



Gulf of Mexico Harmful Algal Bloom Bulletin

Region: Southwest Florida

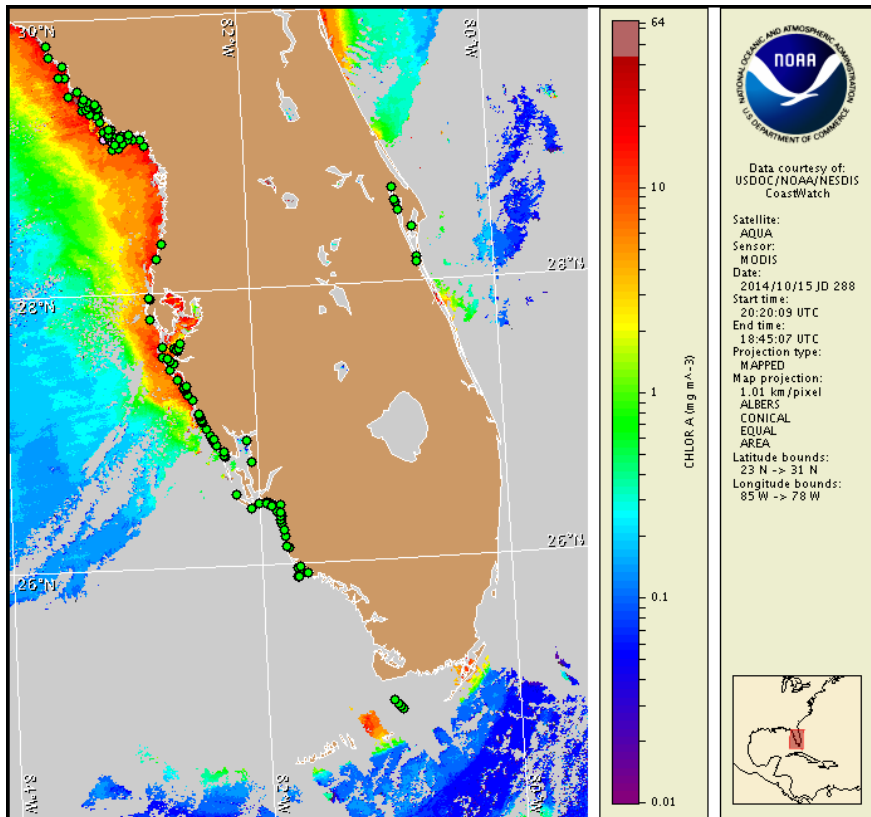
Thursday, 16 October 2014

NOAA National Ocean Service

NOAA Satellite and Information Service

NOAA National Weather Service

Last bulletin: Tuesday, October 14, 2014



Satellite chlorophyll image with possible *K. brevis* HAB areas shown by red polygon(s), when applicable. Points represent cell concentration sampling data from October 6 to 14: red (high), orange (medium), yellow (low b), brown (low a), blue (very low b), purple (very low a), pink (present), and green (not present). Cell count data are provided by Florida Fish and Wildlife Conservation Commission (FWC) Fish and Wildlife Research Institute. 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/habofs_bulletin_guide.pdf

Detailed sample information 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 portions of northwest and southwest Florida from Bay to Levy counties. No respiratory irritation is expected alongshore southwest Florida Thursday, October 16 through Monday, October 20.

Check http://tidesandcurrents.noaa.gov/hab/beach_conditions.html for recent, local observations. Visit <http://tidesandcurrents.noaa.gov/hab/#nwfl> for the most recent northwest Florida conditions report.

Analysis

Dixie to Citrus counties: Samples collected over the past few days along- and offshore Dixie and Levy counties in southwest Florida continue to indicate that *Karenia brevis* is not present. In Dixie County, four new samples taken along- and offshore indicate that *K. brevis* is not present (FWRI; 10/9). In Levy County, five new samples taken along- and offshore continue to indicate that *K. brevis* is not present (FWRI; 10/13). No dead fish or respiratory irritation associated with *K. brevis* have been reported along this portion of the southwest Florida coast over the past several days (FWRI, MML; 10/13-10/16).

