

# Gulf of Mexico Harmful Algal Bloom Bulletin

Region: Southwest Florida

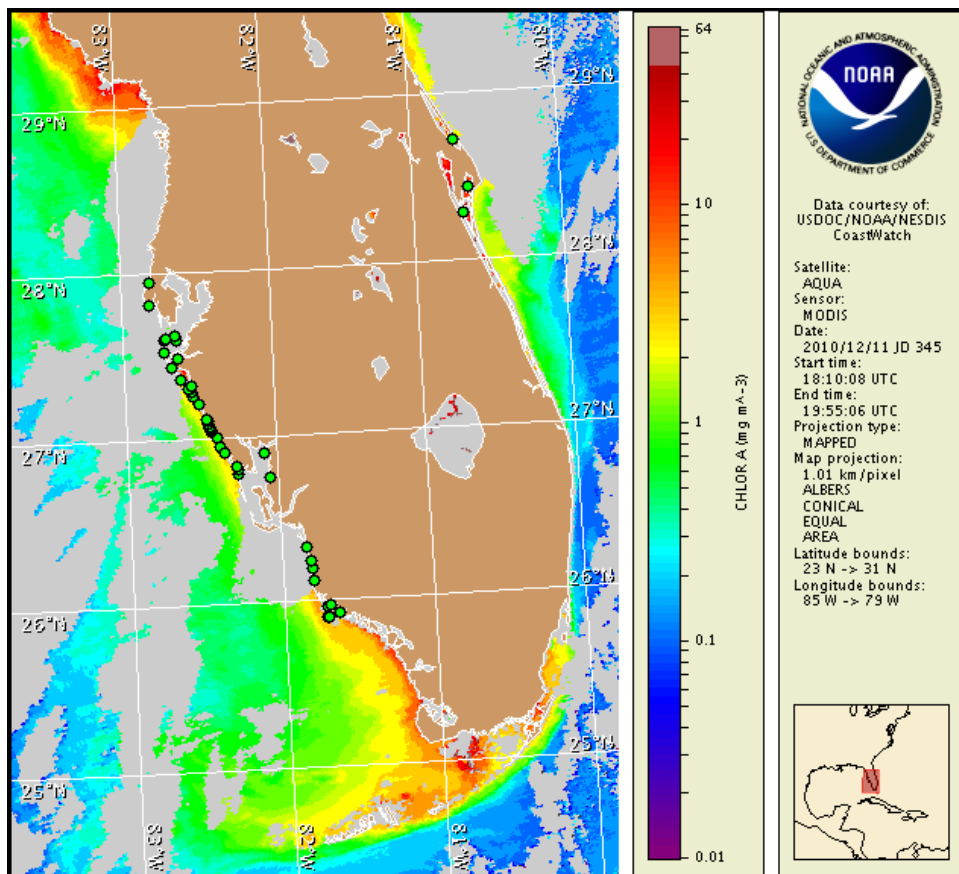
13 December 2010

NOAA Ocean Service

NOAA Satellites and Information Service

NOAA National Weather Service

Last bulletin: December 6, 2010



Satellite chlorophyll image with possible HAB areas shown by red polygon(s). Cell concentration sampling data from December 3 to 9 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)

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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

There is currently no indication of a harmful algal bloom at the coast in southwest Florida, including the Florida Keys. No impacts are expected alongshore southwest Florida today through Sunday, December 19.

## Analysis

There is currently no indication of a harmful algal bloom alongshore southwest Florida, including the Florida Keys. *Karenia brevis* was not present in samples collected last week alongshore Pinellas, Hillsborough, Manatee, Sarasota, Charlotte and Collier counties (FWRI, SCHD, MML; 12/6-12/9).

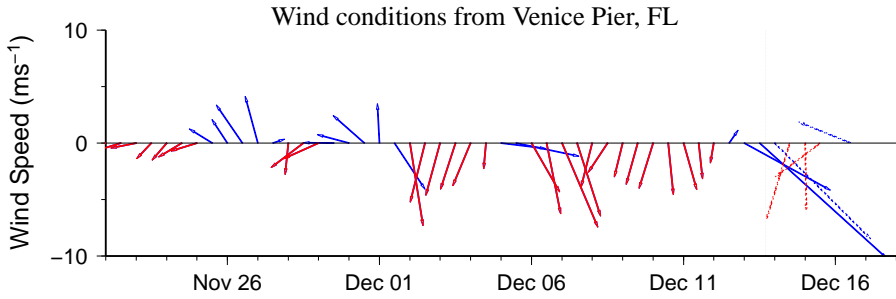
Satellite imagery (MODIS 12/11 shown left) continues to indicate slightly elevated levels of chlorophyll (typically ranging from 2-4  $\mu\text{g/L}$ ) along much of the southwest Florida coast including the Florida Keys, with the highest levels of chlorophyll (ranging from approximately 3-5  $\mu\text{g/L}$ ) located in southern Lee County. Much of the elevated chlorophyll found alongshore and extending up to 6 miles offshore southwest Florida is likely the result of non-toxic mixed diatom blooms that continue to be confirmed by samples (FWRI 12/6-12/9).

Forecasted wind conditions through Friday do not promote the potential for bloom formation.

