



Gulf of Mexico Harmful Algal Bloom Bulletin

Region: Southwest Florida

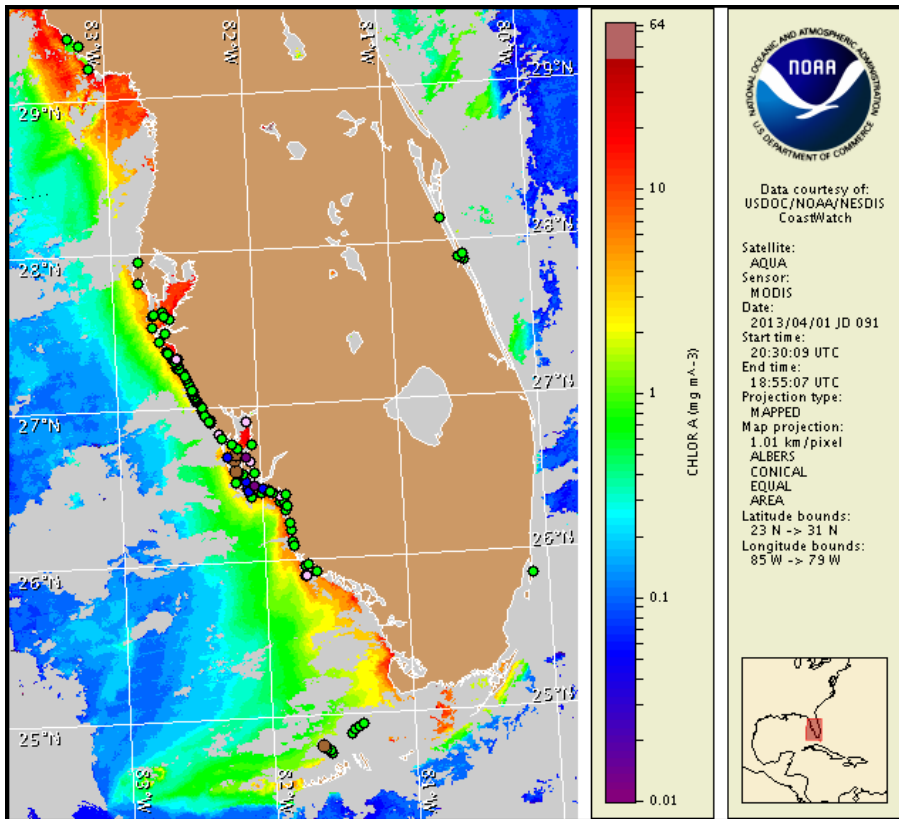
Thursday, 04 April 2013

NOAA National Ocean Service

NOAA Satellite and Information Service

NOAA National Weather Service

Last bulletin: Monday, April 1, 2013



Satellite chlorophyll image with possible *K. brevis* HAB areas shown by red polygon(s). Cell concentration sampling data from March 25 to April 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). 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 along- and offshore southwest Florida. In the bay regions of northern and central Lee County, patchy very low respiratory impacts are possible today through Monday. No respiratory impacts are expected elsewhere alongshore southwest Florida, including the Florida Keys, today through Monday, April 8.

Analysis

In southwest Florida, 'background' to 'low' concentrations of *Karenia brevis* are present from Sarasota to Collier County. Alongshore and in the bay regions of Sarasota County, recent sampling from New Pass (Sarasota Bay), the north Venice Jetty, and from Venice Park, all indicate 'background' concentrations of *K. brevis* (FWRI, MML; 3/29-4/3). Alongshore and in the bays of Charlotte County, recent sampling indicates *K. brevis* concentrations from 'not present' to 'background' (FWRI; 4/1-2). Recent sampling near Punta Blanca Island in northern Pine Island Sound identified 'very low b' concentrations of *K. brevis* while all other samples ranged from 'not present' to 'background' (FWRI; 4/1). All other recent samples collected alongshore southwest Florida from Manatee to Monroe counties indicate that *K. brevis* is not present (FWRI, CCPCPD, SCHD, MML; 3/29-4/3). Offshore the lower Florida Keys, one sample 6.5 miles northwest of Sawyer Key indicated 'low a' *K. brevis* concentrations while all other samples collected offshore Sawyer and Harbor Keys indicated that *K. brevis* is 'not present' (MML; 4/2-4/3). Over the past several days there have been no reports of respiratory irritation or fish kills (FWRI, MML; 4/1-4/4)

