0.1	−3
31 Sa	0214	1.9	58
	0921	0.4	12
	1343	0.7	21
	1917	−0.1	−3

February

	Time	Height	
	h m	ft	cm
1 Su	0249	1.9	58
	0944	0.3	9
	1424	0.8	24
	1957	−0.1	−3
2 M	0320	2.0	61
	1006	0.3	9
	1500	0.8	24
	2034	−0.1	−3
3 Tu ○	0350	1.9	58
	1028	0.2	6
	1536	0.9	27
	2110	−0.1	−3
4 W	0418	1.9	58
	1051	0.2	6
	1611	0.9	27
	2146	0.0	0
5 Th	0445	1.8	55
	1116	0.2	6
	1648	1.0	30
	2222	0.1	3
6 F	0510	1.7	52
	1142	0.2	6
	1729	1.0	30
	2300	0.2	6
7 Sa	0534	1.5	46
	1211	0.1	3
	1815	1.0	30
	2342	0.4	12
8 Su	0557	1.4	43
	1241	0.1	3
	1911	1.1	34
9 M	0032	0.5	15
	0617	1.2	37
	1316	0.1	3
	2023	1.1	34
10 Tu	0141	0.7	21
	0637	1.0	30
	1357	0.1	3
	2149	1.2	37
11 W ◑	0330	0.8	24
	0658	0.9	27
	1449	0.1	3
	2308	1.4	43
12 Th	1551	0.0	0
13 F	0008	1.6	49
	0740	0.5	15
	1032	0.6	18
	1655	0.0	0
14 Sa	0056	1.7	52
	0806	0.5	15
	1206	0.7	21
	1756	−0.1	−3
15 Su	0139	1.9	58
	0834	0.3	9
	1308	0.7	21
	1851	−0.2	−6

	Time	Height	
	h m	ft	cm
16 M	0219	2.0	61
	0903	0.2	6
	1400	0.8	24
	1943	−0.3	−9
17 Tu	0258	2.1	64
	0934	0.1	3
	1448	1.0	30
	2032	−0.3	−9
18 W ●	0336	2.1	64
	1007	0.0	0
	1537	1.1	34
	2121	−0.3	−9
19 Th	0413	2.0	61
	1040	−0.1	−3
	1626	1.2	37
	2211	−0.2	−6
20 F	0450	1.8	55
	1114	−0.1	−3
	1719	1.3	40
	2303	0.0	0
21 Sa	0526	1.6	49
	1150	−0.1	−3
	1815	1.3	40
	2359	0.2	6
22 Su	0602	1.4	43
	1229	−0.1	−3
	1920	1.4	43
23 M	0105	0.4	12
	0638	1.1	34
	1311	−0.1	−3
	2034	1.4	43
24 Tu	0235	0.6	18
	0719	0.9	27
	1400	0.0	0
	2157	1.4	43
25 W ◐	0504	0.6	18
	0824	0.7	21
	1500	0.1	3
	2315	1.5	46
26 Th	0712	0.5	15
	1024	0.6	18
	1611	0.1	3
27 F	0017	1.6	49
	0755	0.4	12
	1156	0.6	18
	1722	0.1	3
28 Sa	0107	1.7	52
	0822	0.3	9
	1257	0.7	21
	1821	0.1	3

March

	Time	Height	
	h m	ft	cm
1 Su	0147	1.7	52
	0844	0.3	9
	1341	0.8	24
	1909	0.0	0
2 M	0221	1.7	52
	0902	0.2	6
	1417	0.9	27
	1950	0.0	0
3 Tu	0252	1.7	52
	0921	0.2	6
	1451	1.0	30
	2028	0.0	0
4 W	0320	1.7	52
	0940	0.1	3
	1523	1.1	34
	2105	0.0	0
5 Th ○	0346	1.6	49
	1001	0.1	3
	1556	1.2	37
	2141	0.0	0
6 F	0410	1.5	46
	1024	0.0	0
	1630	1.2	37
	2218	0.1	3
7 Sa	0434	1.4	43
	1048	0.0	0
	1707	1.3	40
	2258	0.2	6
8 Su	0457	1.3	40
	1114	0.0	0
	1746	1.3	40
	2342	0.3	9
9 M	0519	1.1	34
	1143	0.0	0
	1833	1.3	40
10 Tu	0034	0.5	15
	0541	1.0	30
	1216	0.0	0
	1930	1.3	40
11 W	0144	0.6	18
	0604	0.8	24
	1257	0.1	3
	2043	1.3	40
12 Th	0328	0.6	18
	0634	0.7	21
	1351	0.1	3
	2206	1.4	43
13 F ◑	0552	0.5	15
	0806	0.6	18
	1504	0.1	3
	2318	1.5	46
14 Sa	0652	0.4	12
	1052	0.6	18
	1624	0.1	3
15 Su	0016	1.7	52
	0723	0.3	9
	1212	0.7	21
	1737	0.0	0

	Time	Height	
	h m	ft	cm
16 M	0105	1.8	55
	0752	0.2	6
	1309	0.8	24
	1841	−0.1	−3
17 Tu	0148	1.8	55
	0822	0.1	3
	1358	1.0	30
	1937	−0.2	−6
18 W	0228	1.8	55
	0852	0.0	0
	1444	1.2	37
	2031	−0.2	−6
19 Th ●	0306	1.7	52
	0923	−0.1	−3
	1530	1.4	43
	2123	−0.1	−3
20 F	0343	1.6	49
	0955	−0.2	−6
	1616	1.5	46
	2215	0.0	0
21 Sa	0420	1.4	43
	1028	−0.2	−6
	1704	1.6	49
	2309	0.1	3
22 Su	0456	1.2	37
	1102	−0.2	−6
	1755	1.6	49
23 M	0007	0.2	6
	0532	1.0	30
	1138	−0.2	−6
	1850	1.6	49
24 Tu	0114	0.4	12
	0611	0.8	24
	1218	−0.1	−3
	1953	1.6	49
25 W	0242	0.5	15
	0700	0.7	21
	1305	0.0	0
	2105	1.5	46
26 Th ◐	0449	0.4	12
	0832	0.5	15
	1406	0.2	6
	2221	1.5	46
27 F	0621	0.4	12
	1036	0.6	18
	1527	0.2	6
	2328	1.5	46
28 Sa	0703	0.3	9
	1158	0.6	18
	1653	0.3	9
29 Su	0023	1.5	46
	0730	0.3	9
	1251	0.8	24
	1803	0.2	6
30 M	0106	1.5	46
	0750	0.2	6
	1331	0.9	27
	1857	0.2	6
31 Tu	0142	1.4	43
	0809	0.1	3
	1406	1.1	34
	1942	0.2	6

Time meridian 150° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.
Heights are referred to mean lower low water which is the chart datum of soundings.

Nawiliwili, Kauai Island, Hawaii, 2015

Times and Heights of High and Low Waters

April

	Time	Height	
	h m	ft	cm
1 W	0213	1.4	43
	0828	0.1	3
	1438	1.2	37
	2022	0.1	3
2 Th	0241	1.3	40
	0848	0.0	0
	1509	1.3	40
	2101	0.1	3
3 F	0307	1.3	40
	0909	0.0	0
	1541	1.4	43
	2140	0.2	6
4 Sa ○	0332	1.2	37
	0933	−0.1	−3
	1614	1.5	46
	2220	0.2	6
5 Su	0357	1.1	34
	0959	−0.1	−3
	1648	1.6	49
	2302	0.2	6
6 M	0422	1.0	30
	1026	−0.1	−3
	1726	1.6	49
	2349	0.3	9
7 Tu	0448	0.9	27
	1057	−0.1	−3
	1809	1.6	49
8 W	0045	0.4	12
	0518	0.7	21
	1131	−0.1	−3
	1859	1.6	49
9 Th	0155	0.4	12
	0554	0.6	18
	1213	0.0	0
	2002	1.5	46
10 F	0326	0.4	12
	0658	0.5	15
	1309	0.1	3
	2114	1.5	46
11 Sa ◑	0457	0.4	12
	0916	0.5	15
	1427	0.2	6
	2226	1.6	49
12 Su	0553	0.3	9
	1107	0.6	18
	1558	0.2	6
	2329	1.6	49
13 M	0632	0.1	3
	1215	0.8	24
	1723	0.2	6
14 Tu	0023	1.6	49
	0704	0.0	0
	1307	1.0	30
	1834	0.1	3
15 W	0109	1.5	46
	0736	−0.1	−3
	1354	1.3	40
	1937	0.1	3

	Time	Height	
	h m	ft	cm
16 Th	0152	1.5	46
	0807	−0.2	−6
	1438	1.5	46
	2035	0.1	3
17 F	0232	1.4	43
	0839	−0.3	−9
	1522	1.7	52
	2129	0.1	3
18 Sa ●	0310	1.2	37
	0911	−0.3	−9
	1605	1.8	55
	2223	0.1	3
19 Su	0348	1.1	34
	0944	−0.3	−9
	1649	1.9	58
	2317	0.2	6
20 M	0427	0.9	27
	1019	−0.3	−9
	1735	1.9	58
21 Tu	0015	0.2	6
	0507	0.8	24
	1055	−0.2	−6
	1823	1.8	55
22 W	0119	0.3	9
	0553	0.6	18
	1134	−0.1	−3
	1916	1.7	52
23 Th	0234	0.3	9
	0656	0.5	15
	1218	0.1	3
	2015	1.6	49
24 F	0400	0.3	9
	0836	0.5	15
	1315	0.2	6
	2119	1.5	46
25 Sa ◐	0510	0.3	9
	1027	0.6	18
	1434	0.4	12
	2224	1.4	43
26 Su	0555	0.2	6
	1144	0.7	21
	1610	0.4	12
	2321	1.3	40
27 M	0625	0.2	6
	1235	0.9	27
	1735	0.4	12
28 Tu	0009	1.3	40
	0649	0.1	3
	1315	1.1	34
	1840	0.4	12
29 W	0049	1.2	37
	0710	0.1	3
	1350	1.2	37
	1933	0.4	12
30 Th	0123	1.1	34
	0732	0.0	0
	1422	1.4	43
	2019	0.3	9

May

	Time	Height	
	h m	ft	cm
1 F	0154	1.1	34
	0756	−0.1	−3
	1453	1.6	49
	2101	0.3	9
2 Sa	0223	1.0	30
	0821	−0.2	−6
	1525	1.7	52
	2143	0.3	9
3 Su ○	0252	0.9	27
	0848	−0.2	−6
	1558	1.8	55
	2225	0.3	9
4 M	0322	0.9	27
	0917	−0.2	−6
	1632	1.8	55
	2309	0.3	9
5 Tu	0353	0.8	24
	0949	−0.2	−6
	1710	1.9	58
	2358	0.3	9
6 W	0429	0.7	21
	1023	−0.2	−6
	1752	1.9	58
7 Th	0053	0.3	9
	0511	0.6	18
	1102	−0.1	−3
	1840	1.8	55
8 F	0157	0.3	9
	0608	0.5	15
	1147	0.0	0
	1933	1.8	55
9 Sa	0305	0.3	9
	0739	0.5	15
	1245	0.1	3
	2034	1.7	52
10 Su	0408	0.2	6
	0936	0.6	18
	1403	0.3	9
	2137	1.6	49
11 M ◑	0459	0.1	3
	1107	0.8	24
	1538	0.4	12
	2239	1.5	46
12 Tu	0540	0.0	0
	1211	1.0	30
	1714	0.4	12
	2335	1.4	43
13 W	0617	−0.1	−3
	1303	1.3	40
	1836	0.4	12
14 Th	0026	1.3	40
	0651	−0.2	−6
	1348	1.6	49
	1946	0.4	12
15 F	0113	1.2	37
	0725	−0.3	−9
	1431	1.8	55
	2047	0.3	9

	Time	Height	
	h m	ft	cm
16 Sa	0157	1.0	30
	0759	−0.4	−12
	1513	2.0	61
	2142	0.3	9
17 Su ●	0239	0.9	27
	0833	−0.4	−12
	1553	2.1	64
	2234	0.2	6
18 M	0321	0.8	24
	0908	−0.3	−9
	1634	2.1	64
	2325	0.2	6
19 Tu	0403	0.7	21
	0944	−0.3	−9
	1716	2.1	64
20 W	0015	0.3	9
	0448	0.6	18
	1022	−0.2	−6
	1758	2.0	61
21 Th	0108	0.3	9
	0539	0.6	18
	1101	0.0	0
	1842	1.8	55
22 F	0204	0.3	9
	0644	0.6	18
	1143	0.1	3
	1929	1.7	52
23 Sa	0302	0.3	9
	0812	0.6	18
	1234	0.3	9
	2019	1.5	46
24 Su	0355	0.3	9
	0952	0.7	21
	1342	0.5	15
	2112	1.4	43
25 M ◐	0439	0.2	6
	1113	0.8	24
	1514	0.6	18
	2205	1.3	40
26 Tu	0514	0.2	6
	1210	1.0	30
	1655	0.7	21
	2256	1.2	37
27 W	0543	0.1	3
	1253	1.2	37
	1821	0.7	21
	2342	1.1	34
28 Th	0611	0.0	0
	1329	1.4	43
	1927	0.6	18
29 F	0023	1.0	30
	0639	−0.1	−3
	1402	1.6	49
	2020	0.5	15
30 Sa	0101	0.9	27
	0708	−0.1	−3
	1435	1.8	55
	2105	0.5	15
31 Su	0138	0.8	24
	0739	−0.2	−6
	1508	1.9	58
	2146	0.4	12

June

	Time	Height	
	h m	ft	cm
1 M	0215	0.8	24
	0812	−0.3	−9
	1542	2.0	61
	2228	0.3	9
2 Tu ○	0254	0.7	21
	0847	−0.3	−9
	1618	2.1	64
	2311	0.3	9
3 W	0334	0.7	21
	0924	−0.3	−9
	1656	2.1	64
	2356	0.3	9
4 Th	0420	0.7	21
	1004	−0.2	−6
	1737	2.1	64
5 F	0045	0.3	9
	0513	0.6	18
	1047	−0.1	−3
	1821	2.0	61
6 Sa	0136	0.2	6
	0621	0.6	18
	1135	0.0	0
	1908	1.9	58
7 Su	0229	0.2	6
	0749	0.6	18
	1234	0.2	6
	1958	1.8	55
8 M	0320	0.1	3
	0928	0.8	24
	1350	0.5	15
	2051	1.6	49
9 Tu ◑	0407	0.0	0
	1054	1.0	30
	1529	0.6	18
	2148	1.4	43
10 W	0451	−0.1	−3
	1201	1.3	40
	1716	0.7	21
	2247	1.2	37
11 Th	0532	−0.1	−3
	1254	1.6	49
	1852	0.6	18
	2344	1.1	34
12 F	0611	−0.2	−6
	1340	1.8	55
	2007	0.5	15
13 Sa	0038	0.9	27
	0649	−0.3	−9
	1422	2.0	61
	2106	0.5	15
14 Su	0129	0.8	24
	0727	−0.3	−9
	1502	2.1	64
	2155	0.4	12
15 M	0216	0.8	24
	0805	−0.3	−9
	1541	2.2	67
	2238	0.3	9

	Time	Height	
	h m	ft	cm
16 Tu ●	0302	0.7	21
	0843	−0.3	−9
	1618	2.2	67
	2319	0.3	9
17 W	0346	0.7	21
	0921	−0.2	−6
	1655	2.1	64
	2358	0.3	9
18 Th	0432	0.7	21
	0959	−0.1	−3
	1732	2.0	61
19 F	0038	0.3	9
	0521	0.7	21
	1038	0.0	0
	1809	1.9	58
20 Sa	0118	0.3	9
	0618	0.7	21
	1119	0.2	6
	1846	1.8	55
21 Su	0200	0.3	9
	0729	0.7	21
	1205	0.4	12
	1923	1.6	49
22 M	0241	0.3	9
	0854	0.8	24
	1302	0.6	18
	2001	1.4	43
23 Tu	0321	0.2	6
	1021	0.9	27
	1421	0.7	21
	2041	1.3	40
24 W ◐	0400	0.2	6
	1131	1.1	34
	1609	0.8	24
	2126	1.1	34
25 Th	0437	0.1	3
	1222	1.3	40
	1804	0.8	24
	2219	1.0	30
26 F	0514	0.1	3
	1302	1.5	46
	1929	0.8	24
	2317	0.9	27
27 Sa	0551	0.0	0
	1339	1.7	52
	2023	0.7	21
28 Su	0012	0.8	24
	0628	−0.1	−3
	1413	1.9	58
	2104	0.6	18
29 M	0103	0.8	24
	0707	−0.2	−6
	1448	2.1	64
	2140	0.5	15
30 Tu	0151	0.8	24
	0747	−0.2	−6
	1524	2.2	67
	2217	0.4	12

Time meridian 150° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.
Heights are referred to mean lower low water which is the chart datum of soundings.

Nawiliwili, Kauai Island, Hawaii, 2015

Times and Heights of High and Low Waters

July

	Time	Height	
	h m	ft	cm
1 W ○	0237	0.8	24
	0828	−0.3	−9
	1601	2.2	67
	2254	0.3	9
2 Th	0325	0.8	24
	0910	−0.3	−9
	1639	2.3	70
	2334	0.3	9
3 F	0416	0.8	24
	0954	−0.2	−6
	1718	2.2	67
4 Sa	0015	0.2	6
	0512	0.8	24
	1041	0.0	0
	1759	2.1	64
5 Su	0058	0.2	6
	0618	0.9	27
	1132	0.1	3
	1840	1.9	58
6 M	0142	0.1	3
	0736	0.9	27
	1232	0.4	12
	1923	1.7	52
7 Tu	0228	0.1	3
	0905	1.1	34
	1349	0.6	18
	2009	1.5	46
8 W ◑	0316	0.0	0
	1031	1.3	40
	1532	0.8	24
	2102	1.3	40
9 Th	0404	0.0	0
	1142	1.5	46
	1738	0.8	24
	2204	1.1	34
10 F	0452	−0.1	−3
	1239	1.8	55
	1924	0.7	21
	2314	0.9	27
11 Sa	0539	−0.1	−3
	1327	1.9	58
	2030	0.6	18
12 Su	0021	0.8	24
	0624	−0.1	−3
	1410	2.1	64
	2115	0.5	15
13 M	0118	0.8	24
	0707	−0.2	−6
	1448	2.2	67
	2151	0.5	15
14 Tu	0208	0.8	24
	0749	−0.2	−6
	1524	2.2	67
	2222	0.4	12
15 W ●	0252	0.8	24
	0828	−0.1	−3
	1559	2.2	67
	2252	0.4	12

	Time	Height	
	h m	ft	cm
16 Th	0334	0.9	27
	0907	−0.1	−3
	1632	2.1	64
	2321	0.3	9
17 F	0416	0.9	27
	0945	0.0	0
	1703	2.0	61
	2351	0.3	9
18 Sa	0459	0.9	27
	1023	0.1	3
	1734	1.9	58
19 Su	0022	0.3	9
	0546	0.9	27
	1103	0.3	9
	1804	1.8	55
20 M	0055	0.3	9
	0642	1.0	30
	1146	0.5	15
	1832	1.6	49
21 Tu	0129	0.3	9
	0749	1.0	30
	1238	0.6	18
	1859	1.4	43
22 W	0205	0.3	9
	0911	1.1	34
	1348	0.8	24
	1925	1.2	37
23 Th ◐	0246	0.3	9
	1032	1.2	37
	1532	0.9	27
	1954	1.1	34
24 F	0330	0.2	6
	1137	1.4	43
	1757	0.8	24
	2042	0.9	27
25 Sa	0419	0.2	6
	1227	1.6	49
	1936	0.8	24
	2221	0.9	27
26 Su	0508	0.1	3
	1309	1.8	55
	2015	0.7	21
	2346	0.8	24
27 M	0557	0.0	0
	1347	2.0	61
	2046	0.6	18
28 Tu	0048	0.8	24
	0645	−0.1	−3
	1424	2.1	64
	2116	0.5	15
29 W	0141	0.9	27
	0731	−0.2	−6
	1501	2.2	67
	2147	0.4	12
30 Th	0230	0.9	27
	0816	−0.2	−6
	1538	2.3	70
	2221	0.3	9
31 F ○	0319	1.0	30
	0902	−0.2	−6
	1616	2.3	70
	2256	0.2	6

August

	Time	Height	
	h m	ft	cm
1 Sa	0409	1.1	34
	0950	−0.1	−3
	1653	2.2	67
	2332	0.2	6
2 Su	0504	1.2	37
	1039	0.1	3
	1731	2.0	61
3 M	0010	0.1	3
	0605	1.2	37
	1133	0.3	9
	1810	1.8	55
4 Tu	0051	0.1	3
	0714	1.3	40
	1236	0.5	15
	1849	1.6	49
5 W	0135	0.1	3
	0834	1.4	43
	1356	0.7	21
	1931	1.3	40
6 Th ◑	0223	0.1	3
	0958	1.5	46
	1551	0.9	27
	2025	1.1	34
7 F	0317	0.1	3
	1115	1.7	52
	1815	0.8	24
	2145	0.9	27
8 Sa	0416	0.1	3
	1217	1.8	55
	1941	0.7	21
	2316	0.8	24
9 Su	0515	0.1	3
	1308	2.0	61
	2025	0.6	18
10 M	0028	0.8	24
	0609	0.1	3
	1351	2.0	61
	2057	0.5	15
11 Tu	0122	0.9	27
	0658	0.0	0
	1428	2.1	64
	2122	0.5	15
12 W	0207	1.0	30
	0741	0.0	0
	1502	2.1	64
	2145	0.4	12
13 Th	0246	1.0	30
	0820	0.0	0
	1533	2.0	61
	2208	0.4	12
14 F ●	0322	1.1	34
	0858	0.1	3
	1602	2.0	61
	2232	0.4	12
15 Sa	0359	1.2	37
	0935	0.2	6
	1630	1.9	58
	2256	0.3	9

	Time	Height	
	h m	ft	cm
16 Su	0436	1.2	37
	1013	0.3	9
	1656	1.8	55
	2322	0.3	9
17 M	0517	1.2	37
	1052	0.4	12
	1722	1.6	49
	2350	0.3	9
18 Tu	0601	1.3	40
	1136	0.5	15
	1745	1.5	46
19 W	0020	0.3	9
	0654	1.3	40
	1226	0.7	21
	1807	1.3	40
20 Th	0054	0.3	9
	0800	1.3	40
	1333	0.8	24
	1827	1.2	37
21 F	0134	0.3	9
	0920	1.4	43
	1515	0.9	27
	1848	1.0	30
22 Sa ◐	0224	0.3	9
	1039	1.5	46
23 Su	0325	0.3	9
	1142	1.7	52
	1916	0.7	21
	2215	0.8	24
24 M	0431	0.2	6
	1232	1.8	55
	1942	0.7	21
	2347	0.9	27
25 Tu	0532	0.2	6
	1315	2.0	61
	2008	0.6	18
26 W	0048	0.9	27
	0628	0.1	3
	1354	2.1	64
	2036	0.5	15
27 Th	0138	1.1	34
	0720	0.0	0
	1433	2.2	67
	2106	0.3	9
28 F	0225	1.2	37
	0810	−0.1	−3
	1510	2.2	67
	2137	0.3	9
29 Sa ○	0312	1.3	40
	0859	0.0	0
	1547	2.1	64
	2210	0.2	6
30 Su	0401	1.5	46
	0949	0.1	3
	1624	2.0	61
	2244	0.1	3
31 M	0452	1.6	49
	1042	0.2	6
	1700	1.8	55
	2320	0.1	3

September

	Time	Height	
	h m	ft	cm
1 Tu	0547	1.6	49
	1139	0.4	12
	1738	1.6	49
	2358	0.1	3
2 W	0649	1.7	52
	1245	0.6	18
	1816	1.3	40
3 Th	0040	0.1	3
	0759	1.7	52
	1411	0.8	24
	1901	1.1	34
4 F ◑	0129	0.2	6
	0919	1.7	52
	1616	0.8	24
	2009	0.9	27
5 Sa	0229	0.3	9
	1037	1.8	55
	1821	0.7	21
	2201	0.8	24
6 Su	0341	0.3	9
	1144	1.8	55
	1918	0.6	18
	2334	0.9	27
7 M	0456	0.3	9
	1238	1.9	58
	1951	0.6	18
8 Tu	0037	1.0	30
	0559	0.3	9
	1322	1.9	58
	2016	0.5	15
9 W	0124	1.1	34
	0651	0.3	9
	1359	1.9	58
	2037	0.4	12
10 Th	0202	1.2	37
	0735	0.3	9
	1431	1.9	58
	2057	0.4	12
11 F	0237	1.3	40
	0815	0.2	6
	1500	1.8	55
	2117	0.4	12
12 Sa ●	0310	1.4	43
	0852	0.3	9
	1527	1.8	55
	2138	0.3	9
13 Su	0342	1.5	46
	0930	0.3	9
	1552	1.7	52
	2201	0.3	9
14 M	0416	1.5	46
	1008	0.4	12
	1616	1.5	46
	2225	0.3	9
15 Tu	0452	1.6	49
	1049	0.5	15
	1640	1.4	43
	2251	0.3	9

	Time	Height	
	h m	ft	cm
16 W	0530	1.6	49
	1133	0.6	18
	1702	1.3	40
	2319	0.3	9
17 Th	0614	1.6	49
	1226	0.7	21
	1724	1.2	37
	2351	0.3	9
18 F	0707	1.6	49
	1333	0.8	24
	1747	1.0	30
19 Sa	0029	0.4	12
	0815	1.6	49
	1512	0.8	24
	1817	0.9	27
20 Su ◐	0121	0.4	12
	0935	1.6	49
	1726	0.7	21
	2000	0.8	24
21 M	0233	0.4	12
	1048	1.7	52
	1824	0.7	21
	2239	0.8	24
22 Tu	0355	0.4	12
	1146	1.8	55
	1854	0.6	18
	2355	0.9	27
23 W	0511	0.3	9
	1235	1.9	58
	1923	0.4	12
24 Th	0049	1.1	34
	0615	0.3	9
	1318	2.0	61
	1951	0.3	9
25 F	0135	1.3	40
	0713	0.2	6
	1358	2.0	61
	2021	0.2	6
26 Sa	0220	1.5	46
	0807	0.2	6
	1437	1.9	58
	2052	0.1	3
27 Su ○	0305	1.7	52
	0900	0.2	6
	1514	1.8	55
	2124	0.0	0
28 M	0351	1.9	58
	0953	0.2	6
	1551	1.6	49
	2157	0.0	0
29 Tu	0439	2.0	61
	1048	0.4	12
	1628	1.5	46
	2232	0.0	0
30 W	0529	2.0	61
	1147	0.5	15
	1707	1.3	40
	2310	0.0	0

Time meridian 150° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.
Heights are referred to mean lower low water which is the chart datum of soundings.

Nawiliwili, Kauai Island, Hawaii, 2015

Times and Heights of High and Low Waters

October

	Time	Height	
	h m	ft	cm
1 Th	0624	2.0	61
	1256	0.6	18
	1748	1.1	34
	2350	0.1	3
2 F	0725	1.9	58
	1422	0.7	21
	1843	0.9	27
3 Sa	0038	0.3	9
	0835	1.9	58
	1615	0.7	21
	2018	0.8	24
4 Su ◑	0139	0.4	12
	0950	1.8	55
	1745	0.6	18
	2218	0.8	24
5 M	0301	0.5	15
	1058	1.8	55
	1832	0.5	15
	2342	0.9	27
6 Tu	0430	0.6	18
	1155	1.8	55
	1903	0.5	15
7 W	0036	1.1	34
	0545	0.5	15
	1241	1.7	52
	1926	0.4	12
8 Th	0118	1.2	37
	0642	0.5	15
	1319	1.7	52
	1946	0.4	12
9 F	0153	1.4	43
	0730	0.5	15
	1351	1.6	49
	2006	0.3	9
10 Sa	0225	1.5	46
	0811	0.5	15
	1420	1.6	49
	2026	0.2	6
11 Su	0256	1.7	52
	0851	0.4	12
	1447	1.5	46
	2047	0.2	6
12 M ●	0327	1.8	55
	0929	0.5	15
	1512	1.4	43
	2110	0.2	6
13 Tu	0359	1.8	55
	1009	0.5	15
	1537	1.3	40
	2135	0.1	3
14 W	0432	1.9	58
	1051	0.5	15
	1601	1.2	37
	2202	0.1	3
15 Th	0508	1.9	58
	1137	0.6	18
	1627	1.1	34
	2231	0.2	6

	Time	Height	
	h m	ft	cm
16 F	0548	1.9	58
	1231	0.7	21
	1654	1.0	30
	2303	0.2	6
17 Sa	0634	1.9	58
	1338	0.7	21
	1729	0.9	27
	2342	0.3	9
18 Su	0731	1.8	55
	1504	0.7	21
	1829	0.8	24
19 M	0033	0.4	12
	0839	1.8	55
	1632	0.6	18
	2053	0.7	21
20 Tu ◐	0148	0.5	15
	0951	1.8	55
	1726	0.5	15
	2250	0.8	24
21 W	0322	0.5	15
	1055	1.8	55
	1803	0.4	12
	2356	1.0	30
22 Th	0451	0.5	15
	1149	1.8	55
	1835	0.3	9
23 F	0047	1.3	40
	0607	0.5	15
	1237	1.8	55
	1906	0.2	6
24 Sa	0132	1.5	46
	0712	0.4	12
	1320	1.7	52
	1938	0.0	0
25 Su	0215	1.8	55
	0811	0.4	12
	1401	1.6	49
	2010	−0.1	−3
26 M	0258	2.0	61
	0907	0.4	12
	1441	1.4	43
	2043	−0.1	−3
27 Tu ○	0341	2.2	67
	1002	0.4	12
	1520	1.3	40
	2117	−0.1	−3
28 W	0426	2.3	70
	1057	0.4	12
	1559	1.1	34
	2153	−0.1	−3
29 Th	0512	2.3	70
	1155	0.5	15
	1641	1.0	30
	2230	0.0	0
30 F	0600	2.2	67
	1259	0.5	15
	1729	0.9	27
	2310	0.1	3
31 Sa	0652	2.1	64
	1413	0.6	18
	1833	0.8	24
	2355	0.3	9

November

	Time	Height	
	h m	ft	cm
1 Su	0750	1.9	58
	1536	0.5	15
	2014	0.7	21
2 M	0050	0.5	15
	0853	1.8	55
	1646	0.5	15
	2209	0.8	24
3 Tu ◑	0208	0.6	18
	0958	1.7	52
	1733	0.4	12
	2330	1.0	30
4 W	0348	0.7	21
	1057	1.6	49
	1805	0.4	12
5 Th	0024	1.2	37
	0520	0.7	21
	1146	1.5	46
	1830	0.3	9
6 F	0105	1.3	40
	0630	0.7	21
	1228	1.4	43
	1853	0.2	6
7 Sa	0139	1.5	46
	0726	0.7	21
	1304	1.4	43
	1915	0.2	6
8 Su	0211	1.7	52
	0812	0.6	18
	1336	1.3	40
	1938	0.1	3
9 M	0242	1.8	55
	0854	0.6	18
	1405	1.2	37
	2002	0.1	3
10 Tu	0312	2.0	61
	0934	0.5	15
	1433	1.1	34
	2028	0.0	0
11 W ●	0343	2.0	61
	1014	0.5	15
	1502	1.0	30
	2057	0.0	0
12 Th	0416	2.1	64
	1056	0.5	15
	1532	1.0	30
	2127	0.0	0
13 F	0451	2.1	64
	1141	0.5	15
	1605	0.9	27
	2159	0.0	0
14 Sa	0530	2.1	64
	1232	0.5	15
	1643	0.8	24
	2235	0.1	3
15 Su	0613	2.0	61
	1330	0.5	15
	1734	0.8	24
	2316	0.2	6

	Time	Height	
	h m	ft	cm
16 M	0701	2.0	61
	1434	0.5	15
	1856	0.7	21
17 Tu	0007	0.4	12
	0756	1.9	58
	1537	0.4	12
	2058	0.7	21
18 W ◐	0118	0.5	15
	0857	1.8	55
	1629	0.3	9
	2241	0.9	27
19 Th	0254	0.6	18
	0959	1.7	52
	1711	0.2	6
	2349	1.2	37
20 F	0437	0.7	21
	1058	1.6	49
	1748	0.1	3
21 Sa	0041	1.5	46
	0607	0.7	21
	1153	1.5	46
	1823	0.0	0
22 Su	0126	1.7	52
	0721	0.6	18
	1242	1.3	40
	1858	−0.1	−3
23 M	0209	2.0	61
	0825	0.5	15
	1328	1.2	37
	1933	−0.2	−6
24 Tu	0251	2.2	67
	0921	0.5	15
	1412	1.1	34
	2009	−0.3	−9
25 W ○	0332	2.3	70
	1013	0.4	12
	1455	1.0	30
	2046	−0.2	−6
26 Th	0413	2.4	73
	1104	0.4	12
	1539	0.9	27
	2124	−0.2	−6
27 F	0455	2.3	70
	1154	0.4	12
	1624	0.8	24
	2202	−0.1	−3
28 Sa	0538	2.2	67
	1246	0.4	12
	1715	0.8	24
	2242	0.1	3
29 Su	0621	2.1	64
	1340	0.4	12
	1818	0.7	21
	2324	0.2	6
30 M	0707	1.9	58
	1436	0.4	12
	1942	0.7	21

December

	Time	Height	
	h m	ft	cm
1 Tu	0013	0.4	12
	0755	1.8	55
	1531	0.4	12
	2126	0.8	24
2 W ◑	0116	0.6	18
	0847	1.6	49
	1618	0.4	12
	2257	1.0	30
3 Th	0248	0.8	24
	0941	1.4	43
	1656	0.3	9
	2359	1.2	37
4 F	0440	0.9	27
	1034	1.3	40
	1728	0.2	6
5 Sa	0044	1.4	43
	0618	0.8	24
	1124	1.2	37
	1757	0.2	6
6 Su	0121	1.6	49
	0728	0.8	24
	1209	1.1	34
	1826	0.1	3
7 M	0154	1.8	55
	0820	0.7	21
	1249	1.0	30
	1855	0.0	0
8 Tu	0226	1.9	58
	0902	0.6	18
	1326	0.9	27
	1925	−0.1	−3
9 W	0257	2.0	61
	0939	0.5	15
	1402	0.9	27
	1957	−0.1	−3
10 Th	0329	2.1	64
	1016	0.5	15
	1438	0.9	27
	2031	−0.1	−3
11 F ●	0402	2.2	67
	1053	0.4	12
	1516	0.8	24
	2106	−0.1	−3
12 Sa	0437	2.2	67
	1133	0.4	12
	1557	0.8	24
	2143	−0.1	−3
13 Su	0514	2.2	67
	1216	0.4	12
	1644	0.8	24
	2223	0.0	0
14 M	0553	2.1	64
	1303	0.3	9
	1743	0.7	21
	2306	0.1	3
15 Tu	0635	2.0	61
	1351	0.3	9
	1900	0.8	24
	2358	0.3	9

	Time	Height	
	h m	ft	cm
16 W	0720	1.9	58
	1442	0.2	6
	2039	0.8	24
17 Th	0105	0.5	15
	0809	1.7	52
	1531	0.2	6
	2217	1.0	30
18 F ◐	0239	0.7	21
	0904	1.5	46
	1617	0.1	3
	2332	1.3	40
19 Sa	0434	0.8	24
	1005	1.3	40
	1701	0.0	0
20 Su	0030	1.6	49
	0624	0.8	24
	1109	1.1	34
	1744	−0.1	−3
21 M	0118	1.9	58
	0746	0.7	21
	1210	1.0	30
	1826	−0.2	−6
22 Tu	0201	2.1	64
	0847	0.5	15
	1305	0.9	27
	1906	−0.3	−9
23 W	0242	2.2	67
	0935	0.5	15
	1356	0.9	27
	1947	−0.3	−9
24 Th	0322	2.3	70
	1018	0.4	12
	1443	0.8	24
	2027	−0.3	−9
25 F ○	0400	2.3	70
	1057	0.3	9
	1528	0.8	24
	2106	−0.2	−6
26 Sa	0437	2.3	70
	1135	0.3	9
	1614	0.8	24
	2146	−0.1	−3
27 Su	0514	2.2	67
	1213	0.3	9
	1701	0.8	24
	2225	0.0	0
28 M	0550	2.0	61
	1252	0.3	9
	1754	0.8	24
	2305	0.2	6
29 Tu	0626	1.9	58
	1331	0.3	9
	1858	0.8	24
	2349	0.4	12
30 W	0701	1.7	52
	1412	0.3	9
	2019	0.8	24
31 Th	0041	0.6	18
	0736	1.5	46
	1453	0.3	9
	2152	1.0	30

Time meridian 150° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.
Heights are referred to mean lower low water which is the chart datum of soundings.

Honolulu, Oahu Island, Hawaii, 2015

Times and Heights of High and Low Waters

January

	Time	Height			Time	Height	
	h m	ft	cm		h m	ft	cm
1 Th	0159	2.1	64	**16** F	0129	2.0	61
	0857	0.4	12		0829	0.4	12
	1320	0.8	24		1243	0.8	24
	1913	−0.2	−6		1841	−0.2	−6
2 F	0238	2.2	67	**17** Sa	0209	2.2	67
	0941	0.3	9		0911	0.3	9
	1411	0.8	24		1340	0.8	24
	1951	−0.2	−6		1926	−0.3	−9
3 Sa	0315	2.3	70	**18** Su	0249	2.3	70
	1019	0.2	6		0950	0.1	3
	1456	0.8	24		1432	0.8	24
	2029	−0.2	−6		2012	−0.4	−12
4 Su ○	0349	2.3	70	**19** M	0329	2.4	73
	1054	0.2	6		1028	0.0	0
	1537	0.8	24		1522	0.8	24
	2105	−0.2	−6		2058	−0.4	−12
5 M	0422	2.3	70	**20** Tu ●	0410	2.5	76
	1127	0.1	3		1107	−0.1	−3
	1618	0.8	24		1612	0.9	27
	2141	−0.1	−3		2146	−0.3	−9
6 Tu	0455	2.2	67	**21** W	0451	2.4	73
	1200	0.1	3		1146	−0.1	−3
	1659	0.8	24		1704	1.0	30
	2217	0.0	0		2235	−0.2	−6
7 W	0528	2.1	64	**22** Th	0532	2.3	70
	1234	0.1	3		1226	−0.1	−3
	1743	0.8	24		1801	1.1	34
	2254	0.1	3		2328	0.0	0
8 Th	0600	2.0	61	**23** F	0614	2.1	64
	1308	0.1	3		1307	−0.1	−3
	1832	0.8	24		1903	1.1	34
	2335	0.3	9				
9 F	0633	1.8	55	**24** Sa	0028	0.2	6
	1344	0.1	3		0657	1.8	55
	1929	0.9	27		1351	−0.1	−3
					2014	1.2	37
10 Sa	0021	0.4	12	**25** Su	0141	0.4	12
	0707	1.6	49		0742	1.5	46
	1421	0.1	3		1437	−0.1	−3
	2037	1.0	30		2132	1.4	43
11 Su	0121	0.6	18	**26** M ◐	0316	0.6	18
	0743	1.5	46		0834	1.2	37
	1500	0.1	3		1527	−0.1	−3
	2153	1.1	34		2250	1.5	46
12 M ◑	0247	0.8	24	**27** Tu	0514	0.7	21
	0825	1.3	40		0939	1.0	30
	1541	0.1	3		1620	−0.1	−3
	2303	1.3	40		2359	1.7	52
13 Tu	0443	0.8	24	**28** W	0657	0.5	15
	0917	1.1	34		1059	0.8	24
	1624	0.0	0		1716	−0.1	−3
14 W	0000	1.5	46	**29** Th	0055	1.9	58
	0628	0.7	21		0805	0.4	12
	1025	0.9	27		1217	0.7	21
	1709	0.0	0		1809	−0.1	−3
15 Th	0047	1.7	52	**30** F	0142	2.0	61
	0740	0.6	18		0851	0.3	9
	1138	0.8	24		1320	0.7	21
	1755	−0.1	−3		1857	−0.1	−3
				31 Sa	0221	2.0	61
					0926	0.2	6
					1409	0.7	21
					1941	−0.1	−3

February

	Time	Height			Time	Height	
	h m	ft	cm		h m	ft	cm
1 Su	0257	2.1	64	**16** M	0225	2.2	67
	0956	0.1	3		0919	0.0	0
	1449	0.8	24		1425	0.9	27
	2020	−0.2	−6		2004	−0.4	−12
2 M	0329	2.1	64	**17** Tu	0307	2.3	70
	1024	0.1	3		0954	−0.1	−3
	1526	0.8	24		1514	1.0	30
	2058	−0.1	−3		2055	−0.4	−12
3 Tu ○	0400	2.0	61	**18** W ●	0348	2.2	67
	1050	0.1	3		1029	−0.2	−6
	1602	0.9	27		1602	1.2	37
	2134	−0.1	−3		2146	−0.3	−9
4 W	0430	2.0	61	**19** Th	0428	2.2	67
	1116	0.0	0		1105	−0.2	−6
	1638	1.0	30		1651	1.3	40
	2210	0.0	0		2238	−0.2	−6
5 Th	0459	1.9	58	**20** F	0508	2.0	61
	1143	0.0	0		1141	−0.3	−9
	1716	1.0	30		1743	1.4	43
	2247	0.1	3		2333	0.0	0
6 F	0528	1.8	55	**21** Sa	0549	1.7	52
	1211	0.0	0		1218	−0.2	−6
	1757	1.1	34		1838	1.5	46
	2327	0.2	6				
7 Sa	0557	1.6	49	**22** Su	0034	0.2	6
	1240	0.0	0		0630	1.4	43
	1843	1.1	34		1258	−0.2	−6
					1940	1.5	46
8 Su	0012	0.3	9	**23** M	0146	0.4	12
	0627	1.5	46		0715	1.2	37
	1311	0.1	3		1341	−0.1	−3
	1936	1.2	37		2049	1.6	49
9 M	0107	0.5	15	**24** Tu	0320	0.5	15
	0658	1.3	40		0809	0.9	27
	1346	0.1	3		1432	0.0	0
	2040	1.2	37		2205	1.6	49
10 Tu	0224	0.6	18	**25** W ◐	0512	0.5	15
	0735	1.1	34		0925	0.7	21
	1427	0.1	3		1533	0.0	0
	2152	1.3	40		2319	1.6	49
11 W ◑	0413	0.7	21	**26** Th	0646	0.4	12
	0826	0.9	27		1104	0.6	18
	1517	0.0	0		1643	0.1	3
	2304	1.5	46				
12 Th	0607	0.6	18	**27** F	0023	1.7	52
	0947	0.7	21		0743	0.3	9
	1617	0.0	0		1226	0.6	18
					1750	0.1	3
13 F	0005	1.7	52	**28** Sa	0113	1.8	55
	0719	0.4	12		0822	0.2	6
	1120	0.7	21		1322	0.7	21
	1719	−0.1	−3		1846	0.0	0
14 Sa	0056	1.9	58				
	0806	0.3	9				
	1235	0.7	21				
	1818	−0.2	−6				
15 Su	0142	2.1	64				
	0844	0.1	3				
	1334	0.8	24				
	1912	−0.3	−9				

March

	Time	Height			Time	Height	
	h m	ft	cm		h m	ft	cm
1 Su	0155	1.8	55	**16** M	0109	1.9	58
	0852	0.1	3		0805	0.0	0
	1404	0.8	24		1329	0.9	27
	1933	0.0	0		1904	−0.1	−3
2 M	0230	1.8	55	**17** Tu	0156	2.0	61
	0917	0.1	3		0839	−0.1	−3
	1440	0.9	27		1418	1.1	34
	2015	−0.1	−3		2001	−0.2	−6
3 Tu	0302	1.8	55	**18** W	0239	2.0	61
	0941	0.0	0		0913	−0.2	−6
	1512	1.0	30		1504	1.3	40
	2053	−0.1	−3		2055	−0.2	−6
4 W	0331	1.8	55	**19** Th ●	0321	1.9	58
	1003	0.0	0		0946	−0.3	−9
	1544	1.1	34		1550	1.5	46
	2129	−0.1	−3		2149	−0.2	−6
5 Th ○	0359	1.7	52	**20** F	0401	1.8	55
	1026	0.0	0		1020	−0.3	−9
	1617	1.2	37		1636	1.7	52
	2206	0.0	0		2243	−0.1	−3
6 F	0427	1.6	49	**21** Sa	0442	1.6	49
	1050	−0.1	−3		1054	−0.3	−9
	1651	1.3	40		1723	1.8	55
	2245	0.1	3		2339	0.0	0
7 Sa	0455	1.5	46	**22** Su	0523	1.3	40
	1115	−0.1	−3		1130	−0.3	−9
	1728	1.4	43		1813	1.8	55
	2326	0.2	6				
8 Su	0523	1.4	43	**23** M	0041	0.1	3
	1141	0.0	0		0606	1.1	34
	1808	1.4	43		1207	−0.2	−6
					1907	1.8	55
9 M	0012	0.3	9	**24** Tu	0151	0.2	6
	0553	1.2	37		0655	0.8	24
	1210	0.0	0		1248	−0.1	−3
	1854	1.4	43		2007	1.7	52
10 Tu	0107	0.4	12	**25** W	0316	0.3	9
	0626	1.0	30		0757	0.7	21
	1243	0.0	0		1338	0.0	0
	1948	1.4	43		2115	1.6	49
11 W	0220	0.5	15	**26** Th ◐	0451	0.3	9
	0707	0.8	24		0929	0.6	18
	1323	0.0	0		1443	0.2	6
	2053	1.5	46		2228	1.6	49
12 Th	0359	0.5	15	**27** F	0608	0.2	6
	0808	0.7	21		1113	0.6	18
	1418	0.1	3		1607	0.2	6
	2207	1.5	46		2335	1.6	49
13 F ◑	0538	0.4	12	**28** Sa	0659	0.1	3
	0945	0.6	18		1226	0.7	21
	1530	0.1	3		1727	0.2	6
	2317	1.7	52				
14 Sa	0643	0.2	6	**29** Su	0030	1.6	49
	1123	0.6	18		0735	0.1	3
	1649	0.0	0		1315	0.8	24
					1832	0.2	6
15 Su	0017	1.8	55	**30** M	0115	1.6	49
	0728	0.1	3		0803	0.0	0
	1234	0.7	21		1352	1.0	30
	1801	−0.1	−3		1923	0.1	3
				31 Tu	0152	1.5	46
					0828	0.0	0
					1424	1.1	34
					2007	0.1	3

Time meridian 150° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.
Heights are referred to mean lower low water which is the chart datum of soundings.

Honolulu, Oahu Island, Hawaii, 2015

Times and Heights of High and Low Waters

April

	Time	Height	
	h m	ft	cm
1 W	0225	1.5	46
	0850	−0.1	−3
	1454	1.3	40
	2047	0.1	3
2 Th	0255	1.5	46
	0912	−0.1	−3
	1525	1.4	43
	2126	0.1	3
3 F	0324	1.4	43
	0935	−0.1	−3
	1556	1.5	46
	2205	0.1	3
4 Sa ○	0353	1.3	40
	0958	−0.1	−3
	1629	1.6	49
	2246	0.1	3
5 Su	0422	1.2	37
	1023	−0.1	−3
	1704	1.7	52
	2329	0.1	3
6 M	0454	1.1	34
	1050	−0.1	−3
	1742	1.7	52
7 Tu	0018	0.2	6
	0528	0.9	27
	1120	−0.1	−3
	1825	1.7	52
8 W	0115	0.2	6
	0608	0.8	24
	1154	−0.1	−3
	1914	1.7	52
9 Th	0225	0.3	9
	0700	0.6	18
	1236	0.0	0
	2013	1.7	52
10 F	0347	0.3	9
	0817	0.5	15
	1334	0.1	3
	2121	1.7	52
11 Sa ◑	0503	0.2	6
	0959	0.5	15
	1455	0.2	6
	2230	1.7	52
12 Su	0559	0.1	3
	1128	0.7	21
	1627	0.2	6
	2334	1.7	52
13 M	0643	−0.1	−3
	1232	0.9	27
	1750	0.1	3
14 Tu	0030	1.7	52
	0720	−0.2	−6
	1323	1.2	37
	1900	0.1	3
15 W	0120	1.7	52
	0755	−0.3	−9
	1409	1.4	43
	2002	0.0	0

	Time	Height	
	h m	ft	cm
16 Th	0206	1.6	49
	0829	−0.3	−9
	1453	1.7	52
	2100	0.0	0
17 F	0250	1.5	46
	0902	−0.4	−12
	1536	1.9	58
	2155	−0.1	−3
18 Sa ●	0333	1.3	40
	0936	−0.4	−12
	1620	2.0	61
	2250	0.0	0
19 Su	0416	1.1	34
	1010	−0.4	−12
	1704	2.1	64
	2346	0.0	0
20 M	0459	1.0	30
	1045	−0.3	−9
	1750	2.1	64
21 Tu	0045	0.1	3
	0546	0.8	24
	1122	−0.2	−6
	1837	2.0	61
22 W	0149	0.1	3
	0641	0.6	18
	1202	0.0	0
	1929	1.9	58
23 Th	0300	0.1	3
	0751	0.5	15
	1248	0.1	3
	2027	1.7	52
24 F	0412	0.1	3
	0926	0.5	15
	1351	0.3	9
	2129	1.6	49
25 Sa ◐	0515	0.1	3
	1102	0.6	18
	1519	0.4	12
	2233	1.5	46
26 Su	0602	0.1	3
	1210	0.8	24
	1652	0.4	12
	2330	1.4	43
27 M	0638	0.0	0
	1255	1.0	30
	1808	0.4	12
28 Tu	0019	1.4	43
	0707	0.0	0
	1331	1.2	37
	1908	0.4	12
29 W	0101	1.3	40
	0732	−0.1	−3
	1403	1.3	40
	1958	0.3	9
30 Th	0138	1.2	37
	0756	−0.1	−3
	1434	1.5	46
	2042	0.3	9

May

	Time	Height	
	h m	ft	cm
1 F	0212	1.2	37
	0820	−0.2	−6
	1504	1.7	52
	2125	0.2	6
2 Sa	0245	1.1	34
	0845	−0.2	−6
	1536	1.8	55
	2206	0.2	6
3 Su ○	0318	1.0	30
	0911	−0.2	−6
	1609	1.9	58
	2249	0.1	3
4 M	0352	0.9	27
	0940	−0.2	−6
	1645	2.0	61
	2334	0.1	3
5 Tu	0429	0.8	24
	1010	−0.2	−6
	1723	2.0	61
6 W	0024	0.1	3
	0511	0.7	21
	1044	−0.2	−6
	1805	2.0	61
7 Th	0119	0.1	3
	0600	0.6	18
	1122	−0.1	−3
	1852	2.0	61
8 F	0220	0.1	3
	0704	0.5	15
	1209	0.0	0
	1945	1.9	58
9 Sa	0324	0.1	3
	0829	0.5	15
	1310	0.2	6
	2044	1.8	55
10 Su	0423	0.0	0
	1003	0.6	18
	1434	0.3	9
	2147	1.7	52
11 M ◑	0514	−0.1	−3
	1123	0.9	27
	1613	0.4	12
	2249	1.6	49
12 Tu	0557	−0.2	−6
	1223	1.2	37
	1745	0.4	12
	2348	1.5	46
13 W	0635	−0.3	−9
	1313	1.5	46
	1903	0.3	9
14 Th	0042	1.4	43
	0711	−0.3	−9
	1359	1.7	52
	2009	0.2	6
15 F	0132	1.3	40
	0747	−0.4	−12
	1441	2.0	61
	2109	0.1	3

	Time	Height	
	h m	ft	cm
16 Sa	0220	1.1	34
	0822	−0.4	−12
	1523	2.2	67
	2204	0.1	3
17 Su ●	0306	1.0	30
	0857	−0.4	−12
	1605	2.3	70
	2256	0.0	0
18 M	0352	0.8	24
	0932	−0.4	−12
	1646	2.3	70
	2348	0.0	0
19 Tu	0439	0.7	21
	1009	−0.3	−9
	1728	2.2	67
20 W	0040	0.0	0
	0529	0.6	18
	1046	−0.1	−3
	1811	2.1	64
21 Th	0134	0.0	0
	0625	0.6	18
	1126	0.0	0
	1855	2.0	61
22 F	0229	0.1	3
	0733	0.6	18
	1211	0.2	6
	1942	1.8	55
23 Sa	0324	0.1	3
	0856	0.6	18
	1307	0.4	12
	2032	1.7	52
24 Su	0414	0.1	3
	1024	0.7	21
	1426	0.5	15
	2125	1.5	46
25 M ◐	0458	0.0	0
	1134	0.9	27
	1603	0.6	18
	2219	1.4	43
26 Tu	0535	0.0	0
	1224	1.1	34
	1734	0.6	18
	2311	1.2	37
27 W	0606	0.0	0
	1303	1.3	40
	1848	0.6	18
	2359	1.1	34
28 Th	0635	−0.1	−3
	1337	1.5	46
	1948	0.5	15
29 F	0044	1.1	34
	0703	−0.1	−3
	1410	1.7	52
	2038	0.4	12
30 Sa	0126	1.0	30
	0732	−0.2	−6
	1442	1.9	58
	2123	0.3	9
31 Su	0206	0.9	27
	0802	−0.2	−6
	1516	2.1	64
	2206	0.2	6

June

	Time	Height	
	h m	ft	cm
1 M	0246	0.8	24
	0834	−0.3	−9
	1551	2.2	67
	2248	0.2	6
2 Tu ○	0328	0.8	24
	0907	−0.3	−9
	1628	2.2	67
	2333	0.1	3
3 W	0412	0.7	21
	0944	−0.3	−9
	1707	2.3	70
4 Th	0019	0.1	3
	0501	0.7	21
	1023	−0.2	−6
	1749	2.2	67
5 F	0108	0.0	0
	0557	0.6	18
	1107	−0.1	−3
	1834	2.2	67
6 Sa	0159	0.0	0
	0704	0.6	18
	1158	0.1	3
	1922	2.1	64
7 Su	0250	0.0	0
	0824	0.7	21
	1303	0.3	9
	2013	1.9	58
8 M	0340	−0.1	−3
	0950	0.9	27
	1427	0.5	15
	2108	1.7	52
9 Tu ◑	0427	−0.1	−3
	1106	1.1	34
	1609	0.6	18
	2207	1.5	46
10 W	0511	−0.2	−6
	1208	1.4	43
	1749	0.6	18
	2307	1.3	40
11 Th	0552	−0.3	−9
	1300	1.7	52
	1913	0.5	15
12 F	0007	1.1	34
	0632	−0.3	−9
	1347	2.0	61
	2022	0.4	12
13 Sa	0104	1.0	30
	0711	−0.3	−9
	1429	2.2	67
	2119	0.3	9
14 Su	0157	0.9	27
	0750	−0.3	−9
	1510	2.3	70
	2209	0.2	6
15 M	0247	0.8	24
	0828	−0.3	−9
	1550	2.4	73
	2255	0.1	3

	Time	Height	
	h m	ft	cm
16 Tu ●	0335	0.7	21
	0906	−0.3	−9
	1628	2.4	73
	2338	0.1	3
17 W	0422	0.7	21
	0944	−0.2	−6
	1706	2.3	70
18 Th	0021	0.1	3
	0510	0.7	21
	1023	−0.1	−3
	1744	2.2	67
19 F	0103	0.1	3
	0602	0.7	21
	1103	0.1	3
	1822	2.0	61
20 Sa	0145	0.1	3
	0700	0.7	21
	1146	0.2	6
	1901	1.9	58
21 Su	0227	0.1	3
	0807	0.8	24
	1237	0.4	12
	1941	1.7	52
22 M	0309	0.1	3
	0922	0.9	27
	1342	0.6	18
	2023	1.5	46
23 Tu	0349	0.1	3
	1036	1.0	30
	1512	0.7	21
	2109	1.4	43
24 W ◐	0428	0.1	3
	1137	1.2	37
	1655	0.8	24
	2200	1.2	37
25 Th	0504	0.0	0
	1225	1.5	46
	1828	0.7	21
	2255	1.1	34
26 F	0540	0.0	0
	1306	1.7	52
	1937	0.6	18
	2351	0.9	27
27 Sa	0615	−0.1	−3
	1343	1.9	58
	2031	0.5	15
28 Su	0045	0.9	27
	0651	−0.2	−6
	1418	2.1	64
	2115	0.4	12
29 M	0135	0.8	24
	0729	−0.2	−6
	1455	2.2	67
	2156	0.3	9
30 Tu	0223	0.8	24
	0808	−0.3	−9
	1532	2.3	70
	2235	0.2	6

Time meridian 150° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.
Heights are referred to mean lower low water which is the chart datum of soundings.

Honolulu, Oahu Island, Hawaii, 2015

Times and Heights of High and Low Waters

July

	Time	Height	
	h m	ft	cm
1 W ○	0311	0.8	24
	0848	−0.3	−9
	1610	2.4	73
	2315	0.1	3
2 Th	0400	0.8	24
	0930	−0.3	−9
	1650	2.4	73
	2357	0.0	0
3 F	0451	0.8	24
	1015	−0.2	−6
	1731	2.4	73
4 Sa	0039	0.0	0
	0548	0.8	24
	1104	0.0	0
	1813	2.3	70
5 Su	0123	0.0	0
	0652	0.9	27
	1159	0.2	6
	1857	2.1	64
6 M	0207	−0.1	−3
	0804	1.0	30
	1305	0.4	12
	1944	1.8	55
7 Tu	0253	−0.1	−3
	0923	1.2	37
	1430	0.6	18
	2034	1.6	49
8 W ◑	0340	−0.1	−3
	1040	1.4	43
	1615	0.7	21
	2131	1.3	40
9 Th	0427	−0.1	−3
	1147	1.7	52
	1802	0.7	21
	2236	1.1	34
10 F	0514	−0.2	−6
	1243	1.9	58
	1928	0.6	18
	2345	0.9	27
11 Sa	0601	−0.2	−6
	1332	2.1	64
	2032	0.4	12
12 Su	0050	0.8	24
	0647	−0.2	−6
	1416	2.2	67
	2121	0.3	9
13 M	0147	0.8	24
	0730	−0.2	−6
	1456	2.3	70
	2201	0.2	6
14 Tu	0237	0.8	24
	0812	−0.2	−6
	1533	2.3	70
	2238	0.2	6
15 W ●	0323	0.8	24
	0852	−0.1	−3
	1608	2.3	70
	2312	0.1	3

	Time	Height	
	h m	ft	cm
16 Th	0406	0.8	24
	0931	−0.1	−3
	1643	2.2	67
	2345	0.1	3
17 F	0448	0.9	27
	1009	0.0	0
	1716	2.2	67
18 Sa	0018	0.1	3
	0533	0.9	27
	1048	0.1	3
	1749	2.0	61
19 Su	0051	0.1	3
	0620	1.0	30
	1130	0.3	9
	1822	1.9	58
20 M	0125	0.2	6
	0714	1.0	30
	1217	0.5	15
	1855	1.7	52
21 Tu	0200	0.2	6
	0815	1.1	34
	1315	0.6	18
	1930	1.5	46
22 W	0237	0.2	6
	0925	1.2	37
	1434	0.8	24
	2009	1.3	40
23 Th ◐	0317	0.2	6
	1035	1.4	43
	1619	0.9	27
	2058	1.1	34
24 F	0400	0.2	6
	1136	1.5	46
	1806	0.8	24
	2201	1.0	30
25 Sa	0446	0.1	3
	1226	1.7	52
	1922	0.7	21
	2314	0.9	27
26 Su	0533	0.0	0
	1310	1.9	58
	2013	0.5	15
27 M	0021	0.8	24
	0620	0.0	0
	1351	2.1	64
	2054	0.4	12
28 Tu	0119	0.8	24
	0706	−0.1	−3
	1430	2.3	70
	2130	0.3	9
29 W	0210	0.9	27
	0752	−0.2	−6
	1509	2.4	73
	2206	0.2	6
30 Th	0300	1.0	30
	0838	−0.2	−6
	1548	2.5	76
	2242	0.1	3
31 F ○	0348	1.0	30
	0924	−0.2	−6
	1628	2.4	73
	2319	0.0	0

August

	Time	Height	
	h m	ft	cm
1 Sa	0439	1.1	34
	1013	−0.1	−3
	1708	2.3	70
	2357	0.0	0
2 Su	0533	1.2	37
	1106	0.0	0
	1749	2.2	67
3 M	0037	0.0	0
	0632	1.3	40
	1204	0.3	9
	1831	1.9	58
4 Tu	0118	0.0	0
	0737	1.4	43
	1313	0.5	15
	1916	1.7	52
5 W	0202	0.0	0
	0849	1.6	49
	1439	0.7	21
	2006	1.4	43
6 Th ◑	0251	0.0	0
	1006	1.7	52
	1627	0.7	21
	2108	1.1	34
7 F	0344	0.0	0
	1118	1.8	55
	1814	0.7	21
	2226	0.9	27
8 Sa	0442	0.0	0
	1221	2.0	61
	1931	0.5	15
	2347	0.9	27
9 Su	0540	0.0	0
	1313	2.1	64
	2023	0.4	12
10 M	0055	0.9	27
	0633	0.0	0
	1357	2.2	67
	2102	0.3	9
11 Tu	0149	0.9	27
	0722	0.0	0
	1436	2.2	67
	2134	0.3	9
12 W	0233	1.0	30
	0805	0.0	0
	1511	2.2	67
	2203	0.2	6
13 Th	0312	1.0	30
	0845	0.0	0
	1544	2.2	67
	2230	0.2	6
14 F ●	0348	1.1	34
	0923	0.1	3
	1614	2.1	64
	2257	0.2	6
15 Sa	0425	1.2	37
	1001	0.1	3
	1644	2.0	61
	2324	0.2	6

	Time	Height	
	h m	ft	cm
16 Su	0503	1.3	40
	1040	0.2	6
	1714	1.9	58
	2351	0.2	6
17 M	0543	1.3	40
	1121	0.4	12
	1744	1.7	52
18 Tu	0019	0.2	6
	0627	1.4	43
	1207	0.5	15
	1814	1.6	49
19 W	0050	0.2	6
	0718	1.4	43
	1302	0.7	21
	1846	1.4	43
20 Th	0124	0.3	9
	0817	1.5	46
	1414	0.8	24
	1924	1.2	37
21 F	0204	0.3	9
	0925	1.5	46
	1555	0.8	24
	2014	1.0	30
22 Sa ◐	0253	0.3	9
	1036	1.6	49
	1744	0.8	24
	2132	0.9	27
23 Su	0353	0.3	9
	1139	1.8	55
	1856	0.6	18
	2302	0.9	27
24 M	0456	0.2	6
	1232	2.0	61
	1942	0.5	15
25 Tu	0015	0.9	27
	0555	0.1	3
	1318	2.1	64
	2019	0.4	12
26 W	0112	1.0	30
	0650	0.0	0
	1401	2.3	70
	2053	0.2	6
27 Th	0202	1.1	34
	0742	−0.1	−3
	1442	2.3	70
	2126	0.1	3
28 F	0250	1.3	40
	0832	−0.1	−3
	1522	2.3	70
	2200	0.0	0
29 Sa ○	0336	1.4	43
	0923	−0.1	−3
	1602	2.3	70
	2235	0.0	0
30 Su	0424	1.6	49
	1015	0.0	0
	1642	2.1	64
	2310	0.0	0
31 M	0515	1.7	52
	1110	0.1	3
	1723	1.9	58
	2347	0.0	0

September

	Time	Height	
	h m	ft	cm
1 Tu	0609	1.8	55
	1211	0.3	9
	1805	1.6	49
2 W	0026	0.0	0
	0707	1.8	55
	1322	0.5	15
	1851	1.4	43
3 Th	0109	0.1	3
	0814	1.9	58
	1450	0.6	18
	1947	1.1	34
4 F ◑	0200	0.2	6
	0927	1.9	58
	1634	0.6	18
	2103	0.9	27
5 Sa	0301	0.2	6
	1042	1.9	58
	1807	0.5	15
	2240	0.9	27
6 Su	0413	0.3	9
	1149	2.0	61
	1910	0.4	12
7 M	0004	0.9	27
	0525	0.3	9
	1245	2.0	61
	1953	0.4	12
8 Tu	0104	1.0	30
	0626	0.3	9
	1330	2.0	61
	2026	0.3	9
9 W	0148	1.1	34
	0717	0.2	6
	1408	2.0	61
	2053	0.3	9
10 Th	0225	1.2	37
	0801	0.2	6
	1442	2.0	61
	2118	0.2	6
11 F	0258	1.3	40
	0840	0.2	6
	1512	1.9	58
	2141	0.2	6
12 Sa ●	0330	1.4	43
	0918	0.2	6
	1541	1.9	58
	2204	0.2	6
13 Su	0402	1.5	46
	0956	0.3	9
	1609	1.8	55
	2227	0.2	6
14 M	0436	1.6	49
	1035	0.3	9
	1638	1.7	52
	2252	0.2	6
15 Tu	0512	1.7	52
	1117	0.4	12
	1707	1.5	46
	2318	0.2	6

	Time	Height	
	h m	ft	cm
16 W	0550	1.7	52
	1203	0.5	15
	1737	1.4	43
	2346	0.2	6
17 Th	0634	1.7	52
	1258	0.6	18
	1811	1.2	37
18 F	0017	0.3	9
	0725	1.7	52
	1409	0.7	21
	1853	1.0	30
19 Sa	0056	0.3	9
	0827	1.7	52
	1541	0.7	21
	1955	0.9	27
20 Su ◐	0149	0.4	12
	0937	1.8	55
	1715	0.6	18
	2131	0.8	24
21 M	0301	0.4	12
	1047	1.8	55
	1818	0.5	15
	2307	0.9	27
22 Tu	0422	0.4	12
	1148	2.0	61
	1901	0.4	12
23 W	0015	1.0	30
	0536	0.3	9
	1240	2.1	64
	1936	0.2	6
24 Th	0108	1.2	37
	0639	0.2	6
	1326	2.1	64
	2010	0.1	3
25 F	0154	1.4	43
	0737	0.1	3
	1410	2.1	64
	2042	0.0	0
26 Sa	0239	1.6	49
	0831	0.1	3
	1452	2.1	64
	2115	−0.1	−3
27 Su ○	0324	1.8	55
	0925	0.1	3
	1533	1.9	58
	2149	−0.1	−3
28 M	0409	2.0	61
	1020	0.1	3
	1614	1.8	55
	2223	−0.1	−3
29 Tu	0456	2.1	64
	1117	0.2	6
	1656	1.5	46
	2259	−0.1	−3
30 W	0546	2.2	67
	1219	0.3	9
	1741	1.3	40
	2337	0.0	0

Time meridian 150° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.
Heights are referred to mean lower low water which is the chart datum of soundings.

Honolulu, Oahu Island, Hawaii, 2015

Times and Heights of High and Low Waters

October

	Time	Height	
	h m	ft	cm
1 Th	0639	2.2	67
	1329	0.4	12
	1832	1.1	34
2 F	0019	0.1	3
	0739	2.1	64
	1452	0.5	15
	1937	0.9	27
3 Sa	0109	0.3	9
	0845	2.0	61
	1622	0.5	15
	2110	0.8	24
4 Su ◑	0215	0.4	12
	0957	1.9	58
	1738	0.4	12
	2255	0.8	24
5 M	0341	0.5	15
	1105	1.9	58
	1831	0.3	9
6 Tu	0010	1.0	30
	0506	0.5	15
	1203	1.8	55
	1910	0.3	9
7 W	0101	1.1	34
	0615	0.5	15
	1251	1.8	55
	1940	0.2	6
8 Th	0139	1.3	40
	0710	0.5	15
	1330	1.8	55
	2005	0.2	6
9 F	0211	1.5	46
	0755	0.4	12
	1404	1.7	52
	2028	0.2	6
10 Sa	0242	1.6	49
	0837	0.4	12
	1435	1.7	52
	2050	0.1	3
11 Su	0311	1.7	52
	0916	0.4	12
	1504	1.6	49
	2112	0.1	3
12 M ●	0342	1.9	58
	0955	0.4	12
	1533	1.5	46
	2135	0.1	3
13 Tu	0413	2.0	61
	1035	0.4	12
	1603	1.4	43
	2200	0.1	3
14 W	0447	2.0	61
	1118	0.4	12
	1634	1.2	37
	2226	0.1	3
15 Th	0523	2.0	61
	1205	0.5	15
	1708	1.1	34
	2254	0.2	6

	Time	Height	
	h m	ft	cm
16 F	0603	2.0	61
	1300	0.5	15
	1747	1.0	30
	2326	0.2	6
17 Sa	0650	2.0	61
	1407	0.5	15
	1838	0.8	24
18 Su	0005	0.3	9
	0745	1.9	58
	1525	0.5	15
	1954	0.8	24
19 M	0058	0.4	12
	0848	1.9	58
	1638	0.4	12
	2138	0.8	24
20 Tu ◐	0216	0.5	15
	0956	1.9	58
	1733	0.3	9
	2308	0.9	27
21 W	0352	0.5	15
	1100	1.9	58
	1815	0.2	6
22 Th	0011	1.1	34
	0520	0.5	15
	1157	1.9	58
	1851	0.1	3
23 F	0101	1.4	43
	0633	0.4	12
	1248	1.9	58
	1925	0.0	0
24 Sa	0145	1.7	52
	0737	0.3	9
	1335	1.8	55
	1959	−0.1	−3
25 Su	0228	2.0	61
	0835	0.2	6
	1420	1.7	52
	2032	−0.2	−6
26 M	0311	2.2	67
	0932	0.2	6
	1504	1.5	46
	2106	−0.2	−6
27 Tu ○	0355	2.4	73
	1027	0.2	6
	1548	1.4	43
	2141	−0.2	−6
28 W	0439	2.4	73
	1124	0.2	6
	1633	1.2	37
	2218	−0.1	−3
29 Th	0525	2.4	73
	1223	0.3	9
	1721	1.0	30
	2256	0.0	0
30 F	0614	2.4	73
	1327	0.3	9
	1817	0.9	27
	2337	0.1	3
31 Sa	0706	2.2	67
	1437	0.3	9
	1929	0.8	24

November

	Time	Height	
	h m	ft	cm
1 Su	0024	0.3	9
	0802	2.1	64
	1549	0.3	9
	2105	0.8	24
2 M	0127	0.5	15
	0904	1.9	58
	1651	0.3	9
	2246	0.9	27
3 Tu ◑	0255	0.6	18
	1008	1.8	55
	1740	0.2	6
	2357	1.0	30
4 W	0433	0.7	21
	1107	1.7	52
	1818	0.2	6
5 Th	0045	1.2	37
	0555	0.7	21
	1158	1.6	49
	1848	0.2	6
6 F	0121	1.4	43
	0658	0.6	18
	1241	1.5	46
	1914	0.1	3
7 Sa	0153	1.6	49
	0749	0.6	18
	1319	1.4	43
	1938	0.1	3
8 Su	0223	1.8	55
	0835	0.5	15
	1353	1.3	40
	2001	0.0	0
9 M	0252	2.0	61
	0916	0.5	15
	1426	1.3	40
	2026	0.0	0
10 Tu	0323	2.1	64
	0957	0.4	12
	1459	1.2	37
	2051	0.0	0
11 W ●	0354	2.2	67
	1038	0.4	12
	1533	1.1	34
	2119	0.0	0
12 Th	0428	2.2	67
	1120	0.4	12
	1609	1.0	30
	2148	0.0	0
13 F	0504	2.2	67
	1207	0.3	9
	1648	0.9	27
	2220	0.0	0
14 Sa	0543	2.2	67
	1258	0.3	9
	1734	0.8	24
	2255	0.1	3
15 Su	0626	2.2	67
	1355	0.3	9
	1833	0.7	21
	2337	0.2	6

	Time	Height	
	h m	ft	cm
16 M	0715	2.1	64
	1456	0.3	9
	1953	0.7	21
17 Tu	0031	0.4	12
	0810	2.0	61
	1554	0.2	6
	2130	0.8	24
18 W ◐	0149	0.5	15
	0910	1.9	58
	1644	0.1	3
	2256	1.0	30
19 Th	0330	0.6	18
	1012	1.8	55
	1727	0.0	0
	2359	1.3	40
20 F	0510	0.7	21
	1112	1.7	52
	1806	−0.1	−3
21 Sa	0049	1.6	49
	0634	0.6	18
	1209	1.5	46
	1843	−0.2	−6
22 Su	0135	1.9	58
	0744	0.5	15
	1302	1.4	43
	1919	−0.2	−6
23 M	0218	2.2	67
	0845	0.4	12
	1351	1.3	40
	1955	−0.3	−9
24 Tu	0300	2.4	73
	0941	0.3	9
	1440	1.1	34
	2032	−0.3	−9
25 W ○	0342	2.5	76
	1034	0.2	6
	1527	1.0	30
	2109	−0.3	−9
26 Th	0424	2.6	79
	1126	0.2	6
	1615	0.9	27
	2148	−0.2	−6
27 F	0507	2.5	76
	1218	0.2	6
	1705	0.8	24
	2227	−0.1	−3
28 Sa	0550	2.4	73
	1311	0.2	6
	1801	0.8	24
	2308	0.1	3
29 Su	0635	2.2	67
	1405	0.2	6
	1908	0.7	21
	2352	0.3	9
30 M	0721	2.1	64
	1500	0.2	6
	2030	0.8	24

December

	Time	Height	
	h m	ft	cm
1 Tu	0047	0.5	15
	0810	1.9	58
	1552	0.2	6
	2202	0.9	27
2 W ◑	0202	0.7	21
	0902	1.7	52
	1638	0.2	6
	2319	1.1	34
3 Th	0342	0.8	24
	0957	1.5	46
	1717	0.1	3
4 F	0014	1.3	40
	0523	0.8	24
	1051	1.4	43
	1750	0.1	3
5 Sa	0054	1.5	46
	0643	0.8	24
	1142	1.2	37
	1821	0.1	3
6 Su	0129	1.7	52
	0744	0.7	21
	1229	1.1	34
	1849	0.0	0
7 M	0201	1.9	58
	0834	0.6	18
	1312	1.1	34
	1918	−0.1	−3
8 Tu	0233	2.0	61
	0916	0.5	15
	1352	1.0	30
	1948	−0.1	−3
9 W	0304	2.2	67
	0956	0.4	12
	1432	0.9	27
	2019	−0.1	−3
10 Th	0337	2.3	70
	1035	0.3	9
	1511	0.9	27
	2051	−0.2	−6
11 F ●	0411	2.3	70
	1115	0.2	6
	1552	0.8	24
	2126	−0.2	−6
12 Sa	0448	2.4	73
	1157	0.2	6
	1637	0.8	24
	2202	−0.1	−3
13 Su	0526	2.3	70
	1241	0.2	6
	1727	0.8	24
	2243	0.0	0
14 M	0607	2.3	70
	1327	0.1	3
	1827	0.7	21
	2328	0.1	3
15 Tu	0650	2.2	67
	1416	0.1	3
	1940	0.8	24

	Time	Height	
	h m	ft	cm
16 W	0025	0.3	9
	0737	2.0	61
	1504	0.0	0
	2105	0.9	27
17 Th	0140	0.5	15
	0829	1.8	55
	1552	0.0	0
	2229	1.2	37
18 F ◐	0320	0.7	21
	0926	1.6	49
	1638	−0.1	−3
	2338	1.4	43
19 Sa	0510	0.7	21
	1029	1.4	43
	1722	−0.2	−6
20 Su	0034	1.8	55
	0644	0.6	18
	1133	1.2	37
	1805	−0.2	−6
21 M	0122	2.0	61
	0758	0.5	15
	1235	1.0	30
	1847	−0.3	−9
22 Tu	0207	2.3	70
	0857	0.3	9
	1333	0.9	27
	1928	−0.3	−9
23 W	0249	2.4	73
	0948	0.2	6
	1425	0.9	27
	2009	−0.3	−9
24 Th	0330	2.5	76
	1033	0.1	3
	1515	0.8	24
	2050	−0.3	−9
25 F ○	0410	2.5	76
	1116	0.1	3
	1603	0.8	24
	2130	−0.2	−6
26 Sa	0449	2.4	73
	1157	0.1	3
	1651	0.8	24
	2210	−0.1	−3
27 Su	0527	2.3	70
	1238	0.1	3
	1740	0.8	24
	2251	0.0	0
28 M	0604	2.2	67
	1319	0.1	3
	1835	0.8	24
	2333	0.2	6
29 Tu	0642	2.0	61
	1401	0.1	3
	1938	0.8	24
30 W	0021	0.4	12
	0720	1.8	55
	1442	0.1	3
	2052	0.9	27
31 Th	0121	0.6	18
	0800	1.6	49
	1524	0.1	3
	2211	1.1	34

Time meridian 150° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.
Heights are referred to mean lower low water which is the chart datum of soundings.

Moku O Loe, Oahu Island, Hawaii, 2015

Times and Heights of High and Low Waters

January

	Time	Height	
	h m	ft	cm
1 Th	0119	2.2	67
	0745	1.0	30
	1114	1.3	40
	1812	−0.3	−9
2 F	0153	2.3	70
	0825	1.0	30
	1203	1.2	37
	1847	−0.3	−9
3 Sa	0224	2.4	73
	0857	0.9	27
	1246	1.2	37
	1921	−0.3	−9
4 Su ○	0253	2.5	76
	0926	0.8	24
	1326	1.2	37
	1954	−0.3	−9
5 M	0321	2.5	76
	0955	0.8	24
	1403	1.2	37
	2025	−0.3	−9
6 Tu	0350	2.4	73
	1024	0.8	24
	1440	1.2	37
	2056	−0.2	−6
7 W	0417	2.3	70
	1054	0.7	21
	1517	1.2	37
	2127	0.0	0
8 Th	0445	2.2	67
	1126	0.7	21
	1558	1.2	37
	2156	0.2	6
9 F	0511	2.1	64
	1201	0.7	21
	1645	1.1	34
	2224	0.4	12
10 Sa	0536	1.9	58
	1240	0.6	18
	1748	1.1	34
	2252	0.6	18
11 Su	0559	1.8	55
	1324	0.5	15
	1929	1.1	34
	2323	0.9	27
12 M ◑	0621	1.6	49
	1416	0.4	12
	2225	1.2	37
13 Tu	0025	1.1	34
	0645	1.5	46
	1511	0.3	9
	2350	1.5	46
14 W	0439	1.3	40
	0720	1.4	43
	1605	0.2	6
15 Th	0024	1.8	55
	0651	1.2	37
	0851	1.3	40
	1654	0.0	0

	Time	Height	
	h m	ft	cm
16 F	0055	2.0	61
	0729	1.1	34
	1025	1.2	37
	1739	−0.2	−6
17 Sa	0126	2.3	70
	0800	1.0	30
	1134	1.2	37
	1823	−0.4	−12
18 Su	0200	2.5	76
	0831	0.9	27
	1230	1.3	40
	1905	−0.5	−15
19 M	0234	2.6	79
	0903	0.8	24
	1321	1.3	40
	1947	−0.6	−18
20 Tu ●	0309	2.7	82
	0938	0.7	21
	1410	1.4	43
	2029	−0.5	−15
21 W	0345	2.7	82
	1014	0.6	18
	1500	1.4	43
	2111	−0.4	−12
22 Th	0420	2.6	79
	1052	0.5	15
	1553	1.4	43
	2153	−0.1	−3
23 F	0454	2.4	73
	1133	0.4	12
	1652	1.3	40
	2237	0.2	6
24 Sa	0528	2.2	67
	1218	0.3	9
	1805	1.3	40
	2324	0.6	18
25 Su	0559	1.9	58
	1308	0.3	9
	1947	1.3	40
26 M ◐	0026	1.0	30
	0629	1.7	52
	1407	0.2	6
	2206	1.5	46
27 Tu	0239	1.3	40
	0655	1.4	43
	1513	0.2	6
	2344	1.7	52
28 W	1617	0.1	3
29 Th	0035	2.0	61
	1712	0.0	0
30 F	0111	2.1	64
	0808	1.0	30
	1107	1.1	34
	1757	−0.1	−3
31 Sa	0142	2.2	67
	0825	0.9	27
	1206	1.1	34
	1837	−0.1	−3

February

	Time	Height	
	h m	ft	cm
1 Su	0208	2.3	70
	0843	0.8	24
	1250	1.2	37
	1912	−0.2	−6
2 M	0233	2.3	70
	0901	0.7	21
	1328	1.3	40
	1944	−0.2	−6
3 Tu ○	0257	2.3	70
	0921	0.7	21
	1404	1.4	43
	2016	−0.1	−3
4 W	0320	2.3	70
	0943	0.6	18
	1439	1.4	43
	2046	−0.1	−3
5 Th	0343	2.2	67
	1006	0.5	15
	1515	1.4	43
	2116	0.1	3
6 F	0406	2.1	64
	1031	0.5	15
	1553	1.4	43
	2145	0.2	6
7 Sa	0427	2.0	61
	1057	0.4	12
	1635	1.4	43
	2215	0.5	15
8 Su	0446	1.9	58
	1126	0.4	12
	1724	1.3	40
	2245	0.7	21
9 M	0503	1.7	52
	1200	0.4	12
	1832	1.3	40
	2321	1.0	30
10 Tu	0517	1.6	49
	1243	0.3	9
	2023	1.3	40
11 W ◑	0022	1.2	37
	0525	1.4	43
	1342	0.3	9
	2244	1.5	46
12 Th	1459	0.2	6
	2347	1.8	55
13 F	1613	0.1	3
14 Sa	0026	2.0	61
	0727	1.0	30
	1012	1.1	34
	1715	−0.1	−3
15 Su	0101	2.3	70
	0741	0.9	27
	1135	1.2	37
	1807	−0.2	−6

	Time	Height	
	h m	ft	cm
16 M	0135	2.4	73
	0805	0.7	21
	1234	1.3	40
	1855	−0.4	−12
17 Tu	0209	2.5	76
	0832	0.6	18
	1326	1.5	46
	1940	−0.4	−12
18 W ●	0242	2.6	79
	0903	0.4	12
	1415	1.6	49
	2024	−0.3	−9
19 Th	0315	2.5	76
	0935	0.3	9
	1504	1.7	52
	2108	−0.2	−6
20 F	0347	2.3	70
	1009	0.2	6
	1556	1.7	52
	2152	0.1	3
21 Sa	0417	2.1	64
	1045	0.1	3
	1651	1.7	52
	2237	0.4	12
22 Su	0446	1.9	58
	1123	0.1	3
	1755	1.6	49
	2328	0.8	24
23 M	0511	1.7	52
	1206	0.1	3
	1917	1.6	49
24 Tu	0038	1.1	34
	0528	1.4	43
	1258	0.2	6
	2115	1.6	49
25 W ◐	1408	0.3	9
	2305	1.8	55
26 Th	1534	0.3	9
27 F	0005	1.9	58
	0754	0.9	27
	0955	1.0	30
	1649	0.2	6
28 Sa	0044	2.0	61
	0747	0.8	24
	1129	1.0	30
	1743	0.2	6

March

	Time	Height	
	h m	ft	cm
1 Su	0114	2.1	64
	0755	0.8	24
	1219	1.2	37
	1826	0.1	3
2 M	0138	2.1	64
	0807	0.7	21
	1256	1.3	40
	1901	0.1	3
3 Tu	0200	2.1	64
	0821	0.6	18
	1330	1.4	43
	1934	0.1	3
4 W	0221	2.1	64
	0837	0.5	15
	1402	1.5	46
	2005	0.1	3
5 Th ○	0242	2.1	64
	0856	0.4	12
	1435	1.6	49
	2036	0.1	3
6 F	0302	2.0	61
	0917	0.3	9
	1509	1.7	52
	2107	0.3	9
7 Sa	0323	1.9	58
	0940	0.2	6
	1545	1.7	52
	2138	0.4	12
8 Su	0342	1.8	55
	1004	0.2	6
	1624	1.7	52
	2212	0.6	18
9 M	0400	1.7	52
	1031	0.2	6
	1708	1.7	52
	2248	0.8	24
10 Tu	0417	1.6	49
	1101	0.2	6
	1804	1.6	49
	2336	1.0	30
11 W	0430	1.4	43
	1139	0.2	6
	1925	1.6	49
12 Th	0105	1.2	37
	0430	1.3	40
	1233	0.3	9
	2119	1.7	52
13 F ◑	1355	0.3	9
	2248	1.8	55
14 Sa	1533	0.2	6
	2342	2.0	61
15 Su	0648	0.9	27
	1029	1.0	30
	1651	0.1	3

	Time	Height	
	h m	ft	cm
16 M	0022	2.2	67
	0703	0.7	21
	1144	1.2	37
	1752	0.0	0
17 Tu	0059	2.3	70
	0726	0.5	15
	1239	1.5	46
	1844	−0.1	−3
18 W	0133	2.3	70
	0753	0.3	9
	1329	1.7	52
	1933	−0.1	−3
19 Th ●	0205	2.3	70
	0823	0.1	3
	1417	1.9	58
	2020	0.0	0
20 F	0237	2.2	67
	0854	0.0	0
	1504	2.0	61
	2106	0.2	6
21 Sa	0308	2.0	61
	0927	−0.1	−3
	1553	2.1	64
	2153	0.4	12
22 Su	0337	1.8	55
	1000	−0.1	−3
	1644	2.0	61
	2243	0.7	21
23 M	0403	1.6	49
	1035	−0.1	−3
	1740	2.0	61
	2341	0.9	27
24 Tu	0426	1.4	43
	1112	0.0	0
	1847	1.9	58
25 W	0108	1.1	34
	0437	1.2	37
	1156	0.2	6
	2016	1.8	55
26 Th ◐	1255	0.4	12
	2157	1.8	55
27 F	1433	0.5	15
	2308	1.8	55
28 Sa	0658	0.8	24
	1034	0.9	27
	1613	0.5	15
	2354	1.9	58
29 Su	0659	0.7	21
	1142	1.1	34
	1720	0.5	15
30 M	0026	1.9	58
	0708	0.6	18
	1223	1.2	37
	1807	0.4	12
31 Tu	0052	1.9	58
	0719	0.5	15
	1255	1.4	43
	1846	0.4	12

Time meridian 150° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.
Heights are referred to mean lower low water which is the chart datum of soundings.

Moku O Loe, Oahu Island, Hawaii, 2015

Times and Heights of High and Low Waters

April

	Time	Height	
	h m	ft	cm
1 W	0114	1.9	58
	0733	0.4	12
	1326	1.6	49
	1921	0.4	12
2 Th	0134	1.9	58
	0750	0.3	9
	1357	1.7	52
	1954	0.4	12
3 F	0155	1.8	55
	0810	0.2	6
	1429	1.9	58
	2028	0.4	12
4 Sa ○	0216	1.8	55
	0832	0.1	3
	1502	2.0	61
	2102	0.5	15
5 Su	0237	1.7	52
	0855	0.0	0
	1537	2.0	61
	2138	0.6	18
6 M	0258	1.6	49
	0921	0.0	0
	1615	2.0	61
	2218	0.8	24
7 Tu	0318	1.5	46
	0948	0.0	0
	1659	2.0	61
	2305	0.9	27
8 W	0338	1.4	43
	1020	0.0	0
	1751	1.9	58
9 Th	0011	1.0	30
	0354	1.2	37
	1058	0.1	3
	1858	1.9	58
10 F	1149	0.2	6
	2022	1.9	58
11 Sa ◑	1308	0.3	9
	2144	1.9	58
12 Su	0542	0.8	24
	0849	0.9	27
	1454	0.4	12
	2245	2.0	61
13 M	0555	0.6	18
	1046	1.1	34
	1626	0.4	12
	2332	2.0	61
14 Tu	0618	0.4	12
	1152	1.4	43
	1736	0.3	9
15 W	0012	2.1	64
	0644	0.2	6
	1244	1.7	52
	1835	0.3	9

	Time	Height	
	h m	ft	cm
16 Th	0048	2.0	61
	0713	0.0	0
	1331	1.9	58
	1928	0.3	9
17 F	0122	1.9	58
	0743	−0.2	−6
	1417	2.2	67
	2019	0.4	12
18 Sa ●	0154	1.8	55
	0815	−0.3	−9
	1502	2.3	70
	2108	0.5	15
19 Su	0225	1.7	52
	0848	−0.3	−9
	1547	2.3	70
	2159	0.7	21
20 M	0255	1.5	46
	0921	−0.3	−9
	1634	2.3	70
	2253	0.8	24
21 Tu	0323	1.4	43
	0954	−0.2	−6
	1723	2.2	67
	2358	0.9	27
22 W	0348	1.2	37
	1029	0.0	0
	1818	2.1	64
23 Th	0131	0.9	27
	0405	1.0	30
	1106	0.2	6
	1923	1.9	58
24 F	1152	0.4	12
	2037	1.8	55
25 Sa ◐	1308	0.6	18
	2147	1.8	55
26 Su	0548	0.7	21
	1037	0.9	27
	1507	0.7	21
	2239	1.7	52
27 M	0559	0.6	18
	1140	1.1	34
	1638	0.7	21
	2318	1.7	52
28 Tu	0612	0.5	15
	1217	1.3	40
	1739	0.7	21
	2348	1.7	52
29 W	0627	0.3	9
	1249	1.5	46
	1827	0.7	21
30 Th	0013	1.6	49
	0644	0.2	6
	1319	1.7	52
	1908	0.7	21

May

	Time	Height	
	h m	ft	cm
1 F	0037	1.6	49
	0704	0.1	3
	1350	1.9	58
	1947	0.7	21
2 Sa	0101	1.6	49
	0727	−0.1	−3
	1422	2.1	64
	2025	0.7	21
3 Su ○	0126	1.5	46
	0752	−0.2	−6
	1455	2.2	67
	2104	0.8	24
4 M	0152	1.5	46
	0819	−0.2	−6
	1531	2.3	70
	2146	0.8	24
5 Tu	0218	1.4	43
	0848	−0.2	−6
	1610	2.3	70
	2233	0.9	27
6 W	0245	1.3	40
	0919	−0.2	−6
	1653	2.3	70
	2329	0.9	27
7 Th	0312	1.2	37
	0954	−0.1	−3
	1742	2.2	67
8 F	0043	1.0	30
	0344	1.1	34
	1035	0.0	0
	1838	2.1	64
9 Sa	0223	0.8	24
	0430	0.9	27
	1125	0.2	6
	1941	2.1	64
10 Su	0348	0.7	21
	0637	0.8	24
	1236	0.4	12
	2046	2.0	61
11 M ◑	0430	0.6	18
	0920	0.9	27
	1419	0.6	18
	2145	2.0	61
12 Tu	0502	0.4	12
	1057	1.2	37
	1603	0.7	21
	2235	1.9	58
13 W	0533	0.2	6
	1159	1.5	46
	1726	0.7	21
	2319	1.8	55
14 Th	0604	0.0	0
	1249	1.9	58
	1833	0.7	21
	2359	1.7	52
15 F	0636	−0.2	−6
	1334	2.1	64
	1932	0.7	21

	Time	Height	
	h m	ft	cm
16 Sa	0035	1.6	49
	0709	−0.4	−12
	1416	2.3	70
	2025	0.7	21
17 Su ●	0111	1.5	46
	0742	−0.4	−12
	1458	2.5	76
	2116	0.8	24
18 M	0145	1.4	43
	0816	−0.4	−12
	1539	2.5	76
	2207	0.8	24
19 Tu	0219	1.3	40
	0850	−0.4	−12
	1621	2.5	76
	2300	0.9	27
20 W	0252	1.2	37
	0924	−0.2	−6
	1704	2.4	73
	2359	0.9	27
21 Th	0325	1.1	34
	0958	−0.1	−3
	1748	2.2	67
22 F	0110	0.9	27
	0402	1.0	30
	1032	0.1	3
	1835	2.1	64
23 Sa	0236	0.8	24
	0457	0.9	27
	1109	0.4	12
	1925	1.9	58
24 Su	0347	0.7	21
	0709	0.8	24
	1157	0.6	18
	2016	1.8	55
25 M ◐	0424	0.6	18
	1002	0.9	27
	1326	0.8	24
	2106	1.7	52
26 Tu	0449	0.5	15
	1125	1.1	34
	1530	1.0	30
	2150	1.6	49
27 W	0511	0.4	12
	1207	1.4	43
	1703	1.0	30
	2228	1.5	46
28 Th	0533	0.2	6
	1240	1.6	49
	1809	1.0	30
	2302	1.5	46
29 F	0556	0.1	3
	1311	1.9	58
	1901	1.0	30
	2334	1.4	43
30 Sa	0622	−0.1	−3
	1342	2.1	64
	1946	0.9	27
31 Su	0007	1.4	43
	0650	−0.2	−6
	1414	2.2	67
	2028	0.9	27

June

	Time	Height	
	h m	ft	cm
1 M	0041	1.4	43
	0720	−0.3	−9
	1447	2.4	73
	2110	0.9	27
2 Tu ○	0115	1.3	40
	0753	−0.4	−12
	1523	2.5	76
	2153	0.9	27
3 W	0151	1.3	40
	0827	−0.4	−12
	1602	2.5	76
	2241	0.9	27
4 Th	0229	1.2	37
	0903	−0.3	−9
	1643	2.5	76
	2333	0.9	27
5 F	0311	1.1	34
	0942	−0.2	−6
	1727	2.4	73
6 Sa	0032	0.8	24
	0403	1.0	30
	1024	0.0	0
	1813	2.3	70
7 Su	0136	0.7	21
	0518	0.9	27
	1113	0.2	6
	1902	2.2	67
8 M	0237	0.6	18
	0713	0.9	27
	1217	0.5	15
	1953	2.0	61
9 Tu ◑	0329	0.4	12
	0928	1.1	34
	1351	0.8	24
	2044	1.8	55
10 W	0412	0.2	6
	1104	1.4	43
	1549	1.0	30
	2135	1.7	52
11 Th	0452	0.0	0
	1205	1.7	52
	1730	1.0	30
	2224	1.6	49
12 F	0529	−0.2	−6
	1253	2.0	61
	1847	1.0	30
	2310	1.5	46
13 Sa	0606	−0.3	−9
	1335	2.3	70
	1948	1.0	30
	2354	1.4	43
14 Su	0642	−0.4	−12
	1414	2.4	73
	2038	0.9	27
15 M	0036	1.3	40
	0718	−0.5	−15
	1451	2.5	76
	2123	0.9	27

	Time	Height	
	h m	ft	cm
16 Tu ●	0117	1.3	40
	0753	−0.4	−12
	1527	2.5	76
	2205	0.9	27
17 W	0156	1.2	37
	0828	−0.4	−12
	1603	2.5	76
	2247	0.8	24
18 Th	0236	1.2	37
	0902	−0.2	−6
	1638	2.4	73
	2330	0.8	24
19 F	0317	1.1	34
	0936	−0.1	−3
	1713	2.3	70
20 Sa	0016	0.8	24
	0402	1.0	30
	1009	0.1	3
	1748	2.1	64
21 Su	0104	0.7	21
	0459	0.9	27
	1041	0.4	12
	1822	2.0	61
22 M	0155	0.7	21
	0623	0.9	27
	1116	0.6	18
	1856	1.8	55
23 Tu	0244	0.6	18
	0838	1.0	30
	1203	0.9	27
	1930	1.7	52
24 W ◐	0326	0.5	15
	1054	1.2	37
	1351	1.1	34
	2007	1.5	46
25 Th	0404	0.3	9
	1153	1.4	43
	1625	1.2	37
	2051	1.4	43
26 F	0438	0.2	6
	1228	1.7	52
	1806	1.2	37
	2142	1.3	40
27 Sa	0512	0.0	0
	1259	1.9	58
	1906	1.1	34
	2234	1.3	40
28 Su	0547	−0.1	−3
	1329	2.1	64
	1950	1.1	34
	2325	1.3	40
29 M	0622	−0.3	−9
	1401	2.3	70
	2028	1.0	30
30 Tu	0012	1.3	40
	0659	−0.4	−12
	1434	2.5	76
	2105	0.9	27

Time meridian 150° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.
Heights are referred to mean lower low water which is the chart datum of soundings.

Moku O Loe, Oahu Island, Hawaii, 2015

Times and Heights of High and Low Waters

July

	Time	Height	
	h m	ft	cm
1 W ○	0058	1.3	40
	0737	−0.5	−15
	1510	2.6	79
	2143	0.8	24
2 Th	0144	1.3	40
	0815	−0.5	−15
	1546	2.6	79
	2223	0.8	24
3 F	0231	1.2	37
	0855	−0.4	−12
	1624	2.6	79
	2306	0.7	21
4 Sa	0322	1.2	37
	0936	−0.2	−6
	1702	2.5	76
	2352	0.6	18
5 Su	0421	1.1	34
	1019	0.0	0
	1741	2.3	70
6 M	0041	0.5	15
	0535	1.1	34
	1107	0.3	9
	1820	2.1	64
7 Tu	0134	0.4	12
	0716	1.1	34
	1206	0.7	21
	1900	1.9	58
8 W ◑	0229	0.3	9
	0922	1.3	40
	1339	1.0	30
	1943	1.7	52
9 Th	0323	0.1	3
	1105	1.6	49
	1603	1.2	37
	2033	1.5	46
10 F	0415	0.0	0
	1208	1.9	58
	1807	1.2	37
	2133	1.3	40
11 Sa	0502	−0.2	−6
	1254	2.1	64
	1920	1.1	34
	2237	1.3	40
12 Su	0545	−0.3	−9
	1332	2.3	70
	2006	1.0	30
	2334	1.2	37
13 M	0626	−0.3	−9
	1406	2.4	73
	2041	0.9	27
14 Tu	0025	1.2	37
	0703	−0.4	−12
	1438	2.5	76
	2112	0.9	27
15 W ●	0109	1.2	37
	0739	−0.3	−9
	1508	2.5	76
	2141	0.8	24

	Time	Height	
	h m	ft	cm
16 Th	0151	1.2	37
	0814	−0.3	−9
	1537	2.4	73
	2210	0.7	21
17 F	0231	1.2	37
	0847	−0.2	−6
	1606	2.3	70
	2240	0.7	21
18 Sa	0311	1.2	37
	0919	0.0	0
	1633	2.2	67
	2312	0.7	21
19 Su	0354	1.2	37
	0950	0.2	6
	1659	2.1	64
	2345	0.6	18
20 M	0442	1.2	37
	1021	0.4	12
	1724	1.9	58
21 Tu	0021	0.6	18
	0543	1.1	34
	1052	0.7	21
	1747	1.8	55
22 W	0102	0.5	15
	0712	1.1	34
	1128	0.9	27
	1807	1.6	49
23 Th ◐	0150	0.4	12
	0934	1.2	37
	1233	1.1	34
	1827	1.5	46
24 F	0244	0.3	9
	1123	1.5	46
	1611	1.3	40
	1848	1.4	43
25 Sa	0340	0.2	6
	1206	1.7	52
26 Su	0431	0.1	3
	1238	1.9	58
	1919	1.1	34
	2154	1.2	37
27 M	0518	−0.1	−3
	1309	2.2	67
	1943	1.0	30
	2309	1.2	37
28 Tu	0602	−0.3	−9
	1340	2.4	73
	2011	0.9	27
29 W	0007	1.3	40
	0644	−0.4	−12
	1413	2.5	76
	2040	0.8	24
30 Th	0058	1.3	40
	0726	−0.4	−12
	1446	2.6	79
	2112	0.7	21
31 F ○	0147	1.4	43
	0807	−0.4	−12
	1520	2.6	79
	2147	0.6	18

August

	Time	Height	
	h m	ft	cm
1 Sa	0237	1.4	43
	0849	−0.3	−9
	1555	2.5	76
	2223	0.5	15
2 Su	0329	1.4	43
	0932	−0.1	−3
	1628	2.4	73
	2302	0.4	12
3 M	0426	1.4	43
	1016	0.2	6
	1702	2.1	64
	2344	0.3	9
4 Tu	0535	1.4	43
	1105	0.5	15
	1734	1.9	58
5 W	0032	0.2	6
	0703	1.4	43
	1206	0.9	27
	1805	1.7	52
6 Th ◑	0128	0.2	6
	0903	1.5	46
	1356	1.2	37
	1836	1.4	43
7 F	0232	0.1	3
	1053	1.7	52
8 Sa	0340	0.1	3
	1158	1.9	58
9 Su	0442	0.0	0
	1242	2.1	64
	1937	1.0	30
	2243	1.1	34
10 M	0533	−0.1	−3
	1317	2.2	67
	1959	0.9	27
	2347	1.2	37
11 Tu	0617	−0.1	−3
	1346	2.3	70
	2020	0.8	24
12 W	0034	1.2	37
	0655	−0.2	−6
	1413	2.3	70
	2040	0.7	21
13 Th	0114	1.3	40
	0729	−0.2	−6
	1438	2.3	70
	2100	0.7	21
14 F ●	0151	1.4	43
	0802	−0.1	−3
	1502	2.3	70
	2122	0.6	18
15 Sa	0227	1.4	43
	0833	0.0	0
	1525	2.2	67
	2145	0.5	15

	Time	Height	
	h m	ft	cm
16 Su	0303	1.5	46
	0904	0.1	3
	1548	2.1	64
	2210	0.5	15
17 M	0341	1.5	46
	0935	0.3	9
	1609	1.9	58
	2236	0.4	12
18 Tu	0423	1.5	46
	1006	0.5	15
	1628	1.8	55
	2304	0.4	12
19 W	0511	1.4	43
	1039	0.7	21
	1645	1.6	49
	2336	0.4	12
20 Th	0616	1.4	43
	1117	1.0	30
	1658	1.5	46
21 F	0017	0.4	12
	0757	1.4	43
	1224	1.2	37
	1700	1.4	43
22 Sa ◐	0114	0.4	12
	1014	1.5	46
23 Su	0232	0.3	9
	1123	1.7	52
24 M	0350	0.2	6
	1203	2.0	61
	1907	1.0	30
	2156	1.1	34
25 Tu	0453	0.0	0
	1237	2.2	67
	1917	0.9	27
	2316	1.2	37
26 W	0545	−0.1	−3
	1310	2.3	70
	1938	0.7	21
27 Th	0013	1.3	40
	0632	−0.2	−6
	1342	2.4	73
	2004	0.6	18
28 F	0103	1.5	46
	0716	−0.3	−9
	1414	2.5	76
	2033	0.4	12
29 Sa ○	0151	1.6	49
	0800	−0.3	−9
	1446	2.4	73
	2104	0.3	9
30 Su	0240	1.7	52
	0844	−0.1	−3
	1518	2.3	70
	2137	0.2	6
31 M	0330	1.8	55
	0929	0.1	3
	1549	2.1	64
	2213	0.1	3

September

	Time	Height	
	h m	ft	cm
1 Tu	0424	1.8	55
	1016	0.4	12
	1618	1.9	58
	2251	0.1	3
2 W	0526	1.7	52
	1110	0.7	21
	1645	1.6	49
	2333	0.1	3
3 Th	0644	1.7	52
	1223	1.0	30
	1708	1.4	43
4 F ◑	0024	0.2	6
	0829	1.7	52
5 Sa	0133	0.2	6
	1019	1.8	55
6 Su	0302	0.3	9
	1129	1.9	58
	1908	0.9	27
	2148	1.0	30
7 M	0423	0.2	6
	1214	2.0	61
	1914	0.8	24
	2316	1.1	34
8 Tu	0523	0.2	6
	1247	2.1	64
	1928	0.7	21
9 W	0007	1.2	37
	0608	0.1	3
	1314	2.1	64
	1942	0.6	18
10 Th	0044	1.3	40
	0646	0.1	3
	1338	2.1	64
	1958	0.5	15
11 F	0118	1.5	46
	0719	0.1	3
	1359	2.1	64
	2015	0.4	12
12 Sa ●	0150	1.6	49
	0751	0.1	3
	1420	2.0	61
	2033	0.3	9
13 Su	0222	1.7	52
	0822	0.2	6
	1440	1.9	58
	2054	0.3	9
14 M	0255	1.8	55
	0853	0.3	9
	1500	1.9	58
	2116	0.2	6
15 Tu	0330	1.8	55
	0926	0.5	15
	1519	1.7	52
	2139	0.2	6

	Time	Height	
	h m	ft	cm
16 W	0407	1.8	55
	0959	0.7	21
	1536	1.6	49
	2204	0.2	6
17 Th	0450	1.7	52
	1037	0.8	24
	1551	1.5	46
	2233	0.2	6
18 F	0543	1.7	52
	1125	1.0	30
	1601	1.4	43
	2307	0.2	6
19 Sa	0658	1.6	49
	1301	1.2	37
	1549	1.3	40
	2356	0.3	9
20 Su ◐	0848	1.7	52
21 M	0117	0.4	12
	1020	1.8	55
22 Tu	0303	0.3	9
	1114	2.0	61
	1827	0.8	24
	2217	1.0	30
23 W	0425	0.2	6
	1154	2.1	64
	1838	0.7	21
	2327	1.2	37
24 Th	0527	0.1	3
	1229	2.2	67
	1859	0.5	15
25 F	0020	1.5	46
	0620	0.0	0
	1303	2.2	67
	1924	0.3	9
26 Sa	0107	1.7	52
	0708	0.0	0
	1335	2.2	67
	1953	0.1	3
27 Su	0153	1.9	58
	0755	0.1	3
	1406	2.1	64
	2023	−0.1	−3
28 M	0240	2.1	64
	0842	0.2	6
	1437	2.0	61
	2056	−0.2	−6
29 Tu	0328	2.2	67
	0930	0.4	12
	1507	1.8	55
	2130	−0.2	−6
30 W	0418	2.2	67
	1022	0.7	21
	1535	1.6	49
	2205	−0.2	−6

Time meridian 150° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.
Heights are referred to mean lower low water which is the chart datum of soundings.

Moku O Loe, Oahu Island, Hawaii, 2015

Times and Heights of High and Low Waters

October

	Time	Height	
	h m	ft	cm
1 Th	0514	2.1	64
	1122	0.9	27
	1559	1.4	43
	2243	−0.1	−3
2 F	0620	2.0	61
	1252	1.1	34
	1614	1.2	37
	2327	0.1	3
3 Sa	0745	1.9	58
4 Su ◑	0026	0.3	9
	0922	1.9	58
5 M	0204	0.5	15
	1037	1.9	58
	1827	0.7	21
	2231	0.9	27
6 Tu	0351	0.5	15
	1127	1.9	58
	1834	0.6	18
	2337	1.1	34
7 W	0503	0.5	15
	1202	1.9	58
	1846	0.5	15
8 Th	0016	1.3	40
	0553	0.5	15
	1229	1.9	58
	1900	0.4	12
9 F	0048	1.5	46
	0633	0.4	12
	1252	1.9	58
	1914	0.3	9
10 Sa	0117	1.6	49
	0709	0.4	12
	1312	1.8	55
	1930	0.2	6
11 Su	0146	1.8	55
	0742	0.5	15
	1332	1.8	55
	1949	0.1	3
12 M ●	0216	1.9	58
	0815	0.5	15
	1352	1.7	52
	2010	0.0	0
13 Tu	0248	2.0	61
	0849	0.6	18
	1413	1.6	49
	2032	−0.1	−3
14 W	0321	2.1	64
	0924	0.7	21
	1433	1.5	46
	2056	−0.1	−3
15 Th	0357	2.1	64
	1003	0.8	24
	1452	1.4	43
	2122	−0.1	−3

	Time	Height	
	h m	ft	cm
16 F	0437	2.0	61
	1048	0.9	27
	1509	1.3	40
	2151	0.0	0
17 Sa	0525	2.0	61
	1151	1.1	34
	1521	1.2	37
	2224	0.1	3
18 Su	0626	1.9	58
	2307	0.2	6
19 M	0745	1.9	58
20 Tu ◐	0016	0.4	12
	0909	1.9	58
	1741	0.7	21
	2017	0.8	24
21 W	0209	0.5	15
	1013	1.9	58
	1736	0.6	18
	2231	1.0	30
22 Th	0353	0.5	15
	1102	2.0	61
	1755	0.4	12
	2335	1.3	40
23 F	0509	0.4	12
	1142	2.0	61
	1819	0.2	6
24 Sa	0025	1.6	49
	0610	0.4	12
	1218	2.0	61
	1847	0.0	0
25 Su	0110	2.0	61
	0704	0.4	12
	1252	1.9	58
	1917	−0.2	−6
26 M	0155	2.2	67
	0755	0.5	15
	1325	1.8	55
	1948	−0.4	−12
27 Tu ○	0239	2.4	73
	0846	0.5	15
	1357	1.7	52
	2021	−0.4	−12
28 W	0324	2.4	73
	0937	0.7	21
	1428	1.5	46
	2055	−0.4	−12
29 Th	0411	2.4	73
	1031	0.8	24
	1458	1.4	43
	2130	−0.3	−9
30 F	0500	2.3	70
	1136	0.9	27
	1525	1.2	37
	2206	−0.1	−3
31 Sa	0554	2.2	67
	1306	0.9	27
	1545	1.0	30
	2243	0.1	3

November

	Time	Height	
	h m	ft	cm
1 Su	0657	2.0	61
	2326	0.3	9
2 M	0809	1.9	58
3 Tu ◑	0034	0.6	18
	0921	1.8	55
	1731	0.6	18
	2239	0.9	27
4 W	0241	0.8	24
	1017	1.8	55
	1745	0.5	15
	2341	1.1	34
5 Th	0425	0.8	24
	1059	1.7	52
	1759	0.4	12
6 F	0017	1.4	43
	0531	0.8	24
	1130	1.7	52
	1814	0.3	9
7 Sa	0047	1.6	49
	0621	0.8	24
	1156	1.6	49
	1831	0.1	3
8 Su	0114	1.8	55
	0702	0.8	24
	1220	1.6	49
	1850	0.0	0
9 M	0143	2.0	61
	0739	0.8	24
	1243	1.5	46
	1911	−0.1	−3
10 Tu	0212	2.1	64
	0815	0.8	24
	1307	1.5	46
	1935	−0.2	−6
11 W ●	0243	2.2	67
	0852	0.8	24
	1332	1.4	43
	2000	−0.3	−9
12 Th	0315	2.3	70
	0931	0.8	24
	1357	1.4	43
	2028	−0.3	−9
13 F	0351	2.3	70
	1014	0.9	27
	1422	1.3	40
	2057	−0.2	−6
14 Sa	0429	2.3	70
	1104	0.9	27
	1448	1.2	37
	2129	−0.2	−6
15 Su	0513	2.2	67
	1208	1.0	30
	1515	1.1	34
	2204	0.0	0

	Time	Height	
	h m	ft	cm
16 M	0603	2.2	67
	1338	0.9	27
	1548	1.0	30
	2245	0.1	3
17 Tu	0700	2.1	64
	2342	0.4	12
18 W ◐	0803	2.0	61
	1608	0.6	18
	2034	0.9	27
19 Th	0117	0.6	18
	0905	1.9	58
	1639	0.4	12
	2236	1.1	34
20 F	0319	0.8	24
	1000	1.9	58
	1709	0.2	6
	2341	1.5	46
21 Sa	0456	0.8	24
	1048	1.8	55
	1740	0.0	0
22 Su	0031	1.8	55
	0610	0.8	24
	1130	1.7	52
	1813	−0.2	−6
23 M	0115	2.1	64
	0711	0.8	24
	1209	1.6	49
	1846	−0.4	−12
24 Tu	0157	2.4	73
	0805	0.8	24
	1247	1.5	46
	1921	−0.5	−15
25 W ○	0239	2.6	79
	0856	0.8	24
	1323	1.4	43
	1956	−0.6	−18
26 Th	0320	2.6	79
	0946	0.8	24
	1359	1.3	40
	2031	−0.5	−15
27 F	0401	2.6	79
	1036	0.8	24
	1435	1.2	37
	2107	−0.4	−12
28 Sa	0443	2.5	76
	1131	0.9	27
	1511	1.1	34
	2141	−0.2	−6
29 Su	0526	2.3	70
	1235	0.9	27
	1549	1.0	30
	2216	0.0	0
30 M	0611	2.2	67
	1352	0.8	24
	1639	0.9	27
	2250	0.3	9

December

	Time	Height	
	h m	ft	cm
1 Tu	0658	2.0	61
	1514	0.7	21
	1826	0.8	24
	2327	0.6	18
2 W ◑	0747	1.8	55
	1606	0.6	18
	2154	0.9	27
3 Th	0031	0.8	24
	0839	1.7	52
	1638	0.5	15
	2338	1.1	34
4 F	0305	1.0	30
	0927	1.6	49
	1702	0.4	12
5 Sa	0015	1.4	43
	0503	1.1	34
	1010	1.5	46
	1725	0.2	6
6 Su	0044	1.6	49
	0615	1.1	34
	1047	1.4	43
	1748	0.1	3
7 M	0111	1.9	58
	0706	1.0	30
	1122	1.4	43
	1813	−0.1	−3
8 Tu	0138	2.1	64
	0746	1.0	30
	1155	1.3	40
	1840	−0.2	−6
9 W	0207	2.2	67
	0823	0.9	27
	1229	1.3	40
	1909	−0.3	−9
10 Th	0237	2.4	73
	0859	0.9	27
	1303	1.3	40
	1939	−0.4	−12
11 F ●	0309	2.5	76
	0936	0.9	27
	1337	1.3	40
	2012	−0.4	−12
12 Sa	0343	2.5	76
	1016	0.9	27
	1413	1.2	37
	2045	−0.4	−12
13 Su	0419	2.5	76
	1100	0.8	24
	1452	1.2	37
	2120	−0.3	−9
14 M	0457	2.4	73
	1150	0.8	24
	1536	1.1	34
	2157	−0.1	−3
15 Tu	0537	2.3	70
	1245	0.7	21
	1635	1.0	30
	2238	0.1	3

	Time	Height	
	h m	ft	cm
16 W	0620	2.2	67
	1346	0.6	18
	1806	0.9	27
	2328	0.4	12
17 Th	0707	2.0	61
	1445	0.5	15
	2025	1.0	30
18 F ◐	0042	0.8	24
	0757	1.8	55
	1537	0.3	9
	2235	1.3	40
19 Sa	0250	1.0	30
	0851	1.7	52
	1623	0.1	3
	2347	1.6	49
20 Su	0501	1.1	34
	0947	1.5	46
	1705	−0.1	−3
21 M	0037	2.0	61
	0631	1.1	34
	1042	1.4	43
	1745	−0.3	−9
22 Tu	0119	2.3	70
	0734	1.0	30
	1133	1.4	43
	1824	−0.4	−12
23 W	0158	2.5	76
	0823	0.9	27
	1221	1.3	40
	1903	−0.5	−15
24 Th	0235	2.6	79
	0905	0.9	27
	1305	1.3	40
	1940	−0.5	−15
25 F ○	0311	2.6	79
	0945	0.8	24
	1348	1.3	40
	2017	−0.5	−15
26 Sa	0346	2.6	79
	1023	0.8	24
	1429	1.2	37
	2052	−0.4	−12
27 Su	0420	2.5	76
	1102	0.8	24
	1510	1.2	37
	2126	−0.2	−6
28 M	0454	2.4	73
	1143	0.7	21
	1553	1.1	34
	2158	0.0	0
29 Tu	0526	2.2	67
	1226	0.7	21
	1642	1.0	30
	2229	0.3	9
30 W	0557	2.0	61
	1313	0.7	21
	1749	1.0	30
	2258	0.6	18
31 Th	0626	1.8	55
	1404	0.6	18
	1943	1.0	30
	2326	0.9	27

Time meridian 150° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.
Heights are referred to mean lower low water which is the chart datum of soundings.

Kahului, Maui Island, Hawaii, 2015

Times and Heights of High and Low Waters

January

	Time	Height		Time	Height
	h m	ft / cm		h m	ft / cm
1 Th	0059	2.3 / 70	16 F	0039	2.1 / 64
	0719	1.0 / 30		0706	1.1 / 34
	1124	1.4 / 43		1038	1.3 / 40
	1806	−0.2 / −6		1735	−0.2 / −6
2 F	0134	2.5 / 76	17 Sa	0112	2.4 / 73
	0800	0.9 / 27		0740	0.9 / 27
	1212	1.4 / 43		1142	1.3 / 40
	1842	−0.3 / −9		1818	−0.4 / −12
3 Sa	0206	2.6 / 79	18 Su	0145	2.6 / 79
	0834	0.8 / 24		0813	0.8 / 24
	1254	1.4 / 43		1235	1.4 / 43
	1917	−0.4 / −12		1901	−0.5 / −15
4 Su ○	0237	2.7 / 82	19 M	0220	2.8 / 85
	0905	0.7 / 21		0846	0.6 / 18
	1332	1.4 / 43		1323	1.5 / 46
	1950	−0.4 / −12		1942	−0.6 / −18
5 M	0307	2.7 / 82	20 Tu ●	0255	2.9 / 88
	0935	0.7 / 21		0921	0.5 / 15
	1408	1.4 / 43		1410	1.5 / 46
	2023	−0.3 / −9		2024	−0.6 / −18
6 Tu	0336	2.6 / 79	21 W	0331	2.9 / 88
	1005	0.7 / 21		0957	0.4 / 12
	1444	1.4 / 43		1458	1.6 / 49
	2054	−0.2 / −6		2105	−0.5 / −15
7 W	0405	2.5 / 76	22 Th	0406	2.8 / 85
	1036	0.7 / 21		1035	0.4 / 12
	1520	1.4 / 43		1547	1.6 / 49
	2124	−0.1 / −3		2147	−0.2 / −6
8 Th	0433	2.4 / 73	23 F	0441	2.6 / 79
	1108	0.6 / 18		1115	0.3 / 9
	1557	1.3 / 40		1641	1.5 / 46
	2154	0.1 / 3		2230	0.1 / 3
9 F	0500	2.3 / 70	24 Sa	0515	2.3 / 70
	1143	0.6 / 18		1158	0.3 / 9
	1640	1.3 / 40		1746	1.5 / 46
	2222	0.4 / 12		2316	0.5 / 15
10 Sa	0526	2.1 / 64	25 Su	0548	2.0 / 61
	1220	0.6 / 18		1246	0.3 / 9
	1734	1.2 / 37		1911	1.4 / 43
	2252	0.6 / 18			
11 Su	0550	1.9 / 58	26 M ◐	0015	0.9 / 27
	1304	0.6 / 18		0621	1.8 / 55
	1857	1.2 / 37		1343	0.2 / 6
	2325	0.9 / 27		2115	1.5 / 46
12 M ◑	0615	1.8 / 55	27 Tu	0204	1.2 / 37
	1356	0.5 / 15		0656	1.5 / 46
	2123	1.3 / 40		1452	0.2 / 6
				2310	1.7 / 52
13 Tu	0028	1.2 / 37	28 W	0537	1.2 / 37
	0644	1.6 / 49		0757	1.3 / 40
	1457	0.4 / 12		1603	0.1 / 3
	2321	1.5 / 46			
14 W	0404	1.3 / 40	29 Th	0012	2.0 / 61
	0733	1.4 / 43		0706	1.0 / 30
	1556	0.2 / 6		0955	1.1 / 34
				1704	0.0 / 0
15 Th	0005	1.8 / 55	30 F	0052	2.2 / 67
	0619	1.2 / 37		0738	0.9 / 27
	0911	1.3 / 40		1119	1.1 / 34
	1648	0.0 / 0		1752	−0.1 / −3
			31 Sa	0125	2.3 / 70
				0801	0.8 / 24
				1213	1.2 / 37
				1833	−0.2 / −6

February

	Time	Height		Time	Height
	h m	ft / cm		h m	ft / cm
1 Su	0153	2.4 / 73	16 M	0123	2.5 / 76
	0823	0.7 / 21		0752	0.6 / 18
	1256	1.3 / 40		1237	1.4 / 43
	1909	−0.3 / −9		1850	−0.5 / −15
2 M	0220	2.5 / 76	17 Tu	0157	2.7 / 82
	0845	0.6 / 18		0820	0.4 / 12
	1332	1.4 / 43		1325	1.6 / 49
	1942	−0.3 / −9		1935	−0.5 / −15
3 Tu ○	0245	2.5 / 76	18 W ●	0230	2.7 / 82
	0907	0.5 / 15		0851	0.2 / 6
	1407	1.5 / 46		1412	1.7 / 52
	2014	−0.3 / −9		2018	−0.5 / −15
4 W	0310	2.5 / 76	19 Th	0303	2.7 / 82
	0931	0.5 / 15		0923	0.1 / 3
	1440	1.5 / 46		1458	1.8 / 55
	2044	−0.2 / −6		2101	−0.3 / −9
5 Th	0335	2.4 / 73	20 F	0336	2.5 / 76
	0955	0.4 / 12		0956	0.0 / 0
	1514	1.6 / 49		1545	1.9 / 58
	2114	−0.1 / −3		2143	−0.1 / −3
6 F	0358	2.3 / 70	21 Sa	0407	2.3 / 70
	1020	0.4 / 12		1031	0.0 / 0
	1549	1.6 / 49		1635	1.8 / 55
	2143	0.1 / 3		2227	0.2 / 6
7 Sa	0419	2.2 / 67	22 Su	0437	2.0 / 61
	1046	0.4 / 12		1107	0.0 / 0
	1626	1.5 / 46		1731	1.8 / 55
	2211	0.3 / 9		2314	0.6 / 18
8 Su	0439	2.0 / 61	23 M	0504	1.8 / 55
	1113	0.3 / 9		1147	0.0 / 0
	1709	1.5 / 46		1840	1.7 / 52
	2240	0.6 / 18			
9 M	0457	1.8 / 55	24 Tu	0013	0.9 / 27
	1145	0.3 / 9		0526	1.5 / 46
	1806	1.4 / 43		1234	0.1 / 3
	2313	0.9 / 27		2022	1.6 / 49
10 Tu	0513	1.7 / 52	25 W ◐	0215	1.2 / 37
	1224	0.3 / 9		0531	1.3 / 40
	1936	1.4 / 43		1341	0.2 / 6
				2230	1.7 / 52
11 W ◑	0003	1.1 / 34	26 Th	1516	0.3 / 9
	0524	1.5 / 46		2346	1.9 / 58
	1321	0.3 / 9			
	2207	1.5 / 46			
12 Th	1443	0.2 / 6	27 F	0722	0.8 / 24
	2331	1.8 / 55		1003	0.9 / 27
				1641	0.2 / 6
13 F	1606	0.1 / 3	28 Sa	0029	2.0 / 61
				0725	0.7 / 21
				1133	1.0 / 30
				1740	0.1 / 3
14 Sa	0014	2.0 / 61			
	0709	0.9 / 27			
	1023	1.1 / 34			
	1710	−0.1 / −3			
15 Su	0049	2.3 / 70			
	0727	0.8 / 24			
	1141	1.2 / 37			
	1803	−0.3 / −9			

March

	Time	Height		Time	Height
	h m	ft / cm		h m	ft / cm
1 Su	0101	2.1 / 64	16 M	0013	2.2 / 67
	0738	0.6 / 18		0654	0.5 / 15
	1221	1.2 / 37		1147	1.2 / 37
	1823	0.0 / 0		1748	−0.1 / −3
2 M	0127	2.2 / 67	17 Tu	0050	2.3 / 70
	0753	0.5 / 15		0718	0.3 / 9
	1257	1.4 / 43		1239	1.5 / 46
	1859	−0.1 / −3		1840	−0.2 / −6
3 Tu	0151	2.2 / 67	18 W	0124	2.4 / 73
	0810	0.4 / 12		0745	0.1 / 3
	1330	1.5 / 46		1325	1.8 / 55
	1932	−0.1 / −3		1927	−0.3 / −9
4 W	0214	2.2 / 67	19 Th ●	0157	2.4 / 73
	0829	0.3 / 9		0814	−0.1 / −3
	1401	1.6 / 49		1410	2.0 / 61
	2003	−0.1 / −3		2012	−0.2 / −6
5 Th ○	0236	2.2 / 67	20 F	0229	2.3 / 70
	0850	0.2 / 6		0845	−0.2 / −6
	1433	1.7 / 52		1454	2.1 / 64
	2034	0.0 / 0		2057	−0.1 / −3
6 F	0258	2.2 / 67	21 Sa	0301	2.2 / 67
	0911	0.1 / 3		0917	−0.3 / −9
	1505	1.8 / 55		1538	2.2 / 67
	2104	0.1 / 3		2141	0.1 / 3
7 Sa	0319	2.1 / 64	22 Su	0331	2.0 / 61
	0934	0.1 / 3		0949	−0.3 / −9
	1538	1.8 / 55		1624	2.2 / 67
	2134	0.2 / 6		2227	0.4 / 12
8 Su	0339	1.9 / 58	23 M	0359	1.7 / 52
	0957	0.1 / 3		1022	−0.2 / −6
	1612	1.8 / 55		1714	2.1 / 64
	2204	0.4 / 12		2317	0.7 / 21
9 M	0357	1.8 / 55	24 Tu	0424	1.5 / 46
	1022	0.1 / 3		1057	−0.1 / −3
	1651	1.7 / 52		1812	1.9 / 58
	2237	0.6 / 18			
10 Tu	0414	1.6 / 49	25 W	0023	0.9 / 27
	1050	0.1 / 3		0443	1.2 / 37
	1739	1.7 / 52		1136	0.1 / 3
	2317	0.9 / 27		1931	1.7 / 52
11 W	0428	1.5 / 46	26 Th ◐	1229	0.3 / 9
	1123	0.1 / 3		2120	1.7 / 52
	1848	1.6 / 49			
12 Th	0023	1.1 / 34	27 F	1407	0.4 / 12
	0436	1.3 / 40		2250	1.7 / 52
	1211	0.2 / 6			
	2041	1.6 / 49			
13 F ◑	1332	0.2 / 6	28 Sa	0642	0.7 / 21
	2232	1.8 / 55		1027	0.8 / 24
				1604	0.4 / 12
				2342	1.8 / 55
14 Sa	1522	0.2 / 6	29 Su	0645	0.6 / 18
	2331	2.0 / 61		1140	1.0 / 30
				1716	0.4 / 12
15 Su	0638	0.7 / 21	30 M	0018	1.9 / 58
	1034	1.0 / 30		0656	0.5 / 15
	1647	0.1 / 3		1219	1.3 / 40
				1805	0.3 / 9
			31 Tu	0045	1.9 / 58
				0711	0.3 / 9
				1252	1.5 / 46
				1844	0.2 / 6

Time meridian 150° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.
Heights are referred to mean lower low water which is the chart datum of soundings.

