



# Gulf of Mexico Harmful Algal Bloom Bulletin

Region: South Florida

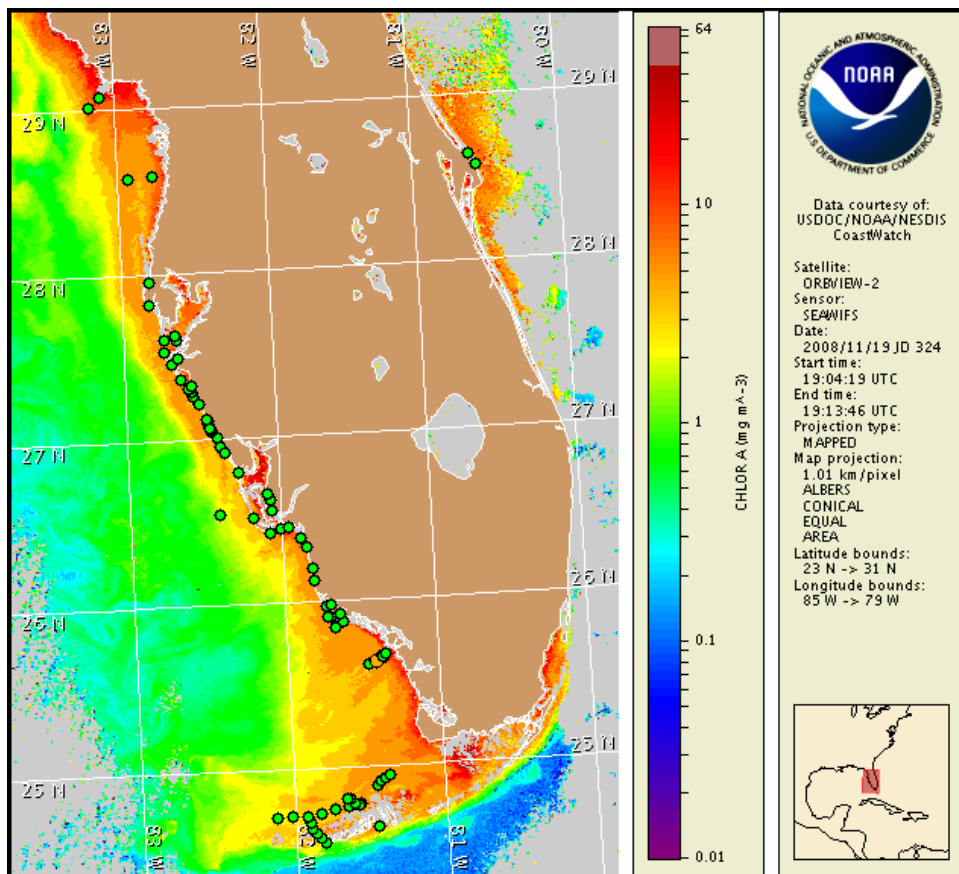
20 November 2008

NOAA Ocean Service

NOAA Satellites and Information Service

NOAA National Weather Service

Last bulletin: November 17, 2008



Satellite chlorophyll image with possible HAB areas shown by red polygon(s). Cell concentration sampling data from November 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 HABFS bulletin guide:

[http://tidesandcurrents.noaa.gov/hab/habfs\\_bulletin\\_guide.pdf](http://tidesandcurrents.noaa.gov/hab/habfs_bulletin_guide.pdf)

Please note the following restrictions on all SeaWiFS imagery derived from CoastWatch.

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. No impacts are expected alongshore southwest Florida today through Sunday, November 23.

## Analysis

There is currently no indication of a harmful algal bloom at the coast in southwest Florida; however a bloom has been identified offshore northern Monroe County. Samples taken approximately 9 miles offshore northern Monroe County indicate up to Medium concentrations of *Karenia brevis* (MML 11/18). Satellite imagery (11/19) does not indicate elevated levels of chlorophyll in the region of the bloom making it difficult to determine the bloom's extent. Reports of discolored water have been received. Continued sampling is recommended.

