



Gulf of Mexico Harmful Algal Bloom Bulletin

Region: Southwest Florida

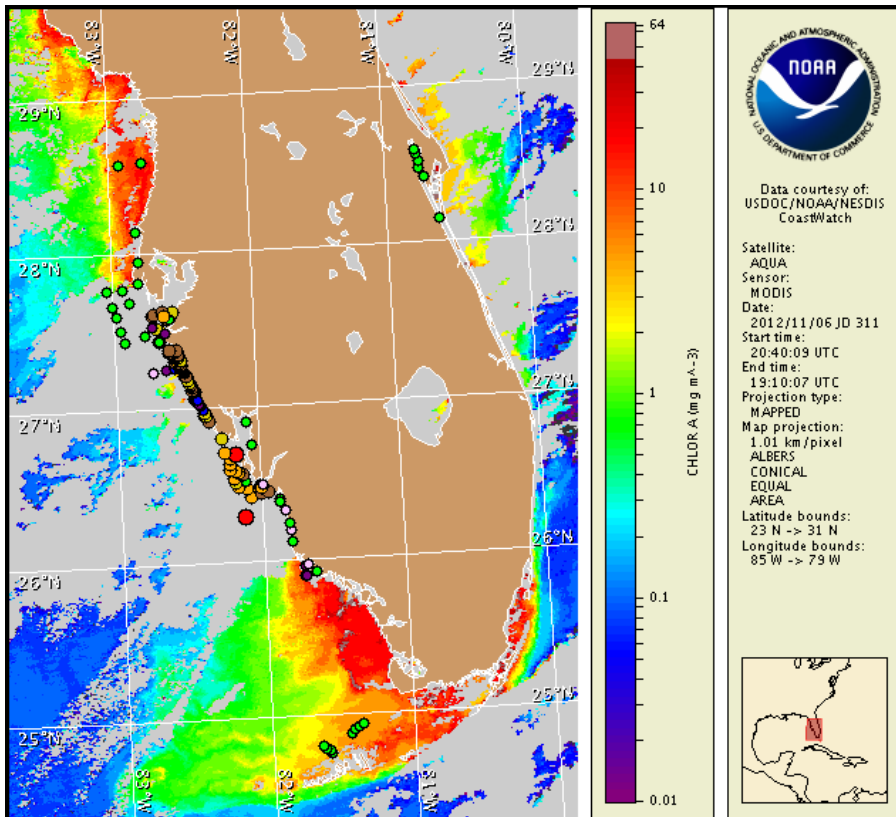
Thursday, 08 November 2012

NOAA National Ocean Service

NOAA Satellite and Information Service

NOAA National Weather Service

Last bulletin: Monday, November 5, 2012



Satellite chlorophyll image with possible *K. brevis* HAB areas shown by red polygon(s). Cell concentration sampling data from October 29 to November 6 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). Cell count data are provided by Florida FWC Fish and Wildlife Research Institute. For a list of sample 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 along- and offshore from southern Pinellas to southern Collier counties. Patchy high respiratory impacts are possible today through Monday in the southern Sarasota Bay region of Sarasota County and the Pine Island Sound region of Lee County. Patchy moderate respiratory impacts are possible today through Monday in the bay region of southern Pinellas and Manatee counties, the Gasparilla Sound region of Charlotte County, and the San Carlos Bay region of central Lee County. Patchy very low respiratory impacts are possible alongshore southern Pinellas, Manatee, Sarasota, Charlotte, and southern Lee counties. Over the past several days, respiratory irritation and dead fish have been reported in Sarasota and Lee counties. No impacts are expected elsewhere alongshore southwest Florida today through Tuesday, November 13.

Analysis

Due to the upcoming Federal Holiday, the next bulletin will be issued on Tuesday, November 13.

A harmful algal bloom of *Karenia brevis* is present along- and offshore southwest Florida from southern Pinellas to southern Collier counties. Recent samples collected within the lower Tampa Bay region of southern Pinellas and northern Manatee counties indicate *K. brevis* concentrations range from 'low a' to 'medium' (FWRI; 11/5-6). One samples collected offshore southern Pinellas and Manatee counties indicated *K. brevis* in background concentrations while 15 other samples indicated *K. brevis* was not present (FWRI; 11/1). Offshore samples collected from northern Sarasota to southern Lee County indicated *K. brevis* ranges between 'not present' and 'medium' (MML; 11/6). Samples collected alongshore Sarasota County indicated *K. brevis* concentrations range from 'not present' to 'low b' (FWRI, SCHD; 11/1-5), except in the southern Sarasota Bay region where one sample collected from Ringling Causeway contained 'high' concentrations of *K. brevis* (SCHD; 11/5). Samples collected alongshore Charlotte County indicated 'low a' concentrations of *K. brevis* while samples from the Gasparilla Sound region indicated 'low b' concentrations (FWRI; 11/5-6). One sample collected from the Sanibel Causeway in the San Carlos Bay region of central Lee County indicated 'medium' concentrations of *K. brevis* (FWRI; 11/2). In the Marco Island region of southern Collier County, samples indicated 'very low a' concentrations of *K. brevis* (FWRI; 11/5). Samples collected from the Florida Keys indicated *K. brevis* is not present (MML; 11/2)

