Gulf of Mexico Harmful Algal Bloom Bulletin

Region: South Florida

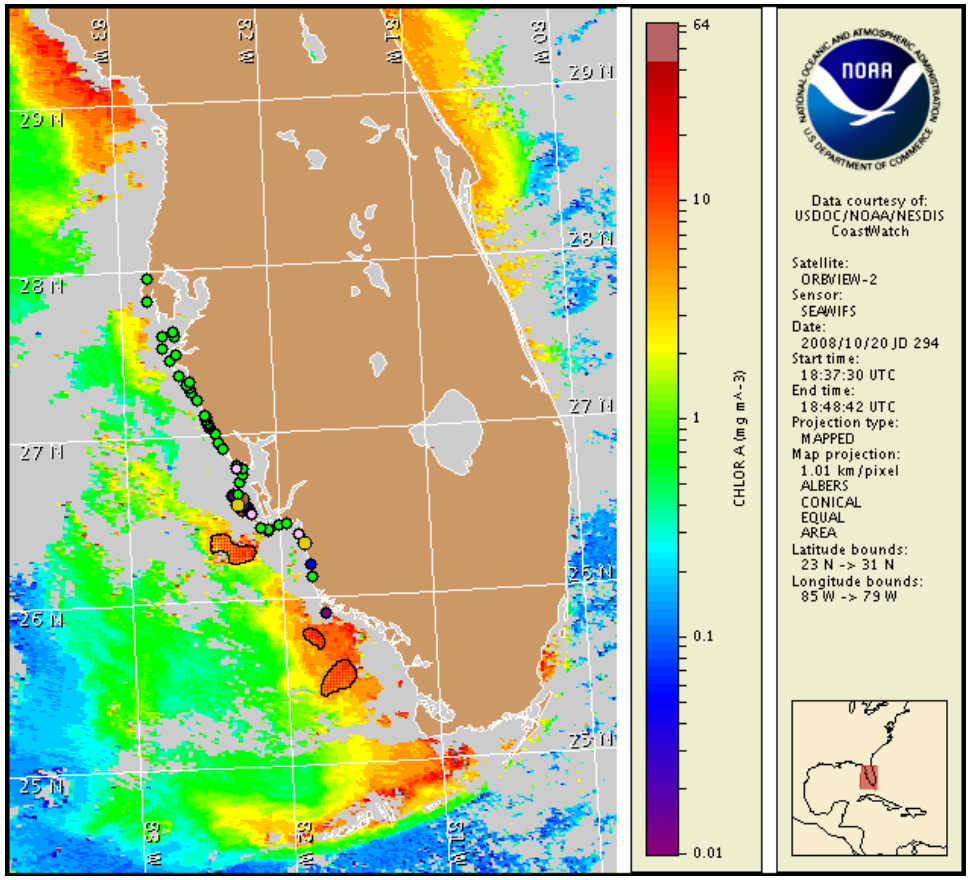
21 October 2008

NOAA Ocean Service

NOAA Satellites and Information Service

NOAA National Weather Service

Last bulletin: October 20, 2008



Satellite chlorophyll image with possible HAB areas shown by red polygon(s). Cell concentration sampling data from October 11 to 20 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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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

SW Florida: A harmful algal bloom has been identified in patches in the southern Lee/northern Collier County region and in northern Lee County. Patchy very low impacts are possible today through Wednesday in northern Lee County and the southern Lee/northern Collier County region. Additionally, harmful algae have been identified in central Collier County. No impacts are expected in central Collier County or elsewhere alongshore southwest Florida today through Wednesday, October 22.

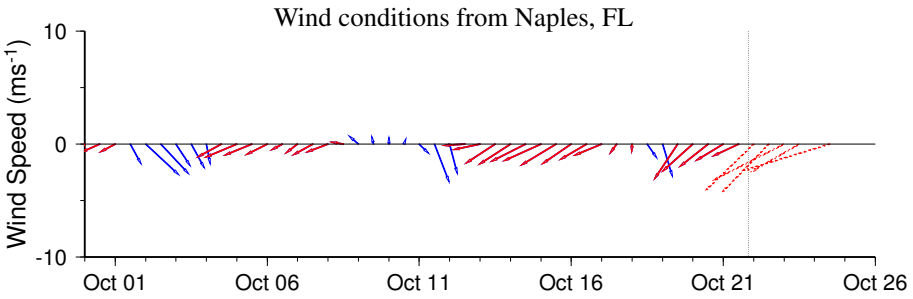
Analysis

*** This is a supplemental bulletin to bulletin number 53 issued Monday October 20 to report on a newly identified bloom. ***

