



Gulf of Mexico Harmful Algal Bloom Bulletin

Region: Southwest Florida

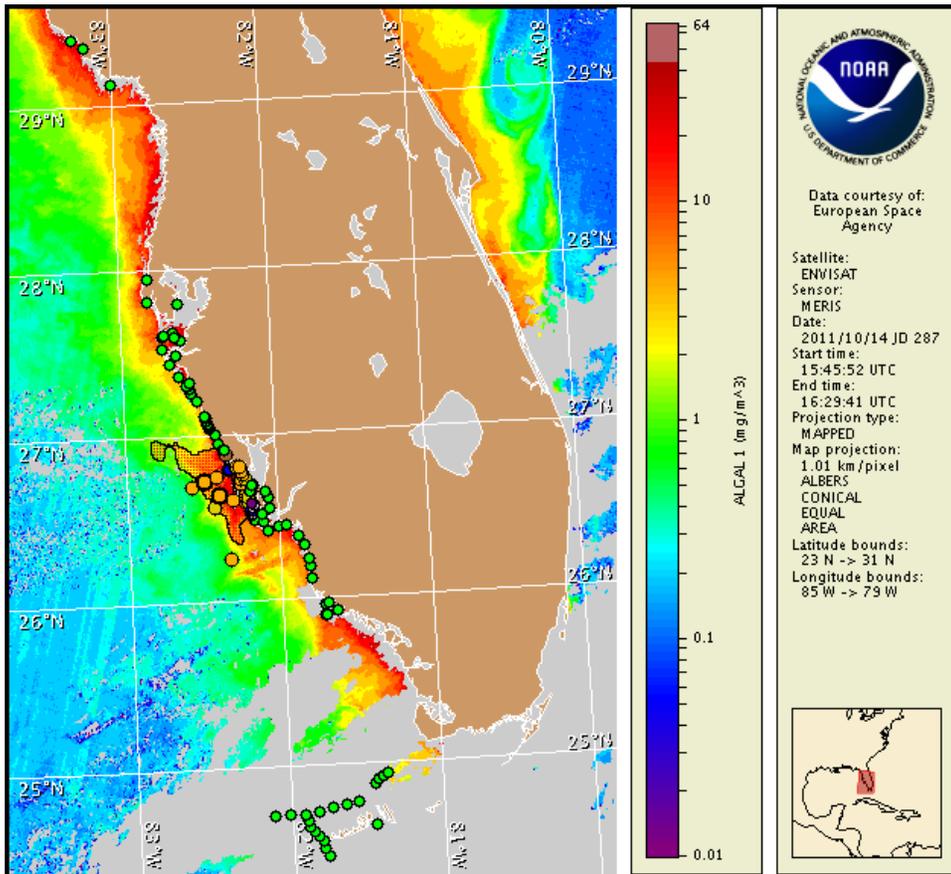
Monday, 17 October 2011

NOAA Ocean Service

NOAA Satellite and Information Service

NOAA National Weather Service

Last bulletin: Thursday, October 13, 2011



Satellite chlorophyll image with possible HAB areas shown by red polygon(s). Cell concentration sampling data from October 7 to 17 shown as red (high), orange (medium), yellow (low b), brown (low a), blue (very low b), purple (very low a), pink (present), and green (not present). For a list of cell count data 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

To see previous bulletins and forecasts for other Harmful Algal Bloom Bulletin regions, visit the NOAA Harmful Algal Bloom Operational Forecast System bulletin archive:

<http://tidesandcurrents.noaa.gov/hab/bulletins.html>

Conditions Report

A harmful algal bloom has been identified along- and offshore Charlotte and Lee counties. Patchy moderate impacts are possible alongshore Charlotte and northern Lee counties, and patchy very low impacts are possible alongshore central Lee County today through Tuesday, with more potential for impacts Wednesday, October 18. No impacts are expected elsewhere alongshore southwest Florida today through Wednesday. Reports of dead fish have been reported from areas alongshore southern Charlotte and northern Lee counties.

