



Gulf of Mexico Harmful Algal Bloom Bulletin

20 December 2007

NOAA Ocean Service

NOAA Satellites and Information Service

Last bulletin: December 20, 2007

Conditions Report

E Florida: A harmful algal bloom persists from central Volusia to northern St. Lucie County. Patchy moderate impacts are possible today, Saturday, and Sunday for central Volusia, and southern Brevard County, with patchy very low impacts possible on Friday. Patchy high impacts are possible today, Saturday, and Sunday in southern Volusia, northern Brevard, and southern Indian River County, with patchy moderate impacts possible on Friday. Patchy low impacts are possible today, Saturday, and Sunday in St. Lucie County, with patchy very low impacts possible on Friday. No other impacts are expected today through Sunday, December 23, along eastern Florida.

SW Florida: There is currently no indication of harmful algal bloom presence alongshore southwest Florida. No impacts are expected in southwest Florida today through Sunday, December 23.

Analysis

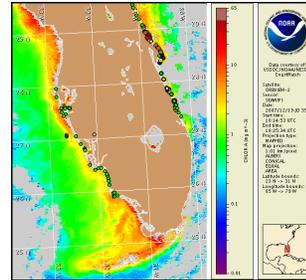
SW Florida: A harmful algal bloom was confirmed in northern Collier County, but samples over the past two weeks have not indicated the presence of *K. brevis* onshore. Elevated chlorophyll levels ($5-7 \mu\text{g/L}$), south and west of Cape Romano indicate that the bloom has moved south. NOAA will continue to track this feature. Continued sampling is recommended. Southerly transport is likely through Sunday. Recent sampling results along southwest Florida this week indicated no presence of *K. brevis* in Charlotte, Sarasota, or Manatee Counties (FWRI; 12/18). A high chlorophyll feature ($>10 \mu\text{g/L}$) extends alongshore Sarasota County from $27^{\circ}39'41''\text{N } 82^{\circ}54'2''\text{W}$ to $27^{\circ}12'13''\text{N } 82^{\circ}37'1''\text{W}$ along its north-south axis. Sampling is recommended. Additional elevated chlorophyll features ($4-6 \mu\text{g/L}$) continue to remain offshore of Monroe County, with the most prominent extending northeast to southwest from $25^{\circ}34'16''\text{N}, 81^{\circ}31'51''\text{W}$ to $25^{\circ}11'53''\text{N}, 81^{\circ}43'24''\text{W}$. Continued sampling is recommended. Imagery (12/19) continues to indicate high chlorophyll levels northwest of Key West, with concentrations up to $10 \mu\text{g/L}$ at $24^{\circ}36'29''\text{N } 81^{\circ}57'24''\text{W}$. No recent sampling results are available at this time. Sampling is recommended. ****Due to extended holiday closure on Monday, December 24, the next bulletin will be disseminated on Wednesday, December 26. An updated Conditions Report will be sent Friday, December 21, stating expected impacts through the closure.**

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.

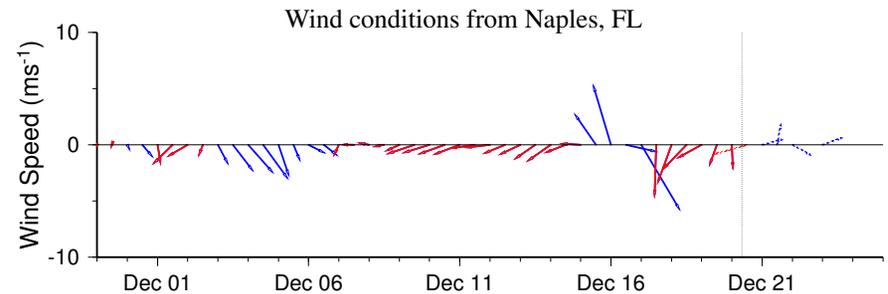
~Keller, Allen

****Please refer to previous South Florida Bulletin (number 91) 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 10 to 18 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:

