



Gulf of Mexico Harmful Algal Bloom Bulletin

Region: Southwest Florida

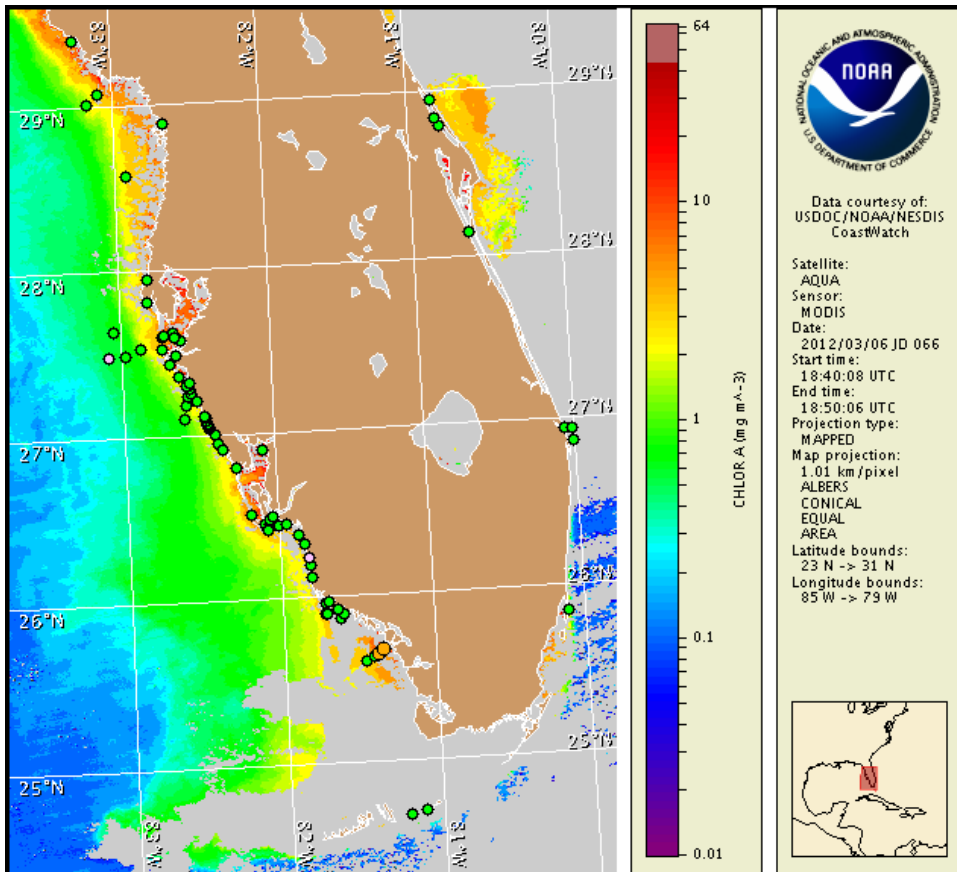
Thursday, 08 March 2012

NOAA Ocean Service

NOAA Satellite and Information Service

NOAA National Weather Service

Last bulletin: Monday, March 5, 2012



Satellite chlorophyll image with possible HAB areas shown by red polygon(s). Cell concentration sampling data from February 27 to March 6 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

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 localized harmful algal bloom was re-identified alongshore northern Monroe County in the Pavilion Key region on March 1. Patchy very low impacts are possible alongshore northern Monroe County today through Sunday. A patchy harmful algal bloom was also last identified offshore in the Gulf side region of the Lower Florida Keys on February 23. No reports of impacts in association with this bloom have recently been reported, however, impacts remain possible in this region. No additional impacts are expected alongshore southwest Florida today through Sunday, March 11.

Analysis

Southwest Florida: A localized *Karenia brevis* bloom was re-identified alongshore and 3 miles offshore of Pavilion Key in northern Monroe County. *K. brevis* concentrations in this region were up to 'medium' last week, no additional samples are presently available. Recent samples collected alongshore Sarasota and Charlotte counties indicate that *K. brevis* is not present (FWRI, SCHD, CCPCPD; 3/5-3/6). Samples collected at Vanderbilt Beach in Collier County this week contained background *K. brevis* concentrations; all other samples collected in Collier County contained no *K. brevis* (CCPCPD, FWRI; 3/5). Detailed sampling information can be obtained through FWRI at <http://myfwc.com/research/redtide/events/status/statewide/>.

