

Gulf of Mexico Harmful Algal Bloom Bulletin

Region: Southwest Florida

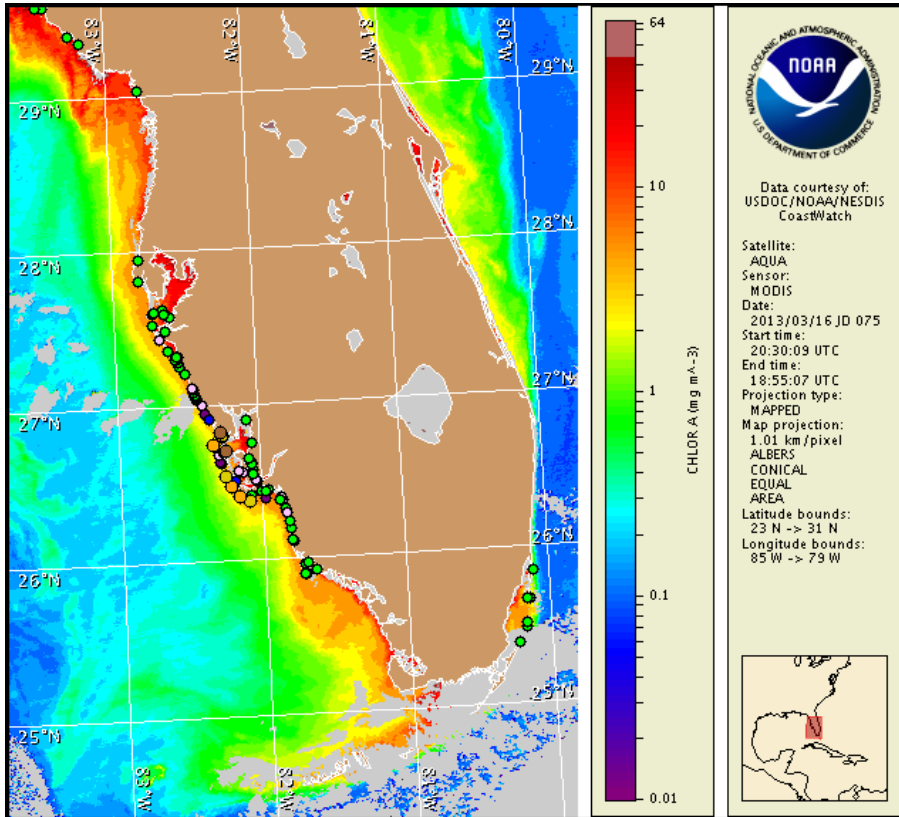
Monday, 18 March 2013

NOAA National Ocean Service

NOAA Satellite and Information Service

NOAA National Weather Service

Last bulletin: Thursday, March 14, 2013



Satellite chlorophyll image with possible *K. brevis* HAB areas shown by red polygon(s). Cell concentration sampling data from March 8 to 15 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

Very low to medium concentrations of *Karenia brevis* (commonly known as Florida Red Tide) are present alongshore and offshore southwest Florida. Alongshore Sarasota, Charlotte and Lee counties, patchy very low respiratory impacts are possible today through Wednesday, with no impacts expected on Thursday. In the bay regions of Charlotte and Lee counties, patchy low respiratory impacts are possible today through Thursday. No respiratory impacts are expected elsewhere alongshore southwest Florida, including the Florida Keys, today through Thursday, March 21. Over the last several days, a report of dead fish was received from Lee County and a report of respiratory irritation was received from Charlotte County.

Analysis

Alongshore and offshore southwest Florida from Sarasota to Collier counties, *Karenia brevis* concentrations range from 'not present' to 'medium'. Recent samples indicate background to 'very low b' concentrations alongshore Sarasota, Charlotte and Lee counties, and up to 'medium' offshore of Lee County (SCHD, FWRI, MML; 3/12-15). In the bay regions of Charlotte and Lee counties, recent samples indicate not present to 'low a' concentrations of *K. brevis* (FWRI, 3/12-14). Alongshore northern and central Collier County, *K. brevis* concentrations remain not present or background (FWRI, CCPCD, 3/14).

