



Gulf of Mexico Harmful Algal Bloom Bulletin

Region: Texas

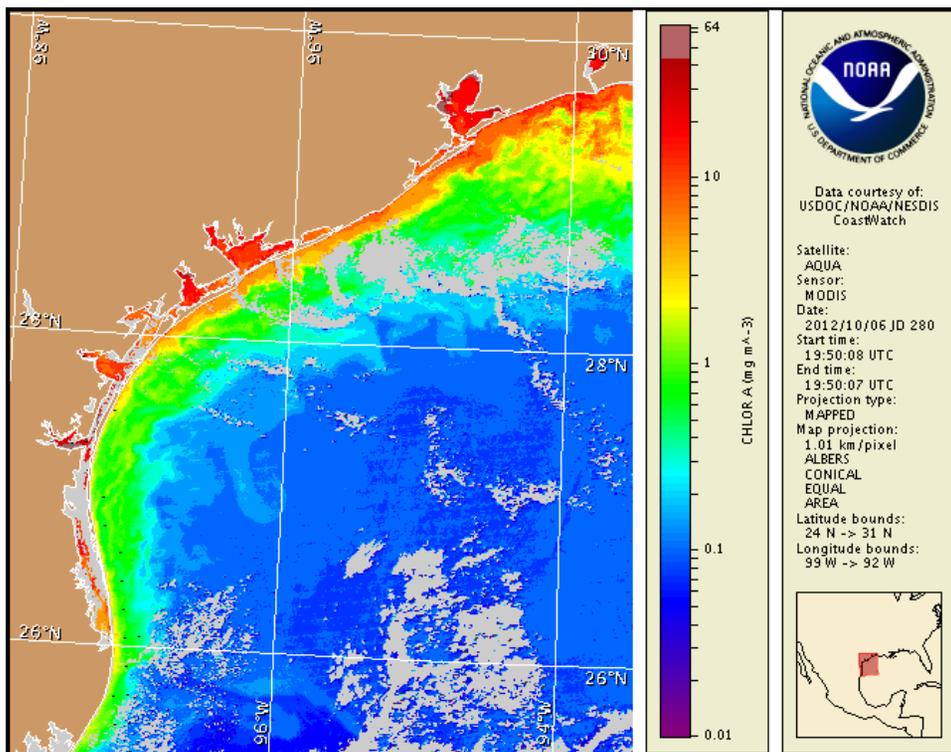
Tuesday, 09 October 2012

NOAA Ocean Service

NOAA Satellite and Information Service

NOAA National Weather Service

Last bulletin: Monday, October 1, 2012



Satellite chlorophyll image with possible HAB areas shown by red polygon(s). Cell concentration sampling data from September 29 to October 4 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

Detailed sample information can be obtained through the Texas Parks and Wildlife Department at:

<http://www.tpwd.state.tx.us/landwater/water/environconcerns/hab/redtide/status.phtml>

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

There is currently no indication of a harmful algal bloom of *Karenia brevis* (commonly known as Texas red tide) at the coast in Texas. No respiratory impacts are expected alongshore Texas today through Sunday, October 14. For information on area shellfish restrictions, contact the Texas Department of State Health Services.

Analysis

There is currently no indication of a harmful algal bloom of *Karenia brevis* at the coast in Texas. No new samples have been received from the Port Mansfield or lower Laguna Madre regions, where not present to 'low a' concentrations were last identified (TPWD; 9/24-27). These regions will continue to be monitored as samples become available.

In recent MODIS imagery (10/6; shown left), elevated chlorophyll (3-10 $\mu\text{g/L}$) is visible stretching along- and offshore from Sabine Pass to Port Aransas, with high chlorophyll (11-19 $\mu\text{g/L}$) also visible in patches along- and offshore this region. Elevated chlorophyll (1-3 $\mu\text{g/L}$) is also visible stretching along- and offshore from Port Aransas to the Rio Grande. Elevated chlorophyll is not necessarily indicative of the presence of *K. brevis* and could also be due to the resuspension of benthic chlorophyll and sediments along the coast. In situ sampling is necessary to confirm the presence of *K. brevis*.

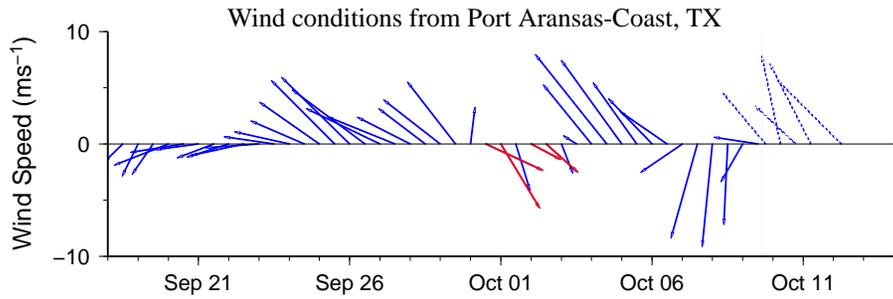
Forecast models based on predicted near-surface currents indicate a potential maximum transport of 40 km south from the Port Aransas region and 100 km south from the Brazos Santiago Pass region from October 6-12.

