



Gulf of Mexico Harmful Algal Bloom Bulletin

Region: Texas

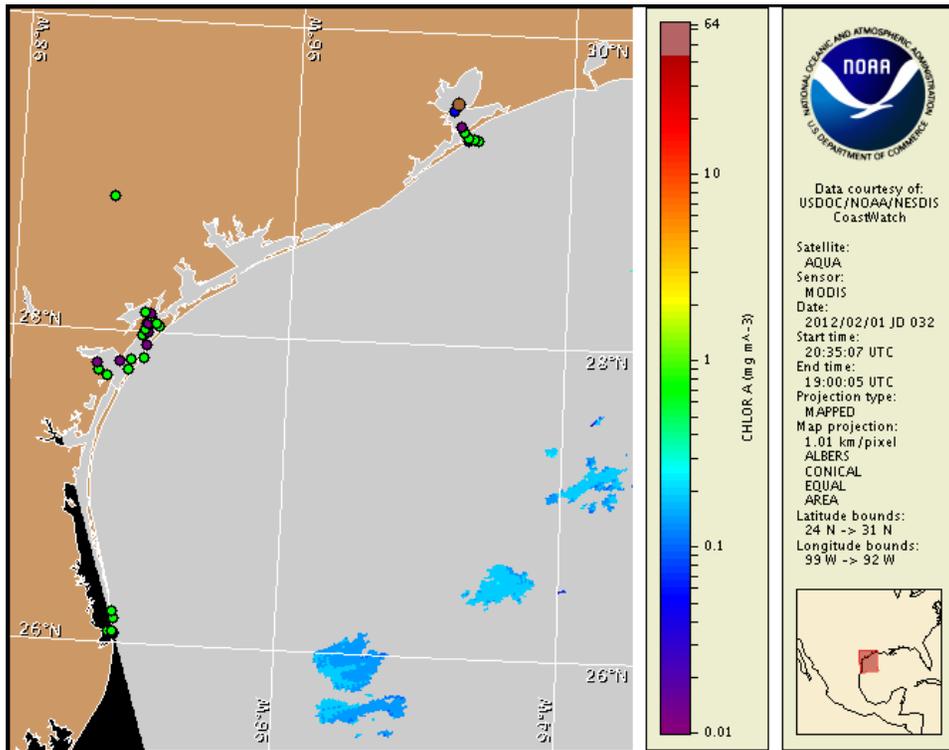
Thursday, 02 February 2012

NOAA Ocean Service

NOAA Satellite and Information Service

NOAA National Weather Service

Last bulletin: Monday, January 30, 2012



Satellite chlorophyll image with possible HAB areas shown by red polygon(s). Cell concentration sampling data from January 23 to February 1 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

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 in the Galveston and Port Aransas/Corpus Christi Bay areas. Patchy low impacts are possible in the Galveston and Port Aransas/Corpus Christi Bay areas today through Saturday, with patchy very low impacts possible Sunday. No additional impacts are expected at the coast in Texas today through Sunday, February 5. The Texas Department of State Health Services (DSHS) continues to monitor blooms of the harmful algae *Karenia brevis* (red tide) and will open areas to harvesting when safe. Effective Thursday, February 2, conditionally approved areas 1, 2 and 3 of Lavaca Bay will open to commercial oyster harvesting. Espiritu Santo Bay also remains open. For the latest information on the opening and closing of oyster harvest areas, please call DSHS at 1-800-685-0361.

Analysis

A harmful algal bloom continues in patches in the Galveston Bay and Port Aransas/Corpus Christi Bay areas; however, samples and satellite imagery indicate that *Karenia brevis* concentrations are dissipating.

