



# Gulf of Mexico Harmful Algal Bloom Bulletin

Region: Southwest Florida

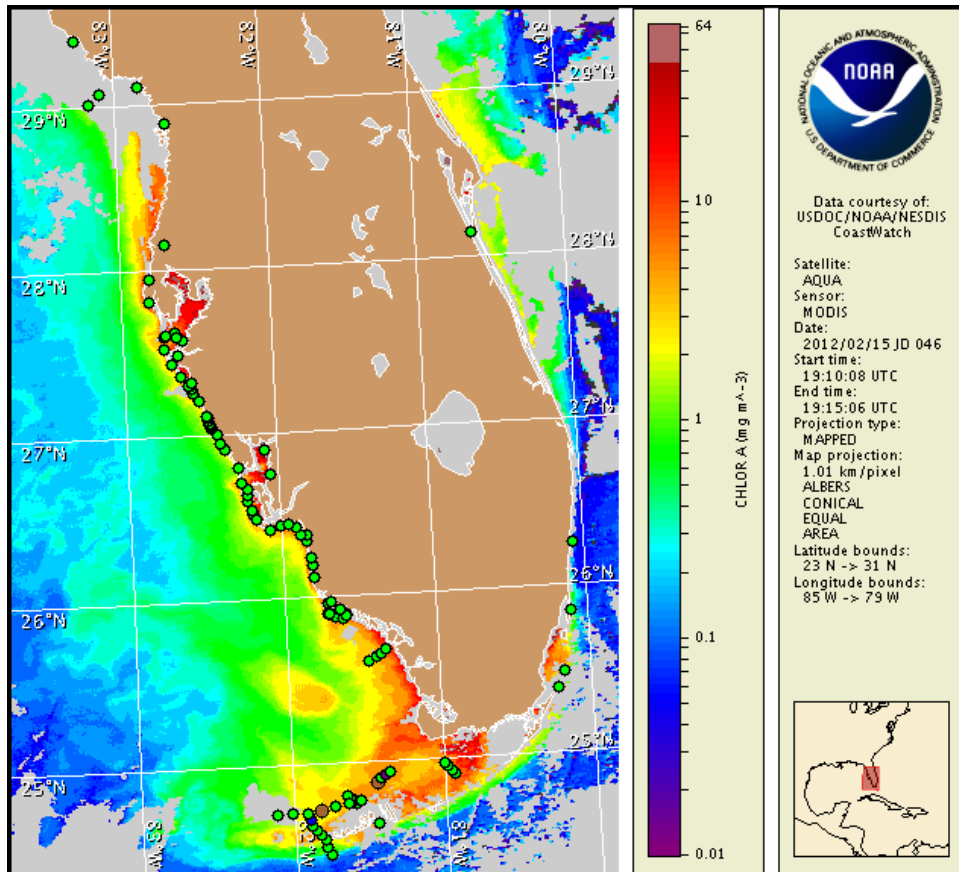
Thursday, 16 February 2012

NOAA Ocean Service

NOAA Satellite and Information Service

NOAA National Weather Service

Last bulletin: Monday, February 13, 2012



Satellite chlorophyll image with possible HAB areas shown by red polygon(s). Cell concentration sampling data from February 6 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). 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 persists offshore in the Gulf side region of the Florida Keys. Patchy low impacts are possible in the Gulf side region of the Lower Florida Keys Sunday through Monday. No additional respiratory impacts are expected alongshore southwest Florida today through Monday, February 20.

## Analysis

\*\* Due to the upcoming Federal holiday, the next regularly scheduled bulletin will be issued on Tuesday, February 21. \*\*

**Florida Keys:** A harmful algal bloom remains present offshore in the Gulf side region of the Lower Florida Keys. No new samples have been reported since Monday's bulletin. '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 (2/15, shown left) in the Florida Keys indicates that an elevated to high chlorophyll feature (2-13  $\mu\text{g/L}$ ) is visible offshore of the Gulf side of the Middle and Lower Keys. However, due to technical difficulties with imagery over the last few days, time series analysis is limited. Continued sampling throughout the Gulf side regions of the Lower and Middle Keys is recommended. Forecasted variable winds may maintain the location of the bloom. Northwest to northeast winds forecasted for Sunday and Monday may increase impacts in the offshore region of the Lower Keys.

