



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

## **The IUGG Electronic Journal**

**Volume 13 No. 9 (1 September 2013)**

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.

### **Contents**

1. Report on the IACS-IAMAS Scientific Assembly
2. Report on the IAVCEI Scientific Assembly
3. Report on the IAHS-IAPSO-IASPEI Scientific Assembly
4. News from the International Council for Science (ICSU)
5. Awards and Honors
6. IUGG-related meetings occurring during September – November

---

### **1. Report on the IACS-IAMAS Scientific Assembly**

IACS and IAMAS held their joint scientific assembly DACA-13 (the Davos Atmosphere and Cryosphere Assembly 2013, “Air, Ice & Process Interactions”) from 8 to 12 July 2013 in Davos, Switzerland. The Opening Ceremony combined live music with short presentations and was moderated by Hans Volkert (IAMAS Secretary General) in an entertaining fashion. The majority of more than 950 participants from 52 countries on five continents were welcomed by Charles Fierz and Andrew Mackintosh (IACS President-Elect and Secretary-General), Athena Coustenis (IAMAS President) and Alik Ismail-Zadeh (IUGG Secretary-General). James Screen (UK) received the first IAMAS Early Career Scientist Medal (ECSM). Werner Schmutz and Michael Lehning introduced both scientific institutes of Davos (PMOD/WRC and SLF). Heini Wernli and Anja Schilling recalled the planning of DACA-13 and introduced organizational details.

Scientifically, the assembly covered numerous fields of atmospheric and cryospheric sciences, enriched by snow hydrology, oceanography, natural hazards, economy and risks, and the history of science. These made up an attractive program consisting of 21 mostly joint Symposia featuring several sessions each. More than 350 posters were on display for the whole week while dedicated poster sessions facilitated deeper discussions with the presenters in attendance. Four distinguished scientists delivered well-attended end-of-day keynote lectures, also open to the Davos public: Thomas Stocker started with the topic “*Climate change: Making the best use of scientific information*”; Valérie Masson-Delmotte lectured on “*Water stable isotopes and climate in Greenland, from present-day atmospheric monitoring to glacial-interglacial ice core records*”, Ronald B. Smith presented “*Global aspects of orographic precipitation*”; and Georg Kaser closed the scientific part of the assembly talking about “*The cryosphere after AR5: more knowledge but also more uncertainty*”. All abstracts can be downloaded from [www.daca-13.ch/program](http://www.daca-13.ch/program).

The assembly was highly ranked by the attendees. The quality of both talks and posters was generally considered as excellent, and the environment of Davos and its Congress Centre allowed for easy exchanges between colleagues and experts from different fields. It was a great pleasure to see many early career scientists attending the conference. Competition for the best student poster was fierce, and at the end of DACA-13, six “poster distinctions” were awarded to Fabiano Monti, Franziska Koch, Heather Archambault, Rianne H. Giesen, Saehee Lim, and Narendra Ojha. The cash prizes were sponsored by the Swiss Meteorological Society (SGM) and the Swiss Snow, Ice and Permafrost Society (SIP).

In addition, the Association of Polar Early Career Scientists (APECS) organized a successful workshop, which, for the first time, considered the needs of early career cryospheric scientists in the Alpine area. Further social events included the Festa Cryospherica at the famous *Schatzalp Hotel*, and the Conference Dinner with over 500 guests in the plenary hall, entertained by a group of traditional musicians. Joyce Penner (IAMAS Vice President) and Andrew Mackintosh (IACS Secretary General) read out together a resolution of thanks to the hosts. All guests warmly applauded the joint organizing team and the considerable group of student helpers.



*Intense discussions during a coffee break (photo: Marco Senft, PMOD/WRC)*

Since 2009, the Swiss National Organizing Committee (SNOC) chaired by Heini Wernli had meticulously planned this event, strongly supported by the two local Davos institutes, the Physikalisch-Meteorologisches Observatorium Davos / World Radiation Center (PMOD/WRC with Local Organizing Committee chair Werner Schmutz) and the WSL Institute for Snow and Avalanche Research (SLF with Scientific Program Committee chair Michael Lehning). Several generous sponsors helped in staging this event: the Swiss Academy of Sciences, MeteoSwiss, the Federal Office for the Environment, the Canton of Grisons as well as WMO (WCRP, WWRP) and IUGG by awarding travel grants in addition to those provided by IAMAS and IACS.

