CREATE YOUR BEACH DATA STORY USING MYGLOS

October 6, 2016

great lakes observing system

GLOS SERVICES

- Data Aggregator
- Data Manager
- Data Distributor
- Funder

Every day is an opportunity for a new story.

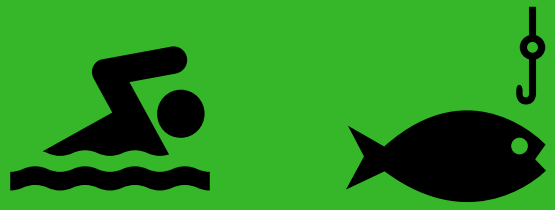
You can go to myGLOS to start yours.

PORTAL.GLOS.US

great lakes observing system

STORY 1
MY LAKESIDE STORY

Lake Erie
Sarnia
London
Niagara Falls
Strathroy
Tillsonburg
Simcoe
St. Thomas
Warren
Chatham-Kent
Detroit
Dearborn
Fredonia
Chautauqua
Lakewood
Erie
Edinboro
Ashtabula
Warren
Meadville
Toledo
Mentor
Cleveland
Sandusky
Fremont
Norwalk
Elyria



Put-in Bay
Kelleys Island
Lakeside, Ohio
Sandusky

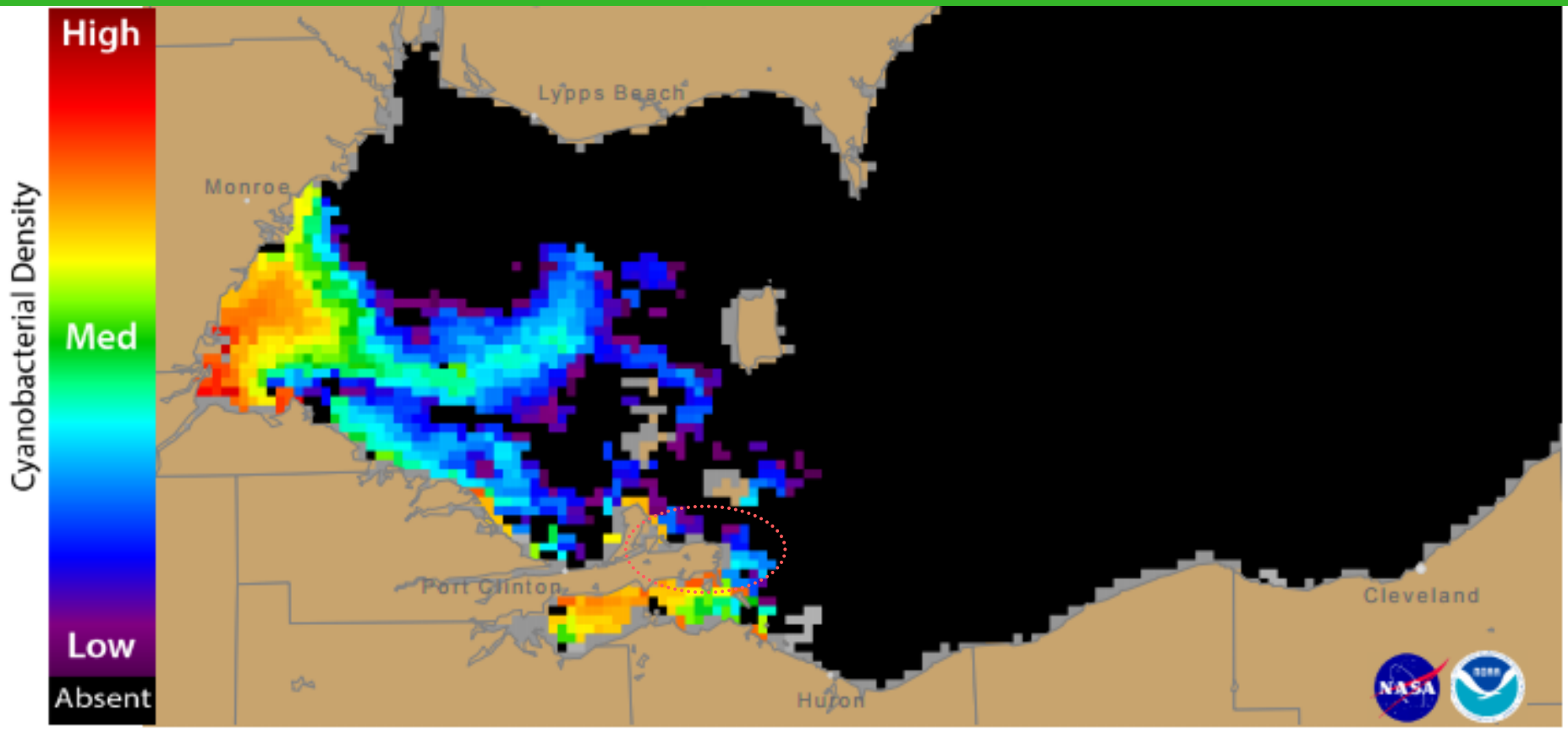
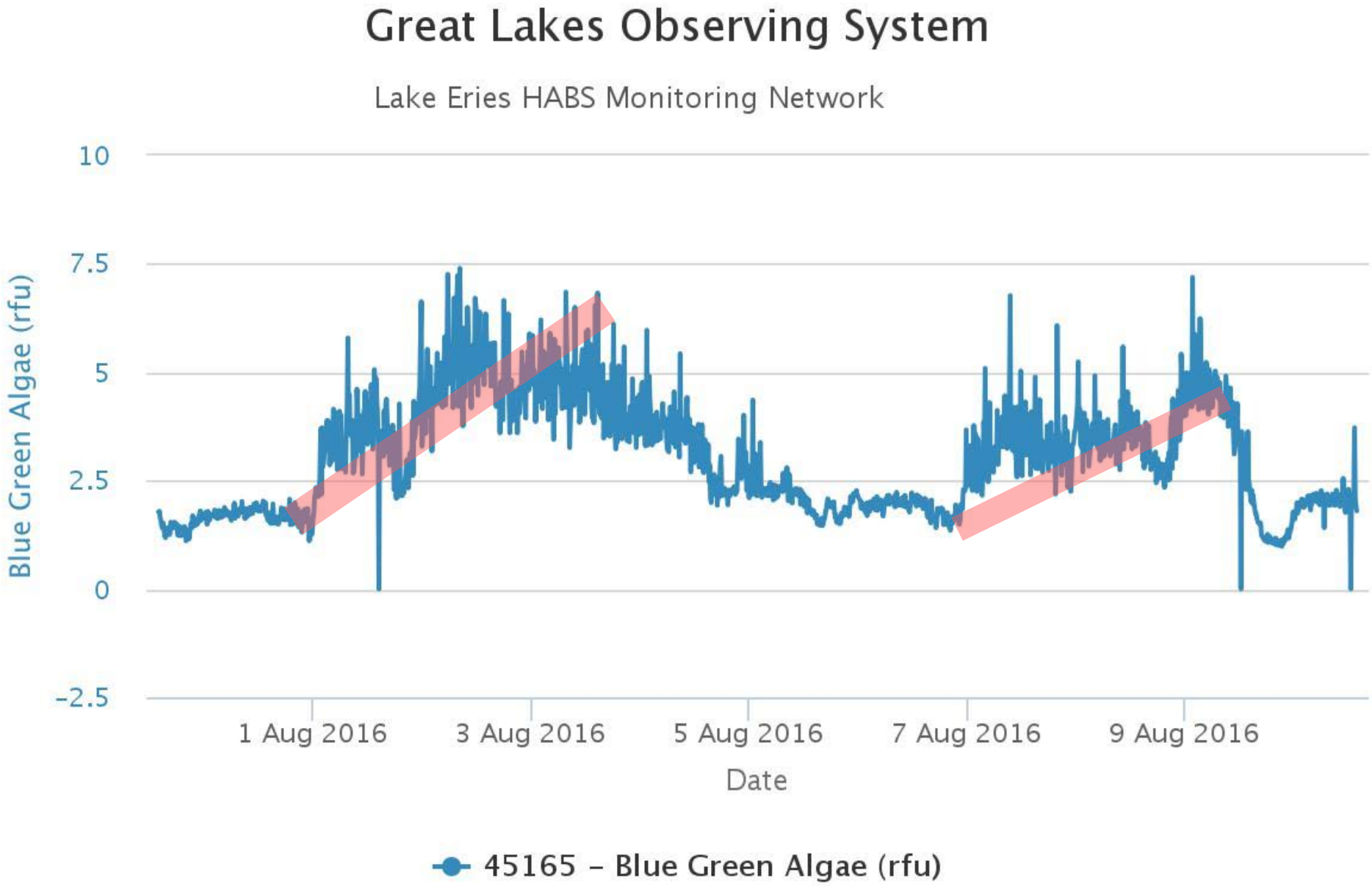


