

Experimental Lake Erie Harmful Algal Bloom Bulletin

2010-014

02 September 2010

National Ocean Service

Great Lakes Environmental Research Laboratory

Last bulletin: 26 August 2010

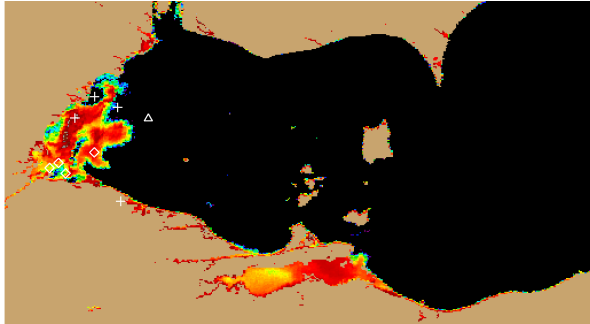


Figure 1. MERIS image from the European Space Agency. Imagery shows the spectral shape at 681 nm from August 31, where colored pixels indicate the likelihood of the last known position of the *Microcystis* spp. bloom (with red being the highest concentration). *Microcystis* spp. abundance data from shown as white squares (very high), circles (high), diamonds (medium), triangles (low) , + (very low) and X (not present).

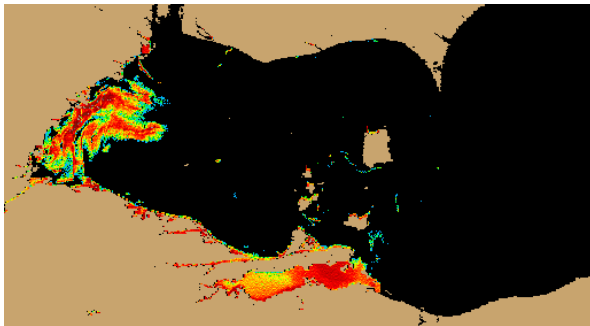


Figure 2. Nowcast position of *Microcystis* spp. bloom for September 02 using GLCFS modeled currents to move the bloom from the August 31 image.

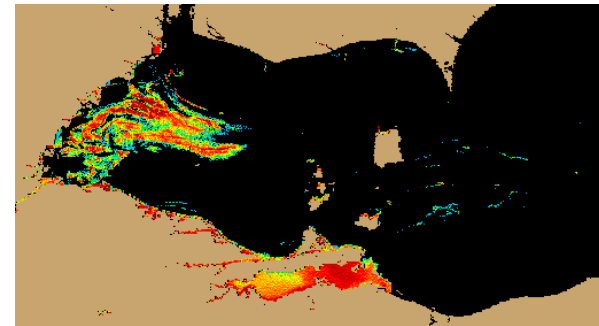


Figure 3. Forecast position of *Microcystis* spp. for September 05 using GLCFS modeled currents to move the bloom from August 31 image.

Conditions: A *Microcystis* bloom has been identified in Maumee Bay and extends north into Brest Bay.

Analysis: Imagery and field samples indicate medium to low concentrations of *Microcystis* in Maumee Bay and extending north into Brest Bay. A large bloom of *Anabaena* was also observed in the western basin and seemed to dominate the phytoplankton community.

The forecast shows offshore eastward transport of the bloom. Additionally, strong winds are forecasted into the weekend and may cause subsurface mixing of the bloom.

-Briggs, Tomlinson

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
- 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

