



# Gulf of Mexico Harmful Algal Bloom Bulletin

Region: Southwest Florida

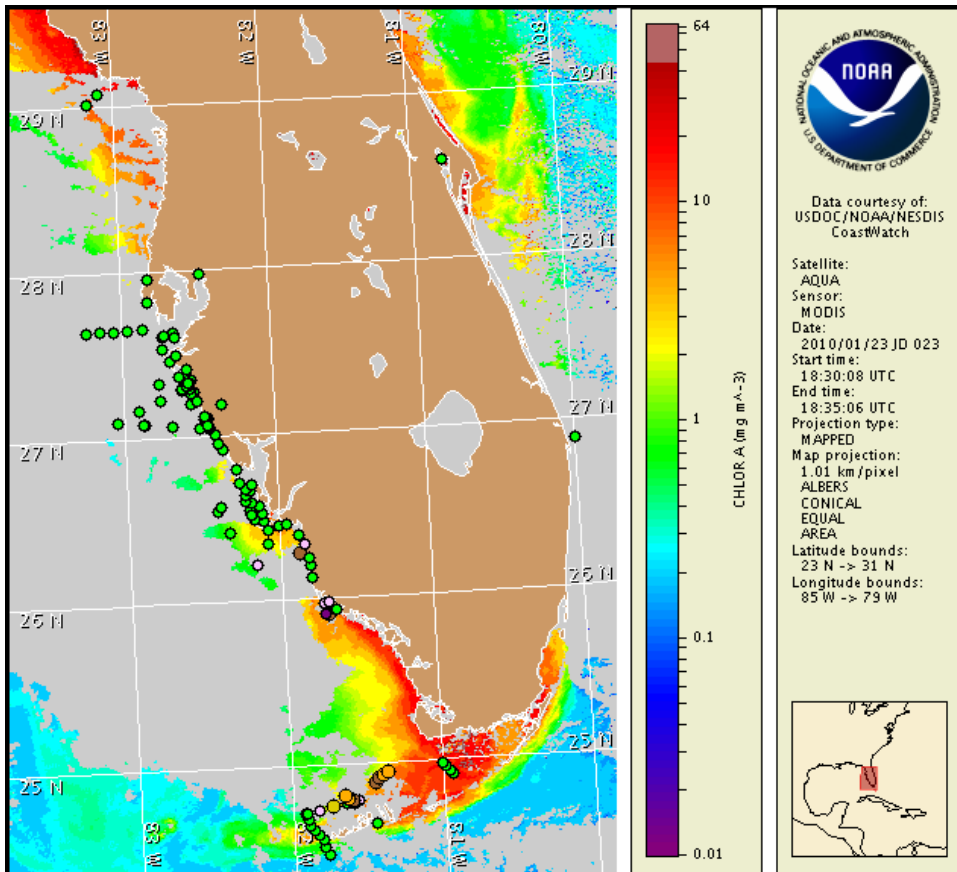
25 January 2010

NOAA Ocean Service

NOAA Satellites and Information Service

NOAA National Weather Service

Last bulletin: January 21, 2010



Satellite chlorophyll image with possible HAB areas shown by red polygon(s). Cell concentration sampling data from January 15 to 22 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](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 has been identified in patches in northern to central Collier County and offshore in the gulfside region of the lower Florida Keys. No reports of respiratory irritation have been received this week. Patchy low impacts today and very low impacts are possible Tuesday and Wednesday in northern to central Collier County. Patchy high impacts are possible today through Wednesday in the lower Florida Keys. No impacts are expected elsewhere alongshore southwest Florida today through Wednesday, January 27.

## Analysis

Patchy harmful algal blooms have been confirmed in northern to central Collier County and north of the lower Florida Keys. 'Low a' *Karenia brevis* concentrations were identified at Caxambas Pass in central Collier County on 1/19 (CCPCPD, FWRI). 'Very low a' concentrations were identified at Clam Pass and South Marco Beach in northern Collier County on 1/19 and 1/21 (CCPCPD, FWRI). Also, two 'low a', a 'low b', and two 'medium' concentrations were identified 3-10 miles north of the lower Florida Keys (MML, 1/18-20).

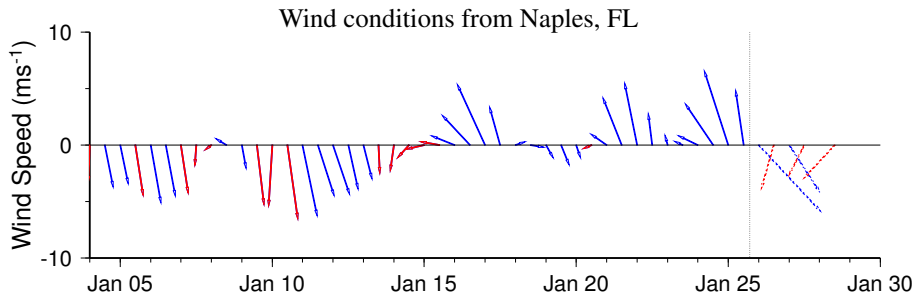
Recent samples in Lee County near Sanibel Island and in the Pine Island Sound region in Lee County indicate that the previously identified harmful algal bloom is no longer present. (FWRI, 1/20).

