



Gulf of Mexico Harmful Algal Bloom Bulletin

Region: Southwest Florida

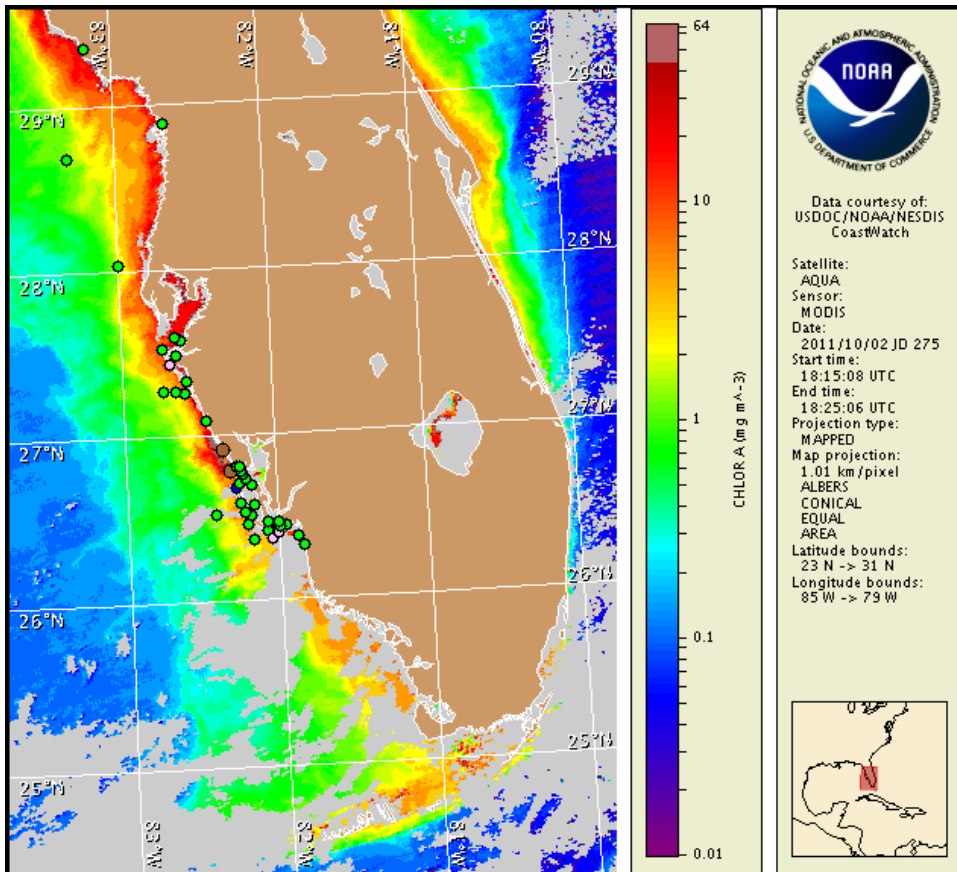
Monday, 03 October 2011

NOAA Ocean Service

NOAA Satellite and Information Service

NOAA National Weather Service

Last bulletin: Thursday, September 29, 2011



Satellite chlorophyll image with possible HAB areas shown by red polygon(s). Cell concentration sampling data from September 23 to 29 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/habofs_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

A harmful algal bloom is present along- and offshore southern Sarasota and Charlotte counties. Harmful algae has been identified offshore northern Lee County. Today through Wednesday, patchy very low impacts are possible in southern Sarasota and Charlotte counties. No impacts are expected elsewhere alongshore southwest Florida today through Wednesday, October 5. Reports of respiratory irritation have been received from Manasota Beach in Sarasota County.

Analysis

The harmful algal bloom first identified early last week continues along- and offshore southern Sarasota County and Charlotte County. Harmful algae have been identified offshore northern Lee County.