Kahului, Maui Island, Hawaii, 2015

Times and Heights of High and Low Waters

April

	Time	Height	
	h m	ft	cm
1 W	0109	2.0	61
	0727	0.2	6
	1322	1.7	52
	1918	0.2	6
2 Th	0132	2.0	61
	0746	0.1	3
	1352	1.8	55
	1951	0.2	6
3 F	0154	1.9	58
	0807	0.0	0
	1423	2.0	61
	2023	0.2	6
4 Sa ○	0216	1.9	58
	0829	−0.1	−3
	1454	2.1	64
	2056	0.3	9
5 Su	0238	1.8	55
	0852	−0.2	−6
	1527	2.1	64
	2130	0.4	12
6 M	0259	1.7	52
	0917	−0.2	−6
	1602	2.1	64
	2205	0.5	15
7 Tu	0320	1.5	46
	0943	−0.2	−6
	1641	2.0	61
	2246	0.7	21
8 W	0340	1.4	43
	1012	−0.1	−3
	1727	1.9	58
	2339	0.9	27
9 Th	0359	1.2	37
	1046	−0.1	−3
	1828	1.9	58
10 F	0109	1.0	30
	0413	1.1	34
	1131	0.1	3
	1952	1.8	55
11 Sa ◑	1244	0.2	6
	2125	1.9	58
12 Su	0533	0.7	21
	0840	0.8	24
	1440	0.3	9
	2235	1.9	58
13 M	0547	0.5	15
	1046	1.0	30
	1621	0.3	9
	2325	2.0	61
14 Tu	0611	0.3	9
	1150	1.4	43
	1733	0.2	6
15 W	0007	2.1	64
	0638	0.1	3
	1239	1.7	52
	1830	0.1	3

	Time	Height	
	h m	ft	cm
16 Th	0044	2.1	64
	0707	−0.2	−6
	1323	2.0	61
	1921	0.1	3
17 F	0118	2.0	61
	0737	−0.3	−9
	1406	2.3	70
	2009	0.2	6
18 Sa ●	0152	1.9	58
	0808	−0.5	−15
	1448	2.4	73
	2056	0.3	9
19 Su	0224	1.8	55
	0840	−0.5	−15
	1530	2.5	76
	2142	0.4	12
20 M	0255	1.6	49
	0913	−0.5	−15
	1613	2.4	73
	2230	0.6	18
21 Tu	0324	1.4	43
	0945	−0.4	−12
	1659	2.3	70
	2324	0.7	21
22 W	0352	1.2	37
	1018	−0.2	−6
	1749	2.1	64
23 Th	0033	0.8	24
	0418	1.1	34
	1054	0.0	0
	1848	1.9	58
24 F	0232	0.8	24
	0437	0.9	27
	1135	0.3	9
	2003	1.8	55
25 Sa ◐	1245	0.5	15
	2125	1.7	52
26 Su	0531	0.6	18
	1018	0.8	24
	1453	0.6	18
	2228	1.7	52
27 M	0547	0.5	15
	1129	1.1	34
	1633	0.6	18
	2312	1.7	52
28 Tu	0603	0.4	12
	1208	1.3	40
	1736	0.6	18
	2346	1.7	52
29 W	0621	0.2	6
	1240	1.6	49
	1823	0.6	18
30 Th	0014	1.7	52
	0641	0.1	3
	1310	1.8	55
	1903	0.5	15

May

	Time	Height	
	h m	ft	cm
1 F	0040	1.7	52
	0702	−0.1	−3
	1341	2.0	61
	1940	0.5	15
2 Sa	0106	1.7	52
	0725	−0.2	−6
	1412	2.2	67
	2016	0.5	15
3 Su ○	0132	1.6	49
	0751	−0.3	−9
	1444	2.3	70
	2053	0.5	15
4 M	0158	1.5	46
	0817	−0.4	−12
	1518	2.3	70
	2131	0.6	18
5 Tu	0224	1.4	43
	0846	−0.4	−12
	1555	2.4	73
	2214	0.7	21
6 W	0252	1.3	40
	0916	−0.4	−12
	1635	2.3	70
	2303	0.7	21
7 Th	0320	1.2	37
	0949	−0.3	−9
	1721	2.2	67
8 F	0004	0.8	24
	0352	1.1	34
	1026	−0.1	−3
	1814	2.2	67
9 Sa	0129	0.8	24
	0437	0.9	27
	1112	0.1	3
	1917	2.1	64
10 Su	0310	0.7	21
	0619	0.8	24
	1219	0.3	9
	2027	2.0	61
11 M ◑	0412	0.5	15
	0906	0.9	27
	1405	0.5	15
	2133	1.9	58
12 Tu	0452	0.3	9
	1048	1.2	37
	1556	0.6	18
	2229	1.9	58
13 W	0525	0.1	3
	1149	1.6	49
	1720	0.6	18
	2317	1.9	58
14 Th	0558	−0.1	−3
	1237	1.9	58
	1826	0.6	18
	2359	1.8	55
15 F	0630	−0.3	−9
	1320	2.2	67
	1921	0.5	15

	Time	Height	
	h m	ft	cm
16 Sa	0037	1.7	52
	0703	−0.5	−15
	1402	2.4	73
	2011	0.5	15
17 Su ●	0114	1.6	49
	0737	−0.6	−18
	1442	2.6	79
	2059	0.5	15
18 M	0150	1.5	46
	0810	−0.6	−18
	1522	2.6	79
	2145	0.6	18
19 Tu	0224	1.4	43
	0844	−0.5	−15
	1602	2.6	79
	2233	0.6	18
20 W	0259	1.3	40
	0918	−0.4	−12
	1643	2.4	73
	2323	0.7	21
21 Th	0333	1.1	34
	0952	−0.2	−6
	1725	2.3	70
22 F	0022	0.8	24
	0410	1.0	30
	1026	0.0	0
	1810	2.1	64
23 Sa	0134	0.8	24
	0500	0.9	27
	1102	0.3	9
	1900	2.0	61
24 Su	0255	0.7	21
	0635	0.8	24
	1149	0.5	15
	1955	1.8	55
25 M ◐	0356	0.6	18
	0919	0.9	27
	1313	0.8	24
	2052	1.7	52
26 Tu	0433	0.5	15
	1102	1.1	34
	1520	0.9	27
	2144	1.6	49
27 W	0501	0.3	9
	1150	1.4	43
	1656	0.9	27
	2229	1.6	49
28 Th	0527	0.2	6
	1225	1.7	52
	1801	0.9	27
	2307	1.5	46
29 F	0553	0.0	0
	1257	1.9	58
	1850	0.9	27
	2343	1.5	46
30 Sa	0620	−0.2	−6
	1329	2.1	64
	1933	0.8	24
31 Su	0017	1.5	46
	0649	−0.3	−9
	1401	2.3	70
	2013	0.7	21

June

	Time	Height	
	h m	ft	cm
1 M	0051	1.4	43
	0719	−0.4	−12
	1434	2.5	76
	2053	0.7	21
2 Tu ○	0125	1.4	43
	0751	−0.5	−15
	1510	2.6	79
	2134	0.7	21
3 W	0200	1.3	40
	0825	−0.5	−15
	1547	2.6	79
	2219	0.7	21
4 Th	0237	1.3	40
	0900	−0.5	−15
	1627	2.6	79
	2307	0.7	21
5 F	0318	1.2	37
	0938	−0.3	−9
	1709	2.5	76
6 Sa	0001	0.7	21
	0407	1.1	34
	1018	−0.1	−3
	1754	2.4	73
7 Su	0102	0.6	18
	0513	1.0	30
	1105	0.1	3
	1843	2.2	67
8 M	0207	0.5	15
	0653	1.0	30
	1206	0.4	12
	1936	2.1	64
9 Tu ◑	0307	0.4	12
	0902	1.1	34
	1338	0.8	24
	2032	1.9	58
10 W	0357	0.2	6
	1043	1.4	43
	1537	0.9	27
	2130	1.8	55
11 Th	0441	0.0	0
	1147	1.8	55
	1718	1.0	30
	2225	1.6	49
12 F	0521	−0.2	−6
	1236	2.1	64
	1833	0.9	27
	2315	1.5	46
13 Sa	0600	−0.4	−12
	1318	2.4	73
	1931	0.8	24
14 Su	0002	1.5	46
	0637	−0.5	−15
	1358	2.5	76
	2019	0.8	24
15 M	0045	1.4	43
	0714	−0.5	−15
	1435	2.6	79
	2102	0.7	21

	Time	Height	
	h m	ft	cm
16 Tu ●	0126	1.4	43
	0750	−0.5	−15
	1511	2.7	82
	2143	0.7	21
17 W	0205	1.3	40
	0825	−0.5	−15
	1547	2.6	79
	2222	0.7	21
18 Th	0244	1.3	40
	0859	−0.3	−9
	1622	2.5	76
	2303	0.7	21
19 F	0323	1.2	37
	0933	−0.2	−6
	1657	2.4	73
	2345	0.7	21
20 Sa	0406	1.1	34
	1006	0.0	0
	1732	2.3	70
21 Su	0031	0.7	21
	0455	1.1	34
	1040	0.3	9
	1806	2.1	64
22 M	0120	0.7	21
	0604	1.0	30
	1116	0.6	18
	1841	1.9	58
23 Tu	0213	0.6	18
	0751	1.0	30
	1204	0.8	24
	1919	1.8	55
24 W ◐	0303	0.5	15
	1005	1.2	37
	1339	1.1	34
	2001	1.6	49
25 Th	0349	0.4	12
	1125	1.5	46
	1604	1.2	37
	2053	1.5	46
26 F	0429	0.2	6
	1209	1.7	52
	1747	1.2	37
	2150	1.4	43
27 Sa	0507	0.0	0
	1243	2.0	61
	1848	1.1	34
	2246	1.4	43
28 Su	0543	−0.1	−3
	1315	2.2	67
	1932	1.0	30
	2336	1.4	43
29 M	0620	−0.3	−9
	1348	2.4	73
	2010	0.9	27
30 Tu	0023	1.4	43
	0657	−0.4	−12
	1422	2.6	79
	2048	0.8	24

Time meridian 150° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.
Heights are referred to mean lower low water which is the chart datum of soundings.

Kahului, Maui Island, Hawaii, 2015

Times and Heights of High and Low Waters

July

	Time	Height	
	h m	ft	cm
1 W ○	0107	1.4	43
	0734	−0.5	−15
	1457	2.7	82
	2126	0.7	21
2 Th	0151	1.4	43
	0813	−0.5	−15
	1533	2.8	85
	2205	0.6	18
3 F	0236	1.4	43
	0852	−0.5	−15
	1610	2.8	85
	2246	0.6	18
4 Sa	0324	1.3	40
	0932	−0.3	−9
	1648	2.7	82
	2330	0.5	15
5 Su	0419	1.3	40
	1014	−0.1	−3
	1726	2.5	76
6 M	0018	0.5	15
	0524	1.3	40
	1101	0.3	9
	1805	2.3	70
7 Tu	0109	0.4	12
	0650	1.3	40
	1158	0.7	21
	1847	2.0	61
8 W ◑	0205	0.3	9
	0843	1.4	43
	1323	1.0	30
	1933	1.8	55
9 Th	0304	0.2	6
	1032	1.6	49
	1536	1.2	37
	2029	1.6	49
10 F	0400	0.0	0
	1144	1.9	58
	1741	1.2	37
	2138	1.4	43
11 Sa	0452	−0.1	−3
	1234	2.2	67
	1856	1.1	34
	2246	1.3	40
12 Su	0538	−0.2	−6
	1314	2.4	73
	1944	0.9	27
	2345	1.3	40
13 M	0621	−0.3	−9
	1350	2.6	79
	2021	0.8	24
14 Tu	0034	1.3	40
	0700	−0.4	−12
	1423	2.6	79
	2053	0.8	24
15 W ●	0118	1.4	43
	0737	−0.4	−12
	1455	2.7	82
	2123	0.7	21

	Time	Height	
	h m	ft	cm
16 Th	0158	1.4	43
	0812	−0.3	−9
	1525	2.6	79
	2154	0.7	21
17 F	0237	1.4	43
	0846	−0.2	−6
	1554	2.6	79
	2224	0.6	18
18 Sa	0315	1.4	43
	0918	−0.1	−3
	1623	2.4	73
	2255	0.6	18
19 Su	0354	1.4	43
	0950	0.1	3
	1650	2.3	70
	2327	0.6	18
20 M	0437	1.4	43
	1021	0.4	12
	1715	2.1	64
21 Tu	0002	0.6	18
	0529	1.3	40
	1053	0.6	18
	1739	2.0	61
22 W	0041	0.6	18
	0640	1.3	40
	1129	0.9	27
	1802	1.8	55
23 Th ◐	0127	0.5	15
	0832	1.3	40
	1226	1.2	37
	1825	1.6	49
24 F	0223	0.4	12
	1043	1.5	46
	1512	1.4	43
	1857	1.5	46
25 Sa	0325	0.3	9
	1145	1.8	55
	1807	1.2	37
	2020	1.3	40
26 Su	0422	0.2	6
	1223	2.0	61
	1856	1.2	37
	2204	1.3	40
27 M	0513	0.0	0
	1256	2.3	70
	1927	1.0	30
	2317	1.3	40
28 Tu	0558	−0.2	−6
	1328	2.5	76
	1956	0.9	27
29 W	0013	1.4	43
	0641	−0.3	−9
	1401	2.7	82
	2027	0.7	21
30 Th	0103	1.5	46
	0722	−0.4	−12
	1435	2.8	85
	2100	0.6	18
31 F ○	0150	1.6	49
	0803	−0.4	−12
	1509	2.8	85
	2134	0.5	15

August

	Time	Height	
	h m	ft	cm
1 Sa	0237	1.7	52
	0845	−0.4	−12
	1543	2.8	85
	2209	0.4	12
2 Su	0326	1.7	52
	0927	−0.2	−6
	1617	2.6	79
	2247	0.3	9
3 M	0419	1.7	52
	1011	0.1	3
	1651	2.4	73
	2327	0.3	9
4 Tu	0519	1.7	52
	1058	0.5	15
	1724	2.2	67
5 W	0012	0.3	9
	0634	1.6	49
	1155	0.9	27
	1758	1.9	58
6 Th ◑	0105	0.3	9
	0815	1.6	49
	1324	1.2	37
	1833	1.6	49
7 F	0208	0.3	9
	1012	1.8	55
	1618	1.3	40
	1925	1.4	43
8 Sa	0321	0.2	6
	1133	2.0	61
	1827	1.2	37
	2113	1.3	40
9 Su	0430	0.1	3
	1223	2.2	67
	1911	1.0	30
	2249	1.2	37
10 M	0526	0.0	0
	1301	2.4	73
	1939	0.9	27
	2352	1.3	40
11 Tu	0612	−0.1	−3
	1333	2.5	76
	2003	0.8	24
12 W	0039	1.4	43
	0652	−0.1	−3
	1402	2.5	76
	2026	0.7	21
13 Th	0118	1.5	46
	0727	−0.1	−3
	1428	2.6	79
	2049	0.6	18
14 F ●	0154	1.6	49
	0801	−0.1	−3
	1454	2.5	76
	2112	0.6	18
15 Sa	0229	1.7	52
	0832	0.0	0
	1518	2.5	76
	2137	0.5	15

	Time	Height	
	h m	ft	cm
16 Su	0303	1.7	52
	0904	0.1	3
	1542	2.4	73
	2202	0.5	15
17 M	0339	1.7	52
	0934	0.3	9
	1604	2.2	67
	2227	0.5	15
18 Tu	0416	1.7	52
	1005	0.5	15
	1625	2.1	64
	2254	0.5	15
19 W	0459	1.7	52
	1036	0.8	24
	1643	1.9	58
	2324	0.5	15
20 Th	0552	1.6	49
	1111	1.0	30
	1658	1.7	52
21 F	0001	0.5	15
	0712	1.6	49
	1204	1.3	40
	1708	1.6	49
22 Sa ◐	0053	0.5	15
	0925	1.6	49
23 Su	0211	0.5	15
	1103	1.8	55
24 M	0338	0.3	9
	1150	2.1	64
	1850	1.1	34
	2158	1.2	37
25 Tu	0446	0.2	6
	1226	2.3	70
	1904	0.9	27
	2319	1.3	40
26 W	0540	0.0	0
	1259	2.5	76
	1927	0.8	24
27 Th	0015	1.5	46
	0627	−0.2	−6
	1331	2.7	82
	1954	0.6	18
28 F	0103	1.7	52
	0711	−0.2	−6
	1404	2.8	85
	2023	0.4	12
29 Sa ○	0149	1.9	58
	0755	−0.2	−6
	1437	2.7	82
	2055	0.3	9
30 Su	0234	2.0	61
	0838	−0.1	−3
	1509	2.6	79
	2127	0.2	6
31 M	0321	2.1	64
	0922	0.1	3
	1541	2.4	73
	2202	0.1	3

September

	Time	Height	
	h m	ft	cm
1 Tu	0411	2.1	64
	1007	0.4	12
	1612	2.2	67
	2238	0.1	3
2 W	0506	2.1	64
	1057	0.7	21
	1641	1.9	58
	2318	0.2	6
3 Th	0612	2.0	61
	1200	1.1	34
	1709	1.7	52
4 F ◑	0005	0.3	9
	0742	1.9	58
	1350	1.3	40
	1731	1.4	43
5 Sa	0108	0.4	12
	0938	1.9	58
6 Su	0239	0.4	12
	1105	2.1	64
	1838	1.0	30
	2141	1.1	34
7 M	0410	0.4	12
	1157	2.2	67
	1854	0.9	27
	2314	1.2	37
8 Tu	0515	0.3	9
	1234	2.3	70
	1912	0.8	24
9 W	0004	1.4	43
	0603	0.2	6
	1303	2.4	73
	1930	0.7	21
10 Th	0042	1.6	49
	0642	0.2	6
	1329	2.4	73
	1948	0.6	18
11 F	0116	1.8	55
	0716	0.2	6
	1352	2.4	73
	2007	0.5	15
12 Sa ●	0147	1.9	58
	0748	0.2	6
	1415	2.4	73
	2028	0.4	12
13 Su	0219	2.0	61
	0820	0.2	6
	1437	2.3	70
	2049	0.3	9
14 M	0250	2.1	64
	0851	0.3	9
	1458	2.2	67
	2112	0.3	9
15 Tu	0323	2.1	64
	0922	0.5	15
	1519	2.1	64
	2135	0.3	9

	Time	Height	
	h m	ft	cm
16 W	0358	2.1	64
	0954	0.7	21
	1537	1.9	58
	2159	0.3	9
17 Th	0436	2.0	61
	1028	0.9	27
	1554	1.8	55
	2226	0.3	9
18 F	0522	1.9	58
	1109	1.1	34
	1606	1.6	49
	2257	0.4	12
19 Sa	0626	1.8	55
	1217	1.3	40
	1610	1.5	46
	2340	0.4	12
20 Su ◐	0808	1.8	55
21 M	0054	0.5	15
	0959	1.9	58
22 Tu	0248	0.5	15
	1101	2.1	64
	1816	1.0	30
	2216	1.2	37
23 W	0418	0.4	12
	1144	2.3	70
	1828	0.8	24
	2326	1.4	43
24 Th	0522	0.3	9
	1220	2.5	76
	1850	0.6	18
25 F	0017	1.7	52
	0614	0.1	3
	1254	2.5	76
	1916	0.3	9
26 Sa	0102	2.0	61
	0702	0.1	3
	1327	2.6	79
	1945	0.1	3
27 Su ○	0146	2.2	67
	0748	0.1	3
	1400	2.5	76
	2016	0.0	0
28 M	0230	2.4	73
	0833	0.2	6
	1432	2.3	70
	2047	−0.1	−3
29 Tu	0314	2.5	76
	0919	0.4	12
	1503	2.2	67
	2121	−0.1	−3
30 W	0401	2.5	76
	1007	0.6	18
	1533	1.9	58
	2155	−0.1	−3

Time meridian 150° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.
Heights are referred to mean lower low water which is the chart datum of soundings.

Kahului, Maui Island, Hawaii, 2015

Times and Heights of High and Low Waters

October

	Time	Height	
	h m	ft	cm
1 Th	0452	2.4	73
	1101	0.9	27
	1601	1.7	52
	2231	0.0	0
2 F	0550	2.3	70
	1212	1.1	34
	1625	1.5	46
	2312	0.2	6
3 Sa	0706	2.1	64
	1430	1.1	34
	1633	1.2	37
4 Su ◑	0006	0.4	12
	0845	2.0	61
5 M	0140	0.6	18
	1014	2.1	64
	1804	0.9	27
	2215	1.1	34
6 Tu	0338	0.7	21
	1112	2.1	64
	1817	0.8	24
	2326	1.3	40
7 W	0455	0.6	18
	1151	2.2	67
	1833	0.6	18
8 Th	0007	1.5	46
	0547	0.6	18
	1220	2.2	67
	1849	0.5	15
9 F	0039	1.8	55
	0628	0.5	15
	1246	2.2	67
	1906	0.4	12
10 Sa	0109	2.0	61
	0703	0.5	15
	1309	2.2	67
	1925	0.3	9
11 Su	0138	2.1	64
	0736	0.5	15
	1331	2.1	64
	1945	0.2	6
12 M ●	0208	2.3	70
	0809	0.5	15
	1353	2.0	61
	2007	0.1	3
13 Tu	0239	2.4	73
	0842	0.6	18
	1415	2.0	61
	2030	0.0	0
14 W	0311	2.4	73
	0916	0.7	21
	1436	1.8	55
	2054	0.0	0
15 Th	0345	2.4	73
	0951	0.8	24
	1457	1.7	52
	2119	0.0	0

	Time	Height	
	h m	ft	cm
16 F	0422	2.3	70
	1032	1.0	30
	1515	1.6	49
	2146	0.1	3
17 Sa	0506	2.2	67
	1124	1.1	34
	1531	1.4	43
	2217	0.2	6
18 Su	0602	2.1	64
	1253	1.2	37
	1539	1.3	40
	2256	0.3	9
19 M	0718	2.1	64
	2359	0.5	15
20 Tu ◐	0848	2.1	64
	1724	0.9	27
	2005	1.0	30
21 W	0154	0.7	21
	1000	2.2	67
	1725	0.8	24
	2227	1.2	37
22 Th	0346	0.7	21
	1052	2.2	67
	1746	0.5	15
	2329	1.6	49
23 F	0503	0.6	18
	1135	2.3	70
	1811	0.3	9
24 Sa	0017	1.9	58
	0603	0.5	15
	1212	2.3	70
	1839	0.1	3
25 Su	0100	2.2	67
	0656	0.5	15
	1248	2.2	67
	1909	−0.1	−3
26 M	0142	2.5	76
	0745	0.5	15
	1322	2.2	67
	1941	−0.3	−9
27 Tu ○	0225	2.7	82
	0832	0.5	15
	1355	2.0	61
	2014	−0.4	−12
28 W	0308	2.8	85
	0920	0.7	21
	1428	1.8	55
	2047	−0.4	−12
29 Th	0352	2.8	85
	1010	0.8	24
	1459	1.7	52
	2122	−0.3	−9
30 F	0438	2.7	82
	1106	0.9	27
	1530	1.5	46
	2157	−0.1	−3
31 Sa	0529	2.5	76
	1217	1.1	34
	1559	1.3	40
	2233	0.2	6

November

	Time	Height	
	h m	ft	cm
1 Su	0628	2.3	70
	1410	1.0	30
	1629	1.1	34
	2316	0.4	12
2 M	0740	2.1	64
3 Tu ◑	0021	0.7	21
	0858	2.0	61
	1706	0.8	24
	2211	1.1	34
4 W	0228	0.9	27
	1003	2.0	61
	1727	0.7	21
	2322	1.3	40
5 Th	0416	0.9	27
	1050	2.0	61
	1746	0.5	15
6 F	0001	1.6	49
	0523	0.9	27
	1125	1.9	58
	1805	0.4	12
7 Sa	0032	1.8	55
	0611	0.8	24
	1154	1.9	58
	1824	0.2	6
8 Su	0101	2.1	64
	0652	0.8	24
	1220	1.9	58
	1845	0.1	3
9 M	0130	2.3	70
	0728	0.8	24
	1246	1.8	55
	1908	0.0	0
10 Tu	0159	2.4	73
	0804	0.8	24
	1312	1.8	55
	1932	−0.1	−3
11 W ●	0230	2.5	76
	0839	0.8	24
	1337	1.7	52
	1958	−0.2	−6
12 Th	0302	2.6	79
	0916	0.8	24
	1403	1.6	49
	2025	−0.2	−6
13 F	0337	2.6	79
	0956	0.9	27
	1429	1.5	46
	2054	−0.2	−6
14 Sa	0414	2.5	76
	1041	1.0	30
	1455	1.4	43
	2124	−0.1	−3
15 Su	0456	2.5	76
	1138	1.0	30
	1524	1.3	40
	2157	0.0	0

	Time	Height	
	h m	ft	cm
16 M	0543	2.4	73
	1255	1.0	30
	1601	1.2	37
	2237	0.2	6
17 Tu	0640	2.3	70
	1436	0.9	27
	1720	1.0	30
	2331	0.5	15
18 W ◐	0746	2.2	67
	1546	0.8	24
	2019	1.0	30
19 Th	0106	0.7	21
	0853	2.1	64
	1626	0.6	18
	2224	1.3	40
20 F	0311	0.9	27
	0953	2.1	64
	1700	0.3	9
	2329	1.7	52
21 Sa	0449	0.9	27
	1044	2.0	61
	1732	0.1	3
22 Su	0017	2.1	64
	0600	0.8	24
	1129	2.0	61
	1805	−0.1	−3
23 M	0100	2.4	73
	0658	0.8	24
	1210	1.9	58
	1839	−0.3	−9
24 Tu	0141	2.7	82
	0750	0.8	24
	1248	1.8	55
	1914	−0.5	−15
25 W ○	0221	2.8	85
	0838	0.7	21
	1326	1.7	52
	1949	−0.5	−15
26 Th	0302	2.9	88
	0925	0.8	24
	1403	1.6	49
	2024	−0.5	−15
27 F	0342	2.9	88
	1012	0.8	24
	1439	1.5	46
	2100	−0.4	−12
28 Sa	0423	2.7	82
	1102	0.9	27
	1515	1.4	43
	2135	−0.2	−6
29 Su	0506	2.6	79
	1158	0.9	27
	1554	1.2	37
	2209	0.1	3
30 M	0550	2.4	73
	1305	0.9	27
	1643	1.1	34
	2245	0.4	12

December

	Time	Height	
	h m	ft	cm
1 Tu	0637	2.2	67
	1425	0.9	27
	1809	1.0	30
	2326	0.7	21
2 W ◑	0729	2.0	61
	1534	0.8	24
	2059	1.0	30
3 Th	0037	0.9	27
	0826	1.9	58
	1618	0.6	18
	2301	1.3	40
4 F	0257	1.1	34
	0922	1.8	55
	1649	0.5	15
	2349	1.6	49
5 Sa	0449	1.2	37
	1011	1.7	52
	1716	0.3	9
6 Su	0023	1.8	55
	0558	1.1	34
	1052	1.6	49
	1742	0.1	3
7 M	0053	2.1	64
	0648	1.0	30
	1129	1.6	49
	1809	0.0	0
8 Tu	0122	2.3	70
	0728	1.0	30
	1204	1.6	49
	1837	−0.2	−6
9 W	0151	2.5	76
	0805	0.9	27
	1237	1.5	46
	1906	−0.3	−9
10 Th	0222	2.6	79
	0841	0.9	27
	1311	1.5	46
	1937	−0.4	−12
11 F ●	0255	2.7	82
	0918	0.8	24
	1344	1.5	46
	2009	−0.4	−12
12 Sa	0329	2.7	82
	0957	0.8	24
	1419	1.4	43
	2041	−0.3	−9
13 Su	0404	2.7	82
	1039	0.8	24
	1456	1.4	43
	2116	−0.2	−6
14 M	0442	2.6	79
	1126	0.8	24
	1539	1.3	40
	2152	−0.1	−3
15 Tu	0522	2.5	76
	1220	0.8	24
	1634	1.2	37
	2232	0.2	6

	Time	Height	
	h m	ft	cm
16 W	0605	2.4	73
	1320	0.7	21
	1755	1.1	34
	2321	0.5	15
17 Th	0652	2.2	67
	1423	0.6	18
	2000	1.1	34
18 F ◐	0035	0.8	24
	0746	2.0	61
	1521	0.4	12
	2209	1.4	43
19 Sa	0240	1.1	34
	0846	1.8	55
	1611	0.2	6
	2326	1.8	55
20 Su	0447	1.2	37
	0949	1.7	52
	1656	0.0	0
21 M	0017	2.1	64
	0613	1.1	34
	1047	1.6	49
	1738	−0.2	−6
22 Tu	0100	2.4	73
	0714	1.0	30
	1140	1.5	46
	1818	−0.4	−12
23 W	0140	2.7	82
	0802	0.9	27
	1227	1.5	46
	1857	−0.5	−15
24 Th	0218	2.8	85
	0844	0.8	24
	1311	1.5	46
	1934	−0.5	−15
25 F ○	0254	2.8	85
	0923	0.7	21
	1352	1.4	43
	2011	−0.5	−15
26 Sa	0330	2.8	85
	1001	0.7	21
	1432	1.4	43
	2047	−0.4	−12
27 Su	0404	2.7	82
	1039	0.7	21
	1511	1.4	43
	2121	−0.2	−6
28 M	0438	2.6	79
	1118	0.7	21
	1552	1.3	40
	2154	0.0	0
29 Tu	0511	2.4	73
	1159	0.7	21
	1638	1.2	37
	2226	0.3	9
30 W	0543	2.2	67
	1245	0.7	21
	1736	1.1	34
	2258	0.6	18
31 Th	0614	2.0	61
	1336	0.7	21
	1907	1.1	34
	2335	0.9	27

Time meridian 150° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.
Heights are referred to mean lower low water which is the chart datum of soundings.

Hilo, Hawaii Island, Hawaii, 2015

Times and Heights of High and Low Waters

January

Day	Time (h m)	Height (ft)	Height (cm)
1 Th	0117	2.5	76
	0742	0.9	27
	1217	1.5	46
	1840	−0.2	−6
2 F	0156	2.7	82
	0827	0.7	21
	1305	1.5	46
	1919	−0.3	−9
3 Sa	0232	2.8	85
	0904	0.6	18
	1348	1.5	46
	1956	−0.3	−9
4 Su ○	0305	2.8	85
	0938	0.6	18
	1428	1.5	46
	2031	−0.3	−9
5 M	0337	2.8	85
	1010	0.5	15
	1506	1.5	46
	2106	−0.2	−6
6 Tu	0409	2.8	85
	1042	0.5	15
	1543	1.5	46
	2139	−0.1	−3
7 W	0440	2.7	82
	1115	0.5	15
	1622	1.5	46
	2213	0.0	0
8 Th	0510	2.6	79
	1149	0.5	15
	1703	1.5	46
	2247	0.2	6
9 F	0541	2.4	73
	1225	0.5	15
	1750	1.4	43
	2323	0.4	12
10 Sa	0611	2.2	67
	1304	0.5	15
	1848	1.4	43
11 Su	0005	0.7	21
	0643	2.0	61
	1347	0.4	12
	2004	1.4	43
12 M ◑	0101	1.0	30
	0719	1.9	58
	1436	0.4	12
	2138	1.5	46
13 Tu	0234	1.2	37
	0805	1.7	52
	1531	0.3	9
	2303	1.7	52
14 W	0441	1.2	37
	0911	1.5	46
	1627	0.2	6
15 Th	0002	2.0	61
	0615	1.1	34
	1029	1.4	43
	1719	0.0	0
16 F	0048	2.3	70
	0714	0.9	27
	1138	1.4	43
	1808	−0.2	−6
17 Sa	0128	2.6	79
	0758	0.7	21
	1237	1.4	43
	1854	−0.4	−12
18 Su	0208	2.8	85
	0838	0.5	15
	1328	1.5	46
	1939	−0.5	−15
19 M	0246	3.0	91
	0917	0.4	12
	1417	1.6	49
	2023	−0.6	−18
20 Tu ●	0325	3.1	94
	0955	0.3	9
	1505	1.7	52
	2107	−0.6	−18
21 W	0404	3.1	94
	1035	0.2	6
	1554	1.7	52
	2152	−0.4	−12
22 Th	0444	3.0	91
	1115	0.1	3
	1645	1.8	55
	2239	−0.2	−6
23 F	0523	2.8	85
	1157	0.1	3
	1742	1.8	55
	2328	0.1	3
24 Sa	0602	2.5	76
	1242	0.1	3
	1847	1.7	52
25 Su	0025	0.5	15
	0643	2.2	67
	1332	0.1	3
	2006	1.7	52
26 M ◐	0138	0.8	24
	0728	1.8	55
	1428	0.1	3
	2140	1.8	55
27 Tu	0325	1.1	34
	0823	1.6	49
	1531	0.1	3
	2309	2.0	61
28 W	0532	1.1	34
	0940	1.3	40
	1636	0.1	3
29 Th	0016	2.2	67
	0657	0.9	27
	1105	1.3	40
	1735	0.0	0
30 F	0105	2.4	73
	0746	0.8	24
	1212	1.3	40
	1825	−0.1	−3
31 Sa	0143	2.5	76
	0820	0.6	18
	1303	1.3	40
	1908	−0.2	−6

February

Day	Time (h m)	Height (ft)	Height (cm)
1 Su	0217	2.6	79
	0849	0.5	15
	1345	1.4	43
	1946	−0.2	−6
2 M	0247	2.6	79
	0915	0.4	12
	1422	1.5	46
	2022	−0.2	−6
3 Tu ○	0315	2.6	79
	0941	0.3	9
	1457	1.6	49
	2055	−0.2	−6
4 W	0343	2.6	79
	1007	0.3	9
	1531	1.7	52
	2128	−0.1	−3
5 Th	0410	2.5	76
	1034	0.3	9
	1607	1.7	52
	2200	0.0	0
6 F	0436	2.4	73
	1102	0.2	6
	1643	1.7	52
	2233	0.2	6
7 Sa	0502	2.3	70
	1131	0.2	6
	1723	1.7	52
	2307	0.4	12
8 Su	0528	2.1	64
	1201	0.2	6
	1809	1.6	49
	2346	0.6	18
9 M	0553	1.9	58
	1236	0.2	6
	1906	1.6	49
10 Tu	0035	0.9	27
	0622	1.7	52
	1319	0.3	9
	2025	1.6	49
11 W ◑	0154	1.1	34
	0659	1.5	46
	1415	0.2	6
	2201	1.7	52
12 Th	0412	1.1	34
	0804	1.3	40
	1527	0.2	6
	2321	2.0	61
13 F	0605	1.0	30
	0953	1.2	37
	1640	0.0	0
14 Sa	0018	2.2	67
	0700	0.8	24
	1124	1.2	37
	1743	−0.1	−3
15 Su	0104	2.5	76
	0739	0.6	18
	1229	1.4	43
	1838	−0.3	−9
16 M	0145	2.7	82
	0815	0.3	9
	1323	1.6	49
	1927	−0.5	−15
17 Tu	0224	2.9	88
	0850	0.2	6
	1412	1.8	55
	2015	−0.6	−18
18 W ●	0302	2.9	88
	0925	0.0	0
	1459	1.9	58
	2101	−0.5	−15
19 Th	0339	2.9	88
	1001	−0.1	−3
	1546	2.0	61
	2147	−0.4	−12
20 F	0416	2.7	82
	1038	−0.2	−6
	1635	2.1	64
	2234	−0.1	−3
21 Sa	0452	2.5	76
	1116	−0.2	−6
	1727	2.1	64
	2324	0.2	6
22 Su	0529	2.2	67
	1155	−0.1	−3
	1824	2.0	61
23 M	0020	0.5	15
	0605	1.8	55
	1239	−0.1	−3
	1932	1.9	58
24 Tu	0132	0.8	24
	0646	1.5	46
	1331	0.1	3
	2057	1.9	58
25 W ◐	0322	1.0	30
	0740	1.3	40
	1437	0.2	6
	2231	1.9	58
26 Th	0537	0.9	27
	0919	1.1	34
	1559	0.2	6
	2346	2.0	61
27 F	0649	0.8	24
	1107	1.1	34
	1714	0.2	6
28 Sa	0039	2.2	67
	0727	0.6	18
	1216	1.2	37
	1812	0.1	3

March

Day	Time (h m)	Height (ft)	Height (cm)
1 Su	0118	2.2	67
	0754	0.5	15
	1302	1.3	40
	1857	0.0	0
2 M	0150	2.3	70
	0818	0.4	12
	1340	1.5	46
	1936	−0.1	−3
3 Tu	0218	2.4	73
	0840	0.3	9
	1413	1.7	52
	2011	−0.1	−3
4 W	0245	2.4	73
	0903	0.2	6
	1445	1.8	55
	2044	−0.1	−3
5 Th ○	0310	2.3	70
	0927	0.1	3
	1517	1.9	58
	2116	0.0	0
6 F	0335	2.3	70
	0951	0.0	0
	1550	2.0	61
	2149	0.1	3
7 Sa	0400	2.2	67
	1016	0.0	0
	1625	2.0	61
	2222	0.2	6
8 Su	0425	2.0	61
	1042	0.0	0
	1701	2.0	61
	2258	0.4	12
9 M	0449	1.9	58
	1110	0.0	0
	1742	1.9	58
	2339	0.6	18
10 Tu	0515	1.7	52
	1142	0.0	0
	1832	1.9	58
11 W	0031	0.8	24
	0544	1.5	46
	1221	0.1	3
	1937	1.8	55
12 Th	0151	0.9	27
	0622	1.3	40
	1315	0.2	6
	2104	1.8	55
13 F ◑	0401	0.9	27
	0737	1.1	34
	1434	0.2	6
	2232	2.0	61
14 Sa	0541	0.8	24
	0947	1.0	30
	1605	0.1	3
	2339	2.2	67
15 Su	0631	0.6	18
	1122	1.2	37
	1722	0.0	0
16 M	0030	2.4	73
	0707	0.3	9
	1226	1.4	43
	1823	−0.2	−6
17 Tu	0113	2.5	76
	0742	0.1	3
	1318	1.7	52
	1917	−0.3	−9
18 W	0153	2.6	79
	0815	−0.1	−3
	1405	2.0	61
	2007	−0.3	−9
19 Th ●	0231	2.6	79
	0849	−0.3	−9
	1451	2.2	67
	2054	−0.3	−9
20 F	0308	2.5	76
	0924	−0.4	−12
	1536	2.4	73
	2142	−0.2	−6
21 Sa	0344	2.3	70
	0959	−0.4	−12
	1623	2.4	73
	2230	0.0	0
22 Su	0420	2.1	64
	1035	−0.4	−12
	1710	2.4	73
	2321	0.3	9
23 M	0456	1.8	55
	1112	−0.3	−9
	1802	2.3	70
24 Tu	0018	0.5	15
	0533	1.5	46
	1152	−0.1	−3
	1900	2.1	64
25 W	0130	0.7	21
	0615	1.2	37
	1239	0.1	3
	2012	2.0	61
26 Th ◐	0313	0.8	24
	0717	1.0	30
	1341	0.2	6
	2137	1.9	58
27 F	0508	0.7	21
	0916	0.9	27
	1511	0.4	12
	2255	1.9	58
28 Sa	0611	0.6	18
	1108	1.0	30
	1642	0.4	12
	2353	2.0	61
29 Su	0646	0.4	12
	1210	1.2	37
	1749	0.3	9
30 M	0036	2.0	61
	0712	0.3	9
	1253	1.4	43
	1839	0.2	6
31 Tu	0109	2.0	61
	0735	0.2	6
	1327	1.6	49
	1919	0.2	6

Time meridian 150° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.
Heights are referred to mean lower low water which is the chart datum of soundings.

Hilo, Hawaii Island, Hawaii, 2015

Times and Heights of High and Low Waters

April

	Time	Height	
	h m	ft	cm
1 W	0138	2.1	64
	0757	0.1	3
	1359	1.8	55
	1956	0.1	3
2 Th	0205	2.1	64
	0820	0.0	0
	1430	2.0	61
	2031	0.1	3
3 F	0231	2.0	61
	0844	−0.1	−3
	1502	2.1	64
	2105	0.1	3
4 Sa ○	0257	2.0	61
	0909	−0.2	−6
	1534	2.2	67
	2140	0.2	6
5 Su	0324	1.9	58
	0934	−0.2	−6
	1608	2.3	70
	2217	0.3	9
6 M	0350	1.7	52
	1001	−0.2	−6
	1644	2.3	70
	2257	0.4	12
7 Tu	0418	1.6	49
	1031	−0.2	−6
	1725	2.2	67
	2343	0.5	15
8 W	0448	1.4	43
	1103	−0.1	−3
	1812	2.1	64
9 Th	0042	0.7	21
	0524	1.2	37
	1144	0.0	0
	1911	2.1	64
10 F	0203	0.7	21
	0616	1.1	34
	1238	0.1	3
	2025	2.0	61
11 Sa ◑	0345	0.7	21
	0752	0.9	27
	1357	0.2	6
	2144	2.0	61
12 Su	0502	0.5	15
	0955	1.0	30
	1535	0.3	9
	2252	2.1	64
13 M	0550	0.3	9
	1121	1.3	40
	1701	0.2	6
	2348	2.2	67
14 Tu	0629	0.1	3
	1221	1.6	49
	1809	0.1	3
15 W	0035	2.3	70
	0704	−0.1	−3
	1311	1.9	58
	1907	0.0	0

	Time	Height	
	h m	ft	cm
16 Th	0117	2.2	67
	0738	−0.3	−9
	1358	2.2	67
	2000	0.0	0
17 F	0157	2.2	67
	0813	−0.5	−15
	1442	2.5	76
	2050	0.0	0
18 Sa ●	0235	2.0	61
	0847	−0.6	−18
	1526	2.6	79
	2139	0.1	3
19 Su	0312	1.9	58
	0923	−0.6	−18
	1609	2.7	82
	2229	0.2	6
20 M	0349	1.7	52
	0958	−0.5	−15
	1654	2.6	79
	2320	0.3	9
21 Tu	0427	1.5	46
	1035	−0.4	−12
	1741	2.5	76
22 W	0016	0.5	15
	0507	1.2	37
	1113	−0.2	−6
	1831	2.3	70
23 Th	0123	0.6	18
	0556	1.1	34
	1156	0.1	3
	1929	2.1	64
24 F	0246	0.6	18
	0706	0.9	27
	1251	0.3	9
	2036	2.0	61
25 Sa ◐	0411	0.6	18
	0900	0.9	27
	1411	0.5	15
	2146	1.9	58
26 Su	0511	0.5	15
	1046	1.0	30
	1550	0.6	18
	2247	1.8	55
27 M	0550	0.3	9
	1150	1.3	40
	1711	0.6	18
	2335	1.8	55
28 Tu	0619	0.2	6
	1233	1.5	46
	1810	0.5	15
29 W	0014	1.8	55
	0645	0.1	3
	1309	1.8	55
	1858	0.5	15
30 Th	0047	1.8	55
	0711	−0.1	−3
	1341	2.0	61
	1939	0.4	12

May

	Time	Height	
	h m	ft	cm
1 F	0118	1.8	55
	0736	−0.2	−6
	1414	2.2	67
	2018	0.4	12
2 Sa	0148	1.7	52
	0802	−0.3	−9
	1446	2.3	70
	2057	0.4	12
3 Su ○	0218	1.7	52
	0830	−0.4	−12
	1519	2.5	76
	2135	0.4	12
4 M	0249	1.6	49
	0859	−0.4	−12
	1555	2.5	76
	2216	0.4	12
5 Tu	0321	1.5	46
	0930	−0.4	−12
	1632	2.5	76
	2301	0.4	12
6 W	0355	1.3	40
	1003	−0.4	−12
	1714	2.5	76
	2351	0.5	15
7 Th	0434	1.2	37
	1040	−0.3	−9
	1800	2.4	73
8 F	0050	0.5	15
	0522	1.1	34
	1124	−0.1	−3
	1853	2.3	70
9 Sa	0201	0.5	15
	0630	1.0	30
	1219	0.1	3
	1954	2.2	67
10 Su	0314	0.5	15
	0809	1.0	30
	1334	0.3	9
	2100	2.2	67
11 M ◑	0417	0.3	9
	0955	1.1	34
	1510	0.4	12
	2204	2.1	64
12 Tu	0506	0.1	3
	1115	1.4	43
	1642	0.5	15
	2301	2.0	61
13 W	0548	−0.1	−3
	1215	1.8	55
	1759	0.5	15
	2352	2.0	61
14 Th	0626	−0.3	−9
	1305	2.2	67
	1903	0.4	12
15 F	0038	1.9	58
	0703	−0.5	−15
	1350	2.5	76
	1959	0.3	9

	Time	Height	
	h m	ft	cm
16 Sa	0121	1.8	55
	0739	−0.6	−18
	1433	2.7	82
	2050	0.3	9
17 Su ●	0202	1.7	52
	0816	−0.6	−18
	1515	2.8	85
	2139	0.3	9
18 M	0243	1.5	46
	0852	−0.6	−18
	1556	2.8	85
	2227	0.3	9
19 Tu	0323	1.4	43
	0929	−0.5	−15
	1638	2.8	85
	2316	0.4	12
20 W	0405	1.3	40
	1006	−0.4	−12
	1720	2.6	79
21 Th	0006	0.4	12
	0449	1.2	37
	1044	−0.2	−6
	1803	2.5	76
22 F	0101	0.5	15
	0540	1.0	30
	1125	0.1	3
	1849	2.3	70
23 Sa	0201	0.5	15
	0647	1.0	30
	1212	0.3	9
	1939	2.1	64
24 Su	0303	0.5	15
	0818	1.0	30
	1314	0.6	18
	2032	1.9	58
25 M ◐	0359	0.4	12
	0959	1.1	34
	1440	0.8	24
	2127	1.8	55
26 Tu	0443	0.3	9
	1114	1.3	40
	1615	0.8	24
	2219	1.7	52
27 W	0520	0.2	6
	1205	1.6	49
	1733	0.8	24
	2306	1.7	52
28 Th	0552	0.0	0
	1245	1.8	55
	1834	0.8	24
	2348	1.6	49
29 F	0623	−0.1	−3
	1321	2.1	64
	1924	0.7	21
30 Sa	0028	1.6	49
	0654	−0.3	−9
	1355	2.3	70
	2008	0.6	18
31 Su	0105	1.5	46
	0725	−0.4	−12
	1430	2.5	76
	2050	0.5	15

June

	Time	Height	
	h m	ft	cm
1 M	0143	1.5	46
	0758	−0.5	−15
	1505	2.6	79
	2131	0.5	15
2 Tu ○	0221	1.4	43
	0832	−0.5	−15
	1542	2.7	82
	2214	0.4	12
3 W	0301	1.4	43
	0908	−0.5	−15
	1621	2.8	85
	2259	0.4	12
4 Th	0344	1.3	40
	0947	−0.4	−12
	1702	2.8	85
	2347	0.4	12
5 F	0431	1.2	37
	1028	−0.3	−9
	1746	2.7	82
6 Sa	0040	0.4	12
	0527	1.1	34
	1115	−0.1	−3
	1833	2.6	79
7 Su	0136	0.4	12
	0638	1.1	34
	1210	0.1	3
	1924	2.4	73
8 M	0234	0.3	9
	0807	1.2	37
	1320	0.4	12
	2018	2.2	67
9 Tu ◑	0330	0.1	3
	0942	1.4	43
	1451	0.7	21
	2116	2.0	61
10 W	0421	0.0	0
	1104	1.7	52
	1629	0.8	24
	2214	1.9	58
11 Th	0508	−0.2	−6
	1207	2.0	61
	1756	0.8	24
	2311	1.7	52
12 F	0552	−0.3	−9
	1258	2.3	70
	1906	0.7	21
13 Sa	0003	1.6	49
	0633	−0.5	−15
	1343	2.6	79
	2003	0.6	18
14 Su	0052	1.5	46
	0713	−0.5	−15
	1425	2.8	85
	2053	0.5	15
15 M	0138	1.4	43
	0752	−0.6	−18
	1504	2.8	85
	2137	0.5	15

	Time	Height	
	h m	ft	cm
16 Tu ●	0222	1.4	43
	0830	−0.5	−15
	1543	2.9	88
	2219	0.4	12
17 W	0305	1.3	40
	0908	−0.5	−15
	1620	2.8	85
	2300	0.4	12
18 Th	0348	1.3	40
	0945	−0.3	−9
	1657	2.7	82
	2342	0.4	12
19 F	0432	1.2	37
	1022	−0.1	−3
	1733	2.6	79
20 Sa	0024	0.4	12
	0520	1.2	37
	1100	0.1	3
	1810	2.4	73
21 Su	0108	0.4	12
	0616	1.2	37
	1142	0.3	9
	1848	2.2	67
22 M	0154	0.4	12
	0726	1.2	37
	1230	0.6	18
	1927	2.0	61
23 Tu	0242	0.4	12
	0852	1.2	37
	1335	0.9	27
	2009	1.8	55
24 W ◐	0330	0.3	9
	1020	1.4	43
	1508	1.0	30
	2057	1.7	52
25 Th	0415	0.2	6
	1128	1.6	49
	1650	1.1	34
	2151	1.6	49
26 F	0457	0.1	3
	1217	1.9	58
	1811	1.0	30
	2247	1.5	46
27 Sa	0537	−0.1	−3
	1258	2.2	67
	1910	0.9	27
	2341	1.4	43
28 Su	0616	−0.2	−6
	1335	2.4	73
	1958	0.8	24
29 M	0031	1.4	43
	0655	−0.4	−12
	1412	2.6	79
	2040	0.6	18
30 Tu	0118	1.4	43
	0734	−0.5	−15
	1449	2.8	85
	2120	0.5	15

Time meridian 150° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.
Heights are referred to mean lower low water which is the chart datum of soundings.

Hilo, Hawaii Island, Hawaii, 2015

Times and Heights of High and Low Waters

July

	Time	Height	
	h m	ft	cm
1 W ○	0204	1.4	43
	0814	−0.5	−15
	1526	2.9	88
	2200	0.4	12
2 Th	0250	1.4	43
	0855	−0.5	−15
	1605	3.0	91
	2242	0.4	12
3 F	0337	1.4	43
	0938	−0.5	−15
	1645	2.9	88
	2325	0.3	9
4 Sa	0429	1.4	43
	1022	−0.3	−9
	1726	2.8	85
5 Su	0010	0.3	9
	0526	1.4	43
	1110	0.0	0
	1808	2.7	82
6 M	0058	0.2	6
	0632	1.4	43
	1204	0.3	9
	1852	2.4	73
7 Tu	0148	0.2	6
	0752	1.5	46
	1311	0.6	18
	1939	2.2	67
8 W ◑	0242	0.1	3
	0922	1.6	49
	1440	0.9	27
	2031	1.9	58
9 Th	0337	0.0	0
	1048	1.9	58
	1628	1.0	30
	2132	1.7	52
10 F	0432	−0.1	−3
	1156	2.2	67
	1806	1.0	30
	2238	1.5	46
11 Sa	0524	−0.2	−6
	1250	2.4	73
	1916	0.9	27
	2342	1.4	43
12 Su	0612	−0.3	−9
	1335	2.6	79
	2008	0.7	21
13 M	0039	1.4	43
	0656	−0.3	−9
	1414	2.7	82
	2049	0.6	18
14 Tu	0128	1.4	43
	0738	−0.4	−12
	1451	2.8	85
	2125	0.5	15
15 W ●	0212	1.4	43
	0816	−0.4	−12
	1524	2.8	85
	2158	0.5	15

	Time	Height	
	h m	ft	cm
16 Th	0254	1.5	46
	0853	−0.3	−9
	1557	2.8	85
	2231	0.4	12
17 F	0334	1.5	46
	0929	−0.2	−6
	1628	2.7	82
	2303	0.4	12
18 Sa	0414	1.5	46
	1005	0.0	0
	1659	2.6	79
	2336	0.4	12
19 Su	0456	1.5	46
	1040	0.2	6
	1729	2.4	73
20 M	0010	0.4	12
	0543	1.5	46
	1117	0.4	12
	1759	2.2	67
21 Tu	0047	0.4	12
	0637	1.5	46
	1159	0.7	21
	1830	2.1	64
22 W	0127	0.4	12
	0745	1.5	46
	1251	0.9	27
	1902	1.9	58
23 Th ◐	0212	0.4	12
	0910	1.5	46
	1411	1.1	34
	1942	1.7	52
24 F	0304	0.3	9
	1037	1.7	52
	1610	1.2	37
	2038	1.5	46
25 Sa	0400	0.2	6
	1142	2.0	61
	1755	1.1	34
	2155	1.4	43
26 Su	0455	0.1	3
	1230	2.2	67
	1858	1.0	30
	2310	1.4	43
27 M	0545	−0.1	−3
	1311	2.5	76
	1942	0.8	24
28 Tu	0012	1.4	43
	0632	−0.2	−6
	1349	2.7	82
	2020	0.7	21
29 W	0105	1.5	46
	0717	−0.4	−12
	1427	2.9	88
	2057	0.5	15
30 Th	0155	1.6	49
	0801	−0.5	−15
	1504	3.0	91
	2133	0.4	12
31 F ○	0242	1.7	52
	0845	−0.5	−15
	1542	3.0	91
	2211	0.2	6

August

	Time	Height	
	h m	ft	cm
1 Sa	0331	1.8	55
	0930	−0.4	−12
	1620	3.0	91
	2250	0.2	6
2 Su	0421	1.8	55
	1016	−0.2	−6
	1658	2.8	85
	2330	0.1	3
3 M	0516	1.9	58
	1105	0.1	3
	1737	2.6	79
4 Tu	0013	0.1	3
	0617	1.9	58
	1200	0.4	12
	1817	2.3	70
5 W	0100	0.1	3
	0729	1.9	58
	1307	0.8	24
	1900	2.0	61
6 Th ◑	0152	0.1	3
	0855	1.9	58
	1440	1.1	34
	1952	1.7	52
7 F	0253	0.1	3
	1025	2.1	64
	1642	1.1	34
	2102	1.5	46
8 Sa	0400	0.1	3
	1140	2.3	70
	1820	1.0	30
	2228	1.3	40
9 Su	0504	0.0	0
	1236	2.4	73
	1918	0.9	27
	2344	1.3	40
10 M	0559	0.0	0
	1320	2.6	79
	1958	0.7	21
11 Tu	0041	1.4	43
	0647	−0.1	−3
	1357	2.7	82
	2029	0.6	18
12 W	0127	1.5	46
	0728	−0.1	−3
	1429	2.7	82
	2057	0.5	15
13 Th	0206	1.6	49
	0806	−0.1	−3
	1459	2.7	82
	2124	0.4	12
14 F ●	0243	1.7	52
	0841	−0.1	−3
	1527	2.7	82
	2150	0.4	12
15 Sa	0318	1.8	55
	0915	0.0	0
	1554	2.6	79
	2217	0.3	9

	Time	Height	
	h m	ft	cm
16 Su	0354	1.8	55
	0949	0.1	3
	1621	2.5	76
	2245	0.3	9
17 M	0431	1.9	58
	1023	0.3	9
	1647	2.3	70
	2313	0.3	9
18 Tu	0511	1.8	55
	1058	0.5	15
	1713	2.2	67
	2344	0.3	9
19 W	0556	1.8	55
	1137	0.7	21
	1739	2.0	61
20 Th	0017	0.4	12
	0651	1.8	55
	1226	1.0	30
	1807	1.8	55
21 F	0058	0.4	12
	0803	1.8	55
	1340	1.2	37
	1841	1.6	49
22 Sa ◐	0151	0.4	12
	0935	1.8	55
	1547	1.3	40
	1940	1.4	43
23 Su	0301	0.4	12
	1057	2.0	61
	1743	1.1	34
	2125	1.3	40
24 M	0414	0.3	9
	1155	2.3	70
	1838	1.0	30
	2259	1.3	40
25 Tu	0519	0.1	3
	1240	2.5	76
	1916	0.8	24
26 W	0005	1.5	46
	0614	−0.1	−3
	1320	2.7	82
	1950	0.6	18
27 Th	0059	1.7	52
	0703	−0.2	−6
	1359	2.9	88
	2024	0.4	12
28 F	0147	1.9	58
	0750	−0.3	−9
	1436	3.0	91
	2058	0.2	6
29 Sa ○	0234	2.1	64
	0836	−0.3	−9
	1513	2.9	88
	2133	0.1	3
30 Su	0321	2.2	67
	0923	−0.2	−6
	1549	2.8	85
	2210	0.0	0
31 M	0410	2.3	70
	1010	0.0	0
	1626	2.6	79
	2247	−0.1	−3

September

	Time	Height	
	h m	ft	cm
1 Tu	0501	2.4	73
	1101	0.3	9
	1703	2.3	70
	2327	0.0	0
2 W	0558	2.3	70
	1158	0.6	18
	1742	2.0	61
3 Th	0011	0.1	3
	0703	2.2	67
	1308	0.9	27
	1824	1.7	52
4 F ◑	0102	0.2	6
	0823	2.2	67
	1449	1.1	34
	1921	1.5	46
5 Sa	0207	0.3	9
	0953	2.2	67
	1653	1.1	34
	2054	1.3	40
6 Su	0327	0.4	12
	1112	2.3	70
	1814	0.9	27
	2241	1.3	40
7 M	0446	0.3	9
	1210	2.4	73
	1859	0.8	24
	2354	1.4	43
8 Tu	0548	0.3	9
	1253	2.5	76
	1930	0.6	18
9 W	0044	1.6	49
	0637	0.2	6
	1328	2.5	76
	1956	0.5	15
10 Th	0123	1.7	52
	0718	0.2	6
	1358	2.5	76
	2020	0.4	12
11 F	0157	1.9	58
	0754	0.1	3
	1425	2.5	76
	2043	0.3	9
12 Sa ●	0230	2.0	61
	0828	0.2	6
	1451	2.5	76
	2106	0.3	9
13 Su	0302	2.1	64
	0902	0.2	6
	1516	2.4	73
	2131	0.2	6
14 M	0335	2.2	67
	0935	0.3	9
	1541	2.3	70
	2156	0.2	6
15 Tu	0409	2.2	67
	1009	0.5	15
	1606	2.2	67
	2222	0.2	6

	Time	Height	
	h m	ft	cm
16 W	0446	2.2	67
	1046	0.6	18
	1631	2.0	61
	2249	0.2	6
17 Th	0526	2.2	67
	1127	0.8	24
	1656	1.8	55
	2320	0.3	9
18 F	0613	2.1	64
	1218	1.0	30
	1724	1.6	49
	2357	0.4	12
19 Sa	0715	2.0	61
	1335	1.1	34
	1800	1.4	43
20 Su ◐	0048	0.4	12
	0837	2.0	61
	1540	1.2	37
	1912	1.3	40
21 M	0204	0.5	15
	1004	2.1	64
	1719	1.0	30
	2123	1.2	37
22 Tu	0335	0.5	15
	1111	2.3	70
	1806	0.8	24
	2259	1.4	43
23 W	0454	0.3	9
	1202	2.5	76
	1841	0.6	18
24 Th	0002	1.6	49
	0556	0.2	6
	1245	2.7	82
	1914	0.4	12
25 F	0053	1.9	58
	0650	0.1	3
	1324	2.7	82
	1947	0.2	6
26 Sa	0140	2.2	67
	0740	0.0	0
	1402	2.8	85
	2021	0.0	0
27 Su	0225	2.5	76
	0829	0.0	0
	1440	2.7	82
	2055	−0.2	−6
28 M	0311	2.7	82
	0917	0.1	3
	1516	2.5	76
	2131	−0.2	−6
29 Tu	0357	2.8	85
	1006	0.3	9
	1553	2.3	70
	2207	−0.2	−6
30 W	0446	2.8	85
	1059	0.5	15
	1631	2.0	61
	2246	−0.1	−3

Time meridian 150° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.
Heights are referred to mean lower low water which is the chart datum of soundings.

Hilo, Hawaii Island, Hawaii, 2015

Times and Heights of High and Low Waters

October

	Time	Height	
	h m	ft	cm
1 Th	0538	2.7	82
	1157	0.7	21
	1710	1.8	55
	2327	0.0	0
2 F	0637	2.5	76
	1310	0.9	27
	1756	1.5	46
3 Sa	0015	0.2	6
	0747	2.4	73
	1449	1.0	30
	1902	1.3	40
4 Su ◑	0119	0.4	12
	0909	2.3	70
	1637	0.9	27
	2058	1.2	37
5 M	0247	0.6	18
	1027	2.2	67
	1743	0.8	24
	2248	1.3	40
6 Tu	0419	0.6	18
	1128	2.3	70
	1822	0.7	21
	2354	1.5	46
7 W	0529	0.6	18
	1212	2.3	70
	1850	0.5	15
8 Th	0038	1.7	52
	0621	0.5	15
	1248	2.3	70
	1915	0.4	12
9 F	0113	1.9	58
	0704	0.5	15
	1317	2.3	70
	1938	0.3	9
10 Sa	0145	2.1	64
	0741	0.4	12
	1345	2.3	70
	2000	0.2	6
11 Su	0216	2.3	70
	0816	0.4	12
	1411	2.2	67
	2024	0.1	3
12 M ●	0247	2.4	73
	0851	0.5	15
	1437	2.2	67
	2048	0.0	0
13 Tu	0319	2.5	76
	0926	0.5	15
	1503	2.1	64
	2113	0.0	0
14 W	0352	2.6	79
	1002	0.6	18
	1529	1.9	58
	2140	0.0	0
15 Th	0427	2.5	76
	1041	0.7	21
	1556	1.8	55
	2208	0.1	3

	Time	Height	
	h m	ft	cm
16 F	0505	2.5	76
	1126	0.8	24
	1625	1.6	49
	2239	0.2	6
17 Sa	0550	2.4	73
	1222	1.0	30
	1658	1.5	46
	2316	0.3	9
18 Su	0645	2.3	70
	1339	1.0	30
	1746	1.3	40
19 M	0005	0.4	12
	0754	2.3	70
	1520	1.0	30
	1916	1.2	37
20 Tu ◐	0119	0.5	15
	0911	2.3	70
	1637	0.8	24
	2126	1.2	37
21 W	0257	0.6	18
	1020	2.3	70
	1725	0.6	18
	2256	1.5	46
22 Th	0428	0.6	18
	1117	2.4	73
	1802	0.4	12
	2357	1.8	55
23 F	0540	0.5	15
	1204	2.5	76
	1837	0.2	6
24 Sa	0047	2.2	67
	0640	0.4	12
	1247	2.5	76
	1911	−0.1	−3
25 Su	0132	2.5	76
	0734	0.3	9
	1327	2.4	73
	1945	−0.2	−6
26 M	0217	2.8	85
	0825	0.3	9
	1406	2.3	70
	2021	−0.4	−12
27 Tu ○	0301	3.0	91
	0915	0.4	12
	1445	2.2	67
	2057	−0.4	−12
28 W	0346	3.1	94
	1005	0.5	15
	1523	2.0	61
	2134	−0.4	−12
29 Th	0431	3.0	91
	1058	0.6	18
	1603	1.8	55
	2212	−0.2	−6
30 F	0519	2.9	88
	1155	0.7	21
	1645	1.5	46
	2252	0.0	0
31 Sa	0611	2.7	82
	1302	0.8	24
	1736	1.4	43
	2337	0.2	6

November

	Time	Height	
	h m	ft	cm
1 Su	0708	2.5	76
	1423	0.9	27
	1847	1.2	37
2 M	0032	0.5	15
	0814	2.3	70
	1547	0.8	24
	2040	1.2	37
3 Tu ◑	0151	0.7	21
	0924	2.2	67
	1650	0.7	21
	2230	1.3	40
4 W	0330	0.9	27
	1026	2.1	64
	1732	0.6	18
	2337	1.6	49
5 Th	0455	0.9	27
	1116	2.1	64
	1803	0.4	12
6 F	0022	1.8	55
	0557	0.8	24
	1156	2.1	64
	1830	0.3	9
7 Sa	0058	2.1	64
	0646	0.8	24
	1230	2.0	61
	1855	0.2	6
8 Su	0130	2.3	70
	0728	0.7	21
	1301	2.0	61
	1920	0.1	3
9 M	0201	2.5	76
	0806	0.7	21
	1330	2.0	61
	1945	0.0	0
10 Tu	0232	2.6	79
	0843	0.7	21
	1400	1.9	58
	2012	−0.1	−3
11 W ●	0305	2.7	82
	0921	0.7	21
	1430	1.8	55
	2041	−0.1	−3
12 Th	0338	2.8	85
	0959	0.7	21
	1501	1.7	52
	2110	−0.1	−3
13 F	0414	2.8	85
	1041	0.7	21
	1533	1.6	49
	2142	−0.1	−3
14 Sa	0452	2.7	82
	1128	0.8	24
	1609	1.5	46
	2216	0.0	0
15 Su	0535	2.7	82
	1222	0.8	24
	1652	1.4	43
	2255	0.1	3

	Time	Height	
	h m	ft	cm
16 M	0623	2.6	79
	1327	0.8	24
	1752	1.2	37
	2344	0.3	9
17 Tu	0720	2.5	76
	1440	0.8	24
	1923	1.2	37
18 W ◐	0051	0.6	18
	0822	2.4	73
	1545	0.6	18
	2115	1.3	40
19 Th	0224	0.7	21
	0927	2.3	70
	1637	0.4	12
	2245	1.6	49
20 F	0403	0.8	24
	1027	2.3	70
	1720	0.2	6
	2349	2.0	61
21 Sa	0527	0.8	24
	1121	2.2	67
	1759	0.0	0
22 Su	0040	2.3	70
	0635	0.7	21
	1210	2.1	64
	1837	−0.2	−6
23 M	0126	2.7	82
	0734	0.6	18
	1255	2.0	61
	1915	−0.4	−12
24 Tu	0210	2.9	88
	0827	0.6	18
	1338	1.9	58
	1953	−0.5	−15
25 W ○	0253	3.1	94
	0916	0.5	15
	1420	1.8	55
	2031	−0.5	−15
26 Th	0335	3.2	98
	1005	0.5	15
	1502	1.7	52
	2109	−0.4	−12
27 F	0418	3.1	94
	1053	0.6	18
	1544	1.6	49
	2148	−0.3	−9
28 Sa	0500	3.0	91
	1143	0.6	18
	1629	1.4	43
	2227	−0.1	−3
29 Su	0544	2.8	85
	1236	0.7	21
	1720	1.3	40
	2309	0.2	6
30 M	0629	2.6	79
	1335	0.7	21
	1823	1.2	37
	2355	0.5	15

December

	Time	Height	
	h m	ft	cm
1 Tu	0718	2.4	73
	1437	0.7	21
	1951	1.2	37
2 W ◑	0053	0.7	21
	0810	2.2	67
	1537	0.6	18
	2136	1.3	40
3 Th	0217	1.0	30
	0906	2.0	61
	1626	0.5	15
	2301	1.5	46
4 F	0358	1.1	34
	1001	1.9	58
	1706	0.4	12
	2357	1.8	55
5 Sa	0524	1.1	34
	1051	1.8	55
	1740	0.3	9
6 Su	0038	2.0	61
	0628	1.0	30
	1135	1.8	55
	1811	0.1	3
7 M	0113	2.3	70
	0718	0.9	27
	1215	1.7	52
	1842	0.0	0
8 Tu	0146	2.5	76
	0800	0.8	24
	1253	1.7	52
	1913	−0.1	−3
9 W	0219	2.7	82
	0839	0.8	24
	1330	1.6	49
	1945	−0.2	−6
10 Th	0252	2.8	85
	0917	0.7	21
	1407	1.6	49
	2018	−0.3	−9
11 F ●	0326	2.9	88
	0955	0.6	18
	1444	1.6	49
	2052	−0.3	−9
12 Sa	0402	2.9	88
	1036	0.6	18
	1523	1.5	46
	2128	−0.3	−9
13 Su	0439	2.9	88
	1119	0.6	18
	1606	1.5	46
	2206	−0.2	−6
14 M	0519	2.8	85
	1205	0.6	18
	1655	1.4	43
	2248	0.0	0
15 Tu	0602	2.7	82
	1257	0.6	18
	1756	1.3	40
	2336	0.3	9

	Time	Height	
	h m	ft	cm
16 W	0648	2.6	79
	1352	0.5	15
	1916	1.3	40
17 Th	0037	0.5	15
	0738	2.4	73
	1450	0.4	12
	2053	1.5	46
18 F ◐	0200	0.8	24
	0835	2.2	67
	1545	0.2	6
	2226	1.7	52
19 Sa	0344	1.0	30
	0936	2.0	61
	1637	0.1	3
	2338	2.1	64
20 Su	0524	1.0	30
	1038	1.8	55
	1725	−0.1	−3
21 M	0034	2.4	73
	0641	0.9	27
	1137	1.7	52
	1810	−0.3	−9
22 Tu	0122	2.7	82
	0742	0.8	24
	1231	1.7	52
	1853	−0.4	−12
23 W	0205	2.9	88
	0832	0.7	21
	1320	1.6	49
	1934	−0.5	−15
24 Th	0245	3.0	91
	0917	0.6	18
	1406	1.6	49
	2015	−0.5	−15
25 F ○	0324	3.1	94
	0958	0.5	15
	1450	1.6	49
	2054	−0.4	−12
26 Sa	0402	3.0	91
	1038	0.5	15
	1533	1.5	46
	2133	−0.3	−9
27 Su	0439	2.9	88
	1117	0.5	15
	1616	1.5	46
	2210	−0.1	−3
28 M	0515	2.8	85
	1157	0.5	15
	1702	1.4	43
	2248	0.1	3
29 Tu	0550	2.6	79
	1239	0.5	15
	1753	1.4	43
	2327	0.4	12
30 W	0626	2.4	73
	1323	0.5	15
	1856	1.3	40
31 Th	0012	0.7	21
	0702	2.1	64
	1411	0.5	15
	2017	1.4	43

Time meridian 150° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.
Heights are referred to mean lower low water which is the chart datum of soundings.

Johnston Island, 2015

Times and Heights of High and Low Waters

January

	Time	Height	
	h m	ft	cm
1 Th	0305	2.3	70
	0947	0.1	3
	1538	1.6	49
	2123	0.2	6
2 F	0352	2.4	73
	1030	0.0	0
	1626	1.7	52
	2208	0.1	3
3 Sa	0433	2.5	76
	1107	−0.1	−3
	1707	1.8	55
	2248	0.1	3
4 Su ○	0510	2.5	76
	1141	−0.2	−6
	1744	1.8	55
	2325	0.1	3
5 M	0545	2.5	76
	1213	−0.2	−6
	1818	1.9	58
6 Tu	0000	0.1	3
	0618	2.5	76
	1245	−0.2	−6
	1852	1.9	58
7 W	0034	0.1	3
	0651	2.4	73
	1315	−0.2	−6
	1925	1.9	58
8 Th	0108	0.2	6
	0723	2.3	70
	1346	−0.1	−3
	2000	1.9	58
9 F	0144	0.3	9
	0756	2.2	67
	1417	0.0	0
	2037	1.9	58
10 Sa	0222	0.4	12
	0830	2.0	61
	1451	0.1	3
	2118	1.9	58
11 Su	0307	0.5	15
	0909	1.8	55
	1528	0.2	6
	2206	1.8	55
12 M ◑	0403	0.6	18
	0958	1.6	49
	1614	0.3	9
	2304	1.8	55
13 Tu	0520	0.7	21
	1101	1.5	46
	1714	0.4	12
14 W	0012	1.9	58
	0654	0.6	18
	1222	1.4	43
	1830	0.4	12
15 Th	0121	2.0	61
	0813	0.4	12
	1346	1.4	43
	1945	0.3	9

	Time	Height	
	h m	ft	cm
16 F	0225	2.1	64
	0913	0.2	6
	1456	1.5	46
	2048	0.2	6
17 Sa	0320	2.3	70
	1001	0.0	0
	1554	1.7	52
	2142	0.0	0
18 Su	0409	2.5	76
	1044	−0.3	−9
	1643	1.9	58
	2231	−0.1	−3
19 M	0454	2.7	82
	1126	−0.5	−15
	1729	2.0	61
	2318	−0.2	−6
20 Tu ●	0538	2.8	85
	1206	−0.6	−18
	1813	2.2	67
21 W	0003	−0.3	−9
	0621	2.8	85
	1246	−0.6	−18
	1857	2.3	70
22 Th	0048	−0.3	−9
	0703	2.7	82
	1326	−0.6	−18
	1942	2.3	70
23 F	0135	−0.2	−6
	0746	2.5	76
	1406	−0.5	−15
	2028	2.3	70
24 Sa	0224	0.0	0
	0830	2.2	67
	1448	−0.3	−9
	2117	2.2	67
25 Su	0318	0.2	6
	0918	1.9	58
	1533	−0.1	−3
	2211	2.1	64
26 M ◐	0423	0.4	12
	1013	1.6	49
	1624	0.1	3
	2313	2.0	61
27 Tu	0546	0.5	15
	1123	1.4	43
	1730	0.3	9
28 W	0024	1.9	58
	0721	0.5	15
	1252	1.3	40
	1852	0.4	12
29 Th	0139	1.9	58
	0838	0.3	9
	1421	1.3	40
	2009	0.4	12
30 F	0245	2.0	61
	0934	0.2	6
	1528	1.4	43
	2109	0.3	9
31 Sa	0337	2.1	64
	1016	0.0	0
	1616	1.5	46
	2157	0.2	6

February

	Time	Height	
	h m	ft	cm
1 Su	0419	2.2	67
	1051	−0.1	−3
	1655	1.7	52
	2237	0.1	3
2 M	0456	2.3	70
	1123	−0.2	−6
	1728	1.8	55
	2313	0.0	0
3 Tu ○	0530	2.3	70
	1153	−0.3	−9
	1800	1.9	58
	2347	−0.1	−3
4 W	0601	2.3	70
	1221	−0.3	−9
	1830	2.0	61
5 Th	0020	−0.1	−3
	0631	2.3	70
	1249	−0.3	−9
	1900	2.0	61
6 F	0052	0.0	0
	0701	2.2	67
	1317	−0.3	−9
	1931	2.0	61
7 Sa	0125	0.0	0
	0731	2.1	64
	1344	−0.2	−6
	2003	2.0	61
8 Su	0159	0.1	3
	0802	2.0	61
	1414	−0.1	−3
	2038	2.0	61
9 M	0238	0.2	6
	0837	1.8	55
	1446	0.0	0
	2119	1.9	58
10 Tu	0323	0.3	9
	0918	1.6	49
	1525	0.1	3
	2209	1.9	58
11 W ◑	0425	0.5	15
	1014	1.4	43
	1616	0.2	6
	2314	1.8	55
12 Th	0553	0.5	15
	1133	1.3	40
	1733	0.3	9
13 F	0032	1.8	55
	0731	0.4	12
	1309	1.2	37
	1907	0.3	9
14 Sa	0150	1.9	58
	0844	0.2	6
	1433	1.4	43
	2026	0.2	6
15 Su	0255	2.1	64
	0938	−0.1	−3
	1536	1.6	49
	2128	0.0	0

	Time	Height	
	h m	ft	cm
16 M	0350	2.3	70
	1024	−0.4	−12
	1627	1.9	58
	2221	−0.2	−6
17 Tu	0438	2.5	76
	1105	−0.6	−18
	1713	2.1	64
	2308	−0.4	−12
18 W ●	0523	2.6	79
	1145	−0.7	−21
	1756	2.3	70
	2354	−0.5	−15
19 Th	0606	2.6	79
	1224	−0.7	−21
	1838	2.4	73
20 F	0038	−0.4	−12
	0648	2.5	76
	1302	−0.7	−21
	1920	2.5	76
21 Sa	0123	−0.4	−12
	0729	2.3	70
	1339	−0.6	−18
	2003	2.4	73
22 Su	0209	−0.2	−6
	0811	2.1	64
	1418	−0.4	−12
	2046	2.3	70
23 M	0257	0.0	0
	0856	1.8	55
	1458	−0.1	−3
	2134	2.1	64
24 Tu	0353	0.2	6
	0946	1.5	46
	1544	0.1	3
	2229	1.9	58
25 W ◐	0505	0.4	12
	1051	1.3	40
	1644	0.3	9
	2338	1.7	52
26 Th	0641	0.4	12
	1221	1.1	34
	1814	0.5	15
27 F	0100	1.7	52
	0809	0.3	9
	1401	1.2	37
	1949	0.5	15
28 Sa	0218	1.7	52
	0909	0.2	6
	1512	1.3	40
	2056	0.3	9

March

	Time	Height	
	h m	ft	cm
1 Su	0316	1.8	55
	0952	0.0	0
	1558	1.5	46
	2145	0.2	6
2 M	0400	1.9	58
	1026	−0.1	−3
	1633	1.7	52
	2224	0.0	0
3 Tu	0436	2.0	61
	1056	−0.2	−6
	1705	1.8	55
	2259	−0.1	−3
4 W	0509	2.1	64
	1125	−0.3	−9
	1735	2.0	61
	2332	−0.2	−6
5 Th ○	0540	2.2	67
	1152	−0.3	−9
	1804	2.1	64
6 F	0003	−0.2	−6
	0610	2.1	64
	1219	−0.4	−12
	1832	2.1	64
7 Sa	0034	−0.2	−6
	0639	2.1	64
	1246	−0.3	−9
	1902	2.2	67
8 Su	0106	−0.2	−6
	0708	2.0	61
	1313	−0.3	−9
	1932	2.2	67
9 M	0139	−0.1	−3
	0739	1.9	58
	1341	−0.2	−6
	2005	2.1	64
10 Tu	0215	0.0	0
	0814	1.7	52
	1413	−0.1	−3
	2043	2.0	61
11 W	0258	0.1	3
	0855	1.5	46
	1451	0.0	0
	2130	1.9	58
12 Th	0353	0.2	6
	0950	1.3	40
	1542	0.2	6
	2232	1.8	55
13 F ◑	0512	0.3	9
	1108	1.2	37
	1658	0.3	9
	2352	1.7	52
14 Sa	0651	0.3	9
	1246	1.2	37
	1842	0.3	9
15 Su	0117	1.8	55
	0811	0.1	3
	1412	1.4	43
	2010	0.2	6

	Time	Height	
	h m	ft	cm
16 M	0230	2.0	61
	0909	−0.2	−6
	1516	1.7	52
	2115	0.0	0
17 Tu	0328	2.1	64
	0956	−0.4	−12
	1607	2.0	61
	2209	−0.3	−9
18 W	0419	2.3	70
	1039	−0.6	−18
	1652	2.3	70
	2257	−0.4	−12
19 Th	0505	2.4	73
	1118	−0.7	−21
	1735	2.5	76
●	2342	−0.5	−15
20 F	0548	2.4	73
	1157	−0.7	−21
	1815	2.6	79
21 Sa	0025	−0.6	−18
	0630	2.3	70
	1234	−0.7	−21
	1855	2.6	79
22 Su	0108	−0.5	−15
	0711	2.1	64
	1311	−0.5	−15
	1935	2.5	76
23 M	0151	−0.4	−12
	0753	1.9	58
	1349	−0.3	−9
	2016	2.3	70
24 Tu	0236	−0.2	−6
	0837	1.7	52
	1427	−0.1	−3
	2100	2.1	64
25 W	0326	0.0	0
	0926	1.4	43
	1510	0.1	3
	2149	1.8	55
26 Th ◐	0427	0.2	6
	1027	1.2	37
	1606	0.4	12
	2251	1.6	49
27 F	0550	0.3	9
	1151	1.1	34
	1736	0.5	15
28 Sa	0011	1.5	46
	0720	0.3	9
	1327	1.2	37
	1921	0.5	15
29 Su	0135	1.5	46
	0826	0.2	6
	1438	1.3	40
	2034	0.4	12
30 M	0240	1.6	49
	0912	0.1	3
	1525	1.5	46
	2124	0.2	6
31 Tu	0328	1.7	52
	0948	−0.1	−3
	1602	1.7	52
	2204	0.0	0

Time meridian 150° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.
Heights are referred to mean lower low water which is the chart datum of soundings.

Johnston Island, 2015

Times and Heights of High and Low Waters

April

	Time	Height	
	h m	ft	cm
1 W	0407	1.8	55
	1020	−0.2	−6
	1634	1.9	58
	2239	−0.1	−3
2 Th	0442	1.9	58
	1050	−0.3	−9
	1704	2.1	64
	2312	−0.2	−6
3 F	0514	2.0	61
	1118	−0.3	−9
	1734	2.2	67
	2344	−0.3	−9
4 Sa ○	0545	2.0	61
	1146	−0.3	−9
	1803	2.3	70
5 Su	0016	−0.3	−9
	0616	1.9	58
	1214	−0.3	−9
	1833	2.3	70
6 M	0048	−0.3	−9
	0648	1.8	55
	1243	−0.3	−9
	1905	2.3	70
7 Tu	0122	−0.3	−9
	0722	1.7	52
	1315	−0.2	−6
	1939	2.2	67
8 W	0200	−0.2	−6
	0800	1.6	49
	1349	−0.1	−3
	2018	2.1	64
9 Th	0243	−0.1	−3
	0845	1.5	46
	1431	0.0	0
	2106	2.0	61
10 F	0337	0.0	0
	0943	1.3	40
	1525	0.2	6
	2206	1.8	55
11 Sa ◑	0449	0.1	3
	1101	1.3	40
	1644	0.3	9
	2322	1.7	52
12 Su	0615	0.1	3
	1230	1.4	43
	1826	0.3	9
13 M	0045	1.7	52
	0733	0.0	0
	1350	1.6	49
	1955	0.2	6
14 Tu	0200	1.8	55
	0834	−0.2	−6
	1452	1.9	58
	2101	0.0	0
15 W	0303	1.9	58
	0924	−0.4	−12
	1543	2.1	64
	2156	−0.3	−9

	Time	Height	
	h m	ft	cm
16 Th	0357	2.0	61
	1008	−0.5	−15
	1628	2.4	73
	2244	−0.4	−12
17 F	0445	2.1	64
	1049	−0.6	−18
	1711	2.5	76
	2328	−0.5	−15
18 Sa ●	0529	2.1	64
	1129	−0.6	−18
	1751	2.6	79
19 Su	0011	−0.6	−18
	0612	2.0	61
	1207	−0.5	−15
	1830	2.6	79
20 M	0053	−0.5	−15
	0654	1.9	58
	1245	−0.4	−12
	1909	2.5	76
21 Tu	0134	−0.4	−12
	0736	1.7	52
	1322	−0.2	−6
	1948	2.3	70
22 W	0216	−0.3	−9
	0820	1.6	49
	1401	0.0	0
	2029	2.1	64
23 Th	0301	−0.1	−3
	0908	1.4	43
	1444	0.2	6
	2115	1.8	55
24 F	0353	0.1	3
	1006	1.3	40
	1537	0.4	12
	2209	1.6	49
25 Sa ◐	0458	0.2	6
	1117	1.2	37
	1656	0.5	15
	2318	1.5	46
26 Su	0615	0.2	6
	1238	1.3	40
	1837	0.6	18
27 M	0035	1.4	43
	0724	0.2	6
	1348	1.4	43
	1957	0.5	15
28 Tu	0146	1.5	46
	0817	0.1	3
	1440	1.6	49
	2052	0.3	9
29 W	0243	1.5	46
	0859	0.0	0
	1521	1.8	55
	2136	0.1	3
30 Th	0329	1.6	49
	0936	−0.1	−3
	1557	2.0	61
	2215	0.0	0

May

	Time	Height	
	h m	ft	cm
1 F	0409	1.7	52
	1009	−0.2	−6
	1630	2.2	67
	2250	−0.2	−6
2 Sa	0445	1.7	52
	1042	−0.2	−6
	1703	2.3	70
	2324	−0.3	−9
3 Su ○	0520	1.8	55
	1114	−0.3	−9
	1735	2.3	70
	2358	−0.3	−9
4 M	0556	1.8	55
	1146	−0.3	−9
	1808	2.4	73
5 Tu	0033	−0.4	−12
	0632	1.7	52
	1219	−0.2	−6
	1843	2.4	73
6 W	0110	−0.4	−12
	0710	1.7	52
	1255	−0.2	−6
	1920	2.3	70
7 Th	0150	−0.3	−9
	0753	1.6	49
	1335	−0.1	−3
	2003	2.2	67
8 F	0235	−0.2	−6
	0843	1.5	46
	1421	0.1	3
	2051	2.1	64
9 Sa	0327	−0.1	−3
	0943	1.5	46
	1520	0.2	6
	2149	1.9	58
10 Su	0430	−0.1	−3
	1054	1.5	46
	1638	0.3	9
	2258	1.8	55
11 M ◑	0543	0.0	0
	1212	1.6	49
	1813	0.4	12
12 Tu	0015	1.7	52
	0654	−0.1	−3
	1324	1.8	55
	1939	0.2	6
13 W	0130	1.7	52
	0756	−0.2	−6
	1425	2.0	61
	2046	0.0	0
14 Th	0236	1.7	52
	0849	−0.3	−9
	1517	2.3	70
	2142	−0.2	−6
15 F	0334	1.8	55
	0937	−0.3	−9
	1604	2.4	73
	2230	−0.3	−9

	Time	Height	
	h m	ft	cm
16 Sa	0425	1.8	55
	1021	−0.4	−12
	1647	2.6	79
	2315	−0.5	−15
17 Su ●	0512	1.8	55
	1102	−0.4	−12
	1728	2.6	79
	2356	−0.5	−15
18 M	0556	1.8	55
	1142	−0.3	−9
	1807	2.5	76
19 Tu	0037	−0.5	−15
	0638	1.8	55
	1221	−0.2	−6
	1846	2.4	73
20 W	0116	−0.4	−12
	0720	1.7	52
	1259	−0.1	−3
	1924	2.3	70
21 Th	0156	−0.3	−9
	0803	1.6	49
	1339	0.1	3
	2003	2.1	64
22 F	0236	−0.2	−6
	0849	1.5	46
	1421	0.2	6
	2045	1.9	58
23 Sa	0321	0.0	0
	0940	1.4	43
	1510	0.4	12
	2132	1.7	52
24 Su	0411	0.1	3
	1038	1.4	43
	1615	0.5	15
	2227	1.6	49
25 M ◐	0509	0.2	6
	1144	1.4	43
	1739	0.6	18
	2332	1.5	46
26 Tu	0612	0.2	6
	1249	1.5	46
	1905	0.6	18
27 W	0041	1.4	43
	0711	0.2	6
	1346	1.7	52
	2012	0.4	12
28 Th	0147	1.4	43
	0802	0.1	3
	1435	1.9	58
	2103	0.3	9
29 F	0243	1.5	46
	0847	0.1	3
	1517	2.1	64
	2147	0.1	3
30 Sa	0332	1.5	46
	0928	0.0	0
	1556	2.2	67
	2226	−0.1	−3
31 Su	0416	1.6	49
	1007	−0.1	−3
	1633	2.3	70
	2304	−0.2	−6

June

	Time	Height	
	h m	ft	cm
1 M	0457	1.7	52
	1045	−0.2	−6
	1710	2.4	73
	2341	−0.3	−9
2 Tu ○	0537	1.7	52
	1123	−0.2	−6
	1748	2.5	76
3 W	0019	−0.4	−12
	0618	1.7	52
	1202	−0.2	−6
	1827	2.5	76
4 Th	0059	−0.4	−12
	0701	1.7	52
	1243	−0.1	−3
	1907	2.4	73
5 F	0140	−0.4	−12
	0747	1.7	52
	1327	0.0	0
	1951	2.3	70
6 Sa	0224	−0.3	−9
	0838	1.7	52
	1417	0.1	3
	2039	2.2	67
7 Su	0313	−0.3	−9
	0935	1.7	52
	1516	0.2	6
	2133	2.0	61
8 M	0408	−0.2	−6
	1039	1.7	52
	1629	0.4	12
	2235	1.8	55
9 Tu ◑	0510	−0.1	−3
	1148	1.8	55
	1756	0.4	12
	2345	1.7	52
10 W	0615	−0.1	−3
	1256	2.0	61
	1921	0.3	9
11 Th	0100	1.6	49
	0719	0.0	0
	1358	2.1	64
	2031	0.2	6
12 F	0211	1.6	49
	0817	−0.1	−3
	1453	2.3	70
	2129	0.0	0
13 Sa	0314	1.6	49
	0910	−0.1	−3
	1542	2.4	73
	2218	−0.2	−6
14 Su	0409	1.6	49
	0957	−0.1	−3
	1627	2.5	76
	2302	−0.3	−9
15 M	0458	1.7	52
	1041	−0.1	−3
	1709	2.5	76
	2342	−0.4	−12

	Time	Height	
	h m	ft	cm
16 Tu ●	0542	1.7	52
	1122	−0.1	−3
	1748	2.5	76
17 W	0020	−0.4	−12
	0623	1.7	52
	1202	−0.1	−3
	1825	2.4	73
18 Th	0057	−0.3	−9
	0703	1.7	52
	1240	0.0	0
	1902	2.3	70
19 F	0133	−0.3	−9
	0742	1.7	52
	1318	0.1	3
	1939	2.2	67
20 Sa	0209	−0.2	−6
	0823	1.7	52
	1358	0.3	9
	2016	2.0	61
21 Su	0246	−0.1	−3
	0906	1.6	49
	1442	0.4	12
	2056	1.9	58
22 M	0326	0.0	0
	0954	1.6	49
	1534	0.5	15
	2141	1.7	52
23 Tu	0410	0.1	3
	1048	1.6	49
	1640	0.6	18
	2234	1.6	49
24 W ◐	0501	0.2	6
	1147	1.7	52
	1801	0.6	18
	2337	1.4	43
25 Th	0600	0.3	9
	1248	1.8	55
	1921	0.6	18
26 F	0047	1.4	43
	0702	0.3	9
	1345	1.9	58
	2026	0.4	12
27 Sa	0155	1.4	43
	0759	0.2	6
	1437	2.1	64
	2118	0.2	6
28 Su	0256	1.5	46
	0851	0.1	3
	1524	2.2	67
	2203	0.0	0
29 M	0348	1.5	46
	0938	0.0	0
	1608	2.4	73
	2244	−0.1	−3
30 Tu	0436	1.7	52
	1022	−0.1	−3
	1650	2.5	76
	2324	−0.3	−9

Time meridian 150° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.
Heights are referred to mean lower low water which is the chart datum of soundings.

Johnston Island, 2015

Times and Heights of High and Low Waters

July

	Time	Height	
	h m	ft	cm
1 W ○	0521	1.8	55
	1106	−0.1	−3
	1731	2.6	79
2 Th	0004	−0.4	−12
	0605	1.9	58
	1149	−0.2	−6
	1813	2.6	79
3 F	0044	−0.5	−15
	0650	1.9	58
	1234	−0.1	−3
	1855	2.6	79
4 Sa	0125	−0.5	−15
	0736	2.0	61
	1320	0.0	0
	1938	2.5	76
5 Su	0207	−0.4	−12
	0825	2.0	61
	1410	0.1	3
	2025	2.3	70
6 M	0252	−0.3	−9
	0917	2.0	61
	1507	0.2	6
	2115	2.1	64
7 Tu	0340	−0.2	−6
	1015	2.0	61
	1614	0.4	12
	2211	1.9	58
8 W ◑	0435	0.0	0
	1118	2.0	61
	1735	0.5	15
	2318	1.6	49
9 Th	0537	0.1	3
	1225	2.1	64
	1902	0.4	12
10 F	0034	1.5	46
	0646	0.2	6
	1332	2.2	67
	2017	0.3	9
11 Sa	0152	1.5	46
	0752	0.2	6
	1432	2.3	70
	2117	0.2	6
12 Su	0302	1.5	46
	0851	0.1	3
	1525	2.3	70
	2206	0.0	0
13 M	0359	1.6	49
	0942	0.1	3
	1612	2.4	73
	2248	−0.1	−3
14 Tu	0446	1.7	52
	1027	0.1	3
	1653	2.5	76
	2326	−0.2	−6
15 W ●	0527	1.8	55
	1108	0.0	0
	1731	2.5	76

	Time	Height	
	h m	ft	cm
16 Th	0001	−0.2	−6
	0605	1.8	55
	1146	0.0	0
	1806	2.5	76
17 F	0034	−0.2	−6
	0640	1.9	58
	1222	0.1	3
	1840	2.4	73
18 Sa	0105	−0.2	−6
	0715	1.9	58
	1258	0.1	3
	1913	2.3	70
19 Su	0137	−0.1	−3
	0751	1.9	58
	1334	0.2	6
	1947	2.2	67
20 M	0209	−0.1	−3
	0828	1.9	58
	1413	0.4	12
	2021	2.0	61
21 Tu	0242	0.0	0
	0908	1.9	58
	1456	0.5	15
	2059	1.9	58
22 W	0318	0.2	6
	0954	1.9	58
	1548	0.6	18
	2144	1.7	52
23 Th ◐	0400	0.3	9
	1047	1.8	55
	1657	0.7	21
	2240	1.5	46
24 F	0454	0.4	12
	1149	1.9	58
	1823	0.7	21
	2352	1.4	43
25 Sa	0602	0.4	12
	1256	1.9	58
	1946	0.6	18
26 Su	0113	1.4	43
	0715	0.4	12
	1400	2.1	64
	2049	0.4	12
27 M	0226	1.5	46
	0821	0.3	9
	1456	2.3	70
	2139	0.1	3
28 Tu	0326	1.6	49
	0917	0.1	3
	1546	2.4	73
	2223	−0.1	−3
29 W	0417	1.8	55
	1006	0.0	0
	1631	2.6	79
	2304	−0.3	−9
30 Th	0504	2.0	61
	1053	−0.1	−3
	1715	2.7	82
	2343	−0.4	−12
31 F ○	0548	2.1	64
	1138	−0.2	−6
	1757	2.8	85

August

	Time	Height	
	h m	ft	cm
1 Sa	0023	−0.5	−15
	0632	2.3	70
	1224	−0.2	−6
	1839	2.7	82
2 Su	0102	−0.5	−15
	0717	2.3	70
	1310	−0.1	−3
	1922	2.6	79
3 M	0142	−0.4	−12
	0802	2.4	73
	1358	0.0	0
	2007	2.4	73
4 Tu	0224	−0.3	−9
	0851	2.3	70
	1451	0.2	6
	2054	2.1	64
5 W	0309	−0.1	−3
	0944	2.3	70
	1553	0.4	12
	2148	1.9	58
6 Th ◑	0359	0.1	3
	1044	2.2	67
	1709	0.5	15
	2253	1.6	49
7 F	0501	0.3	9
	1152	2.1	64
	1840	0.5	15
8 Sa	0014	1.5	46
	0618	0.4	12
	1306	2.1	64
	2002	0.5	15
9 Su	0142	1.4	43
	0737	0.4	12
	1415	2.1	64
	2105	0.3	9
10 M	0255	1.5	46
	0842	0.4	12
	1511	2.2	67
	2152	0.2	6
11 Tu	0349	1.7	52
	0934	0.3	9
	1558	2.3	70
	2231	0.0	0
12 W	0432	1.8	55
	1017	0.2	6
	1637	2.4	73
	2305	−0.1	−3
13 Th	0508	1.9	58
	1055	0.1	3
	1712	2.5	76
	2336	−0.1	−3
14 F ●	0542	2.0	61
	1130	0.1	3
	1745	2.5	76
15 Sa	0005	−0.1	−3
	0613	2.1	64
	1204	0.1	3
	1816	2.4	73

	Time	Height	
	h m	ft	cm
16 Su	0034	−0.1	−3
	0644	2.2	67
	1237	0.1	3
	1847	2.4	73
17 M	0102	−0.1	−3
	0716	2.2	67
	1310	0.2	6
	1917	2.3	70
18 Tu	0130	0.0	0
	0748	2.2	67
	1345	0.3	9
	1949	2.1	64
19 W	0200	0.1	3
	0823	2.1	64
	1423	0.4	12
	2023	2.0	61
20 Th	0232	0.2	6
	0903	2.1	64
	1507	0.5	15
	2103	1.8	55
21 F	0309	0.3	9
	0952	2.0	61
	1604	0.6	18
	2156	1.6	49
22 Sa ◐	0359	0.4	12
	1054	1.9	58
	1726	0.7	21
	2310	1.5	46
23 Su	0510	0.5	15
	1209	2.0	61
	1903	0.6	18
24 M	0040	1.4	43
	0641	0.5	15
	1325	2.1	64
	2018	0.4	12
25 Tu	0203	1.6	49
	0800	0.4	12
	1430	2.2	67
	2112	0.2	6
26 W	0307	1.8	55
	0901	0.2	6
	1524	2.5	76
	2158	0.0	0
27 Th	0358	2.0	61
	0954	0.0	0
	1612	2.6	79
	2239	−0.2	−6
28 F	0444	2.3	70
	1041	−0.1	−3
	1656	2.8	85
	2318	−0.4	−12
29 Sa ○	0527	2.5	76
	1127	−0.2	−6
	1739	2.8	85
	2357	−0.4	−12
30 Su	0610	2.6	79
	1211	−0.2	−6
	1821	2.7	82
31 M	0035	−0.4	−12
	0652	2.7	82
	1256	−0.2	−6
	1904	2.6	79

September

	Time	Height	
	h m	ft	cm
1 Tu	0114	−0.3	−9
	0736	2.7	82
	1343	0.0	0
	1947	2.4	73
2 W	0154	−0.2	−6
	0821	2.6	79
	1432	0.2	6
	2033	2.1	64
3 Th	0236	0.1	3
	0910	2.4	73
	1528	0.4	12
	2126	1.8	55
4 F ◑	0324	0.3	9
	1007	2.2	67
	1639	0.5	15
	2231	1.6	49
5 Sa	0426	0.5	15
	1116	2.0	61
	1811	0.6	18
	2358	1.5	46
6 Su	0554	0.7	21
	1237	2.0	61
	1940	0.6	18
7 M	0132	1.5	46
	0726	0.7	21
	1354	2.0	61
	2043	0.4	12
8 Tu	0244	1.6	49
	0835	0.5	15
	1454	2.1	64
	2129	0.3	9
9 W	0333	1.8	55
	0925	0.4	12
	1539	2.2	67
	2205	0.2	6
10 Th	0411	2.0	61
	1005	0.3	9
	1617	2.3	70
	2236	0.1	3
11 F	0444	2.1	64
	1040	0.2	6
	1650	2.4	73
	2305	0.0	0
12 Sa ●	0514	2.3	70
	1113	0.1	3
	1722	2.4	73
	2333	0.0	0
13 Su	0543	2.4	73
	1145	0.1	3
	1752	2.4	73
14 M	0000	0.0	0
	0612	2.4	73
	1216	0.1	3
	1821	2.4	73
15 Tu	0027	0.0	0
	0642	2.4	73
	1248	0.1	3
	1851	2.3	70

	Time	Height	
	h m	ft	cm
16 W	0054	0.1	3
	0712	2.4	73
	1320	0.2	6
	1921	2.1	64
17 Th	0122	0.1	3
	0745	2.3	70
	1356	0.3	9
	1955	2.0	61
18 F	0154	0.3	9
	0822	2.2	67
	1436	0.4	12
	2035	1.8	55
19 Sa	0230	0.4	12
	0907	2.1	64
	1529	0.6	18
	2128	1.6	49
20 Su ◐	0319	0.5	15
	1008	2.0	61
	1643	0.6	18
	2243	1.5	46
21 M	0432	0.7	21
	1127	2.0	61
	1821	0.6	18
22 Tu	0018	1.5	46
	0615	0.7	21
	1251	2.0	61
	1943	0.5	15
23 W	0143	1.7	52
	0743	0.5	15
	1403	2.2	67
	2041	0.2	6
24 Th	0246	2.0	61
	0848	0.3	9
	1501	2.4	73
	2128	0.0	0
25 F	0337	2.3	70
	0941	0.1	3
	1551	2.6	79
	2210	−0.2	−6
26 Sa	0422	2.6	79
	1029	−0.1	−3
	1637	2.7	82
	2250	−0.3	−9
27 Su ○	0505	2.8	85
	1114	−0.2	−6
	1720	2.7	82
	2329	−0.4	−12
28 M	0546	2.9	88
	1158	−0.3	−9
	1803	2.6	79
29 Tu	0007	−0.3	−9
	0627	2.9	88
	1242	−0.2	−6
	1845	2.5	76
30 W	0046	−0.2	−6
	0709	2.8	85
	1326	−0.1	−3
	1929	2.3	70

Time meridian 150° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.
Heights are referred to mean lower low water which is the chart datum of soundings.

Johnston Island, 2015

Times and Heights of High and Low Waters

October

	Time	Height	
	h m	ft	cm
1 Th	0125	0.0	0
	0752	2.7	82
	1412	0.1	3
	2015	2.0	61
2 F	0206	0.2	6
	0837	2.5	76
	1504	0.3	9
	2106	1.8	55
3 Sa	0252	0.4	12
	0930	2.2	67
	1606	0.5	15
	2211	1.6	49
4 Su ◑	0352	0.7	21
	1035	2.0	61
	1730	0.6	18
	2336	1.5	46
5 M	0525	0.8	24
	1157	1.9	58
	1901	0.6	18
6 Tu	0110	1.6	49
	0708	0.8	24
	1320	1.9	58
	2007	0.5	15
7 W	0219	1.7	52
	0819	0.7	21
	1424	2.0	61
	2053	0.4	12
8 Th	0306	1.9	58
	0908	0.5	15
	1512	2.1	64
	2130	0.3	9
9 F	0343	2.1	64
	0947	0.4	12
	1550	2.2	67
	2201	0.2	6
10 Sa	0415	2.3	70
	1022	0.2	6
	1625	2.2	67
	2231	0.1	3
11 Su	0445	2.4	73
	1055	0.1	3
	1656	2.3	70
	2259	0.1	3
12 M ●	0514	2.5	76
	1126	0.1	3
	1727	2.3	70
	2327	0.0	0
13 Tu	0543	2.6	79
	1157	0.0	0
	1758	2.2	67
	2355	0.0	0
14 W	0612	2.6	79
	1229	0.0	0
	1829	2.2	67
15 Th	0023	0.1	3
	0643	2.6	79
	1301	0.1	3
	1901	2.1	64

	Time	Height	
	h m	ft	cm
16 F	0053	0.2	6
	0715	2.5	76
	1337	0.2	6
	1937	1.9	58
17 Sa	0126	0.3	9
	0753	2.4	73
	1417	0.3	9
	2019	1.8	55
18 Su	0205	0.4	12
	0838	2.2	67
	1507	0.4	12
	2114	1.7	52
19 M	0256	0.6	18
	0935	2.1	64
	1614	0.5	15
	2229	1.6	49
20 Tu ◐	0410	0.7	21
	1050	2.0	61
	1740	0.5	15
	2358	1.7	52
21 W	0553	0.7	21
	1215	2.0	61
	1902	0.4	12
22 Th	0119	1.9	58
	0726	0.6	18
	1331	2.1	64
	2005	0.2	6
23 F	0222	2.2	67
	0834	0.4	12
	1435	2.2	67
	2055	0.0	0
24 Sa	0314	2.5	76
	0929	0.1	3
	1529	2.4	73
	2140	−0.1	−3
25 Su	0400	2.7	82
	1017	−0.1	−3
	1617	2.4	73
	2222	−0.2	−6
26 M	0442	2.9	88
	1102	−0.2	−6
	1703	2.5	76
	2303	−0.3	−9
27 Tu ○	0524	3.0	91
	1145	−0.3	−9
	1747	2.4	73
	2342	−0.2	−6
28 W	0604	3.0	91
	1228	−0.3	−9
	1830	2.3	70
29 Th	0021	−0.1	−3
	0645	2.9	88
	1310	−0.2	−6
	1913	2.2	67
30 F	0101	0.1	3
	0726	2.7	82
	1353	0.0	0
	1958	2.0	61
31 Sa	0141	0.3	9
	0809	2.5	76
	1439	0.2	6
	2048	1.8	55

November

	Time	Height	
	h m	ft	cm
1 Su	0226	0.5	15
	0856	2.2	67
	1532	0.4	12
	2147	1.7	52
2 M	0321	0.7	21
	0952	2.0	61
	1638	0.5	15
	2301	1.6	49
3 Tu ◑	0442	0.9	27
	1102	1.8	55
	1757	0.6	18
4 W	0023	1.6	49
	0626	0.9	27
	1222	1.7	52
	1909	0.6	18
5 Th	0134	1.8	55
	0747	0.8	24
	1335	1.8	55
	2003	0.5	15
6 F	0226	2.0	61
	0842	0.6	18
	1432	1.8	55
	2045	0.4	12
7 Sa	0307	2.2	67
	0925	0.4	12
	1517	1.9	58
	2122	0.3	9
8 Su	0342	2.3	70
	1001	0.3	9
	1556	2.0	61
	2155	0.2	6
9 M	0414	2.5	76
	1036	0.1	3
	1631	2.1	64
	2226	0.1	3
10 Tu	0446	2.6	79
	1109	0.0	0
	1705	2.1	64
	2258	0.1	3
11 W ●	0517	2.7	82
	1141	0.0	0
	1739	2.1	64
	2329	0.1	3
12 Th	0549	2.7	82
	1214	−0.1	−3
	1813	2.1	64
13 F	0001	0.1	3
	0622	2.6	79
	1248	0.0	0
	1848	2.0	61
14 Sa	0034	0.1	3
	0657	2.6	79
	1325	0.0	0
	1927	1.9	58
15 Su	0111	0.2	6
	0735	2.5	76
	1406	0.1	3
	2012	1.8	55

	Time	Height	
	h m	ft	cm
16 M	0153	0.4	12
	0820	2.3	70
	1453	0.2	6
	2107	1.8	55
17 Tu	0246	0.5	15
	0914	2.2	67
	1551	0.3	9
	2215	1.8	55
18 W ◐	0356	0.7	21
	1020	2.0	61
	1701	0.3	9
	2333	1.8	55
19 Th	0531	0.7	21
	1137	1.9	58
	1816	0.3	9
20 F	0049	2.0	61
	0705	0.6	18
	1256	1.9	58
	1924	0.2	6
21 Sa	0154	2.3	70
	0818	0.4	12
	1407	2.0	61
	2021	0.1	3
22 Su	0249	2.5	76
	0916	0.2	6
	1508	2.1	64
	2111	0.0	0
23 M	0338	2.7	82
	1006	−0.1	−3
	1601	2.1	64
	2157	−0.1	−3
24 Tu	0423	2.9	88
	1051	−0.2	−6
	1649	2.2	67
	2241	−0.1	−3
25 W ○	0505	2.9	88
	1134	−0.3	−9
	1734	2.2	67
	2322	−0.1	−3
26 Th	0546	2.9	88
	1215	−0.3	−9
	1817	2.1	64
27 F	0002	0.0	0
	0626	2.8	85
	1255	−0.3	−9
	1900	2.0	61
28 Sa	0042	0.1	3
	0705	2.7	82
	1335	−0.1	−3
	1943	2.0	61
29 Su	0122	0.2	6
	0745	2.5	76
	1416	0.0	0
	2028	1.8	55
30 M	0204	0.4	12
	0826	2.2	67
	1458	0.2	6
	2118	1.8	55

December

	Time	Height	
	h m	ft	cm
1 Tu	0252	0.6	18
	0911	2.0	61
	1546	0.3	9
	2214	1.7	52
2 W ◑	0353	0.8	24
	1005	1.8	55
	1643	0.4	12
	2320	1.7	52
3 Th	0517	0.9	27
	1110	1.7	52
	1748	0.5	15
4 F	0029	1.8	55
	0650	0.8	24
	1225	1.6	49
	1853	0.5	15
5 Sa	0131	1.9	58
	0802	0.7	21
	1336	1.6	49
	1949	0.5	15
6 Su	0222	2.1	64
	0855	0.5	15
	1435	1.6	49
	2037	0.4	12
7 M	0306	2.2	67
	0938	0.3	9
	1524	1.7	52
	2118	0.3	9
8 Tu	0344	2.4	73
	1016	0.2	6
	1607	1.8	55
	2157	0.2	6
9 W	0421	2.5	76
	1052	0.0	0
	1646	1.9	58
	2233	0.1	3
10 Th	0456	2.6	79
	1127	−0.1	−3
	1723	1.9	58
	2309	0.0	0
11 F ●	0532	2.7	82
	1202	−0.2	−6
	1801	2.0	61
	2346	0.0	0
12 Sa	0608	2.7	82
	1237	−0.2	−6
	1840	2.0	61
13 Su	0023	0.1	3
	0645	2.6	79
	1315	−0.2	−6
	1921	2.0	61
14 M	0103	0.1	3
	0724	2.5	76
	1354	−0.2	−6
	2006	2.0	61
15 Tu	0148	0.2	6
	0808	2.4	73
	1438	−0.1	−3
	2057	1.9	58

	Time	Height	
	h m	ft	cm
16 W	0240	0.4	12
	0856	2.2	67
	1527	0.0	0
	2156	1.9	58
17 Th	0344	0.5	15
	0953	2.0	61
	1624	0.1	3
	2302	2.0	61
18 F ◐	0506	0.6	18
	1102	1.8	55
	1730	0.2	6
19 Sa	0014	2.1	64
	0640	0.6	18
	1221	1.7	52
	1841	0.2	6
20 Su	0123	2.2	67
	0801	0.4	12
	1340	1.7	52
	1948	0.2	6
21 M	0225	2.4	73
	0905	0.2	6
	1450	1.7	52
	2047	0.1	3
22 Tu	0319	2.6	79
	0957	0.0	0
	1549	1.8	55
	2139	0.0	0
23 W	0407	2.7	82
	1043	−0.2	−6
	1640	1.9	58
	2225	0.0	0
24 Th	0451	2.7	82
	1124	−0.3	−9
	1725	2.0	61
	2309	0.0	0
25 F ○	0532	2.7	82
	1203	−0.3	−9
	1807	2.0	61
	2349	0.0	0
26 Sa	0610	2.7	82
	1240	−0.3	−9
	1846	2.0	61
27 Su	0028	0.0	0
	0647	2.6	79
	1315	−0.3	−9
	1925	2.0	61
28 M	0106	0.1	3
	0723	2.4	73
	1350	−0.2	−6
	2003	1.9	58
29 Tu	0144	0.3	9
	0759	2.2	67
	1424	0.0	0
	2044	1.9	58
30 W	0225	0.4	12
	0836	2.1	64
	1501	0.1	3
	2127	1.8	55
31 Th	0311	0.6	18
	0917	1.9	58
	1540	0.2	6
	2217	1.8	55

Time meridian 150° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.
Heights are referred to mean lower low water which is the chart datum of soundings.

EXTRA TIDES, 2015

Punta Arenas, Chile

January

4	1839	0.9	30
20	1852	1.3	42
21	1948	1.2	38
22	2037	1.1	36
23	2123	1.2	39

February

18	1844	1.6	51
19	1939	1.4	46

March

1	2250	5.5	182
2	2348	5.7	188

May

8	2227	2.7	88
18	2303	4.1	135

June

6	2223	2.6	86
7	2304	2.5	82
8	2346	2.3	76
14	2316	4.4	144
16	2302	3.7	121

July

2	2343	3.9	128
5	2208	2.4	78
6	2247	2.1	70
13	2245	3.9	127
14	2348	3.7	123
30	2359	3.8	124

August

3	2145	2.0	66
11	2227	3.5	116
12	2337	3.6	117
28	2356	3.8	125

September

9	1933	3.4	112
	2042	3.3	108
	2223	3.5	116
25	2212	3.7	121

November

15	2047	0.9	28
16	2053	0.9	28

December

14	2044	0.9	31
15	2113	1.0	33
17	2127	1.3	42
25	1856	0.7	24
26	1939	0.6	20

Bethel, Kuskokwim River, Alaska

May

7	1942	4.2	128
8	2026	4.3	131
9	2114	4.3	131

November

17	2338	0.6	18

TABLE 2. — TIDAL DIFFERENCES AND OTHER CONSTANTS

EXPLANATION OF TABLE

The publication of full daily predictions is necessarily limited to a comparatively small number of stations. Tide predictions for many other places, however, can be obtained by applying certain differences to the predictions for the reference stations in Table 1. The following pages list the places called “subordinate stations” for which such predictions can be made, and the differences or ratios to be used. These differences or ratios are to be applied to the predictions for the proper reference station which is listed in Table 2 in boldface type above the differences for the subordinate station. The stations in this table are arranged in geographical order. The index to stations at the end of this volume will assist in locating a particular station.

Caution.—The time and height differences listed in Table 2 are average difference derived from comparisons of simultaneous tide observations at the subordinate location and its reference station. Because these figures are constant, they may not always provide for the daily variations of the actual tide, especially if the subordinate station is some distance from the reference station. Therefore, although the application of the time and height differences will generally provide reasonable accurate approximations, they cannot result in predictions as accurate as those listed for the reference stations which are based upon much larger periods of analyses and which do provide for daily variations.

Time differences.—To determine the time of high water or low water at any station listed in this table there is given in the columns headed “Differences, Time” the hours and minutes to be added to or subtracted from the time of high or low water at some reference station. A plus (+) sign indicates that the tide at the subordinate station is later than at the reference station and the difference should be added; a minus (–) sign indicates that it is earlier and should be subtracted.

To obtain the tide at a subordinate station on any date, apply the difference to the tide at the reference station for that same date. In some cases, however, to obtain an a.m. tide it may be necessary to use the preceding day’s p.m. tide at the reference station (or to obtain a p.m. tide it may be necessary to use the following day’s a.m. tide). For example, if a high water at a reference station occurs at 0200 on July 17, and the tide at the subordinate station occurs 5 hour earlier, the high water at the subordinate station will occur at 2100 on July 16. For the second case, if a high water occurs at a reference station at 2200 on July 2, and the tide at the subordinate station occurs 3 hours later, then high water will occur at 0100 on July 3 at the subordinate station. The necessary allowance for change in date when the international date line is crossed is included in the time difference. In such cases use the same date at the reference station as desired for the subordinate station as explained above.

The results obtained by the application of the time differences will be in the kind of time indicated by the time meridian shown above the name of the subordinate station. Differences in time meridians between a subordinate station and its reference station have been accounted for and no further adjustment by the reader is necessary. Summer or daylight-saving time is not used in the tide tables.

Height differences.—The height of the tide, referred to the datum of charts, is obtained by means of the height differences or ratios. A plus (+) sign indicates that the difference should be added to the height at the reference station, and a minus (–) sign indicates that it should be subtracted. All height differences, ranges, and levels in Table 2 are in feet but may be converted to centimeters by the use of Table 7.

Ratio.—For some stations, use of predicted height difference would give unsatisfactory predictions. In such cases they have been omitted and one or two ratios are given (*). Where two ratios are given, one in the “height of high water” column and one in the “height of low water” column, the high waters and low waters at the reference station should be multiplied by these respective ratios. Where only one is given, the omitted ratio is either unreliable or unknown.

For some subordinate stations there is given in parentheses a ratio as well as a correction in feet. In those instances, each predicted high and low water at the reference station should first be multiplied by the ratio and then the correction in feet is added to or subtracted from each product as indicated.

TABLE 2. — TIDAL DIFFERENCES AND OTHER CONSTANTS

As an example, at Treadwell Bay, British Columbia, the values in the time and height difference columns in Table 2 are given as +0 34, +0 46, and (*0.48 + 2.8) as referred to the reference station at Ketchikan, Alaska. If we assume that the tide predictions in column (1) below are those of Ketchikan on a particular day, application of the time and height correction in columns (2) and (3) would result in the tide predictions for Treadwell Bay in column (4).

(1)		(2)	(3)	(4)		
Time h.m.	*Height ft.*	*Time Corrections*	*Height Corrections*	*Time h.m.*	*Height ft.*	*Height centimeters*
0313	3.8	$+0^h\ 46^m$	x0.48 + 2.8	0359	4.6	140
0921	15.2	$+0^h\ 34^m$	x0.48 + 2.8	0955	10.1	308
1601	-0.4	$+0^h\ 46^m$	x0.48 + 2.8	1647	2.6	79
2230	14.1	$+0^h\ 34^m$	x0.48 + 2.8	2304	9.6	293

Range.—The mean range is the difference in height between mean high water (MHW) and mean low water (MLW). The spring range is the average semidiurnal range occurring semimonthly as a result of the Moon being new or full. It is larger than the mean range where the type of tide is either semidiurnal or mixed, and is of not practical significance where the type of tide is diurnal. Where the tide is chiefly of the diurnal type the table gives the diurnal range, which is the difference in height between mean higher high water and mean lower low water.

Datum.—The datum of the predictions obtained through the height differences or ratios is also the datum of the largest scale chart for the locality. To obtain the depth at the time of high or low water, the predicted height should be added to the depth on the chart unless such height is negative (–), when it should be subtracted. To find the height at times between high and low water see Table 3. On some charts the depths are given in meters or centimeters and in such cases the heights of the tide can be converted to other units by the use of Table 7. Chart datums for the portion of the world covered by these tables are approximately as follows: Mean lower low water for the Pacific coast of the United States, Alaska, and the Hawaiian Islands, mean low water springs for Central American and Mexico. For the rest of the area covered by these tables the datums generally used are approximately mean low water springs, Indian spring low water, or the lowest possible low water.

Mean Tide Level (Half-Tide Level). — The mean tide level is a plane midway between mean low water and mean high water. Tabular values are reckoned from chart depth.

Observations Supporting Predictions.– All tidal predictions made by the National Ocean Service are based upon observations taken at the location in question. For most reference stations these observations often are of a continuing nature. As such, they are used to quality control the predictions and to update the harmonic constants used in generating annual predictions. For subordinate stations, the age and duration of their observations vary from a few days of observation taken decades ago to the most recent survey data.

The precision with which the position, ranges and mean tide level are reported in Table 2 is an indication of the age and analytical history of the supporting observation. Stations whose position is reported to the nearest tenth minute of latitude and longitude and whose ranges and mean tide level are reported to the nearest hundredth foot are supported by the most recent observations, analyzed with regard to current chart datums and the 1983-2001 National Tidal Datum Epoch. Stations whose position is reported to the nearest tenth minute but whose ranges and mean tide level are reported to the nearest tenth foot are typically supported by observations taken in the 1960's and 1970's with analysis based upon previous National Tidal Datum Epochs. Finally, stations whose positions is reported to the nearest minute and whose ranges and mean tide level are reported to the nearest tenth foot indicated either older supporting observations or simply data not yet reviewed and entered into the Tables with full published precision. NOS is in the continuous process of updating the Tables with all available data.

TABLE 2. — TIDAL DIFFERENCES AND OTHER CONSTANTS

Old observations are not in and of themselves an indication of poor present predictions. Certain coastal areas do not undergo much human or natural modification while other coastal areas are subject to nearly constant modification by both agents. Local knowledge of conditions is still very important to the wise use of these astronomical predictions.

NOTE. — Dashes are entered in the place of data which are unknown, unreliable, or not applicable.

TABLE 2 – TIDAL DIFFERENCES AND OTHER CONSTANTS

No.	PLACE	POSITION Latitude	POSITION Longitude	DIFFERENCES Time High Water	DIFFERENCES Time Low Water	DIFFERENCES Height High Water	DIFFERENCES Height Low Water	RANGES Mean	RANGES Spring	Mean Tide Level
		South	**West**	h m	h m	ft	ft	ft	ft	ft
	ARGENTINA, Tierra del Fuego <1> Time meridian, 60° W				**on Cabo de Hornos, p.4**					
1	Bahia Buen Suceso	54° 49'	65° 13'	+0 55	+0 54	+0.9	+0.3	4.8	5.8	5.0
3	Bahia Aguirre	54° 55'	65° 58'	+0 28	+0 28	−0.9	−0.4	3.7	4.5	3.7
5	Bahia Ushuaia, Beagle Channel	54° 49'	68° 13'	+0 08	+0 02	−0.9	−0.6	3.9	4.4	3.6
	CHILE, Magellan Strait				**on Puerto Montt, p.12**					
7	Dungeness	52° 24'	68° 26'	−5 05	−5 05	*1.56	*0.94	23.8	29.8	16.8
9	Punta Catalina	52° 32'	68° 46'	−4 58	−4 58	*1.53	*1.04	22.8	28.5	16.8
11	Bahia Posesion	52° 16'	69° 10'	−4 31	−4 33	*1.83	*1.19	27.5	33.4	19.9
13	Banco Direccion	52° 24'	69° 26'	−4 21	−4 21	*1.90	*1.35	28.0	34.0	21.0
15	Bahia Santiago	52° 31'	69° 52'	−3 49	−3 45	−0.8	−1.6	14.0	17.8	10.6
17	Bahia Felipe	52° 57'	69° 47'	−3 48	−3 44	−2.9	−1.7	12.0	15.1	9.5
19	Segunda Angostura	52° 45'	70° 18'	−3 11	−3 03	+2.4	−0.4	16.0	20.3	12.8
					on Punta Arenas, p.8					
21	Puerto Zenteno	52° 47'	70° 46'	−1 45	−1 45	+0.7	0.0	4.5	5.8	4.4
23	Bahia Gente Grande	53° 03'	70° 16'	−0 04	−0 22	+2.3	−0.2	6.3	7.4	5.0
25	PUNTA ARENAS	53° 09'	70° 54'		*Daily predictions*			3.8	4.9	4.0
27	Puerto del Hambre	53° 38'	70° 55'	+0 15	+0 10	0.0	0.0	3.6	4.7	3.9
29	Puerto San Antonio	53° 54'	70° 54'	+0 15	+0 15	+0.5	+0.5	3.8	5.0	4.5
31	Bahia Snug	53° 51'	71° 25'	+1 25	+1 25	+1.4	+0.9	4.3	5.6	5.2
33	Bahia Wood	53° 49'	71° 38'	+1 20	+1 20	+1.4	+0.9	4.3	5.6	5.2
35	Puerto Gallant	53° 42'	72° 00'	+1 20	+1 20	+1.4	+0.9	4.3	5.6	5.2
					on Cabo de Hornos, p.4					
37	Bahia Borja	53° 32'	72° 30'	−2 00	−2 00	−1.8	−2.1	4.5	5.0	2.4
39	Bahia Swallow	53° 30'	72° 47'	−1 55	−1 55	−1.8	−2.1	4.5	5.0	2.4
41	Caleta Playa Parda	53° 19'	73° 01'	−2 05	−2 05	−2.8	−2.1	3.5	4.0	1.9
43	Puerto Angosto	53° 14'	73° 22'	−2 30	−2 30	−2.7	−2.1	3.6	4.0	2.0
45	Caleta Sylvia	52° 58'	73° 33'	−2 11	−2 12	−2.4	−2.0	3.8	4.3	2.2
47	Puerto Tamar	52° 56'	73° 46'	−1 30	−1 30	−0.8	−0.7	4.1	4.6	3.7
49	Islote Pollo, Canal Smyth	52° 23'	73° 41'	−2 06	−2 06	−1.7	−0.9	3.4	4.3	3.1
51	Punta Ancud, Canal Smyth	52° 43'	73° 49'	−1 36	−1 36	−1.7	−0.9	3.4	4.1	3.1
53	Bahia Tuesday	52° 51'	74° 27'	−2 23	−2 24	−0.9	−0.7	4.0	4.5	3.6
55	Cabo Pilar	52° 43'	74° 42'	−2 34	−2 34	−2.7	−2.1	3.6	4.0	2.0
	CHILE, Coast									
57	Paso Goree, Bahia Nassau	55° 19'	67° 14'	+0 13	+0 13	+1.2	−0.6	6.0	6.7	4.7
59	Caleta Saint Martin, Isla Hermite	55° 51'	67° 34'	+0 08	−0 03	+0.6	+0.4	4.4	5.0	4.9
61	CABO de HORNOS	55° 31'	68° 05'		*Daily predictions*			4.2	4.8	4.4
63	Isla Diego Ramirez	56° 28'	68° 43'	+0 19	+0 19	−0.8	−1.1	4.5	5.0	3.4
65	Bahia India, Seno Ano Nuevo	55° 30'	69° 06'	+0 30	+0 30	+0.4	+0.1	4.5	5.0	4.6
67	Isla Noir	54° 29'	73° 00'	−0 53	−0 53	−2.0	−2.1	4.3	4.8	2.3
69	Islas Week	53° 12'	74° 21'	−1 17	−1 17	−2.0	−2.0	4.2	4.7	2.4
71	Evangelistas	52° 24'	75° 06'	−2 09	−2 09	−1.8	−1.5	3.9	4.4	2.7
73	Angostura Guia	50° 45'	74° 24'	−2 25	−2 25	− −	− −	− −	7.9	− −
75	Puerto Henry, Golfo Trinidad	50° 00'	75° 20'	−3 05	−3 05	−1.8	−2.1	4.5	5.0	2.4
77	Angostura Inglesa	48° 59'	74° 24'	−2 50	−2 50	−0.9	−2.0	5.3	6.0	2.9
79	Puerto Barbara, Canal Fallos	48° 02'	75° 24'	−2 48	−2 46	−0.9	−2.0	5.3	6.0	2.9
81	Puerto Barroso, Golfo de Penas	46° 49'	75° 17'	−3 50	−3 50	−0.9	−2.0	5.3	6.0	2.9
83	Puerto Slight, Golfo Tres Montes	46° 49'	75° 33'	−3 31	−3 31	*0.63	*0.57	2.8	3.8	2.7
85	Caleta Pascuas, Bahia San Andres	46° 36'	75° 31'	−2 15	−2 15	−2.0	−2.1	4.3	4.8	2.3
87	Puerto Refugio	45° 52'	74° 47'	−2 20	−2 20	−1.9	−2.0	4.3	4.9	2.4
89	Puerto Yates	45° 26'	74° 26'	−2 30	−2 30	+2.4	+0.3	6.3	8.0	5.7
91	Rada Vallenar	45° 19'	74° 32'	−2 50	−2 50	−1.1	−1.7	4.8	6.0	3.0
93	Puerto Italiano, Canal Darwin	45° 22'	74° 08'	−2 50	−2 50	−0.9	−1.7	5.0	6.2	3.1
95	Puerto Lagunas	45° 17'	73° 46'	−2 00	−2 00	−0.2	−1.6	5.6	7.1	3.5
97	Puerto Americano	45° 03'	73° 45'	−1 45	−1 45	−0.7	−1.7	5.2	6.5	3.2
99	Isla Guamblin	44° 49'	75° 02'	−3 45	−3 45	+0.5	−1.7	6.4	7.7	3.8
101	Isla Guafo	43° 37'	74° 36'	−4 00	−4 00	+0.2	−1.5	5.9	7.5	3.8
	Golfo de Corcovado									
103	Puerto Low	43° 49'	74° 01'	−2 55	−2 55	+0.6	−1.6	6.4	7.9	3.9
105	Puerto Melinka	43° 54'	73° 45'	−3 20	−3 20	+0.9	−1.6	6.7	8.2	4.0
107	Bahia Tictoc	43° 37'	72° 56'	−3 00	−3 00	+1.9	−0.9	7.0	8.6	4.9
109	Puerto San Pedro	43° 20'	73° 42'	−2 20	−2 20	+1.7	−1.3	7.2	8.8	4.6
					on Puerto Montt, p.12					
111	Puerto Quellon	43° 07'	73° 38'	+0 15	+0 15	−4.0	−3.3	12.5	15.7	8.2
113	Puerto Queilen	42° 54'	73° 29'	+0 30	+0 30	−3.7	−3.5	13.0	16.4	8.2
115	Castro	42° 29'	73° 46'	−0 05	−0 05	−1.9	−3.3	14.6	18.4	9.2
	Golfo de Ancud									
117	Puerto Quemchi	42° 09'	73° 29'	+0 15	+0 15	+1.1	−1.5	15.8	19.7	11.6
119	Bahia Linao	41° 56'	73° 33'	+0 20	+0 20	−3.4	−3.2	13.0	16.9	8.5
121	Paso Lagartija	41° 50'	73° 19'	+0 20	+0 20	−3.9	−3.2	12.5	16.5	8.2
123	Paso Tautil	41° 44'	73° 04'	+0 05	+0 05	−0.8	−0.6	13.0	17.7	11.1
125	PUERTO MONTT, Seno Reloncavi	41° 29'	72° 58'		*Daily predictions*			13.2	18.0	11.8
127	Roca Remolinos, Canal Chacao	41° 48'	73° 32'	+0 25	+0 25	−3.9	−3.2	12.5	16.9	8.3

Endnotes can be found at the end of table 2.

