



# Gulf of Mexico Harmful Algal Bloom Bulletin

Region: Southwest Florida

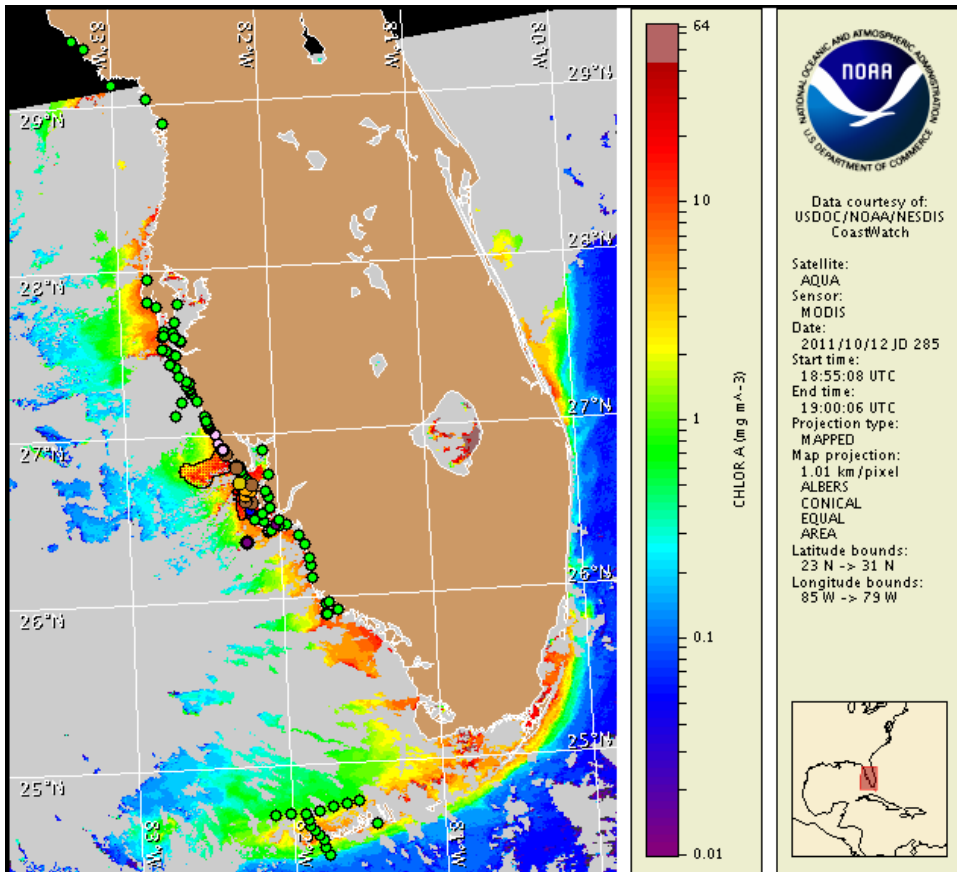
Thursday, 13 October 2011

NOAA Ocean Service

NOAA Satellite and Information Service

NOAA National Weather Service

Last bulletin: Tuesday, October 11, 2011



Satellite chlorophyll image with possible HAB areas shown by red polygon(s). Cell concentration sampling data from October 3 to 12 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 HAB-OFS bulletin guide:

[http://tidesandcurrents.noaa.gov/hab/habfs\\_bulletin\\_guide.pdf](http://tidesandcurrents.noaa.gov/hab/habfs_bulletin_guide.pdf)

To see previous bulletins and forecasts for other Harmful Algal Bloom Bulletin regions, visit the NOAA Harmful Algal Bloom Operational Forecast System bulletin archive:

<http://tidesandcurrents.noaa.gov/hab/bulletins.html>

## Conditions Report

A harmful algal bloom has been identified along- and offshore southern Sarasota, alongshore Charlotte, alongshore northern and central Lee counties, and offshore southern Lee County. Patchy moderate impacts are possible alongshore Charlotte and northern Lee counties, and patchy very low impacts are possible alongshore central Lee County, today through Sunday, October 16. No impacts are expected elsewhere alongshore southwest Florida today through Sunday. Over the past few days, reports of dead fish have been received from areas in southern Pinellas, Charlotte, and northern Lee counties.

