

INTERNATIONAL UNION OF GEODESY AND GEOPHYSICS UNION GEODESIQUE ET GEOPHYSIQUE INTERNATIONALE

The IUGG Electronic Journal

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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. IUGG - Annual Report 2022



The IUGG Annual Report 2022 provides a comprehensive summary of the activities of the Union including its Associations, Union Commissions, and Programs.



We invite you to <u>download</u> this impressive summary of last year's activities.

IUGG thanks everyone who contributed to the Annual Report.

2. National Committee Report

IUGG GREECE – Quadrennial Report 2019-2022 of the National Committee related to IAMAS

This <u>report</u> was prepared as part of the national report of the Committee of Geodesy and Geophysics of Greece, on the occasion of the 28th General Assembly of the International Union of Geodesy and Geophysics (IUGG) which was held in Berlin, Germany, from 11 to 20 July 2023.



The content of the report is divided into eleven sections with each section being entitled with the name of the corresponding university institute or agency. The contribution of each institute is reported based on the material they provided along with the respective list of literature. An attempt was made to slightly homogenize the material provided by the respective contributors. Therefore, the text and, in general, the style of each sub-report, have been maintained in the subsequent sections.

I take the opportunity to express my sincere thanks to all colleagues working at University Departments, Research Institutions and National Agencies in Greece for their contributions, extensive lists of publications and for providing their activities for the compilation of this report.

Christos S. Zerefos, IAMAS National Correspondent for Greece

3. IUGG – Quadrennial Reports of the Liaison Officers to International and Intergovernmental Organizations (2019-2023)

For the term 2019-2023, the IUGG had appointed Liaison Officers to the following International and Intergovernmental Organizations:

Name of the Organization	Name of the proposed liaison (country)
ISC Committee on Data for Science and	Alena RYBKINA (RUSSIA)
Technology (CODATA)	Anatoly SOLOVIEW (RUSSIA)
ISC Committee on Space Research (COSPAR)	Andrew W. YAU (CANADA)
	Christopher KOTSAKIS (GREECE)
ISC Scientific Committee on Antarctic Research	Ian ALLISON (AUSTRALIA)
(SCAR)	John TURNER (UK)
ISC Scientific Committee on Oceanic Research	Trevor MCDOUGALL (Australia)
(SCOR)	Joyce PENNER (USA)
ISC Scientific Committee on Solar-Terrestrial	Renata LUKIANOVA (RUSSIA)
Physics (SCOSTEP)	Peter PILEWSKIE (USA)
ISC World Data System (WDS)	Toshihiko IYEMORI (JAPAN)
	Aude CHAMBODUT (FRANCE)
	Carey NOLL (USA)
UNESCO Section on Earth Sciences and Geo-	Alik ISMAIL-ZADEH
Hazards Risk Reduction	(GERMANY/RUSSIA)
	Harsh GUPTA (INDIA)
UNESCO International Hydrological Program	Christophe CUDENNEC (FRANCE)
(UNESCO-IHP)	Charles FIERZ (SWITZERLAND)
UNESCO Intergovernmental Oceanographic	Denise SMYTHE-WRIGHT (UK)
Commission (UNESCO-IOC)	Satheesh SHENOI (INDIA)

World Meteorological Organization (WMO)	Roger PULWARTY (USA) Christophe CUDENNEC (FRANCE) Charles FIERZ (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)	David SCHNEIDER (USA) Larry MASTIN (USA)
Intergovernmental Panel on Climate Change (IPCC)	Franz KUGLITSCH (GERMANY/AUSTRIA)
World Climate Research Programme (WCRP)	Lisa ALEXANDER (AUSTRALIA)
Consultative Committee for Time and Frequency (CCTF)	Claude BOUCHER (FRANCE) Gerard PETIT (FRANCE)
Pan American Institute of Geography and	Laura SANCHEZ
History (PAIGH)	(GERMANY/COLOMBIA)
Group on Earth Observations (GEO)	Michael SIDERIS (CANADA)
	Chris RIZOS (AUSTRALIA) Kathryn WHALER (UK)

IUGG thanks the Liaison Officers for their long-standing support and for providing their quadrennial reports, which can be downloaded here.

4. IUGG - Resolutions of the 28th IUGG General Assembly: Corrigendum

In the IUGG E-Journal Volume 23 No. 8 (1 August 2023; items), the Resolutions of the 28th IUGG General Assembly were presented.

