

## **Advances in coupled hydrological simulations**

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Recent advances in supercomputer performance, software tools, and numerical algorithms has allowed the development of fully coupled hydrological models for the simulation of the complex nonlinear interactions in the soil-plant-atmosphere continuum at different scales. This session aims at contributions describing model developments, numerical solution approaches, and applications at all scales of interest. Examples include studies on vegetation dynamics from the single plant functioning to homogenized field-scale behavior, interactions with atmospheric circulation, regional and continental scale hydrology, etcetera.