



Gulf of Mexico Harmful Algal Bloom Bulletin

Region: Southwest Florida

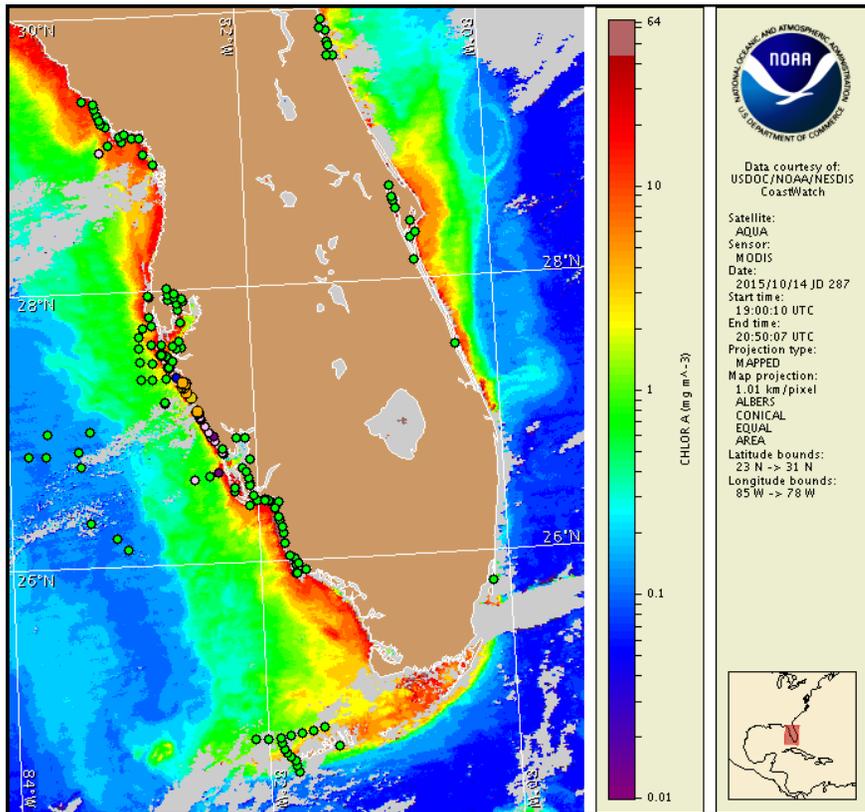
Thursday, 15 October 2015

NOAA National Ocean Service

NOAA Satellite and Information Service

NOAA National Weather Service

Last bulletin: Tuesday, October 13, 2015



Satellite chlorophyll image with possible *K. brevis* HAB areas shown by red polygon(s), when applicable. Points represent cell concentration sampling data from October 5 to 14: 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 high 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 15 through Monday, October 19 is listed below:

County Region: Forecast (Duration)

Southern Manatee: Low (Th-M)

Southern Manatee, bay regions: Moderate (Th-M)

Northern Sarasota: Low (Th-M)

Northern Sarasota, bay regions: High (Th-M)

Northern Charlotte, bay regions: 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. Reports of respiratory irritation and dead fish have been received from alongshore Sarasota County.

Analysis

Recent samples collected alongshore southwest Florida from Pinellas to Collier counties indicate background to 'high' *Karenia brevis* concentrations from southern Manatee to northern Charlotte counties, with the highest concentrations present within Sarasota Bay near Mote Marine Laboratory and alongshore Siesta Key (FWRI; 10/5-10/13). Recent sampling indicates an increase from 'low a' to 'low b' *K. brevis* concentrations within the bay regions of Manatee County (FWRI; 10/5), and from background to 'very low a' *K. brevis* concentrations within Lemon Bay in northern Charlotte County (FWRI; 10/12). Detailed sample information and a summary of impacts can be obtained through FWC Fish and Wildlife Research Institute at: <http://myfwc.com/redtidestatus>. Slight respiratory irritation has been reported at Nokomis, Siesta Key, and Venice North Jetty in Sarasota County; dead fish have been reported at Casey Key Beach in Sarasota County (MML, FWRI; 10/13-14).

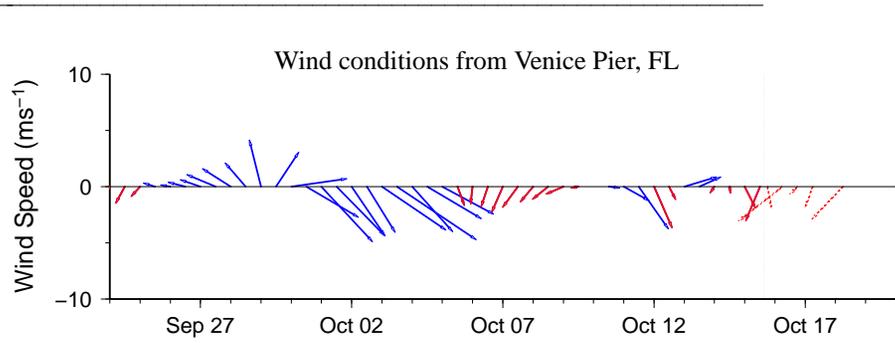
In recent ensemble imagery (MODIS Aqua, 10/14), patches of elevated to very high chlorophyll (2 to >20 $\mu\text{g/L}$) with the optical characteristics of *K. brevis* are visible along and offshore the coast from Pinellas to Collier counties.

