



Gulf of Mexico Harmful Algal Bloom Bulletin

Region: Southwest Florida

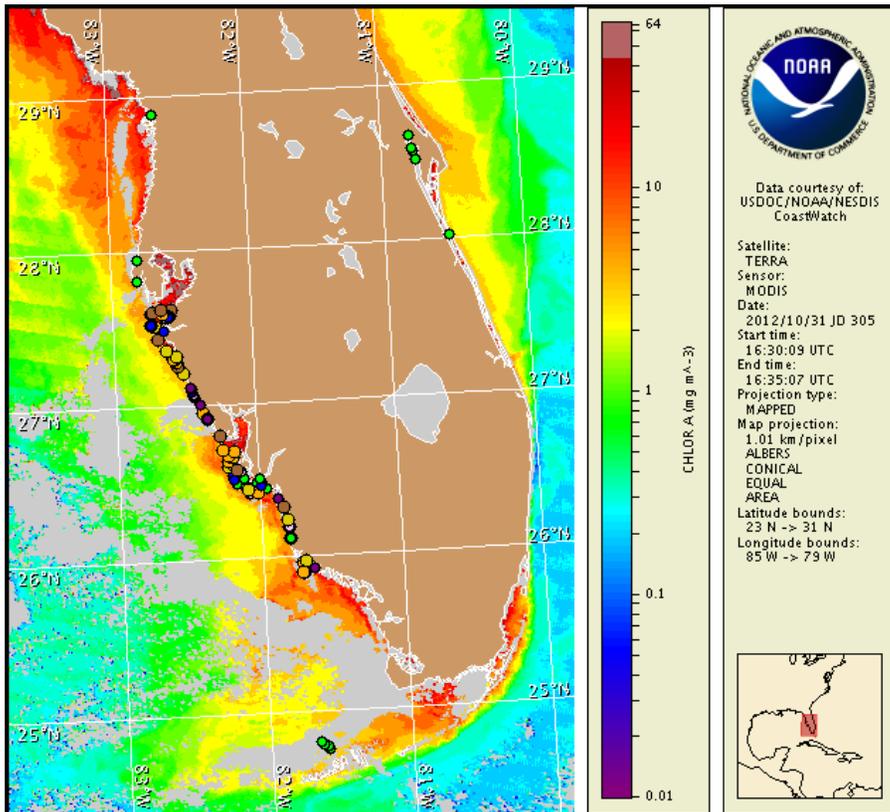
Thursday, 01 November 2012

NOAA National Ocean Service

NOAA Satellite and Information Service

NOAA National Weather Service

Last bulletin: Monday, October 29, 2012



Satellite chlorophyll image with possible *K. brevis* HAB areas shown by red polygon(s). Cell concentration sampling data from October 22 to 31 shown as 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 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 the Florida FWC Fish and Wildlife Research Institute at:

<http://myfwc.com/research/redtide/events/status/statewide/>

To see previous bulletins and forecasts for other Harmful Algal Bloom Bulletin regions, visit at: <http://tidesandcurrents.noaa.gov/hab/bulletins.html>

Conditions Report

A harmful algal bloom of *Karenia brevis* (commonly known as Florida Red Tide) is present along- and offshore from southern Pinellas to southern Collier counties. Patchy moderate respiratory impacts are possible today through Monday in the following regions: in the bay regions of southern Pinellas and Manatee County and in the Gasparilla Sound/Pine Island Sound/San Carlos Bay regions of southern Charlotte and northern and central Lee County. Patchy moderate respiratory impacts are possible today, Friday and Monday, with patch very low respiratory impacts Saturday and Sunday in the following regions: alongshore coastal southern Pinellas, Manatee, Sarasota, Charlotte, and Collier counties. Patchy moderate respiratory impacts are possible today and Monday, with patchy very low impacts possible Friday through Sunday alongshore southern Lee County. Over the past several days, respiratory impacts have been reported in southern Manatee and Sarasota County. No impacts are expected elsewhere alongshore southwest Florida today through Monday, November 5.

