



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

The IUGG Electronic Journal

Volume 23 No. 1 (1 January 2023)

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. 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 2022 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 2023.

We look forward to seeing you in person at our [2023 General Assembly](#) in Berlin.

2. IUGG – Membership and Financial Situation 2023

As of 1 January 2023, IUGG has 73 National Members, including 58 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 2023, the price of 1 unit will be USD 2,375. The 58 paying members represent a total of 277 units, which is equivalent to a total income of USD 657,875. 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 01.01.2023)

Niels Andersen, IUGG Treasurer

3. IUGG – Yearbook 2023

The [IUGG Yearbook 2023](#) is now available. Thanks to the National Committees, the Associations and Commissions for helping to update the information in the Yearbook! During 2023, updates on addresses and other information in the Yearbook should be sent to the [IUGG Secretariat](#) as soon as they are known. Our aim is to update the Yearbook as needed throughout the year.

4. IAGA – Meeting Report: 8th IAGA/ICMA/SCOSTEP Workshop on Vertical Coupling in the Atmosphere-Ionosphere System

The 8th IAGA/ICMA/SCOSTEP Workshop on Vertical Coupling in the Atmosphere-Ionosphere System took place at the Institute of Earth Physics and Space Science in Sopron, Hungary, from 6 to 10 July 2022. The workshop program and the abstracts are available [here](#).

This traditional meeting brought together scientists with different backgrounds from the lower-, middle- and upper neutral atmosphere, ionosphere and magnetosphere communities in order to present their recent work and discuss ongoing issues relating to theoretical, modelling and observational aspects of all kind of processes which transfer energy and momentum from the lower atmosphere to the upper atmosphere and ionosphere, and vice versa.

For the first time the workshop was conducted in a hybrid format due to the ongoing COVID-19 pandemic. In combination with the current political situation several of our colleagues from China, Russia, and also North and South America expressed their regret for not being able to attend the meeting. However, the audience consisted of 41 participants (20 online) from 29 institutions across 20 countries in Europe, Asia, and America. During the workshop, 39 presentations were given: 5 solicited talks, 28 oral, and 6 poster/pico presentations. Further, we conducted two open discussion rounds in order to enhance the exchange between online and onsite participants.



Onsite and online participants of the workshop

Because the pandemic has resulted in a significantly reduced scientific exchange, we reserved several time slots for discussions, poster inspections and support of PhD students and young scientists during the time in Sopron.

Since our last meeting in Potsdam, Germany, in 2018, considerable progress has been achieved in observing and quantifying the variability throughout the atmosphere-ionosphere system driven by dynamical coupling, as well as identifying their respective driving mechanisms. Thus, during the workshop special attention was paid to space weather effects on the upper neutral atmosphere and ionosphere from both theoretical and experimental perspectives. Further central topics intensively discussed dealt with the occurrence and morphology of several types of ionospheric irregularities, the impact of geological processes such as the Hunga Tonga volcano eruption on the upper atmosphere, and also the diverse types of atmospheric waves and their crucial role in the atmosphere system.

We would like to highlight an outstanding presentation by the PhD student Jinee Gogoi entitled: “A comprehensive study of Sudden Stratospheric Warming (SSW) events and their effects on the ionosphere”.

The participants agreed on the idea of a topic-related special issue in the journal *Frontiers of Astronomy and Space Science*. Submissions are already open both for workshop participants and also for other scientists dealing with atmospheric coupling processes. The deadline for submission is expected to be in February 2023.

Christina Arras, Chair of the Scientific Organising Committee
Veronika Barta, Chair of the Local Organising Committee

5. Awards and Honours

Roger S. Pulwarty (USA), Principal IUGG Liaison Officer to the World Meteorological Organization (WMO; 2019-2023), was awarded the [U.S. Presidential Rank Award](#).

European Geosciences Union (EGU)

EGU announced its 2023 Union Medals and Awards, Division Medals, and Division Outstanding Early Career Scientist Awards. These individuals are honoured for their important contributions to the Earth, planetary and space sciences. They will be celebrated during the [EGU General Assembly 2023](#), which will be held from 23 to 28 April 2023 in Vienna, Austria and online. Among the 2023 medalists and awardees are the following scientists who have been active in IUGG:

2023 Union Medal:

Athena Coustenis (France), IAMAS President (2011-2015), was awarded the Jean Dominique Cassini Medal.

2023 Division Medals:

Étienne Berthier (France), IACS National Correspondent since 2014, was awarded the Julia and Johannes Weertman Medal; **Marc F.P. Bierkens** (Netherlands), Vice-President of the IAHS International Commission on Groundwater (ICGW, 2002-2003), was awarded the Henry Darcy Medal; **Jürgen Müller** (Germany), President of the German National Committee since 2011, was awarded the Vening Meinesz Medal; **Taikan Oki** (Japan), Chair of the IAHS Working Group Hydrology 2020 (2004-2007), was awarded the John Dalton Medal; **Lisa Tauxe** (USA), IAGA National Correspondent since 2017, was awarded the Petrus Peregrinus Medal; **Alberto Viglione**

(Italy), Secretary of the IAHS International Commission on Water Resource Systems (ICWRS) since 2016, was awarded the Plinius Medal.

