



Gulf of Mexico Harmful Algal Bloom Bulletin

Region: Southwest Florida

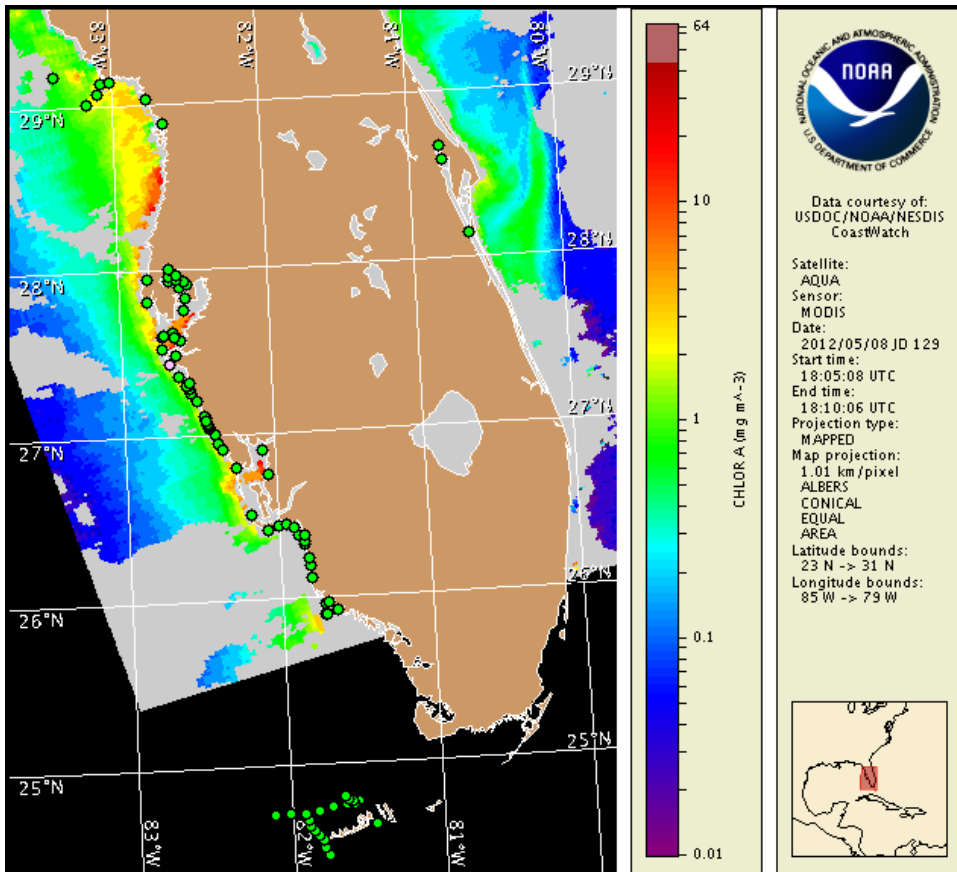
Thursday, 10 May 2012

NOAA Ocean Service

NOAA Satellite and Information Service

NOAA National Weather Service

Last bulletin: Monday, May 7, 2012



Satellite chlorophyll image with possible HAB areas shown by red polygon(s). Cell concentration sampling data from April 30 to May 8 shown as red (high), orange (medium), yellow (low b), brown (low a), blue (very low b), purple (very low a), pink (present), and green (not present). For a list of cell count data 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 the Florida FWC Fish and Wildlife Research Institute at:

<http://myfwc.com/research/redtide/events/status/statewide/>

To see previous bulletins and forecasts for other Harmful Algal Bloom Bulletin regions, visit at: <http://tidesandcurrents.noaa.gov/hab/bulletins.html>

Conditions Report

A patchy harmful algal bloom may remain present offshore of the gulfside region of the Middle Florida Keys. Patchy very low impacts are possible today through Sunday. No additional impacts are expected alongshore southwest Florida today through Sunday, May 13. Patches of discolored water have been reported alongshore Manatee and Sarasota counties over the last several days. This discoloration is attributed to a bloom of the algae *Trichodesmium* which does not produce respiratory irritation impacts associated with the Florida red tide caused by *Karenia brevis*.

Analysis

Southwest Florida: There is currently no indication of a *Karenia brevis* bloom in southwest Florida. Recent samples identified background concentrations of *K. brevis* alongshore Manatee County at Longboat Key (5/8; FWRI). All other samples collected alongshore Pinellas, Manatee, Sarasota, Charlotte, Lee, and Collier counties, including throughout the Marco Island region, indicate that *K. brevis* is not present (5/4-8; FWRI).

