



Gulf of Mexico Harmful Algal Bloom Bulletin

Region: Southwest Florida

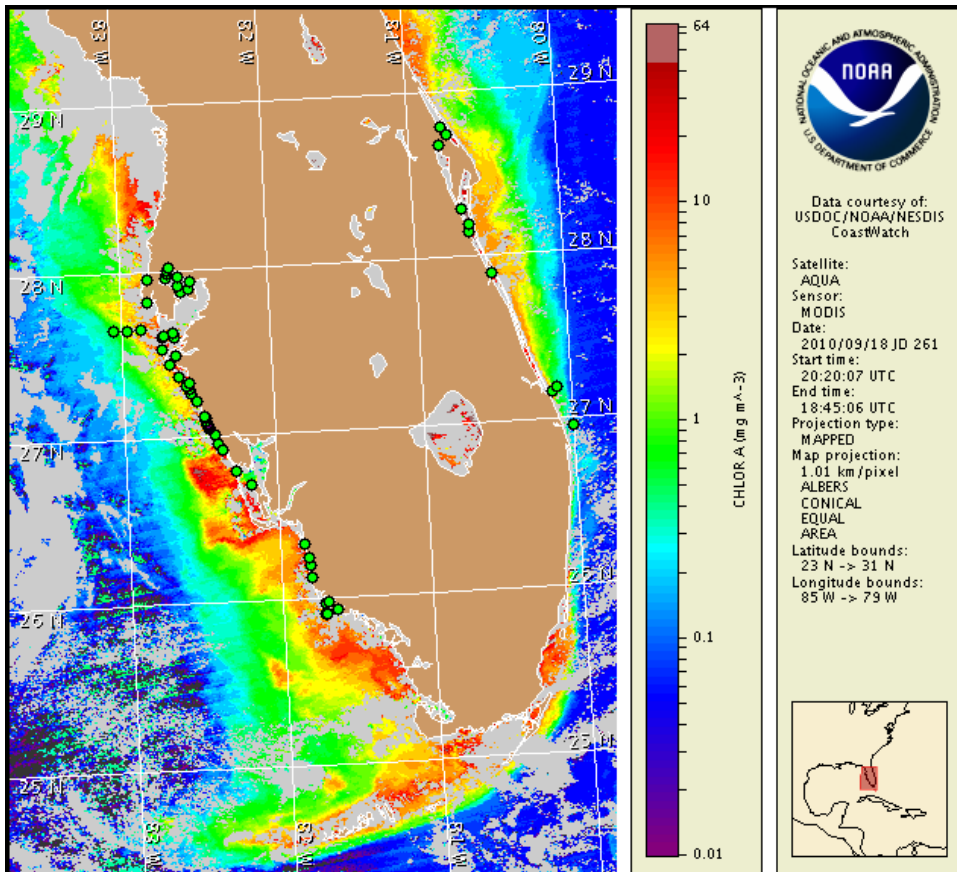
20 September 2010

NOAA Ocean Service

NOAA Satellites and Information Service

NOAA National Weather Service

Last bulletin: September 13, 2010



Satellite chlorophyll image with possible HAB areas shown by red polygon(s). Cell concentration sampling data from September 10 to 15 shown as red (high), orange (medium), yellow (low b), brown (low a), blue (very low b), purple (very low a), pink (present), and green (not present). For a list of cell count data providers and a key to the cell concentration categories, please see the HABFS bulletin guide:

http://tidesandcurrents.noaa.gov/hab/habfs_bulletin_guide.pdf

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1. Data are restricted to civil marine applications only; i.e. federal, state, and local government use/distribution is permitted.
2. Image products may be published in newspapers. Any other publishing arrangements must receive GeoEye approval via the CoastWatch Program.

Conditions Report

There is currently no indication of a harmful algal bloom at the coast in southwest Florida, including the Florida Keys. Harmful algae have been identified alongshore Sarasota County. No impacts are expected alongshore Sarasota County or elsewhere at the coast in southwest Florida through Sunday, September 26. Discolored water has been reported in northern to southern Collier County over the past week. This discoloration is attributed to a bloom of the algae *Takayama cf. acrotrocha* which is not associated with the Florida red tide caused by *Karenia brevis*.

