



IUGG



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Newsletter

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Editor: Gyula Tóth

IAG Communication and Outreach Branch
Department of Geodesy and Surveying
Budapest University of Technology and Economics
H-1521 Budapest, Hungary

Information Service of the International Association of Geodesy

<http://www.iag-aig.org>

newsletter@iag-aig.org

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The *IAG Newsletter* is under the editorial responsibility of the *Communication and Outreach Branch* (COB) of the IAG.

It is an open forum and contributors are welcome to send material (preferably in electronic form) to the IAG COB. These contributions should complement information sent by IAG officials or by IAG symposia organizers (reports and announcements). The *IAG Newsletter* is published monthly. It is available in different formats from the IAG new internet site: <http://www.iag-aig.org>

Each *IAG Newsletter* includes several of the following topics:

- I. news from the Bureau Members
- II. general information
- III. reports of IAG symposia
- IV. reports by commissions, special commissions or study groups
- V. symposia announcements
- VI. book reviews
- VII. fast bibliography

General Announcements

Urgent need to stabilize the global geodesy supply chain

Representatives from multiple fields of defence, policy, and science agencies as well as funding agencies acknowledge the risks associated with failure and degradation of the global geodesy supply chain.

The Global Geodesy Supply Chain

Refers to the collection of:

- Ground station observatories
- Data centres
- Analysis centre
- Highly qualified people

With the mission to:

- Create geodetic products required by satellites everyday
- Necessary for people and machines on Earth
- To accurately and reliably transmit and receive information between Earth and space



BONN, GERMANY: The expert attendees agreed to advance mutual efforts to work with the UN-GGCE to sustain and advance the global geodesy supply chain. PHOTO: UN-GGCE

At an expert consultation meeting convened by the United Nations Global Geodetic Centre of Excellence ([UN-GGCE](#)) at the UN Campus in Bonn, Germany on 22 to 23 April, the 46 attendees agreed that the quality of geodetic products required by satellites must not degrade from current levels.

“It is vital to have meetings like this so Member States, supported by the UNGGCE, have the opportunity to explain the importance of the global geodesy supply chain to people in government who have the skills and influence to help us strengthen it”, says Nick Brown, Head of Office, UN-GGCE

Threat to our use of space

The participants were introduced to the global geodesy supply chain and why it is vital for national economies and the operation of critical infrastructure. This was followed by discussions on the weaknesses in the supply chain and how this is a threat to our use of space from a civilian and defence perspective.

Pathways and actions to address the weaknesses in the short medium and long-term were also discussed.

One of the joint decisions to come out of the meeting was “Member States resolve to coordinate and advance mutual efforts to work with the UNGGCE to sustain and advance the global geodesy supply chain”. In the short term, the focus will be on stabilizing the existing supply chain, so it is able to deliver basic operational requirements to support essential Positioning, Navigation and Timing (PNT) applications.

Member States were also asked to explore options to declare contributions to the global geodesy supply chain as critical national infrastructure.

Need for strong evidence

Of the highest priorities Member States have asked for is to get answers to questions like “What does a ‘stabilized’ ground station network look like?” and “What is the impact to positioning, navigation and timing capabilities of losing specific ground stations?”.

The discussions from this meeting will be included in the 1st Joint Development Plan on Global Geodesy. The Member States agreed to support the UN-GGCE staff in the creation and delivery of the 1st Joint Development Plan on Global Geodesy by August 2024.

UNGGCE Newsletter May 2024
Anne Jørgensen

Meeting Announcements

IAG Scientific Assembly 2025



The next IAG Scientific Assembly will be organized in Rimini, Italy between 1-5 September, 2025. The conference website is available at <https://eventi.unibo.it/iag2025>.

Important deadlines:

- Abstract deadline: March 15, 2025
- Early bird registration: November 1, 2024
- Regular registration: June 1 – July 30, 2025
- Late on-site registration: August and September, 2025.

