



Gulf of Mexico Harmful Algal Bloom Bulletin

Region: Southwest Florida

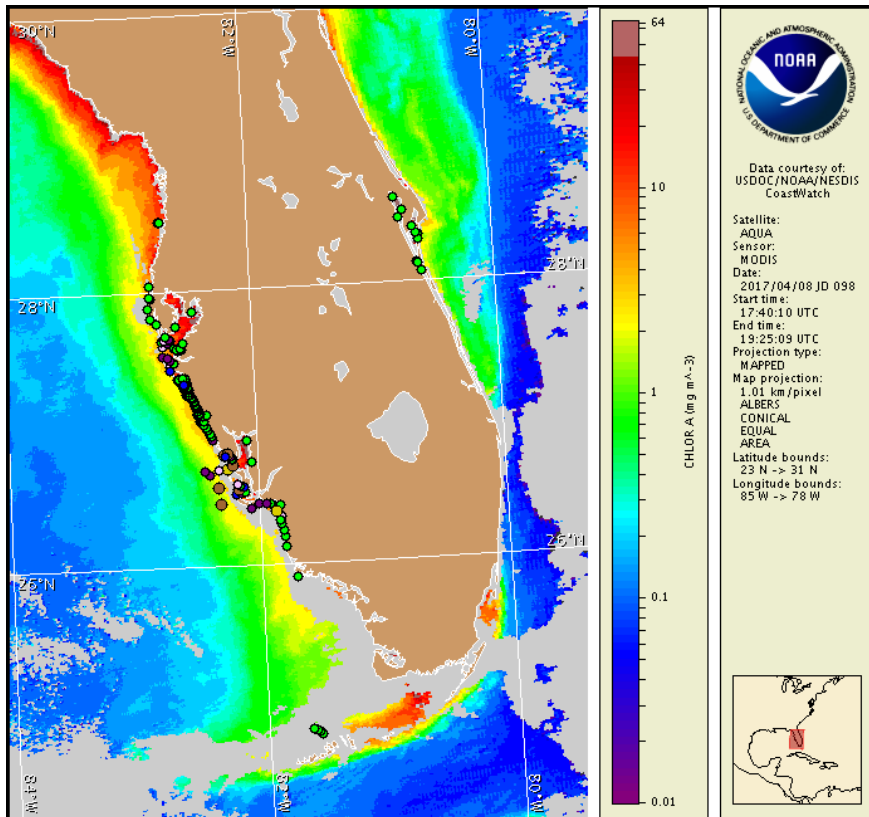
Monday, 10 April 2017

NOAA National Ocean Service

NOAA Satellite and Information Service

NOAA National Weather Service

Last bulletin: Thursday, April 6, 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 31 to April 7: 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 10 through Thursday, April 13 is listed below:

County Region: Forecast (Duration)

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

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

Southern Manatee: Very Low (M-Th)

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

Northern Sarasota: Low (M-Th)

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

Southern Sarasota: Low (M-Th)

Northern Charlotte: Low (M-Th)

Southern Charlotte: Low (M-Th)

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

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

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

Central Lee: Very Low (M-Th)

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

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

Southern Lee, bay regions: 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 have been received from Manatee and Sarasota counties. Dead fish have been reported in Sarasota and Lee counties.

Analysis

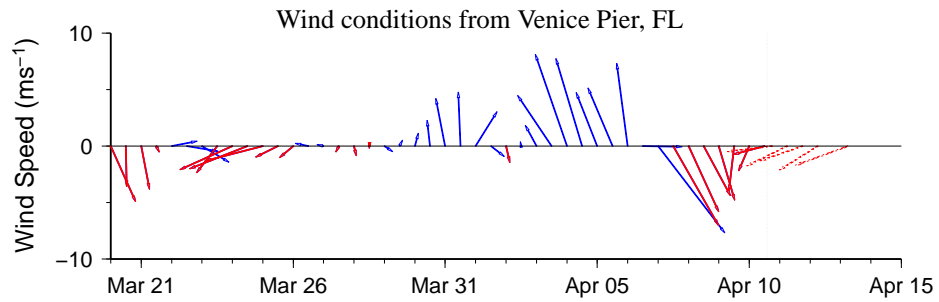
Samples collected along- and offshore the coast of southwest Florida from Pinellas to Monroe counties, including the Florida Keys, continue to identify not present to 'medium' concentrations of *Karenia brevis*, with the highest concentrations present in the bay regions of northern Sarasota County (FWRI, MML, SCHD, CCPC; 3/31-4/7). Up to 'low b' concentrations are present alongshore northern and southern Lee County (FWRI: 4/3, 4/5). 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, 4/8) is partially obscured by clouds alongshore northern Pinellas County and from Charlotte to Collier counties, limiting analysis; however, patches of elevated chlorophyll (2-4 $\mu\text{g/L}$) are visible offshore Manatee and Sarasota counties with some of the optical characteristics of *K. brevis*.

