



Gulf of Mexico Harmful Algal Bloom Bulletin

Region: Southwest Florida

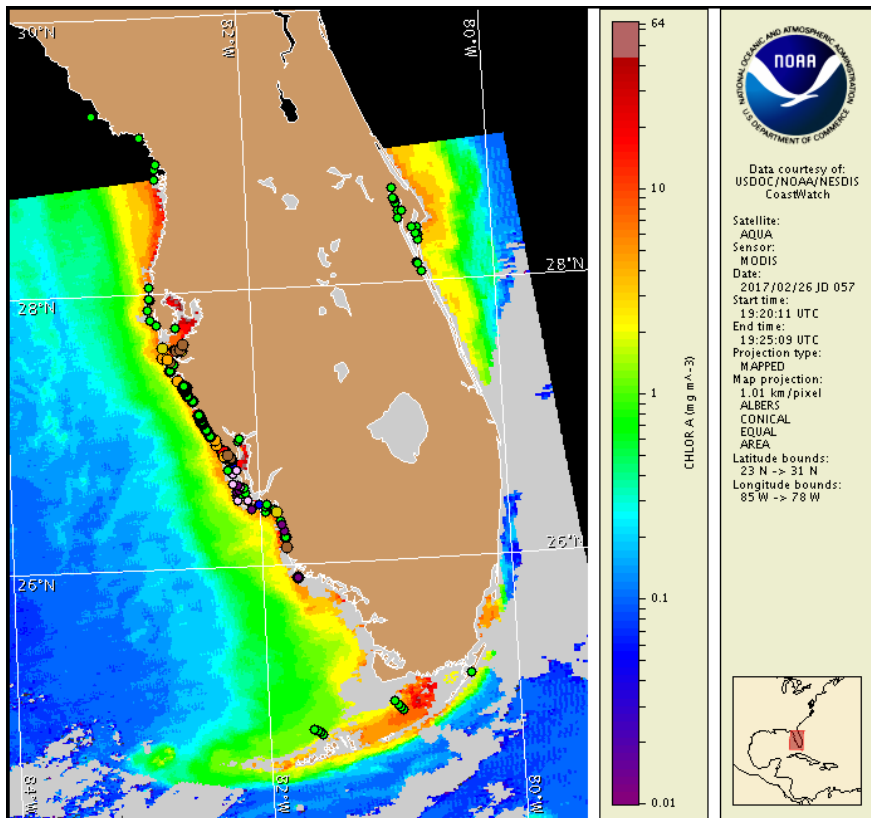
Monday, 27 February 2017

NOAA National Ocean Service

NOAA Satellite and Information Service

NOAA National Weather Service

Last bulletin: Thursday, February 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 February 17 to 24: 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 Monday, February 27 through Thursday, March 2 is listed below:

County Region: Forecast (Duration)

Southern Pinellas: Low (M-Th)

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

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

Southern Manatee: Moderate (M-Th)

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

Northern Sarasota: Moderate (M-Th)

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

Southern Sarasota: Moderate (M-Th)

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

Northern Charlotte: Moderate (M-Th)

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

Southern Charlotte: Moderate (M-Th)

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

Northern Lee: Very Low (M-Th)

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

Central Lee: Very Low (M-Th)

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

South Lee: Moderate (M-Th)

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

Northern Collier: Low (M-Th)

Central Collier: Moderate (M, W), Low (Tu, Th)

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

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, and Collier counties. Dead fish were reported in Manatee, Sarasota, Lee, and Collier counties.

Analysis

Recent samples collected along- and offshore the coast of southwest Florida from Pinellas to Monroe counties identified not present to 'medium' concentrations of *Karenia brevis*, with 'medium' concentrations present from southern Manatee County to southern Sarasota County (FWRI, MML, SCHD, CCENRD; 2/17-2/24). 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, 2/26), patches of elevated chlorophyll (2-6 $\mu\text{g/L}$) with some of the optical characteristics of *K. brevis* were visible from Pinellas to

Collier counties alongshore southwest Florida.

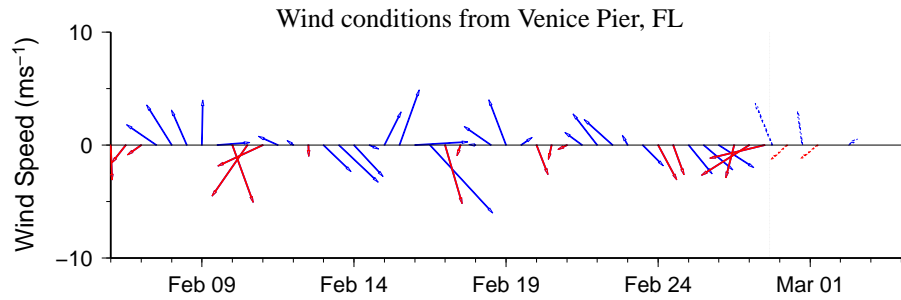
Variable winds forecasted today through Thursday may minimize the potential for transport of surface *K. brevis* concentrations alongshore southwest Florida.

