



Gulf of Mexico Harmful Algal Bloom Bulletin

Region: Southwest Florida

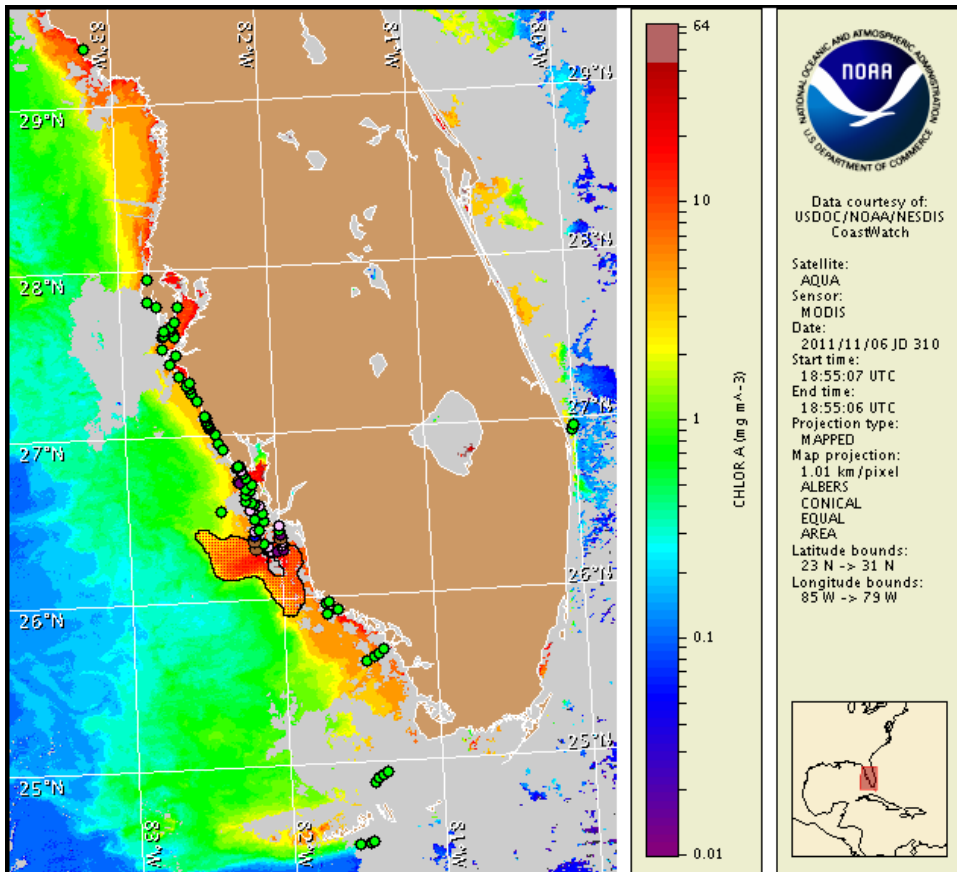
Monday, 07 November 2011

NOAA Ocean Service

NOAA Satellite and Information Service

NOAA National Weather Service

Last bulletin: Thursday, November 3, 2011



Satellite chlorophyll image with possible HAB areas shown by red polygon(s). Cell concentration sampling data from October 28 to November 6 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 and offshore northern to central Lee County. Harmful algae is also present in the Gasparilla and Pine Island Sound regions of Charlotte and Lee County. Patchy low impacts are possible in the Gasparilla Sound regions of Charlotte and northern Lee Counties through Wednesday. No other impacts are expected along the coasts of Charlotte and Lee counties or elsewhere alongshore southwest Florida today through Wednesday, November 9.

Analysis

The harmful algal bloom first identified on 9/26 in southern Sarasota County appears to be dissipating alongshore of Charlotte and northern to central Lee Counties, including the Gasparilla and Pine Island Sound regions. Recent samples show background to very low *Karenia brevis* concentrations in the bay regions of Charlotte (11/1-3; FWRI) and background to low *K. brevis* concentrations offshore and in the bay regions of Lee County (11/3; FWRI). All other samples collected from Pinellas to Collier counties, and in the Florida Keys indicate that *K. brevis* concentrations are either background or not present (10/31-11/4; CCPCPD; FWRI; MML).

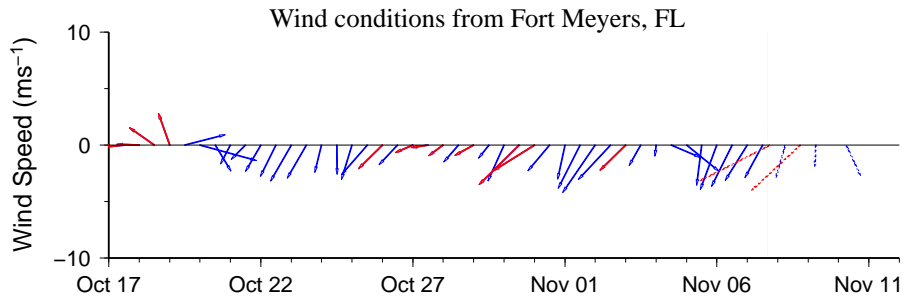
Recent MODIS imagery shows a distinct region 30 miles wide of consistently high chlorophyll (>10 $\mu\text{g/L}$) visible with a west-east orientation offshore south of Sanibel Island and west of Naples Park in Lee and Collier counties (western extent: 26°10'57.2"N, 82°21'53.9"W; eastern 26°14'51.3"N, 81°58'37.3"W), with patchy, lower concentrations extending both slightly north and south ~5 miles offshore of Collier County to nearly Monroe County border (2-5 $\mu\text{g/L}$; approximate southern extent: 25°55'33.8"N, 81°54'50.4"W). The most recent offshore samples are located just north of the highest chlorophyll values (northern central reference: 26°17'3.1"N, 82°11'15.3"W). Continued sampling in the high chlorophyll region is recommended.

