



Gulf of Mexico Harmful Algal Bloom Bulletin

Region: Southwest Florida

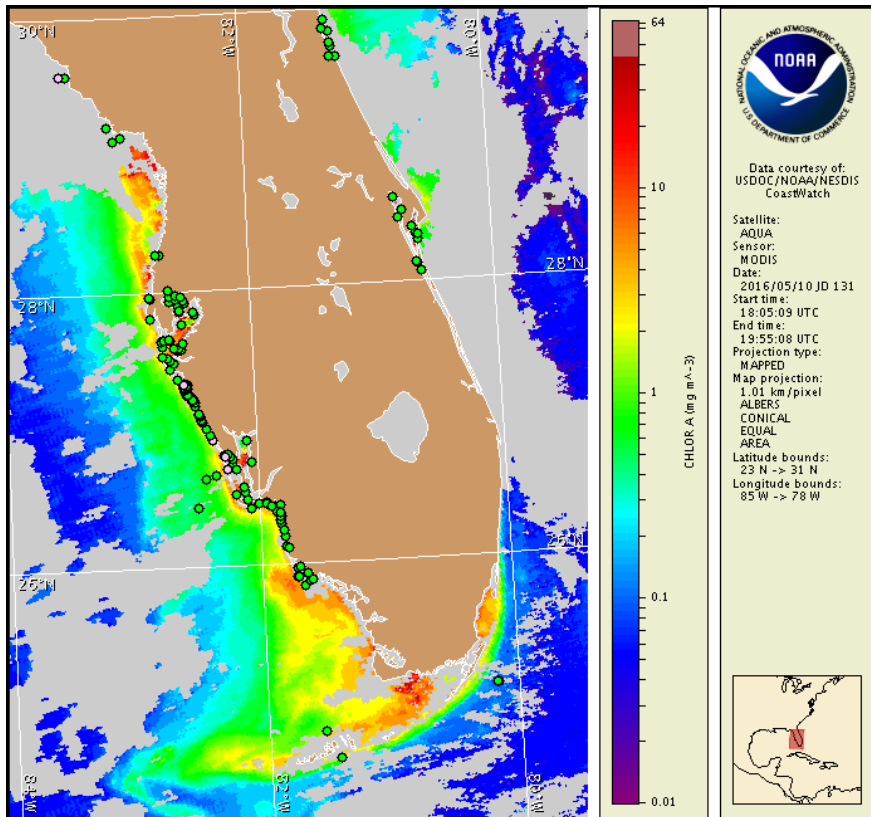
Thursday, 12 May 2016

NOAA National Ocean Service

NOAA Satellite and Information Service

NOAA National Weather Service

Last bulletin: Monday, May 9, 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 2 to 11: 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 Thursday, May 12 to Monday, May 16 is listed below:

County Region: Forecast (Duration)

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.

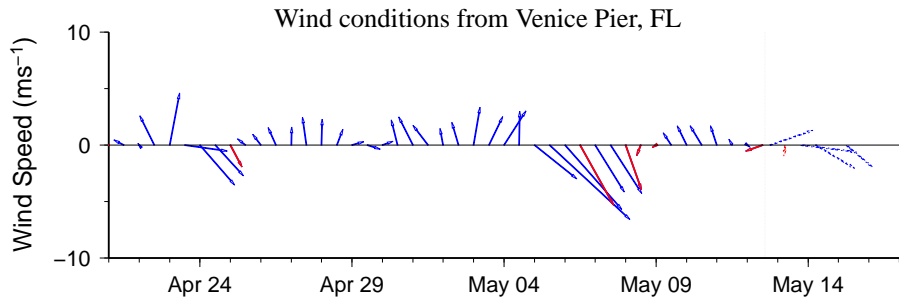
Analysis

Recent sampling alongshore the coast of southwest Florida indicates diminishing *Karenia brevis* concentrations from Pinellas to Sarasota counties (FWRI, SCHD; 5/2-10). Samples collected alongshore Sarasota County over the past week indicate that *K. brevis* is not present at sample sites where 'very low a' to 'low b' concentrations were previously identified (SCHD; 5/6-9). Samples collected alongshore Pinellas and Manatee counties, as well as within the Pine Island Sound region of Lee County, also indicated that *K. brevis* is not present, with just one background concentration identified at Boca Grande Pass in Lee County (FWRI; 5/9). No reports of respiratory irritation or dead fish have been received over the last several days (MML, FWRI; 5/8-11). Detailed sample information and a summary of impacts can be obtained through FWC Fish and Wildlife Research Institute at: <http://myfwc.com/redtidestatus>.

