



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

The IUGG Electronic Journal

Volume 24 No. 2 (1 February 2024)

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.

Contents

1. IUGG Association Journals
 2. IUGG Supported Meetings – Announcements
 - a. IAG/IAMAS – ITU/WMO/UNEP Focus Group on AI for Natural Disaster Management
 - b. IAGA – Course on Operational Space Weather Fundamentals
 - c. IAMAS – Ozone Symposium 2024
 - d. IAPSO – Summer School ‘From meso to sub-mesoscale ocean circulation structures: satellite and in-situ measurements, physical mechanisms and biological impact’
 3. IACS-IAMAS-IAPSO Joint Scientific Assembly 2025 – Call for IAMAS Session Proposals
 4. Kyoto Landslide Commitment 2020
 5. ISC – Global Science-Policy Work: Call for Nominations
 6. IYBSSD – Closing Ceremony
 7. WCRP – Joint Scientific Committee: Call for Membership
 8. Meeting Calendar
-

1. IUGG Association Journals

The IUGG, through some of its Associations, regularly 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 modeling 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 e. g. 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; modeling and quality control; space geodesy; remote sensing; gravity fields, and geodynamics. The Journal of Geodesy is published by Springer. **Five year impact factor: 4.9 (2022).**



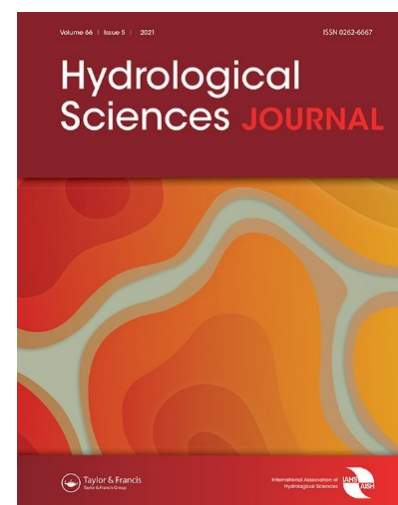
- A journal of the IAG
- An international journal examining scientific problems of geodesy and related interdisciplinary sciences
- Covers the entire range of geodetic science
- Presents peer-reviewed papers on theoretical or modeling studies, and on results of experiments and interpretations
- Reports 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: 3.7 (2022).**

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

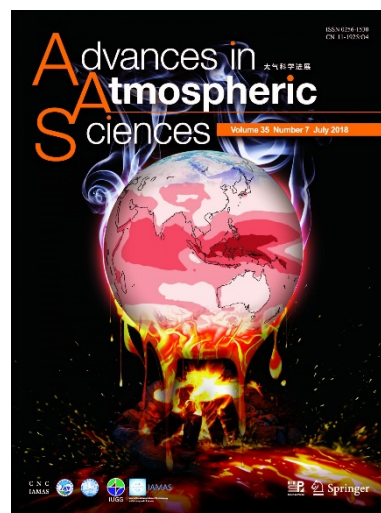


- Measurement, mathematical representation and computational aspects of hydrological processes
- Hydrological aspects of the use and management of water resources and their change under the influence of human activity
- Water resources systems, including the planning, engineering, management and economic aspects of applied hydrology

International Association of Meteorology and Atmospheric Sciences (IAMAS)

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

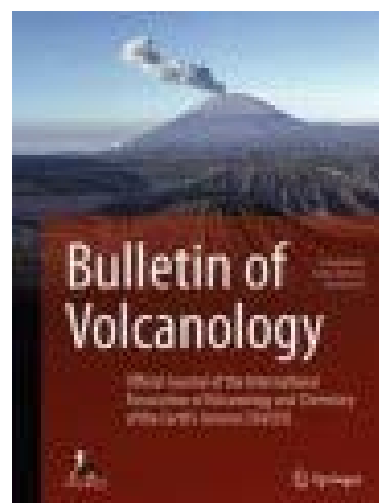
Papers cover the subject areas including but not limited to atmospheric and oceanic theories, modelling and observations; weather and general circulation systems, numerical weather prediction, climate dynamics; satellite meteorology, remote sensing, air chemistry and the boundary layer, clouds and precipitation; 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 generalized 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 associated journal of IAMAS. **Five year impact factor: 4.7 (2022).**

