



Gulf of Mexico Harmful Algal Bloom Bulletin

Region: Southwest Florida

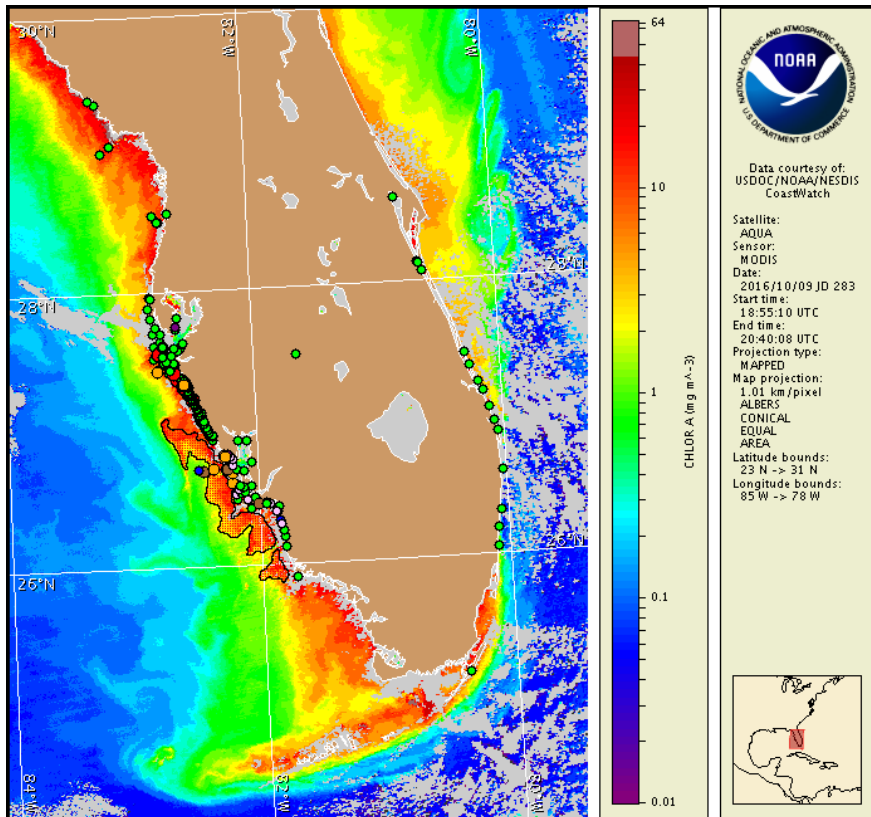
Tuesday, 11 October 2016

NOAA National Ocean Service

NOAA Satellite and Information Service

NOAA National Weather Service

Last bulletin: Thursday, October 6, 2016



Satellite chlorophyll image with possible *K. brevis* HAB areas shown by red polygon(s), when applicable. Points represent cell concentration sampling data from October 1 to 10: 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/hab_publication/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 high 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, October 11 through Thursday, October 13 is listed below:

County Region: Forecast (Duration)

Southern Pinellas: Very Low (Tu-Th)

Southern Pinellas, bay regions: Very Low (Tu-Th)

Northern Manatee; bay regions: Low (Tu-Th)

Southern Manatee: Low (Tu-Th)

Southern Manatee, bay regions: High (Tu-Th)

Northern Sarasota: Low (Tu-Th)

Northern Sarasota, bay regions: High (Tu-Th)

Southern Sarasota: Low (Tu-Th)

Northern Charlotte: Low (Tu-Th)

Southern Charlotte: Low (Tu-Th)

Southern Charlotte, bay regions: Moderate (Tu-Th)

Northern Lee: Low (Tu-Th)

Northern Lee, bay regions: Moderate (Tu-Th)

Central Lee: Low (Tu-Th)

Central Lee, bay regions: Low (Tu-Th)

Southern Lee: Low (Tu-Th)

Southern Lee, bay regions: Moderate (Tu-Th)

Northern Collier: Very Low (Tu-Th)

All Other SWFL County Regions: None expected (Tu-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. Reports of dead fish and respiratory irritation have been received from Manatee, Sarasota, Charlotte, and Lee counties.

Analysis

Karenia brevis is present along- and offshore southwest Florida from Pinellas to northern Collier County, with the highest concentrations identified along- and offshore northern Manatee to northern Sarasota County (FWRI, MML, SCHD, CCENRD; 10/1-10/10). Samples have confirmed up to 'medium' concentrations of *K. brevis* from northern Manatee to northern Lee counties. Sampling is recommended alongshore and in the bay regions of northern Charlotte County. Detailed sample information and a summary of impacts can be obtained through FWC Fish and Wildlife Research Institute at: <http://myfwc.com/redtidestatus>. Reports of slight to intense respiratory irritation have been received from throughout southwest Florida from Manatee to Lee counties. Fish kills have been reported from Pinellas to Collier counties (FWRI, MML; 10/7-10/11).

Recent ensemble imagery (MODIS Aqua, 10/9) indicates the presence of elevated to very

high (2 to >20 $\mu\text{g/L}$) patches of chlorophyll with the optical characteristics of *K. brevis* alongshore, and up to 30 miles offshore, from Pinellas to Collier counties.

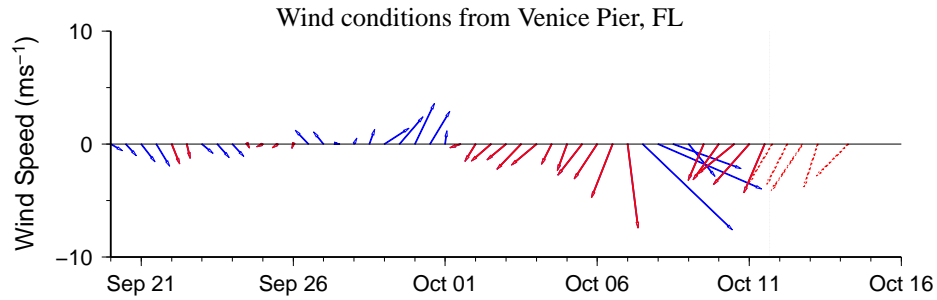
Offshore winds forecasted today through Thursday will reduce the potential for respiratory irritation at the coast.

