



INTERNATIONAL UNION OF GEODESY AND GEOPHYSICS
UNION GEODESIQUE ET GEOPHYSIQUE INTERNATIONALE

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This monthly newsletter is intended to keep IUGG Members and individual scientists informed about the activities of the Union, its Associations and interdisciplinary bodies, and the actions of the IUGG Secretariat, Bureau, and Executive Committee. Past issues are posted [here](#). E-Journals may be forwarded to those who will benefit from the information. Your comments are welcome.

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1. Council Meeting at the 28th IUGG General Assembly

The Council Meeting was held in Berlin, Germany, from 12 to 18 July 2023. At three sessions of the meeting, the Council delegates, representing 39 Member countries, discussed various topics and approved/ratified the following decisions:

- Admission of Latvia as a Regular Member Country and Paraguay as an Associate Member Country.
- Election of new IUGG Officers for 2023-2027 (see item 2).
- Approval of the IUGG Budget for 2023-2027 (see item 4).
- Selection of Incheon, Rep. of Korea as the venue for the 29th IUGG General Assembly in 2027 (see item 5).
- Appointment of IUGG Liaison Officers to International and Intergovernmental Organisations for 2023-2027 (see item 6).
- Passage of six resolutions (see item 7).



*Group photo of the IUGG Council Delegates and IUGG/Association Officers at the 28th General Assembly
(Photo: IUGG2023)*

2. Bureau and Finance Committee Members for 2023-2027

President: Chris Rizos (Australia)

President-Elect: Mioara Manda (France)

Secretary General: Alexander Rudloff (Germany)

Treasurer: Niels Andersen (Denmark)

Members at large: Athena Coustenis (France), Andrew Mackintosh (Australia), Virendra Tiwari (India)

Finance Committee: Archana Bhattacharyya (India), Priscilla Grew (USA), Jan Krynski (Poland). Jan Krynski was selected as the Committee's Chair

3. Association Presidents and Secretaries General for 2023-2025

International Association of Cryospheric Sciences

President: Liss M. Andreassen (Norway)

Secretary General: Richard Essery (UK)

International Association of Geodesy

President: Richard Gross (USA)
Secretary General: Daniela Thaller (Germany)

International Association of Geomagnetism and Aeronomy

President: Andrew Yau (Canada)
Secretary General: Monika Korte (Germany)

International Association of Hydrological Sciences

President: Berit Arheimer (Sweden)
Secretary General: Jean-Marie Kileshye Onema (Congo, Rep. of, South Africa)

International Association of Meteorology and Atmospheric Sciences

President: Andrea Flossmann (France)
Secretary General: Keith Alverson (Canada)

International Association for the Physical Sciences of the Oceans

President: Hans van Haren (Netherlands)
Secretary General: Silvia Blanc (Argentina)

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

President: Michelle Grobelaar (South Africa)
Secretary General: Johannes Schweitzer (Norway)

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

President: Costanza Bonadonna (Switzerland)
Secretary General: Ulrich Kueppers (Germany)

4. Union Budget for 2024-2027

The activities of IUGG are based on payment of membership dues plus other direct and indirect contributions. IUGG has 74 member countries, 59 of them are regular members paying dues. The annual amount of dues is about \$650K (the budget is in US\$; K means thousands). The expected balance on 1 January 2024 is \$900K. Income during the period of 2024-2027 is estimated to be \$2,762K, making ~\$3,662K in total. Planned expenditures is \$3,055K, and hence an expected balance on 31 December 2027 would be \$607K. Half of the paid dues goes to Union Associations (\$1,298K), the remaining part to the Union Grants program and support of scientific meetings (\$300K), travel grants for the next general assembly (\$200K), Science and Education Program (\$320K), Union activities (\$156K), International Science Council (\$128K), and administration (\$621K).

5. Location of the 29th IUGG General Assembly in 2027

The IUGG Council selected *Incheon (Rep. of Korea)* as the site of the 29th IUGG General Assembly to be held in summer 2027. The exact dates of the assembly will be announced soon.

