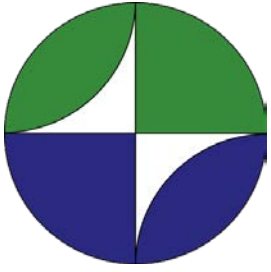


INTERNATIONAL UNION OF GEODESY AND GEOPHYSICS  
UNION GEODESIQUE ET GEOPHYSIQUE INTERNATIONALE

# Annual Report 2025





**INTERNATIONAL UNION OF GEODESY AND GEOPHYSICS**  
**UNION GEODESIQUE ET GEOPHYSIQUE INTERNATIONALE**

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# INTRODUCTION

Established in 1919, the International Union of Geodesy and Geophysics (IUGG) is an international, non-governmental, non-profit organization dedicated to advancing, promoting, and communicating knowledge of the Earth system, its space environment, and the dynamical processes causing change. Through its constituent associations, commissions, and services, IUGG convenes international assemblies and workshops, undertakes research, assembles observations, gains insights, coordinates activities, liaises with other scientific bodies, plays an advocacy role, contributes to education, and works to expand capabilities and participation worldwide. Data, information, and knowledge gained are made openly available for the benefit of society – to provide the information necessary for the discovery and responsible use of natural resources, sustainable management of the environment, reducing the impact of natural hazards, and to satisfy our need to understand the Earth’s natural environment and the consequences of human activities.

The IUGG is comprised of eight semi-autonomous International Associations, each responsible for a specific range of topics or themes within the overall scope of the Union activities. Each Association establishes commissions, divisions, services, working groups, or other entities. In addition, IUGG establishes Union Commissions and other activities to conduct inter-association science (see page 3).

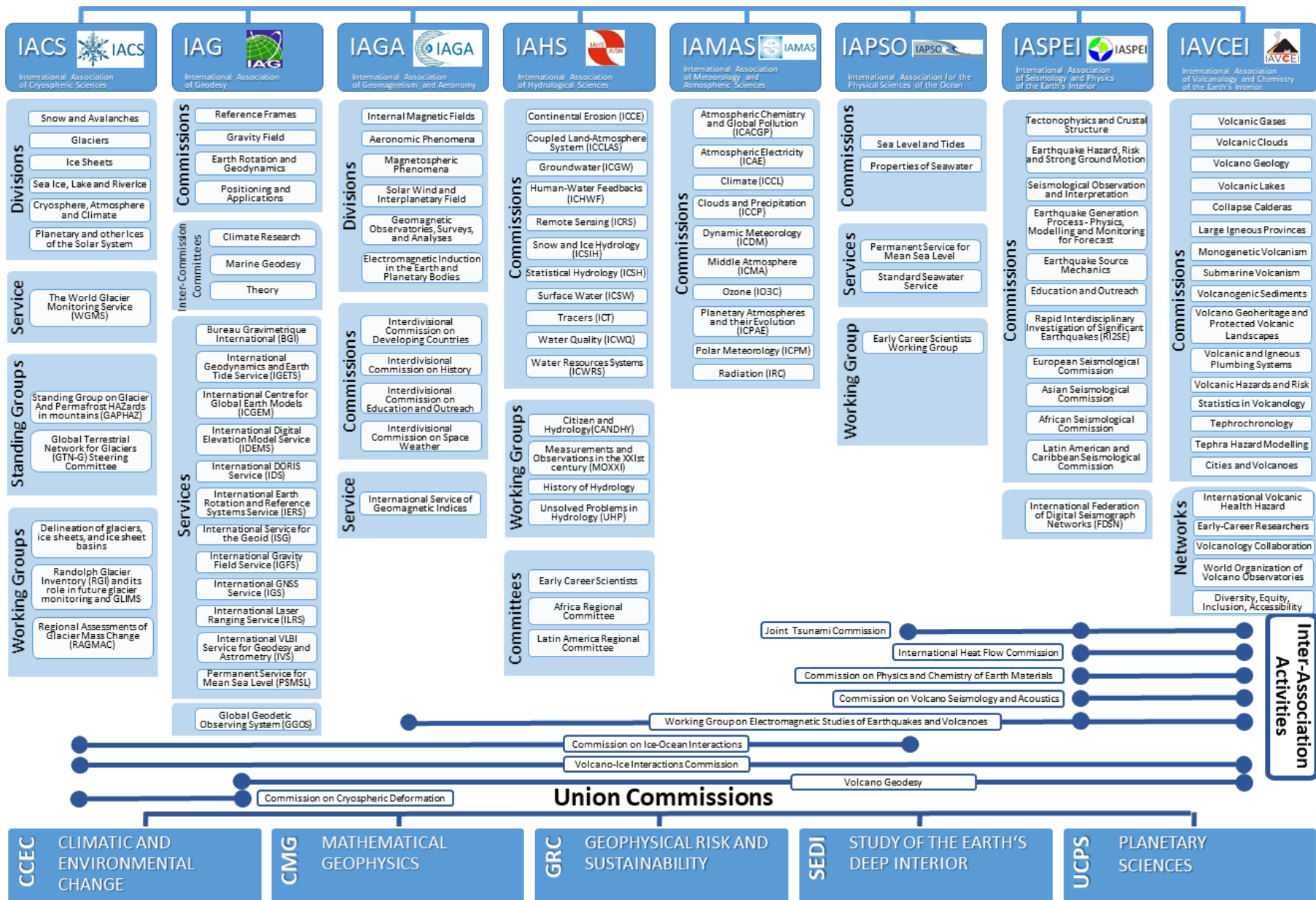
IUGG is one of over 40 scientific unions adhering to the International Science Council (ISC). ISC provides a global forum for scientists to exchange ideas and information and to develop standard methods and procedures for all fields of research. IUGG brings expertise on Earth studies from researchers in its International Associations and Commissions. As a member of ISC, IUGG strongly supports its policy of non-discrimination by affirming the rights and freedom of scientists throughout the world to engage in international scientific activity without limitation by such factors as citizenship, religion, creed, political stance, ethnic origin, race, color, language, age or gender.

IUGG has initiated and/or vigorously supported collaborative efforts that have led to highly productive world-wide interdisciplinary programs and projects. These programs have set a model for international and interdisciplinary cooperation in geosciences (see page 4).

The work of IUGG is related to that of many other scientific organizations. Some of these are inter-governmental such as those affiliated with the United Nations (UN); some are Interdisciplinary Bodies of ISC, and others are organizations of particular interest to specific Associations (see page 4).

# International Union of Geodesy and Geophysics (IUGG)

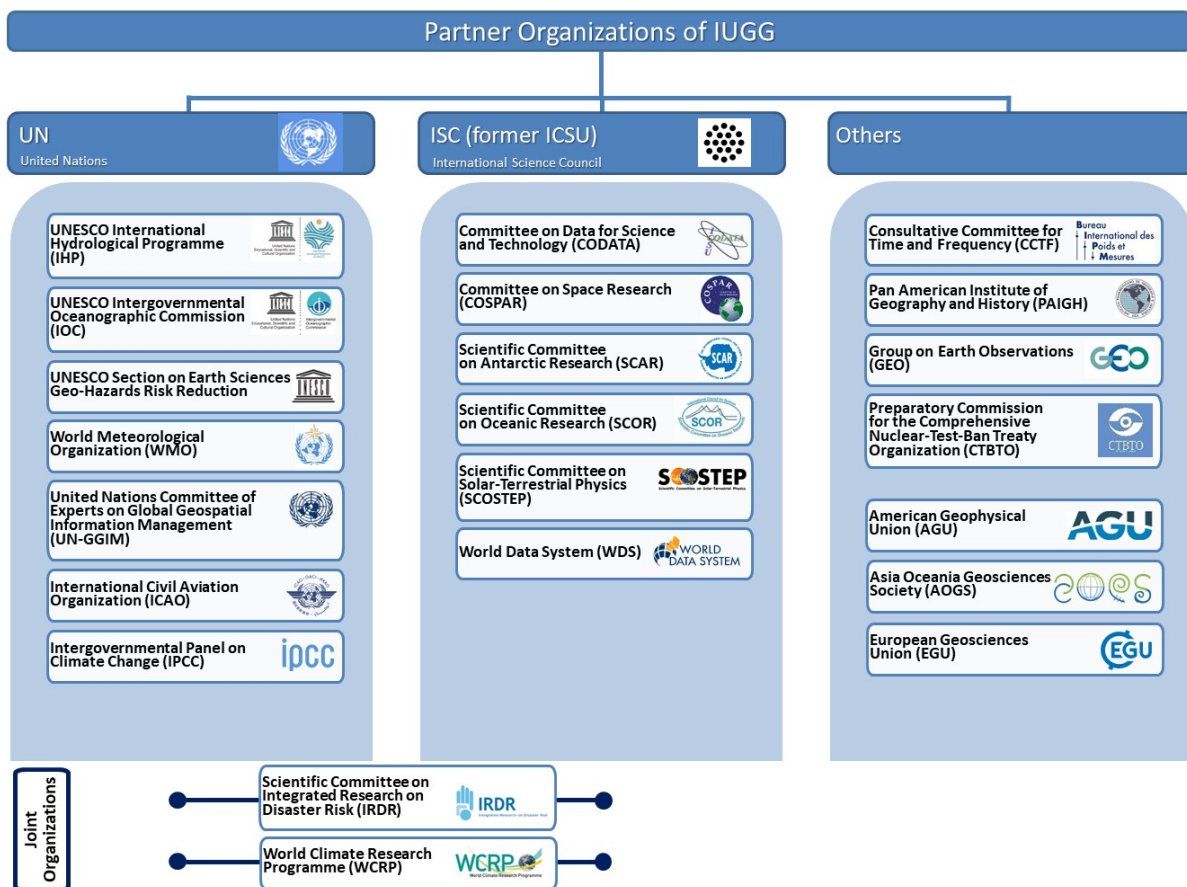
## Associations



## Programs and Projects initiated and/or supported by IUGG

Current	Past
<ul style="list-style-type: none"> <li>• Decade of Action for Cryospheric Science (2025-2034)</li> <li>• International Decade of Sciences for Sustainable Development (2024-2033)</li> <li>• International Year of Glaciers' Preservation (2025)</li> <li>• Global Geodetic Observing System (GGOS)</li> <li>• Integrated Research on Disaster Risk (IRDR)</li> <li>• International Lithosphere Program (ILP)</li> <li>• World Climate Research Programme (WCRP)</li> <li>• World Data System (WDS)</li> </ul>	<ul style="list-style-type: none"> <li>• International Year of Basic Sciences for Sustainable Development (IYBSSD, 2022/2023)</li> <li>• Panta Rhei – Everything Flows (2013-2022)</li> <li>• International Year of Global Understanding (IYGU, 2016)</li> <li>• Mathematics of Planet Earth (MPE, 2013)</li> <li>• International Geosphere-Biosphere Programme (IGBP, 1987-2015)</li> <li>• International Year of Deltas (IYD, 2013-2014)</li> <li>• Extreme Natural Hazards and Societal Implications (ENHANS, 2010-2014)</li> <li>• International Year of Planet Earth (IYPE, 2007-2010)</li> <li>• Electronic Geophysical Year (eGY, 2007-2008)</li> <li>• International Polar Year (IPY, 2007-2008)</li> <li>• International Heliophysical Year (IHY, 2007-2008)</li> <li>• International Decade for Natural Disaster Reduction (IDNDR, 1990-1999)</li> <li>• Geodynamics Project (1972-1979)</li> <li>• Global Atmospheric Research Program (1967-1980)</li> <li>• International Hydrological Decade (1965-1974)</li> <li>• Upper Mantle Project (1964-1970)</li> <li>• International Geophysical Year (IGY, 1957-1958)</li> </ul>

*Programs and Projects initiated and/or supported by IUGG*



*Partner Organizations of IUGG*



Several IUGG National Committees have published Annual and Quadrennial Reports on their activities over the last years. All reports are available [here](#). IUGG National Committees are invited to [submit](#) their annual/quadrennial reports at any time.

## STRUCTURE

Responsibility for directing the Union's affairs is vested in the IUGG Council by the Statutes and By-Laws. The IUGG Council consists of the Council Delegates, who are designated by the Adhering Body of their respective countries. The Council is convened at each quadrennial General Assembly but can make decisions by electronic voting in between General Assemblies. A Bureau, an Executive Committee and a Finance Committee administer IUGG affairs between Council meetings. The Executive Committee has the particular responsibility of overseeing the scientific programs of the Union. The IUGG Secretariat is located at the GFZ Helmholtz Centre for Geosciences (GFZ) in Potsdam, Germany, and assists in the implementation of the decisions of the Bureau, Executive Committee and the Council.

### Associations

The Union brings together eight semi-autonomous Associations, each responsible for a specific range of topics or themes within the overall scope of the Union's activities and each with a sub-structure. The Associations convene their own assemblies and sponsor scientific symposia, often in partnership with one another. Within its own discipline each Association is responsible for determining its own program of investigations and for supporting the activities of its own component parts. All Earth scientists, worldwide, are eligible to participate in IUGG and Association activities, assemblies, workshops, and symposia, although only scientists from member countries with dues paid may serve as Association Presidents.

The eight International Associations are listed below, and short reports on their 2025 activities are included here. Additional information about each Association is given on their websites, which can be accessed from the IUGG [website](#).

- International Association of Cryospheric Sciences (IACS)
- International Association of Geodesy (IAG)
- International Association of Geomagnetism and Aeronomy (IAGA)
- International Association of Hydrological Sciences (IAHS)
- International Association of Meteorology and Atmospheric Sciences (IAMAS)
- International Association for the Physical Sciences of the Oceans (IAPSO)
- International Association of Seismology and Physics of the Earth's Interior (IASPEI)
- International Association of Volcanology and Chemistry of the Earth's Interior (IAVCEI)

### Union Commissions

Owing to the interactive nature of the subject fields addressed by the Union's Associations, a number of Union Commissions have been established that promote the study of particular interdisciplinary problems. In 2025, the following bodies were active:

- Commission on Climatic and Environmental Changes (CCEC)
- Commission on Mathematical Geophysics (CMG)
- Commission on Geophysical Risk and Sustainability (GRC)
- Commission on the Study of the Earth's Deep Interior (SEDI)
- Commission on Planetary Sciences (UCPS)

## **Inter-Unions Commission**

The International Lithosphere Program (ILP), guided by the Scientific Committee on the Lithosphere (SCL), was established in 1980 as the Inter-Unions Commission on the Lithosphere (ICL) by the International Council for Science (ICSU), at the request of IUGG and the International Union of Geological Sciences (IUGS). The name was formally changed to the Scientific Committee on the Lithosphere in 1999. According to Decision 8.4 from the 2005 ICSU General Assembly, ICSU decided "to withdraw ICSU sponsorship from SCL/ILP and to recommend that responsibility would then shift to IUGG and IUGS". Since that time, IUGG and IUGS have reaffirmed the ILP mission and have collaborated to re-define ILP as an Inter-Unions body.

## **GENERAL ASSEMBLIES OF THE UNION**

General Assemblies have been held since 1922 and, since 1963, at 4-year intervals. These assemblies provide an extraordinary opportunity for Earth scientists from around the world to gather and share expertise, research data, and results. Past IUGG General Assemblies are listed in the IUGG Yearbook and on the website. The most recent General Assembly was held in Berlin, Germany, 11-20 July 2023. The next IUGG General Assembly will take place in Incheon, Rep. of Korea, 16-22 July 2027.

## **OTHER SCIENTIFIC MEETINGS**

Each Association organizes its own scientific assembly in the 4-year interval between Union General Assemblies in order to report scientific progress and conduct Association business. Associations sometimes meet jointly with the purpose of promoting interdisciplinary science. Topical and regional symposia and workshops are organized on other occasions by the Associations to provide opportunity for geodesists and geophysicists worldwide to discuss their respective methodologies, results and hypotheses and to plan collaborative research projects. The symposia, often held in less-visited, geophysically interesting locales, are intended to be attractive to the younger scientists from the developing countries of the world.

## **IUGG OFFICERS FOR 2023-2027**

### **IUGG Bureau**

President:	Chris Rizos	AUSTRALIA
President-Elect:	Mioara Manda	FRANCE
Secretary General:	Alexander Rudloff	GERMANY
Treasurer:	Niels Andersen	DENMARK
Members:	Athena Coustenis	FRANCE
	Andrew Mackintosh	AUSTRALIA
	Virendra Tiwari	INDIA

## **IUGG Executive Committee**

### IUGG Bureau Members

Immediate Past President:	Kathy Whaler	UK
IACS President:	Liss M. Andreassen (2023-2025)	NORWAY
	Mathieu Morlighem (2025-2027)	USA
IAG President:	Richard Gross	USA
IAGA President:	Andrew Yau	CANADA
IAHS President:	Berit Arheimer (2023-2025)	SWEDEN
	Salvatore Grimaldi (2025-2027)	ITALY
IAMAS President:	Andrea Flossmann	FRANCE
IAPSO President:	Hans van Haren	NETHERLANDS
IASPEI President:	Michelle Grobbelaar	AUSTRIA/SOUTH AFRICA
IAVCEI President:	Costanza Bonadonna	SWITZERLAND

## **IUGG Finance Committee**

Chair:	Jan Krynski	POLAND
Members:	Archana Bhattacharyya	INDIA
	Priscilla Grew	USA

## **Association Secretaries General**

IACS Secretary General:	Richard Essery	UK
IAG Secretary General:	Daniela Thaller	GERMANY
IAGA Secretary General:	Monika Korte	GERMANY
IAHS Secretary General:	Jean-Marie Kileshye Onema	SOUTH AFRICA/D.R. CONGO
IAMAS Secretary General:	Keith Alverson	CANADA/USA
IAPSO Secretary General:	Silvia Blanc	ARGENTINA
IASPEI Secretary General:	Johannes Schweitzer	NORWAY
IAVCEI Secretary General:	Ulrich Küppers	GERMANY

## **Union Commission Officers**

### Union Commission on Climatic and Environmental Changes (CCEC)

Chair:	Jianping Li	CHINA
Secretary:	Tonie van Dam	USA

### Union Commission on Mathematical Geophysics (CMG)

Chair:	Alik Ismail-Zadeh	GERMANY
Secretary:	Andrew Valentine	UK

### Union Commission on Geophysical Risk and Sustainability (GRC)

Chair:	John LaBrecque	USA
Secretary:	Katia Kontar	USA

### Union Commission on Studies of Earth's Deep Interior (SEDI)

Chair:	Mathieu Dumberry	CANADA
Secretary:	Michael Bergman	USA

Union Commission on Planetary Sciences (UCPS)

Chair:	Shuanggen Jin	CHINA
Secretary:	Paul Hartogh	GERMANY
	Scot Rafkin	USA

**Inter-Unions Commission: International Lithosphere Program (ILP)**

President:	Hans Thybo	TÜRKIYE
Secretary General:	Mian Liu	USA

**IUGG SECRETARIAT**

The IUGG Secretariat is the informational centre of IUGG. It implements the organization plans, organizes the daily management of the Union, prepares business meetings, represents the Union at conferences, publishes documents (e.g., Newsletters, Yearbooks, Annual Reports) and helps National Members to be engaged in the Union's and its Associations activities.

Since the year 2013, the IUGG Secretariat is located at

GFZ Helmholtz Centre for Geosciences  
Telegrafenberg, A17  
14473 Potsdam  
GERMANY

<i>Executive Secretary:</i>	Franz G. Kuglitsch	GERMANY
<i>Assistant:</i>	Katrin Gundrum	GERMANY
<i>Webmaster:</i>	Jan Schubert	GERMANY

# MESSAGE FROM THE PRESIDENT

The year 2025 has been one of considerable activity, engagement with the IUGG Associations, and continued focus on the IUGG's Strategic Plan. Building on the foundations established following the 2023 General Assembly in Berlin, our Associations, Commissions and partner organisations have continued to advance scientific collaboration, strengthen international networks, articulating equality, diversity and inclusion (DIE) principles, support early-career researchers, and promote research excellence and outreach across the geosciences.



One of the most encouraging aspects of the year has been the breadth and vitality of our scientific programme. More than 70 scientific meetings, workshops, schools and symposia were organised under the umbrella of IUGG across many regions of the world. These activities brought together thousands of scientists, including many students and early-career researchers, to exchange knowledge, develop new collaborations, and address some of the most pressing scientific challenges facing society.

The scientific assemblies of our Associations demonstrated the strength and diversity of the IUGG community. From volcanology, cryospheric science and oceanography, to hydrology, geodesy, seismology and geomagnetism, our disciplines continue to generate essential knowledge for understanding a rapidly changing and highly complex Earth System. The growing emphasis on interdisciplinary research, open science, establishing advanced observation systems and the application of Artificial Intelligence technology, is helping to translate scientific discovery into practical solutions to the challenges of geohazards, anthropogenic climate changes, sustainable development and responsible environmental management.

During 2025, significant progress was also made in developing the [IUGG Strategic Plan 2026-2035](#). This initiative will clarify our priorities and strengthen our capacity to serve both the scientific community and society at large. The strategic planning process has benefited from extensive discussion within the Bureau, Executive Committee and Associations, and will continue to guide our activities in the years ahead.

IUGG also continued its close engagement with the International Science Council ([ISC](#)). The ISC General Assembly, held in Muscat, Oman, in January 2025, provided an important forum for discussing the role of science in addressing global challenges and strengthening international scientific cooperation. Through its participation in the ISC and the GeoUnions network, IUGG contributes geoscientific expertise to international initiatives and supports the principles of scientific freedom, open science and evidence-based decision-making.

A particular priority has been strengthening the participation of early-career scientists and enhancing EDI throughout the Union. New committees established during the year will help ensure that IUGG remains a welcoming, representative and forward-looking organisation, capable of attracting and supporting the next generation of geoscientists.

Preparations for the XXIX IUGG General Assembly ([IUGG2027](#)), to be held in Incheon, Republic of Korea, in July 2027, have also advanced. The meetings held in Incheon during 16-18 July 2025 demonstrated the strong commitment of our Korean colleagues and partners to making the IUGG2027 a successful event. We look forward to welcoming the global geoscience community to what promises to be an outstanding scientific event.

None of these achievements would be possible without the dedication of our volunteers, officers, Association leaders, Commission members, National Committees, Secretariat staff and partner organisations. On behalf of the Bureau, I extend my sincere thanks to all who contribute their time, expertise and enthusiasm to the work of IUGG.

At a time when international scientific cooperation is more important than ever, IUGG remains firmly committed to advancing knowledge, fostering collaboration and supporting science for the benefit of humanity and our planet.

Chris Rizos

# IUGG ACTIVITIES

## IUGG SECRETARIAT

The [IUGG Secretariat](#) is located at the GFZ Helmholtz Centre for Geosciences. The Secretariat is managed by the IUGG Secretary General Alexander Rudloff and the IUGG Executive Secretary Franz Kuglitsch, and supported by Katrin Gundrum. The Secretariat is responsible for implementing the day-to-day operations of IUGG; this includes (i) maintenance of daily correspondence and communication with IUGG National Committees, Adhering Organizations, Union Associations, Executive and Financial Committees, Union Commissions, Committees, Partner Organizations, and others; (ii) maintenance of IUGG electronic databases and technical documents; (iii) supervision of the IUGG webmaster and preparation of updates for the IUGG website and social media in timely fashion; (iv) development of IUGG Yearbooks and Annual Reports; (v) negotiations with companies for production of IUGG-related publications, medals, pins etc.; (vi) publication of the IUGG E-Journal (monthly issues); (vii) assistance in technical screening of IUGG grant applications, medal and awards nominations; (viii) preparation work for IUGG General Assemblies, Council, Executive Committee, and Bureau Meetings; and some other activities.

The IUGG Secretariat is co-sponsored by the **GFZ** and the **German Research Foundation (DFG)**. IUGG thanks the GFZ and DFG for the financial support of the Secretariat.

**IUGG Yearbook.** The Secretariat maintains the data related to the IUGG and its Association and produce annually a Yearbook which is available [here](#). By the decision of the IUGG Bureau only the current Yearbook should be linked to the IUGG website.

**IUGG website and social media.** The [IUGG website](#) maintained and regularly updated by the IUGG webmaster Jan Schubert. To learn more about IUGG and to keep individuals updated on Union's activities, the IUGG Secretariat maintains social media accounts on Facebook, LinkedIn, Twitter, and YouTube.

**IUGG Electronic Journal.** The [E-Journal](#), an informal newsletter, was published and distributed monthly keeping IUGG Member National Committees informed about the activities of IUGG, its Associations and Commissions, and the actions of the IUGG Secretariat. Also, the journal publishes feature articles, news from the International Science Council (ISC), news and reports related to IUGG scientific programs and co-sponsored scientific meetings, and a calendar of scientific meetings.

## 2025 SCIENTIFIC MEETINGS UNDER THE UMBRELLA OF IUGG

The IUGG, through its Associations, Commissions, and other sub-entities, organizes and co-sponsors numerous scientific meetings with many thousand participants each year. In 2025, a total of 70 scientific meetings were organized under the umbrella of IUGG. Meeting reports are published regularly in the [IUGG E-Journals](#), our monthly newsletter.

### **January**

- 11-17, IAVCEI, Galeras and Doña Juana volcanoes, Colombia, 7th Volcano Geology International Workshop
- 13-15, IAVCEI, online, Volcano-Ice Interactions Commission (VIIC) Workshop on Glaciovolcanism

- 20-21, IACS, Kerala, India, Workshop on Cryosphere Change and Sustainability in the Indian Himalaya: Celebrating 2025 International Year of Glaciers' Preservation

### **February**

- 24-28, IASPEI, Windhoek, Namibia, 4th General Assembly of the African Seismological Commission

### **March**

- 15-23, IUGG, IAPSO, Honolulu HI, USA, ENSO (El Niño-Southern Oscillation) Winter School 2025
- 23-25, IACS, Boulder CO, USA, Bringing the Arctic Sea Ice Observational and Modelling Communities Together to Assess Sea Ice Loss and Its Impacts
- 24-25, IAG, Online, 3rd Workshop of the Inter-Commission Committee on Geodesy for Climate Research
- 24-28, IUGG, IAMAS, Cambridge, UK, Improved Simulations of the Stratosphere for Better Predictions of Weather, Climate and Extreme Events
- 31-4 April, IUGG SOUTH AFRICA, Cape Town, South Africa, 14th International Conference on Southern Hemisphere Meteorology and Oceanography

### **April**

- 7-9, IAG, ISPRS, Karlsruhe, Germany, 6th Joint International Symposium on Deformation Monitoring (JISDM)
- 7-11, IAG, Almaty, Kazakhstan, 15th International School on 'The Determination and Use of the Geoid'
- 7-11, IAVCEI, Hungary, Workshop of the Commission on Volcanogenic Sediments
- 23-26, IUGG, IAMAS, Beijing, China, 2025 International Symposium on Lightning Physics and Lightning Meteorology

### **May**

- 8-9, IUGG, IAMAS, ESA, ITU, Frascati, Italy, 2nd Meeting of the Global Initiative on Resilience to Natural Hazards through AI Solutions
- 4-9, IUGG, IASPEI, Castasegna, Switzerland, QuakeHack: A Statistical Seismology Hackathon for Early Career Scientists
- 5-16, IUGG, ICTP, Trieste, Italy, 6th Summer School on Theory, Mechanisms and Hierarchical Modelling of Climate Dynamics: Artificial Intelligence and Climate Modelling
- 12-16, IUGG, IAGA, L'Aquila, Italy, Course on Cross-Scale Coupling of Heliophysics System
- 13-15, IAG, Wuhan, China, 3rd International Symposium of IAG Commission 4: Positioning and Application
- 18-24, IAVCEI, Iceland, Field Workshop of the Volcano-Ice Interactions Commission
- 19-30, IACS, Karthaus, Italy, Summerschool on Ice Sheets and Glaciers in the Climate System

### **June**

- 2-6, IACS, IAG, IASPEI, Sidney BC, Canada, 2025 Glacial Isostatic Adjustment Workshop: Advancing Models and Observational Constraints
- 3-12, IAG, IAGA, Online, School on 'Terrestrial Reference Frame. Geodynamic and Atmospheric Monitoring 2025'
- 8-16, IAVCEI, Lipari, Vulcano, Stromboli, Italy, International School of Volcanology 'Working on Active Volcanoes: Learning the Tools of Modern Volcanology'
- 24-27, IAG, Covilha, Portugal, EUREF Symposium 2025 and AC Workshop
- 25-28, IUGG, UCPS, Shanghai, China, Science Symposium of the Union Commission on Planetary Science
- 29 – 4 July, IAVCEI, Geneva, Switzerland, IAVCEI Scientific Assembly 2025
- 30, IAHS, Vienna, Austria, Summer School - Runoff Predictions in Ungauged Basins (PUB)

## **July**

- 7-9, IAVCEI, IFRC, UNDRR, WMO, Geneva, Switzerland, Early Warning For All Workshop
- 7-10, IACS, SCAR, Moreton Bay, Queensland, Australia, Forum for Research into Ice Shelf Processes (FRISP): Southern Hemisphere
- 8, IHFC, IASPEI, IAPSO, IAVCEI, GFZ, Potsdam, Germany, Global Heat Flow Data Portal Release
- 8-11, IASPEI, Shenyang, China, International Symposium on Earthquake Forecasting to Commemorate the 50th Anniversary of the 1975 Haicheng M7.3 Earthquake
- 9-11, IUGG, IAMAS, Abidjan, Ivory Coast, 21st Global Emission Initiative Conference
- 13-18, IAG, Guadalajara, Spain, 1st GGOS IA Summer School
- 15-18, IUGG, Incheon, Rep. of Korea, IUGG Business Meetings 2025
- 19-21, IAHS, Tokyo, Japan, 2nd International Sociohydrology Conference
- 20-25, IACS, IAMAS, IAPSO, Busan, Rep. of Korea, IACS-IAMAS-IAPSO Joint Scientific Assembly 2025
- 31, IACS, Nuuk, Greenland, Arctic Frontiers Abroad Greenland: Workshop on Indigenous Knowledge and Local Collaboration
- 31 – 1 August, IAHS, Munich, Germany, International Workshop on Leveraging Technology and Societal Innovation in Urban Water Management

## **August**

- 25-29, IUGG, IAGA, IASPEI, Lisbon, Portugal, 1st IAGA/IASPEI Early Career Scientists School
- 25-5 September, IUGG, ICTP, Trieste, Italy, 12th Workshop on the Theory and Use of Regional Climate Models
- 26-28, IAG, Aalborg, Denmark, Summer School on 'Satellite-based Hydrological Data Assimilation'
- 31 August – 5 September, IAGA, IASPEI, Lisbon, Portugal, IAGA-IASPEI Joint Scientific Assembly 2025
- 31 August – 7 September, IAVCEI, Hokkaido, Japan, 14th Workshop of the Commission on the Chemistry of Volcanic Gases (CCVG)

## **September**

- 1-5, IAG, Rimini, Italy, IAG Scientific Assembly 2025
- 1-5, ICTP, IAVCEI, Kigali, Rwanda, Volcanic processes: A variety of length and time scales
- 3-5, IAG, Rimini, Italy, GGOS Days 2025
- 9-11, IAVCEI, Hveragerði, Iceland, LASI VII Conference on 'The Physical Geology of Subvolcanic Systems: Laccoliths, Sills and Dykes'
- 14-18, IACS, Innsbruck, Austria, International Mountain Conference 2025
- 15-19, IAG, Dwingeloo, Netherlands, JIVE VLBI School
- 16-18, IUGG, IAMAS, Paris, France, 20 years celebration of the Huygens landing and the Cassini mission's success
- 23 – 1 October, IUGG, IAVCEI, Vulcano Island, Italy, 10th Training School on Convective and Volcanic Clouds (CVC) Detection, Monitoring and Modelling

## **October**

- 1-2, IAG, Cape Town, South Africa, South African National Geodesy Workshop
- 5-10, IAHS, Roorkee, India, IAHS Scientific Assembly 2025
- 5-18, GFZ, IASPEI, Antananarivo, Madagascar, International Training Course on Seismology, Seismic Data Analysis, Hazard Assessment and Risk Mitigation
- 7-9, IAG, Boulder CO, USA, GRACE-FO Science Team Meeting 2025
- 7-11, IAVCEI, Niigata, Japan, Volcanology in Practice
- 13-16, IAG, Cairo, Egypt, The Arab Conference on Astronomy and Geophysics (ACAG 9)
- 13-24, IUGG, ICTP, Trieste, Italy, Workshop on the Deformation at the Intersection Between Physics of Earthquakes and Volcanic Processes
- 20 – 1 November, IAVCEI, Olot, La Palma, Spain, Curso internacional de volcanología

- 21-25, IAG, Gothenburg, Sweden, 10th International VLBI Technology Workshop (IVTW)
- 26-28, IAG, Gothenburg, Sweden, 5th IVS Training School on VLBI for Geodesy and Astrometry
- 27 – 1 November, IAG, IAGA, San Juan, Argentina, XVI Escuela SIRGAS ‘Procesamiento de datos VLBI y SLR’
- 29-31, IAHS, Lusaka, Zambia, 26th WaterNet/WARFSA/GWP-SA Symposium

### **November**

- 3-5, IAG, Athens, Greece, IDS DORIS School and DORIS Days 2025
- 6-7, IAG, Athens, Greece, DORIS Analysis Working Group Meeting
- 12-14, IUGG, IAPSO, IASPEI, IAVCEI, Hyderabad, India, International Tsunami Symposium
- 17-21, IAHS, Astana, Kazakhstan, International Conference on 'Sediment and Pollutants Transport in River Catchments: Radionuclides and Fingerprinting Techniques Applications for Assessment, Monitoring, and Risk Prevention'
- 23-29, IASPEI, IAVCEI, Pucon, Chile, Joint Commission on Volcano Seismology & Acoustics. Annual Workshop
- 24-28, IUGG, IAMAS, Dakar, Senegal, Workshop on 'Data Science for Weather and Climate Research' and Training School on 'Climate Data Analysis and AI in the Global South'

### **December**

- 1-5, IUGG, IAPSO, Puerto Madryn, Argentina, 20th Oceanography Colloquium and 12th National Marine Sciences Conference

## **ASSOCIATION SCIENTIFIC ASSEMBLIES 2025**

### ***IUGG at the IAVCEI Scientific Assembly in Geneva, 30 June – 4 July 2025***

At the end of June, the International Association for Volcanism and Chemistry of the Earth's Interior ([IAVCEI](#)) opened the 2025 series of scientific assemblies of the IUGG Associations (see also item #12). From 30 June to 4 July 2025, the University of Geneva, Switzerland, hosted nearly 1,100 delegates from 62 countries, of which 52% are Early Career Scientists (ECs). The conference, co-organised by 4 countries (Switzerland, France, Germany, and Italy), was opened by Luca Caricchi (University of Geneva) and Olivier Bachmann (ETH Zurich), chair and vice-chair of the organising committee, respectively. In the spirit of the International Geneva, the ceremony saw the participation of (in chronological order)

- Nathalie Fontanet (State secretary in charge of finances of the State Geneva),
- Sébastien Castelltort (Vice-rector research and sustainability of the University of Geneva),
- Alexander Rudloff (IUGG Secretary General),
- Nathalie Bernasconi-Osterwalder (International Institute for Sustainable Development),
- Kamal Kishore (United Nations Office for Disaster Risk Reduction),
- Xavier Castellanos (International Federation of Red Cross and Red Crescent Societies),
- and
- Costanza Bonadonna (IAVCEI President and dean of the faculty of Science of the University of Geneva).

The IUGG Secretary General also participated in the IAVCEI Executive Committee meeting and a meeting with the national delegates. On several further occasions, the IUGG Secretary General had lively exchange and collaborative meetings with members of the IAVCEI Executive Committee (in particular President Costanza Bonadonna and Secretary General Ulrich Küppers) as well as Luca Caricchi from the Local Organising Committee.



*Opening Ceremony, IAVCEI Scientific Assembly 2025*



*Geneva Jet d'Eau coloured in red on occasion of the IAVCEI Scientific Assembly 2025*

The scientific programme included:

- Three fieldtrips to (i) Massif Central (France), (ii) Eifel volcanic field (Germany), as well as (iii) Mt. Etna and Eolian Islands (Italy) prior to the conference,
- An intense week of science with 2 daily keynote presentations (each by an ECR and a senior member of IAVCEI, respectively),
- a mid conference visit to CERN,
- a well-attended IAVCEI Meeting of Members including the Award Ceremony, as well as
- 15 workshops before, during and after the conference.

The Local Organising Committee also organised a week long session on outreach (open to everyone interested) as well as an exposition dedicated to the study of volcanoes ('Le feu de la Terre, une aventure humaine') that will remain open until 28 September 2025. In the week following the IAVCEI Scientific Assembly, the 'Early Warning For All' workshop was hosted at the World Meteorological Organisation (WMO) in Geneva and rounded up a fantastic week of science with excellent spirit and the feeling of contributing to the advancement of science and the building of a great community.

Ulrich Küppers, IAVCEI Secretary General

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### ***IUGG at the IACS-IAMAS-IAPSO Joint Scientific Assembly (BACO2025) in Busan, 20-25 July 2025***

BACO2025, the Joint Scientific Assembly of IACS, IAMAS, and IAPSO, took place at BEXCO in Busan, Rep. of Korea, from 20 to 25 July 2025. The IUGG Bureau was represented by Athena Coustenis and Andrew Mackintosh.

The participants enjoyed the diverse scientific presentations, networking opportunities, and special moments – from the opening ceremony to the closing ceremony – which provided valuable moments for exchange of information with colleagues, including collaboration opportunities, which bode well for future associations meetings.

At the opening ceremony, Athena Coustenis was given the opportunity to address the attendees on behalf of IUGG. She described the IUGG Mission under the auspices of the International Science Council (ISC), the IUGG science goals, structure and draft strategic plan for the coming years. She also mentioned the importance of defending science, in view of necessary measures needed to be put in place in order to avoid the disastrous effects of climate change, echoing in that the wonderful plenary speech of Prof. Lee at that same ceremony.



*Members of the BACO2025 Local Organising Committee, Science Programme Committee, and guests of honour, during the opening ceremony*



*Athena Coustenis giving a welcome address on behalf of IUGG during the opening ceremony*

Athena exchanged impressions and interacted with several attendees at the meeting and in particular the Mayor of Busan Park Heong-joon, Choi Jae Weon, the President of Pusan National University and Bae Sang Hoon, President of Pukyong National University. The Mayor of Busan praised IUGG and its role in such meetings and the President of BACO2025 Local Organising Committee (LOC), Kyung-Ja Ha, also expressed her thanks to IUGG for its role in coordinating and optimising the actions of the IUGG Associations and for supporting meetings like BACO2025.

