



# Gulf of Mexico Harmful Algal Bloom Bulletin

Region: Southwest Florida

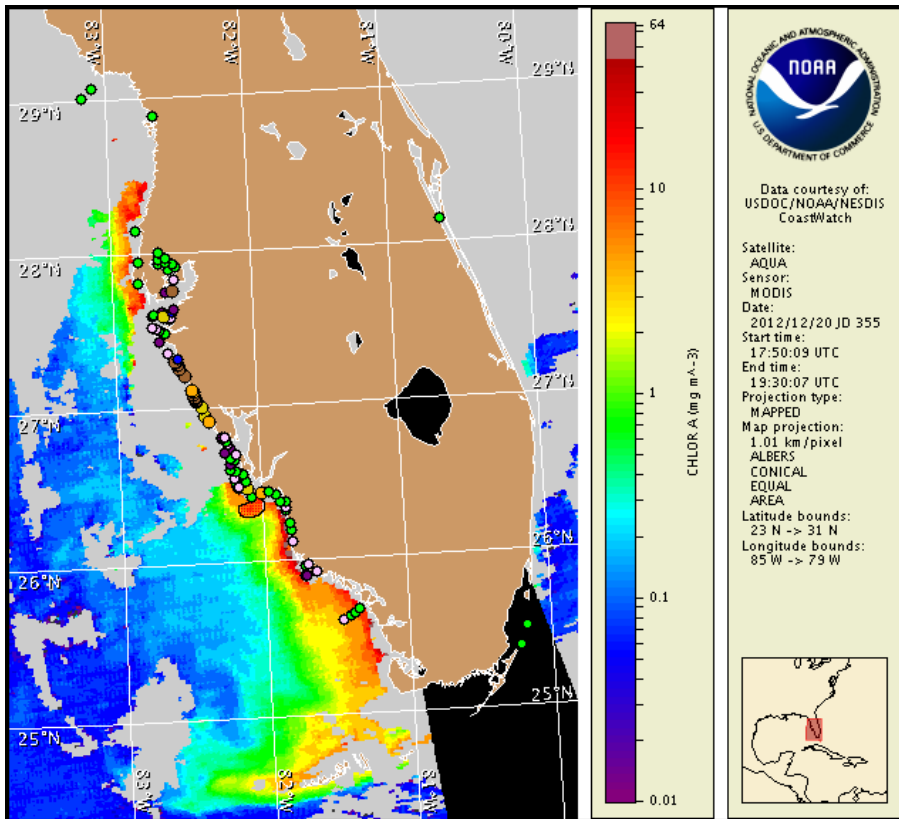
Wednesday, 26 December 2012

NOAA National Ocean Service

NOAA Satellite and Information Service

NOAA National Weather Service

Last bulletin: Thursday, December 20, 2012



Satellite chlorophyll image with possible *K. brevis* HAB areas shown by red polygon(s). Cell concentration sampling data from December 16 to 20 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). Cell count data are provided by Florida FWC Fish and Wildlife Research Institute. For a list of sample 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](http://tidesandcurrents.noaa.gov/hab/habfs_bulletin_guide.pdf)

Detailed sample information can be obtained through the Florida FWC Fish and Wildlife Research Institute at:

<http://myfwc.com/research/redtide/events/status/statewide/>

To see previous bulletins and forecasts for other Harmful Algal Bloom Bulletin regions, visit at: <http://tidesandcurrents.noaa.gov/hab/bulletins.html>

## Conditions Report

Very low to medium concentrations of *Karenia brevis* (commonly known as Florida Red Tide) are present along- and offshore southwest Florida from southern Pinellas to Collier counties. Patchy moderate respiratory impacts are possible today through Sunday in the bay regions of southern Pinellas/northern Manatee and Charlotte/Lee counties. Patchy high respiratory impacts are possible today and Saturday alongshore southern Sarasota, northern Charlotte and southern Lee counties, with patchy very low respiratory impacts possible Thursday, Friday and Sunday. Patchy very low respiratory impacts are possible today through Sunday in the bay regions of southern Manatee/northern Sarasota and central Collier counties. Patchy low impacts are possible today and Saturday in northern Sarasota, with very low impacts possible on Thursday, Friday and Sunday. No respiratory impacts are expected elsewhere alongshore southwest Florida today through Sunday, December 30. Reports of respiratory irritation and fish kills have been received over the past several days alongshore Sarasota County.

