



# Gulf of Mexico Harmful Algal Bloom Bulletin

Region: South Florida

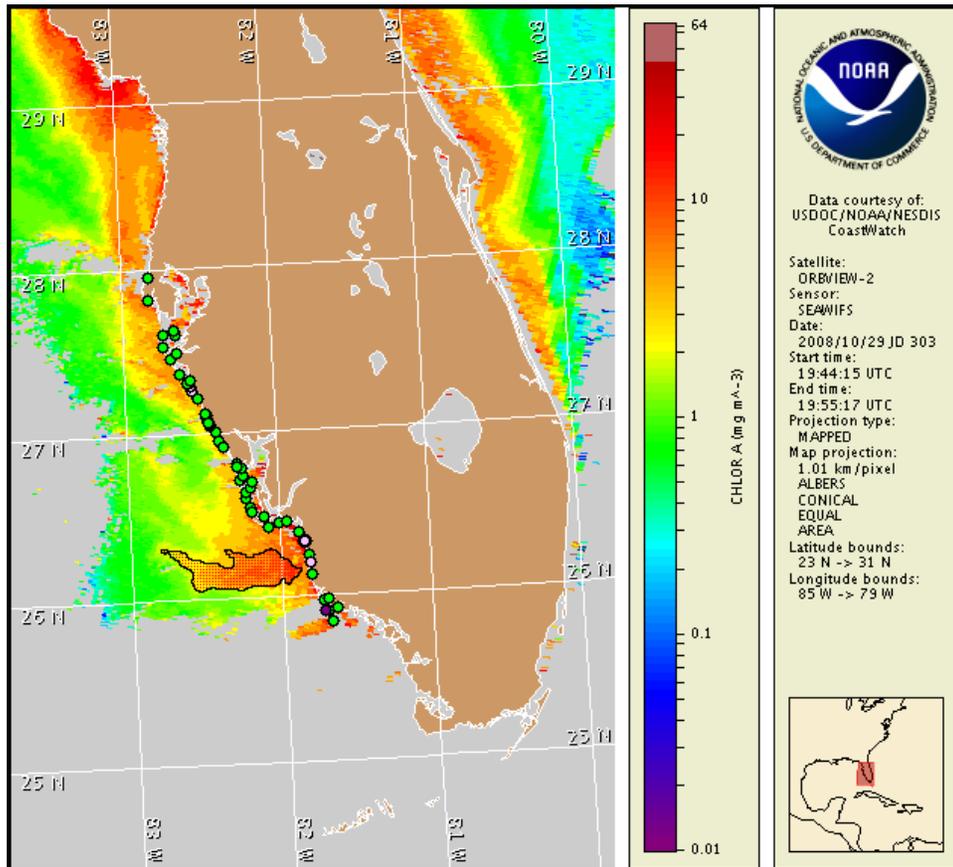
30 October 2008

NOAA Ocean Service

NOAA Satellites and Information Service

NOAA National Weather Service

Last bulletin: October 27, 2008



Satellite chlorophyll image with possible HAB areas shown by red polygon(s). Cell concentration sampling data from October 20 to 29 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

Harmful algae have been identified in central Collier County. No impacts are expected in Collier County or elsewhere alongshore southwest Florida today through Monday, November 3.

## Analysis

*Karenia brevis* continues to be identified in patches up to very low concentrations in the southern Lee/northern Collier County region and in central Collier County. *K. brevis* concentrations have continued to fluctuate over the past week, and were last reported on 10/27 by FWRI to be present at background concentrations in northern Collier County at Barefoot Beach (previously not present on 10/23 and 'low b' on 10/20) and Clam Pass (previously not present on 10/23 and 'very low b' on 10/20) and at 'very low a' concentrations in central Collier County at South Marco Beach (previously 'present' on 10/23 and 'very low a' on 10/20). Background concentrations of *K. brevis* were also identified early this week near New Pass in northern Sarasota County (FWRI). All additional samples collected this week between Pinellas and Collier Counties contained no *K. brevis*. Elevated concentrations of non-harmful algae also remain present in patches along much of the southwest Florida coast (FWRI, 10/27-29).

