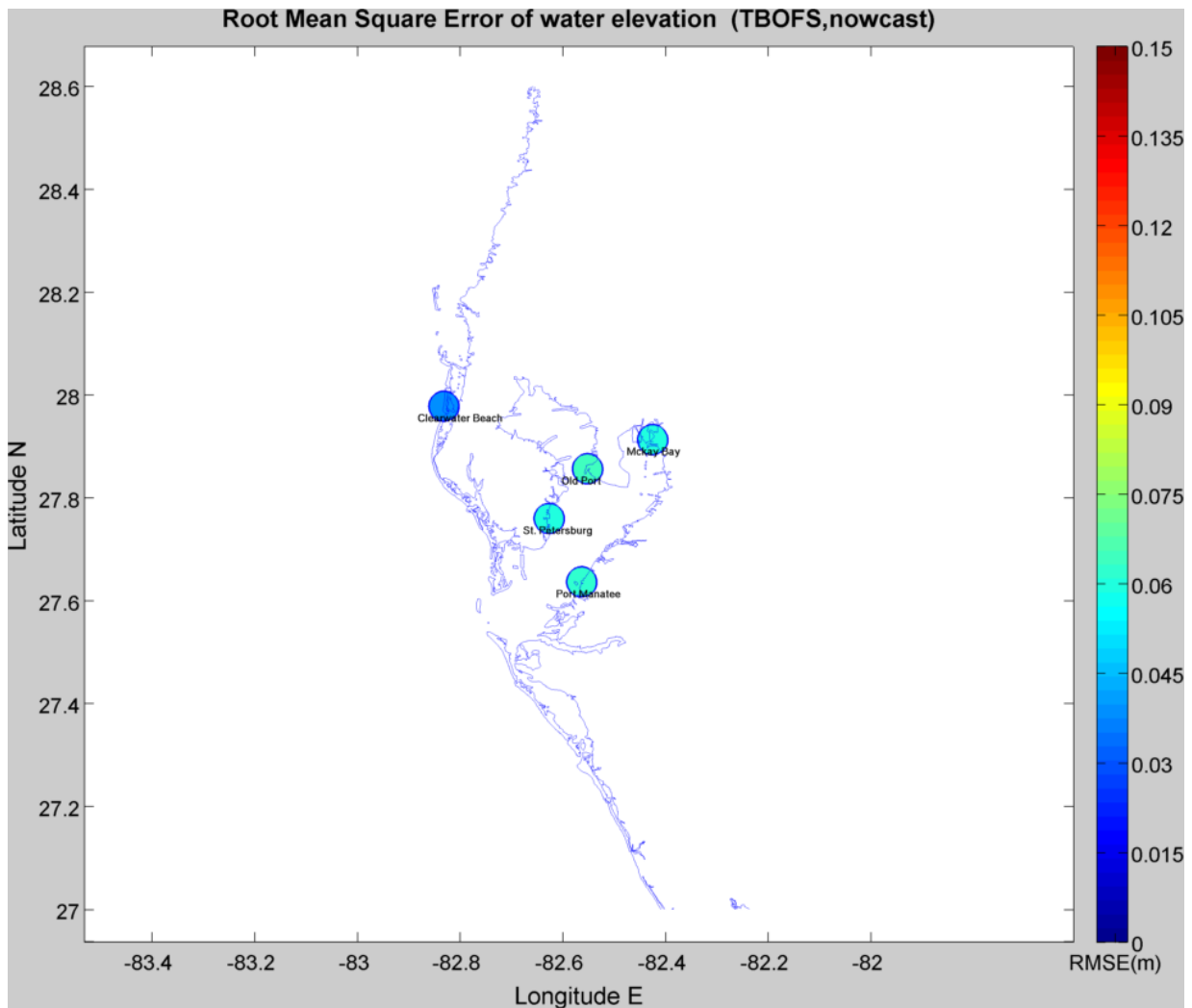


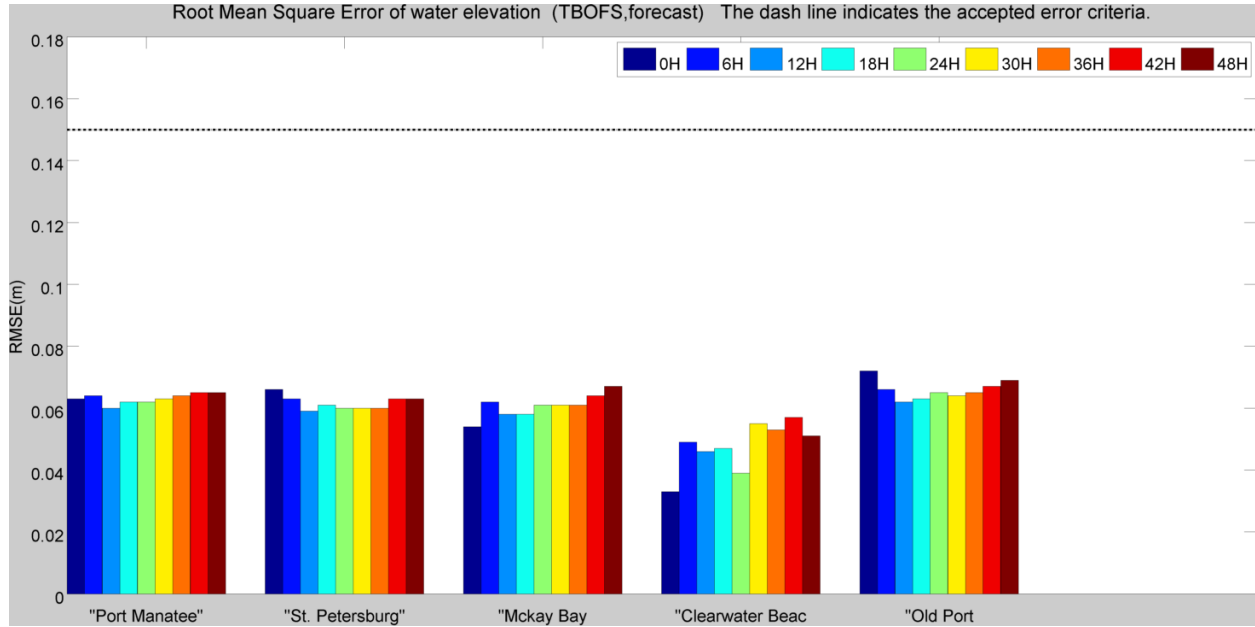
The Tampa Bay Operational Forecast System (TBOFS) uses the three-dimensional Rutgers University's Regional Ocean Modeling System (ROMS). It became operational in 2011 to provide nowcast and forecast guidance of water levels, currents, water temperature and salinity four times per day. CO-OPS produces TBOFS uncertainty estimates by running the NOS standardized skill assessment tools (Hess et al., 2003; Zhang et al. 2009) for the TBOFS 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 TBOFS water levels, currents, water temperature, and salinity nowcasts and forecasts from 9/1/2014 to 9/30/2014.

