



Gulf of Mexico Harmful Algal Bloom Bulletin

Region: Southwest Florida

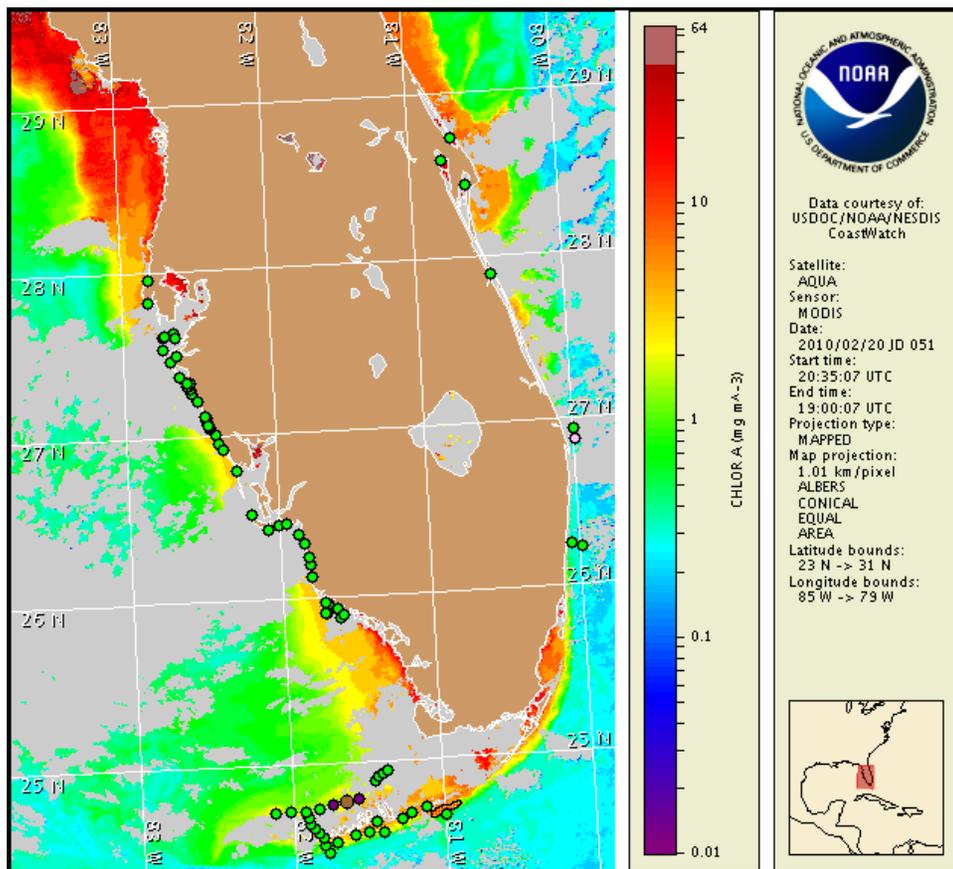
22 February 2010

NOAA Ocean Service

NOAA Satellites and Information Service

NOAA National Weather Service

Last bulletin: February 18, 2010



Satellite chlorophyll image with possible HAB areas shown by red polygon(s). Cell concentration sampling data from February 12 to 20 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 persists offshore the gulfside region of the lower and middle Florida Keys. In the gulfside region of the lower and middle Florida Keys, patchy very low impacts are possible today and patchy low impacts are possible Tuesday and Wednesday. No impacts are expected elsewhere alongshore southwest Florida today through Wednesday, February 24.

Analysis

SW Florida: Harmful algal blooms previously identified at the coast in central Collier County and offshore northern Monroe County have dissipated. The patchy harmful algal bloom identified in the Marco Island region of central Collier County has dissipated. Recent samples indicate that *Karenia brevis* is not present at Camp Key and Coon Key Light (FWRI; 2/17) in central Collier County. No new sample information is available for northern Monroe county where a 'very low b' *K. brevis* concentration was last identified southwest of Pavilion Key on 2/9 (FWRI). All other sample results from alongshore Manatee to Lee County, indicate that *K. brevis* is not present (FWRI 2/17). No reports of impacts due to harmful algal blooms have been received. Where visible, MODIS imagery (2/20) does not indicate the presence of elevated chlorophyll features onshore or offshore central Collier County.

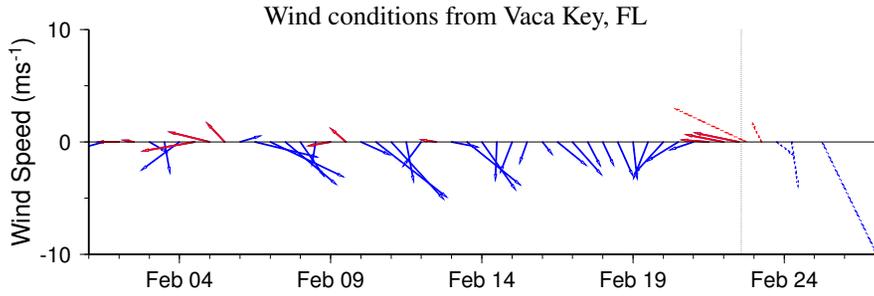
Florida Keys: A patchy harmful algal bloom persists offshore the gulfside region of the lower and middle Florida Keys. No new samples have been received in this region in the past few days. Imagery from 2/20 indicates that the previously identified large band of elevated chlorophyll (3-6 $\mu\text{g/L}$) 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. One of three samples collected in this region indicates that *K. brevis* is present; while the remaining two samples did not contain *K. brevis* (MML 2/17 & 2/20). Continued sampling throughout the Florida Keys is recommended.

