



Gulf of Mexico Harmful Algal Bloom Bulletin

Region: Southwest Florida

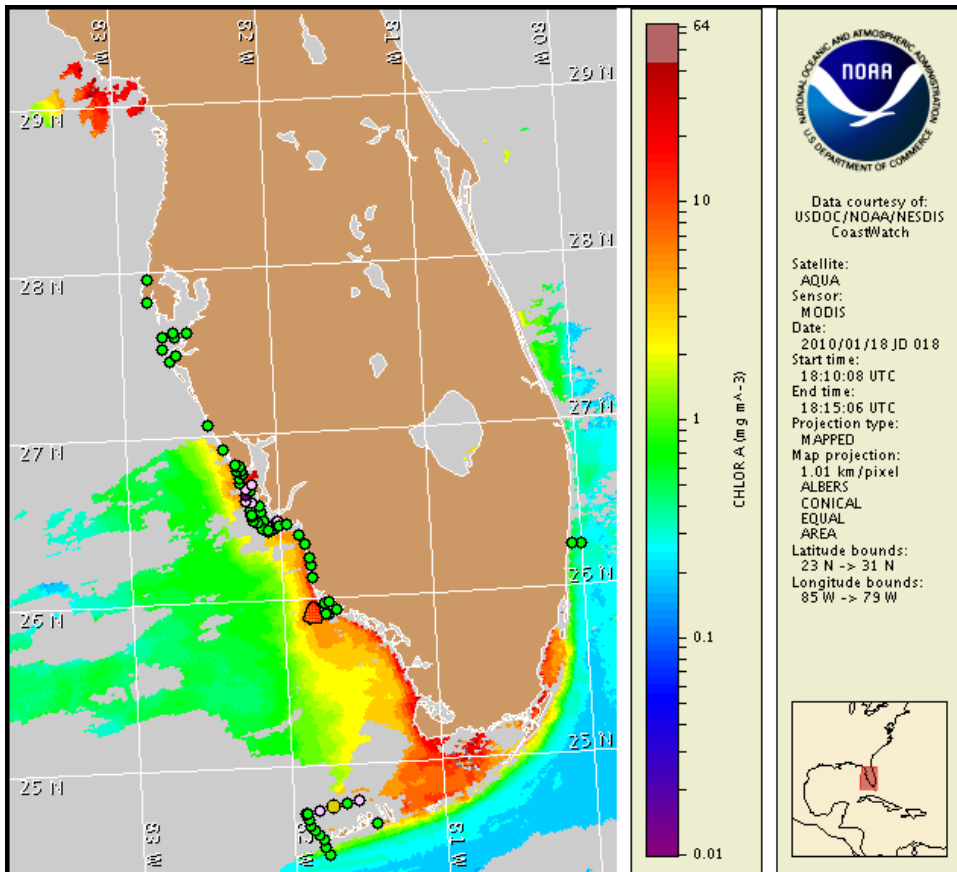
19 January 2010

NOAA Ocean Service

NOAA Satellites and Information Service

NOAA National Weather Service

Last bulletin: January 14, 2010



Satellite chlorophyll image with possible HAB areas shown by red polygon(s). Cell concentration sampling data from January 11 to 18 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 to be present in patches in the Pine Island Sound region of Lee County. Today through Wednesday, patchy very low impacts are possible in the Pine Island Sound region. Reports of respiratory irritation have been received alongshore northern Collier County this week. The possible presence of a harmful algal bloom in this region is currently being investigated. Low impacts are possible today and very low impacts are possible Wednesday in northern Collier County. A harmful algal bloom has also been identified north of the Florida Keys. No additional respiratory irritation impacts due to Florida Red Tide are expected in the Florida Keys region or elsewhere alongshore southwest Florida today through Wednesday, January 20.

Analysis

The harmful algal bloom recently confirmed alongshore and inside the bay and sound regions of Lee County continues to dissipate to 'very low a' *Karenia brevis* concentrations or less (FWRI, 1/11-1/13). No recent sample information is available south of Sanibel Island where 'medium' *K. brevis* concentrations were last identified on 1/7 (FWRI). No elevated chlorophyll features are visible in recent imagery alongshore southwest Florida from Pinellas to Lee County.

Reports of respiratory irritation and dead fish were received from several beaches in northern Collier County on Monday (MML, CCPCPD, 1/18). This is an indication that the bloom may have transported further south into Collier County; sample confirmation is expected later this week. Recent MODIS imagery (shown) identifies an elevated to high chlorophyll feature (6 to >10 $\mu\text{g/L}$) stretching alongshore northern Collier County from 26°13'26"N 81°51'24"W to 25°51'49"N 81°45"W. This feature extends approximately 8 miles offshore in the Marco Island region.

