Gulf of Mexico Harmful Algal Bloom Bulletin

Region: Southwest Florida

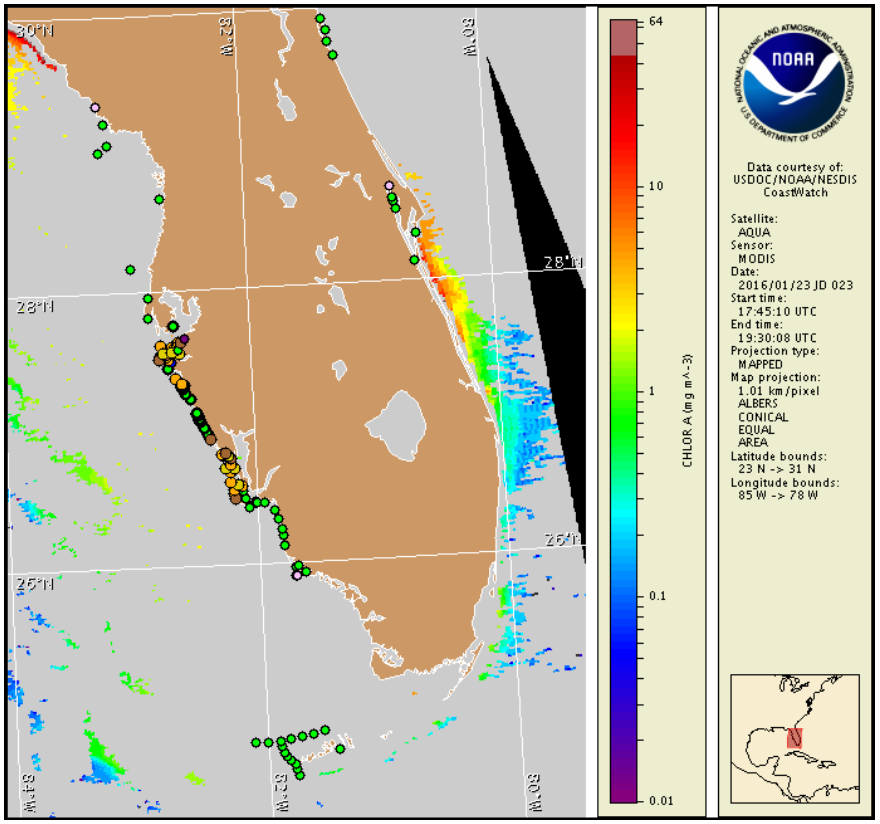
Monday, 25 January 2016

NOAA National Ocean Service

NOAA Satellite and Information Service

NOAA National Weather Service

Last bulletin: Thursday, January 21, 2016



Satellite chlorophyll image with possible *K. brevis* HAB areas shown by red polygon(s), when applicable. Points represent cell concentration sampling data from January 15 to 22: 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/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 is not present in 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 Monday, January 25 through Thursday, January 28 is listed below:

County Region: Forecast (Duration)
Southern Pinellas: Low (M), Very Low (Tu), Moderate (W-Th)
Southern Pinellas, bay regions: Moderate (M-Th)
Northern Manatee, bay regions: Moderate (M-Th)
Southern Manatee: Moderate (M, W-Th), Very Low (Tu)
Southern Manatee, bay regions: Moderate (M-Th)
Northern Sarasota: Moderate (M, W-Th), Low (Tu)
Northern Sarasota, bay regions: Moderate (M-Th)
Southern Sarasota: Low (M-W), Moderate (Th)
Northern Charlotte: Very Low (M-Tu), Low (W-Th)
Southern Charlotte: Very Low (M-W), Low (Th)
Southern Charlotte, bay regions: Moderate (M-Th)
Northern Lee: Low (M-W), Moderate (Th)
Northern Lee, bay regions: Moderate (M-Th)
Central Lee: Low (M-Tu), Moderate (W-Th)
Central Lee, bay regions: Moderate (M-Th)
All Other SWFL County Regions: None expected (M-Th)
All Other NWFL County Regions: Visit http://tidesandcurrents.noaa.gov/hab/#nwfl

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 has been reported in Manatee, Sarasota, and Lee counties.