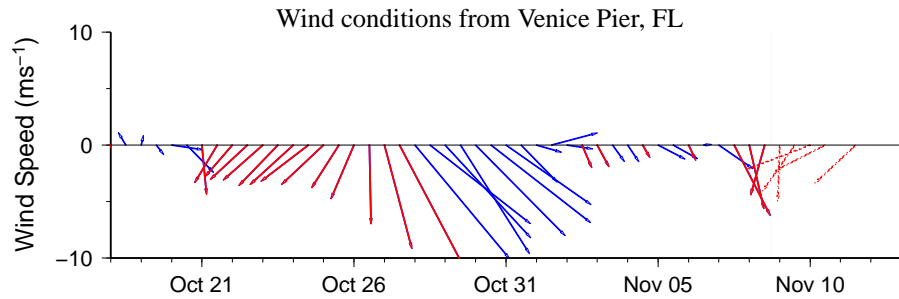
Recent MODIS Aqua imagery (11/6; shown left) is obscured by clouds from southern Pinellas to southern Collier County, limiting analysis. A patch of elevated to very high chlorophyll (5 to >20 $\mu\text{g/L}$) is visible stretching along- and offshore from the Marco Island region of southern Collier County to the Florida Keys. The patches with the highest chlorophyll are visible along- and offshore southern Collier and northern Monroe counties. Elevated chlorophyll is not indicative of the presence of *K. brevis* and may be due to the resuspension of benthic chlorophyll and sediments along the coast.

Forecasted offshore winds today through Monday may decrease the potential for respiratory impacts along the coast from southern Pinellas to Collier counties except in the bay regions.

