



Gulf of Mexico Harmful Algal Bloom Bulletin

Region: Southwest Florida

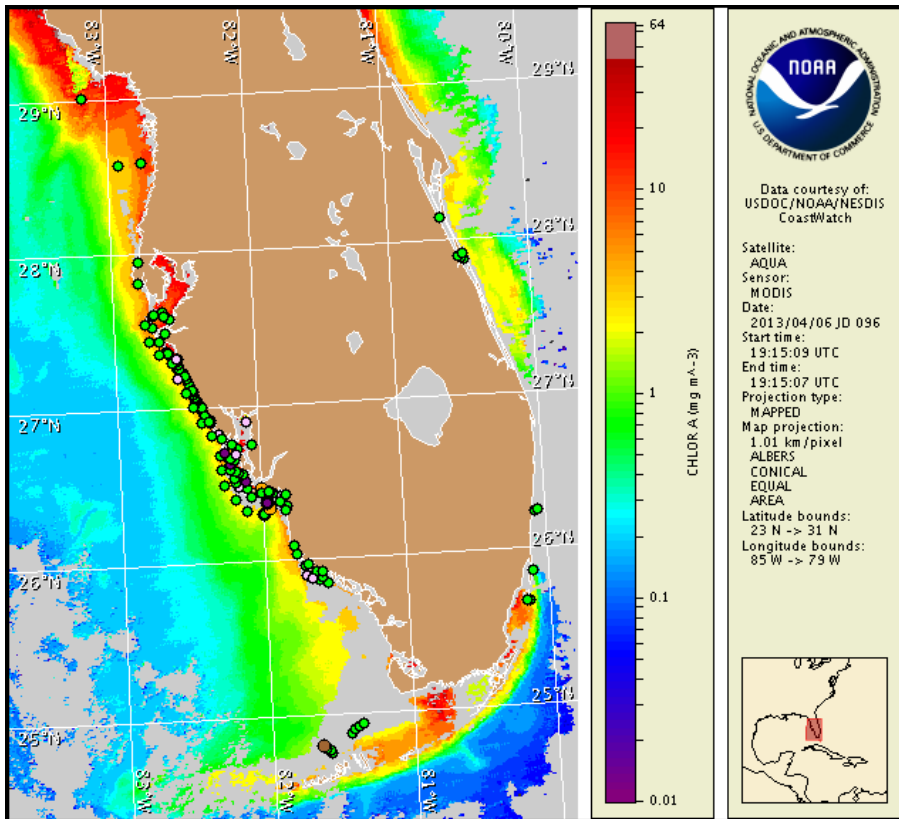
Monday, 08 April 2013

NOAA National Ocean Service

NOAA Satellite and Information Service

NOAA National Weather Service

Last bulletin: Thursday, April 4, 2013



Satellite chlorophyll image with possible *K. brevis* HAB areas shown by red polygon(s). Cell concentration sampling data from March 29 to April 4 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 Thursday. No respiratory impacts are expected elsewhere alongshore southwest Florida, including the Florida Keys, today through Thursday, April 11. Over the past few days, one report of dead fish was received from Lee County.

Analysis

In southwest Florida, 'background' to 'medium' concentrations of *Karenia brevis* are present from Sarasota to Collier County. Overall, bloom concentrations continue to dissipate along the coast. Samples collected early last week identified two 'medium' *K. brevis* concentrations in Lee County alongshore the Sanibel Causeway area and approximately six miles offshore Bonita Beach, as well as two 'low a' samples offshore southern Lee County (FWRI; 4/2). Other samples collected throughout Lee County last week indicated 'not present' to 'very low a' concentrations in the Pine Island Sound region, and no *K. brevis* was identified in samples collected alongshore southern Lee County (FWRI; 4/3). Samples collected alongshore Collier County also continue to indicate that *K. brevis* is not present, with only one 'background' concentration detected alongshore Cape Romano (FWRI; 4/2). One fish kill was reported in Lee County alongshore Coquina Beach (Sanibel Island) on 4/5 (FWRI). No reports of respiratory irritation have been received over the last week (MML; 4/1-4/7).

