



Gulf of Mexico Harmful Algal Bloom Bulletin

Region: Southwest Florida

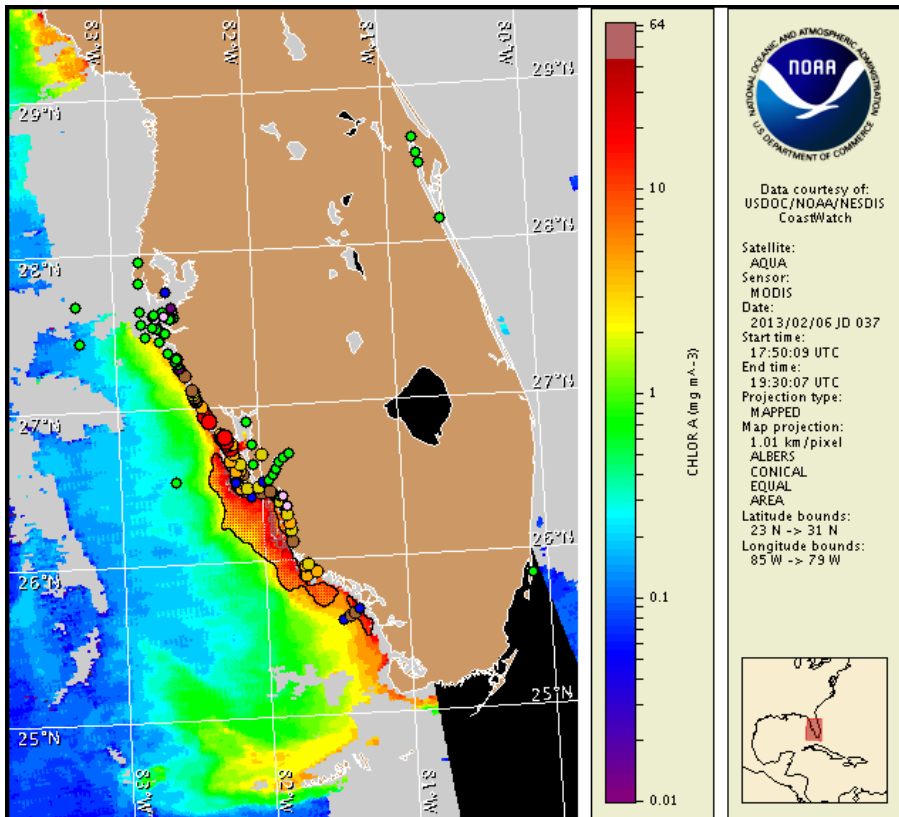
Thursday, 07 February 2013

NOAA National Ocean Service

NOAA Satellite and Information Service

NOAA National Weather Service

Last bulletin: Monday, February 4, 2013



Satellite chlorophyll image with possible *K. brevis* HAB areas shown by red polygon(s). Cell concentration sampling data from January 28 to February 5 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 southwest Florida from southern Pinellas to Monroe counties. Alongshore of northern Sarasota County, patchy low respiratory impacts are possible today through Monday. In southern Sarasota, patchy high respiratory impacts are possible today and Friday, with low impacts possible Saturday through Monday. In the bay regions of Charlotte County, patchy high respiratory impacts are possible today through Monday. In the bay regions Lee County, patchy moderate respiratory impacts are possible today, Friday and Monday, with high impacts possible on Saturday and Sunday. Alongshore Charlotte County, patchy high impacts are possible today and Friday, with low impacts possible Saturday through Monday. Alongshore southern Lee and northern Collier counties, patchy moderate respiratory impacts are possible today and Friday, with patchy very low respiratory impacts possible Saturday through Monday. In the bay regions of central Collier County, patchy moderate respiratory impacts are possible today and Friday, with high impacts possible Saturday through Monday. No respiratory impacts are expected elsewhere alongshore southwest Florida today through Monday, February 11. Reports of dead fish were received from Charlotte and Sarasota counties over the past few days.