Stefano Gandolfi, University of Bologna

GGOS Topical Meeting on the Atmosphere



www.ggos.org/event/ggos-topical-meeting-atmosphere/

Supported by

IUGG – International Union of Geodesy and Geophysics
IAG – International Association of Geodesy
IAGA – International Association of Geomagnetism and Aeronomy
Helmholtz Centre Potsdam **GFZ** German Research Centre for Geosciences
BEV – Federal Office of Metrology and Surveying, Austria
DGFI-TUM – Deutsches Geodätisches Forschungsinstitut, Technische Universität München

GGOS serves as an integrating framework for all components of the International Association of Geodesy, providing a clearinghouse for geodetic expertise and fostering interdisciplinary research. A current challenging topic is the modelling of spatio-temporal variations of the atmosphere (troposphere, stratosphere, mesosphere, thermosphere, ionosphere/plasmasphere) and the magnetosphere using geodetic and geophysical observations. Several colleagues are making great progress in this field, and therefore, GGOS is convening this meeting to bring together all these colleagues to share common research points and to identify new topics for study. The scope of the meeting also encourages the participation of colleagues from the International Association of Geomagnetism and Aeronomy, with the main objective of establishing a multidisciplinary network of scientists to integrate geodetic and geophysical technologies for comprehensive monitoring of the atmosphere and categorise existing and potential new related applications that contribute to the dissemination and societal use of research results in this important field. The meeting will be held face-to-face from 7 to 9 October 2024 at the *Wissenschaftsetage im Bildungsforum* in Potsdam, Germany. Attendance is free (no registration fee), but pre-registration is required to ensure room capacity. Participants are invited to submit their papers to the journal *Advances in Space Research (ASR)*, Special Issue: Ionospheric Imaging: Recent Advances and Future Directions. Thanks to the support of IUGG, IAGA and IAG, we will be able to provide some financial support to early career scientists and colleagues from developing countries who wish to present their research at the meeting. All the details are available at www.ggos.org/event/ggos-topical-meeting-atmosphere/.

Important dates

- Travel Award application deadline July 15
- Travel Award notification July 31
- Abstract submission deadline July 31
- Abstract acceptance notification August 15
- Schedule and conference program August 31
- Pre-registration deadline August 31
- List of participants September 5
- GGOS Topical Meeting October 7 – 9

Do not miss this opportunity to contact and interact with colleagues from the GGOS Focus Areas “Geodetic Space Weather Research”, “Artificial Intelligence for Geodesy”, and “Geohazards Monitoring”, IAG Commission 4 “Positioning and Applications”, IAG Sub-Commission 4.3 “Atmospheric Remote Sensing”, IAGA Interdivisional “Commission on Space Weather”, IAGA Division II “Aeronomical Phenomena”, IAGA Division V “Geomagnetic Observatories, Surveys and Analyses”, IAG Study/Working Groups on “AI for GNSS Remote Sensing”, “Remote sensing using GNSS reflected signals”, “High-resolution probing of the Troposphere

and Ionosphere”, “Understanding Ionospheric and Plasmaspheric Processes”, “Thermosphere Modelling and Applications”, “Space Weather Monitoring and Prediction”, “Atmospheric Coupling Studies” and many other colleagues who are at the forefront of cross-cutting research in this important area.

Laura Sánchez, GGOS President
Martin Sehnal, Director of the GGOS Coordinating Office.

2025 Glacial Isostatic Adjustment Workshop



A workshop focused on glacial isostatic adjustment (GIA), ice sheets, sea-level change, and associated geodetic and geophysical observational constraints will be held at the Institute of Ocean Sciences (IOS) and Pacific Geoscience Centre (PGC), located near Sidney, British Columbia, Canada, from 2-6 June 2025. The workshop aims to bring together 80-100 researchers of all career stages to discuss recent advances in the observations, analysis, and modelling of GIA.

The 5-day program will follow the general format of oral and poster sessions focused on various thematic topics relating to GIA, ice sheet and glacier history, mass balance and projected future change, and the effects of this ice sheet evolution and Earth response on global, regional, and local scales. We invite contributions discussing observations, analyses, and modelling of ice sheet dynamics, the ensuing solid-Earth response, the resulting global and local (relative) sea-level changes, and the interactions and feedbacks between these components of the coupled Earth system.

In addition to oral and poster sessions, the workshop will incorporate opportunities for networking and collaboration, including a one-day field trip to observe local records of GIA, glacial geology, and active tectonics. During the last day, several smaller workshops on specific topics that are of high interest for the GIA community will be offered. These workshops will allow us to gather groups and advance research in targeted fields (e.g., benchmarking of GIA modelling codes, differences between GIA and GNSS reference frames, modelling of paleo ice-sheet histories, GIA in Antarctica, and observational constraints for GIA in Antarctica).

Registration, Accommodations, and Financial Support

Abstract submission will open in late 2024 or early 2025. Instructions for booking accommodations will be provided concurrently. We anticipate a modest registration fee not to exceed \$200 USD. As part of this registration fee, it is planned that coffee breaks and lunches will be provided.

It is anticipated that travel support for early career researchers will be available, with special consideration given to engaging minorities and individuals from underrepresented groups. More information, including instructions for how to apply for funding, will be made available late 2024 or early 2025.

