



# Gulf of Mexico Harmful Algal Bloom Bulletin

Region: Southwest Florida

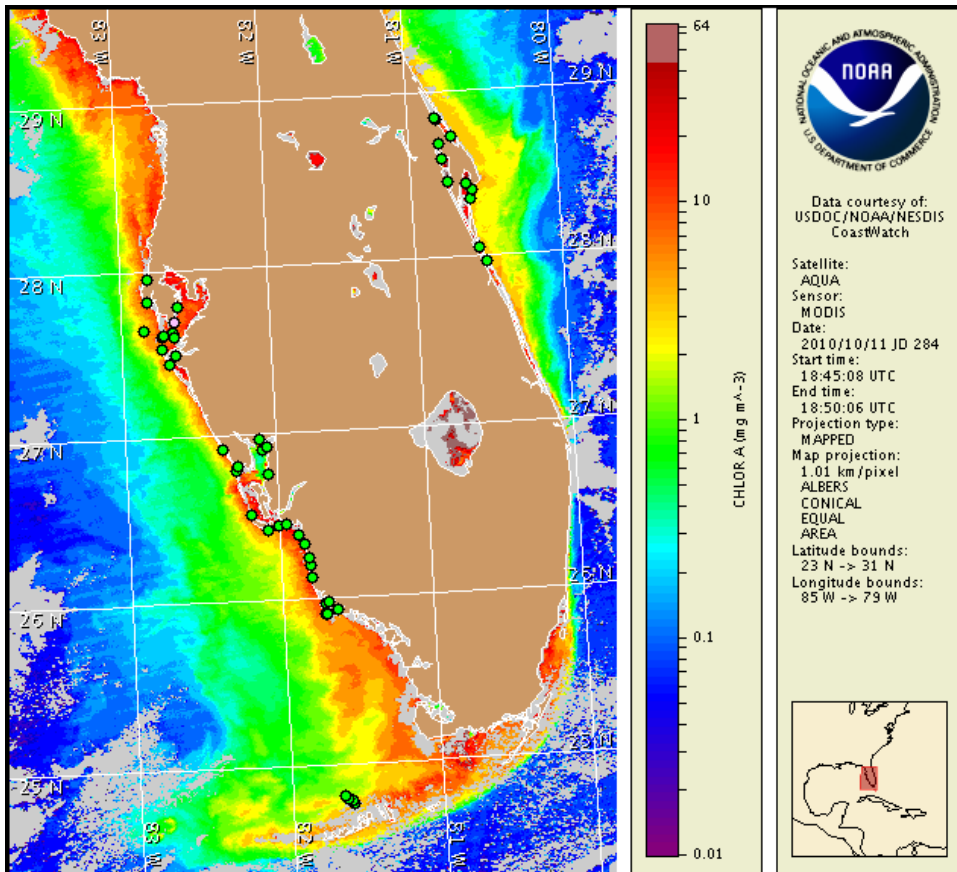
12 October 2010

NOAA Ocean Service

NOAA Satellites and Information Service

NOAA National Weather Service

Last bulletin: October 4, 2010



Satellite chlorophyll image with possible HAB areas shown by red polygon(s). Cell concentration sampling data from October 2 to 11 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)

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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, October 17.

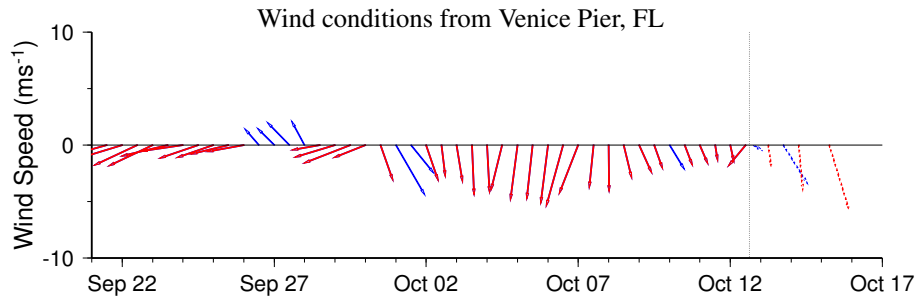
## Analysis

There is currently no indication of a harmful algal bloom in southwest Florida, including the Florida Keys. One background concentration of *Karenia brevis* was detected alongshore of Sarasota County last week (SCHD; 10/4); otherwise, no *K. brevis* was found at the coast in southwest Florida between Pinellas and Collier Counties, or offshore Pinellas County and the Florida Keys (FWRI, MML, CCPCPD; 10/3-10/11). Two background concentrations of *K. brevis* were also found in the Tampa and Sarasota Bay systems (FWRI, 10/7; MML, 10/8). A bloom of *Takayama cf. acrotracha*, first reported on Sept. 9, continues alongshore southern Lee and northern and central Collier Counties; no impacts have been reported due to this bloom in the past week (FWRI, 10/01; CCPCPD, 10/5). Discolored water has also been reported at Lighthouse Beach in Lee County due to a non-harmful diatom bloom (FWRI; 10/8).

