



Gulf of Mexico Harmful Algal Bloom Bulletin

Region: Southwest Florida

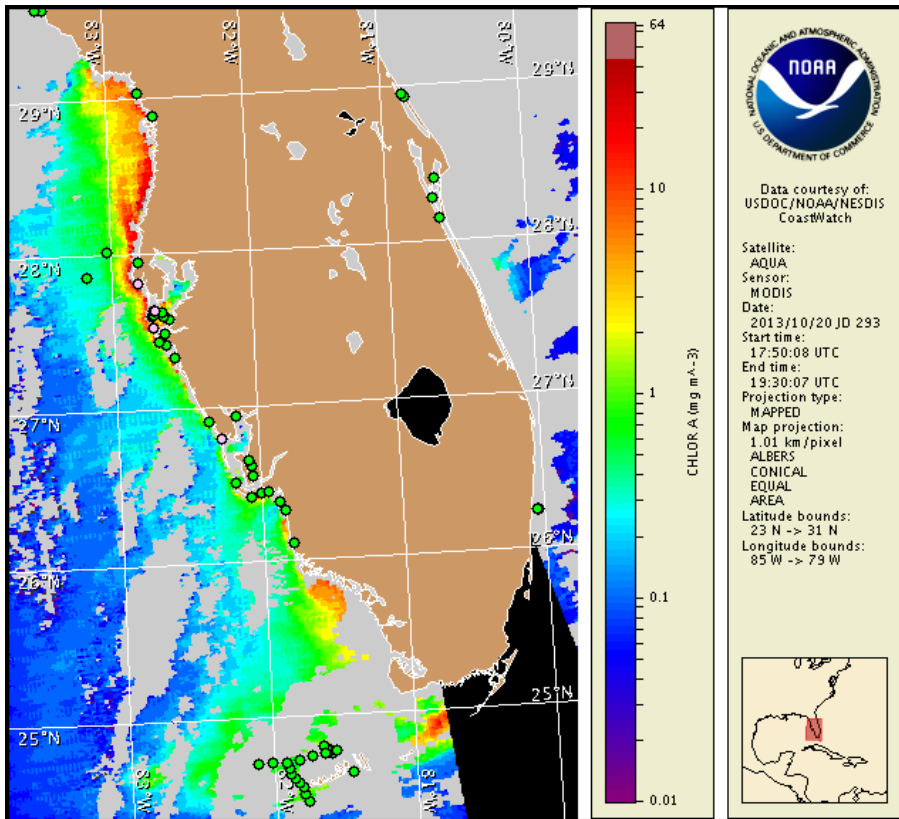
Monday, 21 October 2013

NOAA National Ocean Service

NOAA Satellite and Information Service

NOAA National Weather Service

Last bulletin: Tuesday, October 15, 2013



Satellite chlorophyll image with possible *K. brevis* HAB areas shown by red polygon(s), when applicable. Points represent cell concentration sampling data from October 11 to 18: 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

Karenia brevis (commonly known as Florida red tide) ranges from not present to very low concentrations along the coast of southwest Florida, including the Florida Keys. No respiratory irritation is expected Monday, October 21 through Monday, October 28. Check http://tidesandcurrents.noaa.gov/hab/beach_conditions.html for recent, local observations.

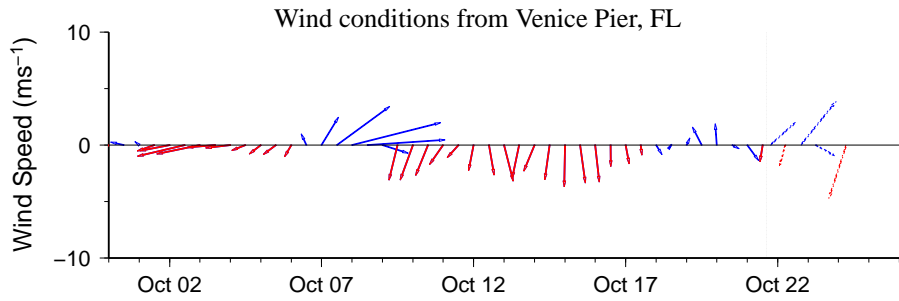
Analysis

Recent samples collected along- and offshore southwest Florida indicate that *Karenia brevis* concentrations range from 'not present' to 'very low' (FWRI, MML, SCHD; 10/8-16). 'Background' to 'very low' concentrations of *K. brevis* were identified from locations in Pinellas, Charlotte, Sarasota and Lee counties, and background concentrations were found offshore of Pinellas and Lee Counties (FWRI, SCHD, MML; 10/8-16). *K. brevis* was 'not present' in Collier County and offshore of Monroe County (FWRI, MML; 10/14, 10/18). No dead fish or respiratory irritation associated with *K. brevis* have been reported in the past week (FWRI, MML; 10/15-21).

Recent MODIS Aqua imagery has shown varying levels of chlorophyll over the past week, with generally low levels of chlorophyll (<3 $\mu\text{g/L}$) along- and offshore from Sarasota to Collier counties, and along- and offshore of the Florida Keys as of October 20 (shown left). Small patches of elevated to high chlorophyll are visible alongshore of Pinellas County and Sanibel Island region, Lee County.

Variable and strong wind conditions decrease the potential for *K. brevis* bloom formation at the coast through the week.

