



# Gulf of Mexico Harmful Algal Bloom Bulletin

Region: South Florida

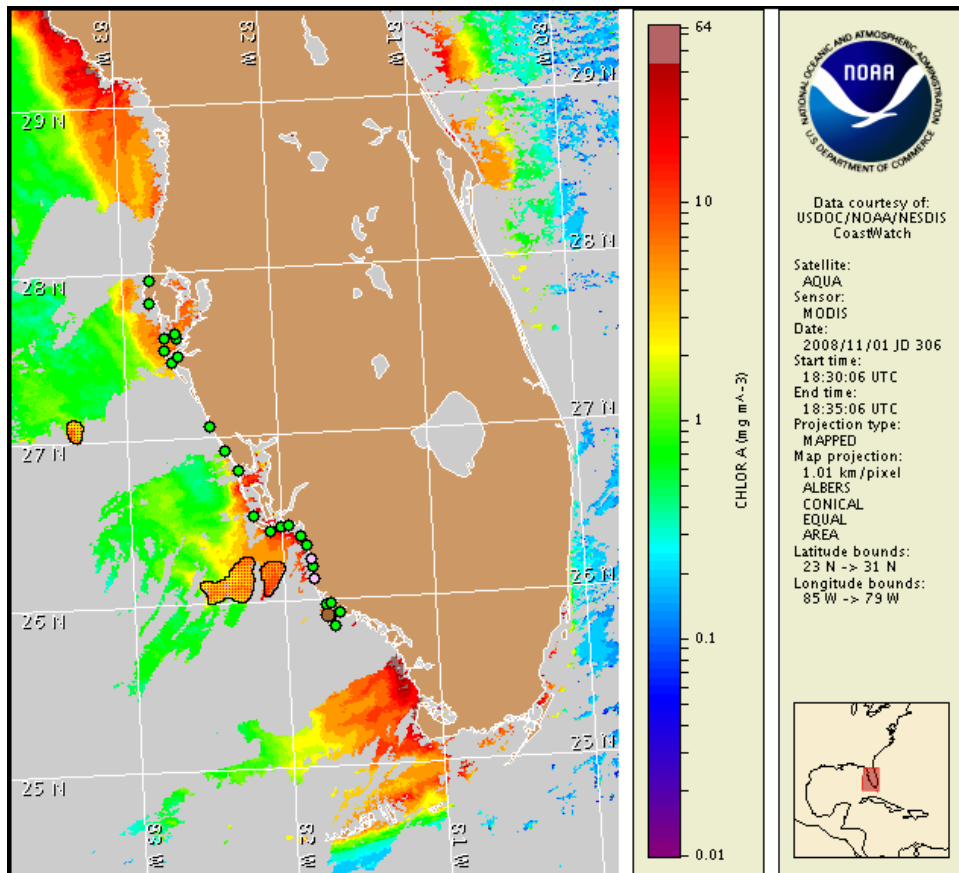
3 November 2008

NOAA Ocean Service

NOAA Satellites and Information Service

NOAA National Weather Service

Last bulletin: October 30, 2008



Satellite chlorophyll image with possible HAB areas shown by red polygon(s). Cell concentration sampling data from October 27 to 30 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

Patchy harmful algal blooms have been identified in northern Sarasota and central Collier Counties. Patchy very low impacts are expected in central Collier County today through Thursday. No impacts are expected in northern Sarasota County or elsewhere in southwest Florida today through Thursday, November 6.

## Analysis

*Karenia brevis* continues to be identified in patchy background concentrations in the northern Collier County region and up to low a (10/31, FWRI) concentrations in central Collier County (10/31, FWRI). Concentrations of *Karenia brevis* at S. Marco Beach in central Collier County have intensified to low a (CCPCD, 10/30; previously very low a, 10/20). Background concentrations persist in the southern Lee/northern Collier County region (10/29; 10/30, CCPCD; 10/31 FWRI). Present to very low b concentrations of *Karenia brevis* were reconfirmed at New Pass in northern Sarasota County (10/31, MML). Elevated concentrations of non-harmful algae also remain present in patches along much of the southwest Florida coast (10/29-10/30, FWRI).

Cloud cover in MODIS imagery over the last several days has obscured satellite imagery over the areas with identified HAB blooms. From what can be observed, chlorophyll levels appear to have increased according to SeaWiFS imagery (not shown). Chlorophyll levels offshore along the central Collier County coast are elevated up to high (5-10  $\mu\text{g/L}$ ) and centralized at 26°0'41"N 81°59'24"W. Elevated to high chlorophyll can also be observed offshore southern Lee and northern Collier Counties (5-10  $\mu\text{g/L}$ ) centralized at 26°19'42"N 81°57'8"W. Additionally, elevated to high chlorophyll (5-10  $\mu\text{g/L}$ ) is visible offshore Manatee and northern Sarasota Counties near 27°15'2"N 81°38'43"W. Sampling in these regions is recommended.

