



# Gulf of Mexico Harmful Algal Bloom Bulletin

Region: Southwest Florida

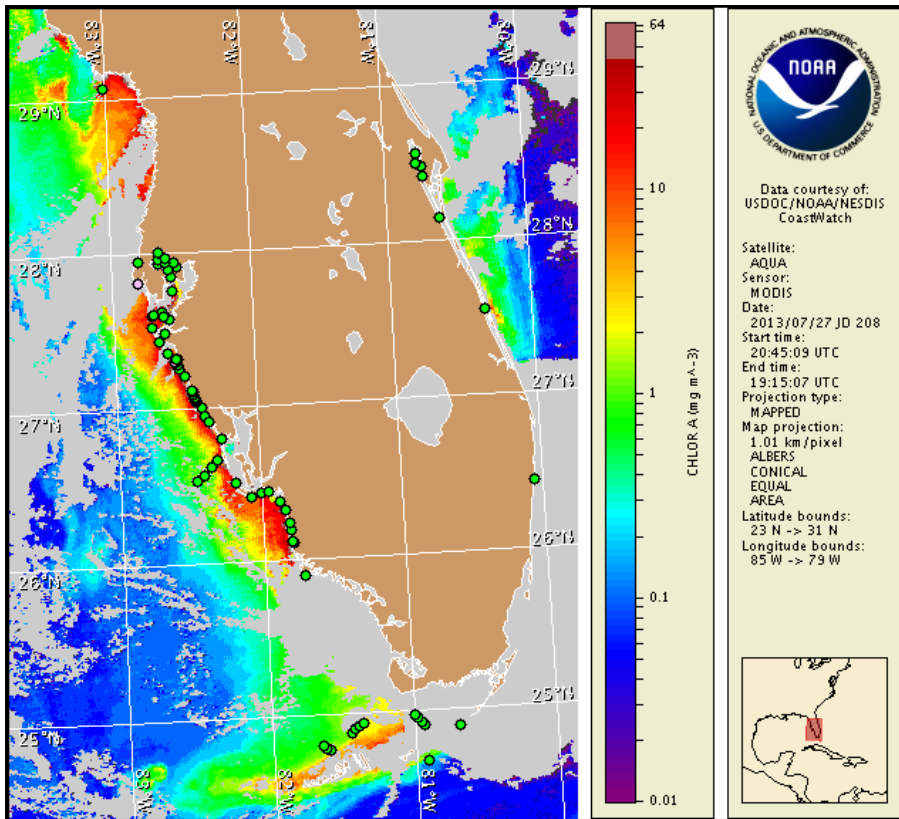
Monday, 29 July 2013

NOAA National Ocean Service

NOAA Satellite and Information Service

NOAA National Weather Service

Last bulletin: Monday, July 22, 2013



Satellite chlorophyll image with possible *K. brevis* HAB areas shown by red polygon(s), when applicable. Points represent cell concentration sampling data from July 19 to 25: 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](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 background concentrations along the coast of southwest Florida, including the Florida Keys. No respiratory irritation is expected Monday, July 29 through Monday, August 5. Check [http://tidesandcurrents.noaa.gov/hab/beach\\_conditions.html](http://tidesandcurrents.noaa.gov/hab/beach_conditions.html) for recent, local observations.

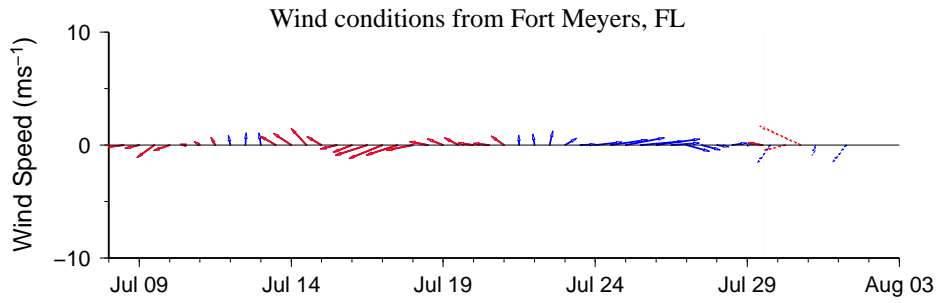
## Analysis

Background concentrations of *Karenia brevis* were identified from one sample collected alongshore southern Pinellas County and one sample collected alongshore northern Sarasota County (FWRI, MML; 7/22). All other samples collected along- and offshore southwest Florida, from Pinellas to Monroe County, including the Florida Keys, did not indicate the presence of *K. brevis* (FWRI, MML, SCHD, CCPCPD; 7/19-7/25). No dead fish or respiratory irritation associated with *K. brevis* have been reported in the past week (FWRI, MML; 7/22-28). Alongshore Lee County, patches of discolored water have been reported, due to fresh, tannin-rich water, not an algal bloom (FWRI, 7/26).