## Analysis

**\*\*Due to the federal holidays, the next standard bulletin will be issued on Monday, December 31, unless conditions warrant.\*\***

**Southwest Florida:** A harmful algal bloom of *Karenia brevis* is present along- and offshore southwest Florida from southern Pinellas to Collier counties, with *K. brevis* concentrations ranging from 'very low' to 'medium'. Recent samples indicate 'very low a' to 'medium' *K. brevis* concentrations alongshore Sarasota County, 'not present' to 'low b' in the bay regions of southern Pinellas, Manatee, Charlotte, and Lee counties (FWRI, SCHD; 12/20-21). Alongshore northern and central Collier County, *K. brevis* concentrations ranged between not present and 'very low a' (FWRI, CPCCPD; 12/18-21). Reports of respiratory irritation and fish kills have been received over the past several days alongshore Sarasota County (MML, FWRI; 12/21-25).

Due to technical difficulties, the most recent MODIS imagery is presently unavailable. We apologize for any inconvenience. MODIS imagery from 12/19-20 (12/20 shown left) indicates that a band of elevated chlorophyll (2 to <10 ug/L) remains along- and offshore from Pinellas to Monroe counties, with a patch of high chlorophyll (>10 ug/L) along- and offshore southern Lee and northern Collier counties. Variable winds this week may maintain the location of the bloom. Strong onshore winds today and Saturday may intensify respiratory impacts along the coast from Sarasota to southern Lee counties.

**Florida Keys:** There are currently no new samples from this region. MODIS imagery from 12/20 (shown left) continues to indicate a large patch of elevated chlorophyll (2 to <10 ug/L) gulfside of the lower Keys.

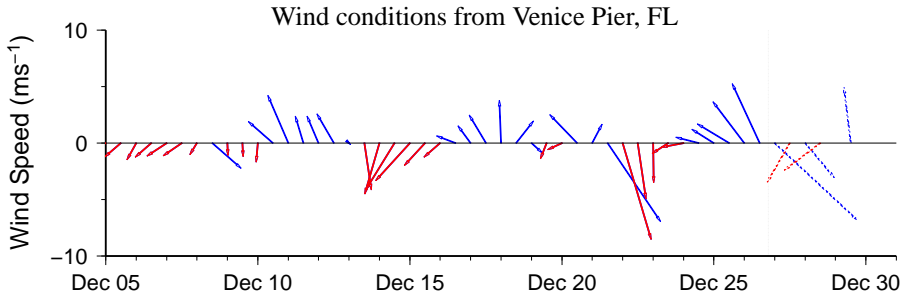
~Fenstermacher, Kavanaugh

## Wind Analysis

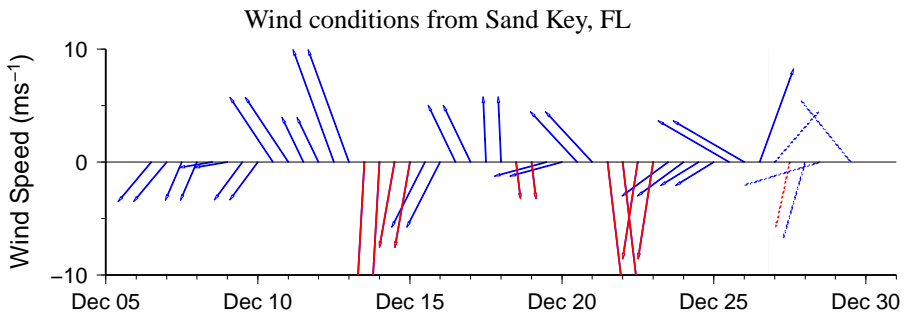
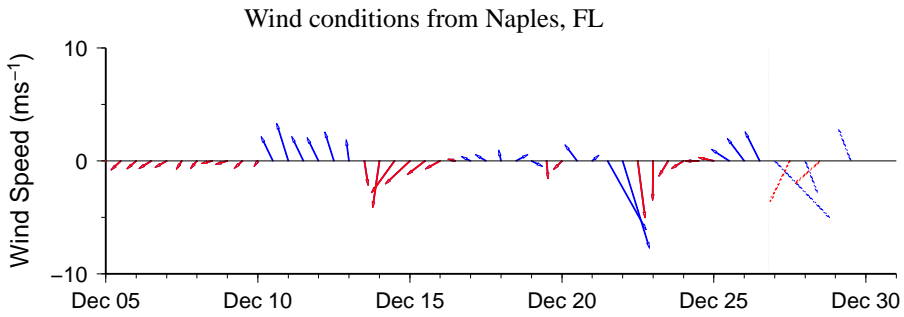
Pinellas to Lee counties: Strong southwest to northerly winds today (20-25 kn; 10-13 m/s). North to northeasterly winds on Thursday (10 kn; 5 m/s). East to southeast winds on Friday (10-15 kn; 5-8 m/s). Southwest to northerly winds on Saturday (20 kn). North to northeasterly winds on Sunday (10-20 kn).

