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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. Comment of the Italian National Committee for Geodesy and Geophysics on the IUGG Statement “The Earth’s climate and responsibilities of scientists and their governments to promote sustainable development”
2. Editorial comment on the IUGG Statement “The Earth’s climate and responsibilities of scientists and their governments to promote sustainable development”
3. Report on the International Symposium on the Cryosphere in a Changing Climate
4. Report on the Workshop on Processing of Cloud Particle Measurements
5. Jubilee
6. Awards and honors
7. Meeting calendar

1. Comment of the Italian National Committee for Geodesy and Geophysics on the IUGG Statement ‘The Earth’s climate and responsibilities of scientists and their governments to promote sustainable development’

On 28 July 2017, the President and the Secretary General of IUGG received a letter from the Italian National Committee for Geodesy and Geophysics, which is published below.

“We, the Italian National IUGG Commission, agree with the main purpose of the Statement adopted by the IUGG Bureau on 12 June 2017 *The Earth’s climate and responsibilities of scientists and their governments to promote sustainable development*:

Speaking for the international Earth and Space scientific community and for the National Members of the Union, the International Union of Geodesy and Geophysics (IUGG) is dismayed that the United States (US) seeks to renegotiate, or withdraw from, the Paris Agreement on Climate Change. This decision will potentially have a significant impact on the implementation of the 2030 Agenda for Sustainable Development and specifically its Sustainable Development Goal 13 “Take urgent action to combat climate change and its impacts”. The world expects that scientific excellence and scientific knowledge will be incorporated into decision-making and that internationally binding decisions, once made, will be honored by governments and their successors.

But we are concerned with the fact that the whole document can be misleading from a scientific point of view. In fact, we strongly support the importance of the study of the effects of greenhouse gases on climate, but effects on climate are surely the superimposition of different processes promoted by human activities, such as the land use changes, and natural endogenous processes, such CO₂ lithosphere-asthenosphere degassing.

Scientific excellence and knowledge should be surely incorporated into “decision-making policies”, remembering to take into account, especially for the Earth Sciences Community, the principle expressed by R. Pielke Jr. in “Room for doubt” (Nature 410, 151, March 2001): *“As a general principle, science and technology will contribute more effectively to society's needs when decision-makers base their expectations on a full distribution of outcomes, and then make choices in the face of the resulting – perhaps considerable – uncertainty.”*

The supplied comment, in our opinion, puts the proper strength on the scientific aspects and boosts the original document, therefore we would appreciate a wide circulation of it within IUGG.

The Italian National IUGG Commission: Prof. Giuliano Panza (President) – IUGG; Dr. Teodoro Georgiadis (Scientific Secretary) – IAMAS; Dr. Massimo Cocco – IASPEI; Prof. Mattia Crespi – IAG; Dr. Giuseppe De Natale – IAVCEI; Dr. Tommaso Moramarco – IAHS; Dr. Mauro Sclavo – IAPSO; Prof. Barbara Stenni – IACS; Prof. Umberto Villante – IAGA.

Italy, 28 July 2017”

2. Editorial comment on the IUGG Statement ‘The Earth’s climate and responsibilities of scientists and their governments to promote sustainable development’

In preparing the IUGG Statement ‘The Earth’s climate and responsibilities of scientists and their governments to promote sustainable development’, both the IUGG Commission on Climatic and Environmental Change (CCEC) and the International Association of Meteorology and Atmospheric Sciences (IAMAS) found that there was a wide divergence of views in relation to the contents of such a statement and, indeed, whether to make such a statement at all. On the latter point it was decided that society needs to hear a scientific viewpoint and that IUGG was indeed the appropriate body to publicize such a viewpoint.

It was also evident in preparation of the statement that the views of individual scientists range in relation to climate change from extreme caution to vocal advocacy. Therefore, the statement focused on the expected funding implications involved in a potential US renegotiation of the Paris Climate Agreement in relation to the Sustainable Development Goals, and then merely to reiterate past IUGG resolutions. This approach was endorsed by CCEC, by IAMAS and by the IUGG Bureau.

In particular, the statement does not discuss the issue of natural and anthropogenic contributors to the climate change nor does it support scientific analyses that do not consider all of the major factors. Instead, the statement highlights the importance of the use of scientific assessments related to climate change as well as the importance of following an international agreement once it has been analyzed, discussed, agreed on, and finally signed by national governments. The latter is one of the major principles of democratic decision-making and management accepted by the United Nations. Indeed, the decision-makers should “base their expectations on a full distribution of outcomes, and then make choices in the face of the resulting – perhaps considerable – uncertainty” (Pielke Jr., R.A., Room for doubt, Nature 410, 151, 8 March 2001). However, this should be done before and not after signing an agreement.

