Gulf of Mexico Harmful Algal Bloom Bulletin

Region: Southwest Florida

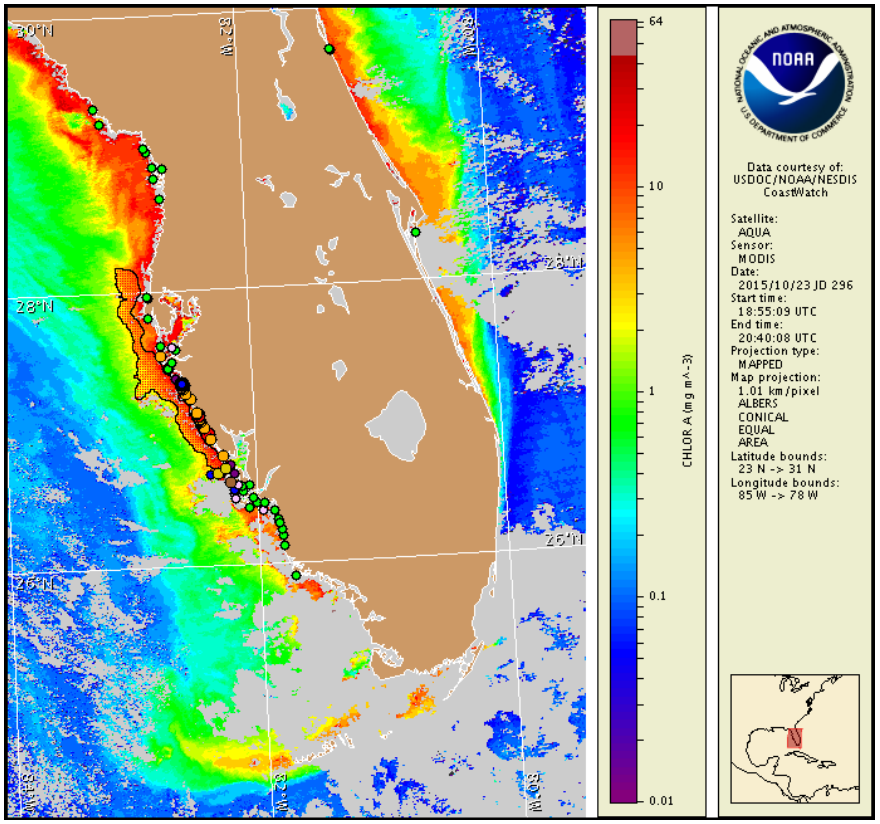
Monday, 26 October 2015

NOAA National Ocean Service

NOAA Satellite and Information Service

NOAA National Weather Service

Last bulletin: Thursday, October 22, 2015



Satellite chlorophyll image with possible *K. brevis* HAB areas shown by red polygon(s), when applicable. Points represent cell concentration sampling data from October 16 to 23: 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, October 26 through Thursday, October 29 is listed below:

County Region: Forecast (Duration)
Northern Manatee: Very Low (M-W), None (Th)
Southern Manatee, bay regions: Moderate (M-Th)
Northern Sarasota: Low (M-Tu), High (W), Moderate (Th)
Northern Sarasota, bay regions: High (M-W), Moderate (Th)
Southern Sarasota: Low (M-Tu), High (W), Moderate (Th)
Northern Charlotte: Very Low (M-Tu), Moderate (W), Low (Th)
Southern Charlotte, bay regions: Moderate (M-W), Low (Th)
Northern Lee: Very Low (M-Tu), Moderate (W), Low (Th)
Northern Lee, bay regions: Low (M-W), Very Low (Th)
All Other SWFL County Regions: None expected (M-Th)
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. Reports of respiratory irritation and dead fish have been received from alongshore Sarasota County. Reports of dead fish have also been received along- and offshore Charlotte County.

