



Gulf of Mexico Harmful Algal Bloom Bulletin

Region: Southwest Florida

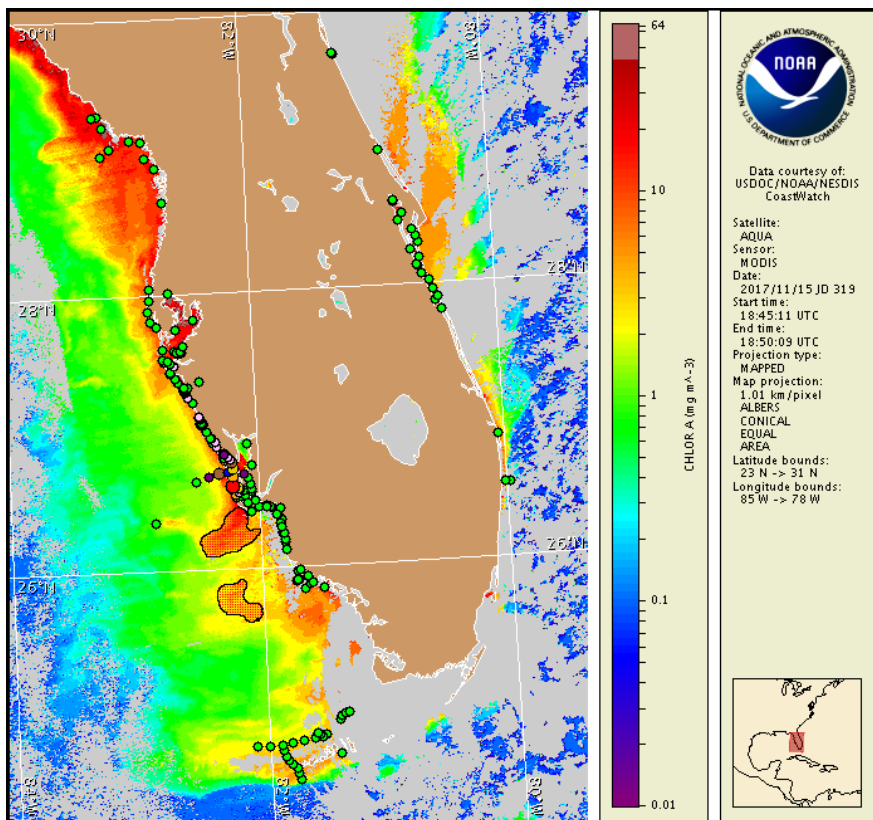
Thursday, 16 November 2017

NOAA National Ocean Service

NOAA Satellite and Information Service

NOAA National Weather Service

Last bulletin: Monday, November 13, 2017



Satellite chlorophyll image with possible *K. brevis* HAB areas shown by red polygon(s), when applicable. Points represent cell concentration sampling data from November 6 to 14: 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 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 Thursday, November 16 through Monday, November 20 is listed below:

County Region: Forecast (Duration)

Northern Sarasota: None (Th-F, M), Very Low (Sa-Su)

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

Southern Sarasota: Very Low (Th-F, M), Low (Sa-Su)

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

Southern Charlotte: Very Low (Th-M)

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

Northern Lee: Low (Th-M)

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

Central Lee: Very Low (Th-M)

Central Lee, bay regions: Moderate (Th-M)

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

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://visitbeaches.org/>) and the Florida Fish and Wildlife Conservation Commission Red Tide Status (<http://myfwc.com/redtidestatus>). There are no new reports of respiratory irritation or dead fish.

Analysis

Recent samples collected alongshore southwest Florida, including the Florida Keys, indicate *Karenia brevis* ranges from not present to 'high' concentrations from Pinellas to Collier counties, with the highest concentrations present in bay regions of northern Lee County, (FWRI, MML, SCHD, CCPCD; 11/6-11/14). Detailed sample information and a summary of impacts can be obtained through FWC Fish and Wildlife Research Institute at: <http://myfwc.com/redtidestatus>.

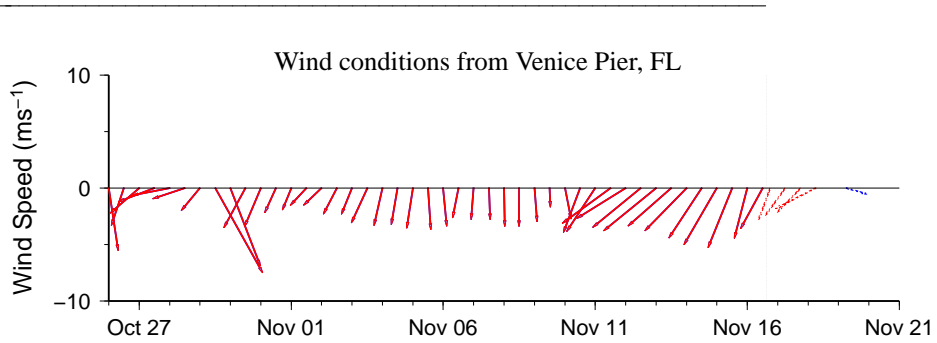
Recent ensemble imagery (MODIS Aqua, 11/15) shows elevated to very high chlorophyll (2 to >20 µg/L) along- and offshore southwest Florida. A patch of elevated to high chlorophyll matching some of the optical characteristics of *K. brevis* is visible alongshore southern Sarasota to northern Lee counties. Two patches of elevated to very high chlorophyll with the optical characteristics of *K. brevis* are visible along- and offshore central Lee to central Collier County, extending up to 30 miles offshore central Lee and up to 45 miles offshore central Collier.

