



Gulf of Mexico Harmful Algal Bloom Bulletin

Region: Southwest Florida

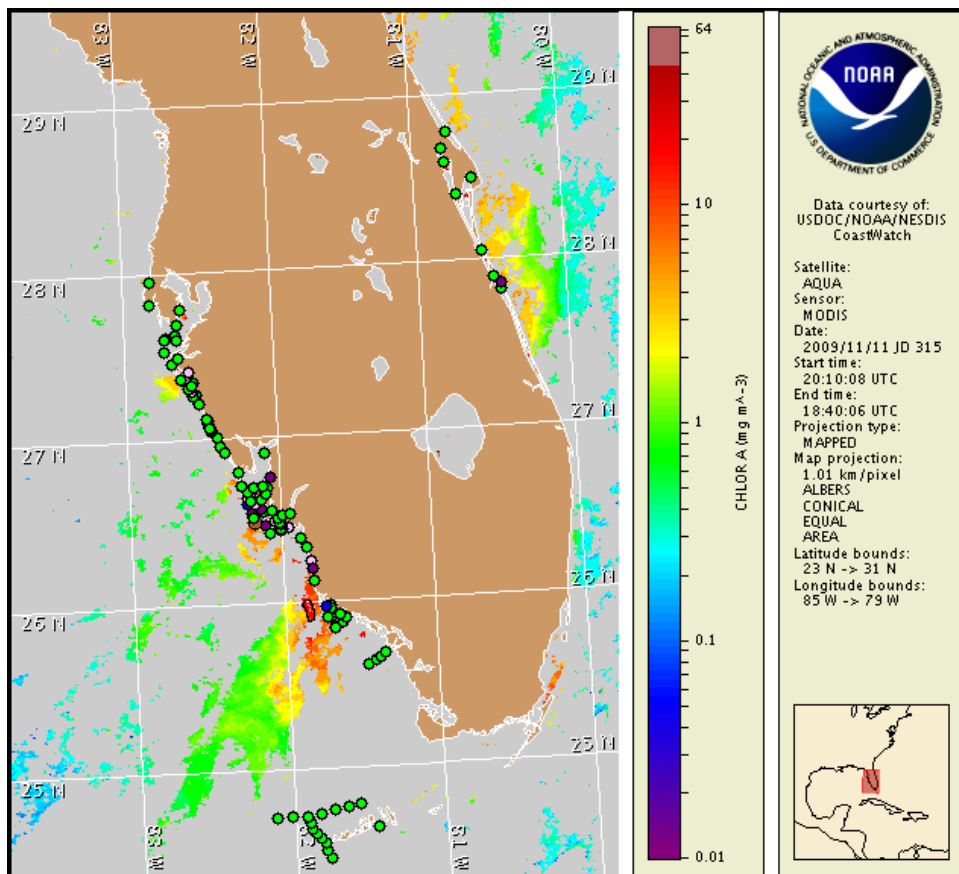
12 November 2009

NOAA Ocean Service

NOAA Satellites and Information Service

NOAA National Weather Service

Last bulletin: November 9, 2009



Satellite chlorophyll image with possible HAB areas shown by red polygon(s). Cell concentration sampling data from November 2 to 10 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 HABFS bulletin guide:

http://tidesandcurrents.noaa.gov/hab/habfs_bulletin_guide.pdf

Please note the following restrictions on all SeaWiFS imagery derived from CoastWatch.

1. Data are restricted to civil marine applications only; i.e. federal, state, and local government use/distribution is permitted.
2. Image products may be published in newspapers. Any other publishing arrangements must receive GeoEye approval via the CoastWatch Program.

Conditions Report

A harmful algal bloom has been identified in patches onshore northern and central Lee County, in the Pine Island Sound/San Carlos Bay region in Lee County, and in central Collier County. Also, a harmful algal bloom has been identified offshore southern Lee and northern Collier counties and harmful algae have been identified onshore northern Collier County. Today through Saturday patchy low impacts are possible in central Lee County, in the Pine Island Sound/San Carlos Bay region and in central Collier County. Patchy very low impacts are possible in central Collier County on Sunday. No additional impacts are expected alongshore southwest Florida today through Sunday, November 15.

