

# Gulf of Mexico Harmful Algal Bloom Bulletin

Region: Southwest Florida

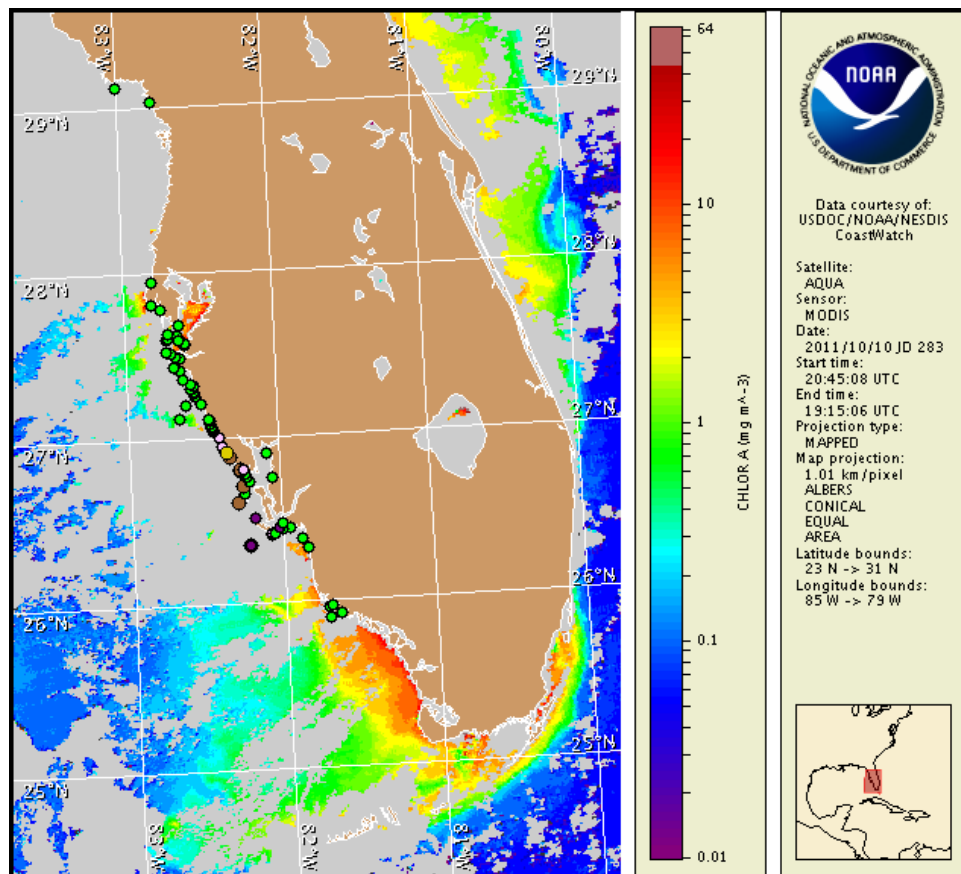
Tuesday, 11 October 2011

NOAA Ocean Service

NOAA Satellite and Information Service

NOAA National Weather Service

Last bulletin: Thursday, October 6, 2011



Satellite chlorophyll image with possible HAB areas shown by red polygon(s). Cell concentration sampling data from October 2 to 10 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/habofs\\_bulletin\\_guide.pdf](http://tidesandcurrents.noaa.gov/hab/habofs_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, offshore southern Charlotte, alongshore northern Lee, and offshore southern Lee County. Harmful algae have been identified alongshore central Lee County in the Sanibel Island region. Patchy moderate impacts are possible alongshore Charlotte County and the Boca Grande region of northern Lee County, today through Wednesday. Patchy very low impacts are possible alongshore Sanibel Island and in the San Carlos Bay region, today through Wednesday. No impacts are expected elsewhere alongshore southwest Florida today through Wednesday, October 12. Dead fish have been reported near the Boca Grande Pass region of Charlotte County and offshore of the Captiva Pass region of northern Lee County.

## Analysis

A harmful algal bloom has been identified along- and offshore southern Sarasota, alongshore Charlotte, offshore southern Charlotte, alongshore northern Lee, and offshore southern Lee County. Harmful algae have been identified alongshore central Lee County in the Sanibel Island region. Two samples collected approximately 8.36 miles southwest of Sanibel Island in Lee County indicate the presence of 'low b' concentrations of *Karenia brevis* at the surface and 'very low a' concentrations 3 meters deep (10/4; FWRI). A sample collected alongshore the northern end of Sanibel Island from South Seas Plantation indicates the presence of *K. brevis* in 'very low a' concentrations (10/5; FWRI). One of two samples collected alongshore the southern end of Sanibel Island indicate 'background' concentrations of *K. brevis* (10/5; FWRI). All other samples collected from alongshore Pinellas, along- and offshore Manatee, and the San Carlos Bay region of central and southern Lee County indicate that *K. brevis* is 'not present' (10/4-10/5; FWRI, MML). Dead fish have been reported near Boca Pass in Charlotte County (10/7; FWRI) and offshore of the Captiva Pass region of northern Lee County (10/11; FWRI). No additional impacts have been reported elsewhere alongshore southwest Florida.

