



# Gulf of Mexico Harmful Algal Bloom Bulletin

Region: Texas

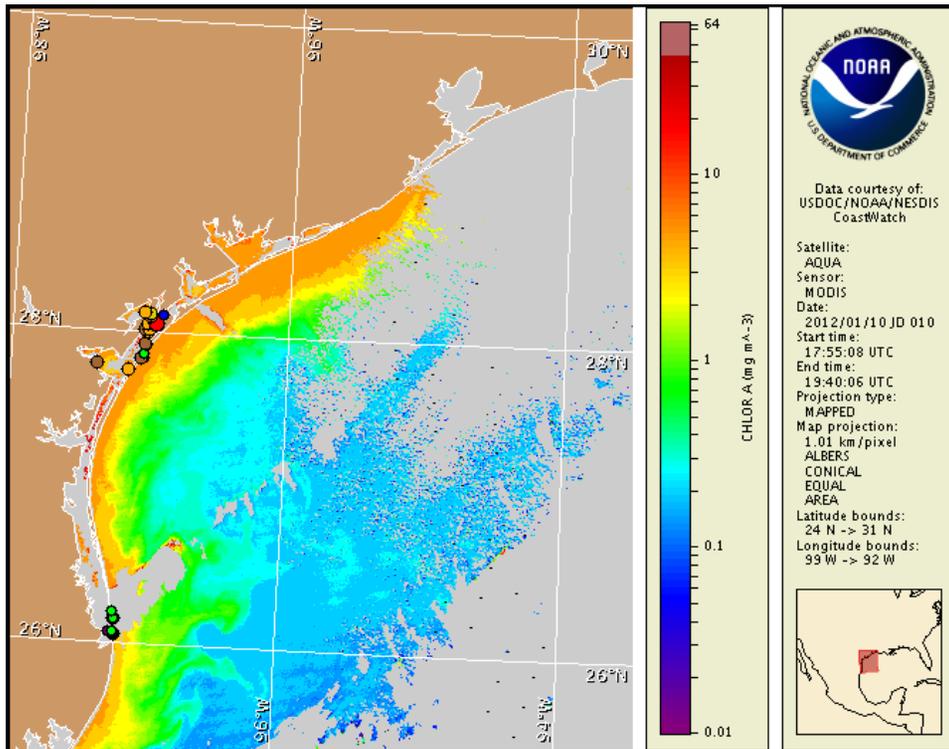
Thursday, 12 January 2012

NOAA Ocean Service

NOAA Satellite and Information Service

NOAA National Weather Service

Last bulletin: Monday, January 9, 2012



Satellite chlorophyll image with possible HAB areas shown by red polygon(s). Cell concentration sampling data from January 2 to 11 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/habfbs\\_bulletin\\_guide.pdf](http://tidesandcurrents.noaa.gov/hab/habfbs_bulletin_guide.pdf)

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 is present along the Texas coast. Patchy high impacts are possible Friday through Monday in the Port Aransas/Corpus Christi Bay area, with patchy low impacts today. Patchy low impacts are possible today through Monday alongshore the South Padre Island region and within the lower Laguna Madre. Water samples last identified harmful algal blooms in the Galveston Bay area on December 28, in the Matagorda Bay area on December 14, and alongshore the Padre Island National Seashore region on November 28. Associated respiratory impacts remain possible in these areas. No additional impacts are expected at the coast in Texas today through Monday, January 16. Reports of dead fish have been received from the Matagorda Bay area. All Texas bays and coastal waters remain closed to commercial and recreational oyster harvesting due to blooms of the harmful algae *Karenia brevis* (red tide).

## Analysis

\*\*Due to the upcoming Federal Holiday, the next bulletin will be issued on Tuesday, January 17.\*\*

A patchy harmful algal bloom continues along much of the Texas coastline, but samples and satellite imagery indicate that *Karenia brevis* concentrations are dissipating in some regions.

No new samples have been received from the Galveston or Matagorda Bay regions. The most recent samples identified 'not present' to 'low b' *K. brevis* concentrations in the Galveston Bay region (12/27-28; TPWD), and 'not present' to 'high' concentrations in the Matagorda Bay region (12/5-14; TPWD). Within the Tres Palacios/Matagorda Bay region, dead fish have been reported washing ashore at the TPWD Perry R. Bass Marine Fisheries Research Center near Palacios (1/10; TPWD).

No new samples have been received from the Port Aransas/Corpus Christi Bay region, where the most recent samples indicated that *K. brevis* concentrations range from 'not present' to 'high' (1/4-5; TPWD).

