



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

## **The IUGG Electronic Journal**

**Volume 18 No. 4 (1 April 2018)**

This informal newsletter is intended to keep IUGG Member National Committees informed about the activities of the IUGG Associations, and actions of the IUGG Secretariat. Past issues are posted on the IUGG website (<http://www.iugg.org/publications/ejournals/>). Please forward this message to those who will benefit from the information. Your comments are welcome.

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### **1. Serbia an Associate Member of IUGG**

An application for admission of Serbia to IUGG as an Associate Member was received from the Geographical Institute “Jovan Cvijic” of the Serbian Academy of Sciences and Arts. The IUGG Executive Committee welcomed this application, and it was placed before the IUGG Adhering Bodies in regular status (dues paid) for a vote by correspondence. The vote is now complete, and the application was accepted: 32 (of 43 eligible to vote) Members voted, and all votes are affirmative. According to the IUGG Statutes and By-Laws, the membership of Serbia is provisional until the approval of the vote by the IUGG Council. Congratulations to the new officers of the Serbian National Committee for Geodesy and Geophysics! They are Aleksandra Nina (President and the IAGA correspondent), Ana Milanović Pešić (Secretary General and the IAHS correspondent), Oleg Odalović (IAG correspondent), and Milan Radovanović (IAMAS correspondent).

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### **2. IUGG becomes an IPCC Observer Organization**

At the 47<sup>th</sup> Session of the International Panel on Climate Change (IPCC) held in Paris, France from 13 to 16 March 2018, the Panel accepted by consensus the accreditation of the IUGG as an Observer Organization. This accreditation will strengthen the Union’s contribution to the Panel’s activities, and allow the Union to provide direct input to the IPCC process by nominating experts to participate in scoping meetings for assessment and special reports.



*At the 47<sup>th</sup> session of the IPCC (photo: International Institute for Sustainable Development)*

The IPCC is currently in its sixth assessment cycle and will be delivering policy-relevant reports every year from 2018 to 2022, except for 2020. The first of these reports, the IPCC Special Report on Global Warming of 1.5°C, will be delivered in October 2018 as per the request of the 2015 United Nations Climate Change Conference (COP21). In 2019, the IPCC will update its methodologies in order for countries to report their emissions in line with the Paris Agreement on the basis of the best science. Two other special reports on land and on oceans will also be delivered in 2019. The Special Report on the Ocean and Cryosphere in a Changing Climate will assess new knowledge related to sea-level risks and options for increasing coastal resilience in both human and natural systems. It will look at water from the mountain top to the sea. During the Sixth Assessment Cycle, the IPCC will also assess many topics related to life on land including desertification, sustainable land management and food security in a Special Report on Climate Change and Land. The full Sixth Assessment Report, including three working group contributions on different aspects of climate change ready in 2021, will be completed with a Synthesis Report in 2022.

During the meeting in Paris, IPCC celebrated its 30<sup>th</sup> anniversary. The IPCC was launched in 1988 to assess the scientific results related to climate change by providing periodic assessment reports. Bert Bolin, a distinguished meteorologist and IUGG Bureau Member (1963-1967), was instrumental in arguing for the establishment of the IPCC; he believed that the World Climate Research Programme (WCRP) and the International Geosphere-Biosphere Programme (IGBP) should coordinate the science related to climate, its variability and change, but the scientific results should be assessed independently. Many IUGG scientists contributed to assessment reports by IPCC, and several of them shared the Nobel Peace Prize awarded to IPCC in 2007.

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### **3. Workshop series organized by the Argentinian National Committee for IUGG**

Since 2013, the Argentinian National Committee for IUGG (CNUGGI) and the National Geographical Institute (IGN) has organized a series of seven workshops with free admission on

topics related to Earth, ocean and atmospheric sciences. The workshops addressed professionals, high school and university level teachers, and the public. Each workshop was inaugurated by the Director of IGN and the CNUGGI President followed by a showing of the IUGG movie and presentations on the theme of the workshop. Also, a round table discussion on selected themes was held generating interaction between the workshop speakers, special guests and the audience. All workshops were held at IGN in Buenos Aires, Argentina, except one, which was held in San Juan, Argentina. Each workshop was attended by more than 150 people. The seven workshops addressed the following topics: (1) Volcanic eruptions: Causes and consequences; (2) Causes of the La Plata River flooding in Buenos Aires; (3) Earthquakes in Argentina and some associated phenomena; (4) Los Andes in movement - seismic risk; (5) Changes on continental glaciers and ice; (6) El Nino phenomenon: Past, present, and future; and (7) GPS and modern geodesy. The eighth workshop will be held in 2018, and the scientific topic of the workshop will be the ocean.

