



Gulf of Mexico Harmful Algal Bloom Bulletin

Region: Southwest Florida

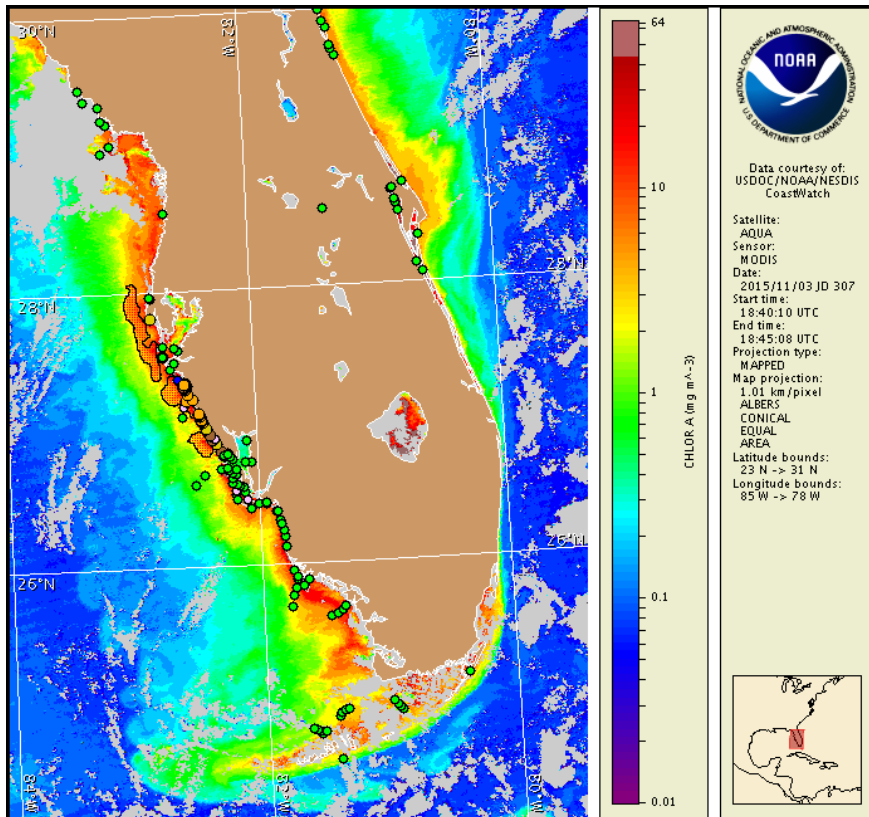
Thursday, 05 November 2015

NOAA National Ocean Service

NOAA Satellite and Information Service

NOAA National Weather Service

Last bulletin: Monday, November 2, 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 26 to November 4: 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, November 5 through Monday, November 9 is listed below:

County Region: Forecast (Duration)

Southern Pinellas: Very Low (Th-F, Su), Moderate (Sa), Low (M)

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

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

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

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

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

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

Northern Charlotte: Very Low (Th-M)

Northern Charlotte, bay regions: Moderate (Th-M)

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

Northern Lee, 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 southern Manatee and Sarasota County.

Analysis

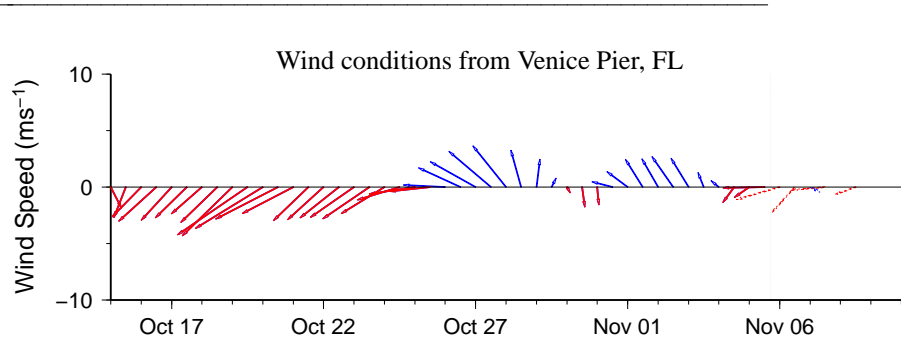
Recent samples collected along- and offshore southwest Florida from Pinellas County to the Florida Keys indicate background to 'medium' *Karenia brevis* concentrations from southern Pinellas to northern Lee County, with the highest concentrations observed in Sarasota County at Siesta Beach, Nokomis Beach, and from Venice Beach to Caspersen Beach (FWRI, SCHD, MML, CCENRD; 10/28-11/3). Respiratory irritation has been reported in Manatee County at Coquina and Manatee beaches and in Sarasota County at Nokomis, Venice N. Jetty, Venice Beach, and Siesta Key (MML; 11/2-11/5). Fish kills were reported at several locations in Manatee and Sarasota counties (FWRI, MML; 11/2-11/5). Detailed sample information and a summary of impacts can be obtained through FWC Fish and Wildlife Research Institute at: <http://myfwc.com/redtidestatus>.

