

INTERNATIONAL UNION OF GEODESY AND GEOPHYSICS UNION GEODESIQUE ET GEOPHYSIQUE INTERNATIONALE

The IUGG Electronic Journal

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This monthly newsletterr 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. Season's Greetings



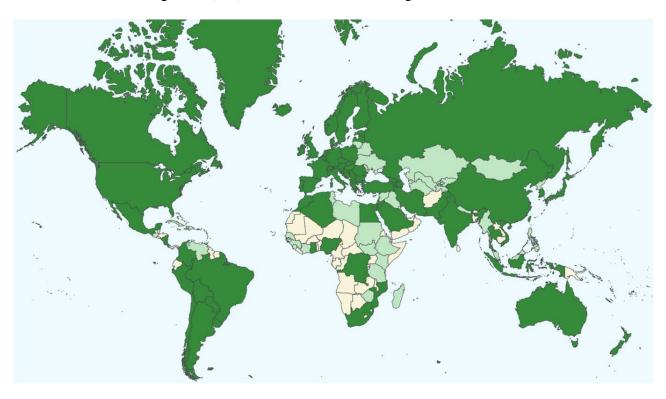
The IUGG Executive Committee and the IUGG Secretariat thank the Adhering Bodies and National Committees, Union Associations and Union Commissions as well as all other groups and individuals who helped make the challenging year 2023 productive, and also to all those who contributed to strengthening international scientific cooperation in Earth and space sciences for the benefit of society.

We wish you happiness, health and great success in 2024.

We look forward to seeing you in person at one of our many 2024 meetings organised under the umbrella of IUGG.

2. IUGG – Membership and Financial Situation 2024

As of 1 January 2024, IUGG has 74 National Members, including 59 countries in paying status. The paying members are placed in categories from 1 to 14 depending on their financial contribution to the Union (the membership dues rise with increasing category number). At present, the highest category is category 11. The members pay dues according to a number of units assigned to their category (in category 1 the number of units is 1, and in category 11 the number is 35). According to a decision made at the XXII IUGG General Assembly (Boulder, USA, 1995), the price of 1 unit is determined every year using an inflator index obtained from the Bureau of Labor Statistics, U.S. Department of Labor. In 2024, the price of 1 unit will be USD 2,460. The 59 paying members represent a total of 278 units, which is equivalent to a total income of USD 683,880. The funds received as dues are the basis for IUGG's operations as a scientific union, although the Union Associations may have their own additional funding through book sales, donations, or other means. The funds are spent to support: (i) scientific activities of Union Associations and Commissions; (ii) international scientific programs, projects and services; (iii) general and scientific assemblies, symposia, workshops, and schools; (iv) the IUGG Grants Program; (v) the International Lithosphere Program; (vi) the International Science Council; (vii) travel of students, early career scientists, and scientists from developing countries to attend scientific meetings; and (viii) administration and management.



 $Regional\ distribution\ of\ current\ (dark\ green)\ and\ former\ (light\ green)\ IUGG\ Member\ Countries\ (as\ of\ 01.01.2024)$

Niels Andersen, IUGG Treasurer

3. IUGG - Yearbook 2024

The <u>IUGG Yearbook 2024</u> is now available. Thanks to the National Committees, the Associations and Commissions for helping to update the information in the Yearbook! During 2024, updates on addresses and other information in the Yearbook should be sent to the <u>IUGG Secretariat</u> as soon as they are known. Our aim is to update the Yearbook as needed throughout the year.

4. IUGG - Grants Program 2024-2027

IUGG continues its Grants Program for 2024-2027, which will complement the Union program of funding symposia and workshops organised or co-sponsored by Union Associations and Union Commissions. Key priority areas are defined for the Grants Program in line with IUGG overall scientific strategies:

- Creation of new knowledge in Earth and space sciences.
- Dissemination of knowledge, data and information on geophysics and geodesy.
- Geoscience for sustainable development.
- Geoscience and policy interface.
- Geoscience education and outreach in developing countries.

Proposals related to the priority areas will be funded for a fixed term of one or two years. The IUGG Grants Program aims to support projects of importance to the international geophysical and geodetic community, which will explore new scientific ideas, develop future international initiatives, and follow open science practices. A typical proposal may be for a workshop or a meeting of experts from several disciplines to develop a specific scientific program or assessment, particularly addressing an enhancement of geophysical research and Earth science education in underdeveloped and developing countries. Although the range of activities supported is broad, the project proposals should be of scientific and societal importance, and their results are expected to provide clear recommendations to politicians and other decision makers at national and local levels and to the general public in terms of the urgent actions to be undertaken. The deliverables of the projects should bring increased visibility to IUGG and the Union Associations.