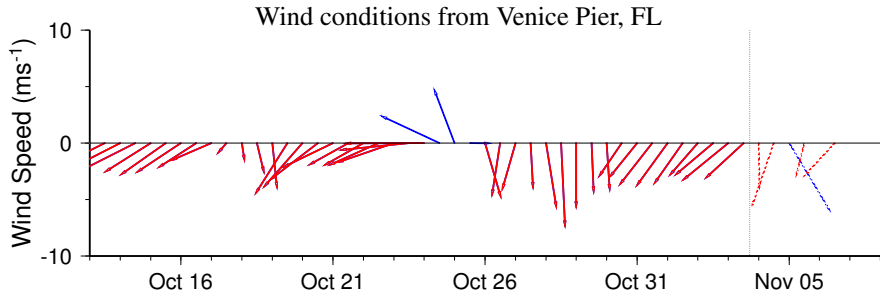
Upwelling conditions will prevail today through Thursday. Bloom intensification is possible. Bloom location will likely be maintained through Thursday, November 6.

Please note that due to past technical difficulties, SeaWiFS imagery is temporarily unavailable for display in this bulletin; MODIS imagery is shown on pages 1 and 3 of this bulletin.

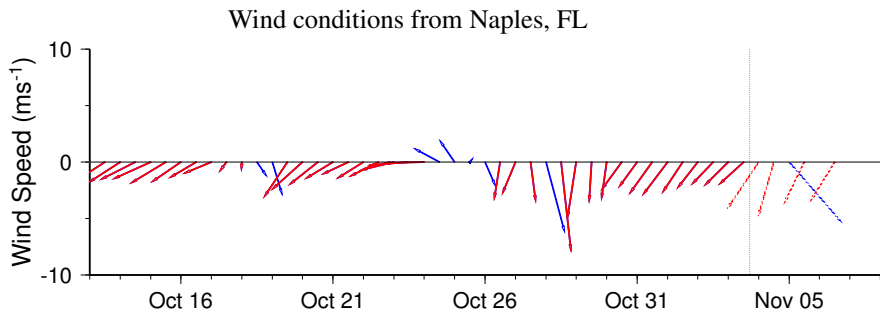
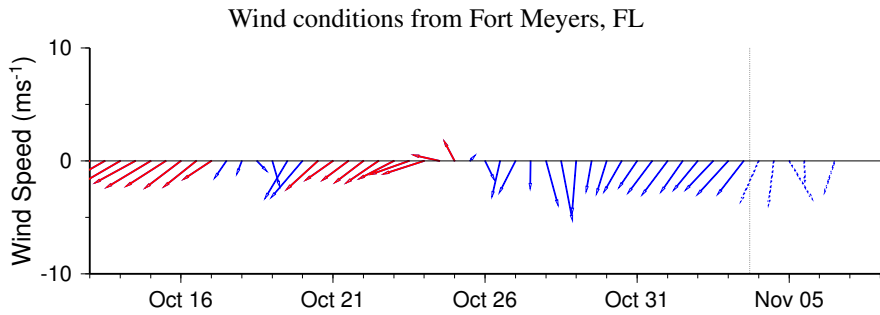
-Lindley, Fenstermacher

