



Gulf of Mexico Harmful Algal Bloom Bulletin

23 November 2005

National Ocean Service

National Environmental Satellite, Data, and Information Service -Stolz, Keller

Last bulletin: November 21, 2005

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

Analysis: The extent of the bloom along SW Florida from Pinellas to Collier County remains obscured by clouds. Offshore samples from 11/16 (FWRI) confirmed high concentrations of *K. brevis* 10-20 miles offshore Boca Grande Pass. Strong northwesterlies over the past few days have likely pushed the bloom further onshore. In addition, a wind transport model indicates the bloom may have moved as much as 60-80km south since Monday. Charlotte and Lee county may experience increased beach impact through Thursday night. The passing of the front will bring a wind shift and decrease impacts at the beach through the weekend.

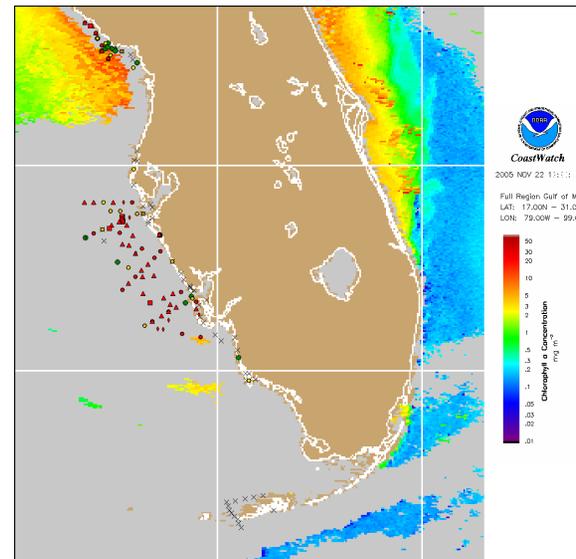
The bloom persists along Dixie and Levy Counties. Clouds obscure the coastline, but chlorophyll concentrations of 10-15 $\mu\text{g/L}$ are visible via

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

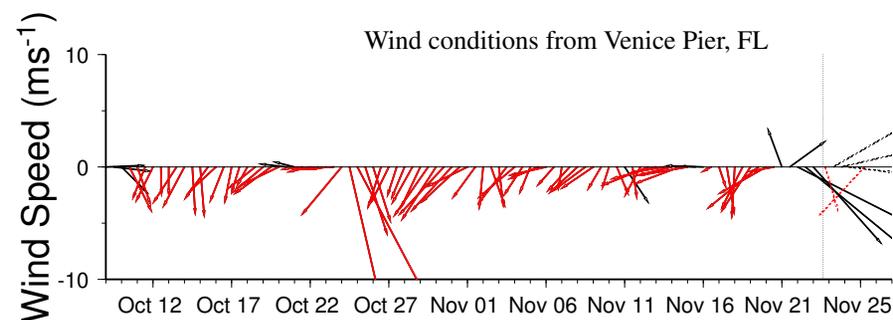
1. These data are restricted to civil marine applications only; i.e. federal, state, and local government use/distribution is permitted.
2. Distribution for military, or commercial purposes is NOT permitted.
3. There are restrictions on Internet/Web/public posting of these data.
4. Image products may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

satellite imagery (11/22) offshore south of Levy County at 28°52'N 82°58'W, indicating the bloom may have moved southeast over the past few days. Sampling is recommended.

Minimal movement of the bloom is expected through the weekend.

