



Gulf of Mexico Harmful Algal Bloom Bulletin

Region: Southwest Florida

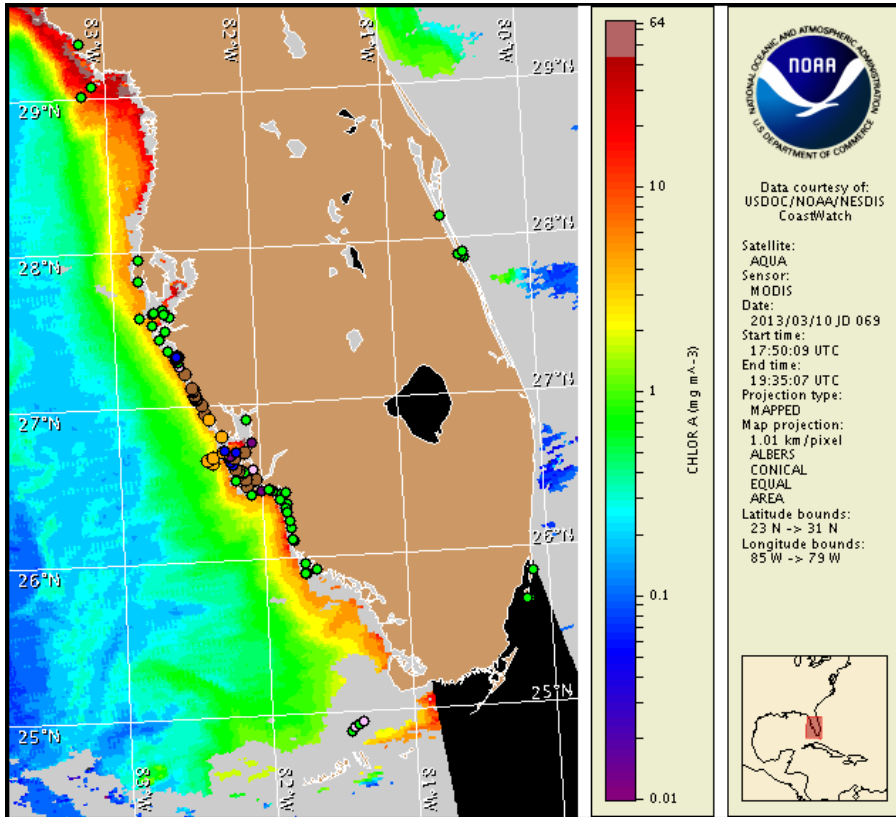
Monday, 11 March 2013

NOAA National Ocean Service

NOAA Satellite and Information Service

NOAA National Weather Service

Last bulletin: Thursday, March 7, 2013



Satellite chlorophyll image with possible *K. brevis* HAB areas shown by red polygon(s). Cell concentration sampling data from March 1 to 8 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 County, patchy moderate respiratory impacts are possible today and tomorrow and patchy very low respiratory impacts are possible Wednesday and Thursday. Alongshore Charlotte County, patchy very low respiratory impacts are possible today, Wednesday and Thursday and patchy moderate respiratory impacts are possible Tuesday. In the bay regions of Charlotte and Lee counties, patchy moderate respiratory impacts are possible today through Thursday. Alongshore central and southern Lee County, southern Collier County, and northern Monroe County, patchy low respiratory impacts are possible today and Tuesday and patchy very low respiratory impacts are possible Wednesday and Thursday. No respiratory impacts are expected elsewhere alongshore southwest Florida, including the Florida Keys, today through Thursday, March 14. Over the last several days, reports of respiratory irritation were received from Charlotte County. Reports of dead fish and discolored water were received from Lee County.

Analysis

Alongshore and offshore southwest Florida from Sarasota to Monroe counties, *Karenia brevis* concentrations range from 'not present' to 'medium'. Harmful algae is also present at the southern entrance of Sarasota Bay (MML; 3/6-7). Samples from alongshore Sarasota County indicate 'low a' to 'medium' concentrations of *K. brevis* (SCHD; 3/4). In the Pine Island Sound region of Charlotte and Lee counties, recent samples indicate not present to 'very low b' concentrations of *K. brevis* (FWRI 3/5). Alongshore central and southern Lee County, where dead fish and discolored water were reported, *K. brevis* concentrations ranged from not present to 'very low a' (FWRI 3/6). Samples from alongshore Collier County continue to indicate that *K. brevis* is 'not present' (FWRI; 3/7).

MODIS Aqua imagery (3/10; shown left) shows elevated chlorophyll alongshore and offshore Sarasota to Charlotte counties (3-5 $\mu\text{g/L}$) and Lee County (3-10 $\mu\text{g/L}$) and elevated to high chlorophyll alongshore and offshore northern to central Collier County (3-13 mg/L).

