



**ATTENTION: Phone number has changed.
SEE NEW NUMBER BELOW
NEW TIME – 1:45 – 2:45 pm**



Great Lakes Water Levels Media Teleconference Wednesday, December 10, 1:45 – 2:45 p.m. ET

CALL-IN INFORMATION:

1-888-809-8974 NEW NUMBER

PASSCODE: GREAT LAKES



Monica Allen, NOAA Communications, 301-734-1123 monica.allen@noaa.gov

Lynn Rose, USACE Chief of Public Affairs, 313-226-4680 lynn.m.rose@usace.army.mil

Deborah Lee, NOAA Great Lakes Environmental Research Laboratory (GLERL), Director
EXPERTISE: Regional water resource management planning

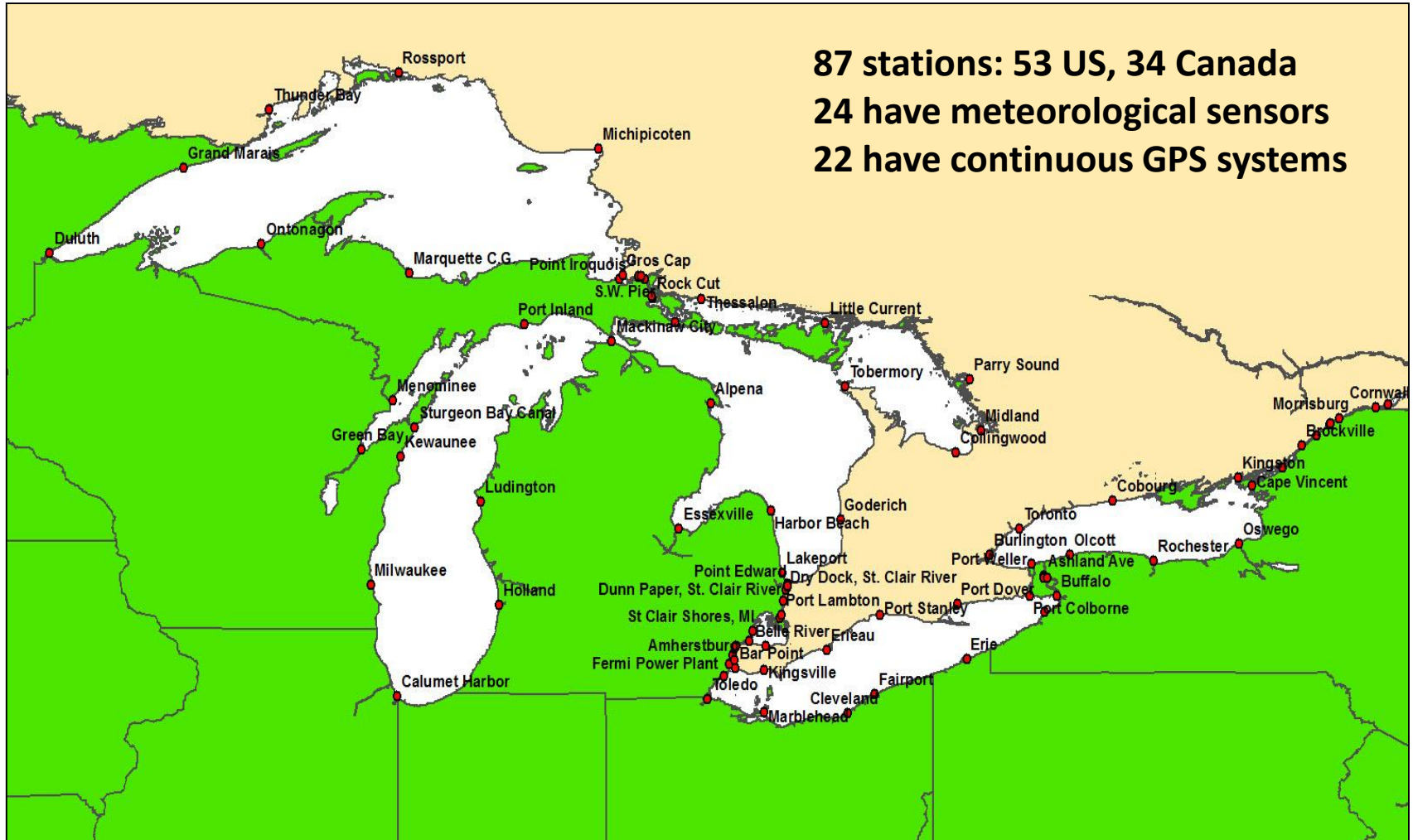
Stephen Gill, NOAA Center for Operational Oceanographic Products and Services
EXPERTISE: Water level measurement tools, Sea level rise

Drew Gronewold, NOAA GLERL, Hydrologist
EXPERTISE: Water levels research

Keith Kompoltowicz, US Army Corps of Engineers, Detroit District,
Chief of Watershed Hydrology for the Corps of Engineers, Detroit District
EXPERTISE: Water levels forecast, International coordination of Great Lakes water levels
regulation in conjunction with International Joint Commission

James Noel, NOAA National Weather Service, Ohio River Forecasting Center
EXPERTISE: Weather systems, River forecasting and climate

Great Lakes US and Canadian long-term water level station network



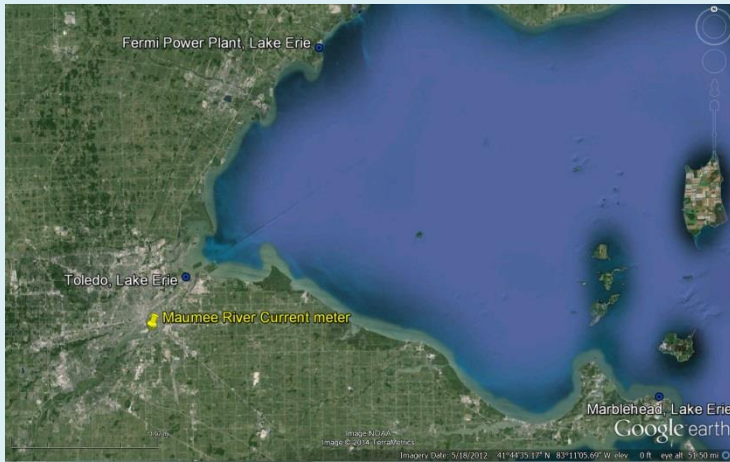
<http://tidesandcurrents.noaa.gov/stations.html?type=Water+Levels>

<http://www.tides.gc.ca/eng/find/region/6>

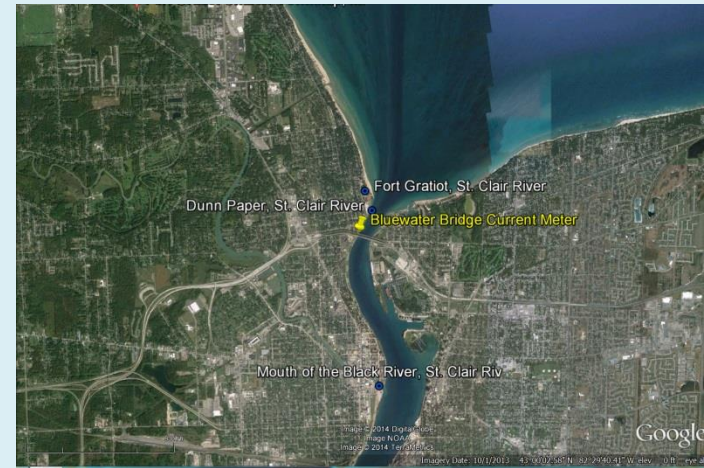
<http://tidesandcurrents.noaa.gov/ports/index.html?port=sI>

