



Gulf of Mexico Harmful Algal Bloom Bulletin

Region: Southwest Florida

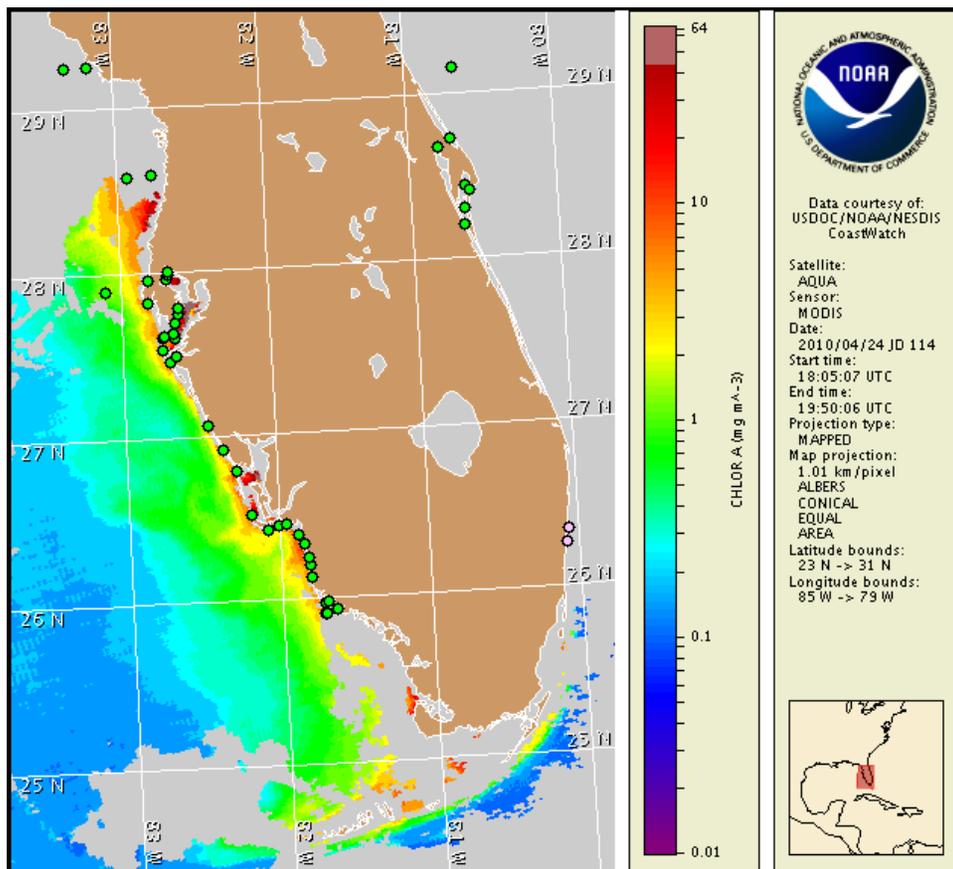
26 April 2010

NOAA Ocean Service

NOAA Satellites and Information Service

NOAA National Weather Service

Last bulletin: April 22, 2010



Satellite chlorophyll image with possible HAB areas shown by red polygon(s). Cell concentration sampling data from April 16 to 22 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 are currently no reports 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, May 2.

Analysis

Southwest Florida: There is currently no indication of a bloom at the coast in southwest Florida. Satellite imagery is mostly cloudy at the coast in southwest Florida, however, chlorophyll levels remain elevated ($>2 \mu\text{g/L}$) near shore from Pinellas to central Collier County. Patches of elevated to high chlorophyll (2 to $>10 \mu\text{g/L}$) are visible offshore Pinellas County and in the Tampa Bay area, as well as alongshore southern Lee to central Collier County and in the Pine Island Sound/San Carlos Bay region of central Lee County. These features are associated with non-harmful algal blooms, including patchy, mixed diatom blooms confirmed in Lee and Collier counties throughout the month of April (FWRI; 3/29-4/22). No *Karenia brevis* was detected in samples collected offshore Pinellas County, or alongshore from Pinellas to Collier County, including the Tampa Bay area, over the past week (FWRI, MML, SCHD; 4/17-22).

