



Gulf of Mexico Harmful Algal Bloom Bulletin

Region: Southwest Florida

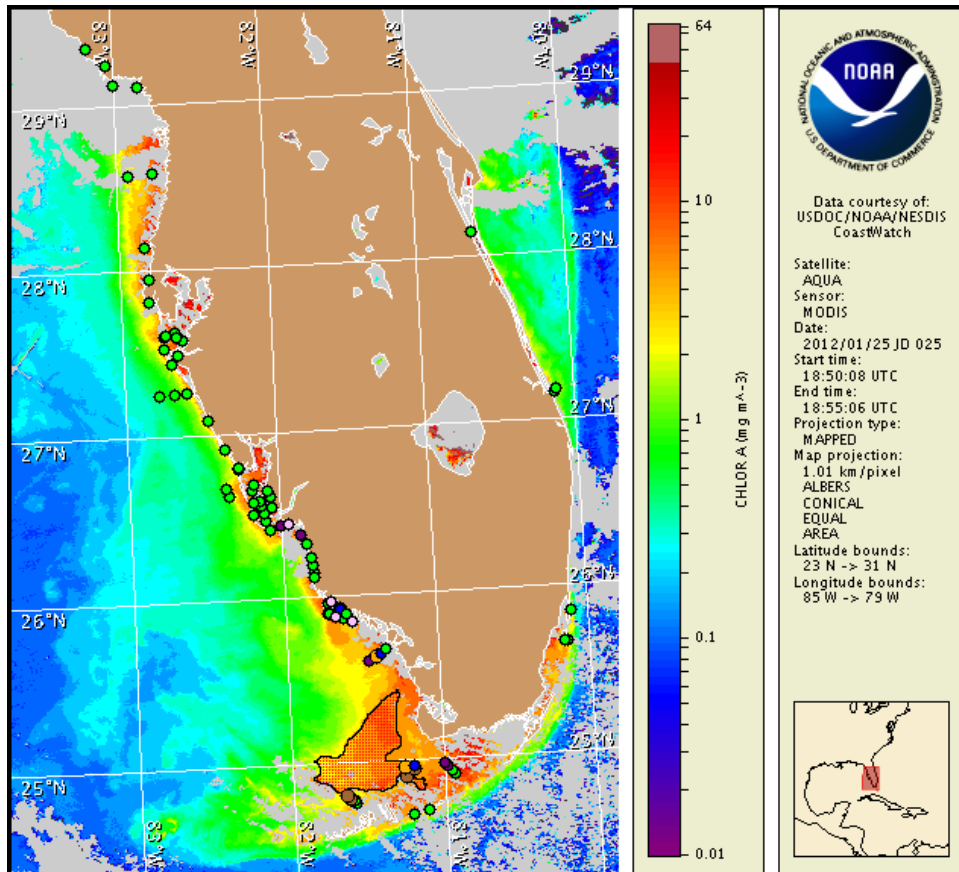
Thursday, 26 January 2012

NOAA Ocean Service

NOAA Satellite and Information Service

NOAA National Weather Service

Last bulletin: Monday, January 23, 2012



Satellite chlorophyll image with possible HAB areas shown by red polygon(s). Cell concentration sampling data from January 17 to 25 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 HAB-OFS bulletin guide:

http://tidesandcurrents.noaa.gov/hab/habfs_bulletin_guide.pdf

To see previous bulletins and forecasts for other Harmful Algal Bloom Bulletin regions, visit the NOAA Harmful Algal Bloom Operational Forecast System bulletin archive:
<http://tidesandcurrents.noaa.gov/hab/bulletins.html>

Conditions Report

A patchy harmful algal bloom persists in the San Carlos Bay and coastal Sanibel Island regions of Lee County, alongshore southern Lee and Collier counties, and offshore northern Monroe County. A harmful algal bloom has also been identified offshore the Gulf side of the Florida Keys. Patchy low impacts are possible in the Marco Island region of central Collier County today through Sunday. Patchy very low impacts are possible in the San Carlos Bay region of Lee County today through Sunday, and in the coastal Sanibel Island region of Lee County and alongshore southern Lee County today and Friday. No other impacts are expected in the coastal Sanibel Island region or alongshore southern Lee County Saturday and Sunday, or elsewhere at the coast in southwest Florida or in the Florida Keys today through Sunday, January 30.

Analysis

Florida Keys: Samples collected early this week identified 'low a' *Karenia brevis* concentrations 5-8 miles offshore northwest of Sawyer Key and 'very low a' concentrations 10-12 miles offshore south of Cape Sable at Oxfoot Key (1/23-24; MML). MODIS imagery (1/25; shown left) remains cloudy throughout much of the Florida Keys; however, elevated to high chlorophyll (3-19 $\mu\text{g/L}$) continues to be visible throughout the region north of the lower to middle Keys.