Real-time current meters operated by NOAA/NOS/CO-OPS

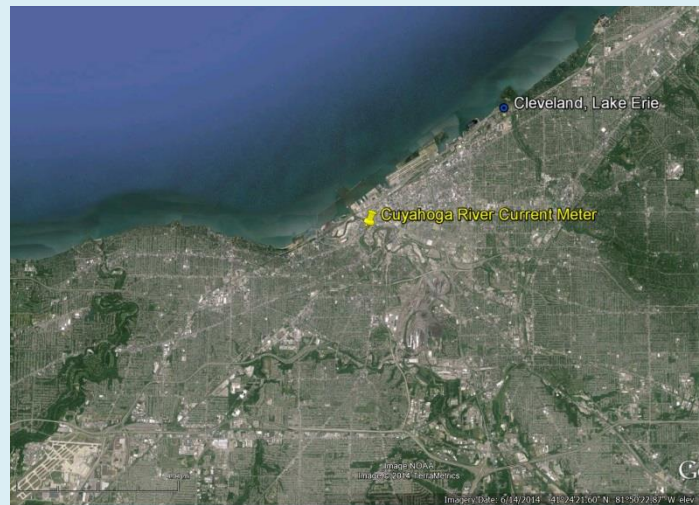
Maumee River current meter



St. Clair River current meter

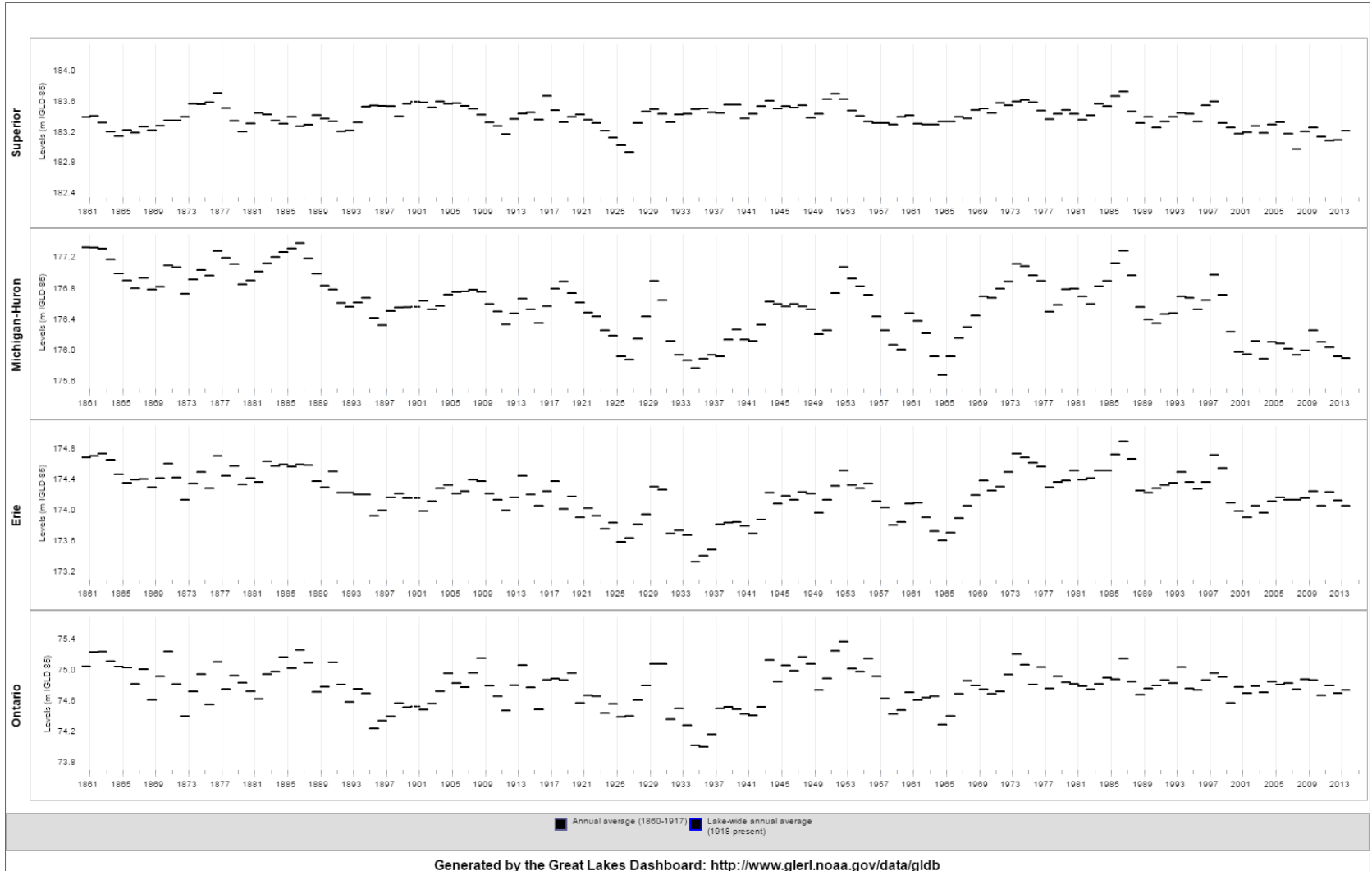


