



Gulf of Mexico Harmful Algal Bloom Bulletin

Region: Southwest Florida

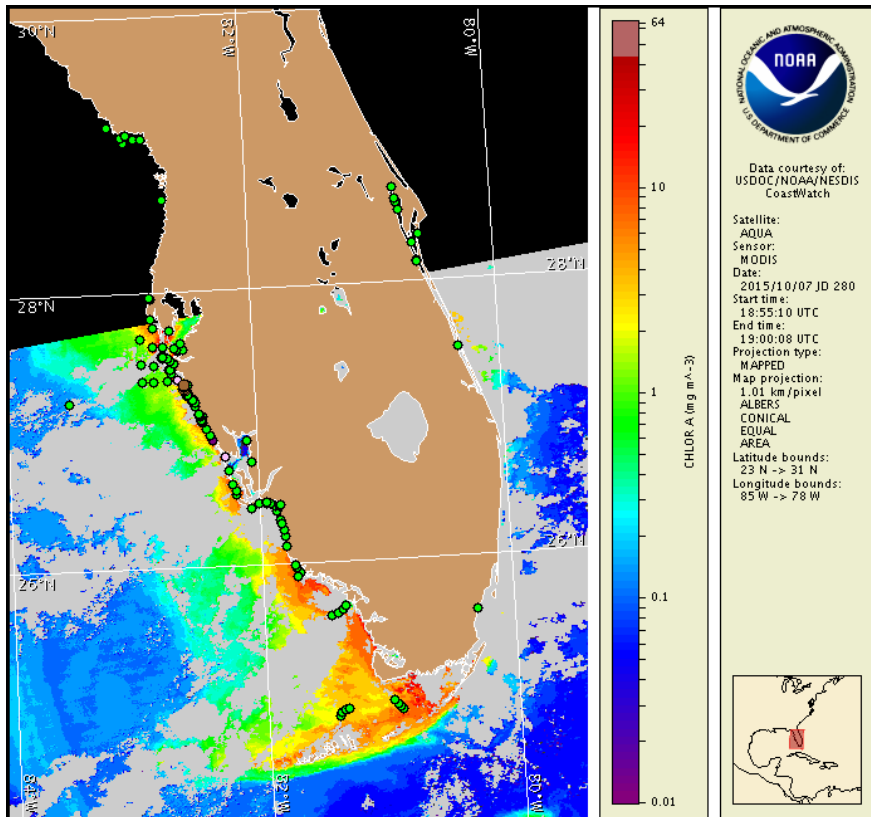
Thursday, 08 October 2015

NOAA National Ocean Service

NOAA Satellite and Information Service

NOAA National Weather Service

Last bulletin: Monday, October 5, 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 28 to October 7: 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 Thursday, October 8 through Tuesday, October 13 is listed below:

County Region: Forecast (Duration)

Northern Sarasota: Low (Th-Sa), Very Low (Su-Tu)

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

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

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

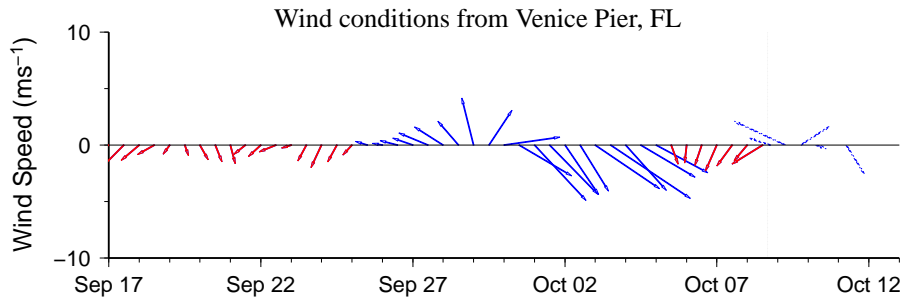
****Due to the upcoming federal holiday, the next bulletin will be issued on Tuesday, October 13.****

Recent samples collected along- and offshore the coast of southwest Florida from Pinellas to Collier counties indicate background to 'low a' *Karenia brevis* concentrations from northern Sarasota to northern Charlotte counties, with the highest concentrations present alongshore northern Sarasota County and within Sarasota Bay (FWRI, MML, SCHD, CCENRD; 9/28-10/5). Samples collected from 10/2-5 along- and inshore Pinellas to Collier counties, including bay regions of Manatee, Charlotte (Harbor), and Lee counties, indicated that no *K. brevis* is present (FWRI). No reports of respiratory irritation or dead fish have been received from alongshore southwest Florida over the last several days (FWRI, MML; 10/5-10/8).

Recent ensemble imagery (MODIS Aqua, 10/7) is obscured by clouds in patches along- and offshore the coast of southwest Florida. Patches of elevated chlorophyll (2-9 $\mu\text{g/L}$) are visible along- and offshore the coast from Pinellas to Collier counties; however, ensemble imagery of this region does not indicate the presence of chlorophyll anomalies with the optical characteristics of *K. brevis*.

