



Experimental Lake Erie Harmful Algal Bloom Bulletin

28 July, 2016, Bulletin 06

Cyanobacteria (*Microcystis*) is detectable in far western Lake Erie, extending from Maumee Bay along the Michigan coast, and extending east into the western basin in moderate concentrations. Low concentrations of cyanobacteria have appeared on the Ohio coast east of Toledo. Scum areas have not been observed. Measured toxin levels have stayed below recreational thresholds.

The central basin currently does not show a detectable bloom. There may be some areas of the *Dolichospermum* cyanobacteria east of the islands.

Winds are expected to be mild over the next few days, with little mixing expected. The bloom is not expected to see much movement

The persistent cyanobacteria bloom continues in Sandusky Bay. No blooms have been observed in the eastern basin.

Dupuy, Stumpf

The images below are "GeoPDF". To see the longitude and latitude under your cursor, select "Tools > Analyze > Geospatial Location Tool".

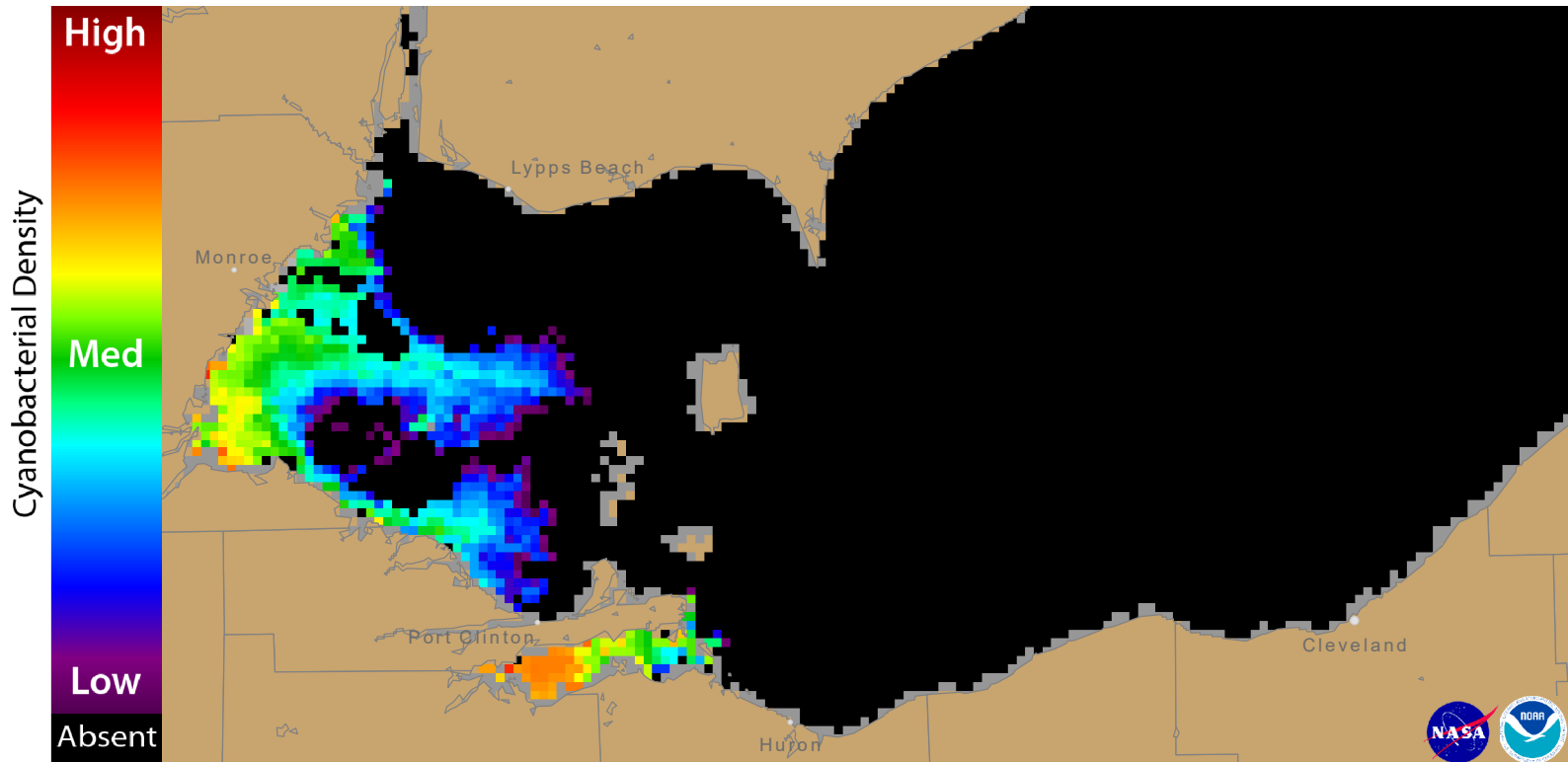
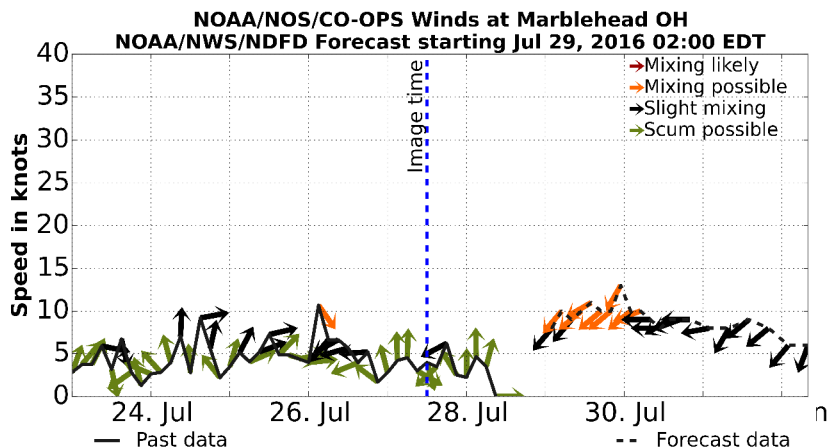


