



Gulf of Mexico Harmful Algal Bloom Bulletin

Region: Southwest Florida

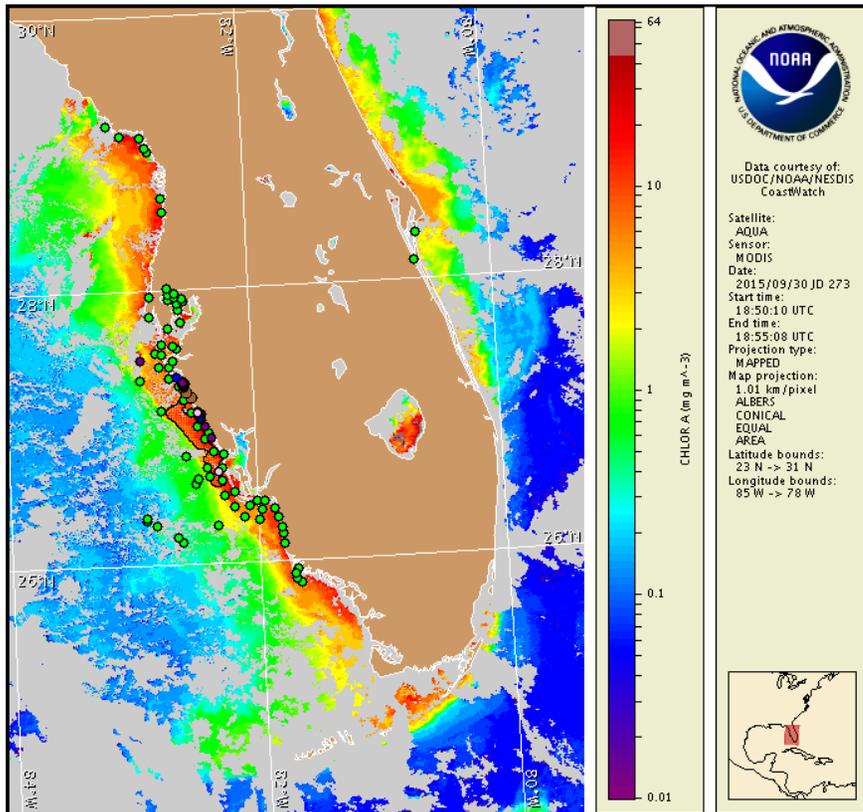
Thursday, 01 October 2015

NOAA National Ocean Service

NOAA Satellite and Information Service

NOAA National Weather Service

Last bulletin: Monday, September 28, 2015



Satellite chlorophyll image with possible *K. brevis* HAB areas shown by red polygon(s), when applicable. Points represent cell concentration sampling data from September 21 to 30: red (high), orange (medium), yellow (low b), brown (low a), blue (very low b), purple (very low a), pink (present), and green (not present). Cell count data are provided by Florida Fish and Wildlife Conservation Commission (FWC) Fish and Wildlife Research Institute. For a list of sample providers and a key to the cell concentration categories, please see the HAB-OFS bulletin guide:

http://tidesandcurrents.noaa.gov/hab/habfs_bulletin_guide.pdf

Detailed sample information can be obtained through FWC Fish and Wildlife Research Institute at:

<http://myfwc.com/redtidestatus>

To see previous bulletins and forecasts for other Harmful Algal Bloom Bulletin regions, visit at: <http://tidesandcurrents.noaa.gov/hab/bulletins.html>

Conditions Report

Karenia brevis (commonly known as Florida red tide) ranges from not present to low concentrations along the coast of southwest Florida, and is not present in the Florida Keys. *K. brevis* concentrations are patchy in nature and levels of respiratory irritation will vary locally based upon nearby bloom concentrations, ocean currents, and wind speed and direction. The highest level of potential respiratory irritation forecast for Thursday, October 1 through Monday, October 5 is listed below:

County Region: Forecast (Duration)

Northern Sarasota: Low (Th-Su), Very Low (M)

Northern Sarasota, bay regions: Very Low (Th-M)

Southern Sarasota: Very Low (Th-M)

Northern Charlotte: Very Low (Th-M)

All Other SWFL County Regions: None expected (Th-M)

All Other NWFL County Regions: Visit <http://tidesandcurrents.noaa.gov/hab/#nwfl>

Check http://tidesandcurrents.noaa.gov/hab/beach_conditions.html for recent, local observations. Health information, from the Florida Department of Health and other agencies, is available at http://tidesandcurrents.noaa.gov/hab/hab_health_info.html. No reports of dead fish or respiratory irritation were received over the past several days.

