



# Gulf of Mexico Harmful Algal Bloom Bulletin

Region: East Florida

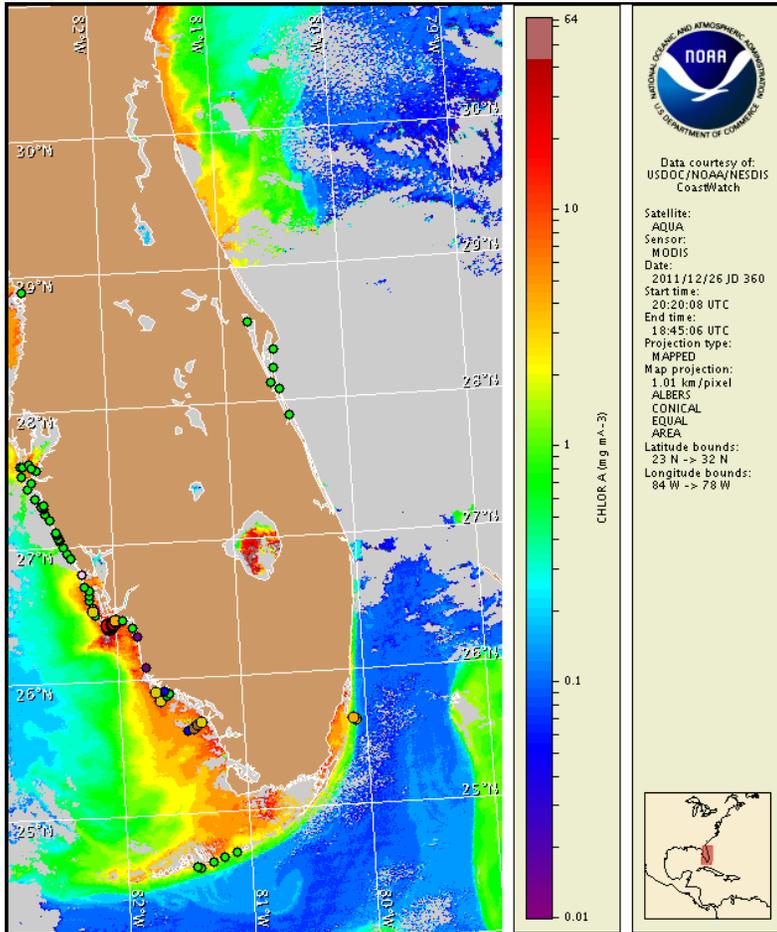
Tuesday, 27 December 2011

NOAA Ocean Service

NOAA Satellite and Information Service

NOAA National Weather Service

Last bulletin:



Satellite chlorophyll image with possible HAB areas shown by red polygon(s). Cell concentration sampling data from December 17 to 22 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 HAB-OFS bulletin guide:

To see previous bulletins and forecasts for other Harmful Algal Bloom Bulletin regions, visit the NOAA Harmful Algal Bloom Operational Forecast System bulletin archive:  
<http://tidesandcurrents.noaa.gov/hab/bulletins.html>

## Conditions Report

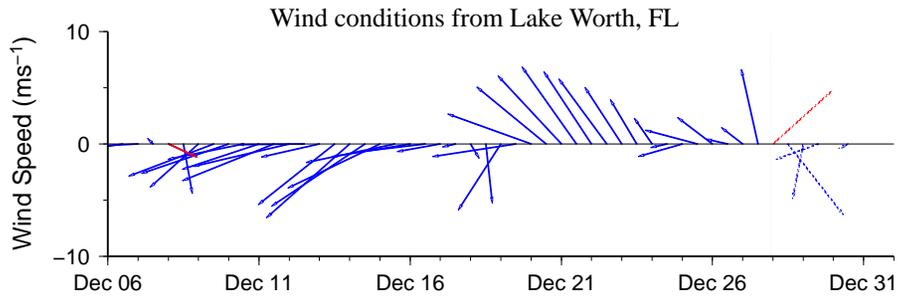
A patchy harmful algal bloom was last identified on 12/11 along the Atlantic side of the upper Florida Keys and near Biscayne Key in Miami-Dade County. In Miami-Dade County, patchy very low impacts are possible today and Wednesday and patchy moderate impacts are possible Wednesday night and Thursday. Along the Atlantic side of the upper Florida Keys, patchy very low impacts are possible today and patchy moderate impacts are possible Wednesday night and Thursday. No additional respiratory impacts are expected elsewhere at the coast in eastern Florida or in the upper Florida Keys today through Thursday, December 29.

## Analysis

**East Florida:** A patchy harmful algal bloom was reported late last week by FWRI approximately 2-15 miles southeast of Key Largo in the Upper Florida Keys and approximately 2-4 miles southeast of Biscayne Bay in Miami-Dade County (NOAA, 12/11). This bloom contained low to medium concentrations of *Karenia brevis* over two weeks ago, however present bloom conditions are unknown. (Note: Samples identifying the bloom along the Upper Florida Keys are unavailable for display on the map shown at left.) Continued sampling is highly recommended due to bloom activity in southwest Florida and oceanographic circulation patterns that could continue to transport *Karenia brevis* concentrations through the Florida straits and up the eastern coast of Florida. Recent MODIS imagery does not show significant elevated or high chlorophyll features in the sampled areas. An elevated chlorophyll feature (2-4  $\mu\text{g/L}$ ) is visible alongshore southern Broward County. It is unclear whether this feature contains harmful algae, however conditions have been favorable for northward transport of the bloom over the past several days.

