Gulf of Mexico Harmful Algal Bloom Bulletin

Region: Southwest Florida

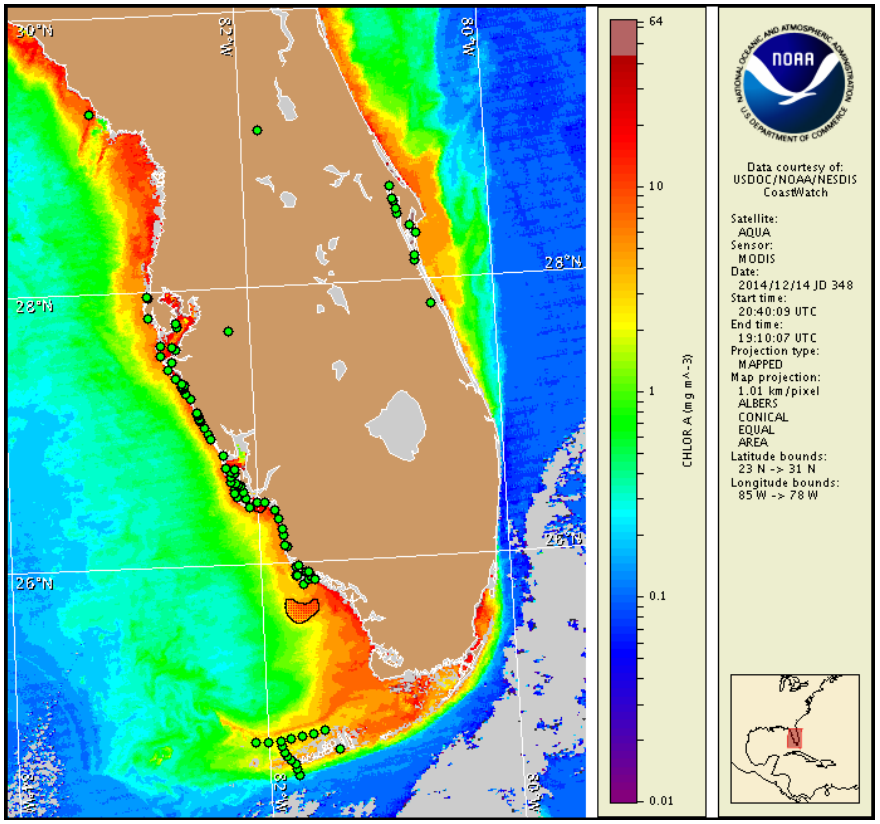
Monday, 15 December 2014

NOAA National Ocean Service

NOAA Satellite and Information Service

NOAA National Weather Service

Last bulletin: Thursday, December 11, 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 5 to 11: 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 Monday, December 15 through Monday, December 22.

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

Analysis

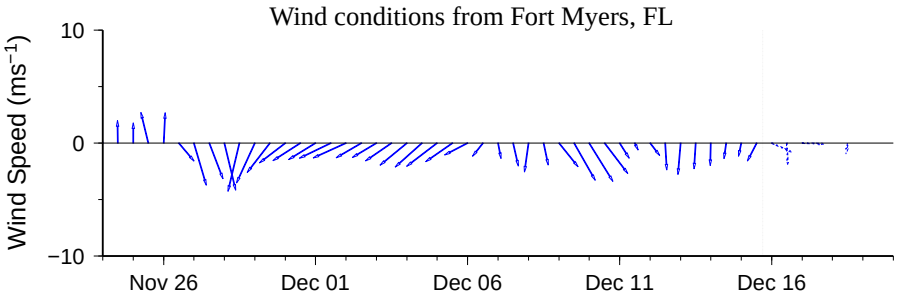
Note: As of today, December 15, southwest Florida bulletins will be issued once weekly on Mondays due to the absence of Karenia brevis concentrations at the coast. This region will continue to be monitored and twice weekly bulletins will resume as conditions warrant.

The most recent samples collected from Pinellas, Manatee, Charlotte, central and southern Lee and central Collier County continue to indicate that *K. brevis* is not present (FWRI; 12/8-11). No reports of dead fish or respiratory irritation has been received over the past few days (FWRI, MML; 12/11-15).

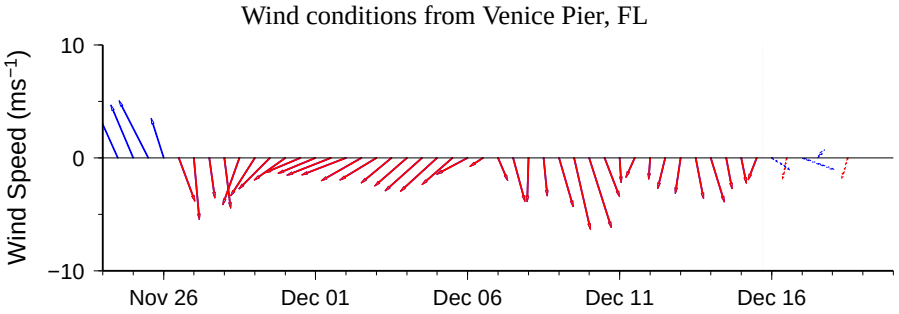
Recent MODIS Aqua imagery (12/14, shown left) indicates elevated levels of chlorophyll (2-6 μg/L) alongshore most of southwest Florida from Pinellas to central Collier County. The only location where chlorophyll levels are greater (8 to >20 μg/L) is along- and offshore southern Lee County. Anomalously elevated to high chlorophyll levels were first visible on MODIS imagery from 12/13. Sampling is recommended in this region. Additionally, the patchy feature of anomalously elevated chlorophyll noted in the previous bulletin is now centered approximately 16-20 miles southwest of central to southern Collier County.