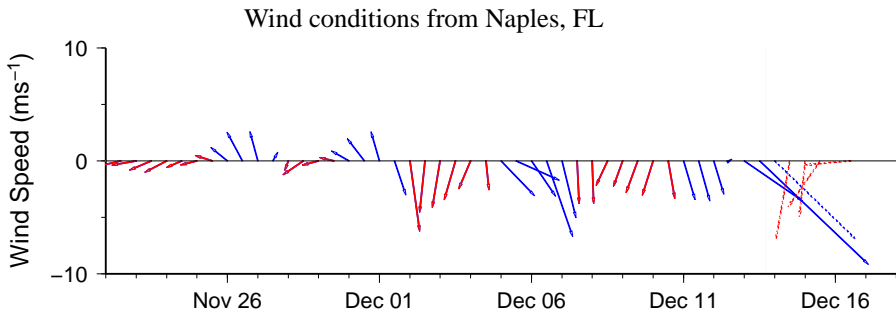
Burrows, Fisher, Kavanaugh

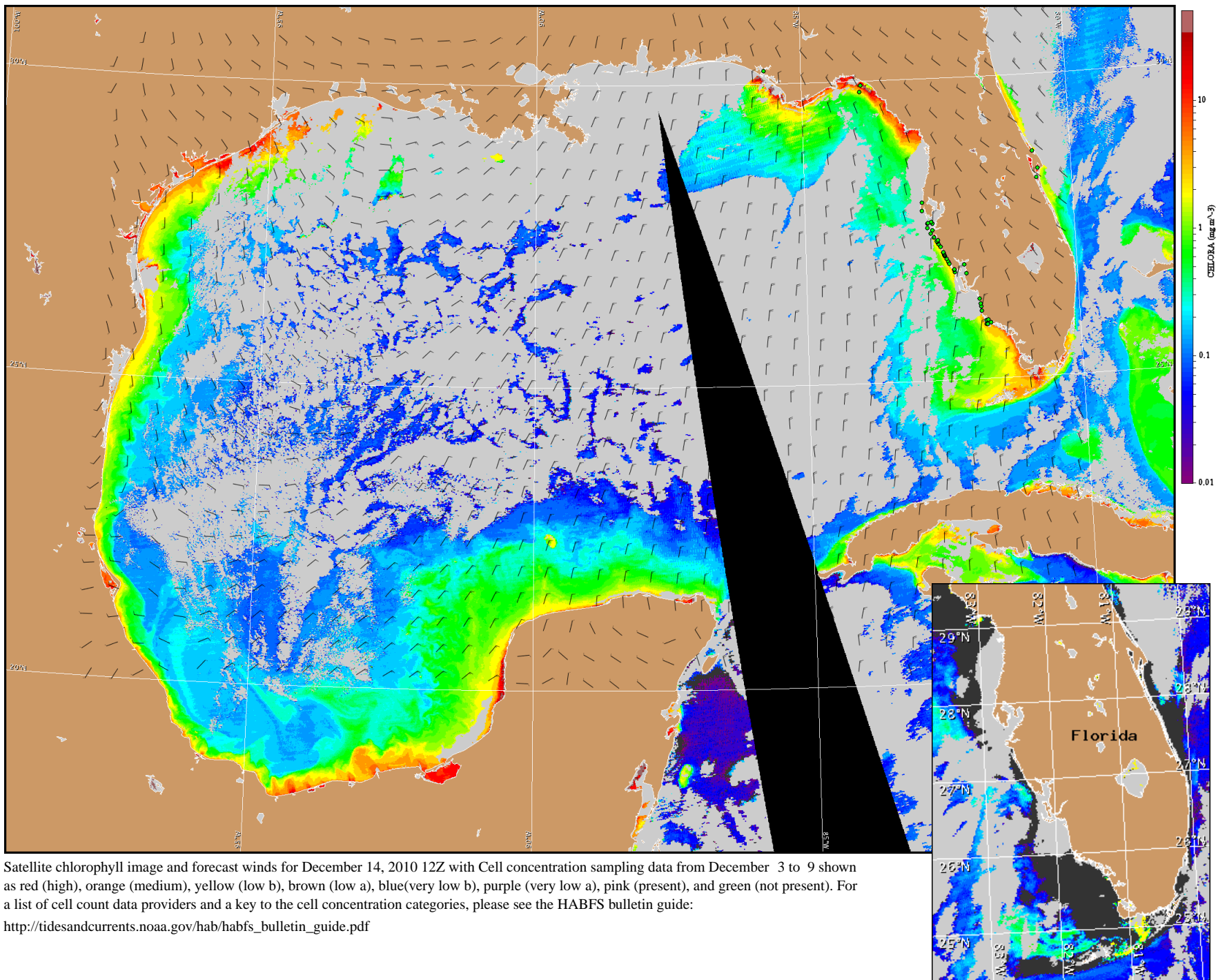
## Wind Analysis

Today through Tuesday night north to northeast winds 26-32 kn (14-16 m/s), diminishing in strength Tuesday through Wednesday night to 7-15 kn (4-8 m/s). Northeast winds Wednesday (10 kn, 5 m/s). Southeast winds Wednesday night (10 kn). Thursday and Friday south winds 8-11 kn (4-6 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 December 14, 2010 12Z with Cell concentration sampling data from December 3 to 9 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).