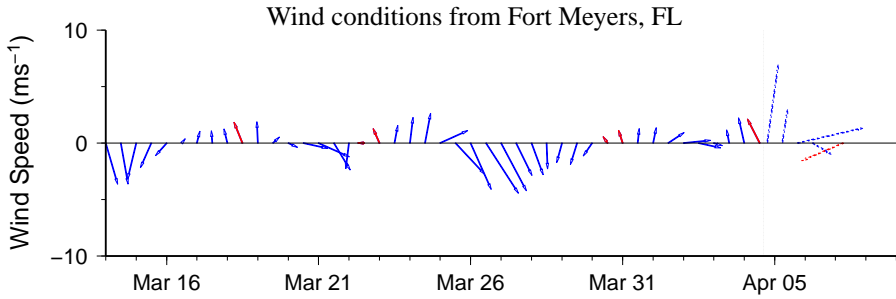
Recent MODIS Aqua imagery (4/1, shown left) is partially obscured by clouds along the southwest Florida coast, limiting analysis. Elevated chlorophyll (3 to 10 $\mu\text{g/L}$) remains present alongshore southwest Florida from southern Charlotte to Monroe County. Elevated to very high chlorophyll (5 to >20 $\mu\text{g/L}$) is visible in patches alongshore from northern Collier to Monroe County including a patch alongshore Cape Sable in southern Monroe County. MODIS imagery along- and offshore the Florida Keys is almost completely obscured by clouds; however, elevated to very high chlorophyll (5 to >20 $\mu\text{g/L}$) is visible in patches offshore the bayside of the middle Keys. Variable winds forecasted today through Monday, April 8, may reduce the potential for transport of *K. brevis* concentrations.

Davis, Derner

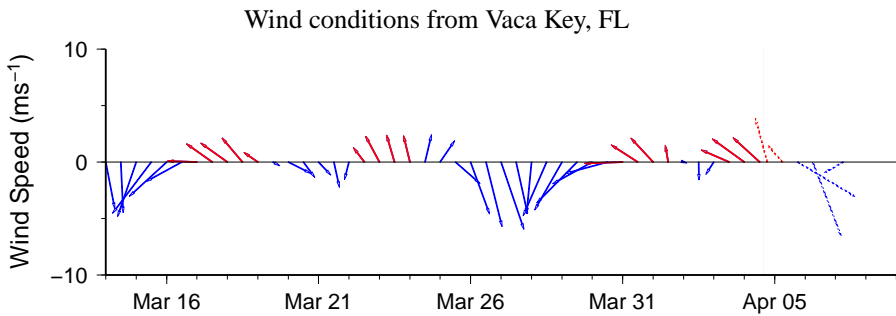
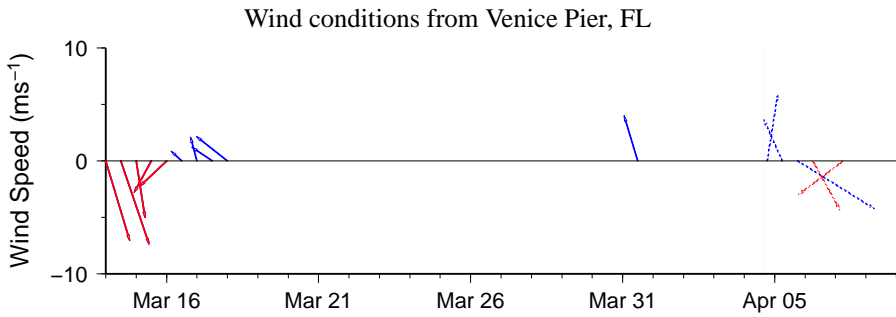
Wind Analysis

