Gulf of Mexico Harmful Algal Bloom Bulletin

17 December 2007

NOAA Ocean Service

NOAA Satellites and Information Service

Last bulletin: December 13, 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.

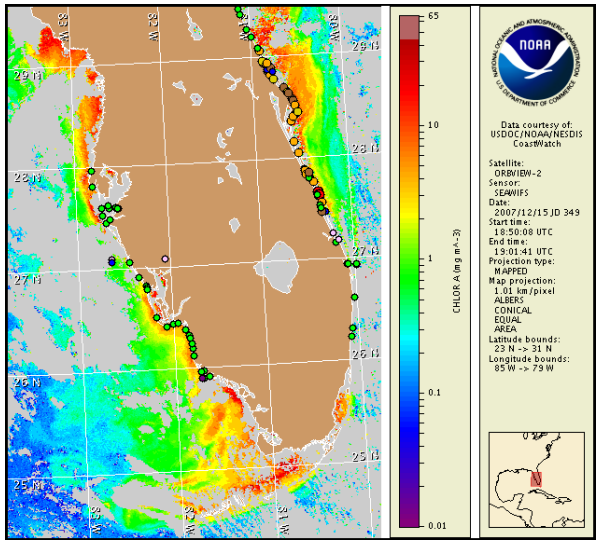
SW Florida: A harmful algal bloom has been identified in northern Collier County. No impacts are expected in Collier County today through Thursday or in any other county in southwest Florida.

Analysis

E Florida: A harmful algal bloom persists along the eastern coast of Florida from central Volusia to northern St. Lucie County with *K.brevis* concentrations ranging from very low to high. Very low to medium concentrations were confirmed from central Volusia to southern Brevard County this week (FWRI; 12/10-11), with high concentrations confirmed in Indian River County at Jaycee Park (FWRI; 12/9) and South Beach Park in Vero Beach(FWRI; 12/10). Very low to low concentrations of *K.brevis* were also confirmed in St. Lucie County at Fort Pierce and South Jetty Park (FWRI; 12/9-11). Background concentrations of *K.brevis* were confirmed in Martin County (FWRI; 12/9). Recent sampling results (FWRI; 12/9) indicate that the bloom is not present as far south as Palm Beach County. Imagery from 12/15 indicates that chlorophyll concentrations(>10μg/L) remain high alongshore from central Volusia to southern Brevard County, 29°17'33"N, 80°59'44"W to 28°5'18"N, 80°29'12"W. Chlorophyll levels also remains high (>10μg/L) offshore from St.Johns to Volusia County, as far east as 29°37'55"N, 80°29'5"W. Continued sampling is recommended. Chlorophyll levels have decreasedover the past few days along the coast of Indian River and St.Lucie Counties; however,continued sampling is recommended. Several reports of fish kills were received from Brevard and Indian River Counties over the weekend (FWRI). Easterly winds on Tuesday and Wednesday may increase the potential for impacts along the coast. Slight southerly movement of the bloom is possible through Thursday.

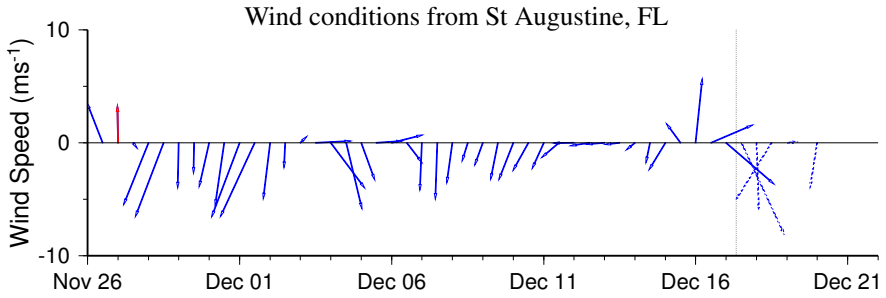
~Keller, Allen

****Please refer to subsequent South Florida Bulletin for analysis and information on southwest Florida and the Florida Keys.**



