



Gulf of Mexico Harmful Algal Bloom Bulletin

Region: Southwest Florida

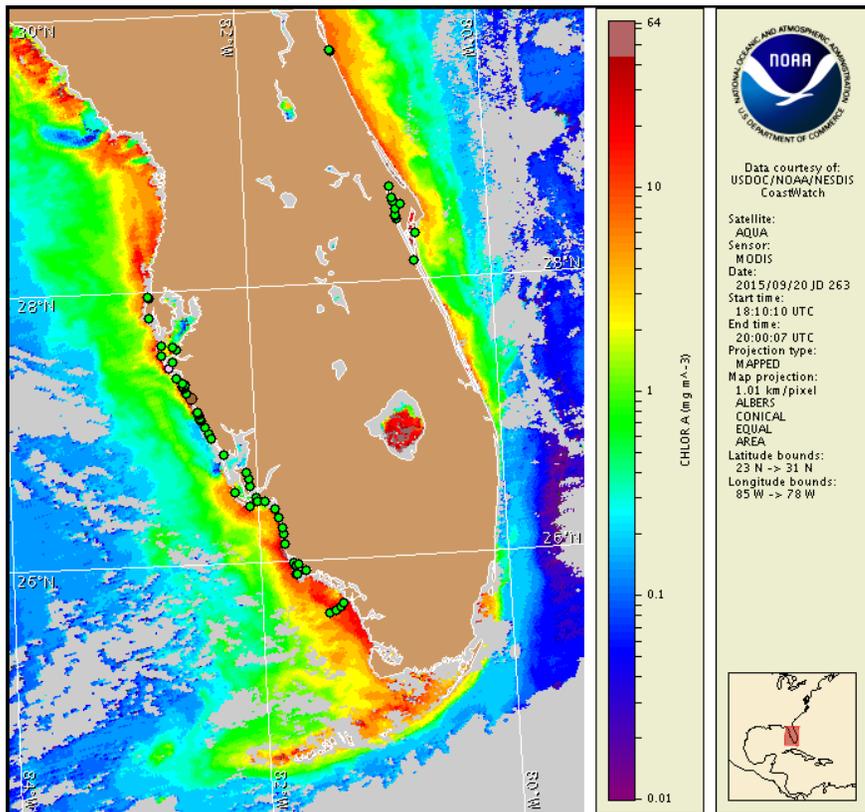
Monday, 21 September 2015

NOAA National Ocean Service

NOAA Satellite and Information Service

NOAA National Weather Service

Last bulletin: Thursday, September 17, 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 11 to 18: 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 Monday, September 21 through Thursday, September 24 is listed below:

County Region: Forecast (Duration)

Northern Sarasota: Very Low (M, W, Th), Low (Tu)

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

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.

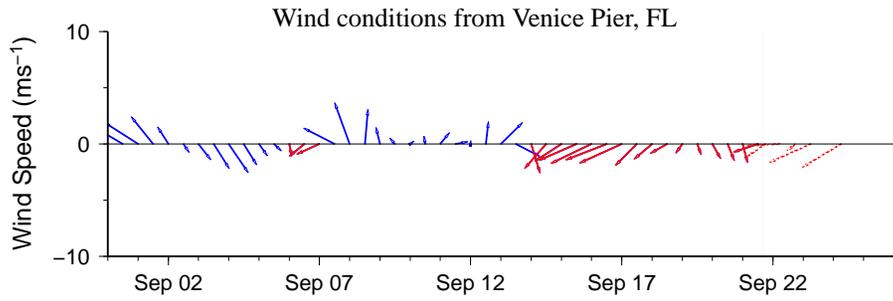
Analysis

Recent samples collected along- and offshore the coast of southwest Florida from Pinellas to Collier counties indicated *Karenia brevis* was not present (FWRI, SCHD, MML, CCENRD; 9/14-9/18). There were no new samples available for Turtle Beach in northern Sarasota County, where a 'low a' *K. brevis* concentration was identified on 9/14 (MML, SCHD).

In recent ensemble imagery from 9/20 (MODIS Aqua, shown left), patches of elevated to very high chlorophyll (2 to >20 $\mu\text{g/L}$) with the optical characteristics of *K. brevis* are visible from central Lee County to central Collier County. The recent imagery did not indicate the presence of chlorophyll anomalies with the optical characteristics of *K. brevis* from southern Sarasota to northern Lee counties.