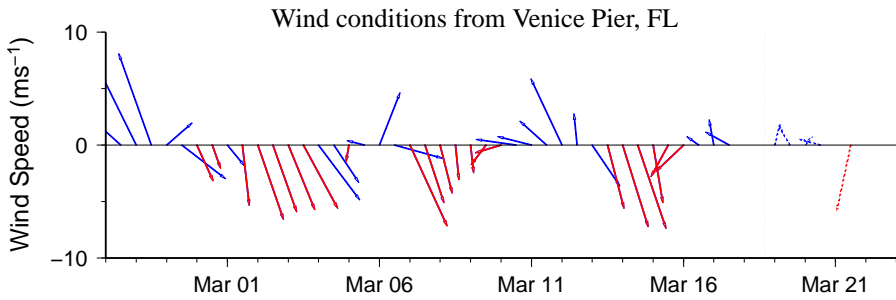
While imagery has been consistently cloudy limiting consecutive analysis, the image shown (3/16) indicates generally normal levels of elevated chlorophyll alongshore from Sarasota to Charlotte counties (~3 $\mu\text{g/L}$), with patches of anomalously higher chlorophyll extending offshore of Venice, Sarasota County (hidden by clouds) and approximately 20 miles offshore of southern Collier and northern Monroe counties (>3 $\mu\text{g/L}$). These areas will continue to be monitored.

Onshore winds alongshore southwest Florida from Monday through Wednesday may increase the potential for respiratory impacts and may reduce the potential for southerly transport of the bloom.