Analysis

A patchy harmful algal bloom of *Karenia brevis* persists along- and offshore southwest Florida from southern Pinellas to Monroe counties, with *K. brevis* concentrations ranging from 'not present' to 'high'. Recent sampling alongshore and in the bays of northern Pinellas and Manatee counties indicated *K. brevis* was 'not present' (FWRI; 2/4-5). Recent sampling in Sarasota and County indicates 'low a' to 'high' concentrations of *K. brevis* (FWRI, SCHD; 1/28-31, 2/4). Recent sampling in Collier County indicates 'low a' to 'medium' concentrations of *K. brevis* (CCPCPD; 2/6). Samples collected from the bay regions of Charlotte and Lee indicate 'low a' to 'high' concentrations of *K. brevis* (FWRI; 2/5). Fish kills have also been reported over the past few days in Charlotte and Sarasota counties over the past few days (FWRI, 2/5).

Recent imagery over the past several days indicates the band of chlorophyll persists and has intensified overall, with extensive patches of very high chlorophyll (<10 µg/L). The band is more cohesive, stretching along- and offshore predominately from Englewood Beach (Charlotte County) to south of Pavillion Key (Monroe County). Imagery is partially cloudy but also indicates small patches of elevated chlorophyll remain alongshore from Venice Beach (Sarasota County) south to Charlotte County. The offshore extent varies from northern Charlotte county (~4 miles) to generally 10 miles alongshore from the Pine Island Sound region (Charlotte County) to south of the Marco Island region (Collier County). Continued sampling of this area is recommended.

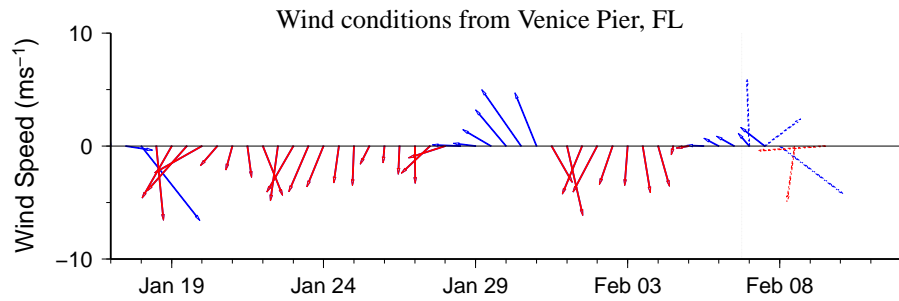
Onshore winds today and Friday from Pinellas to Collier counties may increase the likelihood of respiratory impacts alongshore southwest Florida. Strong winds on Saturday and Sunday may increase the likelihood of impacts in the bay regions from Charlotte to Collier Counties.

Variable winds today through Monday may maintain the location of the bloom.

