



## Gulf of Mexico Harmful Algal Bloom Bulletin

Region: Southwest Florida

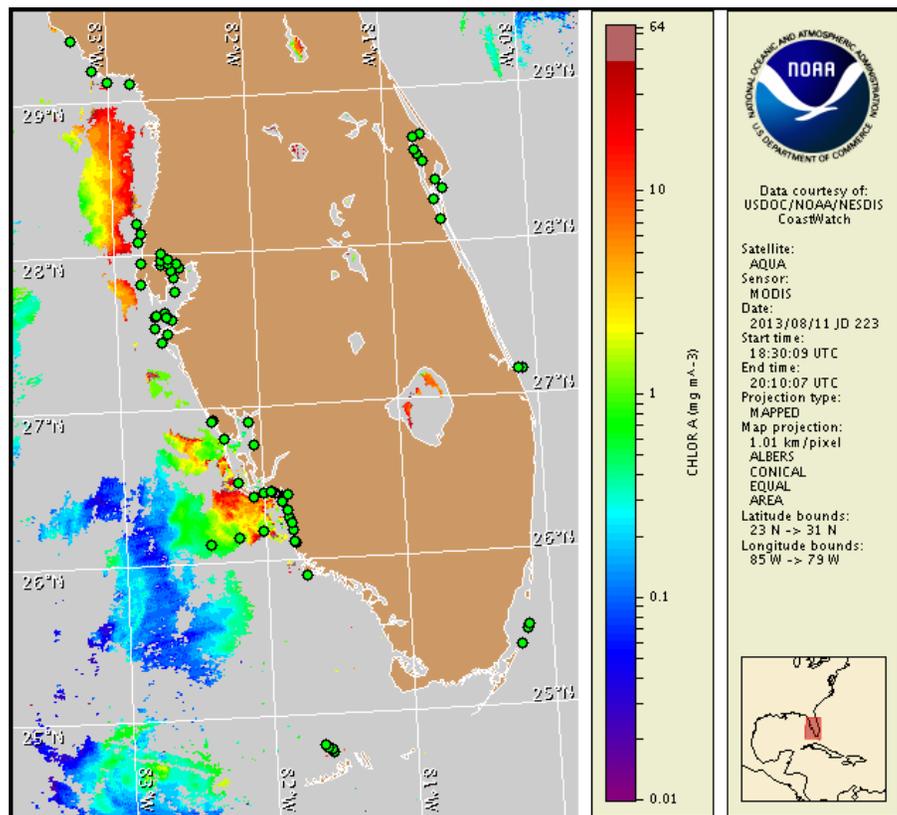
Monday, 12 August 2013

NOAA National Ocean Service

NOAA Satellite and Information Service

NOAA National Weather Service

Last bulletin: Monday, August 5, 2013



Satellite chlorophyll image with possible *K. brevis* HAB areas shown by red polygon(s), when applicable. Points represent cell concentration sampling data from August 2 to 7: 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](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 background concentrations along the coast of southwest Florida, including the Florida Keys. No respiratory irritation is expected Monday, August 12 through Monday, August 19. Check [http://tidesandcurrents.noaa.gov/hab/beach\\_conditions.html](http://tidesandcurrents.noaa.gov/hab/beach_conditions.html) for recent, local observations.

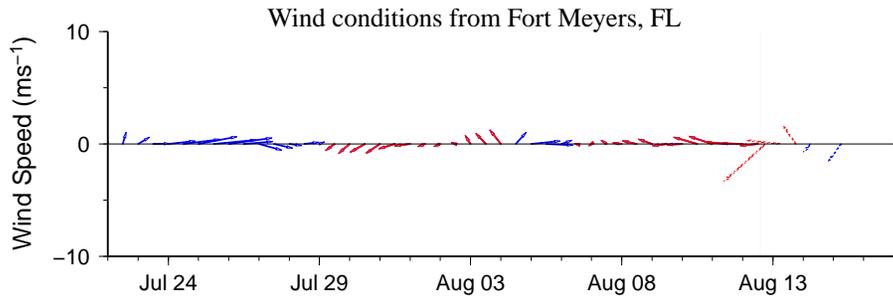
## Analysis

Background concentrations of *Karenia brevis* were identified in two samples collected alongshore northern Sarasota County and one sample collected alongshore southern Lee County early last week (FWRI, MML; 8/5-6). All other samples collected along- and off-shore southwest Florida, from Pinellas to Monroe County, including the Florida Keys, indicate that *K. brevis* is not present (FWRI, MML, SCHD, CCPCPD; 7/26-8/7). No dead fish or respiratory irritation associated with *K. brevis* have been reported in the past week (FWRI, MML; 8/5-11).

MODIS imagery has been obscured by clouds alongshore southwest Florida over the past several days, limiting analysis. In recent MODIS Aqua imagery (8/11, shown left), patches of elevated to very high chlorophyll (3 to >20  $\mu\text{g/L}$ ) are visible along- and off-shore Charlotte and Lee counties. Elevated chlorophyll at the coast is likely the result of mixed non-harmful algal blooms that continue to be reported in many southwest Florida counties.

Upwelling favorable winds over the past few days may increase the potential for bloom formation at the coast early this week.

