# Gulf of Mexico Harmful Algal Bloom Bulletin

Region: South Florida

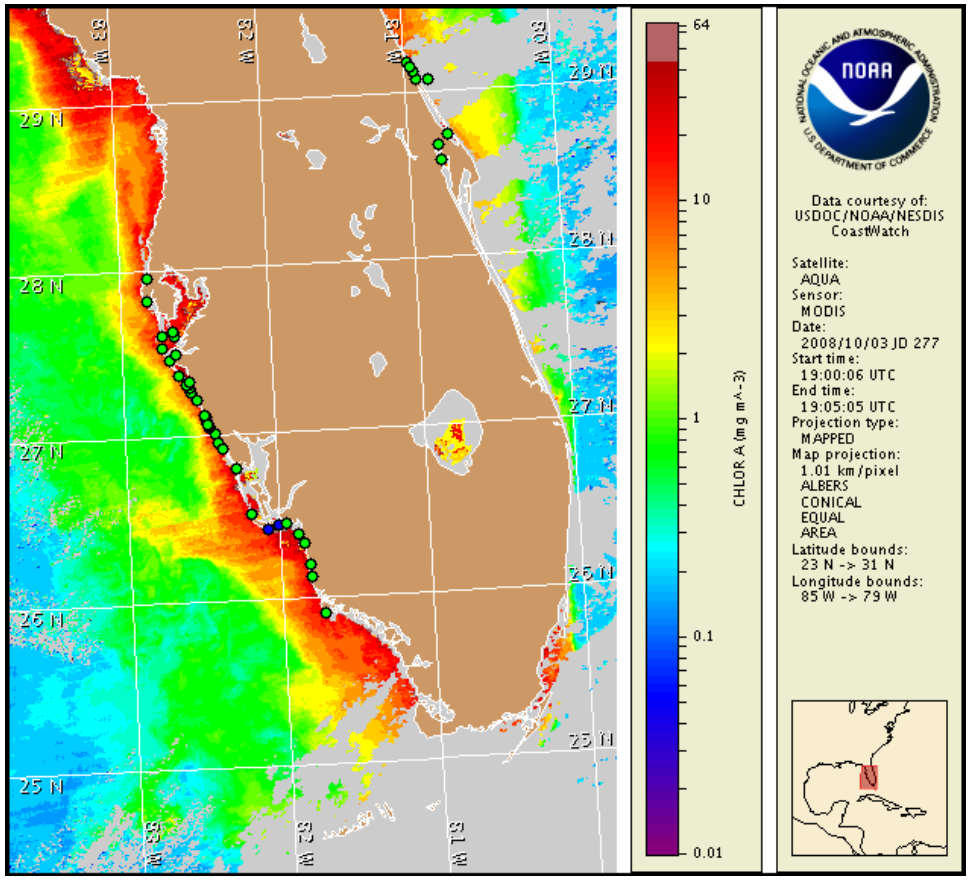
6 October 2008

NOAA Ocean Service

NOAA Satellites and Information Service

NOAA National Weather Service

Last bulletin: October 2, 2008




Satellite chlorophyll image with possible HAB areas shown by red polygon(s). Cell concentration sampling data from September 26 to October 1 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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## Conditions Report

A harmful algal bloom has been identified in southern Lee County. Patchy very low impacts are possible in the eastern Sanibel Island region Monday night and Tuesday night through Thursday. No other impacts are expected alongshore southwest Florida today through Thursday, October 9.

## Analysis

A harmful algal bloom has been confirmed in southern Lee County. 'Very Low b' concentrations of *Karenia brevis* were identified onshore Sanibel Island, Lee County (Tarpon Beach and Lighthouse Beach) on 10/1 (FWRI). Background concentrations were also reported onshore near New Pass in Sarasota County on 9/29 (MML). No additional *K. brevis* was identified alongshore southwest Florida from Pinellas to Collier Counties, or offshore southwest Florida from Manatee to Lee Counties, in the past week (SCHD, FWRI, MML; 9/29-10/3).

