



## Gulf of Mexico Harmful Algal Bloom Bulletin

Region: Southwest Florida

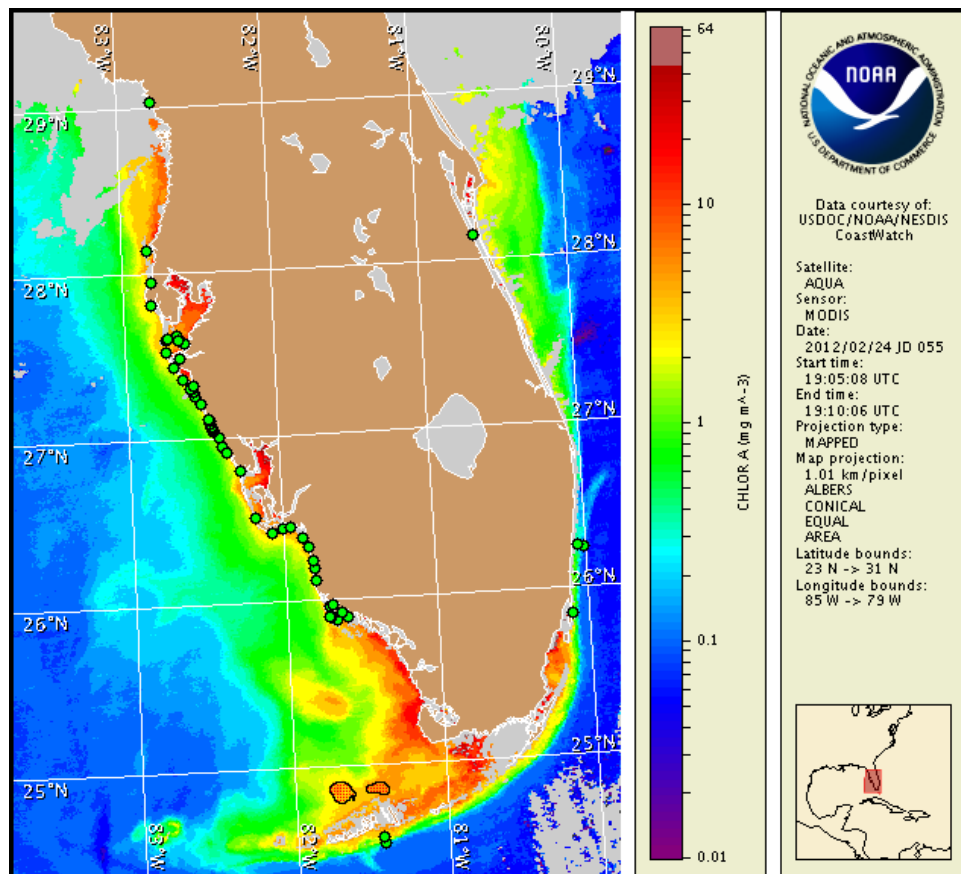
Monday, 27 February 2012

NOAA Ocean Service

NOAA Satellite and Information Service

NOAA National Weather Service

Last bulletin: Thursday, February 23, 2012



Satellite chlorophyll image with possible HAB areas shown by red polygon(s). Cell concentration sampling data from February 18 to 23 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 patchy harmful algal bloom was last identified offshore in the Gulf side region of the Lower Florida Keys, Monroe County, on February 10. No reports of impacts in association with this bloom have been received; however, impacts remain possible in this region. No additional respiratory impacts are expected alongshore southwest Florida today through Wednesday, February 29.

## Analysis

**Florida Keys:** A harmful algal bloom may be present offshore the Gulf side region of the Lower Florida Keys. No new samples have been received since 'very low a' 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). No *K. brevis* was identified in two samples collected approximately 2-3 miles offshore southeast of Key Lois, along the Atlantic side of the Lower Florida Keys (FWRI; 2/22).

