



# Gulf of Mexico Harmful Algal Bloom Bulletin

Region: Southwest Florida

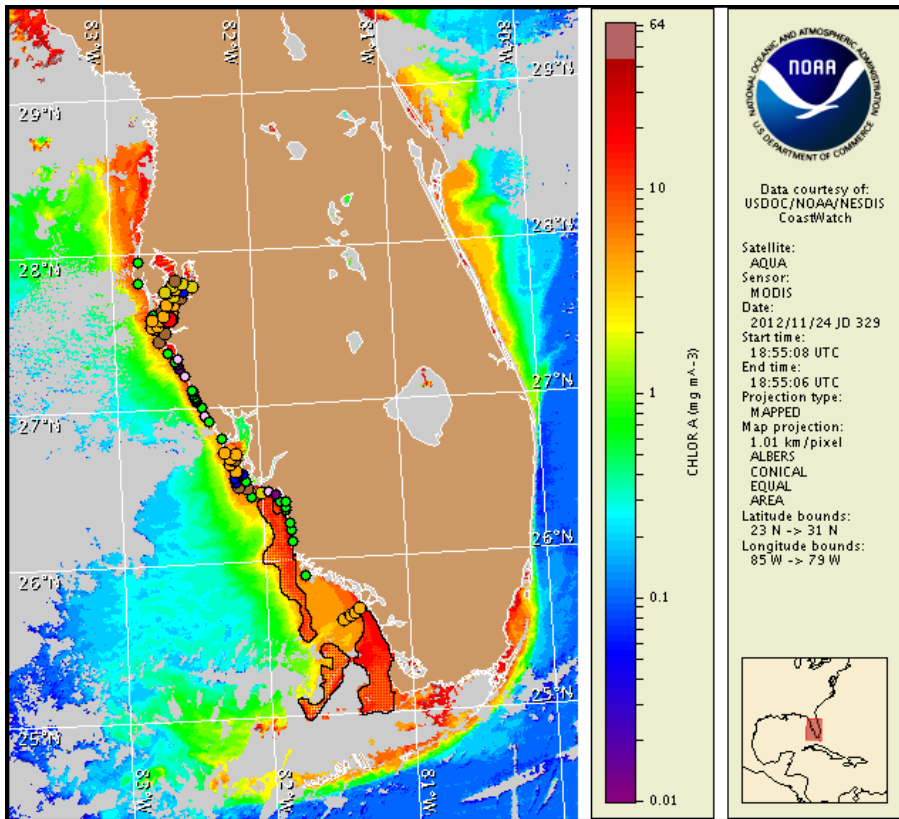
Monday, 26 November 2012

NOAA National Ocean Service

NOAA Satellite and Information Service

NOAA National Weather Service

Last bulletin: Friday, November 23, 2012



Satellite chlorophyll image with possible *K. brevis* HAB areas shown by red polygon(s). Cell concentration sampling data from November 16 to 21 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). Cell count data are provided by Florida 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](http://tidesandcurrents.noaa.gov/hab/habfs_bulletin_guide.pdf)

Detailed sample information can be obtained through the Florida FWC Fish and Wildlife Research Institute at:

<http://myfwc.com/research/redtide/events/status/statewide/>

To see previous bulletins and forecasts for other Harmful Algal Bloom Bulletin regions, visit at: <http://tidesandcurrents.noaa.gov/hab/bulletins.html>

## Conditions Report

Very low to high concentrations of *Karenia brevis* (commonly known as Florida Red Tide) are present along- and offshore from southern Pinellas to northern Monroe counties. Patchy high respiratory impacts are possible today through Thursday in the bay regions of southern Pinellas/northern Manatee counties. Patchy moderate respiratory impacts are possible today through Thursday in the bay regions of southern Charlotte and northern Lee counties. Patchy low respiratory impacts are possible today through Thursday in the bay regions of southern Manatee, northern Sarasota, and central Collier counties. Patchy very low respiratory impacts are possible today through Thursday alongshore northern Monroe County. No respiratory impacts are expected alongshore Sarasota, southern Lee, and northern Collier counties today, Wednesday and Thursday, with patchy very low respiratory impacts possible on Tuesday. No impacts are expected elsewhere alongshore southwest Florida today through Thursday, November 29. Over the past few days, reports of respiratory irritation and dead fish have been received from southern Manatee County and central Collier County, respectively.

