



Gulf of Mexico Harmful Algal Bloom Bulletin

Region: Southwest Florida

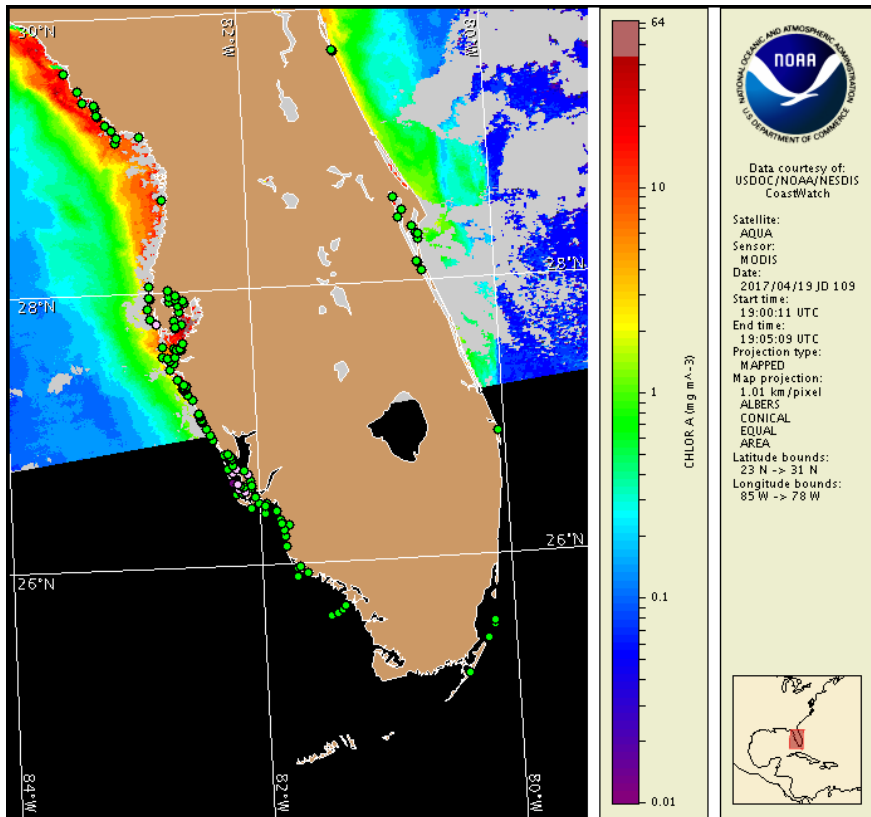
Thursday, 20 April 2017

NOAA National Ocean Service

NOAA Satellite and Information Service

NOAA National Weather Service

Last bulletin: Monday, April 17, 2017



Satellite chlorophyll image with possible *K. brevis* HAB areas shown by red polygon(s), when applicable. Points represent cell concentration sampling data from April 10 to 19: 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 low 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, April 20 through Monday, April 24 is listed below:

County Region: Forecast (Duration)

Southern Manatee: None (Th), Very Low (F-M)

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

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

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

Southern Sarasota: Very Low (Th-M)

Northern Charlotte: None (Th), Very Low (F-M)

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

Central Lee, bay regions: Very Low (Th-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. Dead fish have been reported in Lee County.

Analysis

Recent samples collected alongshore the coast of southwest Florida from Pinellas to Monroe counties indicate *Karenia brevis* is present in up to 'very low a' concentrations along the coast of southwest Florida, with the highest concentrations present in the bay regions of northern Sarasota County (FWRI, SCHD, CCPC; 4/10-19). Samples collected alongshore Sarasota County and in the bay regions of northern and central Lee County indicate that *K. brevis* ranges between not present and 'background' concentrations (FWRI, SCHD; 4/11-17). Detailed sample information and a summary of impacts can be obtained through FWC Fish and Wildlife Research Institute at:

<http://myfwc.com/redtidestatus>.

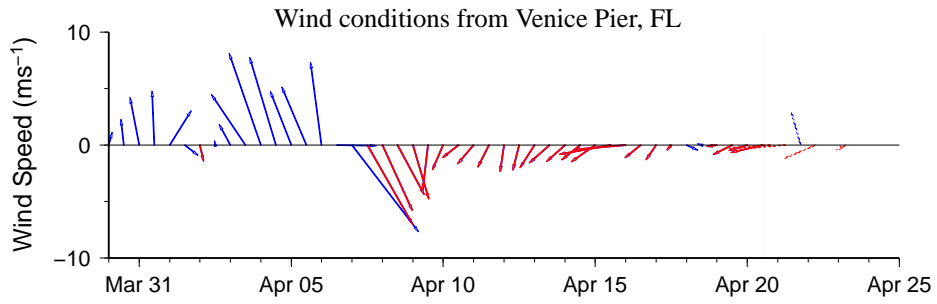
Recent satellite imagery (composite image not available-MODIS Aqua, 4/19 19:00; shown left) has been partially obscured by clouds alongshore southern Manatee to Monroe counties, limiting analysis. No patches of elevated chlorophyll with the optical characteristics of *K. brevis* were visible along- and offshore the coast of southwest Florida.

