



Gulf of Mexico Harmful Algal Bloom Bulletin

Region: Southwest Florida

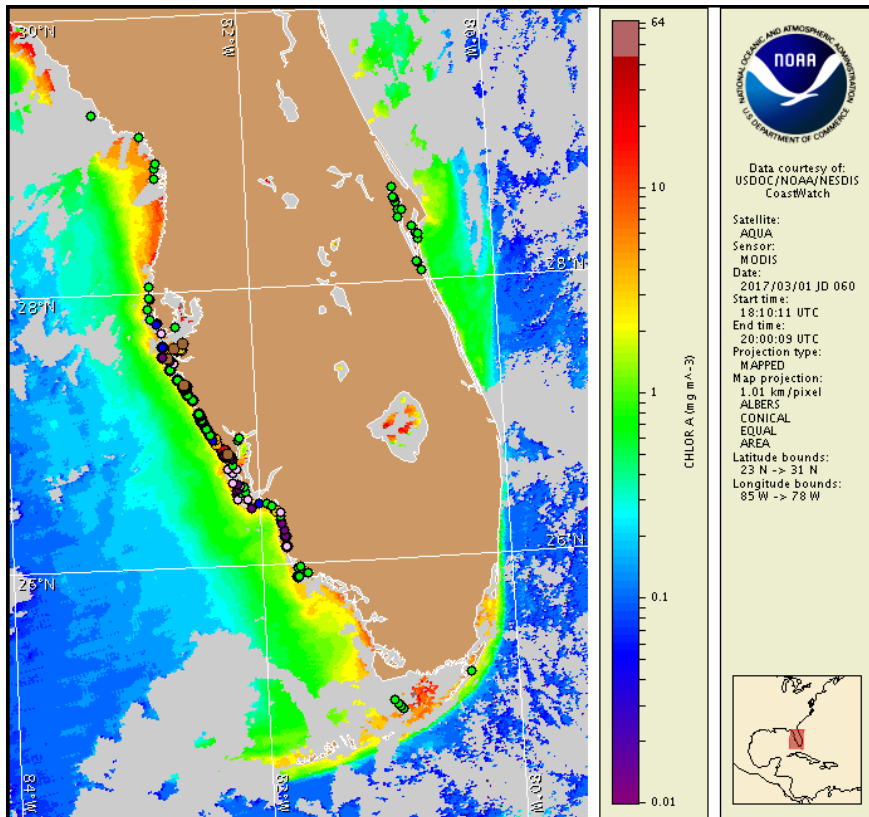
Thursday, 02 March 2017

NOAA National Ocean Service

NOAA Satellite and Information Service

NOAA National Weather Service

Last bulletin: Monday, February 27, 2017



Satellite chlorophyll image with possible *K. brevis* HAB areas shown by red polygon(s), when applicable. Points represent cell concentration sampling data from February 20 to March 1: 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, March 2 through Monday, March 6 is listed below:

County Region: Forecast (Duration)

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

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

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

Southern Manatee: Low (Th-M)

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

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

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

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

Northern Charlotte: Moderate (Th), Very Low (F-M)

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

Southern Charlotte: Low (Th-M)

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

Northern Lee: Very Low (Th-M)

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

Central Lee: Very Low (Th-M)

Central Lee, Bay regions: Very Low (Th-M)

South Lee: Moderate (Th), Very Low (F-M)

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

Northern Collier: Low (Th), Very Low (F-M)

Central Collier: Moderate (Th), Very Low (F-M)

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

Check https://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 https://tidesandcurrents.noaa.gov/hab/hab_health_info.html. Over the last few days, reports of respiratory irritation were received from Manatee, Sarasota, Charlotte, and Collier counties. Dead fish were reported in Manatee, Lee, and Collier counties.

Analysis

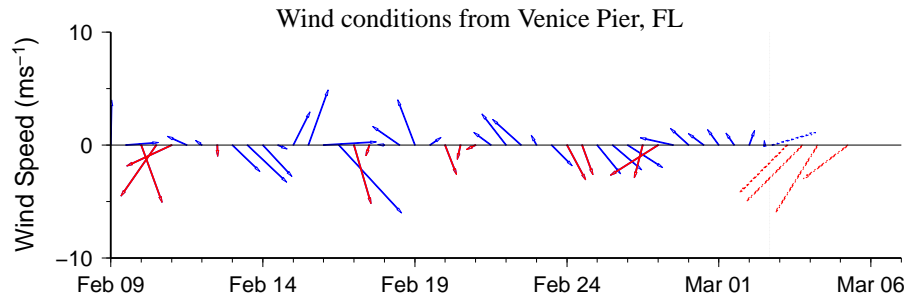
Recent samples collected along- and offshore the coast of southwest Florida from Pinellas to Collier counties identified not present to 'medium' concentrations of *Karenia brevis*, with the highest concentrations collected from the bay regions of northern Sarasota County (FWRI, MML, SCHD, CCPCD; 2/20-3/1). 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, 3/1) patches of elevated chlorophyll (2-5 $\mu\text{g/L}$) are visible but do not indicate the presence of chlorophyll anomalies with the

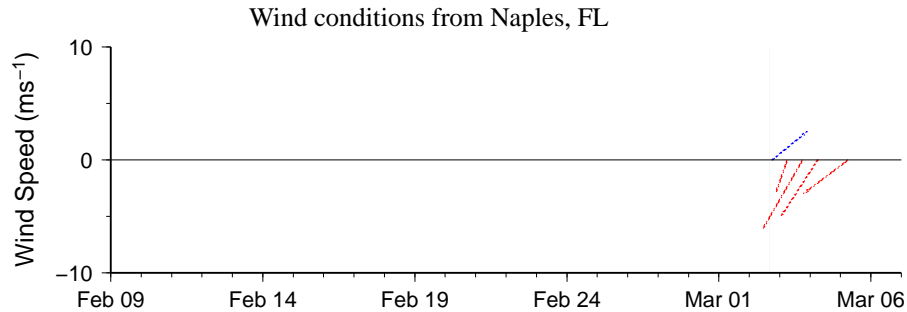
optical characteristics of *K. Brevis* alongshore southwest Florida from Pinellas to Monroe counties, including the Florida Keys.

