



Gulf of Mexico Harmful Algal Bloom Bulletin

Region: Southwest Florida

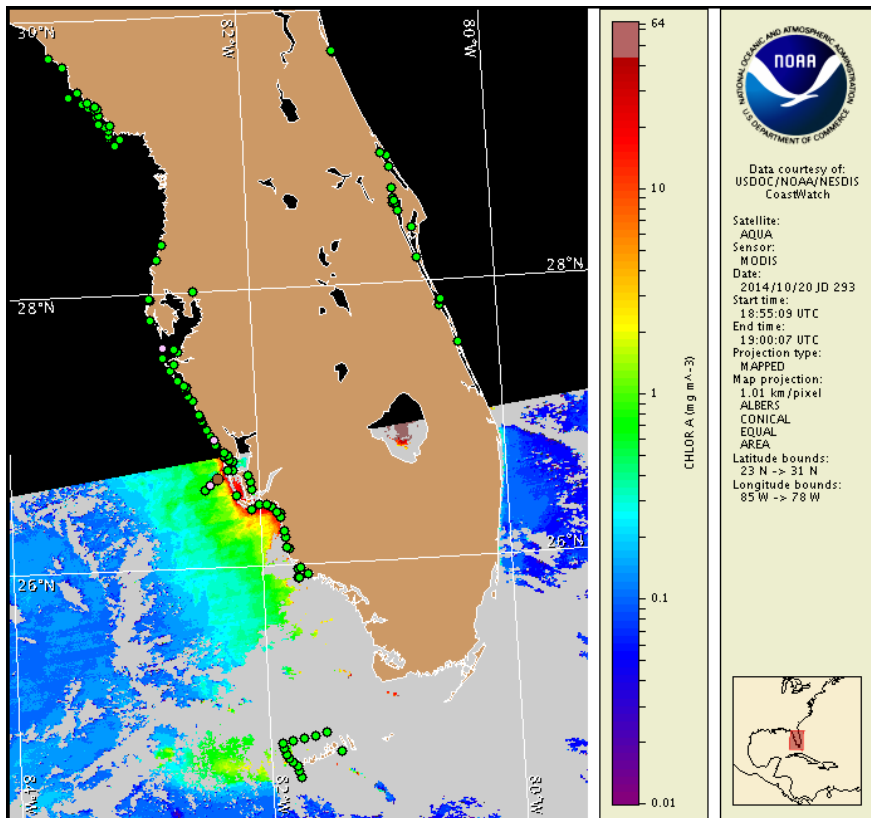
Thursday, 23 October 2014

NOAA National Ocean Service

NOAA Satellite and Information Service

NOAA National Weather Service

Last bulletin: Monday, October 20, 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 13 to 22: 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/habfs_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 low concentrations of *Karenia brevis* (commonly known as Florida red tide) are present along- and offshore portions of southwest Florida from Pinellas to Lee counties. No respiratory irritation is expected alongshore southwest Florida Thursday, October 23 through Monday, October 27.

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

**Due to technical difficulties, the 10/20 daily merge MODIS imagery could not be displayed. Please refer to the northwest Florida bulletin for the remainder of the image. **

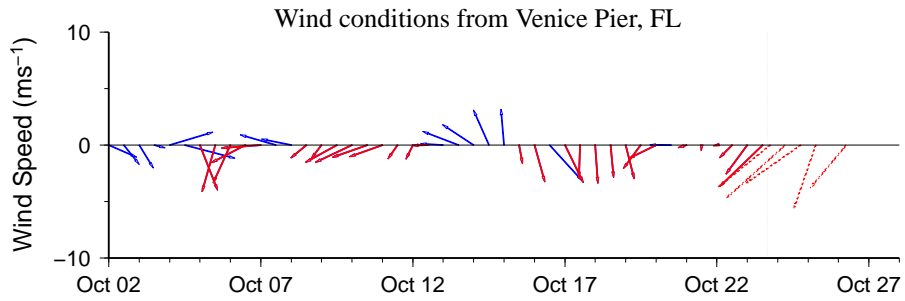
Dixie to Pasco counties: The most recent sampling continues to indicate that *Karenia brevis* (commonly known as Florida red tide) is not present along- and offshore Dixie and Levy counties (FWRI; 10/21-22). No dead fish or respiratory irritation associated with *K. brevis* have been reported along this portion of the southwest Florida coast over the past several days (FWRI, MML; 10/20-10/23). Reporting on this portion of the southwest Florida coast will end and will resume as conditions warrant.

Pinellas to Monroe counties: Recent samples collected along- and offshore Charlotte and Lee counties indicate that *K. brevis* ranges from not present to 'low a' (FWRI; 10/17-20). In northern Lee County, one background concentration of *K. brevis* was identified 11 miles offshore and one 'low a' sample was identified 6.1 miles offshore Cayo Costa (FWRI; 10/17). In the bay regions of northern Lee County, two samples indicated that *K. brevis* is not present (FWRI; 10/20). Also, in the bay regions of Charlotte County, one new sample indicated background concentrations *K. brevis* south of Tom Adams Bridge in Lemon Bay, and six additional new samples indicated that *K. brevis* is not present (FWRI; 10/20). Additional samples collected along- and offshore the Florida Keys, indicate that *K. brevis* is not present (MML; 10/22). 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; 10/20-10/23).