Analysis

Recent samples collected along- and offshore the coast of southwest Florida from Pinellas to Collier counties indicated not present to 'low a' concentrations of *Karenia brevis* (FWRI, SCHD, CCENRD; 9/21-9/30).

In northern Sarasota County, sampling at Siesta Key and Turtle Beach indicated 'low a' concentrations of *K. brevis* while eight other samples alongshore indicated 'very low' *K. brevis* concentrations and five other samples indicated background *K. brevis* concentrations (FWRI; 9/28). In southern Sarasota County, five samples collected alongshore indicated 'very low' concentrations of *K. brevis* (FWRI; 9/28). All other sampling along- and offshore southwest Florida, from Pinellas to Collier counties indicated that *K. brevis* was not present (FWRI, SCHD, CCENRD; 9/21-9/30). No reports of respiratory irritation or dead fish were received from alongshore southwest Florida over the last several days (FWRI, MML, CCENRD; 9/28-10/1).

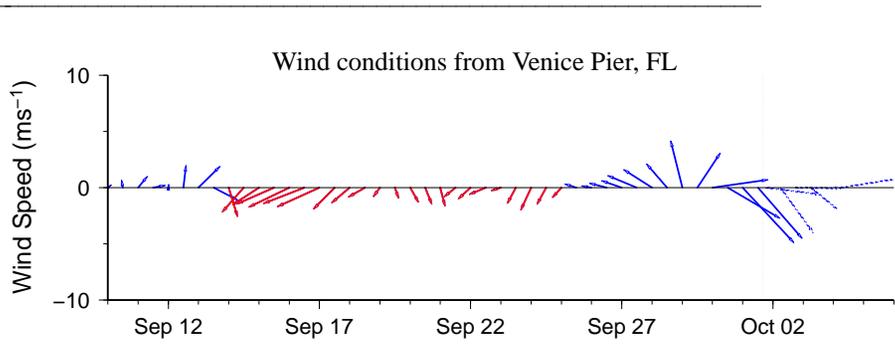
Recent ensemble imagery (MODIS Aqua, 9/30) is partially obscured by clouds along- and offshore southwest Florida from Pinellas to Collier counties, limiting analysis in this region. Patches of elevated to high chlorophyll (2 to 15 $\mu\text{g/L}$) with the optical characteristics of *K. brevis* are visible off- and alongshore from southern Manatee to central Collier counties.

Forecasted winds Thursday night through Monday may promote southward transport of *K. brevis* concentrations in southwest Florida. West and northwest winds forecast today through Thursday will not be favorable for intensification of *K. brevis* concentrations at the coast.

