



Gulf of Mexico Harmful Algal Bloom Bulletin

Region: Southwest Florida

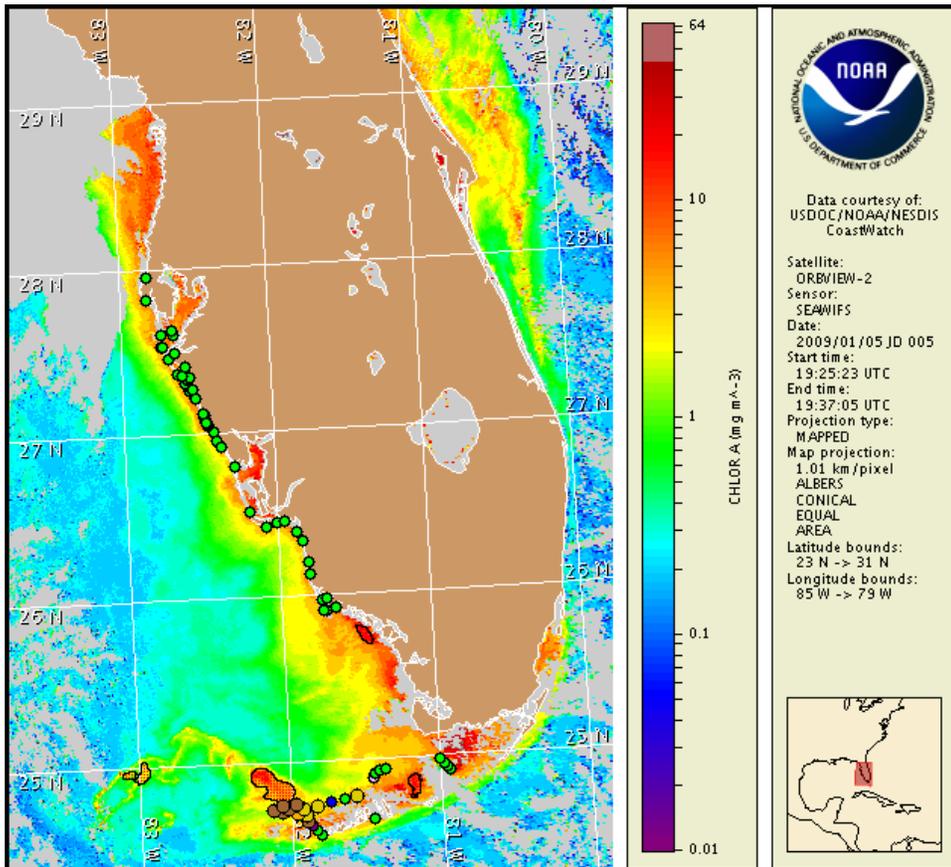
8 January 2009

NOAA Ocean Service

NOAA Satellites and Information Service

NOAA National Weather Service

Last bulletin: January 5, 2009



Satellite chlorophyll image with possible HAB areas shown by red polygon(s). Cell concentration sampling data from December 29 to January 7 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 has been identified on the gulf side of the lower Florida Keys in Monroe County. Patchy moderate impacts are possible on the gulf side of the lower Florida Keys today, Friday and Sunday, and patchy very low impacts are possible on Saturday. No additional impacts are expected elsewhere in southwest Florida today through Sunday, January 11.

