



Experimental Lake Erie Harmful Algal Bloom Bulletin

National Centers for Coastal Ocean Science and Great Lakes Environmental Research Laboratory

1 August 2014, Bulletin 09

The bloom near the Maumee River has expanded since last weeks bulletin. Low winds (<10 knots) are forecasted for the weekend, which may lead to scum formation in the Western basin near the Maumee River. A slight eastern transport has been forecasted for the next few days.

The imagery shows the persistent bloom in Sandusky Bay is present. There are no reported harmful algal blooms or suspicious features in the Eastern Basin at this time.

-Dupuy

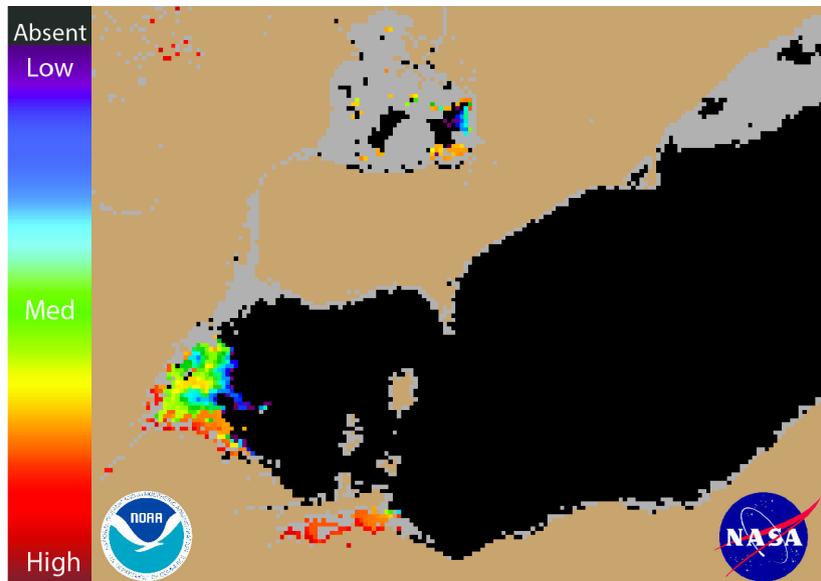


Figure 1. Cyanobacterial Index from NASA's MODIS-Aqua data collected 31 July 2014 at 2:30 pm. Grey indicates clouds or missing data. Black represents no cyanobacteria detected. Cooler colors (blue and purple) indicate low concentrations and warmer colors (red, orange, and yellow) indicate high concentrations. The estimated threshold for cyanobacteria detection is 35,000 cells/mL.

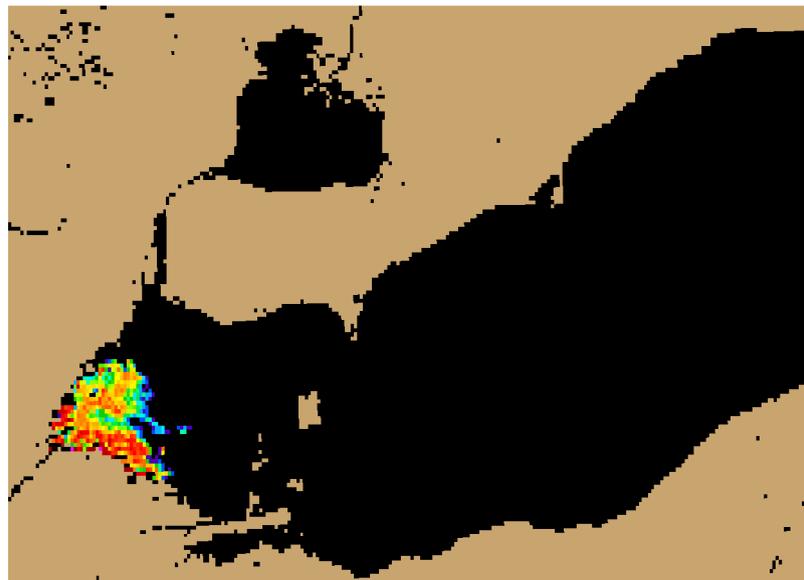


Figure 2. Nowcast position of bloom for 1 August 2014 using GLCFS modeled currents to move the bloom from the 31 July 2014 image.