No new samples have been received from the Galveston Bay region, where the most recent sampling efforts identified 'not present' to 'low a' *K. brevis* concentrations (1/23; TPWD). Recent sampling within the Aransas and Copano bays indicates that *K. brevis* concentrations have decreased or remain at 'not present' at all sampling locations (1/27; TPWD). Within Copano Bay, concentrations continue to range between 'not present' and 'very low a' (1/27; TPWD). Toward the north end of Aransas Bay, concentrations decreased from 'low a' to 'very low a' within Fulton Harbor, and from 'very low a' to 'not present' at ARA 6 offshore Fulton (1/27; TPWD). Along the eastern side of Aransas Bay, concentrations remain at 'not present' at ARA 7 at Long Reef and ARA 13 at Long Reef/St. Jose Island (1/27; TPWD). Along the west side of Aransas Bay, concentrations decreased from 'very low a' to 'not present' within Rockport Harbor, and from 'very low b' to 'very low a' at ARA 11 at ICWW #49 (1/27; TPWD). Concentrations also decreased from 'very low b' to 'very low a' inside Mud Island, at the southern end of Aransas Bay; however, these counts included only *K. mikimotoi* (1/27; TPWD). Two samples collected within Corpus Christi Bay, at COR 8 at the mouth of the Corpus Christi City Marina and COR 22 at the Corpus Christi Ship Channel near La Quinta Channel, also identified *K. mikimotoi* (1/30; TPWD). All samples collected throughout Corpus Christi Bay and within Aransas Pass, including the U.T. Pier at the Port Aransas Jetties, indicate that *K. brevis* is not present (1/27-30; TPWD).

Over the past few days, MODIS imagery (2/1; shown left) has been completely obscured by clouds along the Texas coastline from Sabine Pass to south of the Rio Grande, limiting analysis. MODIS imagery from 1/27-28 (not shown) indicated elevated chlorophyll (2 to 7 µg/L) stretching along much of the Texas coastline, with elevated to very high chlorophyll (4 to >20 µg/L) visible stretching along and offshore from Sabine Pass to Bolivar Roads Pass. 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 120km south from the Galveston Bay region

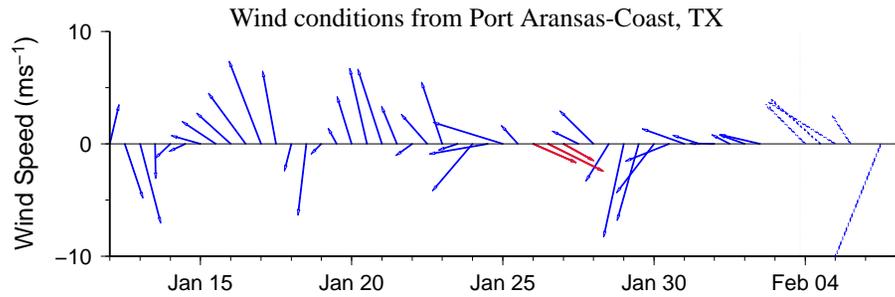
and 30km south from the Port Aransas region from February 1 to 5. Onshore winds forecasted over the next several days may increase the potential for patchy impacts in the Galveston and Aransas/Corpus Christi Bay areas through Saturday.

