



# Gulf of Mexico Harmful Algal Bloom Bulletin

22 December 2005

NOAA Ocean Service

NOAA Satellites and Information Service

Last bulletin: December 19, 2005

## Conditions Report

Harmful algal blooms have been identified in patches in Dixie, Levy, from southern Pinellas to northern Sarasota, and in Monroe Counties. The following patchy impacts are possible through Monday: none to very low in Dixie, Levy, southern Pinellas and Manatee Counties. In northern Sarasota County, patchy none to very low impacts are expected today and Monday with patchy very low to moderate impacts possible Friday through Sunday. In Monroe County, patchy very low to low impacts are possible today through Monday for gulfside Lower Keys and none to very low impacts possible for the oceanside Lower Keys. Discolored water may be present.

## Analysis

Blooms persist in Dixie, Levy and from southern Pinellas to northern Sarasota Counties. Recent samples in Dixie and Levy show the bloom continues to dissipate (FWRI, 12/19). While cloudy imagery limits time series analysis, the persistence of elevated chlorophyll (generally 5-10 µg), now visible as an offshore band, is located approximately 11 offshore from Pinellas to northern Sarasota. The northern extent is located at 27°44'N, 83°4'W and the southern extent is at 27°24'N, 82°55'W. Recommend sampling. Consistent upwelling favorable winds may have increased likelihood of intensification of an offshore bloom. Strengthening onshore winds on Saturday night through Sunday may increase onshore impacts. Cloudy imagery limits the analysis of the blooms in northern Sarasota and offshore of Lee and Collier Counties. Variable winds will likely maintain bloom locations through Monday.

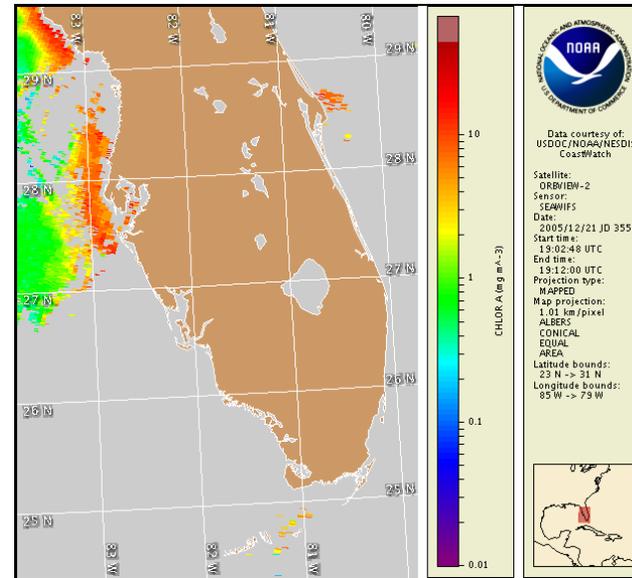
Florida Keys: Cloudiness limits the analysis of the bloom around the Keys. The most recent samples range from none to low, and confirm patchy bloom locations on the gulfside and the oceanside (MML; 12/19). Continued sampling is recommended. North to northeasterlies winds today, tomorrow, and Monday may continue southwesterly

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

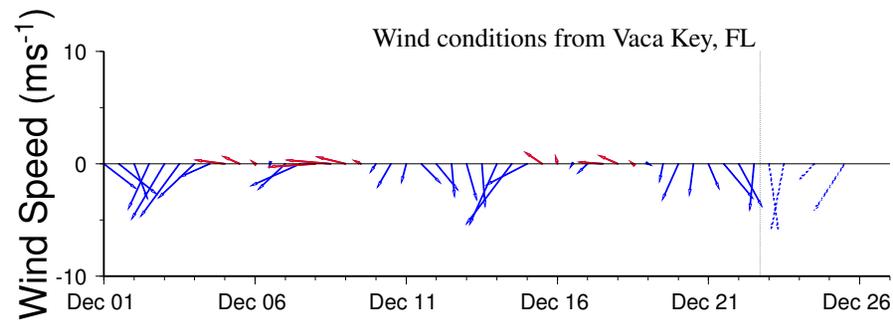
1. Data are restricted to civil marine applications only; i.e. federal, state, and local government use/distribution is permitted.
2. Image products may be published in newspapers. Any other publishing arrangements must receive OrbImage approval via the CoastWatch Program.

transport and increase impacts on the gulfside shorelines. Southeasterlies to southerlies on Saturday and Sunday may cause onshore transport and increase impacts on the oceanside shorelines.