Variable winds forecasted today through Monday may minimize the transport of *K. brevis* concentrations.

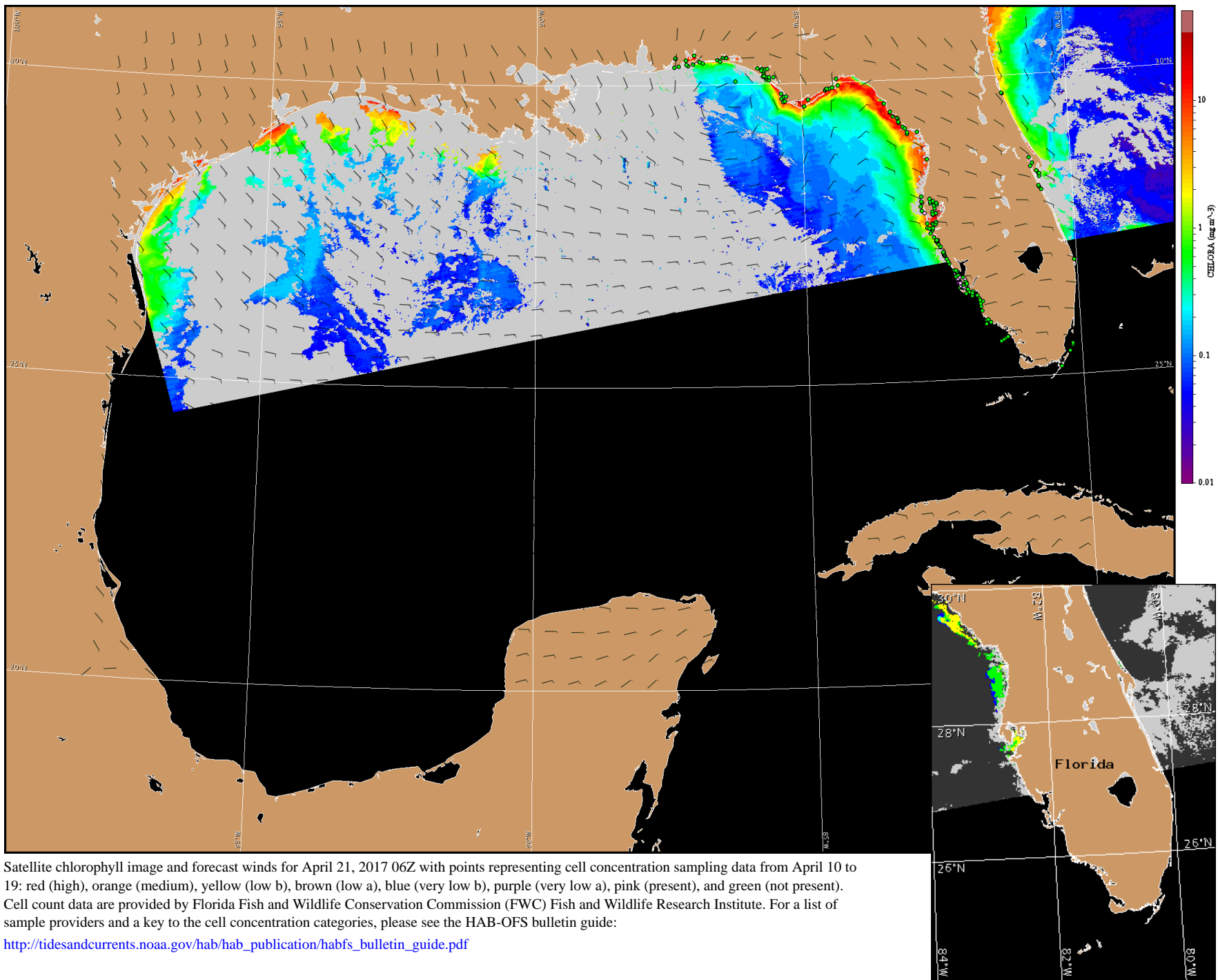
Kavanaugh, Keeney

Wind Analysis

Englewood to Tarpon Springs (Venice): Variable winds (5-15kn, 3-8m/s) today through Monday.



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 April 21, 2017 06Z with points representing cell concentration sampling data from April 10 to 19: 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).