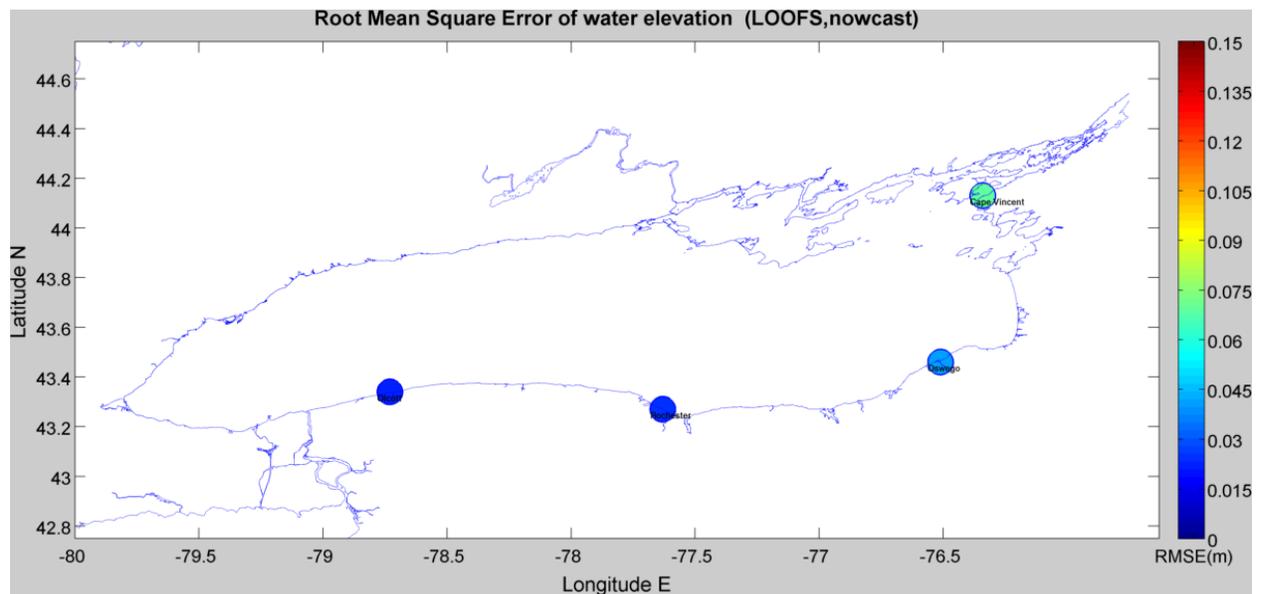


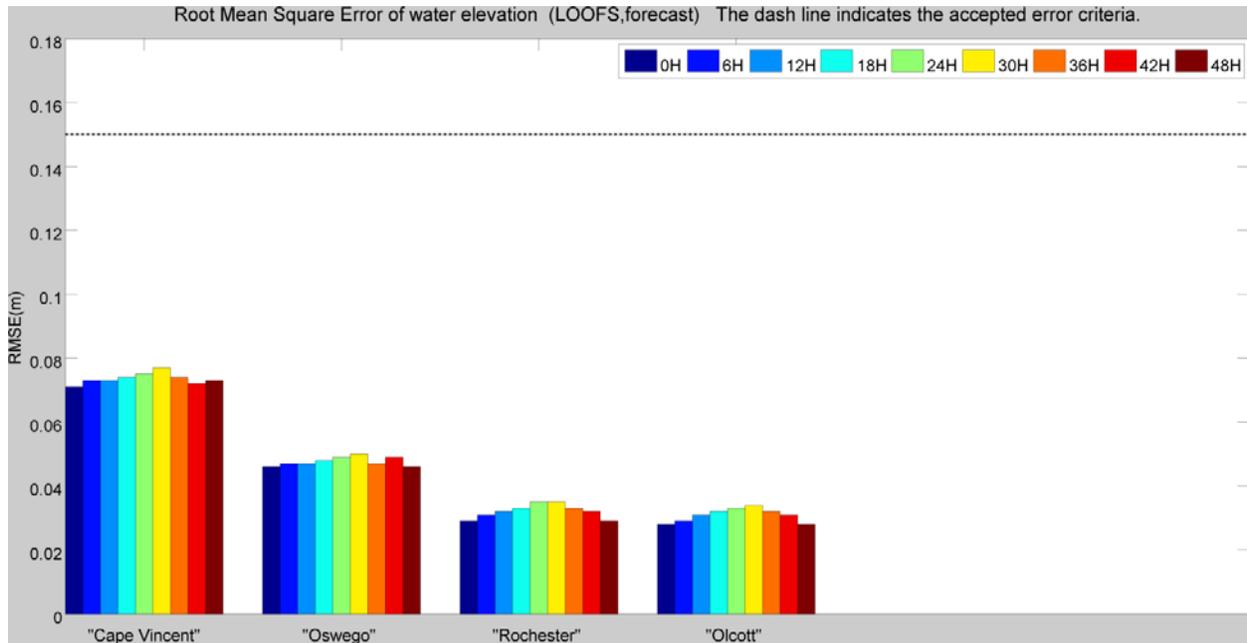
The Lake Ontario Operational Forecast System (LOOFS) uses the Princeton Ocean Model (POM). It became operational in 2002 at CO-OPS's linux server, and moved to NCEP's Central Computing System (CCS) in 2009 to provide hourly nowcast and four times a day forecast guidance of water levels and water temperature. CO-OPS produces LOOFS uncertainty estimates by running the NOS standardized skill assessment tools (Hess et al., 2003; Zhang et al. 2009) for the LOOFS operational model output. The accepted error criteria for skill assessment are: water level 0.15m, current speed 0.26m/s, current direction 22.5 degree, temperature 3.0 °C and salinity 3.5 psu.

The figures below indicate the Root Mean Square Error (RMSE) of LOOFS water levels, currents, water temperature, and salinity nowcasts and forecasts from 9/1/2014 to 9/30/2014.

Nowcast Water Level



Forecast Water Level



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.