



## Gulf of Mexico Harmful Algal Bloom Bulletin

Region: South Florida

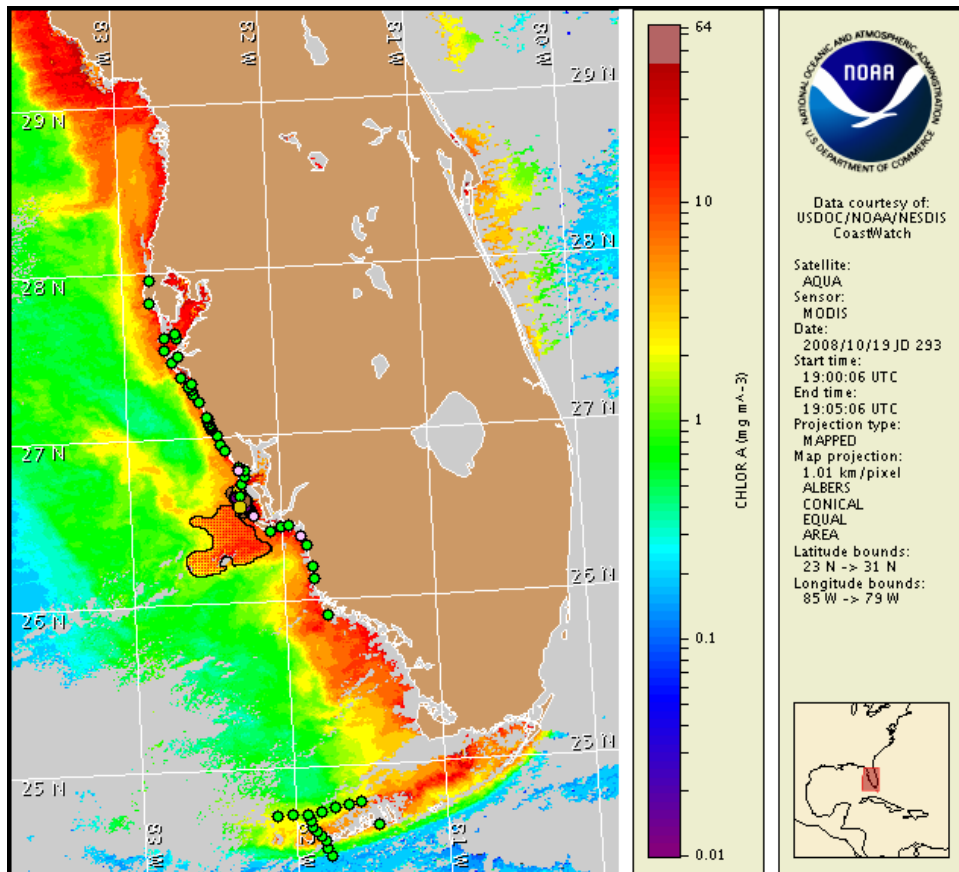
20 October 2008

NOAA Ocean Service

NOAA Satellites and Information Service

NOAA National Weather Service

Last bulletin: October 16, 2008



Satellite chlorophyll image with possible HAB areas shown by red polygon(s). Cell concentration sampling data from October 10 to 16 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

SW Florida: A harmful algal bloom has been identified in northern Lee County. Patchy very low impacts are possible today through Wednesday. No other impacts are expected alongshore southwest Florida today through Wednesday, October 22.

## Analysis

A harmful algal bloom persists from Cayo Costa State Park to Captiva Island in northern Lee County. The most recent samples from central Captiva Island (South Seas Plantation Entrance) to Bonita Beach (Lee/Collier County border) indicate that *Karenia brevis* is either not present or at background concentrations onshore southern Lee County (FWRI 10/15). Samples from Pinellas County indicate that *K. brevis* is not present (FWRI 10/16). All samples indicate the continued presence of various species of non-harmful algae at elevated concentrations. Satellite imagery (MODIS 10/19) indicates a patch of elevated chlorophyll levels (3-10  $\mu\text{g/L}$ ) extending from 27°8'20.5''N 83°18'11''W (approximately 48 miles west of central Sarasota County) to 26°16'31''N 82°11'17''W (approximately 21 miles west of Clam Pass in Collier County). The bottom half of this elevated chlorophyll patch is located just offshore Lee County. Continued sampling is recommended throughout this region.