Recent MODIS imagery indicates that chlorophyll levels remain elevated (2-7  $\mu\text{g/L}$ ) in patches alongshore of southwest Florida and offshore of the Keys over the past week; however, samples do not indicate the presence of *K. brevis*. The elevated chlorophyll feature south to southwest of Sanibel Island has significantly decreased (<1-3  $\mu\text{g/L}$ ) over the last week and appears to have transported offshore and southward. An elevated patch (<3  $\mu\text{g/L}$ ) is now located at 25°55'48.51"N, 82°0'16.75"W. Elevated to high chlorophyll (3 to >10  $\mu\text{g/L}$ ) also remains visible alongshore southern Lee and northern Collier Counties and is likely due to non-harmful algal blooms that continue to be reported along the coast in southwest Florida.

Continued north to northeast winds are forecasted through Sunday, Oct. 17, minimizing the potential for bloom formation this week.

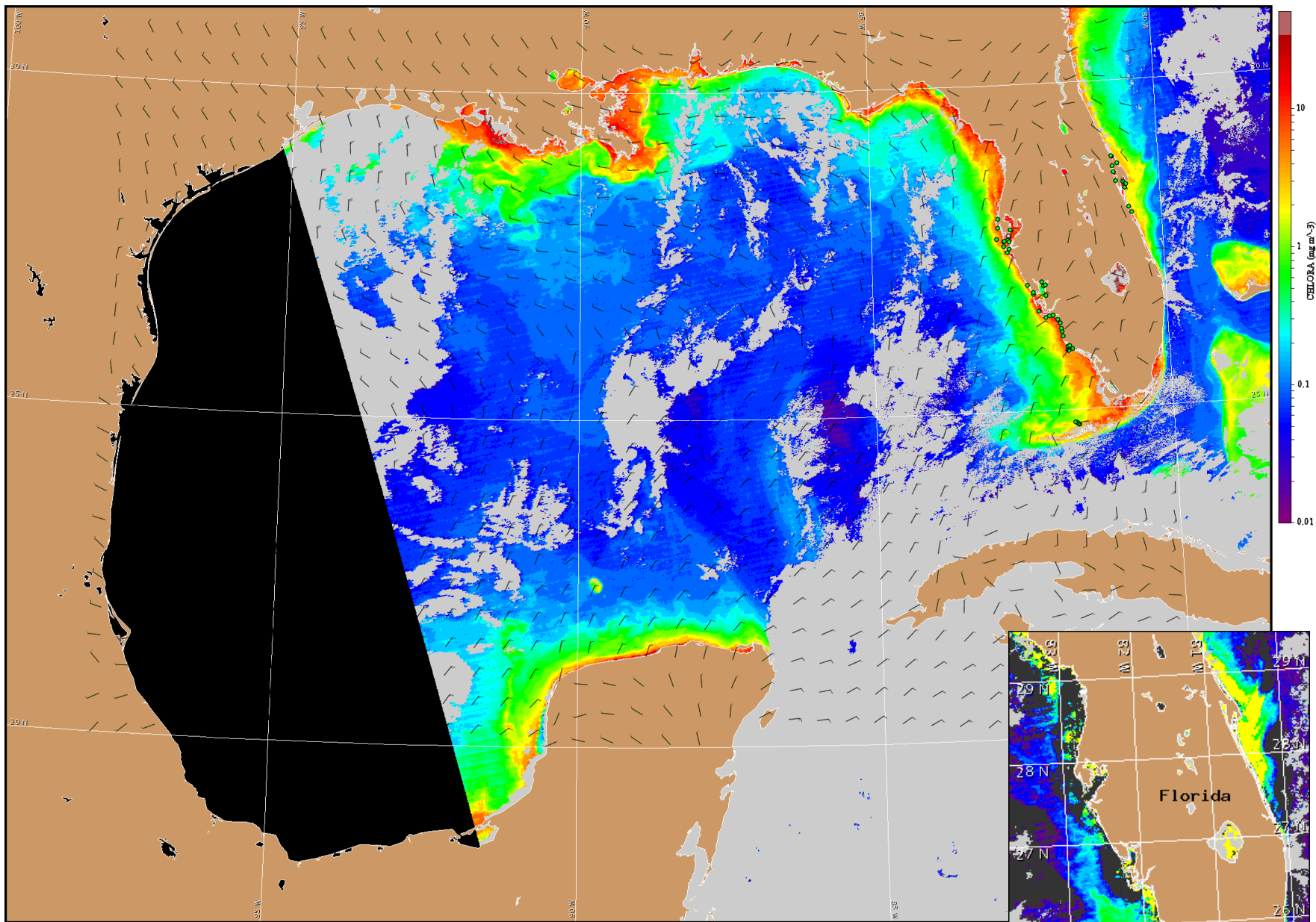
Fenstermacher, Derner



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

SW Florida: Westerlies today and northeasterlies tonight (10 kn; 5 m/s). Northerlies Wednesday through Friday, followed by northeasterlies Friday night and Saturday (10-15 kn; 5-8 m/s).



Satellite chlorophyll image and forecast winds for October 13, 2010 12Z with Cell concentration sampling data from October 2 to 11 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).