



Gulf of Mexico Harmful Algal Bloom Bulletin

Region: Southwest Florida

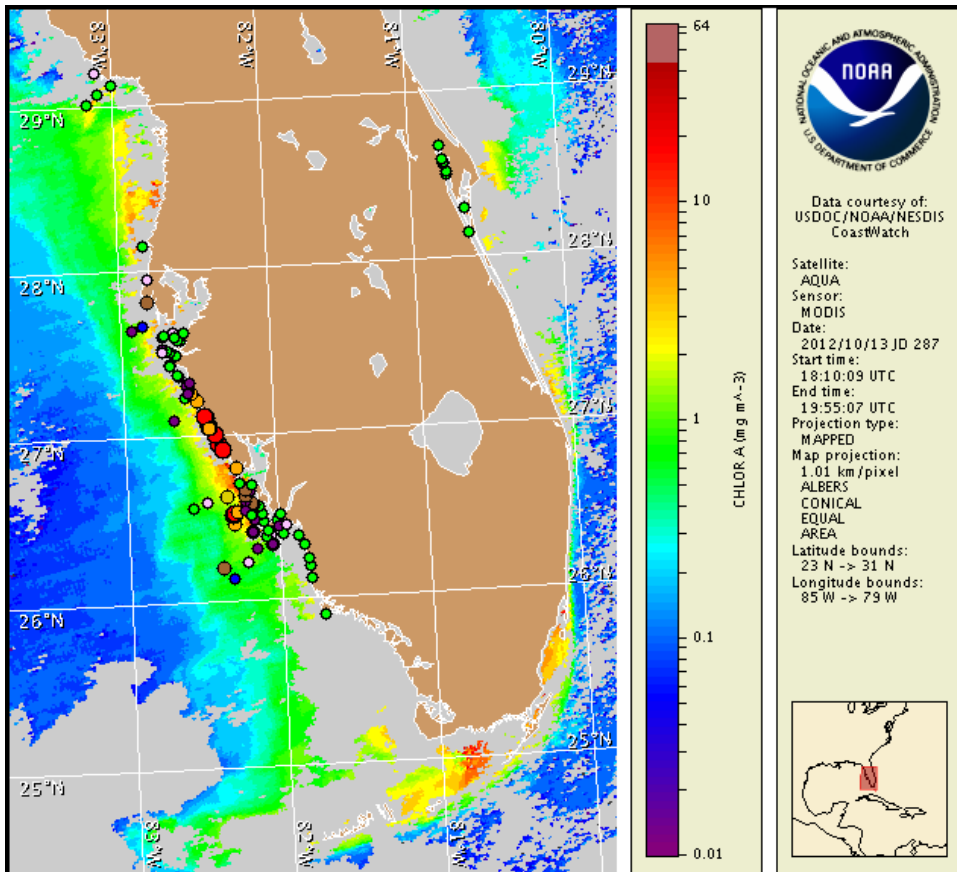
Monday, 15 October 2012

NOAA Ocean Service

NOAA Satellite and Information Service

NOAA National Weather Service

Last bulletin: Thursday, October 11, 2012



Satellite chlorophyll image with possible HAB areas shown by red polygon(s). Cell concentration sampling data from October 6 to 11 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 HAB-OFS bulletin guide:

http://tidesandcurrents.noaa.gov/hab/habfs_bulletin_guide.pdf

Detailed sample information can be obtained through the Florida FWC Fish and Wildlife Research Institute at:

<http://myfwc.com/research/redtide/events/status/statewide/>

To see previous bulletins and forecasts for other Harmful Algal Bloom Bulletin regions, visit at: <http://tidesandcurrents.noaa.gov/hab/bulletins.html>

Conditions Report

A harmful algal bloom of *Karenia brevis* (commonly known as Florida Red Tide) is present at the coast of Sarasota, Charlotte, in the Gasparilla Pass and northern Pine Island Sound regions of Charlotte and northern Lee, and offshore Lee and Collier counties. Bloom concentrations of *K. brevis* are present onshore southern Pinellas County, with harmful algae present onshore southern Manatee County. Today through Wednesday, patchy low respiratory impacts are possible in southern Sarasota and Charlotte counties, with patchy very low respiratory impacts possible in southern Pinellas and northern Sarasota counties. Patchy moderate respiratory impacts are possible in the Gasparilla Sound region today and Tuesday, with patchy low respiratory impacts possible on Wednesday. Patchy low respiratory impacts are possible in the Pine Island Sound region today and Tuesday, with patchy very low respiratory impacts possible on Wednesday. No impacts are expected elsewhere alongshore southwest Florida today through Wednesday, October 17. Over the past few days, reports of respiratory irritation, dead fish, and discolored water have been received in southern Sarasota County.