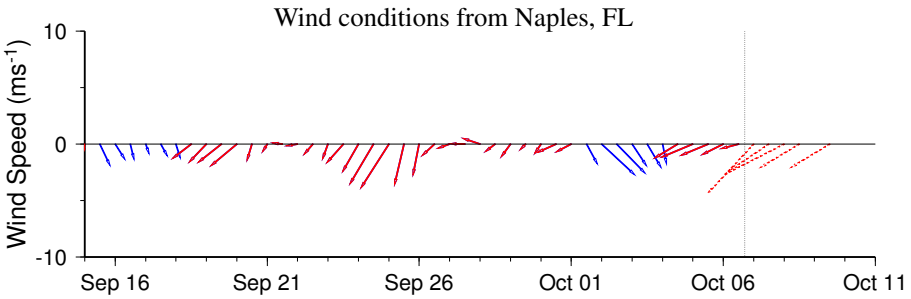
Recent MODIS imagery indicates that chlorophyll levels significantly intensified offshore southern Lee and northern Collier Counties (up to ~12 miles) between 10/1 and 10/3. High chlorophyll levels (>10$\mu$g/L) are visible near Sanibel Island (from 26°25'25"N 82°2'54"W eastward to 26°25'14"N 81°58'39"W and northeast to 26°26'49"N 81°57'21"W); and additionally alongshore southern Lee to northern Collier County (south to 26°12'19"N 81°50'52"W). A larger elevated to high (greater than 3$\mu$g/L) chlorophyll feature is visible up to ~114 miles west and southwest of Sanibel Island. High chlorophyll levels (>10$\mu$g/L) are also visible alongshore Gasparilla Island and Cayo Costa in northern Lee County. Sampling is highly recommended in each of these locations.

Conditions were favorable over the weekend for further intensification of the existing bloom in the Sanibel Island region and for bloom formation elsewhere along southwest Florida. Further intensification of the bloom is possible through Thursday. Slight southerly transport is possible today through Wednesday.

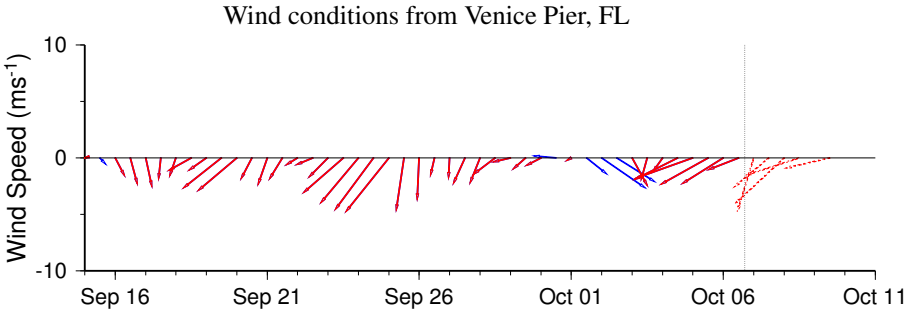
Bulletins will now be issued twice weekly on Monday and Thursday while harmful bloom conditions remain.

