



Gulf of Mexico Harmful Algal Bloom Bulletin

Region: Texas

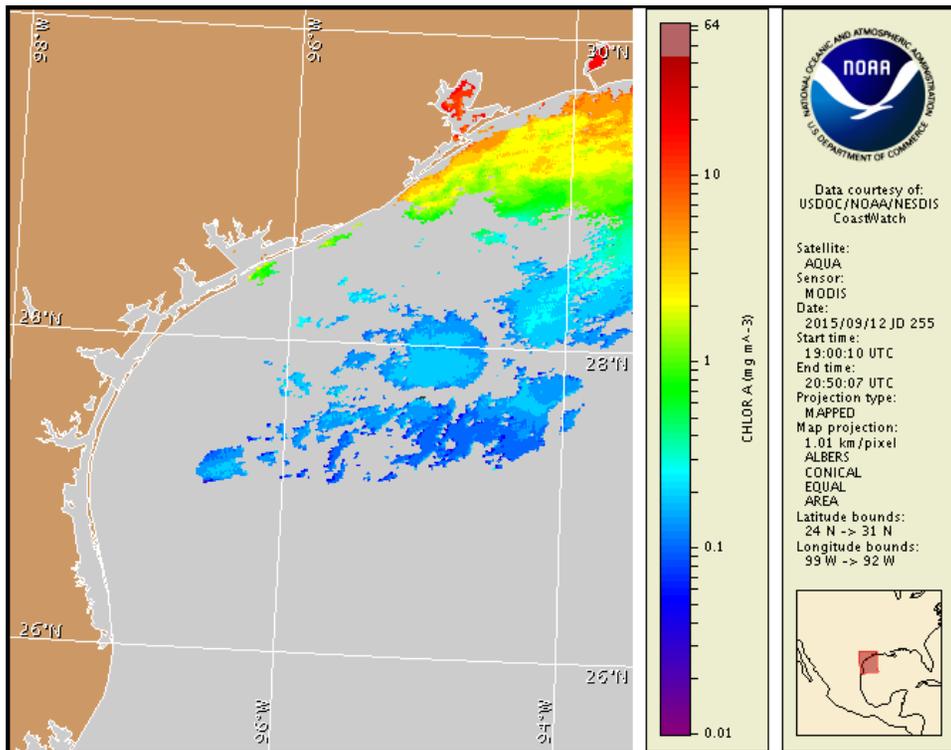
Monday, 14 September 2015

NOAA National Ocean Service

NOAA Satellite and Information Service

NOAA National Weather Service

Last bulletin: Tuesday, September 8, 2015



Satellite chlorophyll image with possible *K. brevis* HAB areas shown by red polygon(s), when applicable. Points represent cell concentration sampling data from September 4 to 11: red (high), orange (medium), yellow (low b), brown (low a), blue (very low b), purple (very low a), pink (present), and green (not present). Cell count data are provided by Texas Parks and Wildlife Department. For a list of sample 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/enviroconcerns/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

A suspected bloom of *Karenia brevis* (commonly known as Texas red tide) is being investigated alongshore from the Port Aransas/Mustang Island to Padre Island National Seashore region. Respiratory irritation in these regions may be possible. Our forecast will be updated if field samples confirm elevated concentrations of *K. brevis* along the coast this week. *K. brevis* concentrations are patchy in nature and levels of respiratory irritation will vary locally based upon nearby bloom concentrations, ocean currents, and wind speed and direction.

Check http://tidesandcurrents.noaa.gov/hab/beach_conditions.html for recent, local observations. Dead fish have been reported from the Port Aransas/Mustang Island to Padre Island National Seashore region.

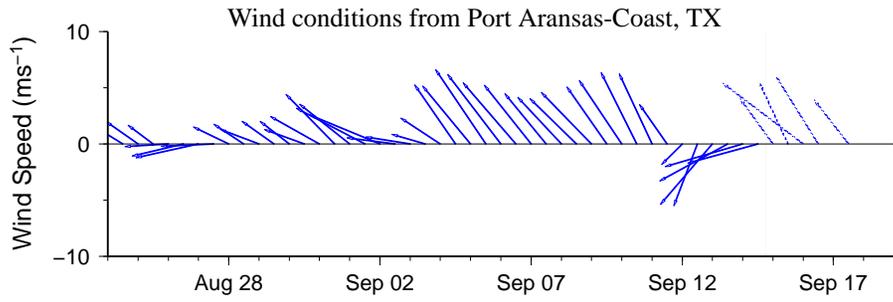
Analysis

A suspected *Karenia brevis* bloom was reported to TPWD along Mustang Island, near Fish Pass Jetties (TPWD; 9/13). Dead fish were reported from Padre Island, south of Packery Channel in the Port Aransas/Mustang Island to Padre Island National Seashore region (TPWD; 9/13). Sampling from Texas A&M University's Imaging FlowCytobot, located on the Port Aransas ship channel, continues to indicate that *Karenia brevis* concentrations range between 'not present' and 'background' (TAMU; 9/8-10). For information on area shellfish restrictions, contact the Texas Department of State Health Services.

