



# Gulf of Mexico Harmful Algal Bloom Bulletin

Region: Southwest Florida

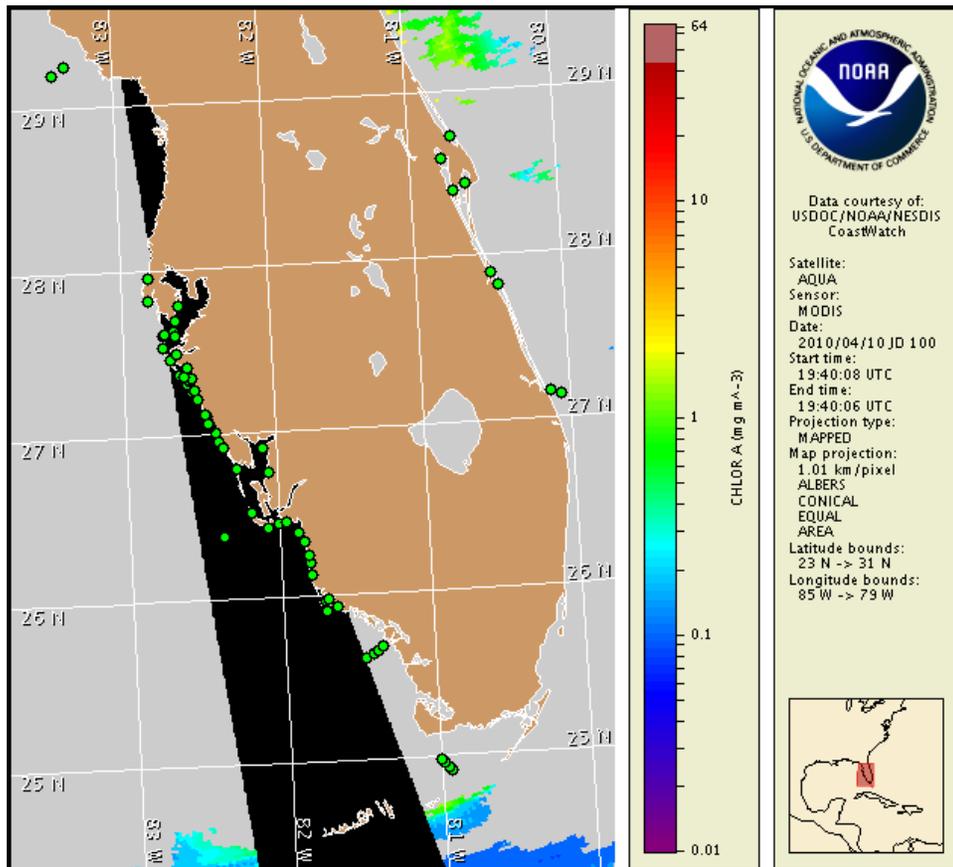
12 April 2010

NOAA Ocean Service

NOAA Satellites and Information Service

NOAA National Weather Service

Last bulletin: April 8, 2010



Satellite chlorophyll image with possible HAB areas shown by red polygon(s). Cell concentration sampling data from April 3 to 8 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 HABFS bulletin guide:

[http://tidesandcurrents.noaa.gov/hab/habfs\\_bulletin\\_guide.pdf](http://tidesandcurrents.noaa.gov/hab/habfs_bulletin_guide.pdf)

Please note the following restrictions on all SeaWiFS imagery derived from CoastWatch.

1. Data are restricted to civil marine applications only; i.e. federal, state, and local government use/distribution is permitted.
2. Image products may be published in newspapers. Any other publishing arrangements must receive GeoEye approval via the CoastWatch Program.

## Conditions Report

A harmful algal bloom was last identified alongshore and offshore in the ocean side region of the lower Florida Keys and offshore in the gulfside region of the lower Florida Keys on March 30-31. No reports of impacts in association with this bloom have been received recently. No impacts are expected in the Florida Keys or elsewhere in southwest Florida today through Wednesday, April 14.

