



Gulf of Mexico Harmful Algal Bloom Bulletin

Region: Southwest Florida

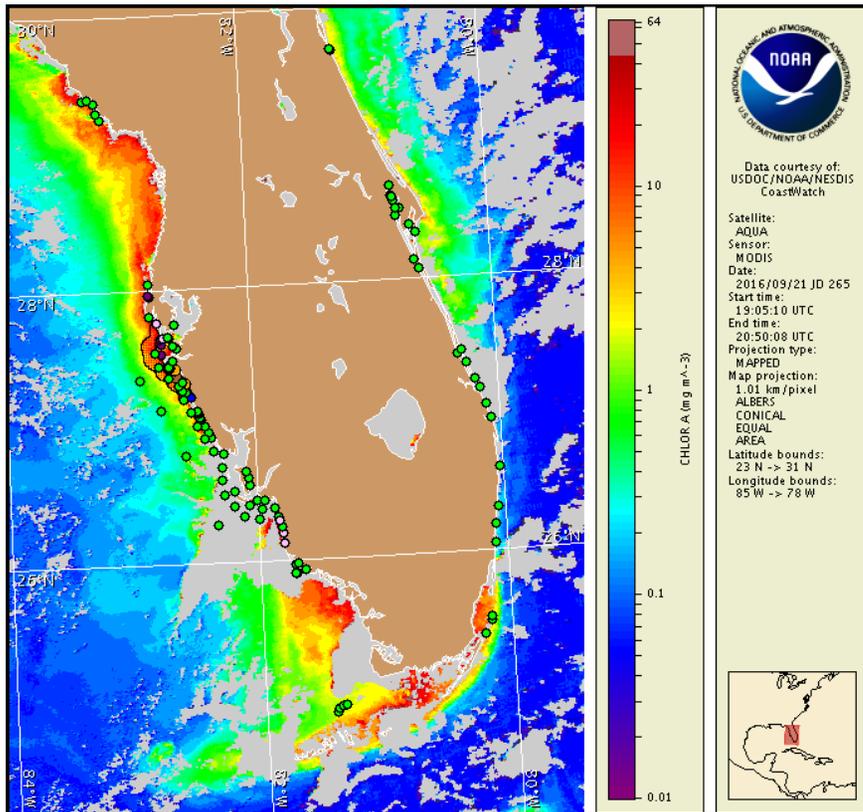
Thursday, 22 September 2016

NOAA National Ocean Service

NOAA Satellite and Information Service

NOAA National Weather Service

Last bulletin: Monday, September 19, 2016



Satellite chlorophyll image with possible *K. brevis* HAB areas shown by red polygon(s), when applicable. Points represent cell concentration sampling data from September 12 to 21: 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/hab_publication/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

Not present to medium concentrations of *Karenia brevis* (commonly known as Florida red tide) are present along- and offshore portions of southwest Florida, and 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, September 22 to Monday, September 26 is listed below:

County Region: Forecast (Duration)

Southern Manatee: Low (Th-M)

Southern Manatee, bay regions: Moderate (Th-F, M), Low (Sa-Su)

Northern Sarasota: Moderate (Th, Sa), Low (F, Su-M)

Northern Sarasota, bay regions: Moderate (Th-Sa, M), Low (Su)

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

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. Reports of respiratory irritation have been received from alongshore southern Manatee and northern Sarasota counties (MML; 9/21-22).

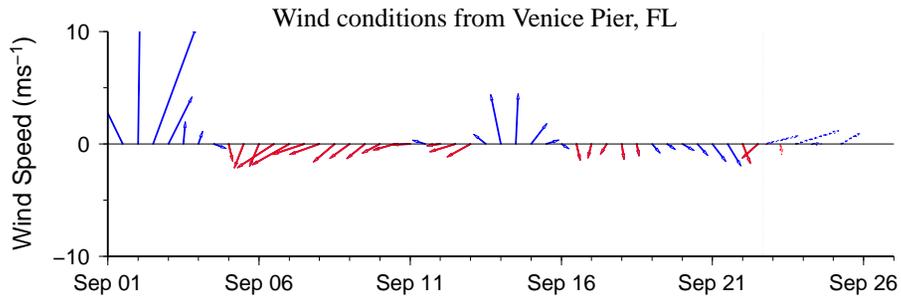
Analysis

Samples collected along- and offshore the coast of southwest Florida from Pinellas to Monroe counties, including the Florida Keys, identified not present to 'medium' concentrations of *Karenia brevis*, with the highest concentrations collected at Longboat Pass boat ramp and west of Long Bar Point in the bay regions of southern Manatee County, from Bird Key Park in northern Sarasota County, and from Lido Key alongshore northern Sarasota (FWRI, MML, SCHD, CCENRD; 9/19-9/22). Detailed sample information and a summary of impacts can be obtained through FWC Fish and Wildlife Research Institute at: <http://myfwc.com/redtidestatus>. Reports of respiratory irritation have been received from Coquina Beach alongshore southern Manatee County and Lido Key alongshore northern Sarasota County in (MML, 9/21-22). Further sampling is recommended alongshore Manatee County.

