



## Gulf of Mexico Harmful Algal Bloom Bulletin

Region: Southwest Florida

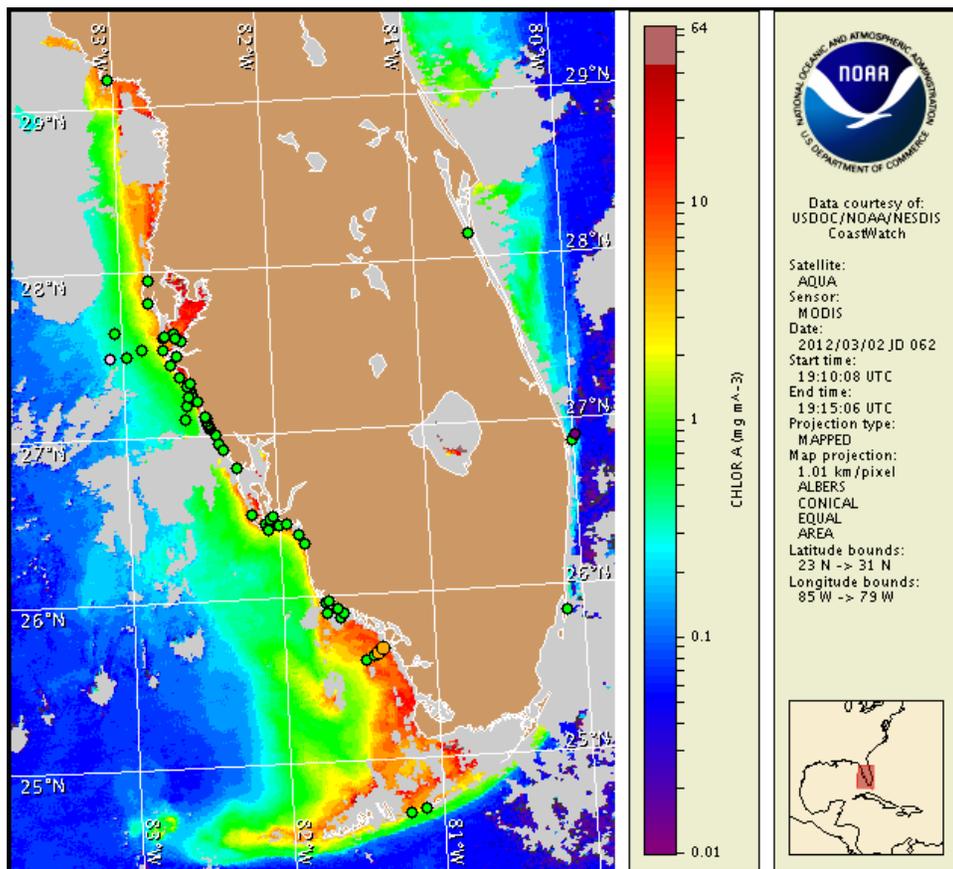
Monday, 05 March 2012

NOAA Ocean Service

NOAA Satellite and Information Service

NOAA National Weather Service

Last bulletin: Thursday, March 1, 2012



Satellite chlorophyll image with possible HAB areas shown by red polygon(s). Cell concentration sampling data from February 24 to March 1 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](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 localized harmful algal bloom has been re-identified alongshore northern Monroe County in the Pavilion Key region. Patchy very low impacts are possible alongshore northern Monroe County today through Wednesday. 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 this bloom have been received, however, impacts remain possible in this region. No additional impacts are expected alongshore southwest Florida today through Wednesday, March 7.

## Analysis

**Southwest Florida:** A harmful algal bloom has been re-identified alongshore and offshore of northern Monroe County. Medium concentrations of *Karenia brevis* were detected in water samples collected alongshore and approximately 3 miles offshore of Pavilion Key on 3/1 (MML). Recent samples collected alongshore Pinellas, Manatee, Sarasota, Charlotte, Lee, and Collier counties, and offshore Pinellas and Sarasota counties indicate that *K. brevis* is not present (FWRI, MML, SCHD, CCPCPD; 2/27-3/2). A single sample collected approximately 22 miles offshore northern Manatee County contained background *K. brevis* concentrations (FWRI, 2/19). Detailed sampling information can be obtained through FWRI at <http://myfwc.com/research/redtide/events/states/statewide/>.

Recent MODIS chlorophyll levels are elevated to high (6 to >10  $\mu\text{g/L}$ ) alongshore much of northern Monroe County; however, elevated chlorophyll in this region is common. A slightly elevated chlorophyll feature (2-4  $\mu\text{g/L}$ ) remains visible 30 miles south of Cape Romano in northern Monroe County. Forecasted winds may transport the bloom and elevated chlorophyll feature offshore Cape Romano south to southwest through Wednesday.

