

INTERNATIONAL GLACIOLOGICAL SOCIETY



International Symposium on
Snow



Davos Congress Centre
Davos, Switzerland
25–30 September 2022

SECOND CIRCULAR
August 2022

<https://www.igsoc.org/symposia/2022/davos2022/>



The International Glaciological Society will hold an International Symposium on 'Snow' in 2022. The symposium will be held at the Davos Congress Centre, Davos, Switzerland on 25–30 September 2022.

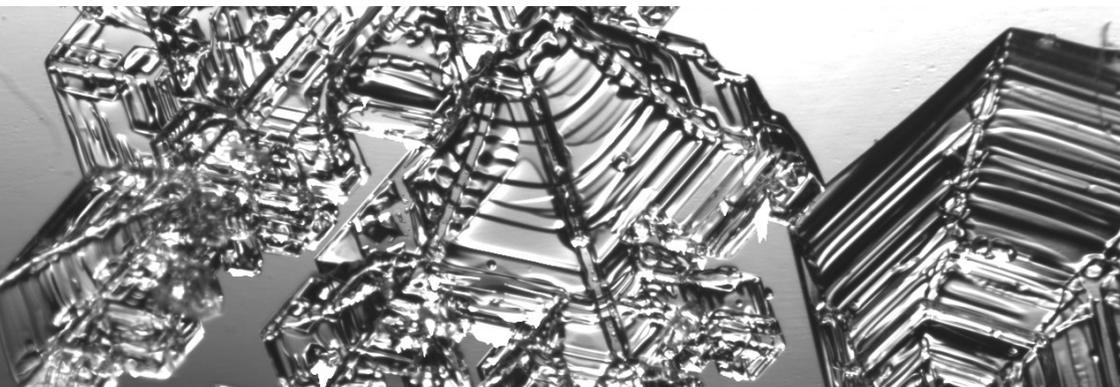
THEME

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.





PROGRAM

True to tradition, the symposium will include oral and poster sessions interlaced with ample free time to facilitate interactions between the participants. Additional activities include an opening icebreaker, a banquet dinner and a choice of five different excursions during the mid-symposium afternoon break.

We offer participants the opportunity to organize small workshops on specific topics, e.g. drone measurements of snow depth, stability tests, new methods to measure snow properties. If you are interested in conducting such a workshop, please contact the Science Steering and Editorial Committee.

VENUE

The SLF is well known worldwide as a leading research institute in its field. Around 150 staff study snow, atmosphere, mass movements, permafrost and mountain ecosystems and translate their knowledge into innovative products for practical use. Within the framework of the CERC (Climate Change, Extremes, and Natural Hazards in Alpine Regions Research Centre), the SLF investigates the effects of climate change on extreme events and natural hazards in mountain regions.

The SLF also provides various services, including the Avalanche Bulletin, advice on avalanche protection measures, and expert opinions on avalanche accidents, and is active in the development of warning systems for natural hazards.

The Symposium will take place in the Davos Congress Centre, centrally located between Davos Dorf and Davos Platz. The Congress Centre offers a selection of perfectly organized rooms, equipped with top-of-the-line presentation technology.





REGISTRATION FEES

All fees are in Swiss francs, CHF

Early registration until 23 August 2022

– Participant (IGS member):	CHF 650
– Participant (not IGS member):	CHF 730
– Student or retired (IGS member):	CHF 350
– Student or retired (not IGS member):	CHF 400
– Accompanying person (≥ 18):	CHF 190
– Accompanying person (7–17):	CHF 155
– Accompanying person (≤ 6):	Free

Surcharges

- Registration after 23 August 2022: add CHF 40
- Registration after 12 September 2022: add further CHF 100

All prices will be charged in UK£ equivalent at the exchange rate valid near the date of transaction.

The fees include:

- **Participants:** Attendance at the conference sessions and activities, the Icebreaker, the midweek excursion, the Banquet and coffee-break refreshments from Monday to Friday.
- **Accompanying persons:** the Icebreaker, the midweek excursion and the Banquet. **Attendance at the presentation sessions is not included.**

Non-member registration includes a year's membership of the IGS.

Please check whether you will require a visa to enter Switzerland. If you need an invitation letter, please contact the IGS office.

Please ensure you have the correct covid-19 vaccination status for the trip to Davos at the time of travel. This is the responsibility of individual travellers.





