



Gulf of Mexico Harmful Algal Bloom Bulletin

Region: Southwest Florida

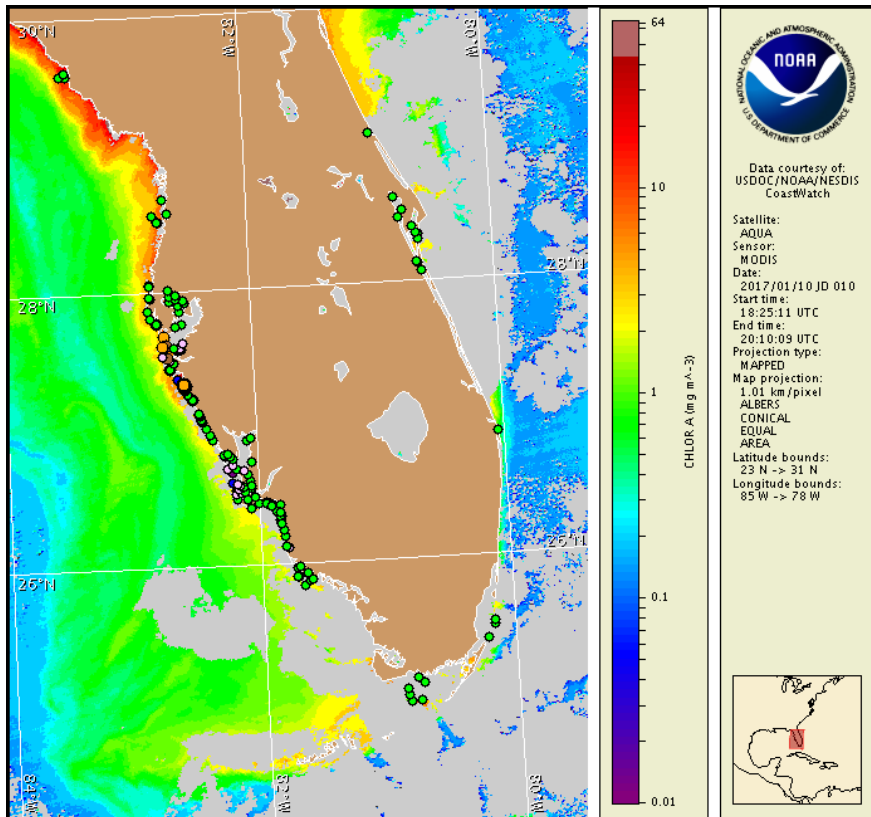
Thursday, 12 January 2017

NOAA National Ocean Service

NOAA Satellite and Information Service

NOAA National Weather Service

Last bulletin: Monday, January 9, 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 2 to 11: 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 Thursday, January 12 through Tuesday, January 17 is listed below:

County Region: Forecast (Duration)

Southern Pinellas: Very Low (Th-Tu)

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

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

Southern Manatee: Very Low (Th-Tu)

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

Northern Sarasota: Very Low (Th-Tu)

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

South Charlotte, bay regions: Very Low (Th-Tu)

Northern Lee, bay regions: Very Low (Th-Tu)

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

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. There were no reports of respiratory irritation this week. Dead fish were reported from Pinellas County.

Analysis

****Due to the upcoming federal holiday, the next bulletin will be issued on Tuesday, January 17.****

Recent samples collected along- and offshore the coast of southwest Florida indicate *Karenia brevis* is present from Pinellas to Collier counties with the highest concentrations located in the bay regions of Pinellas, Manatee, and Sarasota counties and alongshore Sarasota County (FWRI, MML, SCHD, CCENRD; 1/2-1/11). Recent sampling in the bay regions of southern Manatee County indicate *K. brevis* concentrations have increased to 'low b' from 'very low a' (FWRI; 1/9). Alongshore northern Sarasota County, recent sampling indicates *K. brevis* concentrations have increased to 'medium' from 'very low b' (SCHD; 1/9). Detailed sample information and a summary of impacts can be obtained through FWC Fish and Wildlife Research Institute at: <http://myfwc.com/redtidestatus>.

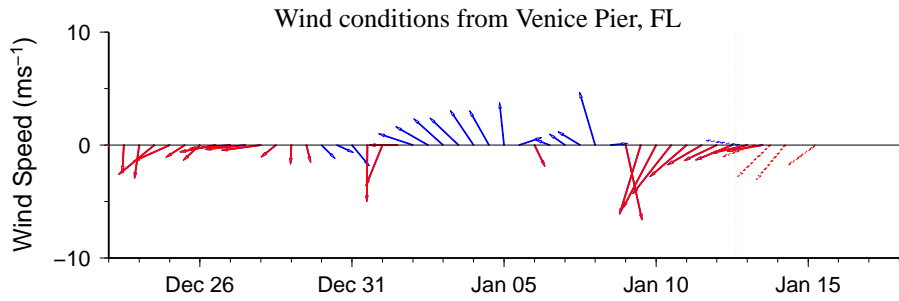
In recent ensemble imagery (MODIS Aqua, 1/10), elevated chlorophyll (2-5 $\mu\text{g/L}$) with some of the optical characteristics of *K. brevis* is visible offshore northern Sarasota County where recent sampling indicated an increase in *K. brevis* concentrations.

