



Gulf of Mexico Harmful Algal Bloom Bulletin

Region: Southwest Florida

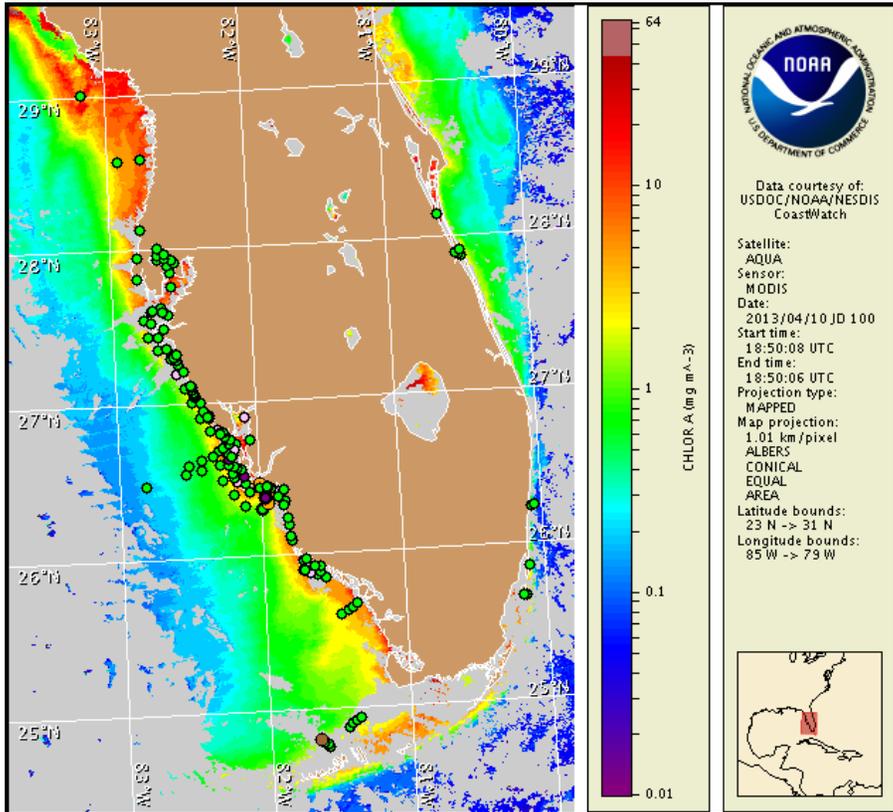
Thursday, 11 April 2013

NOAA National Ocean Service

NOAA Satellite and Information Service

NOAA National Weather Service

Last bulletin: Monday, April 8, 2013



Satellite chlorophyll image with possible *K. brevis* HAB areas shown by red polygon(s). Cell concentration sampling data from April 1 to 10 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. 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 15.

Analysis

Recent sampling throughout southwest Florida continues to indicate that *Karenia brevis* concentrations are dissipating. Samples collected over the past week identified only one 'background' *K. brevis* concentration in Pinellas County (FWRI; 4/9). All other samples collected alongshore southwest Florida from Pinellas to Monroe counties, and offshore Lee County, indicate that *K. brevis* is not present (FWRI, MML, CCPCPD; 4/7-4/10). No recent samples have been received from offshore southern Lee County or within the San Carlos Bay region, where 'low a' to 'medium' *K. brevis* concentrations were identified on 4/2 (FWRI). Continued sampling in this region is recommended to confirm *K. brevis* dissipation. This region will continue to be monitored as information becomes available.

In recent MODIS Aqua imagery (4/10, shown left), elevated chlorophyll (2-6 $\mu\text{g/L}$) is visible alongshore southwest Florida from Sarasota to Monroe County. Imagery is obscured by clouds alongshore Pinellas, Manatee, and much of Collier County, limiting analysis in these regions. No distinct features are visible offshore southwest Florida at this time. Much of the imagery throughout the Florida Keys region is obscured by clouds; however, patches of elevated chlorophyll (3-8 $\mu\text{g/L}$) are visible on the bay side of the lower to middle Keys.

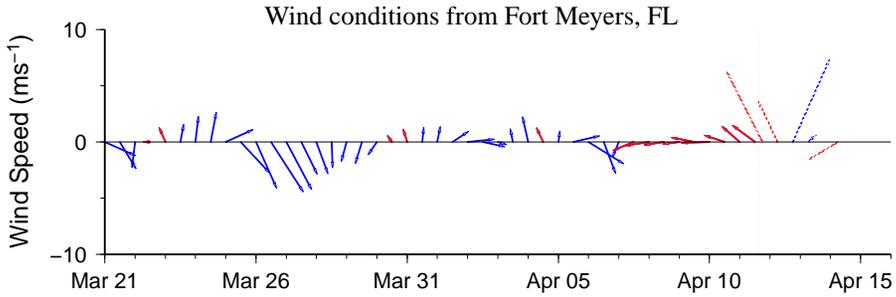
Variable winds forecasted today through Monday may reduce the potential for transport of *K. brevis* concentrations along the coast of southwest Florida.

