

Gulf of Mexico Harmful Algal Bloom Bulletin

Region: South Florida

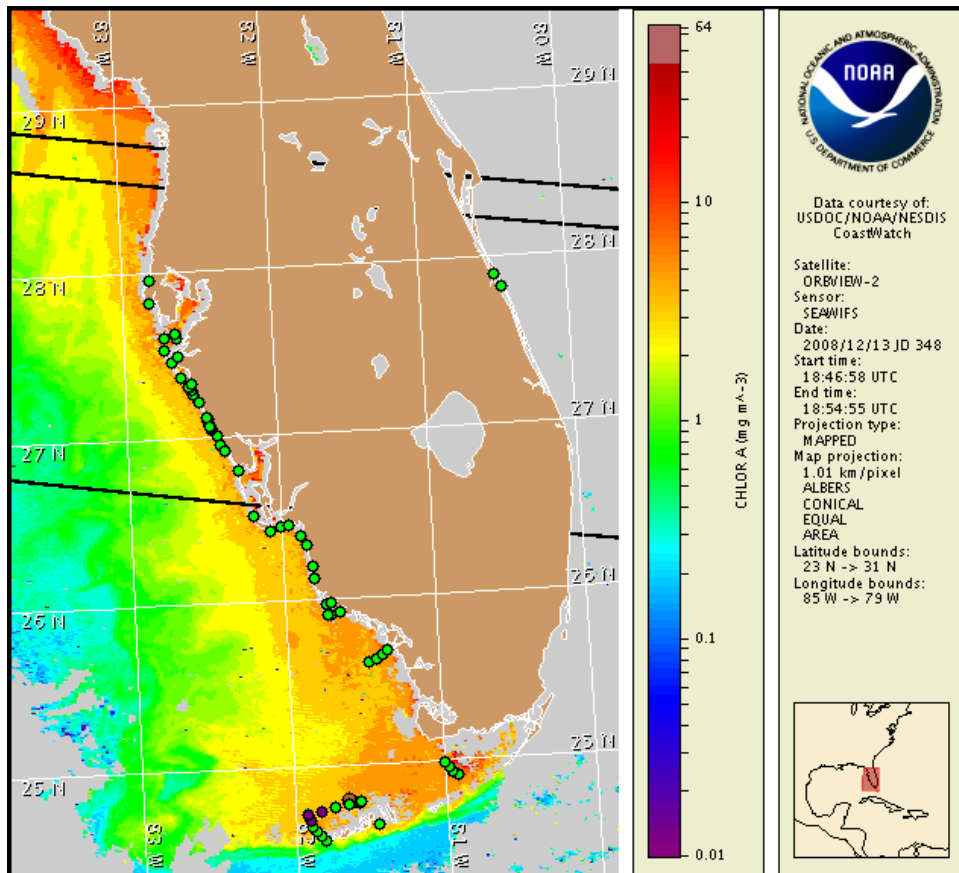
15 December 2008

NOAA Ocean Service

NOAA Satellites and Information Service

NOAA National Weather Service

Last bulletin: December 8, 2008



Satellite chlorophyll image with possible HAB areas shown by red polygon(s). Cell concentration sampling data from December 5 to 10 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

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

There is currently no indication of a harmful algal bloom at the coast in southwest Florida. No impacts are expected alongshore southwest Florida today through Wednesday, December 17.

Analysis

A harmful algal bloom was reported last week approximately 5-16 miles offshore of the Florida Keys, Monroe County. *Karenia brevis* concentrations ranged from not present to Low north of Sugarloaf Key and up to Very Lowa north of Key West (12/08; MML). *K. brevis* concentrations were also reported in the Ten Thousand Islands area, from Tripod Key to Shell Key, Collier County (not present to Very Lowa; 12/08; FWRI).

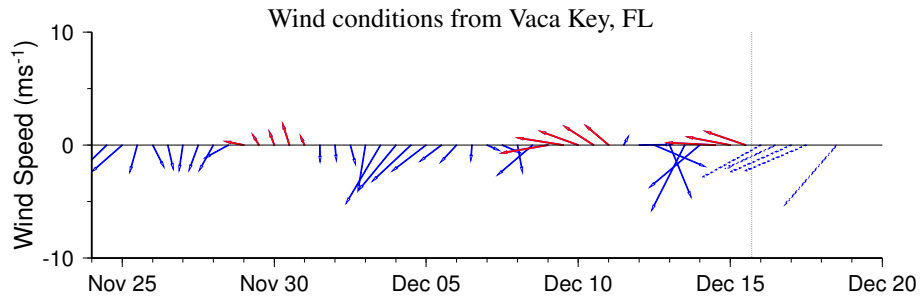
Recent imagery (12/13) indicates chlorophyll levels have declined from high to elevated levels and have become more uniform throughout the southwest Florida region, with slightly increasing levels near the coastline (up to $5 \mu\text{g/L}$). This limits analysis of specific areas at this time. The small patch of elevated chlorophyll located approximately 18 miles offshore of Collier County has moved south and is centered at $25^{\circ}45'55.14''\text{N}$, $81^{\circ}59'0.46''\text{W}$. Chlorophyll levels north of the Keys remain broadly elevated (up to $4 \mu\text{g/L}$) with no distinguished features near locations of *K. brevis* at this time.

