



Gulf of Mexico Harmful Algal Bloom Bulletin

Region: Southwest Florida

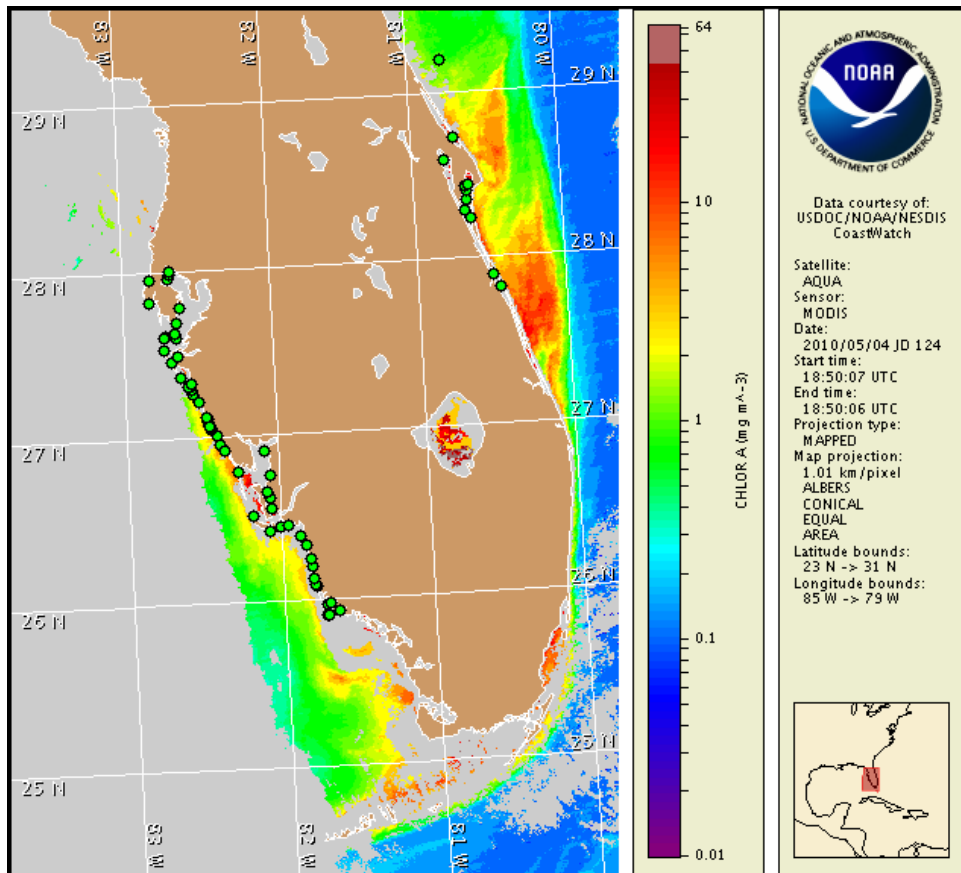
6 May 2010

NOAA Ocean Service

NOAA Satellites and Information Service

NOAA National Weather Service

Last bulletin: May 3, 2010



Satellite chlorophyll image with possible HAB areas shown by red polygon(s). Cell concentration sampling data from April 26 to May 5 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

Please note the following restrictions on all SeaWiFS imagery derived from CoastWatch.

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 Sunday, May 9.

Analysis

Florida Keys: A mixed *Karenia brevis* bloom likely remains in the gulfside region of the lower Florida Keys. Recent samples collected in this region are currently undergoing analysis; no further confirmation of the bloom is available at this time.

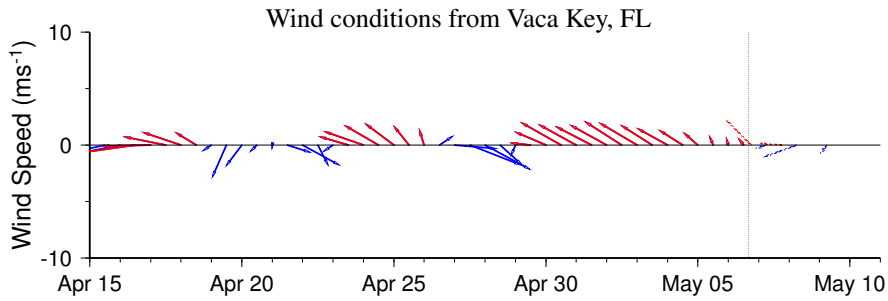
Recent satellite imagery in the Florida Keys continues to be mostly obscured by clouds. However, small patches of the previously reported elevated chlorophyll feature ($5\text{-}9\mu\text{g/L}$) remain partially visible along the northern edge of the lower Florida Keys and in a band east of the lower Keys region to approximately 7-16 miles north of the middle Keys and into the Florida Bay region. Elevated chlorophyll ($2\text{-}5\mu\text{g/L}$) also remains partially visible in at the western most edge of the lower Keys (MODIS, 5/3). Continued sampling throughout the lower Keys region is recommended.