Derner, Urizar

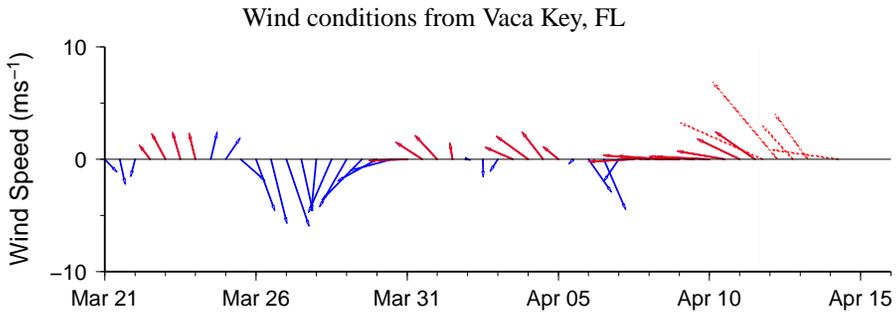
Wind Analysis

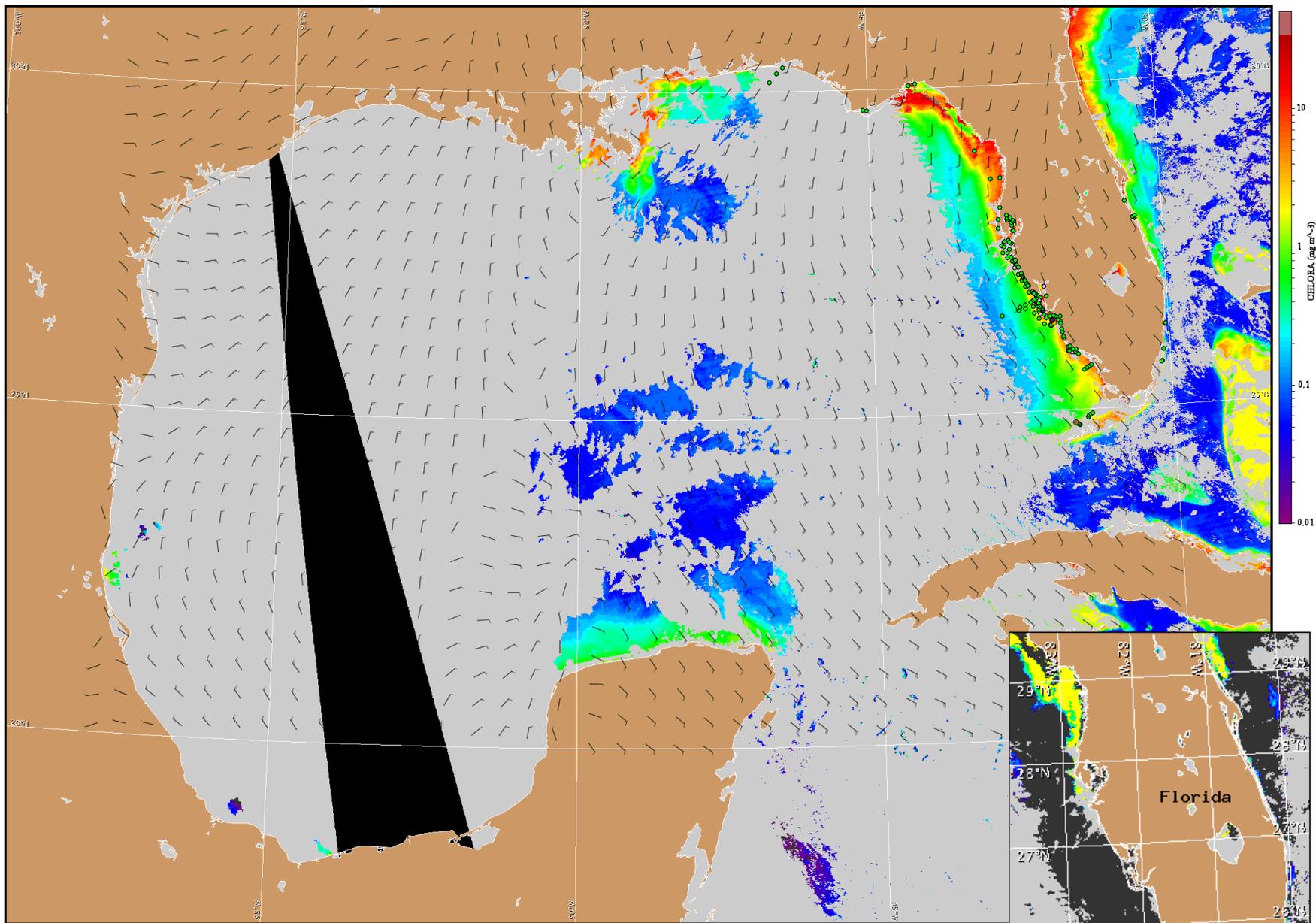
Southwest Florida: Southeast winds (10-15kn, 5-8m/s) today becoming south (15-20kn, 8-10m/s) this afternoon through Friday. Southwest winds (10kn, 5m/s) Friday night. Northwest winds (10kn) Saturday becoming northeast to east winds (5-10kn, 3-5m/s) Saturday night. South winds (10-15kn) Sunday and Monday.

Florida Keys: Southeast winds (10-20kn, 5-10m/s) today. Southeast to south winds (10-15kn) Friday and Saturday. East to southeast winds (10-15kn) Saturday night 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 12, 2013 06Z with cell concentration sampling data from April 1 to 10 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).