## Analysis

**Florida Keys:** A harmful algal bloom was last identified alongshore and offshore in the ocean side region of the lower Florida Keys and offshore in the gulfside region of the lower Florida Keys on March 30-31. No new samples have been received for the harmful algal bloom south of the lower Keys, where up to 'low a' *Karenia brevis* concentrations were identified south of Newfound Harbor Keys on 3/30 (MML). Additionally, no new samples have been received north of the lower Florida Keys, where up to 'medium' *K. brevis* concentrations were identified in an area 5-10 miles north-northeast of Upper Harbor Key on 3/31 (MML). Imagery in the Gulf of Mexico remains cloudy, limiting analysis. Imagery from April 8 (not shown) continues to indicate an elevated chlorophyll feature (5-6  $\mu\text{g/L}$ ) north of Upper Harbor Key, centered at 24°52'54"N 81°25'7.54"W, which coincides with the previously identified bloom location. Continued sampling in these regions is recommended.

Strong easterly wind conditions through this week in the gulfside of the lower Florida Keys will likely maintain bloom location.

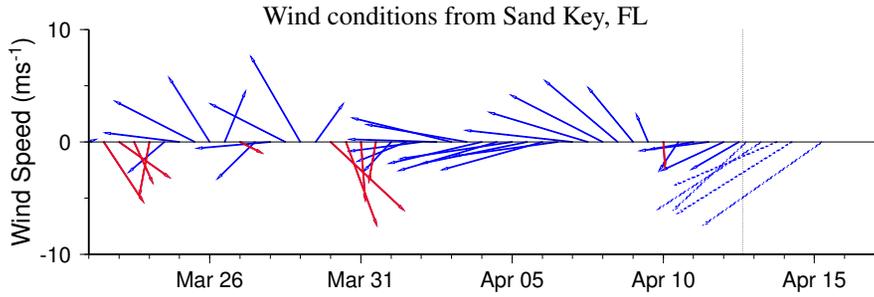
**Southwest Florida:** Recent samples collected alongshore southwest Florida from Pinellas to Monroe County indicate that *K. brevis* is not present (FWRI, MML, SCHD; 4/3-4/7). Imagery in the Gulf of Mexico remains cloudy, limiting analysis. A patchy, non-harmful algal bloom has been confirmed alongshore of Lee County (FWRI, 4/7).

Due to technical difficulties SeaWiFS imagery is currently unavailable for display. MODIS imagery is shown on this bulletin.