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

The [Bulletin of Volcanology](#) was founded in 1922, as 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 (2022).**



2. IUGG Supported Meetings – Announcements

IAG/IAMAS – ITU/WMO/UNEP Focus Group on AI for Natural Disaster Management



Resolutions

Resilience to natural hazards
through AI solutions
ITU Global Initiative

On 13-15 March 2024, NASA's Goddard Earth Systems and Technology Center (GESTAR II) at the University of Maryland, Baltimore County (UMBC) will host a workshop and meeting of the [ITU/WMO/UNEP Focus Group on AI for Natural Disaster Management](#). The workshop will highlight how AI solutions can contribute to

natural hazard resilience. The meeting will discuss the progress of ongoing activities, the adoption of new use cases, and the transition of the Focus Group into an ITU Global Initiative. Anyone with an interest in the topic is welcome to join by registering on the Focus Group website. Furthermore, we have reopened our call for use cases. Therefore, if you are using AI in your research, please consider submitting a use case proposal to have it included in our activities. Finally, through the IUGG Grants Program (special call – IYBSSD2002) for which IAMAS and IAG were lead applicants, we are pleased to announce that limited travel support is available [with priority for those based in least developed countries (LDCs) and small island developing states (SIDS), for woman scientists, and for early career scientists]. To learn more, please contact the [Focus Group secretariat](#).

IAGA – Course on Operational Space Weather Fundamentals

The Course on Operational Space Weather Fundamentals will be held in L'Aquila, Italy, from 13 to 17 May 2024. The course serves as a comprehensive introduction to the multi-faceted field of Space Weather, covering solar-heliospheric, magnetospheric, and ionospheric weather, with a specialized focus on operations and forecasting. By establishing the links from research to operations (R2O) and from operations to research (O2R) and by highlighting the effects of space weather on technological systems and society, this curriculum aims at stimulating the involvement of the next-generation researchers in this rapidly growing discipline.



Lectures on phenomenology will be complemented by laboratory activities and applications with the direct and active involvement of the attendees. Another practical aspect will be covered by the 'career section' aimed at illustrating which skills are desirable for a job in the frame of space weather research and surveillance centres, and how good strategies should be used for educational and communication purposes.

The course is addressed to PhD students and early career scientists in space physics, planetary sciences, aerospace engineering, or related fields. Early-career stage professionals from monitoring agencies and industries related to space weather are invited to apply as well. A selection of 30-40 participants will be made.

More details about the course and the application process are available [here](#).



The Quadrennial Ozone Symposium ([QOS2024](#)) will be held in Boulder CO, USA, from 15 to 19 July 2024. The abstract submission deadline is on **14 February 2024**.

The QOS2024 will bring together and facilitate scientific exchange between scientists from all over the world working on all aspects of ozone research. This is the quadrennial meeting of researchers, educators, public and stakeholders who are interested in monitoring and understanding processes that impact ozone layer including the monitoring of changes in global ozone levels, declining emissions of ozone depleting substances

(ODS) moderated under the Montreal Protocol activities, climate processes and feedbacks, air quality impacts on the tropospheric ozone, environmental and health impacts, development of new instruments and techniques, and extreme events (i.e., volcanic, wildfires, and anthropogenic in nature). Each of the topical sessions will be introduced by a keynote speaker, with oral and poster presentations providing a platform for discussion and exchange in plenary sessions. The event will include the ice breaker meeting, five days of oral and poster presentations, side meetings, and a banquet with awards given to the early career scientists and life career awards. The sessions will also be available for online viewing and virtual presentations in order to facilitate wider participation across the world at a minimal cost to researchers.

