



Gulf of Mexico Harmful Algal Bloom Bulletin

Region: Southwest Florida

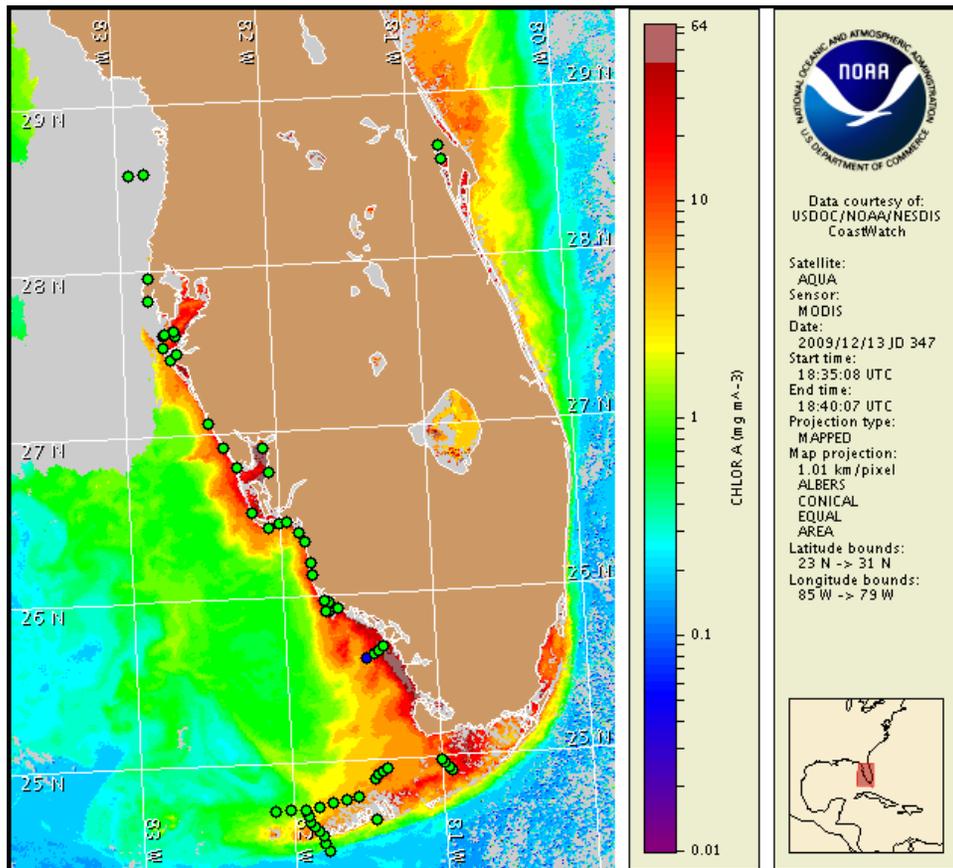
14 December 2009

NOAA Ocean Service

NOAA Satellites and Information Service

NOAA National Weather Service

Last bulletin: December 7, 2009



Satellite chlorophyll image with possible HAB areas shown by red polygon(s). Cell concentration sampling data from December 4 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

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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 onshore southwest Florida, including the Florida Keys. A harmful algal bloom has been identified offshore northern Monroe County. No impacts are expected at the coast in southwest Florida today through Sunday, December 20.

Analysis

A *Karenia brevis* bloom was identified approximately 9 miles offshore Pavilion Key in northern Monroe County on 12/8 ('very low b'; MML). Recent sampling continues to confirm the absence of a harmful bloom onshore southwest Florida from Pinellas to Monroe Counties, including the Florida Keys region (12/7-12/11; FWRI, MML, SCHD, CCPCPD). Background to 'very low a' concentrations of *K. brevis* were identified in 3 samples collected on 12/7 alongshore Sarasota County (SCHD, FWRI 12/7).

