



# Gulf of Mexico Harmful Algal Bloom Bulletin

Region: AL/MS/FL

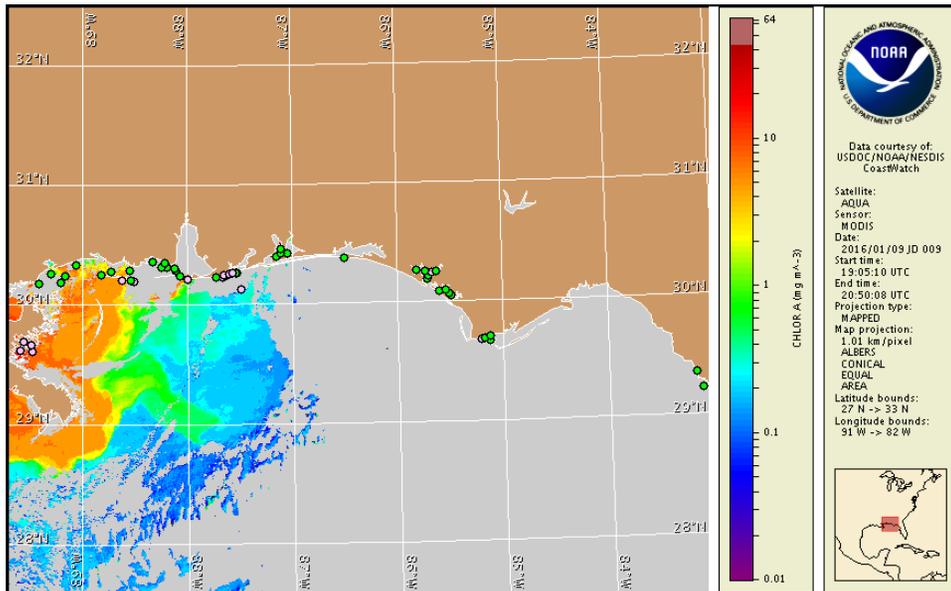
Monday, 11 January 2016

NOAA National Ocean Service

NOAA Satellite and Information Service

NOAA National Weather Service

Last bulletin: Thursday, January 7, 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 1 to 8: 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](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 St. Bernard Parish in Louisiana; Harrison and Jackson counties in Mississippi; 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 Monday, January 11 to Thursday, January 14 is listed below:

**County Region: Forecast (Duration)**

**Okaloosa County: Very Low (M-Th)**

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

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

**All Other NWFL to Louisiana Parish Regions: None expected (M-Th)**

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

Check [http://tidesandcurrents.noaa.gov/hab/beach\\_conditions.html](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](http://tidesandcurrents.noaa.gov/hab/hab_health_info.html). Reports of respiratory irritation were received from Okaloosa and Franklin counties. Reports of dead fish were received from Okaloosa and Gulf counties.

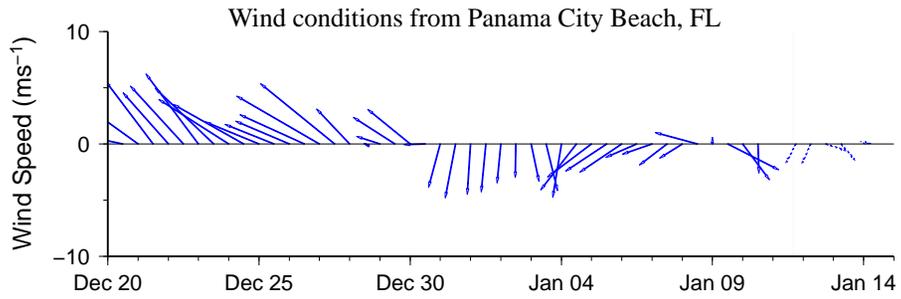
## Analysis

Samples collected along- and offshore Louisiana, Mississippi, Alabama, and northwest Florida indicate not present to background *Karenia brevis* concentrations from St. Bernard Parish, LA to Franklin County, FL. Recent sampling in the bay regions of Santa Rosa and Okaloosa counties indicated that *K. brevis* was not present (FWRI; 1/7). However, reports of respiratory irritation and fish kills in Okaloosa, Gulf, and Franklin counties (MML; 1/7-11) suggest *K. brevis* concentrations may be higher than sampled for those regions. Additional sampling of 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>.

Recent ensemble imagery has been obscured by clouds along the Gulf coast from Louisiana to Florida, limiting analysis. In MODIS Aqua imagery from 1/9 (shown left), patches of elevated chlorophyll (2-6  $\mu\text{g/L}$ ) with some of the optical characteristics of *K. brevis* were visible along- and offshore the Louisiana and Mississippi coast.

North to east winds forecast today through Thursday may increase the potential for westerly transport of surface *K. brevis* concentrations along the coasts of Mississippi, Alabama, and northwest Florida.

