



## Gulf of Mexico Harmful Algal Bloom Bulletin

Region: Southwest Florida

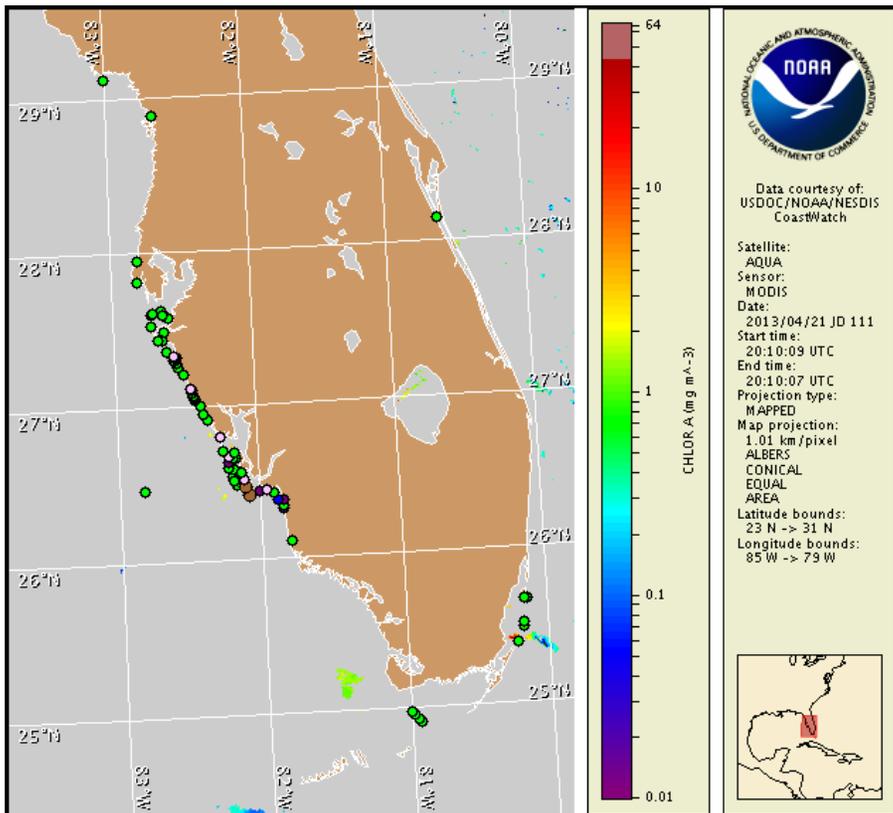
Monday, 22 April 2013

NOAA National Ocean Service

NOAA Satellite and Information Service

NOAA National Weather Service

Last bulletin: Thursday, April 18, 2013



Satellite chlorophyll image with possible *K. brevis* HAB areas shown by red polygon(s), when applicable. Points represent cell concentration sampling data from April 12 to 18: 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](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

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 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 25.

## Analysis

Recent sampling throughout southwest Florida continues to indicate that *Karenia brevis* concentrations persist alongshore and in the bays of central and southern Lee County. Samples collected in the Pine Island Sound region of Lee County indicate *K. brevis* concentrations range between 'not present' and 'low a', with the highest concentration at Long Point and York Island (FWRI; 4/17). Alongshore Lee County, sampling from Captiva Island to Bonita Beach indicates *K. brevis* concentrations range between 'not present' and 'low a' with the highest concentration at Tarpon Beach Road alongshore southern Sanibel (FWRI; 4/17). All other samples collected along- and offshore Manatee to Collier counties indicate 'not present' to 'background' concentrations of *K. brevis* (FWRI, SCHD, MML; 4/16-4/19). No dead fish or respiratory irritation has been reported in the past week.

