



Gulf of Mexico Harmful Algal Bloom Bulletin

1 October 2007

NOAA Ocean Service

NOAA Satellites and Information Service

Last bulletin: September 27, 2007

Conditions Report

NE Florida: A harmful algal bloom has been identified in Nassau, Duval and Saint Johns counties. Patchy high impacts are possible in Duval and northern Saint Johns counties and moderate impacts are possible in Nassau and central Saint Johns counties today through Wednesday, October 3.

SW Florida: No impacts are expected in southwest Florida today through Wednesday, October 3.

Analysis

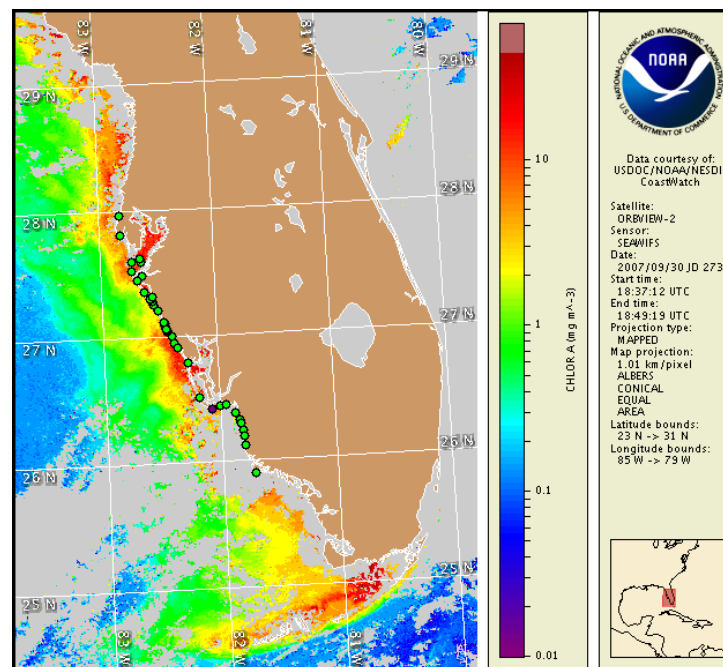
NE Florida: A harmful algal bloom has been identified onshore in Nassau, Duval and Saint Johns counties. Medium concentrations of *Karenia brevis* were found onshore southern Duval County and high concentrations of *K. brevis* were found onshore the Duval/Saint Johns border (FWRI; 9/26-27). In Saint Johns County samples contained medium concentrations of *K. brevis* as far south as South Ponte Vedra Park and Low b concentrations as far south as Vilano Beach. Satellite imagery from September 28 (image shown taken on 9/30) indicates patchy areas of high chlorophyll ($> 10 \mu\text{g/L}$) throughout northeast Florida from $30^{\circ}48.3'N$ $81^{\circ}24.4'W$ to $29^{\circ}43.9'N$ $81^{\circ}10.1'W$ and elevated chlorophyll levels ($2\text{--}10 \mu\text{g/L}$) as far south as $28^{\circ}57.9'N$ $80^{\circ}45.4'W$. Sample results from Camden County in southern Georgia, indicate that *K. brevis* is not present (FWRI; 9/27). Reports of respiratory irritation and dead fish have been received from Duval and Saint Johns counties (FWRI). Continued sampling is recommended. Onshore winds will increase the potential for impacts today through Wednesday. Northerly transport of the bloom is possible on Tuesday night and Wednesday.

SW Florida: Very Low a concentrations of *K. brevis* were confirmed onshore Lee County at Sanibel Island (FWRI; 9/26). Recent sampling indicates that *K. brevis* is not present in Collier and Pinellas counties (FWRI; 9/27). Satellite imagery is cloudy over southern Lee and Collier counties; however a region of high chlorophyll ($> 10 \mu\text{g/L}$) is visible from $27^{\circ}0.2'N$ $82^{\circ}27.3'W$ (offshore central Sarasota County) to $26^{\circ}30.7'N$ $82^{\circ}15.3'W$ (west of Sanibel Island, Lee County). Offshore winds will decrease the potential for impacts along southwest Florida; however conditions are favorable for intensification and formation of a harmful algal bloom. Continued sampling is recommended.

Urizar, Fisher

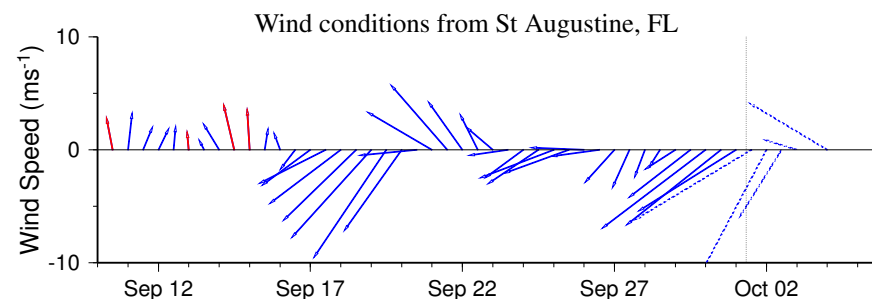
Please note the following restrictions on all SeaWiFS imagery derived from CoastWatch.

