



Gulf of Mexico Harmful Algal Bloom Bulletin

Region: Southwest Florida

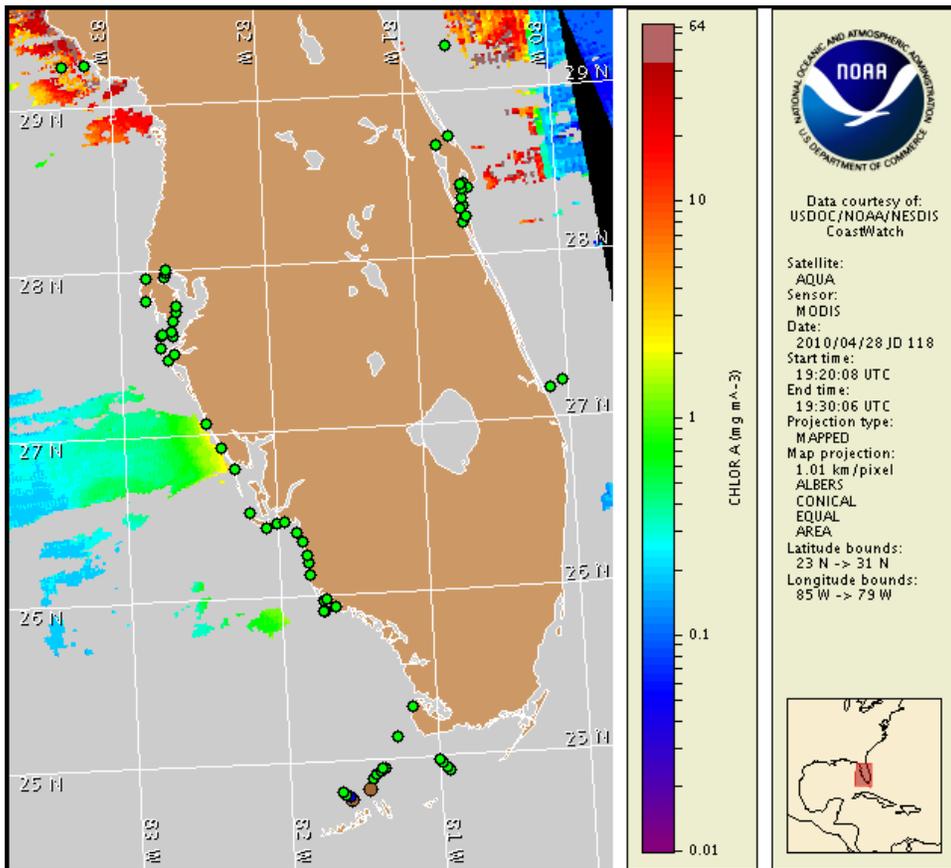
29 April 2010

NOAA Ocean Service

NOAA Satellites and Information Service

NOAA National Weather Service

Last bulletin: April 26, 2010



Satellite chlorophyll image with possible HAB areas shown by red polygon(s). Cell concentration sampling data from April 19 to 27 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; however, a harmful algal bloom has been identified offshore in the gulfside region of the lower Florida Keys. No impacts are expected at the coast in southwest Florida today through Sunday, May 2.

Analysis

Due to the reconfirmation of a harmful algal bloom north of the lower Florida Keys, twice weekly bulletin dissemination will resume as of today, April 29.

Florida Keys: A mixed *Karenia brevis* bloom has been reconfirmed north of the lower Florida Keys. 'Very low b' to 'low a' concentrations of *K. brevis* were identified approximately 2.5 miles north of Sawyer Key on 4/19 (MML) and north of the Content Keys on 4/22 (FWRI). A large elevated chlorophyll feature (4-6 µg/L) was visible in MODIS imagery within both sampled areas on 4/21. Although clouds obscured full extents of this feature between 4/22 and 4/28, the feature did appear throughout this time to extend from north of the Content Keys to east of the lower Keys at increasingly higher chlorophyll concentrations (4->10 µg/L) east of the lower Keys. Recent satellite imagery in the Florida Keys is predominantly obscured by clouds, however small patches of the feature visible in SeaWiFS imagery (4/27; not shown) indicates that the bloom may still be present in the previously sampled areas. Continued sampling throughout this region is recommended.

