



Gulf of Mexico Harmful Algal Bloom Bulletin

Region: AL/MS/FL

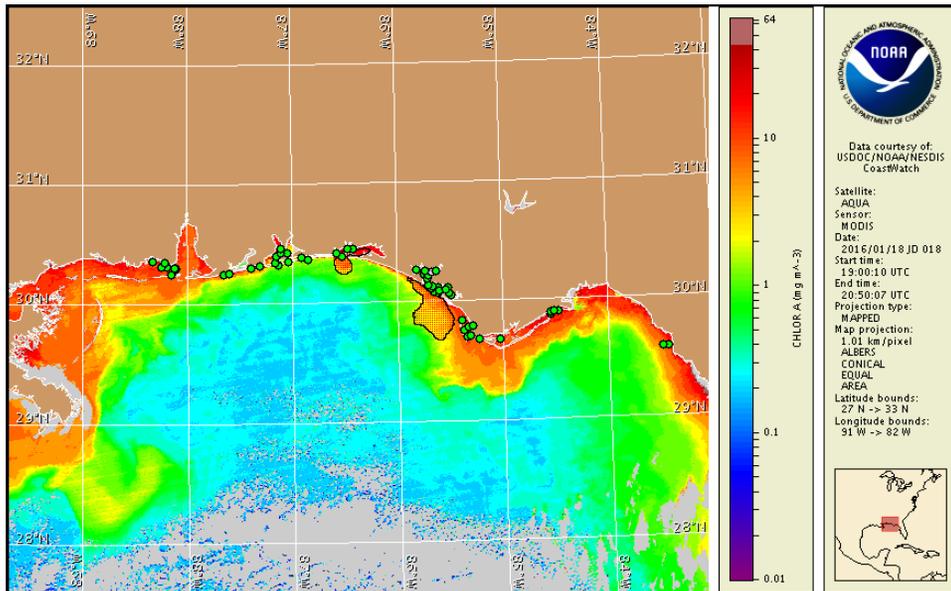
Tuesday, 19 January 2016

NOAA National Ocean Service

NOAA Satellite and Information Service

NOAA National Weather Service

Last bulletin: Thursday, January 14, 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 9 to 18: 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 very low concentrations of *Karenia brevis* (commonly known as Florida red tide) are present along- and offshore Mobile and Baldwin counties in Alabama and 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 Tuesday, January 19 to Thursday, January 21 is listed below:

County Region: Forecast (Duration)

Escambia County: Very Low (Tu), Low (W-Th)

Okaloosa County: Very Low (Tu), Low (W-Th)

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

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

All Other NWFL to Alabama County Regions: None expected (Tu-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 Escambia, Okaloosa, Gulf, and Franklin counties.

Analysis

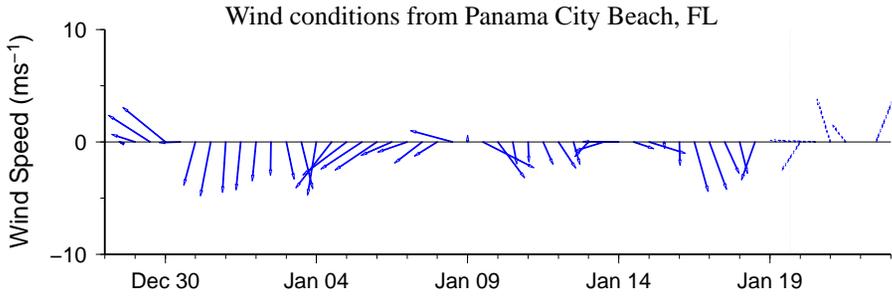
Recent samples collected alongshore northwest Florida indicate not present to very low *Karenia brevis* concentrations from Escambia to Franklin counties (FWRI; 1/11-14). Samples collected last week identified background *K. brevis* concentrations northwest of Little Oyster Bar Point in Bay County and 'very low' concentrations within St. Joseph's Bay in Gulf County (FWRI; 1/11-14). All samples received from alongshore Mobile County, AL and Escambia, Santa Rosa, Okaloosa, and Franklin counties in northwest Florida indicate that *K. brevis* is not present (FWRI, ADPH; 1/11-14). Reports of slight respiratory irritation have been received from alongshore Gulf County (1/12), Okaloosa County (1/12), Pensacola Beach (Escambia County, 1/16), and St. George Island (Franklin County, 1/18). 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, 1/18), patches of elevated chlorophyll (2-10 $\mu\text{g/L}$) with the optical characteristics of *K. brevis* are visible along- and offshore from Escambia to Gulf counties, extending up to 10mi offshore Okaloosa County and 24mi offshore Bay and Gulf counties.

