



Gulf of Mexico Harmful Algal Bloom Bulletin

Region: AL/MS/FL

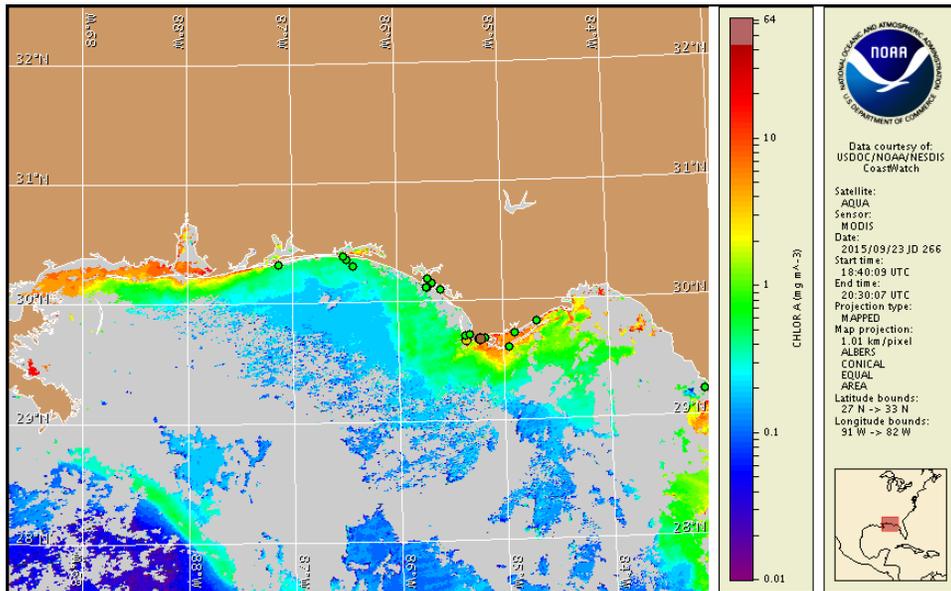
Thursday, 24 September 2015

NOAA National Ocean Service

NOAA Satellite and Information Service

NOAA National Weather Service

Last bulletin: Monday, September 21, 2015



Satellite chlorophyll image with possible *K. brevis* HAB areas shown by red polygon(s), when applicable. Points represent cell concentration sampling data from September 14 to 23: 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 low concentrations of *Karenia brevis* (commonly known as Florida red tide) are present along- and offshore portions of northwest Florida from Escambia to Taylor 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 along-shore northwest Florida Thursday, September 24 to Monday, September 28 is listed below:

County Region: Forecast (Duration)

Gulf County: Moderate (F-Sa), Very Low (Th, Su-M)

Gulf County, east bay regions-Indian Lagoon area: Low (Th-M)

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

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. No reports of respiratory irritation or fish kills have been reported over the past several days.

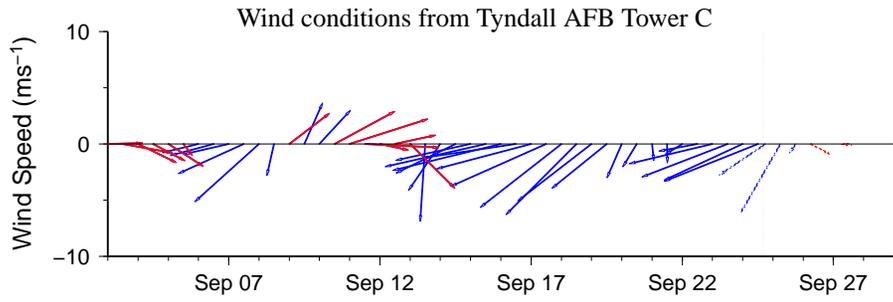
Analysis

Recent samples collected last week from along- and offshore northwest Florida (Escambia to Taylor counties) indicated not present to 'low b' concentrations of *Karenia brevis*. In Gulf County, new sampling throughout Indian Lagoon continues to indicated up to 'low a' *K. brevis* concentrations (FWRI; 9/22). Sampling in St. Joseph Bay of Gulf County and at Pensacola Beach Pier in Escambia County indicate that *K. brevis* is not present (FWRI; 9/18-22). No reports of respiratory irritation or dead fish were received from alongshore northwest Florida this week (FWRI, MML; 9/21-9/24).

Recent ensemble imagery (MODIS Aqua, 9/23), is partially obscured by clouds along- and offshore northwest Florida from Bay to Gulf County, limiting analysis. A feature of elevated chlorophyll ($2-9\mu\text{g/L}$) where up to 'low b' *K. brevis* concentrations were sampled is visible in recent MODIS Aqua imagery (9/23), but ensemble imagery of the region indicated the presence of a chlorophyll anomaly with only one of the optical characteristics of *K. brevis*.

Northeast to east winds Thursday through Monday may promote westward transport of *K. brevis* concentrations and may minimize potential for intensification at the coast.

