



## Gulf of Mexico Harmful Algal Bloom Bulletin

Region: Southwest Florida

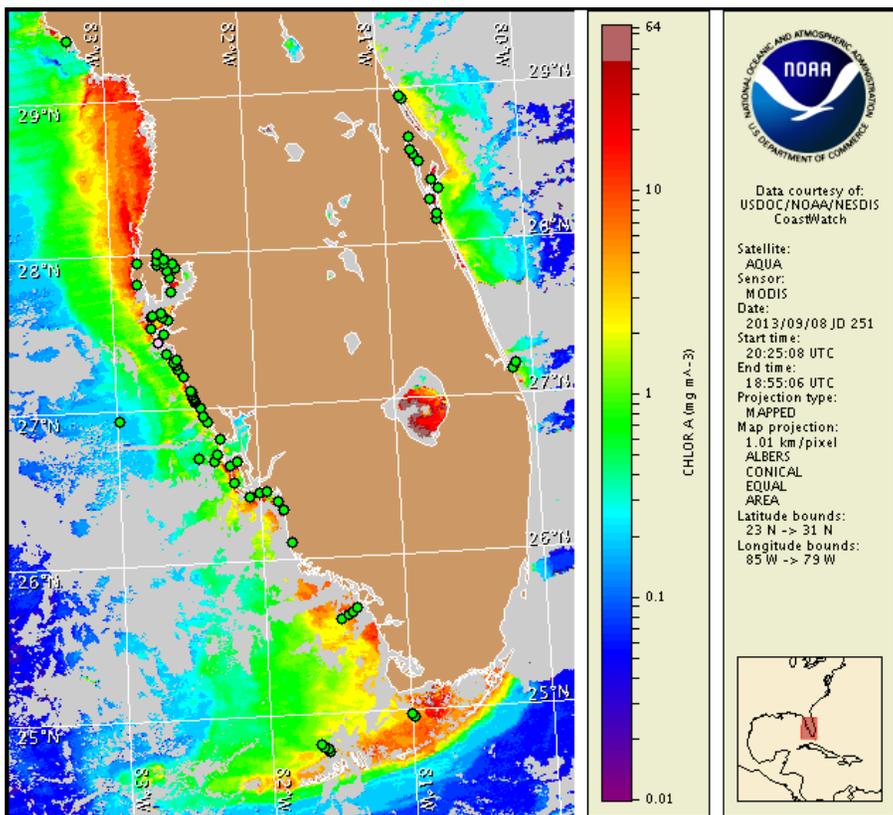
Monday, 09 September 2013

NOAA National Ocean Service

NOAA Satellite and Information Service

NOAA National Weather Service

Last bulletin: Tuesday, September 3, 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 30 to September 6: 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, September 9 through Monday, September 16. Check [http://tidesandcurrents.noaa.gov/hab/beach\\_conditions.html](http://tidesandcurrents.noaa.gov/hab/beach_conditions.html) for recent, local observations.

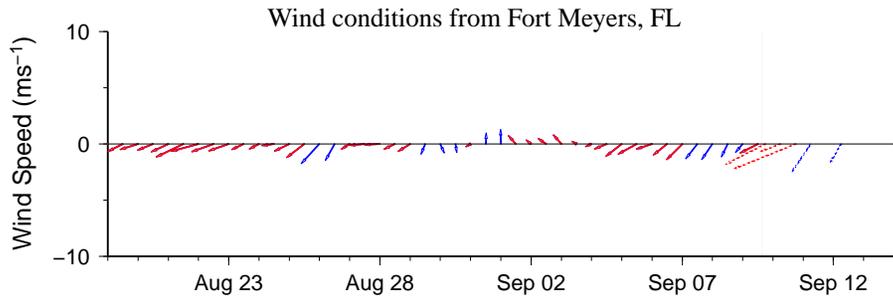
## Analysis

A background concentration of *Karenia brevis* was identified in one sample collected alongshore Manatee County at Longboat Pass last week (FWRI; 9/3). All other samples collected along- and offshore southwest Florida from Pinellas to Collier County and the Florida Keys indicate *K. brevis* is not present (FWRI, SCHD, MML; 8/30-9/6). No dead fish or respiratory irritation associated with *K. brevis* have been reported in the past week (FWRI, MML; 9/3-9/9).

MODIS Aqua imagery has been partially obscured by clouds along- and offshore southwest Florida over the past week, limiting analysis. In recent MODIS Aqua imagery (9/8, shown left), patches of elevated to high chlorophyll (3 to >10  $\mu\text{g/L}$ ) are visible along- and offshore Pinellas through Monroe counties with patches of elevated to very high chlorophyll (3 to >20  $\mu\text{g/L}$ ) visible alongshore from southern Manatee to central Lee County. 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 today through Thursday may increase the potential for bloom formation at the coast this week.

