



Gulf of Mexico Harmful Algal Bloom Bulletin

Region: Southwest Florida

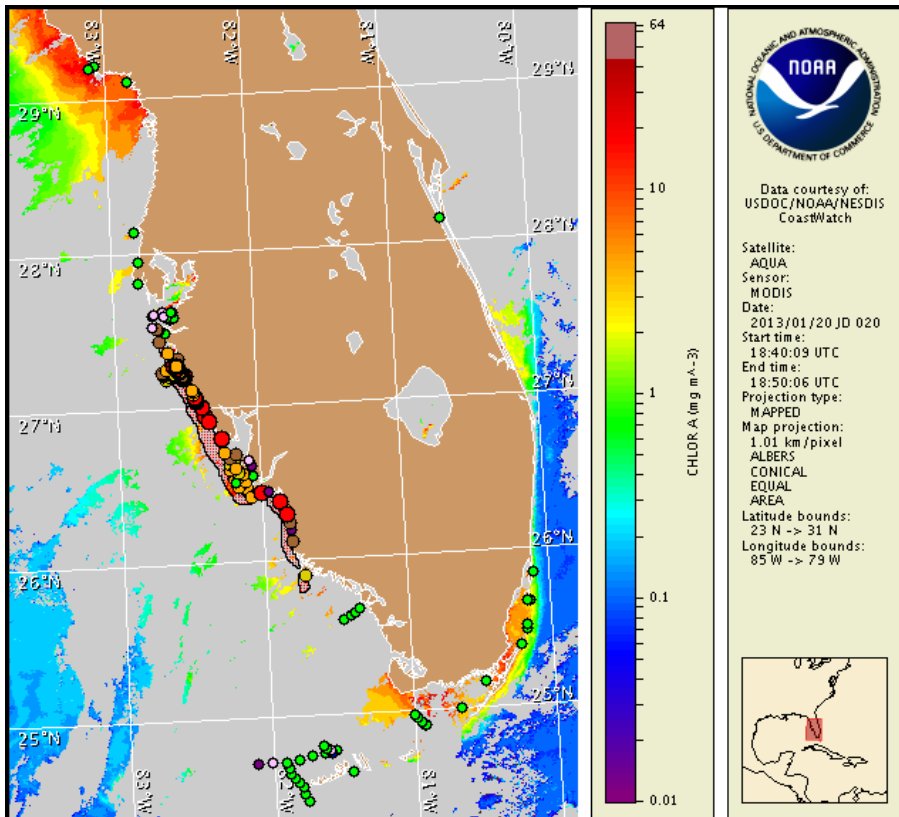
Tuesday, 22 January 2013

NOAA National Ocean Service

NOAA Satellite and Information Service

NOAA National Weather Service

Last bulletin: Thursday, January 17, 2013



Satellite chlorophyll image with possible *K. brevis* HAB areas shown by red polygon(s). Cell concentration sampling data from January 13 to 21 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). Cell count data are provided by Florida 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/habfs_bulletin_guide.pdf

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

<http://myfwc.com/research/redtide/events/status/statewide/>

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

Conditions Report

Very low to high concentrations of *Karenia brevis* (commonly known as Florida Red Tide) are present along- and offshore from southern Pinellas to Collier counties, as well as offshore the gulfside of the lower Florida Keys. Alongshore southern Manatee, Sarasota, and Charlotte counties, patchy low respiratory impacts are possible today through Thursday. In the bay regions of Charlotte and Lee counties, patchy high respiratory impacts are possible today through Thursday. Alongshore southern Lee and northern Collier counties, patchy low respiratory impacts are possible today through Thursday. In the bay areas of central Collier County, patchy moderate respiratory impacts are possible today through Thursday. No respiratory impacts are expected elsewhere alongshore southwest Florida, including the Florida Keys, today through Thursday, January 24. Over the past few days, reports of respiratory irritation were received from Sarasota, Manatee, Charlotte, and Collier counties. Reports of dead fish were received from Sarasota, Manatee, Lee, Charlotte, and Collier County.

Analysis

Southwest Florida: A harmful algal bloom of *Karenia brevis* is present along- and offshore southwest Florida from southern Pinellas to Collier counties, with *K. brevis* concentrations ranging from 'not present' to 'high'. Recent sampling along- and offshore Sarasota County indicated *K. brevis* concentrations from 'very low a' to 'high' (FWRI, MML; 1/16). Samples collected in the Pine Island Sound region and alongshore central Lee County identified 'very low a' to 'high' concentrations of *K. brevis* (FWRI; 1/16). Sampling alongshore Collier County identified 'high' concentrations of *K. brevis* at Barefoot Beach in northern Collier and 'low b' concentrations in the Marco Island region (FWRI, CCPCD; 1/17). Respiratory irritation continues to be reported at several beaches along Sarasota, Manatee (Coquina Beach), Charlotte (GI South Bridge), and Collier counties (MML, CCPCPD; 1/17-22). Numerous fish kills have also been reported over the last several days in Manatee, Sarasota, Lee, Charlotte, and Collier counties (FWRI; 1/17-21).