Northerly winds will decrease the potential for respiratory impacts at the coast in southwest Florida, with higher impacts possible in the bay regions. Continued southerly transport of the bloom is likely through Wednesday.

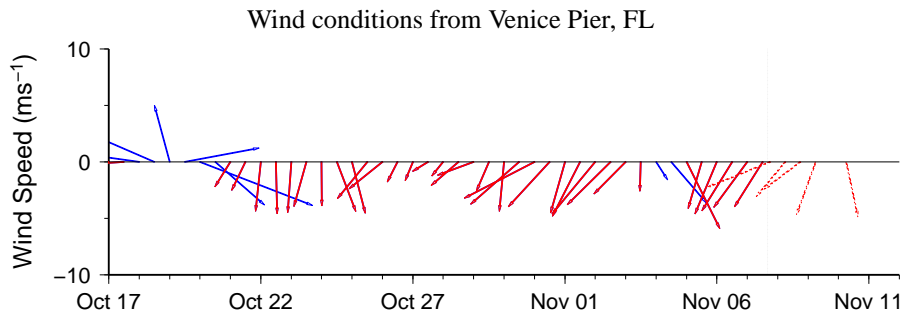
Fenstermacher, Burrows

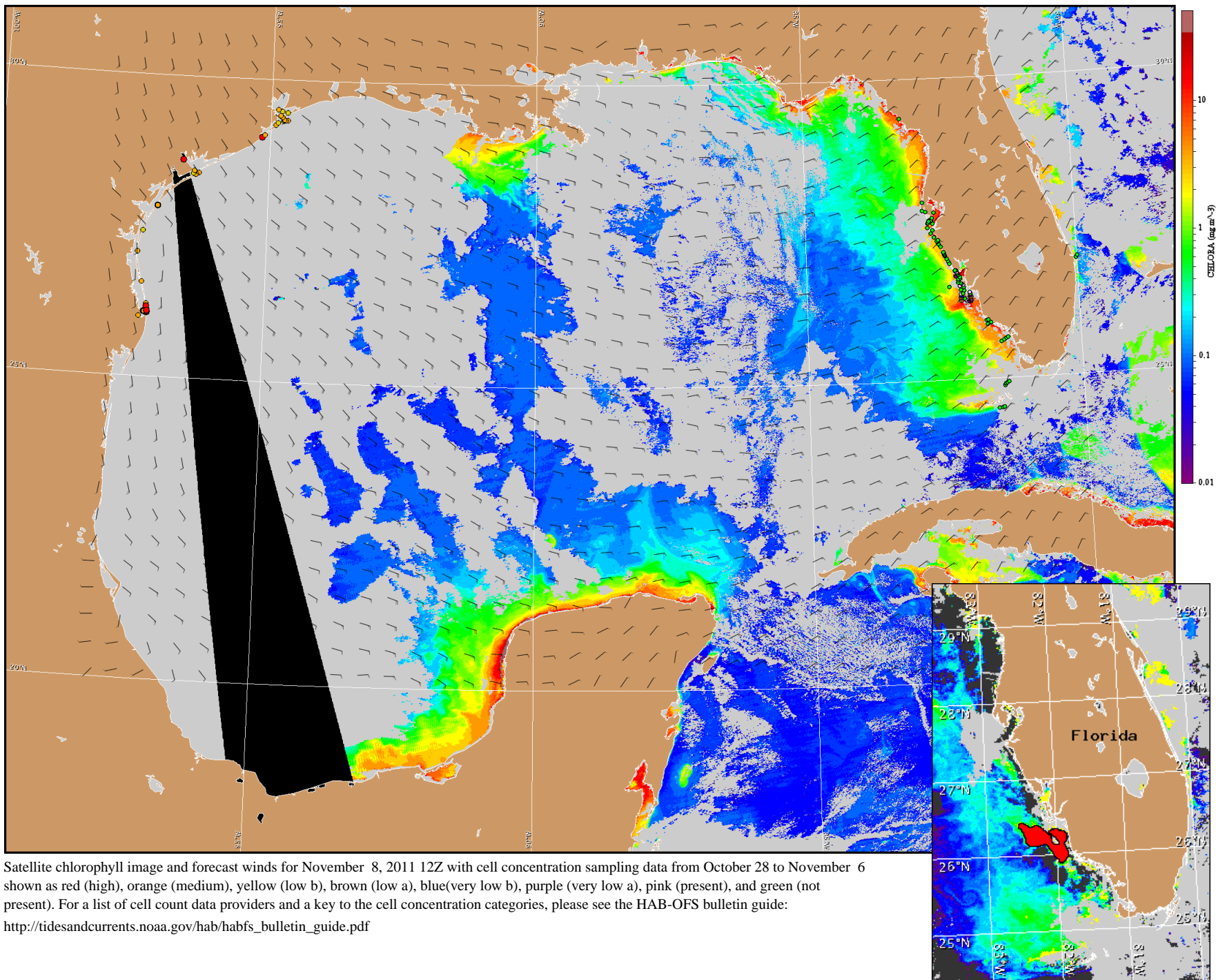
Wind Analysis

SWFL: North to Northeasterlies today thru Wednesday (10-15 kn; 5-8 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 November 8, 2011 12Z with cell concentration sampling data from October 28 to November 6 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).