



Gulf of Mexico Harmful Algal Bloom Bulletin

Region: Southwest Florida

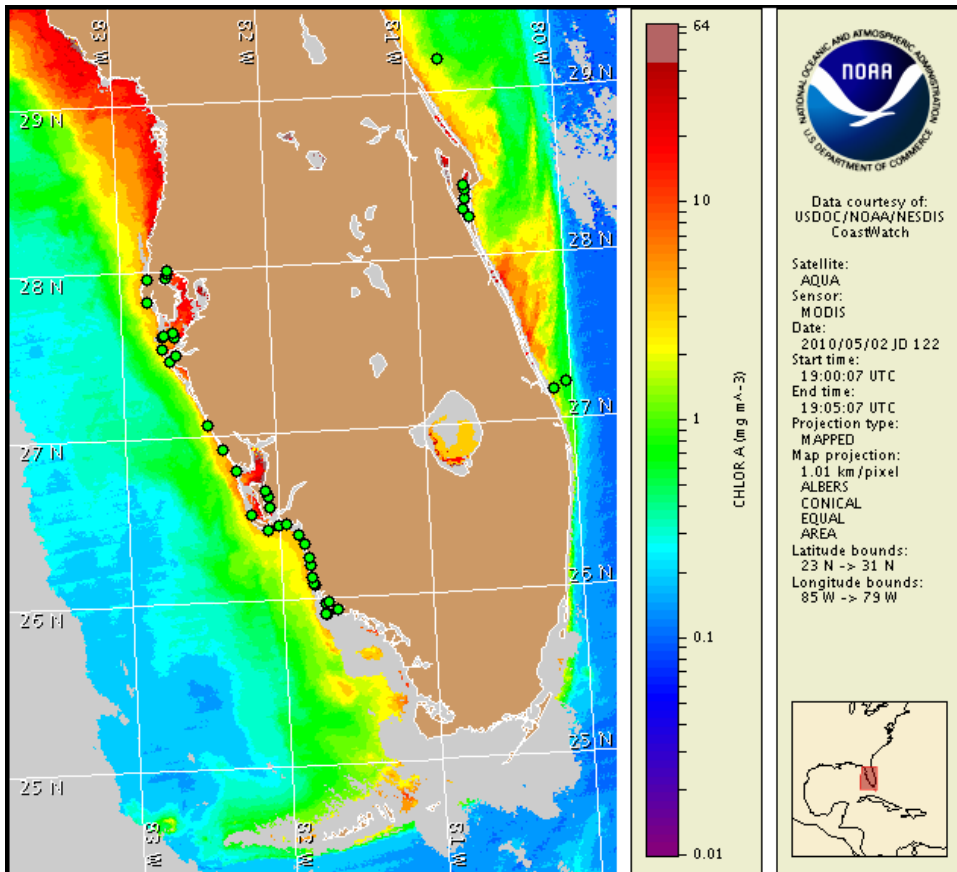
3 May 2010

NOAA Ocean Service

NOAA Satellites and Information Service

NOAA National Weather Service

Last bulletin: April 29, 2010



Satellite chlorophyll image with possible HAB areas shown by red polygon(s). Cell concentration sampling data from April 23 to 29 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 HABFS bulletin guide:

http://tidesandcurrents.noaa.gov/hab/habfs_bulletin_guide.pdf

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1. Data are restricted to civil marine applications only; i.e. federal, state, and local government use/distribution is permitted.
2. Image products may be published in newspapers. Any other publishing arrangements must receive GeoEye approval via the CoastWatch Program.

Conditions Report

There is currently no indication of a harmful algal bloom at the coast in southwest Florida. A harmful algal bloom was last identified offshore in the gulfside region of the lower Florida Keys on April 22. No impacts are expected at the coast in southwest Florida today through Wednesday, May 5.

Analysis

Florida Keys: A mixed *Karenia brevis* bloom likely remains in the gulfside region of the lower Florida Keys. No additional sample information is available north of the lower Keys where 'very low b' to 'low a' concentrations of *K. brevis* were identified approximately 2.3 to 3.5 miles north of Sawyer Key and the Content Keys on 4/19 (MML) and 4/22 (FWRI), respectively.

Recent satellite imagery in the Florida Keys continues to be obscured by clouds. However, small patches of the previously reported elevated to high chlorophyll feature (4-10 $\mu\text{g/L}$) remain partially visible east of the Content Keys (24°48'5''N 81°25'32''W) and east of the lower Keys region. Chlorophyll concentrations appear highest (up to 10 $\mu\text{g/L}$) northeast of the Horseshoe Keys at approximately 24°47'1''N 81°14'48''W. Elevated chlorophyll (3-5 $\mu\text{g/L}$) also remains partially visible at the western most edge of the lower Keys. Continued sampling throughout the lower Keys region is recommended.

