



# Gulf of Mexico Harmful Algal Bloom Bulletin

25 January 2005

National Ocean Service

National Environmental Satellite, Data, and Information Service

Last bulletin: January 21, 2005

**Conditions:** A harmful algal bloom has been identified offshore southwest of Clearwater and west of Sarasota. Very low impacts are possible through Thursday. Discolored water is likely along the Florida Gulf.

A harmful algal bloom has been identified southwest of Cape Sable and north of the lower Keys. Discolored water is possible in the area. No impacts expected at Key West through Thursday.

**Analysis:** The previously identified harmful algal bloom appears to have moved south and was located offshore of Sarasota and Venice. Recent satellite imagery (January 23 - shown) indicates a resuspension event due to a storm front. Strong winds (up to 20 knots) clocked around from southerly to northeasterly. Current extent of bloom cannot be estimated. Based on January 21st imagery, the bloom was patchy and had continued to dissipate, with chlorophyll levels generally less than 4  $\mu\text{g/l}$ . Small, higher patches (8-13  $\mu\text{g/l}$ ) were located offshore of Venice (82°44'W, 27°9'N) and Sarasota (82°39'W, 27°15'N). The most recent sampling (January 18-20) indicated medium concentrations from 1.5 to 30 miles west of Sarasota Bay (FWRI). The eastern fragment of the bloom extended from 82°41'W, 27°23'N (north edge) to 82°37'W, 26°55'N (south edge); and from 82°36'W, 27°11'N (east edge) to 82°49'W, 27°9'N (west edge). The western tendril was patchy with the northernmost extent at 83°9'W, 27°40'N and the southernmost extent at 80°4'W, 27°11'N. Recent and forecasted northerly winds may continue southerly transport and promote upwelling favorable conditions through Tuesday. Reports of discolored water are likely.

Based on January 21st imagery, the harmful algal bloom southwest of Cape Sable and north of the lower Keys was dissipating. Chlorophyll

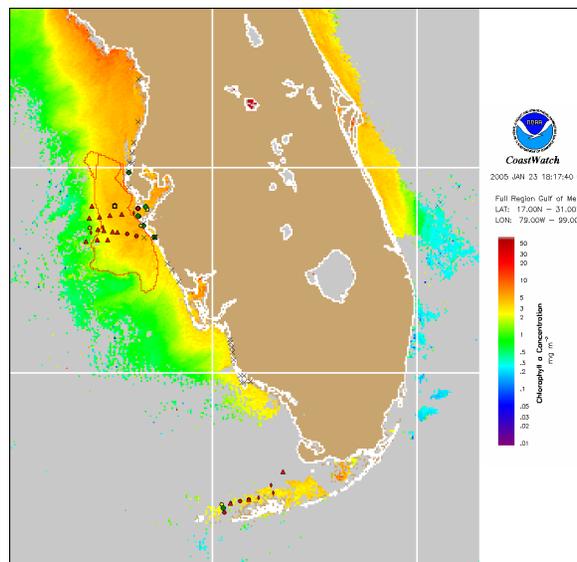
Please note the following restrictions on all SeaWiFS imagery derived from CoastWatch.

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.

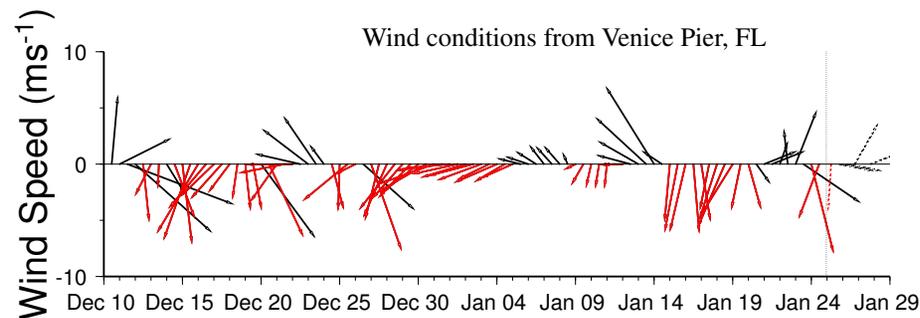
levels were generally less than 4  $\mu\text{g/l}$ . Two onshore samples located near Content Keys had very low cell concentrations (Mote).

~Fenstermacher & Fisher

\*Offshore samples indicated in chlorophyll image were collected from January 10 - 19th.

