



INTERNATIONAL UNION OF GEODESY AND GEOPHYSICS
UNION GEODESIQUE ET GEOPHYSIQUE INTERNATIONALE

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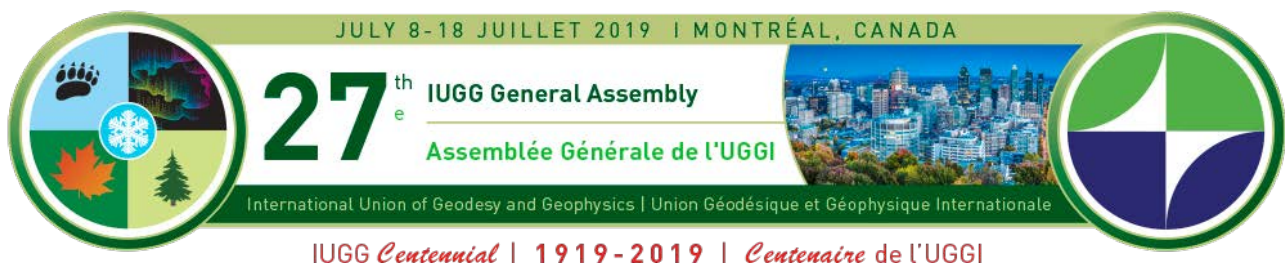
Volume 18 No. 11 (1 November 2018)

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 about the actions of the IUGG Secretariat, Bureau, and Executive Committee. Past issues are posted on the IUGG website (<http://www.iugg.org/publications/ejournals/>). E-Journals may be forwarded to those who will benefit from the information. Your comments are welcome.

Contents

1. 27th IUGG General Assembly: News
 - Abstract submission, registration, housing, and travel grants application opened
 - Administrative meetings
2. Call for invitations to host the 28th IUGG General Assembly
3. Corrections and updates to the IUGG Yearbook 2019
4. Joint AGU-IUGG Centennial Symposium “Disaster Risk Reduction, Resilience, Response, and Recovery” in Washington, D.C., USA
5. Report on the Meeting of the Austrian National Committee for IUGG
6. Report on the Forty-Eighth Session of the IPCC
7. Report on the International Conference “Understanding the Problems of Inland Waters: Case Study for the Caspian Basin”
8. Report on the ISARRA Conference
9. Awards and Honors
10. Meeting calendar

1. 27th IUGG General Assembly: News



Abstract submission, registration, housing, and travel grants application opened

Over the last year, the Scientific Program Committee (SPC) of the 27th IUGG General Assembly has worked diligently to prepare an exciting program. After two face-to-face meetings (Montreal in September 2017, and Vienna in April 2018), and with key input from the Associations and Union Commissions, and the designated lead conveners, the abstract submission, registration, housing, and

travel grants application is now open (<http://iugg2019montreal.com/>). Please submit your abstracts to the IUGG General Assembly! The list comprises 9 Union, 67 inter-Association and 164 Association Symposia. Also, 9 Union Lectures will be delivered during the second morning session on three days of the Assembly. The symposia cover a wide variety of scientific topics and reflect the latest trends and concerns in Earth and space sciences. The inter-Association Symposia show strong elements of interdisciplinary research, while the Association Symposia focus on more specific topics. We have given emphasis to communicating science to the public with three inter-Association symposia covering Earth systems literacy and geophysics in classrooms; outreach and citizen science research projects; innovation in geoscience education; and public communication, outreach, and awareness. (Spiros Pagiatakis, SPC Chair).

The IUGG2019 website allows for

- program overview and symposia details: <http://iugg2019montreal.com/iugg-program.html>
- abstract submission (<http://iugg2019montreal.com/abstract-submission.html>);
- searching for a hotel room (<http://iugg2019montreal.com/accommodation.html>) and when registering for the conference to book your hotel accommodation;
- registration and housing reservation (<http://iugg2019montreal.com/register.html>); and
- submission of a travel grant application (<http://iugg2019montreal.com/travel-grant.html>).