Continued southeast winds are expected today through Wednesday north of the lower Keys. This may promote north to northwestward transport of the bloom.

Southwest Florida: There is currently no indication of a harmful algal bloom in southwest Florida. No *Karenia brevis* was detected in samples collected alongshore southwest Florida from Pinellas to Collier County last week (FWRI, MML, SCHD, CCPCPD; 4/26-29). An elevated chlorophyll feature (2-3 $\mu\text{g/L}$) became visible northwest of Cape Sable in Monroe County on 5/2 (shown left) centered at approximately 25°26'20''N 81°37'9''W. Although we will continue to monitor this feature, elevated chlorophyll features presently visible along and offshore of the southwest Florida coast are likely a result of mixed diatom blooms which continued to be identified at the coast last week (FWRI, 4/26-27). Harmful bloom formation is not expected through Wednesday, May 5.

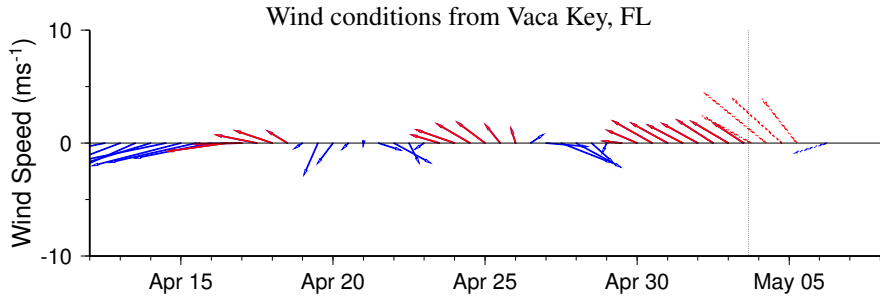
SeaWiFS imagery is not currently being displayed on the bulletin. MODIS imagery is shown at left and on page 3.

-Fisher, Derner, Yang

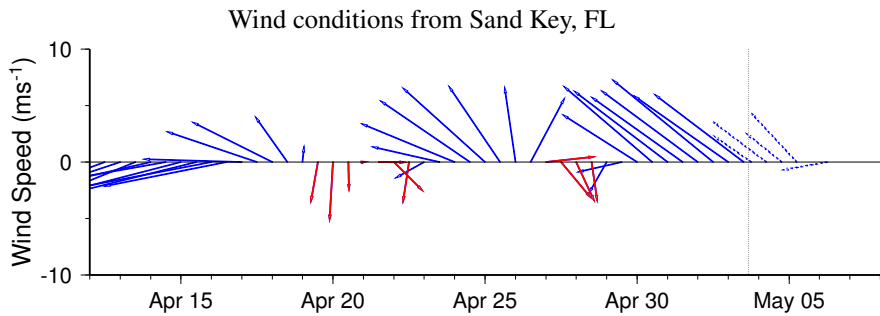
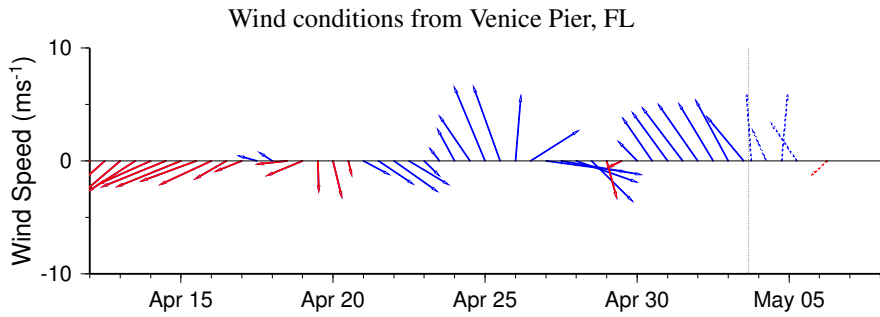
Wind Analysis