The IUGG Bureau congratulates IACS, IAMAS, and IAPSO, for a very successful conference in Busan and looks forward to more such opportunities to promote geodesy and geophysics.

### ***IUGG at the IAG Scientific Assembly in Rimini, 20-25 July 2025***

The IAG Scientific Assembly 2025 (SA) was held at the 'Paracongressi' Conference Centre, in Rimini, Italy, over a 5-day period from 1 to 5 September. The conference centre is located on the edge of the Old Town, and is a modern, airy structure that was an ideal venue for the SA. The SA's theme was 'Geodesy for Changing Environment', which placed emphasis on measuring changes in the Earth System by means of geodetic technologies and methodologies.

The Opening Session on Monday 1 September featured short presentations by the IAG President, Richard Gross; the IUGG President, Chris Rizos; a Councillor of the city of Rimini; a representative of the University of Bologna; the chair of the Local Organising Committee, Susanna Zerbini; the IAG Secretary General, Daniela Thaller; and the Journal of Geodesy Young Author 2024 Awardee, Justyna Sliwinska.

The attendance was very pleasing, exceeding the planned for registrations by a considerable margin, with 659 attendees from 49 countries. Over 700 abstracts were submitted for 57 oral and poster sessions. Oral presentations were made across four parallel sessions. In addition, each day featured a Highlight Session on a contemporary theme, and each day's final session was reserved for poster presentations.



*Chris Rizos, IUGG President, and Niels Andersen, IUGG Treasurer, at the IAG Scientific Assembly 2025 in Rimini, Italy*

Over the five days of the SA attendees heard the latest geodetic research findings, presentations on a range of ambitious satellite and terrestrial geodetic missions, and updates on the many data and analysis products provided by the geodetic services. The progress across all established geodetic fields – such as reference frames, gravity field mapping & interpretation, Earth’s rotation & orientation, geodetic theory and methodology, and technology & applications of satellite navigation/positioning systems – was very impressive.

Attendees also heard the latest developments in AI-related algorithms, Quantum sensor technology, planned space missions, new service initiatives and products, and more; presented in oral sessions and via posters organised by the four IAG commissions, several IAG inter-commission committees and the IAG’s Global Geodetic Observing System (GGOS).

IAG also took the opportunity to host a IAG Council meeting with latest updates and information on special initiatives such as working for diversity in the IAG organisation, how IAG could use its network to have more IUGG/IAG membership countries, and plans for establishing a IAG Secretariat in Vienna, Austria.

The overall impression was of extraordinary progress in the science, technology and applications of Geodesy that address traditional geodetic requirements; as well as ever greater accuracy, reliability, and temporal and spatial resolution, in the measuring or monitoring of many vital Earth System parameters that have geometric, gravimetric or rotational signatures.

Chris Rizos, IUGG President, and Niels Andersen, IUGG Treasurer

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### ***IUGG at the IAHS Scientific Assembly in Roorkee, 5-10 October 2025***

The XIIth IAHS Scientific Assembly was held at the Indian Institute of Technology (IIT) campus in Roorkee, India, from 5 to 10 October. IIT Roorkee is home to several institutions that have a significant role in the Hydrological Sciences in India. IAHS2025 was hosted by the Department of Hydrology IIT Roorkee, in collaboration with the National Institute of Hydrology, the Central Building Research Institute, and the Irrigation Research Institute, and in partnership with the World Meteorological Organization (WMO) and the UNESCO Intergovernmental Hydrological Programme.

It was noted that the last IAHS Scientific Assembly hosted by India took place 16 years ago in 2008, in Hyderabad. As the Director of IIT Roorkee stated ‘Water lies at the centre of humanity’s most pressing challenges, from climate resilience and disaster risk reduction to sustainable management and equitable access. Meeting these challenges demands collaborative science, shared knowledge, and global solidarity.’ IAHS2025 was therefore eagerly anticipated and strongly supported by the Indian hydrological community.

There were approximately 600 attendees from 35 countries. 682 abstracts were submitted, from 49 countries (272 international and 410 by Indian participants), representing 188 institutions, for a total of 21 oral and poster sessions over five days. There was also an Exhibition.

There were no parallel sessions. Each of the sessions was devoted to topics of the 11 IAHS Commissions and several IAHS initiatives. An innovation that was trialled was to restrict the presentations to two types: Plenary talks of 15 minutes length (each with an additional period for questions and answers), and Forum Oral flash presentations of 1 minute duration (that introduced a Poster topic). There were in total 39 Plenary talks, 308 Forum Oral, 462 Posters and 149 Video-interviews (for off-site contributions). In addition there were presentations for Stockholm Water Prize and IAHS Awards.



Chris Rizos, IUGG President, and Salvatore Grimaldi, IAHS President, at the IAHS Scientific Assembly 2025 in Roorkee, India

At this Scientific Assembly the IAHS highlighted its third Decadal Initiative, known as HELPING – Hydrology Engaging Local People IN One Global world. HELPING was launched in 2023, and ‘emphasizes the crucial role of local knowledge in addressing global water challenges, highlighting that solutions to complex hydrological problems emerge most effectively when global science engages with local communities.’

IAHS2025 demonstrated the strong commitment by the IAHS to engaging with the diverse hydrological community, in many countries across the globe.

Chris Rizos, IUGG President

**IUGG at the IAGA-IASPEI Joint Scientific Assembly in Lisbon, 31 August – 5 September 2025**

The International Association of Geomagnetism and Aeronomy ([IAGA](#)) and the International Association of Seismology and Physics of the Earth’s Interior ([IASPEI](#)) held their IAGA-IASPEI Joint Scientific Assembly 2025, hosted by the Instituto Superior de Engenharia de Lisboa (ISEL) in Lisbon, Portugal, from 31 August to 5 September 2025. The assembly was attended by 1,266 participants, about half from each of the two Associations. The participants came from 66 countries and included over 120 students (mainly PhD students).



Opening ceremony (left), coffee break, and poster viewing (right) of the IAGA-IASPEI Joint Assembly 2025

The program consisted of 33 joint sessions, and additionally 106 IAGA and 63 IASPEI sessions and about 50 business meetings where the activities of different Association Divisions, Commissions, and Working Groups were discussed. Highlights of the program included the IAGA Award Ceremony with the Shen Kuo Medal lecture, given by Keke Zhang on the topic of the ‘MSS Geomagnetic Satellite Constellation, Earth’s Core Convection and Real-Time Geomagnetic Modeling’ and the IASPEI Lecture, which was given by Susana Custódio, on the topic of ‘The 1755 Great Lisbon Earthquake, 270 Years Later: A Unique Event in a Cryptic Plate Boundary’. Posters were available for two days during extended one hour coffee breaks, in a pleasant outdoor setting in an inner yard of the institute, where many discussions took place over coffee and plenty of tasty Portuguese snacks.

An Early Career Scientist Social Event on Monday evening was fully booked and the attendees had the opportunity to expand their networks and discuss topics of relevance and concern with researchers at their career stage. The lively scientific discussions in a friendly atmosphere during the Joint Assembly were also complemented by the combined IAGA-IASPEI dinner in the middle of the week, that took place in a beautiful historical building, accompanied by some traditional music.

### ***First combined IAGA-IASPEI School for Early Career Scientists***

Preceding the IAGA-IASPEI Joint Scientific Assembly 2025, the first combined IAGA-IASPEI School for Early Career Scientists took place at the Instituto Superior de Engenharia de Lisboa (ISEL), Lisbon, Portugal, from 25 to 29 August 2025. The School was a combination of the 7th IAGA School (series started in 2013, where more information can be found [here](#)) and the IASPEI Early Career Scientific School (ECSS; a follow-up training activity in different formats connected with IASPEI Scientific Assemblies since 2001, where more information can be found [here](#)). The Schools traditionally take place before or after IAGA, IASPEI, and IUGG Assemblies and are designed to provide early career scientists, mainly PhD students, with a basic understanding of a wide range of the scientific topics covered by the respective association. This time, we took advantage of the Joint IAGA-IASPEI Assembly, in order to further promote interdisciplinary perspectives both groups had a combined half day of lectures and practical courses on legacy magnetic and seismological data, a joint outing to the Lisbon Quake Museum devoted to the 1755 Lisbon Earthquake and the historical developments resulting from the catastrophe, and partly common meals and coffee breaks. Furthermore, the students joined the general part of a demonstration of an ocean bottom seismometer.



*The IAGA and IASPEI School students watching the demonstration of an ocean bottom seismometer*

The IAGA School was attended by 18 participants from 15 different countries. The student selection for the IAGA School follows established guidelines: interested students have to apply to one of the six [IAGA Divisions](#), normally the one that is closest to their scientific work. The call with deadline is published, e.g., on the [IAGA website](#) and through the IAGA social media channels.

The IAGA specific sessions were organised by seven international lecturers working on paleomagnetism, ionospheric, atmospheric, space plasma and space weather processes, geomagnetic field observation and modelling, and electromagnetic induction. Theoretical lectures were supported by practical computer exercises. IAGA lectures will be made available on [YouTube](#).



*Participants of the 7th IAGA School (left) and IASPEI School (right)*

The IASPEI School was attended by 32 PhD students and early postdoctoral researchers from 20 countries.

This year, the program addressed the most recent challenges in Seismological Data, combining lectures and practical sessions delivered by international experts, and was structured around four main themes: Ocean-Bottom Seismometers (OBS), from deployment to data processing; Legacy Data, focusing on digitisation and use of analogue archives; EPOS Infrastructure, providing access to data portals and virtual research environments; and DAS & SOP Technologies, exploring seismic monitoring via submarine telecom cables. All exercises and slides, along with expanded documentation, will be shared with students afterwards to ensure they have appropriate reference material for future workshops.

The students participated enthusiastically and actively in the Schools, and lively discussions took place among students and with lecturers during coffee breaks and the common meals. Both Schools and the combined activities received positive feedback from the participants.

Monika Korte, IAGA Secretary General, and  
Johannes Schweitzer, IASPEI Secretary General

## **PREPARATIONS FOR THE IUGG GENERAL ASSEMBLY 2027**

### ***IUGG Business Meetings 2025***

The meetings of the IUGG Bureau, Executive Committee (EC), and Finance Committee (FC), were held at Songdo Convensia, Incheon, Rep. of Korea, from 14 to 18 July 2025. The IUGG Bureau Members, the Chair of the IUGG Finance Committee, and the Association Presidents reported on the activities since the last EC meeting (Berlin, Germany, July 2023) and planned future activities. The Chairs of the IUGG Local Organising Committee (LOC; Sang-Mook Lee) and the Scientific Programme Committee (SPC; Kang-Kun Lee) reported on the preparations for IUGG2027, which will be held at Songdo Convensia, Incheon, from 16 to 22 July 2027.



*Participants of the IUGG Executive Committee Meeting of IUGG, Incheon, Rep. of Korea*

Moreover, meetings with representatives of the National Geographic Information Institute (NGII; Adhering Body of the Rep. of Korea to IUGG), representatives of the Korean National Committee, and representatives of the city of Incheon were held. The IUGG President and President-Elect were interviewed by the Korean media.

On 17 July 2025, all participants of the IUGG Business Meetings 2025 were invited to join a tour of Songdo Convensia. [MW Networks](#) and [C-IN](#) were hired as professional conference organisers of IUGG2027.

On 18 July 2025, the SPC Members met for their first meeting. The preliminary draft of the scientific programme was discussed.



### ***Interview with IUGG President and President-Elect***

On occasion of the IUGG Business Meetings 2025 in Incheon, Rep. of Korea, and in preparation for the IUGG General Assembly 2027 (IUGG2027), the IUGG President and President-Elect were interviewed by Jeong Ji-young from Donga Science.

*From left: Chris Rizos, IUGG President; Mioara Manda, IUGG President-Elect; and Lee Sang-mook, Chair of the IUGG National Committee for the Rep. of Korea, share a laugh during the interview (photo: Jeong Ji-young)*



***‘Basic Science, May It Become Korea’s Next ‘K-Pop Demon Hunters’. The ‘Olympics for Scientists’ to Be Hosted in Incheon in 2027.***

**‘We hope basic science will become another form of soft power for Korea, just like K-Pop.’**

On 17 July 2025 in Songdo, Incheon, Chris Rizos, President of the International Union of Geodesy and Geophysics (IUGG) and Professor of Civil and Environmental Engineering at the University of New South Wales, remarked, ‘I hope the 2027 IUGG General Assembly in Incheon will be a valuable opportunity to raise Korea’s level of science and technology to the next stage.’

The IUGG, now in its 106th year, is a long-standing international academic union.

Korea won the bid to host the 2027 IUGG General Assembly in Incheon. This marks only the second time the event will be held in Asia, following Japan in 2003. Held every four years, the IUGG General Assembly draws more than 5,000 scientists and is often called the ‘Olympics for scientists’.

Visiting Korea to prepare for the event, Rizos, Mioara Manda (President-Elect of IUGG and Head of Science Coordination at the French Space Agency), and Lee Sang-mook (Chair of the IUGG Korean Committee and Professor at Seoul National University’s School of Earth and Environmental Sciences) stated, ‘This General Assembly will be a crucial opportunity for Korea to strengthen its position on the global science stage.’

**Global challenges require a global perspective**

Manda stressed that what may appear to be a local issue - such as heat waves or earthquakes – is in fact a global phenomenon. ‘A holistic approach to the Earth’s systems is needed. When the world’s leading scientists gather to discuss the latest research, they broaden their perspectives and gain ideas they had never considered before.’ She explained that the significance of the IUGG General Assembly lies in its role as a platform for integrated knowledge exchange across disciplinary boundaries.

The three scientists emphasised that long-term investment and international cooperation in basic science are just as important as technological advancements.

Rizos noted, ‘Korea excels in commercialised technology, but it is difficult to say that it is yet in the top rank in the field of basic science. Now is the time to take the next step.’ He advised Korea to gain more experience by participating in large-scale scientific projects that require global collaboration.

**Fostering scientific talent**

The importance of cultivating creative scientific talent was also emphasised. To nurture such talent, the speakers suggested moving away from short-term performance-driven approaches and instead investing in education from a long-term perspective, providing young students with an environment where they can engage in diverse experiments and hands-on experiences.

They also stressed that science education should be organically connected to industry – from large corporations to start-ups – so that scientific knowledge can naturally take root throughout society.

**Science as a shared human endeavour**

While expressing caution about science being used for military purposes or as a competitive tool, Manda reassured, ‘Science has always been for everyone.’ She added, ‘Research and development concerning humanity’s common assets must always comply with international charters and norms.’

She cited as an example the case in which international research organisations made disaster-related data publicly available to affected countries for a certain period after recent large-scale natural disasters – demonstrating the public nature of science.

### Plans for a 'One Earth Center' in Korea

Professor Lee announced plans to establish a One Earth Center in conjunction with the IUGG General Assembly. Modelled after Italy's International Centre for Theoretical Physics (ICTP), this program would help promising young scientists from developing countries in Asia receive scientific education in Korea.

'I hope the IUGG General Assembly will become a stepping stone for the advancement of science in Korea,' Lee said.

## UNION COMMITTEES

The IUGG President appointed members to several new Union Committees, which are responsible (i) for considering the nominations received for the Gold Medal, Fellowships, and Early Career Scientist Awards to be presented at the IUGG General Assembly 2027 (Awards Committee), (ii) for strengthening the participation of early career scientists in IUGG (Early Career Scientist Committee), (iii) for increasing equality, diversity, and inclusion in IUGG (Equality, Diversity, and Inclusion Committee), (iv) for the selection of candidates to be included in the election of the IUGG Bureau and Finance Committee Members 2027-2031 (Nominating Committee), (v) for preparing the draft resolutions of the IUGG General Assembly 2027 (Resolutions Committee), (vi) for the evaluation of the sites proposed for the IUGG General Assembly 2031 (Site Comparison Committee), and (vii) for preparing modifications of the Statutes and By-Laws of the Union (Statutes and By-Laws Committee). The membership of the committees is the following:

### Awards Committee

- Denise Smythe-Wright (UK, IAPSO), Chair
- Johan Gaume (Switzerland, IACS)
- Richard S. Gross (USA, IAG)
- Jay Johnson (USA, IAGA)
- Fuqiang Tian (China, IAHS)
- Mary Scholes (South Africa, IAMAS)
- Keiko Kuge (Japan, IASPEI)
- Paolo Papale (Italy, IAVCEI)
- Alexander Rudloff (Germany, IUGG, ex-officio)

### Early Career Scientists Committee

- María del Puy Papí Isaba (Austria, IASPEI), Chair
- Dominika Niezabitowska (Sweden, IAGA), Vice-Chair
- Ji-Woong Yang (France, IACS), FRANCE
- Athina Peidou (USA, IAG)
- Moctar Démbéle (Ghana, IAHS)
- Jing Li (China, IAMAS)
- Malin Ödalen (Germany, IAPSO)
- Joali Paredes Marino (New Zealand, IAVCEI)
- Alexander Rudloff (Germany, IUGG, ex-officio)
- Veronica Tollenaar (Belgium, IACS, guest)
- Julia Azumi Koch (Switzerland, IAG, guest)
- Katia Pinhero (France, ECS-Net, guest)

### Equality, Diversity, and Inclusion Committee

- Andrew Mackintosh (Australia, IACS), Chair
- Rebekka Steffen (Sweden, IAG)
- Katia Pinheiro (Brazil/Germany, IAGA)
- Archana Sarkar (India, IAHS)
- Keith Alverson (USA, IAMAS)
- Joellen Russell (USA, IAPSO)
- Michelle Grobbelaar (Austria/South Africa, IASPEI)

### Nominating Committee

- Michael G. Sideris (Canada, IAG), Chair
- Sergio Barrientos (Chile, IASPEI)
- Monika Korte (Germany, IAGA)
- Marilyn Raphael (USA, IAMAS)

### Resolutions Committee

- Kathy Whaler (UK, IAGA), Chair
- Andrew Harris (France, IAVCEI)
- Harald Schuh (Germany, IAG)
- Dmitry Storchak (UK, IASPEI)
- Tirusha Thambiran (South Africa, IAMAS)

### Site Comparison Committee

- Eduard Petrovsky (Czech Republic, IAGA), Chair
- Fiona Darbyshire (Canada, IASPEI)
- Jürgen Müller (Germany, IAG)
- Stefania Sparnocchia (Italy, IAPSO)
- Martin Streck (USA, IAVCEI)
- Hans Volkert (Germany; IAMAS)
- Virendra Tiwari (India, IUGG, ex-officio)

### Statutes and By-Laws Committee

- Charles Barton (Australia, IAGA), Chair
- Zuheir Altamimi (France, IAG)
- Neil Holbrook (Australia, IAMAS)
- Jan Lindsay (New Zealand, IAVCEI)
- Johannes Schweitzer (Norway, IASPEI)
- Mioara Manda (France, IUGG, ex-officio)

More information about the committees can be found [here](#).

## A GUIDE FOR SCIENTISTS ON PARTICIPATING IN IUGG

Are you interested in getting involved in the IUGG community but you do not know where to start?

Then explore our new guide to engage with your International Association. It explains

- (i) what the Associations aim for,
- (ii) how the Associations are organised,
- (iii) how you can get involved, and
- (iv) how the Association can help you develop your ideas and initiatives

The full guide is available [here](#).



## ASSOCIATION JOURNALS

The IUGG, through some of its Associations, publishes a number of peer-reviewed journals covering various topics of Earth and space sciences. All the journals are either full or hybrid open-access. Here, we would like to introduce you to the major journals of our Associations.

### *International Association of Geodesy (IAG)*

The [Journal of Geodesy](#) is an international journal concerned with the study of scientific problems of geodesy and related interdisciplinary sciences. It presents peer-reviewed papers on theoretical or modelling studies, and on results of experiments and interpretations. In addition to original research papers, the journal includes commissioned review papers on topical subjects, occasional short notes on topics with broad significance to the readership, and special issues arising from, for example, scientific symposia or workshops. The journal covers the whole range of geodetic science and reports on theoretical and applied studies in research areas such as positioning; reference frame; geodetic networks; modelling and quality control; space geodesy; remote sensing; gravity fields, and geodynamics. The Journal of Geodesy is published by Springer. **Five year impact factor: 5.1 (2023).**



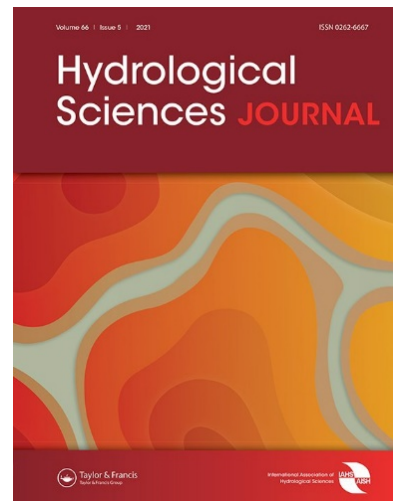
- A journal of the IAG
- An international journal examining scientific problems of geodesy and related interdisciplinary sciences
- Covers the entire range of geodetic science
- Presents peer-reviewed papers on theoretical or modelling studies, and on results of experiments and interpretations
- Reports on theoretical and applied studies in research areas such as positioning; reference frame; geodetic networks and more
- 97% of authors who answered a survey reported that they would definitely publish or probably publish in the journal again

## ***International Association of Hydrological Sciences (IAHS)***

The [Hydrological Sciences Journal](#) is the official Journal of IAHS and provides a forum for original papers and for the exchange of information and views on significant developments in hydrology worldwide. The Hydrological Sciences Journal is published by Taylor & Francis. **Five year impact factor: 3.9 (2023).**

The scope of the journal includes:

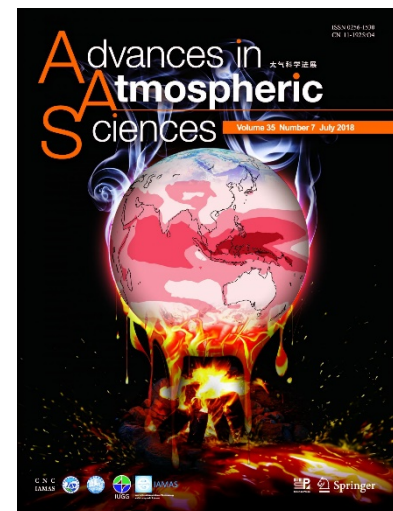
- The hydrological cycle
- Surface water, groundwater, snow and ice, in all their physical, chemical and biological processes, their interrelationships, and their relationships to geographical factors, atmospheric processes and climate, and Earth processes including erosion and sedimentation
- Hydrological extremes and their impact
- Measurement, mathematical representation and computational aspects of hydrological processes
- Hydrological aspects of the use and management of water resources and their change under the influence of human activity
- Water resources systems, including the planning, engineering, management and economic aspects of applied hydrology



## ***International Association of Meteorology and Atmospheric Sciences (IAMAS)***

[Advances in Atmospheric Sciences](#), launched in 1984, aims to publish the latest achievements and developments on the dynamics, physics and chemistry of the Earth's atmosphere and ocean. It also aims to publish potentially high impact papers on the atmospheres of other planets and on earth system dynamics in which the atmosphere and/or ocean are involved.

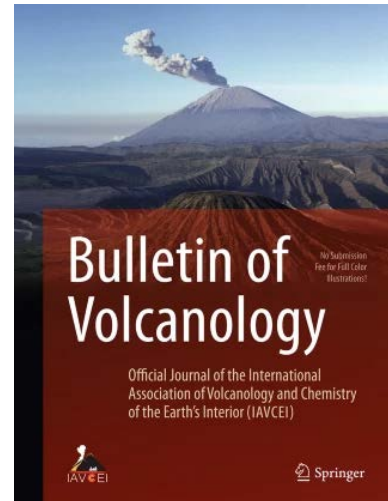
Papers cover the subject areas, including but not limited to, atmospheric and oceanic theories, modelling and observations; weather and general circulation systems, numerical weather prediction, climate dynamics; satellite meteorology, remote sensing, air chemistry and the boundary layer, clouds and precipitation; earth system dynamics, particularly on interactions of the atmosphere and ocean with the biosphere, the cryosphere, and the anthroposphere. The journal encourages studies seeking universal and generalised laws from local and specific phenomena.



Advances in Atmospheric Sciences is sponsored by the Chinese Committee for IAMAS, the Institute of Atmospheric Physics at Chinese Academy of Sciences and Chinese Meteorological Society. It is the official journal of IAMAS. **Five year impact factor: 5.2 (2023).**

## ***International Association of Volcanology and Chemistry of the Earth's Interior (IAVCEI)***

The [Bulletin of Volcanology](#) was founded in 1922, as the Bulletin Volcanologique, and is the official journal of the IAVCEI. The Bulletin of Volcanology publishes papers on volcanoes, their products, their eruptive behaviour, and their hazards. Papers aimed at understanding the deeper structure of volcanoes, and the evolution of magmatic systems using geochemical, petrological, and geophysical techniques are also published. Material is published in four sections: Review Articles; Research Articles; Short Scientific Communications; and a Forum that provides for discussion of controversial issues and for comment and reply on previously published Articles and Communications. The Bulletin of Volcanology is published by Springer. **Five year impact factor: 2.9 (2023).**

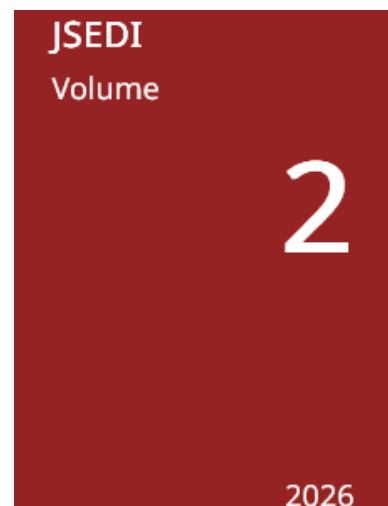


## ***Union Commission on the Study of Earth's Deep Interior (SEDI)***

The [Journal of Studies of Earth's Deep Interior](#) (jSEDI) is an interdisciplinary diamond open access journal devoted to publishing original research on planetary deep interiors. Published by ENS Éditions, the journal issues one volume annually.

jSEDI publishes original scientific research in the broadly defined domain of studies of the Earth's deep interior. Contributions from any discipline or field of study that seeks to expand our understanding of the origin, state, evolution, and role of planet interiors are welcome. The 'Earth' in SEDI is meant in an expansive sense, referring to planets in general, and our subject matter is not restricted to the planet Earth's interior. Fields that commonly contribute to SEDI science include (but are not limited to): geochemistry, seismology, gravity, mineralogy, mineral physics, petrology, geomagnetism, geodynamics, and planetary exploration.

Although the broader scope of SEDI is interdisciplinary in nature, focused disciplinary work is also required to tackle challenges and specialized contributions are welcome.



## **COOPERATION WITH THE ABDUS SALAM INTERNATIONAL CENTRE FOR THEORETICAL PHYSICS (ICTP)**

On 21 May 2024, ICTP Director Atish Dabholkar and IUGG Secretary General Alexander Rudloff signed a Memorandum of Understanding (MoU) to promote educational programs related to geodesy and geophysics for 2024-2027. The agreement encourages collaboration in the organisation of advanced schools/workshops in geodesy and geophysics at ICTP in Trieste, Italy, at ICTP-EAIFR in Kigali, Rwanda, and other low- and middle-income countries.



In 2025, the IUGG supported the following three geoscience education events with a total of USD 15,000:

- 6th Summer School on Theory, Mechanisms and Hierarchical Modelling of Climate Dynamics: Artificial Intelligence and Climate Modelling, 5-16 May, ICTP, Trieste, Italy
- 12th Workshop on the Theory and Use of Regional Climate Models, 25 August-5 September, ICTP, Trieste, Italy
- Workshop on the Deformation at the Intersection Between Physics of Earthquakes and Volcanic Processes, 13-24 October, ICTP, Trieste, Italy

## COOPERATION WITH THE INTERNATIONAL SCIENCE COUNCIL (ISC)

### *IUGG at the ISC General Assembly 2025 and Muscat Global Knowledge in Muscat, 26-30 January 2025*



*Left to Right: Chris Rizos (IUGG President), Mioara Mandea (IUGG President-Elect), Alexander Rudloff (IUGG Secretary-General)*

Several members of the IUGG Bureau participated prominently in the General Assembly of the International Science Council (ISC) and associated side event, the ‘Muscat Global Knowledge Dialogue’ (MGKD), 26-30 January 2025, in Muscat, the Sultanate of Oman. The attendees were President Chris Rizos, the President-Elect Mioara Mandea, and the Secretary-General Alexander Rudloff. Over 415 representatives of ISC organisations, from 132 countries, took part in the week-long event held at the Oman Convention and Exhibition Centre (OCEC).

The ISC is the umbrella organisation to which the IUGG (and about 40 other international scientific unions) belongs. The ISC was established in 2018 through the merger of the International Council of Science (ICSU) and the International Social Science Council (ISSC). Today the ISC comprises over 250 international scientific unions and associations, national and regional scientific organisations including academies and research councils, international federations and societies, as well as young academies and associations. As stated on its website, the ISC works at the global level to pool and bring together scientific expertise, advice and influence on issues of great importance to both science and society. It is both the ‘global voice of science’ and a member-based organisation.

The first three days were devoted to a series of plenary and parallel sessions that addressed a range of global science challenges, such as how science can better engage with policy-makers, how the ISC is building strong links with multilateral bodies such as the UN, and how the ISC members contribute to the goals of sustainable development. The MGKD programme can be found [here](#).

On the afternoon of 26 January a meeting of the ten unions and associations forming the so-called ‘GeoUnions’ cluster took place to discuss concerns including the representation of the GeoUnions within the ISC through members on the ISC Governing Board, and other matters. (The relationship between the IUGG and the GeoUnions is one of the IUGG’s fundamental external links.)

The session on ‘Ocean Science for Sustainability’ on 27 January included a contribution from the IUGG, highlighting the emerging focus of the International Association for the Physical Sciences of the Ocean ([IAPSO](#)). Topics of the session on Tuesday 28 January included the impact of emerging technologies (AI, quantum, synthetic biology, etc), science education, gender issues, the imbalance of scientific

capacity in the North and South, environmental costs, and others. Our President-Elect Mioara Mandaia was a panellist at the session 'The Decade of Science for Sustainable Development'.

The 3<sup>rd</sup> General Assembly of the ISC (GA) took place during the last two days, 29-30 January 2025. Priscilla Grew, from the IUGG Finance Committee, organised a side event on the very relevant topic of 'Union Membership Issues: Retention, Recruitment and Geographic Representation'. The chair, Renee Borges, Secretary-General, International Union of Biological Sciences (IUBS) and the panellists, Mioara Mandaia, President-Elect, International Union of Geodesy and Geophysics (IUGG), Hassina Mouri, President, and David Cohen, Treasurer, International Union of Geological Sciences (IUGS) shared experience about the difficulty of retaining and recruiting dues-paying national members. The drop in membership has been accompanied by a decline in the breadth of geographic representation within Union membership, especially in the Global South, including Oceania. Funding agencies expect Unions to provide more persuasive justifications and cost-benefit analyses for national investment in Union dues. Questions are raised about the comparative value and effectiveness of traditional disciplinary scientific unions as opposed to international organisations organised around topics (e.g., climate, sea level rise, health, hazards).

On the agenda of the GA were the reports of the various ISC officers and committees, as well as the proposed budget. Several contentious issues were discussed, not the least being the tension between the ISC's mission to be the 'Global Voice for Science', and the fact that it is an umbrella organisation of over 250 scientific unions, societies and academies. The ISC Governing Board will continue the discussion of several matters. The IUGG will closely monitor developments.

More information about the GA can be found [here](#).

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### **ISC Annual Report 2024**

The International Science Council's (ISC) published its [2024 Annual Report](#). The report summarises all of the ISC's major activities in 2024, as well as those of its affiliated bodies, and includes the ISC's financial reporting for the year.



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### **ISC Issues Letter in Response to Global Challenges on Science**



**International  
Science Council**

In response to global challenges on science, the International Science Council ([ISC](#)) has issued the following letter:

Dear Members,

We are writing to you when many of you are looking to the International Science Council for guidance on responses to global challenges to science.

It is only a decade since the Sustainable Development Goals were launched, the Sendai Framework agreed, and the Paris climate accord reached. In the early years of this last decade we saw a remarkable

growth in global scientific collaboration, a growing focus on the issues affecting the global commons, an increasing contribution of science from less developed and emerging countries, a far greater diversity within the research community, enhanced moves to open science and open data, and the emergence of transdisciplinary research bringing the natural and social sciences and other forms of knowledge closer together. There was a sense that while there were many challenges, scientists across the world could work with governments, foundations, business and societies to tackle these urgent issues, especially those of the global commons.

In one sense the COVID-19 pandemic was a demonstration of what could be done but it also accelerated perceptual change. The previous investments in life sciences had allowed for remarkable and unprecedented cooperation to develop new effective class of vaccine. But on the other hand it increased tensions between the major technopoles, there was discord between the global north and south related to technology and intellectual property, the multilateral system was seen by some to have been ineffective or politicized, and in some countries, science became a political tool and the tension between science as a source of knowledge and a tool of power became obvious. COVID had financial and social consequences that are still playing out.

But even before COVID came, we had seen the emergence of the so-called 'post-truth era'. Trust in many of the institutions of society had declined. Rapid sociological, demographic, geopolitical, environmental and technological change was unsettling. Dissatisfaction was fueled by many unresolved issues and growing inequalities in many societies.

The changed information environment with the explosion of social media did not help and allowed people to reinforce their biases and ignore inconvenient evidence. It has fueled the transmission of disinformation and conspiracy theories. These have helped undermine the capacity of societies to use scientific knowledge well. It altered public decision making. The pandemic further fueled the populist turn impacting on the role of science. For at its heart, populism rejects organized science from having any privilege in defining truths and from having any privilege in decision making.

As the geopolitical landscape has changed, countries are now rapidly shifting resources to support defense and security. This shift, combined with the economic challenges that flow from the pandemic, from emerging tariff barriers and a retreat from globalization, may drive countries to be less committed to funding the needed global efforts, because they are now focused more on their own more utilitarian needs. In this context international science cooperation has been put at a greater risk.

At the same time and driven by the same factors, we have seen a growing assault on science, universities and academic freedom, not only in one country or in one continent. Sadly, much of that attack is on the issues and science that matters most: climate change, pandemic risks, social science, environmental sustainability, natural capital and more. These are the very domains which are most relevant for society and the global challenges. There has been a growing rejection of evidence in informing policy in some countries.

The global support for international science cooperation has been shifting. Science is defined by its principles, principles that make it a universal language. And science is needed to address so many of the issues we face at every level from local to global. It is critically important at this time that the science community comes together and does not let short-termism and nationalism get in the way of providing the evidence to address those issues that will determine our future on this planet.

The International Science Council is the most comprehensive international science organization and unique in its composition and mission. Its priorities must be shaped by this changing milieu.

Firstly, while the multilateral system may be weakened, it remains the only structure by which global policies can be influenced and effected. Over the past two years the ISC has been investing to ensure

that the voice of the global science community can better assist both the policy and technical agencies in using science in these challenging and urgent times. A critical part of this is helping to shape the global research agenda. We will continue to expand our efforts here – it must be a core priority.

Secondly, as an organization uniquely placed because of our global membership to play a role in informal or so-called track 2 science diplomacy where science helps promote peaceful dialogue between countries, we are working with other partners to try and promote science as a global public good and where possible, as a way to reduce tensions. We need to renew our efforts for countries to understand that it is in the direct national interests to support urgent action on the issues of the global commons.

Thirdly, the importance of promoting international science cooperation remains, both because the world needs it and because it is a glue to help keep the world from fracturing further. We are doing so in multiple ways: promoting the values and principles that allow scientists to cooperate across cultures and contexts, defending open science, and supporting our Affiliated Bodies who play such a critical role in the organization and coordination of international science. Some of these now face real challenges because of recent events and this changed milieu and the ISC is working to help protect and develop them. We will be making further internal changes to be more effective in these roles. Our expanded platform of regional offices is a further step we have taken to promote regional cooperation.

Fourthly, we must reexamine the social contract for science and recognize that greater efforts are needed to protect trust in science and for it to be perceived as trustworthy. There are gaps in the normative framework for scientific research that must be addressed, and we need to better understand why scientific knowledge can be rejected rather than used.

And in that context, we must be clear: science has a unique and critical capacity to give knowledge about our world. As a universal knowledge system, we know that science can contribute so much to finding a safer and better path for all of us on this planet and protect the planet's biota. We have a responsibility to focus on where we can make a difference.

Addressing the worrying and multifaceted named above issues is a complex and sensitive agenda for a small international organization, even with our extensive and influential membership. But we must. For we are uniquely placed and therefore have large responsibilities. How we do so, must be nuanced and principled. Our membership in every country and across every scientific discipline gives us a unique asset. But the ISC will be most effective when every eligible scientific organization becomes a member.

Like other parts of the science system, we are resource limited so we must prioritize. Protecting global science for the global public good, enabling international science cooperation, using our capacities to assist the vulnerable international system and promoting diplomacy towards a better planet must be our primary goals. This sharpens our strategic framework even more than we suggested in Oman.

Clearly, the ISC's effectiveness would be enhanced by access to more resources. We hope, even in these difficult times, that donor countries, foundations or private donors can see the value of what the ISC is doing. In the meantime, we will be undertaking internal change to focus on the highest priority tasks.

While the ISC is uniquely placed, it has a unique burden. These are very challenging times for international science. It is critical that we find ways to be more effective. We are confident we are on the right path to do so.

Sir Peter Gluckman, ISC President  
Prof. Robbert Dijkgraaf, ISC President-elect

## ***ISC Publishes Statement on International Scientific Collaboration***



## **International Science Council**

The Governing Board of the International Science Council ([ISC](#)) has issued the following statement to underscore the urgent need to protect and strengthen global cooperation in science:

### ***International scientific collaboration: Vital yet vulnerable***

As global challenges grow more complex, the foundations of international scientific collaboration are increasingly under threat. In this statement, the International Science Council's Governing Board underscores the urgent need to protect and strengthen global cooperation in science – essential not only for advancing knowledge and innovation, but for safeguarding the wellbeing of people and planet alike.

Science is a special form of globally shared knowledge which the world needs more than ever in addressing the challenges that all face. The international collaboration that is at its heart has been created over many decades, but is now vulnerable and fragile. Given the enormous importance of science to national and global wellbeing, the International Science Council appeals to all decision makers to ensure that the principles of science and its institutions are protected, and that international scientific cooperation is maintained and ideally strengthened.