No samples have been received from alongshore Padre Island National Seashore since 'medium' to 'high' *K. brevis* concentrations were identified on 11/28 (TPWD). In the South Padre Island region, samples collected from along the Gulf coast (Beach Access 5 and 6) and within the lower Laguna Madre (east end of Queen Isabella Causeway) indicate that *K. brevis* has decreased to 'not present' (1/11; TPWD).

Recent MODIS imagery (1/10; page 1) is partially obscured by clouds along the Texas coastline from Sabine Pass to the Freeport area and along a portion of South Padre Island, limiting analysis. Chlorophyll levels along the coast continue to dissipate, with a band of elevated chlorophyll (2 to 5  $\mu\text{g/L}$ ) visible stretching along- and offshore from the Freeport area to South Padre Island and south of the Rio Grande. Elevated chlorophyll at the coast is not necessarily indicative of the bloom's extent and may be due to the continued resuspension of benthic chlorophyll and sediments; in-situ sampling is required to confirm the presence of *K. brevis*.

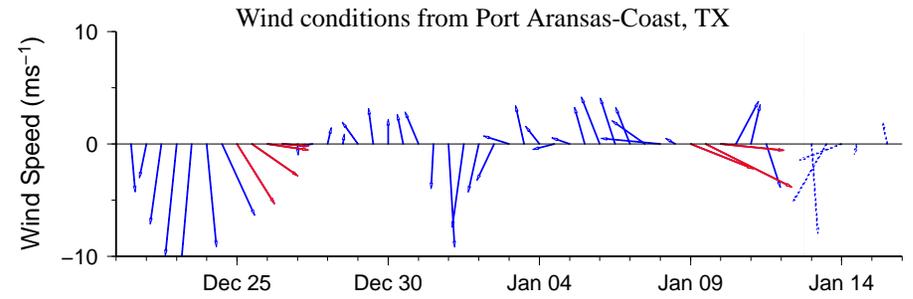
Forecast models based on predicted near-surface currents indicate a maximum bloom

transport from coastal sample locations of 15km north from the Galveston Bay region, 65km north from the Matagorda Peninsula region, 80km north from the Port Aransas region, 60km north along the Padre Island National Seashore region, and <10km north (negligible) from Brazos Santiago Pass from January 10 to 15. Forecasted onshore winds will increase the potential for impacts along the Texas coast today through Monday.

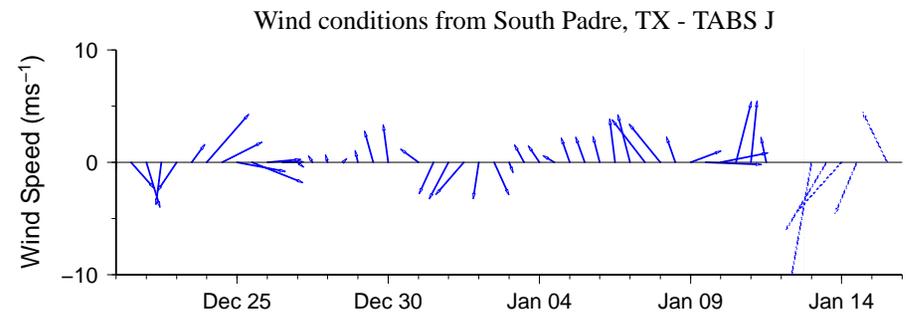
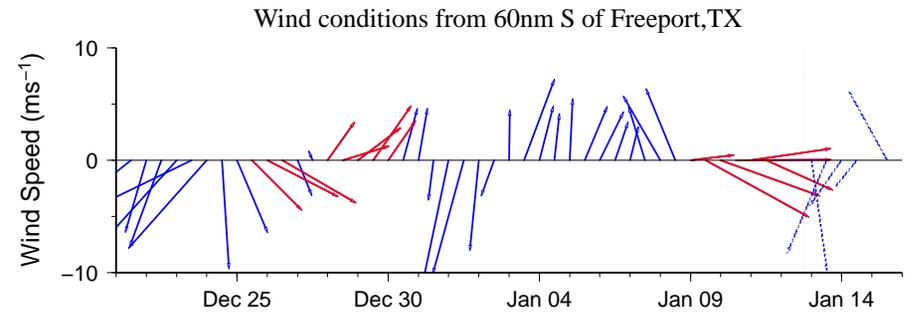
Kavanaugh, Derner

---

-2-



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).

