NOAA's National Water Model: Improving Hydrologic Consistency, Operational Forecast Utility, and Enhancing Impact Based Decision Support Services

Continental-scale hydrologic forecasting models provide a consistent means to predict floods, droughts, water supply, and water quality across broad spatial scales. NOAA's National Water Model (NWM) is an operational example of such a tool. This session seeks submissions on topics aimed at improving process representation, forecast skill, and the utility of NWM output in generating forecasts. Topics of interest include improved process representation across differing landscape and anthropogenic conditions; coupled inland and coastal processes and forecasting total water level; data assimilation approaches; representation of geomorphic and bathymetric conditions as applied to flood inundation forecasting; parameterization and calibration with a focus on machine/deep learning approaches; and performance testing and evaluation. This session seeks presentations or posters on any of these topics. Particularly encouraged are presentations that focus on the operational aspects of using continental-scale water prediction tools to enhance impact based decision support services.