



Gulf of Mexico Harmful Algal Bloom Bulletin

Region: Southwest Florida

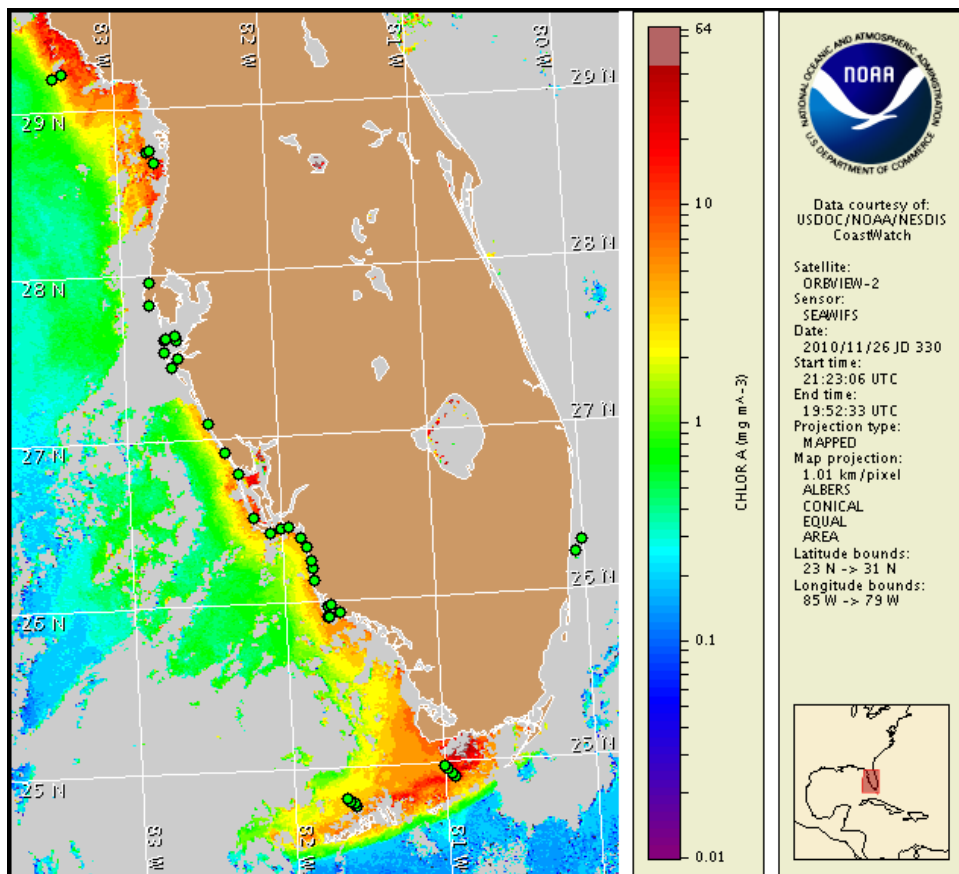
29 November 2010

NOAA Ocean Service

NOAA Satellites and Information Service

NOAA National Weather Service

Last bulletin: November 22, 2010



Satellite chlorophyll image with possible HAB areas shown by red polygon(s). Cell concentration sampling data from November 19 to 24 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

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, December 5.

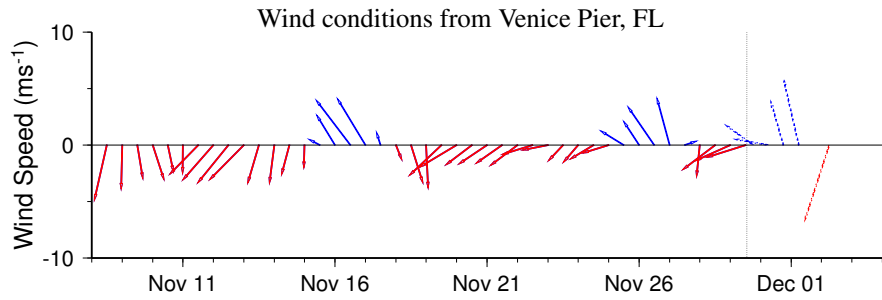
Analysis

There is currently no indication of a harmful algal bloom in southwest Florida, including the Florida Keys. *Karenia brevis* was not identified in water samples collected last week alongshore Pinellas, Manatee, Sarasota, Charlotte, Lee, and Collier counties or offshore Sarasota and Monroe counties (CCPCPD, FWRI, MML, SCHD; 11/16-24).

Imagery has been cloudy at the coast over the last several days, limiting analysis. Elevated chlorophyll (2-5 $\mu\text{g/L}$) is visible along much of the southwest Florida coastline from Pinellas to Collier County and elevated to high chlorophyll (4 to $>10 \mu\text{g/L}$) is visible throughout Pine Island Sound and San Carlos Bay in central Lee County. Much of the elevated chlorophyll at the coast is likely the result of non-toxic mixed diatom blooms that continue to be reported along southwest Florida, as indicated by recent samples, including one sample collected from Lighthouse Beach last week (FWRI; 11/23). Elevated to high chlorophyll (4 to $>10 \mu\text{g/L}$) is also visible throughout the Florida Keys region; however, all samples collected in this region indicate that *K. brevis* is not present.