Over the past 200 years, science has played a major role in improving the quality of human life, fostering economic growth, and deepening broader understanding of nature and society. All nations use science to advance their interests – through health, social progress and economic development. Much of this national benefit is achieved through significant investments in research, including by the private sector and philanthropies, and via collaborations within the global scientific community – for knowledge transcends national boundaries. This collective approach has become more critical given existential threats to planetary and societal health that we now face.

Science also plays an important role in nations advancing their economic, security, and geostrategic goals. The increasingly used policy mantra of science being ‘as open as possible and as closed as necessary’ must not be extended beyond legitimate need.

Science has both contributed to, and exposed, the issues of the impact of humans and their technologies on the planet at every level, from local to global. Over the last few decades, nations and their scientists have collaborated to identify, seek to mitigate, and adapt to these risks. That collaboration has often transcended geostrategic tensions because it is in every nation’s own vested interest to protect the global commons.

What underpins all sciences is a set of principles based on empiricism, transparency, quality assurance and openness that allow science to be a universal system of knowledge. However, the application of scientific knowledge is rightfully determined by the societies in which it is embedded. Scientific communities are right to be concerned about the forces that are challenging them. International scientific collaboration must continue; the responsibility for sustaining research must be more equitably shared – not only to safeguard scientific outcomes, but because nations that invest in and support science also grow from its many benefits. Ignoring science increases the risks to the global commons. Scientific cooperation promotes peaceful dialogue among countries.

For its part, the scientific community must remain true to its core principles but must be more closely and meaningfully connected to society. The contract between science and society must be continually renewed allowing science to make essential contributions to peace, security and well-being.

As the global NGO mainly comprising scientific unions, associations and academies, the ISC is committed to our vision of science as a global public good. We call upon all sectors of society to recognize that the free and responsible practice of science is a community endeavour crucial to the advancement of all humanity.

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### ***ISC together with the UN Publish Statement on Open Science***

At its second annual retreat, the UN Secretary-General's Scientific Advisory Board ([SAB](#)) adopted a landmark statement on open science, with the International Science Council ([ISC](#)) serving as lead coordinator. The statement highlights open science as vital for research, for connecting science with policy and society, and for tackling global inequality, while warning that its benefits are at risk as barriers to international collaboration grow.

The statement can be downloaded [here](#).

## **COOPERATION WITH INTERNATIONAL AND INTERGOVERNMENTAL ORGANIZATIONS**

### ***IACS partners with the International Year of Glaciers' Preservation 2025***

The International Year of Glaciers' Preservation 2025 (IYGP) is approaching and the [IYGP website](#) was launched in November. Several events are planned for next year. The World Glacier Monitoring Service (WGMS) collects a list of national and international events on [its website](#).



**2025**  
**International**  
**Year of Glaciers'**  
**Preservation**

On 21 January the IYGP will be launched and on 21 March the World Glacier Day will be celebrated for the first time. The IYGP is co-chaired by UNESCO and the World Meteorological Organization (WMO). IACS is partner organisation. IACS President Liss Andreassen and WGMS Director Michael Zemp are members of the IYGP Advisory Board. IACS will together with UNESCO and WMO mark the IYGP with

a special session at the IACS-IAMAS-IAPSO Joint Scientific Assembly 2025 ([BACO2025](#)). The IYGP also marks the start of the 'Decade of Action for Cryospheric Science 2025-2034', recently adopted by the United Nations to address the urgency of understanding, monitoring and mitigating the melting of the cryosphere in the face of the climate crisis.

Liss Andreassen, IACS President

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## ***IUGG partners with TopoAsia International Research Initiative***

Launched in Shanghai on 21 October 2025, during the 23rd China International Talent Exchange Conference (CIEP), the TopoAsia International Research Initiative is a major step forward for global Earth system research. Its first international workshop – attracting over 250 participants from nearly 30 countries – united scientists to explore how Asia’s deep Earth and surface systems interact, a topic vital to understanding tectonic activity, natural resources, and environmental change.



*TopoAsia formally launched in Shanghai on 21 October 2025, during the 23rd China International Talent Exchange Conference. IUGG President-Elect Mioara Manda extends a warm invitation to all participants of the TopoAsia Workshop to join the IUGG General Assembly in July 2027, in Incheon, Rep. of Korea*

The TopoAsia initiative was jointly proposed by scientists from China, India, and Russia, inspired in part by the example of past international collaborations established in Europe, including the famous TopoEurope program. The TopoAsia workshop attracted participants from other Asian countries, including Japan, Vietnam, Mongolia, Indonesia, Pakistan, Rep. of Korea, Kazakhstan, Malaysia, Thailand, Myanmar, and Türkiye, as well as many participants from non-Asian countries. Representatives from several international scientific organisations, including the International Lithosphere Program (ILP), the International Union of Geodesy and Geophysics (IUGG), the International Union of Geological Sciences (IUGS), the Asia Oceania Geosciences Society (AOGS), and the International Association of Paleogeography (IAP), attended the launch and offered their warm congratulations. Leaders and representatives from the National Natural Science Foundation of China (NSFC), the Sichuan Provincial Department of Science and Technology, as well as the co-organisers of the workshop – Chengdu University of Technology, China University of Geosciences (Beijing), and the Chinese Academy of Geological Sciences (CAGS) – participated in the TopoAsia launch ceremony. IUGG was represented by the President-Elect, Mioara Manda.

TopoAsia builds on the ‘Four Co-’ Principles: joint planning, collaborative building, open sharing, and mutual success. The initiative’s vision was formalised with the signing of the TopoAsia Shanghai Declaration at the workshop. Core goals include identifying key scientific questions and representative ‘natural laboratories’ across Asia to study Earth’s deep-surface connections. Near-term plans feature setting up organisational committees and a secretariat within three months, launching an official website by late November 2025, and publishing research summaries (including a white paper). Future activities will include international field trips, conference sessions, and expanded global partnerships.

TopoAsia aims to create an open, collaborative platform for cross-border, multi-disciplinary research – advancing scientific understanding while supporting sustainable development in Asia and beyond.

The IUGG congratulates everyone involved on the launch of this important initiative and wishes every success.

Mioara Manda, IUGG President-Elect, on behalf of all partners of the TopoAsia Initiative

## IUGG Signs Appeal to Immigration Authorities

The Presidents of several international scientific unions of the International Science Council (ISC) including IUGG signed a letter for use by scientists who apply for an entrance visa to attend scientific activities in another country. Although this letter has no legally binding value, it may improve the applicant's chances of obtaining the desired visa under challenging situations.



5 March 2025

### Appeal to Immigration Authorities

Signed by Presidents of International Science Unions

Dear Immigration Officer,

The United Nations Sustainable Development Goals (SDGs), particularly Goal 17, advocate strengthening global science partnerships. Collaboration and cooperation among scientists are essential for all humanity and highly beneficial to the countries involved.

As Presidents of global scientific unions affiliated with the ISC (International Science Council), we encourage the immigration authorities worldwide to favorably consider awarding scientists an entrance visa to allow them to participate in scientific conferences and workshops, carry out joint research projects, exchange ideas, prepare joint research proposals, write joint publications, teach students, give lectures, and collaborate in any other form.

We appreciate your help in the name of all scientists worldwide.

**Prof. Ehud Keinan**  
President, International Union of Pure and Applied Chemistry (IUPAC)

**Prof. Silvana Ponce Dawson**  
President, International Union of Pure and Applied Physics (IUPAP)

**Dr. Santiago Garcia-Granda**  
President, International Union of Crystallography (IUCr)

**Prof. Lena Halounova**  
President, International Society for Photogrammetry and Remote Sensing (ISPRS)

**Prof. W.H.A. (Wil) Schilders**  
President, International Council for Industrial and Applied Mathematics (ICIAM)

**Prof. Anthony Watts**  
President, International Union of Pure and Applied Biophysics (IUPAB)

**Prof. Nathalie Lemarchand**  
President, International Geographical Union (IGU)

**Prof. Karl-Josef Dietz**  
President, International Union of Biological Sciences (IUBS)

**Prof. Hiraku Nakajima**  
President, International Mathematical Union (IMU)

**Prof. Chris Rizos**  
President, International Union of Geodesy & Geophysics (IUGG)

**Prof. Ari Sihvola**  
President, International Union of Radio Science (URSI)

**Dr. Jennifer A. Veitch**  
President, International Commission on Illumination (CIE)

**Prof. Laura Sadori**  
President, International Union for Quaternary Research (INQUA)

**Prof. Victor O. Chude**  
President, International Union of Soil Sciences (IUSS)

**Prof. Maria Ackrén**  
President, International Arctic Social Sciences Association (IASSA)

**Prof. Rino Rappuoli**  
President, International Union of Microbiological Societies (IUMS)

**Prof. Anil Kumar**  
President, International Union of Materials Research Societies (IUMRS)

**Prof. Jacques Magnaudet**  
President, International Union of Theoretical and Applied Mechanics (IUTAM)

**Dr. Germán Gutiérrez**  
President, International Union of Psychological Science (IUPSYS)

**Prof. Catherine Lamoureux**  
President, International Union of Toxicology (IUTOX)

**Prof. Georg Gartner**  
President, International Cartographic Association (IASA)



## ***IUGG Signs Statement on Disaster Risk Reduction***

From 2 to 6 June 2025, national representatives, UN agencies, civil society, the private sector, academia, and other stakeholders gathered at the 8th Session of the Global Platform for Disaster Risk Reduction in Geneva, Switzerland, to take stock of progress in the implementation of the Sendai Framework for Disaster Risk Reduction, share new knowledge, exchange best practice, and discuss the latest developments and trends in reducing disaster risk.

IUGG together with Geology for Global Development (GfGD), the American Geophysical Union (AGU), the European Geosciences Union (EGU), the Geological Society of London (GSL), and the Global Volcano Risk Alliance (GVRA) published the following joint statement:

Natural hazards – such as earthquakes, floods, tsunamis, volcanic eruptions, forest fires, hurricanes, avalanches or landslides – when combined with exposure and vulnerability have devastating effects on lives, health and well-being, access to education, livelihoods and economic growth. The *Report of the Midterm Review of the Sendai Framework 2015–2030*, however, notes that risks are being created and accumulated faster than our ability to anticipate, manage and reduce them, and that progress towards a more resilient future has stalled, in part, because of barriers between risk science and risk-informed decision-making (UNDRR, 2023).

Tackling these challenges is critical if we are to deliver the high-level objectives of the 2030 Agenda for Sustainable Development, to achieve a more sustainable and equitable world. As members of the global Earth and environmental science community, we recognise our responsibilities to contribute to dialogue at the Global Platform, to identify opportunities to accelerate progress in reducing risk, and to contribute to the wider actions supporting implementation of the Sendai Framework for Disaster Risk Reduction, leaving no one behind.

Here we outline three themes we believe should be part of conversations at the Global Platform and embedded into any post-event strategy for enhancing risk reduction:

***Enhancing Environmental Data Availability to Understand Current and Future Disaster Risks.*** A key theme of the 2025 Global Platform is the need to manage current and future disaster risks and uncertainties in a rapidly changing climate and global context. Understanding the complexities of dynamic risks requires Earth and environmental data to constrain hazard characteristics and how these may respond to a changing climate. Scientific institutions and operational services involved in Earth and environmental data collection, management, integration, and analysis (e.g., volcano observatories, seismic networks, geological surveys, ministries of water, or meteorological stations) must receive sustained and long-term support to ensure we have a comprehensive and evolving understanding of hazards and risks. Such institutions play an important role in providing public goods and securing development gains.

***Strengthening Support for Scientific Institutions in Low-Income and Least-Developed Countries.*** Given previous comments about their value, the international community must identify ways to accelerate support to scientific institutions in low-income and least-developed countries. These regions often face multiple, interconnected hazards, yet local institutions monitoring and reducing these risks often lack essential equipment and access to training. International collaborations, essential for capacity-building and technology transfer, are under threat due to cuts in Official Development Assistance. To ensure that no one is left behind, all actors must prioritise and strengthen support for these vital institutions, listening to their needs and aligning resources accordingly.

***Improving Public Understanding of the Natural Environment, to Support Education for Sustainable Development.*** Public understanding of the dynamics of environmental systems and the human pressure on the environment can help to encourage appropriate and decisive actions, at all levels, to

deliver the ambitions of the Sendai Framework. Embedding earth and environmental science into both formal and informal education settings, provides knowledge and skills that can empower communities and inform their advocacy for and delivery of effective risk management solutions.

Collectively, we believe these actions will increase the availability of Earth and environmental science for disaster risk reduction, helping to drive progress toward the 2030 Agenda for Sustainable Development, ensuring that no one is left behind.

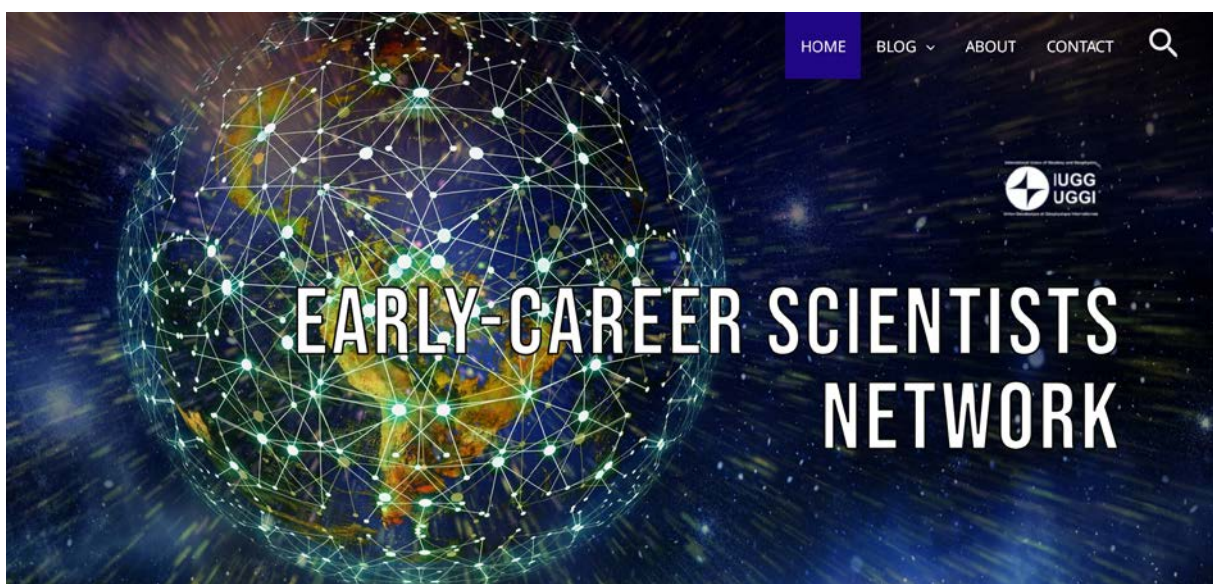
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### ***IUGG Launches its Early-Career Scientists Network (ECSNet)***

The IUGG launched the [ECSNet website](#) and blog to connect Early-Career Scientists (ECS) across all IUGG Associations! The goal is to unify ECS communities, foster international collaboration, and inspire the next generation of scientists. Each Association has already contributed two blog posts: one on how to get involved and another introducing ECS representatives, their careers, research, and how they got involved in their Associations.

ECSNet, led by Katia Pinheiro, offers a platform for ECSs to share their work and grow within and beyond academia. Join us at <https://iugg-ecs.org> and contribute to building a stronger, more connected community of early-career scientists!

ECSNet is funded by the [IUGG Grants Program 2024-2027](#).





## **Great Debate**

IUGG together with the American Geophysical Union (AGU), the European Geosciences Union (EGU), the Geological Society of London (GSL), the Japan Geoscience Union (JpGU), the International Union of Geological Sciences (IUGS), and other globally active geoscience unions and societies organised a Great Debate on *Out of the bubble: Can you become a better science communicator if you leave your comfort zone?* This event (GDB6) was well attended and featured a broad and open panel discussion. The session was also [recorded](#).

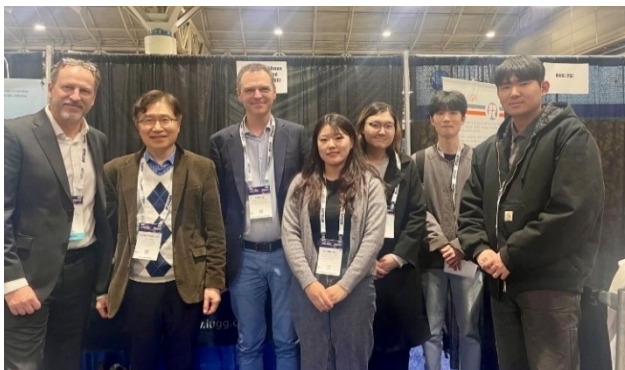
## **Global Geoscience Societies Meeting**

Among others, Alexander Rudloff, IUGG Secretary General, took part in the Global Geoscience Societies Meeting, which has now become a regular opportunity for international geoscience societies and associations to exchange ideas. Topics of discussion included (i) science under pressure, (ii) inclusion of the Global South, (iii) membership issues – both at the individual and country level, (iv) upcoming meetings, etc. Representatives from AGU, the German Geophysical Society (DGG), EGU, JpGU, the Geological Society of America (GSA), GSL, and IUGG participated.

IUGG thanks the EGU for providing an excellent platform for scientific exchange and for inviting the IUGG leadership to attend the President's Reception on the Monday.

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## ***IUGG at the AGU Fall Meeting 2025 in New Orleans, 14-19 December 2025***



*At the exhibition booth with Tomas Maxa, C-IN, Kang-Kun Lee, Chair of the IUGG2027 Science Programme Committee, Franz Kuglitsch, IUGG Executive Secretary, and Korean students (from left to right)*

The IUGG was present with an exhibition booth at the AGU Fall Meeting 2025, which was held from 14 to 19 December 2025 in New Orleans LA, USA. The booth served as a focal point for engaging with attendees and sharing information about ongoing and upcoming activities of IUGG and its Associations including the IUGG General Assembly 2027 (IUGG2027), which will be held from 16 to 22 July 2027 in Incheon, Rep. of Korea. The booth was hosted by Franz Kuglitsch, IUGG Executive Secretary, Tomas Maxa, C-IN (one of the two professional conference organisers responsible for the logistics of IUGG2027), and several students from Korea.

On 18 December 2025, the AGU leadership organised its traditional Global Geoscience Breakfast. The meeting brought together representatives from various global geoscience societies to discuss their upcoming activities and potential collaborations for 2026. Participants shared updates on their societies' priorities, including preparations for conferences, expanding membership and outreach, and addressing governance and inclusion challenges. Participants expressed interest in continuing to work together to address shared challenges and leverage collective strengths. Franz Kuglitsch attended the meeting on-site and reported on behalf of IUGG.



*Onsite participants of the Global Geoscience Breakfast on 18 December 2025*

Alexander Rudloff, IUGG Secretary General, attended the meeting online and presented the *Leading Practice Guide for Governance, Inclusion, Inclusive Science and Outreach*, a document compiled over 18 months by AGU, EGU, GSA, Geological Society of London, IUGG, IUGS, and JPGU. The guide shares frameworks for inclusive governance, common standards, and commitments to DEI and ethical science, with the full document containing 46 pages of resources.

The IUGG thanks the AGU for providing an excellent platform for scientific exchange.

## IUGG MEMBER COUNTRIES

### *IUGG Welcomes Papua New Guinea*



On 29 September 2025, the IUGG Council unanimously accepted the application of Papua New Guinea to join IUGG as a Full Member of Category 1.

The IUGG thanks the Papua New Guinea University of Technology for acting as IUGG's Adhering Body of Papua New Guinea and for appointing the following members of the National Committee:

**Ora Renagi** (President), **Richard Stanaway** (Secretary and IAG Correspondent), **Gideon Aiwa** (IAGA Correspondent), **Stephanie Konts** (IAHS Correspondent), **Felix Pereira** (IAMAS Correspondent), **Ahmad Sana** (IAPSO Correspondent), **Simon Kawagle** (IASPEI Correspondent), and **Suame Ampana** (IAVCEI Correspondent).

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### *IUGG ITALY – Annual Report 2024 of the National Committee*



Each year, the members of the IUGG National Committee for Italy prepare reports summarising the main scientific and organisational activities. The 2024 annual report is now available on a [website](#) and linked to the [Nation Committee Reports section](#) of the IUGG website.

I take this opportunity to thank my fellow National Delegates of the International Associations and their deputies, as well as my deputy Claudia Pasquero, for the work they have done to promote the IUGG and to organise the activities within the International Associations. I would also like to thank the coordinator and the staff of the CNR International Relations Unit for their constant support to the activities of the CNR-IUGG Commission.

Fausto Guzzetti, President of the IUGG National Committee for Italy

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## ***IUGG ROMANIA – One Hundred Years of Geophysical Research and Prospecting in Romania (1925-2025)***



Geophysics in Romania has evolved broadly in step with major international developments in Earth sciences, particularly following the establishment of the International Union of Geodesy and Geophysics (IUGG). The period from 1925 to 2025 outlines a coherent trajectory, from the first organised geophysical prospecting campaigns to the consolidation of a national geophysical school firmly embedded in international scientific networks.

The intellectual and institutional premises were laid in the early decades of the 20th century, when the study of the Earth increasingly relied on rigorous physical measurements and dedicated observation infrastructures. This formative stage is associated with figures such as Gheorghe Demetrescu and Nicolae Coculescu, whose contributions helped shape the scientific environment from which modern Romanian geophysics emerged.

A decisive founding moment is linked to Ludovic Mrazec, who promoted the systematic integration of geophysical methods into subsurface exploration and created the institutional framework for their application. Around him developed the “first wave” of Romanian geophysics, marking the transition from isolated observations to the systematic use of



gravimetry, magnetometry, seismics, and electrometry. This generation includes Sabba S. Ștefănescu, a pioneer of electrometry and co-founder of the Romanian geophysical school; Iulian Gavăț, the leading figure of Romanian gravimetry; Toma Petre Ghițulescu, promoter of applied geophysics in mineral exploration; and Mircea Socolescu, who played a key role in building geophysical infrastructure and fostering an integrated geology–geophysics approach.

After the mid-20th century, a “second wave” brought Romanian geophysics to theoretical and institutional maturity through the work of Liviu Constantinescu and Radu Botetzatu. Their contributions in seismology, geomagnetism, geodynamics, and regional modelling aligned Romanian research with international standards, coinciding with the expansion of seismic networks, numerical modelling, and the modernization of Earth Physics worldwide.

Today, geophysics is understood as an integrated Earth science, in which Earth Physics and applied geophysics are inseparably linked. Fundamental models guide the interpretation of observations, while applications in resource exploration, hazard assessment, environmental monitoring, and infrastructure safety provide validation and societal relevance. Emerging technologies—such as InSAR, ground-penetrating radar, microseismic monitoring, 4D reservoir monitoring, and artificial intelligence—now enable high-resolution, data-intensive investigations of the subsurface.

The international relevance of Romanian geophysical education and research is further illustrated by the careers of outstanding graduates who have reached top positions worldwide, notably Mioara Manda, a leading authority in geomagnetism and international scientific leadership, and Paul Constantin Sava, a benchmark figure in modern applied geophysics, particularly in seismic imaging and inversion.

The Centenary of Romanian Geophysics in 2025 is therefore not only a commemorative milestone, but also a reaffirmation of a mission: advancing the understanding of Earth’s structure and dynamics,

ensuring responsible resource exploration, reducing natural risks, and contributing to environmental protection and societal safety within the global geophysical community.

The Romanian version of this paper is already published on the [website](#) of the Romanian Academy. The English version, currently in press at the editorial office of the Revue Roumaine de Géologie, will be made available on the journal's [website](#) in the first half of the coming year.

President,  
Acad. Nicolae Paun



Secretary General,  
Dr. Constantin Sava



# ACTIVITIES OF THE UNION ASSOCIATIONS

The following reports, prepared by the Secretaries General of the eight Associations of IUGG:

International Association of Cryospheric Sciences (IACS)

International Association of Geodesy (IAG)

International Association of Geomagnetism and Aeronomy (IAGA)

International Association of Hydrological Sciences (IAHS)

International Association of Meteorology and Atmospheric Sciences (IAMAS)

International Association for the Physical Sciences of the Oceans (IAPSO)

International Association of Seismology and Physics of the Earth's Interior (IASPEI)

International Association of Volcanology and Chemistry of the Earth's Interior (IAVCEI)

illustrate the impressive range of activities within each Association as well as their dedication to supporting science within developing countries.

# International Association of Cryospheric Sciences (IACS)



IACS

International Association  
of Cryospheric Sciences

IACS website: [www.cryosphericosciences.org](http://www.cryosphericosciences.org)

## INTRODUCTION

The International Association for Cryospheric Sciences (IACS) is the Association of the International Union of Geodesy and Geophysics (IUGG) concerned with snow and ice science and provides expert advice on cryospheric issues to governmental and non-governmental organisations. The objectives of IACS are to:

- promote studies of cryospheric subsystems of the Earth and solar system;
- encourage research in the above subjects by members of the cryospheric community, national and international institutions and programmes, and individual countries through collaboration and international coordination;
- provide an opportunity on an international basis for discussion and publication of the results of the above research;
- promote education and public awareness on the cryosphere, and facilitate the standardisation of measurement or collection of data on cryospheric systems and of the analysis, archiving and publication of such data;
- promote and support diversity, inclusion and equality within the field of cryospheric science, including but not limited to career stage, gender, racial and ethnic identities, and geographic origin.

## ADMINISTRATION

To run the day-to-day business of IACS, an Executive Committee consisting of the President, Secretary General and Past President holds monthly teleconferences in which all Bureau members are welcome to join.

The 2025 IACS Annual Bureau Meeting was held after the BACO2025 Joint Assembly on 25 and 26 July at different times of day to accommodate online participation from different time zones by Bureau officers who were unable to attend in person.

No Bureau elections were due in 2025, but Mathieu Morlighem succeeded Liss M. Andreassen as IACS President for 2025-2029 after BACO2025. Liss remains on the IACS Bureau as Immediate Past President (2025-2027).



*IACS Bureau members in Busan (from left: Farooq Azam, Andrew Mackintosh, Liss Andreassen, Mathieu Morlighem, Richard Essery, Ji-Woong Yang, Anaïs Orsi), and a smooth handover of the IACS Presidency from Liss Andreassen to Mathieu Morlighem*

## ACTIVITIES

### IACS communications

The IACS homepage (<https://cryosphericsscience.org/>) is hosted at the World Glacier Monitoring Service in Zurich. IACS newsletters feature announcements and reports of IACS activities (<https://cryosphericsscience.org/newsletter/>); four newsletters were published in 2025. Announcements are posted on social media through IACS [Bluesky](#) and [LinkedIn](#) accounts.

IACS had a pod at AGU 2025 for advertising activities and contributed materials for the IUGG stand at EGU 2025.

### IACS Working and Standing Groups

IACS facilitates the transfer of research methods and explores new avenues in cryospheric science through Standing Groups and Working Groups devoted to a theme or subject and composed of experts in the particular field of study. The Randolph Glacier Inventory Working Group and the IACS-MRI-WMO Joint Body on the Status of Mountain Snow Cover were granted one-year extensions in 2025 to complete publications. Four new Working Groups were approved in 2025:

- The Working Group on [Cryosphere Stewardship](#) aims to research and promote effective frameworks to address the diminishing cryosphere while strengthening coordinated action for cryosphere stewardship;
- The Working Group on [International classification of snow avalanches](#) aims to review national and regional variations in avalanche classification to produce a harmonized framework;
- The [Continuity approaches for mass balance Intercomparison eXercise \(ContinuIX\)](#) Working Group brings together the research community developing methodologies to invert glacier surface mass balance from remote sensing datasets;
- The Working Group on [Compilation and Standardization of Snow on Sea Ice Data](#) is compiling existing snow on sea ice data and developing a standardized data tool.

The IACS/IPA Standing Group on Glacier and Permafrost Hazards in High Mountains (GAPHAZ) aims to:

- improve international scientific communication on glacier and permafrost hazards;
- compile knowledge related to glacier and permafrost hazards in high mountains;

- work towards greater transfer of information and improved communication between the scientific and governmental communities;
- signpost sources of advice to international and national agencies, responsible authorities and private companies;
- act as a focal point for information for international media during relevant crises.

GAPHAZ launched a new [website](#) in 2025 and arranged sessions at the International Mountain Conference (14-18 September 2025, Innsbruck), including a special event on the 28 May 2025 Blatten landslide.

IACS is part of the Global Terrestrial Network for Glaciers (GTN-G) Steering Committee. GTN-G is a framework for internationally coordinated monitoring of glaciers jointly run by the US National Snow and Ice Data Center (NSIDC), the Global Land Ice Measurements from Space (GLIMS) initiative, and the World Glacier Monitoring Service (WGMS).

### **IACS Joint Commissions**

Joint Commissions with other IUGG Associations aim to foster collaboration and coordination on topics of overlapping interests. IACS currently has three Joint Commissions:

- the IACS-IAG Joint Commission on Cryospheric Deformation was involved in organizing an International Workshop on Glacial Isostatic Adjustment (2-6 June 2025, Sidney, British Columbia), a session at EGU 2025 and an online seminar series;
- the IACS-IAPSO Joint Commission on Ice-Ocean Interactions organized a symposium on “Ice sheet-ocean interactions and impacts” at BACO2025;
- the IACS-IAVCEI Joint Commission on Volcano-Ice Interactions held an inaugural online workshop 13-15 January 2025 and an in-person field workshop in Iceland, 19-24 May 2025.

Discussion of forming an IACS-IAHS joint commission continued.

### **Co-sponsored events and activities**

IACS supports events that are of interest to the cryospheric community. Our contributions typically cover part of the travel costs for early career scientists and scientists from developing countries attending cryosphere related events, or IACS awards for scientists in these categories. Funding requests must be submitted for deadlines on 1 April and 1 October, and at least two months prior to the event that is to be supported. Proposers are informed of decisions approximately two weeks after the deadline. IACS co-sponsored seven activities in 2025:

- [TIGER Symposium in Geodesy](#), Gävle, Sweden, 28 September – 1 October 2026.
- [International Conference on Himalayan Cryosphere](#) on the eve of the International Year of Glaciers’ Preservation, University of Kashmir, Srinagar Kashmir, India, 22-24 September 2025.
- [Arctic Frontiers Abroad Greenland: Workshop on Indigenous Knowledge and Local Collaboration](#), Nuuk, Greenland, 31 July 2025.
- [Forum for Research into Ice Shelf Processes \(FRISP\): Southern Hemisphere](#), Moreton Bay Research Station, Queensland, Australia, 7-10 July 2025.
- [Summerschool on Ice Sheets and Glaciers in the Climate System](#), Karthaus, Italy, 19-30 May 2025.
- [Bringing the Arctic sea ice observational and modelling communities together to assess sea ice loss and its impacts](#). Boulder, CO, USA, 23 March 2025.
- Workshop on Cryosphere Change and Sustainability in the Indian Himalaya: Celebrating 2025 International Year of Glaciers’ Preservation. Amrita University, Kerala, India, 20-21 January 2025.

## Meetings

The BACO-25 IAMAS-IACS-IAPSO Joint Assembly 2025 (BACO-25) was held in Busan, Republic of Korea, on 20-25 July 2025, at which IACS organized eight symposia and nine joint symposia. The IACS President and Secretary General attended IUGG business meetings and the site visit for IUGG 2027 in Incheon before the Joint Assembly.

IACS Secretary General Richard Essery represented IACS on the steering committee for the fourth International Conference on Arctic Research Planning (Boulder, USA, 25-28 March 2025).

An application submitted by IACS on behalf of IUGG and all of its constituent Associations to join the International Polar Year 2032-33 Planning Group was accepted. IACS Vice President Andrew Mackintosh and Secretary General Richard Essery are representing IUGG on the IPY Planning Group.

The United Nations International Year of Glaciers' Preservation (IYGP) was launched on 21 January 2025 and World Glacier Day was celebrated for the first time on 21 March 2025. IACS Past President Liss Andreassen is a member of the IYGP Advisory Board and is associate chief editor of a special paper collection on Vanishing Glaciers as a contribution to IYGP. Liss Andreassen is also member of the Ad-Hoc Committee for the Decade of Action for Cryospheric Sciences (2025–2034).

## FUTURE ACTIVITIES

IACS received an unprecedented 16 applications for support in the 1 October 2025 round, of which six were selected for support in 2026.

IACS will be a partner in the [Climate and Cryosphere Open Science Conference 2026](#) in Wellington, New Zealand.

Development of IACS symposia for the IUGG 2027 General Assembly has begun, and we are in discussions with potential hosts for a joint conference of cryospheric organizations in 2029.

Richard Essery, IACS Secretary General

# International Association of Geodesy (IAG)



International Association  
of Geodesy

IAG website: <https://geodesy.science>

## ADMINISTRATION

### IAG Executive Committee (EC)

The EC 2023-2027 held its 6<sup>th</sup> and 7<sup>th</sup> meetings in-person (with hybrid option) in Vienna (Austria), on April 26, 2025, and in Rimini (Italy), on August 31, 2025, respectively.

### IAG Bureau

The IAG Bureau (President, Vice-President, and Secretary General) discussed day-to-day decisions through e-mail exchanges and regular monthly online meetings.

### IAG Council

The IAG Council, with currently 73 members, normally meets only at the IUGG General Assemblies. However, this time, the IAG Bureau took the opportunity to convene the Council on September 1<sup>st</sup>, 2025, at the IAG Scientific Assembly in Rimini in order to present some topics and plans to the Council, as well as to gather suggestions from Council members. There was a great deal of interest and vivid fruitful discussions. Two topics, which entail a structural change in the IAG and will be submitted to the Council for a vote at the next IUGG General Assembly, were on the agenda: i) the establishment of a permanent IAG Secretariat at the BEV and ii) the conclusions and recommendations of the IAG Task Force on Inclusion. An important scientific milestone within the IAG was the definition and establishment of the “Essential Geodetic Variables (EGV)”. A lively exchange concerned attracting new countries into IUGG/IAG membership, by reaching out to active geodesists in those countries.

## ACTIVITIES

### IAG Scientific Assembly 2025

IAG has held its quadrennial Scientific Assembly halfway through its four-year term 2023-2027. It took place in-person in Rimini (Italy) on September 1-5, 2025. Under the theme “*Geodesy for a changing environment*” 14 symposia have been successfully held, covering the scientific scope of all IAG components as well as the broader importance of geodesy in data management, outreach and networking with science and policy. Approximately 600 persons attended.

The Congress Center in Rimini offered excellent facilities, allowing for lively discussions in a pleasant atmosphere. The Local Organizing Committee (LOC), headed by Prof. Susanna Zerbini and Prof. Stefano Gandolfi (both from the University of Bologna), did an excellent job in preparing the event and in offering immediate advice and assistance during the conference week.

The Scientific Organizing Committee (SOC) was chaired by the IAG Secretary General D. Thaller. All IAG components were represented with at least one symposium of their own, and there were also 3 joint symposia on the overarching topics geodetic space weather, machine learning in geodesy, and geohazard monitoring. In total, 695 abstracts were submitted, with main authors from 68 countries. China had about 135 submissions, followed by Germany with almost 130 submissions. Contributions were divided by the SOC into 300 oral presentations and 395 posters. The premises at the Congress Center made it possible to hold 4 oral sessions in parallel. Poster sessions of 90 minutes were scheduled at the end of each of four days, so that the poster contributions also received the attention they deserved.

A new feature in the program of the IAG Scientific Assembly was implemented in Rimini at the suggestion of the IAG Secretary General: four “Highlight Sessions” that dealt with important topics in geodesy at a very general, overarching level. These were plenary sessions (not in parallel with others) in the large amphitheatre, so that all participants had the opportunity to attend:

- Northeast Italy with focus on the Po Plain – Impacts of changing climate on the region;
- Geodesy for Climate and Water;
- Future Geodetic Satellite Missions and new Technologies;
- Geodetic Monitoring for Geohazards.



*IAG Scientific Assembly: Opening Ceremony in the large amphitheatre in the Congress Center in Rimini*



*Group photo of the participants of the IAG Scientific Assembly 2025*

All in all, there has been an extremely diverse program of presentations and posters that provided an excellent overview of the numerous topics covered by the IAG.

The proceedings of the IAG Scientific Assembly in Rimini will be published as a separate volume in the Springer IAG Symposia Series.

In addition, numerous IAG components (Commissions, Working Groups, Study Groups, etc.) also took advantage of the opportunity to hold their splinter meetings in Rimini.

For the first time at an IAG Scientific Assembly, social events were planned with a focus on improving diversity: a dinner for Early Career Scientists (ECS) and a “Women in Geodesy” breakfast. Both events were met with great interest and contributed to networking.

### **Activities of Commissions, Inter-Commission Committees, GGOS and Services**

- 3rd ICCM Workshop – Geodesy for Climate Research, March 24 – 25, 2025, online
- 15th International School on “The Determination and Use of the Geoid”, April 7 – 11, 2025, Almaty, Kazakhstan
- ICCM [Seafloor and marine geodesy splinter meeting](#), April 30, 2025, Vienna, Austria
- 3rd IAG Commission 4 Symposium, May 13 – 15, 2025, Wuhan, China
- 2025 Glacial Isostatic Adjustment workshop: Advancing Models and Observational Constraints, June 2 – 6, 2025, Sydney, British Columbia, Canada
- SIRGAS Geodesy virtual School 2025, “Terrestrial Reference Frame. Geodynamic and atmospheric monitoring”, June 3, 5, 6, 10, and 12, 2025, (on average 187 participants per day)
- EUREF Symposia 2025, June 25 – 26, 2025, Covilhã, Portugal
- [1st GGOS IberAtlantic Summer School](#), July 13 – 18, 2025, Yebes Observatory, Spain
- IGFS Summer School on “Satellite-based Hydrological Data Assimilation”, 26 – 28 August 2025, Aalborg, Denmark
- IAG Scientific Assembly 2025, September 1 – 5, 2025, Rimini, Italy
- GGOS Days 2025, September 3 - 5, 2025, Rimini, Italy, in-person, (175 contributions)
- VTW2025 – 10th International VLBI Technology Workshop, October 21– 25, 2025, Gothenburg, Sweden
- [5th IVS Training School on VLBI for Geodesy and Astrometry](#), October 26 – 28, 2025, Gothenburg, Sweden
- 16th SIRGAS School “VLBI and SLR Data Processing”, October 27 – November 1, 2025, San Juan, Argentina
- IDS DORIS School & DORIS Days 2025, November 3 –5, 2025, Athens, Greece

The IAG entities maintain their web pages (accessible via [geodesy.science/iag/structure/](https://geodesy.science/iag/structure/)).