6. Liaison Officers to International and Intergovernmental Organisations for 2023-2027

The Council appointed the following Liaison Officers:

Name of the Organization	Name of the liaison (country)
ISC Committee on Data for Science and Technology (CODATA) and ISC World Data System (WDS)	Kirsten ELGER (GERMANY) Masahito NOSÉ (JAPAN)
ISC Committee on Space Research (COSPAR)	Simon WING (USA) Christopher KOTSAKIS (GREECE)
ISC Scientific Committee on Antarctic Research (SCAR)	Thomas BRACEGIRDLE (UK) Andrew MACKINTOSH (AUSTRALIA)
ISC Scientific Committee on Oceanic Research (SCOR)	Andrea FLOSSMANN (FRANCE) Hans VAN HAREN (NETHERLANDS)
ISC Scientific Committee on Solar-Terrestrial Physics (SCOSTEP)	Michael KOSCH (SOUTH AFRICA) Peter PILEWSKIE (USA)
UNESCO Earth Sciences	Patrick ALLARD (FRANCE) Mari Paz MIRALLES (USA)
UNESCO International Hydrological Program (UNESCO-IHP)	Liss Marie ANDREASSEN (NORWAY) Christophe CUDENNEC (FRANCE)
UNESCO Intergovernmental Oceanographic Commission (UNESCO-IOC)	Denise SMYTHE-WRIGHT (UK)
World Meteorological Organization (WMO)	Roger PULWARTY (USA) Sara BARSOTTI (ICELAND) Christophe CUDENNEC (FRANCE) Minghu DING (CHINA) Eugene ROZANOV (SWITZERLAND) Jens WICKERT (GERMANY) Hua ZHANG (CHINA)
United Nations Committee of Experts on Global Geospatial Information Management (UN-GGIM)	Harald SCHUH (GERMANY)
International Civil Aviation Organization (ICAO)	Samantha ENGWELL (UK) David SCHNEIDER (USA)
Intergovernmental Panel on Climate Change (IPCC)	Franz KUGLITSCH (GERMANY) Jianping LI (CHINA)
World Climate Research Programme (WCRP)	Lisa ALEXANDER (AUSTRALIA)
Consultative Committee for Time and Frequency (CCTF)	Sebastien MERLET (FRANCE)
Pan American Institute of Geography and History (PAIGH)	Laura SANCHEZ (GERMANY/COLOMBIA)
Group on Earth Observations (GEO)	Alexander RUDLOFF (GERMANY)

7. Resolutions of the 28th IUGG General Assembly

The Council approved the following six Resolutions:.

IUGG Resolution 1: Improving Protection of Geodetic Observatories from Active Radio Sources

The International Union of Geodesy and Geophysics,

Considering

- that the United Nations General Assembly Resolution 69/266 “A global geodetic reference frame for sustainable development” invites member states “to commit to improving and maintaining appropriate national geodetic infrastructure as an essential means to enhance the global geodetic reference frame”, and
- that the Global Geodetic Observing System (GGOS) of the International Association of Geodesy (IAG) is based on geodetic observatories employing radio telescopes for the method of Very Long Baseline Interferometry (VLBI) which is fundamental for the Global Geodetic Reference Frame (GGRF),

Acknowledging

- that a multi-national best-effort endeavour to provide the needed products has been carried out by the International VLBI Service for Geodesy and Astrometry (IVS) since 1999, and
- that the IVS is developing a new observing system, the VLBI Global Observing System (VGOS), to improve and enhance the global network capabilities in order to meet the accuracy goals needed for geodesy in the context of sustainable development,

Noting

- that the use of the electromagnetic spectrum is administered globally by the International Telecommunication Union (ITU), depending on inputs from national administrations,
- that the electromagnetic spectrum is a limited resource, and the increasing number of ground and space-based transmitters endanger the undisturbed VLBI observations of cosmic radio sources in the universe, and hence endanger the GGRF, and
- that there is no supra-national administration for the protection of global networks such as the global network of geodetic observatories,

Urges

the affiliated scientific associations to advocate spectrum management issues at national, regional and international administration levels for the protection of their interests in the use of the electromagnetic spectrum.

Resolves

- to support the introduction and conservation of local radio quiet zones or local coordination zones around the VLBI global network stations; and
- to bring this Resolution to the attention of the Director of the United Nations Statistical Commission (UNSC), to the Director of the United Nations Office for Outer Space Affairs (UNOOSA) and to the Secretary General of the ITU.

