



Gulf of Mexico Harmful Algal Bloom Bulletin

Region: Southwest Florida

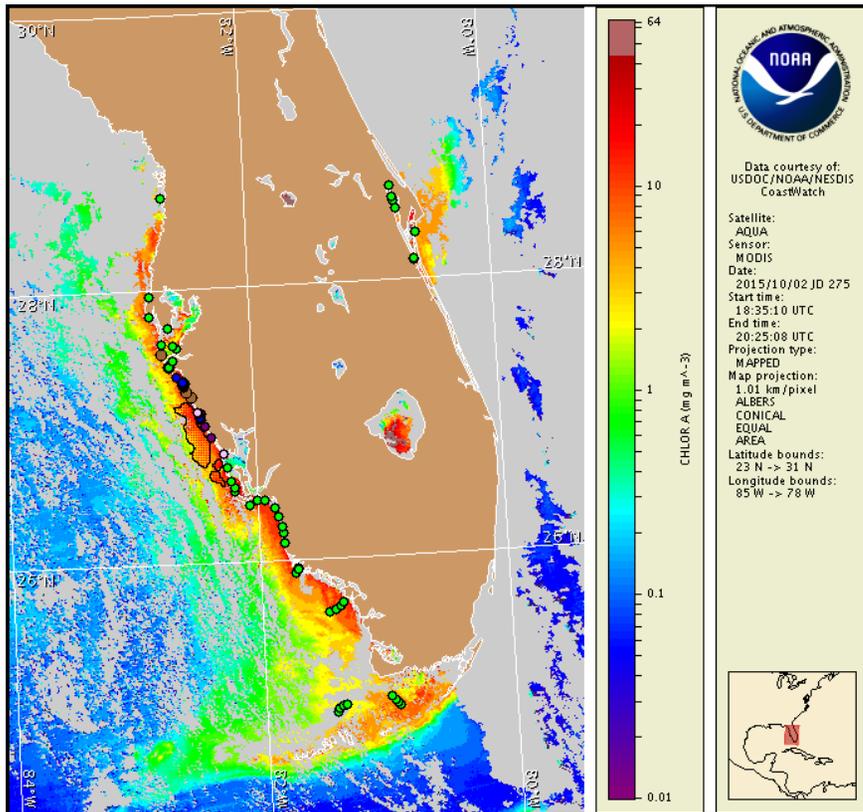
Monday, 05 October 2015

NOAA National Ocean Service

NOAA Satellite and Information Service

NOAA National Weather Service

Last bulletin: Thursday, October 1, 2015



Satellite chlorophyll image with possible *K. brevis* HAB areas shown by red polygon(s), when applicable. Points represent cell concentration sampling data from September 25 to October 2: 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 low 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 5 through Thursday, October 8 is listed below:

County Region: Forecast (Duration)

Southern Manatee: None (M), Low (Tu-Th)

Southern Manatee, bay regions: Low (M-Th)

Northern Sarasota: Very Low (M), Low (Tu-Th)

Northern Sarasota, bay regions: Low (M-Th)

Southern Sarasota: None (M, W-Th), Very Low (Tu)

Northern Charlotte: None (M, W-Th), Very Low (Tu)

All Other SWFL County Regions: None expected (M-Th)

All Other NWFL County Regions: Visit <http://tidesandcurrents.noaa.gov/hab/#nwfl>

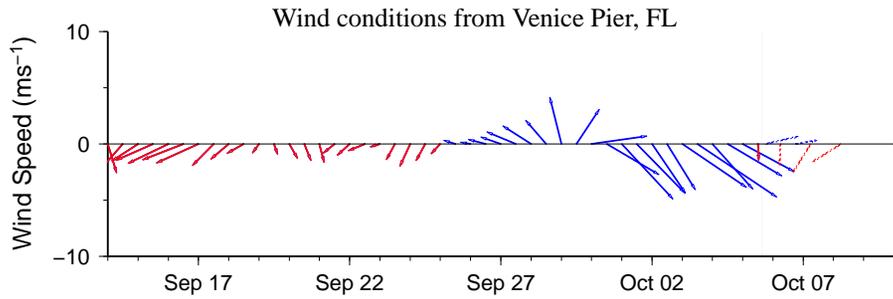
Check http://tidesandcurrents.noaa.gov/hab/beach_conditions.html for recent, local observations. Health information, from the Florida Department of Health and other agencies, is available at http://tidesandcurrents.noaa.gov/hab/hab_health_info.html. No reports of dead fish or respiratory irritation were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

Analysis

Recent samples collected along- and offshore the coast of southwest Florida from Pinellas County to the Florida Keys identified not present to 'low a' concentrations of *Karenia brevis* (FWRI, MML, SCHD, CCENRD; 9/24-10/1). Samples collected alongshore Manatee County on 9/28 identified 'low a' *K. brevis* concentrations at Anna Maria Island and Longboat Pass Boat Ramp within Sarasota Bay (FWRI). Samples collected over the past week continue to indicate 'background' to 'low a' *K. brevis* concentrations alongshore northern to southern Sarasota County and within Sarasota Bay (FWRI, SCHD; 9/26-10/1). In Charlotte County, samples continue to indicate 'very low a' *K. brevis* concentrations along Englewood Beach, with 'background' concentrations identified within Gasparilla Sound (Boca Grande Pier; FWRI; 9/30). All other sampling along- and offshore southwest Florida, from Pinellas to Collier counties, as well as the Florida Keys, indicates that *K. brevis* is not present (FWRI, MML, SCHD, CCENRD; 9/24-10/1). No reports of respiratory irritation or dead fish have been received from alongshore southwest Florida over the last several days (FWRI, MML; 10/1-10/5).

