

Experimental Lake Erie Harmful Algal Bloom Bulletin

2011-007

22 July 2011

National Ocean Service

Great Lakes Environmental Research Laboratory

Last bulletin: 14 July 2011

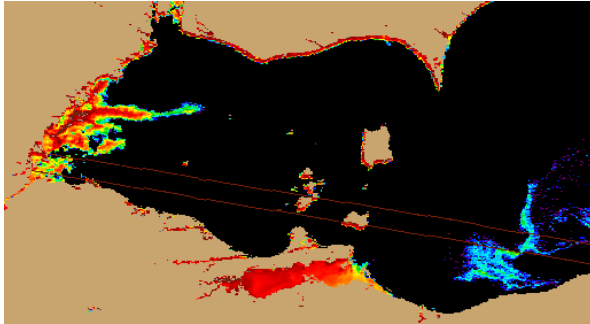


Figure 1. MERIS image from the European Space Agency. Imagery shows the spectral shape at 681 nm from July 16, where colored pixels indicate the likelihood of the last known position of the *Microcystis* spp. bloom (with red being the highest concentration). *Microcystis* spp. abundance data from shown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

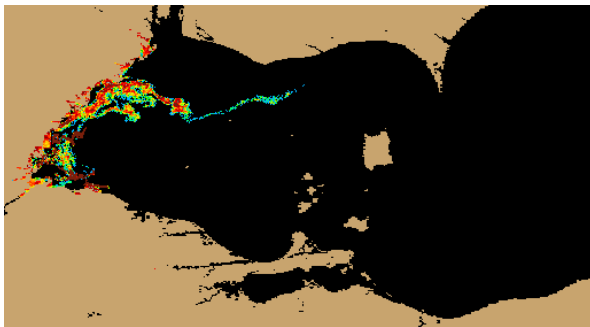


Figure 2. Nowcast position of *Microcystis* spp. bloom for July 22 using GLCFS modeled currents to move the bloom from the July 16 image.

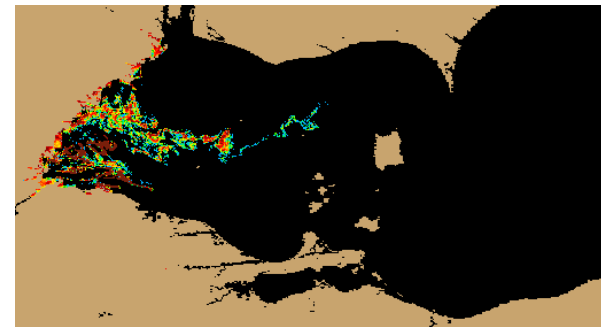


Figure 3. Forecast position of *Microcystis* spp. for July 25 using GLCFS modeled currents to move the bloom from July 16 image.

-Wynne

Conditions: There appears to be a bloom of cyanobacteria in western Lake Erie. The bloom has not been validated with in situ sampling.

Analysis: This image is from Saturday. The wind stress has been low and water temperature has been high so the bloom is most likely still at the surface and conditions are favorable to gain biomass. Forecast transport shows a slight NE movement.

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

