



# Gulf of Mexico Harmful Algal Bloom Bulletin

Region: Southwest Florida

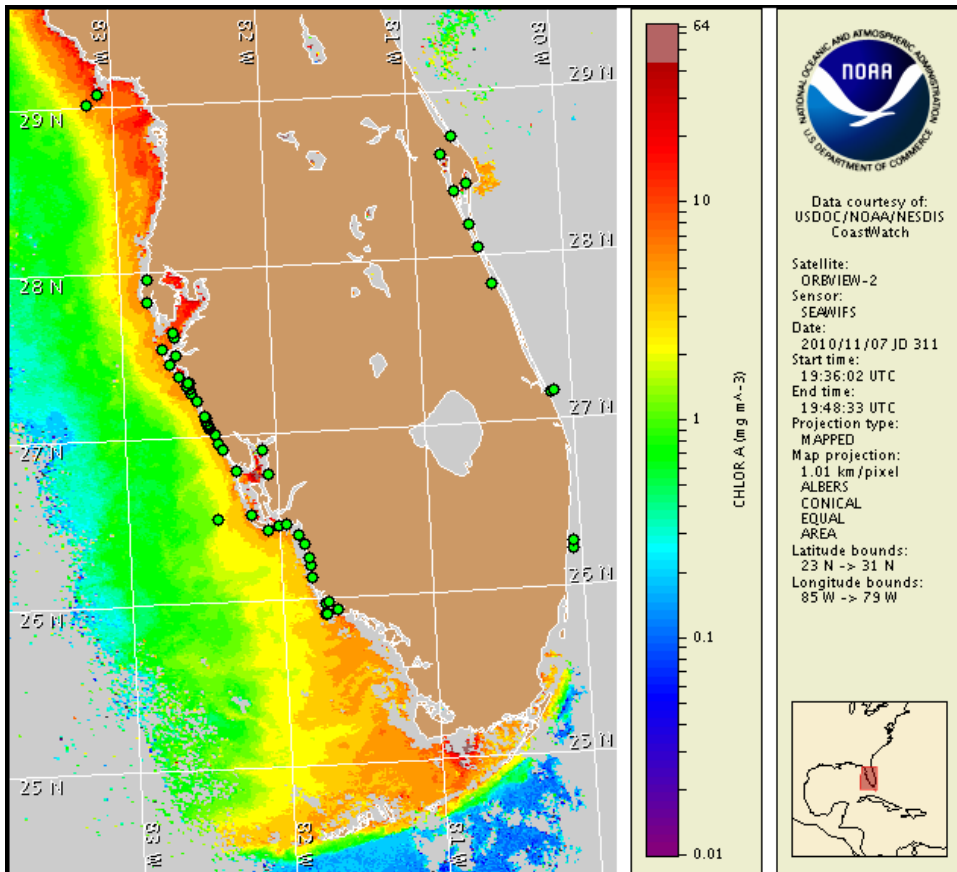
8 November 2010

NOAA Ocean Service

NOAA Satellites and Information Service

NOAA National Weather Service

Last bulletin: November 1, 2010



Satellite chlorophyll image with possible HAB areas shown by red polygon(s). Cell concentration sampling data from October 29 to November 4 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, including the Florida Keys. No impacts are expected alongshore southwest Florida today through Sunday, November 14.