Virtual Participation

To expand the reach and scope of the workshop, a virtual participation option will be offered by streaming of the lectures (free of charge). The organizing committee is also considering additional means by which virtual participants may engage (e.g., Gather.town). Instructions for how to participate virtually will be made available in early 2025.

Organizers:

Thomas James (Geological Survey of Canada and University of Victoria, Canada)
Stephanie Konfal (Byrd Polar and Climate Research Center, Ohio State University, USA)
Karen Simon (Canadian Geodetic Survey, Canada)
Rebekka Steffen (Lantmäteriet, Sweden)

Scientific Committee:

Lambert Caron (Caltech/JPL, US)
Jeff Freymueller (Michigan State University, US)
Franck Ghoms (University of Cape Town, South Africa)
Natalya Gomez (McGill University, Canada)
Thomas James (Geological Survey of Canada and University of Victoria, Canada)
Volker Klemann (GFZ Potsdam, Germany)
Stephanie Konfal (Byrd Polar and Climate Research Center, Ohio State University, US)
Andrew Lloyd (Lamont-Doherty Earth Observatory, US)
Glenn Milne (University of Ottawa, Canada)
Grace Nield (Durham University, UK)
Jun'ichi Okuno (National Institute of Polar Research, Japan)
Tamara Pico (UC Santa Cruz, US)
Juliet Sefton (The University of Melbourne, Australia)
Karen Simon (Canadian Geodetic Survey, Canada)
Rebekka Steffen (Lantmäteriet, Sweden)
Lev Tarasov (Memorial University of Newfoundland, Canada)
Matthias Willen (TU Dresden, Germany)
Maryam Yousefi (Canadian Geodetic Survey, Canada)
Rolf Dach, Arturo Villiger, and Allison Craddock on behalf of the LOC, SOC, and IGS CB

Rebekka Steffen

Meetings Calendar

IGAG Sponsored Meetings

EUREF Symposium 2024

June 5 – 7, 2024, Barcelona, Spain

URL: <https://euref-symposium.atlantidaviatges.com/>

IGS Symposium and Workshop

July 1 – 5, 2024, Bern, Switzerland

URL: <https://igs.org/workshop/2024>

20th Geodynamics and Earth Tides Symposium (G-ETS 2024)

August 25 – 30, 2024, Strasbourg, France

URL: <https://g-ets2024.sciencesconf.org/>

Gravity, Geoid and Height Systems 2024

August 26 – 29, 2024, Thessaloniki, Greece

URL: <https://www.gghs2024.com/>

GGOS Topical Meeting on the Atmosphere

October 7 – 9, 2024, Potsdam, Germany

URL: <https://ggos.org/event/ggos-topical-meeting-atmosphere/>

GGOS Days 2024

October 10 – 11, 2024, Potsdam, Germany

URL: <https://ggos.org/event/ggos-days-2024/>

6th Joint International Symposium on Deformation Monitoring (JISDM)

April 7 – 9, 2025, Karlsruhe, Germany

URL: <https://jisdm2025.gik.kit.edu/>

IAG Scientific Assembly 2025

September 1 – 5, 2025, Rimini, Italy

URL: <https://eventi.unibo.it/iag2025>

Geodesy Related Meetings

34th Conference on Mathematical Geophysics

June 2 – 7, 2024, Bombay, Mumbai, India

URL: <https://www.cmg2024.org>

18th Symposium of SEDI

June 23 – 28, 2024, Great Barrington, MA, USA

URL: <https://sedi-conference-2024-2675c.ingress-baronn.ewp.live/>

45th COSPAR Scientific Assembly

July 13 – 21, 2024, Busan, Korea

URL: <https://www.cospar2024.org/>

32th IAU General Assembly

August 6 – 15, 2024, Cape Town, South Africa

URL: <https://astronomy2024.org/>

2024 European Polar Science Week conference

September 3 – 6, 2024, Copenhagen, Denmark

URL: <https://www.europeanpolarboard.org/news-events/events/event/events/2024-european-polar-science-week-conference/>

9th International Colloquium on Scientific and Fundamental Aspects of GNSS

September 25 – 27, 2024, Wroclaw, Poland

URL: <https://atpi.eventsair.com/9th-gnss-science-colloquium/>

2025 Glacial Isostatic Adjustment workshop: Advancing Models and Observational Constraints

June 2 – 6, 2025, Sydney, British Columbia, Canada

URL: <https://polenet.org/2025-gia-workshop/>