



Gulf of Mexico Harmful Algal Bloom Bulletin

Region: Southwest Florida

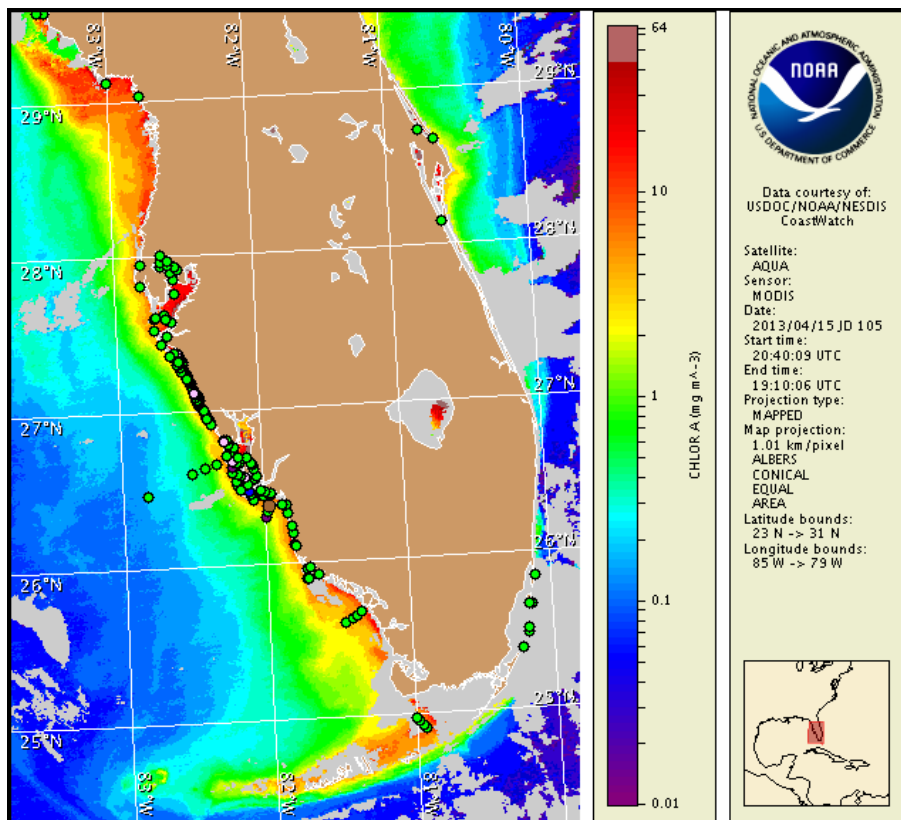
Thursday, 18 April 2013

NOAA National Ocean Service

NOAA Satellite and Information Service

NOAA National Weather Service

Last bulletin: Monday, April 15, 2013



Satellite chlorophyll image with possible *K. brevis* HAB areas shown by red polygon(s). Cell concentration sampling data from April 8 to 16 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 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 22.

Analysis

Recent sampling throughout southwest Florida continues to indicate that *Karenia brevis* concentrations are dissipating. Samples collected alongshore southwest Florida over the past week identified one 'very low b' *K. brevis* concentration in the Pine Island Sound region of Lee County, as well as 'background' concentrations alongshore Nokomis Beach (Sarasota County) and the northeast tip of Gasparilla Island (Charlotte County) (FWRI, SCHD; 4/15-16). *K. brevis* concentrations continue to dissipate offshore southern Lee County, with 'not present' to 'low a' concentrations recently identified in the region approximately 6 miles west of Lovers Key where 'low a' to 'medium' concentrations were previously identified on 4/2 (FWRI; 4/11). All other samples collected along- and offshore Manatee to Collier counties, and in the Oxfoot Key region of Monroe County, indicate that *K. brevis* is not present (FWRI, SCHD, MML; 4/11-4/16). No dead fish or respiratory irritation has been reported in the past week.

