

# Gulf of Mexico Harmful Algal Bloom Bulletin

17 December 2007

NOAA Ocean Service

NOAA Satellites and Information Service

Last bulletin: December 17, 2007

## Conditions Report

### E Florida:

A harmful algal bloom persists from central Volusia to northern St. Lucie County. Patchy moderate impacts are possible today through Wednesday from central Volusia to northern Indian River Counties, with patchy very low impacts possible on Thursday. Patchy high impacts are possible today through Wednesday for southern Indian River County, with patchy low impacts possible on Thursday. Patchy low impacts are possible today through Wednesday for northern St. Lucie County, with patchy very low impacts possible on Thursday. No other impacts are expected today through Thursday, December 20 along eastern Florida.

SW Florida: A harmful algal bloom has been identified in northern Collier County. No impacts are expected in Collier County today through Thursday or in any other county in southwest Florida.

## Analysis

**SW Florida:** A harmful algal bloom has been identified in Collier County, with recent sampling results indicating very low concentrations of *K.brevvis* at South Marco Beach (FWRI; 12/13). Background to very low concentrations were also recently detected in samples offshore Sarasota County (FWRI; 12/10). A high chlorophyll patch remains offshore of Collier County, west of Cape Romano, with a maximum concentration at 26°5'12"N, 81°50'39"W. Additional elevated chlorophyll features (up to 10µg/L) remain offshore of Monroe County, with the most significant extending from 25°37'44"N, 81°35'5"W to 25°19'25"N, 81°41'10"W along its northeast-southwest axis. With easterly winds throughout the week, no impacts are expected, although intensification of the bloom is possible in southwest Florida through Thursday.

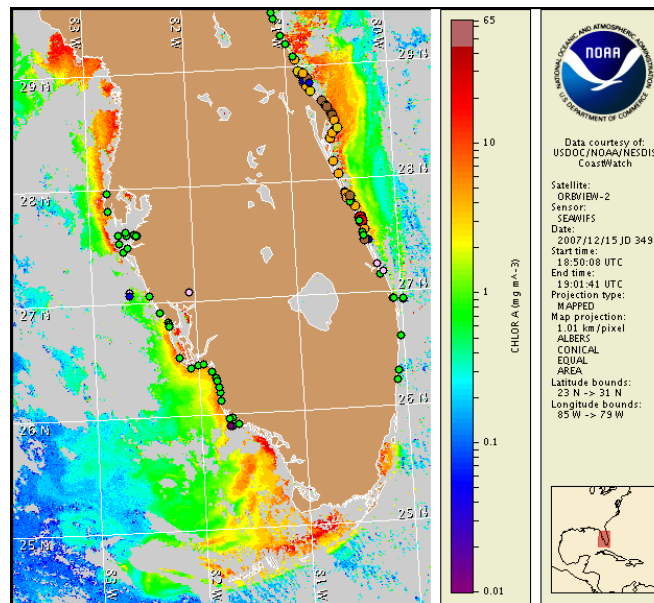
Imagery (12/15) continues to indicate the presence of high chlorophyll levels (9-10µg/L) northwest of Key West, with maximum concentrations centered at 24°38'18"N, 81°49'30"W; 24°41'51"N, 81°55'18"W; 24°36'16"N, 81°52'37"W. No recent sampling results are available at this time. Continued sampling is recommended.

~Keller, Allen

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

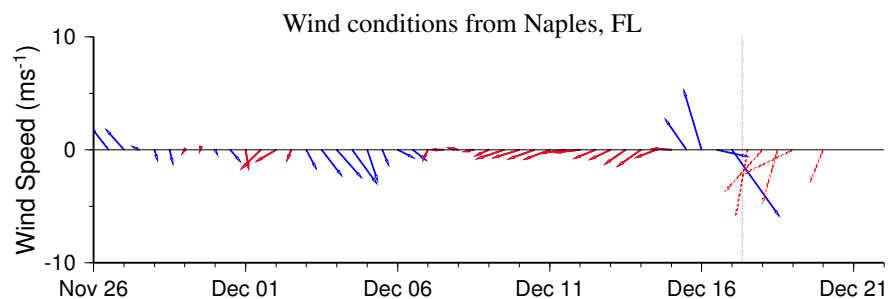
1. Data are restricted to civil marine applications only; i.e. federal, state, and local government use/distribution is permitted.
2. Image products may be published in newspapers. Any other publishing arrangements must receive GeoEye approval via the CoastWatch Program.