Offshore winds forecasted Tuesday through Thursday may minimize the potential for

respiratory irritation alongshore southwest Florida.

Keeney, Kavanaugh

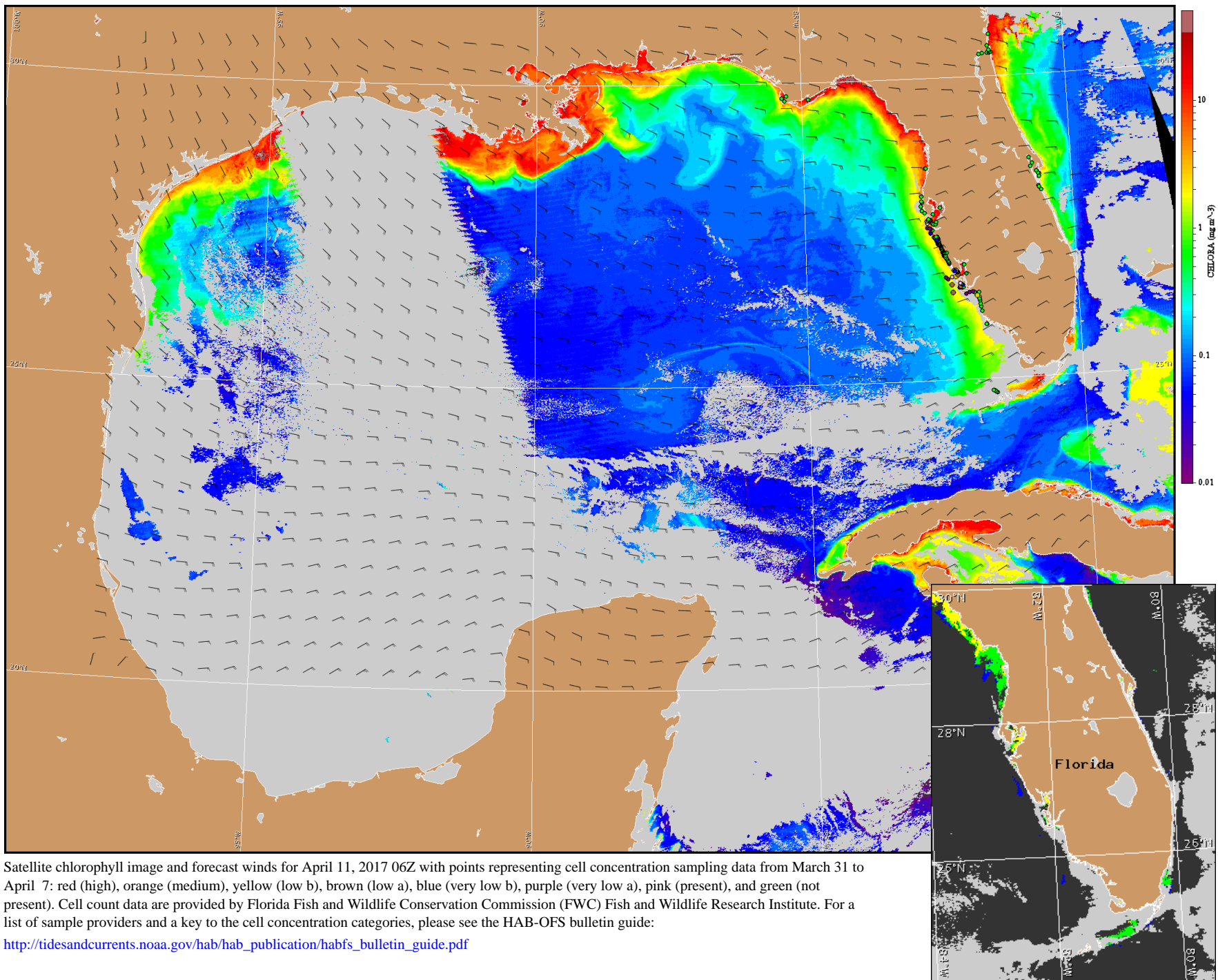


Wind speed and direction are averaged over 12 hours from buoy measurements. Length of line indicates speed; angle indicates direction. Red indicates that the wind direction favors upwelling near the coast. Values to the left of the dotted vertical line are measured values; values to the right are forecasts.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

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Wind Analysis

Englewood to Tarpon Springs (Venice): Variable winds (5-15kn, 3-8m/s) today through Tuesday. Northeast to north winds (5-15kn) Wednesday becoming east to northeast winds (5-15kn) Wednesday night through Thursday.



Satellite chlorophyll image and forecast winds for April 11, 2017 06Z with points representing cell concentration sampling data from March 31 to April 7: 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

Verified and suspected HAB areas shown in red. Other areas with *K. brevis* optical characteristics shown in yellow (see p. 1 analysis for interpretation).