



Gulf of Mexico Harmful Algal Bloom Bulletin

Region: AL/MS/FL

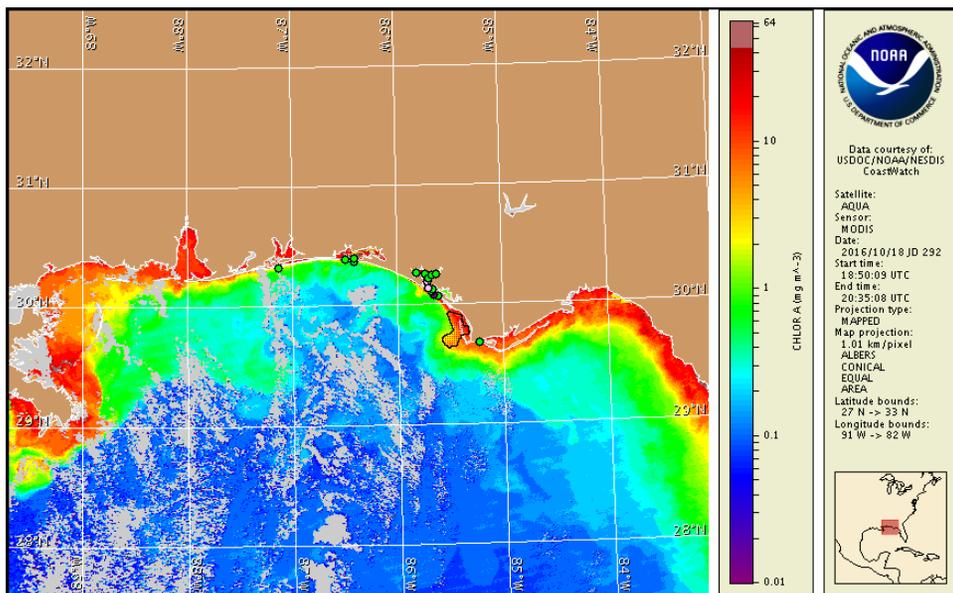
Thursday, 20 October 2016

NOAA National Ocean Service

NOAA Satellite and Information Service

NOAA National Weather Service

Last bulletin: Monday, October 17, 2016



Satellite chlorophyll image with possible *K. brevis* HAB areas shown by red polygon(s), when applicable. Points represent cell concentration sampling data from October 10 to 19: 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/hab_publication/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 alongshore from Bay County, Florida to Baldwin County, Alabama. No respiratory irritation is expected alongshore northwest Florida or Alabama Thursday, October 20 through Monday, October 24.

Check http://tidesandcurrents.noaa.gov/hab/beach_conditions.html for recent, local observations.

Analysis

Recent samples collected alongshore and in the bay regions of Bay County, Florida confirm not present to 'very low a' concentrations of *Karenia brevis* in the upper and lower Grand Lagoons, and southeast of Spanish Ante in Saint Andrews Bay (FWRI; 10/11-10/18). No new samples have been received from alongshore Baldwin County in Alabama, where there were previously up to 'very low a' concentrations of *K. brevis* from Alabama Point, west to Gulf State Park (ADPH; 10/7). There are currently no reports of dead fish, discolored water, or respiratory irritation.