In recent ensemble imagery (MODIS Aqua, 11/3) patches of elevated to very high chlorophyll (2 to >20 $\mu\text{g/L}$) with the optical characteristics of *K. brevis* are visible alongshore, and up to 13 miles offshore, from northern Pinellas to Collier counties.

Variable winds forecasted today through Monday will decrease the potential for transport of surface *K. brevis* concentrations alongshore southwest Florida. Forecasted winds today

through Monday are not favorable for intensification of *K. brevis* concentrations at the coast.

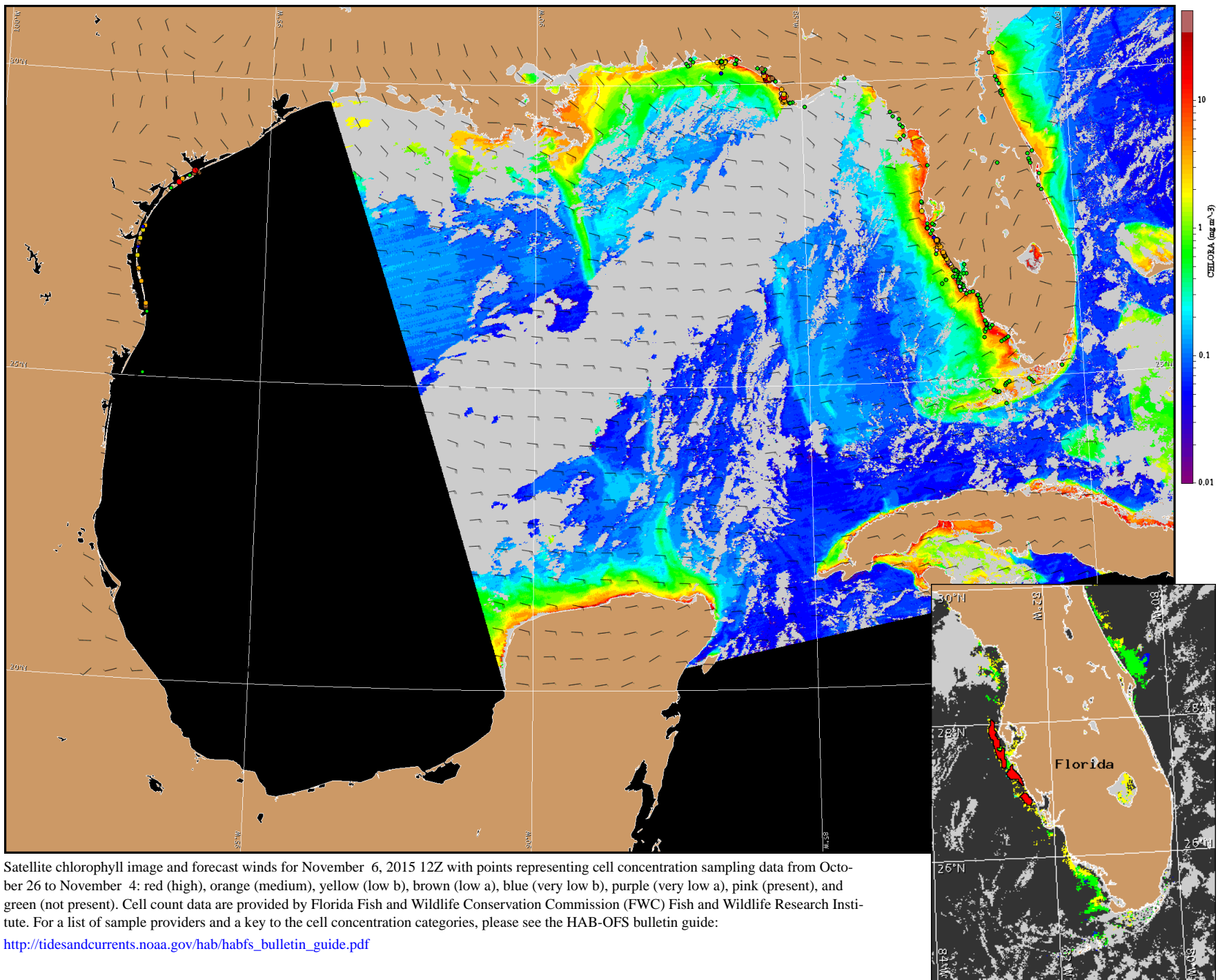
Lalime, Davis



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 to northeast winds (5-15kn, 3-8m/s) today through Friday night. South to southeast winds (5-10kn, 3-5m/s) Saturday becoming east (5kn, 3m/s) after midnight. East winds (5-10kn) Sunday. Southeast winds (10kn, 5m/s) Monday.



Satellite chlorophyll image and forecast winds for November 6, 2015 12Z with points representing cell concentration sampling data from October 26 to November 4: 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).