Gulf of Mexico Harmful Algal Bloom Bulletin

Region: AL/MS/FL

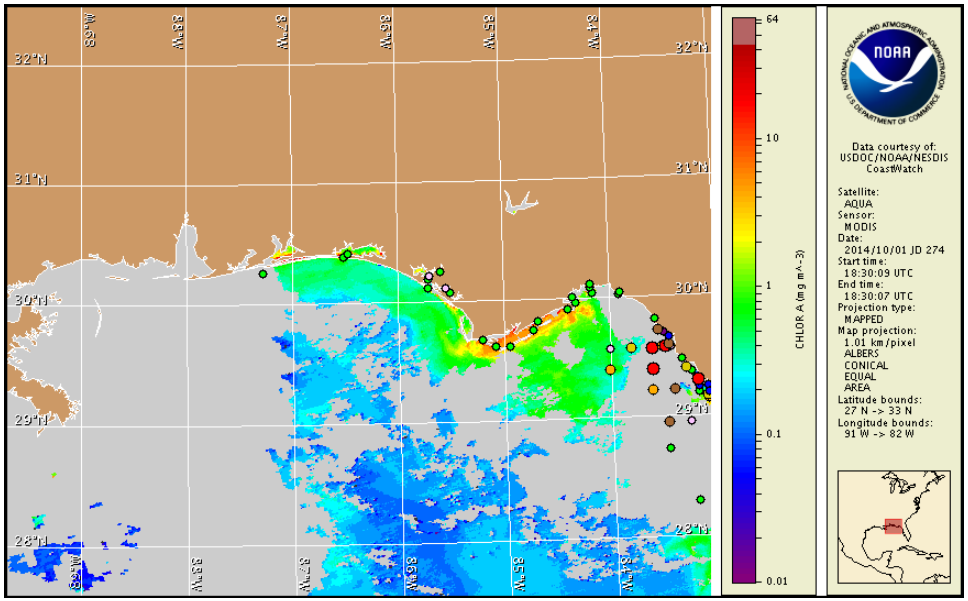
Thursday, 02 October 2014

NOAA National Ocean Service

NOAA Satellite and Information Service

NOAA National Weather Service

Last bulletin: January 17, 2008



Satellite chlorophyll image with possible *K. brevis* HAB areas shown by red polygon(s), when applicable. Points represent cell concentration sampling data from September 22 to October 1: 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 high concentrations of *Karenia brevis* (commonly known as Florida red tide) are present along- and offshore portions of northwest and southwest Florida from Taylor to Citrus 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 Thursday, October 2 through Monday, October 6 is listed below:

County Region: Forecast (Duration)
Taylor: Very Low (Th), Low (F-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. Over the past several days, reports of dead fish were received from Taylor County.

Analysis

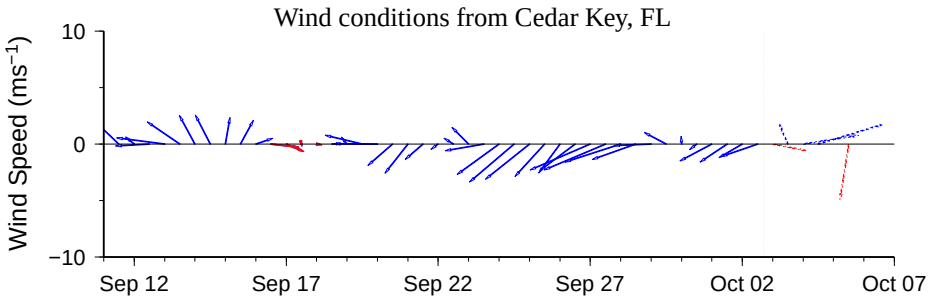
As of today, October 2, bulletins will be issued twice weekly, on Mondays and Thursdays, for both the northwest and southwest Florida regions due to the presence of Karenia brevis concentrations nearshore. Northwest Florida bulletins will report on conditions between Escambia and Taylor counties. Southwest Florida bulletins will report on conditions between Dixie and Monroe counties.

Recent samples collected along- and offshore northwest Florida (Escambia to Taylor counties) over the past week indicated that the *Karenia brevis* bloom has moved northward into Taylor county, identifying not present to 'low a' concentrations of *K. brevis*. Samples collected on Monday identified 'very low a' to 'low a' *K. brevis* concentrations alongshore southern Taylor county, with the highest concentrations collected 0.6 miles southwest of Big Grass Island (FWRI; 9/30). Background concentrations were also identified in Bay County at West Point Bay last week (FWRI; 9/25). All other samples collected along- and offshore Escambia to Taylor counties over the past week indicate that *K. brevis* is not present (FWRI; 9/24-9/30). Reports of dead fish were received last week off Rocky Creek Channel and approximately 9-12 miles offshore Keaton Beach in Taylor County (FWRI; 9/24). Several reports of dead fish along- and offshore Steinhatchee (Taylor County) were also received over the past week (FWRI; 9/23-29). No respiratory irritation associated with *K. brevis* has been reported along the coast of northwest Florida (MML; 9/29-10/2).