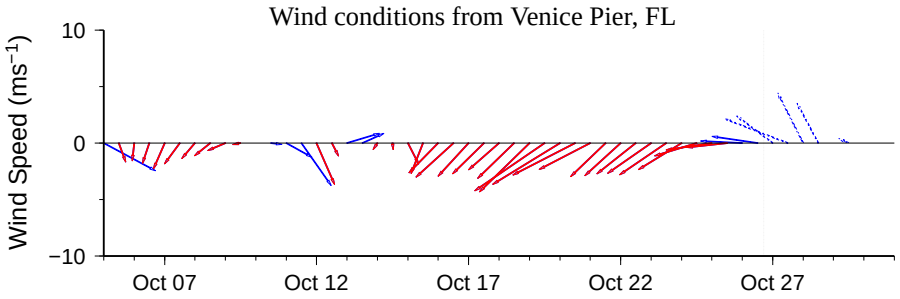
Analysis

Recent samples collected along- and offshore southwest Florida from Pinellas to Collier counties indicate 'background' to 'high' *Karenia brevis* concentrations from northern Manatee to northern Lee counties, with the highest concentrations present alongshore Sarasota County from Lido Key to Blind Pass Beach and within Sarasota Bay near Mote Marine Lab (FWRI, SCHD, MML, CCENRD; 10/19-23). Samples received last week confirmed increased *K. brevis* concentrations in several counties alongshore southwest Florida, including up to 'high' concentrations alongshore southern Sarasota County, up to 'medium' concentrations alongshore Manatee and Charlotte counties, and up to 'low b' concentrations in northern Pine Island Sound in Lee County (FWRI, SCHD; 10/19-23). Slight respiratory irritation has been reported at Mansota Beach in Sarasota County (MML; 10/22, 10/24). Fish kills have been reported offshore Mansota Key, along- and offshore Stump Pass, within Lemon Bay, and inshore of Mansota Key in Charlotte County, and offshore Venice and at Indian Mound Park in Sarasota County (FWRI; 10/22-26). Detailed sample information and a summary of impacts can be obtained through FWC Fish and Wildlife Research Institute at: http://myfwc.com/redtidestatus.

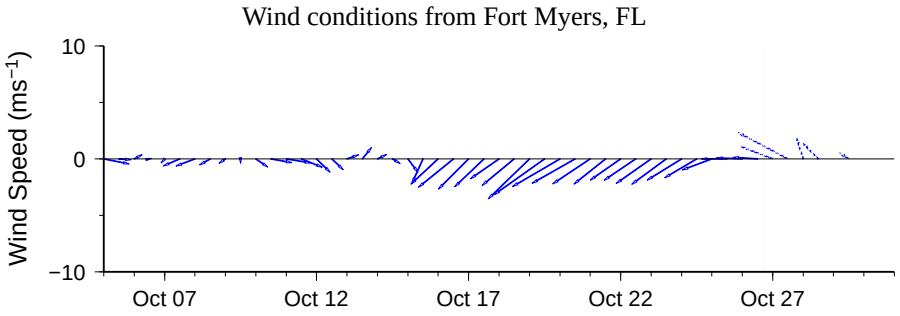
In recent ensemble imagery (MODIS Aqua, 10/23) patches of elevated to very high chlorophyll (2 to >20 μg/L) with the optical characteristics of *K. brevis* are visible along- and offshore from Pinellas to Collier counties.

Variable winds forecasted today through Thursday will decrease the potential for transport of surface *K. brevis* concentrations alongshore southwest Florida. Forecasted winds are not favorable for intensification of *K. brevis* concentrations at the coast.