Recent MODIS Aqua imagery (1/20, shown left), is obscured by clouds along- and offshore southwest Florida, preventing analysis in this region.

Upwelling favorable winds forecast over the next several days may increase the potential for bloom intensification. Northerly winds were observed over the weekend and are forecasted to continue through Wednesday, which may promote southerly transport of the bloom. Offshore winds forecast Tuesday through Thursday may decrease the likelihood of respiratory impacts alongshore southwest Florida except for in the bay regions of Charlotte, Lee, and Collier counties.

Florida Keys: A harmful algal bloom of *Karenia brevis* is present offshore the gulf side of the lower Florida Keys. The most recent sampling indicates 'not present' to 'very low a' *K. brevis* concentrations offshore the lower Florida Keys (MML; 1/15-21). MODIS Aqua imagery (1/20; shown page 1) is obscured by clouds along- and offshore the Florida Keys, limiting analysis.

Burrows, Davis, Kavanaugh

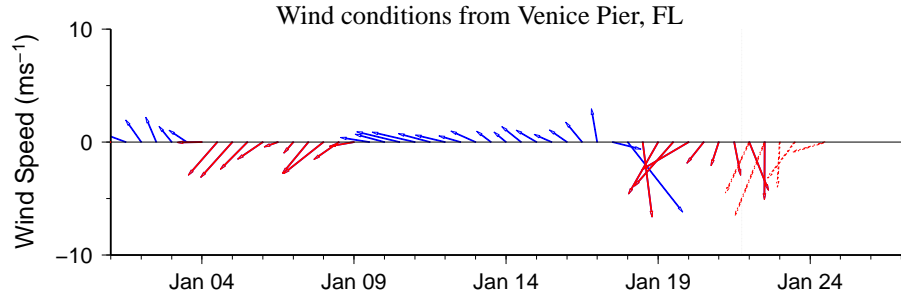
Wind Analysis

Pinellas to Charlotte counties: North winds (15 kn, 8 m/s) today. Northeast winds (10-20 kn, 5-10m/s) tonight through Wednesday. North winds (10 kn, 5 m/s) Thursday becoming northeast winds (10 kn) Thursday night.

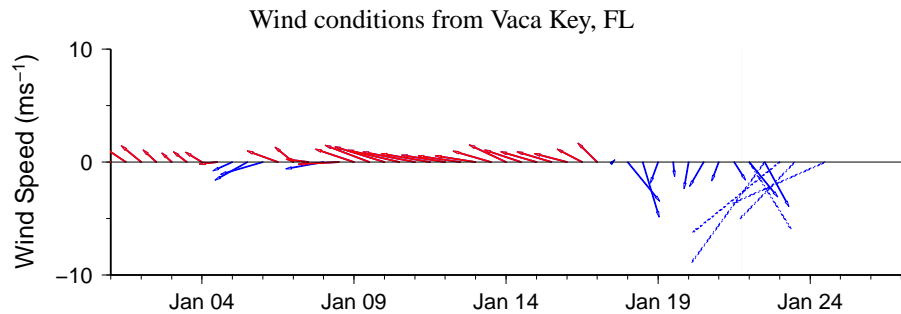
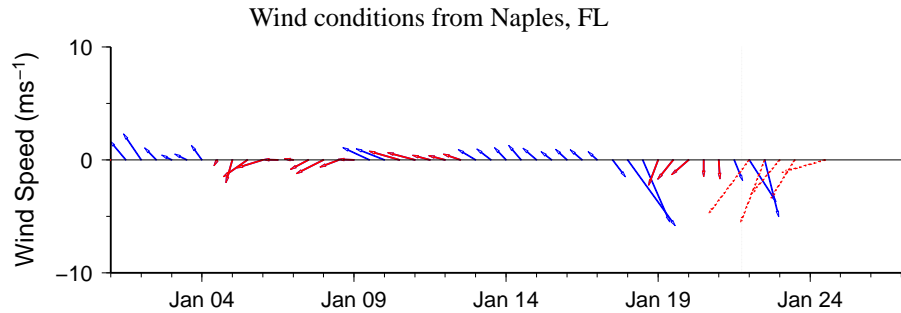
Charlotte and Lee counties: North winds (15 kn) today. Northeast winds (10-20 kn) tonight through Thursday.

