



Gulf of Mexico Harmful Algal Bloom Bulletin

Region: Southwest Florida

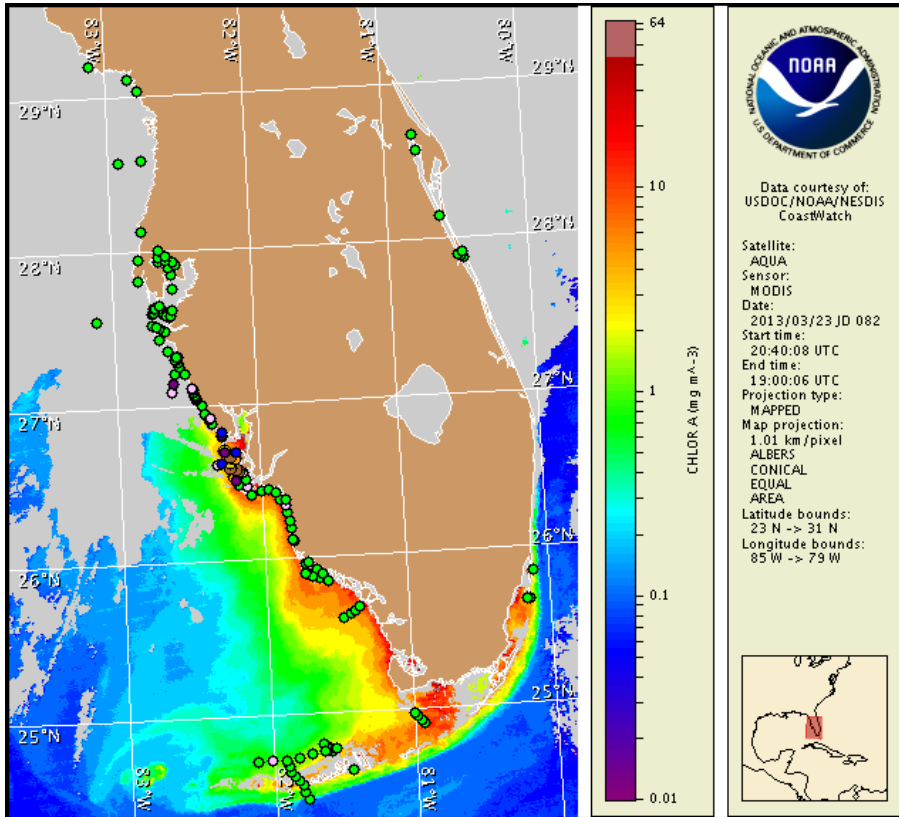
Monday, 25 March 2013

NOAA National Ocean Service

NOAA Satellite and Information Service

NOAA National Weather Service

Last bulletin: Thursday, March 21, 2013



Satellite chlorophyll image with possible *K. brevis* HAB areas shown by red polygon(s). Cell concentration sampling data from March 15 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). 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

Background to medium concentrations of *Karenia brevis* (commonly known as Florida Red Tide) are present along- and offshore southwest Florida, as well as offshore the lower Florida Keys. In the bay regions of Charlotte County, patchy very low respiratory impacts are possible today through Thursday. In the bay regions of northern and central Lee County, patchy moderate respiratory impacts are possible today through Thursday. No respiratory impacts are expected elsewhere alongshore southwest Florida, including the Florida Keys, today through Thursday, March 28.

Analysis

In southwest Florida, *Karenia brevis* concentrations range from 'background' to 'medium' along- and offshore from Charlotte to southern Lee counties, with 'background' concentrations also identified last week alongshore Sarasota and Collier County and offshore the lower Florida Keys. Samples collected in the bay regions of both southern Pinellas and northern Sarasota County continue to indicate *K. brevis* is 'not present' (FWRI; 3/21-22). Recent samples indicate that *K. brevis* concentrations range from 'not present' to 'very low b' along- and offshore northern and central Lee County (FWRI; 3/21). Alongshore and in the bay regions of southern Lee County, samples indicate 'not present' to 'background' concentrations of *K. brevis* (FWRI; 3/21). Alongshore and in the bay regions of Collier County, samples indicate that *K. brevis* is 'not present' (FWRI, CCPCPD; 3/21). Samples collected along- and offshore Pavilion Key, in northern Monroe County, and Oxfoot Key, north of the Middle Keys, indicate that *K. brevis* is 'not present' (MML; 3/21-25).