IUGG Resolution 2: Sustained Terrestrial Water Storage (TWS) Monitoring by Dedicated Gravity Satellite Constellations

The International Union of Geodesy and Geophysics,

Considering

- the interest of the IUGG scientific community to understand the processes of changes in global Terrestrial Water Storage (TWS), comprising all the water storage on the Earth's continental areas in frozen and liquid state, including ice caps, glaciers, snow cover, soil moisture, groundwater and the storage in surface water bodies and the interaction with ocean mass and sea level,
- that satellite gravimetry missions are a unique observing system to directly measure TWS on a regional to global scale,
- the ongoing efforts of national and international institutions and space agencies to extend the GRACE/GRACE-FO program of record that runs already for more than two decades and enhance it with improved satellite gravimetry products, and
- the significant efforts of the International Association of Geodesy (IAG) in developing and maintaining fundamental geodetic products, in particular snapshots of the Earth's time-variable gravity field providing TWS maps for scientific and societal benefits,

Acknowledging

the adoption by the IUGG of Resolution 2 in Prague 2015 on Future Satellite Gravity and Magnetic Mission Constellations, and the adoption of TWS as a new Essential Climate Variable (ECV) in the implementation plan 2022 of the Global Climate Observing System (GCOS),

Noting

- that satellite gravimetry missions such as GRACE and GRACE-FO successfully demonstrated the ability to globally observe the spatial and temporal variations of TWS from time-variable gravity on all continental areas,
- that improved temporal and spatial resolution and significantly increased accuracy are urgently needed by the user community and by operational services for, e.g., flood and drought monitoring and forecasting and water resources management, and
- that new technologies have been developed (such as laser ranging interferometry) or are currently being investigated (such as quantum gravimetry),

Urges

national and international space agencies and decision makers to

- implement and maintain long-term sustained observing systems of the Earth's time-variable gravity field realized by dedicated gravity satellite constellations with improved measurement technology to enable new science and applications of enormous societal benefit; and
- evolve them into sustainable operational services in the longer term.

IUGG Resolution 3: Sharing Geophysical Data across Borders

The International Union of Geodesy and Geophysics,

Noting

- that geopolitical conflicts create restrictions in sharing geophysical data across borders for scientific use, and
- that the above restrictions have negative impact on international scientific research, services and collaboration,

Recognizing

- that sharing geophysical data across borders is an international norm, and
- that sharing geophysical data can enhance their scientific returns and benefit the entire world, including nations that are involved in geopolitical conflicts,

Urges

- National Committees and relevant national bodies to take necessary actions in their respective countries to support sharing of geophysical data across borders; and
- the International Science Council (ISC) and other relevant international bodies to support national authorities, including those involved in geopolitical conflicts, in efforts to share geophysical data across borders.

IUGG Resolution 4: Weather and Climate Engineering Based on the Addition of Aerosol Particles

The International Union of Geodesy and Geophysics,

Considering

that anthropogenic greenhouse gas (GHG) emissions are increasing, leading to multi-decadal increases in global average temperature and other weather and climate impacts,

Recognizing

- that progress has been made in the understanding of the role of aerosol particles (AP) in Earth's weather and climate,
- that approaches to counteract the climate change of anthropogenic origin involving the interaction of AP with the atmosphere have been proposed, and
- that these concepts have become part of the discussion of weather and climate intervention (WCI) or geoengineering, the deliberate intervention in the regional and large-scale planetary environment of a nature and scale intended to counteract anthropogenic climate change and its impacts,

Acknowledging

- that scientific research on detailed AP-based WCI techniques is relatively new and the current level of scientific knowledge about their feasibility and effects is poorly understood,

- that AP-based WCI can potentially damage biodiversity, ecosystems, agricultural production, water security, ecological services for society and sustainable development inside as well as outside target regions, and
- that given the current state of understanding, AP-based WCI cannot be considered a complement to or replacement for other mitigation approaches,

Noting

that in addition to fundamental science questions, any attempt at AP-based WCI gives rise to societal, ethical, legal and governmental issues,

Recommends

further research on the fundamental science and possible efficacy of AP-based WCI schemes, conducted in an open and independent manner that engages public participation, is used to assess properly the potential risks of regional and global climate change both with and without AP-based WCI.

Urges

- the research community and policymakers to consider and address the societal, ethical, legal and governmental implications of AP-based WCI and fully engage all stakeholders in the decision-making process; and
- the development of effective and inclusive national and global governance frameworks that can address and manage all these considerations, prior to any WCI activity.

Resolves

that currently AP-based WCI cannot be considered an acceptable complement to

- the rapid implementation of required large reductions in GHG and short-lived climate pollutants; and
- greatly enhanced resilience to mitigate the increasingly serious problem of global warming.