“Everybody has a right to question scientific results. Researchers do it themselves every day, and that’s what shapes research programmes and hastens progress. But there’s a difference between documenting evidence and sowing doubt to protect agendas. The fact is that climate scientists have produced a mountain of evidence over the past several decades, and numerous scientific organizations – including the Intergovernmental Panel on Climate Change, which represents most governments of the world – have assessed those findings on many occasions. Each time, the confidence in the underlying conclusions has only increased; the onus is now on climate sceptics to find evidence that mainstream science is wrong” (Editorial, Seek climate advice through established routes, *Nature* 548, 5, 3 August 2017; doi:10.1038/548005a).

3. Report on the International Symposium on the Cryosphere in a Changing Climate

The 2017 IACS Scientific Assembly held 12-17 February 2017 was the first international symposium to bring together three leading international organizations for promoting cryospheric research; the International Association of Cryospheric Sciences (IACS), the International Glaciological Society (IGS), and World Climate Research Programme (WCRP) Climate and Cryosphere Project (CLiC). Conceived and planned for at least 5 years, this meeting attracted 227 participants from 27 countries. The symposium consisted of 114 oral presentations and 100 poster presentations keynoted by 7 distinguished speakers who gave plenary lectures at the beginning of each day. The symposium not only attracted leading scientists, but also Michael White, senior editor at *Nature*, and Bronwyn Wake, Chief Editor of *Nature Climate Change*.



Delegates visiting the Waiarapa Fault, site of the 1855 M8 earthquake, during the mid-conference field trip (photo: courtesy of IACS)

The meeting was held at Victoria University in New Zealand’s capital city of Wellington. It began with a traditional Māori welcome known as a *mihi whakatau*. Professor Chris Rizos opened the Symposium on behalf of IUGG President Michael Sideris. IACS held open- and closed-business meetings during and immediately following the symposium. The symposium experience was replete with enjoyable and informative trips and chances to engage in informal discussion with delegates. Just prior to the start of the symposium there was a 2-day trip to Tongariro National Park. All of the delegates who took this excursion managed to complete the famous Tongariro Alpine Crossing, a demanding hike over the top of a volcano in the North Island. On Wednesday afternoon of the symposium, a mid-week excursion was arranged to visit the local geology as well as to sample the wines of one of New Zealand’s prime vineyard districts. A post-symposium excursion in the South

Island was arranged for some participants to visit Aoraki/Mt. Cook and to see its many glaciers. The IACS Presidency was transferred from Charles Fierz to Regine Hock at the IACS Annual Closed Bureau Meeting held in Christchurch after the Aoraki field trip.

Andrew Mackintosh chaired the Local Organizing Committee in his role as IACS Secretary General. Ian Allison, IACS Vice President, chaired the Scientific Programme Committee, which included 13 scientists from 8 countries. Andrew wishes to thank his committee members, IACS colleagues, as well as Magnus Magnusson, IGS Secretary General, Doug MacAyeal IGS President (who co-wrote this article), and Gwénaëlle Hamon, Executive Officer of CLiC, for helping to organize a very successful symposium.



Three generations of the IACS leadership visiting Aoraki/Mt Cook National Park. From left to right Regine Hock (President, 2017-2021), Charles Fierz (President, 2013-2017), and Ian Allison (President, 2009-2013) (photo: courtesy of IACS)

Andrew Macintosh, IACS Secretary General, and Douglas R. MacAyeal, IGS President

4. Report on the Workshop on Processing of Cloud Particle Measurements

The analysis of recent airborne campaigns shows differences in cloud products (e.g., size distributions, bulk cloud properties) resulting from different data analysis methods of imaging cloud probes. Hence experts and students from 26 institutions participated in the EUFAR/IAMAS/IUGG/ICCP Workshop on Processing of Cloud Particle Measurements at the German Aerospace Center (DLR) in Oberpfaffenhofen, Germany, to discuss, optimize and harmonize cloud data analysis in order to augment data quality of current optical array probes employed on aircrafts. 39 participants from 12 nations met from 7 to 9 July 2017 at the Institute for Physics of the Atmosphere to receive training on cloud probe software and to transfer knowledge on cloud probe data evaluation within the international cloud community. The workshop focused on data analysis of optical array cloud probes and hands-on training with the most commonly used software packages by students and early career scientists who will be working with cloud measurements in the future. By the close of the workshop, participants were proficient in manipulating, analyzing and graphing cloud data.

