



water

an Open Access Journal by MDPI



Effects of Climate Change on the Hydrology and Water Quality of Snow-Dominated Mountainous Environments

Guest Editors:

Dr. Graham A. Sestone

US Geological Survey, Denver, CO
80225, USA

Dr. David W. Clow

US Geological Survey, Denver, CO
80225, USA

Deadline for manuscript
submissions:

closed (28 February 2018)

Message from the Guest Editors

In many mountainous regions of the world, water for ecological and human needs is derived from snow that accumulates during the winter and spring, and melts during the spring and summer each year. These seasonal snowpacks serve as large natural water reservoirs that are particularly sensitive to effects of climate warming. Changes to snow dynamics can profoundly influence the hydrology and water quality of snow-dominated mountainous environments. Given projected changes to air temperature and precipitation in mountains of the globe, there is an urgent need for improved understanding of how both water availability and water quality will respond to changing snowpack conditions. In this Special Issue of *Water*, we invite submissions focusing on the effects of climate change on the hydrology and water quality of snow-dominated mountainous regions through field-based investigations, remote sensing observations, and/or modeling experiments. We encourage papers that focus on how changes to snow dynamics will influence the timing and magnitude of streamflow runoff, hydrologic flowpaths, soil moisture, and biogeochemical nutrient cycling.



mdpi.com/si/10950

Special Issue



water



an Open Access Journal by MDPI

Editor-in-Chief

Dr. Jean-Luc PROBST

Centre de Recherche sur la Biodiversité l'Environnement (CRBE) UMR CNRS/UPS/INPT/IRD, Centre National de la Recherche Scientifique (CNRS), University of Toulouse, Campus ENSAT, Auzeville Tolosane, Toulouse, France

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.

Author Benefits

Open Access: free for readers, with article processing charges (APC) paid by authors or their institutions.

High Visibility: indexed within Scopus, SCIE (Web of Science), Ei Compendex, GEOBASE, GeoRef, PubAg, AGRIS, CAPlus / SciFinder, Inspec, and other databases.

Journal Rank: JCR - Q2 (*Water Resources*) / CiteScore - Q1 (Water Science and Technology)

Contact Us

Water Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland

Tel: +41 61 683 77 34
www.mdpi.com

mdpi.com/journal/water
water@mdpi.com
[X@Water_MDPI](https://twitter.com/Water_MDPI)