



# Gulf of Mexico Harmful Algal Bloom Bulletin

Region: Southwest Florida

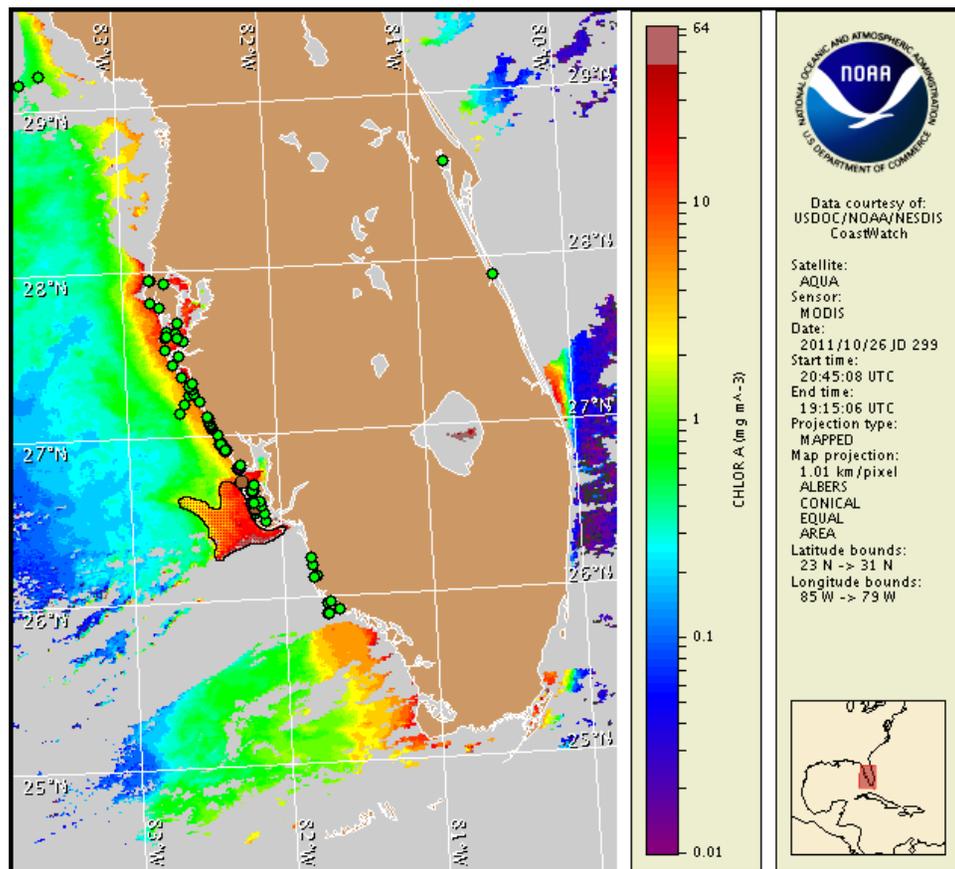
Thursday, 27 October 2011

NOAA Ocean Service

NOAA Satellite and Information Service

NOAA National Weather Service

Last bulletin: Monday, October 24, 2011



Satellite chlorophyll image with possible HAB areas shown by red polygon(s). Cell concentration sampling data from October 17 to 25 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 is present alongshore southern Sarasota, Charlotte, northern and central Lee counties, and offshore Charlotte and Lee counties. Patchy low impacts are possible alongshore southern Sarasota County today and Friday, with very low impacts possible on Saturday and Sunday. Patchy moderate impacts are possible alongshore Charlotte County today and Friday, with very low impacts possible on Saturday and Sunday. Patchy low impacts are possible in Lee County today through Sunday. No impacts are expected elsewhere alongshore southwest Florida today through Sunday, October 30. Reports of dead fish have been received in Charlotte and Lee counties over the last week.