Figure 1. Cyanobacterial Index from NASA's MODIS-Terra data collected 10 August, 2016 at 11:18 EST. Grey indicates clouds or missing data. The estimated threshold for cyanobacteria detection is 20,000 cells/mL.

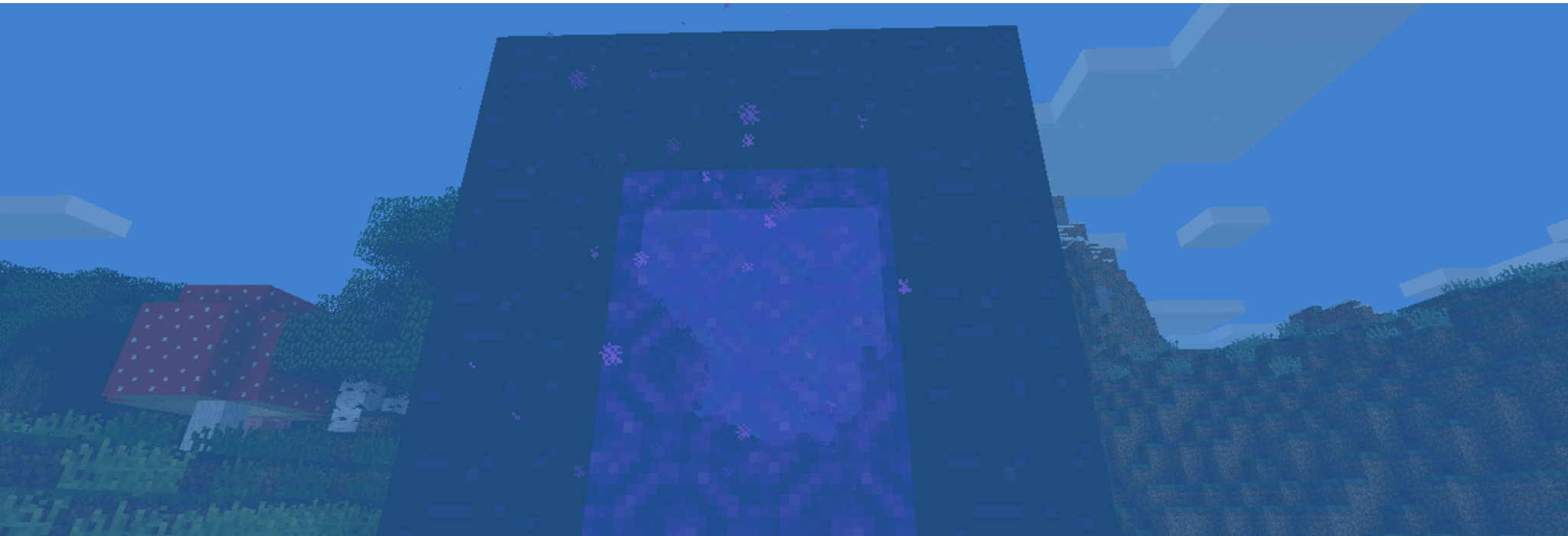

Great Lakes Observing System
Lake Eries HABS Monitoring Network
10
7.5
5
2.5
0
-2.5
Blue Green Algae (rfu)
1 Aug 2016
3 Aug 2016
5 Aug 2016
7 Aug 2016
9 Aug 2016
Date
45165 – Blue Green Algae (rfu)

MYGLOS FEATURES

- Create a myGLOS account
- Search and choose environmental data sets
- Explore models with virtual buoy
- Graph and compare data sets in a time series
- Save those data sets
- Create a link to share your story with others

great lakes observing system

GO TO PORTAL.GLOS.US



Inbox - bpears | Inbox (1) - rebe | Great Lakes Ob | All Your Design | Presentation – | Great Lakes Ob | GLOS Data Por

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great lakes observing system | Data Portal

Catalog | Map

Sear

Category

- All
- Buoy & Station Obs.
- Climatology
- HABS
- Models
- Satellite
- Water Temperature
- Water Quality
- Nutrients
- Hydrologic

Date Range

- All
- +/- 2 Days
- Past 7 Days
- Past 30 Days

Showing 1 to 10 of 105 entrie

ental Research Laboratory (GLERL).

d by Aqua America in Ashtabula, Ohio. The
e station was installed by LimnoTech on

mental responsibility in everything we do.
ressive in the country. When zebra mussels
of preventing mussels from obstructing
effort into learning more about microcystin
clearwell' storage tanks and will be adding
l filters to improve treatment ability and
en on the wastewater treatment facility—

GLOS Data Portal

The GLOS Data Portal provides access to near-realtime and archived observations from the Great Lakes Observing System (GLOS) and GLOS partners.

Data Catalog

Users start with a catalog view of all links available. Search for a specific station or choose from a pre-defined category. Further refine your results by location or date range. View metadata for stations or link to resources.

Mapping

Search for observations on a map, select points and create 'virtual buoys' at a location of your choice, narrow by category or date range. Create a MyGLOS account and save your personal observations.

MyGLOS Alerts

Create a MyGLOS account and receive a notification when the value at a station exceeds your threshold.

Downloads

Download data and plots from GLOS.

The GLOS Data Portal is implemented using the OceansMAP framework. OceansMAP is web-based metocean data visualization and analysis platform that supports users' exploration of observation and model data. OceansMAP was developed by RPS ASA in collaboration with Second Creek Consulting.

Inbox - bpearson@ | Great Lakes Observ | All Your Designs – | Presentation – Crea | GLOS Data Portal

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Catalog | Map

MyGLOS Login

Create an account

Search catalog

Category

- All
- Buoy & Station Obs.
- Climatology
- HABS
- Models
- Satellite
- Water Temperature
- Water Quality
- Nutrients
- Hydrologic

Date Range

- All
- +/- 2 Days
- Past 7 Days
- Past 30 Days

Showing

Register you

Alpena Thunder Bay RECON buoy (45162)

In-situ buoy in Lake Michigan, Alpena (Thunder Bay), operated by NOAA, Great Lakes Environmental Research Laboratory (GLERL).

