



Gulf of Mexico Harmful Algal Bloom Bulletin

9 December 2004

National Ocean Service

National Environmental Satellite, Data, and Information Service

Last bulletin: December 6, 2004

Conditions: A harmful algal bloom has been identified offshore of the 10,000 Islands region south of Collier County, extending to Cape Sable in southern Monroe County. Fish and dolphin mortalities have been reported in offshore waters west of Shark River. Moderate impacts are possible at the coast on Friday and Saturday in the 10,000 Islands region. A very low concentration of *K. brevis* has also been identified just southwest of Marco Island. Very low impacts at the beach are possible on Friday and Saturday.

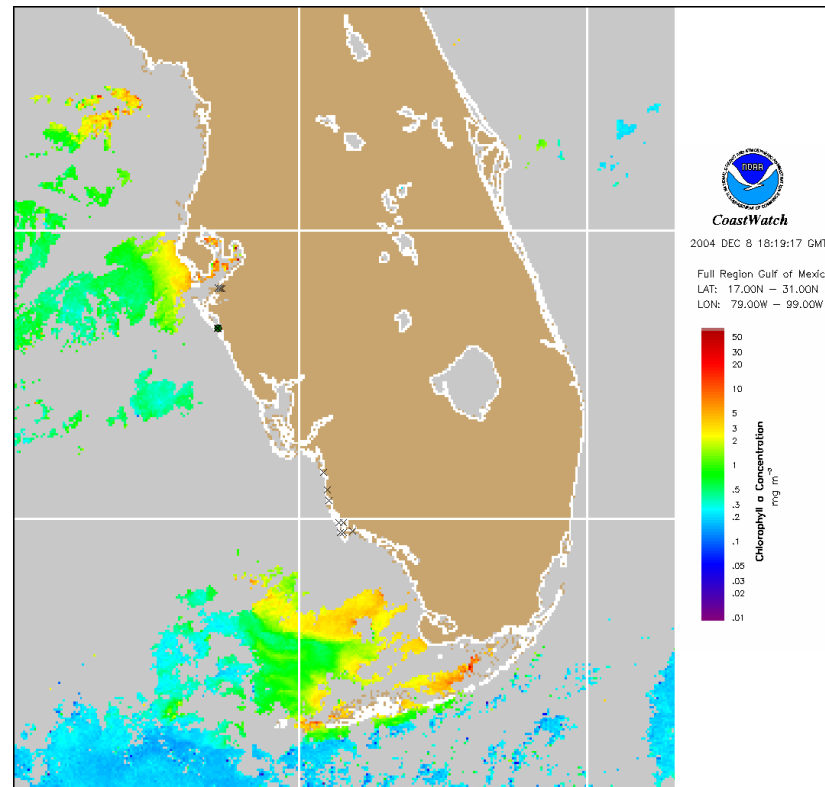
Analysis: Clouds have obscured satellite imagery over much of the Florida coastline and the identified HAB bloom offshore of the 10,000 Islands region recently. The bloom appears to have transported slightly south to 25°10'N. An area of elevated chlorophyll (above 9 µg/L) is visible at 81°38'W, 25°16'N. Further information regarding the current state and exact extent of this bloom is unavailable. Strong onshore winds Friday and Saturday may transport dead fish to the coast. Strong northerly winds will likely transport this bloom further south over the weekend.

Samples collected Dec. 6 by FWRI identified a very low concentration of *K. brevis* southwest of Marco Island (25°54.5'N, 81°42.4'W). This concentration is not identifiable by satellite imagery; however the area will continue to be monitored. Very low impacts at the beach are possible Friday and Saturday in this region.

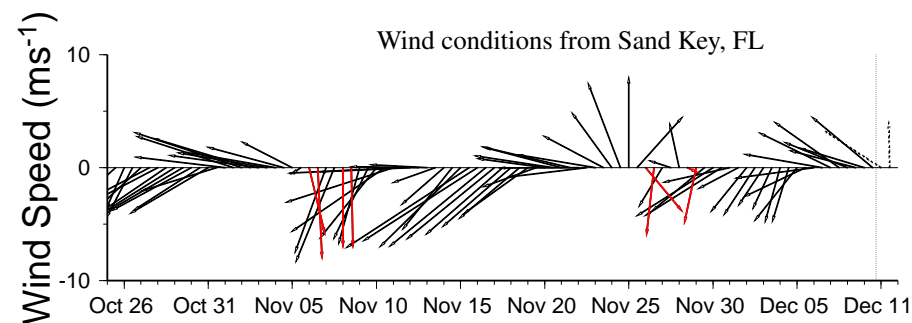
~Fisher, Bronder, Tomlinson

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

1. These data are restricted to civil marine applications only; i.e. federal, state, and local government use/distribution is permitted.
2. Distribution for military, or commercial purposes is NOT permitted.
3. There are restrictions on Internet/Web/public posting of these data.
4. Image products may be published in newspapers. Any other publishing arrangements must receive OrbImage approval via the CoastWatch Program.