Corina Risso, CNUGGI Executive Vice President

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#### 4. Report on the THEMES 2017 workshop



*At the workshop (photo: A. Rubino)*

The workshop “THEMES 2017 - Physics and biogeochemistry of marine environments: multiscale analysis of past and present variability” took place in the Ca’Foscari palace of the University Ca’Foscari of Venice, Italy, 15-17 November 2017. The workshop brought together more than 50 (including 20 female) climatologists, ecologists, oceanographers, and modelers from eight countries to discuss the present state of knowledge and the opportunities for progress in measuring, modeling and predicting marine environments. The workshop consisted of nine sessions and a total of 52 talks, including four solicited talks by prominent international scientists, Werner Alpers (University of Hamburg, Germany), Sandro Carniel (CNR-ISMAR, Venice, Italy), Giuseppe Civitarese (OGS-Trieste, Italy), and Georg Umgiesser (CNR-ISMAR, Venice, Italy). Two evening discussion sessions and a closing open discussion paved the way toward improved cooperation between the different groups active in climatological, ecological and oceanographic investigations of our planet. The workshop was co-sponsored by IUGG and IAPSO. More information on the workshop can be found at: [http://www.dais.unive.it/~themes/themes\\_2017/index.html](http://www.dais.unive.it/~themes/themes_2017/index.html)

Angelo Rubino, Chair of the Local Organizing Committee

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## 5. IAHS and WMO articulate on innovative observations and measurements

In 2013, the International Association of Hydrological Sciences (IAHS) of IUGG established the Measurements and Observations in the XXI Century (MOXXI) working group with the specific aim to promote the advancement of novel observational techniques towards an improved comprehension of the hydrological cycle. Since then, MOXXI has attracted a vibrant multidisciplinary and international community and has organized special sessions at international conferences and focal workshops. A recent community paper “Measurements and Observations in the XXI century (MOXXI): innovation and multi-disciplinarity to sense the hydrological cycle” published in *Hydrological Sciences Journal* offers a synthesis of MOXXI objectives: a proactive behavior toward observations, multi-disciplinarity and cross-fertilization from other fields of science, and the use of affordable and opportunistic technologies to enrich our understanding of hydrological processes (<http://www.tandfonline.com/doi/full/10.1080/02626667.2017.1420191>).

The joint MOXXI – HydroHub “Innovation in Hydrometry - From ideas to operation” workshop was held at the World Meteorological Organization (WMO) in Geneva, Switzerland, 4-5 December 2017. HydroHub is the Global Hydrometry Support Facility of WMO. This two-half day workshop brought together members of the science and operations communities to learn about innovative observational methodologies and to foster the uptake of such novel solutions in operational environments. On the first day, around 70 participants from all over the globe attended 28 short presentations followed by Q&A on a variety of topics, including flood gauging, monitoring networks, citizen science, and drone initiatives in hydrology. On the second day, keynote talks, expert interviews, and breakout group discussions motivated the participants to identify key challenges and needs for the uptake of new technologies into hydrological practice. According to a questionnaire administered by WMO after the event, 94% of the surveyed participants deemed both days either good or excellent. Similar events will help open channels of communication and cooperation between the academia and national services for the development of adequate standards and quality management practices.

More information on the meeting can be found at the WMO website:

<https://public.wmo.int/en/events/workshops/innovation-hydrometry-from-ideas-operation>, and

the workshop report and presentations can be downloaded from the IAHS website:

<https://iahs.info/Commissions--W-Groups/Working-Groups/MOXXI/Information/MOXXI-2017.do>

Flavia Tauro, Chair of the IAHS MOXXI Working Group

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## 6. News from the International Council for Science

### *Call for pre-proposals: Pathways towards Sustainable African Urban Development*

As part of the 5-year “Leading Integrated Research for Agenda 2030 in Africa” program, the International Council for Science (ICSU), in partnership with the Network of African Science Academies (NASAC) and the International Social Science Council (ISSC) will support up to 11 collaborative research projects across Africa (to the value of up to EUR 90,000 each over two years) that will explore integrated approaches for sustainable urban development in Africa. The program is supported by the Swedish International Development Cooperation Agency (Sida). The deadline for pre-proposal submission is **14 May 2018** (18:00 CET). More information can be found at: <https://www.icsu.org/current/news/call-for-pre-proposals-pathways-towards-sustainable-african-urban-development> (source: the ICSU website)

### ***Report on the 3<sup>rd</sup> African Future Earth Committee Meeting***

The African Future Earth Committee (AFEC) met in Johannesburg, South Africa, on 27-28 November 2017. The mission of the African Future Earth Committee is to promote transformations to global sustainability through research and innovation in Africa and for Africa. The attendees were the AFEC members, Jon Padgham of the Global hub of Future Earth (GFE) and Daniel Nyanganyura, Director of the ICSU Regional Office for Africa. Amy Leurs, GFE Executive Director, welcomed the meeting's participants via Skype and informed them about the news in GFE.



