



Gulf of Mexico Harmful Algal Bloom Bulletin

Region: Southwest Florida

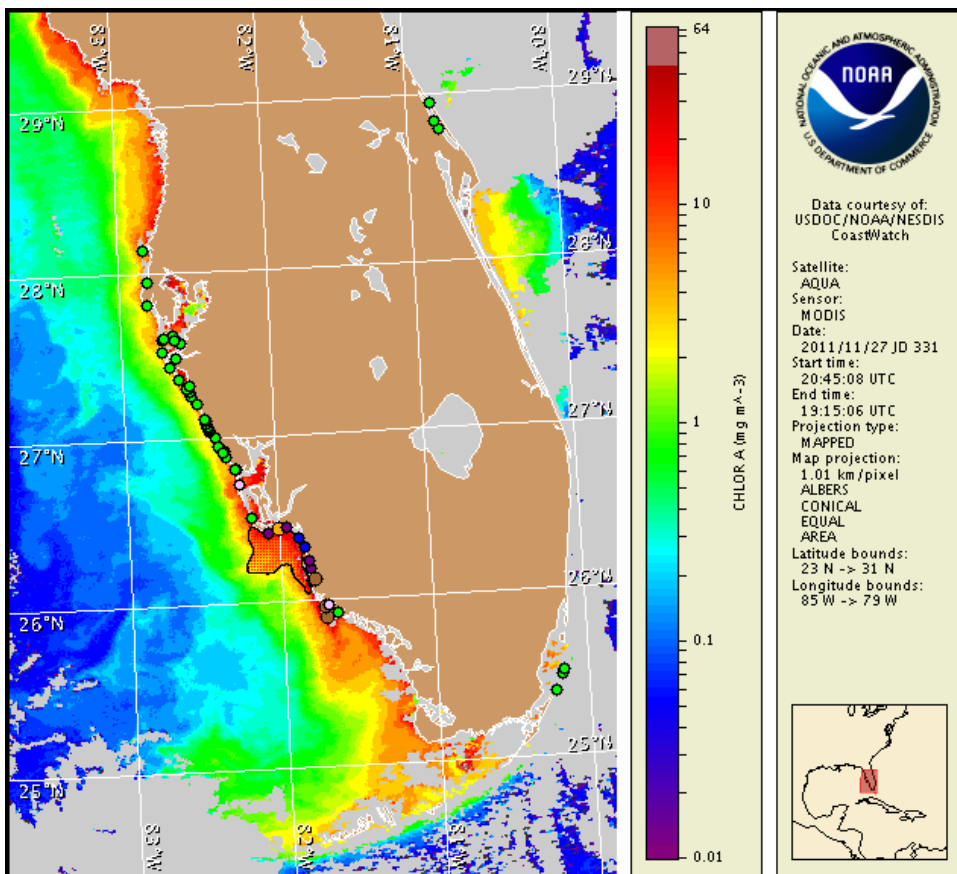
Monday, 28 November 2011

NOAA Ocean Service

NOAA Satellite and Information Service

NOAA National Weather Service

Last bulletin: Wednesday, November 23, 2011



Satellite chlorophyll image with possible HAB areas shown by red polygon(s). Cell concentration sampling data from November 18 to 23 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 northern and central Collier County and in the eastern Sanibel Island region of southern Lee County. This bloom extends offshore southern Lee and northern and central Collier counties. In the eastern Sanibel Island region, patchy high impacts are possible today with patchy very low impacts Tuesday through Wednesday. Patchy low impacts are possible today through Wednesday in northern Collier County and in the Marco Island region of Collier County. No additional impacts are expected at the coast in southwest Florida today through Wednesday, November 30. Dead fish have been reported in southern Lee County over the past week.

Analysis

The harmful algal bloom first identified on 9/26 persists at the coast in the southern to southeastern Sanibel Island region of southern Lee County and alongshore northern Collier County and within the Marco Island region of central Collier County. This bloom also extends into offshore regions of southern Lee and northern Collier counties.

Samples collected last week indicate that 'very low' to 'medium' *Karenia brevis* concentrations were present from southern Lee County to central Collier County; the 'medium' concentration was found at Lighthouse Beach on the east end of Sanibel Island (FWRI, CCPCPD; 11/21-22). 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; 11/17-23). Dead fish were reported in Estero Bay in southern Lee County (FWRI; 11/25).