Figure 1. Cyanobacterial Index from NASA's MODIS-Terra data collected 27 July, 2016 at 11:06 EST. Grey indicates clouds or missing data. The estimated threshold for cyanobacteria detection is 20,000 cells/mL.



Figure 2. Cyanobacterial Index from NASA's MODIS-Terra data collected 27 July, 2016 at 11:06.



Wind speed and direction from Marblehead, OH. Blooms mix through the water column at wind speeds greater than 15 knots (or 7.7 m/s).

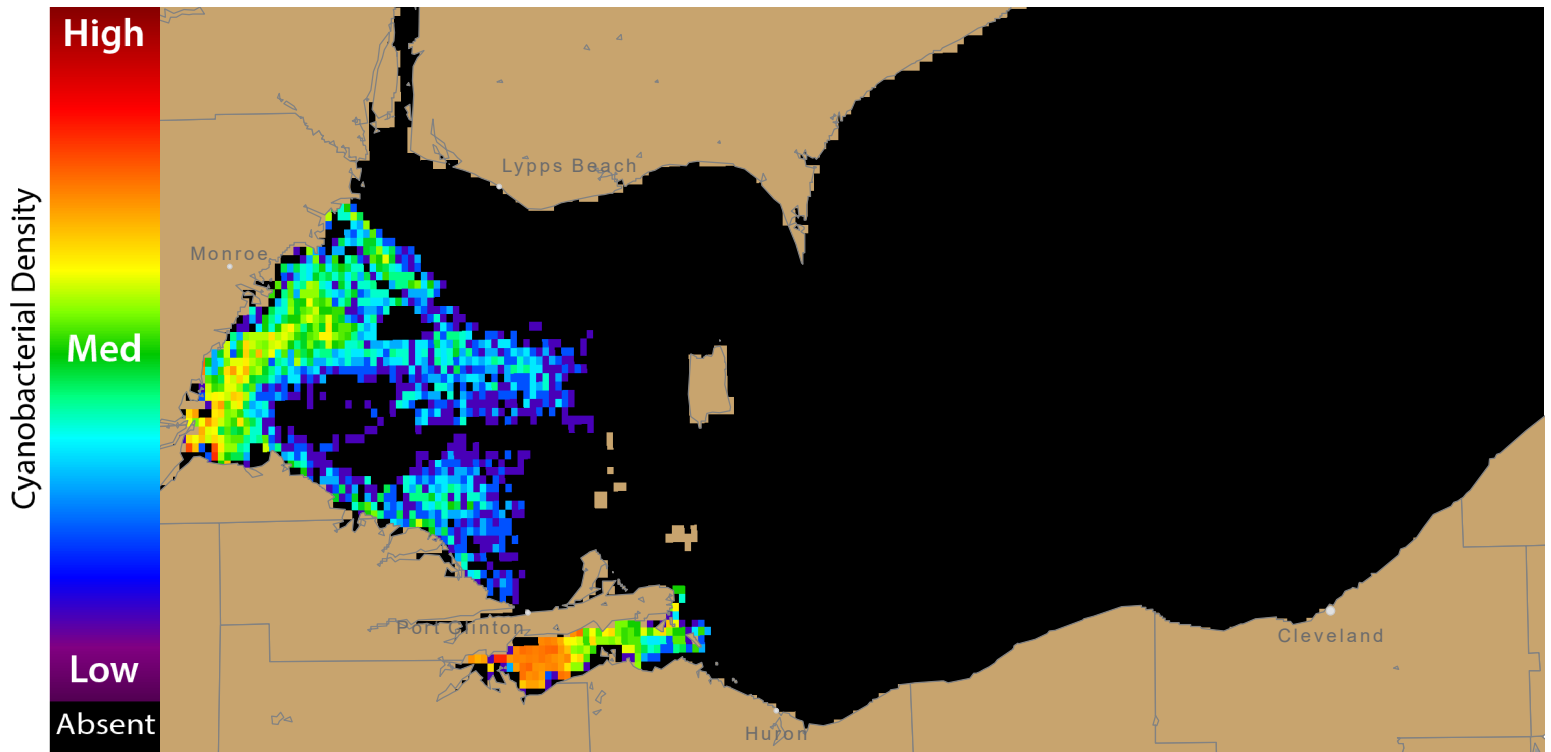


Figure 3. Nowcast position of bloom for 28 July, 2016 using GLCFS modeled currents to move the bloom from the 27 July, 2016 image.

