



# Gulf of Mexico Harmful Algal Bloom Bulletin

Region: Southwest Florida

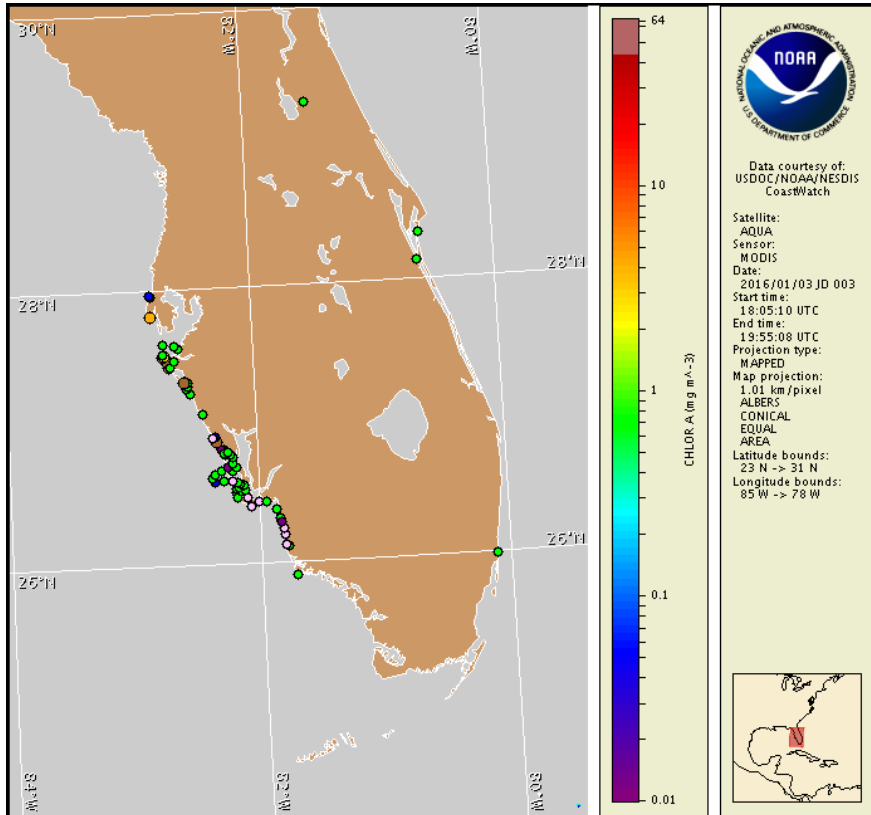
Monday, 04 January 2016

NOAA National Ocean Service

NOAA Satellite and Information Service

NOAA National Weather Service

Last bulletin: Thursday, December 31, 2015



Satellite chlorophyll image with possible *K. brevis* HAB areas shown by red polygon(s), when applicable. Points represent cell concentration sampling data from December 26 to January 1: 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 Fish and Wildlife Conservation Commission (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 FWC Fish and Wildlife Research Institute at:

<http://myfwc.com/redtidestatus>

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

## Conditions Report

*Karenia brevis* (commonly known as Florida red tide) ranges from not present to medium concentrations along the coast of southwest Florida, and is not present in the Florida Keys. *K. brevis* concentrations are patchy in nature and levels of respiratory irritation will vary locally based upon nearby bloom concentrations, ocean currents, and wind speed and direction. The highest level of potential respiratory irritation forecast for Monday, January 4 through Thursday, January 7 is listed below:

**County Region: Forecast (Duration)**

**Southern Pinellas:** Very Low (M-W), Low (Th)

**Southern Pinellas, bay regions:** Moderate (M-Th)

**Northern Manatee, bay regions:** Moderate (M-Th)

**Southern Manatee:** Very Low (M-Th)

**Southern Manatee, bay regions:** Moderate (M-Th)

**Northern Sarasota:** Very Low (M-Th)

**Northern Sarasota, bay regions:** Moderate (M-Th)

**Northern Charlotte, bay regions:** Low (M-W), Very Low (Th)

**Southern Charlotte, bay regions:** Very Low (M-Th)

**Central Collier, bay regions:** Low (M-Th)

**All Other SWFL County Regions:** None expected (M-Th)

**All Other NWFL County Regions:** Visit <http://tidesandcurrents.noaa.gov/hab/#nwfl>

Check [http://tidesandcurrents.noaa.gov/hab/beach\\_conditions.html](http://tidesandcurrents.noaa.gov/hab/beach_conditions.html) for recent, local observations. Health information, from the Florida Department of Health and other agencies, is available at [http://tidesandcurrents.noaa.gov/hab/hab\\_health\\_info.html](http://tidesandcurrents.noaa.gov/hab/hab_health_info.html). Dead fish have been reported in Collier County.

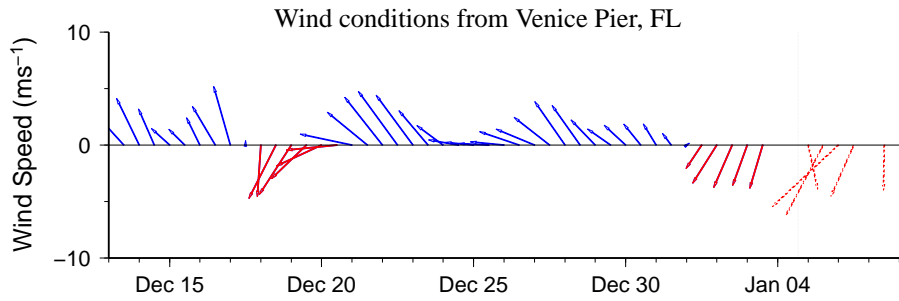
## Analysis

Recent samples collected along- and offshore southwest Florida indicate background to 'medium' *Karenia brevis* concentrations from Pinellas to central Collier counties, with the 'medium' concentrations present in southern Pinellas County and the bay region of northern Sarasota County (FWRI, CCENRD, SCHD, MML; 12/26-1/1). Dead fish have been reported in Collier County (CCENRD; 12/31). Detailed sample information and a summary of impacts can be obtained through FWC Fish and Wildlife Research Institute at: <http://myfwc.com/redtidestatus>.

