Gulf of Mexico Harmful Algal Bloom Bulletin

Region: Southwest Florida

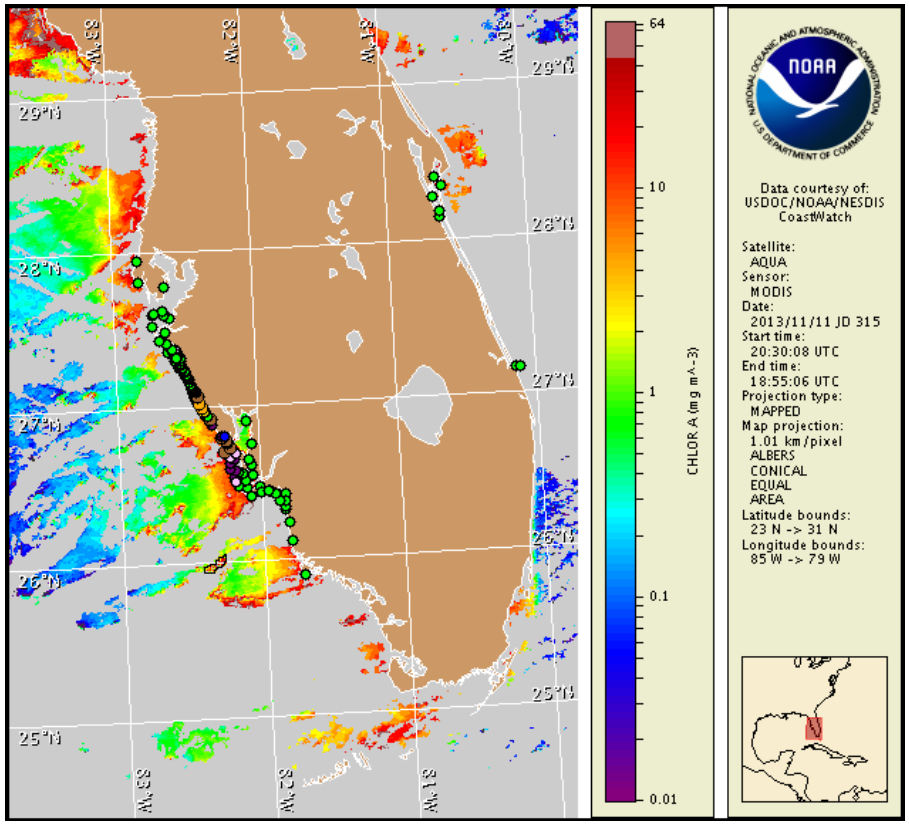
Tuesday, 12 November 2013

NOAA National Ocean Service

NOAA Satellite and Information Service

NOAA National Weather Service

Last bulletin: Thursday, November 7, 2013



Satellite chlorophyll image with possible *K. brevis* HAB areas shown by red polygon(s), when applicable. Points represent cell concentration sampling data from November 2 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

Not present to medium concentrations of *Karenia brevis* (commonly known as Florida red tide) are present along- and offshore portions of southwest Florida, and not present in the Florida Keys. *K. brevis* concentrations are patchy in nature and levels of respiratory irritation will vary locally based upon nearby bloom concentrations, ocean currents, and wind speed and direction. The highest level of potential respiratory irritation forecast for Tuesday, November 12 to Thursday, November 14 is listed below:

County Region: Forecast (Duration)
Southern Sarasota, bay regions: Very Low (T-Th)
Southern Northern Charlotte, bay regions: Very Low (T-Th)
Northern Southern Charlotte, bay regions: Very Low (T-Th)
Northern Lee, bay regions: Very Low (T-Th)
All Other SWFL County Regions: None (T-Th)

Check http://tidesandcurrents.noaa.gov/hab/beach_conditions.html for recent, local observations. Health information, from the Florida Department of Health and other agencies, is available at http://tidesandcurrents.noaa.gov/hab/hab_health_info.html. Over the past several days, no reports of respiratory irritation or dead fish were received from southwest Florida.

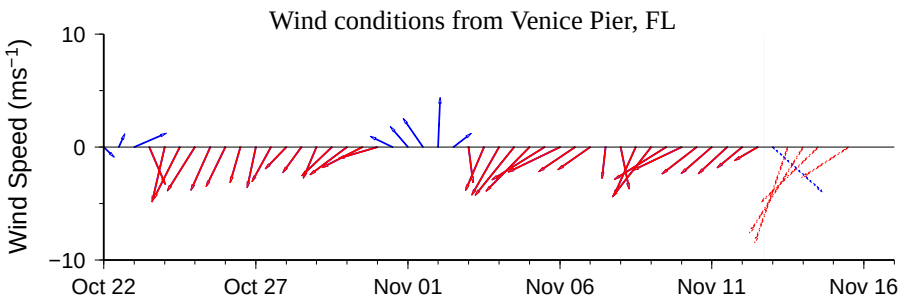
Analysis

Samples collected over the past ten days along- and offshore southwest Florida indicate that *Karenia brevis* concentrations range from 'not present' to 'medium' (FWRI, SCHD, CCPCPD; 11/2-11/8). Background to 'medium' concentrations of *K. brevis* were collected from southern Sarasota County, with the highest concentrations identified from Manasota Key and Casperson Beach (FWRI, MML; 11/4-8). No new samples have been collected since 'background' to 'low a' *K. brevis* concentrations were identified in the Lemon Bay and Gasparilla Sound regions of Charlotte County and alongshore northern Charlotte County, along with 'background' to 'low a' concentrations throughout the northern Pine Island Sound region of Lee County (FWRI; 11/4-7). A sample collected alongshore the South Seas Plantation region of central Lee County identified background concentrations of K. brevis (FWRI; 11/6). All other samples collected alongshore southwest Florida from Pinellas to Collier counties indicated that *K. brevis* is not present (FWRI; 11/2-5). No dead fish or respiratory irritation associated with *K. brevis* have been reported in the past several days (FWRI, MML; 11/4-11).