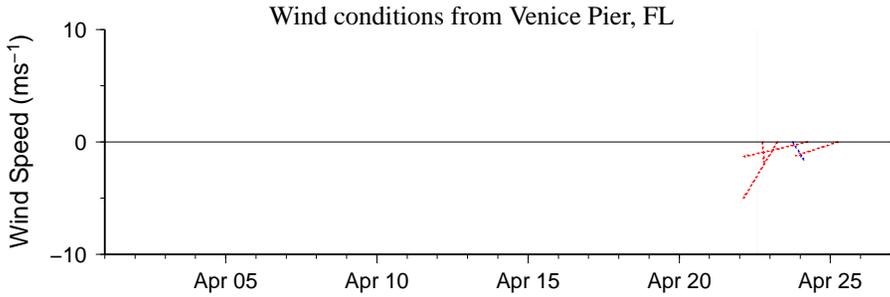
Recent MODIS Aqua imagery has been completely obscured by clouds along- and offshore southwest Florida since 4/17, preventing analysis. MODIS Aqua imagery from 4/16 (not shown) indicates patches of elevated to very high chlorophyll (5-22  $\mu\text{g/L}$ ) along- and offshore the bay side of the lower to middle Keys.

Davis, Fenstermacher

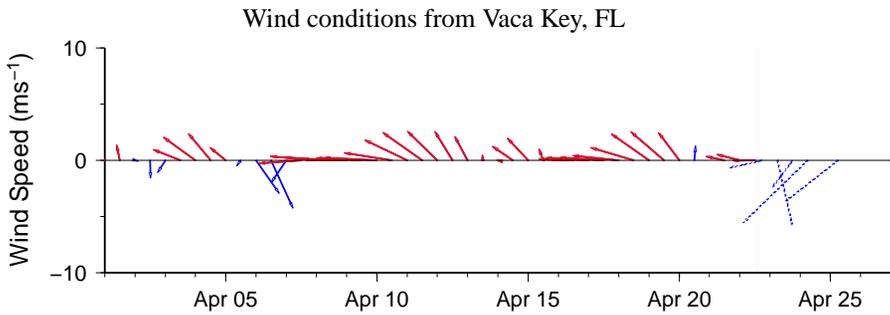
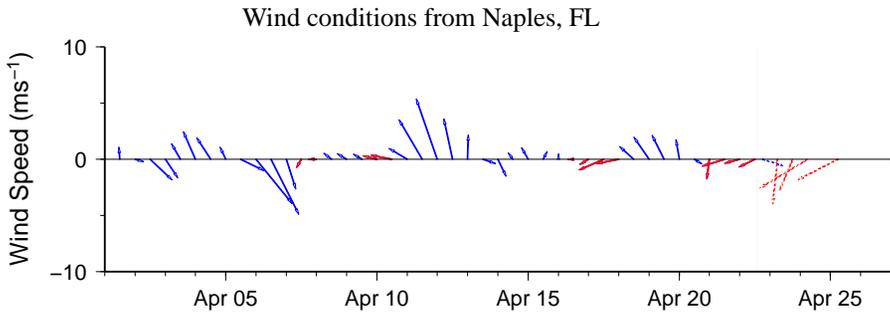
## Wind Analysis