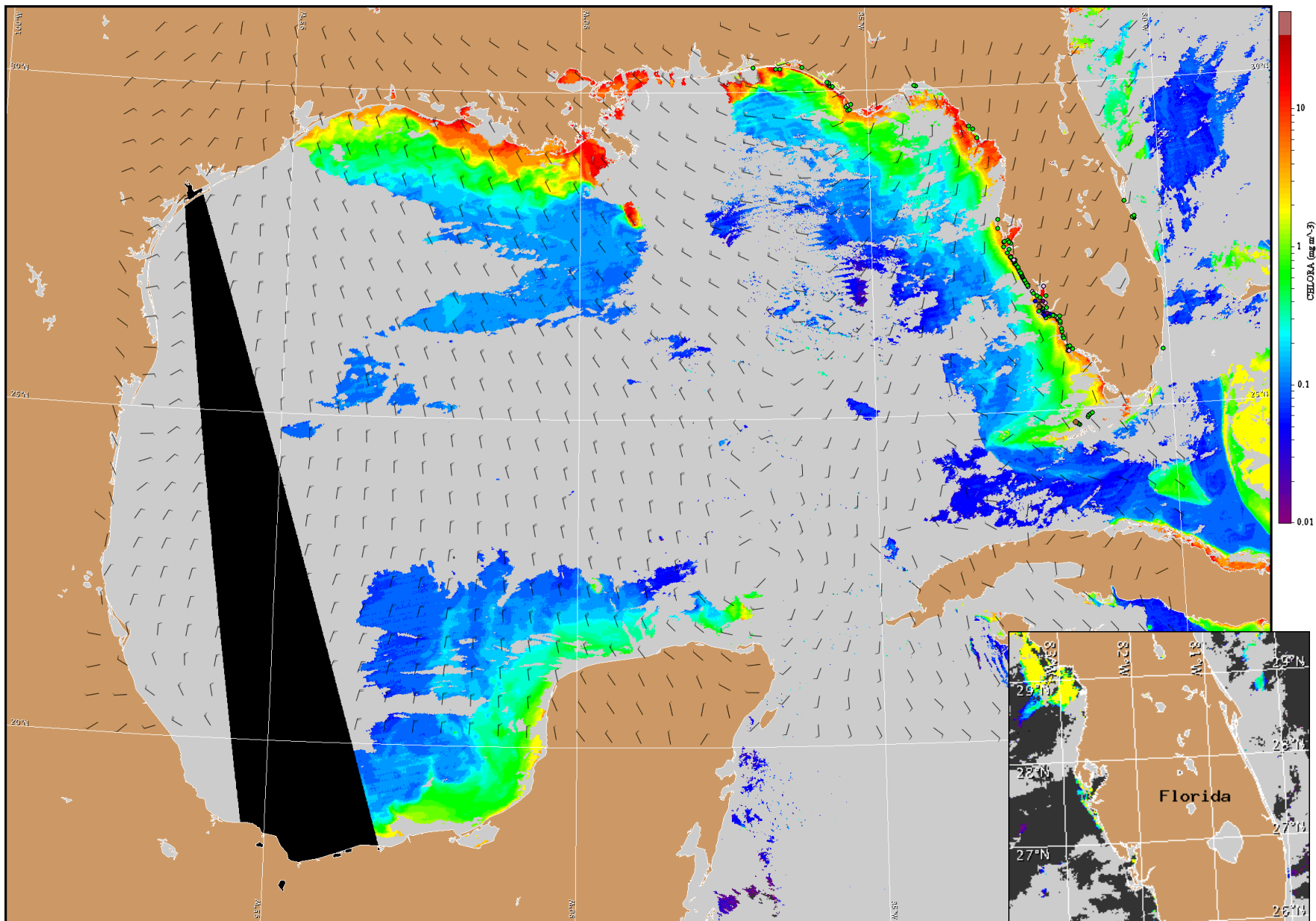
Sarasota to Lee counties: South winds (10-15 kn, 5-8 m/s) today becoming southwest winds (20 kn, 10 m/s) after midnight. Northwest winds (20 kn) Friday becoming north winds (15 kn, 8 m/s) Friday night. Northeast winds (10 kn, 5 m/s) Saturday becoming east winds (15 kn) Saturday night. East winds (10 kn) Sunday becoming southeast winds (5 kn, 3 m/s) in the afternoon. Southeast winds (5-10 kn, 3-5 m/s) Sunday night becoming east winds (15 kn) after midnight. Southeast to south winds (5-15 kn, 3-8 m/s) Monday.

Florida Keys: Southeast to south winds (10-15 kn) the rest of today becoming southwest winds (15-20 kn, 8-10 m/s) after midnight. Southwest winds (20 kn, 10 m/s) Friday becoming west to northwest in the afternoon and decreasing to 15-20 kn in the evening. North winds (15 kn) Saturday decreasing to 10 kn in the afternoon. North to northeast winds (10 kn) Saturday night becoming east by midnight. East winds (10-15 kn) Sunday through Monday.



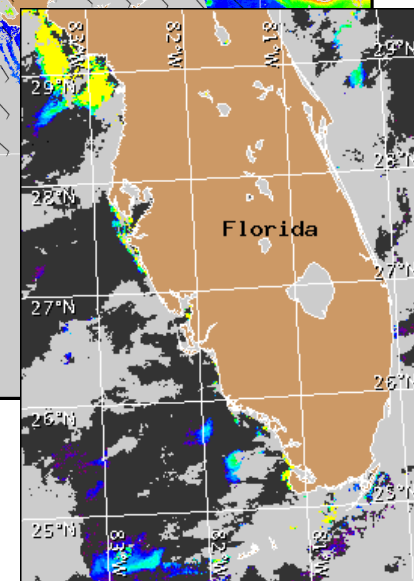
Wind speed and direction are averaged over 12 hours from buoy measurements. Length of line indicates speed; angle indicates direction. Red indicates that the wind direction favors upwelling near the coast. Values to the left of the dotted vertical line are measured values; values to the right are forecasts.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





Satellite chlorophyll image and forecast winds for April 5, 2013 06Z with cell concentration sampling data from March 25 to April 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). 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).