



Gulf of Mexico Harmful Algal Bloom Bulletin

Region: Southwest Florida

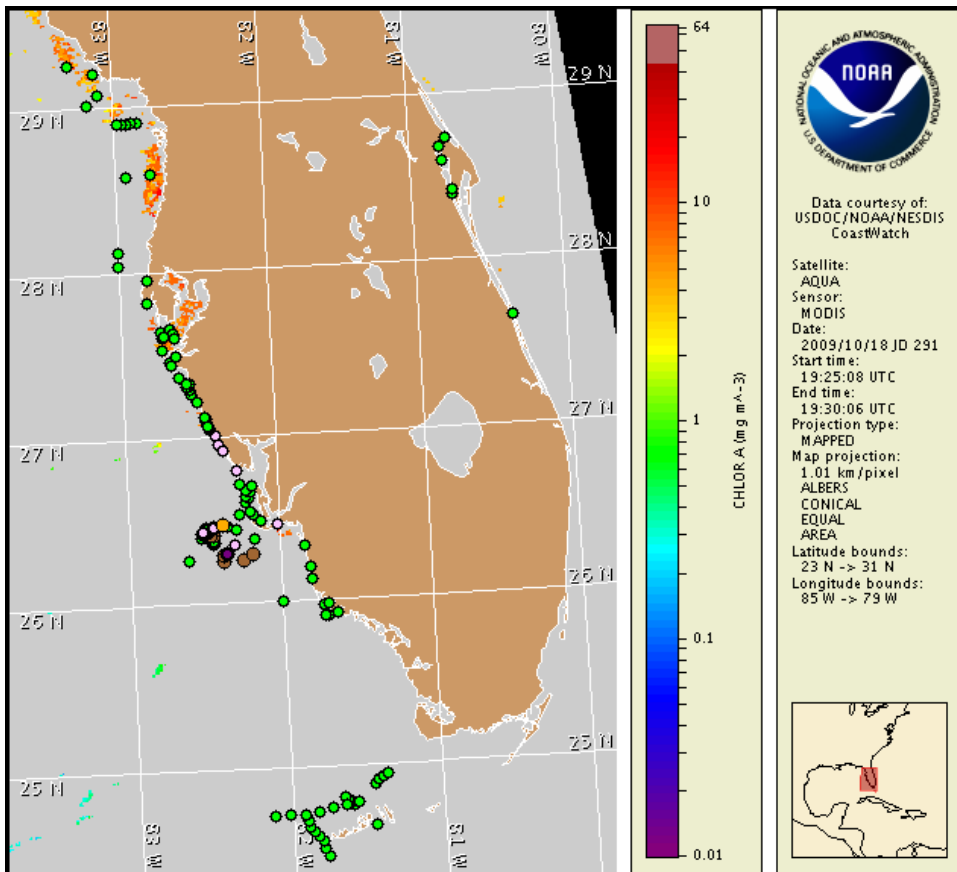
19 October 2009

NOAA Ocean Service

NOAA Satellites and Information Service

NOAA National Weather Service

Last bulletin: October 15, 2009



Satellite chlorophyll image with possible HAB areas shown by red polygon(s). Cell concentration sampling data from October 9 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

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 at the coast in Sarasota County. A harmful algal bloom has been identified offshore of Lee and Collier Counties. No impacts are expected alongshore of southwest Florida today through Wednesday, October 21.

Analysis

A harmful algal bloom due to *Karenia brevis* has been identified approximately 13-40 miles offshore Lee and northern Collier Counties, with background to medium concentrations (FWRI, 10/9-10). Background concentrations of *K. brevis* have been identified alongshore in Charlotte and Lee Counties and background to Very Low concentrations continue in Sarasota County (MML, FWRI, 10/13-14). Over the past few days, *K. brevis* was not detected alongshore of Pinellas, Hillsborough, Manatee, Collier and Monroe Counties and offshore of Pinellas and Monroe Counties (MML, FWRI, 10/16).

MODIS imagery is cloudy in the Gulf of Mexico and limits analysis. Imagery (10/15, not shown) indicates that the patchy, chlorophyll feature (3-10 $\mu\text{g/L}$) associated with the bloom offshore of Lee and northern Collier Counties may also extend offshore of Charlotte County (approximate northern extent: 26.7191°N, 82.5916°W, southern extent: 26.1170°N, 82.2640°W).

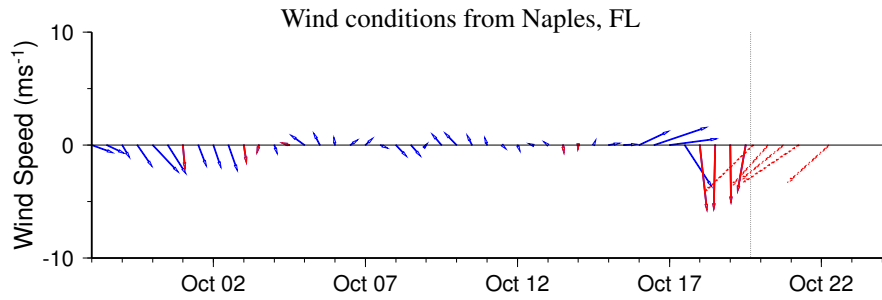
Due to strong northeasterly winds today through Wednesday, the potential for bloom formation at the coast will increase.

