



Gulf of Mexico Harmful Algal Bloom Bulletin

Region: Southwest Florida

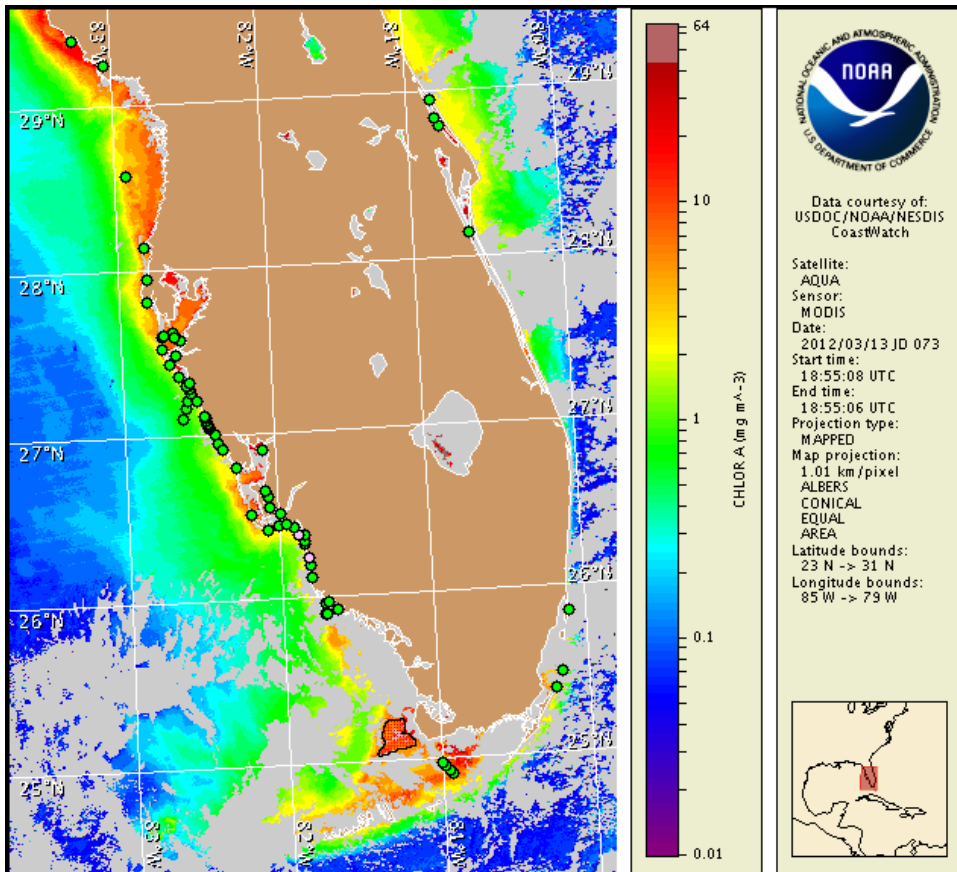
Thursday, 15 March 2012

NOAA Ocean Service

NOAA Satellite and Information Service

NOAA National Weather Service

Last bulletin: Monday, March 12, 2012



Satellite chlorophyll image with possible HAB areas shown by red polygon(s). Cell concentration sampling data from March 5 to 13 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 HAB-OFS bulletin guide:

http://tidesandcurrents.noaa.gov/hab/habfs_bulletin_guide.pdf

To see previous bulletins and forecasts for other Harmful Algal Bloom Bulletin regions, visit the NOAA Harmful Algal Bloom Operational Forecast System bulletin archive:
<http://tidesandcurrents.noaa.gov/hab/bulletins.html>

Conditions Report

A patchy harmful algal bloom was last identified alongshore and offshore Monroe County from the Pavilion Key region to western Cape Sable on 3/1-3/2. Patchy very low impacts remain possible alongshore Monroe County today through Sunday. A patchy harmful algal bloom was also last identified offshore in the Gulf side region of the Lower Florida Keys on February 23. No reports of impacts in association with this bloom have recently been reported, however, impacts remain possible in this region. No additional impacts are expected alongshore southwest Florida today through Sunday, March 18.

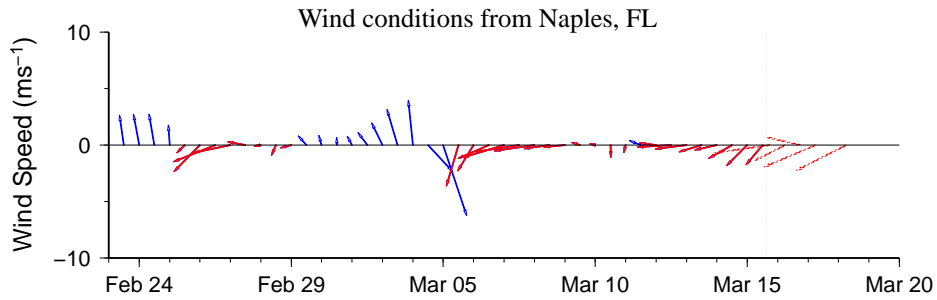
Analysis

Southwest Florida: A harmful algal bloom was last identified on 3/1-3/2 alongshore Monroe County from Pavilion Key to Cape Sable. Samples collected on 3/2 and reported this week alongshore and up to 12 miles offshore Cape Sable in southern Monroe County confirmed the presence of a *K. brevis* bloom (NOAA, FWRI). *K. brevis* concentrations ranged from 'medium' at the coast and offshore up to 8 miles, to 'low a' 12 miles offshore Cape Sable. More recent sample information is presently unavailable for the coastal Monroe County region. Samples collected this week alongshore Pinellas, Sarasota, Charlotte, Lee and Collier counties indicate that *K. brevis* is not present (FWRI, CCPCPD, SCHD; 3/9-3/13). Detailed sampling information can be obtained through FWRI at <http://myfwc.com/research/redtide/events/status/statewide/>.