Analysis

There is currently no indication of a harmful algal bloom in southwest Florida, including the Florida Keys. Two samples collected alongshore Sarasota County indicated 'very low' concentrations of *Karenia brevis* at North Jetty Park and Service Club Park, and background concentrations at Brohard Beach (SCHD; 9/13). All other samples collected alongshore Pinellas, Manatee, Charlotte, Lee, and Collier counties and offshore Pinellas County indicate that *K. brevis* is not present (CCPCPD, FWRI, MML, SCHD; 9/13-9/17). Discolored water has been reported in southern Lee and northern Collier counties due to a bloom of *Takayama cf. acrotrocha*; no impacts have been reported (CCPCPD, FWRI; 9/14,9/17).

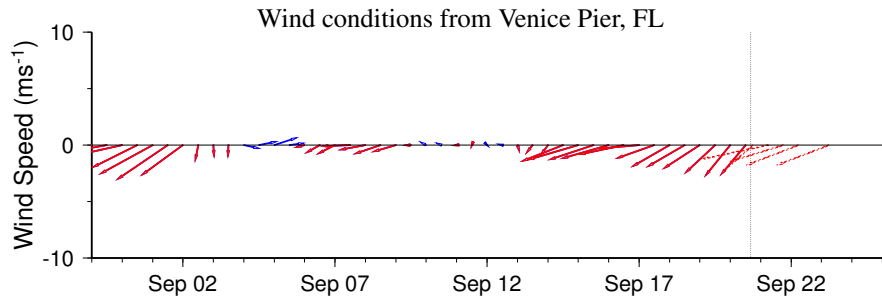
Recent satellite imagery is partially obscured by clouds alongshore southwest Florida. High chlorophyll features ($>10 \mu\text{g/L}$) are visible in MODIS imagery (9/18, shown left) alongshore Charlotte and northern Lee counties, extending approximately 19 miles offshore and in a band south to southwest of Sanibel Island, central Lee County. Elevated to high chlorophyll is visible alongshore northern Collier County (6 to $>9 \mu\text{g/L}$) and approximately 16 miles offshore Naples. Elevated chlorophyll (3 to $>9 \mu\text{g/L}$) is also visible alongshore southern Pinellas County. Non-harmful algal blooms continue to be reported in several counties along the coast of southwest Florida (FWRI; 9/13-9/15).

Observed winds throughout the past week have been conducive to upwelling conditions and bloom formation. *K. brevis* concentrations may have intensified in Sarasota County over the past week. Upwelling favorable northeast to east winds are expected to continue through Friday.