Offshore winds forecasted Thursday night through Monday may minimize the potential for respiratory irritation alongshore southwest Florida.

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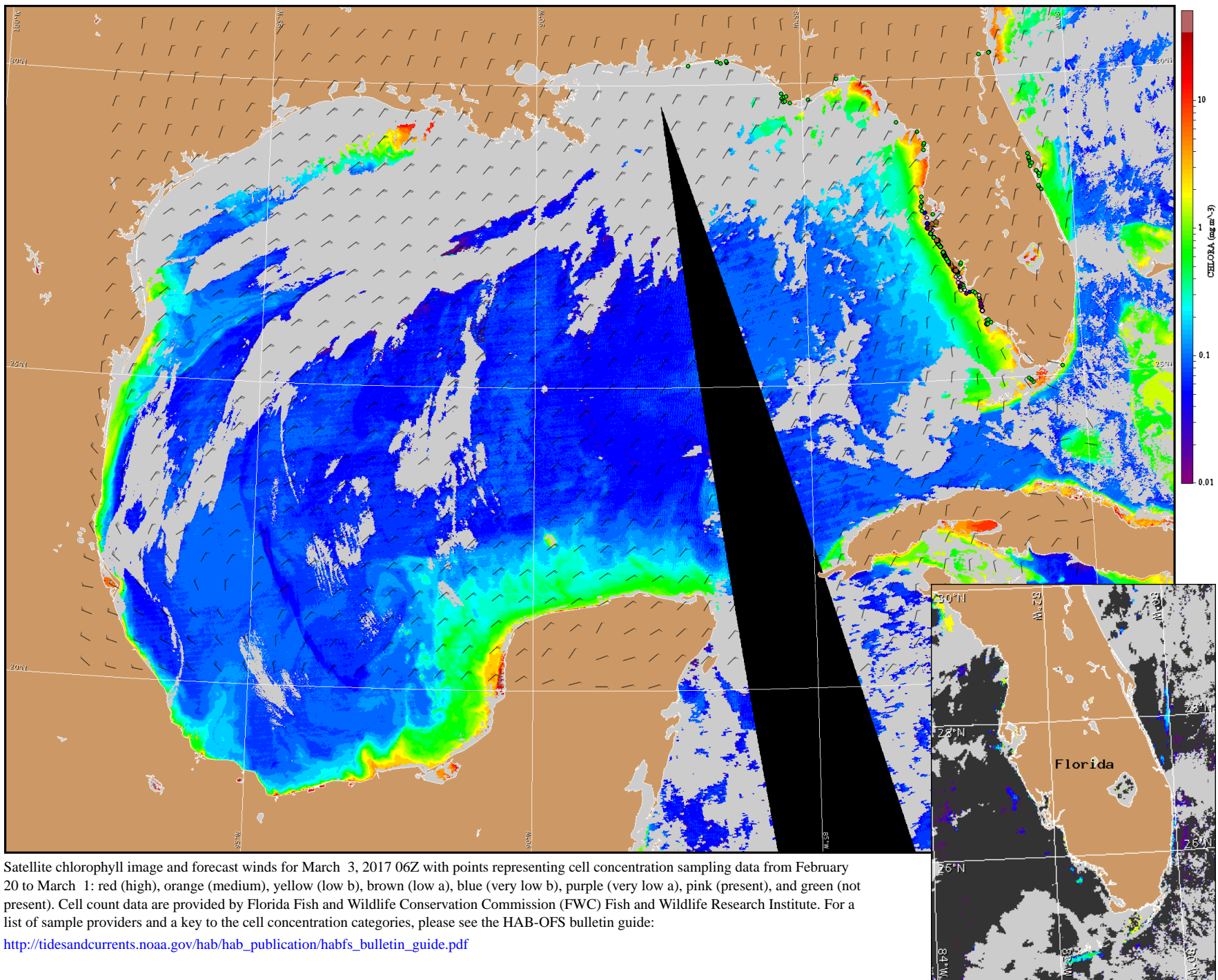
Wind speed and direction are averaged over 12 hours from buoy measurements. Length of line indicates speed; angle indicates direction. Red indicates that the wind direction favors upwelling near the coast. Values to the left of the dotted vertical line are measured values; values to the right are forecasts. Wind observation and forecast data provided by NOAA's National Weather Service (NWS).



Wind Analysis

Englewood to Tarpon Springs (Venice): Southwest winds (5kn, 3m/s) Thursday becoming northwest (5-20kn, 3-10m/s) in the afternoon. Northeast winds (20-25kn, 10-13m/s) Thursday night through Saturday becoming east (10-15kn, 5-8m/s) Saturday night through Monday.

Chokoloskee to Bonita Beach: South southwest winds (5kn, 3m/s) becoming west northwest (10-15kn, 5-8m/s) Thursday. North to northeast winds (10-25kn, 5-13m/s) Thursday night through Friday. East winds (15-25kn, 8-13m/s) Saturday through Monday.



Satellite chlorophyll image and forecast winds for March 3, 2017 06Z with points representing cell concentration sampling data from February 20 to March 1: 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 of high chlorophyll concentration shown in yellow (see p. 1 analysis for interpretation).