



# Gulf of Mexico Harmful Algal Bloom Bulletin

Region: Southwest Florida

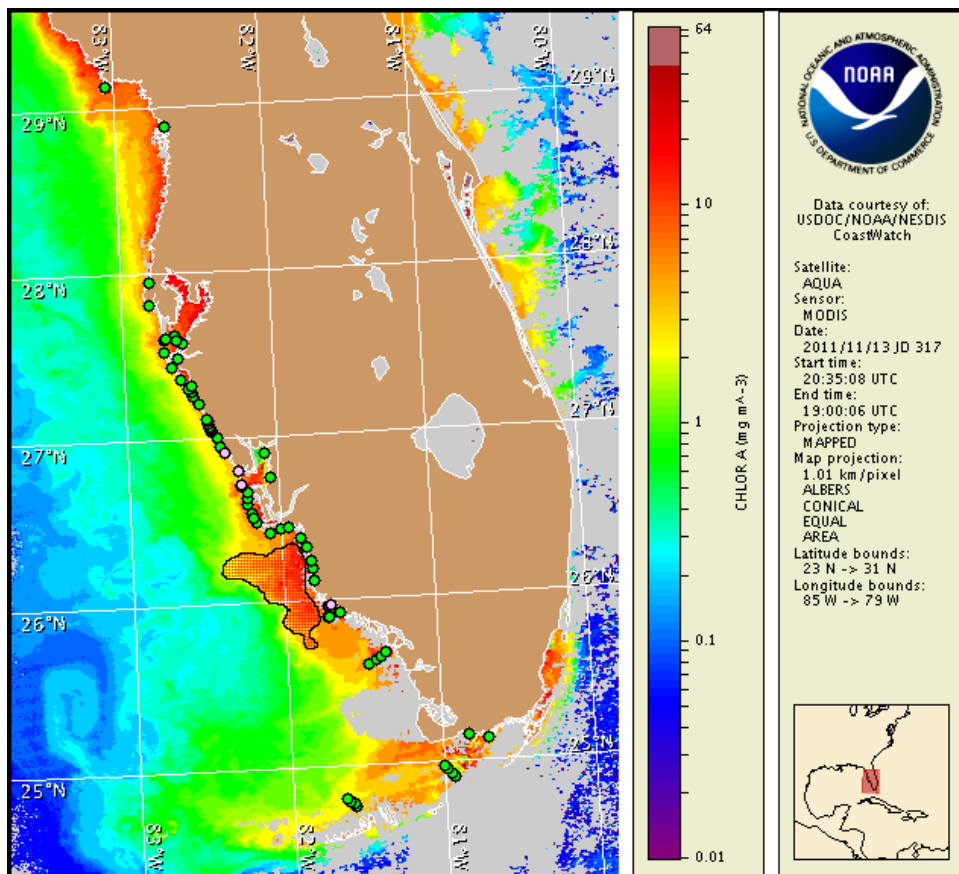
Monday, 14 November 2011

NOAA Ocean Service

NOAA Satellite and Information Service

NOAA National Weather Service

Last bulletin: Thursday, November 10, 2011



Satellite chlorophyll image with possible HAB areas shown by red polygon(s). Cell concentration sampling data from November 4 to 13 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](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 is present offshore central to southern Lee County, south of Sanibel Island. Harmful algae is also present alongshore central Collier County in the Marco Island region. Patchy very low impacts are possible alongshore central Collier County through Wednesday. No other impacts are expected along the coasts of Lee and Collier counties or elsewhere alongshore southwest Florida through Wednesday, November 16.

## Analysis

The harmful algal bloom first identified on 9/26 in southern Sarasota County appears to remain located largely offshore central Lee to central Collier counties. *Karenia brevis* was not detected at bloom concentrations in samples collected over the last ten days along the southwest Florida coast (FWRI, MML, SCHD; 11/4-11/10). Background *K. brevis* concentrations were observed alongshore Charlotte County, near the tip of Gasparilla Sound, and at Port Boca Grande in Lee County (FWRI; 11/10) where *K. brevis* concentrations were previously very low. No additional sample information is available where very low concentrations were detected alongshore Collier County at Big Marco Pass (FWRI, CCPCPD; 11/7). All other samples collected alongshore Pinellas to northern Monroe counties and north of the Florida Keys indicate that *K. brevis* is not present (FWRI; 11/7-11/10). Reports of discolored water were received alongshore central to southern Lee County where blooms of non-toxic algae have been identified (FWRI; 11/9).

