



# Gulf of Mexico Harmful Algal Bloom Bulletin

8 December 2005

NOAA Ocean Service

NOAA Satellites and Information Service

Last bulletin: December 5, 2005

## Conditions Report

Harmful algal blooms have been identified in patches from Pinellas to Charlotte, and in Levy and Monroe Counties. In Pinellas County, very low impacts are possible today and tomorrow, with no impacts Saturday and Sunday. In Levy, Manatee, and Charlotte Counties, low impacts are possible today and tomorrow, with very low impacts Saturday and Sunday. In Sarasota County, patchy moderate impacts are possible today and tomorrow, with very low impacts Saturday and Sunday. In Monroe County, very low impacts are possible today and Saturday, with low impacts tomorrow and Sunday. Discolored water may be present.

## Analysis

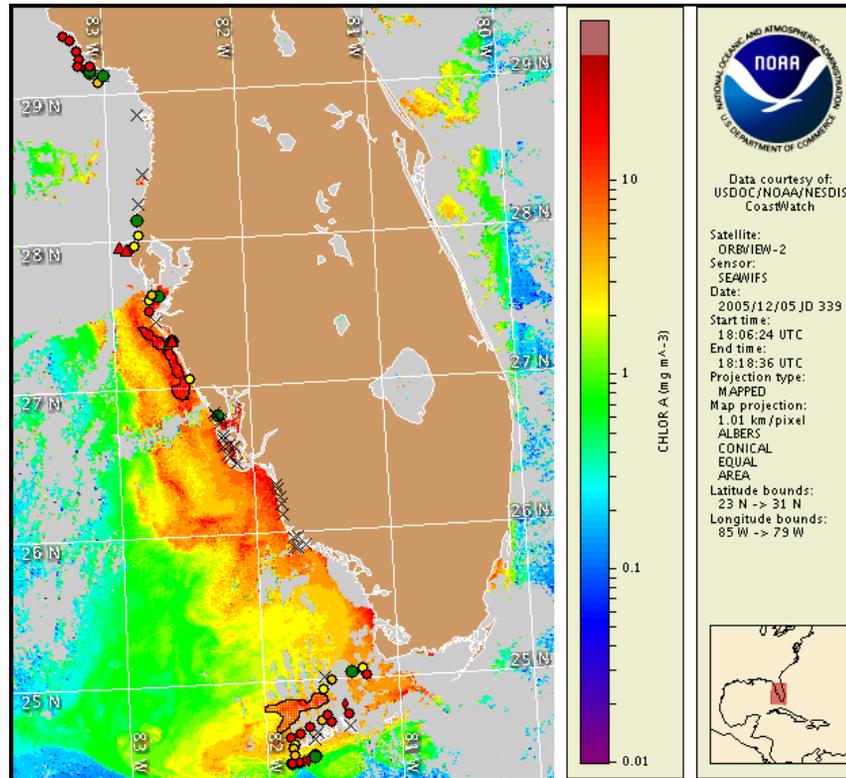
The bloom persists along the southwest Florida coast. Recent imagery has been obscured by clouds. A high chlorophyll feature is still present along shore between Tampa Bay and Charlotte Harbor in imagery from December 5. This imagery indicates a chlorophyll concentration >20 µg/L at 27°19'N 82°42'W, 9 miles (15 km) from Sarasota. A wind transport model indicates possible southward bloom transport of 15 km since 12/5. Variable winds will probably result in little net movement of the bloom through Sunday.

The bloom near the Keys has strengthened. Mote Marine Lab sample data from December 5 had medium concentrations near the Keys. 12/5 imagery indicates an elevated chlorophyll feature west of Key West with a concentration >6 µg/L at 24°36'N 81°53'W, 7 miles (11 km) from Key West. Variable winds will probably result in little net movement of the bloom through Sunday.

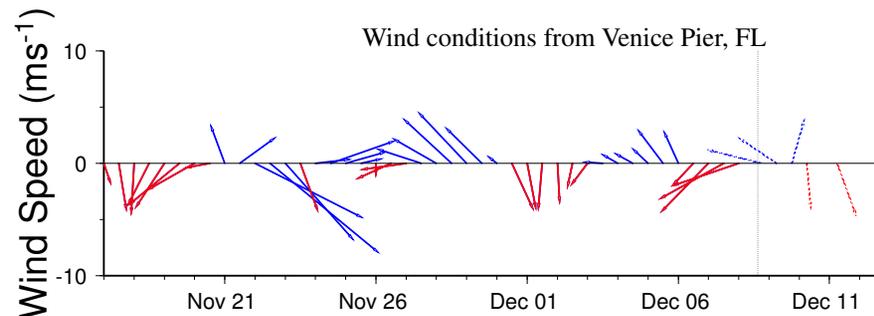
Bronder, Keller

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 OrbImage approval via the CoastWatch Program.

