



Gulf of Mexico Harmful Algal Bloom Bulletin

Region: Southwest Florida

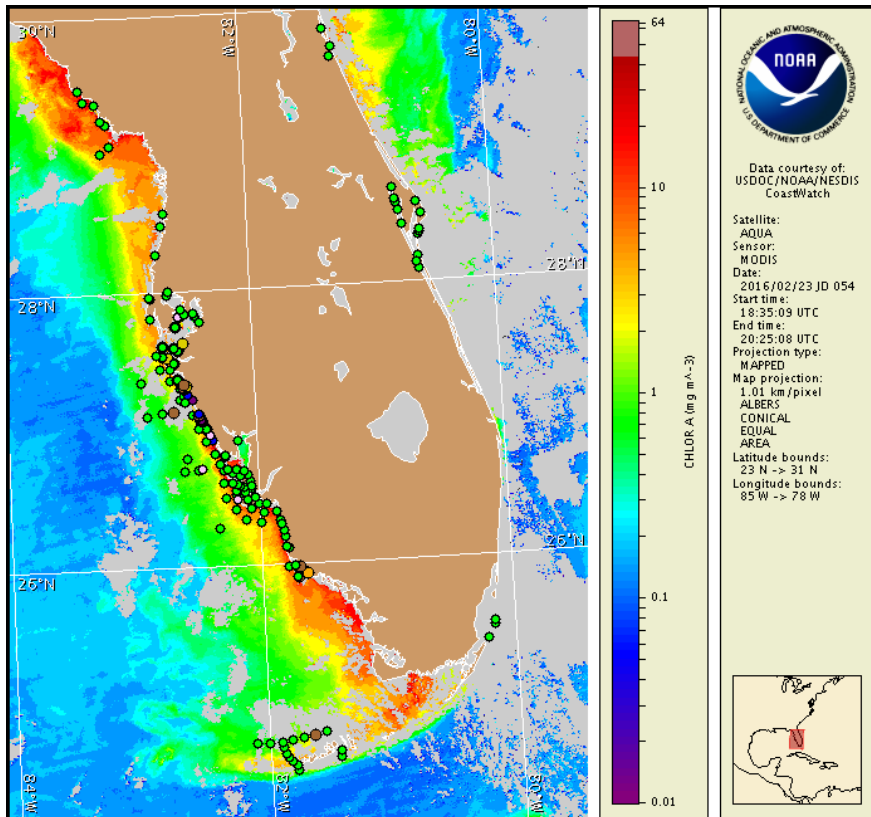
Thursday, 25 February 2016

NOAA National Ocean Service

NOAA Satellite and Information Service

NOAA National Weather Service

Last bulletin: Monday, February 22, 2016



Satellite chlorophyll image with possible *K. brevis* HAB areas shown by red polygon(s), when applicable. Points represent cell concentration sampling data from February 15 to 24: 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 Florida Fish and Wildlife Conservation Commission (FWC) Fish and Wildlife Research Institute. 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/hab_publication/habfs_bulletin_guide.pdf

Detailed sample information can be obtained through FWC Fish and Wildlife Research Institute at:

<http://myfwc.com/redtidestatus>

To see previous bulletins and forecasts for other Harmful Algal Bloom Bulletin regions, visit at: <http://tidesandcurrents.noaa.gov/hab/bulletins.html>

Conditions Report

Karenia brevis (commonly known as Florida red tide) ranges from not present to medium concentrations along the coast of southwest Florida and offshore of the Florida Keys. *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. The highest level of potential respiratory irritation forecast for Thursday, February 25 through Monday, February 29 is listed below:

County Region: Forecast (Duration)

Southern Pinellas, bay regions: Low (Th-Su), Very Low (M)

Northern Manatee, bay regions: Moderate (Th-Su), Low (M)

Southern Manatee: Very Low (Th-M)

Southern Manatee, bay regions: Moderate (Th-Su), Low (M)

Northern Sarasota: Very Low (Th-M)

Northern Sarasota, bay regions: Moderate (Th-Su), Low (M)

Southern Sarasota: Very Low (Th-M)

Central Collier, bay regions: Moderate (Th-M)

All Other SWFL County Regions: None expected (Th-M)

Check http://tidesandcurrents.noaa.gov/hab/beach_conditions.html for recent, local observations. Health information, from the Florida Department of Health and other agencies, is available at http://tidesandcurrents.noaa.gov/hab/hab_health_info.html. Respiratory irritation and dead fish have been reported in Sarasota County. Dead fish have been reported in Collier County.