In recent ensemble imagery (MODIS Aqua, 5/9), patches of elevated chlorophyll ($2\text{-}9\mu\text{g/L}$) with some of the optical properties of *K. brevis* are visible along- and offshore southwest Florida from Pinellas to Sarasota counties, and offshore Collier to Monroe counties.

Northwest winds forecast today through Sunday may promote southerly transport of any remaining surface *K. brevis* concentrations along the coast of southwest Florida.

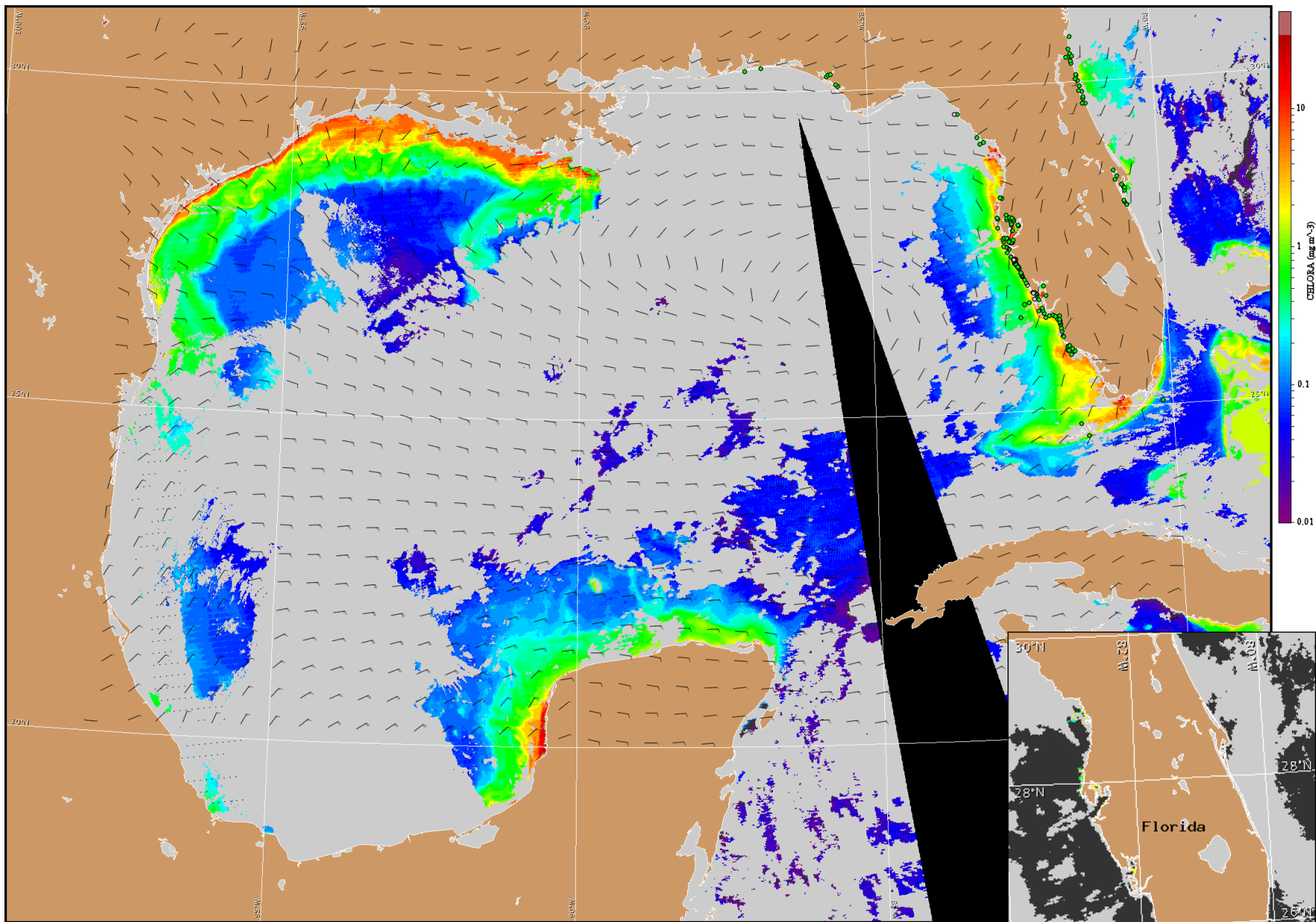
Derner, Lalime



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): Southeast winds (10kn, 5m/s) today becoming southwest this afternoon. Northwest winds (10kn) tonight becoming northeast (5kn, 3m/s) after midnight. North winds (5kn) Friday becoming west (10kn) Friday afternoon. Northwest winds (5-10kn, 3-5m/s) Friday night through Sunday. Southeast winds (5kn) Monday.



Satellite chlorophyll image and forecast winds for May 13, 2016 06Z with points representing cell concentration sampling data from May 2 to 11: 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).