Several commissions and committees of both Associations held business meetings during DACA-13. The IAMAS Executive Committee discussed a resolution about aspects of ‘geo-engineering’ and adopted the bid for a triple-association assembly (IAGA-IAMAS-IAPSO) in Cape Town, South Africa, in 2017. On the weekend after DACA-13, the IACS Bureau interacted with its

correspondents, SG and WG chairs, as well as with its partners and stakeholders in a quite interesting open session; it then dealt with other Association matters during a closed session. At the end of two days of intensive discussions, Charles Fierz took office as IACS President, while Ian Allison continues to serve as Past President.

Received from Charles Fierz (IACS President) and Hans Volkert (IAMAS Secretary General)

---

## 2. Report on the IAVCEI Scientific Assembly



The IAVCEI 2013 Scientific Assembly was held from 20 to 24 July 2013 in Kagoshima, Japan. The assembly recorded the largest number of participants among IAVCEI conferences. It was attended by 1,069 scientists from 43 countries. The main theme of the conference was “Forecasting Volcanic Activity: Reading and translating the messages of nature for society”. 1209 (oral: 651 and poster: 558) papers were presented in 37 scientific sessions grouped into four symposia: Symposium 1 (Magmatic processes), Symposium 2 (Monitoring, observation and modeling of volcanic processes), Symposium 3 (Eruption processes and volcano evolution), and Symposium 4 (Volcanic hazards, risk and environmental impact). Keynote lectures on “Adensite: their origin and the role in the Earth evolution” and “Forecasting volcanic activity of Sakurajima” were delivered by Yoshiyuki Tatsumi and Masato Iguchi (both Japan), respectively. The program and abstracts of the assembly can be downloaded at: <http://www.iavcei2013.com/sessionlist/session.html>.



*Vulcanian eruption at Sakurajima Volcano: mid-assembly field trip on July 22 (photo: J. Marti)*

The Opening Ceremony was held at the Houzan Hall on 20 July and was followed by the Awarding Ceremony where the IAVCEI medals and new honorary members were presented. Shigeo Aramaki (Japan) received the Kraft Medal, Barry Voight (USA) the Thorarinsson Medal, Antonio Costa (Italy) and Fidel Costa (Singapore) the Wager Medal, Heather Wright (USA) the George Walker Award. New IAVCEI Honorary members are Servando de la Cruz-Reyna (Mexico), Sergei Fedotov (Russia), Grant Heiken (USA), and Izumi Yokoyama (Japan).

The scientific assembly was accompanied by two pre-conference and four post-conference field trips to visit various active volcanoes in Japan and China. During the mid-conference field trips to visit volcanoes in Kagoshima, participants were lucky to see the spectacular vulcanian explosions of Sakurajima (see photo). Eight workshops and many business meetings of IAVCEI Commissions and other groups were conducted in association with the conference.

The participants also enjoyed the Ice-Breaker, GALA-party, and the conference dinner, met old friends / found new friends, and experienced the local culture and foods. The next major IAVCEI meetings are COV8 (2014, Yogyakarta, Indonesia), XXVI IUGG General Assembly (2015, Prague, Czech Republic), and IAVCEI Scientific Assembly (2017, Portland, USA). More information can be found at the IAVCEI website: <http://www.iavcei2013.com>.

Received from Joan Marti, IAVCEI Secretary General, and Shinji Takarada (IAVCEI 2013 Steering Committee Member)

---

### 3. Report on the IAHS-IAPSO-IASPEI Scientific Assembly



Three of IUGG's constituent Associations, IAHS, IAPSO and IASPEI, met for a Joint Scientific Assembly in Gothenburg, Sweden, from 22 to 26 July 2013. The theme of the Assembly, "Knowledge for the Future", was chosen in order to highlight the importance of improved knowledge in hydrology, oceanography and seismology in addressing the challenges posed by climate change and the risks of natural extreme events. The Assembly attracted 1087 participants from 66 countries. The Assembly's opening day was marked by a joint plenary session with a lecture from each Association:

- James Mori (Japan), the plenary lecturer for IASPEI described the ambitious JFAST expedition, which aimed to study the causes of the major earthquake that caused the 2011 tsunami. The expedition set new records, drilling over 800 m into the seafloor at a water depth of 8000 m.
- Kathryn Kelly (USA), the plenary lecturer for IAPSO, focused on meridional heat transport in the Atlantic Ocean, a key component of the global climate system. She combined different data sources to review the heat budget and anomalies in the heat transport, indicating a southern source for the anomalies.
- Kuniyoshi Takeuchi (Japan), the plenary lecturer for IAHS, emphasized the key role for geosciences in a proactive approach to disaster risk reduction. He warned that disasters



occur when we ignore nature and the lessons of the past, leading to the take-home message “there is no such thing as a natural disaster”.