North to northeast winds forecast today through Thursday, September 24 may increase the potential for harmful algal bloom formation at the coast of southwest Florida.

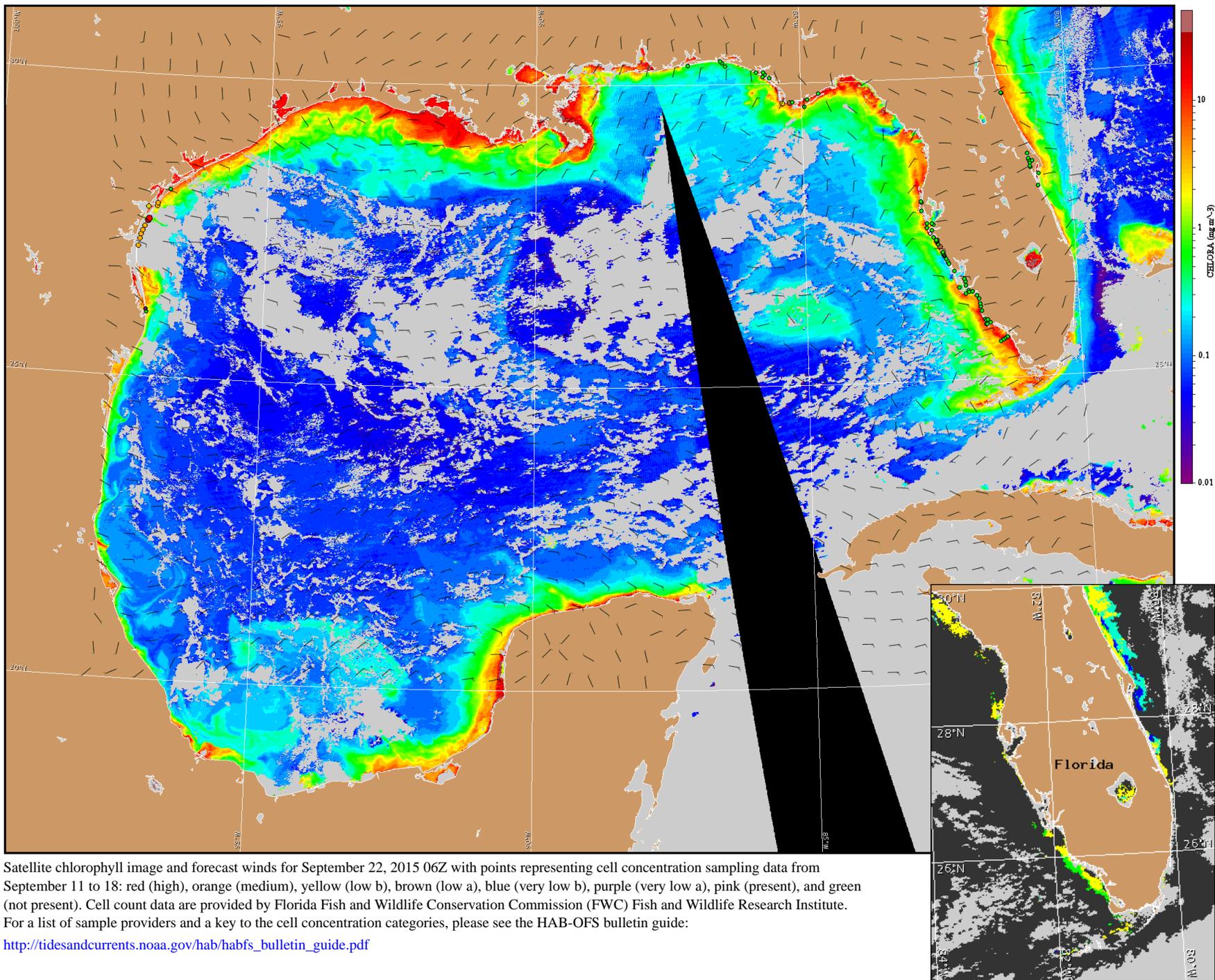
Yang, Davis



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).

Wind Analysis

Englewood to Tarpon Springs (Venice): East winds (10kn, 5m/s) becoming northeast today. North winds (10kn) tonight becoming east after midnight. East winds (10kn) Tuesday becoming north Tuesday afternoon. North to northeast winds (5-15kn, 3-8m/s) Tuesday night through Thursday.



Satellite chlorophyll image and forecast winds for September 22, 2015 06Z with points representing cell concentration sampling data from September 11 to 18: 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

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