



Gulf of Mexico Harmful Algal Bloom Bulletin

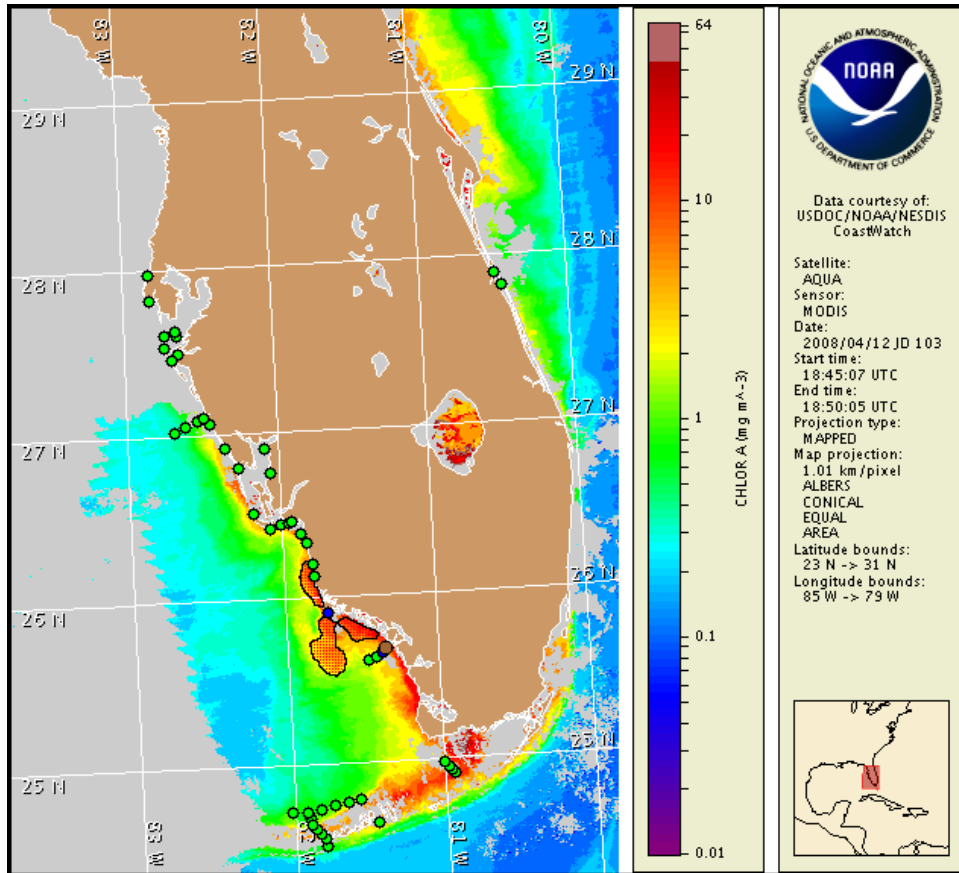
Region: South Florida

14 April 2008

NOAA Ocean Service

NOAA Satellites and Information Service

Last bulletin: April 10, 2008



Satellite chlorophyll image with possible HAB areas shown by red polygon(s). Cell concentration sampling data from April 5 to 9 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://www.csc.noaa.gov/crs/habf/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 harmful algal bloom has been identified in central Collier County and in northern Monroe County. Also, harmful algae has been identified in bay regions of northern Sarasota County. In central Collier County, patchy very low impacts are possible today, with no impacts expected Tuesday through Thursday. In northern Monroe County and in bay regions of northern Sarasota County, patchy very low impacts are possible today through Thursday. No additional impacts are expected elsewhere alongshore southwest Florida today through Thursday, April 17.