### **Communication and Outreach Branch (COB) ); future permanent IAG Secretariat at BEV**

Following the agreement in 2024, to expand the GGOS Coordination Office at BEV to take on the role of a permanent IAG Secretariat, the technical transition between the COB (Budapest) and the BEV (Vienna) has been successfully mastered.

*New IAG web presence:* M. Sehnal and his team from the BEV have made great efforts with the support of the COB and the IAG Office, so that the IAG websites were launched in June 2025 with a new design and improved content, features and functionalities: [geodesy.science/iag/](https://geodesy.science/iag/).

## **IAG Task Force on Inclusion**

The Task Force on Inclusion, aiming at increasing diversity within the IAG in terms of gender, geographical distribution, generation balance / career stage (“3G”), has continued its activities in 2025 along the same lines. It presented its final report to the IAG EC with concrete recommendations.

As a response, an ECS representative (M. Ravanelli) has been invited as a permanent (non-voting) observer to all upcoming IAG EC meetings.

The need for greater diversification was also evident at the Scientific Assembly in Rimini, where only slightly more than a quarter of the participants were female (“gender balance”) and countries from Latin America, Africa, and Asia (with the exception of China) were comparatively under-represented (“geographical balance”). Generational balance is also weak, as ECS usually have little project funding to attend conferences. IAG has significantly supported ECS to attend the Scientific Assembly by offering numerous travel awards, as explained below.

## **Publications**

COB and BEV have continued publishing online the monthly IAG Newsletter and GIM International.

The IAG Office has edited and published *The Geodesist’s Handbook 2024* and *The IAG Travaux 2023-2025* (mid-term Activity Report). Both publications are open access, available via the IAG website and come with a main DOI as well as individual DOIs for each chapter, ensuring that the contributions of IAG components can be cited precisely and independently.

Based on the agreement with Springer Verlag, IAG Symposia Series are open access, and free of charge to the symposia participants. The following book was published in 2025 in the IAG Symposia Series:

- Volume 157: Together Again for Geodesy: Proceedings of the General Assembly of the International Association of Geodesy, Berlin, Germany, 11–20 July, 2023.

The Journal of Geodesy (JoG) received about 400 manuscript submissions in 2025, with an increase of submissions by 14% over 2024, but a lower acceptance rate of about 25%. The impact factor of the Journal is 4.0 (2024). The JoG is ranked the 13th among 102 journals in geochemistry and geophysics.

## **Awards**

IAG Travel Awards to participate to the IAG Scientific Assembly 2025 were granted to 34 persons, all of them being ECS, in total of 29300 €. In addition, 5 ECS received Travel Awards to participate in other IAG-sponsored Symposia, in total of 4500 €.

At the Opening Ceremony of the IAG Scientific Assembly 2025, IAG has presented:

- The IAG Young Author’s Award 2023 to Dr. Safoora Zaminpardaz;
- The IAG Young Author’s Award 2024 to Dr. Justyna Śliwińska-Bronowicz;
- The IAG Best Reviewer’s Award 2023 to Dr. Bailing Li;
- The IAG Best Reviewer’s Award 2024 to Dr. Judit Benedek.

## **Obituaries**

The following obituary was published in the IAG Newsletter: Bernard Chovitz (1924–2025).

## **FUTURE ACTIVITIES**

### **Preparation of the IUGG/IAG General Assembly 2027**

All IAG Bureau members have attended the IUGG Executive Committee Meeting, July 17-18, 2025 in Incheon, Republic of Korea. The preparation of the IUGG General Assembly in 2027 “*One Earth One Future*” has been addressed across all IUGG Associations, together with the local organizers and Korean scientists. The overall strategy, next actions and regular follow-up meetings concerning the local organisation and the scientific program will be implemented in 2026 and 2027.

### **Preparation of the IAG/IAGA joint Scientific Assembly 2029**

In 2029, the IAG Scientific Assembly will take place jointly with IAGA (International Association for Geomagnetism and Aeronomy). The Councils of both IAG and IAGA have been informed by the respective Secretaries General D. Thaller and M. Korte and are endorsing this initiative. The call for applications for the venue has been launched and is open until Q1/2026.

### **IAG becomes a partner of the UN-GGCE**

The United Nations Global Geodetic Center of Excellence (UN-GGCE) was established in 2023 with the goal of working with United Nations Member States, universities and geodetic organizations to sustain and enhance the global geodesy supply chain and the global geodetic reference frame. The supply chain includes geometric and gravimetric satellites and ground stations that make geodetic observations, the data centers that archive and distribute the observations, the analysis centers where the observations are analyzed for geodetic products like the positions of ground stations, reference frames, Earth orientation parameters, and gravity models. Since much of the global geodesy supply chain relies on the IAG’s Scientific Services, the IAG recently became an official partner of the UN-GGCE.

The UN-GGCE Partnership Program was created to recognize the partners’ efforts to sustain the global geodesy supply chain. The IAG is a scientific organization that has been serving scientists since 1862. The data and products provided by the IAG’s Services have been used to gain greater understanding of the geodetic properties of the Earth including its shape, gravity, and rotation and how they change in space and time. Besides their scientific applications, IAG’s data and products are also being increasingly used by society for positioning and navigation services. By partnering with the UN-GGCE, the IAG will be better able to meet the future needs of not only scientists but also of society and its increasing reliance on geodetic data and products.

Daniela Thaller, IAG Secretary General

# International Association of Geomagnetism and Aeronomy (IAGA)



**International Association  
of Geomagnetism and Aeronomy**

IAGA website: [www.iaga-aiga.org](http://www.iaga-aiga.org)

## INTRODUCTION

**IAGA**, the International Association of Geomagnetism and Aeronomy (AIGA - Association Internationale de Géomagnétisme et d'Aéronomie) is one of the eight Associations of the International Union of Geodesy and Geophysics (IUGG). It is a non-governmental body funded through the subscriptions paid to IUGG by its Member Countries. IAGA can trace its origins to the Commission for Terrestrial Magnetism and Atmospheric Electricity, part of the International Meteorological Organisation, which was established in 1873.

IAGA is the premier international scientific association promoting the study of terrestrial and planetary magnetism, and space physics. IAGA is concerned with the understanding and knowledge that result from studies of the magnetic and electrical properties of:

- the Earth's core, mantle and crust
- the middle and upper atmosphere
- the ionosphere and the magnetosphere
- the Sun, the solar wind, the planets and interplanetary bodies.

As a basis for these studies the IAGA community is also strongly involved in present and past magnetic field observations from ground observatories, magnetic surveys, space missions and paleomagnetic data measured in laboratories.

More information on IAGA is provided on its websites: <https://www.iaga-aiga.org>.

## ADMINISTRATION

IAGA is organised in six Divisions and four Inter-divisional Commissions. Each Division may form Working Groups in specialised topics and elects officers to run the business of the Working Groups. The terms of office are linked to the IUGG General Assemblies. Lists of the Division/Inter-divisional Commission leadership and the Working Group names and officers can be found on the following website: <https://www.iaga-aiga.org/about/>. There were no changes to the IAGA Divisions, Commissions and Working Groups in 2025.

IAGA is administered by an Executive Committee (EC) on behalf of IUGG Member Countries in accordance with the IAGA's Statutes and By-Laws. The current Executive Committee members are:

**President:** Andrew Yau (Canada)

**Vice-presidents:** Kusumita Arora (India), Klaus Spitzer (Germany)

**Secretary General:** Monika Korte (Germany)

**Treasurer:** Aude Chambodut (France)

**Members:** Anna Kelbert (USA), Michael Kosch (South Africa), Dominika Niezabitowska (Sweden, Early Career Representative), Masahito Nosé (Japan), Katia Pinheiro (Brazil), Pornchai Supnithi (Thailand), Ricardo Trindade (Brazil)

The EC had three in-person meetings and two virtual meetings in 2025 and communicated frequently by e-mail.

IAGA communicates with Member Countries through National Correspondents nominated by appropriate National Bodies. Member Countries are represented at IAGA Assemblies by accredited Chief Delegates who may vote on matters, according to the voting rules set out in the Statutes and By-Laws, at the Conference of Delegates. More information on all aspects of IAGA administration can be found at: <https://www.iaga-aiga.org/about/>.

## ACTIVITIES

### IAGA-IASPEI JOINT ASSEMBLY



*Interactions over coffee and posters at the IAGA-IASPEI Joint Assembly 2025*

The International Association of Geomagnetism and Aeronomy (IAGA) and the International Association of Seismology and Physics of the Earth's Interior (IASPEI) held their IAGA - IASPEI Joint Scientific Assembly 2025 hosted by the Instituto Superior de Engenharia de Lisboa (ISEL) in Lisbon, Portugal, from 31 August to 5 September. The meeting was a great success as it was attended by 1266 participants, about half of them from each of the two Associations. The participants came from 66 countries and included over 120 students (mainly PhD students).

The program consisted of 33 joint sessions, and additionally 106 IAGA and 63 IASPEI sessions and about 50 business meetings where the activities of different Association Divisions, Commissions and Working Groups were discussed. Highlights of the program included the IAGA Award Ceremony with the Shen Kuo Medal lecture, given by Keke Zhang on the topic of the "MSS Geomagnetic Satellite Constellation, Earth's Core Convection and Real-Time Geomagnetic Modeling" and the IASPEI lecture, which was

given by Susana Custódio, on the topic of “The 1755 Great Lisbon Earthquake, 270 years later: A unique event in a cryptic plate boundary”. Posters were available for two days during extended one hour coffee breaks in a pleasant outdoor setting in an inner yard of the institute, where plenty of discussions took place over coffee and plenty of tasty Portuguese snacks.

An Early Career Scientist Social Event on Monday evening was fully booked and the attendees had the opportunity to expand their networks and discuss any topics of relevance and concern to researchers at their career stage. The lively scientific discussions in a friendly atmosphere during the Joint Assembly were also complemented by the combined IAGA - IASPEI dinner in the middle of the week, that took place in a beautiful historical building, accompanied by some traditional music.

## **IAGA AWARDS AND HONOURS**

### ***IAGA Honorary members***

Two previous IAGA presidents were appointed as IAGA Honorary Members by the Conference of Delegates: Kathryn Whaler, IAGA president from 2011 - 2015 and Eduard Petrovsky, Czech Republic, IAGA president from 2015 - 2019.

### ***Shen Kuo Medal***

The Shen Kuo Medal for interdisciplinary achievements was given to Keke Zhang (Macau), to recognize his fundamental contributions to theory and observation of Earth's magnetic field, ranging from geodynamo theory to leadership of the Macau Science Satellite (MSS) mission.

### ***Long Service Award***

The IAGA Long Service Award was given to Takemi Ishihara (Japan), to recognize his tremendous contributions to data compilation for the World Digital Magnetic Anomaly Map.

### ***Early Career Presentation Award***

Three awards were given to early career scientists who had made outstanding presentations at IAGA-sponsored topical workshops: Banusha Kugabalan (UK), Paraksh Vankawala (USA) and Yiming Zhang (USA).

## **7<sup>TH</sup> IAGA SCHOOL, COMBINED WITH IASPEI SCHOOL**

Preceding the IAGA - IASPEI Joint Scientific Assembly 2025 the first combined IAGA – IASPEI School for early career scientists took place at the Instituto Superior de Engenharia de Lisboa (ISEL), Lisbon, Portugal, from August 25 – 29, 2025. This was a combination of the 7th IAGA School and the IASPEI Early Career Scientific School (ECSS). The Schools traditionally take place before or after IAGA, IASPEI and IUGG Assemblies and are designed to provide early career scientists with a good basic understanding of a wide range of the scientific topics covered by the respective association.

In order to promote interdisciplinary perspectives both groups had a combined half day of lectures and practical courses on legacy data, a joint outing to the Lisbon Quake Museum about the 1755 Lisbon earthquake, and partly common meals and coffee breaks. Furthermore, the IAGA School students joined the general part of a demonstration of an ocean bottom seismometer.

The IAGA part of the Schools was attended by 18 participants from 15 different countries with nearly equal gender balance. The IAGA specific sessions by 7 international lecturers covered paleomagnetism, ionospheric, atmospheric, space plasma and space weather processes, geomagnetic field observation and modelling, and electromagnetic induction. Theoretical lectures were supported by practical computer exercises.



*Group photo of the participants of the IAGA School 2025*

## **SPONSORED TOPICAL MEETINGS**

IAGA regularly supports topical workshops, preferentially in the years between the IAGA and IUGG Assemblies. One activity was sponsored in 2025, the School on “Cross-scale Coupling of Heliophysics Systems”, organized by Consorzio Area di Ricerca in Astrogeofisica, Istituto Nazionale di Geofisica e Vulcanologia, Istituto Nazionale di Astrofisica, The Catholic University of America, Università degli Studi di Firenze, University of Athens, and Università dell’Aquila, Dipartimento di Scienze Fisiche e Chimiche and held at the University of L’Aquila (Italy) from 12 – 16 May 2025.

## **OTHER ACTIVITIES**

### ***World Digital Magnetic Anomaly Map WDMAM***

The World Digital Magnetic Anomaly Map (WDMAM) is an international effort set by IAGA in 2003, joined by the Commission of the Geological Map of the World (CGMW) of UNESCO in 2005, to gather the relevant magnetic anomaly data and wrap the whole planet with a nearsurface (5 km over continents and sea-level on oceans) scalar magnetic anomaly map. The first version was released in 2007, a second version in 2015, see <https://wdmam.org> . An updated version, WDMAMv2.2, that corrects an error in previous version WDMAMv2.1 from 2023 was released in 2025.

### ***Outreach project***

In 2023, IAGA established a new opportunity for outreach project funding, as announced at <https://iaga-aiga.org/grants/outreach/> . In 2025, IAGA funded the project “Lights, Camera, IAGA Early-Career Scientists in action” by Katia Pinheiro. During the IAGA/IASPEI Joint Scientific Meeting 2025 in Lisbon, 20 short videos were filmed featuring 10 early-career scientists (ECS) from four continents. Covering themes across all IAGA divisions – from the Earth’s core to the space environment – the project offered valuable science communication training and increased visibility for both the participants and IAGA. The videos will be shared across IAGA’s social media platforms and will be available on YouTube: <https://www.youtube.com/@iaga-aiga/playlists> .

## PUBLICATIONS AND OUTREACH

The latest issue of the annual IAGA Newsletter, nr. 62, was distributed in December 2025. It can be downloaded from the IAGA website <https://www.iaga-aiga.org/publications>. Current versions of a IAGA Flyer and Poster are also available on the website.

IAGA operates websites at <https://www.iaga-aiga.org> and is active on the following social media:

- Facebook: [www.facebook.com/IAGAandAIGA/](http://www.facebook.com/IAGAandAIGA/)
- X (former Twitter): [www.twitter.com/IAGA\\_AIGA](http://www.twitter.com/IAGA_AIGA)
- Instagram: [www.instagram.com/iaga\\_aiga/](http://www.instagram.com/iaga_aiga/)
- Blog: <https://iaga-aiga.blogspot.com/>
- LinkedIn: <https://hr.linkedin.com/company/iaga-international-association-of-geomagnetism-and-aeronomy>

## FUTURE ACTIVITIES

### *Meetings and workshops*

Current and future activities include the preparation of the 2027 IUGG General Assembly, and the 8<sup>th</sup> IAGA School to be held in the week before this Assembly. IAGA will also be involved in several topical meetings in 2026.

### *Outreach activities*

IAGA established a framework for regular outreach project funding in 2024. Depending on applications, a new project will be funded in 2026. IAGA Early career scientists (ECS) are actively involved in outreach and networking on social media and organising ECS events at scientific and general assemblies.

Monika Korte, IAGA Secretary General

# International Association of Hydrological Sciences (IAHS)



International Association  
of Hydrological Sciences

IAHS website: <https://iahs.info>

## INTRODUCTION

The year 2025 saw a good number of IAHS activities herewith summarized in this annual report. In 2025 IAHS continued to promote and facilitate hydrological research and publications across the globe through the various commissions, working groups and regional committees. The HELPING scientific decade (2023-2032) conducted several activities in the course of the year. 959 new individual members were accepted in 2025 from 106 countries. Of these, 711 members were accepted from financially disadvantaged countries. The total membership is now 12,845, of which 6,663 (52%) are in financially disadvantaged countries. IAHS has members in 172 countries. Increased interest in the Association has been seen in Brazil due to the Latin America Regional Committee and in countries such as Ethiopia and DR Congo as a result of promotion by the Secretary General.

## ADMINISTRATION

IAHS held monthly management team meetings throughout 2025. Two IAHS Bureau meetings were convened online on the 10<sup>th</sup> of July 2025 and the 4<sup>th</sup> of December 2025. In July 2025, Presidents elect seamlessly replaced Presidents in commissions. At the level of the Association Salvatore Grimaldi (Italy) replaced Berit Arheimer (Sweden) for a tenure from 2025-2029. On the other hand, the new IAHS scientific decade HELPING that identified a new Chair in the person of Thom Bogaard (Netherlands), he continued to work with the three themes leaders (Justin Sheffield (UK), Ana Mijic (UK) and Adeyemi Olusola (Canada), overseeing all the 34 working groups. The Editor-in-chief of the IAHS Digital Water Globe, Eduardo Mario Mendiondo (Brazil) continued in 2025 and worked together with six Associate Editors.

Below the International Commissions, Working Groups and regional Initiatives of IAHS that were active in the year 2025:

- International Commission on Continental Erosion (ICCE)
- International Commission on the Coupled Land-Atmosphere System (ICCLAS)
- International Commission on Human-Water Feedbacks (ICHWF)
- International Commission on Groundwater (ICGW)
- International Commission on Remote Sensing (ICRS)
- International Commission on Snow and Ice Hydrology (ICSIH)
- International Commission on Statistical Hydrology (ICSH)
- International Commission on Surface Water (ICSW)
- International Commission on Tracers (ICT)

- International Commission on Water Quality (ICWQ)
- International Commission on Water Resources Systems (ICWRS)
- Working Group MOXXI on Measuring and Observing in the XXIst century
- Working Group CandHY on Citizens AND Hydrology
- Working Group for History of Hydrology
- Working Group for Unsolved Problems in Hydrology (UPH)
- Early Career Scientists Committee
- Africa Regional Committee
- Latin America Regional Committee

The project of the introduction of a new Regional Committee for Oceania was tabled during the Bureau in December 2025 and will be fully considered during the upcoming administrative assembly in July 2027.

## ACTIVITIES

January:

- HSJ, Vol 70, Issue 1 is published and includes the following Featured Article: Burn, D. H., & Whitfield, Paul. H. (2024). Shifting cold regions streamflow regimes in North America affect flood frequency analysis. *Hydrological Sciences Journal*, 70(1), 51–70. <https://doi.org/10.1080/02626667.2024.2422531> HSJ calls for manuscript submissions for Advances in hydrological science in Latin America Special Issue.

February:

- Remote Sensing Applications in River Sediment Research webinar. HSJ launches a new Special Issue, "The contribution of isotope hydrology to water sciences in Africa: Revisiting foundations and exploring new research trends". HSJ, Vol 70, Issue 2 is published and includes the following Featured Article: Chakraborty, P., De Kock, S., Archambeau, P., Piroton, M., Ercicum, S., & Dewals, B. (2024). Assessing the impact of a large multi-purpose reservoir on flood control under moderate and extreme flood conditions. *Hydrological Sciences Journal*, 70(2), 1–27. <https://doi.org/10.1080/02626667.2024.2420007>

March:

- Professor Günter Blöschl honoured with the Stockholm Water Prize 2025! Exciting Recognition for IAHS President, Berit Arheimer: Doctor Ad Honorem
- HSJ, Vol 70, Issues 3 and 4 are published and include the following Featured Articles: Z. Rakotoarimanana, H. Ishidaira, J. Magome & K. Souma (2025). Unveiling hydrological responses in Madagascar's major river basins: addressing data scarcity and land-use change impacts. *Hydrological Sciences Journal*, 70(4), 559-580. <https://doi.org/10.1080/02626667.2025.2456209> and Fischer, S., Dallan, E., Fiori, A., Grimaldi, S., Kochanek, K., Prieto, C., Reis, D. Jr., Volpi, E. (2025). Hydrological design in the HELPING decade – inspiring the community to innovate the hydrological design concept. *Hydrological Sciences Journal*, 70(3), 375-389. <https://doi.org/10.1080/02626667.2024.2436634>

April:

- IAHS at EGU2025, we are thrilled to unveil our focus on HELPING, the Digital Water Globe (DWG) and the Association. Joint IAHS and UNESCO session was convened
- The 2025 recipients of the IAHS-UNESCO-WMO International Hydrology Prize are announced.
- Three SYSTA awardees were funded to attend the 2nd International Sociohydrology Conference in Tokyo, Japan. Two females (from India and Indonesia) and one male from Nigeria.
- "Panta Rhei: a decade of progress in research on change in hydrology and society" is now an Open Access paper published in the *Hydrological Sciences Journal*.

- Congratulations to Marina Batalini de Macedo, winner of the 2024 HSJ Editor Award.
- HSJ, Vol 70, Issues 5 and 6 are published and include the following Featured Articles: A. Cauteruccio, L. Arata, M. Parodi, E. Chinchella & L. G. Lanza (2025). Laboratory testing and modeling of the hydrological performance of a resin gravel permeable pavement. *Hydrological Sciences Journal*, 70(6), 898-908. <https://doi.org/10.1080/02626667.2025.2461696> and B. Magotra, M. Saharia & C. T. Dhanya (2025). Improved streamflow simulations in hydrologically diverse basins using physically informed deep learning models. *Hydrological Sciences Journal*, 70(5), 775-788. <https://doi.org/10.1080/02626667.2025.2458545>

#### May:

- HSJ, Vol 70, Issues 7 and 8 are published and include the following Featured Articles: N. Diodato, F. Granata, F. Di Nunno, C. Di Salvo & G. Bellocchi (2025). Assessing atmospheric influences for improving time-varying data-driven decadal predictions of Mediterranean spring discharge. *Hydrological Sciences Journal*, 70(8), 1328-1340. <https://doi.org/10.1080/02626667.2025.2480128> and M. Seppe Silva, R. Vieira Casanova Monteiro, J. Jose, A. Gires, I. Paz, I. Tchiguirinskaia & D. Schertzer (2025). Multifractal comparison of rainfall measurement with the help of a disdrometer and a mini vertically pointing Doppler radar. *Hydrological Sciences Journal*, 70(7), 1072-1090. <https://doi.org/10.1080/02626667.2025.2464948>

#### June:

- 2025 Falkenmark Award winner announced.
- Exploring New Horizons - IAHS and HSJ to join Bluesky for Hydrological Science Communication.
- Urban Water Webinar Series - Flood risk assessment and management in Ho Chi Minh City, Vietnam. Presented by Dr. Heidi Kreibich.
- Summer School - Runoff Predictions in Ungauged Basins (PUB) in TU Wien, Vienna, Austria.
- HSJ, Vol 70, Issue 9 is published and includes the following Featured Article: D. L. De Luca, F. Napolitano, D. Kim, C. Onof, D. Biondi, L. Wang, F. Russo, E. Ridolfi, B. Moccia & F. Marconi (2025). Rainfall nowcasting models: state of the art and possible future perspectives. *Hydrological Sciences Journal*, 70(9), 1419-1438. <https://doi.org/10.1080/02626667.2025.2490780>

#### July:

- 2025 IAHS Tison Awardees Announced.
- Welcoming Prof. Salvatore Grimaldi – Incoming IAHS President.
- Thank You Prof. Berit Arheimer – Outgoing IAHS President.
- 2nd International Sociohydrology Conference in Tokyo, Japan.
- Invitation to the Future of Sociohydrology Webinar, organised as part of the Early Career Researcher (ECR) program for the 2nd International Sociohydrology Conference, held in Tokyo.
- IUGG preparatory meeting in Incheon where the President and Secretary General represented IAHS.
- HSJ, Vol 70, Issue 10 is published and includes the following Featured Article: S. Choudhary, S. M. Pingale, D. Khare, & R. Krishan (2025). Quantification of the surface and groundwater dynamics of Upper Godavari Sub-Basin using SWAT-MODFLOW and CMIP6 climate change scenarios. *Hydrological Sciences Journal*, 70(10), 1662–1685. <https://doi.org/10.1080/02626667.2025.2492891>

#### August:

- International Workshop on Leveraging Technology and Societal Innovation in Urban Water Management in Carl Friedrich von Siemens Stiftung, Munich, Germany.
- Former IAHS President Receives Stockholm Water Prize from the King of Sweden!

- 16th Annual Catchment Science Summer School in University of Birmingham, UK.
- HSJ, Vol 70, Issues 11 and 12 are published and includes the following Featured Articles: B. Nlend, A. Reimuth, L. Yang, M. Jampani, E. Cristiano, B. Dewals, E. Boyer, I. Cetinkaya, L. Diémé, R. Dutta, W. Feng, G. Grossi, W. Ben Nasr, O. Obaitor, A. Olusola, A. Panchanathan, G. Rab, S. Sharma, C. Wang, M. Warter, C. Welty & D. Tetzlaff (2025). Building resilient urban water systems: emerging opportunities for solving long-lasting challenges. *Hydrological Sciences Journal*, 70(12), 2003-2015. <https://doi.org/10.1080/02626667.2025.2529267> and S. Kuntla & M. Saharia (2025). Large-sample characterization of flooding events in India. *Hydrological Sciences Journal*, 70(11), 1863-1878. <https://doi.org/10.1080/02626667.2025.2513482>

#### September:

- HSJ, Vol 70, Issues 13 and 14 are published and includes the following Featured Articles: R. Choudharya, C. T. Dhanya, A. K. Gosain, S. Chander (2025). Deciphering the changes in spatio-temporal characteristics of flood events across India. *Hydrological Sciences Journal*, 70(14), 2498-2512. <https://doi.org/10.1080/02626667.2025.2551133> and S. Kondapalli, K. A. Sawicz, M. Hergott, X. Zheng, S. Ghosh, M. Vyas, G. Sakamuri, K. Chinnayakanahalli, H. Chowdhary (2025). A cold-region flood model framework for Canada. *Hydrological Sciences Journal*, 70(13), 2238-2257. <https://doi.org/10.1080/02626667.2025.2529272>

#### October:

- The IAHS YouTube channel introduced a series of short videos highlighting the Scientific Posters presented at the IAHS 2025 Scientific Assembly in Indian Institute of Technology, Roorkee as one of the stand-out features of IAHS2025 with its fresh new conference format, designed to foster collaboration and encourage more open discussion across disciplines and generations.
- HSJ Editorial Retreat at IAHS 2025 Scientific Assembly in Roorkee!
- The following awards and medals were presented at the official ceremony at IAHS 2025 Scientific Assembly in Roorkee, India: Dooge Medal is awarded to John W. Pomeroy (Canada), the Volker Medal is awarded to Giuliano Di Baldassarre (Sweden), the 2025 IAHS Falkenmark Award is awarded to Vinícius Bogo Portal Chagas (Brazil), the 2025 Tison Award is awarded to RuiRui Xu, Dexun Qiu and ChangXue Wu (China).
- Seven SYSTA awardees were funded to attend the IAHS 2025 Scientific Assembly in Roorkee. Two females (from Indonesia and Tanzania) and five males (from Cameroon, Chad, Ghana, India and Namibia).
- IAHS announces the addition of a fifth course in the upcoming IAHS Academy to be held in Ningbo, China on 12-18 January 2026.
- Research Frontiers Workshop on Scientific Machine Learning in University of Stuttgart, Germany.
- 26th WaterNet/WARFSA/GWP-SA Symposium in Lusaka, Zambia. IAHS funded the registration of four young water scientists.
- HSJ, Vol 70, Issues 15 is published and includes the following Featured Articles: F. Abdelfadel, M. Hssaisoune, C. Fontaine, Y. Ait Brahim, M. Qurtobi, M. El Hafyani, F. Raibi, E. Tibari, M. Bellarbi, A. Ayaou, L. Bouchaou (2025). Tracing groundwater's footprint in African semi-arid lands: isotopic tools for aquifer management. *Hydrological Sciences Journal*, 70(15), 2745–2761. <https://doi.org/10.1080/02626667.2025.2569672>

#### November:

- The International Conference "Sediment and Pollutants Transport in River Catchments: Radionuclides and Fingerprinting Techniques Applications for Assessment, Monitoring, and Risk Prevention" was held in Astana, the capital of Kazakhstan, at the Kazakhstan Branch of Lomonosov Moscow State University from 17-21 November 2025.
- Four SYSTA awards were made to attend the IAHS Academy in Ningbo, China in January 2026

alongside three awardees from 2024. Awards were made to five females (from Egypt, Ghana, India, South Africa and Tunisia) and two males (from Brazil and Madagascar).

- IAHS members attended the 2025 Irish National Hydrology Conference in Athlone, Ireland.
- 2026 Annual HELPING conference date is announced for January 2026.
- HELPING Working Group Co-Creating Water Knowledge publishes an Opinion Paper in HSJ: Co-creating water knowledge: a community perspective.
- HSJ, Vol 70, Issues 16 is published and includes the following Featured Article: B Han, Y. Zhang, Q. Shao, Q. Duan, A. Ybeyn Gebremedhn (2025). Estimating multi-source input uncertainties and their propagation for integrated water quantity and quality simulations. *Hydrological Sciences Journal*, 70(16), 2976-2992. <https://doi.org/10.1080/02626667.2025.2570849>

December:

- Introducing the new Deputy Secretary General: Dr Ankit Agarwal (India).
- The publication of the long-awaited Panta Rhei synthesis volume: *Coevolution and Prediction of Coupled Human–Water Systems: A Socio-hydrologic Synthesis of Change in Hydrology and Society*, has now been formally published by Elsevier and is available online in open access.
- Special Issue in HSJ: Contribution of isotope hydrology to water sciences in Africa: Revisiting foundations and exploring new research trends.
- IAHS members attended the 54th Practical Online Course in Climate Time Series Analysis.

## FUTURE ACTIVITIES

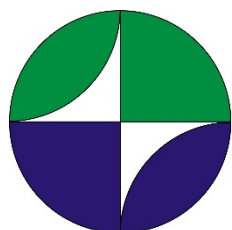
IAHS workplan for the year 2026 includes statutory activities like the Board meeting with IAHS LTD, two bureau meetings for the year and the bi-monthly management team meetings.

IAHS is scheduled to convene the commissions' s workshops in July 2026 in Victoria Falls (STAHY-ICSH and ICGW) in Canberra, Australia in September 2026 (ICWRS). IAHS is involved in the preparation of the 2026 UN water conference and joined the high level preparatory meeting 25-27<sup>th</sup> January in Dakar Senegal where a road map has been defined for the final and main 2026 UN water conference in Abu Dhabi (2-4 December 2026). The inaugural IAHS academy took place 12-18 January 2026 in Ningbo, China.

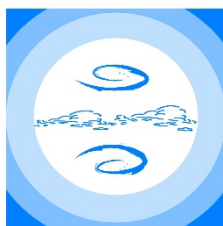
In terms of outreach, IAHS will be represented during the EGU meeting in Vienna. IAHS will continue in 2026 to partners with UN agencies under the umbrella of UN water family. With the 2026 UN water conference as the major event as alluded to earlier. Please refer to the IAHS [website](#) for more information.

Jean-Marie Kileshye Onema, IAHS Secretary General

# International Association of Meteorology and Atmospheric Sciences (IAMAS)



IUGG



IAMAS

International Association of Meteorology  
and Atmospheric Sciences

IAMAS website: [www.iamas.org](http://www.iamas.org)

## INTRODUCTION

IAMAS is a research association of the International Union of Geodesy and Geophysics (IUGG) that focuses on all aspects of the gaseous envelope around the Earth and other planets. The main work is conducted, coordinated, and communicated through IAMAS's 10 International Commissions, which, in alphabetical order, are the:

- International Commission on Atmospheric Chemistry and Global Pollution (iCACGP),
- International Commission on Atmospheric Electricity (ICAE),
- International Commission on Climate (ICCL),
- International Commission on Clouds and Precipitation (ICCP) including the Committee on Nucleation and Atmospheric Aerosols (CNA),
- International Commission on Dynamical Meteorology (ICDM),
- International Commission on the Middle Atmosphere (ICMA),
- International Commission on Planetary Atmospheres and their Evolution (ICPAE),
- International Commission on Polar Meteorology (ICPM),
- International Commission on Tropical Meteorology (ICTM),
- International Ozone Commission (IOC), and
- International Radiation Commission (IRC).

All the international commissions, and IAMAS as a whole, play a leading role in global coordination, communication and discussion of the latest research through organizing and participating in a wide range of scientific meetings that are open to all scientists.

## ADMINISTRATION

### IAMAS Bureau Meetings

Monthly meetings are held virtually by Zoom. The bureau regularly invites different members-at-large and commission presidents to attend these meetings. An in-person meeting was held at BACO-25: an IAMAS-IACS-IAPSO Joint Assembly in Busan, Korea from 20-25 July 2025. The next in-person meeting of the IAMAS Bureau is planned for 6-7 August 2026 at the University of Manchester, UK.

### Funding

IAMAS held an open call for proposals for activities to be undertaken in 2026 by its commissions with a deadline in September 2025 for consideration both by IAMAS directly, and forwarding to IUGG for its consideration. As a result, IUGG funded 7 proposals totalling 20,500 USD and IAMAS funded another 12 proposals totalling 57,500 USD. The next open call for proposals from our commissions will have a deadline in September 2026 in alignment with the planned IUGG proposal deadline.

The list of funded IUGG and IAMAS activities in 2025 is as follows.

#### IAMAS Early Career Committee:

- Sea Ice School, Saroma, Japan (28 February - 9 March 2026)

#### ICACGP:

- 2026 iCACGP-IGAC Joint Conference, Heraklion, Crete, Greece (7-11 September 2026)
- SOLAS Summer School 2026, CEPENE, Tamandaré, Brazil (9-27 March 2026) • LAC Training Course, Santiago, Chile (1st Semester 2026)

#### ICAE:

- 2026 ICAE General Assembly (ICAE2026) in Barcelona, Spain (13-17 July 2026)

#### ICCL:

- International Conference on Climate Impacts in a Changing World 2026, University Main Building, Uppsala, Sweden (9-11 March 2026)
- International workshop on assessing current and future regional climate change and its impacts on hazard: Frontiers in High-Resolution Climate Projection and Advanced Methodologies and Applications for National Hazard Assessment, Kyoto, Japan (5-6 March 2026)
- ITU Global Initiative on Resilience to Natural Hazards through AI Solutions, Geneva, Switzerland (7-10 July 2026)

#### ICCP:

- Pre EGU Workshop, Vienna, Austria (30 April - 1 May 2026)
- Clouds and Precipitation Workshop, Nairobi, Kenya (July 2026)

#### ICDM:

- Diabatic processes across scales in the extratropics, Vienna, Austria (28 April-1 May 2026)
- 21st Cyclone Workshop, Bad Dürkheim, Germany (4-9 October 2026)

#### ICMA:

- Trends 2026, Beijing, China (18-22 May 2026)
- Space Climate 10, Finland (9-12 June 2026)
- APARC General Assembly, Pune, India (12-16 October 2026)

#### ICPAE:

- Europlanet Science Congress, The Hague, Netherlands (6-11 September 2026)

**ICTM:**

- Urbanization and Extreme Weather in the Tropical African Continent, Nairobi, Kenya (July 2026)

**IRC:**

- 2026 AMS Madison Summit Assembly, Madison, Wisconsin, USA (3-7 August 2026)

**African Met Society:**

- First Scientific Conference of the AfMS, Addis Ababa, Ethiopia (20-23 April 2026)

**IAMAS EXECUTIVE COMMITTEE 2023-2027**

**President:** Andrea Flossmann FRANCE

**Vice-Presidents:**

- John Burrows GERMANY
- Mary Scholes SOUTH AFRICA

**Past President:** Joyce E. Penner USA

**Secretary General:** Keith Alverson CANADA

**Members at large:**

- Neil Holbrook AUSTRALIA
- Mu Mu CHINA
- Marilyn Raphael USA
- Tirusha Thambiran SOUTH AFRICA
- John Turner UK

**Early Career Representative:** Jing Li CHINA

**Commission Presidents (Ex Officio Members):** See listings below

**IAMAS COMMISSIONS****Early Career Scientist (ECS) Committee**

**Website:** <https://www.iamas.org/ecs/>

**Chair:** Jing Li CHINA

**Co-chair:** Sarah Perkins-Kirkpatrick AUSTRALIA

**Atmospheric Chemistry and Global Pollution (iCACGP)**

**Website:** [www.icacgp.org](http://www.icacgp.org)

**President:** Mary Barth USA

**Vice-Presidents:**

- Hugh Coe UK
- Christian George FRANCE
- Judith Hoelzemann BRAZIL
- Hiroshi Tanimoto JAPAN

**Atmospheric Electricity (ICAE)**

**Website:** <https://www.iamas.org/icae/>

**President:** Xiushu Qie CHINA

**Secretary:** Weitao Lyu CHINA

### **Climate (ICCL)**

**Website:** <https://www.iamas.org/commissions/iccl/>

**President:** Jianping Li CHINA

**Secretary:** Qiuzhen Yin BELGIUM

### **Clouds and Precipitation (ICCP)**

**Website:** <https://www.iamas.org/iccp/>

**President:** Greg McFarquhar USA

**Vice-President:** Luis Ladino Moreno MEXICO

**Secretary-Treasurer:** Martina Krämer GERMANY

### **ICCP - Committee on Nucleation and Atmospheric Aerosols (CNAA)**

**Website:** <https://www.iamas.org/commissions/cnaa/>

**Chair:** Paul Winkler AUSTRIA

**Secretary:** Dominik Stolzenburg AUSTRIA

### **Dynamic Meteorology (ICDM)**

**Website:** <https://www.iamas.org/icdm/>

**President:** Thomas Spengler NORWAY

**Vice President:** Tim Woollings UK

**Secretary:** Craig Bishop AUSTRALIA

**Past President:** Richard Grotjahn USA

### **Middle Atmosphere (ICMA)**

**Website:** <https://www.iamas.org/icma/>

**President:** Natalia Calvo SPAIN

**Vice-President:** Seok-Woo Son KOREA, Rep. of

### **Ozone (IO3C)**

**Website:** [www.io3c.org](http://www.io3c.org)

**President:** Irina Petropavlovskikh USA

**Vice Presidents:**

- Nathaniel Livesey USA
- Valérie Thouret FRANCE

**Secretary:** Corinne Vigouroux BELGIUM

### **Planetary Atmospheres and their Evolution (ICPAE)**

**Website:** <https://www.iamas.org/icpae/>

**President:** Ann Carine Vandaele BELGIUM

**Secretary:** Giuliano Liuzzi ITALY

### **Polar Meteorology (ICPM)**

**Website:** [www.iamas.org/icpm/](http://www.iamas.org/icpm/)

**President:** Matthew Lazzara USA

**Secretary:** Tracy Moffat-Griffin  
UK

## **Tropical Meteorology (ICTM)**

**Website:** <https://www.iamas.org/ictm/>

**Lead:** Thara Prabhakaran INDIA

**Co-leads:**

- Sam Stechmann USA
- Nedjeljka Žagar GERMANY

## **Radiation (IRC)**

**Website:** <https://www.iamas.org/irc/>

**President:** Manfred Wendisch GERMANY

**Vice President:** Hajime Okamoto JAPAN

**Secretary General:** Christine Chiu USA

# **ACTIVITIES AND PLANNED FUTURE ACTIVITIES**

## **Events**

In 2025, IAMAS proudly co-hosted BACO-25: an IAMAS-IACS-IAPSO Joint Assembly in Busan, Korea from 20-25 July. The meeting was a great success and resulted in the following publication:

Alverson, K., Blanc, S., Essery, R. *et al.* Busan Atmosphere Cryosphere Ocean Conference BACO-25: Our Interconnected Earth. *Adv. Atmos. Sci.* (2026).

