



# Gulf of Mexico Harmful Algal Bloom Bulletin

Region: Southwest Florida

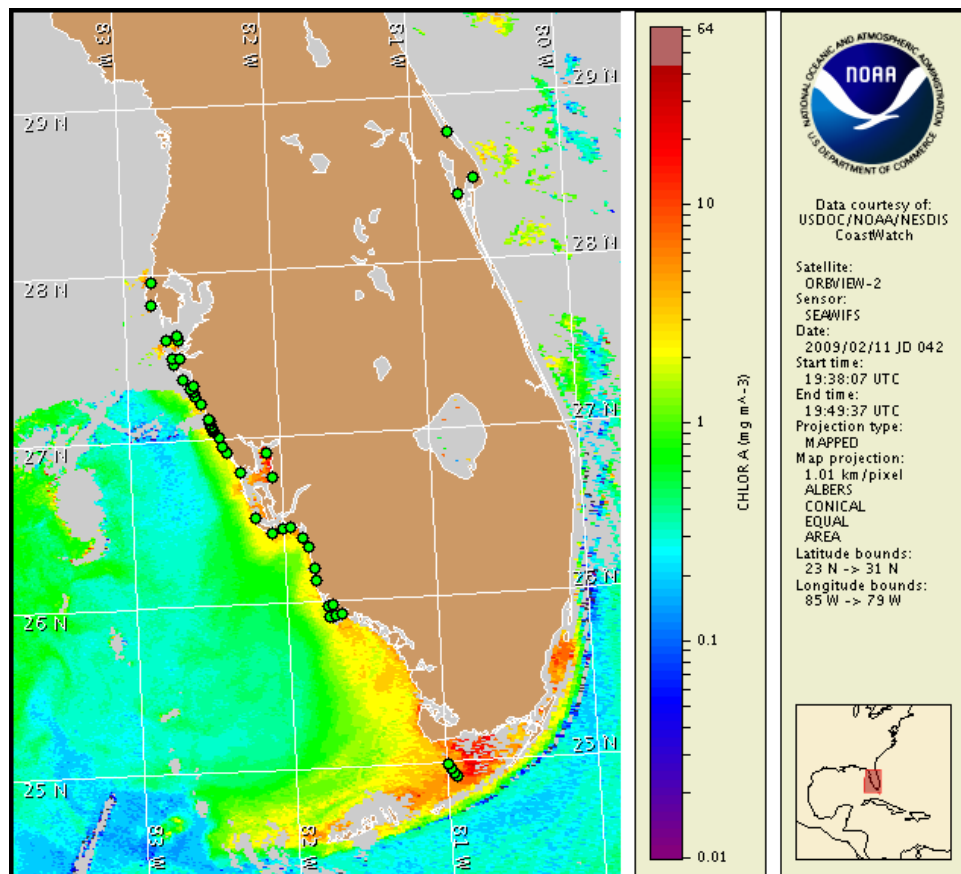
12 February 2009

NOAA Ocean Service

NOAA Satellites and Information Service

NOAA National Weather Service

Last bulletin: February 9, 2009



Satellite chlorophyll image with possible HAB areas shown by red polygon(s). Cell concentration sampling data from February 2 to 9 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 report of a harmful algal bloom at the coast in southwest Florida including the Florida Keys. No impacts are expected alongshore southwest Florida today through Monday, February 16. A non-harmful algal bloom has been identified near Key Marco in southern Collier County; patches of red discolored water have been reported in this region.

## Analysis

There is currently no report of a harmful algal bloom at the coast in southwest Florida including the Florida Keys. No *Karenia brevis* was identified this week alongshore southwest Florida in Sarasota and Collier Counties (FWRI, SCHD; 2/9). Red discolored water has been reported near Key Marco between Goodland and Marco Island. This discoloration is attributed to the presence of a non-harmful dinoflagellate bloom of *Kryptoperidinium foliaceum* (FWRI, 2/11).

