



Gulf of Mexico Harmful Algal Bloom Bulletin

Region: Southwest Florida

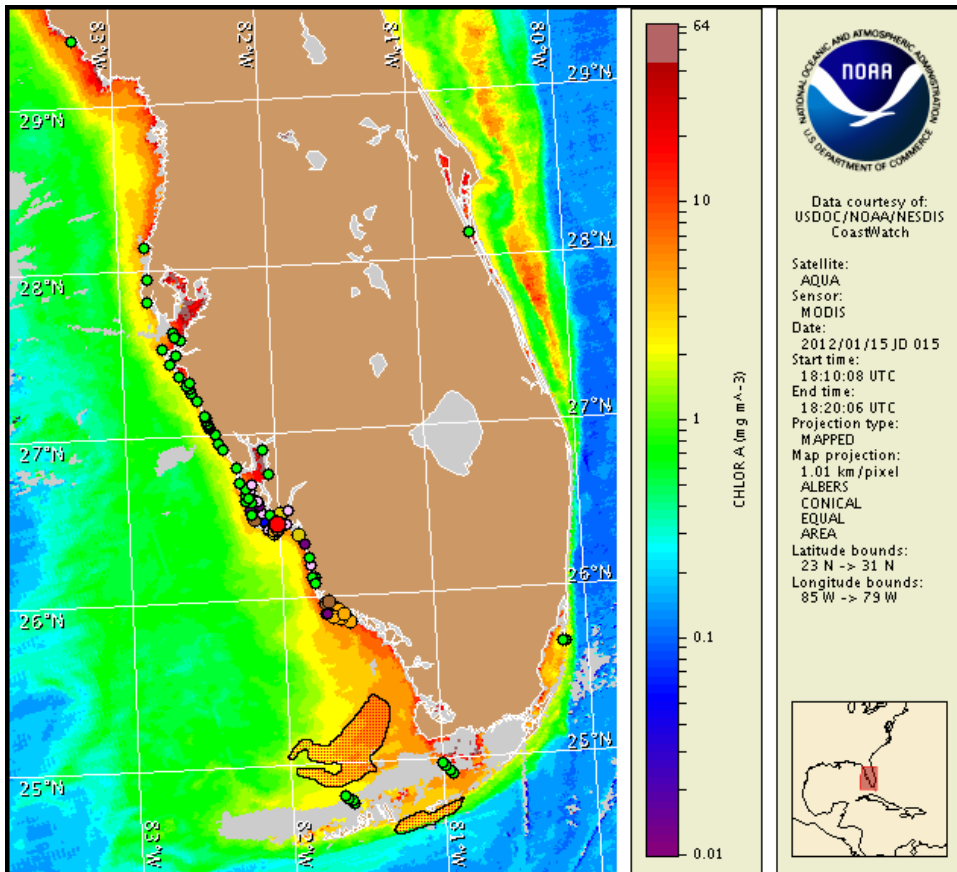
Tuesday, 17 January 2012

NOAA Ocean Service

NOAA Satellite and Information Service

NOAA National Weather Service

Last bulletin: Thursday, January 12, 2012



Satellite chlorophyll image with possible HAB areas shown by red polygon(s). Cell concentration sampling data from January 7 to 15 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 HAB-OFS bulletin guide:

http://tidesandcurrents.noaa.gov/hab/habfs_bulletin_guide.pdf

To see previous bulletins and forecasts for other Harmful Algal Bloom Bulletin regions, visit the NOAA Harmful Algal Bloom Operational Forecast System bulletin archive:
<http://tidesandcurrents.noaa.gov/hab/bulletins.html>

Conditions Report

A patchy harmful algal bloom persists in the Pine Island/San Carlos Bay & coastal Sanibel Island regions of Lee County and southern Lee and Collier Counties. In the Pine Island/San Carlos Bay region of Lee County, patchy high impacts are possible today and Wednesday. In the coastal Sanibel Island region of Lee County, moderate impacts are possible today and Wednesday. In southern Lee County, patchy very low impacts are possible today with moderate impacts possible on Wednesday. In northern Collier County, no impacts are expected today with patchy very low impacts possible Wednesday. In the Marco Island region of central Collier County, patchy moderate impacts possible today and Wednesday. No other impacts are expected throughout southwest Florida today through Wednesday, January 18. In addition, reports of respiratory irritation in Sarasota County were received last week (MML, 1/12).

Analysis

Southwest Florida: A patchy harmful algal bloom persists in patches alongshore and inshore from central Lee County to northern Monroe County. Recent samples of *Karenia brevis* range from very low to medium alongshore and inshore of the Pine Island Sound, San Carlos Bay, and Sanibel Island, with the highest concentrations persisting in the Marco Island and Santina Bay regions, of Lee and Collier Counties (FWRI, CCPCPD, 1/7-12). There are no recent reports of respiratory irritation or dead fish in Collier County (CCPCPD, 1/13) and there are no recent sampling reports for northern Monroe County. However, respiratory irritation was reported last week in Sarasota County, potentially indicating the presence of *K. brevis* (MML, 1/12). No *K. brevis* was detected in samples collected alongshore Pinellas, Manatee, Sarasota, or Charlotte counties (FWRI, SCHD, CCPCPD, MML, 1/7-1/12). Additional sample information can be obtained through FWRI at <http://myfwc.com/research/redtide/events/status/statewide/>.

