



Gulf of Mexico Harmful Algal Bloom Bulletin

Region: Southwest Florida

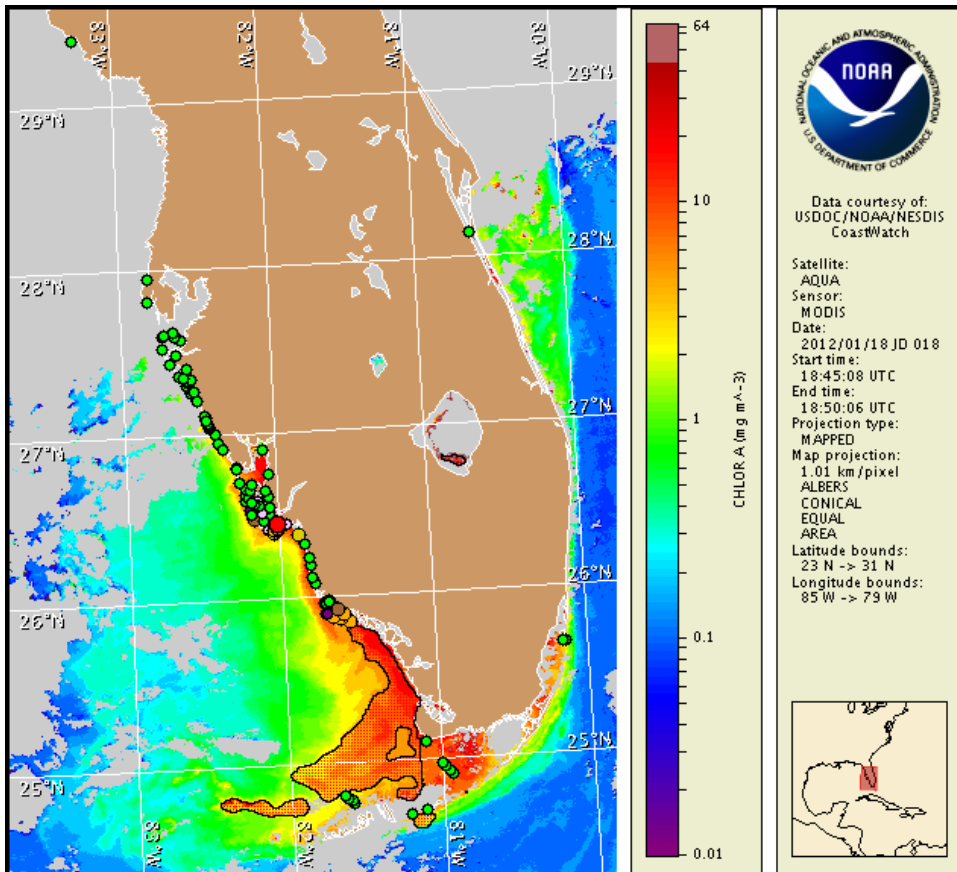
Thursday, 19 January 2012

NOAA Ocean Service

NOAA Satellite and Information Service

NOAA National Weather Service

Last bulletin: Tuesday, January 17, 2012



Satellite chlorophyll image with possible HAB areas shown by red polygon(s). Cell concentration sampling data from January 9 to 18 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 through Sunday. In the coastal Sanibel Island region of Lee County, patchy low impacts are possible today with high impacts possible Friday through Sunday. In southern Lee County, patchy very low impacts are possible today with moderate impacts possible Friday through Sunday. In the Marco Island region of central Collier County, patchy moderate impacts are possible today through Sunday. No other impacts are expected throughout southwest Florida today through Sunday, January 22.

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 high alongshore and inshore of the Pine Island Sound, San Carlos Bay, and Sanibel Island, with not present to low concentrations in the Marco Island and Santana Bay regions, of Lee and Collier Counties (FWRI, CCPCPD, 1/17-18). There are no recent reports of respiratory irritation or dead fish in Collier County (CCPCPD, 1/18). While respiratory irritation was reported last week in Sarasota County, *K. brevis* was not detected in recent samples (FWRI, 1/10-17). No *K. brevis* was detected in samples collected alongshore Pinellas, Manatee, Sarasota, or Charlotte counties nor offshore of the Florida Keys, however various non-toxic blooms have been reported throughout the region (FWRI, SCHD, CCPCPD, MML, 1/10-1/18). Additional sample information can be obtained through FWRI at <http://myfwc.com/research/redtide/events/status/statewide/>.

