



Gulf of Mexico Harmful Algal Bloom Bulletin

Region: Southwest Florida

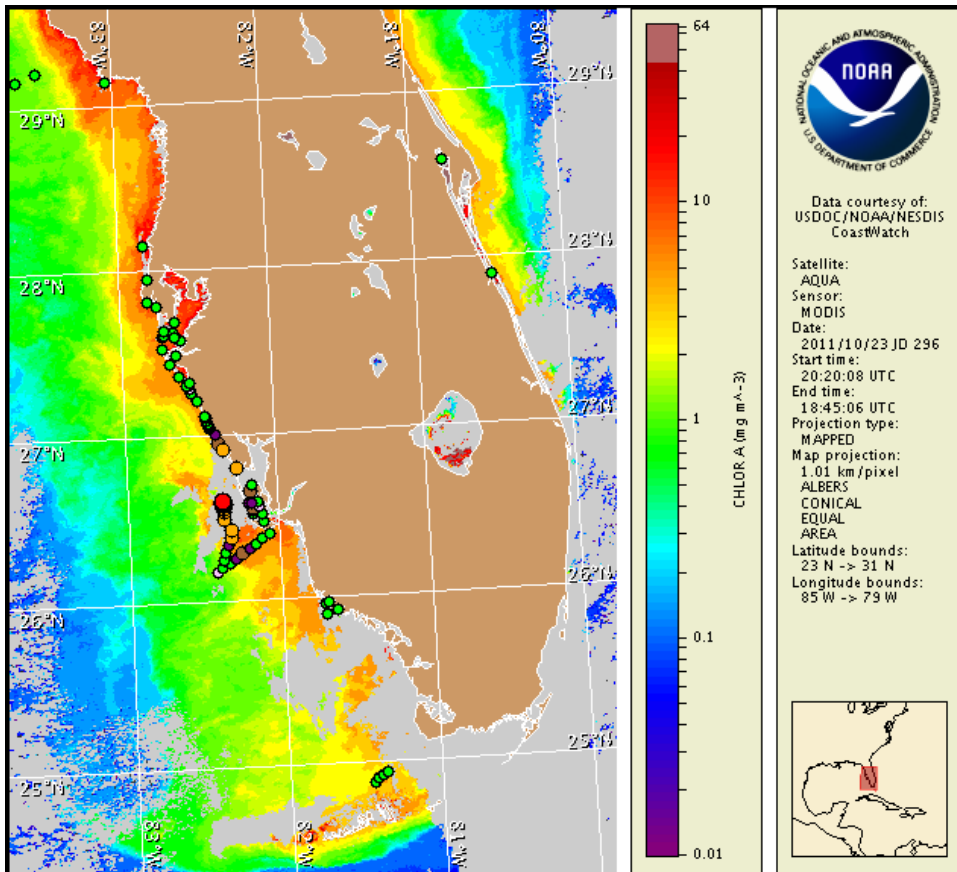
Monday, 24 October 2011

NOAA Ocean Service

NOAA Satellite and Information Service

NOAA National Weather Service

Last bulletin: Thursday, October 20, 2011



Satellite chlorophyll image with possible HAB areas shown by red polygon(s). Cell concentration sampling data from October 14 to 24 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

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 very low impacts are possible alongshore southern Sarasota and Charlotte counties today through Wednesday, October 26. Patchy low impacts are possible alongshore northern and central Lee County today through Wednesday, October 26. No impacts are expected elsewhere alongshore southwest Florida today through Wednesday, October 26.

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 background to low concentrations of *Karenia brevis* in Sarasota, medium in Charlotte, and background to low in northern and central Lee counties (FWRI, MML, SCHD; 10/17-21). Recent measurements from two autonomous underwater vehicles deployed by Mote Marine Laboratory and University of South Florida College of Marine Science, found a patchy *K. brevis* bloom between 10 and 50 km offshore of Charlotte and Lee counties (FWRI; 10/21). All other samples collected from Pinellas, Manatee, and Monroe counties indicate that *K. brevis* is not present (FWRI, MML, SCHD; 10/21). No recent reports of dead fish or respiratory irritation have been received.