LOCATION

Davos is located 1560 m a.s.l. in the heart of the Canton of Grisons in the eastern Swiss Alps. September temperatures average highs of 14°C and lows of 4°C. The town of Davos is easily accessible by train. It is about 130 km southeast of Zurich from where the train journey takes about 2½ hours. There is a major international airport in Zurich and right at the airport you can board a train (changes required at Zurich main station and Landquart).

ACCOMMODATION

There are many hotels in Davos, from simple to luxurious. It may be worth looking on the common internet platform, but we have also contacted some hotels that cover a wide range of comfort and price. They offer a special price and have a block of rooms available until the end of August.

Category I (CHF 55–90): [Youth Hostel](#) (double and shared rooms)

[Hotel Ochsen](#) (single and double rooms)

[Hotel Strela](#) (single and double rooms)

[Hotel Dischma](#) (single and double rooms)

Category II (CHF 90–120): [Spenglers Inn](#) (single and double rooms)

Category III (CHF 130–150): [Hotel Morosani Schweizerhof](#) (single and double rooms)

[Kongresshotel](#) (single rooms; double rooms on request)





To benefit from the special rate, please book your accommodation using the keyword 'IGS2022'. For a shared room, or for a longer stay (beyond 25-30 September), please enquire directly with the hotel. Bookings must be made by phone or email. You will not receive a special rate if you book through Booking.com or similar sites. The allocated rooms are guaranteed until 30 August 2022. After that, there is no guarantee of room availability or special rates.

Price basis for the categories is a single room including breakfast.

Please note that in case of a cancellation, the individual hotels might have different refunding policies.

SOCIAL EVENTS

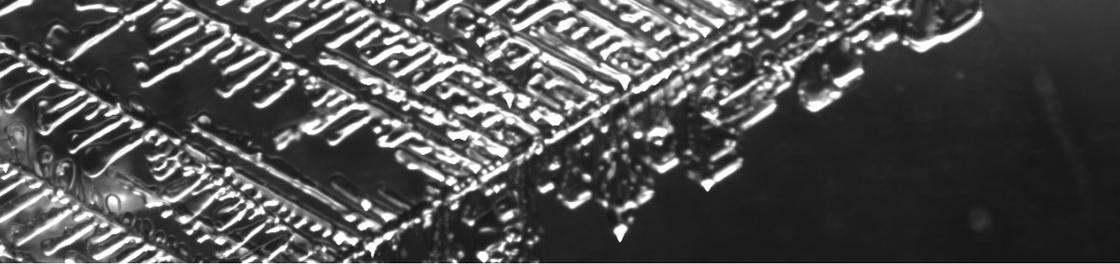
ICEBREAKER

We plan to hold an icebreaker reception at 17:00 on Sunday 25 September at the Davos Congress Centre. Food and beverages will be available. Participants can also use this opportunity to complete their registration and collect their conference materials.

BANQUET

The traditional Symposium Banquet will be held at 19:00 on the evening of Thursday 29 September, also at the Davos Congress Centre.





MID-WEEK EXCURSIONS

There will be a choice of five excursions:

(1) Flüelapass, permafrost (Marcia Phillips) On this trip we will see mountain permafrost landforms in a spectacular setting at 2400 m a.s.l. Flüelapass was the first permafrost research site in the Swiss Alps in the early 1970s and ground temperatures and ice contents have been monitored ever since. We will see different types of instrumentation and discuss interesting phenomena such as ice-rich permafrost in a lake shore, a rock glacier advancing towards a road or air fluxes streaming through a talus slope. The field trip includes a 2–3 hour hike with an elevation difference of 300 m in mountainous terrain and requires good fitness, hiking shoes and warm, waterproof clothing.

Please note there is a limit of 23 participants for this excursion.

(2) Weissfluhjoch, Study plot, Snow and Avalanches (Christoph Marty/ Charles Fierz) This excursion brings us to the Weissfluhjoch, where we will visit the oldest test site of the WSL Institute of Snow and Avalanche Research SLF with a continuous series of measurements since the 1930s. It is equipped with numerous measuring instruments. It is the only place in the world at this elevation where a continuous daily series of weather and snow measurements has been in place for more than 80 years. From the test site we will then enjoy a beautiful 1-hour hike to the station Höhenweg. For this excursion good fitness and hiking shoes are required.