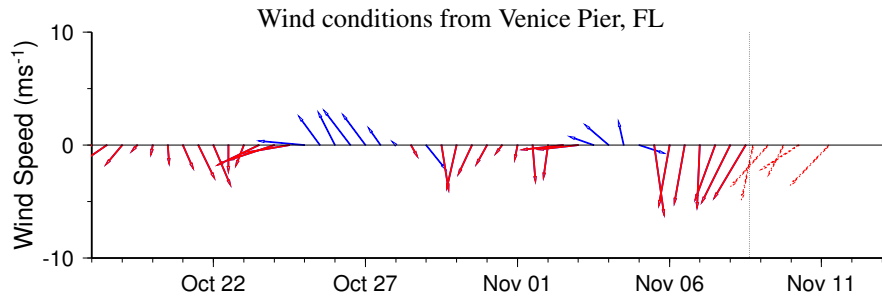
## Analysis

There is currently no indication of a harmful algal bloom at the coast in southwest Florida, including the Florida Keys. *Karenia brevis* was not identified in water samples collected last week alongshore Pinellas, Manatee, Charlotte, Lee and Collier Counties or offshore Sanibel Island in northern Lee County (FWRI, CCPCPD, MML, SCHD; 10/27-11/4). A single background concentration of *K. brevis* was identified alongshore Sarasota County (New Pass, 11/4; MML, FWRI). A bloom of *Takayama cf. acrotrocha*, first reported on 9/9, continues to be present in Collier County; no impacts have been reported (CCPCPD; 11/3).

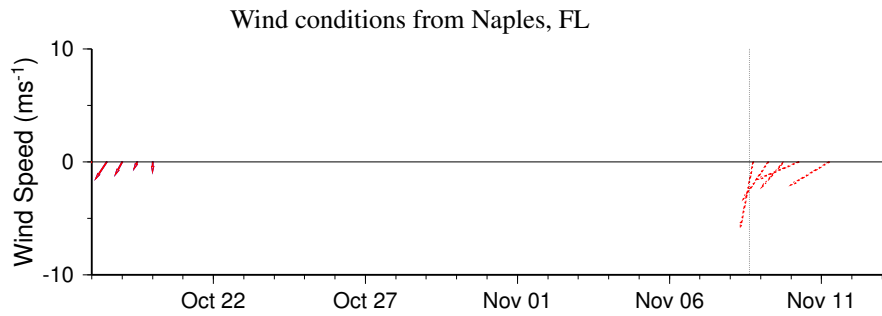
Elevated chlorophyll ( $2-4 \mu\text{g/L}$ ) is visible in recent satellite imagery along and offshore much of the southwest Florida coastline and in the Florida Keys. Strongly favorable upwelling conditions commenced on 11/5 and are likely contributing to a resuspension event visible along southwest Florida in current imagery (shown left). Although elevated chlorophyll has expanded further offshore, levels do not appear to have intensified at the coast over the past week. Chlorophyll levels appear to have weakened in imagery alongshore Lee and Collier counties since 10/31. Distinct elevated chlorophyll features ( $2-4 \mu\text{g/L}$ ) are presently visible 14-21 miles offshore northern Pinellas County and also alongshore to offshore southern Manatee and northern Sarasota counties, extending up to 15 miles from the coast. Much of the elevated chlorophyll visible at the coast is likely resulting from mixed blooms of non-harmful algae that continued to be reported last week alongshore Pinellas, Manatee, Lee, and Collier counties (FWRI, 11/1-11/3).

Northerly to northeasterly upwelling favorable winds are expected to continue through Friday. The potential for bloom formation exists early this week.