IUGG Resolution 5: Preservation and Dissemination of and Enhanced Access to Analogue Records

The International Union of Geodesy and Geophysics,

Considering

the need for historical data preservation and open access in Earth sciences, and the risk of loss of large volumes of such data despite ongoing efforts devoted to their preservation,

Noting

- that the digital management of analogue data (seismograms, magnetograms, marigrams, meteorograms, etc.) will undoubtedly improve their future preservation and add a wealth of information to our analysis,
- that the management of analogue data is a challenging task for many scientific communities, and that some crucial data have already been lost forever, and

- the impending retirement of the last generation of geoscientists familiar with the use of analogue data, along with the loss of knowledge on how these data were recorded, calibrated, and analysed,

Recognizing

- the interdisciplinary consensus that all Earth science data, ranging from the deep Earth interior to the outer atmosphere, should be preserved, open, and freely accessible to the scientific community,
- the increasingly multidisciplinary nature of geoscience research,
- the rising value of long-term data series in geosciences for their long-term variability and short-term extremity,
- the increasing capabilities of modern computational infrastructure to facilitate storage, management, and access of data and information, and
- the growing recognition of the importance and benefits of the standardization of scientific data formats,

Encourages

the scientific community and their scientific bodies worldwide

- to participate continuously in the improvement of analogue data recovery, preservation, digitization, and open distribution using established standards and digital repositories to bridge the existing digital divide between researchers who only use digital records and those who are familiar with analogue ones;
- to document properly and include the procedures originally used to generate these records in their associated metadata; and
- to develop improved tools for their use.

Urges

- the International Science Council, UNESCO, WMO, and other relevant international bodies to assist national authorities in this mission;
- the funding agencies to support the effort to rescue valuable analogue data; and
- the scientific community to contribute to the development of unified standards as well as the coordination of digital repositories and their compatibility among themselves and with the WDS guidelines/policies while following FAIR principles.

IUGG Resolution 6: Thanks

The International Union of Geodesy and Geophysics,

Resolves

To record gratefully its appreciation for the organization, arrangements, and hospitality at its 28th General Assembly.

On behalf of all participants the Council expresses its warm thanks to the Local Organizing Committee, the Scientific Program Committee, the main organizer and host German Research Centre for Geosciences (GFZ) and its co-organizers: the Helmholtz Association, Geo.X, the Federal Institute for Geosciences and Natural Resources (BGR), the Federal Agency for Cartography and Geodesy (BKG), the GEOMAR Helmholtz Centre for Ocean Research Kiel and the Alfred Wegener Institute, Helmholtz Centre for Polar and Marine Research (AWI), the professional conference organizer company C-IN, and all others for making the 28th General Assembly an outstanding success in the beautiful city of Berlin.

8. Meeting Calendar

This calendar includes meetings which are planned to be organised in the next three months under the umbrella of IUGG, and major conferences of IUGG's partner organisations. The calendar is updated regularly and is also available [online](#). If you would like to add a meeting, or report changes, please contact the [IUGG Secretariat](#).

August

- 2-4, UNGGIM, New York City NY, USA, [13th Session of the United Nations Committee of Experts on Global Geospatial Information Management](#)
- 5-12, IAMG, Trondheim, Norway, [22st Annual Conference of the International Association for Mathematical Geosciences](#)
- 13-18, ICA, Cape Town, South Africa, [31st International Cartographic Conference](#)
- 19-26, URSI, Sapporo, Japan, [35th URSI General Assembly and Scientific Symposium](#)
- 28-5 September, IAVCEI, São Miguel, Azores, Portugal, [IAVCEI-CVL11 Workshop on Volcanic Lakes](#)

September

- 2-7, ISPRS, Cairo, Egypt, [ISPRS Geospatial Week 2023](#)
- 3-7, BGR, Berlin, Germany, [GeoBerlin 2023. Geosciences Beyond Boundaries – Research, Society, Future](#)
- 12-15, IAVCEI, Kiel, Germany, [Stronger Together – Oceanic Volcanism Workshop](#)
- 20-22, IAG, Yebes, Spain, [GGOS Days 2023](#)
- 25-29, IAHS, UNESCO, Dakar, Senegal, [Global FRIEND-Water 2023 International Conference](#)

October

- 8-14, AGI, Online, [Earth Science Week 2023](#)
- 16-20, IAG, Arequipa, Peru, ILRS Technical Workshop
- 16-20, IAG, IAVCEI, Lanzarote, Spain, [International Workshop on Geoscience in Active Areas](#)
- 17-19, SCOR, IAPSO, Guayaquil, Ecuador, [2023 SCOR Annual Meeting](#)
- 23-26, CODATA, WDS, Salzburg, Austria, [International Data Week 2023](#)
- 23-27, WCRP, IUGG, Kigali, Rwanda, [WCRP Open Science Conference 2023](#)
- 24-27, IAG, IASPEI, Sousse, Tunisia, [20th WEGENER Assembly 2023](#)

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Editors: Tom Beer, Franz Kuglitsch, Chris Rizos, and Alexander Rudloff (Editor-in-Chief).