



Gulf of Mexico Harmful Algal Bloom Bulletin

Region: Southwest Florida

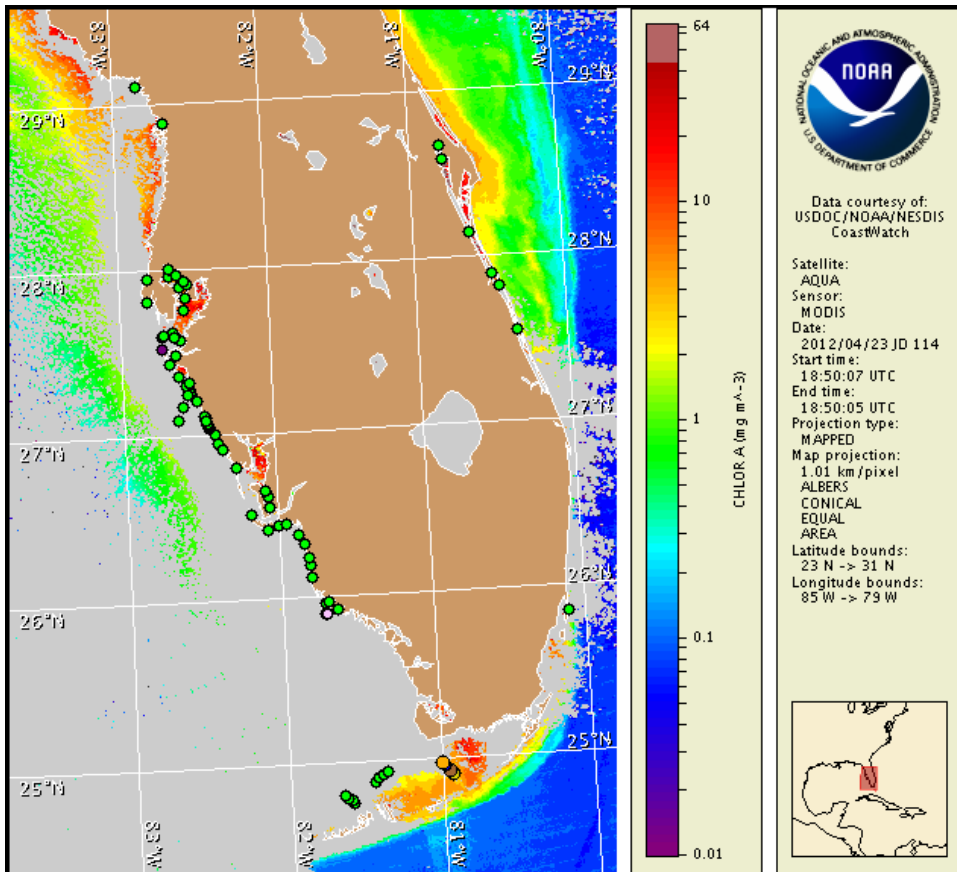
Thursday, 26 April 2012

NOAA Ocean Service

NOAA Satellite and Information Service

NOAA National Weather Service

Last bulletin: Monday, April 23, 2012



Satellite chlorophyll image with possible HAB areas shown by red polygon(s). Cell concentration sampling data from April 16 to 25 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 remains present in the Marco Island region of central Collier County and in the gulfside region of the Lower to Middle Florida Keys. Harmful algae has been identified in Manatee County. Patchy very low impacts are possible in the Marco Island region of central Collier County and patchy moderate impacts are possible in the gulfside region of the Lower to Middle Florida Keys today through Sunday. No additional impacts are expected alongshore southwest Florida today through Sunday, April 29.

Analysis

Southwest Florida: A patchy bloom of *Karenia brevis* remains present in the Marco Island region of central Collier County. Recent samples collected from the Marco Island region identified background concentrations of *K. brevis* at Caxambas Pass (4/23; CCPCPD, FWRI). However, all other samples collected from throughout the region, including from South Marco Beach, indicate that *K. brevis* is not present (4/23; CCPCPD, FWRI). No new samples are available from alongshore Anna Maria Island in Manatee County where 'very low a' concentrations were identified last week (4/17, FWRI). No additional *K. brevis* was detected in samples collected along the coast of southwest Florida from Pinellas to Collier Counties this week (4/23-25; CCPCPD, FWRI, SCHD). Continued sampling in the Marco Island region and alongshore Manatee County is recommended.

Recent MODIS imagery (4/23; shown left) remains obscured by clouds along the coast of southwest Florida, preventing analysis.

Forecasted offshore winds will reduce the potential for impacts along the coast of southwest Florida through the weekend.

