Gulf of Mexico Harmful Algal Bloom Bulletin

Region: Southwest Florida

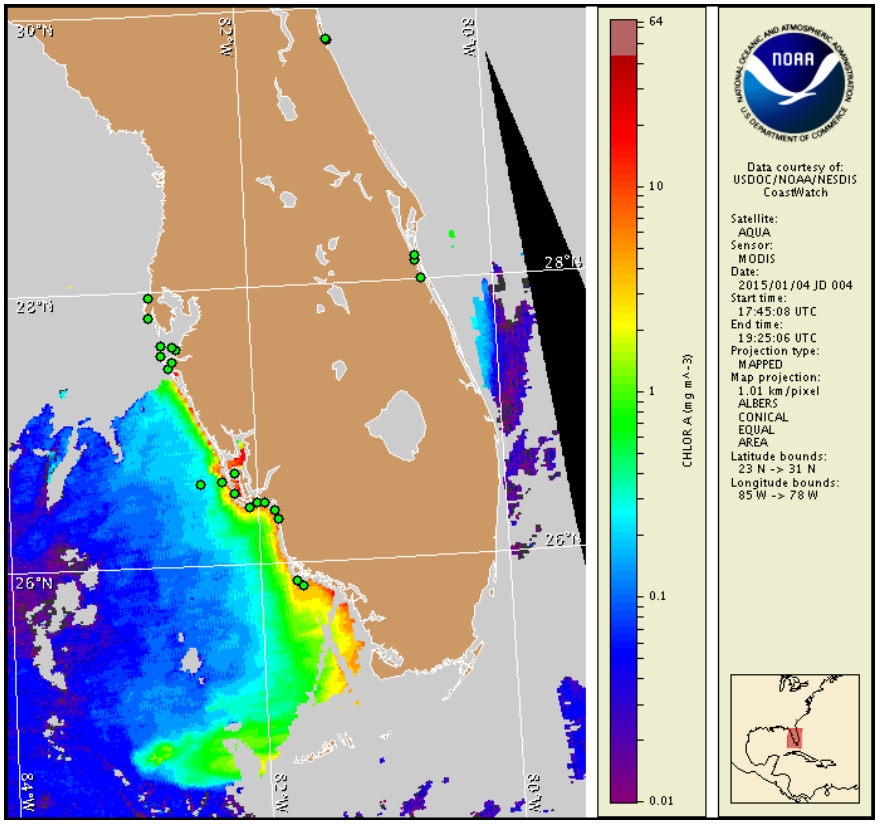
Monday, 05 January 2015

NOAA National Ocean Service

NOAA Satellite and Information Service

NOAA National Weather Service

Last bulletin: Monday, December 29, 2014



Satellite chlorophyll image with possible *K. brevis* HAB areas shown by red polygon(s), when applicable. Points represent cell concentration sampling data from December 26 to 30: 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

There is currently no indication of *Karenia brevis* (commonly known as Florida red tide) along the coast of southwest Florida, including the Florida Keys. No respiratory irritation is expected alongshore southwest Florida, including the Florida Keys, Monday, January 5 through Monday, January 12.

Check http://tidesandcurrents.noaa.gov/hab/beach_conditions.html for recent, local observations.

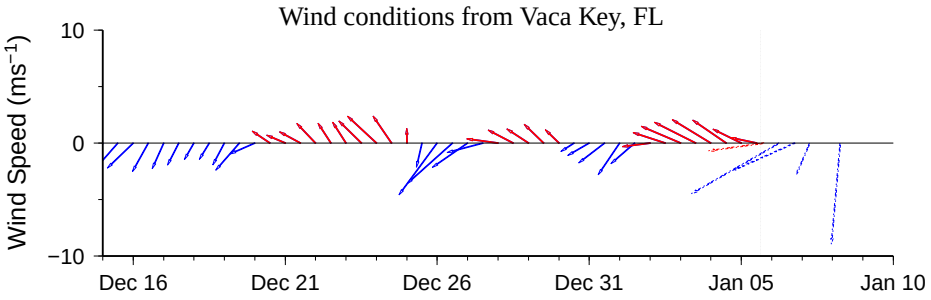
Analysis

The most recent samples received alongshore southwest Florida, from Pinellas to Collier counties, all indicate that *Karenia brevis* is not present (FWRI; 12/27-12/31). In the Florida Keys, no new water samples have been received since sampling confirmed the presence of up to 'medium' concentrations of *K. brevis* offshore north of Sawyer and Harbor Keys in the lower Florida Keys (MML; 12/17-12/18). No reports of dead fish or respiratory irritation associated with *K. brevis* have been received over the past week (FWRI, MML; 12/29-1/5).

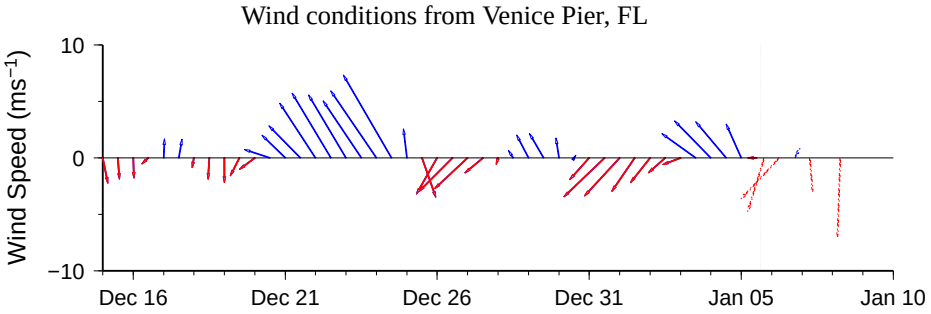
Recent MODIS Aqua imagery (1/4, shown left) is patchy along- and offshore southwest Florida, limiting analysis. Elevated chlorophyll (2-9 μg/L) is visible in patches stretching along- and offshore from Manatee to Collier counties, and a patch of elevated to high chlorophyll (2-18 μg/L) is visible along- and offshore northern Monroe County. MODIS Aqua imagery of the Florida Keys, in the region where up to 'medium' *K. brevis* concentrations were identified on 12/17 and 12/18, has been obscured by clouds over the past several days, preventing analysis. This region will continue to be monitored as imagery becomes available.