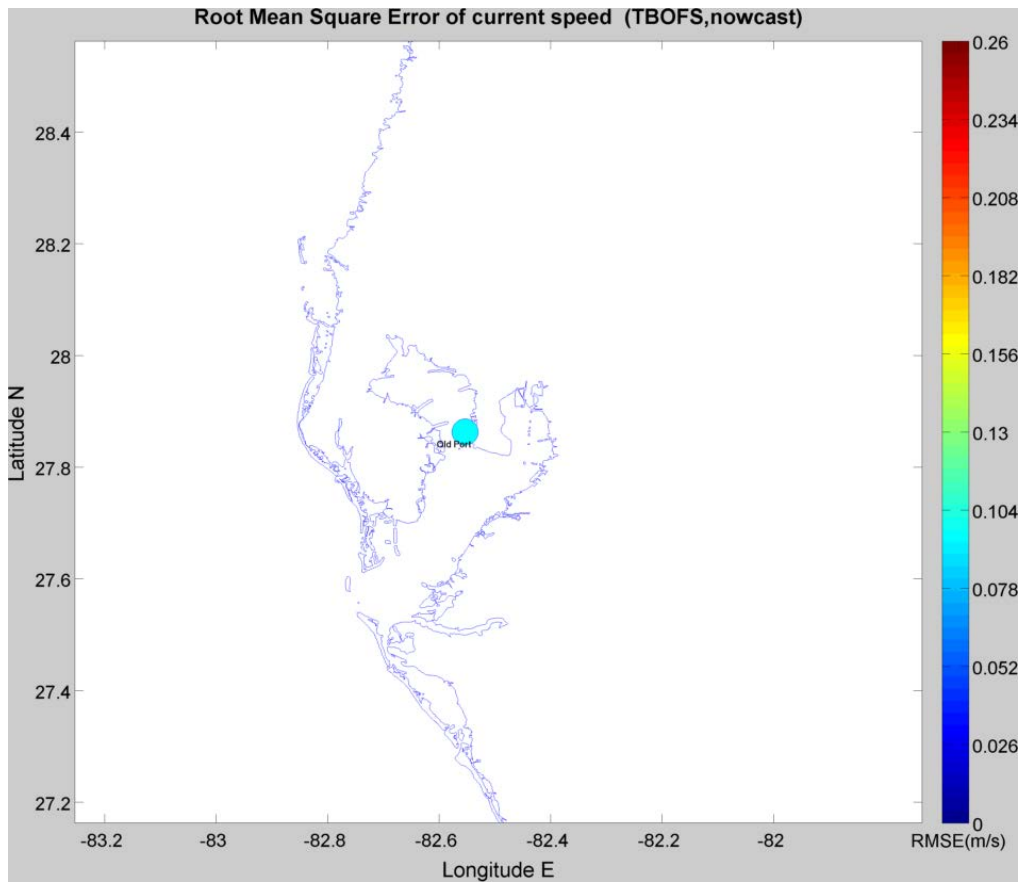
Nowcast Water Level



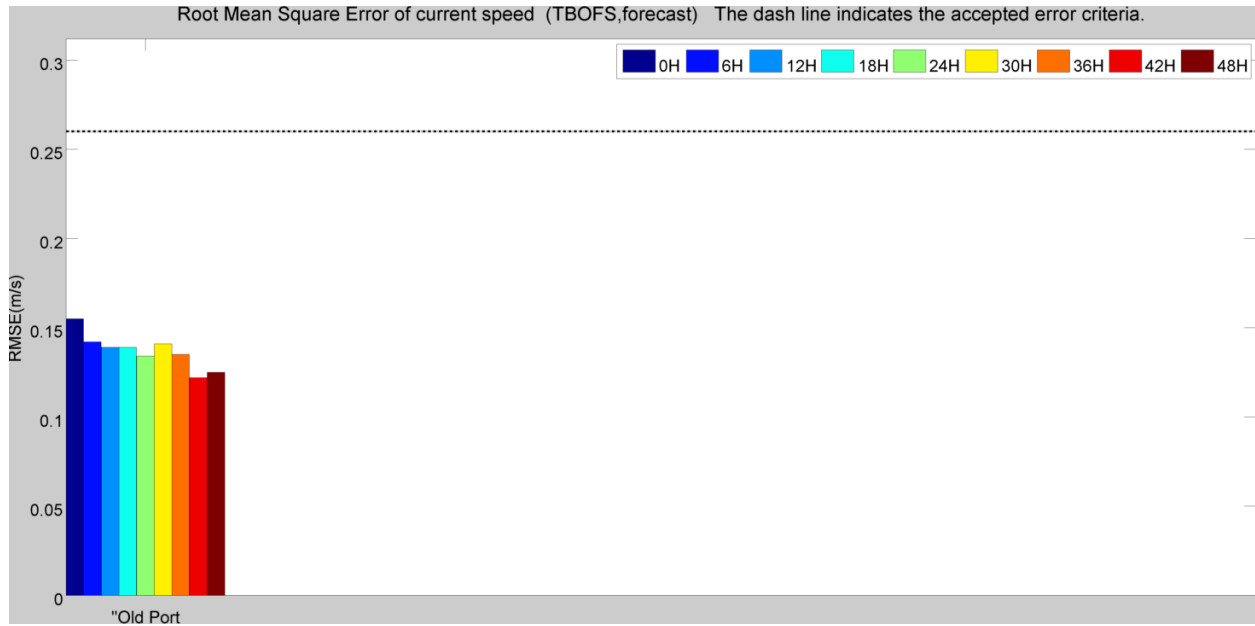
Forecast Water Level