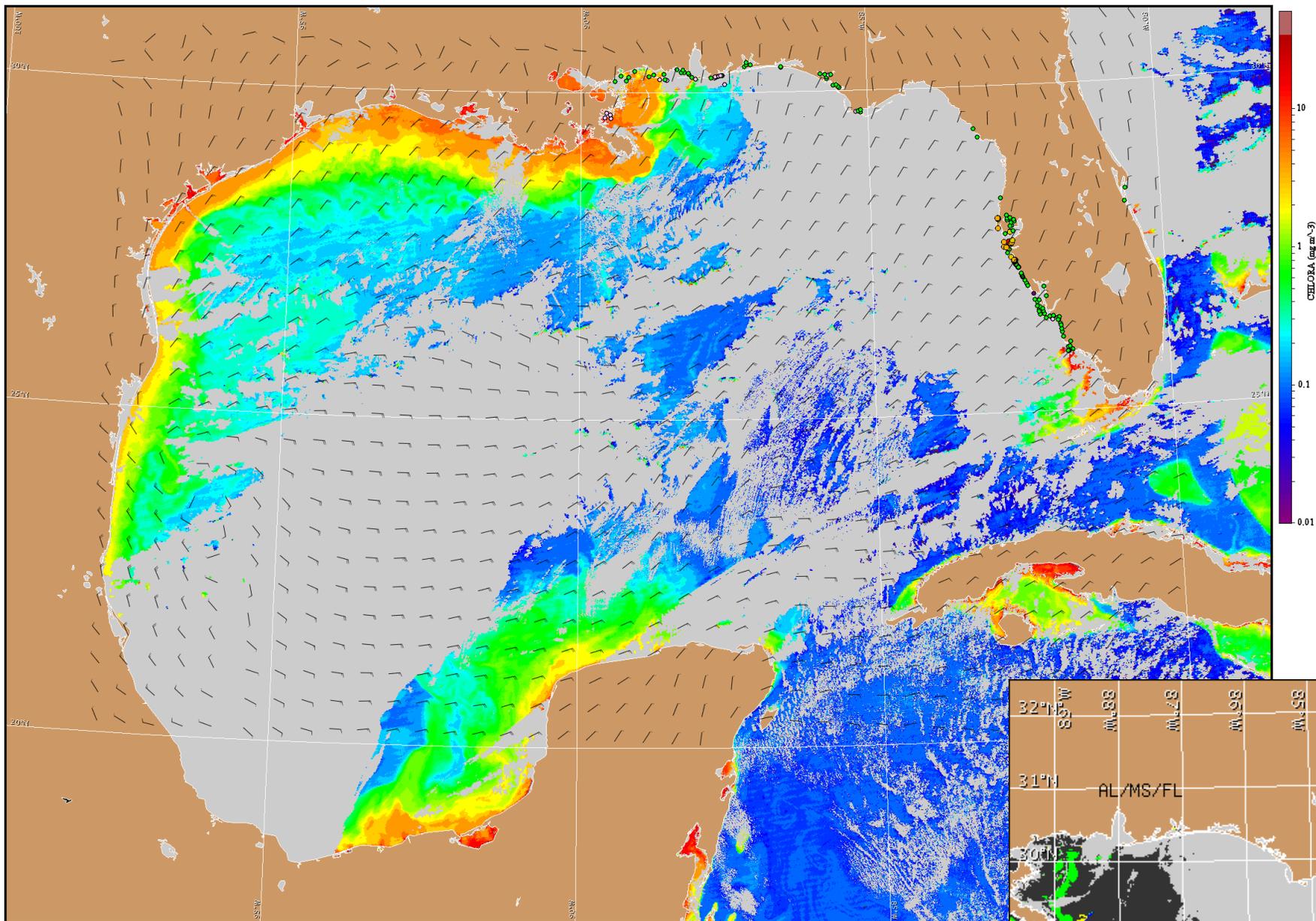
Davis, Derner



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).

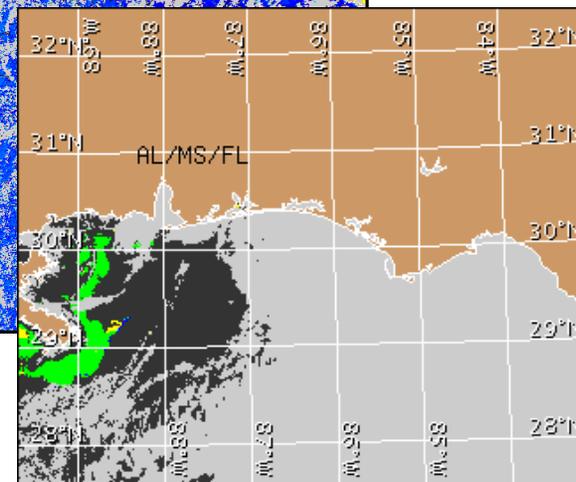
## Wind Analysis

**Escambia to Gulf counties:** North to northeast winds (5-15kn, 3-8m/s) today. North to northwest winds (10-15kn, 5-8m/s) Tuesday. Northeast winds (10-15kn) Wednesday becoming east (10-20kn, 5-10m/s) Wednesday night through Thursday.



Satellite chlorophyll image and forecast winds for January 12, 2016 06Z with points representing cell concentration sampling data from January 1 to 8: 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).