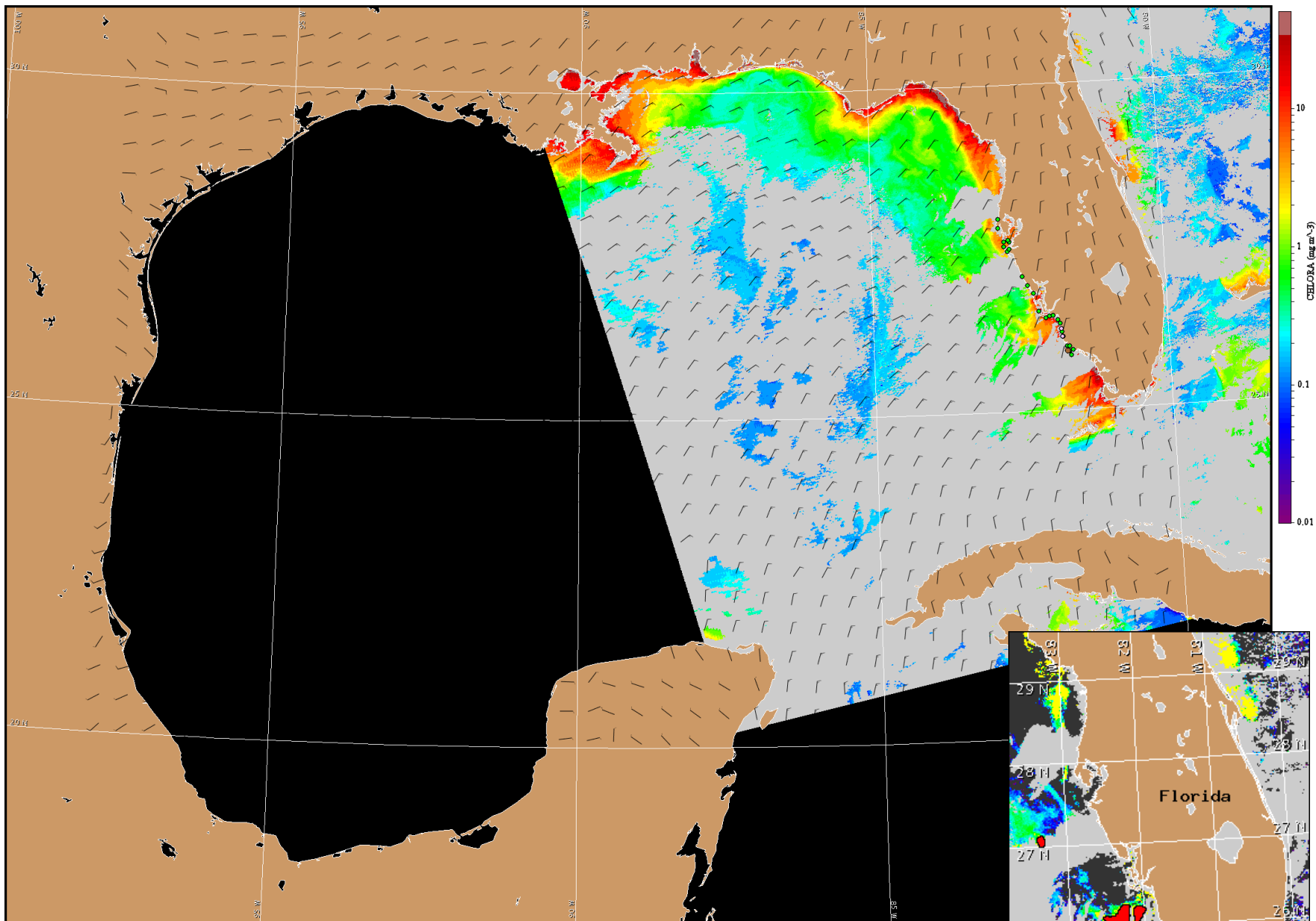
## Wind Analysis

Northeast winds are expected today and tonight (10 kn, 5 m/s). North winds are expected tomorrow (10 kn, 5 m/s) and northeast winds are expected tomorrow night (10 kn, 5 m/s). Wednesday and Wednesday night winds are expected to continue from the north (10 kn, 5 m/s) and northeast (5-10 kn, 3-5 m/s) respectively. Easterly winds are expected on Thursday (5-10 kn, 3-5 m/s).



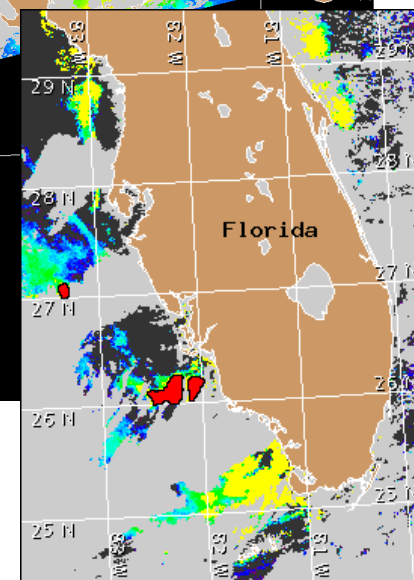
Wind speed and direction are averaged over 12 hours from buoy measurements. Length of line indicates speed; angle indicates direction. Red indicates that the wind direction favors upwelling near the coast. Values to the left of the dotted vertical line are measured values; values to the right are forecasts. Wind observation and forecast data provided by NOAA's National Weather Service (NWS).





Satellite chlorophyll image and forecast winds for November 4, 2008 12Z with Cell concentration sampling data from October 27 to 30 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).