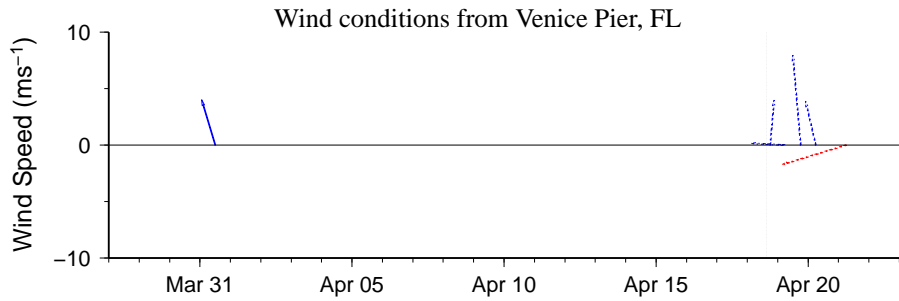
In recent MODIS Aqua imagery (4/15, shown left), elevated chlorophyll (2-8 $\mu\text{g/L}$) is visible alongshore southwest Florida from Pinellas to Lee County. While imagery is obscured by clouds in the Marco Island region of central Collier County, patches of elevated to high chlorophyll (5-16 $\mu\text{g/L}$) are visible alongshore northern and southern Collier County, extending alongshore Monroe County. Much of the imagery throughout the Florida Keys region is also 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.

