



# Gulf of Mexico Harmful Algal Bloom Bulletin

Region: Southwest Florida

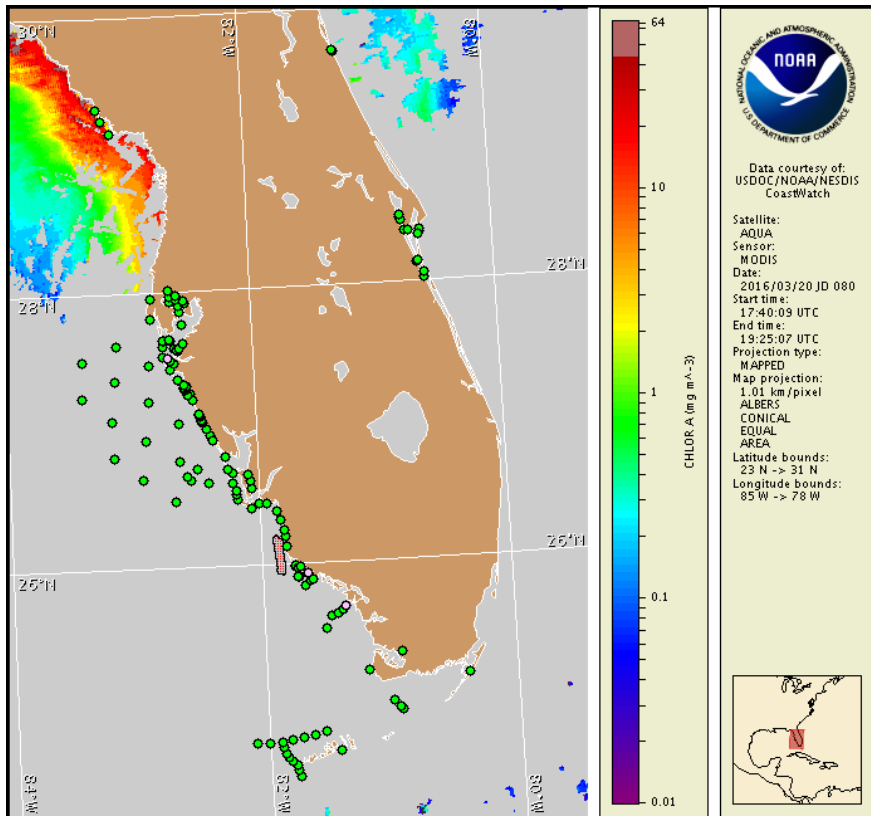
Monday, 21 March 2016

NOAA National Ocean Service

NOAA Satellite and Information Service

NOAA National Weather Service

Last bulletin: Thursday, March 17, 2016



Satellite chlorophyll image with possible *K. brevis* HAB areas shown by red polygon(s), when applicable. Points represent cell concentration sampling data from March 11 to 18: 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](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

*Karenia brevis* (commonly known as Florida red tide) ranges from not present to background concentrations along the coast of southwest Florida and is not present in the Florida Keys. No respiratory irritation is expected alongshore southwest Florida Monday, March 21 through Thursday, March 24.

Check [http://tidesandcurrents.noaa.gov/hab/beach\\_conditions.html](http://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 [http://tidesandcurrents.noaa.gov/hab/hab\\_health\\_info.html](http://tidesandcurrents.noaa.gov/hab/hab_health_info.html). A fish kill has been reported in Sarasota County.

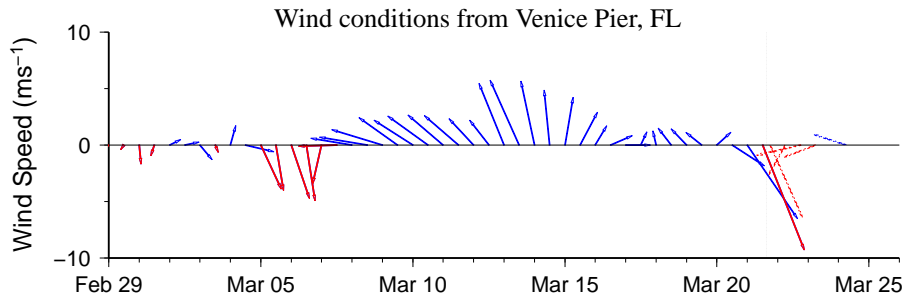
## Analysis

Recent samples collected along-and offshore southwest Florida indicate that *Karenia brevis* concentrations range from not present to background from Pinellas to Monroe counties (FWRI, MML, SCHD, CCENRD; 3/12-17). Up to background concentrations of *K. brevis* are present alongshore Manatee, Collier, and Monroe counties (FWRI, MML; 3/14-17). The most recent samples received from along- and offshore the Florida Keys indicate that *K. brevis* is not present (MML; 3/14-16). 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, 3/20) is completely obscured by clouds along the coast of southwest Florida, preventing analysis of this region. In MODIS Aqua imagery from 3/15 (not shown), a patch of elevated chlorophyll (1-10  $\mu\text{g/L}$ ) with the optical characteristics of *K. brevis* is visible extending from along- and offshore central Collier County to offshore Monroe County.