Recent ensemble imagery (MODIS Aqua, 1/3) has been obscured by clouds along the coast of southwest Florida, preventing analysis.

Winds forecasted today through Thursday may promote the potential for southerly transport of surface *K. brevis* concentrations and may minimize the potential for respiratory irritation alongshore southwest Florida.

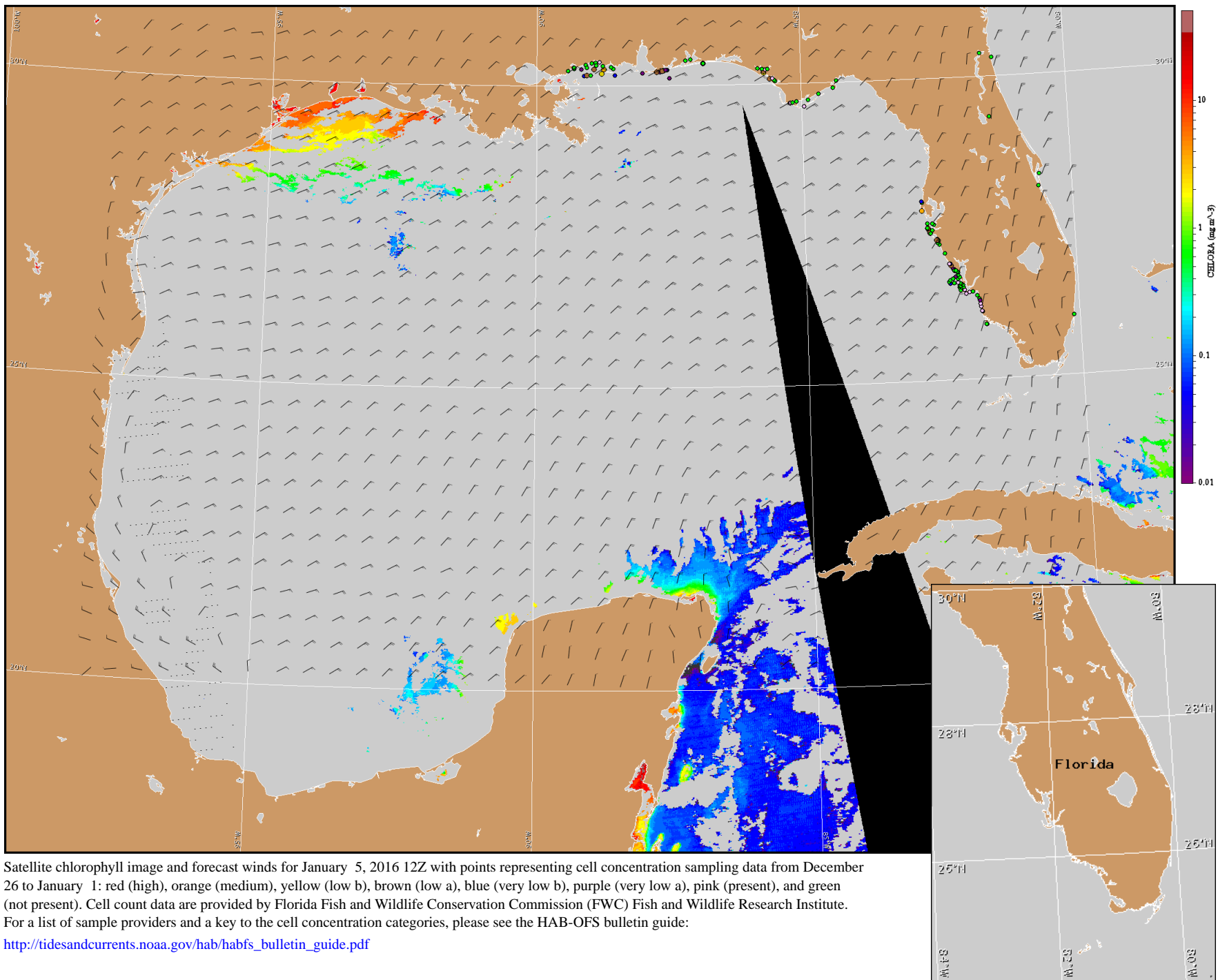
Yang, Davis



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

**Englewood to Tarpon Springs (Venice):** North to northeast winds (15-20kn, 8-10m/s) Monday through Wednesday. Northeast winds (10kn, 5m/s) Thursday becoming east (5kn, 3m/s) Thursday afternoon. Southeast winds (10kn) Thursday night.



Satellite chlorophyll image and forecast winds for January 5, 2016 12Z with points representing cell concentration sampling data from December 26 to January 1: 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 Fish and Wildlife Conservation Commission (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)

Verified and suspected HAB areas shown in red. Other areas with *K. brevis* optical characteristics shown in yellow (see p. 1 analysis for interpretation).