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.



Satellite chlorophyll image with possible HAB areas shown by red polygon(s). Cell concentration sampling data from September 24 to 27 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:

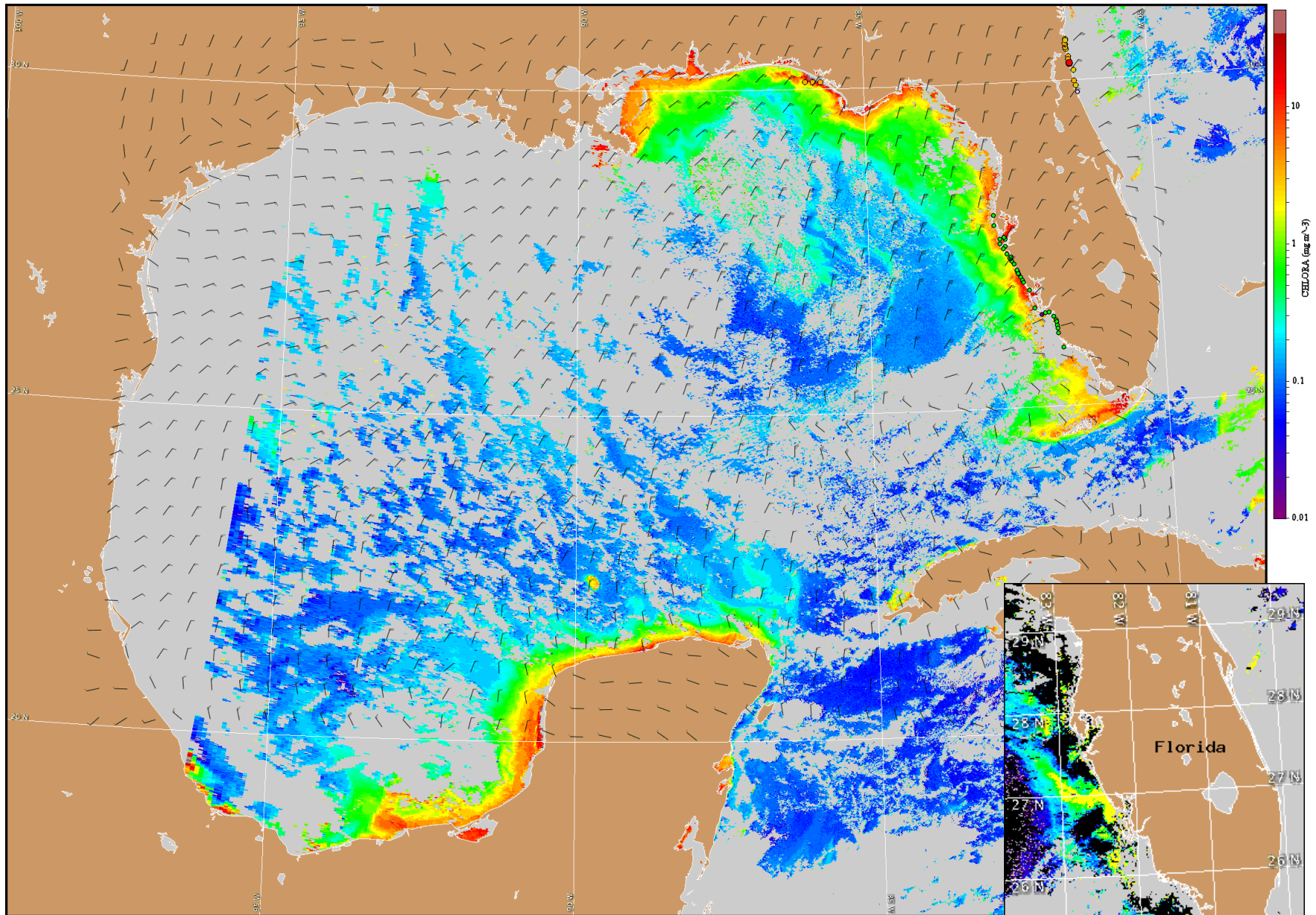
http://www.csc.noaa.gov/crs/habf/habfs_bulletin_guide.pdf



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.

NE Florida: Northeasterlies today and Tuesday (20-30 kt, 10-15 m/s) becoming easterlies on Tuesday night (10-15 kt, 5-8 m/s). Southeasterlies Wednesday (5-10 kt, 3-5 m/s).

SW Florida: Northeasterlies today and Tuesday (20 kt, 10 m/s) becoming easterlies on Tuesday night (15 kt, 8 m/s). Southeasterlies Wednesday (10 kt, 5 m/s) becoming easterlies Wednesday night (5 kt, 3 m/s).



Satellite chlorophyll image and forecast winds for October 2, 2007 12Z with Cell concentration sampling data from September 24 to 27 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