Analysis

A harmful algal bloom containing 'very low b' concentrations of *Karenia brevis* was identified in central Collier County at Big Marco Pass on 11/9 (CCPCPD). 'Very low a' concentrations of *K. brevis* were also identified on this date in northern Collier County at Clam Pass (Seagate Beach) (CCPCPD). Sampling reports over the past ten days confirm the continued presence of a patchy harmful algal bloom (up to 'low a' concentrations) onshore northern and central Lee County, and in the Pine Island Sound/San Carlos Bay region of Lee County (FWRI, CCPCPD). However, sampling reports also indicate that the bloom is weakening in intensity in this region. No additional sample information is available to confirm the continued presence of a harmful algal bloom offshore southern Lee and northern Collier counties, however satellite imagery included in Bulletin 2009-056 issued earlier this week indicated the bloom is still likely present in patches offshore. No *K. brevis* was identified in Manatee, Sarasota or Charlotte Counties this week (11/9-11/10; FWRI, SCHD)

Recent satellite imagery is obscured by clouds throughout southwest Florida, limiting bloom analysis. However, a patch of elevated to high chlorophyll is partially visible alongshore northern to central Collier County from the Clam Pass region south to the Marco Island region. High chlorophyll levels are partially visible in a vertical band approximately 6-7 miles offshore central Collier County from 25°59'57"N 81°53'29"W to 25°53'28"N 81°49'22"W. Sampling is recommended in this area. Large elevated chlorophyll patches are also partially visible trailing southwest of this feature to 25°17'50"N 82°59'91"W.

No additional information is available regarding an elevated chlorophyll feature appearing in imagery on 11/7 offshore southern Pinellas, Manatee and northern Sarasota Counties. This area will continue to be monitored.

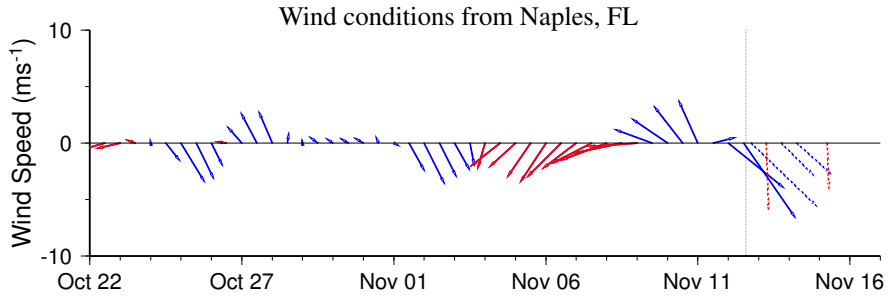
The bloom may have transported northward alongshore up to 10km since Monday, 11/9 based on wind observations at Venice.

Variable northwesterly winds are expected today through Saturday increasing the potential for impacts. Southerly transport of the bloom is likely through Sunday. Conditions are mildly favorable for upwelling and potential bloom intensification over the weekend.

