



Gulf of Mexico Harmful Algal Bloom Bulletin

Region: Southwest Florida

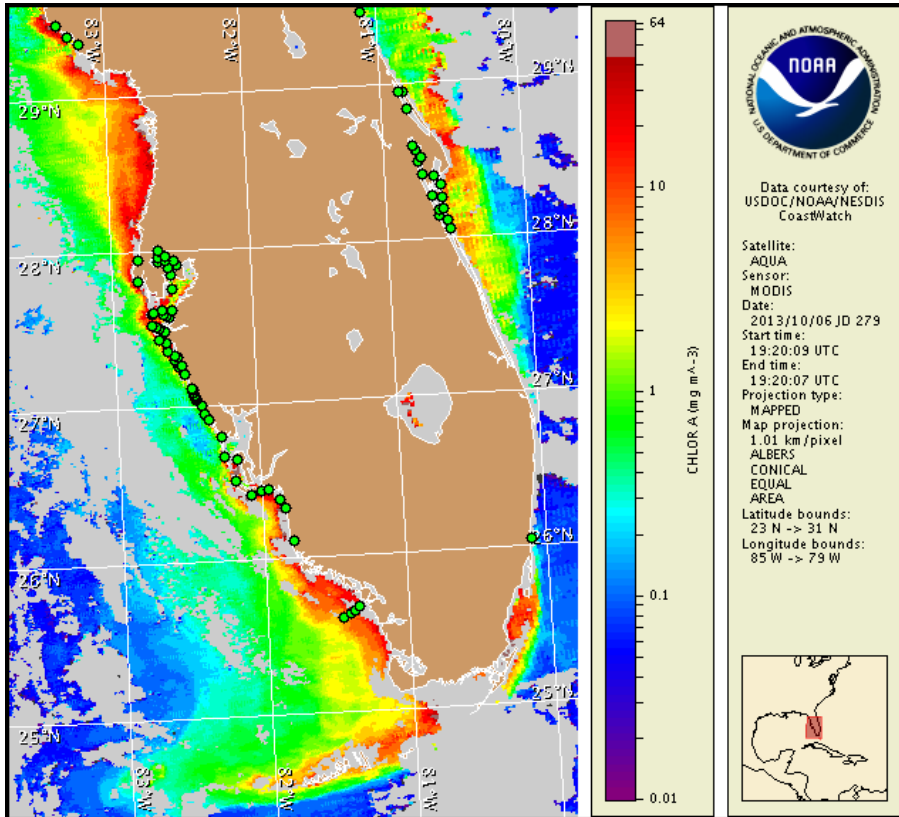
Monday, 07 October 2013

NOAA National Ocean Service

NOAA Satellite and Information Service

NOAA National Weather Service

Last bulletin: Monday, September 30, 2013



Satellite chlorophyll image with possible *K. brevis* HAB areas shown by red polygon(s), when applicable. Points represent cell concentration sampling data from September 27 to October 3: 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 Fish and Wildlife Conservation Commission (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 FWC Fish and Wildlife Research Institute at:

<http://myfwc.com/redtidestatus>

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

Conditions Report

Karenia brevis (commonly known as Florida red tide) ranges from not present to very low concentrations along the coast of southwest Florida, including the Florida Keys. No respiratory irritation is expected Monday, October 7 through Tuesday, October 15. Check http://tidesandcurrents.noaa.gov/hab/beach_conditions.html for recent, local observations.

Analysis

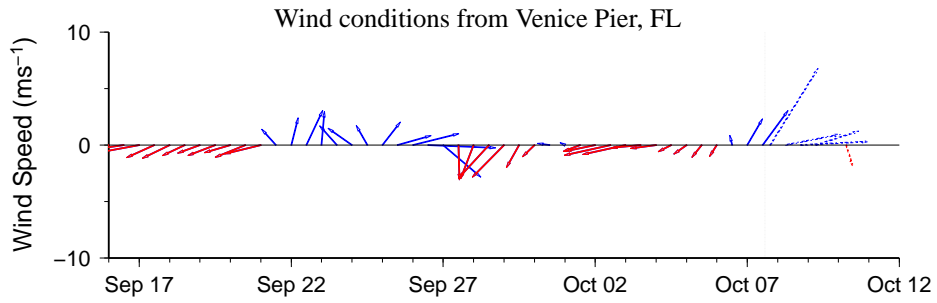
****Due to the upcoming federal holiday, the next bulletin will be issued on Tuesday, October 15.****

Last week, one background concentration and two very low concentrations of *Karenia brevis* were identified in samples collected inshore Sarasota Bay at Bay Dock and New Pass, respectively (FWRI, MML; 10/2, 10/4). All other samples collected alongshore southwest Florida from Pinellas to Collier County indicate *K. brevis* is not present (FWRI, SCHD, MML; 9/30-10/4). No dead fish or respiratory irritation associated with *K. brevis* have been reported in the past week (FWRI, MML; 9/30-10/6).