Recent MODIS imagery indicates elevated to high chlorophyll ($4-19 \mu\text{g/L}$) features alongshore southwest Florida from Lee to Monroe counties, particularly near Pelican Bay and offshore of Cape Romano in Collier County and in the Ten Thousand Islands region of northern Monroe County. Continued sampling is recommended.

Florida Keys: Imagery is cloudy throughout the Florida Keys; however, elevated chlorophyll features ($2-4 \mu\text{g/L}$) are present offshore of the Gulfside and alongshore of the Atlantic side of the Florida Keys, with a distinct very high feature ($>20 \mu\text{g/L}$) northwest of the lower Keys, located at $24^{\circ}48'35''\text{N}$, $82^{\circ}23'55''\text{W}$. Continued sampling in these regions is recommended.

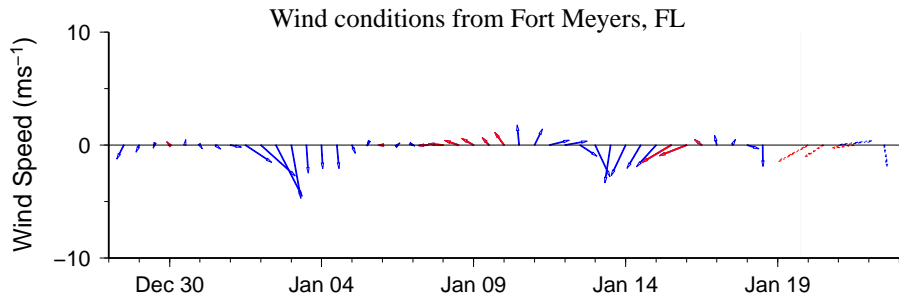
Variable winds may maintain bloom concentrations alongshore Lee County. Onshore winds may increase the potential for impacts in the San Carlos Bay/Sanibel Island and Marco Island regions through Sunday.

~Fenstermacher, Derner

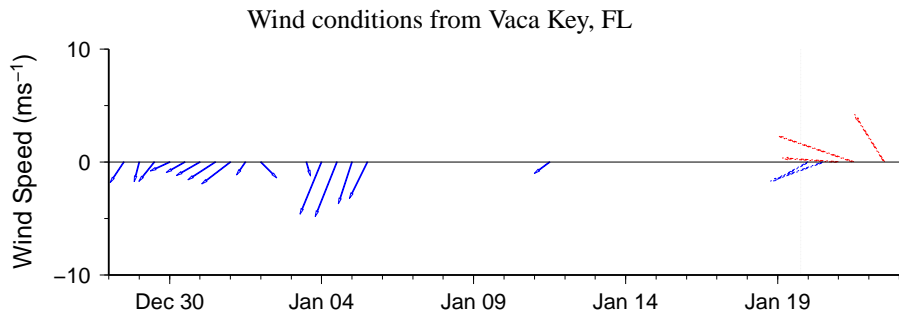
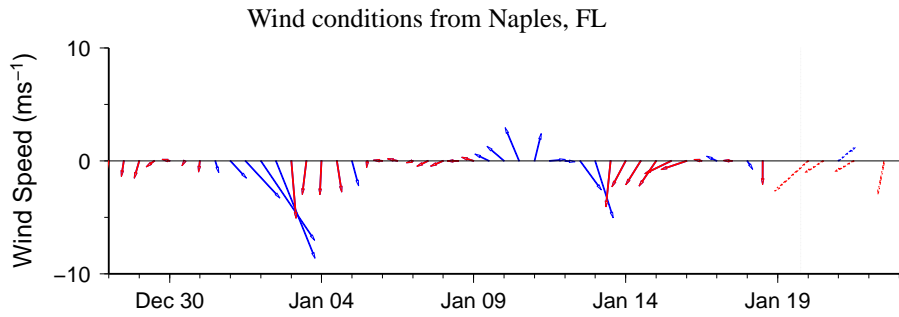
Wind Analysis

