Gulf of Mexico Harmful Algal Bloom Bulletin

Region: Southwest Florida

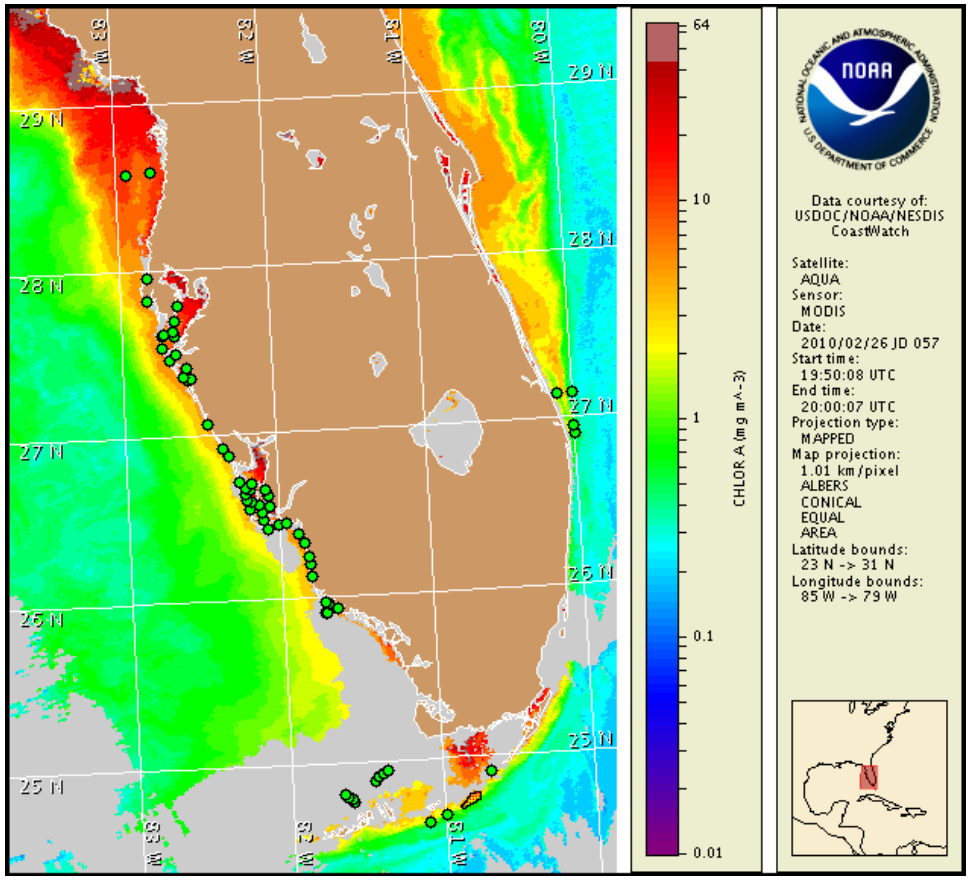
1 March 2010

NOAA Ocean Service

NOAA Satellites and Information Service

NOAA National Weather Service

Last bulletin: February 25, 2010



Satellite chlorophyll image with possible HAB areas shown by red polygon(s). Cell concentration sampling data from February 19 to 25 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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Conditions Report

A patchy harmful bloom was last identified in the gulfside region of the lower Florida Keys on 2/15 (MML). No impacts are expected alongshore southwest Florida including the Florida Keys today through Wednesday, March 3.

Analysis

SW Florida: No *Karenia brevis* has been identified alongshore southwest Florida from Pinellas to Collier County (FWRI, 2/23-2/28). A 'very low a' concentration of *K. brevis* was last identified 23.7 miles southwest of Big Sarasota Pass offshore Sarasota County on 2/19 (MML; not shown). No new sample information is available in northern Monroe County where a 'very low b' *K. brevis* concentration was last identified southwest of Pavilion Key on 2/9 (FWRI). No reports of impacts due to harmful algal blooms have been received this week (MML, FWRI, CCPCPD).

MODIS satellite imagery has been obscured by clouds over the past few days, limiting analysis. The last clear image is from 2/26 and indicates decreasing levels of chlorophyll alongshore southwest Florida, from Pinellas and Manatee counties (3-5 μg/L), Sarasota County (˜3 μg/L), to Charlotte and Lee counties (2-3 μg/L). A visible patch of elevated chlorophyll offshore southwest Florida is centered at 27°25'10''N 82°46'10''W alongshore Manatee County.