External links

Ashtabula Water Intake (leash)

A YSI EXO2 sonde is installed in the raw water intake pipe at the water treatment plant operated by Aqua America in Ashtabula, Ohio. The sensor is located approximately 3ft below the water surface in the intake transmission pipe. The station was installed by LimnoTech on November 19, 2015 and is part of the GLOS Lake Erie HABs monitoring network.

External links

Avon Lake Pump Station (leavon)

First in technology, Avon Lake is always working to balance cost, quality, efficiency, and environmental responsibility in everything we do. We strive to make our drinking water and wastewater treatment systems among the most progressive in the country. When zebra mussels invaded the Great Lakes in the '80s, Avon Lake was the region's first utility to innovate methods of preventing mussels from obstructing raw water intakes. One of the newest threats we protect you from is toxic algae. We are putting effort into learning more about microcystin and other toxins found in harmful algal blooms (HABs) and are putting into pace this year new 'clearwell' storage tanks and will be adding additional pumping and emergency power generation factilities. We will also rehabilitate several filters to improve treatment ability and convert some existing basins to allow water to be recycled within the plant and reduce the burden on the wastewater treatment facility—thereby further reducing your wastewater's impact on Lake Erie.

External links

CO-OPS Stations

NOAA CO-OPS Stations

GLOS Data Portal - New | Settings

portal.glos.us/user/new

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great lakes observing system | Data Portal

MyGLOS

Catalog | Map

New User Account

First Name	Mickey
Last Name	Mouse
Email	Email
Username	LakesideManager
Password	Password
Confirm Password	Confirm Password

Submit

GLOS Data Portal | Settings

portal.glos.us

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Catalog | Map

Lakeside, Ohio

Category

- All
- Buoy & Station Obs.
- Climatology
- HABS
- Models
- Satellite
- Water Temperature
- Water Quality
- Nutrients
- Hydrologic

Date Range

- All
- +/- 2 Days
- Past 7 Days
- Past 30 Days

Showing 1 to 10 of 14 entries

Gibraltar Island Buoy (osugi) Find on map | Add to map

Data from Ohio State University's Stone Laboratory, Gibraltar Island buoy for inclusion in GLOS' Harmful Algal Bloom Viewer.

External links

Add to map

Mentor Wet Well (lementor)

A YSI EXO2 sonde is installed in the wet well at the lake pump station for the water treatment plant operated by Aqua America in Mentor, Ohio. The sensor is located approximately 6ft below the water surface in the wet well. The station was installed by LimnoTech on November 19, 2015 and is part of the GLOS Lake Erie HABs monitoring network.

External links

Ashtabula Water Intake (leash)

A YSI EXO2 sonde is installed in the raw water intake pipe at the water treatment plant operated by Aqua America in Ashtabula, Ohio. The sensor is located approximately 3ft below the water surface in the intake transmission pipe. The station was installed by LimnoTech on November 19, 2015 and is part of the GLOS Lake Erie HABs monitoring network.

External links

Little Cedar Point buoy (utlcp) [offline for season]

Researchers at the University's Lake Erie Center sensors monitor blue-green algae. Missions of the Center include researching environmental conditions in Maumee Bay and western Lake Erie as well as discerning linkages among land-use practices, water quality, habitat, economics, natural resources, sustainability, and environmental and public health. The UT HAB Buoy is sponsored by the Ohio Board of Regents and the University of Toledo.

External links

GLCFS - Lake Michigan - Forecast

The NOAA Great Lakes Coastal Forecasting System (GLCFS) is a set of models that simulate and predict the 2-D and 3-D structure of currents, temperatures, winds, waves, ice, and more in the Great Lakes. Nowcasts and forecasts are generated throughout the day in near-

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Search catalog

Category: All

Date Range: All

- Marblehead Pump Station (lemrbhd)
- Maumee River Nutrient Tracker
- Mentor Wet Well (lementor)
- Milwaukee Buoy ATW20 (45013)
- Munising Buoy (45173) [out of water for season]
- Muskegon Lake buoy (GVSU1)
- Muskegon RECON buoy (45161)
- NDBC & Partner Stations
- NERRS Sites
- NOAA GLERL WE13 (glerlwe13)

Previous | Next

Untitled Collection

09/25 09/26 09/27 09/28 09/29

Slider Range: 09/25/2016 - 09/29/2016

Map Time: 09/27/2016 10:00 -04:00

Data Layers | Legends | Backgrounds

Enter virtual buoy creation mode

Buoy & Station Obs.

