



Gulf of Mexico Harmful Algal Bloom Bulletin

Region: Southwest Florida

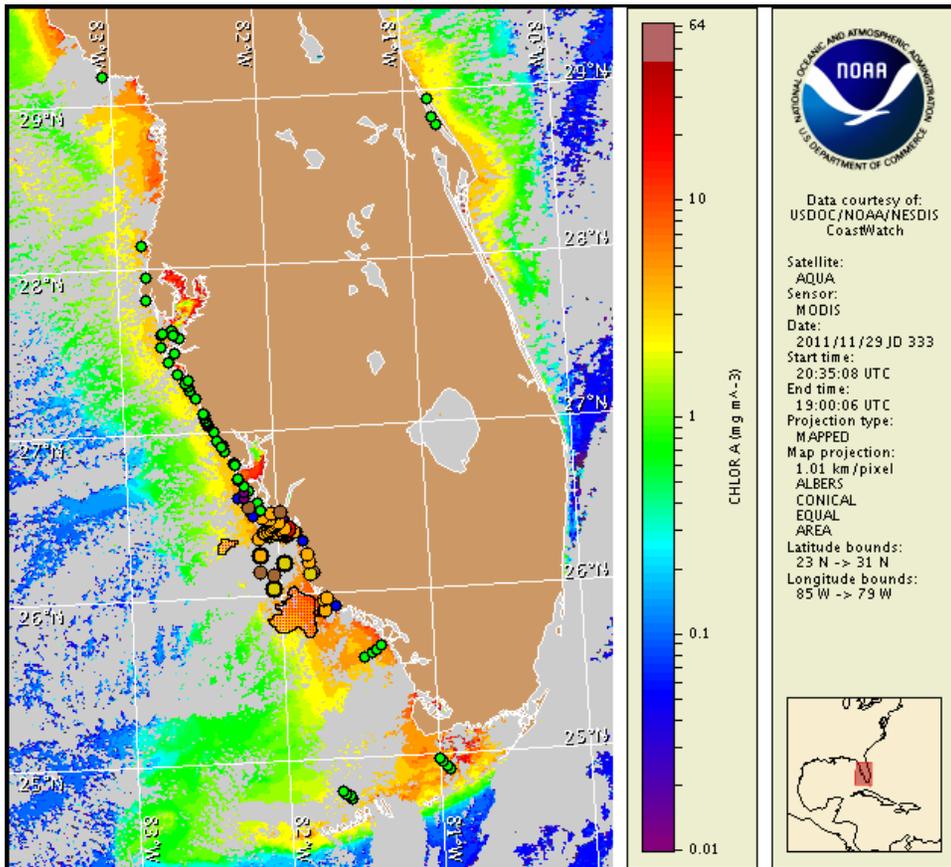
Thursday, 01 December 2011

NOAA Ocean Service

NOAA Satellite and Information Service

NOAA National Weather Service

Last bulletin: Monday, November 28, 2011



Satellite chlorophyll image with possible HAB areas shown by red polygon(s). Cell concentration sampling data from November 21 to 30 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 southern Lee County and northern and central Collier County. The presence of harmful algae has been confirmed in northern Lee County. In the central and eastern Sanibel Island region of southern Lee County, patchy high impacts are possible Friday through Sunday with patchy medium impacts possible today. In the Marco Island region of central Collier County, patchy high impacts are possible today through Sunday. Patchy very low impacts are possible in northern Lee and northern Collier counties today through Sunday. No additional impacts are expected at the coast in southwest Florida today through Sunday, December 4. Dead fish have been reported in southern Lee County and Collier County over past several days. Respiratory irritation has been reported in southern Lee and northern Collier counties over past several days.

Analysis

The harmful algal bloom first identified on 9/26 persists alongshore and offshore southern Lee County and northern Collier County and in the Marco Island region of central Collier County.

Recent samples indicate that 'very low' to 'medium' *Karenia brevis* concentrations were present alongshore northern Lee County to central Collier County, and 'medium' to 'high' *K. brevis* concentrations were present offshore northern Lee and Collier counties (FWRI, CCPCPD; 11/21-30). All other samples collected alongshore from Pinellas through Collier counties and offshore the Florida Keys indicate that *K. brevis* was not present (FWRI, MML, SCHD; 11/21-30). Dead fish were reported in southern Lee and Collier counties (FWRI; 11/25-29). Respiratory irritation was reported in southern Lee and northern Collier counties over the past several days (MML; 11/29-30).

