



# Gulf of Mexico Harmful Algal Bloom Bulletin

Region: Southwest Florida

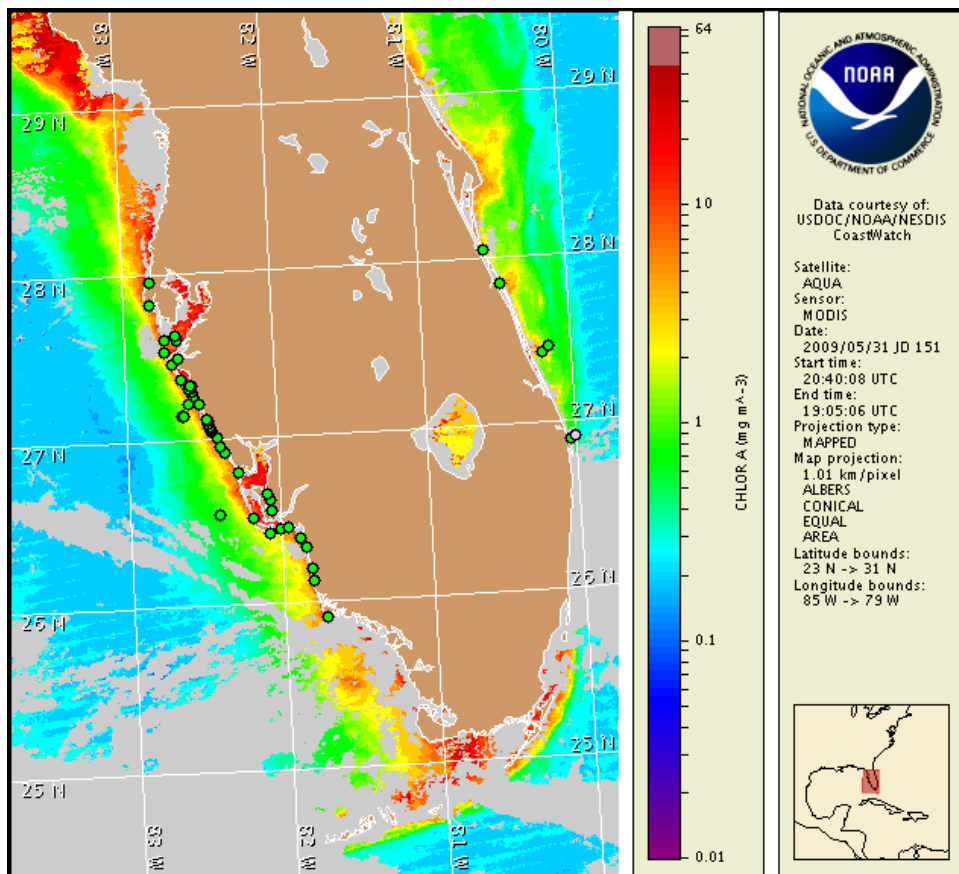
1 June 2009

NOAA Ocean Service

NOAA Satellites and Information Service

NOAA National Weather Service

Last bulletin: May 26, 2009



Satellite chlorophyll image with possible HAB areas shown by red polygon(s). Cell concentration sampling data from May 23 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](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

Harmful algae was last identified in southern Sarasota Bay in northern Sarasota County on May 20. No reports of impacts in association with harmful algae have been received. No impacts are expected alongshore southwest Florida today through Sunday, June 7.

## Analysis

There is currently no indication of a harmful algal bloom in southwest Florida. No new sample information is available inside southern Sarasota Bay where very low concentrations were previously identified on May 20. Background concentrations of *Karenia brevis* were found in a sample taken at New Pass (MML 5/26). Additional samples taken alongshore Manatee, Sarasota, Charlotte, Lee and Collier Counties all indicate that *Karenia brevis* is not present (MML 5/26-28, FWRI 5/26-27, SCHD 5/26).

Recent MODIS satellite imagery indicates elevated chlorophyll levels along the coast of northern Lee and Charlotte Counties, extending northward to Sarasota County near New Pass. Chlorophyll concentrations range from 4 to 8  $\mu\text{g/L}$  and are likely due to blooms of non-harmful algae.

Recent MODIS satellite imagery (5/31) remains cloudy offshore southern Collier and Monroe Counties making it difficult to determine the extent of the elevated chlorophyll levels as previously reported. However patches of elevated chlorophyll remain visible offshore northern Monroe County and are centrally located at approximately 25°31'12"N 81°36'16"W (approximately 4-6  $\mu\text{g/L}$ ). Also, three bands of elevated chlorophyll are visible in northern Collier County extending from the coast up to 16 miles offshore. These bands are likely associated with blooms of non-harmful algae.

