



## **Modelling water and energy budgets from catchment to global scales**

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The overall purpose of the session on “Modelling water and energy budgets from catchment to global scales” is to examine our capability to simulate water and energy budgets from catchment to regional and global scales by bringing together scientists with different backgrounds and modelling approaches. A particular goal is to better understand the capabilities of evolving atmospheric and coupled hydrologic/atmospheric models, macro-scale hydrologic models, land data assimilation systems, as well as new and evolving observations that will arise during the Coordinated Enhanced Observing Period. A focus will be set on the central question of how reliable do meteorological models reproduce meteorological fields for the use in hydrological models (e.g. for flood forecasting). Coupled models with a shared SVAT are given special attention, and studies that compare model and observational datasets are especially encouraged. Terrestrial water fluxes of particular interest include evapotranspiration, runoff, river discharge and groundwater recharge as well as human perturbations of the water cycle, e.g. by water diversions. Of particular interest are analyses of large-scale droughts and floods. We also welcome studies on macro-scale water management (e.g. virtual water) and water quality issues.