



Gulf of Mexico Harmful Algal Bloom Bulletin

Region: Southwest Florida

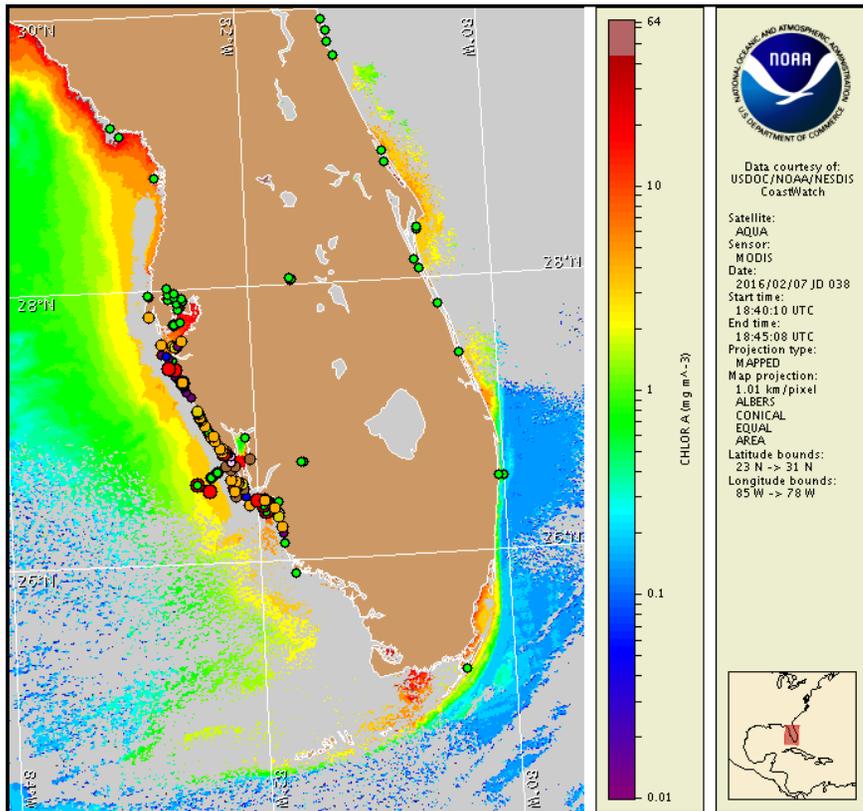
Monday, 08 February 2016

NOAA National Ocean Service

NOAA Satellite and Information Service

NOAA National Weather Service

Last bulletin: Thursday, February 4, 2016



Satellite chlorophyll image with possible *K. brevis* HAB areas shown by red polygon(s), when applicable. Points represent cell concentration sampling data from January 29 to February 5: 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

Karenia brevis (commonly known as Florida red tide) ranges from not present to high concentrations along the coast of southwest Florida, and is 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, February 8 through Thursday, February 11 is listed below:

County Region: Forecast (Duration)

Southern Pinellas: Moderate (M-W), Very Low (Th)

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

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

Southern Manatee: Moderate (M-W), Low (Th)

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

Northern Sarasota: High (M-Tu), Moderate (W), Very Low(Th)

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

Southern Sarasota: High (M-Tu), Moderate (W), Very Low(Th)

Northern Charlotte: High (M-Tu), Moderate (W), Very Low(Th)

Northern Charlotte, bay regions: High (M-W), Moderate (Th)

Southern Charlotte: Moderate (M-W), Very Low (Th)

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

Northern Lee: Moderate (M-W), Low (Th)

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

Central Lee: High (M-W), Low (Th)

Central Lee, bay regions: High (M-Th)

Southern Lee: High (M-Tu), Moderate (W), Very Low (Th)

Southern Lee, bay regions: High (M-Tu), Moderate (W-Th)

Northern Collier: Moderate (M-W), Very Low (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. Respiratory irritation has been reported in Sarasota, and Lee counties. Dead fish have been reported in Manatee, Sarasota, and Lee counties.