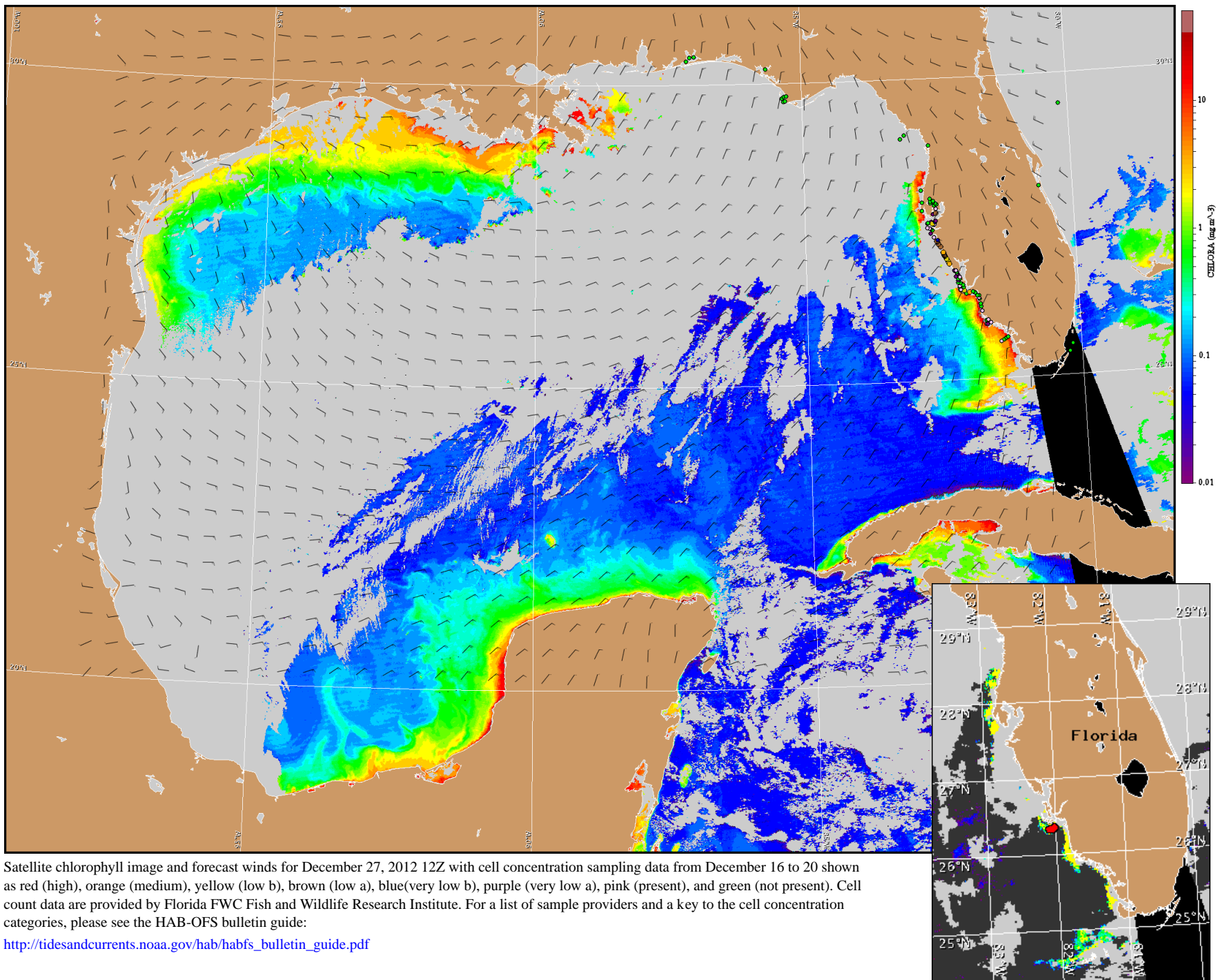
Collier and Monroe counties: Strong southwest to northerly winds today (15-20 kn; 8-10 m/s). North to easterly winds on Thursday (8-13 kn). East to southeast winds on Friday (10-15 kn; 5-8 m/s). Variable southwest to northerly winds on Saturday (10-20 kn). North to northeasterly on Sunday (10-20 kn).

Gulfside of lower Florida Keys: Variable, strong southwest to west winds today (15-20 kn; 8-10 m/s). Northwest to easterly on Thursday (10-15 kn). East to southeast winds on Friday (10-15 kn; 5-8 m/s). Variable southwest to northerlies winds on Saturday (10-20 kn). North to easterly winds on Sunday (10-20 kn).



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 December 27, 2012 12Z with cell concentration sampling data from December 16 to 20 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). Cell count data are provided by Florida FWC Fish and Wildlife Research Institute. For a list of sample 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).