



Gulf of Mexico Harmful Algal Bloom Bulletin

Region: Southwest Florida

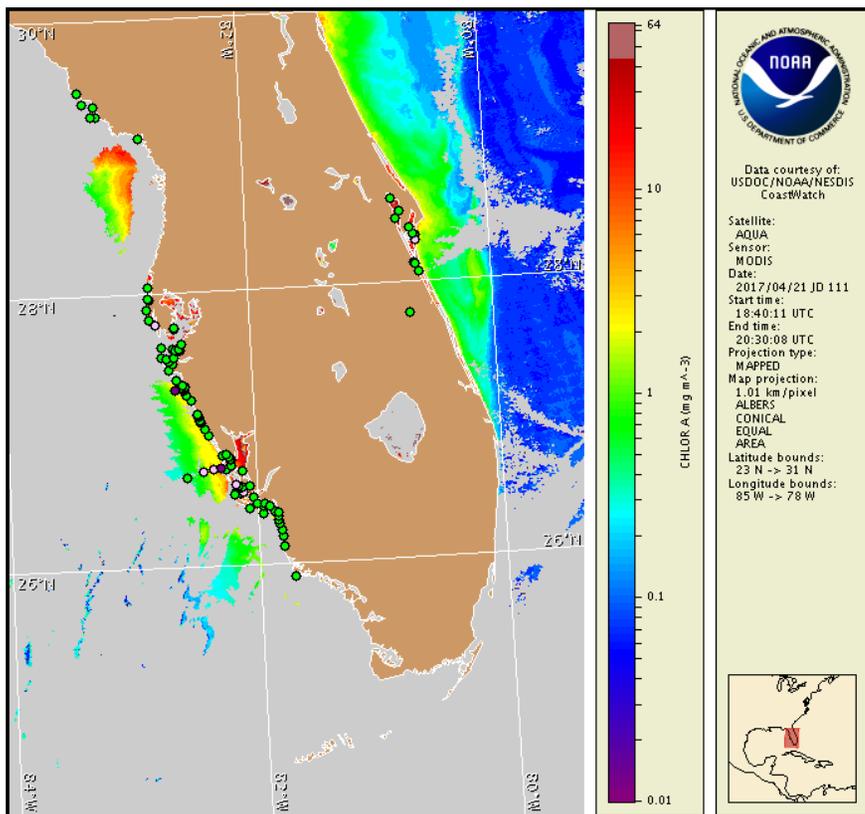
Monday, 24 April 2017

NOAA National Ocean Service

NOAA Satellite and Information Service

NOAA National Weather Service

Last bulletin: Thursday, April 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 April 14 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 very 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 Monday, April 24 through Thursday, April 27 is listed below:

County Region: Forecast (Duration)

Northern Sarasota: Very Low (M-Th)

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

Northern 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. There have been no reports of dead fish or respiratory irritation over the last several days.

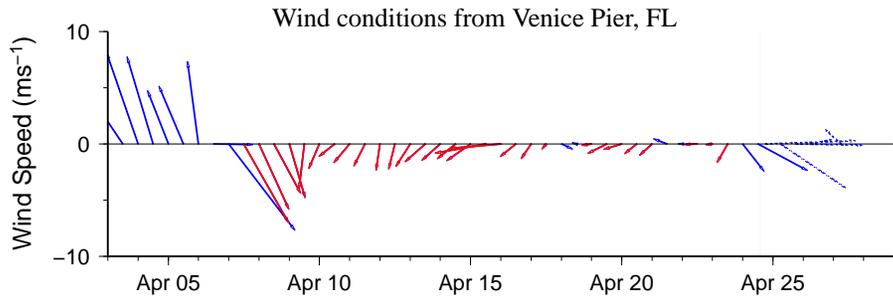
Analysis

Recent samples collected from Pinellas to Monroe counties indicate *Karenia brevis* is present in up to 'background' concentrations alongshore, and up to 'very low a' concentrations 2 miles offshore northern Sarasota County and 1.6 miles offshore of Gasparilla Island State Park alongshore northern Lee County (FWRI, SCHD, CCPC; 4/14-4/21). 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, 4/21) is mostly obscured by clouds alongshore the coast of southwest Florida, limiting analysis; however, patches of elevated chlorophyll (2-5 $\mu\text{g/L}$) are visible offshore Sarasota and Lee counties, but do not indicate the presence of chlorophyll anomalies with the optical characteristics of *K. brevis*.