Offshore winds today through Monday will decrease the potential for respiratory irritation at the coast.

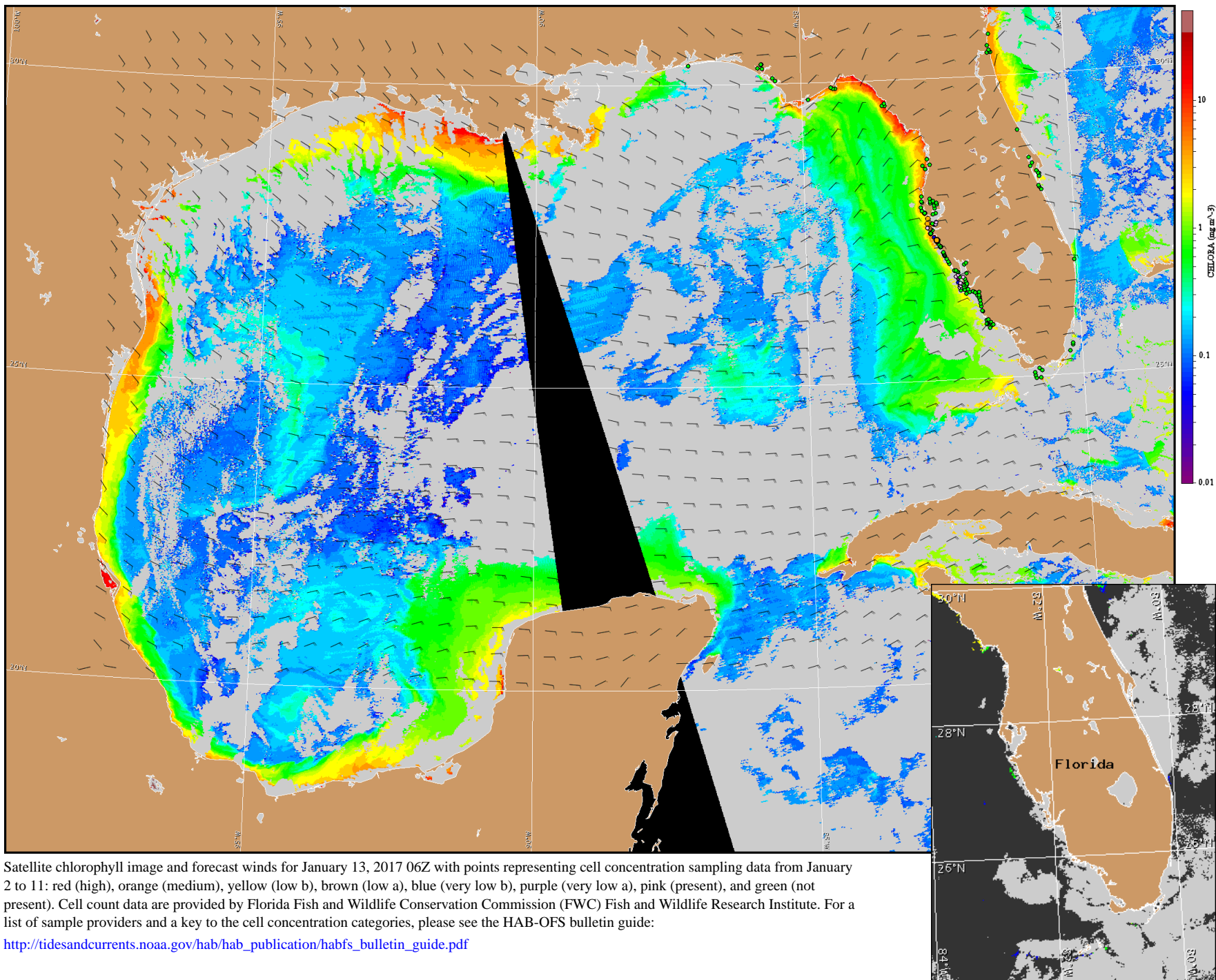
Davis, Lalime, Ludema

Wind Analysis

Englewood to Tarpon Springs (Venice): East to northeast winds (5-15kn, 3-8m/s) today 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 January 13, 2017 06Z with points representing cell concentration sampling data from January 2 to 11: 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).