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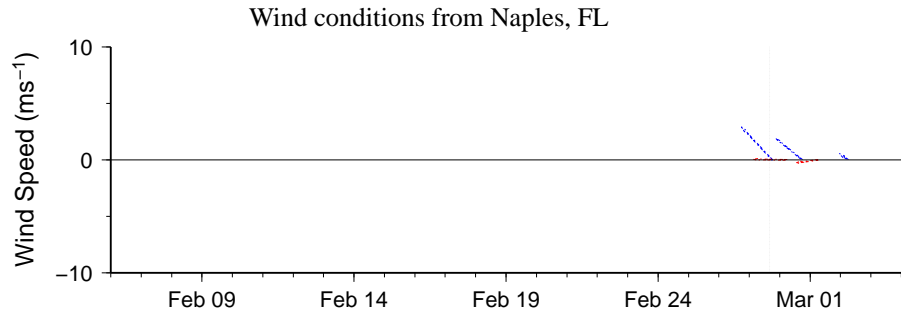
Wind Analysis

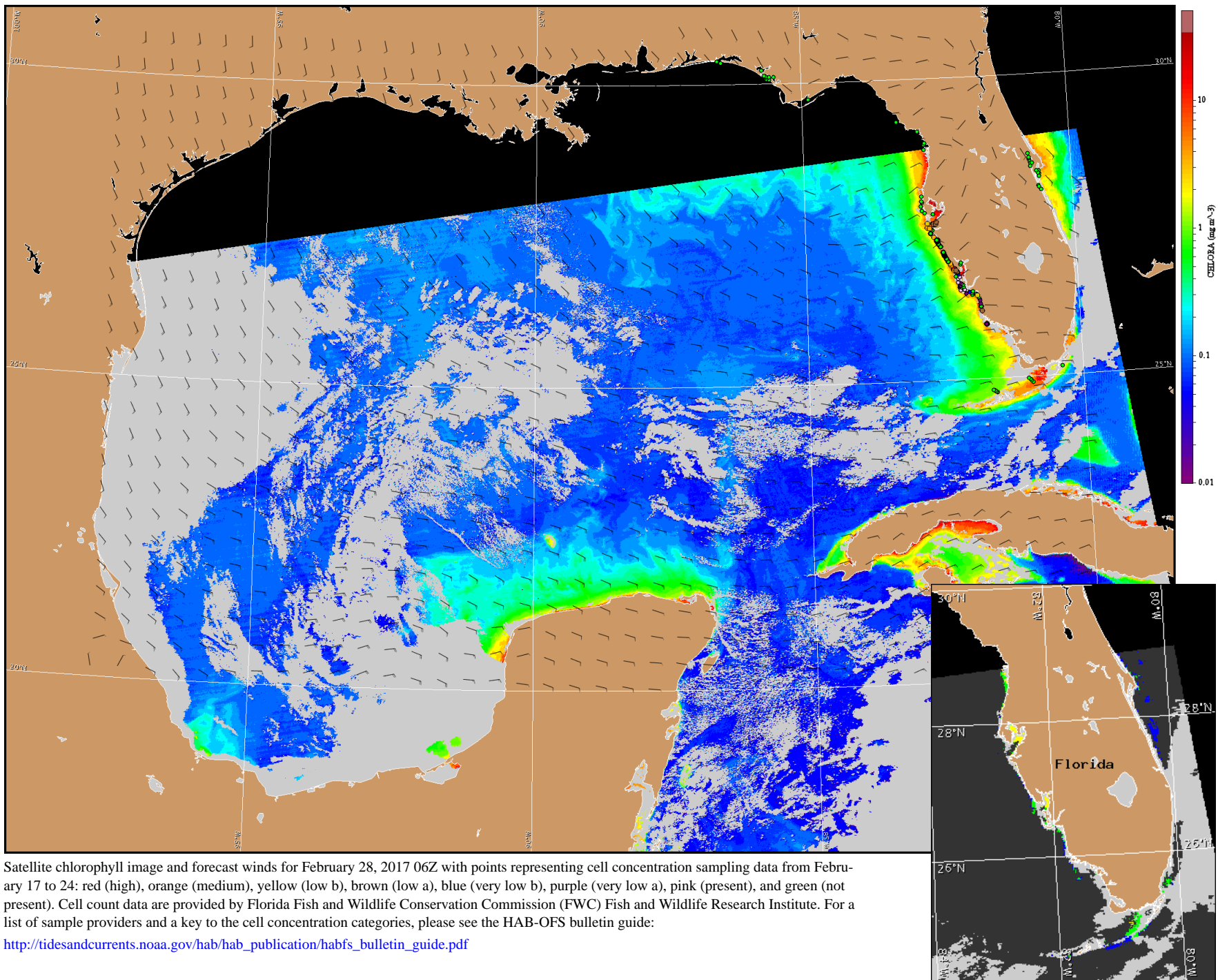
Englewood to Tarpon Springs (Venice): Southeast winds (15-20kn, 8-10m/s) Monday becoming variable winds (5-10kn, 3-5m/s) Monday afternoon through Thursday.

Chokoloskee to Bonita Beach: East to southeast winds (5-15kn, 3-8m/s) today through Thursday becoming west to southwest winds (5kn, 3m/s) Thursday evening.



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 28, 2017 06Z with points representing cell concentration sampling data from February 17 to 24: 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).