

Gulf of Mexico Harmful Algal Bloom Bulletin

Region: Southwest Florida

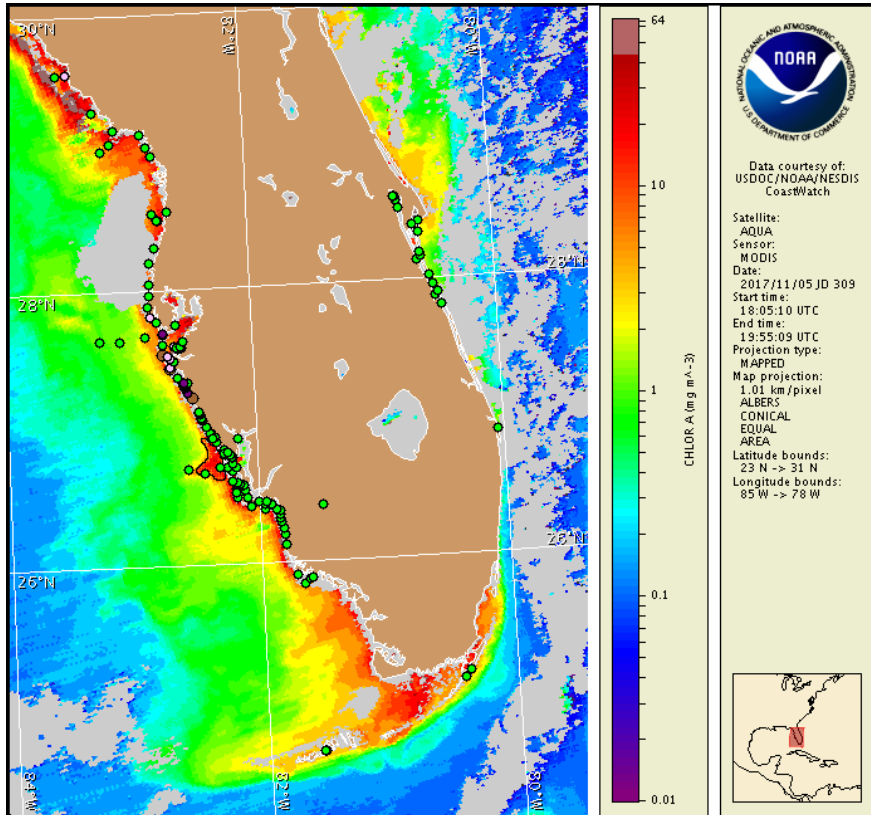
Monday, 06 November 2017

NOAA National Ocean Service

NOAA Satellite and Information Service

NOAA National Weather Service

Last bulletin: Monday, October 30, 2017



Satellite chlorophyll image with possible *K. brevis* HAB areas shown by red polygon(s), when applicable. Points represent cell concentration sampling data from October 27 to November 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:

https://tidesandcurrents.noaa.gov/hab/hab_publication/GOMX_HAB_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: <https://tidesandcurrents.noaa.gov/hab/gomx.html>

Conditions Report

Not present to low concentrations of *Karenia brevis* (commonly known as Florida red tide) are present along- and offshore portions of southwest Florida from Pinellas to Sarasota counties, 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 Monday, November 6 to Thursday, November 9 is listed below:

County Region: Forecast (Duration)

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

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

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

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

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

Health information, from the Florida Department of Health and other agencies, is available at https://tidesandcurrents.noaa.gov/hab/gomx_health.html. For recent, local observations and data check Mote Marine Laboratory Daily Beach Conditions (<http://visit-beaches.org/>) and the Florida Fish and Wildlife Conservation Commission Red Tide Status (<http://myfwc.com/redtidestatus>). There have no reports of respiratory irritation or dead fish.

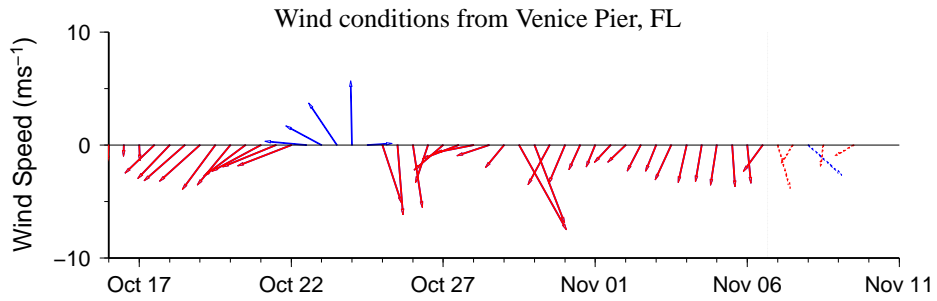
Analysis

Recent samples collected alongshore southwest Florida indicate *Karenia brevis* ranges from 'not present' to 'low a' concentrations from Pinellas to Sarasota counties, with the highest concentrations present in the bay regions of Manatee County (FWRI, MML, SCHD, CCPCD; 10/27-11/2). 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, 11/5) shows elevated to very high chlorophyll (2 to >20 $\mu\text{g/L}$) along- and offshore southwest Florida. Two patches with the optical characteristics of *K. brevis* are visible in the bay regions of northern Manatee County, and alongshore central Lee County, extending up to 18 miles offshore.