While MODIS imagery has been consistently cloudy over the last week, recent imagery (1/15, shown left) indicates the band of patchy, elevated to very high chlorophyll alongshore southwest Florida from Lee to Monroe counties appears to have transported offshore and dissipated overall, except in patches near the Pelican Bay region of Collier County and in the Ten Thousand Islands region of northern Monroe County. However, analysis is limited due to cloudy imagery in the Marco Island region of Collier County. Continued sampling is recommended.

Florida Keys: Elevated chlorophyll features (2-4 $\mu\text{g/L}$) are present offshore of the Gulf side (centered at 25°9'7"N, 81°32'31"W) and alongshore of the Atlantic side of the Florida Keys (eastern extent: 24°44'10"N, 80°54'16"W; western extent: 24°35'37"N, 81°21'49"W). Continued sampling in the these regions is recommended.

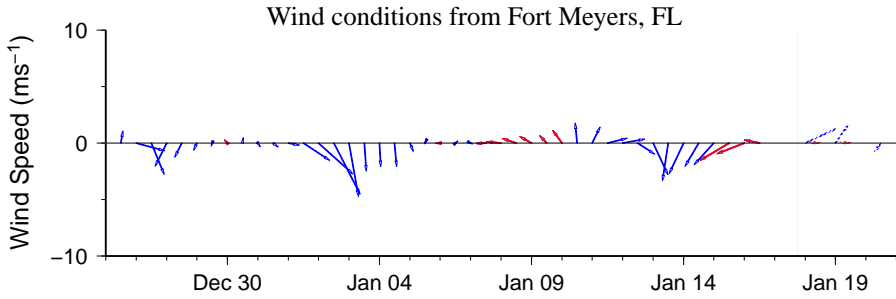
Variable winds may maintain bloom concentrations alongshore Lee, Collier and Monroe counties. Onshore winds on Wednesday may also increase impacts.

~Fenstermacher, Derner

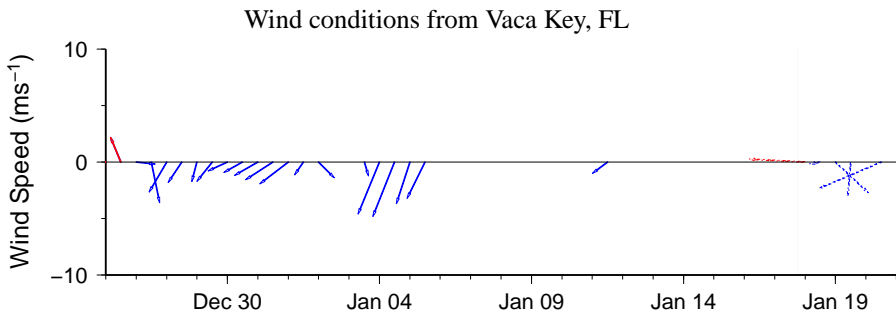
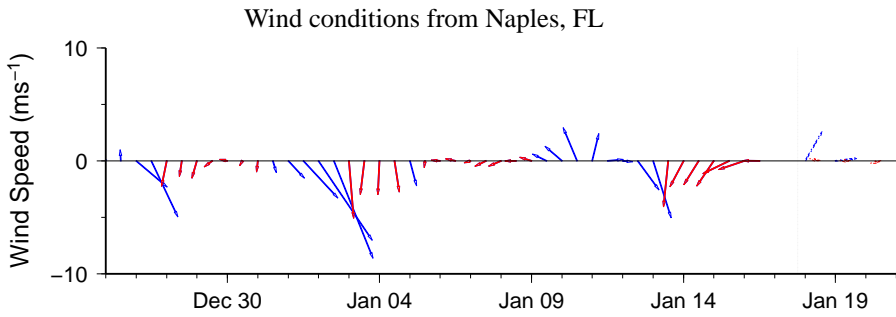
Wind Analysis