In MODIS Aqua imagery from 10/15 (shown left), elevated to very high chlorophyll (7 to $>20 \mu\text{g/L}$) is visible in patches along- and offshore Dixie to Citrus counties. The patch of elevated chlorophyll previously reported just offshore Levy County is no longer visible since chlorophyll levels in the entire region are now elevated. Elevated chlorophyll in this region is not necessarily indicative of the presence of *K. brevis*. Due to the optical characteristics that are typical in the area, some elevated chlorophyll may also be due to the resuspension of benthic chlorophyll and sediments along the coast.

Observed winds and surface currents over the past several days may have promoted southerly transport of *K. brevis* concentrations. Winds and surface currents forecasted today through Saturday may continue to promote southerly transport of surface *K. brevis* concentrations.

Hernando to Monroe counties: Recent samples collected along- and offshore from Charlotte to Collier counties indicate that *K. brevis* is not present (FWRI, CCPCPD; 10/13). No dead fish or respiratory irritation associated with *K. brevis* have been reported along this portion of the southwest Florida coast over the past several days (FWRI, MML; 10/13-10/16).

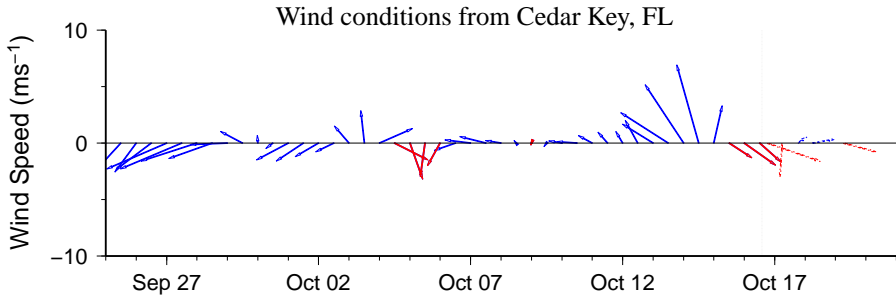
In MODIS Aqua imagery (10/15, shown left) is obscured by clouds from southern Sarasota to Monroe counties. Along- and offshore Hernando to northern Sarasota counties, elevated to very high chlorophyll (3 to $>20 \mu\text{g/L}$) patches remain. Elevated chlorophyll levels along the coast may be the result of various algal species that have been reported throughout the region and not due to *K. brevis*.