Easterly winds will reduce likelihood of impacts in southwest Florida. Westerly transport is possible for the Keys area, today through Wednesday.

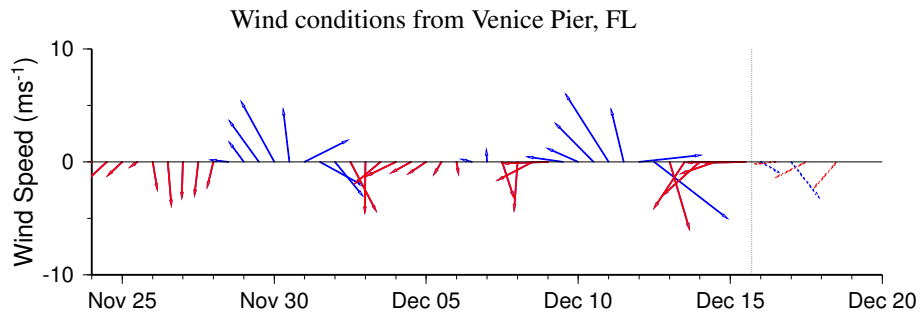
~ Fenstermacher, Urizar

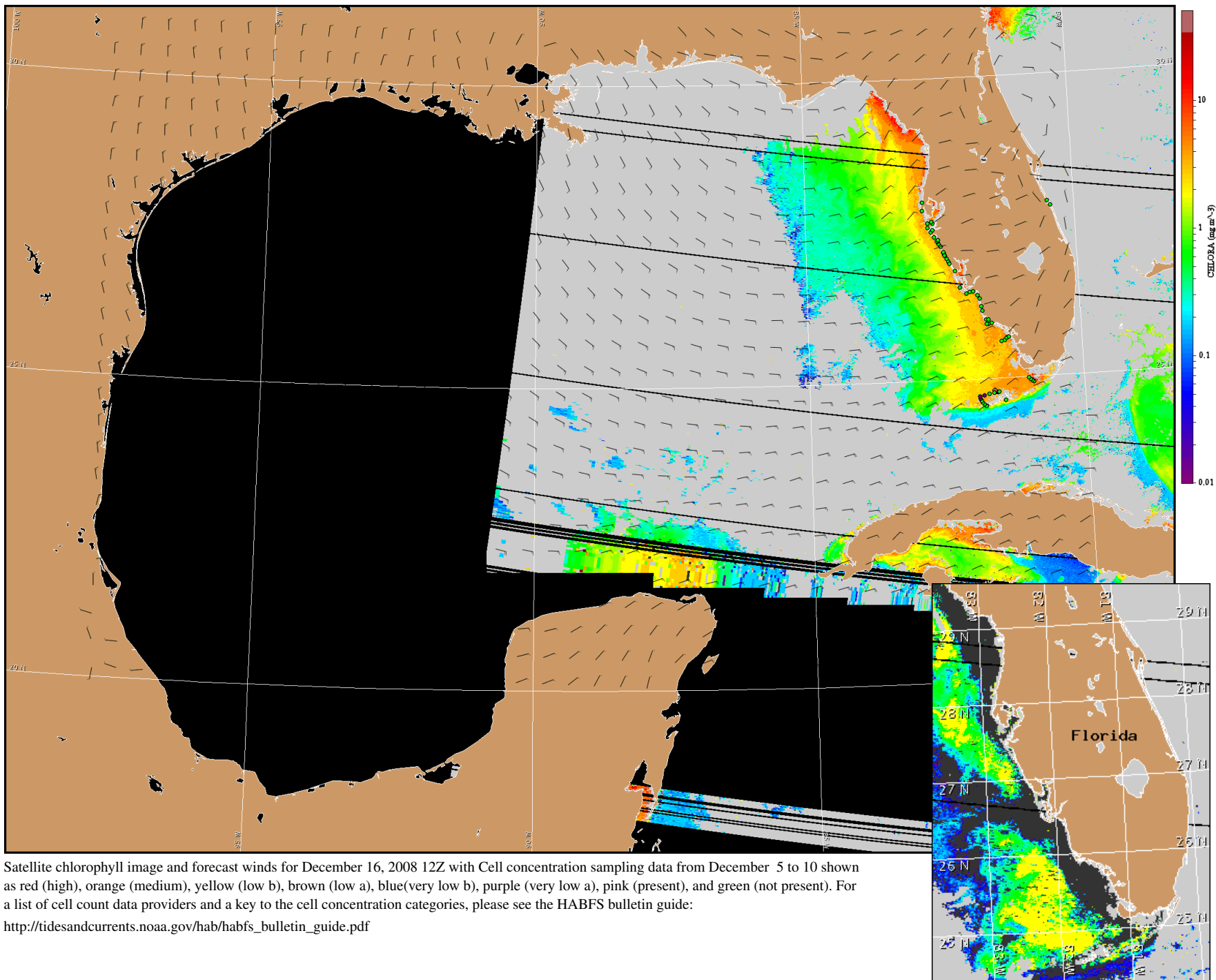
Wind Analysis

SW Florida: East winds today through Wednesday (5-15 kts; 3-8 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 16, 2008 12Z with Cell concentration sampling data from December 5 to 10 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).