Northwest winds Monday and Tuesday may increase the potential for southerly transport of surface *K. brevis* concentrations.

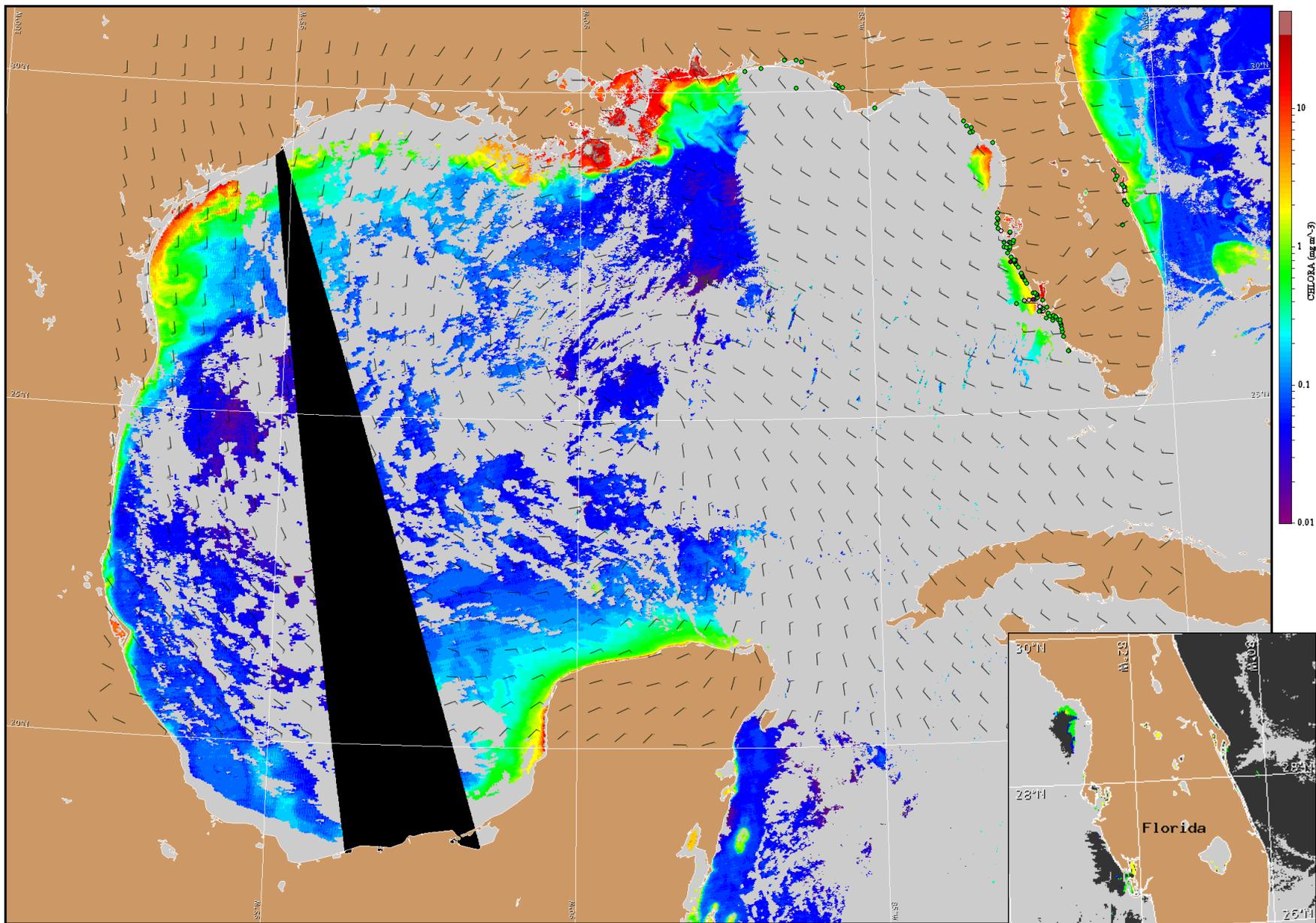
Keeney, Davis



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): Northwest to west winds (10-20kn, 5-10m/s) today and Tuesday. South to southeast winds (5-10kn, 3-5m/s) Wednesday and Thursday.



Satellite chlorophyll image and forecast winds for April 25, 2017 06Z with points representing cell concentration sampling data from April 14 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).