Where visible, MODIS Aqua imagery (10/20, shown left) indicates patches of anomalously elevated to very high chlorophyll levels (2 to >20 $\mu\text{g/L}$) along- and offshore Lee County. These patches were also visible in MODIS Aqua imagery from 10/17 (not shown) where the 'low a' sample was collected 6.1 miles offshore Cayo Costa in northern Lee County. Additional sampling is recommended in this region.

Northeasterly winds over the past several days minimized the potential for alongshore transport of the *K. brevis* concentrations. Forecasted winds today through Monday may also minimize the potential for transport of *K. brevis* concentrations.

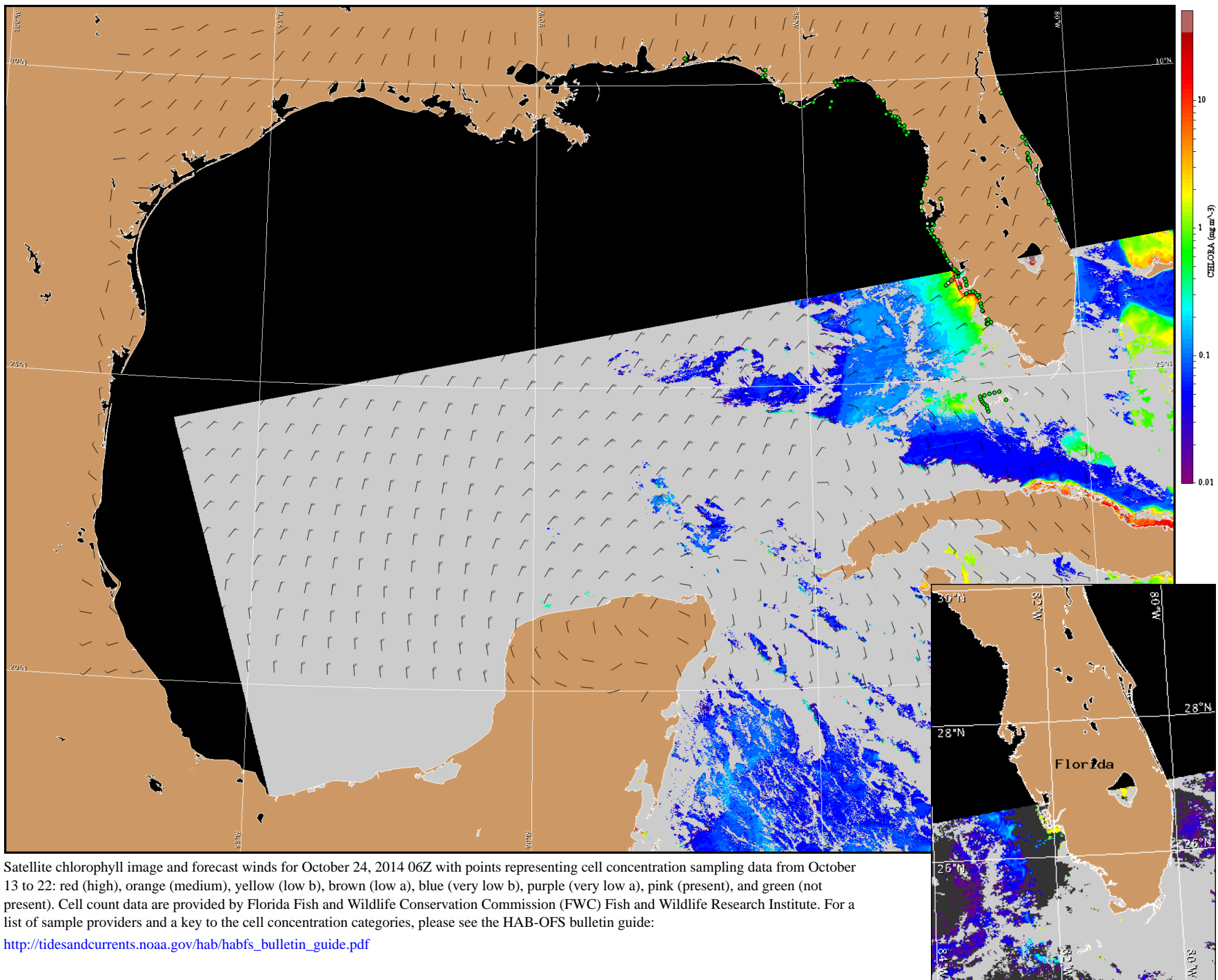
Urizar, Davis



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

Englewood Beach to Tarpon Springs (Venice Buoy): Northeasterly winds (5-20kn, 3-10m/s) today and Friday. Northerly winds (10kn, 5m/s) Saturday. Northeasterly winds (10kn) Sunday. Easterly winds (10kn) Monday.



Satellite chlorophyll image and forecast winds for October 24, 2014 06Z with points representing cell concentration sampling data from October 13 to 22: 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).