



# Gulf of Mexico Harmful Algal Bloom Bulletin

Region: Southwest Florida

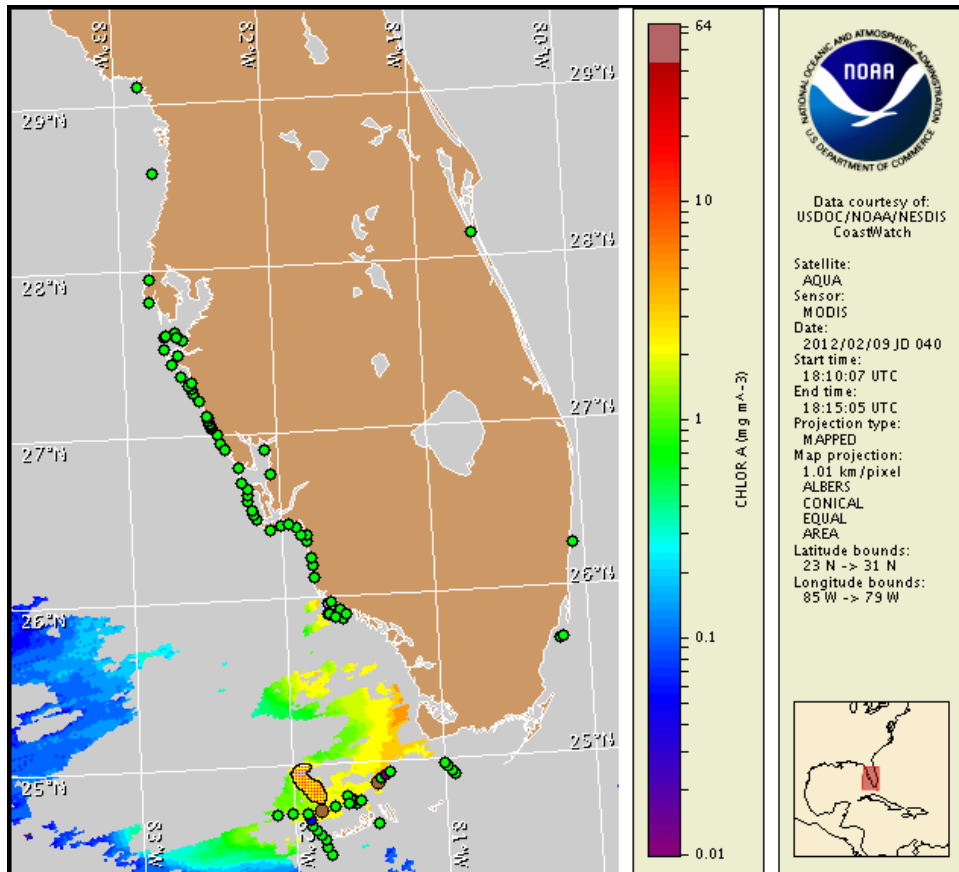
Monday, 13 February 2012

NOAA Ocean Service

NOAA Satellite and Information Service

NOAA National Weather Service

Last bulletin: Thursday, February 9, 2012



Satellite chlorophyll image with possible HAB areas shown by red polygon(s). Cell concentration sampling data from February 3 to 10 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 harmful algal bloom has been identified offshore in the Gulf side region of the Florida Keys. Patchy harmful algae were identified offshore northern Monroe County on February 2. No reports of impacts in association with this bloom have been received. Patchy low impacts are possible in the Gulf side region of the Lower Florida Keys today. No additional respiratory impacts are expected alongshore southwest Florida today through Wednesday, February 15.

## Analysis

**Florida Keys:** A harmful algal bloom remains present offshore in the Gulf side region of the Lower Florida Keys. 'Very low' to 'low a' concentrations of *Karenia brevis* were identified approximately 10 miles north and northwest of Key West (MML, 2/10), and approximately 5-9 miles north and northeast of Harbor Key (MML, 2/8). Other samples collected last week showed *K. brevis* was 'Not Present' (MML, FWRI; 2/6-2/10).

Recent MODIS imagery in the Florida Keys region is predominantly obscured by clouds, limiting analysis. Portions of an elevated chlorophyll feature (1.9-2.8  $\mu\text{g/L}$ ) remain visible in imagery (2/9, shown left) approximately 10 miles north to northwest of Key West. Continued sampling throughout the Gulf side regions of the Lower Keys is recommended. Predominantly east winds may maintain the location of the bloom. Northeast winds forecasted for today may increase impacts in the offshore region.

