



Gulf of Mexico Harmful Algal Bloom Bulletin

Region: Southwest Florida

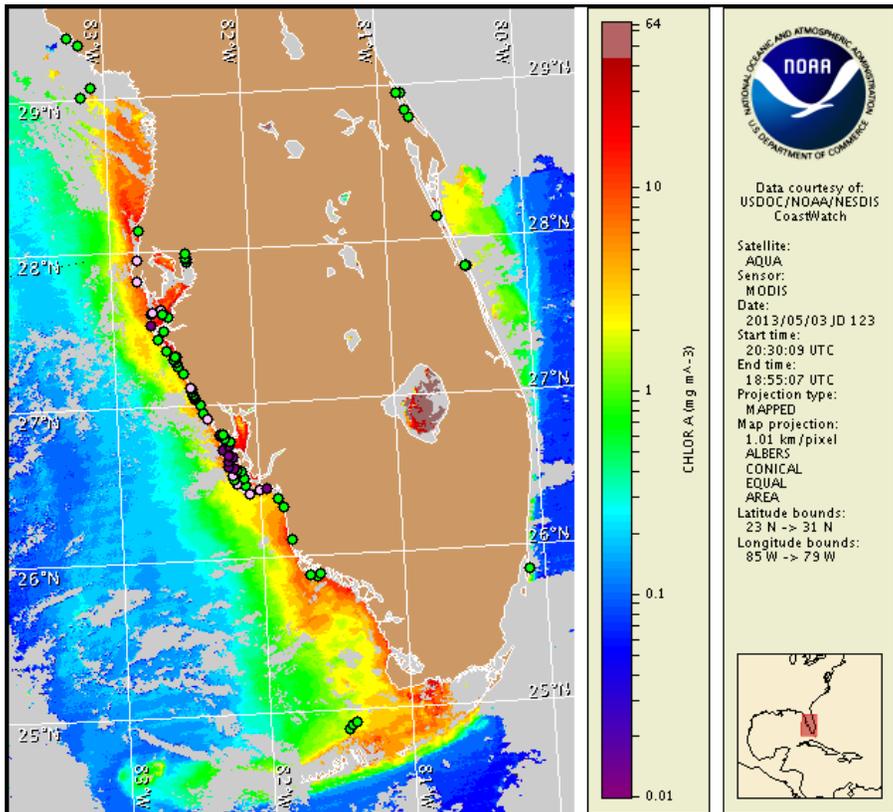
Monday, 06 May 2013

NOAA National Ocean Service

NOAA Satellite and Information Service

NOAA National Weather Service

Last bulletin: Thursday, May 2, 2013



Satellite chlorophyll image with possible *K. brevis* HAB areas shown by red polygon(s), when applicable. Points represent cell concentration sampling data from April 26 to May 2: 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/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

Background to very low concentrations of *Karenia brevis* (commonly known as Florida red tide) are present along- and offshore southwest Florida. In the bay regions of central Lee County, patchy very low respiratory impacts are possible today through Thursday. No respiratory impacts are expected elsewhere alongshore southwest Florida, including the Florida Keys, today through Thursday, May 9.

Analysis

Recent sampling throughout southwest Florida continues to indicate that *Karenia brevis* concentrations up to 'very low a' remain alongshore and in the bays of northern and central Lee County. In the bay regions of Manatee County, one sample from Anna Maria Island indicated 'very low a' *K. brevis* concentrations, while all other samples indicated *K. brevis* was 'not present' (FWRI; 4/30). Recent samples collected in the Pine Island Sound region of northern and central Lee County indicate that *K. brevis* concentrations continue to range between 'not present' and 'very low a' (FWRI; 5/1). All other samples collected along- and offshore southwest Florida, including the Florida Keys indicate 'not present' concentrations of *K. brevis* (FWRI, MML; 4/30-5/2). No dead fish or respiratory irritation associated with *K. brevis* has been reported in the past week.