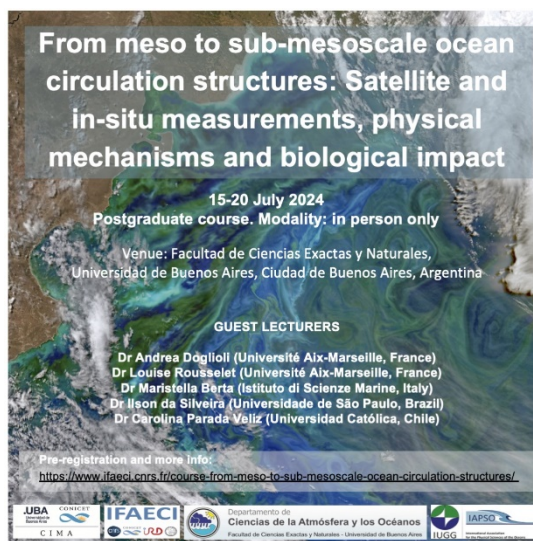
The International Association of Meteorology and Atmospheric Sciences (IAMAS) with its International Ozone Commission, the Cooperative Research in Environmental Sciences of the University of Colorado, and the Local Organizing Committee are looking forward to your participation.

IAPSO – Summer School ‘From meso to sub-mesoscale ocean circulation structures: satellite and in-situ measurements, physical mechanisms and biological impact’

The [Summer School ‘From meso to sub-mesoscale ocean circulation structures: satellite and in-situ measurements, physical mechanisms and biological impact’](#) will be held in Buenos Aires, Argentina, from 15 to 20 July 2023. The aims are to provide basic tools to understand:

- how meso and submesoscale structures develop and propagate in the ocean; and
- how to detect and measure those structures both from satellites and from in situ measurements;
- what impact those structures have on biophysical processes in the ocean and at all the trophic levels.

The registration deadline is on **1 April 2024**.



Time and spatial sampling are limiting factors of the spatio-temporal resolution of the phenomena we can describe in the ocean. In-situ observations and high (e.g., 1 km) satellite spatial resolution images of sea surface temperature and color clearly show the complexity of the ocean. Being able to increase

the spatial and temporal resolution of observations is of critical importance: productivity in the surface of the ocean is up to an order of magnitude larger at scales of 100 m to 1 km (submesoscale) than at scales of 40 to 200 km (mesoscale). Thus, current air-sea fluxes of climate-related variables such as CO₂ could be seriously biased as a proper biological pump is not considered. Furthermore, ocean circulation at scales shorter than 100 km is responsible for transporting half of the heat and carbon from the upper ocean to the deep ocean, two critical processes whose knowledge we should increase to understand global climate change. A major change is expected with the upcoming dataset that will be provided by the Surface Water and Ocean Topography (SWOT) satellite mission, launched in December 2022. Also, the tracking of dense arrays of surface drifters are helping to quantify vertical velocities in the upper layer of the ocean.

The summer school is endorsed by the Department of Atmospheric and Oceanographic Sciences of the Faculty of Natural Sciences of the University of Buenos Aires of Argentina and therefore, gives credits to PhD students who pass a final test.

3. IACS-IAMAS-IAPSO Joint Scientific Assembly 2025 – Call for IAMAS Session Proposals



The IAMAS has sent an initial call for session proposals for the IACS-IAMAS-IAPSO Joint Scientific Assembly 2025 to its constituent commissions with a due date of **1 March 2024**. Anyone interested in leading an IAMAS related session at the Joint Assembly may wish to contact the leadership of the most relevant [IAMAS commission](#) directly or the [IAMAS Secretary General, Keith Alverson](#). Furthermore, looking ahead to the subsequent Assembly, to be held in 2029, any national delegates interested in hosting the IAMAS Assembly, and any other IUGG Associations that may be interested in holding their 2029 Assembly together with IAMAS, are encouraged to contact the IAMAS Secretary General well in advance of the 2025 Meeting.

4. Kyoto Landslide Commitment 2020

The International Consortium of Landslides (ICL), IUGG, and other global stakeholders established the Kyoto Landslide Commitment 2020 for Global Promotion of Understanding and Reducing Landslide Disaster Risk ([KLC2020](#)) in 2020, and decided to launch the open access book series ‘Progress in Landslide Research and Technology (P-LRT)’ as a core activity of KLC2020 at the Fifth World Landslide Forum, which was held from 2 to 6 November 2021 in Kyoto, Japan.

The ICL Open Access Book Series ‘P-LRT’ was launched in 2022 with the founding issues of Volume 1, Issue 1 and Issue 2. Volume 2, Issue 1 and Issue 2 were published in December 2023. The themes of Vols 1 and 2 were diverse and ranged from early warning and real-time prediction to climate change, experimental and numerical analysis, landslide-induced tsunami, hazard mapping, resilience and sustainability, giant landslides on volcanic islands, cultural heritage, and socio-economic significance. All articles/issues can now be accessed and downloaded at: [Vol 1, Issue 1](#); [Vol 1, Issue 2](#); [Vol 2, Issue 1](#); and [Vol 2, Issue 2](#).