Analysis

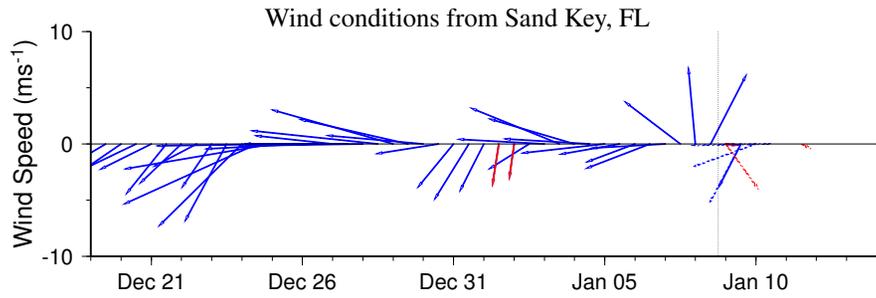
A harmful algal bloom has been reconfirmed alongshore and offshore (north and north-west) of the lower Florida Keys. A large elevated to high chlorophyll feature remains visible in SeaWiFS imagery as of January 5. The feature is shaped as an inverted 'V' with the southwest most tip located at 24°45'46''N 83°17'18''W, stretching northeast to 25°13'11''N 82°38'8''W, then southeast to 24°42'54''N 81°54'39''W (just northeast of the lower Keys). Elevated chlorophyll is also visible surrounding the lower to middle Keys and stretching approximately 15 miles due west of the Marquesas Keys. Very low to medium concentrations of *Karenia brevis* were identified in the direct vicinity of the southeastern most tip of this feature on 1/6 (MML); SeaWiFS chlorophyll levels average 2-3 µg/L at this location and alongshore the lower Keys where very low to low concentrations of *K. brevis* were detected. Higher chlorophyll concentrations (>10 mg/L) are visible in imagery further offshore at 24°56'13''N 82°11'20''W. High chlorophyll (>10 µg/L) is also visible east of Big Pine Key at 24°49'54''N 81°18'13''W. Predicted winds will likely continue westward transport of the bloom through Saturday. Intensification of the bloom at the coast is unlikely through Sunday. Continued sampling is recommended.

Elevated to high chlorophyll (5 to >10 µg/L) remains visible in patches alongshore northern Monroe County in the Everglades National Park region. Recent sample data is not available in this region. Elevated chlorophyll in this region may not be indicative of a harmful bloom; however, sampling is recommended as patches of this feature may have transported from an area previously containing positive concentrations of *K. brevis* in early December.

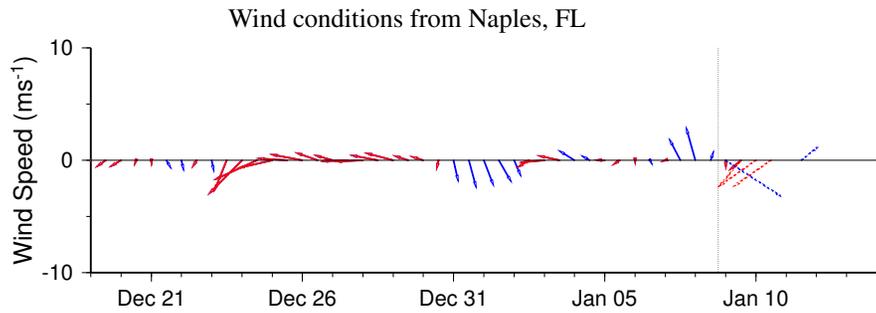
The small elevated chlorophyll feature recently tracked into offshore regions of northern Monroe County continues to diminish in intensity and size as of 1/5 and will likely dissipate fully in the near future.

No *K. brevis* has been detected alongshore southwest Florida from Pinellas to Collier Counties this week (1/5-1/7; FWRI, SCHD). Bloom formation alongshore southwest Florida is unlikely through Sunday.

