



Gulf of Mexico Harmful Algal Bloom Bulletin

Region: Southwest Florida

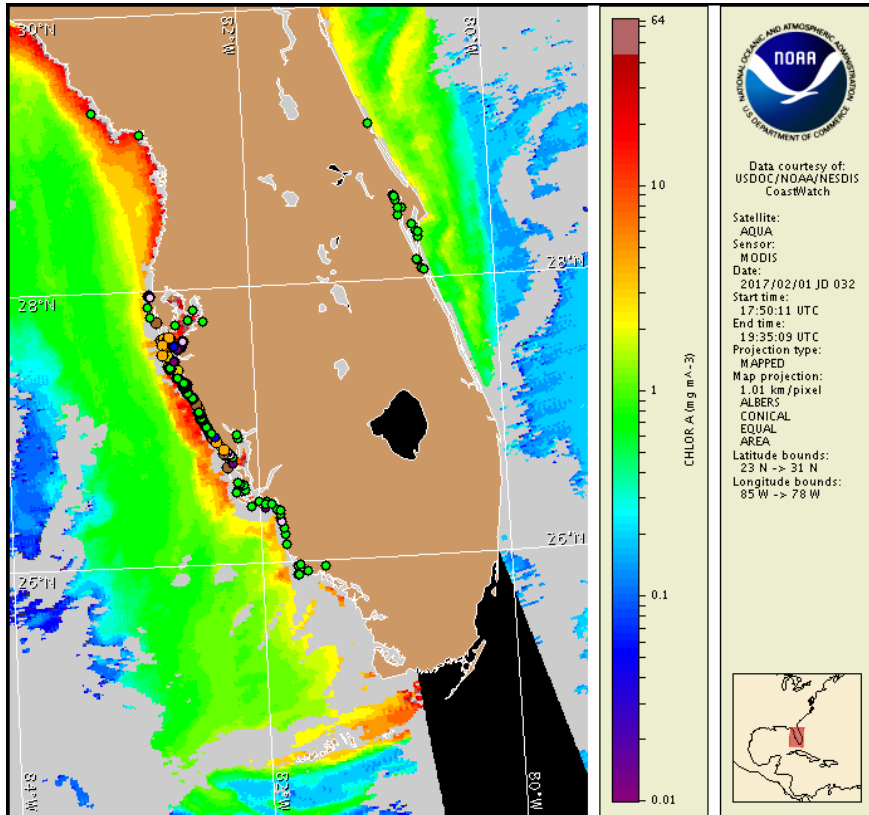
Thursday, 02 February 2017

NOAA National Ocean Service

NOAA Satellite and Information Service

NOAA National Weather Service

Last bulletin: Monday, January 30, 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 23 to 31: 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, February 2 through Monday, February 6 is listed below:

County Region: Forecast (Duration)

Northern Pinellas: Very Low (Th-M)

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

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

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

Southern Manatee: Moderate (Th-F), Low (Sa-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: Moderate (Th-M)

Northern Charlotte: Low (Th-M)

Southern Charlotte: Low (Th-M)

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

Northern Lee: Low (Th-M)

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

Central Lee: 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 few days, dead fish have been reported from Pinellas County, with reports of respiratory irritation and associated dead fish also being reported from Manatee, Sarasota, and Lee counties.

Analysis

Recent samples collected alongshore southwest Florida continue to identify not present to 'medium' concentrations of *Karenia brevis* from Pinellas to Collier counties, with the highest concentrations still present alongshore and in the bay regions of southern Manatee and northern Sarasota counties (FWRI, MML, SCHD; 1/23-1/31). 'Medium' concentrations of *K. brevis* have been newly identified at Stump Pass in the bay regions of northern Charlotte County and near Placida in the bay regions of southern Charlotte County (FWRI; 1/31). Since Monday's bulletin, slight to moderate respiratory irritation continues to be reported from Manatee and Sarasota counties (MML; 1/30-2/1). 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, 2/1) is partially obscured by clouds alongshore from Pinellas to Lee counties. Patches of elevated to high chlorophyll (2-17 $\mu\text{g/L}$) with some of the optical characteristics of *K. brevis* are visible alongshore southwest Florida

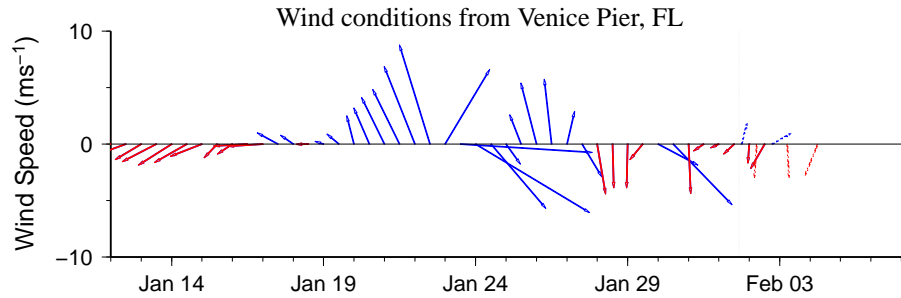
from Manatee to Lee counties, including the Florida Keys.