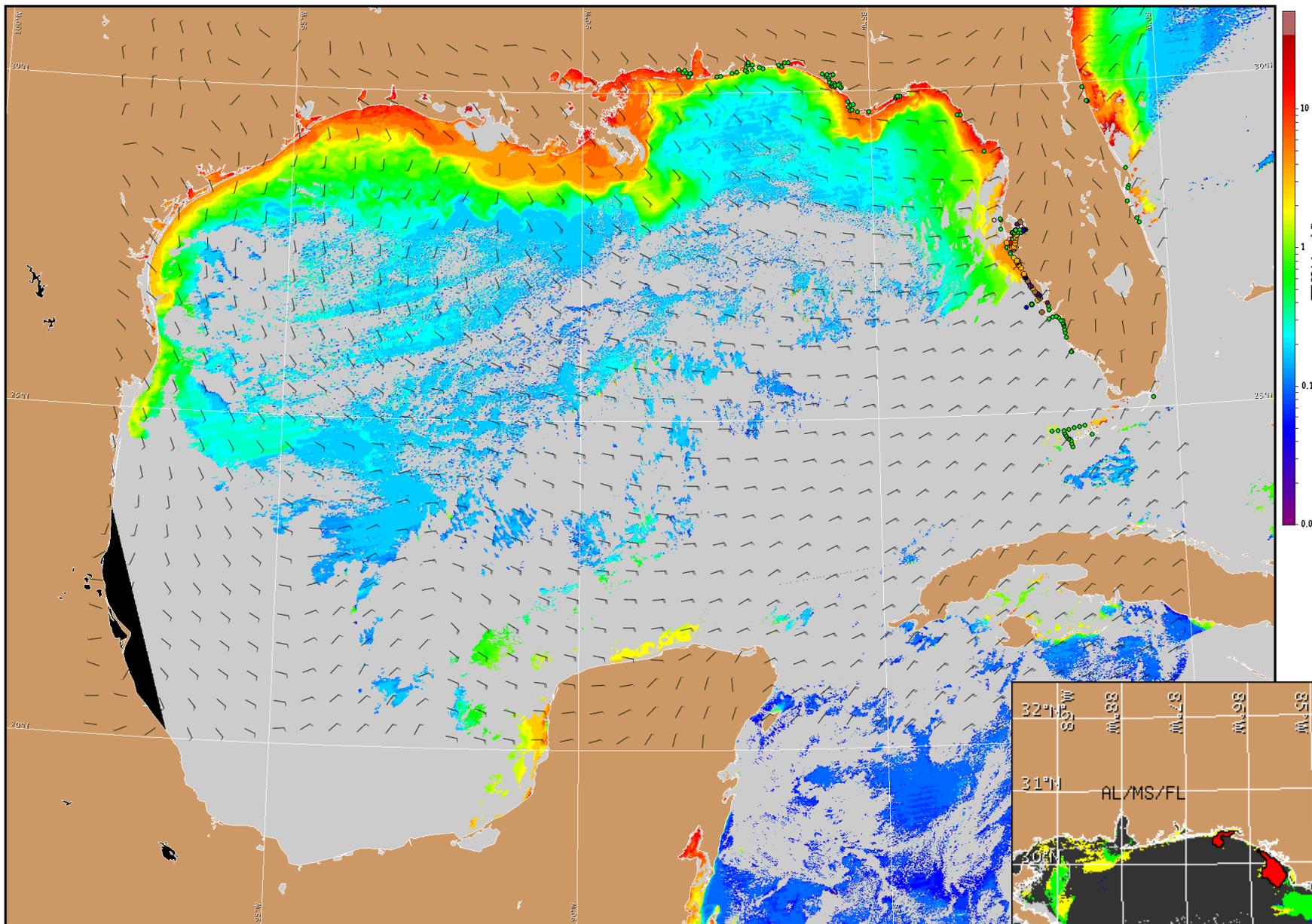
Derner, Davis

Wind Analysis

Escambia to Gulf counties: North to northeast winds (10-15kn, 5-8m/s) today becoming east (10-15kn) tonight. Southeast winds (10-15kn) Wednesday through Thursday.

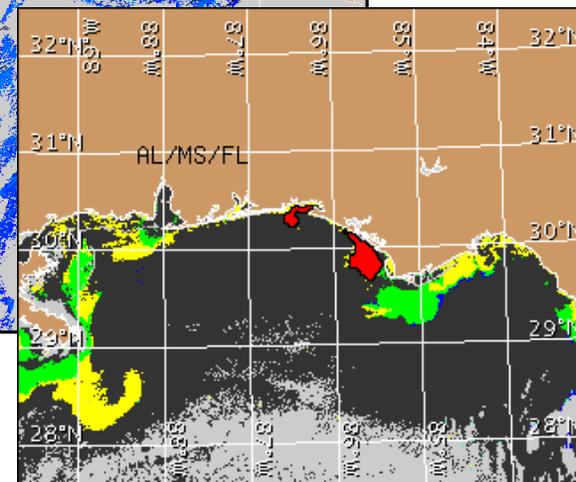


Wind speed and direction are averaged over 12 hours from buoy measurements. Length of line indicates speed; angle indicates direction. Red indicates that the wind direction favors upwelling near the coast. Values to the left of the dotted vertical line are measured values; values to the right are forecasts.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



Satellite chlorophyll image and forecast winds for January 20, 2016 12Z with points representing cell concentration sampling data from January 9 to 18: 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).