



Gulf of Mexico Harmful Algal Bloom Bulletin

Region: Southwest Florida

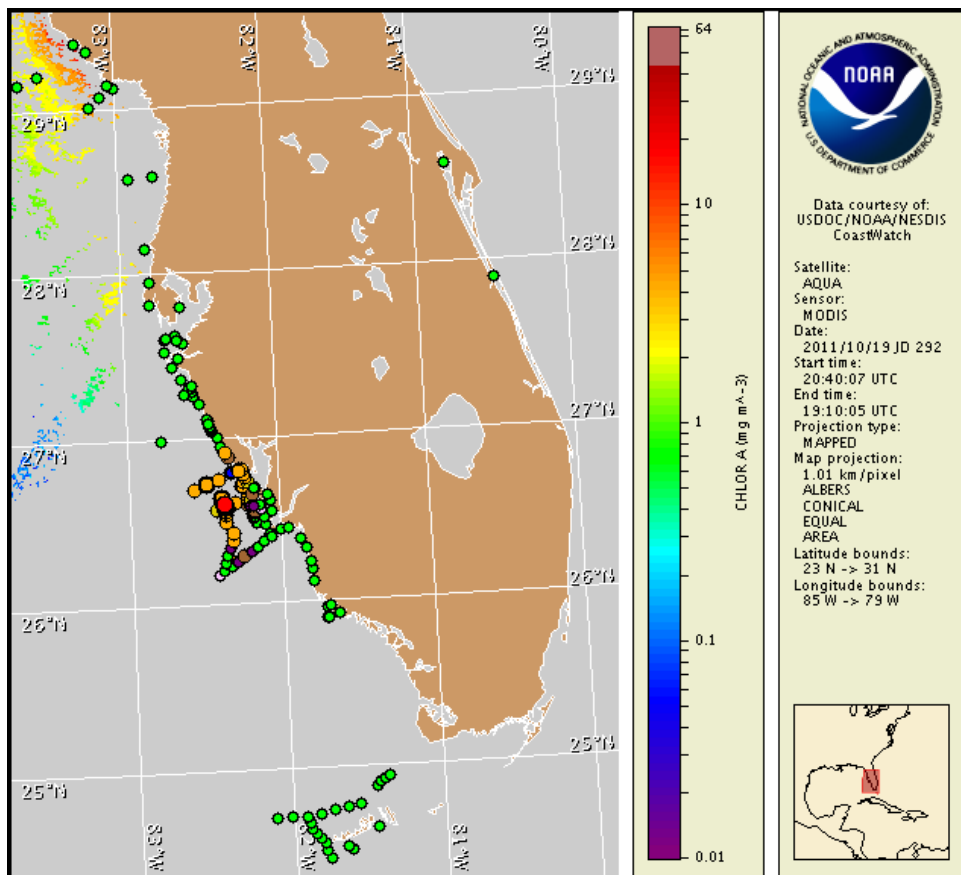
Thursday, 20 October 2011

NOAA Ocean Service

NOAA Satellite and Information Service

NOAA National Weather Service

Last bulletin: Monday, October 17, 2011



Satellite chlorophyll image with possible HAB areas shown by red polygon(s). Cell concentration sampling data from October 10 to 19 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

A harmful algal bloom is present alongshore southern Sarasota, Charlotte, northern and central Lee counties, and offshore Charlotte and Lee counties. Patchy low impacts are possible alongshore southern Sarasota County today, with no impacts expected tonight through Sunday, October 23. Patchy high impacts are possible alongshore Charlotte and northern Lee counties today, with patchy moderate impacts possible tonight through Sunday. Patchy very low impacts are possible alongshore central Lee County today through Sunday. No impacts are expected elsewhere alongshore southwest Florida today through Sunday, October 23. Over the past few days, reports of dead fish have been received from areas in Sarasota, Charlotte, and northern Lee counties. Reports of respiratory irritation have been received from southern Sarasota County.

