Gulf of Mexico Harmful Algal Bloom Bulletin

Region: Southwest Florida

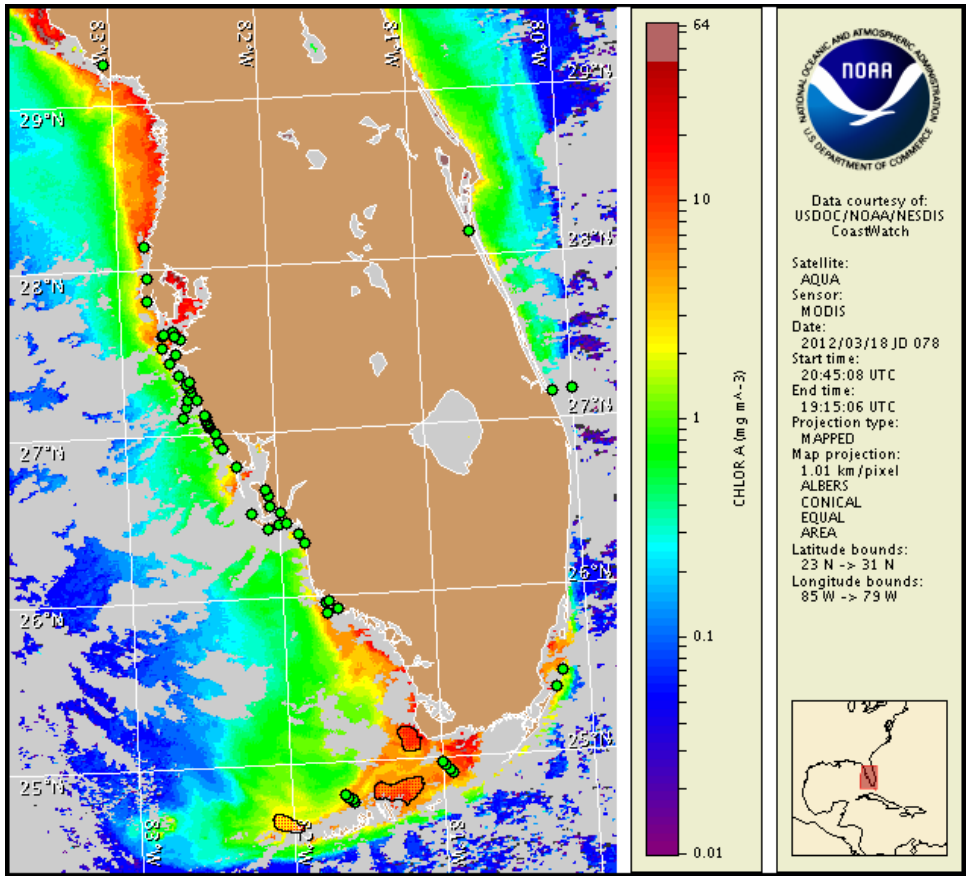
Monday, 19 March 2012

NOAA Ocean Service

NOAA Satellite and Information Service

NOAA National Weather Service

Last bulletin: Thursday, March 15, 2012



Satellite chlorophyll image with possible HAB areas shown by red polygon(s). Cell concentration sampling data from March 9 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). For a list of cell count data 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

To see previous bulletins and forecasts for other Harmful Algal Bloom Bulletin regions, visit the NOAA Harmful Algal Bloom Operational Forecast System bulletin archive: http://tidesandcurrents.noaa.gov/hab/bulletins.html

Conditions Report

A patchy harmful algal bloom was last identified alongshore and offshore Monroe County from the Pavilion Key region to western Cape Sable on 3/1-3/2. A patchy harmful algal bloom was also last identified offshore in the Gulf side region of the Lower Florida Keys on February 23. No reports of impacts in association with these blooms have recently been reported, however, impacts remain possible in these regions. No additional impacts are expected alongshore southwest Florida today through Wednesday, March 21.