Southwest Florida: A harmful algal bloom persists in patches in the San Carlos Bay and coastal Sanibel regions of Lee County, and alongshore southern Lee to northern Monroe counties; however, sampling efforts indicate that the bloom continues to dissipate in Lee and Collier counties (1/20-1/24; CCPCPD, FWRI). Samples collected over the past week identified only 'very low b' *K. brevis* concentrations at the Goodland Bridge in the Marco Island region of southern Collier County, and background concentrations at Big Marco Pass, Cape Romano, and White Horse Key (1/23-24; CCPCPD, FWRI). All other samples collected alongshore southwest Florida from Pinellas to Collier counties indicate that *K. brevis* is not present (1/20-24; CCPCPD, FWRI). No further samples have been received from northern Monroe County, where 'very low a' to 'medium' concentrations were identified approximately 3-9 miles offshore Pavilion Key last week (1/18; MML). Blooms of various non-toxic algal blooms continue to be reported throughout southwest Florida (1/23; FWRI). There have been no recent reports of respiratory irritation or dead fish in Southwest Florida.

Recent MODIS imagery (1/25; shown left) is cloudy along the coast of southwest Florida, limiting analysis. Elevated chlorophyll (2-10 $\mu\text{g/L}$) remains visible along southern Lee County and along- and offshore southern Collier and Monroe counties.

Northerly winds forecasted Friday night through Sunday may result in southern transport of the bloom and will decrease the potential for impacts along the coast of southwest Florida over the weekend.

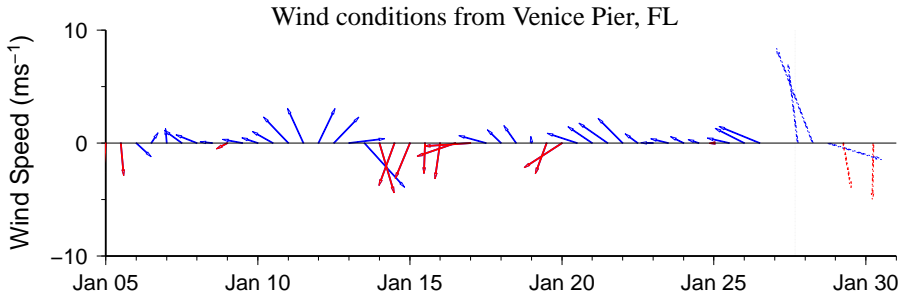
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Wind Analysis

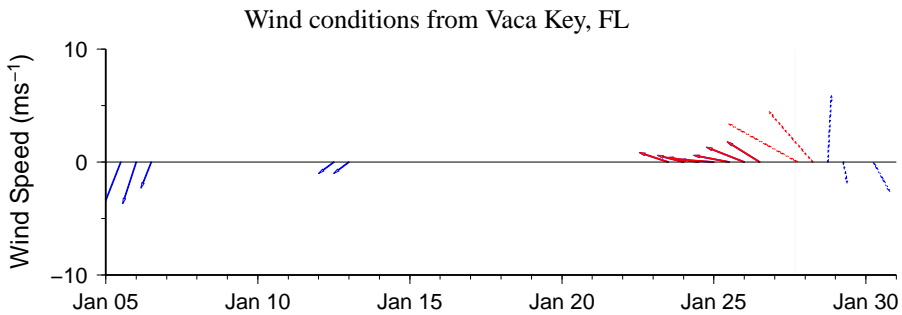
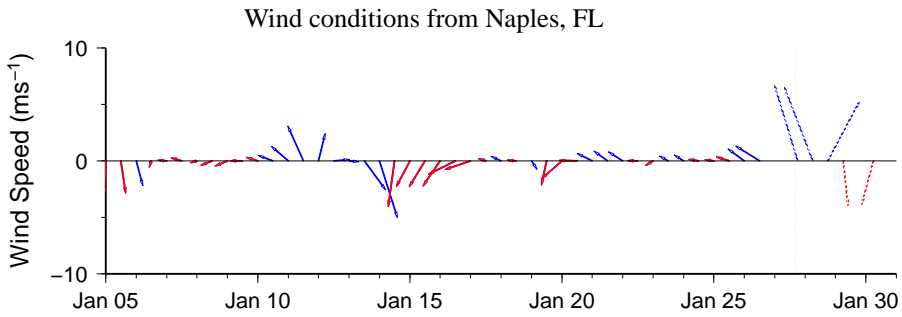
Charlotte and Lee counties: Southeast winds (15kn, 8m/s) today becoming south (15kn) this afternoon through tonight. Southwest winds (15kn) Friday becoming northwest (10kn, 5m/s) Friday afternoon. North winds (10-20kn, 5-10m/s) Friday night through Sunday.