**Southwest Florida:** There is currently no indication of a harmful algal bloom present at the coast in southwest Florida. Background concentrations of *K. brevis* were detected in the Marco Island region of Collier County (FWRI, CCPCPD; 2/6), and no additional *K. brevis* has been identified alongshore from Pinellas to Monroe counties last week (FWRI, MML, CCPCPD; 2/6-2/10). No recent samples were collected in southwest of Pavilion Key in northern Monroe County, where 'Very low' *K. brevis* concentrations were identified on 2/2. Additional sample information can be obtained through FWRI at <http://myfwc.com/research/redtide/events/status/statewide/>.

Recent MODIS imagery in the southwest Florida region is predominantly obscured by clouds, limiting analysis. A slightly elevated chlorophyll feature that may contain *K. brevis* remains visible approximately 30 miles southwest of Cape Romano and continues to dissipate. Forecasted east and south winds may maintain the location of possibly remaining bloom patches through Wednesday. Bloom formation at the coast is unlikely.

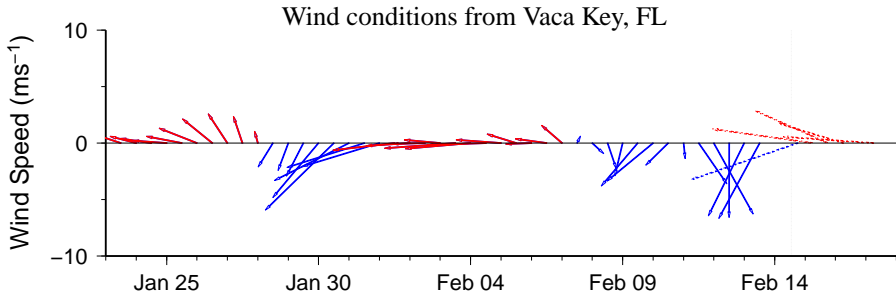
Yang, Fenstermacher

## Wind Analysis

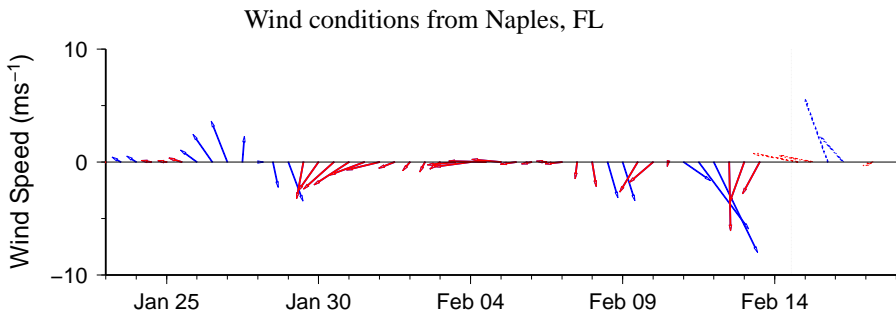
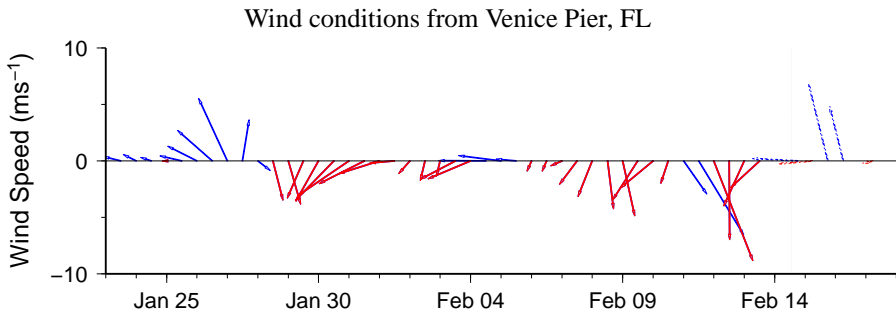
**Florida Keys:** Northeast to east winds (10-20kn, 5-10m/s) today. East winds (10-15kn, 5-8m/s) Tuesday through Wednesday.