Analysis

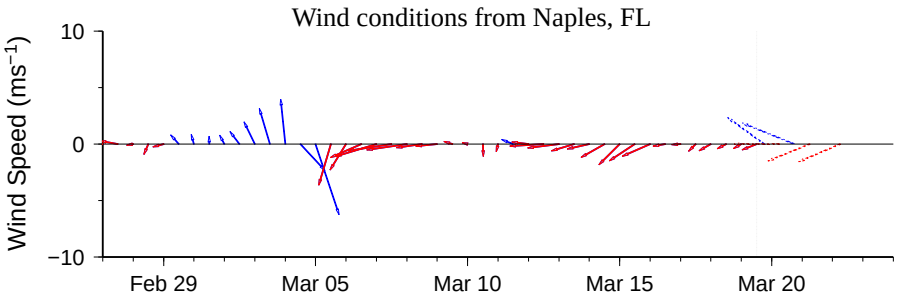
Southwest Florida: A harmful algal bloom was last identified on 3/1-3/2 alongshore Monroe County from Pavilion Key to Cape Sable. Samples collected on 3/2 and reported last week alongshore and up to 12 miles offshore Cape Sable in southern Monroe County confirmed the presence of a *K. brevis* bloom (NOAA, FWRI). *K. brevis* concentrations ranged from 'medium' at the coast and offshore up to 8 miles, to 'low a' 12 miles offshore Cape Sable. More recent sample information is presently unavailable for the coastal Monroe County region. Samples collected recently alongshore from Pinellas to Collier counties indicate that *K. brevis* is not present (FWRI, CCPCPD, SCHD; 3/10-3/16). Detailed sampling information can be obtained through FWRI at http://myfwc.com/research/redtide/events/status/statewide/.

MODIS imagery, although partially cloudy, suggests that the bloom may still be present alongshore and offshore Monroe County and west of Cape Sable. An elevated chlorophyll feature (6 to >10μg/L) is mostly visible alongshore southern Collier County, Monroe County extending 3-9 miles offshore, and Cape Sable extending southwest ~30 miles to 24°56'52''N 81°28'13''W. The elevated chlorophyll feature from south Sanibel Island that was located ~29 miles west of Cape Sable last week has nearly disputed as seen from the image on 3/17 (not shown) and will no longer be tracked. Elevated chlorophyll features are also visible alongshore southern Pinellas, Manatee, Charlotte and northern Lee counties. These features may be the result of non-harmful algal blooms or resuspended sediments, and are unlikely to contain *K. brevis*. Forecasted winds should maintain locatin of the feature through Wednesday. Bloom intensification is not expected.

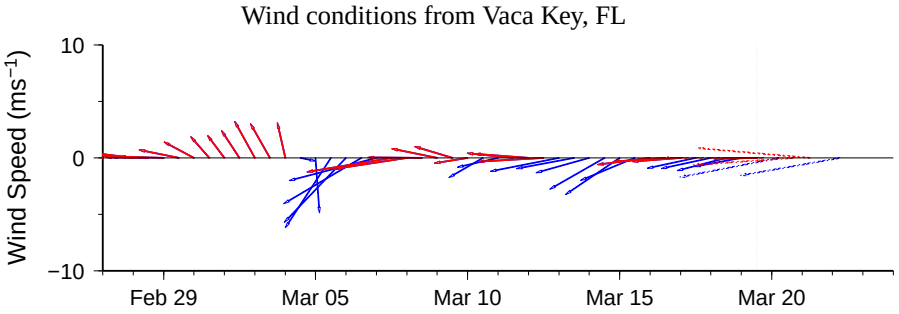
Florida Keys: No additional sample information is presently available offshore in the Gulf side region of the Lower Florida Keys where 'low a' concentrations of *K. brevis* were previously detected on 2/23. No *K. brevis* was detected in the Sandy Key region, Upper and Lower Arsnicker Keys region of Florida Bay, and the Sugarloaf Sound region of the Lower Keys (MML, FWRI; 3/9). Continued sampling is recommended.

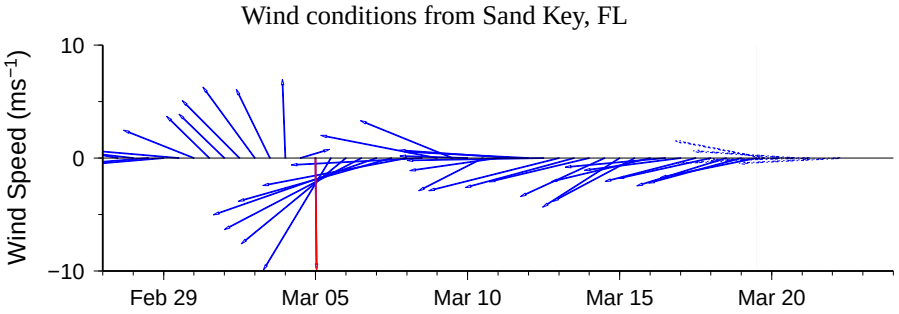
An elevated chlorophyll feature (4 to >10μg/L) remains visible in recent MODIS imagery north of the Lower and Middle Keys, extending from south of Cape Sable to ~13 miles northwest of Key West. Continued westward transport of features in this region is possible through Wednesday.