The feature currently being monitored west of the lower Keys continues to be visible in recent imagery, but has decreased substantially in both extent and intensity since Feb. 8. The feature is currently located approximately 6 to 25 miles directly west of the Marquesas Keys. Small patches of elevated chlorophyll also remain visible in imagery northwest of Key West near 24°36'40"N 81°51'43"W, southwest of Key West from 24°28'21"N 81°52'48"W to 24°29'19"N 81°46'4"W (MODIS, 2/10, not shown), and in a band extending approximately 1-3 miles south of the lower Florida Keys from Cudjoe Key to Bahia Honda Key. Sampling south of the lower Keys is recommended.

Predicted wind conditions may continue to promote slight westward transport of features west of the lower Florida Keys through Saturday. Northerly predicted winds may promote southward transport of features on Sunday and Monday. Conditions are not favorable for bloom formation in southwest Florida.

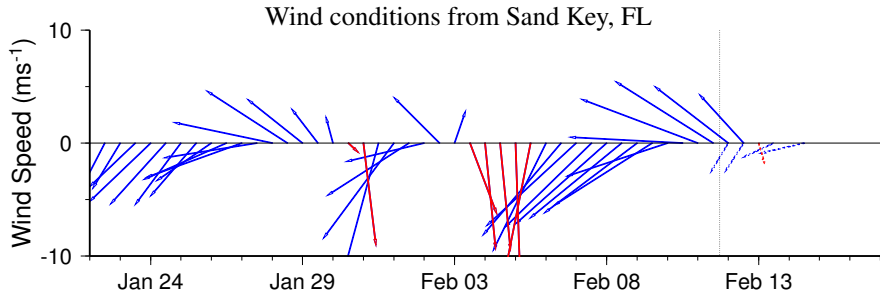
\*Due to the upcoming federal holiday, the next bulletin will be issued on Tuesday, Feb. 17.

~Fisher, Gan

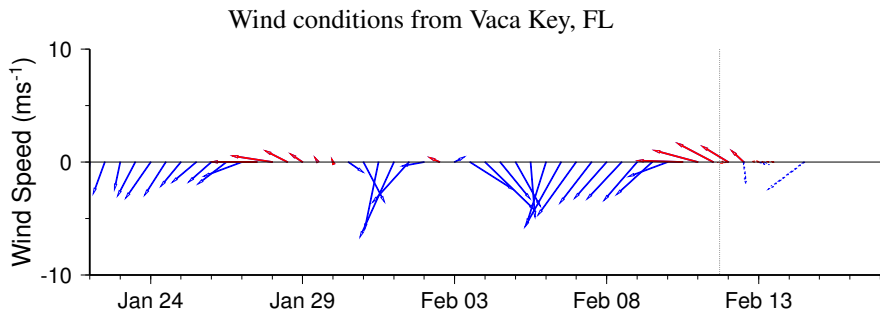
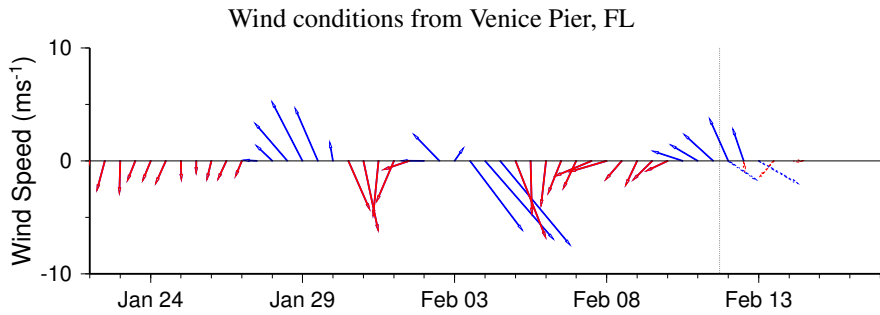
## Wind Analysis