**Florida Keys:** A patchy harmful algal bloom was last identified offshore in the Gulf side region of the Lower Florida Keys. Samples collected on 2/23 detected a 'low a' concentration of *Karenia brevis* approximately 8 miles north of Big Spanish Key (MML). No additional samples are presently available in this region; continued sampling is recommended. Samples collected along the east and west end of 7-Mile Bridge indicate that *K. brevis* is 'not present' (MML, FWRI; 2/9).

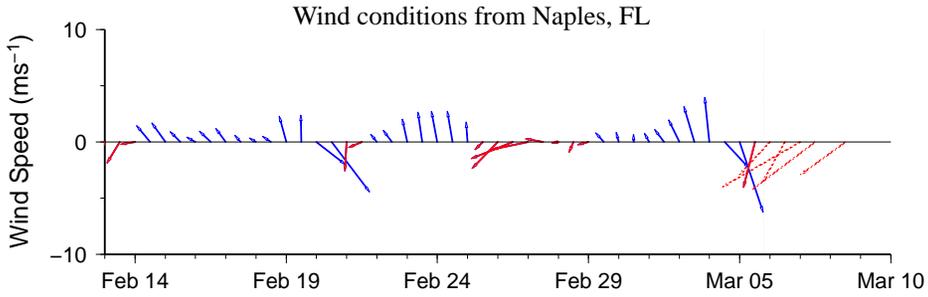
Recent MODIS imagery (3/2; shown left) is partially obscured by clouds, limiting analysis. Elevated chlorophyll (2-6  $\mu\text{g/L}$ ) remains visible north of the Lower Keys from Big Pine Key to Key West. Strong north to northeast winds may transport the bloom closer to shore through Wednesday.

Burrows, Fisher

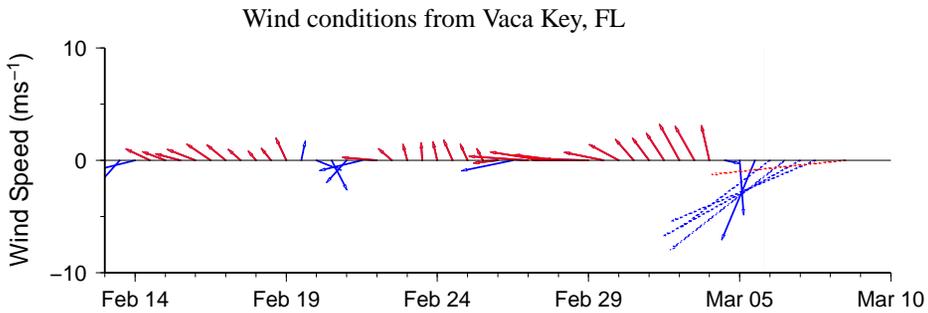
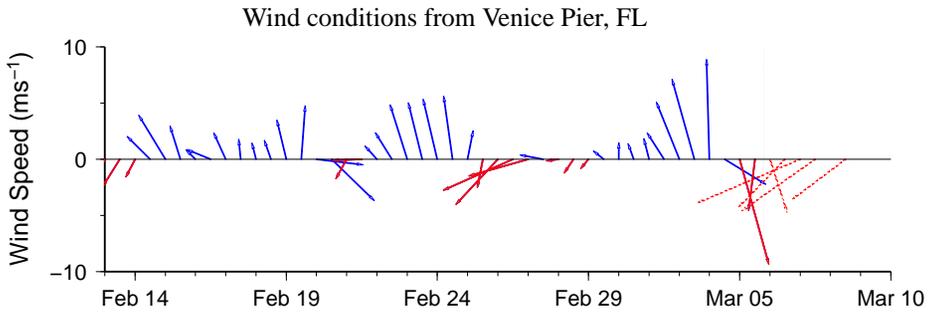
## Wind Analysis