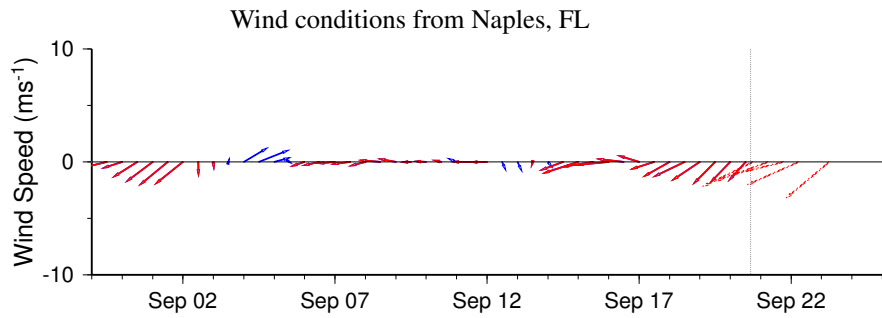
Burrows, Fisher

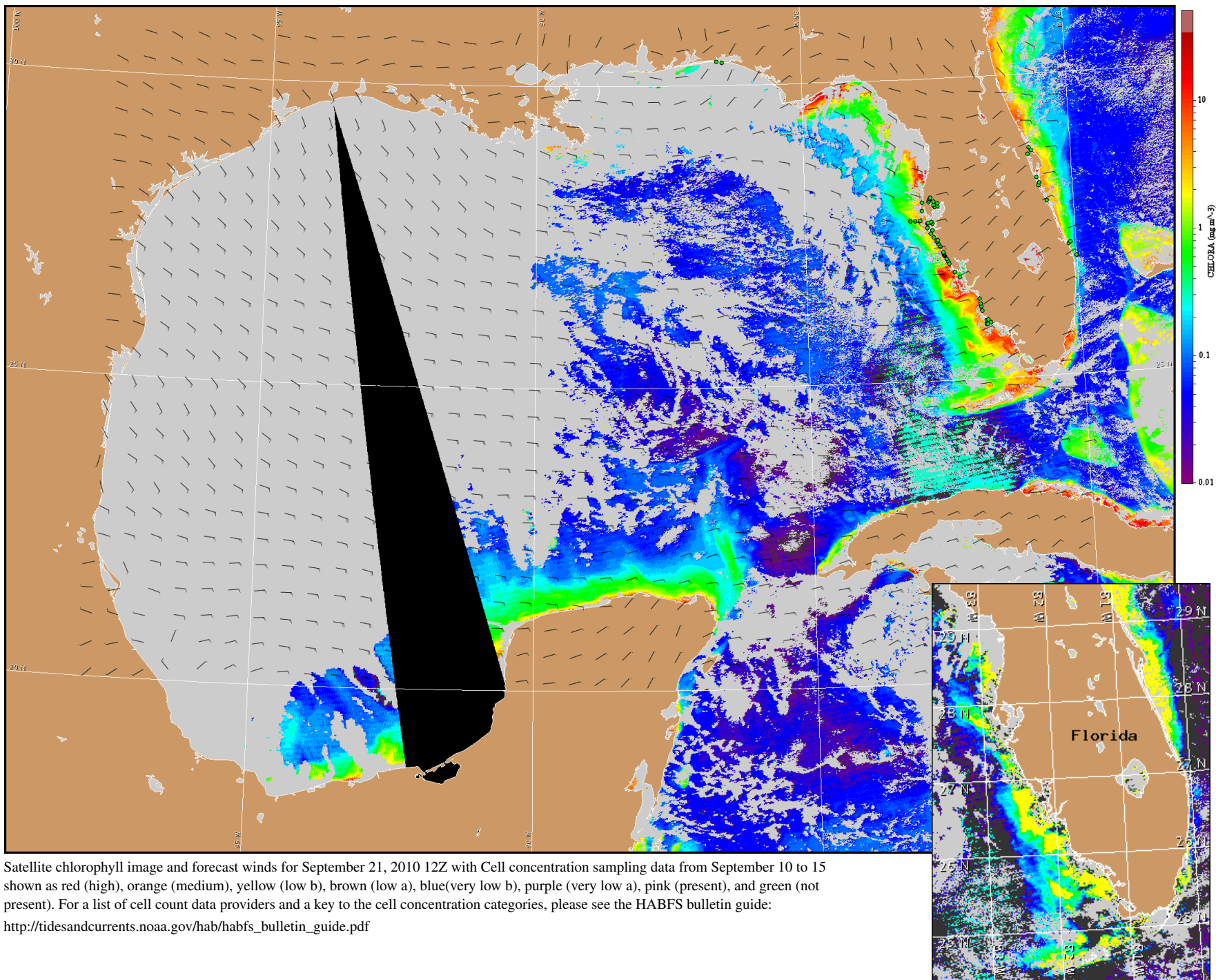
Wind Analysis

Northeast winds today (10-15kn, 5-8 m/s) shifting to the east tonight through Tuesday night. Northeast winds (10-15kn) on Wednesday shifting to the east Wednesday night through Friday.



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).





Satellite chlorophyll image and forecast winds for September 21, 2010 12Z with Cell concentration sampling data from September 10 to 15 shown as red (high), orange (medium), yellow (low b), brown (low a), blue(very low b), purple (very low a), pink (present), and green (not present). For a list of cell count data providers and a key to the cell concentration categories, please see the HABFS bulletin guide: http://tidesandcurrents.noaa.gov/hab/habfs_bulletin_guide.pdf

Verified and suspected HAB areas shown in red. Other areas of high chlorophyll concentration shown in yellow (see p. 1 analysis for interpretation).