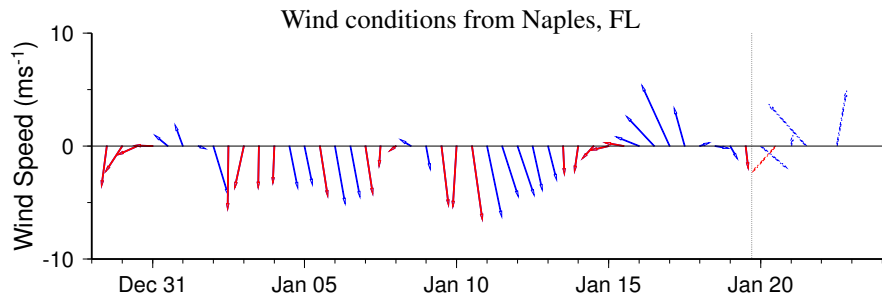
A new harmful algal bloom containing up to 'low b' *K. brevis* concentrations has been identified approximately 5-6nm north of West Harbor Key in the Florida Keys region (MML, 1/18). MODIS imagery (1/16; not shown) shows a patch of elevated chlorophyll located from 24°47'38"N 81°38'46"W to 24°49'5"N 81°35'5"W.

Reports of dead fish have been received in several locations along the coast of southwest Florida from central Pinellas to Monroe counties; these events are a result of unusually cold water temperatures.

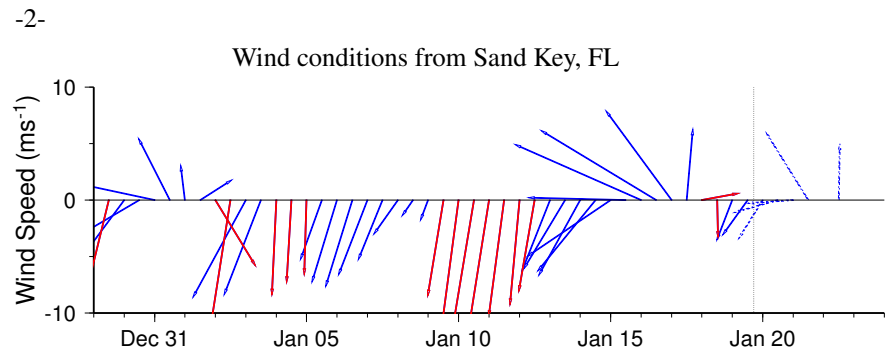
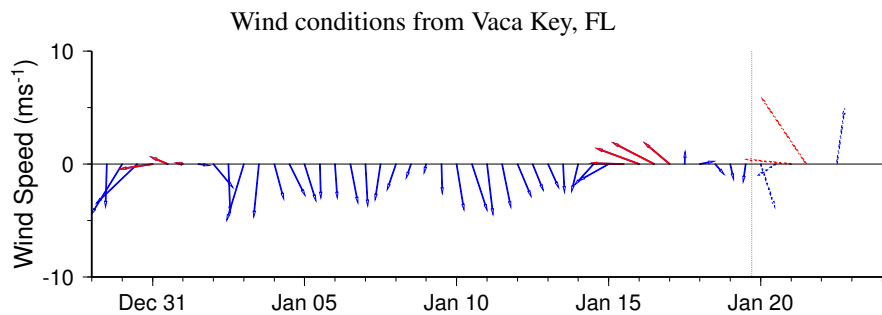
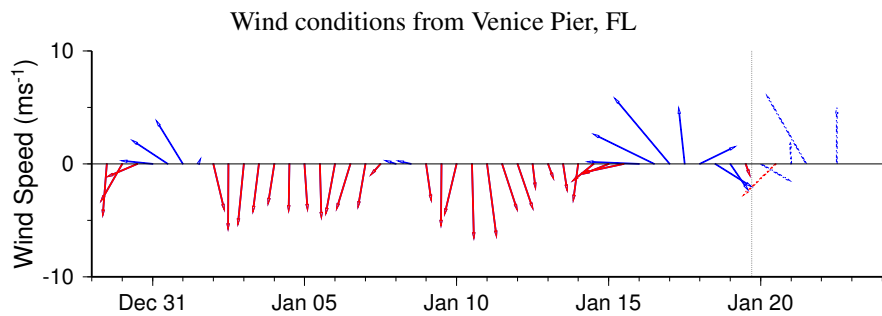
Further southerly transport of the bloom previously identified offshore Sanibel Island will likely be minimized through Wednesday due to variable winds. West winds today will increase the potential for impacts at the beach in Collier County. Intensification of this bloom is not expected through Wednesday. Slight southerly transport of the bloom north of the Florida Keys is possible today.