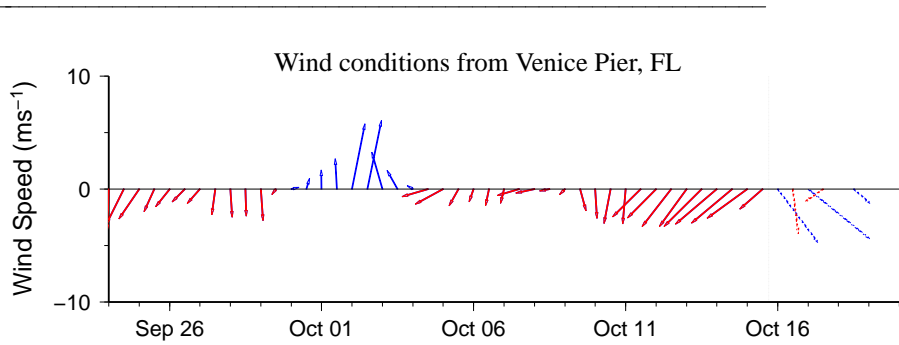
Analysis

A harmful algal bloom of *Karenia brevis* is present at the coast of Sarasota, Charlotte, in the Gasparilla Pass and northern Pine Island Sound regions of Charlotte and northern Lee, and offshore Lee and Collier counties. Bloom concentrations of *K. brevis* are present onshore southern Pinellas, with harmful algae present offshore southern Pinellas and alongshore Manatee County. One sample collected from alongshore Pinellas County identified a 'low a' concentration of *K. brevis* (FWRI; 10/8). Background to 'very low a' concentrations of *K. brevis* have been identified alongshore Manatee County (FWRI; 10/9-11). Samples collected alongshore Sarasota County on 10/8 indicated 'medium' to 'high' *K. brevis* concentrations along the coastline of southern Sarasota from North Jetty to Blind Pass, with the highest concentrations identified at Manasota Beach (FWRI). Samples collected in northern Sarasota County indicated 'very low a' to 'medium' *K. brevis* concentrations (FWRI; 10/8), with one 'very low a' sample collected approximately 13 miles offshore Venice Inlet (FWRI; 10/10). 'High' *K. brevis* concentrations have also been identified in northern Charlotte County, alongshore Englewood Beach, with 'medium' concentrations present at the northern end of Gasparilla Sound (FWRI; 10/9). Samples collected last week from along- and offshore Lee County, and within the Pine Island Sound region of Lee County, identified 'very low a' to 'high' *K. brevis* concentrations, with the highest concentrations present 5-8 miles offshore Captiva Island (FWRI; 10/9). No *K. brevis* was identified in samples collected alongshore Collier County last week (FWRI; 10/8).