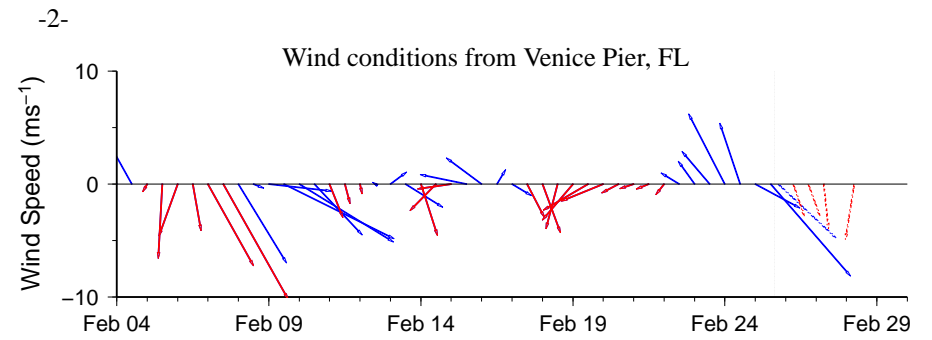
Analysis

Recent samples collected along-and offshore southwest Florida indicate background to 'medium' *Karenia brevis* concentrations from northern Pinellas to central Collier counties and up to 'low a' concentrations offshore the Florida Keys (FWRI, MML, SCHD, CCENRD; 2/19-24). Samples collected early this week indicate that *K. brevis* is present offshore the lower Florida Keys, with 'very low a' to 'low a' concentrations identified approximately 1.7-3.4 miles north of Sawyer and Marvin keys (FWRI, MML; 2/21-23). The most recent sampling alongshore Pinellas and Collier counties continue to indicate that *K. brevis* is not present (FWRI, CCENRD; 2/19-22). Alongshore and in the bay regions of Lee and Charlotte counties, recent sampling indicated *K. brevis* was not present with the exception of two background samples detected at the Boca Grande Fishing Pier and Blind Pass (FWRI; 2/20-23). Over the last few days respiratory irritation and dead fish have been reported from various locations in Sarasota County and dead fish have been reported in Collier County (FWRI, MML; 2/22-25). Detailed sample information and a summary of impacts can be obtained through FWC Fish and Wildlife Research Institute at: <http://myfwc.com/redtidestatus>.

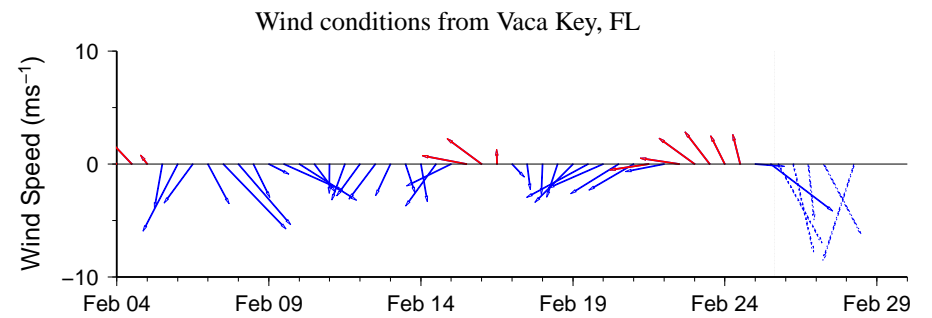
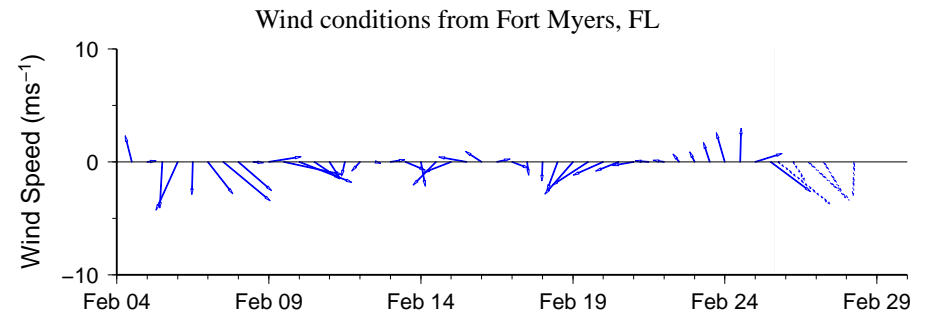
In recent ensemble imagery (MODIS Aqua, 2/23), patches of elevated to very high chlorophyll (2 to >20 $\mu\text{g/L}$) with the optical characteristics of *K. brevis* are visible along-and offshore northern Charlotte to northern Lee counties, where sampling has indicated not present to 'very low b' *K. brevis* concentrations, as well as along- and offshore northern Collier County where recent sampling indicated *K. brevis* was not present.

North to northwest winds forecast today through Sunday may promote southerly transport of surface *K. brevis* concentrations alongshore southwest Florida.

Davis, Derner



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).

