Gulf of Mexico Harmful Algal Bloom Bulletin

Region: Southwest Florida

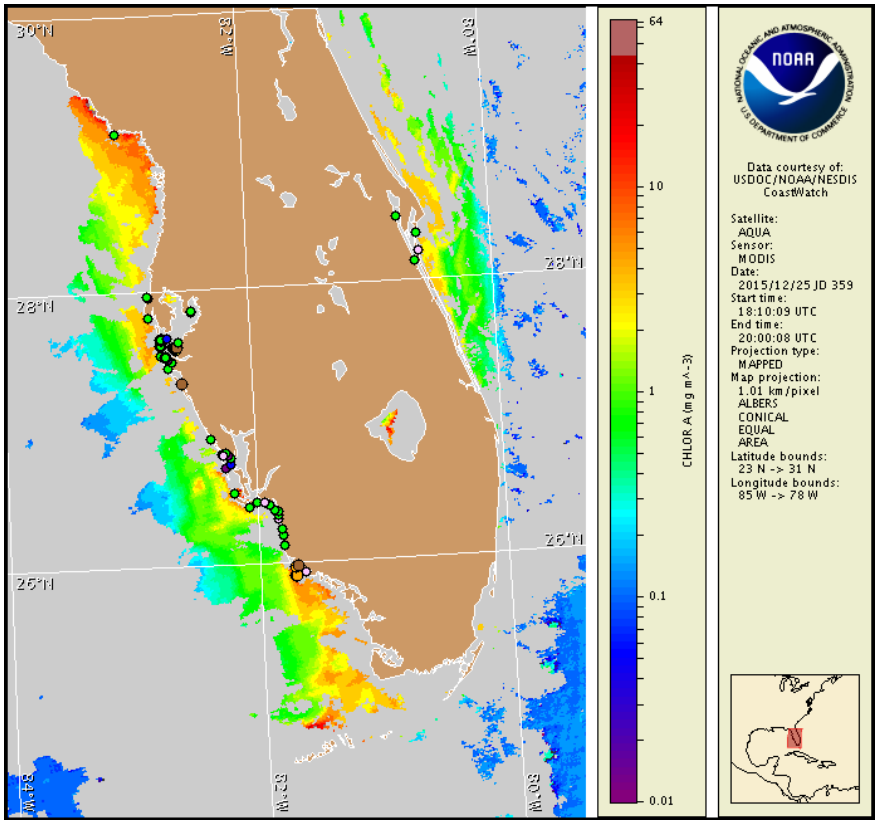
Monday, 28 December 2015

NOAA National Ocean Service

NOAA Satellite and Information Service

NOAA National Weather Service

Last bulletin: Thursday, December 24, 2015



Satellite chlorophyll image with possible *K. brevis* HAB areas shown by red polygon(s), when applicable. Points represent cell concentration sampling data from December 18 to 23: 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, December 28 through Thursday, December 31 is listed below:

County Region: Forecast (Duration)
Southern Pinellas: Low (M-Th)
Southern Pinellas, bay regions: Moderate (M-Th)
Northern Manatee, bay regions: Moderate (M-Th)
Southern Manatee, bay regions: Moderate (M-Th)
Northern Sarasota: Very Low (M), Low (Tu-Th)
Northern Sarasota, bay regions: Moderate (M-Th)
Southern Charlotte, bay regions: Very Low (M-Th)
Northern Lee, bay regions: Very Low (M-Th)
Central Collier: Very Low (M-Th)
Central Collier, 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 Pinellas and Sarasota counties; dead fish have also been reported in Pinellas County.

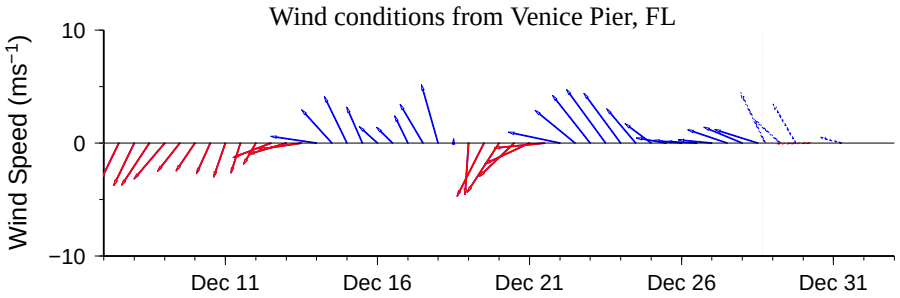
Analysis

No new *Karenia brevis* sampling information has been received since the previous bulletin when conditions along- and offshore the southwest Florida coast indicated background to 'medium' *K. brevis* concentrations from southern Pinellas to central Collier counties. Respiratory irritation has been reported at Fort DeSoto Beach in Pinellas County and at Siesta Key in Sarasota County (MML; 12/25-28). Dead fish and respiratory irritation have been reported at Treasure Island in Boca Ciega Bay in Pinellas County (FWRI; 12/25-26). 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, 12/25), is mostly obscured by clouds from Pinellas to central Collier counties limiting analysis in that region. Patches of elevated chlorophyll (2-7 μg/L) with some of the optical characteristics of *K. brevis* are visible along- and offshore Pinellas, Manatee, Sarasota, and Lee counties.

