



# Gulf of Mexico Harmful Algal Bloom Bulletin

Region: Southwest Florida

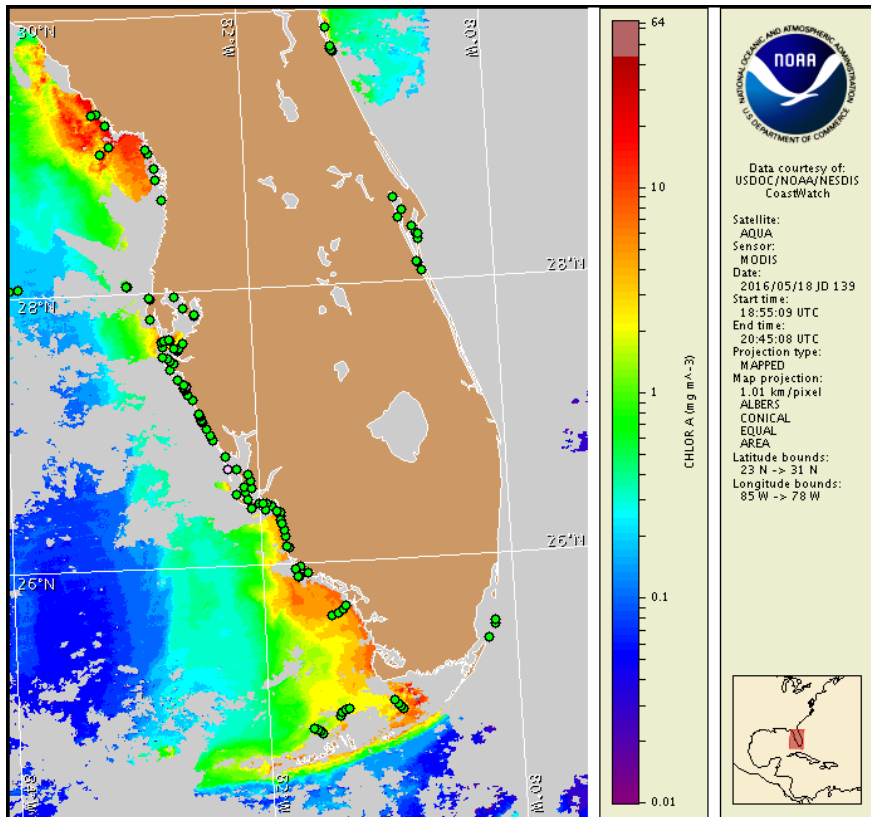
Thursday, 19 May 2016

NOAA National Ocean Service

NOAA Satellite and Information Service

NOAA National Weather Service

Last bulletin: Monday, May 16, 2016



Satellite chlorophyll image with possible *K. brevis* HAB areas shown by red polygon(s), when applicable. Points represent cell concentration sampling data from May 9 to 17: 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

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 Thursday, May 19 to Monday, May 23 is listed below:

**County Region: Forecast (Duration)**

**Northern Sarasota: Very Low (Th-M)**

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

**All Other SWFL County Regions: None expected (Th-M)**

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).

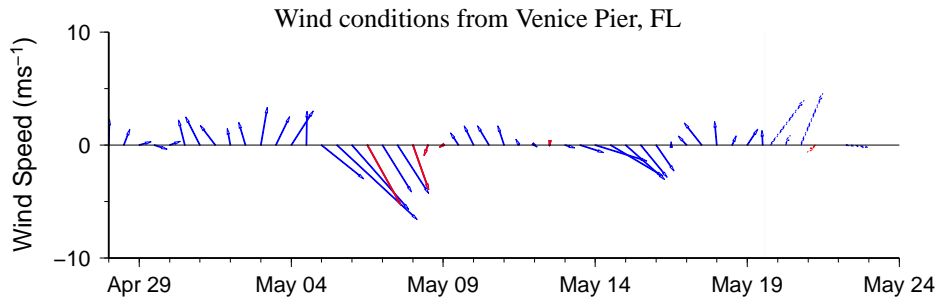
## Analysis

Recent samples collected along- and offshore the coast of southwest Florida from Pinellas to Monroe counties identified not present to 'very low b' concentrations of *Karenia brevis*, with the highest concentrations located within the Sarasota bay region of northern Sarasota County (FWRI, SCHD, MML, CCENRD; 5/11-17). No reports of respiratory irritation or dead fish have been received over the last several days (MML, FWRI; 5/16-18). 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, 5/18) is partially obscured by clouds along-shore southwest Florida from Manatee to southern Lee counties, limiting analysis. A patch of elevated chlorophyll (2-6  $\mu\text{g/L}$ ) with some of the optical properties of *K. brevis* is visible offshore Collier and Monroe counties.

