



Gulf of Mexico Harmful Algal Bloom Bulletin

Region: Southwest Florida

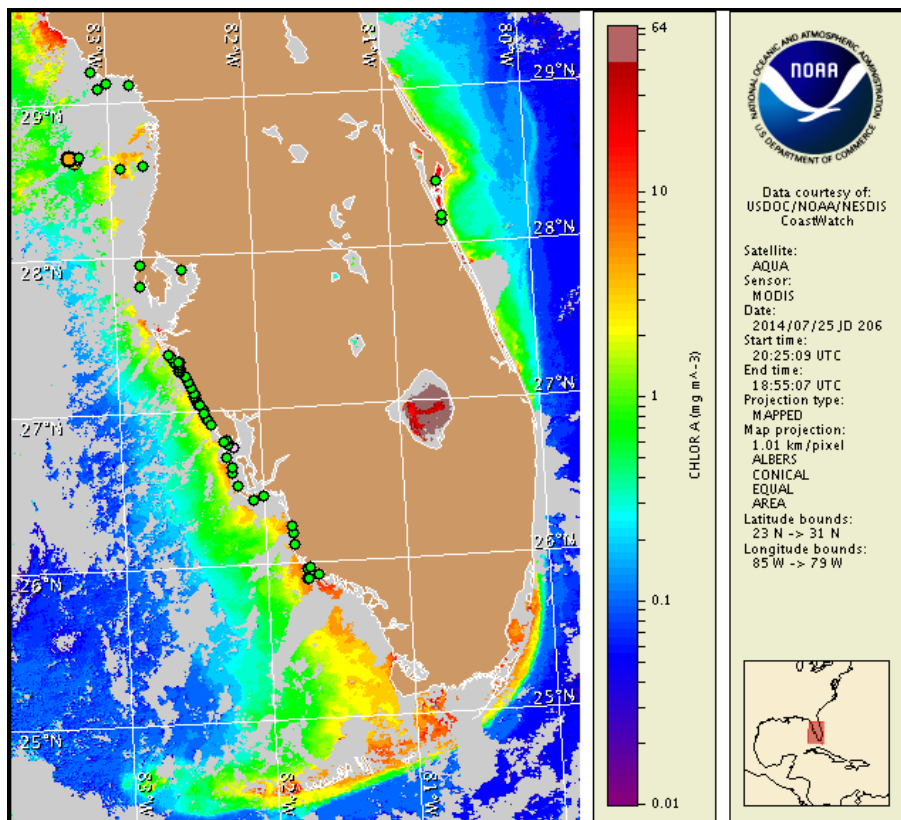
Monday, 28 July 2014

NOAA National Ocean Service

NOAA Satellite and Information Service

NOAA National Weather Service

Last bulletin: Monday, July 21, 2014



Satellite chlorophyll image with possible *K. brevis* HAB areas shown by red polygon(s), when applicable. Points represent cell concentration sampling data from July 18 to 25: 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 high concentrations offshore the coast of northwest Florida. No respiratory irritation is expected alongshore southwest Florida Monday, July 28 through Monday, August 2.

Check http://tidesandcurrents.noaa.gov/hab/beach_conditions.html for recent, local observations. Over the past several days, reports of dead fish and discolored water were received from offshore Levy, Citrus, and Hernando counties.

Analysis

Levy to Pasco County: Samples collected offshore northwest Florida indicate not present to 'high' *Karenia brevis* concentrations with the highest concentration recorded 38 miles offshore South Point in Hernando County (FWRI; 7/18-7/23). Dead fish and discolored water were also observed in this offshore sampling area (FWRI; 7/21-25). Sampling alongshore and up to 3 miles offshore Levy County indicates that *K. brevis* is not present (FWRI; 7/20-7/22). No reports of respiratory irritation were received alongshore from Levy to Pasco County in the past week (FWRI, MML; 7/21-7/28).

Recent MODIS Aqua imagery along- and offshore southwest Florida has been partially obscured by clouds over the past several days, limiting analysis. In MODIS Aqua imagery from 7/25 (shown left) and 7/23 (not shown), a feature of elevated chlorophyll (1-3 $\mu\text{g/L}$) is visible offshore from Dixie to Pasco County in a region consistent with the 'high' *K. brevis* concentrations identified by FWRI on 7/23. Patches of this feature extend from 29°18'8"N 83°55'0"W to 28°16'5"N 83°26'38"W and approximately 31-80mi offshore.

