

*IACS promotes the advancement
of cryospheric sciences of
the Earth and solar system*



IACS

International Association
of Cryospheric Sciences

IACS NEWSLETTER

April 2023

Update on IUGG Assembly 2023

The IUGG General Assembly is approaching. We look forward to seeing many of our members there to exchange scientific ideas and plan further activities with you.

Please note that all presenting authors must register by 17 April and that the Early Bird Registration Fee deadline is 28 April. When you register please select IACS as your association as this directly affects funding allocated to IACS from IUGG.

Venue: [CityCube Berlin](#)

Time: cryosphere sessions all being scheduled for **12-16 July**.

Registration: [Registration Guidelines | IUGG 2023 Berlin](#)

Note that IUGG offers significant reduced fees for undergraduate students, PhD, low and middle-income countries and retired/emeritus, as well as single day and four days registrations.

The IUGG opening ceremony will be **Thursday 13 July**.

IACS highlights:

- IUGG Gold Medal lecture by Valérie Masson-Delmotte (LSCE, France)
- IUGG Early Career Scientist Award talks by Farooq Azam, Natalya Gomez and Johan Gaume
- IACS keynote Union Lecture by Ricarda Winkelmann (Potsdam Institute for Climate Impact Research) **Friday 14 July**
- IACS Open Plenary Meeting with election of new officers for the IACS Bureau for 2023-2027 **Saturday 15 July**
- Fiesta Cryospherica dinner **Saturday 15 July**
- Graham Cogley awards for student oral and poster presentations

IACS working groups, standings groups, joint commissions and bodies can request rooms for splinter meetings during IUGG. Please contact IACS Secretary General [Richard Essery](#) to reserve a booking.

All participants are required to follow the [IUGG Code of Conduct](#).

Our IACS homepage will give further details on IACS activities at IUGG: [Berlin 2023 – IACS \(cryosphericsscience.org\)](#)

The IUGG website has all details on the assembly: [IUGG 2023 Berlin | Welcome](#)



Phishing e-mails

Please be aware that phishing e-mails supposedly on behalf of the IACS president, other IACS officers, IUGG officers and Association Presidents are circulating. Do not reply to these e-mails and do not open any attachments. If in doubt contact the officer directly by their official email.

IUGG Gold medal to Valérie Masson Delmotte

IACS is very proud to have successfully nominated Prof Valérie Masson Delmotte (Laboratoire des sciences du climat et de l'environnement – LSCE, France) for the IUGG Gold Medal, the highest honour of IUGG. Beyond her outstanding scientific contribution, Valérie has dedicated a large part of her time to the service of our community. She has served IACS as head of the Cryosphere, Atmosphere and Climate Division, and contributed to IUGG as member of the International Commission on Climate (IAMAS), and as co-chair of inter-Association sessions and symposia (IACS, IAMAS and IAPSO). Over the last twenty years she has made an invaluable contribution to the success of the Intergovernmental Panel on Climate Change (IPCC), most notably in recent years as Co-Chair of the Sixth Assessment Report's Working Group 1. Valérie has also dedicated much time to outreach activities, for the public at large and school children.

The IUGG Gold Medal is bestowed on Valérie Masson-Delmotte for "**her leading role in deep ice core climate-record projects, unravelling isotope deposition on polar snow, and for her outstanding contributions to increasing society's awareness of climate change**".

The Gold Medal will be presented to Valérie at the Opening Ceremony of the IUGG General Assembly 2023 on 13 July 2023 in Berlin, Germany.



