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International Association
of Cryospheric Sciences

IACS NEWSLETTER

April 2025

Early-Career Researcher Award

IACS is pleased to announce the 2025 recipients of the IACS Early Career Scientist (ECS) Award: **Marie Bouchet** and **Giacomo Traversa**. IACS received 15 nominations for this award.

Marie Bouchet from the Laboratory for Sciences of Climate and Environment, National Center for Scientific Research, France, received the award for her paper:

Bouchet, M., Landais, A., Grisart, A., Parrenin, F., Prié, F., Jacob, R., Fourré, E., Capron, E., Raynaud, D., Lipenkov, V. Y., Loutre, M.-F., Extier, T., Svensson, A., Legrain, E., Martinerie, P., Leuenberger, M., Jiang, W., Ritterbusch, F., Lu, Z.-T., and Yang, G.-M. (2023). The Antarctic Ice Core Chronology 2023 (AICC2023) chronological framework and associated timescale for the European Project for Ice Coring in Antarctica (EPICA) Dome C ice core, *Clim. Past*, 19, 2257–2286.

<https://doi.org/10.5194/cp-19-2257-2023>

The panel citation: This paper presents a new synthesis for the chronology of East Antarctic ice cores over the last 800,000 years. By integrating diverse dating tools, modeling techniques, and new ⁸¹Kr measurements, the authors reduce the dating uncertainty by a factor of 2, which is an important step forward for the paleoclimate community. Their comprehensive approach, including novel methods using oxygen isotopes in air bubbles, enhances our ability to analyze deeper ice-core layers. This work is already a reference in the field, demonstrating strong leadership in bringing together different communities and unifying multiple datasets.

Giacomo Traversa, from the Institute of Polar Sciences, National Research Council of Italy, Italy, received the award for his paper:

Traversa, G. and Di Mauro, B. (2024). Weathering crust formation outpaces melt-albedo feedback on blue ice shelves of East Antarctica. *Commun Earth Environ* 5, 740.

<https://doi.org/10.1038/s43247-024-01896-5>

The panel citation: This innovative and elegant study investigates the effect of weathering crust formation over blue ice areas of East Antarctic ice shelves. By integrating in-situ and remote-sensing data, the authors reveal that surface weathering can increase albedo, suggesting a potential negative feedback to climate warming. Their findings challenge conventional understanding by demonstrating that weathering crust formation can outpace the melt-albedo feedback. Given the limited knowledge on this topic, this research provides new insights that will eventually inform climate models in this region.

The 2025 evaluation panel consisted of Mathieu Morlighem (Chair), Christine Hvidberg, Martin Truffer, Alex Fraser, Sophie Nowicki, Farooq Azam, Doug Brinkerhoff, and Ji-Woong Yang.



Marie Bouchet



Giacomo Traversa

The IACS Early Career Scientist (ECS) award is a cash prize of €1000 awarded every two years to two early career scientists who have published the best scientific papers on a cryospheric subject as assessed by an ad-hoc evaluation committee.

Celebration of the first World Day for Glaciers

The World Glacier Day was celebrated for the first time on 21 March 2025. A high-level event and joint celebration of the first World Day for Glaciers and World Water Day took place on 20–21 March 2025 in UNESCO Headquarters in Paris. On 20 March there were panel discussions and planning of the UN Decade of Action for Cryospheric Sciences. Ji-Woong Yang represented IACS in the session of Education and Capacity Building. Ji-Woong Yang and Farooq Azam from the IACS bureau were also present at the celebration taking place on 21 March.

Local events took place in many countries around that date. The World Glacier Monitoring Service (WGMS) keeps a [list of national and international events](#). Here we shortly report on some of the events.

In **China**, the Dagu Glacier Forum was held 15-18 March at Dagu Glacier Park. Liss Andreassen, IACS president, gave a virtual welcome speech and a scientific talk on behalf of IACS at the event.

In **Iceland**, a joint seminar called 'Glaciers, hydropower and science', shed light on the fruitful collaboration between institutes related to glaciological research, and how scientific results are used to make decisions related to future hydro-power utilization. In addition, winners of the glacier youth competition were announced and an exhibition of aerial images and historical photographs of Icelandic glaciers was opened.

In **Norway**, a national full day seminar was held on 21 March at the Climate House in Oslo. The topics covered included glacier archeology, consequences for ecology in lakes downstream glaciers and glacier mountaineering in addition to overview talks on what is going on with glaciers globally and locally.



From the panel discussion on Thursday 20 March where Ji-Woong Yang represented IACS. Right: Michael Zemp, WGMS director, participated in the celebration in Paris. Photo: Di Wang and WGMS.



The World Day of Glaciers was celebrated with seminar, exhibition and glacier youth competition in Reykjavik, Iceland.

