



Gulf of Mexico Harmful Algal Bloom Bulletin

Region: Southwest Florida

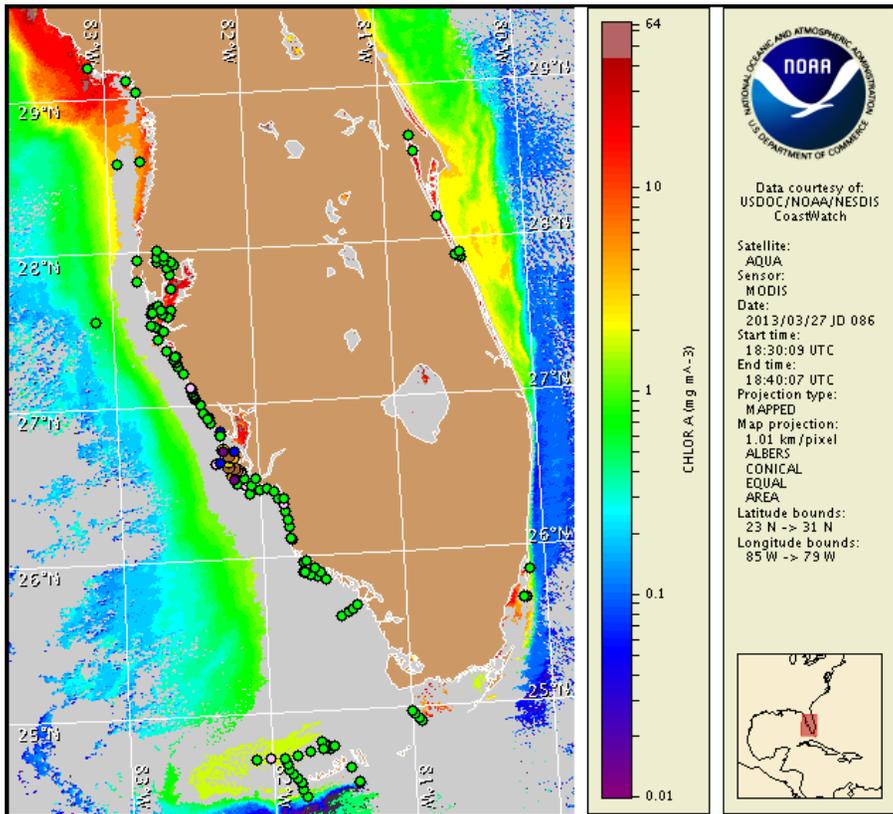
Thursday, 28 March 2013

NOAA National Ocean Service

NOAA Satellite and Information Service

NOAA National Weather Service

Last bulletin: Monday, March 25, 2013



Satellite chlorophyll image with possible *K. brevis* HAB areas shown by red polygon(s). Cell concentration sampling data from March 18 to 26 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

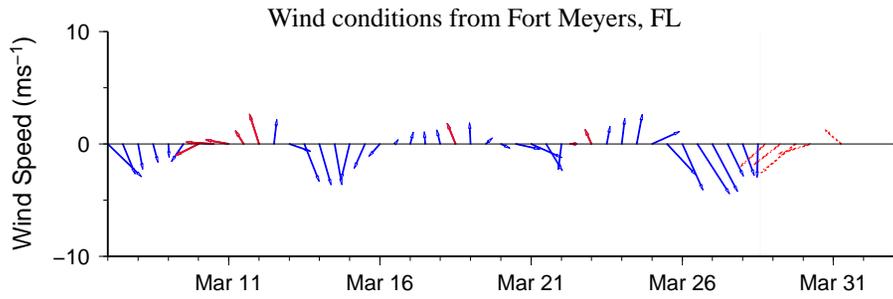
Background to medium concentrations of *Karenia brevis* (commonly known as Florida Red Tide) are present along- and offshore southwest Florida. In the bay regions of northern and central Lee County, patchy very low respiratory impacts are possible today through Monday. Alongshore central Lee County, patchy very low respiratory impacts are possible today, with no respiratory impacts expected Friday through Monday. No respiratory impacts are expected elsewhere alongshore southwest Florida, including the Florida Keys, today through Monday, April 1.

Analysis

In southwest Florida, the most recent ten days of samples indicate *Karenia brevis* concentrations continue to decrease, ranging from 'background' to 'medium' along- and offshore from Charlotte to southern Lee counties, with 'background' concentrations also identified last week alongshore Sarasota and Collier County and offshore the lower Florida Keys. Recent samples collected alongshore and in the bay regions of both Pinellas and Manatee County continue to indicate *K. brevis* is 'not present' (FWRI; 3/22-25). *K. brevis* concentrations were 'not present' in two samples collected alongshore and in the bay regions of Charlotte County, indicating a decrease from the 'very low b' concentrations previously measured on 3/19 (FWRI; 3/26). Two samples from the bay regions of central Lee County also both indicate 'not present' concentrations (FWRI; 3/22). Further sampling alongshore and in the bay regions of northern and central Lee County is needed before analysis can confirm that *K. brevis* is no longer present throughout the area. Alongshore and in the bay regions of Collier County, samples continue to indicate that *K. brevis* is 'not present' (FWRI, CCPCPD; 3/25). Samples collected along- and offshore the oceanside of the Lower Keys indicate that *K. brevis* is 'not present' (FWRI; 3/18-21). No respiratory irritation or fish kills have been reported along southwest Florida in the past ten days (FWRI, MML; 3/18-28).

