

Gulf of Mexico Harmful Algal Bloom Bulletin

Region: Southwest Florida

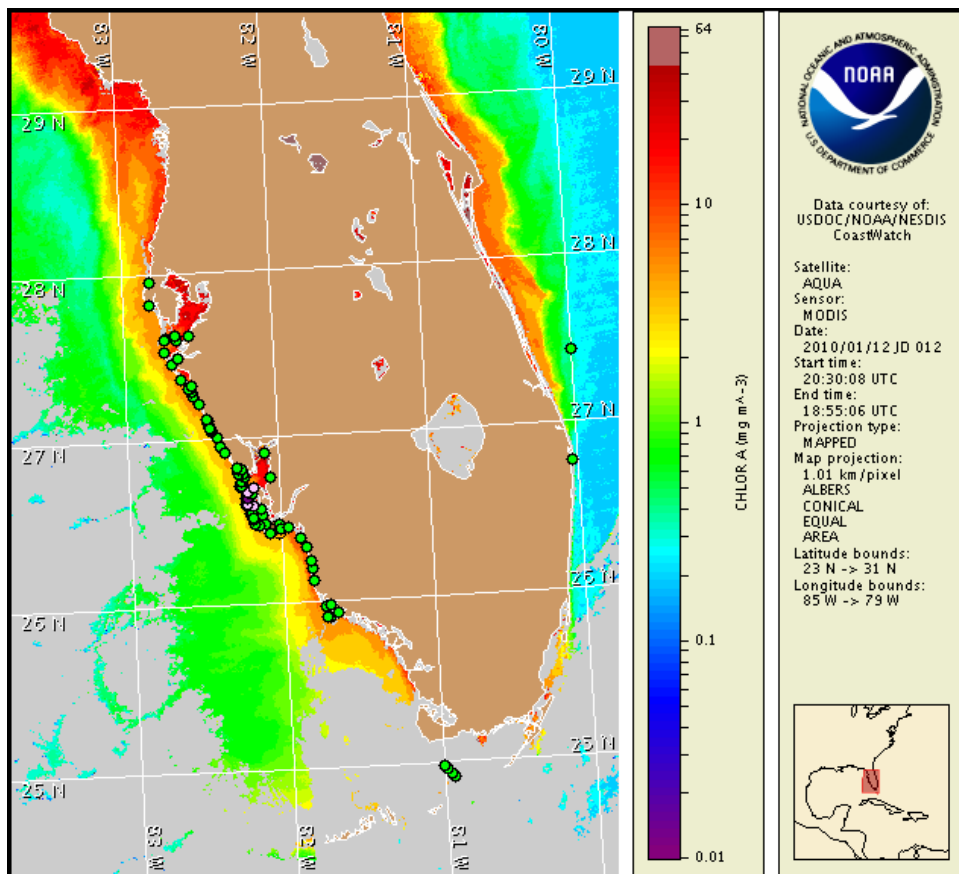
14 January 2010

NOAA Ocean Service

NOAA Satellites and Information Service

NOAA National Weather Service

Last bulletin: January 11, 2010



Satellite chlorophyll image with possible HAB areas shown by red polygon(s). Cell concentration sampling data from January 4 to 13 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

A harmful algal bloom continues to be present in patches in northern and central Lee County and in the Pine Island Sound region of Lee County. Today through Monday, patchy low impacts are possible at the coast in northern Lee County and in the Pine Island Sound region. Today through Friday and Monday, patchy moderate impacts are possible throughout the Sanibel Island region of central Lee County; patchy high impacts are possible Saturday through Sunday in this region. No impacts are expected elsewhere alongshore southwest Florida today through Monday, January 18.

Analysis

Due to the upcoming Federal Holiday, the next bulletin will be issued on Tuesday, January 19.