Observed winds from over the weekend promoted southerly transport of the bloom. Forecasted winds today through Monday may promote southerly transport of surface *K. brevis* concentrations alongshore southwest Florida.

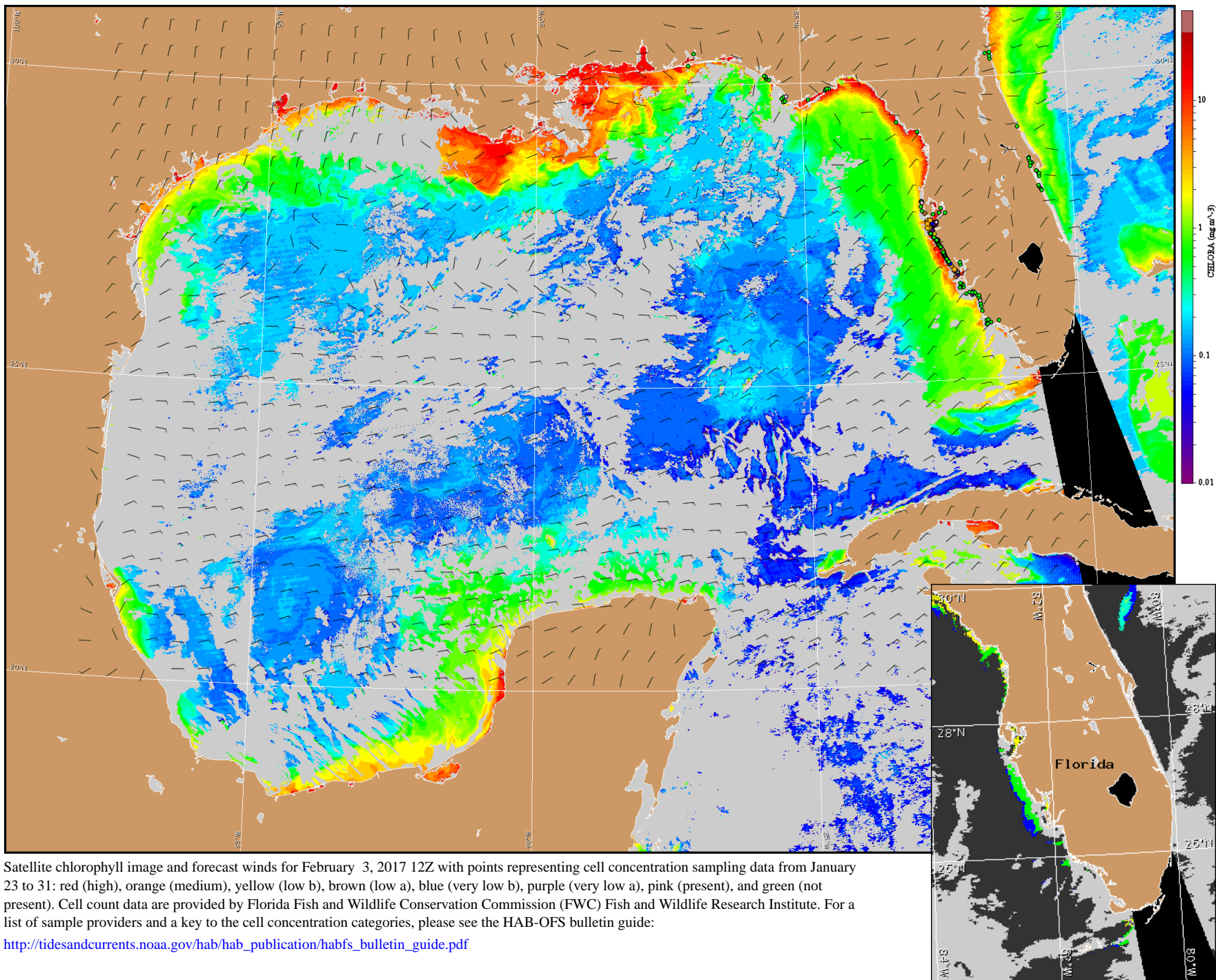
Keeney, Davis, Ludema

Wind Analysis

Englewood to Tarpon Springs (Venice): North to northeast winds (5-10kn, 3-5m/s) today through Monday, with a brief period of northwest winds (5-10kn) Friday afternoon.



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 February 3, 2017 12Z with points representing cell concentration sampling data from January 23 to 31: 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).