



Gulf of Mexico Harmful Algal Bloom Bulletin

Region: AL/MS/FL

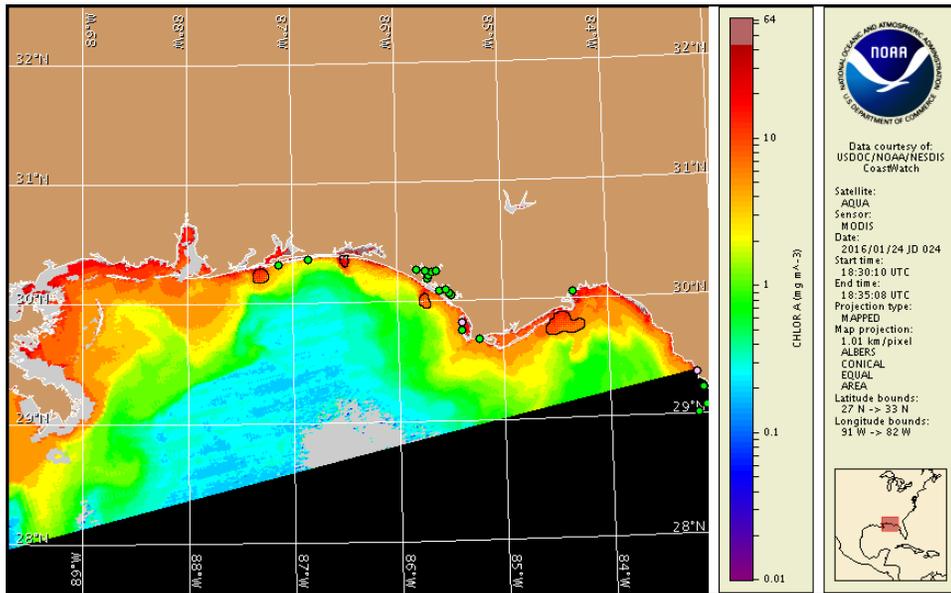
Monday, 25 January 2016

NOAA National Ocean Service

NOAA Satellite and Information Service

NOAA National Weather Service

Last bulletin: Thursday, January 21, 2016



Satellite chlorophyll image with possible *K. brevis* HAB areas shown by red polygon(s), when applicable. Points represent cell concentration sampling data from January 15 to 22: 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 sample 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

Detailed sample information for Florida can be obtained through FWC Fish and Wildlife Research Institute at:

<http://myfwc.com/redtidestatus>

To see previous bulletins and forecasts for other Harmful Algal Bloom Bulletin regions, visit at: <http://tidesandcurrents.noaa.gov/hab/bulletins.html>

Conditions Report

Not present to background concentrations of *Karenia brevis* (commonly known as Florida red tide) are present along- and offshore portions of northwest Florida from Escambia to Franklin counties. *K. brevis* concentrations are patchy in nature and levels of respiratory irritation will vary locally based upon nearby bloom concentrations, ocean currents, and wind speed and direction. The highest level of potential respiratory irritation forecast for alongshore northwest Florida Monday, January 25 to Thursday, January 28 is listed below:

County Region: Forecast (Duration)

Gulf County, west bay regions-St. Joseph Bay area: Low (M-Th)

Franklin County: Low (M-W), Very Low (Th)

Franklin County, bay regions: Low (M-Th)

All Other NWFL County Regions: None expected (M-Th)

SWFL County Regions: Visit <http://tidesandcurrents.noaa.gov/hab/#swfl>

Check http://tidesandcurrents.noaa.gov/hab/beach_conditions.html for recent, local observations. Health information, from the Florida Department of Health and other agencies, is available at http://tidesandcurrents.noaa.gov/hab/hab_health_info.html. Reports of respiratory irritation have been received from Franklin County.

