



Gulf of Mexico Harmful Algal Bloom Bulletin

Region: Southwest Florida

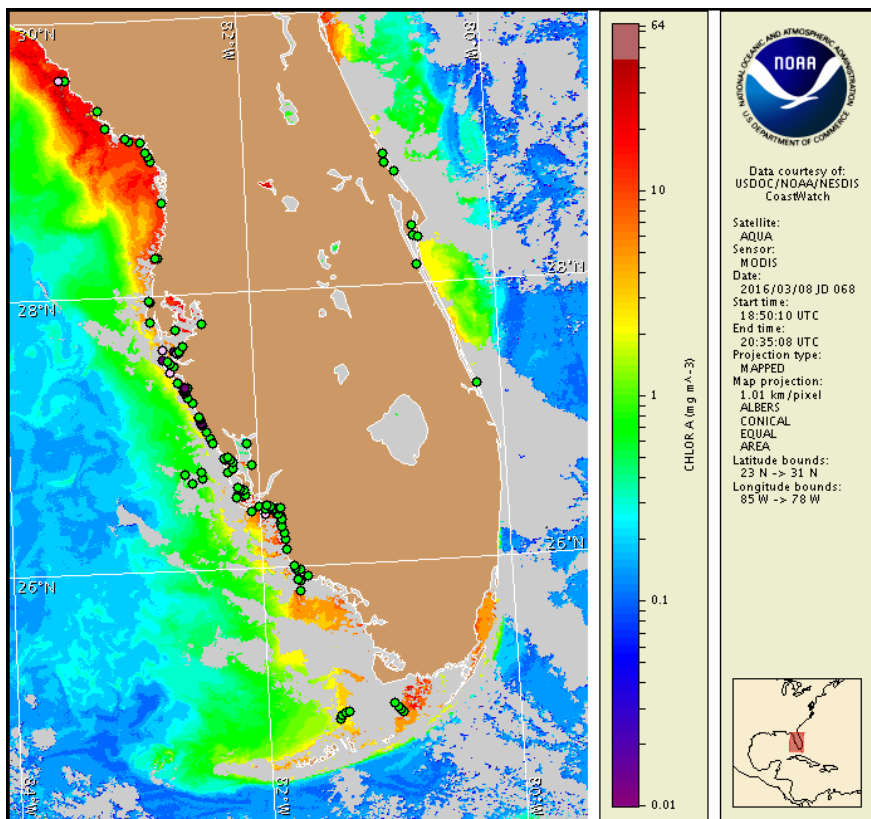
Thursday, 10 March 2016

NOAA National Ocean Service

NOAA Satellite and Information Service

NOAA National Weather Service

Last bulletin: Monday, March 7, 2016



Satellite chlorophyll image with possible *K. brevis* HAB areas shown by red polygon(s), when applicable. Points represent cell concentration sampling data from February 29 to March 8: 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

Karenia brevis (commonly known as Florida red tide) ranges from not present to low concentrations along the coast of southwest Florida and is not present offshore of 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 10 through Monday, March 14 is listed below:

County Region: Forecast (Duration)

Southern Manatee, bay regions: 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 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. Dead fish have been reported in Collier and Monroe counties.

Analysis

Recent samples collected along-and offshore southwest Florida indicate *Karenia brevis* concentrations range from background to 'low' from Pinellas to Sarasota counties, and are not present alongshore Charlotte, Lee, and Collier counties (FWRI, MML, CCENRD; 2/29-3/9). Dead fish were reported in the Ten Thousands Islands region of southern Collier and northern Monroe counties (FWRI; 3/7-3/9). 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, 3/8), is partly obscured by clouds from Pinellas to Monroe counties limiting analysis. Patches of elevated chlorophyll (2-8 $\mu\text{g/L}$) with the optical characteristics of *K. brevis* are visible offshore the southwest Florida coast from southern Lee to southern Collier County.

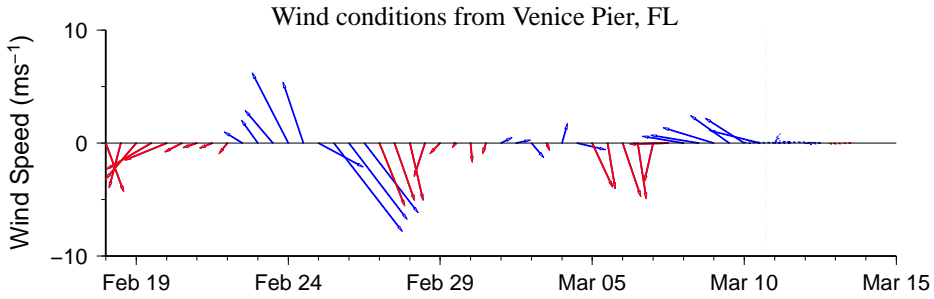
East southeast to south winds forecast alongshore southwest Florida today through Monday may promote the potential for northerly transport of surface *K. brevis* concentrations alongshore southwest Florida.