*Meeting participants (photo: A.A Hady)*

The meeting agenda covered the following topics: Future Earth science activities in Africa, setting the priorities and strategies for action, role of AFEC in the upcoming Future Earth events in Africa, AFEC finances, funding and accounting, stakeholder inputs, and some other topics. AFEC discussed and approved the draft agenda of the upcoming conference “The Role of Science with Society and the Sustainable Development Goals (SDGs) in Africa” to be held from 9 to 11 May 2018 in Port Elizabeth, South Africa. AFEC elected Ahmed A. Hady as its new Chair, and Coleen Vogel as Vice Chair.

Ahmed A. Hady, AFEC Chair, and co-Chair of the IAGA Inter-Divisional Commission on Developing Countries

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## **7. Fifth World Landslide Forum 2020**

The International Consortium on Landslides (ICL) and the ISDR-ICL Sendai Partnerships 2015-2025 (IUGG is a part of the Partnerships) will organize the 5th World Landslide Forum (WLF5) from 2-6 November 2020 in Kyoto, Japan. This Forum will include a mid-term review of the ISDR-ICL Sendai Partnerships, voluntary contribution to the Sendai Framework 2015-2030 and the Agenda 2030 – Sustainable Development Goals, especially Goal 11 - Make cities and human settlements inclusive, safe, resilient and sustainable. The themes of WLF5 will include (1) Sendai Partnerships 2015-2025 and Kyoto 2020 Commitment; (2) Hazard and vulnerability mapping and zonation; (3) Monitoring and early warning; (4) Testing, modeling and risk assessment; (5) Risk management, capacity development and country practices; (6) Catastrophic landslides: causes and consequences; and (7) Frontiers of landslide science and innovative practices. At the 70th session of the UN General Assembly 2015, the 5th of November was designated as the “World Tsunami Awareness Day

(WTAD)”. It recognizes landslides near a coastline or at the bottom of the ocean as one major cause of tsunamis. Symposia or sessions on landslide–induced tsunami will be organized on 5 November 2020 by ICL, UNISDR, UNESCO and IUGG. More information can be found at: <http://wlf5.iplhq.org>

Kyoji Sassa, WLF5 Forum Chair

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## 8. Awards and honors

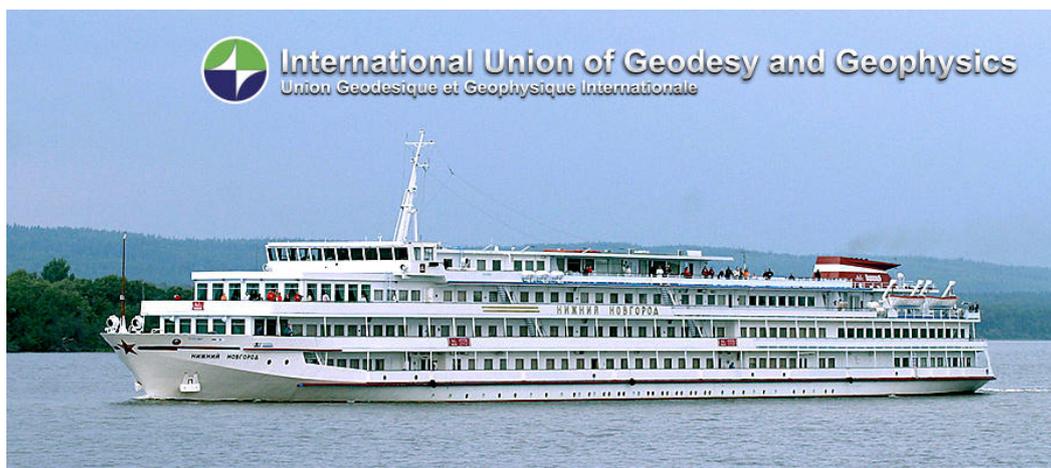
The International Hydrology Prize is awarded annually by the International Association of Hydrological Sciences (IAHS) of IUGG together with UNESCO and the World Meteorological Organization (WMO), to two people, who have made outstanding contributions to hydrological science. The 2018 recipients of the International Hydrology Prize are: **Howard Wheeler** (University of Saskatchewan, Canada) who will receive the Dooge medal for fundamental contributions to the science of hydrology, and **Andreas Schumann** (Ruhr University, Bochum, Germany) who will receive the Volker medal for outstanding applications of hydrological science for the benefit of society at large. The award ceremony will be held on 18 May 2018 at the Global conference ‘Prosperity through hydrological services’ organized by the World Meteorological Organization at the WMO Headquarters in Geneva, Switzerland, and co-sponsored by IAHS (<http://hydroconference.wmo.int/en/conf>). Congratulations to Howard and Andreas!

