



Gulf of Mexico Harmful Algal Bloom Bulletin

Region: Southwest Florida

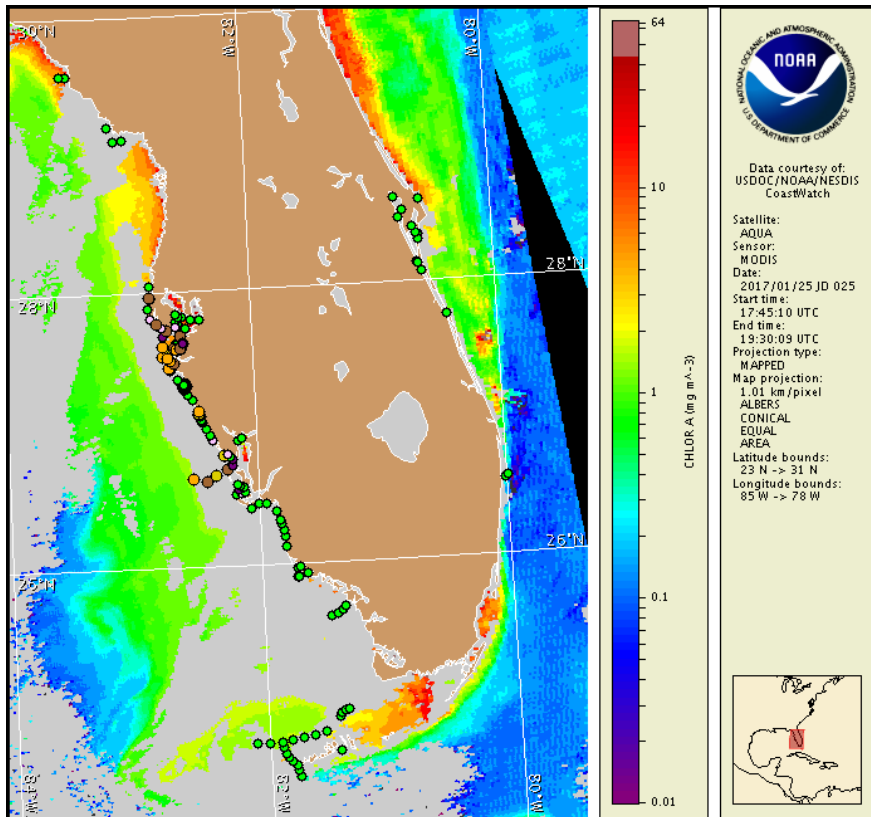
Thursday, 26 January 2017

NOAA National Ocean Service

NOAA Satellite and Information Service

NOAA National Weather Service

Last bulletin: Monday, January 23, 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 16 to 25: 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 medium 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 26 through Monday, January 30 is listed below:

County Region: Forecast (Duration)

Northern Pinellas: Low (Th-M)

Southern Pinellas: Moderate (Th), Low (F-M)

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

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

Southern Manatee: Moderate (Th-M)

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

Northern Sarasota: Moderate (Th-F), Low (Sa-M)

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

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

Southern Charlotte: Low (Th), Very Low (F-M)

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

Northern Lee: Low (Th, Su-M), Very Low (F-Sa)

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

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

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 and dead fish were received from Manatee and Sarasota counties.

Analysis

Recent samples received from along- and offshore southwest Florida, from Pinellas to Monroe counties, including the Florida Keys, identified not present to 'medium' concentrations of *Karenia brevis*, with the highest concentrations collected from the bay regions of northern Manatee to northern Sarasota counties and alongshore southern Manatee County (FWRI, MML, SCHD; 1/16-1/25). Up to 'low b' concentrations of *K. brevis* are present in the bay regions of southern Charlotte County. Moderate respiratory irritation was reported at Siesta Key in Sarasota County and slight respiratory irritation has been reported from various locations in Sarasota County and at Coquina Beach in Manatee County (MML; 1/25-26). Dead fish were reported at all these locations with the largest numbers being reported at Venice North Jetty and Siesta Key in Sarasota County (MML; 1/25-26). 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, 1/25), is completely obscured by clouds along- and offshore southwest Florida from Pinellas County to the Florida Keys, preventing analysis in these regions. MODIS Aqua ensemble imagery (not shown, 1/21) indicated elevated chlorophyll (2-7 $\mu\text{g/L}$) was visible, but did not show the presence of chlorophyll

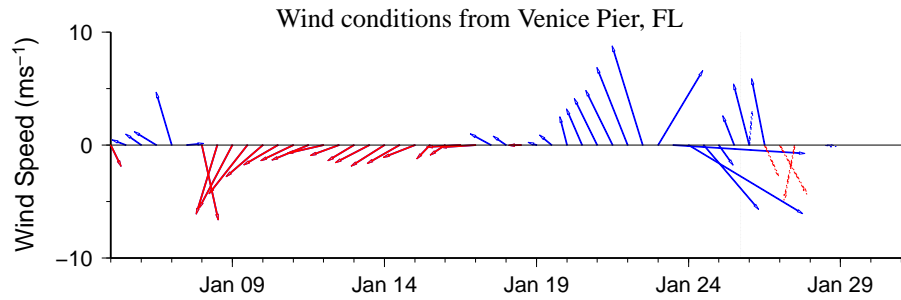
anomalies with the optical characteristics of *K. brevis* alongshore southwest Florida from Pinellas to Monroe counties, including the Florida Keys.

