



## Gulf of Mexico Harmful Algal Bloom Bulletin

Region: Southwest Florida

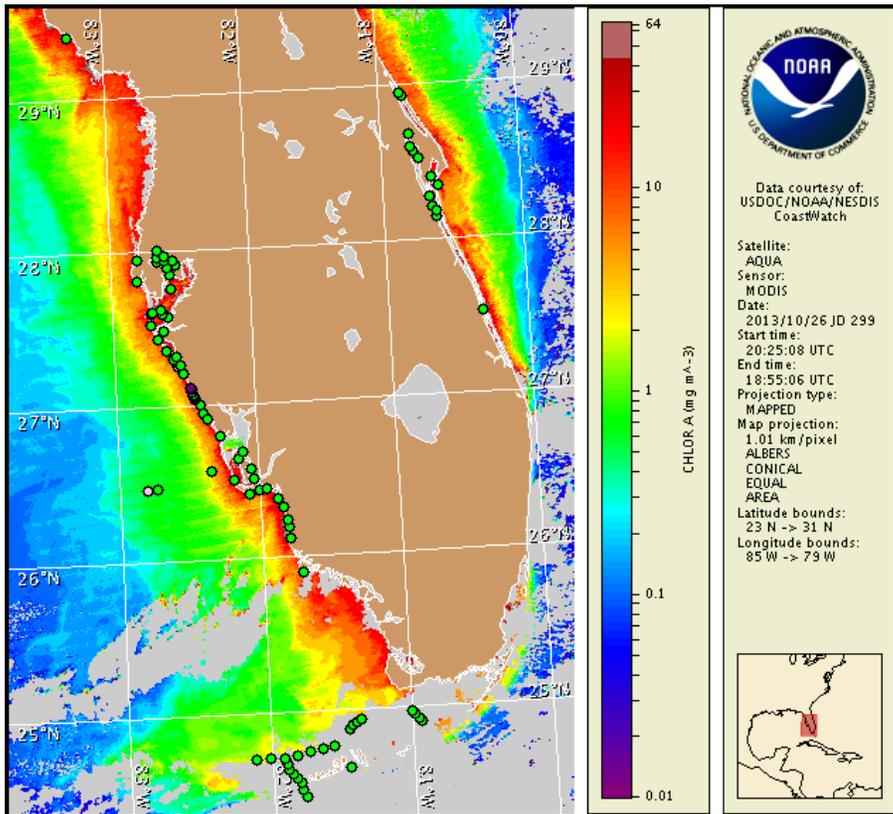
Monday, 28 October 2013

NOAA National Ocean Service

NOAA Satellite and Information Service

NOAA National Weather Service

Last bulletin: Monday, October 21, 2013



Satellite chlorophyll image with possible *K. brevis* HAB areas shown by red polygon(s), when applicable. Points represent cell concentration sampling data from October 18 to 24: 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 low concentrations along the coast of southwest Florida, including the Florida Keys. No respiratory irritation is expected Monday, October 28 through Monday, November 4. Check [http://tidesandcurrents.noaa.gov/hab/beach\\_conditions.html](http://tidesandcurrents.noaa.gov/hab/beach_conditions.html) for recent, local observations.

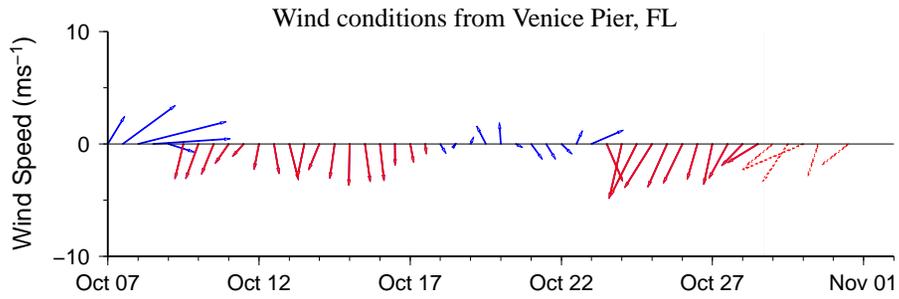
## Analysis

Recent samples collected along- and offshore southwest Florida indicate that *Karenia brevis* concentrations range from 'not present' to 'low' (FWRI, MML, SCHD; 10/20-25). Several 'background' to 'low' concentrations of *K. brevis* were identified along- and offshore Sarasota and Lee counties with 'low' concentrations detected offshore Lido Beach in Sarasota County (FWRI, MML; 10/20-23). All other samples collected alongshore southwest Florida from Pinellas to Monroe County and offshore the Florida Keys indicate *K. brevis* is 'not present' (FWRI, MML, SCHD, CCPCPD; 10/20-25). No dead fish or respiratory irritation associated with *K. brevis* have been reported in the past week (FWRI, MML; 10/21-27).

Recent MODIS Aqua imagery (10/26, shown left) indicates a band of elevated to high chlorophyll (3 to 20  $\mu\text{g/L}$ ) stretching along- and offshore from Pinellas to Collier counties. Patches of very high chlorophyll (>20  $\mu\text{g/L}$ ) are also visible along- and offshore southern Charlotte and northern Lee counties and southern Lee to northern Collier counties.

Upwelling favorable winds observed over the past several days and forecasted for today through Thursday morning may increase the potential for *K. brevis* bloom formation at the coast.