Northerly winds forecast today through Tuesday may promote southerly transport of any remaining surface *K. brevis* concentrations alongshore southwest Florida.

Derner, Lalime

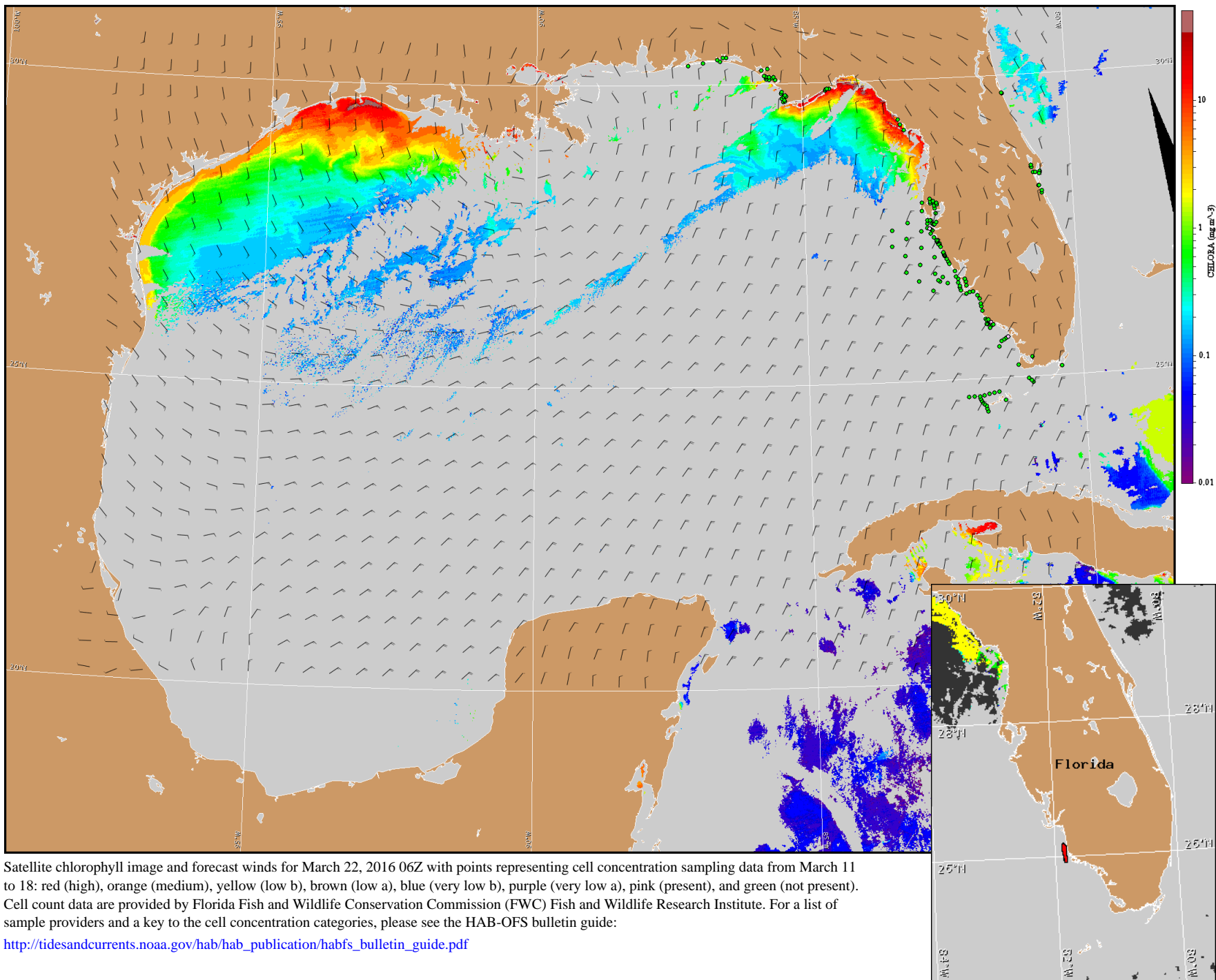


Wind speed and direction are averaged over 12 hours from buoy measurements. Length of line indicates speed; angle indicates direction. Red indicates that the wind direction favors upwelling near the coast. Values to the left of the dotted vertical line are measured values; values to the right are forecasts.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

## Wind Analysis

**Englewood to Tarpon Springs (Venice):** North winds (15-25kn, 8-13m/s) today through tonight becoming northeast (5-15kn, 3-8m/s) Tuesday. North winds (10kn, 5m/s) Tuesday night becoming east-southeast (5-15kn, 3-8m/s) Wednesday through Thursday.

**Chokoloskee to Bonita Beach:** North winds (15-30kn, 8-15m/s) today becoming north northeast (15-20kn, 8-10m/s) tonight. East northeast winds (15-20kn) Tuesday becoming east (10-15kn, 5-8m/s) Tuesday night. East southeast winds (10-15kn) Wednesday. South southeast winds (5-10kn, 3-5m/s) Thursday.



Satellite chlorophyll image and forecast winds for March 22, 2016 06Z with points representing cell concentration sampling data from March 11 to 18: 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).