



## Gulf of Mexico Harmful Algal Bloom Bulletin

10 December 2007

NOAA Ocean Service

NOAA Satellites and Information Service

Last bulletin: December 7, 2007

### Conditions Report

A harmful algal bloom has been identified in patches from Gulf County, Florida to Mobile County, Alabama and in Harrison and Hancock Counties, Mississippi. Patchy very low impacts are possible for bay regions of Gulf County today through Thursday. Patchy moderate impacts are possible for bay regions of Okaloosa County today through Thursday. Patchy low impacts are possible today through Thursday along the coast of Okaloosa County. Patchy very low impacts are possible for bay and coastal regions of Mobile and Baldwin Counties in Alabama, and in Harrison and Hancock Counties in Mississippi. No other impacts are expected in northwest Florida, Alabama, or Mississippi through Thursday, December 13.

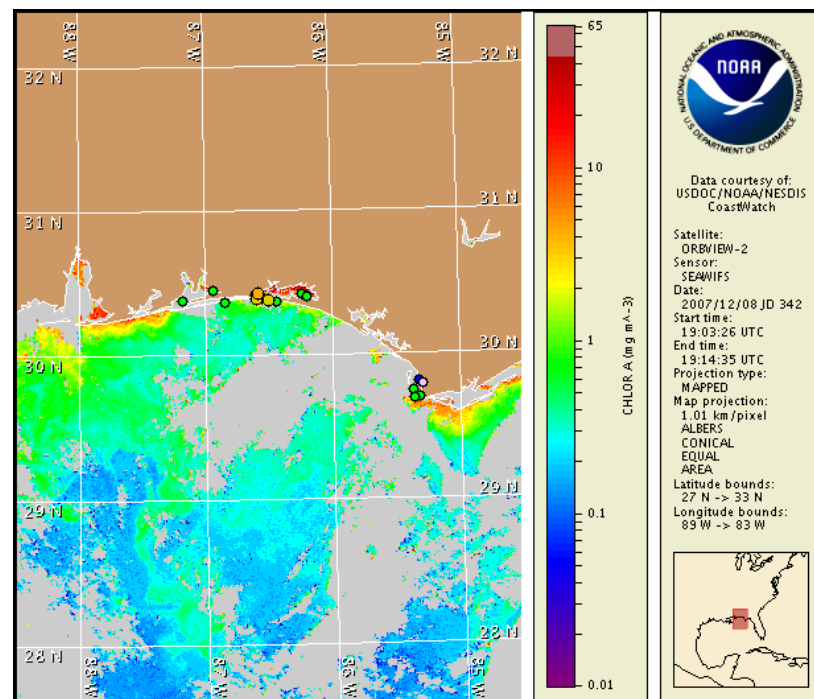
### Analysis

The harmful algal bloom persists in patches along the Florida, Alabama, and Mississippi coasts, and has transported west to Hancock County, Mississippi with very low concentrations of *Karenia brevis* confirmed (12/4-7, AL Dept. of Public Health). Very low concentrations of *K. brevis* were also confirmed in Alabama from Alabama Point in Baldwin County to Dauphin Island in Mobile County (12/3, AL Dept. of Public Health). Samples this week confirmed medium concentrations of *K. brevis* in the western bay regions of Okaloosa County, with low concentrations along the coast (12/5, FWRI). Background to very low concentrations of *K. brevis* were also confirmed in St. Joseph Bay. Chlorophyll levels are elevated along the coast from Okaloosa County, Florida to Baldwin County, Alabama (30°18'21"N 87°19'27"W to 30°13'10"N 87°53'57"W), with high chlorophyll levels ( $>10\mu\text{g/L}$ ) at 30°15'46"N 87°37'1"W and 30°16'18"N 87°34'30"W, based on satellite imagery from 12/8. Continued westerly transport of the bloom is likely through Thursday, with impacts along the coast most likely on Wednesday and Thursday.

- Allen, Keller

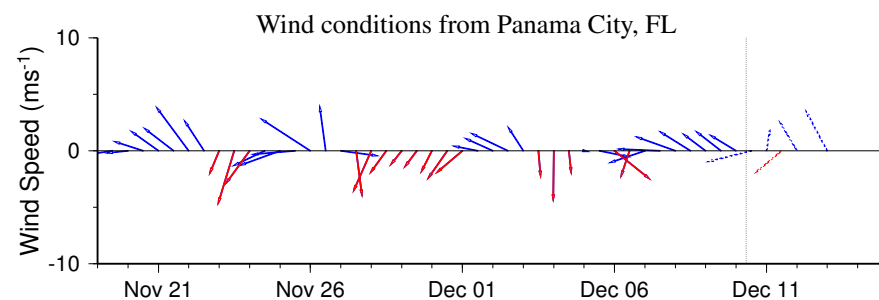
Please note the following restrictions on all SeaWiFS imagery derived from CoastWatch.

