

Gulf of Mexico Harmful Algal Bloom Bulletin

Region: Southwest Florida

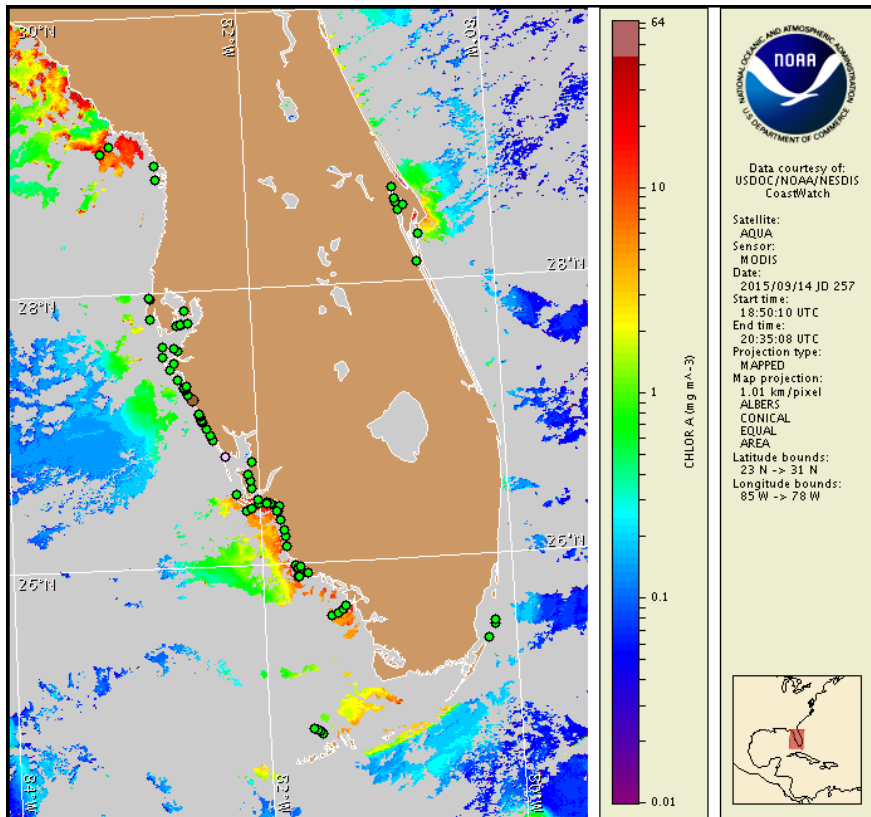
Thursday, 17 September 2015

NOAA National Ocean Service

NOAA Satellite and Information Service

NOAA National Weather Service

Last bulletin: Monday, September 14, 2015



Satellite chlorophyll image with possible *K. brevis* HAB areas shown by red polygon(s), when applicable. Points represent cell concentration sampling data from September 7 to 16: 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 low 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, September 17 through Monday, September 21 is listed below:

County Region: Forecast (Duration)

Northern Sarasota: Very Low (Th, Sa-M), Low (F)

All Other SWFL County Regions: None expected (Th-M)

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. Over the past several days, reports of respiratory irritation were received from Manatee County and reports of dead fish were received from Manatee and Charlotte County.

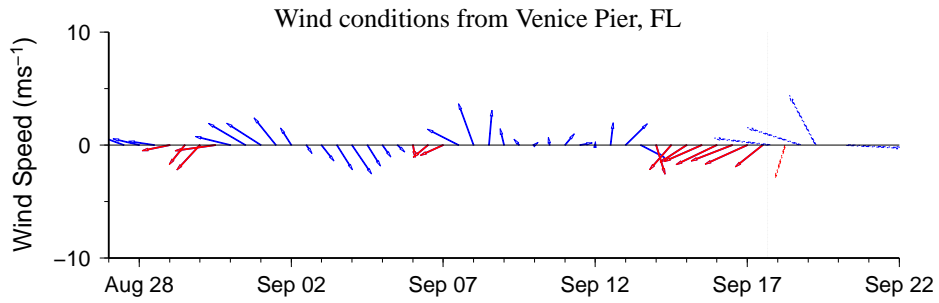
Analysis

Recent samples collected along- and offshore the coast of southwest Florida from Pinellas to Monroe counties, including the Florida Keys, have confirmed the presence of up to 'low a' concentrations of *Karenia brevis*. In northern Sarasota County, recent sampling at Turtle Beach identified 'low a' *K. brevis* concentrations (MML, SCHD; 9/14). In the Sarasota Bay region of southern Manatee and northern Sarasota County, sampling identified background *K. brevis* concentrations at Longboat Pass and Bay Dock (MML; 9/14-15). All other sampling along- and offshore southwest Florida, from Pinellas to Monroe County, including the Florida Keys, indicates that *K. brevis* is not present (FWRI, SCHD, MML; 9/7-9/15).