Recent satellite imagery is cloudy in both Collier County and the lower Florida Keys limiting analysis. No elevated chlorophyll features are visible in recent imagery alongshore southwest Florida from Pinellas to Lee County. An extensive elevated chlorophyll feature is visible alongshore and offshore of the lower Florida Keys including limited visibility areas and the region where 'low a' to 'medium' *K. brevis* concentrations were identified. This feature stretches further eastward to the Content Keys and into the Florida Bay region. Elevated chlorophyll features in the Florida Bay region are not necessarily indicative of harmful algae presence.

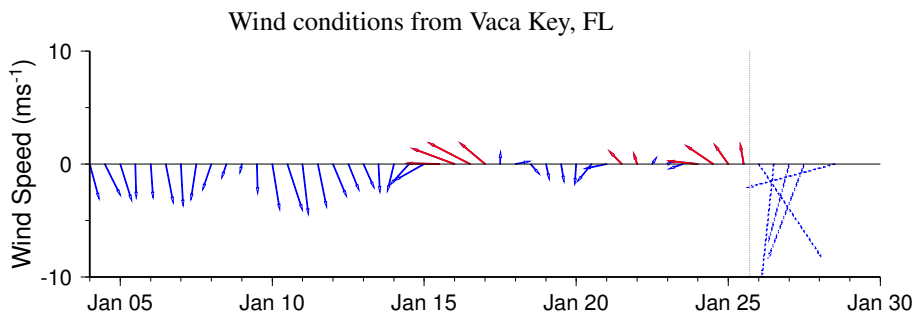
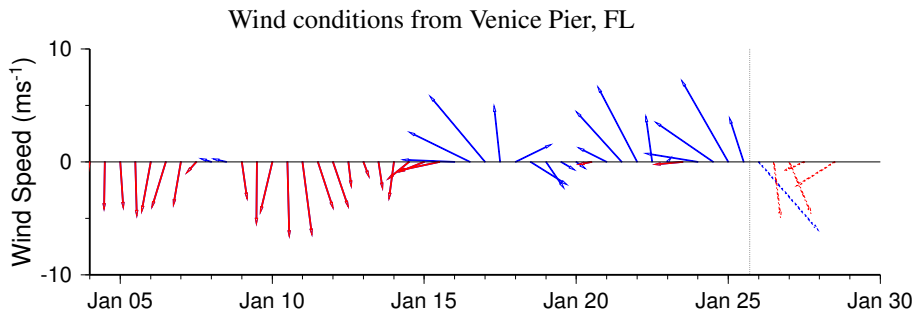
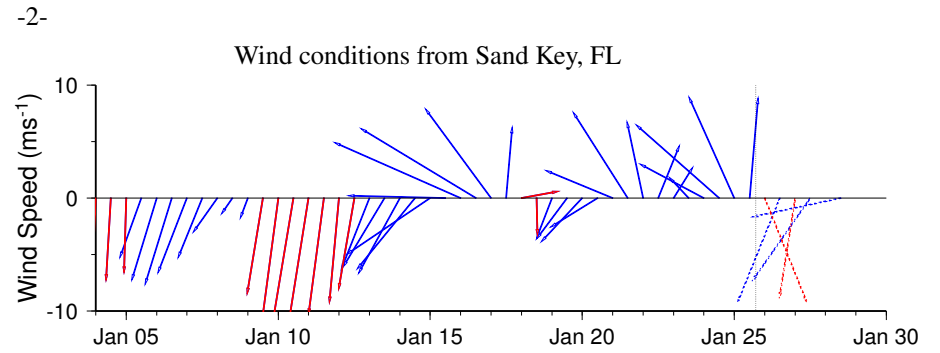
Southerly transport of the bloom identified in Collier County is possible through Wednesday. Offshore winds Tuesday and Wednesday will decrease the potential for impacts at the coast in Collier County. Intensification of this bloom is not expected through Wednesday. Variable forecasted winds and currents through Wednesday may maintain location of the bloom located north of the Lower Florida Keys.