- Sandusky Bay buoy (bgsusd)
- Station sbio1

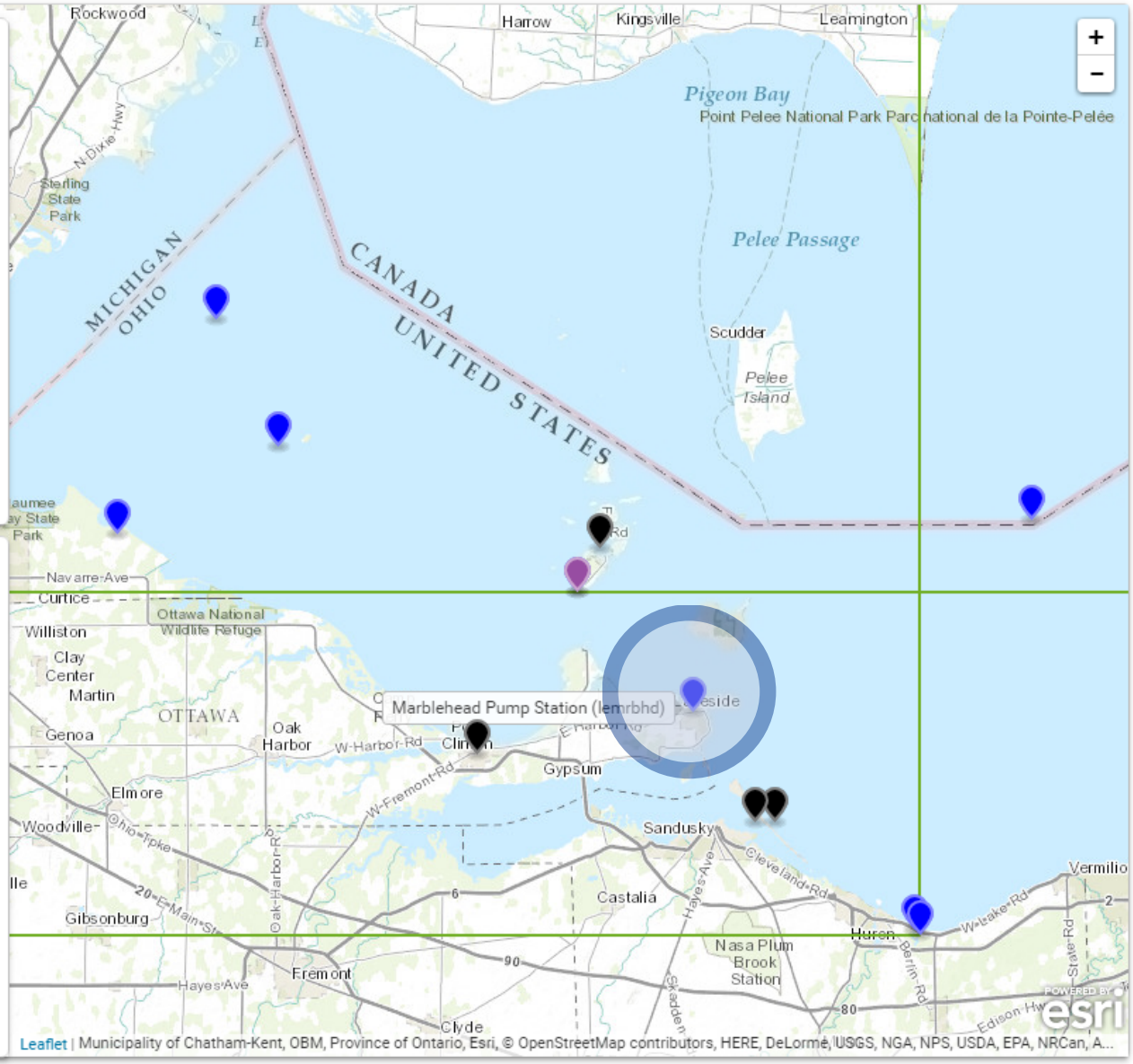
Climatology

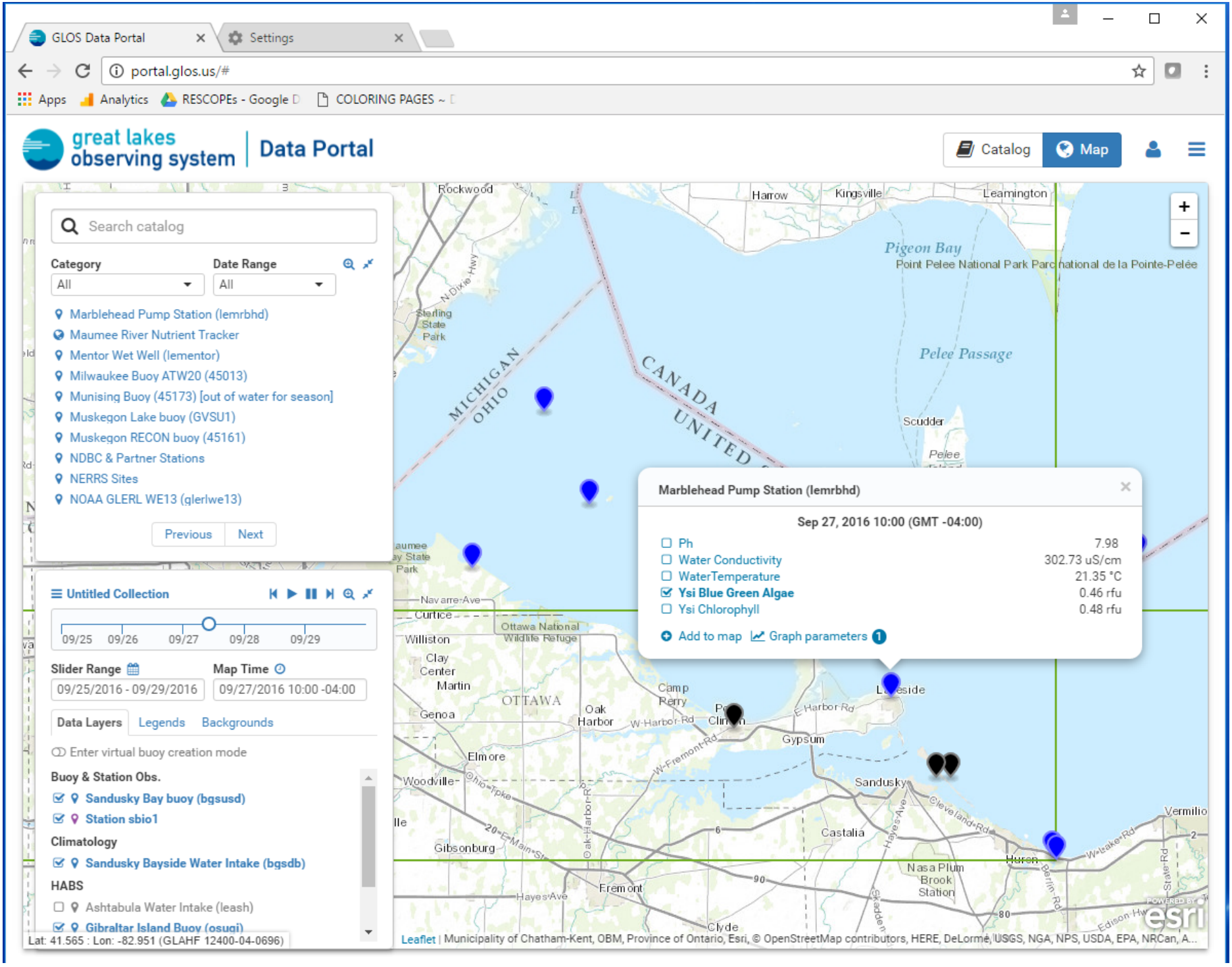
- Sandusky Bayside Water Intake (bgsdb)

HABS

- Ashtabula Water Intake (leash)
- Gibraltar Island Buoy (osugi)

Lat: 41.559 : Lon: -82.723 (GLAHF 12656-03-2192)