The following mistake occurred:

Instead of 'Improving Protection of Geodetic Observatories from Active Radio Sources', the title of Resolution 1 should say 'Improving Protection of Geodetic Observatories from Active Radio Services'.

On 15 September 2023, this correction was approved by the IUGG Council.

The accepted resolutions can be accessed <u>here</u>.

5. IUGG – Symposia Support 2024

The program of IUGG support for scientific meetings (e.g., workshops, advanced schools, symposia) is one of the most important means by which the Union and its Associations pursue a goal of promoting geophysics and geodesy through international collaboration. A fraction of the IUGG's budget is devoted to the support of these scientific meetings. The IUGG Executive Committee places great emphasis on maintaining high scientific standards, coverage of a balanced spectrum of topics, and an appropriately broad and international flavor for the scientific program of the meetings. In that respect, the ISC rules on non-discrimination regarding the access of qualified scientists from all parts of the world to any IUGG-sponsored meeting apply.

The number of co-sponsored meetings ranges from 10 to 15 (up to USD 10,000 each). Accordingly, not all meeting proposals worthy of support can be awarded IUGG sponsorship. The following guidelines for obtaining IUGG sponsorship should be observed by prospective proposers:

- IUGG-sponsored scientific meetings should have a well-defined and scientifically relevant theme, should be scheduled at a propitious time for significant progress in the field, and should be of interest to young researchers as well as senior experts.
- While the IUGG embraces all fields in geophysics and geodesy, a proposed program should maintain a balanced scope relevant to IUGG Associations. Each proposal will be judged on its own scientific merits.
- Given the international nature of the Union, meetings are by definition internationally oriented. This requires a well-balanced geographical distribution.

Normally, the initiative to propose a scientific meeting for IUGG sponsorship originates from a group of scientists in a certain field. Prospective meeting organisers should contact the respective Association Secretary General (ASG) well in advance of their intended proposal submission, by sending a request for IUGG support until **15 October 2023**.

The scientific merit of each scientific meeting's proposal will be evaluated by the respective ASG, taking into consideration comments and advice received from the Association Executive Committee. The ASsG should communicate their recommendation for selection to the IUGG Secretary General before 31 October 2023.

The allocations will be suggested by the IUGG Secretary General and reviewed by the Members of the IUGG Bureau to assure impartiality. The Bureau will decide on the final selection of the meetings to be supported. The decision on IUGG support will be communicated to the ASsG by the IUGG Secretary General in a letter of award as soon as possible but not later than **1 December 2023**. The IUGG support should be acknowledged, and its logo included, in all documents related to a sponsored meeting (e.g., in the scientific program, on the website, brochures, publications of proceedings etc.)

More information is available here.

6. IUGG – Geosciece Connections



IUGG is producing a broad variety of science movies 'Geoscience Connections' related to the disciplines of our eight International Associations, namely cryospheric sciences, geodesy, geomagnetism, hydrology, meteorology, oceanography, seismology, and volcanology. We aim to inspire a new generation of scientists by screening the work of talented young and senior scientists. We assure gender equality and diver sity by interviewing 29 researchers from 16 countries. The

shootings were done in the Czech Repulic, France, and Germany, between October 2022 and July 2023. The short movies will be posted twice a week on the <u>IUGG YouTube channel</u>, starting in October 2023. We hope you enjoy the movies and share them within your networks.

7. IAG – Film: Terrestrial Reference Frames

Do you know how your mobile phone knows where you are and how it knows which way to go when you are looking for something?

The new film 'Terrestrial Reference Frames - Connecting the World through Geodesy' shows you how it works, and illustrates the great importance of the International Terrestrial Reference Frame (ITRF) for science and society. The film is available in several languages including English, Spanish, Portuguese, French, German, Japanese, Dutch and Bulgarian.



The ITRF is a fundamental product of the International Earth Rotation Service (IERS). It is based on the analysis of GNSS (Global Navigation Satellite System), VLBI (Very Long Baseline Interferometry), SLR (Satellite Laser Ranging) and DORIS (Doppler Orbitography and Radiopositioning Integrated by Satellite) data. The establishment and maintenance of the ITRF is only possible within the global and well-structured organization International Association of Geodesy (IAG). With this film, the IAG's Global Geodetic Observing System (GGOS) shows you how it works.

I kindly invite you to watch this film and share it with your colleagues, family, friends and via social media to promote this fundamental geodetic product.