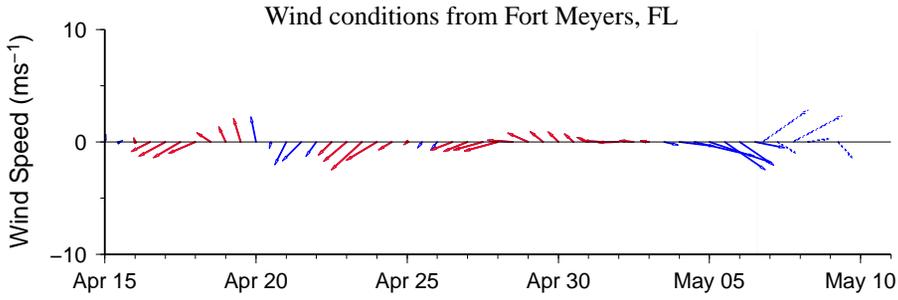
Over the past few days, MODIS Aqua imagery has been partially obscured by clouds, limiting analysis. In MODIS imagery from May 3 (shown left), patches of elevated to very high chlorophyll (2 to >10 $\mu\text{g/L}$) are visible alongshore southwest Florida from Pinellas to Collier County and along- and offshore the gulfside of the Florida Keys. The anomalously high patch of elevated to high chlorophyll noted in previous bulletins remains visible in imagery along- and offshore Charlotte and Lee counties (2-16 $\mu\text{g/L}$). Patches of elevated to very high chlorophyll also remain visible along- and offshore Collier and northern Monroe counties (2-21 $\mu\text{g/L}$) and the gulfside of the Florida Keys (2-10 $\mu\text{g/L}$), but sampling adjacent to these two patches indicates that they are most likely not due to the presence of *K. brevis*.

Forecasted winds through Thursday may promote the transport of *K. brevis* concentrations south.