Derner, Lalime



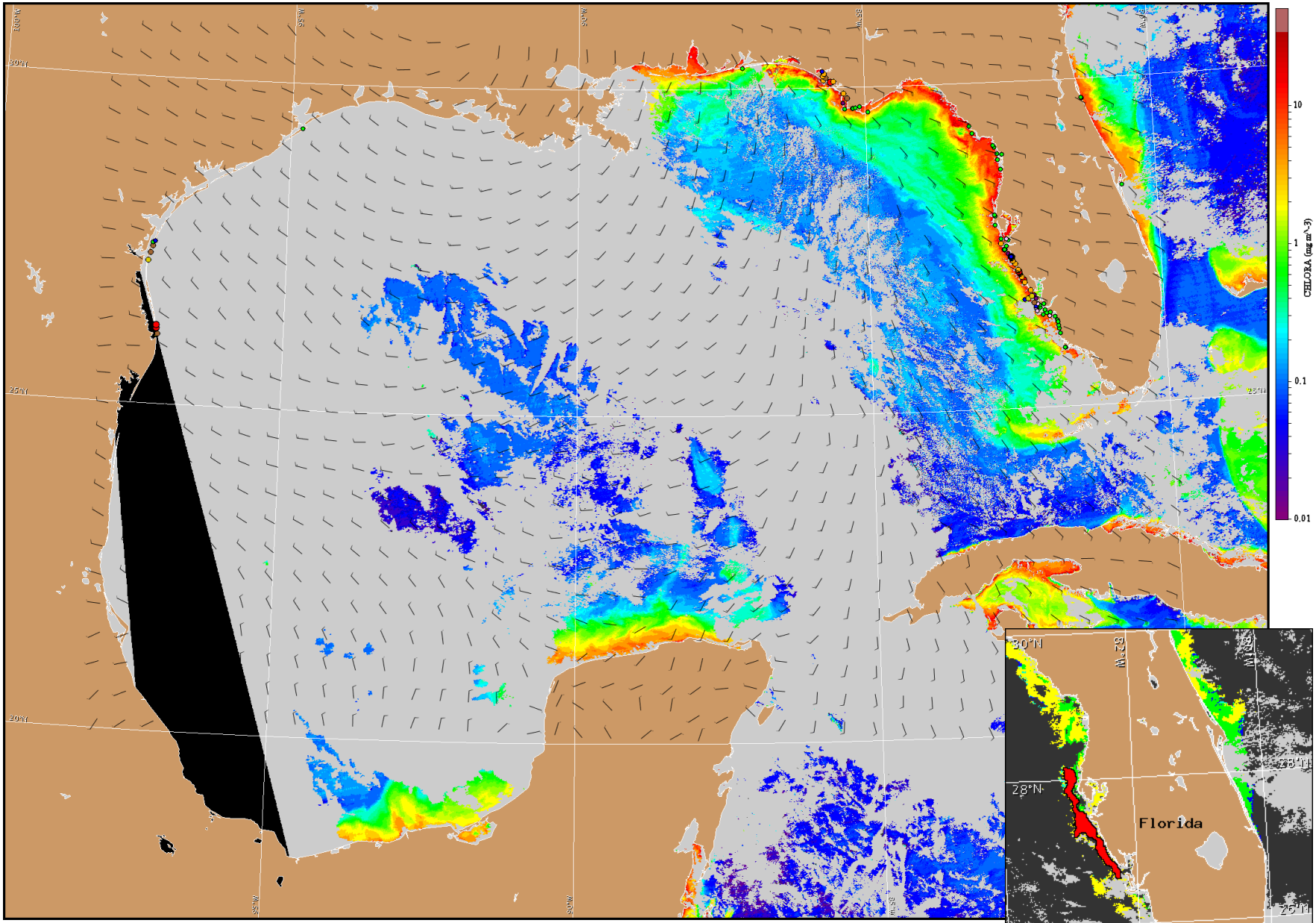
Wind speed and direction are averaged over 12 hours from buoy measurements. Length of line indicates speed; angle indicates direction. Red indicates that the wind direction favors upwelling near the coast. Values to the left of the dotted vertical line are measured values; values to the right are forecasts.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



Wind Analysis

Englewood to Tarpon Springs (Venice): Southeast winds (10-20kn, 5-10m/s) today through Tuesday becoming south (10-15kn, 5-8m/s) Tuesday night through Wednesday. Southwest winds (10kn, 5m/s) in the afternoon becoming west winds (5kn, 3m/s) Wednesday night. Northwest winds (5kn) Thursday.

Bonita Beach to Englewood (Fort Myers): Southeast winds (10-20kn) today through Tuesday. South winds (15kn) Wednesday becoming southwest (5-10kn, 3-5m/s) in the afternoon through Wednesday night. West winds (5kn) Thursday.



Satellite chlorophyll image and forecast winds for October 27, 2015 12Z with points representing cell concentration sampling data from October 16 to 23: 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).