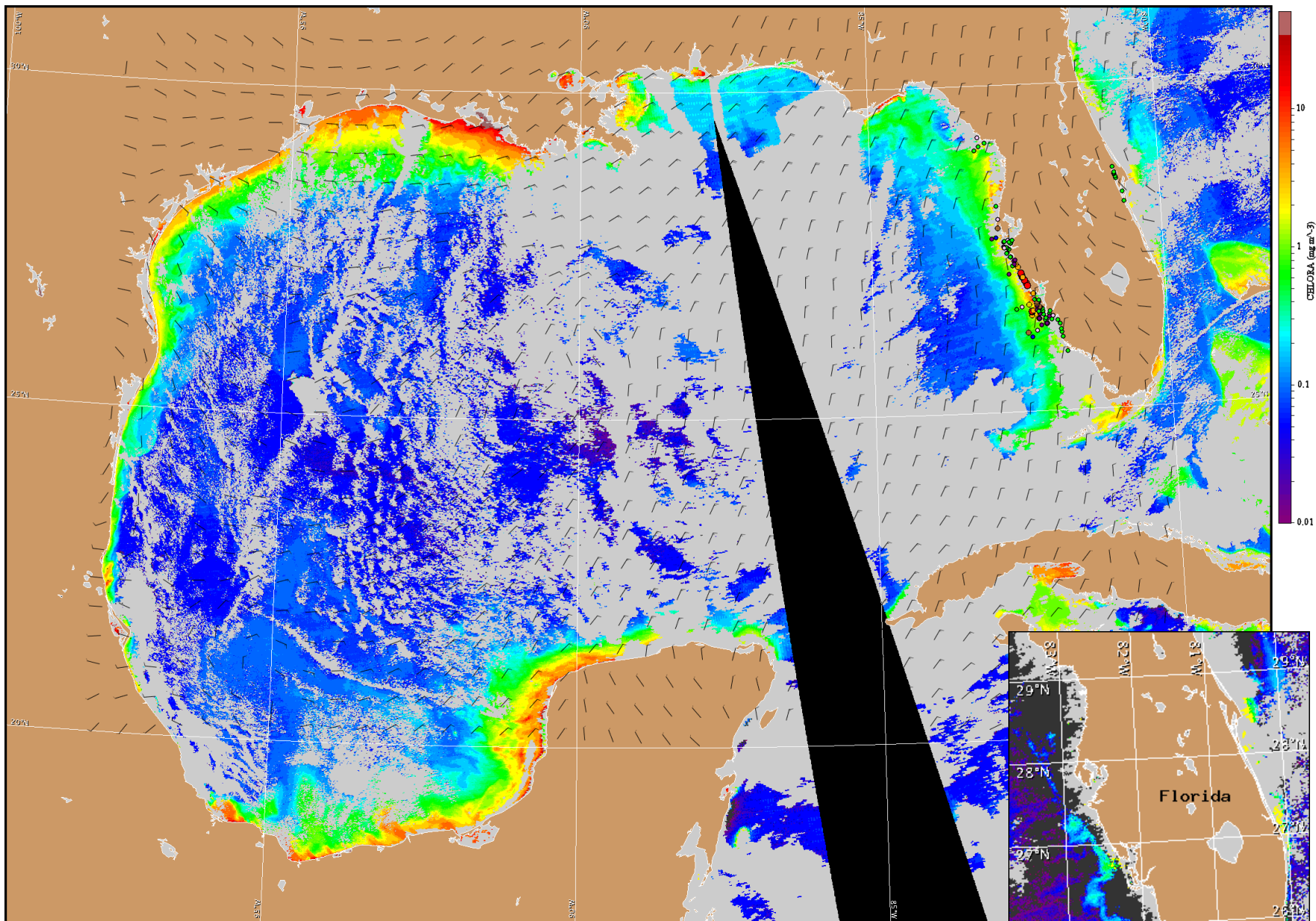
Over the past few days, satellite imagery has been partially cloudy alongshore the southwest Florida coastline, limiting analysis. Recent MODIS Aqua imagery (10/12, not shown) shows patches of elevated to very high chlorophyll (3 to >20 $\mu\text{g/L}$) extending from northern Pinellas to southern Collier County. In MODIS imagery from 10/13 (shown left), patches of elevated to very high chlorophyll (3 to >20 $\mu\text{g/L}$) also continue to be visible along- and offshore Charlotte and Lee Counties. Forecasted offshore winds will minimize the potential for respiratory impacts, except in the Gasparilla and Pine Island Sound regions of Charlotte and Lee Counties, and reduce the potential for further bloom formation at the coast through Wednesday, October 17. Davis, Derner

Wind Analysis

Southwest Florida: North winds (10-15 kn, 5-8 m/s) today through Tuesday. Northeast winds (10 kn, 5 m/s) Tuesday night becoming east winds (5 kn, 3 m/s) Wednesday. Northeast winds (5 kn) Wednesday night.



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 16, 2012 12Z with cell concentration sampling data from October 6 to 11 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 HAB-OFS 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).