Derner, Davis

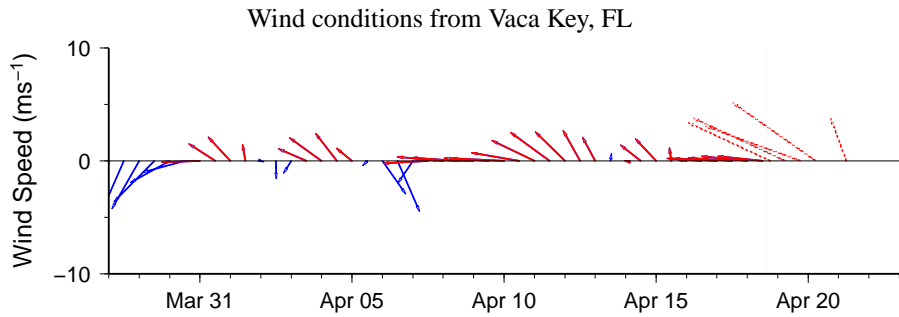
Wind Analysis

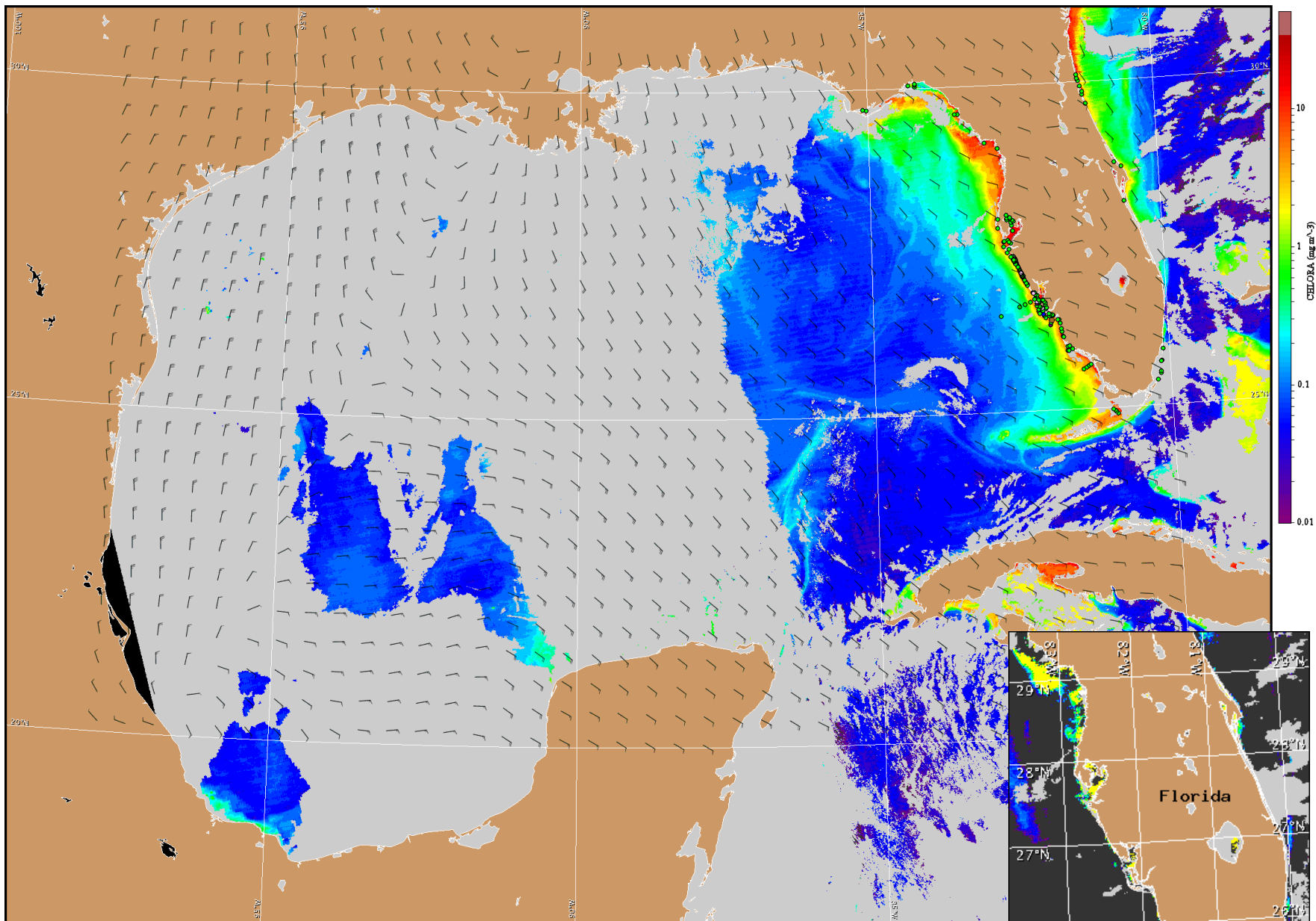
Southwest Florida: Southeast winds (10-15kn, 5-8m/s) today and Friday becoming south winds (5-15kn, 3-8m/s) Friday afternoon through Saturday. Northwest winds (10kn, 5m/s) Saturday afternoon. Variable north to northeast winds (10kn) Saturday night through Sunday becoming east winds (5-10kn, 3-5m/s) Sunday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

Florida Keys: East to southeast winds (15-20kn, 8-10m/s) today and Friday. Southeast winds (10-15kn) Friday night through Saturday. East to southeast winds (10-15kn) Saturday night through Sunday. East winds (15kn) Monday.



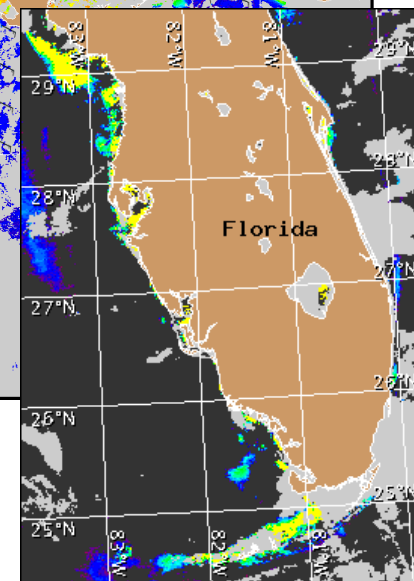
Wind speed and direction are averaged over 12 hours from buoy measurements. Length of line indicates speed; angle indicates direction. Red indicates that the wind direction favors upwelling near the coast. Values to the left of the dotted vertical line are measured values; values to the right are forecasts.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





Satellite chlorophyll image and forecast winds for April 19, 2013 06Z with cell concentration sampling data from April 8 to 16 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).