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## 9. 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 also list more meetings on their websites according to their disciplines.

### *IUGG Conference on Mathematical Geophysics*



The 32nd IUGG Conference on Mathematical Geophysics (CMG2018), organized by the IUGG Union Commission on Mathematical Geophysics (IUGG-CMG), will be held during 23-28 June 2018 in Nizhny Novgorod, Russia. The biennial CMG meeting covers a wide range of current research topics in mathematical geophysics. The conference aims to discuss key theoretical and observational aspects of solid earth, ocean, atmosphere, cryosphere, climate and other contemporary topics. The conference will take place on a boat that cruises the Volga River with daily stops at historic sites. The boat will depart and return to Nizhny Novgorod. The **registration** and **abstract submission deadline**

is **15 April**. For more information please visit the CMG2018 web site: <http://cmg2018.iapras.ru> or contact Anna Kazarova [kazarova@ipfran.ru] for questions or assistance with visa.

### *April*

- 3-6, IAMAS, WCRP, Boulder, CO, USA, Aerosols, Clouds, Precipitation and Climate (ACPS) workshop. Web: <http://acpcinitiative.org/Meetings.html>
- 8-13, EGU, Vienna, Austria, European Geosciences Union General Assembly 2018. Web: <http://www.egu2018.eu>
- 16-20, IAGA, IUGG, COSPAR, SCOSTEP, Buenos Aires, Argentina, COLAGE XI - Eleventh Latin American Conference on Space Geophysics. Web: <http://www.iafe.uba.ar/colage11>
- 23-26, IAG, Chania, Greece, International Review Workshop on Satellite Altimetry Cal/Val Activities and Applications. Web: <http://www.frm4alt.eu/int-cal-val-review>
- 23-27, IASPEI, IUGG, Al Hoceima, Morocco, Second General Assembly of the African Seismological Commission (AfSC 2018). Web: <https://afsc2018.sciencesconf.org/>
- 24-26, IAMAS, IUGG, SCAR, São José dos Campos-SP, Brazil, 4th International ANGWIN workshop: Exploration of High-latitude Upper Atmosphere Wave Dynamics. Web: <http://www.inpe.br/angwin>

### *May*

- 2-4, GEO, Frascati, Italy, 3rd GEO Data Providers Workshop. Web: [http://www.earthobservations.org/me\\_201805\\_dpw.php](http://www.earthobservations.org/me_201805_dpw.php)
- 6-9, IAHS, Algiers, Algeria, International Conference on African Large River Basin Hydrology. Web: <http://friend2018.ensh.dz/Accueil.html>
- 6-11, IAG, Istanbul, Turkey, UN GGIM AP/IAG/FIG Technical Seminar on Reference Frames in Practice. Web: <https://www.fig.net/fig2018/rfip.htm>
- 6-11, IAMAS, IUGG, WCRP, Canmore, AB, Canada, 2018 GEWEX Science Conference "Extremes and Water on the Edge". Web: <https://www.gewexevents.org/events/2018conference/>
- 7-9, IAHS, WMO, Geneva, Switzerland, Global Conference on "Prosperity through hydrological services". Web: <http://hydroconference.wmo.int>
- 8-10, IAHS, Cordoba, Spain, RSHS'18, Remote Sensing & Hydrology Symposium. Web: <http://rshssymposiumcordoba2018.com>
- 12-14, IASPEI, IUGG, Chengdu, China, 12th General Assembly of the Asian Seismological Commission (ASC) together with the 4th International Conference on Continental Earthquakes (ICCE). Web: <http://www.4thicce.com/>
- 12-14, IAPSO, IUGG, Baku, Azerbaijan, Understanding the Problems of Inland Waters: Case Study for the Caspian Basin (UPCB). Web: <http://upcm2018.org/>
- 14-17, IASPEI, IUGG, Miami, FL, USA, 3rd General Assembly of the Latin American and Caribbean Seismological Commission (LACSC) and Seismological Society of America (SSA) joint meeting. Web: <http://seismology2018.org/>
- 14-19, IAGA, IAMAS, IUGG, SCOSTEP, Hefei, China, Long-Term Changes and Trends in the Atmosphere workshop (ICMA). Web: <http://trends2018.ustc.edu.cn/home.html>
- 21-25, IAMAS, IAPSO, SCAR, Nanjing, China, Summer School on the Polar Climate System. Web: <http://202.119.112.75/s/2159/t/2672/a/172397/info.jspy>
- 21-25, IAVCEI, Olot, Spain, 7th International Maar Conference. Web: <http://maar2018.com>
- 28 May - 1 June, URSI, Gran Canaria, Spain, AT-RASC 2018. Second URSI Atlantic Radio Science Meeting. Web: <http://www.atrasc.com/homepage.php>
- 30 May - 1 June, IAG, Amsterdam, Netherlands, EUREF Symposium 2018, Web: <https://euref2018.eventtouch.eu/>

