



Gulf of Mexico Harmful Algal Bloom Bulletin

Region: Southwest Florida

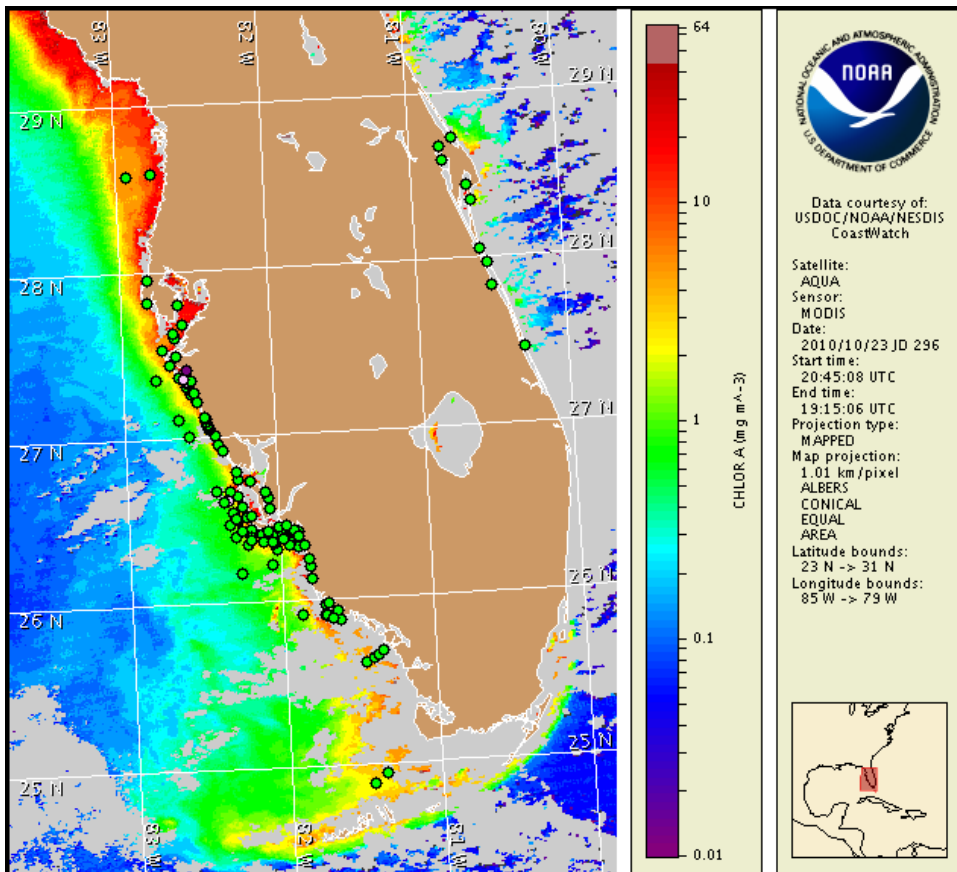
25 October 2010

NOAA Ocean Service

NOAA Satellites and Information Service

NOAA National Weather Service

Last bulletin: October 18, 2010



Satellite chlorophyll image with possible HAB areas shown by red polygon(s). Cell concentration sampling data from October 16 to 22 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

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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 alongshore southwest Florida, including the Florida Keys. Harmful algae have been identified alongshore southern Manatee County. No impacts are expected alongshore southwest Florida today through Sunday, Oct. 31.

Analysis

There is currently no indication of a harmful algal bloom alongshore southwest Florida, including the Florida Keys. Harmful algae have been identified in central Sarasota Bay in southern Manatee County ('very low'; FWRI 10/21). Background concentrations of *Karenia brevis* were also found in southern Sarasota Bay in northern Sarasota County (FWRI 10/21). An additional sample taken from offshore North Captiva Island in central Lee County indicates that *K. brevis* is present at depth. Additional samples taken from alongshore Pinellas to Monroe County at the surface and at depth all indicate that *K. brevis* is not present; although numerous other species of non-harmful algae continue to be reported (FWRI 10/17-21).

