Gulf of Mexico Harmful Algal Bloom Bulletin

Region: Southwest Florida

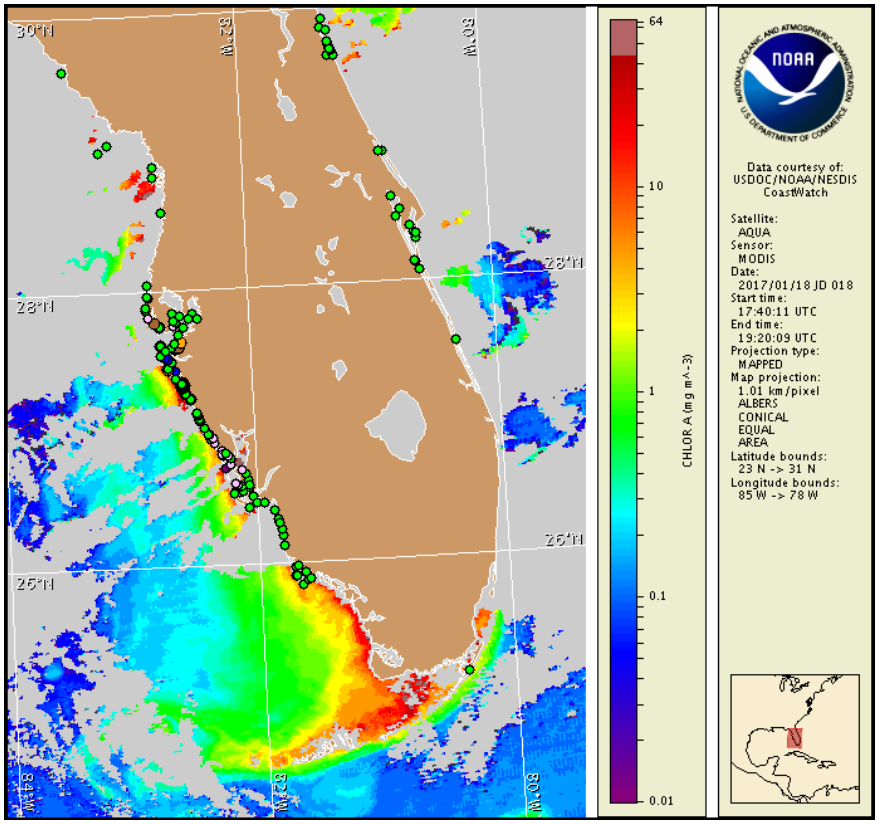
Thursday, 19 January 2017

NOAA National Ocean Service

NOAA Satellite and Information Service

NOAA National Weather Service

Last bulletin: Tuesday, January 17, 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 9 to 18: 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 19 through Monday, January 23 is listed below:

County Region: Forecast (Duration)
Southern Pinellas: Moderate (Th-M)
Southern Pinellas, bay regions: Moderate (Th-M)
Northern Manatee, bay regions: Moderate (Th-M)
Southern Manatee: High (Th-M)
Southern Manatee, bay regions: Moderate (Th-M)
Northern Sarasota: High (Th-M)
Northern Sarasota, bay regions: High (Th-M)
Southern Charlotte, 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 two days, slight respiratory irritation has been reported from several areas alongshore northern Sarasota County. Today, intense respiratory irritation was reported from alongshore southern Manatee County. Dead fish have been reported from southern Lee County, while heavy dead fish and discolored water are being reported from alongshore southern Manatee County.

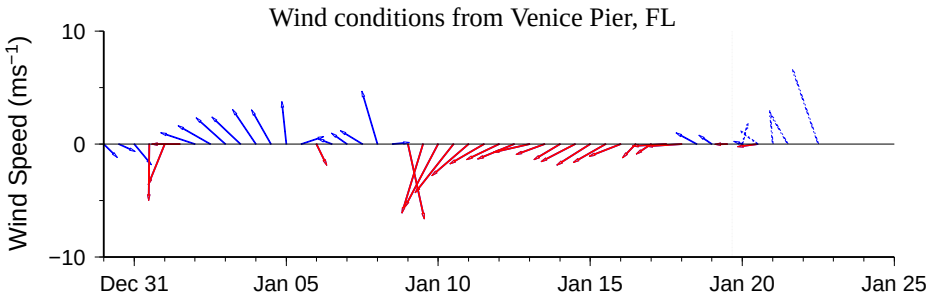
Analysis

Recent samples collected along the coast of southwest Florida continue to indicate the presence of *Karenia brevis* from Pinellas to Lee counties with the highest concentrations located alongshore and in the bay regions of Manatee and Sarasota Counties (FWRI, MML, SCHD, CCENRD; 1/9-1/18). *K. brevis* is still present in up to 'medium' concentrations in the bay regions of northern Manatee and northern Sarasota counties (FWRI; 1/17). 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 1/18) is partially obscured by clouds alongshore from Pinellas to Sarasota counties, limiting chlorophyll analysis. Patches of elevated to high chlorophyll (2 to >20 μg/L) are visible alongshore Sarasota County where recent samples have confirmed an increase in *K. brevis* concentrations.

