



Gulf of Mexico Harmful Algal Bloom Bulletin

Region: Southwest Florida

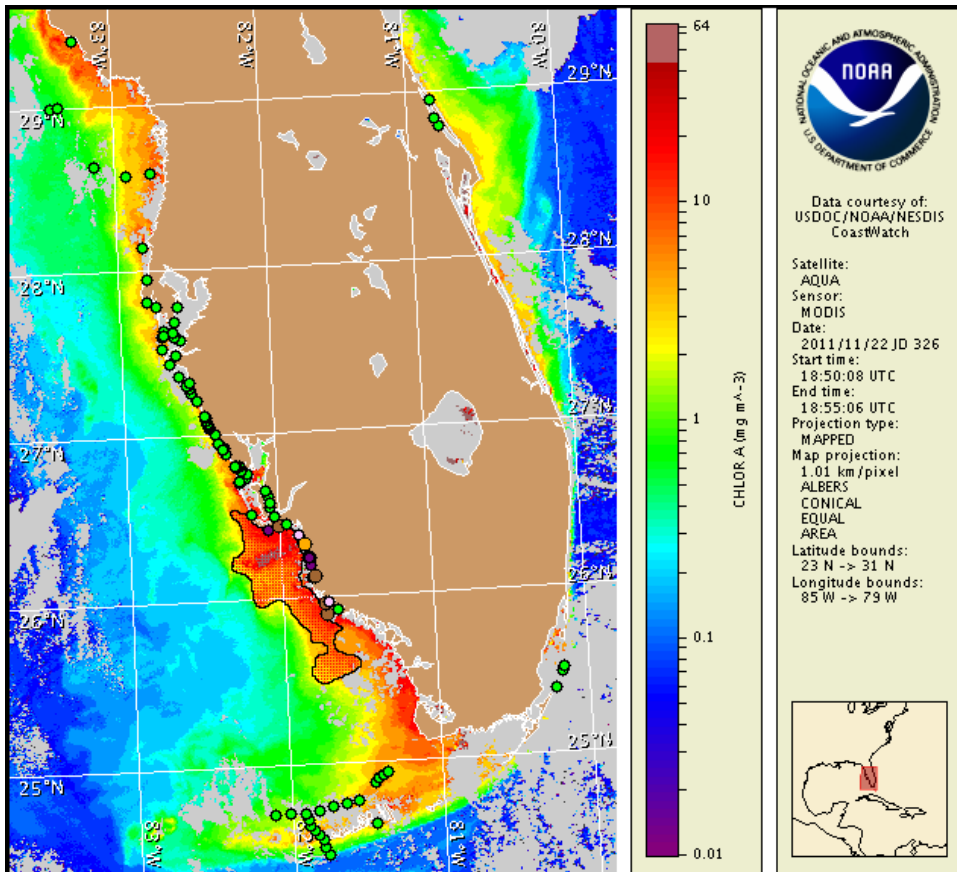
Wednesday, 23 November 2011

NOAA Ocean Service

NOAA Satellite and Information Service

NOAA National Weather Service

Last bulletin: Monday, November 21, 2011



Satellite chlorophyll image with possible HAB areas shown by red polygon(s). Cell concentration sampling data from November 13 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/habofs_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 has been identified 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 Collier Counties. Patchy moderate impacts are possible today in northern Collier County, with patchy very low impacts possible Thursday through Sunday. In the eastern Sanibel Island region patchy low impacts are possible today through Sunday. Patchy low impacts are possible in the Marco Island region of Collier County today through Sunday. No additional impacts are expected at the coast in southwest Florida today through Sunday, November 27.

Analysis

A 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 and central Collier County from the Lee and Collier County border to Naples and within the Marco Island region. This bloom also extends into offshore regions of southern Lee and northern Collier counties. Samples collected this week indicate a decrease in *Karenia brevis* concentrations from 'medium' on 11/17 to 'very low' on 11/21 along the northern Collier County coast (FWRI, CCPCPD). *K. brevis* concentrations are now 'low' in the Naples Bay and Marco Island regions of Collier County where they were previously not present on 11/12 and 11/14, respectively (FWRI, CCPCPD; 11/21). 'Very low' to 'low' *K. brevis* concentrations are also present alongshore southern and southeastern portions of Sanibel Island in Lee County (FWRI; 11/16). All other samples collected alongshore from Pinellas through northern Monroe counties and throughout the Florida Keys region indicate that *K. brevis* is not present (FWRI, MML, SCHD; 11/12-21). No reports of impacts have been received alongshore southwest Florida over the past several days.