Derner, Kavanaugh

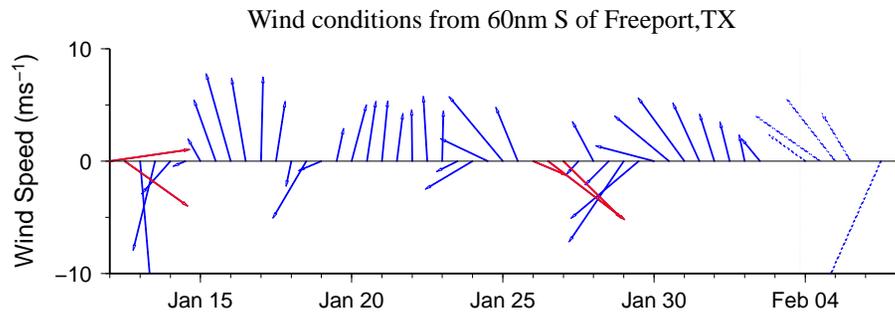
Wind Analysis

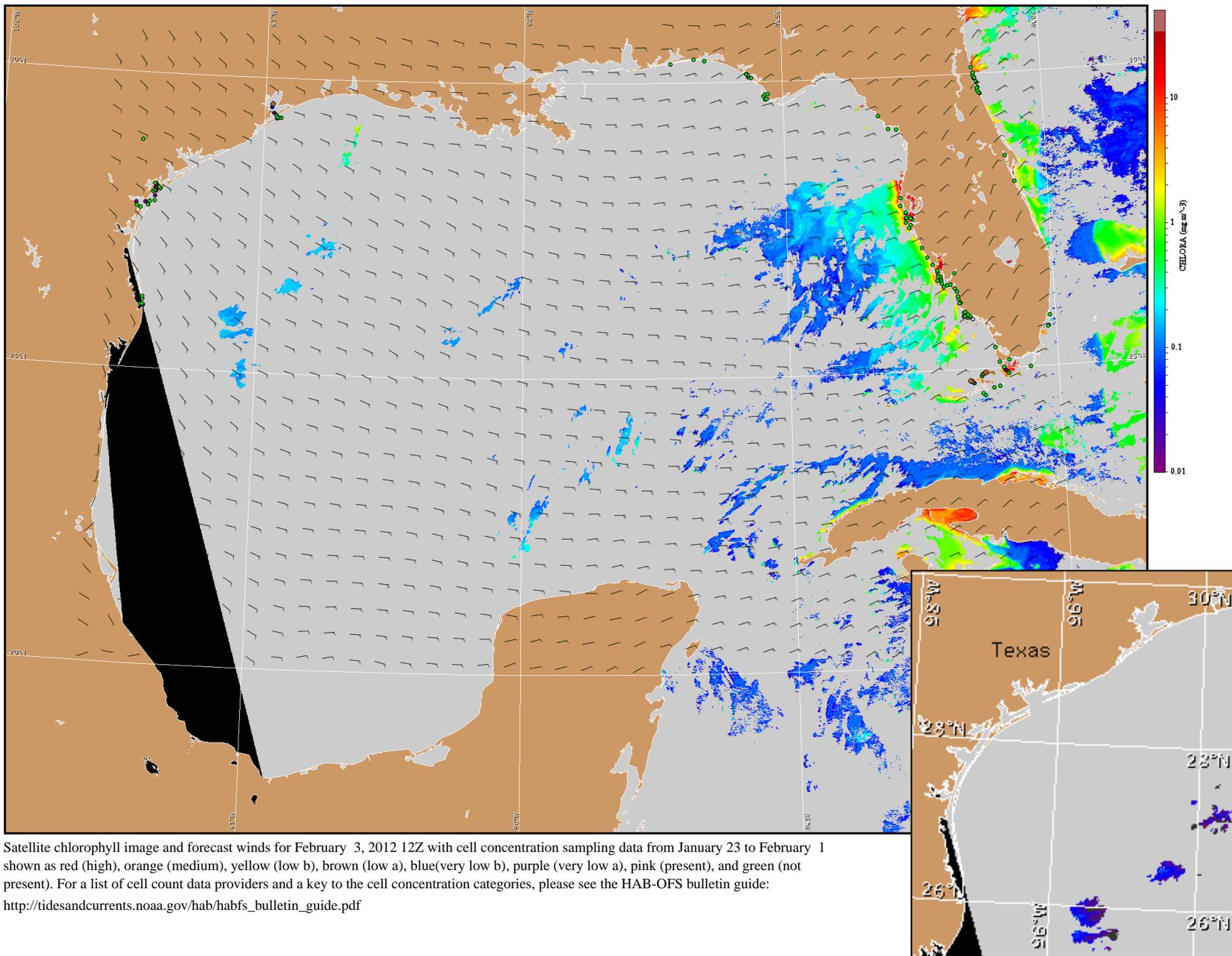
Port Aransas: East winds (5-15kn, 3-8m/s) today becoming southeast (5-15kn) tonight through Friday night. East winds (5kn, 3m/s) Saturday becoming northeast (10-15kn, 5-8m/s) Saturday afternoon. North winds (15-25kn, 8-13m/s) Saturday night through Sunday.

Galveston/Freeport: East winds (5-10kn, 3-5m/s) today becoming southeast (10-15kn) tonight through Friday night. South winds (5-10kn) Saturday becoming southeast Saturday afternoon. North winds (10-25kn, 5-13m/s) Saturday night through Sunday.



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 February 3, 2012 12Z with cell concentration sampling data from January 23 to February 1 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

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