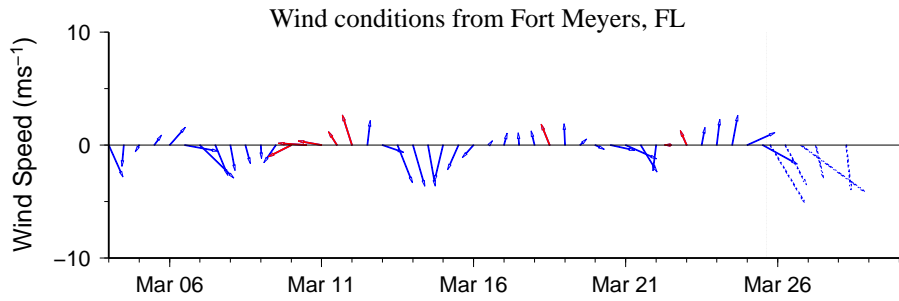
In recent MODIS Aqua imagery (3/23; shown left) the southwest Florida coast is partially obscured by clouds north of Charlotte County, limiting analysis. Elevated to very high chlorophyll (5 to >20 $\mu\text{g/L}$) is visible alongshore and in the bay regions of southern Charlotte and Lee County. A patch of elevated to high chlorophyll (3 to 15 $\mu\text{g/L}$) remains visible extending approximately 15 miles southwest of the Marco Island region of central Collier County (to 25°46'22"N 81°52'17"W), with patches also visible along- and offshore northern Monroe County. These areas will continue to be monitored. Patches of elevated to high chlorophyll (3 to 15 $\mu\text{g/L}$) are also visible along- and offshore the gulfside of the Middle Keys.

Forecasted winds today through Thursday may promote southerly transport of the bloom.