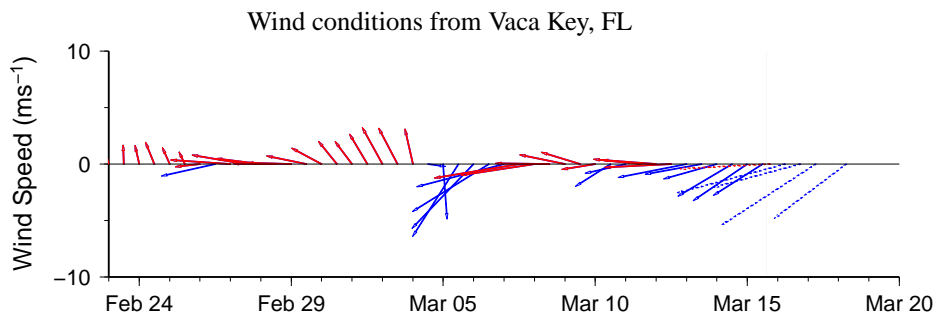
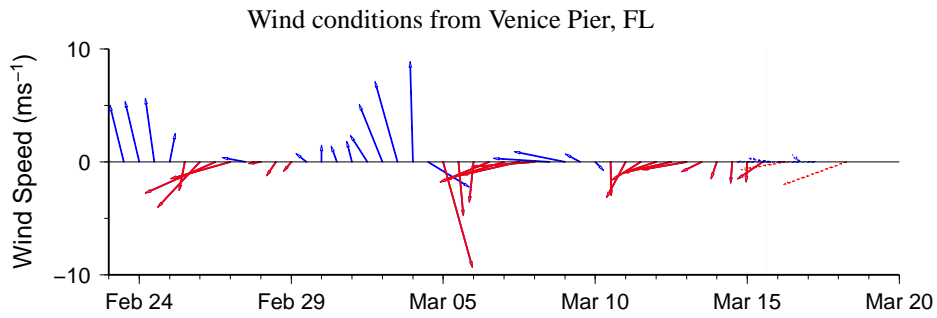
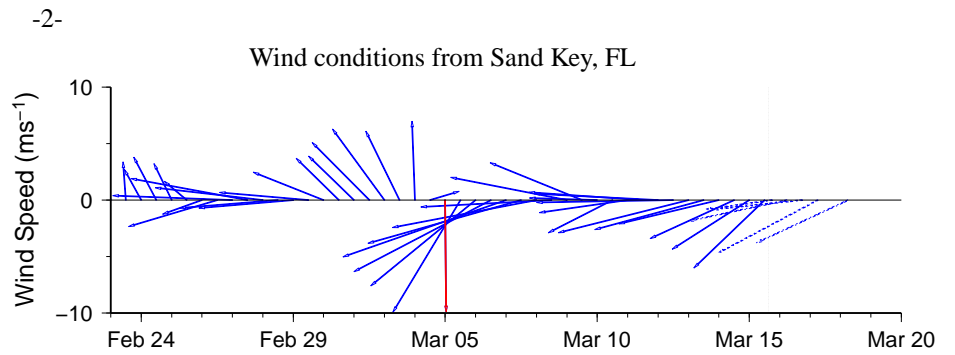
Recent MODIS imagery is predominantly cloudy from Collier County to Monroe County, limiting analysis. However, imagery on 3/13 (shown left) suggests that the bloom is still present west of Cape Sable. An elevated chlorophyll feature (6 to $>10\mu\text{g/L}$) remains mostly visible near the western coast of Cape Sable extending southwest ~ 24 miles to $25^{\circ}1'52''\text{N } 81^{\circ}28'20''\text{W}$. The smaller elevated chlorophyll feature ($2\mu\text{g/L}$) previously reported ~ 30 miles south of Cape Romano in northern Monroe County is currently located ~ 29 miles west of Cape Sable and is continually dissipating. Elevated chlorophyll features are also visible alongshore southern Pinellas, Manatee, Charlotte and northern Lee counties. These features may be the result of non-harmful algal blooms or resuspended sediments, and are unlikely to contain *K. brevis*. Forecasted winds should minimize southward transport of the bloom through Sunday. Bloom intensification is not expected.