South to southeast winds forecasted today through Thursday may increase the potential for northerly transport of surface *K. brevis* concentrations alongshore southwest Florida.

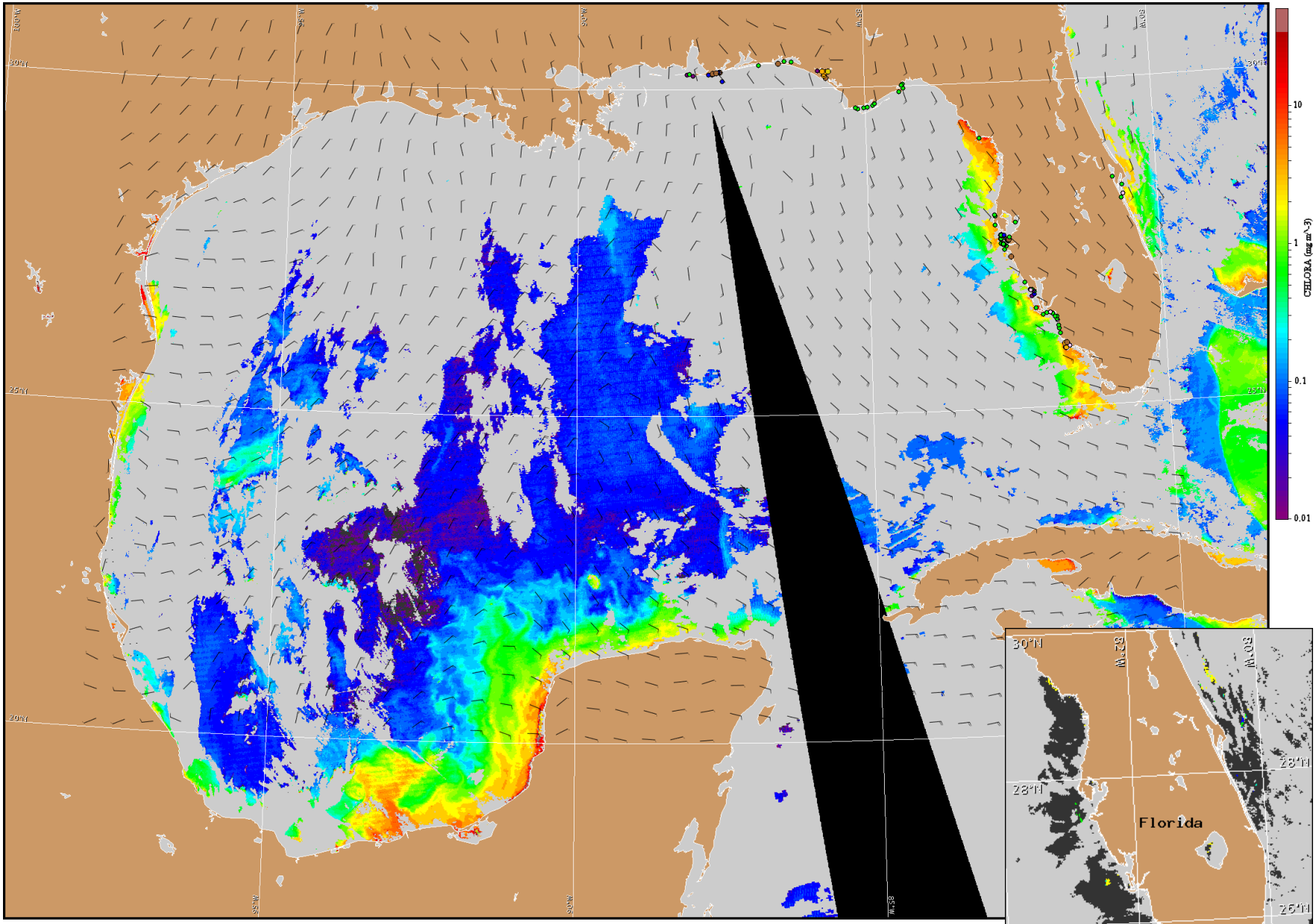
Lalime, Davis



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): South to Southeast winds (5-15kn, 3-8m/s) today through Thursday.



Satellite chlorophyll image and forecast winds for December 29, 2015 12Z with points representing cell concentration sampling data from December 18 to 23: 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).