



Gulf of Mexico Harmful Algal Bloom Bulletin

Region: Southwest Florida

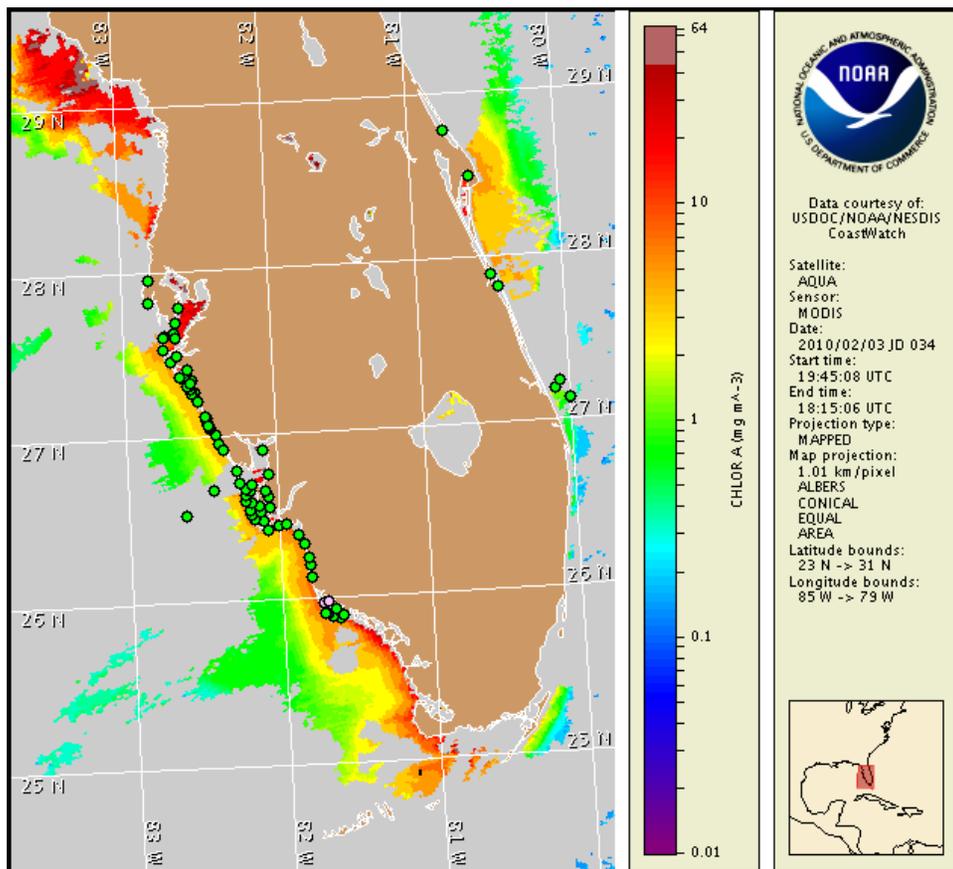
4 February 2010

NOAA Ocean Service

NOAA Satellites and Information Service

NOAA National Weather Service

Last bulletin: February 1, 2010



Satellite chlorophyll image with possible HAB areas shown by red polygon(s). Cell concentration sampling data from January 25 to February 2 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

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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

A harmful algal bloom has been identified in central Collier County and offshore in the gulfside region of the lower Florida Keys. Patchy low impacts are possible today through Sunday in central Collier County. In the lower Florida Keys region, patchy very low impacts are possible today through Friday, and patchy high impacts are possible Saturday through Sunday. No impacts are expected elsewhere alongshore southwest Florida today through Sunday, February 7.

Analysis

A harmful algal bloom has been identified in central Collier County and offshore in the gulfside region of the lower Florida Keys. Recent samples (2/1) indicate 'low a' concentrations of *Karenia brevis* and *Karenia sp.* at Caxambas Pass, where background *K. brevis* concentrations were previously reported (1/26; FWRI). Two background concentrations of *K. brevis* were also identified in the Big Marco Pass area (2/1; FWRI). Samples collected in northern Collier County, including Clam Pass, all indicate that *K. brevis* is not present (2/1; FWRI). There have been no new samples reported from the Florida Keys region. The most recent samples indicated *K. brevis* concentrations ranging from 'very low a' to 'medium' located 3-10 miles north of the lower Florida Keys (1/18-20; MML), and 'not present' in the upper Florida Keys. All other sample results reported alongshore Pinellas, Manatee, Sarasota, Charlotte, Lee, and Collier counties indicate that *K. brevis* is not present.

