Gulf of Mexico Harmful Algal Bloom Bulletin

Region: Southwest Florida

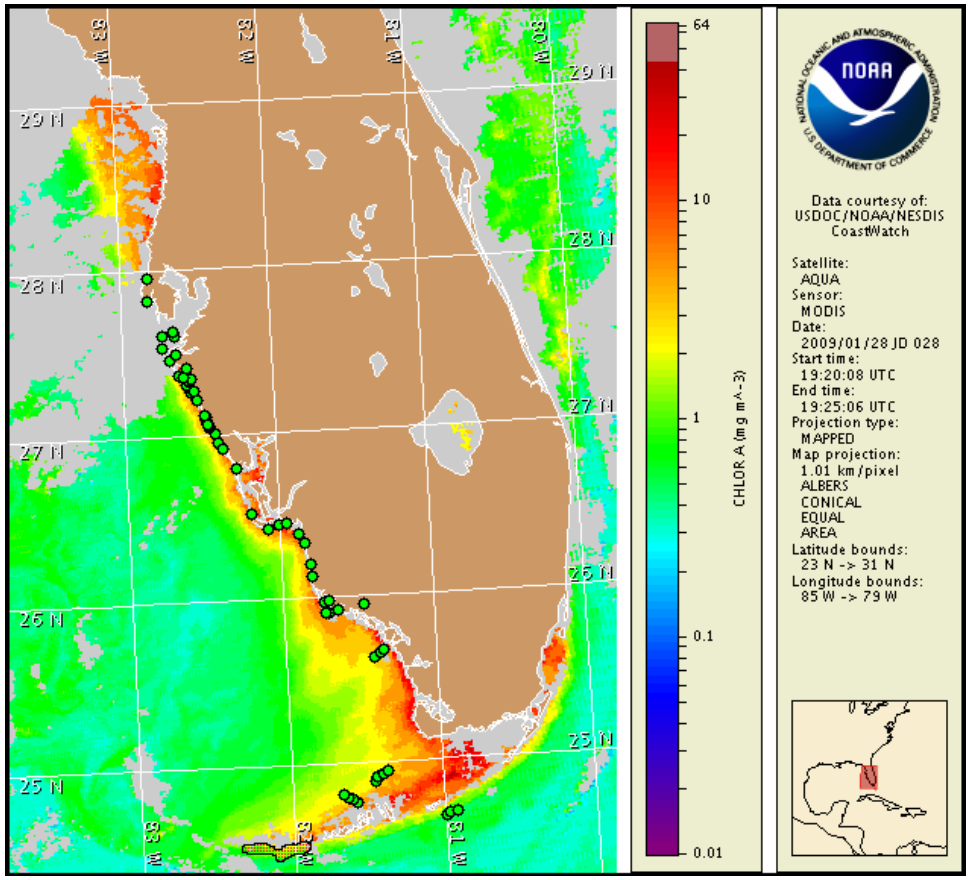
29 January 2009

NOAA Ocean Service

NOAA Satellites and Information Service

NOAA National Weather Service

Last bulletin: January 26, 2009



Satellite chlorophyll image with possible HAB areas shown by red polygon(s). Cell concentration sampling data from January 20 to 28 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

There is currently no indication of a harmful algal bloom at the coast in southwest Florida including the Florida Keys. No impacts are expected alongshore southwest Florida today through Sunday, February 1.

Analysis

There is currently no indication of a harmful algal bloom at the coast in southwest Florida including the lower Florida Keys. SeaWiFS satellite imagery (Jan. 28, not shown) indicates that the chlorophyll feature previously containing *Karenia brevis* onshore and offshore the gulf side of the lower Florida Keys has dissipated. The three previously mentioned remaining portions of the feature have continued to move southwestward away from the lower Florida keys and their chlorophyll levels have declined. The portion of the feature previously located approximately 3 miles northwest of Key West where chlorophyll levels were greater than 10 μg/L is presently centered at 24°32'9''N, 81°58'15''W and chlorophyll levels have declined to approximately 4 μg/L. The rest of the feature now extends out to 24°35'39''N, 82°55'W where chlorophyll levels have declined to approximately 1.5 μg/L. Sample results further confirm that the bloom has dissipated. The most recent sample results indicate that *K. brevis* is not present north of Sawyer Key (MML 1/22 & 1/23) where *K. brevis* was last reported to be at 'Low a' concentrations on Jan. 9 and up to 'Medium' concentrations in December. Sampling west of the lower Florida Keys is recommended.