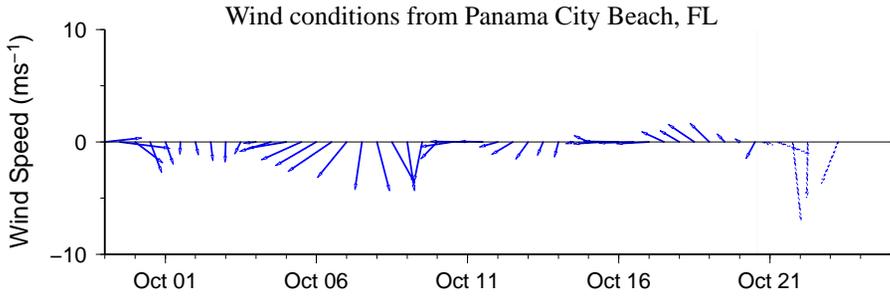
In recent ensemble imagery (MODIS Aqua, 10/18), patches of elevated to very high chlorophyll (2 to >20 $\mu\text{g/L}$) with the optical characteristics of *K. brevis* are present alongshore Gulf to Walton counties in northwest Florida, extending up to 5 miles offshore from Panama City Beach, Florida. Additional sampling alongshore Gulf, Bay, and Walton counties, where *K. brevis* has not been detected, is recommended. Patches of elevated chlorophyll (2-9 $\mu\text{g/L}$) with the optical characteristics of *K. brevis* are visible alongshore Baldwin County, Alabama.

Keeney, Davis

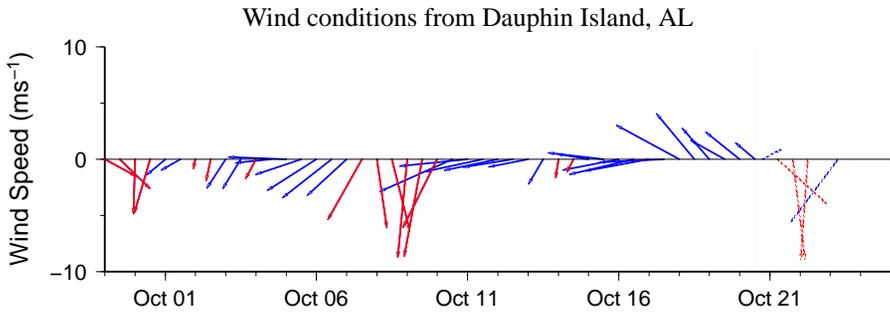
Wind Analysis

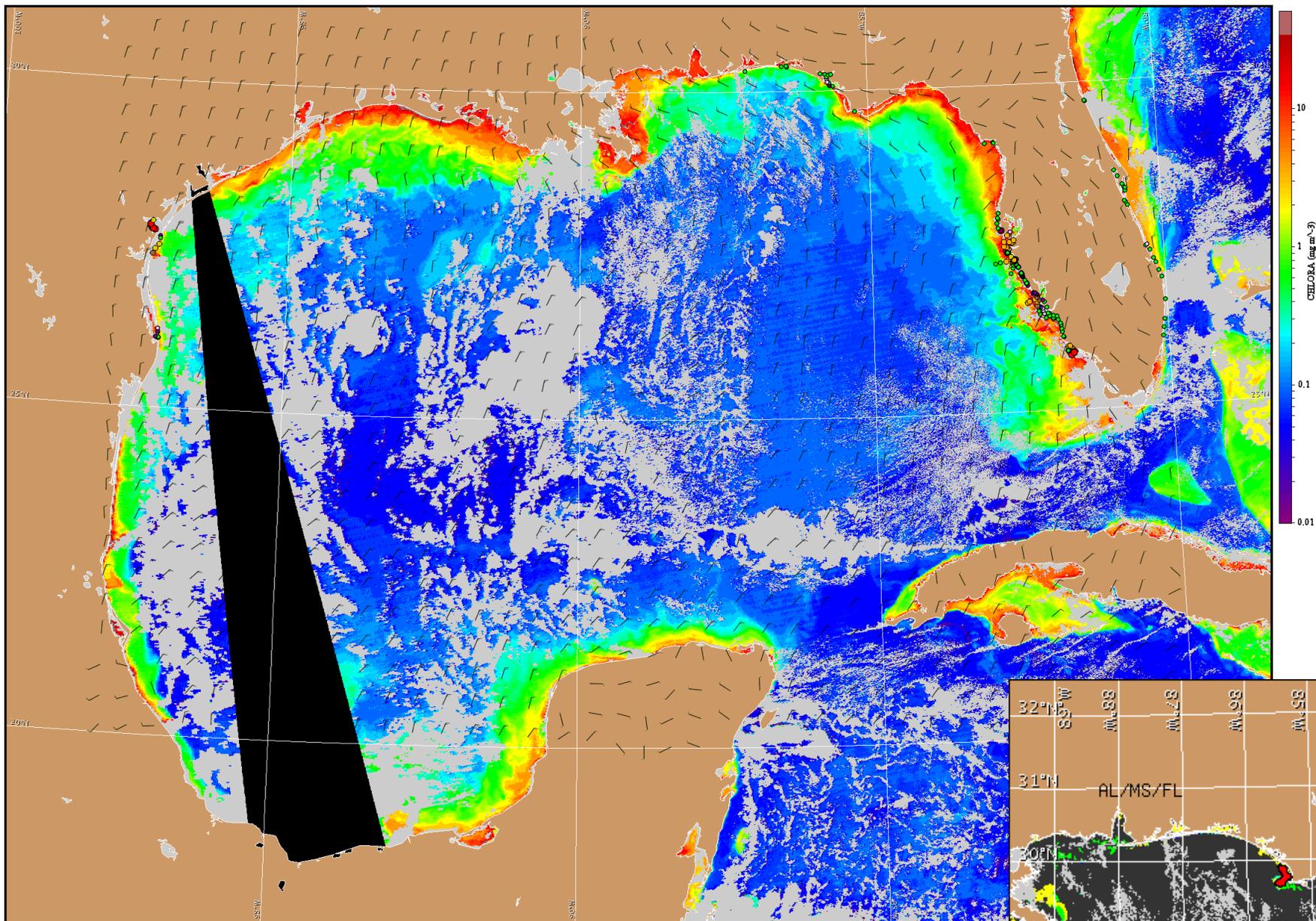
Escambia to Gulf counties: Northeast to northwest winds (5-15kn, 3-8m/s) today. North winds (15-20kn, 8-10m/s) Friday and Saturday, becoming northeast winds (10-15kn, 5-8m/s) Saturday evening. East to northeast winds (5-10kn, 3-5m/s) Sunday. North winds (5-10kn) Monday.