Recent MODIS Aqua imagery (3/27, shown left; 3/25-26, not shown) has been completely obscured by clouds along the southwest Florida coast including the Florida Keys, limiting analysis. Based on winds observed over the past several days *K. brevis* concentrations may have transported south from Monday, 3/25, through today, 3/28. Variable winds forecasted today through Monday (4/1) may minimize further net transport of *K. brevis* concentrations.

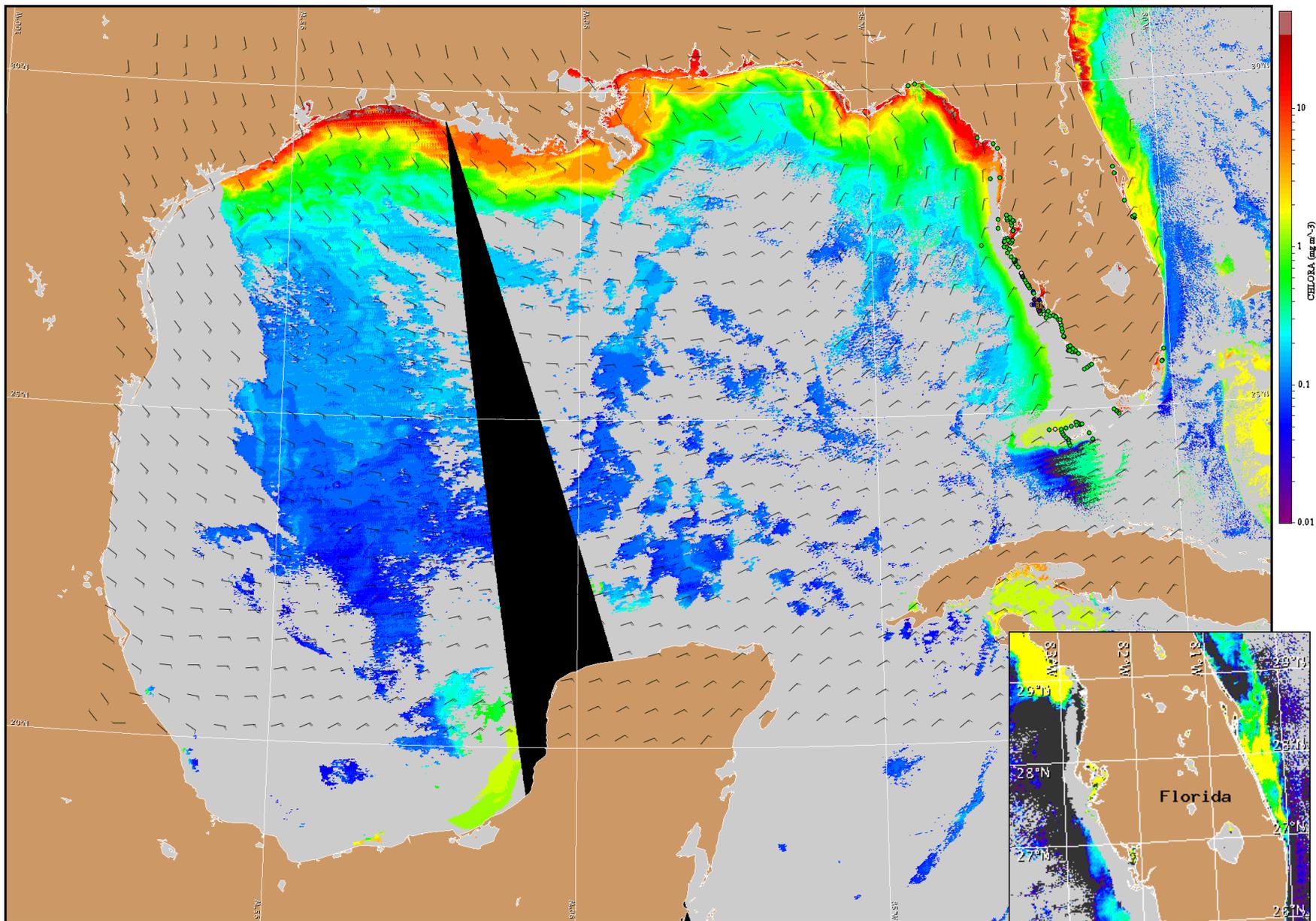
Kavanaugh, Davis



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).

Wind Analysis

Sarasota to Lee counties: Northeast to northwest winds (5-15 kn, 3-8 m/s) today through Friday afternoon. North winds (10-15 kn, 5-8 m/s) Friday night. East to southeast winds (10 kn, 5 m/s) Saturday becoming southwest winds (5 kn, 3 m/s) Saturday afternoon. Northwest winds (10 kn) Saturday night. Southeast to south winds (10 kn) Sunday through Monday.



Satellite chlorophyll image and forecast winds for March 29, 2013 06Z with cell concentration sampling data from March 18 to 26 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

Verified and suspected HAB areas shown in red. Other areas of high chlorophyll concentration shown in yellow (see p. 1 analysis for interpretation).