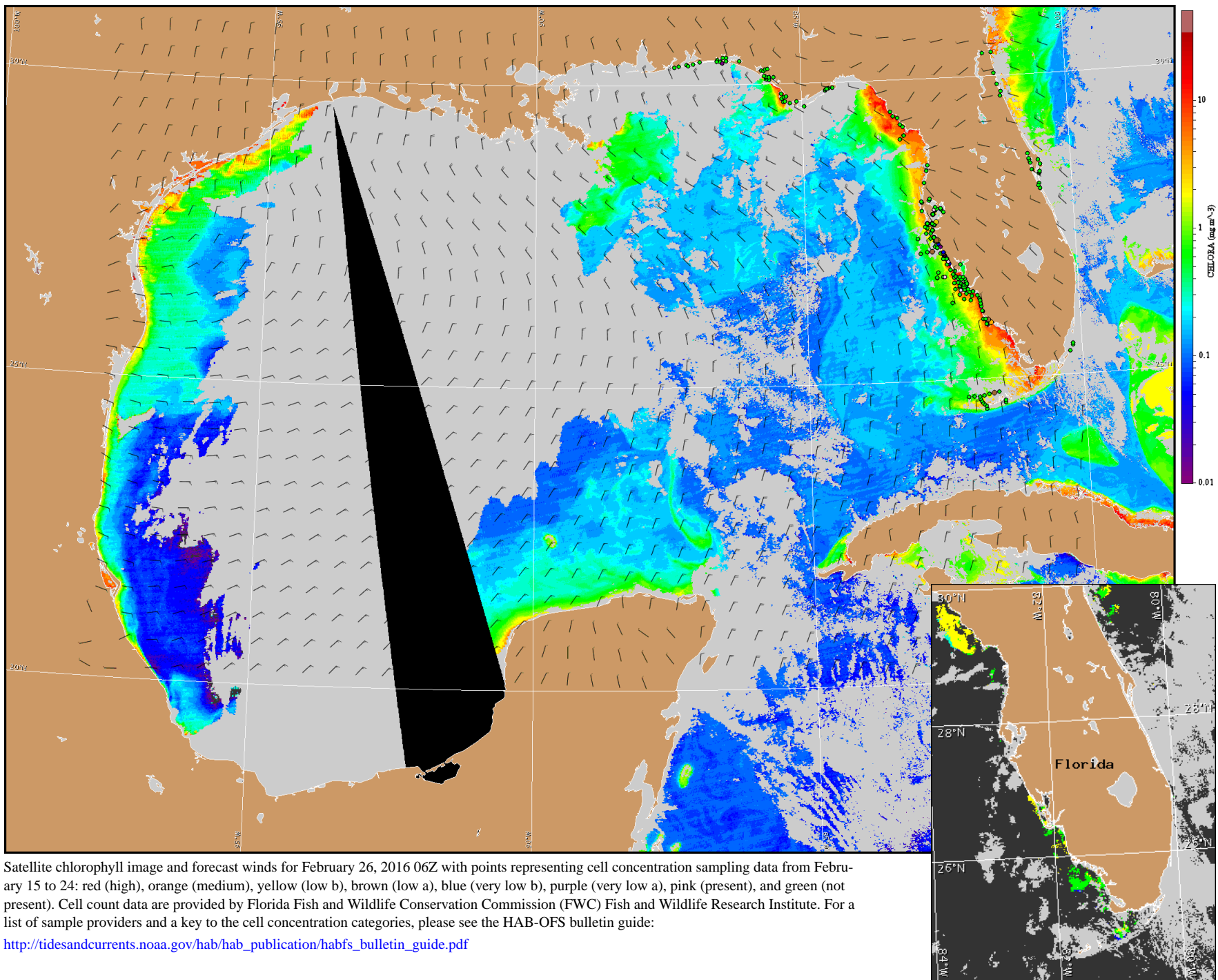


Wind Analysis

Englewood to Tarpon Springs (Venice): Northwest winds (15-20kn, 8-10m/s) today. North winds (5-15kn, 3-8m/s) Friday through Saturday. North to northeast winds (5-10kn, 3-5m/s) Sunday. East winds (5kn, 3m/s) Monday.

Chokoloskee to Bonita Beach: Northwest to north northwest winds (10-20kn, 5-10m/s) today through Friday. North to north northeast winds (10-15kn, 5-8m/s) Saturday. East winds (5-15kn) Sunday through Monday.

Gulf of Mexico From West End of Seven Mile Bridge to Halfmoon Shoal: Northwest to north winds (10-20kn) today through Saturday becoming north to northeast winds (10-15kn, 5-8m/s) Saturday night through Monday.



Satellite chlorophyll image and forecast winds for February 26, 2016 06Z with points representing cell concentration sampling data from February 15 to 24: 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 Florida Fish and Wildlife Conservation Commission (FWC) Fish and Wildlife Research Institute. 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 with *K. brevis* optical characteristics shown in yellow (see p. 1 analysis for interpretation).