



Gulf of Mexico Harmful Algal Bloom Bulletin

Region: Southwest Florida

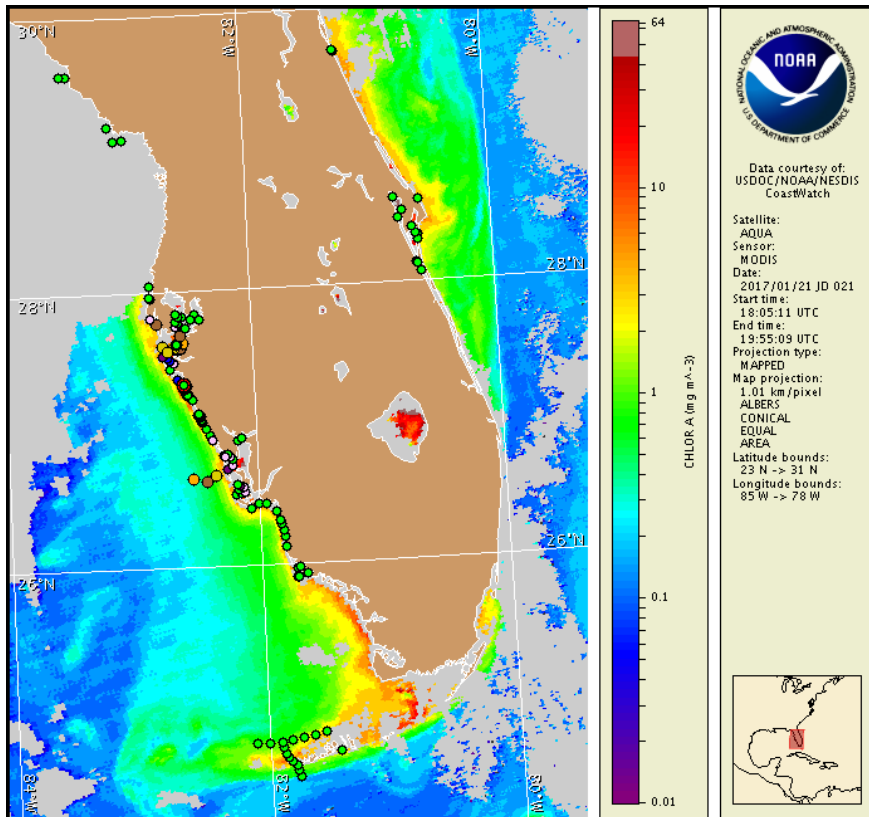
Monday, 23 January 2017

NOAA National Ocean Service

NOAA Satellite and Information Service

NOAA National Weather Service

Last bulletin: Thursday, January 19, 2017



Satellite chlorophyll image with possible *K. brevis* HAB areas shown by red polygon(s), when applicable. Points represent cell concentration sampling data from January 13 to 20: 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 Monday, January 23 through Thursday, January 26 is listed below:

County Region: Forecast (Duration)

Southern Pinellas: Low (M-Th)

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

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

Southern Manatee: Moderate (M-Th)

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

Northern Sarasota: Moderate (M-Th)

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

Southern Sarasota: Low (M-Th)

All Other SWFL County Regions: None expected (M-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. Over the past several days, reports of respiratory irritation were received from Manatee and Sarasota counties. Reports of dead fish were received from Manatee, Sarasota, and Lee counties.

Analysis

Recent samples received from along- and offshore southwest Florida, from Pinellas to Lee counties, including the Florida Keys, identified not present to 'high' concentrations of *Karenia brevis*, with the highest concentrations collected from the bay regions of northern Sarasota County (FWRI, MML, SCHD; 1/13-1/20). Up to 'medium' concentrations of *K. brevis* are present alongshore and in the bay regions of southern Manatee County, where there have been several reports of up to intense respiratory irritation along the coast. Sampling offshore northern Lee County indicates up to 'medium' *K. brevis* concentrations are present 17 miles offshore from Cayo Costa (FWRI; 1/18). Over the weekend, respiratory irritation has decreased from intense to moderate at beaches in Manatee and Sarasota counties. Detailed sample information and a summary of impacts can be obtained through FWC Fish and Wildlife Research Institute at:

<http://myfwc.com/redtidestatus>.

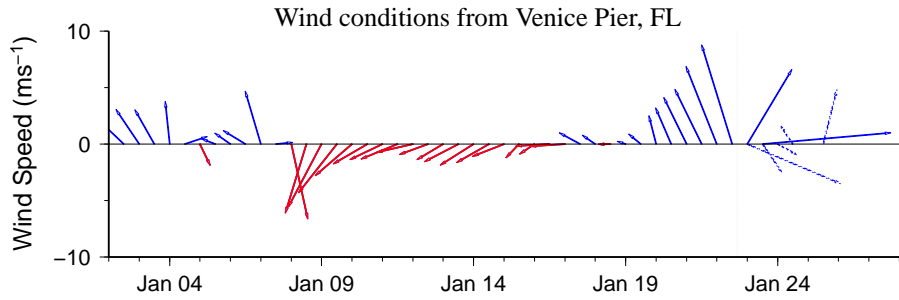
In recent ensemble imagery (MODIS Aqua, 1/21), elevated chlorophyll (2-7 $\mu\text{g/L}$) is visible but does not indicate the presence of chlorophyll anomalies with the optical characteristics of *K. brevis* alongshore southwest Florida from Pinellas to Monroe counties, including the Florida Keys.