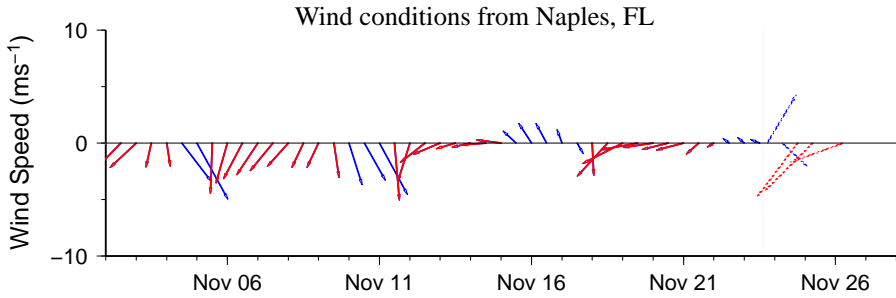
Recent MODIS imagery (11/22, shown left) indicates an intensification of chlorophyll levels (generally >10 μg/L) over the past 5 days alongshore and offshore southern Lee and northern Collier counties, including the southern Sanibel Island region. An elevated to very high chlorophyll feature (6 to >40 μg/L) remains visible in imagery up to 30 miles offshore Barefoot and Vanderbilt beaches in northern Collier County. This feature is located slightly more northeast than the feature reported in Bulletin 2011-056 issued on 11/21 and extends perpendicular to the coast from approximately 26°13'28"N 82°16'54"W to 26°17'59"N 81°55'24"W. Continued sampling is highly recommended alongshore and offshore throughout the southern Lee and northern and central Collier County regions, including south of Sanibel Island and in the high chlorophyll feature area.

Forecasted winds will increase the potential for respiratory impacts at the coast in Collier County today. Continued southerly transport is possible tonight through Saturday. Intensification at the coast remains possible this week.

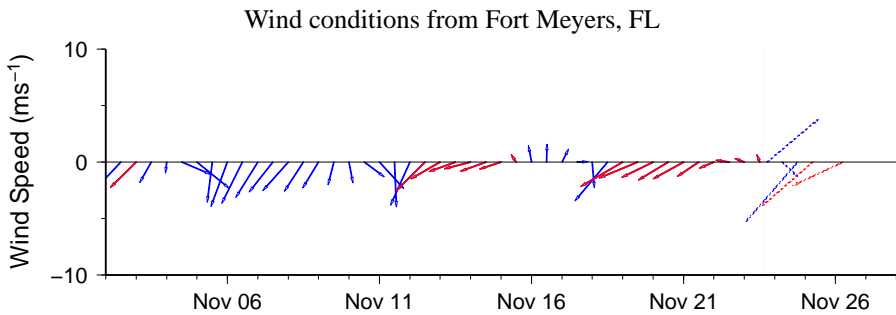
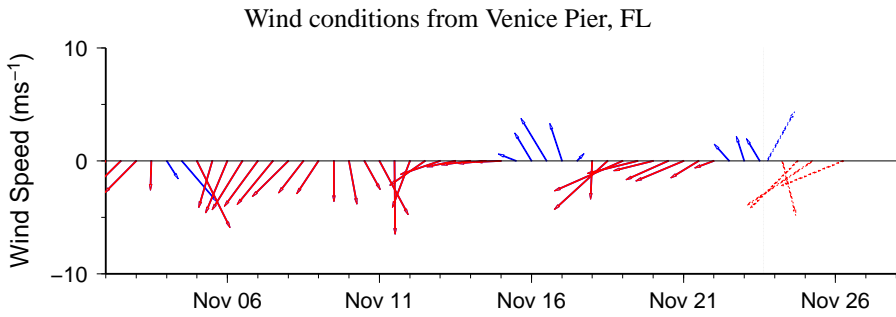
-Fisher, Urizar

