



Gulf of Mexico Harmful Algal Bloom Bulletin

Region: Southwest Florida

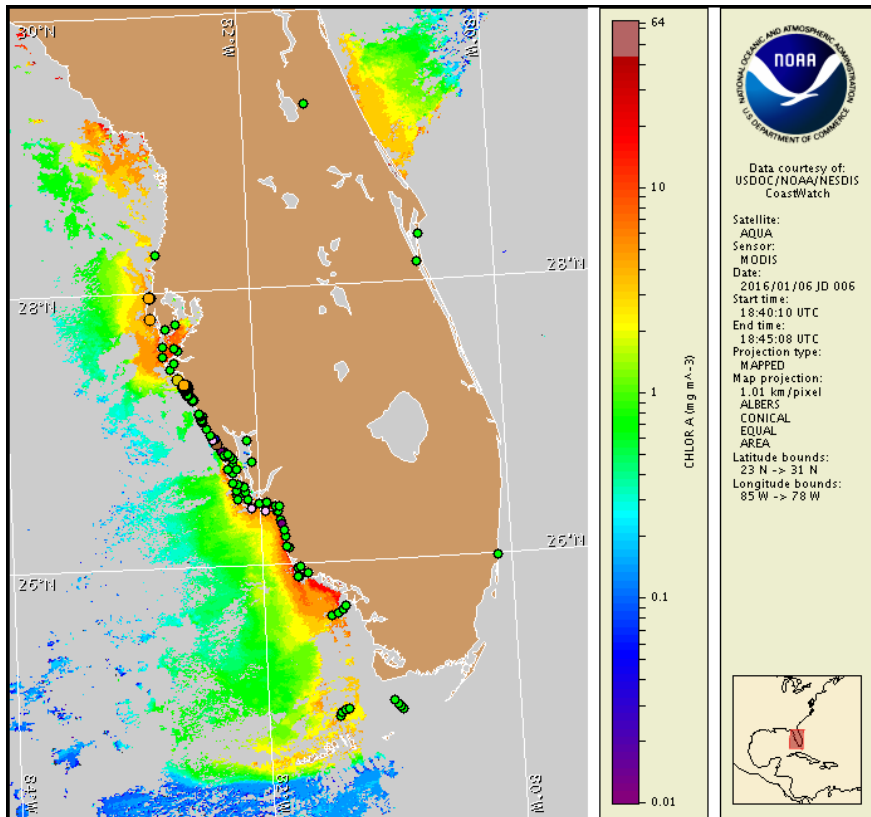
Thursday, 07 January 2016

NOAA National Ocean Service

NOAA Satellite and Information Service

NOAA National Weather Service

Last bulletin: Monday, January 4, 2016



Satellite chlorophyll image with possible *K. brevis* HAB areas shown by red polygon(s), when applicable. Points represent cell concentration sampling data from December 28 to January 6: 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 Thursday, January 7 through Monday, January 11 is listed below:

County Region: Forecast (Duration)

Northern Pinellas: Moderate (Th, Sa-Su), Very Low (F, M)

Northern Pinellas, bay regions: Low (Th-M)

Southern Pinellas: Low (Th), Moderate (F-Su), Very Low (M)

Southern Manatee: Very Low (Th, M), Low (F-Su)

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

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

Northern Charlotte, bay regions: Low (Th-M)

Southern Charlotte, bay regions: None (Th), Very Low (F-M)

Northern Lee: None (Th-F,M), Very Low (Sa-Su)

Northern Collier: None (Th, M), Very Low (F-Su)

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. Dead fish have been reported in Pinellas, Manatee, and Lee counties.

Analysis

Recent samples collected along- and offshore southwest Florida indicate background to 'medium' *Karenia brevis* concentrations from Pinellas to central Collier County, with the 'medium' concentrations present in northern and southern Pinellas County and along-shore northern Sarasota County (FWRI, CCENRD, SCHD, MML; 12/29-1/6). Dead fish have been reported in Pinellas, Manatee, and Lee counties (FWRI; 1/4-5). Detailed sample information and a summary of impacts can be obtained through FWC Fish and Wildlife Research Institute at: <http://myfwc.com/redtidestatus>.

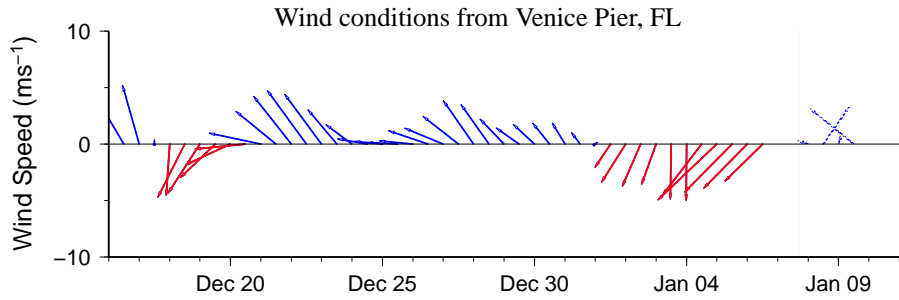
Recent ensemble imagery (MODIS Aqua, 1/6) was partially obscured by clouds along the coast from southern Manatee County to northern Lee County, limiting analysis. Patches of elevated to high chlorophyll (4 to 10 $\mu\text{g/L}$) with some of the optical characteristics of *K. brevis* are visible 5-23km offshore southern Pinellas to southern Manatee counties. Patches of elevated to high chlorophyll (4 to 13 $\mu\text{g/L}$) with some of the optical characteristics of *K. brevis* are also visible along- and offshore central Collier County 1-24km offshore.

