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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 – The People at the Forefront (XXXIII): Athena Coustenis, Bureau Member 2023-2027



I was born in Athens, Greece and therefore come from a country where people have always looked up at clear skies, trying to make sense of what they see and invent how the Universe works... We are also travelers and like different cultures and languages. So, I found myself in Paris studying both Physics and English Literature at Pierre et Marie Curie and La Sorbonne Universities. I started two PhDs with a lot of unconscious enthusiasm, but have so far only completed one, in Astrophysics and Space Technics. During my thesis, I worked on Titan Voyager 1 infrared data and then found myself as Co-Investigator in three instruments of the Cassini-Huygens mission from the start in the early 1990s. This mission followed my career through the two decades of development, operations until 2017 and continuing exploitation of the data.

Athena Coustenis at the Paris Observatory

I was lucky enough to get a permanent position with French National Center for Scientific Research and France thus become my second home. While waiting for Cassini to arrive safely at its destination in 2004, I occupied myself by observing Titan and other celestial objects from large telescopes all over the world and with the Infrared Space Observatory (ISO), using new techniques and improving my codes. Since then I have been working on habitable conditions in the solar system and beyond, investigating the atmospheres of exoplanets and the atmospheres, surfaces and interiors of planets and satellites, and applying some of that knowledge to our own planet. So, since the 1990s, I became involved in the definition, development and exploitation of space missions to solar system bodies with high astrobiological potential, in particular icy moons like Titan and Enceladus, Saturn's satellites, and Jupiter's Ganymede and Europa, but also Mars and exoplanets. I was Co-Lead of the Titan Saturn System Mission (TSSM) project which did not fly but then became Co-Lead of the Jupiter Icy Moons Explorer (JUICE) ESA Mission which launched in April 2023 and is on its way to Jupiter's system. I am also involved in ESA's Ariel mission for the exoplanets characterization. I was fortunate enough to attend close up and personally three important launches: Cassini-Huygens in 1997, Solar Orbiter in 2018 and JUICE with the same emotion and excitement every time. I also lead many observational campaigns from the ground using large telescopes (CFHT, UKIRT, IRTF, VLT, JWST, etc) and used the Infrared Space Observatory (ISO) to conduct planetary investigations. I then analyse and interpret such space and ground-based spectro-imaging data using radiative transfer codes and other imaging analysis tools.

Importantly, I have been a part of the IUGG since more than 20 years now. From 2003 to 2011 I was Chair of the ICPAE Commission, then I became President of the International Association of Meteorology and Atmospheric Sciences (IAMAS) from 2011 to 2015 and Vice-Chair of the IUGG Union Commission on Planetary Sciences (UCPS). And finally, I have the pleasure now of being part of the IUGG Bureau since 2023.



IAMAS Bureau during visit of HALO research aircraft at DLR on 17 July 2014. From left: Joyce Penner, John Turner, Athena Coustenis, Hans Volkert, Guoxiong Wu, Zheng Lin

Beyond my scientific work, I am actively involved in or leading several advisory groups within ESA (Chair of the SSEWG and of the HESAC, member of SSAC and ACEO), and NASA (member exofficio of the NASEM SSB and of the Planetary Decadal Steering Committee) and of other international bodies, helping to establish space programs and optimize their scientific return. I am

currently the Chair of the COSPAR Panel on Planetary Protection and the Comité d'évaluation de la recherche et de l'exploration spatiale (CERES) of CNES. I am also the Vice-Chair of the Division for Planetary Sciences of the American Astronomical Society. I was President of the Division for Planetary Sciences of the European Geophysical Union (EGU), from 2009 to 2013 and of the Space Science Committee of the European Science Foundation from 2014 to 2020.

Given a start in life from a small place, being a woman and facing the challenges of immigrating and achieving her dream in a foreign country, I can only recommend that all young people and especially girls, pursue the path they choose and claim their place in the amazing scientific world.