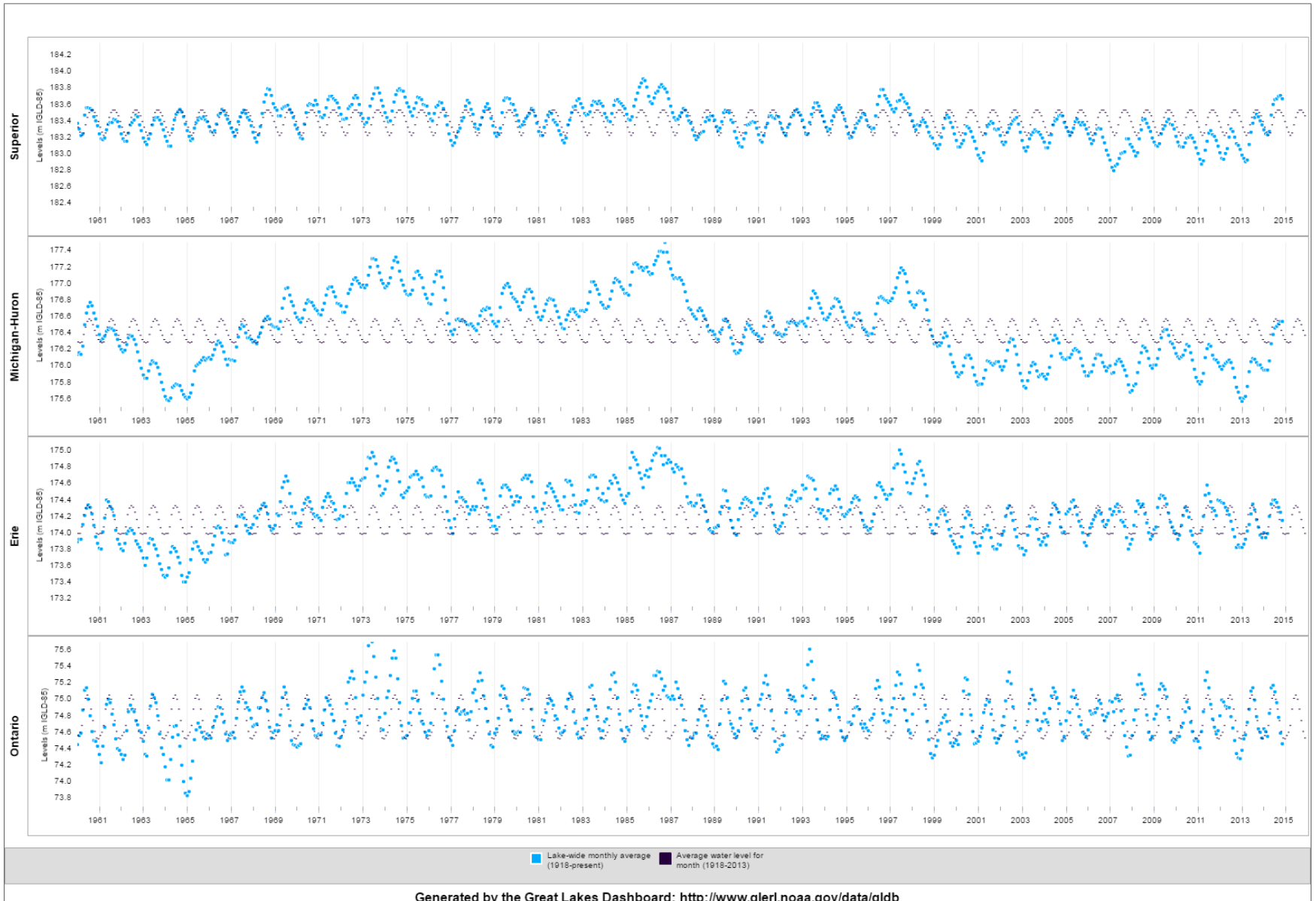
Cuyahoga River current meter

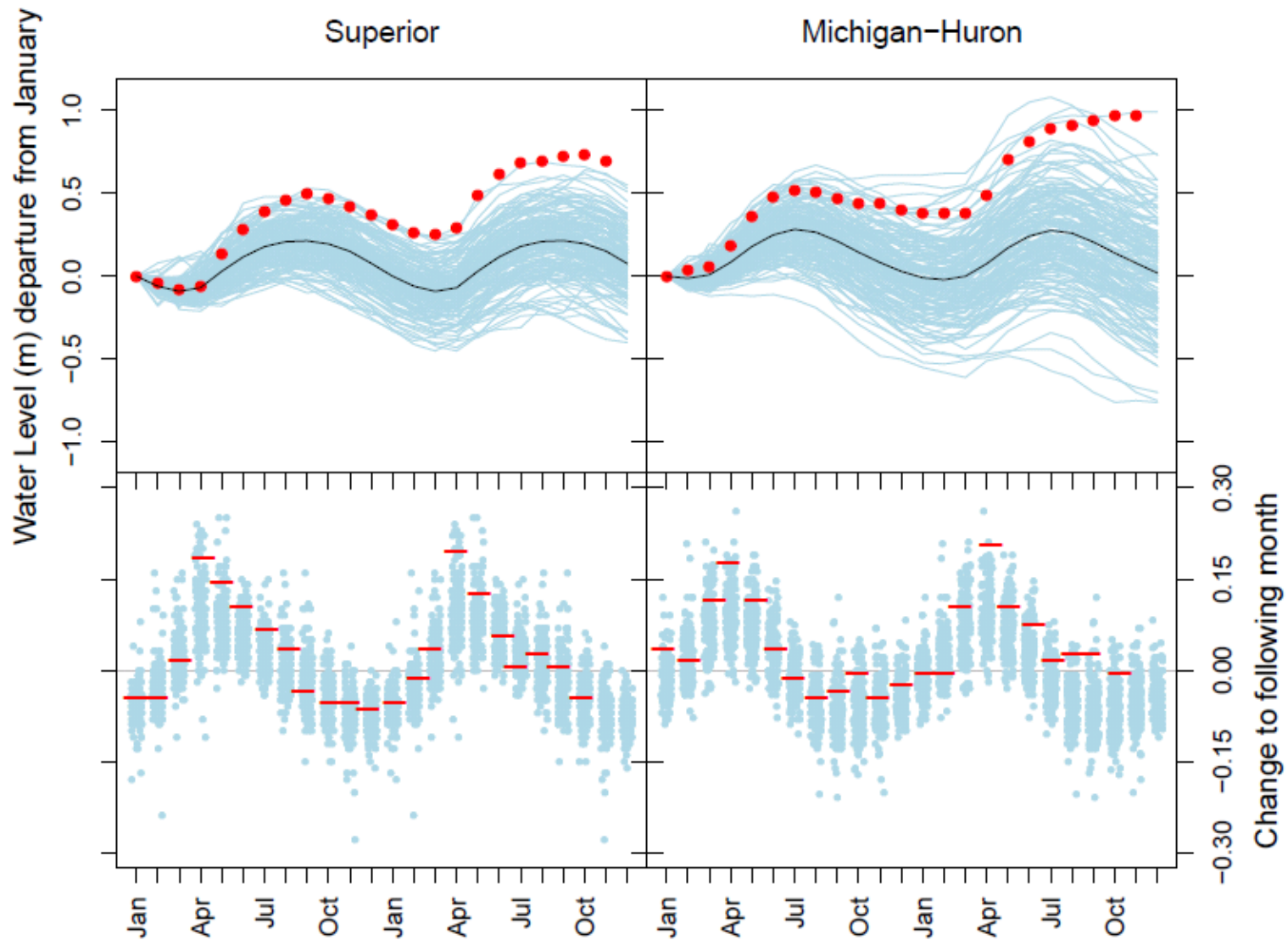


<http://tidesandcurrents.noaa.gov/cdata/StationList?type=Current+Data&filter=active&pid=4>





