

## Experimental Lake Erie Harmful Algal Bloom Bulletin

2010-013

26 August 2010

National Ocean Service

Great Lakes Environmental Research Laboratory

Last bulletin: 19 August 2010

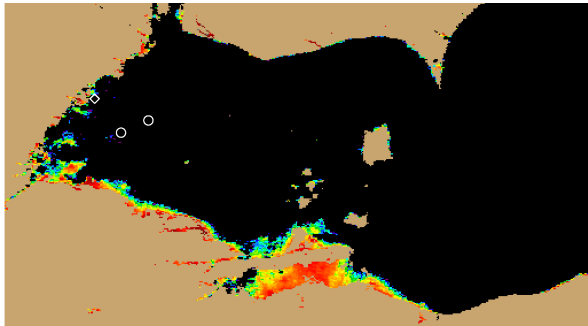


Figure 1. MERIS image from the European Space Agency. Imagery shows the spectral shape at 681 nm from August 25, where colored pixels indicate the likelihood of the last known position of the *Microcystis* spp. bloom (with red being the highest concentration). *Microcystis* spp. abundance data from August 23 shown as white squares (very high), circles (high), diamonds (medium), triangles (low), + (very low) and X (not present).

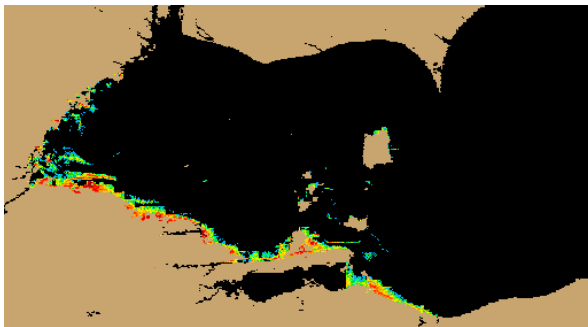


Figure 2. Nowcast position of *Microcystis* spp. bloom for August 26 using GLCFS modeled currents to move the bloom from the August 25 image.

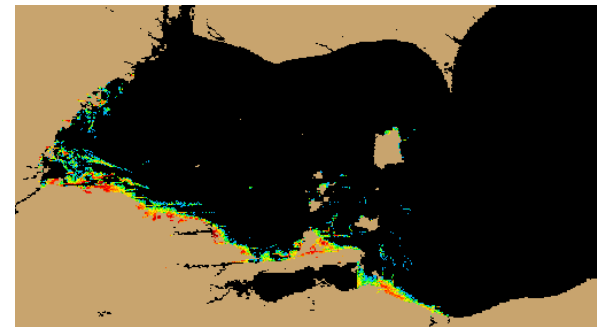


Figure 3. Forecast position of *Microcystis* spp. for August 29 using GLCFS modeled currents to move the bloom from August 25 image.

*Conditions:* A bloom of the cyanobacteria, *Microcystis*, has been identified in Maumee Bay, around Catawba Island and the Bass Islands.

*Analysis:* Imagery and field observations indicate a large *Microcystis* bloom in western Lake Erie. Field sampling indicates bloom presence extends northeast of Maumee Bay. Imagery identifies the bloom along the southern shore of the western basin as far as Sandusky with an unconfirmed patch east of Sandusky Bay. Prior to August 25, buoy data and field observations show strong winds in the western basin of Lake Erie. These winds may have caused the bloom to mix in the water column. However, data show calmer winds around South Bass Island. High winds today may cause further mixing. Clouds (not shown) prevent analysis of bloom extent on the imagery. Transport shows minimal net movement over the next few days.

-Neff, Briggs

Please note:

- MERIS imagery was distributed by the NOAA CoastWatch Program and provided by the European Space Agency
- [http://www.glerl.noaa.gov/res/Centers/HABS/lake\\_erie\\_hab/lake\\_erie\\_hab.html](http://www.glerl.noaa.gov/res/Centers/HABS/lake_erie_hab/lake_erie_hab.html)
- 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