Observed winds over the past few days as well as forecast winds over the next several days may continue to promote southerly transport of any remaining surface *K. brevis* concentrations. Since it is possible that *K. brevis* concentrations have transported southward, the Florida Keys region will continue to be monitored. Additionally, conditions are not favorable for bloom intensification at the coast over the next several days.

Urízar, Yang



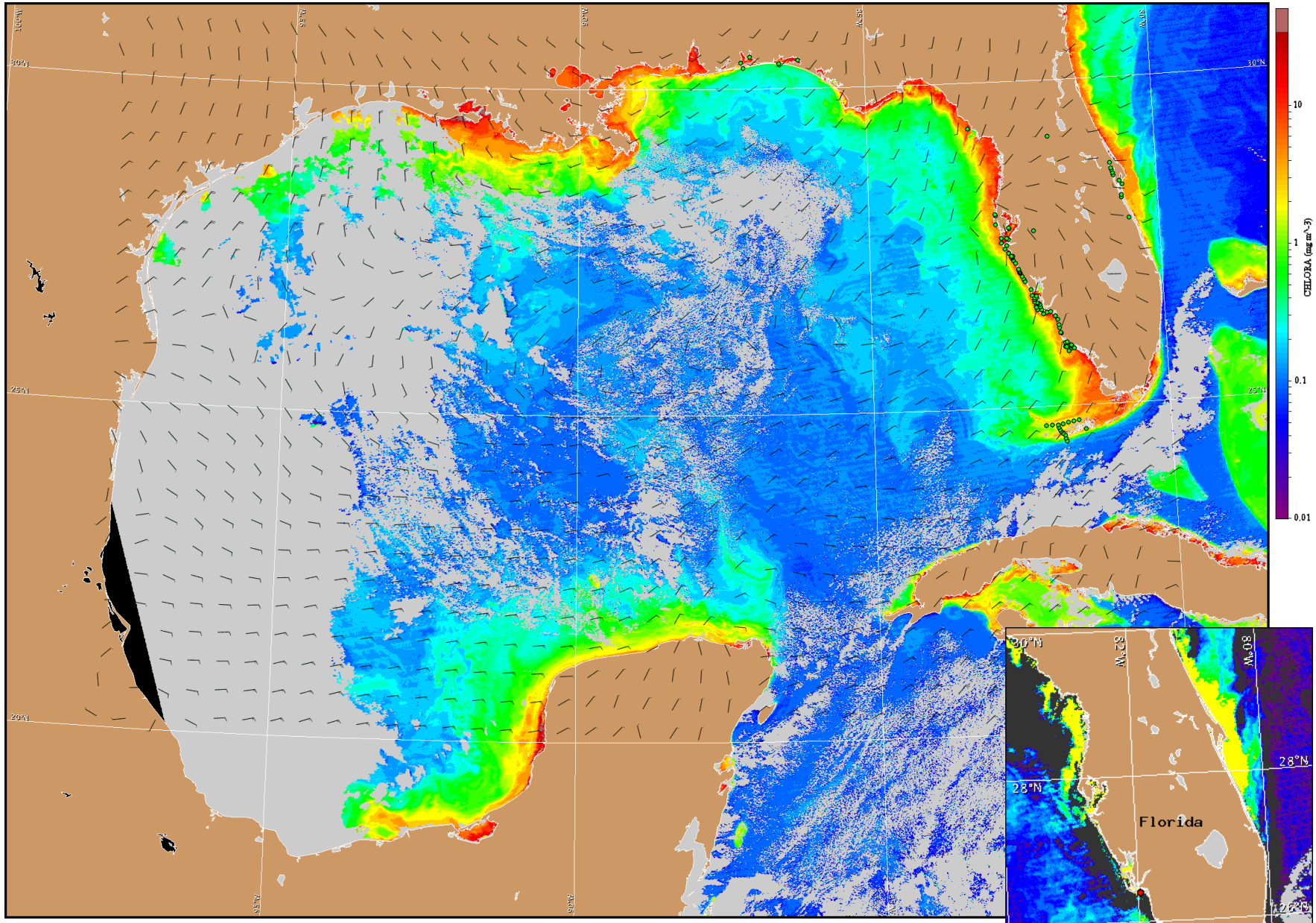
Wind speed and direction are averaged over 12 hours from buoy measurements. Length of line indicates speed; angle indicates direction. Red indicates that the wind direction favors upwelling near the coast. Values to the left of the dotted vertical line are measured values; values to the right are forecasts.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



Wind Analysis

Bonita Beach to Englewood (Fort Myers): Northerly to northeasterly winds (5 kn, 3 m/s) today. Northerly winds (5 kn) Tuesday becoming westerly in the afternoon and night. Northerly to northwesterly winds (5-10 kn, 3-5 m/s) Wednesday. Northeasterly winds (10kn, 5 m/s) Thursday. Southeasterly winds (10 kn) Friday.

Englewood to Tarpon Springs (Venice): Northeasterly to northerly winds (5 kn) today. Westerly to southwesterly winds (5-10 kn) Tuesday. Northerly winds (10 kn) Wednesday. Northeasterly winds (5-10 kn) Thursday. Southeasterly winds (10 kn) Friday.



Satellite chlorophyll image and forecast winds for December 16, 2014 12Z with points representing cell concentration sampling data from December 5 to 11: 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).