Recent MODIS imagery is cloudy, limiting analysis. Imagery from late last week (2/24; shown left) indicates patchy elevated chlorophyll (2-5  $\mu\text{g/L}$ ) north of the Lower Keys, with two patches centered north of Boca Chica Key and Big Torch Key at approximately 24°51'40.4"N 81°43'21.3"W and 24°52'4.6"N 81°28'54.8"W, respectively. A band of elevated chlorophyll (3-9  $\mu\text{g/L}$ ) is also visible stretching along and offshore the Gulf side of the Lower to Middle Keys. East to southeast winds forecasted over the next few days may maintain bloom location through Wednesday.

**Southwest Florida:** There is currently no indication of a harmful algal bloom present at the coast in Southwest Florida. Recent samples collected alongshore Sarasota and Lee counties indicate that *K. brevis* is not present (CCPCPD, FWRI; 2/20-22). Additional sampling information can be obtained through FWRI at <http://myfwc.com/research/redtide/events/status/statewide/>.

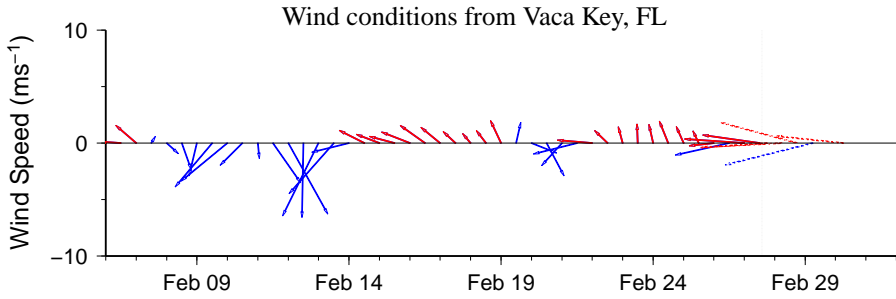
Slightly elevated chlorophyll (2-4  $\mu\text{g/L}$ ) is visible stretching alongshore southwest Florida from Pinellas to Collier Counties. A slightly elevated chlorophyll (2-3  $\mu\text{g/L}$ ) feature that may contain *K. brevis* remains visible approximately 35 miles south of Cape Romano, though continues to decrease in extent and concentration. Forecasted easterly and southerly winds may maintain the location of the elevated chlorophyll offshore Cape Romano through Wednesday. Bloom formation at the coast is unlikely.