<https://doi.org/10.1007/s00376-025-5583-2>

The next IAMAS General Assembly will be held at the IUGG General Assembly 2027 in Incheon, Korea.

## **Awards**

The IAMAS Early Career Medal for 2025 was awarded to Assoc. Professor Hannah Christensen (Oxford University) at BACO-25 in Busan, Korea. The medal was awarded in recognition of her scientific approach, which tackles the hardest problems in meteorology by applying the most fundamental underlying physics.

The next IAMAS Early Career Medal will be presented at the IUGG General Assembly 2027 in Incheon, Korea.

## **International Commission Reports**

**Early Career Scientist Committee** (<https://www.iamas.org/ecs/>)

In 2025, the major activities of the IAMAS ECS committee include attending the IAMAS Assembly at Busan, BACO-25, participating in IUGG ECSnet, and joining the ECS events at EGU.

We contributed to the “ECSNet: the IUGG Early-Career Scientists Network” by introducing an ECS and her project. Dr. Panxi Dia from Zhejiang University was interviewed on behalf of IAMAS, and she talked about her experience in participating in a new geoengineering research project. The interview contents were posted on the IUGG ECS webpage.

We continue to expand our network by advertising IAMAS and our committee on various occasions, including EGU and the IGAC-iCACGP conference. Our member Nikos Daskalakis also participated in organizing the IGAC-iCACGP event.

The ECS working group in the Chinese National Committee of IAMAS also held a series of activities in China. We organized the ECS session at the Future Earth conference, with more than 50 participants and 16 oral talks. We co-organized the annual workshop on Atmospheric Physics, conference on nonlinear and complex systems and three sessions in the annual conference of Chinese Meteorological Society.

**iCACGP** (<http://www.icacgp.org/>)

On 20 July 2025, the iCACGP held its annual business meeting in Busan, South Korea the day before the start of the Busan IAMAS-IACS-IAPSO (BACO) 2025 Joint Assembly. In total, ~17 members attended (12 in person, 5 virtually). The first session of the business meeting included updates from the iLEAPS, SOLAS, and IGAC Projects as well as the status of the planning for the 2026 iCACGP-IGAC conference. The Commission also heard updates on Early Career Research activities from both the IGAC-iCACGP Early Career Researchers SSC chairs and the IAMAS Early Career Researcher Group. Updates from different regions of the world were presented asynchronously via a shared document and on the iCACGP web page. During the second session, the Commission finalized the revised [iCACGP objectives](#) that are now provided on the iCACGP web page. In addition to providing more information for the previous iCACGP objectives, the Commission added an objective to increase diversity of perspectives within iCACGP.

During the BACO 2025 Joint Assembly, the iCACGP led sessions on Atmospheric Chemistry in the Anthropocene and on Atmospheric Composition and the Asian Monsoon. The Commission co-led two other sessions with sister commissions and associations. These included a session on Cloud-Precipitation-Aerosol Interactions with ICCP and a session on Biogeochemical Interactions across the Atmosphere-Ice-Ocean Interface with IACS and IAPSO.

The Atmospheric Composition and the Asian Monsoon (ACAM) activity, which is facilitated by the International Global Air Pollution (IGAC) Project (one of iCACGP's projects) held a training school and workshop in June 2025 in Bali, Indonesia. The training school had 40 early career participants (students and postdocs) while over 100 participants attended the workshop. The ACAM training school focused on enhancing scientific and technical capacity in the areas of remote sensing of aerosols, cloud and atmospheric composition as well as chemistry-climate modeling and inverse modeling of greenhouse gas emissions. In addition to lectures presented by five scientists, the training school participants completed data analysis exercises and group projects, using open-access tools and programming languages, involving satellite data and modeling focusing on Asian atmospheric pollution and regional monsoon climate.

The 3-day ACAM workshop represented four cross-cutting themes – (i) Field campaigns, modeling activities or satellite programs in the context of ACAM science, (ii) Aerosols/air quality characterization, aerosol-monsoon-climate interactions and feedbacks, (iii) Trace gas and greenhouse gas emissions – measurements, inventories, satellite observations and (iv) Chemistry-climate interactions and pollution transport to the upper troposphere/lower stratosphere (UTLS). The workshop concluded with a panel discussion reflecting on the past 10 years of ACAM activities and accomplishments as well as new opportunities and challenges in air pollution, chemistry and Asian monsoon climate. Altogether participants represented 17 countries from Asia, Europe, USA and Australia with 50 early career researchers attending the workshop, thanks to the generous support from both longstanding and new sponsors of ACAM.

Another IGAC activity, the International GEIA (Global Emissions Initiative), held their 21<sup>st</sup> GEIA Conference in July 2025 in Abidjan, Côte d'Ivoire. The conference had 122 participants (including 51 young researchers) from 34 countries. The conference was organized into four scientific sessions: (1) Anthropogenic sources from urban to global scales, (2) Natural Emissions, (3) Integrated top-down and bottom-up assessments and (4) Impacts of emissions of greenhouse gases, air pollutants, and

emerging toxics. A Town Hall session was organized to invite the audience to contribute to a lively interactive discussion of how GEIA can best support decision making processes on mitigation of air pollution and greenhouse gases. Finally, a special session was dedicated to discussion of GEIA Working Groups with updates, opportunities and next steps. It is worth highlighting the remarkable presence of around twenty African countries at the GEIA 2025 conference, a first at an international conference. This participation underscored the wealth of science underway in Africa.

The IGAC-iCACGP Early Career Researcher (ECR) committee conducted their second ECR online conference in September 2025. Building on the success of the inaugural 2023 event, the 2025 conference provided a vibrant, accessible, and truly global platform for the next generation of scientists to connect, share their research, and develop new skills. Run continuously over 19 hours and spanning three major regional sessions (Asia/Oceania, Africa/Europe/Middle East, and the Americas), the conference successfully lowered geographical and financial barriers, welcoming over 750 registered attendees and featuring 208 poster presentations. The conference was a whirlwind of activity, hosted on the interactive Gather Town platform. Each of the three regional blocks featured highlight talks from a total of nine outstanding ECR speakers, who shared cutting-edge research on topics ranging from Arctic sea ice prediction to the atmospheric consequences of Amazon biomass burning. Interactive icebreaker sessions and dedicated networking events connected hundreds of ECRs with peers and senior scientists in lively, small-group discussions. A series of “Skills Workshops,” organized in partnership with the WCRP Academy, ATMO-ACCESS, and Microsoft, provided practical training on crucial topics like the use of AI in climate science, virtual training tools, and leveraging Microsoft Copilot for academic research. The heart of the conference was the two joint poster sessions, which saw a peak of over 180 attendees simultaneously exploring the virtual poster hall. After a rigorous two-stage judging process, the ECR conference organizers announced the six winners of the Best Poster Prize. Each winner receives full funding to attend the iCACGP-IGAC 2026 Science Conference in Crete, Greece.

In 2026, the major iCACGP activity is co-organizing, with IGAC, their biannual conference, iCACGP-IGAC 2026 International Conference, to be held in Heraklion, Crete, Greece during 7-11 September 2026. A second activity for iCACGP will be the selection of the 2026 Paul Crutzen Early Career Award to be announced in late summer. The award is presented to the winner at the iCACGP-IGAC conference. The Commission has also facilitated funding support for two activities. The 2026 SOLAS Summer School is occurring in March 2026 in Brazil and a 4-day training course on atmospheric chemistry modeling and analysis will be held in Santiago, Chile.

**ICAE** (<https://www.iamas.org/icae/>)

ICAE Activities in 2025:

- Organized one ICAE Session for the BACO-25 in Busan 2025.
- Organized the 2nd International Symposium on Lightning Physics and Lightning Meteorology (ISLPM) in Beijing (June 3-6, 2025) with 120 Participants from 10 countries.
- Preparation of the 18th ICAE General Assembly (ICAE2026). Applied and obtained 8000 USD support for the ICAE2026 from IAMAS/IUGG.
- Collection and online publication of two issues of ICAE Newsletters in 2025. All the two issues were distributed to the ICAE mailing list.
- Maintenance of the website for ICAE (<https://www.iamas.org/icae/>).
- The ICAE mailing list has been continually updated.

Plan for ICAE in 2026:

- Organize the 18th ICAE 2026.
- Organize the ICAE EC meeting during ICAE 2026.

- Rejuvenation of the ICAE Committee. Election of New ICAE Officers. • Publication of two issues of ICAE newsletter.
- Maintenance of the website for ICAE.
- Update the ICAE colleague mailing list as needed.

ICCL (<https://www.iamas.org/commissions/iccl/>)

ICCL activities in 2025:

1. Maintenance of the formal website for ICCL (<https://www.iamas.org/iccl/>) with the help of IAMAS (Ms. Katie Quigley).
2. ICCL (co-)organized 12 symposia at the Busan BACO (IAMAS-IACS-IAPSO) Joint Assembly 2025. The titles of the symposia and the ICCL members involved are listed below:

IAPSO and 2 IAMAS symposia

- P04 The Meridional Overturning Circulation (MOC) (Co-conveners: Léon Chafik, Jianping Li)
- M18 Monsoon systems: variability, processes, predictability, change and extremes (Convener: Jianping Li)
- M20 High resolution modelling of regional and local climate (Convener: Tomas Halenka)

9 Joint symposia

- JMP03 High-impact Weather and Climate Extremes (Neil Holbrook, Seok-Woo Son)
- JMP04 Antarctic Bottom Water formation, variability and trends (Zhaomin Wang)
- JMP05 Tropical Pacific SST Warming Patterns: Observations, Models and Impacts (Mat Collins, Leon Chafik)
- JMP06 Advancing air-sea flux process understanding across diverse conditions (Greg Foltz)
- JMP07 Past climate changes and their relevance for the future (Qiuzhen Yin, Ayako Abe-Ouchi, Emilie Capron)
- JMP09 El Niño/Southern Oscillation and its Global and Regional Impacts (Jianping Li)
- JMC13 Tropical-polar interactions under rapid climate change: Processes and influences (Xichen Li)
- JMCP18 Sub-seasonal to Decadal Prediction (S2S-S2D) (Seok-Woo Son)
- JMCP20 Responses of Antarctic ice shelves to changing atmospheric and oceanic forcing (Zhaomin Wang)

3. 2025 UNESCO Chair-International Forum on Blue Carbon and Sustainable Development (BCSD 2025), 11-12 May, Qingdao, China.

The 2025 UNESCO Chair-International Forum on Blue Carbon and Sustainable Development (BCSD2025), co-organized by Ocean University of China, University of Portsmouth, and UNESCO Chair in Ocean Governance was opened during May 11-12 in Qingdao, China. Jianping Li, the President of ICCL, is one of the co-chairs of this international forum. The forum brought together approximately 120 participants from 11 countries, including China, the United States, the United Kingdom, France, Portugal, the Netherlands, South Korea, Nigeria, Rwanda, Pakistan, and Yemen, comprising

experts, scholars, and student representatives. Over the two-day event, attendees focused on the theme of „Blue Carbon and Global-Regional Sustainable Development,“ discussing topics such as blue carbon and climate change, blue governance and ocean health under carbon neutrality, and blue carbon finance. The forum aimed to deepen multilateral exchanges and cooperation, integrate global intellectual resources, and jointly contribute blue solutions to global sustainable development.

4. At EGU 2025 Assembly, 27 April-2 May, Vienna, Austria, organized a monsoon session, Session AS1.24: Monsoon systems in the past and present and under future climate change (Co-convenor Jianping Li).
5. At AGU25 Annual Meeting, 15-19 December, New Orleans, USA, organized Session A004: Advances in Decadal Climate Change: Evidence from Air-Sea Interaction, Mechanisms, and Predictability (Primary Convener: Jianping Li)
6. Ayako Abe-Ouchi, ICCL member, gave a plenary talk at BACO-25 on Thursday July 24, 2026.
7. Organization of ICCL applications to the call for IAMAS and IUGG financial support for activities in 2026. Two proposals were selected for the financial support: “International Conference on Climate Impacts in a Changing World 2026” submitted by Gabriele Messori (Sweden), and “International workshop on assessing current and future regional climate change and its impacts on hazard: Frontiers in High-Resolution Climate Projection and Advanced Methodologies and Applications for National Hazard Assessment” submitted by Tosiya Nakaegawa (Japan).

#### ICCP (<https://www.iamas.org/iccp/>)

A major activity of ICCP in 2025 was the sponsorship of symposia at the BACO25 conference in Busan, South Korea. The ICCP sponsored a session on “Weather modification and small-scale geoengineering: theory, practice and technology” and a session on “Cloud-precipitation-aerosol studies” jointly with ICACGP. ICCP also jointly sponsored a session on “Dynamics and microphysics of moist convection” with ICDM. Between these 3 sessions, there were 42 oral talks and 18 poster presentations that were presented. ICCP held an in-person meeting on the day before the conference when various issues were discussed, including the planning of workshops for 2026 and the continuation of regular virtual meetings throughout the year where various topics are discussed.

ICCP will sponsor two workshops in 2026. The Pre-EGU Ice Cloud Workshop will take place at the University of Vienna on 30 April and 1 May 2026. The focus of the workshop is on the role of ice and mixed-phase clouds in a changing climate, bridging small- and large-scale processes, modeling and observations. The workshop will involve scene-setting talks and discussion-driven sessions, designed for deep scientific exchange allowing active participation of all participants. This workshop should lay the groundwork for a document outlining key open questions and future directions, potentially leading to an opinion paper.

A workshop on Advancing Cloud and Precipitation Research and Applications in Africa will take place at the University of Nairobi, Kenya between 20 and 24 July 2026. The workshop will be jointly sponsored by ICCP and ICTM. Five pillars have been identified for discussion at the workshop: cloud microphysics, aerosol-cloud interactions and convection; observations, measurement techniques and data integration (including satellite data); modeling, prediction, nowcasting and extreme weather; artificial intelligence and machine learning across the weather-climate chain; and climate change, urbanization, and future directions. The workshop will consist of inspirational keynotes, technical plenary contributions, poster and discussion sessions, and practical sessions.

In 2026, the virtual monthly journal club meetings of the ICCP continue. Speakers in

2025-2026 have included Alexei Korolev, Audran Borella, Lei Zhu, Odran Sourdeval, Anna Tippet, Andreas Petzold, Martina Krämer and Luis Antonio Ladino. Planning for symposium and workshops associated with the 2027 29<sup>th</sup> General Assembly of IUGG are currently taking place. Further, ICCP is currently drafting a statement on the importance of air- and ground-based observations for cloud physics research which we expect to release in the near future.

**ICDM** (<https://www.iamas.org/icdm/>)

ICDM has a total of 29 members as well as 4 emeritus members from overall 13 countries. A third of the members in ICDM are women.

In 2025, the ICDM organized several symposiums for the joint IAMAS – IACS – IAPSO Assembly, [BACO 2025](#) in Busan, South Korea, 20-25 July 2025. Currently, ICDM is preparing symposia proposals for the IUGG General Assembly 2027 in Incheon, South Korea.

The next workshop organized by ICDM will focus on [diabatic processes across scales in the extratropics](#) in Wolkersdorf near Vienna, 28 April until 1 May 2026.

**ICMA** (<https://www.iamas.org/icma/>)

In the first half of 2025, ICMA organized and prepared for the Middle Atmosphere Symposium (M10) which was held as part of the IAMAS-IACS-IAPSO Joint Assembly (BACO-25) in Busan over 3 days (July 23<sup>rd</sup>-25<sup>th</sup>). The symposium consisted of 37 abstracts (37 oral presentations and 8 posters from 11 different countries). The presentations covered topics such as stratosphere-troposphere coupling, interactions between radiation, chemistry and dynamics in the middle atmosphere, gravity waves and middle atmosphere response to climate change and new climate intervention techniques.

The ICMA Business Meeting (BM) 2025 was held on July 23<sup>rd</sup> in Busan, during the IAMAS-IACS-IAPSO Joint Assembly (BACO-25) with participation of 13 ICMA members (2 of them attending online). In addition, Prof. John Burrows from University of Bremen attended as IAMAS liaison and Patrick Hupe from BGR, attended as IAMAS national representative from Germany.

In 2025, ICMA sponsored two workshops which received financial support from IUGG and IAMAS: a joint QBOi-SNAPSI-QUOCA activity workshop was held in Cambridge, UK, 24-28 March on “Improved simulations of the stratosphere for better predictions of weather, climate and extreme events” . The workshop aimed to improve understanding of stratospheric processes, variability, uncertainties, and influence on surface climate and predictability. There was a diversity of participating scientists: around a third were women and over half were early career scientists. There were 105 people from 74 institutes across 18 countries.

The Joint APARC/WCRP Workshop and Training School on AI for Climate and Weather Forecast, held from 24 to 28 November 2025 at the African Institute for Mathematical Sciences (AIMS), Mbour, Senegal, was a 5-day capacity-building initiative designed to address the specific needs of Global South countries through a bottom-up, participant-driven approach. Out of more than 1,300 applicants from all around the world, 47 participants, primarily from Africa, were selected for in-person attendance. The initiative co-developed actionable knowledge addressing climate adaptation and resilience challenges, particularly bridging North–South gaps. It also contributed to the long-term goal of building a sustainable network of early-career researchers trained in advanced data science methods.

**IO3C** (<https://www.io3c.org/>)

In 2025, the **International Ozone Commission (IO3C)** intensified its efforts to bridge communications between its members, the scientific community, and the general public. A key focus of this advocacy was the formal support provided to NASA management in July 2025, urging the continued maintenance of **NASA Ozone Trends science** and the **Ozone Watch** webpage. These efforts helped ensure that critical data products from the NASA Earth Science team remained available throughout the 2025 ozone hole period and continue to provide vital information regarding Arctic ozone variability in the spring of 2026.

Building on its commitment to international cooperation, the IO3C supported the organization of the **Network for the Detection of Atmospheric Composition Change (NDACC, [ndacc.org](http://ndacc.org))** Symposium, held from **October 27–30, 2025**, in **Virginia Beach, VA, USA**. This landmark event celebrated 35 years of the NDSC/NDACC network and gathered nearly **200 scientists**, including several IO3C members. Attendees shared recent scientific achievements and discussed critical trends in atmospheric composition observed through the network's global stations.

Following a long-standing tradition, the Commission also published a major press release on **September 16, 2025**, to commemorate the **International Day for the Preservation of the Ozone Layer** and the anniversary of the 1987 Montreal Protocol. To foster global collaboration, members met and began preparations in May to ensure the release was translated into French, German, and Spanish. The final document summarized research progress and outlined future challenges in monitoring the processes that impact the recovery of the stratospheric ozone layer.

In early 2026, IO3C members convened online to review 2025 milestones—including **IAMAS reports** and satellite and modeling workshops—and to plan upcoming activities. During this meeting, officers officially initiated preparations for the **2028 Quadrennial Ozone Symposium (QOS)** by requesting formal proposals to host the event. The Commission continues to contribute to global decision-making and shares its progress through platforms such as the **WCRP APARC** and **NDACC** newsletters, the **WMO GAW Ozone and UV**

**Bulletin**, and social media. In addition, members of IO3C contribute to the next WMO/UNEP Ozone Assessment (2026) and to the Tropospheric Ozone Assessment Report (TOAR II) activities.

**ICPAE** (<https://www.iamas.org/icpae>)

In 2025, ICPAE submitted a proposal (approved) for a session at the Europlanet (EPSC) 2026 Conference in The Hague (Netherlands) in the TP19 Programme Section. The title of the session is “Planetary Atmospheres and Their Long-Term Evolution Across the Solar System and Beyond”, and is currently open for submission. The session is aimed at discussing planetary evolution in a comparative fashion, and highlight novel contributions from modern observatories and platforms. At the same conference, ICPAE will also organize an open lunch meeting, funded by IAMAS, for members and interested individuals.

ICPAE has also organized a session at the Joint IAMAS-IACS-IAPSO Assembly (BACO 25) conference in Busan, South Korea, dedicated to the “Exploration of the Diversity of Planetary Atmospheres and Surfaces”, which attracted a total of 6 abstracts. The committee has also held a hybrid meeting during the same conference. The meeting has been dedicated to the discussion of specific topics the committee intends to dedicate its focus on, and to the discussion of future initiatives of the committee, such as the organization of a cycle of online seminars, to be started by the end of 2026, focused on climate, space weather and atmospheres, and comparative planetology topics at large.

**ICPM** (<https://www.iamas.org/icpm/>)

ICPM endorsed, and encouraged our members to attend, the 20<sup>th</sup> Workshop on Antarctic Meteorology and Climate (<https://amrdc.ssec.wisc.edu/meetings/wamc2025>). It was hosted by Korea Polar Research Institute (KOPRI) and was held in Incheon, Republic of Korea (Just before BACO-25) and was fully hybrid. As a part of this event, we supported the travel of two early career researchers, thanks to the generous support of IAMAS/IUGG.



BACO-25 was a successful meeting for ICPM members, with our sessions well attended and our hybrid business meeting being attended by people across many time zones! At our business meeting we discussed what sessions to focus on for IUGG, future field campaigns and what our thoughts were on Antarctica InSync and IPY plans. The ICPM requests that future IAMAS/IUGG meetings allow hybrid functionality for all business meetings (and ideally the whole meeting!). In BACO-25 we had to run it through our own laptops as we could only run it through the meeting rooms if we paid an additional fee!

Our president (Matthew Lazzara) and several ICPM members had a successful Antarctic field season, working on upgrading parts of the important Automatic Weather Station Network.

**ICTM** (<https://www.iamas.org/ictm/>)

**ECR members of ICTM:**

- Dr. Guy Dagan, Israel
- Dr. Akshaya Nikumbh, India

**The objectives of ICTM are the following:**

- To enhance research in Tropical Meteorology by organizing thematic Conferences, Workshops, and Symposia
- To enhance the understanding of tropical circulation systems using observations and models
- To stimulate the exchange of scientific ideas and international collaborations in
- Tropical Meteorology
- To facilitate support for students and scientists to attend relevant conferences organized by the commission.
- To establish working groups and committees, and joint committees with other Commissions of IUGG.

- To organize joint meetings of the IUGG/IAMAS Commissions during major international conferences.
- To report on commission work to IUGG through IAMAS.

### **Preparatory ICTM\* meetings in 2025**

A meeting was conducted with a few lectures on 12 March 2025 in hybrid mode to launch a series of panel discussions on the relevant topics for tropical meteorology. Dr. Andrea Flossmann, the president of IAMAS has briefed on the role of IUGG and IAMAS in advancing the tropical meteorology research. There were 2 invited talks and one ICTM member talk in the meeting, as detailed below.

- Invited talk by Prof. Cristina Flesia, Chair ISTIP, International Science and

Technology Partnership, Visiting Professor, The University of Milano Bicocca,

Department of Environmental and Earth Science, Piazza Della Scienza, Milano, Italy

- ICTM\* talk by Prof. Dr. Nedjeljka Žagar (ICTM\* Member) Results of the assimilation of Aeolus wind in the tropics in the ECMWF system
- Invited Talk by Prof. Fudeyasu-Hironori-Dt on Typhoon Science and Technology
- Research Center (TRC), Institute for Multidisciplinary Sciences, Yokohama National University, Japan

The topics identified by the ICTM members are the following:

- Moist convection and parameterization of sub-grid physical processes
- Organization of convection, Tropical storms, disturbances, and extreme weather,
- Madden-Julian oscillation in theory, observations, and prediction models,
- Tropical sub-seasonal variability and its effects on extratropics,
- Monsoons and the teleconnections, ENSO, IOD, PDO, Equatorial waves and instabilities,
- The influence of remote forcing versus regional processes on the monsoon variability,
- The influence of surface-atmosphere interactions on the sub-seasonal to seasonal prediction skill in the monsoon season,
- The influence of combined climate oscillations on extremes,
- Climate modes and their impact on tropical weather and climate,
- Modelling climate sensitivity and climate change in the tropics,
- Anthropogenic effects on tropical weather and climate.

Preparatory Workshops and panel discussions were conducted in hybrid mode.

- ICTM panel discussion on "Tropical Data Assimilation and Forecasting" held on 29th April, Organizers: Prof. Nedjeljka Žagar and Prof. Sam Stechmann.
- Panel discussion Theme: The Influence of Remote Forcing Versus Regional Processes on Monsoon Variability and Predictability, Date: Tuesday, May 27, 2025, Organizers Dr. Thara Prabhakaran, Dr. Sabin T. P., Dr. Smriti Gupta, IITM, Pune
- One-Day Brainstorming Workshop/Panel Discussion On Organization of Convection, Tropical Storms, Disturbances, and Extreme Weather 07 July 2025, In Association With Advanced Centre for Atmospheric Radar Research (ACARR), Cochin University of Science and Technology (CUSAT), Cochin, India, Organizer: Dr. S. Abhilash (CUSAT).
- Workshop on Monsoon Variability, Predictability and Prediction held at Indian Institute of Tropical Meteorology (IITM) Pune in Hybrid mode on 30 June 2025. Organizer: Dr. C. Gnanaseelan (IITM, Pune)

- Members have conducted dedicated sessions as part of the preparatory meeting and briefed importance of the ICTM commission, which was further approved by the IUGG and IAMAS officials. Members have conducted/participated in several sessions of the BACO meeting.
- Tropical Meteorology, Moist convection and Chemistry and Climate are a few sessions organized by the ICTM members.

### **ICTM activities 2025-2026**

The ICTM is supporting/participating in the following activities after its inception at the BACO meeting in 2025:

- Supported the early career students to attend the 11th WMO scientific conference on the weather modification conducted at IITM, Pune during 3-7 Nov 2025 <https://wmo-11scwx-mod.tropmet.res.in/>
- Special session on advances in tropical meteorology was organized during the International Symposium on Tropical Meteorology (INTROMET 2025) at IITM in Pune, India on 18-20 November 2025. <https://intromet25.tropmet.res.in/>.  
The ICTM special session was arranged on 19th November 2025 with six invited talks from experts. Dr. R. Krishnan from IITM talked about Indian Monsoon in a Changing Climate – Opportunities and Challenges Dr. Ajay Mohan, USA on Climate Variability and Ocean Warming as Constraints on Near-Equatorial Cyclogenesis. Dr. Anurag Dipankar, ETH Zurich on Progress and Challenges in Global Storm-Resolving Modeling: The Road Ahead, Dr. Abhilash S, Cochin University on Rising Heat, Deepening Tropical Clouds and Stronger Storms Unfolding Urban Climate Risks Along the Southwest Coast of India, Prof. Argha Banerjee, IISER Pune on Himalayan Glaciers, Glacier-Fed Rivers, and Some Interesting Feedback Loops and Dr. Subodh Saha, IITM Pune on Tropical Humid Heat Stress Crosses a Critical Threshold in a Warming World.
- ICTM is part of the 1st International Symposium on Earth System Modelling 12-14 Aug 2026, Brazil <https://earthsym.com.br/>
- Directions for Future Research and Applications on Clouds, Precipitation, and Extreme Weather in Africa 20 to 24 July 2026, Nairobi, Africa <https://www.cloudsfor.africa/>
- Planning a webinar series by the members and other experts on the topics mentioned above.
- A subgroup on the tropical cyclone research is formed and they will have periodic meetings on the advances and Societal aspects of extreme events

### **Nomination of members**

The following members have been nominated and accepted to be on ICTM:

- Dr. Akshaya Nikumbh, Indian Institute of Technology, Mumbai, India
- Dr. Ousmane Ndiaye, African Center of Meteorological Application for Development (ACMAD)
- Dr. William Boos, University of Berkeley, USA
- Dr. Helber Barros, Gomes Institute of Atmospheric Sciences, Brazil
- Dr. Puji Lestari, Universiti Teknologi Bandung, Indonesia
- Dr. Kawawa Banda, University of Zambia, Zambia

### **IRC (<https://www.iamas.org/irc/>)**

The primary activities in 2025 were directed toward the organization and realization of the annual business meeting of the IRC that was held as a combined in-person and online meeting on 22 July 2025, during the joint assembly of IAMAS, IACS, and IAPSO

(BACO-2025). BACO-2025 took place in Busan (Republic of Korea) from July 20 to 25, 2025. A total of 30 people participated during the IRC business meeting (16 in-person and 14 online). The meeting focused on the following topics: Report of the president, introduction of new IRC members (2024-2028), planning of the 2026 IRC business meeting, working group presentations, and organization of IRS 2028.

The president's report included a summary of the financial transactions and the status of the IRC budget; it was compiled by the IRC Vice-President (Hajime Okamoto). The participants accepted the report.

IRC members provided important contributions to the scientific program of BACO 2025. One session (M13) was organized jointly by Wendisch, Okamoto, and Chiu. During M13, three invited lectures were given by Iwabuchi, Hakuba, and Taylor, and eight additional lectures were presented. In addition to several presentations by established scientists, there was a special highlight, namely a talk given by a young scientist from Argentina (Vito Sol Galligani: Investigation of how uncertainties in the microphysics of NWP models are transferred to the microwave radiation space), whose trip to Busan was financially supported by the IRC. All presentations of M13 were well received. Further presentations by IRC members were given in various sessions. Martin Wild was one of the main organizers of session M12.

Furthermore, the upcoming conferences dealing with the scientific areas of the IRC were discussed during the IRC business meeting. The participants agreed to hold the next IRC business meeting during the AMS Conference on Atmospheric Radiation and Cloud Physics, which will take place from August 3 to 7, 2026, in Madison, Wisconsin (USA).

The IRC website has been updated. Each IRC member was asked to check <https://www.iamas.org/irc/> to see if any information is inaccurate or missing. In particular, we asked the IRC working group leaders to provide the necessary information to update the activities of the IRC working groups at <https://www.iamas.org/irc/workinggroups/>.

The main part of the business meeting was devoted to the presentations from the 12 current IRC working groups and the respective discussion of their results. Prior to the business meeting, all working group leaders were asked to provide three slides, which are included in the slides for this meeting.

The following list comprises the current working groups of the IRC:

- ASA - Atmospheric Spectroscopy Applications
- BSRN - Baseline Surface Radiation Network
- CR - Clouds and Radiation
- GEB - Global Energy Balance
- ICLAS - International Coordination group for Laser Atmospheric Studies
- IPRT - International Polarized Radiative Transfer
- ITWG - International TOVS Working Group
- UV - Solar UltraViolet Radiation
- 3DRT (I3RC) - Three-Dimensional Radiative Transfer
- HRMM - Hyperspectral Radiation: Measurements and Modelling
- TSSI - Total and Spectral Solar Irradiance
- MLRS - Machine Learning Applications in Remote Sensing

Following the presentations by the working groups, statistics were presented on the new IRC members elected for the 2025–2028 term (four years). It was discussed that active scientists who are not regular members can join the IRC working groups. In addition, a question was discussed about the current

geographical distribution of IRC members. Currently, we have no IRC members from Africa. We have had African members in the past, but no new members have been proposed. We need to make a greater effort to propose new African candidates as IRC members during the next election.

The procedure for submitting proposals to host the International Radiation Symposium (IRS) 2028 was discussed. A call for proposals was sent to IRC members in fall of 2025. Two letters of intent have been received by the end of 2025. The decision will then be made during the IRC Business Meeting in 2026.

Keith Alverson, IAMAS Secretary General

# International Association for the Physical Sciences of the Oceans (IAPSO)



International Association  
for the Physical Sciences of the Oceans

IAPSO website: <https://iapso-ocean.org/>

## INTRODUCTION

IAPSO has the prime goal of ‘promoting the study of scientific problems relating to the oceans and the interactions taking place at the sea floor, coastal, and atmospheric boundaries insofar as such research is conducted by the use of mathematics, physics, and chemistry.’ IAPSO works mainly through 1) biennial scientific assemblies; 2) working groups; 3) commissions; 4) services and 5) website information. Of special importance to IAPSO is the involvement of scientists, especially early career scientists and students from developing and notably from least developed countries in oceanographic activities.

IAPSO maintains formal liaison with other scientific commissions and committees. These include the ISC's Scientific Committee on Oceanic Research (SCOR), and UNESCO's Intergovernmental Oceanographic Commission (IOC).

## ADMINISTRATION

The IAPSO Bureau was renewed in July 2023 during the IUGG General Assembly in Berlin. It comprises:

President:	Hans van Haren (the Netherlands)
Past President:	Trevor McDougall (Australia)
Secretary General:	Silvia Blanc (Argentina)
Treasurer:	Ken Ridgway (Australia)

The Executive Committee comprises the Bureau members and

Vice-President:	Agatha de Boer (Sweden) <i>resigned July 2025</i> Juliet Hermes (South Africa) <i>internal replacement from July 2025</i> Toshiyuki Hibiya (Japan)
Members at Large:	Juliet Hermes (South Africa) <i>until July 2025</i> Joellen Russell (USA) Yukio Masumoto (Japan) Jae-Hun Park (Republic of Korea) Alejandra Sanchez-Franks (United Kingdom) Regina Rodrigues (Brazil) Peter Zavialov (Russia) Malin Ödalen (Germany, chair IAPSO-EC)

The IAPSO office and day-to-day business is managed by Secretary General (SG) Silvia Blanc. The SG is responsible for the IAPSO website.

IAPSO finances are managed by the Australia-based Treasurer, Ken Ridgway.

IAPSO business meetings were conducted by email and videoconference when appropriate.

## ACTIVITIES

IAPSO participated in the IAMAS/IACS/IAPSO Joint Assembly BACO-25 held in Busan, Republic of Korea, from 20 to 25 July 2025. There were 318 registered people with IAPSO affiliation with about 68% from Asia. The Scientific Program included 7 IAPSO symposia with 98 abstracts submitted, 9 Joint Symposia led by IAPSO with 124 abstracts submitted, and another 16 Joint Symposia led by IAPSO with 316 abstracts submitted. These numbers are partial evidence of a very successful scientific event.

At the IAMAS/IACS/IAPSO Joint Assembly in Busan, IAPSO awarded three medals.

The 2025 **IAPSO Early Career Scientist Medal** was awarded to Dr. Adele K. Morrison (Research School of Earth Sciences, Australian National University, Australia) who gave a talk entitled "[Dynamical linkages between distinct oceanic regimes around Antarctica](#)".

IAPSO's premier Medal, the 2025 **Prince Albert I Medal** was awarded to Prof. Nadia Pinardi, Professor of Physical Oceanography at the Department of Physics and Astronomy, University of Bologna, Italy, "for her outstanding contribution to defining the principles, methods and applications of ocean modelling and forecasting. She has made seminal contributions in physical oceanography over the last 40 years, advancing both geophysical fluid dynamics and ocean predictability, integrating innovative methodologies in observations, numerical modelling and data assimilation. Her dedication and contagious enthusiasm for oceanography and science pushed the frontiers of interdisciplinary science and prediction in the world's coastal areas."

The 2025 **Eugene LaFond Medal**, given in memory of Eugene LaFond (IAPSO Secretary General 1970-1987) to an ocean scientist from a developing country who makes an oral or poster presentation at an IUGG or IAPSO assembly was awarded to Dr. Riesna R. Audh (University of Capetown, South-Africa) for her oral presentation entitled "Rafting of Growing Antarctic Sea Ice Enhances In-Ice Biogeochemical Activity in Winter".

### SCOR Administration

Being member of the SCOR-EC, IAPSO President Hans van Haren attended virtually via zoom the full SCOR Annual Meeting held in Santa Marta Colombia between 28 and 31 October 2025. No less than 14 new proposals for SCOR-WGs were submitted, of which 3 will receive funding: 'SubMHW' SUBsurface Marine HeatWaves, 'ORCAS' Observational Requirements in the Context of AI prediction systems for Sea ice, and 'SPASS' Small Plastics in the ocean's interior: coherent Analysis and Synthesis for better Scrutiny. Besides the discussions on the new projects, all active SCOR working groups and projects were presented. Currently SCOR's budget is still healthy, also for 2026. Unsure what will happen after that given presentday geopolitics.

## ACTIVITIES OF ASSOCIATION COMMISSIONS, WORKING GROUPS

### Early Career Scientist Working Group

In 2025, IAPSO ECS participated in the IAMAS/IACS/IAPSO Joint Assembly BACO-25 Joint Assembly. During the conference, the network organised for a small group to visit the Korea Institute of Science and Technology (KIOST) hosted by a local Early Career researcher. IAPSO ECS joined the IUGG ECS Committee that officially launched on 1 April 2025 and contributed to the IUGG ECS Net (<https://iugg-ecs.org/>). During 2025, regular communications included frequent updates of advertised jobs and other opportunities on the IAPSO ECS website and Bluesky (@iapso-ecs.bsky.social) where the network now reaches 450 subscribers. In addition, IAPSO ECS published a news magazine featuring interviews with early career ocean scientists.

### IAPSO Best Practice Study Groups

An IAPSO Best Practice Study Group ‘BPSG’ addresses an issue whose resolution will assist in the conduct of oceanographic research. In carrying out oceanographic research, a choice must frequently be made between a few options for measuring data, analysing data, processing software, or modelling a system. The reasons for choosing between competing methods are often not well documented and the relative strengths and weaknesses of these routes are usually not published or well known. Each Best Practice Study Group receives up to US\$12,000 towards the costs of a meeting and presents reports with partial advances every six months. Calls for proposals are launched bi-annually (<https://iapso-ocean.org/funding-opportunities/best-practices-study-groups.html>).

