Special Issue

Advances in Soil Hydrology in Cold Regions

Message from the Guest Editors

The complexity of soil hydrological processes in cold regions presents a unique challenge for scientific inquiry and practical management. Changes in the climate, especially warming trends, have significant impacts on the hydrology of these sensitive areas. This Special Issue aims to explore the latest advancements in the monitoring, understanding and modeling of soil hydrology in cold regions.

- Provide new insights into the physical, chemical, and biological processes affecting soil water dynamics in cold regions.
- Explore the impacts of climate change on soil moisture, permafrost thawing, snowmelt patterns, and the interaction between surface water and groundwater.
- Enhance the understanding of the interactions between soil, water, and atmospheric conditions in cold environments.
- Develop and evaluate new methodologies (e.g., remote sensing, isotopic techniques, and computational models) for studying soil hydrology in cold climates.
- Explore the new mechanisms of groundwater flow, solute transport, colloidal particles, and pollutant transport in aquifers under climate change.

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Message from the Editor-in-Chief

In the context of global changes, the sustainable management of water cycles, going from global and regional water cycles to urban, industrial and agricultural water cycles, plays a very important role on the water resources and on their relationships with food, energy, biodiversity, ecosystem functioning and human health. *Water* invites authors to provide innovative original full articles, critical reviews and timely short communications and to propose special issues devoted to new technological and scientific domains and to interdisciplinary approaches of the water cycles. We ensure a critical review process and a quick turnaround between submission and final decision.

Editor-in-Chief

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