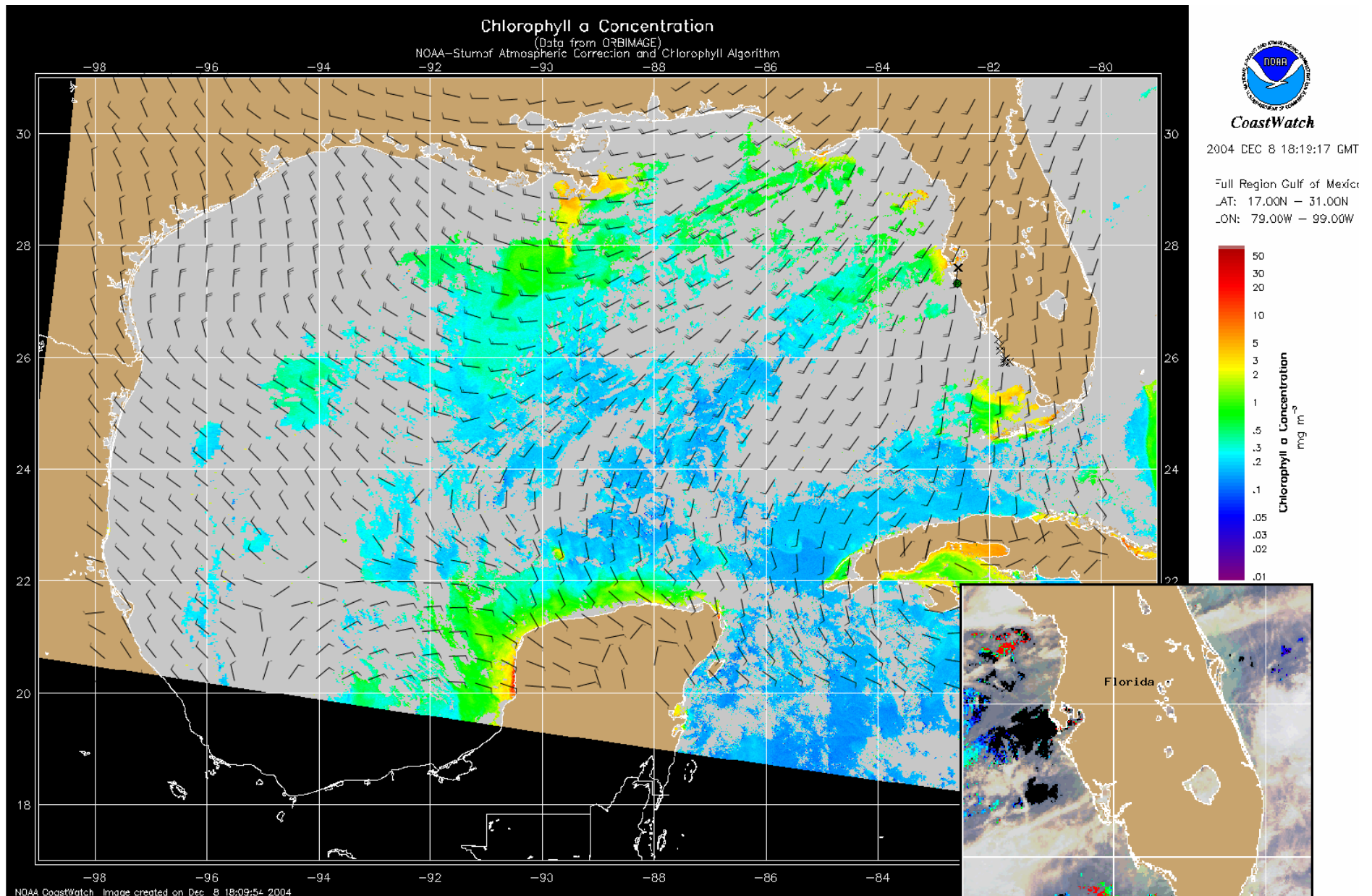


Chlorophyll concentration from satellite with possible HAB areas shown by red polygon(s). Cell concentration sampling data from November 30, 2004 shown as red squares (high), red triangles (medium), red diamonds (low b), red circles (low a), orange circles (very low b), yellow circles (very low a), green circles (present), and black "X" (not present).

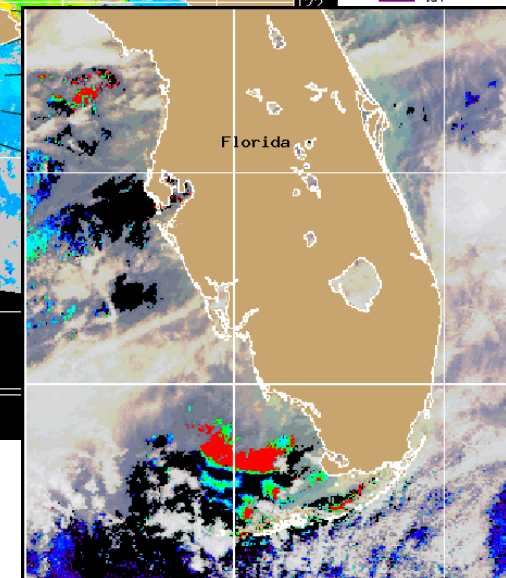


Wind speed and direction are averaged over 12 hours from measurements made on buoys. Length of line indicates speed; angle indicates direction. Red indicates that the wind direction favors upwelling near the coast. Values to the left of the dotted vertical line are measured values; values to the right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

Easterlies today will turn southerly tonight into tomorrow and begin clocking around to the north by Monday. Stronger southwesterlies to northwesterlies (15-20 knots, 8-10 m/s) expected Friday and Saturday, then turning northerly Sunday into Monday.



Chlorophyll concentration from satellite and forecast winds for December 10, 2004 12Z with cell concentration sampling data from November 30, 2004 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).



Blooms shown in red (see p. 1 analysis and image for interpretation)