For additional information, please contact secretariatiugg@jpd.com Administrative meetings

The schedule of IUGG administrative meetings during the 27th IUGG General Assembly in Montréal, Canada, is set as follows. Please mark the meetings in your calendar.

Opening Ceremony of the 27th IUGG General Assembly

Wednesday, 10 July

IUGG Bureau Meeting

Session 1: Monday, 8 July

Session 2: Wednesday, 10 July

Session 3: Monday, 15 July

IUGG Executive Committee Meeting

Session 1: Monday, 8 July

Session 2: Thursday, 11 July

Session 3: Monday, 15 July

IUGG Council Meeting

Session 1: Tuesday, 9 July

Session 2: Friday, 12 July

Session 3: Tuesday, 16 July

Award Ceremony

Saturday, 13 July, 18:00-20:00 (followed by Reception)

Closing Ceremony of the 27th IUGG General Assembly

Wednesday, 17 July, 16:30-18:00 (followed by a Farewell)

IUGG Bureau & Executive Committee (2019-2023) Meetings

Thursday, 18 July, 10:00-12:00 – meeting of the new Bureau

Thursday, 18 July, 14:00-16:00 – meeting of the new Executive Committee

2. Call for invitations to host the 28th IUGG General Assembly

Invitations to host the 28th IUGG General Assembly in 2023 are being accepted and must be received by **7 January 2019**. The Guidelines for proposals are posted on the IUGG website

(<http://www.iugg.org/assemblies/>) or can be received directly from the IUGG Secretariat (secretariat@iugg.org). The IUGG Site Evaluation Committee appointed for that purpose will evaluate all invitations, and a report will be given to the IUGG Council before their final vote.

3. Corrections and updates to the IUGG Yearbook 2019

Corrections and updates to the information contained in the IUGG Yearbook 2019 are now being finalized. Please contact Franz Kuglitsch, IUGG Executive Secretary (fgkugl@gfz-potsdam.de), by **15 November 2018** with additions and corrections.

4. Joint AGU-IUGG Centennial Symposium “Disaster Risk Reduction, Resilience, Response, and Recovery” in Washington, D.C., USA

Disasters and natural hazards may have diverse origins but share many common threads in terms of developing resilience, reducing risks, improving responses, and in managing recovery. Addressing these requires close coordination and communication among scientists, policy makers, engineers, the business and insurance communities, planners, and more. As part of their centennial anniversary celebrations, AGU and IUGG will host a full-day symposium on these important societal issues on Sunday, 9 December, immediately preceding the AGU 2018 Fall Meeting Washington, D.C. Marcia McNutt, President of the National Academy of Science, the Head of the U.S. Adhering Organization to IUGG and former AGU President, will deliver a Keynote Lecture.

The main program will be a series of four panel discussions from world-leading experts exploring the science of disasters and natural hazards and improving response, risk reduction, and recovery. The goal is to form a rich dialog among diverse communities needed to address the increasing and increasingly costly challenges posed by disasters. There will be time within each panel for discussion. Panel topics will cover: (i) Science in Disaster Risk Appraisal and Management; (ii) Science for Risk Reduction, Resilience and Response to Disasters; (iii) Dealing with Cascading Disasters; and (iv) Understanding the Societal Impact of Severe Weather (including Space Weather) and Climate Change. A full program will be available soon.

Attendance is limited to 250 and open to registrants of the AGU Fall Meeting at no additional cost. Registration is available on a first come, first served-basis through the Fall Meeting’s registration site (<https://fallmeeting.agu.org/2018/centennial-events-at-fall-meeting/#AGU-IUGG100Symposium>). Those, who have previously registered for the Fall Meeting will have the opportunity to amend their registration adding this event ticket. The Symposium will start at 8:00 AM and conclude at 5:30 PM and will be held at the Grand Hyatt Washington adjacent to the Washington Convention Center.