## Analysis

A harmful algal bloom has been identified along- and offshore southern Sarasota, alongshore Charlotte, alongshore northern and central Lee counties, and offshore southern Lee County. Six samples collected in the northern Pine Island Sound region indicate *Karenia brevis* concentrations ranging between 'low a' and 'medium' (10/11; FWRI). One 'low b' sample of *K. brevis* was collected from Boca Grande Pass (10/11; FWRI). A sample collected from Redfish Pass indicates the presence of 'very low b' concentrations of *K. brevis* (10/11; FWRI). *K. brevis* was 'not present' in three samples collected from the southern Pine Island Sound region and three samples from the Matlacha Pass region (10/11; FWRI). In Charlotte County, one sample collected from the northeast tip of Gasparilla Island indicates 'low a' concentrations of *K. brevis*, while further north 'background' concentrations were found in a sample from Englewood Beach (10/11; FWRI). All other samples collected from alongshore Pinellas, Manatee, Collier County, and the Florida Keys indicate that *K. brevis* is 'not present' (10/10-10/11; FWRI, MML). Reports of dead fish have been received from areas in southern Pinellas County and in the Boca Grande Pass region of Charlotte and northern Lee counties (10/11-10/12; FWRI). No additional impacts have been reported elsewhere alongshore southwest Florida.

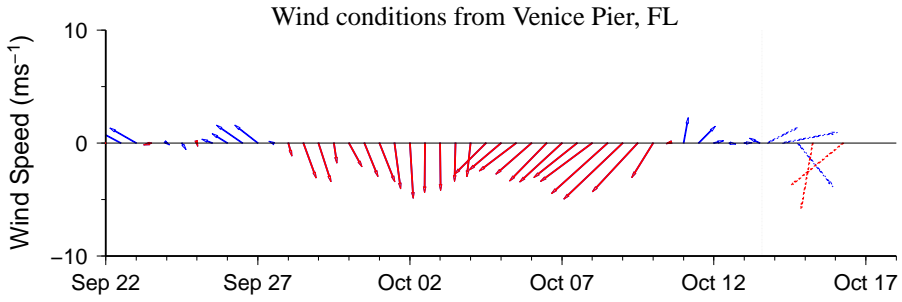
Recent MODIS imagery (10/12, shown at left) is partially obscured by clouds along- and offshore the southwest Florida coast from Manatee to Monroe County and in the Florida Keys, limiting analysis. A feature of elevated to very high chlorophyll (3 to >20  $\mu\text{g/L}$ ) remains visible along- and offshore the coast from southern Sarasota to Lee counties. Through the clouds, the feature seems to stretch from approximately 26°58'1"N 82°23'42"W to 26°20'24"N 82°12'54"W, extending approximately 18 miles offshore from its widest point along the Charlotte County coast and approximately 10 miles offshore from the Sanibel Island region of Lee County. Elevated chlorophyll (3 to <10  $\mu\text{g/L}$ ) is also visible along- and offshore Pinellas and northern Manatee County. Elevated chlorophyll at the coast may contain *K. brevis*, but could also be due to the non-toxic algal blooms that continue to be reported in several counties in southwest Florida (10/10-10/11; FWRI).

Forecasted winds today through Sunday will increase the potential for impacts at the coast and in the island regions, including Manasota Key, Gasparilla Island, Cayo Costa State Park, and the Sanibel Island region. Wind conditions may increase the potential for bloom intensification and further bloom formation alongshore southwest Florida, Friday through Sunday.