TABLE 2 – TIDAL DIFFERENCES AND OTHER CONSTANTS

No.	PLACE	POSITION Latitude	POSITION Longitude	DIFFERENCES Time High Water	DIFFERENCES Time Low Water	DIFFERENCES Height High Water	DIFFERENCES Height Low Water	RANGES Mean	RANGES Spring	Mean Tide Level
		South	**West**	h m	h m	ft	ft	ft	ft	ft
	CHILE, Coast–cont. Time meridian, 60° W				**on Valparaiso, p.16**					
129	Ancud	41° 52'	73° 50'	+2 00	+1 59	+1.4	−0.2	4.6	6.0	3.6
131	Carelmapu, Canal Chacao	41° 45'	73° 42'	+3 12	+3 10	*1.93	*1.20	6.9	8.8	5.3
133	Maullin, Rio Maullin	41° 37'	73° 36'	+3 15	+3 15	+2.5	−0.6	6.1	7.9	3.9
135	Corral, Bahia Corral	39° 52'	73° 26'	+0 56	+0 55	+1.4	+1.2	3.2	4.0	4.3
137	Valdivia, Rio Valdivia	39° 49'	73° 15'	+1 55	+1 55	−1.0	−1.0	3.0	3.9	2.0
139	Queule	39° 23'	73° 14'	+0 45	+0 45	−0.2	−1.0	3.8	4.9	2.4
141	Rio Imperial entrance	38° 48'	73° 23'	+0 30	+0 30	−0.2	−1.0	3.8	4.9	2.4
143	Caleta La Hacienda, Isla Mocha	38° 20'	73° 56'	+0 25	+0 25	+0.1	−0.9	4.0	5.2	2.6
145	Puerto Lebu	37° 37'	73° 41'	+0 40	+0 40	+0.1	−0.7	3.8	4.9	2.7
147	Puerto Yana	37° 22'	73° 40'	+0 35	+0 35	−0.2	−1.0	3.8	4.9	2.4
149	Isla Santa Maria	36° 59'	73° 32'	+0 30	+0 30	+1.0	−0.8	4.8	6.2	3.1
151	Bahia Lota, Bahia Arauco	37° 06'	73° 10'	+0 20	+0 20	−0.2	−1.0	3.8	4.9	2.4
153	Talcahuano, Bahia Concepcion	36° 42'	73° 06'	+0 24	+0 23	+0.1	−0.1	3.2	4.3	3.0
155	Bahia Coliumo	36° 32'	72° 58'	+0 30	+0 30	−0.2	−1.0	3.8	4.9	2.4
157	Buchupureo	36° 04'	72° 47'	+0 30	+0 30	*0.42	*0.13	1.7	2.1	1.0
159	Curanipe	35° 49'	72° 36'	+0 50	+0 50	−1.0	−1.0	3.0	3.9	2.0
161	Constitucion, Rio Maule entrance	35° 19'	72° 24'	+0 25	+0 25	−0.2	−1.0	3.8	4.9	2.4
163	Llico	34° 45'	72° 07'	+0 15	+0 15	−0.2	−1.0	3.8	4.9	2.4
165	Rada Pichilemu	34° 23'	71° 59'	+0 10	+0 10	−0.1	−1.0	3.9	5.0	2.4
167	Rada Topocalma	34° 07'	72° 00'	+0 05	+0 05	+0.4	−0.4	3.8	4.9	3.0
169	San Antonio	33° 35'	71° 38'	−0 05	−0 05	−0.1	−1.0	3.9	5.0	2.4
171	Algarrobo	33° 21'	71° 41'	+0 00	+0 00	0.0	0.0	3.0	3.9	3.0
173	Rada Quintay	33° 11'	71° 42'	−0 05	−0 05	−0.1	−1.0	3.9	5.0	2.4
175	VALPARAISO	33° 02'	71° 38'		*Daily predictions*			3.0	3.9	3.0
177	Quintero	32° 46'	71° 32'	−0 05	−0 05	+1.5	+0.7	3.8	4.9	4.1
179	Zapallar	32° 32'	71° 29'	−0 25	−0 25	−0.2	−1.0	3.8	4.9	2.4
181	Papudo	32° 30'	71° 28'	−0 25	−0 25	−0.2	−1.0	3.8	4.9	2.4
183	Pichidangui	32° 09'	71° 33'	−0 30	−0 30	−0.2	−1.0	3.8	4.9	2.4
185	Los Vilos	31° 54'	71° 32'	−0 20	−0 20	+1.0	+0.4	3.6	4.6	3.7
187	Caleta Oscuro	31° 25'	71° 37'	−0 25	−0 25	−0.3	−0.9	3.6	4.6	2.4
189	Bahia Tongoy	30° 15'	71° 31'	−0 40	−0 40	−0.2	−1.0	3.8	4.9	2.4
191	Coquimbo	29° 56'	71° 20'	−0 21	−0 23	−0.2	−0.1	2.9	3.8	2.9
193	Caleta Totoralillo	29° 29'	71° 20'	−0 50	−0 50	−0.2	−1.0	3.8	4.9	2.4
					on Antofagasta, p.20					
195	Huasco	28° 28'	71° 14'	+0 19	+0 18	−0.3	−0.4	2.7	3.5	2.3
197	Carrizal Bajo	28° 04'	71° 11'	+0 00	−0 01	*0.77	*0.54	2.3	2.9	1.9
199	Caleta Barranquillas	27° 31'	70° 56'	+0 00	+0 00	*0.90	*0.92	2.3	2.9	2.4
201	Caldera	27° 04'	70° 50'	+0 17	+0 16	+0.5	+0.3	2.8	3.6	3.0
203	Puerto Flamenco	26° 34'	70° 44'	+0 10	+0 09	+0.1	0.0	2.7	3.5	2.7
205	Chanaral de las Animas	26° 21'	70° 38'	+0 22	+0 23	+0.1	+0.1	2.6	3.4	2.7
207	Taltal	25° 25'	70° 29'	+0 15	+0 15	0.0	0.0	2.6	3.4	2.6
209	Paposo	25° 02'	70° 28'	+0 15	+0 15	0.0	0.0	2.6	3.4	2.6
211	Blanco Encalada	24° 22'	70° 32'	+0 10	+0 10	+0.1	0.0	2.7	3.5	2.7
213	ANTOFAGASTA	23° 39'	70° 25'		*Daily predictions*			2.6	3.4	2.6
215	Mejillones del Sur	23° 06'	70° 28'	+0 00	+0 00	+0.3	−0.7	3.6	4.7	2.4
217	Cobija	22° 34'	70° 18'	−0 05	−0 05	−0.4	−0.8	3.0	3.9	2.0
219	Tocopilla	22° 06'	70° 14'	−0 05	−0 05	+0.1	−0.3	3.0	3.9	2.5
221	Caleta Lobos	21° 05'	70° 11'	−0 25	−0 25	+0.4	+0.1	2.9	3.8	2.9
223	Iquique	20° 12'	70° 10'	−0 22	−0 15	+0.3	+0.5	2.4	3.1	3.0
225	Caleta Junin	19° 40'	70° 12'	−0 31	−0 13	−0.3	−0.1	2.4	3.1	2.4
227	Pisagua	19° 35'	70° 14'	−0 20	−0 20	+0.7	+0.3	3.0	3.9	3.1
229	Arica	18° 28'	70° 20'	−0 18	−0 19	*0.97	*1.08	2.4	3.1	2.6
	PERU Time meridian, 75° W				**on Matarani, p.24**					
231	Ilo	17° 38'	71° 21'	+0 02	−0 02	+0.2	0.0	2.3	2.9	1.5
233	MATARANI	17° 00'	72° 07'		*Daily predictions*			2.1	2.7	1.4
235	Puerto San Juan	15° 21'	75° 09'	−0 34	−0 37	−0.3	0.0	1.8	2.4	1.2
					on Callao, p.28					
237	Pisco	13° 43'	76° 14'	+0 36	+0 29	−0.4	−0.5	1.9	2.5	1.3
239	CALLAO	12° 03'	77° 09'		*Daily predictions*			1.8	2.4	1.7
241	Huacho	11° 07'	77° 37'	−0 24	−0 31	−0.3	−0.5	2.0	2.6	1.3
243	Bahia Huarmey	10° 06'	78° 10'	−0 46	−0 55	0.0	−0.4	2.2	2.9	1.5
245	Chimbote	9° 05'	78° 38'	−0 58	−1 05	+0.7	+0.2	2.3	3.1	2.2
247	Puerto Chicama	7° 42'	79° 27'	−1 21	−1 33	+0.5	−0.4	2.7	3.5	1.7
249	Punta Eten	6° 57'	79° 52'	−1 29	−1 41	+0.8	−0.4	3.0	3.9	1.9
					on Talara, p.32					
251	Bayovar	5° 50'	81° 03'	+0 21	+0 17	−0.6	−0.1	3.5	4.5	2.2
253	Paita	5° 05'	81° 07'	+0 12	+0 08	−0.3	−0.1	3.8	4.9	2.4
255	TALARA	4° 35'	81° 17'		*Daily predictions*			4.0	5.2	2.6
257	Caleta Lobitos	4° 27'	81° 17'	+0 02	−0 02	+0.1	0.0	4.1	5.3	2.6
259	Zorritos	3° 40'	80° 40'	+0 35	+0 51	+0.8	+0.1	4.7	6.0	3.0

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No.	PLACE	POSITION Latitude	POSITION Longitude	DIFFERENCES Time High Water	DIFFERENCES Time Low Water	DIFFERENCES Height High Water	DIFFERENCES Height Low Water	RANGES Mean	RANGES Spring	Mean Tide Level
		South	**West**	h m	h m	ft	ft	ft	ft	ft
	ECUADOR Time meridian, 75° W				**on La Libertad, p.40**					
261	Puerto Bolivar	3° 16'	80° 01'	+1 01	+0 43	*1.34	*1.25	7.3	9.4	4.7
263	Puna	2° 44'	79° 55'	+1 37	+1 49	*1.76	*1.75	9.5	12.3	6.2
265	GUAYAQUIL	2° 12'	79° 52'		*Daily predictions, p.36*			10.8	12.1	6.0
267	LA LIBERTAD, Bahia de Santa Elena	2° 13'	80° 55'		*Daily predictions*			5.4	7.0	3.5
269	Puerto de Cayo	1° 21'	80° 45'	−0 11	−0 09	*1.11	*1.11	6.0	7.7	3.9
271	Bahia Manta	0° 57'	80° 44'	−0 16	−0 11	*1.15	*1.00	6.3	8.0	4.0
273	Rio Chone	0° 35'	80° 26'	+0 08	+0 11	*1.24	*1.13	6.8	8.6	4.3
275	Cabo Pasado	0° 21'	80° 31'	+0 04	+0 05	*1.19	*1.00	6.6	8.2	4.1
		North	**West**							
277	Rio Santiago	1° 13'	79° 07'	+0 07	+0 10	*1.45	*1.25	8.0	10.0	5.0
279	San Lorenzo	1° 15'	78° 50'	+0 17	+0 09	*1.60	*1.25	8.9	11.0	5.5
	Galapagos Islands	**South**	**West**		**on San Cristobal, p.44**					
281	SAN CRISTOBAL	0° 54'	89° 37'		*Daily predictions*			4.8	6.1	3.1
283	Isla Santa Maria	1° 14'	90° 27'	−0 02	−0 07	*0.83	*0.83	4.0	5.0	2.5
285	Bahia Isabela, Isla Isabela	0° 36'	91° 05'	−0 06	−0 06	*0.80	*0.83	3.8	4.8	2.4
287	Caleta Tagus, Isla Isabela	0° 15'	91° 22'	−0 11	−0 12	*0.85	*0.83	4.1	5.2	2.5
289	Bahia de Perry, Isla Isabela	0° 34'	90° 58'	−0 06	−0 16	*0.96	*1.00	4.6	5.8	2.9
291	Caleta Aeolian, Isla Baltra	0° 26'	90° 17'	−0 02	−0 00	*1.02	*1.00	4.9	6.2	3.0
		North	**West**							
293	Bahia de Darwin, Isla Genovesa	0° 19'	89° 57'	−0 07	−0 05	*1.06	*1.00	5.1	6.4	3.1
	COLOMBIA <2>				**on Buenaventura, p.48**					
295	Tumaco	1° 50'	78° 44'	−0 19	−0 04	*0.79	*0.79	8.2	10.2	5.1
297	BUENAVENTURA	3° 54'	77° 05'		*Daily predictions*			10.4	12.9	6.5
299	Los Negritos	3° 54'	77° 24'	−0 10	−0 01	−0.4	0.0	10.0	12.5	6.3
301	Rio San Juan	4° 17'	77° 30'	−0 09	+0 00	−0.4	0.0	10.0	12.5	6.3
303	Bahia Cuevita	5° 28'	77° 31'	−0 09	+0 00	−0.3	+0.1	10.0	12.8	6.4
305	Ensenada Utria	6° 00'	77° 21'	−0 10	−0 01	−0.3	+0.1	10.0	12.8	6.4
307	Bahia Solano	6° 14'	77° 24'	−0 28	−0 09	*0.78	*0.78	8.3	10.3	5.1
309	Bahia Cupica	6° 41'	77° 30'	−0 19	−0 10	−0.1	+0.2	10.1	13.0	6.5
311	Bahia Octavia	6° 52'	77° 40'	−0 23	−0 09	−0.1	+0.2	10.1	13.0	6.5
	PANAMA <2>				**on Balboa, p.52**					
313	Bahia Pina	7° 34'	78° 11'	+0 00	−0 11	−2.4	−0.3	10.5	13.7	6.8
315	Punta Garachine	8° 05'	78° 25'	+0 00	−0 08	−2.0	−0.3	10.9	14.2	7.0
317	Isla del Rey	8° 18'	78° 54'	−0 03	−0 04	−2.2	−0.3	10.7	13.9	6.9
319	Rio Chepo	8° 59'	79° 07'	−0 01	−0 02	−0.1	0.0	12.5	16.2	8.1
321	BALBOA	8° 57'	79° 34'		*Daily predictions*			12.6	16.4	8.2
323	Naos Island	8° 55'	79° 32'	+0 01	+0 00	−0.5	−0.3	12.4	15.6	7.8
325	Taboga	8° 48'	79° 33'	−0 05	−0 06	−0.1	0.0	12.5	16.2	8.1
327	Bahia de Chame	8° 41'	79° 45'	−0 02	−0 03	−0.1	0.0	12.5	16.2	8.1
329	Punta Mala	7° 28'	80° 00'	+0 03	−0 12	*0.64	*0.63	8.1	10.5	5.2
331	Isla Cebaco	7° 31'	81° 13'	−0 06	−0 05	*0.65	*0.63	8.3	10.8	5.3
333	Bahia Honda	7° 46'	81° 31'	−0 04	−0 03	*0.65	*0.63	8.3	10.8	5.3
335	Isla Parida	8° 08'	82° 19'	+0 00	−0 09	*0.63	*0.47	8.2	10.0	5.0
					on Puntarenas, p.56					
337	Puerto Armuelles	8° 16'	82° 52'	+0 55	+0 59	+0.3	+0.2	7.6	9.6	4.8
	COSTA RICA <2> Time meridian, 90° W									
339	Golfito, Golfo Dulce	8° 39'	83° 11'	−0 13	+0 02	+1.3	+1.1	7.7	9.5	5.8
341	Bahia Uvita	9° 09'	83° 45'	−0 25	−0 20	0.0	0.0	7.5	9.2	4.5
343	Quepos	9° 24'	84° 10'	−0 13	−0 04	−0.7	0.0	6.8	8.4	4.2
345	Puerto Herradura	9° 39'	84° 40'	−0 06	−0 01	0.0	0.0	7.5	9.2	4.5
347	PUNTARENAS	9° 58'	84° 50'		*Daily predictions*			7.5	9.2	4.6
349	Bahia de Culebra	10° 38'	85° 40'	−0 02	−0 02	0.0	0.0	7.5	9.0	4.5
351	Golfo Elena	10° 56'	85° 49'	−0 02	−0 02	−0.1	−0.1	7.5	8.8	4.4
353	Cocos Island	5° 33'	86° 59'	−0 25	−0 25	−0.5	0.0	7.0	8.5	4.3
	NICARAGUA <2>									
355	Puerto Somoza	12° 12'	86° 46'	+0 11	+0 22	−1.7	−0.1	5.9	7.3	3.6
					on La Union, p.60					
357	San Juan del Sur	11° 15'	85° 53'	−0 27	−0 05	*0.77	*0.77	6.2	7.6	3.8
359	Corinto (Isla Cardon)	12° 29'	87° 10'	−0 18	+0 00	−2.1	−0.1	6.1	7.5	3.8
	HONDURAS <2>									
361	Amapala	13° 18'	87° 39'	−0 07	−0 06	−0.1	0.0	8.0	9.8	4.9
	EL SALVADOR									
363	LA UNION (Cutuco)	13° 20'	87° 49'		*Daily predictions*			8.1	10.0	5.0
365	La Libertad	13° 29'	89° 19'	−0 26	+0 00	*0.67	*0.67	5.4	6.7	3.3
367	Acajutla	13° 35'	89° 51'	−0 25	−0 03	*0.64	*0.64	5.2	6.4	3.2

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		North	**West**	h m	h m	ft	ft	ft	ft	ft
	GUATEMALA <2> Time meridian, 90° W				**on La Union, p.60**					
369	Puerto de San Jose	13° 55'	90° 50'	−0 27	−0 03	*0.61	*0.61	5.0	6.1	3.0
371	Champerico	14° 18'	91° 56'	−0 27	−0 03	*0.61	*0.61	5.0	6.1	3.0
	MEXICO <2>				**on Salina Cruz, p.64**			Mean	Diurnal	
373	Puerto Angel	15° 39'	96° 30'	−0 04	−0 04	−0.7	0.0	2.9	3.4	1.6
375	SALINA CRUZ	16° 10'	95° 12'		*Daily predictions*			3.6	4.1	1.9
377	Acapulco	16° 50'	99° 55'	−0 25	−0 24	−1.9	+0.1	1.6	2.1	1.0
					on San Diego, p.72					
379	Manzanillo	19° 03'	104° 20'	+0 37	+0 45	−2.9	−0.5	1.7	2.3	1.3
381	Puerto Vallarta	20° 37'	105° 15'	+0 22	+0 31	*0.62	*0.56	2.6	3.5	1.8
	Time meridian, 105° W									
383	Isla Socorro	18° 44'	111° 01'	−0 38	−0 29	−1.9	−0.5	2.7	3.5	1.8
385	Mazatlan	23° 12'	106° 25'	−0 38	−0 29	*0.70	*0.56	3.0	3.8	2.0
	Gulf of California									
387	Topolobampo	25° 36'	109° 03'	+0 49	+0 57	*0.68	*0.78	2.7	3.7	2.0
389	Puerto Penasco	31° 18'	113° 33'	+4 59	+5 08	*2.58	*1.33	11.7	14.1	7.0
					on Guaymas, p.68					
391	GUAYMAS †	27° 56'	110° 54'		*Daily predictions*			– –	2.6	1.3
393	Tepoca Bay	30° 16'	112° 52'	– – –	– – –	– –	– –	– –	13.0	6.5
395	Colorado River entrance <3>	31° 46'	114° 44'	– – –	– – –	– –	– –	– –	23.0	– –
397	La Paz †	24° 10'	110° 21'	+0 56	−0 47	+0.8	0.0	– –	3.4	1.7
	Baja California				**on San Diego, p.72**					
399	San Carlos	24° 47'	112° 07'	−0 09	+0 00	0.0	−0.2	4.3	5.6	2.9
	Time meridian, 120° W									
401	Isla Guadalupe	28° 53'	116° 18'	−0 30	−0 21	*0.78	*0.78	3.2	4.6	2.3
403	Ensenada, Todos Santos Bay	31° 51'	116° 38'	−0 19	−0 11	*0.92	*0.89	3.8	5.3	2.7
	CALIFORNIA									
405	Imperial Beach	32° 34.7'	117° 08.1'	+0 00	−0 03	*0.93	*0.96	3.74	5.37	2.75
407	Point Loma	32° 40'	117° 14'	−0 09	−0 02	*0.92	*0.92	3.7	5.3	2.8
409	Ballast Point, San Diego Bay	32° 41.2'	117° 14.0'	−0 03	−0 04	*0.96	*0.91	3.91	5.49	2.81
411	San Diego, Quarantine Station	32° 42'	117° 14'	−0 04	+0 02	*0.96	*0.96	3.9	5.6	2.9
413	SAN DIEGO (Broadway)	32° 42.8'	117° 10.4'		*Daily predictions*			4.05	5.73	2.96
415	National City, San Diego Bay	32° 40'	117° 07'	+0 04	+0 10	+0.2	0.0	4.3	5.9	3.0
417	Sweetwater Channel, San Diego Bay	32° 38.9'	117° 06.7'	+0 00	−0 01	*1.02	*0.93	4.20	5.80	2.97
419	Quivira Basin, Mission Bay	32° 46'	117° 14'	+0 05	+0 04	*0.95	*0.95	3.8	5.4	2.8
421	Crown Point, Mission Bay	32° 46.8'	117° 14.1'	−0 03	+0 16	*0.96	*0.96	3.9	5.5	2.8
423	La Jolla (Scripps Institution Wharf)	32° 52.0'	117° 15.5'	+0 00	−0 04	*0.92	*0.97	3.70	5.33	2.75
425	San Clemente	33° 25'	117° 37'	−0 15	−0 11	*0.92	*0.92	3.7	5.3	2.7
	San Pedro Channel				**on Los Angeles, p.76**					
427	Newport Bay Entrance, Corona del Mar	33° 36.2'	117° 53.0'	−0 03	−0 04	*0.98	*0.98	3.76	5.41	2.77
429	Balboa Pier, Newport Beach	33° 35.9'	117° 54.0'	−0 09	+0 00	*0.96	*0.96	3.65	5.33	2.74
431	Santa Ana River entrance (inside)	33° 38'	117° 57'	+0 23	+1 47	*0.54	*0.20	2.4	3.3	1.4
433	Los Patos (highway bridge)	33° 43'	118° 03'	+1 00	+1 12	*0.83	*0.60	3.4	4.7	2.3
435	Long Beach, Terminal Island	33° 45.1'	118° 13.7'	−0 01	+0 00	*1.01	*1.01	3.9	5.6	2.9
437	Long Beach, Inner Harbor	33° 46.3'	118° 12.6'	+0 04	+0 05	*0.96	*0.96	3.7	5.3	2.7
439	Cabrillo Beach	33° 42.4'	118° 16.4'	+0 00	+0 00	*1.00	*1.00	3.81	5.48	2.82
441	LOS ANGELES (Outer Harbor)	33° 43.2'	118° 16.3'		*Daily predictions*			3.81	5.49	2.85
443	Los Angeles Harbor, Mormon Island	33° 45'	118° 16'	+0 04	+0 02	−0.1	0.0	3.8	5.4	2.8
445	King Harbor, Santa Monica Bay	33° 50.8'	118° 23.9'	+0 08	+0 07	*0.96	*1.00	3.64	5.32	2.76
447	El Segundo, Santa Monica Bay	33° 55'	118° 26'	+0 13	+0 13	*0.96	*0.96	3.7	5.3	2.7
449	Santa Monica, Municipal Pier	34° 00.5'	118° 30.0'	+0 03	+0 03	*0.99	*0.99	3.76	5.43	2.81
	Santa Barbara Channel									
451	Mugu Lagoon (ocean pier)	34° 06'	119° 06'	+0 03	+0 11	*0.96	*0.96	3.7	5.3	2.7
453	Port Hueneme	34° 09'	119° 12'	+0 10	+0 13	−0.1	0.0	3.7	5.4	2.8
455	Ventura	34° 16'	119° 17'	+0 09	+0 16	−0.1	0.0	3.7	5.4	2.8
457	Rincon Island, Mussel Shoals	34° 20.9'	119° 26.6'	+0 20	+0 18	*0.99	*1.05	3.72	5.46	2.83
459	Santa Barbara	34° 24.5'	119° 41.1'	+0 23	+0 21	*0.98	*1.04	3.66	5.39	2.79
461	Gaviota State Park	34° 28.1'	120° 13.7'	+0 27	+0 25	*0.96	*1.04	3.58	5.29	2.76
463	Oil Platform Harvet	34° 28.1'	120° 40.4'	+0 37	+0 35	*0.95	*1.06	3.51	5.24	2.75
	Channel Islands									
465	Wilson Cove, San Clemente Island	33° 00'	118° 33'	−0 03	−0 03	*0.94	*0.94	3.6	5.2	2.7
467	Catalina Harbor, Santa Catalina Island	33° 26'	118° 30'	+0 11	+0 17	*0.94	*0.94	3.6	5.2	2.7
469	Avalon, Santa Catalina Island	33° 21'	118° 19'	+0 06	+0 09	*0.96	*0.96	3.7	5.3	2.7
471	Santa Barbara Island	33° 29'	119° 02'	−0 02	+0 04	*0.92	*0.92	3.5	5.1	2.6

Endnotes can be found at the end of table 2.

TABLE 2 – TIDAL DIFFERENCES AND OTHER CONSTANTS

No.	PLACE	POSITION Latitude	POSITION Longitude	DIFFERENCES Time High Water	DIFFERENCES Time Low Water	DIFFERENCES Height High Water	DIFFERENCES Height Low Water	RANGES Mean	RANGES Diurnal	Mean Tide Level
		North	**West**	h m	h m	ft	ft	ft	ft	ft
	CALIFORNIA Channel Islands–cont. Time meridian, 120° W				**on Los Angeles, p.76**					
473	San Nicolas Island	33° 16'	119° 30'	+0 10	+0 21	*0.88	*0.88	3.3	4.9	2.5
475	Prisoners Harbor, Santa Cruz Island	34° 01.2'	119° 41.0'	+0 19	+0 18	*0.94	*1.01	3.54	5.25	2.72
477	Bechers Bay, Santa Rosa Island	34° 00.5'	120° 02.8'	+0 27	+0 27	*0.93	*1.03	3.45	5.14	2.69
479	Cuyler Harbor, San Miguel Island	34° 03'	120° 21'	+0 33	+0 34	*0.94	*0.94	3.5	5.2	2.7
	Outer Coast				**on Port San Luis, p.80**					
481	Point Arguello	34° 35'	120° 39'	−0 03	−0 08	*0.96	*0.96	3.5	5.2	2.7
483	PORT SAN LUIS	35° 10.1'	120° 45.1'		*Daily predictions*			3.58	5.33	2.83
485	San Simeon	35° 38'	121° 11'	+0 08	+0 07	*0.99	*1.00	3.6	5.3	2.8
487	Mansfield Cone	35° 57.0'	121° 28.9'	+0 16	+0 16	*0.98	*0.99	3.50	5.24	2.78
					on Monterey, p.84					
489	Carmel Cove, Carmel Bay	36° 31'	121° 56'	−0 03	−0 04	*0.97	*0.99	3.5	5.2	2.8
	Monterey Bay									
491	MONTEREY, MONTEREY BAY	36° 36.3'	121° 53.3'		*Daily predictions*			3.54	5.34	2.86
493	General Fish Company Pier	36° 48.1'	121° 47.2'	+0 01	+0 01	*0.98	*0.95	3.56	5.31	2.84
495	Moss Landing, Ocean Pier	36° 48'	121° 47'	−0 01	−0 01	*0.95	*0.90	3.5	5.2	2.8
497	Elkhorn Yacht Club	36° 48.8'	121° 47.2'	+0 00	+0 02	*0.97	*0.95	3.52	5.27	2.82
499	Elkhorn Slough, Highway 1 Bridge	36° 48.6'	121° 47.1'	+0 03	−0 02	*0.95	*0.90	3.5	5.2	2.8
501	Pacific Mariculture Dock	36° 49'	121° 46'	+0 15	+0 07	*1.00	*0.98	3.6	5.4	2.9
503	Elkhorn, Elkhorn Slough	36° 49.1'	121° 44.8'	+0 21	+0 05	*0.98	*0.97	3.54	5.32	2.85
505	Kirby Park, Elkhorn Slough	36° 50'	121° 45'	+0 26	+0 08	*1.02	*0.96	3.7	5.5	2.9
507	Elkhorn Slough railroad bridge	36° 51.4'	121° 45.3'	+0 33	+0 08	*1.02	*0.96	3.74	5.52	2.94
509	Santa Cruz, Monterey Bay	36° 58'	122° 01'	−0 06	−0 11	*0.97	*0.99	3.5	5.3	2.8
					on San Francisco, p.88					
511	Ano Nuevo Island	37° 06'	122° 20'	−1 24	−1 04	−0.7	−0.1	3.5	5.2	2.7
513	Pillar Point Harbor, Half Moon Bay	37° 30.1'	122° 28.9'	−1 04	−0 43	*0.95	*0.97	3.85	5.60	3.03
515	Southeast Farallon Island	37° 42'	123° 00'	−0 39	−0 19	−0.3	0.0	3.8	5.6	3.0
517	San Francisco Bar	37° 46'	122° 38'	−0 35	−0 31	−0.2	0.0	3.9	5.6	3.0
519	Ocean Beach, outer coast	37° 46'	122° 31'	−0 49	−0 35	+0.1	0.0	4.2	6.0	3.2
	San Francisco Bay									
521	Point Bonita, Bonita Cove	37° 49'	122° 32'	−0 17	−0 10	+0.3	0.0	4.3	6.0	3.3
523	SAN FRANCISCO (Golden Gate)	37° 48.4'	122° 27.9'		*Daily predictions*			4.10	5.84	3.18
525	Alcatraz Island	37° 50'	122° 25'	+0 14	+0 18	0.0	0.0	4.1	5.8	3.1
527	San Francisco, North Point, Pier 41	37° 49'	122° 25'	+0 13	+0 11	+0.2	0.0	4.3	6.1	3.3
529	Rincon Point, Pier 22 1/2	37° 47'	122° 23'	+0 23	+0 25	+0.4	0.0	4.6	6.3	3.4
531	Yerba Buena Island	37° 48.6'	122° 21.6'	+0 25	+0 33	*1.06	*0.99	4.43	6.16	3.34
533	Oakland, Matson Wharf	37° 49'	122° 20'	+0 28	+0 36	+0.3	0.0	4.4	6.2	3.3
535	Oakland Middle Harbor	37° 48.3'	122° 20.3'	+0 21	+0 31	*1.07	*0.96	4.52	6.22	3.36
537	Oakland Pier	37° 48'	122° 20'	+0 33	+0 48	+0.2	0.0	4.3	6.0	3.2
539	Oakland Inner Harbor	37° 47.7'	122° 16.9'	+0 24	+0 31	*1.12	*0.99	4.71	6.45	3.49
541	Alameda Naval Air Station	37° 47.6'	122° 18.9'	+0 24	+0 33	*1.11	*1.00	4.65	6.40	3.46
543	Alameda	37° 46.3'	122° 17.9'	+0 29	+0 39	*1.11	*0.99	4.84	6.60	3.55
545	Oakland Harbor, Grove Street	37° 48'	122° 17'	+0 33	+0 42	+0.4	0.0	4.5	6.2	3.3
547	Oakland Harbor, Park Street Bridge	37° 46.3'	122° 14.1'	+0 24	+0 32	*1.13	*0.98	4.77	6.51	3.50
549	San Leandro Channel, San Leandro Bay	37° 44.9'	122° 14.1'	+0 42	+0 52	*1.16	*0.98	4.98	6.69	3.60
551	Oakland Airport	37° 43.9'	122° 12.5'	+0 40	+0 45	*1.15	*0.96	4.95	6.65	3.56
553	Potrero Point	37° 46'	122° 23'	+0 33	+0 46	+0.5	0.0	4.6	6.3	3.4
555	Hunters Point	37° 43.8'	122° 21.4'	+0 28	+0 43	*1.18	*1.00	5.03	6.80	3.66
557	San Leandro Marina	37° 41.7'	122° 11.5'	+0 54	+1 23	*1.28	*1.01	5.55	7.31	3.92
559	Roberts Landing, 1.3 miles west of	37° 40'	122° 12'	+0 52	+1 28	+1.4	+0.1	5.4	7.2	3.9
561	South San Francisco	37° 40'	122° 23'	+0 38	+0 56	+1.2	0.0	5.3	7.0	3.8
563	Oyster Point Marina	37° 39.9'	122° 22.6'	+0 41	+1 00	*1.23	*1.00	5.30	7.06	3.78
565	Point San Bruno	37° 39'	122° 23'	+0 38	+1 10	+1.1	+0.1	5.1	6.9	3.7
567	Seaplane Harbor	37° 38'	122° 23'	+0 42	+1 03	+1.4	0.0	5.4	7.2	3.9
569	Coyote Point Marina	37° 35.5'	122° 18.8'	+0 42	+1 08	*1.29	*1.01	5.61	7.37	3.94
571	San Mateo Bridge (west end)	37° 34.8'	122° 15.2'	+0 44	+1 11	*1.36	*1.04	5.90	7.72	4.11
573	San Mateo Bridge (east end)	37° 36'	122° 11'	+0 48	+1 19	+1.8	0.0	5.9	7.7	4.1
575	Alameda Creek	37° 35.7'	122° 08.7'	+0 57	+2 25	*1.05	*0.27	5.20	6.12	2.91
577	Coyote Hills Slough entrance	37° 33.8'	122° 07.7'	+0 52	+2 21	*1.17	*0.45	5.63	6.74	3.33
579	Bay Slough, west end	37° 33.1'	122° 14.6'	+0 48	+1 28	*1.35	*1.00	5.91	7.66	4.09
581	Bay Slough, east end	37° 32.7'	122° 13.3'	+0 49	+1 52	*1.27	*0.77	5.79	7.28	3.77
583	Redwood Creek Marker 8	37° 32'	122° 12'	+0 53	+1 28	*1.41	*1.05	6.2	8.0	4.3
585	Redwood Creek entrance (inside)	37° 31'	122° 12'	+1 06	+1 38	+2.1	+0.1	6.1	7.9	4.2
587	South Bay Wreck	37° 33'	122° 10'	+1 02	+1 37	+2.2	+0.1	6.2	8.0	4.3
589	Corkscrew Slough	37° 30'	122° 13'	+1 03	+1 42	+2.2	+0.1	6.2	8.0	4.3
591	Redwood City, Wharf 5	37° 30.4'	122° 12.6'	+0 48	+1 15	*1.45	*1.05	6.39	8.22	4.41
593	West Point Slough	37° 30.3'	122° 11.5'	+0 56	+1 30	*1.44	*1.04	6.33	8.14	4.34
595	Smith Slough	37° 30'	122° 14'	+1 15	+1 58	+2.1	0.0	6.2	7.9	4.2
597	Newark Slough	37° 31'	122° 05'	+1 11	+1 58	+2.6	+0.1	6.6	8.4	4.2
599	Dumbarton Highway Bridge	37° 30.4'	122° 06.9'	+0 47	+1 14	*1.53	*1.10	6.74	8.61	4.63
601	Ravenswood Slough <17>	37° 29.8'	122° 10.3'	+0 58	– – –	– –	– –	– –	– –	– –
603	Granite Rock, Redwood Creek	37° 29.7'	122° 12.8'	+0 55	+1 31	*1.43	*1.04	6.28	8.08	4.32
605	Palo Alto Marker 8 <18>	37° 28.1'	122° 05.8'	+1 01	– – –	– –	– –	– –	– –	– –
607	Palo Alto Yacht Harbor	37° 27.5'	122° 06.3'	+0 59	+2 14	*1.34	*0.68	6.22	7.62	3.88
609	Mowry Slough	37° 30'	122° 02'	+1 12	+2 07	+2.6	0.0	6.7	8.4	4.4
611	Calaveras Point, west of	37° 28'	122° 04'	+1 05	+1 49	+2.8	+0.1	6.8	8.5	4.6

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No.	PLACE	POSITION Latitude	POSITION Longitude	DIFFERENCES Time High Water	DIFFERENCES Time Low Water	DIFFERENCES Height High Water	DIFFERENCES Height Low Water	RANGES Mean	RANGES Diurnal	Mean Tide Level
		North	West	h m	h m	ft	ft	ft	ft	ft
	CALIFORNIA San Francisco Bay–cont. Time meridian, 120° W				**on San Francisco, p.88**					
613	Mud Slough railroad bridge <18>	37° 28.1'	121° 59.2'	+1 12	– – –	– –	– –	– –	– –	– –
615	Guadalupe Slough	37° 27.2'	122° 02.0'	+1 06	– – –	– –	– –	– –	– –	– –
617	Upper Guadalupe Slough	37° 26.1'	122° 00.4'	+1 14	+2 13	*1.66	*1.13	7.40	9.29	4.98
619	Coyote Creek, Alviso Slough	37° 27.8'	122° 01.4'	+0 59	+1 49	*1.61	*1.09	7.18	9.00	4.83
621	Gold Street Bridge, Alviso Slough	37° 25.4'	121° 58.5'	+1 03	+2 21	*1.67	*0.96	7.62	9.28	4.90
623	Coyote Creek, Tributary no.1	37° 27'	121° 58'	+1 21	+2 45	+2.6	−0.3	7.0	8.4	4.3
625	Coyote Creek, Tributary no.2 <18>	37° 27.6'	121° 57.2'	+1 18	– – –	– –	– –	– –	– –	– –
627	Coyote Creek, Tributary no.3 <18>	37° 27.7'	121° 57.1'	+1 15	– – –	– –	– –	– –	– –	– –
629	Sausalito	37° 50.8'	122° 28.6'	+0 10	+0 14	*0.97	*1.00	3.95	5.69	3.12
631	Sausalito, Corps of Engineers Dock	37° 51.9'	122° 29.6'	+0 10	+0 21	*0.98	*1.00	4.01	5.73	3.13
633	Angel Island (west side)	37° 52'	122° 27'	+0 13	+0 21	−0.2	0.0	3.9	5.6	3.0
635	Angel Island, East Garrison	37° 51.8'	122° 25.1'	+0 16	+0 20	*1.02	*1.04	4.16	5.92	3.25
637	Point Chauncey	37° 53.5'	122° 26.6'	+0 28	+0 32	*0.98	*0.96	4.05	5.72	3.10
639	Berkeley	37° 52'	122° 18'	+0 21	+0 38	+0.1	0.0	4.2	5.9	3.2
641	Point Isabel	37° 54'	122° 19'	+0 23	+0 33	+0.1	0.0	4.2	5.9	3.2
643	Richmond Inner Harbor	37° 54.6'	122° 21.5'	+0 16	+0 30	*1.04	*0.98	4.30	6.04	3.27
645	Chevron Oil Company Pier, Richmond	37° 55.7'	122° 24.0'	+0 24	+0 38	*1.04	*0.98	4.32	6.05	3.25
647	Point Orient	37° 57.5'	122° 25.5'	+0 50	+0 52	*1.03	*0.96	4.28	5.98	3.24
649	Corte Madera Creek	37° 56.6'	122° 30.8'	+0 36	+0 51	*0.99	*0.95	4.12	5.80	3.14
651	Point San Quentin	37° 56.7'	122° 28.4'	+0 42	+0 50	*0.99	*0.93	4.11	5.78	3.12
	San Pablo Bay									
653	Point San Pedro	37° 59.6'	122° 26.8'	+1 02	+1 07	*1.01	*0.92	4.22	5.87	3.16
655	Pinole Point	38° 00.9'	122° 21.7'	+1 16	+1 25	*1.03	*0.89	4.34	5.98	3.20
657	Hercules, Refugio Landing	38° 01.4'	122° 17.5'	+1 15	+1 39	*1.05	*0.85	4.52	6.08	3.23
659	Petaluma River entrance	38° 06.7'	122° 29.9'	+1 23	+2 08	*1.06	*0.86	4.55	6.13	3.28
661	Lakeville, Petaluma River	38° 12'	122° 34'	+1 59	+2 50	*1.11	*0.81	4.9	6.3	3.4
663	Upper drawbridge, Petaluma River	38° 13.7'	122° 36.8'	+2 11	+2 59	*1.15	*0.82	5.10	6.59	3.47
665	Gallinas, Gallinas Creek	38° 00.9'	122° 30.2'	+1 18	+1 25	*1.02	*0.89	4.30	5.92	3.16
667	Hog Island, San Antonio Creek	38° 09.4'	122° 33.0'	+1 47	+2 36	*1.07	*0.79	4.68	6.08	3.23
669	Sonoma Creek Entrance	38° 09.4'	122° 24.4'	+1 22	+2 46	*0.93	*0.59	4.17	5.43	2.75
671	Wingo, Sonoma Creek	38° 13'	122° 26'	+2 12	+3 11	+0.1	−0.3	4.5	5.9	3.1
	Carquinez Strait									
673	Mare Island	38° 04.2'	122° 15.0'	+1 34	+1 57	*0.99	*0.84	4.24	5.76	3.07
675	Vallejo, Mare Island Strait	38° 06.7'	122° 16.4'	+1 47	+2 12	*1.02	*0.84	4.41	5.92	3.15
677	Edgerley Island, Napa River	38° 11.6'	122° 18.8'	+2 02	+2 29	*1.06	*0.76	4.69	6.13	3.20
679	Brazos Drawbridge, Napa River	38° 12.5'	122° 18.2'	+2 02	+2 29	*1.14	*0.86	4.98	6.50	3.46
681	Napa, Napa River	38° 17.9'	122° 16.8'	+2 05	+2 37	*1.22	*0.90	5.35	6.86	3.71
683	Selby	38° 03'	122° 15'	+1 29	+2 04	+0.6	0.0	4.7	6.3	3.4
					on Port Chicago, p.92					
685	Crockett	38° 03.5'	122° 13.4'	−0 58	−1 05	*1.22	*1.31	4.40	5.94	3.17
687	Benicia	38° 02.6'	122° 07.8'	−0 24	−0 33	*1.09	*1.18	3.93	5.33	2.93
689	Martinez – Amoroco Pier	38° 02.0'	122° 07.5'	−0 26	−0 30	*1.09	*1.18	3.93	5.31	2.83
	Suisun Bay									
691	Suisun Slough entrance	38° 07.3'	122° 04.4'	+0 13	+0 26	*0.97	*0.93	3.53	4.72	2.45
693	Pierce Harbor, Goodyear Slough	38° 07.6'	122° 06.0'	+0 27	+0 41	*1.00	*0.96	3.72	4.92	2.57
695	Joice Island, Suisun Slough	38° 10.8'	122° 02.7'	+0 21	+0 41	*1.07	*1.00	3.97	5.21	2.73
697	Suisun City, Suisun Slough	38° 14.2'	122° 01.8'	+0 36	+1 01	*1.11	*1.00	4.17	5.40	2.82
699	PORT CHICAGO, SUISUN BAY	38° 03.4'	122° 02.3'		*Daily predictons*			3.67	4.91	2.57
701	Montezuma Slough Bridge	38° 11.2'	121° 58.8'	+0 37	+0 46	*1.01	*0.95	3.71	4.91	2.56
703	Bradmoor Island, Nurse Slough	38° 11.0'	121° 55.4'	+0 59	+1 06	*1.07	*0.99	3.92	5.17	2.69
705	Meins Landing, Montezuma Slough	38° 08.2'	121° 54.4'	+0 57	+1 11	*1.01	*0.93	3.70	4.90	2.54
707	Montezuma Slough	38° 04.6'	121° 53.1'	+1 16	+1 27	*0.84	*0.82	3.06	4.15	2.14
709	Point Buckler	38° 06.0'	122° 01.0'	+0 13	+0 22	*1.12	*1.08	4.10	5.50	2.80
711	Mallard Island Ferry Wharf	38° 02.6'	121° 55.1'	+0 54	+0 57	*0.83	*0.81	3.01	4.10	2.10
713	Pittsburg, New York Slough	38° 02.1'	121° 52.8'	+0 59	+1 05	*0.83	*0.84	3.02	4.14	2.13
	San Joaquin River									
715	Antioch	38° 01.2'	121° 48.9'	+1 12	+1 26	*0.77	*0.78	2.82	3.88	2.03
717	Threemile Slough entrance	38° 05.0'	121° 41.0'	+2 27	+2 52	*0.71	*0.68	2.60	3.60	1.80
719	Prisoners Point	38° 03.7'	121° 33.3'	+3 25	+3 29	*0.73	*0.69	2.71	3.66	1.86
721	Wards Island, Little Connection Slough	38° 03.0'	121° 29.8'	+3 45	+3 51	*0.68	*0.61	2.50	3.37	1.70
723	Blackslough Landing	37° 59.7'	121° 25.3'	+4 00	+4 15	*0.75	*0.62	2.82	3.73	1.87
725	Stockton	37° 57.5'	121° 17.4'	+4 06	+4 33	*0.81	*0.66	3.06	3.98	2.02
	Mokelumne River									
727	Georgiana Slough entrance	38° 07.6'	121° 34.7'	+3 29	+3 41	*0.67	*0.59	2.46	3.34	1.67
729	Terminous, South Fork	38° 06.6'	121° 29.9'	+3 53	+4 11	*0.70	*0.59	2.62	3.50	1.75
731	New Hope Bridge <4>	38° 14.0'	121° 29.0'	+4 22	+4 56	*0.73	*0.68	2.70	3.60	1.80
733	Bishop Cut, Disappointment Slough	38° 02.6'	121° 25.1'	+4 12	+4 12	*0.79	*0.66	2.94	3.86	1.96
735	False River	38° 03.3'	121° 39.3'	+2 45	+2 45	*0.66	*0.64	2.40	3.31	1.67
737	Dutch Slough	38° 00.7'	121° 38.3'	+2 33	+2 46	*0.68	*0.72	2.46	3.45	1.76
739	Irish Landing, Sand Mound Slough	38° 02.0'	121° 35.0'	+3 29	+3 34	*0.73	*0.68	2.70	3.60	1.80
741	Orwood, Old River	37° 56.0'	121° 34.0'	+4 32	+4 33	*0.76	*0.68	2.80	3.70	1.90
743	Holt, Whiskey Slough	37° 56.0'	121° 26.0'	+4 18	+4 39	*0.80	*0.68	3.00	3.90	2.00

Endnotes can be found at the end of table 2.

TABLE 2 – TIDAL DIFFERENCES AND OTHER CONSTANTS

No.	PLACE	POSITION Latitude	POSITION Longitude	DIFFERENCES Time High Water	DIFFERENCES Time Low Water	DIFFERENCES Height High Water	DIFFERENCES Height Low Water	RANGES Mean	RANGES Diurnal	Mean Tide Level
		North	West	h m	h m	ft	ft	ft	ft	ft
	CALIFORNIA San Joaquin River–cont. Time meridian, 120° W				**on Port Chicago, p.92**					
745	Borden Highway Bridge, Old River	37° 53.4'	121° 34.2'	+4 40	+4 35	*0.64	*0.61	2.33	3.18	1.61
747	Borden Highway Bridge, Middle River	37° 53.5'	121° 29.3'	+4 50	+4 54	*0.67	*0.62	2.51	3.37	1.72
749	Borden Highway Bridge, San Joaquin River	37° 56.2'	121° 20.0'	+4 28	+4 48	*0.78	*0.64	2.95	3.85	1.95
751	Grant Line Canal (drawbridge)	37° 49.0'	121° 27.0'	+6 14	+6 20	*0.76	*0.68	2.80	3.70	1.90
	Sacramento River									
753	Collinsville	38° 04.4'	121° 50.9'	+1 11	+1 20	*0.80	*0.80	2.89	3.96	2.03
755	Threemile Slough	38° 06.4'	121° 42.0'	+1 49	+1 58	*0.82	*0.78	3.01	4.05	2.08
757	Rio Vista	38° 08.8'	121° 41.4'	+1 51	+2 02	*0.88	*0.78	3.25	4.31	2.20
759	Steamboat Slough, Snug Harbor Marina	38° 12.0'	121° 36.7'	+2 24	+2 48	*0.80	*0.65	3.02	3.96	1.99
761	Snodgrass Slough	38° 16.5'	121° 29.2'	+5 00	+5 36	*0.49	*0.39	1.83	2.48	1.21
763	Clarksburg <4>	38° 25.0'	121° 31.0'	+3 58	+5 02	*0.60	*0.41	2.30	2.90	1.40
765	Sacramento <4>	38° 35.0'	121° 30.0'	+5 07	+6 32	*0.60	*0.41	2.30	2.90	1.40
	Outer Coast				**on San Francisco, p.88**					
767	Bolinas Lagoon	37° 54.4'	122° 40.7'	+0 01	+0 34	*0.74	*0.71	3.05	4.48	2.34
769	Point Reyes	37° 59.8'	122° 58.5'	−0 51	−0 31	*0.98	*1.04	3.91	5.77	3.14
	Tomales Bay									
771	Tomales Bay entrance	38° 14'	122° 59'	−0 12	+0 20	*0.87	*0.91	3.5	5.2	2.7
773	Sand Point, Tomales Bay	38° 13.9'	122° 58.0'	−0 04	+0 17	*0.85	*0.86	3.47	5.16	2.71
775	Blakes Landing, Tomales Bay	38° 11.4'	122° 55.0'	+0 32	+1 15	*0.86	*0.79	3.63	5.22	2.70
777	Marshall, Tomales Bay	38° 10'	122° 54'	+0 38	+1 16	−0.6	−0.1	3.6	5.4	2.8
779	Reynolds, Tomales Bay	38° 08.8'	122° 53.0'	+0 26	+1 59	*0.89	*0.83	3.73	5.41	2.82
781	Inverness, Tomales Bay	38° 06.8'	122° 52.1'	+0 29	+1 08	*0.94	*0.91	3.89	5.66	2.98
783	Bodega Harbor entrance	38° 18'	123° 03'	−0 38	−0 16	−0.2	+0.1	3.8	5.7	3.1
785	Fort Ross	38° 31'	123° 15'	−0 51	−0 30	*0.96	*0.96	3.9	5.7	3.0
					on Arena Cove, p.96					
787	Green Cove	38° 42.2'	123° 26.9'	+0 01	−0 01	*0.88	*0.81	3.63	5.23	2.62
789	ARENA COVE	38° 54.8'	123° 42.5'		*Daily predictions*			4.05	5.88	3.19
791	Point Arena	38° 57'	123° 44'	+0 03	+0 01	*0.98	*0.95	4.0	5.8	3.1
793	Mendocino, Mendocino Bay	39° 18'	123° 48'	+0 07	+0 01	*0.98	*0.95	4.0	5.8	3.1
795	Noyo Harbor	39° 25.5'	123° 48.3'	+0 03	+0 03	*1.04	*1.04	4.22	6.11	3.33
797	Westport	39° 38'	123° 47'	+0 14	+0 00	*0.98	*0.95	4.0	5.8	3.1
799	Shelter Cove	40° 02'	124° 04'	+0 06	+0 05	*1.04	*1.03	4.2	6.0	3.3
					on Humboldt Bay, p.100					
	Humboldt Bay									
801	HUMBOLDT BAY (North Spit)	40° 46.0'	124° 13.0'		*Daily predictions*			4.89	6.86	3.70
803	Fields Landing	40° 43.4'	124° 13.3'	−0 03	+0 14	*1.00	*0.99	4.92	6.85	3.69
805	Hookton Slough	40° 41.2'	124° 13.3'	+0 06	+0 15	*1.01	*0.98	4.98	6.94	3.72
807	Elk River Railroad Bridge <18>	40° 45.4'	124° 11.6'	+0 19	+1 32	*0.71	*0.31	4.01	5.10	2.39
809	Bucksport	40° 46.7'	124° 11.8'	+0 17	+0 16	*1.01	*1.00	4.98	6.97	3.75
811	Eureka	40° 48.4'	124° 10.0'	+0 26	+0 13	*1.06	*1.03	5.33	7.32	3.94
813	Eureka Slough Bridge	40° 48.4'	124° 08.5'	+0 33	+0 19	*1.08	*1.02	5.37	7.40	3.97
815	Samoa	40° 49.6'	124° 10.8'	+0 22	+0 11	*1.07	*1.04	5.31	7.34	3.96
817	Arcata Wharf	40° 51'	124° 07'	+0 48	+0 54	+0.1	+0.1	5.0	7.0	3.8
819	Mad River Slough, Arcata Bay	40° 51.9'	124° 08.9'	+0 43	+0 35	*1.12	*1.07	5.56	7.63	4.13
					on Crescent City, p.104					
821	Trinidad Harbor	41° 03.4'	124° 08.8'	−0 02	−0 03	*0.97	*0.98	4.83	6.73	3.63
823	CRESCENT CITY	41° 44.7'	124° 11.0'		*Daily predictions*			4.99	6.87	3.74
825	Pyramid Point, Smith River	41° 56.7'	124° 12.0'	+0 12	+0 11	*0.93	*0.90	4.68	6.41	3.46
	OREGON									
827	Brookings, Chetco Cove	42° 03'	124° 17'	+0 01	+0 04	*1.00	*1.00	5.1	6.9	3.7
829	Gold Beach, Rogue River	42° 25.3'	124° 25.1'	+0 15	+0 16	*1.04	*1.09	5.13	7.16	3.93
831	Wedderburn, Rogue River	42° 26'	124° 25'	+0 09	+0 16	*0.95	*0.92	4.9	6.7	3.6
833	Port Orford	42° 44.4'	124° 29.8'	+0 13	+0 11	*1.06	*1.09	5.21	7.28	3.97
					on Charleston, p.108					
835	Bandon, Coquille River	43° 07.2'	124° 24.8'	−0 05	+0 02	*0.92	*0.94	5.18	7.10	3.78
	Coos Bay									
837	CHARLESTON	43° 20.7'	124° 19.3'		*Daily predictions*			5.69	7.62	4.11
839	Sitka Dock	43° 22.6'	124° 17.8'	+0 07	+0 08	*1.01	*1.01	5.78	7.72	4.17
841	Empire	43° 24'	124° 17'	+0 37	+0 50	*0.86	*0.88	4.9	6.7	3.5
843	Coos Bay	43° 23'	124° 13'	+1 26	+1 28	*0.96	*0.88	5.6	7.3	3.9
	Umpqua River									
845	Entrance, Half Moon Bay	43° 40.5'	124° 11.5'	+0 11	+0 15	*0.93	*0.95	5.29	7.14	3.85
847	Gardiner	43° 44'	124° 07'	+0 56	+1 09	*0.88	*0.80	5.1	6.7	3.5
849	Reedsport	43° 42'	124° 06'	+1 11	+1 24	*0.88	*0.80	5.1	6.7	3.6
	Siuslaw River									
851	Entrance	44° 01'	124° 08'	−0 06	+0 03	*0.96	*0.96	5.5	7.3	4.0
853	Florence, USCG pier	44° 00.1'	124° 07.4'	+0 10	+0 15	*0.97	*0.98	5.53	7.41	4.01
855	Florence	43° 58'	124° 06'	+0 44	+0 58	*0.86	*0.80	5.0	6.6	3.5
857	Waldport, Alsea Bay	44° 26.1'	124° 03.5'	+0 34	+0 45	*0.99	*0.98	5.62	7.59	4.07
859	Drift Creek, Alsea River	44° 24.8'	123° 59.4'	+0 44	+1 51	*0.83	*0.53	5.10	6.45	3.21

Endnotes can be found at the end of table 2.

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No.	PLACE	POSITION Latitude	POSITION Longitude	DIFFERENCES Time High Water	DIFFERENCES Time Low Water	DIFFERENCES Height High Water	DIFFERENCES Height Low Water	RANGES Mean	RANGES Diurnal	Mean Tide Level
		North	West	h m	h m	ft	ft	ft	ft	ft
	OREGON–cont. Time meridian, 120° W				on Crescent City, p.104					
	Yaquina Bay and River									
861	Newport, Yaquina USCG Station	44° 37.6'	124° 03.3'	+0 39	+0 35	*1.22	*1.11	6.22	8.21	4.49
863	Southbeach	44° 37.5'	124° 02.6'	+0 41	+0 34	*1.23	*1.10	6.27	8.34	4.51
865	Weiser Point	44° 35.6'	124° 00.4'	+0 46	+0 40	*1.25	*1.07	6.46	8.47	4.57
867	Toledo	44° 37.0'	123° 56.2'	+1 02	+1 17	*1.31	*1.02	6.87	8.83	4.71
869	Depoe Bay	44° 48.6'	124° 03.5'	+0 27	+0 27	*1.21	*1.10	6.16	8.24	4.45
871	Taft, Siletz Bay	44° 56'	124° 01'	+0 48	+1 13	*0.94	*0.75	5.0	6.6	3.4
873	Kernville, Siletz River	44° 54'	124° 00'	+1 24	+1 53	*0.86	*0.67	4.6	6.1	3.1
875	Cascade Head, Salmon River	45° 02.8'	124° 00.4'	+0 35	+1 02	*1.03	*0.77	5.47	7.13	3.71
877	Nestucca Bay entrance	45° 10'	123° 58'	+0 55	+1 12	*1.10	*0.92	5.8	7.6	4.0
879	Netarts, Netarts Bay	45° 25.8'	123° 56.7'	+1 17	+1 38	*0.98	*0.85	5.02	6.86	3.58
	Tillamook Bay									
881	Barview	45° 34'	123° 57'	+0 42	+0 56	*1.08	*0.92	5.7	7.5	3.9
883	Garibaldi	45° 33.3'	123° 55.1'	+1 12	+0 59	*1.22	*1.09	6.24	8.31	4.48
885	Miami Cove	45° 33'	123° 54'	+1 15	+1 26	*1.06	*0.92	5.6	7.4	3.9
887	Bay City	45° 31'	123° 54'	+1 33	+2 00	*1.02	*0.83	5.4	7.1	3.7
889	Dick Point	45° 28.9'	123° 54.1'	+1 29	+2 19	*1.00	*0.57	5.54	6.95	3.48
891	Tillamook, Hoquarten Slough	45° 28'	123° 51'	+1 52	+3 15	*0.94	*0.58	5.2	6.6	3.3
	Nehalem River									
893	Brighton	45° 40'	123° 56'	+0 51	+0 54	*1.13	*1.00	5.9	7.8	4.1
895	Nehalem	45° 43'	123° 53'	+1 17	+1 56	*1.03	*0.75	5.6	7.2	3.7
	OREGON and WASHINGTON Columbia River <5>				on Astoria, p.112					
897	Columbia River entrance (N. Jetty)	46° 16'	124° 04'	−0 44	−1 00	−1.0	+0.1	5.6	7.5	4.0
899	Fort Canby, Jetty 'A', Wash.	46° 16.1'	124° 02.2'	−0 41	−1 05	*0.97	*1.22	6.31	8.48	4.58
901	Ilwaco, Baker Bay, Wash.	46° 18'	124° 02'	−0 13	+0 01	−0.8	−0.1	6.0	7.6	4.0
903	Chinook, Baker Bay, Wash.	46° 16'	123° 57'	−0 30	−0 52	*0.95	*1.12	6.1	8.1	4.3
905	Hungry Harbor, Wash.	46° 16'	123° 51'	+0 04	−0 09	−0.2	+0.1	6.4	8.2	4.4
907	Point Adams, Oreg.	46° 12'	123° 57'	−0 25	−0 38	−0.2	+0.1	6.4	8.3	4.4
909	Hammond, Oreg.	46° 12.1'	123° 56.7'	−0 38	−0 30	*0.96	*1.08	6.38	8.32	4.45
911	Warrenton, Skipanon River, Oreg.	46° 10'	123° 55'	−0 13	−0 19	−0.1	+0.1	6.5	8.3	4.4
913	Astoria, Youngs Bay, Oreg.	46° 10'	123° 50'	−0 13	−0 14	+0.1	+0.1	6.7	8.6	4.5
915	Cathcart Landing, Youngs River, Oreg.	46° 07.5'	123° 48.3'	−0 08	−0 06	*1.03	*0.98	7.00	8.83	4.64
917	Astoria (Port Docks), Oreg.	46° 11'	123° 52'	−0 08	−0 03	−0.5	0.0	6.2	8.0	4.2
919	ASTORIA (Tongue Point), Oreg.	46° 12.5'	123° 46.0'		*Daily predictions*			6.77	8.61	4.55
921	Knappa, Knappa Slough	46° 11'	123° 35'	+0 29	+0 58	*0.97	*0.86	6.5	8.2	4.2
923	Settlers Point, Oreg.	46° 10'	123° 41'	+0 22	+0 53	−0.5	−0.1	6.3	8.0	4.1
925	Harrington Point, Wash.	46° 16'	123° 39'	+0 21	+0 52	−0.8	−0.2	6.1	7.7	3.9
927	Skamokawa, Steamboat Slough, Wash.	46° 16.0'	123° 27.1'	+0 45	+1 22	– –	– –	6.12	7.56	3.86
929	Cathlamet, Wash.	46° 12'	123° 23'	+1 15	+2 15	– –	– –	5.2	6.4	– –
931	Wauna, Oreg.	46° 09.6'	123° 24.3'	+1 03	+1 45	– –	– –	5.77	7.06	3.57
933	Eagle Cliff, Wash.	46° 10'	123° 14'	+1 43	+3 01	– –	– –	4.5	5.5	– –
935	Stella, Wash.	46° 11'	123° 07'	+2 01	+3 30	– –	– –	4.0	4.9	– –
937	Longview, Wash.	46° 06.4'	122° 57.3'	+1 59	+3 31	– –	– –	3.78	4.61	2.24
939	Kalama, Wash.	46° 00'	122° 51'	+2 54	+4 55	– –	– –	2.6	3.2	– –
941	Saint Helens, Oreg.	45° 51.9'	122° 47.8'	+3 19	+4 49	– –	– –	2.60	3.33	1.54
943	Knapp Landing, Wash.	45° 44'	122° 45'	+4 26	+6 28	– –	– –	1.5	2.0	– –
945	Rocky Point, Multnomah Channel, Oreg.	45° 41.8'	122° 50.1'	+4 19	+6 02	– –	– –	2.52	3.32	1.49
947	Kelley Point, Oreg.	45° 39'	122° 46'	+5 26	+7 16	– –	– –	1.4	2.0	– –
949	St. Johns, Willamette River, Oreg.	45° 35'	122° 46'	+5 08	+7 26	– –	– –	1.7	2.2	– –
951	Portland, Willamette River, Oreg.	45° 30.6'	122° 40.4'	+4 21	+6 33	– –	– –	2.85	3.62	1.68
953	Vancouver, Wash.	45° 37.9'	122° 41.8'	+4 32	+6 14	– –	– –	2.57	3.33	1.51
955	Ellsworth, Wash.	45° 36'	122° 33'	+6 11	+8 03	– –	– –	1.0	1.4	– –
957	Washougal, Wash.	45° 35'	122° 23'	– – –	– – –	– –	– –	0.5	0.9	– –
959	Warrendale, Oreg.	45° 37'	122° 00'	– – –	– – –	– –	– –	0.4	0.6	– –
	WASHINGTON				on Toke Point, p.116					
	Willapa Bay									
961	Nahcotta	46° 30.1'	124° 01.8'	+0 29	+0 28	*1.13	*1.01	7.89	10.03	5.33
963	Tarlatt Slough	46° 22.2'	124° 00.3'	+0 45	+1 14	*1.05	*1.05	7.9	9.4	4.6
965	Paradise Point, Long Island	46° 28.1'	123° 56.7'	+0 43	+0 41	*1.15	*1.04	8.0	10.2	5.4
967	Naselle River, swing bridge	46° 25.8'	123° 54.2'	+0 42	+0 37	*1.22	*1.08	8.48	10.72	5.72
969	Naselle River, 4 miles above swing bridge	46° 23.3'	123° 50.4'	+1 02	+1 02	*1.22	*0.93	8.68	10.75	5.62
971	Bay Center, Palix River	46° 37.4'	123° 56.7'	+0 09	+0 22	*1.04	*1.03	7.07	9.21	4.94
973	Palix River, south fork	46° 35.2'	123° 54.6'	+0 25	+0 31	*1.04	*0.96	7.17	9.28	4.90
975	TOKE POINT	46° 42.5'	123° 57.9'		*Daily predictions*			6.81	8.92	4.78
977	Mailboat Slough, Willapa River	46° 41.3'	123° 49.0'	+0 18	+0 11	*1.07	*1.02	7.36	9.52	5.08
979	South Bend, Willapa River	46° 39.8'	123° 47.9'	+0 14	+0 15	*1.11	*1.05	7.66	9.82	5.27
981	Raymond, Willapa River	46° 41.0'	123° 45.3'	+0 27	+0 17	*1.13	*1.04	7.85	10.01	5.30
	Grays Harbor									
983	Westport, Point Chehalis	46° 54.5'	124° 06.6'	−0 18	−0 33	*1.03	*1.02	7.02	9.15	4.91
985	Point Brown	46° 56.9'	124° 07.7'	−0 09	−0 24	*1.06	*1.04	7.22	9.38	5.04
987	Bay City, South Bay	46° 51.7'	124° 04.0'	−0 01	−0 26	*1.10	*1.13	7.41	9.69	5.25
989	Markham	46° 54.4'	123° 59.9'	+0 05	−0 15	*1.06	*1.02	7.3	9.4	5.1
991	ABERDEEN	46° 58.1'	123° 51.2'		*Daily predictions, p.120*			7.94	10.11	5.44
993	Cosmopolis, Chehalis River	46° 58.0'	123° 46.7'	+0 26	+0 15	*1.23	*1.12	8.53	10.73	5.80
995	Montesano, Chehalis River	46° 58.1'	123° 36.0'	+1 34	+1 45	*0.94	*0.94	6.78	8.23	4.27
997	Point Grenville	47° 18.2'	124° 16.2'	−0 37	−0 44	*0.92	*0.90	6.30	8.19	4.38

Endnotes can be found at the end of table 2.

TABLE 2 – TIDAL DIFFERENCES AND OTHER CONSTANTS

No.	PLACE	POSITION Latitude	POSITION Longitude	DIFFERENCES Time High Water	DIFFERENCES Time Low Water	DIFFERENCES Height High Water	DIFFERENCES Height Low Water	RANGES Mean	RANGES Diurnal	Mean Tide Level
		North	West	h m	h m	ft	ft	ft	ft	ft
	WASHINGTON–cont. Time meridian, 120° W				**on Toke Point, p.116**					
999	Destruction Island	47° 40'	124° 29'	−0 37	−0 43	*0.98	*1.02	6.6	8.7	4.7
1001	James Island	47° 54.4'	124° 38.8'	−0 39	−0 32	*0.92	*0.96	6.22	8.21	4.42
1003	La Push, Quillayute River	47° 54.8'	124° 38.2'	−0 37	−0 35	*0.94	*1.00	6.37	8.44	4.55
1005	Makah Bay	48° 17.8'	124° 40.3'	−0 25	−0 28	*0.99	*1.10	6.56	8.83	4.79
	Strait of Juan de Fuca <6>									
1007	Tatoosh Island, Cape Flattery	48° 23.5'	124° 44.2'	−0 22	−0 25	*0.88	*1.12	5.63	8.00	4.35
1009	NEAH BAY	48° 22.1'	124° 37.0'		*Daily predictions, p.124*			5.52	7.96	4.35
1011	Sekiu, Clallam Bay	48° 15.8'	124° 17.8'	+0 21	+0 02	*0.81	*0.81	4.88	7.50	4.21
1013	Twin Rivers	48° 10.5'	123° 57.0'	+0 33	+0 44	*0.77	*0.77	4.41	7.01	4.12
					on Port Townsend, p.128					
1015	Crescent Bay	48° 10'	123° 44'	−2 41	−2 02	*0.80	*0.80	4.1	6.7	4.1
1017	Port Angeles	48° 07.5'	123° 26.4'	−1 45	−1 14	*0.83	*0.77	4.60	7.06	4.22
1019	Ediz Hook, Port Angeles	48° 08.4'	123° 24.8'	−1 37	−1 13	*0.81	*0.90	4.08	7.01	4.28
1021	Dungeness	48° 10'	123° 07'	−0 54	−0 38	*0.90	*0.90	4.4	7.6	4.7
1023	Sequim Bay entrance	48° 05'	123° 03'	−0 39	−0 07	*0.94	*0.94	4.8	7.9	4.8
1025	Gardiner, Discovery Bay	48° 04'	122° 55'	−0 47	−0 17	*0.94	*0.94	4.8	7.9	4.8
1027	Smith Island	48° 19'	122° 50'	−0 13	−0 25	*0.83	*0.83	4.2	7.0	4.5
1029	Point Partridge, Whidbey Island	48° 14'	122° 46'	−0 11	−0 15	*0.92	*0.92	4.5	7.7	4.7
1031	Sunset Beach, Whidbey Island	48° 17.0'	122° 43.7'	−0 27	−0 16	*0.87	*0.95	4.30	7.39	4.71
	Admiralty Inlet									
1033	Admiralty Head	48° 10'	122° 40'	−0 11	+0 20	0.0	−0.1	5.2	8.4	5.1
1035	PORT TOWNSEND	48° 06.7'	122° 45.5'		*Daily predictions*			5.34	8.52	5.17
1037	Marrowstone Point	48° 06'	122° 41'	+0 02	+0 05	+0.4	−0.1	5.6	8.8	5.3
1039	Mystery Bay, Marrowstone Island	48° 03.5'	122° 41.5'	+0 15	+0 52	*0.95	*0.99	5.01	8.19	4.97
1041	Bush Point, Whidbey Island	48° 02.0'	122° 36.4'	+0 10	+0 45	*1.09	*1.08	5.87	9.35	5.64
	Hood Canal				**on Seattle, p.132**					
1043	Port Ludlow	47° 55.5'	122° 40.8'	−0 14	−0 14	*0.87	*0.95	6.4	9.9	5.9
1045	Foulweather Bluff, Twin Spit	47° 55.6'	122° 37.0'	−0 16	−0 14	*0.88	*0.95	6.46	10.00	5.95
1047	Port Gamble	47° 51.5'	122° 34.8'	−0 09	−0 05	*0.90	*0.95	6.7	10.3	6.1
1049	Lofall	47° 48.9'	122° 39.4'	−0 08	−0 06	*0.94	*1.01	6.96	10.71	6.34
1051	Bangor Wharf	47° 44.9'	122° 43.6'	−0 06	+0 01	*0.97	*1.03	7.31	11.13	6.57
1053	Zelatched Point, Dabob Bay	47° 42.7'	122° 49.3'	−0 09	−0 05	*1.00	*1.02	7.6	11.5	6.7
1055	Whitney Point, Dabob Bay	47° 45.7'	122° 51.0'	−0 05	+0 02	*1.01	*1.06	7.59	11.55	6.80
1057	Quilcene, Quilcene Bay, Dabob Bay	47° 48.0'	122° 51.5'	−0 08	−0 02	*1.00	*1.04	7.59	11.38	6.74
1059	Seabeck, Seabeck Bay	47° 38.5'	122° 49.7'	−0 04	+0 01	*1.01	*1.06	7.58	11.53	6.79
1061	Pleasant Harbor	47° 39.9'	122° 54.7'	−0 14	−0 01	*1.01	*1.02	7.7	11.6	6.8
1063	Triton Head	47° 36.2'	122° 58.9'	−0 06	+0 06	*1.00	*1.02	7.61	11.38	6.69
1065	Ayock Point	47° 30.5'	123° 03.2'	−0 03	+0 05	*0.99	*1.07	7.38	11.37	6.73
1067	Union	47° 21.5'	123° 05.9'	+0 01	+0 10	*1.04	*1.06	7.86	11.84	6.93
1069	Lynch Cove Dock	47° 25.1'	122° 54.1'	+0 00	+0 06	*1.07	*1.08	8.04	12.11	7.08
	Puget Sound									
1071	Hansville	47° 55.1'	122° 32.7'	−0 07	−0 08	*0.92	*0.98	6.83	10.44	6.19
1073	Edmonds	47° 48.8'	122° 23.0'	+0 00	−0 04	*0.96	*0.99	7.26	10.91	6.43
1075	Kingston, Appletree Cove	47° 47.8'	122° 29.7'	−0 05	−0 05	*0.97	*1.00	7.32	10.99	6.48
1077	Port Jefferson	47° 44.7'	122° 28.6'	−0 03	−0 04	*0.95	*0.98	7.20	10.83	6.37
1079	Port Madison	47° 42.3'	122° 31.5'	+0 09	−0 03	*1.00	*0.99	7.7	11.4	6.6
1081	Meadow Point, Shilshole Bay	47° 41.3'	122° 24.2'	+0 00	−0 01	*0.98	*0.99	7.51	11.18	6.57
1083	Poulsbo, Liberty Bay	47° 43.5'	122° 38.3'	+0 05	+0 12	*1.03	*1.01	7.99	11.73	6.85
1085	Brownsville, Port Orchard	47° 39.2'	122° 36.9'	+0 07	+0 09	*1.04	*1.03	8.04	11.82	6.93
1087	SEATTLE (Madison St.), Elliott Bay	47° 36.3'	122° 20.3'		*Daily predictions*			7.66	11.36	6.67
1089	Lockheed Shipyard, Harbor Island	47° 35.1'	122° 21.7'	−0 01	−0 01	*1.00	*1.00	7.67	11.39	6.68
1091	Duwamish Waterway, Eighth Ave. South	47° 32.1'	122° 19.3'	+0 10	+0 11	*0.97	*0.95	7.5	11.1	6.4
1093	Eagle Harbor, Bainbridge Island	47° 37.2'	122° 30.9'	+0 04	+0 05	*1.00	*1.02	7.6	11.3	6.7
1095	Port Blakely	47° 35.8'	122° 30.6'	+0 04	+0 04	*1.01	*0.99	7.8	11.5	6.7
1097	Clam Bay, Rich Passage	47° 34.5'	122° 32.6'	+0 03	+0 04	*1.01	*1.00	7.78	11.46	6.71
1099	Bremerton, Sinclair Inlet, Port Orchard	47° 33.7'	122° 37.4'	+0 11	+0 18	*1.04	*1.00	8.01	11.74	6.85
1101	Tracyton, Dyes Inlet	47° 36.6'	122° 39.6'	+0 28	+0 53	*1.06	*0.95	8.4	12.0	6.9
1103	Harper, Yukon Harbor	47° 31.4'	122° 31.0'	−0 06	−0 01	*1.02	*0.99	7.9	11.6	6.7
1105	Point Vashon, Vashon Island	47° 30.7'	122° 27.8'	+0 02	+0 02	*1.02	*1.01	7.80	11.53	6.76
1107	Des Moines, East Passage	47° 24.0'	122° 19.7'	+0 05	+0 08	*1.03	*1.01	7.91	11.66	6.82
1109	Burton, Quartermaster Hbr. (inside), Vashon I.	47° 23.7'	122° 27.8'	+0 01	+0 03	*1.06	*1.02	8.26	12.05	7.01
1111	Tahlequah, Neil Pt., Dalco Passage, Vashon I.	47° 19.9'	122° 30.4'	+0 04	+0 05	*1.05	*1.01	8.15	11.89	6.93
1113	Gig Harbor	47° 20.4'	122° 35.3'	+0 18	+0 22	*1.05	*0.99	8.2	11.8	6.9
1115	Tacoma, Commencement Bay, Sitcum Waterway	47° 16.0'	122° 24.8'	+0 04	+0 04	*1.04	*1.00	8.09	11.83	6.90
1117	Tacoma Narrows Bridge	47° 16.3'	122° 33.1'	+0 28	+0 23	*1.11	*1.02	8.79	12.59	7.30
1119	Arletta, Hale Passage	47° 16.8'	122° 39.1'	+0 31	+0 40	*1.18	*1.04	9.46	13.31	7.67
1121	Horsehead Bay, Carr Inlet	47° 18.1'	122° 40.9'	+0 38	+0 46	*1.20	*1.05	9.58	13.48	7.76
1123	Wauna, Carr Inlet	47° 22.7'	122° 38.4'	+0 31	+0 44	*1.16	*0.99	9.4	13.1	7.5
1125	Home, Von Geldern Cove, Carr Inlet	47° 16.5'	122° 45.5'	+0 37	+0 45	*1.19	*1.04	9.54	13.42	7.72
1127	Steilacoom, Cormorant Passage	47° 10.4'	122° 36.2'	+0 37	+0 45	*1.20	*1.05	9.59	13.48	7.77
1129	Yoman Point, Anderson Island, Balch Passage	47° 10.8'	122° 40.5'	+0 33	+0 41	*1.20	*1.04	9.61	13.47	7.75
1131	Dupont Wharf, Nisqually Reach	47° 07.1'	122° 40.0'	+0 41	+0 49	*1.20	*1.04	9.63	13.51	7.77
1133	Longbranch, Filucy Bay	47° 12.6'	122° 45.2'	+0 38	+0 47	*1.20	*1.02	9.7	13.5	7.7
1135	Devils Head, Drayton Passage	47° 10.0'	122° 45.8'	+0 40	+0 50	*1.25	*1.10	9.98	14.18	8.09

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No.	PLACE	POSITION Latitude	POSITION Longitude	DIFFERENCES Time High Water	DIFFERENCES Time Low Water	DIFFERENCES Height High Water	DIFFERENCES Height Low Water	RANGES Mean	RANGES Diurnal	Mean Tide Level
		North	West	h m	h m	ft	ft	ft	ft	ft
	WASHINGTON Puget Sound–cont. Time meridian, 120° W				on Seattle, p.132					
1137	Henderson Inlet	47° 09.3'	122° 50.3'	+0 47	+0 58	*1.24	*1.06	10.0	14.0	8.0
1139	McMicken Island, Case Inlet	47° 14.8'	122° 51.7'	+0 40	+0 52	*1.24	*1.06	10.00	13.96	8.01
1141	Vaughn, Case Inlet	47° 20.5'	122° 46.5'	+0 51	+0 57	*1.26	*1.06	10.2	14.1	8.1
1143	Allyn, Case Inlet	47° 23.0'	122° 49.4'	+0 48	+0 59	*1.26	*1.07	10.20	14.16	8.13
1145	Walkers Landing, Pickering Passage	47° 16.9'	122° 55.4'	+0 44	+0 55	*1.26	*1.07	10.20	14.15	8.12
1147	Shelton, Oakland Bay	47° 12.9'	123° 05.0'	+1 26	+2 05	*1.26	*0.92	10.6	14.2	7.9
1149	Arcadia, Totten Inlet	47° 11.8'	122° 56.3'	+0 49	+1 05	*1.28	*1.06	10.4	14.4	8.2
1151	Barron Point, Little Snookum Inlet Entrance	47° 09.4'	123° 00.5'	+0 50	+0 59	*1.29	*1.06	10.53	14.52	8.28
1153	Burns Point, Totten Inlet	47° 07.3'	123° 03.4'	+0 54	+1 07	*1.33	*1.06	11.0	15.0	8.5
1155	Rocky Point, Eld Inlet	47° 04.9'	123° 00.3'	+0 39	+0 56	*1.31	*1.10	10.6	14.7	8.4
1157	Dofflemeyer Point, Boston Hbr., Budd Inlet	47° 08.5'	122° 54.2'	+0 44	+0 57	*1.28	*1.09	10.35	14.37	8.27
1159	Budd Inlet, Olympia Shoal	47° 05.9'	122° 53.7'	+0 43	+0 55	*1.29	*1.08	10.46	14.48	8.30
1161	Olympia, Budd Inlet	47° 03.6'	122° 54.2'	+0 45	+0 57	*1.29	*1.08	10.48	14.56	8.31
	Possession Sound and Port Susan									
1163	Glendale, Whidbey Island	47° 56.4'	122° 21.4'	+0 01	−0 03	*0.97	*0.99	7.38	11.02	6.50
1165	Everett	47° 58.8'	122° 13.4'	+0 01	−0 01	*0.97	*0.99	7.41	11.09	6.51
1167	Marysville, Quilceda Creek	48° 02.7'	122° 12.7'	+0 09	+0 29	*0.95	*0.89	7.47	10.83	6.25
1169	Tulalip, Tulalip Bay	48° 03.9'	122° 17.3'	+0 01	−0 02	*0.97	*0.98	7.44	11.06	6.50
1171	Tulare Beach	48° 06.4'	122° 20.8'	−0 02	−0 03	*0.97	*0.97	7.48	11.08	6.48
1173	Kayak Point	48° 08.2'	122° 22.1'	+0 00	−0 02	*0.99	*0.99	7.56	11.24	6.58
1175	Stanwood, Stillaguamish River <7>	48° 14'	122° 22'	+0 23	+2 14	*0.62	*0.29	5.7	7.4	3.6
	Saratoga Passage and Skagit Bay									
1177	Sandy Point, Whidbey Island	48° 02.1'	122° 22.6'	+0 03	−0 01	*0.99	*1.00	7.56	11.25	6.60
1179	Holly Farms Harbor, Holmes Harbor, Whidbey I.	48° 01.6'	122° 32.1'	+0 01	−0 04	*1.01	*0.99	7.76	11.44	6.67
1181	Greenbank, Whidbey Island	48° 06.3'	122° 34.2'	−0 03	−0 06	*0.99	*0.99	7.6	11.3	6.6
1183	Crescent Harbor, N. Whidbey Island	48° 17'	122° 37'	+0 04	−0 04	*1.03	*0.99	8.0	11.6	6.8
1185	Coupeville, Penn Cove, Whidbey Island	48° 13.4'	122° 41.4'	+0 15	+0 09	*1.01	*0.99	7.8	11.5	6.7
1187	La Conner, Swinomish Channel <8>	48° 23.5'	122° 29.8'	+0 21	+0 39	*0.90	*0.95	6.74	10.34	6.06
1189	Sneeoosh Point	48° 24.0'	122° 32.9'	+0 32	+0 39	*0.97	*0.90	7.64	11.05	6.38
1191	Turner Bay, Similk Bay	48° 26.7'	122° 33.3'	+0 34	+0 36	*0.90	*0.88	6.98	10.34	5.99
1193	Ala Spit, Whidbey Island	48° 23.8'	122° 35.2'	+0 12	+0 26	*0.92	*0.95	6.9	10.5	6.1
1195	Yokeko Point, Deception Pass	48° 24.8'	122° 36.9'	+0 26	+0 38	−1.0	−0.2	6.9	10.5	6.1
1197	Cornet Bay, Deception Pass	48° 24.1'	122° 37.4'	+0 15	+0 26	*0.89	*0.95	6.6	10.2	6.0
	Rosario Strait, etc.				on Port Townsend, p.128					
1199	Deception Pass St. Park, Bowman Bay, Fidalgo I.	48° 24.9'	122° 39.1'	−0 18	+0 00	*0.90	*0.98	4.62	7.72	4.76
1201	Aleck Bay, Lopez Island	48° 26'	122° 51'	−0 18	−0 08	*0.88	*0.88	4.2	7.4	4.6
1203	Burrows Bay (Allan Island)	48° 28'	122° 42'	+0 09	+0 03	*0.95	*0.88	5.0	8.1	4.8
1205	Ship Harbor, Fidalgo Island	48° 30.4'	122° 40.6'	+0 18	+0 29	*0.93	*1.02	4.75	8.05	4.93
1207	Anacortes, Guemes Channel	48° 31'	122° 37'	+0 22	+0 33	*0.96	*1.00	4.8	8.2	5.0
1209	Swinomish Channel ent., Padilla Bay	48° 28'	122° 31'	+0 36	+1 17	0.0	0.0	5.1	8.4	5.1
1211	Armitage Island, Thatcher Pass	48° 32.1'	122° 47.8'	+0 22	+0 29	*0.92	*0.93	4.91	7.84	4.78
1213	Strawberry Bay, Cypress Island	48° 34'	122° 43'	+0 34	+0 52	*0.95	*0.95	4.8	8.0	4.9
1215	Peavine Pass	48° 36'	122° 48'	+0 34	+0 18	*0.98	*0.92	5.0	8.2	4.9
1217	Tide Point, Cypress Island	48° 35.2'	122° 44.2'	+0 31	+0 41	*0.94	*0.95	4.88	8.08	4.86
	Bellingham Bay									
1219	Chuckanut Bay	48° 40'	122° 30'	+0 33	+0 53	0.0	−0.1	5.2	8.4	5.1
1221	Bellingham	48° 44.7'	122° 29.7'	+0 43	+1 11	*0.99	*0.94	5.44	8.51	5.07
	Hale Passage									
1223	Gooseberry Point	48° 43.9'	122° 40.2'	+0 41	+1 10	*1.04	*0.97	5.57	8.83	5.26
1225	Point Migley	48° 45'	122° 43'	+0 56	+0 51	+0.1	0.0	5.2	8.6	5.2
1227	Village Point, Lummi Island	48° 43.0'	122° 42.5'	+0 44	+1 12	*1.01	*1.02	5.22	8.62	5.20
1229	Sandy Point, Lummi Bay	48° 47.4'	122° 42.5'	+0 52	+1 24	*1.05	*1.03	5.50	8.97	5.18
1231	Rosario, East Sound, Orcas Island	48° 39'	122° 52'	+0 27	+1 04	*0.96	*0.96	4.9	8.1	4.9
1233	Upright Head, Lopez Island	48° 34'	122° 53'	+0 26	+0 44	*0.93	*0.93	4.6	7.8	4.8
1235	Orcas, Orcas Island	48° 36'	122° 57'	+0 33	+0 56	*0.90	*0.90	4.5	7.6	4.7
	San Juan Channel									
1237	Richardson, Lopez Island	48° 26.8'	122° 54.0'	−0 27	−0 12	*0.85	*0.84	4.55	7.17	4.36
1239	Shaw Island, Ferry Terminal, Harney Channel	48° 35.1'	122° 55.7'	+0 31	+0 56	*0.90	*0.99	4.40	7.63	4.73
1241	Friday Harbor, San Juan Island	48° 32.8'	123° 00.6'	+0 33	+0 51	*0.91	*0.92	4.82	7.76	4.70
	Strait of Georgia									
1243	Echo Bay, Sucia Islands	48° 45'	122° 54'	+1 01	+1 34	+0.1	0.0	5.2	8.6	5.2
1245	Ferndale	48° 50'	122° 43'	+0 49	+1 20	+0.5	0.0	5.6	9.0	5.4
1247	CHERRY POINT	48° 51.8'	122° 45.5'		*Daily predictions, p.136*			5.71	9.15	5.47
1249	Blaine, Semiahmoo Bay	48° 59.5'	122° 45.9'	+0 54	+1 27	*1.11	*1.06	6.01	9.53	5.67
	Haro Strait									
1251	Kanaka Bay, San Juan Island	48° 29.1'	123° 05.0'	−0 11	−0 01	*0.86	*0.95	4.24	7.30	4.54
1253	Hanbury Point, Mosquito Pass, San Juan I.	48° 34.7'	123° 10.4'	+0 08	+0 26	*0.89	*0.97	4.43	7.57	4.68
1255	Roche Harbor, San Juan Island	48° 36.6'	123° 09.1'	+0 33	+0 47	*0.90	*0.99	4.47	7.60	4.76
1257	Turn Point, Stuart Island	48° 41'	123° 14'	+0 24	+0 47	*0.90	*0.90	4.4	7.5	4.7
	Boundary Pass									
1259	Patos Island Wharf	48° 47'	122° 58'	+1 03	+1 30	+0.2	0.0	5.3	8.6	5.2

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		North	West	h m	h m	ft	ft	ft	ft	ft
	BRITISH COLUMBIA Time meridian, 120° W				**on Victoria, p.140**					
	Passages inside Vancouver Island <16>									
1261	Sooke, Vancouver Island	48° 22'	123° 44'	−0 11	−0 33	+0.8	+0.5	– –	6.4	6.6
1263	Esquimalt, Vancouver Island	48° 26'	123° 26'	+0 12	+0 17	0.0	−0.1	– –	6.2	6.3
1265	VICTORIA, Vancouver Island	48° 26'	123° 23'		*Daily predictions*			– –	6.1	6.3
					on Vancouver, p.144					
1267	Sidney, Haro Strait	48° 39'	123° 24'	−1 01	−1 12	*0.71	*0.61	– –	7.8	7.1
1269	Fulford Harbor, Saltspring Island	48° 46'	123° 27'	−0 55	−1 08	−3.5	−1.0	– –	8.0	7.6
1271	Active Pass, Mayne Island	48° 52'	123° 20'	−0 16	−0 30	−1.5	−0.8	– –	9.8	8.6
1273	Cowichan Bay	48° 45'	123° 37'	−0 53	−1 09	−3.0	−0.6	– –	8.0	8.1
1275	Chemainus, Stuart Channel	48° 55'	123° 42'	−0 51	−1 03	−2.2	−1.0	– –	9.3	8.3
1277	Ladysmith	48° 59'	123° 47'	−0 53	−1 02	−2.3	−0.8	– –	9.0	8.4
1279	Sand Heads, Fraser River	49° 07'	123° 18'	−0 25	−0 27	−1.2	−1.1	– –	10.4	8.7
1281	Atkinson Point, Burrard Inlet	49° 19'	123° 15'	−0 25	−0 27	−1.2	−1.1	– –	10.4	8.7
1283	VANCOUVER, Burrard Inlet	49° 18'	123° 07'		*Daily predictions*			– –	10.5	9.9
1285	Squamish, Howe Sound	49° 41'	123° 10'	−0 24	−0 24	−0.8	−1.2	– –	10.9	8.9
1287	Nanaimo	49° 10'	123° 57'	−0 20	−0 20	0.0	+0.1	– –	10.4	10.0
1289	Pender Harbor, Malaspina Strait	49° 38'	124° 02'	−0 22	−0 22	−1.1	−1.2	– –	10.6	8.8
1291	Comox, Baynes Sound	49° 40'	124° 55'	−0 18	−0 20	−0.4	−1.5	– –	11.6	9.0
1293	Whaletown, Cortes Island	50° 06'	125° 03'	−0 15	−0 17	+0.5	−0.2	– –	11.2	10.0
1295	Duncan Bay, Discovery Passage	50° 05'	125° 18'	−1 03	−1 16	−3.7	−1.5	– –	8.3	7.4
1297	Redonda Bay, Deer Passage	50° 16'	124° 59'	−0 07	−0 08	+1.2	+0.5	– –	11.2	10.8
1299	Yuculta, Cordero Channel	50° 24'	125° 08'	−0 59	−0 36	−0.2	+1.0	– –	9.3	10.4
1301	Waddington Harbor, Bute Inlet	50° 56'	124° 51'	−0 12	−0 08	+0.6	−0.4	– –	11.5	10.1
1303	Gowlland Harbor, Discovery Passage	50° 04'	125° 14'	−1 09	−1 18	−3.0	−0.9	– –	8.4	8.0
1305	Seymour Narrows (Canoe Pass)	50° 08'	125° 21'	−2 30	−3 30	0.0	+0.5	– –	10.0	10.0
1307	Owen Bay, Okisollo Channel	50° 19'	125° 13'	−3 01	−3 02	−1.4	−0.2	– –	9.3	8.9
					on Sitka, p.156					
1309	Turn Island, Johnstone Strait	50° 21'	125° 29'	+1 56	+2 02	+0.6	+0.9	– –	9.6	6.3
1311	Knox Bay, West Thurlow Island	50° 24'	125° 36'	+1 30	+1 40	+2.9	+3.1	– –	9.7	8.5
1313	Kelsey Bay, Johnstone Strait	50° 24'	125° 58'	+0 54	+1 05	+4.3	+3.6	– –	10.6	9.4
1315	Port Neville, Johnstone Strait	50° 30'	126° 05'	+0 54	+0 59	+5.1	+3.8	– –	11.2	9.8
1317	Port Harvey, Johnstone Strait	50° 34'	126° 17'	+0 38	+0 47	+4.0	+3.2	– –	10.7	8.9
1319	Chatham Channel (Root Point)	50° 35'	126° 12'	+0 43	+0 57	+5.1	+3.4	– –	11.6	9.5
1321	Glendale Cove, Knight Inlet	50° 40'	125° 44'	+0 21	+0 31	+6.6	+3.7	– –	12.8	10.6
1323	Farewell Harbor, Blackfish Sound	50° 36'	126° 42'	+0 37	+0 58	+3.9	+2.9	– –	10.9	8.5
1325	Blunden Harbor	50° 54'	127° 17'	+0 19	+0 20	+4.9	+3.3	– –	11.5	9.4
1327	Alert Bay, Cormorant Island	50° 35'	126° 56'	+0 29	+0 35	+4.8	+3.3	– –	11.4	9.4
1329	Port Hardy, Vancouver Island	50° 43'	127° 29'	+0 08	+0 14	+4.7	+3.3	– –	11.3	9.4
1331	Shushartie Bay, Goletas Channel	50° 51'	127° 52'	+0 02	+0 08	+4.0	+2.7	– –	11.2	8.7
	Vancouver Island, Southwest Coast									
1333	Port San Juan	48° 33'	124° 25'	−0 11	−0 10	(*0.65+3.4)		5.0	7.2	6.8
1335	Carmanah Point	48° 37'	124° 45'	−0 16	−0 14	(*0.75+2.3)		6.0	7.4	6.2
1337	Bamfield, Barkley Sound	48° 50'	125° 08'	−0 29	−0 23	(*0.86+2.5)		6.6	8.7	7.1
1339	Port Alberni	49° 14'	124° 49'	−0 20	−0 19	(*0.87+2.5)		6.7	8.6	7.1
1341	Clayoquot	49° 09'	125° 55'	−0 16	−0 11	+1.7	+2.4	7.0	8.8	7.3
1343	Riley Cove	49° 23'	126° 13'	−0 14	−0 09	+1.5	+2.3	6.9	8.8	7.2
1345	Nootka Sound	49° 37'	126° 37'	−0 14	−0 13	+1.2	+2.0	6.9	8.9	6.9
1347	Esperanza Inlet	49° 52'	126° 43'	−0 16	−0 11	+2.0	+1.9	7.8	9.4	7.2
1349	Kyuquot Sound	50° 08'	127° 18'	−0 11	−0 06	+1.8	+2.5	7.0	8.8	7.4
1351	Nasparti Inlet	50° 06'	127° 43'	−0 09	−0 05	+2.1	+2.6	7.2	9.1	7.6
1353	Klaskish Inlet	50° 15'	127° 44'	−0 06	−0 03	+2.1	+2.6	7.2	9.1	7.6
1355	Bergh Cove, Quatsino Sound	50° 32'	127° 37'	−0 06	−0 01	+2.7	+3.1	7.3	9.4	8.2
	Prince Rupert				**on Ketchikan, p.148**			Mean	Spring	
1357	Treadwell Bay, Slingsby Channel	51° 06'	127° 32'	+0 34	+0 46	(*0.48+2.8)		6.3	7.9	6.6
1359	Wadhams, Rivers Inlet	51° 31'	127° 31'	+0 08	+0 15	(*0.68+3.3)		8.9	11.3	8.7
	Fitz Hugh Sound									
1361	Namu Harbor	51° 52'	127° 52'	+0 18	+0 21	(*0.69+3.0)		9.0	11.3	8.5
1363	Addenbroke Island	51° 36'	127° 49'	+0 09	+0 21	(*0.66+3.4)		8.6	10.9	8.7
1365	Ocean Falls, Fisher Channel	52° 21'	127° 41'	+0 09	+0 21	(*0.74+3.7)		9.5	12.0	9.6
1367	Bella Bella, Lama Passage, Campbell Island	52° 08'	128° 08'	+0 11	+0 17	(*0.70+3.7)		9.1	11.8	9.3
1369	Port Blackney, Milbanke Sound	52° 19'	128° 21'	+0 11	+0 19	(*0.72+3.1)		9.3	11.8	8.9
1371	Bella Coola, North Bentinck Arm	52° 23'	126° 48'	+0 14	+0 23	(*0.78+3.1)		10.1	13.0	9.3
	Finlayson Channel									
1373	Klemtu Passage	52° 36'	128° 31'	+0 14	+0 25	(*0.72+3.8)		9.3	11.6	9.6
1375	Carter Bay	52° 50'	128° 24'	+0 17	+0 23	(*0.78+3.1)		10.1	13.2	9.3
1377	Barnard Harbor, Whale Channel	53° 05'	129° 07'	+0 24	+0 35	+0.7	+2.8	10.9	13.9	9.8
1379	Hartley Bay, Wright Sound	53° 26'	129° 15'	+0 20	+0 31	+1.6	+3.4	11.2	14.3	10.5
1381	Kitimat, Douglas Channel	53° 59'	128° 42'	+0 24	+0 40	+2.4	+3.6	11.8	15.1	11.0
1383	Kemano Bay, Gardner Canal	53° 31'	128° 07'	+0 24	+0 40	+2.7	+3.6	12.1	15.5	11.2
1385	Lowe Inlet, Grenville Channel	53° 33'	129° 35'	+0 32	+0 44	+2.8	+4.0	11.8	14.9	11.4
	Principe Channel, etc.									
1387	Port Stephens	53° 21'	129° 43'	+0 22	+0 32	+0.5	+3.2	10.3	13.2	9.9
1389	Port Canaveral	53° 35'	130° 09'	+0 29	+0 38	+0.5	+3.2	10.3	13.2	9.9
1391	Beaver Passage	53° 48'	130° 21'	+0 38	+0 50	+3.7	+3.5	13.2	17.1	11.6

Endnotes can be found at the end of table 2.

TABLE 2 – TIDAL DIFFERENCES AND OTHER CONSTANTS

No.	PLACE	POSITION Latitude	POSITION Longitude	DIFFERENCES Time High Water	DIFFERENCES Time Low Water	DIFFERENCES Height High Water	DIFFERENCES Height Low Water	RANGES Mean	RANGES Spring	Mean Tide Level
		North	**West**	h m	h m	ft	ft	ft	ft	ft
	BRITISH COLUMBIA Prince Rupert–cont. Time meridian, 120° W				**on Ketchikan, p.148**					
	Chatam Sound									
1393	Porcher Island	54° 05'	130° 24'	+0 34	+0 46	+3.6	+4.6	12.0	15.2	12.1
1395	Qlawdzeet Anchorage	54° 12'	130° 46'	+0 43	+0 49	+4.2	+4.3	12.9	16.6	12.3
1397	Prince Rupert	54° 19'	130° 20'	+0 51	+0 57	+4.6	+4.3	13.3	17.3	12.5
1399	Port Simpson	54° 34'	130° 26'	+0 51	+0 57	+3.9	+4.2	12.7	16.5	12.1
	Queen Charlotte Island									
1401	Skidegate Inlet	53° 15'	132° 04'	+1 01	+1 07	+5.5	+4.8	13.7	17.7	13.2
1403	Tasu Sound	52° 45'	132° 01'	+0 22	+0 29	(*0.58+3.6)		7.5	9.4	8.2
	BRITISH COLUMBIA and ALASKA Dixon Entrance									
	Graham Island, B.C.									
1405	Parry Passage	54° 11'	132° 59'	+0 20	+0 30	(*0.68+4.2)		8.9	11.2	9.6
1407	Wiah Point	54° 07'	132° 19'	+0 36	+0 40	(*0.79+3.8)		10.3	12.9	10.1
1409	Masset Harbor	53° 59'	132° 08'	+1 01	+1 13	(*0.58+2.0)		7.6	9.5	6.6
	Time meridian, 135° W							Mean	Diurnal	
1411	Cape Muzon, Dall Island, Alaska	54° 40.6'	132° 40.1'	−0 14	−0 08	*0.78	*0.93	9.9	12.1	6.40
1413	Kelp Island Passage, Duke Island	54° 52.6'	131° 18.0'	−0 04	+0 03	*0.94	*0.96	12.2	14.6	7.60
1415	Nakat Harbor, Alaska	54° 49.2'	130° 42.0'	+0 01	+0 09	*0.95	*0.89	12.4	14.7	7.60
	Time meridian, 120° W									
1417	Haystack Island, B.C. <9>	54° 43'	130° 37'	+0 45	+0 49	−0.4	0.0	12.6	15.0	7.8
	Portland Canal, etc.									
1419	Wales Island (Cannery), Pearse Canal <9>	54° 47'	130° 33'	+0 57	+1 04	−0.1	0.0	12.9	15.3	7.9
1421	Kumeon Bay, B.C. <9>	54° 43'	130° 14'	+0 53	+0 56	+0.2	0.0	13.2	15.6	8.1
1423	Mill Bay, Nass River, B.C. <9>	55° 00'	129° 54'	+0 51	+1 17	+0.1	−0.1	13.2	15.5	8.0
1425	Stewart, B.C. <9>	55° 55'	129° 48'	+0 53	+0 56	+1.4	+0.1	14.3	16.8	8.7
	Time meridian, 135° W									
1427	Davis River entrance, Alaska <9>	55° 45.6'	130° 10.6'	−0 02	+0 00	*1.08	*0.96	14.2	16.6	8.60
	ALASKA Revillagigedo Channel									
1429	Morse Cove, Duke Island	54° 55.2'	131° 15.3'	+0 03	+0 15	*0.96	*0.96	12.43	14.80	7.70
1431	Kah Shakes Cove	55° 02.5'	130° 58.8'	+0 00	+0 06	*0.97	*0.96	12.60	14.98	7.80
1433	Boca de Quadra	55° 07.0'	130° 47.9'	+0 00	+0 02	*0.98	*0.98	12.72	15.14	7.70
1435	Custom House Cove, Mary Island	55° 06.0'	131° 13.0'	+0 00	−0 01	*0.99	*0.99	12.78	15.24	7.95
1437	Mop Point, Thorne Arm	55° 23.0'	131° 14.1'	−0 05	−0 03	*0.98	*0.98	12.80	15.20	7.90
1439	Coon Island, George Inlet	55° 27.7'	131° 30.3'	−0 03	−0 07	*0.99	*0.96	12.90	15.30	7.90
	Tongass Narrows									
1441	KETCHIKAN	55° 20.0'	131° 37.5'		*Daily predictions*			12.97	15.45	8.06
1443	Ward Cove	55° 23.9'	131° 43.6'	−0 05	−0 03	*1.02	*0.96	13.28	15.70	8.10
	Behm Canal									
1445	Alva Bay, Revillagigedo Island	55° 14.0'	131° 08.0'	−0 05	−0 03	*0.98	*0.96	12.80	15.20	7.90
1447	Vallenar Point	55° 25.6'	131° 50.8'	−0 01	−0 06	*0.99	*0.96	12.90	15.30	7.90
1449	Rudyerd Bay	55° 38.5'	130° 38.7'	+0 01	+0 02	*1.02	*0.96	13.30	15.70	8.10
1451	Fitzgibbon Cove	55° 59.0'	131° 10.5'	−0 05	−0 01	*1.02	*0.96	13.40	15.80	8.20
1453	Burroughs Bay, Behm Canal	55° 02.3'	131° 05.7'	−0 01	+0 00	*1.03	*0.99	13.45	15.90	8.28
1455	Yes Cannery, Yes Bay	55° 54.8'	131° 47.8'	+0 00	+0 01	*1.02	*0.96	13.30	15.70	8.10
1457	Loring, Naha Bay	55° 36.1'	131° 37.9'	−0 02	−0 06	*1.02	*0.96	13.16	15.70	8.20
1459	Tamgas Harbor, Annette Island	55° 04.0'	131° 32.5'	−0 09	−0 08	*0.98	*0.89	12.80	15.00	7.80
1461	Ingraham Bay, Prince of Wales Island	54° 58.8'	132° 00.4'	+0 03	+0 04	*0.93	*0.96	12.00	14.40	7.50
1463	Menefee Anch., Prince of Wales Island	55° 01.6'	132° 00.8'	−0 02	+0 01	*0.94	*0.89	12.20	14.40	7.50
1465	Niblack Anchorage, Moira Sound	55° 04.0'	132° 07.2'	+0 03	+0 09	*0.94	*0.96	12.20	14.60	7.60
1467	Metlakatla, Port Chester	55° 07.7'	131° 34.3'	−0 04	−0 02	*0.96	*0.99	12.43	14.87	7.77
	Clarence Strait									
1469	Nehenta Bay, Gravina Island	55° 10.0'	131° 47.8'	−0 01	−0 01	*0.95	*0.96	12.30	14.70	7.70
1471	Lancaster Cove, Cholmondeley Sound	55° 12.8'	132° 05.7'	+0 05	+0 03	*0.98	*0.96	12.70	15.10	7.90
1473	Divide Head, Cholmondeley Sound	55° 15.1'	132° 18.0'	−0 05	−0 08	*0.98	*0.96	12.70	15.10	7.90
	Kasaan Bay									
1475	Saltery Cove, Skowl Arm	55° 24.1'	132° 19.7'	+0 04	+0 02	*1.01	*1.01	13.07	15.57	8.13
1477	Kasaan	55° 32.1'	132° 23.8'	+0 05	+0 03	*1.02	*1.01	13.20	15.69	7.84
1479	Lindeman Cove	55° 36.1'	132° 30.7'	+0 06	+0 03	*1.02	*1.01	13.27	15.75	8.22
1481	Hollis Anchorage	55° 28.8'	132° 38.7'	+0 06	+0 02	*1.03	*1.01	13.39	15.88	7.94
1483	Bradfield Canal, Ernest Sound	56° 11.0'	131° 34.3'	+0 11	+0 05	*1.08	*0.99	14.09	16.59	8.60
1485	Ratz Harbor, Prince of Wales Island	55° 52.8'	132° 35.7'	+0 09	+0 00	*1.03	*0.99	13.46	15.90	7.94
1487	Lake Bay	56° 01.0'	132° 55.0'	+0 10	+0 01	*1.03	*0.89	13.60	15.90	8.20
1489	Beck Island	56° 02.8'	132° 51.72'	+0 10	+0 05	*1.05	*1.01	13.65	16.14	8.41

Endnotes can be found at the end of table 2.

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No.	PLACE	POSITION Latitude	POSITION Longitude	DIFFERENCES Time High Water	DIFFERENCES Time Low Water	DIFFERENCES Height High Water	DIFFERENCES Height Low Water	RANGES Mean	RANGES Diurnal	Mean Tide Level
		North	**West**	h m	h m	ft	ft	ft	ft	ft
	ALASKA Clarence Strait–cont. Time meridian, 135° W				**on Ketchikan, p.148**					
1491	Thorne Island, Whale Passage	56° 03.5'	132° 59.1'	+0 12	+0 01	*1.04	*0.98	13.52	15.93	8.30
1493	Blashke Island	56° 07.6'	132° 53.7'	+0 13	+0 24	*1.03	*0.93	13.46	15.82	8.20
1495	Point Harrington	56° 10.7'	132° 41.8'	+0 09	+0 01	*1.04	*0.97	13.55	15.96	8.29
1497	Thoms Point, Zimovia Strait	56° 07.1'	132° 04.7'	+0 07	+0 01	*1.06	*0.99	13.90	16.33	8.50
1499	Village Rock, Zimovia Strait	56° 13.2'	132° 17.8'	+0 09	+0 01	*1.05	*0.97	13.75	16.13	8.40
1501	Madan Bay	56° 23.5'	132° 10.1'	+0 12	+0 04	*1.05	*0.98	13.81	16.23	8.42
1503	Wrangell, Wrangell Island	56° 28.2'	132° 23.2'	+0 10	+0 01	*1.04	*0.96	13.57	15.96	8.29
	Cordova Bay				**on Sitka, p.156**					
1505	Minnie Bay	54° 43'	132° 18'	−0 05	+0 00	+2.7	+0.1	10.3	12.7	6.6
1507	Tah Bay	54° 50'	132° 20'	−0 04	+0 03	+2.6	+0.1	10.2	12.5	6.6
1509	Hunter Bay	54° 52'	132° 19'	−0 02	+0 03	+2.7	+0.1	10.3	12.7	6.6
1511	Kassa Inlet entrance	54° 56'	132° 31'	−0 03	+0 01	+2.6	+0.1	10.2	12.5	6.6
1513	Elbow Bay	54° 54'	132° 39'	−0 04	−0 04	+2.6	+0.1	10.2	12.6	6.6
1515	Mabel Island	55° 00'	132° 36'	−0 10	−0 01	+2.8	+0.1	10.4	12.8	6.7
1517	Keete Island, Nutkwa Inlets	55° 03'	132° 35'	−0 13	−0 05	+2.8	+0.1	10.4	12.8	6.7
1519	Keete Inlet	55° 05'	132° 29'	−0 11	−0 01	+2.9	+0.1	10.5	12.9	6.7
	Hetta Inlet									
1521	Mud Bay	55° 05'	132° 38'	−0 05	+0 01	+2.8	+0.1	10.4	12.8	6.7
1523	Copper Harbor	55° 13'	132° 37'	−0 10	−0 08	+2.8	+0.1	10.4	12.8	6.7
1525	Sulzer	55° 17'	132° 37'	−0 02	+0 08	+2.9	+0.1	10.5	12.9	6.7
1527	American Bay, Kaigani Strait	54° 51'	132° 50'	+0 01	+0 01	+2.5	0.0	10.2	12.4	6.5
	Tlevak Strait									
1529	Kasook Inlet, Sukkwan Island	55° 01'	132° 47'	−0 13	−0 05	+2.8	0.0	10.5	12.6	6.6
1531	View Cove	55° 05'	133° 01'	−0 02	+0 02	+2.8	0.0	10.5	12.7	6.6
1533	South Pass, Sukkwan Strait	55° 10'	132° 52'	−0 02	+0 02	+2.9	+0.1	10.5	12.9	6.8
1535	Saltery Point	55° 11'	132° 48'	−0 08	−0 05	+2.9	+0.1	10.5	12.9	6.8
1537	North Pass, West End	55° 12'	132° 56'	−0 12	−0 06	+3.0	+0.1	10.6	13.0	6.8
1539	Natalia Point	55° 14'	133° 03'	−0 05	+0 01	+2.9	+0.1	10.5	12.9	6.8
1541	Soda Bay	55° 16'	132° 58'	+0 03	+0 07	+3.0	+0.1	10.6	13.0	6.8
1543	Tlevak Narrows	55° 16'	133° 07'	−0 07	−0 01	+1.7	+0.1	9.3	11.7	6.2
	Dall Island, west coast									
	Cape Muzon (see Index)	54° 40'	132° 40'	– – –	– – –	– –	– –	– –	– –	– –
1545	Security Cove	54° 45'	132° 51'	−0 20	−0 24	+1.0	0.0	8.7	10.8	5.7
1547	Sakie Bay	55° 04'	133° 12'	+0 01	+0 05	+0.3	0.0	8.0	10.3	5.4
1549	Sea Otter Harbor	55° 07'	133° 10'	−0 04	+0 04	−0.2	−0.1	7.6	9.7	5.1
	Bucareli Bay to Davidson Inlet									
	Ulloa Channel									
	Bucareli Bay									
1551	Craig, Klawock Inlet	55° 29.3'	133° 08.5'	−0 08	−0 08	*1.02	*0.94	7.95	10.15	5.35
1553	Cruz Pass, San Fernando Island	55° 32'	133° 19'	−0 15	−0 12	+0.1	−0.1	7.9	10.1	5.2
	Gulf of Esquibel									
1555	Steamboat Bay, Noyes Island	55° 32.0'	133° 38.2'	−0 12	−0 13	*1.04	*0.93	8.16	10.33	5.44
1557	Anguilla Island	55° 41'	133° 35'	−0 18	−0 14	+0.4	−0.1	8.2	10.3	5.4
1559	Nossuk Bay, Tonowek Bay	55° 43.3'	133° 21.0'	−0 14	−0 14	*1.05	*0.94	8.21	10.40	5.48
	Davidson Inlet									
1561	Port Alice, Heceta Island	55° 49'	133° 36'	−0 20	−0 14	+0.9	0.0	8.6	10.8	5.7
1563	Tuxekan, 0.5 mile south of	55° 53'	133° 15'	−0 17	−0 07	+0.9	−0.1	8.7	10.9	5.6
1565	El Capitan Island	55° 56'	133° 20'	−0 11	−0 10	+0.9	−0.1	8.7	10.8	5.6
1567	Cyrus Cove, Sea Otter Sound	55° 55'	133° 24'	−0 16	−0 12	+1.1	0.0	8.8	10.9	5.8
1569	Marble Island	56° 00'	133° 28'	−0 19	−0 15	+0.8	−0.1	8.6	10.7	5.6
1571	Edna Bay	55° 57'	133° 40'	−0 20	−0 08	+0.9	0.0	8.6	10.8	5.7
	Sumner Strait									
1573	Coronation Island	55° 54'	134° 07'	−0 16	−0 17	+0.8	0.0	8.5	10.7	5.6
1575	Pole Anchorage, Kosciusko Island	55° 57'	133° 49'	−0 22	−0 22	+1.4	−0.1	9.2	11.4	5.9
1577	Port McArthur, Kuiu Island	56° 04'	134° 07'	−0 11	−0 07	+0.6	−0.1	8.4	10.6	5.5
1579	Affleck Canal entrance, Kuiu Island	56° 02.2'	134° 06.9'	−0 09	−0 06	*1.09	*0.95	8.63	10.73	5.70
1581	Kell Bay, Affleck Canal, Kuiu Island	56° 09'	134° 08'	+0 01	+0 01	+1.3	0.0	9.0	11.2	5.9
1583	Point St. Albans	56° 05'	133° 58'	−0 17	−0 13	+1.4	0.0	9.1	11.3	5.9
1585	Shakan Bay Entrance	56° 08'	133° 37'	−0 13	−0 12	+1.8	0.0	9.5	11.7	6.2
1587	Shakan Strait, Kosciusko Island	56° 08.9'	133° 27.6'	−0 07	−0 10	*1.16	*0.95	9.28	11.49	6.02
1589	El Capitan Passage	56° 04'	133° 19'	−0 05	+0 02	+0.9	−0.1	8.7	10.8	5.6
1591	Port Beauclerc, Kuiu Island	56° 17'	133° 57'	−0 14	−0 12	+1.9	−0.1	9.7	11.9	6.2
1593	Port Protection, Prince of Wales Island.	56° 19'	133° 36'	−0 13	−0 11	+2.4	0.0	10.1	12.4	6.4
1595	Reid Bay	56° 23'	133° 53'	−0 11	−0 19	+2.5	0.0	10.2	12.4	6.5
1597	Sumner Island	56° 25'	133° 48'	−0 19	−0 12	+2.6	0.0	10.3	12.6	6.6
					on Ketchikan, p.148					
1599	Bushy Island, Snow Passage	56° 16.6'	132° 59.1'	+0 03	+0 01	*0.95	*0.93	12.41	14.74	7.66
1601	Reef Point, Stikine Strait	56° 21.2'	132° 33.2'	+0 09	+0 02	*1.04	*0.96	13.57	15.96	8.28
1603	Greys Island	56° 31.3'	132° 32.5'	+0 11	+0 05	*1.01	*0.94	13.20	15.57	8.08

Endnotes can be found at the end of table 2.

TABLE 2 – TIDAL DIFFERENCES AND OTHER CONSTANTS

No.	PLACE	POSITION Latitude	POSITION Longitude	DIFFERENCES Time High Water	DIFFERENCES Time Low Water	DIFFERENCES Height High Water	DIFFERENCES Height Low Water	RANGES Mean	RANGES Diurnal	Mean Tide Level
		North	**West**	h m	h m	ft	ft	ft	ft	ft
	ALASKA Wrangell Narrows Time meridian, 135° W				**on Ketchikan, p.148**					
1605	Point Lockwood, Woewodski Island	56° 33.5'	132° 57.8'	+0 15	+0 08	*0.98	*0.98	12.67	15.09	7.87
1607	Beecher Pass	56° 35.7'	132° 59.2'	+0 22	+0 14	*1.00	*0.98	13.05	15.47	8.06
1609	Anchor Point	56° 38.3'	132° 55.6'	+0 31	+0 40	*1.04	*0.99	13.56	15.99	8.00
1611	Papke's Landing	56° 40.6'	132° 55.9'	+0 33	+0 50	*1.00	*1.01	13.92	16.39	8.54
1613	Turn Point	56° 48.0'	132° 58.8'	+0 25	+0 38	*1.04	*0.96	13.68	16.07	8.34
1615	Petersburg	56° 48.9'	132° 57.4'	+0 28	+0 37	*1.04	*0.97	13.56	15.99	8.00
	Keku Strait									
1617	Monte Carlo Island	56° 32.1'	133° 45.9'	+0 03	+0 03	*0.80	*0.89	10.30	12.50	6.60
1619	The Summit	56° 40.9'	133° 44.1'	+0 19	+0 23	*0.98	*0.99	12.63	15.04	7.86
1621	Entrance Island	56° 48.7'	133° 47.2'	+0 18	+0 20	*0.94	*0.98	12.17	14.56	7.62
1623	Kake Harbor	56° 56.9'	133° 53.6'	+0 16	+0 20	*0.92	*0.97	11.81	14.24	7.43
	Frederick Sound				**on Juneau, p.152**					
1625	Dry Strait	56° 37'	132° 34'	−0 18	−0 03	−0.2	0.0	13.5	16.1	8.3
1627	Cosmos Point	56° 39.8'	132° 37.0'	−0 05	−0 05	*0.98	*0.99	13.47	16.00	8.43
1629	Ideal Cove, Mitkof Island	56° 40'	132° 38'	−0 09	−0 05	−0.2	0.0	13.5	16.1	8.3
1631	Leconte Bay	56° 47.3'	132° 30.1'	−0 01	+0 02	*0.98	*0.99	13.47	16.01	8.31
1633	Brown Cove	56° 53'	132° 48'	−0 14	−0 10	−0.3	−0.1	13.5	15.8	8.2
1635	Thomas Bay	57° 00'	132° 47'	+0 07	+0 07	−0.8	−0.1	13.0	15.4	8.0
1637	Portage Bay, Kupreanof Island	57° 00'	133° 19'	−0 19	−0 15	−0.7	0.0	13.0	15.5	8.1
1639	Cleveland Passage, Whitney Island	57° 13'	133° 30'	−0 01	+0 03	−1.2	−0.1	12.6	15.0	7.8
1641	Cannery Cove, Pybus Bay	57° 18.4'	134° 08.0'	−0 08	−0 06	*0.90	*0.94	12.24	14.63	7.60
1643	Eliza Harbor, Liesnoi Island	57° 10'	134° 17'	−0 19	−0 19	−1.9	−0.1	11.9	14.3	7.4
1645	Eliza Harbor, Admiralty Island	57° 11.3'	134° 17.2'	−0 06	−0 04	*0.87	*0.92	11.79	14.10	7.35
1647	Herring Bay	57° 06.8'	134° 22.8'	−0 08	−0 07	*0.84	*0.91	11.44	13.70	7.16
1649	Saginaw Bay, Kuiu Island	56° 54.2'	134° 18.1'	−0 24	−0 21	*0.84	*0.96	11.36	13.73	7.21
	Stephens Passage									
1651	The Brothers	57° 17.7'	133° 47.8'	−0 07	−0 04	*0.91	*0.98	12.34	14.85	7.73
1653	Port Houghton, Robert Islands	57° 18'	133° 28'	−0 21	−0 17	−0.8	−0.1	13.0	15.4	8.0
1655	Hobart Bay	57° 24'	133° 25'	−0 06	+0 03	−1.1	−0.1	12.7	15.1	7.8
1657	Good Island, Gambier Bay	57° 29.2'	133° 53.9'	−0 05	−0 04	*0.93	*0.96	12.77	15.25	7.91
1659	Gambier Bay (cannery wharf)	57° 29.0'	133° 57.6'	−0 01	−0 01	*0.92	*0.96	12.63	15.08	7.86
1661	Upper Endicott Arm, North Shore	57° 31.3'	133° 03.3'	+0 01	+0 06	*0.98	*0.99	13.52	16.04	8.34
1663	Windham Bay	57° 33'	133° 30'	+0 00	+0 00	−1.1	−0.1	12.7	15.1	7.8
1665	Rasp Ledge, Seymour Canal	57° 41'	134° 02'	+0 06	+0 05	−0.7	+0.1	12.9	15.6	8.2
1667	Windfall Harbor, Seymour Canal	57° 52'	134° 16'	+0 14	+0 18	−0.2	0.0	13.5	16.0	8.3
1669	Holkham Bay, Wood Spit	57° 43'	133° 35'	+0 03	+0 06	−0.8	−0.1	13.0	15.4	8.0
1671	Holkham Bay, Tracy Arm Entrance	57° 46.6'	133° 36.2'	+0 01	+0 02	*0.96	*0.96	13.14	15.61	8.11
1673	Sawyer Island, Tracy Arm	57° 52.7'	133° 11.4'	+0 02	+0 06	*0.97	*1.01	13.32	15.83	8.25
1675	Port Snettisham, Point Styleman	57° 58'	133° 53'	−0 12	−0 06	−0.4	−0.1	13.4	15.8	8.2
1677	Port Snettisham, Crib Point	58° 05.7'	133° 44.3'	−0 03	−0 03	*0.98	*0.97	13.40	15.86	8.23
1679	Taku Harbor	58° 04.1'	134° 00.6'	−0 03	−0 04	*0.97	*1.00	13.29	15.71	8.22
1681	Greely Point, Taku Inlet	58° 13'	134° 04'	−0 01	−0 04	−0.6	−0.1	13.2	15.7	8.1
1683	Taku Point, Taku Inlet	58° 24'	134° 01'	+0 14	+0 13	+0.4	0.0	14.1	16.7	8.6
1685	JUNEAU	58° 17.9'	134° 24.7'		*Daily predictions*			13.74	16.31	8.47
1687	Young Bay	58° 11.0'	134° 35.2'	+0 00	+0 02	*1.00	*1.00	13.80	16.39	8.49
1689	Fritz Cove, Douglas Island	58° 19'	134° 36'	−0 01	+0 05	−0.3	−0.1	13.5	15.9	8.2
1691	Auke Bay	58° 23'	134° 39'	−0 06	−0 03	−0.4	0.0	13.3	15.9	8.2
	Lynn Canal									
1693	Funter, Funter Bay	58° 15'	134° 54'	+0 00	+0 01	−1.1	0.0	12.6	15.1	7.9
1695	Barlow Cove, Mansfield Peninsula	58° 19.3'	134° 52.7'	−0 04	−0 01	*0.96	*0.99	13.22	15.75	8.19
1697	Lincoln Island	58° 29.9'	134° 57.9'	−0 03	+0 01	*0.98	*1.00	13.49	15.98	8.33
1699	William Henry Bay	58° 43'	135° 14'	+0 02	+0 09	−0.5	0.0	13.2	15.7	8.2
1701	Cove Point, Berner's Bay	58° 45.1'	135° 01.7'	−0 02	+0 00	*1.00	*1.02	13.64	16.26	8.45
1703	Chilkat Inlet	59° 10.2'	135° 24.0'	−0 04	−0 01	*1.01	*1.00	13.89	16.49	8.53
1705	Haines Inlet	59° 14'	135° 26'	−0 09	−0 06	+0.5	0.0	14.2	16.8	8.7
1707	Taiyasanka Harbor, Taiya Inlet	59° 18.1'	135° 25.7'	−0 04	−0 02	*1.03	*1.01	14.20	16.89	8.72
1709	Skagway, Taiya Inlet	59° 27.0'	135° 19.6'	−0 03	−0 01	*1.03	*1.01	14.11	16.74	8.68
	Chatham Strait				**on Sitka, p.156**					
1711	Port Alexander, Baranof Island	56° 14.8'	134° 38.8'	+0 07	+0 10	*1.14	*1.01	8.59	10.93	5.76
1713	Port Walter, Baranof Island	56° 23'	134° 40'	+0 04	+0 13	+1.5	+0.1	9.1	11.5	6.0
1715	Table Bay, Kuiu Island	56° 10'	134° 15'	−0 15	−0 13	+1.1	0.0	8.8	11.1	5.8
1717	Port Malmesbury, Kuiu Island	56° 18'	134° 14'	+0 04	+0 13	+1.2	+0.1	8.8	11.2	5.9
1719	Tebenkof Bay, Kuiu Island	56° 25'	134° 08'	+0 04	+0 11	+1.8	+0.1	9.4	11.8	6.2
1721	Red Bluff Bay	56° 51'	134° 43'	−0 02	+0 12	+2.7	+0.2	10.2	12.7	6.7
					on Juneau, p.152					
	Frederick Sound (see Index)	– – –	– – –	– – –	– – –	– –	– –	– –	– –	– –
1723	Baranof, Warm Spring Bay	57° 05'	134° 50'	−0 07	−0 04	−2.8	−0.1	11.0	13.4	7.0
1725	Whitewater Bay, Admiralty Island	57° 14'	134° 36'	−0 19	−0 15	−2.0	+0.3	11.4	13.9	7.6
1727	Kasnyku Bay	57° 13'	134° 52'	−0 10	−0 06	−2.4	−0.1	11.4	13.8	7.2
1729	Point Thatcher	57° 25'	134° 51'	−0 15	−0 11	−1.9	+0.2	11.6	14.2	7.6
	Peril Strait (see Index)	– – –	– – –	– – –	– – –	– –	– –	– –	– –	– –

Endnotes can be found at the end of table 2.

TABLE 2 – TIDAL DIFFERENCES AND OTHER CONSTANTS

No.	PLACE	POSITION Latitude	POSITION Longitude	DIFFERENCES Time High Water	DIFFERENCES Time Low Water	DIFFERENCES Height High Water	DIFFERENCES Height Low Water	RANGES Mean	RANGES Diurnal	Mean Tide Level
		North	**West**	h m	h m	ft	ft	ft	ft	ft
	ALASKA Chatham Strait–cont. Time meridian, 135° W				**on Juneau, p.152**					
1731	Killisnoo	57° 28'	134° 34'	−0 06	−0 04	−2.1	0.0	11.6	14.1	7.4
	Kootznahoo Inlet									
1733	Favorite Bay	57° 29'	134° 33'	+0 11	+0 15	−2.8	+0.3	10.6	13.0	7.2
1735	Mitchell Bay	57° 32'	134° 24'	+1 22	+1 31	*0.67	*0.62	9.2	11.0	5.6
1737	Tenakee Springs, Tenakee Inlet	57° 47'	135° 13'	−0 04	+0 05	−1.5	−0.1	12.3	14.7	7.7
1739	Freshwater Bay, Chichagof Island	57° 51'	135° 01'	−0 08	+0 00	−1.5	+0.3	11.9	14.4	7.8
1741	Hawk Inlet Entrance	58° 05.1'	134° 46.6'	−0 04	−0 01	*0.94	*0.98	12.85	15.29	7.98
	Baranof Island, west coast				**on Sitka, p.156**					
1743	Dorothy Cove, Necker Bay	56° 43.3'	135° 04.5'	−0 02	−0 02	*0.97	*0.95	7.48	9.61	5.12
1745	Golf Island, Necker Island	56° 47.2'	135° 23.5'	−0 02	−0 01	*0.98	*0.97	7.53	9.70	5.18
	Sitka Sound									
1747	Symonds Bay, Biorka Island	56° 51'	135° 31'	−0 15	−0 16	−0.1	0.0	7.6	9.8	5.2
1749	SITKA	57° 03.1'	135° 20.5'		*Daily predictions*			7.70	9.94	5.31
1751	Olga Point, Olga Strait	57° 14'	135° 32'	+0 00	+0 14	0.0	0.0	7.7	9.9	5.3
	Salisbury Sound and Peril Strait									
1753	Klokachef Island	57° 25'	135° 53'	−0 10	−0 06	−0.1	+0.1	7.5	9.9	5.2
1755	Scraggy Point	57° 20'	135° 43'	−0 09	+0 00	−0.1	+0.1	7.5	9.8	5.2
1757	Scraggy Island	57° 20.4'	135° 42.4'	+0 00	−0 01	*1.00	*1.03	7.62	9.97	5.31
1759	Haley Anchorage, Fish Bay	57° 22'	135° 37'	+0 03	+0 12	+0.2	+0.1	7.8	10.1	5.4
1761	Serguis Narrows	57° 24.6'	135° 37.6'	+0 19	+0 24	*1.33	*1.05	10.62	13.04	6.86
1763	Bear Bay	57° 25'	135° 35'	+0 18	+0 29	+3.7	+0.2	11.2	13.6	7.2
					on Juneau, p.152					
1765	Povorotni Island, Pogibshi Point	57° 31'	135° 33'	−0 09	+0 02	−1.3	−0.1	12.5	14.9	7.7
1767	Nismeni Cove	57° 34'	135° 25'	−0 15	−0 03	−1.3	−0.1	12.5	15.0	7.7
1769	Point Elizabeth	57° 31'	135° 17'	−0 15	−0 05	−1.6	0.0	12.1	14.7	7.6
1771	Lindenburg Head	57° 27'	135° 02'	−0 15	−0 05	−1.8	0.0	11.9	14.5	7.5
1773	Fairway Island	57° 27'	134° 53'	−0 15	−0 05	−2.1	0.0	11.6	14.2	7.4
	Chichagof Island, west coast				**on Elfin Cove, p.160**					
1775	Falcon Arm, Slocum Arm	57° 33'	135° 56'	−0 05	−0 07	*0.96	*1.10	8.1	10.2	5.6
1777	Elbow Passage, Klag Bay	57° 37'	136° 05'	+0 08	+0 13	*0.98	*1.03	8.4	10.7	5.7
1779	Kimshan Cove, Ogden Passage	57° 41'	136° 06'	+0 05	+0 06	*0.92	*1.03	7.8	10.1	5.4
	Lisianski Strait and Inlet									
1781	Canoe Cove, North Pass	57° 51'	136° 25'	+0 02	−0 01	*0.91	*0.89	7.9	10.1	5.2
1783	Miner Island	58° 01'	136° 20'	−0 08	−0 06	*0.94	*0.96	8.1	10.4	5.5
1785	Pelican Harbor	57° 57.4'	136° 13.6'	+0 02	+0 00	*0.96	*1.00	8.27	10.61	5.31
	Yakobi Island, outer coast									
1787	Takanis Bay	57° 55'	136° 31'	−0 04	−0 01	*0.90	*1.03	7.6	10.1	5.3
1789	Surge Bay	58° 01.0'	136° 31.8'	+0 00	+0 02	*0.88	*0.96	7.5	9.9	5.1
	Cross Sound									
1791	ELFIN COVE, Port Althorp	58° 11.6'	136° 20.5'		*Daily predictions*			8.68	11.02	5.80
1793	Inian Cove, North Inian Pass	58° 15.8'	136° 19.5'	+0 12	+0 03	*1.05	*1.01	9.12	11.18	6.04
	Icy Strait									
1795	Mud Bay, Goose Island	58° 12.7'	136° 02.1'	+0 06	+0 06	*1.20	*0.96	10.6	12.9	6.7
1797	Point Adolphus	58° 17.2'	135° 48.2'	+0 29	+0 35	*1.31	*1.11	11.62	14.14	7.43
1799	Excursion Inlet Entrance	58° 25.0'	135° 26.8'	+0 15	+0 16	*1.38	*1.05	12.44	14.88	7.76
1801	Excursion Inlet, north end	58° 29.8'	135° 29.3'	+0 26	+0 24	*1.36	*1.07	12.17	14.62	7.64
1803	Hoonah, Port Frederick	58° 06.4'	135° 26.6'	+0 11	+0 19	*1.40	*1.09	12.55	15.08	7.87
1805	Swanson Harbor, Ansley Island	58° 12.3'	135° 06.5'	+0 14	+0 11	*1.41	*1.08	12.70	15.30	7.93
	Glacier Bay									
1807	Bartlett Cove	58° 27.4'	135° 53.0'	+0 19	+0 22	*1.36	*1.11	12.19	14.72	7.72
1809	Willoughby Island	58° 36.4'	136° 07.2'	+0 41	+0 50	*1.50	*1.16	13.4	16.0	8.4
1811	Muir Inlet	58° 54.8'	136° 06.6'	+0 39	+0 49	*1.55	*1.19	13.97	16.65	8.72
1813	Wachusett Inlet	58° 56.8'	136° 19.9'	+0 39	+0 50	*1.57	*1.20	14.17	16.84	8.83
1815	Composite Island	58° 53.3'	136° 34.4'	+0 45	+0 51	*1.54	*1.20	13.9	16.5	8.6
1817	Tarr Inlet	58° 57.8'	136° 52.6'	+0 41	+0 51	*1.60	*1.20	14.18	16.87	8.38
	Gulf of Alaska									
1819	Graves Harbor	58° 16.6'	136° 40.7'	+0 04	+0 07	*0.91	*1.03	7.6	10.0	5.3
1821	Dixon Harbor	58° 23'	136° 52'	+0 07	+0 07	*0.89	*0.96	7.6	9.9	5.2
1823	Lituya Bay, 2 miles inside entrance	58° 37'	137° 37'	+0 06	+0 36	*0.87	*0.89	7.5	9.7	5.0
					on Yakutat, p.164					
1825	Yakutat, Yakutat Bay	59° 32.9'	139° 44.1'		*Daily predictions*			7.82	10.07	5.30
1827	Johnstone Passage, Yakutat Bay	59° 34.9'	139° 42.2'	+0 01	+0 03	*1.00	*1.00	7.76	9.97	5.27
1829	Redfield Cove, Yakutat Bay	59° 36.9'	139° 34.8'	+0 01	+0 00	*1.00	*0.92	7.82	9.97	5.19
1831	Point Latouche, Yakutat Bay	59° 54.2'	139° 37.6'	+0 06	+0 03	*1.00	*0.93	7.84	10.00	5.21
1833	Riou Bay, Icy Bay	59° 53.1'	141° 27.4'	+0 02	+0 03	*0.98	*1.01	7.6	9.9	5.2
1835	Tyndall Glacier, Icy Bay	60° 04.7'	141° 16.5'	+0 20	+0 17	*0.96	*0.97	7.50	9.67	5.10
1837	Wingham Island, Controller Bay	60° 03'	144° 24'	+0 05	+0 08	*0.99	*1.01	7.7	10.1	5.2

Endnotes can be found at the end of table 2.

