



Gulf of Mexico Harmful Algal Bloom Bulletin

Region: Southwest Florida

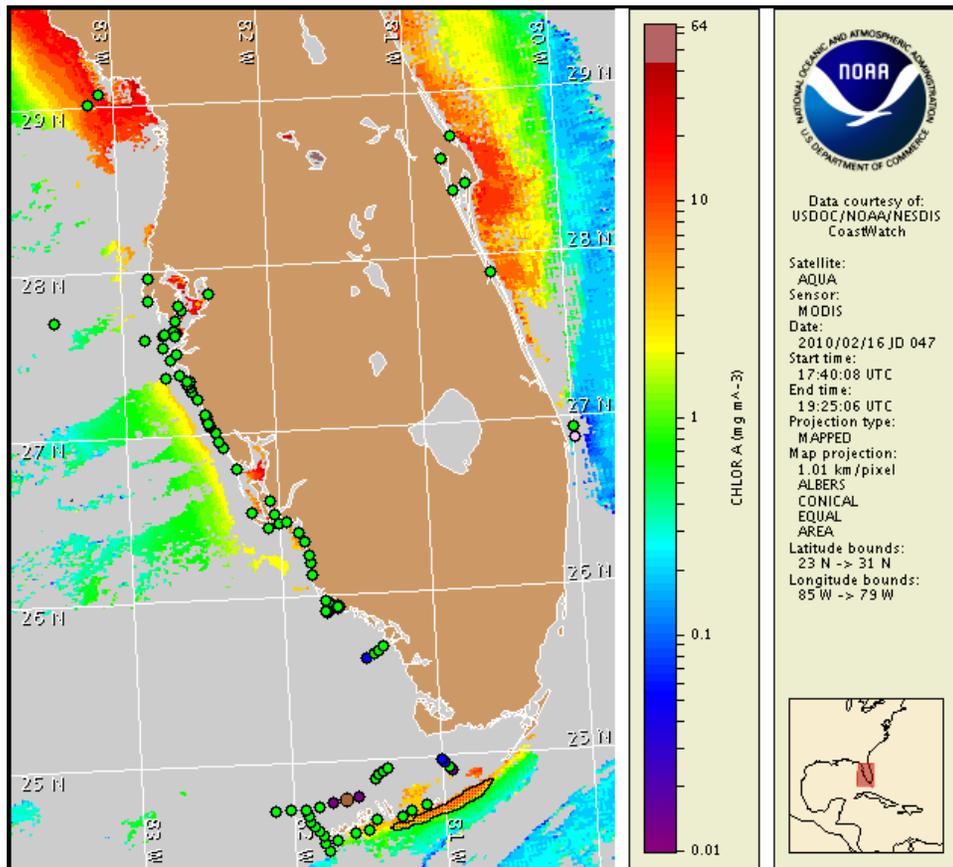
18 February 2010

NOAA Ocean Service

NOAA Satellites and Information Service

NOAA National Weather Service

Last bulletin: February 16, 2010



Satellite chlorophyll image with possible HAB areas shown by red polygon(s). Cell concentration sampling data from February 8 to 17 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

A harmful algal bloom continues offshore in the gulfside region of the lower and middle Florida Keys. Localized harmful algal blooms may still be present in patches at the coast in central Collier County and offshore northern Monroe County. In the gulfside region of the lower and middle Florida Keys, patchy low impacts are possible today through Sunday. No impacts are expected elsewhere alongshore southwest Florida today through Sunday, February 21.

Analysis

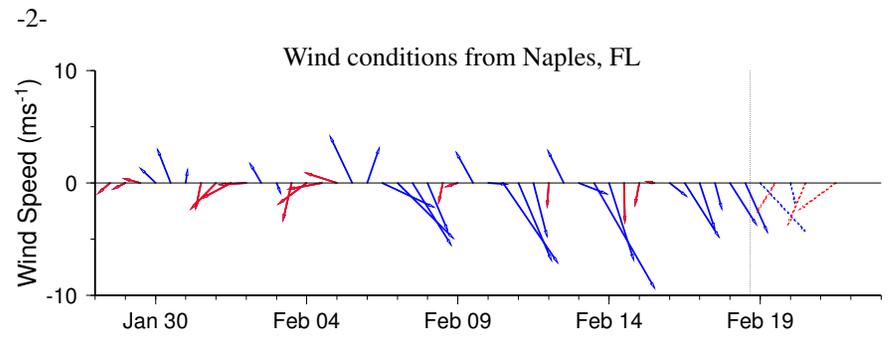
SW Florida: Localized harmful algal blooms may still be present in patches at the coast in central Collier County and offshore northern Monroe County. The patchy harmful algal bloom identified in the Marco Island region of central Collier County appears to have dissipated, as recent samples indicate no *Karenia brevis* presence at Caxambas Pass, Goodland Bridge, Big Marco Pass (2/15), or South Marco Beach (2/16), where previous samples indicated *K. brevis* concentrations ranging from background to 'low a' (2/8; FWRI). No new sample information is available for northern Monroe county where a 'very low b' *K. brevis* concentration was identified southwest of Pavilion Key on 2/9 (FWRI). All other sample results reported alongshore southwest Florida from Pinellas to Lee County, and offshore Pinellas County, indicate that *K. brevis* is not present. No reports of impacts due to harmful algal blooms have been received.