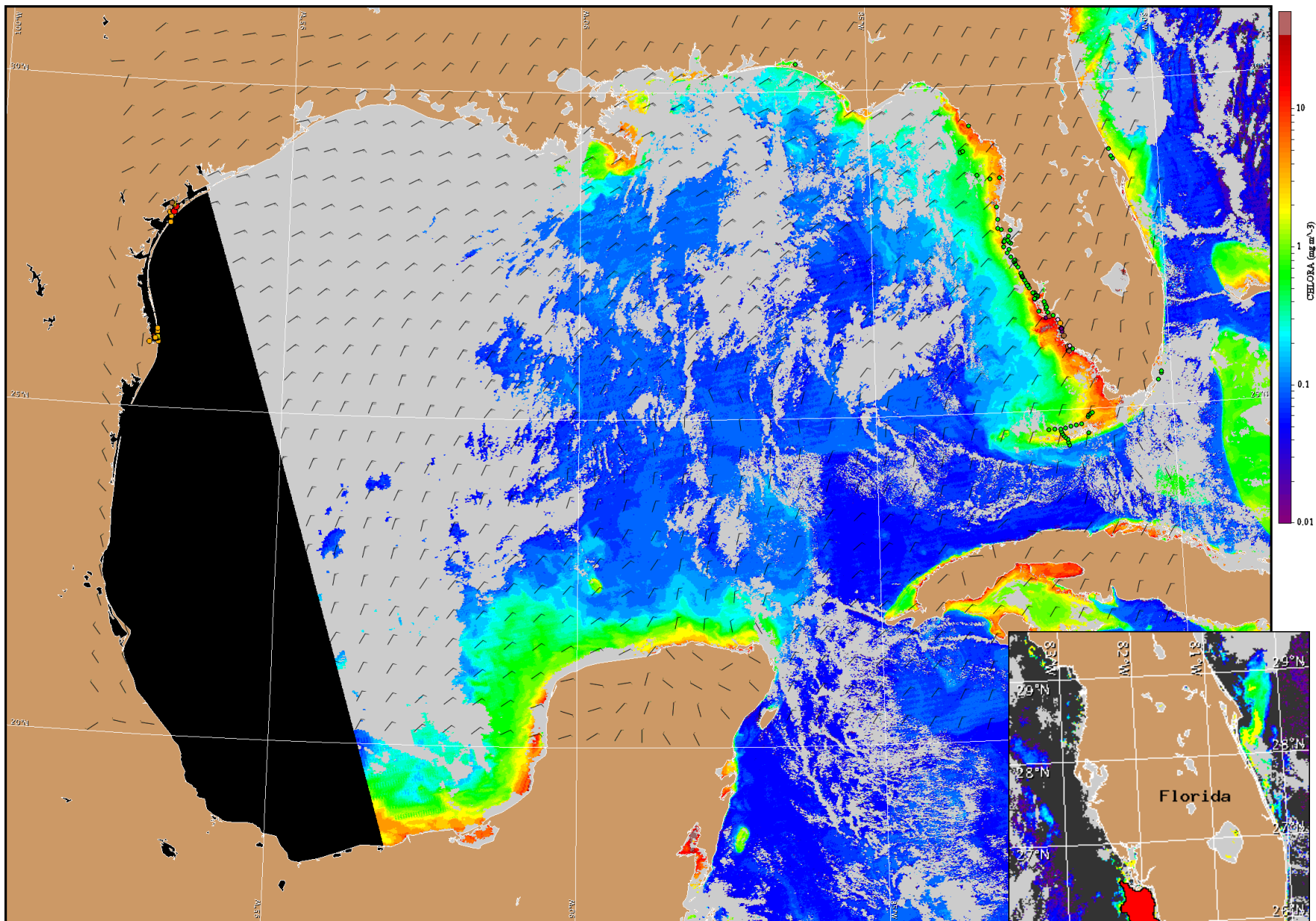
Wind Analysis

Southwest Florida: (Collier County) South to southeast winds (5-10kn, 3-5m/s) becoming west to southwest in the afternoon. North to northwest winds tonight (10-15kn, 5-8m/s). Northeast winds Thursday (13-22kn, 7-11/s). East winds Friday through Saturday (15-20kn, 8-10m/s). Southeast winds Sunday (12-15kn, 6-8m/s). **(Pinellas through Lee counties)** Southwest to northwest winds today (10-15kn, 5-8m/s), shifting north tonight (15-20kn, 8-10m/s). Northeast winds Thursday (15-20kn, 8-10m/s). East winds Friday through Saturday (15kn, 8m/s). Southeast winds Saturday night (10-15kn, 5-8m/s). South winds Sunday (15kn, 8m/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 24, 2011 12Z with cell concentration sampling data from November 13 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

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