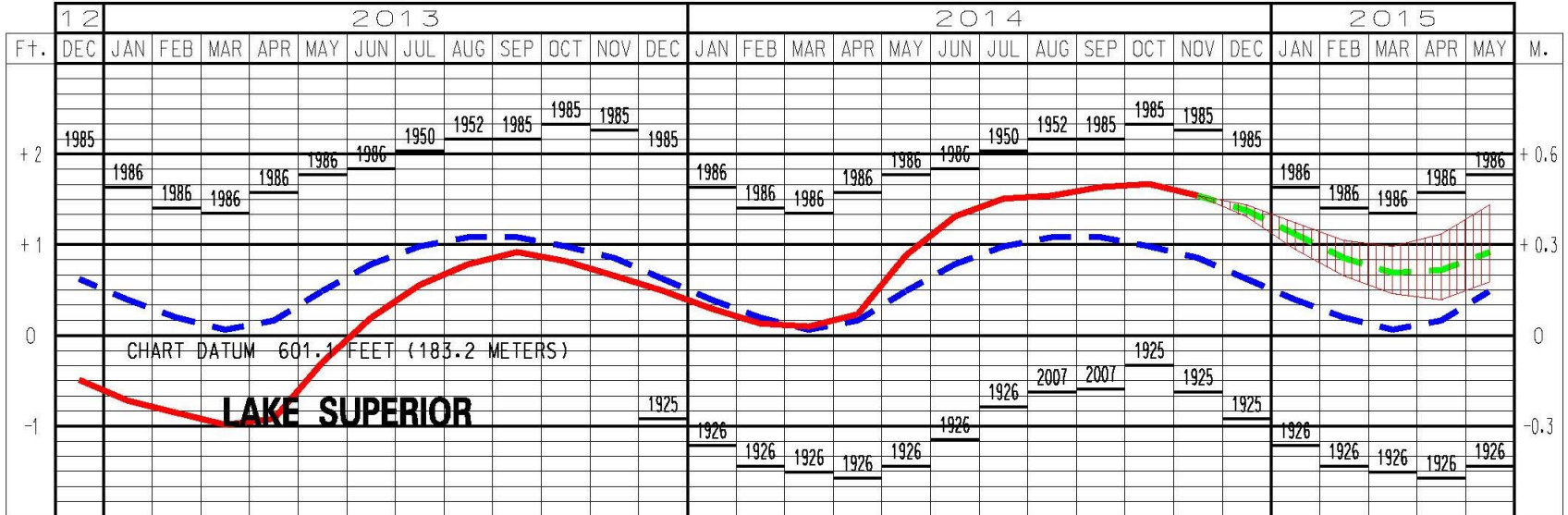




Seasonal monthly-average water levels for Lake Superior and Lake Michigan-Huron. Top panels include monthly average water level departures from January levels for each 24-month period on record starting in January and ending in the following December (blue lines) as well as the average seasonal water level anomaly (black line); water levels from January 2013 through November 2014 are presented as red dots. Bottom panels include historical water level differences from one month to the next, with red horizontal dashes representing month-to-month differences from January 2013 through November 2014. From Gronewold et al., *Eos*, Transactions, American Geophysical Union, in review.



LAKE SUPERIOR WATER LEVELS – DECEMBER 2014

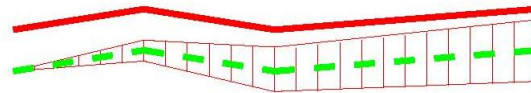


LEGEND

LAKE LEVELS

RECORDED

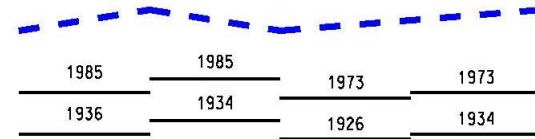
PROJECTED



AVERAGE **

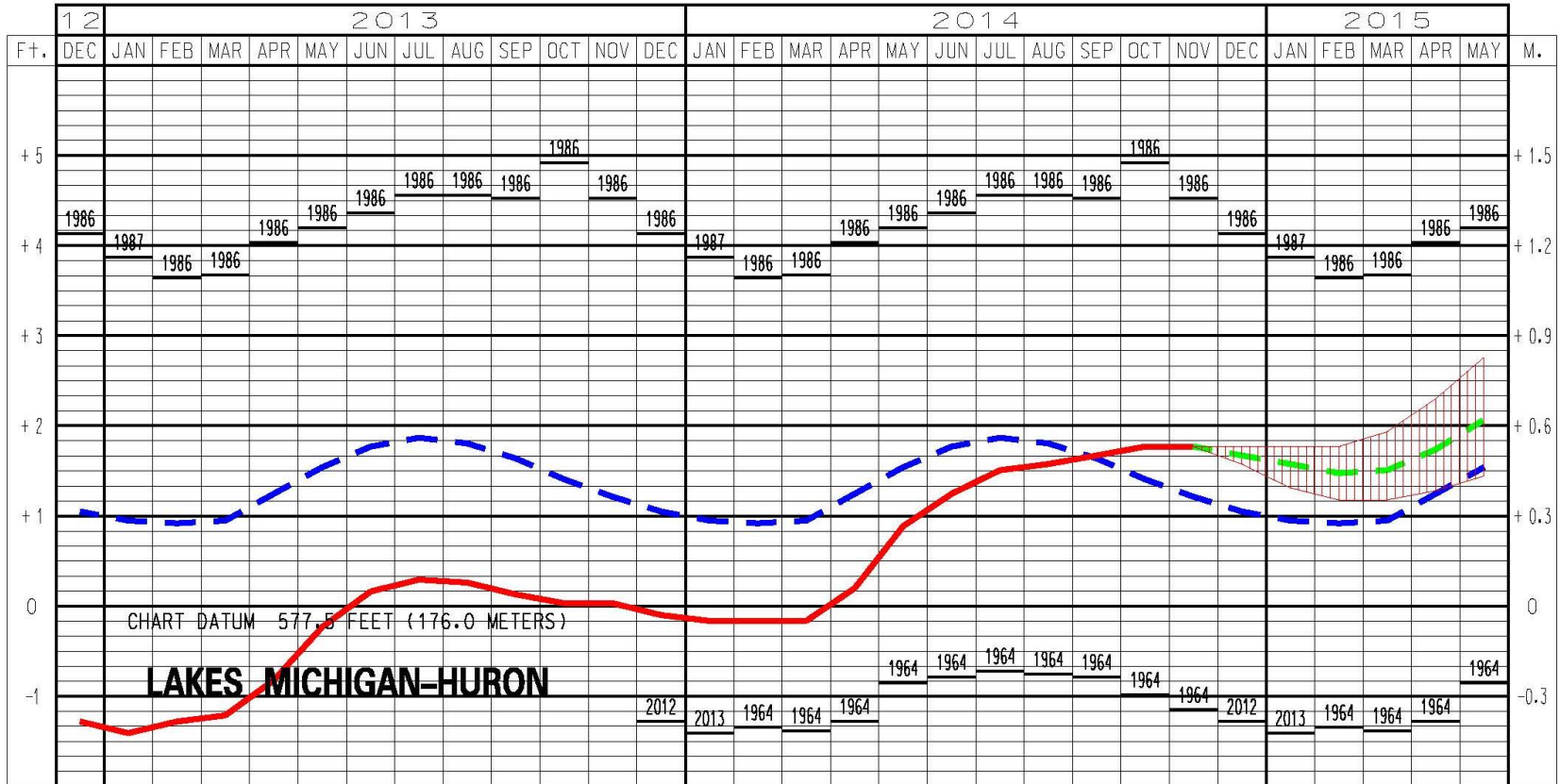
MAXIMUM **

MINIMUM **



** Average, Maximum and Minimum for period 1918-2013

LAKES MICHIGAN-HURON WATER LEVELS - DECEMBER 2014



LEGEND

LAKE LEVELS

RECORDED

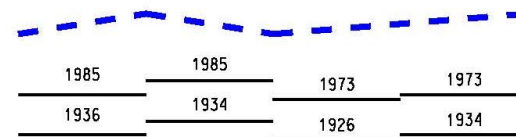
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AVERAGE **