Recent MODIS imagery (3/6; shown left) is mostly obscured by clouds in southern Collier and Monroe counties, limiting analysis. Chlorophyll levels continue to appear elevated (4 to 10 µg/L) in the Pavilion Key area, however, elevated chlorophyll in this region is common. The elevated chlorophyll feature located approximately 30 miles south of Cape Romano in northern Monroe County as of 3/3 is obscured by clouds. Forecasted winds may transport the bloom and elevated chlorophyll feature north to northwest through Sunday.

Florida Keys: A patchy harmful algal bloom was last identified offshore in the Gulf side region of the Lower Florida Keys on 2/23. No additional sample information is presently available in this region where 'low a' concentrations of *K. brevis* were detected approximately 8 miles north of Big Spanish Key (MML, 2/23). Continued sampling is recommended.

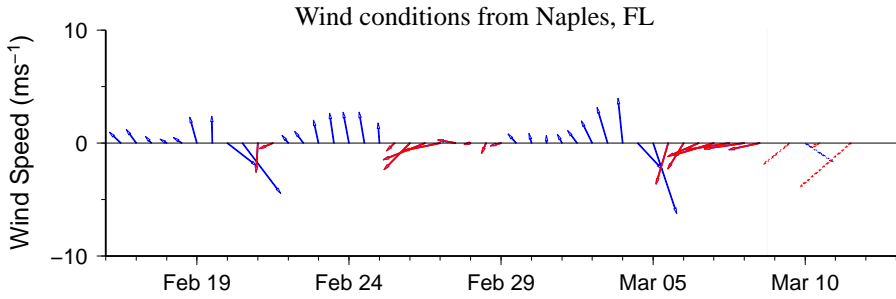
Recent MODIS imagery (3/6; shown left) throughout the Florida Keys is obscured by clouds, limiting analysis. East to northeast winds may transport the previously identified bloom westward through Sunday.

Burrows, Fisher

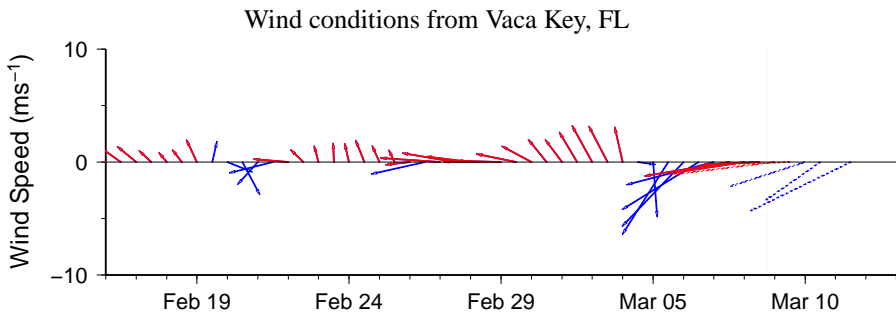
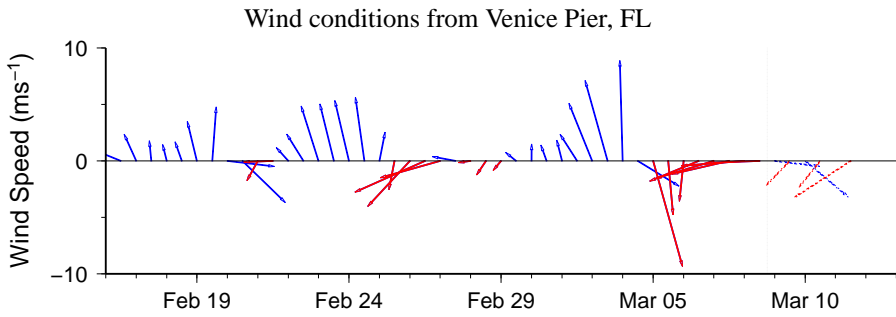
Wind Analysis

