



Gulf of Mexico Harmful Algal Bloom Bulletin

21 November 2005

National Ocean Service

National Environmental Satellite, Data, and Information Service

Last bulletin: November 17, 2005

Conditions: Harmful algal blooms have been identified in patches along SW Florida from Pinellas to mid Collier County and from Dixie to Levy County. Patchy moderate to high impacts are possible in northern Lee, Sarasota, and Dixie Counties through Wednesday, with patchy low to moderate impacts possible in Levy, Manatee, and Charlotte Counties. Very low impacts expected in Pinellas and Collier County through Wednesday. A second bloom has been identified in patches in Okaloosa, Bay, Franklin, and Wakulla Counties. Patchy low to moderate impacts possible from Okaloosa to Bay County, with very low impacts likely from Gulf to Wakulla County. Dead fish have been reported in Pinellas, Walton, and Okaloosa Counties over the last week. Dead fish smell, while unpleasant, does not produce the same respiratory irritation as harmful algal blooms.

Analysis: The bloom remains along the southwest Florida coast. Recent imagery has been obscured by clouds, but a wind transport model indicates the offshore bloom may have moved as much as 20-25km north since Thursday. Samples from 11/14-17 (FWRI) indicate medium concentrations of *K. brevis* at New Pass, Pine Island Sound, and Captiva Pass. Low to very low concentrations were reported in patches from Clearwater to Caxambas Pass. Strong westerlies and northwesterlies through Wednesday are likely to bring the bloom to shore, particularly from southern Sarasota to Lee County, and intensify coastal impacts. Reports of discolored water, respiratory irritation, and dead fish are possible.

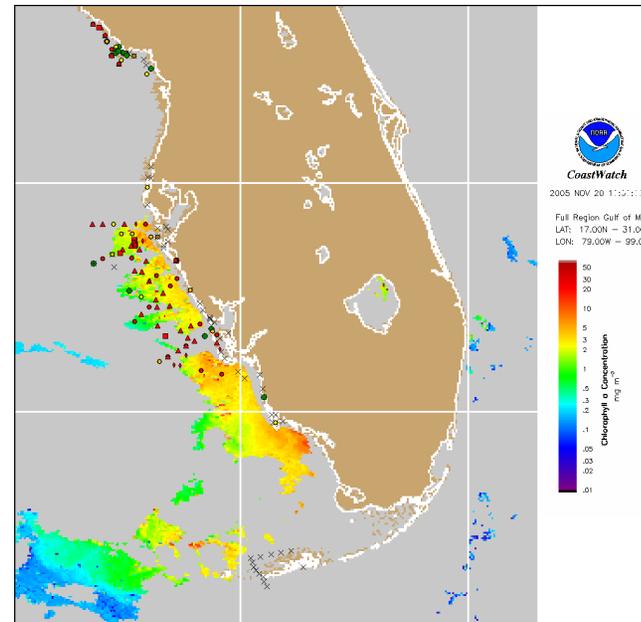
The bloom persists along Dixie and Levy Counties. Chlorophyll concentrations are obscured by clouds, but samples indicate medium to high concentrations of *K. brevis* in Dixie County at Horseshoe Beach

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

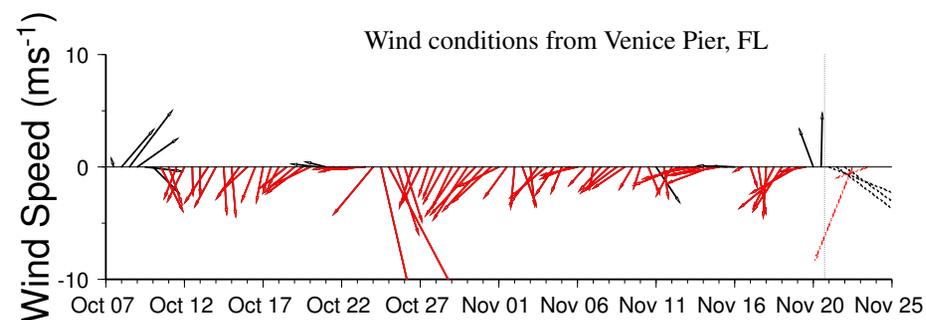
1. These data are restricted to civil marine applications only; i.e. federal, state, and local government use/distribution is permitted.
2. Distribution for military, or commercial purposes is NOT permitted.
3. There are restrictions on Internet/Web/public posting of these data.
4. Image products may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

and Seven Sisters Reef (11/14, FWRI). Samples in Levy County (11/14, FWRI) indicate very low levels of *K. brevis*, but westerlies through Wednesday are likely to transport bloom southwest into Levy County.

