



# Gulf of Mexico Harmful Algal Bloom Bulletin

1 December 2005

NOAA Ocean Service

NOAA Satellites and Information Service

Last bulletin: December 1, 2005

## Conditions Report

A harmful algal bloom has been identified in patches from Wakulla to Okaloosa County. Today through Sunday, patchy very low to low impacts are possible from Walton to Wakulla County, with patchy low to moderate impacts possible in Okaloosa County. Dead fish have been reported in Okaloosa County over the past few days. Dead fish smell, while unpleasant, does not produce the same respiratory irritation as harmful algal blooms.

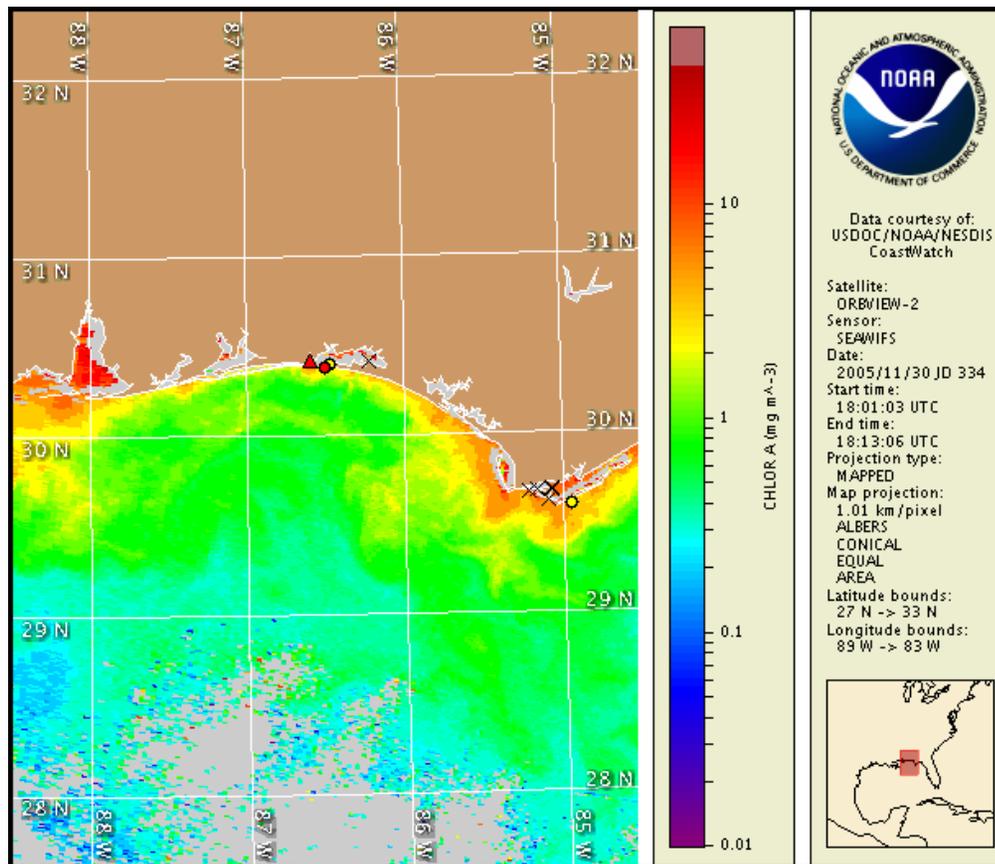
## Analysis

The bloom remains in patches along the Florida Panhandle. Low concentrations of *K. brevis* were found in Choctawhatchee Bay, Okaloosa County on 11/29; no *K. brevis* above background levels was found in Apalachicola Bay this week. Chlorophyll levels average  $<4\mu\text{g/L}$  along the coast from Okaloosa to Franklin County, with more elevated levels ( $9\mu\text{g/L}$ ) just south of Cape San Blas at  $29^{\circ}36\text{N}$ ,  $85^{\circ}20\text{W}$  and along-shore eastern Franklin County. Wind transport model analyses indicate westward bloom movement 13-17km since 11/28. Continued sampling recommended. Offshore winds should minimize coastal impacts through Friday, although dead fish may continue to be reported within the bays. Impacts will increase Saturday and Sunday as winds shift onshore. Significant movement and intensification of the bloom is unlikely over the weekend.

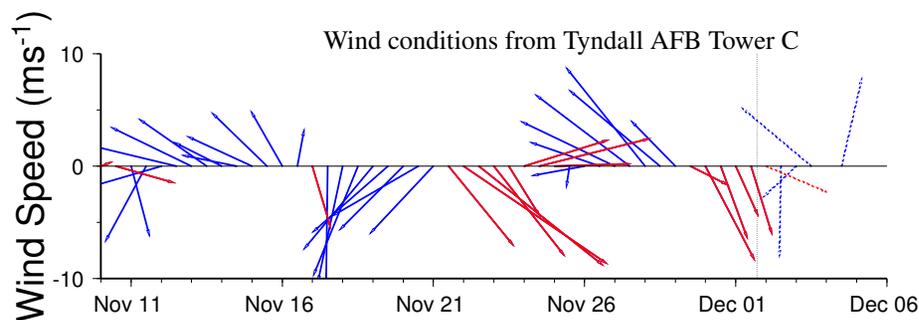
~Fisher, Bronder

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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.