Proposals can be submitted by IUGG Associations and Union Commissions only. Associations' bodies (e.g., Commissions, Task and Work Groups) seeking funding for a project should submit their proposals via relevant IUGG Associations or Union Commissions. Any grant application must involve at least two IUGG bodies (Associations or Union Commissions): a Lead Applicant + at least one Supporting Applicant. Preference will be given to proposals that are multi- and trans-disciplinary and truly international, especially those involving more than two of the IUGG Associations and Union Commissions and representatives of several nations and countries. Proposals should be global or regional in scope and involve a multi-national group, especially scientists from developing countries, women, and younger researchers.

The number of proposals to be funded per year is not fixed, but depends upon relevance, quality, proposal budget requests, and the total amount of funds available for the Grants Program. The total funding for the Program in 2024-2025 is USD 100,000. The same amount of funds is reserved for 2026-2027. A ceiling of USD 20,000 is imposed on all applications. Co-sponsorship from other sources is encouraged.

The deadline for the project proposal submission is 1 April 2024 for the first call and 1 April 2026 for the second call. Following a biennial call, all proposals are peer-reviewed in open competition by the IUGG Bureau. If necessary, experts may be invited to participate in the review process. Successful applicants will be notified by 1 June 2024 (and 1 June 2026, respectively).

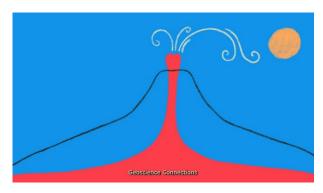
Grants will be made for periods of one or two years commencing from 1 July 2024 (and 1 July 2026, respectively). Projects may be cancelled if progress has been unsatisfactory. For funded projects, an annual report is to be sent to the IUGG Secretariat by 31 October 2025 (31 October 2027, respectively) and subsequently annually on the same date for all multi-year projects. A final technical report (incl. the highlights of the project; deliverables; recommendations) and a financial report (incl.

details and invoices about the expenditures which are covered by the IUGG funds) are to be submitted within three months of the date of the project completion.

Applicants are encouraged to submit their applications electronically. The application form can be obtained from the <u>IUGG Secretariat</u> on a request of IUGG Association or Union Commission Secretaries General.

Further information is available here.

5. IUGG – Geoscience Connections



'Geoscience Connections' offers you a fascinating journey through the Earth's history, explained by eight early-career researchers who represent each International Association of IUGG. The timeline starts from the formation of our planet and across billions of years when humans became Earth's inhabitants. On the one hand, the intelligent human brain allowed for the development of various brilliant technologies and a complex society. On the other hand, humans have participated in the

uncontrolled exploitation of natural resources, and are thought to have caused many problems to other living beings on our planet. IUGG geoscientists help us to better understand Earth processes, bring us hope for the problems humanity faces and solutions towards a more sustainable Earth.

6. CMG – Keilis-Borok Medal: Call for Nominations (EXTENDED deadline)

The IUGG Commission on Mathematical Geophysics (CMG) calls for nominations for the Vladimir Keilis-Borok Medal. The medal recognises middle career scientists who made important contributions to the field of mathematical geophysics. The medal will be awarded during the 2024 CMG meeting in Mumbai, India. Scientists after 10 years and within 20 years of receiving their PhD are eligible to be nominated. The nomination deadline is on 28 January 2024. The details of the award, including the instructions on submitting a nomination package, can be found here.

7. WCRP – Open Science Conference 2023: Meeting Report

More than 1400 delegates of the World Climate Research Programme 2023 Open Science Conference (WCRP2023) met in Kigali from 23 to 27 October 2023, representing scientists from diverse research communities worldwide as well as practitioners, planners and politicians, to discuss urgently needed solutions to climate change and the evolution of inclusive international climate science.



This once-in-a-decade event was truly hybrid with around 700 delegates participating onsite at the Conference Center and an equal number joining virtually from all around the world. The Conference was instrumental in reaching audiences from the Global South: 32% of the delegates were from Africa

and 26% from other regions of the Global South. At the same time the event had a clear eye to the future, attracting many early career scientists.