MODIS imagery has been partially obscured by clouds alongshore southwest Florida over the past several days, limiting analysis. In recent MODIS Aqua imagery (7/27, shown left; 7/28, not shown), patches of elevated to very high chlorophyll (3 to >20  $\mu\text{g/L}$ ) are visible along- and offshore from southern Pinellas to Collier counties. Elevated chlorophyll at the coast is likely the result of mixed non-harmful algal blooms that continue to be reported in many southwest Florida counties. In addition, fresh, tannin-rich water has recently caused patches of discoloration in the waters alongshore Lee County (FWRI, 7/26).

Harmful algal bloom formation alongshore southwest Florida is not expected today through Monday, August 5.

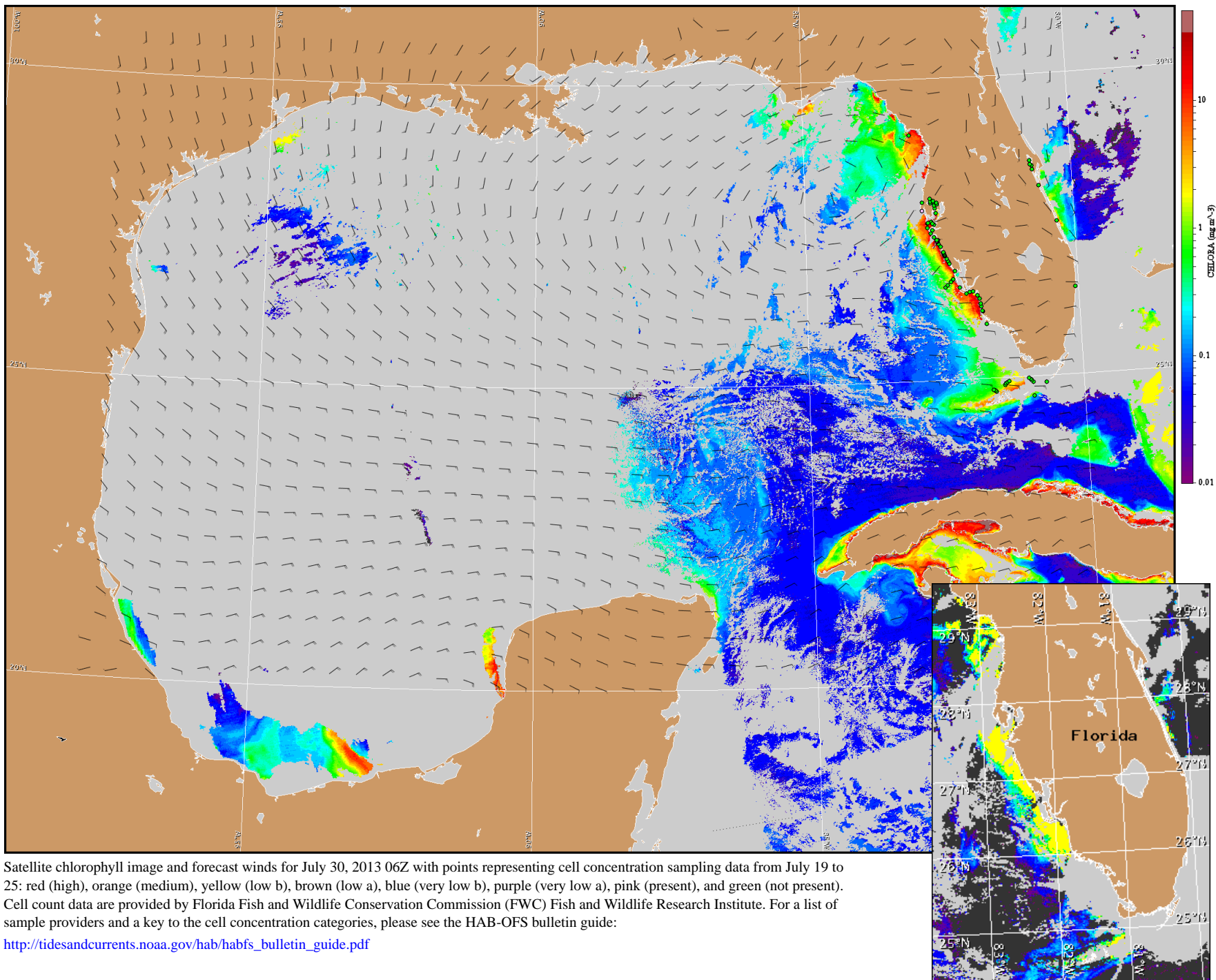
Kavanaugh, Yang



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

**Southwest Florida:** North winds (5 kn, 3 m/s) today becoming northeast winds (10 kn, 5 m/s) tonight. East winds (10 kn) Tuesday becoming north to northeast winds (10 kn) Tuesday afternoon. East to southeast winds Wednesday (10 kn) becoming northwest winds (10 kn) Wednesday afternoon. East winds (10 kn) Wednesday night becoming southeast winds (10 kn) Thursday through Friday. South winds (5 kn) Friday afternoon.



Satellite chlorophyll image and forecast winds for July 30, 2013 06Z with points representing cell concentration sampling data from July 19 to 25: 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).