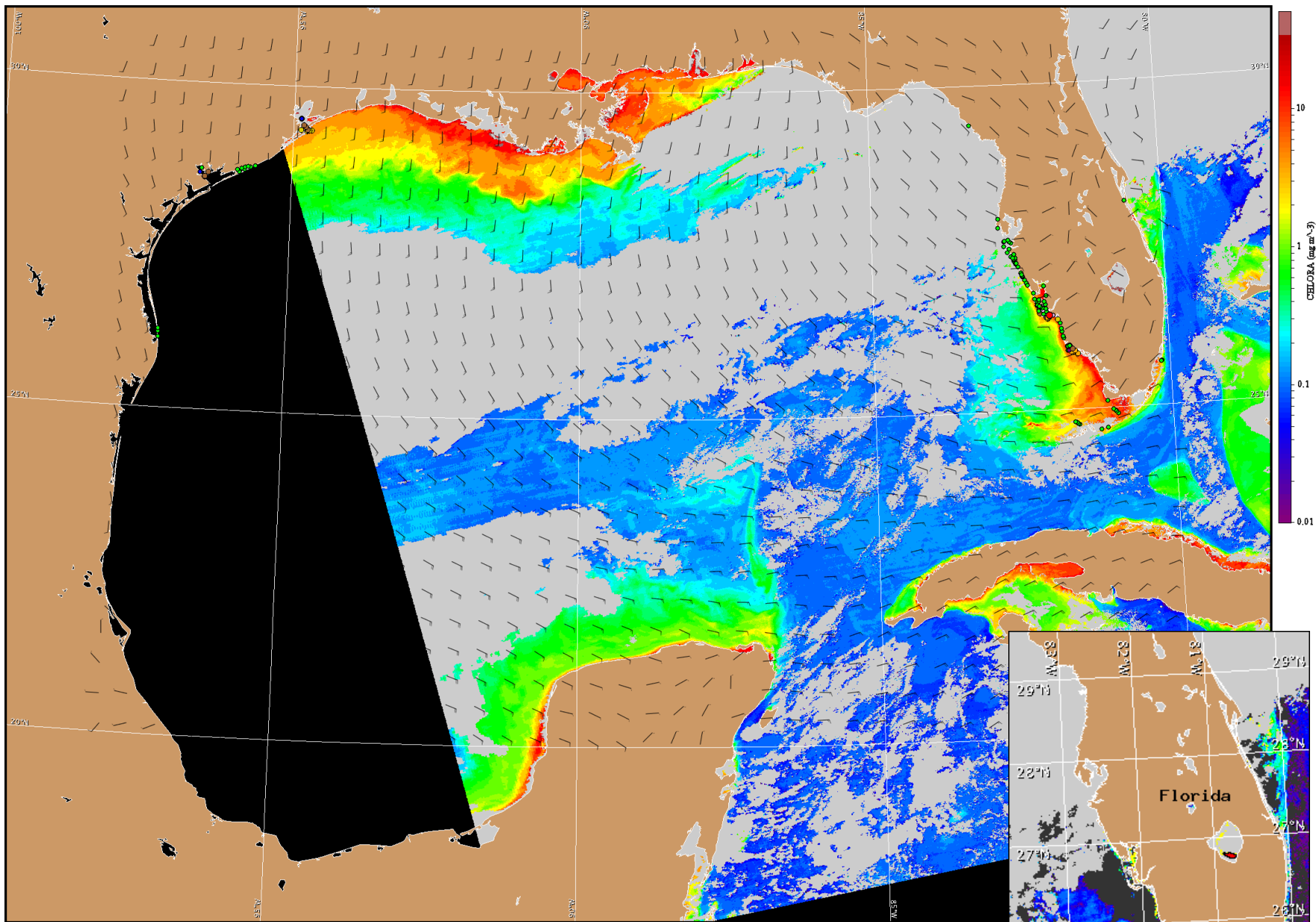
Sarasota to Lee Counties: Northeast to northwest winds today followed by south to southeast winds tonight through Saturday (10 kn; 5 m/s) and southwest winds on Sunday (5 kn; 3 m/s).

Collier and Monroe Counties and the Florida Keys :East to northeast winds today and east to southeast winds Friday through Sunday (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 20, 2012 12Z with cell concentration sampling data from January 9 to 18 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

Verified and suspected HAB areas shown in red. Other areas of high chlorophyll concentration shown in yellow (see p. 1 analysis for interpretation).