Analysis

The harmful algal bloom first identified on 9/26 in southern Sarasota County continues alongshore southern Sarasota, Charlotte, northern and central Lee counties, and offshore Charlotte and Lee counties. Recent sampling shows medium concentration of *Karenia brevis* at Eagle Beach in northern Charlotte County and at the northeast tip of Gasparilla Island in southern Charlotte County (FWRI; 10/18), low a concentration north of Part Island and 1.5 miles north west of Redfish Pass, and very low a concentration at Captiva Rock and North Captiva Island, in northern Pine Island Sound region (FWRI; 10/17). Recent offshore sampling shows concentrations of *K. brevis* ranges from not present to high offshore central and southern Lee County with high concentrations at about 9.5 miles northwest of North Captiva Island (FWRI; 10/14). Very low to low concentrations were detected in southern Sarasota County (FWRI; 10/16-10/19). A background concentration was detected 38 miles west of Clam Pass, Collier County. All other samples collected from Pinellas, Hillsborough, Manatee, and Monroe counties indicate that *K. brevis* is not present (FWRI, MML, SCHD; 10/13-10/19).

Widespread dead fish both along- and offshore have been reported in Sarasota, Charlotte, and Lee counties, with the most recent reported near Sarasota in Sarasota County (FWRI; 10/15-10/18) and Don Pedro Island, Charlotte County (FWRI; 10/16). Slight respiratory irritation has been reported at Manasota Beach in southern Sarasota County (MML; 10/19). No additional impacts have been reported elsewhere alongshore southwest Florida.

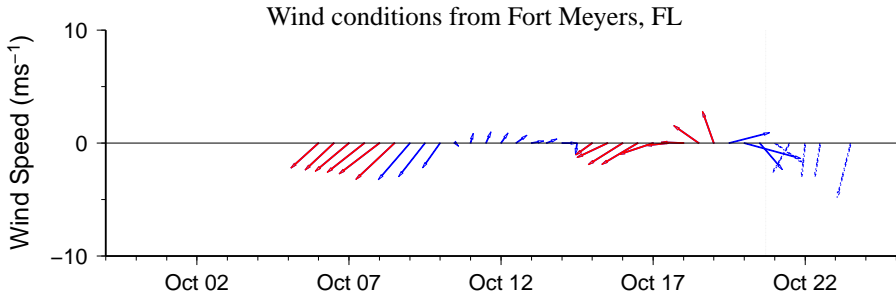
MODIS imagery has been cloudy since last bulletin issuance, limiting analysis.

Forecasted strong northwest winds today will increase the potential for impacts in southern Sarasota, Charlotte, northern and central Lee counties. The potential for impacts at the coast of those areas will be reduced as the forecasted winds shift to the north and northeast tonight through Sunday; however, impacts may continue in the bay regions. Southward transport of the bloom is possible through Sunday, October 23.

