Gulf of Mexico Harmful Algal Bloom Bulletin

Region: Southwest Florida

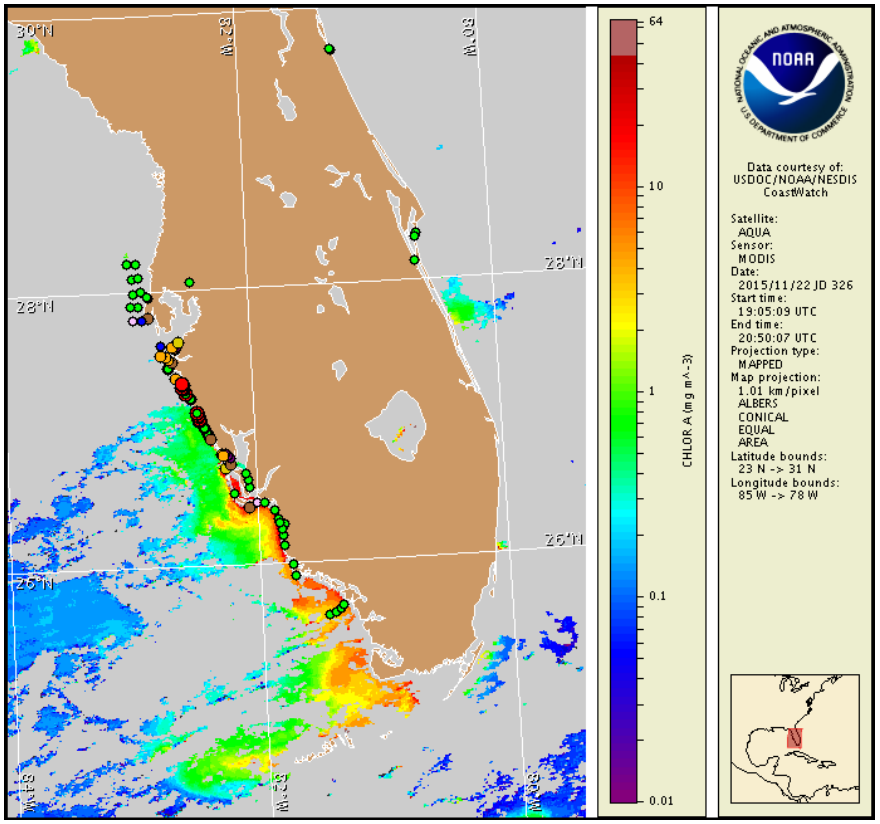
Monday, 23 November 2015

NOAA National Ocean Service

NOAA Satellite and Information Service

NOAA National Weather Service

Last bulletin: Thursday, November 19, 2015



Satellite chlorophyll image with possible *K. brevis* HAB areas shown by red polygon(s), when applicable. Points represent cell concentration sampling data from November 13 to 20: 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 high concentrations along the coast of southwest Florida, and is 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 Monday, November 23 through Wednesday, November 25 is listed below:

County Region: Forecast (Duration)
Northern Pinellas: Very Low (M-W)
Northern Pinellas, bay regions: Low (M-W)
Southern Pinellas: Very Low (M-W)
Southern Pinellas, bay regions: Moderate (M-W)
Pinellas-Northern Manatee, bay regions: High (M-W)
Southern Manatee: Very Low (M-W)
Southern Manatee, bay regions: High (M-W)
Northern Sarasota: Low (M-W)
Northern Sarasota, bay regions: High (M-W)
Southern Sarasota: Low (M-W)
Northern Charlotte: Very Low (M-W)
Southern Charlotte: Very Low (M-W)
Southern Charlotte, bay regions: High (M-W)
Northern Lee: Very Low (M-W)
Northern Lee, bay regions: Low (M-W)
Central Lee: Very Low (M-W)
All Other SWFL County Regions: None expected (M-W)
All Other NWFL County Regions: Visit http://tidesandcurrents.noaa.gov/hab/#nwfl

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.Respiratory irritation and fish kills have been reported in Manatee and Sarasota counties.

Analysis

Due to the upcoming federal holiday, the next bulletin will be issued on Wednesday, November 25.

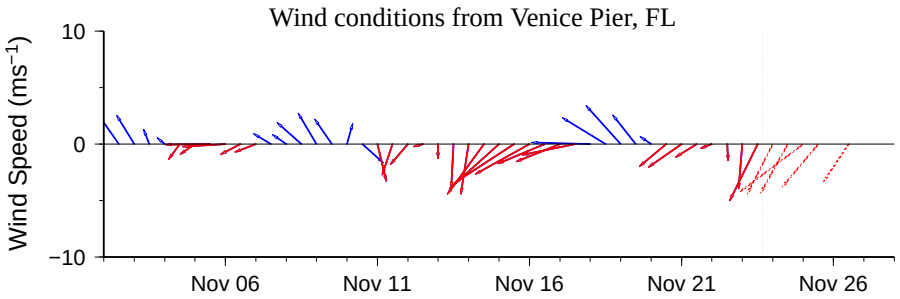
Recent samples collected along- and offshore southwest Florida from Pinellas County to the Florida Keys indicate background to 'high' *Karenia brevis* concentrations from northern Pinellas to northern Collier County (FWRI, SCHD, MML, CCENRD; 11/13-20). Offshore Pasco and Pinellas counties, a sampling transect on 11/17 indicated 'background' to 'very low b' *K. brevis* concentrations at six locations (FWRI). Reports of dead fish and respiratory irritation have been received from Manatee and Sarasota counties (FWRI, MML; 11/20-23). Detailed sample information and a summary of impacts can be obtained through FWC Fish and Wildlife Research Institute at: http://myfwc.com/redtidestatus.