7th Snow Science Winter School

After a two-year break, the 7th EGU Snow Science Winter School took place at the end of January in Davos, Switzerland, hosted by the WSL Institute of Snow and Avalanche Research SLF and co-organized with MétéoFrance and the Finnish Meteorological Institute. An international and motivated group of 25 participants was welcomed by bright sunshine, spring temperatures, and unusually little snow; snow-free patches providing evidence of high variability in snow properties'. However, low snow depths did not hamper high spirits! During the week-long course, students gained hands-on experience with diverse snow measuring techniques, from traditional snow profiles to more modern instruments such as the Snow Micro-Penetrator. Shallow snowpits presented a large diversity of grain shapes - even intact precipitation particles thanks to a snowfall towards the end of the week. Equally diverse were the science questions proposed and investigated by different groups through field experiments designed by the students themselves. Amongst the experiments were a 20-m long trench to document change in snow properties from a tree stem to the open, distributed snowpits to explore how the river affects snow microstructure, accurate profiles to enable comparison of several instruments, and more. Field days were complemented by lectures on all possible topics snow. A visit to the local brewery on the final evening rounded off the course and marked Martin Schneebeli's finish line of all seven snow schools before his well-deserved retirement. Thank you, Martin!

The 7th EGU Snow Science Winter School was supported by European Geosciences Union EGU, Centre National pour la Recherche Météorologique CNRM, Finnish Meteorological Institute FMI, Swiss Federal Institute for Forest, Snow and Landscape Research WSL and International Association of Cryospheric Sciences IACS



7th Snow Science Winter school participants.

Division Deputy Head Ice sheets

Deputy Heads for the five IACS topical divisions may be appointed by the IACS Bureau to support the Head of Division in their duties.

From January 2023 Ted Scambos from The Earth Science and Observation Center (ESOC), at the Cooperative Institute for Research in Environmental Science (CIRES) USA is now assisting Sophie Novicki as deputy head for the Ice sheets division.

Ted Scambos



Rotation of GAPHAZ officers

Pratima Pandey (Indian Institute of Remote Sensing, Dehradun, India) has been selected for the role of the GAPHAZ Secretary for 2023-2024. She will join the officer team together with Michele Koppes (Chair) and Holger Frey (Vice Chair).



Pratima Pandey

RAGMAC-GlaMBIE Workshop

From 6-8 February 2023, a RAGMAC-GlaMBIE workshop was organized at the University of Zurich, Switzerland. On the first day of the workshop, authors involved in the IACS Working Group on Regional Assessments of Glacier Mass Change (RAGMAC, <https://cryosphericsscience.org/activities/wg-ragmac/>) discussed best practices for glacier mass changes based on glaciological and geodetic methods and related uncertainties.

The second workshop day was dedicated to the ESA [GlaMBIE](#) project, which builds on nascent efforts within and directly contributes to RAGMAC to set up and coordinate an intercomparison exercise of regional glacier mass changes from glaciological in-situ measurements and various remote-sensing sources, including geodetic DEM differencing, altimetry, and gravimetry.



RAGMAC workshop participants at the University of Zurich. Dinner featuring traditional Swiss Alphorn performance by Samuel Nussbaumer from WGMS/GlaMBIE and his friend.



Black ice and ice skaters on lake Maridalsvannet in Oslo, Norway on 1 January 2023. The photo is taken close to a river inlet, which causes variations in the ice thickness. To the right of the skaters we can see the boundary between thicker (15 cm) and thinner (2-3 cm) ice, thinning towards open water. The change in ice thickness is due to mixing of the 0°C inlet river water and the slightly warmer lake water. Photo: Kjetil Melvold.

GGOS Portal – Community Survey

Global Geodetic Observing System (GGOS) is conducting a survey to inquire the opinions of geodetic data users on data availability and visibility and to identify requirements for a comprehensive and user-friendly GGOS-Portal. The survey is open until 28 April at <https://ggos.org/portal/>.



EGU Weertman medal to Etienne Berthier

We congratulate Etienne Berthier, IACS National Correspondent of France and GLIMS core team member, as recipient of the Julia and Johannes Weertman Medal of the European Geosciences Union (EGU) for his outstanding scientific achievements in regional and global glacier mass change and remote sensing, and for immense service to the global cryospheric community.



Etienne Berthier

About IACS

The International Association of Cryospheric Sciences (IACS) is a constituent Association of the International Union of Geodesy and Geophysics (IUGG).

IACS promotes and sponsors workshops, symposia and educational activities.

IACS has targeted working groups on cryospheric topics.

IACS offers free individual membership: www.cryosphericciences.org

The IACS newsletter is issued 2-4 times a year.

Previous newsletters are found on: cryosphericciences.org/newsletter/