Forecasted winds alongshore southwest Florida today through Thursday may increase the potential for respiratory irritation at the coast.

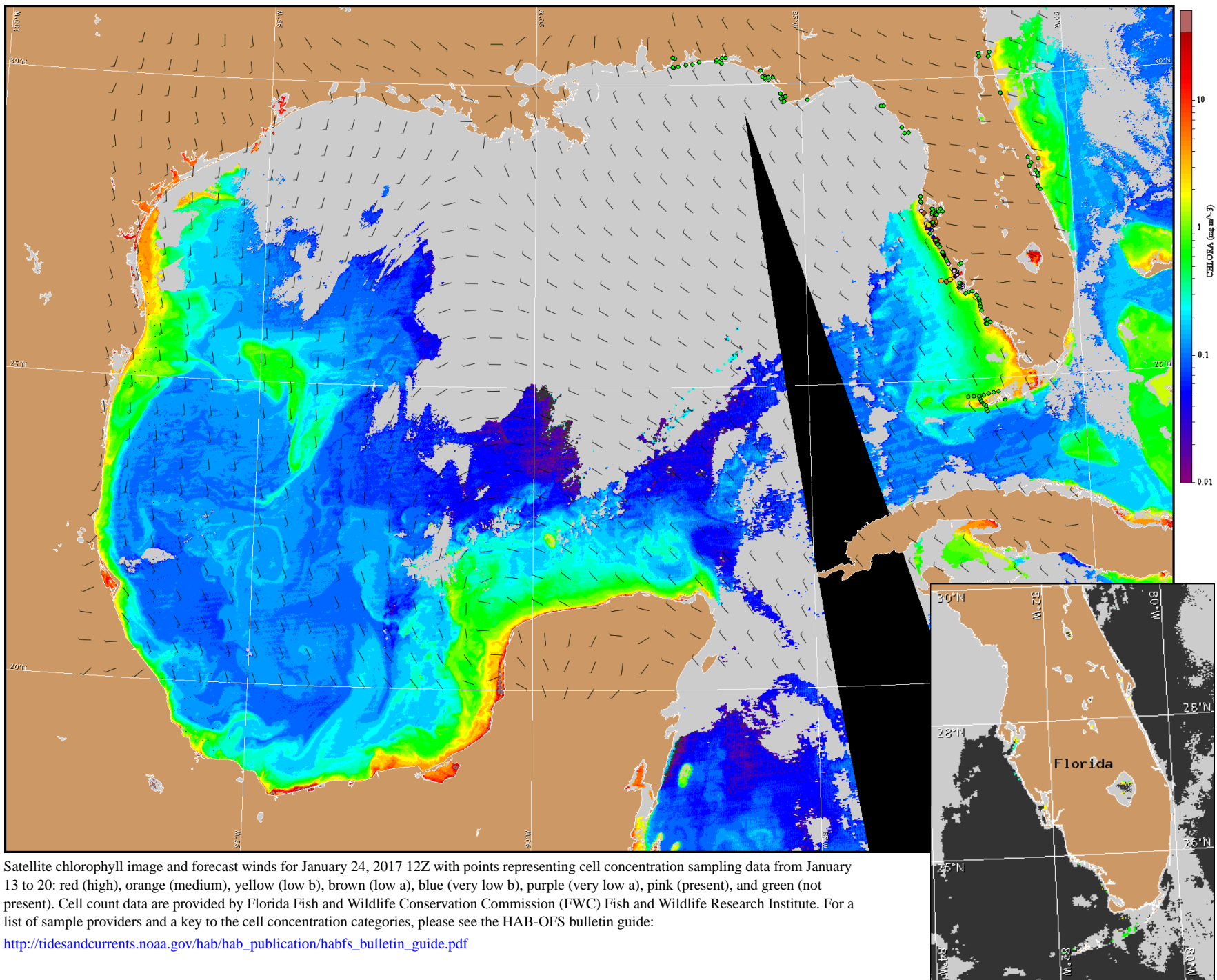
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Wind Analysis

Englewood to Tarpon Springs (Venice): Northwest winds (5-25kn, 3-13m/s) today through Tuesday night becoming southeast (5kn, 3m/s) after midnight. South winds (10kn, 5m/s) Wednesday. West winds (10kn) Thursday morning.



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 January 24, 2017 12Z with points representing cell concentration sampling data from January 13 to 20: 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).