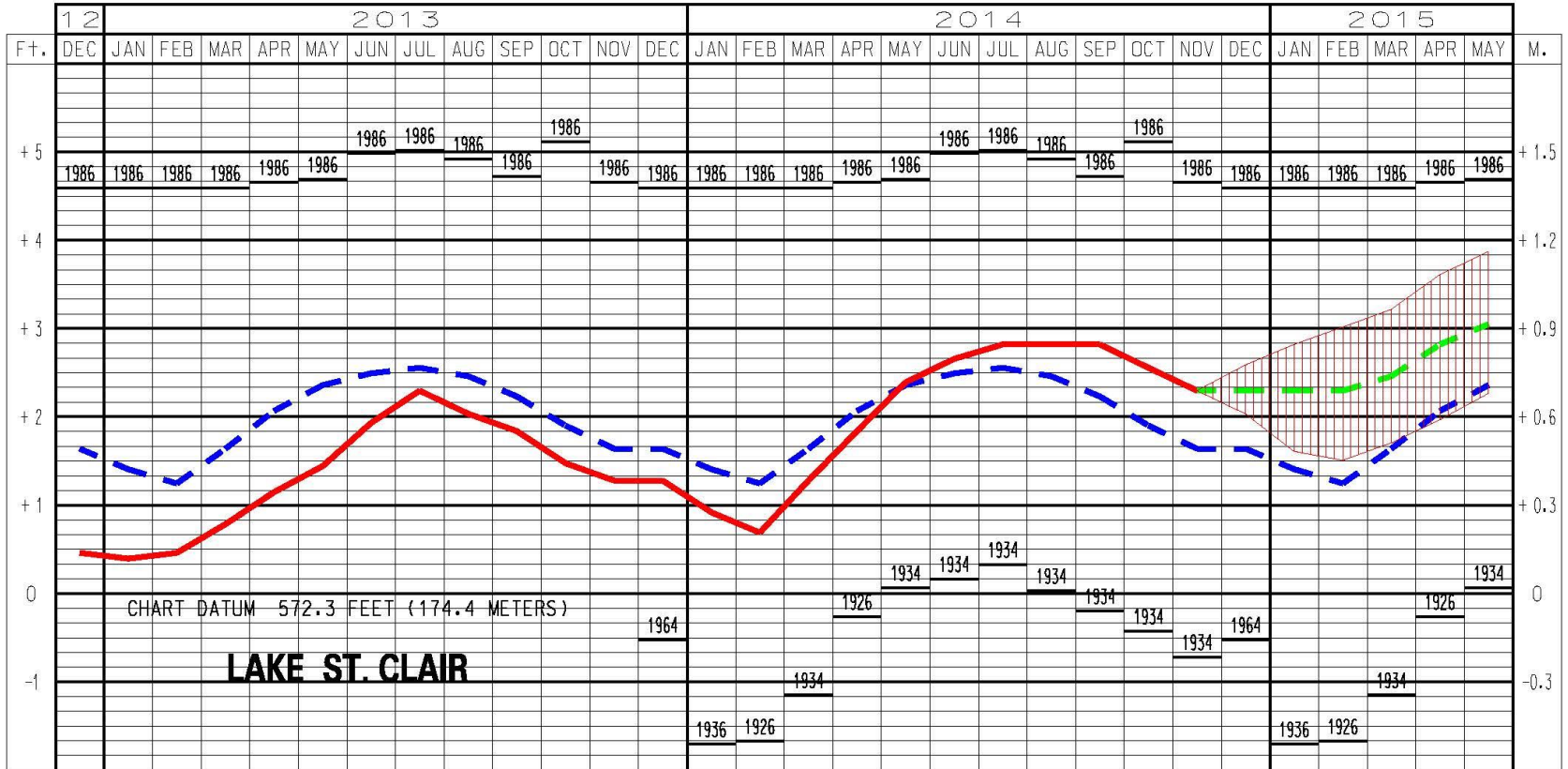
MAXIMUM **

MINIMUM **



** Average, Maximum and Minimum for period 1918-2013

LAKE ST. CLAIR WATER LEVELS – DECEMBER 2014



LEGEND LAKE LEVELS

RECORDED

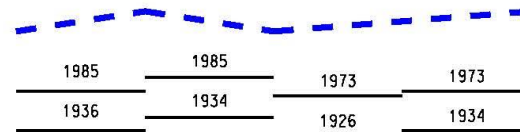
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AVERAGE **