Due to technical difficulties SeaWiFS imagery is currently unavailable. MODIS imagery is displayed.

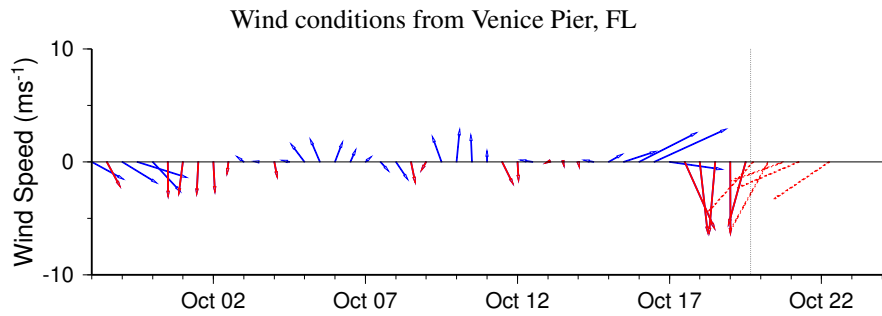
~Fenstermacher, Urizar

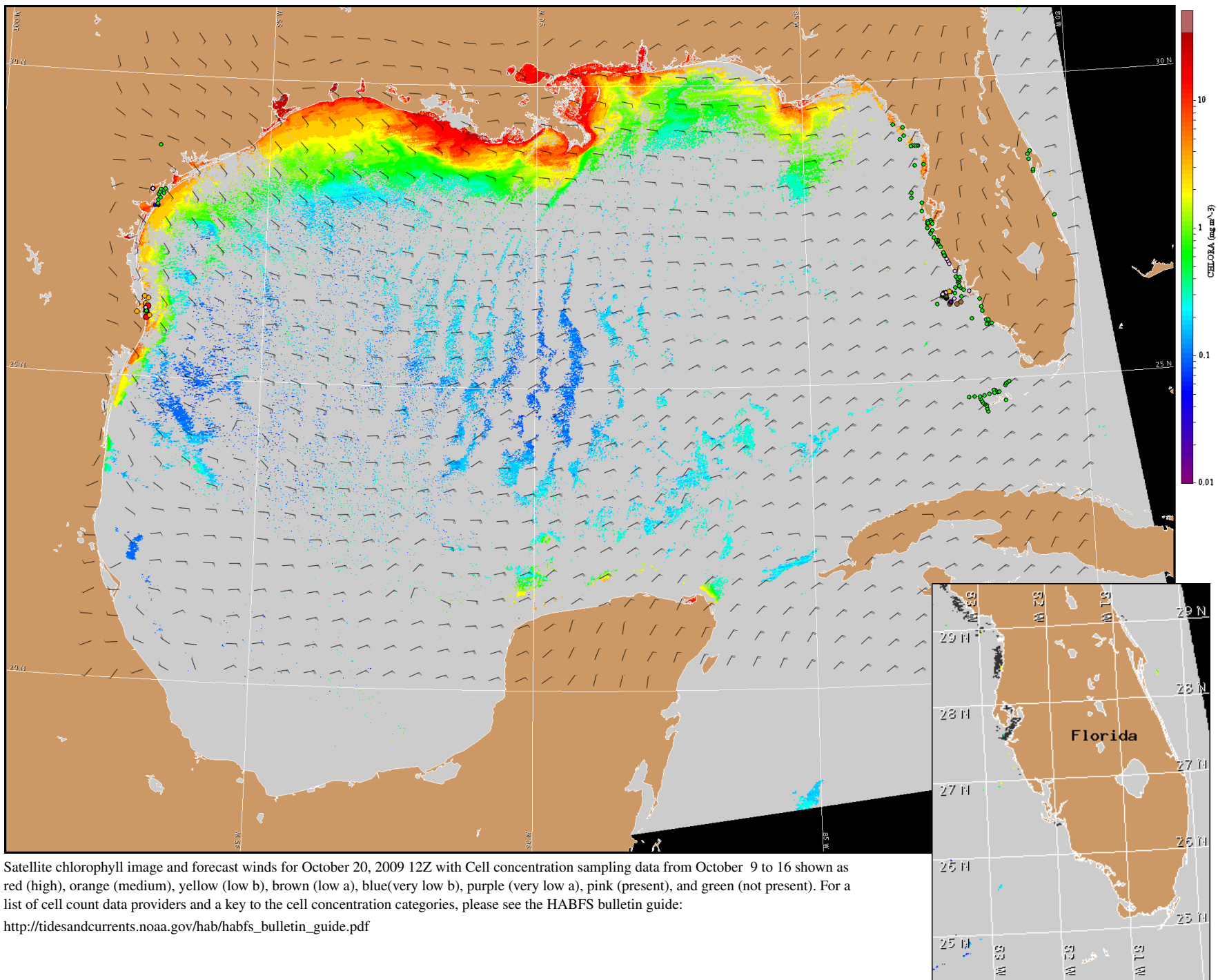
Wind Analysis

Strong northeasterlies through Wednesday (15 - 20 kn; 8-10 m/s) followed by easterlies Wednesday night and Thursday (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 20, 2009 12Z with Cell concentration sampling data from October 9 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).