



## Gulf of Mexico Harmful Algal Bloom Bulletin

Region: Southwest Florida

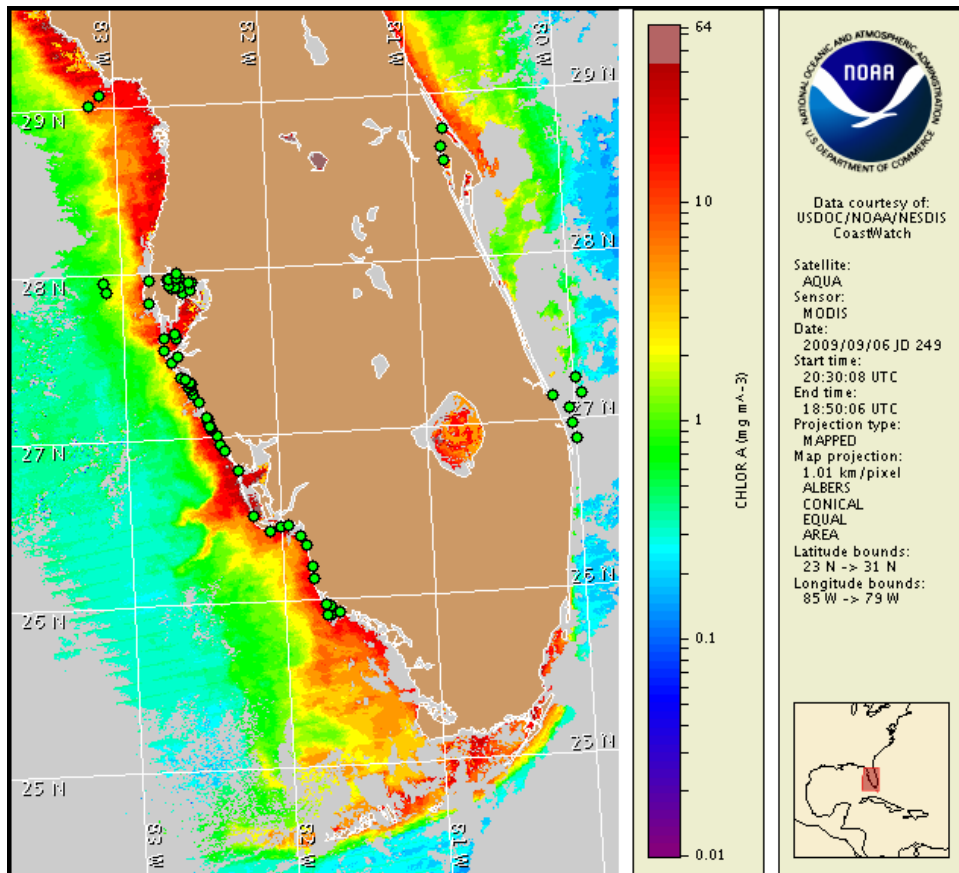
8 September 2009

NOAA Ocean Service

NOAA Satellites and Information Service

NOAA National Weather Service

Last bulletin: August 31, 2009



Satellite chlorophyll image with possible HAB areas shown by red polygon(s). Cell concentration sampling data from August 29 to September 3 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, September 13. 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. A "Very low a" concentration of *Karenia brevis* was identified last week alongshore Sarasota County at New Pass (MML, 9/1) but was no longer present in later samples (9/1-9/4). No additional *K. brevis* was detected alongshore southwest Florida from Pinellas to Collier County, or offshore Pinellas county (FWRI, SCHD, MML; 8/31-9/4).

MODIS imagery (9/6) continues to show the presence of elevated to high chlorophyll levels along much of the southwest Florida shoreline. More distinct high chlorophyll features remain visible alongshore southern Sarasota, Charlotte and northern Lee Counties ( $>10\mu\text{g/L}$ ) but samples from this region (MML, 9/1-9/2) did not contain *K. brevis*. The feature alongshore Charlotte County extends westward to approximately  $26^{\circ}31'24''\text{N}$   $82^{\circ}40'54''\text{W}$ . High chlorophyll is also visible south of Sanibel Island in southern Lee County and south of Cape Romano in southern Collier County (5 to  $>10\mu\text{g/L}$ ). An elevated chlorophyll feature is also visible extending offshore Pinellas County to approximately  $27^{\circ}39'49''\text{N}$   $82^{\circ}57'6''\text{W}$ . Medium concentrations of *Trichodesmium erythraeum* were identified just west of this feature on 8/30.

An elevated to high chlorophyll feature (5 to  $>10\mu\text{g/L}$ ) remains visible north of the Florida Keys, however the feature's extent has diminished. Cloud cover obscures feature's full extent. No additional samples were taken in this region.

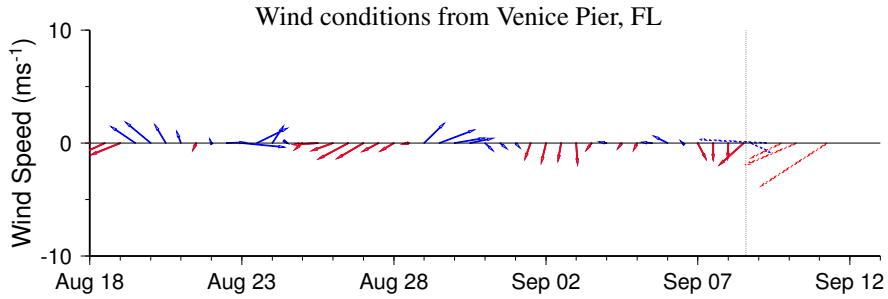
Predicted winds are conducive to upwelling through Thursday September 10 increasing the potential for bloom formation alongshore southwest Florida.