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Marblehead Pump Station (lemrbhd)
Maumee River Nutrient Tracker
Mentor Wet Well (lementor)
Milwaukee Buoy ATW20 (45013)
Munising Buoy (45173) [out of water for season]
Muskegon Lake buoy (GVSU1)
Muskegon RECON buoy (45161)
NDBC & Partner Stations
NERRS Sites
NOAA GLERL WE13 (glerlwe13)
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Slider Range
09/25/2016 - 09/29/2016
Map Time
09/27/2016 10:00 -04:00
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Buoy & Station Obs.
Sandusky Bay buoy (bgsusd)
Station sbio1
Climatology
Sandusky Bayside Water Intake (bgsdb)
HABS
Ashtabula Water Intake (leash)
Gibraltar Island Buoy (osugi)
Lat: 41.565 : Lon: -82.951 (GLAHF 12400-04-0696)
Marblehead Pump Station (lemrbhd)
Sep 27, 2016 10:00 (GMT -04:00)
Ph 7.98
Water Conductivity 302.73 uS/cm
WaterTemperature 21.35 °C
Ysi Blue Green Algae 0.46 rfu
Ysi Chlorophyll 0.48 rfu
Add to map
Graph parameters 1
Pigeon Bay
Point Pelee National Park Parc national de la Pointe-Pelée
Pelee Passage
MICHIGAN
OHIO
CANADA
UNITED
Rockwood
Harrow
Kingsville
Leamington
Scudder
Pelee
Sterling State Park
Ottawa National Wildlife Refuge
Williston
Clay Center
Martin
Genoa
OTTAWA
Oak Harbor
Camp Perry
Gypsum
Elmore
Woodville
Sandusky
Castalia
Gibsonburg
Fremont
Clyde
Huron
Nasa Plum Brook Station
Vermilio
Leaflet | Municipality of Chatham-Kent, OBM, Province of Ontario, Esri, © OpenStreetMap contributors, HERE, DeLorme, USGS, NGA, NPS, USDA, EPA, NRCan, A...
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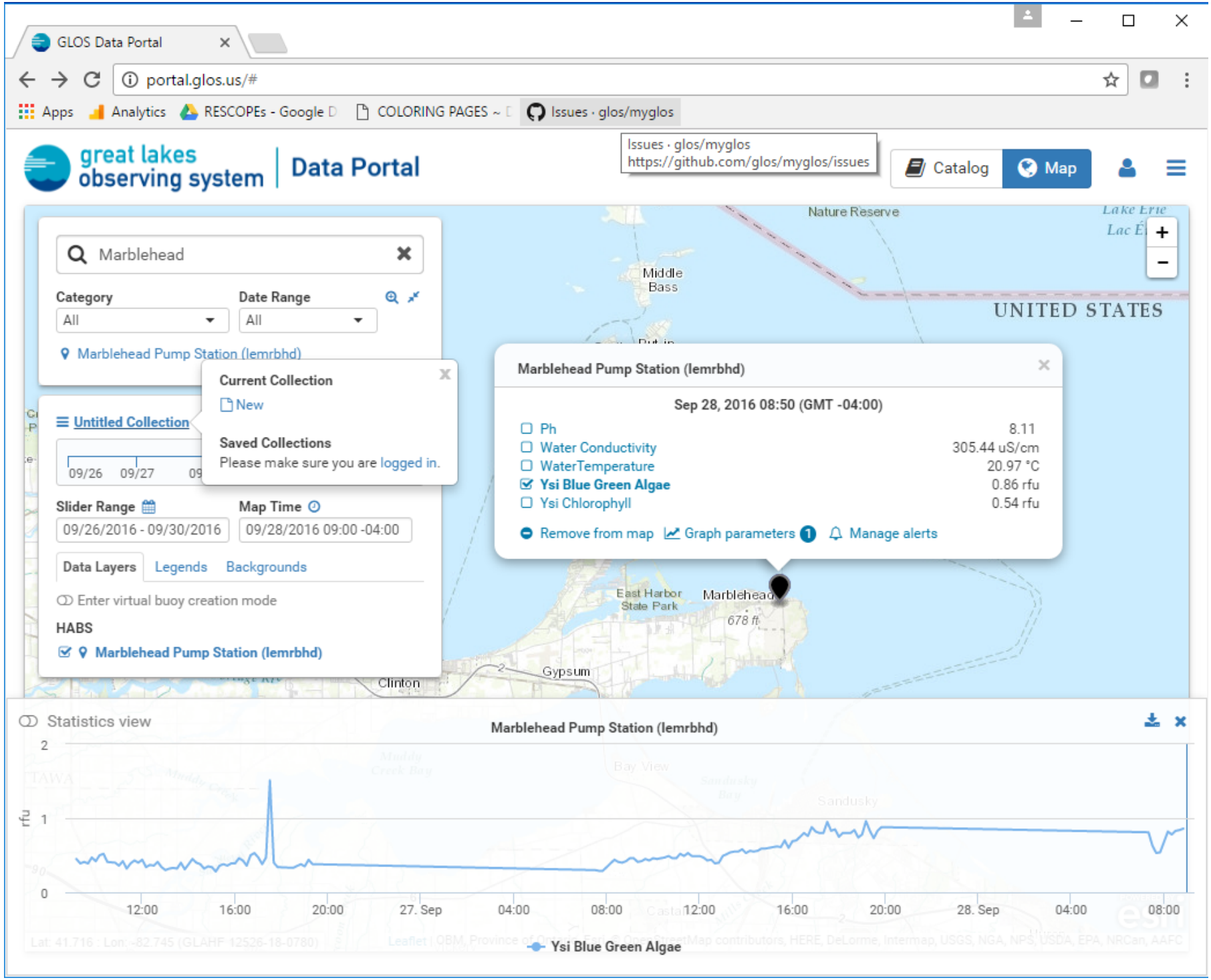
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Issues · glos/myglos
https://github.com/glos/myglos/issues
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Marblehead Pump Station (lemrbhd)
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HABS
Marblehead Pump Station (lemrbhd)
Nature Reserve
Middle Bass
UNITED STATES
Marblehead Pump Station (lemrbhd)
Sep 28, 2016 08:50 (GMT -04:00)
Ph 8.11
Water Conductivity 305.44 uS/cm
WaterTemperature 20.97 °C
Ysi Blue Green Algae 0.86 rfu
Ysi Chlorophyll 0.54 rfu
Remove from map
Graph parameters
Manage alerts
East Harbor State Park
Marblehead
678 ft
Gypsum
Clinton
Statistics view
Marblehead Pump Station (lemrbhd)
rfu
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12:00
16:00
20:00
27. Sep
04:00
08:00
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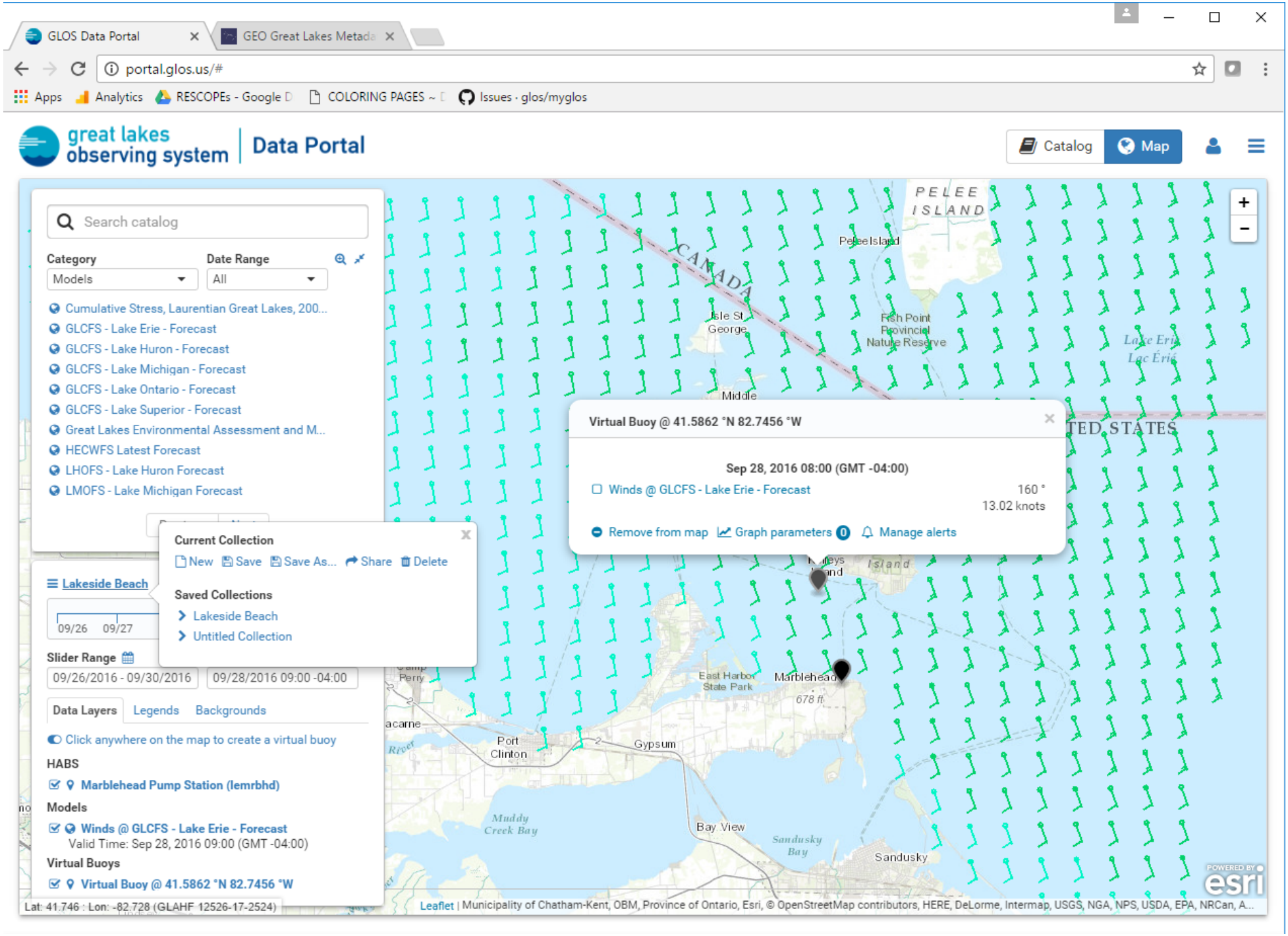