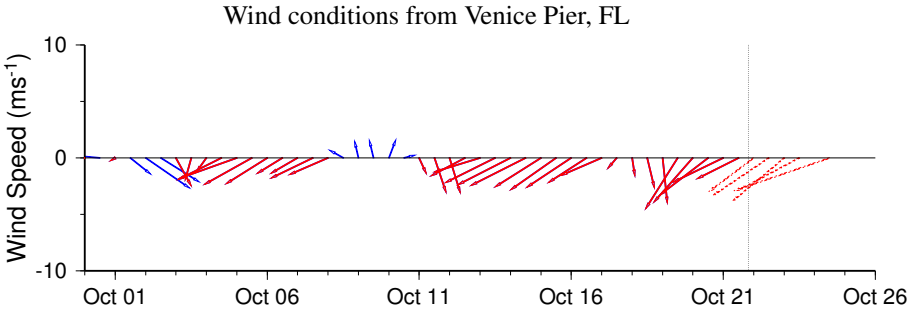
A harmful algal bloom has been identified in the southern Lee/northern Collier County region and persists from Cayo Costa State Park to Captiva Island in northern Lee County. Samples collected yesterday indicate Lowb concentrations of *Karenia brevis* in Barefoot Beach, Very Lowb concentrations in Clam Pass, not present in Naples Pier, and Very Lowa concentrations in Marco Island (FWRI 10/20). Satellite imagery (10/20) is cloudy along the coast throughout southwest Florida; however three elevated chlorophyll patches are visible offshore. The first elevated chlorophyll patch (as high as 8 μg/L) is located approximately 13 miles southwest of Sanibel Island (centered at 26°17'52''N 82°17'17''W). The second elevated chlorophyll patch (7-10 μg/L) is visible approximately 10 miles offshore Marco Island in Collier County (centered at 25°47'7''N 81°49'16''W). And the third elevated chlorophyll patch (3-9 μg/L) is located approximately 25 miles offshore southern Collier County (centered at 25°32'30''N 81°40'25''W). Sampling is recommended in all of these regions.

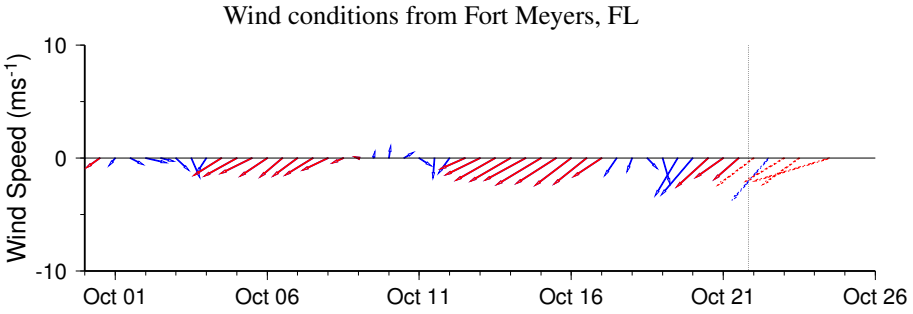
Offshore winds will reduce the potential for impacts at the coast today and tomorrow. Bloom intensification is possible today and tomorrow in the southern Lee/northern Collier County region. Also, conditions are favorable for additional bloom formation in southwest Florida today through Friday. Alongshore transport of the blooms is not expected today through Wednesday, October 22.

Urízar, Gan, Fisher



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).

