



Experimental Lake Erie Harmful Algal Bloom Bulletin

2010-002

03 June 2010

National Ocean Service

Great Lakes Environmental Research Laboratory

Last bulletin: 27 May 2010

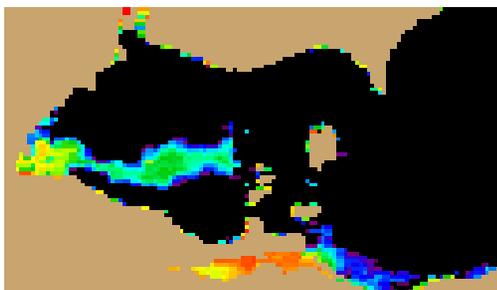


Figure 1. MERIS image from the European Space Agency. Imagery shows the spectral shape at 681 nm from May 28, where colored pixels indicate the likelihood of the last known position of the *Microcystis* spp. bloom (with red being the highest concentration). *Microcystis* spp. abundance data from shown 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.

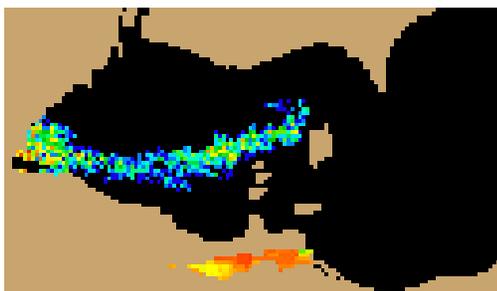


Figure 2. Nowcast position of *Microcystis* spp. bloom for June 03 using GLCFS modeled currents to move the bloom from the May 28 image. Please note: Colored pixels in Sandusky Bay are due to a mixed bloom dominated by *Planktothrix* spp.

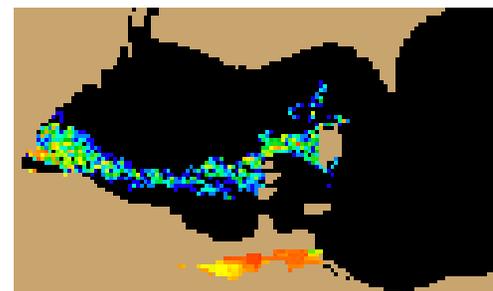


Figure 3. Forecast position of *Microcystis* spp. for June 06 using GLCFS modeled currents to move the bloom from May 28 image. Please note: Colored pixels in Sandusky Bay are due to a mixed bloom dominated by *Planktothrix* spp.

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: There are no confirmed reports of a cyanobacterial bloom in western Lake Erie at this time.

Analysis: Satellite imagery is 6 days old. There has been a feature in the western portion of Lake Erie that is optically consistent to a cyanobacterial bloom. It has not been confirmed. Recent windstress have mixed the suspected feature to a depth undetectable by satellite (>1 meter). Sampling in the area is recommended. The forecasted bloom trajectory is the shape of an arc. The western point in the vicinity of Maumee Bay is at -83.37, 41.78. The midpoint is approximately at -83.09, 41.68. The eastern point in the vicinity of the Bass Islands is -82.84, 41.71.

-Wynne, Stumpf