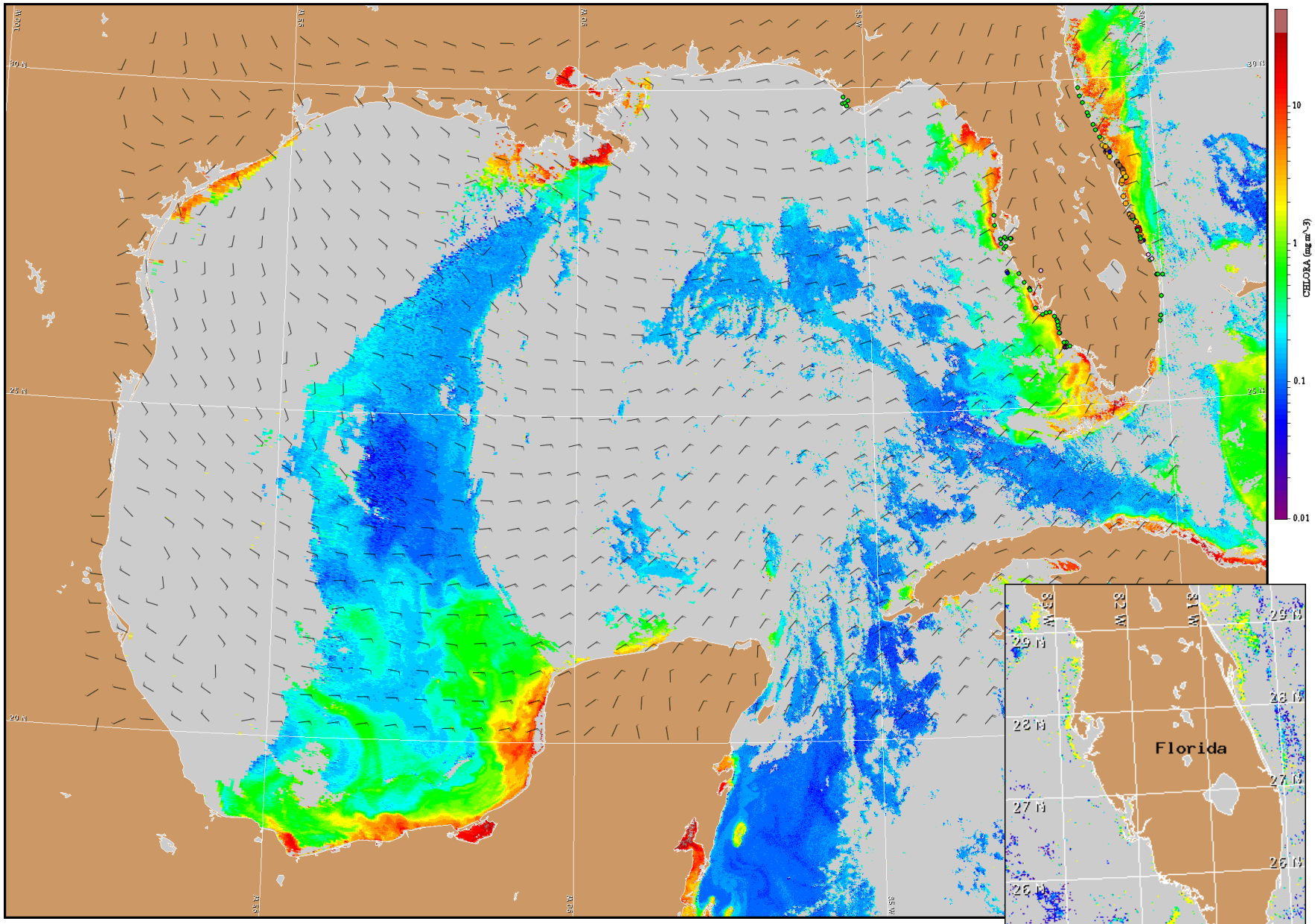
Satellite chlorophyll image with possible HAB areas shown by red polygon(s). Cell concentration sampling data from December 7 to 14 shown as red (high), orange (medium), yellow (low b), brown (low a), blue(very low b), purple (very low a), pink (present), and green (not present). For a list of cell count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



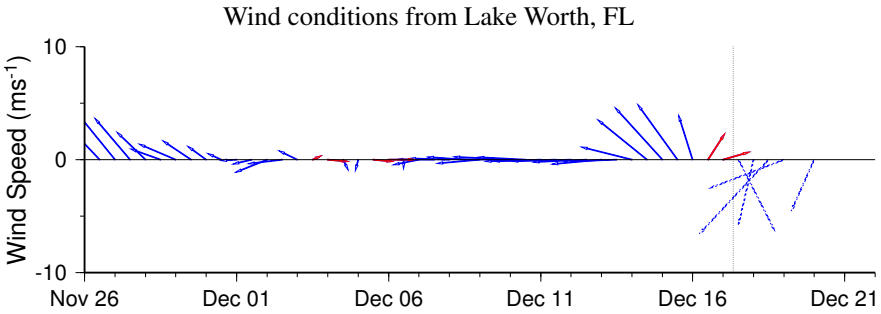
Wind speed and direction are averaged over 12 hours from buoy measurements. Length of line indicates speed; angle indicates direction. Red indicates that the wind direction favors upwelling near the coast. Values to the left of the dotted vertical line are measured values; values to the right are forecasts.

E Florida: Northerly winds today, with northeasterly to easterly winds on Tuesday (5-10 knots; 3-5 m/s). Southeasterly winds on Wednesday, becoming easterly in the evening (5 knots; 3 m/s). Westerly winds on Thursday (10-15 knots; 5-8m/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

Verifi ed 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 Lake Worth, FL
Wind Speed (ms-1)
10
0
-10
Nov 26
Dec 01
Dec 06
Dec 11
Dec 16
Dec 21