



Gulf of Mexico Harmful Algal Bloom Bulletin

Region: Southwest Florida

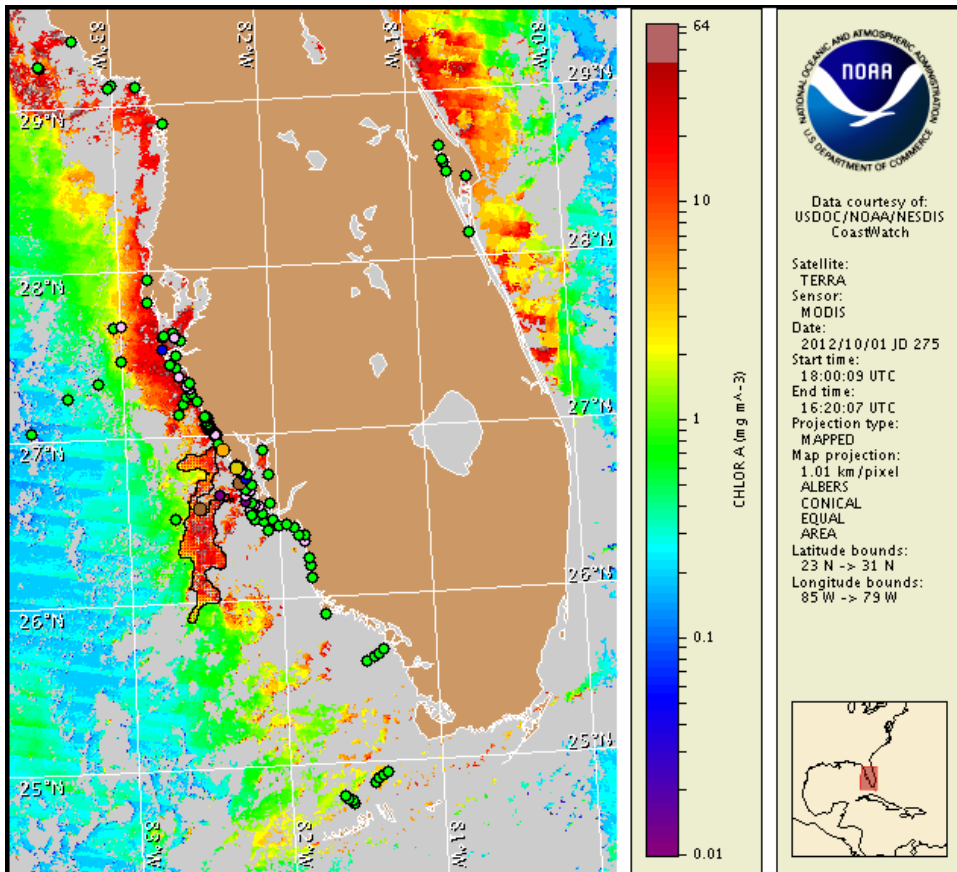
Thursday, 04 October 2012

NOAA Ocean Service

NOAA Satellite and Information Service

NOAA National Weather Service

Last bulletin: Monday, October 1, 2012



Satellite chlorophyll image with possible HAB areas shown by red polygon(s). Cell concentration sampling data from September 24 to October 3 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) has been identified at the coast of southern Sarasota, Charlotte, and northern Lee counties. The harmful algae *Karenia brevis* have been identified onshore southern Manatee, northern Sarasota, and in the Pine Island Sound region of northern Lee County. In southern Sarasota, Charlotte and northern Lee counties, patchy very low respiratory impacts are possible today through Monday. In southern Manatee County, no respiratory impacts are expected today through Monday. No impacts are expected elsewhere alongshore southwest Florida today, October 3. Over the past few days, reports have been received of respiratory irritation and discolored water in southern Sarasota County. Reports of dead fish have also been received from the following county regions: offshore Pinellas, alongshore Sarasota, alongshore southern Charlotte, and along- and offshore Lee. No impacts are expected elsewhere alongshore southwest Florida today through Monday, October 8.