Derner, Yang

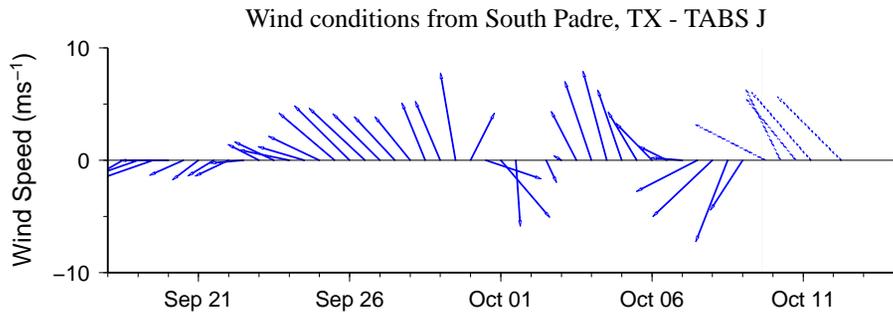
Wind Analysis

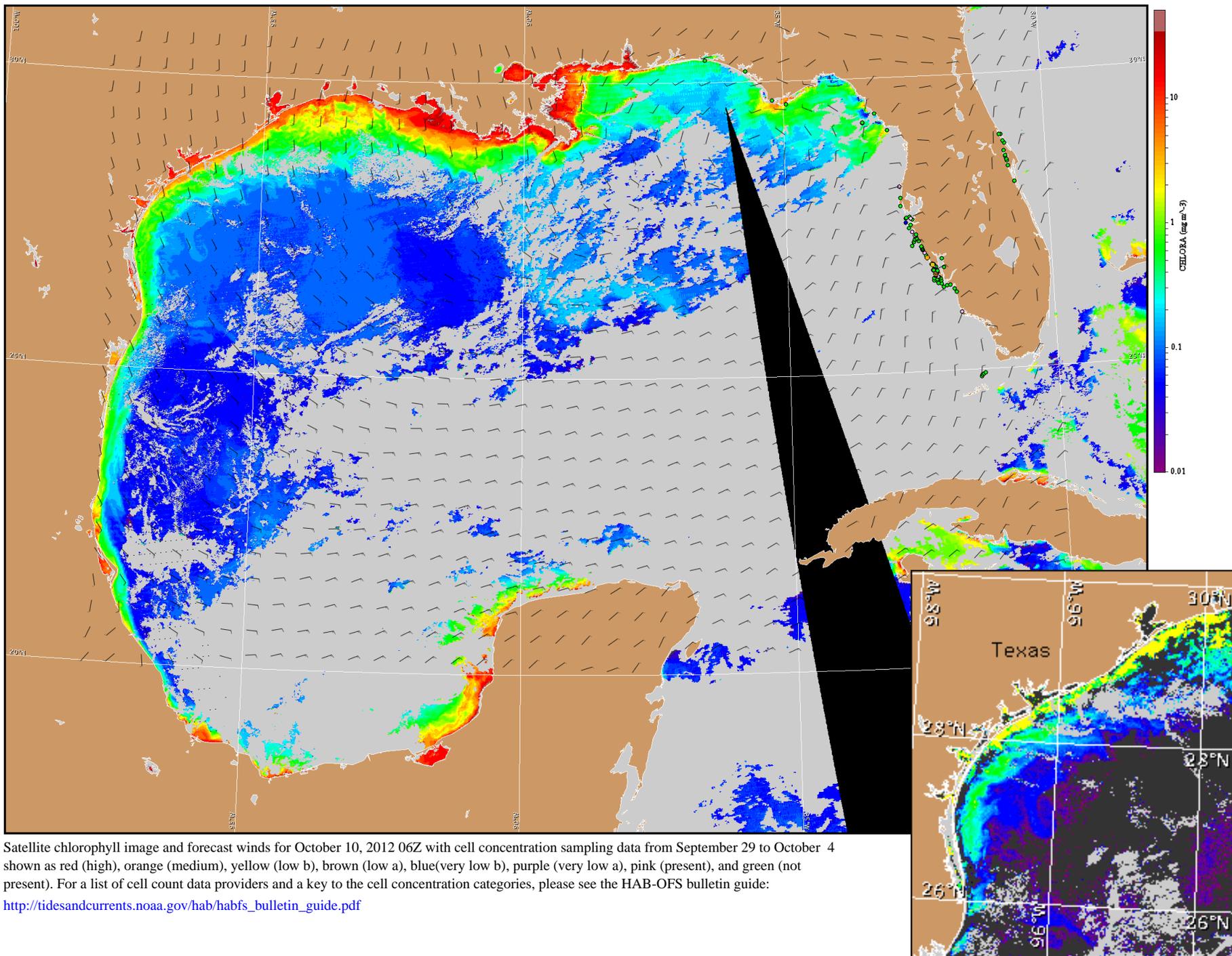
Port Aransas: Southeast winds (10-20kn, 5-10m/s) today through Saturday.

South Padre Island: Southeast winds (15-20kn, 8-10m/s) today through Saturday.



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).





Satellite chlorophyll image and forecast winds for October 10, 2012 06Z with cell concentration sampling data from September 29 to October 4 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:

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Verified and suspected HAB areas shown in red. Other areas of high chlorophyll concentration shown in yellow (see p. 1 analysis for interpretation).