



# Gulf of Mexico Harmful Algal Bloom Bulletin

Region: Southwest Florida

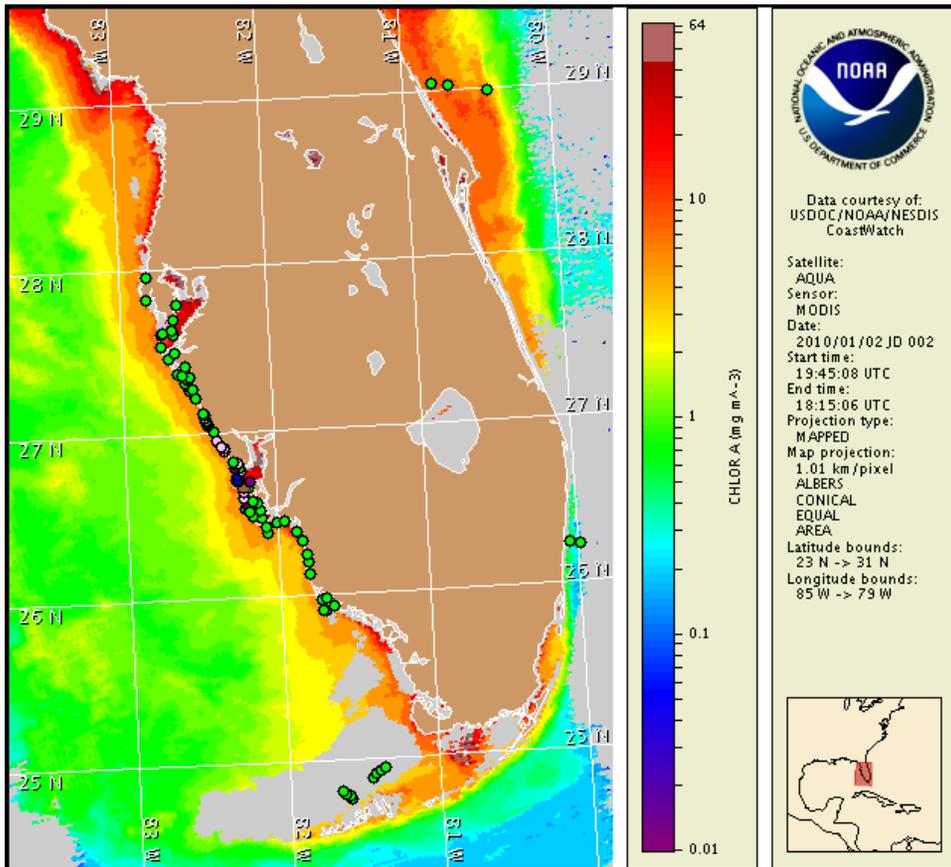
4 January 2010

NOAA Ocean Service

NOAA Satellites and Information Service

NOAA National Weather Service

Last bulletin: December 31, 2009



Satellite chlorophyll image with possible HAB areas shown by red polygon(s). Cell concentration sampling data from December 26 to 31 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 has been identified in patches alongshore Sarasota, Charlotte, and northern Lee counties, in the northern Pine Island region of Lee County, and offshore Sarasota, northern Lee and northern Monroe counties. Today through Wednesday, patchy low impacts are possible in the northern Pine Island Sound region of Lee County and patchy very low impacts are possible in Sarasota, Charlotte and northern Lee counties. No impacts are expected elsewhere alongshore southwest Florida today through Wednesday January 6.

## Analysis

The harmful algal bloom in southwest Florida persists in patches from Sarasota to northern Lee County including inside the Charlotte Harbor and Gasparilla Sound region and the northern Pine Island Sound region of Lee County where 'Low a' concentrations of *Karenia brevis* were identified last week (FWRI 12/28). The most recent sample results indicate *K. brevis* is not present in the Sarasota Bay System (FWRI; 12/30). No additional samples have been received from southwest Florida since last week. Recent satellite imagery indicates that chlorophyll levels have dissipated slightly alongshore Sarasota and Charlotte counties where they are approximately 4  $\mu\text{g/L}$  and alongshore northern Lee County where they are approximately 4-5  $\mu\text{g/L}$ .

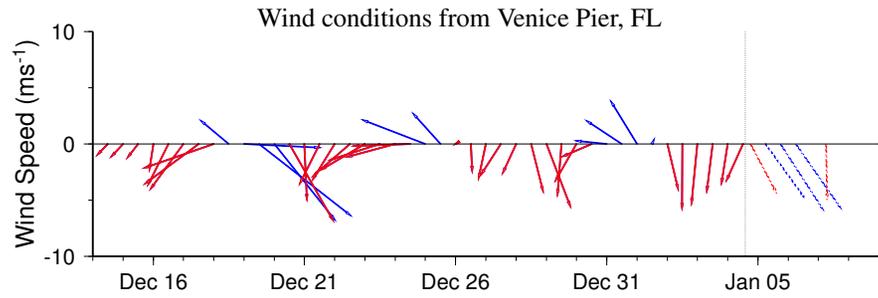
The bloom was also last identified offshore Sarasota County on 12/14-12/15 (FWRI, MML) and offshore northern Lee on 12/21-12/24. More current sample data is not available in these offshore regions. Satellite imagery indicates the presences of two chlorophyll patches located offshore both counties. Offshore Sarasota County, the patch extends from 27°10'45"N 82°40'46"W southward to 27°2'23"N 82°36'55"W and is approximately 7nm offshore. Offshore Lee County, the patch extends from 26°38'59"N 82°25'55"W southward to 26°28'24"N 82°20'59"W and is approximately 6.5nm offshore.