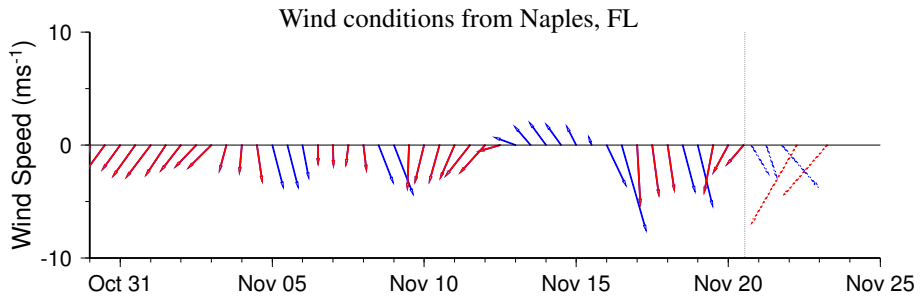
Samples from alongshore Manatee, Sarasota, Charlotte and Collier Counties indicate that *K. brevis* is not present at the coast; however numerous species of non-harmful algae remain (FWRI 11/17-18; SCHD 11/17). Satellite imagery indicates that chlorophyll levels have declined throughout southwest Florida and elevated chlorophyll features have moved southward in the past few days (11/17-19) except for the previously identified feature located east of Sanibel Island alongshore southern Lee County. This feature remains in place (centered at 26°26'20"N, 81°58'36"W) and still contains high levels of chlorophyll (>10 µg/L). The elevated chlorophyll feature located north of the Florida Keys has moved southward (now approximately 4 miles north of the Florida Keys) and extends from 25°20'40"N, 81°56'11"W southward to 24°41'25"N, 81°45'44"W. The third elevated chlorophyll feature (>3 µg/L) located offshore Sarasota County has diminished in size and has also moved closer to shore. It now extends from 27° 22' 15"N, 82°41'25"W southeastward to 27°2' 10"N, 82°31'26"W. Sampling in all three regions is also recommended.

Conditions are favorable for bloom formation in southern Lee County and continued southward transport of all features is possible today through Sunday, November 23.