A follow-on joint symposium will be held during the 27th IUGG General Assembly (<http://iugg2019montreal.com>) on Sunday, 14 July 2019, at the Palais des Congrès in Montréal, Québec, Canada with the aim of refining further the recommendations of the Washington symposium.

John LaBrecque, Chair, IUGG Commission on Geophysical Risk and Sustainability

5. Report on the Meeting of the Austrian National Committee for IUGG

The annual meeting of the Austrian National Committee for IUGG was held on 17-18 September 2018 in Innsbruck, Austria, at the invitation of the Department of Atmospheric and Cryospheric Sciences (ACINN) of the University of Innsbruck. The Head of the Department Georg Kaser welcomed the members of the ANC.



Participants of the ANC meeting (from left to right): Thomas Karl, Univ. Innsbruck, Ingomar Fritz, IAVCEI Correspondent; Johannes Böhm, IAG Correspondent; Kristin Richter, IAPSO Correspondent; Georg Kaser, IACS Correspondent; Mathias Rotach, IAMAS Correspondent; Günter Blöschl, IAHS correspondent; Wolfgang Lenhardt, ANC President and IASPEI Correspondent; Franz Kuglitsch, IUGG Executive Secretary; Barbara Leichter, IAGA Correspondent; and Norbert Höggerl, ANC Secretary General.

During the ANC meeting the following topics were addressed: (i) IUGG 2019 General Assembly Montreal: state of the ongoing preparation work; (ii) IUGG- and Liaison-Officer, Early-Career Scientists, Gold Medal and Fellowship nominations by the ANC; (iii) Reports by Correspondents of IUGG Associations; and (iv) Information exchange. The following topics were also discussed: Individual membership – advantage or disadvantage? No homogeneous answers were given, because there are differences in the benefits of individual membership: in some associations, there is a right to vote and not in others. To promote early career scientists in the International Association of Hydrological Sciences (IAHS), a commission has been set up. The idea behind this commission is to find the right way to foster communication with these scientists. Günter Blöschl, IAHS President, pointed out that early career scientists of the different Associations of the IUGG should interact more efficiently. Georg Kaser, the scientific representative of Austria in the Intergovernmental Panel on Climate Change (IPCC), gave an impressive report of the work of this UN body.

Michael Meyer delivered a lecture “Peopling the Tibetan Plateau & the High Himalaya - New dates and old challenges in high-altitude (geo)archaeology on the roof of the world”. The Austrian National Committee meeting was the perfect platform for the exchange of valuable information between the members of the different associations of the IUGG in a very relaxed atmosphere. More information can be obtained on the following websites: <http://acinn.uibk.ac.at>; <http://www.oegk-geodesy.at/index.html>

Norbert Höggerl, Secretary of the Austrian National Committee.

6. Report on the Forty-Eighth Session of the IPCC

The 48th Session of the Intergovernmental Panel on Climate Change (IPCC-48) and the First Joint Session of IPCC Working Groups I, II, and III took place at the Songdo Convensia, Incheon, Republic of Korea, from 1 to 6 October 2018. Jianping Li, Vice-Chair of IUGG Union Commission of Climatic and Environmental Change (CCEC), attended the sessions as an IUGG representative. IUGG has observer status in this intergovernmental panel. The opening ceremony of the Session was held on 1 October. The following people addressed the Session's delegates: Hoesung Lee, Chair of the IPCC; H.E. Moon Jae-in, President of Republic of Korea (via a video message); Elena Manaenkova, Deputy Secretary-General, World Meteorological Organization; Jian Liu, Acting Director, Chief Scientist, United Nations Environment Programme; Youssef Nassef, Director of Adaptation Programme, United Nations Framework Convention on Climate Change (UNFCCC); H.E. Kim Eunkyung, Minister of Environment of the Republic of Korea; Kim Jong-seok, Administration of Korea Meteorological Administration; and Park Nam-chun, Mayor of Incheon Metropolitan City.