MAXIMUM **

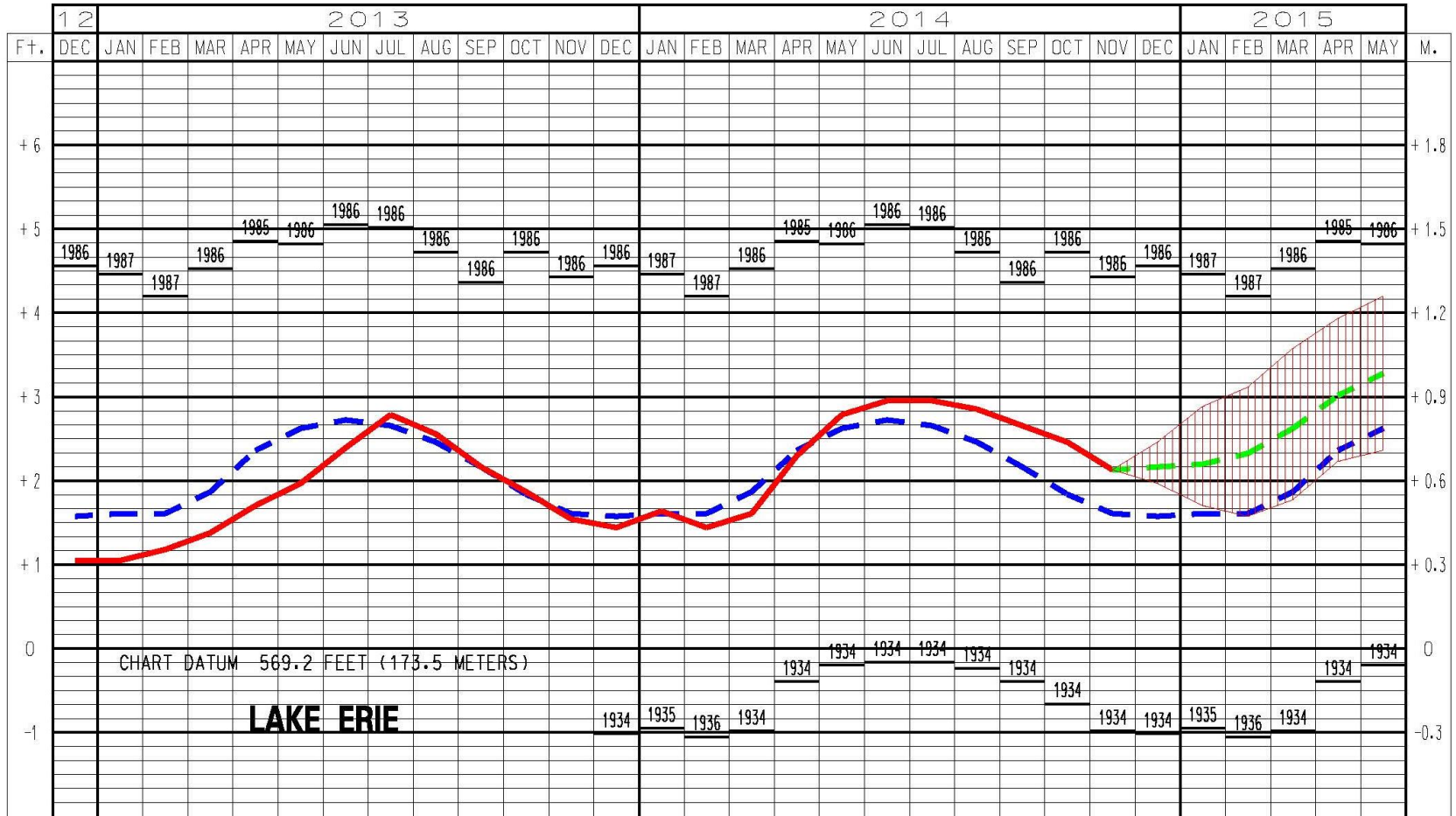
MINIMUM **



** Average, Maximum and Minimum for period 1918-2013



LAKE ERIE WATER LEVELS - DECEMBER 2014

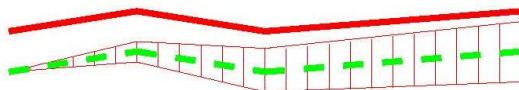


LEGEND

LAKE LEVELS

RECORDED

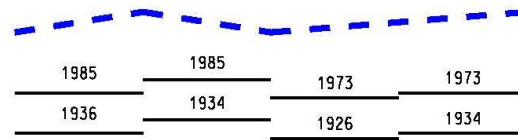
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AVERAGE **

