



# Gulf of Mexico Harmful Algal Bloom Bulletin

Region: Southwest Florida

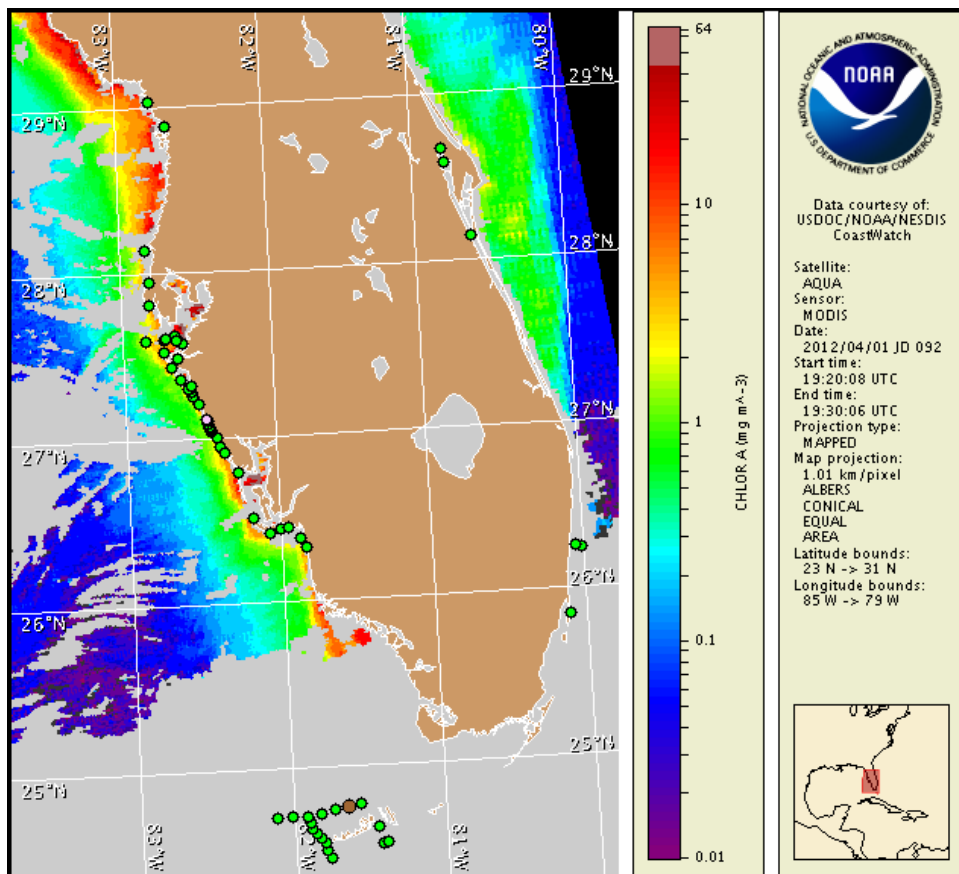
Monday, 02 April 2012

NOAA Ocean Service

NOAA Satellite and Information Service

NOAA National Weather Service

Last bulletin: Thursday, March 29, 2012



Satellite chlorophyll image with possible HAB areas shown by red polygon(s). Cell concentration sampling data from March 24 to 29 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 is present offshore the Gulf side region of the Lower Florida Keys, with patchy very low impacts possible today through Wednesday. No additional impacts are expected alongshore southwest Florida today through Wednesday, April 4.

## Analysis

**Southwest Florida:** There is currently no indication of a harmful algal bloom present at the coast in Southwest Florida. Recent samples collected in Sarasota County identified 'very low' *Karenia brevis* concentrations offshore South Venice, as well as background concentrations alongshore Nokomis Beach and New Pass (3/27-28; MML, SCHD). No additional *K. brevis* has been identified alongshore from Pinellas to Lee counties or offshore Manatee County (3/26-30; FWRI, MML, SCHD). Additional sampling information can be obtained through FWRI at <http://myfwc.com/research/redtide/events/status/statewide/>.