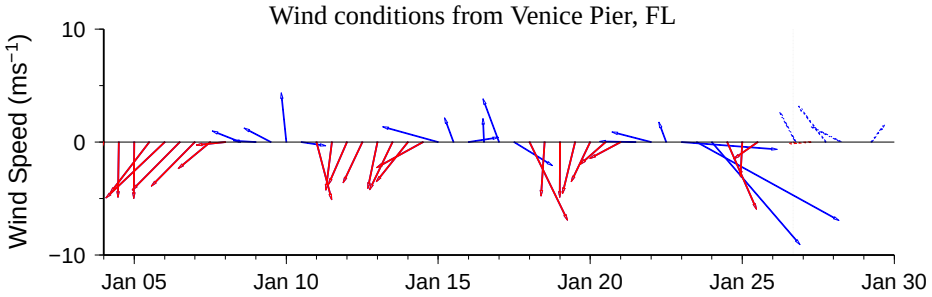
Analysis

Recent samples collected along-and offshore southwest Florida indicate background to 'medium' *Karenia brevis* concentrations from Pinellas to central Lee counties, with the most-dense sampling of 'medium' concentrations located alongshore and in the bay regions of Sarasota County (FWRI; 1/14-1/21). 'Medium' *K. brevis* concentrations were identified in two locations alongshore Captiva Island in central Lee County, extending the presence of 'medium' *K. brevis* concentrations from Pinellas to central Lee counties (FWRI; 1/20). Slight to moderate respiratory irritation has been reported from Manatee Beach, Venice North Jetty, Lido Key, and Nokomis in Sarasota County and Coquina Beach in Manatee County (FWRI; 1/22-1/24). Intense respiratory irritation was reported at the Causeway Islands in Lee County (FWRI; 1/23). Detailed sample information and a summary of impacts can be obtained through FWC Fish and Wildlife Research Institute at: http://myfwc.com/redtidestatus.

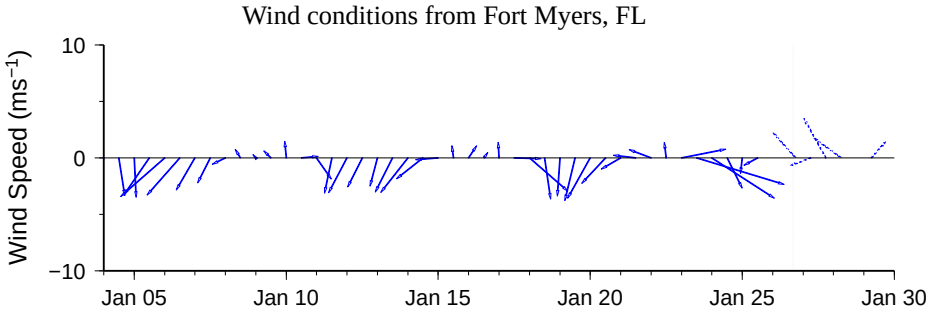
Recent ensemble imagery (MODIS Aqua, 1/23) is completely obscured by clouds alongshore the coast of southwest Florida, limiting chlorophyll analysis at this time.

Southerly winds forecast today through Wednesday may increase the potential for northward transport of surface *K. brevis* concentrations alongshore southwest Florida.