MODIS imagery has been mostly cloudy since last bulletin issuance, limiting analysis. The chlorophyll concentrations decreased overall in most non-cloudy areas of southern Lee and Collier counties. The offshore extent of the bloom appears to have increased.

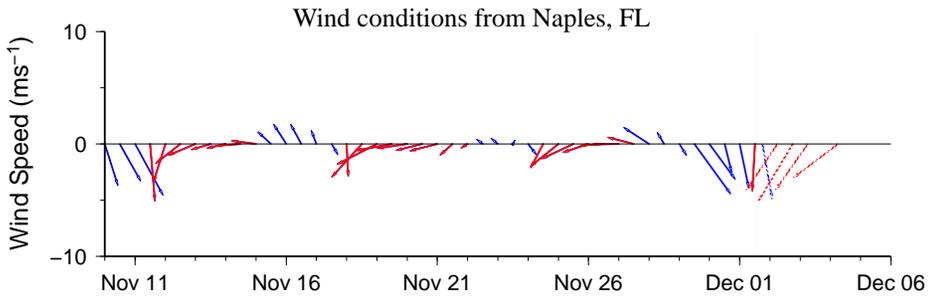
Forecasted offshore winds may increase the potential for respiratory impacts in bay regions of southern Lee County and central Collier County and may decrease the potential for respiratory impacts at the coast. Forecasted winds may decrease the potential for bloom intensification and may retain the bloom location.

-Yang, Fenstermacher

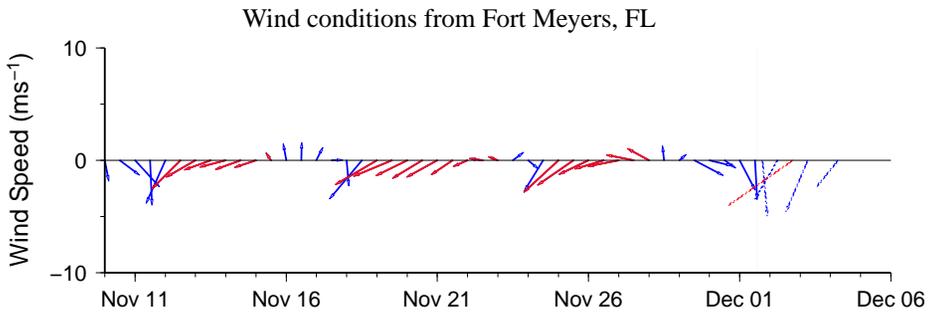
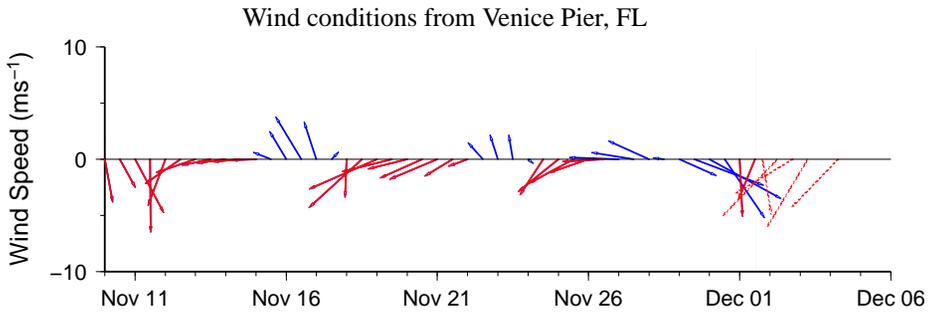
Wind Analysis