(3) Höhenweg-Böden, Avalanche protection (Stefan Margreth) This excursion takes us to the middle station of the Parsenn cable car: Parsenn-Höhenweg. From there we will enjoy a beautiful 2-hour hike to Davos Dorf. On the way we can observe several avalanche protection measures. For this excursion good fitness and hiking shoes are required.

(4) Seehornwald, Carbon observation system, rock slope failure (Susanne Burri, Caprez Ingenieure) This excursion takes us to the Davos–Seehornwald research site, which is located just out of the town of Davos in a subalpine forest at 1640 m a.s.l. mainly consisting of Norway spruce trees that are about 30 m tall and up to 450 years old. Here, scientists investigate how air pollution and climate change affect forest health, growth and development as well as the forest's greenhouse gas budget. The first CO₂ flux measurements started as early as 1995 and the site is one of the oldest ecosystem flux sites globally (continuous eddy covariance flux data since 1997). It is the only subalpine Class 1 forest site within the European Research Infrastructure ICOS (Integrated Carbon Observation System). We will get a brief overview of the station as well as its environmental surroundings and we present some interesting scientific observations from long-term research. The excursion includes an easy hike through the Seehornwald, so hiking shoes are required.

In March 2020, a major rockfall occurred on the southern flank of the Seehorn. Where there were many trees before, one now looks onto a boulder field. The area affected by the rockfall is so large that it is clearly visible even from Davos Platz without binoculars. About 10 000 m³ of debris and earth material were released. The area where the rockfall occurred is not called rockfall forest for nothing. How did the event occur? You will find out on this excursion.





(5) Stillberg, Snow-forest interaction, mountain ecosystem (Peter Bebi)

On this excursion, we will explore the Stillberg, German for ‘silent mountain’, and the alpine treeline from the valley floor. The Jakobshorn gondola will take us to the Jakobshorn peak. From there we hike down to the Stillberg and Teufi. We will discuss the results of a 45-year long afforestation study at the treeline and various ecosystem manipulation experiments studying the effects of elevated atmospheric CO₂, nutrient fertilization and warmer climatic conditions. Good hiking shoes and adequate clothes are required.

ABSTRACT AND PAPER PUBLICATION

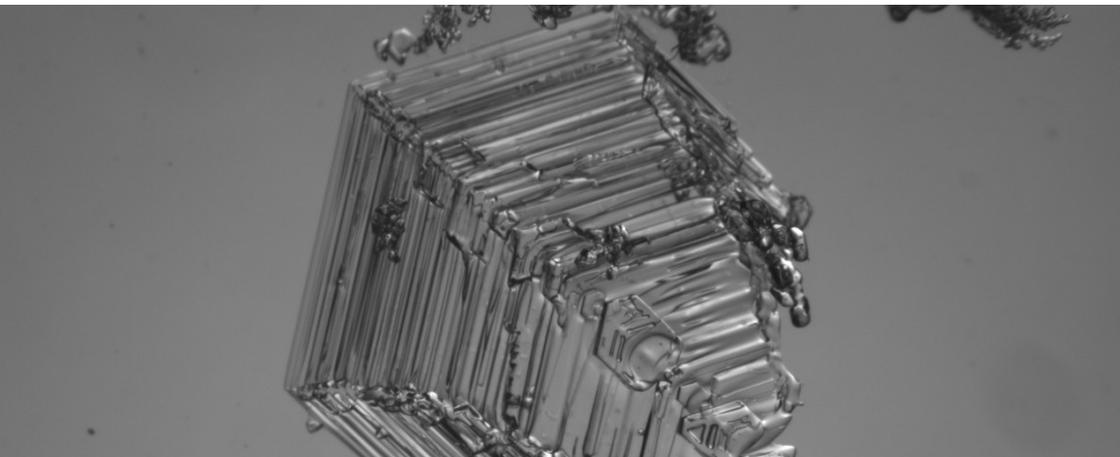
Participants who wish to present a paper (oral or poster) at the Symposium will be required to submit an abstract by 30 June 2022. Accepted abstracts will be posted on the Symposium’s website. The Council of the IGS will publish a thematic issue of the *Annals of Glaciology* on topics consistent with the Symposium themes. Participants are encouraged to submit manuscripts for this *Annals* volume.