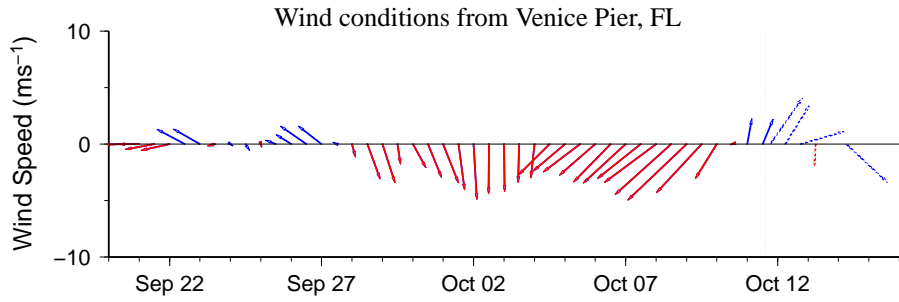
A recent aerial survey identified a large bloom between the Gasparilla Pass and Captiva Pass regions of northern Lee County (10/11; FWRI). Recent MODIS imagery (10/10, shown at left) is partially obscured by clouds along- and offshore the southwest Florida coast from Pinellas to Collier County and in the Florida Keys, limiting analysis. In MODIS imagery from October 7th (not shown), a feature of elevated to very high chlorophyll (2 to >20  $\mu\text{g/L}$ ) remains visible along- and offshore the coast from Sarasota to Lee County. The feature stretches from approximately 27°6'24"N 82°28'9"W to 26°20'57"N 82°12'52"W and extends approximately 3 miles offshore from its widest point along the Sarasota and Charlotte County coast, and approximately 13 miles offshore from the Sanibel Island region of Lee 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 (10/4-10/5; FWRI).

Forecasted onshore winds today through Wednesday will increase the potential for impacts at the coast. Southern transport of the bloom is possible through Wednesday. Wind conditions may minimize the potential for bloom intensification and further bloom formation alongshore southwest Florida today through Wednesday.

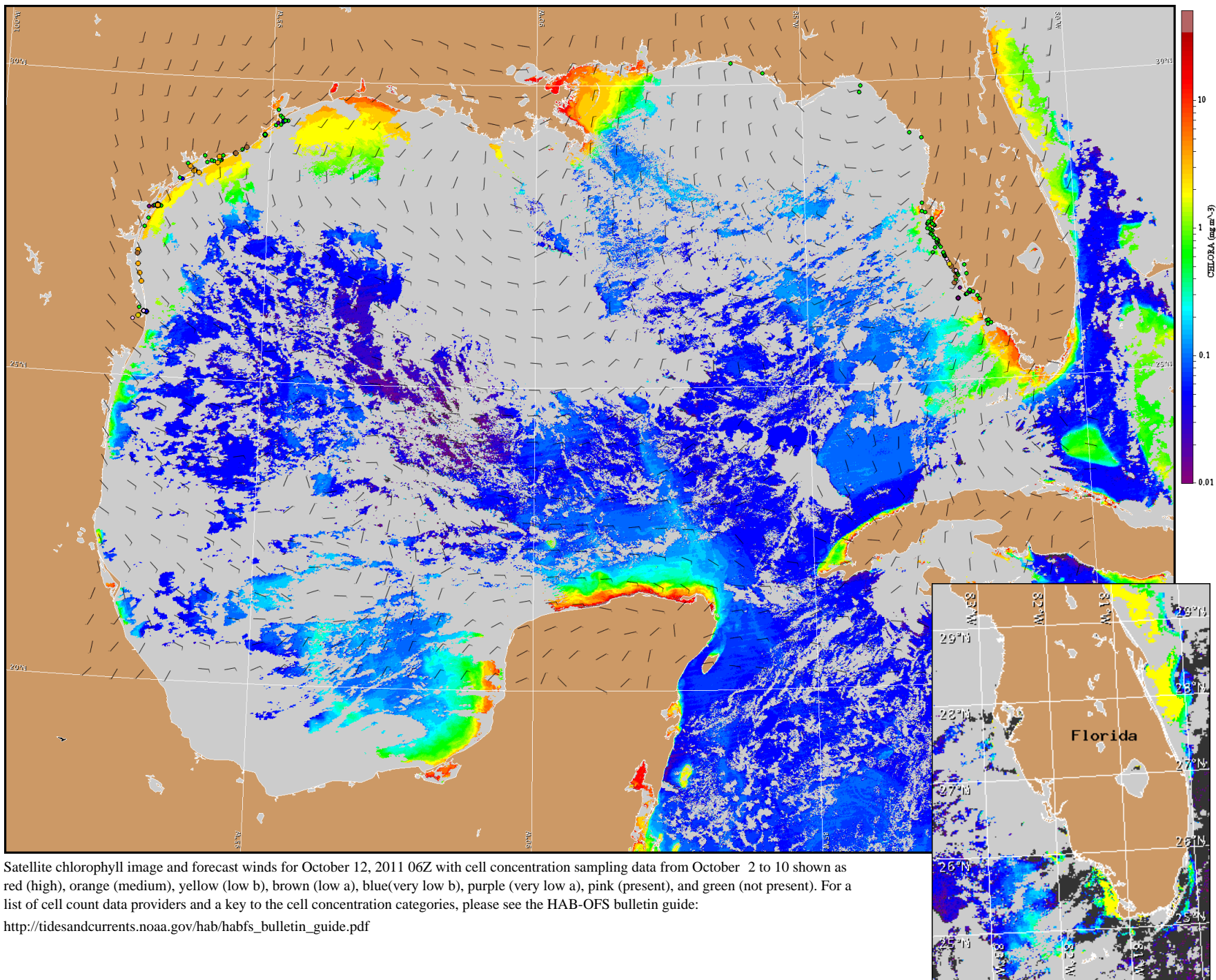
Kavanaugh, Yang

## Wind Analysis

**Venice:** West winds (10 kn, 5 m/s) today through Wednesday.



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 12, 2011 06Z with cell concentration sampling data from October 2 to 10 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).