Fisher, Yang, Kavanaugh

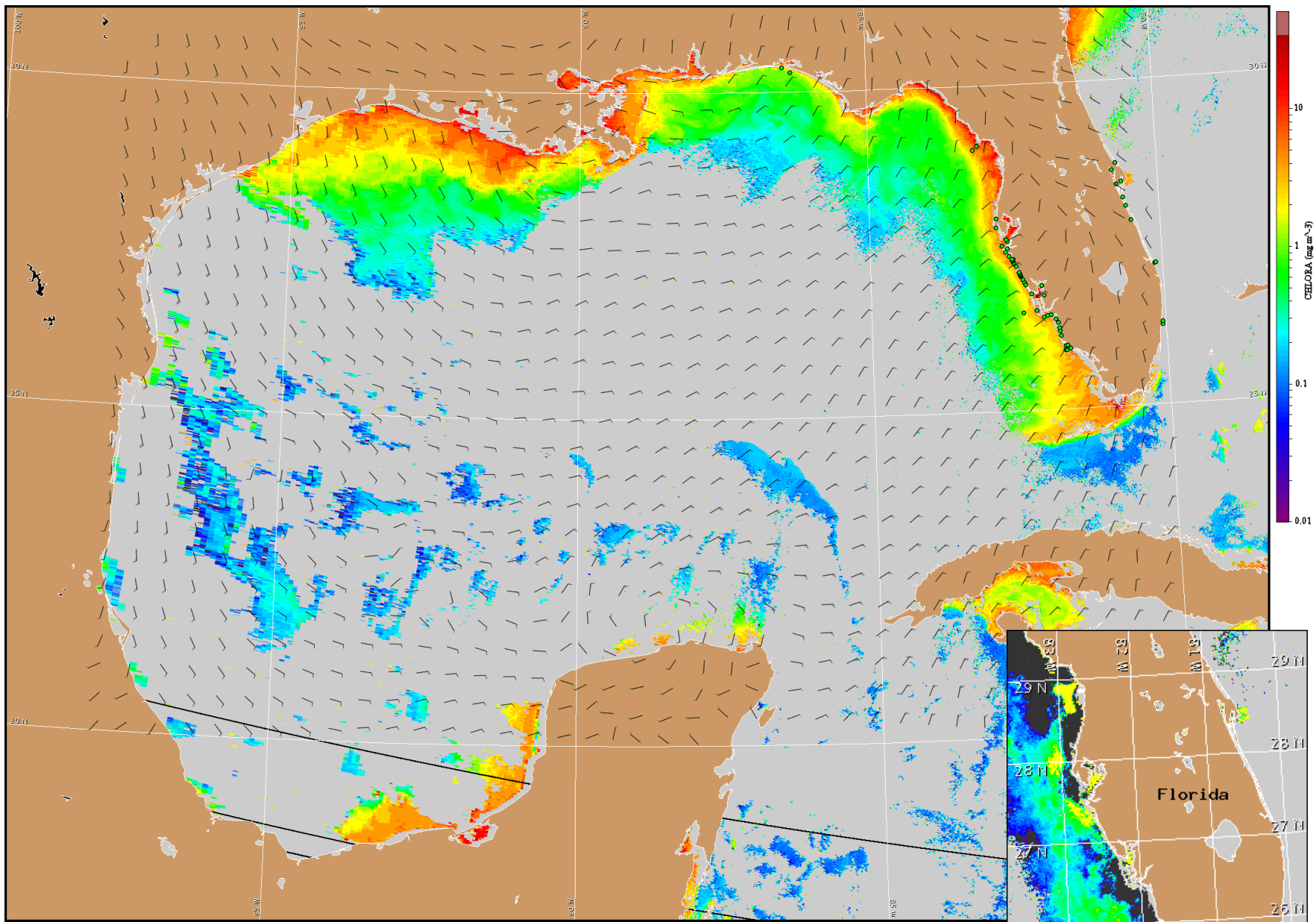


Wind speed and direction are averaged over 12 hours from buoy measurements. Length of line indicates speed; angle indicates direction. Red indicates that the wind direction favors upwelling near the coast. Values to the left of the dotted vertical line are measured values; values to the right are forecasts.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



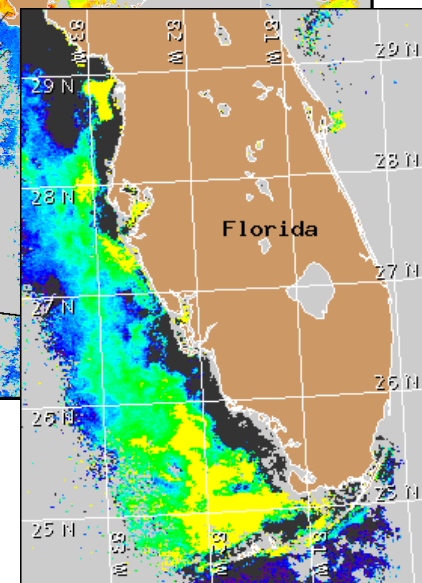
## Wind Analysis

**Southwest Florida:** North winds (10-15kn, 5-8m/s) today. Northeast winds (10kn, 5m/s) tonight through Tuesday, becoming northwest Tuesday afternoon. North to northeast winds (5-10kn, 3-5m/s) Tuesday night through Wednesday night. Northeast winds (10-15kn, 5-8m/s) Thursday through Friday.



Satellite chlorophyll image and forecast winds for November 9, 2010 12Z with Cell concentration sampling data from October 29 to November 4 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:

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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).