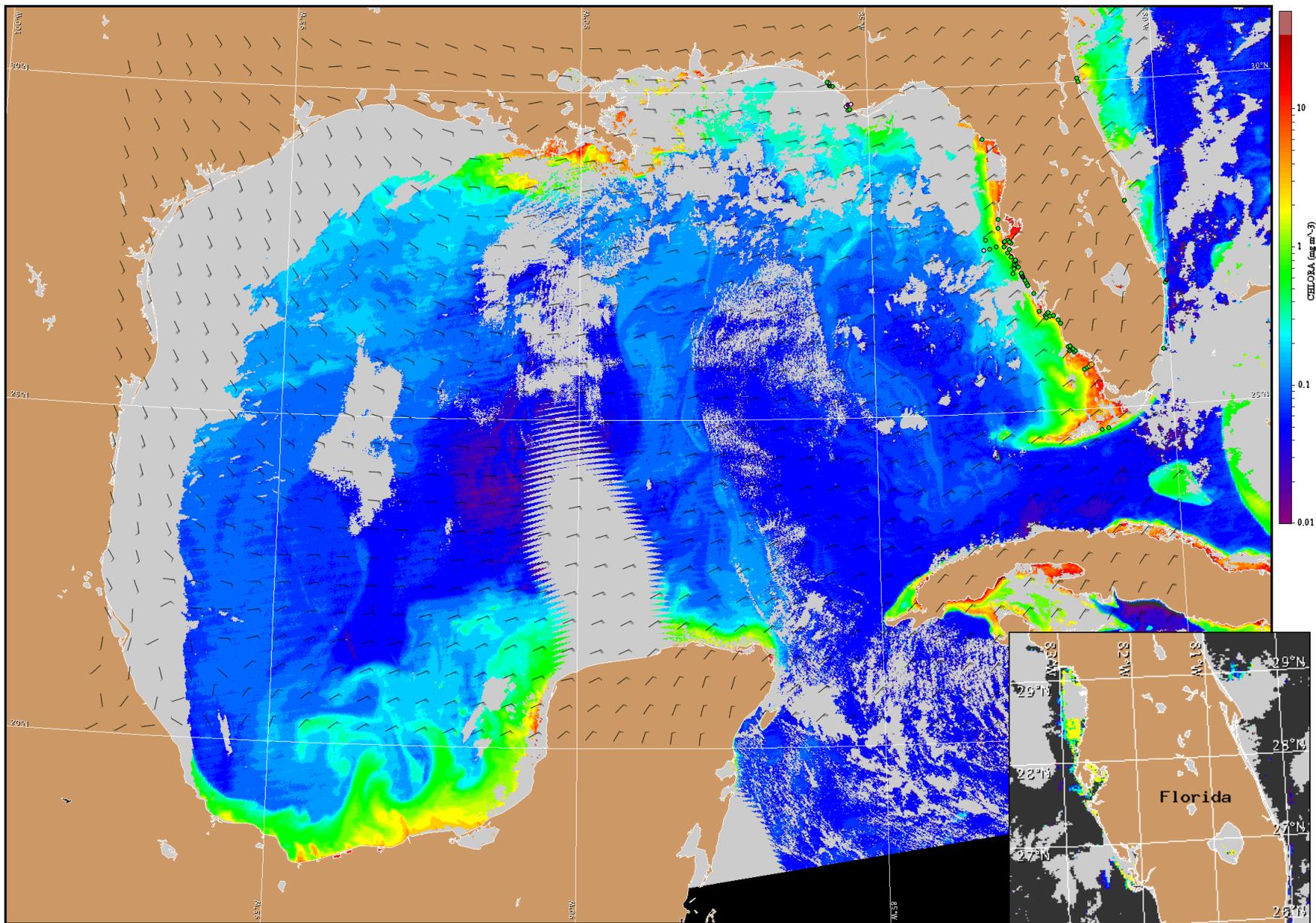
**Southwest Florida:** North to northeast winds today through tonight (12-22 kn, 7-11 m/s). East northeast winds Tuesday through Tuesday night (20-25, 10-13 m/s kn). East winds Wednesday through Wednesday night (20-25 kn).

**Gulf Side of Florida Keys:** North to northeast winds today through tonight (15-25 kn, 8-13 m/s). Northeast to east winds Tuesday and Wednesday (20-25 kn, 10- 13 m/s).



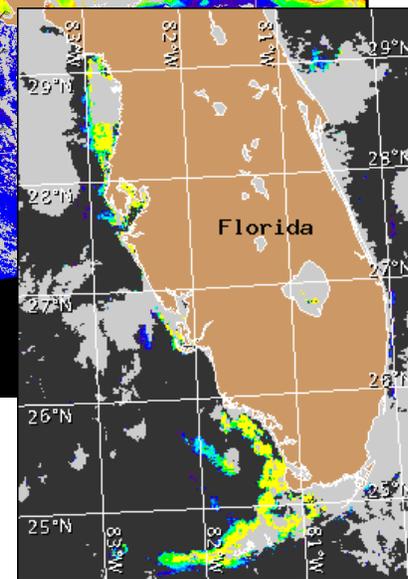
Wind speed and direction are averaged over 12 hours from buoy measurements. Length of line indicates speed; angle indicates direction. Red indicates that the wind direction favors upwelling near the coast. Values to the left of the dotted vertical line are measured values; values to the right are forecasts.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





Satellite chlorophyll image and forecast winds for March 6, 2012 12Z with cell concentration sampling data from February 24 to March 1 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:

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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).