Keeney, Urizar

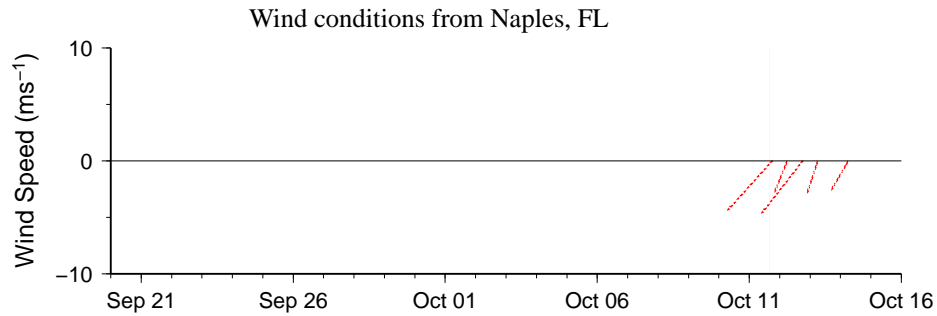
Wind Analysis

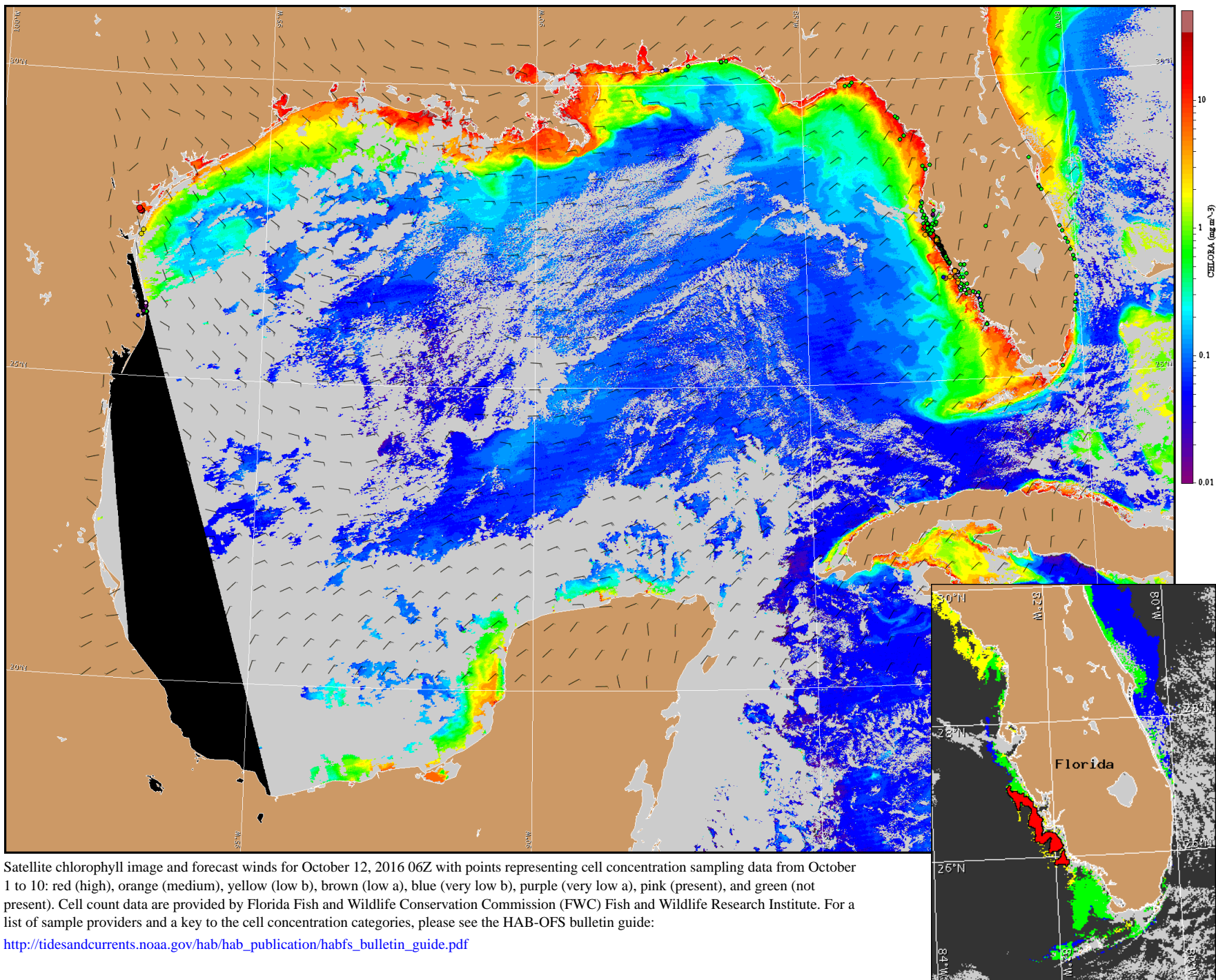
Englewood to Tarpon Springs (Venice): Northeast winds (10-20 kn, 5-10 m/s) today through Thursday.

Chokoloskee to Bonita Beach: Northeast winds (15-20 kn, 8-10 m/s) today through Thursday.



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).





Satellite chlorophyll image and forecast winds for October 12, 2016 06Z with points representing cell concentration sampling data from October 1 to 10: 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).