In recent MODIS Aqua imagery (10/6, shown left), patches of elevated to very high chlorophyll (3 to >20 $\mu\text{g/L}$) are visible along- and offshore the coast of southwest Florida from Pinellas to Manatee County, and from central Lee to Monroe County. Elevated chlorophyll at the coast is likely the result of mixed non-harmful algal blooms that continue to be reported in many southwest Florida counties.

Wind conditions are unfavorable for upwelling today through Friday, decreasing the potential for *K. brevis* bloom formation at the coast this week.

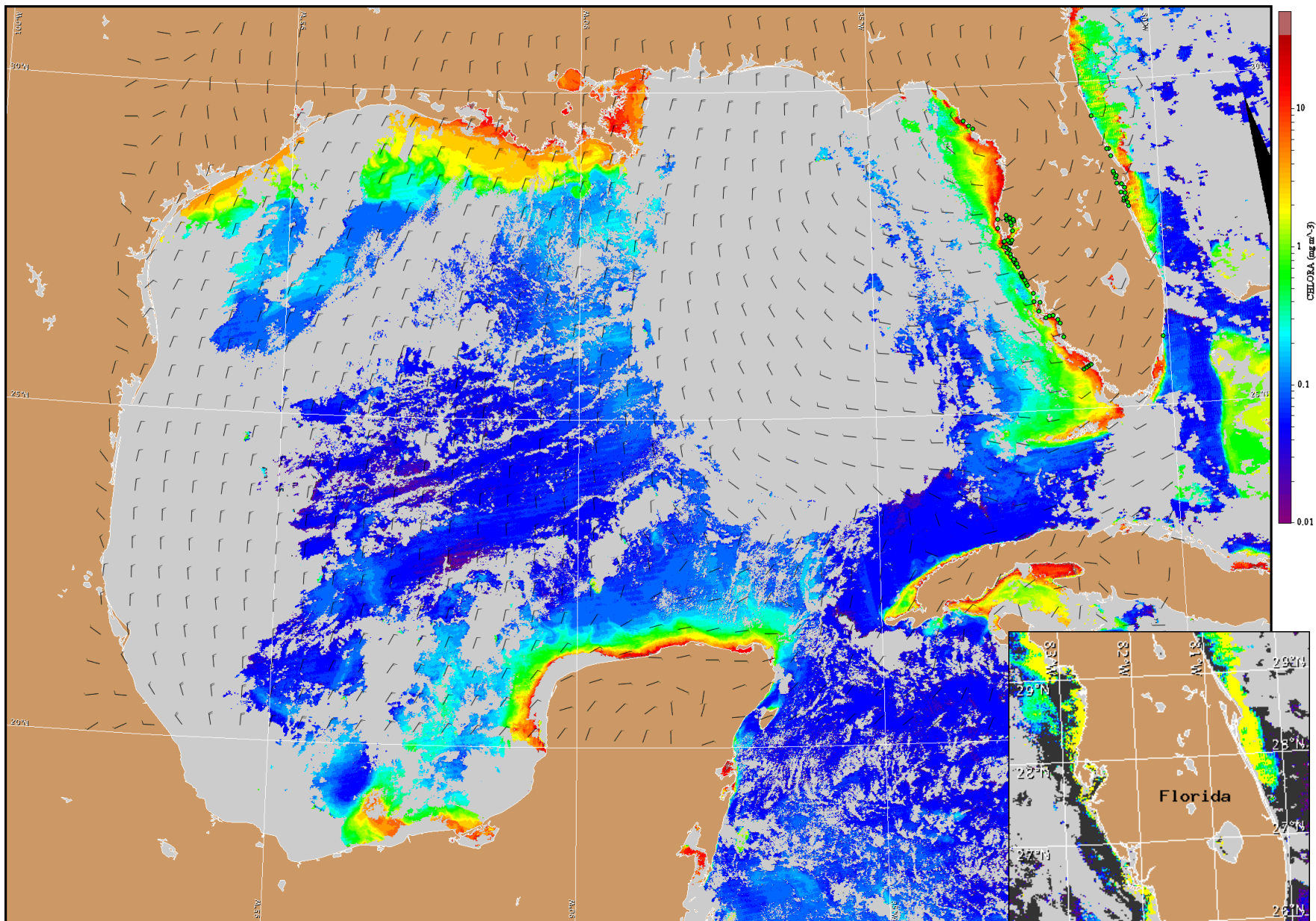
Davis, Kavanaugh



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).

Wind Analysis

Southwest Florida: Southwest winds (15-20kn, 8-10m/s) today becoming west winds (15kn, 8m/s) tonight. West winds (10kn, 5m/s) Tuesday becoming northwest winds (10kn) Tuesday evening. Northwest winds (10kn) Wednesday becoming north winds (5kn, 3m/s) after midnight. Northeast to north winds (10kn) Thursday becoming east winds after midnight. Northeast to north winds (5-10kn, 3-5m/s) Friday.



Satellite chlorophyll image and forecast winds for October 8, 2013 06Z with points representing cell concentration sampling data from September 27 to October 3: 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 Fish and Wildlife Conservation Commission (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).