



Gulf of Mexico Harmful Algal Bloom Bulletin

28 December 2004

National Ocean Service

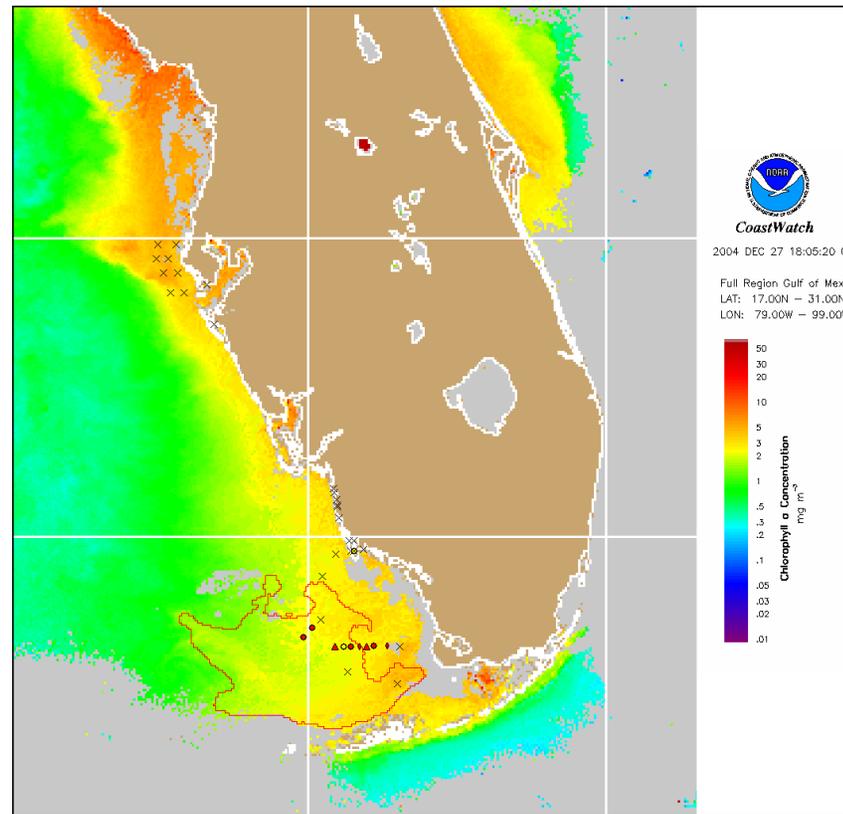
National Environmental Satellite, Data, and Information Service

Last bulletin: December 27, 2004

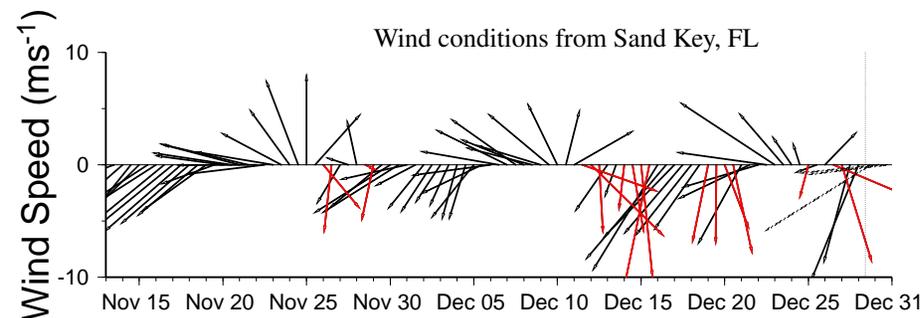
This bulletin is supplemental to the bulletin sent out yesterday, December 27.

Analysis: This is the first image in many days where clouds do not obscure the harmful algal bloom located near the lower Keys. The main section extends from approximately 82°31'W, 25°6'N (western edge) to 81°37'W, 25°6'N (eastern edge) with a center point of 82°4'W, 25°6'N. The southernmost extent, near the Key West shoreline, is estimated to be 81°47'W, 24°42'N. However, the area is obscured by clouds. Chlorophyll levels decrease from 3.6 μg on the eastern edge to less than 2 μg on the western edge. The highest chlorophyll values (5.7 μg) are located in the patchy southeastern tendrils (center point- 81°21'W, 25°3'N). The increased extent may also be related to resuspension from high winds and choppy surf.

~Fenstermacher & Fisher



Chlorophyll concentration from satellite with possible HAB areas shown by red polygon(s). Cell concentration sampling data from December 14, 2004 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).