~Fisher, Urizar



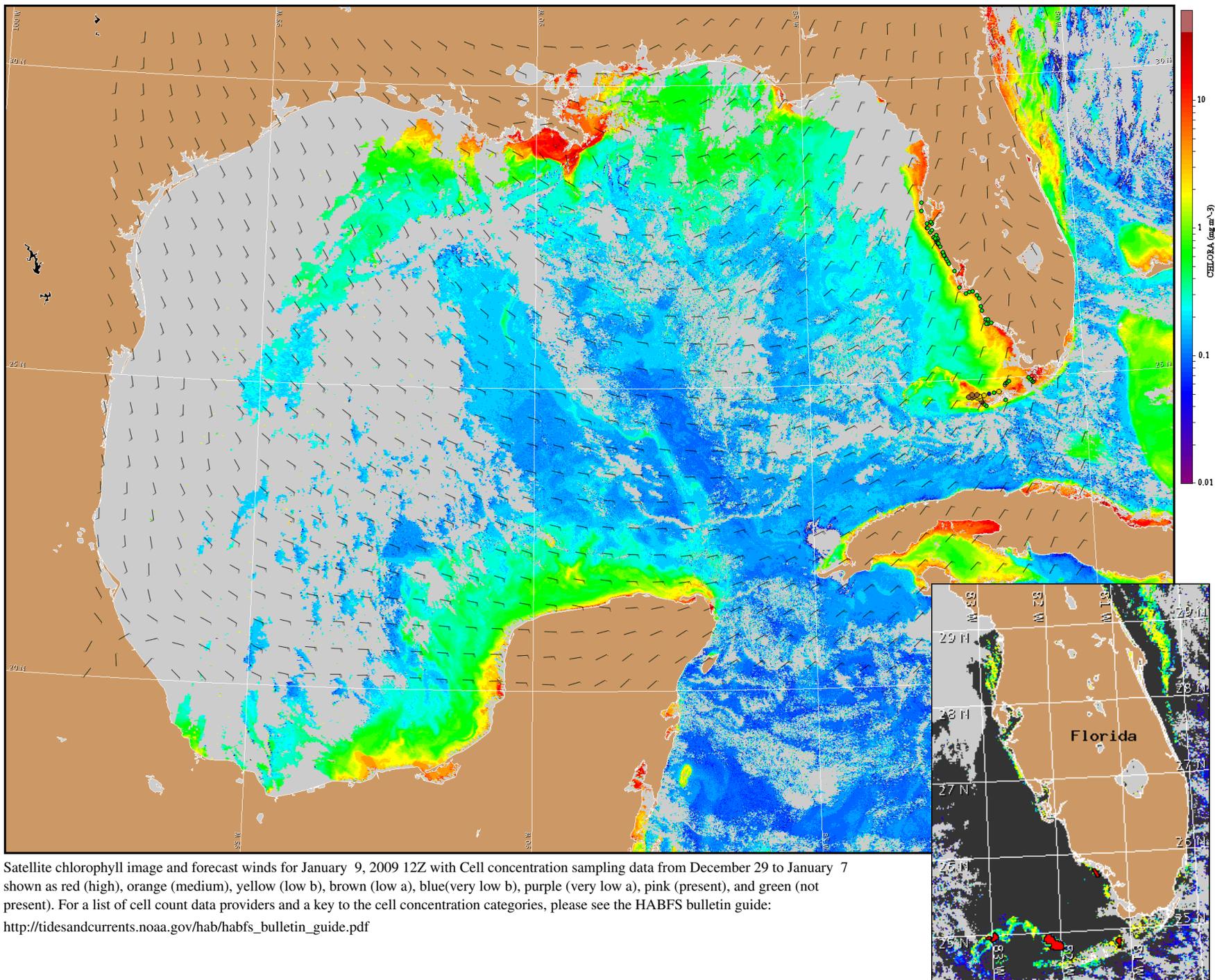
Wind speed and direction are averaged over 12 hours from buoy measurements. Length of line indicates speed; angle indicates direction. Red indicates that the wind direction favors upwelling near the coast. Values to the left of the dotted vertical line are measured values; values to the right are forecasts.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



Wind Analysis

Florida Keys: North to northeast winds today (5-10kn, 3-5m/s). Northeast winds Friday (10kn, 5m/s), shifting east Friday night. Southeast winds Saturday (10kn). Northwest winds Sunday (10-15kn, 5-8m/s).

SW Florida (Everglades region): Northwest winds today shifting north tonight (5-10kn, 3-5m/s). East winds Friday (5-10kn). Southeast winds Saturday shifting south Saturday night (5-10kn). West winds Sunday (5-10kn) becoming northwest (10-15kn, 5-8m/s).



Satellite chlorophyll image and forecast winds for January 9, 2009 12Z with Cell concentration sampling data from December 29 to January 7 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).