## Analysis

A harmful algal bloom of *Karenia brevis* is present along- and offshore southwest Florida from southern Pinellas to northern Monroe counties, with concentrations ranging from very low to high. No new samples have been received since last Wednesday (11/21). Over the past few days, respiratory irritation was reported on Coquina Beach of southern Manatee County (MML; 11/24).

Recent MODIS Aqua imagery (11/24; shown left) is partially obscured by clouds offshore Pinellas and Charlotte counties, and in the Florida Keys, limiting analysis in these regions. Chlorophyll remains elevated to high (2 to >10  $\mu\text{g/L}$ ) along- and offshore from Pinellas to Monroe counties, with small patches of very high (>20  $\mu\text{g/L}$ ) concentrations inshore southern Pinellas and northern Manatee, in the bay regions of northern and central Lee counties, alongshore southern Lee and northern Collier counties, and about 20 miles offshore northwest and west of Cape Sable.

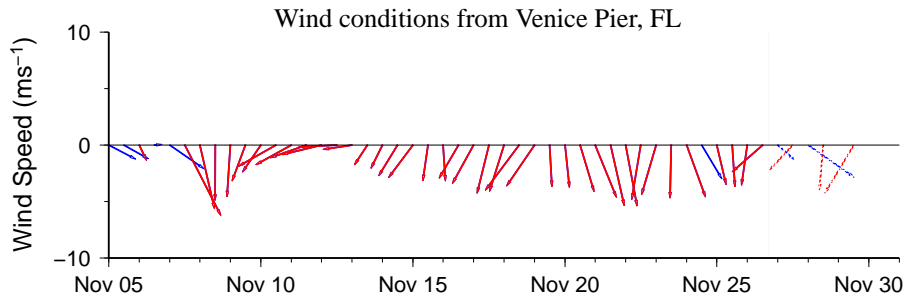
Forecasted offshore winds today through Thursday may minimize the potential for onshore transport of the bloom and decrease the potential for respiratory impacts along the coast from southern Pinellas to Monroe counties, except in the bay regions. North to northeast winds forecasted through Thursday may promote the potential for continued southerly transport of the bloom. Due to upwelling favorable winds, intensification of the bloom may also be possible in southern Lee and Collier counties.