TABLE 2 – TIDAL DIFFERENCES AND OTHER CONSTANTS

No.	PLACE	POSITION Latitude	POSITION Longitude	DIFFERENCES Time High Water	DIFFERENCES Time Low Water	DIFFERENCES Height High Water	DIFFERENCES Height Low Water	RANGES Mean	RANGES Diurnal	Mean Tide Level
		North	**West**	h m	h m	ft	ft	ft	ft	ft
	ALASKA Gulf of Alaska–cont. Time meridian, 135° W				**on Cordova, p.168**					
	Copper River Delta									
1839	Kokinhenik Island <10>	60° 18'	145° 05'	+0 08	– – –	– –	– –	– –	– –	– –
1841	Pete Dahl Slough	60° 23'	145° 24'	+0 06	+0 38	−2.4	0.0	7.7	10.0	5.3
1843	Eyak River entrance	60° 28'	145° 40'	+0 14	+0 58	−1.6	−0.1	8.6	10.8	5.7
1845	Middleton Island (north end)	59° 27.6'	146° 18.6'	−0 21	−0 14	−2.2	−0.1	8.0	10.3	5.4
	Prince William Sound									
	Orca Inlet									
1847	Shag Rock	60° 28'	145° 59'	−0 11	−0 16	−1.1	−0.1	9.1	11.4	6.0
1849	Gravel Point	60° 28'	145° 58'	+0 01	+0 31	−0.1	0.0	10.0	12.3	6.5
1851	CORDOVA	60° 33.5'	145° 45.2'		*Daily predictions*			10.17	12.59	6.59
1853	Orca	60° 35'	145° 43'	+0 01	+0 01	−0.2	0.0	9.9	12.4	6.4
1855	Windy Bay, Hawkins Island	60° 34'	145° 58'	−0 08	−0 01	−0.5	0.0	9.6	12.1	6.3
1857	Comfort Cove, Port Gravina	60° 43'	146° 05'	−0 16	−0 06	−0.7	−0.1	9.5	11.8	6.2
	Hinchinbrook Island									
1859	Johnstone Point	60° 29'	146° 37'	−0 07	+0 02	−0.8	−0.1	9.4	11.8	6.1
1861	Port Etches	60° 19.7'	146° 33'	−0 09	+0 01	−1.3	−0.2	9.0	11.2	5.8
1863	Cape Hinchinbrook	60° 14.3'	146° 38.8'	−3 36	−3 28	*0.88	*0.98	8.86	11.24	5.90
	Montague Island									
1865	Wooded Islands	59° 52.5'	147° 24.2'	−0 02	+0 00	*0.80	*0.95	7.90	10.24	5.39
1867	Patton Bay	59° 54'	147° 26'	−0 12	−0 05	−2.3	−0.1	7.9	10.2	5.3
1869	Macleod Harbor	59° 53.4'	147° 46.7'	+0 10	−0 04	*0.89	*0.96	8.90	11.19	5.90
1871	Hanning Bay	59° 57'	147° 41'	−0 08	−0 05	−1.0	−0.1	9.2	11.5	6.0
1873	5 miles NE of Point Brazil	59° 01.5'	147° 35.5'	−0 02	+0 00	*0.91	*0.96	9.14	11.51	6.02
1875	Perch Point	60° 07.6'	147° 23.7'	−0 08	−0 03	*0.92	*0.94	9.31	11.72	6.08
1877	Port Chalmers	60° 14.5'	147° 14.9'	−0 02	−0 01	*0.94	*0.97	9.53	11.91	6.22
1879	Gibbon Anchorage, Green Island	60° 16'	147° 26'	−0 21	−0 06	−0.8	−0.2	9.5	11.5	6.1
1881	Seal Island	60° 25.5'	147° 24.6'	−0 01	+0 02	*0.93	*0.98	9.40	11.79	6.18
1883	Latouche, Latouche Island	60° 03'	147° 54'	−0 05	−0 02	−1.0	0.0	9.1	11.5	6.0
1885	Guguak	60° 06.0'	148° 02.2'	−0 07	−0 03	*0.91	*0.95	9.19	11.57	6.04
1887	Sawmill Bay, Evans Island	60° 03'	148° 04'	−0 03	+0 03	−1.2	0.0	8.9	11.3	5.9
1889	Point Elrington, Elrington Island	59° 56.3'	148° 13.6'	−0 13	−0 02	*0.84	*0.94	8.44	10.83	5.64
	Knight Island									
1891	Point Helen	60° 09.2'	147° 47.0'	−0 03	−0 01	*0.92	*1.00	9.21	11.63	6.11
1893	Snug Harbor	60° 15.0'	147° 43.0'	−0 03	+0 00	*0.91	*0.97	9.17	11.54	6.06
1895	Bay of Isles, South Arm	60° 22.0'	147° 42.0'	+0 00	+0 02	*0.94	*1.01	9.43	11.88	6.24
1897	Port Audrey	60° 20.6'	147° 46.1'	+0 00	+0 03	*0.92	*0.95	9.27	11.58	6.07
1899	Louis Bay	60° 27.7'	147° 40.3'	+0 00	+0 03	*0.96	*1.04	9.61	12.06	6.37
1901	Herring Point	60° 28.5'	147° 47.5'	−0 04	+0 01	*0.95	*1.01	9.55	11.95	6.26
1903	Smith Island	60° 32'	147° 19'	−0 05	−0 04	−0.8	−0.1	9.4	11.8	6.1
1905	Snug Corner Cove, Port Fidalgo	60° 44'	146° 39'	−0 07	−0 06	−0.6	0.0	9.5	12.0	6.2
1907	Landlocked Bay, Port Fidalgo	60° 51'	146° 32'	−0 12	−0 08	−0.7	−0.1	9.5	11.9	6.1
					on Valdez, p.172					
	Valdez Arm									
1909	Busby Island	60° 53.9'	146° 46.9'	−0 02	−0 02	*0.98	*0.98	9.54	11.89	6.25
1911	Rocky Point	60° 56.8'	146° 45.3'	+0 00	−0 03	*0.99	*0.99	9.60	12.10	6.30
1913	Jack Bay	61° 02.4'	146° 36.9'	−0 01	−0 02	*0.99	*0.99	9.63	12.10	6.30
1915	VALDEZ, Port Valdez	61° 07.5'	146° 21.7'		*Daily predictions*			9.70	12.15	6.36
					on Cordova, p.168					
1917	Columbia Glacier, Columbia Bay	61° 01.4'	147° 05.1'	−0 01	+0 01	*0.95	*0.99	9.60	12.01	6.30
1919	Jackson Cove, Glacier Island	60° 53'	147° 14'	−0 10	−0 02	−0.6	0.0	9.5	11.9	6.2
1921	Naked Island, McPherson Passage	60° 40'	147° 24'	−0 18	−0 08	−0.7	−0.1	9.5	11.8	6.1
1923	Kings Bay, Port Nellie Juan	60° 32'	148° 28'	−0 01	+0 09	−0.6	0.0	9.5	11.9	6.2
1925	Culross Bay, Wells Passage	60° 44'	148° 11'	−0 15	−0 01	−0.4	0.0	9.7	12.1	6.3
1927	Long Bay Entrance, Culross Passage	60° 42'	148° 16'	+0 03	+0 09	−0.9	−0.1	9.3	11.6	6.1
1929	Whittier, Passage Canal	60° 47'	148° 40'	−0 05	+0 01	−0.3	0.0	9.8	12.3	6.4
1931	Applegate Island	60° 38'	148° 10'	−0 01	+0 06	−0.6	0.0	9.5	11.9	6.2
1933	Perry Island, South Bay	60° 40.3'	147° 55.9'	−0 02	−0 01	*0.94	*0.98	9.53	11.96	6.24
1935	Eshamy Bay, Knight Island Passage	60° 27'	147° 59'	+0 01	+0 04	−0.4	0.0	9.7	12.1	6.4
1937	Eshamy Lagoon	60° 27.7'	147° 02.7'	−0 11	+0 00	*0.92	*1.03	9.11	11.51	6.06
1939	Chenega Island, Dangerous Passage	60° 20'	148° 09'	−0 01	+0 06	−0.9	0.0	9.2	11.6	6.1
1941	Chenega Island, southwest end	60° 17.2'	148° 07.2'	−0 03	+0 00	*0.94	*1.00	9.37	11.71	6.14
1943	Bainbridge Point, Bainbridge Island	60° 11.8'	148° 02.5'	−0 06	+0 01	*0.93	*0.98	9.36	11.79	6.16
1945	Hogg Bay, Port Bainbridge	60° 04'	148° 12'	−0 12	−0 03	−1.9	−0.1	8.3	10.6	5.5
	Kenai Peninsula, outer coast				**on Seward, p. 176**					
1947	Day Harbor	60° 00.6'	149° 03.7'	−0 02	+0 00	*0.99	*1.01	8.2	10.5	5.5
1949	SEWARD, Resurrection Bay	60° 07.2'	149° 25.6'		*Daily predictions*			8.33	10.62	5.55
1951	Aialik Bay, North end	59° 57.2'	149° 42.9'	+0 00	+0 02	*1.00	*0.99	8.38	10.62	5.53
1953	Aialik Sill, Aialik Bay	59° 53.1'	149° 43.1'	+0 01	+0 01	*1.00	*0.98	8.38	10.65	5.55
1955	Bear Cove, Aialik Peninsula	59° 48.1'	149° 36.9'	+0 01	+0 01	*1.00	*0.97	8.34	10.57	5.51
1957	Agnes Cove, Aialik Peninsula	59° 46.4'	149° 35.3'	+0 00	+0 01	*1.01	*1.00	8.39	10.69	5.57
1959	Camp Cove, Aialik Bay	59° 41.6'	149° 44.9'	+0 00	+0 01	*1.01	*0.98	8.40	10.66	5.57
1961	Crater Bay, Harris Bay	59° 42.8'	149° 47.2'	+0 03	+0 02	*1.01	*0.95	8.49	10.72	5.56
1963	Upper Northwestern Fiord, Harris Bay	59° 47.4'	150° 01.9'	+0 07	+0 12	*1.02	*0.99	8.59	10.84	5.65
1965	Two Arm Bay, Harris Bay	59° 39.7'	150° 06.5'	−0 10	−0 05	*1.03	*0.94	8.7	11.0	5.7
1967	Chance Cove (Lagoon)	59° 29.3'	150° 18.7'	+0 00	+0 01	*1.04	*1.01	8.7	11.0	5.7

Endnotes can be found at the end of table 2.

TABLE 2 – TIDAL DIFFERENCES AND OTHER CONSTANTS

No.	PLACE	POSITION Latitude	POSITION Longitude	DIFFERENCES Time High Water	DIFFERENCES Time Low Water	DIFFERENCES Height High Water	DIFFERENCES Height Low Water	RANGES Mean	RANGES Diurnal	Mean Tide Level
		North	**West**	h m	h m	ft	ft	ft	ft	ft
	ALASKA Kenai Peninsula, outer coast–cont. Time meridian, 135° W				**on Seward, p. 176**					
1969	Beauty Bay, Nuka Bay	59° 31.6'	150° 37.7'	+0 12	+0 14	*1.08	*1.01	9.1	11.4	5.9
1971	Nuka Passage	59° 24.5'	150° 40.0'	+0 11	+0 12	*1.09	*1.01	9.2	11.5	6.0
1973	Takoma Cove, Port Dick	59° 15.7'	150° 58.9'	+0 23	+0 18	*1.15	*1.01	9.8	12.1	6.3
1975	Picnic Harbor, Rocky Bay	59° 15'	151° 26'	+0 17	+0 19	+0.3	−0.1	10.5	12.7	6.6
	Cook Inlet				**on Seldovia, p.180**					
1977	Ushagat Island, Barren Islands	58° 57'	152° 16'	−0 08	−0 04	*0.76	*0.76	11.4	13.7	7.2
1979	Port Chatham	59° 13'	151° 44'	−0 28	−0 34	*0.78	*0.92	11.9	14.3	7.5
1981	Port Graham	59° 21'	151° 49'	−0 08	−0 14	−1.0	0.0	14.5	16.9	8.9
	Kachemak Bay									
1983	SELDOVIA	59° 26.4'	151° 43.2'		*Daily predictions*			15.54	18.04	9.46
1985	Kasitsna Bay	59° 28.1'	151° 33.9'	+0 01	+0 01	*1.01	*0.99	15.66	18.15	9.52
1987	Tutka Bay	59° 26'	151° 21'	−0 01	−0 01	+0.2	0.0	15.7	18.1	9.5
1989	Sadie Cove	59° 29'	151° 22'	−0 04	−0 04	+0.1	−0.1	15.6	18.0	9.4
1991	Halibut Cove	59° 36'	151° 13'	−0 03	−0 05	+0.7	0.0	16.2	18.7	9.7
1993	Homer	59° 36.2'	151° 25.2'	+0 05	+0 03	*1.01	*0.97	15.83	18.32	9.57
1995	Bear Cove	59° 44'	151° 01'	−0 04	−0 05	+0.4	−0.1	16.0	18.4	9.6
1997	Anchor Point	59° 46'	151° 53'	+0 29	+0 21	+0.4	0.0	15.9	18.3	9.6
1999	Cape Ninilchik	60° 01'	151° 43'	+0 41	+0 54	+1.2	+0.2	16.5	19.1	10.1
2001	Ninilchik	60° 03'	151° 40'	+0 41	+1 04	+1.2	0.0	16.7	19.1	10.0
2003	Cape Kasilof	60° 20.2'	151° 22.8'	+1 31	+1 54	*1.12	*1.18	17.27	19.95	10.64
2005	Chinulna Point	60° 30.2'	151° 16.9'	+1 54	+2 22	*1.17	*1.25	18.02	20.88	11.12
2007	Kenai River entrance	60° 33'	151° 17'	+1 52	+2 18	+2.7	+0.5	17.7	20.7	11.0
2009	Kenai City Pier	60° 33'	151° 14'	+1 54	+2 55	+1.9	−0.1	17.5	19.8	10.4
2011	NIKISKI	60° 41.0'	151° 23.9'		*Daily predictions, p.184*			17.63	20.42	10.86
2013	East Foreland	60° 43'	151° 25'	+2 37	+2 58	+3.0	+0.5	18.0	21.0	11.2
					on Anchorage, p.188					
2015	North Foreland	61° 02.6'	151° 09.7'	−1 02	−1 27	*0.71	*0.96	18.14	20.99	11.23
2017	Point Possession	61° 02.2'	150° 24.7'	−0 41	−0 49	*0.89	*0.98	23.15	26.04	13.79
2019	Fire Island	61° 10.4'	150° 12.2'	−0 17	−0 27	*0.92	*0.98	23.97	26.91	14.20
2021	ANCHORAGE, Knik Arm	61° 14.3'	149° 53.4'		*Daily predictions*			26.19	29.16	15.34
2023	Port Mackenzie	61° 16.1'	149° 55.0'	+0 07	+0 03	*1.00	*0.99	26.15	29.10	15.30
2025	Goose Creek	61° 23.5'	149° 51.0'	+0 22	+0 38	*1.06	*0.99	28.03	31.02	16.25
					on Seldovia, p.180					
2027	Kaligan Island (north end)	60° 30.7'	151° 57.1'	+1 48	+1 55	*1.04	*1.17	16.00	18.74	10.00
2029	Drift River Terminal	60° 34'	152° 08'	+1 39	+2 04	*1.01	*1.18	15.4	18.1	9.7
2031	Tuxedni Channel	60° 09.2'	152° 38.1'	+1 09	+1 15	*0.90	*1.05	13.80	16.34	8.68
2033	Snug Harbor	60° 06'	152° 34'	+1 04	+1 15	−2.3	0.0	13.2	15.7	8.3
2035	Oil Bay, Kamishak Bay	59° 38'	153° 16'	+1 15	+1 16	*0.77	*0.83	12.6	13.9	7.3
2037	Iliamna Bay	59° 37'	153° 35'	+0 12	+0 16	*0.80	*0.82	12.3	14.5	7.5
2039	Nordyke Island, Kamishak Bay	59° 11'	154° 05'	+0 10	+0 22	−2.8	−0.2	12.9	15.2	8.0
	Kodiak and Afognak Islands				**on Kodiak, p.192**					
2041	Tonki Bay	58° 19.0'	152° 04.0'	+0 14	+0 21	*1.30	*1.18	8.90	11.20	5.75
2043	Kizhuyak Point	57° 54'	152° 39'	+0 05	+0 09	+0.6	+0.1	7.3	9.4	4.8
2045	Port Lions	57° 52.4'	152° 52.0'	−0 03	−0 01	*1.07	*1.05	7.28	9.36	4.80
2047	Ouzinkie, Spruce Island	57° 55.3'	152° 29.8'	−0 08	−0 10	*1.02	*1.03	6.93	8.90	4.59
2049	Kodiak, Port of Kodiak	57° 47.0'	152° 25.7'	−0 03	−0 02	0.0	0.0	6.78	8.76	4.48
2051	Kodiak, St. Paul Harbor	57° 44.7'	152° 29.0'	−0 03	−0 01	*0.99	*1.03	6.65	8.70	4.45
2053	KODIAK, Womens Bay	57° 43.9'	152° 30.7'		*Daily predictions*			6.78	8.78	4.49
2055	Ugak Bay (Saltery Cove)	57° 29'	152° 44'	−0 29	−0 20	−0.3	−0.1	6.6	8.4	4.3
2057	Port Hobron, Sitkalidak Island	57° 10'	153° 09'	−0 18	−0 06	−0.3	+0.1	6.4	8.3	4.4
2059	Old Harbor	57° 12.1'	153° 18.2'	−0 19	−0 08	*0.98	*1.12	6.45	8.32	4.45
2061	Three Saints Bay	57° 07'	153° 31'	−0 22	−0 13	−0.2	+0.1	6.5	8.3	4.4
2063	Japanese Bay	56° 58'	153° 42'	−0 17	−0 10	−0.3	+0.1	6.4	8.2	4.4
2065	Sitkinak Lagoon	56° 30'	154° 08'	−0 20	+0 07	−1.0	+0.2	5.6	7.5	4.1
					on Alitak, p.196					
2067	ALITAK, Lazy Bay	56° 53.9'	154° 14.8'		*Daily predictions*			9.25	11.63	6.20
2069	Moser Bay (Trap Point)	56° 59.0'	154° 09.3'	+0 11	+0 10	*0.99	*1.01	9.3	11.6	6.2
2071	Olga Bay (A. P. A. Cannery)	57° 09.5'	154° 14.3'	+3 46	+3 54	*0.10	*0.06	1.0	1.4	0.6
					on Seldovia, p.180					
	Uyak Bay									
2073	Uyak	57° 38.1'	154° 00.4'	−0 17	−0 03	*0.75	*0.98	11.26	13.78	7.28
2075	Larsen Bay	57° 32.0'	153° 59.4'	−0 09	+0 03	*0.74	*0.95	11.20	13.74	7.22
2077	Mining Camp	57° 28'	153° 49'	−0 37	−0 10	−4.1	−0.1	11.5	13.9	7.3
2079	Zachar Bay	57° 33'	153° 44'	−0 09	+0 00	*0.77	*0.77	11.3	13.8	7.3
	Uganik Bay									
2081	Village Islands	57° 47'	153° 33'	−0 15	−0 02	*0.80	*0.80	11.7	14.4	7.5
2083	Northeast Arm	57° 44'	153° 20'	−0 12	−0 01	*0.77	*0.77	11.4	13.9	7.3
2085	Uganik Passage	57° 48'	153° 18'	−0 07	+0 02	*0.81	*0.81	11.9	14.6	7.6
2087	Viekoda Bay	57° 54'	153° 10'	−0 11	−0 03	*0.80	*0.80	11.8	14.4	7.6

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		North	**West**	h m	h m	ft	ft	ft	ft	ft
	ALASKA Kodiak and Afognak Islands–cont. Time meridian, 135° W				**on Seldovia, p.180**					
	Kupreanof Strait									
2089	Onion Bay	58° 03'	153° 14'	+0 00	−0 01	*0.80	*0.80	11.8	14.4	7.6
2091	Dry Spruce Island	57° 57'	153° 02'	+0 02	+0 13	*0.77	*0.77	11.4	13.9	7.4
2093	Nachalni Island	57° 59'	152° 56'	+0 10	+0 24	*0.76	*0.76	11.2	13.6	7.2
2095	Uzkosti Point	57° 56'	152° 49'	−0 43	+0 34	*0.64	*0.64	8.8	11.6	6.2
2097	Dolphin Point, Raspberry Strait	58° 07'	153° 09'	−0 25	−0 05	−4.1	−0.1	11.5	14.0	7.3
2099	Malina Bay, Shelikof Strait	58° 11'	152° 57'	−0 14	+0 00	*0.81	*0.81	12.0	14.5	7.7
2101	Redfox Bay, Shuyak Strait	58° 27'	152° 36'	−0 14	−0 02	−4.4	−0.2	11.3	13.7	7.2
	Shuyak Island									
2103	Big Bay	58° 33'	152° 37'	+0 10	+0 15	*0.77	*0.77	11.5	13.9	7.3
2105	Carry Inlet	58° 35'	152° 31'	+0 06	+0 07	*0.73	*0.73	10.7	13.1	6.9
	Alaska Peninsula									
2107	Nukshak Island, Shelikof Strait	58° 23.5'	153° 57.5'	−0 01	+0 07	*0.76	*0.95	11.42	13.82	7.32
2109	Kukak, Kukak Bay	58° 20'	154° 07'	−0 08	+0 05	*0.74	*0.74	11.1	13.3	6.9
2111	Aguchik Island, Kukak Bay	58° 17.4'	154° 16.2'	−0 04	+0 06	*0.75	*0.94	11.35	13.76	7.27
2113	Takli Island, Shelikof Strait	58° 03.8'	154° 28.6'	−0 09	+0 03	*0.73	*1.00	10.95	13.59	7.18
2115	Katmai Bay, Shelikof Strait	58° 00'	154° 59'	−0 14	+0 01	*0.71	*0.71	10.5	12.8	6.6
2117	Puale Bay	57° 42'	155° 23'	−0 22	−0 03	*0.67	*0.67	9.8	12.1	6.4
					on Kodiak, p.192					
2119	Kanatak Lagoon, Portage Bay	57° 31'	156° 04'	+0 21	+0 51	+3.0	+0.3	9.5	11.8	6.1
2121	Lees Cabins, Wide Bay	57° 26'	156° 18'	+0 21	+0 32	+3.2	+0.2	9.8	11.9	6.2
2123	Kujulik Bay (North Shore)	56° 36.8'	157° 59.0'	+0 31	+0 46	*1.10	*1.35	7.18	9.50	5.08
2125	Unavikshak Island	56° 29.5'	157° 44.4'	+0 31	+0 44	*1.05	*1.24	6.86	9.08	4.80
2127	Nakchamik Island	56° 21.1'	157° 48.7'	+0 29	+0 41	*1.04	*1.33	6.73	8.99	4.82
2129	Chignik, Anchorage Bay	56° 17.8'	158° 24.0'	+0 34	+0 44	*1.04	*1.28	6.77	8.96	4.78
2131	Castle Bay, Northwest Arm	56° 13.9'	158° 20.8'	+0 32	+0 47	*1.02	*1.30	6.58	8.82	4.72
2133	Chankliut Island	56° 08.8'	158° 06.4'	+0 32	+0 43	*0.98	*1.27	6.32	8.50	4.55
2135	Chowiet Island, Semidi Island	56° 03.1'	156° 41.9'	+0 15	+0 25	*1.04	*1.29	6.75	8.95	4.79
2137	Hump Island, Kuiukta Bay	56° 06.8'	158° 35.8'	+0 35	+0 42	*0.91	*1.23	5.78	7.93	4.24
2139	Three Star Point	55° 54'	159° 10'	+0 28	+0 37	*0.90	*1.28	5.7	7.9	4.2
2141	Mitrofania Island	55° 53.4'	158° 49.2'	+0 32	+0 39	*0.88	*1.23	5.62	7.73	4.15
2143	Chiachi Island (east side)	55° 51'	159° 06'	+0 22	+0 37	*0.89	*1.28	5.6	7.8	4.2
2145	Kupreanof Harbor, Paul Island	55° 47'	159° 21'	+0 19	+0 35	*0.89	*1.28	5.6	7.8	4.2
2147	Fox Bay, Kupreanof Peninsula	55° 38'	159° 37'	+0 18	+0 33	*0.86	*1.19	5.5	7.6	4.0
2149	Dent Point, Stepovak Bay	55° 47'	159° 53'	+0 17	+0 33	*0.86	*1.19	5.5	7.6	4.0
					on Sand Point, p.200					
	Shumagin Islands									
2151	Herendeen Island	55° 03.9'	159° 25.1'	−0 01	−0 02	*1.02	*1.02	5.27	7.39	3.99
2153	Bird Island	54° 50.1'	159° 45.5'	−0 06	−0 09	*0.97	*1.03	4.96	7.05	3.85
2155	Sanborn Harbor, Nagai Island	55° 09'	159° 59'	+0 03	−0 03	*1.00	*0.98	5.2	7.2	3.9
2157	Mist Harbor, Nagai Island	55° 08'	159° 51'	+0 01	−0 02	*0.97	*0.90	5.1	7.0	3.7
2159	Pirate Cove, Popof Island	55° 22'	160° 22'	+0 08	+0 03	*1.03	*0.98	5.4	7.4	4.0
2161	SAND POINT, POPOF ISLAND	55° 20.2'	160° 30.1'		*Daily predictions*			5.19	7.23	3.93
2163	Zachary Bay, Unga Island	55° 20'	160° 37'	+0 00	+0 09	*1.03	*0.98	5.4	7.5	4.0
2165	Albatross Anchorage, Balboa Bay	55° 35'	160° 37'	−0 02	+0 03	*1.06	*1.05	5.5	7.6	4.1
2167	Beaver Bay	55° 28'	160° 50'	+0 03	+0 02	*1.01	*1.05	5.2	7.3	4.0
2169	Seal Cape, Coal Bay	55° 22'	161° 20'	+0 00	+0 05	*0.98	*1.05	5.0	7.0	3.9
2171	Ukolnoi Island	55° 16'	161° 32'	+0 07	+0 00	*0.97	*0.98	5.0	7.0	3.8
2173	Dolgoi Harbor, Dolgoi Island	55° 07.3'	161° 47.5'	+0 10	+0 02	*0.94	*0.98	4.80	6.78	3.71
2175	Settlement Point, Pavlof Bay	55° 30'	161° 28'	+0 09	+0 08	*0.98	*0.90	5.2	7.2	3.8
2177	King Cove	55° 03.7'	162° 19.6'	+0 11	+0 03	*0.94	*1.00	4.83	6.83	3.74
2179	Lenard Harbor, Cold Bay	55° 07'	162° 23'	+0 12	+0 17	*0.98	*0.98	5.1	7.2	3.8
2181	Cold Bay	55° 12.5'	162° 41.8'	+0 14	+0 11	*1.03	*1.01	5.38	7.42	4.03
	Sanak Islands									
2183	Peterson Bay	54° 24'	162° 38'	−0 05	−0 08	*0.83	*1.05	4.0	6.2	3.4
2185	Sanak Harbor	54° 29'	162° 49'	+0 14	+0 03	*0.89	*1.05	4.4	6.6	3.6
	Aleutian Islands									
	Unimak Island									
2187	Dora Harbor	54° 42'	163° 16'	+0 15	+0 15	*0.87	*1.05	4.3	6.5	3.5
2189	Ikatan Bay	54° 45'	163° 19'	+0 09	+0 05	*0.90	*0.98	4.6	6.5	3.6
					on Unalaska, p.204					
2191	False Pass, Isanotski Strait	54° 52'	163° 24'	−1 47	−2 25	*1.02	*1.19	2.1	4.1	2.4
2193	St. Catherine Cove	55° 01'	163° 30'	+0 04	−0 18	*1.23	*1.36	2.6	4.7	2.9
2195	Cape Mordvinof	54° 56'	164° 28'	+0 26	+0 19	*1.73	*1.36	4.3	6.4	3.7
2197	Cape Sarichef	54° 36'	164° 55'	−0 24	−0 56	*1.37	*1.27	3.2	5.0	3.1
2199	Scotch Cap	54° 23.6'	164° 44.7'	−2 45	−2 53	*1.69	*1.74	4.00	6.18	3.62
2201	Tigalda Bay, Tigalda Island	54° 07.2'	164° 58.6'	−2 40	−1 11	*0.91	*0.91	1.8	3.3	1.9
2203	Southeast Tigalda Island	54° 06.1'	164° 56.5'	−3 34	−3 42	*1.42	*1.42	3.39	5.30	3.02
2205	Rootok Island, Rootok Strait	54° 03.1'	165° 30.8'	−3 38	−3 28	*1.36	*1.32	3.28	5.06	2.87
2207	Trident Bay, Akun Island	54° 08.4'	165° 31.6'	−3 53	−2 57	*1.12	*0.60	3.17	4.13	2.14
2209	Akun Bay, Akun Island	54° 14.0'	165° 32.0'	−0 15	−0 36	*0.87	*0.53	2.40	3.08	1.69
2211	Surf Bay, Akun Island	54° 09.0'	165° 36.9'	+0 08	+0 11	*1.05	*1.08	2.47	3.76	2.23

Endnotes can be found at the end of table 2.

TABLE 2 – TIDAL DIFFERENCES AND OTHER CONSTANTS

No.	PLACE	POSITION Latitude	POSITION Longitude	DIFFERENCES Time High Water	DIFFERENCES Time Low Water	DIFFERENCES Height High Water	DIFFERENCES Height Low Water	RANGES Mean	RANGES Diurnal	Mean Tide Level
		North	**West**	h m	h m	ft	ft	ft	ft	ft
	ALASKA Aleutian Islands–cont. Time meridian, 135° W				**on Unalaska, p.204**					
	Akutan Island									
2213	Akutan	54° 08.0'	165° 46.6'	+0 02	+0 03	*1.03	*0.97	2.53	3.73	2.16
2215	Akutan Harbor	54° 08'	165° 48'	−0 17	−0 07	*1.08	*1.10	2.4	3.9	2.5
2217	Green Bight	54° 06.6'	165° 39.7'	−2 32	−2 59	*1.35	*1.42	3.17	5.01	2.91
2219	Broad Bight	54° 03.8'	165° 56.2'	−3 10	−3 25	*1.52	*1.55	3.59	5.56	3.24
2221	Reef Bight	54° 07.8'	166° 05.9'	−0 23	−0 37	*1.00	*1.04	2.34	3.60	2.14
2223	Malga Bay, Unalga Island	53° 59'	166° 10'	−0 18	−1 05	*0.85	*0.93	1.8	3.3	2.0
	Unalaska Island									
2225	English Bay	53° 56'	166° 15'	+0 16	−0 01	*0.79	*0.76	1.8	3.0	1.8
2227	Dutch Harbor, Amaknak Island	53° 54'	166° 32'	+0 00	−0 07	*1.00	*1.00	2.2	3.7	2.3
2229	UNALASKA	53° 52.8'	166° 32.2'		*Daily predictions*			2.39	3.60	2.12
2231	Anderson Bay	53° 41'	166° 50'	−0 01	+0 28	*1.08	*1.10	2.4	4.0	2.5
2233	Skan Bay	53° 37'	167° 03'	−0 07	−0 19	*1.05	*1.10	2.3	4.0	2.4
2235	Kashega Bay	53° 28'	167° 05'	−0 08	−0 24	*1.08	*1.19	2.3	4.0	2.5
2237	Chernofski Harbor	53° 24'	167° 32'	−0 10	−0 29	*1.02	*1.10	2.2	3.8	2.4
2239	Kuliliak Bay	53° 28'	167° 01'	−3 10	−3 35	*1.46	*1.27	3.5	5.6	3.2
2241	Eagle Bay	53° 29'	166° 56'	−2 56	−3 16	*1.46	*1.02	3.8	5.4	3.1
2243	Raven Bay	53° 28'	166° 52'	−3 16	−3 48	*1.49	*1.27	3.6	5.7	3.3
2245	Usof Bay	53° 31'	166° 48'	−3 30	−3 45	*1.55	*1.19	3.9	6.1	3.3
2247	Udamat Bay, Sedanka Island	53° 50'	166° 13'	−3 13	−3 25	*1.35	*1.35	3.3	5.1	2.9
2249	Udagak Strait	53° 44'	166° 18'	−3 32	−3 59	*1.37	*1.02	3.5	5.5	2.9
2251	Kisselen Bay, Beaver Inlet	53° 43'	166° 34'	−2 59	−3 14	*1.40	*1.10	3.5	5.2	3.0
2253	Bogoslof Island	53° 55'	168° 02'	−0 30	−0 55	*1.08	*1.10	2.4	3.9	2.5
	Umnak Island									
2255	Otter Point	53° 24'	167° 51'	−0 27	−0 40	*0.88	*0.93	1.9	3.4	2.0
2257	Inanudak Bay	53° 18'	168° 21'	−0 06	−0 30	*0.96	*0.93	2.2	3.7	2.2
2259	Okee Bay	53° 01'	168° 50'	−0 07	−0 43	*0.99	*1.10	2.1	3.7	2.3
2261	Adugak Islands	52° 55'	169° 10'	−0 33	−0 56	*1.02	*1.10	2.2	4.0	2.4
2263	Cape Sagak	52° 50'	169° 03'	−3 03	−3 16	*1.20	*1.02	2.9	4.9	2.6
2265	Driftwood Bay	52° 57'	168° 43'	−2 56	−3 22	*1.35	*1.10	3.3	5.3	2.9
2267	Nikolski	52° 56.5'	168° 52.3'	−0 24	−0 19	*1.11	*0.99	2.76	4.02	2.30
2269	Kigul Island	53° 03'	168° 26'	−3 04	−3 42	*1.37	*1.27	3.2	5.5	3.1
	Time meridian, 150° W									
2271	Applegate Cove, Chuginadak Island	52° 52'	169° 52'	−1 21	−1 58	*1.08	*1.27	2.2	4.2	2.6
2273	Herbert Island, west side	52° 43'	170° 09'	−2 40	−2 51	*1.14	*0.93	2.8	4.4	2.5
	Yunaska Island									
2275	East Cove	52° 40'	170° 34'	−2 36	−3 35	*0.88	*0.85	2.0	3.7	2.0
2277	North side	52° 41'	170° 42'	−2 05	−2 29	*1.02	*1.19	2.1	4.0	2.4
2279	Amukta Island, north side	52° 31'	171° 14'	−2 32	−3 03	*0.94	*1.10	1.9	3.6	2.2
					on Sweeper Cove, p.208					
2281	Finch Cove, Seguam Island †	52° 23'	172° 24'	−1 00	+0 07	*0.87	*0.87	– –	3.2	1.6
	Atka Island									
2283	Martin Harbor, Korovin Bay †	52° 14'	174° 18'	+0 19	+0 21	*0.87	*0.87	– –	3.2	1.6
2285	Atka, Nazan Bay †	52° 13.9'	174° 10.3'	−0 11	+0 18	*0.92	*0.92	2.66	3.38	1.84
2287	Cape Utalug (4 miles west of) †	52° 07'	174° 12'	−1 38	−2 32	*1.19	*1.19	– –	4.4	2.2
2289	Atka Pass, east end †	52° 00'	175° 19'	−1 07	−2 10	*1.24	*1.24	– –	4.6	2.3
2291	Sagchudak Island †	52° 02'	174° 29'	−1 26	−2 25	*1.24	*1.24	– –	4.6	2.3
2293	Explorer Bay †	52° 04'	174° 34'	−2 43	−2 24	*1.24	*1.24	– –	4.6	2.3
2295	Bechevin Bay †	52° 02'	175° 07'	+0 11	+0 04	*0.95	*0.95	– –	3.5	1.7
2297	Fenimore Pass †	51° 58'	175° 35'	−0 04	−0 13	*0.89	*0.89	– –	3.3	1.6
2299	Bugle Point, Great Sitkin Island †	52° 02'	175° 59'	+0 01	−0 05	*0.89	*0.89	– –	3.3	1.6
2301	Sand Bay, Great Sitkin Island †	51° 58'	176° 05'	−0 05	−0 20	*0.97	*0.97	– –	3.6	1.8
2303	Tanager Point, Chugul Island †	51° 57'	175° 52'	– – –	−2 08	*1.00	*1.00	– –	3.7	1.9
2305	Laska Cove, Kagalaska Island †	51° 50'	176° 24'	−0 04	+0 07	*0.97	*0.97	– –	3.6	1.8
	Adak Island									
2307	SWEEPER COVE, Kuluk Bay †	51° 51.8'	176° 37.9'		*Daily predictions*			2.90	3.71	2.01
2309	Adak Bight †	51° 46'	176° 26'	−1 24	−2 02	*1.00	*1.00	– –	3.7	1.8
2311	Boot Bay †	51° 43'	176° 32'	−1 38	−2 09	*0.97	*0.97	– –	3.6	1.8
2313	Bay of Waterfalls †	51° 39'	176° 50'	−1 20	−2 04	*0.95	*0.95	– –	3.5	1.7
2315	Unalga Bight †	51° 47'	176° 48'	−0 07	−0 21	*0.97	*0.97	– –	3.6	1.8
	Kanaga Island									
2317	Shoal Point	51° 52'	177° 04'	+0 01	−0 16	*0.86	*0.86	– –	3.2	1.6
2319	Cape Chlanak	51° 43'	177° 09'	−1 22	−1 34	*0.92	*0.92	– –	3.4	1.7
2321	Kanaga Bay †	51° 43'	177° 12'	−1 39	−1 44	*1.05	*1.05	– –	3.9	1.9
2323	Cape Chunu †	51° 40'	177° 38'	−1 44	−1 54	*1.11	*1.11	– –	4.1	2.0
	Tanaga Island									
2325	Hot Springs Bay †	51° 47'	177° 48'	−0 40	−0 12	*0.84	*0.84	– –	3.1	1.5
2327	Tanaga Bay †	51° 43'	178° 00'	−0 06	−0 32	*1.08	*1.08	– –	4.0	2.0
2329	Lash Bay †	51° 40'	178° 03'	−0 56	−1 39	*1.14	*1.14	– –	4.2	2.1
	Delarof Islands									
2331	Ogliuga Island (east coast) †	51° 36'	178° 37'	+0 01	−0 43	*0.95	*0.95	– –	3.5	1.7
2333	Gareloi Island †	51° 45'	178° 48'	−0 08	−0 30	*1.00	*1.00	– –	3.7	1.8
		North	**East**							
	Rat Islands									
2335	Constantine Harbor, Amchitka Island †	51° 25'	179° 17'	+0 19	−0 06	*0.76	*0.76	– –	2.8	1.4
2337	Gertrude Cove, Kiska Island †	51° 56'	177° 27'	+0 02	−0 19	*0.86	*0.86	– –	3.2	1.6
2339	Kiska Harbor, Kiska Island †	51° 59'	177° 33'	+0 24	−0 13	*0.97	*0.97	– –	3.6	1.8

Endnotes can be found at the end of table 2.

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No.	PLACE	POSITION Latitude	POSITION Longitude	DIFFERENCES Time High Water	DIFFERENCES Time Low Water	DIFFERENCES Height High Water	DIFFERENCES Height Low Water	RANGES Mean	RANGES Diurnal	Mean Tide Level
		North	**East**	h m	h m	ft	ft	ft	ft	ft
	ALASKA Aleutian Islands–cont. Time meridian, 150° W				**on Massacre Bay, p.212**					
2341	Alcan Harbor, Shemya Island †	52° 44'	174° 04'	+0 00	−0 03	*1.03	*1.03	– –	3.4	1.7
2343	Otkriti Bay, Agattu Island †	52° 23'	173° 38'	−0 14	−0 13	*1.03	*1.03	– –	3.4	1.7
	Attu Island									
2345	MASSACRE BAY †	52° 50'	173° 12'		*Daily predictions*			– –	3.3	1.6
2347	Chichagof Harbor †	52° 56'	173° 14'	+0 13	+0 16	*1.09	*1.09	– –	3.6	1.8
2349	Holtz Bay †	52° 56'	173° 10'	−0 04	+0 18	*1.12	*1.12	– –	3.7	1.8
2351	Steller Cove †	52° 59'	172° 54'	−0 13	+0 11	*1.12	*1.12	– –	3.7	1.8
2353	Etienne Bay †	52° 56'	172° 37'	−0 17	+0 03	*1.12	*1.12	– –	3.7	1.8
	Bristol Bay Time meridian, 135° W	**North**	**West**		**on Unalaska, p.204**					
2355	Amak Island	55° 25'	163° 07'	+1 47	+1 48	*2.13	*1.78	5.2	7.7	4.7
2357	Grant Point, Izembek Lagoon	55° 16'	162° 54'	+3 03	+4 05	*1.23	*0.85	3.2	4.5	2.6
					on Port Moller, p.220					
2359	PORT MOLLER	55° 59.4'	160° 33.7'		*Daily predictions*			7.39	10.42	5.89
2361	Port Heiden	56° 56.0'	158° 43.7'	+1 43	+2 05	*1.15	*1.18	8.5	12.3	6.9
	Egegik River									
2363	Entrance	58° 14.3'	157° 30.0'	+3 16	+3 47	*1.69	*1.14	13.8	18.2	9.4
2365	Egegik	58° 13.0'	157° 22.5'	+3 42	+5 36	*1.20	*0.36	10.8	13.3	6.2
2367	Middle Bluff, Kvichak Bay	58° 27.2'	157° 30.0'	+3 56	+4 10	*1.84	*1.14	15.2	19.6	10.1
	Naknek River									
2369	Entrance <13>	58° 43.3'	157° 03.4'	+4 27	+5 26	*2.15	*1.00	18.5	22.6	11.4
2371	Omakstalia Point	58° 42.4'	156° 45.4'	+4 58	+8 35	*0.69	*0.14	6.3	8.1	3.4
2373	King Salmon Airport	58° 40.3'	156° 39.4'	+5 43	+9 46	*0.24	*0.09	2.1	3.2	1.2
	Kvichak River									
2375	Kvichak	58° 58.2'	156° 56.8'	+5 21	+7 49	*1.54	*0.41	13.9	16.5	7.8
2377	Levelock	59° 06.8'	156° 49.9'	+6 13	+9 34	*0.90	*0.23	8.2	10.3	4.6
	Nushagak Bay									
2379	Protection Point	58° 30.0'	158° 42.7'	+4 24	+4 25	*1.66	*1.27	13.15	17.74	9.36
2381	Clarks Point	58° 50.9'	158° 33.1'	+4 33	+4 59	*1.96	*1.21	16.22	20.67	10.78
2383	Snag Point	59° 02.4'	158° 26.8'	+5 15	+6 04	*1.96	*1.05	16.58	20.64	10.60
2385	Black Rock, Walrus Islands <14>	58° 42.5'	160° 11.3'	+4 53	+4 53	*0.80	*0.82	5.9	9.5	4.7
	Kuskokwim Bay and River				**on Platinum, p.224**					
2387	PLATINUM	59° 02.8'	161° 49.0'		*Daily predictions*			6.12	9.44	3.68
2389	Goodnews Bay entrance	59° 02.7'	161° 48.5'	+0 04	+0 11	*1.01	*0.95	6.2	8.9	3.7
2391	Carter Bay, Kuskokwim Bay	59° 22.6'	162° 01.7'	+0 42	+0 45	*1.24	*1.05	7.67	10.68	4.50
2393	Quinhagak (Kwinak), Kanektok River	59° 45.0'	161° 54.9'	+1 38	+2 06	*1.44	*1.06	9.03	11.93	5.18
2395	Apokak Creek entrance	60° 08.2'	162° 09.5'	+3 18	+4 30	*1.47	*0.79	9.4	12.0	5.2
2397	Popokamute	60° 07.4'	162° 30.0'	+3 04	+4 12	*1.32	*0.97	8.30	11.02	4.77
2399	Helmick Point, southeast of	60° 16.2'	162° 24.6'	+3 56	+5 10	*1.23	*1.02	7.62	10.18	4.45
2401	Lomavik	60° 33.2'	162° 17.8'	+5 57	+7 31	*0.94	*1.11	5.64	7.92	3.52
2403	BETHEL, KUSKOKWIM RIVER	60° 48.0'	161° 45.0'		*Daily predictions p.228*			2.42	3.67	1.56
2405	Mekoryuk, Nunivak Island	60° 25.0'	166° 10.0'	+2 05	+2 25	*1.05	*1.02	6.41	7.62	3.85
2407	Nelson Island, Tooksook Bay	60° 31.0'	165° 08.0'	+2 48	+3 09	*1.31	*1.65	7.76	9.21	4.92
	Bering Sea				**on Unalaska, p.204**					
2409	Zapadni Bay, St. George Island	56° 34'	169° 41'	+1 15	+1 18	*0.89	*0.89	– –	3.3	1.7
2411	VILLAGE COVE, St. Paul Island	57° 07.5'	170° 16.5'		*Daily predictions, p. 216*			2.10	3.30	2.03
2413	St. Matthew Island	60° 22'	172° 43'	+0 22	+0 50	*0.57	*0.57	1.3	2.1	1.2
					on Nome, p.236					
	St. Lawrence Island									
2415	Northeast Cape	63° 19.0'	168° 58.0'	−2 38	−3 47	*1.65	*0.71	2.01	2.46	1.22
2417	Fossil River entrance	63° 28.0'	170° 01.0'	−2 39	−3 56	*1.11	*0.65	1.3	1.7	0.8
2419	Niyrakpak Lagoon entrance	63° 37.2'	171° 23.0'	−3 06	−4 19	*0.81	*0.65	0.9	1.2	0.6
	Norton Sound				**on Unalakleet, p.232**					
2421	Numam Iqua (Sheldon Pt.), Kwemeluk Pass †	62° 31.9'	164° 50.7'	−5 28	−6 20	*0.57	*0.68	1.81	2.64	1.07
2423	Apoon Mouth, Yukon River †	63° 03'	163° 23'	−1 30	−1 30	*1.03	*1.03	– –	4.0	2.0
2425	Pikmiktalik River entrance †	63° 16'	162° 36'	−1 13	−1 13	*1.08	*1.08	– –	4.2	2.1
2427	St. Michael †	63° 29'	162° 02'	−0 11	−2 16	*1.00	*1.00	– –	3.9	2.0
2429	North Bay, Stuart Island †	63° 37'	162° 30'	−0 28	−0 28	*0.72	*0.72	– –	2.8	1.4
2431	UNALAKLEET †	63° 52.5'	160° 47.2'		*Daily predictions*			3.17	3.89	1.84
2433	Shaktoolik †	64° 22.8'	161° 14.1'	+0 17	+0 03	*0.97	*0.97	2.43	3.76	1.84
					on Nome, p.236					
2435	NOME	64° 30.0'	165° 25.8'		*Daily predictions*			1.04	1.54	0.83
2437	Point Spencer, Port Clarence	65° 15.4'	166° 50.8'	+4 56	+5 10	*0.88	*0.42	1.06	1.28	0.66
2439	Teller, Port Clarance	65° 16.0'	166° 21.1'	+4 01	+4 13	*0.80	*0.87	0.80	1.18	0.67
2441	Lost River, Seward Peninsula	65° 23.4'	167° 08.7'	+6 43	+5 30	*0.71	*0.29	0.86	1.09	0.53
	Bering Straits				**on Cape Krusenstern, p.240**					
2443	Tin City	65° 33.5'	167° 58.5'	+0 15	+0 57	*1.38	*0.83	1.02	0.73	0.46
2445	Shishmaref Inlet	66° 15.8'	166° 01.2'	+2 18	+2 32	*1.45	*0.92	0.76	1.03	0.49

Endnotes can be found at the end of table 2.

TABLE 2 – TIDAL DIFFERENCES AND OTHER CONSTANTS

No.	PLACE	POSITION Latitude	POSITION Longitude	DIFFERENCES Time High Water	DIFFERENCES Time Low Water	DIFFERENCES Height High Water	DIFFERENCES Height Low Water	RANGES Mean	RANGES Diurnal	Mean Tide Level
		North	**West**	h m	h m	ft	ft	ft	ft	ft
	ALASKA Kotzebue Sound Time meridian, 135° W				**on Cape Krusenstern, p.240**					
2447	Deering	66° 05.8'	162° 44.4'	+7 35	+9 28	*2.71	*2.33	1.36	1.83	0.96
2449	Kotzebue	66° 54.1'	162° 34.9'	+9 58	+11 23	*0.95	*1.42	0.40	0.66	0.37
2451	CAPE KRUSENSTERN	67° 03.3'	163° 19.3'	cDaily	predicti	ons		0.48	0.66	0.36
2453	Red Dog Dock	67° 34.6'	164° 03.9'	+2 04	+2 51	*1.20	*1.08	0.66	0.88	0.46
2455	Kivalina	67° 43.6'	164° 35.5'	+1 24	+4 38	*1.28	*0.83	0.67	0.90	0.43
2457	Point Hope	68° 20.5'	166° 48.4'	+4 12	+3 54	*0.99	*0.81	0.50	0.67	0.35
	Arctic Ocean <15>				**on Kodiak, p.192**					
2459	Barrow offshore	71° 21.6'	156° 43.8'	−1 12	−1 53	*0.07	*0.05	0.49	0.66	0.30
2461	Point Barrow	71° 22'	156° 22'	−0 37	−0 26	*0.04	*0.04	0.3	0.4	0.2
2463	PRUDHOE BAY	70° 24.0'	148° 31.6'		*Daily predictions, p.244*			0.51	0.70	0.34
2465	Flaxman Island	70° 11'	145° 50'	−0 57	−0 28	*0.08	*0.09	0.5	0.7	0.3
2467	Herschel Island, Mackenzie Bay	69° 34'	138° 55'	−1 36	−1 42	– –	– –	0.6	0.7	1.5
2469	Tuktoyaktuk, Mackenzie Bay	69° 27'	133° 00'	−1 30	−0 54	– –	– –	1.1	1.2	1.3
	HAWAIIAN ISLANDS Time meridian, 165° W				**on Honolulu, p.256**					
2471	SAND ISLAND, MIDWAY ISLANDS	28° 12.7'	177° 21.6'		*Daily predictions, p.248*			0.9	1.3	0.7
2473	Lisianski Island	26° 04'	173° 58'	– – –	– – –	– –	– –	0.5	0.8	0.3
	Time meridian, 150° W									
2475	Laysan Island	25° 46'	171° 45'	+1 02	+1 12	*0.53	*0.50	0.7	1.0	0.4
2477	East Island, French Frigate Shoals	23° 47'	166° 13'	+0 03	+0 08	*0.73	*0.73	0.9	1.4	0.6
2479	Nonopapa, Niihau Island	21° 52'	160° 14'	−0 16	−0 11	*0.77	*0.77	1.0	1.6	0.7
					on Nawiliwili, p.252					
	Kauai Island									
2481	Waimea Bay	21° 57'	159° 40'	+0 07	+0 18	*0.86	*0.91	1.0	1.6	0.7
2483	Port Allen, Hanapepe Bay	21° 54.2'	159° 3.5'	−0 15	−0 10	*1.01	*1.00	1.24	1.84	0.82
2485	NAWILIWILI BAY	21° 57.4'	159° 21.6'		*Daily predictions*			1.2	1.8	0.8
2487	Hanamaulu Bay	22° 00'	159° 20'	+0 10	+0 04	*1.00	*0.91	1.2	1.8	0.8
2489	Hanalei Bay	22° 13'	159° 30'	−1 01	−1 22	*1.07	*0.91	1.3	1.8	0.8
					on Honolulu, p.256					
	Oahu Island									
2491	Haleiwa, Waialua Bay †	21° 36'	158° 07'	−1 02	−2 05	*0.80	*0.80	– –	1.6	0.7
2493	Waianae	21° 27'	158° 12'	+0 20	+0 18	*0.93	*1.00	1.2	1.8	0.8
2495	Pearl Harbor Entrance, Bishop Point	21° 19.8'	157° 58.0'	+0 15	+0 06	*1.00	*0.88	1.30	1.66	0.79
2497	Pearl Harbor, Ford Island Ferry	21° 22.1'	157° 56.4'	+0 16	+0 08	*1.03	*0.88	1.35	1.73	0.82
2499	HONOLULU	21° 18.5'	157° 52.0'		*Daily predictions*			1.28	1.64	0.80
2501	Hanauma Bay	21° 17'	157° 42'	−0 59	−0 45	*1.00	*1.00	1.3	1.9	0.8
					on Moku O Loe, p.260					
2503	Waimanalo	21° 20'	157° 42'	+0 11	+0 05	*0.88	*0.75	1.1	1.8	0.8
2505	MOKU O LOE	21° 26.2'	157° 47.6'		*Daily predictions*			1.5	2.1	1.0
2507	Waikane, Kaneohe Bay	21° 30'	157° 51'	−0 22	−0 04	*1.13	*1.00	1.4	2.2	1.1
2509	Laiemaloo	21° 38.2'	157° 55.3'	+0 43	+0 00	*1.05	*1.08	1.05	2.29	1.11
2511	Laie Bay	21° 39'	157° 56'	−0 21	−0 32	*1.00	*0.75	1.3	2.2	0.9
					on Honolulu, p.256					
	Molokai Island									
2513	Kolo	21° 06'	157° 12'	+0 05	+0 01	0.0	0.0	1.3	2.0	0.8
2515	Kaunakakai Harbor	21° 05.1'	157° 01.9'	−0 10	−0 14	*1.13	*1.25	1.42	1.82	0.91
2517	Kamalo Harbor	21° 03'	156° 53'	−0 37	−0 16	+0.1	0.0	1.4	2.1	0.9
2519	Pukoo Harbor	21° 04'	156° 48'	−1 03	−0 48	+0.1	0.0	1.4	2.1	0.9
2521	Kaumalapau, Lanai Island	20° 47'	157° 00'	+0 02	+0 03	+0.2	0.0	1.5	2.2	0.9
	Kahoolawe Island									
2523	Kuheia Bay	20° 36'	156° 36'	−0 09	−0 09	+0.2	0.0	1.5	2.1	0.9
2525	Smuggler Cove	20° 31'	156° 41'	−0 15	+0 03	+0.2	0.0	1.5	2.2	0.9
					on Kahului, p.264					
	Maui Island									
2527	KAHULUI	20° 53.9'	156° 28.3'		*Daily predictions*			1.6	2.3	1.1
2529	Hana	20° 46'	155° 59'	+0 40	+0 18	*1.05	*0.54	1.8	2.5	1.1
2531	Makena	20° 39'	156° 27'	+1 21	+1 09	*0.73	*0.54	1.2	1.8	0.8
2533	Kihei, Maalaea Bay	20° 47'	156° 28'	+1 52	+1 19	*0.94	*0.54	1.6	2.3	1.0
2535	Lahaina	20° 53'	156° 41'	+1 18	+1 01	*0.89	*0.81	1.4	2.2	1.0
					on Hilo, p.268					
	Hawaii Island									
2537	Mahukona	20° 11'	155° 54'	+0 38	+0 42	*0.80	*0.67	1.4	2.1	0.9
2539	Kawaihae	20° 02.4'	155° 49.9'	+1 01	+0 57	*0.83	*0.60	1.46	2.14	0.91
2541	Kailua Kona	19° 39'	156° 00'	+0 38	+0 37	*0.80	*0.67	1.4	2.1	0.9
2543	Napoopoo, Kealakekua Bay	19° 28'	155° 55'	+0 48	+0 47	*0.80	*0.67	1.4	2.1	0.9
2545	Honuapo	19° 05'	155° 33'	+0 38	+0 33	*1.01	*1.00	1.7	2.5	1.1
2547	HILO	19° 43.8'	155° 03.4'		*Daily predictions*			1.67	2.40	1.13
2549	JOHNSTON ATOLL	16° 44.3'	169° 31.8'		*Daily predictions p.272*			1.9	2.2	1.1

Endnotes can be found at the end of table 2.

ENDNOTES

* Ratio. If the ratio is accompanied by a correction factor, multiply the heights of the high and low waters at the reference station by the ratio, and then apply the correction factor. See note and examples on pages 277 and 278.

† The tide at this place is chiefly diurnal. See caution note on page 277 .

<1> For places on the Atlantic coast, see “Tide Tables, East Coast of North and South America.”

<2> For places on the Caribbean Sea and Gulf of Mexico, see “Tide Tables, East Coast of North and South America.”

<3> The bore in the Colorado River above Phillips Point is reported to have a height of several feet at times of large tides.

<4> These data apply only during low river stages.

<5> The Columbia River is subject to annual freshets. Short range predictions are available at local river forecast centers. The data for stations above Harrington Point apply only during low river stages.

<6> For stations on the Canadian side see pages 290 and 291.

<7> The low water seldom falls below the chart datum.

<8> The data for La Conner apply only during low levels of the channel which usually occur in midsummer. Low water seldom falls below the chart datum.

<9> Heights are referred to mean lower low water, the datum of soundings on National Ocean Service charts.

<10> Because of shoals, low water at this place is restricted from falling below half tide level outside the river entrance.

<11> A bore frequently occurs in Turnagain Arm just after low water. Under favorable conditions it is said to reach a height of 6 feet.

<12> Because of the shoal condition of the upper part of Knik Arm, the channel off Eklutna becomes practically a nontidal stream during the period when the height of the tide at Anchorage is less than 15 feet above mean lower low water.

<13> No low water falls below –2 feet.

<14> When the difference in height between lower high water and higher low water at Port Moller is less than 4 feet, reliance should not be placed on calculated corresponding tides at Black Rock because the tide there may actually be diurnal.

<15> Along the Arctic coast of Alaska east of Cape Lisburne, the mean range is about 0.5 foot.

<16> For the passages inside Vancouver Island the height differences apply only to the higher high and lower low waters at the indicated reference station.

<17> The slough in this area goes dry at low water stages of the tide. The mean high water depth is about 5 feet.

<18> Due to bottom configuration and depths at low water stages, a low water stand may occur at this station.

<19> The times listed for this reference station are the Greenwich Intervals for high water and low water respectively. Please see the discussion at the beginning of Table 2 under the heading “Time differences”.

TABLE 3.—HEIGHT OF TIDE AT ANY TIME

EXPLANATION OF TABLE

Although the footnote of Table 3 may contain sufficient explanation for finding the height of tide at any time, two examples are given here to illustrate its use.

Example 1.—Find the height of the tide at 0735 at Balboa, Panama, on a day when the predicted tides from Table 1 are given as:

Low Water	
Time	*Height*
h.m.	*ft*
0500	3.1
1746	2.5

High Water	
Time	*Height*
h.m.	*ft*
1114	14.7
2356	13.4

An inspection of the above example shows that the desired time falls between the two morning tides

The duration of rise is $11^h\ 14^m – 5^h\ 00^m = 6^h\ 14^m$.

The time after low water for which the height is required is $7^h\ 35^m – 5^h\ 00^m = 2^h\ 35^m$.

The range of tide is 14.7 – 3.1 = 11.6 feet.

The duration of rise or fall in table 3 is given in heavy-faced type for each 20 minutes from $4^h\ 00^m$ to $10^h\ 40^m$. The nearest tabular value to $6^h\ 14^m$, the above duration of rise, is $6^h\ 20^m$; and on the horizontal line of $6^h\ 20^m$, the nearest tabular time to $2^h\ 35^m$ after low water for which the height is required is $2^h\ 32^m$. Following down the column in which this $2^h\ 32^m$ is found to its intersection with the line of the range 11.5 feet (the nearest tabular value to the above range of 11.6 feet), the correction is found to be 4.0 feet, which being reckoned from low water, must be added, making 3.1 + 4.0 = 7.1 feet or 216 centimeters which is the required height above mean lower low water, the datum for Balboa.

Example 2. —Find the height of the tide at 0300 at Los Angeles, Calif., on a day when the predicted tides are given as:

High Water	
Time	*Height*
h.m.	*ft*
0039	4.9
1510	3.1

Low Water	
Time	*Height*
h.m.	*ft*
0814	0.2
1933	2.4

The duration of fall is $8^h\ 14^m – 00^h\ 39^m = 7^h\ 35^m$.

The time after high water for which the height is required is $3^h\ 00^m – 00^h\ 39^m = 02^h\ 21^m$.

The range of tide is 4.9 – 0.2 = 4.7 feet.

Entering Table 3 at the duration of fall of $7^h\ 40^m$, which is the nearest value to $7^h\ 35^m$, the nearest value on the horizontal line to $2^h\ 21^m$ is $2^h\ 18^m$ after high water. Follow down this column to its intersection with a range of 4.5 feet which is the nearest tabular value to 4.7 feet, one obtains 0.9 which, being calculated from high water, must be subtracted from it. The approximate height at $03^h\ 00^m$ is, therefore, 4.9 - 0.9 = 4.0 feet or 122 centimeters.

When the duration of rise or fall is greater than $10^h\ 40^m$, enter the table with one-half the given duration and with one-half the time from the nearest high or low water; but if the duration of rise or fall is less than 4 hours, enter the table with double the given duration and with double the time from the nearest high or low water.

TABLE 3.—HEIGHT OF TIDE AT ANY TIME

Similarly, when the range of tide is greater than 20 feet, enter the table with one-half the given range. The tabular correction should then be doubled before applying it to the given high or low water height. If the range of tide is greater than 40 feet, take one-third of the range and multiply the tabular correction by 3.

If the height at any time is desired for a place listed in Table 2 predictions of the high and low waters for the day in question should be obtained by the use of the difference given for the place in that table. Having obtained these predictions, the height for any intermediate time is obtained in the same manner as illustrated in the foregoing example.

GRAPHIC METHOD

If the height of the tide is required for a number of times on a certain day, the full tide curve for the day may be obtained by the *one-quarter, one-tenth rule*. The procedure is as follows:

1. On cross-section paper plot the high and low water points in the order of their occurrence for the day, measuring time horizontally and height vertically. These are the basic points for the curve.

2. Draw light straight lines connecting the points representing successive high and low waters.

3. Divide each of these straight lines into four equal parts. The halfway point of each line gives another point for the curve.

4. At the quarter point adjacent to high water draw a vertical line above the point and at the quarter point adjacent to low water draw a vertical line below the point, making the length of these lines equal to one-tenth of the range between the high and low waters used. The points marking the ends of these vertical lines give two additional intermediate points for the curve.

5. Draw a smooth curve through the points of high and low waters and the intermediate points, making the curve well rounded near high and low waters. This curve will approximate the actual tide curve and heights for any time of the day may be readily scaled from it.

Caution.—Both methods presented are based on the assumption that the rise and fall conform to simple cosine curves. Therefore, the heights obtained will be approximate. The roughness of approximation will vary as the tide curve differs from a cosine curve.

An example of the use of the graphical method is illustrated below. Using the same predicted tides as in example 2, the approximate height at $3^h\ 00^m$ could be determined as shown below.

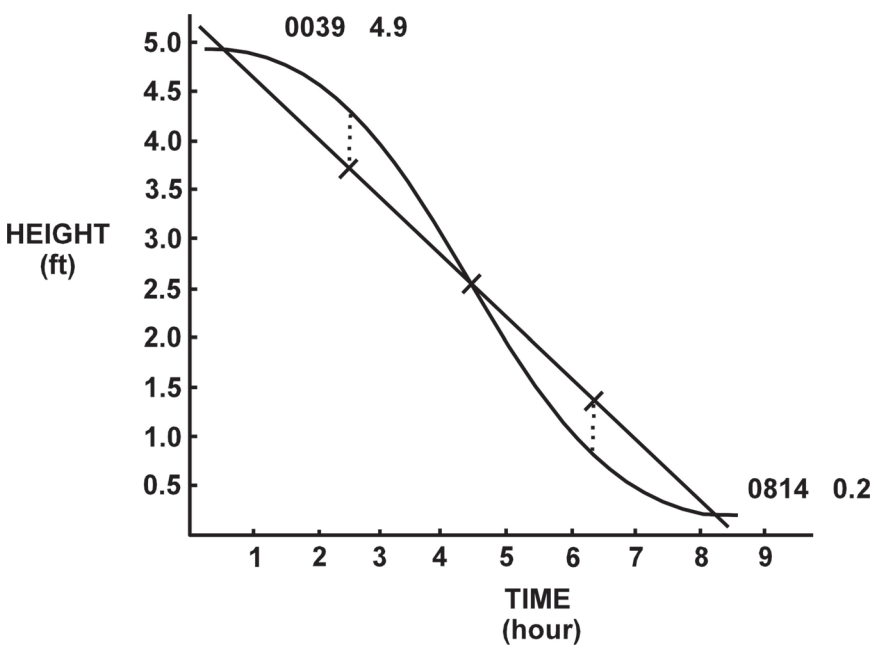


TABLE 3.—HEIGHT OF TIDE AT ANY TIME

Duration of rise or fall, see footnote	Time from the nearest high water or low water														
h. m.	*h. m.*	*h. m.*	*h. m.*	*h. m.*	*h. m.*	*h. m.*	*h. m.*	*h. m.*	*h. m.*	*h. m.*	*h. m.*	*h. m.*	*h. m.*	*h. m.*	*h. m.*
4 10	0 08	0 16	0 24	0 32	0 40	0 48	0 56	1 04	1 12	1 20	1 28	1 36	1 44	1 52	2 00
4 20	0 09	0 17	0 26	0 35	0 43	0 52	1 01	1 09	1 18	1 27	1 35	1 44	1 53	2 01	2 10
4 40	0 09	0 19	0 28	0 37	0 47	0 56	1 05	1 15	1 24	1 33	1 43	1 52	2 01	2 11	2 20
5 00	0 10	0 20	0 30	0 40	0 50	1 00	1 10	1 20	1 30	1 40	1 50	2 00	2 10	2 20	2 30
5 20	0 11	0 21	0 32	0 43	0 53	1 04	1 15	1 25	1 36	1 47	1 57	2 08	2 19	2 29	2 40
5 40	0 11	0 23	0 34	0 45	0 57	1 08	1 19	1 31	1 42	1 53	2 05	2 16	2 27	2 39	2 50
6 00	0 12	0 24	0 36	0 48	1 00	1 12	1 24	1 36	1 48	2 00	2 12	2 24	2 36	2 48	3 00
6 20	0 13	0 25	0 38	0 51	1 03	1 16	1 29	1 41	1 54	2 07	2 19	2 32	2 45	2 57	3 10
6 40	0 13	0 27	0 40	0 53	1 07	1 20	1 33	1 47	2 00	2 13	2 27	2 40	2 53	3 07	3 20
7 00	0 14	0 28	0 42	0 56	1 10	1 24	1 38	1 52	2 06	2 20	2 34	2 48	3 02	3 16	3 30
7 20	0 15	0 29	0 44	0 59	1 13	1 28	1 43	1 57	2 12	2 27	2 41	2 56	3 11	3 25	3 40
7 40	0 15	0 31	0 46	1 01	1 17	1 32	1 47	2 03	2 18	2 33	2 49	3 04	3 19	3 35	3 50
8 00	0 16	0 32	0 48	1 04	1 20	1 36	1 52	2 08	2 24	2 40	2 56	3 12	3 28	3 44	4 00
8 20	0 17	0 33	0 50	1 07	1 23	1 40	1 57	2 13	2 30	2 47	3 03	3 20	3 37	3 53	4 10
8 40	0 17	0 35	0 52	1 09	1 27	1 44	2 01	2 19	2 36	2 53	3 11	3 28	3 45	4 03	4 20
9 00	0 18	0 36	0 54	1 12	1 30	1 48	2 06	2 24	2 42	3 00	3 18	3 36	3 54	4 12	4 30
9 20	0 19	0 37	0 56	1 15	1 33	1 52	2 11	2 29	2 48	3 07	3 25	3 44	4 03	4 21	4 40
9 40	0 19	0 39	0 58	1 17	1 37	1 56	2 15	2 35	2 54	3 13	3 33	3 52	4 11	4 31	4 50
10 00	0 20	0 40	1 00	1 20	1 40	2 00	2 20	2 40	3 00	3 20	3 40	4 00	4 20	4 40	5 00
10 20	0 21	0 41	1 02	1 23	1 43	2 04	2 25	2 45	3 06	3 27	3 47	4 08	4 29	4 49	5 10
10 40	0 21	0 43	1 04	1 25	1 47	2 08	2 29	2 51	3 12	3 33	3 55	4 16	4 37	4 59	5 20

Range of tide, see footnote	Correction to height														
Ft.	*Ft.*	*Ft.*	*Ft.*	*Ft.*	*Ft.*	*Ft.*	*Ft.*	*Ft.*	*Ft.*	*Ft.*	*Ft.*	*Ft.*	*Ft.*	*Ft.*	*Ft.*
0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2
1.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.2	0.2	0.2	0.3	0.3	0.4	0.4	0.5
1.5	0.0	0.0	0.0	0.1	0.1	0.1	0.2	0.2	0.3	0.4	0.4	0.5	0.6	0.7	0.8
2.0	0.0	0.0	0.0	0.1	0.1	0.2	0.3	0.3	0.4	0.5	0.6	0.7	0.8	0.9	1.0
2.5	0.0	0.0	0.1	0.1	0.2	0.2	0.3	0.4	0.5	0.6	0.7	0.9	1.0	1.1	1.2
3.0	0.0	0.0	0.1	0.1	0.2	0.3	0.4	0.5	0.6	0.8	0.9	1.0	1.2	1.3	1.5
3.5	0.0	0.0	0.1	0.2	0.2	0.3	0.4	0.6	0.7	0.9	1.0	1.2	1.4	1.6	1.8
4.0	0.0	0.0	0.1	0.2	0.3	0.4	0.5	0.7	0.8	1.0	1.2	1.4	1.6	1.8	2.0
4.5	0.0	0.0	0.1	0.2	0.3	0.4	0.6	0.7	0.9	1.1	1.3	1.6	1.8	2.0	2.2
5.0	0.0	0.1	0.1	0.2	0.3	0.5	0.6	0.8	1.0	1.2	1.5	1.7	2.0	2.2	2.5
5.5	0.0	0.1	0.1	0.2	0.4	0.5	0.7	0.9	1.1	1.4	1.6	1.9	2.2	2.5	2.8
6.0	0.0	0.1	0.1	0.3	0.4	0.6	0.8	1.0	1.2	1.5	1.8	2.1	2.4	2.7	3.0
6.5	0.0	0.1	0.2	0.3	0.4	0.6	0.8	1.1	1.3	1.6	1.9	2.2	2.6	2.9	3.2
7.0	0.0	0.1	0.2	0.3	0.5	0.7	0.9	1.2	1.4	1.8	2.1	2.4	2.8	3.1	3.5
7.5	0.0	0.1	0.2	0.3	0.5	0.7	1.0	1.2	1.5	1.9	2.2	2.6	3.0	3.4	3.8
8.0	0.0	0.1	0.2	0.3	0.5	0.8	1.0	1.3	1.6	2.0	2.4	2.8	3.2	3.6	4.0
8.5	0.0	0.1	0.2	0.4	0.6	0.8	1.1	1.4	1.8	2.1	2.5	2.9	3.4	3.8	4.2
9.0	0.0	0.1	0.2	0.4	0.6	0.9	1.2	1.5	1.9	2.2	2.7	3.1	3.6	4.0	4.5
9.5	0.0	0.1	0.2	0.4	0.6	0.9	1.2	1.6	2.0	2.4	2.8	3.3	3.8	4.3	4.8
10.0	0.0	0.1	0.2	0.4	0.7	1.0	1.3	1.7	2.1	2.5	3.0	3.5	4.0	4.5	5.0
10.5	0.0	0.1	0.3	0.5	0.7	1.0	1.3	1.7	2.2	2.6	3.1	3.6	4.2	4.7	5.2
11.0	0.0	0.1	0.3	0.5	0.7	1.1	1.4	1.7	2.3	2.8	3.3	3.8	4.4	4.9	5.5
11.5	0.0	0.1	0.3	0.5	0.8	1.1	1.5	1.8	2.3	2.9	3.4	4.0	4.6	5.1	5.8
12.0	0.0	0.1	0.3	0.5	0.8	1.1	1.5	1.9	2.5	3.0	3.6	4.1	4.8	5.4	6.0
12.5	0.0	0.1	0.3	0.5	0.8	1.2	2.6	1.9	2.6	3.1	3.7	4.3	5.0	5.6	6.2
13.0	0.0	0.1	0.3	0.6	0.9	1.2	1.7	2.2	2.7	3.2	3.9	4.5	5.1	5.8	6.5
13.5	0.0	0.1	0.3	0.6	0.9	1.3	1.7	2.2	2.8	3.4	4.0	4.7	5.3	6.0	6.8
14.0	0.0	0.2	0.3	0.6	0.9	1.3	1.8	2.3	2.9	3.5	4.2	4.8	5.5	6.3	7.0
14.5	0.0	0.2	0.4	0.6	1.0	1.4	1.9	2.4	3.0	3.6	4.3	5.0	5.7	6.5	7.2
15.0	0.0	0.2	0.4	0.6	1.0	1.4	1.9	2.5	3.1	3.8	4.4	5.2	5.9	6.7	7.5
15.5	0.0	0.2	0.4	0.7	1.0	1.5	2.0	2.6	3.2	3.9	4.6	5.4	6.1	6.9	7.8
16.0	0.0	0.2	0.4	0.7	1.1	1.5	2.1	2.6	3.3	4.0	4.7	5.5	6.3	7.2	8.0
16.5	0.0	0.2	0.4	0.7	1.1	1.6	2.1	2.7	3.4	4.1	4.9	5.7	6.5	7.4	8.2
17.0	0.0	0.2	0.4	0.7	1.1	1.6	2.2	2.8	3.5	4.2	5.0	5.9	6.7	7.6	8.5
17.5	0.0	0.2	0.4	0.8	1.2	1.7	2.2	2.9	3.6	4.4	5.2	6.0	6.9	7.8	8.8
18.0	0.0	0.2	0.4	0.8	1.2	1.7	2.3	3.0	3.7	4.5	5.3	6.2	7.1	8.1	9.0
18.5	0.1	0.2	0.5	0.8	1.2	1.8	2.4	3.1	3.8	4.6	5.5	6.4	7.3	8.3	9.2
19.0	0.1	0.2	0.5	0.8	1.3	1.8	2.4	3.1	3.9	4.8	5.6	6.6	7.5	8.5	9.5
19.5	0.1	0.2	0.5	0.8	1.3	1.9	2.5	3.2	4.0	4.9	5.8	6.7	7.7	8.7	9.8
20.0	0.1	0.2	0.5	0.9	1.3	1.9	2.6	3.3	4.1	5.0	5.9	6.9	7.9	9.0	10.0

Obtain from the predictions the high water and low water, one of which is before and the other after the time for which the height is required. The difference between the times of occurrence of these tides is the duration of rise or fall, and the difference between their heights is the range of tide for the above table. Find the difference between the nearest high or low water and the time for which the height is required.

Enter the table with the duration of rise or fall, printed in heavy-faced type, which most nearly agrees with the actual value, and on that horizontal line find the time from the nearest high or low water which agrees most nearly with the corresponding actual difference. The correction sought is in the column directly below, on the line with the range of tide.

When the nearest tide is high water, subtract the correction.

When the nearest tide is low, add the correction.

TABLE 4.—LOCAL MEAN TIME OF SUNRISE AND SUNSET

EXPLANATION OF TABLE

This table gives the local mean time of the rising and setting of the Sun's upper limb for every fifth day of the year. The times were computed for the instant when the true zenith distance of the Sun's center is 90° 50', 34' having been allowed for horizontal refraction and 16' for semidiameter. No allowance has been made for elevation of the observer.

Because of the sensible variations which may be made in the time of rising or setting of the Sun by a difference in elevation of the observer, and by changes in the refraction, any great refinement in the interpolation of intermediate dates or latitudes in this table is unnecessary.

The value obtained from Table 4 may be converted to standard time by means of Table 5, which follows it.

Date		0°		5° N.		10° N.		15° N.		20° N.		25° N.	
		Rise	Set	Rise	Set	Rise	Set	Rise	Set	Rise	Set	Rise	Set
		h. m.	h. m.	h. m.	h. m.	h. m.	h. m.	h. m.	h. m.	h. m.	h. m.	h. m.	h. m.
Jan.	1	06 00	18 07	06 08	17 59	06 17	17 50	06 26	17 41	06 35	17 32	06 45	17 22
	6	06 02	18 09	06 10	18 01	06 19	17 53	06 27	17 44	06 36	17 35	06 46	17 25
	11	06 04	18 11	06 12	18 03	06 20	17 55	06 29	17 47	06 37	17 38	06 47	17 29
	16	06 06	18 13	06 14	18 06	06 21	17 58	06 29	17 50	06 38	17 42	06 47	17 33
	21	06 08	18 15	06 15	18 08	06 22	18 00	06 30	17 53	06 38	17 45	06 46	17 36
	26	06 09	18 16	06 16	18 09	06 23	18 02	06 30	17 55	06 37	17 48	06 45	17 40
	31	06 10	18 17	06 16	18 11	06 22	18 04	06 29	17 58	06 36	17 51	06 43	17 44
Feb.	5	06 10	18 17	06 16	18 12	06 22	18 06	06 28	18 00	06 34	17 54	06 41	17 47
	10	06 11	18 18	06 16	18 13	06 21	18 07	06 26	18 02	06 32	17 57	06 38	17 51
	15	06 11	18 18	06 15	18 13	06 20	18 09	06 24	18 04	06 29	17 59	06 35	17 54
	20	06 10	18 17	06 14	18 13	06 18	18 09	06 22	18 05	06 26	18 01	06 31	17 57
	25	06 10	18 16	06 13	18 13	06 16	18 10	06 20	18 07	06 23	18 03	06 27	18 00
Mar.	2	06 09	18 15	06 11	18 13	06 14	18 10	06 17	18 08	06 19	18 05	06 22	18 02
	7	06 08	18 14	06 10	18 13	06 12	18 11	06 13	18 09	06 15	18 07	06 18	18 05
	12	06 07	18 13	06 08	18 12	06 09	18 11	06 10	18 10	06 11	18 09	06 13	18 07
	17	06 05	18 12	06 06	18 11	06 06	18 11	06 07	18 10	06 07	18 10	06 08	18 10
	22	06 04	18 10	06 04	18 10	06 03	18 11	06 03	18 11	06 03	18 11	06 02	18 12
	27	06 02	18 09	06 01	18 10	06 00	18 11	05 59	18 12	05 58	18 13	05 57	18 14
Apr.	1	06 01	18 07	05 59	18 09	05 58	18 11	05 56	18 12	05 54	18 14	05 52	18 16
	6	05 59	18 06	05 57	18 08	05 55	18 10	05 52	18 13	05 50	18 16	05 47	18 18
	11	05 58	18 04	05 55	18 07	05 52	18 10	05 49	18 14	05 46	18 17	05 42	18 21
	16	05 57	18 03	05 53	18 07	05 49	18 10	05 46	18 14	05 42	18 18	05 37	18 23
	21	05 55	18 02	05 51	18 06	05 47	18 11	05 43	18 15	05 38	18 20	05 33	18 25
	26	05 54	18 01	05 50	18 06	05 45	18 11	05 40	18 16	05 34	18 22	05 29	18 27
May	1	05 54	18 01	05 48	18 06	05 43	18 12	05 37	18 17	05 31	18 23	05 25	18 30
	6	05 53	18 00	05 47	18 06	05 41	18 12	05 35	18 19	05 28	18 25	05 21	18 32
	11	05 53	18 00	05 46	18 06	05 40	18 13	05 33	18 20	05 26	18 27	05 18	18 35
	16	05 53	18 00	05 46	18 07	05 39	18 14	05 31	18 21	05 24	18 29	05 15	18 38
	21	05 53	18 00	05 46	18 08	05 38	18 15	05 30	18 23	05 22	18 31	05 13	18 40
	26	05 53	18 01	05 46	18 08	05 38	18 16	05 30	18 25	05 21	18 33	05 12	18 43
	31	05 54	18 01	05 46	18 09	05 38	18 18	05 29	18 26	05 20	18 35	05 10	18 45
June	5	05 55	18 02	05 46	18 10	05 38	18 19	05 29	18 28	05 20	18 37	05 10	18 47
	10	05 56	18 03	05 47	18 12	05 38	18 20	05 29	18 29	05 20	18 39	05 10	18 49
	15	05 57	18 04	05 48	18 13	05 39	18 22	05 30	18 31	05 20	18 40	05 10	18 51
	20	05 58	18 05	05 49	18 14	05 40	18 23	05 31	18 32	05 21	18 42	05 11	18 52
	25	05 59	18 06	05 50	18 15	05 41	18 24	05 32	18 33	05 22	18 43	05 12	18 53
	30	06 00	18 07	05 51	18 16	05 43	18 25	05 33	18 34	05 24	18 43	05 13	18 54
July	5	06 01	18 08	05 52	18 17	05 44	18 25	05 35	18 34	05 25	18 44	05 15	18 54
	10	06 02	18 09	05 53	18 17	05 45	18 26	05 36	18 34	05 27	18 43	05 17	18 53
	15	06 02	18 10	05 54	18 17	05 46	18 26	05 38	18 34	05 29	18 43	05 19	18 52
	20	06 03	18 10	05 55	18 17	05 47	18 25	05 39	18 33	05 31	18 42	05 22	18 51
	25	06 03	18 10	05 56	18 17	05 48	18 24	05 41	18 32	05 33	18 40	05 24	18 49
	30	06 03	18 10	05 56	18 17	05 49	18 23	05 42	18 31	05 35	18 38	05 26	18 46
Aug.	4	06 03	18 10	05 56	18 16	05 50	18 22	05 43	18 29	05 36	18 36	05 29	18 43
	9	06 02	18 09	05 56	18 15	05 51	18 20	05 44	18 26	05 38	18 33	05 31	18 40
	14	06 01	18 08	05 56	18 13	05 51	18 18	05 45	18 24	05 40	18 30	05 33	18 36
	19	06 00	18 07	05 56	18 12	05 51	18 16	05 46	18 21	05 41	18 26	05 36	18 32
	24	05 59	18 06	05 55	18 10	05 51	18 14	05 47	18 18	05 42	18 22	05 38	18 27
	29	05 58	18 04	05 54	18 08	05 51	18 11	05 47	18 14	05 44	18 18	05 40	18 22
Sept.	3	05 56	18 03	05 53	18 05	05 51	18 08	05 48	18 11	05 45	18 14	05 41	18 17
	8	05 55	18 01	05 52	18 03	05 50	18 05	05 48	18 07	05 46	18 09	05 43	18 12
	13	05 53	17 59	05 51	18 01	05 50	18 02	05 48	18 03	05 47	18 05	05 45	18 07
	18	05 51	17 57	05 50	17 58	05 50	17 59	05 49	18 00	05 48	18 00	05 47	18 01
	23	05 49	17 56	05 49	17 56	05 49	17 56	05 49	17 56	05 49	17 56	05 49	17 56
	28	05 48	17 54	05 48	17 53	05 49	17 53	05 49	17 52	05 50	17 51	05 51	17 50
Oct.	3	05 46	17 52	05 47	17 51	05 49	17 50	05 50	17 48	05 51	17 47	05 53	17 45
	8	05 44	17 51	05 46	17 49	05 48	17 47	05 50	17 45	05 53	17 42	05 55	17 40
	13	05 43	17 50	05 46	17 47	05 48	17 44	05 51	17 41	05 54	17 38	05 57	17 35
	18	05 42	17 49	05 45	17 45	05 49	17 42	05 52	17 38	05 56	17 35	05 59	17 31
	23	05 41	17 48	05 45	17 44	05 49	17 40	05 53	17 35	05 57	17 31	06 02	17 26
	28	05 40	17 47	05 45	17 43	05 50	17 38	05 54	17 33	05 59	17 28	06 05	17 23
Nov.	2	05 40	17 47	05 45	17 42	05 51	17 36	05 56	17 31	06 02	17 25	06 08	17 19
	7	05 40	17 47	05 46	17 41	05 52	17 35	05 58	17 29	06 04	17 23	06 11	17 16
	12	05 41	17 48	05 47	17 41	05 53	17 35	06 00	17 28	06 07	17 21	06 14	17 14
	17	05 41	17 48	05 48	17 42	05 55	17 35	06 02	17 27	06 10	17 20	06 18	17 12
	22	05 42	17 50	05 50	17 42	05 57	17 35	06 05	17 27	06 13	17 19	06 21	17 11
	27	05 44	17 51	05 52	17 43	05 59	17 36	06 07	17 28	06 16	17 19	06 25	17 10
Dec.	2	05 46	17 53	05 54	17 45	06 02	17 37	06 10	17 28	06 19	17 19	06 28	17 10
	7	05 48	17 55	05 56	17 47	06 04	17 38	06 13	17 30	06 22	17 20	06 32	17 11
	12	05 50	17 57	05 58	17 49	06 07	17 40	06 16	17 31	06 25	17 22	06 35	17 12
	17	05 52	18 00	06 01	17 51	06 10	17 42	06 19	17 33	06 28	17 24	06 38	17 14
	22	05 55	18 02	06 03	17 54	06 12	17 45	06 21	17 36	06 31	17 26	06 41	17 16
	27	05 57	18 05	06 06	17 56	06 15	17 47	06 24	17 38	06 33	17 29	06 43	17 19
Jan.	1	06 00	18 07	06 08	17 59	06 17	17 50	06 26	17 41	06 35	17 32	06 45	17 22

Local mean time. To obtain standard time of rise or set, see Table 5.

Date		30° N.		32° N.		34° N.		36° N.		38° N.		40° N.	
		Rise	Set	Rise	Set	Rise	Set	Rise	Set	Rise	Set	Rise	Set
		h. m.	h. m.	h. m.	h. m.	h. m.	h. m.	h. m.	h. m.	h. m.	h. m.	h. m.	h. m.
Jan.	1	06 56	17 11	07 00	17 06	07 05	17 02	07 11	16 56	07 16	16 51	07 22	16 45
	6	06 57	17 15	07 01	17 10	07 06	17 06	07 11	17 01	07 16	16 55	07 22	16 50
	11	06 57	17 19	07 01	17 14	07 06	17 10	07 11	17 05	07 16	17 00	07 21	16 54
	16	06 57	17 23	07 01	17 19	07 05	17 14	07 10	17 10	07 15	17 05	07 20	17 00
	21	06 55	17 27	06 59	17 23	07 03	17 19	07 08	17 15	07 12	17 10	07 17	17 06
	26	06 54	17 32	06 57	17 28	07 01	17 24	07 05	17 20	07 09	17 16	07 14	17 11
	31	06 51	17 36	06 54	17 33	06 58	17 29	07 02	17 25	07 06	17 22	07 10	17 17
Feb.	5	06 48	17 40	06 51	17 37	06 54	17 34	06 58	17 31	07 01	17 27	07 05	17 23
	10	06 44	17 44	06 47	17 42	06 50	17 39	06 53	17 36	06 56	17 33	06 59	17 29
	15	06 40	17 48	06 43	17 46	06 45	17 44	06 48	17 41	06 50	17 38	06 53	17 35
	20	06 36	17 52	06 38	17 50	06 40	17 48	06 42	17 46	06 44	17 44	06 47	17 41
	25	06 31	17 56	06 32	17 54	06 34	17 53	06 36	17 51	06 38	17 49	06 40	17 47
Mar.	2	06 25	17 59	06 27	17 58	06 28	17 57	06 29	17 55	06 31	17 54	06 33	17 52
	7	06 20	18 03	06 21	18 02	06 22	18 01	06 23	18 00	06 24	17 59	06 25	17 58
	12	06 14	18 06	06 15	18 06	06 15	18 05	06 16	18 04	06 16	18 04	06 17	18 03
	17	06 08	18 09	06 08	18 09	06 08	18 09	06 09	18 09	06 09	18 09	06 09	18 08
	22	06 02	18 12	06 02	18 13	06 02	18 13	06 01	18 13	06 01	18 13	06 01	18 14
	27	05 56	18 15	05 55	18 16	05 55	18 17	05 54	18 17	05 54	18 18	05 53	18 19
Apr.	1	05 50	18 18	05 49	18 19	05 48	18 20	05 47	18 21	05 46	18 23	05 45	18 24
	6	05 44	18 21	05 43	18 23	05 41	18 24	05 40	18 26	05 38	18 27	05 37	18 29
	11	05 38	18 24	05 37	18 26	05 35	18 28	05 33	18 30	05 31	18 32	05 29	18 34
	16	05 33	18 28	05 31	18 30	05 28	18 32	05 26	18 34	05 24	18 36	05 21	18 39
	21	05 27	18 31	05 25	18 33	05 22	18 36	05 20	18 38	05 17	18 41	05 14	18 44
	26	05 22	18 34	05 20	18 37	05 17	18 40	05 14	18 43	05 11	18 46	05 07	18 49
May	1	05 18	18 37	05 15	18 40	05 11	18 43	05 08	18 47	05 04	18 50	05 01	18 54
	6	05 13	18 40	05 10	18 44	05 06	18 47	05 03	18 51	04 59	18 55	04 55	18 59
	11	05 10	18 44	05 06	18 47	05 02	18 51	04 58	18 55	04 54	19 00	04 49	19 04
	16	05 06	18 47	05 02	18 51	04 58	18 55	04 54	18 59	04 49	19 04	04 44	19 09
	21	05 04	18 50	04 59	18 54	04 55	18 59	04 50	19 03	04 45	19 08	04 40	19 14
	26	05 01	18 53	04 57	18 57	04 52	19 02	04 47	19 07	04 42	19 12	04 37	19 18
	31	05 00	18 56	04 55	19 00	04 50	19 05	04 45	19 10	04 40	19 16	04 34	19 22
June	5	04 59	18 58	04 54	19 03	04 49	19 08	04 44	19 13	04 38	19 19	04 32	19 25
	10	04 58	19 01	04 53	19 05	04 48	19 11	04 43	19 16	04 37	19 22	04 31	19 28
	15	04 58	19 02	04 54	19 07	04 48	19 13	04 43	19 18	04 37	19 24	04 31	19 30
	20	04 59	19 04	04 54	19 09	04 49	19 14	04 43	19 20	04 37	19 26	04 31	19 32
	25	05 00	19 05	04 55	19 10	04 50	19 15	04 45	19 21	04 39	19 26	04 32	19 33
	30	05 02	19 05	04 57	19 10	04 52	19 15	04 46	19 21	04 40	19 27	04 34	19 33
July	5	05 04	19 05	04 59	19 10	04 54	19 15	04 49	19 20	04 43	19 26	04 37	19 32
	10	05 06	19 04	05 02	19 09	04 57	19 14	04 51	19 19	04 46	19 25	04 40	19 30
	15	05 09	19 03	05 04	19 07	05 00	19 12	04 55	19 17	04 49	19 22	04 43	19 28
	20	05 12	19 01	05 07	19 05	05 03	19 10	04 58	19 14	04 53	19 19	04 47	19 25
	25	05 15	18 58	05 11	19 02	05 06	19 06	05 02	19 11	04 57	19 16	04 52	19 21
	30	05 18	18 55	05 14	18 59	05 10	19 03	05 05	19 07	05 01	19 11	04 56	19 16
Aug.	4	05 21	18 51	05 17	18 55	05 13	18 58	05 09	19 02	05 05	19 06	05 01	19 11
	9	05 24	18 47	05 20	18 50	05 17	18 54	05 13	18 57	05 10	19 01	05 05	19 05
	14	05 27	18 42	05 24	18 45	05 21	18 48	05 17	18 52	05 14	18 55	05 10	18 59
	19	05 29	18 37	05 27	18 40	05 24	18 43	05 21	18 46	05 18	18 49	05 15	18 52
	24	05 32	18 32	05 30	18 34	05 28	18 37	05 25	18 39	05 23	18 42	05 20	18 44
	29	05 35	18 26	05 33	18 28	05 31	18 30	05 29	18 32	05 27	18 35	05 24	18 37
Sept.	3	05 38	18 21	05 36	18 22	05 35	18 24	05 33	18 25	05 31	18 27	05 29	18 29
	8	05 41	18 15	05 39	18 16	05 38	18 17	05 37	18 18	05 35	18 20	05 34	18 21
	13	05 43	18 08	05 42	18 09	05 42	18 10	05 41	18 11	05 40	18 12	05 39	18 13
	18	05 46	18 02	05 45	18 03	05 45	18 03	05 44	18 03	05 44	18 04	05 43	18 04
	23	05 49	17 56	05 49	17 56	05 48	17 56	05 48	17 56	05 48	17 56	05 48	17 56
	28	05 51	17 50	05 52	17 49	05 52	17 49	05 52	17 49	05 53	17 48	05 53	17 48
Oct.	3	05 54	17 44	05 55	17 43	05 56	17 42	05 56	17 41	05 57	17 41	05 58	17 40
	8	05 57	17 38	05 58	17 37	05 59	17 35	06 00	17 34	06 02	17 33	06 03	17 32
	13	06 00	17 32	06 02	17 30	06 03	17 29	06 05	17 27	06 06	17 26	06 08	17 24
	18	06 04	17 26	06 05	17 25	06 07	17 23	06 09	17 21	06 11	17 19	06 13	17 17
	23	06 07	17 21	06 09	17 19	06 11	17 17	06 14	17 15	06 16	17 12	06 19	17 10
	28	06 11	17 17	06 13	17 14	06 16	17 12	06 18	17 09	06 21	17 06	06 24	17 03
Nov.	2	06 14	17 12	06 17	17 10	06 20	17 07	06 23	17 04	06 26	17 00	06 30	16 57
	7	06 18	17 09	06 21	17 06	06 25	17 02	06 28	16 59	06 32	16 55	06 35	16 51
	12	06 22	17 06	06 26	17 02	06 29	16 59	06 33	16 55	06 37	16 51	06 41	16 47
	17	06 26	17 03	06 30	16 59	06 34	16 56	06 38	16 51	06 42	16 47	06 47	16 43
	22	06 30	17 01	06 34	16 57	06 39	16 53	06 43	16 49	06 48	16 44	06 53	16 39
	27	06 35	17 00	06 39	16 56	06 43	16 52	06 48	16 47	06 53	16 42	06 58	16 37
Dec.	2	06 39	17 00	06 43	16 55	06 48	16 51	06 53	16 46	06 58	16 41	07 03	16 35
	7	06 42	17 00	06 47	16 55	06 52	16 51	06 57	16 46	07 02	16 40	07 08	16 35
	12	06 46	17 01	06 51	16 56	06 56	16 51	07 01	16 46	07 06	16 41	07 12	16 35
	17	06 49	17 03	06 54	16 58	06 59	16 53	07 04	16 48	07 10	16 42	07 16	16 36
	22	06 52	17 05	06 57	17 00	07 02	16 55	07 07	16 50	07 13	16 44	07 19	16 38
	27	06 54	17 08	06 59	17 03	07 04	16 58	07 09	16 53	07 15	16 47	07 21	16 41
Jan.	1	06 56	17 11	07 00	17 06	07 05	17 01	07 10	16 56	07 16	16 51	07 22	16 45

Local mean time. To obtain standard time of rise or set, see Table 5.

Date		42° N.		44° N.		46° N.		48° N.		50° N.		52° N.	
		Rise	Set	Rise	Set	Rise	Set	Rise	Set	Rise	Set	Rise	Set
		h. m.	h. m.	h. m.	h. m.	h. m.	h. m.	h. m.	h. m.	h. m.	h. m.	h. m.	h. m.
Jan.	1	07 28	16 39	07 35	16 32	07 42	16 25	07 50	16 17	07 58	16 09	08 08	15 59
	6	07 28	16 44	07 35	16 37	07 42	16 30	07 49	16 22	07 58	16 14	08 07	16 05
	11	07 27	16 49	07 33	16 42	07 40	16 36	07 47	16 28	07 55	16 20	08 04	16 12
	16	07 25	16 54	07 31	16 48	07 38	16 42	07 44	16 35	07 52	16 28	08 00	16 19
	21	07 22	17 00	07 28	16 55	07 34	16 49	07 40	16 42	07 48	16 35	07 55	16 28
	26	07 19	17 07	07 24	17 02	07 29	16 56	07 35	16 50	07 42	16 43	07 49	16 36
	31	07 14	17 13	07 19	17 08	07 24	17 03	07 29	16 58	07 35	16 52	07 42	16 45
Feb.	5	07 09	17 19	07 13	17 15	07 18	17 11	07 23	17 06	07 28	17 00	07 34	16 55
	10	07 03	17 26	07 07	17 22	07 11	17 18	07 15	17 14	07 20	17 09	07 25	17 04
	15	06 56	17 32	07 00	17 29	07 03	17 26	07 07	17 22	07 11	17 18	07 16	17 13
	20	06 49	17 39	06 52	17 36	06 55	17 33	06 58	17 30	07 02	17 26	07 06	17 23
	25	06 42	17 45	06 44	17 43	06 47	17 40	06 49	17 38	06 52	17 35	06 55	17 32
Mar.	2	06 34	17 51	06 36	17 49	06 38	17 47	06 40	17 45	06 42	17 43	06 44	17 41
	7	06 26	17 57	06 27	17 56	06 29	17 54	06 30	17 53	06 32	17 51	06 33	17 50
	12	06 18	18 03	06 18	18 02	06 19	18 01	06 20	18 00	06 21	17 59	06 22	17 59
	17	06 09	18 08	06 09	18 08	06 10	18 08	06 10	18 08	06 10	18 08	06 11	18 07
	22	06 01	18 14	06 00	18 14	06 00	18 15	06 00	18 15	05 59	18 15	05 59	18 16
	27	05 52	18 20	05 51	18 20	05 50	18 21	05 50	18 22	05 49	18 23	05 47	18 25
Apr.	1	05 44	18 25	05 42	18 26	05 41	18 28	05 39	18 30	05 38	18 31	05 36	18 33
	6	05 35	18 31	05 33	18 33	05 31	18 35	05 29	18 37	05 27	18 39	05 24	18 42
	11	05 27	18 36	05 24	18 39	05 22	18 41	05 19	18 44	05 16	18 47	05 13	18 50
	16	05 19	18 42	05 16	18 45	05 13	18 48	05 10	18 51	05 06	18 55	05 02	18 59
	21	05 11	18 47	05 08	18 51	05 04	18 54	05 00	18 58	04 56	19 03	04 51	19 07
	26	05 04	18 53	05 00	18 57	04 56	19 01	04 51	19 05	04 46	19 10	04 41	19 16
May	1	04 57	18 58	04 52	19 03	04 48	19 07	04 43	19 13	04 37	19 18	04 31	19 24
	6	04 50	19 04	04 45	19 09	04 40	19 14	04 35	19 19	04 29	19 26	04 22	19 32
	11	04 44	19 09	04 39	19 14	04 33	19 20	04 27	19 26	04 21	19 33	04 13	19 41
	16	04 39	19 14	04 33	19 20	04 27	19 26	04 21	19 33	04 13	19 40	04 05	19 48
	21	04 34	19 19	04 28	19 25	04 22	19 32	04 15	19 39	04 07	19 47	03 58	19 56
	26	04 31	19 24	04 24	19 30	04 17	19 37	04 10	19 45	04 01	19 53	03 52	20 03
	31	04 28	19 28	04 21	19 35	04 14	19 42	04 06	19 50	03 57	19 59	03 47	20 09
June	5	04 26	19 32	04 19	19 39	04 11	19 46	04 03	19 55	03 54	20 04	03 43	20 14
	10	04 24	19 35	04 17	19 42	04 09	19 50	04 01	19 58	03 51	20 08	03 41	20 18
	15	04 24	19 37	04 17	19 44	04 09	19 52	04 00	20 01	03 50	20 11	03 40	20 21
	20	04 24	19 39	04 17	19 46	04 09	19 54	04 00	20 03	03 50	20 13	03 40	20 23
	25	04 26	19 40	04 18	19 47	04 10	19 55	04 01	20 04	03 52	20 13	03 41	20 24
	30	04 28	19 40	04 20	19 47	04 12	19 55	04 04	20 03	03 54	20 13	03 43	20 23
July	5	04 30	19 39	04 23	19 46	04 15	19 53	04 07	20 02	03 58	20 11	03 47	20 21
	10	04 34	19 37	04 27	19 44	04 19	19 51	04 11	19 59	04 02	20 08	03 52	20 18
	15	04 37	19 34	04 31	19 41	04 24	19 48	04 16	19 56	04 07	20 04	03 58	20 14
	20	04 42	19 31	04 35	19 37	04 29	19 44	04 21	19 51	04 13	19 59	04 04	20 08
	25	04 46	19 26	04 40	19 32	04 34	19 38	04 27	19 45	04 19	19 53	04 11	20 01
	30	04 51	19 21	04 46	19 27	04 40	19 33	04 33	19 39	04 26	19 46	04 18	19 54
Aug.	4	04 56	19 16	04 51	19 21	04 45	19 26	04 40	19 32	04 33	19 38	04 26	19 45
	9	05 01	19 09	04 57	19 14	04 52	19 19	04 46	19 24	04 40	19 30	04 34	19 36
	14	05 06	19 02	05 02	19 06	04 58	19 11	04 53	19 16	04 48	19 21	04 42	19 27
	19	05 12	18 55	05 08	18 59	05 04	19 03	05 00	19 07	04 55	19 11	04 50	19 16
	24	05 17	18 47	05 14	18 50	05 10	18 54	05 06	18 57	05 02	19 01	04 58	19 06
	29	05 22	18 39	05 19	18 42	05 16	18 45	05 13	18 48	05 10	18 51	05 06	18 55
Sept.	3	05 27	18 31	05 25	18 33	05 23	18 35	05 20	18 38	05 17	18 41	05 14	18 43
	8	05 32	18 22	05 31	18 24	05 29	18 26	05 27	18 28	05 25	18 30	05 22	18 32
	13	05 38	18 14	05 36	18 15	05 35	18 16	05 34	18 17	05 32	18 19	05 31	18 20
	18	05 43	18 05	05 42	18 06	05 41	18 06	05 41	18 07	05 40	18 08	05 39	18 09
	23	05 48	17 56	05 48	17 56	05 48	17 57	05 47	17 57	05 47	17 57	05 47	17 57
	28	05 53	17 48	05 54	17 47	05 54	17 47	05 54	17 46	05 55	17 46	05 55	17 45
Oct.	3	05 59	17 39	05 59	17 38	06 00	17 37	06 01	17 36	06 02	17 35	06 04	17 34
	8	06 04	17 31	06 05	17 29	06 07	17 28	06 08	17 26	06 10	17 24	06 12	17 22
	13	06 10	17 22	06 12	17 20	06 14	17 18	06 16	17 16	06 18	17 14	06 21	17 11
	18	06 15	17 14	06 18	17 12	06 20	17 09	06 23	17 07	06 26	17 04	06 29	17 00
	23	06 21	17 07	06 24	17 04	06 27	17 01	06 31	16 58	06 34	16 54	06 38	16 50
	28	06 27	17 00	06 31	16 56	06 34	16 53	06 38	16 49	06 42	16 45	06 47	16 40
Nov.	2	06 33	16 53	06 37	16 49	06 41	16 45	06 46	16 41	06 51	16 36	06 56	16 30
	7	06 39	16 47	06 44	16 43	06 48	16 38	06 53	16 33	06 59	16 28	07 05	16 22
	12	06 46	16 42	06 50	16 37	06 56	16 32	07 01	16 27	07 07	16 20	07 14	16 14
	17	06 52	16 38	06 57	16 32	07 03	16 27	07 09	16 21	07 15	16 14	07 23	16 07
	22	06 58	16 34	07 03	16 28	07 09	16 22	07 16	16 16	07 23	16 08	07 31	16 01
	27	07 04	16 31	07 10	16 25	07 16	16 19	07 23	16 12	07 31	16 04	07 39	15 56
Dec.	2	07 09	16 29	07 15	16 23	07 22	16 16	07 29	16 09	07 37	16 01	07 46	15 52
	7	07 14	16 28	07 20	16 22	07 27	16 15	07 35	16 07	07 44	15 59	07 53	15 49
	12	07 18	16 29	07 25	16 22	07 32	16 15	07 40	16 07	07 49	15 58	07 59	15 48
	17	07 22	16 30	07 29	16 23	07 36	16 16	07 44	16 08	07 53	15 59	08 03	15 49
	22	07 25	16 32	07 32	16 25	07 39	16 18	07 47	16 10	07 56	16 01	08 06	15 51
	27	07 27	16 35	07 34	16 28	07 41	16 21	07 49	16 13	07 58	16 04	08 08	15 54
Jan.	1	07 28	16 39	07 35	16 32	07 42	16 25	07 50	16 17	07 59	16 08	08 08	15 59

Local mean time. To obtain standard time of rise or set, see Table 5.

Date		54° N.		56° N.		58° N.		60° N.		62° N.		64° N.	
		Rise	Set	Rise	Set	Rise	Set	Rise	Set	Rise	Set	Rise	Set
		h. m.	h. m.	h. m.	h. m.	h. m.	h. m.	h. m.	h. m.	h. m.	h. m.	h. m.	h. m.
Jan.	1	08 19	15 48	08 31	15 36	08 45	15 22	09 02	15 05	09 23	14 44	09 50	14 17
	6	08 17	15 54	08 29	15 42	08 43	15 29	08 59	15 13	09 19	14 53	09 43	14 28
	11	08 14	16 02	08 26	15 50	08 38	15 38	08 54	15 22	09 12	15 04	09 35	14 41
	16	08 10	16 10	08 20	15 59	08 32	15 47	08 47	15 33	09 03	15 17	09 24	14 56
	21	08 04	16 19	08 14	16 09	08 25	15 58	08 38	15 45	08 53	15 30	09 12	15 12
	26	07 57	16 28	08 06	16 19	08 16	16 09	08 28	15 58	08 42	15 44	08 58	15 28
	31	07 49	16 38	07 57	16 30	08 06	16 21	08 17	16 11	08 29	15 59	08 43	15 44
Feb.	5	07 40	16 48	07 48	16 41	07 56	16 33	08 05	16 24	08 16	16 13	08 28	16 01
	10	07 31	16 58	07 37	16 52	07 44	16 45	07 52	16 37	08 02	16 28	08 12	16 17
	15	07 21	17 08	07 26	17 03	07 32	16 57	07 39	16 50	07 47	16 42	07 56	16 33
	20	07 10	17 18	07 14	17 14	07 20	17 09	07 25	17 03	07 32	16 57	07 39	16 49
	25	06 59	17 28	07 02	17 25	07 06	17 21	07 11	17 16	07 16	17 11	07 22	17 05
Mar.	2	06 47	17 38	06 50	17 35	06 53	17 32	06 57	17 29	07 01	17 25	07 05	17 21
	7	06 35	17 48	06 37	17 46	06 39	17 44	06 42	17 41	06 45	17 39	06 48	17 36
	12	06 23	17 58	06 24	17 56	06 26	17 55	06 27	17 54	06 29	17 52	06 30	17 51
	17	06 11	18 07	06 11	18 07	06 12	18 07	06 12	18 06	06 12	18 06	06 13	18 06
	22	05 59	18 16	05 58	18 17	05 57	18 18	05 57	18 19	05 56	18 19	05 55	18 20
	27	05 46	18 26	05 45	18 27	05 43	18 29	05 42	18 31	05 40	18 33	05 38	18 35
Apr.	1	05 34	18 35	05 32	18 37	05 29	18 40	05 27	18 43	05 23	18 46	05 20	18 50
	6	05 22	18 44	05 19	18 48	05 15	18 51	05 11	18 55	05 07	19 00	05 02	19 05
	11	05 10	18 54	05 06	18 58	05 01	19 02	04 56	19 07	04 51	19 13	04 45	19 20
	16	04 58	19 03	04 53	19 08	04 48	19 13	04 42	19 20	04 35	19 27	04 27	19 35
	21	04 46	19 12	04 41	19 18	04 34	19 25	04 27	19 32	04 19	19 40	04 09	19 50
	26	04 35	19 22	04 29	19 28	04 21	19 36	04 13	19 44	04 03	19 54	03 52	20 06
May	1	04 24	19 31	04 17	19 39	04 09	19 47	03 59	19 57	03 48	20 08	03 35	20 22
	6	04 14	19 40	04 06	19 49	03 57	19 58	03 46	20 09	03 33	20 22	03 18	20 38
	11	04 05	19 49	03 56	19 58	03 45	20 09	03 33	20 21	03 19	20 36	03 01	20 54
	16	03 56	19 58	03 46	20 08	03 35	20 20	03 21	20 33	03 05	20 50	02 45	21 10
	21	03 49	20 06	03 38	20 17	03 25	20 30	03 10	20 45	02 52	21 03	02 30	21 26
	26	03 42	20 13	03 30	20 25	03 16	20 39	03 00	20 55	02 40	21 16	02 15	21 41
	31	03 36	20 20	03 24	20 33	03 09	20 47	02 51	21 05	02 30	21 27	02 01	21 56
June	5	03 32	20 26	03 19	20 39	03 03	20 55	02 45	21 13	02 21	21 37	01 50	22 09
	10	03 29	20 30	03 15	20 44	02 59	21 00	02 39	21 20	02 15	21 45	01 40	22 20
	15	03 27	20 34	03 13	20 48	02 57	21 05	02 36	21 25	02 11	21 51	01 34	22 28
	20	03 27	20 36	03 13	20 50	02 56	21 07	02 36	21 27	02 09	21 54	01 31	22 32
	25	03 29	20 36	03 14	20 51	02 58	21 07	02 37	21 28	02 11	21 54	01 33	22 32
	30	03 31	20 36	03 17	20 49	03 01	21 06	02 41	21 26	02 15	21 51	01 39	22 27
July	5	03 35	20 33	03 22	20 47	03 06	21 02	02 47	21 22	02 22	21 46	01 49	22 19
	10	03 41	20 29	03 28	20 42	03 12	20 57	02 54	21 15	02 31	21 38	02 01	22 08
	15	03 47	20 24	03 34	20 37	03 20	20 51	03 03	21 08	02 42	21 28	02 15	21 55
	20	03 54	20 18	03 42	20 29	03 29	20 43	03 13	20 58	02 54	21 17	02 29	21 41
	25	04 01	20 11	03 51	20 21	03 38	20 33	03 24	20 48	03 06	21 05	02 45	21 26
	30	04 09	20 02	04 00	20 12	03 48	20 23	03 35	20 36	03 20	20 51	03 01	21 10
Aug.	4	04 18	19 53	04 09	20 02	03 59	20 12	03 47	20 24	03 33	20 37	03 16	20 53
	9	04 27	19 43	04 18	19 51	04 09	20 00	03 59	20 11	03 47	20 22	03 32	20 37
	14	04 35	19 33	04 28	19 40	04 20	19 48	04 11	19 57	04 00	20 07	03 48	20 20
	19	04 44	19 22	04 38	19 28	04 31	19 35	04 23	19 43	04 14	19 52	04 03	20 02
	24	04 53	19 10	04 48	19 16	04 42	19 22	04 35	19 28	04 27	19 36	04 18	19 45
	29	05 02	18 59	04 58	19 03	04 53	19 08	04 47	19 14	04 40	19 20	04 33	19 27
Sept.	3	05 11	18 47	05 07	18 50	05 03	18 54	04 59	18 59	04 53	19 04	04 47	19 10
	8	05 20	18 34	05 17	18 37	05 14	18 40	05 10	18 44	05 06	18 47	05 02	18 52
	13	05 29	18 22	05 27	18 24	05 25	18 26	05 22	18 28	05 19	18 31	05 16	18 34
	18	05 38	18 10	05 37	18 11	05 35	18 12	05 34	18 13	05 32	18 15	05 30	18 16
	23	05 47	17 57	05 46	17 57	05 46	17 58	05 46	17 58	05 45	17 58	05 45	17 59
	28	05 56	17 45	05 56	17 44	05 57	17 43	05 57	17 43	05 58	17 42	05 59	17 41
Oct.	3	06 05	17 32	06 06	17 31	06 08	17 29	06 09	17 28	06 11	17 26	06 13	17 23
	8	06 14	17 20	06 16	17 18	06 19	17 16	06 21	17 13	06 24	17 10	06 28	17 06
	13	06 23	17 08	06 26	17 05	06 30	17 02	06 33	16 58	06 38	16 54	06 43	16 49
	18	06 33	16 57	06 37	16 53	06 41	16 48	06 46	16 44	06 51	16 38	06 58	16 32
	23	06 42	16 46	06 47	16 41	06 52	16 35	06 58	16 29	07 05	16 23	07 13	16 15
	28	06 52	16 35	06 58	16 29	07 04	16 23	07 11	16 16	07 19	16 08	07 28	15 58
Nov.	2	07 02	16 25	07 08	16 18	07 16	16 11	07 24	16 02	07 33	15 53	07 44	15 42
	7	07 12	16 15	07 19	16 08	07 27	15 59	07 37	15 50	07 47	15 39	08 00	15 26
	12	07 21	16 06	07 29	15 58	07 39	15 49	07 49	15 38	08 02	15 26	08 16	15 11
	17	07 31	15 58	07 40	15 49	07 50	15 39	08 02	15 27	08 16	15 13	08 33	14 56
	22	07 40	15 52	07 50	15 42	08 01	15 30	08 14	15 17	08 30	15 02	08 48	14 43
	27	07 49	15 46	07 59	15 35	08 11	15 23	08 26	15 09	08 43	14 52	09 04	14 31
Dec.	2	07 56	15 42	08 08	15 30	08 21	15 17	08 36	15 02	08 55	14 44	09 18	14 20
	7	08 03	15 39	08 15	15 27	08 29	15 13	08 45	14 57	09 05	14 37	09 30	14 12
	12	08 09	15 38	08 22	15 25	08 36	15 11	08 53	14 54	09 14	14 33	09 41	14 06
	17	08 14	15 38	08 27	15 25	08 41	15 11	08 59	14 53	09 20	14 32	09 48	14 04
	22	08 17	15 40	08 30	15 27	08 45	15 12	09 02	14 55	09 24	14 33	09 52	14 05
	27	08 19	15 43	08 31	15 30	08 46	15 16	09 03	14 58	09 25	14 37	09 53	14 09
Jan.	1	08 19	15 48	08 31	15 36	08 46	15 21	09 02	15 04	09 23	14 44	09 50	14 17

Local mean time. To obtain standard time of rise or set, see Table 5.

Date		66° N.		68° N.		70° N.		72° N.		74° N.		76° N.	
		Rise	Set	Rise	Set	Rise	Set	Rise	Set	Rise	Set	Rise	Set
		h. m.	h. m.	h. m.	h. m.	h. m.	h. m.	h. m.	h. m.	h. m.	h. m.	h. m.	h. m.
Jan.	1	10 28	13 39	Rises 3 Jan		Sun does not		Sun does not		Sun does not		Sun does not	
	6	10 18	13 54	11 23	12 48	rise until		rise until		rise until		rise until	
	11	10 05	14 11	10 54	13 22	17 January		26 January		2 February		9 February	
	16	09 51	14 29	10 29	13 51								
	21	09 35	14 48	10 07	14 17	10 59	13 25	.. ..	.. ..	.. ..	.. ..	.. ..	.. ..
	26	09 18	15 08	09 44	14 41	10 22	14 04	11 46	12 40	.. ..	.. ..	.. ..	.. ..
	31	09 01	15 27	09 23	15 05	09 53	14 35	10 38	13 50	.. ..	.. ..	.. ..	.. ..
Feb.	5	08 43	15 46	09 02	15 27	09 25	15 04	09 59	14 30	10 55	13 34	.. ..	.. ..
	10	08 25	16 05	08 40	15 49	09 00	15 30	09 26	15 04	10 03	14 27	11 14	13 16
	15	08 07	16 23	08 19	16 10	08 35	15 54	08 55	15 34	09 23	15 07	10 04	14 26
	20	07 48	16 41	07 58	16 30	08 11	16 18	08 27	16 02	08 48	15 42	09 17	15 13
	25	07 29	16 58	07 38	16 50	07 48	16 40	08 00	16 28	08 15	16 13	08 36	15 52
Mar.	2	07 10	17 15	07 17	17 09	07 24	17 02	07 33	16 53	07 45	16 42	08 00	16 27
	7	06 52	17 32	06 56	17 28	07 01	17 23	07 07	17 17	07 15	17 10	07 25	17 00
	12	06 33	17 49	06 35	17 46	06 38	17 44	06 41	17 40	06 46	17 36	06 51	17 31
	17	06 13	18 05	06 14	18 05	06 15	18 04	06 16	18 04	06 17	18 03	06 18	18 02
	22	05 54	18 22	05 53	18 23	05 52	18 25	05 50	18 27	05 48	18 29	05 45	18 32
	27	05 35	18 38	05 32	18 41	05 28	18 45	05 24	18 50	05 19	18 55	05 12	19 03
Apr.	1	05 16	18 54	05 11	18 59	05 05	19 05	04 58	19 13	04 49	19 22	04 37	19 35
	6	04 56	19 11	04 50	19 18	04 41	19 26	04 31	19 37	04 18	19 50	04 02	20 08
	11	04 37	19 27	04 28	19 37	04 17	19 48	04 04	20 02	03 47	20 20	03 23	20 45
	16	04 18	19 44	04 06	19 56	03 53	20 10	03 36	20 28	03 13	20 52	02 40	21 27
	21	03 58	20 02	03 44	20 16	03 28	20 34	03 06	20 57	02 35	21 29	01 47	22 22
	26	03 39	20 20	03 22	20 37	03 01	20 58	02 33	21 28	01 50	22 14	.. ..	.. ..
May	1	03 19	20 38	02 59	20 58	02 33	21 26	01 56	22 06	00 39	.. ..	.. ..	.. ..
	6	02 59	20 57	02 36	21 21	02 03	21 56	01 06	23 00	.. ..	.. ..	.. ..	.. ..
	11	02 40	21 16	02 11	21 46	01 26	22 34	.. ..	.. ..	.. ..	.. ..	.. ..	.. ..
	16	02 20	21 36	01 44	22 14	00 30	.. ..	.. ..	.. ..	.. ..	.. ..	.. ..	.. ..
	21	02 00	21 57	01 12	22 48	.. ..	.. ..	.. ..	.. ..	.. ..	.. ..	.. ..	.. ..
	26	01 39	22 18	00 24	.. ..	.. ..	.. ..	.. ..	.. ..	.. ..	.. ..	.. ..	.. ..
	31	01 18	22 41	.. ..	.. ..	.. ..	.. ..	.. ..	.. ..	.. ..	.. ..	.. ..	.. ..
June	5	00 56	23 05										
	10	00 31	23 34										
	15	Sun rises		Sun rises		Sun rises		Sun rises		Sun rises		Sun rises	
	20	12 June		26 May		16 May		8 May		1 May		25 April	
	25	.. ..	.. ..	Sun sets		Sun sets		Sun sets		Sun sets		Sun sets	
	30	.. ..	23 51	17 July		27 July		4 August		11 August		18 August	
July	5	00 46	23 18	.. ..	.. ..	.. ..	.. ..	.. ..	.. ..	.. ..	.. ..	.. ..	.. ..
	10	01 11	22 55	.. ..	.. ..	.. ..	.. ..	.. ..	.. ..	.. ..	.. ..	.. ..	.. ..
	15	01 34	22 34	.. ..	.. ..	.. ..	.. ..	.. ..	.. ..	.. ..	.. ..	.. ..	.. ..
	20	01 56	22 14	00 54	23 10	.. ..	.. ..	.. ..	.. ..	.. ..	.. ..	.. ..	.. ..
	25	02 16	21 53	01 33	22 34	.. ..	.. ..	.. ..	.. ..	.. ..	.. ..	.. ..	.. ..
	30	02 36	21 33	02 03	22 06	01 02	23 00	.. ..	.. ..	.. ..	.. ..	.. ..	.. ..
Aug.	4	02 56	21 14	02 28	21 40	01 48	22 18	.. ..	23 47	.. ..	.. ..	.. ..	.. ..
	9	03 14	20 54	02 52	21 16	02 21	21 45	01 32	22 31	.. ..	.. ..	.. ..	.. ..
	14	03 33	20 34	03 14	20 52	02 49	21 16	02 15	21 49	01 13	22 44	.. ..	.. ..
	19	03 50	20 15	03 35	20 30	03 15	20 49	02 48	21 14	02 09	21 51	00 47	22 58
	24	04 07	19 55	03 54	20 08	03 38	20 23	03 18	20 43	02 49	21 10	02 06	21 50
	29	04 24	19 36	04 13	19 46	04 01	19 58	03 44	20 14	03 23	20 34	02 53	21 03
Sept.	3	04 40	19 16	04 32	19 24	04 22	19 34	04 09	19 46	03 53	20 02	03 32	20 22
	8	04 57	18 57	04 50	19 03	04 43	19 10	04 33	19 19	04 21	19 30	04 06	19 45
	13	05 12	18 38	05 08	18 42	05 03	18 47	04 56	18 53	04 48	19 00	04 38	19 10
	18	05 28	18 18	05 26	18 21	05 23	18 23	05 19	18 27	05 14	18 31	05 08	18 37
	23	05 44	17 59	05 43	18 00	05 42	18 00	05 41	18 01	05 40	18 02	05 38	18 04
	28	06 00	17 40	06 01	17 39	06 02	17 37	06 04	17 36	06 05	17 33	06 08	17 31
Oct.	3	06 16	17 21	06 19	17 18	06 22	17 14	06 26	17 10	06 31	17 05	06 38	16 58
	8	06 32	17 02	06 37	16 57	06 42	16 51	06 49	16 44	06 58	16 35	07 09	16 24
	13	06 48	16 43	06 55	16 36	07 03	16 28	07 13	16 18	07 25	16 05	07 41	15 49
	18	07 05	16 24	07 14	16 15	07 24	16 05	07 37	15 51	07 54	15 35	08 17	15 12
	23	07 22	16 05	07 33	15 54	07 46	15 41	08 03	15 24	08 25	15 02	08 56	14 30
	28	07 39	15 47	07 53	15 34	08 09	15 17	08 31	14 55	09 00	14 26	09 45	13 40
Nov.	2	07 57	15 29	08 13	15 12	08 34	14 52	09 01	14 25	09 41	13 45	11 14	12 12
	7	08 16	15 11	08 35	14 51	09 00	14 26	09 35	13 51	10 39	12 46	.. ..	.. ..
	12	08 34	14 53	08 57	14 30	09 28	13 59	10 18	13 09	.. ..	.. ..	.. ..	.. ..
	17	08 53	14 36	09 21	14 08	10 01	13 28	.. ..	.. ..	.. ..	.. ..	.. ..	.. ..
	22	09 12	14 19	09 45	13 46	10 41	12 50	.. ..	.. ..	.. ..	.. ..	.. ..	.. ..
	27	09 31	14 03	10 11	13 23	.. ..	.. ..	.. ..	.. ..	.. ..	.. ..	.. ..	.. ..
Dec.	2	09 49	13 49	10 40	12 58	.. ..	.. ..	.. ..	.. ..	.. ..	.. ..	.. ..	.. ..
	7	10 06	13 37	11 15	12 27	.. ..	.. ..	.. ..	.. ..	.. ..	.. ..	.. ..	.. ..
	12	10 20	13 27										
	17	10 30	13 22	Sun does not		Sun does not		Sun does not		Sun does not		Sun does not	
	22	10 35	13 22	rise after		rise after		rise after		rise after		rise after	
	27	10 34	13 28	9 December		25 November		16 November		8 November		2 November	
Jan.	1	10 28	13 38	.. ..	.. ..	.. ..	.. ..	.. ..	.. ..	.. ..	.. ..	.. ..	.. ..

Local mean time. To obtain standard time of rise or set, see Table 5.

Date		0°		5° S.		10° S.		15° S.		20° S.		25° S.	
		Rise	Set	Rise	Set	Rise	Set	Rise	Set	Rise	Set	Rise	Set
		h. m.	h. m.	h. m.	h. m.	h. m.	h. m.	h. m.	h. m.	h. m.	h. m.	h. m.	h. m.
Jan.	1	06 00	18 07	05 51	18 16	05 42	18 24	05 33	18 33	05 24	18 43	05 13	18 53
	6	06 02	18 09	05 54	18 18	05 45	18 26	05 36	18 35	05 27	18 44	05 17	18 54
	11	06 04	18 11	05 56	18 20	05 48	18 28	05 39	18 36	05 30	18 45	05 21	18 55
	16	06 06	18 13	05 58	18 21	05 50	18 29	05 42	18 37	05 34	18 46	05 24	18 55
	21	06 08	18 15	06 00	18 22	05 53	18 29	05 45	18 37	05 37	18 45	05 28	18 54
	26	06 09	18 16	06 02	18 23	05 55	18 30	05 48	18 37	05 40	18 45	05 32	18 53
	31	06 10	18 17	06 04	18 23	05 57	18 30	05 50	18 36	05 43	18 43	05 36	18 51
Feb.	5	06 10	18 17	06 05	18 23	05 59	18 29	05 53	18 35	05 46	18 41	05 39	18 48
	10	06 11	18 18	06 06	18 23	06 00	18 28	05 55	18 33	05 49	18 39	05 43	18 45
	15	06 11	18 18	06 06	18 22	06 01	18 27	05 57	18 31	05 52	18 36	05 46	18 42
	20	06 10	18 17	06 06	18 21	06 02	18 25	05 58	18 29	05 54	18 33	05 49	18 38
	25	06 10	18 16	06 06	18 20	06 03	18 23	06 00	18 26	05 56	18 30	05 52	18 34
Mar.	2	06 09	18 15	06 06	18 18	06 04	18 21	06 01	18 23	05 58	18 26	05 55	18 29
	7	06 08	18 14	06 06	18 16	06 04	18 18	06 02	18 20	06 00	18 22	05 57	18 24
	12	06 07	18 13	06 05	18 14	06 04	18 15	06 03	18 17	06 01	18 18	06 00	18 19
	17	06 05	18 12	06 05	18 12	06 04	18 13	06 03	18 13	06 03	18 14	06 02	18 14
	22	06 04	18 10	06 04	18 10	06 04	18 10	06 04	18 10	06 04	18 09	06 04	18 09
	27	06 02	18 09	06 03	18 08	06 04	18 07	06 05	18 06	06 06	18 05	06 06	18 04
Apr.	1	06 01	18 07	06 02	18 06	06 04	18 04	06 05	18 02	06 07	18 01	06 09	17 59
	6	05 59	18 06	06 01	18 03	06 04	18 01	06 06	17 59	06 08	17 56	06 11	17 54
	11	05 58	18 04	06 01	18 01	06 04	17 58	06 07	17 55	06 10	17 52	06 13	17 49
	16	05 57	18 03	06 00	18 00	06 04	17 56	06 07	17 52	06 11	17 48	06 15	17 44
	21	05 55	18 02	06 00	17 58	06 04	17 54	06 08	17 49	06 13	17 45	06 17	17 40
	26	05 54	18 01	05 59	17 56	06 04	17 52	06 09	17 47	06 14	17 41	06 20	17 36
May	1	05 54	18 01	05 59	17 55	06 04	17 50	06 10	17 44	06 16	17 38	06 22	17 32
	6	05 53	18 00	05 59	17 54	06 05	17 48	06 11	17 42	06 18	17 35	06 24	17 29
	11	05 53	18 00	05 59	17 53	06 06	17 47	06 13	17 40	06 19	17 33	06 27	17 26
	16	05 53	18 00	06 00	17 53	06 07	17 46	06 14	17 39	06 21	17 31	06 29	17 23
	21	05 53	18 00	06 00	17 53	06 08	17 45	06 15	17 38	06 23	17 30	06 32	17 21
	26	05 53	18 01	06 01	17 53	06 09	17 45	06 17	17 37	06 25	17 28	06 34	17 19
	31	05 54	18 01	06 02	17 53	06 10	17 45	06 19	17 37	06 27	17 28	06 37	17 18
June	5	05 55	18 02	06 03	17 54	06 12	17 45	06 20	17 37	06 29	17 28	06 39	17 18
	10	05 56	18 03	06 04	17 55	06 13	17 46	06 22	17 37	06 31	17 28	06 41	17 18
	15	05 57	18 04	06 05	17 55	06 14	17 47	06 23	17 38	06 33	17 28	06 43	17 18
	20	05 58	18 05	06 07	17 56	06 15	17 48	06 24	17 39	06 34	17 29	06 44	17 19
	25	05 59	18 06	06 08	17 58	06 16	17 49	06 25	17 40	06 35	17 30	06 45	17 20
	30	06 00	18 07	06 09	17 59	06 17	17 50	06 26	17 41	06 36	17 32	06 46	17 22
July	5	06 01	18 08	06 09	18 00	06 18	17 51	06 27	17 42	06 36	17 33	06 46	17 23
	10	06 02	18 09	06 10	18 01	06 18	17 52	06 27	17 44	06 36	17 35	06 45	17 25
	15	06 02	18 10	06 10	18 02	06 18	17 54	06 27	17 45	06 35	17 37	06 44	17 28
	20	06 03	18 10	06 10	18 02	06 18	17 55	06 26	17 47	06 34	17 39	06 43	17 30
	25	06 03	18 10	06 10	18 03	06 17	17 56	06 25	17 48	06 33	17 40	06 41	17 32
	30	06 03	18 10	06 10	18 03	06 16	17 56	06 23	17 50	06 31	17 42	06 39	17 35
Aug.	4	06 03	18 10	06 09	18 03	06 15	17 57	06 22	17 51	06 28	17 44	06 36	17 37
	9	06 02	18 09	06 08	18 03	06 14	17 58	06 20	17 52	06 26	17 46	06 32	17 39
	14	06 01	18 08	06 07	18 03	06 12	17 58	06 17	17 53	06 23	17 47	06 29	17 41
	19	06 00	18 07	06 05	18 03	06 10	17 58	06 14	17 53	06 19	17 48	06 24	17 43
	24	05 59	18 06	06 03	18 02	06 07	17 58	06 11	17 54	06 15	17 50	06 20	17 45
	29	05 58	18 04	06 01	18 01	06 04	17 58	06 08	17 54	06 11	17 51	06 15	17 47
Sept.	3	05 56	18 03	05 59	18 00	06 02	17 57	06 04	17 55	06 07	17 52	06 10	17 49
	8	05 55	18 01	05 57	17 59	05 59	17 57	06 01	17 55	06 03	17 53	06 05	17 51
	13	05 53	17 59	05 54	17 58	05 55	17 57	05 57	17 55	05 58	17 54	06 00	17 53
	18	05 51	17 57	05 52	17 57	05 52	17 56	05 53	17 56	05 54	17 55	05 54	17 54
	23	05 49	17 56	05 49	17 56	05 49	17 56	05 49	17 56	05 49	17 56	05 49	17 56
	28	05 48	17 54	05 47	17 55	05 46	17 56	05 45	17 56	05 45	17 57	05 44	17 58
Oct.	3	05 46	17 52	05 44	17 54	05 43	17 55	05 42	17 57	05 40	17 58	05 38	18 00
	8	05 44	17 51	05 42	17 53	05 40	17 55	05 38	17 57	05 36	18 00	05 33	18 02
	13	05 43	17 50	05 40	17 52	05 38	17 55	05 35	17 58	05 32	18 01	05 28	18 05
	18	05 42	17 49	05 39	17 52	05 35	17 56	05 31	17 59	05 28	18 03	05 24	18 07
	23	05 41	17 48	05 37	17 52	05 33	17 56	05 29	18 00	05 24	18 05	05 19	18 10
	28	05 40	17 47	05 36	17 52	05 31	17 57	05 26	18 02	05 21	18 07	05 15	18 13
Nov.	2	05 40	17 47	05 35	17 52	05 30	17 58	05 24	18 03	05 18	18 09	05 12	18 16
	7	05 40	17 47	05 34	17 53	05 28	17 59	05 22	18 05	05 16	18 12	05 09	18 19
	12	05 41	17 48	05 34	17 54	05 28	18 01	05 21	18 07	05 14	18 15	05 06	18 22
	17	05 41	17 48	05 34	17 55	05 27	18 02	05 20	18 10	05 12	18 18	05 04	18 26
	22	05 42	17 50	05 35	17 57	05 28	18 05	05 20	18 12	05 12	18 21	05 03	18 30
	27	05 44	17 51	05 36	17 59	05 28	18 07	05 20	18 15	05 11	18 24	05 02	18 33
Dec.	2	05 46	17 53	05 37	18 01	05 29	18 09	05 21	18 18	05 12	18 27	05 02	18 37
	7	05 48	17 55	05 39	18 03	05 31	18 12	05 22	18 21	05 12	18 30	05 02	18 40
	12	05 50	17 57	05 41	18 06	05 33	18 15	05 23	18 24	05 14	18 33	05 04	18 44
	17	05 52	18 00	05 44	18 08	05 35	18 17	05 25	18 26	05 16	18 36	05 05	18 47
	22	05 55	18 02	05 46	18 11	05 37	18 20	05 28	18 29	05 18	18 39	05 08	18 49
	27	05 57	18 05	05 48	18 13	05 40	18 22	05 30	18 31	05 21	18 41	05 10	18 52
Jan.	1	06 00	18 07	05 51	18 16	05 42	18 24	05 33	18 33	05 24	18 43	05 13	18 53

Local mean time. To obtain standard time of rise or set, see Table 5.