**Southwest Florida:** There is currently no indication of a harmful algal bloom present at the coast in southwest Florida. Samples collected this week showed *K. brevis* was 'Not Present' from Pinellas to northern Monroe counties including the Marco Island region of Collier County and Pavilion Key of northern Collier County (FWRI, CPCCPD; 2/11-2/14). Additional sample information can be obtained through FWRI at <http://myfwc.com/research/redtide/events/status/statewide/>.

Recent MODIS imagery (2/15, shown left) in the southwest Florida shows slightly elevated chlorophyll feature (1.8-3.8  $\mu\text{g/L}$ ) that may contain *K. brevis* remains visible approximately 35 miles southwest of Cape Romano. Forecasted variable winds may maintain the location of the elevated chlorophyll patch offshore of Cape Romano through Monday. Bloom formation at the coast is unlikely.

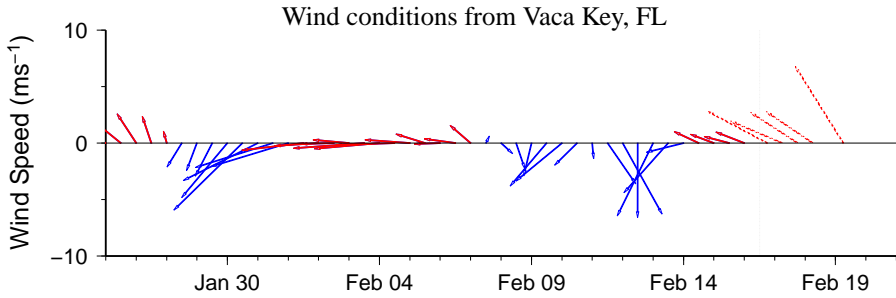
Yang, Fenstermacher

## Wind Analysis

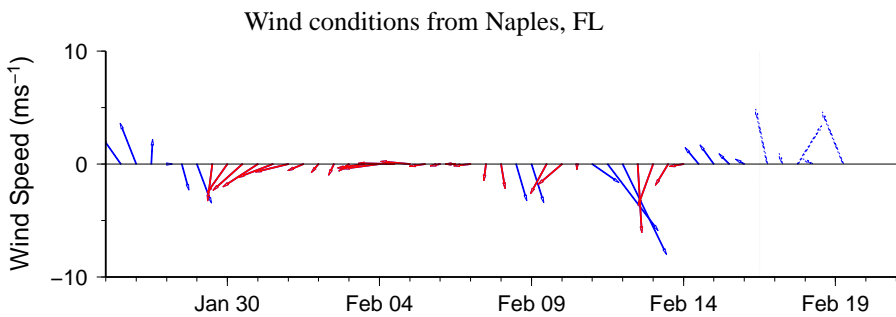
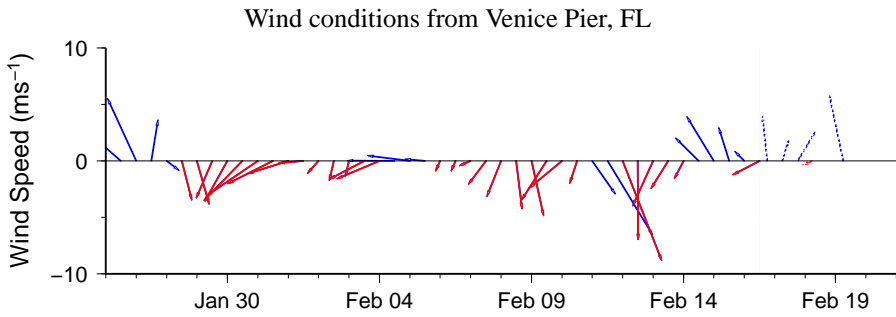
**Florida Keys:** East to southeast winds(10-15kn, 5-8m/s) today through Friday. Southeast to south winds (10-15kn) Saturday. Southwest winds (15kn) Saturday shifting northwest to north (15-20kn, 8-10m/s) Sunday night. Northeast winds (15-20kn) Monday.

