

Special Issue

Modeling and Measurement of Cold Regions Hydrosystems and Their Evolution under Climate Change

Message from the Guest Editors

Raised by the incontestable Arctic amplification of overall climate change, the fate of carbon, nutrients and metals in Arctic river, lake and soil waters is at the forefront of field and modelling studies. Arctic warming is anticipated to result in massive carbon (C) mobilization from permafrost soils to the atmosphere, rivers and lakes, thereby potentially worsening global warming via greenhouse gas (GHG) emissions. However, the control factors, timing and reality of C, nutrients and toxicants released from soils and sediments are still poorly understood, in part because element biogeochemical cycling in continental waters of cold regions linked to biotic activity at the ecosystem level and physical transport processes between ecosystem compartments are not sufficiently characterized. This Special Issue addresses broad theoretical (modelling) and experimental (field and laboratory) studies on river, lake, surface, soil and ground water of cold regions' hydrosystems, and how ongoing climate change affects the hydrosystems of high-latitude[...] For more details, please see: https://www.mdpi.com/journal/water/special_issues/M14H4GF42M

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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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