Date		30° S.		32° S.		34° S.		36° S.		38° S.		40° S.	
		Rise	Set	Rise	Set	Rise	Set	Rise	Set	Rise	Set	Rise	Set
		h. m.	h. m.	h. m.	h. m.	h. m.	h. m.	h. m.	h. m.	h. m.	h. m.	h. m.	h. m.
Jan.	1	05 02	19 05	04 57	19 09	04 52	19 15	04 47	19 20	04 41	19 26	04 35	19 32
	6	05 06	19 05	05 01	19 10	04 56	19 15	04 51	19 20	04 45	19 26	04 39	19 32
	11	05 10	19 05	05 05	19 10	05 00	19 15	04 55	19 20	04 50	19 25	04 44	19 31
	16	05 14	19 05	05 10	19 09	05 05	19 14	05 00	19 19	04 55	19 24	04 49	19 29
	21	05 18	19 04	05 14	19 08	05 10	19 12	05 05	19 17	05 00	19 21	04 55	19 27
	26	05 23	19 02	05 19	19 05	05 15	19 10	05 11	19 14	05 06	19 18	05 01	19 23
	31	05 27	18 59	05 24	19 03	05 20	19 06	05 16	19 10	05 12	19 14	05 07	19 19
Feb.	5	05 32	18 56	05 28	18 59	05 25	19 02	05 21	19 06	05 18	19 10	05 13	19 14
	10	05 36	18 52	05 33	18 55	05 30	18 58	05 27	19 01	05 23	19 04	05 20	19 08
	15	05 40	18 48	05 37	18 50	05 35	18 53	05 32	18 56	05 29	18 59	05 26	19 02
	20	05 44	18 43	05 42	18 45	05 39	18 47	05 37	18 50	05 34	18 52	05 32	18 55
	25	05 48	18 38	05 46	18 40	05 44	18 42	05 42	18 44	05 40	18 46	05 37	18 48
Mar.	2	05 51	18 33	05 50	18 34	05 48	18 36	05 47	18 37	05 45	18 39	05 43	18 41
	7	05 55	18 27	05 54	18 28	05 52	18 29	05 51	18 30	05 50	18 32	05 49	18 33
	12	05 58	18 21	05 57	18 22	05 57	18 22	05 56	18 23	05 55	18 24	05 54	18 25
	17	06 01	18 15	06 01	18 15	06 01	18 16	06 00	18 16	06 00	18 17	05 59	18 17
	22	06 04	18 09	06 04	18 09	06 04	18 09	06 04	18 09	06 04	18 09	06 04	18 09
	27	06 07	18 03	06 08	18 03	06 08	18 02	06 09	18 02	06 09	18 01	06 10	18 01
Apr.	1	06 10	17 57	06 11	17 56	06 12	17 55	06 13	17 55	06 14	17 54	06 15	17 53
	6	06 13	17 51	06 15	17 50	06 16	17 49	06 17	17 47	06 18	17 46	06 20	17 45
	11	06 16	17 45	06 18	17 44	06 19	17 42	06 21	17 41	06 23	17 39	06 25	17 37
	16	06 19	17 40	06 21	17 38	06 23	17 36	06 25	17 34	06 27	17 32	06 30	17 30
	21	06 22	17 35	06 25	17 32	06 27	17 30	06 29	17 28	06 32	17 25	06 35	17 22
	26	06 26	17 30	06 28	17 27	06 31	17 24	06 34	17 22	06 36	17 19	06 40	17 16
May	1	06 29	17 25	06 32	17 22	06 35	17 19	06 38	17 16	06 41	17 13	06 45	17 09
	6	06 32	17 21	06 35	17 18	06 38	17 15	06 42	17 11	06 46	17 07	06 49	17 03
	11	06 35	17 17	06 39	17 14	06 42	17 10	06 46	17 06	06 50	17 02	06 54	16 58
	16	06 38	17 14	06 42	17 10	06 46	17 07	06 50	17 02	06 54	16 58	06 59	16 53
	21	06 41	17 12	06 45	17 08	06 49	17 03	06 54	16 59	06 58	16 54	07 03	16 49
	26	06 44	17 10	06 48	17 05	06 53	17 01	06 57	16 56	07 02	16 51	07 08	16 46
	31	06 47	17 08	06 51	17 04	06 56	16 59	07 01	16 54	07 06	16 49	07 11	16 44
June	5	06 50	17 07	06 54	17 03	06 59	16 58	07 04	16 53	07 09	16 48	07 15	16 42
	10	06 52	17 07	06 56	17 02	07 01	16 57	07 06	16 52	07 12	16 47	07 18	16 41
	15	06 54	17 07	06 58	17 02	07 03	16 57	07 09	16 52	07 14	16 47	07 20	16 41
	20	06 55	17 08	07 00	17 03	07 05	16 58	07 10	16 53	07 16	16 47	07 22	16 41
	25	06 56	17 09	07 01	17 04	07 06	16 59	07 11	16 54	07 17	16 49	07 23	16 43
	30	06 57	17 11	07 01	17 06	07 06	17 01	07 11	16 56	07 17	16 50	07 23	16 45
July	5	06 56	17 13	07 01	17 08	07 06	17 03	07 11	16 58	07 16	16 53	07 22	16 47
	10	06 56	17 15	07 00	17 11	07 05	17 06	07 10	17 01	07 15	16 56	07 21	16 50
	15	06 54	17 18	06 59	17 13	07 03	17 09	07 08	17 04	07 13	16 59	07 18	16 54
	20	06 53	17 20	06 57	17 16	07 01	17 12	07 06	17 07	07 10	17 03	07 15	16 58
	25	06 50	17 23	06 54	17 19	06 58	17 15	07 02	17 11	07 07	17 07	07 12	17 02
	30	06 47	17 26	06 51	17 22	06 55	17 19	06 59	17 15	07 03	17 11	07 07	17 06
Aug.	4	06 44	17 29	06 47	17 26	06 50	17 22	06 54	17 19	06 58	17 15	07 02	17 11
	9	06 39	17 32	06 43	17 29	06 46	17 26	06 49	17 22	06 53	17 19	06 56	17 15
	14	06 35	17 35	06 38	17 32	06 41	17 29	06 44	17 26	06 47	17 23	06 50	17 20
	19	06 30	17 38	06 32	17 35	06 35	17 33	06 38	17 30	06 40	17 27	06 43	17 25
	24	06 25	17 40	06 27	17 38	06 29	17 36	06 31	17 34	06 34	17 32	06 36	17 29
	29	06 19	17 43	06 21	17 41	06 23	17 40	06 25	17 38	06 27	17 36	06 29	17 34
Sept.	3	06 13	17 46	06 15	17 45	06 16	17 43	06 18	17 42	06 19	17 40	06 21	17 38
	8	06 07	17 49	06 08	17 48	06 10	17 46	06 11	17 45	06 12	17 44	06 13	17 43
	13	06 01	17 51	06 02	17 51	06 03	17 50	06 03	17 49	06 04	17 49	06 05	17 48
	18	05 55	17 54	05 55	17 54	05 56	17 53	05 56	17 53	05 56	17 53	05 57	17 52
	23	05 49	17 57	05 49	17 57	05 49	17 57	05 49	17 57	05 48	17 57	05 48	17 57
	28	05 43	17 59	05 42	18 00	05 42	18 00	05 41	18 01	05 41	18 01	05 40	18 02
Oct.	3	05 36	18 02	05 36	18 03	05 35	18 04	05 34	18 05	05 33	18 06	05 32	18 07
	8	05 30	18 05	05 29	18 06	05 28	18 08	05 27	18 09	05 25	18 11	05 24	18 12
	13	05 25	18 08	05 23	18 10	05 22	18 12	05 20	18 13	05 18	18 15	05 16	18 17
	18	05 19	18 12	05 17	18 14	05 15	18 16	05 13	18 18	05 11	18 20	05 09	18 23
	23	05 14	18 15	05 12	18 18	05 09	18 20	05 07	18 23	05 04	18 25	05 01	18 28
	28	05 09	18 19	05 07	18 22	05 04	18 24	05 01	18 27	04 58	18 30	04 55	18 34
Nov.	2	05 05	18 23	05 02	18 26	04 59	18 29	04 55	18 32	04 52	18 36	04 48	18 39
	7	05 01	18 27	04 58	18 30	04 54	18 34	04 51	18 37	04 47	18 41	04 43	18 45
	12	04 58	18 31	04 54	18 35	04 50	18 38	04 46	18 42	04 42	18 47	04 38	18 51
	17	04 55	18 35	04 51	18 39	04 47	18 43	04 43	18 48	04 38	18 52	04 33	18 57
	22	04 53	18 39	04 49	18 44	04 45	18 48	04 40	18 53	04 35	18 58	04 30	19 03
	27	04 52	18 44	04 47	18 48	04 43	18 53	04 38	18 58	04 33	19 03	04 27	19 08
Dec.	2	04 51	18 48	04 47	18 52	04 42	18 57	04 37	19 02	04 31	19 08	04 25	19 14
	7	04 51	18 51	04 47	18 56	04 42	19 01	04 36	19 07	04 31	19 12	04 25	19 18
	12	04 52	18 55	04 47	19 00	04 42	19 05	04 37	19 11	04 31	19 16	04 25	19 23
	17	04 54	18 58	04 49	19 03	04 44	19 08	04 38	19 14	04 32	19 20	04 26	19 26
	22	04 56	19 01	04 51	19 06	04 46	19 11	04 40	19 17	04 34	19 23	04 28	19 29
	27	04 59	19 03	04 54	19 08	04 48	19 13	04 43	19 19	04 37	19 25	04 31	19 31
Jan.	1	05 02	19 05	04 57	19 09	04 52	19 15	04 46	19 20	04 41	19 26	04 34	19 32

Local mean time. To obtain standard time of rise or set, see Table 5.

Date		42° S.		44° S.		46° S.		48° S.		50° S.		52° S.	
		Rise	Set	Rise	Set	Rise	Set	Rise	Set	Rise	Set	Rise	Set
		h. m.	h. m.	h. m.	h. m.	h. m.	h. m.	h. m.	h. m.	h. m.	h. m.	h. m.	h. m.
Jan.	1	04 28	19 39	04 21	19 46	04 13	19 54	04 04	20 02	03 55	20 12	03 44	20 22
	6	04 33	19 38	04 26	19 45	04 18	19 53	04 10	20 01	04 00	20 10	03 50	20 21
	11	04 38	19 37	04 31	19 44	04 24	19 51	04 16	19 59	04 07	20 08	03 57	20 18
	16	04 44	19 35	04 37	19 42	04 30	19 48	04 23	19 56	04 14	20 04	04 05	20 13
	21	04 50	19 32	04 44	19 38	04 37	19 45	04 30	19 52	04 22	19 59	04 14	20 08
	26	04 56	19 28	04 50	19 34	04 44	19 40	04 38	19 46	04 31	19 53	04 23	20 01
	31	05 03	19 23	04 57	19 29	04 52	19 34	04 46	19 40	04 39	19 46	04 32	19 54
Feb.	5	05 09	19 18	05 04	19 23	04 59	19 28	04 54	19 33	04 48	19 39	04 42	19 45
	10	05 16	19 12	05 12	19 16	05 07	19 20	05 02	19 25	04 57	19 30	04 51	19 36
	15	05 22	19 05	05 19	19 09	05 15	19 13	05 10	19 17	05 06	19 21	05 01	19 26
	20	05 29	18 58	05 26	19 01	05 22	19 04	05 19	19 08	05 15	19 12	05 10	19 16
	25	05 35	18 50	05 32	18 53	05 30	18 56	05 26	18 59	05 23	19 02	05 20	19 05
Mar.	2	05 41	18 42	05 39	18 45	05 37	18 47	05 34	18 49	05 32	18 52	05 29	18 54
	7	05 47	18 34	05 46	18 36	05 44	18 37	05 42	18 39	05 40	18 41	05 38	18 43
	12	05 53	18 26	05 52	18 27	05 51	18 28	05 50	18 29	05 48	18 30	05 47	18 32
	17	05 59	18 17	05 58	18 18	05 58	18 18	05 57	18 19	05 56	18 20	05 56	18 20
	22	06 04	18 09	06 04	18 09	06 04	18 09	06 04	18 09	06 04	18 09	06 04	18 09
	27	06 10	18 00	06 11	18 00	06 11	17 59	06 12	17 58	06 12	17 58	06 13	17 57
Apr.	1	06 16	17 52	06 17	17 51	06 18	17 49	06 19	17 48	06 20	17 47	06 21	17 46
	6	06 21	17 43	06 23	17 42	06 24	17 40	06 26	17 38	06 28	17 36	06 30	17 34
	11	06 26	17 35	06 29	17 33	06 31	17 31	06 33	17 28	06 36	17 26	06 38	17 23
	16	06 32	17 27	06 34	17 25	06 37	17 22	06 40	17 19	06 43	17 16	06 47	17 12
	21	06 37	17 20	06 40	17 16	06 44	17 13	06 47	17 10	06 51	17 06	06 55	17 02
	26	06 43	17 12	06 46	17 09	06 50	17 05	06 54	17 01	06 59	16 56	07 03	16 52
May	1	06 48	17 06	06 52	17 02	06 56	16 57	07 01	16 53	07 06	16 48	07 11	16 42
	6	06 54	16 59	06 58	16 55	07 03	16 50	07 08	16 45	07 13	16 39	07 20	16 33
	11	06 59	16 54	07 04	16 49	07 09	16 43	07 14	16 38	07 21	16 32	07 27	16 25
	16	07 04	16 48	07 09	16 43	07 15	16 38	07 21	16 31	07 28	16 25	07 35	16 17
	21	07 09	16 44	07 14	16 38	07 20	16 32	07 27	16 26	07 34	16 19	07 42	16 11
	26	07 13	16 41	07 19	16 35	07 26	16 28	07 33	16 21	07 40	16 13	07 49	16 05
	31	07 17	16 38	07 24	16 31	07 30	16 25	07 38	16 17	07 46	16 09	07 55	16 00
June	5	07 21	16 36	07 27	16 29	07 34	16 22	07 42	16 15	07 50	16 06	08 00	15 57
	10	07 24	16 35	07 31	16 28	07 38	16 21	07 46	16 13	07 54	16 04	08 04	15 55
	15	07 26	16 34	07 33	16 28	07 41	16 20	07 49	16 12	07 57	16 03	08 07	15 54
	20	07 28	16 35	07 35	16 28	07 42	16 21	07 50	16 13	07 59	16 04	08 09	15 54
	25	07 29	16 36	07 36	16 29	07 43	16 22	07 51	16 14	08 00	16 05	08 10	15 55
	30	07 29	16 38	07 36	16 32	07 43	16 24	07 51	16 16	08 00	16 07	08 10	15 58
July	5	07 28	16 41	07 35	16 34	07 42	16 27	07 50	16 19	07 58	16 11	08 08	16 01
	10	07 27	16 44	07 33	16 38	07 40	16 31	07 47	16 23	07 56	16 15	08 05	16 06
	15	07 24	16 48	07 30	16 42	07 37	16 35	07 44	16 28	07 52	16 20	08 01	16 12
	20	07 21	16 52	07 27	16 46	07 33	16 40	07 40	16 33	07 47	16 26	07 55	16 18
	25	07 17	16 57	07 22	16 51	07 28	16 45	07 35	16 39	07 42	16 32	07 49	16 24
	30	07 12	17 01	07 17	16 56	07 23	16 51	07 28	16 45	07 35	16 39	07 42	16 31
Aug.	4	07 06	17 06	07 11	17 02	07 16	16 57	07 22	16 51	07 27	16 45	07 34	16 39
	9	07 00	17 11	07 05	17 07	07 09	17 03	07 14	16 58	07 19	16 52	07 25	16 47
	14	06 54	17 16	06 57	17 13	07 01	17 09	07 06	17 04	07 11	16 59	07 16	16 54
	19	06 46	17 21	06 50	17 18	06 53	17 15	06 57	17 11	07 01	17 07	07 06	17 02
	24	06 39	17 27	06 42	17 24	06 45	17 21	06 48	17 17	06 52	17 14	06 55	17 10
	29	06 31	17 32	06 33	17 29	06 36	17 27	06 39	17 24	06 42	17 21	06 45	17 18
Sept.	3	06 23	17 37	06 25	17 35	06 27	17 33	06 29	17 31	06 31	17 29	06 34	17 26
	8	06 14	17 42	06 16	17 41	06 17	17 39	06 19	17 38	06 20	17 36	06 22	17 34
	13	06 06	17 47	06 07	17 46	06 08	17 45	06 09	17 44	06 10	17 43	06 11	17 42
	18	05 57	17 52	05 57	17 52	05 58	17 52	05 58	17 51	05 59	17 51	05 59	17 50
	23	05 48	17 57	05 48	17 58	05 48	17 58	05 48	17 58	05 48	17 58	05 47	17 59
	28	05 39	18 03	05 39	18 03	05 38	18 04	05 37	18 05	05 37	18 06	05 36	18 07
Oct.	3	05 31	18 08	05 30	18 09	05 28	18 11	05 27	18 12	05 26	18 14	05 24	18 15
	8	05 22	18 14	05 21	18 15	05 19	18 17	05 17	18 19	05 15	18 21	05 13	18 24
	13	05 14	18 19	05 12	18 22	05 10	18 24	05 07	18 27	05 04	18 29	05 01	18 32
	18	05 06	18 25	05 03	18 28	05 00	18 31	04 57	18 34	04 54	18 38	04 50	18 41
	23	04 58	18 31	04 55	18 34	04 52	18 38	04 48	18 42	04 44	18 46	04 40	18 50
	28	04 51	18 37	04 47	18 41	04 43	18 45	04 39	18 49	04 34	18 54	04 29	18 59
Nov.	2	04 44	18 43	04 40	18 48	04 36	18 52	04 31	18 57	04 25	19 03	04 20	19 09
	7	04 38	18 50	04 34	18 55	04 29	19 00	04 23	19 05	04 17	19 11	04 10	19 18
	12	04 33	18 56	04 28	19 01	04 22	19 07	04 16	19 13	04 09	19 20	04 02	19 27
	17	04 28	19 02	04 22	19 08	04 16	19 14	04 10	19 21	04 03	19 28	03 55	19 36
	22	04 24	19 09	04 18	19 15	04 12	19 21	04 04	19 28	03 57	19 36	03 48	19 45
	27	04 21	19 14	04 15	19 21	04 08	19 28	04 00	19 35	03 52	19 44	03 43	19 53
Dec.	2	04 19	19 20	04 12	19 27	04 05	19 34	03 57	19 42	03 48	19 51	03 38	20 01
	7	04 18	19 25	04 11	19 32	04 03	19 40	03 55	19 48	03 46	19 57	03 36	20 07
	12	04 18	19 29	04 11	19 37	04 03	19 44	03 54	19 53	03 45	20 02	03 34	20 13
	17	04 19	19 33	04 12	19 40	04 04	19 48	03 55	19 57	03 45	20 07	03 35	20 18
	22	04 21	19 36	04 14	19 43	04 06	19 51	03 57	20 00	03 47	20 10	03 36	20 21
	27	04 24	19 38	04 17	19 45	04 09	19 53	04 00	20 02	03 50	20 11	03 39	20 22
Jan.	1	04 28	19 39	04 21	19 46	04 13	19 54	04 04	20 02	03 55	20 12	03 44	20 22

Local mean time. To obtain standard time of rise or set, see Table 5.

Date	54° S.		56° S.		58° S.		60° S.	
	Rise	Set	Rise	Set	Rise	Set	Rise	Set
	h. m.	h. m.	h. m.	h. m.	h. m.	h. m.	h. m.	h. m.
Jan. 1	03 32	20 34	03 18	20 48	03 02	21 04	02 43	21 23
6	03 39	20 32	03 25	20 45	03 10	21 01	02 51	21 19
11	03 46	20 29	03 34	20 41	03 19	20 56	03 01	21 13
16	03 55	20 24	03 43	20 35	03 29	20 49	03 13	21 05
21	04 04	20 17	03 53	20 28	03 40	20 41	03 26	20 55
26	04 14	20 10	04 04	20 20	03 52	20 31	03 39	20 44
31	04 24	20 02	04 15	20 10	04 05	20 21	03 53	20 32
Feb. 5	04 34	19 52	04 26	20 00	04 17	20 09	04 06	20 20
10	04 45	19 42	04 38	19 49	04 29	19 57	04 20	20 06
15	04 55	19 32	04 49	19 38	04 42	19 45	04 34	19 52
20	05 05	19 21	05 00	19 26	04 54	19 32	04 47	19 38
25	05 16	19 09	05 11	19 14	05 06	19 18	05 01	19 24
Mar. 2	05 26	18 57	05 22	19 01	05 18	19 05	05 14	19 09
7	05 35	18 45	05 33	18 48	05 30	18 51	05 27	18 54
12	05 45	18 33	05 43	18 35	05 41	18 37	05 39	18 39
17	05 55	18 21	05 54	18 22	05 53	18 23	05 52	18 24
22	06 04	18 09	06 04	18 09	06 04	18 09	06 04	18 09
27	06 14	17 56	06 14	17 55	06 15	17 55	06 16	17 53
Apr. 1	06 23	17 44	06 24	17 42	06 26	17 41	06 28	17 38
6	06 32	17 32	06 34	17 29	06 37	17 27	06 40	17 24
11	06 41	17 20	06 44	17 17	06 48	17 13	06 52	17 09
16	06 50	17 08	06 54	17 04	06 59	17 00	07 04	16 54
21	06 59	16 57	07 04	16 52	07 10	16 47	07 16	16 40
26	07 09	16 46	07 14	16 40	07 21	16 34	07 28	16 27
May 1	07 17	16 36	07 24	16 29	07 32	16 22	07 40	16 13
6	07 26	16 26	07 34	16 19	07 42	16 10	07 52	16 01
11	07 35	16 17	07 43	16 09	07 53	15 59	08 03	15 49
16	07 43	16 09	07 52	16 00	08 03	15 49	08 15	15 37
21	07 51	16 02	08 01	15 52	08 12	15 40	08 25	15 27
26	07 58	15 55	08 09	15 45	08 21	15 32	08 35	15 18
31	08 05	15 50	08 16	15 39	08 29	15 26	08 44	15 11
June 5	08 10	15 46	08 22	15 34	08 36	15 21	08 52	15 05
10	08 15	15 44	08 27	15 31	08 41	15 17	08 58	15 00
15	08 18	15 42	08 31	15 30	08 45	15 15	09 03	14 58
20	08 20	15 43	08 33	15 30	08 48	15 15	09 05	14 58
25	08 21	15 44	08 34	15 31	08 49	15 17	09 06	14 59
30	08 21	15 47	08 33	15 34	08 47	15 20	09 05	15 03
July 5	08 18	15 51	08 31	15 39	08 45	15 25	09 01	15 08
10	08 15	15 56	08 27	15 44	08 40	15 31	08 56	15 15
15	08 10	16 02	08 22	15 51	08 34	15 38	08 49	15 23
20	08 05	16 08	08 15	15 58	08 27	15 46	08 41	15 33
25	07 58	16 16	08 07	16 06	08 18	15 55	08 31	15 43
30	07 50	16 24	07 59	16 15	08 09	16 05	08 20	15 53
Aug. 4	07 41	16 32	07 49	16 24	07 58	16 15	08 08	16 05
9	07 32	16 40	07 39	16 33	07 47	16 25	07 56	16 16
14	07 22	16 49	07 28	16 42	07 35	16 35	07 43	16 27
19	07 11	16 57	07 16	16 52	07 22	16 46	07 29	16 39
24	07 00	17 06	07 04	17 01	07 10	16 56	07 15	16 51
29	06 48	17 15	06 52	17 11	06 56	17 07	07 01	17 02
Sept. 3	06 36	17 23	06 39	17 21	06 43	17 17	06 46	17 14
8	06 24	17 32	06 26	17 30	06 29	17 28	06 32	17 25
13	06 12	17 41	06 13	17 40	06 15	17 38	06 17	17 37
18	06 00	17 50	06 00	17 49	06 01	17 49	06 01	17 48
23	05 47	17 59	05 47	17 59	05 47	18 00	05 46	18 00
28	05 35	18 08	05 34	18 09	05 32	18 10	05 31	18 12
Oct. 3	05 22	18 17	05 20	18 19	05 18	18 21	05 16	18 24
8	05 10	18 26	05 07	18 29	05 04	18 32	05 01	18 36
13	04 58	18 36	04 54	18 40	04 50	18 44	04 46	18 49
18	04 46	18 46	04 42	18 50	04 37	18 55	04 31	19 01
23	04 35	18 55	04 29	19 01	04 23	19 07	04 16	19 14
28	04 24	19 05	04 17	19 12	04 10	19 19	04 02	19 27
Nov. 2	04 13	19 15	04 06	19 23	03 58	19 31	03 48	19 41
7	04 03	19 25	03 55	19 34	03 46	19 43	03 35	19 54
12	03 54	19 35	03 45	19 45	03 34	19 55	03 22	20 08
17	03 46	19 45	03 36	19 56	03 24	20 07	03 11	20 21
22	03 38	19 55	03 27	20 06	03 15	20 19	03 00	20 34
27	03 32	20 04	03 20	20 16	03 07	20 30	02 50	20 46
Dec. 2	03 27	20 12	03 15	20 25	03 00	20 40	02 43	20 57
7	03 24	20 19	03 11	20 33	02 55	20 48	02 37	21 07
12	03 22	20 25	03 09	20 39	02 52	20 55	02 33	21 15
17	03 22	20 30	03 08	20 44	02 51	21 01	02 31	21 21
22	03 24	20 33	03 10	20 47	02 53	21 04	02 32	21 25
27	03 27	20 34	03 13	20 48	02 56	21 05	02 36	21 25
Jan. 1	03 32	20 34	03 18	20 48	03 02	21 04	02 42	21 24

Local mean time. To obtain standard time of rise or set, see Table 5.

TABLE 5.—REDUCTION OF LOCAL MEAN TIME TO STANDARD TIME

Difference of longitude between local and standard meridian	*Correction to local mean time to obtain standard time*	*Difference of longitude between local and standard meridian*	*Correction to local mean time to obtain standard time*	*Difference of longitude between local and standard meridian*	*Correction to local mean time to obtain standard time*
° ′ ° ′	*Minutes*	° ′ ° ′	*Minutes*	°	*Hours*
0 00 to 0 07	0	7 23 to 7 37	30	15	1
0 08 to 0 22	1	7 38 to 7 52	31	30	2
0 23 to 0 37	2	7 53 to 8 07	32	45	3
0 38 to 0 52	3	8 08 to 8 22	33	60	4
0 53 to 1 07	4	8 23 to 8 37	34	75	5
1 08 to 1 22	5	8 38 to 8 52	35	90	6
1 23 to 1 37	6	8 53 to 9 07	36	105	7
1 38 to 1 52	7	9 08 to 9 22	37	120	8
1 53 to 2 07	8	9 23 to 9 37	38	135	9
2 08 to 2 22	9	9 38 to 9 52	39	150	10
2 23 to 2 37	10	9 53 to 10 07	40	165	11
2 38 to 2 52	11	10 08 to 10 22	41	180	12
2 53 to 3 07	12	10 23 to 10 37	42		
3 08 to 3 22	13	10 38 to 10 52	43		
3 23 to 3 37	14	10 53 to 11 07	44		
3 38 to 3 52	15	11 08 to 11 22	45		
3 53 to 4 07	16	11 23 to 11 37	46		
4 08 to 4 22	17	11 38 to 11 52	47		
4 23 to 4 37	18	11 53 to 12 07	48		
4 38 to 4 52	19	12 08 to 12 22	49		
4 53 to 5 07	20	12 23 to 12 37	50		
5 08 to 5 22	21	12 38 to 12 52	51		
5 23 to 5 37	22	12 53 to 13 07	52		
5 38 to 5 52	23	13 08 to 13 22	53		
5 53 to 6 07	24	13 23 to 13 37	54		
6 08 to 6 22	25	13 38 to 13 52	55		
6 23 to 6 37	26	13 53 to 14 07	56		
6 38 to 6 52	27	14 08 to 14 22	57		
6 53 to 7 07	28	14 23 to 14 37	58		
7 08 to 7 22	29	14 38 to 14 52	59		

If local meridian is east of standard meridian, subtract the correction from local time.

If local meridian is west of standard meridian, add the correction to local time.

For differences of longitude less than 15°, use the first part of the table. For greater differences use both parts thus: 47° 23’ is equivalent to 45°+ 2° 23’, the correction for 45° is 3 hours, the correction for 2° 23’ is 10 minutes; therefore the total correction for the difference in longitude 47° 23’ is 3 hours and 10 minutes.

TABLE 6.—MOONRISE AND MOONSET

EXPLANATION OF TABLE

This table gives the time of rising and setting of the Moon's upper limb for every day in the year, at each of the following places:

Panama Canal	San Francisco, California	Anchorage, Alaska
Los Angeles, California	Seattle, Washington	Honolulu, Hawaii

All of Table 6 was supplied by the Nautical Almanac Office of the United States Naval Observatory. For the Panama Canal the times were computed for a point about midway between the two ends and are applicable to the entire canal and are accurate to within a minute or two.

Panama Canal (West End)

Day	JANUARY		FEBRUARY		MARCH		APRIL		MAY		JUNE		Day
	Rise h m	Set h m	Rise h m	Set h m	Rise h m	Set h m	Rise h m	Set h m	Rise h m	Set h m	Rise h m	Set h m	
1	1528	0316	1644	0442	1530	0327	1632	0417	1644	0415	1754	0506	1
2	1616	0414	1733	0529	1617	0413	1717	0457	1731	0457	1848	0556	2
3	1707	0506	1820	0614	1704	0456	1802	0537	1820	0540	1943	0649	3
4	1758	0557	1907	0657	1750	0538	1848	0618	1910	0625	2038	0744	4
5	1848	0646	1952	0739	1835	0618	1936	0659	2002	0713	2132	0840	5
6	1937	0733	2037	0819	1920	0658	2024	0743	2055	0803	2224	0937	6
7	2024	0817	2122	0859	2005	0738	2115	0828	2149	0856	2315	1034	7
8	2111	0900	2207	0938	2051	0819	2206	0916	2243	0950	....	1129	8
9	2156	0940	2254	1019	2138	0900	2259	1007	2335	1046	0005	1224	9
10	2240	1020	2342	1102	2227	0944	2353	1100	....	1142	0054	1319	10
11	2326	1100	....	1147	2318	1030	....	1154	0027	1238	0142	1414	11
12	....	1140	0032	1234	....	1119	0046	1250	0117	1333	0232	1510	12
13	0012	1222	0125	1326	0010	1211	0139	1347	0207	1429	0322	1606	13
14	0100	1306	0219	1421	0104	1305	0231	1445	0257	1525	0414	1703	14
15	0150	1354	0316	1519	0159	1402	0323	1542	0347	1622	0508	1759	15
16	0243	1445	0413	1619	0254	1501	0415	1640	0438	1720	0602	1853	16
17	0338	1540	0510	1720	0349	1600	0506	1738	0531	1817	0656	1946	17
18	0436	1638	0606	1821	0443	1700	0558	1837	0625	1915	0749	2035	18
19	0534	1739	0701	1921	0536	1759	0651	1936	0719	2011	0840	2122	19
20	0633	1840	0754	2020	0629	1859	0745	2034	0814	2105	0929	2206	20
21	0729	1941	0845	2118	0722	1958	0840	2130	0907	2156	1016	2248	21
22	0823	2040	0937	2215	0814	2056	0934	2225	0959	2244	1102	2329	22
23	0916	2138	1028	2311	0907	2153	1027	2316	1049	2329	1147	....	23
24	1006	2234	1119	....	1000	2249	1118	....	1137	....	1232	0008	24
25	1055	2330	1210	0005	1053	2343	1208	0005	1223	0011	1318	0048	25
26	1144	....	1301	0059	1145	....	1256	0050	1308	0052	1404	0129	26
27	1234	0024	1351	0150	1236	0035	1343	0133	1353	0132	1453	0212	27
28	1323	0118	1441	0240	1326	0124	1428	0215	1438	0212	1544	0258	28
29	1413	0211	....	0327	1414	0210	1513	0255	1525	0253	1637	0346	29
30	1504	0303	....	....	1501	0254	1558	0335	1613	0335	1732	0438	30
31	1554	0353	....	....	1547	0336	....	....	1703	0419	....	....	31

Day	JULY		AUGUST		SEPTEMBER		OCTOBER		NOVEMBER		DECEMBER		Day
	Rise h m	Set h m	Rise h m	Set h m	Rise h m	Set h m	Rise h m	Set h m	Rise h m	Set h m	Rise h m	Set h m	
1	1828	0533	1954	0711	2110	0850	2138	0930	2303	1059	2323	1114	1
2	1923	0630	2046	0810	2202	0948	2232	1028	2354	1149	....	1157	2
3	2018	0728	2137	0908	2254	1045	2326	1123	....	1235	0010	1238	3
4	2111	0826	2227	1005	2347	1142	....	1217	0043	1319	0056	1318	4
5	2202	0924	2317	1101	....	1237	0019	1307	0130	1401	0140	1358	5
6	2252	1020	....	1157	0040	1330	0110	1354	0215	1441	0225	1438	6
7	2341	1116	0008	1252	0132	1421	0159	1439	0300	1521	0311	1520	7
8	....	1211	0059	1347	0223	1510	0247	1521	0345	1601	0358	1603	8
9	0030	1306	0151	1441	0313	1556	0333	1602	0430	1641	0446	1649	9
10	0120	1401	0243	1533	0402	1640	0418	1642	0516	1724	0537	1737	10
11	0210	1456	0335	1624	0449	1722	0503	1722	0604	1808	0628	1828	11
12	0302	1551	0426	1712	0535	1803	0548	1802	0653	1854	0721	1921	12
13	0354	1645	0516	1758	0620	1843	0633	1843	0743	1943	0814	2015	13
14	0447	1738	0605	1841	0705	1922	0720	1926	0834	2034	0906	2110	14
15	0540	1828	0652	1923	0750	2003	0807	2010	0926	2126	0957	2205	15
16	0632	1916	0738	2004	0836	2044	0856	2057	1017	2220	1047	2300	16
17	0722	2001	0823	2043	0922	2127	0946	2146	1108	2314	1135	2354	17
18	0810	2044	0908	2123	1010	2212	1037	2237	1159	....	1224	....	18
19	0856	2125	0953	2204	1059	2300	1129	2330	1248	0008	1312	0048	19
20	0942	2205	1039	2246	1150	2350	1221	....	1338	0103	1402	0143	20
21	1027	2245	1126	2330	1242	....	1312	0024	1427	0159	1453	0240	21
22	1112	2325	1215	....	1335	0043	1404	0120	1518	0255	1547	0337	22
23	1157	....	1306	0017	1429	0138	1455	0216	1610	0353	1642	0435	23
24	1244	0007	1359	0107	1523	0235	1546	0313	1704	0451	1738	0534	24
25	1333	0050	1453	0200	1616	0333	1638	0412	1800	0551	1834	0631	25
26	1424	0136	1549	0256	1709	0432	1731	0511	1857	0651	1930	0725	26
27	1518	0226	1644	0354	1802	0532	1826	0610	1954	0750	2023	0817	27
28	1613	0319	1739	0453	1855	0631	1922	0711	2050	0846	2114	0906	28
29	1709	0415	1833	0553	1949	0731	2018	0811	2143	0939	2202	0951	29
30	1805	0513	1925	0652	2043	0831	2114	0910	2235	1028	2249	1034	30
31	1900	0612	2018	0751	....	....	2209	1006	....	....	2249	1115	31

Time meridian 75° W. 0000 is midnight. 1200 is noon.

Los Angeles, California

Day	JANUARY		FEBRUARY		MARCH		APRIL		MAY		JUNE		Day
	Rise h m	Set h m	Rise h m	Set h m	Rise h m	Set h m	Rise h m	Set h m	Rise h m	Set h m	Rise h m	Set h m	
1	1427	0337	1546	0500	1436	0342	1603	0407	1636	0345	1811	0411	1
2	1515	0434	1640	0542	1529	0421	1656	0440	1731	0419	1908	0457	2
3	1606	0527	1734	0621	1622	0458	1749	0512	1827	0454	2004	0548	3
4	1659	0617	1827	0658	1715	0533	1843	0544	1924	0533	2056	0644	4
5	1753	0703	1920	0731	1808	0606	1938	0619	2020	0616	2145	0744	5
6	1847	0744	2013	0804	1901	0638	2034	0655	2116	0703	2231	0846	6
7	1941	0822	2106	0836	1955	0710	2130	0735	2209	0755	2313	0950	7
8	2034	0857	2200	0908	2048	0743	2225	0819	2259	0851	2354	1055	8
9	2127	0930	2254	0941	2143	0817	2319	0907	2346	0951	....	1200	9
10	2220	1002	2349	1016	2238	0855	....	0959	....	1053	0033	1304	10
11	2313	1034	....	1055	2334	0935	0011	1057	0031	1157	0112	1409	11
12	....	1106	0046	1138	....	1020	0101	1158	0112	1302	0153	1513	12
13	0008	1141	0143	1226	0030	1111	0148	1302	0153	1408	0235	1617	13
14	0103	1218	0240	1320	0124	1206	0232	1408	0233	1514	0321	1719	14
15	0201	1259	0336	1420	0217	1306	0315	1515	0313	1620	0409	1819	15
16	0300	1346	0430	1526	0307	1411	0356	1623	0356	1727	0501	1913	16
17	0359	1439	0520	1634	0355	1519	0438	1732	0441	1831	0556	2004	17
18	0457	1538	0608	1744	0440	1628	0521	1840	0529	1933	0651	2049	18
19	0554	1643	0652	1854	0523	1738	0605	1947	0620	2031	0747	2129	19
20	0646	1751	0735	2004	0606	1847	0652	2050	0713	2124	0843	2206	20
21	0735	1900	0816	2112	0648	1956	0742	2150	0809	2211	0937	2241	21
22	0819	2009	0858	2218	0732	2103	0834	2244	0904	2254	1031	2313	22
23	0901	2117	0941	2321	0817	2207	0927	2333	0959	2332	1124	2345	23
24	0942	2223	1025	....	0904	2307	1021	....	1054	....	1217	....	24
25	1022	2327	1112	0021	0954	....	1116	0018	1147	0008	1310	0017	25
26	1102	....	1200	0118	1045	0003	1210	0057	1240	0041	1405	0051	26
27	1143	0030	1251	0210	1137	0053	1303	0134	1333	0113	1501	0126	27
28	1227	0130	1343	0258	1230	0139	1356	0208	1427	0145	1558	0206	28
29	1314	0228	....	....	1324	0221	1449	0240	1521	0218	1656	0249	29
30	1403	0323	....	....	1417	0259	1542	0313	1617	0252	1752	0338	30
31	1454	0413	....	....	1510	0334	....	....	1714	0330	....	....	31

Day	JULY		AUGUST		SEPTEMBER		OCTOBER		NOVEMBER		DECEMBER		Day
	Rise h m	Set h m	Rise h m	Set h m	Rise h m	Set h m	Rise h m	Set h m	Rise h m	Set h m	Rise h m	Set h m	
1	1848	0432	1951	0630	2032	0843	2042	0944	2206	1116	2242	1117	1
2	1940	0531	2033	0738	2116	0951	2133	1046	2302	1201	2336	1152	2
3	2028	0635	2114	0846	2201	1056	2227	1143	2358	1241	....	1225	3
4	2113	0740	2154	0953	2250	1158	2321	1235	....	1318	0030	1258	4
5	2155	0846	2236	1058	2340	1256	....	1322	0052	1352	0123	1329	5
6	2235	0952	2319	1202	....	1350	0016	1404	0145	1425	0216	1402	6
7	2314	1057	....	1305	0032	1439	0110	1442	0238	1456	0309	1436	7
8	2354	1202	0004	1404	0126	1523	0204	1517	0331	1529	0403	1513	8
9	....	1306	0052	1501	0221	1604	0258	1551	0424	1602	0458	1554	9
10	0035	1409	0143	1553	0315	1641	0351	1623	0517	1637	0553	1638	10
11	0118	1511	0236	1641	0409	1716	0443	1655	0612	1715	0648	1727	11
12	0205	1610	0330	1724	0502	1749	0536	1727	0706	1757	0741	1821	12
13	0254	1705	0425	1804	0555	1821	0630	1801	0801	1843	0832	1918	13
14	0347	1757	0520	1840	0648	1853	0723	1837	0854	1933	0920	2019	14
15	0441	1844	0614	1914	0741	1926	0817	1916	0945	2027	1004	2121	15
16	0537	1926	0708	1947	0834	2000	0911	1959	1034	2125	1046	2224	16
17	0632	2005	0801	2019	0928	2037	1005	2046	1120	2225	1125	2328	17
18	0727	2040	0854	2051	1021	2117	1057	2137	1203	2327	1204	....	18
19	0822	2113	0946	2124	1116	2201	1147	2232	1244	....	1243	0032	19
20	0915	2146	1040	2159	1209	2250	1235	2331	1324	0031	1324	0137	20
21	1008	2217	1134	2238	1302	2344	1321	....	1404	0136	1407	0242	21
22	1101	2250	1229	2320	1353	....	1405	0034	1445	0243	1453	0348	22
23	1154	2324	1324	....	1442	0042	1447	0139	1528	0350	1544	0452	23
24	1249	....	1419	0007	1528	0145	1529	0246	1614	0458	1638	0554	24
25	1344	0001	1513	0100	1613	0251	1611	0354	1704	0605	1735	0651	25
26	1441	0042	1605	0158	1656	0400	1654	0504	1758	0710	1833	0743	26
27	1537	0127	1654	0300	1739	0510	1740	0613	1854	0810	1931	0830	27
28	1633	0218	1740	0407	1822	0620	1828	0722	1951	0905	2029	0912	28
29	1727	0315	1825	0516	1907	0730	1920	0828	2049	0954	2125	0950	29
30	1818	0417	1907	0625	1953	0838	2014	0929	2146	1038	2219	1025	30
31	1906	0522	1949	0735	....	....	2110	1026	....	....	2219	1058	31

Time meridian 120° W. 0000 is midnight. 1200 is noon.

San Francisco, California

Day	JANUARY		FEBRUARY		MARCH		APRIL		MAY		JUNE		Day
	Rise h m	Set h m	Rise h m	Set h m	Rise h m	Set h m	Rise h m	Set h m	Rise h m	Set h m	Rise h m	Set h m	
1	1437	0401	1556	0525	1446	0406	1619	0427	1657	0400	1837	0421	1
2	1524	0459	1651	0607	1540	0445	1713	0458	1753	0432	1934	0506	2
3	1615	0553	1746	0645	1635	0521	1808	0528	1851	0507	2030	0557	3
4	1708	0643	1841	0719	1730	0554	1904	0559	1949	0544	2122	0653	4
5	1802	0728	1935	0752	1824	0625	2001	0632	2046	0626	2210	0753	5
6	1858	0808	2030	0822	1919	0655	2058	0707	2142	0712	2254	0857	6
7	1953	0845	2125	0852	2014	0726	2155	0745	2235	0804	2335	1003	7
8	2048	0918	2220	0923	2110	0757	2251	0828	2325	0900	....	1109	8
9	2143	0950	2316	0954	2206	0830	2345	0915	....	1001	0013	1216	9
10	2237	1020	....	1028	2303	0906	....	1008	0010	1105	0050	1323	10
11	2333	1050	0013	1106	....	0945	0037	1106	0053	1210	0127	1430	11
12	....	1121	0111	1147	0000	1029	0126	1208	0133	1317	0206	1536	12
13	0029	1153	0209	1235	0056	1119	0211	1314	0211	1425	0247	1642	13
14	0126	1229	0307	1329	0151	1215	0254	1422	0249	1533	0331	1745	14
15	0225	1309	0402	1430	0243	1316	0335	1531	0328	1642	0418	1845	15
16	0325	1355	0455	1536	0332	1422	0414	1642	0408	1750	0510	1940	16
17	0425	1448	0544	1646	0418	1531	0453	1752	0452	1856	0604	2029	17
18	0524	1547	0630	1758	0501	1643	0534	1902	0538	1959	0701	2113	18
19	0619	1652	0712	1911	0542	1755	0617	2011	0629	2057	0758	2153	19
20	0711	1802	0752	2022	0622	1907	0702	2116	0722	2150	0855	2228	20
21	0757	1913	0832	2132	0703	2018	0751	2216	0818	2237	0951	2301	21
22	0840	2024	0912	2240	0744	2126	0842	2310	0914	2318	1046	2332	22
23	0920	2134	0952	2345	0828	2232	0936	2359	1011	2355	1141	....	23
24	0958	2243	1035	....	0914	2333	1031	....	1106	....	1236	0002	24
25	1036	2349	1121	0046	1002	....	1126	0042	1202	0029	1331	0032	25
26	1114	....	1209	0144	1054	0029	1222	0121	1256	0100	1427	0104	26
27	1154	0053	1259	0236	1146	0119	1317	0156	1351	0131	1525	0138	27
28	1237	0155	1352	0323	1240	0204	1411	0228	1446	0201	1623	0216	28
29	1323	0254	....	....	1335	0245	1506	0259	1543	0232	1721	0259	29
30	1411	0349	....	....	1429	0321	1601	0329	1640	0305	1819	0347	30
31	1503	0439	....	....	1524	0355	....	....	1738	0341	....	....	31

Day	JULY		AUGUST		SEPTEMBER		OCTOBER		NOVEMBER		DECEMBER		Day
	Rise h m	Set h m	Rise h m	Set h m	Rise h m	Set h m	Rise h m	Set h m	Rise h m	Set h m	Rise h m	Set h m	
1	1914	0441	2012	0642	2046	0904	2052	1009	2216	1142	2255	1139	1
2	2005	0541	2052	0753	2128	1013	2142	1112	2313	1226	2351	1213	2
3	2052	0645	2130	0903	2212	1120	2235	1209	....	1304	....	1244	3
4	2135	0752	2209	1012	2259	1223	2330	1301	0010	1340	0046	1315	4
5	2215	0900	2248	1119	2349	1322	....	1347	0105	1412	0141	1345	5
6	2253	1008	2330	1226	....	1416	0026	1428	0200	1443	0235	1416	6
7	2330	1115	....	1329	0041	1504	0122	1504	0255	1513	0331	1449	7
8	....	1222	0014	1430	0136	1548	0217	1538	0349	1544	0426	1524	8
9	0008	1328	0101	1527	0231	1627	0312	1610	0444	1615	0523	1603	9
10	0047	1433	0152	1619	0327	1703	0407	1640	0540	1649	0619	1647	10
11	0129	1536	0245	1706	0422	1736	0501	1711	0636	1726	0714	1736	11
12	0214	1636	0340	1748	0517	1807	0556	1742	0731	1807	0808	1830	12
13	0303	1732	0436	1827	0612	1838	0651	1814	0827	1852	0858	1928	13
14	0356	1823	0532	1902	0707	1908	0746	1849	0920	1942	0944	2029	14
15	0450	1909	0628	1934	0801	1939	0841	1926	1011	2036	1027	2133	15
16	0547	1950	0723	2005	0856	2012	0936	2008	1059	2134	1107	2238	16
17	0644	2027	0818	2035	0951	2048	1030	2054	1144	2236	1145	2344	17
18	0740	2101	0912	2106	1046	2127	1123	2146	1226	2340	1222	....	18
19	0836	2133	1007	2137	1141	2210	1213	2241	1305	....	1259	0050	19
20	0931	2203	1102	2211	1235	2259	1300	2342	1343	0046	1338	0157	20
21	1026	2233	1158	2248	1328	2353	1345	....	1421	0153	1419	0305	21
22	1120	2304	1254	2329	1418	....	1427	0046	1500	0302	1504	0412	22
23	1216	2337	1350	....	1506	0052	1507	0153	1541	0412	1553	0517	23
24	1312	....	1445	0016	1551	0156	1547	0302	1625	0522	1646	0620	24
25	1409	0012	1539	0108	1634	0304	1627	0412	1714	0630	1743	0717	25
26	1506	0052	1630	0207	1715	0415	1708	0524	1806	0736	1842	0809	26
27	1604	0136	1718	0311	1756	0527	1752	0636	1902	0837	1942	0855	27
28	1700	0227	1802	0419	1837	0639	1839	0746	2001	0931	2041	0935	28
29	1753	0324	1845	0529	1919	0751	1929	0853	2059	1019	2139	1011	29
30	1843	0426	1925	0641	2004	0901	2023	0956	2158	1101	2235	1044	30
31	1929	0533	2005	0753	....	....	2119	1052	....	....	2235	1116	31

Time meridian 120° W. 0000 is midnight. 1200 is noon.

Seattle, Washington

Day	JANUARY		FEBRUARY		MARCH		APRIL		MAY		JUNE		Day
	Rise	Set	Rise	Set	Rise	Set	Rise	Set	Rise	Set	Rise	Set	
	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	
1	1412	0424	1531	0550	1424	0429	1613	0434	1704	0354	1900	0359	1
2	1457	0524	1629	0628	1522	0504	1713	0459	1806	0421	2000	0441	2
3	1547	0620	1729	0702	1621	0535	1813	0525	1908	0451	2056	0530	3
4	1641	0709	1828	0732	1721	0604	1914	0551	2010	0524	2147	0626	4
5	1739	0751	1928	0800	1820	0630	2015	0619	2111	0602	2231	0728	5
6	1838	0828	2028	0826	1920	0656	2117	0649	2208	0646	2311	0836	6
7	1938	0901	2128	0851	2021	0721	2217	0724	2301	0737	2346	0947	7
8	2038	0930	2228	0916	2121	0747	2316	0803	2348	0834	....	1059	8
9	2137	0956	2329	0943	2222	0816	....	0849	....	0938	0019	1212	9
10	2237	1021	....	1012	2323	0847	0011	0941	0030	1045	0050	1325	10
11	2338	1046	0031	1045	....	0923	0102	1041	0108	1157	0121	1438	11
12	....	1112	0133	1123	0023	1004	0148	1146	0142	1309	0154	1551	12
13	0039	1140	0234	1208	0122	1052	0229	1256	0215	1424	0229	1701	13
14	0142	1211	0333	1302	0216	1148	0307	1410	0246	1538	0308	1808	14
15	0245	1247	0428	1403	0307	1252	0341	1526	0319	1653	0353	1910	15
16	0349	1330	0518	1513	0353	1402	0415	1643	0354	1807	0443	2005	16
17	0451	1420	0603	1628	0434	1517	0448	1800	0432	1918	0538	2053	17
18	0550	1520	0643	1746	0511	1634	0522	1916	0514	2024	0636	2135	18
19	0644	1628	0719	1906	0546	1753	0600	2030	0602	2123	0737	2210	19
20	0731	1741	0753	2024	0620	1912	0640	2139	0655	2215	0838	2241	20
21	0813	1858	0826	2141	0654	2029	0726	2241	0752	2259	0939	2309	21
22	0850	2016	0900	2254	0730	2143	0816	2336	0851	2337	1039	2335	22
23	0924	2133	0935	....	0808	2253	0910	....	0951	....	1139	....	23
24	0956	2247	1014	0004	0850	2357	1007	0023	1052	0010	1239	0000	24
25	1027	....	1056	0109	0936	....	1105	0103	1152	0039	1339	0026	25
26	1100	0000	1142	0209	1027	0054	1205	0138	1252	0106	1441	0052	26
27	1135	0110	1233	0302	1121	0144	1304	0209	1352	0131	1543	0122	27
28	1214	0216	1327	0348	1217	0227	1404	0237	1452	0157	1645	0155	28
29	1256	0318	....	....	1315	0305	1503	0303	1553	0223	1747	0234	29
30	1344	0415	....	....	1414	0337	1604	0328	1656	0251	1845	0320	30
31	1436	0505	....	....	1513	0407	....	....	1758	0323	....	....	31

Day	JULY		AUGUST		SEPTEMBER		OCTOBER		NOVEMBER		DECEMBER		Day
	Rise	Set	Rise	Set	Rise	Set	Rise	Set	Rise	Set	Rise	Set	
	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	
1	1939	0413	2022	0628	2034	0912	2028	1030	2152	1205	2241	1153	1
2	2028	0514	2056	0744	2111	1027	2116	1136	2253	1246	2342	1222	2
3	2110	0622	2128	0900	2150	1139	2209	1235	2354	1321	....	1249	3
4	2148	0734	2201	1016	2234	1246	2305	1325	....	1352	0043	1315	4
5	2222	0847	2234	1130	2322	1347	....	1409	0054	1420	0142	1340	5
6	2254	1002	2311	1242	....	1441	0003	1447	0154	1445	0242	1406	6
7	2326	1116	2351	1350	0015	1528	0103	1519	0254	1511	0342	1434	7
8	2357	1229	....	1454	0111	1609	0203	1549	0353	1536	0443	1505	8
9	....	1341	0035	1552	0210	1645	0303	1616	0453	1603	0543	1540	9
10	0031	1451	0125	1644	0309	1716	0402	1641	0553	1633	0643	1621	10
11	0108	1558	0219	1730	0409	1745	0502	1707	0654	1705	0740	1709	11
12	0150	1701	0316	1809	0509	1812	0601	1733	0753	1742	0834	1803	12
13	0237	1758	0416	1843	0609	1837	0701	1800	0851	1825	0922	1903	13
14	0329	1848	0516	1914	0709	1903	0801	1831	0946	1914	1006	2008	14
15	0425	1931	0617	1942	0808	1929	0901	1905	1037	2010	1044	2117	15
16	0524	2009	0717	2008	0908	1957	0959	1943	1123	2111	1119	2227	16
17	0625	2042	0817	2033	1007	2029	1056	2028	1204	2217	1151	2339	17
18	0726	2111	0916	2059	1107	2104	1149	2119	1241	2326	1222	....	18
19	0827	2138	1016	2125	1205	2145	1238	2216	1315	....	1253	0052	19
20	0927	2204	1116	2155	1301	2232	1323	2320	1347	0038	1326	0205	20
21	1027	2229	1216	2227	1354	2326	1403	....	1419	0151	1402	0319	21
22	1126	2255	1316	2305	1442	....	1440	0028	1452	0306	1442	0431	22
23	1227	2323	1414	2350	1527	0028	1514	0141	1527	0422	1527	0541	23
24	1328	2354	1511	....	1607	0136	1548	0256	1606	0538	1619	0645	24
25	1429	....	1604	0041	1645	0249	1622	0413	1650	0652	1717	0743	25
26	1530	0029	1652	0141	1720	0406	1657	0531	1740	0801	1818	0833	26
27	1629	0111	1736	0248	1754	0524	1735	0649	1835	0902	1921	0916	27
28	1726	0200	1815	0401	1828	0643	1817	0805	1935	0956	2025	0952	28
29	1817	0257	1852	0518	1905	0802	1904	0916	2037	1042	2127	1023	29
30	1904	0402	1926	0636	1945	0918	1956	1021	2139	1120	2229	1052	30
31	1945	0513	2000	0754	....	....	2053	1117	....	....	2229	1118	31

Time meridian 120° W. 0000 is midnight. 1200 is noon.

Anchorage, Alaska

Day	JANUARY		FEBRUARY		MARCH		APRIL		MAY		JUNE		Day
	Rise h m	Set h m	Rise h m	Set h m	Rise h m	Set h m	Rise h m	Set h m	Rise h m	Set h m	Rise h m	Set h m	
1	1407	0615	1528	0743	1427	0615	1657	0542	1820	0433	2056	0358	1
2	1446	0723	1635	0813	1535	0641	1809	0556	1934	0448	2201	0432	2
3	1535	0821	1745	0836	1646	0702	1921	0611	2048	0507	2257	0517	3
4	1633	0906	1857	0855	1757	0719	2034	0626	2200	0529	2341	0615	4
5	1738	0942	2008	0912	1908	0734	2147	0642	2308	0558	....	0725	5
6	1848	1009	2120	0926	2020	0749	2300	0702	....	0636	0016	0844	6
7	1959	1030	2232	0940	2132	0803	....	0726	0009	0725	0043	1008	7
8	2111	1048	2344	0954	2245	0818	0010	0757	0059	0826	0105	1134	8
9	2222	1103	....	1010	2357	0835	0115	0838	0139	0938	0124	1302	9
10	2334	1117	0057	1028	....	0856	0211	0930	0210	1058	0141	1429	10
11	....	1131	0210	1050	0109	0922	0258	1035	0235	1222	0159	1557	11
12	0047	1145	0323	1119	0218	0956	0336	1150	0256	1350	0219	1723	12
13	0200	1202	0432	1158	0321	1041	0405	1313	0315	1518	0241	1846	13
14	0315	1222	0534	1249	0416	1138	0429	1441	0333	1648	0310	2003	14
15	0431	1247	0626	1356	0501	1249	0450	1612	0352	1817	0346	2110	15
16	0545	1321	0708	1515	0536	1411	0510	1745	0414	1945	0431	2205	16
17	0653	1407	0740	1644	0604	1540	0529	1917	0439	2108	0528	2247	17
18	0752	1509	0806	1818	0627	1713	0549	2048	0511	2221	0633	2319	18
19	0839	1624	0827	1953	0648	1847	0613	2214	0553	2323	0743	2344	19
20	0915	1751	0847	2127	0708	2021	0642	2333	0644	....	0855	....	20
21	0943	1923	0906	2258	0728	2153	0719	....	0745	0012	1008	0003	21
22	1005	2056	0926	....	0750	2321	0805	0040	0852	0048	1120	0020	22
23	1024	2228	0949	0026	0816	....	0900	0134	1003	0116	1232	0034	23
24	1042	2357	1016	0148	0848	0042	1003	0216	1115	0138	1343	0049	24
25	1100	....	1050	0302	0927	0154	1111	0248	1226	0156	1456	0103	25
26	1120	0124	1132	0407	1016	0253	1221	0312	1338	0212	1609	0119	26
27	1143	0246	1223	0501	1114	0341	1332	0332	1450	0226	1723	0137	27
28	1212	0404	1322	0543	1217	0417	1443	0349	1602	0240	1836	0200	28
29	1247	0514	....	....	1325	0445	1555	0404	1716	0255	1945	0229	29
30	1332	0615	....	....	1435	0507	1707	0418	1830	0312	2047	0309	30
31	1426	0704	....	....	1546	0526	....	....	1944	0333	....	....	31

Day	JULY		AUGUST		SEPTEMBER		OCTOBER		NOVEMBER		DECEMBER		Day
	Rise h m	Set h m	Rise h m	Set h m	Rise h m	Set h m	Rise h m	Set h m	Rise h m	Set h m	Rise h m	Set h m	
1	2137	0401	2138	0651	2101	1028	2026	1219	2151	1357	2307	1319	1
2	2217	0507	2158	0822	2125	1157	2108	1332	2301	1429	....	1337	2
3	2248	0624	2217	0954	2153	1322	2159	1433	....	1453	0020	1352	3
4	2312	0749	2235	1124	2228	1438	2259	1521	0013	1512	0132	1407	4
5	2332	0917	2256	1252	2313	1545	....	1557	0125	1529	0243	1421	5
6	2351	1046	2320	1417	....	1639	0005	1625	0236	1544	0355	1436	6
7	....	1215	2350	1537	0006	1722	0115	1647	0348	1558	0507	1453	7
8	0008	1342	....	1649	0108	1754	0226	1705	0459	1613	0619	1513	8
9	0027	1508	0027	1751	0215	1820	0337	1721	0611	1629	0730	1539	9
10	0048	1631	0114	1842	0325	1841	0449	1736	0723	1647	0839	1613	10
11	0114	1749	0210	1921	0436	1858	0600	1750	0834	1710	0941	1656	11
12	0146	1859	0315	1951	0548	1913	0711	1805	0944	1738	1034	1752	12
13	0226	1957	0424	2015	0659	1928	0823	1822	1049	1815	1117	1859	13
14	0317	2044	0535	2034	0811	1942	0934	1842	1147	1903	1151	2015	14
15	0418	2120	0648	2051	0922	1958	1044	1906	1235	2001	1217	2136	15
16	0526	2148	0800	2106	1033	2016	1152	1937	1314	2111	1239	2301	16
17	0637	2210	0911	2120	1144	2037	1254	2017	1344	2228	1258	....	17
18	0750	2227	1022	2135	1253	2103	1348	2108	1409	2350	1316	0027	18
19	0902	2243	1134	2151	1359	2137	1433	2211	1430	....	1333	0154	19
20	1014	2257	1245	2209	1500	2221	1510	2324	1449	0116	1353	0322	20
21	1126	2311	1356	2232	1552	2317	1539	....	1507	0244	1416	0449	21
22	1237	2326	1506	2301	1635	....	1603	0044	1526	0414	1444	0615	22
23	1350	2343	1612	2340	1710	0026	1624	0211	1548	0545	1521	0735	23
24	1502	....	1711	....	1738	0145	1644	0341	1614	0715	1608	0845	24
25	1615	0003	1801	0030	1801	0312	1703	0514	1647	0841	1707	0942	25
26	1725	0029	1841	0134	1822	0444	1724	0647	1730	0958	1815	1026	26
27	1830	0103	1913	0251	1842	0618	1749	0820	1825	1103	1929	1059	27
28	1926	0148	1939	0417	1903	0752	1819	0949	1929	1152	2044	1124	28
29	2012	0247	2001	0548	1925	0926	1858	1111	2040	1230	2159	1144	29
30	2047	0359	2021	0722	1952	1056	1946	1220	2153	1258	2312	1200	30
31	2115	0522	2040	0856	....	....	2045	1315	....	....	2312	1215	31

Time meridian 135° W. 0000 is midnight. 1200 is noon.

Honolulu, Hawaii

Day	JANUARY		FEBRUARY		MARCH		APRIL		MAY		JUNE		Day
	Rise h m	Set h m	Rise h m	Set h m	Rise h m	Set h m	Rise h m	Set h m	Rise h m	Set h m	Rise h m	Set h m	
1	1532	0401	1651	0522	1538	0406	1651	0443	1713	0432	1835	0514	1
2	1622	0456	1741	0607	1628	0448	1740	0520	1804	0510	1931	0602	2
3	1713	0549	1832	0649	1717	0528	1829	0556	1856	0551	2026	0655	3
4	1804	0639	1921	0728	1806	0606	1919	0633	1949	0633	2119	0751	4
5	1856	0726	2010	0806	1855	0643	2009	0712	2043	0720	2211	0849	5
6	1947	0809	2058	0843	1944	0719	2101	0753	2138	0809	2300	0948	6
7	2037	0850	2147	0919	2033	0756	2154	0836	2231	0902	2347	1048	7
8	2126	0929	2236	0955	2122	0833	2248	0923	2323	0957	....	1148	8
9	2215	1006	2326	1033	2213	0912	2341	1013	....	1055	0032	1247	9
10	2303	1042	....	1112	2305	0953	....	1106	0013	1154	0116	1346	10
11	2352	1119	0018	1155	2358	1037	0034	1202	0101	1253	0201	1446	11
12	....	1156	0111	1241	....	1125	0126	1301	0147	1353	0246	1546	12
13	0042	1235	0206	1332	0052	1217	0216	1401	0233	1454	0334	1645	13
14	0134	1316	0302	1428	0147	1313	0304	1502	0318	1554	0423	1744	14
15	0228	1402	0359	1527	0240	1411	0352	1605	0404	1656	0515	1841	15
16	0324	1452	0454	1630	0333	1513	0439	1707	0452	1757	0608	1935	16
17	0422	1547	0548	1734	0425	1616	0526	1810	0541	1858	0702	2026	17
18	0520	1646	0640	1839	0514	1720	0614	1913	0633	1957	0756	2113	18
19	0617	1749	0729	1944	0603	1824	0703	2015	0726	2053	0849	2157	19
20	0712	1853	0818	2047	0651	1928	0754	2115	0820	2146	0941	2237	20
21	0805	1957	0905	2149	0739	2031	0847	2213	0914	2235	1031	2315	21
22	0854	2101	0952	2250	0828	2133	0940	2306	1007	2320	1120	2352	22
23	0941	2203	1039	2349	0917	2233	1033	2356	1059	....	1209	....	23
24	1027	2303	1127	....	1008	2331	1126	....	1150	0001	1257	0028	24
25	1112	....	1216	0046	1059	....	1217	0042	1239	0040	1347	0105	25
26	1157	0002	1306	0140	1151	0025	1308	0125	1328	0117	1437	0143	26
27	1243	0100	1357	0232	1242	0116	1357	0205	1416	0154	1529	0223	27
28	1330	0157	1447	0320	1334	0203	1446	0242	1505	0230	1623	0306	28
29	1419	0252	....	....	1424	0246	1534	0319	1556	0308	1719	0353	29
30	1509	0344	....	....	1513	0327	1623	0355	1647	0347	1815	0444	30
31	1600	0435	....	....	1602	0406	....	....	1741	0429	....	....	31

Day	JULY		AUGUST		SEPTEMBER		OCTOBER		NOVEMBER		DECEMBER		Day
	Rise h m	Set h m	Rise h m	Set h m	Rise h m	Set h m	Rise h m	Set h m	Rise h m	Set h m	Rise h m	Set h m	
1	1910	0539	2025	0727	2125	0921	2146	1010	2310	1139	2337	1146	1
2	2004	0638	2112	0830	2214	1023	2239	1110	....	1226	....	1226	2
3	2055	0738	2159	0932	2303	1124	2333	1206	0003	1309	0027	1303	3
4	2144	0840	2244	1033	2354	1223	....	1257	0055	1350	0116	1339	4
5	2231	0941	2331	1134	....	1319	0026	1345	0145	1427	0205	1416	5
6	2316	1041	....	1233	0046	1412	0118	1430	0234	1504	0253	1453	6
7	....	1141	0018	1332	0138	1501	0210	1511	0322	1540	0342	1531	7
8	0001	1241	0107	1428	0231	1548	0300	1550	0411	1617	0433	1612	8
9	0046	1340	0157	1523	0322	1631	0349	1627	0500	1654	0525	1656	9
10	0132	1438	0249	1615	0413	1711	0438	1704	0549	1734	0617	1743	10
11	0219	1536	0341	1704	0503	1750	0526	1740	0640	1816	0710	1834	11
12	0309	1633	0434	1749	0553	1827	0615	1817	0732	1901	0803	1928	12
13	0400	1727	0526	1832	0641	1903	0704	1855	0824	1948	0855	2023	13
14	0453	1819	0617	1912	0730	1940	0754	1935	0916	2039	0945	2121	14
15	0547	1907	0707	1950	0818	2017	0844	2018	1007	2133	1032	2219	15
16	0640	1952	0756	2027	0907	2055	0936	2103	1058	2229	1118	2317	16
17	0732	2034	0845	2103	0957	2136	1027	2151	1146	2326	1203	....	17
18	0823	2113	0933	2139	1048	2219	1119	2243	1233	....	1247	0016	18
19	0913	2151	1022	2217	1139	2306	1210	2337	1318	0024	1331	0115	19
20	1002	2227	1112	2256	1232	2356	1300	....	1404	0123	1417	0215	20
21	1050	2303	1202	2338	1324	....	1349	0034	1449	0223	1505	0315	21
22	1139	2340	1254	....	1416	0050	1437	0133	1535	0324	1556	0416	22
23	1228	....	1347	0023	1508	0147	1524	0234	1624	0426	1649	0517	23
24	1319	0019	1441	0113	1558	0247	1611	0335	1715	0529	1745	0617	24
25	1411	0100	1535	0206	1647	0349	1658	0438	1808	0632	1841	0713	25
26	1505	0144	1629	0304	1736	0452	1747	0542	1904	0734	1938	0806	26
27	1600	0232	1722	0404	1824	0556	1838	0647	2000	0833	2033	0855	27
28	1656	0325	1812	0507	1913	0701	1931	0751	2057	0928	2126	0940	28
29	1751	0422	1902	0611	2003	0805	2025	0853	2152	1018	2218	1022	29
30	1844	0522	1950	0715	2054	0909	2121	0952	2246	1104	2308	1100	30
31	1936	0624	2037	0818	....	....	2216	1048	....	....	2308	1137	31

Time meridian 150° W. 0000 is midnight. 1200 is noon.

TABLE 7.—CONVERSION OF FEET TO CENTIMETERS

Feet	Tenths of a Foot										Feet
	0.0	0.1	0.2	0.3	0.4	0.5	0.6	0.7	0.8	0.9	
0	0	3	6	9	12	15	18	21	24	27	**0**
1	30	34	37	40	43	46	49	52	55	58	**1**
2	61	64	67	70	73	76	79	82	85	88	**2**
3	91	94	98	101	104	107	110	113	116	119	**3**
4	122	125	128	131	134	137	140	143	146	149	**4**
5	152	155	158	162	165	168	171	174	177	180	**5**
6	183	186	189	192	195	198	201	204	207	210	**6**
7	213	216	219	223	226	229	232	235	238	241	**7**
8	244	247	250	253	256	259	262	265	268	271	**8**
9	274	277	280	283	287	290	293	296	299	302	**9**
10	305	308	311	314	317	320	323	326	329	332	**10**
11	335	338	341	344	347	351	354	357	360	363	**11**
12	366	369	372	375	378	381	384	387	390	393	**12**
13	396	399	402	405	408	411	415	418	421	424	**13**
14	427	430	433	436	439	442	445	448	451	454	**14**
15	457	460	463	466	469	472	475	479	482	485	**15**
16	488	491	494	497	500	503	506	509	512	515	**16**
17	518	521	524	527	530	533	536	539	543	546	**17**
18	549	552	555	558	561	564	567	570	573	576	**18**
19	579	582	585	588	591	594	597	600	604	607	**19**
20	610	613	616	619	622	625	628	631	634	637	**20**
21	640	643	646	649	652	655	658	661	664	668	**21**
22	671	674	677	680	683	686	689	692	695	698	**22**
23	701	704	707	710	713	716	719	722	725	728	**23**
24	732	735	738	741	744	747	750	753	756	759	**24**
25	762	765	768	771	774	777	780	783	786	789	**25**
26	792	796	799	802	805	808	811	814	817	820	**26**
27	823	826	829	832	835	838	841	844	847	850	**27**
28	853	856	860	863	866	869	872	875	878	881	**28**
29	884	887	890	893	896	899	902	905	908	911	**29**
30	914	917	920	924	927	930	933	936	939	942	**30**
31	945	948	951	954	957	960	963	966	969	972	**31**
32	975	978	981	985	988	991	994	997	1000	1003	**32**
33	1006	1009	1012	1015	1018	1021	1024	1027	1030	1033	**33**
34	1036	1039	1042	1045	1049	1052	1055	1058	1061	1064	**34**
35	1067	1070	1073	1076	1079	1082	1085	1088	1091	1094	**35**
36	1097	1100	1103	1106	1109	1113	1116	1119	1122	1125	**36**
37	1128	1131	1134	1137	1140	1143	1146	1149	1152	1155	**37**
38	1158	1161	1164	1167	1170	1173	1177	1180	1183	1186	**38**
39	1189	1192	1195	1198	1201	1204	1207	1210	1213	1216	**39**
40	1219	1222	1225	1228	1231	1234	1237	1241	1244	1247	**40**
41	1250	1253	1256	1259	1262	1265	1268	1271	1274	1277	**41**
42	1280	1283	1286	1289	1292	1295	1298	1301	1305	1308	**42**
43	1311	1314	1317	1320	1323	1326	1329	1332	1335	1338	**43**
44	1341	1344	1347	1350	1353	1356	1359	1362	1366	1369	**44**
45	1372	1375	1378	1381	1384	1387	1390	1393	1396	1399	**45**
46	1402	1405	1408	1411	1414	1417	1420	1423	1426	1430	**46**
47	1433	1436	1439	1442	1445	1448	1451	1454	1457	1460	**47**
48	1463	1466	1469	1472	1475	1478	1481	1484	1487	1490	**48**
49	1494	1497	1500	1503	1506	1509	1512	1515	1518	1521	**49**
50	1524	1527	1530	1533	1536	1539	1542	1545	1548	1551	**50**

Feet to Meters = Centimeters divided by 100 (from above table)
Example: 09.40 feet = (287 centimeters) / (100) = 02.87 meters.

1 Meter = 100 centimeters
1 Meter = 3.2808399 feet

1 Foot = 0.30480061 meters
1 Foot = 30.480061 centimeters

TABLE 8.—TIDE PREDICTION ACCURACY

EXPLANATION OF TABLE

The accuracy of National Ocean Service tide predictions is determined by comparing predicted and observed high and low waters at all stations for which data exists, primarily the U.S. and its territories. Each water-level station is unique; there is no single standard of accuracy when comparing astronomic tide predictions with observed water levels. Water-level station locations are examined on an individual basis to determine if the predictions are adequate. Comparisons are based on 1989 data except for those locations where the stations were not in operation or the data acquired were unacceptable. If a station was not in operation in 1989, the last good year of data was used. Comparisons are made by subtracting the observed times and heights of the high and low waters from the predicted tides to compute a difference.

Table Legend

Station ID—Each water-level station in the United States and dependent territories has a unique seven digit identification number (ID). The ID is unrelated to the four digit station number used in the published prediction tables.

90% Distribution Level—90% of the absolute values of the differences are less than or equal to the values in these columns.

Standard Deviation of Differences—Standard deviation of all the differences.

Average Difference—Average of the signed sum of all the differences.

TABLE 8.—TIDE PREDICTION ACCURACY

		90% Distribution Level				Standard Deviation of Differences				Average Differences			
		Time Differences		Height Differences		Times		Heights		Times		Heights	
Station ID Station Name	Year	High Water (Hours)	Low Water (Hours)	High Water (Feet)	Low Water (Feet)	High Water (Hours)	Low Water (Hours)	High Water (Feet)	Low Water (Feet)	High Water (Hours)	Low Water (Hours)	High Water (Feet)	Low Water (Feet)
161-2340 Honolulu, HI	1995	0.6	0.5	0.3	0.3	0.39	0.37	0.21	0.20	0.01	0.03	-0.03	0.02
941-0170 San Diego, CA	1995	0.4	0.3	0.3	0.3	0.17	0.17	0.17	0.18	0.20	0.16	0.06	-0.07
941-0660 Los Angeles, CA	2004	0.2	0.1	0.3	0.3	0.11	0.11	0.19	0.19	0.00	0.00	0.00	0.00
941-4290 San Francisco, CA	1995	0.3	0.4	0.4	0.6	0.18	0.25	0.31	0.39	-0.12	-0.03	0.03	-0.02
941-8767 Humbolt Bay, CA	2004	0.2	0.2	0.5	0.5	0.10	0.11	0.29	0.31	-0.05	0.04	0.00	-0.01
941-9750 Cresent City,CA	2004	0.2	0.2	0.6	0.6	0.11	0.11	0.35	0.34	-0.01	-0.01	-0.01	0.00
943-9040 Astoria, OR	1995	0.2	0.3	0.7	0.9	0.11	0.17	0.48	0.55	-0.02	0.04	-0.04	0.07
944-1187 Aberdeen, WA	1982	0.4	0.7	1.0	>1.0	0.26	0.31	0.58	0.76	0.04	0.34	-0.29	-0.10
944-3090 Neah Bay, WA	2004	0.2	0.2	0.7	0.8	0.13	0.17	0.42	0.44	-0.02	0.00	0.00	-0.01
44-4900 Port Townsend, WA	2004	0.3	0.3	0.7	0.7	0.21	0.46	0.40	0.50	-0.04	0.02	0.01	0.00
944-7130 Seattle, WA	2004	0.3	0.2	0.7	0.7	0.16	0.14	0.41	0.40	0.05	0.04	0.01	0.01
945-0460 Ketchikan, AK	2004	0.1	0.1	0.7	0.7	0.08	0.09	0.42	0.42	0.00	0.00	-0.01	0.00
945-1600 Sitka, AK	2004	0.1	0.1	0.7	0.7	0.09	0.09	0.40	0.39	0.00	0.01	-0.01	0.00
945-2210 Juneau, AK	2004	0.1	0.1	0.8	0.7	0.10	0.10	0.49	0.47	0.00	0.00	0.08	-0.08
945-4050 Cordova, AK	2004	0.2	0.2	0.7	0.7	0.15	0.14	0.43	0.44	0.04	0.05	-0.02	0.03
945-4240 Valdez, AK	2004	0.2	0.2	0.7	0.7	0.14	0.12	0.42	0.44	-0.01	0.00	-0.01	0.01
945-5500 Seldovia, AK	1995	0.1	0.1	0.8	0.9	0.08	0.09	0.52	0.56	-0.01	0.03	-0.04	0.07
945-5760 Nikishki, AK	2004	0.3	0.3	0.9	1.0	0.15	0.17	0.51	0.55	-0.13	-0.13	-0.03	0.14
945-5920 Anchorage, AK	1995	0.2	0.2	>1.0	>1.0	0.12	0.12	0.70	0.78	0.08	0.02	0.06	0.20
945-7283 Kodiak, AK	1983	0.2	0.2	0.9	0.9	0.16	0.15	0.55	0.55	0.01	0.04	-0.09	-0.23
946-5261 Nushagak Bay, AK	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -
946-8132 St. Michael, AK	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -
946-1380 Sweeper Cove	1995	0.4	0.3	0.7	0.8	0.33	0.23	0.47	0.48	0.09	0.07	-0.02	0.04
946-2620 Unalaska, AK	2004	0.4	0.4	0.7	0.7	0.47	0.20	0.46	0.45	0.01	0.02	-0.02	0.00

TABLE 9.— LOWEST/ HIGHEST ASTRONOMICAL TIDE AND OTHER TIDAL DATUMS

EXPLANATION OF TABLE

Lowest Astronomical Tide (LAT) and Highest Astronomical Tide (HAT) are the lowest and highest predicted values for the tides at a given location over a 19 year period. These values were calculated by generating tide predictions for the time period of the latest National Tidal Datum Epoch (1983-2001) using the latest set of tidal harmonic constituents. The highest and lowest values predicted were recorded to the nearest 0.1 foot. It is important to note that the LAT and HAT values are derived solely from predicted tides based on astronomical forces. Observed water levels can be above the HAT level or below the LAT level due to storms, winds, or other meteorological effects which are not accounted for in the tide predictions.

Table Legend

Station - Each water level station in the United States and its territories has a unique seven digit identification number (ID). The ID is unrelated to the four digit indexing number used in the published prediction tables.

LAT - Lowest Astronomical Tide - The lowest predicted tidal level

MLLW - Mean Lower Low Water

MLW - Mean Low Water

MHW - Mean High Water

MHHW - Mean Higher High Water

HAT - Highest Astronomical Tide - The highest predicted tidal level

Notes

All elevations are provided in feet relative to Mean Lower Low Water (MLLW), the reference datum for tide predictions and soundings on NOAA nautical charts. The other tidal datums (Mean Low Water, Mean High Water, and Mean Higher High Water) in this table are included to provide additional information.

TABLE 9.— LOWEST/ HIGHEST ASTRONOMICAL TIDE AND OTHER TIDAL DATUMS

RELATIVE TO MLLW (feet)

Station	Name	LAT	MLW	MHW	MHHW	HAT
9410170	San Diego, California	-2.2	0.9	5.0	5.7	7.8
9410660	Los Angeles, California	-1.9	0.9	4.8	5.5	7.3
9412110	Port San Luis, California	-2.0	1.0	4.6	5.3	7.1
9413450	Monterey, California	-2.0	1.1	4.6	5.3	7.0
9414290	San Francisco, California	-2.1	1.1	5.2	5.8	7.3
9415144	Port Chicago, California	-1.0	0.7	4.4	4.9	6.1
9416841	Arena Cove, California	-2.2	1.2	5.2	5.9	7.7
9418767	North Spit, California	-2.3	1.3	6.1	6.9	8.6
9419750	Crescent City, California	-2.6	1.2	6.2	6.9	8.9
9432780	Charleston, Oregon	-2.7	1.3	7.0	7.6	9.7
9439040	Astoria, Oregon	-2.0	1.2	7.9	8.6	10.6
9441187	Aberdeen, Washington	-3.3	1.5	9.4	10.1	12.8
9441187	Toke Point, Washington	-3.0	1.4	8.2	8.9	11.4
9443090	Neah Bay, Washington	-3.2	1.6	7.1	8.0	10.6
9444900	Port Townsend, Washington	-3.8	2.5	7.8	8.5	10.2
9447130	Seattle, Washington	-4.1	2.8	10.5	11.4	13.5
9449424	Cherry Point, Washington	-3.9	2.6	8.3	9.1	11.0
9450460	Ketchikan, Alaska	-4.5	1.6	14.5	15.4	19.5
9452210	Juneau, Alaska	-4.9	1.6	15.3	16.3	20.9
9451600	Sitka, Alaska	-3.4	1.5	9.2	9.9	12.9
9454050	Cordova, Alaska	-3.8	1.5	11.7	12.6	16.1
9454240	Valdez, Alaska	-3.8	1.5	11.2	12.1	15.4
9455500	Seldovia, Alaska	-5.9	1.7	17.2	18.0	23.1
9455760	Nikiski, Alaska	-5.2	2.1	19.7	20.4	25.2
9455920	Anchorage, Alaska	-4.5	2.2	28.4	29.2	34.6
9457292	Kodiak Island, Alaska	-2.7	1.1	7.9	8.8	11.5
9459450	Sand Point, Alaska	-2.8	1.3	6.5	7.2	9.5
9462620	Unalaska, Alaska	-1.9	0.9	3.3	3.6	5.0
9461380	Adak Island, Alaska	-2.1	0.6	3.5	3.7	5.6
9460150	Massacre Bay, Alaska	-1.9	0.6	3.0	3.3	5.0
9465261	Nushagak Bay, Alaska	-5.0	2.5	17.8	19.5	24.1
9468132	St. Michael, Alaska	-1.0	0.6	3.6	3.9	5.7
9468756	Nome, Alaska	-0.5	0.3	1.4	1.5	1.7
9497645	Prudhoe Bay, Alaska	-0.7	0.1	0.6	0.7	1.5
1619910	Sand Island, Midway Islands	-0.6	0.2	1.1	1.3	1.6
1611400	Nawiliwili, Kauai Island, Hawaii	-0.5	0.2	1.4	1.8	2.6
1612340	Honolulu, Oahu Island, Hawaii	-0.5	0.2	1.4	1.9	2.8
1612480	Mokuoloe, Oahu Island, Hawaii	-0.8	0.3	1.8	2.1	2.9
1615680	Kahului, Maui Island, Hawaii	-0.8	0.3	1.9	2.3	3.1
1617760	Hilo, Hawaii Island, Hawaii	-0.8	0.3	2.0	2.4	3.3
1619000	Johnston Island	-0.7	0.1	2.0	2.2	3.1

PUBLICATIONS RELATING TO TIDES AND TIDAL CURRENTS

TIDE TABLES

Advance information relative to the rise and fall of the tide is given in annual tide tables. These tables include the predicted times and heights of high and low waters for every day in the year for a number of reference stations and differences for obtaining similar predictions for numerous other places.

Tide Tables, Central and Western Pacific Ocean and Indian Ocean.

Tide Tables, East Coast of North and South America (Including Greenland).

Tide Tables, Europe and West Coast of Africa (Including the Mediterranean Sea).

Tide Tables, West Coast of North and South America (Including the Hawaiian Islands).

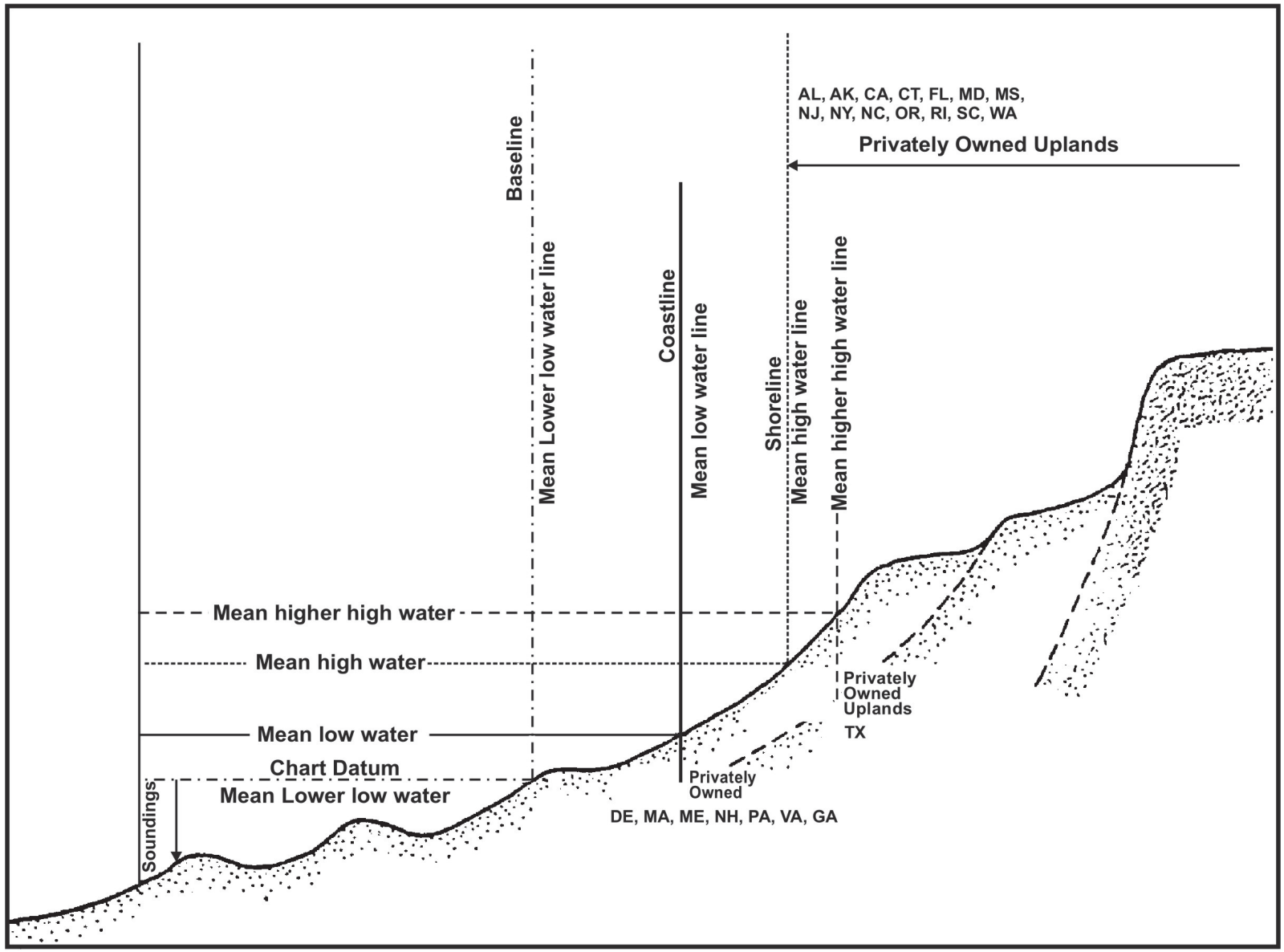
TIDAL CURRENT TABLES

Accompanying the rise and fall of the tide is a periodic horizontal flow of the water known as the tidal current. Advance information relative to these currents is made available in annual tidal current tables which include daily predictions of the times of slack water and the times and velocities of strength of flood and ebb currents for a number of waterways together with differences for obtaining predictions for numerous other places.

Tidal Current Tables, Atlantic Coast of North America.

Tidal Current Tables, Pacific Coast of North America and Asia.

OFFICIAL U.S. DATUMS



Appendix

Hourly Heights

Daily predictions for Anchorage, Nikiski, Seldovia and Valdez, Alaska

ANCHORAGE, ALASKA, 2015

Lat. 61° 14 N Long. 149° 53 W

JANUARY

Predicted hourly heights in feet

Day	Hours 0/12	Hours 1/13	Hours 2/14	Hours 3/15	Hours 4/16	Hours 5/17	Hours 6/18	Hours 7/19	Hours 8/20	Hours 9/21	Hours 10/22	Hours 11/23
1	6.7	14.5	20.0	23.8	26.5	26.7	23.9	19.1	14.1	10.0	6.7	5.7
Th	10.1	17.2	22.1	26.2	28.7	28.5	24.9	20.0	14.8	9.7	4.5	-0.1
2	-0.8	6.5	14.4	20.2	24.2	27.4	27.7	24.7	19.6	14.5	10.2	6.9
F	5.2	10.6	17.7	22.7	26.7	29.1	28.2	24.2	19.1	14.1	9.0	4.2
3	-1.1	-0.6	7.8	15.7	21.4	25.4	28.5	27.9	24.3	18.9	13.6	9.7
Sa	6.3	5.2	12.3	19.0	24.1	27.8	29.5	27.5	22.8	17.6	12.7	7.8
4	3.2	-2.0	1.2	10.2	17.9	23.3	27.0	29.1	27.3	22.9	17.3	11.9
Su	8.7	5.1	6.5	14.6	21.0	25.9	28.9	29.6	26.2	20.9	15.8	10.7
5	6.4	1.5	-1.7	4.6	13.2	20.6	25.4	28.6	28.9	25.8	20.9	15.1
M	10.1	7.2	4.5	9.2	17.2	23.1	27.5	29.8	28.9	24.4	18.7	13.6
6	8.6	4.5	-0.3	0.5	8.7	16.6	23.2	27.4	29.4	28.0	23.7	18.5
Tu	12.7	8.3	5.4	5.3	12.5	19.7	25.0	28.6	29.9	27.4	22.1	16.3
7	11.2	6.5	2.3	-0.8	4.4	13.0	19.9	25.5	28.9	29.3	26.2	21.2
W	15.8	10.4	6.6	4.2	7.7	15.8	21.8	26.4	29.1	28.9	25.1	19.4
8	13.7	8.7	4.5	0.4	1.0	9.2	17.0	22.9	27.4	29.6	28.2	23.9
Th	18.5	13.2	8.4	4.9	4.5	11.0	18.3	23.5	27.1	28.7	27.0	22.5
9	16.7	11.1	6.5	2.6	0.0	4.8	13.8	20.5	25.2	28.6	29.3	26.3
F	21.2	15.8	10.8	6.7	3.7	6.2	13.7	20.0	24.4	27.1	27.5	24.6
10	19.8	14.2	8.8	4.9	1.6	1.8	9.2	17.5	23.1	26.7	29.0	28.1
Sa	24.2	18.7	13.4	9.0	5.3	3.5	8.3	15.3	20.8	24.5	26.5	25.7
11	22.3	17.7	12.5	7.6	4.2	2.0	5.0	12.8	20.0	24.6	27.3	28.4
Su	26.5	22.1	16.7	11.7	8.0	4.4	4.3	9.6	15.5	20.5	23.8	25.3
12	23.9	20.6	16.5	11.9	7.6	4.7	4.0	8.3	15.0	21.2	25.0	27.0
M	27.3	25.0	20.6	15.5	11.0	7.5	4.2	5.1	9.6	14.8	19.4	22.6
13	23.8	22.6	19.9	16.6	12.5	8.7	6.2	6.6	10.4	15.9	21.3	24.4
Tu	26.1	26.1	23.9	19.7	15.0	11.0	7.4	4.4	5.2	8.6	13.5	17.9
14	21.2	22.7	22.1	20.2	17.6	14.0	10.4	8.1	8.5	11.1	16.0	20.8
W	23.6	25.3	25.5	23.5	19.6	15.1	11.3	7.5	4.5	4.3	7.2	12.0
15	16.6	20.4	22.4	22.6	21.5	19.1	15.6	11.9	9.5	9.1	10.9	15.7
Th	20.2	23.2	25.2	25.7	23.8	19.8	15.3	11.3	7.3	3.8	2.9	5.8
16	10.9	16.0	20.5	23.1	23.9	23.1	20.6	16.7	12.7	9.8	8.5	10.3
F	15.5	20.3	23.6	26.1	26.6	24.5	20.0	15.3	10.9	6.7	2.6	1.3
17	4.7	10.7	16.5	21.7	24.6	25.7	24.5	21.3	16.9	12.5	8.9	7.3
Sa	9.8	16.0	21.0	25.0	27.7	28.0	25.1	20.0	14.7	10.2	5.6	1.0
18	-0.3	4.5	11.6	18.1	23.5	26.5	27.4	25.3	21.3	16.2	11.3	7.4
Su	5.8	9.7	17.2	22.5	27.0	29.5	29.3	25.3	19.5	13.8	9.1	4.2
19	-0.7	-1.5	5.4	13.3	20.3	25.5	28.4	28.5	25.4	20.5	15.0	9.7
M	5.8	4.4	10.4	18.9	24.3	29.0	31.2	30.1	25.0	18.8	12.8	7.9
20	2.8	-2.6	-1.7	7.5	15.5	22.7	27.5	30.1	28.9	24.9	19.2	13.5
Tu	8.1	4.0	3.4	12.1	20.5	26.2	30.6	32.5	30.0	24.2	17.7	11.7
21	6.5	1.2	-4.3	-0.2	10.3	18.2	24.9	29.4	31.1	28.6	23.8	17.8
W	11.9	6.7	2.0	3.4	14.1	22.0	27.7	31.7	33.0	29.2	23.0	16.4
22	10.4	5.0	-0.7	-5.0	2.8	13.4	21.0	27.0	31.1	31.3	27.8	22.2
Th	16.2	10.2	5.1	0.2	4.6	15.8	23.2	28.7	32.3	32.6	27.9	21.5
23	14.9	8.7	3.4	-2.6	-3.8	6.7	16.6	23.7	29.0	32.3	31.0	26.5
F	20.5	14.4	8.6	3.2	-0.8	6.3	16.9	24.1	29.1	32.4	31.4	26.3
24	19.8	13.3	7.0	2.0	-3.3	-0.8	10.4	19.6	25.8	30.6	32.7	30.2
Sa	24.9	18.6	12.6	7.1	1.4	-0.6	7.7	17.3	24.3	28.9	31.6	29.8
25	24.8	18.3	12.0	5.9	1.2	-2.3	2.9	13.4	21.8	27.2	31.3	32.2
Su	29.0	23.2	17.1	11.2	5.9	0.5	0.4	8.2	17.0	23.6	27.9	29.9
26	28.1	23.5	17.5	11.4	5.8	1.8	0.3	6.2	15.4	22.8	27.5	30.8
M	31.0	27.7	21.9	16.1	10.6	5.4	0.8	1.4	7.9	15.8	22.0	26.1
27	27.8	26.6	22.8	17.7	12.0	7.0	3.9	3.4	8.3	16.0	22.5	26.7
Tu	29.4	29.5	26.4	21.1	15.9	10.7	5.9	1.8	2.0	6.8	13.9	19.9
28	23.8	25.7	25.6	23.0	18.8	13.7	9.3	6.7	6.0	9.2	15.4	21.2
W	24.9	27.5	28.0	25.6	21.1	16.4	11.5	6.9	2.9	2.0	5.2	11.6
29	17.6	21.7	24.3	25.4	24.0	20.6	15.8	11.8	9.0	7.4	8.9	14.1
Th	19.6	23.2	26.0	27.1	25.4	21.5	17.1	12.4	7.8	3.6	1.5	3.3
30	10.0	16.1	20.5	23.8	26.0	25.5	22.3	17.6	13.6	10.2	7.7	7.8
F	13.0	18.5	22.2	25.4	26.9	25.5	21.9	17.4	12.9	8.1	3.8	0.4
31	2.2	9.5	15.9	20.7	24.4	27.1	26.6	23.2	18.3	13.9	10.2	6.9
Sa	6.7	12.8	18.3	22.5	25.8	27.4	25.7	21.7	17.1	12.5	7.7	3.3

Time meridian 135° W. 0 is midnight. 12 is noon.
Heights are referred to mean lower low water (N.O.S. chart datum).

Lat. 61° 14 N Long. 149° 53 W

FEBRUARY

Predicted hourly heights in feet

Day	Hours 0/12	Hours 1/13	Hours 2/14	Hours 3/15	Hours 4/16	Hours 5/17	Hours 6/18	Hours 7/19	Hours 8/20	Hours 9/21	Hours 10/22	Hours 11/23
1	-0.8	2.5	10.5	17.1	21.9	25.8	28.1	26.9	22.8	17.6	12.8	9.2
Su	5.5	6.6	13.8	19.4	23.8	27.0	28.1	25.3	20.8	16.1	11.2	6.7
2	1.8	-1.3	4.6	12.8	19.4	23.9	27.5	28.5	26.1	21.3	15.7	11.0
M	7.6	4.1	8.1	15.8	21.4	25.7	28.4	28.2	24.3	19.2	14.3	9.4
3	5.1	-0.1	0.0	8.0	15.9	22.2	26.3	28.8	28.0	24.3	19.0	13.2
Tu	9.0	5.4	4.1	11.0	18.3	23.7	27.6	29.5	27.6	22.7	17.2	12.2
4	7.4	2.9	-1.1	3.4	12.1	19.4	25.0	28.4	29.2	26.5	21.8	16.2
W	10.6	6.8	3.5	6.0	14.3	20.9	25.9	29.2	29.7	26.1	20.5	14.8
5	9.7	5.3	0.5	0.1	8.2	16.3	22.6	27.4	29.8	28.5	24.3	18.9
Th	13.4	8.3	4.4	3.0	9.3	17.4	23.2	27.5	29.9	28.6	23.9	17.9
6	12.2	7.3	3.0	-0.6	3.8	13.1	20.1	25.5	29.3	29.9	26.7	21.5
F	15.9	10.6	6.0	2.3	4.5	13.0	20.0	25.1	28.5	29.5	26.6	21.3
7	15.2	9.5	5.1	1.1	0.8	8.9	17.6	23.5	27.7	30.1	28.7	24.2
Sa	18.4	13.0	8.2	3.8	1.6	7.6	16.0	22.0	26.3	28.8	28.0	24.1
8	18.6	12.6	7.3	3.5	0.7	4.6	13.9	21.1	26.0	29.0	29.7	26.7
Su	21.3	15.4	10.3	6.2	2.0	2.8	10.7	17.9	23.3	26.7	28.0	25.9
9	21.5	16.2	10.6	5.9	2.8	2.6	9.4	17.6	23.6	27.3	29.2	28.2
M	24.1	18.5	12.9	8.5	4.7	1.5	5.0	12.8	18.9	23.5	26.2	26.4
10	23.7	19.5	14.7	9.7	5.8	3.6	6.1	13.4	19.8	24.8	27.5	28.2
Tu	26.1	21.8	16.3	11.3	7.5	3.9	2.1	7.0	13.4	18.9	22.7	24.9
11	24.5	22.0	18.4	14.3	10.0	6.8	5.6	9.6	15.5	20.8	24.8	26.7
W	26.6	24.2	20.1	15.1	10.7	7.4	3.9	3.3	7.6	13.0	17.8	21.2
12	23.4	23.2	21.4	18.5	15.1	11.4	8.4	8.1	11.5	15.9	20.6	23.8
Th	25.5	25.3	23.3	19.5	14.9	11.0	7.7	4.4	3.9	7.0	11.8	16.2
13	19.8	22.4	22.9	21.9	19.7	16.6	13.1	10.1	9.5	11.6	15.2	19.7
F	22.7	24.7	25.0	23.4	20.0	15.5	11.6	8.1	4.7	3.4	5.5	10.2
14	14.8	19.1	22.5	23.7	23.4	21.4	18.2	14.3	10.9	9.4	10.2	13.9
Sa	18.7	22.2	24.9	25.8	24.7	21.1	16.4	12.1	8.2	4.3	2.1	3.7
15	8.8	14.2	19.6	23.6	25.3	25.3	22.9	19.1	14.6	10.6	8.0	8.3
Su	12.6	18.4	22.7	26.2	27.5	26.4	22.3	17.0	12.2	7.9	3.3	0.4
16	1.9	8.3	14.8	21.1	25.3	27.4	27.0	23.9	19.1	14.0	9.2	6.0
M	6.2	12.0	19.0	24.0	28.1	29.6	28.1	23.1	17.2	11.9	7.2	2.1
17	-1.5	0.9	9.2	16.6	23.2	27.3	29.4	28.0	23.9	18.3	12.8	7.6
Tu	3.9	4.3	12.5	20.2	25.8	30.0	31.6	29.0	23.3	16.9	11.3	6.2
18	0.8	-3.4	1.4	11.3	19.0	25.5	29.4	30.8	28.2	23.2	17.1	11.3
W	6.0	1.6	3.4	13.8	21.6	27.6	31.6	32.9	29.1	22.9	16.1	10.4
19	5.1	-0.8	-4.4	3.8	14.2	21.7	27.7	31.4	31.4	27.6	21.8	15.6
Th	9.7	4.3	-0.8	4.0	15.6	23.1	29.0	32.9	33.2	28.5	21.9	15.1
20	9.1	3.8	-2.7	-3.7	7.6	17.3	24.4	29.9	32.9	31.1	26.4	20.1
F	13.9	8.1	2.1	-2.4	5.7	17.1	24.4	30.0	33.6	32.6	27.3	20.5
21	13.7	7.5	2.2	-4.0	-0.7	11.7	20.4	26.9	31.8	33.5	30.2	24.6
Sa	18.1	12.0	6.3	-0.3	-2.4	8.0	18.4	25.4	30.5	33.5	31.3	25.7
22	18.9	12.1	5.9	0.8	-3.5	3.6	15.3	23.1	28.9	33.0	33.0	28.7
Su	22.4	16.1	10.0	4.4	-2.0	-0.8	9.9	19.2	25.8	30.5	32.4	29.6
23	24.0	17.3	10.6	4.9	0.3	-0.9	7.9	18.0	25.1	29.9	33.0	31.6
M	26.7	20.2	14.3	8.5	2.9	-2.1	1.4	11.0	19.5	25.4	29.4	30.5
24	27.8	22.4	16.2	9.8	5.0	1.6	2.9	11.1	19.6	25.7	29.7	31.5
Tu	29.5	24.5	18.5	13.0	7.7	2.5	-0.6	3.5	11.3	18.8	24.1	27.5
25	28.2	26.1	21.5	16.1	10.3	6.4	4.4	6.4	12.8	19.8	24.9	28.0
W	29.1	27.3	22.8	17.6	12.7	7.8	3.4	1.4	4.6	10.8	17.2	22.0
26	25.1	26.2	25.0	21.6	17.0	12.0	8.9	7.4	8.5	12.8	18.7	23.0
Th	25.5	26.7	25.5	22.0	17.6	13.2	8.8	5.0	3.1	4.8	9.3	15.2
27	19.8	23.1	24.9	24.9	22.6	18.6	14.2	11.4	9.4	9.0	11.6	16.7
F	20.8	23.3	25.0	24.7	22.1	18.3	14.2	10.1	6.3	3.9	3.9	7.5
28	13.5	18.4	22.1	24.7	25.7	24.1	20.3	16.0	12.9	9.9	8.1	9.7
Sa	15.1	19.1	22.2	24.5	25.0	22.8	19.2	15.1	10.9	6.8	3.7	2.5

Time meridian 135° W. 0 is midnight. 12 is noon.
Heights are referred to mean lower low water (N.O.S. chart datum).

ANCHORAGE, ALASKA, 2015

Lat. 61° 14 N Long. 149° 53 W

MARCH

Predicted hourly heights in feet

Day	Hours 0/12	Hours 1/13	Hours 2/14	Hours 3/15	Hours 4/16	Hours 5/17	Hours 6/18	Hours 7/19	Hours 8/20	Hours 9/21	Hours 10/22	Hours 11/23
1	6.4	13.0	18.3	22.3	25.5	26.9	25.2	21.2	16.6	12.7	9.1	6.3
Su	8.3	14.4	18.8	22.5	25.2	25.9	23.4	19.5	15.2	10.7	6.3	2.5
2	1.3	6.9	13.9	19.5	23.6	26.9	27.8	25.4	20.8	15.7	11.2	7.3
M	4.4	8.3	15.1	19.9	24.0	26.7	26.7	23.5	19.1	14.5	9.6	5.1
3	0.8	1.6	9.0	16.1	21.7	25.6	28.4	27.8	24.4	19.1	13.6	9.2
Tu	5.0	3.6	10.1	17.0	22.1	26.1	28.3	26.9	22.7	17.8	12.9	8.0
4	3.3	-0.3	4.1	12.4	19.1	24.4	27.8	29.0	26.7	22.2	16.5	11.0
W	6.9	2.8	4.7	13.0	19.5	24.6	28.2	29.2	26.2	21.1	15.8	10.8
5	6.1	1.1	0.4	8.2	16.2	22.4	27.0	29.5	28.5	24.7	19.4	13.6
Th	8.5	4.2	1.8	7.7	16.2	22.3	26.9	29.8	29.0	24.7	19.0	13.5
6	8.6	3.9	-0.3	3.7	13.0	20.0	25.5	29.3	30.0	27.0	21.9	16.3
F	10.8	6.0	1.7	3.0	11.6	19.2	24.7	28.8	30.3	27.8	22.6	16.5
7	10.9	6.3	1.7	0.6	8.7	17.4	23.4	28.0	30.6	29.1	24.5	18.8
Sa	13.3	8.2	3.4	0.5	6.2	15.2	21.8	26.7	29.8	29.6	25.7	20.1
8	13.9	8.4	4.3	0.7	4.3	13.9	21.2	26.3	29.8	30.5	27.1	21.5
Su	15.7	10.5	5.8	1.0	1.4	10.2	18.1	23.9	27.9	29.8	27.9	23.3
9	17.5	11.4	6.4	2.8	2.1	9.6	18.3	24.1	28.3	30.4	28.9	24.2
M	18.3	12.7	8.0	3.5	-0.2	4.4	13.6	20.2	25.2	28.2	28.6	25.6
10	20.8	15.1	9.4	5.2	2.7	5.8	14.7	21.3	26.2	29.1	29.5	26.3
Tu	21.0	15.2	10.2	6.1	1.9	0.6	7.9	15.9	21.5	25.5	27.6	26.7
11	23.3	18.6	13.5	8.4	5.0	4.4	10.4	18.1	23.1	27.0	28.7	27.6
W	23.5	18.2	12.9	8.5	5.0	1.3	2.7	10.4	16.9	21.8	24.9	26.3
12	24.8	21.6	17.3	12.8	8.6	6.0	7.2	13.8	19.5	23.8	26.6	27.5
Th	25.4	21.3	16.4	11.6	7.9	4.7	1.9	4.7	11.3	16.9	21.0	23.8
13	24.9	23.6	20.9	17.2	13.3	9.7	7.6	9.6	14.9	19.4	23.2	25.4
F	26.0	24.0	20.5	15.9	11.6	8.2	5.0	2.9	5.4	10.7	15.9	19.6
14	22.7	24.1	23.5	21.4	18.1	14.6	11.1	9.0	10.4	13.9	18.1	21.9
Sa	24.2	25.3	23.9	21.0	16.7	12.5	9.0	5.6	3.3	4.7	9.1	14.2
15	18.3	22.3	24.4	24.5	22.9	19.7	15.9	12.1	9.4	9.2	11.7	16.3
Su	20.5	23.7	25.6	25.2	22.7	18.3	13.7	9.7	6.0	2.9	3.1	7.2
16	12.8	18.0	22.9	25.6	26.3	24.8	21.2	16.7	12.2	8.5	7.0	9.0
M	14.5	19.9	24.2	27.0	27.2	24.8	19.9	14.8	10.2	5.9	1.9	1.2
17	5.5	12.5	18.9	24.4	27.4	28.4	26.3	22.0	16.6	11.5	6.8	4.4
Tu	6.4	13.7	20.3	25.5	28.8	29.5	26.6	21.1	15.3	10.3	5.3	0.7
18	-0.7	5.1	13.7	20.6	26.3	29.4	30.1	27.0	21.8	15.8	10.2	5.1
W	1.8	4.7	14.0	21.4	27.1	30.6	31.3	27.6	21.6	15.3	9.9	4.6
19	-0.5	-1.9	6.6	15.9	22.9	28.3	31.4	30.9	26.8	20.7	14.6	8.8
Th	3.4	-0.7	4.4	15.3	22.8	28.6	32.2	32.3	27.7	21.3	14.8	9.2
20	3.8	-2.0	-1.4	9.6	18.6	25.4	30.4	32.8	30.8	25.7	19.1	13.1
F	7.4	1.4	-2.6	5.8	16.9	24.2	29.9	33.4	32.4	27.2	20.4	13.9
21	8.1	2.8	-3.1	1.1	13.3	21.4	27.8	32.3	33.4	29.8	23.9	17.4
Sa	11.5	5.8	-1.1	-2.9	8.1	18.4	25.5	30.9	33.8	31.6	26.0	19.1
22	12.6	6.8	1.4	-2.9	5.2	16.8	24.0	29.8	33.7	32.9	28.1	21.7
Su	15.5	9.6	3.8	-3.2	-1.3	10.6	19.8	26.5	31.5	33.4	30.3	24.4
23	17.6	10.9	5.5	0.4	-0.6	9.7	19.7	26.2	31.3	33.9	31.4	25.9
M	19.4	13.5	7.7	1.7	-3.8	1.6	12.7	20.9	27.1	31.4	32.2	28.7
24	22.6	16.0	9.5	4.7	0.7	3.2	13.4	21.7	27.5	31.6	32.6	29.2
Tu	23.3	17.1	11.6	6.0	0.3	-2.3	4.8	14.2	21.6	26.9	30.4	30.3
25	26.8	21.0	14.8	8.8	4.9	2.8	7.2	15.8	22.7	27.5	30.4	30.2
W	26.6	20.9	15.4	10.2	5.1	0.4	0.5	7.3	15.0	21.4	25.9	28.5
26	28.2	25.0	19.9	14.3	9.2	6.4	5.9	10.1	16.6	22.4	26.2	28.0
Th	27.4	24.2	19.2	14.4	9.7	5.3	2.0	3.2	8.7	14.9	20.3	24.2
27	26.4	26.5	23.9	19.8	14.9	10.7	8.7	8.5	11.1	15.9	20.9	23.9
F	25.3	25.0	22.5	18.5	14.4	10.3	6.4	4.0	5.0	8.8	13.8	18.7
28	22.4	24.9	25.4	23.9	20.5	16.2	12.6	10.6	9.5	10.5	14.2	18.7
Sa	21.5	23.2	23.7	22.1	18.9	15.2	11.4	7.9	5.4	5.4	7.8	12.4
29	17.4	21.4	24.2	25.4	24.7	21.8	17.6	14.0	11.2	8.9	8.6	12.0
Su	16.8	19.9	22.4	23.6	22.9	20.0	16.3	12.5	8.7	5.6	4.7	6.4
30	11.6	17.0	21.5	24.5	26.3	25.8	22.7	18.3	14.1	10.3	7.1	6.3
M	10.6	16.1	19.8	23.0	24.7	24.1	21.0	17.1	12.9	8.5	4.9	3.2
31	5.8	12.1	17.8	22.6	25.8	27.6	26.4	22.7	17.7	12.8	8.4	4.8
Tu	4.7	10.8	16.6	21.1	24.6	26.3	25.1	21.4	17.0	12.4	7.6	3.5

Time meridian 135° W. 0 is midnight. 12 is noon.
Heights are referred to mean lower low water (N.O.S. chart datum).

Lat. 61° 14 N Long. 149° 53 W

APRIL

Predicted hourly heights in feet

Day	Hours 0/12	Hours 1/13	Hours 2/14	Hours 3/15	Hours 4/16	Hours 5/17	Hours 6/18	Hours 7/19	Hours 8/20	Hours 9/21	Hours 10/22	Hours 11/23
1	2.1	6.9	14.0	19.8	24.6	27.6	28.4	26.0	21.4	15.9	10.7	6.1
W	2.5	4.8	12.5	18.4	23.2	26.6	27.7	25.3	20.9	16.0	11.1	6.1
2	1.9	2.4	9.8	16.8	22.5	26.8	29.0	28.1	24.4	19.1	13.5	8.3
Th	3.6	1.3	6.9	15.1	20.9	25.6	28.5	28.1	24.6	19.4	14.2	9.4
3	4.4	0.9	5.0	13.8	20.1	25.3	29.0	29.6	26.7	21.9	16.3	10.9
F	5.9	1.2	2.0	10.3	18.0	23.6	27.8	29.6	27.6	23.0	17.3	12.1
4	7.5	2.6	1.6	9.4	17.7	23.4	28.0	30.4	29.0	24.5	18.9	13.5
Sa	8.3	3.2	-0.2	4.8	13.9	20.8	26.0	29.5	29.7	26.3	20.9	15.0
5	9.8	5.5	1.6	4.7	14.2	21.2	26.3	29.9	30.6	27.1	21.7	16.0
Su	10.8	5.8	0.7	0.4	8.8	17.0	23.3	27.8	30.2	28.8	24.4	18.7
6	12.7	7.7	3.8	2.4	9.7	18.4	24.1	28.5	30.8	29.3	24.5	18.7
M	13.2	8.3	3.3	-1.0	3.2	12.6	19.6	25.2	28.8	29.8	27.1	22.2
7	16.4	10.5	6.0	3.0	5.6	14.8	21.4	26.4	29.8	30.3	26.8	21.4
Tu	15.6	10.6	6.0	1.1	-0.6	7.2	15.6	21.7	26.4	29.0	28.4	25.0
8	19.9	14.3	8.8	5.0	3.9	10.3	18.7	23.6	27.8	29.8	28.4	23.7
W	18.2	12.9	8.4	4.1	-0.2	1.7	11.0	17.8	23.1	26.8	28.2	26.6
9	22.8	17.8	12.6	7.9	5.0	6.5	14.7	20.9	24.9	28.1	28.8	25.8
Th	20.9	15.5	10.8	6.7	2.9	0.0	4.8	13.3	19.1	23.6	26.4	27.0
10	24.9	21.2	16.5	11.9	7.9	5.9	9.5	17.0	21.6	25.2	27.4	27.2
F	23.6	18.9	13.9	9.6	6.0	2.5	1.3	7.1	14.2	19.5	23.2	25.7
11	25.9	24.0	20.4	16.1	12.0	8.5	7.3	11.2	16.9	21.1	24.5	26.3
Sa	25.8	22.6	18.3	13.5	9.5	6.1	2.9	2.6	7.6	13.8	18.9	22.4
12	25.2	25.6	24.1	20.7	16.7	12.8	9.3	8.0	10.8	15.1	19.6	23.1
Su	25.3	25.3	22.9	19.1	14.4	10.4	6.8	3.6	3.0	6.7	12.6	17.7
13	21.8	25.2	26.1	25.2	22.0	17.9	13.6	9.7	7.6	8.6	12.3	17.5
M	21.8	25.0	25.9	24.4	20.9	16.2	11.7	7.7	4.0	2.4	5.2	11.1
14	16.9	22.0	25.9	27.5	26.9	23.5	19.0	14.0	9.5	6.1	5.7	9.4
Tu	15.8	21.3	25.5	27.2	26.6	23.0	18.0	12.9	8.4	4.0	1.4	3.5
15	10.0	17.1	22.9	27.2	29.2	28.6	24.7	19.3	13.7	8.6	4.1	2.8
W	6.8	15.0	21.6	26.5	28.9	28.7	24.8	19.4	13.7	8.7	3.7	0.5
16	2.2	10.4	18.2	24.5	28.8	30.9	29.6	24.9	18.8	13.0	7.3	2.4
Th	0.1	5.6	15.3	22.4	27.7	30.5	30.2	25.9	19.9	13.9	8.6	3.4
17	-0.4	2.2	12.3	20.1	26.3	30.5	32.2	29.6	24.2	17.7	11.9	6.2
F	0.6	-1.9	6.1	16.4	23.6	28.9	31.8	30.8	26.0	19.7	13.6	8.1
18	3.1	-1.1	4.0	15.1	22.4	28.3	32.1	32.7	28.8	22.7	16.3	10.6
Sa	5.0	-1.4	-2.6	8.0	17.8	24.9	29.9	32.6	30.6	25.4	18.9	12.8
19	7.4	2.4	-0.9	7.4	18.0	24.6	30.2	33.3	32.1	27.2	20.7	14.8
Su	9.2	3.5	-3.3	-1.2	10.4	19.3	26.1	30.9	32.7	29.8	24.2	17.7
20	11.5	6.5	1.5	0.8	11.5	20.5	26.7	31.6	33.6	30.7	25.0	18.7
M	13.0	7.4	1.5	-4.2	1.7	12.7	20.8	27.2	31.5	32.2	28.6	22.6
21	16.2	10.0	5.5	1.2	4.2	15.0	22.5	28.2	32.2	32.7	28.6	22.5
Tu	16.6	11.1	5.6	-0.4	-3.1	5.3	14.9	22.3	27.9	31.4	31.0	26.9
22	20.9	14.6	8.7	4.9	2.4	8.2	17.5	24.0	28.8	31.6	30.6	26.0
W	19.9	14.5	9.1	3.9	-1.2	-0.1	8.6	16.7	23.3	28.0	30.4	29.3
23	24.9	19.2	13.2	8.2	5.1	5.0	11.5	18.9	24.5	28.2	29.8	27.9
Th	23.3	17.6	12.6	7.6	3.0	-0.2	3.5	11.2	18.1	23.5	27.4	28.9
24	27.4	23.1	17.9	12.5	8.4	6.4	7.8	13.4	19.3	23.9	26.6	27.1
F	25.1	20.9	15.9	11.3	7.0	3.2	2.0	6.4	12.8	18.5	23.0	26.2
25	27.3	25.7	22.0	17.3	12.6	9.4	8.1	9.6	13.6	18.5	22.3	24.3
Sa	24.6	23.0	19.5	15.2	11.1	7.4	4.3	4.2	8.1	13.3	18.0	22.1
26	25.1	26.1	24.8	21.7	17.5	13.4	10.5	9.2	9.6	12.4	16.7	20.3
Su	22.3	23.0	22.0	19.4	15.6	11.9	8.4	5.7	5.4	8.4	12.7	17.3
27	21.4	24.5	25.6	24.8	22.2	18.3	14.2	11.0	8.9	8.2	10.3	14.8
M	18.7	21.2	22.6	22.3	20.3	16.7	13.1	9.5	6.4	5.5	7.7	11.9
28	16.9	21.2	24.6	26.0	25.6	22.9	18.8	14.3	10.5	7.3	5.9	8.2
Tu	13.6	18.1	21.3	23.3	23.6	21.7	18.0	14.0	10.1	6.3	4.7	6.7
29	11.8	17.3	21.9	25.5	27.0	26.4	23.1	18.5	13.6	9.1	5.1	3.6
W	7.1	13.6	18.6	22.5	24.7	25.1	22.8	18.8	14.3	9.9	5.5	3.7
30	6.5	13.0	18.6	23.4	26.9	28.1	26.4	22.4	17.3	12.1	7.0	2.8
Th	2.0	7.7	14.9	20.1	24.2	26.4	26.2	23.1	18.5	13.8	9.1	4.5

Time meridian 135° W. 0 is midnight. 12 is noon.
Heights are referred to mean lower low water (N.O.S. chart datum).

ANCHORAGE, ALASKA, 2015

Lat. 61° 14 N Long. 149° 53 W

MAY

Predicted hourly heights in feet

Day	Hours 0/12	Hours 1/13	Hours 2/14	Hours 3/15	Hours 4/16	Hours 5/17	Hours 6/18	Hours 7/19	Hours 8/20	Hours 9/21	Hours 10/22	Hours 11/23
1	3.1	8.0	15.4	20.7	25.5	28.5	28.5	25.5	20.7	15.3	10.0	4.9
F	0.8	2.2	9.9	17.0	22.3	26.2	27.8	26.4	22.5	17.3	12.5	7.8
2	3.5	3.7	11.2	18.3	23.3	27.6	29.6	28.0	23.6	18.3	13.0	7.9
Sa	2.6	-0.5	4.2	12.9	19.5	24.6	28.0	28.5	25.7	21.0	15.5	10.8
3	6.4	2.8	6.2	15.1	21.3	26.0	29.5	29.9	26.5	21.2	15.7	10.6
Su	5.6	0.4	-0.2	7.6	15.8	22.0	26.7	29.2	28.2	24.4	19.0	13.5
4	8.9	4.9	3.4	10.3	18.7	24.1	28.3	30.6	29.1	24.3	18.5	13.2
M	8.4	3.3	-1.3	2.1	11.2	18.4	24.3	28.2	29.7	27.3	22.7	17.1
5	11.5	7.2	3.9	5.8	14.7	21.4	26.4	29.8	30.5	27.1	21.7	16.0
Tu	11.0	6.2	0.9	-1.5	5.7	14.2	20.7	26.0	29.1	29.1	25.8	20.8
6	15.1	9.6	5.8	4.0	9.8	18.3	23.5	28.1	30.3	29.1	24.5	19.0
W	13.6	8.8	4.1	-0.9	0.4	9.5	16.6	22.7	27.1	29.2	27.9	24.1
7	18.9	13.3	8.2	5.0	5.7	14.0	20.7	25.1	28.8	29.7	26.9	21.7
Th	16.3	11.4	6.8	2.2	-1.4	3.6	12.7	18.8	24.1	27.5	28.5	26.4
8	22.2	17.1	11.9	7.4	5.0	8.5	17.0	22.0	26.1	28.6	28.3	24.4
F	19.3	14.0	9.5	5.2	1.0	-0.4	6.9	14.8	20.5	24.9	27.6	27.6
9	25.0	20.6	15.7	10.9	7.1	5.7	10.9	18.0	22.4	26.1	27.9	26.7
Sa	22.5	17.6	12.5	8.2	4.3	0.6	1.5	9.0	16.0	21.4	25.1	27.4
10	26.9	24.3	19.7	15.0	10.6	7.1	6.5	11.6	17.3	22.0	25.3	27.0
Su	25.6	21.8	17.0	12.1	7.9	4.2	1.1	2.9	9.6	16.4	21.5	25.1
11	27.3	26.9	24.3	19.7	15.1	10.7	7.1	6.5	10.2	15.3	20.5	24.1
M	26.2	25.3	22.2	17.6	12.9	8.6	4.7	1.9	3.4	9.2	16.0	21.1
12	25.2	27.6	27.5	25.0	20.4	15.6	10.9	7.0	5.4	7.6	12.7	18.6
Tu	23.1	25.9	25.8	23.6	19.3	14.5	9.8	5.7	2.6	3.1	8.2	15.2
13	20.8	25.5	28.3	28.7	26.2	21.4	16.1	11.0	6.4	3.5	4.5	9.9
W	17.0	22.5	26.1	27.0	25.5	21.3	16.3	11.2	6.7	2.9	2.5	7.2
14	14.8	21.1	26.1	29.3	30.0	27.2	22.0	16.2	10.7	5.5	1.6	1.7
Th	7.8	16.2	22.5	26.6	28.3	27.2	23.1	17.7	12.2	7.4	3.1	2.0
15	6.7	15.4	21.9	27.1	30.3	31.0	27.6	21.9	15.7	10.2	4.6	0.0
F	-0.6	7.1	16.3	22.9	27.3	29.5	28.4	24.2	18.4	12.8	7.6	3.3
16	1.6	7.5	16.9	23.2	28.4	31.4	31.3	27.1	21.0	14.9	9.4	3.9
Sa	-1.5	-1.6	7.9	17.1	23.8	28.1	30.4	28.9	24.3	18.2	12.6	7.5
17	3.4	1.8	9.7	18.8	24.8	29.7	32.2	30.8	25.8	19.5	13.8	8.4
Su	3.0	-3.0	-1.0	9.7	18.4	24.9	29.0	30.9	28.7	23.6	17.5	11.8
18	7.2	3.0	2.9	12.7	20.8	26.6	30.9	32.4	29.6	23.9	17.8	12.5
M	7.2	1.7	-3.8	1.4	11.9	20.0	26.1	30.0	30.9	27.8	22.3	16.3
19	10.6	6.6	2.5	5.4	15.7	22.6	28.1	31.7	31.9	27.8	21.8	16.1
Tu	10.8	5.7	-0.1	-3.2	4.8	14.2	21.8	27.3	30.6	30.3	26.4	20.7
20	14.8	9.3	5.7	2.8	8.9	18.1	24.2	29.1	31.6	30.3	25.5	19.5
W	14.2	8.8	4.0	-1.5	-0.7	8.4	16.6	23.5	28.2	30.6	29.2	24.6
21	19.0	13.0	8.2	5.0	4.6	12.2	19.8	25.2	29.1	30.5	28.1	22.9
Th	17.1	12.1	7.0	2.3	-1.3	3.2	11.7	18.8	24.7	28.7	29.9	27.5
22	22.6	17.2	11.5	7.5	5.0	7.3	14.7	20.9	25.5	28.3	28.5	25.4
F	20.2	14.8	10.0	5.5	1.3	0.6	7.1	14.6	20.6	25.4	28.4	28.6
23	25.6	20.7	15.5	10.5	7.2	6.1	9.8	16.0	21.2	24.8	26.7	26.1
Sa	22.9	18.0	13.0	8.5	4.6	1.5	3.5	10.3	16.7	21.6	25.5	27.7
24	27.1	23.8	19.2	14.3	10.1	7.4	7.4	11.1	16.1	20.6	23.6	24.8
Su	23.9	20.9	16.6	12.0	8.1	4.6	2.8	6.0	12.2	17.7	21.9	25.3
25	26.9	25.9	22.7	18.3	13.9	10.1	7.6	8.0	10.8	15.2	19.3	22.1
M	23.2	22.5	20.0	16.3	12.1	8.5	5.4	4.4	7.4	13.0	17.9	21.7
26	24.9	26.4	25.3	22.3	18.1	13.9	10.1	7.6	7.3	9.3	13.4	17.9
Tu	20.9	22.4	22.1	20.4	17.1	13.1	9.6	6.6	5.4	7.8	12.8	17.5
27	21.5	24.7	26.3	25.3	22.5	18.4	14.0	9.8	6.8	5.5	7.2	11.7
W	16.8	20.3	22.4	22.7	21.6	18.5	14.6	10.8	7.5	5.6	7.4	12.3
28	17.5	21.5	25.1	26.7	25.8	22.8	18.4	13.7	9.1	5.3	3.4	5.3
Th	10.9	16.5	20.5	23.2	23.9	23.1	19.9	15.6	11.5	7.8	5.3	7.0
29	12.6	18.1	22.2	26.0	27.4	26.2	22.5	17.8	12.8	7.9	3.5	1.5
F	4.5	11.3	17.2	21.6	24.5	25.4	24.1	20.4	15.8	11.6	7.4	4.8
30	7.3	14.0	19.5	23.6	27.2	28.1	25.9	21.5	16.4	11.4	6.4	1.7
Sa	0.3	5.2	12.8	18.7	23.3	26.0	26.4	24.3	20.0	15.1	10.8	6.6
31	4.6	8.9	16.4	21.4	25.6	28.5	28.4	24.8	19.7	14.6	9.7	4.6
Su	0.1	0.3	7.4	14.9	20.8	25.1	27.5	26.8	23.6	18.7	13.7	9.5

Time meridian 135° W. 0 is midnight. 12 is noon.
Heights are referred to mean lower low water (N.O.S. chart datum).