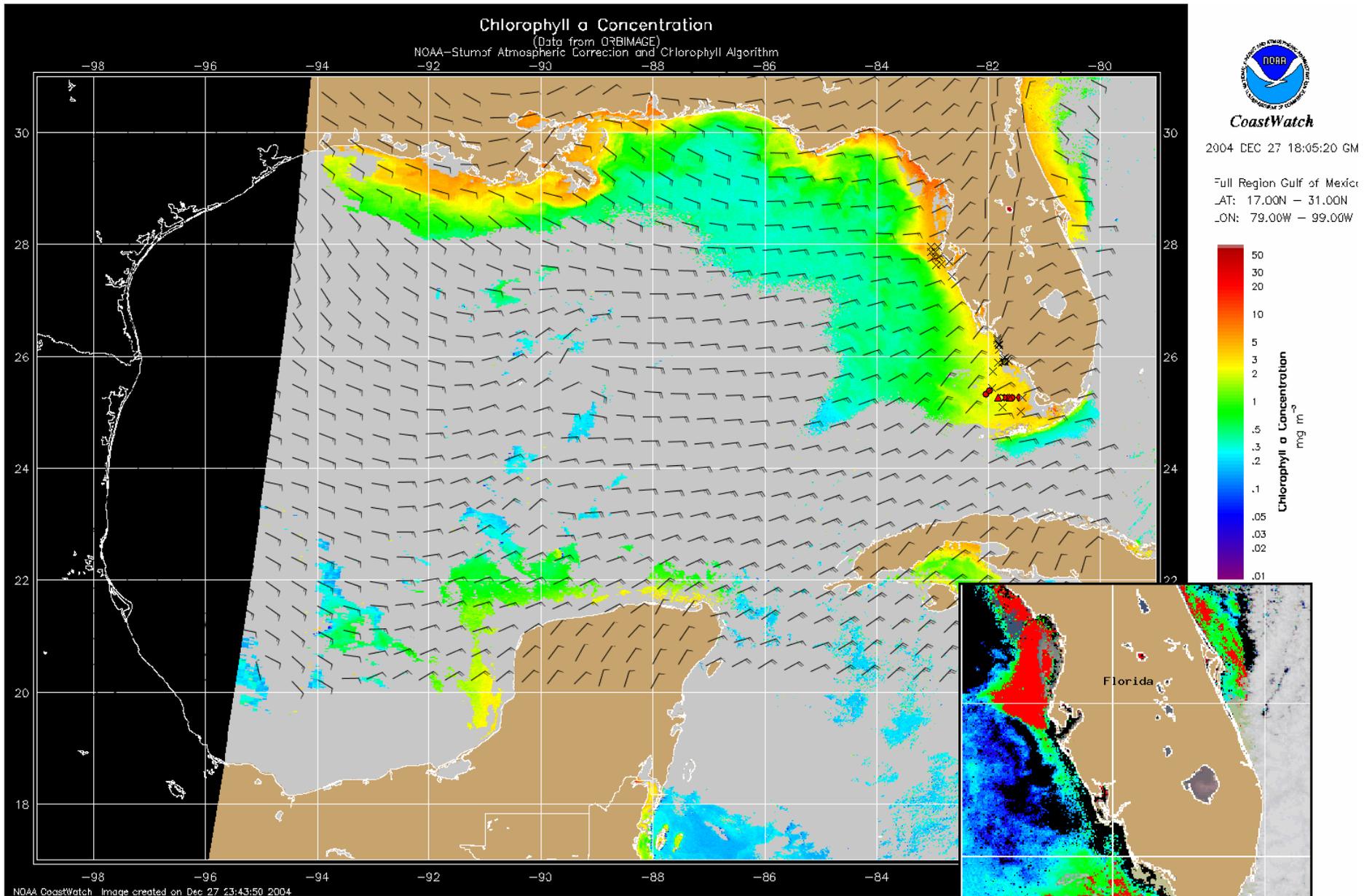


Wind speed and direction are averaged over 12 hours from measurements made on buoys. Length of line indicates speed; angle indicates direction. Red indicates that the wind direction favors upwelling near the coast. Values to the left of the dotted vertical line are measured values; values to the right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

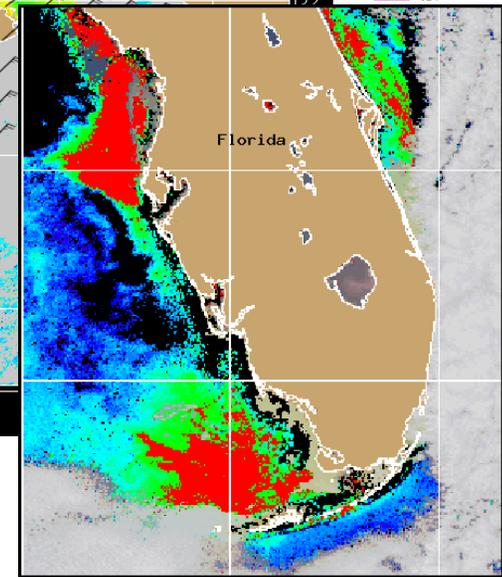
20 knot (10 m/s) northeasterlies expected through Wednesday. Varying northeasterly and easterly though Friday.

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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.
2. Distribution for military, or commercial purposes is NOT permitted.
3. There are restrictions on Internet/Web/public posting of these data.
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Chlorophyll concentration from satellite and forecast winds for December 29, 2004 06Z with cell concentration sampling data from December 14, 2004 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)