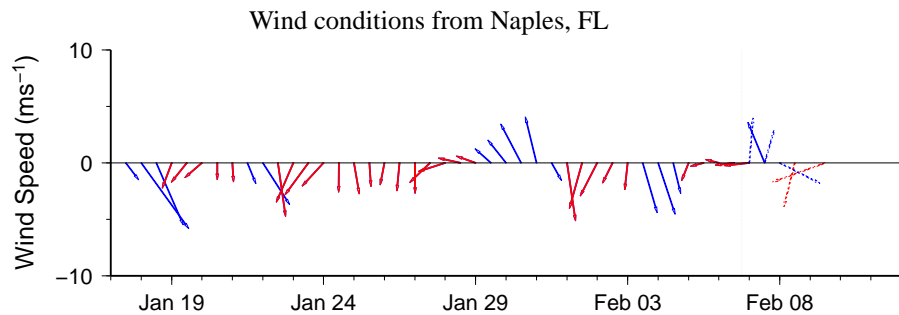
Wind Analysis

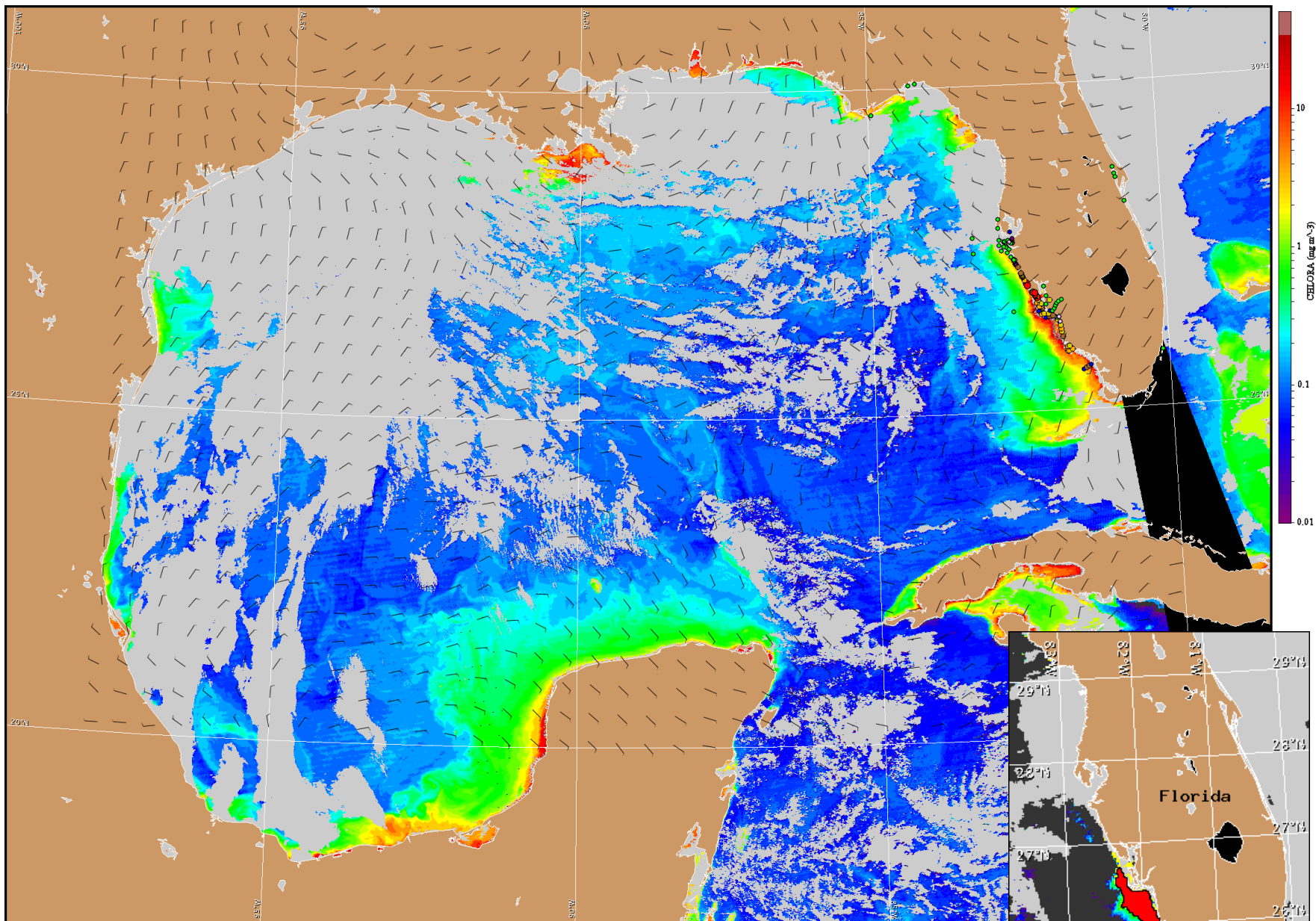
Pinellas to Lee counties: South to southwesterlies today (10-15 kn; 3-8 m/s). Northwest-erlies on Friday and northerlies Friday night (10-15 kn). Northeasterlies on Saturday and strong easterlies on Saturday night through Sunday (10-20 kn; 5-10 m/s). Southeasterlies on Monday (5-20 kn; 3-10 m/s).

Collier to Monroe counties: Southeast to southwesterlies today (5-15 kn; 3-8 m/s). Northwest to southwest winds on Friday (5-15 kn). Strong east to northeast winds on Saturday (10-22 kn; 5-11 m/s). East to southeast winds on Sunday and Monday (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 February 8, 2013 12Z with cell concentration sampling data from January 28 to February 5 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).