

Gulf of Mexico Harmful Algal Bloom Bulletin

Region: Southwest Florida

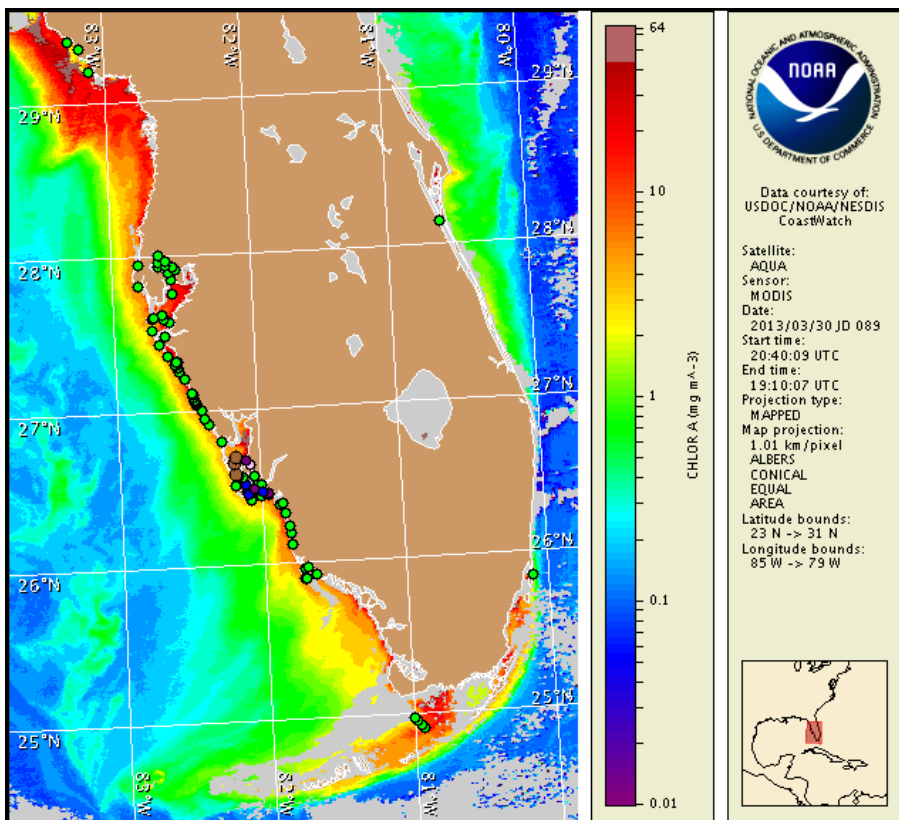
Monday, 01 April 2013

NOAA National Ocean Service

NOAA Satellite and Information Service

NOAA National Weather Service

Last bulletin: Thursday, March 28, 2013



Satellite chlorophyll image with possible *K. brevis* HAB areas shown by red polygon(s). Cell concentration sampling data from March 22 to 29 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 low concentrations of *Karenia brevis* (commonly known as Florida Red Tide) are present in southwest Florida, in the bay regions of northern and central Lee County. In the bay regions of northern and central Lee County, patchy very low respiratory impacts are possible today through Thursday. No respiratory impacts are expected elsewhere alongshore southwest Florida, including the Florida Keys, today through Thursday, April 4. Over the past few days, reports of dead fish were received from Lee County.

