



Gulf of Mexico Harmful Algal Bloom Bulletin

Region: Southwest Florida

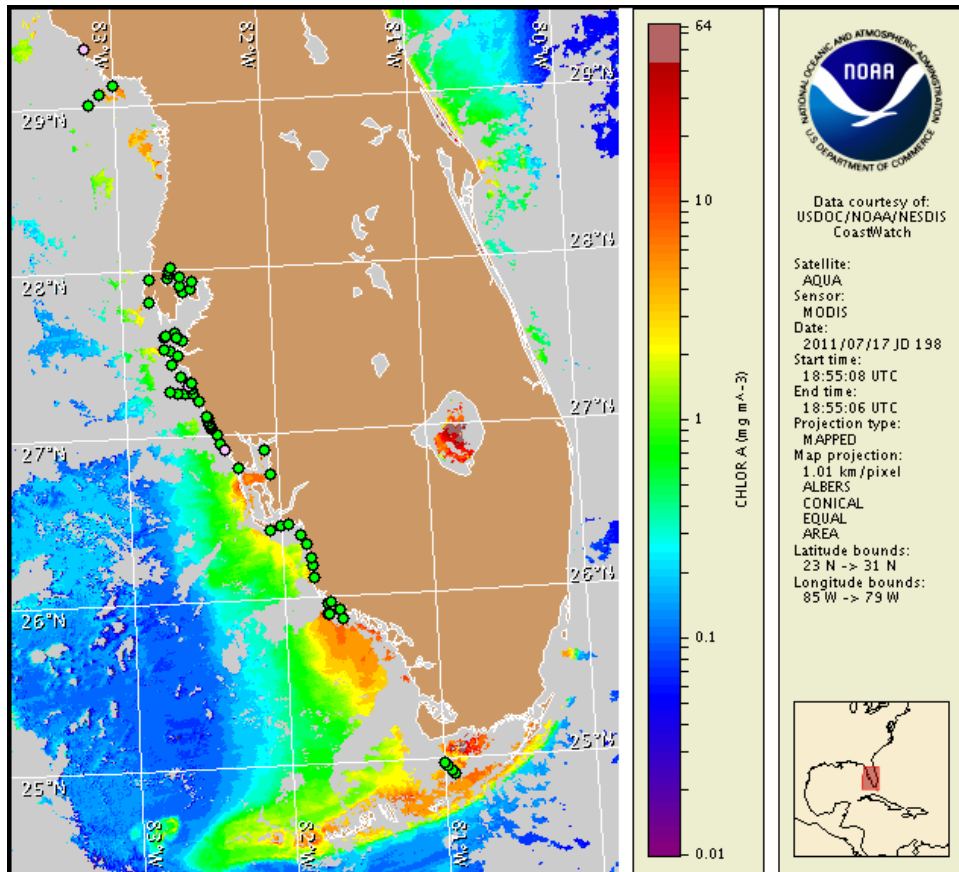
Monday, 18 July 2011

NOAA Ocean Service

NOAA Satellite and Information Service

NOAA National Weather Service

Last bulletin: Monday, July 11, 2011



Satellite chlorophyll image with possible HAB areas shown by red polygon(s). Cell concentration sampling data from July 8 to 14 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 HAB-OFS bulletin guide:

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

To see previous bulletins and forecasts for other Harmful Algal Bloom Bulletin regions, visit the NOAA Harmful Algal Bloom Operational Forecast System bulletin archive:

<http://tidesandcurrents.noaa.gov/hab/bulletins.html>

Conditions Report

There is currently no indication of a harmful algal bloom at the coast in southwest Florida, including the Florida Keys. No impacts are expected alongshore southwest Florida today through Sunday, July 24.

Analysis

There is currently no indication of a harmful algal bloom in southwest Florida, including the Florida Keys. Background concentrations of *Karenia brevis* were identified in a single sample collected in northern Charlotte County (FWRI, 7/12), and background to 'very low' *K. brevis* concentrations were identified in 3 samples collected alongshore and inshore northern Sarasota County (MML, SCHD, FWRI; 7/11-12). *K. brevis* was not identified in water samples collected elsewhere last week alongshore Pinellas to Collier counties or offshore northern Sarasota County and the Florida Keys (FWRI, MML, SCHD; 7/9-15).