Satellite imagery over the past week indicates that chlorophyll levels have decreased throughout southwest Florida and the Florida Keys, including the region offshore Collier County where 'very low' concentrations of *K. brevis* were reported (FWRI 10/14). A patch of elevated to high (>3 $\mu\text{g/L}$) chlorophyll levels is located offshore central Lee County and centered at 26° 39' 18" N 82° 20' 25" W.

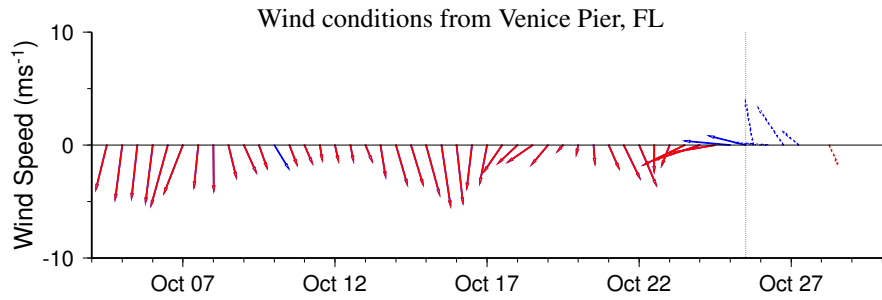
Additionally, a bloom of *Takayama cf. acrotrocha*, first reported on 9/9, in Collier County appears to be dissipating (FWRI; 10/18-19).

Upwelling favorable easterly to northerly winds are expected Wednesday night through Friday, increasing the potential for bloom formation at the coast.