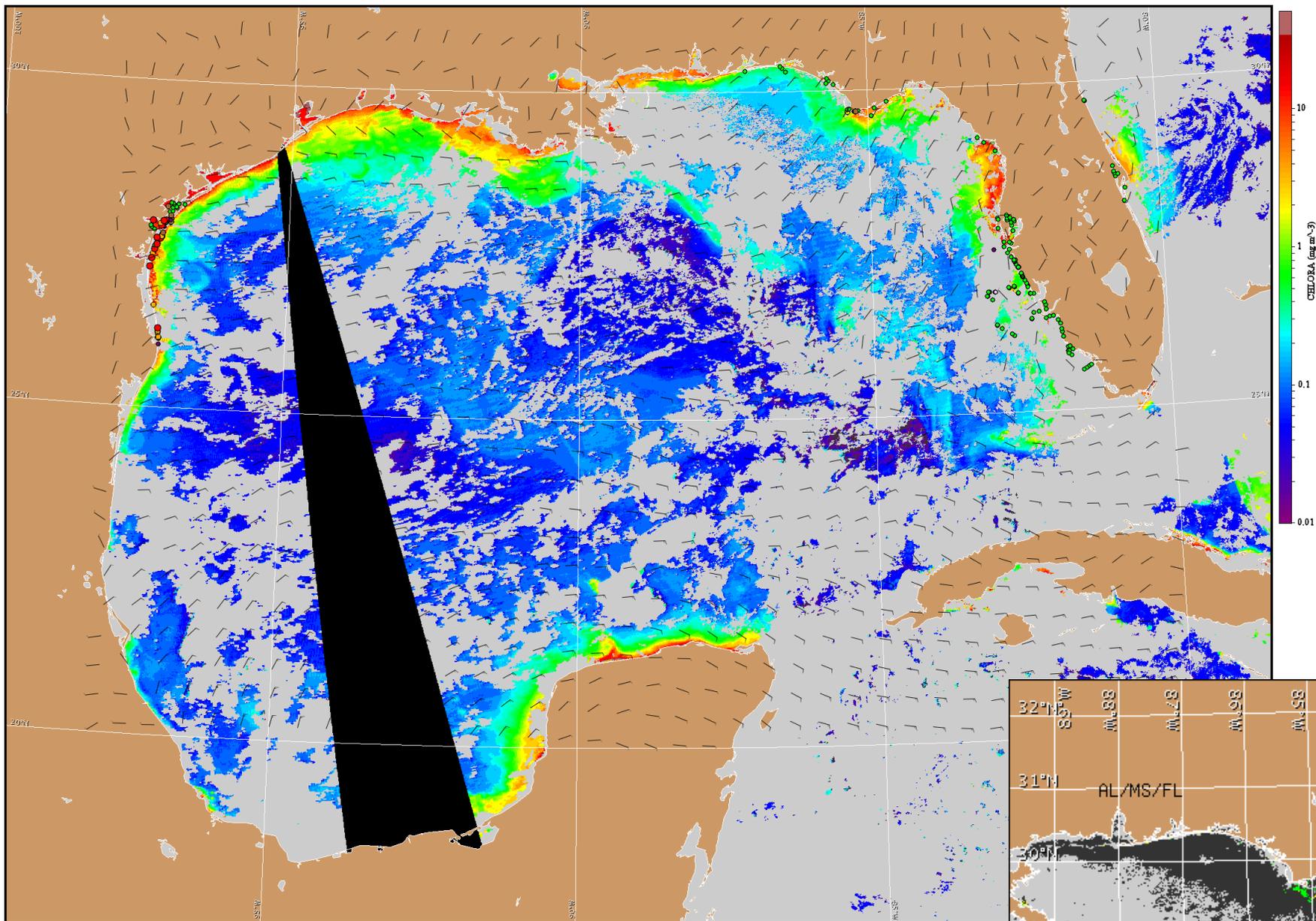
Davis, Yang



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).

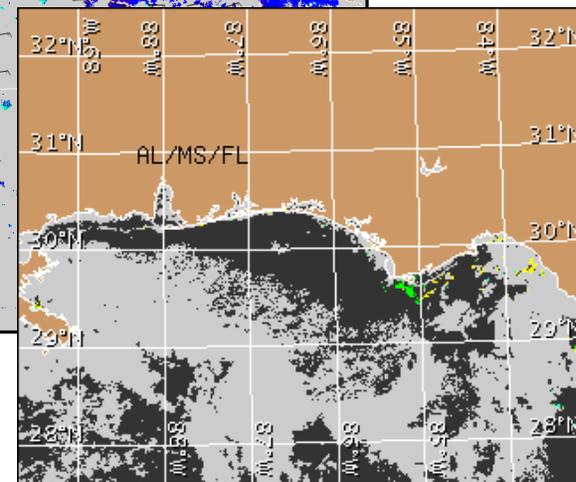
Wind Analysis

Escambia to Taylor counties: Northeast winds (5-15kn, 3-8m/s) today through Friday. West winds (5kn, 3m/s) Saturday becoming east winds (5-15kn) Saturday evening through Monday.



Satellite chlorophyll image and forecast winds for September 25, 2015 06Z with points representing cell concentration sampling data from September 14 to 23: 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).