



Gulf of Mexico Harmful Algal Bloom Bulletin

Region: Southwest Florida

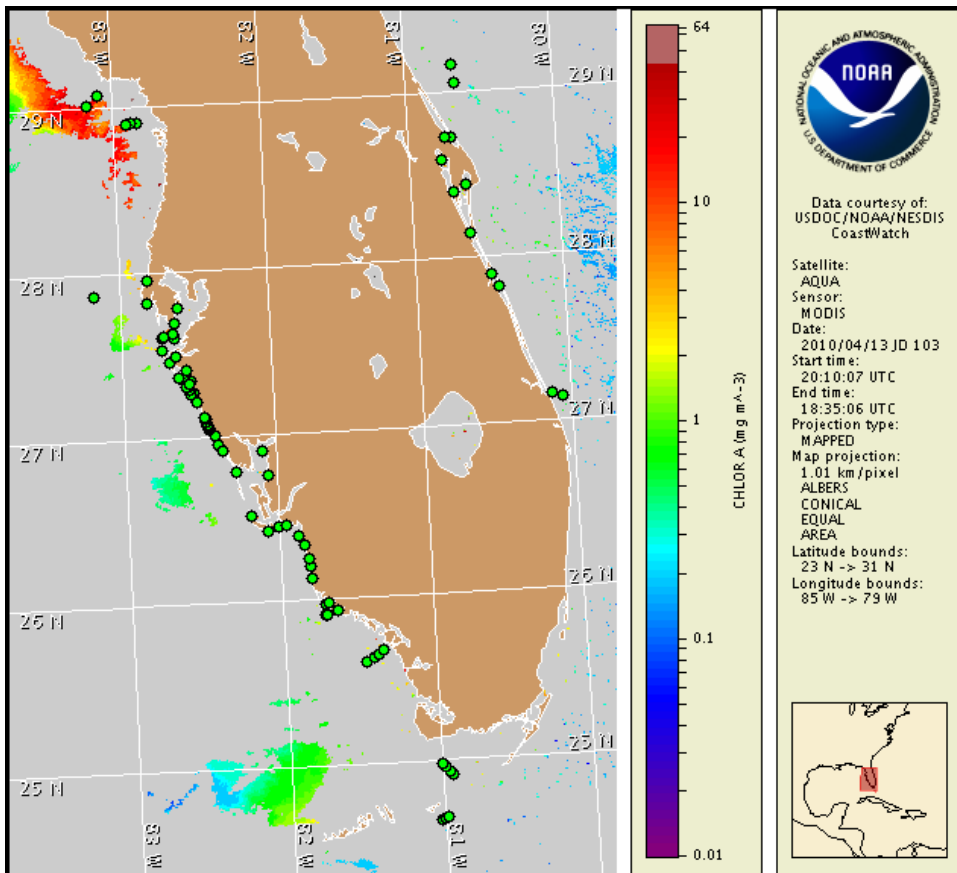
15 April 2010

NOAA Ocean Service

NOAA Satellites and Information Service

NOAA National Weather Service

Last bulletin: April 12, 2010



Satellite chlorophyll image with possible HAB areas shown by red polygon(s). Cell concentration sampling data from April 5 to 13 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

A patchy harmful algal bloom was last identified alongshore and offshore the ocean side of the lower Florida Keys on 3/30 and offshore the gulf side of the lower Florida Keys on 3/31. No reports of impacts associated with these blooms have been received. No impacts are expected alongshore the Florida Keys or elsewhere alongshore southwest Florida today through Sunday, April 18.

Analysis

Florida Keys: A harmful algal bloom was last identified alongshore and offshore in the ocean side region of the lower Florida Keys on 3/30 and offshore in the gulfside region of the lower Florida Keys on 3/31. No new samples have been received for either location, where up to 'low a' and 'medium' *Karenia brevis* concentrations were identified south of Newfound Harbor Keys and 5-10 miles north of Upper Harbor Keys, respectively (MML; 3/30-31). Three samples collected this week approximately 5 miles southeast of Marathon all indicate that *K. brevis* is not present. Satellite imagery throughout the Florida Keys has been cloudy the past several days, limiting analysis. No recent chlorophyll information is available south or north of the lower Keys where *K. brevis* was previously identified; continued sampling throughout this region is recommended.

Strong northeast and east winds over the next several days may promote westward transport of the bloom north of the lower Florida Keys through Saturday.

