# **Special Issue**

# Measuring and Modeling Snow, Ice, and Avalanches in the Climate Change Era.

## Message from the Guest Editors

Nowadays, snowfall and snow cover formation and dynamics are terribly affected, in the face of transient climate change. As such, scientists are called to investigate the changing cryospheric dynamics under transient climate change by using an array of methods, proposing modeling tools for snow, ice, and avalanches dynamics and methods to assess and cope with the associated risks. This Special Issue thus welcomes contribution covering present and prospective dynamics of the cryosphere under present and future climate, including, but not limited to:

- Monitoring techniques for snowpack and snow dynamics, ice bodies, and avalanches.
- Modeling tools for depicting the dynamics of the cryosphere under present and prospective climate.
- Models and methods to assess cryospheric risks and to provide countermeasures.
- Experimental and modeling studies convering modified cold environments in response to the modified cryosphere.
- Scenarios of modified cryospheric processes in response to modified climate in the era of climate change.

**Keywords:** Snow; avalanches; glaciers; risk/hazard mapping; climate change; monitoring/modeling; cold regions

#### **Guest Editors**

Dr. Daniele Bocchiola

Prof. Dr. Guglielmina Diolaiuti

Dr. Michele Freppaz

# Deadline for manuscript submissions

closed (30 November 2019)



# Water

an Open Access Journal by MDPI

Impact Factor 3.0 CiteScore 6.0



mdpi.com/si/24583

Water Editorial Office MDPI, Grosspeteranlage 5 4052 Basel, Switzerland Tel: +41 61 683 77 34 water@mdpi.com

mdpi.com/journal/ water





# Water

an Open Access Journal by MDPI

Impact Factor 3.0 CiteScore 6.0



# **About the Journal**

## 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

## 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

#### **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 (Aquatic Science)

