



Gulf of Mexico Harmful Algal Bloom Bulletin

Region: Southwest Florida

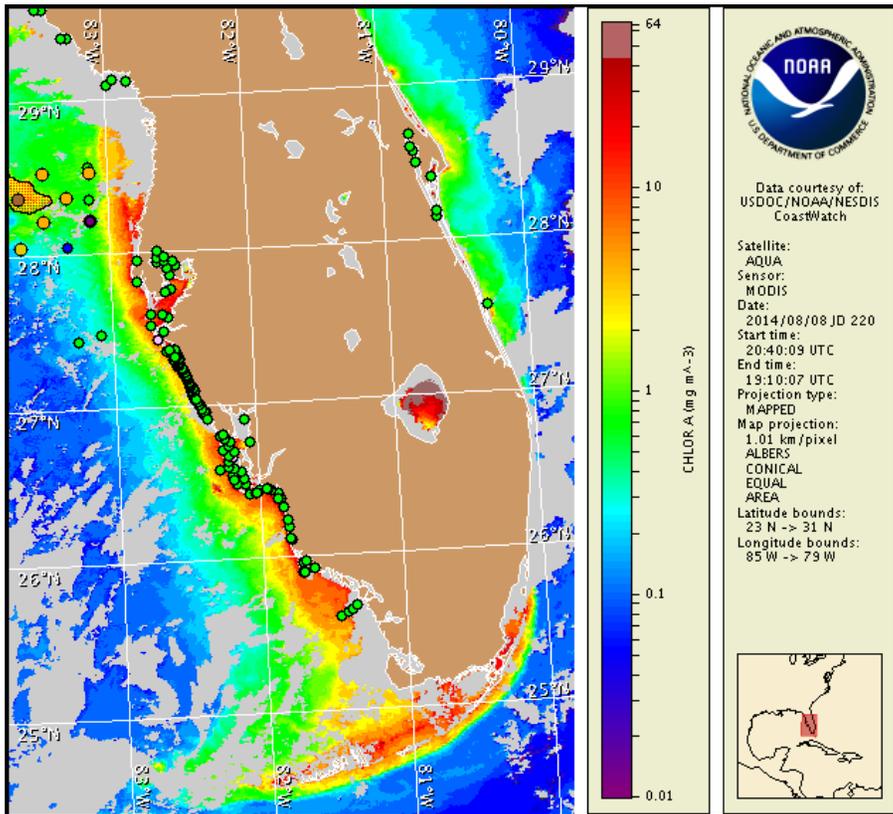
Monday, 11 August 2014

NOAA National Ocean Service

NOAA Satellite and Information Service

NOAA National Weather Service

Last bulletin: Monday, August 4, 2014



Satellite chlorophyll image with possible *K. brevis* HAB areas shown by red polygon(s), when applicable. Points represent cell concentration sampling data from August 1 to 8: 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 background concentrations along the coast of southwest Florida and is not present in the Florida Keys. *K. brevis* ranges from not present to medium concentrations offshore the coast of northwest Florida. No respiratory irritation is expected alongshore west Florida Monday, August 11 through Monday, August 18. If field observations confirm *K. brevis* concentrations at the coast, this forecast will be updated prior to August 18.

Check http://tidesandcurrents.noaa.gov/hab/beach_conditions.html for recent, local observations. Over the past several days, reports of dead fish, discolored water, and respiratory irritation have been received from offshore Dixie to northern Pinellas counties.

Analysis

Dixie to Pinellas County: Samples collected along- and offshore northwest Florida over the past week identified not present to 'medium' concentrations of *Karenia brevis* 23-80 miles offshore Hernando to northern Pinellas counties (FWRI; 8/1-5).

Recent MODIS Aqua imagery along- and offshore west Florida has been partially obscured by clouds over the past several days, limiting analysis. In MODIS Aqua imagery from 8/8 (shown left) and 8/6 (not shown), the previously reported feature of elevated chlorophyll (1-4 $\mu\text{g/L}$) appears to have moved south over the past week. It is now visible offshore from Hernando to Pasco counties. Patches of this feature extend from 28°35'52.57"N 83°47'29.95"W to 28°12'34.33"N 83°31'6.83"W, approximately 40-80mi west of the coast.

Dead fish, discolored water, and respiratory irritation continue to be observed in the sampling area of the bloom 20-50 miles offshore from Dixie to northern Pinellas counties (FWRI; 8/4-10). No reports of respiratory irritation have been received from alongshore Dixie to Pinellas counties in the past week (FWRI, MML; 8/4-10).