A localized *K. brevis* bloom was also last identified 9 miles offshore of Pavilion Key in northern Monroe County on 12/22 (MML). No reports of respiratory irritation or dead fish have been received over the past week.

Bloom intensification at the coast is unlikely today through Wednesday. Southward transport of offshore chlorophyll patches is possible today through Wednesday.

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

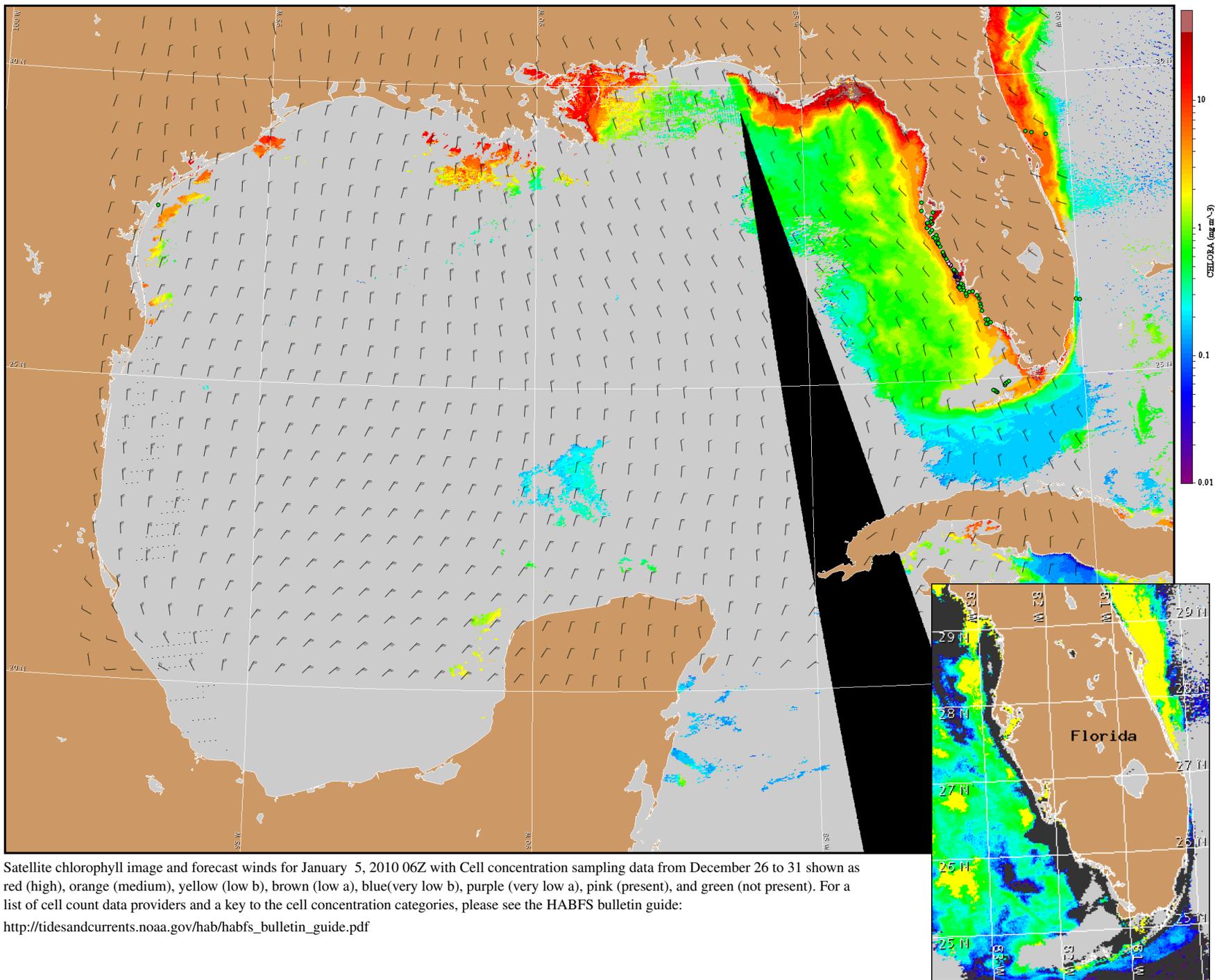
Urizar, Derner



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).

## Wind Analysis

Southwest Florida: Northwestern winds (10-15 kn, 5-8 m/s) today. Northwestern to northerly winds Tuesday (15-20 kn 8-10 m/s) and Wednesday (5-10 kn, 3-5 m/s).



Satellite chlorophyll image and forecast winds for January 5, 2010 06Z with Cell concentration sampling data from December 26 to 31 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).