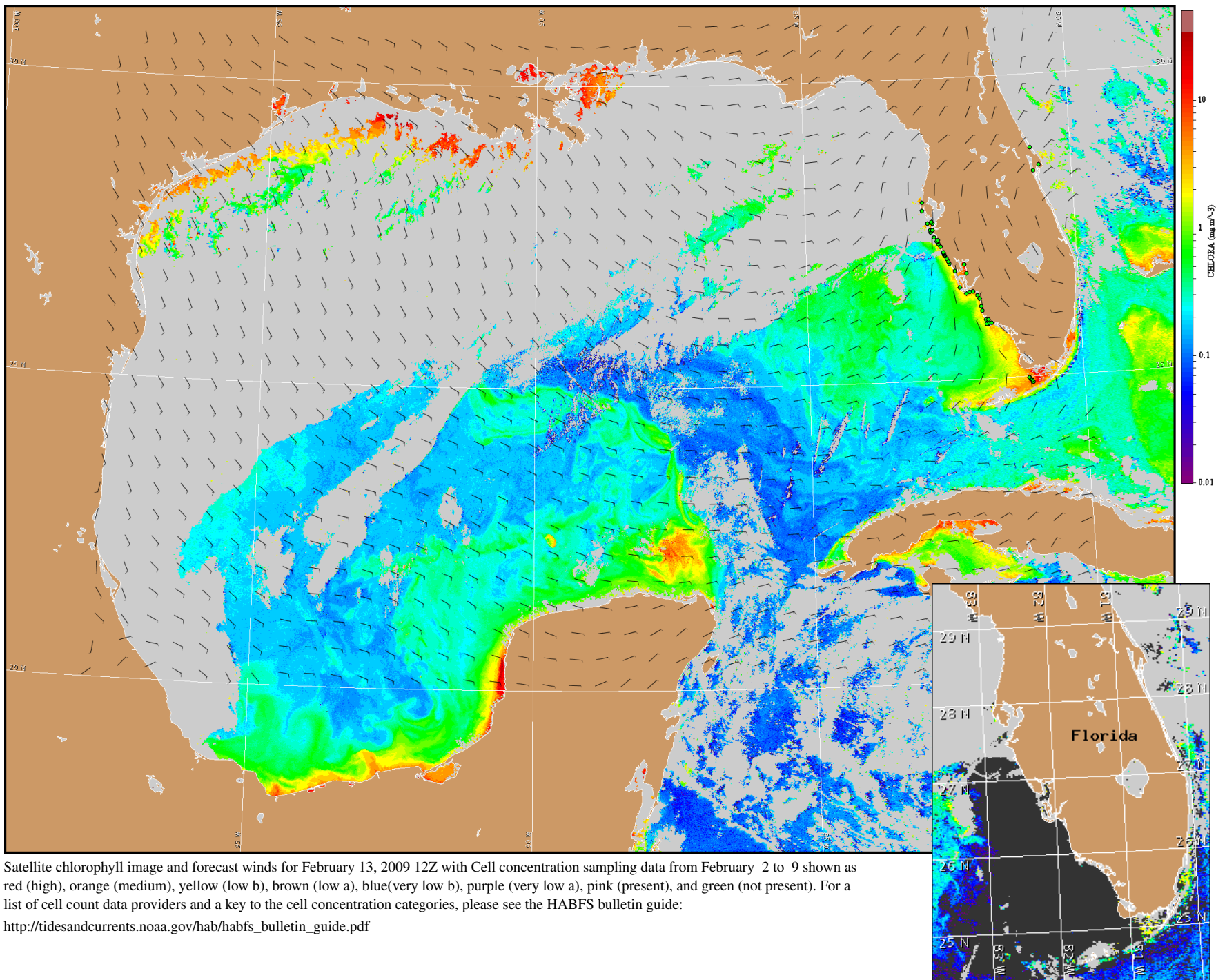
Lower Florida Keys: Southeast to east winds today through Friday (5-15kn, 3-8m/s). Variable winds Saturday (5-10kn, 3-5m/s). Northwest to north winds on Sunday and Monday (10-15kn, 5-8m/s).

SW Florida: Variable winds today through Sunday. North winds Monday (10-15kn, 5-8m/s).



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 February 13, 2009 12Z with Cell concentration sampling data from February 2 to 9 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).