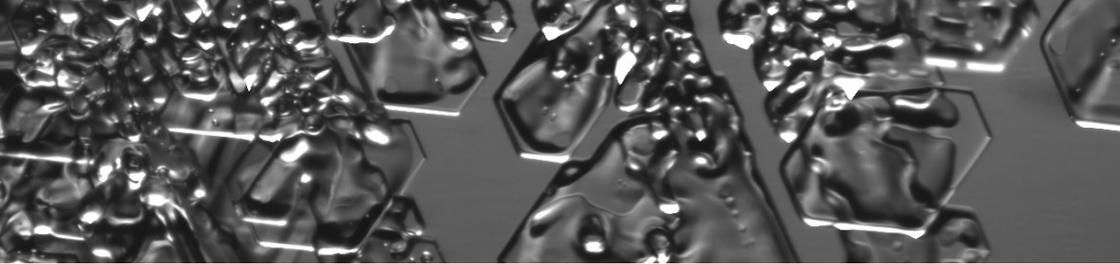
SYMPOSIUM ORGANIZATION

Magnús Már Magnússon (International Glaciological Society)

LOCAL ORGANIZING COMMITTEE

Jürg Schweizer, Martin Schneebeli, Nadine Salzmann, Marion Hofmänner, Cornelia Accola





SCIENCE STEERING AND EDITORIAL COMMITTEE

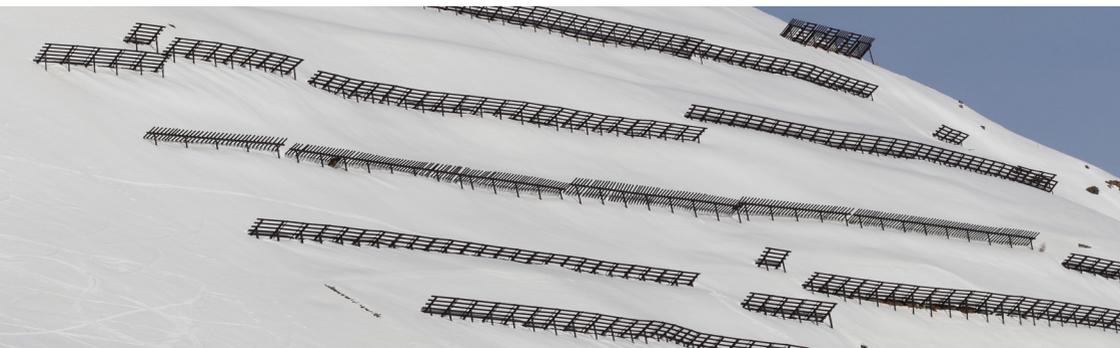
Martin Schneebeli, Nadine Salzmann, Michael Lehning, Yves Bühler, Tobias Jonas, Henning Löwe, Alec van Herwijnen, Marcia Phillips, Perry Bartelt, Charles Fierz, Betty Sovilla, Christoph Marty, Chris Pielmeier, Michael Bründl, Rebecca Mott, Stefan Margreth (SLF Davos), Jan-Thomas Fischer, Michaela Teich (BFW Innsbruck, Austria), Ingrid Reiweger, Franziska Koch (BOKU Vienna, Austria), Marie Dumont, Pascal Hagenmüller (CEN, MeteoFrance, Grenoble, France), Nicolas Eckert (INRAE Grenoble), Pascal Haegeli (Simon Fraser University), Karl Birkeland (US Forest Service), Ruzica Dadic (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)

FURTHER INFORMATION

If you wish to attend the symposium, please register online at <https://www.igsoc.org/symposia/2022/davos2022/>

Information will also be updated on the local website: <https://www.slf.ch/en/about-the-slf/events-and-courses/international-symposium-on-snow-2022/>

Please use the symposium hashtag #IGSDavos2022 when you tweet about it





IMPORTANT DATES

Snow

Opening of online abstract submission:	18 April 2022
Abstract submission deadline:	30 June 2022
Opening of online registration:	14 July 2022
Notification of abstract acceptance:	8 July 2022
Early registration deadline:	23 August 2022
Deadline for full refund:	5 September 2022
Deadline for refund on a sliding scale:	15 September 2022
Late registration surcharge starts:	12 September 2022
Symposium starts:	25 September 2022

Annals of Glaciology volume 65

Paper submission deadline:	1 April 2023
Final revised papers deadline:	30 November 2023

The Call for Papers for the *Annals of Glaciology* is posted on https://www.igsoc.org/annals/call_4_papers/. Accepted papers will be published as soon as authors have returned their proofs and all corrections have been made.

Hard copy publication is scheduled for mid to late 2024.

