



Gulf of Mexico Harmful Algal Bloom Bulletin

Region: Southwest Florida

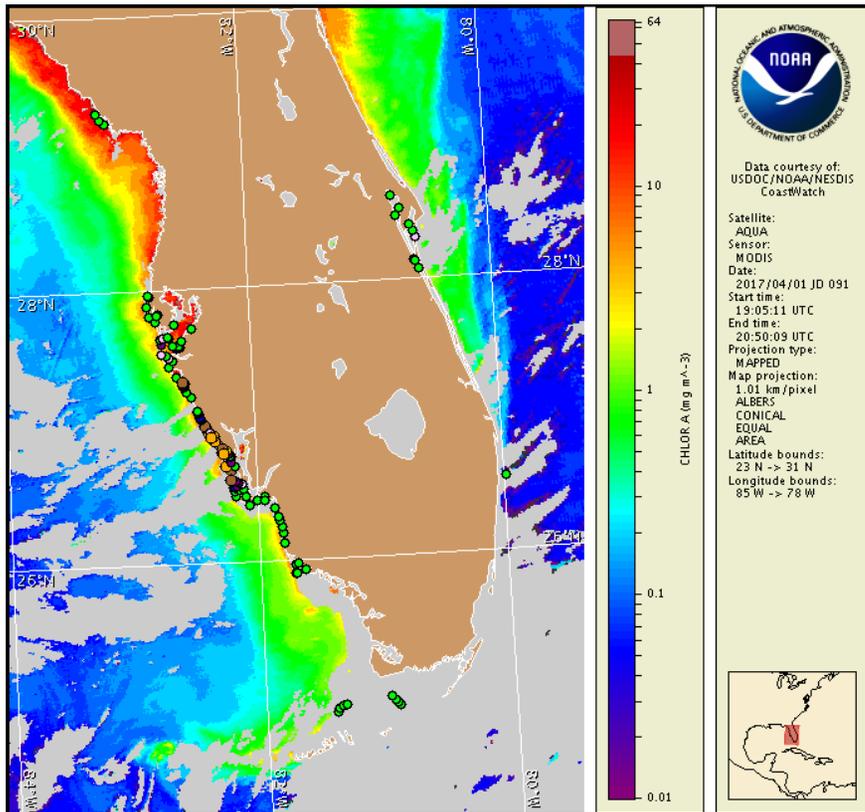
Monday, 03 April 2017

NOAA National Ocean Service

NOAA Satellite and Information Service

NOAA National Weather Service

Last bulletin: Thursday, March 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 March 24 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 Monday, April 3 through Thursday, April 6 is listed below:

County Region: Forecast (Duration)

Southern Pinellas: Very Low (M-Th)

Southern Manatee: Very Low (M-Th)

Northern Sarasota: Low (M-Th)

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

Southern Sarasota: Moderate (M-Th)

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

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

Central Lee: Very Low (M-Th)

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

Southern Lee: Very Low (M-Th)

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

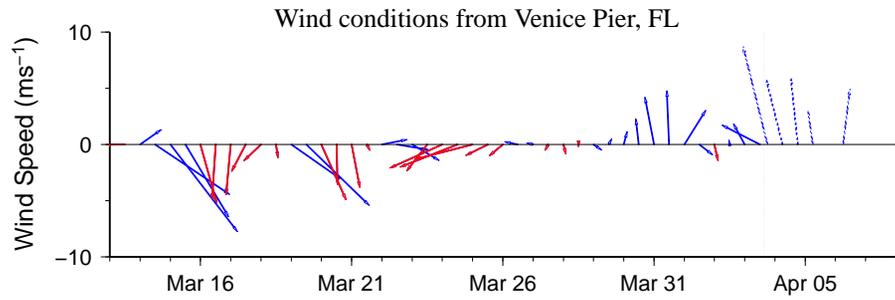
Check https://tidesandcurrents.noaa.gov/hab/beach_conditions.html for recent, local observations. Health information, from the Florida Department of Health and other agencies, is available at https://tidesandcurrents.noaa.gov/hab/hab_health_info.html. Over the past several days, reports of respiratory irritation were received from Sarasota County. Reports of dead fish were received from Lee County.

Analysis

Samples collected along- and offshore the coast of southwest Florida from Pinellas to Monroe counties, including the Florida Keys, continue to identify not present to 'medium' concentrations of *Karenia brevis*, with the highest concentrations present alongshore and in the bay regions from southern Sarasota to southern Charlotte counties (FWRI, MML, SCHD, CCENRD; 3/24-3/31). 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, 4/1) is partially obscured by clouds from Sarasota to Monroe counties, limiting analysis; however, patches of elevated chlorophyll (2-7 $\mu\text{g/L}$) are visible with some of the optical characteristics of *K. brevis* alongshore southwest Florida from Pinellas to Lee counties.