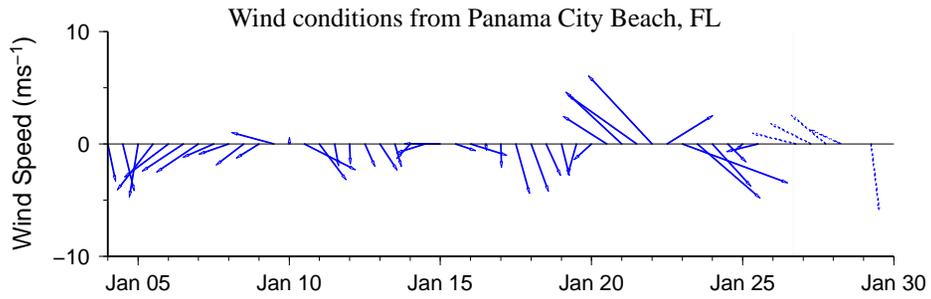
Analysis

Recent samples collected alongshore northwest Florida identified not present to background *Karenia brevis* concentrations from Escambia to Franklin counties (FWRI; 1/15-20). Background *K. brevis* concentrations were identified alongshore Gulf County approximately 4.2 miles north of Eagle Harbor (FWRI; 1/15). All other samples collected alongshore Escambia, Santa Rosa, Bay, Gulf, and Wakulla counties indicated that *K. brevis* is not present, including a sample collected alongshore Pensacola Beach, where respiratory irritation was last reported on 1/18 (FWRI; 1/15-20). Reports of slight respiratory irritation have been received from the bay and Gulf sides of St. George Island in Franklin County (MML; 1/23-24). Additional sampling in these regions is recommended. Detailed sample information and a summary of impacts can be obtained through FWC Fish and Wildlife Research Institute at: <http://myfwc.com/redtidestatus>.

In recent ensemble imagery (MODIS Aqua, 1/24), patches of elevated to high chlorophyll (2-20 $\mu\text{g/L}$) with the optical characteristics of *K. brevis* are visible along- and offshore Escambia, Okaloosa, Bay, Gulf, and Franklin counties.

Variable winds forecast over the next several days will decrease the potential for transport of any remaining surface *K. brevis* concentrations alongshore northwest Florida.