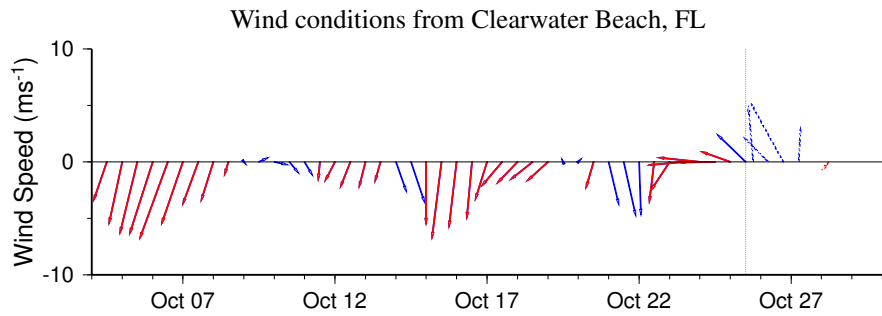
Urizar, Burrows

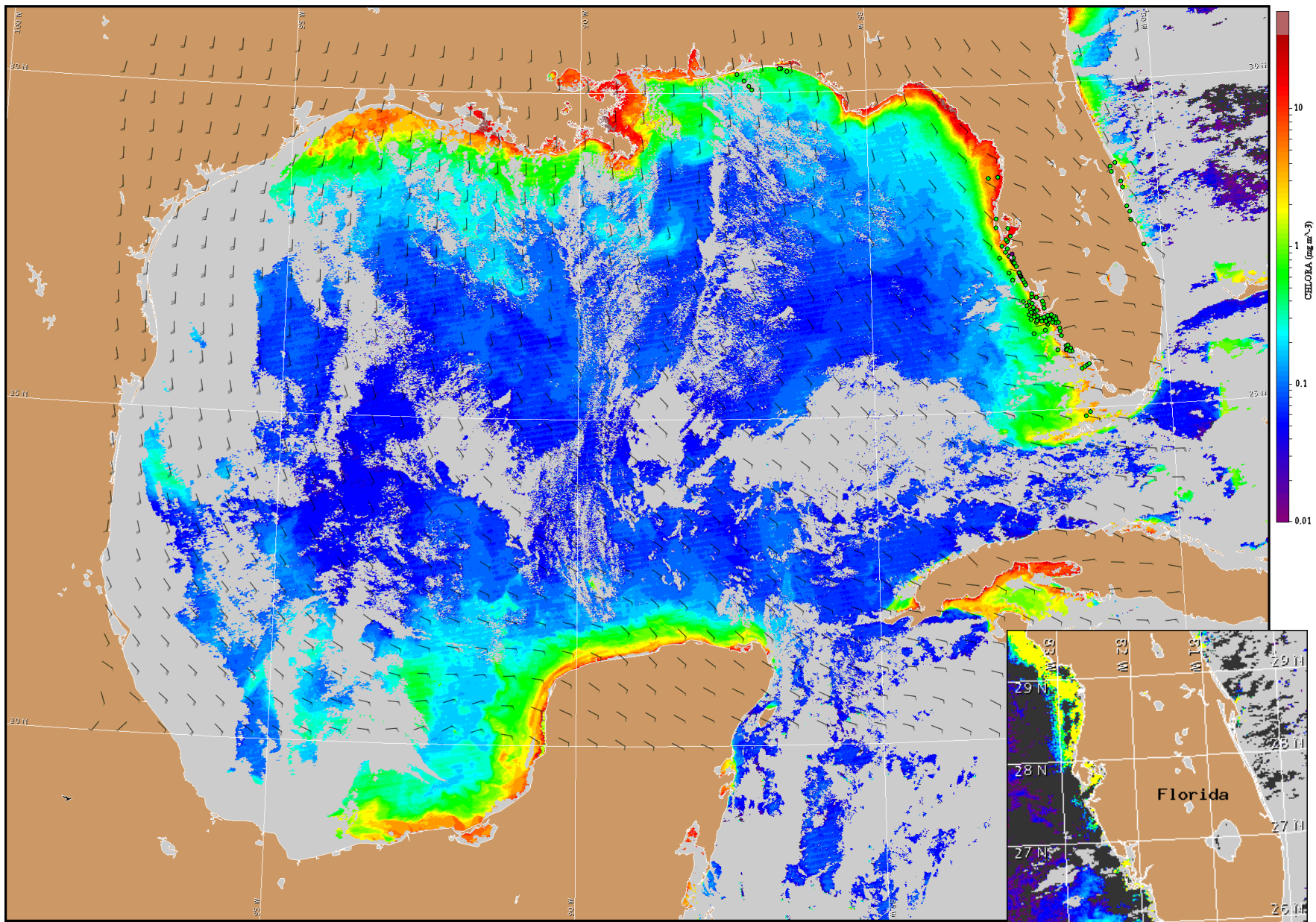
Wind Analysis

SW Florida: Southeasterly to southerly winds (10 kn, 5 m/s) today through Wednesday. Easterly winds (5 kn, 3 m/s) Wednesday night. Northerly winds Thursday becoming northeasterly Thursday night (10 kn). Northerly winds (15 kn, 8 m/s) Friday.



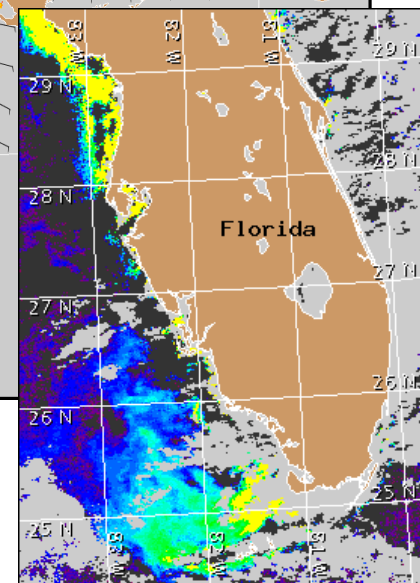
Wind speed and direction are averaged over 12 hours from buoy measurements. Length of line indicates speed; angle indicates direction. Red indicates that the wind direction favors upwelling near the coast. Values to the left of the dotted vertical line are measured values; values to the right are forecasts.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





Satellite chlorophyll image and forecast winds for October 26, 2010 06Z with Cell concentration sampling data from October 16 to 22 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).