Recent MODIS imagery (5/8; shown left) is patchy along the coast of southwest Florida, limiting analysis. Elevated chlorophyll (1-9 $\mu\text{g/L}$) is visible along much of the coast from Pinellas to Collier counties in MODIS imagery from May 7-8, with elevated to high chlorophyll (1-13 $\mu\text{g/L}$) visible along- and offshore Monroe County in MODIS imagery from May 7 (not shown). Elevated chlorophyll alongshore southwest Florida is likely the result of non-harmful algal blooms that continue to be reported along the coast from Pinellas to Lee counties (5/4-8; FWRI).

Florida Keys: Recent sampling has confirmed that *K. brevis* is no longer present offshore the gulfside region of the Lower Florida Keys. Continued sampling offshore north of Sawyer Key continues to indicate that *K. brevis* is not present (5/8; MML). No new samples have been received where a 'very low b' to 'medium' bloom was detected offshore of the Middle Keys (Oxfoot Key) on 4/24 (MML). A patchy *K. brevis* bloom may remain present north of the Middle Keys; continued sampling in this region is recommended.

Recent MODIS imagery is obscured by clouds throughout much of the Florida Keys region, limiting analysis. Elevated chlorophyll (2-8 $\mu\text{g/L}$) remains visible in the region north of the Middle Keys in MODIS imagery from May 7 (not shown). Forecasted winds may maintain location of the bloom through Sunday.

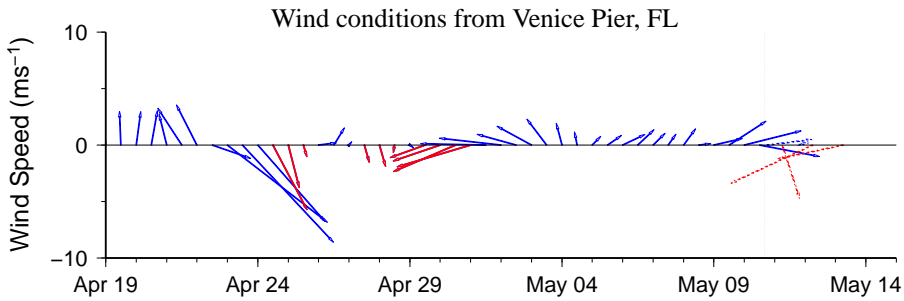
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Wind Analysis

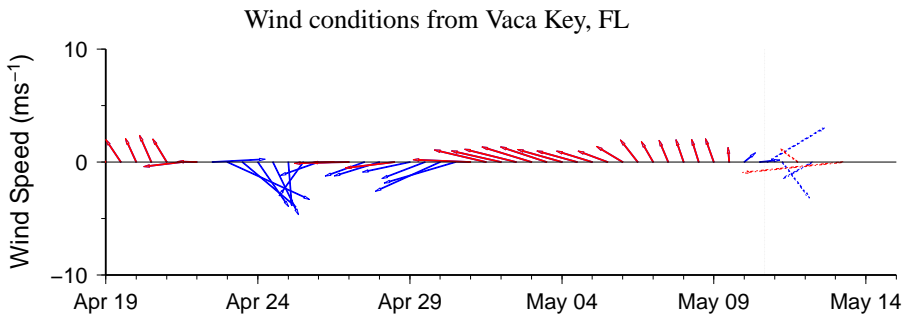
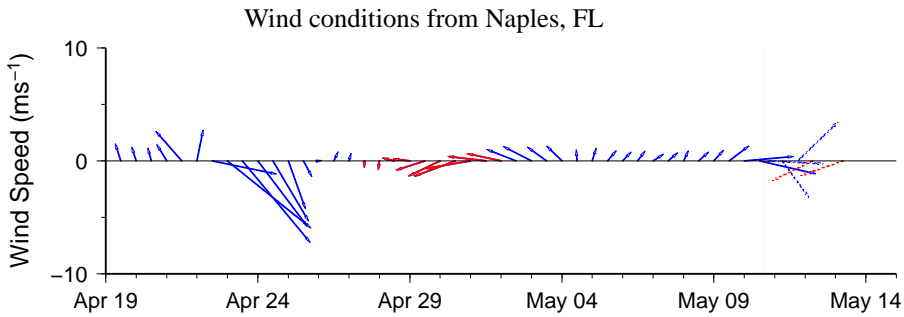
Pinellas to Lee Counties: Variable north winds (10-15kn, 5-8m/s) today and tonight. East winds (10kn, 5m/s) Friday becoming northwest in the afternoon. East winds (10-20kn, 5-10m/s) Friday night through Sunday becoming northeast (10kn) Sunday afternoon. East winds (10kn) Sunday night.