Satellite imagery is cloudy alongshore southern Collier and Monroe counties, limiting analysis. Recent MODIS imagery (2/15; not shown) suggests that patches of elevated chlorophyll previously identified in central to southern Lee County may have dissipated. Variable north winds today through Saturday may promote southerly transport of any remaining *K. brevis* patches in southern Lee, Collier, and northern Monroe counties.

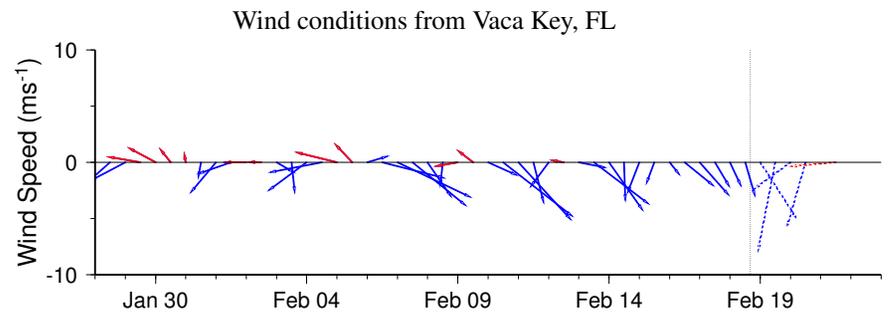
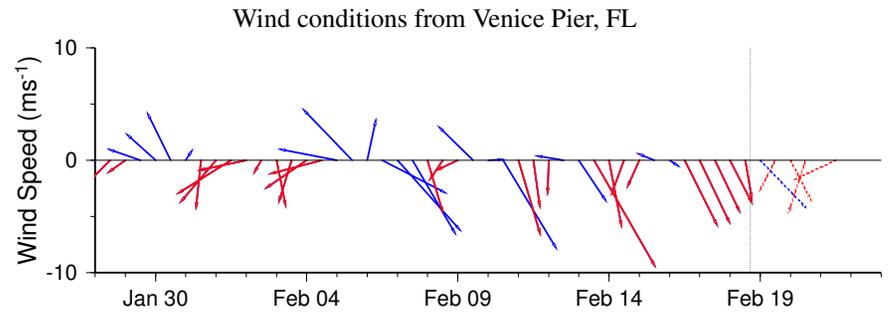
Florida Keys: A patchy harmful algal bloom continues offshore in the gulfside region of the lower and middle Florida Keys. In the lower Florida Keys region, 'very low a' *K. brevis* concentrations were identified approximately 1.7 mi north of Sawyer Key and 6.6 mi north of West Harbor Key; 'low a' *K. brevis* concentrations were identified approximately 4 miles north of Marvin Key (2/15; MML). No new sample information is available north of the middle Florida Keys where 'very low a' to 'very low b' *K. brevis* concentrations were last identified on 2/8 (MML). Continued sampling throughout the Florida Keys is recommended.

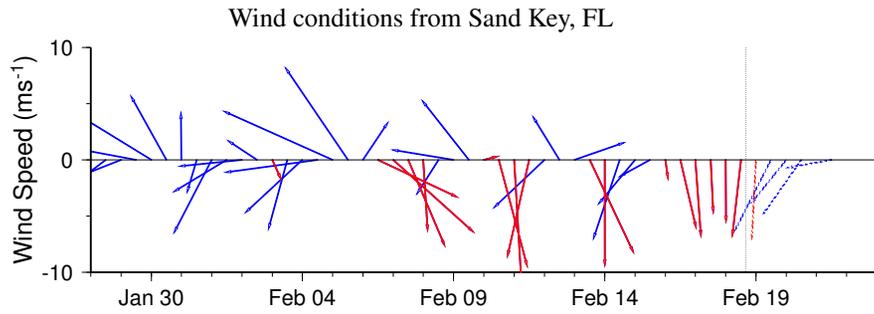
Recent satellite imagery surrounding the Florida Keys is predominately obscured by clouds, limiting analysis. Imagery from 2/16 (shown left) indicates that the previously identified large band of elevated chlorophyll (3-6 $\mu\text{g/L}$) continues to be present extending from southwest of Cudjoe Key in the lower Florida Keys region to south of Mantecumbe, in the upper Florida Keys region (approximately 24°32'50"N 81°31'7"W to 24°51'59"N 80°37'43"W). Sampling is recommended in this region as *K. brevis* may have transported here from the Gulf of Mexico. Strong north winds forecasted through Saturday will increase the potential for southward transport of the bloom north of the Keys.

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



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).