-Stolz, Fisher

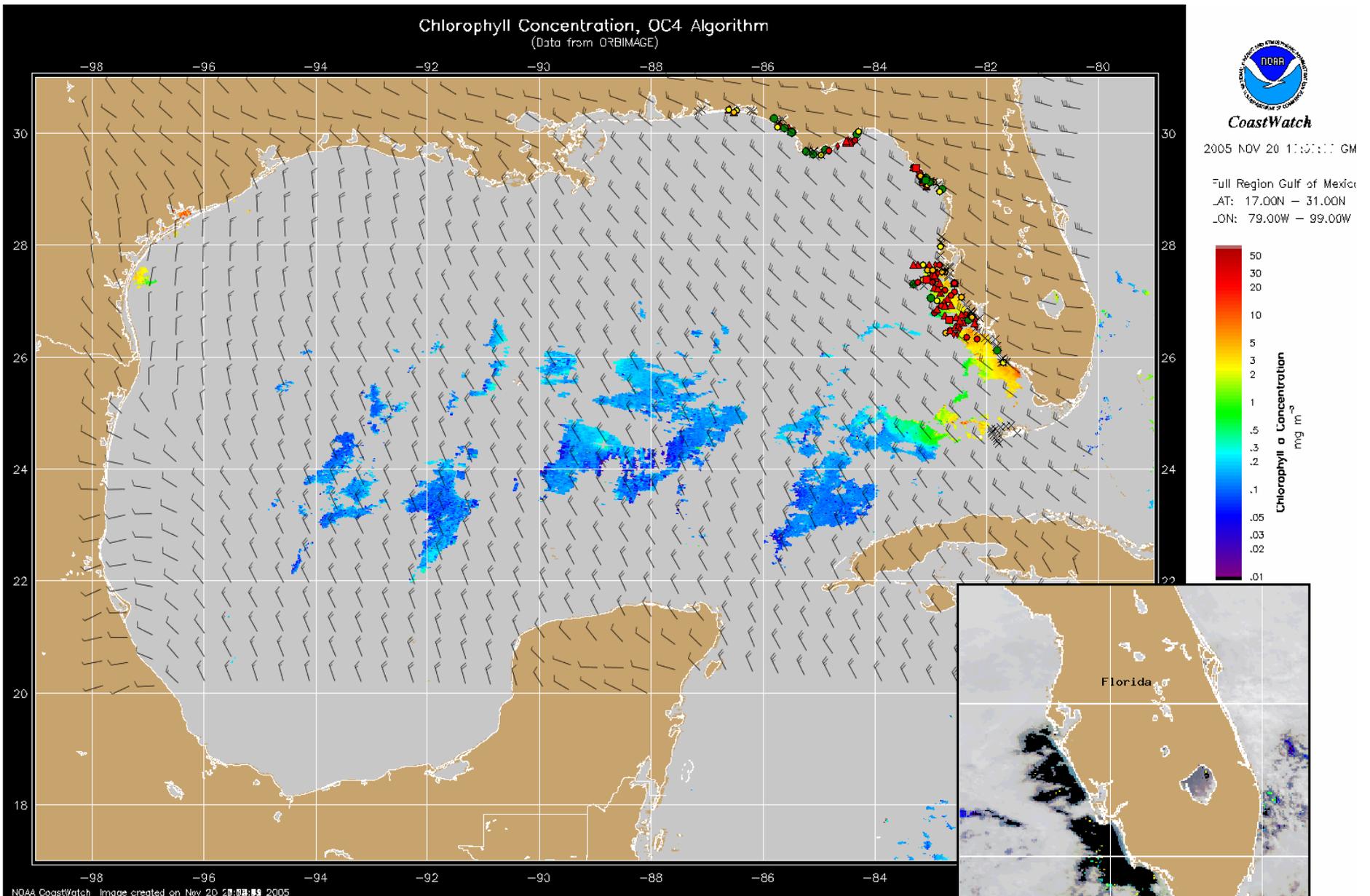


Chlorophyll concentration from satellite with HAB areas shown by red polygon(s). Cell concentration sampling data from November 15, 2005 shown as red squares (high), red triangles (medium), red diamonds (low b), red circles (low a), orange circles (very low b), yellow circles (very low a), green circles (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.

SW Florida: Westerly winds today at 20-25 knots (10-13 m/s) becoming northwest tonight and tomorrow. Northerly winds Tuesday night clocking to the west by Wednesday night and weakening to 15 knots (8 m/s). Northwest winds Thursday, 15-20 knots (8-10 m/s).



Chlorophyll concentration from satellite and forecast winds for November 22, 2005 12Z with cell concentration sampling data from November 15, 2005 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)