The plenary lectures were followed by a formal Opening Ceremony. The participants of the assembly were welcomed by David Turner (Chair, Local Organizing Committee), Elisabet Ahlberg (Dean, University of Gothenburg), Leif Anderson (First Vice-President, Royal Swedish Academy of Sciences), Alik Ismail-Zadeh (IUGG Secretary General), and Emmali Jansson (Deputy Mayor, City of Gothenburg). The Opening Ceremony was followed by a reception hosted by the City of Gothenburg.

Each Association offered a broad program of lectures and posters, with up to 11 parallel sessions at any one time. The lecture program was organized into 48 Association symposia, together with nine joint symposia focusing on areas such as land-ocean interactions, advanced applied statistics, and tsunamis. This program was complemented by two afternoon poster sessions. Some highlights from the Association’s programs:

- IASPEI’s Milne lecture on the History of British seismology was delivered by Roger Musson (UK). The lecture was followed by a documentary movie about the life of John Milne, the English scientist, who played a leading role in development of seismology as a scientific discipline. Dr. Robin Adams was awarded the first IASPEI Medal, for sustaining IASPEI goals and activities and for scientific merits.
- The highlight of the IAPSO program was the presentation of the 2013 Albert I Gold Medal, commemorating the Prince of Monaco, Vice President of IUGG (1919-1922). The medal was presented to Albert Gordon (USA), who then delivered the Albert I Memorial Lecture describing his research on the Indonesian Throughflow, the link between the Pacific and Indian Oceans.
- *Deltas* were a significant focus of the IAHS program, including a plenary lecture delivered by Efi Foufoula-Georgiou (USA), where she described an international initiative to develop and deliver the knowledge base for understanding and protecting these vulnerable coastal systems. Several prizes and medals were awarded during the week.

Hubert Savenije (who was the IAHS President-elect for 2011-2013) assumed office of the IAHS President for the term of 2013-2017. Participants of the IAHS Plenary thanked President Gordon Young for his leadership during the presidential term of 2009-2013. More information on the assembly can be found at: <http://iahs-iapso-iaspei2013.com/>.

Received from David Turner, Chair of the Local Organising Committee

---

#### **4. News from the International Council for Science (ICSU)**

##### ***ICSU supports the independence of the Russian Academy of Sciences***

Following recent developments in Russia, including the proposed legislation that would threaten the independence of the Russian Academy of Sciences, ICSU’s Committee on Freedom and Responsibility in the Conduct of Science (CFRS) has expressed its support for an independent, merit-based Russian Academy. Among many other sweeping changes, the proposed legislation would see the Russian Academy merged with several smaller scientific institutions and abolish any distinction between fully-fledged academicians and corresponding members. CFRS believes that the free and responsible conduct of science requires the independence of scientific academies. It is

therefore deeply concerned about the proposed reforms, especially because these proposals appear to have arisen without proper consultation with the scientific community.

Leiv K. Sydnes, the chair of CFRS, has expressed ICSU's support for the Academy's independence in a letter sent to Vladimir Fortov, President of the Russian Academy of Sciences. The full letter at: [http://www.icsu.org/news-centre/news/pdf/ICSU\\_CFRS\\_letter\\_Russian\\_Academy\\_of\\_Sciences.pdf](http://www.icsu.org/news-centre/news/pdf/ICSU_CFRS_letter_Russian_Academy_of_Sciences.pdf)

Source: ICSU web-site

---

## 5. Awards and Honors

**John Labrecque** (NASA Science Mission, USA), Vice Chair of the IUGG Union Commission on Geophysical Risk and Sustainability, was awarded the 2013 Flinn Award of the American Geophysical Union (AGU).

**Jaime Urrutia-Fucugauchi** (UNAM, Mexico), IUGG Liaison Officer to the ICSU ROLAC, was awarded the 2013 AGU International Award.

**Günter Blöschl** (Vienna University of Technology, Austria), President of the IAHS ICWRS Commission, was awarded the IAHS-UNESCO-WMO International Hydrology Prize.

**Federico Lombardo** and **Elena Volpi** (University Roma Tre, Italy) were awarded the IAHS Tison award for young scientists.

---

## 6. IUGG-related meetings occurring during September – November

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>). Specific information about these meetings can be found there. Individual Associations also list more meetings on their websites according to their disciplines.