Yang, Fenstermacher



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).



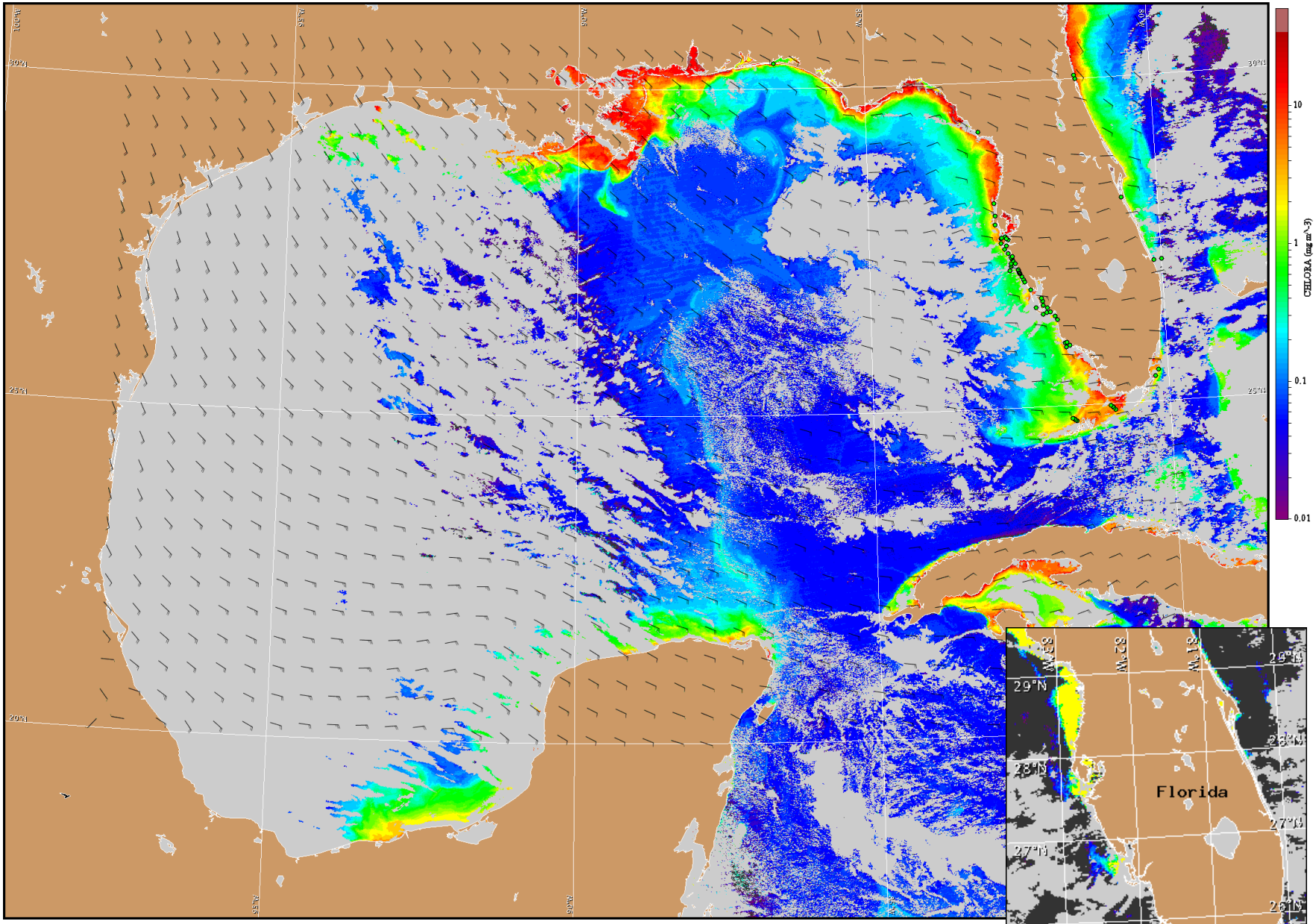


Wind Analysis

Collier and Monroe Counties: East or southeast winds (12-20kn, 6-10m/s) today through Wednesday night.

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

Pinellas to Lee Counties: East winds (15-20kn) today and Tuesday. Eaast to southeast winds (20kn) Tuesday night and Wednesday.



Satellite chlorophyll image and forecast winds for March 20, 2012 06Z with cell concentration sampling data from March 9 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). For a list of cell count data 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).