The WCRP2023 was held in Africa in recognition of the disparities in the drivers and consequences of climate change around the world; persistent inequities in the global scientific community that undermine and disadvantage the knowledge contribution from communities in resource-poor nations; and a collective commitment to address both. As other regions of the Global South, African countries face disproportionate burdens and impacts, risks arising from climate change-related, severe weather events and patterns, including prolonged droughts, heatwaves, devastating floods and landslides, disastrous tropical cyclones, and wild/forest fires.

Conference Output:

- Kigali Declaration
- Concept Papers published in Frontiers in Climate

WCRP thanks IUGG for its financial support to cover the registration fees of 13 early-career scientists from Africa.

Michael Sparrow, Head of the WCRP Secretariat

8. ISC – IRDR Scientific Committee: Call for Nominations



Members of the International Science Council (ISC), incl. IUGG, are now invited to nominate candidates for the <u>IRDR</u> Scientific Committee.

Please let the <u>IUGG Secretariat</u> know by **10 January 2024** if you know anyone who would be willing to be nominated for the IRDR Scientific Committee on behalf of IUGG. Then, the IUGG Bureau will discuss the proposals received and decide on which nomination(s) to submit.

Any candidate should be aware of providing information as requested by the online nomination form.

9. Awards and Honours

International Science Council (ISC)

ISC announced its <u>2023 Fellows</u>. The ISC Fellowship recognises individuals for their outstanding contributions to the promotion of science as a global public good. The Fellowship is the highest honour that can be conferred on an individual by the ISC.

Among the 2023 Fellows are the following scientists who have been active in IUGG:

John A. Church (Australia), IAPSO Prince Albert I Medalist 2023; Corina Risso (Argentina), Chair of the IUGG Finance Committee (2019-2023); Carlos A. Vargas Jiménez (Colombia), IASPEI National Correspondent (2005-2023); and Jun Xia (China), IUGG Bureau Member (2019-2023).

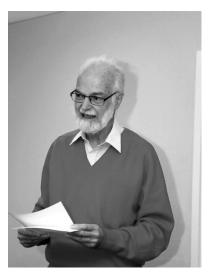
Congratulations!

10. Obituaries

Søren Gregersen (1942-2023), IUGG Treasurer 1987-1999

On 28 September 2023, Søren Gregersen Dr. Scient., State Seismologist and former IUGG Treasurer from 1987 to 1999, passed away in Hørsholm, Denmark, at the age of 81.

Søren Gregersen was born on 27 April 1942 and from a young age had a strong interest in science. At that time growing up in Denmark, science was dominated by Niels Bohr, and major advances in physics were being made. In October 1960, at the age of 18, Søren was selected along with an American scout, to live for 6 months at the Camp Century base, where drilling into the Greenland ice sheet was underway. During his time at the base, Søren worked with researchers and the US military staff running the base and operating a nuclear reactor for a power supply. In regular letters, Søren's adventures on the Greenland ice sheet were published in Danish newspapers, making him famous throughout Denmark as 'Søren the scout'. At University of Copenhagen, Søren studied geophysics and specialized in seismology, earning the master of science degree in 1968.



Søren Gregersen (Photo Credit: Peter Brandi)

After completing his degree, Søren was employed as a geodesy assistant at the Danish Geodetic Institute, where the seismic service at that time was hosted and that operated and reported on data from seismographs in Denmark and Greenland since 1927. In 1970 Søren went to the Lamont-Doherty Geological Observatory at Columbia University in New York, USA., where he graduated with a Ph.D. in seismology in 1974. His thesis was on on the amplitudes of horizontally refracted Love waves. As a researcher, he returned to the Danish Geodetic Institute and continued his work in seismology focusing on earthquakes in Denmark and Greenland, Lg wave propagation and Lg wave tomography. Søren's studies on Lg waves constituted a major part of his Dr. Scient thesis which he successfully defended at University of Copenhagen on 6 December 1985. Søren presented his research on many journeys around the world and often was provided with gifts for Inge Lehmann, which he presented to her during coffee at her apartment in Copenhagen.

In 1994 the seismic service was transferred to the National Survey and Cadastre where Søren was appointed senior researcher. In 1997, Søren was appointed State Seismologist and headed the section managing the seismic service. In addition, Søren was appointed adjunct professor at University of Copenhagen lecturing in solid earth physics and supervising student projects. As a supervisor Søren Gregersen was always welcoming students to the seismology field.