- 30 May - 2 June, NC Turkey, Izmir, Turkey, TUJJBK 2018. Scientific Congress of the Turkish National Union of Geodesy and Geophysics. Web: <http://www.tujjbkongre2018.org/en/>

## **June**

- 3-8, AOGS, Honolulu, HI, USA, AOGS2018. 15th Annual Meeting. Web: <http://www.asiaoceania.org/aogs2018>
- 3-8, IAG, Longyearbyen, Spitsbergen, Norway, 10th IVS General Meeting. Web: [http://event.trippus.net/Home/GetContent/AEAKgINexbzL4CiuUetTDa3g1dTtEfiBEO6rlmTTQCBd02esN01lraDp2He0cAiBMqbFcggKFZr\\_/AEAKgIOQ-p4F2ngZaONjRQGY8lcBzAq4plxWk17NdeVcjL-WW\\_8ek7SQGTxKcLOptgCsTbfsTDH8/eng/19099](http://event.trippus.net/Home/GetContent/AEAKgINexbzL4CiuUetTDa3g1dTtEfiBEO6rlmTTQCBd02esN01lraDp2He0cAiBMqbFcggKFZr_/AEAKgIOQ-p4F2ngZaONjRQGY8lcBzAq4plxWk17NdeVcjL-WW_8ek7SQGTxKcLOptgCsTbfsTDH8/eng/19099)
- 5-15, IACS, IUGG, McCarthy, AK, USA, International Summer School in Glaciology. Web: <http://glaciers.gi.alaska.edu/courses/summer-school/2018>
- 11-12, GEO, Geneva, Switzerland, 2018 GEO Symposium. Web: [http://www.earthobservations.org/me\\_201806\\_wps.php?t=climate](http://www.earthobservations.org/me_201806_wps.php?t=climate)
- 13-15, IAHS, Beijing, China, 8th International Water Resources Management Conference of ICWRS. Web: <http://iwr2018.bnu.edu.cn>
- 15-26, SCAR, Davos, Switzerland, POLAR2018. Where the poles come together. A SCAR & IASC Conference. Web: <http://www.polar2018.org/>
- 16-21, IUGS, Vancouver, Canada, RFG 2018. Resources for Future Generations. Web: <http://www.rfg2018.org/rfg/2018/home>
- 17-22, IAMAS, Nara, Japan, ICAE 2018. 16th International Conference on Atmospheric Electricity. Web: <http://icae2018.saej.jp/>
- 18-20, IAG, GFZ, Potsdam, Germany, 1st Workshop on the International Geodynamics and Earth Tide Service (IGETS). Web: <https://isdg.gfz-potsdam.de/igets-data-base/igets-workshop-2018>
- 18-22, IAG, ICT, Rome, Italy, IX Hotine-Marussi Symposium on Mathematical Geodesy. Web: <https://sites.google.com/uniroma1.it/hotinemarussi2018>
- 23-28, CMG, IUGG, Nizhny Novgorod, Russia, 32nd IUGG Conference on Mathematical Geophysics (CMG). Web: <http://cmg2018.iapras.ru>
- 29-30, IAG, Wuhan, China, IAG workshop: Hydrogeodesy. Web: <http://hydrogeodesy2018.csp.escience.cn>

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Editors: Tom Beer, Alik Ismail-Zadeh (Editor-in-Chief), Franz Kuglitsch (Associate Editor), and Kathryn Whaler.

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