As a result of the 2025 call for IAPSO BPSG the following two proposals were selected for the period 2026-2027:

- BPSG on [Best practices for numerical methods in computational Lagrangian oceanography](#).
- BPSG on [Multi-Model Wave Reanalyses in Overlapping Regional Domains \(MER-EP Wave inter-comparison Study Group\)](#).

### Joint Commission on Ice-Ocean Interactions (JCIOI, joint with IACS)

JCIOI published the RECOIL (Reconciling Cross-platform Observations of Ice-shelf Melt) document, which is now available online (<https://doi.org/10.5281/zenodo.17469856>). The document represents a direct outcome and follow-up of the IAPSO-funded Best Practice Study Group held in Copenhagen in September 2024, which aimed to develop a framework for observing and modelling ocean-driven iceshelf melt rates in Antarctica. RECOIL provides a community-based framework for reconciling observations of iceshelf melt across multiple observational platforms.

In addition, JCIOI committee members contributed to the establishment of the Antarctica InSync working group, with a focus on advancing coordinated research on ice–ocean interactions across the Antarctic system.

Finally, JCIOI hosted a session with SOFIA at BACO-25: JCP05 Ice sheet-ocean interactions and impacts.

### Joint Committee on the Properties of Seawater (JCS)

The JCS executive and Taskgroup chairs met with the SCOR Executive Director and IAPSO President virtually on April 22, 2025. An in-person meeting on July 22, 2025 was held at the IAMAS/IACS/IAPSO Joint Assembly in 2025 (Busan, S. Korea), followed by a special session on the Thermophysical Properties of Seawater. A report on that Workshop, along with the significant proposed changes to the

structure of JCS was generated. These changes were then circulated to the entire membership of JCS over August 2025.

JCS maintains a web site at [www.teos-10.org](http://www.teos-10.org). This site gets around 1000 visitors per month. Annual downloads of most items are stable, with the GSW Matlab toolbox being the most downloaded item (between 1500-2000 times a year) which is also available from a github repository ([github.com/TEOS-10](https://github.com/TEOS-10)) for developers and those interested in contributing to the software. However, currently the loss of our software subgroup member, who maintained these sites, means that continued upkeep is uncertain.

Members of the JCS were involve in different international research projects, such as MINKE related to CTD calibrations, SCOR WG-172 on salt intrusions in rivers, NERC-NSF project in collaboration with the National Oceanography Centre UK) and the Monterey Bay Aquarium Research Institute (USA). Eleven papers on the topics addressed by JCS were published by its members in scientific journals.

### **Tsunami Commission (JTC, Joint with IASPEI and IAVCEI)**

The JTC of the International Union of Geodesy and Geophysics (IUGG) organized the 32<sup>nd</sup> International Tsunami Symposium (ITS-2025) from 12–14 November 2025 in Hyderabad, India. More than 140 papers were presented in the Symposium. The JTC also organized a hybrid Business Meeting on Nov. 16<sup>th</sup>, during the Symposium. Six Working Groups: Tsunami Terminology WG, Science-based Tsunami Warning WG, Tsunami Magnitude WG, GNSS Data for Tsunami Warning WG, Meteotsunami WG, and Tsunami Data WG, presented their recent activities during the business meeting. The JTC jointly organized the 9<sup>th</sup> Joint ICG/PTWS-IUGG/JTC workshop - 60<sup>th</sup> Anniversary of the ICG/PTWS – Past and Future in Beijing, China, on April 1<sup>st</sup> (online) and 7<sup>th</sup> (hybrid), 2025. Members of the JTC actively participated in organizing numerous tsunami sessions at IAMAS-IACS-IAPSO Joint Assembly (BACO-25), AGU, EGU, and AOGS General Assemblies. The JTC published current tsunami research in Pure and Applied Geophysics as topical collections, especially for the 2025 Kamchatka earthquake and Tsunami.

### **IASPEI/IAVCEI/IAPSO International Heat Flow Commission (IHFC)**

In 2025, the IHFC advanced its core mission of coordinating global heat-flow research through database development, community engagement, and education. A major milestone was the launch of the open and FAIR-compliant Global Heat Flow Data Portal ([www.heatflow.world](http://www.heatflow.world)), providing curated access to global geothermal data. IHFC supported international initiatives including ISMIP7 via an expert survey on geothermal heat flow in Greenland and Antarctica. Strategic coordination was strengthened through the Heat Flow Autumn Meeting and IHFC business meeting. Substantial progress was made toward the next Global Heat Flow Database release (planned for 2026), including quality control and metadata refinement. Early Career Researchers were actively integrated through fellowships and database assessment activities. Updated IHFC statutes entered into force, reinforcing governance and long-term sustainability, supported by external funding from industry partners.

### **IAPSO Standard Seawater Service**

The demand for IAPSO Standard Seawater remains strong and the company OSIL--Ocean Scientific International Ltd has continued to invest heavily in the upkeep and replacement of the equipment necessary to operate and produce the standards.

During the period (May 2023 – January 2026) 3 batches of Normal Standard Seawater were produced. Additional batches of low (S=10, S=30) and high (S=38) salinity seawater standards were produced.

The Service continues contributing to various groups globally involved with; possible use of the P Series (normal standard seawater) as a CO<sub>2</sub> standard, production of Carbonate standards, production of

additional super-full bottles for interlaboratory comparison for seawater pH. They remain committed to supporting research exercises within the community as and when required.

### **IAPSO Commission on Sea Level and Tides**

The Commission on Seawater and Tides proposed relevant changes on its future approach and organization, that meant certain reformulation, including the nomination of a new President by the end of the year or the beginning of 2026, at the IAPSO General Business held on 23 July 2025 during the IAMAS/IACS/IAPSO Joint Assembly BACO-25 held in Busan, Republic of Korea.

### **Supported Meetings**

IAPSO request to support the following scientific meeting has been accepted in the frame of the IUGG – Symposia Support 2025 Programme:

- 4<sup>th</sup> World Conference on Meteotsunamis, Klaipeda, Lithuania, 5-9 October 2026 (USD 4,000).

### **Awards**

Emeritus Scientia Professor Trevor McDougall has been honoured with the 2025 Alfred Wegener Medal at the European Geosciences Union (EGU) General Assembly (April 2025), which recognises exceptional scientific achievements by outstanding researchers in the Earth Sciences.

### **Obituaries**



**Professor Hisashi Mitsuyasu** (1929-2025, Japan), an Honorary Member of the Oceanographic Society of Japan, recipient of the AMS Sverdrup Gold Medal (1988), the Oceanographic Society of Japan Award (1993), and a Fellow of the Japan Geoscience Union (JpGU, 2018), passed away on 20 November 2025.

Professor Mitsuyasu was a pioneering leader in ocean wave research and a leading authority on air–sea interaction. His seminal contributions to the understanding of wind waves, wave dynamics, and the transfer of momentum from the atmosphere to the ocean laid essential foundations for modern wave modeling and prediction. Through exceptionally precise and innovative experimental approaches, he advanced both physical oceanography and ocean engineering, significantly influencing the international ocean wave research community.

He received his Ph.D. from Hiroshima University for his studies on breaking-wave forces acting on solid boundaries. After conducting ocean wave research as a visiting scientist at Texas A&M University, he returned to Japan to serve at the Port and Harbour Research Institute of the Ministry of Transport, and later devoted many years to research and education at Kyushu University. Throughout his career, he maintained strong international collaborations, helping to integrate Japanese ocean wave research into the global scientific framework.

Beyond his scientific achievements, Professor Mitsuyasu made substantial contributions to the international oceanographic community through leadership, service, and sustained engagement in scientific organizations. His scientific excellence and profound contributions to Earth and planetary sciences were recognized through prestigious awards such as the AMS Sverdrup Gold Medal and his election as a JpGU Fellow.

Professor Mitsuyasu will be remembered with deep respect and gratitude for his originality, rigor, and leadership, and for the enduring influence of his work on generations of oceanographers worldwide.



**Professor Kenzo Takano** (1929-2025, Japan), Emeritus Professor of the University of Tsukuba, passed away on November 18, 2025 at the age of 96. Prof. Takano received both his undergraduate degree and Ph.D. from the University of Tokyo. He worked at the Institut océanographique de Paris and the Centre National de la Recherche Scientifique (CNRS), France, before returning to Japan to continue his research at the University of Tokyo and the Institute of Physical and Chemical Research. He later served as a professor at the University of Tsukuba until his retirement in 1993.

He was a pioneer in numerical modeling of the general ocean circulation. He developed an ocean model coupled with the Mintz–Arakawa UCLA atmospheric model and received the first Society Award from the Japanese–French Oceanographic Society for his contributions to general circulation studies. He devised a numerical calculation scheme, known as the Takano–Oonishi scheme, for momentum advection over sloping topography. He was also a pioneer in current measurements using moored instruments. He maintained current-meter moorings at abyssal depths in the western North Pacific and described key features of mid-ocean mesoscale eddies.

Beyond his individual scientific achievements, he made important contributions to the oceanographic community in East Asia. He organized a research program entitled the Japan and East China Seas Study (JECSS) to promote collaboration among East Asian oceanographers and hosted JECSS meetings on several occasions, from which many scientists in the region benefited.

Prof. Takano will be long remembered for his outstanding achievements in ocean circulation modeling and deep-ocean current measurements, as well as for his sustained encouragement of oceanographic research and collaboration in East Asia. He will be deeply missed.

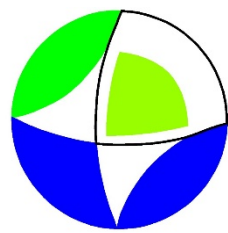
## **FUTURE ACTIVITIES**

The following activities are scheduled for 2026 and beyond:

- Participation in the 2026 SCOR Annual Meeting in Helsinki, Finland from 07 to 10 September 2026.
- Active collaboration in the organization of the 29<sup>th</sup> IUGG General Assembly, July 2027, Incheon, Republic of Korea.
- First steps on the organization of the IAMAS/IAPSO Joint Assembly in the University of Manchester, UK, July 2029.

Silvia Blanc, IAPSO Secretary General  
Hans van Haren, IAPSO President

# International Association of Seismology and Physics of the Earth's Interior (IASPEI)



International Association of Seismology  
and Physics of the Earth's Interior

IASPEI website: <http://iaspei.org>

## INTRODUCTION

The International Association of Seismology and Physics of the Earth's Interior (IASPEI) is the leading international association promoting studies in seismology, earthquake processes, and structure and ongoing geodynamical processes within the Earth's interior. IASPEI achieves its goals primarily through scientific conferences organized by IASPEI and its Commissions, but also sponsors other international initiatives, fosters international cooperation, both in monitoring of seismic sources and research, and education activities, especially in countries that are working towards full scientific development.

Most IASPEI efforts during 2025 were directed towards the 4th Joint Scientific Assembly of IASPEI and IAGA in Lisbon, Portugal and the Assembly of the African Seismological Commission (AfSC) in Windhoek, Namibia.

## ADMINISTRATION

**EC & Bureau meetings.** The IASPEI Bureau / Executive Committee (EC) had regular e-mail exchanges regarding all Association related questions (as e.g., financial support, requests, planning of future Assemblies or business to be solved immediately) between the members of the IASPEI Bureau and EC throughout the whole year and an in-person meeting of EC and Bureau during the 4th Joint Scientific Assembly of IASPEI and IAGA in Lisbon, Portugal.

**Changes in administration (setting up of new Commissions, Working Groups, etc., or termination of old Commissions, Working Groups, etc.).** After longer discussions in EC, during the Regional Commission Assemblies and a preparation phase the new IASPEI Commission on the Rapid Interdisciplinary Investigation of Significant Earthquakes (RI2SE) was set up.

**Website.** The IASPEI website has the address <http://iaspei.org>.

**Statutes.** No changes. IASPEI is registered as a Norwegian organization (Norwegian Org. Number 916 047 495).

**Newsletters.** IASPEI Newsletters were regularly sent as PDF-file attachments to more than 4200 e-mail addresses. The Newsletters are also available for download from the IASPEI website. Four Newsletter issues were distributed in 2025.

## ACTIVITIES

### Scientific Assemblies, Workshops/Symposia etc.

The 4th General Assembly of the African Seismological Commission in Windhoek, Namibia, was planned for autumn 2024 but then moved to 24-28 February 2025. The assembly was organized as a hybrid in-person and online meeting, with 51 participants from all over Africa with 60 oral presentations. The Assembly was followed by two days of technical training offered by the Comprehensive Nuclear-Test-Ban Treaty Organisation (CTBTO) and Kinematics.



*Participants of the 5th General Assembly of the African Seismological Commission in Windhoek, Namibia in February 2025*

The International Association of Geomagnetism and Aeronomy (IAGA) and the International Association of Seismology and Physics of the Earth's Interior (IASPEI) held their IAGA-IASPEI Joint Scientific Assembly 2025 hosted by the Instituto Superior de Engenharia de Lisboa (ISEL) in Lisbon, Portugal, from 31 August to 5 September. The meeting was attended by 1266 participants, about half of them from each of the two Associations. The participants came from 66 countries and included over 120 students (PhD, graduate and undergraduate).

The program consisted of 33 joint sessions, and additionally 106 IAGA and 63 IASPEI sessions and about 50 business meetings where the activities of different Association Divisions, Commissions and Working Groups were discussed. Highlights of the program included the IAGA Award Ceremony with the Shen Kuo Medal lecture, given by Keke Zhang on the topic of the "MSS Geomagnetic Satellite Constellation, Earth's Core Convection and Real-Time Geomagnetic Modeling" and the IASPEI lecture, which was given by Susana Custódio, on the topic of "The 1755 Great Lisbon Earthquake, 270 years later: A unique event in a cryptic plate boundary". Posters were available for two days during extended one hour coffee breaks in a pleasant outdoor setting in an inner yard of the institute, where plenty of discussions took place over coffee and plenty of tasty Portuguese snacks.

An Early Career Scientist Social Event on Monday evening was fully booked and the attendees had the opportunity to expand their networks and discuss any topics of relevance and concern to researchers at their career stage. The lively scientific discussions in a friendly atmosphere during the Joint Assembly

were also complemented by the combined IAGA-IASPEI dinner in the middle of the week, that took place in a beautiful historical building, accompanied by some traditional music.



*Left: Coffee break and poster viewing at the IAGA-IASPEI Joint Assembly 2025; Right: Opening ceremony of IAGA-IASPEI Joint Assembly 2025*

The Joint Assembly was preceded by the IAGA and IASPEI Schools, that for the first time had a combined day of lectures on legacy magnetic and seismological data and a common outing to the Lisbon Quake Museum, an impressive interactive museum about the devastating 1755 Lisbon Earthquake and the historical developments resulting from the catastrophe. The Schools were attended by 18 PhD students from IAGA from 15 different countries, and 32 students and early career scientists from IASPEI from 19 countries.

#### **Activities of Association Commissions, Working Groups, Divisions, Services etc.**

Some 2,000 hard copies of the first printed edition of the IASPEI New Manual of Seismological Observatory Practice (NMSOP, 2002) are currently being used in more than 100 countries at seismological observatories, data and analysis centers, and for teaching, research, and field applications. In addition, it is used as basic material within national and international seismology training courses, or by private enterprises and individual scientists. In 2009, this issue had been electronically published and work started for an updated new edition. In 2014, the rigorously updated and amended electronic second edition, NMSOP-2, was completed and put online, thanks to the efforts of the late Peter Bormann. This version, as well as future ones, are professionally maintained, further developed and edited by the GFZ German Research Centre for Geosciences under a long-term commitment and the auspices of IASPEI and its Commission on Seismological Observation and Interpretation (CoSOI). All versions are freely available and downloadable from the website of the GFZ Library (<http://bib.telegrafenberg.de/publizieren/vertrieb/nmsop/>).

#### **Scientific Programs, Projects, Publications**

In 2025, IASPEI continued to financially support the work of the Inter-Association Working Group on Electromagnetic Studies of Earthquakes and Volcanoes (EMSEV).

#### **Awards**

The **IASPEI Medal** is awarded for distinguished contributions in seismology: for sustaining IASPEI goals and activities and for scientific merits in the field of seismology and physics of the Earth's interior. No Medal was awarded during the IASPEI Assemblies in 2025.

In 2016, the IASPEI Bureau established an **IASPEI Early Career Scientist Award** program aimed at engaging excellent young researchers in the IASPEI community. Each of the four IASPEI Regional Commissions was asked to select one Early Career researcher (graduate student, postdoctoral researcher, pre-tenure faculty member) from their commission at each even-year Assembly of that

Regional Commission. The AfSC decided during the General Assembly in February 2025 to give an IASPEI Early Career Award to Ms. Sophy Kipkwony from Kenya.

In 2025, IASPEI established an **IASPEI Discovery Award in Seismology**. It is planned to grant the award the first time during the forthcoming General Assembly in 2027.

### **Obituaries**

Obituaries for internationally recognized scientists of the IASPEI community are regularly published in the IASPEI Newsletters and on the IASPEI webpage. In 2025, sadly, 6 obituaries had to be published.

## **FUTURE ACTIVITIES**

In 2026, the IASPEI main activities will be again concentrating on the General Assemblies of the four regional commissions of IASPEI (AfSC, ASC, ESC, LACSC).

- ASC will hold its 16th General Assembly in Tashkent, Uzbekistan, in April.
- LACSC will hold its 6th General Assembly in Mexico City, Mexico, in August.
- ESC will hold its 39th General Assembly on Istanbul, Türkiye, in September.
- AfSC plans its 6th General Assembly for November in Nigeria.

Johannes Schweitzer, IASPEI Secretary General

# International Association of Volcanology and Chemistry of the Earth's Interior (IAVCEI)



International Association of Volcanology  
and Chemistry of the Earth's Interior

IAVCEI website: <https://www.iavceivolcano.org/>

## INTRODUCTION

IAVCEI represents the international focus for research in Volcanology and Chemistry of the Earth's Interior. IAVCEI scientists are involved in a variety of disciplines of Earth Sciences, including physical volcanology, igneous geochemistry, geochronology, petrology, and geophysics. Moreover, many IAVCEI members are involved in continuous monitoring of active volcanoes in Volcano Observatories worldwide.

## ADMINISTRATION

The 2023-2027 IAVCEI Executive Committee is composed of the following elected members:

PRESIDENT	Costanza BONADONNA	SWITZERLAND
SECRETARY GENERAL	Ulrich KUEPPERS	GERMANY
VICE-PRESIDENT	Marta CALVACHE	COLOMBIA
VICE-PRESIDENT	Andrew HARRIS	FRANCE
ECR REPRESENTATIVE	Joali PAREDES	NEW ZEALAND
COUNCILORS	Alessandro AIUPPA	ITALY
	Alvaro AMIGO	CHILE
	Alessandro BONFORTE	ITALY
	Nobuo GESHI	JAPAN

The 2023-2027 IAVCEI Advisory Board includes past-president (Patrick ALLARD, France) and the following non-elected members:

### **BULLETIN OF VOLCANOLOGY**

(EDITOR-IN-CHIEF)	Marie EDMONDS	UK
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### **International Network for VOLcanology Collaboration (INVOLC)**

(CO-LEADER)	Karen FONTIJN	BELGIUM
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### **Indigenous Volcanology Network**

(CO-LEADER)	Rebecca FITZGERLAD	NEW ZEALAND
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### **World Organization of Volcano Observatories (WOVO)**

(LEADER)	Nico FOURNIER	NEW ZEALAND
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### **Diversity, Equity, and Inclusion (DEI)**

(ADVISOR)	Elisabeth GALLANT	USA
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A new **Diversity, Equity, Inclusion, and Accessibility (DEIA) Network** was established to embed diversity, equity, inclusion, and accessibility as core values across all IAVCEI structures, activities, and communities, in a way that strengthens and supports the Association as a whole. Its purpose is to provide a sustained, member-driven platform that enhances and enables IAVCEI's mission, ensuring that all members across gender, geography, culture, background, and career stage can contribute meaningfully and equitably to the advancement of volcanology.

The Commission on Explosive Volcanology was closed for inactivity.

## Membership

By the end of 2025, IAVCEI had 1664 members that had their 2025 membership fee paid. 1726 former members had not extended their membership for 2025. A lot of work was invested to improve the management of memberships and strengthen the "benefits for members" strategy. The 1664 paid members represent 63 countries and consist of 44.04% women, 55.05% men and 0.91% non-binary. 45.68% of our members Early Career Researchers. This attests the vitality and attractiveness of our Association.

## ACTIVITIES

### Communication, Newsletters and website

#### IAVCEI Social Media Communication Team

The IAVCEI Social Media Communication Team is composed of diverse members in terms of discipline, region, and gender (including representatives of our 3 partner institutions ALVO, AIV and VSJ):

Joali PAREDES (ECR REPRESENTATIVE)	(New Zealand, LEADER)
Juan David ALVAREZ SILVA	(Colombia - ALVO representative)
Chris E CONWAY	(Geological Survey of Japan – VSJ Representative)
Valentin FRERET-LORGERIL	(Clermont-Ferrand, France)
Johana Andrea GÓMEZ ARANGO	(Universidad Nacional Autónoma de México)
Alicia MANZO	(Dos Rios Ranch State Park, USA)
Silvia MASSARO	(Univ. Bari, Italy - AIV representative)
Indranova SUHENDRO	(Univ. Yogyakarta, Indonesia)
Alexis YAYING PENG	(ETH Zurich, Switzerland)

In 2025, the IAVCEI Communication Team continued to highlight IAVCEI events, its members, monthly publications in the Bulletin of Volcanology, as well as promoting our newsletters. In 2025, IAVCEI's social media platforms continued to grow, reaching more than 2,900 members in the Facebook group, 3,716 followers on X, and 2,338 followers on Instagram.

Four Newsletters were published in 2025 (<https://www.iavceivolcano.org/newsletter/>). The IAVCEI website (<https://www.iavceivolcano.org/>) has been updated regularly and repeatedly in order to best reflect activities of the organization.

### Bulletin of Volcanology

Bulletin of Volcanology, the official journal of IAVCEI published by Springer, is the oldest journal in volcanology (established in 1922). During 2025 the journal continued to attract an increasing number of high-quality manuscript submissions. During 2025 222 submissions were received, which is an increase of 11% on the previous year and 23% over 2023. We can also report that despite the higher number of papers published the impact factor has remained high, at 3.4. Our diverse editorial team currently numbers around 25, with a good number of early career researchers and one editor who is dedicated solely to assisting first author ECRs through the paper publishing process.

Bulletin of Volcanology is a hybrid journal, which allows both subscription-based publishing and open access publishing at the article level. Increasingly we are finding that authors are opting for open access: in 2025 >70% of our submissions were published that way. If the corresponding author of the paper belongs to an institution or country with a transformative agreement with Springer, then this agreement covers the open access fee with no cost to the author. We are actively encouraging all our authors to explore this option to increase the accessibility of our articles.

Bulletin of Volcanology publishes a range of article types including Data Reports, established in 2022, to allow researchers and volcano observatory staff to publish datasets. We have, at any time, up to 10 active (= article submission possible) special collections, often focussing on outputs from IAVCEI Commission meetings and General Assemblies. We have just closed a collection of 10 open access papers tackling the unrest at Kolumbo Volcano (Greece), and we will shortly complete collections relating to the 2022 eruption of Mauna Loa and monogenetic volcanism.

### **Meetings, workshops and courses**

- ***IAVCEI 2025 Scientific Assembly***

From 30 June to 4 July 2025, the University of Geneva hosted the IAVCEI Scientific Assembly, welcoming more than 1,050 delegates from 62 countries. With 56% of participants identifying as Early Career Researchers (ECRs), the Assembly highlighted both renewal and continuity within the global volcanology community. Hosted for the first time in Switzerland and co-organized by Switzerland, France, Germany, and Italy, the meeting combined cutting-edge science with strong societal engagement.

Although Geneva has no active volcanoes, its role as a global hub for diplomacy provided an exceptional setting to connect volcanology with international policy and governance. The opening ceremony featured speakers from the International Institute for Sustainable Development, IFRC, and UNDRR, emphasizing the critical role of volcanological science in disaster risk reduction, climate adaptation, and sustainable development. This perspective was reinforced throughout the week, including a mid-conference excursion to CERN and a post-Assembly workshop at the World Meteorological Organization aligned with the UN's Early Warnings for All initiative.

The in-person format fostered interaction and inclusivity, with limited parallel sessions, daily keynote lectures pairing senior scientists and ECRs, and extended poster sessions. Seven thematic sessions covered the breadth of volcanological research, complemented by a dedicated "Future of Volcanology" theme led by ECRs.

Strong attention was given to diversity and global representation, including over 40 full travel grants and a widely attended round table on women in volcanology. Outreach activities, field trips, commission-led events, and vibrant social moments further strengthened community ties. The Assembly concluded by celebrating excellence, reflecting on IAVCEI's future, and announcing Costa Rica as the host of the 2029 Scientific Assembly.

The IAVCEI SA received the 2026 Impact Award from the Geneva Tourism & Conventions Foundation in recognition of its collaborative outreach initiatives, inclusive programs, and partnership with International Geneva.

- ***Advancing Volcanic Hazards in Early Warnings for All (7–9 July 2025)***

The workshop *Advancing Volcanic Hazards in Early Warnings for All*, held at WMO headquarters in Geneva from 7–9 July 2025, concluded the IAVCEI Scientific Assembly by strengthening engagement between the volcanological community and international organizations

(<https://www.unige.ch/sciences/terre/CERG-C/international-conferences/EW4ALL>). Bringing together over 100 participants from observatories, UN agencies, disaster risk institutions, and academia, the workshop addressed the integration of volcanic hazards into the UN's Early Warnings for All (EW4All) initiative. Through invited talks, case studies, posters, and breakout groups aligned with the four EW4All pillars, participants identified key gaps, priorities, and actionable pathways. The workshop resulted in a shared vision, a forthcoming synthesis report, and targeted recommendations to advance volcanic early warning systems globally.

- **Other meetings co-organized and/or sponsored by the IAVCEI in 2025**

- 11 – 17 January [Volcano Geology commission]: 7th Volcano Geology workshop, Colombia. <https://volcanogeology.iavceivolcano.org>
- 7 – 11 April [Volcanogenic Sediments commission]: Field workshop, Hungary. <https://cvs.iavceivolcano.org/cvs-activities/>
- 19 – 24 May [Volcano-Ice Interactions commission]: Field workshop in Iceland. <https://viic.iavceivolcano.org/iceland-workshop-may-2025/>
- 31 August – 7 September [Commission Chemistry of Volcanic Gases]: Field workshop, Hokkaido, Japan. <https://ccvg.iavceivolcano.org/field-workshops/14th-workshop-japan-2025/>
- 1 – 5 September [ICTP-EAIFR, IAVCEI-supported]: Volcanic processes: A variety of length and time scales, Kigali, Rwanda. <https://eaifr.ictp.it/events/conference-on-volcanic-processes-a-variety-of-length-and-time-scales/>
- 9 – 11 September (field trips 12 – 14 September) [Volcanic and Igneous Plumbing Systems commission]: Laccoliths, sills and dykes (LASI 7), Hveragerði, Iceland. <https://lasi7.hi.is/>
- 23 September - 1 October [IAVCEI-sponsored]: Convective and Volcanic Clouds (CVC) detecting, monitoring and modeling, Vulcano island, Italy. <http://www.cvctrainingschool.org/school/>
- 7 – 11 October [Niigata University, IAVCEI-supported]: Volcanology in Practice, Niigata, Japan. <https://www.thevolcano.world>
- 20 October – 1 November [Fundació d'Estudis Superiors d'Olot (FES), IAVCEI-supported]: Curso internacional de volcanología, Olot (La Garrotxa) La Palma, Spain. <https://espaicrater.com/es/cursovolcanologia/>
- 12 – 14 November [IAPSO/IASPEI/IAVCEI Commission on Tsunamis]: International Tsunami Symposium, Hyderabad, India. <https://its2025.incois.gov.in/>
- 23 – 29 November [IASPEI/IAVCEI Commission on Volcano Seismology & Acoustics]: Annual workshop, Pucon, Chile. <https://sites.google.com/uct.cl/volcanoworkshop/>

## IAVCEI Awards

During the 2025 IAVCEI SA in Geneva, three medals and one award were presented at the Meeting of Members. The Thorarinsson Medal, IAVCEI's most senior honour, was awarded to Lionel Wilson (University of Lancaster, UK); the Fisher Medal to Paraskevi "Evi" Nomikou (National & Kapodistrian University of Athens, Greece); the Wager Medal to Teresa Ubide Garralda (University of Queensland, Australia); and the George Walker Award to Claire Harnett (University College Dublin, Ireland), in recognition of their outstanding contributions to volcanology across career stages.

## IAVCEI Commissions, Networks and Working Groups

The updated list of Commissions, Networks and Working Groups (joint Commissions) is reported below. Today the IAVCEI hosts 17 purely IAVCEI Commissions, 5 Networks, and 7 Joint Commissions (with other IUGG's Associations):

***i. IAVCEI Commissions***

1. Chemistry of Volcanic Gases
2. Volcanic Lakes
3. Volcanic Clouds
4. Collapse Calderas
5. Monogenetic Volcanism
6. Submarine Volcanism
7. Volcanic and Igneous Plumbing Systems
8. Large Igneous Provinces
9. Volcanogenic Sediments
10. Volcano Geology
11. Tephrochronology
12. Tephra Hazard Modelling
13. Statistics in Volcanology
14. Volcanic Hazards and Risk
15. Cities and Volcanoes
16. International Volcanic Health Hazard Network (IVHHN)
17. Volcano Geoheritage and Protected Volcanic Landscapes

***ii. Networks***

- a. Early-Career Researchers Network (ECR-Net)
- b. International Network for VOLcanology Collaboration (INVOLC)
- c. World Organization of Volcano Observatories (WOVO)
- d. Indigenous Volcanology Network
- e. Diversity, Equity, Inclusion, and Accessibility (DEIA)

***iii. Joint Commissions***

1. IAG/IAVCEI Commission on Volcano Geodesy
2. IASPEI/IAVCEI Commission on Volcano Seismology and Acoustics
3. IASPEI/IAVCEI/IAGA Commission Physics & Chemistry of Earth Materials
4. IAGA/IASPEI/IAVCEI Working Group on Electromagnetic Studies of Earthquakes and Volcanoes (EMSEV)
5. IAGA/IASPEI/IAVCEI International Heat Flow Commission
6. IAVCEI/IACS Commission on Volcano-Ice Interaction
7. IAPSO/IASPEI/IAVCEI Commission on Tsunamis

In 2025, the Commissions and Networks' main commitment was their participation in the IAVCEI Scientific Assembly, held from 30 June to 4 July 2025 in Geneva, Switzerland. In addition to the sessions proposed for most of them, there were numerous short courses and workshops at the beginning of the Assembly, events that were very well received and had a large turnout of attendees.

In recognition of the importance of the work carried out for the Commissions and Networks, each of them had a short but impactful presentation at the opening ceremony of the IAVCEI Scientific Assembly 2025. Similarly, the poster sessions throughout the Assembly had an exclusive part for the Commissions and Networks to interact with the attendees, making known their objectives, activities and attracting the interest of possible new participants in their events.

During the Scientific Assembly, the Executive Committee met with the chairs and co- chairs of the Commissions and Networks. The following points were discussed at the meeting: a summary was given of the main purposes, membership, definitions, and recent work carried out in organizing the Association. An evaluation was also made of the responsibilities of the Commissions and Networks according to the Statutes and By-laws. Discussions were held regarding the different sources of funding and the requirements and procedures for obtaining those funding. A presentation of the new IAVCEI

Newsletter was done, where Commissions and Networks have a specific section to publicize their activities and events, there was also a presentation of the Communication and Social Networks team, the IAVCEI website, and the offer of web space and email. In addition to being the first opportunity for the EC to meet in person with the Commissions and Networks, this meeting also provided an opportunity to hear their concerns and needs and thus identify the best ways to support the work that advances volcanology and chemistry worldwide. At the closure of the meeting between the EC with the Commissions and Networks was emphasized the importance of organizing and participating in the IUGG General Assembly in Incheon, Korea in 2027.

Finally, during the Scientific Assembly, the Commissions and networks had the opportunity to meet with members, discuss plans, needs, elections and scheduling activities for the coming years.

In 2025 several Commissions has elections among others are: Volcanic Hazards and Risk, Tephra Hazard Modelling, Volcanic Gases, Volcanic Gases, and Statistics Volcanology and Volcano Seismology and Acoustics Inter Association Commission.

### World Organization of Volcano Observatories (WOVO)

WOVO is a IAVCEI Network, with the aim to connect, support, and advocate for volcano monitoring institutions worldwide through three core programmes: Volcano Observatories Best Practice Workshops, WOVOdat, and cross-disciplinary initiatives such as the Volcanic Ash and Aviation Hazards (VAAH) and Early Warnings.

The WOVO ELT currently consists of the leads of the three core programmes (Laura Sandri, INGV and Jake Lowenstern, USGS/VDAP, for the Volcano Observatories Best Practice workshop (VOBP); Benoit Taisne and Christina Widiwijayanti, EOS/ASE/NTU, for WOVOdat; Sara Barsotti, IMO, for Volcanic Ash and Aviation Hazards (VAAH), a secretarial team from the IAVCEI EC (Nobuo Geshi, Kyushu Uni, Álvaro Amigo, SERNAGEOMIN, and Alessandro Bonforte, INGV), and a chair (Nico Fournier, GNS Science). If needed, the ELT can be completed by additional members to ensure fair geographical representation.

Key priorities we set for 2024-2026 were to:

- create Terms of Reference for the ELT and include additional ELT members to ensure fair geographical representation; and create some processes for future ELTs (e.g., voting)
- update the list of WOVO volcano observatory members
- update the WOVO website (<https://wovo.iavceivolcano.org/>) as the main information portal for WOVO
- offer some engagement opportunities at the IAVCEI 2025 Scientific Assembly
- organise VOBP6 in 2026
- continue the WOVOdat effort
- Represent and advocate for volcano observatories at UN Early Warning For All discussions

In 2025, significant progress was made on all fronts as we:

- Finalised and published the WOVO charter, with both the inclusion of two additional ELT members to ensure fair geographical representation and setting up the voting process for the future being still work in progress.
- Created and made discoverable a first list of volcano observatories, which is continuously being updated and available on the WOVO website.
- Fully revamped the WOVO website around our three core programmes (VOBP, WOVOdata and VAAH) and the list of volcano observatories, and will continue to populate the website.
- Organised an in-person WOVO meeting at the IAVCEI2025 SA in Geneva.

- Represented and advocated for volcano observatories at UN Early Warning For All discussions (workshop in Geneva + meetings with WMO) (July 2025).
- Organised WOVO/VAAH online workshop (two sessions to cater for different time zones) on 3 Dec 2025 with volcano observatories to go through new VONA and ICAO (aviation) requirements (see meeting recordings here).

In 2026, we will continue the effort above, including the preparation for the next VOBP workshop, finalising the current ELT membership (incl. secretarial support) and succession process.

### Early Career Researchers Network (ECR -Net)

In 2025, the Early Career Researchers Network (ECR-Net) continued to strengthen engagement, visibility, and professional development opportunities for early-career volcanologists within IAVCEI. A major focus of the year was the IAVCEI Scientific Assembly 2025 in Geneva, where Early Career Researchers (ECRs) formed a substantial proportion of attendees and played a highly visible role across scientific and social activities.

#### 1. Scientific Assembly Activities (Geneva, 2025)

ECR-Net coordinated a full week of activities aimed at showcasing early-career research and fostering connections across career stages:

##### 1.1. Scientific sessions: Two sessions were created and organized by ECR-Net to highlight ECRs and their work at the IAVCEI Scientific Assembly 2025

###### 1.1.1. ECR plenary session.

New addition, first implemented in 2023 with great success. 30-minute session each day to showcase excellent early-career researchers. Total of 4 ECR plenary speakers throughout the week.

###### 1.1.2. The Future of Volcanology.

Another way to highlight the ECRs participation during the SA IAVCEI 2025. Over four days, eight ECRs delivered invited presentations highlighting innovative research directions and emerging approaches in volcanology.

##### 1.2. ECR-Net Scavenger Hunt (Geneva Edition): One of the most popular social initiatives was the ECR-Net Scavenger Hunt, which ran throughout the Assembly week. Eleven teams participated in challenges designed to encourage networking, engagement with IAVCEI leadership, and exploration of volcanology-related themes in Geneva. The event concluded with a tie for first place, with winning team members receiving a four-year IAVCEI membership waiver.

##### 1.3. Mentoring event: A large-scale mentoring event was held during the SA week in Geneva, attracting more than 100 ECR participants. Senior researchers led informal discussions on career pathways, science communication, research impact, and connections beyond academia. The event was highly successful in fostering cross-career dialogue and new professional connections.

#### 2. Renewal of the ECR-Net Working Group: In mid-2025, coinciding with the General Assembly, ECR-Net completed a planned renewal of its Working Group. Seven outgoing members were replaced by seven newly selected members, while five members continued their service. The new Working Group reflects strong diversity in nationality, country of residence, gender, research focus, and career stage. The selection process followed a transparent and structured approach, with applications advertised widely through international mailing lists, social media, the IAVCEI newsletter, and regional volcanology associations. Candidates were assessed using predefined criteria to minimise bias and enhance geographic and demographic representation. The next call for Working Group members is planned for 2027, with a continued focus on expanding outreach to underrepresented regions.

#### 3. Update of the ECR-Net website

4. Social media: ECR-Net continued to support the promotion of volcanology-related events and opportunities through its social media platforms. A dedicated Instagram account was launched, complementing the existing Facebook group and X presence. We have 1,228 members of our Facebook group, 1,844 followers on X, and 623 followers on Instagram. Plans are underway to expand communication further through the creation of a Bluesky account.

#### International Network for VOLcanology Collaboration (INVOLC)

INVOLC holds quarterly online board meetings to provide updates from regional networks and representatives (Central America, South America, Africa, South-East Asia, SW Pacific) and to plan activities. We previously had 13 board members and held internal discussions to restructure the board. We now identified a few key positions and roles and responsibilities and have opened a call for new candidates to sit on the board. We received 5 expressions of interest and are currently in the process of the transition.

The main deliverable of INVOLC in 2025 was the organisation of a workshop "Towards Inclusive Collaboration: Reflections and discussion on engagement in global volcanology" during the IAVCEI Scientific Assembly. The workshop was attended by ca. 35 participants of a variety of career levels, positions and countries, and led to the development of recommendations provided to the IAVCEI Executive Committee. In addition, we gave an invited presentation on the same topic during the same conference.