Variable winds forecast today through Thursday will decrease the potential for transport or intensification of any remaining surface *K. brevis* concentrations along the coast of southwest Florida.

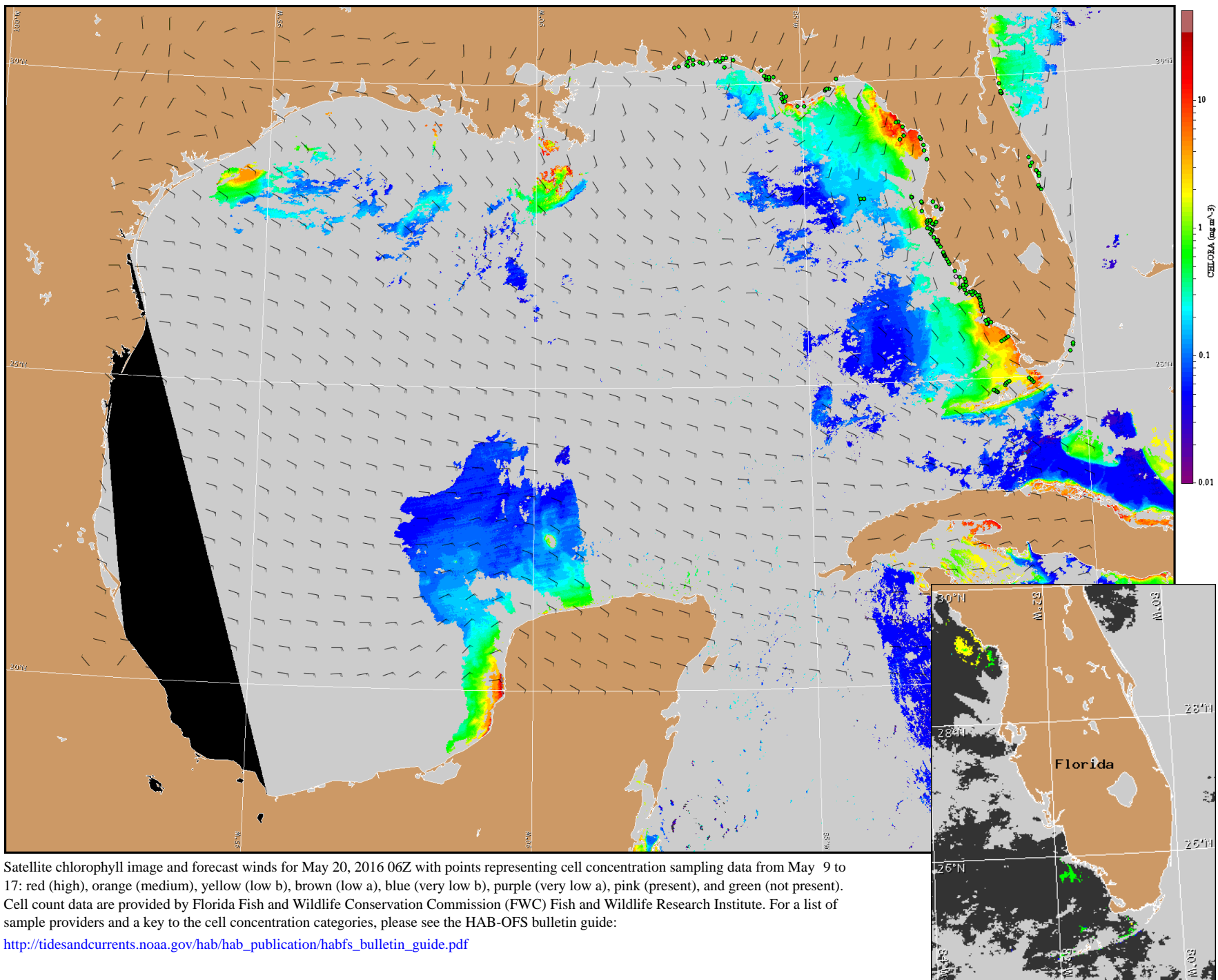
Lalime, Derner



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):** South to west winds (5kn, 3m/s) today through Saturday becoming west (10kn, 5m/s) Saturday afternoon through the night. Northwest winds (10kn) Sunday through Sunday night becoming north winds (10kn) Monday.



Satellite chlorophyll image and forecast winds for May 20, 2016 06Z with points representing cell concentration sampling data from May 9 to 17: 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).