Florida Keys: A harmful algal bloom of *K. brevis* remains present north of the Middle Florida Keys and may remain north of the Lower Florida Keys. Recent samples collected from the gulfside region of the Middle Florida Keys identified 'very low b' to 'medium' *K. brevis* concentrations offshore Oxfoot Key (4/24; MML). Samples collected from the gulfside region of the Lower Florida Keys indicate that *K. brevis* is not present in the Sawyer Key region (4/25; MML).

Recent MODIS imagery (4/23, shown left; 4/24, not shown) remains partially obscured by clouds in the Florida Keys region, limiting analysis. Patches of elevated to very high chlorophyll (2 to >20 $\mu\text{g/L}$) remain visible north of the Lower to Middle Keys. Elevated chlorophyll (2-7 $\mu\text{g/L}$) is also visible along the ocean side of the Middle to Upper Keys; sampling is recommended.

Forecasted winds may maintain the location of the bloom through the weekend.

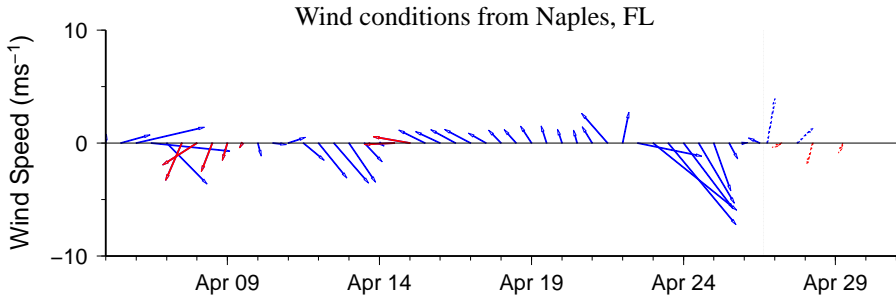
Kavanaugh, Fenstermacher

Wind Analysis

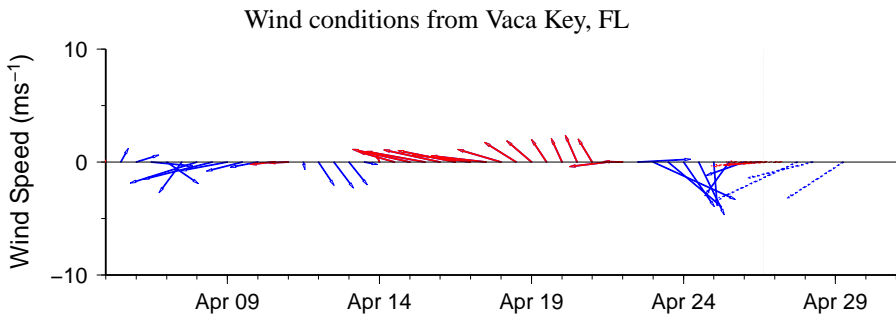
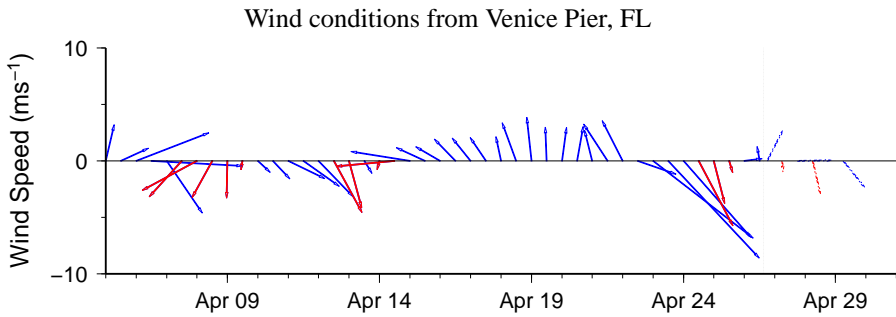
Collier to Monroe Counties: Southeast to east winds (9-17 kn, 5-9 m/s) today through Saturday night. East to northeast winds (10-13 kn, 5-7 m/s) Sunday.