28. Sep
04:00
08:00
Ysi Blue Green Algae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GLCFS - Lake Huron - Forecast
GLCFS - Lake Michigan - Forecast
GLCFS - Lake Ontario - Forecast
GLCFS - Lake Superior - Forecast
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HECWFS Latest Forecast
LHOFS - Lake Huron Forecast
LMOFS - Lake Michigan Forecast
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Lakeside Beach
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09/27
Slider Range
09/26/2016 - 09/30/2016
09/28/2016 09:00 -04:00
Data Layers
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Backgrounds
Click anywhere on the map to create a virtual buoy
HABS
Marblehead Pump Station (lemrbhd)
Models
Winds @ GLCFS - Lake Erie - Forecast
Valid Time: Sep 28, 2016 09:00 (GMT -04:00)
Virtual Buoys
Virtual Buoy @ 41.5862 °N 82.7456 °W
Lat: 41.746 : Lon: -82.728 (GLAHF 12526-17-2524)
Virtual Buoy @ 41.5862 °N 82.7456 °W
Sep 28, 2016 08:00 (GMT -04:00)
Winds @ GLCFS - Lake Erie - Forecast
160 °
13.02 knots
Remove from map
Graph parameters
Manage alerts
PELEE ISLAND
Pelee Island
CANADA
Isle St George
Fish Point Provincial Nature Reserve
Lake Erie
Lac Erié
Middle
UNITED STATES
East Harbor State Park
Marblehead
678 ft
Port Clinton
Gypsum
Muddy Creek Bay
Bay View
Sandusky Bay
Sandusky
Leaflet | Municipality of Chatham-Kent, OBM, Province of Ontario, Esri, © OpenStreetMap contributors, HERE, DeLorme, Intermap, USGS, NGA, NPS, USDA, EPA, NRCan, A...
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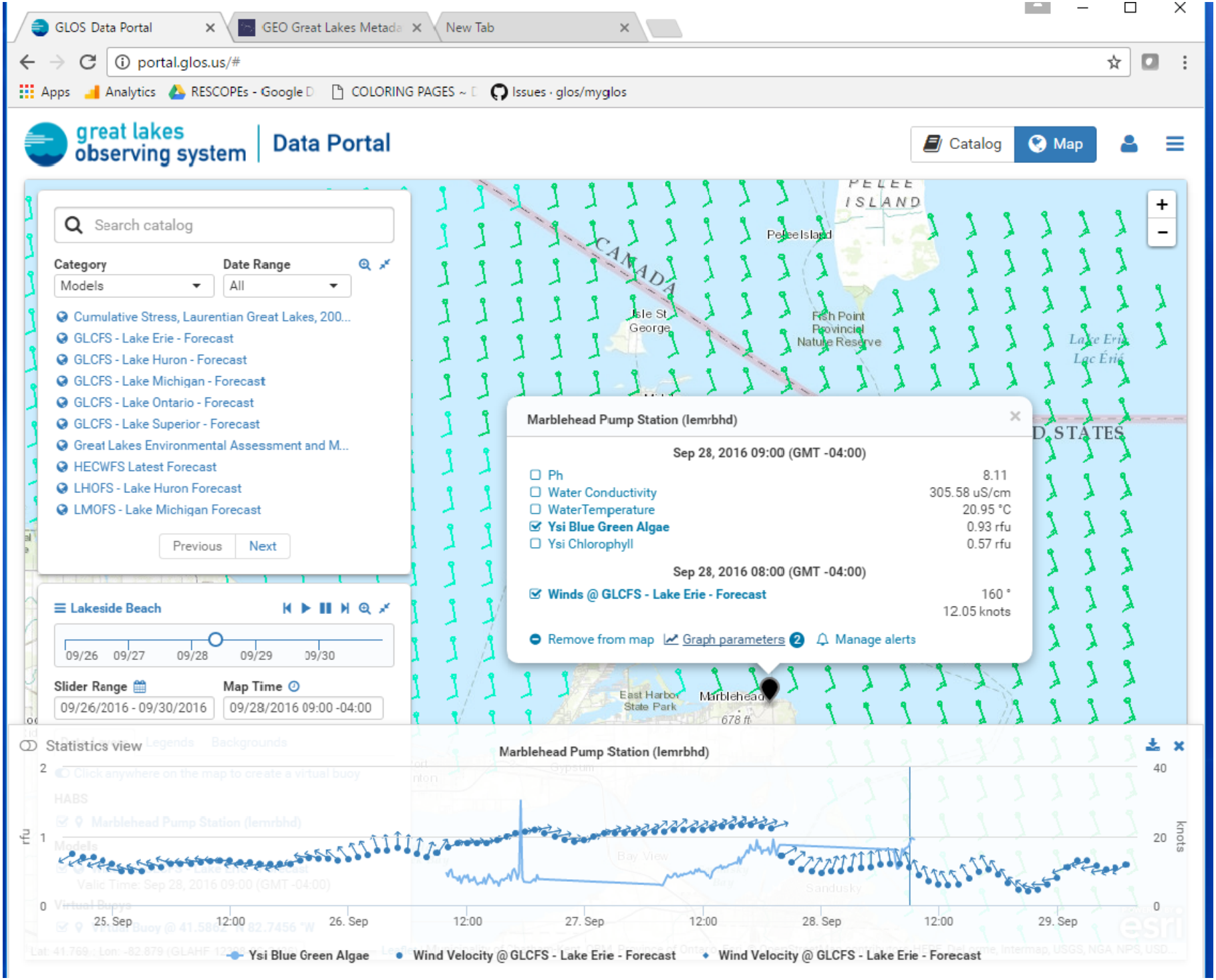
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Map Time
09/28/2016 09:00 -04:00
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Pelee Island
CANADA
Isle St George
Fish Point Provincial Nature Reserve
Lake Erie
Lac Erié
D STATES
East Harbor State Park
Marblehead
678 ft
Marblehead Pump Station (lemrbhd)
Sep 28, 2016 09:00 (GMT -04:00)
Ph 8.11
Water Conductivity 305.58 uS/cm
WaterTemperature 20.95 °C
Ysi Blue Green Algae 0.93 rfu
Ysi Chlorophyll 0.57 rfu
Sep 28, 2016 08:00 (GMT -04:00)
Winds @ GLCFS - Lake Erie - Forecast 160 ° 12.05 knots
Remove from map
Graph parameters
Manage alerts
Statistics view
Marblehead Pump Station (lemrbhd)
rfu
knots
25. Sep
12:00
26. Sep
27. Sep
28. Sep
29. Sep
Ysi Blue Green Algae
Wind Velocity @ GLCFS - Lake Erie - Forecast
Wind Velocity @ GLCFS - Lake Erie - Forecast