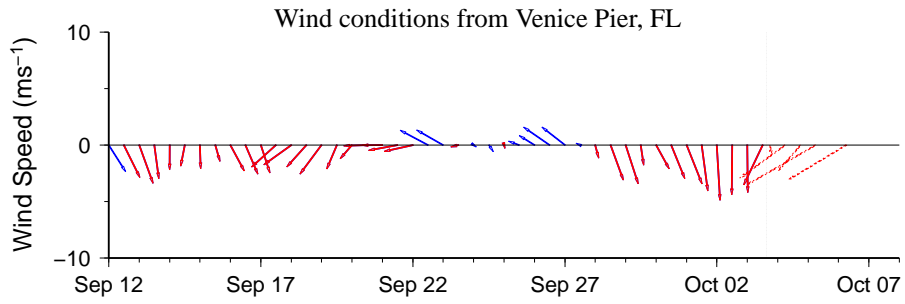
The most recent sample results show concentrations of *Karenia brevis* ranging from not present to medium alongshore southern Sarasota and Charlotte counties, and from not present to high offshore southern Sarasota and Charlotte counties. One sample containing very low *K. brevis* concentrations (1.6 miles west of Costa Caya) was identified offshore northern Lee County. Two other samples collected 2.5 to 3 miles southwest of Sanibel Island in Lee County indicated background *K. brevis* concentrations. *K. brevis* concentrations ranging from not present to background were identified alongshore Pinellas County (FWRI, MML, SCHD; 9/26-9/30).

Imagery from 10/2 (shown left) is obscured at the coast from Lee to Collier County. A very high chlorophyll feature ($>20 \mu\text{g/L}$) is visible spanning 15 miles alongshore southern Sarasota County and Charlotte County ($27^{\circ}02'16''\text{N}$ $82^{\circ}26'58''\text{W}$ to $26^{\circ}49'25''\text{N}$ $82^{\circ}18'25''\text{W}$) extending approximately 5-6 miles offshore with surrounding elevated to high chlorophyll concentrations ($3\text{-}20 \mu\text{g/L}$ extending up to 12 miles offshore). A band of elevated to high chlorophyll concentrations ($1\text{-}>10 \mu\text{g/L}$) also exists along the coast from Pinellas County to northern Sarasota County; much of the elevated chlorophyll may be due to non-toxic algal blooms that continue to be reported alongshore several counties in southwest Florida (FWRI; 9/26-9/30).

Forecasted winds today through Wednesday will reduce the potential for impacts at the coast. Conditions are favorable for bloom intensification and further bloom formation alongshore southwest Florida today through Wednesday.

Slight respiratory irritation has been reported at Manasota Beach in southern Sarasota County (MML; 9/30 and 10/2)