Analysis

Recent samples collected along-and offshore southwest Florida indicate background to 'high' *Karenia brevis* concentrations from Pinellas to northern Collier counties (FWRI, CCENRD; 1/29-2/4). 'High' concentrations of *K. brevis* are located in Sarasota Bay near Longboat Key in Manatee County, and near New Pass in Sarasota County; in the Gasparilla Sound to Pine Island Sound regions of Charlotte and Lee counties, up to 17 miles offshore northern Lee County, alongshore central Lee County, and up to 5 miles offshore southern Lee County (FWRI; 2/1-4). Over the last few days respiratory irritation has been reported at various locations in Sarasota and Lee counties (MML; 2/5-8). Dead fish have been reported in Manatee, Sarasota and Lee counties (FWRI, MML; 2/6-8). 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, 2/7) is partially obscured by a band of clouds along- and offshore portions of southwest Florida, limiting analysis. Patches of elevated chlorophyll (2-4 $\mu\text{g/L}$) are visible offshore Pinellas to northern Lee counties.

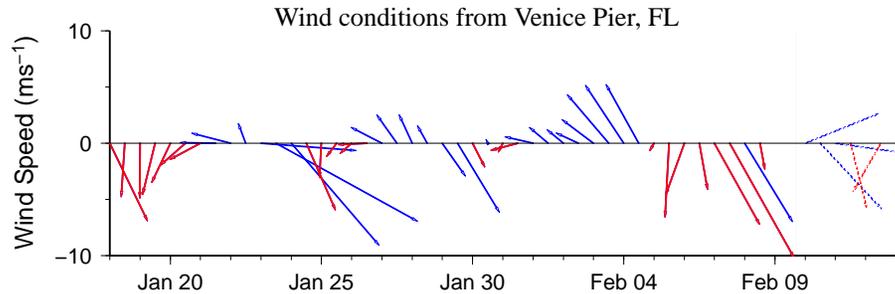
General northwesterly winds forecast tonight through Thursday may increase the potential for southerly transport of surface *K. brevis* concentrations alongshore southwest Florida.