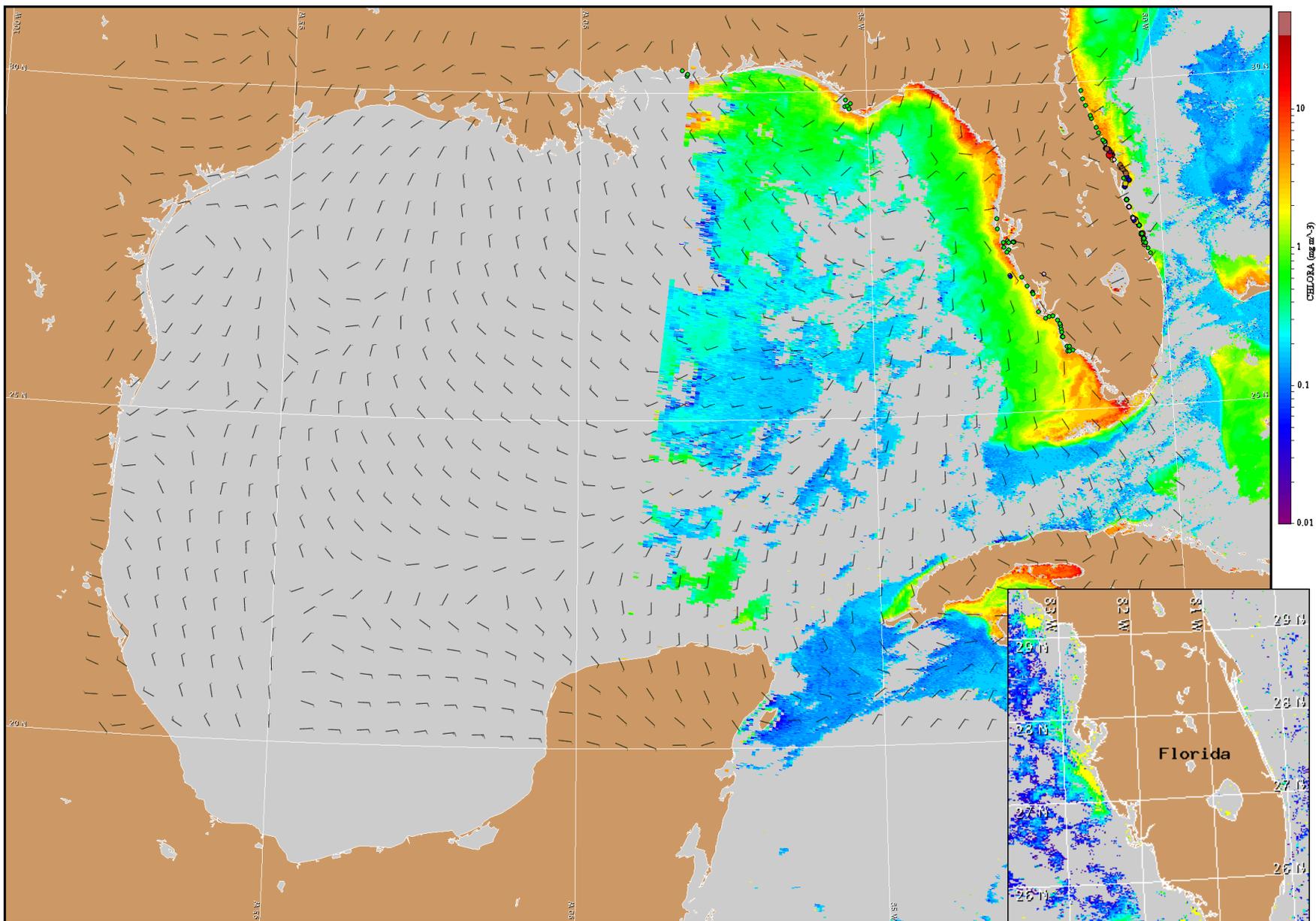
http://www.csc.noaa.gov/crs/habf/habfs_bulletin_guide.pdf



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, becoming southerly this evening (10-15 knots; 5-8 m/s). Northwesterly to northeasterly winds on Friday (10-20 knots; 5-10 m/s). Easterly winds on Saturday and Sunday (10 knots; 5m/s).

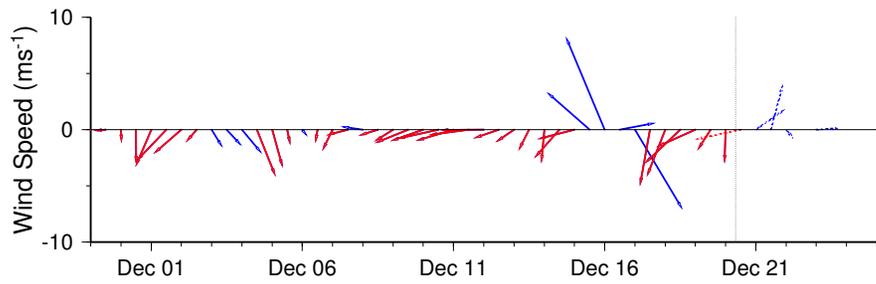
FL Keys: Northeasterly to easterly winds today, with variable winds on Friday (10-15 knots; 5-8 m/s). Northwesterly to northerly winds Friday night, with northeasterly winds on Saturday (10 knots; 5 m/s). Easterly winds on Sunday and Monday (10 knots; 5 m/s).



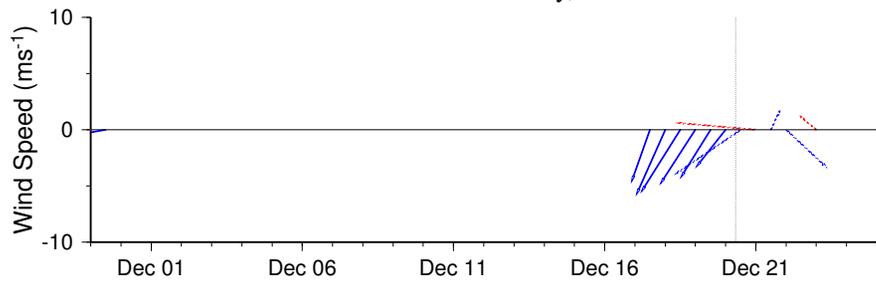
Satellite chlorophyll image and forecast winds for December 21, 2007 12Z with Cell concentration sampling data from December 10 to 18 shown as red (high), orange (medium), yellow (low b), brown (low a), blue(very low b), purple (very low a), pink (present), and green (not present). For a list of cell 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

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