Imagery over the past several days has been cloudy, limiting analysis. Elevated to high chlorophyll (3-16  $\mu\text{g/L}$ ) is visible stretching along- and offshore southern Collier County, Monroe County, and extending offshore Cape Sable westward toward the Lower Florida Keys (MODIS 3/29; not shown). MODIS imagery from 3/29 (not shown) also indicates that the elevated to high chlorophyll feature (5-13  $\mu\text{g/L}$ ) west of Cape Sable persists, and does not appear to have decreased in concentration. This region will continue to be monitored as imagery becomes available. Elevated to high chlorophyll (1 to <20  $\mu\text{g/L}$ ) is also visible in patches along- and offshore from Pinellas to Collier counties. These patches may be the result of various non-toxic blooms that have been reported throughout the region (3/28-29; FWRI). Forecasted winds may maintain the location of elevated chlorophyll features along the coast through Wednesday.

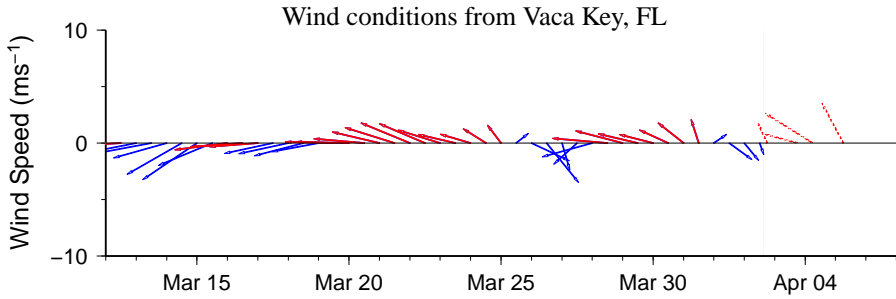
**Florida Keys:** No additional sample information is presently available in the Gulf side region of the Lower Florida Keys where one 'low a' sample was collected offshore north of Marvin Key on 3/24 (MML). Recent MODIS imagery is completely obscured by clouds throughout the Florida Keys, limiting analysis in this region; however, imagery from 3/29 (MODIS; not shown) indicates that elevated to high chlorophyll (4-13  $\mu\text{g/L}$ ) remains present north of the Lower and Middle Florida Keys. East to southeast winds forecasted over the next few days may maintain bloom location through Wednesday.