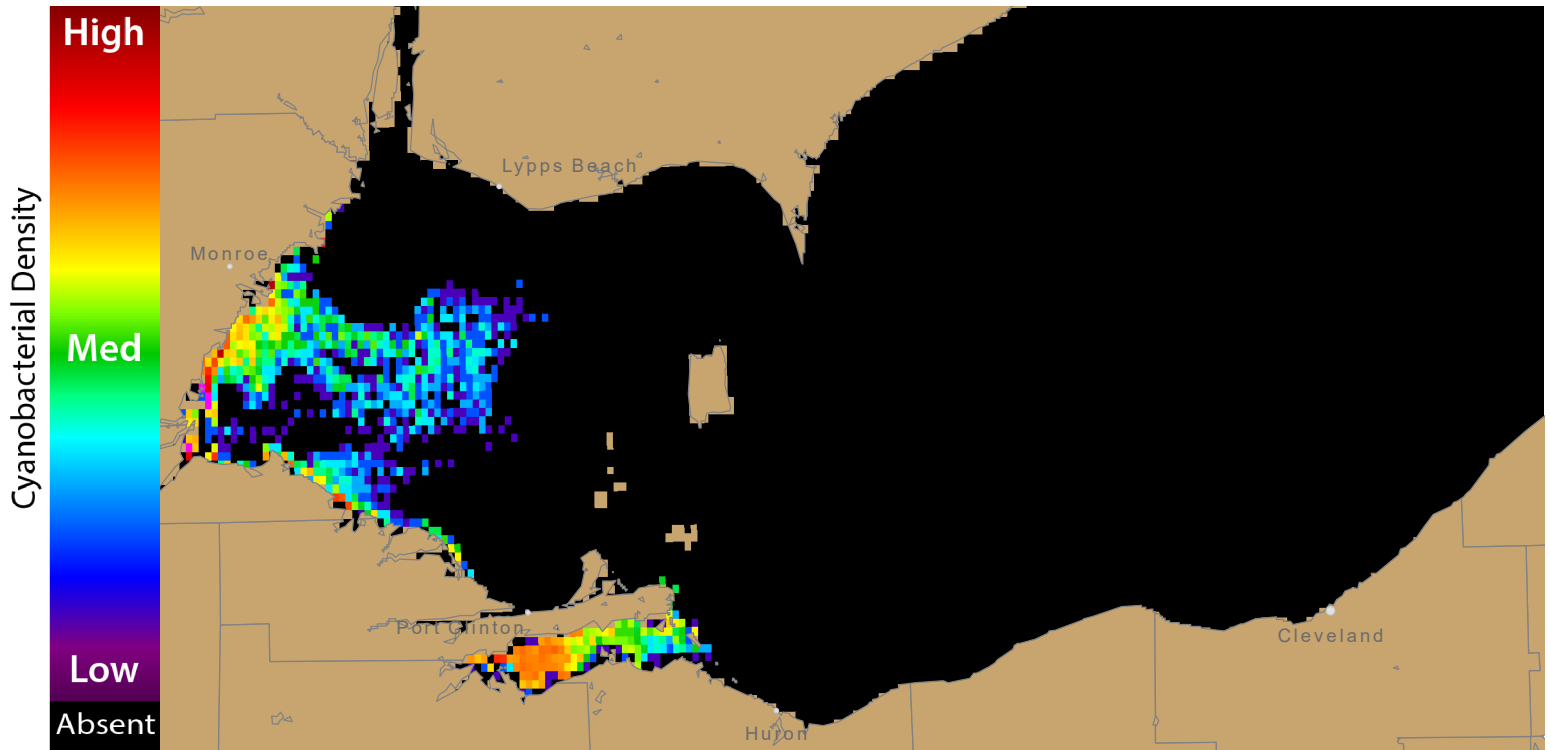
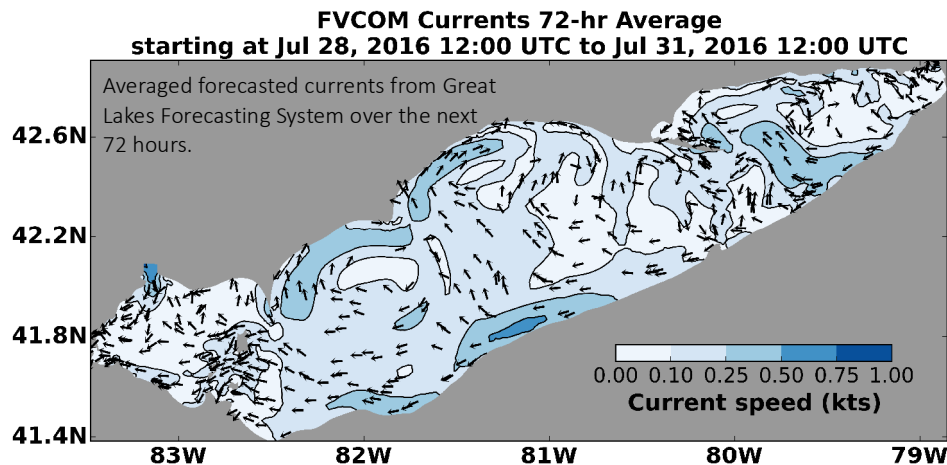


Figure 4. Forecast position of bloom for 31 July, 2016 using GLCFS modelled currents to move the bloom from the 27 July, 2016 image.



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