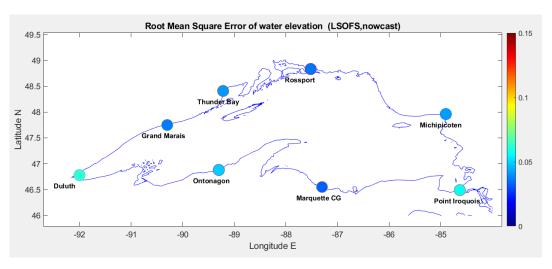
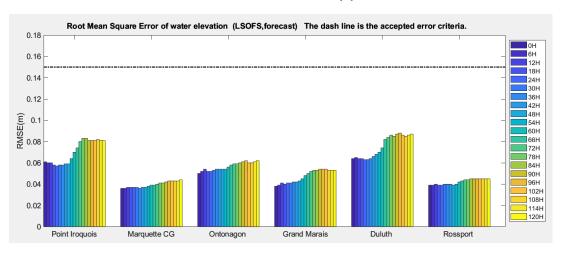
The Lake Superior Operational Forecast System (LSOFS) uses the Finite Volume Community Ocean Model (FVCOM) as its dynamic core. It became operational in October 2022 to provide nowcast and forecast guidance of water levels, currents, water temperature out to 120 hours, four times per day. CO-OPS produces LSOFS uncertainty estimates by running the NOS standardized skill assessment tools (Hess et al., 2003; Zhang et al. 2009) for the LSOFS operational model output. The accepted error criteria for skill assessment are: water level 0.15m and temperature 3.0 °C.

The figures below indicate the Root Mean Square Error (RMSE) of LSOFS water levels (m) and water temperature (°C) nowcast and forecasts from 8/1/2021 to 8/1/2022.

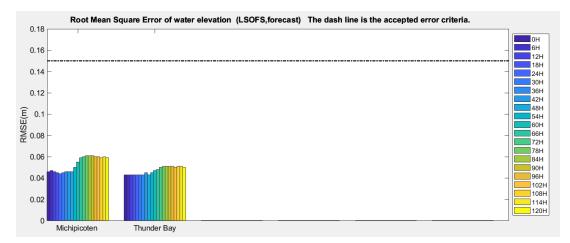
Nowcast Water Level



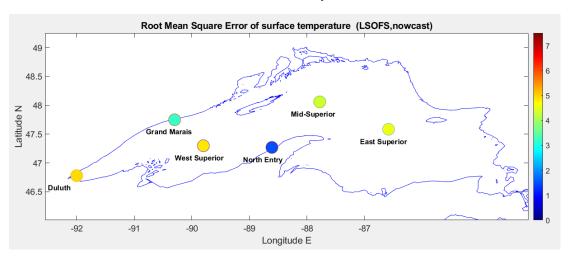
Forecast Water Level (1)



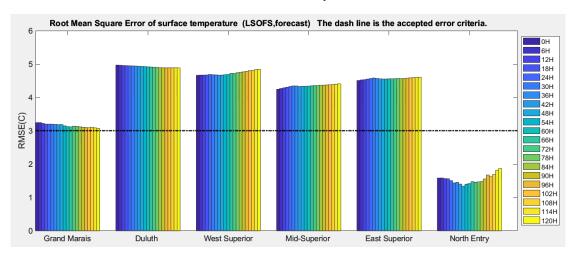
Forecast Water Level (2)



Nowcast Water Temperature



Forecast Water Temperature



REFERENCES

Hess, K.W.; Gross, T.F.; Schmalz, R.A.; Kelley, J.G.W.; Aikman, F.; Wei, E.; Vincent, M.S. *NOS Standards for Evaluating Operational Nowcast and Forecast Hydrodynamic Model Systems*; NOAA Technical Report NOS CS 17; *National Oceanic and Atmospheric Administration*: Silver Spring, MD, USA, 2003.

Zhang, A., Hess, K., Wei, E. and Myers, E., 2009. Implementation of model skill assessment software for water level and current in tidal regions, NOAA Technical Report, NOS CS 24.