Gulf of Mexico Harmful Algal Bloom Bulletin

Region: Southwest Florida

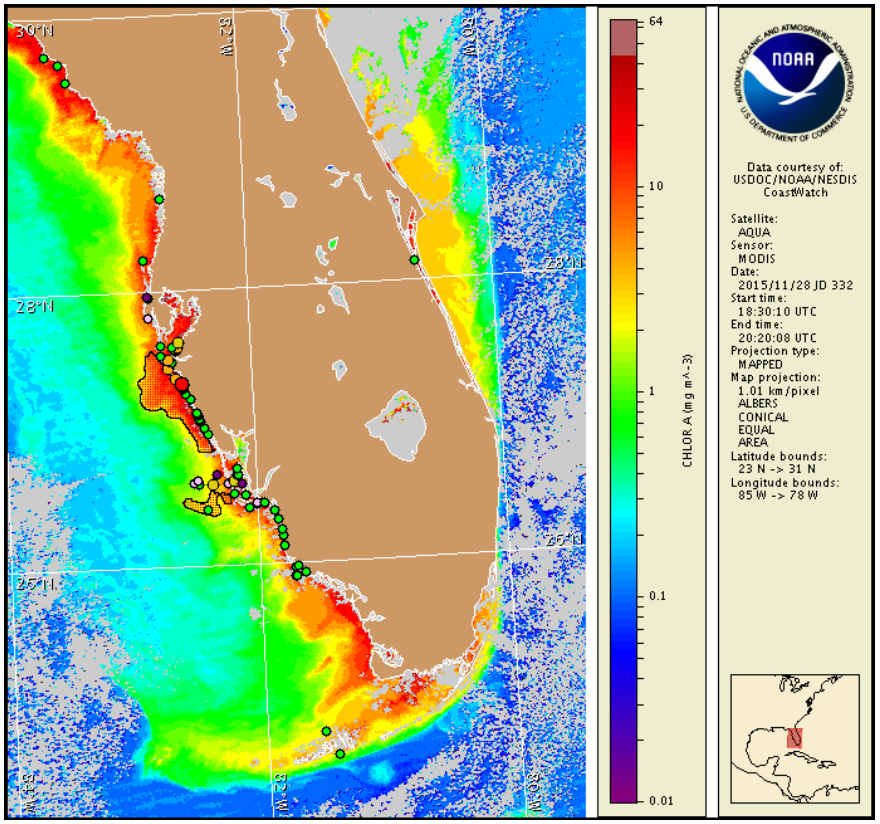
Monday, 30 November 2015

NOAA National Ocean Service

NOAA Satellite and Information Service

NOAA National Weather Service

Last bulletin: Wednesday, November 25, 2015



Satellite chlorophyll image with possible *K. brevis* HAB areas shown by red polygon(s), when applicable. Points represent cell concentration sampling data from November 20 to 27: 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 high 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, wind speed, and direction. The highest level of potential respiratory irritation forecast for Monday, November 30 through Thursday, December 3 is listed below:

County Region: Forecast (Duration)
Northern Pinellas: Very Low (M-Th)
Northern Pinellas, bay regions: Very Low (M-Th)
Southern Pinellas, bay regions: Moderate (M-Th)
Northern Manatee, bay regions: Moderate (M-Th)
Southern Manatee: Very Low (M, Th), Low (Tu), Moderate (W)
Southern Manatee, bay regions: Moderate (M-Th)
Northern Sarasota: Very Low (M, Th), Low (Tu-W)
Northern Sarasota, bay regions: High (M-Th)
Southern Sarasota: Very Low (M-T, Th) Low (W)
Northern Charlotte, bay regions: Very Low (M-Th)
Southern Charlotte: Very Low (M, Th), Low (Tu), Moderate (W)
Southern Charlotte, bay regions: Moderate (M-Th)
Northern 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. Dead fish have been reported from Sarasota and Charlotte counties over the past several days.

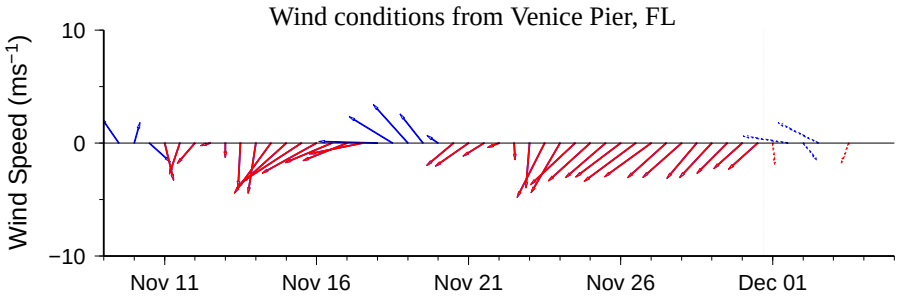
Analysis

Recent samples collected along- and offshore southwest Florida from Pinellas County to the Florida Keys indicate background to 'high' *Karenia brevis* concentrations from northern Pinellas to northern Collier County (FWRI, 11/18-11/24). The highest concentrations of *K. brevis* are still present in the bay regions of northern Sarasota County (FWRI; 11/18-11/24). Up to 'very low b' concentrations of *Karenia brevis* are present in the bay regions of northern Pinellas County, 'low b' concentrations in the bay regions of southern Pinellas County, and 'medium' concentrations in the bay regions of northern and southern Manatee County (FWRI; 11/18-11/24). Reports of dead fish have been received from Sarasota and Charlotte counties. (FWRI, MML; 11/25, 11/30). Detailed sample information and a summary of impacts can be obtained through FWC Fish and Wildlife Research Institute at: http://myfwc.com/redtidestatus.