Recent sample results indicate that the harmful algal bloom continues to persist from northern to central Lee County including the Pine Island Sound and eastern Sanibel Island regions of Lee County. Samples collected over the past 10 days alongshore of Lee County and inside the Pine Island Sound region indicate *Karenia brevis* concentrations ranging from not present to 'low a' (FWRI) in patches throughout the region; however, *K. brevis* concentrations at several sites in the Pine Island Sound and San Carlos Bay region have decreased as of 1/11 ('not present' to 'very low a'; FWRI). Three samples collected in the eastern Sanibel Island area on 1/7 indicate *K. brevis* concentrations ranging from 'very low b' at Sanibel Island Lighthouse to 'medium' one mile south of Sanibel Beach (FWRI).

Recent sample results also continue to indicate that the harmful algal bloom previously reported in patches alongshore Sarasota and Charlotte counties, including Charlotte Harbor, has dissipated. No additional sample results for Sarasota County have been received since early last week, at which time all samples indicated that *Karenia brevis* was not present (FWRI, MML, SCHD; 1/4-1/5). Sample results reported alongshore Pinellas, Manatee, Charlotte, and Collier counties and offshore the Florida Keys all indicate that *K. brevis* is not present.

Satellite imagery indicates elevated to high chlorophyll levels (4-11 $\mu\text{g/L}$) throughout the Pine Island Sound and San Carlos Bay region of northern to central Lee County; however, elevated chlorophyll in this region may not be indicative of HAB presence or extent. Elevated chlorophyll levels (3-9 $\mu\text{g/L}$) are also present alongshore central Lee to northern Collier counties.

Reports of dead fish have been received in several locations along the coast of southwest Florida from central Pinellas to central Collier counties; however, these events are most likely a result of unusually cold water temperatures. Confirmed cause of the fish kills is unknown at this time.

Bloom intensification at the coast is unlikely today through Monday. Slight northerly transport of the bloom is possible through Saturday, with strong westerly winds on Sunday increasing the potential for southerly transport.

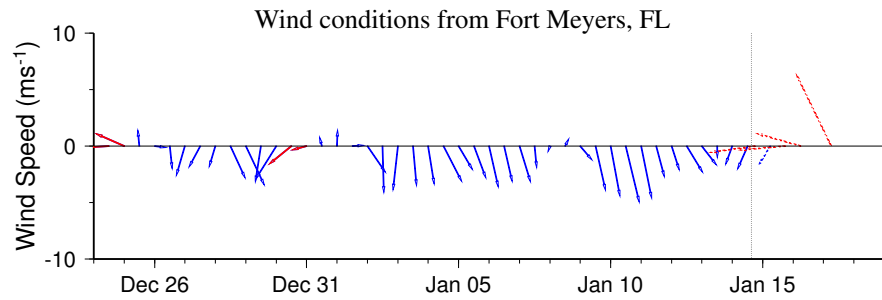
Due to technical difficulties SeaWifs imagery is currently unavailable for display. MODIS

imagery is shown on this bulletin.

