



Gulf of Mexico Harmful Algal Bloom Bulletin

Region: Southwest Florida

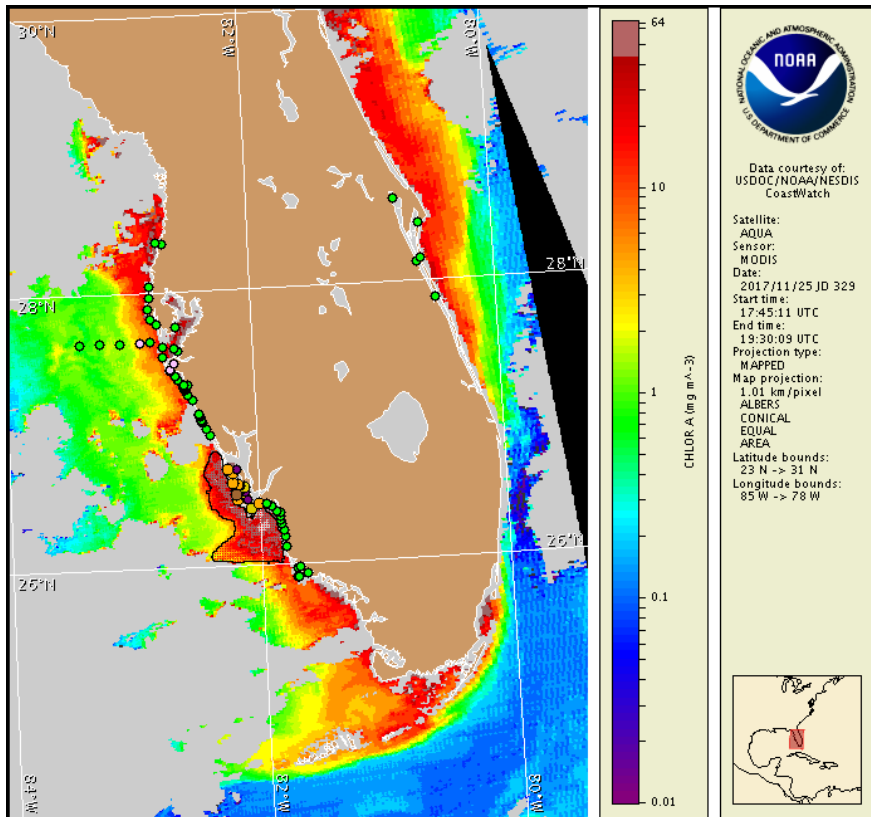
Monday, 27 November 2017

NOAA National Ocean Service

NOAA Satellite and Information Service

NOAA National Weather Service

Last bulletin: Wednesday, November 22, 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 17 to 21: 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 medium concentrations of *Karenia brevis* (commonly known as Florida red tide) are present alongshore portions of southwest Florida. *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 27 through Thursday, November 30 is listed below:

County Region: Forecast (Duration)

Southern Charlotte: Very Low (M-Th)

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

Northern Lee: Very Low (M-Th)

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

Central Lee: Low (M-Th)

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

Southern Lee: Very Low (M-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://visitbeaches.org/>) and the Florida Fish and Wildlife Conservation Commission Red Tide Status (<http://myfwc.com/redtidestatus>). Over the past several days, reports of respiratory irritation and dead fish were received from Lee County.

Analysis

Recent samples collected alongshore southwest Florida continue to indicate *Karenia brevis* ranges from not present to 'medium' concentrations from Pinellas to Collier counties, with 'medium' concentrations collected alongshore and in the bay regions of northern and central Lee County (FWRI, MML, SCHD, CCPCD; 11/17-11/21). Detailed sample information and a summary of impacts can be obtained through FWC Fish and Wildlife Research Institute at: <http://myfwc.com/redtidestatus>.

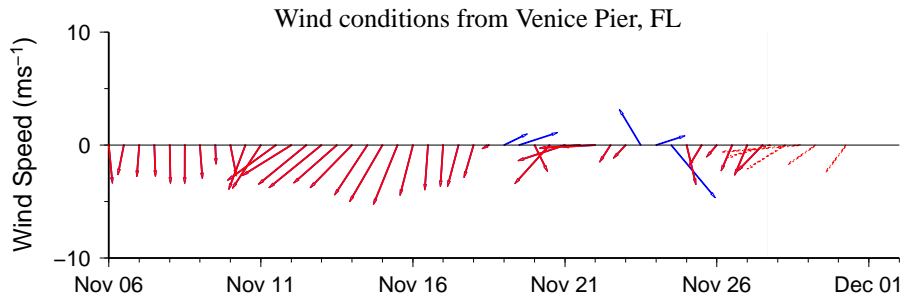
Recent ensemble imagery (MODIS Aqua, 11/25) is partially obscured by clouds from Pinellas to Collier counties, limiting analysis. Elevated to very high chlorophyll (2 to $>20\mu\text{g/L}$) is present along- and offshore southwest Florida from Sarasota to Monroe counties. A patch of elevated to high chlorophyll matching the optical characteristics of *K. brevis* is visible alongshore Charlotte to Collier counties.