Martin Sehnal, Director of GGOS Coordinating Office

8. IAMAS – Symposia Support 2024-2025





The International Association of Meteorology and Atmospheric Sciences (<u>IAMAS</u>) supports activities that have high scientific standards (e.g., workshops, advanced schools, symposia) organised by our commissions. These should cover a balanced spectrum of topics relevant to our association. We are now accepting proposals for financial

support, which are generally in the USD 500 to 5,000 range. Such applications must come to IAMAS from our commissions, who may send requests for financial support for the coming two calendar years (2024 and 2025) by **15 October 2023**. Note that our commissions can additionally request support from IUGG, by the same deadline (see item 5). All IUGG requests must follow <u>IUGG formats</u>, and be sent to IAMAS by one of our commissions for review. Scientists who are interested in working with one of the <u>IAMAS commissions</u> in developing such proposals are encouraged to get in touch with them directly.

Keith Alverson, IAMAS Secretary General

9. IAPSO – Call for Best Practice Study Groups

The International Association for the Physical Sciences of the Oceans (IAPSO) is inviting applications for Best Practice Study Groups in the period 2024-2025. Each group will receive up to USD 12,000 towards the costs of a meeting. Proposals should reach the IAPSO Secretary General via e-mail



by 15 November 2023. The proposers of Best Practice Study Group proposals will be notified by 31 December 2023 of the success or otherwise of their proposals.

Background on IAPSO

IAPSO is the peak international scientific body for physical and chemical oceanography. In fulfilling this role, IAPSO is actively involved in setting best-practice standards and procedures for the conduct of our science. We also run international oceanographic meetings every two years, and we are taking an increasing role in publicising the importance of the ocean. IAPSO is one of eight Associations of IUGG.

Purpose of an IAPSO Best Practice Study Group

An IAPSO Best Practice Study Group will address 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.

Where it is thought beneficial to bring together experts in competing methods to make detailed comparison then IAPSO may be willing to fund such a face-to-face meeting. There should be a definite prospect that such detailed comparison and discussions will result in an agreed position statement or guideline that outlines the relative strengths of the methods, procedures or software. These will help oceanographic researchers to make the best choices to, for example, analyse their data.

IAPSO is seeking to support two IAPSO Best Practice Study Groups in the 2024-2025 period. Each IAPSO Best Practice Study Group should arrange a meeting of several days' duration where consensus should be sought regarding the pros and cons of different techniques. Ideally, this consensus will result in a short technical guideline that will assist oceanographic researchers in making the best choices to, for example, analyse their data.

IAPSO recommends the successful groups make use of the repository of the <u>IOC Ocean Best Practices System</u> to survey existing documentation and experts related to the Best Practice topic. We expect that the final documentation created by the group will be made accessible via the IOC Ocean Best Practices System and undergo the GOOS endorsement process.

Details of grant

A successful study group will receive up to USD 12,000 towards the costs of a meeting to be held in the period 2024-2025. Each IAPSO Best Practice Study Group will involve a single meeting of several days' duration.

Criteria for selection

The following criteria will be used in the evaluation of the proposals

- Does the proposal attempt to put forward best practices for a modelling, data collection, or data processing step or method in which researchers currently have a choice between various options?
- Is there reason to think that a face-to-face meeting of specialists in these procedures might lead to progress in understanding the relative strengths of the options?
- Is it reasonable to expect that a summary Guideline document will arise from such a face-to-face Study Group; a document that outlines the relative strengths of the analysis options?
- Is there reason to expect that if such an IAPSO Best Practice Study Group did agree on and publish such an IAPSO Guideline, that most practicing ocean researchers would agree that the recommended method is preferred and would adopt this recommendation?
- Will the use of this recommendation advance an important aspect of the physical or chemical sciences of the ocean?

Preference will be given to groups who intend to hold meetings in association with the IAPSO assemblies and/or present their results at the IAPSO assemblies.

How to Apply

A brief application of a few pages, which describes how the above criteria will be addressed by the study group, should be submitted. The application should include a list of potential attendees, as well as a budget indicating how the funding from IAPSO will enable the meeting to occur. Send applications by <u>e-mail</u> to Silvia Blanc, IAPSO Secretary General, by **15 November 2023**.

Hans van Haren, IAPSO President

10. ISC – Fellowship 2023: Call for Nominations



The International Science Council (ISC) is pleased to share the 2023 call for nominations to the ISC Fellowship.