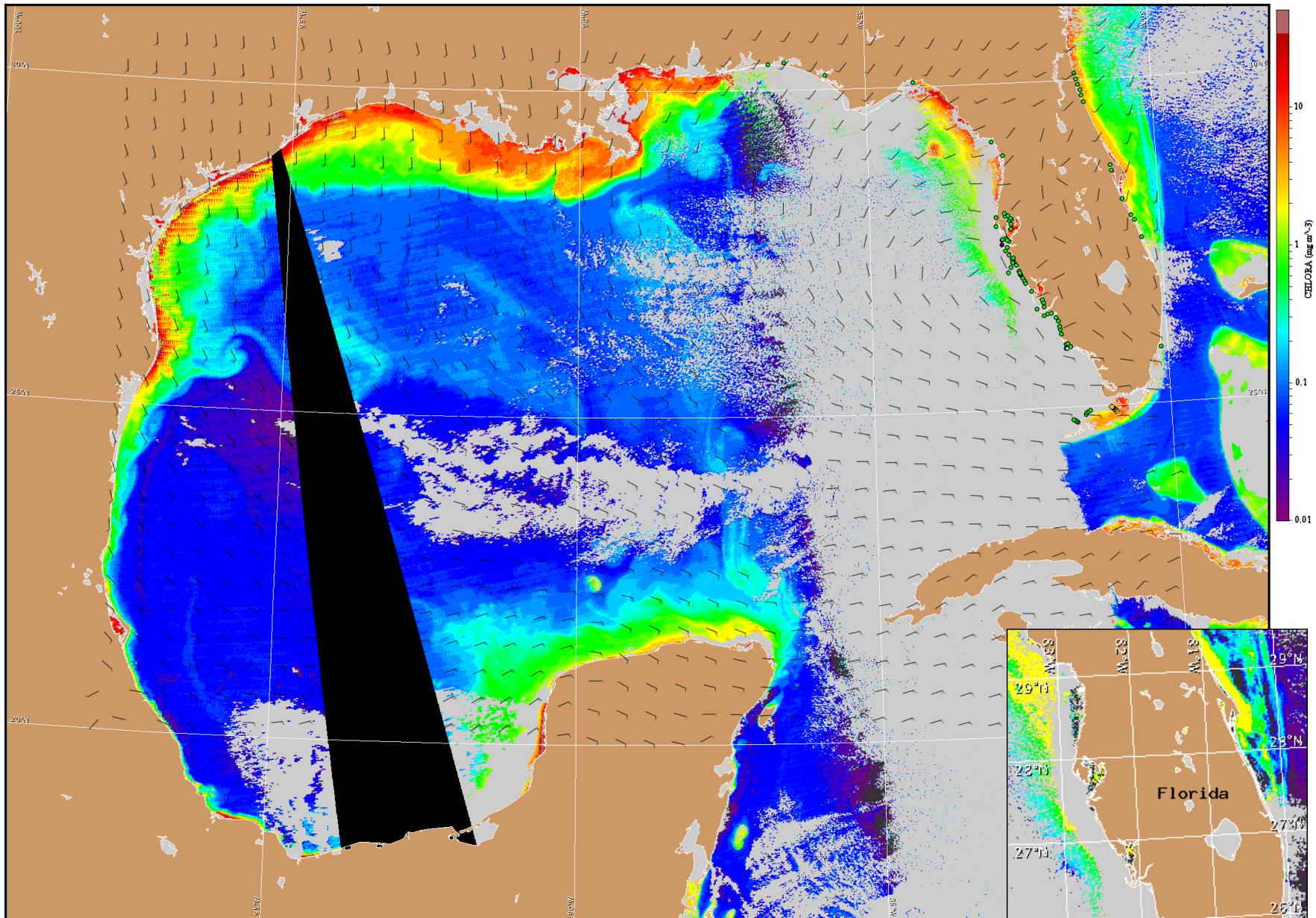
Florida Keys - Gulfside: East winds (10-15 kn, 5-8 m/s) today through Friday becoming east to southeast winds (10-15 kn) Friday night through Sunday.

Pinellas to Lee Counties: Southwest winds (10 kn, 5 m/s) this afternoon. West winds tonight (5-10 kn, 3-5 m/s) becoming south winds toward morning. West winds Friday (10 kn) becoming north to northwest winds (5-15 kn, 3-8 m/s) Friday night through Saturday. East to northeast winds (10-15 kn) late Saturday evening through Sunday.



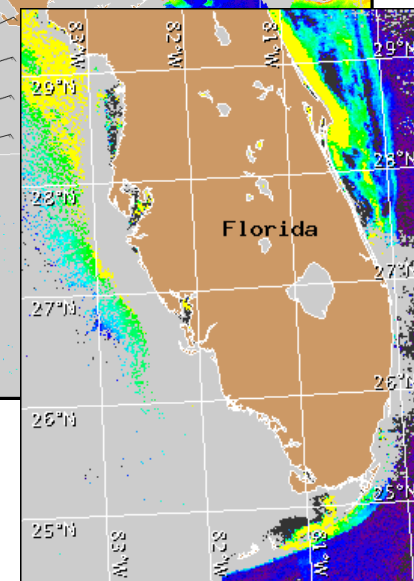
Wind speed and direction are averaged over 12 hours from buoy measurements. Length of line indicates speed; angle indicates direction. Red indicates that the wind direction favors upwelling near the coast. Values to the left of the dotted vertical line are measured values; values to the right are forecasts.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





Satellite chlorophyll image and forecast winds for April 27, 2012 06Z with cell concentration sampling data from April 16 to 25 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).