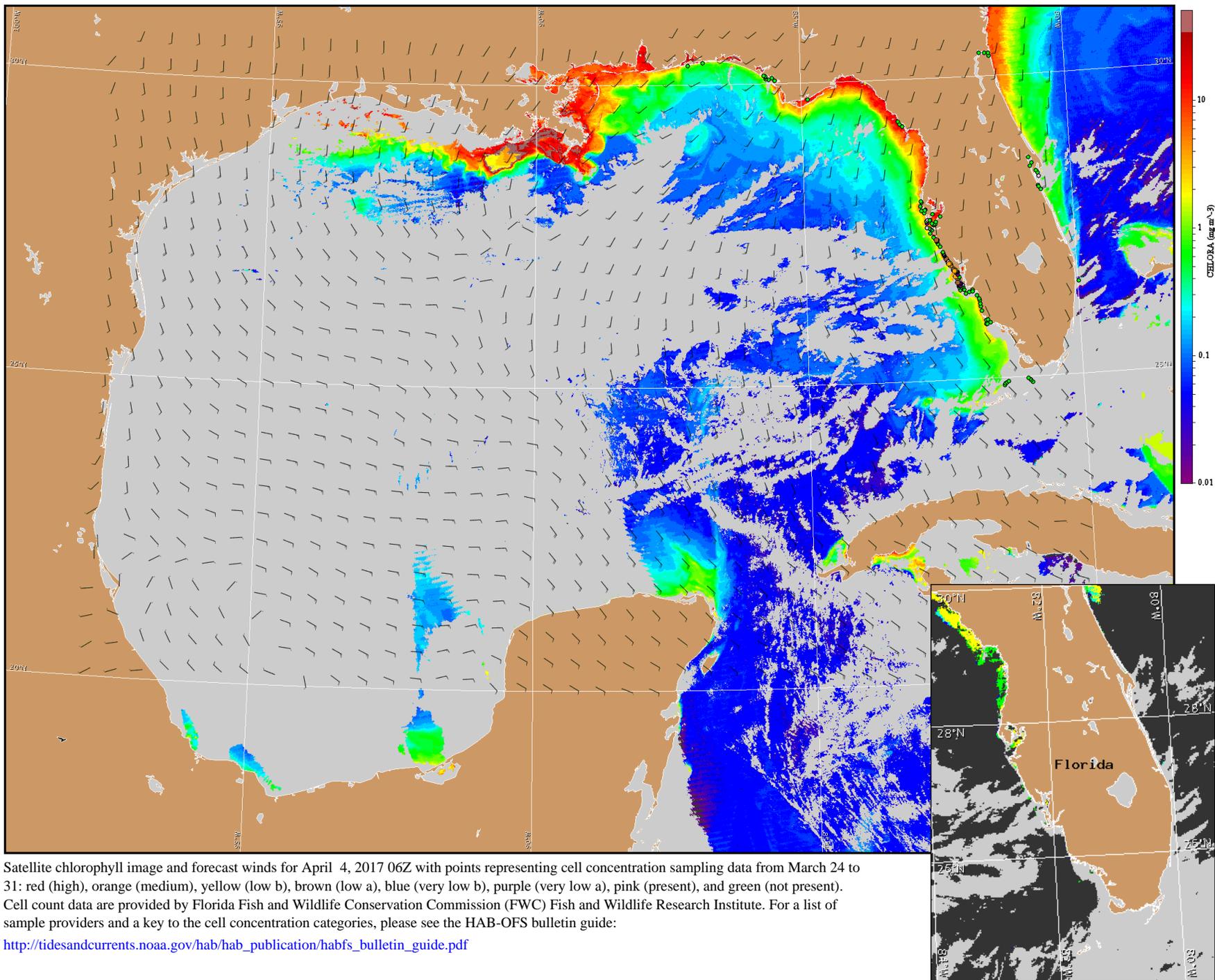
Southeast to south winds forecasted today through Wednesday may promote the potential for northerly transport of surface *K. brevis* concentrations alongshore southwest Florida.



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 to south winds (5-20kn, 3-10m/s) today through Wednesday. Southwest winds (15kn, 8m/s) Wednesday night. Northwest winds (15-20kn, 8-10m/s) Thursday.



Satellite chlorophyll image and forecast winds for April 4, 2017 06Z with points representing cell concentration sampling data from March 24 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).