In recent MODIS Aqua imagery (4/6, shown left), elevated chlorophyll (2-6 $\mu\text{g/L}$) is visible alongshore southwest Florida from Pinellas to Lee County, as well as offshore Collier County. Imagery is obscured by clouds alongshore southern Lee, southern Collier, and Monroe counties, limiting analysis in these areas where several patches of elevated to very high chlorophyll (5 to >20 $\mu\text{g/L}$) were visible last week (MODIS 4/1). These regions will continue to be monitored as imagery becomes available. Imagery throughout the Florida Keys region is also heavily obscured by clouds; however, patches of elevated chlorophyll (2-5 $\mu\text{g/L}$) are visible east of the lower Keys, along with patches of elevated to very high chlorophyll (4 to >20 $\mu\text{g/L}$) north of the middle Keys.

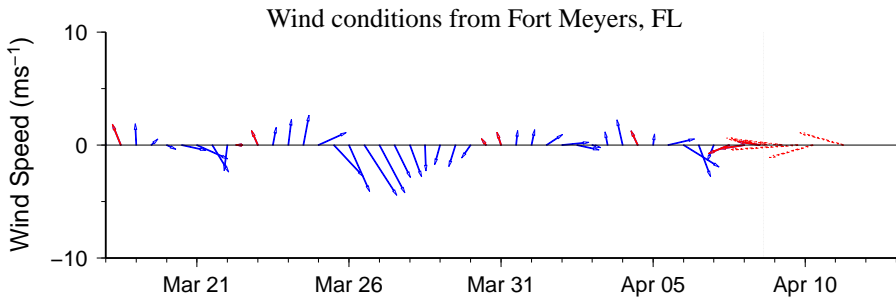
Variable winds forecasted today through Thursday may reduce the potential for transport of *K. brevis* concentrations along the coast of southwest Florida. Consistent easterly winds forecasted over the next several days in the Florida Keys may promote westward transport of bloom concentrations north of the lower Keys.