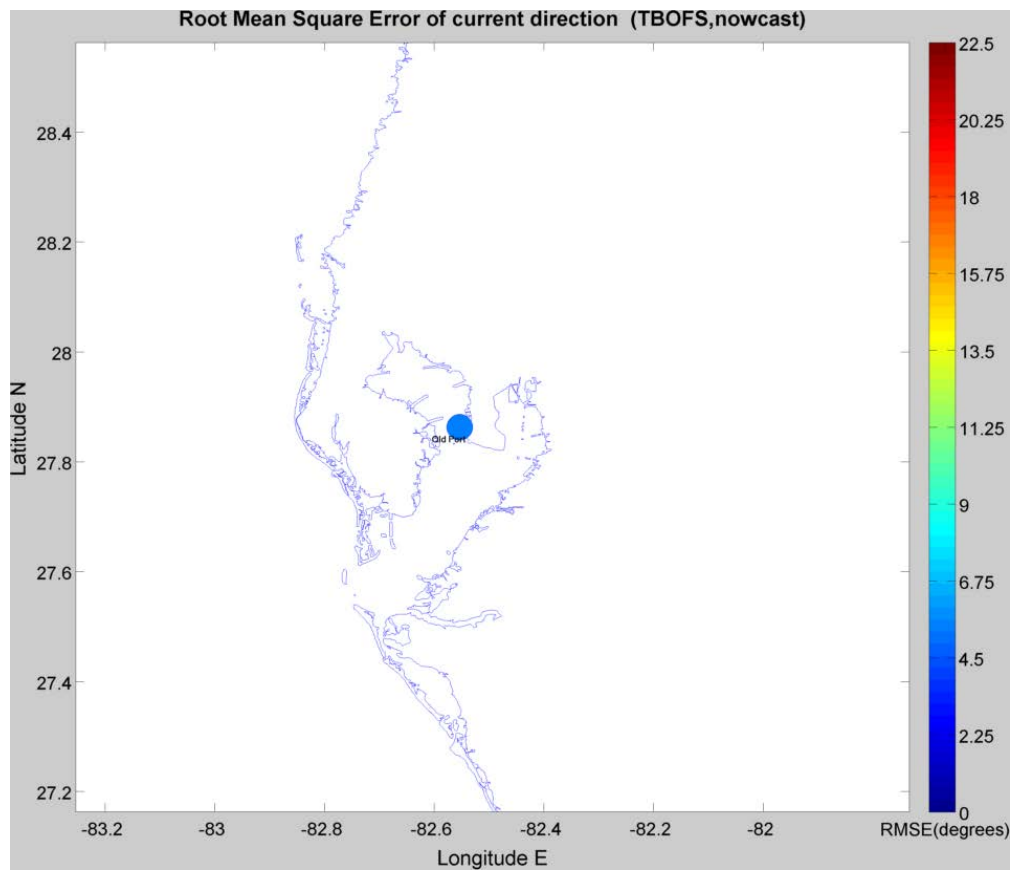
Nowcast Surface Current Speed



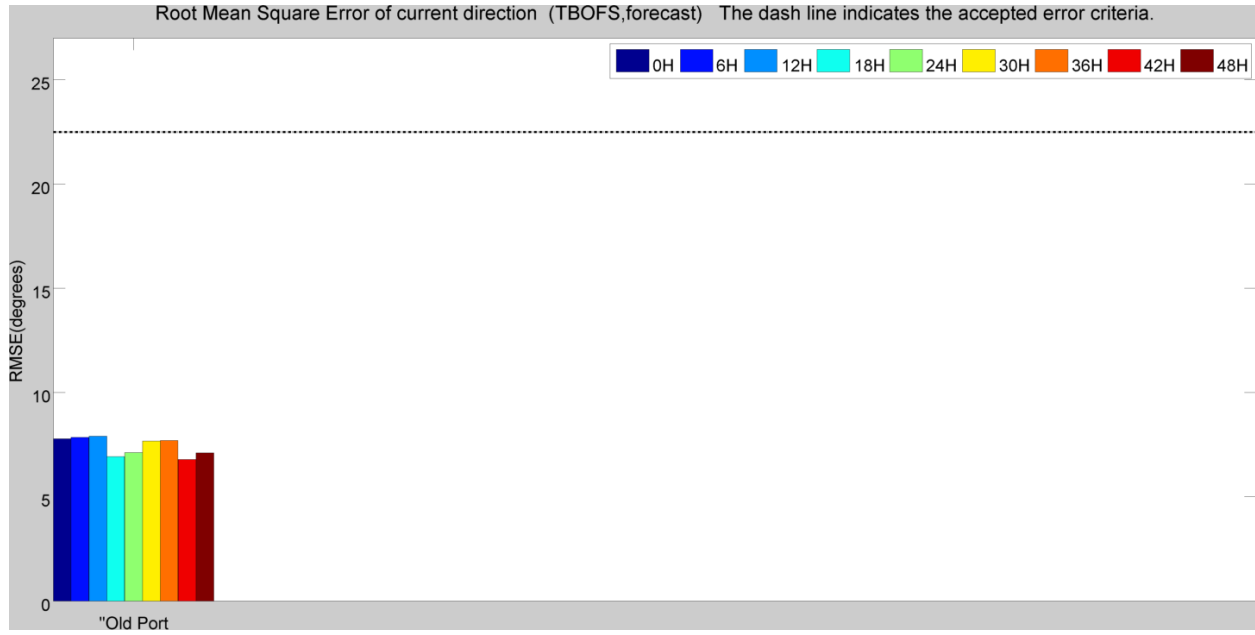
Forecast Surface Current Speed