Lalime, Davis

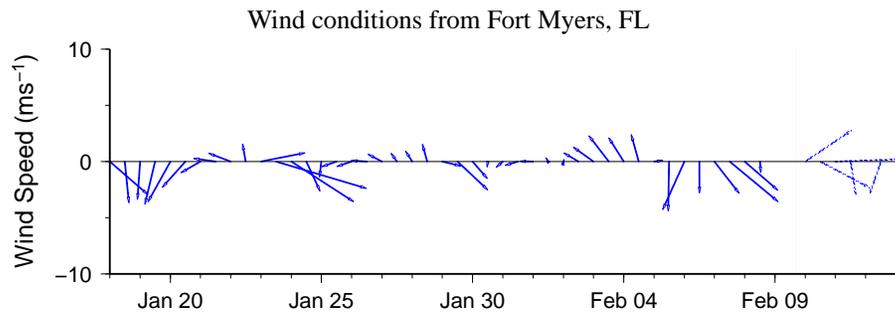
Wind Analysis

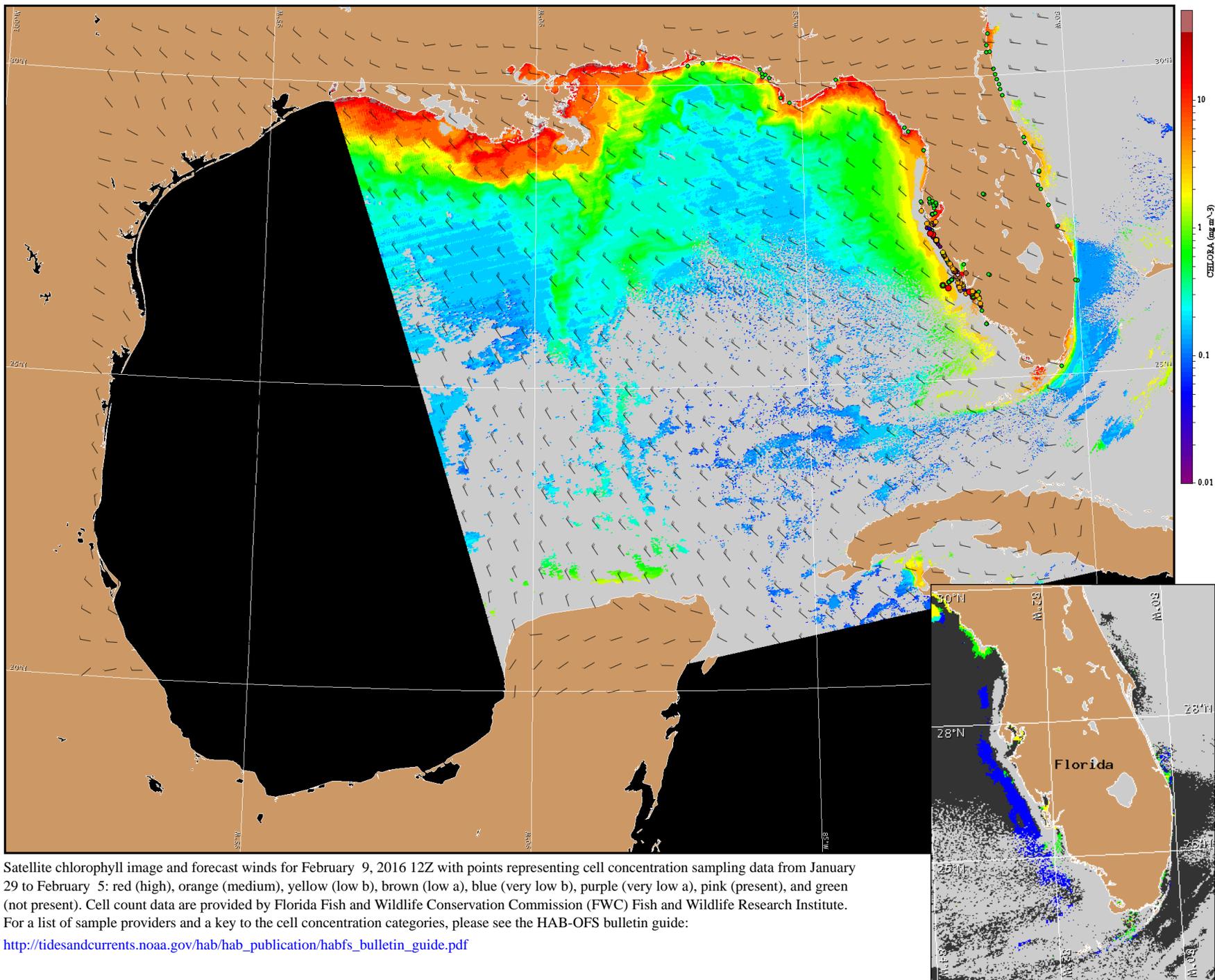
Englewood to Tarpon Springs (Venice): West winds (5-10kn, 3-5m/s) today increasing to 20-30kn (10-15m/s) in the afternoon through tonight. Northwest to west winds (10-25kn, 5-13m/s) Tuesday through Wednesday night. North to northeast winds (5-15kn, 3-8m/s) Thursday.

Bonita Beach to Englewood (Ft. Myers): North winds (5-10kn) today becoming west (20kn, 10m/s) in the afternoon. West to northwest winds (20-30kn) tonight through Tuesday night. Northwest winds (15kn, 8m/s) Wednesday becoming north (5-15kn) Thursday.



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 9, 2016 12Z with points representing cell concentration sampling data from January 29 to February 5: 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).