Fenstermacher & Stolz



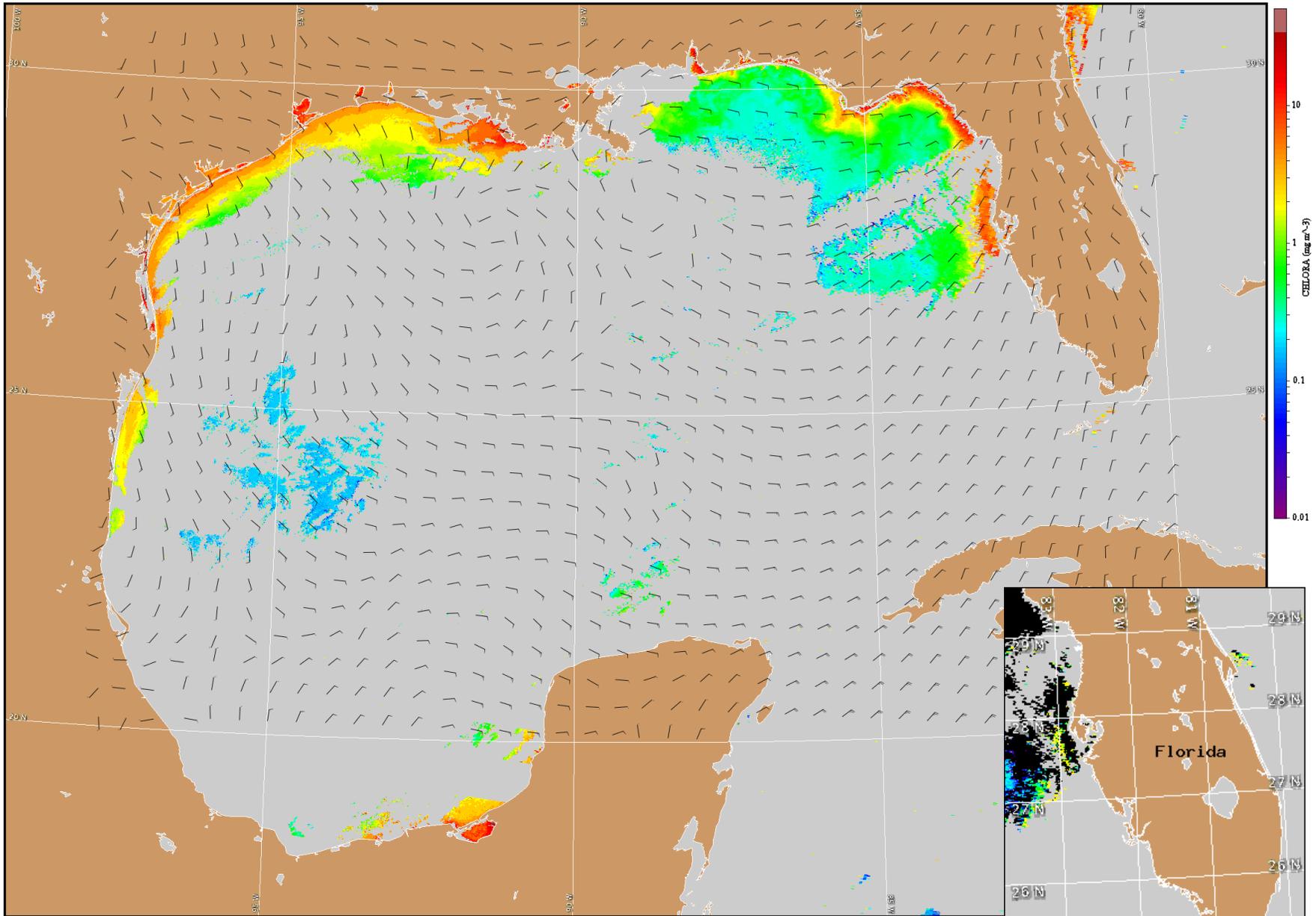
Satellite chlorophyll image with possible HAB areas shown by red polygon(s).



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: North to northeasterlies today and Friday (10 knots; 5 m/s) followed by southeast to south- westerlies Friday night through Saturday (5-15 knots; 3-8 m/s). Strong westerlies on Sunday (10-20 knots; 5-10 m/s) followed by northwesterlies on Monday (15 knots; 8 m/s).

FL Keys: Strong northerlies today (15-20 knots; 8-10 m/s) followed by north to northeasterlies on Friday becoming southeasterlies on Saturday (10-15 knots; 5-8 m/s). Southerlies shifting to northwesterlies on Sunday followed by north to northwesterlies on Monday (10-15 knots; 5-8 m/s).



Satellite chlorophyll image and forecast winds for December 23, 2005 12Z.

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