Analysis

Patchy bloom concentrations of *Karenia brevis* (commonly known as Florida Red Tide) have been identified onshore and offshore Charlotte and northern Lee County. The harmful algae *K. brevis* have been identified onshore southern Manatee, southern Sarasota, and in the Pine Island Sound region of northern Lee County. Recent samples taken from alongshore of Charlotte and Lee County and in the Pine Island Sound region of northern Lee County ranged from background to medium (9/29-10/2, FWRI, SCHD). Samples ranged from background to very low onshore of southern Manatee and background onshore and offshore of Sarasota (9/29-10/2, FWRI, SCHD).

Satellite imagery has been cloudy over the last few days limiting analysis. MODIS TERRA imagery (10/1, shown left) continues to indicate several distinct areas of elevated to high levels of chlorophyll alongshore and out to 15 miles offshore of Pinellas to northern Sarasota Counties ($>10 \mu\text{g/L}$) tapering into southern Sarasota, alongshore and up to 35 miles offshore of Charlotte and Lee Counties ($>10 \mu\text{g/L}$) and offshore of Collier and Monroe Counties and north of the Keys, as highlighted in the image on left and on the inset of page 3 of this bulletin.

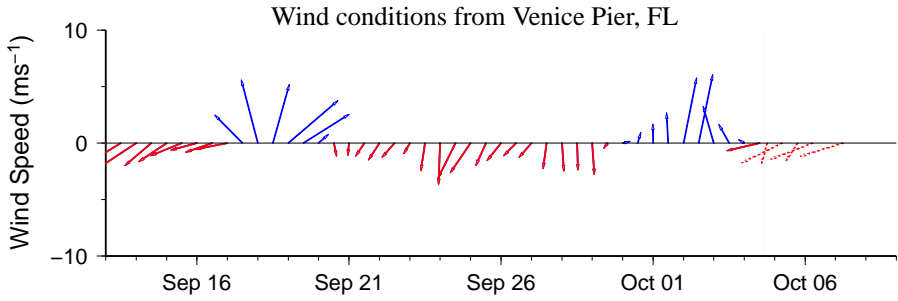
Offshore winds will minimize respiratory impacts through Monday, except in the bay regions of Charlotte and Lee Counties, however consistent upwelling conditions may also intensify bloom concentrations.