ISC Fellows are individuals of high scientific and public standing who serve as experts for the ISC's governance, scientific initiatives and partnerships, and support the ISC in its mission to be the global voice for science by amplifying this voice through ambassadorial and advisory roles.

Nominations can be submitted by ISC Members incl. IUGG until 15 October 2023 by completing the <u>online form</u>. Please note that the nomination must be supported by another ISC Member or ISC affiliated body.

Please note that nominations remain valid for three years, therefore, nominations submitted in 2022 will be reconsidered for future intakes, and do not need to be resubmitted.

Please inform the <u>IUGG Secretariat</u> by **5 October 2023** if you know of any colleagues who would be willing to be nominated for ISC Fellowship 2023 by IUGG. Any potential candidate should be aware of the information required on the online nomination form.

11. Global Geoscience Societies – Early Career Survey

Students and Early Career Professionals in the Geosciences

Take Our Survey

The Global Geoscience Societies would like your feedback and insights on geoscience career opportunities to help us develop programs, resources, and tools to ensure you can excel in your chosen field.





























The Early Career and Student Communities Survey has been put together by 13 geoscience societies, incl. IUGG, and is designed to help societies and unions to understand the career aspirations and challenges for students and early career professionals interested in Earth and Space Science. Simply scan the QR code below to access the survey, or use this <u>link</u>.

If applicable, please support this survey! The survey will remain open until December 2023.

12. Awards and Honours

American Geophysical Union (AGU)

AGU announced its **2023 Union Medallists**, **Awardees**, **and Prize Recipients** for their excellence in scientific research, education, communication, and outreach, as well as its **Section Awardees and Named Lecturers** who will be honoured for their sustained and unique contributions to advancing our understanding of Earth, its atmosphere and oceans, and planets and astral bodies beyond our own. The awardees will receive their honours at the 2023 AGU Fall Meeting. Among the 2023 Union Awardees, Section Awardees and Named Lecturers are the following scientists who have been active in IUGG: *Natalya Gomez* (Canada), Vice-Chair of the IACS-IAG Joint Commission on Cryospheric Deformation (since 2021) was awarded the James B. Macelwane Medal; *J John Taber* (USA), Co-Chair of the IASPEI Commission on Education & Outreach (2004-2017) was awarded the Excellence in Earth and Space Science Education Award; and *Nick van de Giesen* (Netherlands), Secretary of the IAHS International Commission on Water Resources Systems (ICWRS, 2008-2015) and IAHS National Correspondent (2018-2022) was awarded the Ambassador Award.

Congratulations!

13. 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 <u>online</u>. If you would like to add a meeting, or report changes, please contact the <u>IUGG Secretariat</u>.

October

- 8-14, AGI, Online, Earth Science Week 2023
- 16-20, IAG, Online, ILRS Technical Workshop
- 16-20, IAG, IAVCEI, Lanzarote, Spain, <u>International Workshop on Geoscience in Active</u>
 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
- 23-28, IAVCEI, Milos and Santorini, Greece, <u>6th International Workshop of the IAVCEI</u> Commission on Volcano Geology
- 24-27, IAG, IASPEI, Sousse, Tunisia, 20th WEGENER Assembly 2023
- 25-27, IAHS, Zanzibar, Tansania, <u>24th WaterNet/WARFSA/GWP-SA Symposium on 'Accelerating Change: Fostering Innovation and Integration for Sustainable Water Resources Management in Eastern and Southern Africa'</u>

November

- 6-10, GEO, Cape Town, South Africa, GEO Week 2023
- 9-10, IAHS, Kathmandu and Dhulikhel, Nepal, <u>International Conference on Mountain</u> Hydrology and Cryosphere
- 9-10, IAHS, Boston MA, USA, <u>13th International Workshop on Statistical Hydrology</u> (STAHY)
- 13-17, IAG, PAIGH, Buenos Aires, Argentina, <u>14th International School on 'The</u> Determination and Use of the Geoid'
- 14-17, WLF, Florence, Italy, 6th World Landslide Forum
- 20-22, IAG, Jiaozuo, China, <u>International Symposium on Satellite Navigation: Advances</u>, Opportunities and Challenges (ISSN2023)

December

- 1-3, IAHS, Zhuhai City, China, <u>5th IAHS-ICWQ Workshop</u>
- 11-15, AGU, San Francisco CA, USA, AGU Fall Meeting 2023

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