Forecasted winds tonight through Monday may promote southerly transport of surface *K. brevis* concentrations alongshore southwest Florida. Offshore winds forecasted Saturday through Monday will reduce the potential for respiratory irritation at the coast.

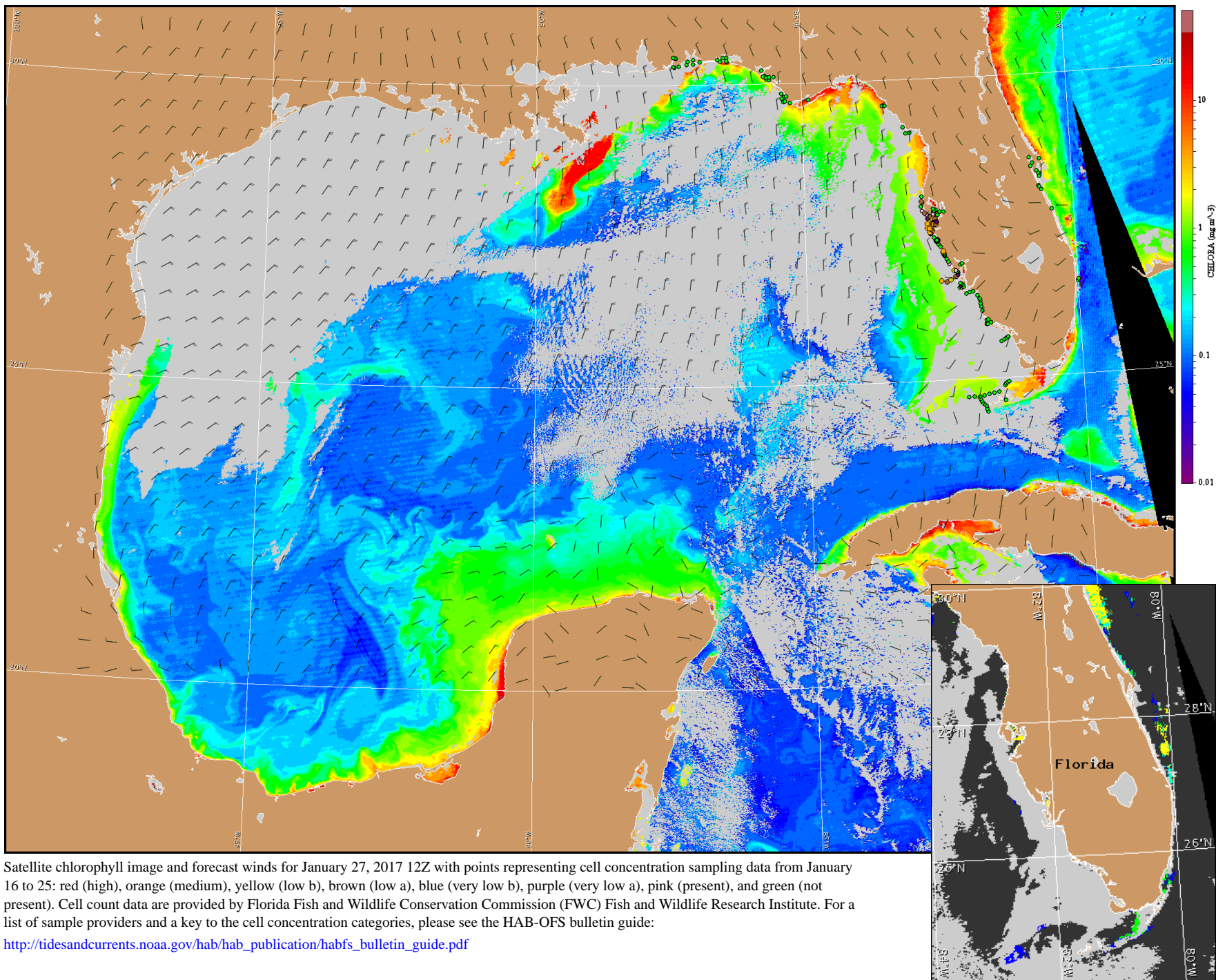
Lalime, Keeney, Ludema

Wind Analysis

Englewood to Tarpon Springs (Venice): Southwest winds (15kn, 8m/s) this afternoon. West winds (10kn) becoming north winds (10-15kn, 5-8m/s) tonight through Saturday. Northwest winds (10kn) Saturday night through Sunday night. North winds (15kn) 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 27, 2017 12Z with points representing cell concentration sampling data from January 16 to 25: 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).