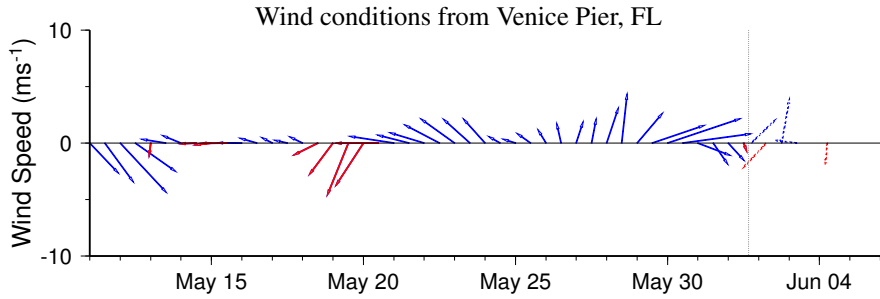
Harmful algal bloom formation alongshore southwest Florida is not expected today through Sunday, June 7.

Due to technical difficulties SeaWiFS imagery is presently unavailable. MODIS imagery has been used for bloom analysis and is displayed on this bulletin.

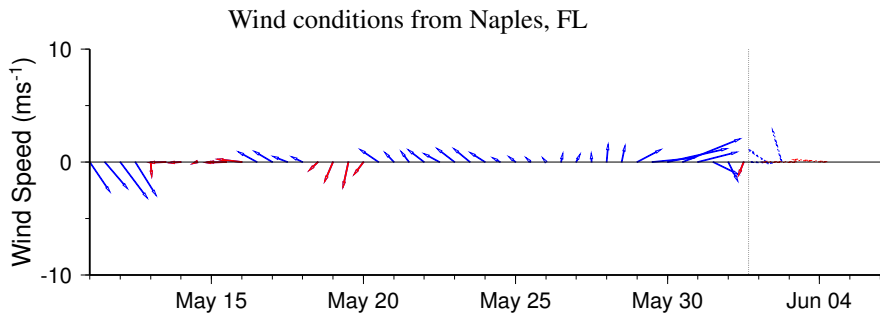
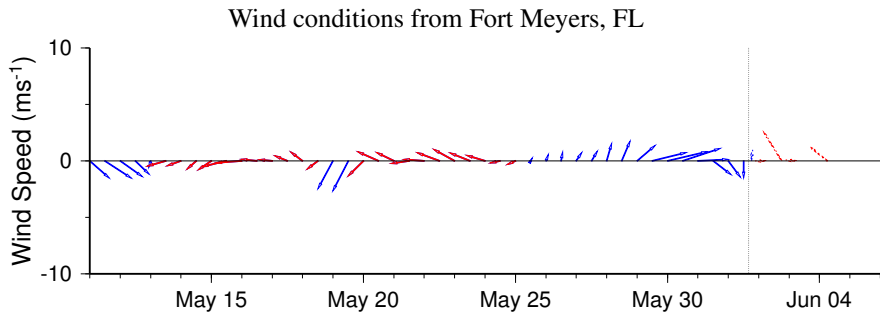
-Lindley, Fisher, Derner