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

~Fisher, Fenstermacher, Gan



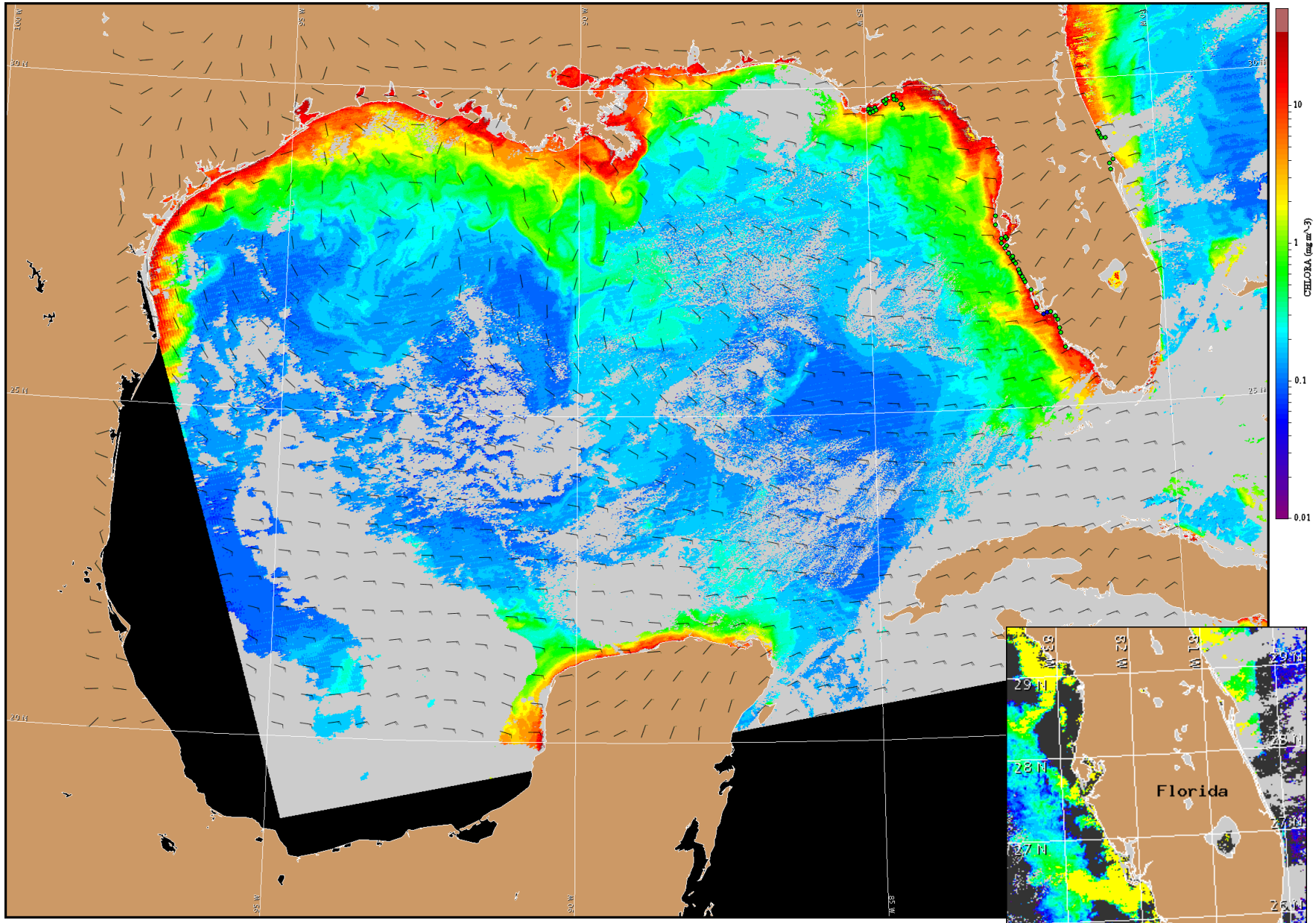

Wind speed and direction are averaged over 12 hours from buoy measurements. Length of line indicates speed; angle indicates direction. Red indicates that the wind direction favors upwelling near the coast. Values to the left of the dotted vertical line are measured values; values to the right are forecasts.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




## Wind Analysis

Northeast winds today (10-15kn, 5-8m/s). East winds tonight (5-10kn, 3-5m/s). Northeast winds Tuesday (10-15kn, 5-8m/s). East winds Tuesday night (15kn, 8m/s). Southeast winds Wednesday (10kn) becoming northwest (5-10kn) in the afternoon, then west to south Wednesday night. Southwest winds Thursday (10kn).

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 7, 2008 12Z with Cell concentration sampling data from September 26 to October 1 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




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