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 December 3 to 6 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:

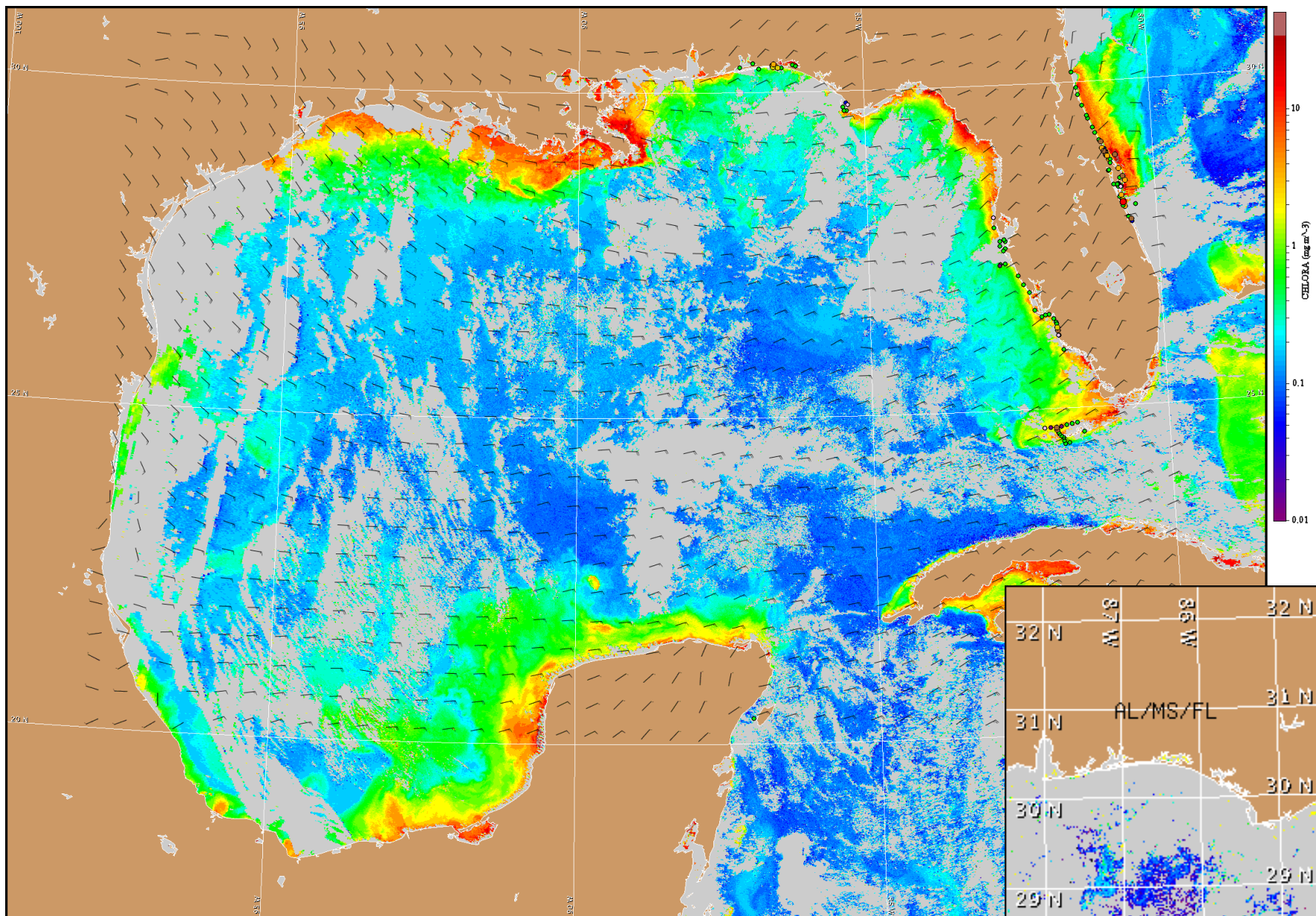
[http://www.csc.noaa.gov/crs/habf/habfs\\_bulletin\\_guide.pdf](http://www.csc.noaa.gov/crs/habf/habfs_bulletin_guide.pdf)



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.

**NW Florida & Alabama:** Easterly winds today at 10 knots (5 m/s) becoming southeasterly to easterly tonight through Wednesday. South to southwesterly winds Thursday.

**Mississippi:** Easterly winds today and tomorrow at 10-15 knots (5-8 m/s). Southeasterly winds Wednesday, becoming southwesterly by Thursday at 5-10 knots (3-5 m/s).



Satellite chlorophyll image and forecast winds for December 11, 2007 12Z with Cell concentration sampling data from December 3 to 6 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).