MODIS imagery has been primarily obscured by clouds north of Charlotte County; no features indicative of a harmful bloom were visible between Pinellas and Sarasota counties on 7/15. Recent imagery (7/17) indicates a patch of elevated chlorophyll (4-9 $\mu\text{g/L}$) alongshore Cayo Costa in northern Lee County, extending ~3-4 miles offshore. Slightly elevated chlorophyll (~2 $\mu\text{g/L}$) is also visible ~10 miles offshore northern Collier County (centralized at 26°15'N 82°1'39"W). Chlorophyll visible in imagery on 7/15 may continue to be elevated to high (6 to >10 $\mu\text{g/L}$) alongshore Collier County, however clouds currently obscure imagery at the coast in this region. Elevated chlorophyll features visible at and near the coast are likely the result of non-toxic algal blooms that continue to be reported in several southwest Florida counties, including Lee and Collier counties (FWRI, 7/11-13).

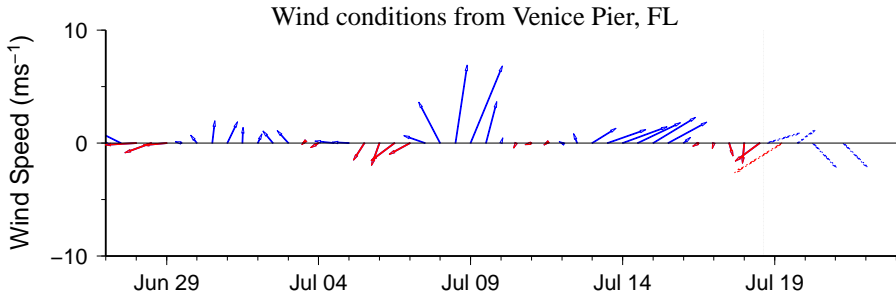
Lee County Health Department continues to issue warnings to avoid contact with the Caloosahatchee River and other fresh water systems due to the presence of potentially harmful Cyanobacteria concentrations (LCHD, 7/18).

Harmful algal bloom formation is not expected at the coast through Sunday, July 24.