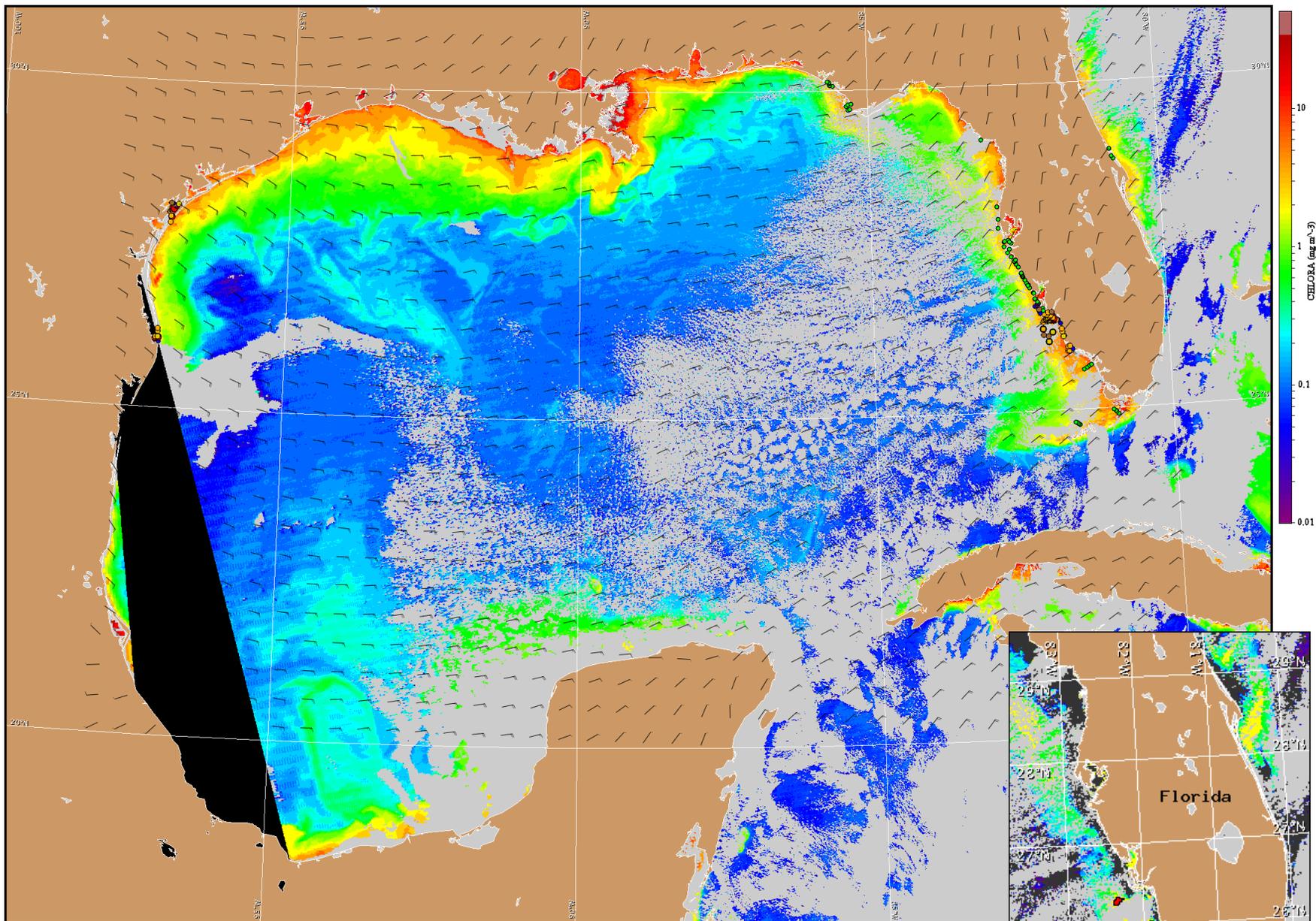
Southwest Florida: (Collier County) North northeast winds (12-15kn, 6-8m/s) today. Northeast winds (14-19kn, 7-10m/s) tonight and Friday. Northeast winds (16-21kn, 8-11m/s) Friday night. East northeast winds (16-21kn) Saturday through Sunday night.

(Charlotte through Lee counties) North winds (10-15kn, 5-8m/s) today becoming northeast in the afternoon. Northeast winds (10-15kn) tonight through Friday night. East winds (15-20kn, 8-10m/s) Saturday through Sunday night.



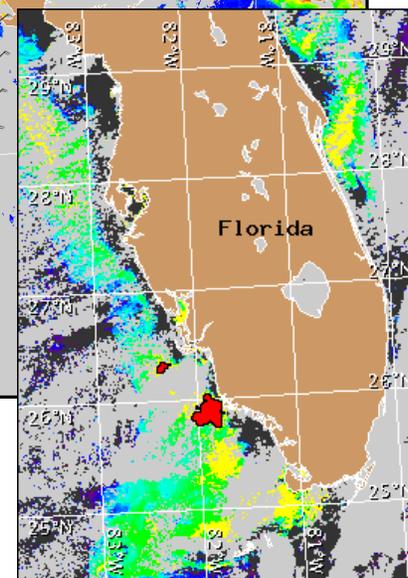
Wind speed and direction are averaged over 12 hours from buoy measurements. Length of line indicates speed; angle indicates direction. Red indicates that the wind direction favors upwelling near the coast. Values to the left of the dotted vertical line are measured values; values to the right are forecasts.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





Satellite chlorophyll image and forecast winds for December 2, 2011 12Z with cell concentration sampling data from November 21 to 30 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).