## Analysis

The harmful algal bloom first identified on 9/26 in southern Sarasota County continues alongshore southern Sarasota, Charlotte, northern and central Lee counties, and offshore Charlotte and Lee counties. Recent alongshore sampling shows not present to very low concentrations of *Karenia brevis* in Charlotte County and not present to low in northern and central Lee counties (FWRI, 10/23-25). All other samples collected alongshore of Pinellas, Manatee, and Collier counties indicate that *K. brevis* is not present (FWRI, CCPCPD; 10/24-26).

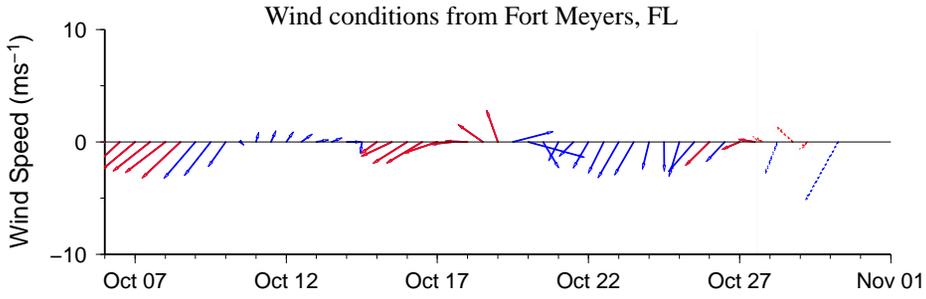
While cloudy MODIS imagery limits analysis of the southern extent of the bloom, recent imagery indicates the bloom may extend up to 38 miles offshore Charlotte and Lee counties (26°24'36"N, 82°30'2"W). In addition, chlorophyll values have increased overall from patchy, elevated (2-4  $\mu\text{g/l}$ ) to consistently elevated to high (8 to >10  $\mu\text{g/l}$ ).

Strong northeasterly winds on Saturday and Sunday may maintain the bloom location.