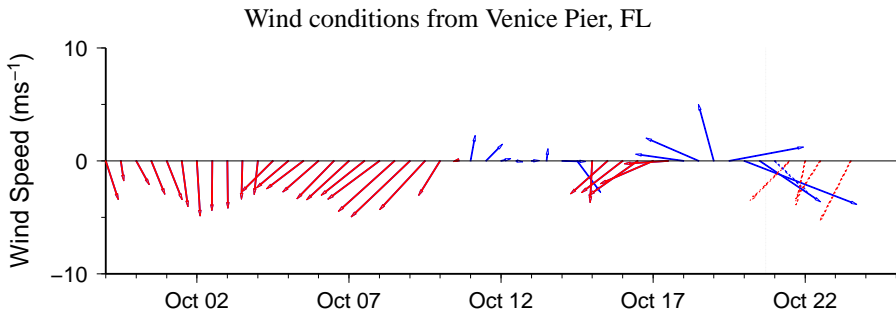
Yang, Fenstermacher

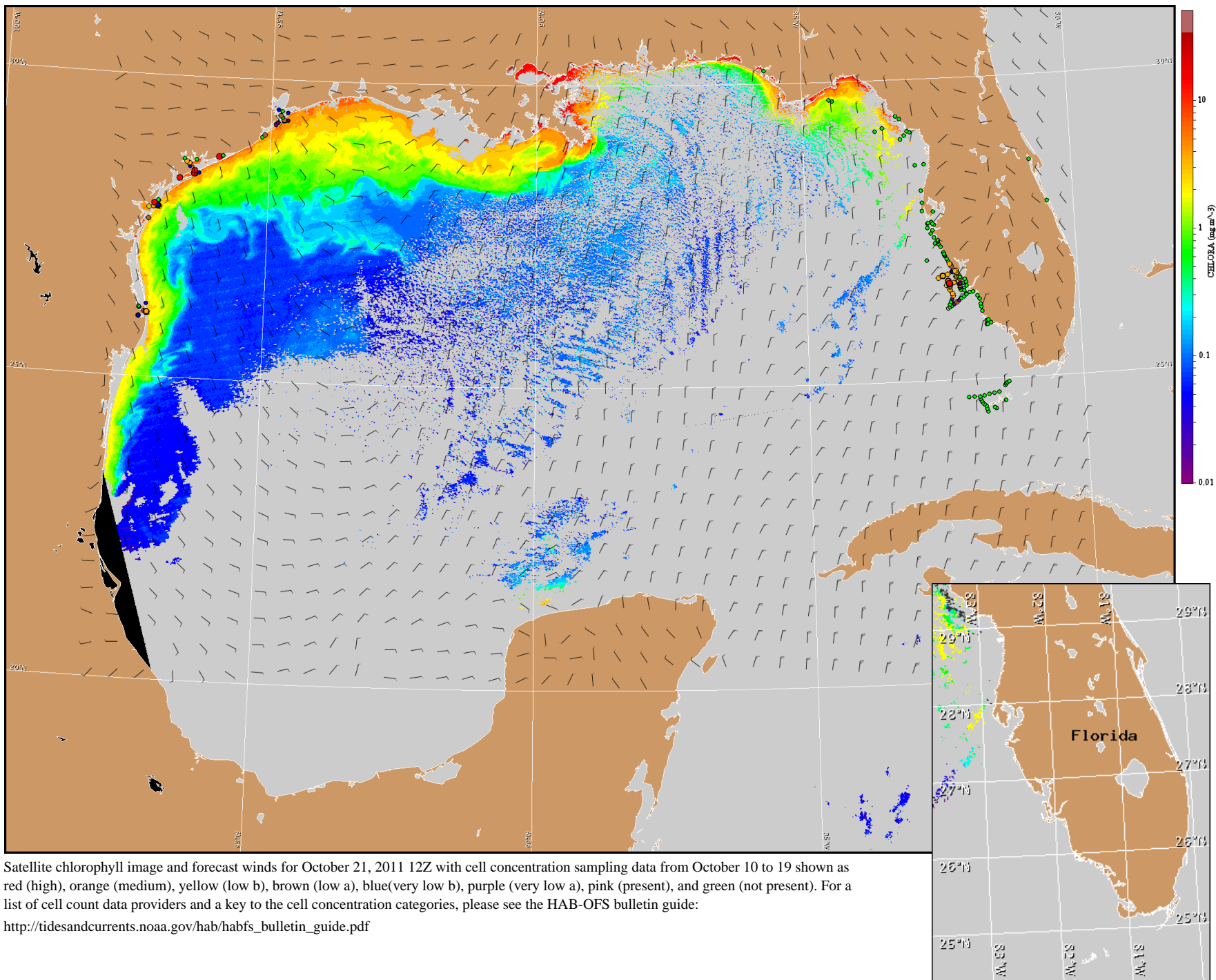
Wind Analysis

Southwest Florida: Northwest winds (20-15 kn, 10-8 m/s) this afternoon becoming north (10 kn, 5 m/s) tonight and Friday. Northeast winds (10-15 kn) Friday night through Saturday night. North winds (10 kn) Sunday turning northeast (15 kn) Sunday night.



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 October 21, 2011 12Z with cell concentration sampling data from October 10 to 19 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).