



Gulf of Mexico Harmful Algal Bloom Bulletin

29 December 2005

NOAA Ocean Service

NOAA Satellites and Information Service

Last bulletin: December 27, 2005

Conditions Report

Harmful algal blooms have been identified in patches in Dixie, Levy, southern Pinellas, northern Sarasota, and Monroe Counties. No impacts expected in Dixie and Levy Counties through tomorrow, with patchy very low impacts possible over the weekend. No impacts expected in southern Pinellas or northern Sarasota Counties through the weekend. Patchy very low impacts possible for oceanside Lower Keys today. Otherwise, no impacts expected in the Lower Keys through the weekend.

Analysis

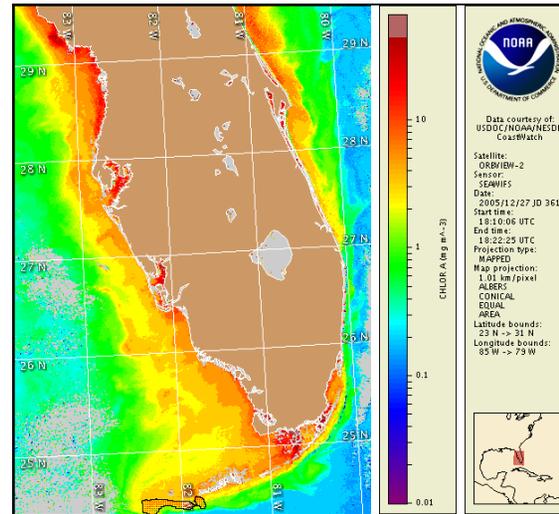
The bloom has continued to dissipate alongshore SW Florida, with only two 'present' concentrations of *K. brevis* reported at Skyway Pier (12/19) and Redington Pier (12/27), and a very low concentration at New Pass (12/19-22, FWRI). No *K. brevis* was identified from Tarpon Springs to Marco Island (12/19-27, FWRI). No intensification expected through the weekend. Chlorophyll remains elevated (3-4 $\mu\text{g/L}$) approximately 25 miles offshore southern Collier and northern Monroe Counties, extending from 25°36'N to 25°8'N along its north-south axis and 82°8'W to 82°20'W along its east-west axis. This feature likely contains *K. brevis*, as it transported offshore from onshore regions containing *K. brevis*. It is expected to continue moving south, and will be monitored, although it is anticipated to move west of and around the Marquesas.

The bloom continues to dissipate along Dixie and Levy Counties. Very low concentrations of *K. brevis* were reported 12/19 (FWRI) at several locations along the coast from Seven Sisters Reef to Rattlesnake Key, but nearly all of those locations reported not present concentrations in 12/27 samples. Satellite imagery indicates elevated chlorophyll (>30 $\mu\text{g/L}$) only at the mouth of the Suwanee River due to river output. Samples from Suwanee Sound indicated no *K. brevis* (12/27, FWRI).

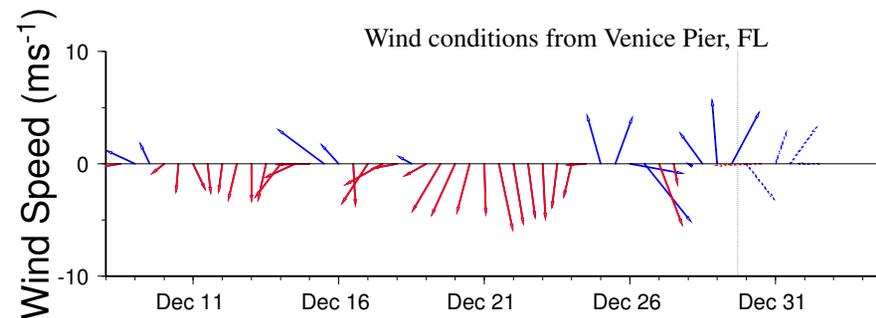
The bloom near the Lower Keys extends primarily from southwest of

the Marquesas (24°25'N 82°29'W) to southwest of Marathon (24°39'N 81°07'W, although it is also present north and northwest of the Lower Keys. Very low to low samples were reported last week north and south of the Lower Keys from Marathon to the Marquesas. Chlorophyll concentrations >20 $\mu\text{g/L}$ were detected 12/27 west of Key West at 24°36'N 81°54'W. Sampling recommended in this area. Continued transport around the Lower Keys is likely through the weekend.