It is always a pleasure to be part of a family that promotes science at such a high level and incorporates the value of advances in research on an international level. It is also the duty of the Bureau to facilitate interactions and exchanges among our members and with other bodies for the benefit of our community in studying the Earth's environment, solar-terrestrial relations, and analogous problems associated with the Moon and other planets. And on a personal level, I am always amazed by the unlimited thirst that the public demonstrates for the wonderful results and information we are fortunate to garner and which I am always happy to share with conferences and school presentations.

2. IUGG – Great Debate at the EGU General Assemly 2024



The IUGG kindly invites you join the Great Debate on *How can geoscience unions and societies effectively integrate science into global policy decisions?* on Tuesday, 16 April 2024, 08:30-10:15, Room E1, Austria Center Vienna, on occasion of the EGU General Asssembly 2024.

This Great Debate is a joint effort of the 'Task Team on Global Policy Advice' of the Global Geoscience Societies – a loose consortium composed of the American Geophysical Union (AGU), the European Geosciences Union (EGU), the Geological Society of London (GSL), the Japan Geoscience Union (JpGU), the International Union of Geodesy and Geophysics (IUGG), the International Union of Geological Sciences (IUGS), and other globally active geoscience unions and societies. IUGG will be represented by Alexander Rudloff, IUGG Secretary General.

More information can be found here.

3. IAGA – Outreach Projects: Call for Applications

Outreach project proposal can be submitted anytime, but evaluations and assessments will be done by IAGA once a year in early June. In general, one project per year will be selected for funding. The project should last up to two years. Maximum funding is EUR 5,000.





More information and guidelines for preparing your proposal can be found here.

Are you intersted in more IAGA news? Sign up for the IAGA newsletter!

4. IAGA-IASPEI – Joint Scientific Assembly 2025: Call for Session Proposals



The preparations for the <u>IAGA-IASPEI Joint Scientific Assembly 2025</u> in Lisbon, Portugal, have fully started and at this point the most important issue is to decide on the scientific programme that the abstract submission can be opened in September/October 2024. There will be three types of symposia: IAGA-IASPEI joint symposia and IAGA and IASPEI stand-alone symposia.

If you have an idea for an interesting topic of a joint or stand-alone symposium, please send the symposium title with a short description and a list of possible conveners as soon as possible to <u>Monika Korte</u>, IAGA Secretary General, and/or <u>Johannes Schweitzer</u>, IASPEI Secretary General.

A final decision on the symposia will be made by the members of the Scientific Programme and Local Organising Committees.

5. IAMAS – Scientific Assembly 2029: Seeking Bids

Although 2029 may seem a long way off, the Bureau of IAMAS is starting to think about the organisation of what will be the IAMAS Scientific Assembly to follow the Busan Assembly in 2025. The assembly will possibly be held in conjunction with one or more IUGG Associations. Large conference centres get booked up



years in advance and it is necessary to start the planning of the 2029 assembly early so that a decision on its location can be made in Busan in 2025. Officers of IAMAS and our commissions, along with National Delegates, are therefore invited to explore interest in their country in hosting the 2029 Assembly and possibly preparing a bid to be presented in Busan. In the first instance it is suggested that anyone interested contact the <u>IAMAS Secretary-General</u> to discuss the preparation of a bid.

Are you intersted in more IAMAS news? Sign up for the IAMAS newsletter!

6. SCAR – Fellowships 2024: Call for Applications



The Scientific Committee on Antarctic Research (SCAR) launched its <u>2024</u> Antarctic-related Fellowships for early-career researchers. In 2024, additional funding is being provided by the Prince Albert II of Monaco Foundation through the <u>Polar Initiative</u>. SCAR will therefore once again be awarding four to five Fellowships of up to USD 15,000 each for 2024. The SCAR Fellowship Programme is designed to encourage the active involvement of early-career researchers in furthering our understanding of Antarctica. The Fellowships enable

early-career researchers to join a project team from another country, opening up new opportunities and often creating partnerships that last many years and over many Antarctic research seasons.

