



## Experimental Lake Erie Harmful Algal Bloom Bulletin

2009-008

10 September 2009

National Ocean Service

Great Lakes Environmental Research Laboratory

Last bulletin: 03 September 2009

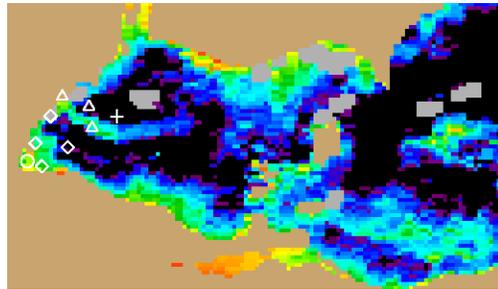


Figure 1. MERIS image from the European Space Agency. Imagery shows the spectral shape at 681 nm from September 06, where colored pixels indicate the likelihood of the last known position of the *Microcystis* spp. bloom (with red being the highest concentration). *Microcystis* spp. abundance data from September 08 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.

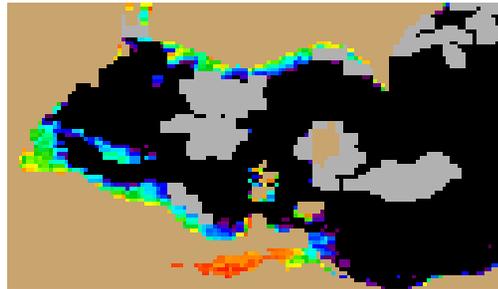
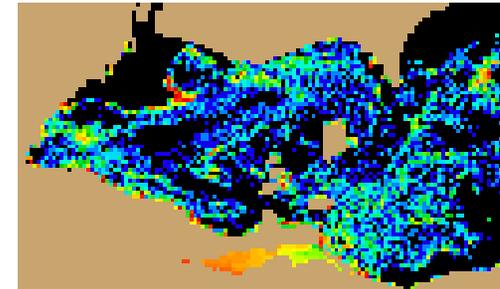


Figure 2. MERIS image from the European Space Agency. Imagery shows the spectral shape at 681 nm from September 9, where colored pixels indicate the likelihood of the last known position of the *Microcystis* spp. bloom (with red being the highest concentration).



*Conditions:* A *Microcystis* spp. bloom is present in much of the western basin of Lake Erie, Maumee Bay and adjacent waters. A mixed cyanobacterial bloom is also present in Sandusky Bay.

*Analysis:* The image from September 6 shows a fairly extensive cyanobacterial bloom through much of Lake Erie. Recent weather conditions have been windy, which has caused the bloom to be mixed throughout the water column, as seen in the image in Figure 2, which is from September 9. The modeled forecast position likely represents the location and concentration present in the integrated water column, although not representative of the surface locations and concentrations.

-Wynne, Tomlinson

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

