



Gulf of Mexico Harmful Algal Bloom Bulletin

Region: Southwest Florida

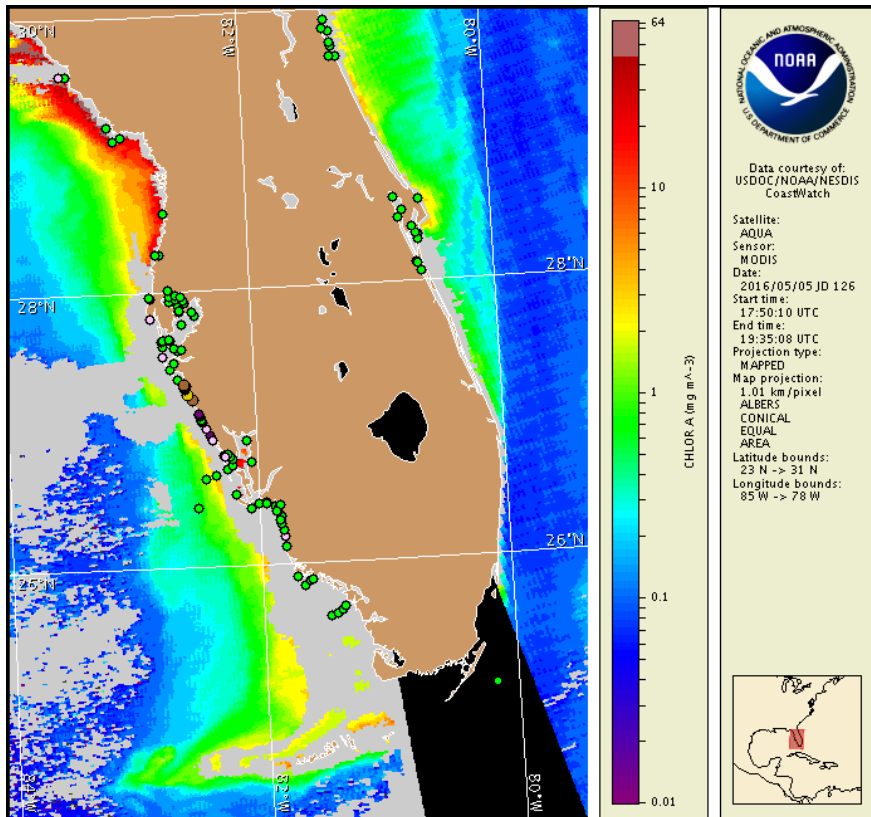
Monday, 09 May 2016

NOAA National Ocean Service

NOAA Satellite and Information Service

NOAA National Weather Service

Last bulletin: Thursday, May 5, 2016



Satellite chlorophyll image with possible *K. brevis* HAB areas shown by red polygon(s), when applicable. Points represent cell concentration sampling data from April 29 to May 5: 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 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, May 9 to Thursday, May 12 is listed below:

County Region: Forecast (Duration)

Southern Pinellas: Very Low (M-Th)

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

Northern Sarasota: Low (M-Th)

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

Southern Sarasota: Very Low (M-Th)

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

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. Reports of respiratory irritation have been received from Manatee County.

Analysis

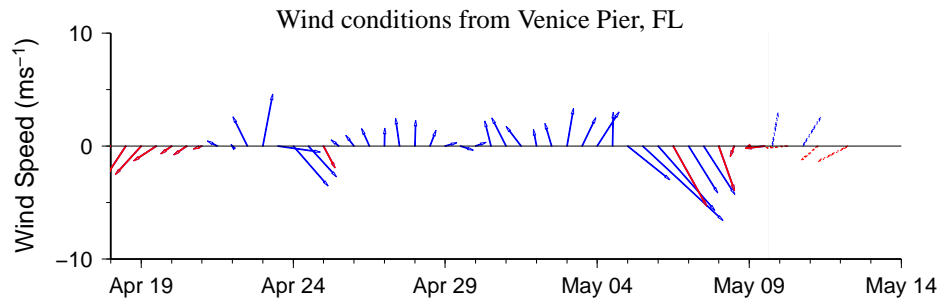
****Due to technical difficulties, the most recent MODIS Aqua imagery could not be displayed; however, the analysis references the most recent available imagery. We apologize for any inconvenience and the issue will be resolved by the next scheduled bulletin on May 12.****

Recent sampling indicates that *Karenia brevis* concentrations range from not present to 'low b' along- and offshore the coast of southwest Florida from southern Pinellas to Collier counties, with the highest concentrations alongshore northern Sarasota County (FWRI, MML, SCHD, CCENRD; 4/29-5/5). Samples collected alongshore and within the bay regions of Sarasota County identified not present to 'low b' *K. brevis* concentrations, with the highest concentrations detected alongshore the Siesta Key area (SCHD, MML; 5/2-5). 'Low a' *K. brevis* concentrations were identified alongshore Longboat Key in Manatee County and 'very low a' concentrations were identified alongshore southern Pinellas and southern Sarasota counties (FWRI; 5/2). Respiratory irritation reports have been received from Manatee and Coquina beaches in Manatee County (FWRI, MML; 5/6-7). Detailed sample information and a summary of impacts can be obtained through FWC Fish and Wildlife Research Institute at: <http://myfwc.com/redtidestatus>.