Variable winds today through Sunday will likely minimize bloom transport in the Keys region.

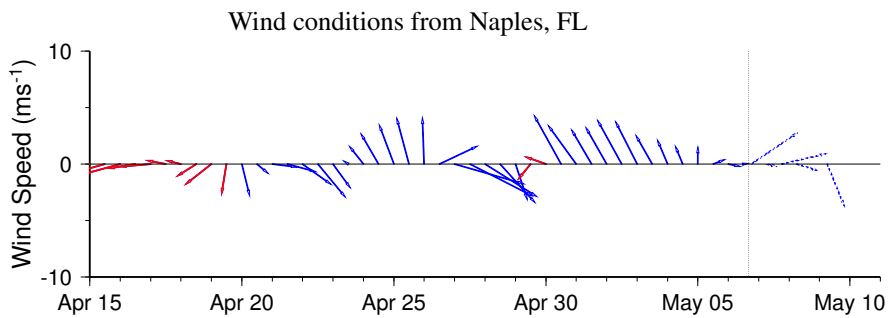
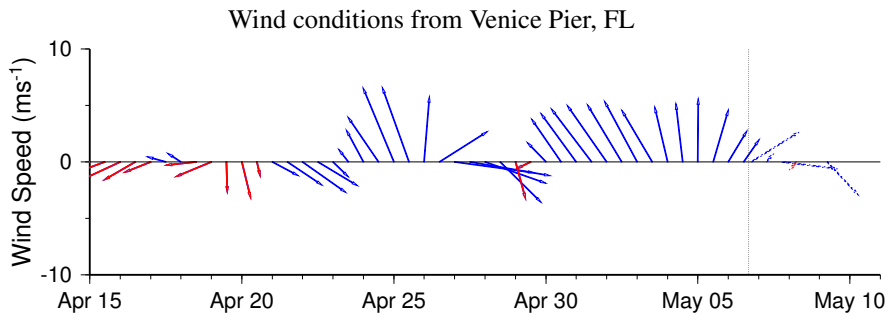
Southwest Florida: There is currently no indication of a harmful algal bloom in southwest Florida. No *Karenia brevis* was identified in samples collected alongshore southwest Florida from Pinellas to Collier County this week (FWRI, MML, SCHD, CCPCPD; 5/3-5/5). Mixed diatom blooms continue to be reported in many southwest Florida counties (FWRI, 5/3-5/5). The elevated chlorophyll feature located northwest of Cape Sable in Monroe County remains visible in recent imagery and appears to have intensified over the past few days ($2\text{-}6\mu\text{g/L}$). The feature is centered slightly further to the northwest at approximately $25^{\circ}30'21''\text{N } 81^{\circ}41'8''\text{W}$. 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. Harmful bloom formation is not expected through Sunday, May 9.

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

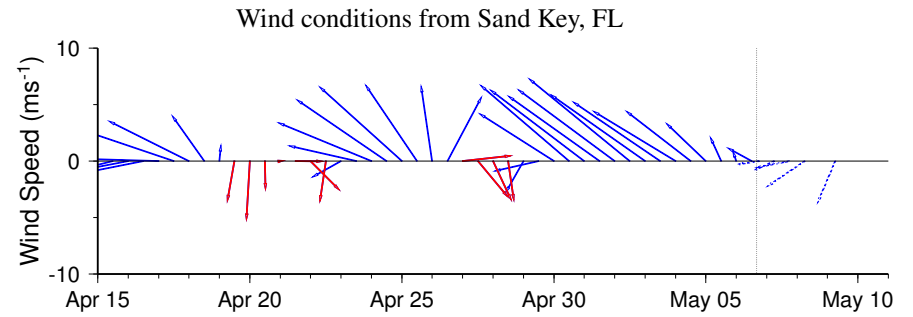
-Fisher, Derner, Burrows



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).