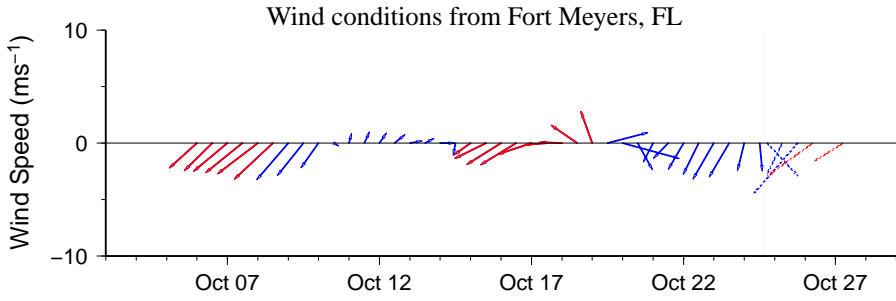
While consecutively cloudy MODIS imagery limits time series analysis, recent imagery indicates an extended band of patchy, elevated chlorophyll (2-4 $\mu\text{g/l}$) alongshore most of the southwest Florida coastline, with high to very high (>20 $\mu\text{g/l}$) patches alongshore and up to 33 miles offshore Charlotte and Lee counties (10/21 MODIS imagery not shown).

North to easterly upwelling favorable winds today thru Wednesday will increase the potential for intensification, and potentially increase impacts in the bay regions of Lee County. Slight southward transport of the bloom is possible through Wednesday, October 26.