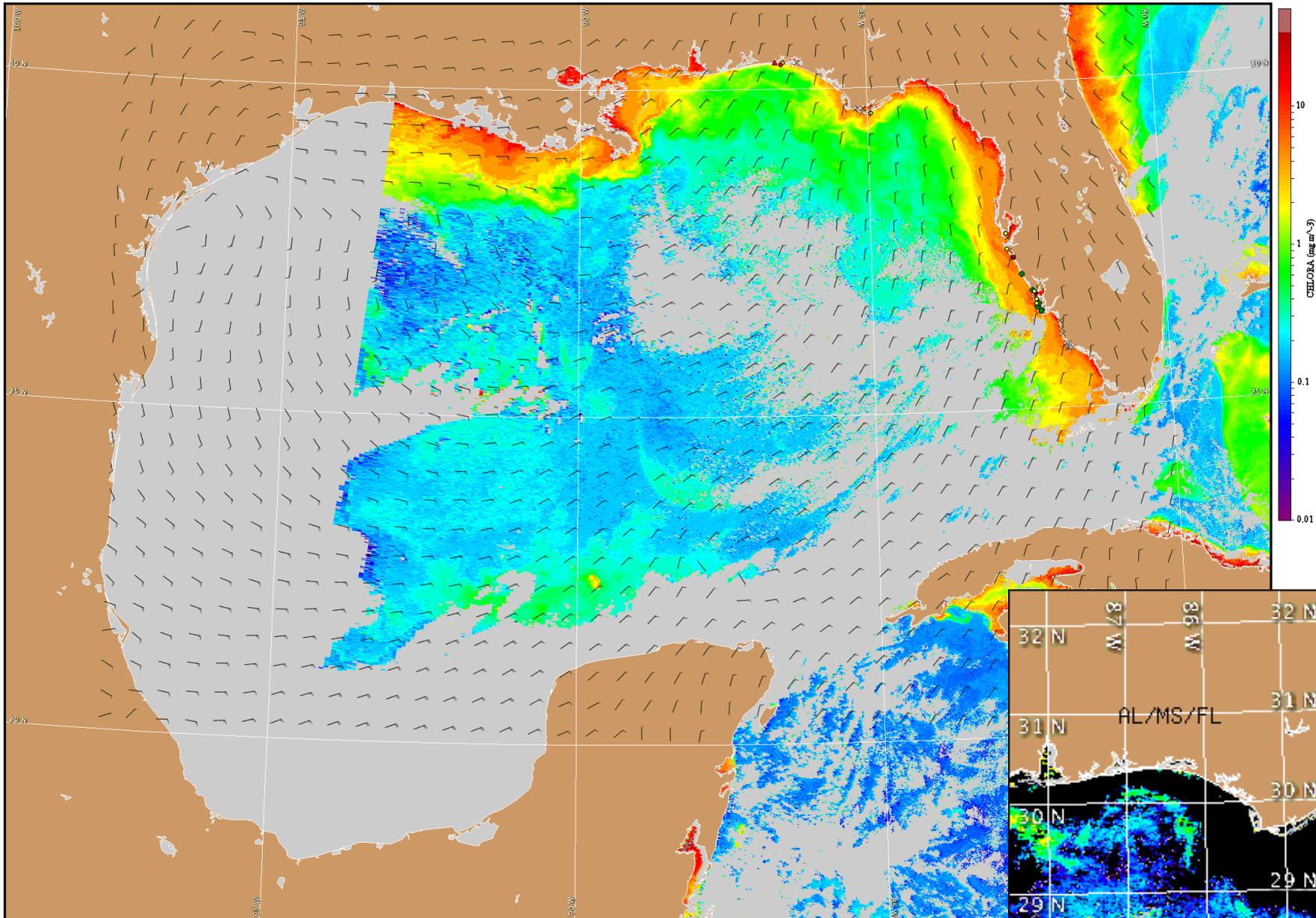


Satellite chlorophyll image with possible HAB areas shown by red polygon(s).

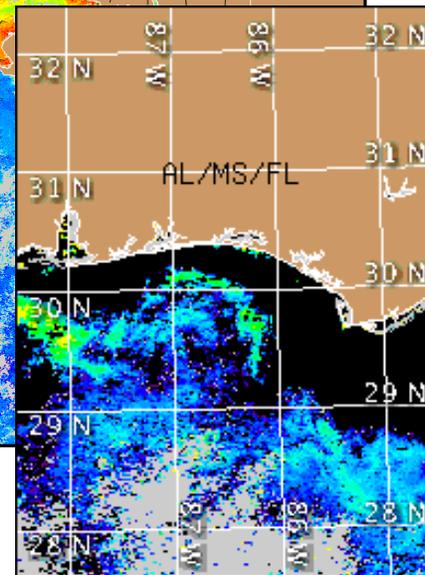


Wind speed and direction are averaged over 12 hours from buoy measurements. Length of line indicates speed; angle indicates direction. Red indicates that the wind direction favors upwelling near the coast. Values to the left of the dotted vertical line are measured values; values to the right are forecasts.

FL Panhandle: Mild (5-10kts, 3-5m/s) northwesterlies today will shift northerly on Friday at 10-15kts (5-8m/s), then easterly Friday night (5-10kts, 3-5m/s). Southerly winds (10-15kts, 5-8m/s) on Saturday expected to turn southwesterly Sunday. Stronger northerly winds forecasted for Monday.



Satellite chlorophyll image and forecast winds for December 2, 2005 12Z with cell concentration sampling data from November 21-22 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).



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