



Gulf of Mexico Harmful Algal Bloom Bulletin

Region: Southwest Florida

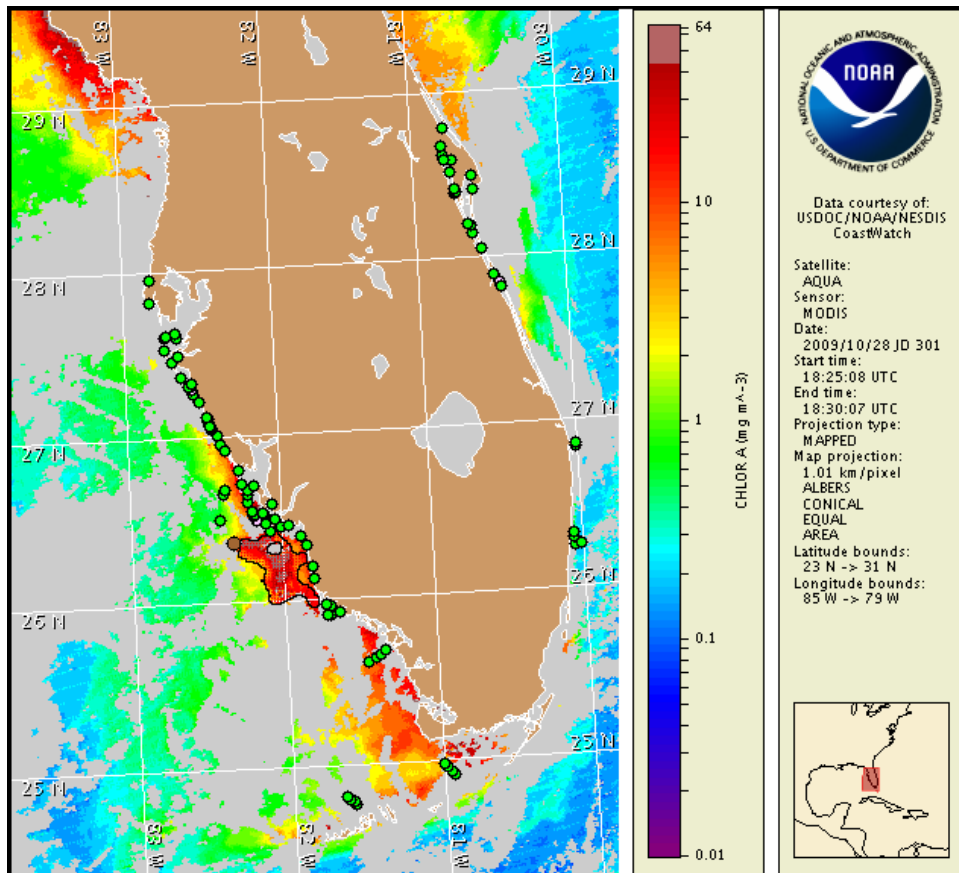
29 October 2009

NOAA Ocean Service

NOAA Satellites and Information Service

NOAA National Weather Service

Last bulletin: October 26, 2009



Satellite chlorophyll image with possible HAB areas shown by red polygon(s). Cell concentration sampling data from October 19 to 28 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 harmful algal bloom has been identified onshore northern Lee County and offshore southern Lee and northern Collier counties. No impacts are expected alongshore southwest Florida today through Sunday, November 1.

Analysis

A harmful algal bloom has been identified in northern Lee County and offshore southern Lee and northern Collier counties. Recent sample results indicate that *Karenia brevis* is no longer present in Captiva Pass nor in Boca Grande Pass where Very Low B and Very Low A concentrations were previously identified (FWRI 10/26). Additional samples taken alongshore Pinellas, Manatee, Charlotte, Lee and Collier counties all indicate that *K. brevis* is not present (FWRI 10/24-28). One of numerous samples taken alongshore Sarasota County indicates background concentrations of *K. brevis*; while all others indicate that *K. brevis* is not present (FWRI SCHD 10/26-27).