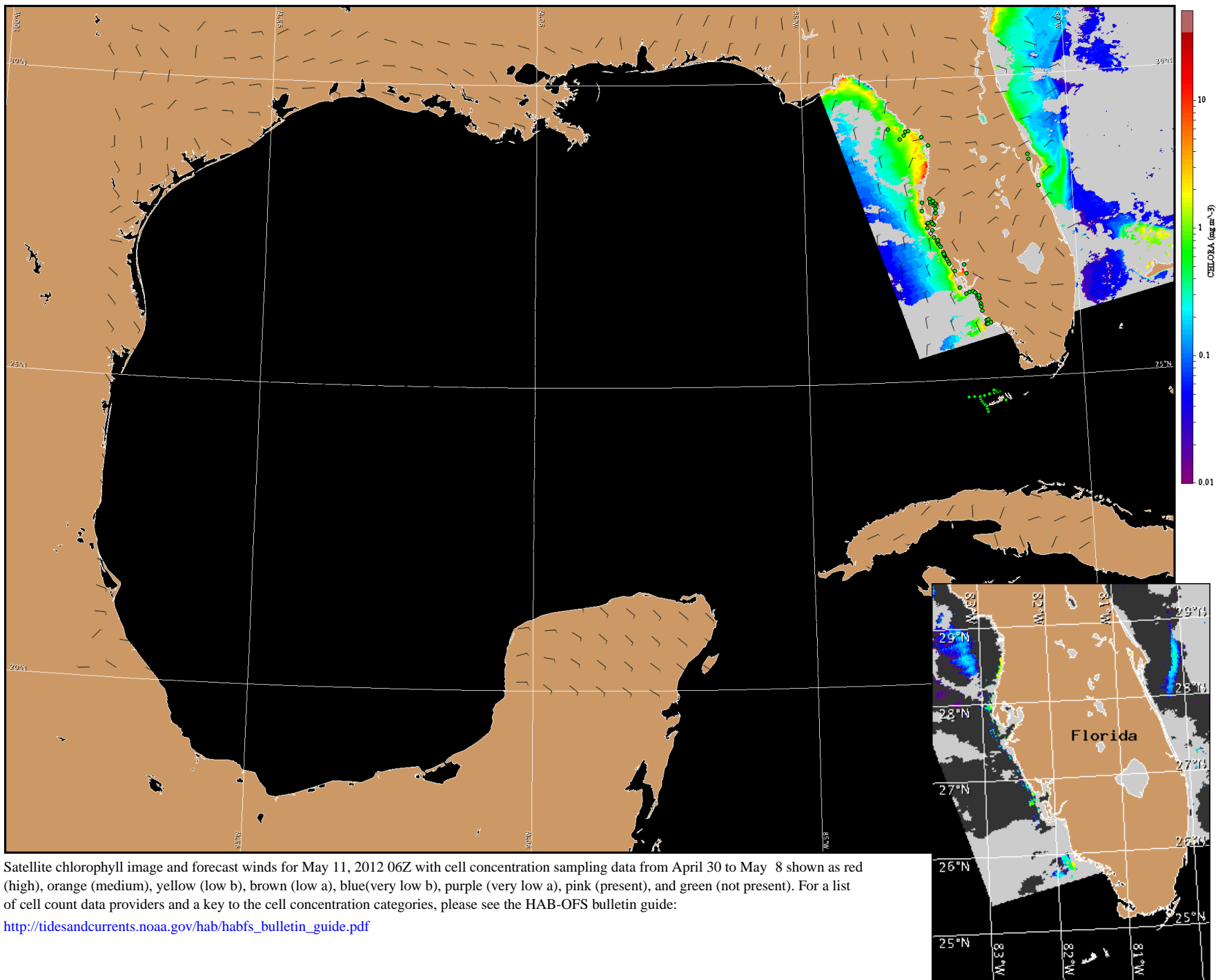
Collier to Monroe Counties: West to northwest winds (8-13kn, 4-7m/s) today and tonight. East winds (5-8kn, 3-4m/s) Friday becoming south southeast in the afternoon. East northeast winds (14-19kn, 7-10m/s) Friday night. East winds (12-19kn, 6-10m/s) Saturday and Sunday.

Florida Keys - Gulfside: West winds (5-10kn, 3-5m/s) today becoming northwest tonight. North to northeast winds (5kn, 3m/s) Friday becoming variable in the afternoon. Northeast to east winds (10-15kn) Friday night and Saturday. East to southeast winds (10-15kn) Sunday.



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 11, 2012 06Z with cell concentration sampling data from April 30 to May 8 shown as red (high), orange (medium), yellow (low b), brown (low a), blue(very low b), purple (very low a), pink (present), and green (not present). For a list of cell count data 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).