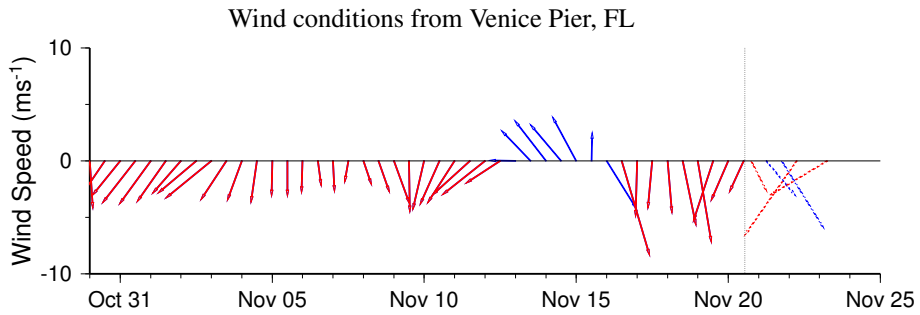
Urizar, Lindley

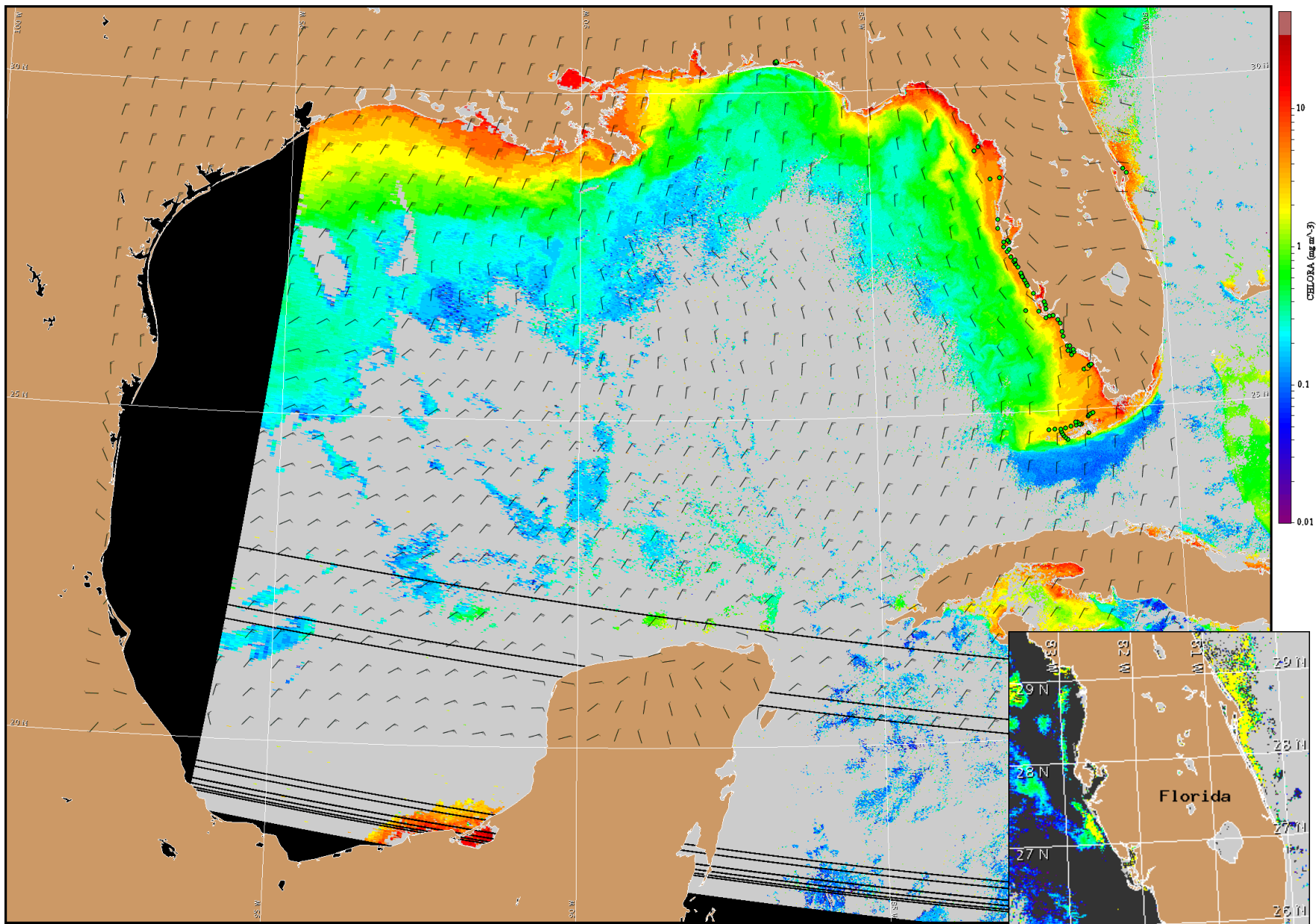
## Wind Analysis

Southwest Florida: Northwestern to northerly winds (5-15 kn, 3-8 m/s) today. Northerly winds (5-20 kn, 3-10 m/s) Friday. Northeasterly winds (10-20 kn, 5-10 m/s) Friday night through Sunday.

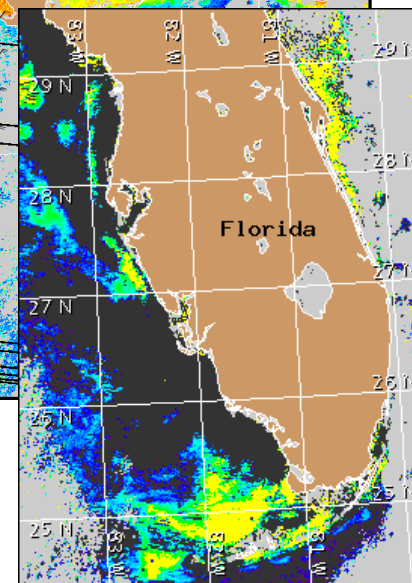


Wind speed and direction are averaged over 12 hours from buoy measurements. Length of line indicates speed; angle indicates direction. Red indicates that the wind direction favors upwelling near the coast. Values to the left of the dotted vertical line are measured values; values to the right are forecasts.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





Satellite chlorophyll image and forecast winds for November 21, 2008 12Z with Cell concentration sampling data from November 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 HABFS bulletin guide: [http://tidesandcurrents.noaa.gov/hab/habfs\\_bulletin\\_guide.pdf](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).