Recent MODIS Aqua imagery (9/28-10/1) has been partially or completely obscured by clouds along- and offshore Escambia to Taylor counties, limiting analysis. In MODIS Aqua imagery from 10/1 (shown left), patches of elevated chlorophyll (1-6μg/L) are visible along- and offshore Franklin and Wakulla counties. Clear imagery for Taylor County is currently not available; however, this region will continue to be monitored as imagery becomes available.

Observed winds over the past several days may have promoted northerly transport of *K. brevis* concentrations. Variable winds and surface currents forecasted over the next several days may maintain the location of surface *K. brevis* concentrations or promote slight southerly transport.

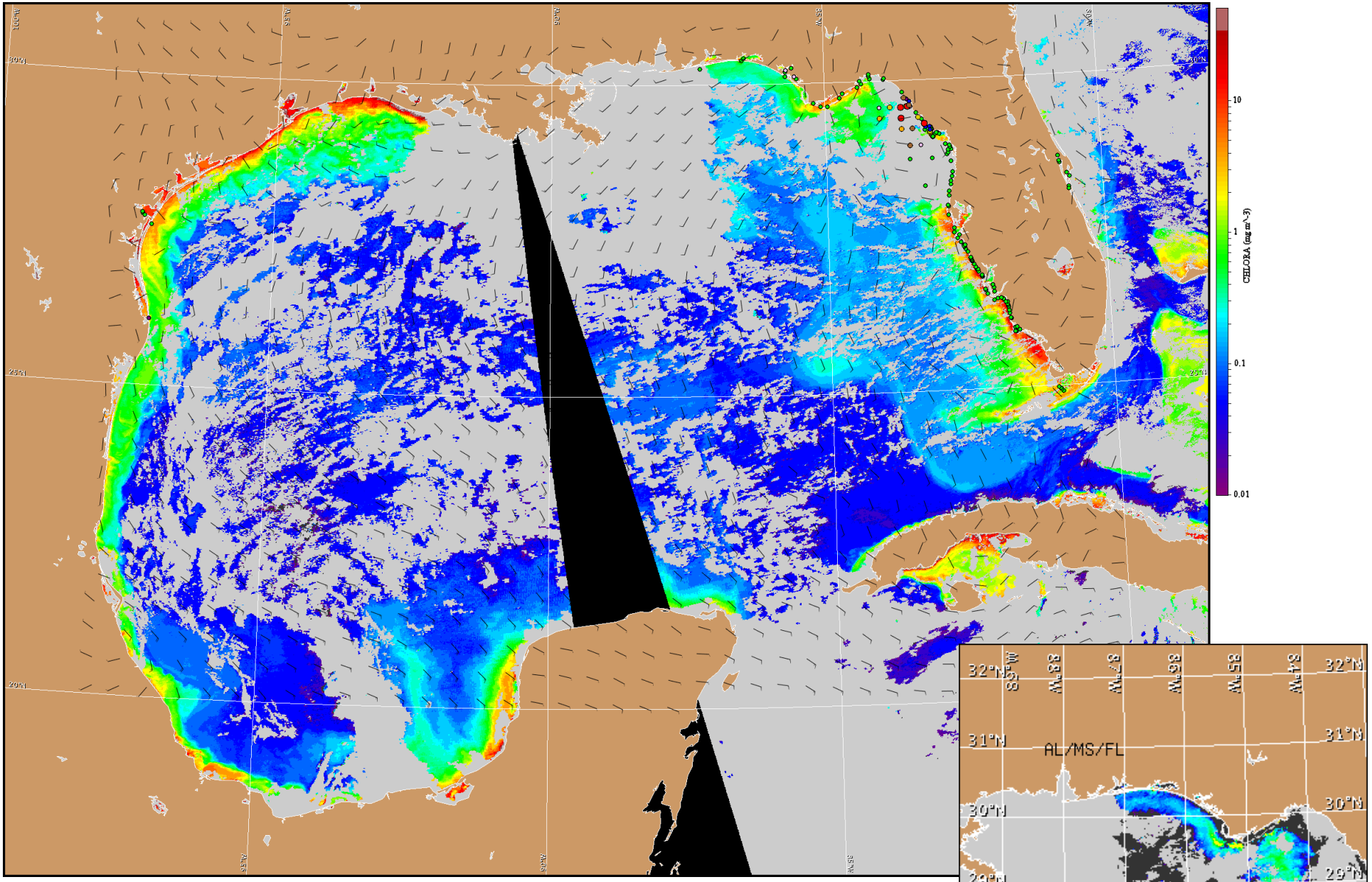
Derner, Yang



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

Franklin to Taylor counties: East winds (5-10kn, 3-5m/s) today becoming southeast (10kn, 5m/s) tonight. Southwest winds (5-10kn) Friday increasing to 15kn (8m/s) Friday afternoon. West winds (10-15kn, 5-8m/s) Friday night becoming northwest winds (20kn, 10m/s) after midnight. North winds (20kn) Saturday becoming northwest (10-15kn) Saturday afternoon. North winds (15kn) Saturday. North winds (5-15kn, 3-8m/s) Sunday becoming northeast (10kn) Sunday night. Southeast winds (5kn, 3m/s) Monday.



Satellite chlorophyll image and forecast winds for October 3, 2014 12Z with points representing cell concentration sampling data from September 22 to October 1: 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 of high chlorophyll concentration shown in yellow (see p. 1 analysis for interpretation).