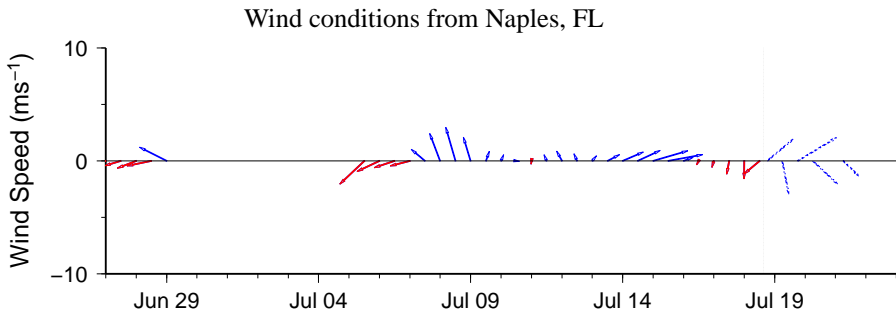
-Fisher, Yang

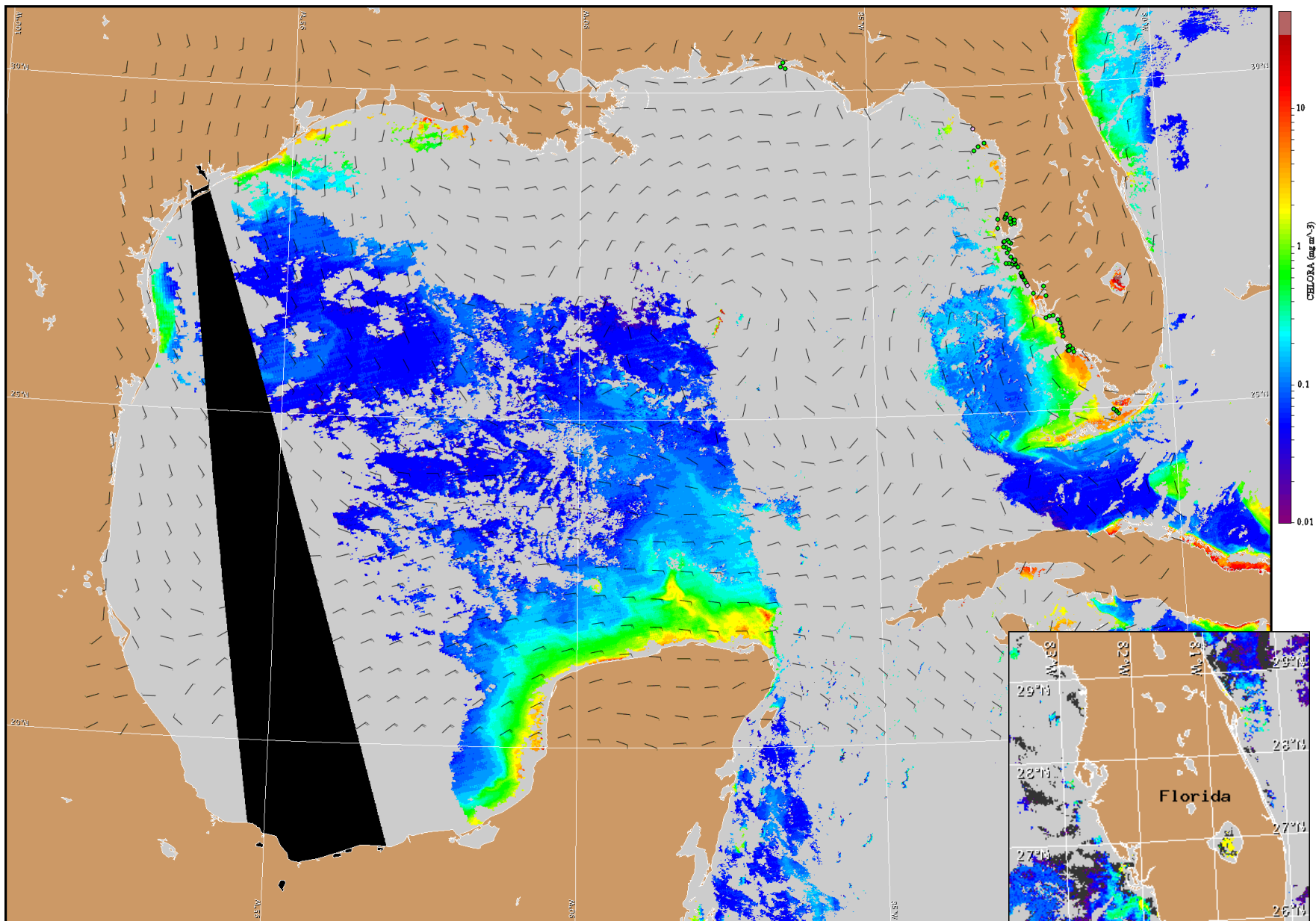
Wind Analysis

Southwest Florida: North winds (10kn, 5m/s) today becoming east tonight. Northeast winds (5kn, 3m/s) Tuesday, becoming northwest (10kn) in the afternoon. North to northeast winds (5kn) Tuesday night. West winds Wednesday through Friday (5-10kn), shifting northwest during the nights.



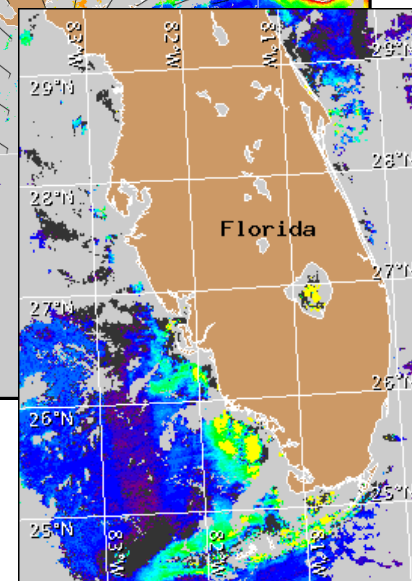
Wind speed and direction are averaged over 12 hours from buoy measurements. Length of line indicates speed; angle indicates direction. Red indicates that the wind direction favors upwelling near the coast. Values to the left of the dotted vertical line are measured values; values to the right are forecasts.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





Satellite chlorophyll image and forecast winds for July 19, 2011 06Z with cell concentration sampling data from July 8 to 14 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 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).