



Gulf of Mexico Harmful Algal Bloom Bulletin

Region: Southwest Florida

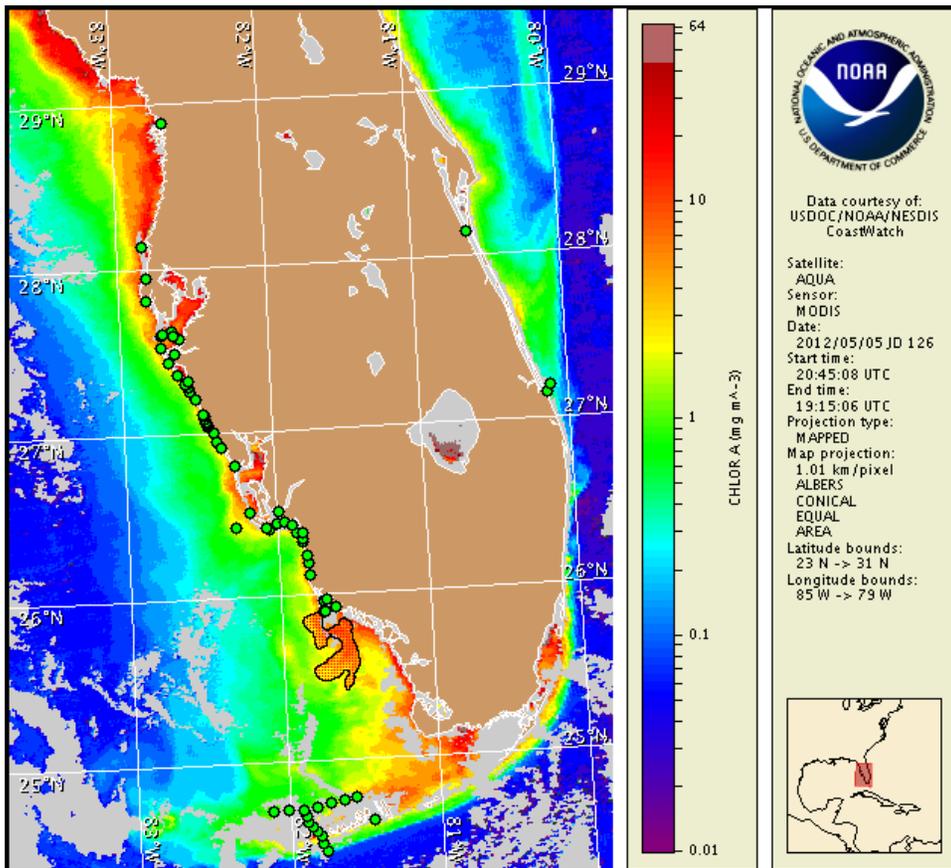
Monday, 07 May 2012

NOAA Ocean Service

NOAA Satellite and Information Service

NOAA National Weather Service

Last bulletin: Thursday, May 3, 2012



Satellite chlorophyll image with possible HAB areas shown by red polygon(s). Cell concentration sampling data from April 27 to May 6 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 Wednesday. No additional impacts are expected alongshore southwest Florida today through Wednesday, May 9.

Analysis

Southwest Florida: There is currently no indication of a *Karenia brevis* bloom in southwest Florida. Recent samples indicate that *K. brevis* is not present in Pinellas, Manatee, or Lee counties (4/29-5/3; FWRI). The most recent samples from the Marco Island region of Collier County indicated that *K. brevis* was not present (4/30; FWRI); however, continued sampling throughout this region is recommended to confirm the absence of *K. brevis*.

Recent MODIS imagery (5/5; shown left) shows elevated chlorophyll (1-9 $\mu\text{g/L}$) along- and offshore much of the coast of southwest Florida from Pinellas to Collier County, including a large patch extending offshore and south of the Marco Island region. Elevated to high chlorophyll (3-16 $\mu\text{g/L}$) is also visible along- and offshore Monroe County and west of Cape Sable. Patches of elevated chlorophyll at the coast of southwest Florida may be the result of non-harmful algal blooms or resuspended sediments, and are unlikely to contain *K. brevis*.