The main agenda topic was the approval of the Summary for Policymakers (SPM) of the IPCC Special Report on Global Warming of 1.5°C (SR15) and the acceptance of the underlying report. This IPCC Special Report addresses the impacts of global warming of 1.5°C above pre-industrial levels and related global greenhouse gas emission pathways, in the context of strengthening the global response to the threat of climate change, sustainable development, and efforts to eradicate poverty. After intensive discussion and some work on re-wording of the SPM, the session adopted the SPM. The document contains four parts: (i) Understanding Global Warming of 1.5°C; (ii) Projected Climate Change, Potential Impacts and Associated Risks; (iii) Emission Pathways and System Transitions Consistent with 1.5°C Global Warming; and (iv) Strengthening the Global Response in the Context of Sustainable Development and Efforts to Eradicate Poverty. In addition, IPCC-48 accepted decisions on the IPCC Scholarship Programme and on the Ad Hoc Task Group on Financial Stability. It was decided that IPCC-49 would take place in May 2019 in Kyoto, Japan, and the Session should approve the 2019 Refinement of the 2006 Guidelines on National Greenhouse Gas Inventories. As this was the first time that IUGG attended IPCC Annual Meetings as an observer, it is important to mention that participation by the IUGG liaisons to IPCC can help the Union to understand better the latest progress and new actions of IPCC and to shape the Union's activities in the research area of climate and its variability.

Jianping Li, CCEC Vice-Chair

7. Report on the International Conference “Understanding the Problems of Inland Waters: Case Study for the Caspian Basin”

The Conference “Understanding the Problems of Inland Waters: Case Study for the Caspian Basin – UPCB2018” was held in Baku, Azerbaijan, from 12 to 14 May 2018 and co-sponsored by IUGG-IAPSO. The conference was organized by the Institute of Geography of the Azerbaijan National Academy of Sciences and the Inter-Islamic Science and Technology Network on Oceanography. The aim of the conference was to increase the exchange and cooperation between different international organizations and scientific teams (“communities”) dealing with studies of the Caspian Sea, Aral Sea, and Urmia and Van lakes. About 140 scientists and students from more than 55 organizations, including about 50 delegates from foreign countries, including France, Germany, Iran, Italy, Russia, Switzerland, Turkey, Turkmenistan, and the USA, participated in the conference. In addition to the conference, IUGG was also one of the main supporters of the one-day International Student Workshop devoted to the main themes of UPCB2018 Conference and organized on 11 May 2018. The aim of this workshop was to help students and early career scientists increase their

knowledge of geoscience and on the application of remote sensing to studies of environmental problems related to the Caspian basin. 31 students and young researchers and nine international and local experts specializing in remote sensing and geoscience lectured at the workshop.



At the UPCB2018 conference

One of the main outcomes of the UPCB conference was a discussion related to the establishment of an International Working Group (IWG) on Sustainable Development of the Caspian Sea Basin with the aim to initiate and oversee multi-disciplinary studies across the Caspian basin at different scales. The IWG suggested organizing an international Capacity Building Workshop (CBW) on sustainable development of the Caspian Sea Basin in Baku. This CBW should primarily address researchers and PhD students from different fields, such as archeology, urban planning, geomorphology, geology, geophysics, petroleum, biology, sustainable development, oceanology, hydrology, climate change, remote sensing, GIS and other related disciplines.

Elnur Safarov, Organizing Committee

8. Report on the ISARRA Conference

The International Society for Atmospheric Research using Remotely-piloted Aircraft Conference (ISARRA 2018) was held in Boulder CO, USA from 9 to 12 July 2018. This annually-held conference brings together the world's experts in the use of unmanned aircraft systems (UAS) for atmospheric research. This year's conference was hosted by the University of Colorado Boulder and attended by 130 participants from 17 different countries. The conference included several plenary oral sessions, during which researchers were able to provide presentations on the following topics: UAS to measure and understand turbulence; UAS to measure and understand clouds, aerosols and trace gases; UAS in the development of numerical weather prediction capabilities; UAS to measure and understand boundary layer processes; development of UAS capabilities and infrastructure for atmospheric science; use of UAS to understand high latitude processes; and UAS as a tool for observing severe weather phenomena. In addition, there was an introductory session, a poster session, time for exhibitors to present their UAS-centric equipment, and a conference dinner. During the introductory session, Joachim Reuder and Gregory Roberts gave keynote presentations on their ongoing work to develop and deploy UAS to study high latitude boundary layers and aerosol-cloud interactions, respectively. The poster session featured 38 different posters on a variety of topics, including the deployment of UAS to study the areas listed above for the oral sessions, development of