Yang, Derner

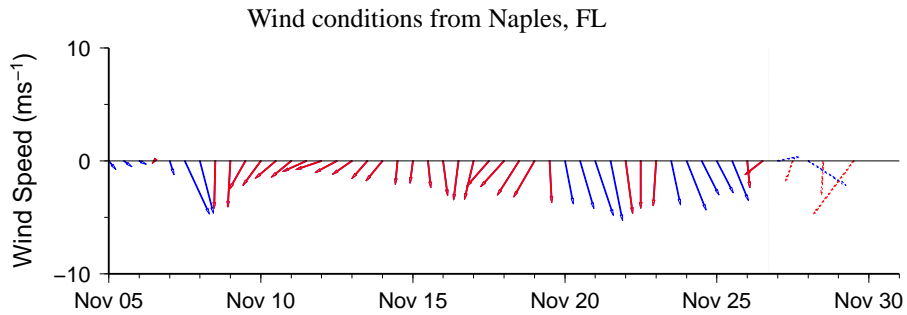
## Wind Analysis

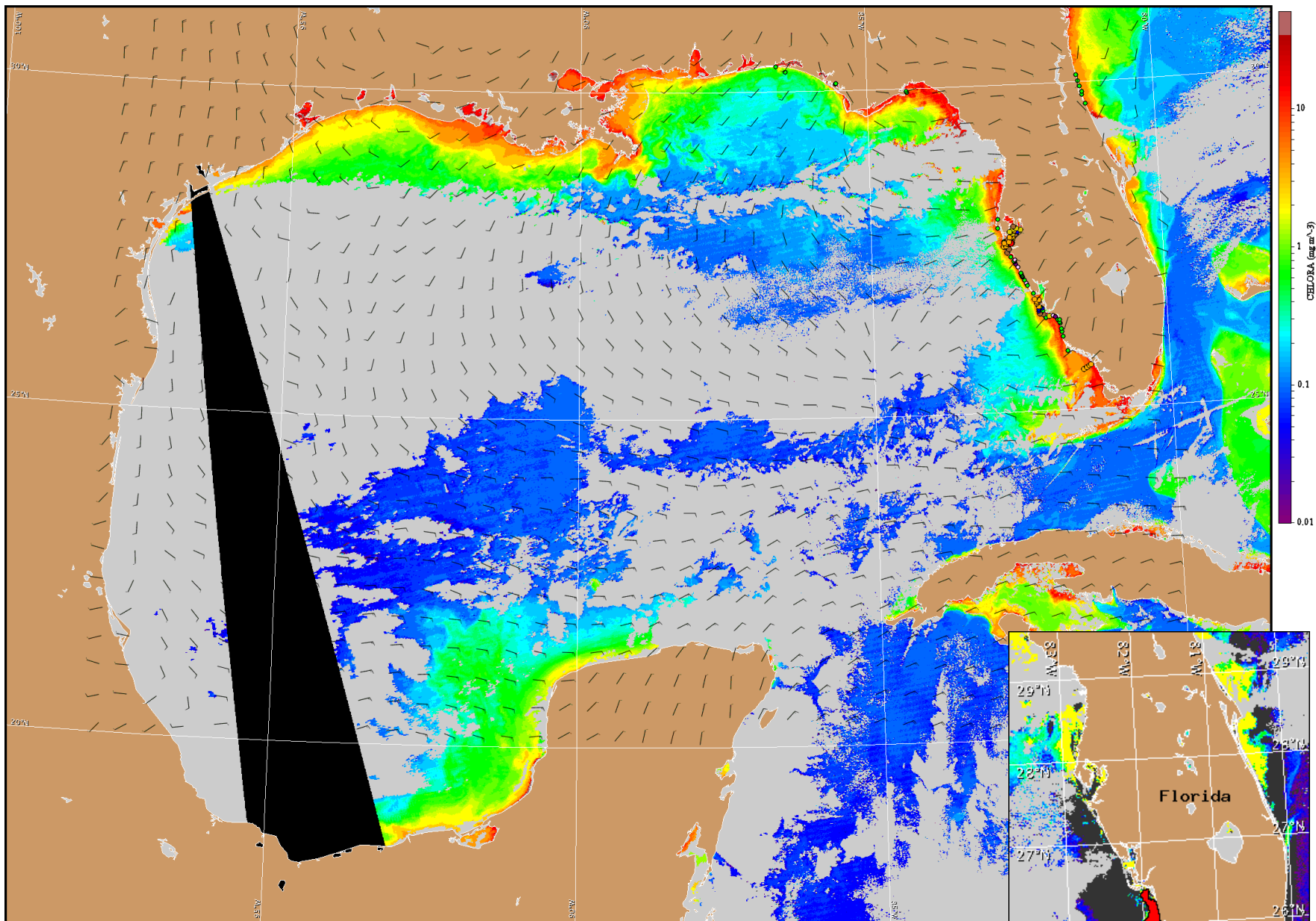
**Venice:** East winds (5-10kn, 3-5m/s) becoming northwest (5kn, 3m/s) this afternoon. Northeast winds (5kn) tonight becoming east (10kn, 5m/s) after midnight. Southeast winds (10kn) Tuesday morning becoming northwest in the afternoon. North winds (10kn) Tuesday night. Northeast winds (10-15kn, 5-8m/s) Wednesday through Thursday.

**Naples:** East winds (5-8kn, 3-4m/s) today becoming east (5-10kn) tonight. East northeast winds (7-12kn, 4-6m/s) Tuesday becoming northeast Tuesday night. North northeast winds (9-14kn, 5-7m/s) Wednesday becoming northeast (14-19kn, 7-10m/s) Wednesday night. East northeast winds (14-19kn) Thursday.



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 27, 2012 12Z with cell concentration sampling data from November 16 to 21 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). Cell count data are provided by Florida 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).