Conditions:
A harmful algal bloom has been identified south of Cape Romano and west of Cape Sable. Fish and dolphin mortalities west of Shark River were reported last week. Samples taken between December 6 and 8 showed medium concentration of the harmful algae Karenia Brevis 17 miles west of Cape Sable, and very low concentration at Caxambas Pass, near Marco Island. Impacts on the coast are expected to be low through Thursday.

Analysis:
Some of the recent satellite images have been obscured by clouds. Imagery indicates that the HAB has moved slightly southeast, and is merging with the Rhizosolenia bloom south of it at 81°50' W, 25°N. The southeastern edge of the HAB is at 81°33'W, 25°10'N. Chlorophyll concentration at 81°42'W, 25°16'N is above 4 µg/L. Samples from December 8 show medium concentration west of Cape Sable at 25.269267°N, 81.484983°W.

Imagery indicates another high chlorophyll feature on the eastern edge of the HAB, which is possibly an extension of the HAB. The center of this feature is at 81°26'W, 25°33'N. Chlorophyll concentration at 81°21'W, 25°39'N is above 8 µg/L.

Southward transport of the HAB is likely through Thursday.

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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.
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4. Image products may be published in newspapers. Any other publishing arrangements must receive OrbImage approval via the CoastWatch Program.

Wind conditions from Sand Key, FL

Winds have been rotating clockwise from easterly to northeasterly over the past week. The forecast calls for northwesterly wind tonight (5-10 knots, 3-5 meters/second), northerly tomorrow (15-20 knots, 8-10 meters/second), northerly to northeasterly tomorrow night and Wednesday (15-20 knots, 8-10 meters/second), and northeasterly Wednesday night and Thursday (15-20 knots, 8-10 meters/second).
Chlorophyll concentration from satellite and forecast winds for December 14, 2004 18Z with cell concentration sampling data from November 30, 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)
Wind conditions from Venice Pier, FL