



Experimental Lake Erie Harmful Algal Bloom Bulletin

2010-004

15 July 2010

National Ocean Service

Great Lakes Environmental Research Laboratory

Last bulletin: 25 June 2010

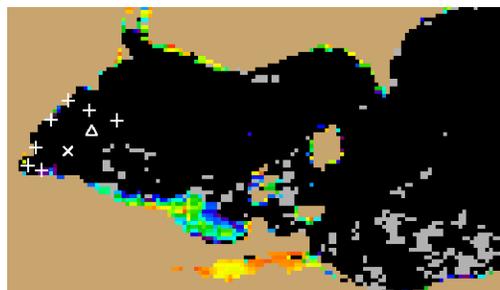


Figure 1. MERIS image from the European Space Agency. Imagery shows the spectral shape at 681 nm from July 14, where colored pixels indicate the likelihood of the last known position of the *Microcystis* spp. bloom (with red being the highest concentration). *Microcystis* spp. abundance data from July 12 shown as white squares (very high), circles (high), diamonds (medium), triangles (low) , + (very low) and X (not present). Please note: Colored pixels in Sandusky Bay are due to a mixed bloom dominated by *Planktothrix* spp.

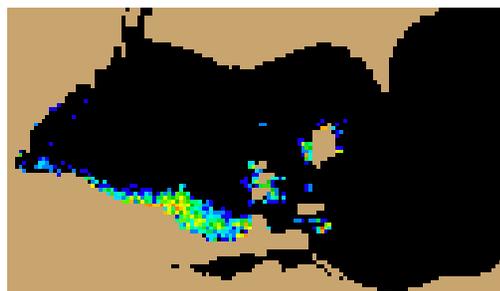


Figure 2. Nowcast position of *Microcystis* spp. bloom for July 15 using GLCFS modeled currents to move the bloom from the July 14 image. Please note: Colored pixels in Sandusky Bay are due to a mixed bloom dominated by *Planktothrix* spp.

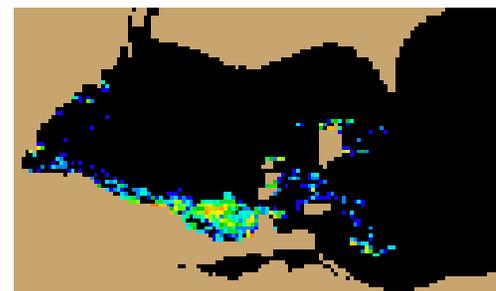


Figure 3. Forecast position of *Microcystis* spp. for July 18 using GLCFS modeled currents to move the bloom from July 14 image. Please note: Colored pixels in Sandusky Bay are due to a mixed bloom dominated by *Planktothrix* spp.

Please note:

- MERIS imagery was distributed by the NOAA CoastWatch Program and provided by the European Space Agency
- Cell counts were collected by the Great Lakes Environmental Research Laboratory
- The wind data is available through the National Data Buoy Center and the National Weather Service
- Modeled currents were provided through the Great Lakes Coastal Forecasting System

Conditions: There have been recent reports of patchy low to very low concentrations of *Microcystis* this week in the western basin of Lake Erie.

Analysis: Imagery shows a persistent bloom along the south shore of the western basin, from Cedar Point to Catawba Island. Cell counts provided by GLERL show patchy low to very low concentrations of *Microcystis* north of Cedar Point, however, samples have not confirmed a bloom within the area highlighted in the imagery. Patchy features are also indicated around the Bass Islands and Kelleys Island. Researchers at the University of Toledo have indicated, based on visual observations, that these features may likely be *Microcystis*. Therefore, sampling is recommended. The forecast indicates that the bloom will move further eastward over the weekend and may move to the eastern side of Catawba Island by Sunday.

-Tomlinson, Wynne