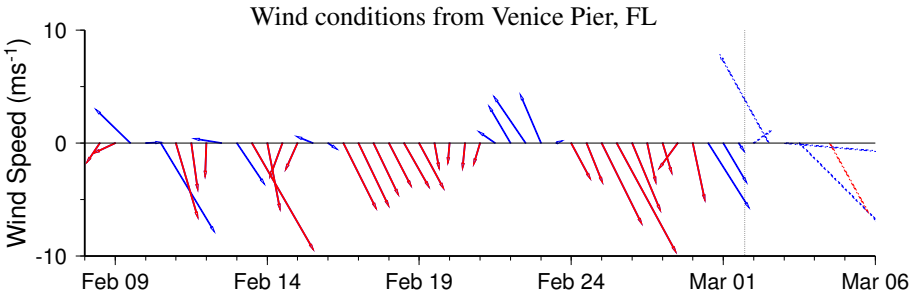
Florida Keys: A patchy harmful algal bloom was last identified in the gulfside region of the lower Florida Keys on 2/15 (up to 'low a'; MML). Recent samples north of the middle Florida Keys where 'very low a' to 'very low b' *K. brevis* concentrations were previously identified on 2/8 (MML) now indicate that *K. brevis* is no longer present (FWRI, 2/23-2/28). A 'present' concentration of *K. brevis* was identified 4.75 miles south of Fat Deer Key (MML, 2/20). Other nearby samples indicate that *K. brevis* is not present (MML, 2/20).

Satellite imagery from 2/26 (shown) is predominantly obscured by clouds along the Florida Keys, limiting analysis. Three patches of elevated chlorophyll are visible through the clouds and are located along the southern side of the Florida Keys. The first patch is centered at 24°30'21''N 81°42'46'W, the second patch extends from 24°35'16''N 81°20'18''W eastward to 24°38'49''N 81°3'54''W and the last patch extends from 24°42'15''N 80°56'29''W northeastward to 24°51'41''N 80°38'28''W. Due to previous southward transport, sampling in these three regions is recommended.

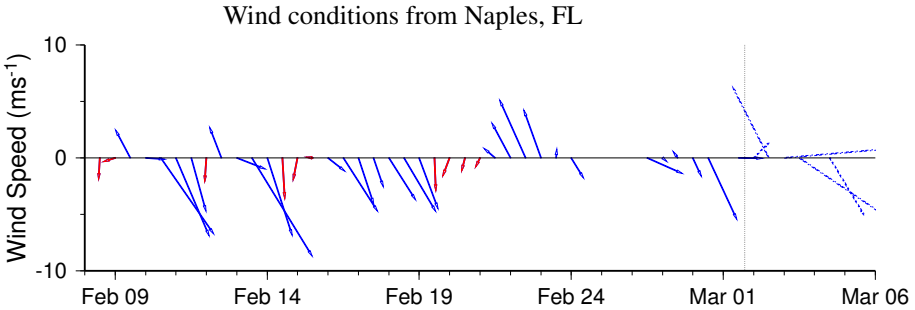
Due to variable winds in southwest Florida, bloom formation is not likely. Due to variable winds in the Florida Keys, transport of any remaining bloom patches is not likely.

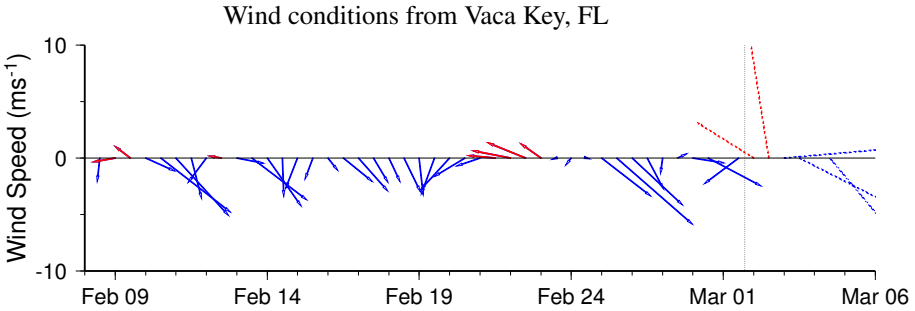
Due to technical difficulties SeaWiFS imagery is currently unavailable for display. MODIS imagery is shown on this bulletin.

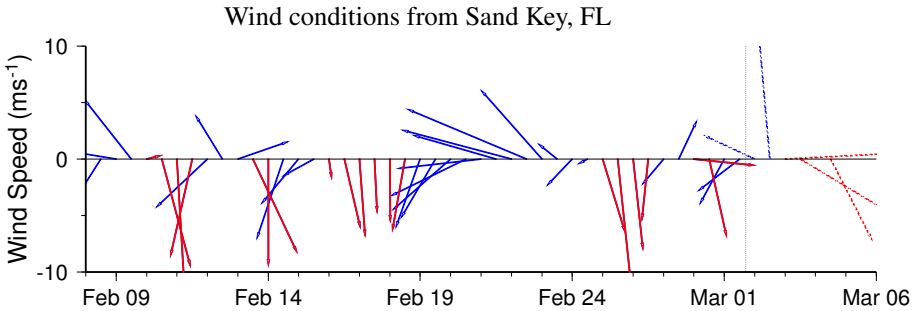
-Lindley, Fenstermacher



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).