Analysis

A harmful algal bloom has been identified in central Collier County (very low at Marco Island) and northern Monroe County (very low to low southwest of Pavilion Key). Additionally, very low concentrations of *Karenia brevis* were identified last week in northern Sarasota County (New Pass region; MML 4/9); however more recent samples contained background to no *K. brevis* (MML, 4/14). MODIS and SeaWiFS imagery continues to be obscured by clouds in this region. Elevated to high chlorophyll features ($5\mu\text{g/L}$ - $>10\mu\text{g/L}$) are visible in recent MODIS imagery (4/12) alongshore Collier County from $26^{\circ}14'39''\text{N}$, $81^{\circ}51'48''\text{W}$ to Marco Island, extending offshore approximately 4-8 miles. Abundant non-harmful algae has been confirmed in this region as well (FWRI, 4/10). This feature extends southward into northern Monroe County to $25^{\circ}32'13''\text{N}$, $81^{\circ}42'53''\text{W}$ at the southernmost point and offshore to $81^{\circ}51'59''\text{W}$ longitude. High chlorophyll levels ($>10\mu\text{g/L}$) are also visible in MODIS imagery alongshore of the Ten Thousand Islands region; however this may not be indicative of harmful algae presence. No elevated chlorophyll features are visible in the Pavilion Key region. Sampling is recommended at all cited locations. South to southeastward transport is possible today through Wednesday. Intensification of the bloom is possible midweek.

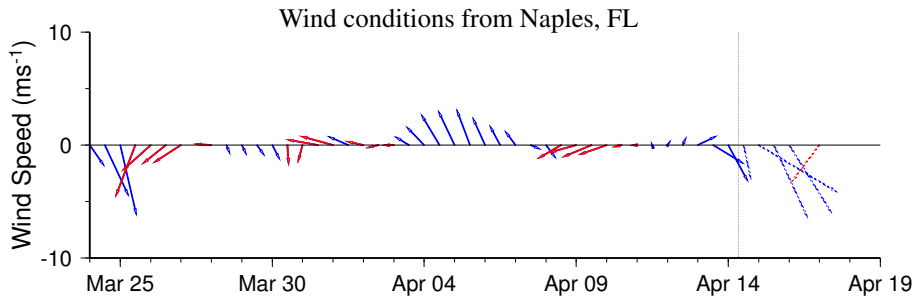
Please note that due to technical difficulties, SeaWiFS imagery is temporarily unavailable; MODIS imagery is displayed on pages 1 and 3 of this bulletin.