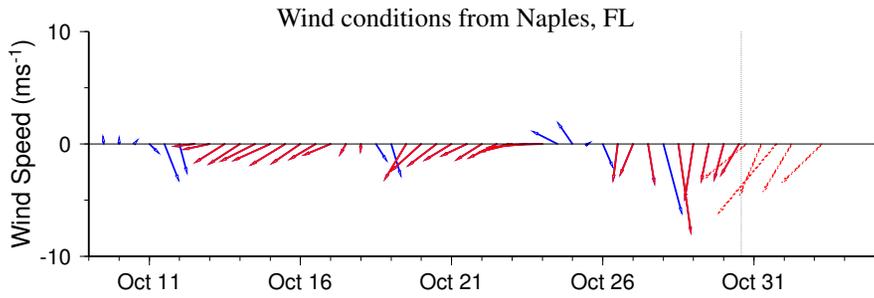
Chlorophyll levels appear to have decreased over the past two days after briefly intensifying on 10/27, according to SeaWiFS imagery. Present chlorophyll levels remain high ( $> 10 \mu\text{g/L}$ ) along the southern Lee and northern Collier County coasts (south to Vanderbilt Beach) and elevated up to  $8 \mu\text{g/L}$  in central Collier County near  $26^{\circ}1'32''\text{N } 81^{\circ}47'35''\text{W}$ . A large elevated chlorophyll feature remains visible offshore northern Collier County, stretching up to 55 miles from the coast, and centralized at  $26^{\circ}10'4''\text{N } 82^{\circ}14'3''\text{W}$ . This feature appears to have moved further south since 10/27 and will likely continue to move in a south to southwestward direction over the next few days. Elevated chlorophyll (up to  $5 \mu\text{g/L}$ ) is also visible alongshore and offshore Manatee and northern Sarasota Counties in a band stretching approximately 25 miles off Longboat Key, from  $27^{\circ}11'31''\text{N } 82^{\circ}36'28''\text{W}$  north to  $27^{\circ}34'38''\text{N } 83^{\circ}2'14''\text{W}$ . Sampling in these features is recommended.

Upwelling conditions will prevail today through Monday. Bloom intensification and formation throughout southwest Florida is possible. Alongshore transport is unlikely through Monday, November 3.

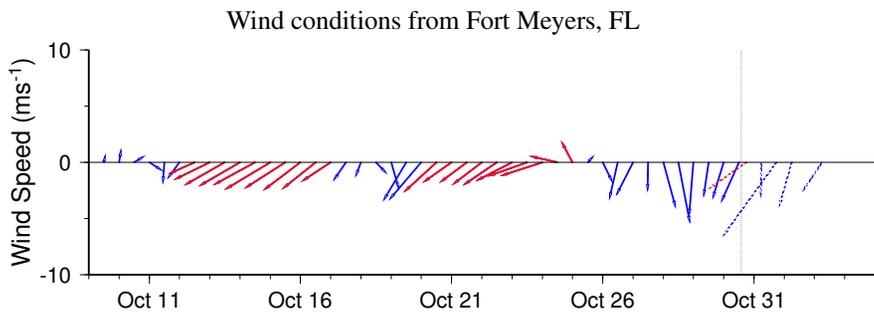
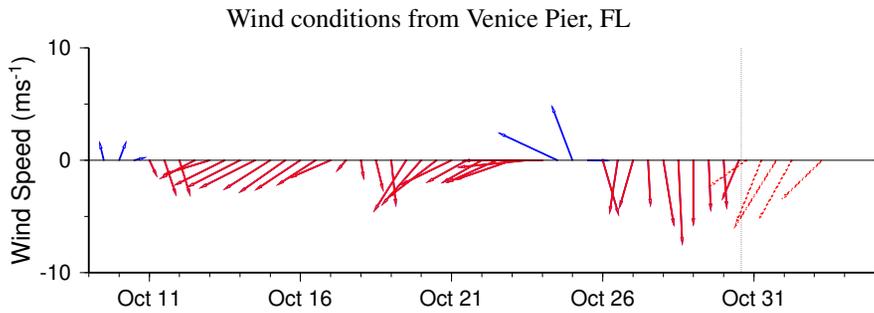
~Fisher, Gan