Recent ensemble imagery (MODIS Aqua, 9/16) indicates the presence of elevated to high (4 to >20 $\mu\text{g/L}$) patches of chlorophyll with the optical characteristics of *K. brevis* along- and offshore from Pinellas to Charlotte County and high (4 to >20 $\mu\text{g/L}$) patches alongshore northern Collier County, extending up to 35 miles offshore.

Variable northwest to northeast winds forecast today through Sunday, September 25 may increase the potential for harmful algal bloom intensification at the coast of southwest Florida.

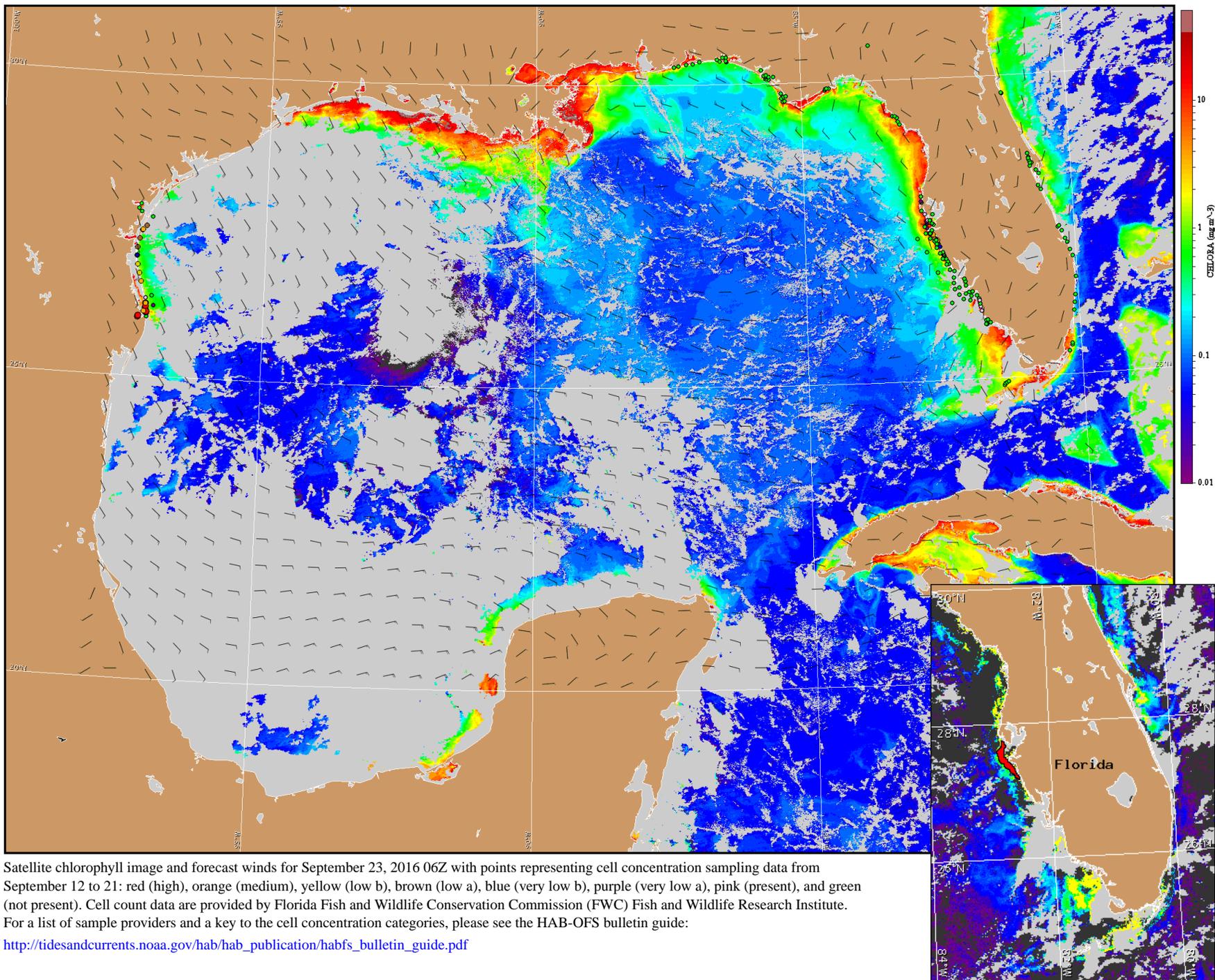
Urizar, Keeney



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): Variable northwest to northeast winds (5-10 kn, 3-5 m/s) today through Sunday with southwest winds Sunday afternoon. East to southeast winds (5 kn) Monday.



Satellite chlorophyll image and forecast winds for September 23, 2016 06Z with points representing cell concentration sampling data from September 12 to 21: 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 of high chlorophyll concentration shown in yellow (see p. 1 analysis for interpretation).