Southwest Florida: Recent samples collected alongshore southwest Florida from Pinellas to Monroe County indicate that *K. brevis* is not present (FWRI, MML, SCHD; 4/6-4/13). Imagery alongshore and offshore southwest Florida remains cloudy, limiting analysis. MODIS imagery from 4/12 (not shown) suggests that chlorophyll levels remain elevated to high (3 to >10 $\mu\text{g/L}$) offshore northern Lee County, west of Cayo Costa. It is possible that chlorophyll levels remain elevated along much of the coast in southwest Florida; however, imagery at the coast is completely obscured by clouds and further chlorophyll information is not available. Elevated to high chlorophyll levels along the coast of southwest Florida are associated with non-harmful algal blooms that have been identified in recent samples, including patchy, mixed diatom blooms confirmed in Lee and Collier counties (FWRI; 4/12-13).

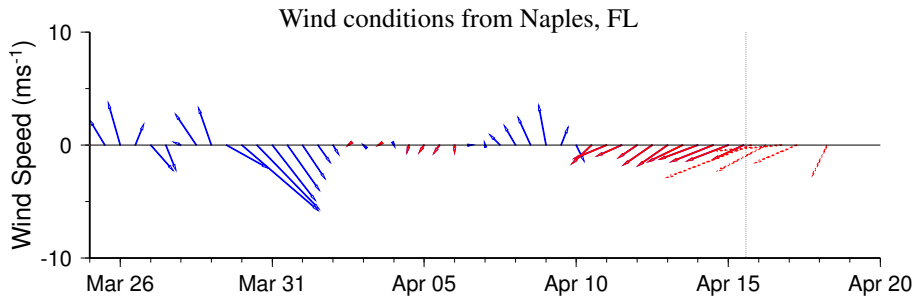
Due to technical difficulties SeaWiFS imagery is currently unavailable for display. MODIS imagery is shown on this bulletin.

Derner, Urizar

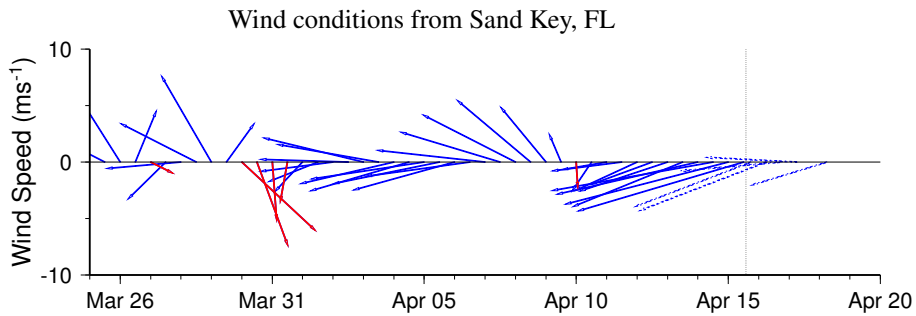
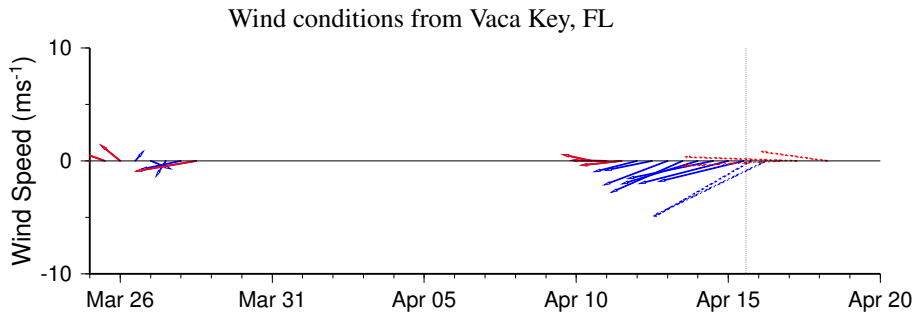
Wind Analysis