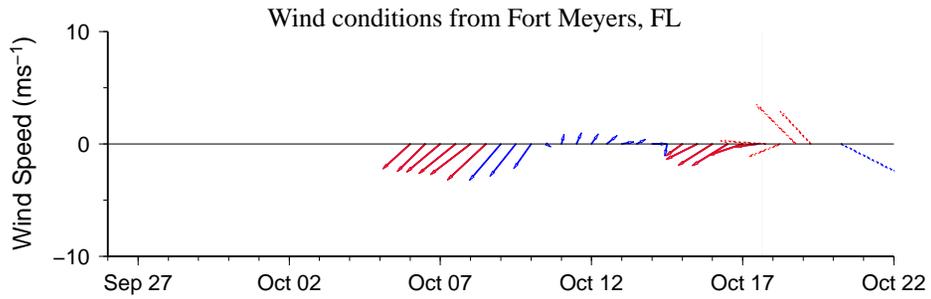
Analysis

A harmful algal bloom has been identified along- and offshore Charlotte and northern Lee counties. Recent sampling results show very low b to low b concentrations of *Karenia brevis* 3 miles west of Placida Harbor in Charlotte County. Low a to medium concentrations were measured at Stump Pass and Bird Key in Charlotte County (FWRI; 10/12). Medium to high concentrations 4.8 to 20 miles west of Boca Grande, and low b to high concentrations 4.8 to 13.5 miles west of Cayo Costa were reported in northern Lee County (FWRI; 10/11). Other samples in Lee County showed background to medium concentrations of *K. brevis* at Boca Grande, Boca Grande Pass, Pejuan Point, Redfish Pass, North Captiva Island, Captiva Island, Captiva Rocks, and Captiva Shoals (FWRI; 10/12, FWRI; 10/13). The bloom currently extends approximately 20 offshore and 15 miles alongshore of Charlotte and Lee counties where the greatest abundance of *K. brevis* is offshore Lee County. *K. brevis* was not detected in samples collected the week of October 14 alongshore of Pinellas, Hillsborough, Manatee, Sarasota and Collier counties of alongshore and offshore of the Florida Keys in Monroe County (FWRI; 10/10-10/14). Widespread fish kills both alongshore and offshore have been reported in association with this bloom in Sarasota, Charlotte, and Lee counties, with the most recent reported on October 14 from the Englewood area of Charlotte County and alongshore and offshore of Boca Grande in Lee County (FWRI; 10/14).

Recent MODIS imagery is partially obscured by clouds along- and offshore the southwest Florida coast from Manatee to Monroe counties and in the Florida Keys, limiting analysis (10/14). A feature of elevated to very high chlorophyll (3 to >20 μL) remains visible along- and offshore the coast from southern Sarasota to Lee counties. Elevated chlorophyll at the coast may contain *K. brevis*, but could also be due to the non-toxic algal blooms that continue to be reported in several counties in southwest Florida (FWRI; 10/11-10/13).

Variable forecasted winds today through Tuesday will reduce the potential for impacts at the coast, with more potential for impacts on Wednesday.