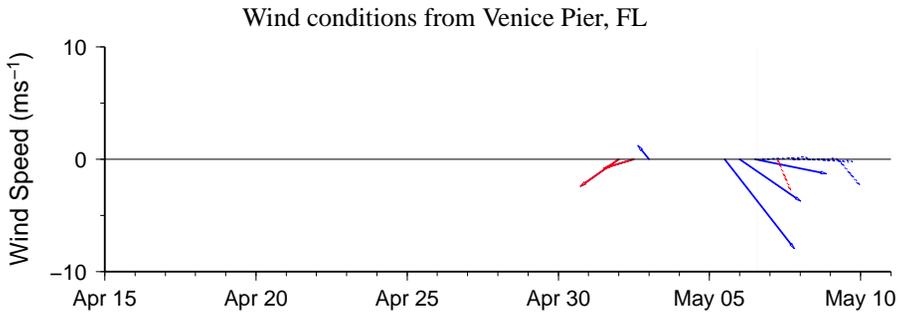
Kavanaugh, Yang

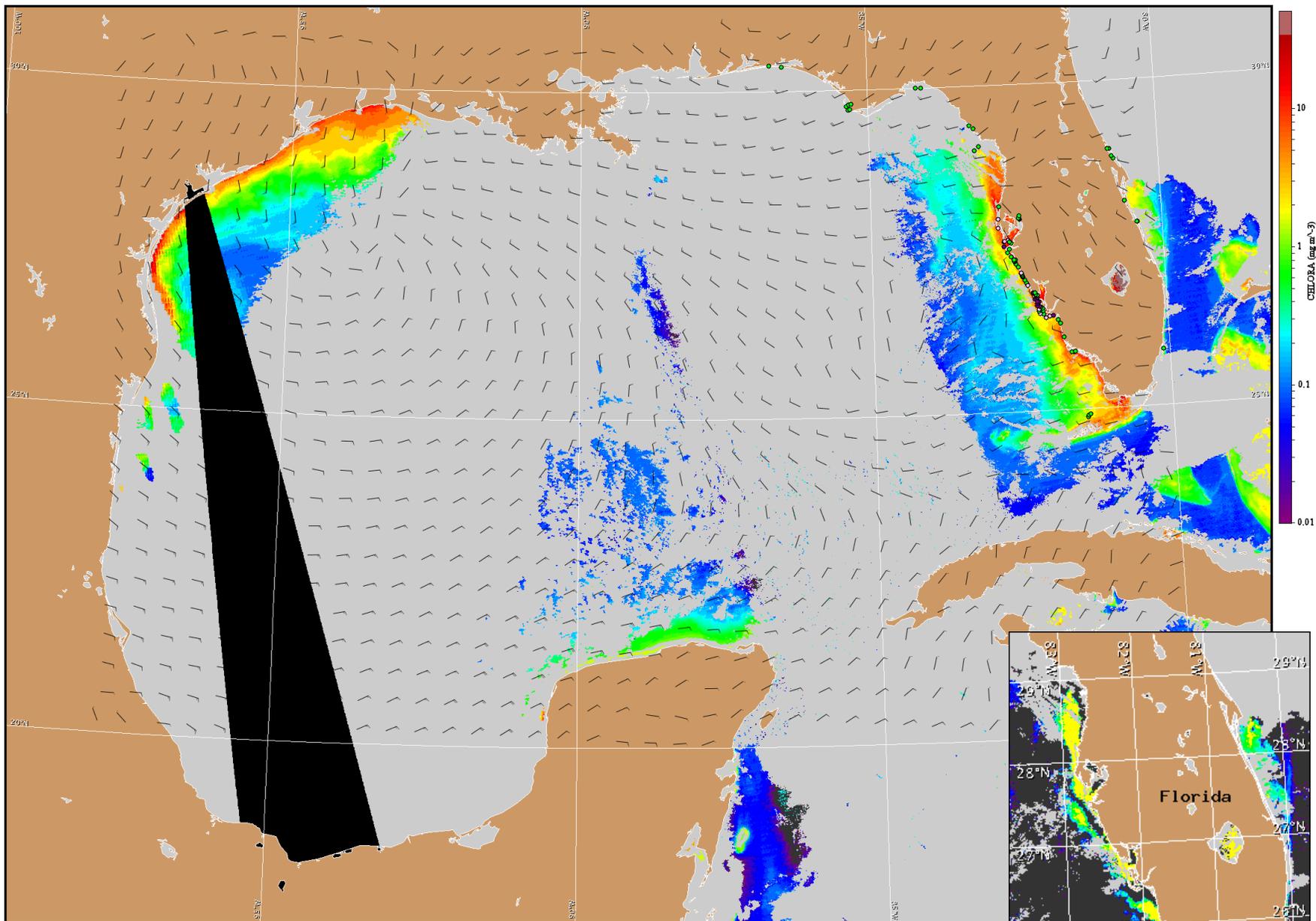
Wind Analysis

Southwest Florida: West to northwest winds (5-15 kn, 3-8 m/s) today through Wednesday night becoming north winds (5 kn, 3 m/s) after midnight. Southeast winds (5 kn) becoming west to northwest winds (10 kn, 5 m/s) through Thursday night.



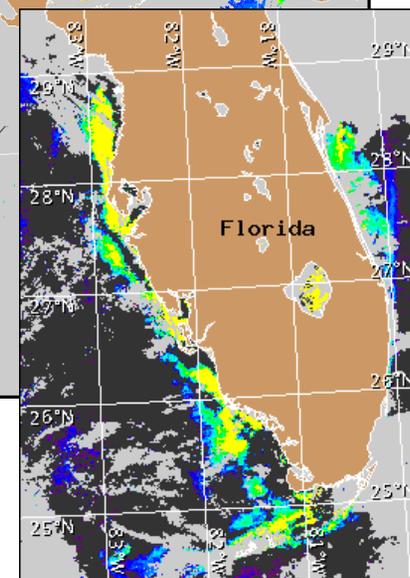
Wind speed and direction are averaged over 12 hours from buoy measurements. Length of line indicates speed; angle indicates direction. Red indicates that the wind direction favors upwelling near the coast. Values to the left of the dotted vertical line are measured values; values to the right are forecasts.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





Satellite chlorophyll image and forecast winds for May 7, 2013 06Z with points representing cell concentration sampling data from April 26 to May 2: 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 of high chlorophyll concentration shown in yellow (see p. 1 analysis for interpretation).