Gulf of Mexico Harmful Algal Bloom Bulletin

Region: Southwest Florida

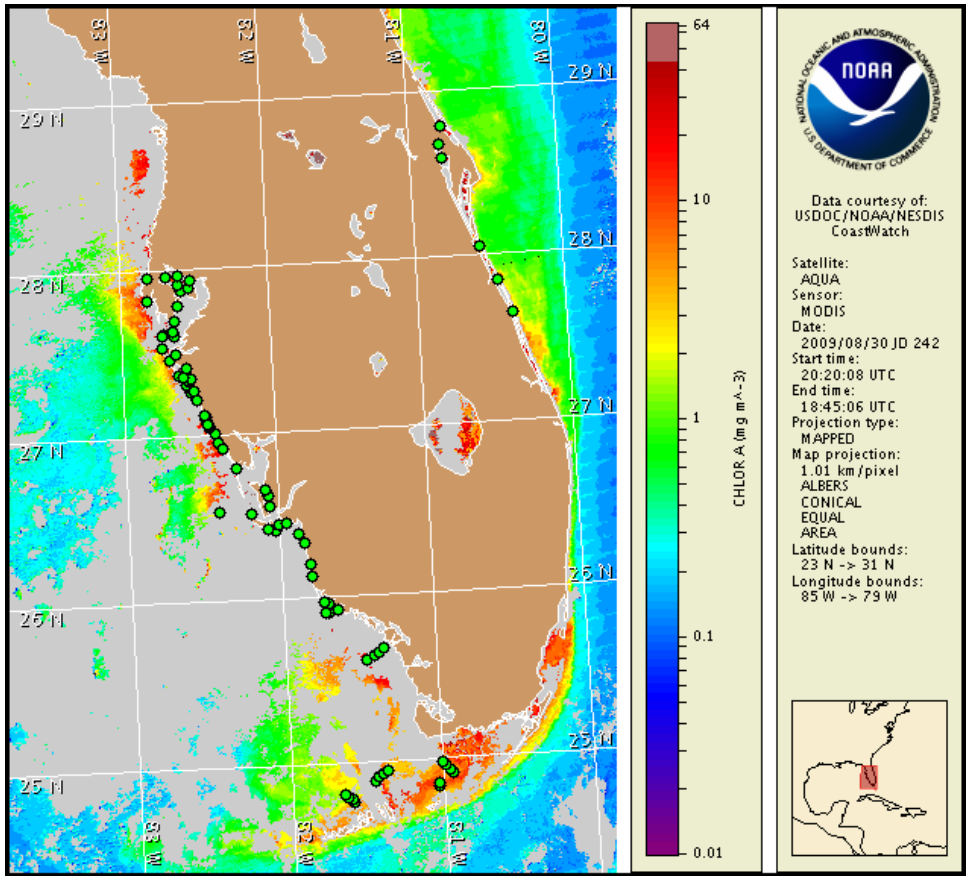
31 August 2009

NOAA Ocean Service

NOAA Satellites and Information Service

NOAA National Weather Service

Last bulletin: August 24, 2009



Satellite chlorophyll image with possible HAB areas shown by red polygon(s). Cell concentration sampling data from August 21 to 27 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

Conditions Report

There is currently no indication of a harmful algal bloom at the coast in southwest Florida, including the Florida Keys. No impacts are expected alongshore southwest Florida today through Sunday, September 6. Discolored water in the northwestern region of Tampa Bay is attributed to a bloom of the algae Pyrodinium bahamense which does not produce respiratory irritation impacts associated with the Florida red tide caused by Karenia brevis.

Analysis

There is currently no indication of a harmful algal bloom at the coast in southwest Florida. Background concentrations of *Karenia brevis* were identified last week inside Sarasota Bay, Sarasota County (SCHD, 8/24). No *K. brevis* was detected alongshore southwest Florida from Pinellas to Collier County, or offshore Lee (Sanibel and Captiva Islands) and Monroe Counties (northern region and Keys region) in the past week (FWRI, SCHD, MML; 8/23-8/28).