Variable winds at the beginning of the week limit the potential for bloom formation through Tuesday. Northerly to northeasterly upwelling favorable winds forecasted through Friday will increase the potential for bloom formation later in the week.

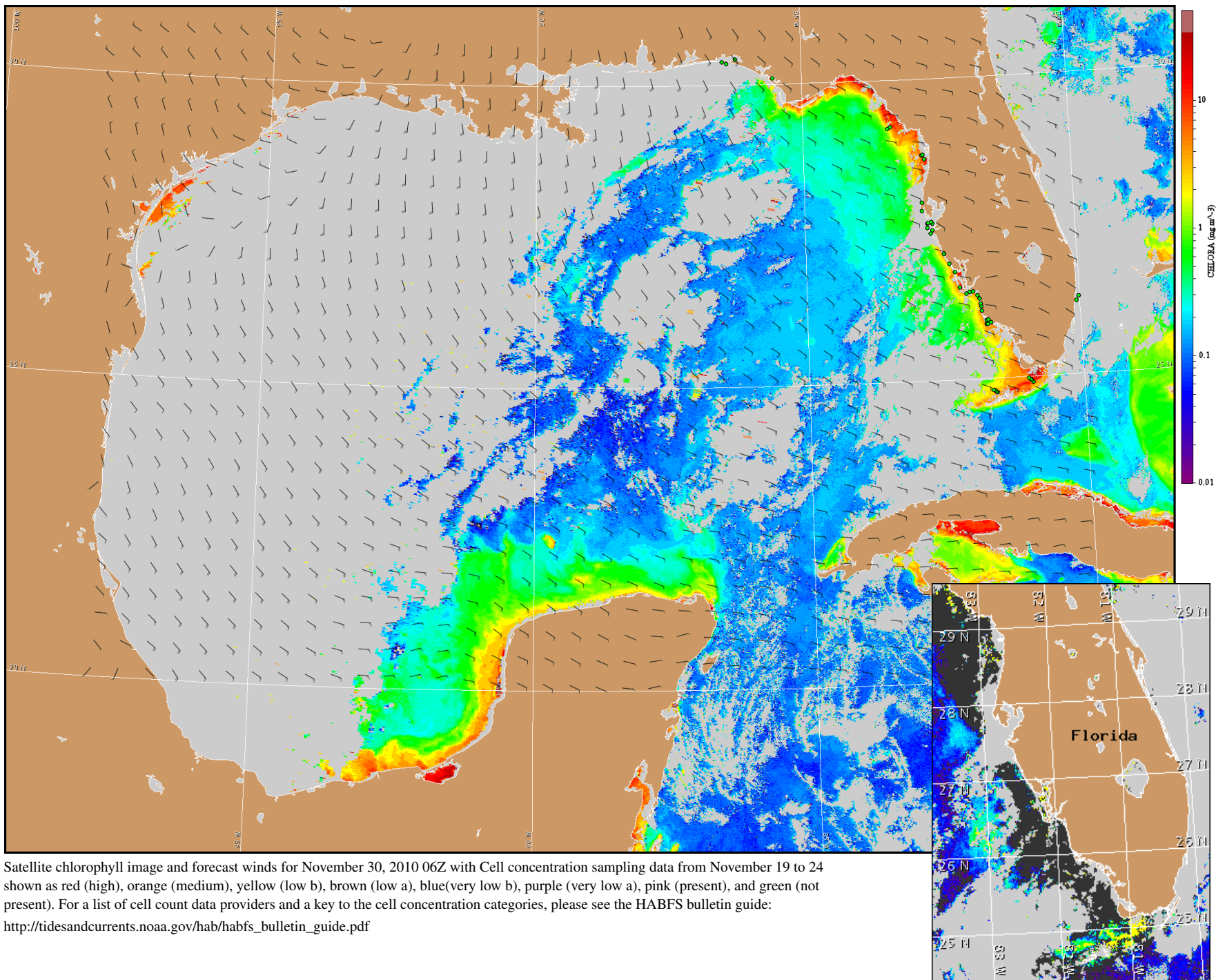
Derner, Urizar, Kavanaugh



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: East to southeast winds (10-15kn, 5-8m/s) today. South to southwest winds (15-20kn, 8-10m/s) Tuesday. North to northeast winds (20kn, 10m/s) Wednesday. Northeast winds (15-20kn) Thursday. North winds (10-15kn) Friday.



Satellite chlorophyll image and forecast winds for November 30, 2010 06Z with Cell concentration sampling data from November 19 to 24 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

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