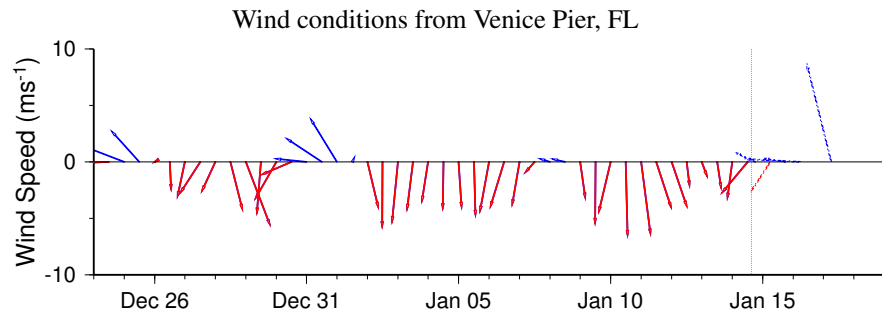
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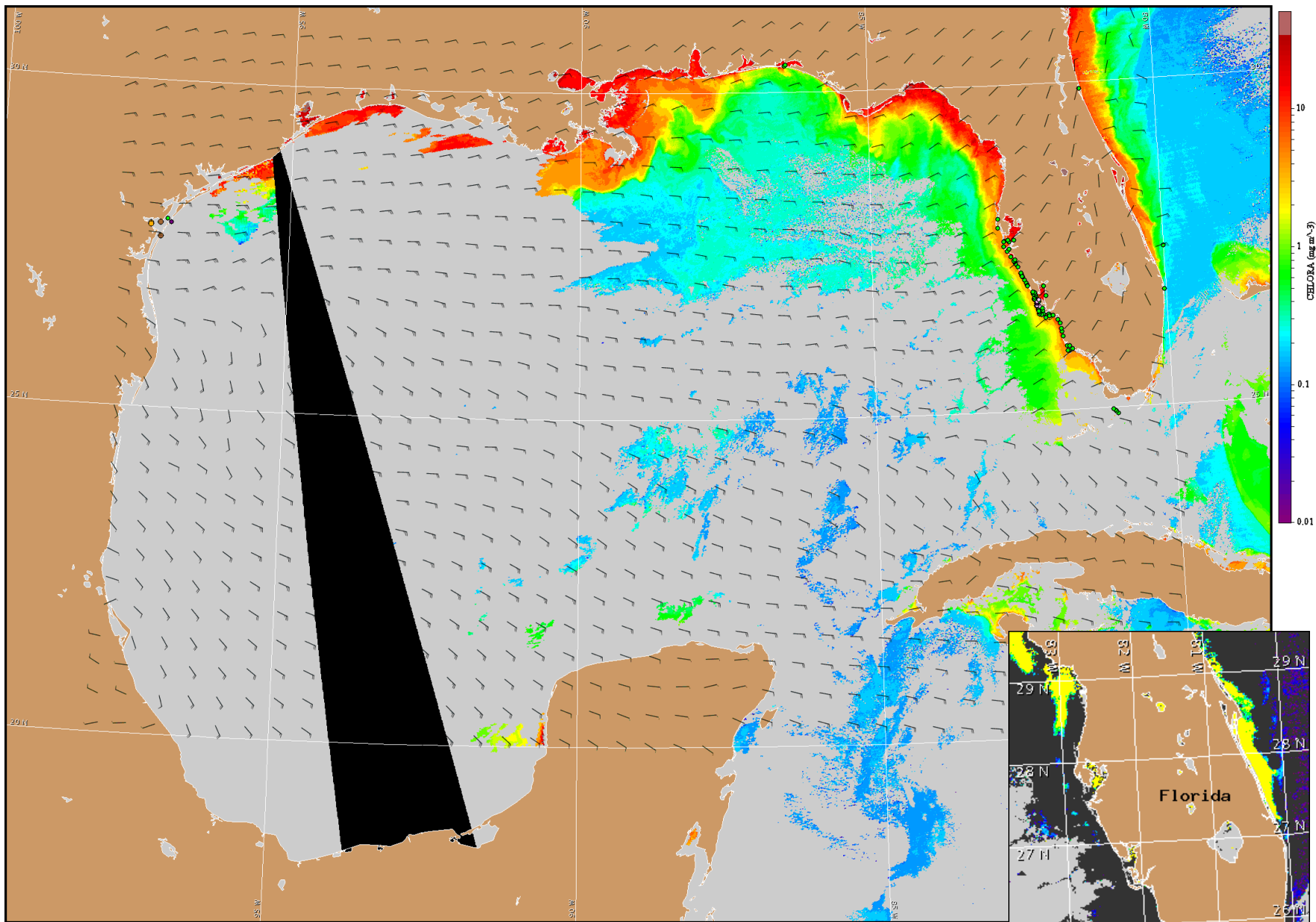
Wind Analysis

Southwest Florida: East winds today through Friday (10-15kn, 5-8m/s). Southeast winds Saturday, shifting southwest Saturday night (20kn, 10m/s). West winds (20kn) on Sunday, shifting northwest Sunday night through Monday (15kn, 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 January 15, 2010 12Z with Cell concentration sampling data from January 4 to 13 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).