Lat. 61° 14 N Long. 149° 53 W

JUNE

Predicted hourly heights in feet

Day	Hours 0/12	Hours 1/13	Hours 2/14	Hours 3/15	Hours 4/16	Hours 5/17	Hours 6/18	Hours 7/19	Hours 8/20	Hours 9/21	Hours 10/22	Hours 11/23
1	5.7	5.1	11.7	19.0	23.7	27.6	29.6	27.9	23.1	17.6	12.6	7.9
M	2.8	-1.3	1.8	10.2	17.3	23.1	26.9	28.4	26.5	22.4	17.1	12.0
2	8.0	4.8	6.7	15.1	21.4	26.1	29.3	30.0	26.6	21.2	15.6	10.7
Tu	6.0	0.8	-1.8	4.6	12.9	19.8	25.1	28.3	28.6	25.6	20.9	15.4
3	10.2	6.5	4.4	9.6	18.2	23.5	28.0	30.3	29.4	24.8	19.1	13.7
W	8.8	4.0	-1.2	-0.8	7.9	15.3	22.0	26.7	29.2	28.2	24.4	19.3
4	13.7	8.7	5.3	5.1	13.1	20.4	25.3	29.1	30.4	27.9	22.7	17.1
Th	11.8	6.9	2.1	-2.4	1.9	11.0	17.7	23.9	27.8	29.3	27.2	22.9
5	17.7	12.1	7.5	4.4	7.1	16.1	21.9	26.5	29.5	29.7	25.8	20.5
F	15.0	10.0	5.1	0.3	-2.1	5.3	13.7	20.1	25.3	28.6	28.8	26.0
6	21.3	16.1	10.6	6.4	4.2	9.5	17.8	22.9	27.1	29.3	28.3	23.8
Sa	18.5	13.1	8.1	3.5	-0.9	-0.3	8.5	16.1	22.1	26.4	29.0	28.1
7	24.8	19.7	14.6	9.5	5.5	4.5	11.1	18.2	23.3	27.0	28.7	26.9
Su	22.3	16.9	11.7	6.8	2.5	-1.1	2.0	10.8	18.1	23.5	27.2	29.1
8	27.7	23.8	18.6	13.5	8.7	4.9	4.9	11.1	17.5	23.0	26.3	27.9
M	25.8	21.5	16.2	11.1	6.3	2.2	-0.3	3.9	12.0	19.3	24.1	27.8
9	29.2	27.6	23.4	18.0	12.9	8.2	4.4	4.5	9.5	16.0	21.7	25.4
Tu	27.0	25.4	21.7	16.6	11.6	6.8	2.8	1.1	4.9	12.4	19.5	24.3
10	28.0	29.3	27.9	23.5	18.1	12.9	8.0	4.0	3.3	7.1	13.7	20.0
W	24.3	26.3	25.6	22.6	18.0	13.0	8.1	4.2	2.3	5.2	12.1	19.1
11	24.1	28.0	29.6	28.4	24.0	18.6	13.1	8.0	3.4	1.6	4.4	11.3
Th	18.4	23.3	26.0	26.3	24.1	19.9	14.8	9.7	5.6	3.1	5.1	11.5
12	18.7	24.0	28.0	30.0	29.0	24.5	19.0	13.2	8.0	2.9	0.0	1.9
F	9.5	17.3	22.7	25.9	27.3	25.7	21.7	16.3	11.2	6.8	3.8	4.8
13	11.2	18.8	24.1	28.3	30.4	29.2	24.6	18.9	13.2	7.8	2.5	-1.3
Sa	0.2	8.9	17.0	22.7	26.3	28.3	26.9	22.8	17.1	12.0	7.4	4.3
14	4.6	11.8	19.4	24.7	28.8	30.7	29.0	24.0	18.2	12.8	7.4	2.3
Su	-2.5	-0.1	9.5	17.6	23.3	27.0	29.1	27.4	22.9	17.1	11.9	7.7
15	4.3	4.9	13.4	20.5	25.9	29.6	30.9	28.1	22.8	17.1	11.9	6.8
M	1.7	-3.3	1.3	11.1	19.0	24.4	28.0	29.5	27.0	22.0	16.3	11.1
16	7.5	3.9	6.4	15.6	22.0	27.2	30.3	30.6	26.8	21.1	15.7	10.6
Tu	5.9	0.5	-3.1	4.0	13.3	20.9	25.8	29.1	29.3	25.9	20.6	14.9
17	9.9	6.7	3.6	9.0	17.7	23.7	28.4	30.7	29.7	25.0	19.1	14.0
W	8.9	4.6	-1.0	-1.2	7.4	15.9	22.9	27.2	29.7	28.5	24.3	18.9
18	13.1	8.8	5.5	4.5	12.0	19.6	25.1	29.0	30.5	28.1	22.8	17.1
Th	12.1	7.1	2.7	-1.6	2.3	11.0	18.6	24.7	28.5	29.6	27.1	22.3
19	16.9	11.3	7.5	4.6	6.7	14.9	21.2	26.0	29.1	29.4	25.9	20.3
F	14.9	9.9	5.3	0.9	-0.4	6.6	14.5	21.1	26.2	29.1	28.8	25.2
20	20.1	14.8	9.7	6.3	4.7	9.6	17.0	22.4	26.3	28.4	27.4	23.4
Sa	17.8	12.5	7.8	3.6	0.1	2.7	10.9	17.7	23.1	27.2	28.9	27.3
21	23.0	17.9	12.7	8.4	5.3	6.0	12.1	18.4	23.0	26.0	27.1	25.1
Su	20.8	15.5	10.4	6.2	2.5	1.0	6.5	14.5	20.3	24.5	27.7	28.2
22	25.5	20.8	15.8	11.1	7.3	5.0	7.6	13.5	18.9	22.8	25.2	25.4
M	23.0	18.8	13.8	9.0	5.5	2.3	3.3	9.8	16.9	21.8	25.3	27.6
23	27.1	23.9	19.1	14.2	10.1	6.4	5.2	8.4	13.5	18.5	22.1	24.1
Tu	23.8	21.4	17.7	13.2	8.9	5.6	3.5	5.7	11.8	18.2	22.4	25.3
24	27.0	26.1	22.7	18.1	13.5	9.5	5.9	5.3	8.0	12.5	17.3	21.0
W	22.9	22.8	20.8	17.9	13.7	9.8	6.7	5.2	7.3	12.6	18.4	22.2
25	24.9	26.5	25.5	22.2	17.8	13.4	9.3	5.7	4.8	6.6	10.9	15.9
Th	19.9	22.1	22.5	21.3	19.0	15.1	11.2	8.2	6.8	7.9	12.6	18.0
26	21.8	24.5	26.2	25.3	22.2	17.8	13.5	9.1	5.3	3.6	4.9	9.4
F	14.8	19.2	22.0	23.0	22.5	20.4	16.6	12.6	9.5	7.4	7.9	12.4
27	17.8	21.6	24.6	26.4	25.5	22.2	17.7	13.2	8.7	4.5	2.1	3.5
Sa	8.6	14.6	19.3	22.7	24.1	23.9	21.6	17.6	13.3	10.0	7.3	7.7
28	12.7	18.3	22.1	25.4	27.0	25.8	21.9	17.2	12.5	7.9	3.3	0.7
Su	2.8	9.0	15.3	20.5	23.9	25.5	24.9	22.0	17.5	13.1	9.4	6.7
29	7.8	13.9	19.6	23.5	26.8	27.9	25.7	21.1	16.0	11.3	6.7	2.0
M	-0.4	3.2	10.4	17.0	22.3	25.6	26.8	25.3	21.6	16.6	12.1	8.3
30	5.9	8.6	15.9	21.3	25.5	28.3	28.6	25.2	19.9	14.5	9.9	5.2
Tu	0.4	-1.1	4.8	12.5	19.2	24.3	27.3	27.6	24.9	20.4	15.2	10.5

Time meridian 135° W. 0 is midnight. 12 is noon.
Heights are referred to mean lower low water (N.O.S. chart datum).

ANCHORAGE, ALASKA, 2015

Lat. 61° 14 N Long. 149° 53 W

JULY

Predicted hourly heights in feet

Day	Hours 0/12	Hours 1/13	Hours 2/14	Hours 3/15	Hours 4/16	Hours 5/17	Hours 6/18	Hours 7/19	Hours 8/20	Hours 9/21	Hours 10/22	Hours 11/23
1	6.9	5.2	10.3	18.2	23.3	27.6	29.7	28.8	24.2	18.4	13.0	8.4
W	3.6	-1.3	-0.8	7.3	14.9	21.7	26.2	28.6	27.7	24.1	19.0	13.6
2	8.9	5.4	5.1	12.9	20.3	25.3	29.2	30.6	28.2	22.9	16.9	11.6
Th	6.8	1.9	-2.8	1.0	10.1	17.4	23.8	27.8	29.4	27.3	23.0	17.6
3	12.0	7.4	4.0	6.0	15.5	21.9	26.9	30.2	30.8	27.0	21.4	15.4
F	10.1	5.2	0.0	-3.3	4.0	12.9	19.9	25.6	29.2	29.5	26.4	21.6
4	16.0	10.4	6.0	2.8	7.9	17.5	23.3	28.0	30.7	30.1	25.4	19.7
Sa	13.8	8.4	3.5	-1.9	-2.1	7.5	15.8	22.4	27.2	30.1	29.0	25.2
5	19.9	14.4	9.0	4.5	2.4	9.9	18.6	24.3	28.4	30.6	28.9	23.8
Su	17.9	12.2	6.7	1.9	-2.8	0.6	10.9	18.6	24.5	28.7	30.6	28.4
6	23.8	18.3	12.7	7.5	2.9	2.8	11.2	19.1	24.7	28.4	30.1	27.4
M	22.3	16.4	10.7	5.3	0.7	-2.3	3.8	13.6	21.0	26.1	29.8	30.5
7	27.7	22.5	16.8	11.2	6.3	1.8	3.3	11.2	18.8	24.4	27.9	29.0
Tu	26.3	21.3	15.5	9.9	4.7	0.5	-0.4	6.5	15.5	22.5	27.0	30.3
8	30.2	27.0	21.4	15.8	10.3	5.3	1.4	3.2	10.1	17.7	23.3	26.8
W	27.8	25.5	21.1	15.7	10.1	5.3	1.7	1.8	8.1	16.4	22.8	27.1
9	30.0	29.8	26.6	21.0	15.5	10.1	5.0	1.3	2.5	8.2	15.8	21.5
Th	25.3	26.6	25.3	21.7	16.9	11.5	6.8	3.7	3.7	8.7	16.2	22.3
10	26.5	29.2	29.4	26.4	21.1	15.8	10.4	5.4	1.4	1.3	6.0	13.5
F	19.7	23.7	25.7	25.7	23.1	18.8	13.4	9.0	5.7	4.9	8.5	15.2
11	21.3	25.5	28.5	29.2	26.5	21.6	16.3	10.9	5.9	1.4	0.1	3.8
Sa	11.6	18.2	22.6	25.4	26.6	24.7	20.6	15.2	10.9	7.2	5.5	7.7
12	14.4	20.5	24.8	28.1	29.1	26.6	21.9	16.5	11.4	6.2	1.5	-1.2
Su	2.3	10.8	17.6	22.4	25.8	27.6	26.0	21.7	16.4	11.8	7.9	5.5
13	7.1	14.4	20.3	24.9	28.2	29.2	26.4	21.6	16.3	11.3	6.2	1.4
M	-2.3	2.3	11.2	18.2	23.0	26.6	28.4	26.4	21.8	16.4	11.6	8.0
14	4.8	7.2	15.2	21.1	25.7	28.7	29.2	25.7	20.6	15.5	10.5	5.9
Tu	0.7	-2.6	3.9	12.9	19.8	24.2	27.8	28.7	25.9	20.8	15.3	10.7
15	7.4	4.1	8.7	16.9	22.6	26.9	29.4	28.9	24.5	19.1	14.2	9.2
W	5.1	-0.6	-1.5	6.9	15.4	22.0	25.9	28.8	28.2	24.4	19.1	13.4
16	9.5	6.0	4.2	11.2	18.8	24.3	28.2	30.0	27.9	22.8	17.3	12.4
Th	7.7	3.5	-1.6	1.5	10.4	18.4	24.2	27.7	29.1	27.0	22.4	16.9
17	11.3	8.0	4.4	5.8	14.2	20.8	25.9	29.1	29.8	26.3	20.7	15.3
F	10.3	5.9	1.3	-0.9	5.9	14.2	21.2	26.2	29.0	28.6	25.1	20.1
18	14.6	9.5	6.2	3.7	8.8	16.9	22.6	27.0	29.5	28.6	24.2	18.3
Sa	13.0	8.1	3.9	-0.2	2.0	10.6	17.8	23.8	27.9	29.4	27.3	22.7
19	17.5	12.1	7.7	4.3	4.7	12.1	19.1	24.0	27.6	29.0	26.7	21.7
Su	15.8	10.6	6.1	1.9	0.1	6.5	15.0	21.1	25.8	28.9	28.7	25.2
20	20.1	14.8	9.9	5.8	3.3	7.1	14.9	20.8	24.9	27.6	27.6	24.2
M	19.0	13.3	8.3	4.4	0.9	2.7	11.2	18.7	23.6	27.3	29.1	27.3
21	22.8	17.4	12.3	8.0	4.1	3.6	9.6	16.6	21.8	25.2	26.9	25.6
Tu	21.9	16.8	11.4	6.9	3.5	1.7	6.6	14.9	21.4	25.3	27.9	28.3
22	25.4	20.5	15.1	10.4	6.6	3.1	4.8	11.1	17.3	21.9	24.7	25.6
W	23.7	20.1	15.5	10.4	6.5	3.7	4.1	10.0	17.2	22.7	25.8	27.6
23	27.0	23.7	18.7	13.6	9.4	5.6	3.1	5.8	11.3	16.9	21.0	23.7
Th	24.2	22.4	19.2	15.3	10.8	7.3	5.2	7.0	12.0	18.2	22.8	25.4
24	26.6	25.7	22.4	17.7	13.0	9.2	5.3	3.5	5.9	10.5	15.6	19.7
F	22.4	23.0	21.9	19.5	16.2	12.2	8.9	7.4	8.9	12.7	18.0	22.1
25	24.4	25.6	24.9	21.8	17.5	13.2	9.4	5.4	3.7	5.1	9.1	14.0
Sa	18.3	21.4	22.7	22.3	20.7	17.7	13.9	10.6	9.1	9.5	12.4	17.4
26	21.2	23.7	25.2	24.7	21.9	17.7	13.5	9.5	5.5	3.2	3.8	7.7
Su	12.8	17.7	21.3	23.3	23.5	22.2	19.1	15.1	11.6	9.5	8.9	11.9
27	17.0	20.9	23.8	25.6	25.3	22.4	17.9	13.5	9.3	5.1	2.1	2.5
M	6.8	12.6	18.1	22.3	24.6	25.0	23.4	19.8	15.3	11.5	8.7	7.9
28	11.6	17.3	21.6	25.0	26.9	26.3	22.7	17.8	13.0	8.7	4.2	0.8
Tu	1.4	6.9	13.5	19.7	24.0	26.3	26.4	23.8	19.5	14.6	10.3	7.2
29	6.9	12.0	18.5	23.1	26.9	28.5	27.2	22.6	17.1	12.1	7.6	2.9
W	-0.7	1.0	8.3	15.4	21.9	25.9	28.0	27.0	23.5	18.4	13.2	8.7
30	5.5	6.1	13.4	20.2	25.2	28.9	30.1	27.6	22.1	16.2	11.0	6.3
Th	1.4	-2.3	1.8	10.5	17.9	24.2	27.9	29.3	27.0	22.6	17.0	11.5
31	7.0	3.7	6.1	15.4	22.0	27.2	30.5	31.1	27.3	21.3	15.1	9.8
F	5.0	-0.3	-3.2	4.2	13.3	20.6	26.3	29.6	29.8	26.4	21.2	15.4

Time meridian 135° W. 0 is midnight. 12 is noon.
Heights are referred to mean lower low water (N.O.S. chart datum).

Lat. 61° 14 N Long. 149° 53 W

AUGUST

Predicted hourly heights in feet

Day	Hours 0/12	Hours 1/13	Hours 2/14	Hours 3/15	Hours 4/16	Hours 5/17	Hours 6/18	Hours 7/19	Hours 8/20	Hours 9/21	Hours 10/22	Hours 11/23
1	9.9	5.4	1.9	7.2	17.4	23.7	28.7	31.7	31.3	26.4	20.1	13.9
Sa	8.5	3.6	-2.3	-2.5	7.6	16.3	23.2	28.3	31.0	29.6	25.3	19.7
2	13.8	8.4	3.5	0.8	9.1	19.0	25.0	29.7	32.4	30.6	25.1	18.7
Su	12.6	7.0	1.9	-3.7	0.1	11.4	19.3	25.6	30.1	31.6	28.8	23.9
3	18.0	12.1	6.8	1.3	0.8	11.1	20.1	26.0	30.2	32.3	29.3	23.6
M	17.2	11.0	5.4	0.2	-3.6	3.9	14.9	22.1	27.6	31.6	31.6	27.7
4	22.1	16.2	10.4	5.1	-0.4	1.9	12.5	20.8	26.4	30.3	31.4	27.8
Tu	22.1	15.7	9.5	4.1	-0.7	-1.5	7.9	17.7	24.4	29.1	32.2	30.9
5	26.4	20.2	14.5	8.8	3.4	-1.1	3.2	12.8	20.8	26.1	29.7	30.0
W	26.5	20.9	14.8	8.6	3.7	-0.2	1.6	10.8	19.6	25.6	29.8	31.8
6	29.9	25.0	18.8	13.2	7.8	2.4	-0.7	3.9	12.4	20.0	25.0	28.2
Th	28.3	25.5	20.4	14.8	8.9	4.6	1.9	4.6	12.4	20.2	25.6	29.2
7	30.6	28.7	23.9	18.2	12.8	7.5	2.5	0.2	3.9	11.1	18.2	23.1
F	26.2	26.9	25.0	20.9	15.8	10.4	6.6	4.7	6.6	12.6	19.5	24.4
8	27.6	29.1	27.7	23.4	18.3	13.2	8.1	3.5	1.1	3.1	9.1	16.0
Sa	21.0	24.3	26.0	25.3	22.3	17.6	12.6	9.2	6.8	7.3	11.6	17.9
9	22.6	25.8	27.8	27.1	23.5	19.0	14.1	9.2	4.6	1.5	1.9	6.9
Su	14.0	19.3	23.1	25.7	26.3	24.0	19.5	14.7	11.1	8.0	7.0	10.1
10	16.3	21.0	24.7	27.1	27.1	24.0	19.7	14.8	10.0	5.3	1.6	0.4
M	5.5	13.0	18.7	22.9	26.3	27.5	25.3	20.7	15.9	11.8	8.1	5.9
11	8.8	15.6	20.5	24.5	27.2	27.4	24.3	19.9	15.0	10.1	5.5	1.0
Tu	-0.7	5.6	13.5	19.5	23.7	27.4	28.3	25.7	20.7	15.6	11.2	7.4
12	4.5	8.8	16.1	21.2	25.4	28.0	27.7	24.0	19.2	14.3	9.4	5.1
W	-0.1	-0.5	7.5	15.4	21.3	25.3	28.5	28.3	24.8	19.4	14.0	10.0
13	6.0	3.8	10.4	17.7	22.9	26.8	29.0	27.5	22.9	17.9	12.9	8.2
Th	3.9	-1.2	1.7	10.6	18.2	23.6	27.2	29.1	27.3	22.9	17.2	11.8
14	8.4	4.1	4.8	13.1	19.9	25.0	28.4	29.6	26.5	21.2	16.0	11.0
F	6.6	1.9	-0.9	5.7	14.3	21.3	26.0	28.8	28.8	25.5	20.4	14.6
15	9.7	6.2	2.9	7.5	16.1	22.2	26.9	29.7	29.2	24.9	19.1	13.8
Sa	8.9	4.7	0.1	1.7	10.5	18.1	24.2	28.1	29.6	27.5	23.0	17.6
16	12.0	7.6	3.9	3.5	11.2	18.9	24.4	28.4	30.1	27.9	22.7	16.7
Su	11.5	6.8	2.4	0.0	6.3	15.2	21.6	26.7	29.6	29.2	25.4	20.1
17	14.7	9.5	5.3	2.3	6.1	14.8	21.3	26.0	29.2	29.4	25.8	20.1
M	14.2	9.0	4.8	0.8	2.6	11.7	19.3	24.5	28.5	30.0	27.6	22.6
18	17.0	11.9	7.3	3.1	2.4	9.7	17.7	23.2	27.1	29.1	27.7	23.3
Tu	17.5	11.7	7.0	3.2	1.2	7.2	16.4	22.6	26.8	29.5	29.1	25.2
19	19.6	14.1	9.4	5.2	1.5	4.4	12.9	19.7	24.4	27.4	28.1	25.4
W	20.8	15.2	9.6	5.6	2.6	3.9	12.1	19.8	24.9	28.0	29.3	27.2
20	22.4	16.7	11.6	7.5	3.5	1.5	7.2	14.9	20.8	24.7	26.9	26.4
Th	23.2	18.8	13.6	8.6	5.3	3.7	7.9	15.7	21.8	25.9	28.0	27.9
21	24.9	20.0	14.6	10.0	6.4	2.6	2.8	9.2	15.6	20.8	24.0	25.6
F	24.5	21.6	17.7	13.2	8.9	6.2	6.3	11.4	17.4	22.4	25.6	27.0
22	26.0	22.9	18.3	13.4	9.5	6.1	2.8	4.4	9.7	15.2	19.7	22.6
Sa	24.0	23.3	21.0	17.8	13.9	10.2	7.9	9.0	13.1	17.5	21.9	24.4
23	25.5	24.5	21.8	17.7	13.3	9.8	6.3	3.6	5.0	9.1	13.9	18.0
Su	21.3	23.0	23.0	21.5	18.9	15.4	11.9	9.7	10.4	12.9	16.7	20.7
24	23.2	24.5	24.1	21.9	18.1	14.0	10.4	6.8	4.0	4.5	7.7	12.3
M	16.7	20.7	23.1	23.8	22.8	20.4	16.9	13.1	10.5	10.0	11.5	15.5
25	19.6	22.6	24.6	24.8	22.9	19.0	14.7	10.8	6.9	3.7	3.1	6.1
Tu	11.1	16.3	21.2	24.2	25.3	24.5	21.7	17.6	13.3	10.0	8.4	9.8
26	14.6	19.5	23.3	26.0	26.5	24.4	19.9	15.1	10.7	6.4	2.5	1.5
W	4.9	11.1	17.3	22.8	25.9	27.3	25.8	22.2	17.2	12.4	8.3	6.2
27	8.2	14.6	20.3	24.9	28.0	28.5	25.7	20.4	14.9	10.2	5.5	1.1
Th	-0.2	4.7	12.4	19.4	25.0	28.0	28.9	26.4	21.7	16.1	10.8	6.4
28	4.0	7.2	15.6	21.9	27.1	30.1	30.3	26.3	20.4	14.3	9.3	4.3
F	-0.4	-1.4	6.2	14.8	22.0	27.2	30.1	29.8	26.1	20.5	14.5	9.1
29	4.5	1.8	7.5	17.3	23.8	29.0	31.9	31.3	26.2	19.8	13.5	8.3
Sa	3.2	-2.1	-1.1	9.2	17.7	24.6	29.4	31.6	29.8	25.1	18.9	12.9
30	7.5	2.5	0.2	9.0	19.1	25.5	30.5	33.2	31.3	25.5	18.8	12.5
Su	7.1	1.9	-3.5	1.1	12.8	20.6	27.1	31.3	32.4	29.0	23.6	17.2
31	11.3	6.0	0.1	-0.2	11.2	20.6	26.9	31.5	33.6	30.4	24.4	17.6
M	11.3	5.9	0.3	-3.6	5.1	16.4	23.5	29.2	32.9	32.2	27.7	21.6

Time meridian 135° W. 0 is midnight. 12 is noon.
Heights are referred to mean lower low water (N.O.S. chart datum).

ANCHORAGE, ALASKA, 2015

Lat. 61° 14 N Long. 149° 53 W

SEPTEMBER

Predicted hourly heights in feet

Day	Hours 0/12	Hours 1/13	Hours 2/14	Hours 3/15	Hours 4/16	Hours 5/17	Hours 6/18	Hours 7/19	Hours 8/20	Hours 9/21	Hours 10/22	Hours 11/23
1	15.5	9.7	4.2	-2.1	1.1	13.3	21.8	27.7	32.1	33.2	29.2	23.0
Tu	16.2	9.8	4.6	-1.0	-1.6	9.6	19.5	25.9	31.0	33.7	31.3	25.9
2	19.6	13.7	8.0	2.1	-3.1	3.3	14.7	22.7	28.1	32.0	32.0	27.7
W	21.4	14.8	8.5	3.6	-1.0	2.0	13.3	21.9	27.7	32.0	33.2	29.7
3	23.9	17.7	12.0	6.4	0.4	-2.4	5.4	15.5	22.9	27.8	31.0	30.3
Th	26.2	20.1	13.8	7.8	3.5	0.7	5.9	15.7	23.2	28.2	31.7	31.7
4	27.9	22.0	16.2	10.7	5.4	0.0	-0.6	6.8	15.5	22.3	26.7	29.3
F	28.6	25.0	19.6	13.7	8.2	4.8	3.7	8.7	16.6	23.2	27.4	30.0
5	29.6	26.2	20.7	15.5	10.4	5.3	1.0	1.4	7.2	14.6	20.7	24.8
Sa	27.2	27.2	24.4	19.9	14.6	9.9	7.2	6.5	9.9	16.0	21.8	25.4
6	27.6	27.6	24.9	20.3	15.8	11.0	6.3	2.7	2.7	6.6	12.8	18.6
Su	22.7	25.4	26.4	24.8	21.2	16.3	12.2	9.7	8.1	9.5	14.2	19.6
7	23.0	25.4	26.2	24.5	20.8	16.7	12.1	7.8	4.2	3.1	5.2	10.8
M	16.7	21.1	24.5	26.4	25.9	22.9	18.2	14.2	11.0	8.2	8.0	12.0
8	17.5	21.2	24.2	25.8	25.0	21.8	17.7	13.2	8.8	4.9	2.6	3.6
Tu	9.6	15.9	20.8	24.6	27.2	27.1	24.1	19.3	15.0	11.0	7.3	6.0
9	10.5	16.5	20.7	24.3	26.4	25.8	22.5	18.2	13.6	8.9	4.7	1.4
W	2.7	9.9	16.6	21.7	25.6	28.4	27.9	24.2	19.0	14.1	9.8	5.5
10	4.4	10.6	16.9	21.6	25.4	27.6	26.4	22.5	17.9	13.0	8.1	3.8
Th	0.2	3.7	11.9	18.6	23.5	27.2	29.2	27.5	23.0	17.3	12.2	8.0
11	3.5	4.4	12.3	18.6	23.6	27.2	28.7	26.2	21.6	16.6	11.6	6.9
F	2.3	0.2	6.7	14.9	21.4	25.8	28.9	29.1	26.0	20.7	14.8	9.9
12	5.8	2.0	6.4	15.0	21.1	25.9	29.0	29.0	25.2	19.9	14.7	9.7
Sa	5.2	0.7	2.3	11.0	18.5	24.4	28.2	29.8	27.9	23.5	17.8	12.1
13	7.6	3.4	2.2	9.9	18.0	23.8	28.1	30.2	28.3	23.4	17.7	12.5
Su	7.7	3.1	0.5	6.7	15.5	22.0	27.1	30.0	29.5	25.8	20.4	14.8
14	9.5	5.2	1.5	4.7	13.9	20.9	26.1	29.7	30.2	26.8	21.2	15.3
M	10.2	5.7	1.5	2.8	12.0	19.6	25.2	29.3	30.6	28.0	22.9	17.3
15	11.9	7.1	2.6	1.3	8.6	17.3	23.4	27.8	30.4	29.1	24.6	18.6
Tu	12.8	8.0	3.9	1.4	7.5	16.9	23.0	27.7	30.6	29.8	25.5	19.7
16	14.2	9.3	4.7	0.7	3.5	12.8	20.1	25.3	28.9	29.9	27.2	22.1
W	16.1	10.4	6.2	2.8	4.0	12.9	20.7	25.7	29.2	30.4	27.7	22.4
17	16.5	11.4	7.0	2.5	0.5	7.2	16.0	22.2	26.5	28.9	28.4	24.8
Th	19.6	13.9	8.6	5.1	3.4	8.5	17.4	23.3	27.4	29.6	28.9	24.7
18	19.2	13.7	9.1	5.2	1.1	2.3	10.9	18.1	23.4	26.7	28.0	26.4
F	22.6	17.6	12.3	7.8	5.1	5.9	13.3	20.2	24.7	27.8	28.7	26.4
19	21.8	16.4	11.6	7.7	4.1	1.1	5.2	13.2	19.1	23.5	26.0	26.5
Sa	24.5	20.9	16.4	11.8	8.1	6.3	9.3	16.3	21.2	24.9	27.0	26.9
20	24.0	19.6	14.7	10.5	7.1	3.8	2.3	7.5	13.9	19.0	22.5	24.8
Su	25.0	23.3	20.1	16.3	12.3	9.2	8.2	11.9	17.0	20.8	24.0	25.6
21	25.2	22.4	18.6	14.2	10.5	7.4	4.2	3.7	8.2	13.4	17.9	21.2
M	23.7	24.2	23.1	20.5	17.2	13.5	10.5	9.7	12.4	15.8	19.6	22.5
22	24.3	24.3	22.3	19.0	14.9	11.3	8.1	4.8	4.3	7.4	12.0	16.4
Tu	20.3	23.4	24.6	24.1	21.8	18.5	14.7	11.2	9.8	10.9	13.8	18.0
23	21.4	24.0	24.8	23.5	20.5	16.2	12.3	8.6	5.0	3.6	5.7	10.5
W	15.5	20.3	24.2	25.9	25.8	23.4	19.6	15.1	11.0	8.4	8.2	11.5
24	16.7	21.2	24.9	26.4	25.7	22.3	17.6	13.0	8.7	4.5	2.1	3.9
Th	9.5	15.7	21.6	25.9	27.9	27.7	24.5	19.8	14.5	9.7	6.1	5.4
25	9.6	16.5	22.1	26.6	28.6	28.0	23.9	18.5	13.1	8.4	3.5	0.5
F	2.4	9.8	17.2	23.6	28.0	30.0	29.0	24.9	19.1	13.3	8.0	3.7
26	2.7	8.8	17.4	23.7	28.6	30.8	29.8	24.8	18.7	12.8	7.7	2.5
Sa	-1.0	2.2	11.8	19.5	26.1	30.1	31.8	29.4	24.2	17.7	11.8	6.3
27	1.5	0.7	9.4	18.9	25.5	30.4	32.6	30.5	24.9	18.2	12.2	6.8
Su	1.6	-2.1	3.9	14.8	22.2	28.4	32.1	32.6	28.8	22.8	16.1	10.3
28	4.8	-0.8	-0.1	11.2	20.5	27.0	31.7	33.6	30.4	24.3	17.4	11.4
M	6.0	0.5	-2.1	7.3	18.1	24.9	30.6	33.7	32.4	27.4	20.9	14.6
29	8.9	3.2	-3.0	0.9	13.4	21.9	28.2	32.6	33.6	29.5	23.2	16.3
Tu	10.2	5.1	-0.5	-0.4	11.6	21.0	27.3	32.3	34.4	31.3	25.5	18.9
30	13.0	7.3	1.2	-4.1	3.3	15.4	23.2	29.1	33.1	32.8	28.3	21.8
W	15.1	8.9	4.1	-0.9	3.1	15.4	23.4	29.2	33.4	33.9	29.5	23.3

Time meridian 135° W. 0 is midnight. 12 is noon.
Heights are referred to mean lower low water (N.O.S. chart datum).

Lat. 61° 14 N Long. 149° 53 W

OCTOBER

Predicted hourly heights in feet

Day	Hours 0/12	Hours 1/13	Hours 2/14	Hours 3/15	Hours 4/16	Hours 5/17	Hours 6/18	Hours 7/19	Hours 8/20	Hours 9/21	Hours 10/22	Hours 11/23
1	17.0	11.2	5.7	-0.8	-3.5	6.3	16.9	24.2	29.5	32.7	31.5	26.8
Th	20.3	13.7	7.9	3.5	0.4	7.4	18.2	25.1	30.2	33.4	32.3	27.3
2	21.0	15.2	9.6	4.1	-1.9	-1.1	8.8	18.0	24.6	29.2	31.6	30.0
F	25.2	19.0	12.7	7.5	3.8	3.1	10.8	19.6	25.8	29.9	32.0	30.0
3	25.0	19.0	13.7	8.4	3.2	-1.2	1.8	10.5	18.4	24.2	28.2	29.9
Sa	28.3	23.9	18.3	12.4	8.1	5.4	6.3	12.7	19.8	25.1	28.3	29.5
4	27.5	23.0	17.8	13.0	8.1	3.5	0.9	4.3	11.2	17.9	22.9	26.5
Su	28.1	27.0	23.2	18.4	13.2	9.7	7.7	8.5	12.9	18.7	23.2	25.8
5	26.8	25.5	21.9	17.5	13.1	8.7	4.8	3.1	5.7	10.8	16.6	21.3
M	24.7	26.7	26.2	23.5	19.3	14.7	11.6	9.5	9.0	11.6	16.5	20.7
6	23.2	24.7	24.3	21.8	18.1	14.1	10.0	6.4	4.6	5.8	9.7	15.1
Tu	19.9	23.6	26.0	26.4	24.5	20.6	16.2	12.9	9.9	8.0	9.5	14.2
7	18.6	21.6	23.9	24.4	22.6	19.2	15.3	11.2	7.3	4.9	5.0	8.4
W	14.3	19.4	23.5	26.3	27.3	25.5	21.5	16.8	12.9	9.0	6.1	7.2
8	12.7	17.6	21.4	24.3	25.4	23.8	20.3	16.1	11.6	7.3	4.4	3.8
Th	8.1	14.7	20.1	24.4	27.4	28.3	26.0	21.4	16.2	11.6	7.1	3.8
9	5.9	12.8	18.1	22.5	25.7	26.8	24.6	20.6	16.0	11.1	6.4	3.2
F	3.3	9.5	16.4	22.0	26.1	28.8	28.6	25.3	20.0	14.4	9.4	4.8
10	1.9	6.6	14.3	19.9	24.5	27.5	27.8	24.6	19.9	15.0	9.8	5.1
Sa	2.0	4.5	12.5	19.0	24.5	28.1	29.7	27.8	23.4	17.6	12.0	7.1
11	2.5	1.6	9.1	16.8	22.4	26.8	29.0	27.9	23.7	18.4	13.3	8.2
Su	3.6	1.8	7.9	16.1	22.1	27.1	29.9	29.5	25.9	20.6	14.8	9.4
12	4.7	0.6	3.5	12.6	19.6	25.0	28.8	29.7	27.0	21.9	16.3	11.2
M	6.4	2.3	3.8	12.5	19.8	25.3	29.4	30.7	28.1	23.2	17.5	12.0
13	7.0	2.2	0.3	7.1	16.1	22.4	27.3	30.1	29.4	25.3	19.6	13.9
Tu	9.1	4.8	2.2	7.9	17.1	23.2	28.0	30.9	30.1	25.8	20.0	14.5
14	9.4	4.6	0.2	2.2	11.4	19.1	24.9	29.0	30.5	28.1	23.2	17.2
W	11.6	7.3	3.5	4.2	13.0	20.8	26.0	29.8	31.1	28.2	22.8	16.9
15	11.8	7.0	2.2	-0.4	6.0	15.0	21.7	26.7	29.8	29.7	26.2	20.8
Th	14.9	9.5	5.8	3.6	8.4	17.6	23.5	28.0	30.5	29.8	25.4	19.6
16	14.1	9.3	4.9	0.4	1.3	10.2	17.9	23.7	27.7	29.5	28.0	24.0
F	18.5	12.8	8.1	5.1	5.5	13.4	20.8	25.4	28.9	29.9	27.3	22.1
17	16.5	11.6	7.3	3.1	-0.1	4.8	13.7	19.9	24.9	27.8	28.4	26.0
Sa	21.8	16.6	11.4	7.4	5.5	9.1	17.4	22.5	26.4	28.7	28.2	24.3
18	19.2	14.0	9.7	5.9	2.1	1.1	8.4	15.8	21.2	25.1	27.2	26.8
Su	24.2	20.0	15.4	10.8	7.6	7.0	12.6	19.3	23.1	26.2	27.5	26.0
19	21.8	17.0	12.4	8.6	5.3	2.0	3.4	10.8	16.8	21.5	24.6	26.3
M	25.6	23.1	19.1	15.0	11.0	8.3	8.8	14.3	19.1	22.6	25.2	26.1
20	24.2	20.5	16.1	11.9	8.5	5.4	2.7	5.2	11.4	16.8	21.0	23.9
Tu	25.7	25.1	22.9	19.3	15.4	11.7	9.0	9.6	13.7	17.6	21.3	23.8
21	25.1	23.7	20.7	16.6	12.6	9.1	5.9	3.4	5.6	10.6	16.0	20.1
W	23.7	25.7	25.7	23.8	20.2	16.2	12.2	9.1	8.8	11.3	15.4	19.7
22	23.0	25.0	24.5	22.1	18.2	13.9	10.1	6.4	3.6	4.7	9.2	15.0
Th	19.7	24.2	26.7	27.2	25.3	21.3	16.8	12.2	8.3	6.6	8.1	13.0
23	18.5	22.9	25.9	26.3	24.4	20.2	15.5	10.9	6.7	3.1	3.2	7.8
F	14.5	20.3	25.4	28.3	29.1	26.8	22.1	16.7	11.4	6.7	3.8	4.9
24	11.1	18.2	23.7	27.5	28.5	26.6	22.0	16.6	11.4	6.5	2.3	1.8
Sa	7.1	15.2	21.7	27.2	30.2	30.8	27.6	22.1	15.9	10.3	4.9	1.2
25	2.4	10.5	18.8	25.0	29.1	30.5	28.3	23.1	17.0	11.4	6.1	1.6
Su	0.9	7.7	17.0	23.7	29.2	32.1	31.8	27.5	21.2	14.7	9.0	3.4
26	-1.1	0.9	11.3	19.9	26.4	30.5	31.9	29.0	23.4	16.8	11.1	5.6
M	1.0	0.7	10.0	19.4	25.9	31.1	33.5	31.8	26.5	19.7	13.4	7.7
27	2.0	-3.1	1.2	12.9	21.3	27.7	31.7	32.6	28.9	22.8	16.1	10.4
Tu	5.2	0.5	2.0	13.4	21.8	28.0	32.7	34.1	30.8	24.7	18.0	12.1
28	6.5	0.5	-4.3	3.2	14.8	22.7	28.7	32.5	32.4	28.1	21.7	15.2
W	9.4	4.7	0.2	4.8	16.7	24.0	29.9	33.8	33.7	29.1	22.6	16.3
29	10.6	5.2	-1.4	-3.9	6.1	16.6	24.1	29.6	32.8	31.6	26.8	20.3
Th	13.9	8.4	4.0	0.9	8.6	19.4	25.8	31.1	34.0	32.3	26.9	20.4
30	14.6	9.0	3.6	-2.7	-1.7	9.1	18.3	25.2	30.1	32.4	30.3	25.2
F	18.9	12.6	7.6	3.6	3.0	12.3	21.1	27.0	31.3	33.0	30.1	24.4
31	18.2	12.9	7.4	2.2	-2.6	1.8	11.7	19.8	25.9	30.0	31.3	28.8
Sa	23.5	17.5	11.5	7.3	4.2	6.1	14.8	22.0	27.1	30.4	30.9	27.6

Time meridian 135° W. 0 is midnight. 12 is noon.
Heights are referred to mean lower low water (N.O.S. chart datum).

ANCHORAGE, ALASKA, 2015

Lat. 61° 14 N Long. 149° 53 W

NOVEMBER

Predicted hourly heights in feet

Day	Hours 0/12	Hours 1/13	Hours 2/14	Hours 3/15	Hours 4/16	Hours 5/17	Hours 6/18	Hours 7/19	Hours 8/20	Hours 9/21	Hours 10/22	Hours 11/23
1	22.0	16.4	11.3	6.2	1.4	-0.8	5.3	13.7	20.8	25.8	29.3	29.9
Su	27.1	22.0	16.5	11.1	7.7	5.7	8.8	15.8	21.9	26.1	28.4	28.2
2	25.0	20.0	15.0	10.3	5.8	1.9	2.1	8.0	15.0	20.9	25.2	28.0
M	28.3	25.6	21.2	16.1	11.5	8.7	7.6	10.3	15.6	20.7	24.1	25.9
3	25.6	23.1	18.8	14.5	10.2	6.3	3.4	4.6	9.6	15.3	20.3	24.2
Tu	26.7	27.0	24.8	21.0	16.4	12.4	9.9	8.7	10.1	14.2	18.7	21.9
4	23.6	23.9	22.1	18.7	14.8	11.0	7.4	5.1	6.1	10.0	14.8	19.5
W	23.3	25.9	26.4	24.8	21.4	17.1	13.2	10.4	8.3	8.6	12.0	16.7
5	20.1	22.3	23.2	22.4	19.6	15.9	12.2	8.5	6.0	6.4	9.4	14.1
Th	19.0	23.0	25.8	26.6	25.4	22.0	17.5	13.3	9.7	6.8	6.4	10.0
6	15.4	19.3	22.3	23.8	23.6	20.9	17.2	13.1	9.1	6.0	5.8	8.7
F	14.1	19.3	23.6	26.5	27.5	25.9	22.1	17.2	12.4	8.1	4.5	4.2
7	9.1	15.3	19.8	23.3	25.2	25.0	22.1	17.9	13.4	8.8	5.3	5.0
Sa	8.8	15.2	20.4	25.0	27.7	28.3	25.8	21.3	15.9	10.8	5.9	2.2
8	3.0	9.8	16.3	21.3	25.0	26.9	26.0	22.4	17.7	12.9	7.9	4.3
Su	4.7	10.6	17.2	22.4	26.9	29.0	28.3	24.7	19.5	14.0	8.6	3.6
9	0.4	3.7	11.9	18.3	23.5	26.9	28.1	26.1	21.7	16.5	11.6	6.7
M	3.5	5.9	13.7	19.8	24.9	28.8	29.8	27.4	22.6	17.1	11.6	6.4
10	1.5	-0.2	6.2	14.6	20.8	25.7	28.6	28.4	25.2	20.1	14.8	10.0
Tu	5.4	3.4	8.9	17.2	22.7	27.4	30.3	29.6	25.4	20.0	14.5	9.3
11	4.2	-0.3	1.2	9.8	17.5	23.4	27.7	29.6	27.9	23.6	17.9	12.7
W	8.2	4.3	4.9	13.1	20.5	25.5	29.5	30.9	28.2	22.9	17.2	11.9
12	7.0	2.0	-1.1	4.3	13.3	20.3	25.7	29.2	29.6	26.6	21.5	15.7
Th	10.6	6.7	4.0	8.2	17.2	23.2	27.9	30.6	30.2	25.9	20.1	14.5
13	9.6	4.8	0.0	0.0	8.3	16.3	22.8	27.4	29.8	28.8	24.8	19.4
F	13.6	8.8	5.6	5.1	12.6	20.3	25.4	29.3	30.7	28.3	23.1	17.4
14	12.2	7.4	2.8	-1.0	3.1	12.0	18.9	24.7	28.3	29.5	27.3	22.8
Sa	17.4	11.8	7.6	5.1	8.0	16.7	22.3	26.8	29.6	29.5	25.6	20.2
15	14.8	10.1	5.6	1.2	-0.3	7.1	14.9	21.0	25.9	28.5	28.4	25.5
Su	20.8	15.6	10.4	6.9	5.8	11.6	19.3	23.6	27.4	29.0	27.4	22.8
16	17.6	12.6	8.2	4.2	0.3	2.0	10.6	17.2	22.6	26.4	28.2	27.1
M	23.8	19.1	14.2	9.7	6.7	7.3	14.4	20.3	24.2	27.1	27.8	25.2
17	20.6	15.6	11.0	7.0	3.3	0.6	4.8	12.9	18.8	23.5	26.5	27.6
Tu	26.0	22.5	17.9	13.4	9.4	6.8	8.7	15.2	20.0	23.9	26.2	26.6
18	23.7	19.4	14.6	10.3	6.6	3.2	1.7	6.9	13.9	19.6	23.6	26.5
W	27.2	25.6	22.0	17.5	13.2	9.4	6.9	8.9	14.0	18.8	22.8	25.2
19	25.8	23.3	19.4	14.8	10.7	7.0	3.6	2.8	7.4	14.0	19.7	23.6
Th	26.7	27.4	26.1	22.4	17.8	13.3	9.2	6.5	7.5	11.4	16.8	21.3
20	24.6	25.6	24.0	20.6	16.1	11.9	7.9	4.3	3.2	6.9	13.4	19.3
F	23.7	27.2	28.3	27.2	23.3	18.4	13.5	8.9	5.4	4.9	8.4	14.6
21	20.2	24.4	26.2	25.6	22.6	18.1	13.4	8.9	4.9	3.0	6.0	12.6
Sa	19.1	24.2	28.1	29.6	28.5	24.2	18.9	13.3	8.2	3.7	2.1	5.4
22	12.8	19.6	24.6	27.2	27.5	24.8	20.1	14.8	9.8	5.2	2.6	5.1
Su	12.3	19.5	25.0	29.3	31.1	29.6	24.7	18.8	12.8	7.4	2.1	-0.4
23	3.2	12.1	19.7	25.3	28.4	29.2	26.4	21.4	15.5	10.3	5.2	2.4
M	4.6	13.0	20.6	26.3	30.6	32.2	30.0	24.5	18.0	12.1	6.4	1.0
24	-2.4	2.3	12.6	20.4	26.2	29.6	30.4	27.3	21.8	15.7	10.3	5.3
Tu	2.1	5.0	14.8	22.1	27.9	31.9	32.9	29.4	23.4	16.9	11.2	5.6
25	-0.1	-3.8	3.2	13.8	21.6	27.2	30.6	30.9	27.3	21.3	15.2	9.7
W	5.2	1.9	6.7	17.1	23.8	29.5	32.9	32.7	28.2	21.8	15.6	10.1
26	4.7	-1.4	-3.9	5.4	15.4	23.1	28.2	31.4	30.7	26.4	20.2	14.2
Th	8.9	4.8	2.0	9.5	19.3	25.6	30.8	33.4	31.7	26.3	19.9	14.2
27	8.7	3.6	-2.8	-2.2	8.3	17.4	24.6	29.3	31.7	29.9	25.0	18.8
F	12.8	8.1	4.1	3.3	12.7	21.2	27.1	31.5	33.0	30.0	24.2	17.9
28	12.5	7.1	2.1	-3.3	1.0	11.2	19.5	25.9	30.1	31.4	28.6	23.3
Sa	17.3	11.3	7.3	3.6	5.8	15.4	22.5	27.9	31.3	31.7	27.8	21.8
29	16.0	10.6	5.6	0.5	-2.1	5.0	14.0	21.5	26.9	30.3	30.4	26.9
Su	21.4	15.6	10.1	6.7	4.1	8.8	17.2	23.3	27.7	30.2	29.5	25.2
30	19.3	14.0	8.9	4.3	0.0	0.9	8.8	16.6	22.9	27.4	29.9	29.0
M	25.0	19.7	14.1	9.5	6.5	5.7	11.2	18.2	23.3	26.8	28.3	26.9

Time meridian 135° W. 0 is midnight. 12 is noon.
Heights are referred to mean lower low water (N.O.S. chart datum).

Lat. 61° 14 N Long. 149° 53 W

DECEMBER

Predicted hourly heights in feet

Day	Hours 0/12	Hours 1/13	Hours 2/14	Hours 3/15	Hours 4/16	Hours 5/17	Hours 6/18	Hours 7/19	Hours 8/20	Hours 9/21	Hours 10/22	Hours 11/23
1	22.6	17.2	12.3	7.6	3.6	0.9	4.5	12.0	18.5	23.6	27.3	28.8
Tu	27.3	23.1	18.2	13.1	9.3	6.8	7.5	12.5	18.2	22.5	25.2	26.1
2	24.4	20.6	15.7	11.2	7.3	3.7	2.9	7.6	14.2	19.6	23.8	26.8
W	27.6	25.7	21.8	17.2	12.7	9.3	7.3	8.4	12.4	17.2	21.1	23.5
3	24.1	22.7	19.5	15.3	11.2	7.7	4.8	5.1	9.6	15.2	19.8	23.5
Th	26.2	26.7	24.8	21.2	16.9	12.7	9.3	7.4	8.0	11.1	15.7	19.6
4	22.0	22.9	22.0	19.6	15.9	12.2	8.7	6.2	6.5	10.3	15.2	19.6
F	23.2	25.8	26.3	24.6	21.2	17.0	12.7	9.0	6.7	6.4	9.2	14.0
5	18.4	21.2	22.6	22.4	20.8	17.3	13.5	10.0	7.1	6.8	10.1	14.8
Sa	19.4	23.0	25.9	26.5	24.9	21.4	17.0	12.4	8.2	5.0	4.3	7.4
6	13.1	17.9	21.4	23.3	23.8	22.3	18.7	14.7	10.8	7.3	6.4	9.5
Su	14.9	19.6	23.5	26.6	27.1	25.2	21.3	16.5	11.5	6.9	3.1	2.3
7	6.5	13.1	18.3	22.4	24.7	25.4	23.6	19.6	15.1	10.9	6.9	5.9
M	9.7	15.9	20.5	24.7	27.6	27.7	24.9	20.5	15.4	10.3	5.2	1.2
8	1.2	7.2	14.2	19.7	24.0	26.3	26.5	23.9	19.3	14.7	10.1	6.1
Tu	5.7	11.1	17.7	22.2	26.4	28.7	27.7	23.9	18.9	13.7	8.6	3.4
9	-0.4	1.5	9.2	16.2	21.8	25.8	27.7	26.8	23.2	18.1	13.3	8.9
W	5.3	6.5	13.7	19.9	24.5	28.2	29.5	27.0	22.1	16.8	11.7	6.7
10	1.6	-1.2	3.5	11.9	18.7	24.1	27.6	28.5	26.2	21.7	16.3	11.5
Th	7.4	4.8	8.6	16.8	22.4	26.9	29.7	29.5	25.5	20.0	14.6	9.7
11	4.8	-0.2	-0.8	6.6	14.7	21.4	26.2	29.0	28.4	25.0	19.8	14.2
F	9.6	6.0	5.1	11.9	19.6	24.8	28.8	30.5	28.6	23.6	17.8	12.5
12	7.6	2.8	-1.6	1.3	10.0	17.5	23.8	27.8	29.6	27.7	23.4	17.9
Sa	12.2	8.0	4.9	6.8	15.4	21.8	26.7	29.9	30.3	26.8	21.3	15.6
13	10.5	5.6	0.8	-1.8	4.8	13.1	20.1	25.7	28.9	29.3	26.4	21.5
Su	16.0	10.5	6.7	4.5	9.7	18.2	23.4	27.9	30.1	29.1	24.5	19.0
14	13.5	8.5	3.8	-0.8	-0.1	8.6	15.9	22.5	27.0	29.4	28.4	24.7
M	19.7	14.2	9.1	5.6	5.2	12.8	20.0	24.7	28.3	29.6	27.2	22.2
15	16.7	11.5	6.6	2.2	-1.4	3.0	12.1	18.6	24.3	27.9	29.2	27.1
Tu	23.0	17.8	12.6	8.1	4.8	6.6	14.9	20.8	25.3	28.1	28.6	25.2
16	20.1	14.7	9.8	5.2	1.2	-0.5	6.4	14.8	21.0	25.6	28.6	28.8
W	26.0	21.4	16.3	11.3	7.2	4.4	7.8	15.3	21.0	25.2	27.6	27.5
17	23.8	18.8	13.5	8.8	4.6	0.9	1.3	8.9	16.6	22.5	26.4	29.0
Th	28.4	25.3	20.3	15.2	10.5	6.4	4.2	7.8	14.2	20.2	24.3	26.8
18	26.4	23.1	18.4	13.4	8.8	4.7	1.6	3.1	10.2	17.6	23.1	26.8
F	29.1	28.3	25.2	19.9	14.9	10.1	5.9	3.7	6.4	12.2	18.6	23.1
19	25.9	25.9	23.5	19.2	14.5	9.8	5.7	2.9	4.3	10.4	17.7	23.0
Sa	26.9	29.1	28.7	25.5	20.2	15.1	10.1	5.6	2.8	4.2	9.6	16.5
20	21.7	25.1	25.9	24.6	20.9	16.4	11.5	7.3	4.2	4.7	9.9	17.1
Su	22.6	26.8	29.3	29.4	26.2	20.9	15.5	10.2	5.3	1.5	1.7	6.9
21	14.6	20.6	24.7	26.4	26.1	23.1	18.5	13.2	8.8	5.1	4.7	9.1
M	16.4	22.3	26.8	29.8	30.1	26.8	21.5	15.7	10.3	4.9	0.5	-0.5
22	4.9	13.5	20.1	24.7	27.3	27.7	24.9	20.0	14.5	9.8	5.6	4.4
Tu	8.4	16.4	22.4	27.3	30.4	30.7	27.0	21.5	15.5	10.2	4.6	-0.3
23	-2.3	4.2	13.5	20.4	25.2	28.4	28.9	25.9	20.6	15.0	9.9	5.8
W	3.9	8.6	17.2	23.2	28.2	31.1	30.9	26.6	20.8	15.0	9.6	4.3
24	-1.2	-3.1	5.1	14.4	21.5	26.2	29.5	29.5	25.9	20.1	14.5	9.5
Th	5.7	3.5	9.9	18.6	24.5	29.3	31.7	30.5	25.5	19.5	14.0	8.6
25	3.7	-2.4	-2.4	7.2	16.3	23.1	27.5	30.3	29.2	24.9	19.0	13.2
F	8.8	4.8	3.7	12.2	20.2	26.1	30.3	32.0	29.4	23.8	17.9	12.5
26	7.3	2.5	-3.3	0.1	10.1	18.7	24.9	28.9	30.6	28.3	23.3	17.4
Sa	11.6	7.8	3.7	5.3	14.7	21.9	27.4	31.0	31.6	27.8	21.8	16.1
27	10.7	5.9	0.7	-2.9	3.9	13.3	21.1	26.6	30.0	30.2	26.7	21.3
Su	15.4	10.0	6.5	3.2	8.1	17.0	23.3	28.2	31.0	30.3	25.6	19.5
28	14.1	8.7	4.2	-0.8	-0.3	8.2	16.5	23.4	28.0	30.4	29.0	24.6
M	19.1	13.3	8.6	5.2	4.1	11.2	18.9	24.3	28.3	30.1	28.2	23.1
29	17.1	11.8	6.8	2.4	-0.8	3.8	12.5	19.5	25.1	28.9	29.8	27.2
Tu	22.2	16.8	11.4	7.4	4.4	6.2	13.7	20.2	24.7	27.8	28.5	25.6
30	20.4	14.7	9.7	5.3	1.4	1.3	8.4	16.1	21.9	26.4	29.1	28.5
W	25.0	19.8	14.6	9.9	6.3	4.6	8.6	15.4	20.8	24.5	26.7	26.3
31	23.0	18.1	12.8	8.2	4.5	1.8	4.6	12.2	18.9	23.5	26.9	28.4
Th	26.9	22.8	17.7	12.9	8.8	5.6	5.5	10.0	15.8	20.6	23.7	25.2

Time meridian 135° W. 0 is midnight. 12 is noon.
Heights are referred to mean lower low water (N.O.S. chart datum).

NIKISKI, ALASKA, 2015

Lat. 60° 41 N Long. 151° 24 W

JANUARY

Predicted hourly heights in feet

Day	Hours 0/12	Hours 1/13	Hours 2/14	Hours 3/15	Hours 4/16	Hours 5/17	Hours 6/18	Hours 7/19	Hours 8/20	Hours 9/21	Hours 10/22	Hours 11/23
1	15.0	17.6	18.2	16.9	14.5	11.8	8.6	5.9	5.4	7.5	10.8	14.5
Th	18.1	20.6	21.0	19.3	16.1	12.2	7.6	2.9	-0.1	0.1	2.7	6.8
2	11.5	15.9	18.6	19.1	17.6	15.0	11.9	8.3	5.5	5.3	7.6	11.2
F	15.2	18.9	21.2	21.2	19.0	15.4	11.1	6.1	1.3	-1.3	-0.5	2.9
3	7.6	12.9	17.4	19.8	19.7	17.8	14.8	11.3	7.4	4.8	5.2	8.1
Sa	12.1	16.4	19.9	21.7	21.0	18.2	14.1	9.4	4.2	-0.4	-2.1	-0.2
4	4.1	9.4	14.8	18.9	20.7	19.9	17.3	13.9	10.0	6.2	4.2	5.4
Su	9.1	13.5	17.8	20.9	21.9	20.3	16.8	12.3	7.3	2.2	-1.7	-2.1
5	1.0	6.0	11.7	16.9	20.3	21.1	19.4	16.2	12.4	8.4	4.9	3.8
M	6.2	10.6	15.2	19.1	21.5	21.5	19.1	15.0	10.2	5.1	0.4	-2.3
6	-1.3	3.0	8.6	14.1	18.7	21.2	21.0	18.5	14.7	10.6	6.7	3.9
Tu	4.0	7.4	12.2	16.7	20.0	21.5	20.7	17.5	12.9	7.9	3.2	-0.7
7	-2.0	0.4	5.6	11.3	16.3	20.0	21.4	20.3	17.1	12.9	8.8	5.3
W	3.4	4.8	9.0	13.9	17.8	20.4	21.0	19.4	15.6	10.8	5.9	1.7
8	-1.0	-0.9	2.9	8.4	13.7	18.0	20.7	21.1	19.1	15.4	11.1	7.2
Th	4.4	3.6	6.1	10.6	15.1	18.3	20.1	20.0	17.7	13.6	8.8	4.4
9	1.1	-0.4	1.1	5.6	11.0	15.6	19.0	20.7	20.3	17.6	13.6	9.5
F	6.2	4.1	4.4	7.4	11.9	15.7	18.1	19.3	18.6	16.0	11.8	7.4
10	3.8	1.5	1.1	3.6	8.3	13.1	16.8	19.3	20.2	19.1	16.1	12.1
Sa	8.4	5.8	4.5	5.4	8.6	12.5	15.5	17.3	18.0	17.1	14.4	10.5
11	6.7	4.0	2.7	3.1	6.1	10.6	14.6	17.3	19.0	19.3	17.8	14.7
Su	11.0	7.9	5.9	5.1	6.2	9.2	12.5	14.8	16.2	16.7	15.8	13.2
12	9.8	6.9	5.0	4.3	5.3	8.2	12.2	15.3	17.3	18.5	18.4	16.7
M	13.6	10.4	7.9	6.2	5.5	6.6	9.2	11.8	13.7	15.0	15.6	14.9
13	12.7	10.0	7.7	6.5	6.1	7.0	9.8	13.0	15.5	17.0	17.9	17.7
Tu	15.9	13.1	10.3	8.1	6.4	5.5	6.3	8.5	10.7	12.5	14.1	15.0
14	14.7	13.0	10.7	8.9	7.8	7.4	8.1	10.6	13.4	15.4	16.8	17.7
W	17.4	15.7	13.0	10.3	8.0	6.0	4.8	5.3	7.4	9.6	11.8	13.9
15	15.2	15.2	13.8	11.7	10.0	8.7	7.9	8.5	10.7	13.4	15.5	17.1
Th	18.0	17.7	15.8	13.0	10.1	7.4	4.9	3.4	4.0	6.3	9.0	11.8
16	14.5	16.2	16.2	14.7	12.6	10.6	8.8	7.6	8.2	10.6	13.5	16.0
F	17.9	18.9	18.3	16.0	12.8	9.4	6.1	3.1	1.5	2.6	5.5	9.0
17	12.7	15.9	17.7	17.4	15.5	13.0	10.4	8.1	6.7	7.5	10.5	14.0
Sa	17.0	19.2	20.1	19.0	16.1	12.2	8.1	4.2	0.9	-0.4	1.5	5.5
18	10.0	14.3	17.8	19.3	18.5	15.9	12.6	9.4	6.6	5.3	6.8	10.7
Su	15.0	18.5	20.9	21.4	19.6	15.8	11.1	6.4	1.9	-1.5	-1.9	1.2
19	6.3	11.7	16.5	19.8	20.7	19.0	15.6	11.6	7.8	4.8	3.9	6.4
M	11.3	16.4	20.3	22.5	22.4	19.7	15.1	9.6	4.3	-0.5	-3.4	-2.7
20	1.8	8.0	14.0	18.9	21.7	21.6	19.0	14.7	10.1	5.8	2.8	2.7
Tu	6.5	12.3	17.9	21.9	23.7	22.8	19.3	13.9	7.9	2.2	-2.5	-4.6
21	-2.5	3.3	10.2	16.5	21.0	23.0	22.0	18.4	13.4	8.3	3.8	1.2
W	2.1	7.0	13.5	19.2	23.0	24.2	22.6	18.4	12.5	6.1	0.4	-3.8
22	-4.8	-1.3	5.5	12.7	18.6	22.5	23.6	21.7	17.4	11.9	6.4	2.1
Th	0.1	2.1	7.8	14.6	20.0	23.3	24.0	21.8	17.1	11.0	4.7	-0.6
23	-4.0	-3.8	0.8	8.0	15.0	20.3	23.3	23.6	20.9	16.1	10.3	5.0
F	1.1	-0.1	2.7	8.7	15.1	20.0	22.8	23.0	20.5	15.7	9.6	3.8
24	-0.7	-3.1	-1.8	3.4	10.4	16.7	21.1	23.4	23.0	19.8	14.7	9.1
Sa	4.2	0.9	0.3	3.5	9.3	15.0	19.2	21.5	21.5	19.0	14.3	8.8
25	3.9	0.2	-1.2	0.8	6.0	12.3	17.5	21.1	22.8	21.9	18.5	13.6
Su	8.5	4.2	1.4	1.1	4.2	9.3	14.1	17.7	19.7	19.7	17.5	13.4
26	8.8	4.8	2.1	1.2	3.4	8.1	13.4	17.6	20.5	21.7	20.6	17.4
M	13.0	8.6	4.9	2.3	2.0	4.6	8.7	12.6	15.7	17.8	18.1	16.4
27	13.1	9.6	6.6	4.4	3.7	5.5	9.4	13.6	17.0	19.4	20.5	19.6
Tu	16.8	13.0	9.3	5.9	3.3	2.5	4.3	7.5	10.8	13.8	16.1	17.0
28	16.0	13.6	11.0	8.6	6.5	5.6	6.9	9.9	13.1	16.0	18.3	19.5
W	18.9	16.7	13.5	10.2	6.8	3.7	2.4	3.5	6.1	9.1	12.3	15.2
29	16.6	16.3	14.6	12.6	10.4	8.1	6.7	7.3	9.6	12.3	15.1	17.6
Th	19.1	18.8	16.9	14.2	10.9	7.2	3.6	1.8	2.5	4.8	7.9	11.7
30	15.1	17.1	17.1	15.8	13.9	11.5	8.7	6.8	7.1	9.0	11.6	14.6
F	17.5	19.2	19.1	17.3	14.5	11.0	6.7	2.7	0.7	1.5	4.0	7.8
31	12.1	16.0	18.0	18.1	16.7	14.6	11.6	8.3	6.1	6.4	8.5	11.5
Sa	14.9	18.1	19.7	19.4	17.3	14.2	10.2	5.5	1.3	-0.3	1.0	4.2

Time meridian 135° W. 0 is midnight. 12 is noon.
Heights are referred to mean lower low water (N.O.S. chart datum).

Lat. 60° 41 N Long. 151° 24 W

FEBRUARY

Predicted hourly heights in feet

Day	Hours 0/12	Hours 1/13	Hours 2/14	Hours 3/15	Hours 4/16	Hours 5/17	Hours 6/18	Hours 7/19	Hours 8/20	Hours 9/21	Hours 10/22	Hours 11/23
1	8.7	13.5	17.4	19.2	18.8	17.0	14.3	10.7	7.0	5.1	5.9	8.6
Su	12.1	15.9	19.1	20.4	19.5	16.8	13.2	8.7	3.7	-0.2	-0.9	1.4
2	5.5	10.6	15.6	19.0	20.1	19.0	16.4	13.0	9.0	5.4	4.1	5.9
M	9.3	13.4	17.4	20.2	20.7	19.0	15.6	11.4	6.5	1.6	-1.3	-0.7
3	2.8	7.7	13.1	17.8	20.4	20.5	18.3	15.0	11.1	6.9	3.8	3.6
Tu	6.5	10.8	15.2	19.0	21.0	20.6	17.9	13.8	9.1	4.1	-0.1	-1.7
4	0.4	5.1	10.5	15.8	19.7	21.2	20.1	17.0	13.0	8.7	4.7	2.6
W	3.9	7.9	12.7	17.0	20.2	21.3	19.8	16.2	11.5	6.6	2.0	-1.2
5	-1.1	2.6	8.1	13.6	18.2	21.0	21.3	19.0	15.1	10.6	6.4	3.0
Th	2.2	4.9	9.7	14.6	18.5	20.9	20.9	18.5	14.1	9.1	4.3	0.5
6	-1.3	0.6	5.5	11.3	16.3	19.9	21.5	20.6	17.3	12.8	8.3	4.4
F	2.1	2.6	6.5	11.7	16.2	19.4	20.8	19.9	16.7	11.9	6.9	2.7
7	0.0	-0.2	3.1	8.7	14.2	18.3	20.8	21.2	19.2	15.3	10.5	6.3
Sa	3.2	2.0	3.8	8.3	13.3	17.2	19.5	20.0	18.4	14.7	9.9	5.4
8	2.1	0.6	1.9	6.1	11.7	16.4	19.4	20.8	20.2	17.4	13.1	8.6
Su	5.0	2.8	2.7	5.3	9.9	14.3	17.3	18.8	18.7	16.6	12.8	8.4
9	4.7	2.6	2.3	4.5	9.1	14.1	17.7	19.6	20.0	18.7	15.5	11.3
M	7.3	4.6	3.2	3.8	6.7	10.9	14.5	16.6	17.6	17.2	15.0	11.5
10	7.7	5.1	3.9	4.4	7.1	11.4	15.5	18.1	19.1	18.9	17.1	13.9
Tu	10.1	6.8	4.8	4.0	4.7	7.5	11.1	13.8	15.5	16.2	15.8	13.9
11	10.9	8.0	6.3	5.7	6.5	9.1	12.9	16.1	17.7	18.2	17.7	15.9
W	12.9	9.6	7.0	5.4	4.6	5.2	7.5	10.5	12.7	14.2	15.2	15.1
12	13.6	11.2	9.0	7.8	7.4	8.0	10.2	13.4	15.8	17.0	17.4	17.0
Th	15.4	12.7	9.8	7.5	5.8	4.7	4.9	6.8	9.4	11.5	13.3	14.7
13	15.1	14.1	12.2	10.3	9.1	8.4	8.5	10.3	13.0	15.2	16.5	17.2
F	17.0	15.6	13.0	10.2	7.8	5.6	3.9	3.7	5.5	8.2	10.7	13.2
14	15.2	16.0	15.2	13.3	11.4	9.7	8.4	8.0	9.6	12.3	14.7	16.5
Sa	17.7	17.8	16.4	13.7	10.5	7.5	4.6	2.3	2.1	4.2	7.4	10.7
15	14.0	16.6	17.5	16.4	14.2	11.7	9.3	7.3	6.7	8.5	11.7	14.8
Su	17.3	19.0	19.2	17.4	14.2	10.4	6.6	2.9	0.3	0.4	3.2	7.4
16	11.8	15.8	18.5	19.1	17.5	14.5	11.2	8.0	5.4	4.9	7.4	11.4
M	15.5	18.8	20.7	20.6	18.2	14.2	9.6	4.9	0.7	-1.8	-0.9	3.1
17	8.4	13.7	18.1	20.6	20.5	17.9	14.0	9.8	5.8	3.0	3.1	6.6
Tu	11.8	16.7	20.6	22.5	21.8	18.6	13.7	8.2	2.9	-1.6	-3.5	-1.3
18	4.0	10.4	16.2	20.6	22.4	21.2	17.6	12.8	7.8	3.3	0.7	1.8
W	6.6	12.7	18.3	22.3	23.8	22.3	18.2	12.5	6.5	0.8	-3.4	-4.2
19	-0.6	6.0	13.0	18.9	22.7	23.6	21.3	16.7	11.0	5.5	0.9	-1.1
Th	1.2	7.1	14.0	19.8	23.5	24.4	22.1	17.3	11.1	4.7	-0.8	-4.3
20	-3.8	1.2	8.6	15.7	21.2	24.1	23.9	20.6	15.1	9.0	3.3	-1.0
F	-2.0	1.5	8.2	15.2	20.7	23.9	24.1	21.2	15.9	9.5	3.3	-1.7
21	-4.1	-2.2	3.8	11.4	18.0	22.7	24.6	23.4	19.3	13.4	7.1	1.7
Sa	-1.9	-2.0	2.4	9.3	15.9	20.8	23.4	23.1	19.8	14.3	8.2	2.6
22	-1.5	-2.7	0.3	6.7	13.8	19.5	23.2	24.2	22.2	17.6	11.7	5.8
Su	0.9	-1.8	-1.0	3.7	10.1	16.0	20.1	22.1	21.4	18.1	12.9	7.4
23	2.8	-0.2	-0.4	3.2	9.4	15.4	20.0	22.6	22.9	20.5	16.0	10.5
M	5.3	1.2	-0.8	0.4	4.8	10.4	15.2	18.7	20.3	19.6	16.5	12.0
24	7.6	4.0	1.9	2.4	5.9	11.2	16.0	19.4	21.3	21.2	18.8	14.7
Tu	10.0	5.7	2.4	0.7	1.8	5.5	10.0	13.8	16.8	18.3	17.9	15.4
25	11.9	8.6	6.0	4.4	4.9	7.9	12.0	15.5	18.1	19.6	19.5	17.5
W	14.0	10.3	6.8	3.9	2.2	2.8	5.6	8.9	12.1	14.9	16.7	16.7
26	15.1	12.6	10.2	8.1	6.6	6.7	8.8	11.7	14.3	16.5	18.0	18.2
Th	16.7	14.1	11.2	8.2	5.3	3.1	3.1	5.0	7.6	10.4	13.5	15.7
27	16.4	15.5	13.8	11.9	9.9	8.0	7.4	8.7	10.7	12.8	15.0	16.9
F	17.6	16.7	14.7	12.2	9.4	6.0	3.3	2.7	4.0	6.3	9.4	12.9
28	15.7	16.8	16.4	15.0	13.2	10.8	8.3	7.1	7.8	9.5	11.7	14.3
Sa	16.7	17.7	17.2	15.4	13.0	9.7	5.8	2.7	1.9	3.1	5.7	9.3

Time meridian 135° W. 0 is midnight. 12 is noon.
Heights are referred to mean lower low water (N.O.S. chart datum).

NIKISKI, ALASKA, 2015

Lat. 60° 41 N Long. 151° 24 W

MARCH

Predicted hourly heights in feet

Day	Hours 0/12	Hours 1/13	Hours 2/14	Hours 3/15	Hours 4/16	Hours 5/17	Hours 6/18	Hours 7/19	Hours 8/20	Hours 9/21	Hours 10/22	Hours 11/23
1	13.4	16.5	17.8	17.4	15.9	13.7	10.6	7.5	6.0	6.7	8.6	11.3
Su	14.5	17.2	18.4	17.8	15.8	12.9	9.1	4.7	1.6	1.1	2.8	6.1
2	10.4	14.8	17.9	18.9	18.0	15.9	13.0	9.2	5.9	4.7	5.9	8.5
M	11.9	15.6	18.4	19.2	18.0	15.5	12.0	7.6	3.0	0.4	0.8	3.5
3	7.6	12.4	16.9	19.4	19.6	17.8	15.0	11.3	7.1	4.0	3.7	5.9
Tu	9.3	13.4	17.3	19.6	19.7	17.6	14.3	10.1	5.4	1.2	-0.4	1.4
4	5.2	10.0	15.1	18.9	20.5	19.5	16.8	13.1	8.8	4.7	2.4	3.3
W	6.7	11.0	15.4	19.0	20.5	19.5	16.5	12.4	7.8	3.1	-0.2	-0.2
5	3.0	7.9	13.1	17.7	20.6	20.8	18.6	14.9	10.5	6.1	2.4	1.4
Th	3.9	8.4	13.2	17.5	20.4	20.8	18.7	14.7	10.0	5.3	1.2	-0.7
6	1.0	5.7	11.1	16.1	19.9	21.4	20.3	16.9	12.4	7.7	3.5	0.9
F	1.4	5.3	10.6	15.5	19.2	21.1	20.3	17.1	12.5	7.6	3.2	0.1
7	-0.1	3.3	8.9	14.4	18.7	21.2	21.4	18.9	14.6	9.7	5.1	1.6
Sa	0.2	2.4	7.4	12.9	17.3	20.2	20.9	19.1	15.2	10.2	5.4	1.8
8	0.1	1.6	6.4	12.3	17.1	20.3	21.5	20.4	16.9	12.0	7.1	3.1
Su	0.6	0.6	4.1	9.6	14.7	18.4	20.3	20.0	17.5	13.1	8.2	4.1
9	1.5	1.3	4.1	9.6	15.1	19.0	20.9	20.9	18.7	14.6	9.6	5.1
M	1.9	0.5	1.8	6.0	11.5	15.8	18.5	19.6	18.6	15.6	11.2	6.8
10	3.7	2.3	3.3	7.0	12.5	17.1	19.8	20.5	19.6	16.7	12.4	7.7
Tu	4.0	1.8	1.3	3.4	7.8	12.6	16.0	17.9	18.4	17.1	14.0	10.0
11	6.4	4.3	3.9	5.6	9.6	14.5	18.0	19.5	19.5	17.9	14.9	10.7
W	6.7	3.8	2.4	2.5	4.8	8.8	12.8	15.4	16.8	17.0	15.7	13.0
12	9.6	6.9	5.7	5.8	7.7	11.3	15.4	17.9	18.6	18.2	16.5	13.6
Th	9.9	6.5	4.3	3.3	3.5	5.5	9.0	12.2	14.3	15.6	16.0	15.0
13	12.7	10.1	8.1	7.2	7.3	8.9	12.0	15.2	17.0	17.5	17.1	15.7
F	13.1	9.9	7.1	5.2	4.0	3.8	5.4	8.3	11.1	13.2	14.8	15.6
14	15.1	13.3	11.1	9.4	8.3	8.0	9.0	11.6	14.3	15.9	16.7	16.8
Sa	15.8	13.6	10.7	8.0	5.8	4.1	3.3	4.5	7.2	10.0	12.5	14.8
15	16.1	16.0	14.4	12.2	10.2	8.6	7.5	8.0	10.3	13.0	15.1	16.6
Su	17.3	16.7	14.6	11.7	8.6	5.8	3.3	2.0	3.1	6.0	9.4	12.8
16	15.8	17.5	17.4	15.5	12.9	10.3	7.7	6.0	6.3	8.8	12.0	14.9
M	17.3	18.6	18.1	15.8	12.4	8.7	5.1	1.8	0.3	1.8	5.5	9.8
17	14.0	17.6	19.4	18.8	16.3	12.8	9.3	5.9	3.6	4.2	7.5	11.6
Tu	15.6	18.8	20.4	19.7	16.8	12.6	8.1	3.6	-0.1	-1.3	1.1	5.8
18	11.2	16.2	19.9	21.2	19.8	16.3	11.9	7.4	3.3	1.1	2.4	6.7
W	12.0	17.0	20.7	22.1	20.8	17.1	12.1	6.8	1.8	-1.9	-2.3	1.4
19	7.3	13.5	18.8	22.2	22.6	20.1	15.5	10.2	4.9	0.5	-1.2	1.2
Th	6.8	13.1	18.6	22.4	23.3	21.2	16.7	11.0	5.2	0.0	-3.2	-2.3
20	2.7	9.6	16.2	21.3	23.9	23.2	19.5	14.1	8.0	2.3	-1.9	-2.7
F	1.0	7.6	14.5	20.1	23.5	23.8	20.9	15.7	9.6	3.6	-1.3	-3.5
21	-1.2	5.0	12.3	18.8	23.2	24.7	22.9	18.3	12.1	5.8	0.1	-3.5
Sa	-3.2	1.7	8.9	15.8	21.1	23.9	23.4	19.8	14.3	8.1	2.4	-1.7
22	-2.7	1.0	7.8	15.0	20.7	24.1	24.5	21.8	16.5	10.1	3.9	-1.3
Su	-4.1	-2.6	3.1	10.3	16.7	21.3	23.3	22.2	18.4	12.8	7.0	2.0
23	-1.1	-0.8	3.7	10.5	16.9	21.6	23.9	23.4	20.0	14.6	8.4	2.7
M	-1.7	-3.5	-1.1	4.7	11.3	16.9	20.7	22.1	20.7	16.8	11.6	6.5
24	2.5	0.4	1.6	6.4	12.6	17.8	21.4	22.8	21.7	18.1	12.9	7.3
Tu	2.5	-1.0	-2.0	0.8	6.1	11.7	16.3	19.4	20.4	18.9	15.4	10.9
25	6.8	3.8	2.5	4.2	8.6	13.7	17.6	20.2	21.0	19.6	16.3	11.7
W	7.1	3.2	0.5	0.0	2.5	7.0	11.4	15.1	17.8	18.7	17.4	14.5
26	11.0	7.9	5.7	4.8	6.4	9.9	13.7	16.5	18.3	18.9	17.8	15.0
Th	11.3	7.7	4.6	2.3	1.8	3.7	7.1	10.5	13.6	16.1	17.2	16.5
27	14.3	11.7	9.5	7.6	6.6	7.6	10.1	12.7	14.8	16.4	17.2	16.5
F	14.5	11.7	8.9	6.3	3.9	3.0	4.2	6.6	9.4	12.3	15.0	16.5
28	16.3	14.8	12.9	11.0	9.0	7.5	7.8	9.4	11.2	13.0	14.9	16.2
Sa	16.1	14.7	12.6	10.2	7.5	4.8	3.4	4.0	5.9	8.4	11.5	14.6
29	16.5	16.7	15.6	14.0	11.9	9.4	7.3	7.0	8.1	9.7	11.8	14.2
Su	16.0	16.4	15.4	13.5	11.1	8.0	4.8	3.0	3.4	5.3	8.1	11.7
30	15.2	17.3	17.6	16.4	14.5	11.9	8.7	6.2	5.7	6.8	8.8	11.5
M	14.5	16.7	17.2	16.1	14.0	11.1	7.5	3.9	2.3	3.0	5.3	8.7
31	12.9	16.5	18.4	18.3	16.6	14.1	10.8	7.0	4.5	4.4	6.0	8.7
Tu	12.2	15.7	17.9	18.0	16.3	13.7	10.2	6.1	2.7	1.7	3.2	6.3

Time meridian 135° W. 0 is midnight. 12 is noon.
Heights are referred to mean lower low water (N.O.S. chart datum).

Lat. 60° 41 N Long. 151° 24 W

APRIL

Predicted hourly heights in feet

Day	Hours 0/12	Hours 1/13	Hours 2/14	Hours 3/15	Hours 4/16	Hours 5/17	Hours 6/18	Hours 7/19	Hours 8/20	Hours 9/21	Hours 10/22	Hours 11/23
1	10.4	14.9	18.3	19.5	18.5	16.0	12.7	8.7	4.8	2.7	3.5	6.1
W	9.8	13.9	17.4	19.0	18.3	15.9	12.5	8.6	4.4	1.5	1.6	4.3
2	8.3	12.9	17.2	19.8	19.9	17.8	14.4	10.4	6.1	2.4	1.4	3.5
Th	7.2	11.6	16.0	19.0	19.7	18.0	14.7	10.7	6.5	2.6	0.9	2.5
3	6.4	11.2	15.8	19.4	20.8	19.5	16.3	12.1	7.6	3.3	0.5	1.0
F	4.4	9.2	14.0	18.0	20.2	19.8	17.0	12.9	8.6	4.4	1.3	1.1
4	4.3	9.3	14.3	18.4	20.9	20.8	18.3	14.1	9.3	4.7	0.9	-0.6
Sa	1.5	6.3	11.6	16.3	19.6	20.7	19.1	15.4	10.8	6.4	2.8	0.9
5	2.4	7.0	12.5	17.2	20.4	21.5	20.0	16.3	11.4	6.5	2.2	-0.7
Su	-0.6	3.0	8.6	14.0	18.1	20.4	20.4	17.8	13.5	8.8	4.7	1.9
6	1.5	4.6	10.1	15.5	19.4	21.3	21.1	18.4	13.9	8.7	4.0	0.4
M	-1.3	0.3	5.0	10.9	15.8	19.1	20.4	19.5	16.2	11.6	7.1	3.7
7	2.0	3.0	7.2	13.0	17.8	20.6	21.3	19.9	16.4	11.5	6.4	2.2
Tu	-0.5	-0.9	1.8	7.2	12.8	16.9	19.3	19.8	18.1	14.6	10.1	6.1
8	3.6	3.0	5.1	9.9	15.3	19.1	20.7	20.4	18.2	14.3	9.4	4.7
W	1.4	-0.3	0.2	3.6	9.0	13.9	17.1	18.8	18.7	16.8	13.2	9.1
9	5.9	4.2	4.5	7.2	12.0	16.6	19.3	20.0	19.0	16.5	12.5	8.0
Th	4.0	1.4	0.5	1.6	5.2	10.1	14.1	16.6	17.8	17.6	15.6	12.3
10	8.9	6.4	5.4	6.0	8.8	13.1	16.8	18.6	18.8	17.7	15.1	11.5
F	7.4	4.2	2.2	1.6	2.7	6.1	10.3	13.6	15.8	16.9	16.8	15.1
11	12.2	9.3	7.4	6.6	7.1	9.5	13.1	16.1	17.4	17.6	16.7	14.5
Sa	11.3	7.8	5.0	3.2	2.4	3.3	6.1	9.8	12.8	15.0	16.4	16.6
12	15.2	12.7	10.2	8.3	7.2	7.2	9.1	12.1	14.7	16.1	16.7	16.4
Su	14.7	11.9	8.7	6.1	4.0	2.7	3.1	5.6	9.0	12.1	14.7	16.6
13	17.2	16.0	13.6	11.0	8.7	6.9	6.3	7.7	10.5	13.2	15.2	16.6
M	16.9	15.6	13.0	9.9	6.9	4.2	2.3	2.3	4.8	8.4	11.9	15.2
14	17.7	18.4	17.0	14.4	11.3	8.3	5.6	4.4	5.7	8.8	12.1	15.1
Tu	17.4	18.2	17.0	14.2	10.7	7.1	3.7	1.3	1.3	4.2	8.3	12.7
15	16.7	19.4	19.8	18.0	14.7	10.8	6.9	3.5	2.0	3.7	7.5	11.8
W	15.8	18.7	19.7	18.4	15.1	11.0	6.7	2.6	0.0	0.5	4.2	9.2
16	14.3	18.7	21.3	21.1	18.4	14.2	9.5	4.7	0.8	-0.3	2.1	6.9
Th	12.2	17.1	20.4	21.2	19.2	15.3	10.6	5.7	1.3	-1.0	0.4	5.0
17	10.9	16.6	21.0	22.9	21.8	18.1	13.0	7.5	2.2	-1.7	-2.2	1.4
F	7.2	13.4	18.7	21.9	22.1	19.5	14.9	9.7	4.5	0.1	-1.5	1.1
18	6.7	13.2	19.0	22.9	23.9	21.7	17.1	11.2	5.2	-0.3	-3.7	-3.2
Sa	1.6	8.3	14.9	20.1	22.8	22.4	19.0	14.0	8.5	3.3	-0.6	-1.1
19	2.6	9.0	15.7	21.0	24.0	23.9	20.8	15.4	9.2	3.0	-2.2	-4.8
Su	-3.0	2.7	9.8	16.3	21.1	23.1	21.9	18.1	12.8	7.3	2.5	-0.6
20	0.0	4.8	11.5	17.7	22.2	24.2	23.1	19.2	13.5	7.2	1.3	-3.3
M	-4.8	-1.9	4.3	11.3	17.3	21.3	22.6	20.9	16.8	11.6	6.5	2.2
21	0.2	1.9	7.2	13.6	18.9	22.4	23.4	21.6	17.3	11.6	5.7	0.4
Tu	-3.3	-3.8	-0.1	6.2	12.5	17.6	20.9	21.6	19.5	15.4	10.6	6.1
22	2.7	1.6	4.1	9.4	14.9	19.1	21.6	21.9	19.6	15.3	10.0	4.8
W	0.4	-2.4	-2.0	2.0	7.7	13.1	17.3	19.9	20.2	18.1	14.3	10.1
23	6.4	3.8	3.5	6.2	10.9	15.3	18.4	20.1	19.9	17.7	13.7	9.0
Th	4.7	1.2	-0.7	0.1	3.9	8.7	13.0	16.5	18.7	18.9	16.9	13.6
24	10.1	7.2	5.3	5.2	7.7	11.4	14.7	16.9	18.2	18.0	16.0	12.6
F	8.8	5.4	2.7	1.2	2.0	5.2	9.0	12.4	15.5	17.5	17.8	16.1
25	13.4	10.7	8.4	6.7	6.5	8.4	11.1	13.4	15.2	16.4	16.5	14.9
Sa	12.3	9.3	6.7	4.3	2.8	3.4	5.8	8.7	11.7	14.6	16.7	17.1
26	15.9	13.7	11.5	9.4	7.5	6.9	8.1	10.0	11.8	13.6	15.1	15.6
Su	14.6	12.6	10.2	7.9	5.5	3.8	4.0	5.9	8.3	11.1	14.1	16.5
27	17.1	16.2	14.3	12.2	9.9	7.5	6.5	7.1	8.6	10.4	12.5	14.6
M	15.5	14.9	13.2	11.2	8.8	6.1	4.1	4.1	5.8	8.1	11.2	14.5
28	16.9	17.6	16.6	14.7	12.3	9.4	6.6	5.3	5.8	7.4	9.6	12.4
Tu	14.9	16.1	15.6	13.9	11.7	9.0	5.9	3.9	4.0	5.8	8.6	12.0
29	15.5	17.9	18.2	16.8	14.5	11.6	8.1	5.0	3.7	4.7	6.8	9.7
W	13.1	15.9	17.0	16.2	14.2	11.5	8.4	5.1	3.4	4.1	6.5	9.8
30	13.6	17.1	18.9	18.6	16.5	13.4	9.9	6.0	2.9	2.3	4.1	7.1
Th	10.8	14.6	17.3	17.9	16.5	13.8	10.6	7.1	4.0	3.0	4.7	7.9

Time meridian 135° W. 0 is midnight. 12 is noon.
Heights are referred to mean lower low water (N.O.S. chart datum).

NIKISKI, ALASKA, 2015

Lat. 60° 41 N Long. 151° 24 W

MAY

Predicted hourly heights in feet

Day	Hours 0/12	Hours 1/13	Hours 2/14	Hours 3/15	Hours 4/16	Hours 5/17	Hours 6/18	Hours 7/19	Hours 8/20	Hours 9/21	Hours 10/22	Hours 11/23
1	11.8	15.7	18.8	19.7	18.4	15.3	11.6	7.6	3.5	1.0	1.5	4.4
F	8.3	12.6	16.5	18.7	18.4	16.1	12.8	9.2	5.6	3.1	3.2	6.0
2	10.1	14.3	18.0	20.1	19.9	17.4	13.5	9.2	4.8	1.1	-0.3	1.5
Sa	5.6	10.3	14.8	18.3	19.5	18.3	15.1	11.3	7.5	4.2	2.6	4.0
3	8.1	12.8	16.9	19.9	20.8	19.3	15.7	11.1	6.5	2.2	-0.8	-0.9
Su	2.5	7.5	12.6	16.9	19.6	19.8	17.6	13.8	9.6	5.9	3.1	2.7
4	5.7	10.7	15.5	19.1	21.0	20.7	17.9	13.5	8.5	3.8	0.0	-2.0
M	-0.5	4.2	9.9	14.9	18.6	20.3	19.5	16.4	12.2	8.0	4.6	2.7
5	3.6	7.8	13.3	17.9	20.6	21.4	19.8	16.1	11.1	6.0	1.6	-1.5
Tu	-2.2	0.7	6.3	12.1	16.7	19.5	20.3	18.7	15.1	10.6	6.6	3.8
6	2.9	5.1	10.1	15.7	19.5	21.2	20.9	18.4	14.1	8.9	3.9	0.0
W	-2.2	-1.6	2.4	8.4	13.9	17.7	19.8	19.8	17.6	13.7	9.3	5.7
7	3.6	3.7	6.8	12.2	17.3	20.2	21.0	19.9	16.8	12.2	7.0	2.5
Th	-0.7	-1.9	-0.4	4.3	10.2	15.0	18.1	19.5	19.0	16.5	12.5	8.5
8	5.4	4.0	4.8	8.4	13.7	17.9	20.0	20.2	18.6	15.3	10.7	5.9
F	2.0	-0.5	-1.1	1.1	5.9	11.3	15.4	17.9	19.0	18.2	15.6	11.8
9	8.2	5.7	4.7	5.9	9.5	14.1	17.6	19.1	19.0	17.4	14.2	9.9
Sa	5.6	2.3	0.3	0.1	2.4	7.0	11.7	15.2	17.5	18.4	17.6	15.1
10	11.6	8.4	6.2	5.4	6.4	9.7	13.7	16.5	17.8	17.8	16.5	13.7
Su	9.8	6.0	3.2	1.4	1.2	3.3	7.4	11.6	14.8	17.1	18.2	17.5
11	15.1	11.8	8.9	6.7	5.5	6.1	8.9	12.4	15.0	16.5	17.0	16.2
M	13.8	10.4	7.0	4.4	2.4	1.9	3.7	7.4	11.3	14.6	17.1	18.4
12	17.9	15.5	12.3	9.3	6.7	4.9	5.0	7.4	10.7	13.5	15.6	16.9
Tu	16.6	14.6	11.5	8.2	5.3	3.0	2.0	3.7	7.2	11.2	14.8	17.7
13	19.2	18.6	16.2	12.7	9.3	6.0	3.5	3.2	5.5	9.0	12.4	15.4
W	17.4	17.5	15.7	12.6	9.2	5.9	3.0	1.8	3.5	7.2	11.5	15.6
14	18.9	20.4	19.5	16.6	12.7	8.6	4.5	1.5	1.2	3.8	7.8	12.0
Th	15.9	18.4	18.7	16.8	13.4	9.6	5.9	2.6	1.4	3.4	7.7	12.5
15	17.1	20.5	21.6	20.1	16.6	12.0	7.2	2.5	-0.8	-0.8	2.5	7.4
F	12.5	17.0	19.7	19.8	17.5	13.7	9.5	5.3	1.9	1.1	3.8	8.7
16	14.1	18.8	22.0	22.5	20.2	15.9	10.7	5.3	0.2	-2.8	-2.0	2.1
Sa	7.8	13.6	18.4	20.9	20.5	17.7	13.5	9.0	4.5	1.3	1.2	4.8
17	10.3	15.9	20.6	23.1	22.7	19.6	14.6	8.9	3.2	-1.8	-4.2	-2.4
Su	2.7	9.0	15.1	19.7	21.7	20.6	17.3	12.8	8.1	3.7	1.0	1.8
18	6.3	12.2	17.7	21.8	23.5	22.2	18.3	12.9	7.0	1.3	-3.3	-4.8
M	-1.9	4.0	10.6	16.5	20.6	21.9	20.3	16.5	11.8	7.1	3.0	1.1
19	3.0	8.1	14.1	19.1	22.4	23.1	21.0	16.6	11.0	5.2	-0.2	-4.1
Tu	-4.3	-0.4	5.9	12.3	17.7	21.0	21.6	19.4	15.4	10.8	6.3	2.8
20	1.8	4.6	10.0	15.5	19.8	22.2	22.1	19.4	14.8	9.2	3.8	-1.0
W	-3.9	-3.0	1.6	7.8	13.7	18.3	20.9	20.9	18.3	14.3	9.8	5.8
21	3.0	2.9	6.3	11.5	16.3	19.7	21.2	20.6	17.6	13.0	7.8	2.9
Th	-1.0	-2.9	-1.1	3.8	9.5	14.5	18.4	20.4	19.9	17.1	13.2	9.2
22	5.7	3.7	4.3	7.9	12.5	16.3	18.8	19.8	18.9	15.8	11.4	6.8
F	2.7	-0.3	-1.2	1.1	5.8	10.7	14.9	18.1	19.5	18.8	16.0	12.4
23	8.9	6.1	4.6	5.6	8.9	12.7	15.6	17.5	18.2	17.2	14.3	10.4
Sa	6.5	3.3	1.0	0.7	3.2	7.2	11.3	14.8	17.5	18.7	17.8	15.2
24	12.0	9.0	6.7	5.5	6.5	9.3	12.2	14.4	16.0	16.7	15.8	13.3
Su	10.0	6.9	4.3	2.5	2.5	4.8	8.2	11.5	14.5	16.9	18.0	17.1
25	14.7	11.9	9.4	7.3	6.1	6.8	8.9	11.1	13.0	14.7	15.6	14.9
M	12.9	10.2	7.7	5.5	3.9	3.9	5.9	8.7	11.5	14.3	16.6	17.6
26	16.7	14.6	12.1	9.7	7.4	6.0	6.4	8.0	9.9	11.8	13.8	15.0
Tu	14.7	13.0	10.8	8.6	6.5	4.9	4.8	6.5	9.0	11.6	14.4	16.7
27	17.6	16.7	14.6	12.1	9.6	6.9	5.2	5.4	6.9	8.8	11.1	13.6
W	15.1	15.0	13.5	11.4	9.3	7.1	5.3	5.2	6.9	9.4	12.1	15.0
28	17.3	18.0	16.8	14.4	11.7	8.7	5.7	3.9	4.2	6.0	8.3	11.2
Th	14.1	15.8	15.7	14.1	11.9	9.5	7.0	5.2	5.4	7.4	10.2	13.2
29	16.1	18.2	18.3	16.6	13.8	10.6	7.2	4.0	2.3	3.2	5.6	8.6
F	12.1	15.3	16.8	16.4	14.3	11.8	9.1	6.5	4.9	5.7	8.3	11.5
30	14.7	17.6	19.1	18.5	16.0	12.5	8.9	5.1	1.9	0.9	2.7	5.9
Sa	9.8	13.7	16.8	17.8	16.7	14.2	11.2	8.3	5.6	4.6	6.2	9.6
31	13.3	16.7	19.1	19.7	18.1	14.8	10.7	6.7	2.7	0.0	0.0	2.9
Su	7.1	11.6	15.6	18.2	18.5	16.6	13.5	10.2	7.0	4.7	4.5	7.2

Time meridian 135° W. 0 is midnight. 12 is noon.
Heights are referred to mean lower low water (N.O.S. chart datum).

Lat. 60° 41 N Long. 151° 24 W

JUNE

Predicted hourly heights in feet

Day	Hours 0/12	Hours 1/13	Hours 2/14	Hours 3/15	Hours 4/16	Hours 5/17	Hours 6/18	Hours 7/19	Hours 8/20	Hours 9/21	Hours 10/22	Hours 11/23
1	11.4	15.4	18.6	20.3	19.8	17.2	13.1	8.5	4.2	0.4	-1.6	-0.2
M	3.9	9.0	13.7	17.5	19.4	18.8	16.1	12.5	8.9	5.7	3.9	4.9
2	8.7	13.5	17.6	20.2	21.0	19.4	15.8	11.0	6.2	1.8	-1.6	-2.4
Tu	0.4	5.6	11.1	15.8	19.0	20.0	18.5	15.2	11.2	7.4	4.5	3.5
3	5.7	10.5	15.6	19.4	21.3	21.0	18.5	14.1	8.9	3.9	-0.3	-2.9
W	-2.4	1.7	7.7	13.3	17.6	20.0	20.2	17.9	14.1	9.8	6.1	3.6
4	3.5	6.9	12.3	17.4	20.5	21.6	20.5	17.3	12.4	6.9	2.0	-1.7
Th	-3.4	-1.7	3.5	9.8	15.1	18.8	20.5	19.9	17.1	12.8	8.5	5.0
5	3.1	4.0	8.2	13.9	18.5	21.0	21.4	19.7	15.9	10.7	5.3	0.7
F	-2.4	-3.1	-0.3	5.4	11.6	16.4	19.4	20.6	19.4	16.1	11.7	7.5
6	4.4	3.1	4.7	9.3	14.8	18.8	20.7	20.6	18.6	14.6	9.4	4.3
Sa	0.2	-2.2	-2.1	1.4	7.2	12.9	17.1	19.6	20.3	18.7	15.2	10.8
7	6.9	4.2	3.4	5.4	10.0	14.9	18.3	19.8	19.6	17.4	13.5	8.6
Su	4.0	0.6	-1.3	-0.6	3.1	8.6	13.7	17.4	19.6	19.9	18.1	14.6
8	10.3	6.7	4.3	3.7	5.7	9.9	14.2	17.1	18.5	18.4	16.5	12.9
M	8.5	4.5	1.6	0.1	0.9	4.5	9.6	14.0	17.3	19.4	19.6	17.8
9	14.3	10.3	6.9	4.5	3.7	5.3	9.0	12.8	15.5	17.2	17.5	16.0
Tu	12.9	9.0	5.6	3.0	1.5	2.2	5.5	10.0	14.1	17.3	19.3	19.6
10	17.7	14.3	10.6	7.2	4.5	3.2	4.4	7.6	11.1	14.0	16.2	17.1
W	16.1	13.4	10.1	6.9	4.3	2.6	3.1	6.1	10.2	14.1	17.4	19.6
11	19.8	18.0	14.6	10.8	7.2	3.9	2.1	2.9	5.9	9.5	12.8	15.7
Th	17.2	16.6	14.4	11.3	8.2	5.3	3.3	3.5	6.4	10.4	14.3	17.8
12	20.1	20.4	18.3	14.8	10.8	6.6	2.8	0.5	1.3	4.4	8.3	12.4
F	15.9	17.8	17.5	15.3	12.3	9.0	5.8	3.5	3.7	6.6	10.7	14.9
13	18.7	20.9	20.9	18.5	14.7	10.2	5.6	1.2	-1.2	-0.2	3.4	7.9
Sa	12.7	16.7	18.8	18.4	16.1	12.8	9.3	5.7	3.3	3.7	7.0	11.4
14	15.9	19.7	21.7	21.2	18.3	14.0	9.1	4.0	-0.6	-2.6	-1.0	3.2
Su	8.4	13.7	17.9	19.8	19.0	16.4	12.8	9.0	5.1	2.9	3.9	7.7
15	12.5	17.2	20.8	22.3	21.0	17.6	12.8	7.6	2.3	-2.2	-3.5	-1.0
M	3.9	9.7	15.2	19.2	20.5	19.2	16.1	12.3	8.2	4.4	2.6	4.4
16	8.8	13.9	18.5	21.6	22.3	20.3	16.3	11.3	5.9	0.5	-3.4	-3.7
Tu	-0.2	5.5	11.5	16.8	20.2	20.9	18.9	15.4	11.3	7.1	3.6	2.6
17	5.3	10.2	15.3	19.5	21.9	21.8	19.2	14.7	9.5	4.1	-0.9	-3.9
W	-3.0	1.5	7.5	13.4	18.2	20.8	20.7	18.2	14.4	10.1	6.0	3.0
18	3.0	6.5	11.7	16.4	20.0	21.7	20.8	17.6	12.9	7.7	2.5	-1.8
Th	-3.6	-1.5	3.7	9.7	15.1	19.2	21.0	20.1	17.1	13.0	8.8	5.0
19	2.9	3.9	8.0	13.0	17.2	20.0	20.9	19.5	15.9	11.1	6.1	1.5
F	-1.9	-2.5	0.7	6.1	11.6	16.3	19.6	20.7	19.2	15.8	11.7	7.7
20	4.5	3.2	5.1	9.3	13.8	17.3	19.4	19.8	17.9	14.2	9.4	4.9
Sa	1.0	-1.3	-0.7	3.1	8.3	13.2	17.1	19.6	20.0	18.1	14.5	10.5
21	7.0	4.4	3.9	6.2	10.3	14.1	16.8	18.4	18.4	16.3	12.6	8.2
Su	4.3	1.4	0.1	1.5	5.4	10.1	14.2	17.4	19.2	19.1	16.8	13.3
22	9.7	6.7	4.8	4.7	7.2	10.7	13.8	15.9	17.2	17.0	14.9	11.4
M	7.6	4.5	2.4	1.8	3.7	7.4	11.4	14.7	17.3	18.7	18.1	15.8
23	12.4	9.3	6.8	5.2	5.4	7.6	10.5	12.9	14.8	15.9	15.7	13.8
Tu	10.8	7.7	5.4	3.8	3.6	5.6	8.9	12.2	14.9	17.0	18.1	17.3
24	15.0	11.9	9.2	7.0	5.5	5.6	7.4	9.8	11.9	13.7	15.0	15.0
W	13.4	10.8	8.3	6.5	5.2	5.2	7.0	9.9	12.6	14.9	16.8	17.6
25	16.8	14.5	11.7	9.2	7.0	5.3	5.2	6.8	8.8	10.8	12.9	14.5
Th	14.8	13.5	11.3	9.2	7.6	6.3	6.2	7.9	10.5	12.9	15.0	16.9
26	17.6	16.6	14.2	11.5	8.9	6.4	4.5	4.3	5.8	8.0	10.3	12.8
F	14.7	15.2	14.0	12.0	10.0	8.3	6.8	6.7	8.4	10.9	13.3	15.6
27	17.3	17.8	16.5	14.0	11.0	8.2	5.3	3.2	3.1	4.9	7.5	10.4
Sa	13.4	15.6	16.0	14.7	12.6	10.4	8.4	6.7	6.7	8.7	11.5	14.1
28	16.5	18.2	18.2	16.4	13.4	10.1	6.8	3.5	1.5	2.0	4.5	7.8
Su	11.3	14.7	16.8	16.9	15.2	12.7	10.2	7.8	6.2	6.6	9.1	12.4
29	15.4	17.9	19.2	18.5	16.0	12.4	8.6	4.8	1.5	-0.1	1.3	4.7
M	8.8	12.9	16.4	18.1	17.6	15.3	12.3	9.4	6.8	5.3	6.5	9.9
30	13.8	17.1	19.4	20.1	18.6	15.2	11.0	6.7	2.6	-0.6	-1.4	1.2
Tu	5.7	10.5	15.0	18.2	19.2	17.9	14.9	11.4	8.1	5.4	4.5	6.6

Time meridian 135° W. 0 is midnight. 12 is noon.
Heights are referred to mean lower low water (N.O.S. chart datum).

NIKISKI, ALASKA, 2015

Lat. 60° 41 N Long. 151° 24 W

JULY

Predicted hourly heights in feet

Day	Hours 0/12	Hours 1/13	Hours 2/14	Hours 3/15	Hours 4/16	Hours 5/17	Hours 6/18	Hours 7/19	Hours 8/20	Hours 9/21	Hours 10/22	Hours 11/23
1	11.0	15.4	18.8	20.8	20.6	18.2	14.1	9.2	4.5	0.3	-2.5	-2.1
W	1.8	7.3	12.7	17.1	19.8	19.9	17.7	14.1	10.1	6.5	3.9	3.9
2	7.2	12.4	17.2	20.4	21.8	20.8	17.5	12.7	7.3	2.3	-1.7	-3.7
Th	-1.9	3.3	9.5	15.0	19.0	20.9	20.2	17.2	12.9	8.5	4.8	2.7
3	3.7	8.1	13.9	18.6	21.5	22.2	20.5	16.5	11.1	5.4	0.5	-3.2
F	-4.1	-0.9	5.2	11.7	17.0	20.4	21.5	20.0	16.3	11.5	6.9	3.4
4	1.9	3.9	9.1	15.1	19.6	22.0	22.1	19.8	15.3	9.5	3.9	-0.9
Sa	-3.8	-3.5	0.8	7.5	13.8	18.5	21.3	21.7	19.4	15.1	10.1	5.5
5	2.3	1.6	4.4	10.0	15.8	19.8	21.8	21.4	18.7	14.0	8.2	2.8
Su	-1.3	-3.4	-2.0	3.0	9.6	15.4	19.5	21.7	21.4	18.6	14.0	8.9
6	4.6	1.9	1.7	5.0	10.6	15.8	19.3	20.9	20.3	17.5	12.8	7.4
M	2.6	-0.8	-2.1	0.0	5.2	11.4	16.5	19.9	21.5	20.8	17.7	13.0
7	8.2	4.3	2.0	2.1	5.4	10.5	15.1	18.1	19.5	19.1	16.4	12.1
Tu	7.2	3.2	0.5	-0.2	2.1	7.1	12.5	16.9	19.8	21.1	20.1	16.9
8	12.5	8.1	4.5	2.3	2.3	5.3	9.7	13.6	16.5	18.1	17.9	15.6
W	11.9	7.9	4.6	2.3	1.8	4.0	8.4	13.1	16.8	19.4	20.5	19.5
9	16.5	12.4	8.4	5.0	2.6	2.3	4.6	8.4	11.9	14.8	16.8	17.1
Th	15.4	12.4	9.1	6.3	4.2	3.5	5.3	9.0	13.1	16.4	19.0	20.1
10	19.2	16.4	12.7	8.9	5.4	2.5	1.7	3.5	6.8	10.2	13.5	16.0
F	16.9	15.8	13.3	10.6	8.0	5.6	4.6	5.9	9.2	12.8	16.1	18.8
11	20.1	19.3	16.7	13.1	9.3	5.3	1.9	0.7	2.2	5.3	9.0	12.8
Sa	16.0	17.3	16.6	14.5	11.9	9.1	6.4	4.9	6.0	9.0	12.6	16.0
12	18.9	20.3	19.5	16.9	13.3	9.2	4.7	0.9	-0.5	1.1	4.4	8.6
Su	13.1	16.6	18.2	17.5	15.4	12.7	9.5	6.3	4.7	5.8	8.9	12.7
13	16.4	19.5	20.7	19.7	16.8	12.9	8.4	3.5	-0.5	-1.6	0.4	4.4
M	9.2	14.1	17.8	19.1	18.2	15.8	12.7	9.1	5.7	4.2	5.7	9.2
14	13.3	17.3	20.2	21.1	19.6	16.2	12.0	7.1	2.0	-1.8	-2.2	0.6
Tu	5.3	10.7	15.8	19.1	19.9	18.4	15.6	12.0	8.0	4.6	3.6	5.9
15	9.9	14.3	18.4	20.9	21.1	19.0	15.1	10.5	5.3	0.3	-2.8	-2.1
W	1.7	7.1	12.7	17.5	20.2	20.2	18.1	14.7	10.7	6.5	3.5	3.4
16	6.6	11.1	15.7	19.4	21.4	20.8	17.9	13.5	8.6	3.4	-1.2	-3.1
Th	-1.1	3.7	9.4	14.9	19.1	20.9	20.0	17.1	13.2	9.0	5.0	2.7
17	3.8	7.7	12.6	17.0	20.2	21.3	19.9	16.3	11.6	6.5	1.6	-2.1
F	-2.5	0.8	6.3	12.0	16.9	20.3	21.0	19.2	15.7	11.4	7.2	3.6
18	2.4	4.6	9.3	14.1	18.1	20.5	20.8	18.6	14.5	9.5	4.6	0.3
Sa	-2.1	-1.1	3.3	9.0	14.3	18.5	20.8	20.6	18.0	13.9	9.5	5.6
19	2.8	2.8	6.0	10.8	15.3	18.5	20.2	19.7	16.9	12.5	7.6	3.2
Su	-0.1	-1.2	1.1	6.2	11.6	16.1	19.4	20.7	19.6	16.4	12.1	7.9
20	4.6	2.7	3.7	7.4	12.1	15.9	18.4	19.4	18.3	15.1	10.7	6.2
M	2.6	0.3	0.5	3.8	8.9	13.7	17.3	19.6	20.0	18.2	14.7	10.5
21	6.8	4.2	3.2	4.8	8.7	12.8	15.8	17.7	18.2	16.8	13.5	9.3
Tu	5.5	2.9	1.7	2.8	6.5	11.2	15.0	17.7	19.2	19.0	16.8	13.1
22	9.3	6.3	4.3	4.0	5.9	9.4	12.8	15.1	16.6	16.8	15.3	12.2
W	8.6	5.7	4.0	3.5	5.1	8.8	12.7	15.6	17.6	18.5	17.8	15.4
23	12.0	8.8	6.3	4.8	4.7	6.5	9.5	12.1	14.0	15.3	15.6	14.3
Th	11.7	8.7	6.6	5.5	5.4	7.1	10.3	13.5	15.7	17.1	17.7	16.8
24	14.5	11.4	8.7	6.6	5.2	4.9	6.5	9.0	11.2	12.9	14.4	14.9
F	13.9	11.8	9.5	7.9	7.0	6.9	8.4	11.2	13.7	15.5	16.7	17.1
25	16.3	14.1	11.3	8.8	6.8	5.1	4.6	5.8	8.0	10.1	12.2	14.0
Sa	14.9	14.3	12.5	10.6	9.1	8.0	7.7	8.9	11.4	13.7	15.3	16.6
26	17.1	16.3	14.1	11.3	8.8	6.4	4.3	3.6	4.8	7.1	9.5	12.1
Su	14.5	15.6	15.1	13.4	11.4	9.7	8.3	7.6	8.8	11.3	13.7	15.6
27	17.1	17.7	16.6	14.2	11.2	8.2	5.3	2.8	2.1	3.7	6.5	9.7
M	12.9	15.7	16.8	16.1	14.1	11.8	9.6	7.6	6.9	8.4	11.3	14.1
28	16.5	18.3	18.6	17.1	14.2	10.6	7.0	3.6	0.9	0.6	3.0	6.7
Tu	10.7	14.6	17.3	18.1	16.8	14.2	11.4	8.6	6.3	5.8	7.9	11.6
29	15.1	18.0	19.7	19.6	17.4	13.7	9.5	5.3	1.4	-1.1	-0.5	3.0
W	7.8	12.5	16.7	19.2	19.3	17.1	13.8	10.2	6.9	4.5	4.6	7.8
30	12.4	16.6	19.8	21.2	20.4	17.3	12.8	7.8	3.1	-0.9	-2.8	-0.9
Th	3.9	9.6	14.9	18.9	20.8	19.9	16.8	12.7	8.5	4.8	2.7	3.8
31	8.1	13.6	18.3	21.4	22.4	20.7	16.8	11.5	5.9	0.9	-2.9	-3.7
F	-0.3	5.7	12.1	17.4	21.0	21.9	20.0	16.0	11.1	6.4	2.6	1.2

Time meridian 135° W. 0 is midnight. 12 is noon.
Heights are referred to mean lower low water (N.O.S. chart datum).

Lat. 60° 41 N Long. 151° 24 W

AUGUST

Predicted hourly heights in feet

Day	Hours 0/12	Hours 1/13	Hours 2/14	Hours 3/15	Hours 4/16	Hours 5/17	Hours 6/18	Hours 7/19	Hours 8/20	Hours 9/21	Hours 10/22	Hours 11/23
1	3.5	8.9	15.1	19.9	22.7	23.0	20.5	15.8	9.9	4.0	-1.0	-4.1
Sa	-3.6	1.2	8.1	14.7	19.7	22.4	22.4	19.5	14.7	9.3	4.4	0.9
2	0.2	3.7	10.0	16.3	20.9	23.2	22.9	19.7	14.5	8.3	2.4	-2.2
Su	-4.3	-2.4	3.4	10.7	17.0	21.3	23.2	22.2	18.5	13.2	7.5	2.7
3	-0.3	0.0	4.4	11.0	17.1	21.2	23.0	22.1	18.5	13.0	6.9	1.5
M	-2.3	-3.4	-0.3	6.1	13.1	18.7	22.2	23.2	21.5	17.3	11.7	6.1
4	1.7	-0.6	0.5	5.3	11.6	17.1	20.6	22.0	20.8	17.1	11.8	6.2
Tu	1.5	-1.4	-1.5	2.2	8.6	14.8	19.5	22.2	22.6	20.4	15.9	10.5
5	5.4	1.6	-0.2	1.3	5.9	11.6	16.3	19.3	20.5	19.3	15.8	11.0
W	6.2	2.5	0.4	0.9	4.8	10.5	15.7	19.5	21.6	21.6	19.2	14.9
6	10.0	5.6	2.2	0.7	2.0	6.1	10.9	14.8	17.5	18.8	17.9	15.0
Th	11.0	7.2	4.3	2.7	3.3	6.8	11.5	15.7	18.8	20.5	20.4	18.2
7	14.4	10.2	6.3	3.2	1.5	2.5	5.7	9.6	13.0	15.7	17.3	16.9
F	14.8	11.7	8.8	6.4	4.8	5.2	7.9	11.7	15.0	17.7	19.4	19.5
8	17.7	14.5	10.9	7.4	4.2	2.0	2.3	4.8	8.0	11.2	14.3	16.4
Sa	16.7	15.2	12.9	10.6	8.3	6.4	6.2	8.1	11.1	14.0	16.6	18.6
9	19.0	17.7	15.0	11.8	8.3	4.6	1.9	1.7	3.6	6.5	10.0	13.6
Su	16.3	17.1	16.2	14.3	12.0	9.4	7.0	6.2	7.7	10.2	13.1	16.0
10	18.4	19.1	18.0	15.6	12.4	8.6	4.4	1.2	0.7	2.5	5.7	9.8
M	13.9	17.0	18.0	17.2	15.3	12.8	9.6	6.6	5.6	6.9	9.6	12.8
11	16.2	18.8	19.6	18.5	15.8	12.4	8.1	3.4	0.1	-0.2	2.1	5.8
Tu	10.5	15.1	18.2	19.1	17.9	15.6	12.5	8.8	5.5	4.7	6.4	9.5
12	13.2	17.0	19.6	20.1	18.5	15.5	11.5	6.7	1.9	-1.0	-0.5	2.5
W	7.0	12.3	16.9	19.6	19.8	18.0	15.1	11.3	7.2	4.1	3.9	6.4
13	10.2	14.4	18.3	20.5	20.4	18.0	14.4	9.9	4.8	0.2	-1.7	0.0
Th	4.0	9.2	14.6	18.8	20.6	19.8	17.2	13.6	9.4	5.2	2.8	3.7
14	7.1	11.6	16.1	19.6	21.1	20.0	16.9	12.6	7.7	2.7	-1.1	-1.6
F	1.4	6.4	12.0	17.0	20.3	21.0	19.2	15.7	11.5	7.1	3.3	2.0
15	4.2	8.6	13.4	17.8	20.6	21.1	19.1	15.1	10.4	5.4	0.9	-1.6
Sa	-0.5	3.9	9.4	14.8	19.1	21.3	20.7	17.8	13.6	9.2	4.9	1.9
16	2.0	5.5	10.5	15.3	19.1	21.1	20.5	17.5	13.0	8.0	3.4	-0.2
Su	-1.2	1.6	6.9	12.5	17.3	20.5	21.4	19.7	15.9	11.3	6.8	3.1
17	1.3	2.8	7.3	12.5	16.9	19.8	20.8	19.3	15.6	10.8	6.0	2.0
M	-0.3	0.3	4.4	10.1	15.2	19.0	21.0	20.7	18.0	13.7	9.0	5.0
18	2.1	1.5	4.2	9.2	14.1	17.7	19.8	19.9	17.7	13.6	8.8	4.6
Tu	1.7	0.7	2.7	7.5	13.0	17.2	19.8	20.7	19.4	16.1	11.5	7.2
19	3.9	2.0	2.5	5.9	10.8	15.0	17.7	19.1	18.5	16.0	11.8	7.5
W	4.2	2.3	2.5	5.5	10.4	15.1	18.2	19.7	19.7	17.7	14.1	9.8
20	6.1	3.6	2.6	3.9	7.5	11.8	15.0	17.0	17.8	17.0	14.4	10.6
Th	7.0	4.7	3.9	4.8	8.1	12.6	16.2	18.2	18.9	18.3	16.1	12.5
21	8.7	5.8	4.1	3.6	5.1	8.4	11.9	14.4	15.9	16.5	15.7	13.3
F	10.2	7.5	6.0	5.7	7.0	10.1	13.8	16.4	17.6	17.9	17.0	14.8
22	11.6	8.4	6.1	4.8	4.4	5.7	8.5	11.3	13.3	14.7	15.4	14.9
Sa	13.0	10.5	8.6	7.6	7.4	8.5	11.1	14.1	15.9	16.8	16.9	16.2
23	14.2	11.4	8.7	6.7	5.3	4.7	5.6	7.9	10.3	12.2	13.9	15.0
Su	14.9	13.5	11.5	9.9	8.9	8.4	9.0	11.2	13.6	15.2	16.2	16.6
24	16.1	14.3	11.7	9.2	7.1	5.2	4.1	4.7	6.8	9.3	11.6	13.8
M	15.5	15.7	14.4	12.5	10.8	9.3	8.3	8.6	10.6	13.0	14.8	16.2
25	17.1	16.7	15.0	12.3	9.5	6.8	4.3	2.8	3.4	5.8	8.7	11.8
Tu	14.7	16.7	16.9	15.5	13.2	11.0	8.8	7.2	7.4	9.6	12.5	15.0
26	17.1	18.3	17.9	15.8	12.6	9.2	5.8	2.6	1.0	2.1	5.2	9.1
W	13.0	16.5	18.5	18.2	16.2	13.2	10.2	7.3	5.3	5.9	8.8	12.5
27	15.9	18.6	19.9	19.2	16.4	12.4	8.1	4.0	0.5	-0.8	1.3	5.6
Th	10.5	15.1	18.8	20.3	19.2	16.2	12.3	8.5	5.0	3.2	4.5	8.5
28	13.3	17.5	20.6	21.6	20.1	16.4	11.6	6.5	1.8	-1.6	-2.0	1.4
F	6.9	12.7	17.8	21.1	21.7	19.5	15.4	10.7	6.1	2.4	1.1	3.6
29	8.9	14.6	19.4	22.4	22.9	20.4	15.8	10.2	4.6	-0.3	-3.2	-2.3
Sa	2.5	9.2	15.5	20.4	22.9	22.4	19.1	14.1	8.6	3.6	0.0	-0.4
30	3.4	9.8	16.2	21.1	23.7	23.4	20.1	14.7	8.6	2.7	-1.9	-3.9
Su	-1.5	4.7	12.0	18.3	22.6	24.1	22.4	18.0	12.2	6.3	1.2	-1.8
31	-1.0	4.0	11.1	17.6	22.2	24.2	23.1	19.1	13.3	7.0	1.3	-2.6
M	-3.4	0.4	7.4	14.7	20.5	23.9	24.3	21.6	16.5	10.3	4.3	-0.4

Time meridian 135° W. 0 is midnight. 12 is noon.
Heights are referred to mean lower low water (N.O.S. chart datum).

NIKISKI, ALASKA, 2015

Lat. 60° 41 N Long. 151° 24 W

SEPTEMBER

Predicted hourly heights in feet

Day	Hours 0/12	Hours 1/13	Hours 2/14	Hours 3/15	Hours 4/16	Hours 5/17	Hours 6/18	Hours 7/19	Hours 8/20	Hours 9/21	Hours 10/22	Hours 11/23
1	-2.7	-0.8	5.1	12.3	18.4	22.5	23.8	22.1	17.8	11.8	5.8	0.8
Tu	-2.3	-1.8	3.0	10.2	17.0	21.8	24.2	23.7	20.3	14.8	8.6	3.0
2	-1.1	-2.5	0.2	6.3	13.1	18.4	21.8	22.6	20.7	16.3	10.7	5.3
W	1.2	-0.8	0.6	5.8	12.5	18.2	22.0	23.5	22.4	18.7	13.3	7.6
3	2.7	-0.8	-1.5	1.5	7.2	13.1	17.6	20.4	21.0	19.0	15.0	10.1
Th	5.7	2.6	1.4	3.3	8.2	13.9	18.4	21.2	22.1	20.8	17.2	12.3
4	7.4	3.2	0.4	0.0	2.8	7.6	12.4	16.1	18.6	19.2	17.6	14.3
F	10.4	7.0	4.6	3.8	5.6	9.7	14.1	17.5	19.7	20.4	19.2	16.1
5	12.1	8.0	4.6	2.0	1.4	3.5	7.3	11.0	14.3	16.8	17.8	16.8
Sa	14.3	11.4	8.8	6.8	5.8	7.1	10.2	13.4	16.0	17.9	18.9	18.1
6	15.8	12.5	9.3	6.2	3.4	2.3	3.6	6.4	9.5	12.6	15.4	17.0
Su	16.7	15.0	12.9	10.7	8.5	7.0	7.5	9.6	12.0	14.3	16.5	17.9
7	17.7	16.0	13.5	10.6	7.4	4.2	2.5	3.1	5.2	8.1	11.6	14.9
M	17.0	17.3	16.1	14.3	12.0	9.3	7.2	7.0	8.5	10.6	13.1	15.7
8	17.7	18.0	16.7	14.5	11.6	7.9	4.1	1.9	2.3	4.3	7.5	11.6
Tu	15.4	17.8	18.3	17.2	15.2	12.4	9.0	6.3	5.8	7.2	9.6	12.6
9	15.9	18.2	18.7	17.4	15.0	11.7	7.4	3.2	1.1	1.6	4.1	8.0
W	12.6	16.7	19.1	19.2	17.6	15.1	11.6	7.6	4.8	4.6	6.5	9.5
10	13.2	16.9	19.2	19.4	17.6	14.7	10.8	6.0	1.9	0.3	1.7	5.0
Th	9.5	14.5	18.5	20.2	19.6	17.2	13.9	9.8	5.6	3.2	3.8	6.5
11	10.4	14.7	18.5	20.2	19.6	17.1	13.5	9.0	4.2	0.6	0.1	2.6
F	6.9	12.0	16.9	20.2	20.8	19.1	15.9	11.9	7.4	3.4	2.0	3.8
12	7.6	12.2	16.7	20.0	20.8	19.2	15.8	11.5	6.8	2.3	-0.2	0.8
Sa	4.7	9.7	15.0	19.3	21.3	20.7	17.8	13.7	9.3	4.7	1.5	1.5
13	4.8	9.5	14.4	18.6	21.0	20.7	18.0	13.8	9.2	4.6	0.8	-0.1
Su	2.6	7.6	13.0	17.8	21.0	21.6	19.6	15.7	11.1	6.5	2.4	0.5
14	2.1	6.6	11.9	16.6	20.1	21.3	19.9	16.2	11.5	6.9	2.8	0.3
M	1.1	5.4	10.9	16.1	19.9	21.7	21.0	17.8	13.2	8.3	4.0	0.9
15	0.4	3.5	8.9	14.1	18.3	20.8	20.9	18.4	14.2	9.3	5.0	1.8
Tu	0.9	3.3	8.6	14.2	18.5	21.1	21.5	19.5	15.5	10.5	5.9	2.2
16	0.3	1.3	5.6	11.1	15.9	19.2	20.6	19.8	16.7	12.1	7.5	3.9
W	1.9	2.4	6.2	11.8	16.7	19.9	21.2	20.4	17.6	13.1	8.2	4.1
17	1.4	0.7	2.9	7.7	12.9	16.9	19.2	19.8	18.3	14.9	10.4	6.5
Th	3.9	3.0	4.7	9.1	14.3	18.2	20.2	20.4	18.8	15.4	10.9	6.6
18	3.3	1.6	1.8	4.7	9.5	13.9	16.9	18.4	18.5	16.7	13.4	9.4
F	6.3	4.7	4.8	7.1	11.5	16.0	18.7	19.6	19.0	17.0	13.6	9.4
19	5.8	3.4	2.5	3.2	6.2	10.5	14.0	16.2	17.3	17.2	15.5	12.5
Sa	9.3	7.0	6.2	6.7	9.1	13.0	16.5	18.2	18.4	17.6	15.5	12.4
20	8.8	5.9	4.2	3.5	4.3	7.1	10.6	13.4	15.1	16.2	16.2	14.8
Su	12.4	9.9	8.3	7.7	8.2	10.2	13.4	16.0	17.1	17.2	16.5	14.7
21	12.0	9.0	6.6	5.1	4.3	4.8	7.0	10.0	12.4	14.1	15.5	15.9
M	15.0	12.9	10.9	9.5	8.7	8.7	10.3	12.9	15.0	16.0	16.4	16.2
22	14.8	12.4	9.7	7.5	5.7	4.3	4.3	6.2	9.0	11.5	13.7	15.7
Tu	16.5	15.8	13.9	11.8	10.1	8.7	8.1	9.3	11.7	13.9	15.4	16.5
23	16.8	15.7	13.4	10.6	8.0	5.5	3.5	3.2	5.1	8.1	11.2	14.2
W	16.7	17.8	17.0	14.8	12.2	9.8	7.5	6.5	7.6	10.3	13.1	15.6
24	17.5	18.1	17.1	14.5	11.1	7.8	4.5	2.0	1.8	4.2	8.0	12.0
Th	15.8	18.6	19.4	18.0	15.2	11.8	8.4	5.4	4.2	5.9	9.4	13.2
25	16.6	19.2	19.9	18.4	15.1	11.0	6.9	2.9	0.3	0.6	4.0	8.8
F	13.7	18.1	20.8	20.9	18.6	14.7	10.4	6.1	2.7	1.9	4.4	9.1
26	14.1	18.4	21.2	21.6	19.3	15.2	10.2	5.3	1.0	-1.3	0.1	4.7
Sa	10.6	16.3	20.7	22.8	21.9	18.4	13.4	8.2	3.4	0.0	-0.1	3.7
27	9.6	15.6	20.3	23.0	22.7	19.5	14.5	8.9	3.6	-0.7	-2.2	0.6
Su	6.5	13.2	19.1	23.1	24.1	22.0	17.3	11.5	5.7	0.6	-2.3	-1.2
28	3.9	10.8	17.3	22.0	24.1	23.0	19.0	13.3	7.4	2.0	-1.7	-2.0
M	2.1	9.0	16.1	21.6	24.7	24.6	21.2	15.7	9.3	3.2	-1.6	-3.7
29	-1.3	4.9	12.3	18.7	23.1	24.4	22.5	17.9	12.0	6.0	1.0	-1.9
Tu	-0.9	4.5	11.8	18.5	23.3	25.3	24.0	19.9	13.8	7.3	1.4	-3.0
30	-4.0	-0.5	6.3	13.7	19.6	23.2	23.8	21.4	16.6	10.7	5.2	0.8
W	-1.0	1.2	7.2	14.3	20.2	23.8	24.8	22.7	18.1	11.9	5.7	0.3

Time meridian 135° W. 0 is midnight. 12 is noon.
Heights are referred to mean lower low water (N.O.S. chart datum).

Lat. 60° 41 N Long. 151° 24 W

OCTOBER

Predicted hourly heights in feet

Day	Hours 0/12	Hours 1/13	Hours 2/14	Hours 3/15	Hours 4/16	Hours 5/17	Hours 6/18	Hours 7/19	Hours 8/20	Hours 9/21	Hours 10/22	Hours 11/23
1	-3.2	-3.2	1.0	7.8	14.5	19.6	22.5	22.6	19.9	15.2	9.8	5.0
Th	1.6	0.7	3.7	9.6	15.9	20.7	23.3	23.4	21.0	16.3	10.5	4.9
2	0.4	-2.3	-1.6	2.7	8.9	14.6	18.8	21.1	21.0	18.5	14.2	9.6
F	5.7	3.1	2.9	6.1	11.4	16.5	20.0	21.8	21.6	19.1	14.8	9.8
3	5.1	1.4	-0.6	0.3	4.2	9.4	13.9	17.4	19.5	19.5	17.3	13.7
Sa	10.1	7.0	5.1	5.1	7.9	12.1	15.8	18.4	19.8	19.6	17.5	13.9
4	9.9	6.2	3.1	1.3	2.0	5.1	9.1	12.7	15.8	17.9	18.3	16.7
Su	14.0	11.2	8.8	6.9	6.7	8.7	11.7	14.4	16.4	17.8	18.0	16.5
5	13.8	10.7	7.7	4.9	2.9	3.1	5.3	8.3	11.4	14.5	16.9	17.7
M	16.8	14.8	12.6	10.3	8.2	7.4	8.4	10.5	12.5	14.5	16.3	17.1
6	16.4	14.4	11.9	9.3	6.3	3.8	3.4	4.9	7.4	10.4	13.8	16.6
Tu	17.9	17.4	15.8	13.7	11.2	8.5	7.0	7.4	8.9	10.8	13.3	15.7
7	17.1	16.8	15.3	13.1	10.3	6.8	3.9	3.1	4.4	6.8	10.1	14.0
W	17.2	18.6	18.2	16.6	14.2	11.0	7.7	5.7	5.9	7.5	9.9	13.0
8	16.0	17.7	17.6	16.1	13.6	10.4	6.4	3.3	2.6	4.1	7.0	10.9
Th	15.2	18.4	19.6	18.8	16.6	13.6	9.7	6.0	4.1	4.7	6.8	9.9
9	13.8	17.2	18.8	18.3	16.3	13.3	9.5	5.3	2.4	2.4	4.6	8.2
F	12.7	17.1	19.9	20.3	18.6	15.7	12.0	7.6	3.9	2.6	4.0	7.1
10	11.1	15.4	18.7	19.7	18.5	15.7	12.2	7.9	3.8	1.8	2.8	6.0
Sa	10.4	15.1	19.1	21.0	20.3	17.6	13.9	9.5	5.0	1.8	1.7	4.4
11	8.5	13.1	17.4	20.0	20.1	17.9	14.4	10.3	6.0	2.5	1.8	4.2
Su	8.4	13.2	17.8	20.9	21.4	19.4	15.7	11.3	6.7	2.5	0.4	1.8
12	5.7	10.6	15.5	19.3	20.9	19.8	16.6	12.5	8.2	4.2	1.8	2.6
M	6.5	11.5	16.3	20.1	21.8	20.9	17.6	13.1	8.4	3.9	0.5	-0.1
13	2.9	7.9	13.2	17.7	20.6	21.0	18.8	14.8	10.4	6.2	3.0	2.0
Tu	4.5	9.4	14.7	18.9	21.5	21.8	19.5	15.3	10.3	5.6	1.6	-0.6
14	0.4	4.8	10.4	15.5	19.3	21.1	20.4	17.2	12.8	8.4	4.8	2.6
W	3.1	7.0	12.6	17.4	20.7	21.9	20.8	17.5	12.7	7.6	3.3	0.2
15	-0.7	1.9	7.2	12.8	17.3	20.1	20.9	19.2	15.5	11.0	6.9	4.1
Th	3.1	5.0	9.9	15.4	19.4	21.4	21.3	19.2	15.2	10.2	5.4	1.8
16	-0.3	0.2	3.9	9.5	14.6	18.2	20.1	20.0	17.7	13.9	9.6	6.2
F	4.2	4.4	7.3	12.5	17.3	20.2	21.0	20.1	17.3	13.0	8.2	4.0
17	1.2	0.2	1.7	5.9	11.3	15.6	18.3	19.4	18.8	16.3	12.6	8.8
Sa	6.2	5.1	6.0	9.5	14.4	18.3	20.0	20.0	18.5	15.4	11.2	6.9
18	3.5	1.6	1.3	3.3	7.6	12.3	15.7	17.7	18.4	17.7	15.3	11.9
Su	8.7	6.8	6.4	7.6	11.0	15.2	18.1	19.1	18.6	17.0	14.0	10.2
19	6.5	3.9	2.5	2.5	4.6	8.5	12.5	15.2	16.9	17.6	16.9	14.7
M	11.8	9.3	7.8	7.5	8.6	11.6	15.0	17.1	17.7	17.4	16.0	13.4
20	10.1	7.0	4.8	3.5	3.4	5.2	8.6	12.0	14.5	16.2	17.2	16.8
Tu	14.9	12.3	10.1	8.6	8.0	8.7	11.1	13.9	15.8	16.6	16.7	15.8
21	13.7	10.7	7.9	5.8	4.2	3.7	5.1	8.2	11.3	13.9	16.1	17.5
W	17.3	15.6	13.1	10.7	8.8	7.5	7.6	9.7	12.4	14.5	15.9	16.8
22	16.4	14.6	11.8	8.9	6.4	4.3	3.2	4.5	7.5	10.9	14.1	16.9
Th	18.6	18.4	16.5	13.6	10.7	8.0	5.9	5.7	7.9	10.9	13.7	16.1
23	17.7	17.8	16.0	12.9	9.6	6.4	3.6	2.3	3.7	7.2	11.2	15.1
F	18.5	20.2	19.7	17.1	13.5	9.8	6.2	3.6	3.4	6.1	9.9	13.8
24	17.2	19.3	19.4	17.2	13.6	9.6	5.8	2.5	1.2	3.2	7.5	12.4
Sa	17.0	20.6	21.9	20.6	17.2	12.7	8.0	3.7	0.9	1.2	4.8	9.7
25	14.7	18.8	21.1	20.8	18.0	13.7	9.0	4.6	1.2	0.4	3.4	8.7
Su	14.4	19.4	22.8	23.3	21.0	16.4	11.1	5.7	0.9	-1.7	-0.4	4.4
26	10.4	16.2	20.7	22.7	21.7	18.1	13.1	8.0	3.3	0.1	0.3	4.5
M	10.7	16.9	21.8	24.5	24.0	20.5	15.0	9.0	3.1	-1.6	-3.5	-1.0
27	4.8	11.7	17.9	22.2	23.6	21.8	17.5	12.2	6.8	2.2	-0.4	1.0
Tu	6.3	13.1	19.3	23.7	25.3	23.7	19.2	13.1	6.7	0.8	-3.5	-4.4
28	-0.7	6.1	13.3	19.3	23.1	23.8	21.3	16.5	11.0	5.8	1.5	-0.1
W	2.5	8.5	15.4	21.1	24.7	25.2	22.6	17.5	11.2	4.8	-0.8	-4.4
29	-4.1	0.6	7.8	14.7	20.2	23.3	23.2	20.2	15.4	10.0	5.1	1.6
Th	1.0	4.5	10.8	17.2	22.0	24.5	24.2	20.9	15.6	9.4	3.4	-1.5
30	-4.2	-2.8	2.5	9.4	15.7	20.4	22.7	22.1	19.0	14.3	9.3	5.0
F	2.3	2.6	6.6	12.7	18.1	21.9	23.4	22.5	19.0	13.9	8.1	2.9
31	-1.2	-3.0	-0.9	4.4	10.6	16.0	19.8	21.6	20.8	17.7	13.4	9.1
Sa	5.6	3.6	4.5	8.5	13.7	18.0	20.7	21.7	20.5	17.2	12.5	7.6

Time meridian 135° W. 0 is midnight. 12 is noon.
Heights are referred to mean lower low water (N.O.S. chart datum).