Forecasted winds over the next several days will minimize the transport of *K. brevis* concentrations alongshore southwest Florida. Variable winds forecast today through Monday are not favorable for intensification of *K. brevis* concentrations at the coast.

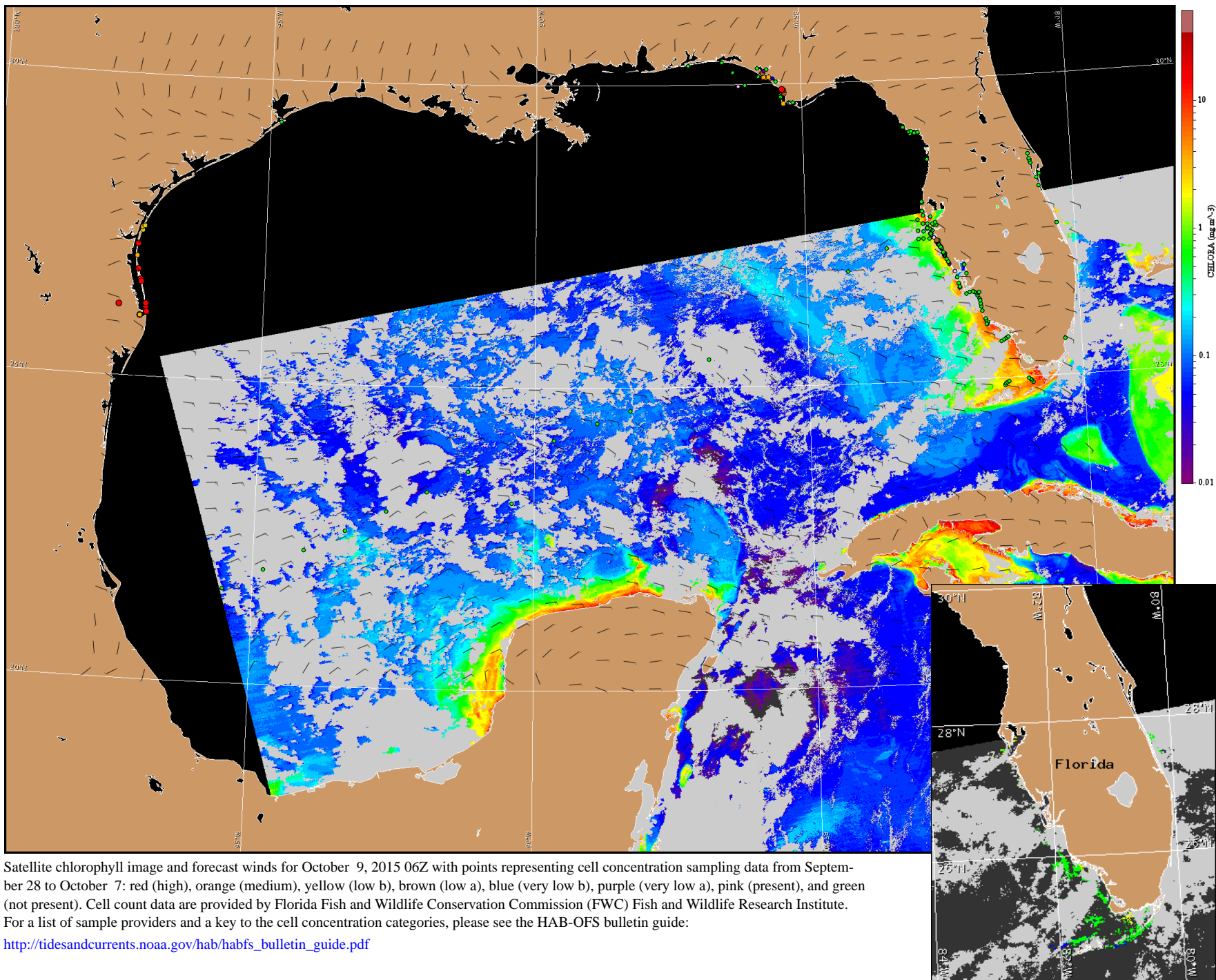
Derner, Davis



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): East winds (10-15kn, 5-8m/s) today becoming northwest (10kn, 5m/s) this afternoon. Northeast winds (10-15kn). East winds (10kn) Friday becoming southwest Friday afternoon. Variable north winds (5-10kn, 3-5m/s) Friday night through Saturday. North winds (10kn) Saturday night and Sunday becoming northeast Sunday night. North winds (5kn, 3m/s) Monday.



Satellite chlorophyll image and forecast winds for October 9, 2015 06Z with points representing cell concentration sampling data from September 28 to October 7: 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).