International Science Council (ISC)

The ISC appointed new [Fellows](#) in recognition of their outstanding contributions to promoting science as a global public good. The Fellowship is the highest honour that can be conferred on an individual by the ISC. Among them are the following scientists who have been active in IUGG:

Harsh K. Gupta (India), IUGG President (2011-2015), and **Guoxiong Wu** (China), IAMAS President (2007-2011).

Congratulations!

6. Obituaries

With great sadness IUGG reports the death of

Basil (Vasilis) Papazachos (1930-2022), IASPEI National Correspondent of Greece (2009-2011), and
William H. K. Lee (1942-1922), IASPEI Medalist 2015.

The obituaries can be found [here](#).

7. Important IUGG Deadlines

- 11 January 2023:** [Submit proposals to host the IUGG General Assembly in 2027.](#)
11 January 2023: [Submit proposals for changes to the Statutes and By-Laws.](#)
31 January 2023: [Submit draft resolutions for IUGG2023.](#)
14 February 2023: [Submit abstracts for IUGG2023](#) and [apply for travel grants.](#)
28 April 2023: [Register as early bird for IUGG2023.](#)
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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](#).

January

- 30-3 February, IAVCEI, Rotorua, New Zealand, [IAVCEI Scientific Assembly](#)

February

- 1-3, IAHS, Cordoba, Spain, [Cordoba Workshop to identify the next IAHS Scientific Decade](#)
- 19-24, IUGG, IAVCEI, Morelia, Mexico, [Celebrating the 80th anniversary of Parícutin volcano](#)

- 28-2 March, IAGA, La Jolla CA, USA, [2023 MagIC Workshop: Magnetism and Earth History: Field Evolution, Environmental Change, and Paleogeography](#)

March

- 13-17, IPCC, Interlaken, Switzerland, [58th session of the IPCC](#)
- 22-24, UN, New York City NY, USA, [UN 2023 Water Conference](#)
- 28-30, IAG, Online, [2nd ICCG Workshop on Geodesy for Climate Research](#)
- IAG, IUGG, Espoo, Finland, Workshop in Geodesy and SAR

April

- 4-6, AGU, Atlanta GA, USA, [Ocean Visions Biennial Summit 2023](#)
- 16-21, COSPAR, Singapore, [5th COSPAR Symposium: Space Science with Small Satellites](#)
- 23-28, EGU, Vienna, Austria, [EGU General Assembly 2023](#)

May

- 12-16, IAGA, IAPS, Milan, Italy, [PLANCKS 2023](#)
- 15-19, AGU, Agros, Cyprus, [Chapman on Hydrothermal Circulation and Seawater Chemistry](#)
- 21-26, JPGU, Chiba, Japan, [Japan Geoscience Union Meeting 2023](#)
- 22-25, AGU, Washington DC, USA, [Chapman on Climate and Health in Africa](#)
- 22-26, IAG, Gothenburg, Sweden, [EUREF Symposium 2023](#)
- 22-26, IAGA, Sopron, Hungary, 19th IAGA workshop on geomagnetic observatories, data acquisition and processing
- 22-2 June, WMO, Geneva, Switzerland, [19th World Meteorological Congress](#)
- 28-2 June, AGU, Berlin, Germany, [Chapman on Advances in Understanding Alfvén Waves in the Sun and the Heliosphere](#)

June

- 5-10, IAHS, UNESCO, Dakar, Senegal, [Global FRIEND-Water 2023 International Conference](#)
- 19-23, CTBTO, Vienna, Austria, [CTBT: Science and Technology \(SnT2023\)](#)
- 26-30, IAMAS, Brisbane, Australia, [International Conference of Nucleation and Atmospheric Aerosol \(ICNAA\)](#)

July

- 3-7, IACS, IUGG, Gävle, Sweden, [2023 Glacial Isostatic Adjustment Training School](#)
- 11-20, IUGG, Berlin, Germany, [IUGG General Assembly 2023](#)
- 14-20, INQUA, Rome, Italy, [21st INQUA Congress](#)
- 20-21, IAGA, Neustrelitz, Germany, Workshop on Current Challenges in Data Assimilation for Geospace Systems
- 30-4 August, Singapore, [AOGS Annual Meeting 2023](#)

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](#)

September

- 2-7, ISPRS, Cairo, Egypt, [ISPRS Geospatial Week 2023](#)
- 5-15, IAG, Yebes, Spain, [GGOS Days 2023](#)

October

- 8-14, AGI, Online, [Earth Science Week 2023](#)
- 16-20, IAG, Arequipa, Peru, ILRS Technical Workshop
- 23-26, CODATA, WDS, Salzburg, Austria, [International Data Week 2023](#)
- 23-27, WCRP, Kigali, Rwanda, [WCRP Open Science Conference 2023](#)
- IAG, IAVCEI, Lanzarote, Spain, Geoscience in active areas
- IUGG, Washington DC, USA, Sixth Meeting of ITU/WMO/UNEP Focus Group on AI for Natural Disaster Management

November

- 14-17, WLF, Florence, Italy, [6th World Landslide Forum](#)

December

- 11-15, AGU, San Francisco CA, USA, AGU Fall Meeting 2023

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