Recent ensemble imagery (MODIS Aqua, 11/22) has been obscured by clouds alongshore

southwest Florida over the last several days, limiting analysis. In recent ensemble imagery, patches of elevated to very high chlorophyll (2 to >20 μg/L) with the optical characteristics of *K. brevis* are visible along- and offshore from central Lee to northern Collier County.

Northeast winds forecast today through Wednesday will minimize the potential for respiratory irritation at the coast of southwest Florida.

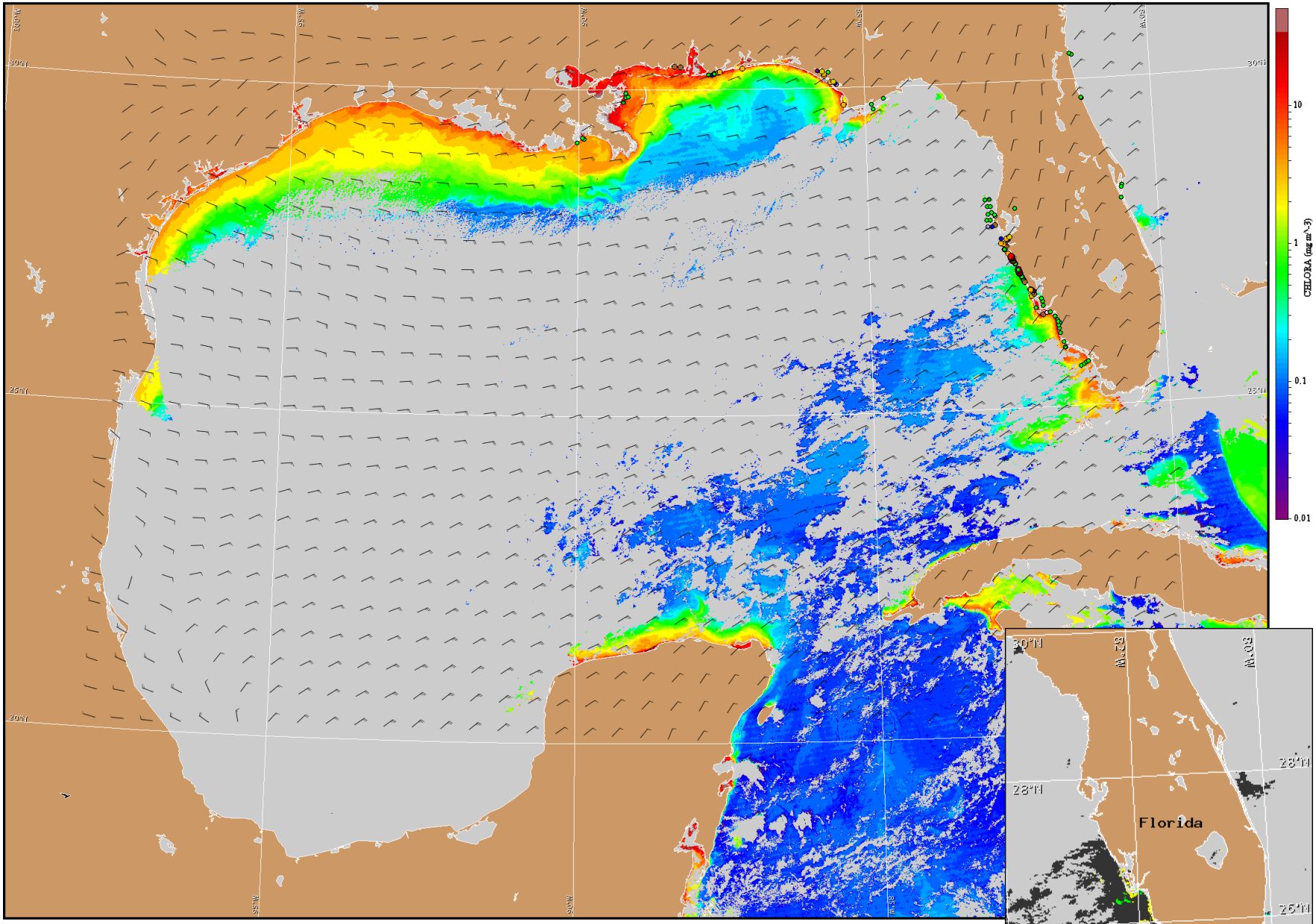
Davis, Yang



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

Englewood to Tarpon Springs (Venice): Northeast winds (10-20kn, 5-10m/s) today through Wednesday.



Satellite chlorophyll image and forecast winds for November 24, 2015 12Z with points representing cell concentration sampling data from November 13 to 20: 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 with *K. brevis* optical characteristics shown in yellow (see p. 1 analysis for interpretation).