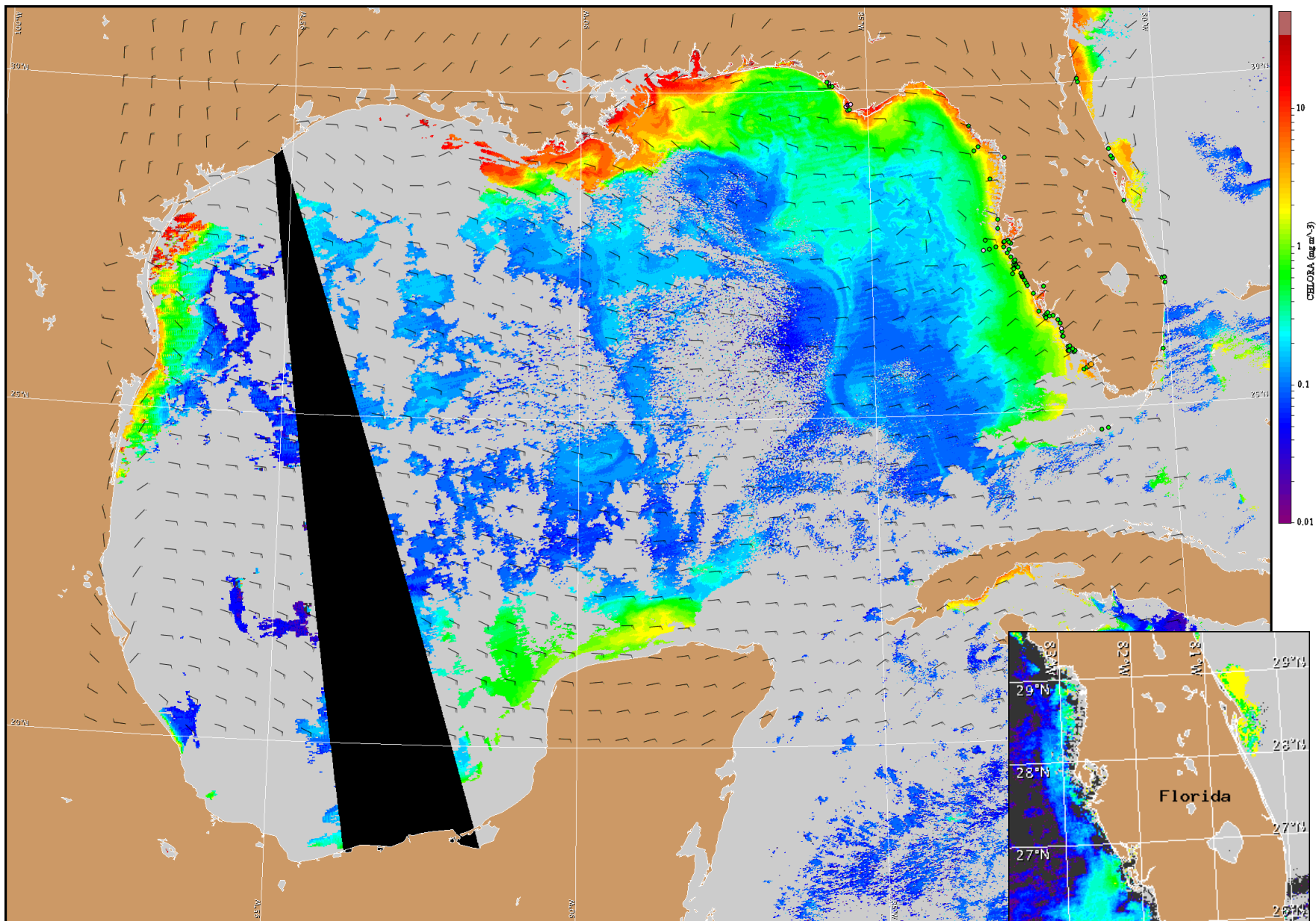
Southwest Florida: East winds today and tonight (12-17 kn, 7-9 m/s). East southeast winds Friday (10-15 kn, 5-8 m/s) becoming east northeast Friday night through Sunday night (8-21 kn, 4-11 m/s).

Gulf Side of Florida Keys: East winds today through Friday (10-20 kn, 5-10 m/s). Northeast to east winds Friday night through Saturday night (10-15 kn, 5-8 m/s). East winds Sunday (15-20 kn, 8-10 m/s).



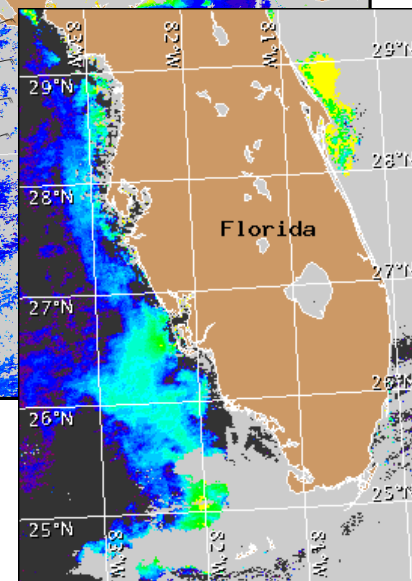
Wind speed and direction are averaged over 12 hours from buoy measurements. Length of line indicates speed; angle indicates direction. Red indicates that the wind direction favors upwelling near the coast. Values to the left of the dotted vertical line are measured values; values to the right are forecasts. Wind observation and forecast data provided by NOAA's National Weather Service (NWS).





Satellite chlorophyll image and forecast winds for March 9, 2012 12Z with cell concentration sampling data from February 27 to March 6 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).