Gulf Shores of Alabama: Northeast winds (3-8kn, 2-4m/s) today, becoming southwest winds (8-13kn, 4-7m/s) in the evening, eventually shifting to northwest winds (20-25kn, 10-13m/s) late Thursday night. North winds (18-25kn, 9-13m/s) Friday. North to northeast winds (8-20kn, 4-10m/s) Saturday. East winds (5-13kn, 3-7m/s) Sunday. Northeast winds (8-13kn) Monday, shifting to west winds Monday evening.



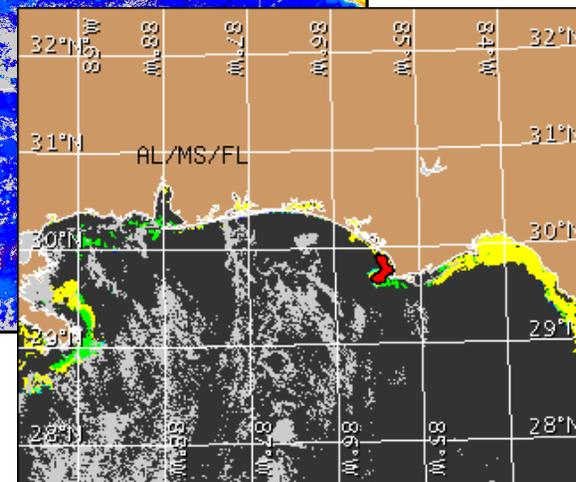
Wind speed and direction are averaged over 12 hours from buoy measurements. Length of line indicates speed; angle indicates direction. Red indicates that the wind direction favors upwelling near the coast. Values to the left of the dotted vertical line are measured values; values to the right are forecasts.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





Satellite chlorophyll image and forecast winds for October 21, 2016 06Z with points representing cell concentration sampling data from October 10 to 19: 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).