The deadline for the SCAR Fellowship applications is **31 August 2024**.

Find out how to apply for the Fellowship <u>here</u>. The SCAR Secretariat has compiled a list of <u>frequently</u> <u>asked questions</u>, where you can also find an overview of <u>past and present SCAR Fellows</u>.

7. UN-GGIM – Trainings/Webinars in Geospatial Data Management and GEO-AI: Survey

The <u>Geospatial Societies</u> network of the <u>UN-GGIM</u> (United Nations - Global Geospatial Information Management) is collecting information on all the centers of the world providing Trainings/Webinars in Geospatial data management and GEO-AI. This information will be very useful for all the national institutions, students and professionals willing to improve their



skills in these new technologies for geo-information management. Please fill the questionnaire <u>here</u>.

The UN-GGIM Geospatial Societies will publish online the list of centers and the analysis of the training offer in 2024, will widely diffuse it and will send it back to the people who filled the survey.

Celine Rozenblat, Chair of the UN-GGIM Geospatial Societies

8. ISC

Nominations and Elections Committee: Call for Nominations



The International Science Council (ISC) calls for nominations for the ISC Nominations and Elections Committee (NEC), which will direct the process for nominations, election and appointment of members of the ISC Governing Board, in accordance with the

newly revised Statutes and Rules of Procedure.

ISC Member Organisations including IUGG may nominate a single candidate for the NEC. Full details of the call and the Terms of Reference of the committee are available here.

If you are interested in being nominated by IUGG, please contact the <u>IUGG Secretariat</u> by **10 April 2024** and provide all the information which is requested by the <u>online form to submit nominations to</u> NEC.

Message from the President following the ISC extraordinary General Assembly 28-29 February 2024

The past 15 months have been marked by an intensive and exhaustive effort to review the <u>Statutes and Rules of Procedure for the ISC</u>. This task, inherently difficult and complex, could not have been achieved without the dedication and hard work of everyone involved. I extend my heartfelt thanks to the Working Group on Constitutional Reform, led by Dame Julie Maxton, and to all of you who participated in numerous Zoom calls, meetings and interactions with myself and the Secretariat.

Given the diverse membership of the ISC, achieving a high level of consensus was crucial. I am pleased to report that the results of the General Assembly and the voting process reflect this, with 90% of voting Members supporting the new Statutes and Rules of Procedure.

More importantly, the discussions surrounding the revision of the Statutes have fostered frank and collegial dialogue among Members about the ISC's aspirations and goals. It is vital that we continue to capture this spirit in our strategic planning in the months ahead.

The revised Statutes not only reaffirm the vision and mission of the Council but also clarify its role as the Global Voice for Science.

In the coming weeks, we will initiate a consultation process to collectively identify our priorities. The ISC plays a unique and critical role, representing the broad spectrum of the scientific community to both the multilateral system and those influencing science policy, from the local to the global level. At a time when global and regional cooperation is increasingly challenging yet paramount, science faces significant obstacles, including the risk to trust in science. Without this trust, science cannot be effectively utilized, and societies cannot flourish.

We are confronted with a multitude of challenges – sociological, demographic, economic, mental and physical health, resource scarcity, food, water, energy, environmental issues, climate change, technological advancements and political instability. Now more than ever, the world needs science to be applied effectively across all dimensions, from discovery to application. The new Statutes position the ISC to advocate for and protect science for the global public good.

I thank you for your support and commitment and look forward to your further engagement as the ISC moves forward with a critical but difficult and complex mission.

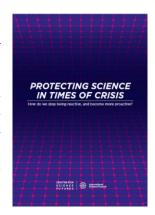
Following the acceptance of the new Statutes and Rules of Procedure, one immediate task is to form the Nominations and Elections Committee. Please monitor your inbox for a call for nominations for this committee coming later today.