Four book covers of the ICL Open Access Book Series ‘P-LRT’ in 2022 and 2023

In order to contribute to KLC2020, ICL and the Global Promotion Committee of IPL and KLC2020 (GPC/IPL-KLC) including IUGG jointly organised the Sixth World Landslide Forum, in Florence, Italy, from 14 to 17 November 2023. The IUGG President Chris Rizos provided a [video message](#) for the opening ceremony and the IUGG Secretary General Alexander Rudloff participated in the High-Level Panel Discussion ‘Review of KLC2020 and the way Forward’ on 14 November 2023. The [Florence Declaration on Landslide Risk Reduction](#) was adopted in this High-Level Panel Discussion. The number of participants was 1,202, from 69 countries, and the number of oral presentations was 643. The Sixth World Landslide Forum programme covered [six themes](#) including (i) Kyoto Landslide Commitment for sustainable development, (ii) Remote sensing, monitoring and early warning, (iii) Testing, modeling and mitigation techniques, (iv) Mapping, hazard, risk assessment and management, (v) Climate change, extreme weather conditions, earthquakes and landslides, and (vi) Progress in landslide science and applications. All abstracts are available [here](#).

KLC2020 was supported by the IUGG Grants Program.

Kyoji Sassa, ICL Secretary General

5. ISC – Global Science-Policy Work: Call for Nominations



**International
Science Council**

The International Science Council (ISC) [calls for experts to participate in global science-policy work](#) who should constitute an ISC roster of experts pertaining to 20 key areas that are prominent on the United Nation’s (UN) agenda.

The ISC will draw on this roster to

- provide ad-hoc science advice to the UN secretariat and UN Member States
- prepare high-level briefs for the UN Secretariat and UN Member States
- develop statements on behalf of the international scientific community
- provide recommendations of speakers for high-level debates and panels for policy-making audiences

Please consider adding your name to the roster by completing the [online form](#) by **29 February 2024**.

6. IYBSSD – Closing Ceremony

The Closing Ceremony of the International Year of Basic Sciences for Sustainable Development ([IYBSSD](#)) took place on 15 December 2023 in the new Science Gateway building at CERN in Geneva, Switzerland. The ceremony showcased the rich portfolio of a year filled with insightful discussions, ground-breaking research, and significant advancements in the field of basic sciences. It reflected on the achievements made towards the implementation of the Sustainable Development Goals (SDGs) and looked ahead to future challenges and opportunities in the realm of sustainable development and scientific innovation, now that an [International Decade of Sciences for Sustainable Development](#) (2024-2033) has been declared.



IUGG, as a founding partner of the IYBSSD, was represented by its Secretary General.

The programme of this event is available [here](#).

7. WCRP – Joint Scientific Committee: Call for Membership



The World Climate Research Programme ([WCRP](#)) is calling for nominations for membership of the WCRP's Joint Scientific Committee (JSC). Initial terms are for four years, starting January 2025.

The JSC is the highest-level steering committee of WCRP and an inclusive source of leadership for international climate research. Its membership includes world-leading scientists from around the world, representing a wide range of disciplines with relevance to WCRP's work, both from the natural and social sciences. The JSC leads all aspects related to the science and organization of WCRP, aligned with its Science and Implementation Plan and with the overall aims and interests of its sponsoring organizations: the World Meteorological Organization, the Intergovernmental Oceanographic Commission of UNESCO, and the International Science Council. Nominations are invited from excellent, world-leading scientists from around the globe with a proven track record. Nominations are particularly encouraged from women and from those in the Global South. JSC members are selected for their scientific knowledge and standing, capability, and strategic vision. Initial shortlisting will be carried out by the JSC, with the final approvals being made by WCRP's sponsors.

Nominations can be self-nominations or submitted by others. The deadline for nominations is **15 March 2024**.

Further information is available [here](#).

8. Meeting Calendar

This calendar includes meetings which are planned to be organised under the umbrella of IUGG, and major conferences of IUGG's partner organisations (in *italics*). 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](#).