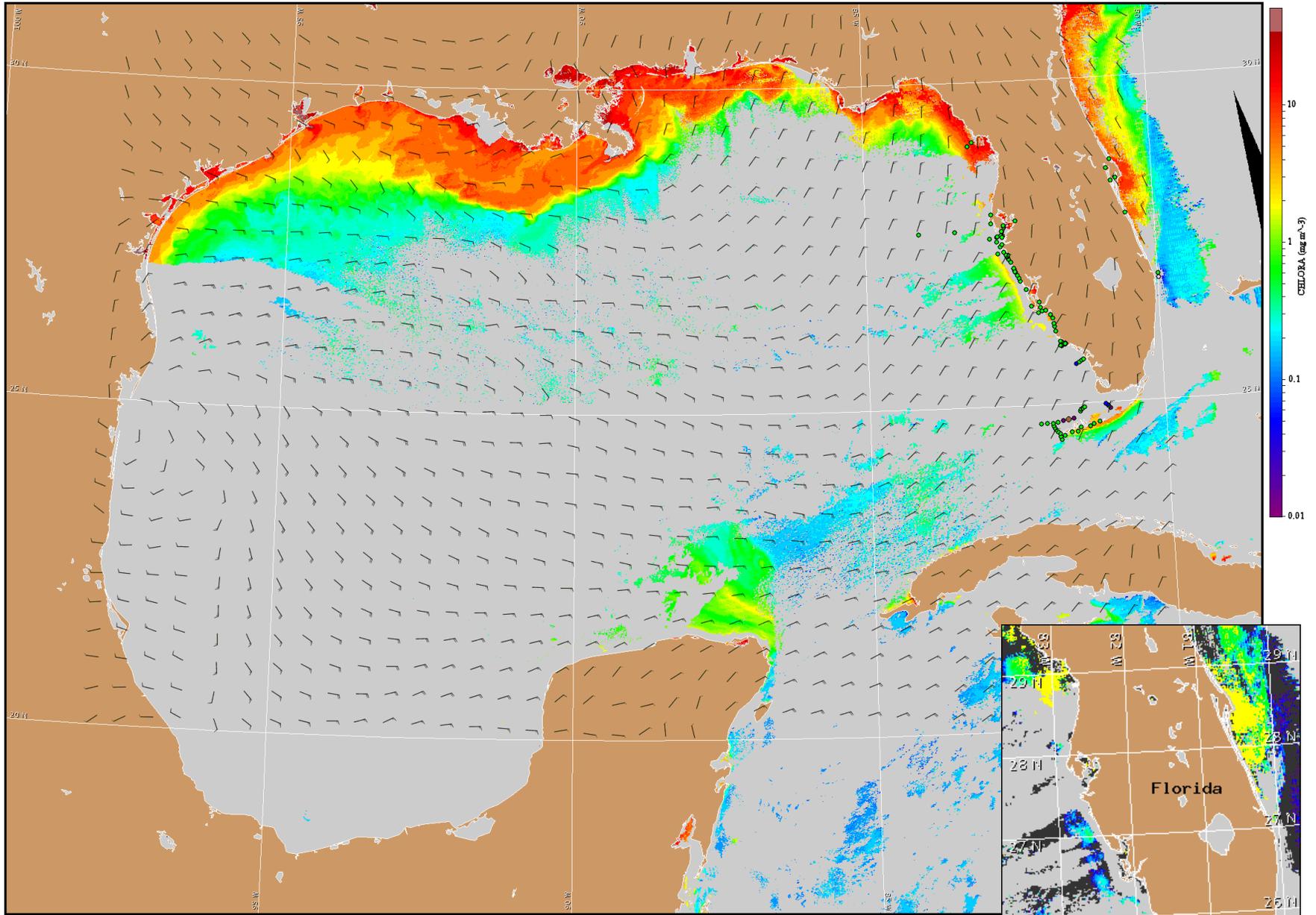




Wind Analysis

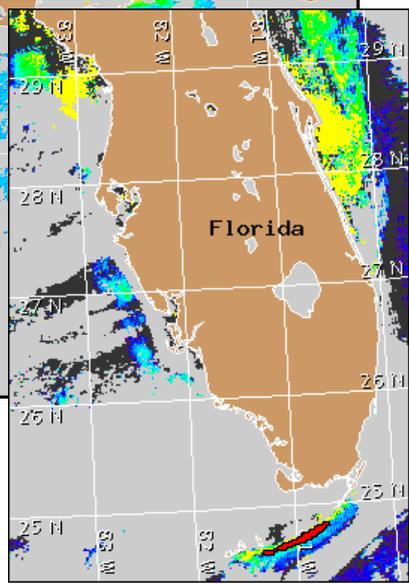
Southwest Florida: North winds today through tonight (7-13kn, 4-7m/s). Northeast winds shifting north on Friday night (5-13kn, 3-7m/s). Northeast winds Saturday (5-11kn, 3-6m/s). East to southeast winds on Sunday (6-14kn, 3-7m/s).

Florida Keys (gulfside): North to northeast winds today and tonight (10-15kn, 5-8m/s). North to northeast winds Friday (5-15kn, 3-8m/s). Northeast winds Saturday (10kn, 5m/s). East winds Sunday (10-15kn).



Satellite chlorophyll image and forecast winds for February 19, 2010 12Z with Cell concentration sampling data from February 8 to 17 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).