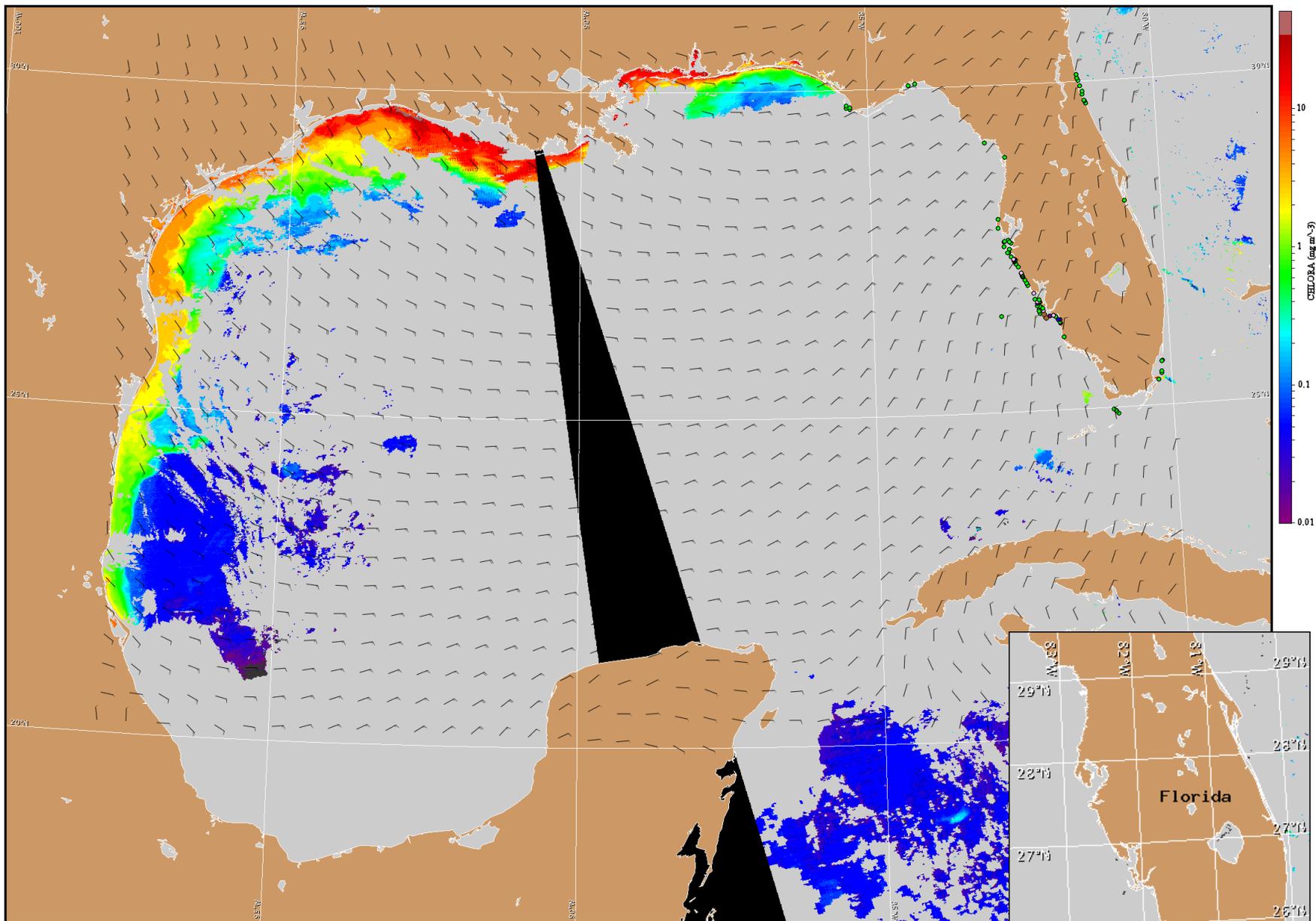
**Southwest Florida:** North winds (15 kn, 8 m/s) today becoming northeast winds (10-20 kn, 5-10 m/s) tonight and Tuesday turning northwest Tuesday afternoon. East winds (10-15 kn, 5-8 m/s) Tuesday night and Wednesday becoming northwest winds Wednesday afternoon. North winds (10 kn, 5 m/s) Wednesday night. Variable winds Thursday becoming east winds (10 kn) Thursday afternoon. North winds (10 kn) Thursday night.

**Florida Keys:** East winds (10-15 kn) today becoming northeast winds (5-10 kn, 3-5 m/s) this afternoon. Northeast winds (10-15 kn) Tuesday through Thursday.



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 23, 2013 06Z with points representing cell concentration sampling data from April 12 to 18: 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).