



an Open Access Journal by MDPI

Hydrological Extremes in a Warming Climate: Nonstationarity, Uncertainties and Impacts

Guest Editors:

Dr. Rajesh R. Shrestha

Research Scientist, Environment and Climate Change Canada, Watershed Hydrology and Ecology Research Division, University of Victoria, Victoria, BC V8P 5C2, Canada

Dr. Mohammad Reza Najafi

Department of Civil and Environmental Engineering, Western University, Ontario, ON N6A 3K7, Canada

Deadline for manuscript submissions: closed (31 January 2022)

Message from the Guest Editors

This special issue will provide a platform for research that will assess the impacts of historical and projected climate change on hydrologic extremes. We seek both application studies and methodological studies that focus on hydrological extremes (peak- and low-flows) and associated risks (floods, droughts). The topics covered by this special Issue will include but not limited to the following:

Analysis of historical variability and trends in streamflow extremes (e.g., peak flow, low flow, timing) and teleconnections to hydroclimatic drivers

Model based studies on future changes in hydrologic extremes and the role of internal variability and anthropogenic forcings

Development and application of nonstationary methods for the evaluation of hydrologic extreme events

Evaluation of uncertainties of extreme value projections Methods to quantify flood and drought risks

Implications of changes in hydrologic extreme events on water resources management



Specialsue





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 scientific domains and 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