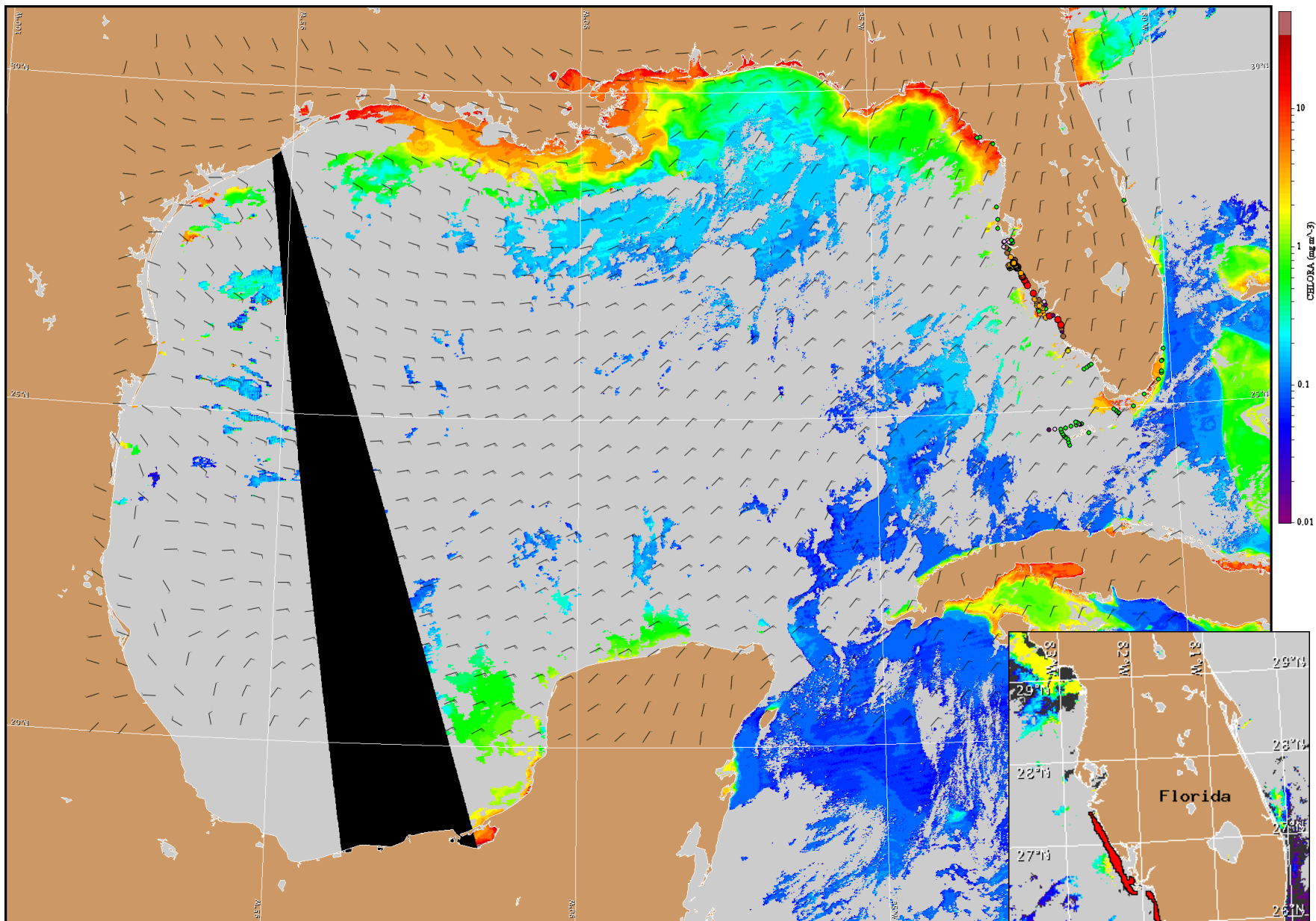
Collier and Monroe counties: North northeast winds (8-13kn, 4-7m/s) today. Northeast winds (12-19 kn, 6-10 m/s) tonight through Wednesday. North northeast winds (11-16 kn, 6-8 m/s) Thursday becoming northeast Thursday night.

Gulf side of lower Florida Keys: North winds (15kn) today. North to northeast winds (15-20 kn) tonight through Thursday.



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 January 23, 2013 12Z with cell concentration sampling data from January 13 to 21 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). Cell count data are provided by Florida 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 of high chlorophyll concentration shown in yellow (see p. 1 analysis for interpretation).