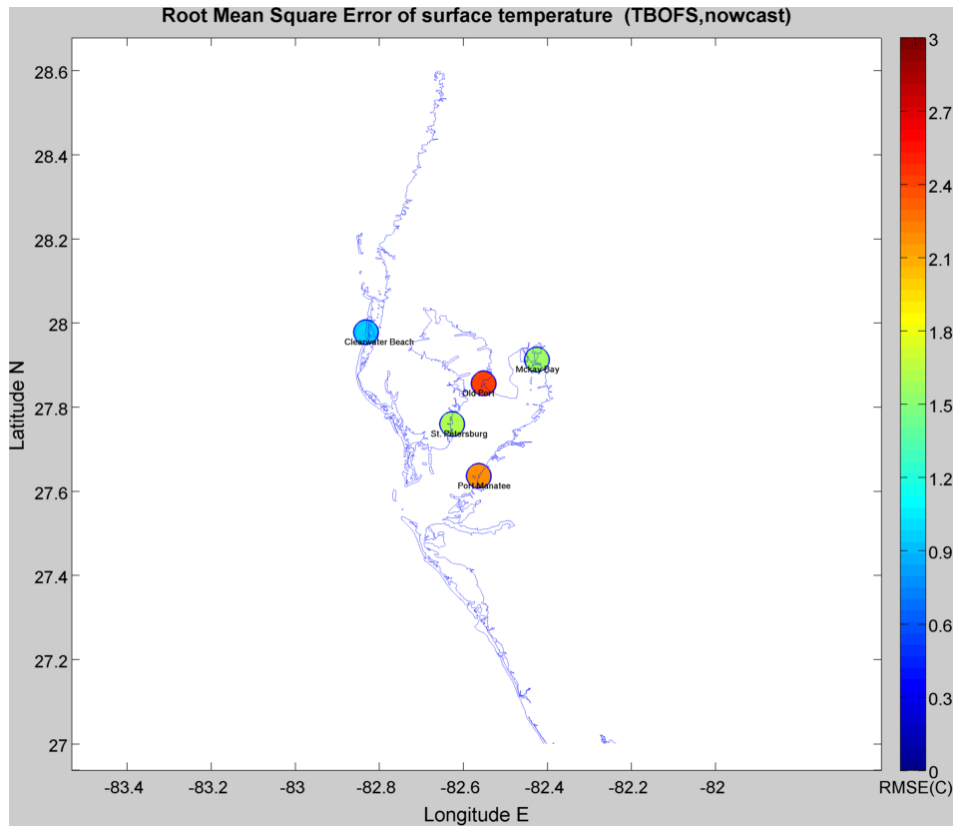
Nowcast Surface Current Direction



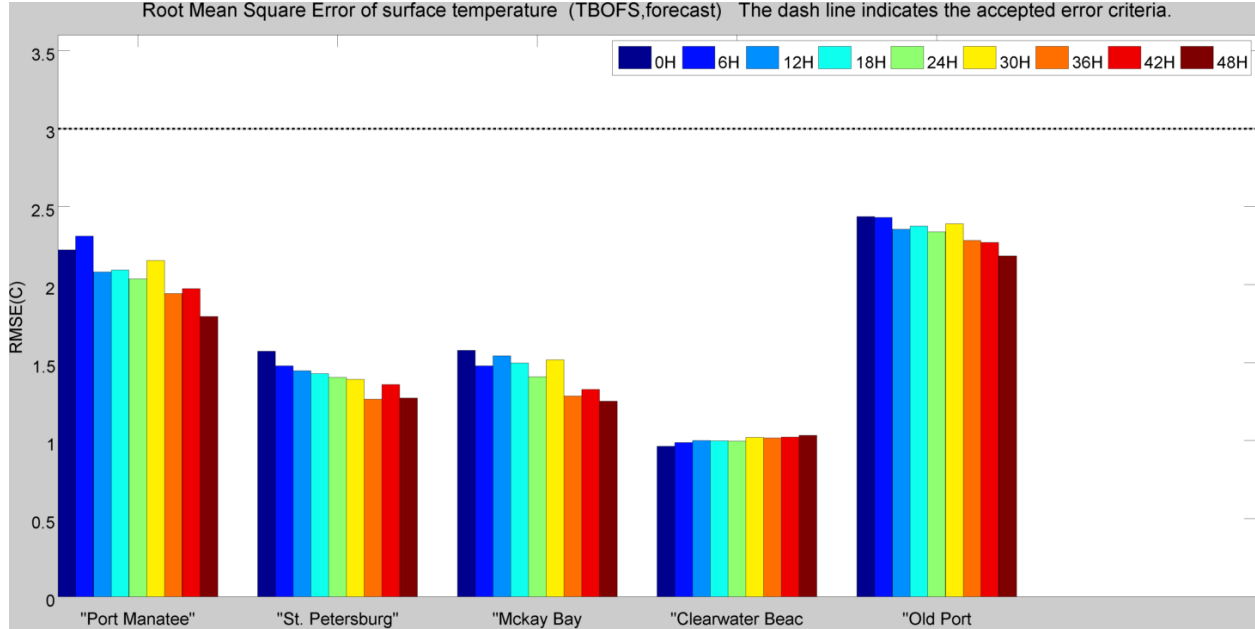
Forecast Surface Current Direction



Nowcast Surface Temperature



Forecast Surface 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.