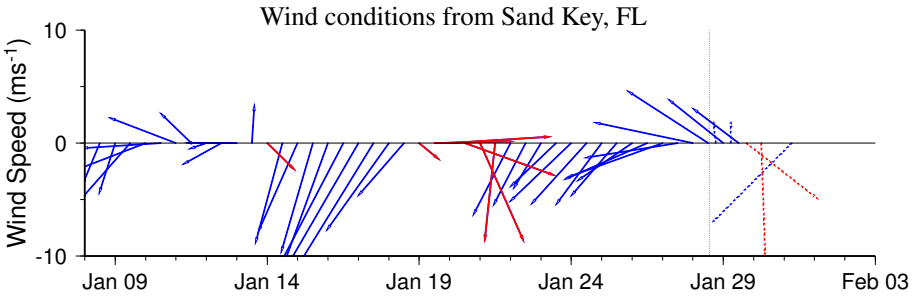
Samples taken approximately 5 miles southeast of Marathon within the previously reported elevated chlorophyll feature (> 2 μg/L) extending from the ocean side of the middle Florida Keys northeastward along east Florida to Key Biscayne indicate that *K. brevis* is not present. This elevated chlorophyll feature is not visible in recent MODIS satellite imagery (1/28, shown left); however it remains visible in SeaWiFS satellite imagery. Reporting on this feature will continue as new information becomes available or as requested.

The previously reported small elevated chlorophyll feature (approximately 4 μg/L) that was located offshore central Collier County has moved southward and is now located 10 miles south of Goodland Bay (approximately 20 miles offshore the Collier/Monroe County border). Sampling is recommended.

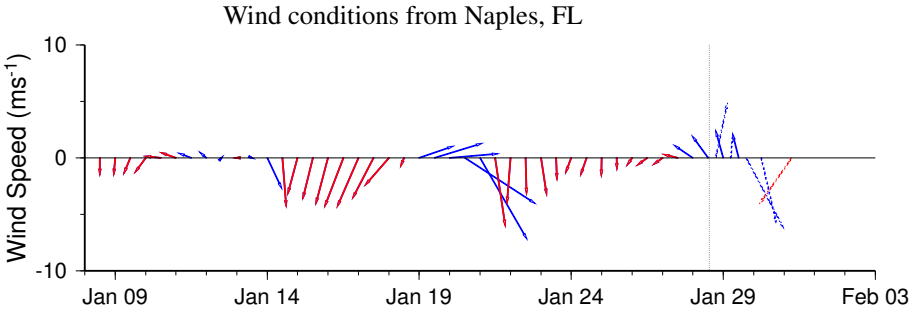
Recent samples collected offshore Pavilion Key in northern Monroe County indicate that *K. brevis* is not present (MML 1/22). Additional samples received from Pinellas, Manatee and Collier counties indicate that *K. brevis* is not present at the coast in these regions (FWRI 1/26-28).

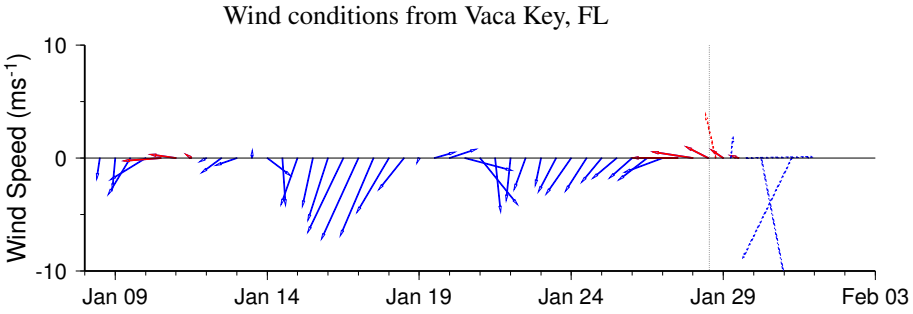
Saturday and Sunday, conditions will be favorable for continued westward transport of the remaining elevated chlorophyll patches southwest of the lower Florida Keys. Bloom formation alongshore southwest Florida is not expected today through Sunday, Feb. 1.

Urízar, 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).