Forecasted west to northwest winds over the next several days may promote southerly transport of the bloom identified offshore Hernando County July 28 through August 1.

Pinellas to Monroe County: Samples collected over the past week along- and offshore the coast of southwest Florida from Pinellas to Collier County indicate that *Karenia brevis* is not present, with the exception of background concentrations identified in samples collected at Bull Key in Charlotte County and the Boca Grande Pass in Lee County (FWRI, MML, SCHD, CCPCPD; 7/21-7/24).

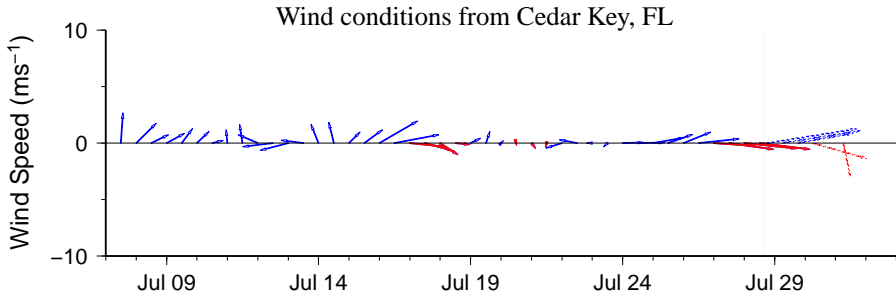
In MODIS Aqua imagery from 7/25 (shown left), elevated chlorophyll (2-8 $\mu\text{g/L}$) is visible along- and offshore from Manatee to Collier County.