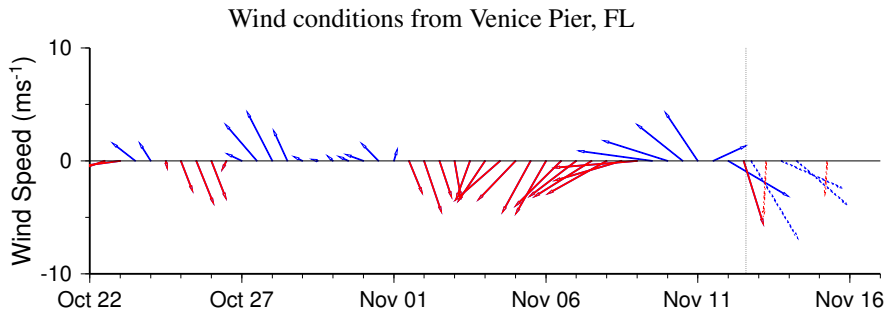
-Fisher, Lindley

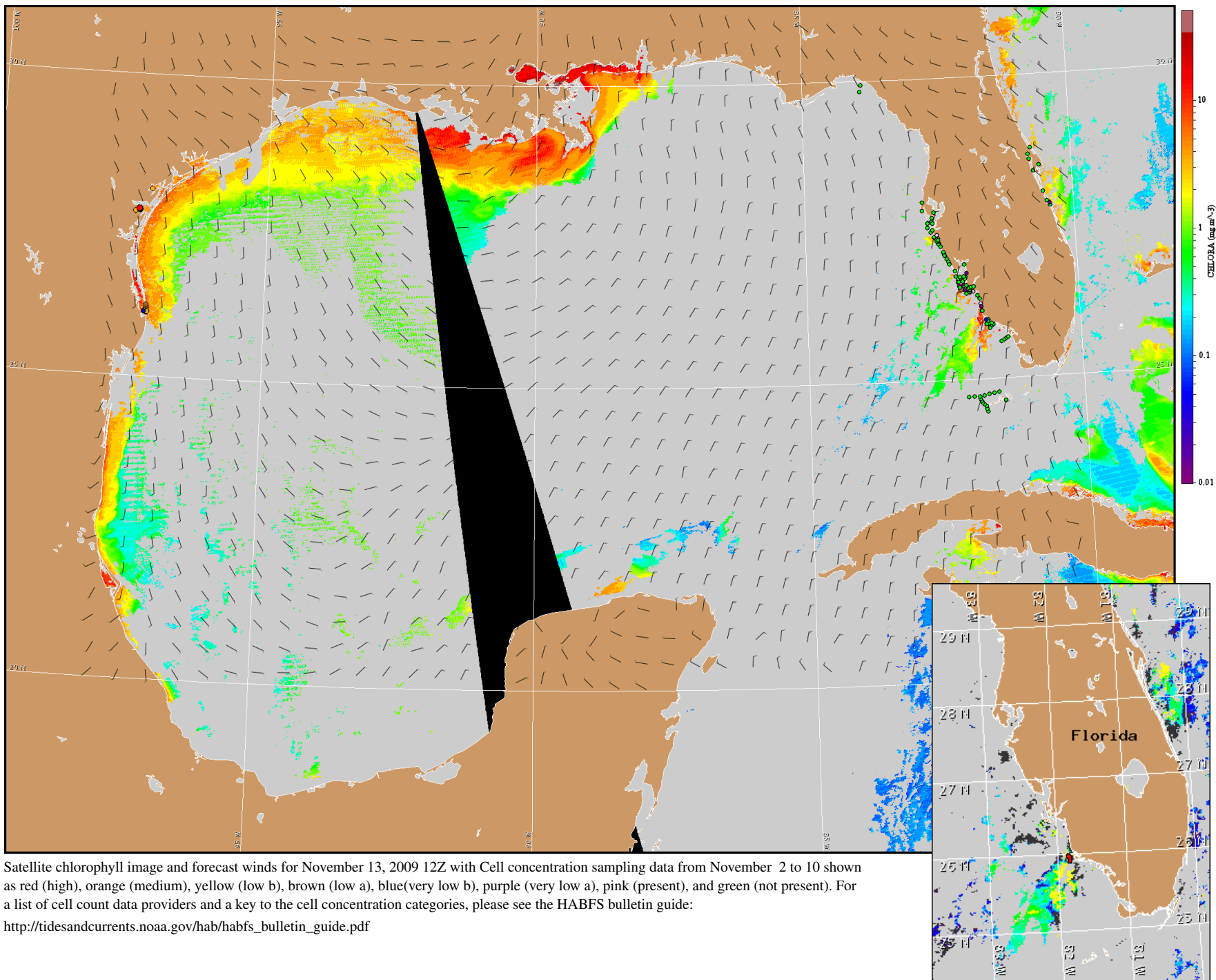
Wind Analysis

North to northwest winds today (20kn, 10m/s; 10-15kn, 5-8m/s south of Lee County) through Friday (15-20kn, 8-10m/s; 5-10kn, 3-5m/s south of Lee County). North to northwest winds Saturday (5-10kn), becoming northeast Saturday night. North to northeast winds (5-10kn) Sunday and Monday.



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 13, 2009 12Z with Cell concentration sampling data from November 2 to 10 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 HABFS 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).