\*Due to technical difficulties, SeaWiFS imagery is presently unavailable for analysis or display. MODIS imagery is displayed on this bulletin.

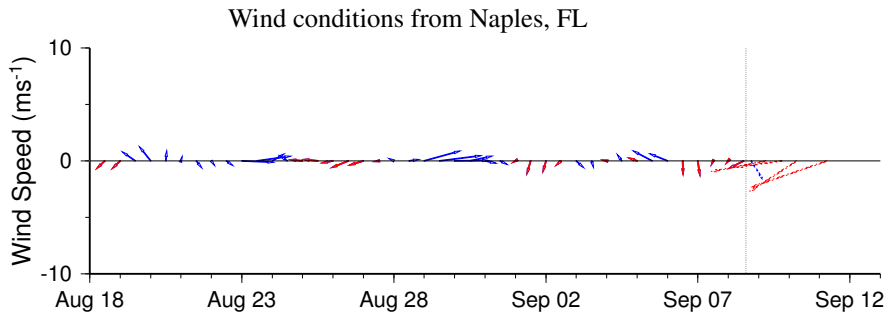
-Lindley, Fisher

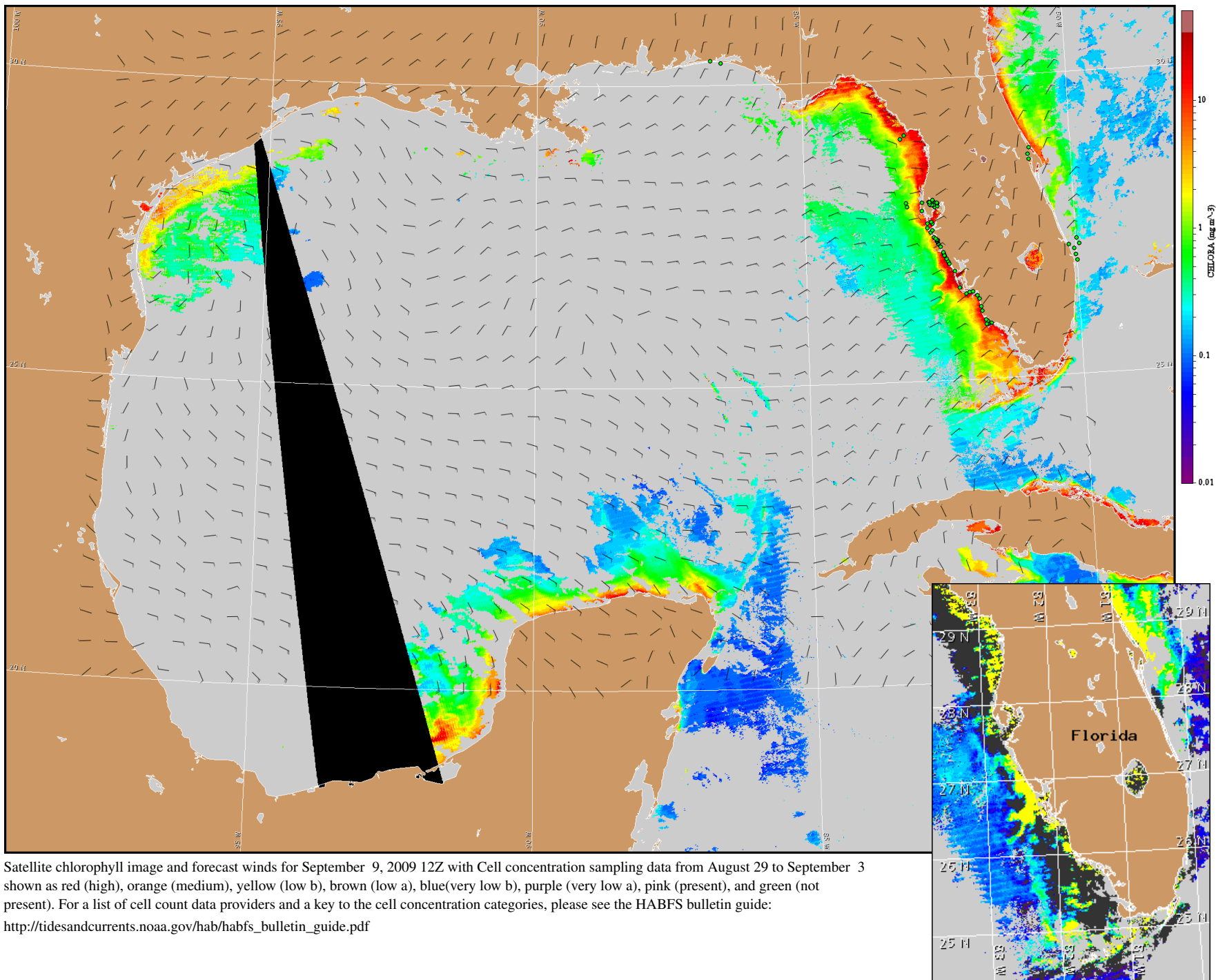
## Wind Analysis

East winds today and tonight (10 kn, 5 m/s). Northeast winds Wednesday becoming east Wednesday night and Thursday (10 kn, 5 m/s). Southeast winds Thursday night becoming south on Friday (10 kn, 5 m/s). Southwest winds Friday night becoming south on Saturday (10 kn, 5 m/s).



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).





Satellite chlorophyll image and forecast winds for September 9, 2009 12Z with Cell concentration sampling data from August 29 to September 3 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)

Verified and suspected HAB areas shown in red. Other areas of high chlorophyll concentration shown in yellow (see p. 1 analysis for interpretation).