Experimental
Lake Erie Harmful Algal Bloom Bulletin

2010-002
17 June 2010
National Ocean Service
Great Lakes Environmental Research Laboratory
Last bulletin: 10 June 2010

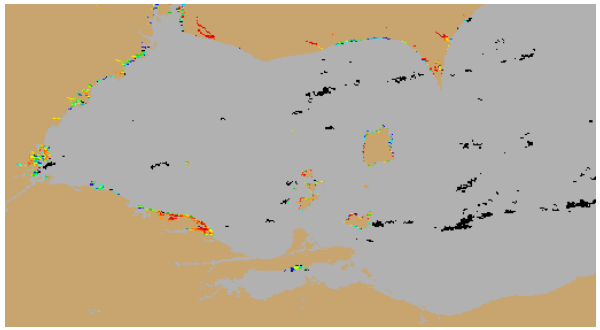


Figure 1. MERIS image from the European Space Agency. Imagery shows the spectral shape at 681 nm from June 13, where colored pixels indicate the likelihood of the last known position of the *Microcystis* spp. bloom (with red being the highest concentration). *Microcystis* spp. abundance data from shown 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 June 17 using GLCFS modeled currents to move the bloom from the June 13 image.

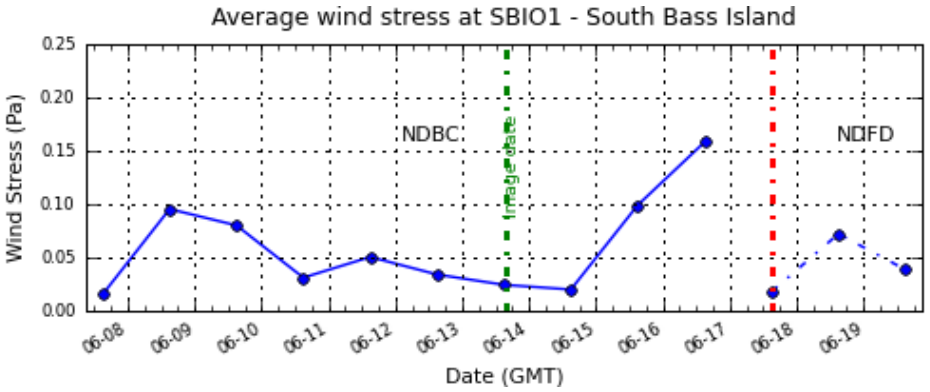
Conditions: There are no confirmed harmful algal blooms at this time. No impacts are expected.

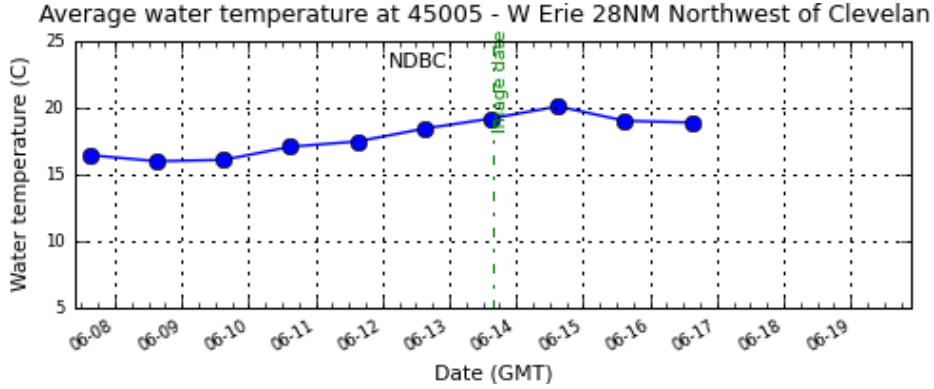
Analysis: Microcystis continues to be present in very low concentrations in the vicinity of Maumee Bay (~-83.38,41.72). Strong winds that have occured since the image date would not favor bloom development. Current imagery also no signs of a bloom.

-Wynne, Manuar

Figure 3. Forecast position of *Microcystis* spp. for June 20 using GLCFS modeled currents to move the bloom from June 13 image.

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


Average wind stress at SBIO1 - South Bass Island
Wind Stress (Pa)
0.25
0.20
0.15
0.10
0.05
0.00
NDBC
Image date
NDFD
06-08
06-09
06-10
06-11
06-12
06-13
06-14
06-15
06-16
06-17
06-18
06-19
Date (GMT)


Average water temperature at 45005 - W Erie 28NM Northwest of Clevelan
Water temperature (C)
25
20
15
10
5
NDBC
Image date
06-08
06-09
06-10
06-11
06-12
06-13
06-14
06-15
06-16
06-17
06-18
06-19
Date (GMT)