Davis, Kavanaugh

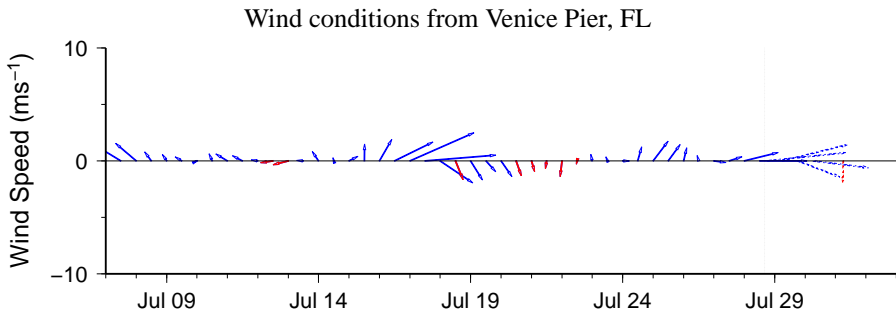
Wind Analysis

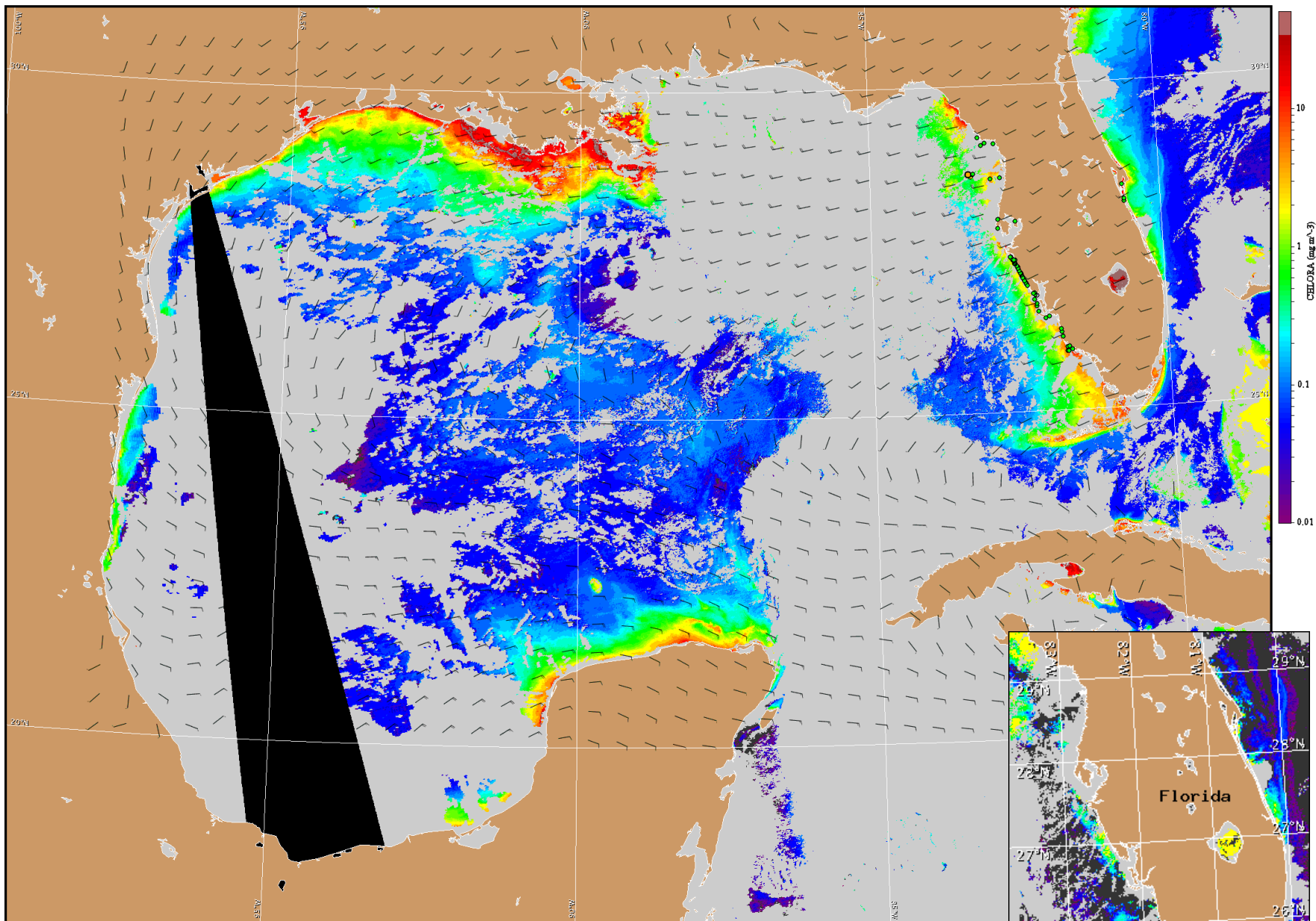
Cedar Key, Florida: West winds (10-20kn, 5-10m/s) today through Tuesday becoming northwest winds (5-10kn, 3-5m/s) after midnight. Northwest winds (5-10kn) Wednesday and Thursday becoming west winds (10kn, 5m/s) Thursday afternoon. Northwest winds (5-10kn) Thursday night becoming west winds (5kn, 3m/s) Friday.

Venice, Florida: West winds (10-15kn, 5-8m/s) today through Tuesday night becoming northwest winds (5-10kn, 3-5m/s) after midnight. Northwest winds (5-10kn) Wednesday through after midnight Thursday. West winds (5kn, 3m/s) Friday.



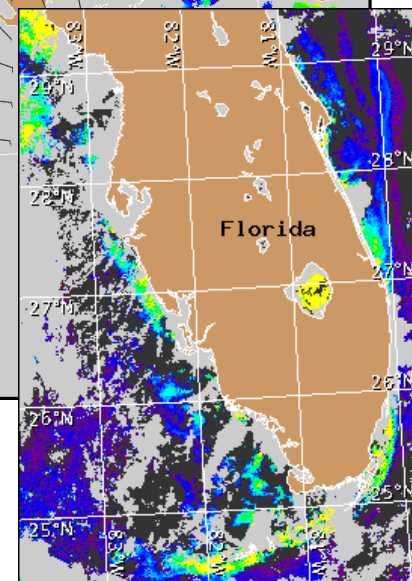
Wind speed and direction are averaged over 12 hours from buoy measurements. Length of line indicates speed; angle indicates direction. Red indicates that the wind direction favors upwelling near the coast. Values to the left of the dotted vertical line are measured values; values to the right are forecasts.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





Satellite chlorophyll image and forecast winds for July 29, 2014 06Z with points representing cell concentration sampling data from July 18 to 25: 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).