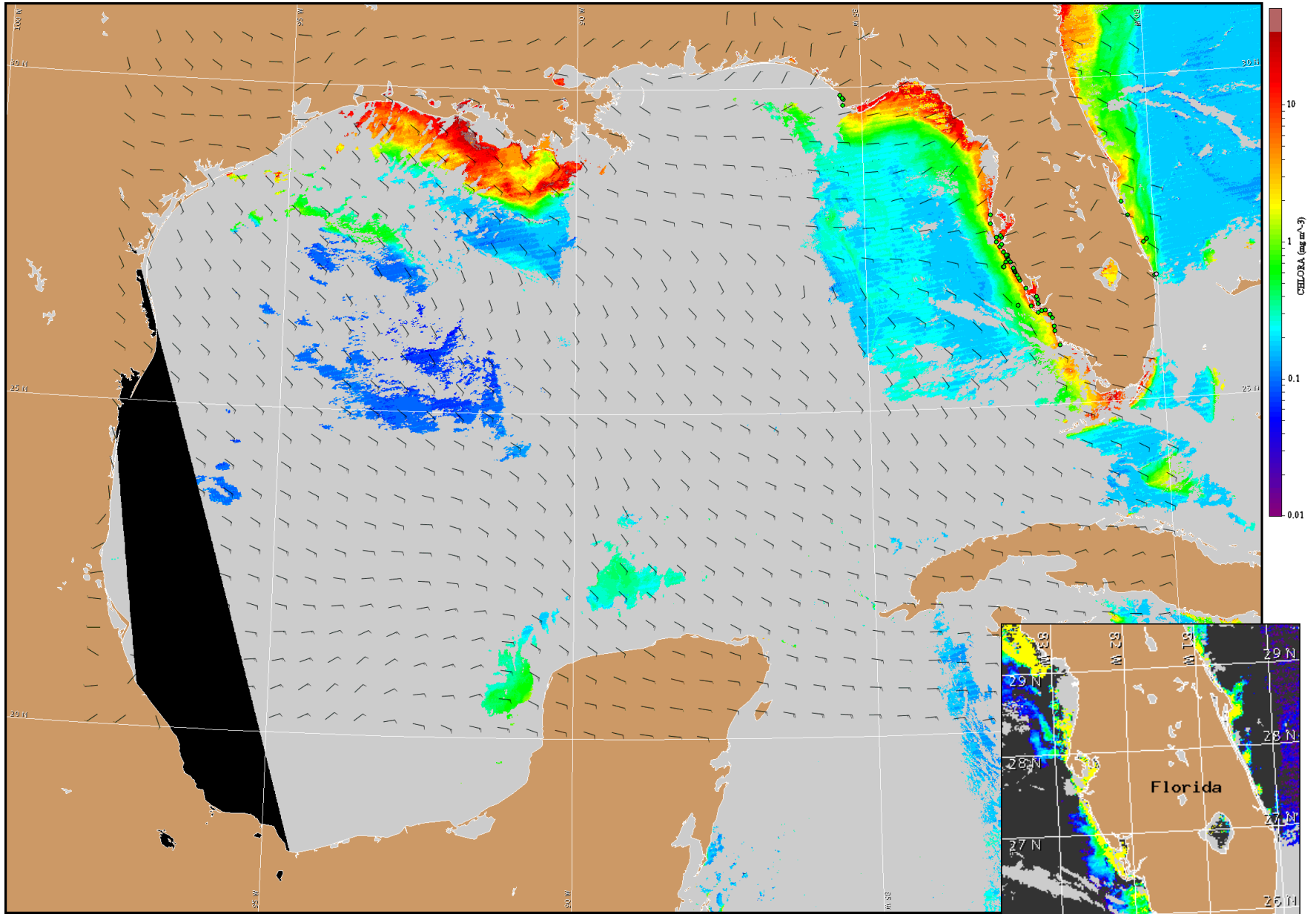
## Wind Analysis

Southwest Florida: East winds today (5 kn, 3 m/s). Southwest winds tonight (5-10 kn, 3-5 m/s). East winds Tuesday and Wednesday (5-10 kn, 3-5 m/s). Northwest winds Wednesday night (5 kn, 3 m/s). Southwest winds Thursday and Friday (5-10 kn, 3-5 m/s).



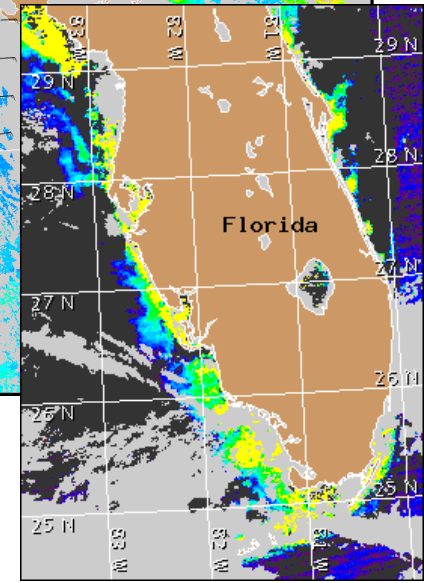
Wind speed and direction are averaged over 12 hours from buoy measurements. Length of line indicates speed; angle indicates direction. Red indicates that the wind direction favors upwelling near the coast. Values to the left of the dotted vertical line are measured values; values to the right are forecasts.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





Satellite chlorophyll image and forecast winds for June 2, 2009 12Z with Cell concentration sampling data from May 23 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:

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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).