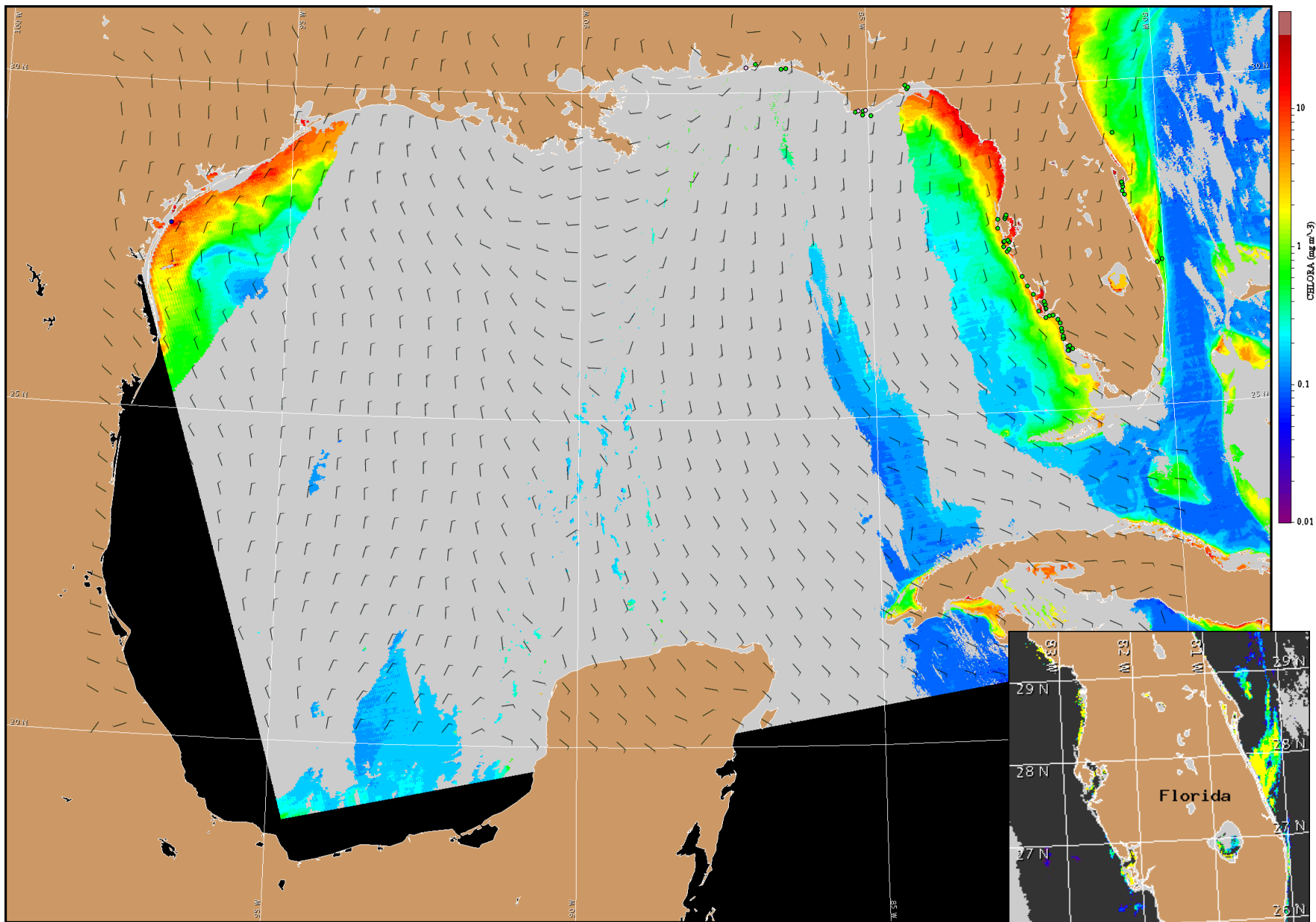
Florida Keys (gulfside): Southeast winds today through Wednesday (10-15kn, 5-8m/s).

Southwest Florida: South winds today (10-15kn, 5-8m/s). Southwest winds Tuesday (15kn, 8m/s), shifting south Tuesday night (10kn, 5m/s). Southwest winds Wednesday (10kn, 5m/s), shifting southeast Wednesday night (5kn, 3m/s).



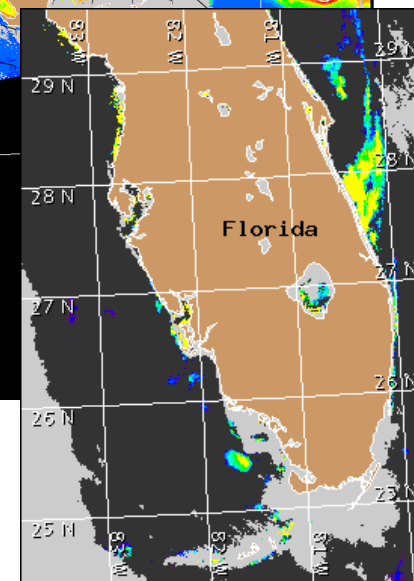
Wind speed and direction are averaged over 12 hours from buoy measurements. Length of line indicates speed; angle indicates direction. Red indicates that the wind direction favors upwelling near the coast. Values to the left of the dotted vertical line are measured values; values to the right are forecasts.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





Satellite chlorophyll image and forecast winds for May 4, 2010 12Z with Cell concentration sampling data from April 23 to 29 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 HABFS 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).