High chlorophyll levels ($>10\mu\text{g/L}$) are visible in recent imagery alongshore to offshore southern Collier County and Monroe County up to approximately 14 miles from the coast. The edge of this feature extends to the site of the confirmed 'very low b' concentration; no *K. brevis* was identified in 3 additional samples collected within this feature. More distinct high chlorophyll features ($>10\mu\text{g/L}$) are visible further offshore at approximately $25^{\circ}38'22''\text{N } 81^{\circ}37'40''\text{W}$, $25^{\circ}28'32''\text{N } 81^{\circ}26'9''\text{W}$, and $25^{\circ}10'23''\text{N } 81^{\circ}35'34''\text{W}$ (west of Cape Sable). Elevated chlorophyll features in this region are common and are not necessarily indicative of a harmful algal bloom.

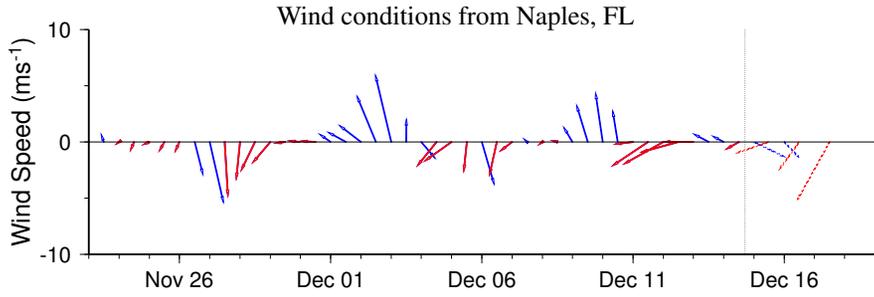
An elevated chlorophyll feature ($3\text{--}6\mu\text{g/L}$) is visible 6-12 miles offshore northern Sarasota County in recent imagery at approximately $27^{\circ}16'16''\text{N } 82^{\circ}42'19''\text{W}$. Elevated to high chlorophyll ($3\text{--}>10\mu\text{g/L}$) is also visible alongshore Charlotte and northern Lee Counties, extending offshore Charlotte County approximately 19 miles and offshore northern Lee County approximately 14 miles.

Winds this week are favorable for upwelling. Southerly transport of features is possible through Friday.