Derner, Burrows

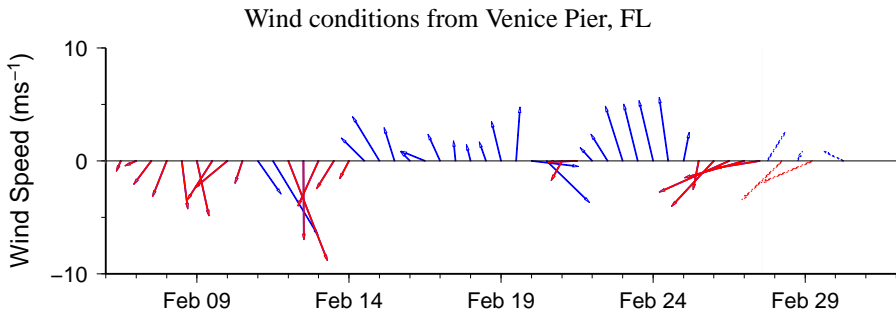
## Wind Analysis

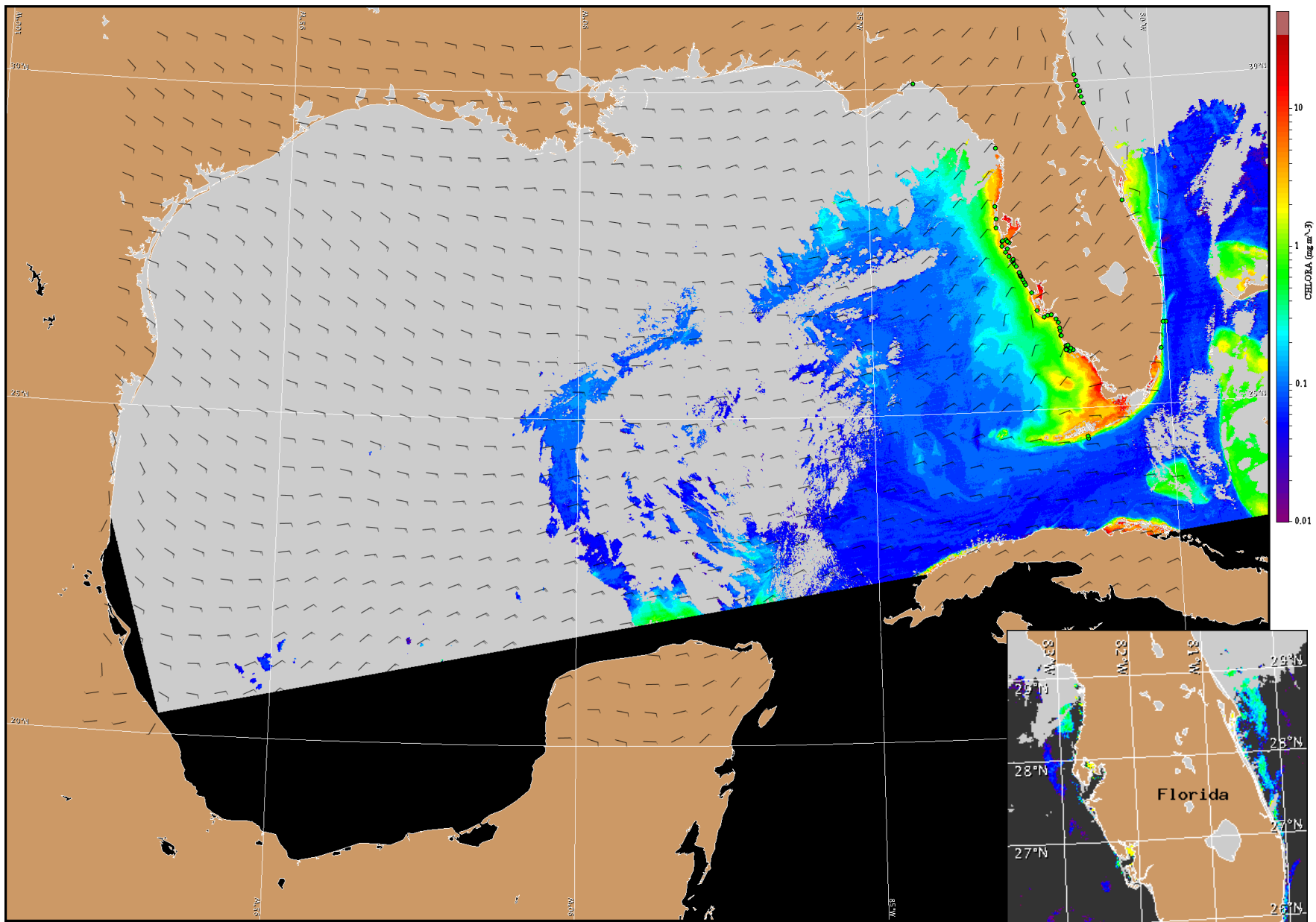
**Gulf side of Florida Keys:** East winds (10-20kn; 5-10m/s) today through Tuesday. East to southeast winds (10-15kn; 5-8m/s) Wednesday.

**Southwest Florida:** East winds (10kn, 5 m/s) today becoming north (5kn, 3m/s) in the afternoon. Northeast winds (10kn) tonight through Tuesday, becoming east (10kn) Tuesday night. South winds (10kn) 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 28, 2012 06Z with cell concentration sampling data from February 18 to 23 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)

Verified and suspected HAB areas shown in red. Other areas of high chlorophyll concentration shown in yellow (see p. 1 analysis for interpretation).