In recent ensemble imagery (MODIS Aqua, 10/2), patches of elevated to high chlorophyll (4-15 $\mu\text{g/L}$) with the optical characteristics of *K. brevis* are visible along- and offshore from southern Manatee to central Collier counties.

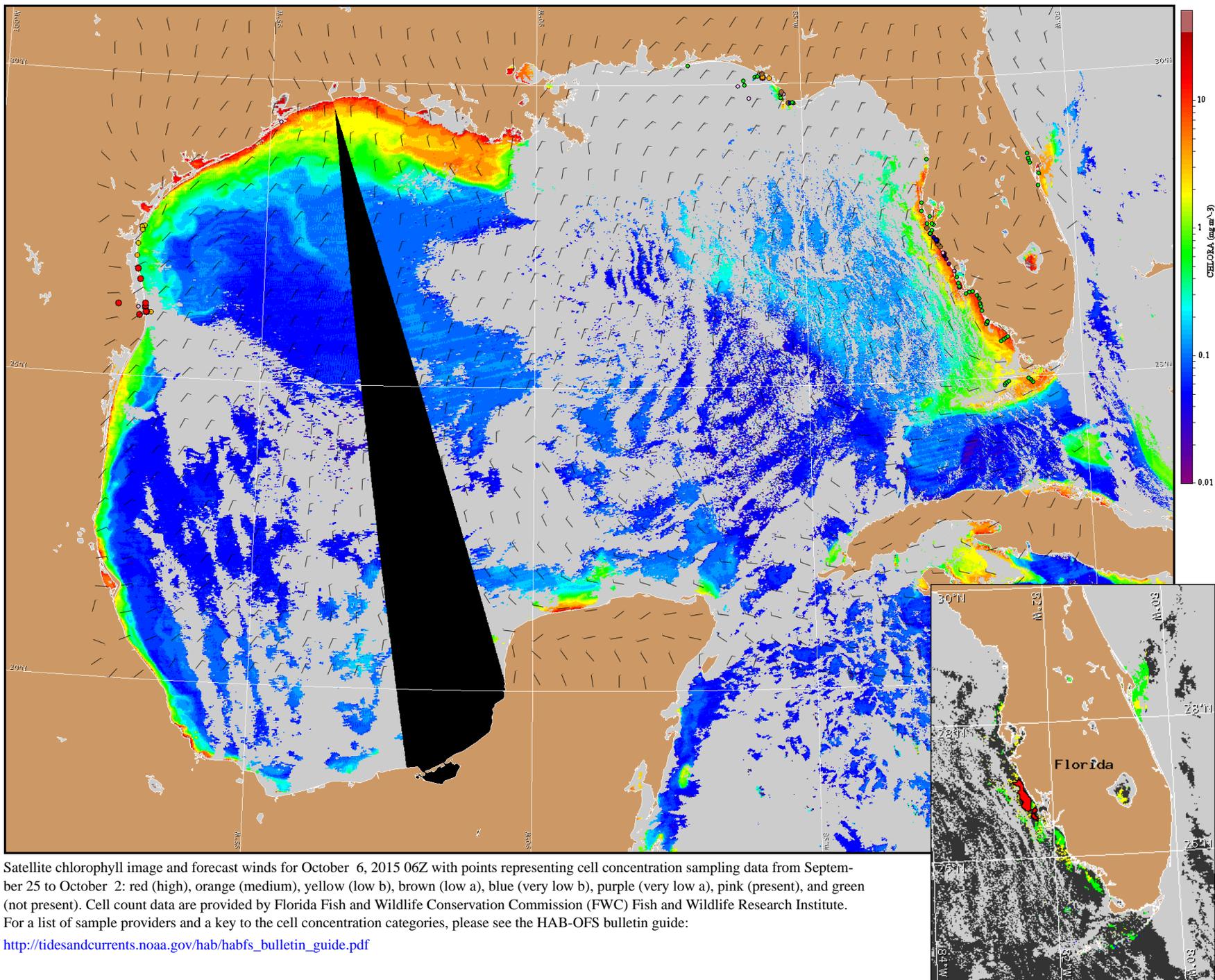
Forecasted winds today through Wednesday may promote southward transport of *K. brevis* concentrations alongshore southwest Florida. Upwelling favorable winds forecast Tuesday through Thursday may promote intensification of *K. brevis* concentrations at the coast. -Derner, Davis



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): North winds (10kn, 5m/s) today becoming northwest (10kn) tonight. Northeast winds (10kn) Tuesday becoming north in the afternoon through Tuesday night. Northeast winds (10kn) Wednesday. East winds (10kn) Thursday.



Satellite chlorophyll image and forecast winds for October 6, 2015 06Z with points representing cell concentration sampling data from September 25 to October 2: 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).