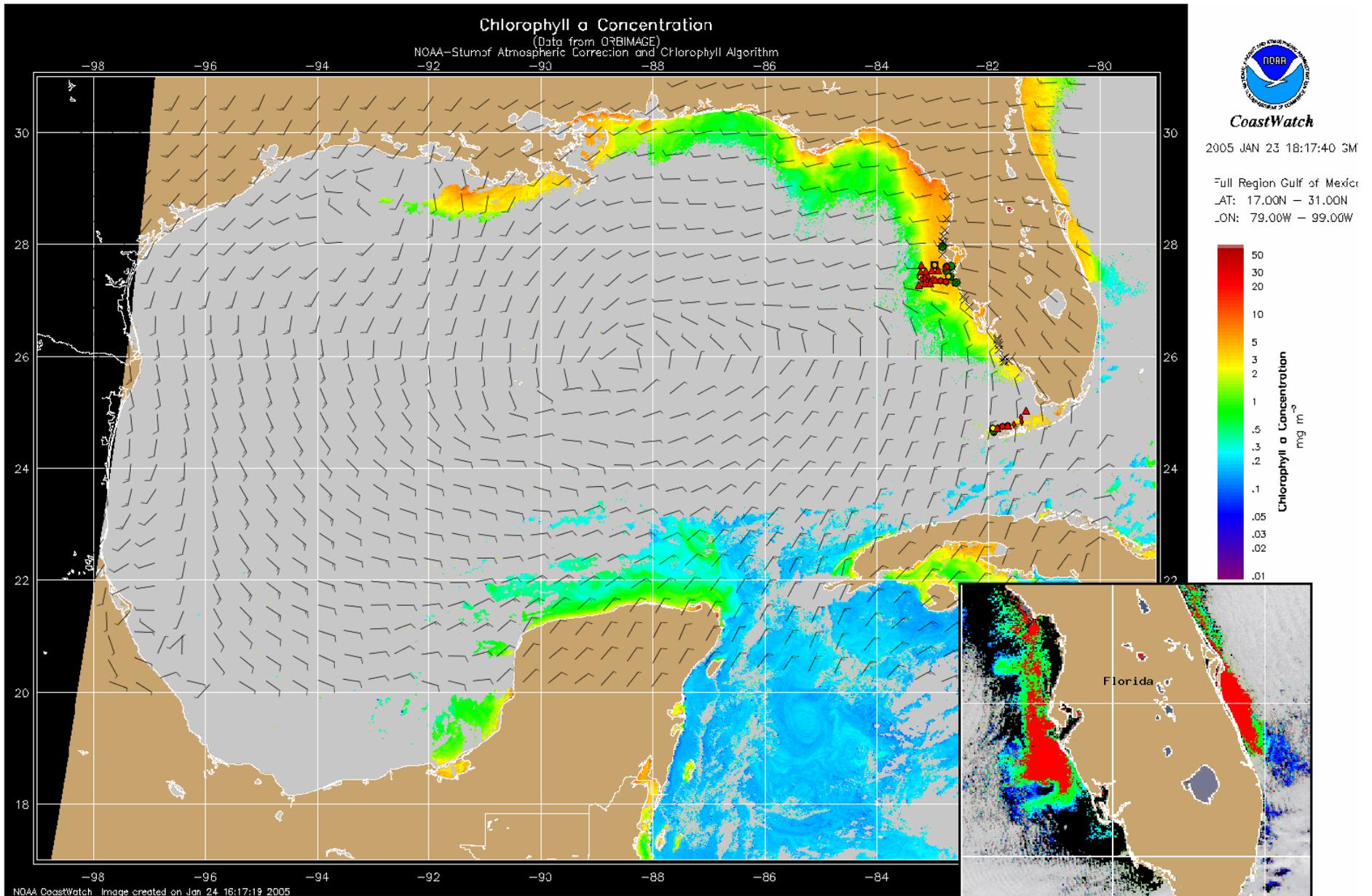


Chlorophyll concentration from satellite with possible HAB areas shown by red polygon(s). Cell concentration sampling data from January 19, 2005 shown as red squares (high), red triangles (medium), red diamonds (low b), red circles (low a), orange circles (very low b), yellow circles (very low a), green 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.

Venice Pier: Strong 15-20 knot (8-10 m/s) northeast winds clocking around and decreasing in speed to 5 knot (3 m/s) northwest winds through Tuesday. 5-10 knot (3-5 m/s) southwest winds on Wednesday & Thursday. Sand Key: Strong 15-20 knot (8-10 m/s) variable northeast ranging to northwest winds through Tuesday. Variable 5-10 knot (3-5 m/s) winds Wednesday & Thursday.



Chlorophyll concentration from satellite and forecast winds for January 25, 2005 18Z with cell concentration sampling data from January 19, 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 and image for interpretation)