Winds forecasted today through Sunday may promote the potential for northerly transport of surface *K. brevis* concentrations from northern Pinellas to northern Sarasota counties.

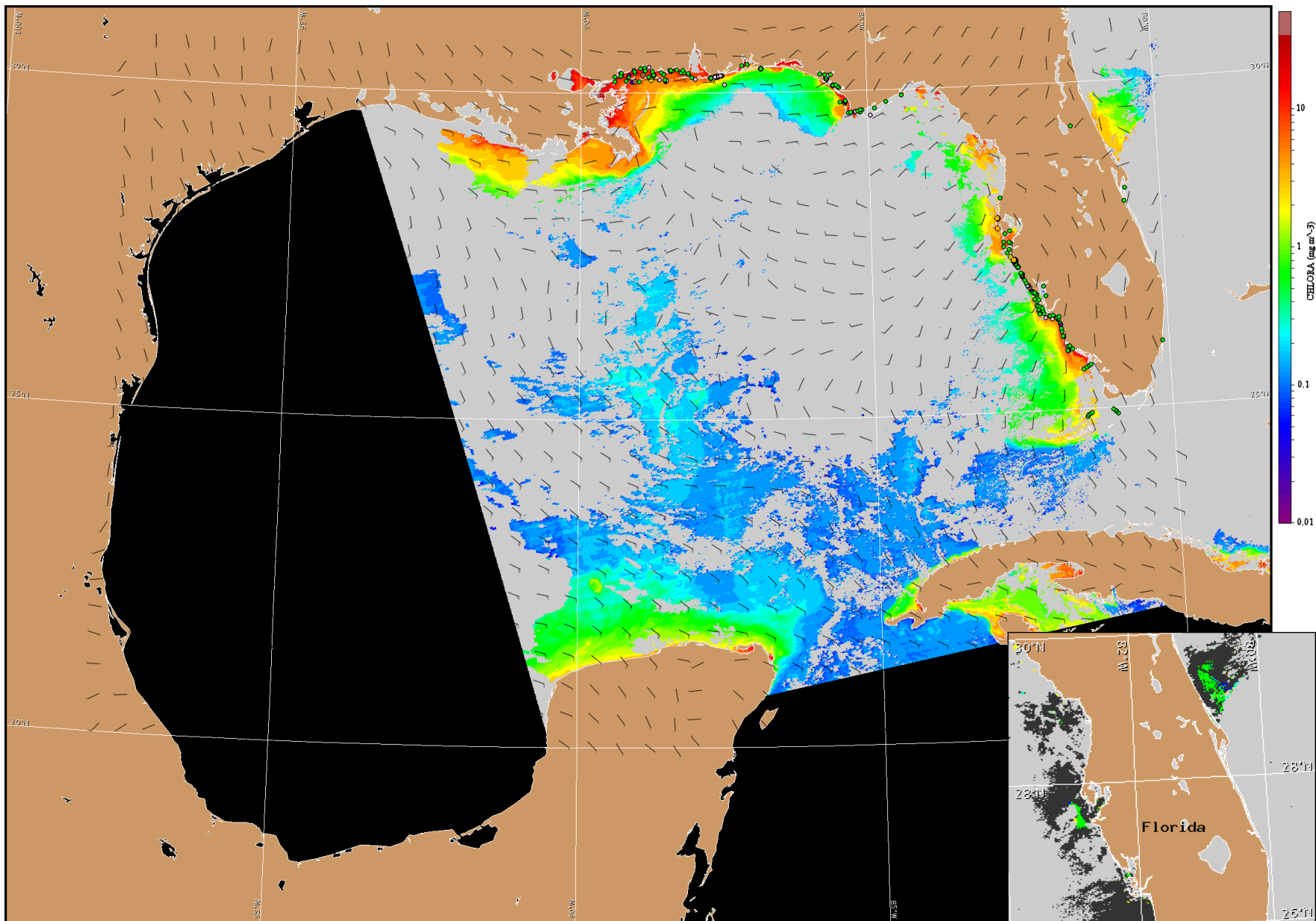
Yang, Davis

Wind Analysis

Englewood to Tarpon Springs (Venice): North winds (5kn, 3m/s) Thursday afternoon. Southeast to south winds (5-15kn, 3-8m/s) Thursday night through Saturday afternoon. Southwest winds becoming west (10kn, 5m/s) Saturday night. Northwest winds (10kn, 5m/s) Sunday. North winds (10kn) Sunday night and Monday.



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 8, 2016 12Z with points representing cell concentration sampling data from December 28 to January 6: 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.

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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).