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

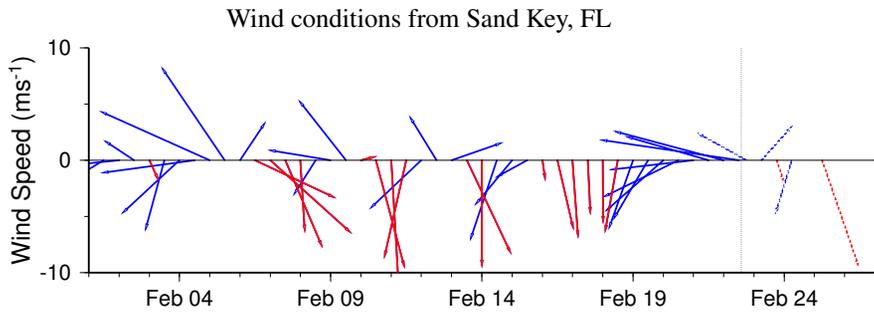
Urizar, Lindley

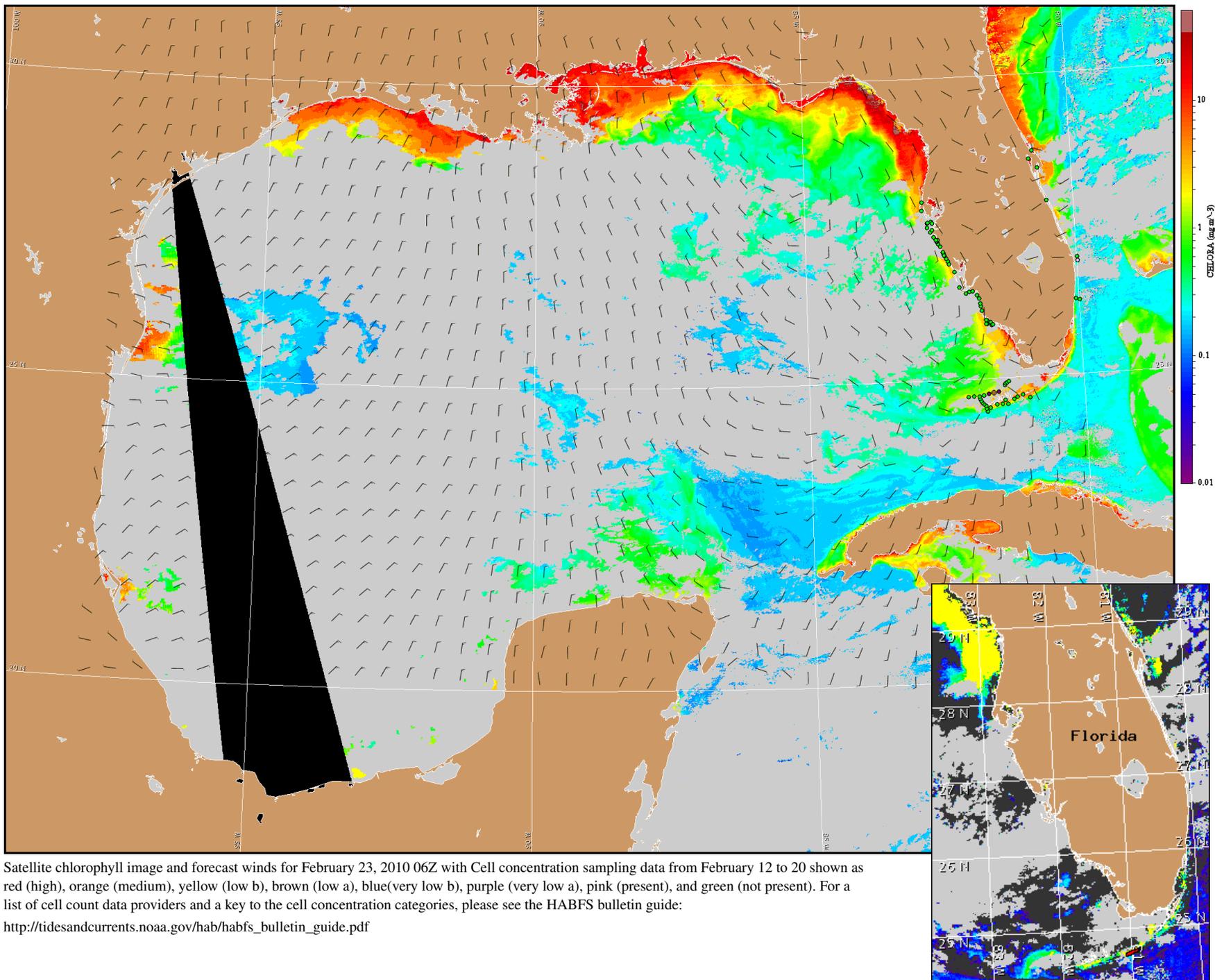
Wind Analysis

Florida Keys: Southeasterly winds (20 kn, 10 m/s) today and southwesterly to westerly winds tonight (10-15 kn, 5-8m/s). Westerly to northeasterly winds Tuesday (10 kn). Southeasterly winds Wednesday (10 kn) shifting to northwesterly to northerly winds Wednesday night (20-25 kn, 10-13 m/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 23, 2010 06Z with Cell concentration sampling data from February 12 to 20 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).