*Plans for 2026:* We are in the process of formalising the new leadership and working through a process of ensuring continuity through support from existing board members. We hope to have the new INVOLC board in place in early 2026. They will decide on activities for 2026. This will likely include a proposal to organise a session or workshop at the IUGG/IAVCEI General Assembly in 2027, directed towards the South-East Asian community. They will also follow up on earlier recommendations made after our workshop held in 2025. The organisation of INVOLC task groups will also be redefined once the new board is in place.

#### Indigenous Volcanology Network (IVN)

The Indigenous Volcanology Network is the newest network under IAVCEI, established in late 2024. It aims to support mentoring of Indigenous volcanologists, provide support for volcanologists who intend to undertake research involving Indigenous people or exploring Indigenous knowledge, and support Indigenous people seeking information and guidance from volcanologists. A meeting was held at the 2025 IAVCEI Scientific Assembly to determine and elect a formal leadership structure; provide support and mentorship for new Indigenous volcanologists; initiate a framework of ethical considerations for engaging, researching, and working with Indigenous people in mutually beneficial manners; initiate and advance future formal exchanges, workshops, publications, and databases to extend the Indigenous voice in volcanology. Six new members were added to the leadership structure (Thomas Jones, Rebecca Fitzgerald, Glyn Williams-Jones, Juan Alvarez, Kristie-Lee Thomas, and Marvin Lopez Acevedo) in addition to the Network founders and co-leads Cheryl Cameron and Jon Procter. Plans were also initiated at this meeting for an in-person workshop in 2027. In addition to the meeting, the network also co-convened a conference session ("From Indigenous Knowledge to Geoheritage: Strengthening Community Resilience and Public Engagement in Volcanic Regions") that was well attended.

Effort has also gone into planning future online events to reach and connect with a wider audience than what can be achieved in person. The IVN has a webinar planned for early February 2026, with two Indigenous speakers: Mayalitza Sosof Sisof and Alex Petzey.

## Statutes and By-Laws

The current version of the Statutes and By-Laws dates from 29 May 2024. <https://www.iavceivolcano.org/statutes-and-by-laws/>.

After the Meeting of Members at the 2025 Scientific Assembly, the IAVCEI members had the opportunity to express their opinion in three polls published on the IAVCEI website, regarding some administrative and voting aspects. The results were published in newsletter 4'25 and are currently in the legal implementation phase in Germany.

## FUTURE ACTIVITIES

Major milestones in 2026 will include:

- Regional COV meetings (as the COV13 event, planned for summer 2026 in Bend, Oregon, was postponed based on a unanimous decision in April 2025)
- Publication of the *IAVCEI Newsletters 2026-1, 2026-2, 2026-3, 2026-4*.
- Financial updates (e.g., reports, supports to meetings and Commissions' activities)

Costanza Bonadonna, IAVCEI President

# ACTIVITIES OF THE UNION COMMISSIONS

The following reports illustrate the impressive range of activities within each Union Commission as well as their dedication to supporting science within developing countries. Each Union Commission has a website where much more information can be found.

## Union Commission on Climate and Environmental Change (CCEC)



### INTRODUCTION

The history and purpose of CCEC may be found on the CCEC web site at: <https://iugg.org/associations-commissions/commissions/cccec/>.

### ADMINISTRATION

The Chair is Jianping Li (China), the Secretary-Treasurer is Tonie van Dam (USA/LU), and the Immediate Past Chair is Tom Beer (Australia).

Commission members include Harry Bryden (UK), Mark Clilverd (UK), Annette Eicker (Germany), Torsten Dahm (Germany), Andrew Mackintosh (Australia), Alberto Montanari (Italy), Keith Alverson (Canada/USA), Alan Robock (USA), and Dan Rosbjerg (Denmark).

### ACTIVITIES

#### Organization of Scientific Meetings

1. At EGU 2025 General Assembly (27 April-2 May), Vienna, Austria, organized session AS1.24: Monsoon systems in the past and present and under future climate change (Jianping Li as a Co-Convener).
2. Organization of “2025 UNESCO Chair-International Forum on Blue Carbon and Sustainable Development (BCSD 2025)” (11-12 May), Qingdao, China.
3. At Busan IAMAS-IACS-IAPSO Joint Assembly 2025 (20-25 July), Busan, Korea, organized session P04: The Meridional Overturning Circulation (MOC) (Jianping Li as a Co-Convener).
4. At Busan IAMAS-IACS-IAPSO Joint Assembly 2025 (20-25 July), Busan, Korea, organized session M18: Monsoon systems: variability, processes, predictability, change and extremes (Lead Convener: Jianping Li).

5. At Busan IAMAS-IACS-IAPSO Joint Assembly 2025 (20-25 July), Busan, Korea, organized session JMP09: El Niño/Southern Oscillation and its Global and Regional Impacts (Jianping Li as a Co-Convener).
6. At AOGS 22nd Annual Meeting (27 July-1 August), Singapore, organized session AS91: Ocean-Land-Atmosphere Interactions and Extreme Weather and Climate (Jianping Li as a Co-Convener).
7. At AGU25 Annual Meeting (15-19 December 2025), New Orleans, USA, organized Session A043: Advances in Decadal Climate Change: Evidence from Air-Sea Interaction, Mechanisms, and Predictability (Primary Convener: Jianping Li).

### IPCC Activities

IUGG is one of IPCC Observer Organizations. Chair Jianping Li is the IUGG Liaison Officer to IPCC (2023-2027). As an observer, he was invited by IPCC to attend the Sixty-second Session of the IPCC in Hangzhou, China, from 24 to 28 February 2025.

### Opening Speeches and Invited Talks

1. Invited Talk, Jianping Li, Deep Atlantic Multidecadal Variability, 2025 Xiamen Symposium on Marine Environmental Sciences, January 14-17 2025, Xiamen, China.
2. Invited Talk, Jianping Li, Carbon permit allocation and mandatory carbon neutrality time for one country under equal environmental human rights, 2025 UNESCO Chair-International Forum on Blue Carbon and Sustainable Development, May 11-12 2025, Qingdao, China.
3. Opening Speech, Jianping Li delivered an opening speech on behalf of the CCEC at 2025 Pacific Island Countries Climate Action Dialogue held in Apia, Samoa on June 24 2025.
4. Invited Talk, Jianping Li, Variability of Autumn Tropical Pacific Yellowfin Tuna Tied to the Spring North Atlantic Tripole, 2025 Pacific Island Countries Climate Action Dialogue, June 24 2025.
5. Invited Talk, Jianping Li, Multidecadal Variability from Ocean to Atmosphere in the North Atlantic: Perturbation Potential Energy as the Bridge, 2025 Global Chinese Marine Science Symposium, November 27-30 2025, Kuala Lumpur, Malaysia.

### Online Meeting with IUGG Bureau

On October 29, 2025, Jianping Li and Tom Beer attended the online meeting with IUGG Bureau, during which Jianping Li gave a brief introduction of CCEC, reported on its activities from 2023 to 2025, and outlined the future prospects for CCEC's initiatives in the coming years. It is pointed out that it is necessary to extend to another CCEC term (2027-2031).

## FUTURE ACTIVITIES

We plan to organize the following Scientific Meetings:

1. Co-organization, EGU 2026 General Assembly session Monsoon systems: processes, prediction, and climatic changes in the past and future, 3-8 May 2026, Vienna, Austria (Convener: Andrew Turner; Co-conveners: Roberta D'Agostino, Ayantika Dey Choudhury, Kyung-Ja Ha, Jianping Li).
2. Co-organization, "2026 UNESCO Chair-International Forum on Blue Carbon and Sustainable Development (BCSD 2026)" in June 2026, Qingdao, China.
3. Co-organization, "15th East Asian Climate (EAC) Workshop", 12-13 August 2026, Busan, South Korea.
4. Co-organization, IUGG General Assembly 2027, Union Symposium: Global Change and Wildfires: The GeoSciences Perspective, from Cause to Impact, 16-22 July 2027, Incheon, South Korea. (Confirmed Lead Convener: Tom Beer; Possible Co-conveners: Keith Alverson, Tamas Bozoki).

## Others

1. Jianping Li will serve as the Vice Chairman of the 6th Congress of Chinese Geodesy and Geophysics (CCGG), which will be held in Shanghai, China from January 23 to 26, 2026.
2. As the IUGG Liaison Officer to IPCC (2023-2027), Jianping Li has been invited by IPCC to attend the Sixty-fourth Session of the IPCC in Bangkok, Thailand, from 24 to 27 March 2026.
3. We plan to organize a CCEC business meeting in Budapest in September 2026.
4. We plan to host an International Workshop on Wildfires in Budapest on 18 September 2026.

Jiangping Li, CCEC Chair

# Union Commission on Mathematical Geophysics (CMG)

CMG website: <https://iugg.org/associations-commissions/commissions/cmg/>

## INTRODUCTION

The Commission on Mathematical Geophysics (hereinafter 'CMG') aims to encourage exchange of ideas and information in all areas of geophysics, with emphasis on the application of mathematics, statistics and computer science to geophysical problems, and to promote the development and application of mathematical methods and appropriate theoretical techniques for the solution of problems across the complete spectrum of geophysical disciplines. The Commission is scientifically sponsored by all IUGG Associations.

The main activities of CMG in 2025 were (i) to establish a cooperation with the International Association for Mathematical Geosciences, and (ii) to launch a project focused on development of virtual library for open-source software and tools used in geosciences.

## ADMINISTRATION

CMG is led by an Executive Committee, currently comprising: Alik Ismail-Zadeh (Chair; Germany), Enamundram Chandrasekhar (Vice-Chair; India; until 14.12.2025), Andrew Valentine (Secretary; UK), Yehuda Ben-Zion (past Chair; USA), Elisa Arnone (Italy; from 28.09.2025); Roberto Carniel (Italy), Fabio Castelli (Italy; until 27.09.2025), Alexander Fournier (France), Pavel Novák (Czechia), Sang-Mook Lee (Rep. of Korea), Elisa Mantelli (Germany), Oleg Melnik (UK), and Leslie Smith (USA).

The Executive Committee is supported by an Advisory Committee, currently comprising: Salvatore Grimaldi (Italy), Ute Herzfeld (USA), Dick Peltier (Canada), Annick Pouquet (USA), Daniel Rothman (USA), Malcolm Sambridge (Australia) and Frederik Simons (USA).

The CMG Executive Committee held online its annual meeting on July 22, 2025, and discussed a collaboration with IAMG (see item 1 under Activities), development of an online library of open-source software and tools (see item 2 under Activities), call for nominations for the 2026 Keilis-Borok Medal, and composition of the Medal committee.

## ACTIVITIES

### 1. Cooperation with the International Association for Mathematical Geosciences

The IUGG Union Commission on Mathematical Geophysics (CMG) and the International Association for Mathematical Geosciences (IAMG), an Affiliate Member of IUGG, have agreed to join forces in organizing a series of joint scientific events over the coming years:

- CMG will contribute to the 24<sup>th</sup> IAMG Annual Conference (IAMG2026) to be held in Montreal, Canada, on August 23–28, 2026.
- IAMG is also considering participation in the IUGG Union Symposium at the IUGG General Assembly in Incheon, South Korea, on July 16–22, 2027.

- CMG and IAMG plan to jointly organize a symposium on mathematical and computational geosciences at the International Geological Congress in Calgary, Canada, on August 12–20, 2028.

This agreement was reached at the 23<sup>rd</sup> IAMG Annual Conference (IAMG2025), held in Zhuhai, China, from 9 to 14 October 2025. The CMG Chair Alik Ismail-Zadeh delivered keynote lecture entitled “*Data-Driven Computational Modelling in Geodynamics*”. He also met the IAMG President Raimon Tolosana Delgado, to discuss the framework and details of cooperation between IUGG-CMG and IAMG.



*Attendees at IAMG2025. In the first row (centre): Ute Müller, IAMG Secretary General; Raimon Tolosana-Delgado, IAMG President; Qiuming Chen, IAMG Past President (conference host), Alik Ismil-Zadeh, CMG Chair*

## **2. Library of Open-Source Software and Tools used in Geosciences**

The IUGG Commission on Mathematical Geophysics (CMG) has launched a project focused on compiling a collection of open-source software and tools used in mathematical and computational geosciences, primarily within the geophysical and geodetic sciences. These open-source products are typically developed by research institutions and universities and are often hosted in open repositories such as institutional websites, hubs for open-source scientific software, or dedicated repositories. An online library will present the collected software, including titles, brief descriptions, and links to source code, tools, or the websites of the hosting organizations. The entries will be reviewed by members of the CMG Executive Committee and other experts in the relevant fields. The first phase of the project will run through the end of 2027.

## FUTURE ACTIVITIES

- CMG will cooperate with IAMG in organization of the 24th IAMG Annual Conference (IAMG2026) to be held in Montreal, Canada, from 23 to 28 August 2026. More details of the joint activity can be found at <https://www.iamgconferences.org/iamg2026/>.



- CMG received several nominations for the 2026 Vladimir Keilis-Borok Medal; these will be assessed by a group of CMG Executive Committee members in early 2026. The Medal will be awarded at IAMG2026, where the awardee will deliver the Medal Lecture.
- CMG together with IUGG Commission on Geophysical Risks and Sustainability, IUGG Associations, IAMG, and the Integrated Research on Disaster Risk (IRDR) International Scientific Programme will begin preparations for the Union symposium on “Geosciences and Mathematics for Disaster Risk Reduction and Sustainable Development” to be organized at the 29<sup>th</sup> General Assembly of the IUGG in Incheon, Republic of Korea (July 16-2, 2027).

Alik Ismail-Zadeh, CMG Chair  
Andrew Valentine, CMG Secretary

# Union Commission on Geophysical Risk and Sustainability (GRC)



GRC website: <https://iugg.org/associations-commissions/commissions/grc/>

## INTRODUCTION

The IUGG Commission on Geophysical Risk and Sustainability (IUGG GeoRisk Commission, or GRC) was established by the IUGG Bureau in August 2000. The GRC seeks to advance the role of science in the reduction of natural disasters through better societal understanding of environmental natural hazards. Fully understanding the risk posed by natural hazards also requires an understanding of their environmental and economic impacts. Areas of development include accurate early warning through the robust and effective flow of critical information to decision making by emergency managers, policymakers, scientists, and the general public via initiatives, meetings, workshops, and publications. The GeTEWS Oceania Initiative of the GRC is working to develop Tsunami Early Warning for the Pacific Island community that will also advance eighteen resolutions of the IUGG General Assemblies. The GRC continues its support of the KLC2020, a global initiative launched by the [International Consortium on Landslides \(ICL\)](#) to reduce landslide disaster risk, acting as a blueprint for 2020–2030.

## ADMINISTRATION

### Executive Committee:

**Chair:** John LaBrecque (IAG, USA)

**Vice-Chair:** Vyacheslav Gusiakov (IAPSO, RUSSIA)

**Vice-Chair:** Chun-Chieh Wu (IAMAS, CHINA: ACADEMY OF SCIENCES IN TAIPEI)

**Secretary/ Treasurer:** Timothy Melbourne (IAG/GGOS, USA)

Mohsen Ghafory-Ashtiany (IASPEI, IRAN)

Michael Krautblatter (IACS, GERMANY)

Christa von Hillebrandt-Andrade (IAPSO, PUERTO RICO)

George Balasis (IAGA, GREECE)

Roberto Sulpizio (IAVCEI, ITALY)

Kosuke Heki (IAG, China)

### Members in Active Advisory Capacity:

**Past Chair:** Joan Marti (IAVCEI, Spain)

Tom Beer (IAMAS, AUSTRALIA)

Harsh Gupta (IASPEI, INDIA)

Alik Ismail-Zadeh (CMG, GERMANY)

Vladimir Kossobokov (IASPEI, RUSSIA)

Gordon McBean (IAMAS, CANADA)

Ramesh P. Singh (IASPEI, USA)

Stephen McNutt (IASPEI, USA)

Ester Sztein (GSA, USA)

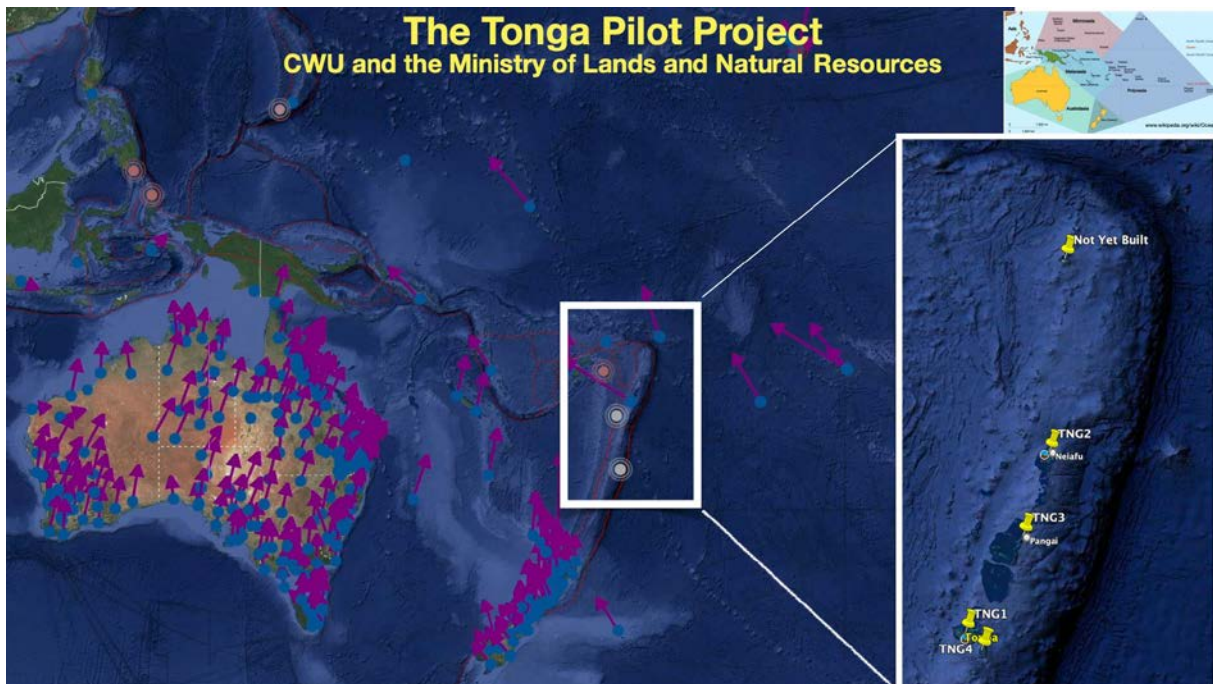
**Business Meetings:** Prior to the 2023 General Assembly, the GRC Executive Committee was informed by the IUGG Governing Board to suspend its planned elections pending a review of the IUGG Commissions. During the AGU24 in December 2024, the Committee was informed that the review was complete and that it could resume the renewal of the GRC administration. The Committee is reviewing the GRC Terms of Reference and searching for new representatives for the Associations and Commissions. Timothy Melbourne has joined the GRC executive committee as Secretary/Treasurer upon the resignation of Katia Kontar. We appreciate the strong contributions made to the GRC by Dr. Kontar.

The Working Group of GeTEWS Oceania Initiative of the GRC has conducted near-weekly Zoom meetings to steer the development of the Initiative. The GRC also organized under US Law the IUGG Commission on Geophysical Risk and Sustainability, Inc. as a non-profit organization. The GeoRisk Commission, Inc. is tasked with financial support for the GeoRisk Commission and allows the flow of funds without taxation from the IUGG and other supporting organizations. The GeoRisk Commission, Inc. also provides a path for charitable contributions to the GRC. The Corporation received \$24,000 (US) in charitable donations for the support of the GeTEWS Initiative in addition to the allocation and grant funds from the IUGG in 2025.

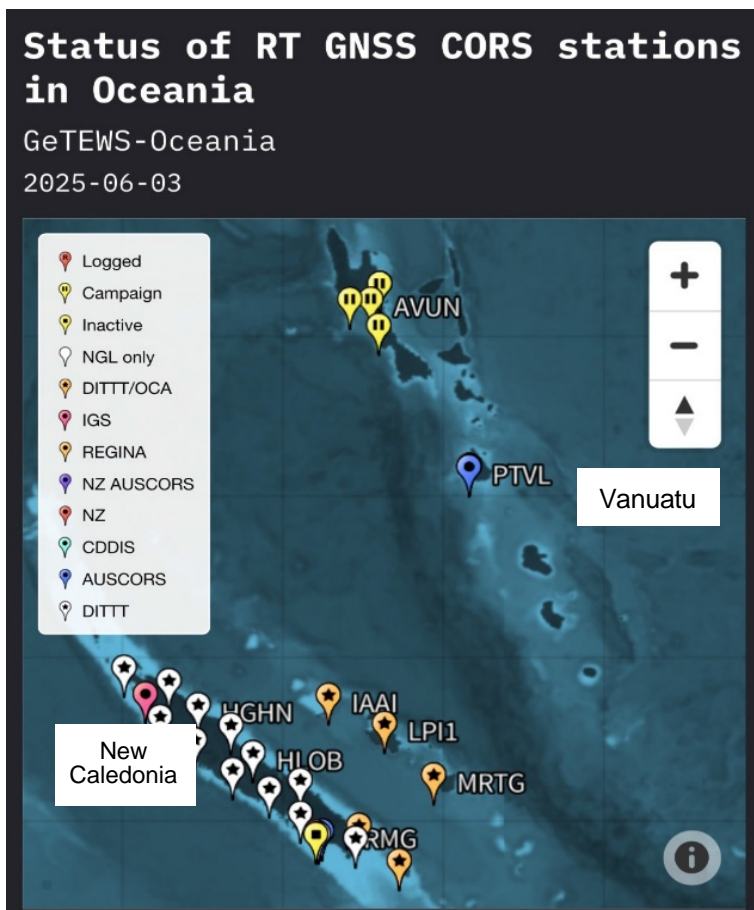
## ACTIVITIES

The GeTEWS Oceania Working Group worked with the Pacific Geospatial and Surveying Council (PGSC) to plan a meeting of its membership in late 2024. The Working Group drafted a proposal for the implementation of the GeTEWS Oceania Initiative for presentation during the planned workshop. In early 2025, the Working Group determined that pilot projects were a more cost-efficient and effective approach to engage PGSC membership in the development outlined in the Working Group's proposal. The Working Group has held Zoom meetings on a weekly schedule to address the needs of these two pilot projects and to support outreach efforts. The first two pilot projects are:

1. **The Tonga GeTEWS Network Pilot Project:** The project goal is to understand the challenges of developing a GeTEWS network of networks for Oceania. This project is led by Viliami Folau of the Ministry of Lands and Natural Resources, Kingdom of Tonga, and Timothy Melbourne of Central Washington University (CWU), who is the Chair of the GeTEWS Oceania Working Group. Four multi-GNSS CORS stations have been installed, with a total of six stations to be installed in 2026 (see Fig.). A formal agreement between the Tonga Ministry of Lands, CWU, and the GRC was developed through negotiations and involved presentations made to the Minister of Lands by Tim Melbourne and to the HRH Cabinet of Ministers by John LaBrecque. The agreement has been signed by the Minister of Lands, the Chair of the GRC, and is awaiting a final signature by the appropriate representatives of Central Washington University.
2. **Vanuatu Pilot Project:** Lucie Rolland of the Observatoire de la Côte d'Azur is leading a design for the GeTEWS Oceania network of networks utilizing existing infrastructure wherever possible. The broader network design seeks to augment existing geospatial efforts such as the Asia-Pacific Reference Frame and other environmental monitoring efforts as well as contributing to national capacity building for the Pacific Islands. The Vanuatu Pilot Project (see Fig.) is an outgrowth of the design effort to build upon abandoned geodetic sites. The Vanuatu project also seeks increased data sharing of New Caledonia's Banian Network. The Vanuatu effort is supported by Virginie Durand of the Observatoire de la Côte d'Azur. Two CORS stations will be installed in the spring of 2026 at abandoned geodetic sites.
3. **Geoscience Australia** reported plans for the installation of additional GNSS CORS sites in Tonga and Vanuatu. We welcome these efforts and we encourage the streaming of all data subject to national agreements. Representatives of Geoscience Australia have participated in GeTEWS Oceania working group meetings which we hope will lead to strong coordination.



The map displays in purple the real-time GNSS streams for the Oceania region provided by Central Washington University. Note the paucity of operating stations within the northern region of Oceania. The five new GNSS CORS stations being developed by the Tonga pilot project of the GeTEWS Oceania Initiative are identified within the mapped inset. Four of the five stations are installed and operating. The fifth and sixth stations will be installed in 2026. The sixth station location is to be determined. Capacity building by improving the reliability of the streamed data and the availability of the data to Oceania agencies through local agency involvement are the primary objectives of the Tonga pilot project



Development map for Pilot Project Vanuatu. Project lead: Lucie Rolland. The project seeks to increase access to the Banian GNSS data of New Caledonia. Virginie Durand will lead effort to install CORS stations at abandoned CORS and campaign sites on Vanuatu beginning Spring

Presentations at Scientific Assemblies in 2025:

1. T. Melbourne, IAG Scientific Assembly Rimini, Italy, [GeTEWS Tonga Pilot Project.mp4](#)
2. J. LaBrecque, International Committee on GNSS, Wellington, NZ
3. T. Melbourne, Presentation to the Minister of Lands-Tonga 2/4/2025
4. J. LaBrecque, [Presentation to HRH Cabinet of Ministers Tonga 7/24/2025 \(pdf\)](#)
5. V. Folau et al, International Tsunami Symposium, 11/13/2025, [Kamchatka 2025 underscores GNSS enhanced TEWS.mp4](#)
6. Support for IUGG participation in ILC2020

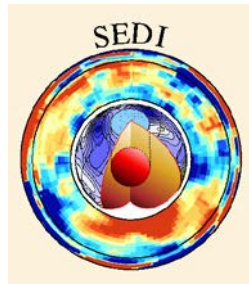
## FUTURE ACTIVITIES

The GRC will engage in three principal activities in 2026. These projects will utilize the existing financial resources of the GRC treasury as well as contributions from other sources including the South Pacific Community, the IUGG, the Central Washington University, and private contributions to the GeoRisk Commission, Inc.

1. Complete installation of the six-station Tonga GNSS Network and training of Tonga staff, including a Director of the Tonga GNSS Network and a Manager of Technical Operations. Continued support for the development of the Vanuatu Pilot Project.
2. Restructure the GRC, including revision of the terms of reference, the renewal of the governing structure, and rejuvenation of the executive committee for the IUGG GRC and GRC, Inc. The objective will be to provide the GRC with a mandate and governing structure which addresses the need for a Commission that will provide an effective organization for the advancement of prioritized resolutions of the IUGG General Assemblies. Hence, the GRC will achieve relevance to the IUGG membership.
3. Organize the IUGG2027 symposium approved by the IUGG Board that is currently titled **GNSS Enhanced Tsunami Early Warning for the Oceania Region**. Development of the Symposium will involve the GRC membership and the GeTEWS Oceania Working Group.

John LaBrecque, GRC Chair

# Union Commission on the Study of the Earth's Deep Interior (SEDI)



SEDI website: [www.sedigroup.org](http://www.sedigroup.org)

## INTRODUCTION

**SEDI** is an international scientific organization dedicated to the **Study of the Earth's Deep Interior**. The scope of SEDI includes the core and lower mantle, but interest may extend to the surface. The scientific questions and problems of interest to SEDI include: 1) the investigation of the origin, evolution, structure, geochemical and mineralogical composition of the inner core, outer core, mantle and crust, 2) the investigation of core magnetohydrodynamics (and more generally of the fluid rotational dynamics) at all time scales, both from theoretical and observational points of view, 3) the investigation of mantle dynamics, both from theoretical and observational points of view, 4) the investigation of mechanical, electromagnetic, thermal and chemical interactions between the inner-core, core, mantle, crust (and possibly surface fluid layers), with an aim to develop a global view of the Earth as a system of interacting regions, 5) the thermodynamics of the Earth and the investigation of its long-term thermal evolution.

Since 1987, SEDI has been a Union Commission of the International Union of Geodesy and Geophysics ([IUGG](http://www.iugg.org)). As such, it cuts across the traditional discipline-oriented bounds of many of the Associations of the IUGG, which normally study the Earth from a more specific set of tools and observations. The intent of SEDI is to amalgamate efforts from different scientific disciplines to generate the most coherent and consistent picture of the composition, structures, dynamics and evolution of Earth's deep interior.

## ADMINISTRATION

SEDI is currently chaired by Mathieu Dumberry (University of Alberta, Edmonton, Canada). The current vice-chair is Lauren Waszek (James Cook University, Townsville, Australia), and Michael Bergman (Simon's Rock College, Great Barrington, USA) acts as Secretary-General. SEDI has a membership of about 600, as recorded on the email list used to broadcast information related to SEDI activities, upcoming meetings, funding opportunities, and academic openings.

## ACTIVITIES

The main activity of SEDI is to organize a meeting every second summer. SEDI meetings offer the perfect setting for lively yet collegial discussions on the state-of-the-art of the scientific topics that animate our community and typically attract a large number of students and postdocs. The previous meeting was held in the summer of 2024 (June 23-28 of 2024) at Bard's College at Simon's Rock, Great Barrington, MA, USA and organized primarily by Michael Bergman. The meeting, as always, was a great success. A special issue in the journal *Physics of the Earth and Planetary Interiors* featured 17 articles related to the research presented at the meeting. The SEDI officers acted as the editors for this special

issue. The full list of papers can be found at <https://www.sciencedirect.com/special-issue/10BBTDD35LS>.

SEDI sponsored two sessions at the joint IASPEI-IAGA meeting which was held in Lisbon, Portugal, from August 31 to September 5, 2025: 1) J01 Structure and evolution of the lowermost mantle and core from observations and modeling (11 talks, 3 posters); and 2) J09 Remote sensing of decadal dynamical processes of the Earth's interior (9 talks, 1 poster).

One new SEDI project initiated in 2024, but taking flight during 2025, was the development of a *Diamond Open Access* peer-reviewed scientific journal titled "**Journal of Studies of Earth's Deep Interior**" (**jsedi**) for the SEDI community. This project was pioneered by John Hernlund and Stephane Labrosse, and together with the current SEDI chair (Mathieu Dumberry), are the acting Editor in chiefs of the journal. We have attracted a list of strong associate editors in each of the main scientific disciplines covered by SEDI. Although the journal is formally independent of SEDI, the editors and contributors to jsedi are all members of the SEDI community and regular attendants at SEDI meetings. We have opened the journal for submission in April of 2025. At the time of writing, 4 papers have been published (completing Volume 1) and 5 papers are currently under review. The journal website can be found at <https://jsedi.episciences.org/>.

## FUTURE ACTIVITIES

The next SEDI meeting will be held this coming summer, June 27 to July 3rd in Townsville, Australia (local organizer Lauren Waszek). The meeting location was decided by conducting an online vote among the SEDI membership; the other (losing) proposed location was Shengdu, China (local organizer, Xiaodong Song). The scientific program for the 2026 Townsville SEDI meeting is finalized, and registration will be opened on February 1st. More information on this upcoming meeting can be found at <https://sites.google.com/view/sedi2026/home>. This meeting will also feature a novelty, a full day of talks and workshops aimed at early and mid-career researchers. The meeting organizer secured funding (15,000 \$AUD, through an Australian Academy of Science Amplify grant) to help organize this day and to fund the travel expenses of early career researchers.

SEDI will organize a Union Symposium titled "New Discoveries in Deep Interior of Earth and Planets" at the 2027 General Assembly of IUGG, for which we have just been awarded two oral sessions of 90 minutes each, plus a poster session. Invitations to speakers will take place in 2026.

The other main activity of SEDI in 2026 will be the continuing development of the journal jsedi.

Mathieu Dumberry, SEDI Chair  
Lauren Waszek, SEDI Vice-Chair  
Michael Bergman, SEDI Secretary-General

# Union Commission on Planetary Sciences (UCPS)



UCPS website: <http://202.127.29.4/geodesy/ucps>

## INTRODUCTION

The IUGG Union Commission on Planetary Sciences (UCPS) aims to promote and coordinate scientific (physical, chemical, and mathematical) studies of planets in the solar system and around other stars. UCPS intends to advance planetary science through advocacy of solar system and extrasolar exploration, seeking insights on the origin, formation and evolution of planets and systems, including a search for habitable worlds beyond Earth. The UCPS together with other IUGG associations will share knowledge through scientific research and comparative studies between planetary objects and the Earth in the fields of atmosphere, surface and interior science. Additional information about UCPS can be found at <http://202.127.29.4/geodesy/ucps>.

### Objectives:

- To advance and foster the study of scientific problems in the planetary sciences;
- To promote and coordinate international cooperation in planetary science, and promote planetary science activities in developing countries;
- To facilitate, on an international basis, discussion and publication of the results of the studies, research and work indicated above;
- To contribute to coordinating activities for future space missions.

## ADMINISTRATION

### Executive Committee

- |                     |            |   |
|---------------------|------------|---|
| • Shuanggen Jin     | Chair      | IAG, China                                |
| • Paul Byrne        | Vice-Chair | Washington University in St. Louis, USA   |
| • Andrea Longobardo | Vice-Chair | National Institute of Astrophysics, Italy |
| • Zhonghua Yao      | Secretary  | University of Hong Kong, China            |
| • Jianguo Yan       | Treasurer  | Wuhan University, China                   |

## ACTIVITIES

- 9-11 December, 2025, UCPS and Shuanggen Jin organized co-organized International Symposium on Peaceful Use of Space Technology with giving a keynote, Qionghai, China.



- 3-5 January 2025, UCPS and Shuanggen co-organized Youth Workshop on Satellite Navigation with giving a talk, Shenzhen, China.



- 14-15 May 2025, Shuanggen Jin was invited to attend IAG Commission 4 Symposium with giving a Keynote and chairing one session, Wuhan, China.



## FUTURE ACTIVITIES

- 21-23 September 2026, [2nd IUGG Symposium on Planetary Science \(IUGG-PS 2026\): New Observations and Advances in Solar System](#), Wuhan, China.

Shuanggen Jin, UCPS Chair

# THE INTER-ASSOCIATION WORKING GROUP: Electro-magnetic Studies of Earthquakes and Volcanoes (EMSEV)



EMSEV website: [www.emsev-iugg.org/emsev](http://www.emsev-iugg.org/emsev)

## INTRODUCTION

EMSEV (Electromagnetic Studies of Earthquakes and Volcanoes) is an Inter-Association Working Group operating within the framework of the International Union of Geodesy and Geophysics ([IUGG](#)). EMSEV is strongly supported by three IUGG Associations— [IAGA](#), [IASPEI](#), and [IAVCEI](#) — which actively promote its scientific activities.

EMSEV has continuously investigated earthquakes and active volcanoes with the aim of improving the understanding of their underlying physical and dynamical processes. Drawing on the expertise of a worldwide community of more than 400 researchers and students, EMSEV fosters innovative research primarily in the field of electromagnetism, in close integration with other geophysical observations, particularly satellite data, to describe, monitor, analyze, and model seismic and volcanic phenomena.

The objectives of EMSEV are:

- (1) to evaluate and promote advanced studies in electromagnetic research through international co-operation, conferences, and workshops;
- (2) to integrate electromagnetic methods with other geophysical techniques in order to identify physical processes occurring before, during, and after earthquakes and volcanic eruptions;
- (3) to organize and manage international and regional workshops; and
- (4) to contribute to educational and field programs related to observational results and the mitigation of earthquake and volcanic hazards.

## ADMINISTRATION

Due to the COVID-19 pandemic, EMSEV was unable to convene in-person international meetings for several years. In 2024, the EMSEV General Assembly was successfully held in Chania, Greece.

At EMSEV2024, it was unanimously approved that the EMSEV International Conference in 2026 will be held in Kumamoto, Japan. The selection of Kumamoto was motivated by two major considerations: (1) the year 2026 marks the tenth anniversary of the 2016 Kumamoto earthquake (M 7.3), and (2) it also marks the fifteenth anniversary of the 2011 Great East Japan (Tohoku) earthquake (M 9.0).

Kumamoto is also located in close proximity to Mount Aso, one of Japan's largest active calderas, and a scientific excursion to the volcano is planned as part of the conference program.

Elections for the EMSEV Bureau Chair and other Bureau members will be conducted during EMSEV2026.

### **EMSEV bureau.**

The current EMSEV Bureau is composed as follows:

- Chair: Toshiyasu Nagao (Japan);
- Vice Chairs: Valerio Tramutoli (Italy) and Qinghua Huang (China);
- Secretary: Jann-Yeng Liu (Taiwan).

The Bureau includes Association Liaison Members representing the parent Associations:

- IAVCEI: Takeshi Hashimoto (Hokkaido University, Japan);
- IASPEI: Qinghua Huang (Peking University, China);
- IAGA: Jann-Yeng Liu (National Central University, Taiwan).

As of 2025, the EMSEV Bureau comprises 21 members from 10 countries. A detailed list of Bureau members, Country Liaisons, EMSEV Members, and Collaborators is available on the EMSEV website.

Detailed member list is presented on <https://www.emsev-iugg.org/emsev/profile.html>. You can find **Country liaison members**, **EMSEV Members**, and **EMSEV Collaborators** at <https://www.emsev-iugg.org/emsev/>.

## **ACTIVITIES**

The most important international meeting for EMSEV in 2025 was the IAGA-IASPEI Joint Assembly held in Lisbon. EMSEV held two sessions at this international conference. Several EMSEV Bureau members also attended and made presentations at the IAVCEI General Assembly.

### **IAGA-IASPEI Joint Assembly (Lisbon, Portugal, 31 Aug - 5 Sep 2025)**

- Combined GNSS, Ground, and Satellite Data to Study Co-Seismic Parameters Associated with Natural Hazards. Convenor: Ramesh Shingh, Co-convenors: Kosuke Heki, Jann-Yenq Liu, Toshiyasu Nagao
- Interdisciplinary Observations of Pre-Earthquake Processes. -from mechanical to electromagnetic and geochemical phenomena-, Convenor: Dimitar Ouzounov, Co-convenors: Katsumi Hattori, Qinghua Huang, Valerio Tramutoli

Following this Assembly, the EMSEV Chair attended the International Conference on Recent Trends in Geoscience Research and Applications 2025 (GeosciRA25) in Belgrade, Serbia, to strengthen EMSEV activities in Southeast Europe.

The EMSEV chair also began preparations for the EMSEV General Meeting in Kumamoto in 2026, reserving the venue, etc.