Analysis

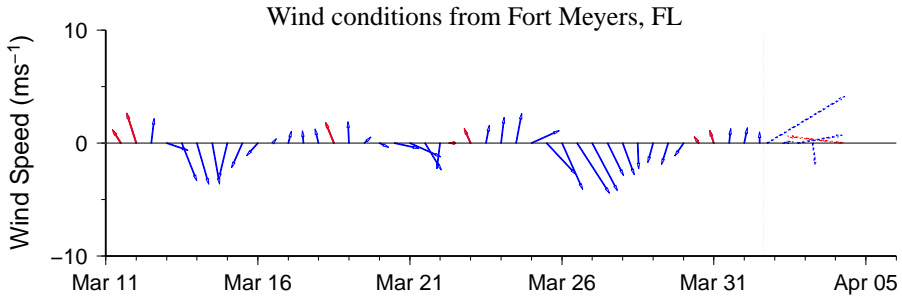
In southwest Florida, sampling over the previous week now indicates that *Karenia brevis* concentrations are no longer present alongshore southwest Florida, but concentrations of *K. brevis* remain present in the Pine Island Sound region of Lee County. Alongshore and in the bay regions of Sarasota County, recent sampling indicates that *K. brevis* is 'not present' (FWRI, MML; 3/25-3/29). Recent sampling in northern and central Pine Island Sound indicate *K. brevis* concentrations between 'not present' and 'low a', with the highest concentration collected from Captiva Rocks (FWRI; 3/27-3/28). Over the past several days there have been no reports of respiratory irritation (MML; 3/28-4/1); however, one fish kill was reported near the Tween Waters Resort on Captiva Island (FWRI; 3/29).

Recent MODIS Aqua imagery (3/30, shown left) indicates that elevated chlorophyll (3 to 10 $\mu\text{g/L}$) remains present alongshore southwest Florida from southern Charlotte to Monroe County, including in the Pine Island Sound region. In the Florida Keys, elevated to very high chlorophyll (5 to >20 $\mu\text{g/L}$) is visible offshore the gulfside of the middle Keys. Elevated to high chlorophyll (5 to 16 $\mu\text{g/L}$) is visible alongshore Sarasota and northern Charlotte County, but it is not indicative of the presence of *K. brevis*. Variable winds forecasted today through Thursday, April 4, may reduce the potential for transport of *K. brevis* concentrations.