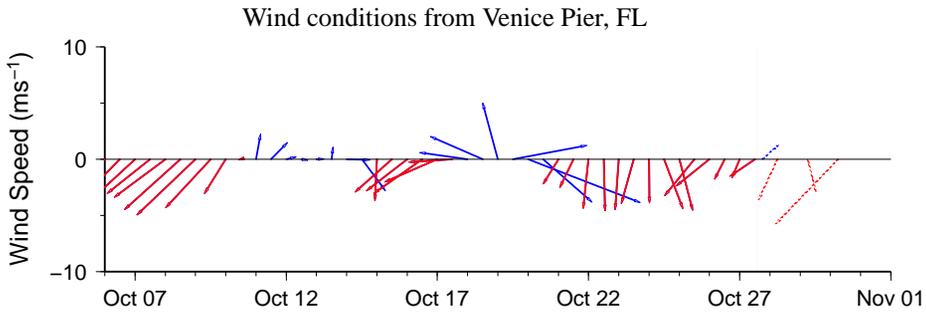
\*Fenstermacher, Derner

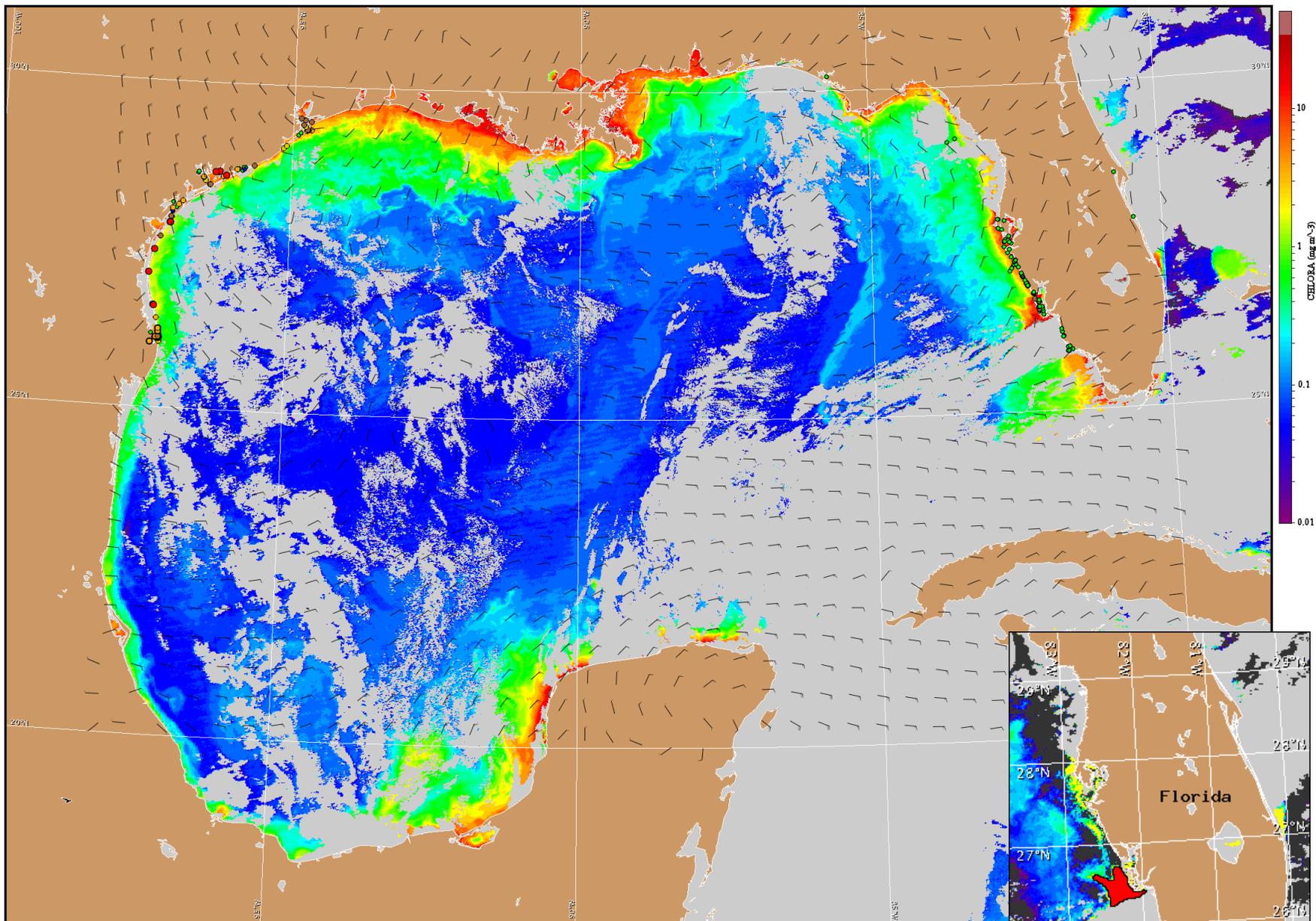
## Wind Analysis

SW Florida: South to northeast winds today and northeast to northwesterly winds on Friday (5-10 kn; 3-5 m/s). Strong northeasterlies on Saturday and Sunday (20 kn; 10 m/s).



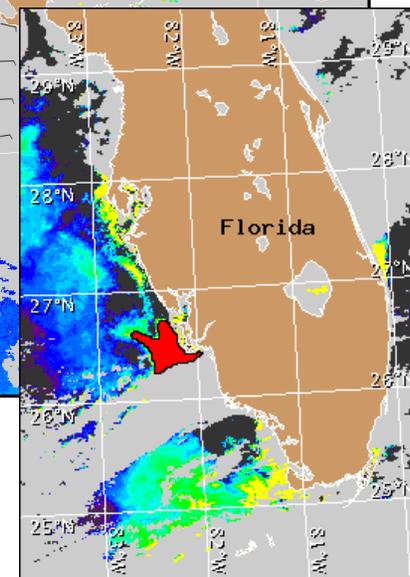
Wind speed and direction are averaged over 12 hours from buoy measurements. Length of line indicates speed; angle indicates direction. Red indicates that the wind direction favors upwelling near the coast. Values to the left of the dotted vertical line are measured values; values to the right are forecasts.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





Satellite chlorophyll image and forecast winds for October 28, 2011 06Z with cell concentration sampling data from October 17 to 25 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).