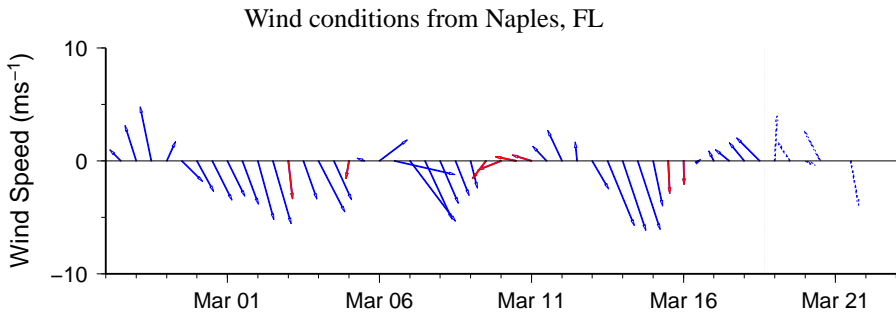
~Fenstermacher, Derner

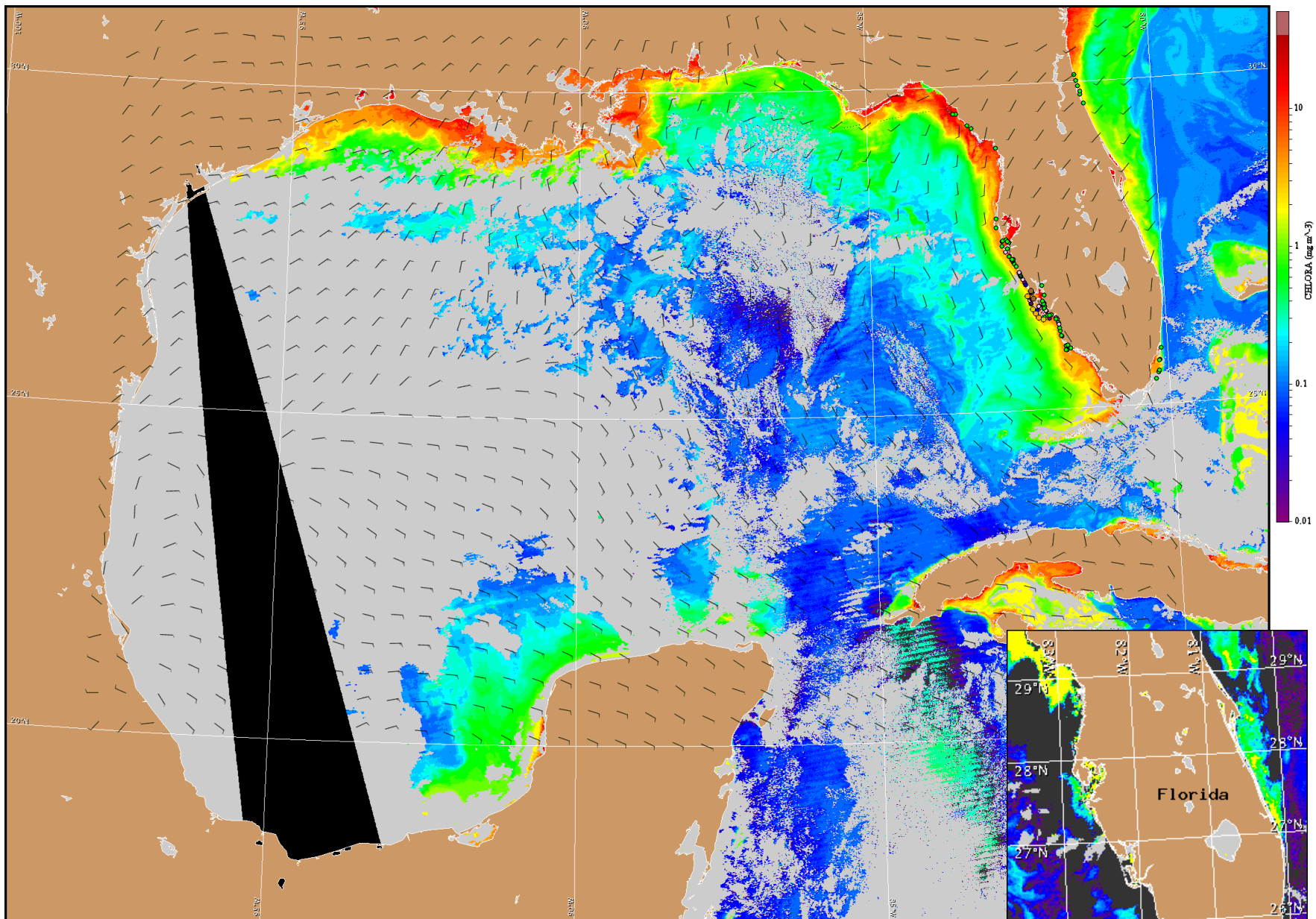
Wind Analysis

Sarasota to Lee: South to southeast winds today (5-15 kn; 3-8 m/s). South to westerly winds Tuesday, with northerlies Tuesday night (5-10 kn; 3-5 m/s). East to northwest winds Wednesday (5-15 kn). Northerly winds Wednesday night and Thursday (5-15 kn).



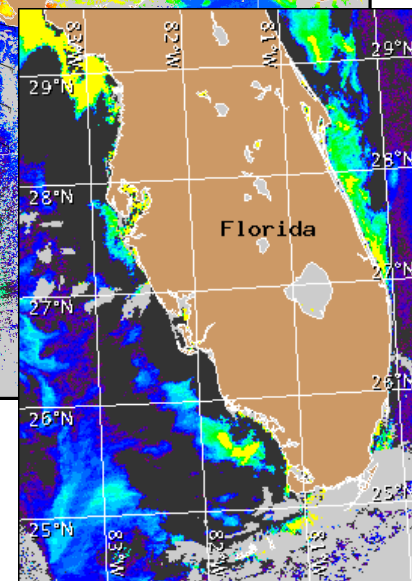
Wind speed and direction are averaged over 12 hours from buoy measurements. Length of line indicates speed; angle indicates direction. Red indicates that the wind direction favors upwelling near the coast. Values to the left of the dotted vertical line are measured values; values to the right are forecasts.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





Satellite chlorophyll image and forecast winds for March 19, 2013 12Z with cell concentration sampling data from March 8 to 15 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).