Derner, Burrows

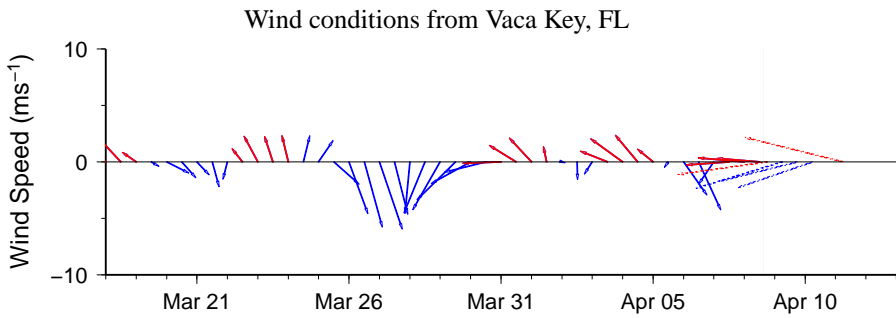
Wind Analysis

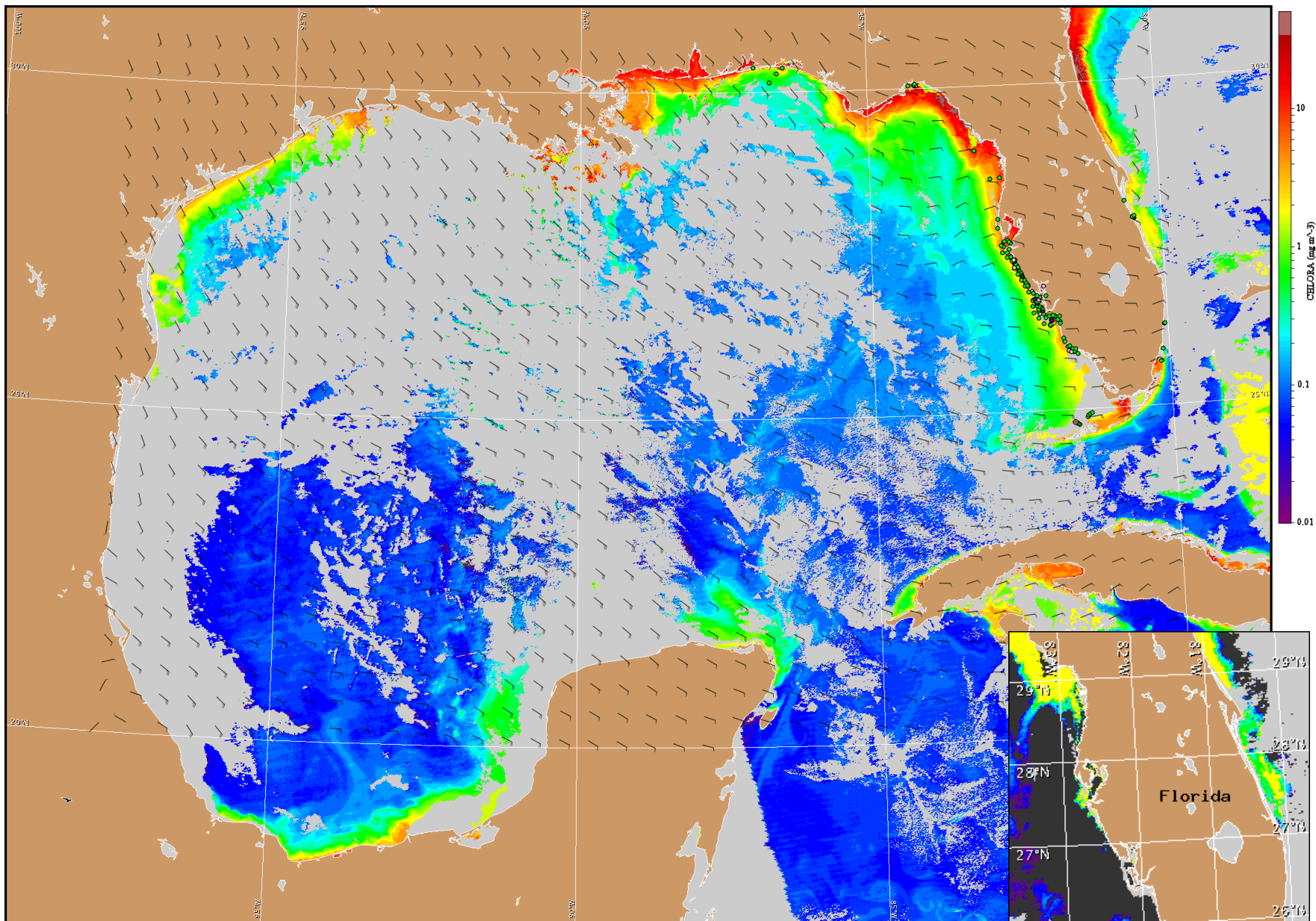
Southwest Florida: Southeast winds (10kn, 5m/s) today becoming west this afternoon. North winds (5-10kn, 3-5m/s) tonight becoming east (10-15kn, 5-8m/s) after midnight. Southeast winds (10-15kn) Tuesday becoming west (5-10kn) Tuesday afternoon. North winds (5-10kn) Tuesday night becoming east (10-15kn) after midnight. Southeast winds (15kn) Wednesday becoming southwest (5-10kn) in the afternoon. Southeast winds (5-15kn, 3-8m/s) Wednesday night. South winds (15kn, 8m/s) Thursday.

Florida Keys: East winds (15kn) today through Tuesday. East to southeast winds (15-20kn, 8-10m/s) Tuesday night through Wednesday. Southeast winds (15-20kn) Wednesday night through Thursday.



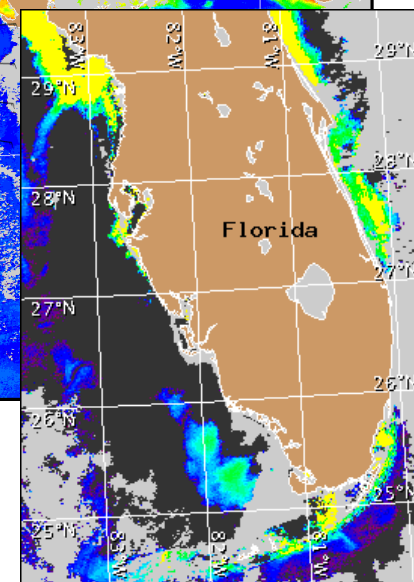
Wind speed and direction are averaged over 12 hours from buoy measurements. Length of line indicates speed; angle indicates direction. Red indicates that the wind direction favors upwelling near the coast. Values to the left of the dotted vertical line are measured values; values to the right are forecasts.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





Satellite chlorophyll image and forecast winds for April 9, 2013 06Z with cell concentration sampling data from March 29 to April 4 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).