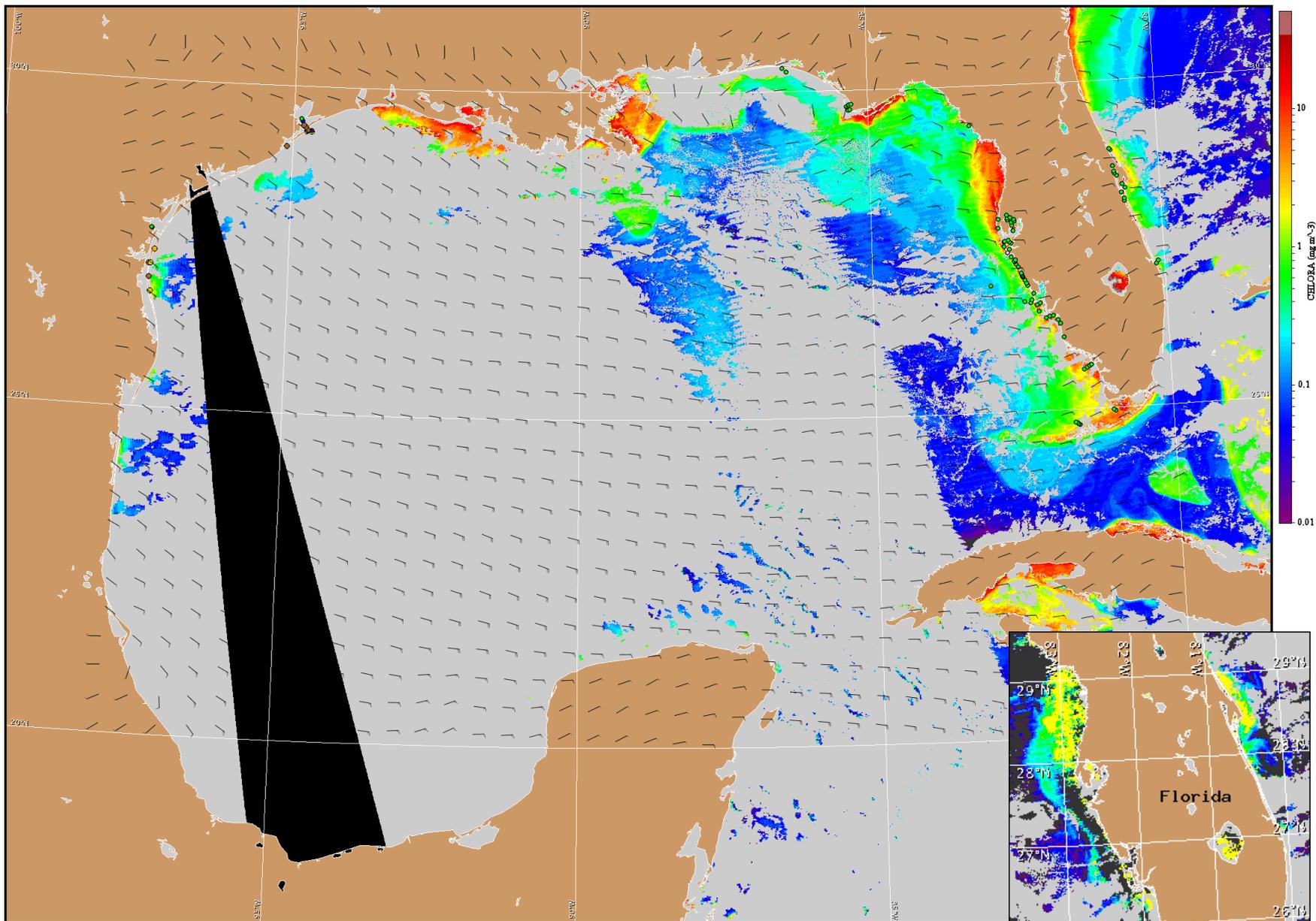
Davis, Kavanaugh



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).

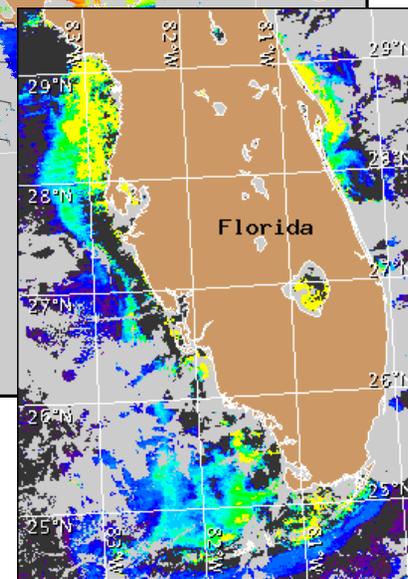
## Wind Analysis

**Southwest Florida:** Northeast winds (10kn, 5m/s) today becoming north winds (10kn) this afternoon. Northeast winds (10-15kn, 5-8m/s) this evening becoming east winds (10-15kn) tonight through Wednesday. East winds (10kn) Thursday becoming variable in the afternoon. East winds (5-10kn, 3-5m/s) Thursday night. Variable to locally onshore winds (10kn) Friday.



Satellite chlorophyll image and forecast winds for September 10, 2013 06Z with points representing cell concentration sampling data from August 30 to September 6: 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).