Over the past few days, winds observed from the northwest to southwest may have promoted transport of the offshore surface *K. brevis* concentrations south and east towards the coast, and transport may continue in this direction August 11 through August 15 based on forecasted west to southwest winds over the next several days.

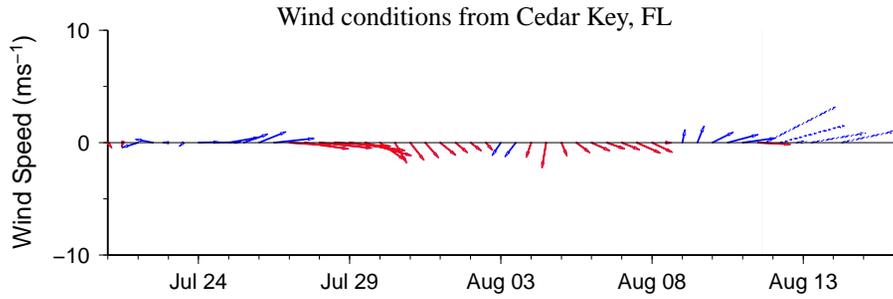
Manatee to Monroe County: Samples collected over the past week along- and offshore the coast of southwest Florida from Manatee to Monroe counties, including the Florida Keys, indicate that *K. brevis* is not present, with the exception of 'background' concentrations identified in samples collected from Long Boat Pass in the Sarasota Bay region of southern Manatee County and north of Part Island in the Pine Island Sound region of northern Lee County (FWRI, MML, SCHD, CCPCPD; 8/1-7).

In MODIS Aqua imagery from 8/8 (shown left), patches of elevated chlorophyll (2-10 $\mu\text{g/L}$) are visible along- and offshore from Manatee to Charlotte counties. Patches of elevated to very high chlorophyll (2 to >20 $\mu\text{g/L}$) are visible along- and offshore Lee and Collier counties. Elevated chlorophyll along the coast may be the result of various algal species that have been reported throughout the region and not due to *K. brevis*.
Kavanaugh, Davis