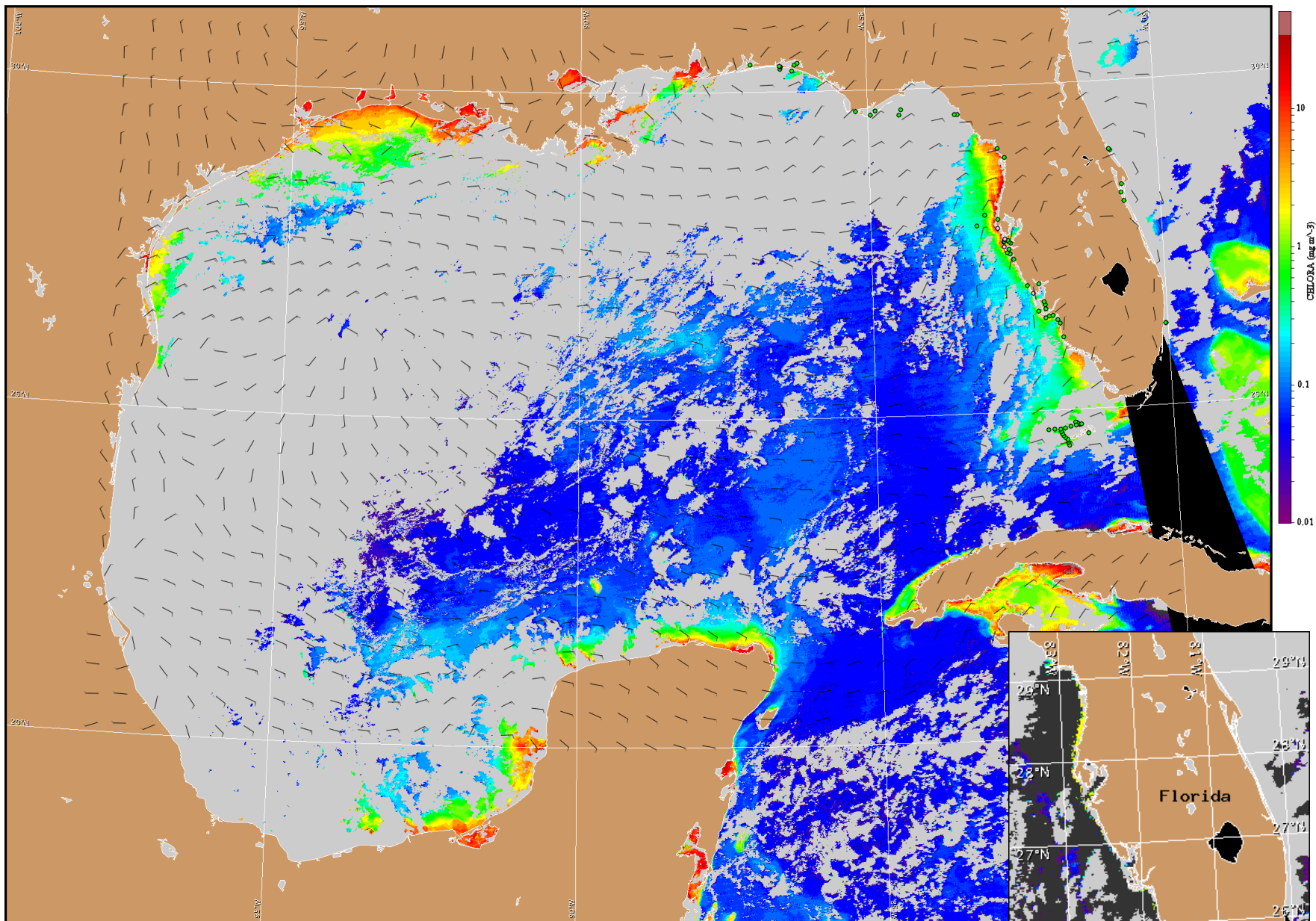
~Fenstermacher, Yang



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).

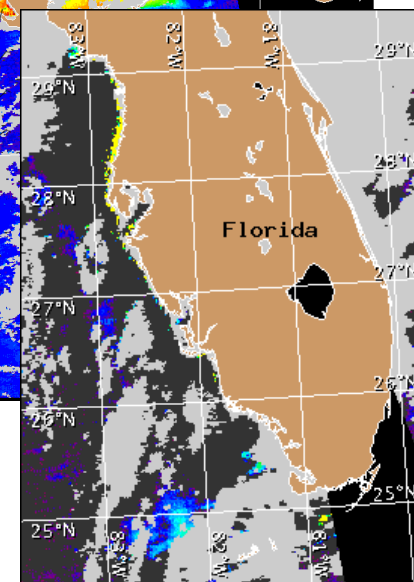
Wind Analysis

SWFL: Variable winds through Wednesday. South to northwesterlies today and southeast to westerlies on Tuesday (5-10 kn; 3-5 m/s). Southwest to northwesterlies on Wednesday and northeasterlies on Wednesday night (5-15 kn; 3-8 m/s). Strong northeasterlies on Thursday and Friday (10-20 kn, 8-13 m/s).



Satellite chlorophyll image and forecast winds for October 22, 2013 06Z with points representing cell concentration sampling data from October 11 to 18: 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).