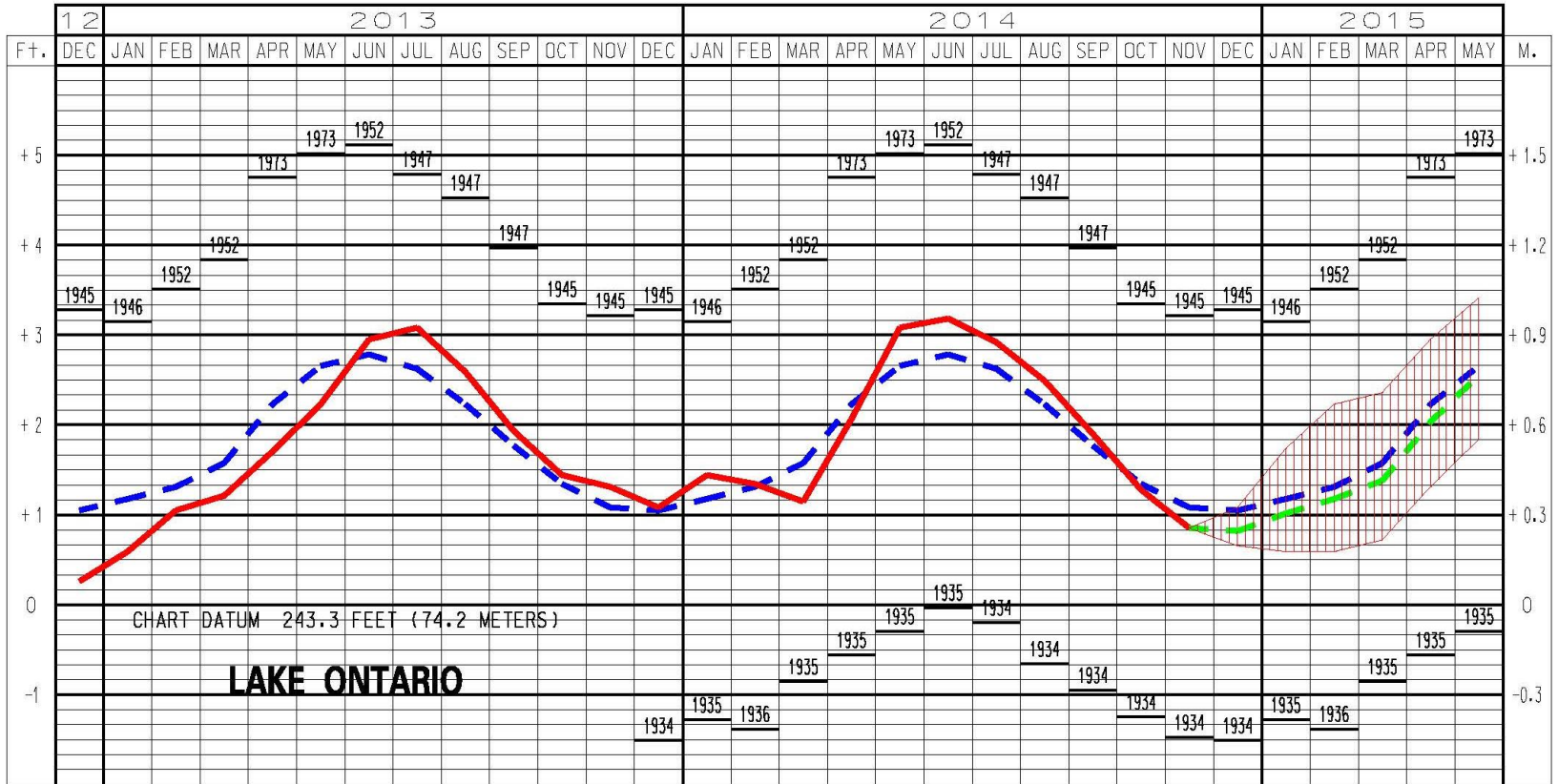
MAXIMUM **

MINIMUM **



** Average, Maximum and Minimum for period 1918-2013

LAKE ONTARIO WATER LEVELS – DECEMBER 2014



LEGEND LAKE LEVELS

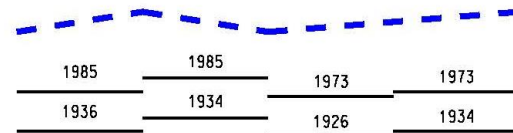
RECORDED
PROJECTED



AVERAGE **

MAXIMUM **

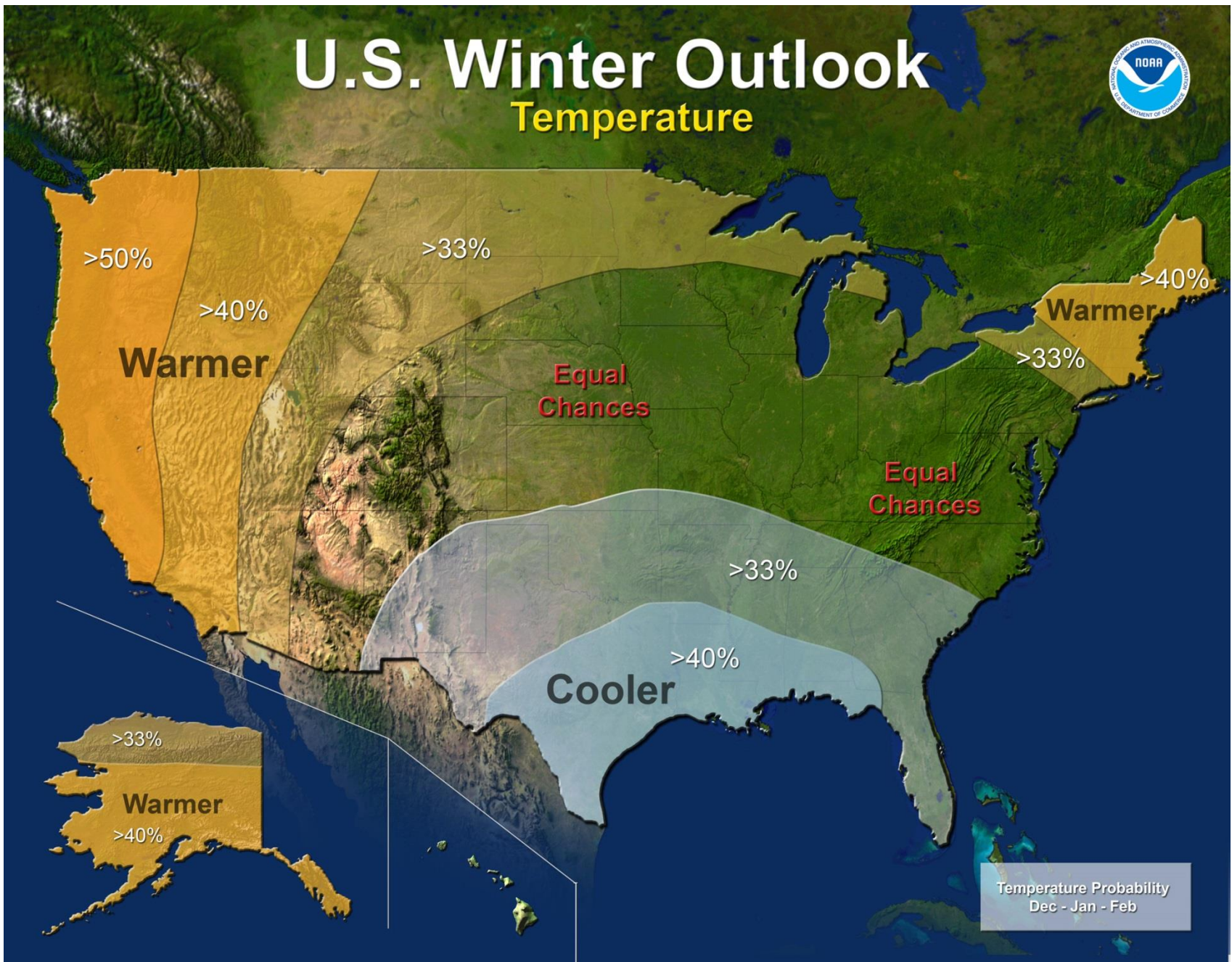
MINIMUM **



** Average, Maximum and Minimum for period 1918-2013

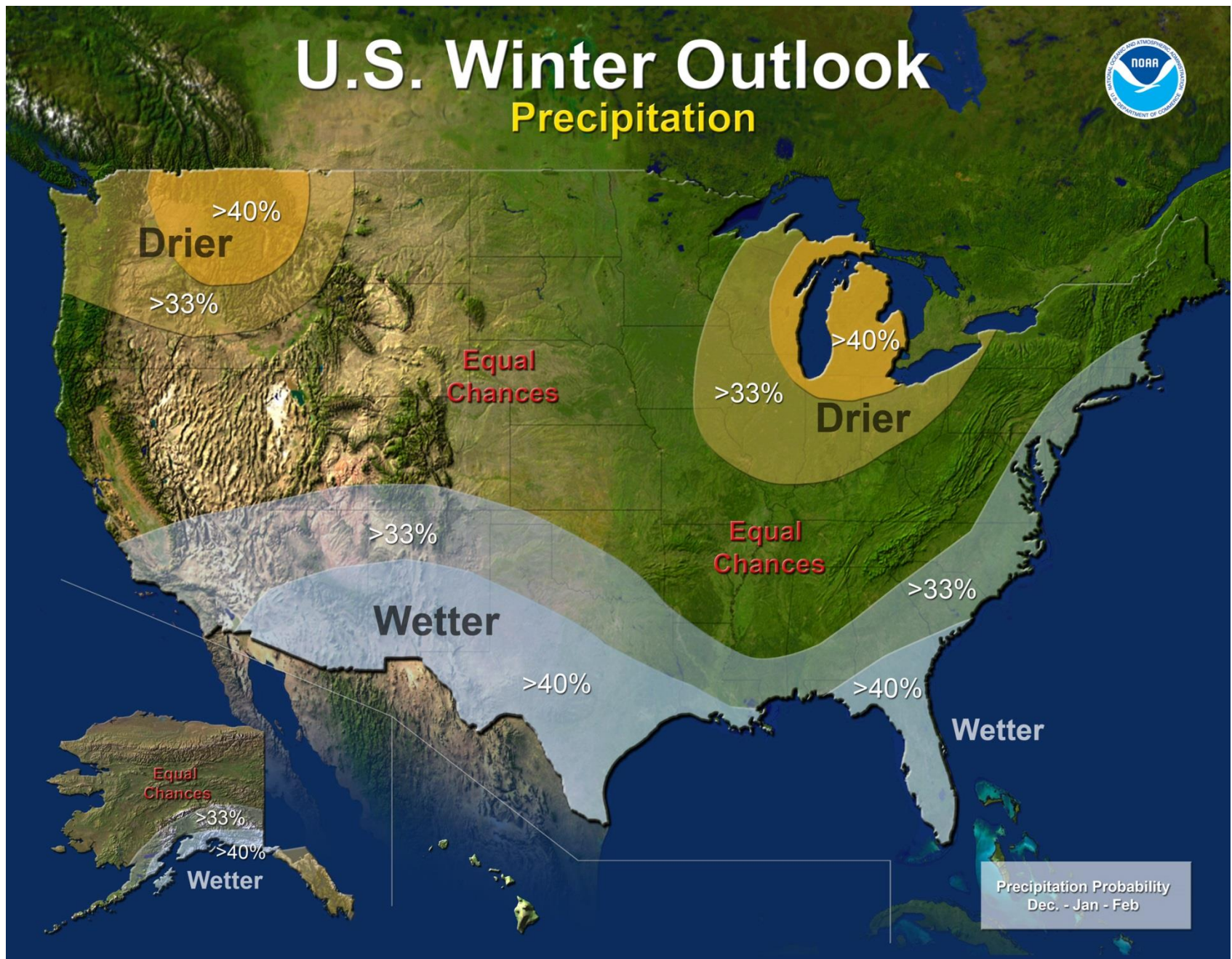
U.S. Winter Outlook

Temperature



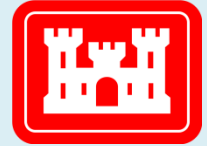
U.S. Winter Outlook

Precipitation





Online tools



NOAA Lake Level Viewer

<http://coast.noaa.gov/digitalcoast/tools/llv>

NOAA Great Lakes Hydro-Climate Dashboard visualization tool

<http://www.glerl.noaa.gov/data/hcdb>

Agency water levels web sites

Forecast Bulletins - US Army Corps of Engineers

<http://www.lre.usace.army.mil/Missions/GreatLakesInformation/GreatLakesWaterLevels/WaterLevelForecast/MonthlyBulletinofGreatLakesWaterLevels.aspx>

Forecast Bulletins - Environment Canada

<https://www.ec.gc.ca/eau-water/default.asp?lang=En&n=79962112-1>