Winds forecasted today through Monday are not favorable for the transport of *K. brevis* concentrations alongshore southwest Florida. Upwelling favorable winds forecasted through Monday may increase the potential for intensification of *K. brevis* concentrations at the coast.

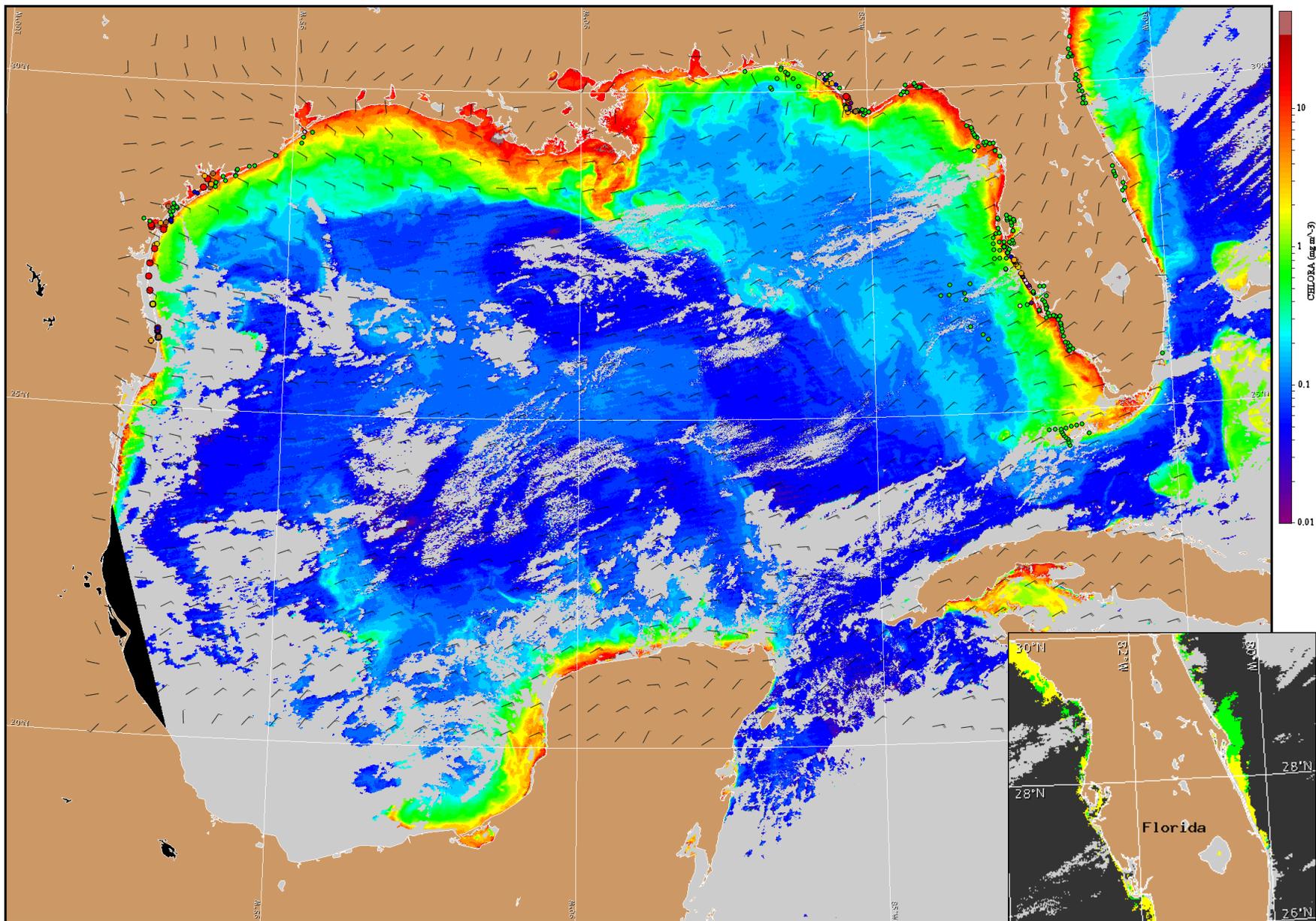
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Wind Analysis

Englewood to Tarpon Springs (Venice): Northeast winds (10-20kn, 5-10m/s) today through Monday.

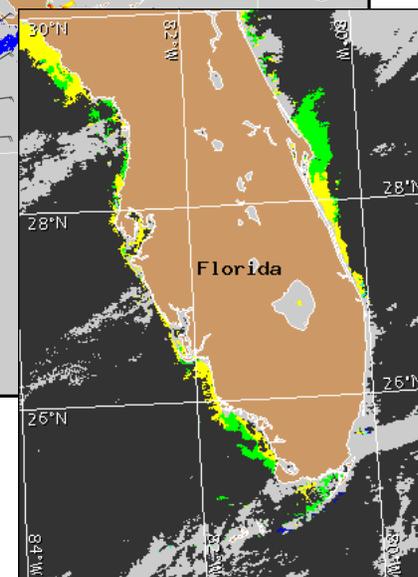


Wind speed and direction are averaged over 12 hours from buoy measurements. Length of line indicates speed; angle indicates direction. Red indicates that the wind direction favors upwelling near the coast. Values to the left of the dotted vertical line are measured values; values to the right are forecasts.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



Satellite chlorophyll image and forecast winds for October 16, 2015 06Z with points representing cell concentration sampling data from October 5 to 14: 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).