Sir Peter Gluckman, ISC President

Protecting Science in Times of Crisis

The International Science Council (ISC) announces the release of its timely publication, <u>Protecting Science in Times of Crisis: How do we stop being reactive</u>, and become more proactive?

This comprehensive paper by the <u>Centre for Science Futures</u>, the ISC's think tank, addresses the urgent need for a new approach to safeguard science and its practitioners during global crises. With many conflicts spread over vast geographical zones; increasing extreme weather events due to climate change; and natural hazards such as earthquakes in unprepared regions, this new report takes stock of what we have learned in recent years from our collective efforts to protect scientists and scientific institutions during times of crisis.



Launch of Pilot Science Missions for Sustainability

Building on the recommendations of the Global Commission on Science Missions for Sustainability, the International Science Council (ISC) announced the launch of a Global Call to co-design and embark on Pilot Science Missions for Sustainability. With this call, the ISC invites novel collaborative consortia of scientists and scientific organisations, policy-makers, non-governmental organisations, communities, and the private sector, working on the cutting edge of identifying solutions for complex sustainability challenges, to co-design science missions for sustainability over an initial 18-month period. The call is open to bids for pilot missions worldwide, while pilots led by institutions located in the Global South are strongly encouraged to apply. The deadline for applications is 31 May 2024 (00:00 UTC). More information on the scope of the call, the application and selection processes and the timeframe are available here.

9. Awards and Honours

IUGG Commission on Mathematical Geophysics (CMG)

The 2024 Vladimir Keilis-Borok Medal was awarded to *Valerio Lucarini* (University of Leicester, UK) for his outstanding contribution to mathematical geophysics and development of cutting-edge mathematical theories for understanding the climate system fluctuations and its response to forcing. The Medal will be presented during the <u>34th IUGG Conference on Mathematical Geophysics</u>, 2-7 June 2024, in Mumbai, India, where Professor Lucarini will deliver the Medal Lecture.

The Vladimir Keilis-Borok Medal was established in 2021 to recognize middle career scientists, who made important contributions to the field of mathematical geophysics. The aim of the Medal is to honour the legacy of Keilis-Borok – a visionary science leader and organiser, prolific mathematical geophysicist, the CMG founder, and former IUGG President – in promoting transformative scientific advancement and selfless leadership.

Copernicus Gesellschaft

Lisa Alexander (Australia), IUGG Liaison Officer to the World Climate Research Programme (WCRP), was awarded the Copernicus Medal 2024.

Congratulations!

10. Obituary

With great sadness IUGG reports the death of

Gennady Aleksandrovich Sobolev (1935-2024), President of the IUGG National Committee of Russia (2003-2007).

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

April

- 1-5, IUGG, IAMAS, Cargèse, Corsica, France, <u>Molecular Understanding of Atmospheric</u> Aerosols Workshop and School
- 10-12, UNESCO-IOC, Barcelona, Spain, Ocean Decade Conference
- 8-12, ESA, Copenhagen, Denmark, Swarm 10 Year Anniversary & Science Conference 2024
- 14-19, EGU, Vienna, Austria, <u>EGU General Assembly 2024</u>

Mav

- 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> Changes and Trends in the Atmosphere
- 13-17, IUGG, IAGA, L'Aquila, Italy, Course on Operational Space Weather Fundamentals

- 19-21, IUSS, Florence, Italy, <u>Centennial Celebration and Congress of the International</u> 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, <u>Workshop on Computational Geosciences</u> for <u>Sustainable Development</u>