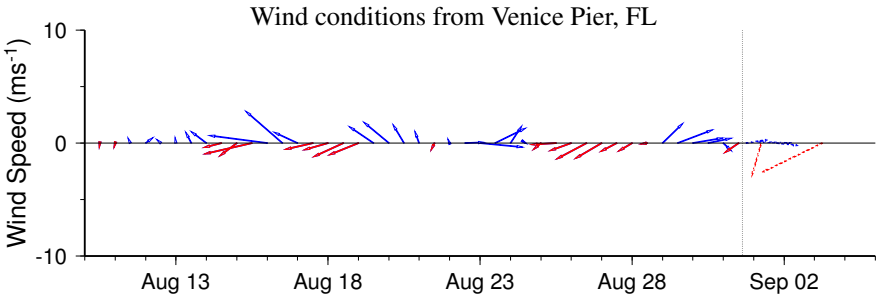
SeaWiFS imagery (8/30; not shown*) continues to indicate the presence of elevated to high chlorophyll levels (~5 to >10μg/L) along much of the southwest Florida shoreline. More distinct high chlorophyll features (>10μg/L) remain visible alongshore southern Charlotte and northern Lee Counties, extending offshore approximately 15 miles. High chlorophyll is also visible southeast of Sanibel Island in southern Lee County and south of Cape Romano in southern Collier County. Cloud cover limits analysis in Pinellas and Sarasota Counties.

An elevated to high chlorophyll feature (5 to >10μg/L) remains visible north of the Florida Keys, however the feature's extent has diminished from an expansive band to a distinct patch centralized at 24°56'57''N 81°40'51''W. Samples collected just south and east of this feature on 8/21 and 8/27 contained no *K. brevis* (MML). This feature is unlikely to be a bloom of *K. brevis* as *K. brevis* blooms do not typically initiate in this region, however sampling is recommended.

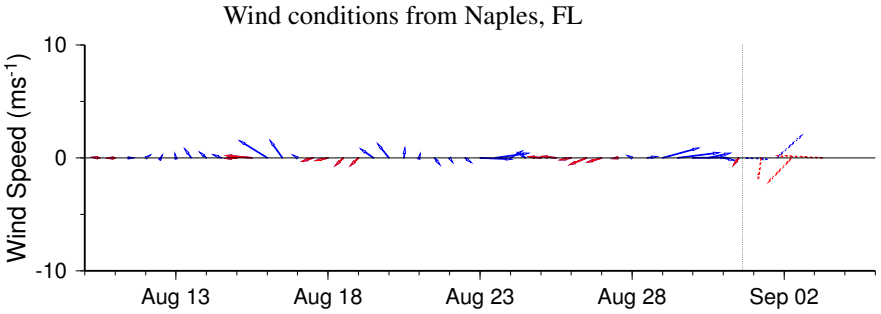
Observed northeasterly winds recorded between 8/24-27 were conducive to slight upwelling conditions and possible bloom formation alongshore southwest Florida. Each of the features described above are likely due in large part to non-harmful blooms of various algal species which continue to be detected alongshore Pinellas, Manatee, Sarasota, Charlotte, Lee and Collier Counties (FWRI, 8/24-26). Predicted winds are not favorable for bloom formation this week.

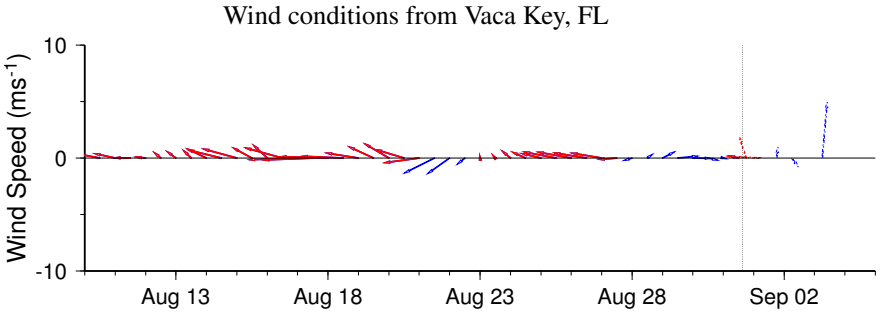
*Due to technical difficulties, SeaWiFs imagery is presently unavailable for display. MODIS imagery is displayed on this bulletin.

-Fisher, Lindley



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).