Many students across Europe benefited from Søren's leadership during the Teleseismic Tomography experiment across the Tornquist Zone, in short the TOR project, one of the first large multi-national deployments of broad band and short period digital mobile seismic stations, in Germany, Denmark and Sweden.

In 2004 the seismic service was transferred to the Geological Survey of Denmark and Greenland, where Søren continued his work as State Seismologist until 15 November 2009, when he retired.

After his retirement Søren enjoyed life with his wife Allis and their grandchildren. Søren also received the Emeritus title at the Geological Survey of Denmark and Greenland, publishing several papers mainly focused on postglacial uplift and earthquakes in Scandinavia.

Over a period of 16 years Søren Gregersen was engaged in the IUGG leadership. He served as Assistant Treasurer 1983-1987 and from 1987-1999 he took on the full responsibilities as Treasurer. This period was a period where major changes were made to the financial/membership structure of the union. Søren Gregersen played an active role in the restructuring that was approved by the Council in 1995 in Boulder. The system is still in function.

Both as an IUGG officer and as a scientist Søren Gregersen was very dedicated to the advancement of the sciences of IUGG. He always stressed IUGG's role as a true global scientific union.

We have met Søren at various times of his life. It goes back to the late 60's where Søren Gregersen was hired as an instructor for the first Solid Earth Physics course at the University of Copenhagen.

Working together with Søren has always been a pleasure. And traveling with Søren was also a great pleasure, especially when Allis joined Søren at the many conferences. Søren had an enormous network in the research community from his engagement at the IUGG, the CTBTO, and many other international collaborations. He was always eager to share his network and to bring people together with a contagious kindness, enthusiasm, and optimism.

Peter Voss, Member of the IUGG National Committee for Denmark Aksel W. Hansen, President of the IUGG National Committee for Denmark and IUGG Treasurer (1999-2019)

Niels Andersen, IUGG Treasurer and Member of the IUGG National Committee for Denmark

With great sadness IUGG reports the death of

Ivan Georgiev, President of the IUGG National Committee of Bulgaria (2017-2023).

11. Meeting Calendar

January

- 15-25, IACS, Mount Ruapehu, New Zealand, Girls on Ice Aotearoa

February

- 11-17, IAVCEI, La Antigua, Guatemala, Cities on Volcanoes 12
- 25-2 March, IACS, Sodankyla, Finland, 8th Snow Science Winter School
- 28-29, ISC, Online, ISC Extraordinary General Assembly

March

- 4-8, IAG, Tsukuba, Japan, IVS 2024. 13th General Meeting and 25th Anniversary
- 21-29, IACS, Edinburgh, UK, Arctic Science Summit Weak

April

- 1-4, IUGG, IAMAS, Cargèse, Corsica, France, Molecular Understanding of Atmospheric Aerosols Workshop and School
- 14-19, EGU, Vienna, Austria, EGU General Assembly 2024

May

- May, IUGG, IASPEI, France, Marine heat flow: assessment of the Southern Hemisphere and kick-off for the development of marine heat flow as an Essential Ocean Variable
- 6-10, IUGG, IAGA, IAMAS, Ourense, Spain, <u>12th International Workshop on Long-Term</u> <u>Changes and Trends in the Atmosphere</u>
- 13-17, IUGG, IAGA, L'Aquila, Italy, Course on Operational Space Weather Fundamentals
- 20-24, IAVCEI, Nový Jičín, Czech Republic, Volcandpark 2024
- 30-1 June, IUGG, CMG, IASPEI, Mumbai, India, Workshop on Computational Geosciences for Sustainable Development

June

- 2-7, IUGG, CMG, Mumbai, India, 34th Conference on Mathematical Geophysics.
- Mathematical Geophysics for Sustainable Development
- 2-7, IUGG, IAGA, Fredericton, New Brunswick, Canada, The Combined ANGWIN/VCAIS Meeting
- 7-17, IUGG, IACS, McCarthy AK, USA, <u>International Summer School in Glaciology</u>
- 17-21, IUGG, IAMAS, Hangzhou, China, Quadrennial International Radiation Symposium 2024
- 23-28, AOGS, Pyeongchang, Rep. of Korea, AOGS Annual Meeting 2024
- 23-28, IUGG, SEDI, Great Barrington MA, USA, 18th Symposium of SEDI
- 24-27, IUGG, IAMAS, La Jolla CA, USA, <u>International Atmospheric Rivers Conference</u> 2024
- 24-28, IUGG, IASPEI, San José, Costa Rica, <u>4th Regional Assembly Latin American and Caribbean Seismological Commission</u>
- 30-5 July, IAGA, Utrecht, Netherlands, <u>18th Castle Meeting New trends on Paleo-, Rockand Environmental Magnetism</u>

