



Gulf of Mexico Harmful Algal Bloom Bulletin

Region: Southwest Florida

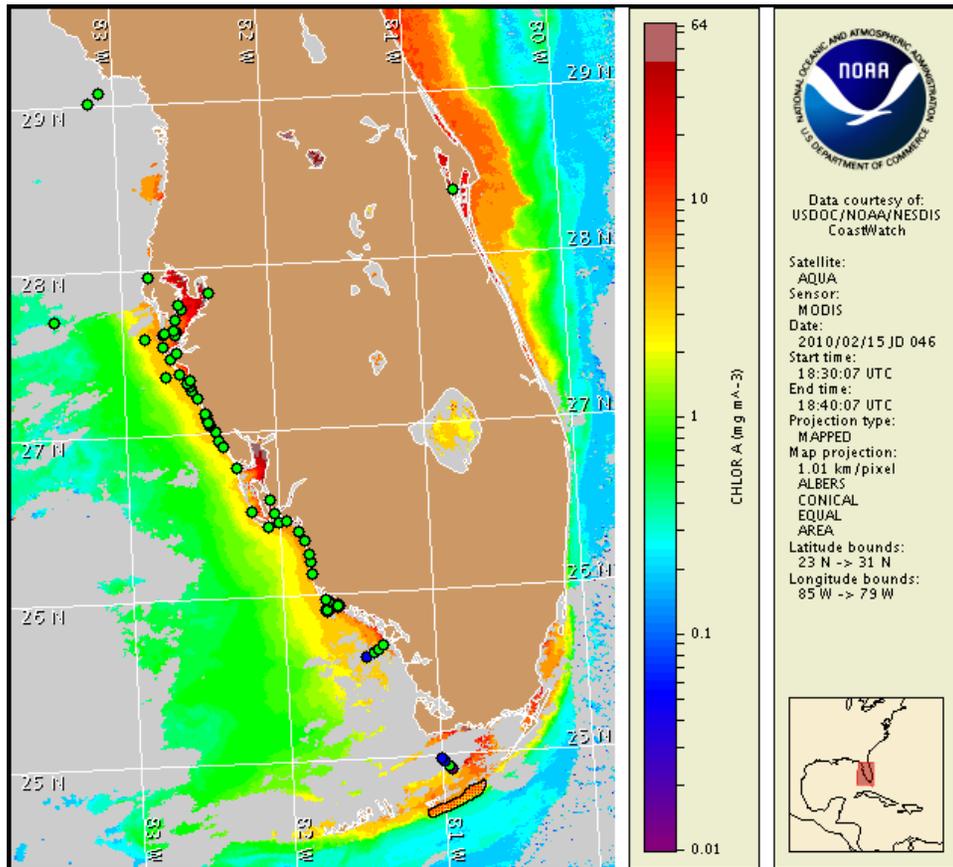
16 February 2010

NOAA Ocean Service

NOAA Satellites and Information Service

NOAA National Weather Service

Last bulletin: February 12, 2010



Satellite chlorophyll image with possible HAB areas shown by red polygon(s). Cell concentration sampling data from February 8 to 15 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 localized harmful algal bloom continues at the coast in central Collier County and offshore northern Monroe County. A harmful algal bloom has also been identified offshore in the gulfside region of the middle Florida Keys. In central Collier County, patchy low impacts are possible today through Wednesday. In the gulfside region of the middle Florida Keys, patchy very low impacts are possible today through Wednesday. No impacts are expected elsewhere alongshore southwest Florida today through Wednesday, February 17.

Analysis

SW Florida: Localized harmful algal blooms are currently present in central Collier County and offshore northern Monroe County. A patchy harmful algal bloom continues in the Marco Island region of central Collier County where the most recent samples indicate *Karenia brevis* concentrations ranging from background to 'low a' (2/8; FWRI). No new samples have been collected in the area south of Sanibel Island where 'low a' *K. brevis* concentrations were identified on 2/3 (FWRI), nor in 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.

Recent satellite imagery suggests that patches of elevated chlorophyll previously identified west and south of Sanibel Island in central to southern Lee County may have dissipated. Imagery along the coast in southern Collier County and Monroe County is cloudy and limits analysis in this region.