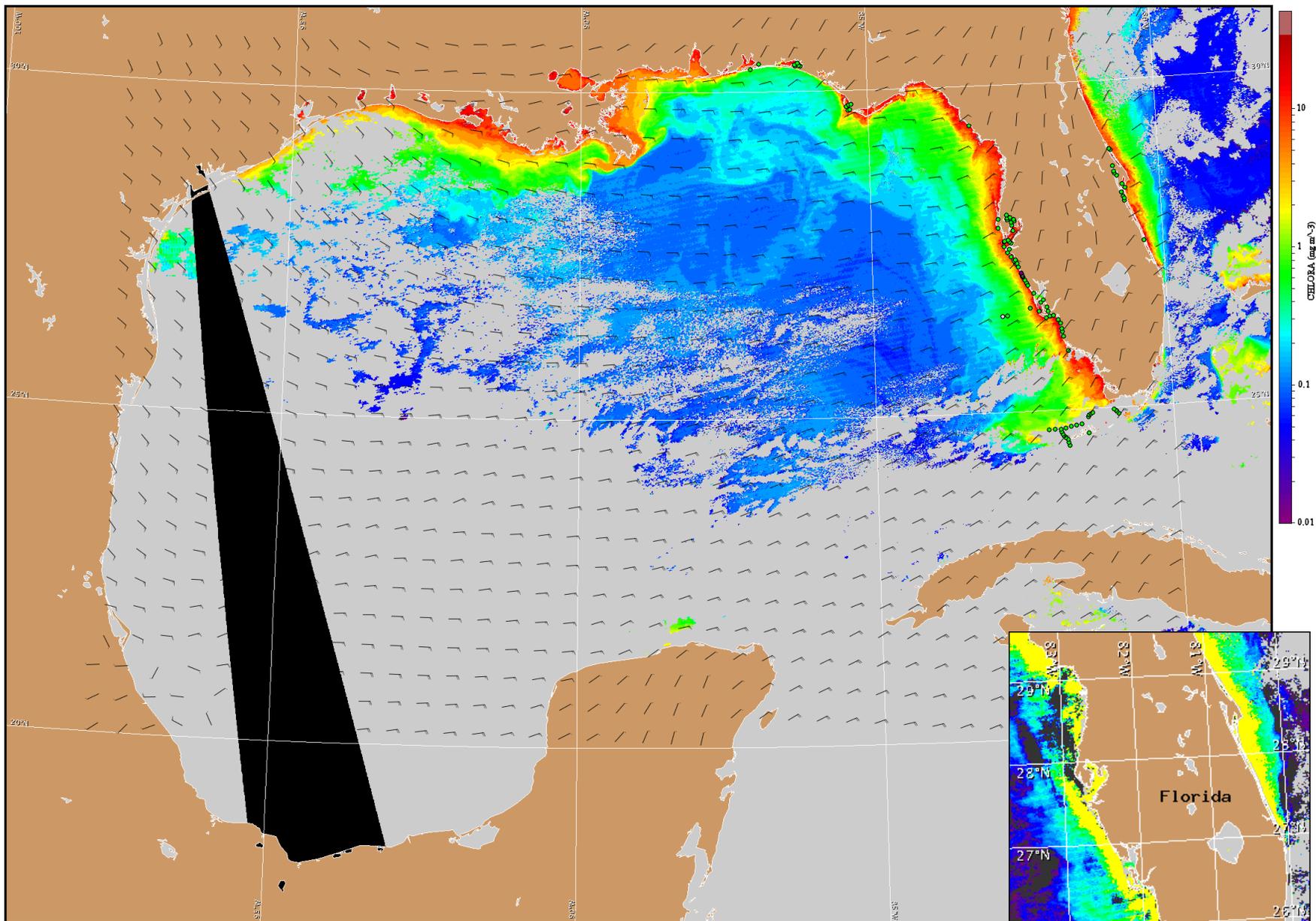
Yang, Derner



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).

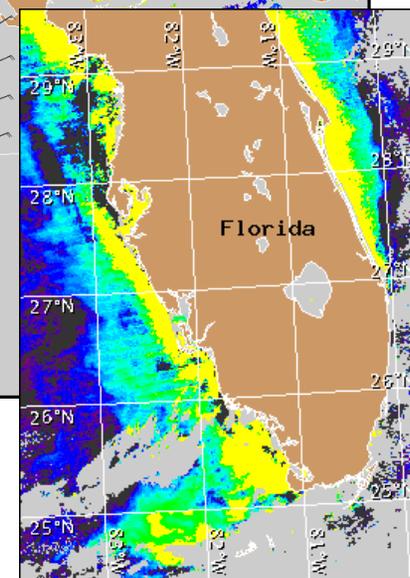
## Wind Analysis

**Southwest Florida:** Northeast winds (5-20kn, 3-10m/s) today through Wednesday. East winds (10-20kn, 5-10m/s) Wednesday night. Southeast winds (10-15kn, 5-8m/s) Thursday becoming south Thursday afternoon. Southwest winds (10-15kn) Thursday night. South winds (10-15kn) Friday becoming southwest (5-10kn, 3-5m/s) Friday afternoon.



Satellite chlorophyll image and forecast winds for October 29, 2013 12Z with points representing cell concentration sampling data from October 18 to 24: 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).