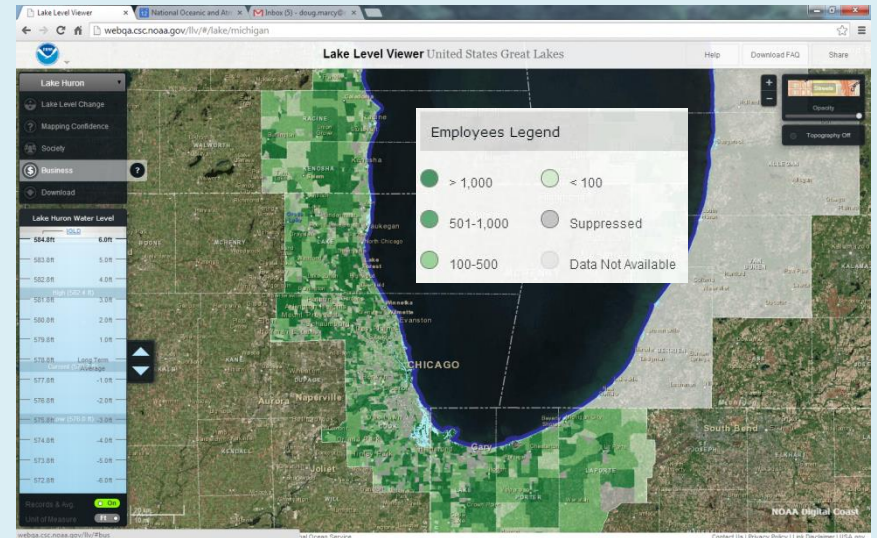
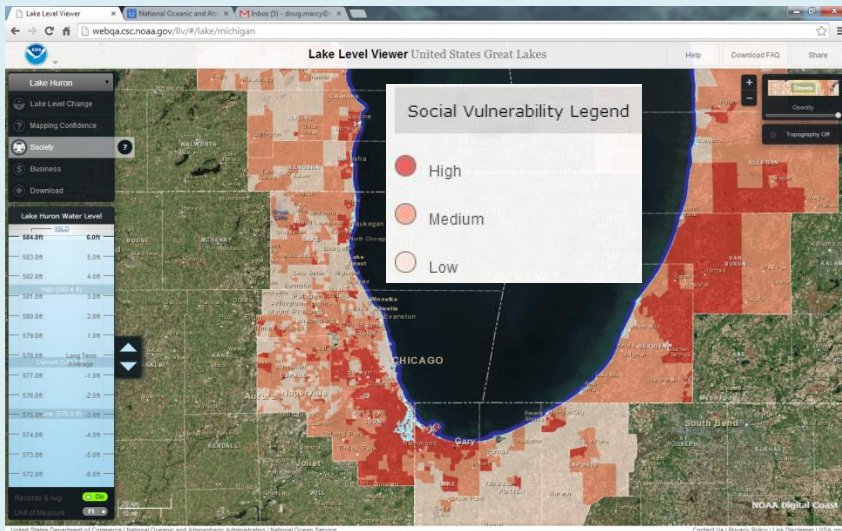
Great Lakes Operational Forecasting System Water Level Data

<http://tidesandcurrents.noaa.gov/ofsglofs.html>

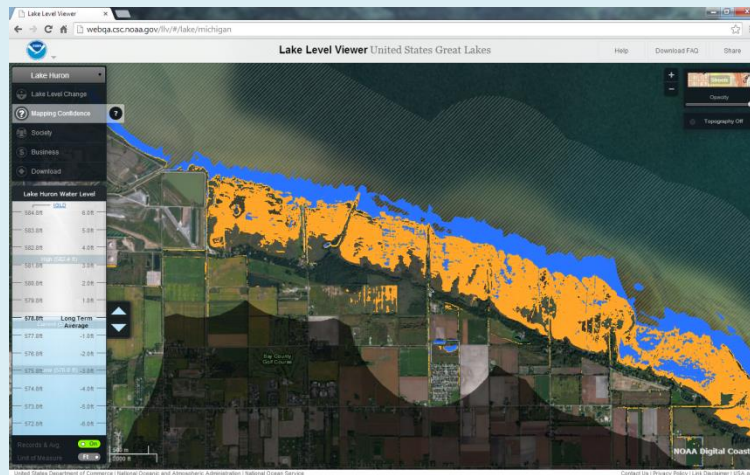
Great Lakes Water Levels NOAA GLERL

<http://www.glerl.noaa.gov/data/now/wlevels/levels.html>

Lake Level Viewer – Socioeconomic overlays



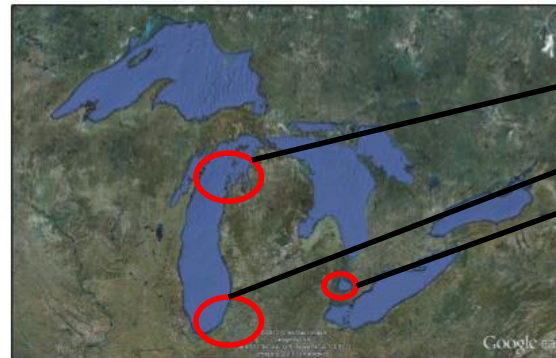
Lake Level Viewer – Estimates of mapping product confidence



New NOAA Technical Report

NOAA Technical Report NOS CO-OPS 0074

Gap Analysis of the Great Lakes Component of the National Water Level Observation Network (NWLON)



Regions identified
as gaps in NWLON
coverage

Silver Spring, Maryland

September 2014



noaa National Oceanic and Atmospheric Administration

U.S. DEPARTMENT OF COMMERCE
National Ocean Service
Center for Operational Oceanographic Products and Services

http://tidesandcurrents.noaa.gov/publications/NOAA_Technical_Report_NOS_COOPS_074.pdf





Questions?