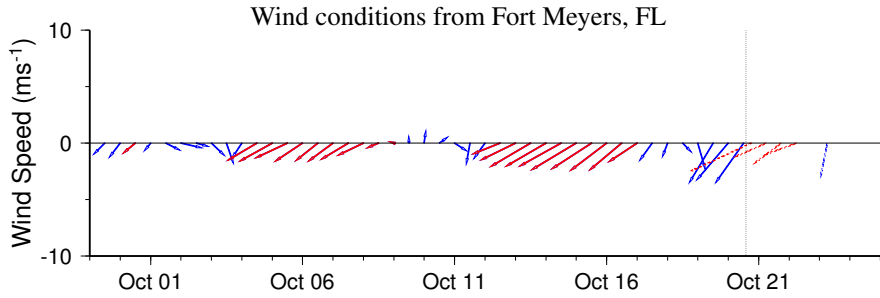
Offshore winds will reduce the potential for impacts at the coast and upwelling favorable conditions will continue today through Friday, October 24. Alongshore transport of the bloom is not expected today through Wednesday, October 22.

Please note that MODIS imagery is shown on pages 1 and 3 of this bulletin.

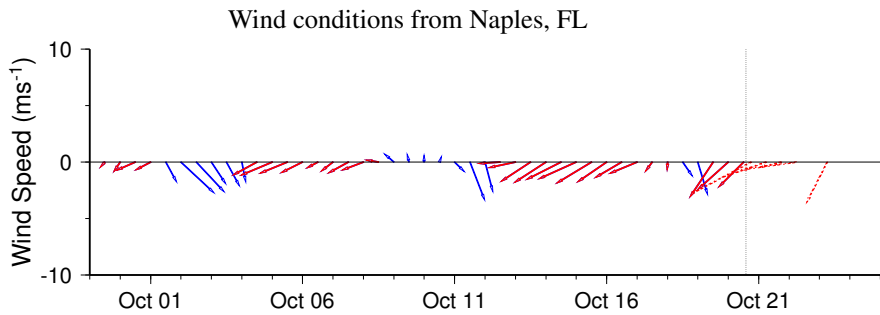
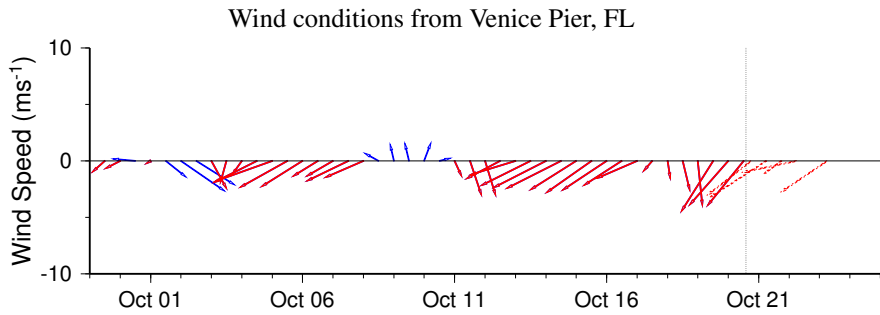
Urizar, Lindley