Derner, Burrows

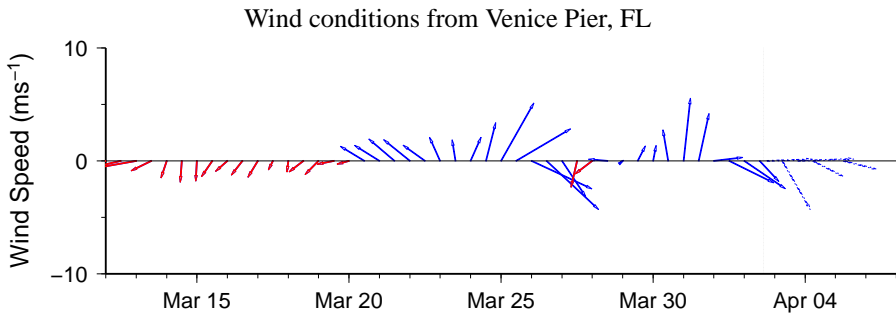
## Wind Analysis

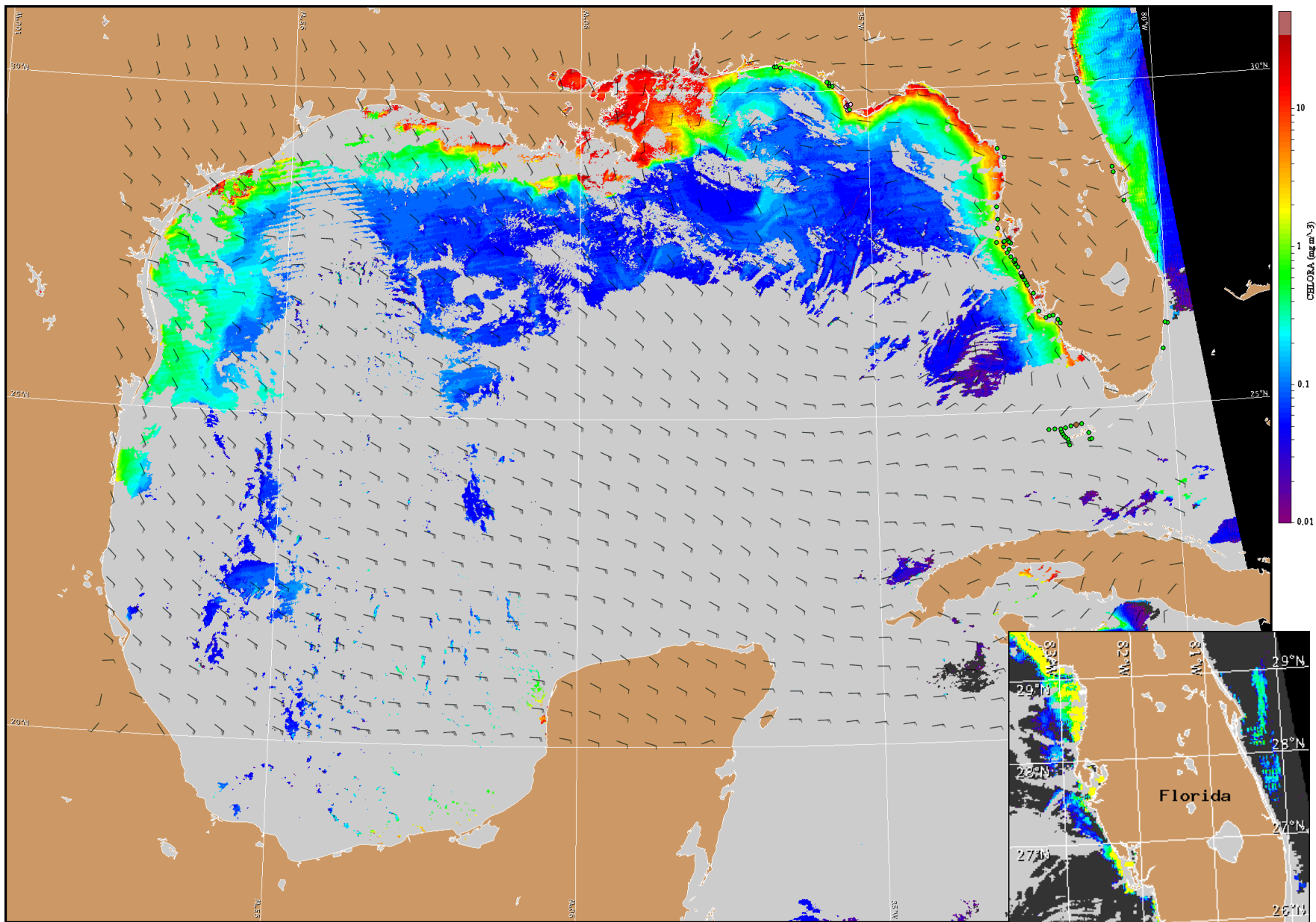
**Gulf side of Florida Keys:** Variable winds (5kn, 3m/s) today. East to southeast winds (5-10kn, 3-5m/s) Tuesday. Southeast winds (10-15kn, 5-8m/s) Tuesday night through Wednesday.

**Southwest Florida:** North to northwest winds (5-10kn) today and Tuesday becoming west (5kn, 3m/s) Tuesday night. Southwest winds (10kn, 5m/s) Wednesday.



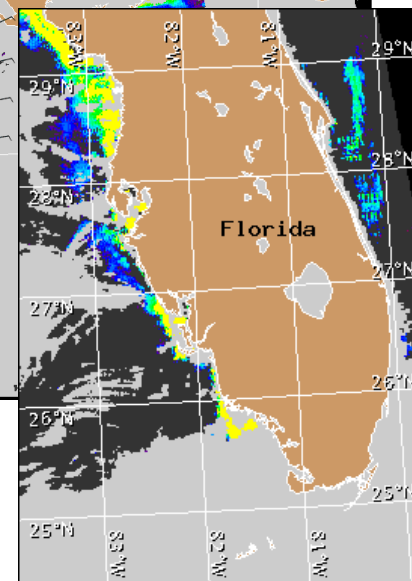
Wind speed and direction are averaged over 12 hours from buoy measurements. Length of line indicates speed; angle indicates direction. Red indicates that the wind direction favors upwelling near the coast. Values to the left of the dotted vertical line are measured values; values to the right are forecasts.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





Satellite chlorophyll image and forecast winds for April 3, 2012 06Z with cell concentration sampling data from March 24 to 29 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).