East to southeast winds north of the lower Keys today through Sunday may promote 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 Sarasota, Charlotte and Collier counties this week (FWRI, 4/26-27). Non-harmful mixed diatom blooms continued to be identified at the coast this week in Charlotte and Collier counties (FWRI, 4/26-27). Recent satellite imagery is cloudy throughout southwest Florida, limiting chlorophyll analysis. Harmful bloom formation is not expected through Sunday, May 2.

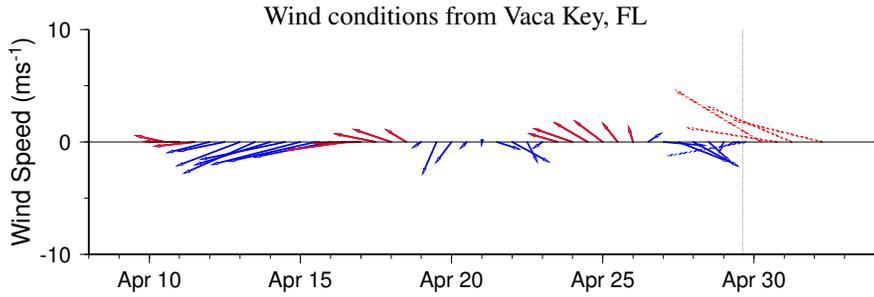
SeaWiFS imagery is not currently being displayed on the bulletin. MODIS imagery is shown at left and on page 3.

-Fisher, Derner, Burrows

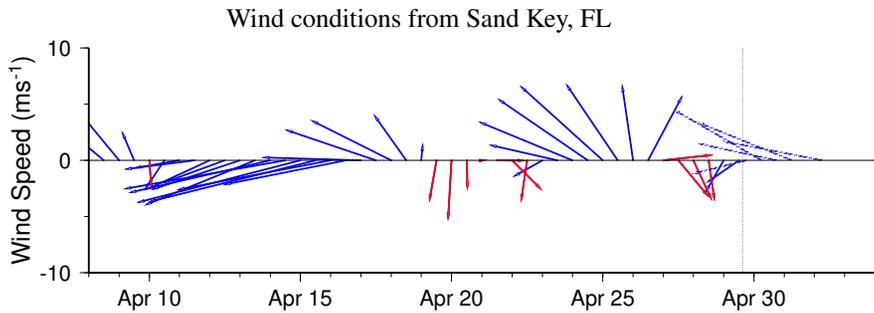
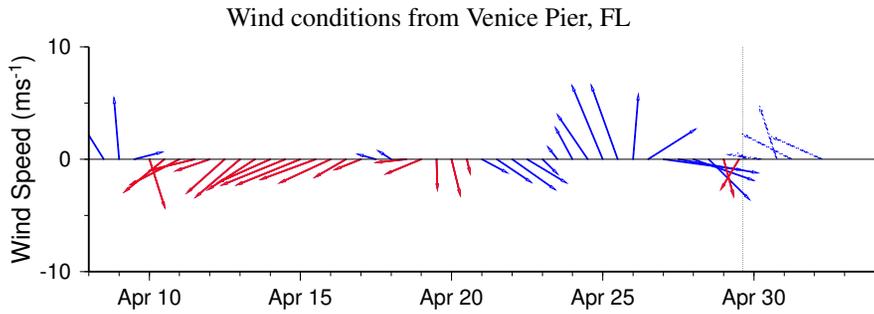
Wind Analysis

