

Experimental Lake Erie Harmful Algal Bloom Bulletin

2011-016

22 September 2011

National Ocean Service

Great Lakes Environmental Research Laboratory

Last bulletin: 15 September 2011

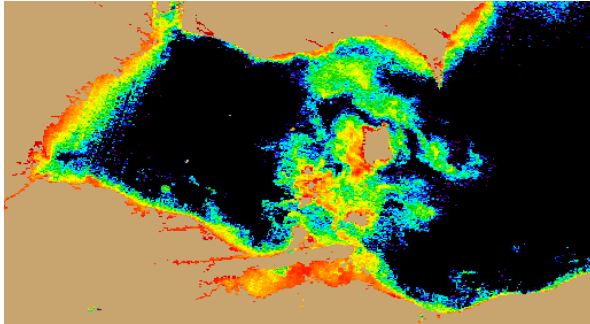


Figure 1. MERIS image from the European Space Agency. Imagery shows the spectral shape at 681 nm from September 16, where colored pixels indicate the likelihood of the last known position of the *Microcystis* spp. bloom (with red being the highest concentration). *Microcystis* spp. abundance data from shown as white squares (very high), circles (high), diamonds (medium), triangles (low), + (very low) and X (not present).

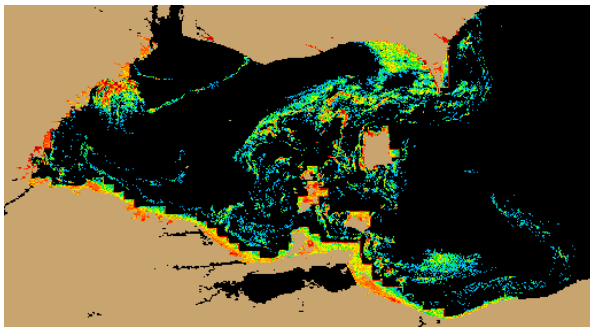


Figure 2. Nowcast position of *Microcystis* spp. bloom for September 22 using GLCFS modeled currents to move the bloom from the September 16 image.

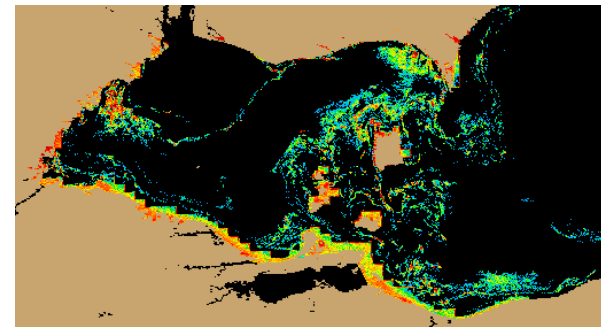


Figure 3. Forecast position of *Microcystis* spp. for September 25 using GLCFS modeled currents to move the bloom from September 16 image.

Conditions: A *Microcystis* bloom persists in Western Lake Erie.

Analysis: Winds have transported the bloom up the Michigan Coast. The high winds likely mixed and stressed the bloom. The image shown is approximately a week old due to persistent cloud cover in the region. It is expected there is additional biomass within the western basin that would likely resurface with low wind stress. Water temperatures remain high enough to allow continued maintenance of the bloom.

-Neff, Wynne

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