Winds forecasted through Monday continue to be upwelling favorable decreasing the potential for intensification of the bloom.

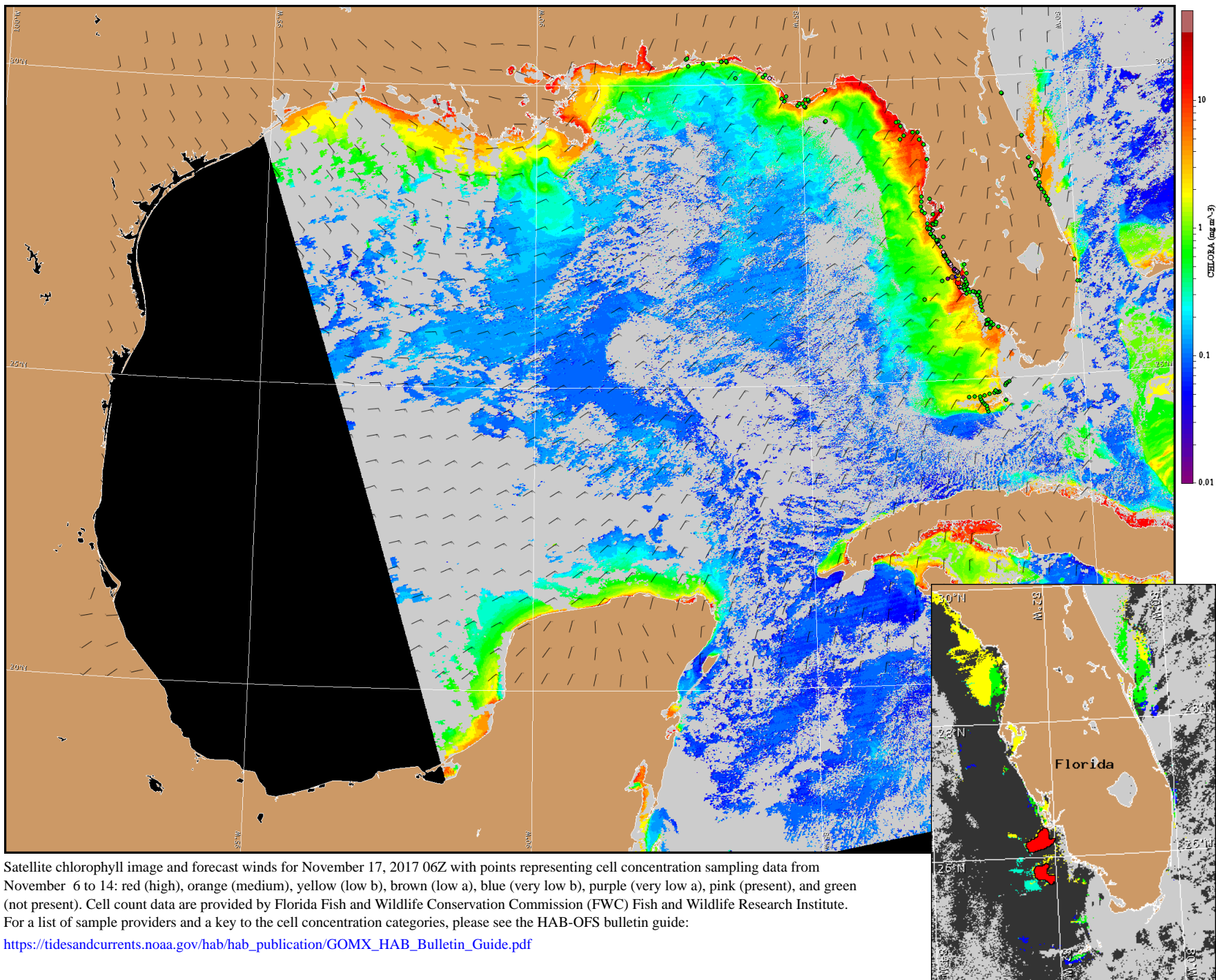
Urizar, Lalime

Wind Analysis

Englewood to Tarpon Springs (Venice): Northeast to north winds (5-15 kn, 3-8 m/s) today through Friday. East winds (10 kn, 5 m/s) Saturday becoming southwest winds (5 kn, 3 m/s) in the afternoon. West to northwest winds (5-15 kn) Saturday night through Sunday. North to northeast winds (10-20 kn, 5-10 m/s) Sunday night through Monday.



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 November 17, 2017 06Z with points representing cell concentration sampling data from November 6 to 14: 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).