



Gulf of Mexico Harmful Algal Bloom Bulletin

Region: Southwest Florida

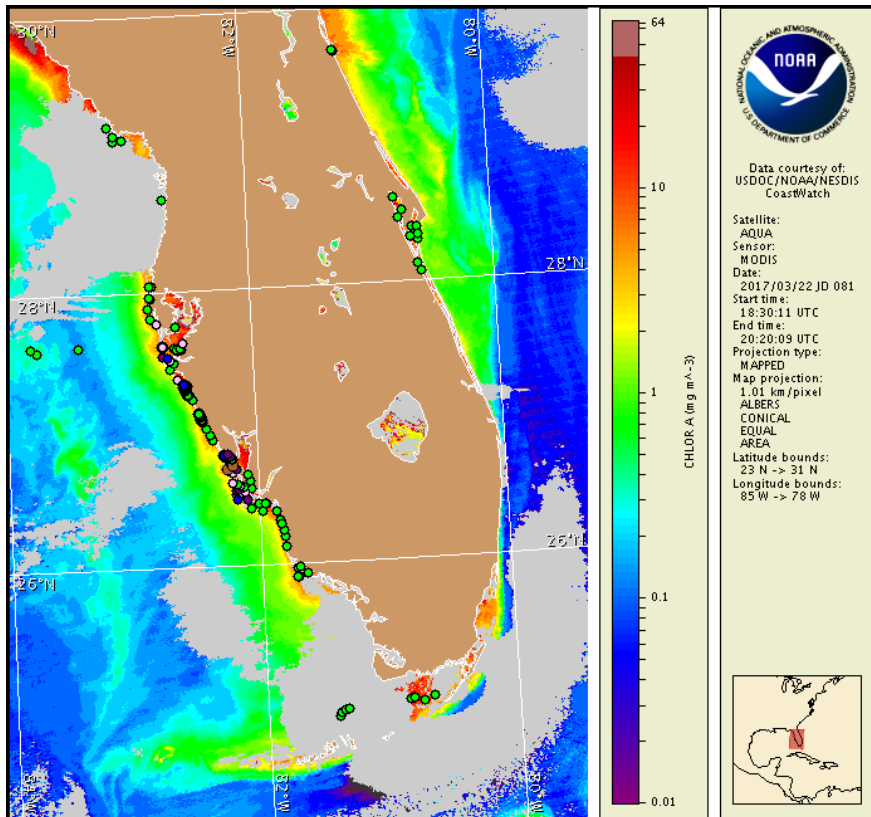
Thursday, 23 March 2017

NOAA National Ocean Service

NOAA Satellite and Information Service

NOAA National Weather Service

Last bulletin: Monday, March 20, 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 13 to 21: 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 Thursday, March 23 through Monday, March 27 is listed below:

County Region: Forecast (Duration)

Southern Manatee: Very Low (Th-M)

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

Northern Sarasota: Very Low (Th-Sa), Low (Su-M)

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

Southern Sarasota: Very Low (Th-M)

Southern Charlotte: Very Low (Th-M)

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

Northern Lee: Very Low (Th-Sa), Low (Su-M)

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

Central Lee: Very Low (Th-Sa), Low (Su-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. Over the past several days, there have been no reports of respiratory irritation. Dead fish were reported in Sarasota and Lee counties.

Analysis

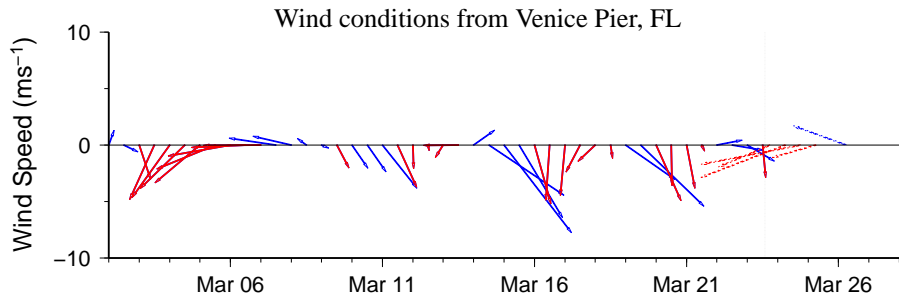
Recent sampling indicates 'very low a' to 'low a' *Karenia brevis* concentrations alongshore and in the bay regions of southwest Florida from southern Manatee to central Lee counties (FWRI, MML, SCHD, CCPCD; 3/16-3/21). A single 'medium' *K. brevis* concentration was identified at New Pass in the bay region of northern Sarasota County (MML; 3/21). Alongshore southern Pinellas County, recent sampling indicates *K. brevis* concentrations have decreased to 'background' from up to 'low a' at Mullet Key and John's Pass (FWRI; 3/20). 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, 3/22) does not indicate the presence of chlorophyll anomalies with the optical characteristics of *K. brevis* along southwest Florida from Pinellas to Collier counties.