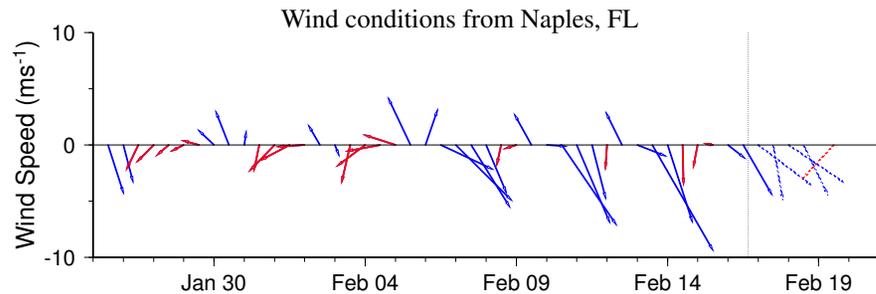
Strong north to northwest winds today and Wednesday may promote southerly transport of the bloom and any remaining *K. brevis* patches south of Sanibel Island to Collier County.

Florida Keys: A patchy harmful algal bloom has been identified offshore in the gulfside region of the middle Florida Keys. *K. brevis* concentrations up to 'very low b' were identified approximately 10-16 miles north of the middle Florida Keys on 2/8 (FWRI). No new sample information is available north of the lower Florida Keys where 'medium' concentrations were identified on 1/20 (FWRI). Continued sampling is recommended.

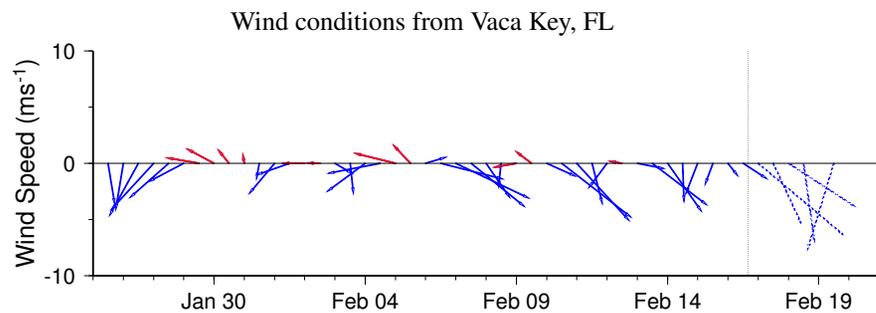
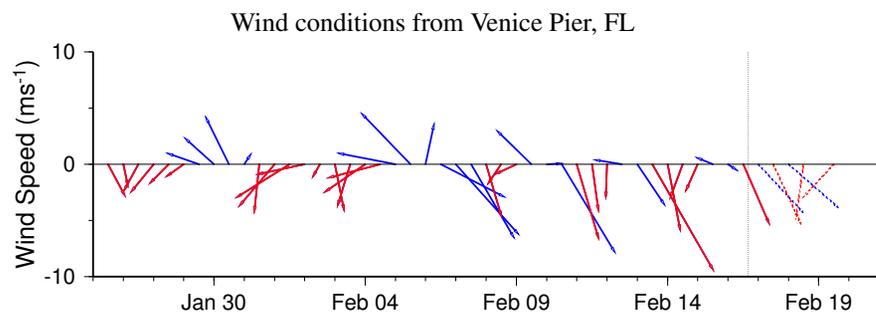
Recent satellite imagery north of the Florida Keys is predominately obscured by clouds; however, the previously identified large band of elevated chlorophyll (3-6 $\mu\text{g/L}$) continues to be visible from south of Cudjoe Key in the lower Florida Keys region to south of Mantecumbe, in the upper Florida Keys region. Sampling is recommended in this region as *K. brevis* may have transported here from the Gulf of Mexico. Strong north winds forecasted over the next two days will increase the potential for southward transport of the bloom north of the Keys.

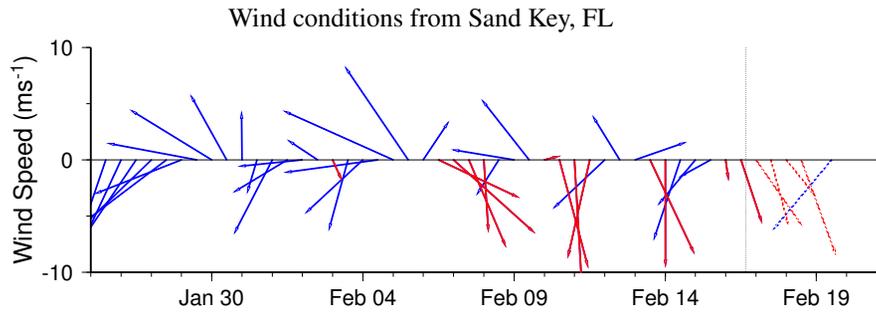
Due to technical difficulties SeaWiFS imagery is currently unavailable for display. MODIS imagery is shown on this bulletin.