MODIS Aqua imagery has been cloudy over the past several days, limiting analysis. In MODIS Aqua Imagery from 11/11 (shown left), elevated chlorophyll (2 to >20 μg/L) is visible in patches along- and offshore from southern Sarasota to Collier County. Elevated chlorophyll is not necessarily indicative of the presence of K. brevis and could also be an artifact of clouds in the imagery. In situ sampling is necessary to confirm the presence of .brevis. This region will continue to be monitored as imagery becomes available.

Continued offshore winds forecasted over the next few days may decrease the potential for *K. brevis* bloom formation at the coast, and will also decrease the potential for respiratory irritation alongshore southwest Florida.

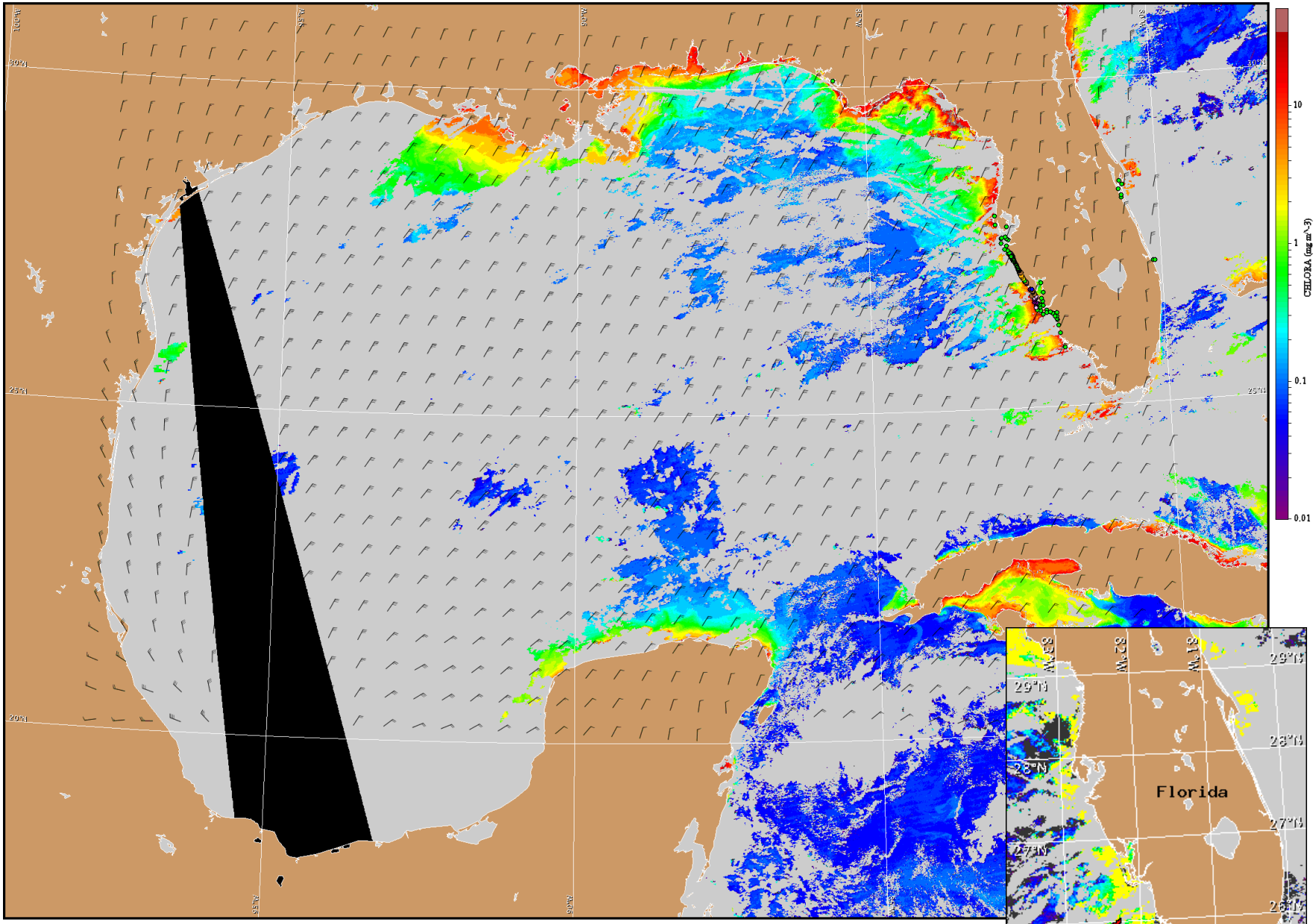
Burrows, Kavanaugh



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

Southwest Florida: Northeast to north winds (5-15kn, 3-8m/s) today. North winds around 20kn (10m/s) tonight, becoming northeast winds (20-25kn, 10-13m/s) Wednesday through Thursday. East winds (20kn, 10m/s) Thursday night.



Satellite chlorophyll image and forecast winds for November 13, 2013 12Z with points representing cell concentration sampling data from November 2 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:

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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).