



Experimental Lake Erie Harmful Algal Bloom Bulletin

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

25 July 2014, Bulletin 08

We do not believe that the bloom near the Maumee River has expanded. Ohio EPA observed 7.1 ppb of Microcystins at Maumee Bay State Park on Monday, July 21st, and a Recreational Public Health Advisory was issued for the park on Wednesday, July 23rd. A 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, Stumpf, Wynne

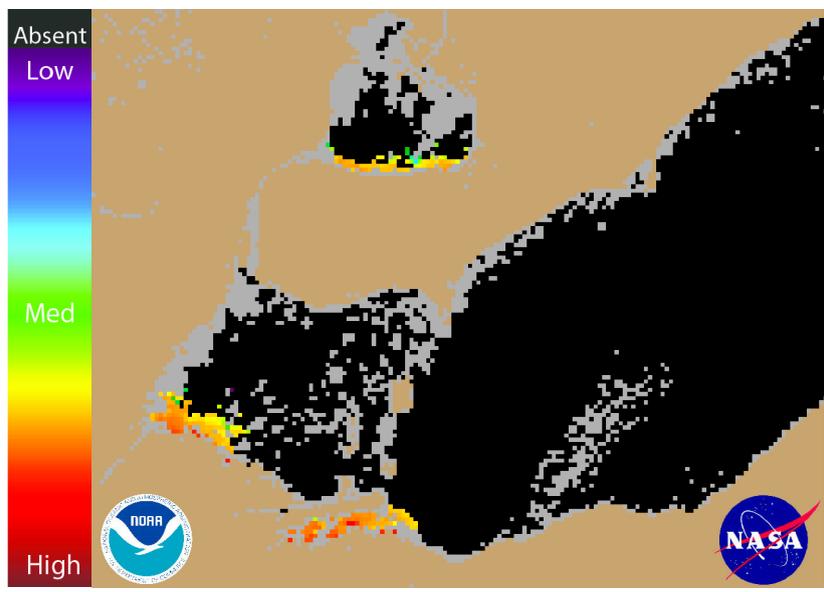


Figure 1. Cyanobacterial Index from NASA's MODIS-Terra data collected 24 July 2014 at 1:35 pm. Grey indicates clouds or missing data. Black represents no cyanobacteria detected. Colored pixels indicate the presence of cyanobacteria. Cooler colors (blue and purple) indicate low concentrations and warmer colors (red, orange, and yellow) indicate high concentrations. The estimated threshold for cyanobacteria detection is 35,000 cells/mL.

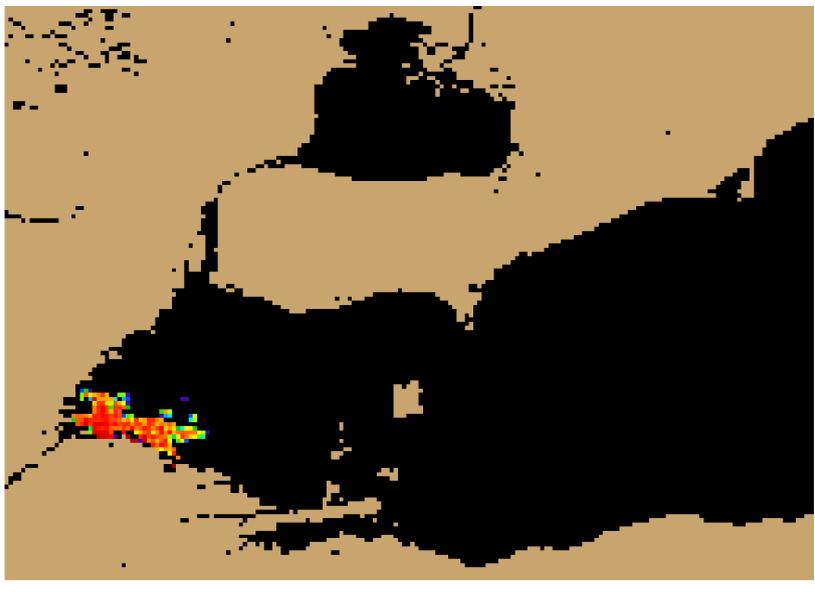


Figure 2. Nowcast position of bloom for 25 July 2014 using GLCFS modeled currents to move the bloom from the 24 July 2014 image.