In recent ensemble imagery (MODIS Aqua, 11/28) patches of elevated to very high chlorophyll (2 to >20 μg/L) with the optical characteristics of *K. brevis* are visible alongshore, extending up to 19 miles offshore Manatee to northern Sarasota counties; and alongshore Lee County, extending up to 23 miles offshore.

Offshore winds forecasted today through Thursday will minimize the potential for respiratory irritation at the coast of southwest Florida.

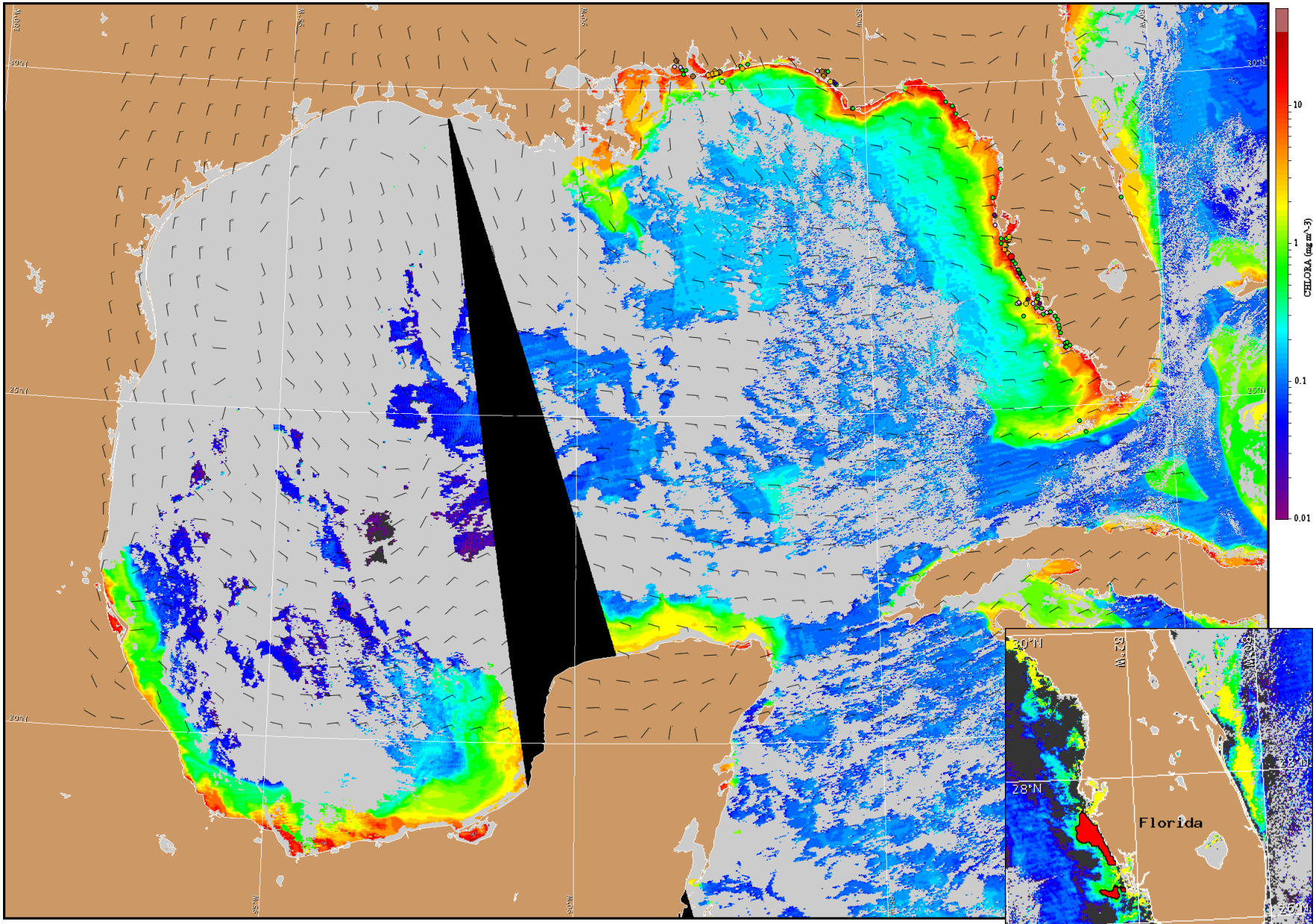
Keeney, Urízar



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): Northeast winds (10kn, 5m/s) today. East winds (5-10kn, 3-5m/s) Tuesday, shifting to northeast winds (5-10kn) Tuesday evening. Southeast winds (5kn, 3m/s) Wednesday, shifting north (5kn) Wednesday evening. Northeast winds (10kn) Thursday.



Satellite chlorophyll image and forecast winds for December 1, 2015 12Z with points representing cell concentration sampling data from November 20 to 27: 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 of high chlorophyll concentration shown in yellow (see p. 1 analysis for interpretation).