Variable winds forecast Saturday through Monday will minimize the potential for transport of surface *K. brevis* concentrations alongshore southwest Florida.

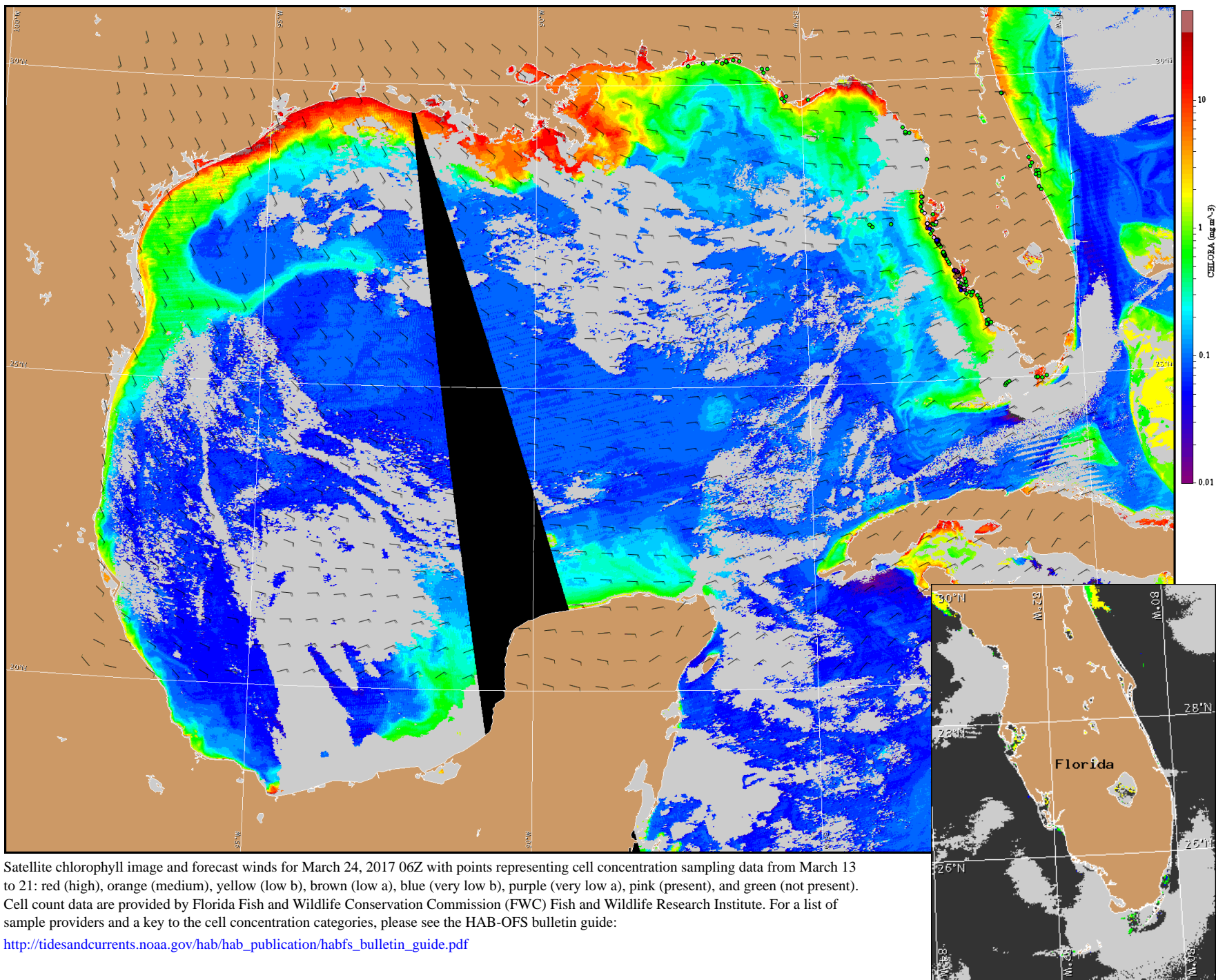
Davis, Ludema



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): Northeast to east winds (5-20kn, 3-10m/s) today. East winds (5-15kn, 3-8m/s) Friday. Variable winds (5-10kn, 3-5m/s) Saturday through Sunday. East to southeast winds (5-10kn) Monday.



Satellite chlorophyll image and forecast winds for March 24, 2017 06Z with points representing cell concentration sampling data from March 13 to 21: 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).