July

- 13-14, IUGG, IAMAS, Seogwiposi, Jeju, Rep. of Korea, Workshop on Scientific Directions for Cloud Chamber Research
- 13-14, IUGG, IAMAS, Seogwiposi, Jeju, Rep. of Korea, Workshop on Evaluation of Cloud Probe Processing Software
- 13-21, COSPAR, IUGG, Busan, Rep. of Korea, 45th COSPAR Scientific Assembly
- 14-19, IAMAS, Jeju, Rep. of Korea, <u>International Conference on Clouds and Precipitation</u>
- 15-19, IUGG, IAMAS, Boulder CO, USA, Quadrennial Ozone Symposium
- 15-20, IUGG, IAPSO, Buenos Aires, Argentina, From meso to sub-mesoscale ocean circulation stractures: satellite and in-situ measurements, physical mechanisms and biological impact
- 24-25, IAHS, Eichstätt, Germany, <u>International Commission on Continental Erosion (ICCE)</u> Symposium 2024

August

- 6-15, IAU, Cape Town, South Africa, <u>32nd IAU General Assembly</u>
- 24-30, IGU, Dublin, Ireland, <u>35th International Geographical Congress</u>
- 25-30, IAG, Strasbourg, France, 20th Geodynamics and Earth Tides Symposium
- 25-31, IUGS, Busan, Rep. of Korea, 37th International Geological Congress
- 26-29, IAG, Thessaloniki, Greece, Gravity, Geoid and Height Systems 2024

September

- 7-13, IAGA, Beppu, Japan, <u>26th Electromagnetic Induction Workshop</u>
- 9-13, IAMAS, Kuala Lumpur, Malaysia, <u>16th International Commission on Atmospheric Chemistry and Global Pollution Symposium and 18th International Global Atmospheric Chemistry Science Conference</u>
- 22-27, IUGG, IASPEI, Corfu, Greece, <u>39th General Assembly of the European Seismological Commission</u>
- 30-4 October, IAGA, Breckenridge CO, USA, <u>11th VLF and ELF Remote Sensing of the Ionosphere and Magnetosphere (VERSIM) Meeting</u>

October

- 6-9, EMSEV, IAGA, IASPEI, IAVCEI, Chania, Greece, <u>Electromagnetic Studies of</u> Earthquakes and Volcanoes
- 7-11, IAG, Potsdam, Germany, GGOS Days 2024 and GGOS Focus Areas Topical Meeting
- 31-6 November, IAGA, Vassouras, Brazil, XXth IAGA Workshop on Geomagnetic Observatory Instruments, Data Acquisition and Processing
- October, IUGG, IASPEI, South Africa, 4th General Assembly of the African Seismological Commission

November

- 3-8, IUGG, IASPEI, Antalya, Türkiye, 15th General Assembly of the Asian Seismological Commission
- 4-7, IUGG, IAHS, Florianópolis, Brazil, 9th International Water Resources Management Conference of the International Association of Hydrological Sciences; 14th International Workshop on Statistical Hydrology of the International Association of Hydrological Sciences; and 1st Encontro Brasileiro de Hidrologia Estatística

December

- 9-13, AGU, Washington DC, USA, AGU Fall Meeting 2024

Associations Scientific Assemblies 2025

- 29 June 4 July, IAVCEI, Geneva, Switzerland, IAVCEI Scientific Assembly 2025
- 20-25 July, IACS, IAMAS, IAPSO, Busan, Rep. of Korea, <u>IACS-IAMAS-IAPSO Joint</u> Scientific Assembly 2025
- 31 August 6 September, IAGA, IASPEI, Lisbon, Portugal, IAGA-IASPEI Joint Scientific Assembly 2025
- 1-5 September, IAG, Rimini, Italy, IAG Scientific Assembly 2025
- 5-10 October, IAHS, Roorkee, India, IAHS Scientific Assembly 2025

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