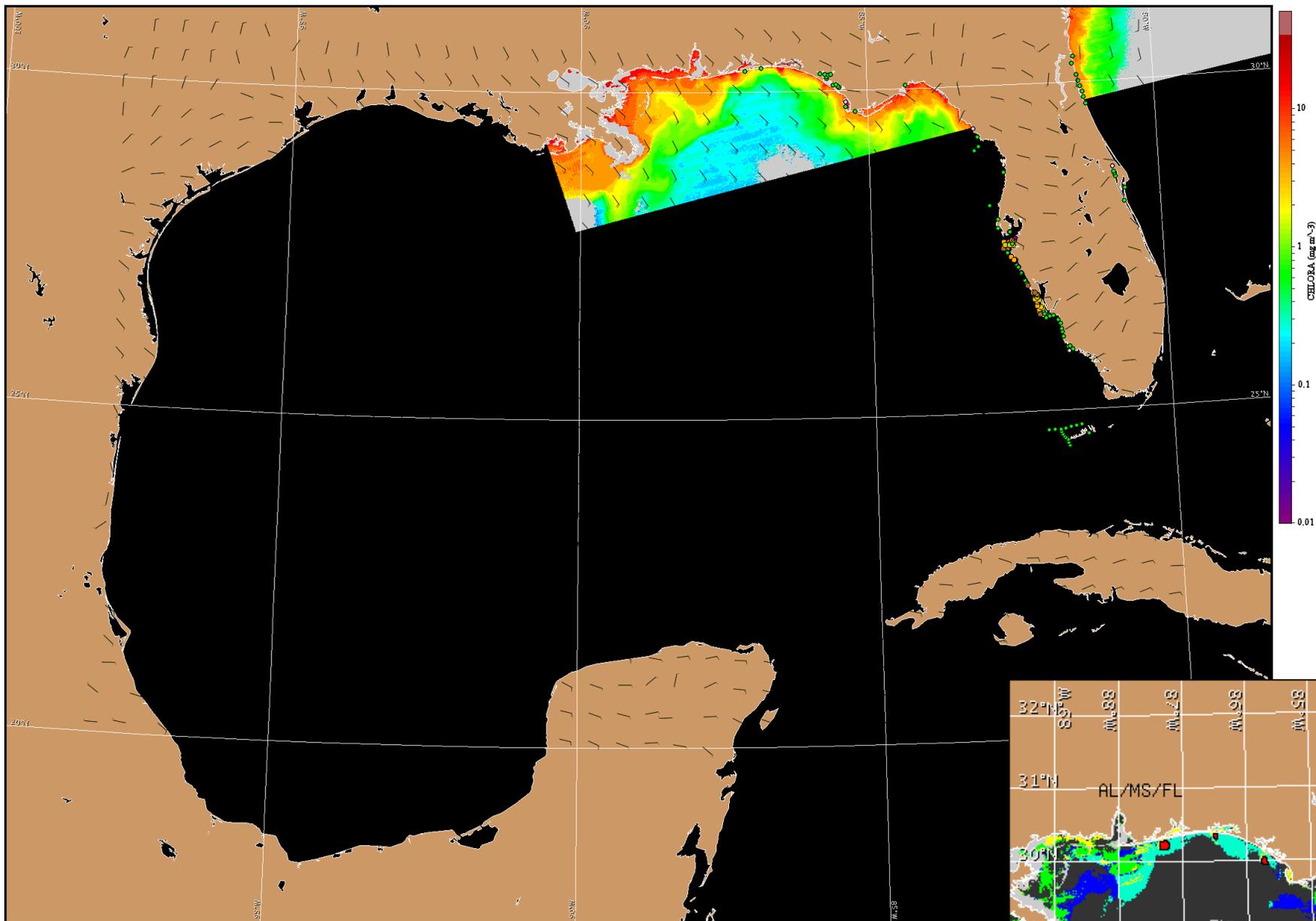
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Wind speed and direction are averaged over 12 hours from buoy measurements. Length of line indicates speed; angle indicates direction. Red indicates that the wind direction favors upwelling near the coast. Values to the left of the dotted vertical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

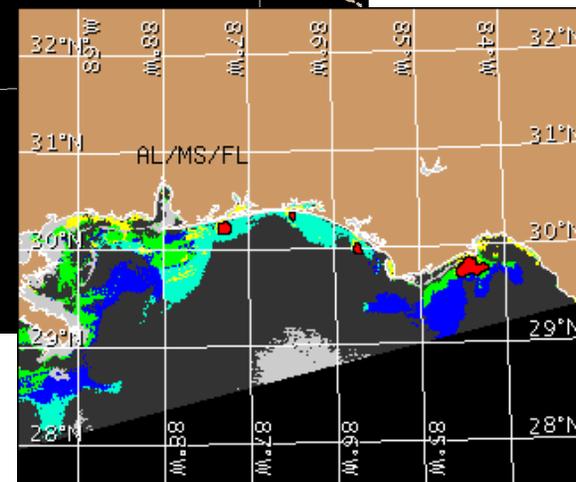
Wind Analysis

Escambia to Gulf counties: Southeast winds (10-20kn, 5-10m/s) today through Tuesday becoming south (10-15kn, 5-8m/s) Tuesday night. West winds (10-15kn, 5-8m/s) Wednesday becoming north (15-20kn, 8-10m/s) in the afternoon through Wednesday night. Northwest winds (20kn, 10m/s) Thursday.



Satellite chlorophyll image and forecast winds for January 26, 2016 06Z with points representing cell concentration sampling data from January 15 to 22: 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 sample 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 with *K. brevis* optical characteristics shown in yellow (see p. 1 analysis for interpretation).