Samples taken 13 nm southwest of Sanibel Island in southern Lee County indicate Medium concentrations of *K. brevis* at the surface and Low A concentrations at 16m depth (FWRI 10/24). In northern Lee County, samples taken 14 nm offshore Captiva Island indicate that *K. brevis* is not present (FWRI 10/24). Samples taken offshore northern Monroe County and in the Florida Keys also indicate that *K. brevis* is not present (MML 10/22-26).

MODIS satellite imagery (10/28) is obscured by clouds throughout southwest Florida; however, elevated to high chlorophyll levels ($>5 \mu\text{g/L}$) alongshore Lee County and high ($>10 \mu\text{g/L}$) chlorophyll levels alongshore northern Collier County are visible. Also visible are patches of high levels of chlorophyll ($>10 \mu\text{g/L}$) offshore southern Lee and northern Collier counties. Generally, the patches extend from $26^{\circ}26'33''\text{N } 82^{\circ}3'27''\text{W}$ southward to $26^{\circ}2'23''\text{N } 82^{\circ}0'32''\text{W}$. Continued sampling throughout is recommended.

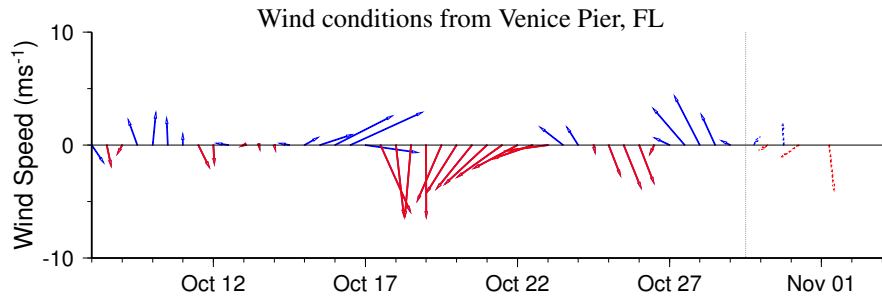
There is potential for bloom intensification and for further bloom formation alongshore southwest Florida today and through Sunday due to forecasted winds.

Due to technical difficulties SeaWiFS imagery is currently unavailable. MODIS imagery is displayed on this bulletin.