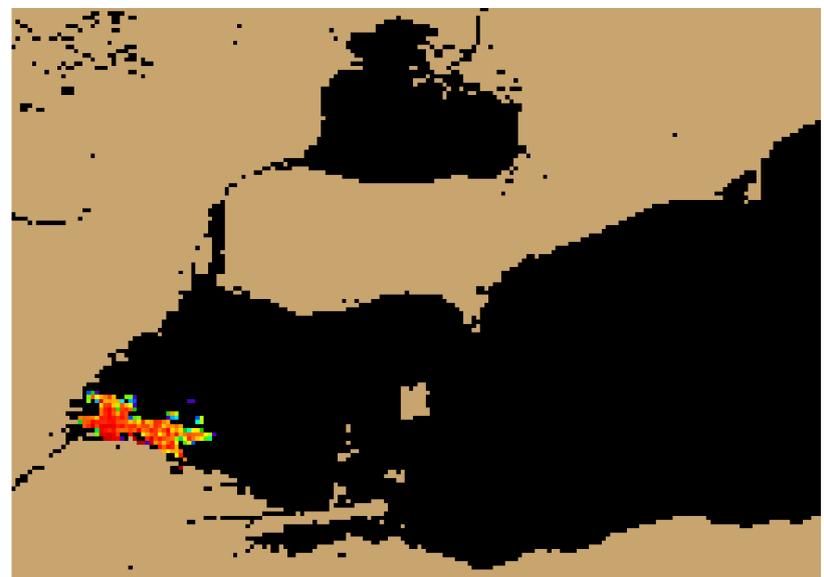
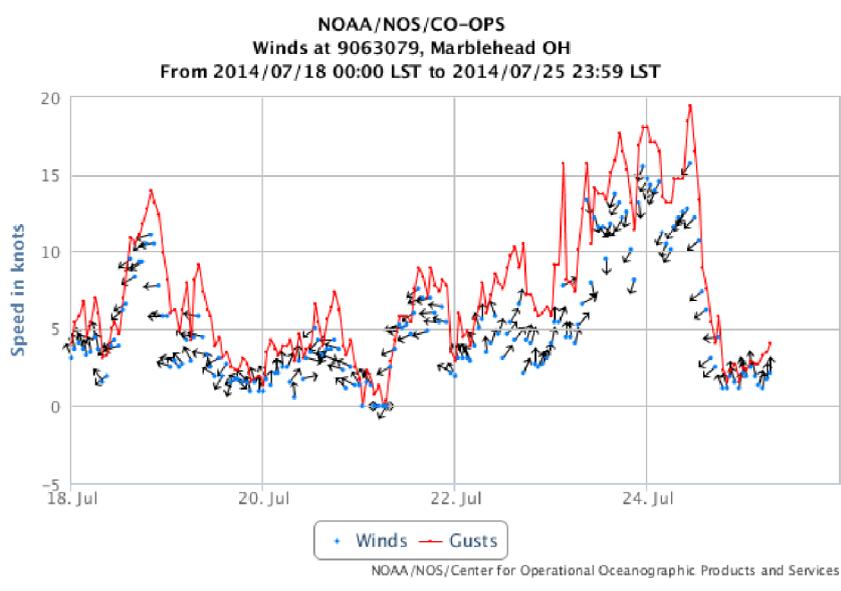
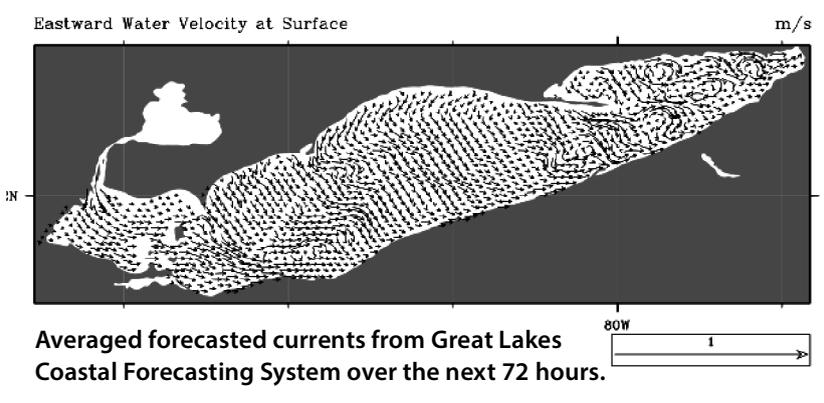


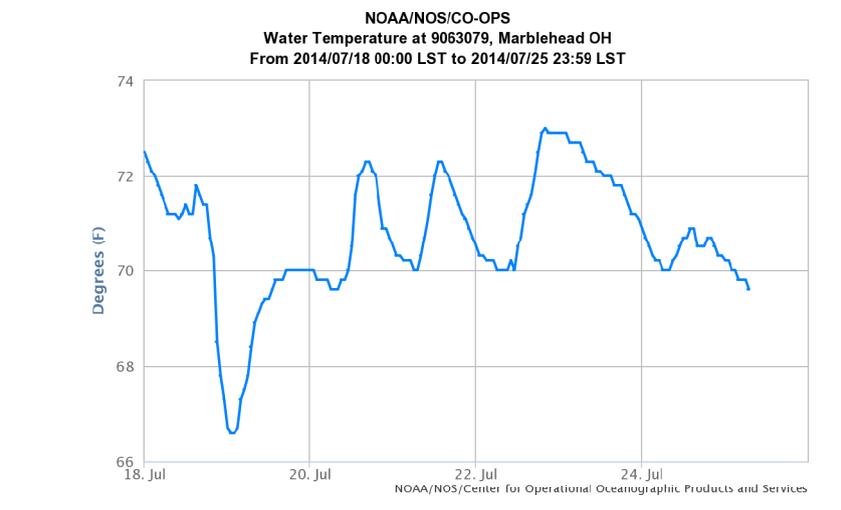
Figure 3. Forecast position of bloom for 28 July 2014 using GLCFS modeled currents to move the bloom from the 24 July 2014 image.



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).