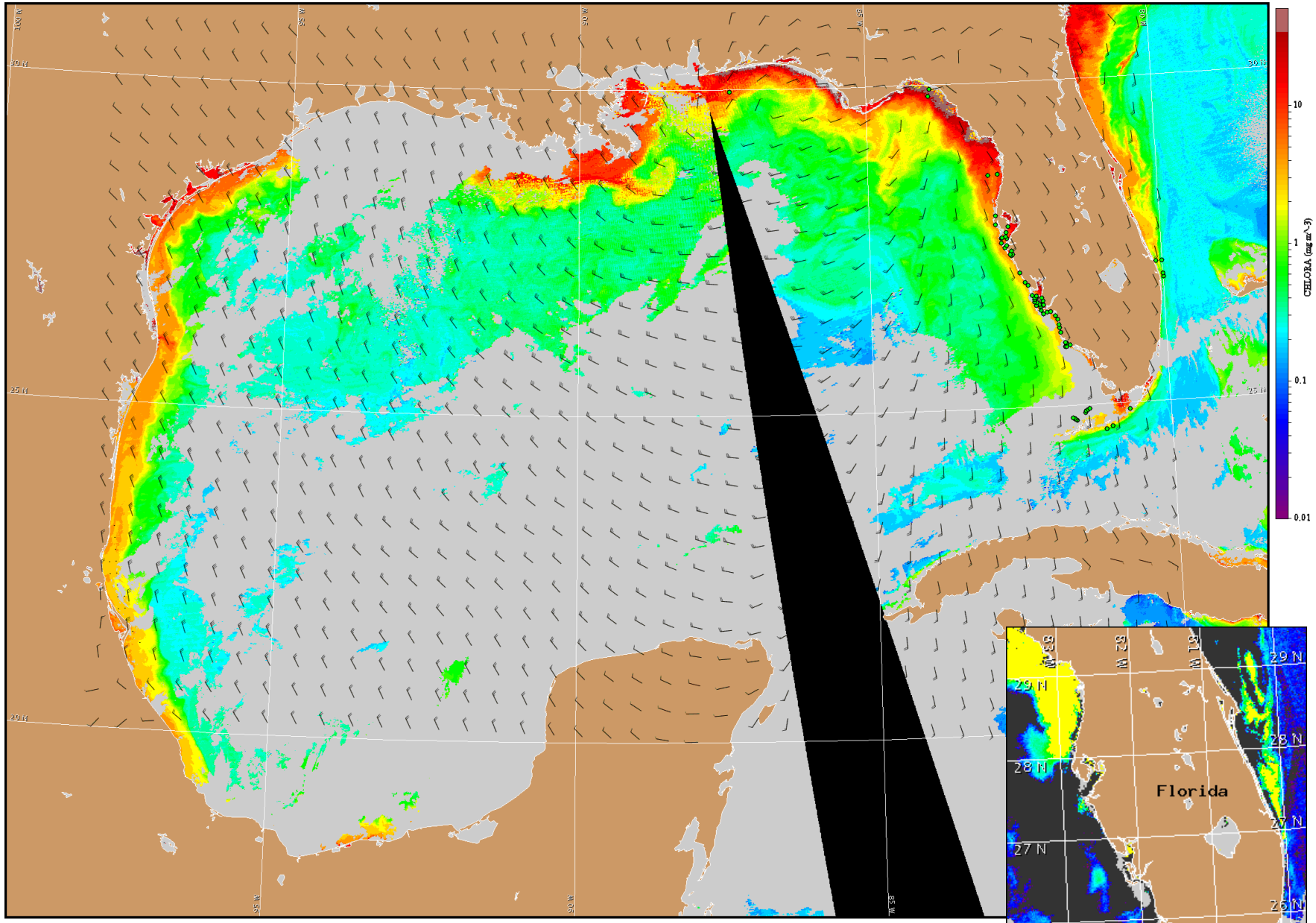


Wind Analysis

Southwest Florida: East winds today (5 kn, 3 m/s). Southeast winds tonight (20 kn, 10 m/s). West winds Tuesday becoming northwest Tuesday night through Wednesday (20-25 kn, 10-13 m/s). North winds Wednesday night (15 kn, 8 m/s).

Florida Keys: Northeast winds today (10 kn, 5 m/s). Southeast winds tonight (10-15 kn, 5-8 m/s). South to southwest winds Tuesday (20-25 kn, 10-13 m/s). West to northwest winds Tuesday night through Wednesday (20-25 kn, 10-13 m/s).

To see previous bulletins and forecasts for other Harmful Algal Bloom Bulletin regions, visit the NOAA CoastWatch bulletin archive: http://coastwatch.noaa.gov/hab/bulletins_ns.htm



Satellite chlorophyll image and forecast winds for March 2, 2010 12Z with Cell concentration sampling data from February 19 to 25 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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Verifi ed and suspected HAB areas shown in red. Other areas of high chlorophyll concentration shown in yellow (see p. 1 analysis for interpretation).