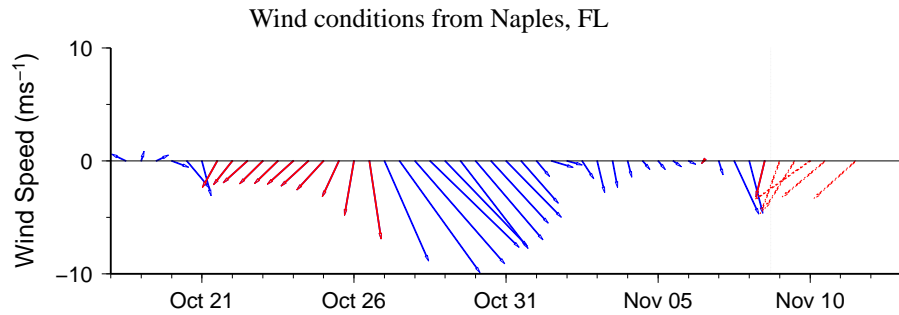
Wind Analysis

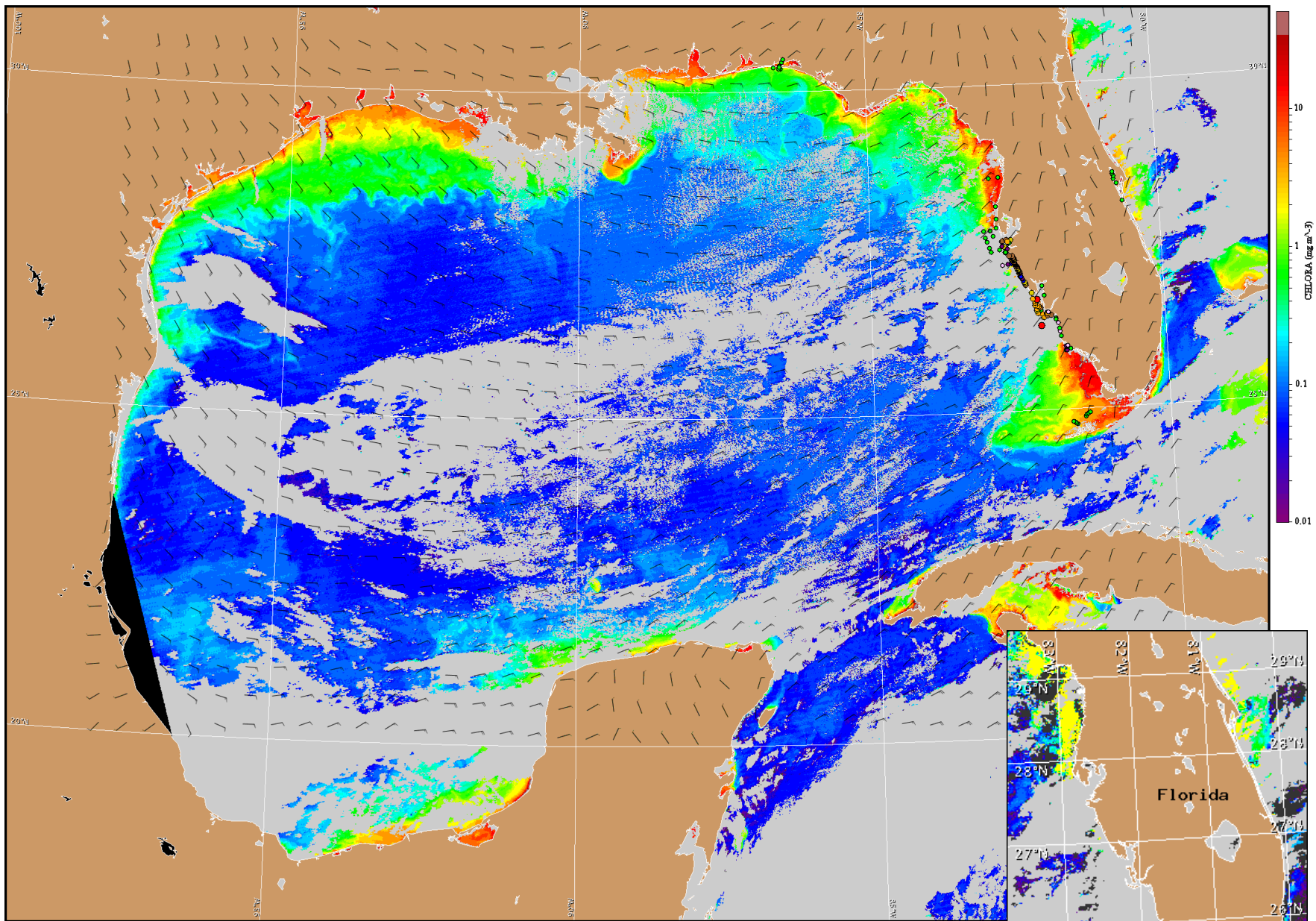
Venice: North winds (10-15 kn, 5-8 m/s) today becoming northeast (10-15 kn) tonight through Friday. East winds (10-15 kn) Saturday through Monday.

Naples: North winds (13-18 kn, 7-9 m/s) today becoming north northeast winds (14-19 kn, 7-10 m/s) tonight. Northeast winds (15-22 kn, 8-11 m/s) Friday. East winds (16-21 kn, 8-11 m/s) Saturday through Monday.



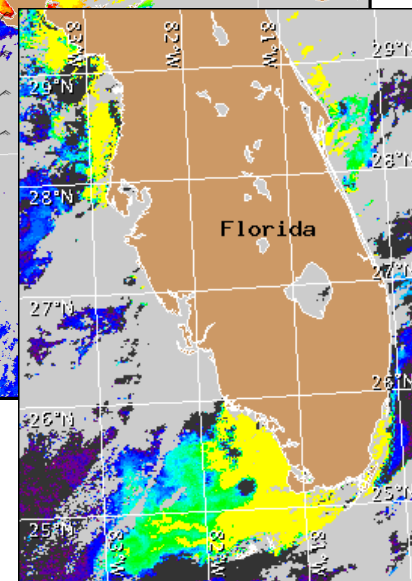
Wind speed and direction are averaged over 12 hours from buoy measurements. Length of line indicates speed; angle indicates direction. Red indicates that the wind direction favors upwelling near the coast. Values to the left of the dotted vertical line are measured values; values to the right are forecasts.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





Satellite chlorophyll image and forecast winds for November 9, 2012 12Z with cell concentration sampling data from October 29 to November 6 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). Cell count data are provided by Florida FWC Fish and Wildlife Research Institute. For a list of sample 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).