Urizar, Davis

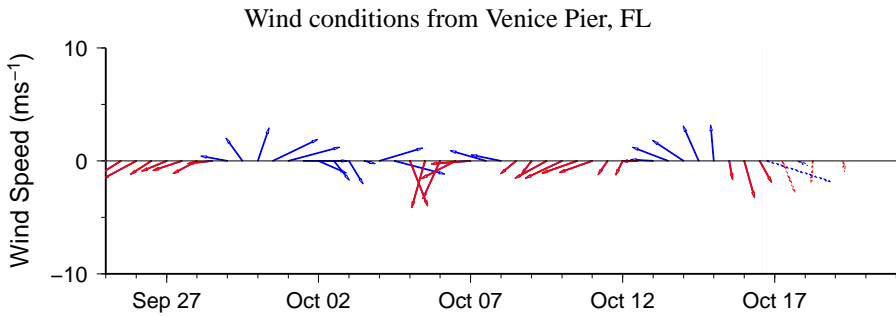
Wind Analysis

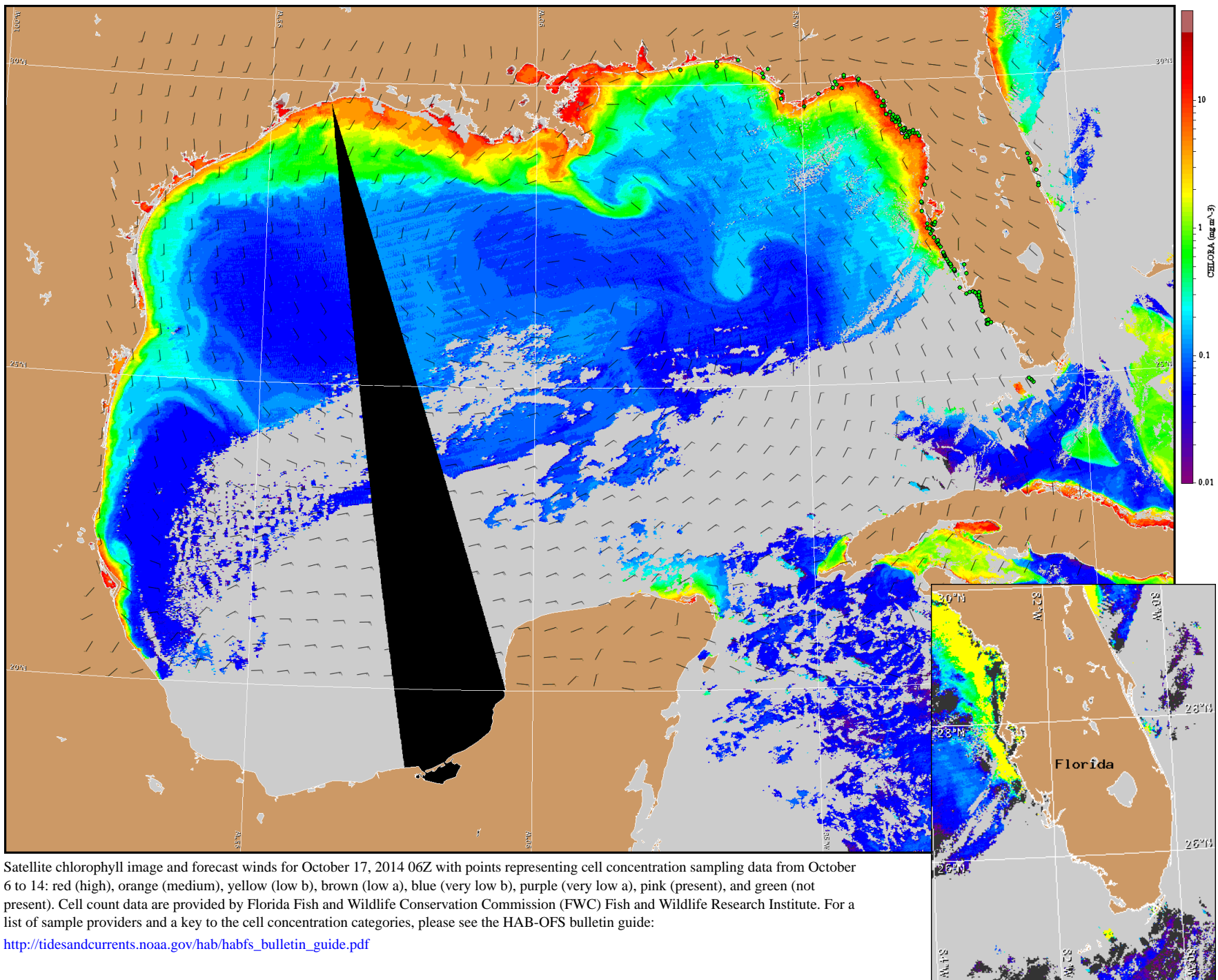
Suwannee River to Keaton Beach Northwestern winds (10-15 kn, 5-8 m/s) today and northerly to northwesterly winds tonight (5-15 kn, 3-8 m/s). Northerly winds (10 kn, 5 m/s) Friday with westerly winds in the afternoon and night. Northwestern winds (10 kn) Saturday. Northeasterly winds (10 kn) Sunday. Easterly winds (10 kn) Monday.

Englewood to Suwannee River (Venice and Cedar Key Buoys): Northwestern winds (5-15 kn) today. Northeasterly winds (5-10 kn, 3-5 m/s) Friday becoming northwesterly in the afternoon. North to northwesterly winds (5-10 kn) Friday night through Saturday. Northerly to northeasterly winds (5-10 kn) Sunday. Easterly winds (10 kn) Monday.



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 17, 2014 06Z with points representing cell concentration sampling data from October 6 to 14: red (high), orange (medium), yellow (low b), brown (low a), blue (very low b), purple (very low a), pink (present), and green (not present). Cell count data are provided by Florida Fish and Wildlife Conservation Commission (FWC) Fish and Wildlife Research Institute. 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).