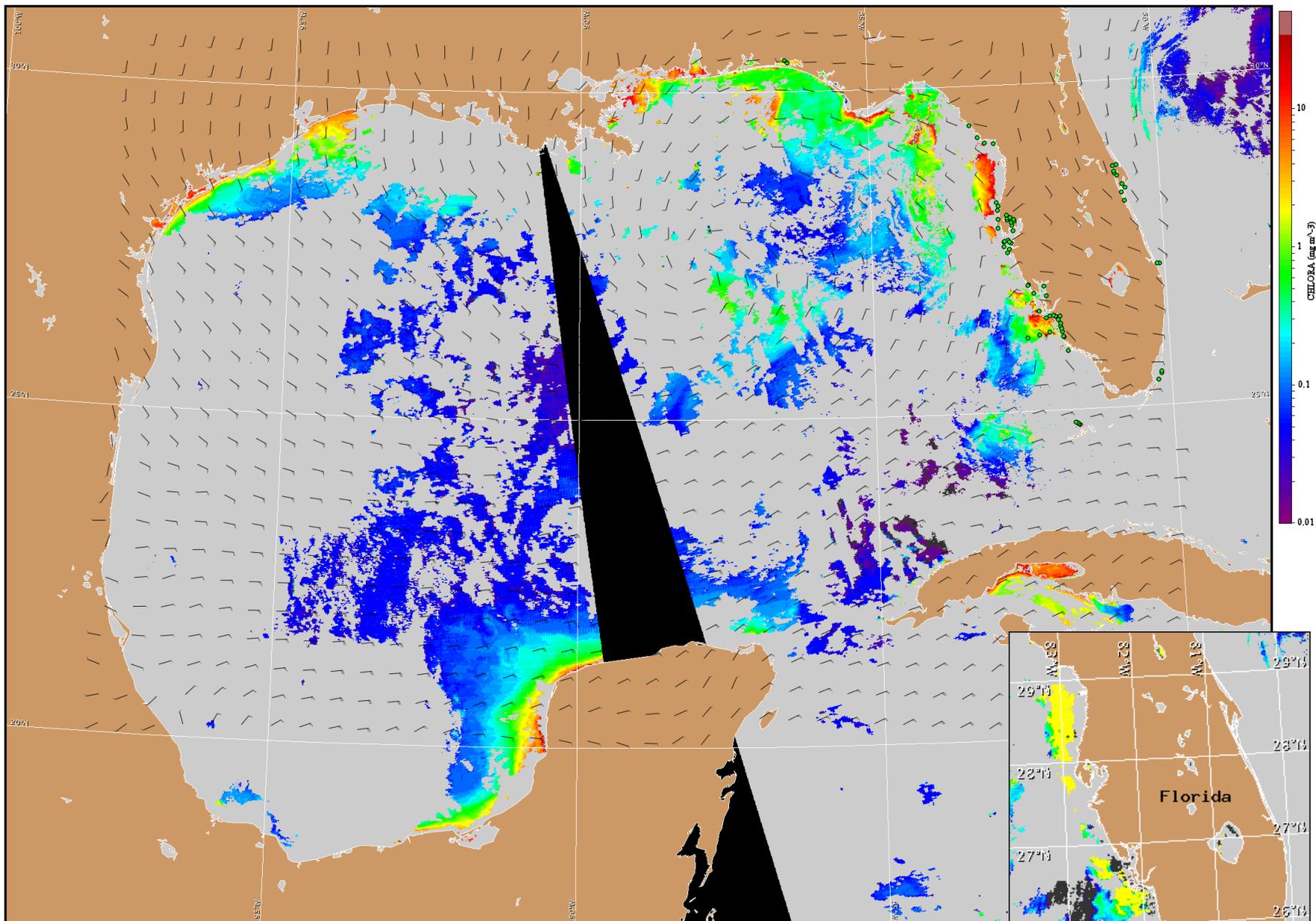
Derner, Burrows



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).

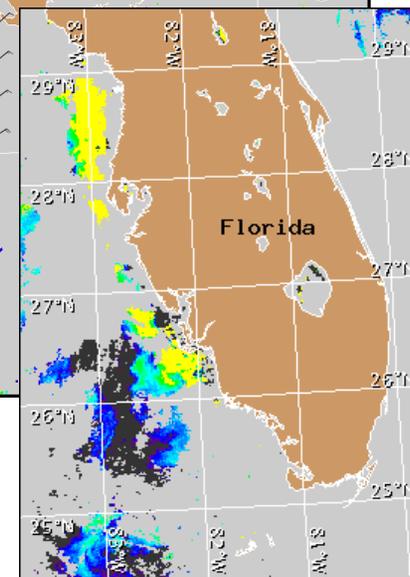
## Wind Analysis

**Southwest Florida:** East winds (5-10kn, 3-5m/s) today becoming west in the afternoon. Northwest to east winds (5-10kn) tonight. Southeast winds (5-10kn) Tuesday becoming west in the afternoon. Southwest winds (5-10kn) Tuesday night through Wednesday. South winds (10kn, 5m/s) Thursday. South winds (10kn) Friday becoming southwest in the afternoon.



Satellite chlorophyll image and forecast winds for August 13, 2013 06Z with points representing cell concentration sampling data from August 2 to 7: 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 of high chlorophyll concentration shown in yellow (see p. 1 analysis for interpretation).