Keeney, Derner



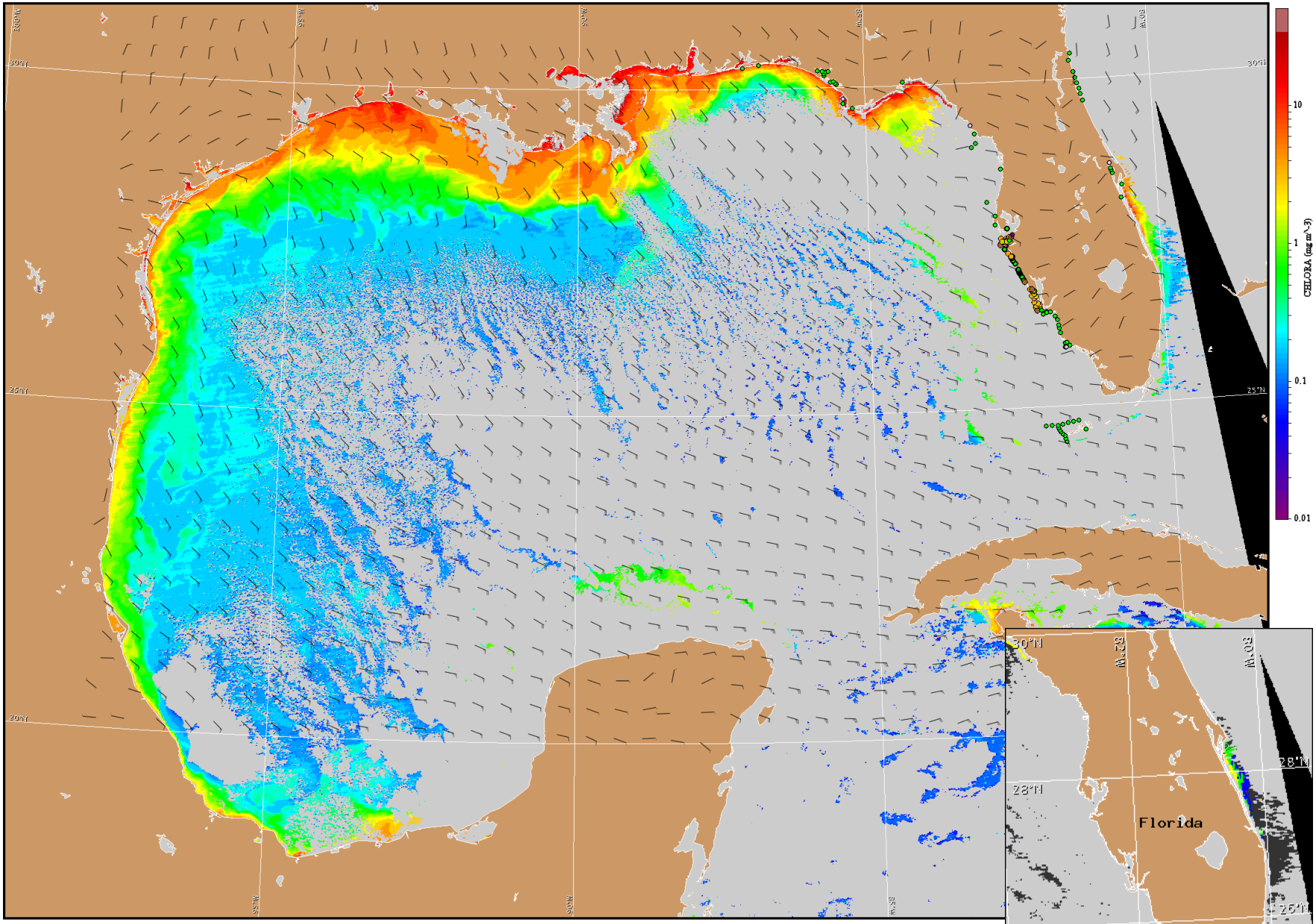
Wind speed and direction are averaged over 12 hours from buoy measurements. Length of line indicates speed; angle indicates direction. Red indicates that the wind direction favors upwelling near the coast. Values to the left of the dotted vertical line are measured values; values to the right are forecasts.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



Wind Analysis

Englewood to Tarpon Springs (Venice): Southeast winds (10kn, 5m/s) today becoming east (5-10kn, 3-5m/s) tonight through Tuesday. Southeast winds (10kn, 5m/s) Tuesday night. South to southwest winds (10kn) Wednesday. North to northwest winds (5-15kn, 3-8m/s) Thursday.

Bonita Beach to Englewood (Ft. Myers): Southeast winds (10kn) today becoming east winds (10kn) tonight. Southeast winds (10kn) Tuesday through Wednesday, shifting to southwest winds (10kn) Wednesday evening. Northwest winds (5-15kn) Thursday.



Satellite chlorophyll image and forecast winds for January 26, 2016 06Z with points representing cell concentration sampling data from January 15 to 22: 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).