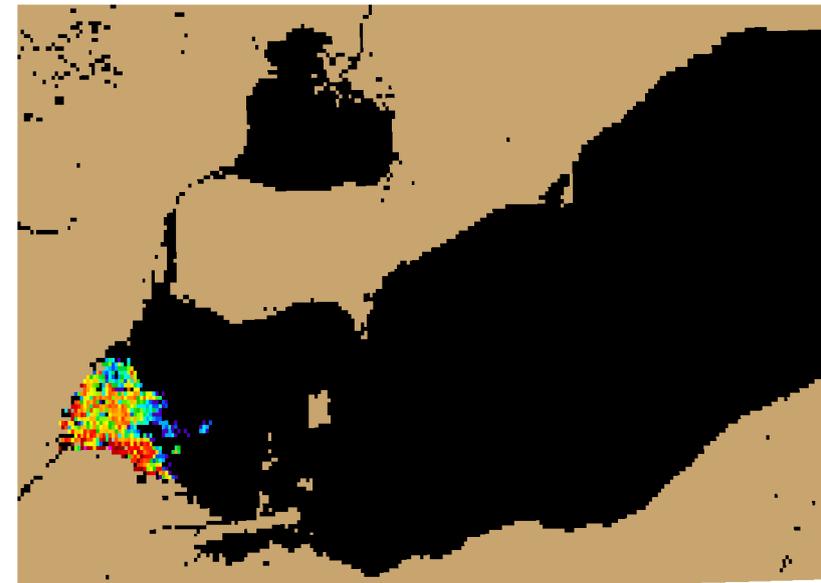
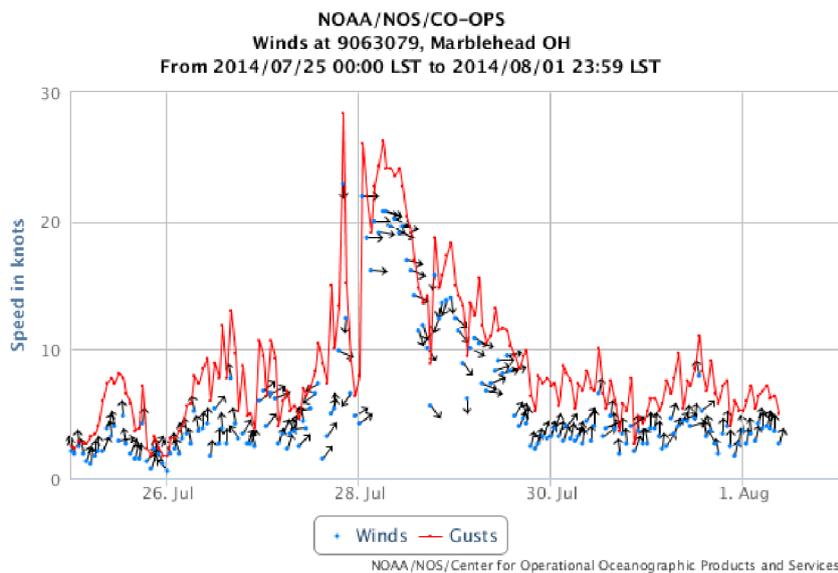
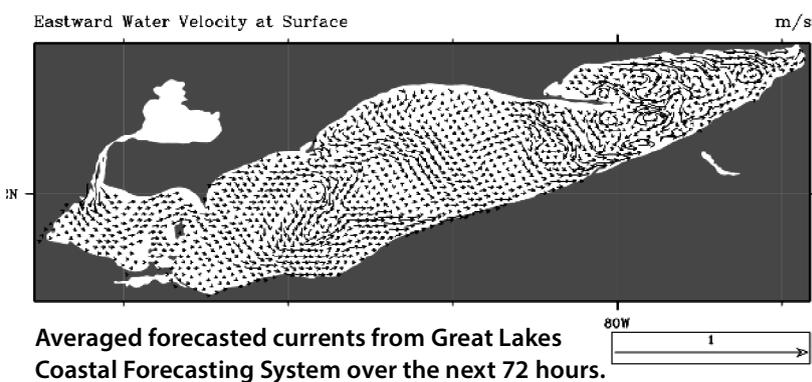


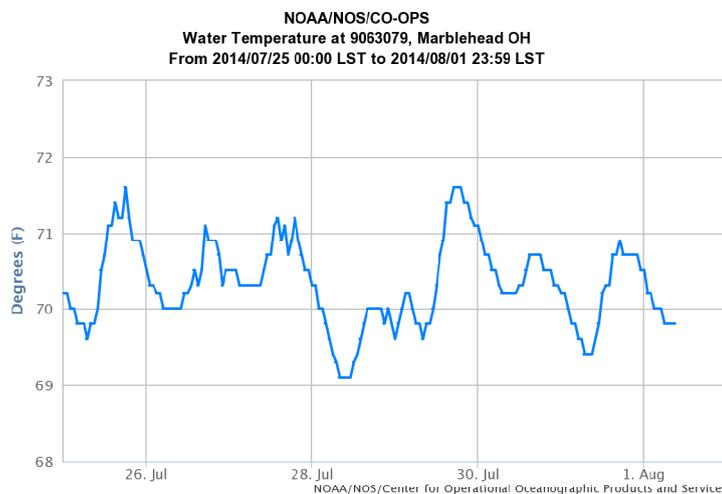
Figure 3. Forecast position of bloom for 4 August 2014 using GLCFS modeled currents to move the bloom from the 31 July 2014 image.



Wind Speed, Gusts and Direction from Marblehead, OH. From: NOAA/Center for Operational Oceanographic Products and Services (CO-OPS). Note: 1 knot = 0.51444 m/s. Blooms mix through the water column at wind speeds greater than 7.7 m/sec (~ 15 knots).



Averaged forecasted currents from Great Lakes Coastal Forecasting System over the next 72 hours.



Water Temperature from Marblehead, OH. From: NOAA/Center for Operational Oceanographic Products and Services (CO-OPS).