Recent ensemble imagery (MODIS Aqua, 9/14) is completely obscured by clouds along- and offshore southwest Florida from Pinellas to central Lee counties, preventing analysis in this region. Patches of elevated to high chlorophyll (2 to 12 $\mu\text{g/L}$) with the optical characteristics of *K. brevis* are visible in recent ensemble imagery from central Lee County to central Collier County.

Northeast to northwest winds forecast today through Saturday, September 19 may increase the potential for harmful algal bloom formation at the coast of southwest Florida.

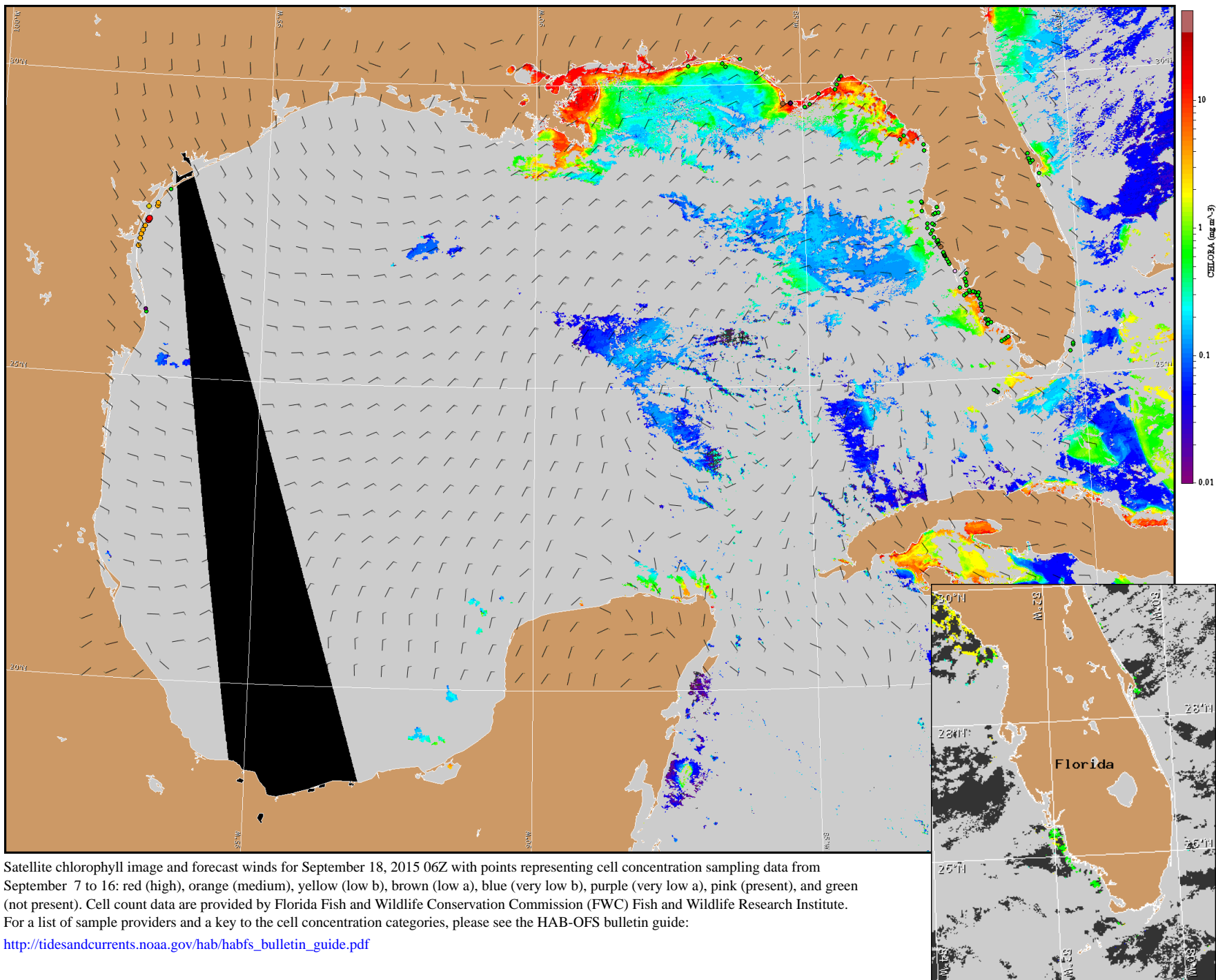
Lalime, Davis



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): Northeast to east winds (5-15kn, 3-8m/s) today. East winds (10kn, 5m/s) tonight through Friday night. North winds (5kn, 3m/s) Saturday becoming northwest (10kn) Saturday night. West winds (10kn) Sunday changing to northwest winds (10kn) Sunday night becoming north winds (5kn) after midnight. Southeast winds (5kn) Monday becoming north winds (5kn) in the afternoon.



Satellite chlorophyll image and forecast winds for September 18, 2015 06Z with points representing cell concentration sampling data from September 7 to 16: 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

Verified and suspected HAB areas shown in red. Other areas with *K. brevis* optical characteristics shown in yellow (see p. 1 analysis for interpretation).