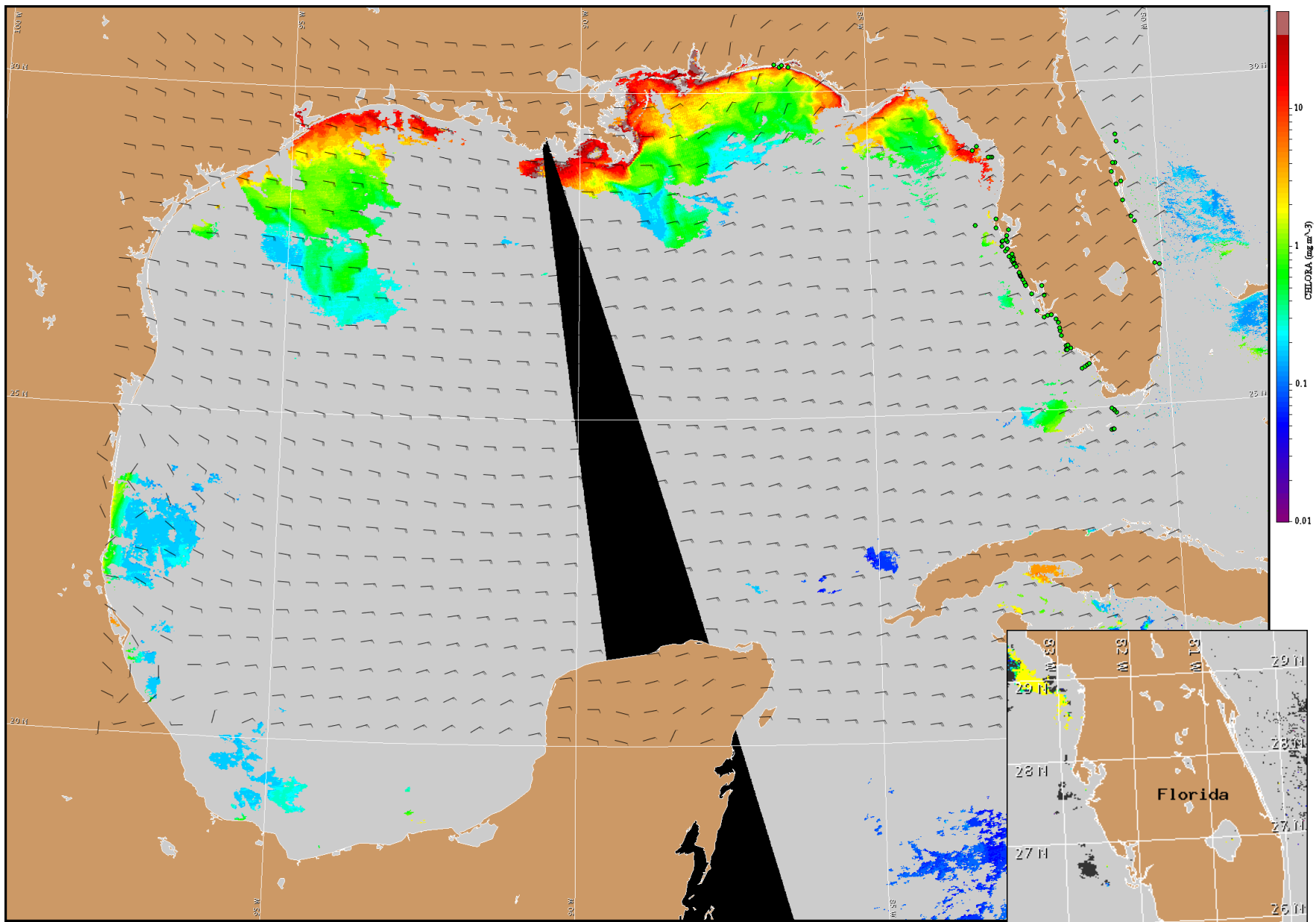
Southwest Florida: Northeast winds (15-20kn, 8-10m/s) today. East winds tonight (15-20kn) through Saturday (10-15kn, 5-8m/s). Northeast winds (10-15kn) Sunday.

Florida Keys: Northeast to east winds (20-25kn; 10-13m/s) today. East winds tonight (15-20kn, 8-10m/s) through Saturday (10-15kn, 5-8m/s). Southeast winds (10-15kn) Sunday.



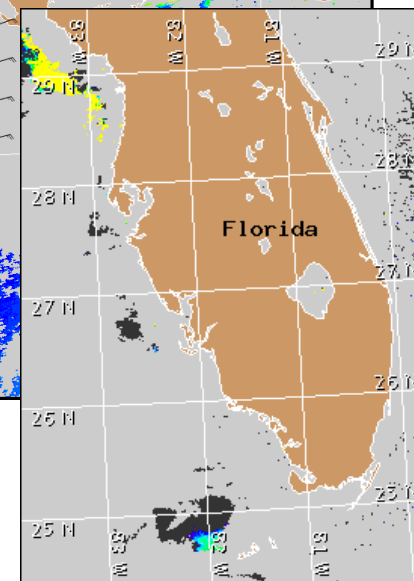
Wind speed and direction are averaged over 12 hours from buoy measurements. Length of line indicates speed; angle indicates direction. Red indicates that the wind direction favors upwelling near the coast. Values to the left of the dotted vertical line are measured values; values to the right are forecasts.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





Satellite chlorophyll image and forecast winds for April 16, 2010 06Z with Cell concentration sampling data from April 5 to 13 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



Verified and suspected HAB areas shown in red. Other areas of high chlorophyll concentration shown in yellow (see p. 1 analysis for interpretation).