North to northeasterly winds forecast today through Friday may promote westerly transport of surface *K. brevis* concentrations north of the lower Florida Keys.

Davis, Urízar



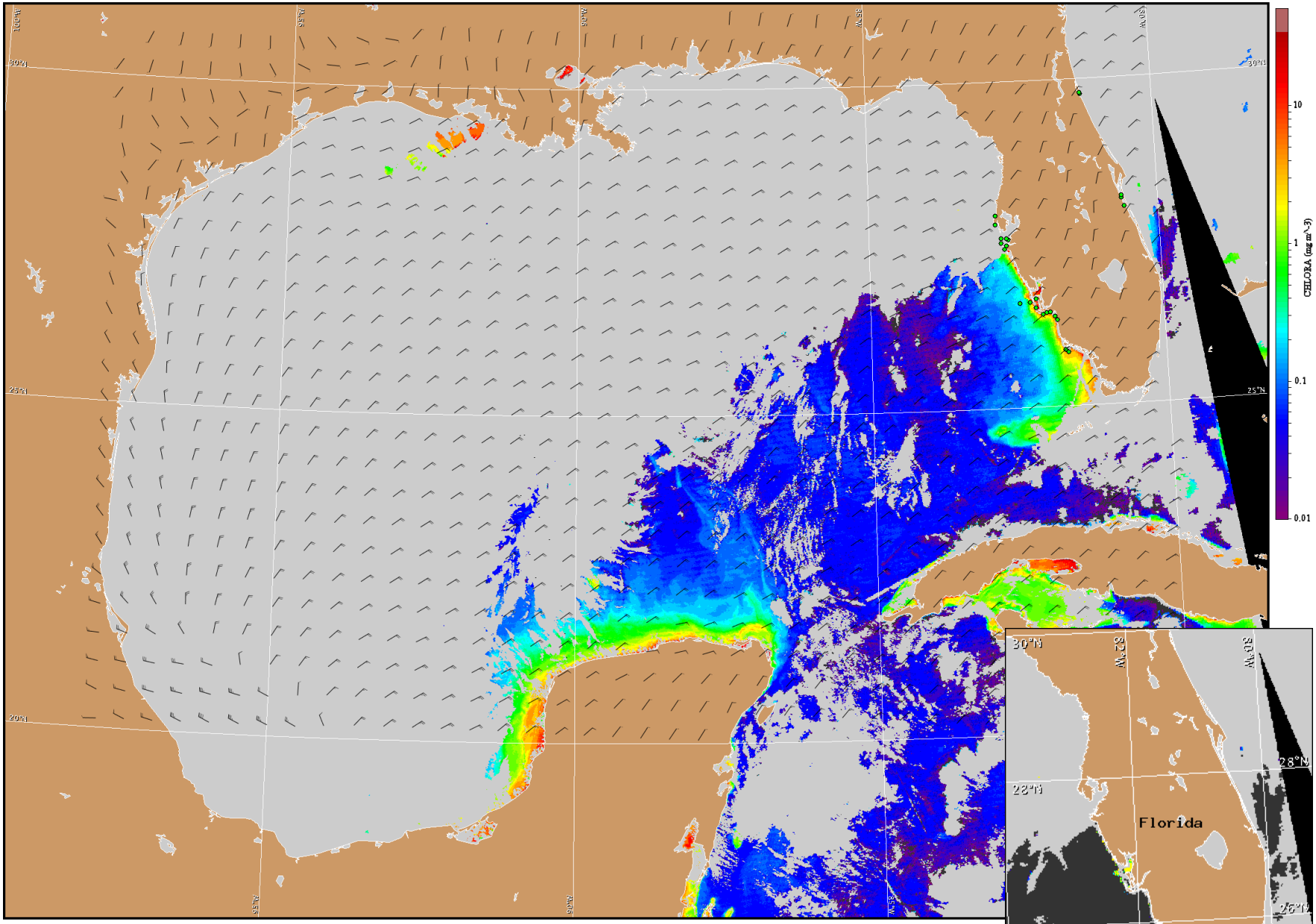
Wind speed and direction are averaged over 12 hours from buoy measurements. Length of line indicates speed; angle indicates direction. Red indicates that the wind direction favors upwelling near the coast. Values to the left of the dotted vertical line are measured values; values to the right are forecasts.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



Wind Analysis

Englewood to Tarpon Springs (Venice): North winds (15-20kn, 8-10m/s) today becoming northeast winds (10-15kn, 5-8m/s) tonight. North to northeast winds (5-25kn, 3-13m/s) Tuesday through Friday.

Florida Keys: West end of Seven Mile Bridge to Halfmoon Shoal: Northeast to east winds (10-20kn, 5-10m/s) today and Tuesday becoming north to northeast winds (10-15kn) Tuesday night. North to northeast winds (10-25kn, 5-13m/s) Wednesday through Friday.



Satellite chlorophyll image and forecast winds for January 6, 2015 06Z with points representing cell concentration sampling data from December 26 to 30: 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).