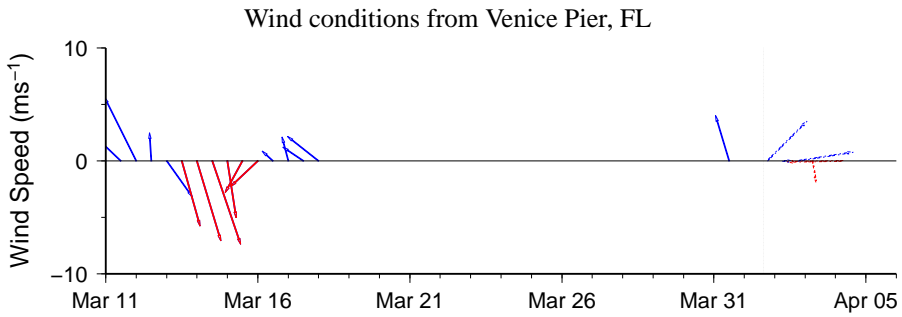
Davis, Kavanaugh

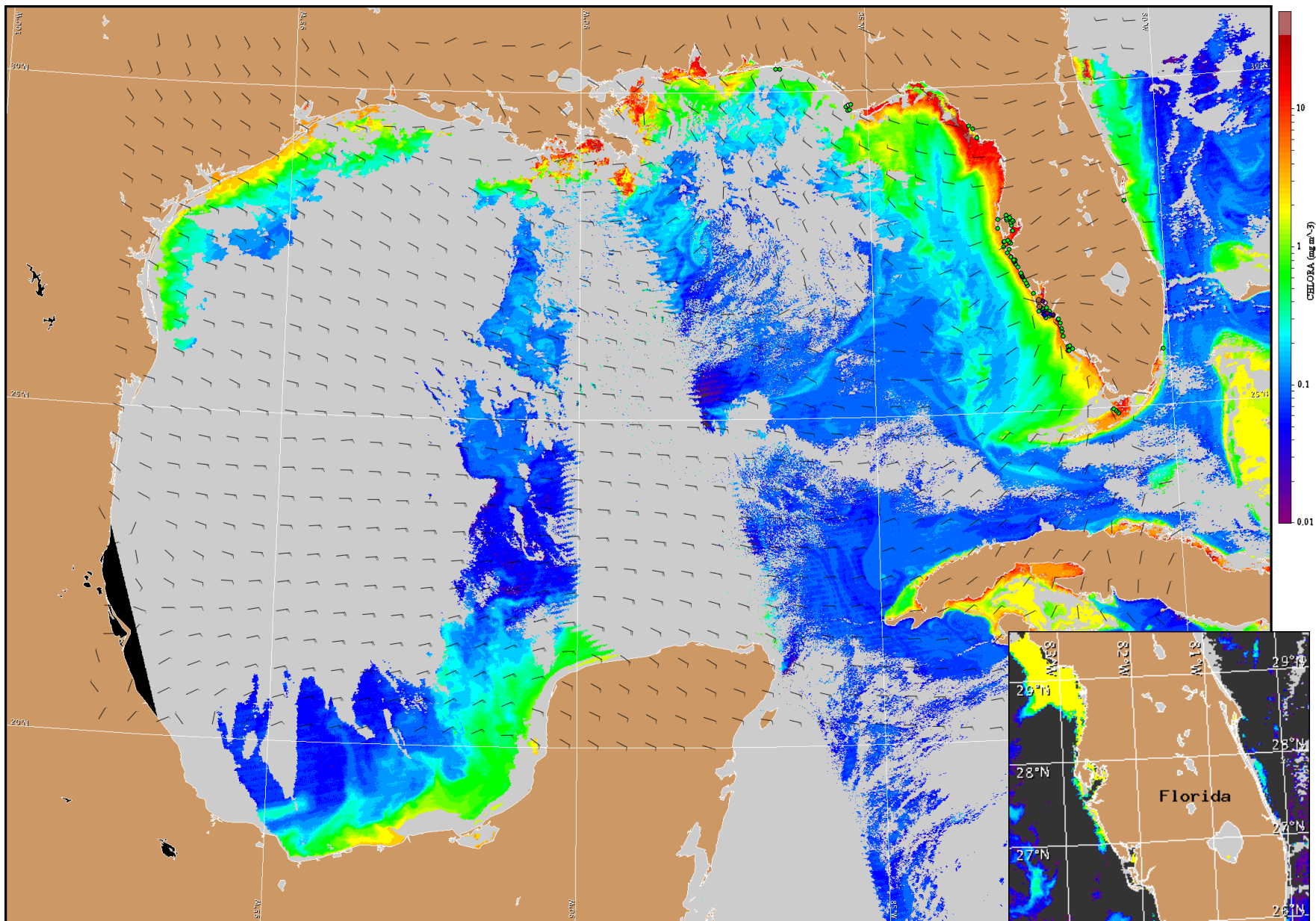
Wind Analysis

Sarasota to Lee counties: Southwest winds (10 kn, 5 m/s) today becoming west winds in the afternoon. North winds (5 kn, 3 m/s) tonight. Northwest winds (5 kn) Tuesday becoming west winds (10 kn) in the afternoon. North winds (10 kn) Tuesday night becoming northeast after midnight. Southeast winds (15 kn, 8 m/s) Wednesday becoming south winds (5-10 kn, 3-5 m/s) in the afternoon. Southeast winds (15-20 kn, 8-10 m/s) Wednesday night and Thursday becoming south winds Thursday night.



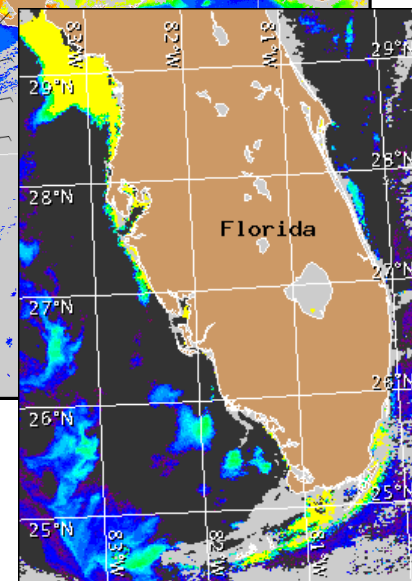
Wind speed and direction are averaged over 12 hours from buoy measurements. Length of line indicates speed; angle indicates direction. Red indicates that the wind direction favors upwelling near the coast. Values to the left of the dotted vertical line are measured values; values to the right are forecasts.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





Satellite chlorophyll image and forecast winds for April 2, 2013 06Z with cell concentration sampling data from March 22 to 29 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).