Experimental
Lake Erie Harmful Algal Bloom Bulletin
2010-001
27 May 2010
National Ocean Service
Great Lakes Environmental Research Laboratory
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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 the May 25 image. Please note: Colored pixels in Sandusky Bay are due to a mixed bloom dominated by Planktothrix spp.

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 SBI01 - South Bass Island

Wind Stress (Pa)

Date (GMT)

NDBC
NDFD