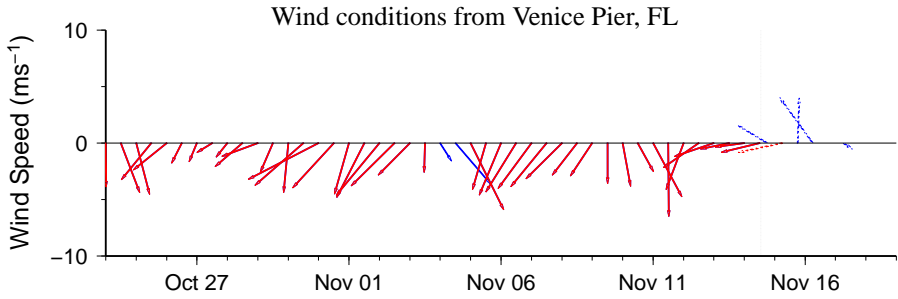
Chlorophyll levels in recent MODIS imagery (11/10-11/13) have weakened alongshore northern to central Lee County and offshore Sanibel Island in southern Lee County. Isolated chlorophyll is higher (5-9  $\mu\text{g/L}$ ) near the Captiva and Boca Grande areas of Lee County. Imagery indicates that the bloom may presently be located offshore Collier County where a large area of elevated to high chlorophyll (5 to >10  $\mu\text{g/L}$ ) is visible up to 15 miles from the coastline between the Lee and Collier County border and Cape Romano. Sampling in this offshore region is recommended.

Forecasted winds through Wednesday may promote bloom formation at the coast in Collier County. Further southward transport is unlikely through Wednesday.

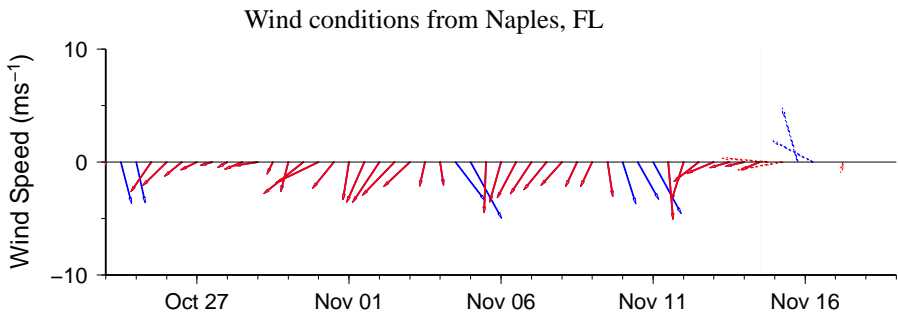
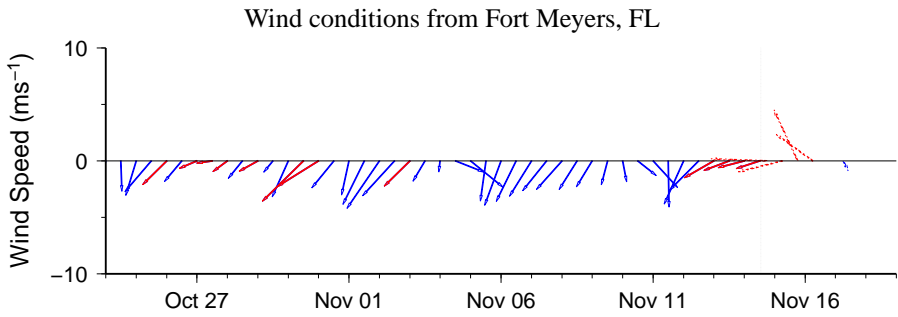
-Burrows, Fisher