****Due to the upcoming Federal Holiday, the next bulletin will be issued on Tuesday, October 9.****

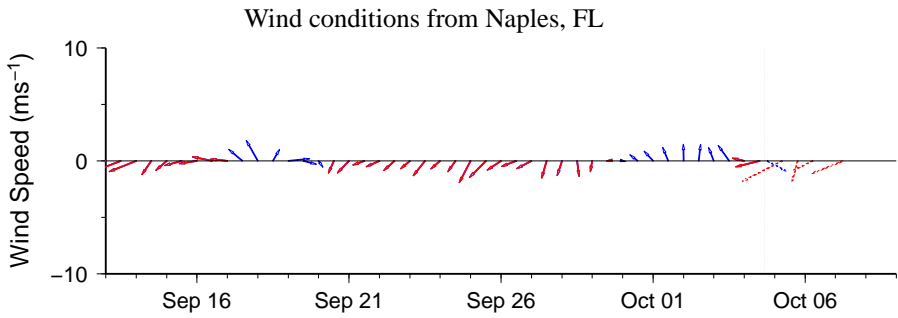
~Fenstermacher, Kavanaugh

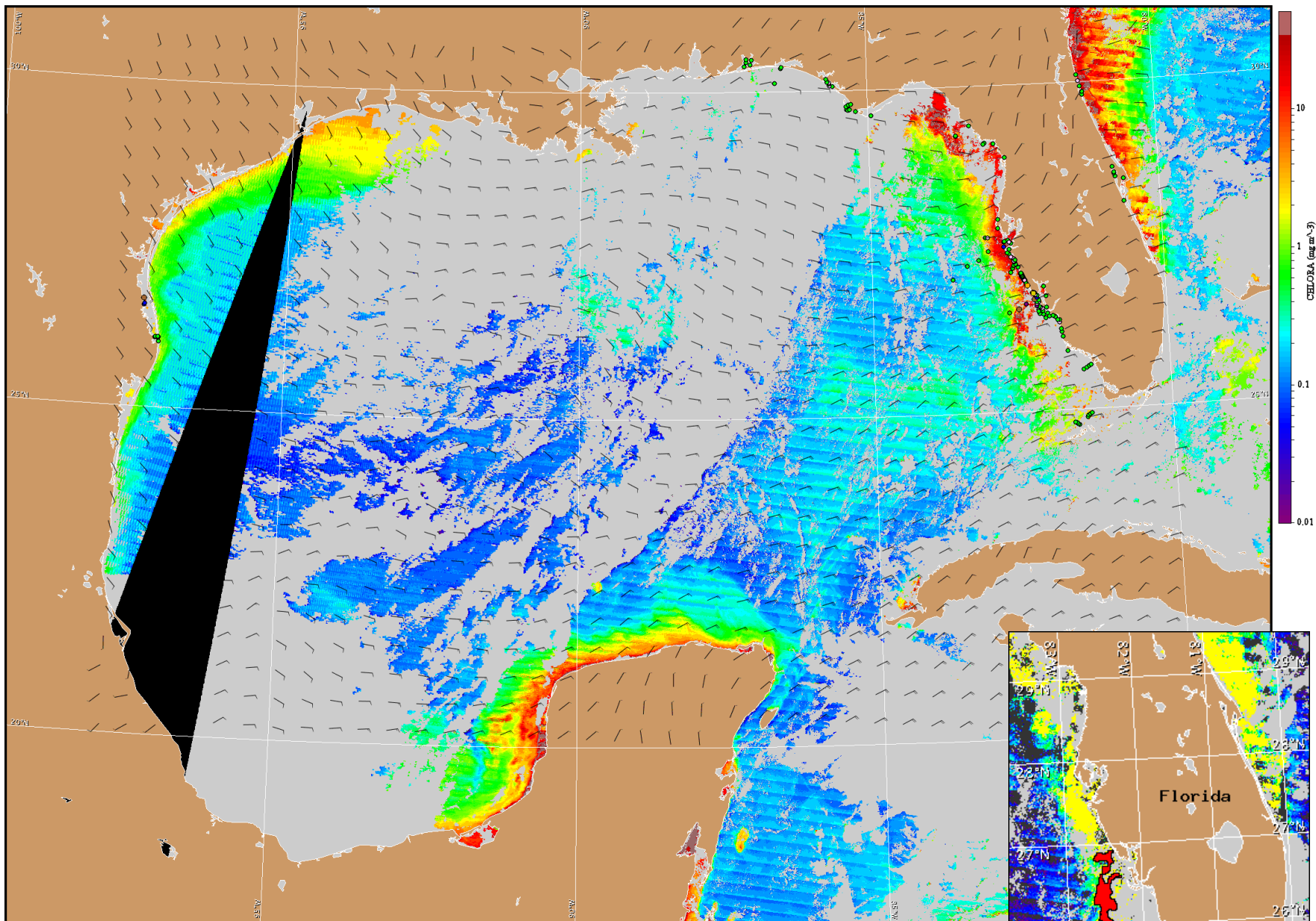
Wind Analysis

SWFL: Northeast to east winds today through Friday becoming north winds Friday afternoon (5-10 kn; 3-5 m/s). Northeast to east winds Friday night through Saturday night (5-10 kn). North to northeast winds Sunday through Monday (5-10 kn).



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 5, 2012 06Z with cell concentration sampling data from September 24 to October 3 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).