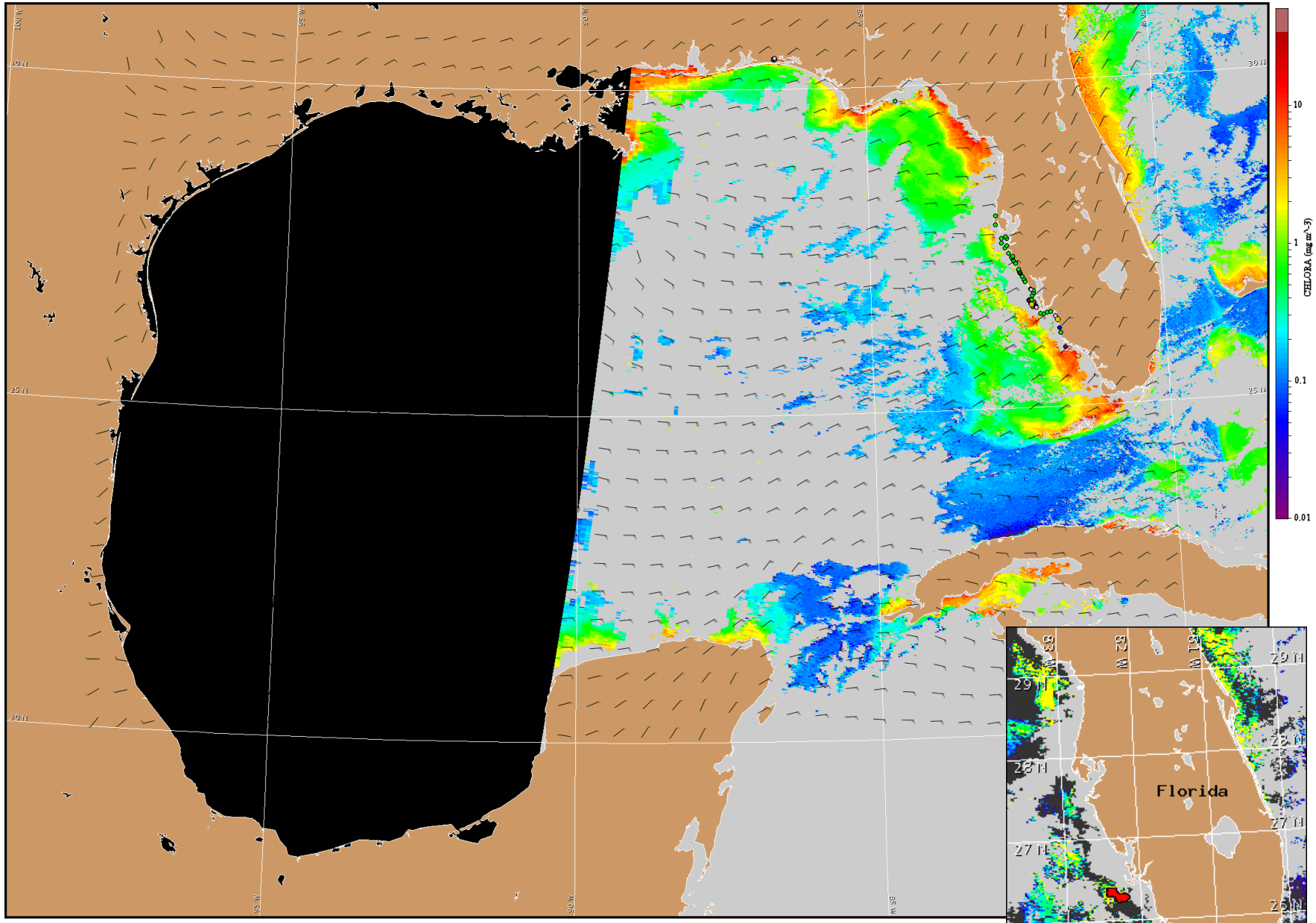




Wind Analysis

SW Florida: Northeasterly winds (10-15 kn, 5-8 m/s) today and tomorrow. Easterly winds (10-15 kn) Wednesday night through Friday. Southerly winds Friday night (10-15 kn). Southwesterly winds (5-10, 3-5 m/s) Saturday.

To see previous bulletins and forecasts for other Harmful Algal Bloom Bulletin regions, visit the NOAA CoastWatch bulletin archive: http://coastwatch.noaa.gov/hab/bulletins_ns.htm



Satellite chlorophyll image and forecast winds for October 22, 2008 12Z with Cell concentration sampling data from October 11 to 20 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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Verifi ed and suspected HAB areas shown in red. Other areas of high chlorophyll concentration shown in yellow (see p. 1 analysis for interpretation).