



# Gulf of Mexico Harmful Algal Bloom Bulletin

Region: Southwest Florida

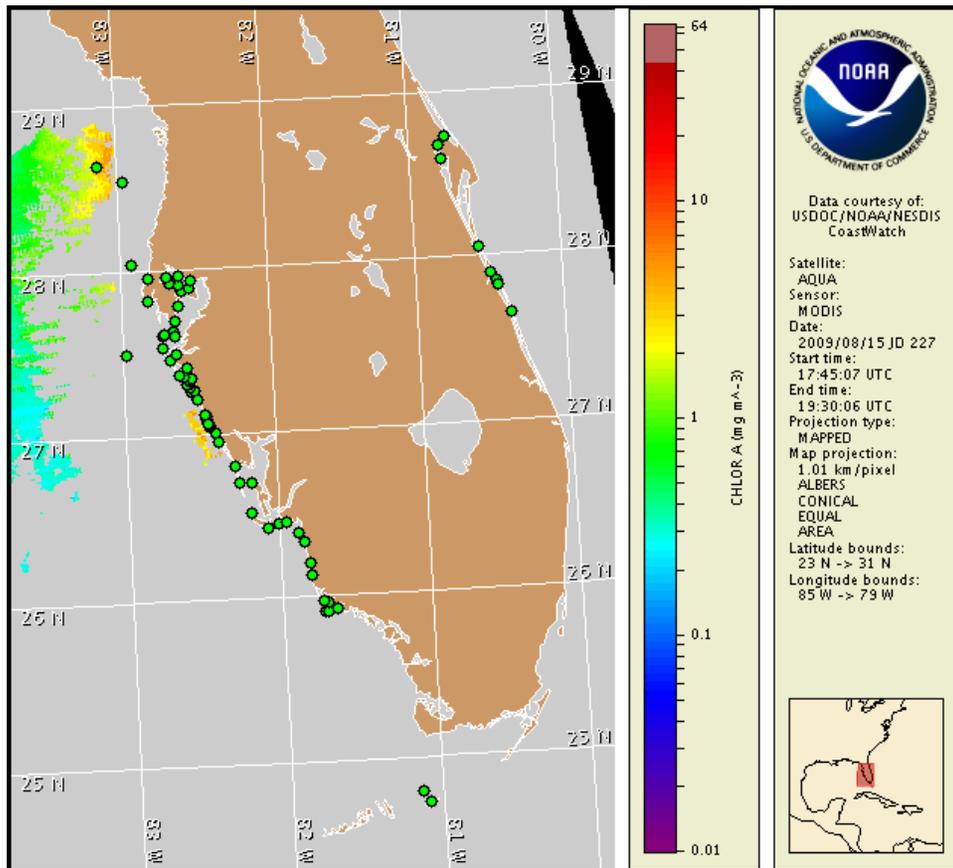
17 August 2009

NOAA Ocean Service

NOAA Satellites and Information Service

NOAA National Weather Service

Last bulletin: August 10, 2009



Satellite chlorophyll image with possible HAB areas shown by red polygon(s). Cell concentration sampling data from August 8 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 HABFS bulletin guide:

[http://tidesandcurrents.noaa.gov/hab/habfs\\_bulletin\\_guide.pdf](http://tidesandcurrents.noaa.gov/hab/habfs_bulletin_guide.pdf)

Please note the following restrictions on all SeaWiFS imagery derived from CoastWatch.

1. Data are restricted to civil marine applications only; i.e. federal, state, and local government use/distribution is permitted.
2. Image products may be published in newspapers. Any other publishing arrangements must receive GeoEye approval via the CoastWatch Program.

## Conditions Report

There is currently no indication of a harmful algal bloom at the coast in southwest Florida, including the Florida Keys. No impacts are expected alongshore southwest Florida today through Sunday, August 23. Discolored water in the northwestern region of Tampa Bay is attributed to a bloom of the algae *Pyrodinium bahamense* which does not produce respiratory irritation impacts associated with the Florida red tide caused by *Karenia brevis*.

## Analysis

There is currently no indication of a harmful algal bloom at the coast in southwest Florida. The most recent samples from alongshore Pinellas, Manatee, Sarasota, Charlotte, Lee, and Collier counties all indicate that *Karenia brevis* is not present (FWRI, MML, SCHD; 8/9-8/14).

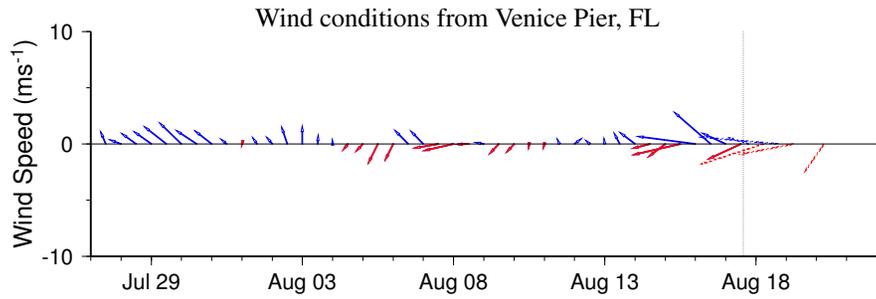
Recent imagery is almost entirely obscured by cloud cover throughout southwest Florida, limiting additional analysis of previously identified features. Imagery from 8/12 (MODIS), suggests that previously identified elevated chlorophyll levels (3-7  $\mu\text{g/L}$ ) along much of the southwest Florida shoreline have decreased since the last bulletin; however, high chlorophyll (>10  $\mu\text{g/L}$ ) features remain visible alongshore and offshore Collier and Monroe counties, extending from northern Collier County to southern Monroe County (Marco Island, Cape Romano, extending west of Cape Sable). These features are likely associated with non-harmful blooms of various algal species that continue to be detected alongshore southwest Florida (FWRI 8/10-8/14).

