



# Gulf of Mexico Harmful Algal Bloom Bulletin

Region: Texas

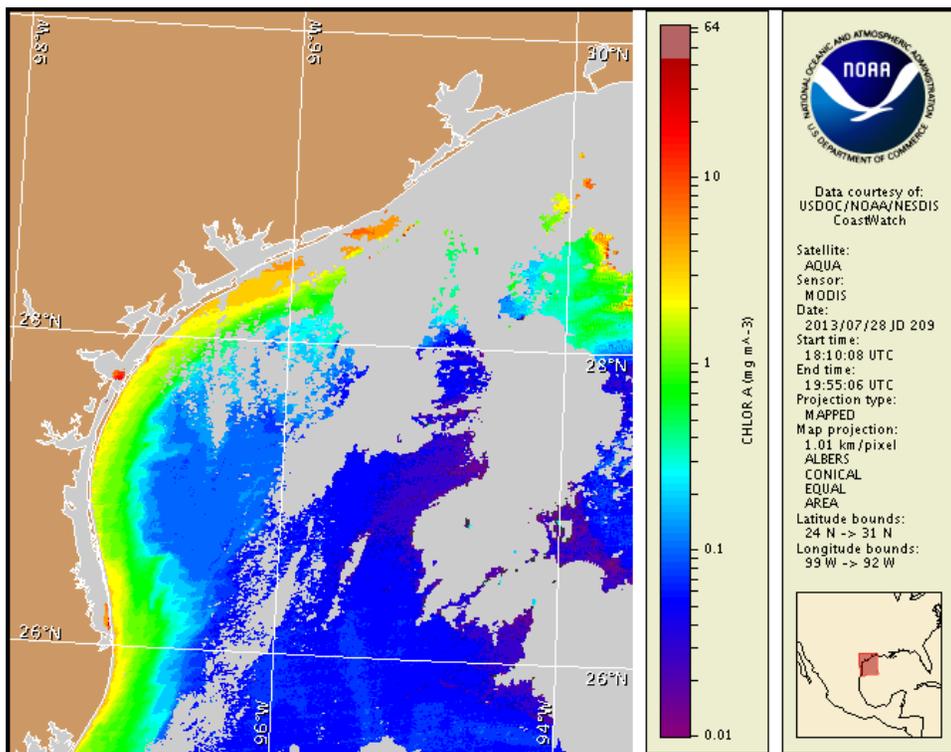
Monday, 29 July 2013

NOAA National Ocean Service

NOAA Satellite and Information Service

NOAA National Weather Service

Last bulletin: Monday, July 22, 2013



Satellite chlorophyll image with possible *K. brevis* HAB areas shown by red polygon(s), when applicable. Points represent cell concentration sampling data from July 19 to 25: 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](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

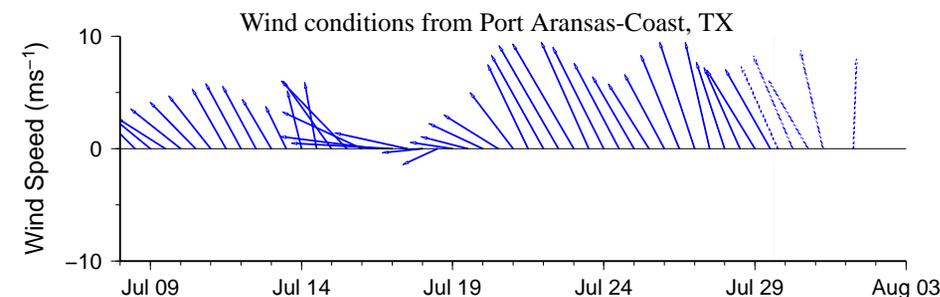
There is currently no indication of *Karenia brevis* (commonly known as Texas red tide) along the coast of Texas. No respiratory irritation is expected Monday, July 29 through Monday, August 5. Check [http://tidesandcurrents.noaa.gov/hab/beach\\_conditions.html](http://tidesandcurrents.noaa.gov/hab/beach_conditions.html) for recent, local observations. There are currently patches of a bloom of the algae *Aureoumbra lagunensis* in the upper Laguna Madre region. This algae species does not produce the respiratory irritation associated with the Texas red tide caused by *Karenia brevis*, but it may cause discolored water and fish kills.

## Analysis

There is currently no indication of a harmful algal bloom of *Karenia brevis* at the coast in Texas. Recent MODIS Aqua imagery is partially obscured by clouds from Sabine Pass to the Matagorda Peninsula region and along the Mustang Island region, limiting analysis. In imagery from 7/28 (shown left), elevated chlorophyll (2-5  $\mu\text{g/L}$ ) is visible in patches along- and offshore the Matagorda Peninsula 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 potential maximum transport of 40 km north from the Port Aransas region from July 28 to August 1.