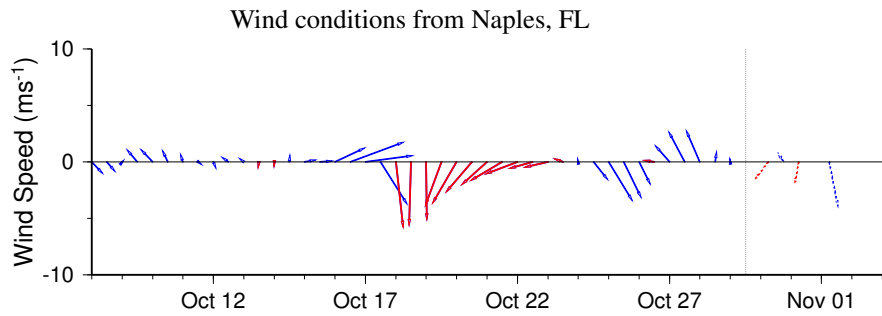
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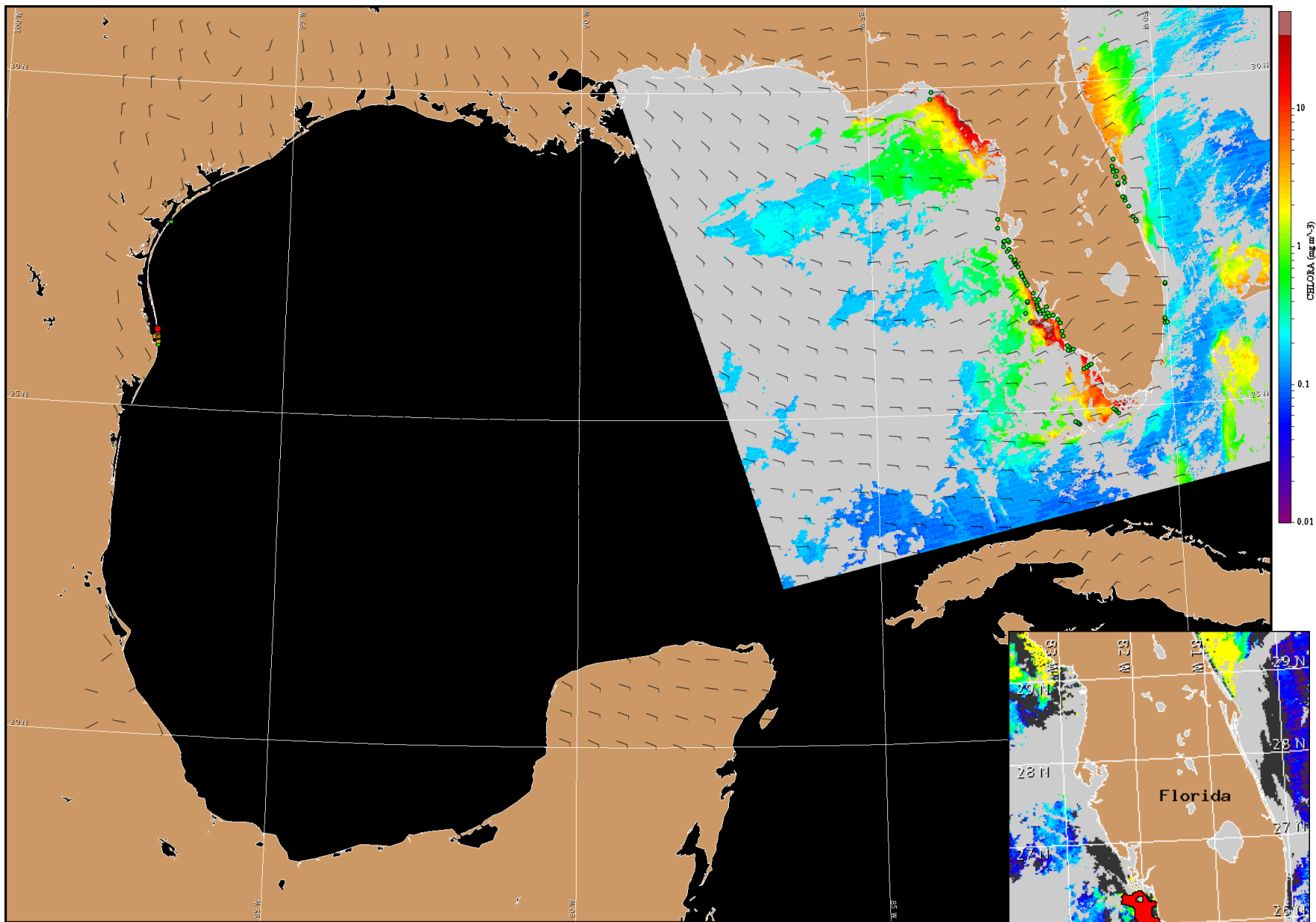
Wind Analysis

Southwest Florida: Southeasterly to easterly winds (10-15 kn, 5-8 m/s) today and Friday.
Easterly winds (10 kn, 5 m/s) Saturday. Northeasterly winds (10 kn) Sunday.



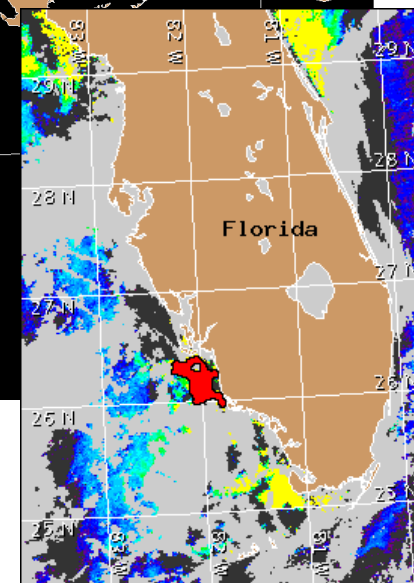
Wind speed and direction are averaged over 12 hours from buoy measurements. Length of line indicates speed; angle indicates direction. Red indicates that the wind direction favors upwelling near the coast. Values to the left of the dotted vertical line are measured values; values to the right are forecasts.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





Satellite chlorophyll image and forecast winds for October 30, 2009 06Z with Cell concentration sampling data from October 19 to 28 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).