### **EMSEV-RELATED SESSIONS AT OTHER MEETINGS**

In 2025, we proposed and held EMSEV sessions at the following international conferences:

**EGU** (Vienna, Austria, 27 April – 2 May 2025) Multi-parametric Short-Term Seismic Hazard monitoring and Physical and Statistical Models for Earthquake Risk assessment. Co-organized by EMRP1/ESSI2/GI6, co-sponsored by JpGU and EMSEV. Convener: Valerio Tramutoli; Co-convenors: Pier Francesco Biagi, Antonella Peresan, Carolina Filizzola, Nicola Genzano, Katsumi Hattori, Rajesh Rupakhety

**JpGU** (Chiba, Japan, 25-30 May 2025) M-IS09: Interdisciplinary studies on pre-earthquake processes. Convener: Katsumi Hattori; Co-conveners: Jann-Yeng Liu, Dimitar Ouzounov, Huang Qinghua

**IWEP9** (Chiba, Japan, 27-28 May, 2025), 9th International Workshop on Earthquake Preparation Process, – Observation, Validation, Modeling, Forecasting, Main sponsor: Chiba University. <https://khattori-lab.com/iwep9/organization/>

## **OTHER INTERNATIONAL CONFERENCE ACTIVITIES**

**International Symposium on Earthquake Forecasting to Commemorate the 50th Anniversary of the 1975 Haicheng M7.3 Earthquake** (8-11 Jul 2025, Liaoning, China), <https://www.ief.ac.cn/hceq50/>

The year 2025 marks the 50th anniversary of the Haicheng earthquake in China, the only earthquake in the world that has been reported to have been successfully predicted.

Taking the opportunity of the 50th anniversary of the successful prediction of the Haicheng earthquake, to promote the modernization of earthquake prediction, China Earthquake Administration (CEA), in cooperation with the International Association of Seismology and Physics of the Earth's Interior (IASPEI) and other Institutions, organized the above symposium in Shenyang, Liaoning, China.

This international conference was attended by IASPEI President Dr. Michelle Grobbelaar, as well as many EMSEV Bureau members.

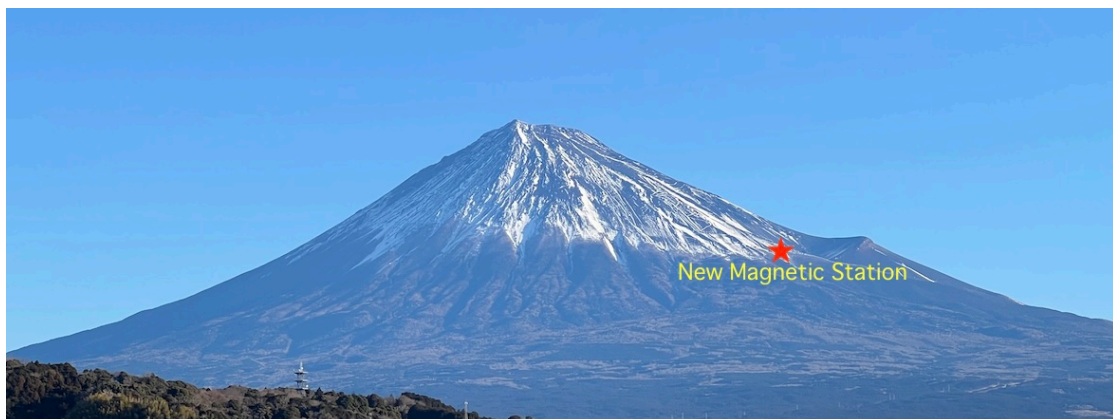
**The 17th China international geo-ElectroMagnetic Induction Workshop (CEMIW)** (11-14 April 2025, Hangzhou, China), <http://www.cemiw.cn/>

This workshop is led by the Geo-electromagnetism Committee of the Chinese Geophysical Society (CGS), which operates within the framework of IAGA Division VI (Electromagnetic Induction in the Earth and Planetary Bodies). EMSEV activity is strongly correlated with Division VI activity. In this workshop, Professor Qinghua Huang of Peking University (EMSEV vice chair and IASPEI Liaison) was the chairman.

## **JOINT INTERNATIONAL ACTIVITIES**

### **Activity on volcanoes (Mt. Fuji, Japan)**

In 2024, a new 3-year grant from the Ministry of Education, Culture, Sports, Science and Technology of Japan (MEXT) was awarded to establish a new geomagnetic station on Mt. Fuji, with the EMSEV chair as the principal investigator. Using this grant, in November 2025, a new geomagnetic station was installed at the southern foot of the mountain at an altitude of 2,400m. As part of the EMSEV activity, EMSEV provided support, including consumables and other necessary resources.



### **Continuation of Atmospheric field measurement in Kakioka, Japan**

For nearly a century, the Kakioka Geomagnetic Observatory of the Japan Meteorological Agency (JMA) conducted atmospheric electric field observations using the classical water-drop electrometer developed by Lord Kelvin; these observations were concluded in February 2021.

To ensure the continuity of atmospheric electric field measurements, EMSEV has supported these observations through the deployment of a field mill. After 2021, EMSEV has been carrying out atmospheric electric field measurements using this system. EMSEV also provided support for the continuation of this observation.

### **FUTURE ACTIVITIES**

In 2026, EMSEV2026 will be held in Kumamoto, Japan. We also plan to participate in various international conferences.

Furthermore, we plan to propose a session as EMSEV for the IUGG General Assembly in Incheon, South Korea, in 2027.

T. Nagao, V. Tramutoli, Q. Huang, J-Y Liu, EMSEV Bureau Members

# THE INTER-UNIONS COMMISSION: International Lithosphere Program (ILP)



ILP website: <https://ilp.nju.edu.cn>

## INTRODUCTION

The International Lithosphere Program (ILP) is a joint project of IUGG and IUGS and receives additional funding from member countries (cf. financial report). ILP seeks to elucidate the nature, dynamics, origin and evolution of the lithosphere through international, multidisciplinary geoscience research projects in Task Forces (TF) and Regional Coordinating Committees (CC).

The major ILP themes are: I. Geoscience of global change, II. Contemporary dynamics and deep processes, III. Continental lithosphere, IV. Oceanic lithosphere.

All TF and CC are led by international teams and supported by ILP with 4,000 Euro per year over a period of 5 years. This “seed money” is used by the project leaders to raise additional funds and build strong interfaces with other projects within and outside ILP (ICDP, SINOPROBE etc.).

## ADMINISTRATION

ILP operates on the base of terms of reference and has an international Bureau. The Bureau meets regularly to monitor the progress and to select new projects in close consultation with its Advisory Board and the representatives of National Committees. The Bureau is chaired by the President with support from the Secretary General and the Executive Secretary. ILP is supported by a science advisory board and its honorary members. The ILP Secretariat is complementarily located at Nanjing University, China. The 2025 ILP Bureau membership is as follows:

President	H. Thybo	Denmark/China
Secretary General until 30 August 2025	M. Liu	USA
Interim Secretary General from 30 August 2025 and Executive Secretary	Q. Wang	China
Representative of IUGG	A. Rudloff	Germany
Representative of IUGs	Ludwig Stroink	Germany
Chair Committee National Representatives	A. Tibaldi	Italy
Past President	S. Cloetingh	Netherlands
Advisory Board to ILP:	F.Y. Wu	China
	J. Freymueller	USA
	Andrea Tomassi	France
	Atalay Ayele	Ethiopia
	Heidrun Kopp	Germany
The Bureau is further supported by:		
Honorary President	A. Green	Switzerland
ILP Fellow	J.F.W. Negendank	Germany

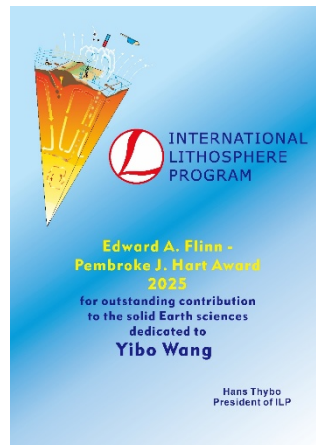
## ACTIVITIES

ILP had a strong representation at the joint IAGA-IASPEI Congress in Lisbon 2025 with a symposium entitled 45 Years with ILP and at the EGU Annual Meeting with its Town Hall Business Meeting. 16 symposia were co-sponsored by ILP or convened by members of the Task Forces and Coordinating Committees at international meetings, and ILP projects organized 16 international workshops in 2025.

The Evgueni Burov Medal for 2025 was awarded to Prof. Laetitia le Pourhiet, Sorbonne Université, France for “her contributions to our understanding of the links between the geological record and lithospheric and mantle dynamics, as well as exemplary dedication to supporting the geodynamics community”. The awardee gave a lecture at the ILP Business meeting at EGU 2025.



*Prof. Laetitia le Pourhiet received the Evgenii Burov Medal 2025*



*Dr. Yibo Wang received the Flinn-Hart Award to an early career scientist in 2025*

The Flinn-Hart Award to an early career scientist was presented to Dr. Yibo Wang, Institute of Geology and Geophysics, Chinese Academy of Sciences in recognition of “his pioneering research on the lithospheric thermal structure of fault zones, deep thermal sources and their relationship with seismic belts, and the contribution of radiogenic heat production to surface heat flow”. The awardee gave a presentation at the symposium “45 Years with ILP” at the joint IAGA-IASPEI congress in Lisbon 2025.

A bureau meeting was held on 1 September 2025 in Lisbon. The president reported on the activities during the past year, emphasizing the importance of the support from ILP to the Task Forces and Coordinating Committees for achieving large scale funding to the projects, and the wide range of high-level ILP symposia and workshops. The Executive Secretary reported on the finances, which keep balance with a planned decrease of the savings, but the contribution from national members is not satisfying although China has decided to double its annual contribution to ILP. Seven proposals for new Task Forces and Coordinating Committees were discussed; one proposal is still under revision and the following new projects have been approved to begin in 2026:

2026-TF2 - Volcanotectonic process and new technologies: Lithosphere interactions from depth to the surface (Chairs: Alessandro Tibaldi, Italy; Agust Gudmundsson, UK; Federica Lanza, Switzerland; Athanas S. Macheyeke, Tanzania; Thomas Walter, Germany),

2026-TF3 - Global pore pressure data - A new addition to the World Stress Map Project (Chairs: Mojtaba Rajabi, Australia; Michael Drews, Germany; Oliver Heidbach, Germany; Indira Shatyrbayeva, Germany),

2026-TF6 - Sedimentary Basins (Chairs: Piotr Krzywiec, Poland; Xiumian Hu, China)

2026-CC2 TopoAsia: 4D Topography Evolution in Asia - From Deep Earth to Surface (Chairs: Chengshan Wang, China; Irina Artemieva, Denmark; Gregory Houseman, UK; Harsh Gupta, India; Laiming Zhang, China)

ILP has been more active than ever in 2025, with a record number of 15 active projects. The projects include researchers from all continents and represent a broad coverage of lithosphere research. We are in particular pleased that the group of PIs include an increasing number of early career scientists.

## **FUTURE ACTIVITIES**

- Initiate 2-4 new Task Forces/Coordinating Committees.
- Provide support to the Task Forces/Coordinating Committees.
- Increase ILP visibility with Town Halls and TF/CC-sessions at EGU26, DEEP2026 and AGU 2026.
- Workshops of individual TFs and CCs are being planned.
- ILP Business meeting and meeting of the bureau during the EGU2026 meeting.
- Meeting between the ILP officers and the new advisory Board.
- Award the E. Burov medal and Flinn-Hart award with lectures at the EGU26 meeting.
- Expand the national membership, e.g., with dedicated approach to Australia, Netherlands and Switzerland with strong representation in ILP projects.
- Seeking new support from national science foundations and industry.

### **Budget Request for 2026**

To assure continuity and enable us to support the selected Task Forces and Coordinating Committees, we request an IUGG subvention of 15,000.00 USD as in previous years.

Hans Thybo, ILP President

# IUGG FINANCIAL REPORT 2025

## INTRODUCTION

This report describes the status of the IUGG finances for the year 2025, the second year of the IUGG quadrennium 2024-2027. The [budget](#) for 2024-2027 was approved at IUGG2023 in Berlin. The report will be presented at the Bureau meeting in October 2026.

As of 1 January 2026, IUGG has 75 members, of which 61 are paying members representing 281 units. On 1 January 2026, Papua New Guinea joined IUGG as a new cat 1 member. In 2025 Republic of Korea changed category from 2 to 3. Otherwise, the membership situation has not changed; for details, see section *Membership information and statistics as of 1 January 2026* below.

The paying members pay membership dues according to their category. Each category is assigned a certain number of units. The price of 1 unit in a given year is calculated using the September value of the U.S. inflator index for the previous year. In 2025 the price was USD 2,525/unit up 2,6% from the 2024 value, close to the budget value of USD 2,535.

There are still some effects remaining in the IUGG finances from the COVID-19 pandemic. In the 2024-2027 quadrennium the budget is structured to ensure activities postponed during the pandemic are now fully resumed, thereby bringing the 2027 balance back to approximately one year's turnover. It appears that the 2025 outgoing balance is still a bit higher than in the budget.

The accounting method is a cash flow system, with the money kept in three bank accounts, USD, EUR and DKK. The 4-year accounting for the whole budget period is more representative for the financial status of the union than the individual accountings year by year.

The IUGG accounts are audited by a professional auditor. A new book-keeping and accounting method will be introduced soon.

The IUGG webmaster is based in Potsdam, Germany. IUGG has signed a contract with Nord Space to do the book-keeping as part of a new financial administrative strategy. Former IUGG Treasurer, Dr. Aksel Walløe Hansen, is hired as a special consultant for the period 2024-2027.

### Overview of the report:

- Summary of the IUGG accounts for 2025, in USD
- General comments and notes
- Overview of IUGG grants and the allocations in 2025
- Membership information and statistics

# SUMMARY OF THE IUGG ACCOUNTS FOR 2025, IN USD



## SUMMARY OF IUGG ACCOUNTS 2025

US dollars	Accounts	Budget
<b>RECEIPTS</b>		
1. Membership Subscription	600 233,77	659 100,00
2. Assembly Surcharge	0,00	
3. Royalties	0,00	200,00
4. Miscellaneous		
a. Interest	14.233,94	20.000,00
b. Gain on exchange	3.503,83	
c. Other	536,56	
d. Associations, 2019 surcharge	0,00	
5. Total Receipts	618 508,10	679 300,00
6. Cash in hand	0,00	0,00
7. Bank balance on 1/1 2025	968 691,23	853 300,00
Check Sum	1 587 199,33	1 532 600,00
<b>EXPENDITURES</b>		
11. Administration		
11.1 Personnel	22 023,81	10 000,00
11.2 Equipment	184,35	1 000,00
11.3 Supplies	0,00	2 000,00
11.4 Communications	406,92	1 000,00
11.5 Accountant	51 298,17	55 000,00
11.6 Travel	126 031,41	90 000,00
11.7 Miscellaneous	24 059,32	5 000,00
12. New initiatives		
12.1 Education and outreach	15 000,00	30 000,00
12.2 Science	15 940,02	50 000,00
13. General Assemblies		
13.1 Organizational expenses	0,00	0,00
13.2 Travel grants	0,00	0,00
14. Symposia	110 782,70	100 000,00
15. Annual allocations		
15.1 Annual allocations	310 940,84	319 200,00
16. Dues and Grants		
16.1 ISC	29 366,23	32 000,00
17. Union activities		
17.1 GRC, SEDI, CMG, UCPS, CCEC	31 000,00	20 000,00
17.2 Inter-Union Science (IUP)	0,00	15 000,00
18. Fees		
18.1 Bank fees	3 020,34	3 000,00
19. Contingencies	0,00	2 500,00
20. Loss on exchange	0,00	
21. Total Expenditures	740 054,11	735 700,00
22. Balance on 31/12 2025	847 145,22	796 900,00
Check sum	1 587 199,33	1 532 600,00

		<b>US/DKK</b>	
December 31, 2025	Exchange rates Line 8	7,158	=DEC 31, 2024
Niels Andersen/Aksel Walkøe Hansen	Line 22	6,348	=DEC 31, 2025
	Other:	6,628	average
		<b>US/EUR</b>	
	Line 8	0,960	=DEC 31, 2024
	Line 22	0,850	=DEC 31, 2025
	Other:	0,888	average

## GENERAL REMARKS AND NOTES TO THE IUGG SUMMARY

### General Remarks

In 2025 the finances of IUGG are still affected by the COVID-19 pandemic. This is reflected in the bottom line of the summary of the IUGG accounts with total assets of USD 850K, meaning the outgoing 2025 balance is almost of the same size as two years' normal turnover.

The budget adopted at IUGG2023 is designed to lower the balance by the end in 2027, by allowing a higher expenditure than income for the whole period, resulting in a deficit of almost USD 300K for the whole period 2024-2027. During 2025 the balance was not lowered as anticipated.

The basic currency of IUGG is USD. Therefore, the summary of the IUGG accounts is shown in USD. It is the sum of three different accounts at Danske Bank in USD, EUR, and DKK, respectively. In addition, IUGG has a Mastercard account, which is mainly used in connection with travelling.

In 2022, financial transactions between Denmark and Russia were stopped in late winter time due to the international sanctions imposed on Russia. This situation is still in operation in 2025.

As part of a new financial strategy with centralizing the finances of IUGG in Copenhagen IUGG is currently hosting several association and commission funds: two associations (IAG, IACS), five commissions (CCEC, SEDI, ESC, IHFC, FDSN) and one interunion programme ILP.

The accounts hosted by IUGG are not included in this report

The new administrative strategy is taking the finances of IUGG into a more professional era.

### Notes

#### Income

##### **Line 1, Membership Subscription**

Following the cash-flow system the amount given in the summary is a mixture of late payments for 2024 and even earlier years, regular payments for 2025 plus a few early payments for 2026.

##### **Line 4.a, Interest**

In 2023, Danske Bank again paid interest on the USD account, of the order 2% on an annual basis. This is continued in 2025.

##### **Line 4.b, Gain on exchange**

This line, together with the corresponding line 20 (loss on exchange), is used to balance the combined accounts (USD, EUR, DKK) for a particular year. In reality the loss/gain is not realized in the given year. Due to fluctuations in currencies, gains/losses will change from year to year. In the long run, the gains/losses tend to cancel each other. It should also be noted that an averaged exchange rate is used for all account movements within the year.

##### **Line 4.c, Other**

This line was introduced in 2020 to handle the payments of some contributions to ILP. These payments will be moved to the correct account. Line 4.c should be compared to line 11.7 representing the transfer of all received ILP funds to the special ILP account, see below. The line is also used for other purposes.

**Line 4.d, Associations, general assembly surcharge**

For IUGG2023 the surcharge was calculated as 6% of the total registration fee paid to the organizers of IUGG2023. The money was distributed among the eight associations.

**Expenditures****Line 11.1, Personnel**

During 2024, Aksel Walløe Hansen, IUGG treasurer 1999-2019, has assisted the current treasurer as a special consultant.

**Line 11.5, Accountant**

This line represents the payment to the new book-keeping company Nord Space.

**Line 11.6, Travel**

The major travel cost in 2025 was associated with the Executive Committee meeting in Incheon, Rep. of Korea.

**Line 11.7, Miscellaneous**

The payment of the web master is debited under this line. The line also includes the special insurance against attacks by hackers. The line also covers expenses in connection with promotion activities. The line is also used to account for various miscellaneous payments to/from IUGG.

**Line 12, New Initiatives**

The line represents IUGG support for two types of initiatives: Co-funding IUGG-related activities of the International Centre for Theoretical Physics (ICTP) and a grant programme to support scientific projects.

See also the details of lines 12 and 14 below.

**Line 14, Symposia**

This line is meant to account for smaller grants awarded to workshops and conferences.

See the overview page 125 for more details.

**Line 15.1, Annual allocations to Associations**

The annual IUGG allocation to the associations (50% of the dues paid the year before) is determined after receipt of the financial reports for the previous year. The distribution percentages for the period 2024-2027 and the allocations in 2025 are shown in the following table:

	%	2025 amounts in USD
IACS	9.25	28,906
IAG	13.04	40,750
IAGA	14.01	43,781
IAHS	12.74	39,813
IAMAS	15.85	49,531
IAPSO	11.32	35,375
IASPEI	13.27	41,469
IAVCEI	10.52	32,875
Total		<b>312,500</b>

Also included in line 15.1 is the annual allocation to EMSEV, paid on behalf of IAGA; IASPEI and IAVCEI.

From 2024 and onwards the allocation to IACS will no longer be coupled to that of IAVCEI. The allocation will then follow the normal procedure laid out in the IUGG Guidelines.

In the USD summary, page 121, the total allocation to the association is 310,941. Which is also shown in item i) on page 125. The difference is 1,559 compared to the above table.

This difference is an effect of using USD, EUR and AUD in the transfers to the associations. In combination with the way we convert other currencies to USD. As mentioned in the Line 4b note on page 122 averaged exchange rates are used in the Excel sheet during the year. The more EUR and AUD fluctuate compared with USD the bigger differences.

**Line 16, Dues and grants**

As usual this line represents the IUGG dues to ISC, International Science Council.

**Line 17, Union activities**

In 2025 only one IUGG commissions GRC received financial support from IUGG.

**Line 20, loss on exchange**

For details, see the explanatory text for line 4.b.

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## OVERVIEW OF IUGG GRANTS AND ALLOCATIONS IN 2025

IUGG is supporting science in different ways:

- i) Annual allocation to Associations, line 15
- ii) New initiatives, line 12
- iii) Smaller scientific meetings/workshops, line 14
- iv) Union activities, line 17
- v) Travel grants in connection with General Assemblies, line 13.2

Below, find the main figures for the amounts allocated for the year 2025, in USD:

<b>i) Line 15.1, Associations</b>		
8 Associations		<b>310,941</b>
<b>ii) Line 12, New initiatives</b>		
2025 allocation to ICTP plus 2 larger projects received funding in 2025		<b>30,940</b>
<b>iii) Line 14, Symposia grants</b>		
In 2025 17 grants were paid to the principal investigators.		<b>110,782</b>
<b>iv) Line 17, Union activities</b>		
17.1, GRC	16,000	
17.2, ILP	15,000	
Total		<b><u>31,000</u></b>
<b>v) Line 13.2, Travel grants, General Assemblies</b>		<b>0</b>
<b>Grand total</b>		<b><u>483,663</u></b>

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## MEMBERSHIP INFORMATION AND STATISTICS

On 1 January 2026, IUGG has 75 members, 61 paying members and 14 associate members. The 61 paying members represent 281 units.

On the date of writing this report, 12 May 2026, 16 paying members representing 32 units are in observer status. The total payment received for 2025 represents the equivalent of 248 units corresponding to 44 paid up members.

### In category 1, 9 members, 9 units

Iran (15. year as observer)	special situation
Azerbaijan (11. year as observer)	
Vietnam (10. year as observer)	
Jordan (9. year as observer)	
Mozambique (7. year as observer)	
Algeria (4. year as observer)	
Colombia (3. year as observer)	
Romania (3. year as observer)	
Iceland (2. year as observer)	

### In category 2, 5 members, 10 units

Nigeria (10. year as observer)  
 Saudi Arabia (2. year as observer)  
 Egypt (7. year as observer)  
 Pakistan (6. year as observer)  
 Portugal (2. year as observer)

### In category 3, 1 member, 3 units

Argentina (1. year as observer)

### In category 6, 1 member, 10 units

Russia (4. year as observer)	special situation
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In summary, the membership overview is

Category	No. of members	No. of units/ member	Total units
11	1	35	35
8	3	20	60
7	1	15	15
6	5	10	50
5	3	7	21
4	6	5	30
3	6	3	18
2	16	2	32
1	20	1	20
A	14	0	0
In total	75		281

# ADDITIONAL UNION MATTERS

## Awards and Honours

### ***International Association of Cryospheric Sciences (IACS)***

**Marie Bouchet** (France) and **Giacomo Traversa** (Italy) were awarded the IACS Early Career Scientist Award 2025.

### ***International Association of Geomagnetism and Aeronomy (IAGA)***

**Takemi Ishihara** (Japan) was awarded the 2025 IAGA Long Service Medal.

**Banusha Kugabalan** (U.K.), **Paraksh M. Vankawala** (U.S.A.), **Yiming Zhang** (U.S.A.) were awarded the 2025 Early Career Scientist Presentation Awards.

**Keke Zhang** (China) was awarded the 2025 Shen Kuo Award.

### ***International Association of Hydrological Sciences (IAHS)***

**John Pomeroy** (Canada; Dooge medal) and **Giuliano Di Baldassarre** (Sweden; Volker medal) were awarded the 2025 IAHS-UNESCO-WMO International Hydrology Prize.

**Vinicius Bogo Portal Chagas** (Brasil) was awarded the IAHS Falkenmark Award.

**RuiRui Xu**, **Dexun Qiu** and **ChangXue Wu** (all China) were awarded the 2025 Tison Award.

### ***International Association for the Physical Sciences of the Oceans (IAPSO)***

**Adele K. Morrison** (Australia) was awarded the IAPSO Early Career Scientist Medal 2025.

**Nadia Pinardi** (Italy) was awarded the Prince Albert I Medal 2025.

### ***International Association of Volcanology and Chemistry of the Earth's Interior (IAVCEI)***

**Claire Harnett** (Ireland) was awarded the 2025 IAVCEI George Walker Award.

**Paraskevi Nomikou** (Greece) was awarded the 2025 IAVCEI Fisher Medal.

**Teresa Ubide** (Spain) was awarded the 2025 IAVCEI Wager Medal.

**Lionel Wilson** (UK) was awarded the 2025 IAVCEI Thorarinsson Medal.

### ***American Geophysical Union (AGU)***

The AGU, at its 2025 Fall Meeting, awarded the following scientists who have been active in IUGG:

**Benjamin James Andrews** (USA), Co-Leader of the IAVCEI Commission on Geochemistry (2016-2023), was awarded the VGP Section Award for Service to the Community and Public Engagement.

**Tirtha Banerjee** (USA), Vice-President of the IAHS Commission of Coupled Land-Atmosphere Systems (ICCLAS, since 2023), was awarded the Global Environmental Change Early Career Award.

**Timothy Druitt** (France), Editor of the IAVCEI Bulletin of Volcanology (2003) was awarded Union Fellow.

**Ramon Egli** (Austria), Co-Chair of the IAGA Working Group I-3: Rock- and Environmental Magnetism (2016-2019), was awarded the William Gilbert Award

**Jeffrey McDonnell** (Canada), Chair of the IAHS Commission Prediction on Ungauged Basins (PUB, 2005-2007) was awarded the Robert E. Horton Medal.

**Hisashi Nakamura** (Japan), IAMAS National Correspondent (since 2012) was awarded Union Fellow.  
**Ashish Sharma** (Australia), President of the IAHS Commission on Statistical Hydrology (ICSH, 2018-2021) was awarded Union Fellow.  
**Soroosh Sorooshian** (USA), IUGG Fellow (2019) was awarded the William Bowie Medal.  
**Chris Soulsby** (UK), Vice-President of the IAHS International Commission on Tracers (ICT, 2004-2007), was named the Walter Langbein Lecturer.  
**Eli Tziperman** (USA), Vice-Chair of the Union Commission on Mathematical Geophysics (CMG, 2003-2013) was awarded Union Fellow.

### **European Geosciences Union (EGU)**

The EGU, at its 2025 General Assembly, awarded the following scientists who have been active in IUGG:

**René Forsberg** (Denmark), Chair of the IAG International Gravity Field Service (IGFS; 2004-2013), was awarded the Vening Meinesz Medal.  
**Heidrun Kopp** (Germany), Vice-President of the IAG Inter-Commission Committee on Marine Geodesy (ICCM; since 2020), was awarded receive the Stephan Mueller Medal.  
**Trevor John McDougall** (Australia), IAPSO President (2019-2023), was awarded the Alfred Wegener Medal.  
**Nils Olsen** (Denmark), IAGA National Correspondent (since 2007), was awarded the Petrus Peregrinus Medal.  
**Raymond Pierrehumbert** (USA), Vice-Chair of the Union Commission on Mathematical Geophysics (CMG; 2001-2008), was awarded the Jean Dominique Cassini Medal.  
**Jan Seibert** (Switzerland), President of the IUGG National Committee for Switzerland and IAHS National Correspondent (2016-2023), was awarded the Henry Darcy Medal.  
**Paul Tackley** (Switzerland), Executive Committee Member of the Union Commission on the Study of the Earth's Deep Interior (SEDI; 2016-2023), was awarded the Arthur Holmes Medal.

### **Others**

**Berit Arheimer** (Sweden), President of the International Association of Hydrological Sciences (IAHS; 2021-2025), was awarded an honorary doctorate from the University of Cordoba (Spain).  
**Kusumita Arora** (India), IAGA Vice-President (2023-2027), was awarded the Women Scientist Award 2025 of the Geological Society of India.  
**Günter Blöschl** (Austria), President of the International Association of Hydrological Sciences (IAHS; 2017-2021), was awarded the Stockholm Water Prize 2025.  
**John Burrows** (Germany), IAMAS Vice-President (2023-2027), was awarded the NASA Exceptional Public Service Award.  
**Luca Caricchi, Costanza Bonadonna and Joël Ruch** (all Switzerland), were awarded the Impact Award of the Geneva Tourism & Convention Foundation for organizing the 2025 IAVCEI Scientific Assembly.  
**Benjamin F. Chao** (China-Taipei), IAG National Correspondent (2009-2015), was awarded the 2025 AOGS Axford Medal.  
**Shuanggen Jin** (China), Chair of the Union Commission on Planetary Sciences (UCPS; 2015-2027), was elected Fellow of the International Engineering and Technology Institute (IETI).  
**Marilyn N. Raphael** (USA), Member of the IUGG Nominating Committee (2026-2027) and IAMAS Member at Large (2023-2027), was elected member of the U.S. National Academy of Sciences.  
**Dmitry Storchak** (UK), IASPEI's 2nd Vice President (2023-2027), was awarded the Service Award (G) of The Royal Astronomical Society (RAS).  
**Virendra M. Tiwari** (India), IUGG Bureau Member (2023-2027), was elected Vice President of the Geological Society of India (2026-2028).  
**Kathy Whaler** (UK), IUGG Immediate Past President, was awarded an Honorary DSc by the University of Sussex.

## Charles Fierz (1958-2025)

It is with deep sadness that we announce the passing of Charles Fierz, a snow scientist and admired figure within the cryospheric sciences community. He passed away on 10 December, in Davos, Switzerland, at the age of 67. Charles' efforts over two decades made a lasting contribution to the International Association of Cryospheric Sciences (IACS), the International Union of Geodesy and Geophysics (IUGG), and the wider field of snow and ice science.

Charles served with distinction in numerous leadership roles within IACS. In 2004, he joined the predecessor to IACS, the IUGG Union Commission for Cryospheric Sciences, as Head of the Seasonal Snowcover and Avalanches Division. When IACS was officially approved at the 24th IUGG General Assembly in 2007 in Perugia, Italy, Charles became Head of the Snow and Avalanches Division. For this occasion, he coined the term 'Festa Cryospherica' for the IACS celebration now customarily held at IUGG and IACS assemblies. He served two terms as Head of Snow and Avalanches (2007-2011 and 2019-2023) before becoming President-Elect, President, and Immediate Past President from 2013 to 2019. His dedication to the organisation, to advancing the field of cryospheric science, and to mentoring young scientists and those new to scientific stewardship roles was extraordinary. His invaluable contributions were recognised in 2023, when he was appointed an Honorary Member of IACS – an honour reflecting his tireless efforts on behalf of the Association.



*Charles in front of his home in Davos, June 2018. Photo: Liss M. Andreassen*

Charles was a team leader at the WSL Institute for Snow and Avalanche Research SLF in Davos, Switzerland, where his work on snow research earned him international recognition. His passion for snow science was evident in his pioneering work on the SNOWPACK model, a key tool in snow cover modelling. He was particularly dedicated to making precise snow measurements, and many young scientists benefited from his instruction at the face of a freshly cut snow profile. His interest in detail made him perfect for developing classifications, and he was a driver of the International Classification for Seasonal Snow on the Ground, leading a working group that produced the widely recognised glossary published by UNESCO in 2009.

A significant part of Charles's legacy is his work on Global Cryosphere Watch (GCW), a crosscutting activity of the World Meteorological Organization (WMO). His meticulous work, which included attending countless meetings, building consensus, and providing detailed technical and scientific contributions, has helped shape best practices for the global measurement of the cryosphere.

Charles's distinguished career was marked not only by his administrative acumen but also by his exceptional ability to bring people together. His contributions were central to the development of IACS, particularly during its formative years. Among many examples of his long-term commitment, his leadership in the 2019 revision of the IACS statutes and by-laws made a lasting contribution to the organisation's future. Charles also played a critical role in supporting the IACS Secretariat, offering counsel to two successive Secretaries General, Andrew Mackintosh and Richard Essery. His efforts also

included mentoring and bringing in institutional memory for his successors as IACS presidents. His kind guidance has been invaluable.

Charles encouraged scientists from around the world to join the IACS Bureau, to take on higher office, or establish IACS working groups. He had an instinct for recognising those with the right attributes for service roles and encouraged them, graciously but with persistence, until they accepted. Though he did not speak of this explicitly, Charles was a notable supporter of women in research and science, encouraging the careers of many, now prominent, women scientists.

Charles was a quiet yet passionate leader, known for his knowledge, his commitment to collaboration, and his attention to detail. He was a friend and mentor, and his absence will be deeply felt by all those who worked with him. His legacy will continue in the many people he mentored, the research he advanced, and the future of cryospheric science he helped shape, especially in IACS where he was a force. We will miss him.

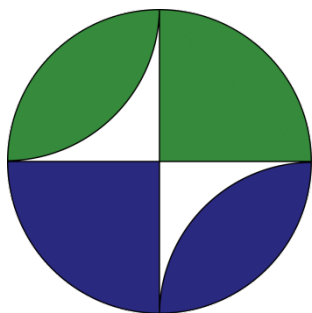
On behalf of past and present IACS bureau members,  
Andrew Mackintosh and Liss M. Andreassen, 15 December 2025

***The IUGG conveys its deepest condolences to Charles' family and colleagues.  
Thank you so much, Charles, for your dedication. It was an honour to work with you.  
Rest in peace.***

# LIST OF ACRONYMS

AAAS	American Association for the Advancement of Science
AGU	American Geophysical Union
AOGS	Asia Oceania Geosciences Society
APECS	Association of Polar Early Career Scientists
CAST	China Association for Science and Technology
CCEC	Commission on Climatic and Environmental Changes
CCTF	Consultative Committee for Time and Frequency
CEA	China Earthquake Administration
CMG	Commission on Mathematical Geophysics
CNC-IUGG	Chinese National Committee for Geodesy and Geophysics
CODATA	Committee on Data for Science and Technology
COSPAR	Committee on Space Research
CTBTO	Comprehensive Nuclear-Test-Ban Treaty Organization
DFG	German Research Foundation
EGU	European Geosciences Union
EMSEV	IAGA/IASPEI/IAVCEI Inter-Association Working Group on Electromagnetic Studies of Earthquakes and Volcanoes
GEO	Group on Earth Observation
GGOS	Global Geodetic Observing System
GOOS	Global Ocean Observing System
GRC	Commission on Geophysical Risk and Sustainability
IACS	International Association of Cryospheric Sciences
IAEA	International Atomic Energy Agency
IAG	International Association of Geodesy
IAGA	International Association of Geomagnetism and Aeronomy
IAHS	International Association of Hydrological Sciences
IAMAS	International Association of Meteorology and Atmospheric Sciences
IAPSO	International Association for the Physical Sciences of the Ocean
IASPEI	International Association of Seismology and Physics of the Earth's Interior
IAU	International Astronomical Union
IAVCEI	International Association of Volcanology and Chemistry of the Earth's Interior
ICACGP	International Commission on Atmospheric Chemistry and Global Pollution
ICAE	International Commission on Atmospheric Electricity
ICAO	International Civil Aviation Organization
ICCL	International Commission on Climate
ICCP	International Commission on Clouds and Precipitation
ICDM	International Commission on Dynamical Meteorology
ICMA	International Commission on the Middle Atmosphere
ICPAE	International Commission on Planetary Atmospheres and their Evolution
ICPM	International Commission on Polar Meteorology
ICSU	International Council for Science
ICTP	Abdus Salam International Centre for Theoretical Physics
IGCP	International Geoscience Programme
IGOS-P	Integrated Global Observing Strategy Partnership
IGU	International Geographical Union
IHP	International Hydrological Programme
ILP	International Lithosphere Program
INQUA	International Union for Quaternary Research

INTERMAGNET	International Real-time Magnetic Observatory Network
IOC	UNESCO Intergovernmental Oceanographic Commission
IOC	International Ozone Commission
IRC	International Radiation Commission
IRDR	Integrated Research on Disaster Risk
ISC	International Science Council
ISC	International Seismological Centre
ISPRS	International Society for Photogrammetry and Remote Sensing
ISSC	International Social Sciences Council
IUGG	International Union of Geodesy and Geophysics
IUGS	International Union of Geological Sciences
IUSS	International Union of Soil Sciences
IUTAM	International Union of Theoretical and Applied Mechanics
JBGIS	Joint Board of Geospatial Information Societies
NKGG	German National Committee for Geodesy and Geophysics
OECD	Organisation for Economic Co-operation and Development
ÖNK	Austrian National Committee for IUGG
PAIGH	PanAmerican Institute of Geography and History
PHIVOLCS	The Philippines Institute of Volcanology and Seismology
SCAR	Scientific Committee on Antarctic Research
SCOR	Scientific Committee on Ocean Research
SCOSTEP	Scientific Committee on Solar-Terrestrial Physics
SEDI	Study of the Deep Interior of the Earth
UCDI	Union Commission on Data and Information
UCPS	Union Commission on Planetary Sciences
UNESCO	United Nations Educational, Scientific and Cultural Organization
UNISDR	United Nations International Strategy on Disaster Reduction
UNOOSA	United Nations Office for Outer Space Affairs
UN-SPIDER	United Nations Platform for Space-based Information for Disaster Management and Emergency Response
URSI	International Union of Radio Science
WCRP	World Climate Research Programme
WDS	ISC World Data System
WMO	World Meteorological Organization
WPMG	Western Pacific Geophysics Meeting
WSF	World Science Forum
VAACs	Volcanic Ash Advisory Centers
VASAG	Joint WMO-IUGG Volcanic Ash Scientific Advisory Group



**INTERNATIONAL UNION OF GEODESY AND GEOPHYSICS**  
**UNION GEODESIQUE ET GEOPHYSIQUE INTERNATIONALE**

## **IUGG Secretariat**

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