Florida Keys: No additional sample information is presently available offshore in the Gulf side region of the Lower Florida Keys where 'low a' concentrations of *K. brevis* were previously detected on 2/23. No *K. brevis* was detected in the Sugarloaf Sound region of the Lower Keys on 3/9. Continued sampling is recommended. An elevated chlorophyll feature (4 to $>10\mu\text{g/L}$) remains visible in recent MODIS imagery (3/13, shown left) north of the Lower and Middle Keys, extending from Cape Sable to ~ 13 miles northwest of Key West. Continued westward transport of features in this region is possible through Sunday.

Fisher, Yang



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).

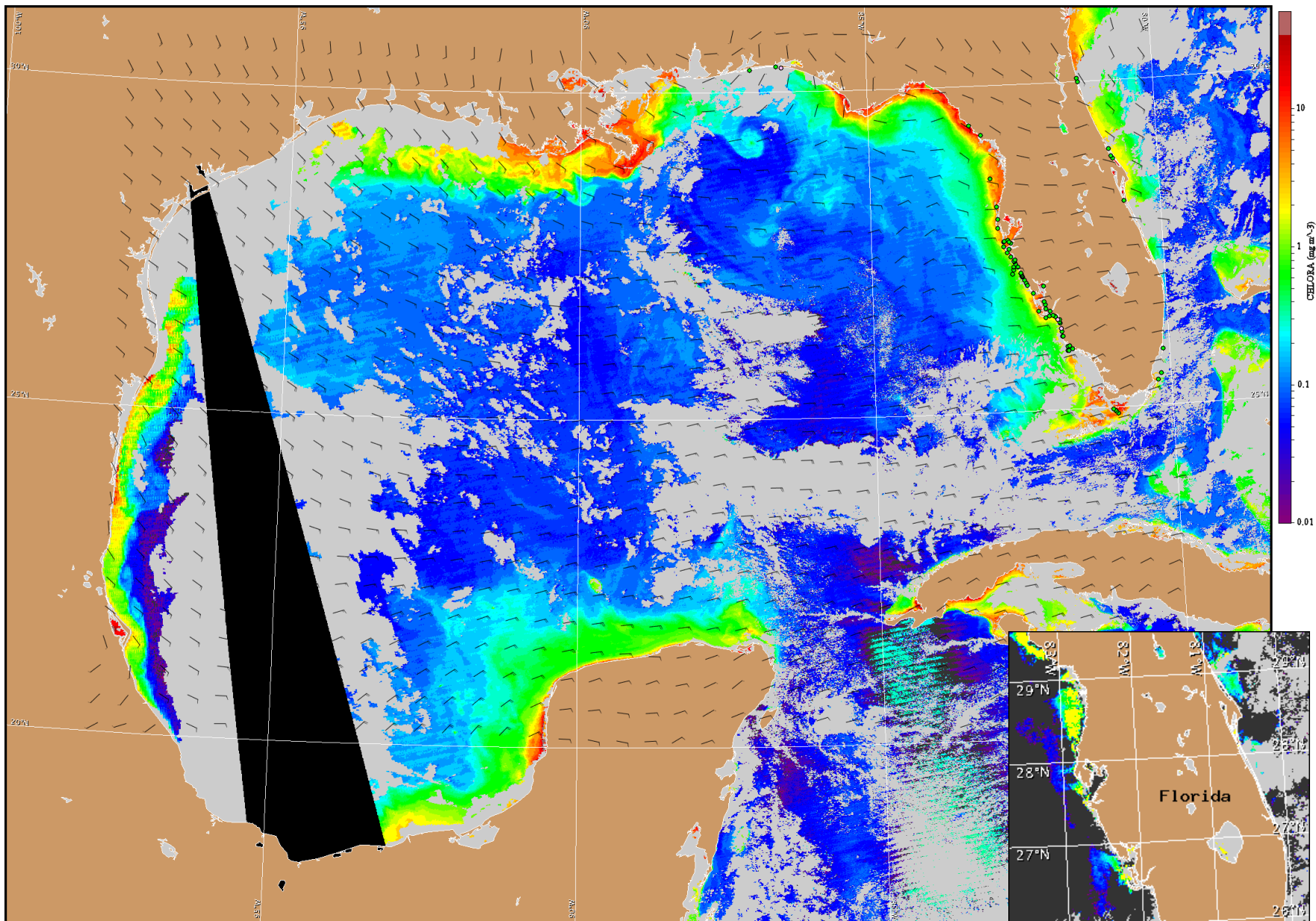


Wind Analysis

Collier and Monroe Counties: East winds today through Friday and on Saturday (10-15kn, 5-8m/s). East northeast winds Friday night and Saturday night through Sunday night (13-17kn, 7-9m/s).

Florida Keys: Northeast to east winds today through Sunday (15-20kn, 8-10m/s).

Pinellas to Lee Counties: Variable north winds today (10kn, 5m/s). East winds Friday, becoming northwest in the afternoon (10kn, 5m/s). East winds Friday night and Saturday night, shifting north Saturday afternoon (10-15kn, 5-8m/s). Northeast winds Sunday shifting east Sunday night (10-15kn, 5-8m/s).



Satellite chlorophyll image and forecast winds for March 16, 2012 06Z with cell concentration sampling data from March 5 to 13 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 HAB-OFS 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).