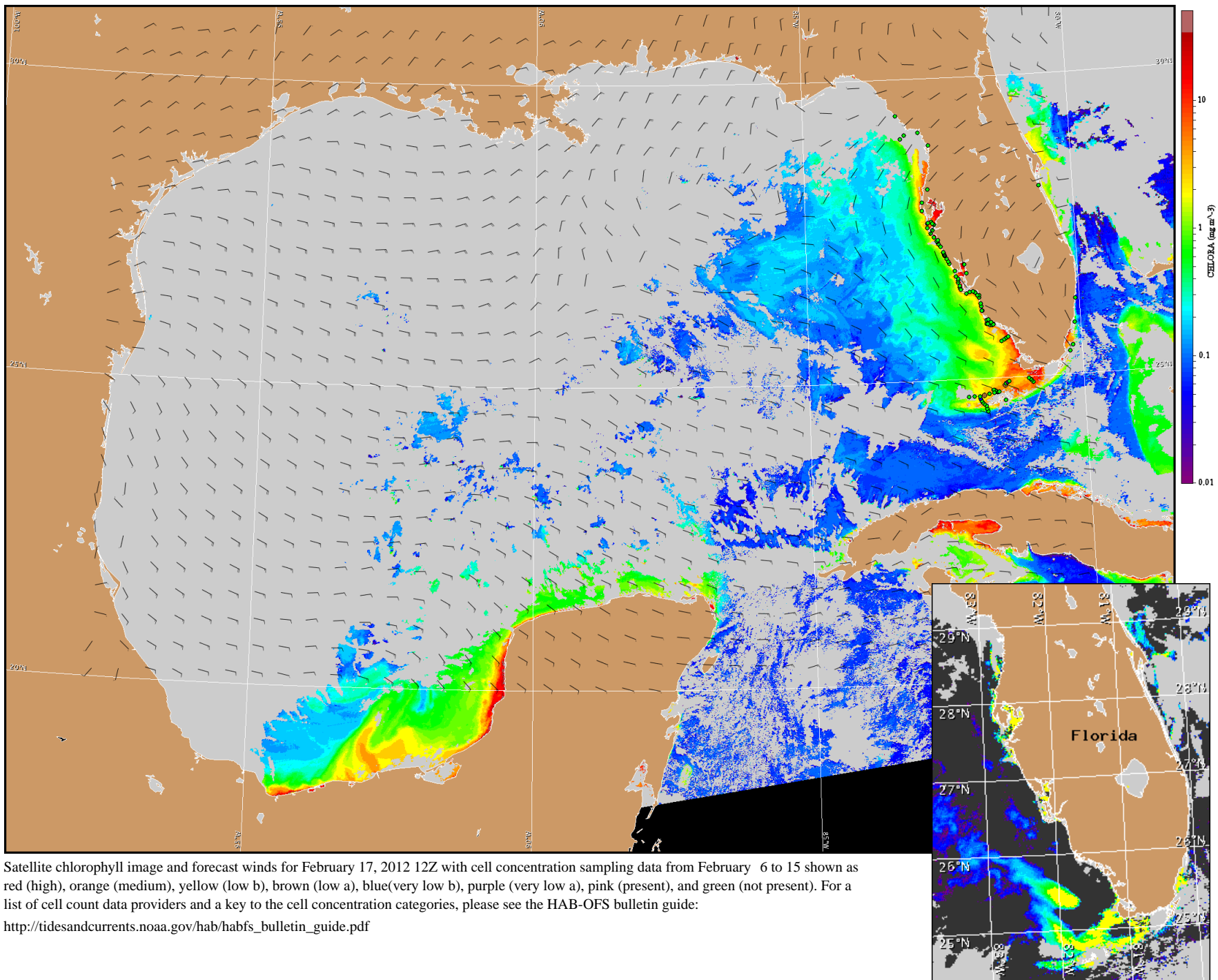
**Pinellas to Lee Counties:** South winds (5-10kn, 3-5m/s) today. Southwest to south winds (5-10kn) Friday. South winds (15kn) Saturday becoming southwest (20kn) Saturday night. Northwest winds (20kn) shifting northeast Sunday night. Northeast winds (20kn) Monday becoming east (10-15kn) Monday afternoon.

**Collier and Monroe Counties:** East southeast to south winds (5-12kn, 3-6m/s) today through Friday. South southeast winds (12-15kn, 6-8m/s) Saturday shifting south (13-16kn, 7-8m/s) Saturday night. West southwest winds (14-19kn, 7-10m/s) Sunday shifting north Sunday night. Northeast winds (14-19kn) Monday.



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 17, 2012 12Z with cell concentration sampling data from February 6 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). 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).