



Experimental Lake Erie Harmful Algal Bloom Bulletin

2010-001

27 May 2010

National Ocean Service

Great Lakes Environmental Research Laboratory

Last bulletin: 15 October 2009

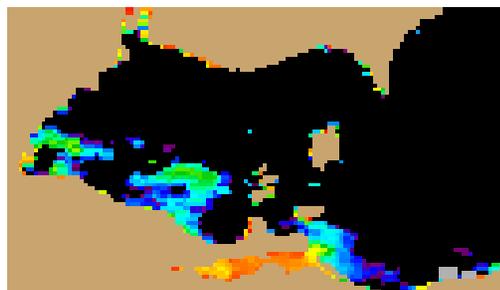


Figure 1. MERIS image from the European Space Agency. Imagery shows the spectral shape at 681 nm from May 25, where colored pixels indicate the likelihood of the last known position of the *Microcystis* spp. bloom (with red being the highest concentration). *Microcystis* spp. abundance data from shown 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.

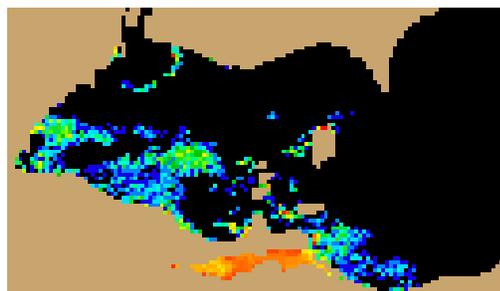


Figure 2. Nowcast position of *Microcystis* spp. bloom for May 27 using GLCFS modeled currents to move the bloom from the May 25 image. Please note: Colored pixels in Sandusky Bay are due to a mixed bloom dominated by *Planktothrix* spp.

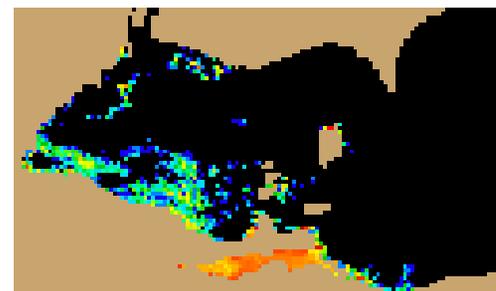


Figure 3. Forecast position of *Microcystis* spp. for May 30 using GLCFS modeled currents to move the bloom from May 25 image. Please note: Colored pixels in Sandusky Bay are due to a mixed bloom dominated by *Planktothrix* spp.

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 bloom at this time.

Analysis: Satellite imagery indicates that there is a potential bloom in the western basin of Lake Erie with patches near Maumee Bay as well as east of Sandusky Bay. Forecasts move the bloom south. Winds are not expected to mix the bloom vertically within the model timeframe. Imagery puts the patches at roughly 83d18'31.4593"W, 41d43'54.9435"N, and 83d05'27.3772"W, 41d38'34.1835"N, and 82d39'54.8573"W, 41d32'37.7835"N.

-Neff, Wynne, Tomlinson

Average wind stress at SBIO1 - South Bass Island