Discolored water continued to be reported last week in the northwestern Tampa Bay region due to a bloom of *Pyrodinium bahamense*. No impacts have been reported in association with this bloom (FWRI; 8/14).

Conditions are favorable for upwelling today through Wednesday, increasing the potential for *K. brevis* bloom formation at the coast.

Due to technical difficulties SeaWiFS imagery is presently unavailable for display on this bulletin. MODIS imagery is shown on page 1 and 3.

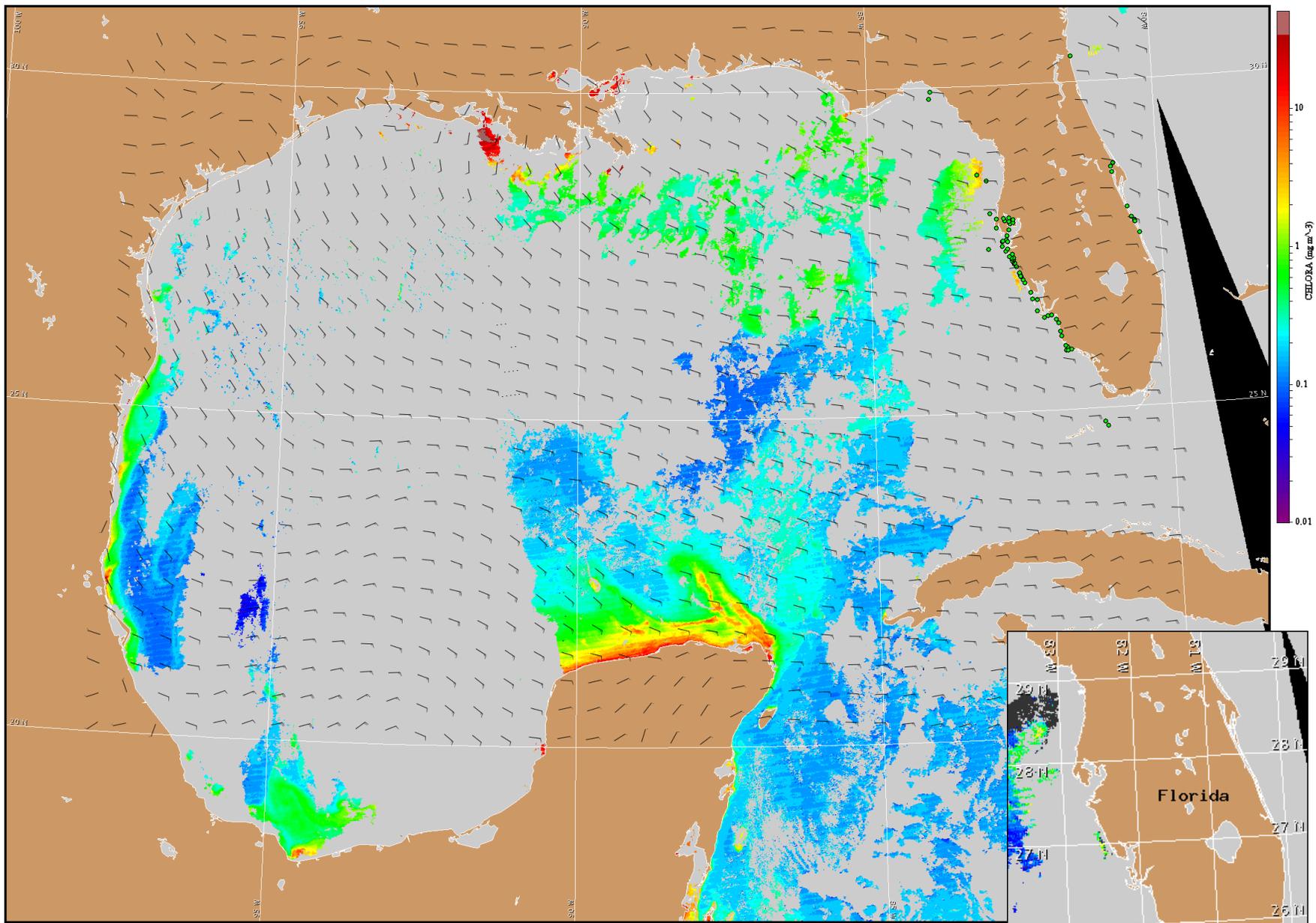
Derner, Fisher



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

East winds (5-15kn, 3-8m/s) today through Wednesday night. South winds (5kn, 3m/s) Thursday, shifting west in the afternoon. West winds (5kn) becoming south late Thursday evening and overnight. South winds (5kn) Friday becoming west in the late morning and afternoon.



Satellite chlorophyll image and forecast winds for August 18, 2009 12Z with Cell concentration sampling data from August 8 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 HABFS 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).