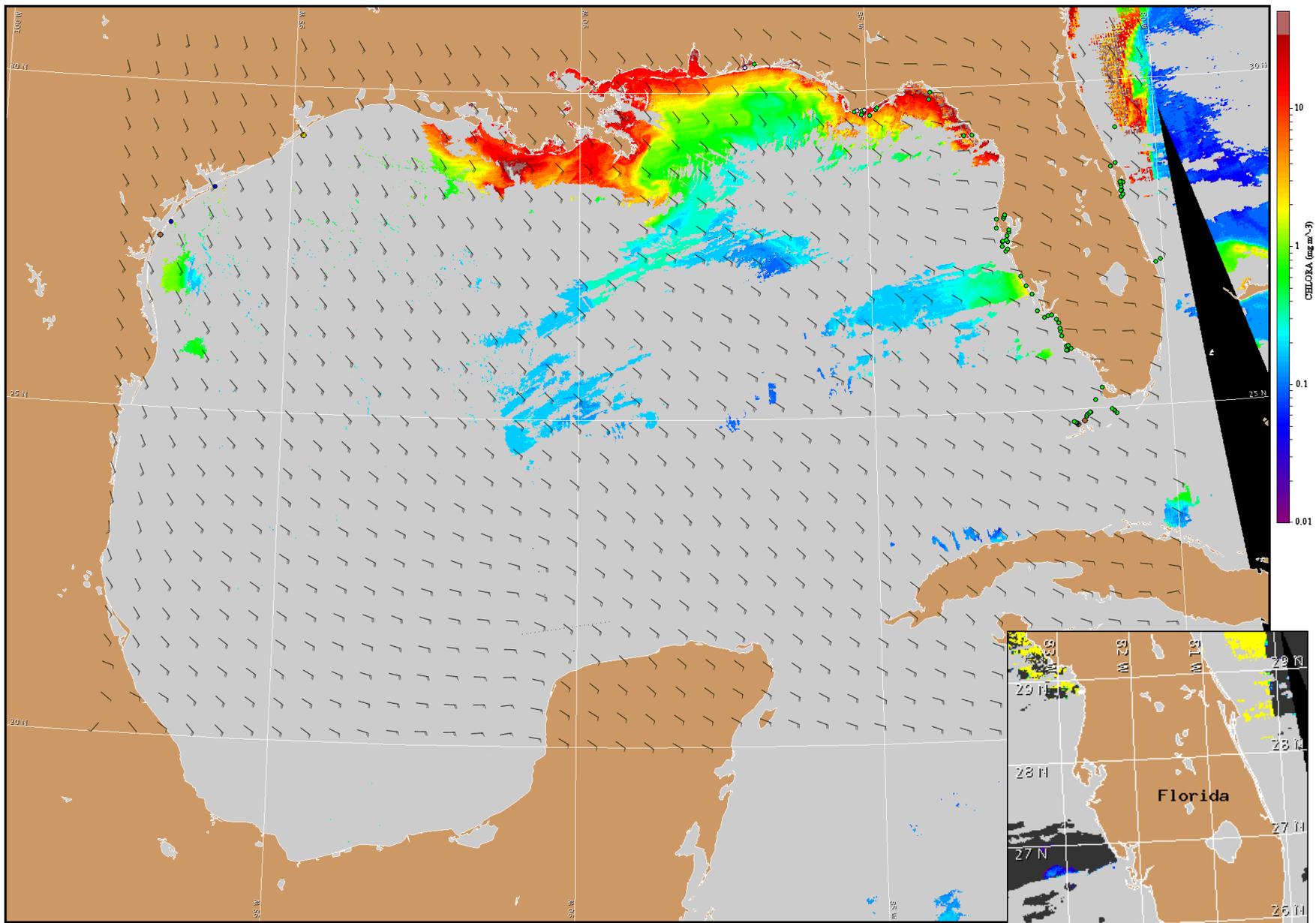
Florida Keys (gulfside): East winds today (10kn, 5m/s), becoming east to southeast tonight (10-15kn, 8m/s). Southeast winds Friday through Saturday (15-20kn, 8-10m/s). East to southeast winds Sunday (15kn, 8m/s).

Southwest Florida: East winds today, becoming southwest then southeast tonight (5-10kn, 3-5m/s). Southeast winds Friday (20kn, 10m/s) through Saturday (10-15kn, 5-8m/s). South winds Sunday becoming southeast Sunday night (10kn, 5m/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 April 30, 2010 06Z with Cell concentration sampling data from April 19 to 27 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).