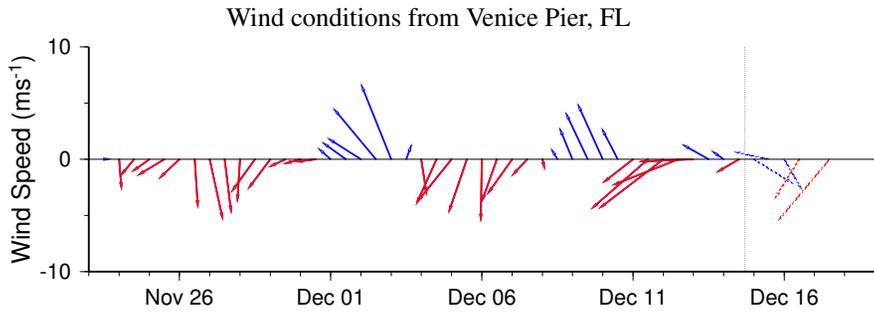
-Fisher, Lindley

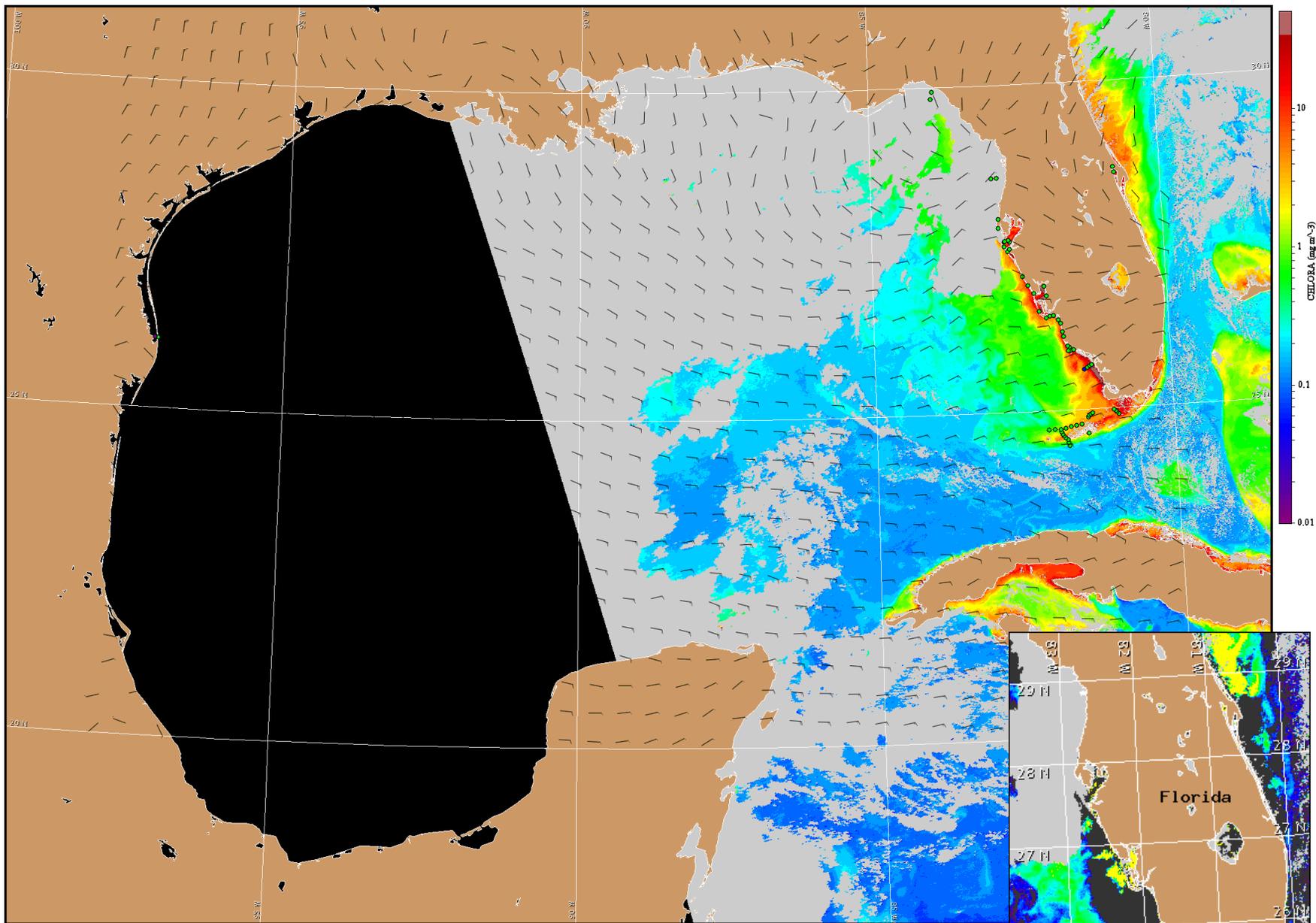
Wind Analysis

East to northeast winds today through Thursday (5-10kn, 3-5m/s; increasing to 15-20kn 8-10m/s Wednesday through Thursday). North to northeast winds on Friday (10-15kn, 5-8m/s).



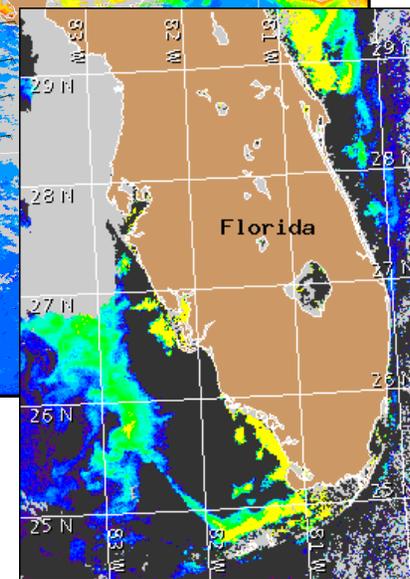
Wind speed and direction are averaged over 12 hours from buoy measurements. Length of line indicates speed; angle indicates direction. Red indicates that the wind direction favors upwelling near the coast. Values to the left of the dotted vertical line are measured values; values to the right are forecasts.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





Satellite chlorophyll image and forecast winds for December 15, 2009 12Z with Cell concentration sampling data from December 4 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).