Recent MODIS imagery (11/27, shown left) indicates that an 'elevated' to 'very high' (>4 to >20 $\mu\text{g/L}$) chlorophyll feature remains visible in imagery up to 30 miles offshore southern Lee and northern Collier counties with patchy 'very high' (>20 $\mu\text{g/L}$) chlorophyll measured near shore from around Sanibel Island to Marco Island. Continued sampling is highly recommended alongshore and offshore throughout the southern Lee County and northern and central Collier County regions.

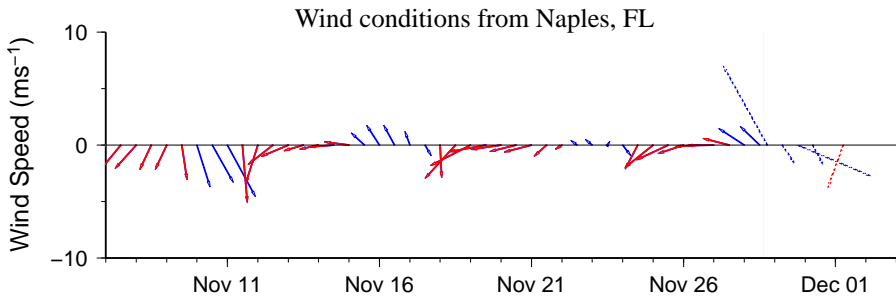
Forecasted winds will increase the potential for respiratory impacts at the coast in Collier County today through Wednesday and at the coast of the eastern Sanibel Island region today. Continued southerly transport is possible tonight through Saturday. The potential for bloom intensification will be minimal through Wednesday.

-Yang, Urizar

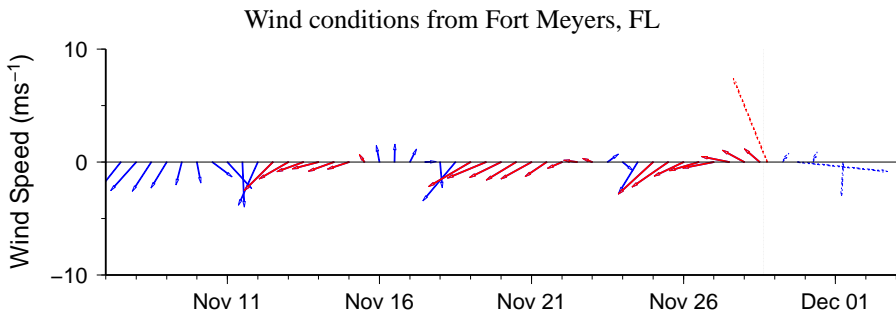
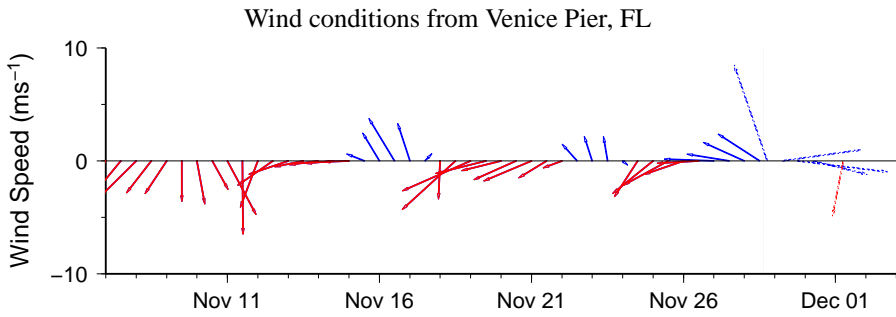
Wind Analysis