### September

- 01-06, IAG, Potsdam, Germany, IAG Scientific Assembly. Web: <http://www.iag2013.org>.
- 01-07, IASPEI, St. Petersburg, Russia, 8<sup>th</sup> International Symposium on Rockbursts and Seismicity in Mines. Web: <http://pts.mi-perm.ru/rasim/>.
- 02-07, IACS, Zermatt, Switzerland, Summer School on Mass Balance Measurements and Analysis 2013. Web: [http://www.geo.uzh.ch/microsite/wgms/mb\\_summerschool.html](http://www.geo.uzh.ch/microsite/wgms/mb_summerschool.html).
- 09-11, IAG, Nottingham, UK, 2<sup>nd</sup> Joint International symposium on Deformation Monitoring (JISDM).  
Web: <http://www.nottingham.ac.uk/engineering/conference/jisdms/index.aspx>.
- 16-18, IAG/IAU, Paris, France, Journées 2013 Systèmes de Référence Spatio-Temporels. Web: <http://synte.obspm.fr/jsr/journees2013/>.
- 16-20, IAHS, Perth, Australia, IAHS International 40<sup>th</sup> Congress – Solving the Groundwater Challenges of the 21<sup>st</sup> Century. Web: <http://iahcongress2013.org/>.
- 17-20, IAG, St. Petersburg, Russia, Terrestrial Gravimetry: Static and Mobile Measurements (TGSM-2013). Web: <http://www.elektropribor.spb.ru/tgsm2013/eginf>.

- 19-20, ITU/BIPM, Geneva, Switzerland, Workshop on the Future of the International Time Scale. Web: <http://www.itu.int/ITU-R/index.asp?category=conferences&rlink=itu-bipm-workshop-13&lang=en>
- 20-24, IUGG, Prague, Czech Rep., Bureau, Executive Committee, Finance Committee and Science Program Committee meetings.
- 23-28, IACS, Yuzhno-Sakhalinsk, Russia, International Symposium “Physics, chemistry and mechanics of snow”. Web: <http://snowphysics.fegi.ru/en/main.html>.
- 25-28, IUGG, Göcek, Turkey & Rhodes, Greece, 26th International Tsunami Symposium. Web: <http://tsunami2013.org>.
- 30 September - 2 October, IAGA, IUGG, Kaluga, Russia, International Conference “Geophysical Observatories, Multifunctional GIS and Data Mining”. Web: [http://www.kaluga2013.gcras.ru/index\\_eng.html](http://www.kaluga2013.gcras.ru/index_eng.html).

#### **October**

- 7-11, IAG, Loja, Ecuador, 11<sup>th</sup> International School of the Geoid Service: Heights and Height Datum. Web: <http://www.11iges.utpl.edu.ec/>
- 14-17, IAG, Columbus, Ohio, USA, Asia-Pacific Space Geodynamics Symposium. Web: <http://geodeticsscience.org/apsg2013>
- 17-19, IAHS, EGU, Kos, Greece, Facets of Uncertainty - 5th EGU Leonardo Conference, Hydrofractals'13, Statistical Hydrology – Stahy'13. Web: <http://kos2013.org/>
- 21-23, IAG/IAGA/IASPEI, Panama City, Panama, School on Reference Systems, Crustal Deformation and Ionosphere Modelling. Web: <http://www.sirgas.org/index.php?id=233>
- 22-25, IAG, Istanbul, Turkey, International Symposium on Global Navigation Satellite Systems 2013. Web: <http://www.isgnss2013.org/>.
- 24-26, IAG, Panama City, Panama, SIRGAS Meeting 2013. Web: <http://www.sirgas.org/index.php?id=193&L=2>

#### **November**

- 11-15, IAG, Fujiyoshida, Japan, 18th International Workshop on Laser Ranging. Web: <http://geo.science.hit-u.ac.jp/lw18/>
- 12-15, IRDR, Sanya, China, Scientific Committee and IRDR-China meetings.
- 16-18, GeoUnions, Antalya, Turkey, Joint Board Meeting of the ICSU GeoUnions.
- 18-20, IUGG/WMO, Geneva, Switzerland, 2<sup>nd</sup> IUGG-WMO workshop on ash dispersal forecast and civil aviation. Web: <http://www.unige.ch/sciences/terre/mineral/CERG/Workshop2.html>.
- 27-29, IAHS, Kathmandu, Nepal, International Conference on Climate Change, Water and Disaster in Mountainous Areas. Web: <http://www.soham.org.np/news/international-sem-2013.pdf>

---

End of IUGG Electronic Journal Volume 13 Number 9 (1 September 2013)

Editor: Alik Ismail-Zadeh, Secretary General (Alik.Ismail-Zadeh@kit.edu)

Associate Editor: Franz Kuglitsch, Executive Secretary (fgkugl@gfz-potsdam.de)

**Note: Contributions to IUGG E-Journal are welcome from members of the IUGG family. Please send your contributions to Alik Ismail-Zadeh by e-mail (insert in Subject line: *contribution to E-Journal*). The contributions will be reviewed and may be shortened.**