**\*\*Please refer to previous South Florida Bulletin (number 89) for analysis and information regarding northeast Florida.**



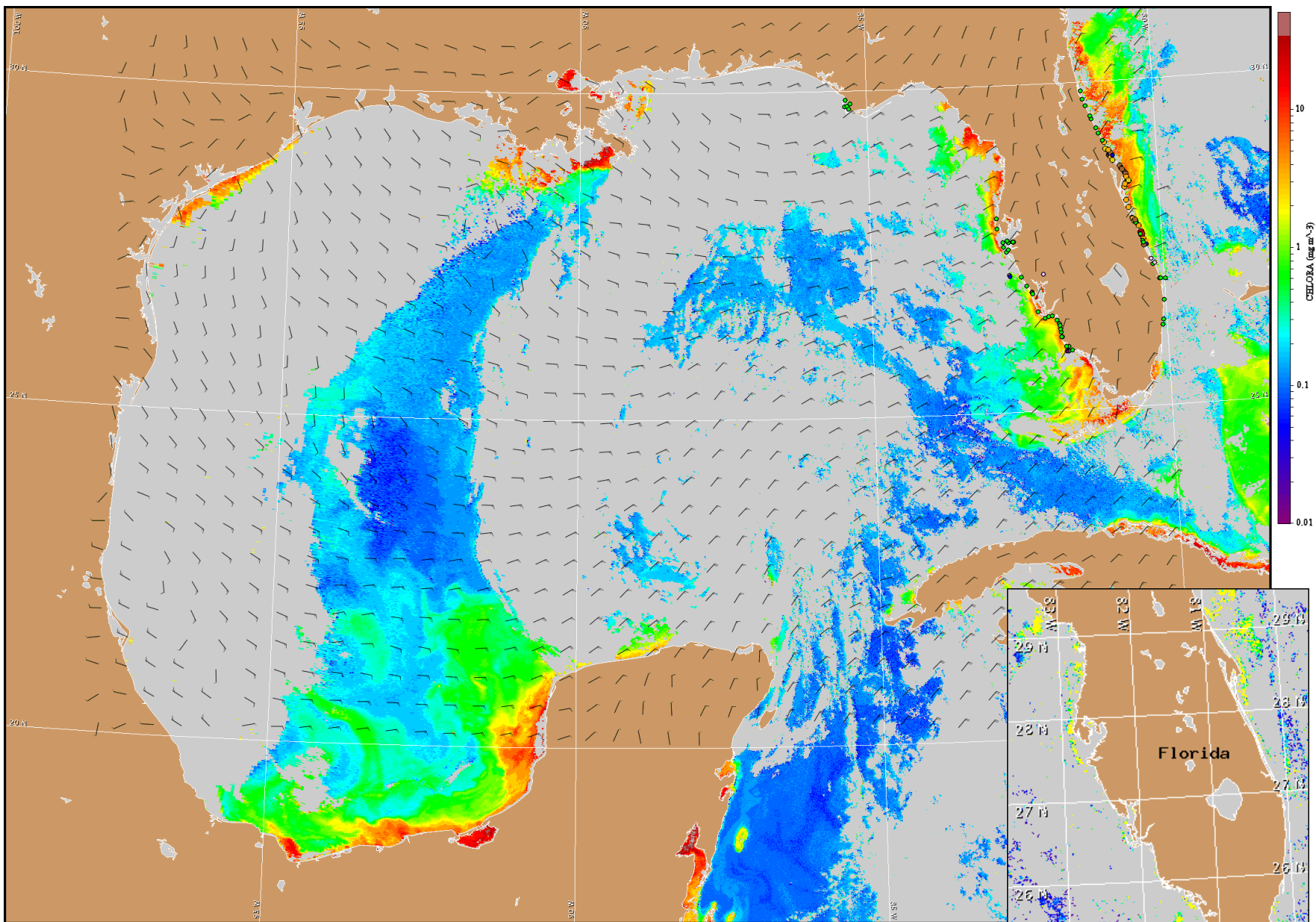
Satellite chlorophyll image with possible HAB areas shown by red polygon(s). Cell concentration sampling data from December 7 to 14 shown as red (high), orange (medium), yellow (low b), brown (low a), blue(very low b), purple (very low a), pink (present), and green (not present). For a list of cell count data providers and a key to the cell concentration categories, please see the HABFS bulletin guide:

[http://www.csc.noaa.gov/crs/habf/habfs\\_bulletin\\_guide.pdf](http://www.csc.noaa.gov/crs/habf/habfs_bulletin_guide.pdf)

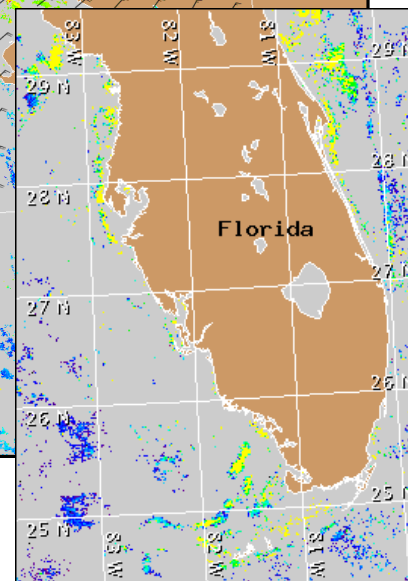


Wind speed and direction are averaged over 12 hours from buoy measurements. Length of line indicates speed; angle indicates direction. Red indicates that the wind direction favors upwelling near the coast. Values to the left of the dotted vertical line are measured values; values to the right are forecasts.

SW Florida: Northeasterly winds today (20 knots; 10m/s), with easterly winds Tuesday through Wednesday (10-15 knots; 5-8 m/s). Southeasterly winds on Thursday (15 knots; 8 m/s).

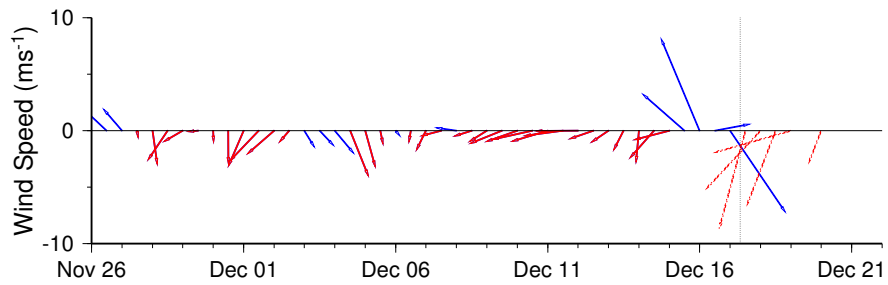


Satellite chlorophyll image and forecast winds for December 18, 2007 12Z with Cell concentration sampling data from December 7 to 14 shown as red (high), orange (medium), yellow (low b), brown (low a), blue(very low b), purple (very low a), pink (present), and green (not present). For a list of cell count data providers and a key to the cell concentration categories, please see the HABFS bulletin guide: [http://www.csc.noaa.gov/crs/habf/habfs\\_bulletin\\_guide.pdf](http://www.csc.noaa.gov/crs/habf/habfs_bulletin_guide.pdf)

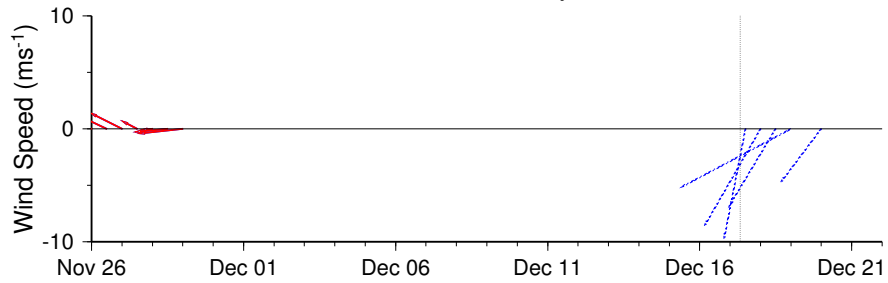


Verified and suspected HAB areas shown in red. Other areas of high chlorophyll concentration shown in yellow (see p. 1 analysis for interpretation).

Wind conditions from Venice Pier, FL



Wind conditions from Vaca Key, FL



Wind conditions from Sand Key, FL