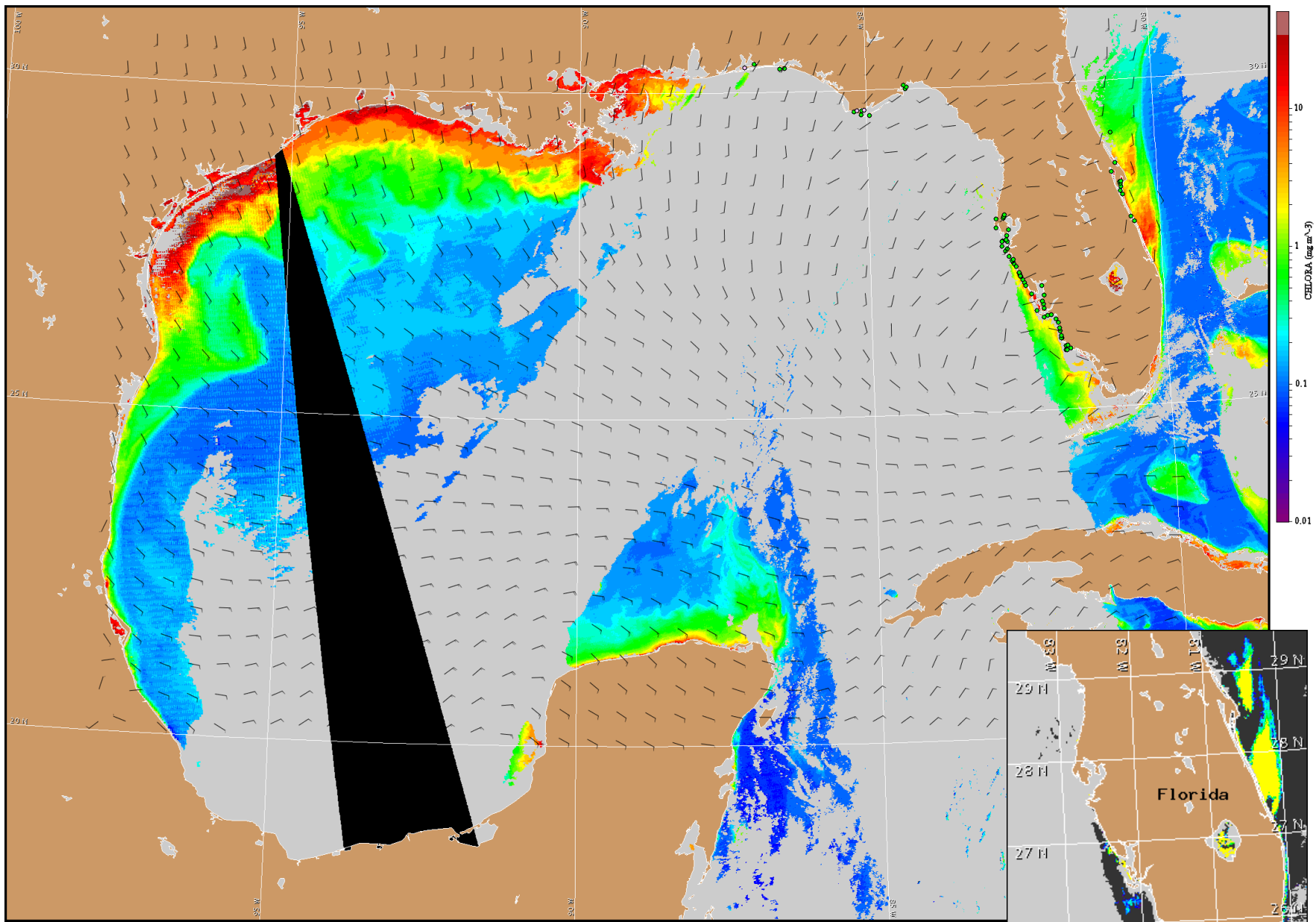
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Wind Analysis

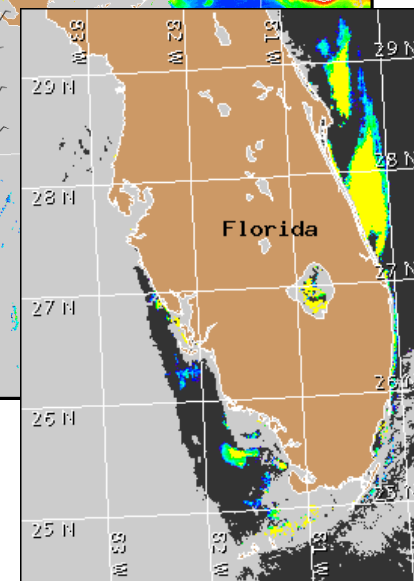
Florida Keys (gulfside): Variable winds today (5-10kn, 3-5m/s), becoming northeast to east tonight. Northeast winds Friday shifting south, then east into Friday night (5-10kn). Northwest winds Saturday (10kn, 5m/s). North winds Sunday (10kn).

Southwest Florida: West winds today through Friday (5-10kn, 3-5m/s). Southwest to west winds Friday night (5-10kn), becoming northwest. Northwest winds Saturday (10kn, 5m/s). Northwest to north winds Sunday (5-10kn), becoming east Sunday night (15kn, 8m/s).



Satellite chlorophyll image and forecast winds for May 7, 2010 06Z with Cell concentration sampling data from April 26 to May 5 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).