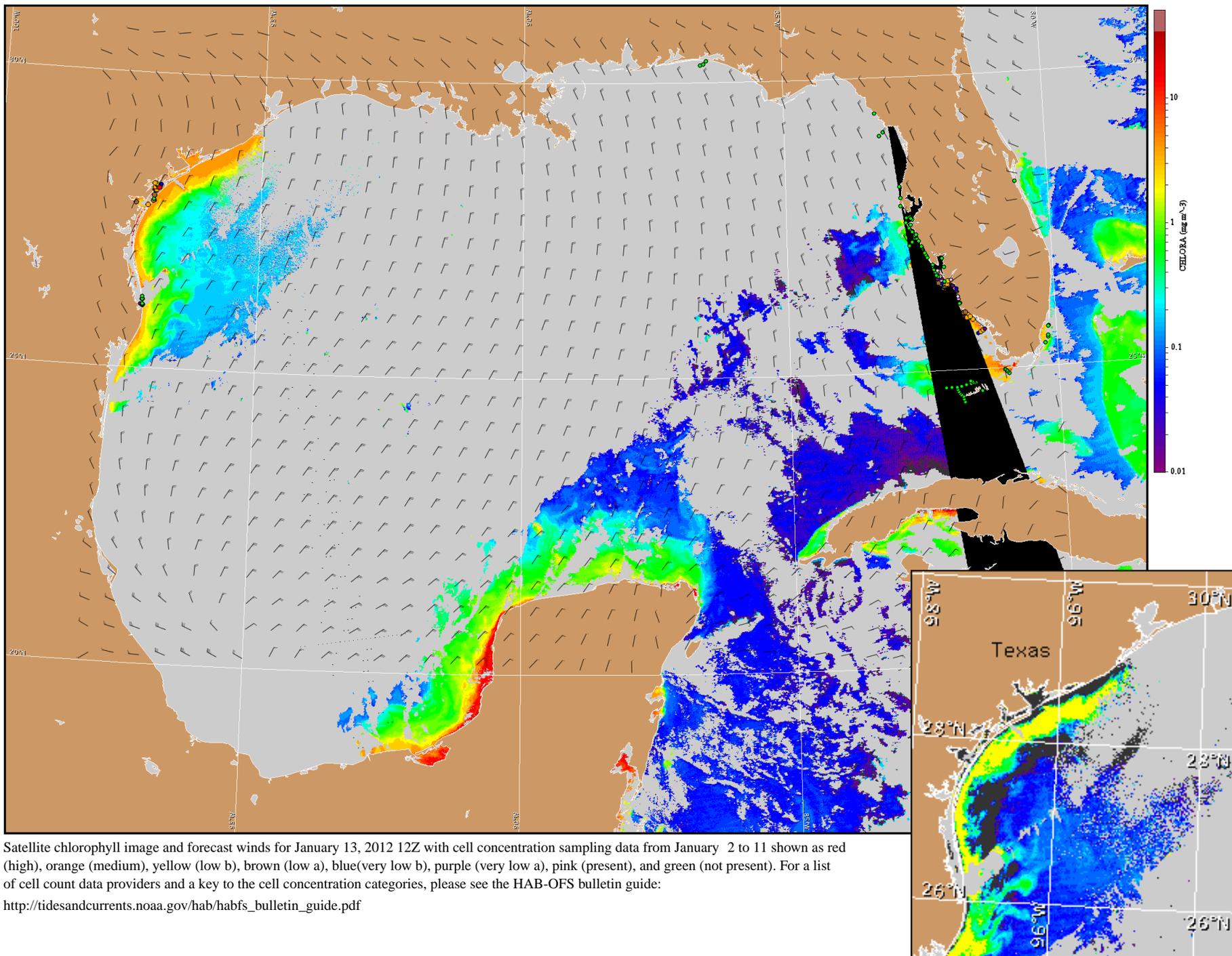


## Wind Analysis

**Galveston/Freeport:** North winds (5-30 kn, 3-15 m/s) today through Friday. Northeast to east winds (5 kn, 3 m/s) Saturday. Southeast winds (5-20 kn, 3-10 m/s) Saturday night through Sunday. South winds (15-20 kn, 8-10 m/s) Monday.

**Port Aransas:** North winds (10-30 kn, 5-15 m/s) today. Northeast winds (5-15 kn, 3-8 m/s) Friday. East winds (5-15 kn) Saturday through Sunday becoming southeast winds (15-20 kn) Sunday afternoon. South winds (15-20 kn) Monday.

**South Padre:** North winds (15-35 kn, 8-18 m/s) today. Northeast winds (10-15 kn, 5-8 m/s) Friday. East winds (15 kn, 8 m/s) Saturday. Southeast winds (20 kn, 10 m/s) Sunday. South winds (20 kn) Monday.



Satellite chlorophyll image and forecast winds for January 13, 2012 12Z with cell concentration sampling data from January 2 to 11 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).