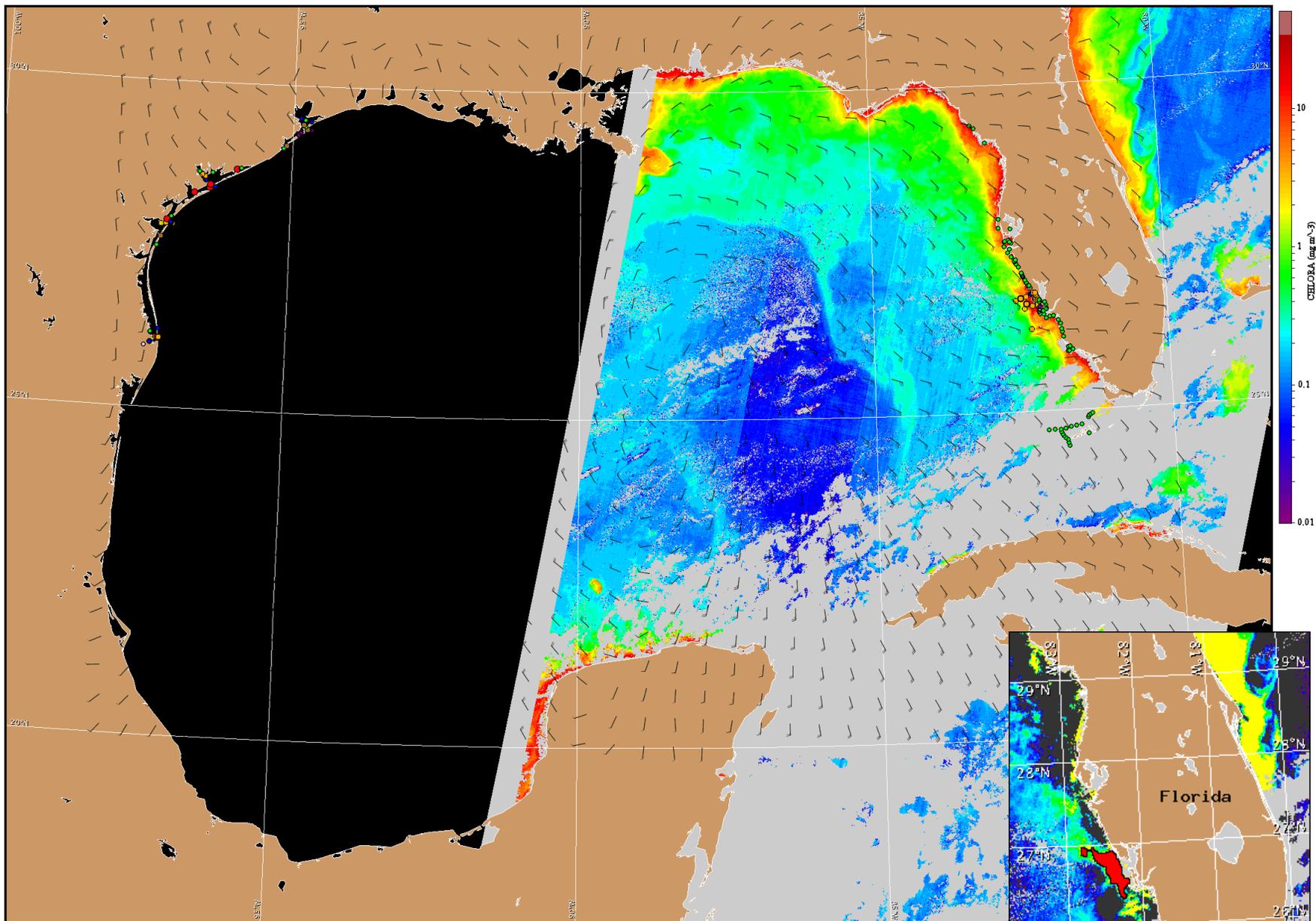
-Burrows, Fenstermacher



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).

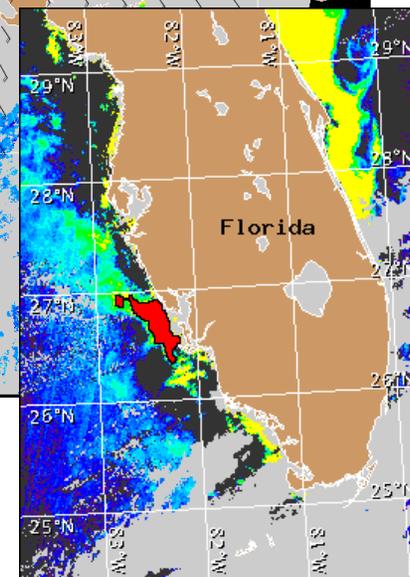
Wind Analysis

SW Florida: East winds increasing 15 to 20 knots (7-10 m/s) today becoming southeast winds tonight (20 kn). Tuesday south winds around 20 kn becoming southwest winds around 20 knots to west winds after midnight. Wednesday northwest winds 20-25 knots (10-13 m/s) becoming north winds Wednesday night around 20 knots.



Satellite chlorophyll image and forecast winds for October 18, 2011 12Z with cell concentration sampling data from October 7 to 17 shown as red (high), orange (medium), yellow (low b), brown (low a), blue(very low b), purple (very low a), pink (present), and green (not present). For a list of cell count data 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).