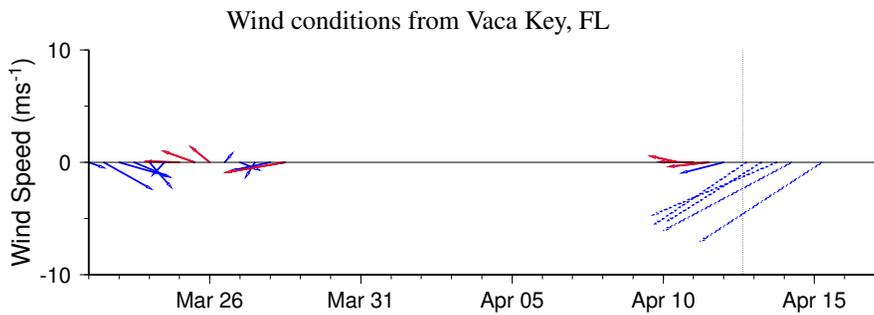
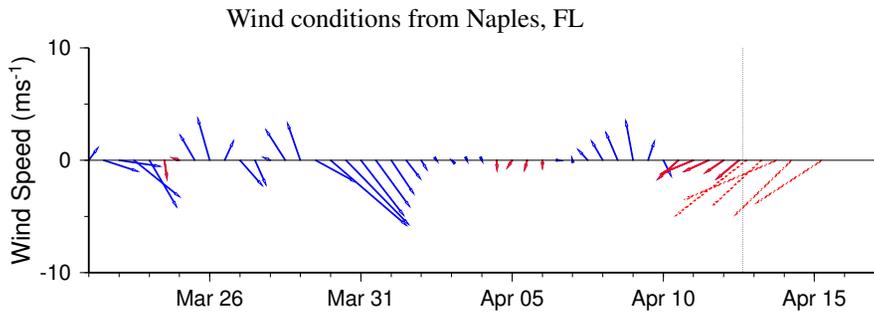
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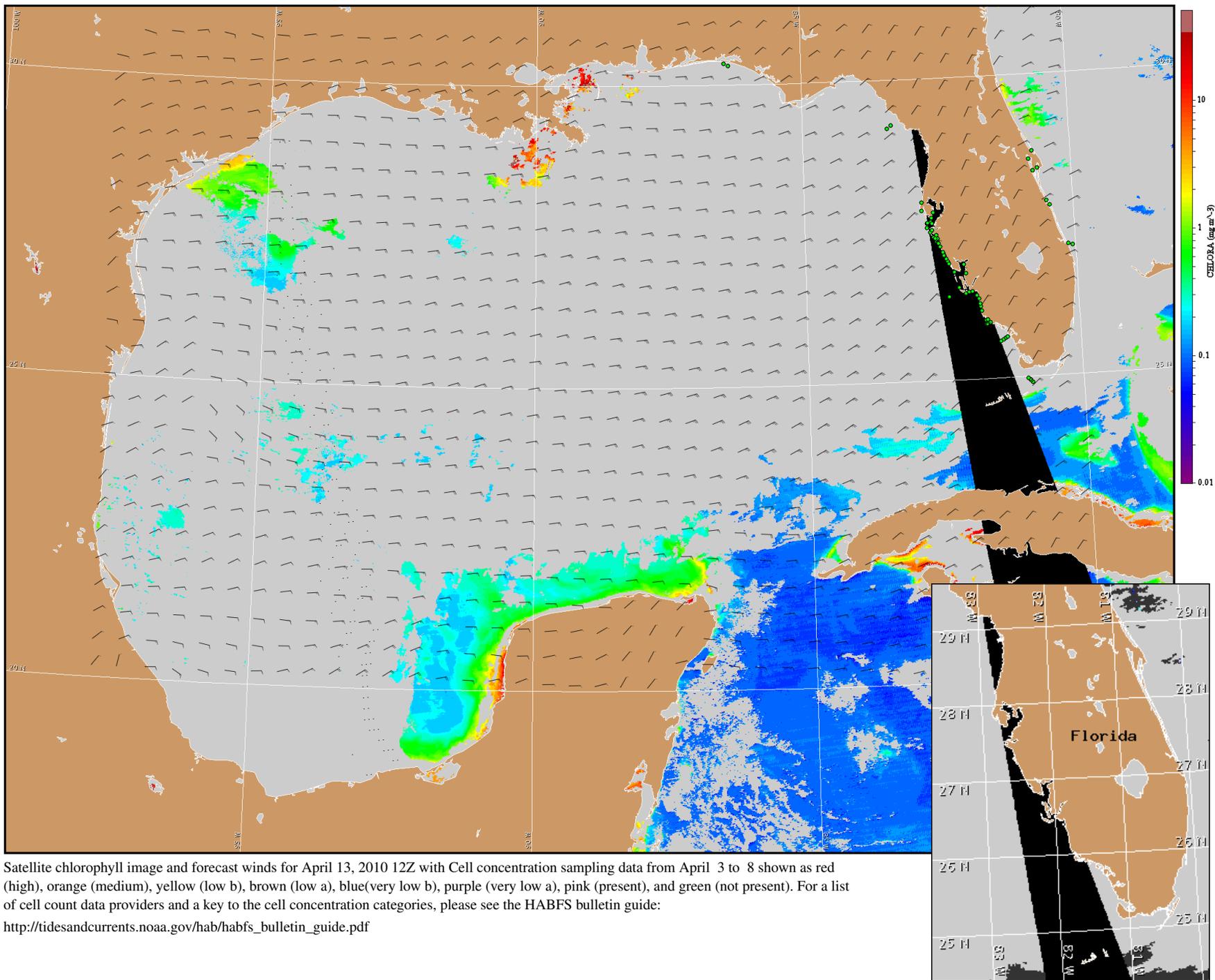
## Wind Analysis

FL Keys: Strong northeast to easterly winds today through Tuesday (10-20 kn; 5-10 m/s).  
Strong easterlies on 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 April 13, 2010 12Z with Cell concentration sampling data from April 3 to 8 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 HABFS 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).