Florida Keys: Satellite imagery in the Florida Keys is largely obscured by clouds, limiting analysis. A large area of elevated to high chlorophyll (5 to $>10 \mu\text{g/L}$) is visible in recent MODIS imagery (4/23; not shown) just offshore Big Pine Key, surrounding the area from the north wrapping around to the east of Big Pine Key and nearby islands, with the area of highest chlorophyll level ($>10 \mu\text{g/L}$) centered northeast of Big Pine Key around $24^{\circ}48'11''\text{N}$ $81^{\circ}16'32''\text{W}$. No new samples have been received for this region, where a harmful algal bloom was last identified on 3/31 (MML). Sampling throughout this region is recommended.

Variable winds forecasted throughout the week alongshore southwest Florida and in the lower Florida Keys minimize the potential for feature transport through Friday, April 30.

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

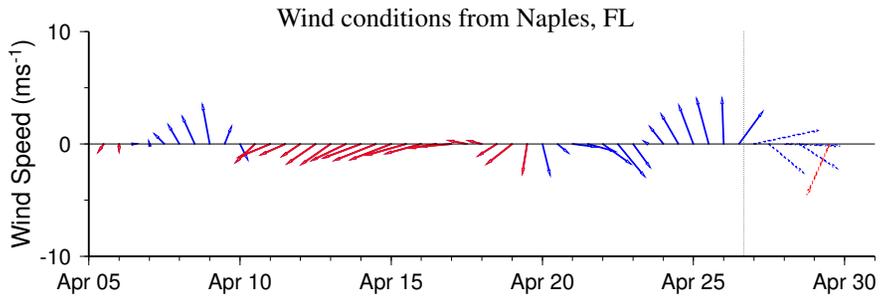
****Note: The next bulletin will be issued on Monday, May 3.****

Derner, Fisher, Yang

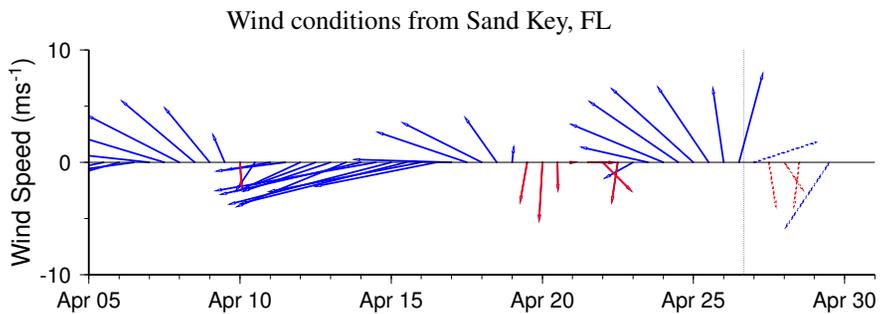
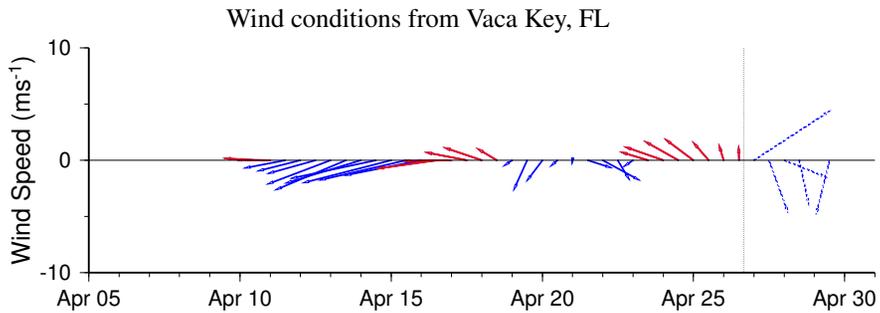
Wind Analysis