Due to technical difficulties, recent MODIS Aqua imagery is currently unavailable. MODIS Aqua imagery from 5/5 (shown left) is completely obscured by clouds along the coast of southwest Florida, preventing analysis. In MODIS Aqua imagery from 5/2 (not shown, see last bulletin), patches of elevated chlorophyll (2-10 $\mu\text{g/L}$) with some of the optical properties of *K. brevis* were visible along- and offshore southwest Florida from Pinellas to Lee Counties. We will continue to monitor the southwest Florida coastline as imagery becomes available.

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

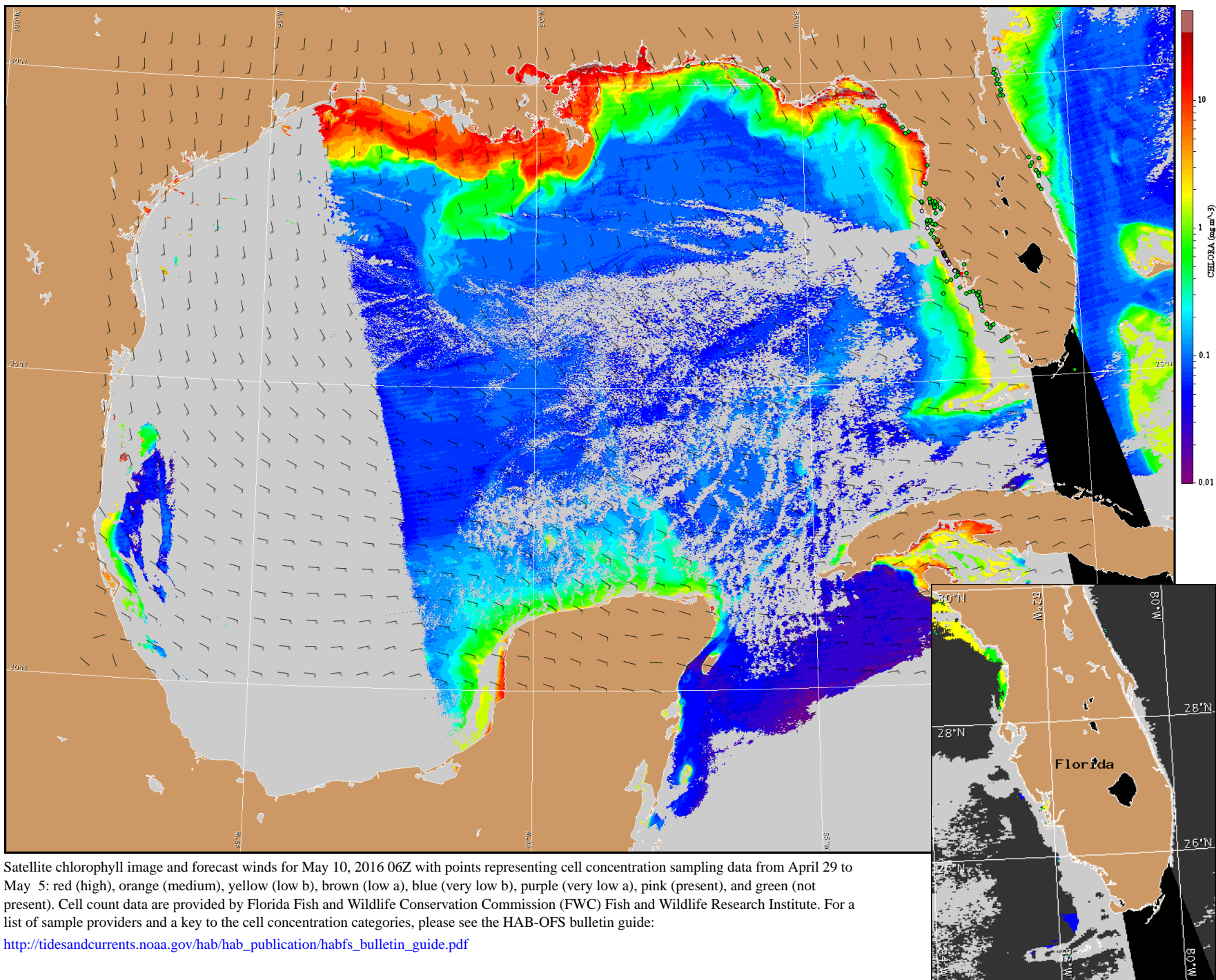
Derner, Yang



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): Southeast winds (10kn, 5m/s) today becoming southwest this afternoon. Variable easterly to westerly winds (5-10kn, 3-5m/s) tonight. Southerly winds (5-15kn, 3-8m/s) Tuesday. Northerly winds (5-10kn) Tuesday night. Southerly winds (5-10kn) Wednesday. North winds (10kn) Wednesday night. Southerly winds (5kn, 3m/s) Thursday.



Satellite chlorophyll image and forecast winds for May 10, 2016 06Z with points representing cell concentration sampling data from April 29 to May 5: 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).