



Gulf of Mexico Harmful Algal Bloom Bulletin

5 December 2005

NOAA Ocean Service

NOAA Satellites and Information Service

Last bulletin: December 2, 2005

Conditions Report

Harmful algal blooms have been identified in patches from Dixie to Levy, Pinellas to Charlotte Counties, and Monroe County. Very low impacts are possible today in Pinellas County. Low impacts are possible today in Dixie, Levy, Manatee, Charlotte, and Monroe Counties, with possible very low impacts tomorrow through Wednesday. Patchy moderate impacts are possible today in Sarasota County, with possible very low impacts tomorrow through Wednesday. Discolored water may be present.

Analysis

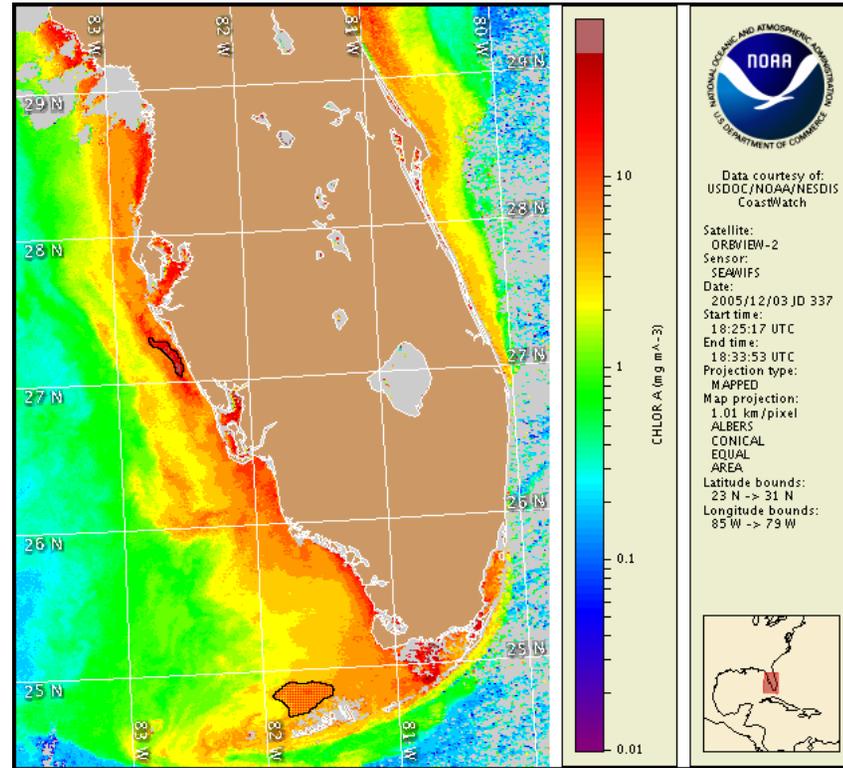
The bloom persists along shore from Dixie to Levy, Pinellas to Charlotte Counties, and offshore of Lee and Collier Counties. FWRI sample data from last week indicate medium concentrations of *Karenia brevis* in Sarasota County and a high concentration off shore of Collier County. Imagery from 12/3 continues to show an high chlorophyll feature extending along the coast from just south of Tampa Bay to just north of Charlotte Harbor. Near the north end of this feature, at 27°24'N 82°48' W, imagery indicates a chlorophyll concentration >17 µg/L. Near the south end of said feature, at 26°50'N 82°28' W, the concentration is 10 µg/L. Several points within this feature had concentrations >20 µg/L, including 27°05'N 82°32' W. A wind transport model indicates northward bloom transport of 20 km since 12/1. Offshore expansion and intensification of the bloom is possible through Wednesday.

A bloom has formed near the Florida Keys. Mote Marine Lab sample data from last week shows low *Karenia brevis* concentrations north and south of the Keys. Fish kills and discolored water were reported as well. Imagery indicates a chlorophyll concentration >5 µg/L north of the lower Keys at 24°50'N 81°42' W. Variable winds through Wednesday will result in little net movement of the bloom.

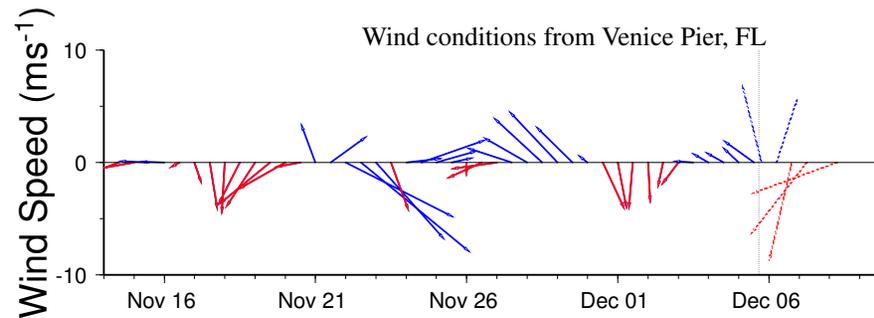
Please note the following restrictions on all SeaWiFS imagery derived from CoastWatch.

