

## Experimental Lake Erie Harmful Algal Bloom Bulletin

2011-012

25 August 2011

National Ocean Service

Great Lakes Environmental Research Laboratory

Last bulletin: 18 August 2011

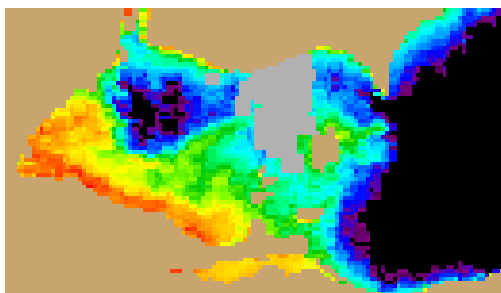


Figure 1. MERIS image from the European Space Agency. Imagery shows the spectral shape at 681 nm from August 23, where colored pixels indicate the likelihood of the last known position of the *Microcystis* spp. bloom (with red being the highest concentration). *Microcystis* spp. abundance data from shown as white squares (very high), circles (high), diamonds (medium), triangles (low), + (very low) and X (not present). Please note: Colored pixels in Sandusky Bay are due to a mixed bloom dominated by *Planktothrix* spp.

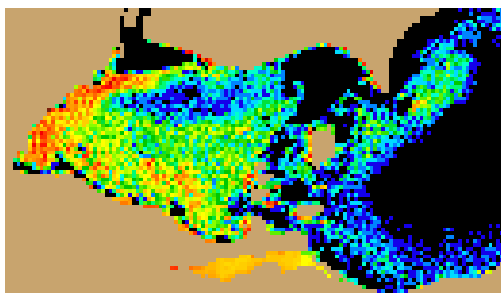


Figure 2. Nowcast position of *Microcystis* spp. bloom for August 25 using GLCFS modeled currents to move the bloom from the August 23 image. Please note: Colored pixels in Sandusky Bay are due to a mixed bloom dominated by *Planktothrix* spp.

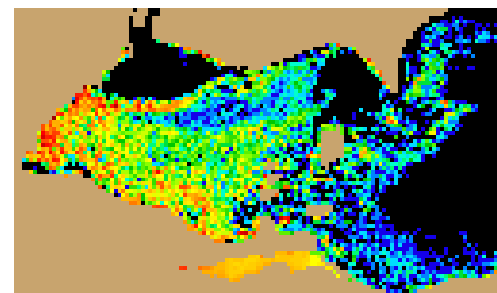


Figure 3. Forecast position of *Microcystis* spp. for August 28 using GLCFS modeled currents to move the bloom from August 23 image. Please note: Colored pixels in Sandusky Bay are due to a mixed bloom dominated by *Planktothrix* spp.

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

*Analysis:* A large *Microcystis* bloom has spread throughout the western basin of Lake Erie. Since last Thursday the bloom has moved further North and East and seems to extend past Pelee Point on the north shore, and past Sandusky Bay to the south. Transport over the weekend is expected to move the bloom further to the east. Winds today may cause the surface expression of the bloom to decrease, followed by further intensification over the weekend.

-Tomlinson, Neff