Florida Keys: Recent sampling has confirmed that *K. brevis* is no longer present offshore the gulfside region of the Lower Florida Keys. Several samples collected yesterday (5/6) along a transect north of the Lower Florida Keys, spanning from north of Sawyer Key to northwest of Key West, all indicated that *K. brevis* is not present. *K. brevis* was also not identified in samples collected south of Key West and Cudjoe Key (5/6; 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 present in the region north of the Middle Keys. Forecasted winds may maintain location of the bloom through Wednesday.

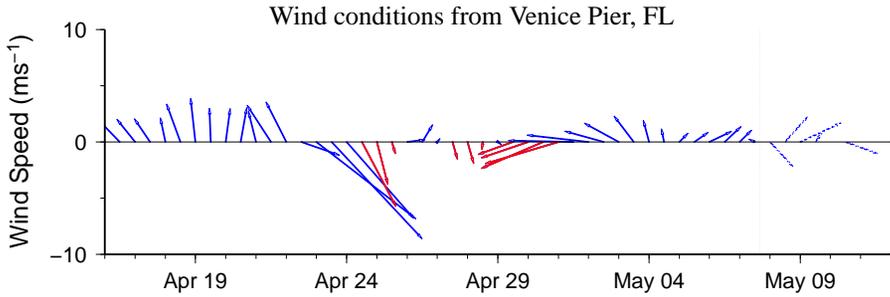
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Wind Analysis

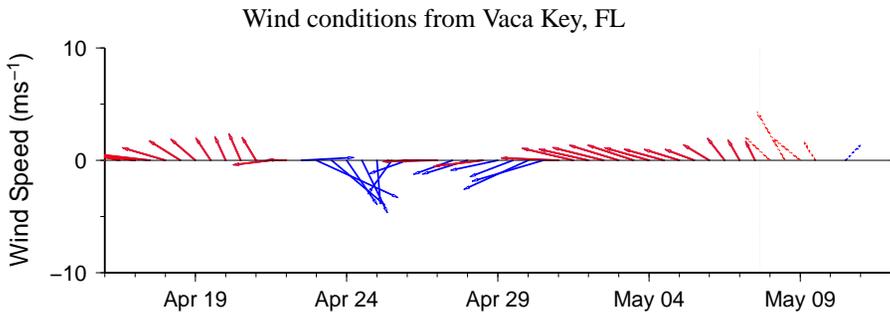
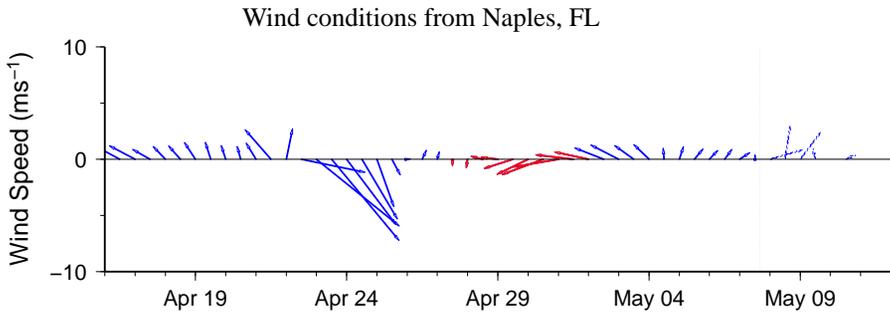
Pinellas to Lee Counties: West winds (5-10kn, 3-5m/s) today becoming variable tonight (5kn, 3m/s). Southwest winds (5-15kn, 3-8m/s) Tuesday and Wednesday. West winds (10kn, 5m/s) Wednesday night.

