



# Gulf of Mexico Harmful Algal Bloom Bulletin

6 October 2005

National Ocean Service

National Environmental Satellite, Data, and Information Service

Last bulletin: October 6, 2005

**Conditions:** Harmful algal blooms have been identified from Pinellas to northern Collier, Dixie to Levy, and Okaloosa to Franklin Counties. The following patchy impacts are possible through Monday, with greater possibility of impacts on Friday and Saturday: none to low at Pinellas, Charlotte, Lee and northern Collier Counties. The following patchy impacts are possible at Manatee and Sarasota; none to low today, Thursday, Sunday and Monday, and low to moderate Friday and Saturday. The following patchy impacts are possible through Monday: none to low at Okaloosa, Walton, Bay, Dixie and Levy Counties. The following patchy impacts are possible at Gulf and Franklin; none to low through Saturday and low to moderate Sunday and Monday. Dead fish have been reported over the past few days in Santa Rosa, Okaloosa, Gulf, Lee and Collier Counties. Dead fish smell, while unpleasant, does not produce the same respiratory irritation as red tide.

**Analysis:** Cloudy imagery limits analysis of bloom. Imagery indicates persistence of elevated chlorophyll band. The elevated chlorophyll band is located up to 25 miles offshore of Bay county (generally <6  $\mu\text{g/l}$ ) and up to 7 miles offshore of Okaloosa and Walton (generally 2-6  $\mu\text{g/l}$ ). High chlorophyll levels are present offshore of Crooked Island, Bay County (>50  $\mu\text{g/l}$ ; 29° 48'N, 85°36'W). Hot spots are also located offshore of the Okaloosa/Walton County Line (up to 22  $\mu\text{g/l}$ ; 30° 14'N, 87°0'W ) and on the Santa Rosa-Okaloosa County line (up to 43  $\mu\text{g/l}$ ; 30° 11'N, 87°26'W ). Recommend sampling. The bloom has been confirmed alongshore of Okaloosa and Walton Counties, with not present to low *K. brevis* concentrations (FWRI; Oct. 4).

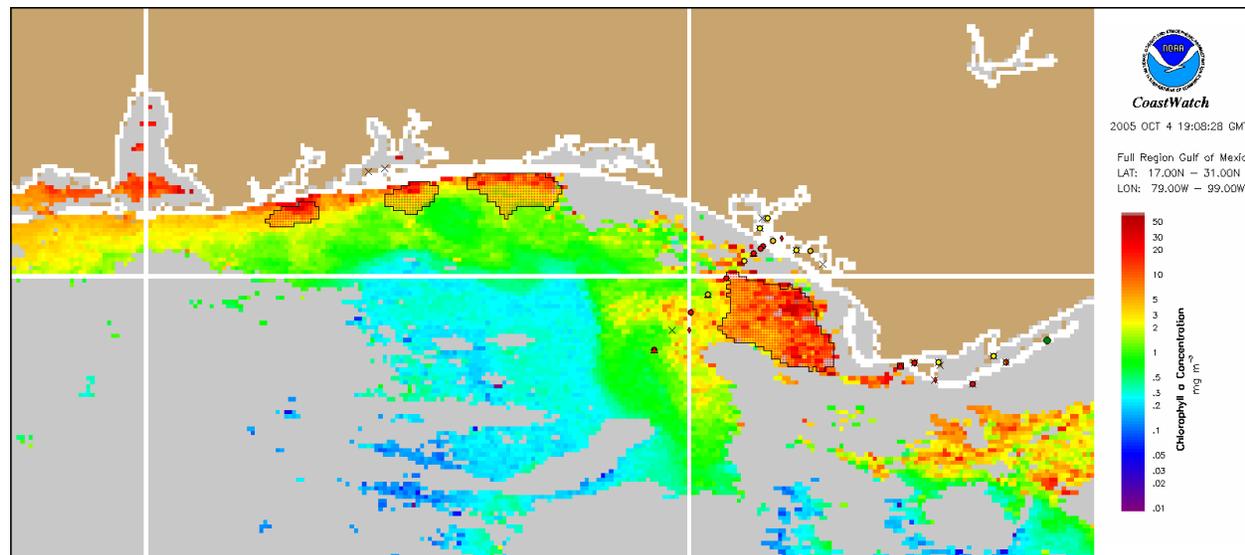
Strong northerly winds may promote offshore transport and decrease impacts through Saturday. Upwelling conditions may intensify bloom

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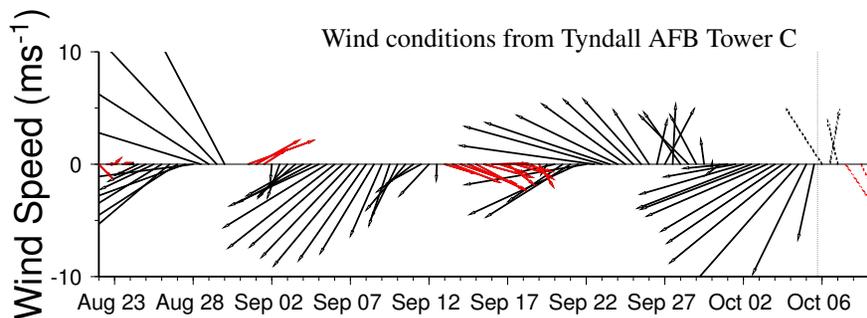
1. These data are restricted to civil marine applications only; i.e. federal, state, and local government use/distribution is permitted .
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concentrations. Northeasterlies and easterlies on Sunday and Monday may increase onshore transport and increase reports of respiratory distress in Gulf and Franklin Counties.