Winds forecast Monday through Thursday are upwelling favorable, decreasing the potential for bloom intensification at the coast.

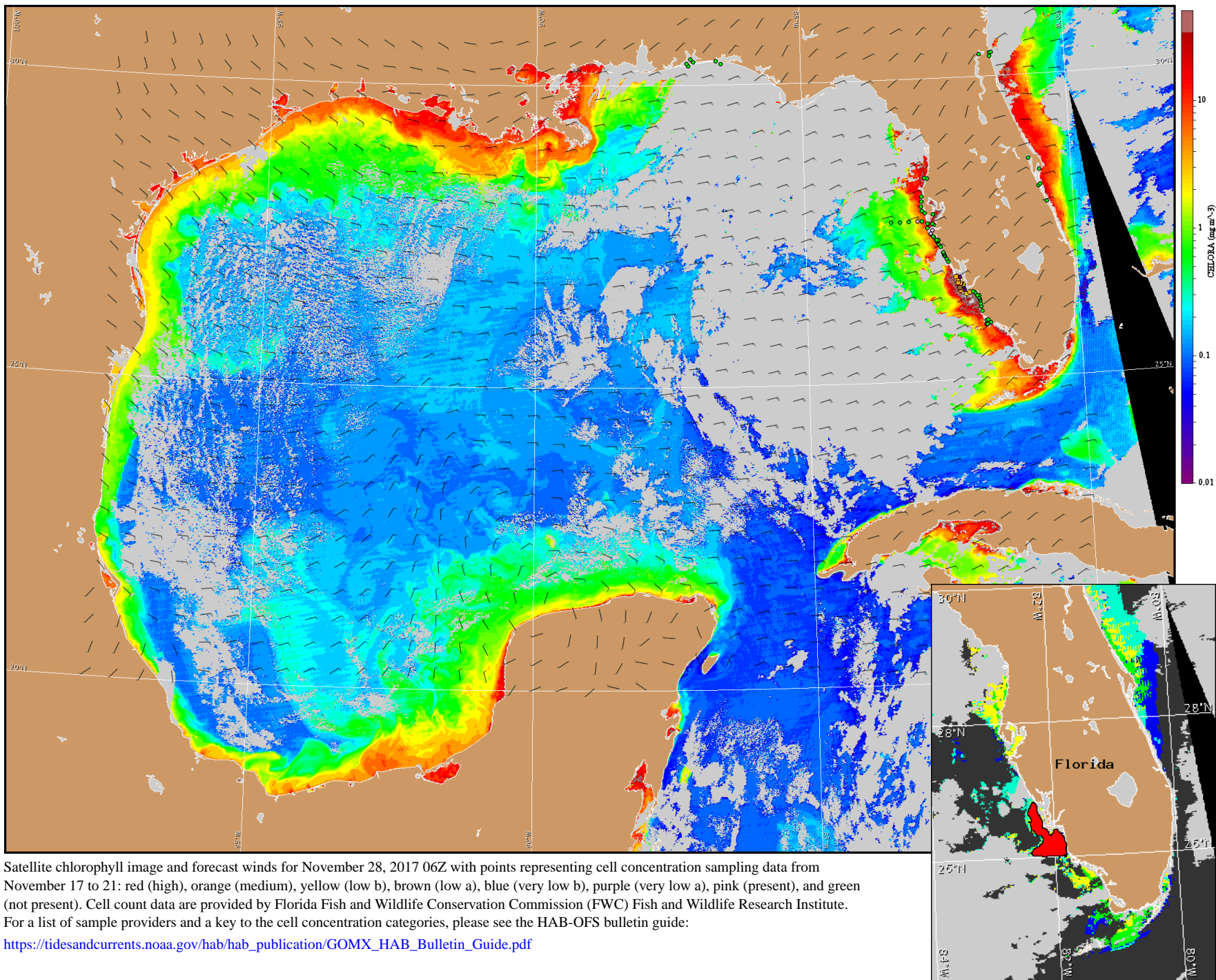
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Wind Analysis

Englewood to Tarpon Springs (Venice): Northeast to east winds (5-15kn, 3-8m/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 November 28, 2017 06Z with points representing cell concentration sampling data from November 17 to 21: 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.

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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).