Satellite imagery indicates elevated chlorophyll (4->7 $\mu\text{g/L}$) along the coast stretching from northern to central Collier County (Marco Island region). Imagery is patchy in the Florida Keys region, though indicates elevated chlorophyll (4->7 $\mu\text{g/L}$) on the gulf side, north of the Marathon Keys, centered around 24°56'25"N 81°6'25"W. Elevated chlorophyll features in the Florida Bay region are not necessarily indicative of harmful algae presence.

There have been several reports of dead fish at the Naples Pier received over the past week. Confirmed cause of the fish kills is unknown at this time.

Variable winds forecasted for the Collier County region suggest that bloom intensification is unlikely today through Sunday. Variable winds in the Florida Keys over the next several days also decrease the likelihood of bloom intensification or transport in this region.

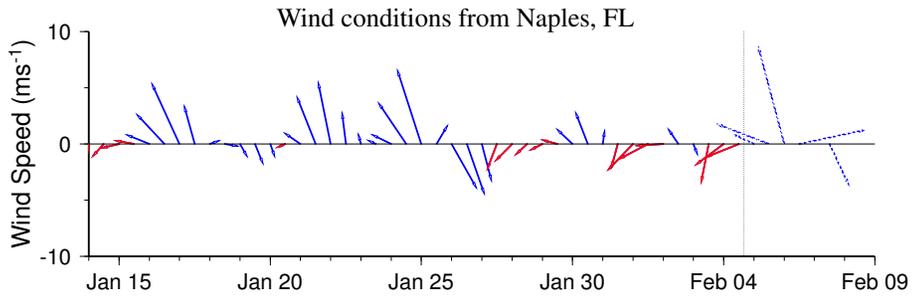
Due to technical difficulties SeaWiFS imagery is currently unavailable for display. MODIS imagery is shown on this bulletin.

Derner, Urizar

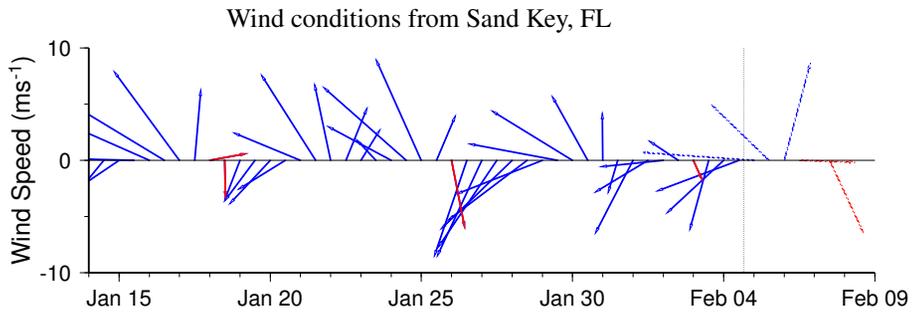
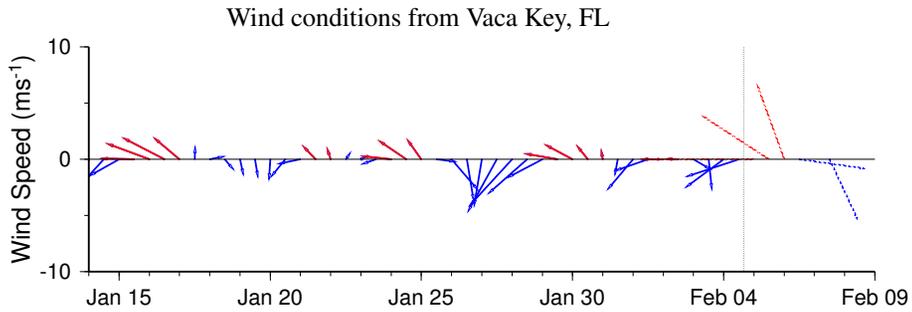
Wind Analysis

