



# Gulf of Mexico Harmful Algal Bloom Bulletin

Region: Southwest Florida

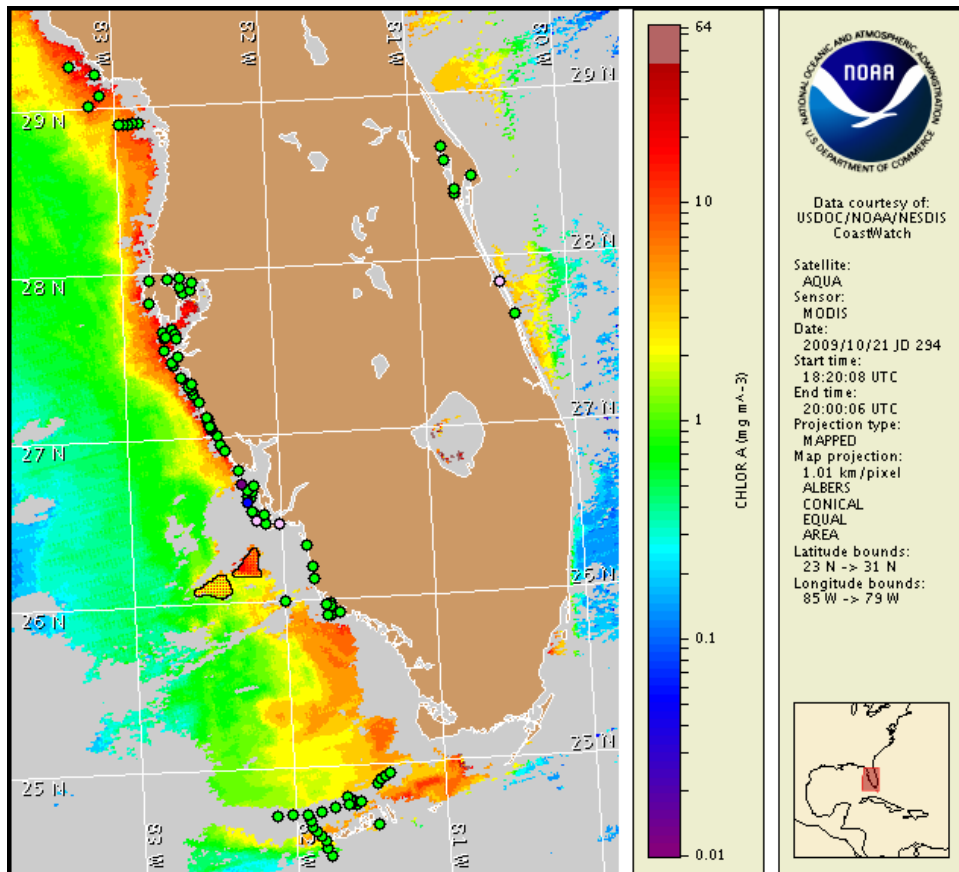
22 October 2009

NOAA Ocean Service

NOAA Satellites and Information Service

NOAA National Weather Service

Last bulletin: October 19, 2009



Satellite chlorophyll image with possible HAB areas shown by red polygon(s). Cell concentration sampling data from October 12 to 21 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](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 in northern Lee County. No impacts are expected alongshore southwest Florida today through Sunday, October 25.

## Analysis

A harmful algal bloom has been identified in northern Lee County. Recent samples indicate Very Low B concentrations of *Karenia brevis* at Captiva Pass and Very Low A concentrations at Boca Grande Pass in northern Lee County (FWRI 10/20). Additional samples taken alongshore Manatee, Charlotte and Collier Counties all indicate that *K. brevis* is not present (SCHD10/19; FWRI 10/19-20). Alongshore Sarasota County, only one out of numerous samples collected indicates background concentrations of *K. brevis*; all others indicate that *K. brevis* is not present (SCHD 10/19; MML 10/19-20). It appears that the previously reported bloom located offshore Lee and Collier counties has either expanded or moved onshore northern Lee County; although this information cannot be verified by satellite imagery due to significant cloud cover over this region in the past few days. The most recent MODIS image (10/20) is obscured by clouds alongshore from southern Sarasota to Monroe County making it difficult to determine the extent of the bloom alongshore northern Lee County. A portion of a high chlorophyll feature ( $>10 \mu\text{g/L}$ ) associated with the bloom is visible and extends from  $26^{\circ}22'6''\text{N}$   $82^{\circ}14'1''\text{W}$  to  $26^{\circ}2'24''\text{N}$   $82^{\circ}26'35''\text{W}$ , approximately 10 mi offshore southern Lee County. Continued sampling is recommended.

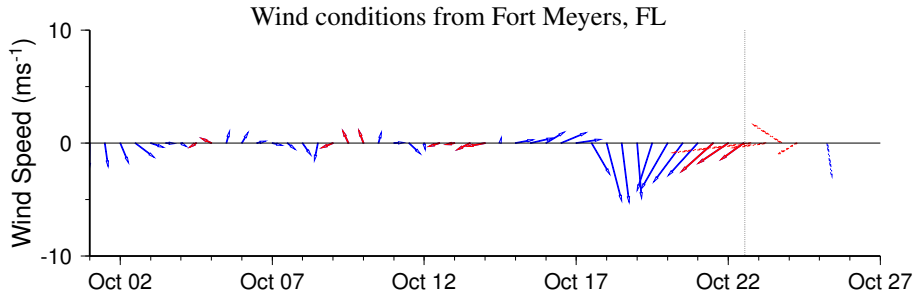
Alongshore transport of the bloom is not expected today through Sunday due to variable forecasted wind conditions. There is a potential for further bloom formation alongshore southwest Florida today and through the weekend due to forecasted winds.