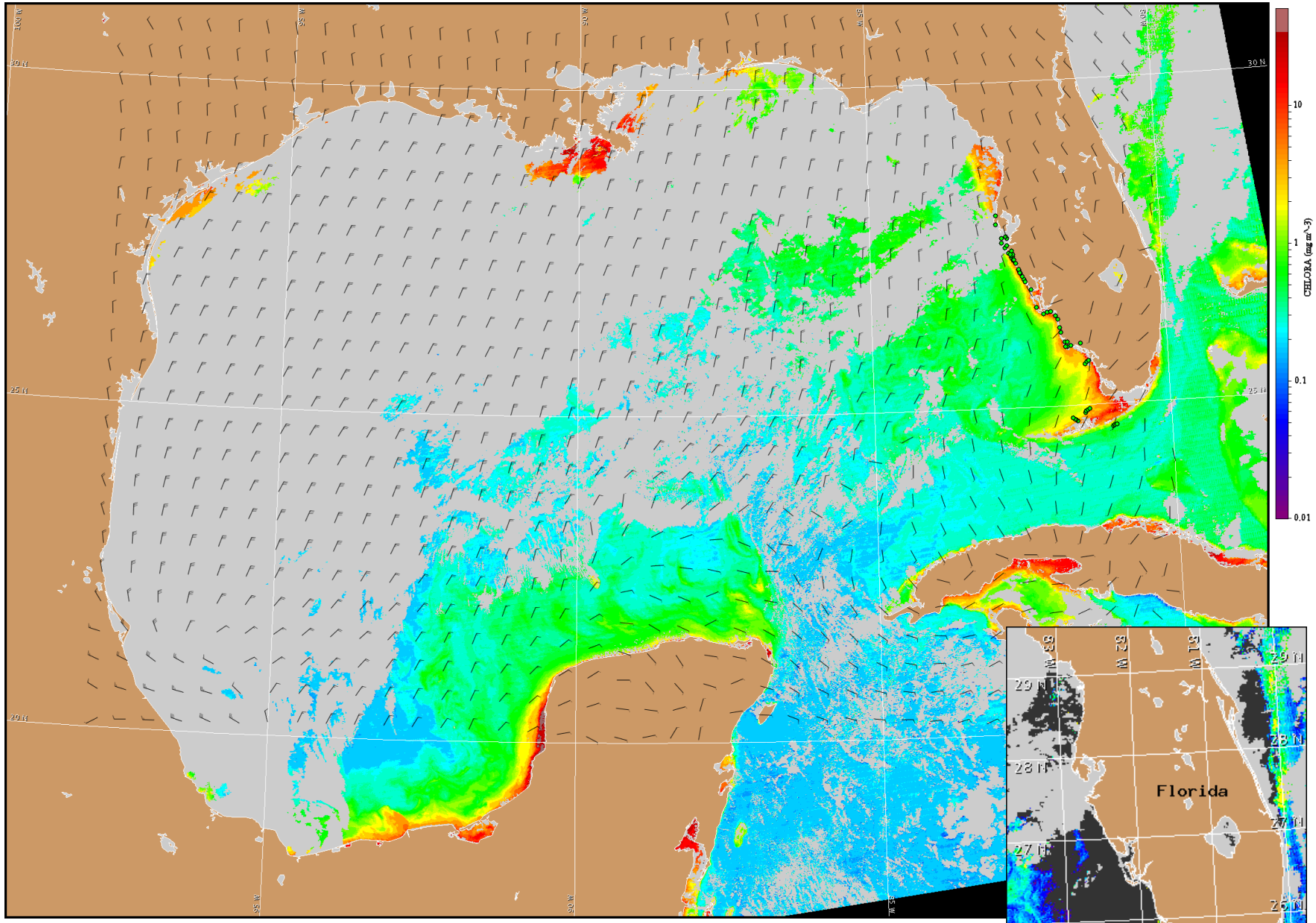


Wind Analysis

Florida Keys: Variable winds today (5-10 kn, 3-5 m/s). Southwesterly to westerly winds Friday (10 knots, 5 m/s) and northwesterly winds Friday night (20 kn, 10 m/s). Northerly to northeasterly winds Saturday (20 kn). Easterly winds Sunday (15 kn, 8 m/s).

Southwest Florida: Southerly to southwesterly winds today (10 kn). Northerly winds Friday (15-20 kn, 8-10 m/s). Northeasterly winds Saturday (15-20 kn). Southeasterly winds Sunday (15 kn).

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 January 30, 2009 12Z with Cell concentration sampling data from January 20 to 28 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

Verified and suspected HAB areas shown in red. Other areas of high chlorophyll concentration shown in yellow (see p. 1 analysis for interpretation).