Analysis

A harmful algal bloom of *Karenia brevis* is present along- and offshore southwest Florida from southern Pinellas to southern Collier counties. Recent samples collected within the lower Tampa Bay region of southern Pinellas and northern Manatee counties indicate *K. brevis* concentrations range from 'not present' to 'medium' (FWRI; 10/29-10/30). In southern Manatee County, samples collected ranged from 'very low b' to 'low a' (FWRI; 10/30). In Charlotte County, samples collected ranged from 'very low a' to 'low a' (FWRI; 10/30). Recent samples collected within the southern Pine Island Sound/San Carlos Bay region of central Lee County indicate *K. brevis* concentrations have increased to a range between 'not present' and 'medium', with the highest concentration in the southern Sanibel region (FWRI; 10/26-29). Due to weather conditions over the past few days that were unsuitable for sampling, no recent samples have been received from Collier County, where previous sampling indicated 'very low a' to 'medium' *K. brevis* concentrations (CCPCPD; 10/25, 10/30). Recent samples indicate *K. brevis* is not present in the Florida Keys (MML; 10/31).

Recent MODIS Terra imagery (10/31; shown left) is partially obscured along- and offshore southwest Florida, limiting analysis. Patches of elevated to very high chlorophyll (5 to >20 $\mu\text{g/L}$) continue to be visible stretching along- and offshore from northern Lee to southern Collier County. Elevated chlorophyll (2-7 $\mu\text{g/L}$) also is visible along- and offshore from Pinellas to Monroe County.

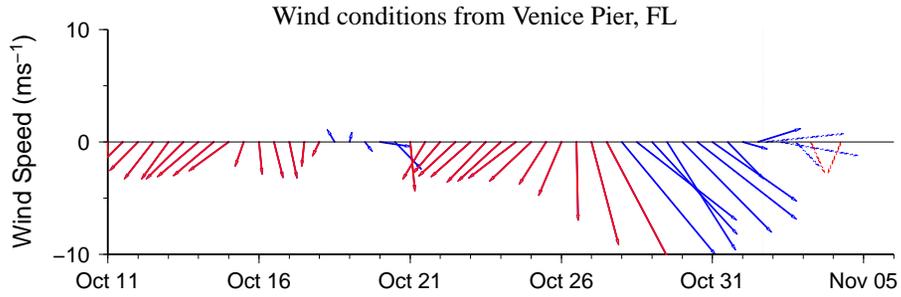
Forecasted winds today, Friday and Monday may increase the potential for respiratory impacts along the coast from southern Pinellas to southern Collier County. Today through Monday there may be a potential for respiratory impacts in the bay areas of southern Pinellas/northern Manatee County and southern Charlotte/Lee County.