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

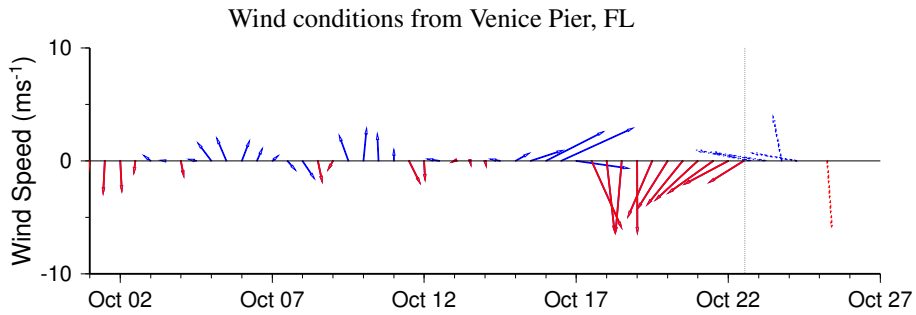
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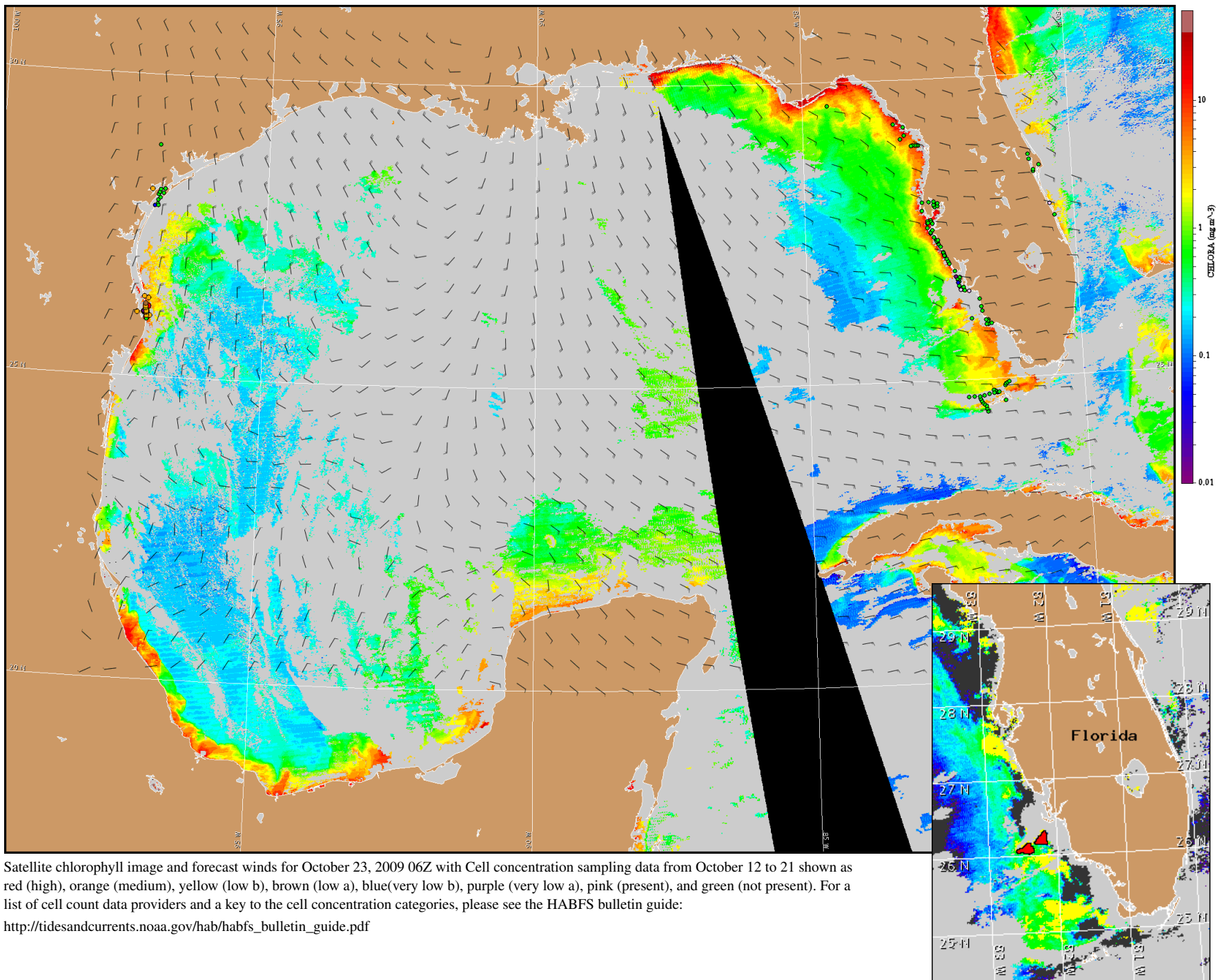
## Wind Analysis

Southwest Florida: Easterly winds (15-20 kn, 8-10 m/s) today. Southeasterly to westerly winds (5-15 kn, 3-8 m/s) Friday. Southwesterly to northerly winds (5-15 kn) Saturday. Northerly to northeasterly winds (10-15 kn, 5-8 m/s) 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 23, 2009 06Z with Cell concentration sampling data from October 12 to 21 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).