Forecasted winds alongshore southwest Florida today through Monday may increase the potential for respiratory irritation at the coast and are favorable for bloom intensification. Strong southerly winds will decrease the potential for southern transport of the bloom.

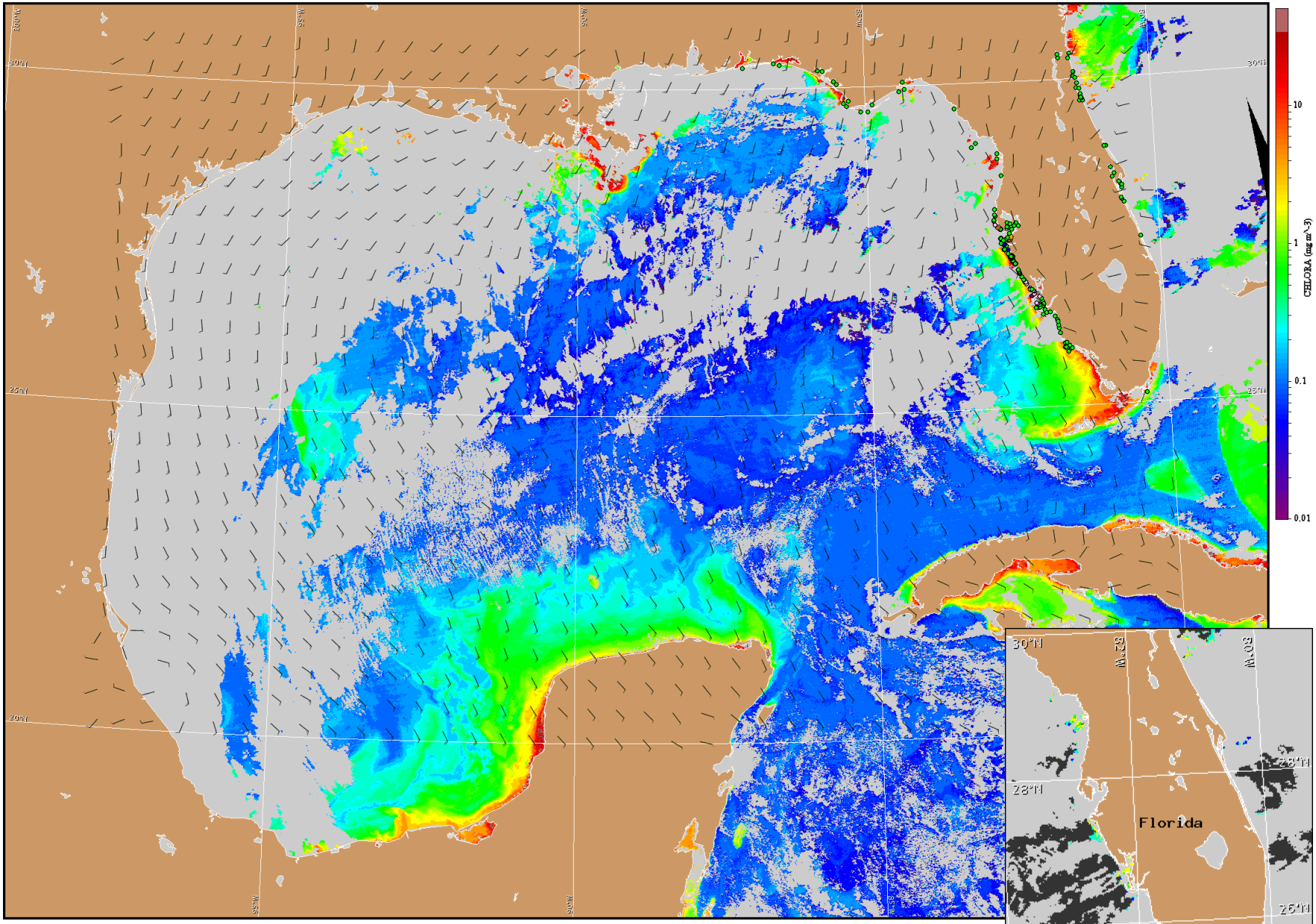
Keeney, Urízar, Ludema



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).

Wind Analysis

Englewood to Tarpon Springs (Venice): Southeast winds today (5 kn, 3 m/s). South winds (10-15 kn, 5-8 m/s) this afternoon through Saturday. Southwest to west winds (20-25 kn, 10-13 m/s) Sunday into Monday.



Satellite chlorophyll image and forecast winds for January 20, 2017 12Z with points representing cell concentration sampling data from January 9 to 18: 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).