NIKISKI, ALASKA, 2015

Lat. 60° 41 N Long. 151° 24 W

NOVEMBER

Predicted hourly heights in feet

Day	Hours 0/12	Hours 1/13	Hours 2/14	Hours 3/15	Hours 4/16	Hours 5/17	Hours 6/18	Hours 7/19	Hours 8/20	Hours 9/21	Hours 10/22	Hours 11/23
1	3.2	0.0	-1.1	1.2	6.0	11.2	15.6	18.8	20.3	19.5	16.8	13.1
Su	9.5	6.7	5.2	6.2	9.7	13.7	16.9	18.9	19.6	18.6	15.8	11.8
2	7.8	4.3	1.7	0.9	3.1	7.1	11.2	14.8	17.7	19.1	18.6	16.3
M	13.2	10.4	8.0	6.5	7.3	9.9	12.9	15.2	16.9	17.8	17.1	14.9
3	11.8	8.7	5.8	3.5	2.7	4.4	7.5	10.7	13.9	16.7	18.3	18.1
Tu	16.3	13.8	11.4	9.0	7.3	7.5	9.3	11.4	13.3	15.2	16.4	16.4
4	14.8	12.4	9.9	7.3	4.9	3.9	5.0	7.4	10.2	13.3	16.3	18.1
W	18.1	16.6	14.5	12.1	9.4	7.3	6.9	8.0	9.7	11.7	14.1	15.9
5	16.3	15.3	13.3	11.0	8.4	5.7	4.4	5.1	7.2	10.0	13.3	16.6
Th	18.5	18.6	17.1	14.9	12.2	8.9	6.3	5.6	6.6	8.4	10.9	13.9
6	16.2	16.9	16.0	14.1	11.7	8.7	5.7	4.3	5.1	7.4	10.4	14.1
F	17.5	19.3	19.0	17.2	14.6	11.3	7.5	4.7	4.1	5.4	7.8	11.1
7	14.6	17.2	17.8	16.6	14.4	11.6	8.2	5.1	4.1	5.4	8.1	11.7
Sa	15.6	18.9	20.1	19.2	16.7	13.4	9.5	5.5	2.9	2.9	5.0	8.2
8	12.3	16.1	18.4	18.5	16.7	14.0	10.7	7.1	4.4	4.1	6.3	9.7
Su	13.7	17.6	20.2	20.6	18.6	15.3	11.4	7.1	3.1	1.3	2.4	5.5
9	9.7	14.1	17.9	19.5	18.8	16.2	12.9	9.3	5.8	3.8	4.7	7.9
M	12.0	16.1	19.6	21.2	20.3	17.3	13.2	8.9	4.4	1.0	0.3	2.8
10	7.0	11.8	16.3	19.5	20.1	18.4	15.1	11.4	7.7	4.6	3.7	6.0
Tu	10.2	14.7	18.6	21.1	21.4	19.2	15.3	10.6	6.1	1.9	-0.5	0.3
11	4.2	9.2	14.2	18.4	20.5	20.1	17.4	13.6	9.7	6.2	3.9	4.4
W	8.0	12.9	17.3	20.5	21.9	20.8	17.5	12.8	7.9	3.5	-0.1	-1.2
12	1.2	6.2	11.7	16.5	19.8	20.9	19.5	16.1	11.9	8.0	5.0	3.8
Th	5.7	10.4	15.5	19.5	21.6	21.7	19.5	15.3	10.2	5.4	1.4	-1.2
13	-0.9	2.9	8.7	14.1	18.2	20.6	20.7	18.4	14.5	10.3	6.7	4.4
F	4.4	7.5	12.8	17.7	20.8	21.9	20.8	17.7	13.0	7.9	3.4	0.0
14	-1.5	0.2	5.0	11.0	15.9	19.2	20.7	20.0	17.2	13.1	9.0	6.0
Sa	4.5	5.5	9.5	14.9	19.1	21.2	21.3	19.5	15.8	11.0	6.0	2.1
15	-0.5	-0.9	1.9	7.2	12.8	16.9	19.5	20.3	19.0	15.9	11.9	8.2
Su	5.8	5.1	6.9	11.2	16.2	19.6	20.8	20.2	18.0	14.2	9.4	4.9
16	1.6	-0.1	0.3	3.6	8.9	13.9	17.3	19.2	19.6	18.1	14.9	11.1
M	8.0	6.1	5.9	8.0	12.3	16.6	19.1	19.8	18.9	16.6	12.9	8.5
17	4.6	2.0	0.8	1.7	5.2	10.1	14.3	17.2	18.8	19.0	17.4	14.4
Tu	10.9	8.2	6.6	6.5	8.6	12.5	16.1	18.0	18.5	17.8	15.7	12.3
18	8.4	5.1	2.9	2.0	2.9	6.2	10.6	14.3	16.9	18.4	18.7	17.2
W	14.3	11.1	8.6	7.0	6.7	8.4	11.7	14.8	16.6	17.3	17.1	15.4
19	12.5	9.0	6.1	4.0	2.9	3.7	6.6	10.6	14.1	16.7	18.5	18.9
Th	17.4	14.6	11.5	8.8	6.8	6.0	7.2	10.2	13.1	15.2	16.7	17.0
20	15.9	13.3	10.1	7.2	5.0	3.5	3.9	6.7	10.5	14.1	17.0	19.2
F	19.6	18.1	15.1	11.7	8.6	5.8	4.4	5.4	8.3	11.6	14.4	16.7
21	17.7	16.9	14.5	11.3	8.2	5.4	3.5	3.7	6.6	10.6	14.5	18.0
Sa	20.3	20.7	18.8	15.4	11.5	7.6	4.1	2.3	3.3	6.6	10.5	14.3
22	17.4	18.9	18.2	15.6	12.1	8.6	5.3	3.0	3.4	6.6	11.1	15.6
Su	19.5	21.9	21.8	19.3	15.2	10.5	5.9	1.8	-0.1	1.5	5.5	10.3
23	15.0	18.7	20.4	19.4	16.4	12.4	8.4	4.7	2.4	3.2	7.1	12.3
M	17.3	21.3	23.3	22.5	19.2	14.3	9.0	3.8	-0.6	-2.1	0.2	5.2
24	10.9	16.3	20.3	21.6	20.1	16.6	12.2	7.8	3.8	1.9	3.5	8.2
Tu	13.9	19.2	23.0	24.3	22.6	18.4	12.9	7.1	1.5	-2.7	-3.5	-0.1
25	5.8	12.2	17.9	21.7	22.4	20.3	16.2	11.5	6.9	3.0	1.7	4.2
W	9.7	15.7	20.9	24.2	24.6	22.0	17.1	11.1	5.1	-0.5	-4.2	-3.9
26	0.6	7.2	13.9	19.4	22.6	22.6	19.9	15.5	10.6	6.0	2.5	2.0
Th	5.5	11.5	17.5	22.1	24.6	24.1	20.7	15.4	9.3	3.3	-1.9	-4.7
27	-3.2	2.1	9.0	15.5	20.4	22.9	22.2	19.1	14.5	9.6	5.2	2.4
F	2.9	7.1	13.2	18.7	22.6	24.1	22.9	19.0	13.6	7.6	2.0	-2.5
28	-4.2	-1.7	4.2	10.8	16.7	20.9	22.6	21.4	18.0	13.4	8.8	4.9
Sa	2.8	4.1	8.8	14.5	19.2	22.2	23.0	21.2	17.2	11.9	6.3	1.4
29	-2.3	-2.9	0.4	6.3	12.3	17.4	20.8	21.9	20.4	16.8	12.5	8.3
Su	5.0	3.7	5.6	10.2	15.1	18.8	21.1	21.3	19.4	15.4	10.5	5.7
30	1.5	-1.2	-1.0	2.7	8.1	13.3	17.5	20.3	20.9	19.2	15.8	11.8
M	8.2	5.5	4.8	6.9	11.0	15.0	17.8	19.5	19.6	17.6	14.0	9.7

Time meridian 135° W. 0 is midnight. 12 is noon.
Heights are referred to mean lower low water (N.O.S. chart datum).

Lat. 60° 41 N Long. 151° 24 W

DECEMBER

Predicted hourly heights in feet

Day	Hours 0/12	Hours 1/13	Hours 2/14	Hours 3/15	Hours 4/16	Hours 5/17	Hours 6/18	Hours 7/19	Hours 8/20	Hours 9/21	Hours 10/22	Hours 11/23
1	5.6	2.4	0.5	1.2	4.8	9.5	13.7	17.2	19.5	19.9	18.2	15.0
Tu	11.6	8.6	6.3	5.8	7.8	11.1	14.1	16.3	17.8	17.9	16.2	13.1
2	9.5	6.3	3.7	2.3	3.3	6.5	10.3	13.7	16.7	18.8	19.1	17.4
W	14.6	11.7	9.1	7.0	6.4	8.0	10.5	12.8	14.7	16.2	16.6	15.3
3	12.8	9.9	7.4	5.2	4.0	4.9	7.5	10.6	13.5	16.3	18.3	18.6
Th	17.1	14.6	12.0	9.5	7.3	6.4	7.5	9.4	11.3	13.3	15.2	15.9
4	15.0	13.0	10.7	8.6	6.5	5.3	5.9	8.2	10.8	13.5	16.3	18.2
F	18.4	17.0	14.7	12.2	9.5	6.9	5.7	6.4	8.1	10.1	12.5	14.8
5	15.9	15.4	13.7	11.6	9.5	7.3	5.9	6.5	8.5	11.0	13.8	16.7
Sa	18.5	18.6	17.0	14.6	11.8	8.7	5.8	4.5	5.2	7.0	9.5	12.5
6	15.3	16.5	16.0	14.3	12.2	9.9	7.4	6.1	6.8	9.0	11.7	14.7
Su	17.6	19.2	18.8	16.8	14.0	10.8	7.2	4.1	3.1	4.2	6.6	9.8
7	13.4	16.3	17.5	16.7	14.7	12.3	9.6	7.0	6.0	7.2	9.8	12.9
M	16.1	18.8	19.8	18.8	16.1	12.8	9.1	5.2	2.3	1.9	3.9	7.1
8	11.0	14.9	17.7	18.4	17.0	14.5	11.7	8.8	6.3	5.9	7.9	11.1
Tu	14.6	17.8	20.0	20.2	18.2	14.8	10.9	6.8	2.9	0.6	1.2	4.3
9	8.4	12.9	16.8	19.1	19.0	16.8	13.8	10.6	7.6	5.5	6.0	9.0
W	13.0	16.6	19.6	20.9	20.1	17.1	13.0	8.6	4.3	0.7	-0.6	1.4
10	5.6	10.4	15.1	18.6	20.1	19.0	16.1	12.6	9.2	6.3	5.0	6.6
Th	10.7	15.1	18.7	21.0	21.3	19.3	15.5	10.7	6.1	1.9	-1.1	-1.1
11	2.4	7.6	12.8	17.2	20.1	20.5	18.5	15.0	11.2	7.7	5.1	4.8
F	7.8	12.6	17.2	20.4	21.8	21.1	18.1	13.5	8.4	3.7	-0.1	-2.1
12	-0.6	4.1	9.9	15.1	19.0	20.9	20.4	17.6	13.6	9.6	6.2	4.3
Sa	5.2	9.3	14.6	19.0	21.5	22.0	20.3	16.5	11.4	6.2	1.7	-1.5
13	-2.3	0.6	6.3	12.3	17.1	20.2	21.3	19.9	16.5	12.2	8.1	5.1
Su	4.0	6.0	10.9	16.3	20.2	21.9	21.6	19.1	14.8	9.5	4.4	0.3
14	-2.1	-1.6	2.4	8.6	14.3	18.5	20.8	21.1	19.1	15.2	10.8	7.0
M	4.5	4.2	7.0	12.3	17.4	20.5	21.6	20.7	17.8	13.2	7.9	3.2
15	-0.3	-1.7	-0.3	4.5	10.6	15.8	19.2	21.0	20.6	18.1	14.0	9.7
Tu	6.2	4.3	4.6	7.9	13.1	17.6	20.1	20.7	19.5	16.5	11.9	6.9
16	2.8	0.1	-0.7	1.5	6.5	12.2	16.7	19.5	20.8	20.0	17.2	13.1
W	9.1	6.0	4.5	5.1	8.4	13.2	17.0	19.0	19.5	18.4	15.4	11.2
17	6.7	3.2	1.1	0.8	3.3	8.1	13.2	17.0	19.5	20.4	19.5	16.6
Th	12.7	8.9	6.1	4.6	5.2	8.2	12.4	15.7	17.6	18.3	17.4	14.9
18	11.1	7.3	4.3	2.6	2.4	4.7	9.1	13.6	17.0	19.3	20.2	19.2
F	16.4	12.7	9.1	6.3	4.5	4.7	7.3	10.9	14.0	16.1	17.3	17.0
19	15.0	11.8	8.4	5.8	4.0	3.6	5.7	9.6	13.7	17.0	19.4	20.4
Sa	19.4	16.6	12.9	9.3	6.2	3.9	3.5	5.7	9.1	12.3	15.1	17.0
20	17.2	15.7	12.9	9.8	7.2	5.1	4.3	6.1	9.8	13.7	17.1	19.7
Su	20.8	19.8	17.0	13.2	9.3	5.6	2.6	1.9	3.9	7.4	11.1	14.7
21	17.3	18.0	16.7	14.1	11.1	8.1	5.5	4.5	6.2	9.8	13.9	17.6
M	20.5	21.6	20.4	17.3	13.1	8.8	4.4	0.9	0.1	2.3	6.3	10.7
22	15.1	18.2	19.2	17.9	15.1	11.8	8.4	5.4	4.2	6.1	10.0	14.4
Tu	18.5	21.5	22.4	20.8	17.2	12.6	7.7	2.7	-1.0	-1.5	1.3	6.0
23	11.2	16.2	19.5	20.3	18.7	15.6	11.9	8.1	4.8	3.8	6.1	10.6
W	15.4	19.7	22.6	23.0	20.7	16.6	11.5	6.1	0.8	-2.7	-2.5	1.2
24	6.7	12.5	17.7	20.8	21.1	19.0	15.5	11.4	7.2	3.9	3.5	6.5
Th	11.5	16.6	20.9	23.3	23.1	20.1	15.4	10.0	4.3	-0.9	-3.8	-2.6
25	2.0	8.1	14.3	19.3	21.8	21.5	18.8	14.8	10.4	6.1	3.1	3.5
F	7.4	12.8	17.9	21.9	23.6	22.5	19.0	13.9	8.2	2.5	-2.3	-4.2
26	-1.8	3.7	10.1	16.1	20.6	22.4	21.3	18.0	13.7	9.1	4.9	2.7
Sa	4.0	8.6	14.1	19.0	22.3	23.3	21.5	17.4	12.1	6.4	1.0	-3.0
27	-3.6	0.0	6.0	12.3	17.8	21.4	22.3	20.5	16.8	12.3	7.8	4.1
Su	2.7	5.0	10.0	15.3	19.6	22.1	22.4	20.0	15.6	10.2	4.9	0.1
28	-2.8	-2.1	2.3	8.4	14.2	18.9	21.7	21.8	19.4	15.4	10.9	6.7
M	3.6	3.3	6.3	11.3	16.1	19.6	21.4	21.0	18.2	13.7	8.6	3.8
29	-0.1	-1.8	0.1	4.9	10.6	15.7	19.5	21.4	20.9	18.0	13.9	9.7
Tu	6.1	3.8	4.2	7.7	12.3	16.2	18.9	20.2	19.4	16.4	12.0	7.4
30	3.4	0.6	0.0	2.6	7.4	12.4	16.6	19.6	20.8	19.7	16.6	12.6
W	8.9	5.9	4.4	5.3	8.7	12.6	15.7	17.8	18.7	17.7	14.8	10.8
31	6.9	3.9	2.0	2.2	5.1	9.5	13.6	16.9	19.2	19.8	18.4	15.4
Th	11.8	8.6	6.3	5.1	6.2	9.2	12.3	14.7	16.4	17.2	16.2	13.6

Time meridian 135° W. 0 is midnight. 12 is noon.
Heights are referred to mean lower low water (N.O.S. chart datum).

SELDOVIA, ALASKA, 2015

Lat. 59° 27 N Long. 151° 43 W

JANUARY

Predicted hourly heights in feet

Day	Hours 0/12	Hours 1/13	Hours 2/14	Hours 3/15	Hours 4/16	Hours 5/17	Hours 6/18	Hours 7/19	Hours 8/20	Hours 9/21	Hours 10/22	Hours 11/23
1	15.1	13.8	11.4	8.5	6.0	5.0	5.6	7.5	10.6	13.9	16.7	18.2
Th	18.0	16.2	12.9	8.7	4.5	1.4	0.2	0.9	3.4	7.0	10.9	14.1
2	15.9	16.0	14.6	11.8	8.5	5.8	4.7	5.3	7.6	11.0	14.6	17.4
F	18.8	18.3	16.1	12.3	7.6	3.1	0.0	-0.9	0.4	3.5	7.7	12.0
3	15.3	17.0	16.8	14.8	11.5	7.8	5.0	4.1	5.2	8.0	11.8	15.5
Sa	18.3	19.3	18.4	15.5	11.1	6.0	1.5	-1.2	-1.4	0.6	4.4	9.1
4	13.5	16.7	17.9	17.1	14.4	10.6	6.6	4.0	3.7	5.4	8.8	12.9
Su	16.7	19.1	19.6	17.9	14.3	9.4	4.1	-0.1	-2.0	-1.3	1.6	6.1
5	11.0	15.2	17.9	18.4	16.7	13.3	9.1	5.2	3.2	3.6	6.1	10.0
M	14.3	17.8	19.6	19.3	16.8	12.5	7.2	2.1	-1.3	-2.2	-0.4	3.3
6	8.2	13.0	16.8	18.6	18.2	15.7	11.7	7.3	4.0	2.8	4.1	7.3
Tu	11.4	15.6	18.5	19.6	18.4	15.1	10.3	5.0	0.5	-1.8	-1.5	1.3
7	5.5	10.5	14.9	17.8	18.7	17.3	14.1	9.8	5.8	3.2	3.0	5.2
W	8.7	12.9	16.5	18.7	18.9	16.8	12.9	8.0	3.2	-0.3	-1.4	0.1
8	3.5	7.9	12.6	16.3	18.2	18.0	15.8	12.2	8.1	4.7	3.1	3.8
Th	6.5	10.1	13.9	16.9	18.3	17.5	14.8	10.7	6.1	2.1	-0.2	-0.2
9	2.2	5.9	10.2	14.2	17.0	17.9	16.8	14.1	10.4	6.8	4.2	3.6
F	5.0	7.9	11.3	14.5	16.7	17.2	15.7	12.7	8.7	4.8	1.8	0.7
10	1.7	4.5	8.2	12.0	15.2	17.1	17.1	15.4	12.4	9.0	6.1	4.4
Sa	4.4	6.2	8.9	11.8	14.3	15.8	15.6	13.9	10.9	7.4	4.4	2.4
11	2.2	3.8	6.8	10.1	13.3	15.7	16.6	16.0	13.9	11.1	8.2	5.9
Su	4.8	5.3	7.0	9.4	11.8	13.7	14.6	14.1	12.3	9.7	6.9	4.7
12	3.6	3.9	5.8	8.6	11.4	13.9	15.6	16.0	15.0	12.9	10.3	7.8
M	6.0	5.3	5.8	7.4	9.3	11.1	12.7	13.3	12.8	11.3	9.2	7.1
13	5.6	4.9	5.5	7.4	9.8	12.1	14.2	15.4	15.4	14.3	12.3	10.0
Tu	7.8	6.1	5.4	5.8	7.0	8.6	10.2	11.7	12.4	12.2	11.2	9.6
14	7.9	6.6	6.1	6.6	8.2	10.3	12.4	14.2	15.3	15.3	14.2	12.2
W	10.0	7.8	5.9	5.0	5.1	6.1	7.5	9.3	11.1	12.2	12.4	11.7
15	10.4	8.9	7.5	6.7	7.1	8.4	10.4	12.5	14.4	15.6	15.6	14.5
Th	12.5	10.0	7.5	5.2	3.9	3.8	4.8	6.5	8.8	11.1	12.7	13.3
16	12.8	11.5	9.6	7.8	6.7	6.8	8.1	10.2	12.6	14.9	16.4	16.5
F	15.3	12.9	9.9	6.7	3.9	2.2	2.1	3.4	5.8	8.8	11.8	14.0
17	14.7	14.1	12.4	10.0	7.5	5.9	5.9	7.4	10.0	13.1	15.9	17.6
Sa	17.7	16.2	13.2	9.4	5.4	2.0	0.1	0.4	2.4	5.7	9.6	13.3
18	15.7	16.4	15.3	12.9	9.6	6.4	4.6	4.7	6.8	10.1	13.9	17.3
Su	19.1	19.0	16.9	13.1	8.4	3.5	-0.3	-1.9	-1.0	2.0	6.3	11.1
19	15.2	17.6	17.9	16.1	12.7	8.5	4.8	2.9	3.6	6.5	10.7	15.2
M	18.8	20.6	20.0	17.1	12.4	6.8	1.3	-2.5	-3.5	-1.6	2.4	7.7
20	13.1	17.3	19.4	19.0	16.2	11.8	6.9	2.9	1.4	2.8	6.6	11.5
Tu	16.5	20.3	21.7	20.5	16.8	11.2	4.9	-0.8	-4.1	-4.2	-1.3	3.7
21	9.6	15.2	19.2	20.7	19.3	15.6	10.3	5.0	1.2	0.4	2.6	7.1
W	12.6	17.7	21.3	22.2	20.3	15.7	9.5	3.0	-2.3	-4.9	-3.9	-0.1
22	5.6	11.8	17.2	20.6	21.2	18.9	14.3	8.6	3.3	0.0	0.0	3.0
Th	7.9	13.5	18.5	21.5	21.8	19.2	14.2	7.8	1.5	-3.0	-4.5	-2.6
23	1.9	7.8	13.8	18.7	21.2	20.9	17.8	12.8	7.0	2.1	-0.4	0.2
F	3.7	8.7	14.0	18.5	20.9	20.6	17.6	12.4	6.4	0.9	-2.7	-3.1
24	-0.5	4.2	9.9	15.4	19.4	21.1	20.0	16.4	11.3	5.9	1.7	-0.2
Sa	1.0	4.5	9.2	13.9	17.8	19.5	18.8	15.7	11.0	5.7	1.2	-1.3
25	-1.0	1.9	6.5	11.6	16.2	19.4	20.2	18.6	15.0	10.2	5.5	1.9
Su	0.7	1.9	5.1	9.1	13.2	16.3	17.6	16.8	14.1	10.1	5.8	2.4
26	0.7	1.5	4.3	8.3	12.5	16.3	18.7	19.0	17.3	14.0	9.8	5.7
M	2.7	1.7	2.7	5.2	8.5	11.9	14.5	15.7	15.1	13.0	10.0	6.7
27	4.1	2.9	3.7	6.1	9.3	12.8	15.8	17.6	17.8	16.3	13.4	9.9
Tu	6.4	3.7	2.5	3.1	4.9	7.5	10.3	12.7	14.0	14.0	12.7	10.6
28	8.1	6.0	4.9	5.4	7.1	9.6	12.4	15.0	16.6	16.9	15.8	13.5
W	10.4	7.2	4.4	3.0	2.9	4.1	6.2	8.9	11.4	13.1	13.7	13.1
29	11.6	9.6	7.5	6.2	6.2	7.4	9.3	11.8	14.3	16.0	16.5	15.8
Th	13.8	11.0	7.7	4.7	2.8	2.3	3.1	5.1	7.9	10.8	13.0	14.1
30	14.0	12.8	10.7	8.3	6.7	6.2	7.0	8.8	11.4	14.0	15.9	16.7
F	16.1	14.3	11.3	7.6	4.2	2.0	1.3	2.2	4.5	7.8	11.1	13.7
31	15.1	15.0	13.6	11.1	8.3	6.3	5.6	6.4	8.4	11.3	14.3	16.4
Sa	17.3	16.6	14.4	11.0	6.9	3.1	0.9	0.4	1.8	4.7	8.5	12.2

Time meridian 135° W. 0 is midnight. 12 is noon.
Heights are referred to mean lower low water (N.O.S. chart datum).

Lat. 59° 27 N Long. 151° 43 W

FEBRUARY

Predicted hourly heights in feet

Day	Hours 0/12	Hours 1/13	Hours 2/14	Hours 3/15	Hours 4/16	Hours 5/17	Hours 6/18	Hours 7/19	Hours 8/20	Hours 9/21	Hours 10/22	Hours 11/23
1	15.0	16.2	15.8	13.8	10.7	7.4	5.2	4.7	5.9	8.5	11.9	15.1
Su	17.3	17.9	16.8	14.0	9.9	5.4	1.6	-0.3	-0.2	2.0	5.7	10.1
2	13.9	16.5	17.2	16.1	13.3	9.5	5.9	3.9	3.9	5.8	9.1	13.0
M	16.3	18.3	18.4	16.5	12.9	8.2	3.4	0.0	-1.2	0.0	3.2	7.6
3	12.2	15.8	17.8	17.6	15.5	11.9	7.6	4.2	2.8	3.7	6.4	10.4
Tu	14.5	17.6	19.0	18.3	15.5	11.1	5.9	1.3	-1.3	-1.3	1.1	5.1
4	10.0	14.5	17.5	18.5	17.3	14.1	9.8	5.5	2.6	2.2	4.1	7.7
W	12.0	16.1	18.7	19.2	17.4	13.7	8.7	3.6	-0.3	-1.7	-0.4	3.0
5	7.6	12.5	16.5	18.6	18.4	16.1	12.1	7.5	3.6	1.7	2.4	5.2
Th	9.3	13.7	17.3	19.1	18.6	15.8	11.4	6.3	1.7	-1.1	-1.1	1.4
6	5.5	10.4	14.9	17.9	18.9	17.5	14.2	9.8	5.4	2.3	1.6	3.3
F	6.8	11.0	15.1	17.9	18.7	17.1	13.6	9.0	4.2	0.6	-0.8	0.5
7	3.9	8.3	12.9	16.6	18.5	18.2	15.8	11.9	7.6	3.9	1.9	2.3
Sa	4.8	8.5	12.4	15.8	17.7	17.5	15.2	11.3	6.9	2.9	0.5	0.5
8	2.8	6.6	10.9	14.8	17.4	18.2	16.8	13.7	9.8	5.9	3.2	2.2
Su	3.5	6.3	9.9	13.3	15.8	16.7	15.7	13.0	9.3	5.5	2.7	1.5
9	2.5	5.4	9.1	12.9	15.9	17.4	17.1	15.1	11.8	8.1	5.0	3.2
M	3.1	4.8	7.6	10.7	13.3	15.1	15.3	13.9	11.2	8.0	5.1	3.3
10	3.1	4.7	7.7	11.1	14.1	16.2	16.8	15.8	13.5	10.3	7.2	4.8
Tu	3.7	4.0	5.8	8.3	10.7	12.7	13.9	13.8	12.4	10.1	7.6	5.6
11	4.5	4.9	6.7	9.4	12.2	14.5	15.9	16.0	14.7	12.4	9.6	7.0
W	5.1	4.2	4.7	6.2	8.2	10.1	11.7	12.7	12.7	11.6	9.9	8.1
12	6.6	5.9	6.4	8.0	10.3	12.5	14.3	15.4	15.3	14.1	12.0	9.5
Th	7.2	5.5	4.5	4.7	5.8	7.4	9.1	10.7	11.9	12.3	11.7	10.5
13	9.1	7.8	7.0	7.1	8.4	10.2	12.2	13.9	15.0	15.2	14.2	12.4
F	10.0	7.7	5.6	4.2	3.9	4.6	6.1	8.0	10.0	11.8	12.7	12.7
14	11.7	10.3	8.6	7.3	7.0	7.8	9.5	11.5	13.6	15.2	15.8	15.1
Sa	13.3	10.8	7.9	5.1	3.1	2.3	3.0	4.7	7.2	10.1	12.6	14.0
15	14.2	13.1	11.2	8.8	6.8	5.9	6.5	8.4	11.0	13.8	16.0	17.0
Su	16.5	14.5	11.3	7.6	4.0	1.3	0.4	1.3	3.7	7.2	11.0	14.2
16	15.9	16.0	14.3	11.5	8.2	5.4	4.1	4.9	7.3	10.8	14.5	17.4
M	18.7	18.0	15.4	11.4	6.7	2.2	-0.9	-1.6	0.1	3.5	8.1	12.8
17	16.3	18.0	17.5	15.0	11.0	6.7	3.3	2.0	3.4	6.7	11.1	15.7
Tu	19.0	20.3	19.2	15.9	10.8	5.2	0.1	-2.9	-3.0	-0.3	4.3	9.8
18	15.0	18.6	19.9	18.5	14.8	9.7	4.5	0.9	0.1	2.3	6.6	12.0
W	17.1	20.6	21.6	19.8	15.6	9.6	3.2	-1.9	-4.4	-3.4	0.3	5.9
19	12.1	17.5	20.7	21.1	18.5	13.7	7.7	2.2	-1.1	-1.1	2.0	7.2
Th	13.1	18.4	21.7	22.2	19.6	14.5	7.9	1.4	-3.3	-4.8	-2.8	2.0
20	8.2	14.6	19.6	22.0	21.3	17.7	12.0	5.6	0.2	-2.5	-1.6	2.4
F	8.1	14.2	19.3	22.0	21.8	18.5	12.9	6.2	0.1	-3.8	-4.1	-1.0
21	4.4	10.7	16.7	20.9	22.3	20.6	16.2	10.0	3.7	-1.0	-2.8	-1.1
Sa	3.3	9.1	14.9	19.4	21.4	20.5	16.7	11.1	4.9	-0.3	-3.0	-2.3
22	1.4	6.9	12.9	18.1	21.3	21.6	19.1	14.3	8.3	2.6	-1.3	-2.2
Su	0.1	4.5	9.8	14.9	18.6	19.9	18.5	14.8	9.6	4.3	0.3	-1.2
23	0.2	4.1	9.2	14.3	18.5	20.6	20.2	17.2	12.5	7.2	2.4	-0.6
M	-0.8	1.5	5.4	10.0	14.2	17.1	17.9	16.4	13.1	8.8	4.7	1.8
24	1.1	2.9	6.4	10.7	14.9	18.0	19.2	18.3	15.4	11.3	6.9	3.0
Tu	0.8	0.8	2.8	6.0	9.6	13.0	15.2	15.7	14.6	12.0	8.8	5.8
25	3.8	3.6	5.2	8.0	11.3	14.5	16.7	17.5	16.5	14.1	10.8	7.3
W	4.2	2.4	2.2	3.6	5.9	8.7	11.4	13.3	14.0	13.4	11.8	9.6
26	7.4	5.8	5.6	6.7	8.7	11.1	13.5	15.2	15.9	15.3	13.6	11.1
Th	8.2	5.5	3.7	3.1	3.8	5.3	7.5	9.9	11.9	13.1	13.1	12.3
27	10.8	8.9	7.4	6.7	7.2	8.4	10.2	12.3	14.0	14.9	14.8	13.7
F	11.7	9.2	6.5	4.3	3.2	3.3	4.4	6.5	9.0	11.4	13.0	13.6
28	13.2	11.9	10.0	8.0	6.9	6.8	7.6	9.3	11.4	13.4	14.8	15.1
Sa	14.3	12.4	9.7	6.7	4.1	2.7	2.5	3.6	6.0	9.0	11.8	13.8

Time meridian 135° W. 0 is midnight. 12 is noon.
Heights are referred to mean lower low water (N.O.S. chart datum).

SELDOVIA, ALASKA, 2015

Lat. 59° 27 N Long. 151° 43 W

MARCH

Predicted hourly heights in feet

Day	Hours 0/12	Hours 1/13	Hours 2/14	Hours 3/15	Hours 4/16	Hours 5/17	Hours 6/18	Hours 7/19	Hours 8/20	Hours 9/21	Hours 10/22	Hours 11/23
1	14.6	14.2	12.6	10.2	7.7	6.2	5.8	6.6	8.6	11.2	13.7	15.3
Su	15.8	14.9	12.8	9.6	6.0	3.1	1.6	1.7	3.4	6.4	9.9	13.0
2	15.1	15.7	14.8	12.6	9.4	6.5	4.8	4.6	6.0	8.6	11.8	14.6
M	16.3	16.6	15.3	12.4	8.6	4.6	1.7	0.6	1.4	3.9	7.6	11.6
3	14.8	16.5	16.5	14.7	11.6	7.8	4.7	3.3	3.7	5.9	9.4	13.1
Tu	16.0	17.5	17.1	14.9	11.3	6.8	2.7	0.2	0.0	1.8	5.4	9.7
4	13.8	16.6	17.6	16.6	13.7	9.7	5.6	2.7	2.0	3.5	6.7	10.8
W	14.8	17.5	18.3	17.0	13.8	9.3	4.5	0.8	-0.7	0.2	3.3	7.6
5	12.3	16.1	18.1	18.0	15.7	11.9	7.2	3.2	1.1	1.6	4.1	8.2
Th	12.7	16.5	18.6	18.4	16.1	12.0	7.0	2.3	-0.6	-0.8	1.5	5.5
6	10.4	14.9	17.9	18.8	17.4	14.0	9.4	4.7	1.3	0.3	2.0	5.5
F	10.1	14.6	17.8	19.0	17.7	14.3	9.6	4.6	0.6	-0.9	0.3	3.7
7	8.3	13.2	17.0	19.0	18.6	15.9	11.6	6.7	2.4	0.1	0.5	3.2
Sa	7.4	12.1	16.1	18.4	18.5	16.2	12.1	7.2	2.7	-0.1	-0.2	2.3
8	6.4	11.2	15.5	18.4	19.0	17.3	13.7	9.0	4.4	1.0	0.0	1.5
Su	5.0	9.4	13.6	16.8	18.1	17.2	14.1	9.8	5.3	1.8	0.4	1.5
9	4.9	9.3	13.6	17.1	18.7	18.1	15.3	11.2	6.7	2.8	0.6	0.7
M	3.1	6.9	10.9	14.5	16.7	17.1	15.3	12.0	7.9	4.2	1.9	1.7
10	3.9	7.6	11.7	15.3	17.6	18.1	16.4	13.2	9.0	5.0	2.1	1.0
Tu	2.0	4.8	8.4	11.8	14.5	15.9	15.5	13.4	10.2	6.8	4.1	2.9
11	3.6	6.3	9.8	13.3	16.0	17.3	16.8	14.6	11.3	7.5	4.3	2.3
W	2.0	3.4	6.1	9.2	11.9	13.9	14.6	13.9	11.9	9.2	6.6	4.9
12	4.4	5.6	8.2	11.3	14.0	15.9	16.4	15.5	13.2	10.1	6.9	4.4
Th	3.0	2.9	4.4	6.7	9.1	11.3	12.8	13.4	12.8	11.2	9.2	7.3
13	6.0	5.8	7.0	9.2	11.7	13.8	15.2	15.5	14.5	12.5	9.8	7.2
F	5.0	3.7	3.5	4.6	6.4	8.3	10.2	11.8	12.6	12.5	11.4	9.9
14	8.3	7.1	6.7	7.5	9.2	11.2	13.0	14.4	14.9	14.3	12.7	10.4
Sa	7.9	5.7	4.1	3.4	3.9	5.3	7.2	9.3	11.3	12.7	13.1	12.5
15	11.1	9.4	7.8	6.8	6.9	8.2	10.0	12.0	13.8	14.9	14.9	13.7
Su	11.5	8.9	6.1	3.8	2.5	2.6	3.9	6.1	8.9	11.6	13.7	14.5
16	14.0	12.3	10.0	7.5	5.8	5.4	6.5	8.6	11.2	13.9	15.7	16.2
M	15.2	12.8	9.6	6.0	2.8	0.9	0.9	2.6	5.6	9.3	12.9	15.4
17	16.4	15.5	13.2	9.8	6.4	3.9	3.2	4.6	7.4	11.0	14.6	17.2
Tu	17.9	16.8	13.8	9.7	5.1	1.2	-0.9	-0.6	1.9	5.9	10.6	14.9
18	17.6	18.3	16.7	13.3	8.8	4.4	1.4	0.9	2.9	6.7	11.4	15.9
W	18.8	19.6	18.0	14.2	9.1	3.6	-0.7	-2.5	-1.5	2.0	7.1	12.6
19	17.3	19.8	19.8	17.2	12.6	7.0	1.8	-1.1	-1.0	1.9	6.8	12.4
Th	17.4	20.4	20.9	18.5	13.9	7.9	1.9	-2.3	-3.5	-1.4	3.2	9.1
20	15.1	19.6	21.5	20.5	16.7	11.0	4.6	-0.7	-3.1	-2.2	1.8	7.5
F	13.6	18.7	21.5	21.3	18.2	12.8	6.3	0.3	-3.3	-3.4	-0.2	5.2
21	11.6	17.4	21.3	22.3	20.2	15.4	8.9	2.3	-2.6	-4.2	-2.3	2.4
Sa	8.6	14.8	19.6	21.8	20.8	17.0	11.2	4.7	-0.6	-3.2	-2.2	1.8
22	7.6	13.9	19.2	22.1	22.1	19.0	13.4	6.7	0.5	-3.5	-4.2	-1.4
Su	3.7	9.8	15.6	19.7	21.1	19.5	15.3	9.6	3.7	-0.7	-2.1	-0.2
23	4.3	10.0	15.7	20.0	21.8	20.8	17.0	11.3	5.0	-0.4	-3.3	-3.1
M	0.1	5.1	10.7	15.7	19.0	19.6	17.6	13.5	8.3	3.4	0.2	-0.1
24	2.3	6.7	11.8	16.5	19.7	20.5	18.8	14.8	9.5	4.1	-0.2	-2.1
Tu	-1.2	1.9	6.3	11.1	15.1	17.5	17.6	15.6	12.0	7.7	4.0	1.9
25	2.2	4.8	8.6	12.7	16.3	18.5	18.6	16.6	13.0	8.5	4.2	0.9
W	-0.3	0.8	3.5	7.0	10.8	13.9	15.7	15.6	14.0	11.1	8.0	5.3
26	4.0	4.5	6.6	9.6	12.7	15.3	16.7	16.5	14.7	11.8	8.3	5.0
Th	2.6	1.7	2.4	4.4	7.1	10.0	12.5	13.9	14.1	13.0	11.1	8.8
27	6.8	5.8	6.1	7.6	9.6	11.9	13.8	14.9	14.8	13.5	11.4	8.8
F	6.2	4.1	3.2	3.5	4.7	6.6	9.0	11.2	12.7	13.3	12.9	11.6
28	9.9	8.2	7.0	6.9	7.6	8.9	10.7	12.4	13.5	13.8	13.2	11.7
Sa	9.7	7.4	5.3	4.0	3.7	4.4	6.0	8.2	10.5	12.4	13.4	13.4
29	12.5	10.9	8.9	7.3	6.6	6.8	7.8	9.5	11.4	12.9	13.7	13.5
Su	12.4	10.5	8.0	5.6	3.9	3.3	3.9	5.5	8.0	10.7	12.9	14.1
30	14.2	13.2	11.2	8.7	6.7	5.6	5.7	6.8	8.9	11.3	13.2	14.3
M	14.3	13.1	10.8	7.9	5.0	3.2	2.6	3.4	5.6	8.7	11.7	14.1
31	15.2	15.0	13.4	10.7	7.6	5.2	4.1	4.5	6.2	9.0	11.9	14.2
Tu	15.4	15.1	13.3	10.4	6.9	3.8	2.1	2.0	3.6	6.5	10.2	13.5

Time meridian 135° W. 0 is midnight. 12 is noon.
Heights are referred to mean lower low water (N.O.S. chart datum).

Lat. 59° 27 N Long. 151° 43 W

APRIL

Predicted hourly heights in feet

Day	Hours 0/12	Hours 1/13	Hours 2/14	Hours 3/15	Hours 4/16	Hours 5/17	Hours 6/18	Hours 7/19	Hours 8/20	Hours 9/21	Hours 10/22	Hours 11/23
1	15.6	16.3	15.2	12.7	9.2	5.7	3.3	2.6	3.8	6.4	9.9	13.3
W	15.6	16.4	15.5	12.9	9.3	5.3	2.3	1.1	1.9	4.5	8.3	12.3
2	15.5	17.1	16.8	14.8	11.2	7.0	3.4	1.4	1.6	3.8	7.4	11.5
Th	15.0	17.0	17.1	15.2	11.8	7.5	3.4	0.9	0.7	2.7	6.3	10.7
3	14.7	17.4	18.0	16.6	13.4	9.0	4.4	1.1	0.1	1.4	4.7	9.1
F	13.4	16.7	18.0	17.1	14.2	10.0	5.3	1.6	0.2	1.2	4.4	8.7
4	13.3	16.9	18.7	18.1	15.4	11.2	6.3	1.9	-0.6	-0.4	2.2	6.3
Sa	11.1	15.3	17.9	18.3	16.3	12.5	7.8	3.4	0.5	0.3	2.7	6.7
5	11.4	15.7	18.5	19.1	17.2	13.5	8.5	3.6	-0.1	-1.4	0.1	3.7
Su	8.3	13.0	16.7	18.4	17.7	14.8	10.5	5.8	2.0	0.4	1.5	4.9
6	9.4	14.0	17.6	19.2	18.5	15.5	11.0	5.9	1.4	-1.2	-1.1	1.5
M	5.6	10.3	14.5	17.4	18.0	16.4	12.9	8.5	4.3	1.5	1.2	3.4
7	7.4	11.9	15.9	18.5	18.9	17.0	13.3	8.4	3.7	0.2	-1.2	0.0
Tu	3.2	7.5	11.8	15.3	17.2	17.0	14.7	11.0	6.9	3.6	2.0	2.7
8	5.7	9.8	13.8	17.0	18.4	17.8	15.1	11.0	6.4	2.4	-0.1	-0.5
W	1.5	5.0	9.0	12.7	15.3	16.4	15.5	13.0	9.5	6.1	3.7	3.1
9	4.6	7.8	11.6	14.9	17.1	17.6	16.3	13.2	9.2	5.1	2.0	0.4
Th	0.7	3.0	6.3	9.8	12.7	14.7	15.2	14.1	11.8	8.8	6.2	4.6
10	4.5	6.3	9.3	12.4	15.0	16.5	16.4	14.8	11.8	8.2	4.8	2.3
F	1.3	1.9	4.1	6.9	9.8	12.2	13.8	14.2	13.2	11.2	8.9	6.8
11	5.6	5.7	7.3	9.8	12.3	14.3	15.5	15.3	13.8	11.2	8.1	5.3
Sa	3.2	2.2	2.7	4.4	6.8	9.2	11.5	13.1	13.7	13.1	11.5	9.6
12	7.7	6.4	6.2	7.3	9.3	11.4	13.2	14.5	14.6	13.5	11.5	8.8
Su	6.2	4.0	2.7	2.7	4.0	6.1	8.5	10.9	12.9	13.9	13.7	12.5
13	10.5	8.3	6.6	5.8	6.3	7.9	10.0	12.1	13.9	14.6	14.1	12.5
M	10.0	7.2	4.5	2.6	2.2	3.2	5.2	8.0	11.0	13.6	15.0	15.0
14	13.7	11.3	8.4	5.9	4.4	4.5	6.1	8.5	11.3	13.9	15.4	15.4
Tu	13.9	11.2	7.8	4.4	1.9	1.1	2.1	4.6	8.0	11.8	15.0	16.7
15	16.6	14.7	11.6	7.7	4.3	2.3	2.3	4.2	7.4	11.2	14.6	16.7
W	16.9	15.3	12.0	7.9	3.8	0.8	-0.1	1.3	4.5	8.9	13.4	16.9
16	18.6	18.0	15.3	11.1	6.3	2.0	-0.2	0.1	2.7	6.9	11.6	15.8
Th	18.2	18.4	16.3	12.3	7.4	2.6	-0.5	-1.0	1.1	5.2	10.4	15.4
17	19.0	20.2	18.9	15.2	9.9	4.1	-0.5	-2.5	-1.5	2.0	7.1	12.7
F	17.2	19.6	19.4	16.7	12.0	6.4	1.3	-1.5	-1.3	1.7	6.7	12.5
18	17.6	20.8	21.3	18.9	14.2	8.0	1.8	-2.7	-4.1	-2.2	2.2	8.1
Sa	14.0	18.5	20.5	19.7	16.3	11.0	5.1	0.2	-1.9	-0.8	3.1	8.7
19	14.6	19.4	21.8	21.4	18.1	12.5	5.8	-0.4	-4.3	-4.8	-2.0	3.2
Su	9.3	15.2	19.3	20.7	19.2	15.2	9.6	3.9	-0.3	-1.5	0.6	5.1
20	10.8	16.4	20.4	22.0	20.6	16.4	10.4	3.8	-1.8	-4.8	-4.3	-0.8
M	4.6	10.7	16.0	19.4	20.1	18.1	13.7	8.3	3.1	-0.1	-0.3	2.5
21	7.2	12.6	17.5	20.6	21.1	18.9	14.4	8.4	2.3	-2.3	-4.2	-2.8
Tu	1.0	6.2	11.7	16.2	18.8	18.8	16.4	12.2	7.3	3.1	0.9	1.5
22	4.6	9.0	13.7	17.7	19.8	19.5	16.8	12.2	6.8	1.8	-1.8	-2.6
W	-0.8	2.9	7.5	12.2	15.8	17.6	17.2	14.7	11.0	6.9	3.7	2.4
23	3.5	6.5	10.3	14.0	17.0	18.2	17.4	14.6	10.5	6.0	2.1	-0.4
Th	-0.6	1.2	4.4	8.3	12.1	14.9	16.1	15.5	13.3	10.3	7.2	4.9
24	4.2	5.3	7.7	10.7	13.6	15.6	16.3	15.3	12.9	9.6	6.0	3.0
F	1.3	1.3	2.9	5.5	8.5	11.5	13.7	14.7	14.2	12.6	10.3	7.9
25	6.1	5.6	6.5	8.2	10.4	12.5	14.0	14.5	13.7	11.8	9.3	6.7
Sa	4.3	2.9	2.9	4.0	5.9	8.4	10.8	12.8	13.7	13.6	12.4	10.7
26	8.7	7.1	6.4	6.8	7.9	9.5	11.2	12.6	13.2	12.8	11.5	9.7
Su	7.5	5.5	4.1	3.8	4.5	6.0	8.1	10.4	12.4	13.5	13.6	12.8
27	11.2	9.3	7.4	6.4	6.3	7.0	8.4	10.1	11.7	12.7	12.7	11.9
M	10.3	8.3	6.1	4.6	4.0	4.5	5.8	8.0	10.5	12.6	13.9	14.1
28	13.2	11.5	9.2	7.0	5.6	5.2	5.9	7.5	9.6	11.6	12.9	13.2
Tu	12.5	10.9	8.6	6.1	4.3	3.7	4.3	5.9	8.5	11.3	13.6	14.8
29	14.7	13.5	11.2	8.3	5.7	4.1	3.9	4.9	7.1	9.8	12.3	13.8
W	14.1	13.1	11.0	8.2	5.5	3.6	3.2	4.3	6.6	9.7	12.8	15.0
30	15.8	15.2	13.2	10.1	6.7	3.8	2.4	2.7	4.5	7.4	10.8	13.5
Th	15.0	14.9	13.3	10.6	7.3	4.3	2.7	2.9	4.7	7.8	11.4	14.6

Time meridian 135° W. 0 is midnight. 12 is noon.
Heights are referred to mean lower low water (N.O.S. chart datum).

SELDOVIA, ALASKA, 2015

Lat. 59° 27 N Long. 151° 43 W

MAY

Predicted hourly heights in feet

Day	Hours 0/12	Hours 1/13	Hours 2/14	Hours 3/15	Hours 4/16	Hours 5/17	Hours 6/18	Hours 7/19	Hours 8/20	Hours 9/21	Hours 10/22	Hours 11/23
1	16.5	16.7	15.1	12.2	8.4	4.5	1.7	0.9	2.0	4.8	8.5	12.3
F	15.0	16.1	15.4	13.1	9.6	5.9	3.0	2.0	3.1	5.9	9.7	13.6
2	16.5	17.7	16.9	14.4	10.5	6.0	2.1	-0.2	-0.1	2.1	5.8	10.1
Sa	14.0	16.4	16.9	15.3	12.2	8.1	4.3	1.9	1.9	4.0	7.6	11.9
3	15.7	18.1	18.3	16.5	12.9	8.2	3.4	-0.2	-1.5	-0.2	3.0	7.4
Su	12.0	15.7	17.5	17.1	14.6	10.8	6.4	2.9	1.3	2.4	5.5	9.8
4	14.2	17.6	19.0	18.2	15.3	10.8	5.6	1.0	-1.8	-1.9	0.5	4.5
M	9.3	13.8	16.9	17.9	16.6	13.4	9.1	4.9	2.0	1.5	3.7	7.5
5	12.0	16.1	18.8	19.2	17.3	13.4	8.3	3.2	-0.8	-2.6	-1.5	1.8
Tu	6.4	11.2	15.2	17.6	17.7	15.6	11.8	7.5	3.7	1.8	2.4	5.4
6	9.6	14.0	17.5	19.2	18.6	15.7	11.2	6.0	1.3	-1.8	-2.4	-0.4
W	3.5	8.1	12.6	16.0	17.5	16.8	14.2	10.3	6.3	3.2	2.3	3.8
7	7.3	11.5	15.3	18.0	18.8	17.3	13.9	9.2	4.3	0.3	-1.9	-1.5
Th	1.2	5.2	9.5	13.4	16.1	16.9	15.7	12.8	9.1	5.6	3.4	3.2
8	5.3	8.8	12.6	15.9	17.8	17.8	15.8	12.1	7.6	3.3	0.1	-1.2
F	-0.3	2.6	6.5	10.3	13.7	15.7	16.1	14.6	11.8	8.5	5.6	4.0
9	4.3	6.5	9.7	13.0	15.6	16.9	16.5	14.3	10.8	6.8	3.1	0.6
Sa	-0.2	1.0	3.8	7.2	10.6	13.5	15.2	15.3	13.9	11.4	8.5	6.1
10	4.7	5.1	7.0	9.8	12.5	14.7	15.8	15.3	13.4	10.3	6.8	3.7
Su	1.5	0.8	2.0	4.4	7.5	10.5	13.2	14.8	15.0	13.8	11.6	8.9
11	6.6	5.1	5.2	6.7	9.0	11.4	13.5	14.7	14.6	13.1	10.5	7.5
M	4.6	2.4	1.6	2.5	4.6	7.3	10.4	13.1	14.9	15.3	14.3	12.1
12	9.4	6.8	4.9	4.5	5.5	7.5	9.9	12.3	14.0	14.4	13.5	11.3
Tu	8.5	5.5	3.1	2.0	2.5	4.4	7.1	10.4	13.5	15.5	16.1	15.2
13	12.8	9.7	6.5	4.0	3.1	3.8	5.8	8.6	11.5	13.9	14.9	14.4
W	12.5	9.6	6.3	3.4	1.8	2.1	4.1	7.2	10.9	14.4	16.7	17.4
14	16.1	13.3	9.5	5.5	2.4	1.1	1.8	4.1	7.6	11.3	14.4	15.9
Th	15.6	13.6	10.3	6.5	3.2	1.4	1.7	4.0	7.6	11.9	15.7	18.2
15	18.6	16.9	13.4	8.8	4.0	0.4	-1.0	0.0	3.0	7.3	11.8	15.3
F	17.1	16.8	14.4	10.7	6.3	2.6	0.7	1.4	4.2	8.5	13.3	17.3
16	19.6	19.5	17.1	12.8	7.4	2.0	-1.7	-2.8	-1.1	2.6	7.7	12.7
Sa	16.5	18.3	17.6	14.8	10.4	5.6	1.8	0.3	1.5	5.0	9.9	14.9
17	18.9	20.7	19.9	16.7	11.6	5.6	0.0	-3.5	-3.9	-1.5	3.1	8.7
Su	14.0	17.7	19.1	17.9	14.5	9.6	4.6	1.0	0.2	2.1	6.3	11.5
18	16.5	20.0	21.1	19.6	15.6	9.9	3.6	-1.8	-4.6	-4.1	-0.9	4.2
M	10.0	15.2	18.5	19.3	17.5	13.6	8.5	3.7	0.7	0.6	3.3	7.8
19	13.0	17.6	20.5	20.9	18.6	14.0	8.0	1.8	-2.9	-4.7	-3.4	0.4
Tu	5.8	11.4	16.1	18.8	18.9	16.6	12.4	7.4	3.1	0.9	1.6	4.8
20	9.4	14.3	18.2	20.3	19.8	16.9	12.0	6.1	0.6	-3.1	-3.9	-1.9
W	2.2	7.4	12.6	16.6	18.5	18.0	15.2	11.0	6.5	2.9	1.7	3.1
21	6.4	10.7	14.9	18.1	19.3	18.1	14.8	10.0	4.7	0.1	-2.5	-2.4
Th	0.1	4.1	8.9	13.3	16.5	17.6	16.6	13.8	9.9	6.0	3.4	2.9
22	4.6	7.8	11.5	15.0	17.3	17.7	16.1	12.8	8.5	4.0	0.4	-1.2
F	-0.5	2.1	5.8	9.9	13.5	15.9	16.5	15.2	12.5	9.2	6.1	4.2
23	4.2	5.9	8.7	11.7	14.4	16.0	15.9	14.2	11.2	7.5	4.0	1.4
Sa	0.5	1.5	3.9	7.0	10.4	13.4	15.1	15.3	14.0	11.7	9.0	6.5
24	5.1	5.3	6.7	8.9	11.3	13.4	14.5	14.2	12.6	10.1	7.2	4.5
Su	2.6	2.1	3.1	5.2	7.8	10.6	13.0	14.4	14.4	13.3	11.4	9.1
25	7.0	5.8	5.9	6.9	8.6	10.5	12.2	13.1	12.9	11.7	9.7	7.4
M	5.3	3.7	3.4	4.3	6.0	8.3	10.7	12.8	14.0	14.0	13.0	11.3
26	9.2	7.3	6.0	5.8	6.5	7.8	9.5	11.2	12.2	12.3	11.4	9.9
Tu	7.9	6.0	4.6	4.2	5.0	6.5	8.6	11.0	13.0	14.1	14.1	13.1
27	11.4	9.2	7.0	5.5	5.1	5.6	6.9	8.8	10.7	12.0	12.3	11.7
W	10.3	8.5	6.5	5.0	4.6	5.3	6.8	9.1	11.5	13.6	14.6	14.5
28	13.2	11.2	8.6	6.1	4.4	3.9	4.6	6.2	8.5	10.8	12.4	12.9
Th	12.3	10.8	8.7	6.5	4.9	4.5	5.4	7.2	9.8	12.6	14.6	15.4
29	14.9	13.2	10.6	7.5	4.7	2.9	2.6	3.7	5.9	8.8	11.5	13.3
F	13.8	13.0	11.1	8.6	6.0	4.4	4.2	5.5	8.0	11.0	13.9	15.9
30	16.3	15.2	12.8	9.5	5.8	2.8	1.2	1.4	3.2	6.2	9.7	12.8
Sa	14.6	14.8	13.5	11.0	7.9	5.1	3.7	4.0	6.0	9.1	12.6	15.6
31	17.2	17.0	15.1	11.8	7.8	3.7	0.7	-0.3	0.7	3.4	7.2	11.2
Su	14.3	15.8	15.5	13.5	10.4	6.9	4.0	3.0	4.1	6.9	10.6	14.4

Time meridian 135° W. 0 is midnight. 12 is noon.
Heights are referred to mean lower low water (N.O.S. chart datum).

Lat. 59° 27 N Long. 151° 43 W

JUNE

Predicted hourly heights in feet

Day	Hours 0/12	Hours 1/13	Hours 2/14	Hours 3/15	Hours 4/16	Hours 5/17	Hours 6/18	Hours 7/19	Hours 8/20	Hours 9/21	Hours 10/22	Hours 11/23
1	17.2	18.2	17.2	14.4	10.3	5.6	1.4	-1.2	-1.4	0.6	4.2	8.7
M	12.9	15.8	16.8	15.8	13.1	9.3	5.5	3.0	2.6	4.6	8.2	12.3
2	16.1	18.5	18.8	16.9	13.2	8.4	3.3	-0.7	-2.6	-1.8	1.2	5.6
Tu	10.4	14.5	17.1	17.4	15.6	12.2	8.0	4.2	2.2	2.8	5.6	9.7
3	14.1	17.6	19.4	18.8	16.1	11.5	6.2	1.2	-2.4	-3.3	-1.4	2.4
W	7.3	12.1	15.9	17.8	17.4	14.9	10.9	6.6	3.2	1.9	3.4	6.9
4	11.3	15.6	18.6	19.6	18.3	14.7	9.6	4.1	-0.5	-3.2	-3.1	-0.4
Th	4.0	9.0	13.6	16.9	18.0	16.9	13.8	9.5	5.4	2.6	2.2	4.4
5	8.2	12.6	16.5	19.0	19.2	17.1	13.0	7.8	2.5	-1.5	-3.3	-2.3
F	1.1	5.7	10.5	14.7	17.3	17.8	16.0	12.6	8.4	4.7	2.5	2.8
6	5.4	9.3	13.4	16.8	18.6	18.3	15.7	11.4	6.4	1.7	-1.6	-2.6
Sa	-0.9	2.7	7.1	11.6	15.2	17.3	17.2	15.1	11.6	7.7	4.4	2.8
7	3.5	6.2	9.8	13.5	16.4	17.7	17.0	14.3	10.2	5.6	1.6	-1.0
Su	-1.4	0.6	4.1	8.2	12.3	15.4	17.0	16.6	14.4	11.0	7.4	4.5
8	3.2	4.0	6.4	9.7	12.9	15.4	16.4	15.7	13.2	9.6	5.6	2.1
M	0.1	0.0	2.0	5.2	9.0	12.6	15.4	16.7	16.2	14.0	10.9	7.5
9	4.7	3.4	4.0	6.0	8.8	11.7	14.1	15.2	14.7	12.7	9.6	6.2
Tu	3.2	1.3	1.3	3.0	6.0	9.4	12.8	15.4	16.6	16.1	14.1	11.1
10	7.7	4.8	3.2	3.4	5.0	7.5	10.3	12.8	14.2	14.2	12.8	10.2
W	7.2	4.3	2.4	2.2	3.7	6.3	9.6	13.0	15.7	16.9	16.5	14.5
11	11.4	7.8	4.5	2.5	2.2	3.6	6.0	9.0	11.9	13.8	14.3	13.4
Th	11.2	8.3	5.3	3.2	2.7	4.0	6.5	9.9	13.4	16.2	17.5	17.1
12	14.9	11.6	7.5	3.8	1.3	0.8	2.0	4.6	8.1	11.5	14.0	15.0
F	14.3	12.2	9.1	5.9	3.5	2.8	4.0	6.7	10.3	14.1	17.0	18.3
13	17.7	15.3	11.4	6.9	2.6	-0.2	-0.8	0.7	3.8	7.8	11.8	14.7
Sa	15.9	15.3	13.0	9.6	6.0	3.3	2.6	4.0	7.0	11.0	15.0	17.9
14	19.1	18.1	15.2	10.8	5.7	1.1	-1.7	-2.1	-0.1	3.6	8.2	12.6
Su	15.7	16.9	16.1	13.4	9.5	5.5	2.8	2.3	4.1	7.5	11.9	16.1
15	18.9	19.7	18.2	14.7	9.7	4.2	-0.5	-3.1	-2.8	-0.2	4.2	9.3
M	13.9	16.9	17.7	16.4	13.2	8.9	4.7	2.2	2.2	4.5	8.4	13.0
16	17.1	19.6	19.9	17.8	13.7	8.2	2.5	-2.0	-3.8	-2.8	0.5	5.4
Tu	10.7	15.2	17.8	18.1	16.2	12.4	7.8	3.8	1.7	2.4	5.3	9.5
17	14.2	18.0	19.9	19.5	16.7	12.1	6.4	0.8	-2.9	-3.9	-2.0	1.9
W	7.1	12.3	16.3	18.3	17.9	15.4	11.2	6.6	3.0	1.7	3.1	6.4
18	10.8	15.2	18.4	19.6	18.5	15.2	10.2	4.6	-0.4	-3.2	-3.1	-0.5
Th	3.8	8.9	13.7	17.0	18.3	17.2	14.1	9.8	5.5	2.6	2.2	4.1
19	7.7	11.9	15.8	18.3	18.8	17.0	13.2	8.2	3.1	-0.9	-2.6	-1.7
F	1.4	5.8	10.6	14.7	17.2	17.6	15.9	12.6	8.5	4.8	2.7	3.0
20	5.4	8.9	12.7	15.9	17.7	17.4	15.1	11.2	6.6	2.2	-0.8	-1.4
Sa	0.3	3.6	7.7	12.0	15.3	16.9	16.6	14.5	11.1	7.5	4.6	3.3
21	4.1	6.5	9.7	13.0	15.5	16.5	15.7	13.1	9.4	5.5	2.0	0.1
Su	0.3	2.4	5.6	9.3	12.8	15.4	16.2	15.4	13.1	10.0	7.0	4.7
22	4.1	5.2	7.4	10.1	12.7	14.6	15.1	13.9	11.5	8.2	5.0	2.5
M	1.4	2.1	4.3	7.3	10.5	13.3	15.1	15.4	14.3	12.0	9.4	6.8
23	5.1	4.8	5.8	7.7	9.9	12.1	13.5	13.6	12.5	10.3	7.7	5.2
Tu	3.4	2.9	3.8	5.9	8.5	11.2	13.5	14.7	14.7	13.5	11.4	9.0
24	6.9	5.4	5.1	6.0	7.5	9.4	11.2	12.4	12.5	11.6	9.9	7.8
W	5.8	4.4	4.2	5.2	7.0	9.3	11.6	13.6	14.5	14.3	13.0	11.1
25	8.9	6.8	5.3	5.0	5.6	6.9	8.6	10.4	11.7	12.0	11.4	10.0
Th	8.2	6.5	5.3	5.1	6.0	7.7	9.8	12.0	13.8	14.6	14.3	12.9
26	10.9	8.6	6.4	4.8	4.3	4.8	6.1	7.9	9.9	11.5	12.1	11.7
F	10.5	8.9	7.1	5.8	5.5	6.4	8.1	10.2	12.5	14.3	15.1	14.6
27	13.0	10.8	8.1	5.5	3.7	3.1	3.7	5.3	7.6	10.1	12.0	12.8
Sa	12.5	11.2	9.4	7.3	5.8	5.4	6.4	8.3	10.8	13.3	15.2	15.9
28	15.1	13.1	10.3	7.2	4.2	2.2	1.7	2.7	4.9	7.8	10.8	13.0
Su	13.9	13.5	11.8	9.5	7.0	5.2	5.0	6.2	8.6	11.6	14.5	16.4
29	16.8	15.6	13.0	9.5	5.7	2.3	0.4	0.3	2.0	5.0	8.6	12.1
M	14.4	15.2	14.3	12.1	9.1	6.1	4.3	4.3	6.2	9.2	12.7	15.9
30	17.7	17.7	15.9	12.5	8.2	3.8	0.2	-1.4	-0.7	1.9	5.7	10.0
Tu	13.7	16.0	16.3	14.8	11.8	8.1	4.9	3.2	3.8	6.4	10.1	14.1

Time meridian 135° W. 0 is midnight. 12 is noon.
Heights are referred to mean lower low water (N.O.S. chart datum).

SELDOVIA, ALASKA, 2015

Lat. 59° 27 N Long. 151° 43 W

JULY

Predicted hourly heights in feet

Day	Hours 0/12	Hours 1/13	Hours 2/14	Hours 3/15	Hours 4/16	Hours 5/17	Hours 6/18	Hours 7/19	Hours 8/20	Hours 9/21	Hours 10/22	Hours 11/23
1	17.4	18.9	18.4	15.7	11.5	6.5	1.6	-1.8	-2.8	-1.2	2.4	7.0
W	11.8	15.5	17.4	17.1	14.8	11.0	6.8	3.4	2.2	3.6	7.0	11.3
2	15.6	18.7	19.8	18.5	15.1	10.0	4.5	-0.5	-3.4	-3.5	-0.8	3.5
Th	8.7	13.6	17.1	18.4	17.3	14.1	9.7	5.2	2.1	1.6	3.8	7.9
3	12.6	16.9	19.7	20.2	18.1	13.9	8.3	2.5	-2.1	-4.3	-3.3	0.2
F	5.2	10.6	15.4	18.3	18.9	17.0	13.0	8.2	3.8	1.2	1.5	4.4
4	8.9	13.7	17.8	20.1	19.9	17.2	12.4	6.5	0.9	-3.0	-4.2	-2.3
Sa	1.8	7.1	12.4	16.7	19.0	18.8	16.1	11.7	6.8	2.8	0.8	1.8
5	5.1	9.7	14.3	18.0	19.7	19.0	15.8	10.8	5.1	0.1	-3.0	-3.3
Su	-0.7	3.7	8.9	13.9	17.6	19.1	18.2	15.0	10.5	5.8	2.3	1.0
6	2.3	5.8	10.1	14.4	17.5	18.7	17.6	14.2	9.4	4.3	0.1	-2.2
M	-1.7	1.2	5.6	10.4	14.8	17.8	18.7	17.3	14.0	9.6	5.3	2.3
7	1.3	2.9	6.1	10.0	13.7	16.4	17.3	16.0	12.9	8.7	4.4	0.9
Tu	-0.7	0.2	3.1	7.1	11.5	15.3	17.7	18.1	16.5	13.3	9.2	5.3
8	2.6	1.8	3.1	5.9	9.2	12.5	14.9	15.7	14.7	12.2	8.7	5.1
W	2.3	1.1	2.0	4.6	8.2	12.0	15.3	17.3	17.5	15.9	12.9	9.2
9	5.6	2.9	2.0	2.9	5.1	8.0	11.1	13.4	14.5	13.9	12.0	9.2
Th	6.3	3.8	2.7	3.5	5.7	8.7	12.1	15.1	16.9	17.2	15.8	13.0
10	9.5	5.9	3.1	1.8	2.3	4.0	6.7	9.7	12.3	13.7	13.8	12.5
F	10.2	7.6	5.2	3.9	4.3	6.1	8.8	12.0	14.9	16.8	17.2	15.9
11	13.3	9.8	6.1	2.9	1.2	1.3	2.8	5.5	8.7	11.7	13.7	14.2
Sa	13.4	11.3	8.7	6.1	4.5	4.6	6.1	8.7	11.9	15.0	17.0	17.5
12	16.3	13.6	9.9	5.8	2.2	0.3	0.2	1.8	4.7	8.4	11.9	14.2
Su	15.1	14.3	12.2	9.3	6.3	4.4	4.3	5.8	8.6	12.1	15.4	17.5
13	18.0	16.7	13.7	9.6	5.0	1.2	-0.9	-0.8	1.2	4.7	8.9	12.7
M	15.2	16.1	15.1	12.6	9.2	5.8	3.8	3.8	5.6	8.8	12.7	16.1
14	18.2	18.4	16.8	13.3	8.7	3.7	-0.2	-2.0	-1.4	1.3	5.4	10.0
Tu	14.0	16.4	17.0	15.5	12.4	8.4	4.8	3.0	3.4	5.8	9.5	13.6
15	17.0	18.8	18.7	16.4	12.3	7.2	2.1	-1.5	-2.6	-1.3	2.2	6.9
W	11.7	15.5	17.5	17.4	15.2	11.4	7.1	3.6	2.3	3.4	6.3	10.5
16	14.7	17.9	19.3	18.4	15.4	10.7	5.3	0.4	-2.5	-2.6	-0.3	3.8
Th	8.8	13.5	16.9	18.1	17.2	14.2	9.9	5.5	2.5	2.0	3.8	7.4
17	11.8	15.9	18.5	19.2	17.5	13.8	8.7	3.3	-0.9	-2.8	-1.8	1.3
F	5.9	10.9	15.2	17.8	18.1	16.2	12.6	8.1	4.0	1.9	2.2	4.8
18	8.7	13.1	16.7	18.7	18.4	16.0	11.7	6.6	1.7	-1.5	-2.2	-0.2
Sa	3.5	8.3	12.9	16.5	18.1	17.4	14.7	10.7	6.4	3.1	1.9	3.1
19	6.1	10.1	14.1	17.0	18.2	17.1	14.0	9.6	4.8	0.7	-1.3	-0.8
Su	1.9	6.0	10.5	14.5	17.1	17.6	16.1	12.9	8.9	5.1	2.7	2.4
20	4.3	7.5	11.2	14.6	16.7	17.0	15.3	11.9	7.6	3.6	0.6	-0.2
M	1.2	4.4	8.3	12.3	15.4	17.0	16.6	14.5	11.1	7.5	4.5	2.9
21	3.4	5.6	8.6	11.8	14.5	15.8	15.4	13.3	10.0	6.3	3.2	1.4
Tu	1.5	3.5	6.7	10.2	13.5	15.7	16.4	15.3	12.9	9.7	6.7	4.4
22	3.6	4.5	6.6	9.2	11.8	13.8	14.6	13.8	11.7	8.8	5.8	3.6
W	2.6	3.4	5.6	8.6	11.5	14.0	15.5	15.5	14.1	11.6	8.8	6.4
23	4.7	4.3	5.2	7.1	9.3	11.3	12.8	13.2	12.4	10.6	8.2	6.1
Th	4.5	4.1	5.2	7.3	9.8	12.2	14.2	15.1	14.7	13.2	10.9	8.5
24	6.4	5.0	4.7	5.5	7.0	8.8	10.5	11.8	12.2	11.7	10.2	8.5
F	6.8	5.7	5.5	6.5	8.3	10.4	12.5	14.1	14.7	14.3	12.8	10.7
25	8.4	6.4	5.0	4.6	5.1	6.3	7.9	9.7	11.2	11.9	11.6	10.6
Sa	9.2	7.7	6.6	6.3	7.1	8.7	10.6	12.5	14.1	14.8	14.3	12.9
26	10.8	8.5	6.3	4.5	3.8	4.2	5.3	7.1	9.2	11.1	12.2	12.3
Su	11.5	10.0	8.4	7.0	6.4	7.0	8.5	10.5	12.7	14.5	15.3	14.9
27	13.4	11.1	8.4	5.6	3.4	2.5	2.8	4.3	6.6	9.3	11.8	13.2
M	13.5	12.5	10.8	8.6	6.7	5.8	6.3	8.0	10.5	13.2	15.4	16.4
28	15.9	14.1	11.2	7.8	4.3	1.7	0.7	1.5	3.6	6.7	10.2	13.1
Tu	14.8	14.9	13.5	11.0	8.1	5.6	4.6	5.3	7.6	10.8	14.1	16.7
29	17.7	17.0	14.6	10.9	6.6	2.5	-0.3	-1.0	0.4	3.4	7.5	11.7
W	14.9	16.5	16.1	14.0	10.6	6.9	4.0	3.1	4.4	7.5	11.5	15.4
30	18.2	19.1	17.9	14.7	10.0	4.9	0.3	-2.3	-2.4	0.0	4.1	9.0
Th	13.7	16.9	18.1	16.9	13.8	9.5	5.1	2.2	1.7	3.9	7.8	12.6
31	16.9	19.7	20.3	18.3	14.1	8.6	2.9	-1.8	-3.9	-3.0	0.5	5.5
F	11.1	15.9	18.8	19.2	17.1	12.9	7.8	3.2	0.5	0.8	3.8	8.6

Time meridian 135° W. 0 is midnight. 12 is noon.
Heights are referred to mean lower low water (N.O.S. chart datum).

Lat. 59° 27 N Long. 151° 43 W

AUGUST

Predicted hourly heights in feet

Day	Hours 0/12	Hours 1/13	Hours 2/14	Hours 3/15	Hours 4/16	Hours 5/17	Hours 6/18	Hours 7/19	Hours 8/20	Hours 9/21	Hours 10/22	Hours 11/23
1	13.8	18.3	20.8	20.8	18.0	13.0	6.9	0.9	-3.3	-4.6	-2.6	1.9
Sa	7.6	13.3	17.9	20.1	19.6	16.5	11.5	5.9	1.4	-0.7	0.5	4.3
2	9.5	14.9	19.2	21.3	20.5	17.0	11.5	5.1	-0.6	-4.0	-4.2	-1.2
Su	3.9	9.8	15.4	19.3	20.7	19.2	15.3	9.8	4.2	0.1	-1.2	0.8
3	5.1	10.4	15.6	19.4	20.9	19.5	15.5	9.8	3.7	-1.2	-3.7	-2.8
M	0.8	6.2	11.9	16.9	20.0	20.5	18.2	13.8	8.2	3.0	-0.4	-0.9
4	1.5	5.8	10.9	15.6	18.8	19.7	17.9	13.8	8.5	3.1	-0.9	-2.3
Tu	-0.7	3.2	8.3	13.5	17.7	19.9	19.6	16.9	12.4	7.2	2.6	-0.1
5	-0.2	2.3	6.4	10.9	14.9	17.5	18.0	16.1	12.4	7.8	3.4	0.4
W	-0.3	1.6	5.4	9.9	14.3	17.7	19.2	18.4	15.6	11.4	6.8	2.9
6	0.7	0.8	3.0	6.4	10.2	13.6	15.8	16.1	14.6	11.6	7.9	4.5
Th	2.2	1.9	3.8	7.0	10.8	14.4	17.1	18.1	17.2	14.7	11.0	7.1
7	3.7	1.7	1.6	3.3	6.0	9.1	12.1	14.1	14.6	13.6	11.4	8.7
F	6.0	4.1	3.9	5.3	7.8	10.9	13.9	16.1	17.0	16.4	14.3	11.2
8	7.8	4.6	2.5	2.0	3.0	5.1	7.8	10.6	12.7	13.7	13.4	12.0
Sa	9.9	7.5	5.7	5.2	6.0	7.9	10.4	13.1	15.3	16.4	16.1	14.4
9	11.8	8.5	5.3	2.9	1.9	2.3	4.0	6.6	9.5	12.1	13.6	13.9
Su	13.0	11.1	8.7	6.6	5.6	6.0	7.4	9.8	12.5	14.9	16.2	16.3
10	14.9	12.4	9.0	5.4	2.6	1.2	1.4	3.1	5.9	9.3	12.3	14.2
M	14.8	14.0	12.0	9.2	6.6	5.2	5.3	6.8	9.3	12.3	15.0	16.6
11	16.8	15.4	12.7	8.9	4.8	1.7	0.3	0.6	2.7	6.1	9.9	13.2
Tu	15.4	15.9	14.7	12.1	8.8	5.9	4.3	4.5	6.3	9.3	12.8	15.7
12	17.4	17.4	15.7	12.4	8.0	3.6	0.5	-0.7	0.2	3.0	7.1	11.3
W	14.7	16.6	16.6	14.8	11.5	7.6	4.5	3.1	3.8	6.3	9.9	13.8
13	16.8	18.2	17.7	15.3	11.3	6.4	1.9	-0.8	-1.2	0.6	4.3	8.9
Th	13.2	16.4	17.6	16.8	14.1	10.1	5.9	2.9	2.2	3.7	7.0	11.1
14	15.2	17.9	18.8	17.5	14.2	9.5	4.4	0.2	-1.7	-1.0	1.9	6.3
F	11.1	15.3	17.8	18.1	16.2	12.6	8.0	3.9	1.6	1.9	4.3	8.2
15	12.7	16.6	18.8	18.8	16.5	12.5	7.3	2.3	-1.0	-1.7	0.1	3.9
Sa	8.8	13.5	17.0	18.5	17.7	14.8	10.5	5.8	2.2	1.0	2.3	5.5
16	9.9	14.3	17.7	19.0	18.0	14.8	10.2	5.0	0.7	-1.4	-0.8	2.1
Su	6.5	11.4	15.6	18.1	18.5	16.5	12.8	8.2	3.9	1.2	1.1	3.4
17	7.2	11.6	15.6	18.1	18.4	16.5	12.7	7.9	3.2	0.0	-0.8	1.0
M	4.7	9.2	13.7	17.0	18.4	17.5	14.6	10.5	6.1	2.6	1.1	2.0
18	5.0	8.9	13.0	16.2	17.8	17.1	14.5	10.4	6.0	2.2	0.2	0.7
Tu	3.4	7.4	11.7	15.3	17.6	17.7	15.9	12.5	8.4	4.6	2.1	1.7
19	3.4	6.6	10.3	13.7	16.1	16.7	15.4	12.4	8.5	4.8	2.2	1.4
W	2.9	6.0	9.8	13.4	16.1	17.3	16.5	14.0	10.5	6.8	3.9	2.4
20	2.8	5.0	8.0	11.1	13.7	15.3	15.2	13.5	10.6	7.4	4.6	3.0
Th	3.2	5.2	8.3	11.6	14.4	16.1	16.4	14.9	12.3	9.1	6.1	4.0
21	3.2	4.0	6.1	8.7	11.2	13.1	14.0	13.6	12.0	9.6	7.1	5.2
F	4.4	5.1	7.2	9.9	12.5	14.6	15.6	15.3	13.6	11.1	8.4	6.0
22	4.4	4.0	4.9	6.7	8.7	10.6	12.1	12.8	12.5	11.2	9.4	7.5
Sa	6.3	5.8	6.6	8.4	10.7	12.7	14.2	14.9	14.5	12.9	10.7	8.4
23	6.4	5.0	4.5	5.1	6.4	8.0	9.7	11.2	12.1	12.1	11.2	9.9
Su	8.5	7.3	6.8	7.4	8.8	10.6	12.4	13.8	14.5	14.2	13.0	11.0
24	8.8	6.8	5.1	4.3	4.5	5.5	7.0	8.8	10.7	12.0	12.5	12.1
M	10.9	9.4	8.0	7.1	7.2	8.3	10.0	11.8	13.6	14.7	14.8	13.7
25	11.8	9.4	6.9	4.6	3.3	3.2	4.2	6.0	8.4	10.9	12.8	13.7
Tu	13.4	12.0	10.1	8.0	6.5	6.2	7.2	9.1	11.6	13.9	15.6	16.0
26	14.9	12.7	9.7	6.4	3.4	1.6	1.5	2.9	5.4	8.7	12.0	14.4
W	15.4	14.8	12.8	10.0	7.0	4.9	4.5	5.9	8.4	11.7	14.9	17.1
27	17.6	16.3	13.4	9.5	5.2	1.6	-0.4	-0.1	2.0	5.6	9.9	13.9
Th	16.5	17.2	15.9	13.0	9.1	5.3	2.8	2.7	4.7	8.2	12.5	16.4
28	18.8	19.2	17.3	13.5	8.6	3.5	-0.5	-2.2	-1.2	2.0	6.7	11.9
F	16.2	18.6	18.7	16.4	12.3	7.4	3.0	0.6	1.0	4.0	8.6	13.7
29	18.0	20.5	20.4	17.7	13.0	7.1	1.5	-2.5	-3.5	-1.4	3.0	8.7
Sa	14.3	18.6	20.4	19.6	16.1	10.9	5.2	0.6	-1.4	0.0	3.9	9.4
30	15.1	19.5	21.7	20.9	17.4	11.8	5.4	-0.4	-3.7	-3.7	-0.5	4.9
Su	11.1	16.7	20.5	21.5	19.5	15.0	8.9	2.9	-1.4	-2.6	-0.3	4.5
31	10.5	16.3	20.5	22.0	20.5	16.3	10.2	3.7	-1.6	-4.0	-2.8	1.4
M	7.2	13.5	18.7	21.7	21.6	18.6	13.3	6.9	1.0	-2.6	-2.8	0.3

Time meridian 135° W. 0 is midnight. 12 is noon.
Heights are referred to mean lower low water (N.O.S. chart datum).

SELDOVIA, ALASKA, 2015

Lat. 59° 27 N Long. 151° 43 W

SEPTEMBER

Predicted hourly heights in feet

Day	Hours 0/12	Hours 1/13	Hours 2/14	Hours 3/15	Hours 4/16	Hours 5/17	Hours 6/18	Hours 7/19	Hours 8/20	Hours 9/21	Hours 10/22	Hours 11/23
1	5.5	11.5	17.0	20.6	21.5	19.3	14.7	8.6	2.6	-1.8	-3.1	-0.9
Tu	3.7	9.6	15.5	19.9	21.8	20.8	17.1	11.4	5.2	0.0	-2.7	-2.1
2	1.4	6.6	12.2	17.0	19.9	20.1	17.6	13.0	7.4	2.3	-0.9	-1.2
W	1.5	6.2	11.6	16.6	20.0	21.0	19.3	15.3	9.9	4.3	0.0	-1.9
3	-0.8	2.6	7.3	12.2	16.2	18.4	18.2	15.8	11.7	7.0	3.0	0.8
Th	1.2	4.0	8.2	12.8	16.8	19.2	19.5	17.5	13.7	9.0	4.3	0.9
4	-0.4	0.7	3.7	7.6	11.6	14.8	16.5	16.3	14.3	11.0	7.4	4.4
F	2.9	3.5	5.9	9.4	13.0	16.0	17.8	17.8	16.0	12.8	8.9	5.1
5	2.3	1.2	2.0	4.2	7.2	10.4	13.1	14.7	14.8	13.4	11.1	8.5
Sa	6.1	4.9	5.3	7.1	9.6	12.4	14.8	16.2	16.3	15.0	12.5	9.5
6	6.3	3.8	2.5	2.8	4.2	6.4	9.1	11.6	13.4	14.0	13.4	11.9
Su	9.8	7.7	6.4	6.3	7.3	9.1	11.3	13.4	15.0	15.4	14.7	12.9
7	10.4	7.5	4.9	3.2	2.8	3.6	5.4	8.0	10.7	12.9	14.0	14.0
M	12.9	11.0	8.7	7.0	6.3	6.7	8.1	10.2	12.5	14.4	15.3	15.1
8	13.7	11.3	8.2	5.2	3.1	2.3	2.9	4.7	7.6	10.7	13.2	14.8
Tu	15.0	13.8	11.6	8.9	6.6	5.5	5.7	7.1	9.5	12.3	14.6	15.8
9	15.8	14.4	11.7	8.2	4.7	2.3	1.5	2.3	4.6	8.0	11.5	14.4
W	15.9	15.8	14.2	11.4	8.0	5.4	4.2	4.6	6.5	9.6	12.8	15.4
10	16.8	16.5	14.6	11.3	7.2	3.5	1.2	0.8	2.3	5.4	9.4	13.2
Th	15.9	17.0	16.3	13.8	10.2	6.4	3.7	2.9	3.9	6.7	10.4	14.1
11	16.7	17.7	16.8	14.1	10.1	5.6	1.9	0.2	0.6	3.1	7.0	11.4
F	15.2	17.4	17.7	16.0	12.5	8.2	4.3	2.0	2.0	4.0	7.7	11.9
12	15.7	17.9	18.2	16.4	12.9	8.2	3.6	0.5	-0.3	1.3	4.8	9.4
Sa	13.9	17.1	18.5	17.6	14.7	10.5	5.8	2.1	0.7	1.8	4.9	9.3
13	13.8	17.2	18.8	18.1	15.3	10.9	6.0	1.7	-0.4	0.1	3.0	7.3
Su	12.1	16.2	18.6	18.7	16.6	12.7	7.9	3.3	0.5	0.3	2.6	6.6
14	11.3	15.6	18.4	18.9	17.2	13.4	8.6	3.8	0.5	-0.3	1.6	5.3
M	10.1	14.7	17.9	19.1	18.0	14.7	10.2	5.3	1.4	-0.2	0.9	4.1
15	8.6	13.2	16.9	18.7	18.2	15.5	11.2	6.4	2.3	0.2	0.8	3.8
Tu	8.1	12.8	16.6	18.8	18.7	16.4	12.3	7.6	3.2	0.4	0.1	2.2
16	6.1	10.5	14.7	17.5	18.2	16.8	13.4	9.0	4.8	1.8	1.0	2.8
W	6.5	10.8	14.9	17.7	18.7	17.4	14.2	9.9	5.4	2.0	0.4	1.2
17	4.1	8.0	12.0	15.4	17.2	17.0	14.9	11.3	7.4	4.0	2.2	2.7
Th	5.3	9.0	12.9	16.1	17.9	17.7	15.5	11.9	7.8	4.1	1.7	1.2
18	2.8	5.9	9.5	12.8	15.2	16.2	15.4	13.0	9.7	6.5	4.2	3.5
F	4.7	7.6	11.1	14.2	16.4	17.2	16.2	13.6	10.1	6.5	3.7	2.2
19	2.4	4.4	7.3	10.2	12.8	14.5	14.8	13.8	11.6	8.9	6.5	5.1
Sa	5.1	6.7	9.4	12.3	14.6	16.0	16.1	14.7	12.1	9.0	6.1	4.0
20	3.1	3.6	5.4	7.8	10.2	12.1	13.4	13.6	12.7	11.0	9.0	7.2
Su	6.3	6.5	8.0	10.2	12.5	14.2	15.1	15.0	13.6	11.4	8.8	6.4
21	4.7	3.9	4.3	5.7	7.6	9.5	11.2	12.5	12.9	12.4	11.2	9.7
M	8.2	7.3	7.3	8.4	10.1	11.9	13.4	14.4	14.4	13.4	11.6	9.4
22	7.2	5.4	4.3	4.2	5.2	6.7	8.6	10.5	12.2	13.1	13.1	12.1
Tu	10.7	9.0	7.7	7.2	7.8	9.1	10.8	12.6	14.0	14.6	14.1	12.6
23	10.4	7.9	5.6	3.9	3.4	4.0	5.6	7.9	10.5	12.8	14.2	14.4
W	13.4	11.5	9.3	7.2	6.0	6.3	7.6	9.7	12.2	14.4	15.6	15.4
24	13.9	11.4	8.3	5.2	2.8	1.9	2.6	4.7	7.8	11.2	14.2	15.9
Th	16.0	14.6	11.9	8.6	5.7	4.0	4.2	6.0	9.0	12.4	15.4	17.2
25	17.1	15.3	12.1	8.0	4.0	1.1	0.2	1.5	4.4	8.5	12.9	16.3
F	18.0	17.6	15.3	11.5	7.1	3.4	1.6	2.1	4.8	8.8	13.3	17.0
26	19.0	18.7	16.3	12.1	7.1	2.4	-0.7	-1.1	1.0	5.0	10.2	15.1
Sa	18.7	19.9	18.7	15.2	10.2	4.9	0.7	-0.9	0.5	4.2	9.3	14.6
27	18.7	20.6	19.9	16.6	11.5	5.7	0.6	-2.1	-1.8	1.4	6.5	12.4
Su	17.6	20.8	21.3	19.0	14.3	8.2	2.3	-1.8	-2.7	-0.4	4.4	10.4
28	16.1	20.2	21.7	20.3	16.2	10.3	4.1	-0.8	-2.9	-1.4	2.8	8.7
M	14.9	19.8	22.3	21.8	18.3	12.6	5.9	-0.1	-3.6	-3.6	-0.3	5.2
29	11.6	17.4	21.1	22.0	19.8	15.0	8.8	2.7	-1.5	-2.6	-0.1	4.9
Tu	11.1	17.0	21.3	22.9	21.3	16.9	10.6	3.8	-1.7	-4.4	-3.4	0.6
30	6.5	12.8	18.1	21.2	21.4	18.6	13.5	7.5	2.0	-1.3	-1.3	2.0
W	7.2	13.2	18.5	21.8	22.3	19.9	15.0	8.6	2.3	-2.4	-4.0	-2.3

Time meridian 135° W. 0 is midnight. 12 is noon.
Heights are referred to mean lower low water (N.O.S. chart datum).

Lat. 59° 27 N Long. 151° 43 W

OCTOBER

Predicted hourly heights in feet

Day	Hours 0/12	Hours 1/13	Hours 2/14	Hours 3/15	Hours 4/16	Hours 5/17	Hours 6/18	Hours 7/19	Hours 8/20	Hours 9/21	Hours 10/22	Hours 11/23
1	2.1	7.7	13.5	18.1	20.4	20.0	16.9	12.0	6.6	2.1	-0.1	0.8
Th	4.3	9.3	14.6	18.9	21.2	20.9	17.9	13.0	7.2	1.8	-1.9	-2.7
2	-0.5	3.6	8.6	13.6	17.3	18.9	18.1	15.2	10.9	6.5	3.0	1.7
F	3.1	6.5	10.8	15.0	18.3	19.7	18.9	15.9	11.5	6.6	2.2	-0.4
3	-0.7	1.3	4.8	9.0	13.0	15.9	17.1	16.3	13.9	10.5	7.1	4.6
Sa	3.8	5.2	7.9	11.3	14.5	16.9	17.8	16.8	14.3	10.7	6.9	3.5
4	1.4	1.3	2.8	5.5	8.7	11.9	14.3	15.4	15.0	13.3	10.9	8.3
Su	6.3	5.6	6.5	8.5	10.9	13.3	15.1	15.9	15.3	13.4	10.8	7.8
5	5.0	3.2	2.8	3.7	5.6	8.1	10.8	13.0	14.3	14.4	13.4	11.7
M	9.5	7.7	6.7	7.0	8.1	9.8	11.8	13.5	14.5	14.4	13.3	11.4
6	9.0	6.4	4.5	3.6	3.9	5.2	7.3	9.9	12.3	14.0	14.6	14.0
Tu	12.6	10.5	8.3	6.9	6.5	7.1	8.5	10.5	12.5	13.9	14.4	13.8
7	12.3	9.9	7.2	4.9	3.7	3.6	4.7	7.0	9.8	12.5	14.5	15.3
W	14.8	13.2	10.7	8.0	6.1	5.4	5.9	7.5	9.9	12.4	14.2	15.0
8	14.6	12.9	10.3	7.2	4.5	3.1	3.1	4.5	7.2	10.5	13.5	15.6
Th	16.2	15.3	13.1	10.0	6.8	4.7	4.0	4.8	7.1	10.1	13.1	15.2
9	16.0	15.2	13.1	9.9	6.3	3.6	2.4	2.9	5.0	8.4	12.1	15.1
F	16.8	16.9	15.2	12.2	8.4	4.9	2.9	2.8	4.4	7.5	11.2	14.4
10	16.4	16.8	15.4	12.5	8.7	4.9	2.4	1.8	3.2	6.3	10.3	14.1
Sa	16.9	17.9	17.0	14.3	10.4	6.1	2.7	1.4	2.1	4.8	8.7	12.8
11	16.0	17.6	17.2	14.9	11.2	6.9	3.2	1.5	1.9	4.4	8.3	12.7
Su	16.3	18.4	18.3	16.3	12.6	7.9	3.5	0.8	0.4	2.3	6.0	10.5
12	14.7	17.5	18.3	16.9	13.7	9.4	5.0	1.9	1.2	2.9	6.4	10.9
M	15.2	18.2	19.2	17.9	14.7	10.1	5.2	1.2	-0.5	0.4	3.4	7.8
13	12.6	16.5	18.5	18.3	15.9	11.9	7.3	3.3	1.2	1.8	4.6	8.9
Tu	13.5	17.3	19.3	19.1	16.6	12.4	7.4	2.7	-0.4	-0.8	1.3	5.2
14	10.0	14.5	17.7	18.8	17.5	14.3	9.9	5.5	2.2	1.4	3.3	7.0
W	11.5	15.7	18.7	19.5	18.1	14.6	9.8	4.9	0.9	-1.0	-0.2	2.9
15	7.3	11.9	15.9	18.1	18.2	16.1	12.4	8.0	4.2	2.1	2.6	5.4
Th	9.5	13.8	17.3	19.1	18.8	16.3	12.1	7.3	2.9	0.0	-0.6	1.3
16	4.9	9.3	13.4	16.5	17.8	17.0	14.3	10.5	6.7	3.8	2.9	4.4
F	7.7	11.7	15.4	17.9	18.7	17.3	14.1	9.8	5.4	1.9	0.1	0.5
17	3.1	6.8	10.7	14.1	16.3	16.8	15.4	12.7	9.2	6.1	4.3	4.3
Sa	6.4	9.7	13.2	16.1	17.7	17.5	15.5	12.1	8.1	4.4	1.8	0.9
18	2.0	4.7	8.1	11.4	14.1	15.6	15.6	14.0	11.5	8.6	6.3	5.2
Su	5.8	8.0	11.0	13.9	15.9	16.8	16.1	13.9	10.7	7.2	4.2	2.4
19	2.0	3.3	5.9	8.8	11.4	13.6	14.7	14.5	13.2	11.0	8.8	7.0
M	6.3	7.0	8.9	11.4	13.6	15.2	15.7	14.9	12.9	10.1	7.2	4.8
20	3.3	3.0	4.2	6.3	8.7	11.0	12.9	14.0	14.1	13.1	11.3	9.4
Tu	7.8	7.0	7.4	8.9	10.8	12.7	14.1	14.7	14.3	12.7	10.4	7.9
21	5.6	4.0	3.5	4.3	6.0	8.1	10.4	12.6	14.0	14.4	13.7	12.1
W	10.1	8.2	7.0	6.8	7.9	9.5	11.4	13.2	14.3	14.4	13.4	11.4
22	8.9	6.4	4.4	3.4	3.7	5.3	7.5	10.2	12.9	14.8	15.5	14.8
Th	13.0	10.6	8.0	6.0	5.3	6.1	7.9	10.2	12.8	14.7	15.4	14.7
23	12.7	9.9	6.8	4.1	2.6	2.8	4.4	7.2	10.7	14.0	16.3	17.1
F	16.1	13.7	10.4	6.9	4.1	3.1	4.0	6.3	9.5	13.0	15.7	16.9
24	16.2	14.0	10.5	6.7	3.3	1.4	1.7	4.0	7.5	11.8	15.7	18.3
Sa	18.8	17.2	13.9	9.4	5.0	1.7	0.6	2.0	5.1	9.5	13.9	17.2
25	18.5	17.7	14.8	10.6	5.9	2.1	0.3	1.0	4.1	8.6	13.6	17.9
Su	20.3	20.2	17.7	13.2	7.8	2.5	-0.9	-1.6	0.5	4.8	10.1	15.2
26	18.8	20.0	18.7	15.1	10.1	4.8	0.8	-0.6	1.0	5.0	10.3	15.8
M	20.0	21.9	21.0	17.4	11.9	5.6	0.0	-3.2	-3.1	0.0	5.2	11.2
27	16.6	20.1	20.9	19.0	14.7	9.1	3.6	-0.2	-0.8	1.7	6.5	12.4
Tu	17.9	21.7	22.8	20.9	16.3	10.0	3.3	-2.1	-4.7	-3.6	0.4	6.2
28	12.6	17.9	21.0	21.2	18.5	13.7	7.8	2.5	-0.5	-0.2	3.1	8.4
W	14.3	19.5	22.5	22.7	19.9	14.6	8.0	1.4	-3.4	-5.0	-3.1	1.6
29	7.6	13.8	18.6	21.0	20.6	17.4	12.4	6.7	2.0	-0.1	1.1	5.0
Th	10.3	15.9	20.3	22.4	21.7	18.2	12.6	6.1	0.2	-3.7	-4.2	-1.6
30	3.2	9.0	14.6	18.7	20.4	19.4	16.0	11.1	6.1	2.3	1.1	2.9
F	6.9	11.8	16.6	20.1	21.3	19.9	16.2	10.8	4.9	0.0	-2.8	-2.6
31	0.3	4.9	10.0	14.8	18.1	19.1	17.8	14.5	10.2	6.0	3.2	2.8
Sa	4.8	8.4	12.6	16.5	19.0	19.5	17.8	14.2	9.4	4.6	0.7	-1.2

Time meridian 135° W. 0 is midnight. 12 is noon.
Heights are referred to mean lower low water (N.O.S. chart datum).

SELDOVIA, ALASKA, 2015

Lat. 59° 27 N Long. 151° 43 W

NOVEMBER

Predicted hourly heights in feet

Day	Hours 0/12	Hours 1/13	Hours 2/14	Hours 3/15	Hours 4/16	Hours 5/17	Hours 6/18	Hours 7/19	Hours 8/20	Hours 9/21	Hours 10/22	Hours 11/23
1	-0.5	2.3	6.2	10.5	14.4	16.9	17.6	16.3	13.5	9.9	6.6	4.6
Su	4.5	6.4	9.3	12.6	15.6	17.3	17.4	15.8	12.7	8.8	5.0	2.1
2	0.8	1.6	3.9	7.0	10.5	13.7	15.7	16.2	15.1	12.9	10.2	7.6
M	6.0	5.9	7.3	9.4	11.9	14.1	15.5	15.5	14.2	11.9	8.9	6.0
3	3.7	2.7	3.2	4.9	7.3	10.2	12.8	14.6	15.2	14.6	13.0	10.8
Tu	8.6	7.0	6.7	7.4	8.8	10.7	12.6	13.9	14.2	13.4	11.8	9.6
4	7.1	5.1	4.0	4.2	5.4	7.3	9.8	12.3	14.1	14.9	14.6	13.4
W	11.4	9.2	7.4	6.6	6.8	7.8	9.4	11.3	12.9	13.6	13.4	12.2
5	10.4	8.1	6.0	4.7	4.6	5.4	7.3	9.8	12.4	14.3	15.3	15.1
Th	13.8	11.6	9.0	6.9	5.7	5.6	6.6	8.5	10.7	12.7	13.8	13.9
6	12.9	11.0	8.5	6.2	4.7	4.5	5.4	7.5	10.3	13.1	15.1	16.0
F	15.5	13.8	11.2	8.1	5.6	4.3	4.4	5.7	8.2	11.0	13.3	14.6
7	14.6	13.4	11.1	8.2	5.7	4.3	4.3	5.7	8.3	11.5	14.5	16.3
Sa	16.8	15.7	13.3	9.9	6.4	3.8	2.8	3.4	5.5	8.7	12.0	14.5
8	15.7	15.3	13.5	10.6	7.4	4.8	3.7	4.3	6.4	9.7	13.3	16.1
Su	17.5	17.2	15.3	12.0	8.0	4.3	1.9	1.5	3.0	6.0	9.9	13.5
9	15.9	16.6	15.6	13.1	9.6	6.1	3.7	3.3	4.8	7.8	11.7	15.3
M	17.7	18.4	17.1	14.2	10.1	5.6	2.0	0.3	0.9	3.4	7.3	11.6
10	15.2	17.2	17.2	15.3	12.0	8.1	4.7	2.9	3.4	5.9	9.7	13.9
Tu	17.3	19.0	18.6	16.3	12.4	7.6	3.1	0.0	-0.7	1.1	4.6	9.1
11	13.6	16.8	18.1	17.2	14.5	10.6	6.5	3.4	2.6	4.3	7.7	11.9
W	16.0	18.8	19.6	18.1	14.7	10.0	5.0	0.8	-1.3	-0.7	2.1	6.4
12	11.2	15.3	17.9	18.3	16.6	13.1	8.9	5.0	2.8	3.1	5.7	9.7
Th	14.1	17.7	19.7	19.4	16.9	12.6	7.5	2.7	-0.7	-1.7	0.0	3.7
13	8.4	13.0	16.6	18.4	17.9	15.4	11.5	7.3	4.0	2.8	4.2	7.6
F	11.8	15.9	18.8	19.7	18.4	15.0	10.3	5.2	1.0	-1.4	-1.2	1.5
14	5.6	10.2	14.4	17.3	18.2	16.9	13.9	9.9	6.2	3.7	3.5	5.8
Sa	9.5	13.6	17.0	19.1	19.1	16.9	13.0	8.1	3.5	0.1	-1.2	0.0
15	3.2	7.4	11.7	15.2	17.3	17.4	15.6	12.4	8.8	5.7	4.1	4.7
Su	7.4	11.0	14.6	17.4	18.6	17.8	15.1	11.0	6.5	2.6	0.1	-0.3
16	1.5	4.9	8.8	12.6	15.5	16.9	16.5	14.5	11.4	8.2	5.7	4.8
M	5.9	8.6	11.9	14.9	17.0	17.6	16.3	13.5	9.7	5.7	2.5	0.7
17	0.9	3.0	6.2	9.7	12.9	15.3	16.3	15.7	13.7	10.9	8.2	6.2
Tu	5.6	6.7	9.2	12.0	14.4	16.0	16.3	15.1	12.5	9.1	5.7	3.1
18	1.7	2.1	4.1	6.9	10.0	12.9	15.0	15.8	15.3	13.5	11.0	8.5
W	6.6	6.0	6.8	8.8	11.2	13.3	14.9	15.3	14.3	12.2	9.3	6.4
19	4.0	2.7	2.9	4.6	7.2	10.0	12.8	14.9	15.9	15.5	13.8	11.4
Th	8.8	6.7	5.7	6.1	7.7	9.8	12.0	13.8	14.7	14.3	12.6	10.1
20	7.4	4.9	3.4	3.3	4.7	7.1	10.0	13.0	15.4	16.5	16.2	14.5
F	11.9	8.9	6.2	4.6	4.6	6.0	8.2	10.8	13.3	14.8	14.9	13.6
21	11.3	8.4	5.6	3.6	3.2	4.4	6.9	10.2	13.6	16.4	17.7	17.3
Sa	15.3	12.1	8.4	5.0	2.8	2.6	4.0	6.7	10.1	13.3	15.5	16.1
22	14.9	12.4	9.1	5.7	3.3	2.7	4.1	6.9	10.8	14.7	17.8	19.1
Su	18.4	15.9	11.9	7.3	3.2	0.7	0.4	2.3	5.7	10.0	14.0	16.7
23	17.4	16.2	13.3	9.4	5.4	2.7	2.1	3.9	7.3	11.8	16.2	19.4
M	20.5	19.3	15.9	11.1	5.7	1.0	-1.6	-1.4	1.2	5.5	10.6	15.1
24	18.0	18.7	17.1	13.6	9.1	4.7	1.9	1.7	4.0	8.2	13.2	17.9
Tu	20.9	21.5	19.6	15.4	9.7	3.7	-1.1	-3.4	-2.6	0.9	6.0	11.7
25	16.5	19.3	19.6	17.5	13.4	8.3	3.8	1.3	1.6	4.7	9.4	14.8
W	19.4	21.9	21.9	19.2	14.2	8.0	1.7	-2.9	-4.5	-2.8	1.4	7.2
26	13.1	17.7	20.2	19.9	17.2	12.6	7.3	2.9	1.0	2.1	5.8	10.9
Th	16.2	20.4	22.3	21.6	18.1	12.6	6.1	0.0	-3.9	-4.6	-2.0	2.7
27	8.7	14.4	18.6	20.5	19.6	16.3	11.4	6.3	2.4	1.3	3.1	7.2
F	12.3	17.3	20.8	22.0	20.5	16.4	10.7	4.4	-1.0	-4.0	-3.7	-0.5
28	4.5	10.2	15.4	19.0	20.1	18.6	15.0	10.2	5.5	2.5	2.1	4.5
Sa	8.6	13.4	17.7	20.4	20.8	18.7	14.5	8.9	3.2	-1.2	-3.1	-2.0
29	1.4	6.3	11.5	16.0	18.7	19.2	17.3	13.7	9.3	5.3	3.1	3.4
Su	5.9	9.7	13.9	17.4	19.3	19.1	16.7	12.5	7.5	2.8	-0.6	-1.5
30	0.1	3.5	7.8	12.3	16.0	18.0	17.9	15.9	12.5	8.8	5.6	4.1
M	4.8	7.2	10.4	13.8	16.5	17.7	17.1	14.7	11.0	6.8	3.1	0.7

Time meridian 135° W. 0 is midnight. 12 is noon.
Heights are referred to mean lower low water (N.O.S. chart datum).

Lat. 59° 27 N Long. 151° 43 W

DECEMBER

Predicted hourly heights in feet

Day	Hours 0/12	Hours 1/13	Hours 2/14	Hours 3/15	Hours 4/16	Hours 5/17	Hours 6/18	Hours 7/19	Hours 8/20	Hours 9/21	Hours 10/22	Hours 11/23
1	0.5	2.2	5.3	9.0	12.7	15.6	17.0	16.6	14.7	11.8	8.7	6.2
Tu	5.2	5.9	7.9	10.5	13.1	15.2	15.9	15.2	13.1	10.0	6.8	3.9
2	2.3	2.4	4.0	6.6	9.7	12.8	15.0	16.0	15.6	13.9	11.5	9.0
W	6.9	6.0	6.5	8.0	9.9	12.0	13.7	14.3	13.7	12.1	9.8	7.3
3	5.1	3.9	4.0	5.4	7.5	10.1	12.7	14.6	15.4	15.0	13.6	11.6
Th	9.3	7.3	6.4	6.5	7.5	9.0	10.9	12.4	13.2	13.0	11.8	10.0
4	8.0	6.1	5.1	5.1	6.2	8.1	10.4	12.7	14.5	15.3	14.9	13.6
F	11.6	9.3	7.2	6.0	5.9	6.6	8.1	10.0	11.7	12.8	12.9	12.1
5	10.6	8.7	6.9	5.7	5.7	6.7	8.4	10.8	13.1	14.9	15.5	15.1
Sa	13.6	11.4	8.8	6.5	5.0	4.8	5.6	7.3	9.6	11.7	13.1	13.4
6	12.7	11.2	9.1	7.1	5.9	5.8	6.9	8.9	11.5	14.0	15.6	16.1
Su	15.4	13.5	10.8	7.7	5.1	3.6	3.6	4.8	7.1	9.9	12.4	14.0
7	14.3	13.3	11.5	9.0	6.8	5.5	5.7	7.2	9.6	12.6	15.2	16.7
M	16.8	15.4	12.9	9.6	6.1	3.3	2.1	2.5	4.5	7.5	10.9	13.7
8	15.2	15.2	13.8	11.3	8.4	6.0	5.0	5.6	7.7	10.8	14.0	16.6
Tu	17.8	17.2	15.1	11.8	7.8	4.0	1.4	0.8	2.0	4.8	8.6	12.4
9	15.2	16.4	15.8	13.7	10.6	7.4	5.0	4.4	5.8	8.7	12.3	15.7
W	18.1	18.6	17.3	14.3	10.1	5.6	1.8	-0.3	-0.1	2.2	5.9	10.2
10	14.1	16.7	17.3	16.0	13.1	9.5	6.0	4.0	4.2	6.5	10.0	14.0
Th	17.4	19.2	19.0	16.7	12.8	8.0	3.3	-0.3	-1.5	-0.2	3.0	7.5
11	12.1	15.9	17.9	17.7	15.6	12.0	8.0	4.7	3.3	4.5	7.6	11.7
F	15.8	18.8	19.9	18.8	15.6	10.9	5.7	1.1	-1.8	-1.9	0.4	4.5
12	9.4	14.0	17.3	18.6	17.6	14.7	10.6	6.5	3.6	3.2	5.2	9.0
Sa	13.3	17.2	19.7	20.0	18.0	14.0	8.8	3.5	-0.6	-2.5	-1.5	1.8
13	6.3	11.3	15.6	18.2	18.7	16.9	13.3	9.1	5.2	3.1	3.6	6.4
Su	10.5	14.8	18.2	20.0	19.4	16.6	12.0	6.7	1.8	-1.6	-2.4	-0.4
14	3.5	8.2	13.0	16.7	18.6	18.2	15.8	11.9	7.8	4.5	3.1	4.3
M	7.6	11.7	15.6	18.5	19.5	18.3	14.9	10.2	5.1	0.8	-1.6	-1.5
15	1.2	5.3	9.9	14.2	17.3	18.4	17.4	14.6	10.7	6.9	4.2	3.5
Tu	5.2	8.5	12.4	15.8	18.1	18.5	16.8	13.3	8.8	4.2	0.7	-0.9
16	-0.1	2.9	7.0	11.2	15.0	17.4	18.0	16.6	13.6	9.9	6.5	4.3
W	4.0	5.8	9.0	12.4	15.3	17.1	17.2	15.4	12.1	8.0	4.1	1.3
17	0.3	1.5	4.5	8.3	12.1	15.3	17.3	17.5	15.9	13.0	9.6	6.5
Th	4.5	4.3	6.0	8.7	11.6	14.2	15.8	15.9	14.3	11.5	8.0	4.8
18	2.5	1.7	3.0	5.7	9.1	12.5	15.5	17.2	17.2	15.7	12.9	9.7
F	6.7	4.6	4.2	5.4	7.7	10.3	12.8	14.5	15.0	13.9	11.6	8.7
19	5.9	3.7	3.0	4.0	6.4	9.5	12.7	15.6	17.2	17.3	15.9	13.2
Sa	9.9	6.7	4.3	3.4	4.2	6.2	8.8	11.5	13.7	14.6	14.1	12.4
20	9.8	7.1	4.9	3.9	4.6	6.7	9.6	12.9	15.8	17.6	17.8	16.4
Su	13.6	10.1	6.4	3.5	2.2	2.6	4.5	7.4	10.6	13.4	14.9	14.9
21	13.5	11.1	8.1	5.5	4.2	4.6	6.6	9.7	13.2	16.4	18.4	18.6
M	17.1	14.0	9.9	5.6	2.2	0.5	0.9	3.1	6.4	10.3	13.7	15.8
22	16.1	14.7	12.1	8.7	5.6	4.0	4.3	6.4	9.8	13.8	17.3	19.3
Tu	19.5	17.6	14.0	9.3	4.4	0.6	-1.2	-0.5	2.1	6.2	10.8	14.6
23	17.0	17.3	15.7	12.6	8.7	5.2	3.4	3.9	6.4	10.3	14.6	18.3
W	20.3	20.2	17.8	13.6	8.2	2.8	-1.1	-2.6	-1.4	1.9	6.7	11.8
24	15.9	18.2	18.3	16.2	12.5	8.1	4.3	2.7	3.6	6.6	11.0	15.7
Th	19.3	21.1	20.4	17.5	12.6	6.7	1.1	-2.6	-3.5	-1.5	2.6	8.0
25	13.3	17.3	19.3	18.8	16.0	11.7	7.0	3.3	2.2	3.7	7.3	12.0
F	16.8	20.2	21.4	20.1	16.5	11.1	4.9	-0.5	-3.5	-3.5	-0.8	4.0
26	9.6	14.9	18.5	19.8	18.6	15.2	10.5	5.7	2.5	2.1	4.3	8.3
Sa	13.2	17.7	20.6	21.1	19.1	14.9	9.2	3.2	-1.6	-3.7	-2.7	0.8
27	5.9	11.5	16.3	19.2	19.7	17.8	13.9	9.0	4.6	2.2	2.5	5.3
Su	9.5	14.2	18.2	20.4	20.2	17.5	12.9	7.3	1.8	-2.0	-2.9	-1.1
28	2.9	8.0	13.2	17.2	19.3	19.0	16.4	12.3	7.7	4.0	2.4	3.5
M	6.5	10.7	14.9	18.1	19.5	18.6	15.5	10.8	5.7	1.1	-1.5	-1.4
29	1.1	5.2	10.0	14.5	17.6	18.8	17.7	14.8	10.8	6.7	3.9	3.2
Tu	4.7	7.8	11.5	15.0	17.5	18.1	16.6	13.4	9.1	4.7	1.2	-0.2
30	0.7	3.5	7.4	11.5	15.2	17.4	17.7	16.2	13.2	9.6	6.3	4.3
W	4.2	5.9	8.7	11.8	14.6	16.3	16.3	14.6	11.5	7.9	4.4	2.1
31	1.5	2.9	5.7	9.1	12.6	15.4	16.8	16.5	14.8	12.0	9.0	6.4
Th	4.9	5.2	6.7	9.1	11.6	13.7	14.8	14.5	12.9	10.3	7.4	4.9

Time meridian 135° W. 0 is midnight. 12 is noon.
Heights are referred to mean lower low water (N.O.S. chart datum).

VALDEZ, ALASKA, 2015

Lat. 61° 08 N Long. 146° 22 W

JANUARY

Predicted hourly heights in feet

Day	Hours 0/12	Hours 1/13	Hours 2/14	Hours 3/15	Hours 4/16	Hours 5/17	Hours 6/18	Hours 7/19	Hours 8/20	Hours 9/21	Hours 10/22	Hours 11/23
1	8.5	7.0	5.3	4.1	3.8	4.5	6.2	8.4	10.6	12.3	13.0	12.6
Th	10.9	8.4	5.5	2.7	0.8	0.1	0.9	2.7	5.0	7.3	9.1	10.0
2	9.9	8.9	7.3	5.5	4.1	3.7	4.5	6.5	8.9	11.1	12.7	13.3
F	12.6	10.7	7.9	4.7	1.7	-0.2	-0.5	0.6	2.9	5.5	8.0	9.7
3	10.6	10.3	9.1	7.2	5.2	3.8	3.5	4.7	7.0	9.5	11.8	13.2
Sa	13.4	12.3	10.1	7.0	3.5	0.6	-1.0	-0.8	0.9	3.6	6.4	8.8
4	10.5	11.0	10.5	8.9	6.7	4.6	3.3	3.5	5.2	7.7	10.3	12.3
Su	13.4	13.3	11.8	9.1	5.7	2.3	-0.4	-1.4	-0.5	1.7	4.6	7.5
5	9.8	11.1	11.2	10.2	8.3	5.9	3.9	3.1	3.8	5.8	8.5	11.0
M	12.8	13.4	12.8	10.8	7.8	4.3	1.1	-1.0	-1.3	0.2	2.9	6.0
6	8.7	10.6	11.4	11.1	9.6	7.4	5.0	3.4	3.1	4.3	6.7	9.4
Tu	11.6	12.9	13.1	11.9	9.5	6.3	2.9	0.2	-1.2	-0.7	1.4	4.4
7	7.3	9.7	11.1	11.4	10.6	8.7	6.4	4.3	3.1	3.3	5.0	7.5
W	10.1	11.9	12.7	12.3	10.7	8.0	4.9	1.8	-0.3	-0.8	0.4	2.9
8	5.9	8.6	10.5	11.3	11.1	9.8	7.7	5.5	3.7	3.1	3.9	5.8
Th	8.3	10.5	11.9	12.1	11.2	9.3	6.6	3.7	1.2	-0.2	0.1	1.8
9	4.5	7.3	9.6	10.9	11.2	10.5	8.9	6.9	4.8	3.5	3.4	4.5
F	6.6	8.8	10.6	11.4	11.2	10.0	7.9	5.4	2.9	1.1	0.4	1.3
10	3.4	6.1	8.5	10.2	11.0	10.8	9.8	8.1	6.2	4.4	3.5	3.8
Sa	5.1	7.1	8.9	10.2	10.5	10.0	8.7	6.8	4.6	2.6	1.4	1.5
11	2.8	5.0	7.3	9.3	10.4	10.8	10.4	9.2	7.5	5.7	4.3	3.7
Su	4.2	5.5	7.2	8.6	9.4	9.5	9.0	7.8	6.1	4.3	2.8	2.2
12	2.7	4.2	6.2	8.2	9.7	10.5	10.6	10.1	8.8	7.1	5.4	4.2
M	3.9	4.4	5.6	6.9	7.9	8.5	8.6	8.2	7.2	5.8	4.4	3.3
13	3.1	3.8	5.3	7.1	8.7	9.9	10.5	10.6	9.9	8.6	6.9	5.3
Tu	4.2	3.8	4.2	5.1	6.2	7.1	7.7	8.1	7.9	7.1	6.0	4.8
14	4.1	4.0	4.7	6.0	7.6	9.0	10.1	10.7	10.8	10.0	8.6	6.8
W	5.1	3.9	3.4	3.6	4.3	5.3	6.4	7.3	7.9	8.0	7.4	6.4
15	5.4	4.7	4.6	5.2	6.3	7.7	9.2	10.4	11.2	11.2	10.3	8.7
Th	6.7	4.8	3.4	2.6	2.6	3.3	4.6	6.0	7.4	8.3	8.5	8.0
16	7.0	5.9	5.1	4.8	5.2	6.3	7.9	9.6	11.0	11.8	11.7	10.7
F	8.8	6.5	4.2	2.4	1.3	1.4	2.4	4.2	6.1	7.9	9.0	9.2
17	8.6	7.5	6.1	5.0	4.4	4.8	6.1	8.1	10.2	11.8	12.7	12.4
Sa	11.0	8.7	6.0	3.2	1.0	0.0	0.3	1.9	4.2	6.7	8.7	9.9
18	10.1	9.3	7.7	6.0	4.4	3.7	4.3	6.0	8.5	10.9	12.7	13.5
Su	13.0	11.2	8.4	5.1	1.9	-0.4	-1.3	-0.5	1.8	4.7	7.6	9.8
19	10.9	10.8	9.6	7.6	5.3	3.5	2.9	3.9	6.1	9.1	11.8	13.6
M	14.2	13.3	11.1	7.7	3.9	0.5	-1.8	-2.2	-0.6	2.3	5.7	8.8
20	10.9	11.8	11.4	9.6	7.1	4.4	2.5	2.2	3.6	6.4	9.7	12.5
Tu	14.3	14.6	13.3	10.6	6.8	2.6	-0.8	-2.7	-2.5	-0.2	3.2	6.9
21	10.0	12.0	12.5	11.5	9.2	6.2	3.4	1.6	1.7	3.6	6.8	10.3
W	13.0	14.6	14.5	12.8	9.7	5.6	1.5	-1.7	-3.0	-2.1	0.7	4.5
22	8.3	11.2	12.8	12.8	11.3	8.6	5.3	2.5	1.0	1.5	3.8	7.2
Th	10.6	13.2	14.4	13.9	11.9	8.6	4.5	0.6	-2.0	-2.7	-1.1	2.1
23	6.0	9.6	12.1	13.2	12.8	10.8	7.8	4.5	1.9	0.7	1.6	4.1
F	7.5	10.7	12.8	13.6	12.9	10.8	7.5	3.7	0.3	-1.7	-1.7	0.3
24	3.7	7.4	10.6	12.6	13.2	12.4	10.2	7.2	4.0	1.6	0.8	1.9
Sa	4.4	7.5	10.2	12.0	12.4	11.7	9.6	6.7	3.4	0.6	-0.8	-0.3
25	2.0	5.3	8.6	11.1	12.7	12.9	11.9	9.7	6.7	3.8	1.7	1.1
Su	2.3	4.6	7.2	9.4	10.7	11.1	10.4	8.7	6.2	3.5	1.4	0.6
26	1.4	3.6	6.5	9.2	11.2	12.4	12.5	11.4	9.3	6.6	3.9	2.0
M	1.6	2.5	4.4	6.4	8.2	9.3	9.8	9.4	8.2	6.2	4.1	2.5
27	2.0	2.9	4.8	7.2	9.3	11.0	12.0	12.1	11.2	9.2	6.7	4.2
Tu	2.5	1.9	2.5	3.9	5.5	6.9	8.1	8.8	8.9	8.0	6.6	4.9
28	3.7	3.4	4.0	5.5	7.3	9.1	10.7	11.7	11.9	11.0	9.3	6.9
W	4.6	2.8	2.0	2.2	3.1	4.4	5.9	7.3	8.4	8.7	8.3	7.2
29	5.9	4.8	4.3	4.6	5.7	7.2	8.9	10.4	11.6	11.8	11.1	9.4
Th	7.2	4.8	2.9	1.7	1.6	2.3	3.7	5.4	7.1	8.4	9.0	8.8
30	7.9	6.6	5.4	4.6	4.6	5.5	7.0	8.8	10.5	11.7	12.0	11.2
F	9.5	7.2	4.7	2.5	1.1	0.8	1.7	3.3	5.4	7.4	8.9	9.6
31	9.4	8.4	7.0	5.5	4.4	4.3	5.2	6.9	8.9	10.8	12.0	12.2
Sa	11.3	9.5	6.9	4.1	1.7	0.3	0.3	1.5	3.6	6.0	8.1	9.6

Time meridian 135° W. 0 is midnight. 12 is noon.
Heights are referred to mean lower low water (N.O.S. chart datum).

Lat. 61° 08 N Long. 146° 22 W

FEBRUARY

Predicted hourly heights in feet

Day	Hours 0/12	Hours 1/13	Hours 2/14	Hours 3/15	Hours 4/16	Hours 5/17	Hours 6/18	Hours 7/19	Hours 8/20	Hours 9/21	Hours 10/22	Hours 11/23
1	10.2	9.8	8.6	6.8	5.0	3.9	3.9	5.1	7.1	9.4	11.3	12.3
Su	12.3	11.2	9.0	6.1	3.1	0.7	-0.4	0.1	1.9	4.4	7.0	9.1
2	10.4	10.7	9.9	8.2	6.1	4.1	3.2	3.6	5.3	7.7	10.1	11.8
M	12.7	12.3	10.7	8.1	4.9	1.8	-0.3	-0.8	0.4	2.8	5.6	8.2
3	10.1	11.1	10.9	9.5	7.4	5.0	3.2	2.7	3.7	5.9	8.5	10.8
Tu	12.4	12.8	11.9	9.8	6.8	3.4	0.6	-0.9	-0.6	1.3	4.1	7.1
4	9.5	11.0	11.4	10.6	8.7	6.2	3.8	2.5	2.6	4.2	6.7	9.4
W	11.5	12.6	12.5	11.1	8.5	5.2	2.0	-0.3	-0.9	0.2	2.7	5.8
5	8.6	10.6	11.6	11.3	9.8	7.5	4.9	2.9	2.1	2.8	5.0	7.7
Th	10.2	12.0	12.5	11.8	9.8	6.9	3.7	0.9	-0.6	-0.3	1.6	4.4
6	7.5	9.9	11.4	11.7	10.7	8.7	6.2	3.8	2.2	2.1	3.5	5.9
F	8.6	10.8	12.0	11.9	10.6	8.3	5.4	2.5	0.4	-0.2	0.8	3.3
7	6.3	9.0	10.9	11.7	11.3	9.8	7.5	5.0	2.9	2.0	2.5	4.3
Sa	6.9	9.3	11.0	11.5	10.9	9.3	6.9	4.2	1.8	0.5	0.7	2.4
8	5.1	8.0	10.2	11.4	11.5	10.5	8.7	6.4	4.1	2.5	2.1	3.1
Su	5.2	7.6	9.5	10.6	10.7	9.7	8.0	5.7	3.4	1.7	1.2	2.1
9	4.2	6.8	9.2	10.8	11.4	11.0	9.7	7.8	5.5	3.6	2.5	2.5
M	3.8	5.9	7.9	9.3	9.9	9.6	8.6	6.9	5.0	3.2	2.2	2.3
10	3.6	5.8	8.1	10.0	11.0	11.1	10.4	9.0	7.1	5.0	3.4	2.6
Tu	3.0	4.3	6.1	7.7	8.6	8.9	8.6	7.7	6.4	4.8	3.5	3.0
11	3.5	5.0	7.0	8.9	10.3	10.9	10.7	10.0	8.6	6.7	4.8	3.4
W	2.9	3.3	4.4	5.8	7.0	7.8	8.1	8.0	7.4	6.3	5.1	4.1
12	3.9	4.6	5.9	7.6	9.1	10.2	10.7	10.6	9.9	8.5	6.7	4.9
Th	3.5	2.9	3.1	4.0	5.1	6.2	7.1	7.7	7.9	7.5	6.6	5.6
13	4.8	4.7	5.2	6.3	7.6	9.0	10.1	10.7	10.8	10.1	8.7	6.9
F	4.9	3.4	2.6	2.5	3.1	4.1	5.4	6.7	7.7	8.2	8.0	7.3
14	6.3	5.4	5.0	5.2	6.0	7.3	8.8	10.1	11.1	11.3	10.7	9.2
Sa	7.1	4.9	3.0	1.8	1.4	1.9	3.3	5.1	6.8	8.3	9.0	8.9
15	8.0	6.8	5.5	4.7	4.5	5.3	6.8	8.6	10.4	11.7	12.1	11.4
Su	9.7	7.2	4.6	2.2	0.5	0.1	0.9	2.8	5.2	7.5	9.2	10.0
16	9.8	8.6	6.9	5.1	3.8	3.5	4.4	6.3	8.8	11.0	12.5	12.9
M	12.0	10.0	7.1	3.9	1.0	-0.8	-1.0	0.4	3.0	5.9	8.6	10.5
17	11.1	10.6	8.9	6.6	4.2	2.6	2.3	3.6	6.2	9.2	11.7	13.4
Tu	13.7	12.5	10.0	6.5	2.8	-0.3	-2.0	-1.7	0.5	3.7	7.1	10.0
18	11.8	12.1	11.0	8.7	5.7	2.9	1.2	1.3	3.2	6.3	9.7	12.4
W	14.0	14.1	12.5	9.5	5.6	1.6	-1.5	-2.7	-1.7	1.2	4.9	8.6
19	11.5	12.9	12.8	11.0	8.1	4.6	1.6	0.0	0.6	3.0	6.6	10.2
Th	13.0	14.3	14.1	12.1	8.7	4.5	0.5	-2.1	-2.7	-0.9	2.5	6.5
20	10.2	12.7	13.7	12.9	10.6	7.1	3.3	0.4	-0.7	0.4	3.3	7.0
F	10.6	13.1	14.2	13.5	11.2	7.6	3.5	-0.1	-2.2	-2.0	0.4	4.1
21	8.1	11.5	13.5	13.9	12.6	9.8	6.0	2.3	-0.3	-0.9	0.6	3.7
Sa	7.4	10.7	12.8	13.4	12.5	10.0	6.6	2.8	-0.2	-1.5	-0.7	2.1
22	5.8	9.5	12.3	13.7	13.6	11.9	8.8	5.2	1.7	-0.4	-0.6	1.1
Su	4.2	7.6	10.3	12.0	12.3	11.2	8.9	5.8	2.6	0.3	-0.3	1.0
23	3.8	7.3	10.4	12.5	13.4	12.9	11.0	8.0	4.6	1.6	-0.1	0.0
M	1.8	4.6	7.4	9.6	10.8	10.9	10.0	8.0	5.4	3.0	1.3	1.2
24	2.7	5.3	8.2	10.7	12.2	12.7	12.0	10.2	7.5	4.5	2.0	0.6
Tu	0.9	2.4	4.7	6.9	8.5	9.5	9.7	9.0	7.5	5.6	3.7	2.6
25	2.8	4.2	6.3	8.6	10.4	11.5	11.8	11.2	9.7	7.3	4.8	2.6
W	1.5	1.6	2.8	4.4	6.0	7.4	8.4	8.8	8.5	7.5	6.1	4.7
26	3.9	4.1	5.1	6.7	8.3	9.7	10.7	11.1	10.7	9.5	7.5	5.2
Th	3.3	2.2	2.0	2.7	3.8	5.1	6.5	7.7	8.4	8.5	7.9	6.8
27	5.6	4.9	4.8	5.4	6.4	7.7	9.0	10.1	10.7	10.6	9.5	7.8
F	5.7	3.8	2.5	2.0	2.2	3.1	4.5	6.0	7.5	8.5	8.8	8.4
28	7.5	6.3	5.3	4.9	5.0	5.9	7.1	8.6	9.9	10.7	10.7	9.7
Sa	8.1	6.0	3.9	2.3	1.5	1.7	2.7	4.3	6.2	7.9	9.0	9.4

Time meridian 135° W. 0 is midnight. 12 is noon.
Heights are referred to mean lower low water (N.O.S. chart datum).