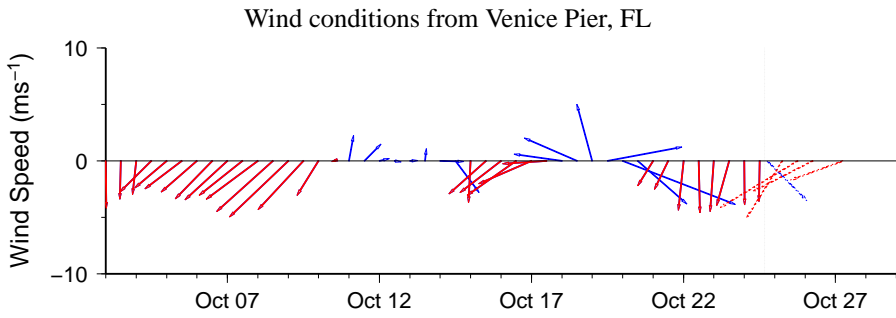
~Fenstermacher, Derner

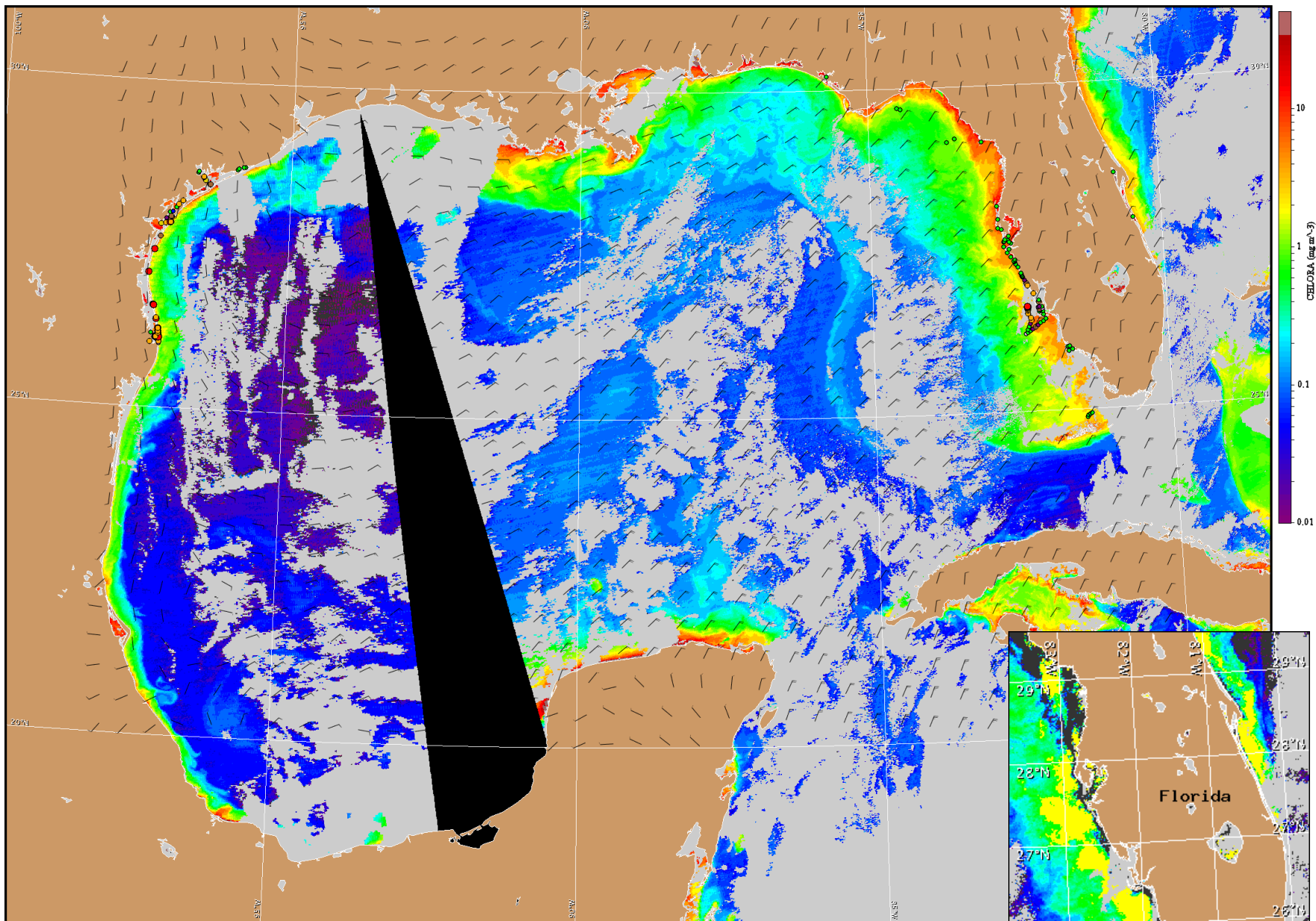
Wind Analysis

SW Florida: Northerly winds today and northeasterlies tonight through Tuesday (8 m/s; 15 kn). Easterlies Wednesday (5-8 m/s; 10-15 kn).



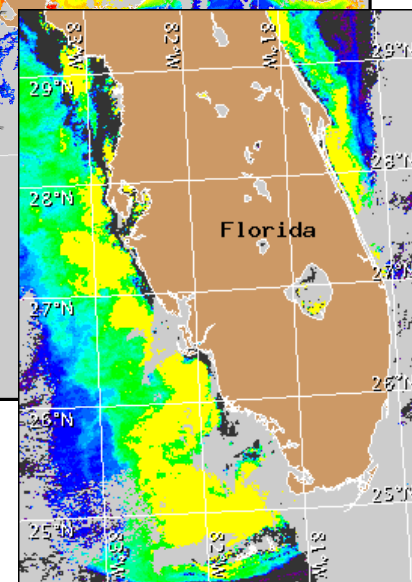
Wind speed and direction are averaged over 12 hours from buoy measurements. Length of line indicates speed; angle indicates direction. Red indicates that the wind direction favors upwelling near the coast. Values to the left of the dotted vertical line are measured values; values to the right are forecasts.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





Satellite chlorophyll image and forecast winds for October 25, 2011 12Z with cell concentration sampling data from October 14 to 24 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



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