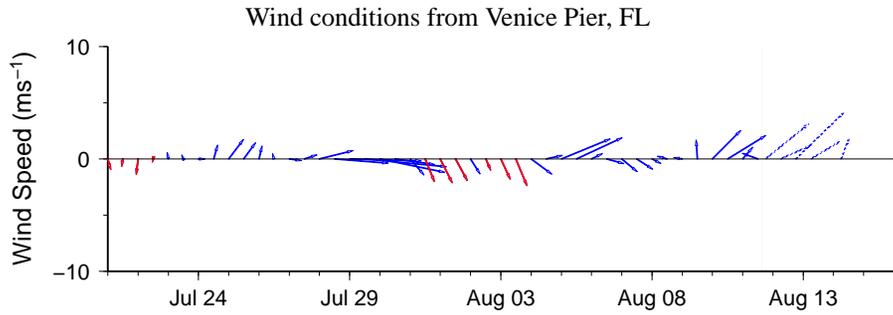
Wind Analysis

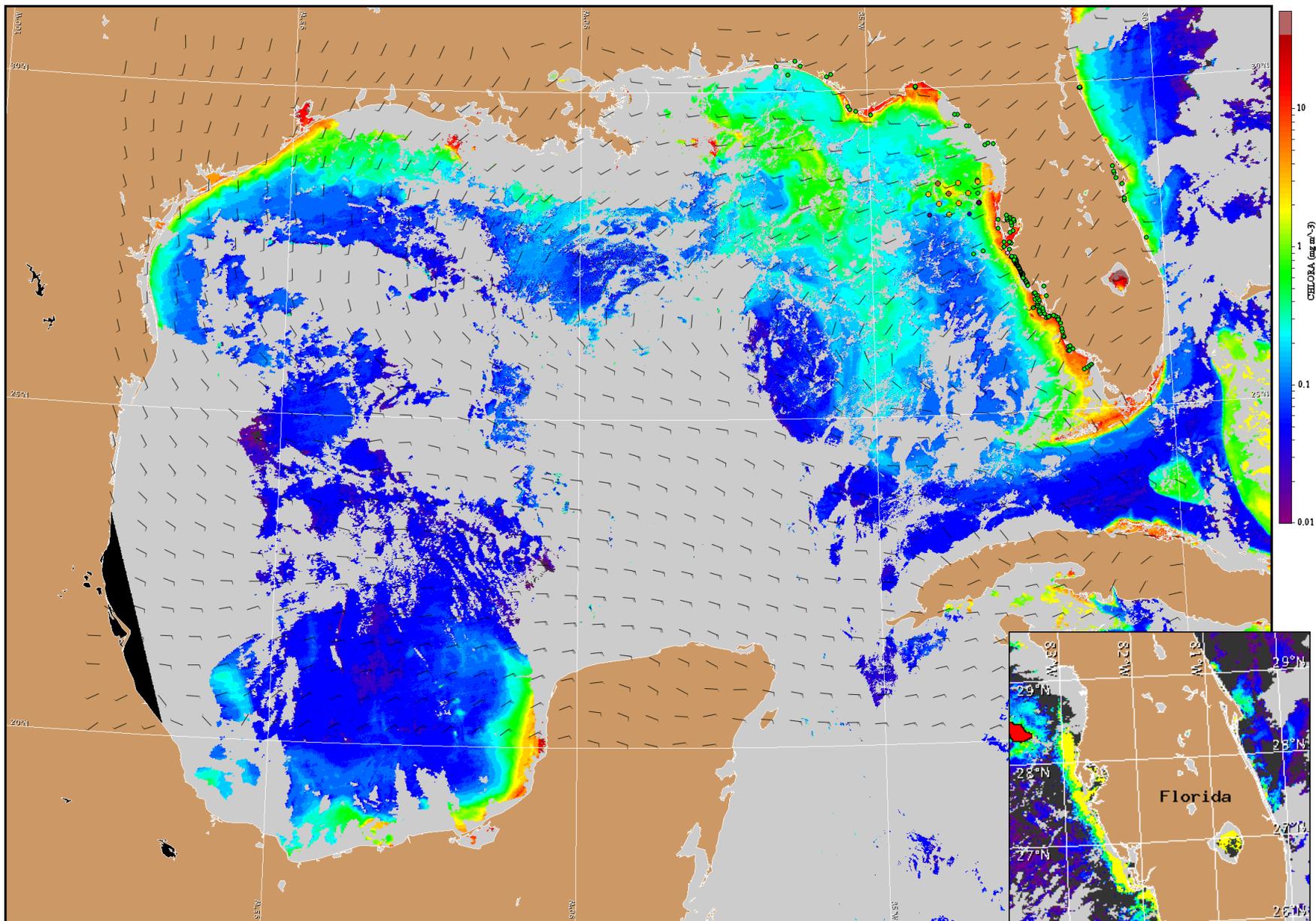
Cedar Key: West winds (5-15kn, 3-8m/s) today becoming southwest winds (5-15kn) Tuesday until after midnight. West winds (10kn, 5m/s) Wednesday. Southwest winds (10kn) Wednesday night through Thursday. West winds (10kn) Thursday night through Friday.

Venice: Southwest winds (5-15kn) today through Thursday night. West winds (10kn) Friday.



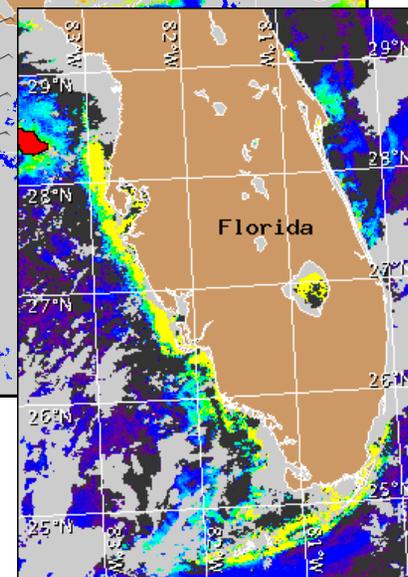
Wind speed and direction are averaged over 12 hours from buoy measurements. Length of line indicates speed; angle indicates direction. Red indicates that the wind direction favors upwelling near the coast. Values to the left of the dotted vertical line are measured values; values to the right are forecasts.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





Satellite chlorophyll image and forecast winds for August 12, 2014 06Z with points representing cell concentration sampling data from August 1 to 8: 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



Verified and suspected HAB areas shown in red. Other areas of high chlorophyll concentration shown in yellow (see p. 1 analysis for interpretation).