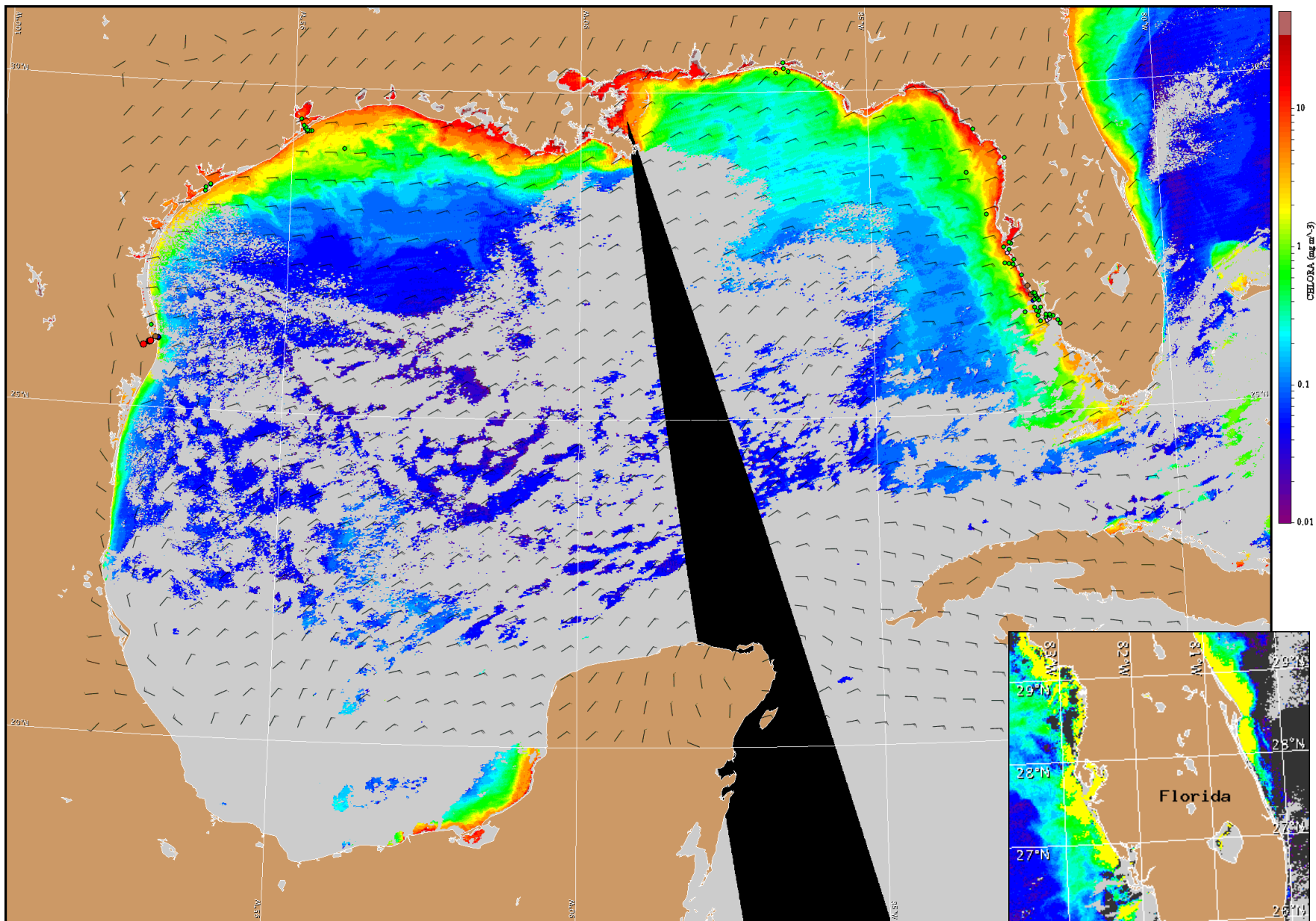
-Yang, Derner



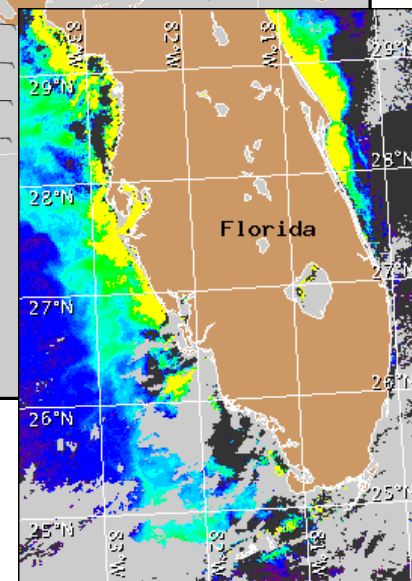
Wind speed and direction are averaged over 12 hours from buoy measurements. Length of line indicates speed; angle indicates direction. Red indicates that the wind direction favors upwelling near the coast. Values to the left of the dotted vertical line are measured values; values to the right are forecasts.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

Wind Analysis

Northeast winds (10kn, 5 m/s) this afternoon, (15 kn, 8 m/s) tonight through Wednesday night.



Satellite chlorophyll image and forecast winds for October 4, 2011 12Z with cell concentration sampling data from September 23 to 29 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



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