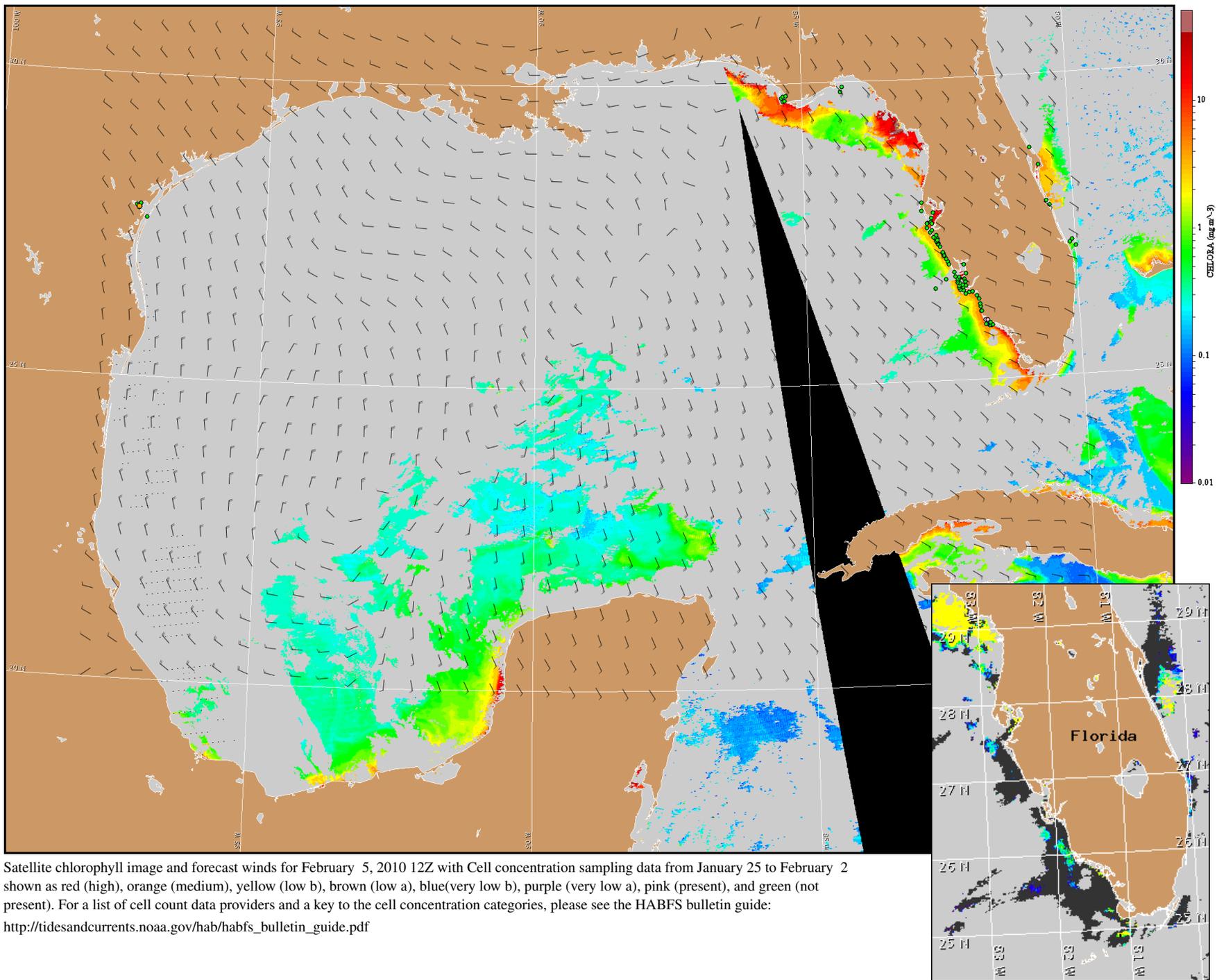
Southwest Florida: East to southeast winds today (10-15kn, 5-8m/s). South winds Friday (20kn, 10m/s). West winds Friday night (15kn, 8m/s) becoming northwest Saturday through Sunday (15-20kn, 8-10m/s). Northeast winds Sunday night (10kn, 5m/s).

Florida Keys (gulfside): East winds today (15kn, 8m/s) shifting southeast tonight through Friday (15-20kn, 8-10m/s). Southwest winds Friday night (15-20kn). Northwest to north winds Saturday through Sunday (15-20kn).



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 5, 2010 12Z with Cell concentration sampling data from January 25 to February 2 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).