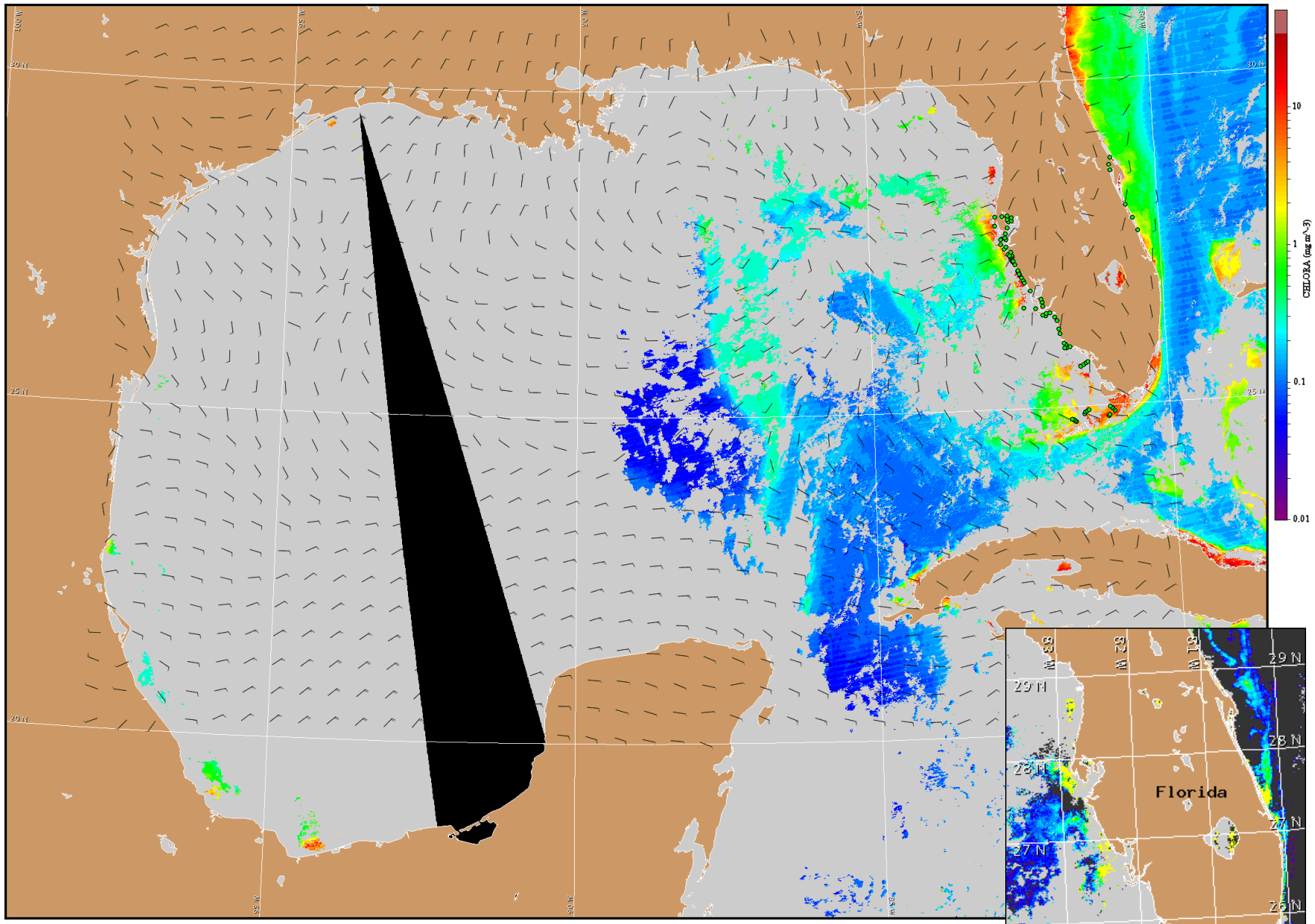




Wind Analysis

Southwest winds today becoming northwest (5-10kn, 3-5m/s). North winds tonight becoming east (5kn, 3m/s). North winds Tuesday (5kn). East winds Tuesday night (5kn). South winds (10kn) Wednesday becoming west in the late afternoon. Northwest winds (10kn) Thursday. North winds Thursday night (10kn, 5m/s). North winds Friday (5kn).

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 September 1, 2009 06Z with Cell concentration sampling data from August 21 to 27 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).