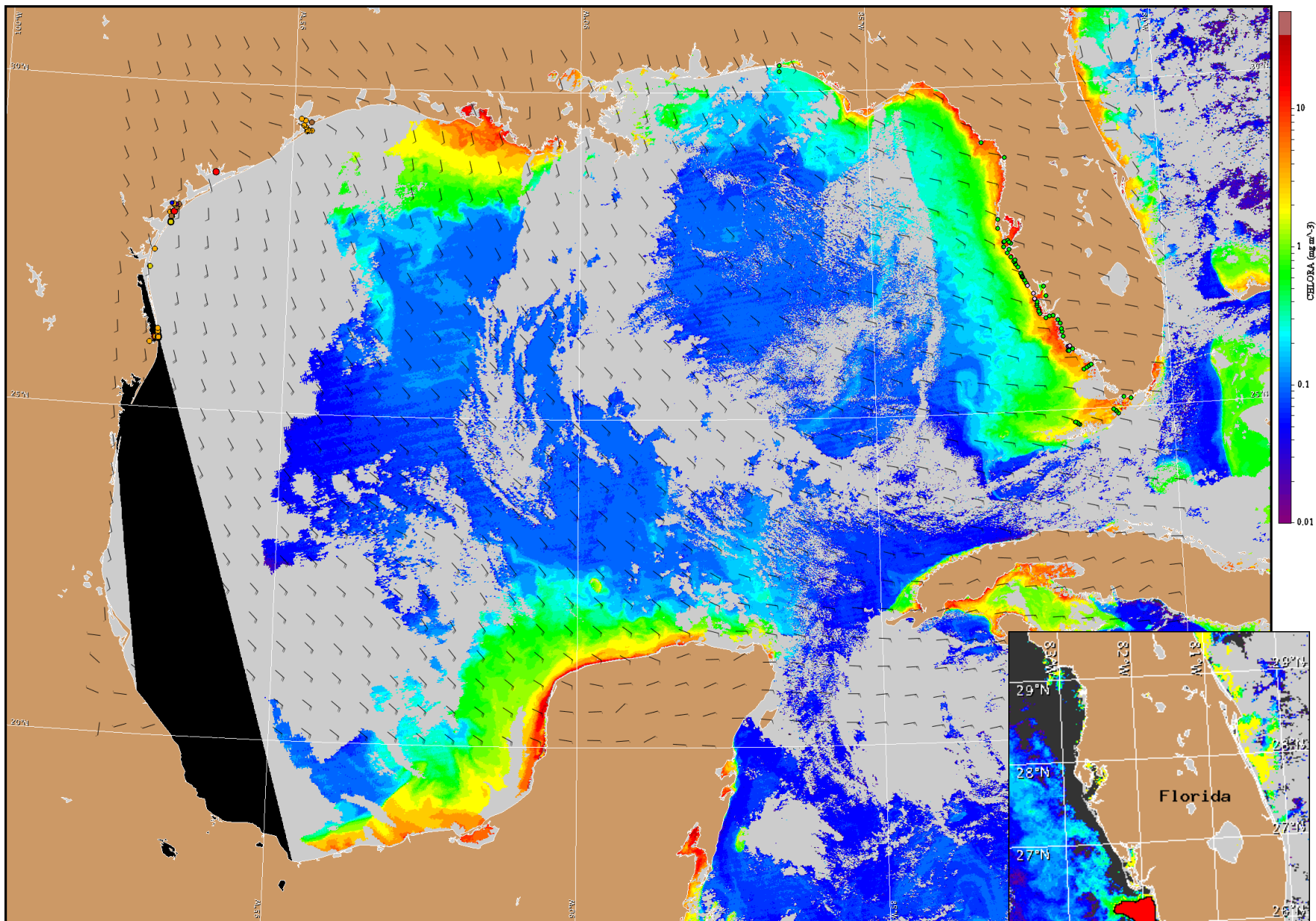
### Wind Analysis

Southwest Florida: Today and tonight east winds 10-16 kn (5-8 m/s). Tuesday through Tuesday night east to southeast winds 10-16 kn. Wednesday through Wednesday night south to southeast winds 7-15 kn (4-8 m/s).



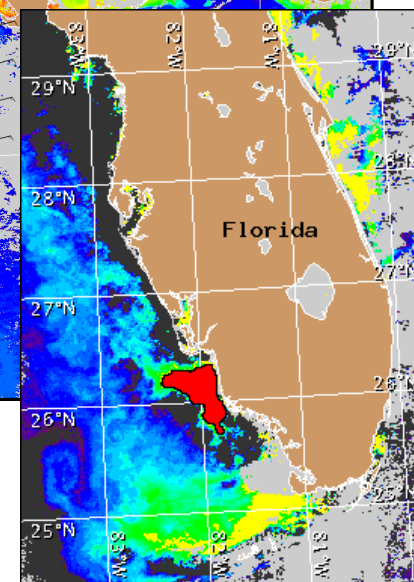
Wind speed and direction are averaged over 12 hours from buoy measurements. Length of line indicates speed; angle indicates direction. Red indicates that the wind direction favors upwelling near the coast. Values to the left of the dotted vertical line are measured values; values to the right are forecasts.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





Satellite chlorophyll image and forecast winds for November 15, 2011 12Z with cell concentration sampling data from November 4 to 13 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](http://tidesandcurrents.noaa.gov/hab/habfs_bulletin_guide.pdf)



Verified and suspected HAB areas shown in red. Other areas of high chlorophyll concentration shown in yellow (see p. 1 analysis for interpretation).