Lalime, Davis

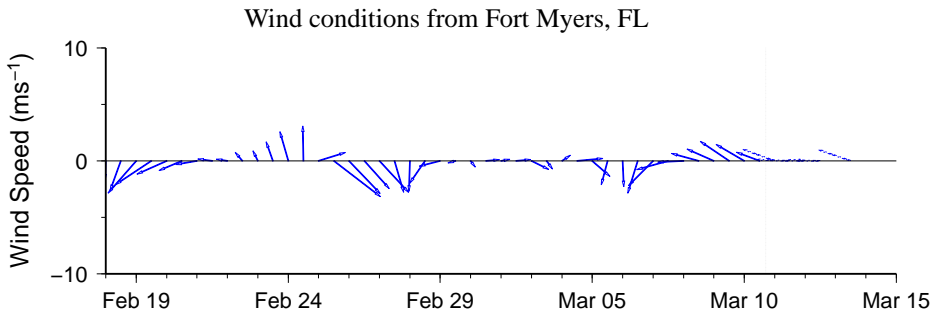
Wind Analysis

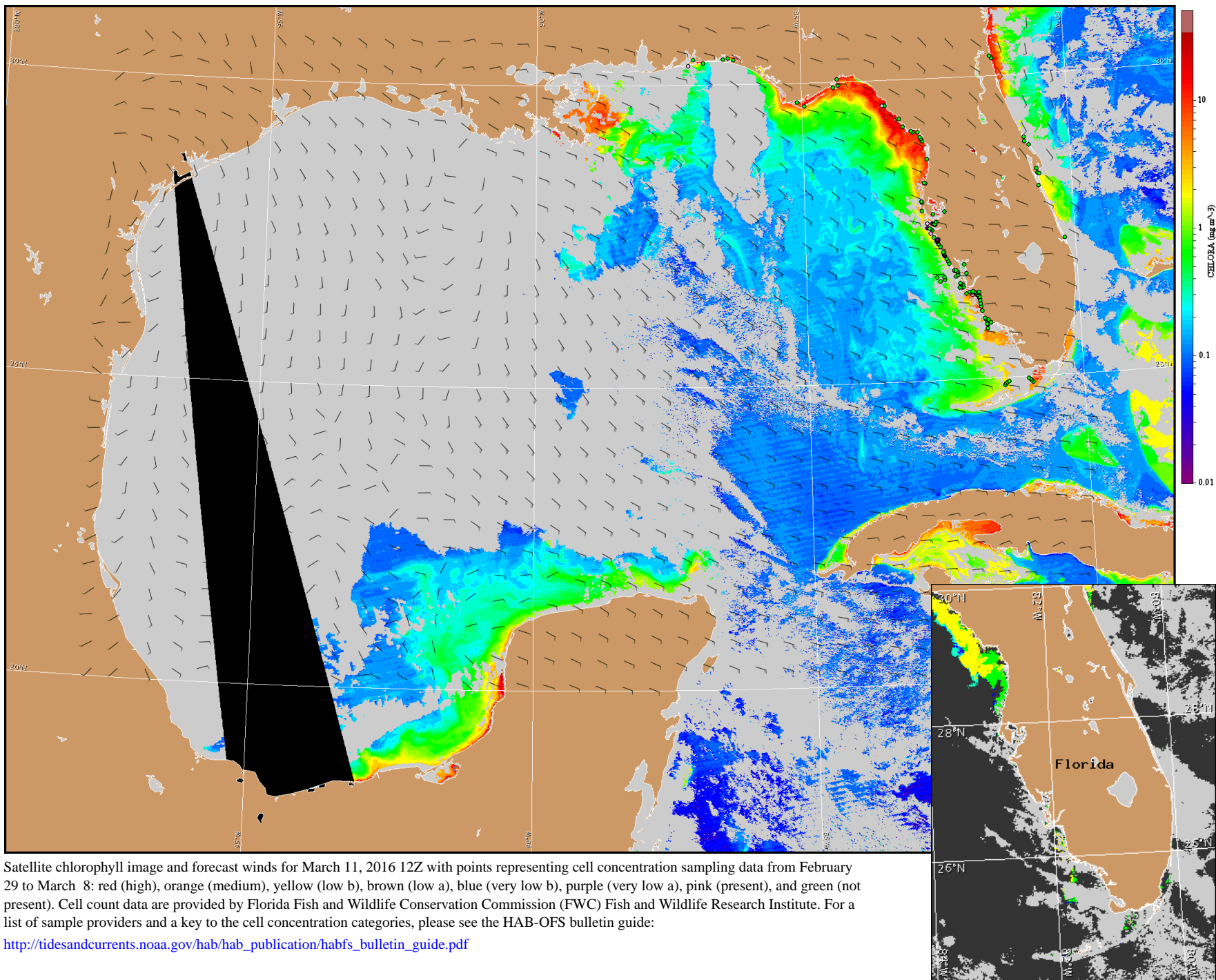
Englewood to Tarpon Springs (Venice): Southeast to south winds (5-15kn, 3-8m/s) today through Friday becoming east to southeast winds (10kn, 5m/s) Saturday. South winds (10kn) Sunday and Monday.

Chokoloskee to Bonita Beach: East southeast winds (10-15kn, 5-8m/s) today through Saturday night. South winds (5-10kn, 3-5m/s) Sunday and 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 March 11, 2016 12Z with points representing cell concentration sampling data from February 29 to March 8: 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).