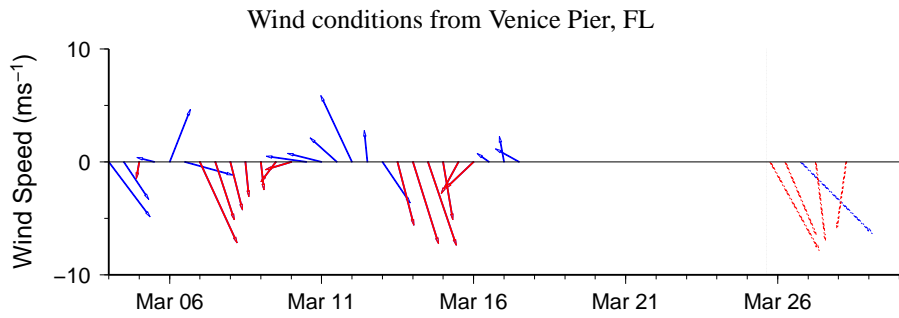
Kavanaugh, Davis

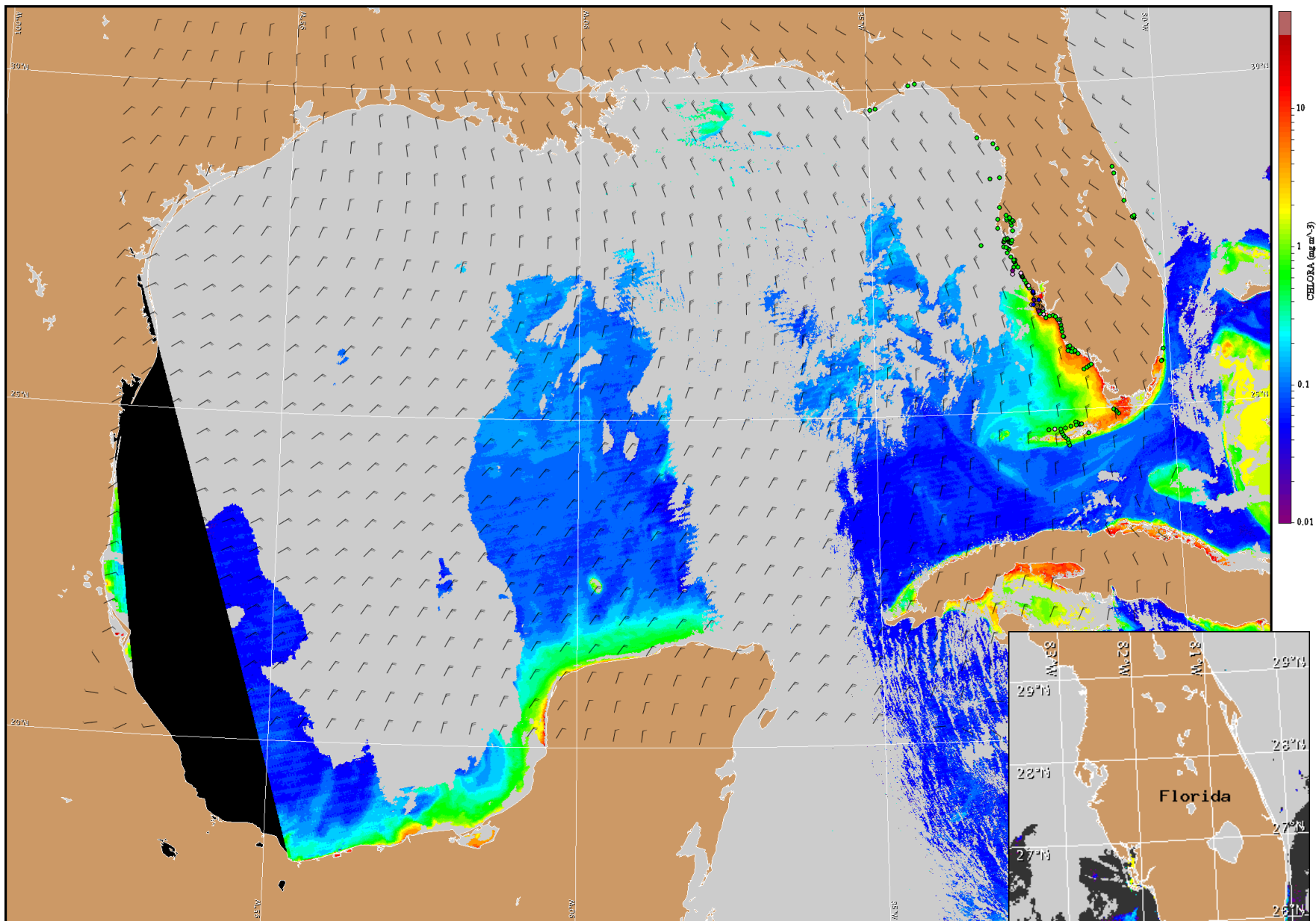
Wind Analysis

Sarasota to Lee counties: North winds (15-25 kn, 8-13 m/s) today through Tuesday night diminishing to (10-15 kn, 5-8 m/s) Wednesday through Thursday. Northeast winds (15 kn, 8 m/s) Thursday night.



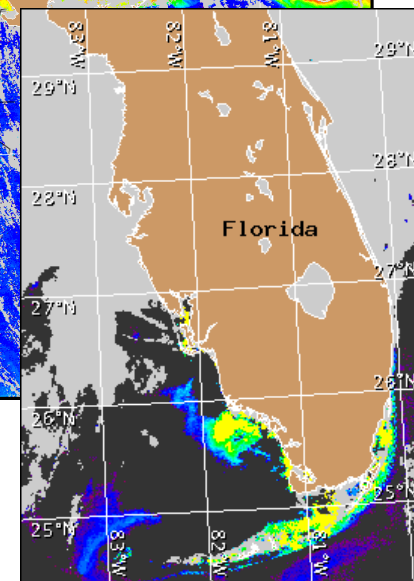
Wind speed and direction are averaged over 12 hours from buoy measurements. Length of line indicates speed; angle indicates direction. Red indicates that the wind direction favors upwelling near the coast. Values to the left of the dotted vertical line are measured values; values to the right are forecasts.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





Satellite chlorophyll image and forecast winds for March 26, 2013 06Z with cell concentration sampling data from March 15 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). 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).