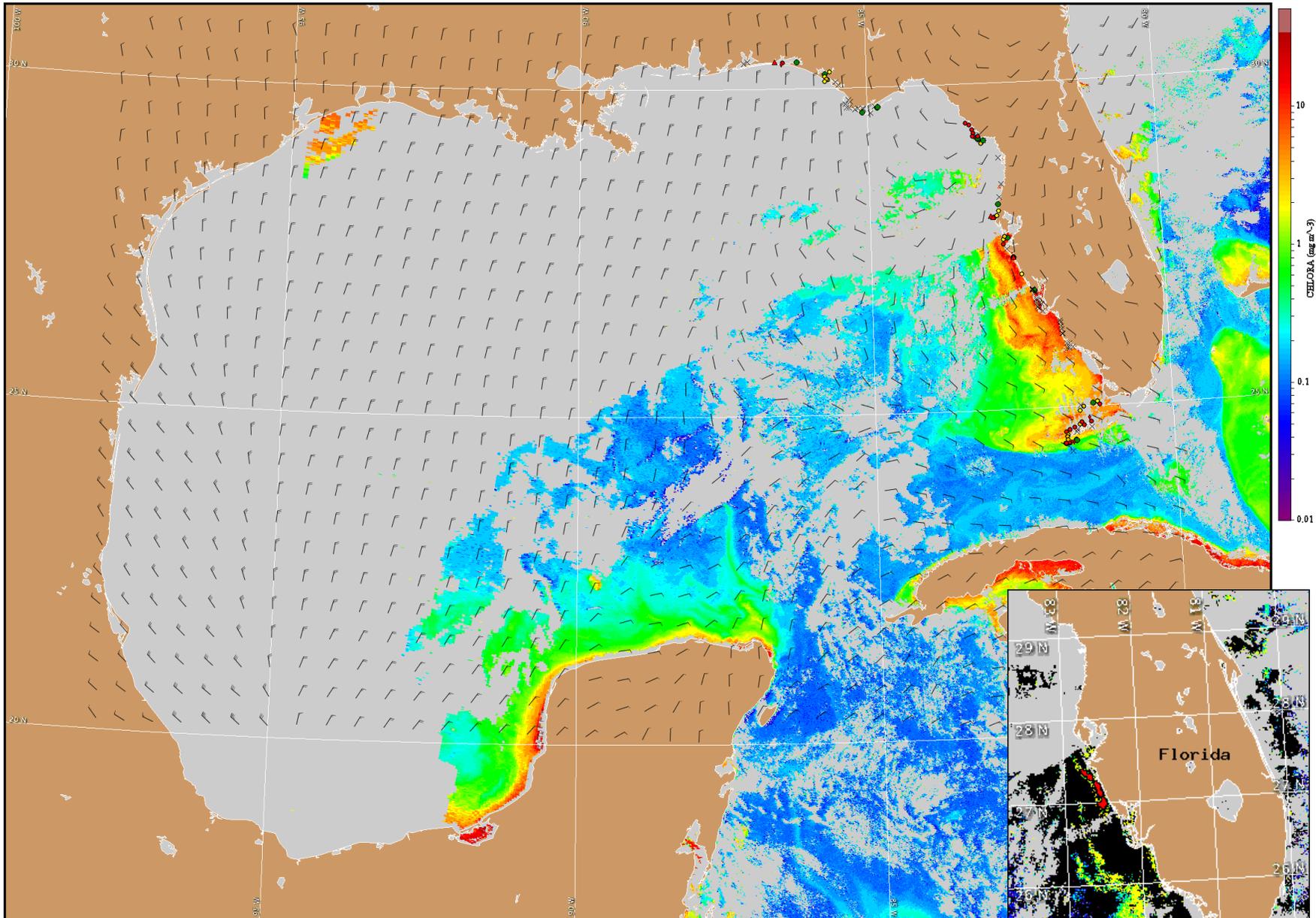


Satellite chlorophyll image with possible HAB areas shown by red polygon(s). Cell concentration sampling data from November 28-December 2 shown as red squares (high), red triangles (medium), red diamonds (low b), red circles (low a), orange circles (very low b), yellow circles (very low a), green circles (present), and black "X" (not present).

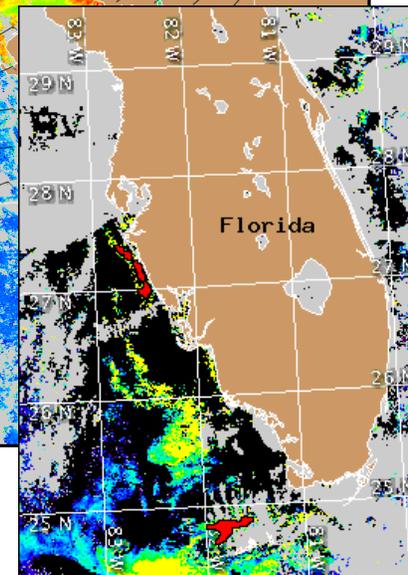


Wind speed and direction are averaged over 12 hours from buoy measurements. Length of line indicates speed; angle indicates direction. Red indicates that the wind direction favors upwelling near the coast. Values to the left of the dotted vertical line are measured values; values to the right are forecasts.

SW Florida: winds will be southeast (20 kts, 10 m/s) today, southwest (10 kts, 5 m/s) becoming north (15 kts, 8 m/s) tomorrow, north (15 kts, 8 m/s) Saturday and Sunday. Keys: winds will be east (15 kts, 8 m/s) today, south (5 kts, 3 m/s) becoming northwest tomorrow, northeast (10 kts, 5 m/s) Saturday, southwest (15 kts, 8 m/s) Sunday.



Satellite chlorophyll image and forecast winds for December 9, 2005 12Z with cell concentration sampling data from November 28-December 2 shown as red squares (high), red triangles (medium), red diamonds (low b), red circles (low a), orange circles (very low b), yellow circles (very low a), green circles (present), and black "X" (not present).



Verified HAB areas shown in red. Other bloom areas shown in yellow (see p. 1 analysis for interpretation).