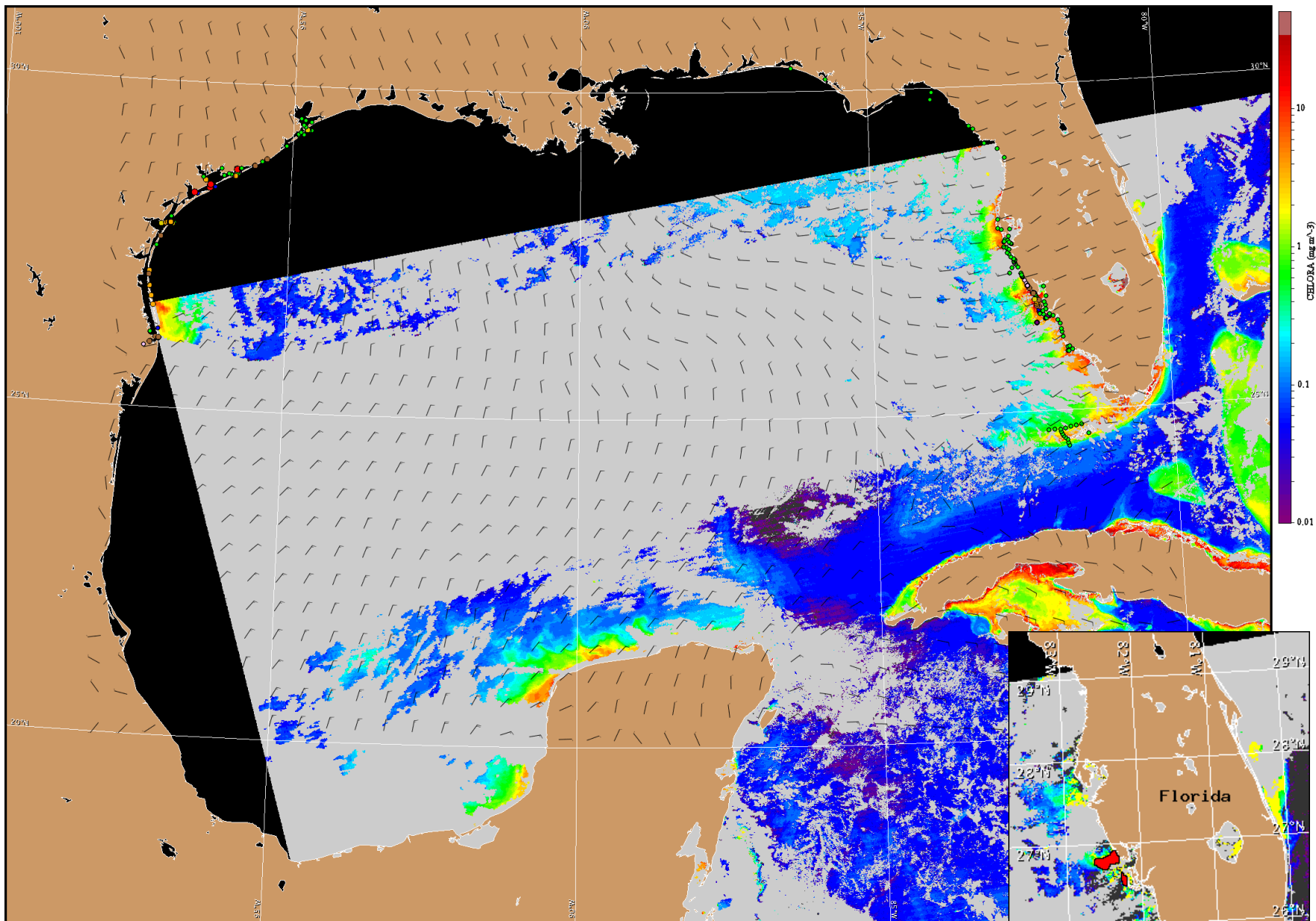
Kavanaugh, Burrows

## Wind Analysis

**Venice:** West winds (10 kn, 5 m/s) today becoming northwest winds (10 kn) this evening through Friday. Northeast winds (10-15 kn, 5-8 m/s) Friday evening through 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 14, 2011 06Z with cell concentration sampling data from October 3 to 12 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 HAB-OFS 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).