Supplemental reports for this region will be updated as bloom conditions, imagery, and sampling information become available. Please contact [hab@noaa.gov](mailto:hab@noaa.gov) for specific inquiries or information.

Fisher, Yang

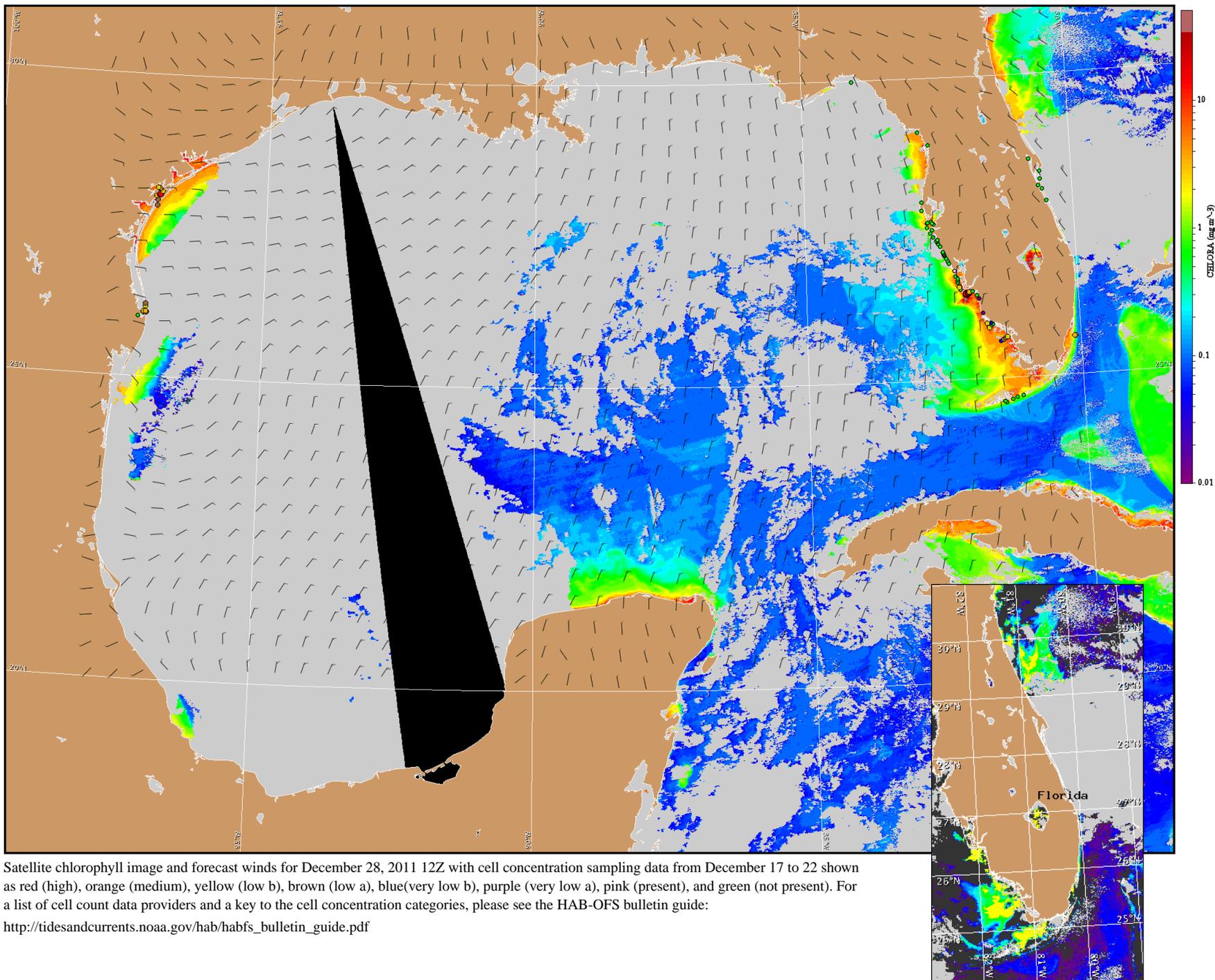


Wind speed and direction are averaged over 12 hours from buoy measurements. Length of line indicates speed; angle indicates direction. Red indicates that the wind direction favors upwelling near the coast. Values to the left of the dotted vertical line are measured values; values to the right are forecasts. Wind observation and forecast data provided by NOAA's National Weather Service (NWS).

## Wind Analysis

**Southeast Florida:** West southwest winds today becoming west northwest (14-21kn, 7-11m/s). North to northwest winds Wednesday (11-21kn, 6-11m/s). North northeast winds Wednesday night (9-12kn, 5-6m/s). East northeast winds Thursday and Friday (6-10kn, 3-5m/s).

**Upper Florida Keys:** Southwest to west winds, shifting northwest tonight (10-15kn, 5-8m/s). North winds Wednesday becoming north to northeast (10-20kn, 5-10m/s). Northeast winds Wednesday night and Thursday (10-15kn, 5-8m/s)



Satellite chlorophyll image and forecast winds for December 28, 2011 12Z with cell concentration sampling data from December 17 to 22 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 HAB-OFS bulletin guide:

[http://tidesandcurrents.noaa.gov/hab/habfs\\_bulletin\\_guide.pdf](http://tidesandcurrents.noaa.gov/hab/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).