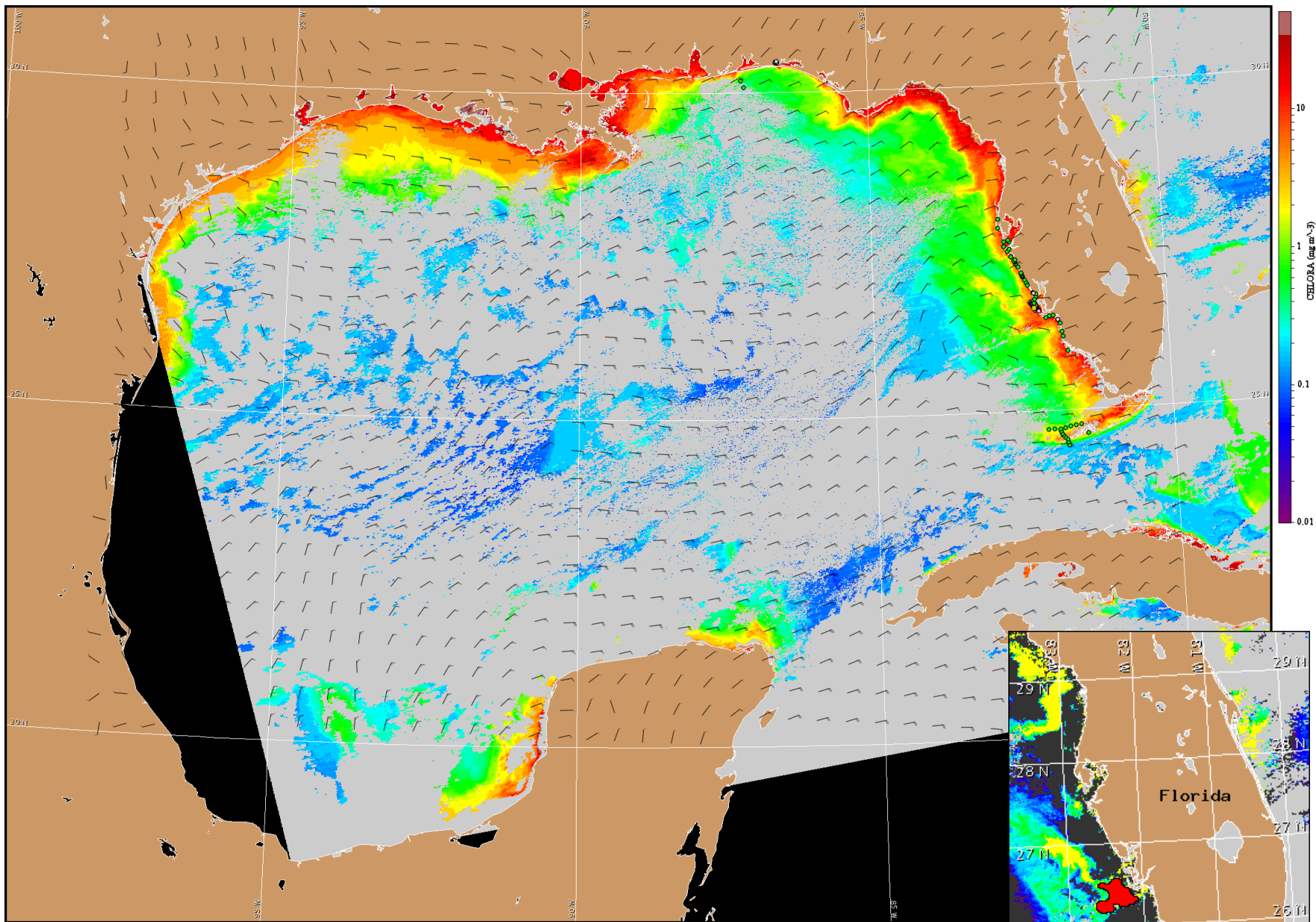
## Wind Analysis

SW Florida: Northeasterly winds (20 kn, 10 m/s) today. Easterly winds tonight through Friday (10-15 kn, 5-8 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 October 21, 2008 06Z with Cell concentration sampling data from October 10 to 16 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).