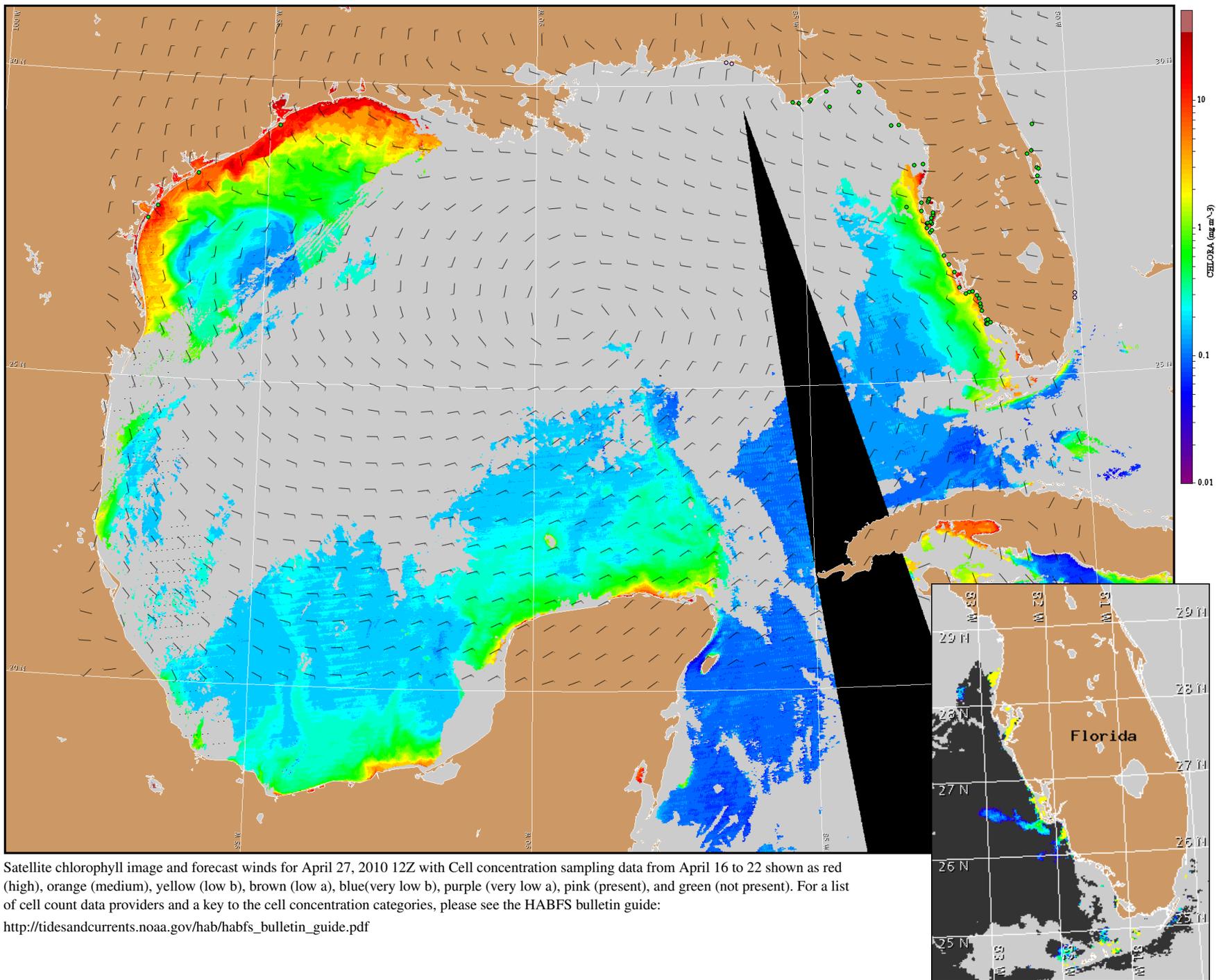
Southwest Florida: West winds (15-20kn, 8-10m/s) today. Northwest winds (15kn, 8m/s) tonight. West winds (15kn) Tuesday, becoming northwest (15kn) Tuesday night. North-northeast winds (10kn, 5m/s) Wednesday. East winds (5-15kn, 3-8m/s) Thursday. Southeast winds (20kn, 10m/s) Thursday night and Friday.

Florida Keys: Southwest winds (15-20kn, 8-10m/s) today, becoming west-northwest tonight (10-20kn, 5-10m/s). Northwest to north winds (10kn, 5m/s) Tuesday. Variable winds (5-10kn, 3-5m/s) Wednesday. East to southeast winds (15kn, 8m/s) Thursday and Friday.



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 April 27, 2010 12Z with Cell concentration sampling data from April 16 to 22 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).