instrumentation for deployment on UAS, recent and upcoming field campaigns, and aircraft development. The industry exhibit session provided opportunities for meeting participants to interact with vendors from several companies and learn about UAS-specific instrumentation, platforms and services related to the deployment of these systems for atmospheric research.



Conference group photo (photo: Roger Laurence)

Travel support for early career and under-represented participants was provided through a variety of channels. IUGG partially supported conference registration costs for 10 early career participants from Cyprus, Germany, India, Norway, UK, and the USA. Additional travel support was made available by the U.S. National Science Foundation and the U.S. Department of Energy. More information on the conference can be found at the event's website: <http://isarra.colorado.edu/>.

Gijs de Boer, Chair of the Conference's Local Organizing Committee

9. Awards and Honors

The European Geosciences Union (EGU) announced the recipients of its Union Medals and Awards, Division Medals, and Division Outstanding Early Career Scientists Awards, who will be honored for their important contributions to the Earth, planetary and space sciences. They will receive their prizes at the 2019 EGU General Assembly in Vienna, Austria from 7 to 12 April 2019. Among the 2019 Division medalists are the following scientists who have been active in IUGG: **Daniel N. Baker** (USA), former Member of the IAGA Executive Committee, was awarded the Hannes Alfvén Medal; **Günter Blöschl** (Austria), President of IAHS, was awarded the John Dalton Medal; **Andreas Kääb** (Norway), former Member of the GRC Executive Committee, was awarded the Louis Agassiz Medal; **Tonie van Dam** (Luxembourg), Member of the CCEC Executive Committee, was awarded the Vening Meinesz Medal. *Congratulations to all medalists!*

10. Meeting calendar

A calendar of meetings of interest to IUGG disciplines (especially those organized by IUGG Associations) is posted on the IUGG website (<http://www.iugg.org/calendar.php>). Individual Associations may list more meetings on their websites according to their disciplines.

November

- 4-6, IAG, Shanghai, China, International Workshop on GNSS Ionosphere (IWGI2018). Web: <http://202.127.29.4/geodesy/iwgi2018/>
- 5-8, CODATA, WDS, Gaborone, Botswana, International Data Week 2018. Web: <http://www.codata.org/events/conferences/international-data-week-2018>
- 5-9, IAG, Canberra, Australia, 21st International Workshop on Laser Ranging. Web: <http://www.iwlr2018.serc.org.au/>
- 5-9, IAGA, Santa Maria-RS, Brazil, 7th Symposium of the Brazilian Space Geophysics and Aeronomy Society (SBGEA). Web: <http://www.sbgea.org.br/en/vii-sbgea-2/>
- 6-9, IAHS, UNESCO-IHP, Beijing, China, 8th Global FRIEND Water Conference. Web: <http://8thfriendwater.iahr.org.cn>
- 9-10, CODATA, Gaborone, Botswana, 31st CODATA General Assembly. Web: <http://www.codata.org/events/general-assembly/general-assembly-2018>
- 12-17, IAMAS, San Juan, Puerto Rico, School of Atmospheric Measurements in Latin America and the Caribbean: Atmospheric Particles and Reactive Gases (SAMLAC). Web: <http://samlac.uprrp.edu>

December

- 9, AGU, IUGG, Washington, DC, USA, AGU-IUGG Workshop on Disaster Science.
- 10-14, AGU, Washington, DC, USA, AGU 2018 Fall Meeting. Web: <http://fallmeeting.agu.org/2018>

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