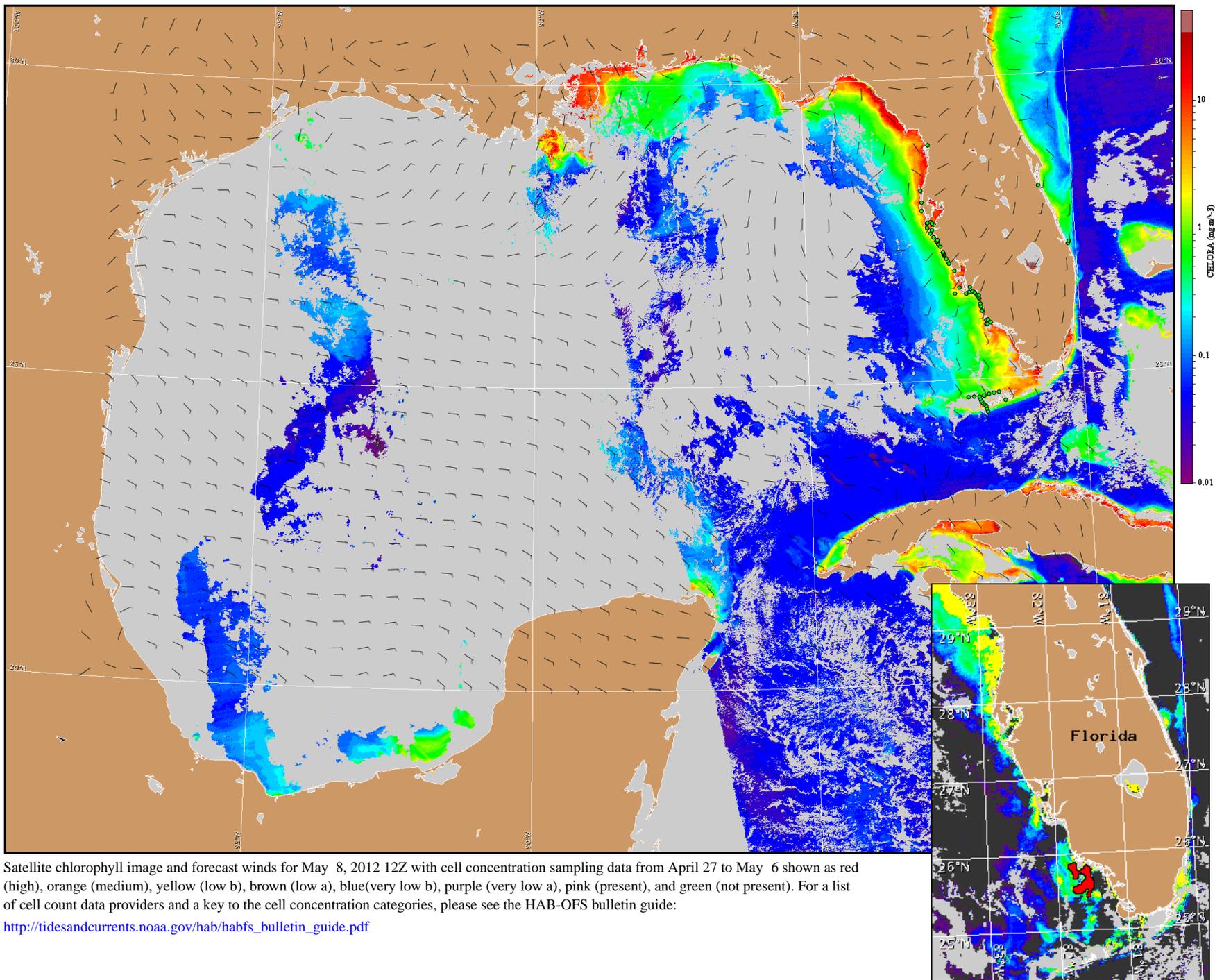
Collier to Monroe Counties: Variable south winds (5-11kn, 3-6m/s) today through Wednesday. West winds (5-8kn, 3-4m/s) Wednesday night.

Florida Keys - Gulfside: South to southeast winds (5-10kn) today and tonight. Variable winds (5-10kn) Tuesday and Wednesday.



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 8, 2012 12Z with cell concentration sampling data from April 27 to May 6 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).