VALDEZ, ALASKA, 2015

Lat. 61° 08 N Long. 146° 22 W

MARCH

Predicted hourly heights in feet

Day	Hours 0/12	Hours 1/13	Hours 2/14	Hours 3/15	Hours 4/16	Hours 5/17	Hours 6/18	Hours 7/19	Hours 8/20	Hours 9/21	Hours 10/22	Hours 11/23
1	9.0	7.9	6.5	5.1	4.4	4.4	5.3	6.8	8.6	10.1	11.0	10.9
Su	9.9	8.1	5.8	3.5	1.6	0.8	1.2	2.7	4.7	6.9	8.7	9.8
2	10.0	9.3	7.8	6.0	4.4	3.5	3.7	5.0	7.0	9.0	10.6	11.4
M	11.2	9.9	7.8	5.1	2.5	0.8	0.3	1.2	3.2	5.6	8.0	9.7
3	10.5	10.3	9.1	7.2	5.0	3.3	2.7	3.4	5.2	7.5	9.7	11.2
Tu	11.8	11.2	9.5	6.9	4.0	1.4	0.0	0.2	1.8	4.3	7.0	9.3
4	10.7	11.0	10.3	8.4	6.0	3.7	2.2	2.1	3.5	5.8	8.4	10.5
W	11.8	11.9	10.8	8.6	5.6	2.6	0.4	-0.3	0.7	3.0	5.9	8.5
5	10.5	11.4	11.1	9.6	7.3	4.6	2.3	1.4	2.0	4.0	6.7	9.4
Th	11.3	12.1	11.7	9.9	7.2	4.1	1.4	-0.2	0.0	1.8	4.6	7.6
6	10.0	11.5	11.7	10.7	8.5	5.8	3.1	1.3	1.0	2.4	4.9	7.8
F	10.3	11.8	12.0	10.9	8.7	5.7	2.7	0.6	-0.1	0.9	3.4	6.5
7	9.3	11.2	12.0	11.5	9.7	7.1	4.2	1.8	0.7	1.2	3.2	6.1
Sa	8.8	10.9	11.8	11.4	9.8	7.2	4.3	1.8	0.4	0.6	2.4	5.3
8	8.3	10.7	12.0	12.0	10.7	8.4	5.6	2.9	1.0	0.6	1.9	4.3
Su	7.1	9.6	11.1	11.4	10.4	8.5	5.9	3.3	1.4	0.8	1.8	4.2
9	7.2	9.8	11.5	12.1	11.4	9.6	7.0	4.3	2.0	0.8	1.0	2.8
M	5.4	8.0	9.9	10.8	10.5	9.2	7.2	4.9	2.8	1.6	1.8	3.4
10	6.0	8.7	10.8	11.8	11.7	10.4	8.4	5.9	3.4	1.6	0.9	1.7
Tu	3.7	6.2	8.3	9.7	10.0	9.5	8.1	6.3	4.3	2.8	2.3	3.1
11	5.0	7.5	9.8	11.2	11.6	11.0	9.5	7.5	5.1	2.9	1.5	1.4
W	2.4	4.4	6.5	8.2	9.0	9.1	8.5	7.4	5.8	4.3	3.3	3.2
12	4.3	6.3	8.5	10.2	11.1	11.1	10.3	8.9	6.9	4.8	2.9	1.8
Th	1.8	2.9	4.6	6.3	7.6	8.3	8.4	8.0	7.1	5.9	4.7	4.0
13	4.2	5.3	7.0	8.7	10.0	10.7	10.6	9.9	8.6	6.8	4.8	3.1
F	2.1	2.1	3.0	4.3	5.7	6.8	7.6	8.0	8.0	7.3	6.3	5.2
14	4.6	4.8	5.6	7.0	8.4	9.5	10.2	10.4	10.0	8.9	7.1	5.1
Sa	3.4	2.3	2.0	2.5	3.6	4.9	6.3	7.4	8.2	8.4	7.9	6.9
15	5.8	5.0	4.8	5.3	6.3	7.7	9.0	10.0	10.6	10.4	9.4	7.7
Su	5.5	3.5	2.0	1.3	1.6	2.7	4.3	6.1	7.8	9.0	9.3	8.7
16	7.5	6.1	4.8	4.2	4.3	5.3	6.8	8.6	10.2	11.2	11.2	10.2
M	8.2	5.8	3.3	1.4	0.4	0.6	2.0	4.2	6.6	8.7	10.1	10.4
17	9.6	7.9	5.9	4.1	2.9	2.9	4.1	6.2	8.6	10.7	11.9	12.0
Tu	10.8	8.6	5.7	2.7	0.4	-0.7	-0.2	1.8	4.7	7.6	10.0	11.4
18	11.4	10.2	7.9	5.2	2.8	1.3	1.5	3.2	5.9	8.9	11.4	12.7
W	12.7	11.3	8.6	5.2	1.8	-0.6	-1.5	-0.4	2.3	5.8	9.1	11.5
19	12.6	12.2	10.3	7.4	4.0	1.2	-0.2	0.3	2.7	6.0	9.4	12.0
Th	13.4	13.2	11.4	8.2	4.4	0.9	-1.4	-1.7	0.1	3.4	7.2	10.6
20	12.9	13.6	12.6	10.0	6.4	2.6	-0.4	-1.4	-0.3	2.6	6.4	9.9
F	12.5	13.7	13.1	10.9	7.5	3.5	0.1	-1.7	-1.3	1.2	4.9	8.9
21	12.0	13.9	14.0	12.3	9.2	5.1	1.2	-1.5	-2.1	-0.4	3.0	6.9
Sa	10.4	12.7	13.5	12.6	10.1	6.5	2.7	-0.2	-1.4	-0.3	2.6	6.6
22	10.3	13.1	14.3	13.8	11.6	8.0	3.9	0.2	-2.0	-2.0	0.1	3.6
Su	7.4	10.5	12.5	12.9	11.7	9.1	5.7	2.3	0.0	-0.5	1.1	4.3
23	8.1	11.4	13.5	14.1	13.1	10.5	6.9	3.0	-0.3	-1.9	-1.4	0.9
M	4.3	7.7	10.4	11.8	11.8	10.5	8.1	5.1	2.3	0.7	0.8	2.7
24	5.9	9.1	11.8	13.2	13.3	12.0	9.4	6.0	2.5	-0.2	-1.3	-0.4
Tu	1.9	4.9	7.7	9.8	10.8	10.7	9.5	7.4	4.9	2.8	1.8	2.3
25	4.3	7.0	9.6	11.5	12.4	12.2	10.8	8.5	5.5	2.6	0.4	-0.2
W	0.7	2.8	5.2	7.4	8.9	9.7	9.6	8.7	7.1	5.2	3.6	3.0
26	3.7	5.4	7.5	9.5	10.8	11.3	11.0	9.9	7.9	5.4	3.0	1.3
Th	0.9	1.7	3.3	5.1	6.7	8.0	8.7	8.9	8.4	7.2	5.7	4.5
27	4.1	4.6	5.9	7.4	8.8	9.7	10.3	10.2	9.3	7.7	5.7	3.7
F	2.3	1.8	2.2	3.3	4.7	6.0	7.3	8.2	8.7	8.4	7.5	6.4
28	5.3	4.9	5.0	5.8	6.8	7.9	8.8	9.5	9.7	9.2	7.8	6.1
Sa	4.3	2.9	2.3	2.4	3.1	4.2	5.6	7.1	8.2	8.9	8.7	8.0
29	6.9	5.8	5.0	4.8	5.2	6.0	7.1	8.3	9.3	9.7	9.3	8.1
Su	6.5	4.7	3.1	2.2	2.1	2.7	4.0	5.7	7.4	8.7	9.4	9.2
30	8.3	7.0	5.6	4.5	4.0	4.3	5.3	6.7	8.3	9.5	10.0	9.5
M	8.3	6.6	4.6	2.8	1.8	1.7	2.6	4.2	6.3	8.2	9.5	10.0
31	9.5	8.4	6.7	4.9	3.5	3.0	3.6	5.0	6.9	8.7	10.0	10.3
Tu	9.8	8.3	6.3	4.0	2.1	1.2	1.5	2.9	5.1	7.3	9.2	10.4

Time meridian 135° W. 0 is midnight. 12 is noon.
Heights are referred to mean lower low water (N.O.S. chart datum).

Lat. 61° 08 N Long. 146° 22 W

APRIL

Predicted hourly heights in feet

Day	Hours 0/12	Hours 1/13	Hours 2/14	Hours 3/15	Hours 4/16	Hours 5/17	Hours 6/18	Hours 7/19	Hours 8/20	Hours 9/21	Hours 10/22	Hours 11/23
1	10.5	9.6	7.9	5.8	3.7	2.3	2.2	3.2	5.2	7.4	9.4	10.5
W	10.7	9.8	7.9	5.5	3.1	1.3	0.8	1.8	3.8	6.3	8.7	10.4
2	11.1	10.7	9.2	6.9	4.4	2.2	1.2	1.7	3.4	5.9	8.3	10.2
Th	11.1	10.8	9.4	7.1	4.4	2.1	0.7	0.9	2.6	5.2	7.9	10.1
3	11.4	11.5	10.4	8.2	5.5	2.8	0.9	0.5	1.7	4.1	6.8	9.3
F	10.9	11.3	10.5	8.6	6.0	3.3	1.2	0.6	1.6	4.0	6.9	9.5
4	11.3	12.0	11.4	9.5	6.8	3.8	1.2	0.0	0.4	2.3	5.1	7.9
Sa	10.2	11.3	11.2	9.9	7.5	4.7	2.3	0.9	1.1	2.9	5.7	8.6
5	10.9	12.2	12.1	10.7	8.2	5.2	2.2	0.1	-0.4	0.8	3.3	6.3
Su	9.0	10.8	11.4	10.7	8.8	6.3	3.6	1.7	1.1	2.1	4.5	7.5
6	10.2	11.9	12.4	11.6	9.6	6.7	3.6	0.9	-0.5	-0.3	1.6	4.4
M	7.4	9.7	10.9	10.9	9.8	7.7	5.2	2.9	1.6	1.8	3.5	6.2
7	9.1	11.3	12.4	12.1	10.7	8.2	5.2	2.3	0.2	-0.6	0.3	2.6
Tu	5.5	8.2	10.0	10.7	10.2	8.8	6.7	4.4	2.7	2.1	2.9	5.0
8	7.8	10.3	11.9	12.2	11.4	9.5	6.9	4.0	1.5	-0.1	-0.2	1.2
W	3.7	6.4	8.6	9.8	10.0	9.3	7.9	6.0	4.1	2.9	2.8	4.1
9	6.4	8.9	10.9	11.9	11.7	10.5	8.5	6.0	3.3	1.2	0.1	0.4
Th	2.0	4.4	6.8	8.5	9.3	9.3	8.6	7.3	5.7	4.2	3.4	3.7
10	5.1	7.3	9.5	10.9	11.4	10.9	9.7	7.8	5.4	3.1	1.3	0.5
F	1.0	2.6	4.8	6.7	8.1	8.7	8.8	8.3	7.2	5.8	4.5	3.9
11	4.4	5.8	7.6	9.3	10.4	10.7	10.3	9.2	7.5	5.4	3.2	1.6
Sa	1.0	1.5	2.9	4.6	6.3	7.6	8.4	8.7	8.4	7.4	6.1	4.9
12	4.4	4.7	5.7	7.2	8.6	9.6	10.1	10.0	9.2	7.7	5.7	3.6
Su	2.0	1.3	1.5	2.6	4.2	5.9	7.3	8.5	9.1	8.9	8.0	6.6
13	5.2	4.4	4.3	5.0	6.2	7.6	8.9	9.7	10.0	9.6	8.2	6.2
M	4.1	2.3	1.3	1.2	2.1	3.7	5.7	7.6	9.1	9.9	9.7	8.6
14	6.9	5.2	3.9	3.4	3.7	4.9	6.6	8.4	9.8	10.5	10.2	8.9
Tu	6.8	4.4	2.3	0.9	0.7	1.6	3.6	6.0	8.4	10.2	11.0	10.6
15	9.2	7.0	4.7	2.8	1.9	2.2	3.7	5.9	8.3	10.1	11.1	10.9
W	9.5	7.2	4.5	2.0	0.4	0.1	1.4	3.9	6.9	9.6	11.5	12.1
16	11.4	9.4	6.6	3.7	1.3	0.2	0.8	2.8	5.6	8.5	10.7	11.8
Th	11.5	9.9	7.3	4.2	1.4	-0.2	-0.1	1.7	4.7	8.1	11.0	12.7
17	13.0	11.8	9.2	5.7	2.3	-0.3	-1.3	-0.2	2.4	5.8	9.0	11.3
F	12.3	11.9	10.0	7.0	3.6	0.8	-0.6	0.0	2.5	6.0	9.5	12.3
18	13.8	13.6	11.7	8.5	4.5	0.8	-1.8	-2.3	-0.7	2.5	6.2	9.5
Sa	11.8	12.6	11.9	9.6	6.4	3.0	0.4	-0.5	0.7	3.7	7.4	10.9
19	13.3	14.3	13.6	11.1	7.4	3.2	-0.6	-2.7	-2.6	-0.5	3.1	6.8
Su	10.0	12.0	12.5	11.4	9.0	5.7	2.5	0.3	0.1	1.8	5.1	8.8
20	11.9	13.9	14.3	13.0	10.1	6.1	2.0	-1.4	-3.0	-2.3	0.2	3.9
M	7.5	10.3	11.9	12.0	10.7	8.2	5.1	2.3	0.7	1.0	3.2	6.5
21	9.8	12.5	13.8	13.7	11.9	8.9	5.0	1.1	-1.7	-2.6	-1.5	1.3
Tu	4.7	7.9	10.3	11.4	11.3	9.8	7.4	4.7	2.4	1.5	2.2	4.5
22	7.6	10.4	12.4	13.2	12.6	10.6	7.6	4.1	0.8	-1.3	-1.7	-0.3
W	2.4	5.5	8.1	9.9	10.7	10.4	9.0	6.9	4.6	2.9	2.4	3.4
23	5.6	8.2	10.5	11.8	12.1	11.3	9.4	6.7	3.7	1.0	-0.6	-0.6
Th	0.9	3.3	5.9	8.0	9.3	9.9	9.6	8.4	6.7	4.9	3.6	3.4
24	4.5	6.3	8.4	9.9	10.8	10.9	10.1	8.5	6.2	3.6	1.5	0.4
F	0.6	2.0	4.0	6.0	7.6	8.7	9.2	9.1	8.2	6.8	5.3	4.3
25	4.2	5.1	6.5	7.9	9.1	9.7	9.8	9.2	7.9	6.0	3.9	2.2
Sa	1.4	1.6	2.7	4.3	5.8	7.2	8.3	8.9	8.9	8.2	7.0	5.7
26	4.8	4.7	5.2	6.1	7.2	8.1	8.7	9.0	8.7	7.7	6.1	4.3
Su	2.9	2.1	2.2	3.0	4.3	5.7	7.1	8.3	9.0	9.1	8.4	7.2
27	6.0	5.0	4.6	4.7	5.4	6.3	7.3	8.2	8.7	8.6	7.7	6.3
M	4.7	3.4	2.5	2.5	3.1	4.2	5.7	7.3	8.7	9.5	9.4	8.6
28	7.3	5.9	4.6	3.9	3.9	4.5	5.6	6.9	8.1	8.8	8.8	7.9
Tu	6.5	4.9	3.5	2.5	2.4	3.1	4.5	6.2	8.1	9.4	10.0	9.7
29	8.6	7.0	5.3	3.8	2.9	2.9	3.8	5.3	7.0	8.4	9.2	9.1
W	8.1	6.6	4.8	3.2	2.3	2.3	3.3	5.1	7.2	9.1	10.3	10.6
30	9.9	8.4	6.3	4.2	2.5	1.7	2.1	3.5	5.5	7.5	9.0	9.7
Th	9.3	8.1	6.3	4.4	2.7	1.9	2.3	3.9	6.1	8.5	10.3	11.1

Time meridian 135° W. 0 is midnight. 12 is noon.
Heights are referred to mean lower low water (N.O.S. chart datum).

VALDEZ, ALASKA, 2015

Lat. 61° 08 N Long. 146° 22 W

MAY

Predicted hourly heights in feet

Day	Hours 0/12	Hours 1/13	Hours 2/14	Hours 3/15	Hours 4/16	Hours 5/17	Hours 6/18	Hours 7/19	Hours 8/20	Hours 9/21	Hours 10/22	Hours 11/23
1	10.9	9.7	7.6	5.2	2.8	1.1	0.8	1.8	3.8	6.2	8.3	9.7
F	10.1	9.4	7.9	5.8	3.7	2.1	1.8	2.8	5.0	7.5	9.8	11.3
2	11.7	10.9	9.1	6.5	3.6	1.2	0.0	0.3	1.9	4.5	7.1	9.2
Sa	10.3	10.3	9.2	7.3	5.0	2.9	1.8	2.1	3.8	6.4	9.0	11.1
3	12.1	11.9	10.5	8.0	5.0	2.0	-0.1	-0.8	0.3	2.6	5.5	8.1
Su	9.9	10.7	10.3	8.7	6.5	4.1	2.3	1.8	2.8	5.1	7.9	10.4
4	12.1	12.5	11.7	9.6	6.6	3.3	0.5	-1.1	-1.0	0.8	3.6	6.5
M	9.0	10.5	10.8	9.9	8.0	5.6	3.4	2.0	2.2	3.9	6.5	9.4
5	11.6	12.7	12.5	10.9	8.3	5.0	1.8	-0.6	-1.5	-0.7	1.6	4.7
Tu	7.6	9.7	10.7	10.5	9.2	7.1	4.8	2.9	2.2	3.0	5.1	7.9
6	10.6	12.3	12.8	11.9	9.9	6.9	3.6	0.6	-1.2	-1.5	0.0	2.7
W	5.7	8.3	10.0	10.6	10.0	8.5	6.4	4.2	2.8	2.6	3.9	6.3
7	9.1	11.3	12.5	12.4	11.1	8.7	5.7	2.5	-0.1	-1.4	-1.0	0.9
Th	3.7	6.6	8.8	10.0	10.2	9.4	7.8	5.8	4.0	3.0	3.2	4.9
8	7.3	9.8	11.6	12.2	11.6	10.1	7.7	4.7	1.9	-0.3	-1.1	-0.3
F	1.8	4.5	7.1	8.9	9.8	9.8	8.9	7.4	5.6	4.0	3.3	3.8
9	5.6	7.9	10.0	11.3	11.5	10.8	9.2	6.9	4.3	1.7	-0.1	-0.6
Sa	0.4	2.5	5.0	7.2	8.8	9.5	9.5	8.8	7.3	5.6	4.2	3.6
10	4.2	5.8	7.8	9.5	10.5	10.6	10.0	8.7	6.6	4.2	1.9	0.3
Su	0.1	1.1	3.0	5.2	7.2	8.6	9.5	9.6	8.9	7.5	5.8	4.4
11	3.7	4.2	5.5	7.1	8.6	9.5	9.9	9.6	8.5	6.7	4.4	2.3
M	0.9	0.6	1.5	3.2	5.3	7.2	8.8	9.8	10.1	9.4	7.9	6.0
12	4.4	3.5	3.6	4.6	6.0	7.4	8.6	9.4	9.5	8.7	7.1	4.9
Tu	2.9	1.4	1.0	1.7	3.3	5.3	7.4	9.3	10.5	10.8	9.9	8.2
13	6.0	4.1	2.8	2.5	3.2	4.6	6.4	8.1	9.3	9.7	9.1	7.6
W	5.5	3.3	1.8	1.1	1.7	3.3	5.6	8.0	10.2	11.5	11.6	10.5
14	8.4	5.8	3.4	1.7	1.1	1.8	3.5	5.7	7.9	9.5	10.2	9.7
Th	8.1	5.9	3.6	1.8	1.0	1.6	3.5	6.2	9.0	11.2	12.5	12.3
15	10.9	8.3	5.2	2.3	0.2	-0.4	0.5	2.7	5.4	8.0	9.9	10.7
F	10.2	8.6	6.2	3.6	1.6	0.9	1.8	4.0	7.1	10.1	12.3	13.3
16	12.8	10.9	7.8	4.3	1.0	-1.2	-1.6	-0.2	2.5	5.6	8.5	10.4
Sa	11.1	10.5	8.7	6.1	3.4	1.4	0.9	2.2	4.9	8.2	11.2	13.2
17	13.9	12.9	10.5	7.0	3.1	-0.4	-2.4	-2.3	-0.4	2.7	6.2	9.0
Su	10.9	11.5	10.6	8.6	5.8	3.0	1.2	1.2	2.9	5.9	9.3	12.1
18	13.8	14.0	12.6	9.7	5.9	1.8	-1.5	-3.0	-2.4	0.0	3.4	6.9
M	9.6	11.2	11.5	10.4	8.1	5.3	2.7	1.3	1.7	3.9	7.0	10.2
19	12.7	13.9	13.6	11.8	8.6	4.6	0.7	-2.1	-3.1	-1.9	0.9	4.3
Tu	7.6	10.0	11.3	11.3	9.9	7.5	4.8	2.5	1.6	2.5	4.9	8.0
20	10.9	12.9	13.6	12.8	10.6	7.3	3.5	0.0	-2.3	-2.6	-1.0	2.0
W	5.3	8.2	10.2	11.1	10.8	9.2	6.9	4.4	2.6	2.2	3.4	5.9
21	8.7	11.1	12.6	12.8	11.7	9.3	6.1	2.6	-0.3	-1.9	-1.6	0.3
Th	3.2	6.2	8.6	10.2	10.7	10.1	8.5	6.4	4.3	3.0	2.9	4.3
22	6.7	9.1	10.9	11.8	11.6	10.4	8.1	5.2	2.2	-0.2	-1.1	-0.5
F	1.6	4.2	6.8	8.7	9.9	10.1	9.5	8.0	6.1	4.4	3.4	3.7
23	5.1	7.1	9.0	10.3	10.8	10.4	9.2	7.1	4.6	2.1	0.3	-0.1
Sa	0.8	2.8	5.1	7.1	8.7	9.5	9.7	9.0	7.7	6.0	4.6	3.9
24	4.2	5.5	7.1	8.5	9.4	9.7	9.3	8.2	6.4	4.3	2.3	1.0
Su	0.9	1.9	3.7	5.6	7.3	8.6	9.3	9.4	8.8	7.5	6.0	4.8
25	4.2	4.5	5.5	6.7	7.7	8.5	8.8	8.5	7.6	6.1	4.3	2.7
M	1.8	1.9	2.8	4.3	5.9	7.4	8.6	9.4	9.5	8.8	7.5	6.0
26	4.8	4.2	4.3	5.0	5.9	6.9	7.7	8.2	8.1	7.4	6.1	4.5
Tu	3.2	2.5	2.6	3.4	4.7	6.2	7.7	9.0	9.7	9.7	8.8	7.4
27	5.9	4.6	3.8	3.7	4.2	5.1	6.2	7.3	8.0	8.1	7.4	6.2
W	4.8	3.6	3.0	3.0	3.7	5.0	6.6	8.3	9.6	10.2	9.9	8.8
28	7.2	5.5	4.0	3.0	2.8	3.4	4.5	5.9	7.3	8.1	8.3	7.6
Th	6.4	5.0	3.8	3.1	3.1	4.0	5.5	7.4	9.1	10.3	10.7	10.1
29	8.7	6.8	4.7	3.0	1.9	1.8	2.7	4.3	6.1	7.6	8.6	8.6
F	7.9	6.6	5.1	3.8	3.0	3.2	4.4	6.2	8.3	10.1	11.2	11.1
30	10.1	8.3	6.0	3.6	1.7	0.8	1.0	2.4	4.5	6.6	8.3	9.1
Sa	9.0	8.1	6.6	4.9	3.5	2.9	3.4	5.0	7.3	9.5	11.2	11.8
31	11.4	9.9	7.5	4.8	2.2	0.3	-0.2	0.6	2.6	5.1	7.4	9.0
Su	9.7	9.3	8.1	6.3	4.4	3.0	2.8	3.8	5.9	8.5	10.7	12.1

Time meridian 135° W. 0 is midnight. 12 is noon.
Heights are referred to mean lower low water (N.O.S. chart datum).

Lat. 61° 08 N Long. 146° 22 W

JUNE

Predicted hourly heights in feet

Day	Hours 0/12	Hours 1/13	Hours 2/14	Hours 3/15	Hours 4/16	Hours 5/17	Hours 6/18	Hours 7/19	Hours 8/20	Hours 9/21	Hours 10/22	Hours 11/23
1	12.3	11.3	9.3	6.4	3.4	0.7	-0.9	-0.9	0.7	3.2	6.0	8.3
M	9.7	10.1	9.4	7.8	5.7	3.8	2.7	2.9	4.5	7.0	9.7	11.7
2	12.7	12.5	10.9	8.3	5.1	1.8	-0.7	-1.7	-1.0	1.2	4.1	6.9
Tu	9.1	10.3	10.3	9.2	7.3	5.1	3.2	2.5	3.3	5.4	8.2	10.8
3	12.5	13.1	12.3	10.2	7.1	3.6	0.4	-1.7	-2.1	-0.7	2.0	5.1
W	7.9	9.9	10.7	10.3	8.8	6.6	4.4	2.8	2.6	3.9	6.4	9.2
4	11.6	13.0	13.0	11.7	9.2	5.8	2.3	-0.7	-2.2	-2.0	0.0	3.0
Th	6.2	8.8	10.4	10.8	10.0	8.3	6.0	3.9	2.6	2.8	4.6	7.2
5	10.0	12.1	13.0	12.6	10.9	8.1	4.7	1.3	-1.3	-2.3	-1.5	0.9
F	4.0	7.1	9.4	10.6	10.7	9.6	7.7	5.5	3.5	2.6	3.2	5.2
6	7.9	10.4	12.1	12.5	11.8	9.9	7.1	3.8	0.7	-1.4	-1.9	-0.7
Sa	1.9	5.0	7.8	9.8	10.7	10.5	9.3	7.4	5.1	3.4	2.7	3.5
7	5.6	8.1	10.3	11.6	11.7	10.8	9.0	6.3	3.2	0.5	-1.2	-1.2
Su	0.3	3.0	5.9	8.3	9.9	10.6	10.4	9.1	7.2	5.0	3.3	2.8
8	3.7	5.6	7.8	9.6	10.6	10.8	10.0	8.3	5.9	3.1	0.8	-0.5
M	-0.3	1.3	3.8	6.5	8.6	10.1	10.7	10.5	9.2	7.2	5.0	3.3
9	2.8	3.5	5.1	7.0	8.6	9.5	9.8	9.3	8.0	5.8	3.4	1.4
Tu	0.3	0.7	2.2	4.5	6.8	8.9	10.4	11.1	10.7	9.4	7.2	5.0
10	3.2	2.5	2.9	4.2	5.8	7.4	8.5	9.2	9.0	8.0	6.1	3.9
W	2.1	1.2	1.5	2.8	4.9	7.2	9.2	10.8	11.5	11.2	9.6	7.4
11	4.9	2.9	1.9	2.0	3.0	4.6	6.3	7.9	8.9	9.0	8.2	6.6
Th	4.6	2.9	1.9	2.0	3.2	5.2	7.5	9.8	11.4	12.1	11.6	9.9
12	7.4	4.6	2.3	1.0	0.8	1.8	3.5	5.6	7.6	8.9	9.3	8.6
F	7.1	5.2	3.5	2.3	2.3	3.4	5.5	8.1	10.5	12.2	12.7	12.0
13	10.0	7.2	4.1	1.5	-0.2	-0.4	0.8	2.9	5.4	7.7	9.2	9.7
Sa	9.1	7.7	5.7	3.7	2.4	2.4	3.7	6.0	8.8	11.2	12.8	13.1
14	12.1	9.8	6.7	3.3	0.4	-1.3	-1.3	0.3	2.8	5.7	8.1	9.7
Su	10.2	9.6	8.0	5.8	3.6	2.3	2.4	4.0	6.7	9.5	11.9	13.3
15	13.3	12.0	9.4	5.9	2.2	-0.7	-2.2	-1.7	0.3	3.2	6.3	8.7
M	10.3	10.6	9.8	7.9	5.5	3.3	2.2	2.6	4.6	7.4	10.3	12.5
16	13.6	13.3	11.5	8.6	4.8	1.1	-1.6	-2.6	-1.6	0.9	4.0	7.1
Tu	9.4	10.7	10.8	9.7	7.6	5.0	3.0	2.1	3.0	5.3	8.2	10.9
17	12.8	13.5	12.8	10.7	7.4	3.6	0.1	-2.2	-2.6	-1.0	1.8	5.0
W	7.9	10.0	11.0	10.7	9.3	7.0	4.5	2.7	2.3	3.6	6.0	8.9
18	11.4	12.8	13.1	12.0	9.5	6.1	2.4	-0.6	-2.3	-2.0	0.0	3.0
Th	6.1	8.8	10.5	11.0	10.3	8.6	6.3	4.0	2.6	2.7	4.3	6.8
19	9.5	11.5	12.5	12.3	10.8	8.2	4.9	1.5	-1.0	-1.9	-1.0	1.3
F	4.3	7.2	9.4	10.6	10.7	9.7	7.9	5.6	3.7	2.7	3.2	5.0
20	7.5	9.8	11.3	11.8	11.2	9.5	6.9	3.8	1.0	-0.8	-1.1	0.2
Sa	2.7	5.6	8.0	9.7	10.5	10.3	9.1	7.2	5.1	3.5	3.0	3.8
21	5.6	7.8	9.7	10.8	10.9	10.0	8.2	5.8	3.1	0.9	-0.3	0.0
Su	1.7	4.1	6.6	8.6	9.8	10.2	9.8	8.5	6.7	4.8	3.6	3.4
22	4.3	6.0	7.9	9.2	9.9	9.8	8.9	7.2	5.0	2.8	1.1	0.5
M	1.2	3.0	5.3	7.4	8.9	9.8	10.0	9.4	8.0	6.3	4.7	3.7
23	3.7	4.6	6.1	7.5	8.5	9.0	8.8	8.0	6.5	4.6	2.8	1.7
Tu	1.5	2.5	4.2	6.2	7.9	9.1	9.8	9.9	9.1	7.7	6.0	4.6
24	3.8	3.8	4.6	5.7	6.8	7.7	8.1	8.1	7.4	6.1	4.6	3.2
W	2.4	2.6	3.5	5.1	6.8	8.2	9.4	10.0	9.9	9.0	7.5	5.8
25	4.4	3.7	3.6	4.2	5.1	6.1	7.0	7.6	7.7	7.2	6.1	4.8
Th	3.7	3.2	3.4	4.3	5.7	7.2	8.6	9.7	10.3	10.0	9.0	7.3
26	5.6	4.1	3.2	3.0	3.4	4.3	5.5	6.6	7.5	7.7	7.3	6.3
F	5.2	4.2	3.7	3.9	4.7	6.0	7.6	9.2	10.3	10.7	10.2	8.9
27	7.1	5.2	3.5	2.4	2.1	2.6	3.7	5.2	6.7	7.7	8.1	7.7
Sa	6.7	5.5	4.5	3.9	4.0	4.9	6.4	8.2	9.9	11.0	11.2	10.4
28	8.8	6.7	4.5	2.6	1.3	1.1	1.9	3.5	5.4	7.1	8.2	8.6
Su	8.1	7.0	5.7	4.5	3.8	4.0	5.1	6.9	9.0	10.8	11.7	11.7
29	10.6	8.6	6.1	3.5	1.3	0.1	0.2	1.5	3.6	5.9	7.8	8.9
M	9.2	8.5	7.2	5.6	4.2	3.5	3.9	5.4	7.6	9.9	11.7	12.4
30	12.0	10.5	8.0	5.1	2.1	-0.1	-1.0	-0.4	1.5	4.1	6.7	8.7
Tu	9.7	9.7	8.8	7.1	5.2	3.6	3.1	3.9	5.9	8.5	10.9	12.5

Time meridian 135° W. 0 is midnight. 12 is noon.
Heights are referred to mean lower low water (N.O.S. chart datum).

VALDEZ, ALASKA, 2015

Lat. 61° 08 N Long. 146° 22 W

JULY

Predicted hourly heights in feet

Day	Hours 0/12	Hours 1/13	Hours 2/14	Hours 3/15	Hours 4/16	Hours 5/17	Hours 6/18	Hours 7/19	Hours 8/20	Hours 9/21	Hours 10/22	Hours 11/23
1	13.0	12.2	10.2	7.2	3.8	0.7	-1.4	-1.8	-0.6	2.0	5.0	7.7
W	9.6	10.5	10.1	8.7	6.6	4.5	2.9	2.7	4.0	6.5	9.3	11.8
2	13.2	13.3	12.1	9.5	6.1	2.4	-0.6	-2.3	-2.2	-0.2	2.8	6.0
Th	8.7	10.5	11.0	10.3	8.4	6.0	3.7	2.3	2.5	4.3	7.2	10.1
3	12.4	13.5	13.3	11.6	8.6	4.9	1.2	-1.7	-2.8	-2.0	0.5	3.9
F	7.2	9.8	11.2	11.3	10.1	7.9	5.2	3.0	1.9	2.6	4.7	7.8
4	10.7	12.7	13.5	12.8	10.7	7.5	3.7	0.2	-2.2	-2.8	-1.3	1.6
Sa	5.1	8.3	10.6	11.6	11.3	9.7	7.2	4.5	2.4	1.7	2.7	5.1
5	8.2	10.9	12.6	13.0	12.0	9.7	6.5	2.8	-0.3	-2.2	-2.2	-0.2
Su	3.0	6.4	9.3	11.2	11.8	11.1	9.3	6.7	4.0	2.1	1.6	2.9
6	5.4	8.2	10.6	12.0	12.1	11.0	8.7	5.7	2.4	-0.3	-1.6	-1.1
M	1.1	4.3	7.5	10.0	11.5	11.8	10.9	9.0	6.3	3.7	2.0	1.7
7	3.0	5.4	7.9	9.9	10.9	11.0	9.9	7.9	5.2	2.3	0.1	-0.7
Tu	0.2	2.5	5.5	8.3	10.4	11.6	11.7	10.8	8.8	6.1	3.6	2.0
8	1.8	3.0	5.0	7.1	8.8	9.7	9.9	9.1	7.5	5.2	2.7	1.0
W	0.6	1.6	3.7	6.3	8.7	10.5	11.6	11.7	10.7	8.7	6.1	3.7
9	2.1	1.7	2.6	4.2	6.0	7.5	8.6	9.1	8.7	7.4	5.5	3.5
Th	2.1	1.8	2.7	4.5	6.7	8.9	10.7	11.7	11.9	10.8	8.8	6.2
10	3.8	2.0	1.5	2.0	3.2	4.8	6.5	7.8	8.6	8.6	7.6	6.0
F	4.3	3.1	2.7	3.4	4.9	6.9	9.0	10.8	11.9	12.1	11.0	8.9
11	6.3	3.7	1.8	0.9	1.1	2.2	3.9	5.8	7.5	8.6	8.8	8.1
Sa	6.7	5.1	3.8	3.3	3.7	5.0	7.0	9.2	11.1	12.2	12.3	11.2
12	9.0	6.3	3.5	1.3	0.1	0.2	1.4	3.4	5.7	7.6	8.9	9.3
Su	8.7	7.3	5.7	4.2	3.3	3.6	5.0	7.2	9.5	11.5	12.6	12.5
13	11.2	8.9	5.9	2.9	0.4	-0.8	-0.5	1.1	3.5	6.0	8.1	9.4
M	9.8	9.1	7.7	5.8	4.0	3.1	3.5	5.1	7.5	10.0	11.9	12.9
14	12.6	11.1	8.5	5.3	2.0	-0.5	-1.5	-0.8	1.3	4.0	6.7	8.8
Tu	10.1	10.3	9.4	7.6	5.4	3.5	2.8	3.5	5.4	8.0	10.5	12.3
15	13.0	12.5	10.6	7.7	4.2	0.9	-1.3	-1.8	-0.5	2.0	4.9	7.6
W	9.6	10.7	10.5	9.2	7.1	4.7	3.0	2.5	3.7	6.0	8.7	11.1
16	12.6	13.0	12.0	9.8	6.6	3.0	-0.1	-1.8	-1.6	0.3	3.1	6.1
Th	8.7	10.4	11.0	10.4	8.7	6.3	3.9	2.5	2.5	4.1	6.7	9.4
17	11.5	12.7	12.6	11.2	8.6	5.2	1.7	-0.9	-1.8	-0.9	1.4	4.5
F	7.4	9.7	10.9	11.0	9.9	7.8	5.3	3.2	2.2	2.8	4.8	7.5
18	10.0	11.8	12.5	11.9	10.0	7.2	3.8	0.8	-1.1	-1.3	0.2	2.9
Sa	6.0	8.6	10.4	11.1	10.6	9.1	6.8	4.4	2.7	2.3	3.4	5.6
19	8.2	10.4	11.7	11.8	10.8	8.7	5.8	2.7	0.2	-0.9	-0.4	1.7
Su	4.6	7.4	9.6	10.8	10.9	10.0	8.2	5.9	3.8	2.5	2.6	4.0
20	6.3	8.7	10.4	11.2	10.9	9.5	7.3	4.6	2.0	0.2	-0.2	1.0
M	3.4	6.1	8.5	10.2	10.8	10.5	9.2	7.3	5.1	3.4	2.6	3.1
21	4.7	6.9	8.8	10.0	10.3	9.7	8.3	6.1	3.8	1.8	0.7	1.0
Tu	2.6	5.0	7.4	9.3	10.4	10.6	9.9	8.5	6.6	4.6	3.2	2.8
22	3.6	5.2	7.1	8.5	9.3	9.3	8.6	7.3	5.4	3.5	2.0	1.6
W	2.3	4.1	6.3	8.3	9.7	10.4	10.3	9.5	8.0	6.1	4.4	3.3
23	3.1	4.0	5.4	6.8	7.9	8.4	8.4	7.8	6.6	5.1	3.6	2.6
Th	2.6	3.6	5.3	7.2	8.8	9.8	10.3	10.1	9.2	7.6	5.8	4.3
24	3.3	3.3	4.0	5.1	6.3	7.1	7.7	7.8	7.4	6.4	5.1	4.0
F	3.4	3.7	4.7	6.1	7.7	9.0	9.9	10.3	10.1	9.1	7.5	5.7
25	4.2	3.3	3.1	3.6	4.5	5.5	6.5	7.2	7.6	7.4	6.6	5.5
Sa	4.6	4.2	4.4	5.2	6.5	7.9	9.2	10.2	10.6	10.3	9.1	7.4
26	5.6	4.0	2.9	2.5	2.8	3.7	4.9	6.2	7.2	7.8	7.7	7.0
Su	6.0	5.1	4.6	4.6	5.3	6.5	8.0	9.5	10.6	11.1	10.6	9.3
27	7.4	5.3	3.5	2.1	1.5	1.9	3.0	4.6	6.3	7.6	8.4	8.3
M	7.6	6.5	5.4	4.6	4.4	5.1	6.5	8.3	10.0	11.3	11.7	11.1
28	9.5	7.3	4.8	2.6	0.9	0.4	1.0	2.6	4.7	6.8	8.4	9.2
Tu	9.0	8.1	6.7	5.2	4.1	3.9	4.7	6.5	8.7	10.8	12.1	12.4
29	11.5	9.6	6.9	4.0	1.3	-0.4	-0.7	0.5	2.7	5.3	7.7	9.4
W	10.1	9.7	8.3	6.4	4.5	3.2	3.1	4.4	6.7	9.4	11.6	12.9
30	13.0	11.8	9.4	6.2	2.8	-0.1	-1.6	-1.4	0.4	3.3	6.3	8.9
Th	10.5	10.9	10.1	8.2	5.8	3.5	2.3	2.5	4.3	7.1	10.1	12.4
31	13.6	13.4	11.7	8.8	5.1	1.4	-1.4	-2.5	-1.6	0.9	4.3	7.6
F	10.2	11.5	11.5	10.1	7.7	4.8	2.5	1.4	2.1	4.4	7.7	10.8

Time meridian 135° W. 0 is midnight. 12 is noon.
Heights are referred to mean lower low water (N.O.S. chart datum).

Lat. 61° 08 N Long. 146° 22 W

AUGUST

Predicted hourly heights in feet

Day	Hours 0/12	Hours 1/13	Hours 2/14	Hours 3/15	Hours 4/16	Hours 5/17	Hours 6/18	Hours 7/19	Hours 8/20	Hours 9/21	Hours 10/22	Hours 11/23
1	13.0	14.0	13.4	11.3	7.9	3.9	0.2	-2.2	-2.7	-1.2	2.0	5.7
Sa	9.0	11.4	12.3	11.8	9.8	6.9	3.8	1.5	0.7	1.9	4.7	8.1
2	11.2	13.3	13.9	12.9	10.4	6.8	2.8	-0.6	-2.5	-2.4	-0.1	3.4
Su	7.2	10.3	12.3	12.8	11.7	9.2	6.0	2.9	0.8	0.4	2.0	5.1
3	8.5	11.4	13.1	13.3	12.0	9.4	5.8	2.0	-0.9	-2.2	-1.4	1.3
M	5.0	8.6	11.3	12.8	12.8	11.3	8.6	5.3	2.2	0.4	0.5	2.3
4	5.3	8.5	11.0	12.4	12.3	10.9	8.3	5.0	1.7	-0.6	-1.3	0.1
Tu	2.9	6.5	9.7	11.9	12.9	12.5	10.7	8.0	4.8	2.0	0.5	0.7
5	2.6	5.4	8.2	10.3	11.2	11.1	9.8	7.5	4.7	2.0	0.2	0.1
W	1.7	4.5	7.6	10.2	12.0	12.6	12.0	10.3	7.6	4.6	2.1	0.8
6	1.1	2.8	5.2	7.5	9.1	10.0	10.0	9.0	7.1	4.8	2.6	1.4
Th	1.6	3.2	5.6	8.2	10.3	11.7	12.2	11.6	10.0	7.5	4.7	2.4
7	1.2	1.5	2.8	4.6	6.5	7.9	8.8	9.1	8.5	7.1	5.3	3.6
F	2.7	2.9	4.2	6.2	8.3	10.1	11.3	11.9	11.4	9.9	7.6	5.0
8	2.9	1.6	1.5	2.4	3.8	5.4	6.9	8.1	8.7	8.5	7.5	6.0
Sa	4.6	3.8	3.8	4.8	6.3	8.0	9.7	11.1	11.7	11.4	10.0	7.9
9	5.4	3.2	1.7	1.3	1.8	3.0	4.6	6.3	7.8	8.7	8.8	8.0
Su	6.8	5.4	4.4	4.2	4.7	6.0	7.7	9.5	11.0	11.8	11.5	10.2
10	8.1	5.6	3.2	1.5	0.7	1.1	2.4	4.2	6.3	8.0	9.1	9.3
M	8.6	7.4	5.8	4.6	4.0	4.4	5.7	7.6	9.6	11.2	12.0	11.7
11	10.4	8.1	5.4	2.8	0.8	0.0	0.6	2.2	4.4	6.7	8.6	9.7
Tu	9.9	9.1	7.5	5.7	4.1	3.4	3.9	5.5	7.7	9.9	11.5	12.3
12	11.9	10.3	7.8	4.8	2.0	0.0	-0.5	0.5	2.6	5.2	7.6	9.5
W	10.4	10.3	9.1	7.2	5.0	3.4	2.8	3.7	5.7	8.2	10.4	12.0
13	12.5	11.8	9.9	7.0	3.8	0.9	-0.7	-0.6	1.0	3.5	6.3	8.7
Th	10.4	10.9	10.4	8.7	6.4	4.0	2.5	2.5	3.9	6.3	8.9	11.1
14	12.4	12.5	11.3	9.0	5.8	2.5	0.0	-1.0	-0.2	2.0	4.9	7.7
F	9.9	11.1	11.1	10.0	7.8	5.2	3.0	1.9	2.4	4.4	7.1	9.7
15	11.7	12.6	12.2	10.5	7.7	4.3	1.3	-0.6	-0.8	0.7	3.4	6.4
Sa	9.1	10.9	11.5	10.9	9.1	6.6	4.0	2.1	1.6	2.8	5.2	8.0
16	10.5	12.0	12.3	11.4	9.2	6.2	3.0	0.4	-0.7	0.0	2.2	5.1
Su	8.1	10.3	11.5	11.4	10.2	7.9	5.3	2.9	1.6	1.8	3.5	6.2
17	8.9	10.9	11.9	11.7	10.2	7.7	4.8	2.0	0.1	-0.1	1.3	3.9
M	6.9	9.5	11.1	11.6	10.9	9.1	6.7	4.1	2.2	1.5	2.3	4.5
18	7.1	9.5	11.0	11.4	10.7	8.9	6.4	3.7	1.5	0.4	1.0	2.9
Tu	5.7	8.5	10.5	11.4	11.3	10.0	8.0	5.6	3.3	1.9	1.8	3.1
19	5.4	7.8	9.7	10.7	10.6	9.5	7.6	5.3	3.0	1.5	1.3	2.4
W	4.7	7.4	9.6	11.0	11.3	10.6	9.1	7.0	4.7	2.9	2.0	2.4
20	3.9	6.1	8.1	9.5	9.9	9.5	8.3	6.6	4.6	3.0	2.1	2.5
Th	4.0	6.3	8.6	10.2	11.0	10.8	9.9	8.3	6.3	4.3	2.8	2.3
21	3.0	4.6	6.4	7.9	8.8	9.0	8.5	7.5	6.1	4.5	3.3	3.0
F	3.8	5.4	7.4	9.2	10.3	10.7	10.4	9.4	7.8	5.9	4.1	3.0
22	2.7	3.4	4.8	6.2	7.4	8.0	8.2	7.9	7.1	6.0	4.8	4.0
Sa	4.0	4.8	6.3	8.0	9.4	10.2	10.4	10.1	9.2	7.7	5.8	4.2
23	3.1	2.9	3.5	4.5	5.6	6.6	7.4	7.8	7.8	7.2	6.3	5.3
Su	4.7	4.7	5.5	6.7	8.0	9.2	10.0	10.4	10.2	9.3	7.8	6.0
24	4.3	3.1	2.7	3.0	3.8	4.9	6.0	7.1	7.8	8.1	7.7	6.8
M	5.8	5.2	5.0	5.5	6.5	7.7	9.0	10.1	10.7	10.6	9.7	8.1
25	6.1	4.2	2.8	2.0	2.0	2.9	4.2	5.8	7.3	8.4	8.8	8.3
Tu	7.4	6.2	5.2	4.7	4.9	5.9	7.3	9.0	10.5	11.3	11.3	10.3
26	8.4	6.1	3.8	1.9	0.9	1.0	2.1	4.0	6.2	8.1	9.3	9.7
W	9.1	7.8	6.2	4.7	3.8	4.0	5.2	7.1	9.3	11.2	12.2	12.1
27	10.8	8.6	5.8	3.0	0.8	-0.3	0.1	1.8	4.4	7.0	9.2	10.5
Th	10.6	9.6	7.8	5.6	3.6	2.6	2.9	4.6	7.2	9.9	12.0	13.0
28	12.8	11.2	8.5	5.1	1.9	-0.5	-1.3	-0.4	2.1	5.3	8.3	10.6
F	11.7	11.4	9.9	7.4	4.6	2.3	1.3	2.0	4.4	7.5	10.6	12.8
29	13.7	13.2	11.1	7.9	4.1	0.7	-1.6	-1.9	-0.1	3.0	6.6	9.8
Sa	12.0	12.7	11.9	9.6	6.5	3.2	0.9	0.2	1.5	4.4	8.0	11.2
30	13.4	14.1	13.2	10.7	7.0	3.0	-0.4	-2.1	-1.7	0.7	4.4	8.2
Su	11.3	13.1	13.3	11.9	9.0	5.3	1.9	-0.3	-0.5	1.4	4.7	8.5
31	11.7	13.6	14.0	12.7	9.8	6.0	2.1	-0.9	-2.0	-0.9	2.1	6.0
M	9.8	12.6	13.9	13.5	11.4	8.1	4.2	0.9	-1.0	-0.7	1.6	5.2

Time meridian 135° W. 0 is midnight. 12 is noon.
Heights are referred to mean lower low water (N.O.S. chart datum).

VALDEZ, ALASKA, 2015

Lat. 61° 08 N Long. 146° 22 W

SEPTEMBER

Predicted hourly heights in feet

Day	Hours 0/12	Hours 1/13	Hours 2/14	Hours 3/15	Hours 4/16	Hours 5/17	Hours 6/18	Hours 7/19	Hours 8/20	Hours 9/21	Hours 10/22	Hours 11/23
1	8.9	11.8	13.4	13.4	11.8	8.8	5.1	1.6	-0.8	-1.3	0.5	3.8
Tu	7.7	11.1	13.3	14.0	13.1	10.6	7.1	3.3	0.3	-1.1	-0.4	2.1
2	5.6	9.0	11.4	12.6	12.3	10.7	7.9	4.5	1.6	-0.2	0.0	2.1
W	5.4	8.9	11.8	13.4	13.6	12.3	9.8	6.4	2.9	0.3	-0.7	0.2
3	2.7	5.9	8.7	10.7	11.5	11.1	9.6	7.2	4.4	2.1	0.9	1.5
Th	3.7	6.7	9.7	11.9	13.0	12.9	11.5	9.1	6.0	2.9	0.7	0.0
4	1.0	3.2	5.8	8.0	9.6	10.3	10.0	8.9	7.0	4.8	3.0	2.3
F	3.0	5.0	7.5	9.8	11.4	12.2	12.0	10.9	8.7	6.0	3.3	1.4
5	0.9	1.7	3.4	5.4	7.1	8.4	9.2	9.3	8.6	7.1	5.4	4.0
Sa	3.6	4.2	5.7	7.6	9.3	10.6	11.4	11.4	10.5	8.7	6.3	4.0
6	2.3	1.6	2.0	3.2	4.7	6.2	7.6	8.6	9.0	8.7	7.6	6.2
Su	5.0	4.5	4.8	5.8	7.2	8.6	9.8	10.8	11.0	10.4	8.9	6.8
7	4.6	2.9	2.0	2.0	2.7	4.0	5.5	7.1	8.5	9.2	9.1	8.2
M	6.9	5.7	4.9	4.8	5.3	6.5	7.9	9.4	10.5	11.0	10.6	9.2
8	7.2	5.0	3.1	1.8	1.5	2.2	3.6	5.4	7.3	8.9	9.7	9.6
Tu	8.7	7.3	5.8	4.7	4.2	4.6	5.9	7.6	9.3	10.7	11.3	10.8
9	9.4	7.3	4.9	2.7	1.3	1.0	1.9	3.6	5.8	8.0	9.6	10.3
W	10.1	8.9	7.2	5.3	3.9	3.4	4.0	5.6	7.7	9.7	11.1	11.6
10	11.0	9.4	7.0	4.3	2.0	0.7	0.7	2.1	4.3	6.8	9.0	10.5
Th	10.9	10.3	8.7	6.5	4.3	2.9	2.6	3.8	5.8	8.2	10.3	11.6
11	11.9	10.9	8.9	6.2	3.3	1.1	0.2	0.9	2.9	5.5	8.1	10.2
F	11.2	11.2	10.0	7.9	5.3	3.0	1.9	2.2	4.0	6.5	9.1	11.1
12	12.1	11.9	10.4	8.0	5.0	2.2	0.4	0.2	1.6	4.2	7.1	9.6
Sa	11.2	11.7	11.0	9.2	6.6	3.8	1.8	1.3	2.3	4.7	7.5	10.0
13	11.7	12.2	11.5	9.5	6.7	3.6	1.2	0.1	0.8	3.0	5.9	8.7
Su	10.9	12.0	11.8	10.3	7.9	5.0	2.4	1.0	1.2	2.9	5.7	8.5
14	10.8	12.0	12.0	10.7	8.3	5.3	2.5	0.7	0.5	2.0	4.7	7.7
M	10.2	11.8	12.2	11.3	9.2	6.4	3.5	1.4	0.6	1.6	3.9	6.8
15	9.5	11.3	12.0	11.3	9.5	6.9	4.1	1.8	0.8	1.4	3.6	6.5
Tu	9.3	11.4	12.3	11.9	10.3	7.8	4.9	2.3	0.8	0.8	2.4	5.1
16	7.9	10.2	11.4	11.4	10.3	8.2	5.6	3.2	1.7	1.5	2.9	5.4
W	8.3	10.6	12.0	12.1	11.1	9.0	6.4	3.7	1.6	0.8	1.5	3.5
17	6.2	8.7	10.4	11.0	10.5	9.1	7.0	4.8	2.9	2.1	2.6	4.5
Th	7.1	9.6	11.4	12.0	11.5	10.0	7.8	5.3	2.9	1.4	1.2	2.3
18	4.5	7.0	9.0	10.1	10.2	9.5	8.1	6.2	4.4	3.1	2.9	4.0
F	6.1	8.5	10.5	11.5	11.5	10.6	9.0	6.8	4.5	2.6	1.6	1.8
19	3.2	5.3	7.3	8.8	9.4	9.3	8.6	7.4	5.8	4.4	3.7	3.9
Sa	5.3	7.3	9.3	10.7	11.2	10.9	9.9	8.3	6.3	4.3	2.7	2.0
20	2.4	3.8	5.6	7.2	8.2	8.7	8.6	8.1	7.1	5.9	4.8	4.4
Su	4.9	6.2	7.9	9.4	10.4	10.7	10.3	9.5	8.0	6.2	4.4	3.0
21	2.4	2.8	3.9	5.3	6.6	7.6	8.2	8.4	8.1	7.3	6.3	5.4
M	5.0	5.4	6.5	7.8	9.0	9.9	10.3	10.2	9.5	8.2	6.5	4.6
22	3.2	2.5	2.7	3.5	4.7	6.0	7.2	8.1	8.6	8.6	7.9	6.8
Tu	5.8	5.3	5.4	6.1	7.2	8.4	9.4	10.2	10.4	9.9	8.7	6.9
23	4.9	3.3	2.3	2.1	2.8	4.0	5.6	7.3	8.6	9.4	9.3	8.5
W	7.2	5.9	4.9	4.6	5.1	6.2	7.8	9.3	10.5	11.0	10.7	9.3
24	7.3	5.0	3.0	1.6	1.2	2.0	3.6	5.8	7.9	9.6	10.5	10.3
Th	9.1	7.3	5.5	4.0	3.4	3.8	5.3	7.4	9.5	11.2	11.9	11.5
25	9.9	7.5	4.8	2.3	0.6	0.3	1.5	3.7	6.5	9.1	11.0	11.7
F	11.1	9.4	7.0	4.5	2.5	1.8	2.5	4.6	7.4	10.0	12.0	12.7
26	12.1	10.2	7.4	4.2	1.3	-0.3	-0.3	1.5	4.5	7.8	10.6	12.4
Sa	12.7	11.6	9.2	6.1	3.0	0.8	0.3	1.6	4.3	7.7	10.7	12.8
27	13.4	12.5	10.2	6.9	3.3	0.4	-1.0	-0.3	2.2	5.7	9.4	12.2
Su	13.6	13.5	11.7	8.6	4.9	1.4	-0.7	-0.8	1.1	4.5	8.2	11.4
28	13.3	13.7	12.5	9.8	6.1	2.4	-0.3	-1.1	0.3	3.4	7.3	11.0
M	13.5	14.5	13.7	11.3	7.6	3.5	0.0	-1.8	-1.4	1.2	4.9	8.8
29	11.8	13.5	13.6	12.0	9.0	5.3	1.8	-0.4	-0.6	1.4	4.9	8.9
Tu	12.3	14.4	14.8	13.4	10.4	6.4	2.3	-0.9	-2.3	-1.3	1.6	5.5
30	9.2	12.0	13.3	13.0	11.2	8.1	4.6	1.6	0.0	0.5	2.9	6.5
W	10.2	13.1	14.6	14.4	12.6	9.4	5.3	1.4	-1.3	-2.1	-0.7	2.4

Time meridian 135° W. 0 is midnight. 12 is noon.
Heights are referred to mean lower low water (N.O.S. chart datum).

Lat. 61° 08 N Long. 146° 22 W

OCTOBER

Predicted hourly heights in feet

Day	Hours 0/12	Hours 1/13	Hours 2/14	Hours 3/15	Hours 4/16	Hours 5/17	Hours 6/18	Hours 7/19	Hours 8/20	Hours 9/21	Hours 10/22	Hours 11/23
1	6.1	9.4	11.7	12.6	12.1	10.2	7.4	4.3	1.8	0.9	1.8	4.4
Th	7.8	11.1	13.3	14.2	13.6	11.5	8.3	4.6	1.2	-1.0	-1.3	0.3
2	3.2	6.5	9.2	11.0	11.6	11.0	9.4	7.0	4.4	2.5	2.1	3.2
F	5.7	8.7	11.2	12.8	13.2	12.4	10.5	7.6	4.4	1.5	-0.2	-0.3
3	1.3	3.9	6.6	8.7	10.1	10.6	10.2	8.8	6.9	4.9	3.5	3.3
Sa	4.5	6.6	8.9	10.8	11.9	12.1	11.4	9.7	7.3	4.5	2.1	0.8
4	0.9	2.2	4.2	6.3	8.0	9.2	9.8	9.6	8.7	7.2	5.6	4.5
Su	4.4	5.3	6.8	8.5	9.9	10.7	11.0	10.6	9.3	7.3	5.0	3.0
5	1.8	1.8	2.7	4.2	5.8	7.2	8.5	9.3	9.5	8.9	7.7	6.3
M	5.3	5.0	5.5	6.5	7.7	8.8	9.7	10.3	10.2	9.3	7.6	5.6
6	3.8	2.6	2.3	2.8	3.9	5.3	6.8	8.3	9.4	9.8	9.3	8.2
Tu	6.8	5.6	5.0	5.1	5.7	6.7	8.0	9.2	10.0	10.2	9.5	8.0
7	6.1	4.2	2.9	2.3	2.6	3.6	5.1	7.0	8.7	9.9	10.2	9.7
W	8.5	6.9	5.4	4.5	4.2	4.8	6.0	7.6	9.1	10.2	10.4	9.7
8	8.2	6.2	4.3	2.7	2.0	2.4	3.6	5.5	7.6	9.5	10.6	10.7
Th	9.9	8.4	6.5	4.6	3.5	3.3	4.1	5.8	7.7	9.5	10.6	10.8
9	9.9	8.2	6.0	3.8	2.2	1.7	2.4	4.1	6.4	8.7	10.5	11.3
F	11.0	9.8	7.7	5.4	3.4	2.3	2.5	3.9	6.1	8.3	10.2	11.1
10	11.0	9.8	7.7	5.3	3.0	1.6	1.6	2.9	5.2	7.8	10.0	11.5
Sa	11.8	10.9	9.1	6.6	4.0	2.1	1.4	2.2	4.3	6.8	9.2	10.9
11	11.5	10.9	9.3	6.9	4.3	2.2	1.3	2.0	4.0	6.7	9.3	11.3
Su	12.2	11.9	10.4	7.9	5.0	2.4	0.9	0.9	2.5	5.1	7.9	10.1
12	11.5	11.6	10.6	8.5	5.8	3.3	1.7	1.5	3.0	5.5	8.4	10.8
M	12.3	12.5	11.5	9.3	6.4	3.4	1.1	0.2	1.0	3.3	6.2	8.9
13	10.9	11.8	11.4	9.8	7.4	4.7	2.5	1.6	2.3	4.4	7.3	10.0
Tu	12.0	12.8	12.3	10.5	7.8	4.7	1.9	0.2	0.1	1.7	4.4	7.4
14	9.9	11.4	11.7	10.7	8.7	6.2	3.8	2.2	2.0	3.5	6.1	9.0
W	11.4	12.7	12.8	11.6	9.2	6.2	3.2	0.8	-0.2	0.6	2.7	5.7
15	8.5	10.5	11.4	11.2	9.8	7.6	5.2	3.3	2.4	3.0	5.0	7.7
Th	10.4	12.2	12.9	12.2	10.4	7.8	4.7	2.0	0.3	0.1	1.4	3.9
16	6.8	9.2	10.7	11.1	10.4	8.8	6.7	4.6	3.2	3.0	4.2	6.5
F	9.2	11.4	12.5	12.4	11.3	9.1	6.4	3.6	1.4	0.3	0.7	2.4
17	5.0	7.6	9.5	10.4	10.4	9.5	7.9	6.1	4.4	3.6	3.9	5.5
Sa	7.8	10.2	11.8	12.3	11.7	10.2	8.0	5.5	3.0	1.3	0.7	1.5
18	3.4	5.8	8.0	9.4	9.9	9.7	8.8	7.4	5.8	4.6	4.2	4.9
Su	6.5	8.7	10.5	11.6	11.6	10.8	9.3	7.3	5.0	2.8	1.5	1.2
19	2.2	4.1	6.2	7.9	9.0	9.4	9.2	8.5	7.3	6.0	5.0	4.8
M	5.6	7.1	8.9	10.3	11.0	10.9	10.1	8.8	7.0	4.9	3.0	1.8
20	1.7	2.7	4.3	6.1	7.6	8.6	9.1	9.1	8.6	7.5	6.3	5.4
Tu	5.1	5.8	7.1	8.5	9.6	10.2	10.3	9.8	8.8	7.1	5.2	3.4
21	2.2	2.0	2.8	4.2	5.8	7.3	8.5	9.3	9.6	9.1	8.0	6.6
W	5.5	5.1	5.4	6.3	7.5	8.7	9.6	10.1	10.0	9.2	7.6	5.6
22	3.7	2.4	2.0	2.5	3.8	5.5	7.3	8.9	10.0	10.4	9.8	8.4
Th	6.7	5.3	4.4	4.3	5.1	6.4	7.9	9.3	10.3	10.5	9.8	8.2
23	6.1	3.9	2.3	1.7	2.1	3.5	5.5	7.8	9.8	11.2	11.4	10.5
F	8.7	6.5	4.5	3.1	2.8	3.6	5.3	7.4	9.5	10.9	11.3	10.5
24	8.7	6.3	3.9	2.0	1.1	1.6	3.5	6.1	8.9	11.2	12.4	12.4
Sa	11.0	8.7	5.8	3.2	1.5	1.1	2.3	4.6	7.4	9.9	11.6	12.0
25	11.1	9.1	6.3	3.5	1.4	0.6	1.5	3.9	7.1	10.3	12.6	13.6
Su	13.2	11.2	8.2	4.7	1.6	-0.3	-0.3	1.4	4.4	7.7	10.5	12.3
26	12.6	11.5	9.1	6.0	3.0	0.8	0.4	1.9	4.9	8.5	11.8	13.9
M	14.5	13.5	10.9	7.2	3.3	0.0	-1.7	-1.3	1.1	4.6	8.3	11.2
27	12.8	12.9	11.5	8.8	5.5	2.4	0.5	0.6	2.7	6.2	10.0	13.1
Tu	14.8	15.0	13.3	10.2	6.0	1.8	-1.4	-2.6	-1.6	1.4	5.2	8.9
28	11.7	13.1	12.9	11.1	8.2	4.9	2.0	0.6	1.3	3.9	7.6	11.2
W	14.0	15.2	14.8	12.7	9.1	4.8	0.7	-2.1	-2.8	-1.2	2.1	5.9
29	9.4	11.9	12.9	12.4	10.5	7.6	4.4	2.0	1.2	2.4	5.2	8.8
Th	12.1	14.3	15.0	14.1	11.6	7.9	3.7	0.0	-2.2	-2.3	-0.3	3.0
30	6.7	9.8	11.8	12.4	11.7	9.8	7.0	4.3	2.4	2.1	3.6	6.4
F	9.7	12.4	14.0	14.2	13.0	10.4	6.8	3.1	-0.1	-1.7	-1.3	0.8
31	4.0	7.2	9.8	11.3	11.7	10.9	9.1	6.7	4.4	3.0	3.1	4.7
Sa	7.3	10.0	12.1	13.2	13.0	11.7	9.3	6.1	2.9	0.3	-0.8	-0.1

Time meridian 135° W. 0 is midnight. 12 is noon.
Heights are referred to mean lower low water (N.O.S. chart datum).

VALDEZ, ALASKA, 2015

Lat. 61° 08 N Long. 146° 22 W

NOVEMBER

Predicted hourly heights in feet

Day	Hours 0/12	Hours 1/13	Hours 2/14	Hours 3/15	Hours 4/16	Hours 5/17	Hours 6/18	Hours 7/19	Hours 8/20	Hours 9/21	Hours 10/22	Hours 11/23
1	2.0	4.8	7.4	9.4	10.6	10.9	10.2	8.7	6.7	4.8	3.8	4.1
Su	5.6	7.8	9.9	11.3	12.0	11.7	10.5	8.4	5.8	3.1	1.1	0.4
2	1.1	3.0	5.3	7.4	9.0	10.0	10.3	9.8	8.6	6.9	5.4	4.6
M	4.8	6.0	7.7	9.2	10.2	10.7	10.6	9.7	8.0	5.8	3.6	2.0
3	1.5	2.2	3.6	5.4	7.1	8.5	9.6	10.0	9.8	8.7	7.3	5.9
Tu	5.1	5.2	5.9	7.1	8.2	9.1	9.7	9.8	9.2	7.9	6.1	4.2
4	2.9	2.4	2.8	4.0	5.4	6.9	8.4	9.6	10.2	9.9	9.0	7.6
W	6.2	5.2	5.0	5.4	6.2	7.2	8.2	9.1	9.5	9.1	8.0	6.4
5	4.8	3.5	2.9	3.1	4.0	5.4	7.1	8.7	10.0	10.5	10.2	9.1
Th	7.6	6.0	4.8	4.3	4.5	5.2	6.4	7.8	9.0	9.6	9.3	8.3
6	6.7	5.1	3.7	3.0	3.2	4.1	5.7	7.6	9.4	10.7	11.0	10.4
F	9.1	7.2	5.4	4.0	3.3	3.5	4.6	6.2	7.9	9.3	9.9	9.5
7	8.4	6.8	5.0	3.6	2.9	3.2	4.5	6.5	8.6	10.4	11.4	11.4
Sa	10.4	8.6	6.4	4.3	2.7	2.2	2.8	4.4	6.5	8.5	9.8	10.3
8	9.7	8.4	6.5	4.6	3.2	2.7	3.5	5.3	7.6	9.8	11.5	12.1
Su	11.5	10.0	7.7	5.2	2.9	1.5	1.4	2.7	4.8	7.2	9.2	10.4
9	10.6	9.7	8.1	6.0	4.0	2.8	2.8	4.2	6.5	9.0	11.1	12.4
M	12.4	11.3	9.2	6.4	3.6	1.4	0.5	1.1	3.0	5.6	8.2	10.1
10	11.0	10.7	9.5	7.5	5.2	3.4	2.6	3.3	5.3	7.9	10.5	12.3
Tu	12.9	12.4	10.6	7.9	4.8	2.0	0.2	0.0	1.3	3.9	6.7	9.2
11	10.8	11.3	10.6	8.9	6.6	4.4	3.0	2.8	4.2	6.7	9.4	11.7
W	13.0	13.1	11.8	9.5	6.4	3.2	0.6	-0.5	0.0	2.1	5.0	7.8
12	10.0	11.2	11.2	10.1	8.1	5.7	3.8	2.9	3.5	5.4	8.2	10.8
Th	12.7	13.4	12.8	10.9	8.0	4.8	1.7	-0.3	-0.7	0.6	3.1	6.2
13	8.8	10.7	11.3	10.9	9.3	7.2	5.0	3.5	3.2	4.4	6.8	9.5
F	11.9	13.2	13.2	12.0	9.6	6.5	3.3	0.7	-0.7	-0.4	1.5	4.3
14	7.3	9.6	10.9	11.1	10.3	8.5	6.4	4.5	3.5	3.8	5.5	8.0
Sa	10.6	12.5	13.2	12.6	10.9	8.3	5.2	2.3	0.1	-0.6	0.3	2.5
15	5.4	8.1	10.0	10.8	10.7	9.6	7.8	5.9	4.4	3.8	4.6	6.5
Su	9.0	11.2	12.5	12.7	11.7	9.8	7.2	4.3	1.7	0.0	-0.2	1.1
16	3.6	6.3	8.6	10.0	10.5	10.2	9.1	7.4	5.7	4.5	4.2	5.3
M	7.3	9.5	11.3	12.1	11.9	10.7	8.8	6.4	3.7	1.5	0.3	0.5
17	2.0	4.4	6.9	8.8	9.9	10.3	9.9	8.8	7.3	5.7	4.7	4.6
Tu	5.7	7.5	9.4	10.8	11.3	11.0	9.9	8.2	6.0	3.7	1.7	0.8
18	1.2	2.8	5.0	7.1	8.8	9.8	10.2	9.9	8.9	7.4	5.8	4.8
W	4.7	5.7	7.2	8.8	9.9	10.4	10.3	9.5	8.1	6.1	3.9	2.2
19	1.4	1.8	3.3	5.2	7.2	8.8	10.0	10.6	10.3	9.3	7.6	5.9
Th	4.7	4.4	5.0	6.3	7.7	8.8	9.6	9.9	9.5	8.3	6.4	4.4
20	2.7	1.9	2.2	3.5	5.3	7.3	9.1	10.6	11.3	11.0	9.7	7.8
F	5.8	4.3	3.6	3.9	4.9	6.4	7.9	9.2	9.9	9.8	8.8	7.0
21	4.9	3.2	2.2	2.3	3.5	5.4	7.7	9.8	11.5	12.2	11.7	10.1
Sa	7.8	5.4	3.4	2.3	2.4	3.5	5.3	7.4	9.2	10.3	10.4	9.4
22	7.6	5.4	3.4	2.3	2.2	3.5	5.7	8.4	10.9	12.6	13.2	12.4
Su	10.4	7.5	4.6	2.1	0.7	0.8	2.3	4.7	7.3	9.5	10.9	11.0
23	10.0	8.0	5.6	3.4	2.1	2.1	3.7	6.3	9.4	12.1	13.7	14.0
M	12.8	10.3	6.9	3.4	0.6	-0.8	-0.4	1.6	4.5	7.6	10.1	11.5
24	11.6	10.4	8.2	5.5	3.2	1.8	2.2	4.2	7.2	10.5	13.2	14.6
Tu	14.5	12.8	9.8	5.9	2.1	-0.8	-2.0	-1.1	1.4	4.8	8.1	10.7
25	12.0	12.0	10.5	8.1	5.2	2.8	1.7	2.5	4.9	8.3	11.6	14.1
W	15.1	14.6	12.4	8.9	4.8	0.8	-1.9	-2.6	-1.2	1.8	5.5	8.8
26	11.3	12.4	12.0	10.4	7.7	4.8	2.5	1.8	3.1	5.9	9.3	12.5
Th	14.5	15.2	14.2	11.6	7.8	3.5	-0.2	-2.5	-2.6	-0.6	2.7	6.3
27	9.5	11.6	12.4	11.8	9.9	7.1	4.3	2.5	2.3	3.9	6.8	10.2
F	12.9	14.6	14.7	13.3	10.5	6.6	2.5	-0.8	-2.5	-2.0	0.3	3.7
28	7.2	10.0	11.8	12.2	11.3	9.3	6.6	4.1	2.7	2.9	4.8	7.7
Sa	10.7	13.0	14.1	13.8	12.1	9.2	5.5	1.8	-0.9	-1.9	-1.0	1.6
29	4.8	7.9	10.3	11.6	11.7	10.6	8.6	6.2	4.1	3.1	3.7	5.6
Su	8.3	10.8	12.5	13.2	12.6	10.8	8.0	4.7	1.6	-0.5	-1.0	0.3
30	2.9	5.8	8.4	10.3	11.2	11.1	10.0	8.2	6.1	4.4	3.7	4.4
M	6.3	8.6	10.5	11.7	12.0	11.2	9.5	7.1	4.2	1.7	0.3	0.2

Time meridian 135° W. 0 is midnight. 12 is noon.
Heights are referred to mean lower low water (N.O.S. chart datum).

Lat. 61° 08 N Long. 146° 22 W

DECEMBER

Predicted hourly heights in feet

Day	Hours 0/12	Hours 1/13	Hours 2/14	Hours 3/15	Hours 4/16	Hours 5/17	Hours 6/18	Hours 7/19	Hours 8/20	Hours 9/21	Hours 10/22	Hours 11/23
1	1.7	4.0	6.6	8.7	10.1	10.8	10.6	9.6	7.9	6.1	4.7	4.3
Tu	5.0	6.6	8.4	9.8	10.6	10.7	10.0	8.6	6.5	4.2	2.2	1.2
2	1.5	2.9	5.0	7.0	8.7	9.9	10.5	10.3	9.4	7.8	6.2	5.0
W	4.7	5.3	6.5	7.8	8.8	9.5	9.6	9.2	8.0	6.3	4.4	2.9
3	2.2	2.6	3.9	5.6	7.3	8.7	9.8	10.4	10.2	9.3	7.8	6.3
Th	5.1	4.7	5.1	5.9	6.9	7.8	8.6	8.9	8.7	7.8	6.3	4.8
4	3.6	3.1	3.5	4.5	5.9	7.5	8.9	10.1	10.6	10.3	9.3	7.8
F	6.2	5.0	4.4	4.5	5.1	6.0	7.1	8.1	8.7	8.6	7.8	6.6
5	5.2	4.1	3.7	4.0	4.9	6.3	7.9	9.4	10.6	11.0	10.5	9.2
Sa	7.6	5.8	4.4	3.6	3.6	4.2	5.4	6.8	8.0	8.8	8.8	8.1
6	6.8	5.5	4.5	4.0	4.2	5.2	6.8	8.6	10.2	11.2	11.4	10.6
Su	9.0	7.1	5.1	3.4	2.6	2.6	3.6	5.2	6.9	8.4	9.2	9.1
7	8.3	7.0	5.6	4.5	4.0	4.3	5.6	7.5	9.5	11.1	11.9	11.7
M	10.5	8.5	6.2	3.9	2.2	1.5	1.9	3.4	5.5	7.5	9.0	9.7
8	9.5	8.5	7.0	5.4	4.2	3.8	4.6	6.3	8.5	10.6	12.0	12.5
Tu	11.8	10.1	7.7	5.0	2.5	0.9	0.6	1.7	3.7	6.2	8.3	9.8
9	10.2	9.7	8.4	6.7	5.0	3.8	3.8	5.1	7.2	9.7	11.7	12.8
W	12.8	11.6	9.4	6.5	3.5	1.1	-0.2	0.2	1.9	4.5	7.1	9.2
10	10.5	10.6	9.8	8.1	6.1	4.3	3.5	4.0	5.8	8.4	10.9	12.6
Th	13.3	12.8	11.0	8.3	5.0	2.0	-0.2	-0.8	0.2	2.6	5.5	8.2
11	10.1	11.0	10.8	9.5	7.5	5.3	3.8	3.4	4.6	6.8	9.6	11.9
F	13.3	13.5	12.4	10.1	6.9	3.5	0.6	-1.1	-1.0	0.8	3.6	6.6
12	9.2	10.8	11.3	10.6	8.9	6.7	4.6	3.4	3.6	5.3	7.9	10.6
Sa	12.7	13.7	13.3	11.6	8.9	5.5	2.1	-0.5	-1.5	-0.7	1.7	4.8
13	7.8	10.0	11.3	11.3	10.2	8.2	5.9	4.1	3.3	4.0	6.1	8.9
Su	11.5	13.1	13.6	12.7	10.6	7.6	4.1	1.0	-1.0	-1.4	0.0	2.8
14	6.0	8.8	10.7	11.4	11.0	9.6	7.5	5.3	3.7	3.4	4.5	6.9
M	9.6	11.9	13.1	13.0	11.8	9.4	6.4	3.1	0.4	-1.1	-0.8	1.1
15	4.0	7.1	9.5	11.0	11.4	10.7	9.1	7.0	4.9	3.6	3.6	5.0
Tu	7.4	9.9	11.8	12.5	12.2	10.7	8.4	5.5	2.5	0.3	-0.7	0.0
16	2.2	5.1	7.9	10.0	11.1	11.3	10.4	8.8	6.7	4.7	3.6	3.8
W	5.3	7.5	9.7	11.1	11.6	11.2	9.8	7.7	5.0	2.4	0.6	0.1
17	1.1	3.3	6.1	8.5	10.3	11.2	11.2	10.4	8.7	6.5	4.6	3.6
Th	3.8	5.1	7.1	8.9	10.1	10.6	10.3	9.2	7.3	5.0	2.8	1.3
18	1.0	2.2	4.3	6.7	8.9	10.5	11.4	11.4	10.5	8.7	6.5	4.6
F	3.5	3.5	4.6	6.2	7.8	8.9	9.6	9.7	8.9	7.4	5.3	3.4
19	2.1	2.0	3.0	4.9	7.1	9.2	10.8	11.8	11.9	10.9	8.9	6.6
Sa	4.4	3.1	2.8	3.6	4.9	6.5	7.9	9.0	9.4	9.0	7.8	5.9
20	4.2	2.9	2.7	3.5	5.2	7.4	9.5	11.3	12.4	12.4	11.3	9.1
Su	6.5	4.1	2.4	1.8	2.3	3.6	5.4	7.3	8.8	9.6	9.4	8.3
21	6.7	4.9	3.5	3.1	3.7	5.4	7.6	10.0	12.0	13.1	13.0	11.6
M	9.2	6.3	3.5	1.4	0.5	1.0	2.5	4.8	7.1	9.0	10.0	10.0
22	9.0	7.3	5.4	3.8	3.1	3.7	5.5	8.0	10.7	12.7	13.8	13.5
Tu	11.8	9.1	5.8	2.6	0.2	-0.7	-0.1	1.9	4.6	7.4	9.5	10.6
23	10.6	9.5	7.6	5.5	3.7	2.9	3.7	5.8	8.6	11.4	13.4	14.3
W	13.7	11.8	8.7	5.0	1.5	-0.9	-1.7	-0.6	1.9	5.0	8.0	10.2
24	11.3	11.1	9.8	7.6	5.2	3.3	2.7	3.8	6.3	9.3	12.1	14.0
Th	14.6	13.7	11.4	7.9	3.9	0.4	-1.9	-2.1	-0.5	2.5	5.8	8.8
25	10.9	11.8	11.4	9.7	7.3	4.7	2.9	2.6	4.1	6.9	10.0	12.7
F	14.3	14.5	13.3	10.5	6.8	2.8	-0.6	-2.4	-2.0	0.2	3.4	6.8
26	9.6	11.5	12.0	11.3	9.3	6.6	4.1	2.6	2.8	4.7	7.6	10.6
Sa	13.0	14.2	14.1	12.4	9.4	5.5	1.7	-1.2	-2.3	-1.3	1.3	4.6
27	7.9	10.4	11.8	12.0	10.8	8.6	5.9	3.6	2.6	3.2	5.4	8.3
Su	11.1	13.0	13.8	13.2	11.2	8.0	4.3	0.9	-1.4	-1.7	-0.2	2.6
28	5.9	8.9	10.9	11.9	11.6	10.1	7.8	5.3	3.4	2.8	3.8	6.1
M	8.9	11.2	12.7	13.0	12.0	9.8	6.7	3.3	0.5	-1.0	-0.7	1.2
29	4.1	7.2	9.6	11.2	11.6	11.0	9.3	7.1	4.8	3.4	3.2	4.5
Tu	6.8	9.2	11.0	11.9	11.8	10.6	8.4	5.6	2.8	0.6	-0.2	0.6
30	2.8	5.6	8.2	10.1	11.1	11.2	10.3	8.6	6.5	4.6	3.6	3.7
W	5.1	7.1	9.1	10.4	10.9	10.5	9.3	7.3	4.9	2.6	1.1	0.9
31	2.1	4.3	6.7	8.8	10.2	10.9	10.7	9.7	8.1	6.2	4.6	3.8
Th	4.2	5.5	7.2	8.6	9.5	9.8	9.4	8.3	6.6	4.6	2.9	2.0

Time meridian 135° W. 0 is midnight. 12 is noon.
Heights are referred to mean lower low water (N.O.S. chart datum).

GLOSSARY OF TERMS

ANNUAL INEQUALITY—Seasonal variation in the water level or current, more or less periodic, due chiefly to meteorological causes.

APOGEAN TIDES OR TIDAL CURRENTS—Tides of decreased range or currents of decreased speed occurring monthly as the result of the Moon being in apogee (farthest from the Earth).

AUTOMATIC TIDE GAGE—An instrument that automatically registers the rise and fall of the tide. In some instruments, the registration is accomplished by recording the heights at regular intervals in digital format, in others by a continuous graph in which the height versus corresponding time of the tide is recorded.

BENCH MARK (BM)—A fixed physical object or marks used as reference for a vertical datum. A *tidal bench mark is* one near a tide station to which the tide staff and tidal datums are referred. A *Geodetic bench mark* identifies a surveyed point in the National Geodetic Vertical Network.

CHART DATUM—The tidal datum to which soundings on a chart are referred. It is usually taken to correspond to low water elevation of the tide, and its depression below mean sea level is represented by the symbol Zo.

CURRENT—Generally, a horizontal movement of water. Currents may be classified as *tidal* and *nontidal*. Tidal currents are caused by gravitational interactions between the Sun, Moon, and Earth and are a part of the same general movement of the sea that is manifested in the vertical rise and fall, called *tide*. Nontidal currents include the permanent currents in the general circulatory systems of the sea as well as temporary currents arising from more pronounced meteorological variability.

CURRENT DIFFERENCE—Difference between the time of slack water (or minimum current) or strength of current in any locality and the time of the corresponding phase of the tidal current at a reference station, for which predictions are given in the *Tidal Current Tables*.

CURRENT ELLIPSE—A graphic representation of a rotary current in which the velocity of the current at different hours of the tidal cycle is represented by radius vectors and vectorial angles. A line joining the extremities of the radius vectors will form a curve roughly approximating an ellipse. The cycle is completed in one-half tidal day or in a whole tidal day according to whether the tidal current is of the semidiurnal or the diurnal type. A current of the mixed type will give a curve of two unequal loops each tidal day.

CURRENT METER—An instrument for measuring the speed and direction or just the speed of a current. The measurements are usually Eulerian since the meter is most often fixed or moored at a specific location.

DATUM (vertical)—For marine applications, a base elevation used as a reference from which to reckon heights or depths. It is called a *tidal datum* when defined by a certain phase of the tide. Tidal datums are local datums and should not be extended into areas which have differing topographic features without substantiating measurements. In order that they may be recovered when needed, such datums are referenced to fixed points known as *bench marks.*

DAYLIGHT SAVING TIME—A time used during the summer in some localities in which clocks are advanced 1 hour from the usual standard time.

DIURNAL—Having a period or cycle of approximately 1 tidal day. Thus, the tide is said to be diurnal when only one high water and one low water occur during a tidal day, and the tidal current is said to be diurnal when there is a single flood and single ebb period in the tidal day. A rotary current is diurnal if it changes its direction through all points of the compass once each tidal day.

DIURNAL INEQUALITY—The difference in height of the two high waters or of the two low waters of each day; also the difference in speed between the two flood tidal currents or the two ebb tidal currents of each day. The difference changes with the declination of the Moon and to a lesser extent with the declination of the Sun. In general, the inequality tends to increase with an increasing declination, either north or south, and to diminish as the Moon approaches the Equator. *Mean diurnal high water inequality* (DHQ) is one-half the average difference between the two high waters of each day observed over a specific 19-year Metonic cycle (the National Tidal Datum Epoch). It is obtained by subtracting the mean of all high waters from the mean of the higher high waters. *Mean diurnal low water inequality* (DLQ) is one-half the average difference between the two low waters of each day observed over a specific 19-year Metonic cycle (the National Tidal Datum Epoch). It is obtained by subtracting the mean of the lower low waters from the mean of all low waters. *Tropic high water inequality* (HWQ) is the average difference between the two high waters of the day at the times of the tropic tides. *Tropic low water inequality* (LWQ) is the average difference between the two low waters of the day at the times of the tropic tides. Mean and tropic inequalities as

defined above are applicable only when the type of tide is either semidiurnal or mixed. Diurnal inequality is sometimes called *declinational inequality.*

DOUBLE EBB—An ebb tidal current where, after ebb begins, the speed increases to a maximum called *first ebb*; it then decreases, reaching a *minimum ebb* near the middle of the ebb period (and at some places it may actually run in a flood direction for a short period); it then again ebbs to a maximum speed called second ebb after which it decreases to slack water.

DOUBLE FLOOD—A flood tidal current where, after flood begins, the speed increases to a maximum called first flood; it then decreases, reaching a minimum flood near the middle of the flood period (and at some places it may actually run in an ebb direction for a short period); it then again floods to a maximum speed called second flood after which it decreases to slack water.

DOUBLE TIDE—A double-headed tide, that is, a high water consisting of two maxima of nearly the same height separated by a relatively small depression, or a low water consisting of two minima separated by a relatively small elevation. Sometimes, it is called an agger.

DURATION OF FLOOD AND DURATION OF EBB—Duration of flood is the interval of time in which a tidal current is flooding, and the *duration of ebb* is the interval in which it is ebbing. Together they cover, on an average, a period of 12.42 hours for a semidiurnal tidal current or a period of 24.84 hours for a diurnal current. In a normal semidiurnal tidal current, the duration of flood and duration of ebb will each be approximately equal to 6.21 hours, but the times may be modified greatly by the presence of a nontidal flow. In a river the duration of ebb is usually longer than the duration of flood because of the freshwater discharge, especially during the spring when snow and ice melt are the predominant influences.

DURATION OF RISE AND DURATION OF FALL—*Duration of rise* is the interval from low water to high water, and *duration of fall* is the interval from high water to low water. Together they cover, on an average, a period of 12.42 hours for a semidiurnal tide or a period of 24.84 hours for a diurnal tide. In a normal semidiurnal tide, the duration of rise and duration of fall will each be approximately equal to 6.21 hours, but in shallow waters and in rivers there is a tendency for a decrease in the duration of rise and a corresponding increase in the duration of fall.

EBB CURRENT—The movement of a tidal current away from shore or down a tidal river or estuary. In the mixed type of reversing tidal current, the terms *greater ebb* and *lesser ebb* are applied respectively to the ebb tidal currents of greater and lesser speed of each day. The terms *maximum ebb* and *minimum ebb* are applied to the maximum and minimum speeds of a current running continuously ebb, the speed alternately increasing and decreasing without coming to a slack or reversing. The expression maximum ebb is also applicable to any ebb current at the time of greatest speed.

EQUATORIAL TIDAL CURRENTS—Tidal currents occurring semimonthly as a result of the Moon being over the Equator. At these times the tendency of the Moon to produce a diurnal inequality in the tidal current is at a minimum.

EQUATORIAL TIDES—Tides occurring semi monthly as the result of the Moon being over the Equator. At these times the tendency of the Moon to produce a diurnal inequality in the tide is at a minimum.

FLOOD CURRENT—The movement of a tidal current toward the shore or up a tidal river or estuary. In the mixed type of reversing current, the terms *greater flood* and *lesser flood* are applied respectively to the flood currents of greater and lesser speed of each day. The terms *maximum flood* and *minimum flood* are applied to the maximum and minimum speeds of a flood current, the speed of which alternately increases and decreases without coming to a slack or reversing. The expression maximum flood is also applicable to any flood current at the time of greatest speed.

GREAT DIURNAL RANGE (Gt)—The difference in height between mean higher high water and mean lower low water. The expression may also be used in its contracted form, *diurnal range*.

GREENWICH INTERVAL—An interval referred to the transit of the Moon over the meridian of Greenwich as distinguished from the local interval which is referred to the Moon's transit over the local meri-dian. The relation in hours between Greenwich and local intervals may be expressed by the formula:

Greenwich interval = local interval +0.069 L

where L is the west longitude of the local meridan in degrees. For east longitude, L is to be considered negative.

GULF COAST LOW WATER DATUM—A chart datum. Specifically, the tidal datum formerly designated for the coastal waters of the Gulf Coast of the United States. It was defined as *mean lower low water* when the type of tide was mixed and *mean low water* when the type of tide was diurnal.

HALF-TIDE LEVEL—See *mean tide level*.

HARMONIC ANALYSIS—The mathematical process by which the observed tide or tidal current at any place is separated into basic harmonic constituents.

HARMONIC CONSTANTS—The amplitudes and epochs of the harmonic constituents of the tide or tidal current at any place.

HARMONIC CONSTITUENT—One of the harmonic elements in a mathematical expression for the tide-producing force and in corresponding formulas for the tide or tidal current. Each constituent represents a periodic change or variation in the relative positions of the Earth, Moon, and Sun. A single constituent is usually written in the form $y=A \cos (at+\alpha)$, in which y is a function of time as expressed by the symbol t and is reckoned from a specific origin. The coefficient A is called the amplitude of the constituent and is a measure of its relative importance. The angle $(at+\alpha)$ changes uniformly and its value at any time is called the phase of the constituent. The speed of the constituent is the rate of change in its phase and is represented by the symbol a in the formula. The quantity α is the phase of the constituent at the initial instant from which the time is reckoned. The period of the constituent is the time required for the phase to change through 360° and is the cycle of the astronomical condition represented by the constituent.

HIGH WATER (HW)—The maximum height reached by a rising tide. The height may be due solely to the periodic tidal forces or it may have superimposed upon it the effects of prevailing meteorological conditions. Use of the synonymous term, *high tide*, is discouraged.

HIGHER HIGH WATER (HHW)—The higher of the two high waters of any tidal day.

HIGHER LOW WATER (HLW)—The higher of the two low waters of any tidal day.

HYDRAULIC CURRENT—A current in a channel caused by a difference in the surface level at the two ends. Such a current may be expected in a strait connecting two bodies of water in which the tides differ in time or range. The current in the East River, N.Y., connecting Long Island Sound and New York Harbor, is an example.

KNOT—A unit of speed, one international nautical mile (1,852.0 meters or 6,076.11549 international feet) per hour.

LOW WATER (LW)—The minimum height reached by a falling tide. The height may be due solely to the periodic tidal forces or it may have superimposed upon it the effects of meteorological conditions. Use of the synonymous term, *low tide*, is discouraged.

LOWER HIGH WATER (LHW)—The lower of the two high waters of any tidal day.

LOWER LOW WATER (LLW)—The lower of the two low waters of any tidal day.

LUNAR DAY—The time of the rotation of the Earth with respect to the Moon, or the interval between two successive upper transits of the Moon over the meridian of a place. The mean lunar day is approximately 24.84 solar hours long, or 1.035 times as long as the mean solar day.

LUNAR INTERVAL—The difference in time between the transit of the Moon over the meridian of Greenwich and over a local meridian. The average value of this interval expressed in hours is 0.069 L, in which L is the local longitude in degrees, positive for west longitude and negative for east longitude. The lunar interval equals the difference between the local and Greenwich interval of a tide or current phase.

LUNICURRENT INTERVAL—The interval between the Moon's transit (upper or lower) over the local or Greenwich meridian and a specified phase of the tidal current following the transit. Examples: *strength of flood interval and strength of ebb interval,* which may be abbreviated to *flood interval and ebb interval,* respectively. The interval is described as local or Greenwich according to whether the reference is to the Moon's transit over the local or Greenwich meridian. When not otherwise specified, the reference is assumed to be local.

LUNITIDAL INTERVAL—The interval between the Moon's transit (upper or lower) over the local or Greenwich meridian and the following high or low water. The average of all high water intervals for all phases of the Moon is known as *mean high water lunitidal interval* and is abbreviated to high water interval (HWI). Similarly the *mean low water lunitidal interval* is abbreviated to *low water interval* (LWI). The interval is described as local or Greenwich according to whether the reference is to the transit over the local or Greenwich meridian. When not otherwise specified, the reference is assumed to be local.

MEAN HIGH WATER (MHW)—A tidal datum. The arithmetic mean of the high water heights observed over a specific 19-year Metonic cycle (the National Tidal Datum Epoch). For stations with shorter series, simultaneous observational comparisons are made with a primary control tide station in order to derive the equivalent of a 19-year value.

MEAN HIGHER HIGH WATER (MHHW)—A tidal datum. The arithmetic mean of the higher high water heights of a mixed tide observed over a specific 19-year Metonic cycle (the National Tidal Datum Epoch). Only the higher high water of each pair of high waters, or the only high water of a tidal day is included in the mean.

MEAN HIGHER HIGH WATER LINE (MHHWL)—The intersection of the land with the water surface at the elevation of mean higher high water.

MEAN LOW WATER (MLW)—A tidal datum. The arithmetic mean of the low water heights observed over a specific 19-year Metonic cycle (the National Tidal Datum Epoch). For stations with shorter series, simultaneous observational comparisons are made with a primary control tide station in order to derive the equivalent of a 19-year value.

MEAN LOW WATER SPRINGS (MLWS)—A tidal datum. Frequently abbreviated *spring low water.* The arithmetic mean of the low water heights occurring at the time of the spring tides observed over a specific 19-year Metonic cycle (the National Tidal Datum Epoch).

MEAN LOWER LOW WATER (MLLW)—A tidal datum. The arithmetic mean of the lower low water heights of a mixed tide observed over a specific 19-year Metonic cycle (the National Tidal Datum Epoch). Only the lower low water of each pair of low waters, or the only low water of a tidal day is included in the mean.

MEAN RANGE OF TIDE (Mn)—The difference in height between mean high water and mean low water.

MEAN RIVER LEVEL—A tidal datum. The average height of the surface of a tidal river at any point for all stages of the tide observed over a 19-year Metonic cycle (the National Tidal Datum Epoch), usually determined from hourly height readings. In rivers subject to occasional freshets the river level may undergo wide variations, and for practical purposes certain months of the year may be excluded in the determination of tidal datums. For charting purposes, tidal datums for rivers are usually based on observations during selected periods when the river is at or near low water stage.

MEAN SEA LEVEL (MSL)—A tidal datum. The arithmetic mean of hourly water elevations observed over a specific 19-year Metonic cycle (the National Tidal Datum Epoch). Shorter series are specified in the name; e.g., monthly mean sea level and yearly mean sea level.

MEAN TIDE LEVEL (MTL)—Also called half-tide level. A tidal datum midway between mean high water and mean low water.

MIXED TIDE—Type of tide with a large inequality in the high and/or low water heights, with two high waters and two low waters usually occurring each tidal day. In strictness, all tides are mixed but the name is usually applied to the tides intermediate to those predominantly semidiurnal and those predominantly diurnal.

NATIONAL TIDAL DATUM EPOCH—The specific 19-year period adopted by the National Ocean Service as the official time segment over which tide observations are taken and reduced to obtain mean values (e.g., mean lower low water, etc.) for tidal datums. It is necessary for standardization because of periodic and apparent secular trends in sea level. The present National Tidal Datum Epoch is 1960 through 1978. It is reviewed annually for possible revision and must be actively considered for revision every 25 years.

NEAP TIDES OR TIDAL CURRENTS—Tides of decreased range or tidal currents of decreased speed occurring semimonthly as the result of the Moon being in quadrature. The *neap range* (Np) of the tide is the average semidiurnal range occurring at the time of neap tides and is most conveniently computed from the harmonic constants. It is smaller than the mean range where the type of tide is either semidiurnal or mixed and is of no practical significance where the type of tide is diurnal. The average height of the high waters of the neap tides is called *neap high water* or *high water neaps* (MHWN) and the average height of the corresponding low waters is called neap low water or low water neaps (MLWN).

PERIGEAN TIDES OR TIDAL CURRENTS—Tides of increased range or tidal currents of increased speed occurring monthly as the result of the Moon being in perigee or nearest the Earth. The *perigean range* (Pn) of tide is the average semidiurnal range occurring at the time of perigean tides and is most conveniently computed from the harmonic constants. It is larger than the mean range where the type of tide is either semidiurnal or mixed, and is of no practical significance where the type of tide is diurnal.

RANGE OF TIDE—The difference in height between consecutive high and low waters, the *mean range* is the difference in height between mean high water and mean low water. Where the type of tide is diurnal the mean range is the same as the diurnal range.

For other ranges, see great diurnal, spring, neap, perigean, apogean, and tropic tides.

REFERENCE STATION—A tide or current station for which independent daily predictions are given in the *Tide Tables and Tidal Current Tables,* and from which corresponding predictions are obtained for subordinate stations by means of differences and ratios.

REVERSING CURRENT—A tidal current which flows alternately in approximately opposite directions with a slack water at each reversal of direction. Currents of this type usually occur in rivers and straits where the direction of flow is more or less restricted to certain channels. When the movement is towards the shore or up a stream, the current is said to be flooding, and when in the opposite direction it is said to be ebbing. The combined flood and ebb movement including the slack water covers, on an average, 12.42 hours for the semidiurnal current. If unaffected by a nontidal flow, the flood and ebb movements will each last about 6 hours, but when combined with such a flow, the durations of flood and ebb may be quite unequal. During the flow in each direction the speed of the current will vary from zero at the time of slack water to a maximum about midway between the slacks.

ROTARY CURRENT—A tidal current that flows continually with the direction of flow changing through all points of the compass during the tidal period. Rotary currents are usually found offshore where the direction of flow is not restricted by any barriers. The tendency for the rotation in direction has its origin in the Coriolis force and, unless modified by local conditions, the change is clockwise in the Northern Hemisphere and counterclockwise in the Southern. The speed of the current usually varies throughout the tidal cycle, passing through the two maxima in approximately opposite directions and the two minima with the direction of the current at approximately 90° from the direction at time of maximum speed.

SEMIDIURNAL—Having a period or cycle of approximately one-half of a tidal day. The predominating type of tide throughout the world is semidiurnal, with two high waters and two low waters each tidal day. The tidal current is said to be semidiurnal when there are two flood and two ebb periods each day.

SET (OF CURRENT)—The direction *towards* which the current flows.

SLACK WATER—The state of a tidal current when its speed is near zero, especially the moment when a reversing current changes direction and its speed is zero. The term is also applied to the entire period of low speed near the time of turning of the current when it is too weak to be of any practical importance in navigation. The relation of the time of slack water to the tidal phases varies in different localities. For standing tidal waves, slack water occurs near the times of high and low water, while for progressive tidal waves, slack water occurs midway between high and low water.

SPRING TIDES OR TIDAL CURRENTS—Tides of increased range or tidal currents of increased speed occurring semimonthly as the result of the Moon being new or full. The *spring range* (Sg) of tide is the average semidiurnal range occurring at the time of spring tides and is most conveniently computed from the harmonic constants. It is larger than the mean range where the type of tide is either semidiurnal or mixed, and is of no practical significance where the type of tide is diurnal. The mean of the high waters of the spring tide is called *spring high water or mean high water springs* (MHWS), and the average height of the corresponding low waters is called *spring low water or mean low water springs* (MLWS).

STAND OF TIDE—Sometimes called a platform tide. An interval at high or low water when there is no sensible change in the height of the tide. The water level is stationary at high and low water for only an instant, but the change in level near these times is so slow that it is not usually perceptible. In general, the duration of the apparent stand will depend upon the range of tide, being longer for a small range than for a large range, but where there is a tendency for a double tide the stand may last for several hours even with a large range of tide.

STANDARD TIME—A kind of time based upon the transit of the Sun over a certain specified meridian, called the *time meridian*, and adopted for use over a considerable area. With a few exceptions, standard time is based upon some meridian which differs by a multiple of 15° from the meridian of Greenwich.

STRENGTH OF CURRENT—Phase of tidal current in which the speed is a maximum; also the speed at this time. Beginning with slack before flood in the period of a reversing tidal current (or minimum before flood in a rotary current), the speed gradually increases to flood strength and then diminishes to slack before ebb (or minimum before ebb in a rotary current), after which the current turns in direction, the speed increases to ebb strength and then diminishes to slack before flood completing the cycle. If it is assumed that the speed throughout the cycle varies as the ordinates of a cosine curve, it can

be shown that the average speed for an entire flood or ebb period is equal to $2/\pi$ or 0.6366 of the speed of the corresponding strength of current.

SUBORDINATE CURRENT STATION—(1) A current station from which a relatively short series of observations is reduced by comparison with simultaneous observations from a control current station. (2) A station listed in the *Tidal Current Tables* for which predictions are to be obtained by means of differences and ratios applied to the full predictions at a reference station .

SUBORDINATE TIDE STATION—(1) A tide station from which a relatively short series of observations is reduced by comparison with simultaneous observations from a tide station with a relatively long series of observations. (2) A station listed in the *Tide Tables* for which predictions are to be obtained by means of differences and ratios applied to the full predictions at a reference station.

TIDAL CURRENT TABLES—Tables which give daily predictions of the times and speeds of the tidal currents. These predictions are usually supplemented by current differences and constants through which additional predictions can be obtained for numerous other places.

TIDAL DIFFERENCE—Difference in time or height of a high or low water at a subordinate station and at a reference station for which predictions are given in the *Tide Tables*. The difference, when applied according to sign to the prediction at the reference station, gives the corresponding time or height for the subordinate station .

TIDE—The periodic rise and fall of the water resulting from gravitational interactions between the Sun, Moon, and Earth. The vertical component of the particulate motion of a tidal wave. Although the accompanying horizontal movement of the water is part of the same phenomenon, it is preferable to designate the motion as tidal current.

TIDE TABLES—Tables which give daily predictions of the times and heights of high and low waters. These predictions are usually supplemented by tidal differences and constants through which additional predictions can be obtained for numerous other places.

TIME MERIDIAN—A meridian used as a reference for time.

TROPIC CURRENTS—Tidal currents occurring semimonthly when the effect of the Moon's maximum declination is greatest. At these times the tendency of the Moon to produce a diurnal inequality in the current is at a maximum.

TROPIC RANGES—The *great tropic range* (Gc), or *tropic range*, is the difference in height between tropic higher high water and tropic lower low water. The *small tropic range* (Sc) is the difference in height between tropic lower high water and tropic higher low water. The *mean tropic range* (Mc) is the mean between the great tropic range and the small tropic range. The small tropic range and the mean tropic range are applicable only when the type of tide is semidiurnal or mixed. Tropic ranges are most conveniently computed from the harmonic constants.

TROPIC TIDES—Tides occurring semimonthly when the effect of the Moon's maximum declination is greatest. At these times there is a tendency for an increase in the diurnal range. The tidal datums pertaining to the tropic tides are designated as *tropic higher high water* (TcHHW), *tropic lower high water* (TcLHW), *tropic higher low water* (TcHLW), and *tropic lower low water* (TcLLW).

TYPE OF TIDE—A classification based on characteristic forms of a tide curve. Qualitatively, when the two high waters and two low waters of each tidal day are approximately equal in height, the tide is said to be *semidiurnal*; when there is a relatively large diurnal inequality in the high or low waters or both, it is said to be *mixed*; and when there is only one high water and one low water in each tidal day, it is said to be *diurnal*.

VANISHING TIDE—In a mixed tide with very large diurnal inequality, the lower high water (or higher low water) frequently becomes indistinct (or vanishes) at time of extreme declinations. During these periods the diurnal tide has such overriding dominance that the semidiurnal tide, although still present, cannot be readily seen on the tide curve.

INDEX TO STATIONS
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Bahia Octavia, Colombia	311
Bahia Pina, Panama	313
Bahia Posesion, Chile	11
Bahia San Andres, Chile	85
Bahia Santiago, Chile	15
Bahia Snug, Chile	31
Bahia Solano, Colombia	307
Bahia Swallow, Chile	39
Bahia Tictoc, Chile	107
Bahia Tongoy, Chile	189
Bahia Tuesday, Chile	53
Bahia Ushuaia, Argentina	5
Bahia Uvita, Costa Rica	341
Bahia Wood, Chile	33
Bainbridge Island, Alaska	1943
Bainbridge Island, Wash	1093

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Baja, Calif.	399-403
Baker Bay, Wash.	901,903
Balboa Bay, Alaska	2165
Balboa, Panama * (52)	321
Balboa Pier, Calif.	429
Balch Passage, Wash.	1129
Ballast Point, California	409
Bamfield, British Columbia	1337
Banco Direccion, Chile	13
Bandon, Oreg.	835
Bangor Wharf, Wash.	1051
Baranof, Alaska	1723
Baranof Island, Alaska	1711-1713,1743-1751
Barkley Sound, British Columbia	1337
Barlow Cove, Alaska	1695
Barnard Harbor, British Columbia	1377
Barren Islands, Alaska	1977
Barron Point, Wash.	1151
Barrow, Alaska	2459
Bartlett Cove, Alaska	1807
Barview, Oreg.	881
Bay Center, Wash.	971
Bay City, Oreg.	887
Bay City, Wash.	987
Bay of Isles, Alaska	1895
Bay of Waterfalls, Alaska	2313
Bay Slough, Calif.	579,581
Baynes Sound, British Columbia	1291
Bayovar, Peru	251
Beagle Channel, Argentina	5
Bear Bay, Alaska	1763
Beauty Bay, Alaska	1969
Beaver Bay, Alaska	2167
Bear Cove, Aialik Peninsula, Alaska	1955
Bear Cove, Kachemak Bay, Alaska	1995
Beaver Inlet, Alaska	2251
Beaver Passage, British Columbia	1391
Bechers Bay, Calif.	477
Bechevin Bay, Alaska	2295
Beecher Pass, Alaska	1607
Behm Canal, Alaska	1445-1457
Bella Bella, British Columbia	1367
Bella Coola, British Columbia	1371
Bellingham, Wash.	1221
Bellingham Bay, Wash.	1219,1221
Benicia, Calif.	687
Bergh Cove, British Columbia	1355
Bering Sea, Alaska	2411-2443
Berkeley, Calif.	639
Berner s Bay, Alaska	1701
Bethel, Alaska * (228)	2403
Big Bay, Alaska	2103
Biorka Island, Alaska	1747
Bird Island, Alaska	2153
Bishop Cut, Calif.	733
Bishop Point, Hawaii	2495
Black Rock, Alaska	2385
Blackfish Sound, British Columbia	1323
Blackslough Landing, Calif.	723
Blaine, Wash.	1249
Blakes Landing, Calif.	775
Blanco Encalada, Chile	211
Blunden Harbor, British Columbia	1325
Boca de Quadra, Alaska	1433
Bodega Harbor, Calif.	783
Bogoslof Island, Alaska	2253
Bolinas Lagoon, Calif.	767
Bonita Cove, Calif.	521
Boot Bay, Alaska	2311
Borden Highway Bridge, Calif.	745-749
Boston Harbor, Wash.	1157
Bowman Bay, Wash.	1199
Bradfield Canal, Alaska	1483
Bradmoor Island	703
Brazos Drawbridge	679
Bremerton, Wash.	1099
Brighton, Oreg.	893
Bristol Bay, Alaska	2355-2385
British Columbia	1261-1427
Broad Bight, Alaska	2219
Brookings, Oreg.	827
The Brothers, Alaska	1651
Brown Cove, Alaska	1633
Brownsville, Wash.	1085
Bucareli Bay, Alaska	1551-1553
Buchupureo, Chile	157
Bucksport, Calif.	809
Budd Inlet, Wash.	1157-1161
Buenaventura, Colombia * (48)	297
Bugle Point, Alaska	2299
Burns Point, Wash.	1153
Burrard Inlet, British Columbia	1281,1283
Burroughs Bay, Alaska	1453
Burrows Bay, Wash.	1203
Burton, Wash.	1109
Busby Island, Alaska	1909
Bush Point, Wash.	1041
Bushy Island, Alaska	1599
Bute Inlet, British Columbia	1301

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Cabo de Hornos, Chile * (4)	61
Cabo Pasado, Ecuador	275
Cabo Pilar, Chile	55
Cabrillo Beach, Calif.	439
Calaveras Point, Calif.	611
Caldera, Chile	201
Caleta Aeolian, Galapagos Islands	291
Caleta Barranquillas, Chile	199
Caleta Junin, Chile	225
Caleta La Hacienda, Chile	143
Caleta Lobitos, Peru	257
Caleta Lobos, Chile	221
Caleta Oscuro, Chile	187
Caleta Pascuas, Chile	85
Caleta Playa Parda, Chile	41
Caleta Saint Martin, Chile	59
Caleta Sylvia, Chile	45
Caleta Tagus, Galapagos Islands	287
Caleta Totoralillo, Chile	193
California	405-823
Callao, Peru * (28)	239
Camp Cove, Alaska	1959
Campbell Island, British Columbia	1367
Canada	1261-1409
Canal Chacao, Chile	127,131
Canal Darwin, Chile	93
Canal Fallos, Chile	79
Canal Smyth, Chile	49-51
Cannery Cove, Alaska	1641
Canoe Cove, Alaska	1781
Canoe Pass, British Columbia	1305
Cape Chlanak, Alaska	2319
Cape Chunu, Alaska	2323
Cape Flattery, Wash.	1007
Cape Hinchinbrook, Alaska	1863
Cape Kasilof, Alaska	2003
Cape Krusenstern, Alaska * (240)	2451
Cape Mordvinof, Alaska	2195
Cape Muzon, Alaska	1411
Cape Ninilchik, Alaska	1999
Cape Sagak, Alaska	2263
Cape Sarichef, Alaska	2197
Cape Utalug, Alaska	2287
Carelmapu, Chile	131

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Carmanah Point, British Columbia	1335
Carmel Bay, Calif	489
Carmel Cove, Calif	489
Carquinez Strait, Calif	673-689
Carr Inlet, Wash	1121-1125
Carrizal Bajo, Chile	197
Carry Inlet, Alaska	2105
Carter Bay, Alaska	2391
Carter Bay, British Columbia	1375
Cascade Head, Oreg	875
Case Inlet, Wash	1139-1143
Castle Bay, Alaska	2131
Castro, Chile	115
Catalina Harbor, Calif	467
Cathcart Landing, Oreg	915
Cathlamet, Wash	929
Champerico, Guatemala	371
Chanaral de las Animas, Chile	205
Chance Cove, Alaska	1967
Chankliut Island, Alaska	2133
Channel Islands, Calif	465-479
Charleston, Oreg * (108)	837
Chatham Channel, British Columbia	1319
Chatham Sound, British Columbia	1393-1399
Chatham Strait, Alaska	1711-1737
Chehalis River, Wash	993,995
Chemainus, British Columbia	1275
Chenega Island, Alaska	1939,1941
Chernofski Harbor, Alaska	2237
Cherry Point, Wash * (136)	1247
Chetco Cove, Oreg	827
Chevron Oil Company Pier, Calif	645
Chiachi Island, Alaska	2143
Chichagof Harbor, Alaska	2347
Chichagof Island, Alaska	1739,1775-1789
Chile	7-229
Chilkat Inlet, Alaska	1703
Chilkoot Inlet, Alaska	1705
Chimbote, Peru	245
Chinook, Wash	903
Chinulna Point, Alaska	2005
Cholmondeley Sound, Alaska	1471,1473
Chowiet Island, Alaska	2135
Chuckanut Bay, Wash	1219
Chuginadak Island, Alaska	2271
Chugul Island, Alaska	2303
Clallam Bay, Wash	1011
Clam Bay, Wash	1097
Clarence Strait, Alaska	1459-1503
Clarks Point, Alaska	2381
Clarksburg, Calif	763
Clayoquot, British Columbia	1341
Cleveland Passage, Alaska	1639
Coal Bay, Alaska	2169
Cobija, Chile	217
Cocos Island, Costa Rica	353
Cold Bay, Alaska	2179,2181
Collinsville, Calif	753
Colombia	295-311
Colorado River entrance, Mexico	395
Columbia Glacier, Alaska	1917
Columbia River	897-959
Comfort Cove, Alaska	1857
Commencement Bay, Wash	1115
Comox, British Columbia	1291
Composite Island, Alaska	1815
Constantine Harbor, Alaska	2335
Constitucion, Chile	161
Controller Bay, Alaska	1837
Cook Inlet, Alaska	1977-2039
Coon Island, Alaska	1439
Coos Bay, Oreg	837-843
Copper Harbor, Alaska	1523
Copper River Delta, Alaska	1839-1841
Coquille River, Oreg	835
Coquimbo, Chile	191
Cordero Channel, British Columbia	1299
Cordova, Alaska * (168)	1851
Cordova Bay, Alaska	1505-1519
Corinto, Nicaragua	359
Corkscrew Slough, Calif	589
Cormorant Island, British Columbia	1327
Cormorant Passage, Wash	1127
Cornet Bay, Wash	1197
Corona del Mar, Calif	427
Coronation Island, Alaska	1573
Corral, Chile	135
Corte Madera Creek, Calif	649
Cortes Island, British Columbia	1293
Cosmopolis, Wash	993
Cosmos Point, Frederick Sound, Alaska	1627
Costa Rica	339-353
Coupeville, Wash	1185
Cove Point, Alaska	1701
Cowichan Bay, British Columbia	1273
Coyote Creek, Calif	619-627
Coyote Hills Slough, Calif	577
Coyote Point, Calif	569
Craig, Alaska	1551
Crater Bay, Alaska	1961
Crescent Bay, Wash	1015
Crescent City, Calif. * (104)	823
Crescent Harbor, Wash	1183
Crib Point, Alaska	1677
Crockett, Calif	685
Cross Sound, Alaska	1791,1793
Crown Point, Mission Bay, Calif	421
Cruz Pass, Alaska	1553
Culross Bay, Alaska	1925
Culross Passage, Alaska	1927
Curanipe, Chile	159
Custom House Cove, Mary Isl., AK	1435
Cutuco, El Salvador	363
Cuyler Harbor, Calif	479
Cypress Island, Wash	1213,1217
Cyrus Cove, Alaska	1567

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Dabob Bay, Wash	1053,1055,1057
Dalco Passage, Wash	1111
Dall Island, Alaska	1411,1545-1549
Dangerous Passage, Alaska	1939
Davidson Inlet, Alaska	1561-1571
Day Harbor, Alaska	1947
Deception Pass, Wash	1195,1197,1199
Deer Passage, British Columbia	1297
Deering, Alaska	2447
Delarof Islands, Alaska	2331,2333
Dent Point, Alaska	2149
Depoe Bay, Oreg	869
Des Moines, Wash	1107
Destruction Island, Wash	999
Devils Head, Wash	1135
Dick Point, Oreg	889
Disappointment Slough, Calif	733
Discovery Bay, Wash	1025
Discovery Passage, B.C	1295,1303
Divide Head, Alaska	1473
Dixon Entrance	1405-1417
Dixon Harbor, Alaska	1821
Dofflemeyer Point, Wash	1157
Dolgoi Harbor, Alaska	2173
Dolgoi Island, Alaska	2173
Dolphin Point, Alaska	2097
Dora Harbor, Alaska	2187

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Dorothy Cove, Alaska..... 1743
Douglas Channel, British Columbia..... 1381
Douglas Island, Alaska..... 1689
Drayton Passage, Wash..... 1135
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Drift River Terminal, Alaska..... 2029
Driftwood Bay, Alaska..... 2265
Dry Spruce Island, Alaska..... 2091
Dry Strait, Frederick Sound, Alaska.... 1625
Duke Island, Alaska..... 1413,1429
Dumbarton Highway Bridge, Calif..... 599
Duncan Bay, British Columbia..... 1295
Dungeness, Chile..... 7
Dungeness, Wash..... 1021
Dupont Wharf, Wash..... 1131
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Dutch Slough, Calif..... 737
Duwamish Waterway, Wash..... 1091
Dyes Inlet, Wash..... 1101

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Eagle Bay, Alaska..... 2241
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Eagle Harbor, Bainbridge I., Wash..... 1093
East Foreland, Alaska..... 2013
East Garrison, Calif..... 635
East Island, Hawaiian Islands..... 2477
East Passage, Wash..... 1107
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Edgerley Island, Calif..... 677
Ediz Hook, Wash..... 1019
Edmonds, Wash..... 1073
Edna Bay, Alaska..... 1571
Egegik, Alaska..... 2365
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El Capitan Island, Alaska..... 1565
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El Salvador..... 363-367
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Elbow Bay, Alaska..... 1513
Elbow Passage, Alaska..... 1777
Eld Inlet, Wash..... 1155
Eliza Harbor, Alaska..... 1643,1645
Elfin Cove, Alaska * (160)..... 1791
Elk River, Calif..... 807
Elkhorn, Calif..... 503
Elkhorn Slough, Calif..... 499,503-507
Elkhorn Yacht Club, Calif..... 497
Elliott Bay, Wash..... 1087
Ellsworth, Wash..... 955
Elrington Island, Alaska..... 1889
Empire, Coos Bay, Oreg..... 841
Endicott Arm, Alaska..... 1661
English Bay, Alaska..... 2225
Ensenada, Mexico..... 403
Ensenada Utria, Colombia..... 305
Entrance Island, Alaska..... 1621
Entrance Point, Alaska..... 2359
Ernest Sound, Alaska..... 1483
Eshamy Bay, Alaska..... 1935
Eshmay Lagoon, Alaska..... 1937
Esperanza Inlet, British Columbia..... 1347
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Etienne Bay, Alaska..... 2353
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Eureka Slough Bridge, Calif..... 813
Evangelistas, Chile..... 71
Evans Island, Alaska..... 1887
Everett, Wash..... 1165
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Explorer Bay, Alaska..... 2293
Eyak River, Alaska..... 1843

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Falcon Arm, Alaska..... 1775
False Pass, Alaska..... 2191
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Farewell Harbor, British Columbia..... 1323
Favorite Bay, Alaska..... 1733
Fenimore Pass, Alaska..... 2297
Ferndale, Wash..... 1245
Fidalgo Island, Wash..... 1199
Fields Landing, Calif..... 803
Filucy Bay, Wash..... 1133
Finch Cove, Alaska..... 2281
Finlayson Channel, B.C..... 1373,1375
Fire Island, Alaska..... 2019
Fish Bay, Alaska..... 1759
Fisher Channel, British Columbia..... 1365
Fitzgibbon Cove, Alaska..... 1451
Fitz Hugh Sound, B.C..... 1361,1363
Flaxman Island, Alaska..... 2465
Florence, Oreg..... 853,855
Ford island, Hawaii..... 2497
Fords Cove, British Columbia..... 1425
Fort Canby, Wash..... 899
Fort Ross, Calif..... 785
Fossil River, Alaska..... 2417
Foulweather Bluff, Wash..... 1045
Fox Bay, Alaska Peninsula..... 2147
Fraser River, British Columbia..... 1279
Frederick Sound, Alaska..... 1625-1649
French Frigate Shoals, Hawaiian Islands 2477
Freshwater Bay, Alaska..... 1739
Friday Harbor, Wash..... 1241
Fritz Cove, Alaska..... 1689
Fulford Harbor, British Columbia..... 1269
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Gallinas Creek, Calif..... 665
Gambier Bay, Alaska..... 1657,1659
Gardiner, Oreg..... 847
Gardiner, Wash..... 1025
Gardner Canal, British Columbia..... 1383
Gareloi Island, Alaska..... 2333
Garibaldi, Oreg..... 883
Gaviota State Park, Calif..... 461
General Fish Company Pier..... 493
Georgiana Slough, Calif..... 727
George Inlet, Alaska..... 1439
Gertrude Cove, Alaska..... 2337
Gibbon Anchorage, Alaska..... 1879
Gig Harbor, Wash..... 1113
Glacier Bay, Alaska..... 1807-1817
Glacier Island, Alaska..... 1919
Glendale Cove, British Columbia..... 1321
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Gold Street Bridge, Calif..... 621
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Goletas Channel, British Columbia..... 1331
Golf Island, Alaska..... 1745
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Golfo de Ancud, Chile..... 117-123
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Goose Island, Alaska	1795
Goosebery Point, Wash	1223
Gowlland Harbor, British Columbia	1303
Graham Island, British Columbia	1405-1409
Granite Rock, Calif	603
Grant Line Canal, Calif	751
Grant Point, Alaska	2357
Gravel Point, Alaska	1849
Graves Harbor, Alaska	1819
Gravina Island, Alaska	1469
Grays Harbor, Wash	983-995
Great Sitkin Island, Alaska	2299,2301
Greely Point, Alaska	1681
Greenbank, Wash	1181
Green Bight, Alaska	2217
Green Cove, Calif	787
Green Island, Alaska	1879
Grenville Channel, British Columbia	1385
Greys Island, Sumner Strait, Alaska	1603
Grove Street, Oakland Harbor, Calif	545
Guadalupe Slough, Calif	615
Guatemala	369,371
Guayaquil, Ecuador * (36)	265
Guaymas, Mexico * (68)	391
Guemes Channel, Wash	1207
Guguak, Alaska	1885
Gulf of Alaska	1819-1845
Gulf of California	387-397
Gulf of Esquibel, Alaska	1555-1559

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Haines Inlet, Alaska	1705
Hale Passage, Puget Sound	1119
Hale Passage, Wash	1223,1225
Haleiwa, Hawaii	2491
Haley Anchorage, Alaska	1759
Half Moon Bay, Calif	513
Half Moon Bay, Oreg	845
Halibut Cove, Kachemak Bay, Alaska	1991
Hammond, Oreg	909
Hana, Hawaii	2529
Hanalei Bay, Hawaii	2489
Hanamaulu Bay, Hawaii	2487
Hanapepe Bay, Hawaii	2483
Hanauma Bay, Hawaii	2501
Hanbury Point, Wash	1253
Hanning Bay, Alaska	1871
Hansville, Wash	1071
Harbor Island, Wash	1089
Harney Channel, Wash	1239
Haro Strait, Wash	1251-1259
Harper, Wash	1103
Harrington Point, Wash	925
Harris Bay, Alaska	1961,1965
Hartley Bay, British Columbia	1379
Hawaii Island, Hawaii	2537-2547
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Hawk Inlet	1741
Hawkins Island, Alaska	1855
Haystack Island, British Columbia	1417
Heceta Island, Alaska	1561
Helmick Point, Alaska	2399
Henderson Inlet, Wash	1137
Herbert Island, Alaska	2273
Hercules, Calif	657
Herendeen Island, Alaska	2151
Herring Point, Alaska	1901
Herring Bay, Alaska	1647
Herschel Island, Arctic Ocean	2467
Hetta Inlet, Alaska	1521-1525
Highway 1 Bridge, California	499
Hilo, Hawaii * (268)	2547
Hinchinbrook Island, Alaska	1859-1863
Hobart Bay, Alaska	1655
Hogg Bay, Alaska	1945
Hog Island, San Antonio Creek, Calif	667
Holkham Bay, Alaska	1669,1671
Hollis Anchorage, Alaska	1481
Holly Farms Harbor, Wash	1179
Holmes Harbor, Wash	1179
Holt, Whiskey Slough, Calif	743
Holtz Bay, Alaska	2349
Homer, Alaska	1993
Home, Wash	1125
Honduras	361
Honolulu, Hawaii * (256)	2499
Honuapo, Hawaii	2545
Hood Canal, Wash	1043-1069
Hookton Slough, Calif	805
Hoonah, Alaska	1803
Hoquarten Slough, Oreg	891
Horsehead Bay, Wash	1121
Hot Springs Bay, Alaska	2325
Howe Sound, British Columbia	1285
Huacho, Peru	241
Huasco, Chile	195
Humboldt Bay, Calif * (100)	801
Humboldt Bay, Calif	801-817
Hump Island, Alaska	2137
Hungry Harbor, Wash	905
Hunter Bay, Alaska	1509
Hunters Point, Calif	555

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Icy Bay, Alaska	1833,1835
Icy Strait, Alaska	1815
Ideal Cove, Mitkof Island, Alaska	1629
Ikatan Bay, Alaska	2189
Iliamna Bay, Alaska	2037
Ilo, Peru	231
Ilwaco, Wash	901
Imperial Beach, Calif	405
Inanudak Bay, Alaska	2257
Inian Cove, Alaska	1793
Ingraham Bay, Alaska	1461
Inverness, Calif	781
Iquique, Chile	223
Irish Landing, Calif	739
Isanotski Strait, Alaska	2191
Isla Baltra, Galapagos Islands	291
Isla Cardon, Nicaragua	359
Isla Cebaco, Panama	331
Isla del Rey, Panama	317
Isla Diego Ramirez, Chile	63
Isla Genovesa, Galapagos Islands	293
Isla Guadalupe, Mexico	401
Isla Guafo, Chile	101
Isla Guamblin, Chile	99
Isla Hermite, Chile	59
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Isla Noir, Chile	67
Isla Parida, Panama	335
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Kachemak Bay, Alaska..... 1983-1995
Kagalaska Island, Alaska..... 2305
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Kahoolawe Island, Hawaii..... 2523,2525
Kahului, Hawaii * (264)..... 2527
Kaigani Strait, Alaska..... 1527
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Kake Harbor, Alaska..... 1623
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Kanaka Bay, Wash..... 1251
Kanatak Lagoon, Alaska..... 2119
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Kenai City Pier, Alaska..... 2009
Kenai Peninsula, Alaska..... 1947-1975
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Kernville, Oreg..... 873
Ketchikan, Alaska * (148)..... 1441
Kigul Island, Alaska..... 2269
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King Cove, Alaska..... 2177
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Kodiak, Alaska..... 2049-2053
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Kokinhenik Island, Alaska..... 1839
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Larsen Bay, Alaska..... 2075
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Laysan Island, Hawaiian Islands..... 2475
Lazy Bay, Alaska..... 2067
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ASTRONOMICAL DATA, 2015

January

	d	h	m
N	3	18	..
○	5	04	53
A	9	18	..
E	11	06	..
◑	13	09	46
S	18	07	..
●	20	13	14
P	21	20	..
E	24	09	..
◐	27	04	48
N	31	02	..

February

	d	h	m
○	3	23	09
A	6	06	..
E	7	13	..
◑	12	03	50
S	14	18	..
●	18	23	47
P	19	07	..
E	20	19	..
◐	25	17	14
N	27	08	..

March

	d	h	m
A	5	07	..
○	5	18	05
E	6	20	..
◑	13	17	48
S	14	02	..
P	19	19	..
E	20	07	..
●	20	09	36
⊖m	20	16	57
N	26	15	..
◐	27	07	43

April

	d	h	m
A	1	13	..
E	3	02	..
○	4	12	06
S	10	08	..
◑	12	03	44
E	16	17	..
P	17	03	..
●	18	18	57
N	23	00	..
◐	25	23	55
A	29	03	..
E	30	09	..

May

	d	h	m
○	4	03	42
S	7	14	..
◑	11	10	36
E	14	02	..
P	15	00	..
●	18	04	13
N	20	10	..
◐	25	17	19
A	26	22	..
E	27	18	..

June

	d	h	m
○	2	16	19
S	3	22	..
◑	9	15	42
P	10	04	..
E	10	09	..
●	16	14	05
N	16	20	..
⊖j	21	01	48
A	23	17	..
E	24	03	..
◐	24	11	03

July

	d	h	m
S	1	07	..
○	2	02	20
P	5	18	..
E	7	15	..
◑	8	20	24
N	14	05	..
●	16	01	24
A	21	11	..
◐	24	04	04
○	31	10	43

August

	d	h	m
P	2	10	..
E	3	23	..
◑	7	02	03
N	10	12	..
●	14	14	53
E	17	20	..
A	18	02	..
◐	22	19	31
S	25	04	..
○	29	18	35
P	30	15	..
E	31	09	..

September

	d	h	m
◑	5	09	54
N	6	18	..
●	13	06	41
E	14	03	..
A	14	11	..
◐	21	08	59
S	21	13	..
⊖s	23	17	27
E	27	20	..
P	28	01	..
○	28	02	50

October

	d	h	m
N	4	00	..
◑	4	21	06
E	11	09	..
A	11	13	..
●	13	00	06
S	18	19	..
◐	20	20	31
E	25	07	..
P	26	13	..
○	27	12	05
N	31	09	..

November

	d	h	m
◑	3	12	24
E	7	16	..
A	7	12	..
●	11	17	47
S	15	01	..
◐	19	06	27
E	21	16	..
P	23	20	..
○	25	22	44
N	27	21	..

December

	d	h	m
◑	3	07	40
E	5	00	..
A	5	14	..
●	11	10	29
S	12	09	..
◐	18	15	14
E	18	24	..
P	21	08	..
⊖d	21	13	37
N	25	08	..
○	25	11	11

● -- new Moon
◐ -- first quarter
○ -- full Moon
◑ -- last quarter

LUNAR DATA

A -- Moon in apogee
P -- Moon in perigee
N -- Moon farthest north of Equator
E -- Moon on Equator
S -- Moon farthest south of Equator

SOLAR DATA

⊖m -- March equinox
⊖j -- June solstice
⊖s -- September equinox
⊖d -- December solstice

Greenwich mean time (GMT) or universal time (UT) is the mean solar time on the Greenwich meridian reckoned in days of 24 mean solar hours written as 00^h at midnight and 12^h at noon. To convert the above times to those of other standard time meridians, add 1 hour for each 15° of east longitude of the desired meridian and subtract 1 hour for each 15° of west longitude. This table was compiled from data supplied by the Nautical Almanac Office, United States Naval Observatory.