Derner, Fisher



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).

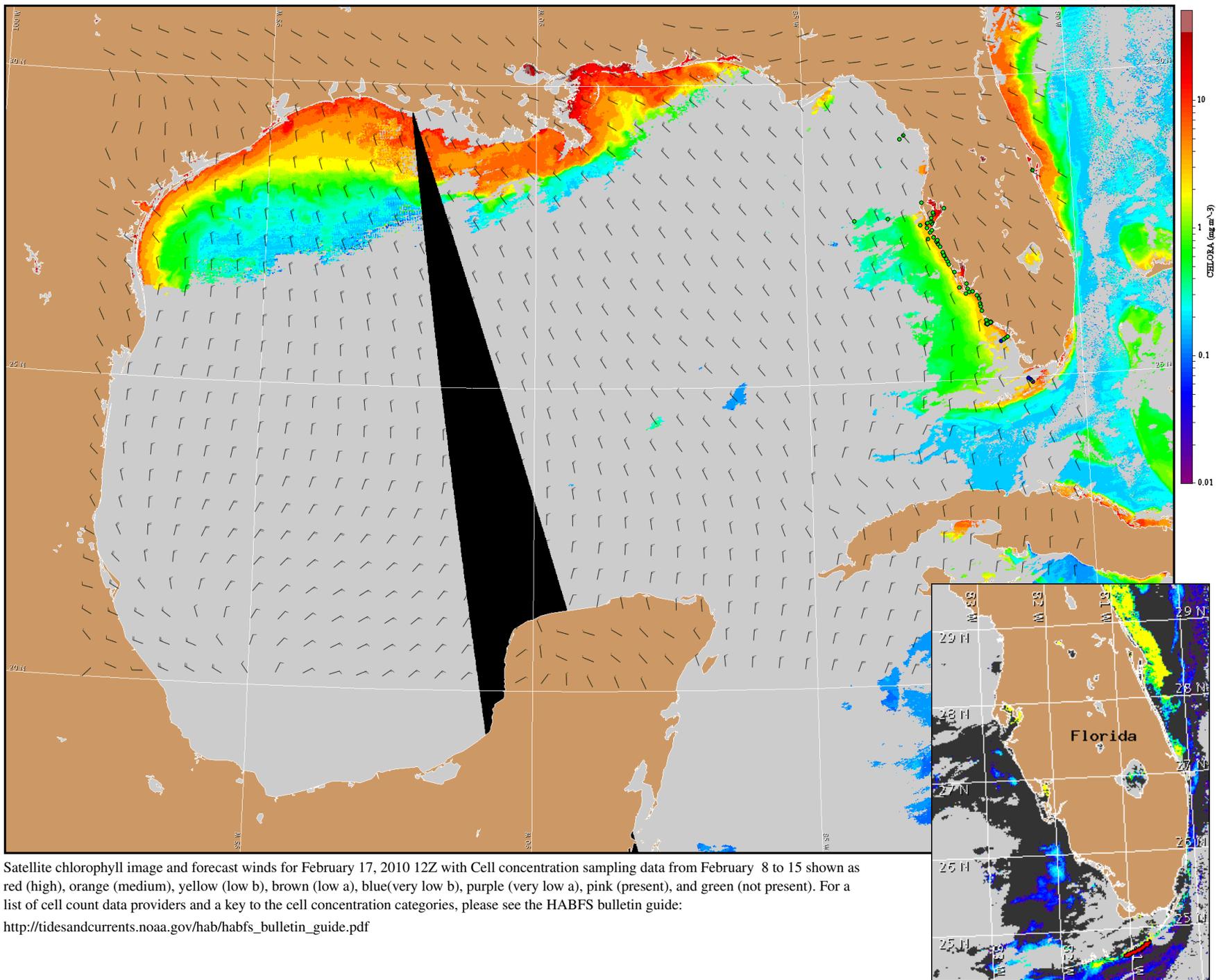




Wind Analysis

Southwest Florida: Northwest winds today (14-19kn, 7-10m/s) shifting northerly tonight (12-17kn, 6-9m/s). Northwest winds Wednesday (11-17kn, 6-9m/s).

Florida Keys (gulfside): Northwest to North winds today and Wednesday (15-20kn, 8-10m/s).



Satellite chlorophyll image and forecast winds for February 17, 2010 12Z with Cell concentration sampling data from February 8 to 15 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).