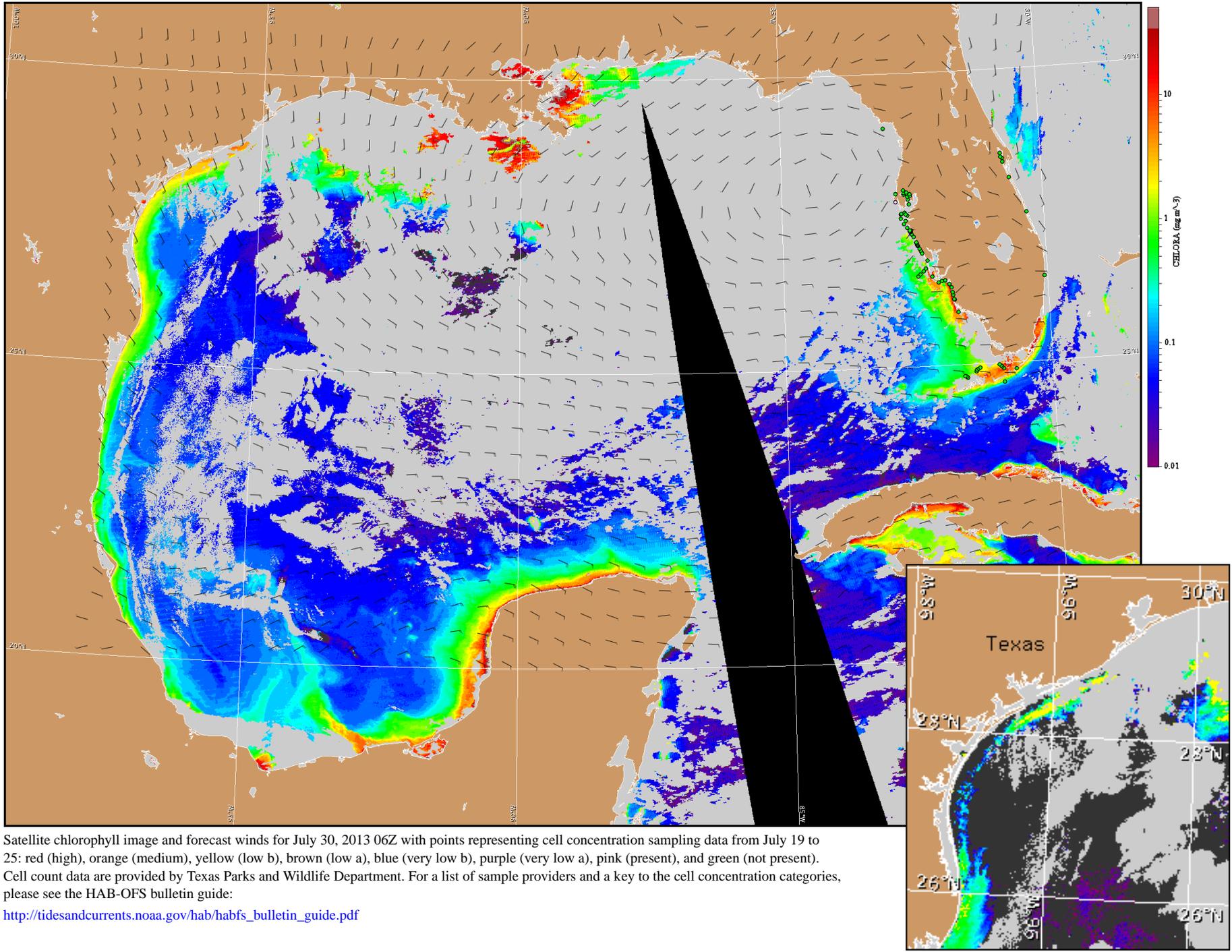
Derner, Davis



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:** Southeast winds (15-25kn, 8-13m/s) today through Tuesday night becoming south winds (10-15kn, 5-8m/s) after midnight. Southeast winds (10-15kn) Wednesday becoming south (10-15kn) Wednesday night. Southeast winds (5-10kn, 3-5m/s) Thursday becoming south (10-15kn) Thursday night. Southeast winds (10-15kn) Friday.



Satellite chlorophyll image and forecast winds for July 30, 2013 06Z with points representing cell concentration sampling data from July 19 to 25: 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).