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

-Lindley, Fenstermacher



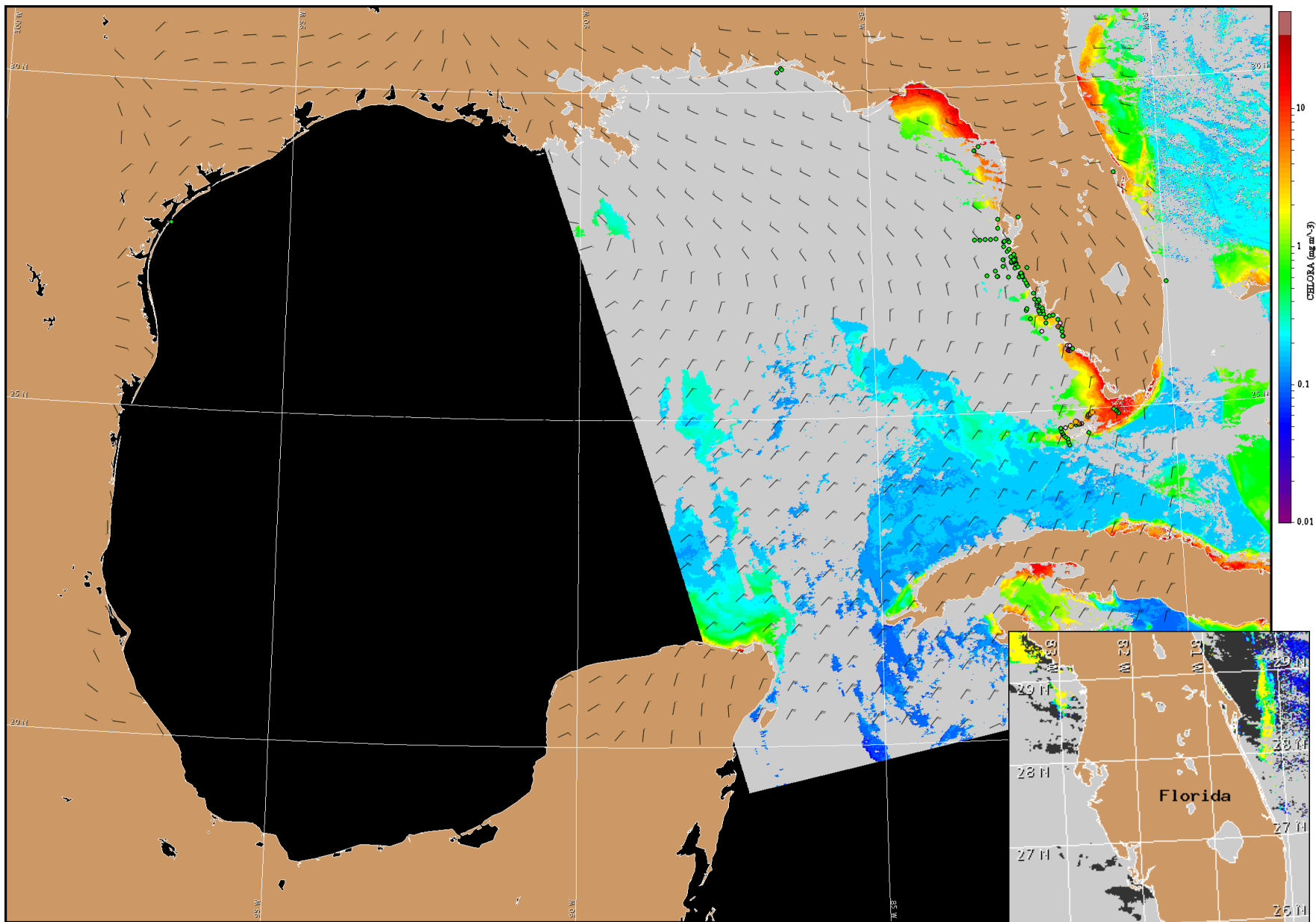
Wind speed and direction are averaged over 12 hours from buoy measurements. Length of line indicates speed; angle indicates direction. Red indicates that the wind direction favors upwelling near the coast. Values to the left of the dotted vertical line are measured values; values to the right are forecasts. Wind observation and forecast data provided by NOAA's National Weather Service (NWS).



## Wind Analysis

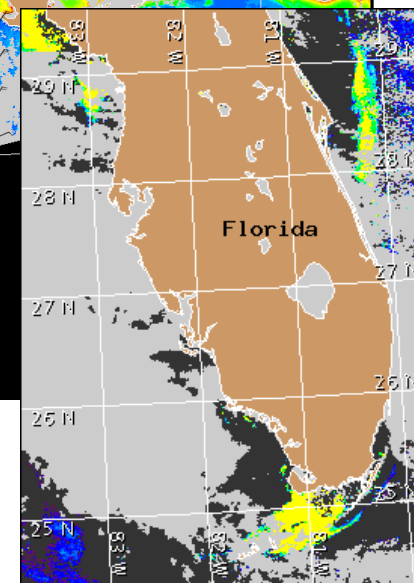
SW Florida: West winds today (15-20 kn, 8-10 m/s). North winds tonight through Tuesday Night (15-20 kn, 8-10 m/s). Northeast winds Wednesday becoming Northeasterly Wednesday night (10-15 kn, 5-8 m/s).

FL Keys (gulfside): South to Southwest winds today (20 kn, 10 m/s) becoming Northwest tonight (15-20 kn, 8-10 m/s). North to Northeast winds Tuesday and Wednesday (15-20 kn, 8-10 m/s).



Satellite chlorophyll image and forecast winds for January 26, 2010 12Z with Cell concentration sampling data from January 15 to 22 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).