June

- 2-7, IUGG, CMG, Mumbai, India, <u>34th Conference on Mathematical Geophysics:</u>
 <u>Mathematical Geophysics for Sustainable Development</u>
- 2-7, IUGG, IAGA, Fredericton, New Brunswick, Canada, <u>The Combined ANGWIN/VCAIS</u>
 <u>Meeting</u>
- 5-7, IAG, Barcelona, Spain, EUREF Symposium 2024
- 7-17, IUGG, IACS, McCarthy AK, USA, <u>International Summer School in Glaciology</u>
- 17-21, IUGG, IAMAS, Hangzhou, China, <u>Quadrennial International Radiation Symposium</u> 2024
- 18-20, IAVCEI, Liverpool, UK, <u>1st International Conference on Volcanic and Igneous Plumbin Systems (VIPS)</u>
- 23-28, AOGS, Pyeongchang, Rep. of Korea, AOGS Annual Meeting 2024
- 23-28, IUGG, IAG, 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>5th General Assembly of the Latin American</u> and Caribbean Seismological Commission
- 30-6 July, IAGA, Utrecht, Netherlands, <u>18th Castle Meeting New trends on Paleo-, Rockand Environmental Magnetism</u>

July

- 7-12, IAMAS, Sapporo, Japan, <u>9th Global Energy and Water Exchanges (GEWEX) Open</u> Science Conference
- 8-12, IAMAS, Jeju, Rep. of Korea, <u>11th International Cloud Modeling Workshop (ICMW)</u> 2024
- 12-13, IUGG, IAMAS, Jeju, Rep. of Korea, <u>Workshop on Evaluation of Cloud Probe Processing Software</u>
- 13-14, IUGG, IAMAS, Jeju, Rep. of Korea, Workshop on Scientific Directions for Cloud Chamber Research
- 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, <u>Summer School</u>, <u>From meso to submesoscale ocean circulation structures: satellite and in-situ measurements, physical mechanisms and biological impact
 </u>
- 20, IAMAS, Jeju, Rep. of Korea, <u>A Short Course on Cloud Microphysics and Radar Observations</u>
- 20-27, IAHS, UNESCO-IHP, WMO, Cairo, Egypt, <u>IAHS Academy</u>
- 24-25, IAHS, Eichstätt, Germany, <u>International Commission on Continental Erosion (ICCE)</u> Symposium 2024

August

- 6-15, IAU, Cape Town, South Africa, 32nd IAU General Assembly
- 24-30, IGU, Dublin, Ireland, 35th International Geographical Congress

- 25-30, IAG, Strasbourg, France, <u>20th Geodynamics and Earth Tides Symposium</u>
- 25-31, IUGS, Busan, Rep. of Korea, <u>37th International Geological Congress</u>

September

- 4-6, IAG, Thessaloniki, Greece, Gravity, Geoid and Height Systems 2024
- 7-13, IAGA, Beppu, Japan, <u>26th Electromagnetic Induction Workshop</u>
- 9-13, IAMAS, Kuala Lumpur, Malaysia, <u>16th International Commission on Atmospheric</u> <u>Chemistry and Global Pollution Symposium and 18th International Global Atmospheric</u> <u>Chemistry Science Conference</u>
- 16-20, IASPEI, Corfu, Greece, Young Seismologist Training Course
- 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

- October, IAMAS, Qingdao, China, ICCL Conference
- 1-4, IUGG, IASPEI, Windhoek, Namibia, 4th General Assembly of the African Seismological Commission
- 6-9, EMSEV, IAGA, IASPEI, IAVCEI, Chania, Greece, <u>Electromagnetic Studies of Earthquakes and Volcanoes</u>
- 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

November

- November, IAG, Bogota, Colombia, <u>SIRGAS 2024</u>
- 3-7, IUGG, IASPEI, Belek, Türkiye, <u>15th General Assembly of the Asian Seismological Commission</u>
- 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
- 10-14, IAMAS, Goa, India, 9th SOLAS Open Science Conference

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, <u>IACS-IAMAS-IAPSO Joint Scientific Assembly 2025</u>
- 31 August 6 September, IAGA, IASPEI, Lisbon, Portugal, <u>IAGA-IASPEI Joint Scientific</u> 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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Editors: Franz Kuglitsch, Mioara Mandea, Alexander Rudloff (Editor-in-Chief), and Kathy Whaler.