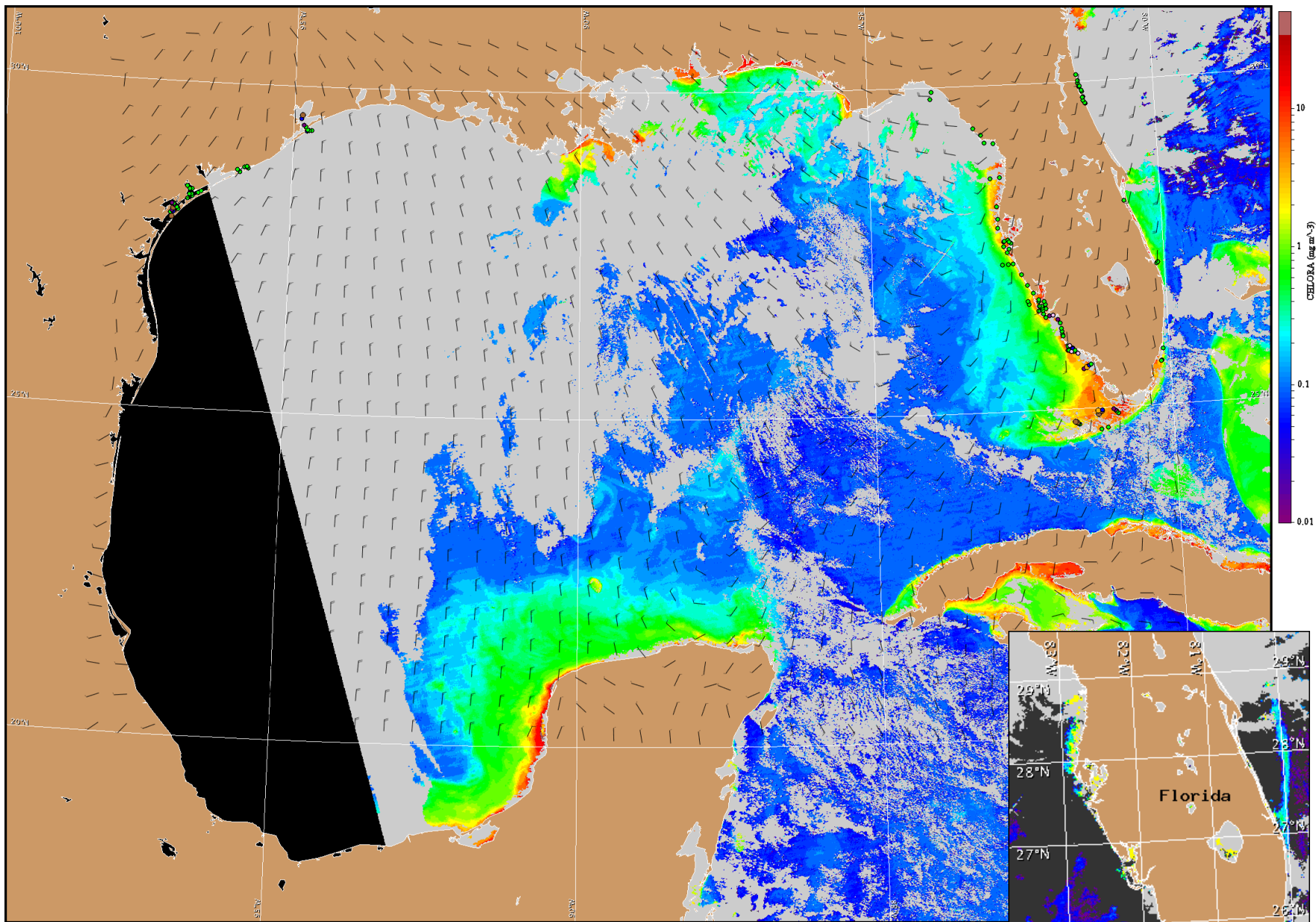
Collier and Monroe counties: Variable southerly winds (8-15kn, 4-8m/s) today and Friday. Variable northerly winds (5-23kn, 3-12m/s) Friday night through Sunday.

Gulf side of Florida Keys: Southeast winds (10-15kn, 5-8m/s) today and tonight. South to southeast winds (10kn) Friday and Saturday. North winds (10-20kn) Sunday.



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 27, 2012 12Z with cell concentration sampling data from January 17 to 25 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 HAB-OFS 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).