great lakes observing system | Data Portal

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Search catalog

Category: Models
Date Range: All

- Cumulative Stress, Laurentian Great Lakes, 200...
- GLCFS - Lake Erie - Forecast
- GLCFS - Lake Huron - Forecast
- GLCFS - Lake Michigan - Forecast
- GLCFS - Lake Ontario - Forecast
- GLCFS - Lake Superior - Forecast
- Great Lakes Environmental Assessment and M...
- HECWFS Latest Forecast
- LHOFS - Lake Huron Forecast
- LMOFS - Lake Michigan Forecast

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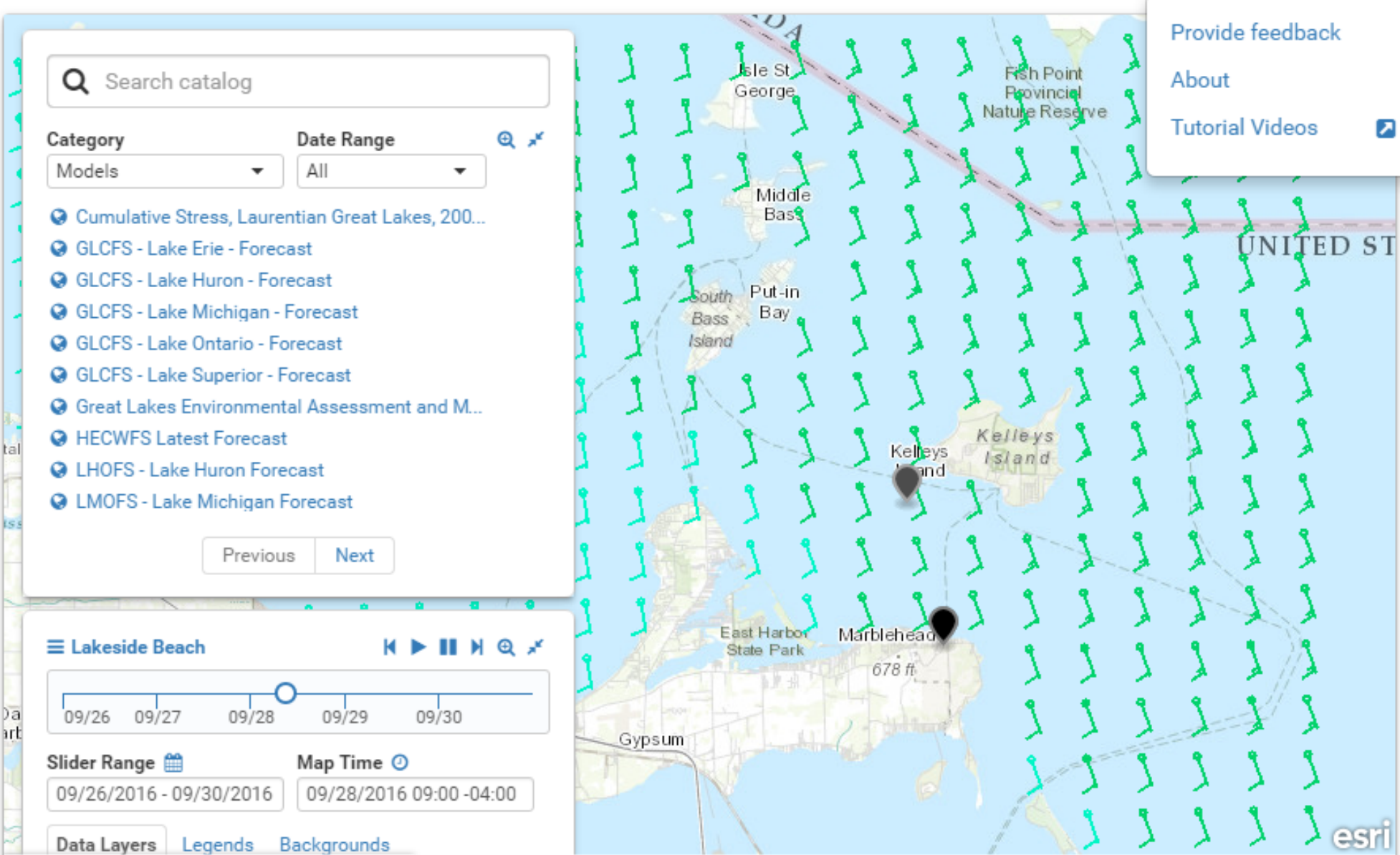
Lakeside Beach

09/26 09/27 09/28 09/29 09/30

Slider Range: 09/26/2016 - 09/30/2016
Map Time: 09/28/2016 09:00 -04:00

Data Layers | Legends | Backgrounds



Lat: 41.692 : Lon: -82.549 (GLAHF 12782-14-1214) Leaflet | OBM, Province of Ontario, Esri, © OpenStreetMap contributors, HERE, DeLorme, Intermap, USGS, NGA, NPS, USDA, E...

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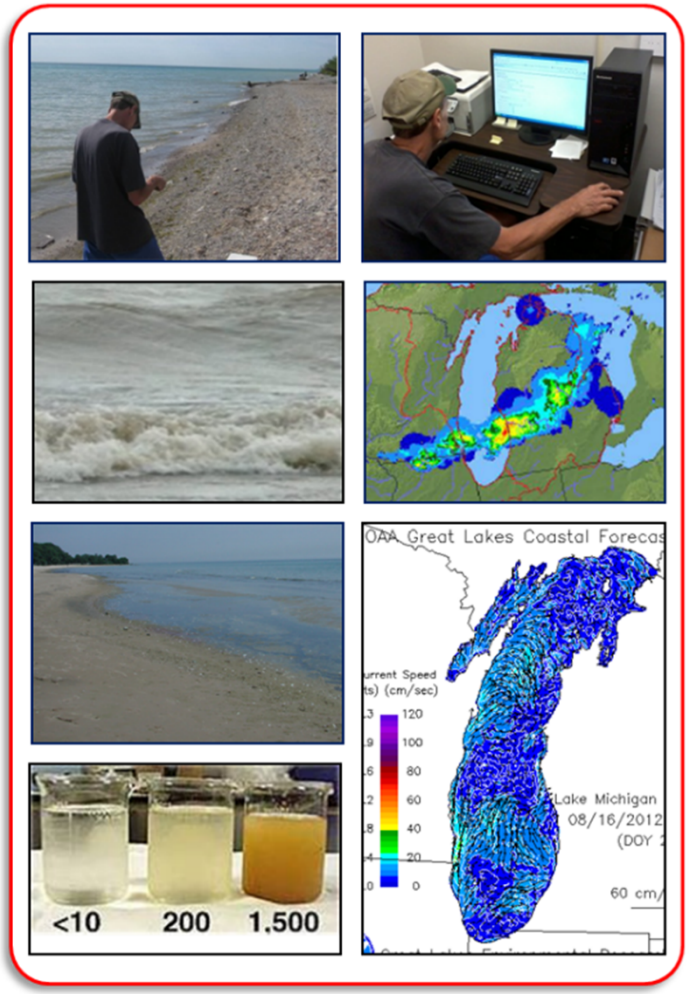
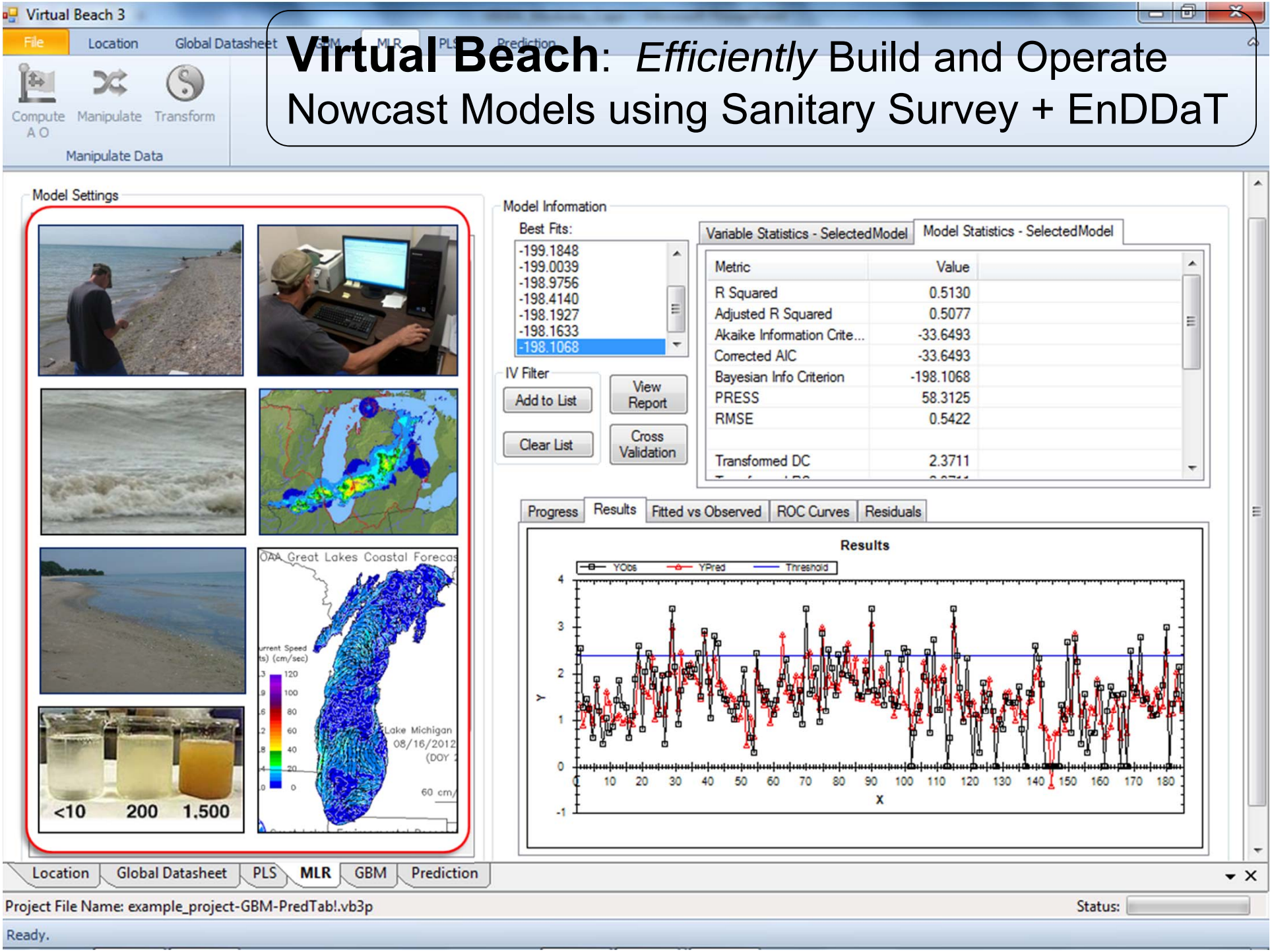
Special Project: Improving Beach "Nowcasts" using Web Data Services