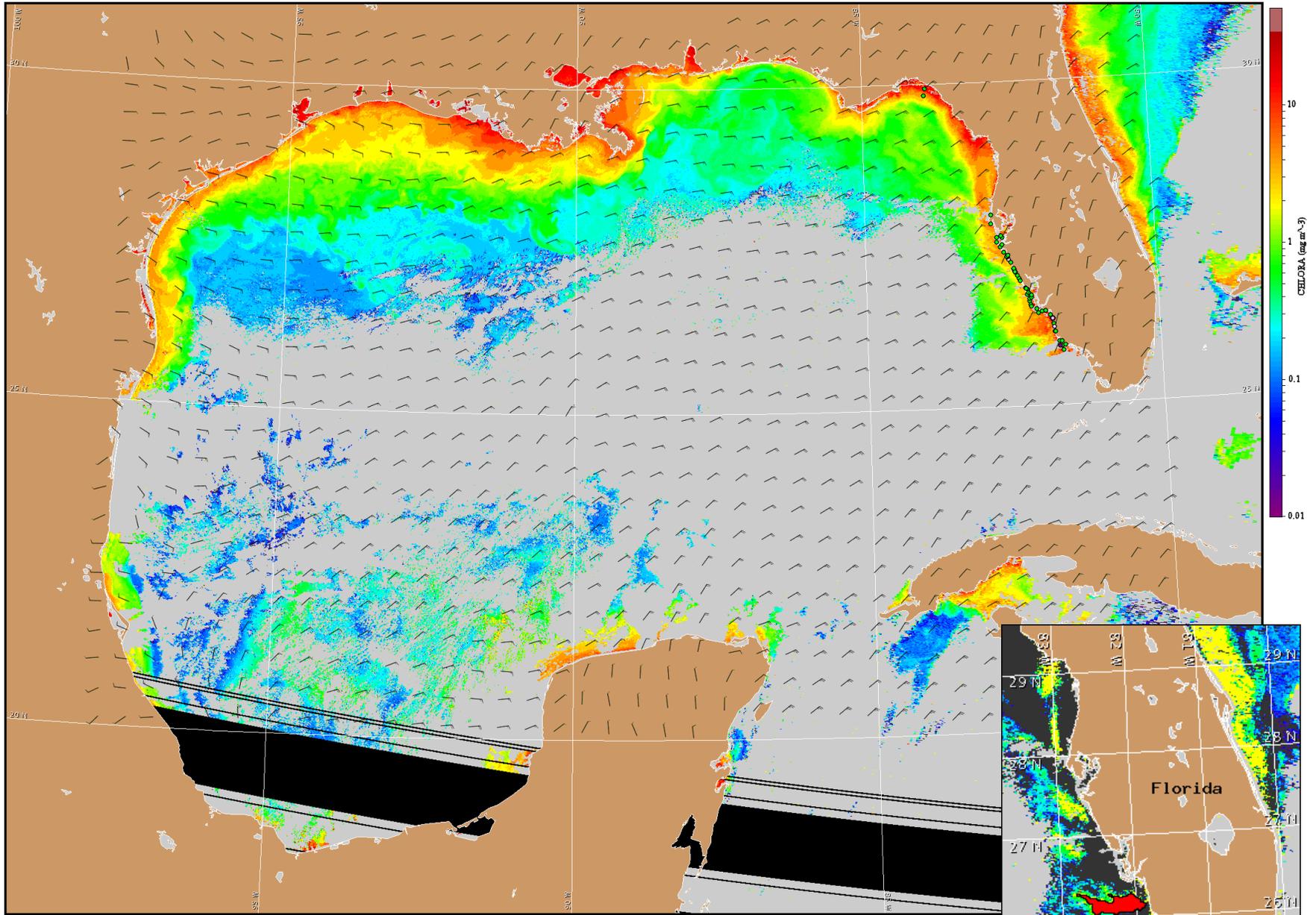
## Wind Analysis

Northeast winds today are expected to continue through Monday at the following strengths: today 10-15kn (5-8m/s), Friday 15-20kn (8-10m/s), Saturday 15kn (8m/s), Saturday night and Sunday 15-20kn, Monday 5-10kn (3-5m/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 October 31, 2008 12Z with Cell concentration sampling data from October 20 to 29 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).