~Fisher, Urizar

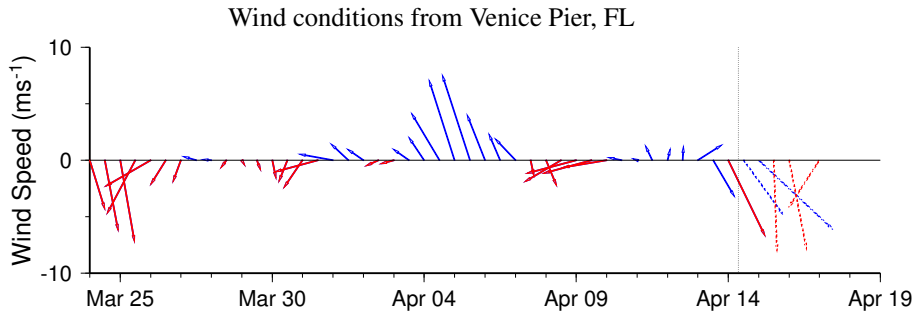
Wind Analysis

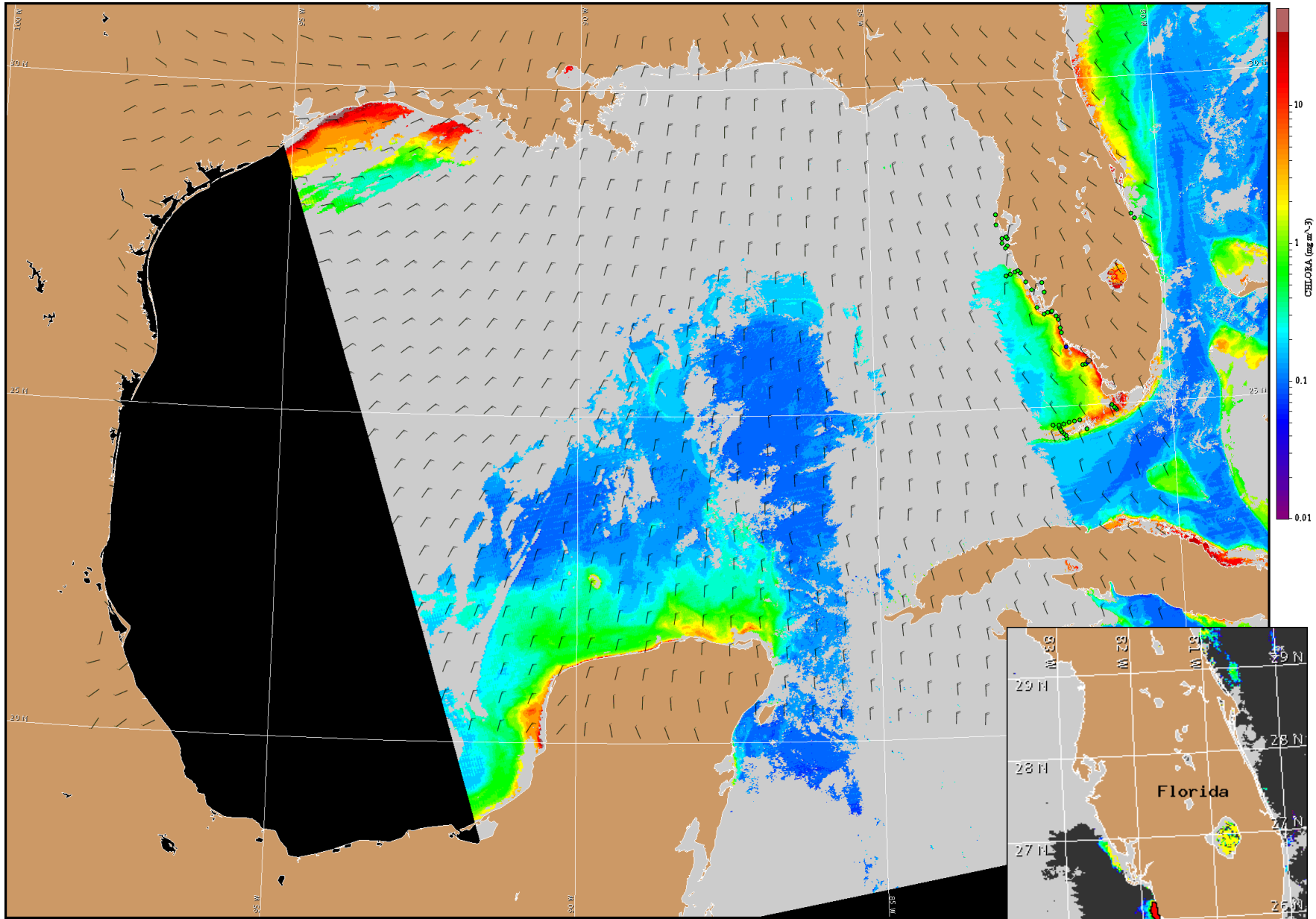
Collier and Monroe Counties: Northwest winds today (10-20kn, 5-10m/s). North winds Tuesday (10-15kn, 5-8m/s) through Wednesday (5-15kn, 3-8m/s), shifting northeast Wednesday night (10-15kn). Northeast to east winds expected Thursday.

Pinellas to Lee Counties: Northwest winds today (up to 20kn, 10m/s). North winds Tuesday (15-20kn, 8-10m/s), shifting northeast Tuesday night through Wednesday. East winds (10-15kn, 5-8m/s) expected Wednesday night into Thursday.

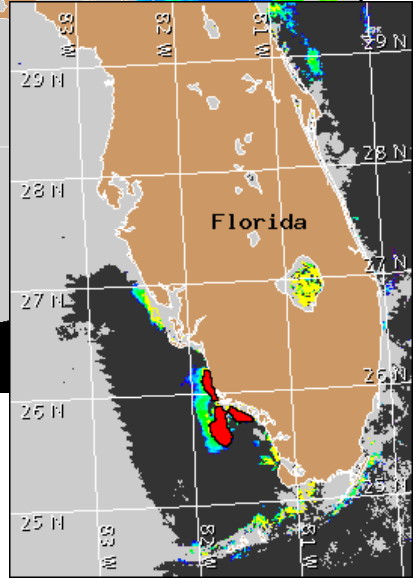


Wind speed and direction are averaged over 12 hours from buoy measurements. Length of line indicates speed; angle indicates direction. Red indicates that the wind direction favors upwelling near the coast. Values to the left of the dotted vertical line are measured values; values to the right are forecasts.





Satellite chlorophyll image and forecast winds for April 15, 2008 12Z with Cell concentration sampling data from April 5 to 9 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://www.csc.noaa.gov/crs/habf/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).