

Snow

Call for Papers

The International Glaciological Society (IGS) will prepare a special issue of the *Annals of Glaciology* with the theme 'Snow' in 2023. The issue will be part of Annals Volume 64.

The Associate Chief Editors for this issue will be Martin Schneebeli (SLF Davos), Michaela Teich (BFW Innsbruck, Austria), Nicolas Eckert (INRAE Grenoble),
Scientific editors are: Nadine Salzmann, Michael Lehning, Yves Bühler, Tobias Jonas, Henning Löwe, Alec van Herwijnen, Marcia Phillips, Perry Bartelt, Charles Fierz, Betty Sovilla, Stefan Margreth, Christoph Marty, Chris Pielmeier, Michael Bründl (SLF Davos), Jan-Thomas Fischer, Ingrid Reiweger, Franziska Koch (BOKU Vienna, Austria), Marie Dumont, Pascal Hagenmüller (CEN, MeteoFrance, Grenoble, France), Pascal Haegeli (Simon Fraser University), Karl Birkeland (US Forest Service), Ruzica Dacic (University of Wellington, NZ), Johan Gaume (EPF Lausanne), Ulrich Strasser (University Innsbruck), Hans-Peter Marshall (Boise State University), Alex Langlois (University Sherbrooke, Canada), Chris Derksen (ECCC, Canada), Shichang Kang (Northwest Institute of Eco-Environment and Resources, China), Teruo Aoki (National Institute of Polar Research, Tokyo, Japan), Juha Lemmetyinen (Finnish Meteorological Institute, Finland), Rune Engeset (NVE, Norway), Maurine Montagnat (Université Grenoble Alpes), Nick Rutter (Northumbria University, UK).

Schedule for publication:

- 1 September 2022 – submissions open
- 30 June 2023 – deadline for submitting a manuscript to this Annals volume.
- 31 December 2023 – deadline for supplying final accepted paper.
- Accepted papers will be published online as soon as authors have returned their proofs and all corrections have been made.
- The completed *Annals* issue will be available in early 2024.

THEME

Snow is a complex material, transient and of singular beauty. While our understanding has improved over the recent decades, it still offers numerous scientific challenges. The snow cover plays a crucial role in the climate of cold regions – from high latitudes to high elevations – and impacts societies and their activities. Because of its high climate sensitivity, snow is declining, with far-reaching consequences for the environment and humanity.

Given these prospects and improvements in advanced technologies for monitoring and modelling, we announce a symposium focused on understanding snow and its impacts on the environment, people and infrastructure.

Snow will be examined at all scales – from the microscale of snow structure to the global scale.

This meeting seeks to address various challenges by bringing together scientists from diverse communities engaged in research on snow. We welcome snow-related contributions, including ground-based observations, remote sensing, laboratory experiments, numerical modelling, data compilations and analyses, risk management, water resources, climate and social impact assessment.

SUGGESTED TOPICS:

These include (but are not limited to):

1. **Observing and modelling of snow and its changes at different scales:** Snow microstructure; distribution and variability of snow cover, snow depth and SWE; Snow stratigraphy; modelling seasonal snow, including coupling of cryosphere models with regional climate models, and intercomparison of models; snow and climate – projections and forecasts of seasonal snow under a changing climate, role of meteorological extreme events
2. **Snow physics and chemistry:** heat and mass transfer in snow, snow metamorphism; physical and mechanical properties of snow; snow chemistry
3. **Snow as a component of climate,** including snow–atmosphere interactions and snow–ground interaction
4. **Remote sensing of seasonal snow and avalanches from local to global scale,** applying platforms from ground-based to satellite, including snow on sea and lake ice, snow and avalanche mapping
5. **Snow in motion and snow engineering:** snow avalanches – formation, including stability evaluation, avalanche forecasting and warning; snow avalanches – dynamics, including avalanche impact, mitigation and hazard mapping; snow tribology, including winter sports and mobility on snow; snow loads on structures
6. **Snow and biosphere,** including snow-vegetation/forest interactions
7. **Snow hydrology,** including snow distribution, snow melt and runoff

If you have questions about the suitability of your paper for this *Annals* issue, please contact the *Annals* Associate Chief Editor Martin Schneebeli (schneebeli@slf.ch).

The *Annals of Glaciology* is listed on the 'Web of Science'. Current impact factor is 2.863.

Please note the usual high standards of IGS publications apply, and authors are expected to contribute toward publication of the issue through article processing charges. For further details on article processing charges, please see <https://www.cambridge.org/core/journals/annals-of-glaciology/information/open-access-information-for-journal-of-glaciology-and-annals-of-glaciology>. For information on the preparation of manuscripts for submission, please see <https://www.cambridge.org/core/journals/annals-of-glaciology/information/instructions-contributors>.

The link to the submissions <https://mc.manuscriptcentral.com/aog>