



Pacific seaboard runoff modelling with RAVEN Hydrological Modelling Framework

Fresh water runoff is an important part of forcing for coastal ocean models. We propose a hydrological modelling approach to model runoff from streams discharging in the Pacific Ocean along the Canadian west coast. This approach involves watershed delineation and discretization based on gridded elevation data and hydrological modelling based on RAVEN hydrological modelling framework. The resulting product is expected to address the need of operational ocean models for reliable physically-based runoff estimates including short-term forecasts. Current status of this project is presented. We discuss verification and calibration results and present our approach to extrapolation to ungauged watersheds. Automation at all stages of the modelling system development is essential and allows covering wide coastal areas.

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