Recent MODIS Aqua imagery (9/12, shown left), is partially obscured by clouds along- and offshore the Texas coast, limiting analysis. Patches of elevated chlorophyll (1-10 $\mu\text{g/L}$) are visible along- and offshore the Texas coastline from the Sabine Pass to San Luis Pass region. Elevated chlorophyll is not indicative of the presence of *K. brevis* and is most likely due to the resuspension of benthic chlorophyll and sediments along the coast.

Forecast models based on predicted near-surface currents indicate a maximum bloom transport from coastal sample locations of 80 km south from Mustang Island from September 13-17, with a potential maximum transport of 100km south from the Port Aransas region from September 12-17.

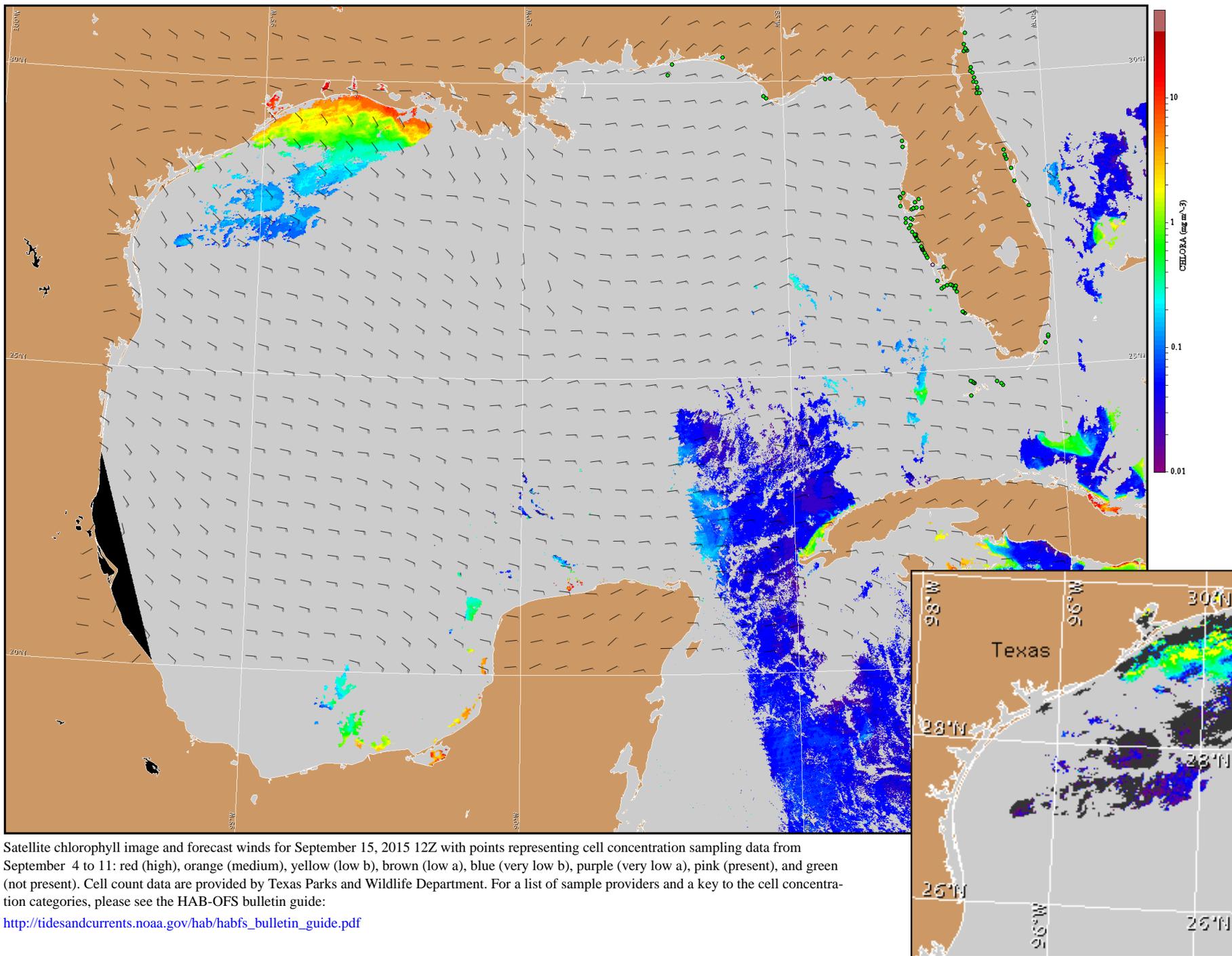
Kavanaugh, Keeney



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

Port Aransas: East winds (10kn, 5m/s) today becoming southeast winds (5-15kn, 3-8m/s) tonight through Friday night.



Satellite chlorophyll image and forecast winds for September 15, 2015 12Z with points representing cell concentration sampling data from September 4 to 11: red (high), orange (medium), yellow (low b), brown (low a), blue (very low b), purple (very low a), pink (present), and green (not present). Cell count data are provided by Texas Parks and Wildlife Department. For a list of sample 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).