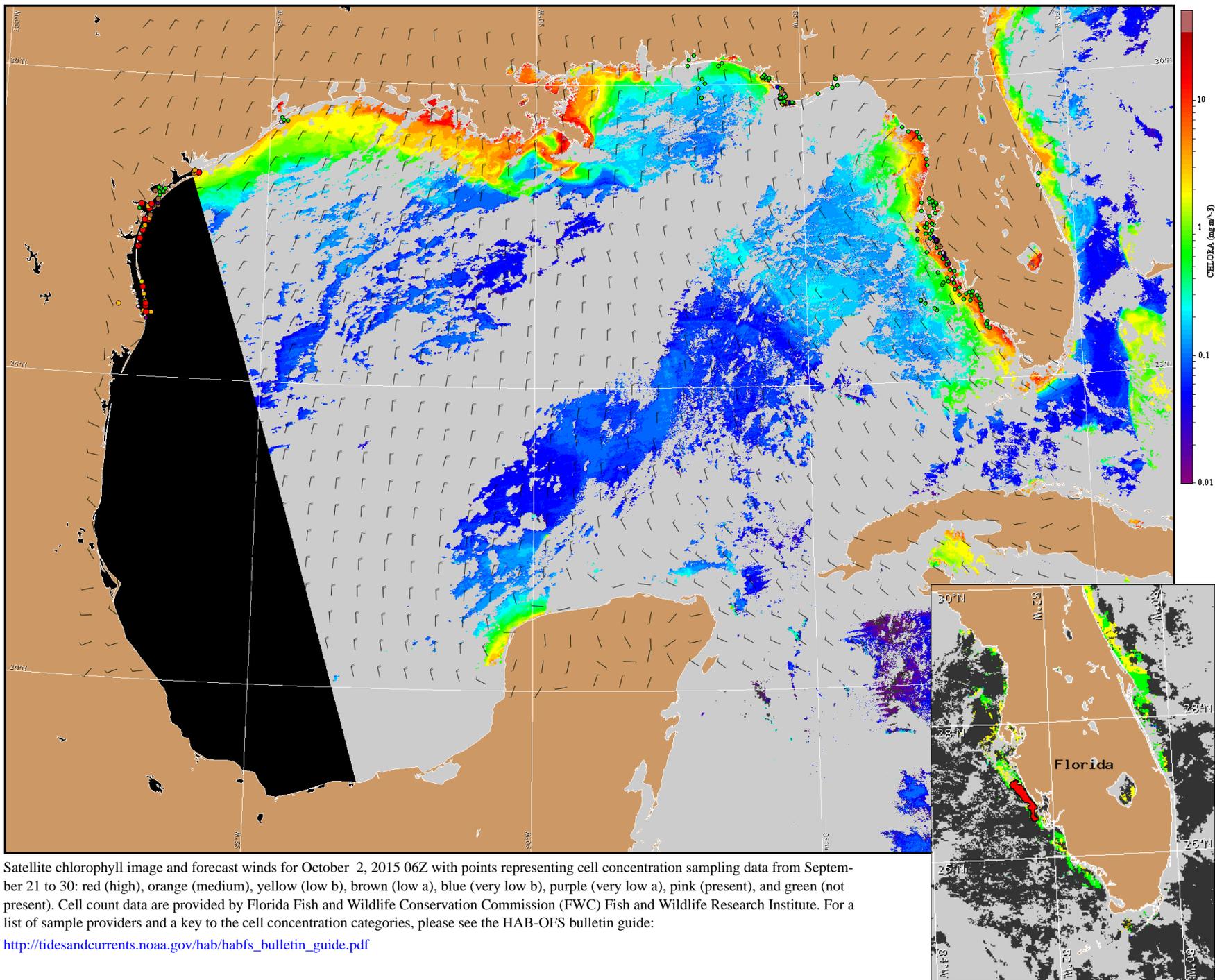
Yang, Davis

Wind Analysis

Englewood to Tarpon Springs (Venice): Northwest to north winds (5-15kn, 3-8m/s) today through Friday. West to northwest winds (15-25kn, 8-13m/s) Saturday through Monday.



Wind speed and direction are averaged over 12 hours from buoy measurements. Length of line indicates speed; angle indicates direction. Red indicates that the wind direction favors upwelling near the coast. Values to the left of the dotted vertical line are measured values; values to the right are forecasts. Wind observation and forecast data provided by NOAA's National Weather Service (NWS).



Satellite chlorophyll image and forecast winds for October 2, 2015 06Z with points representing cell concentration sampling data from September 21 to 30: red (high), orange (medium), yellow (low b), brown (low a), blue (very low b), purple (very low a), pink (present), and green (not present). Cell count data are provided by Florida Fish and Wildlife Conservation Commission (FWC) Fish and Wildlife Research Institute. For a list of sample providers and a key to the cell concentration categories, please see the HAB-OFS bulletin guide:

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Verified and suspected HAB areas shown in red. Other areas with *K. brevis* optical characteristics shown in yellow (see p. 1 analysis for interpretation).