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

- 3-6, IAHS, Roorkee, India, [Roorkee Water Conclave 2024](#)
- 4-8, IAG, Tsukuba, Japan, [IVS 2024. 13th General Meeting and 25th Anniversary](#)
- 10-14, DGG, Jena, Germany, [84th Annual Meeting of the German Geophysical Society](#)
- 13-15, IUGG, IAG, IAMAS, Baltimore MD, USA, [ITU/WMO/UNEP Focus Group on AI for Natural Disaster Management](#)
- 21-29, IACS, Edinburgh, UK, [Arctic Science Summit Week](#)

April

- 1-4, IUGG, IAMAS, Cargèse, Corsica, France, Molecular Understanding of Atmospheric Aerosols Workshop and School
- 8-12, ESA, Copenhagen, Denmark, [Swarm 10 Year Anniversary & Science Conference 2024](#)
- 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, [12th International Workshop on Long-Term Changes and Trends in the Atmosphere](#)
- 13-17, IUGG, IAGA, L'Aquila, Italy, [Course on Operational Space Weather Fundamentals](#)
- 19-21, IUSS, Florence, Italy, [Centennial Celebration and Congress of the International Union of Soil Sciences](#)
- 20-24, IAVCEI, Nový Jičín, Czech Republic, [Volcandpark 2024](#)
- 26-31, JpGU, Chiba, Japan, [Japan Geoscience Union Meeting 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, [International Summer School in Glaciology](#)
- 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, [International Atmospheric Rivers Conference 2024](#)
- 24-28, IUGG, IASPEI, San José, Costa Rica, [4th Regional Assembly Latin American and Caribbean Seismological Commission](#)
- 30-5 July, IAGA, Utrecht, Netherlands, [18th Castle Meeting - New trends on Paleo-, Rock- and Environmental Magnetism](#)

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, [International Conference on Clouds and Precipitation](#)
- 15-19, IUGG, IAMAS, Boulder CO, USA, [Quadrennial Ozone Symposium](#)
- 15-20, IUGG, IAPSO, Buenos Aires, Argentina, [Summer School 'From meso to sub-mesoscale ocean circulation structures: satellite and in-situ measurements, physical mechanisms and biological impact'](#)
- 24-25, IAHS, Eichstätt, Germany, [International Commission on Continental Erosion \(ICCE\) Symposium 2024](#)

August

- 6-15, IAU, Cape Town, South Africa, [32nd IAU General Assembly](#)
- 24-30, IUGG, Dublin, Ireland, [35th International Geographical Congress](#)
- 25-30, IAG, Strasbourg, France, [20th Geodynamics and Earth Tides Symposium](#)
- 25-31, IUGG, Busan, Rep. of Korea, [37th International Geological Congress](#)

September

- 4-6, IAG, Thessaloniki, Greece, [Gravity, Geoid and Height Systems 2024](#)
- 7-13, IAGA, Beppu, Japan, [26th Electromagnetic Induction Workshop](#)
- 9-13, IAMAS, Kuala Lumpur, Malaysia, [16th International Commission on Atmospheric Chemistry and Global Pollution Symposium and 18th International Global Atmospheric Chemistry Science Conference](#)
- 22-27, IUGG, IASPEI, Corfu, Greece, [39th General Assembly of the European Seismological Commission](#)
- 30-4 October, IAGA, Breckenridge CO, USA, [11th VLF and ELF Remote Sensing of the Ionosphere and Magnetosphere \(VERSIM\) Meeting](#)

October

- 6-9, EMSEV, IAGA, IASPEI, IAVCEI, Chania, Greece, [Electromagnetic Studies of 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](#)

Association Scientific Assemblies 2025

- 29 June – 4 July, IAVCEI, Geneva, Switzerland, IAVCEI Scientific Assembly 2025
 - 20-25 July, IACS, IAMAS, IAPSO, Busan, Rep. of Korea, [IACS-IAMAS-IAPSO Joint 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
-

IUGG Electronic Journal Volume 24 Number 2 (1 February 2024)

Editors: Franz Kuglitsch, Mioara Manda, Alexander Rudloff (Editor-in-Chief), and Kathy Whaler.