~Fenstermacher and Fisher

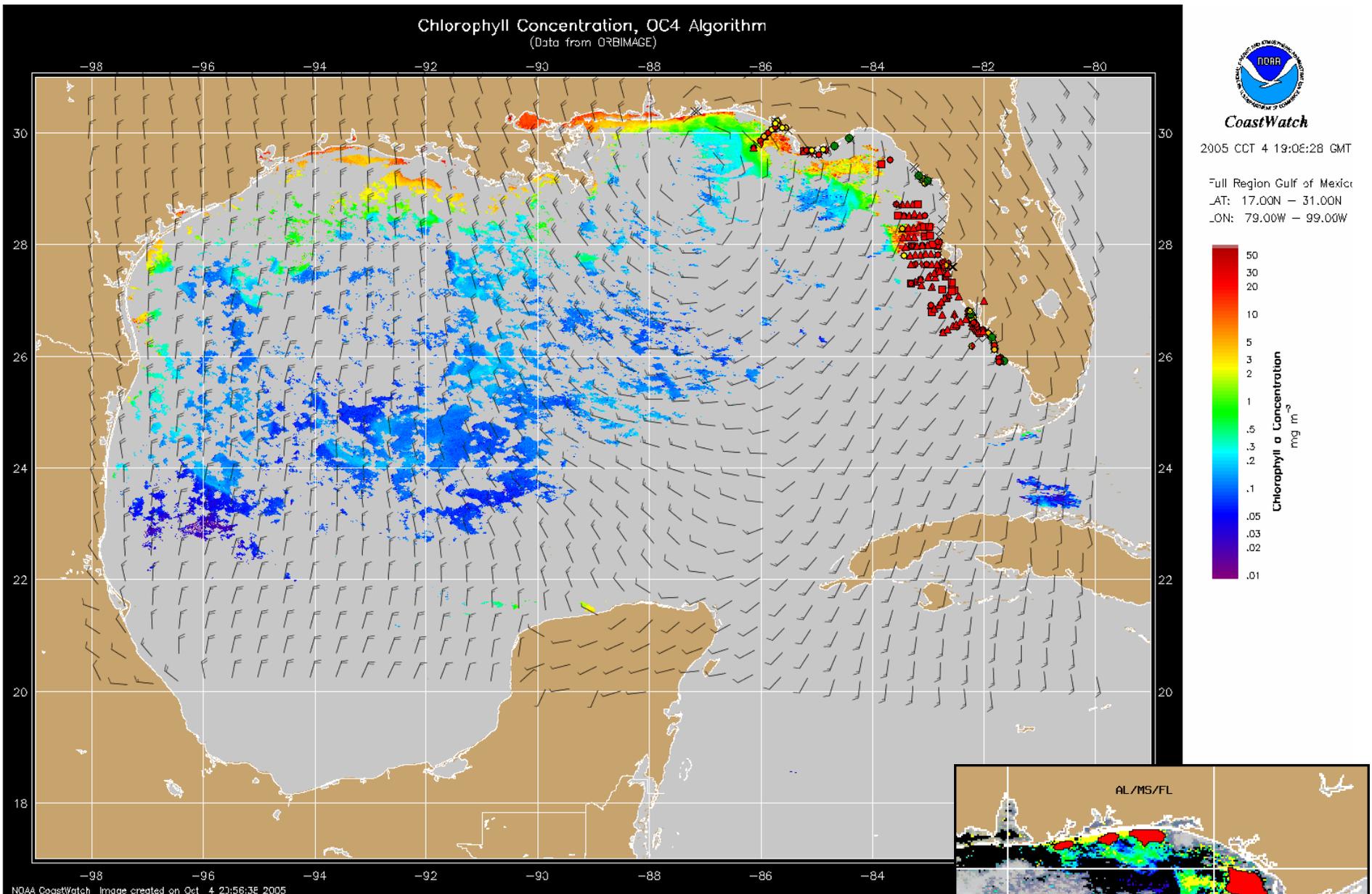


Chlorophyll concentration from satellite with HAB areas shown by red polygon(s).



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.

NW Florida: Strong, variable northerlies through Saturday (10-20 knots; 5-8 m/s) followed by northeast to easterly winds on Sunday and Monday (10-15 knots; 3-5 m/s).



Chlorophyll concentration from satellite and forecast winds for October 7, 2005 12Z with cell concentration sampling data from September 30, 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)