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

-Fisher, Lindley



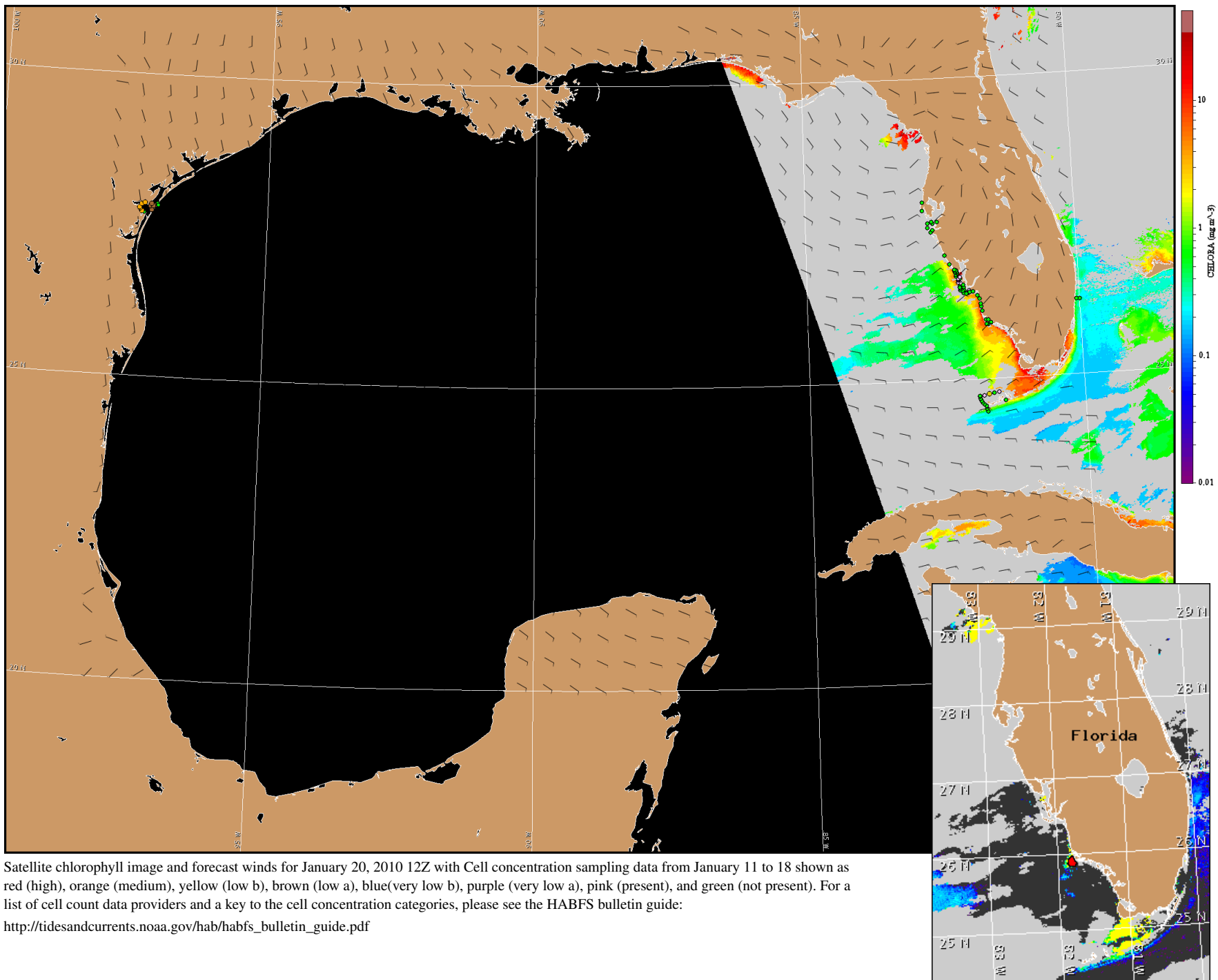
Wind speed and direction are averaged over 12 hours from buoy measurements. Length of line indicates speed; angle indicates direction. Red indicates that the wind direction favors upwelling near the coast. Values to the left of the dotted vertical line are measured values; values to the right are forecasts.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



Wind Analysis

SW Florida: North winds today (10kn, 5m/s) becoming west to southwest in the afternoon. Northwest to west winds tonight (5-10kn, 3-5m/s) becoming northeast to east. Southeast winds Wednesday (10-15kn, 5-8m/s). South winds expected Thursday (15-20kn, 8-10m/s).

FL Keys (gulfside): North to northeast winds today (5-10kn, 3-5m/s). East winds Wednesday (10kn, 5m/s). Southeast winds Wednesday night (10-15kn, 5-8m/s) and Thursday.



Satellite chlorophyll image and forecast winds for January 20, 2010 12Z with Cell concentration sampling data from January 11 to 18 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).