- **Partners**: GLOS, Wisconsin Sea Grant Institute, USGS Office of Water Information
- **Objective**: Increase the use of GLOS Data (from NOAA, USGS, Envt. Canada) within operational "nowcast" models
- **www.virtualbeach.org**



Virtual Beach: *Efficiently* Build and Operate Nowcast Models using Sanitary Survey + EnDDaT



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science for a changing world

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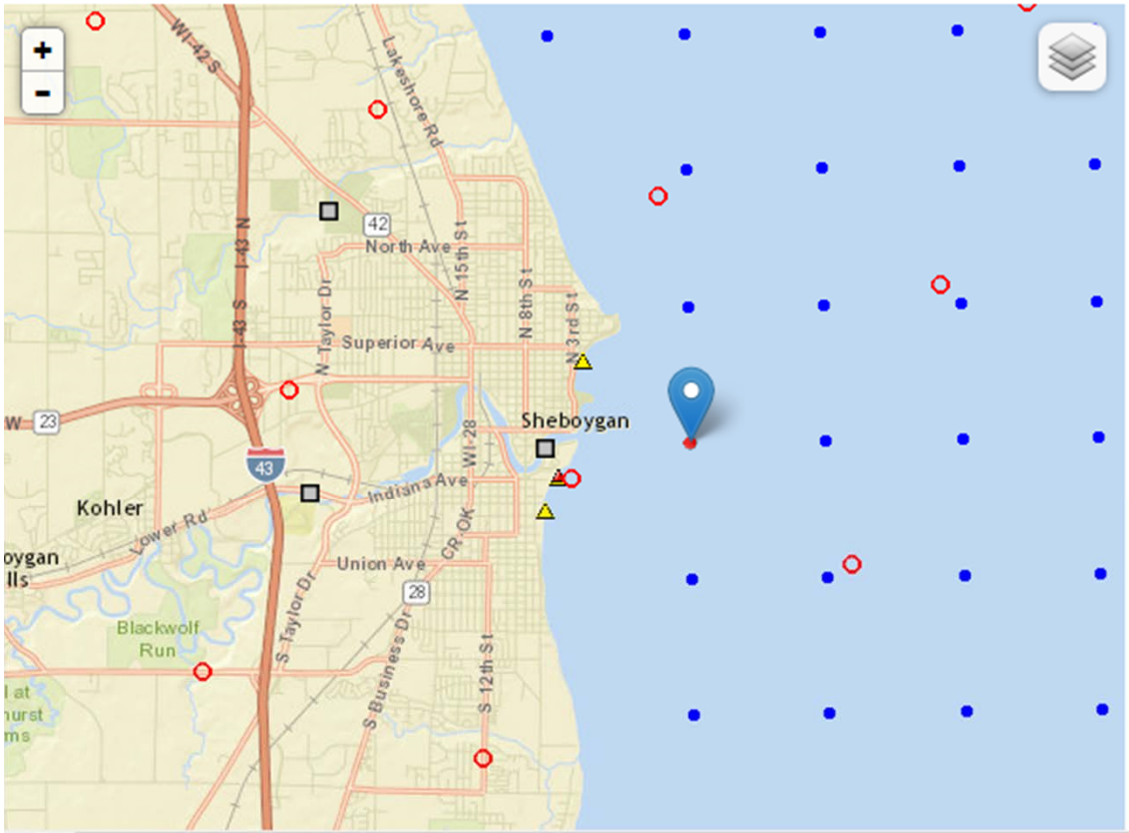
Environmental Data Discovery and Transformation - Version 1.3.23

Access and Integrate Environmental Observations for Coastal Decision Support

Choose Data | Create Project Location | EnDDaT Information

- [x] USGS Time Series (NWIS, Plotting Tool)
- [x] Great Lakes Coastal Forecasting System (GLCFS)
- [ ] USGS Water Quality (Water Quality)
- [ ] 6-hr Quantitative National Precipitation
- [x] 1-hr Quantitative North Central Precipitation
- [ ] National Data Buoy Center (NDBC)

Search within a 5 mile bounding box from selected project (click marker to identify)



NWIS | GLCFS | Water Quality | Precipitation

Overview | Active single point

Active Grid Point:
Approximate distance to active project: 1.231 miles

x	y	Latitude	Longitude
119	14	43.747955	-87.68291

Available Data:
Great Lakes Coastal Forecasting System (GLCFS), NO
GLERL Wave Model-Great Lakes, Princeton Ocean Mo

	Property	Ur
[ ]	Ice Concentration	%
[x]	Height Above Model Sea Level	m
[ ]	Ice Thickness	m
[x]	Eastward Water Velocity at Surface	m/s

JOIN MYGLOS TODAY

great lakes observing system

QUESTIONS?

Becky Pearson,Program Manager

bpearson@glos.us

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