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.

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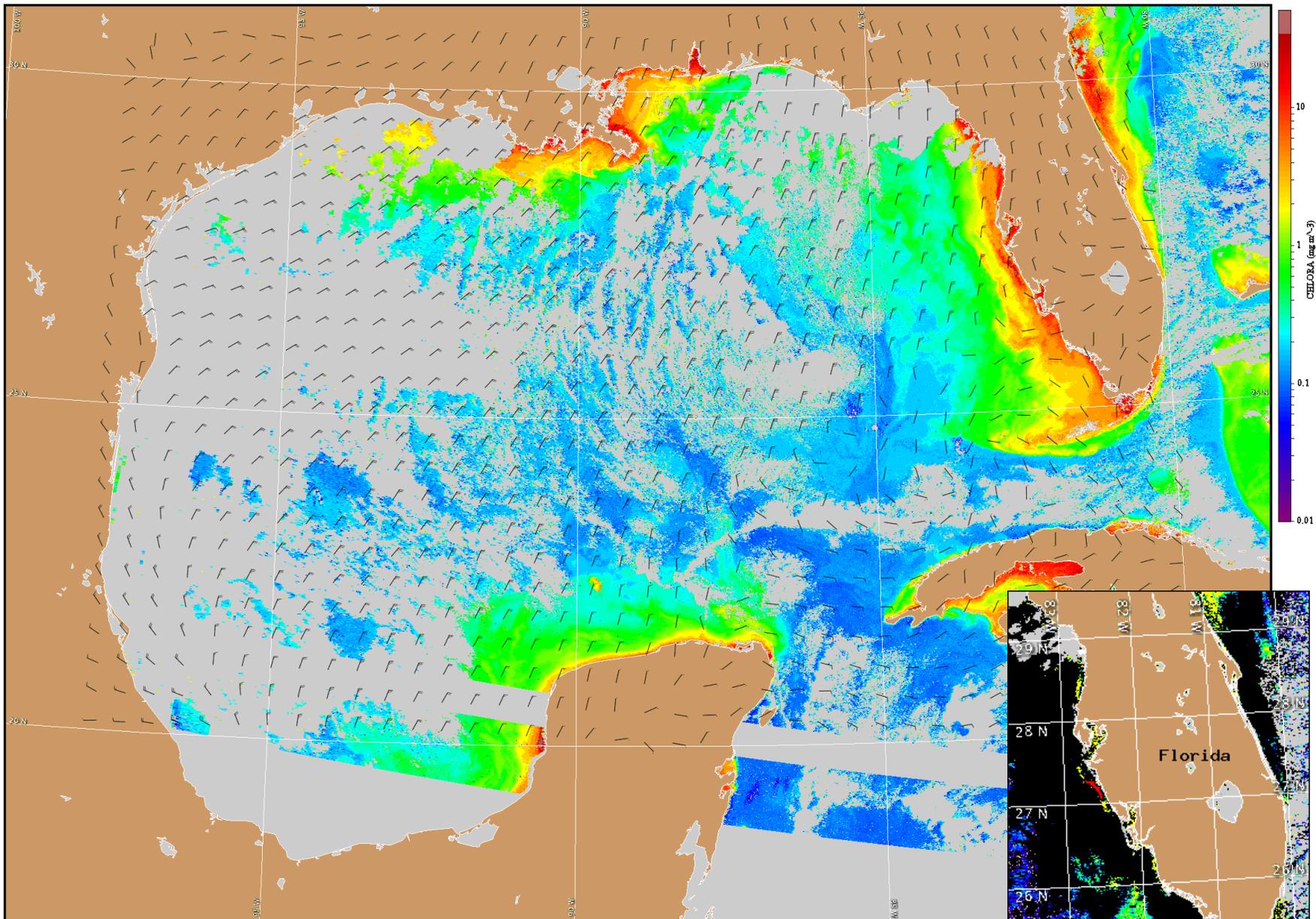
Satellite chlorophyll image with possible HAB areas shown by red polygon(s).



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.

SW Florida: Winds will be southwest (15 kts, 8 m/s) today, northeast (20 kts, 10 m/s) tomorrow through Wednesday.

Lower Keys: Winds will be southeast (9 kts, 5 m/s) today, west becoming north (13 kts, 7 m/s) tomorrow, east (13 kts, 7 m/s) Wednesday.



Satellite chlorophyll image and forecast winds for December 6, 2005 12Z.

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