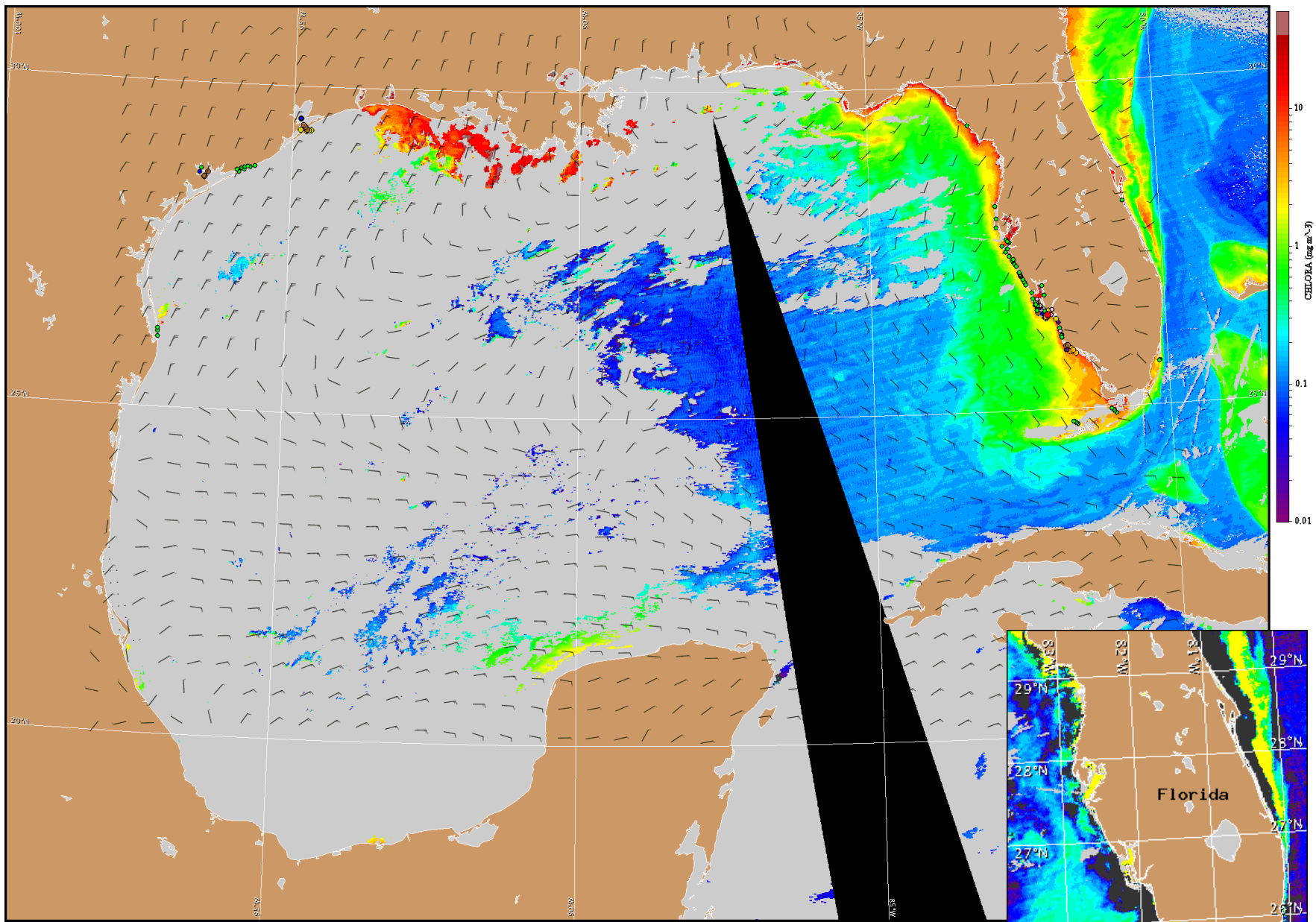
Sarasota to Lee Counties: Southerlies today becoming southwest to westerlies on Wednesday, and northerlies Wednesday night (10-15 kn, 5-8 m/s).

Collier to Monroe Counties & Florida Keys: East to southeast winds today and Wednesday becoming west to northwesterly and variable Wednesday afternoon (5-15 kn, 3-8 m/s).



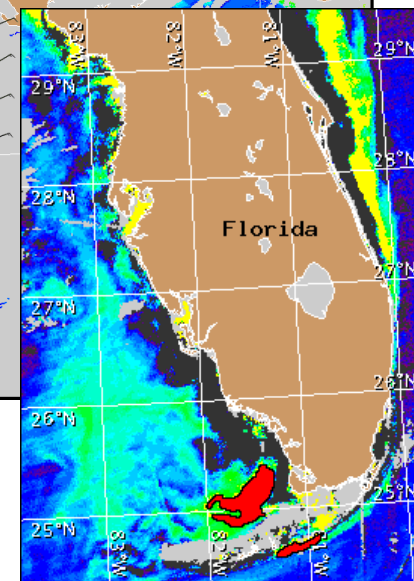
Wind speed and direction are averaged over 12 hours from buoy measurements. Length of line indicates speed; angle indicates direction. Red indicates that the wind direction favors upwelling near the coast. Values to the left of the dotted vertical line are measured values; values to the right are forecasts.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





Satellite chlorophyll image and forecast winds for January 18, 2012 12Z with cell concentration sampling data from January 7 to 15 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 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).