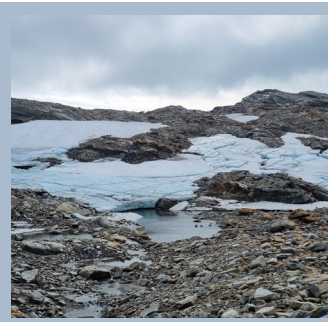
Photos: Kristinn Ingvarsson



Left: The World Day of Glaciers and the World Water Day was celebrated in Oslo, Norway. Right: Liss Andreassen, IACS president, gave an online welcome speech and a scientific talk on behalf of IACS at the Dagu Glacier Forum, China, on 16 March. Photo: Bjørn Lytskjold & Christina D. Prestegård

Vanishing glaciers - call for papers

IACS is contributing to a special issue of the *Annals of Glaciology* with the theme '[Vanishing Glaciers](#)' in 2025. Deadline for submitting papers is **1 June**. More information is also given in the International Glaciological Society's bi-weekly seminar on 15 January: '[Vanishing glaciers & 2025 International Year of Glaciers' Preservation](#)' consisting of five short talks by Liss Andreassen, Dominic Boyer, Hrafnhildur Hannesdottir, Bruce Raup and Hester Jiskoot.



Bringing the Arctic sea ice observational and modelling communities together to assess sea ice loss and its impacts

The Climate and Cryosphere (CliC) Arctic Sea Ice Working Group (ASIWG) held their first open meeting since 2023. The meeting was held in Boulder, Colorado (USA) on 23 March 2025 with over 30 attendees.

Approximately 36% of the attendees were Early Career Researchers (ECR). After an introduction, which included the presentation of new members of the working group, the



morning sessions were dedicated to: (1) presentations and discussions on the lessons learned from the 4th International Polar Year (IPY) in 2007-2008 and future priorities and coordination opportunities for the sea ice community as planning begins for the 5th IPY in 2032-2033 (2) examples of joint sea ice modeling and observational activities and recommendations for better supporting joint activities in the future, and (3) novel applications of open science in the cloud, artificial intelligence, and machine learning for sea ice science. The afternoon session was focused on upcoming products, observing program updates, and observational opportunities to facilitate coordination and collaboration across the international sea ice community.

At the end of the workshop, there was a fruitful discussion that centered on recommendations and suggestions for future ASIWG activity priorities. The workshop collectively identified the need for a planning tool to help the broader Arctic science community learn about and coordinate with various upcoming field activities. There was discussion on the need for identifying linkages between the Arctic and Antarctic environments with respect to scientific similarities and their roles in the global climate, as well as practicalities in the standardization of observing methods for the 5th IPY between the Arctic and the Antarctic. This led to strong support from the workshop attendees for an updated edition of the *Field Techniques for Sea Ice Measurements* book (first edition edited by Hajo Eicken and others, issued in 2009), to help support 5th IPY field observational activities, which the ASIWG has agreed to undertake. There were also suggestions for the need to revisit the World Meteorological Organization's sea ice nomenclature given the vast changes in the Arctic sea ice state and the need for more language translations, as well as Indigenous knowledge input. A suggestion for supporting hackweeks to support specific science and data challenges was put forward as one of the activities that the ASIWG could also support in the coming years. We thank the International Association of Cryospheric Sciences (IACS) and the World Climate Research Programme's Climate and Cryosphere (CliC) project for their valuable support.

Report by Melinda Webster (University of Washington)

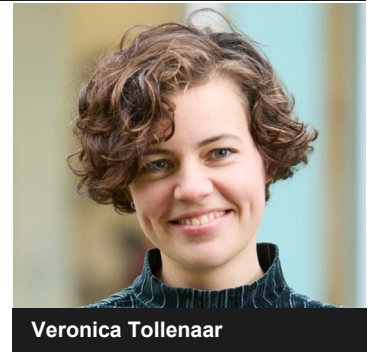


Mt Stanley viewed from Mt Baker 1906 and 2022. Nestled on the Uganda-DR Congo border in East-Africa, the Rwenzori Mountains, a UNESCO World Heritage site, are home to some of the world's last tropical glaciers. The ice in the Rwenzori Mountains is retreating and highlights the rapid ice loss in East Africa, with profound consequences for climate science and spiritual heritage. Beyond the science, the loss is deeply cultural. For the Bakonzo people, the glaciers are sacred, believed to be home to their god, Kithasamba. The glaciers' disappearance signals not just an environmental crisis, but the erosion of an irreplaceable cultural heritage. Text and 2022 photo by Klaus Thymann/Project Pressure. 1906: photographer Vittorio Sella on expedition with Luigi Amedeo of Savoy, Duke of Abruzzi. See more at www.project-pressure.org

ECSNet Project

Veronica Tollenaar is the Early-career scientist (ESC) representative of IACS. Read her blogpost: <https://iugg-ecs.org/early-career-representative-of-iacs-veronica-tollenaar/>

The “[ECSNet](#): the IUGG Early-Career Scientists Network” received funding from IUGG in 2024, aiming to establish a dynamic new network form ECSs across all IUGG Associations.



Veronica Tollenaar

BACO-25

The IAMAS-IACS-IAPSO Joint Assembly 2025 ([BACO-25](#)) will be held from 20-25 July 2025 in Busan, Republic of Korea.

The scientific program will include IACS sessions on the cryosphere and cryosphere-related symposia joint with IAMAS or IAPSO. IACS will have an open plenary meeting for its members and correspondents. IACS working groups, standings groups, joint commissions and bodies can request rooms for splinter meetings during the assembly.

IACS highlights will also include a plenary keynote lecture by Ayako Abe-Ouchi (University of Tokyo) and Graham Cogley awards for student oral and poster presentations.

- All authors need to register by 15 April 2025.
- Early bird registration up to 30 April 2025.

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/