Forecast winds Tuesday through Thursday alongshore southwest Florida may increase the potential for southerly transport of the bloom.

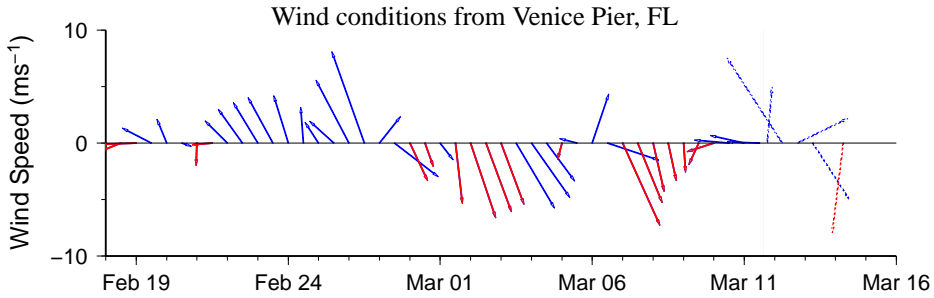
Urizar, Fenstermacher

Wind Analysis

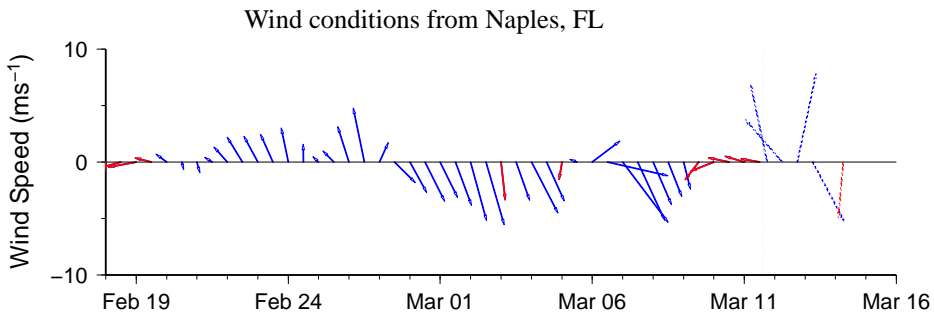
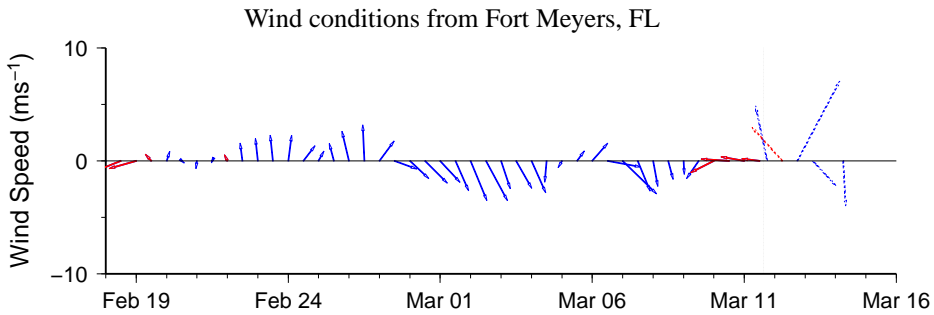
Pinellas to Sarasota: Southerly winds (10-15kn, 5-8m/s) today. Southwesterly winds (15kn, 8m/s) Tuesday becoming northwesterly in the afternoon and northerly Tuesday night. Northerly winds Wednesday (20kn, 10m/s) and Thursday (10-20kn, 5-10m/s).