-Stolz & Fisher



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



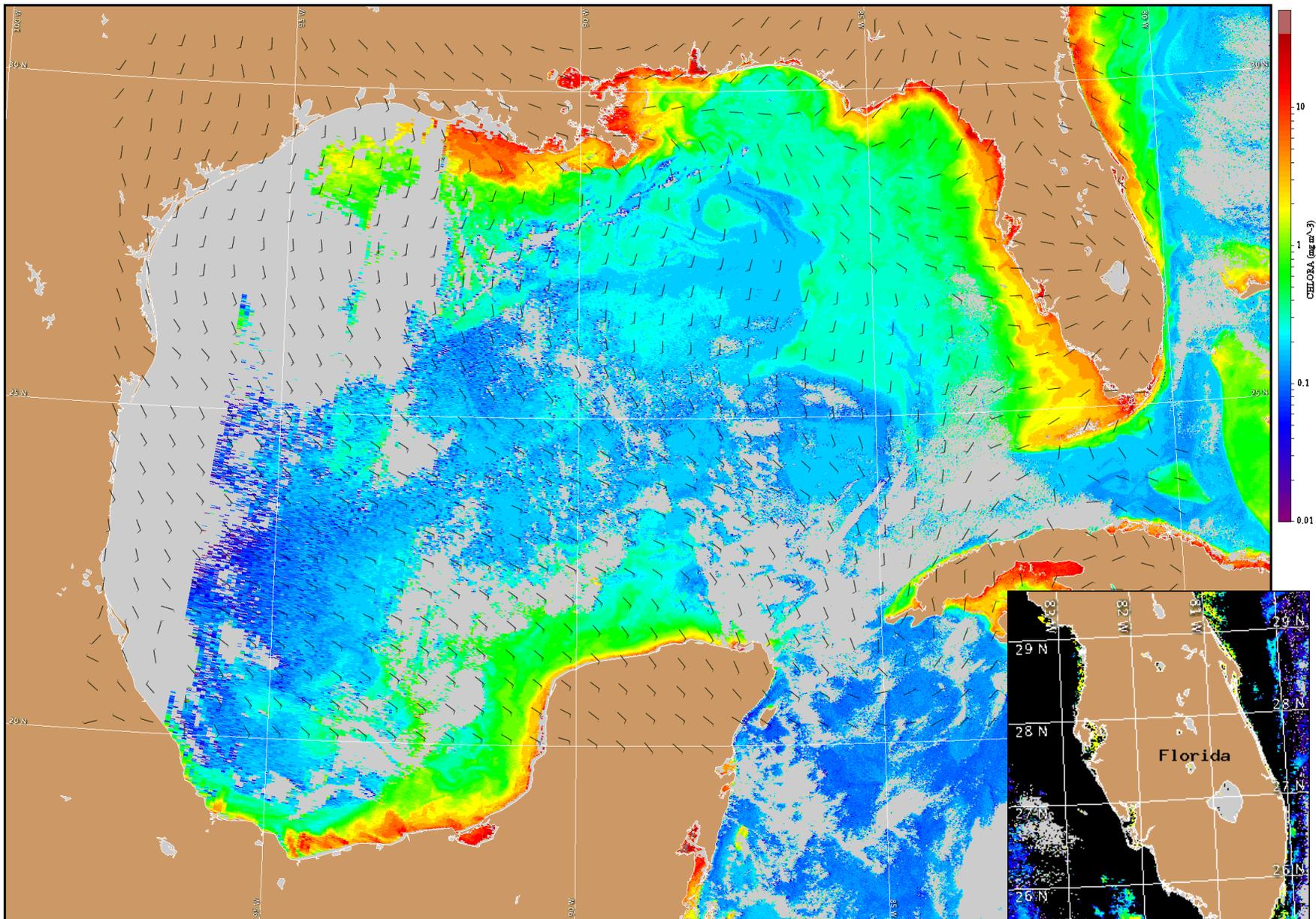
Wind speed and direction are averaged over 12 hours from buoy measurements. Length of line indicates speed; angle indicates direction. Red indicates that the wind direction favors upwelling near the coast. Values to the left of the dotted vertical line are measured values; values to the right are forecasts.

SW Florida: Northwesterly winds at 15-20 knots (8-10 m/s) today, diminishing to 10 knots (5 m/s) tonight. Light and variable winds Friday becoming easterly (5 knots, 3 m/s) in the afternoon. Winds clocking to the south by Saturday at 10 knots (5 m/s), and southeast Sunday.

FL Keys: Southwest to westerly winds today at 15 knots (8 m/s), becoming northwest overnight and variable Friday at 5-10 knots (3-5 m/s). East to southeast winds Friday night through Sunday at 10-15 knots (5-8 m/s).

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

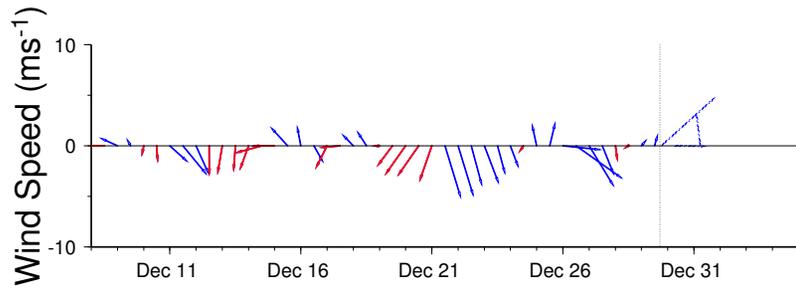
1. Data are restricted to civil marine applications only; i.e. federal, state, and local government use/distribution is permitted.
2. Image products may be published in newspapers. Any other publishing arrangements must receive OrbImage approval via the CoastWatch Program.



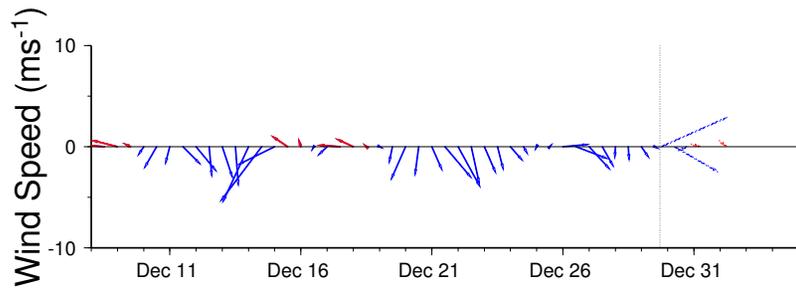
Satellite chlorophyll image and forecast winds for December 30, 2005 12Z.

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

Wind conditions from Naples, FL



Wind conditions from Vaca Key, FL



Wind conditions from Cedar Key, FL