Alongshore winds were observed over the weekend. Alongshore winds forecast today through Thursday will reduce the potential for bloom intensification at the coast.

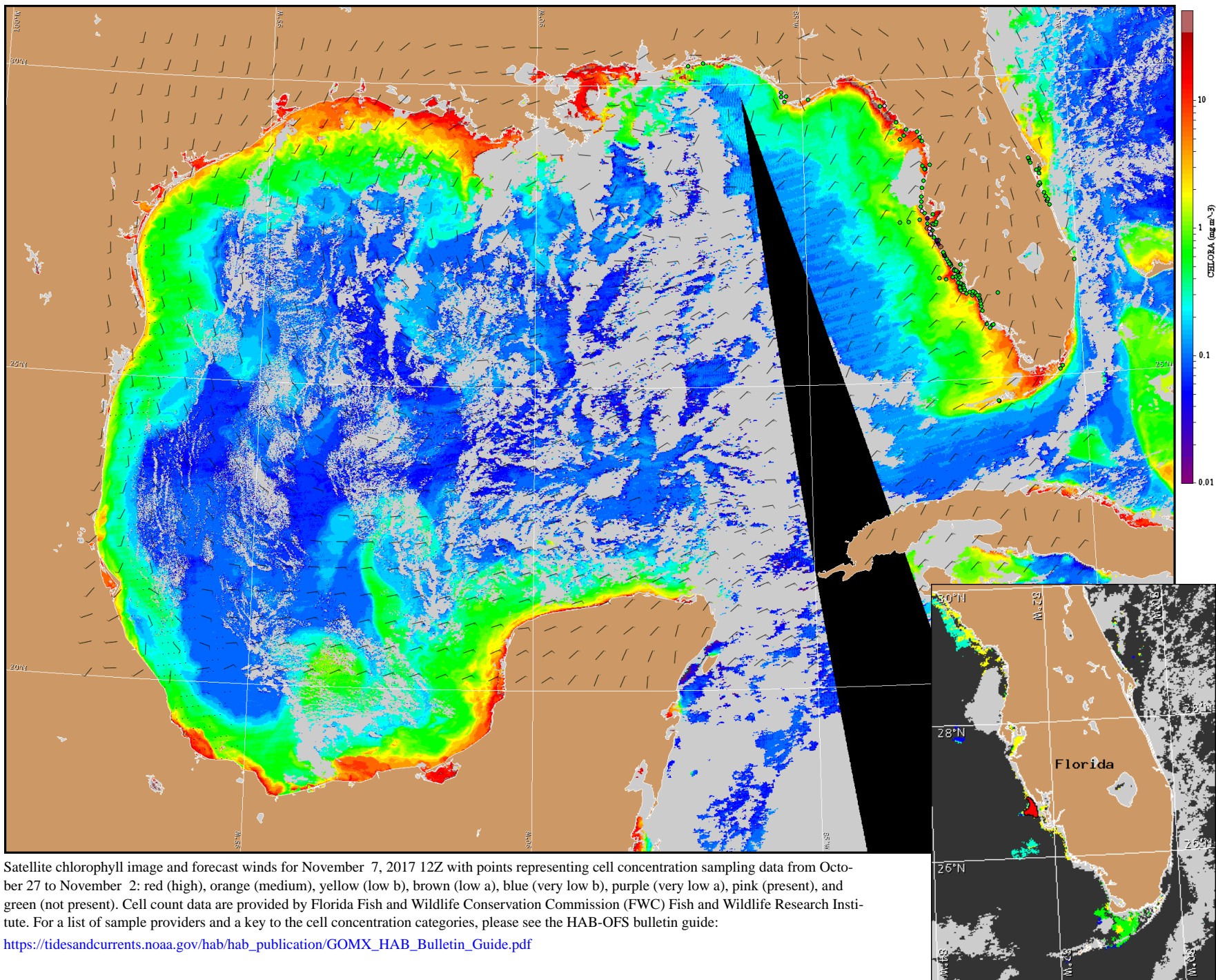
Keeney, Urizar



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 to north winds (5-15kn, 3-8m/s) today through Wednesday. Southeast winds (5kn, 3m/s) Thursday becoming northwest winds (10kn, 5m/s) Thursday evening.



Satellite chlorophyll image and forecast winds for November 7, 2017 12Z with points representing cell concentration sampling data from October 27 to November 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).