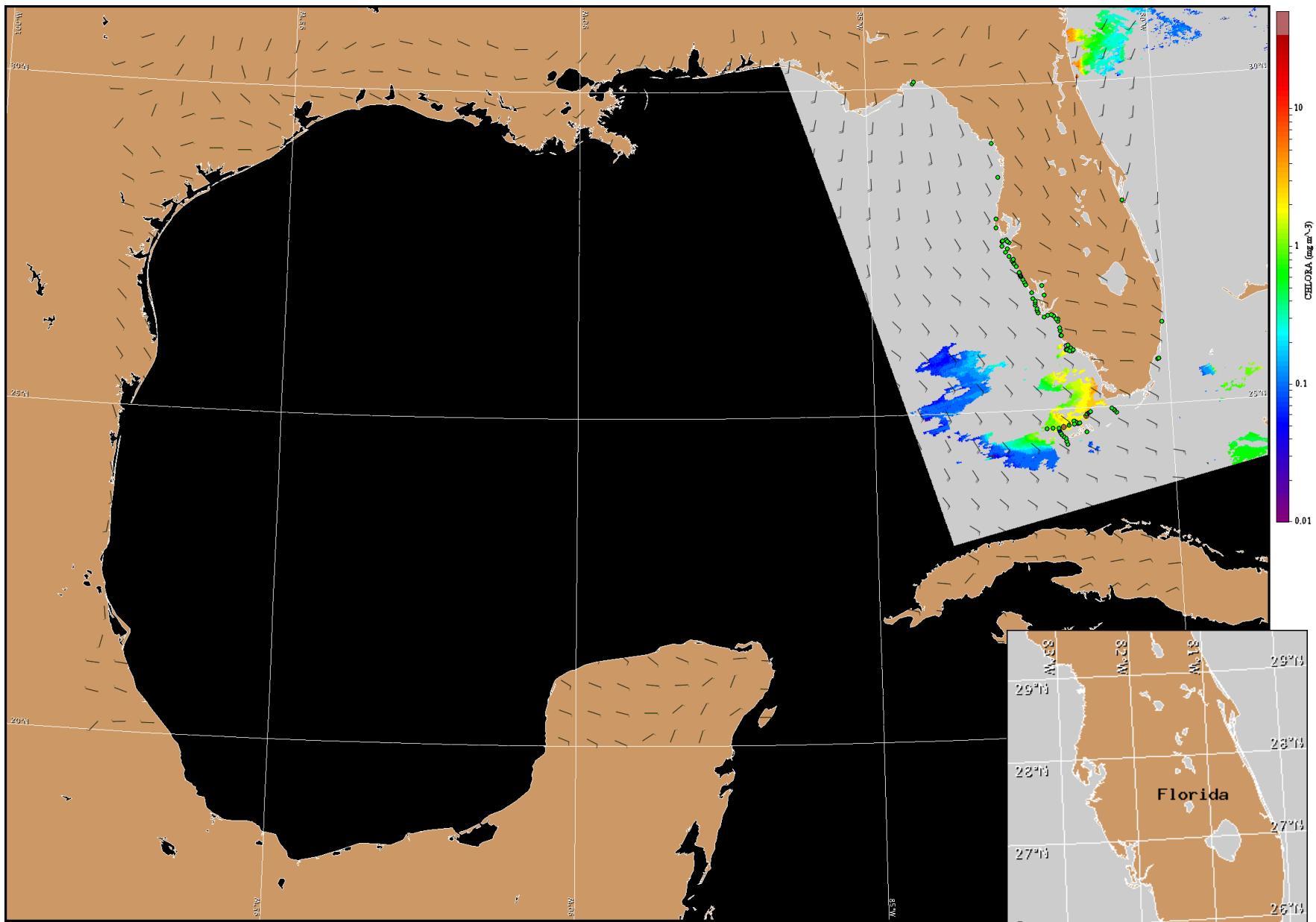
**Pinellas to Lee Counties:** East winds (10kn) today shifting southeast tonight. South winds (10-15kn) Tuesday through Wednesday.

**Collier and Monroe Counties:** East northeast winds (13-16kn, 7-8m/s) today shifting east (11-14kn, 6-7m/s) tonight. East southeast winds (8-14kn, 4-7m/s) Tuesday through Wednesday.



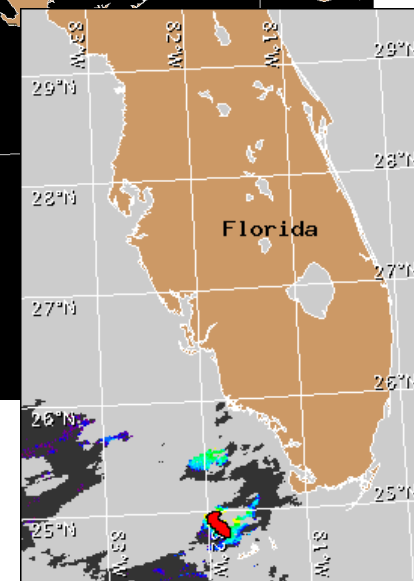
Wind speed and direction are averaged over 12 hours from buoy measurements. Length of line indicates speed; angle indicates direction. Red indicates that the wind direction favors upwelling near the coast. Values to the left of the dotted vertical line are measured values; values to the right are forecasts.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





Satellite chlorophyll image and forecast winds for February 14, 2012 12Z with cell concentration sampling data from February 3 to 10 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).