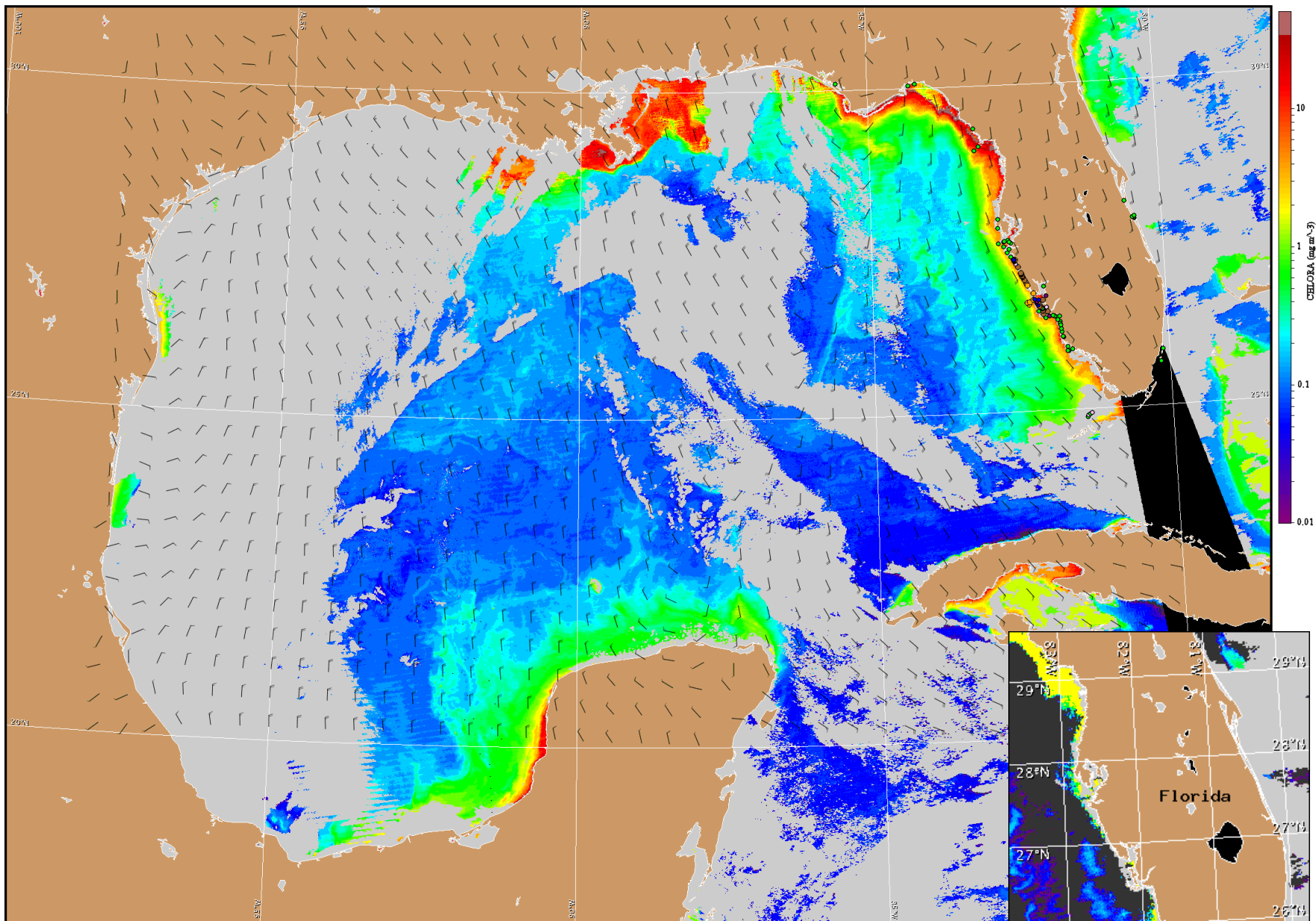
Charlotte and Lee: Southeasterly winds (15kn) today around 15 knots. Southerly winds (15kn) Tuesday becoming westerly in the afternoon and northerly on Tuesday night. Northerly winds Wednesday (20kn) and Thursday (10-20kn). Northeasterly winds (15kn) Thursday night.

Collier and northern Monroe: Southeasterly winds (10-15kn) today and south south-easterly winds (11-16kn, 6-8m/s) tonight. Southerly winds (10-15kn) Tuesday becoming southwesterly in the afternoon. West northwesterly winds (12-17kn, 6-9m/s) Tuesday night becoming north northwesterly (15-20 kn). North northeasterly winds (15-22kn, 8-11m/s) Wednesday and Thursday.



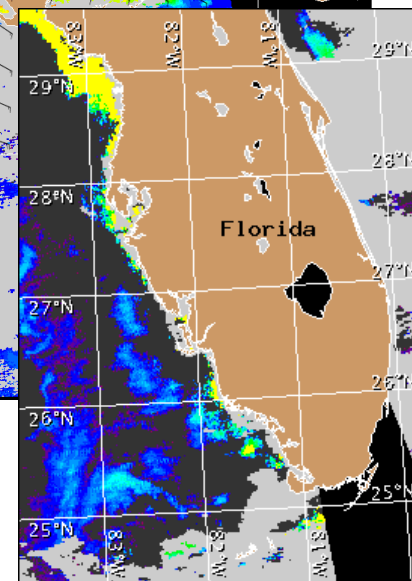
Wind speed and direction are averaged over 12 hours from buoy measurements. Length of line indicates speed; angle indicates direction. Red indicates that the wind direction favors upwelling near the coast. Values to the left of the dotted vertical line are measured values; values to the right are forecasts.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





Satellite chlorophyll image and forecast winds for March 12, 2013 06Z with cell concentration sampling data from March 1 to 8 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).