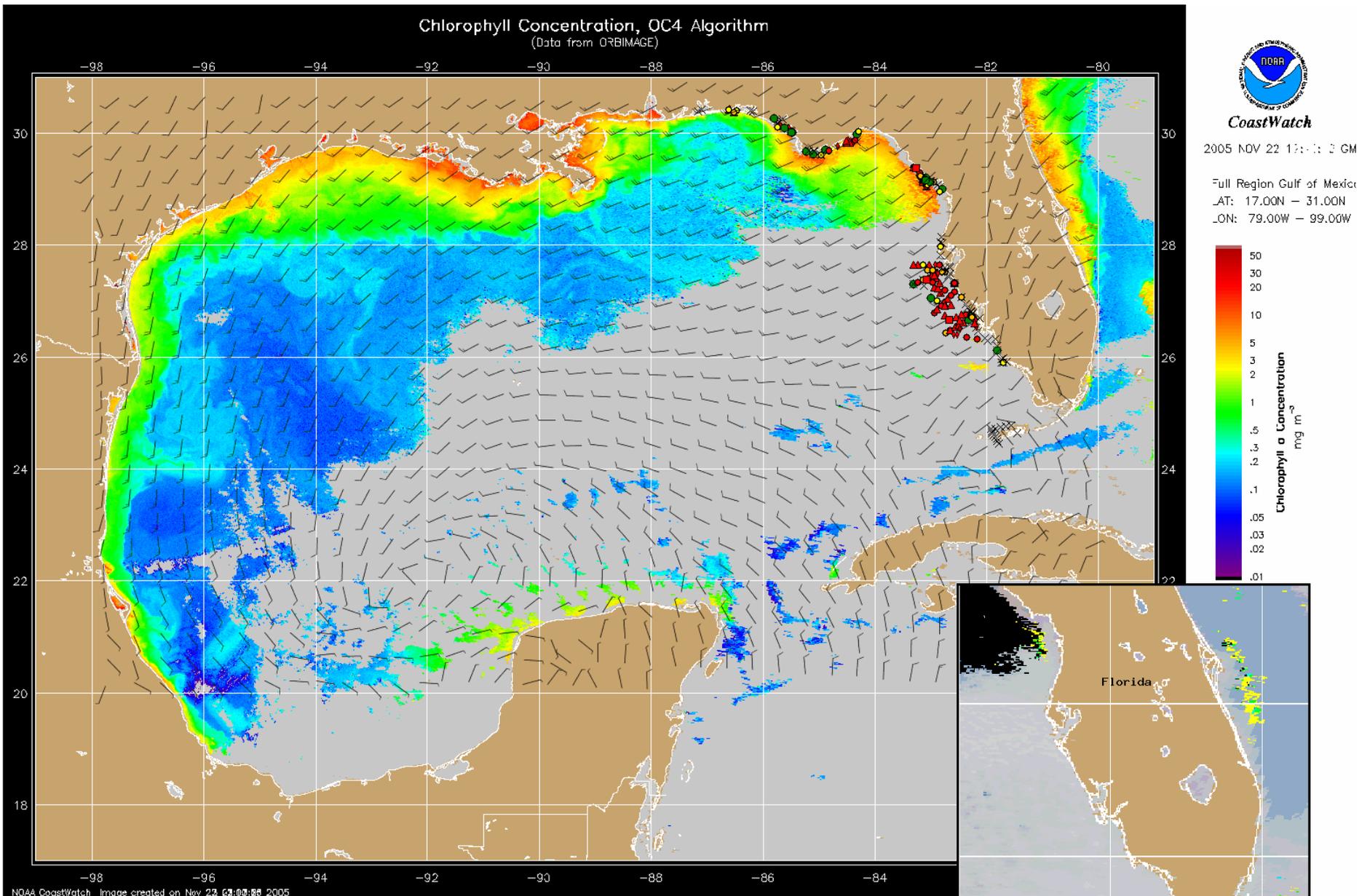


Chlorophyll concentration from satellite with HAB areas shown by red polygon(s). Cell concentration sampling data from November 15, 2005 shown as red squares (high), red triangles (medium), red diamonds (low b), red circles (low a), orange circles (very low b), yellow circles (very low a), green circles (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: Northwesterly winds today (15 knots, 8 m/s) becoming westerly by tonight. Westerly winds Thursday at 10-15 knots (5-8 m/s). Northerly winds Friday becoming easterly Saturday and Sunday and picking up to 15-20 knots (8-10 m/s).



Chlorophyll concentration from satellite and forecast winds for November 24, 2005 06Z 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)