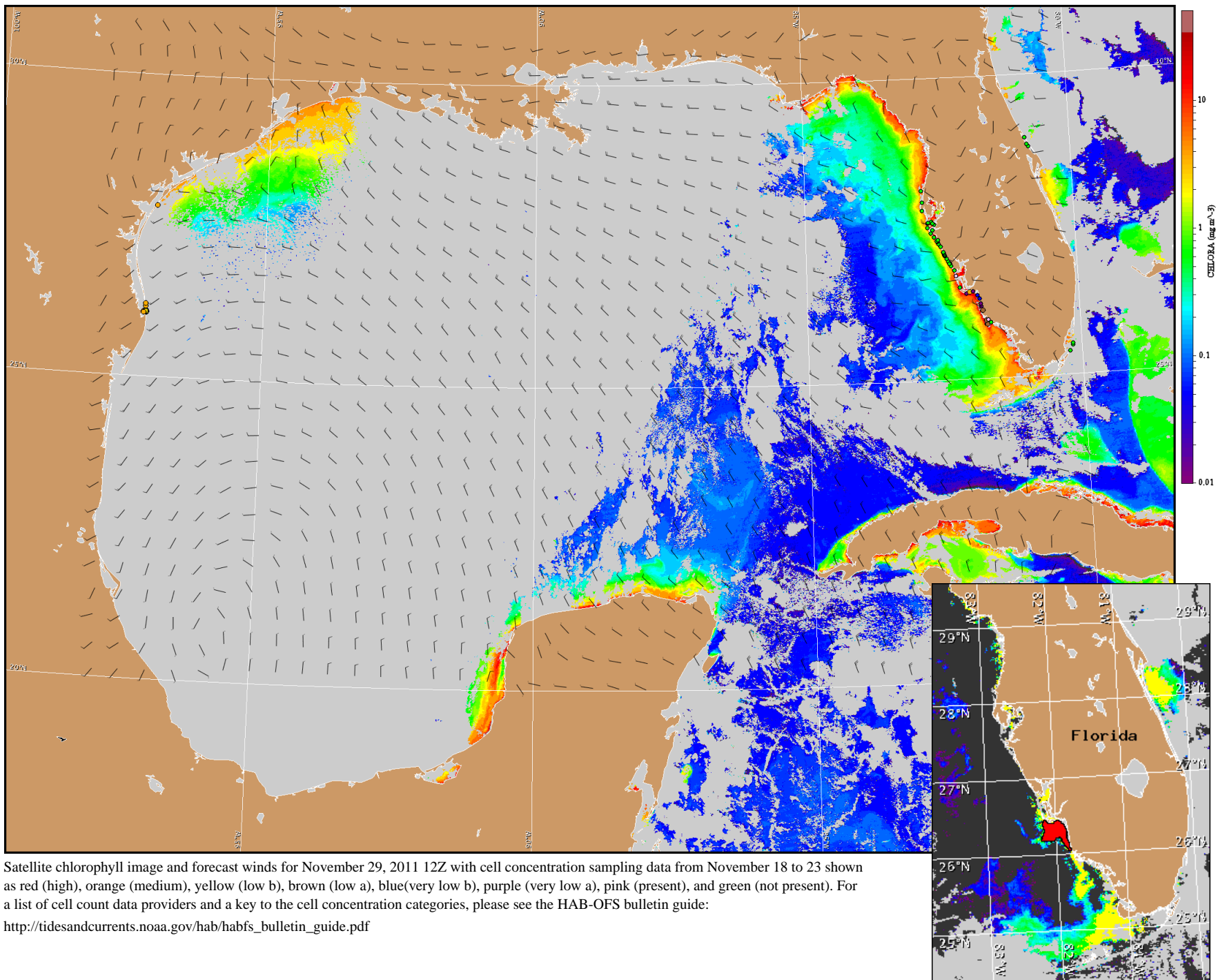
Southwest Florida: (Collier County) South southeast winds (16-19kn, 8-10m/s) becoming south southwest(17-20kn, 9-10m/s) in the afternoon. Northwest winds tonight (17-22kn, 9-11m/s). Northwest winds Tuesday (12-17kn, 6-9m/s). Northwest winds (10-13kn, 6-7m/s) Wednesday. North winds (12-15kn, 6-8m/s) Wednesday night.

(Charlotte through Lee counties) South winds (up to 20kn,10m/s) shifting west late in the afternoon. West winds (20kn, 10m/s) tonight. Northwest winds (20-15kn, 10-8m/s) Tuesday to Wednesday. North winds (15kn) Wednesday 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 November 29, 2011 12Z with cell concentration sampling data from November 18 to 23 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).