Kavanaugh, Davis

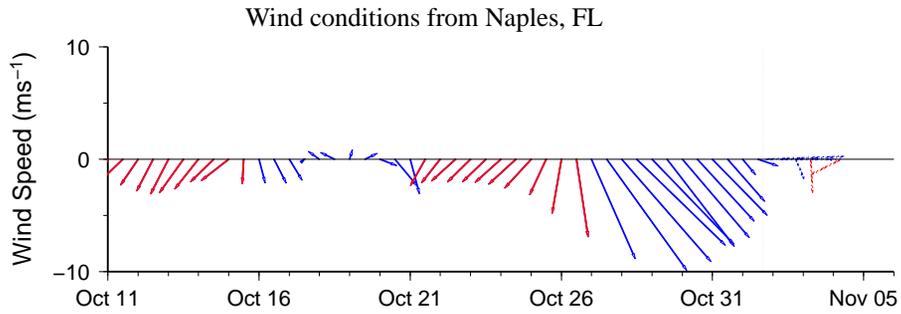
Wind Analysis

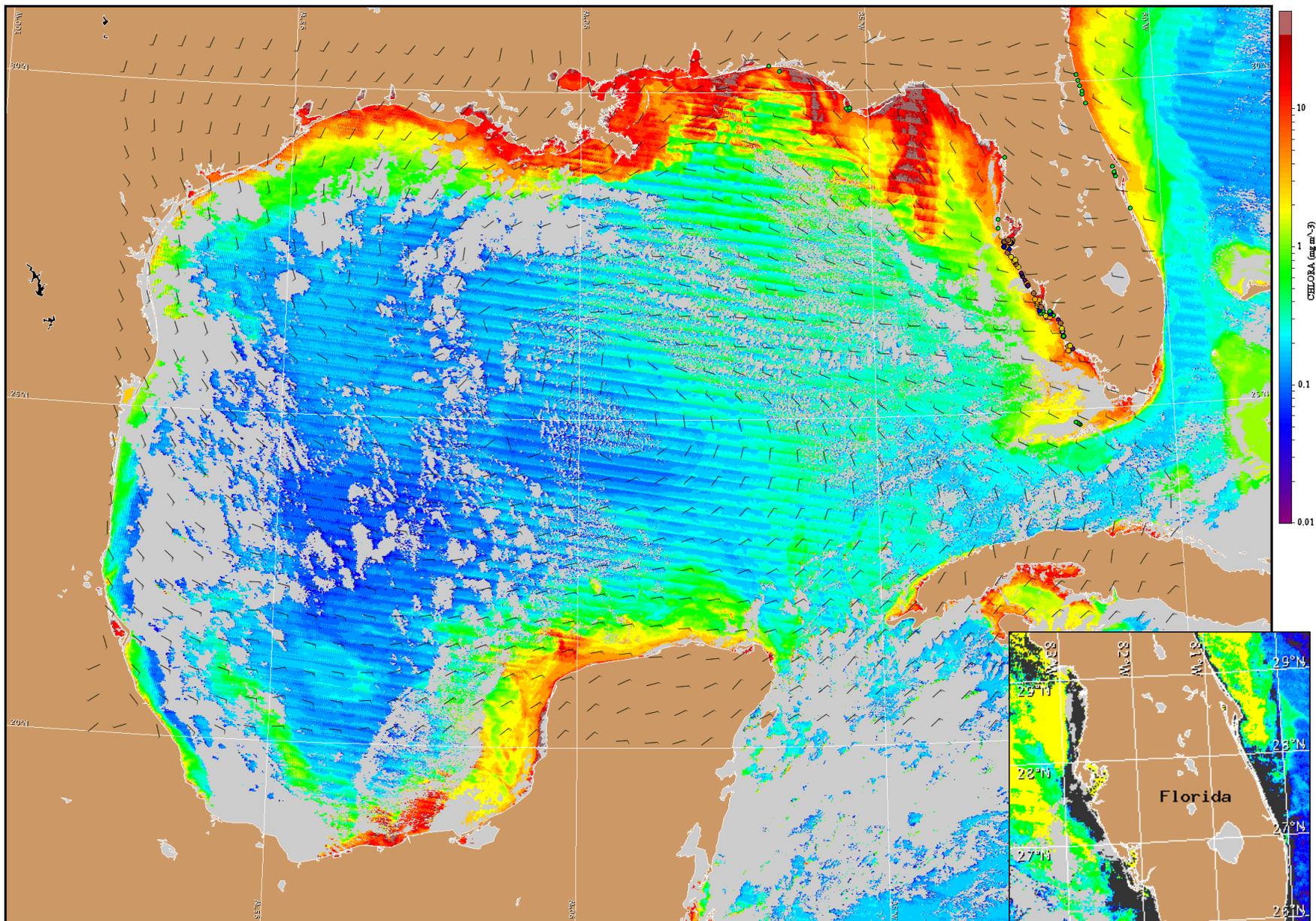
Venice: West to northwest winds (10-15 kn, 5-8 m/s) today becoming north after mid-night. Northeast to north winds (5-10 kn, 3-5 m/s) Friday through Saturday. East winds (10 kn, 5 m/s) Saturday night through Sunday. Northwest winds (10 kn) Monday.

Naples: West northwest winds (9-15 kn, 5-8 m/s) today. Northwest to north northwest winds (6-12 kn, 3-6 m/s) Friday. North northeast winds (6-11 kn, 3-6 m/s) Saturday becoming east winds (8-13 kn, 4-7 m/s) Saturday night through Sunday. Northeast winds (5-7 kn, 3-4 m/s) Monday becoming northwest winds (5-8 kn, 3-4 m/s) Monday afternoon.



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 November 2, 2012 06Z with cell concentration sampling data from October 22 to 31 shown as 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 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).