EUFAR/IAMAS/IUGG/ICCP workshop participants on 8 July 2017 at DLR, Oberpfaffenhofen, Germany



01 Regis DUPUY, Fr	07 Mengistu WOLDE, CA	13 Sorin VAJAIAC, RO	19 Max MAHN, US	25 Yvonne BOOSE, DE	30 Jonny Croisier, UK
02 Aaron BANSEMER, US	08 Stavros KEPPAS, UK	14 Victor PETROV, RU	20 Alexei KOROLEV, CA	26 Matt FREER, US	31 David Plummer, US
03 A. KIRCHGAESSER, UK	09 David DELENE, US	15 Valerian HAHN, DE	21 Pierre COUTRIS, FR	27 Jeff FRENCH, US	32 Greg McFARQUHAR, US
04 Graeme NOTT, UK	10 Thomas LACHLAN-COPE, UK	16 Larry OOLMAN, US	22 Mizanur RAHMAN, BD	28 Jea Min YEOM, KOR	33 Elisabeth OSTROM, GB
05 Tina JURKAT, DE	11 Marina SCHIMPF, UK	17 Max PORT, DE	23 C.G. DESHPANDE, IN	29 Joe FINLON, US	34 Darrel BAUMGARDNER, US
06 Nicolas GAPP, US	12 Junghwa LEE, DE	18 Christiane VOIGT, DE	24 Keshaw RAJHANS, IN		

Legend: **id number**, First name, FAMILY NAME, Country code (of work, not necessarily nationality)

Not shown: Colin GURGANUS, US, Alisia SADYKOVA, RU, Stefan KAUFMANN, DE, Jonas KLEINE, DE, Adam MAJEWSKI, US.

Photo: Voigt

Arrangement: Hans Volkert

Christiane Voigt (DLR), Darrel Baumgardner (DMT), and Greg McFarquhar (University Illinois)

5. Jubilee



Congratulations to **Harsh Gupta**, Immediate Past President of IUGG, on the occasion of his 75th birthday! The life of Harsh Gupta is a wonderful example of extraordinary service for geoscience and society. He has held leadership roles in national and international scientific organizations, e.g., the Asia Oceania Geosciences Society (AOGS), the Asian Seismological Commission (ASC), the International Association of Seismology and Physics of the Earth Interior (IASPEI), the International Council for Science (ICSU), the International Lithosphere Program (ILP), IUGG, the International Union of Geological Sciences (IUGS); in education as Vice Chancellor of Cochin University of Science and Technology; and in research management as Director of the Indian National Geophysical Research Institute (NGRI) in Hyderabad.

As the Leader of the Third Indian Scientific Expedition to Antarctica he, together with his Indian colleagues, succeeded in establishing a permanent base station for scientific research in a record time of one Antarctic Summer. As Secretary to the Government of India, Department of Ocean Development, he contributed to detailed Indian Ocean surveys for submitting India's claim for Legal Continental Shelf and to the foundation of the Indian Tsunami and Storm Surge Warning Center. As a Member of the National Disaster Management Authority of the Government of India, Harsh coordinated and administered the necessary work in those areas within zones of high earthquake vulnerability. Harsh's scientific achievements are significant. Particularly, he provided the first geophysical evidences of an enormously thick crust below the Himalaya and Tibet Plateau region,

contributed to the understanding of the impact of artificial water reservoirs on triggered seismicity, and to comprehension of the genesis of earthquakes in stable continental regions. All these activities helped to advance geosciences and to bridge our science with societal needs. We wish Harsh great health and happiness!

6. Awards and Honors

The Intergovernmental Panel on Climate Change (IPCC) announced selected experts to contribute to the *Special Report on the Ocean and Cryosphere in a Changing Climate*. Among the experts are five experts of the International Association of Cryospheric Sciences (IACS) of IUGG: **Hiroyuki Enomoto** (Japan), IACS Bureau Member, **Regine Hock** (USA), IACS President, **Andrew Mackintosh** (New Zealand), IACS Secretary General, **Ben Marzeion** (Germany), 2017 IUGG Early Career Scientist Awardee, and **Xiao Cunde** (China), IACS Vice President.

Congratulations to all!

7. 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.

September

- 4-13, GFZ, Potsdam, Germany, Potsdam Summer School. Human Environments in a Changing World. Web: <http://potsdam-summer-school.org/>
- 5-7, IAG, Reykjavik, Iceland, Workshop on Glacial Isostatic Adjustment and Elastic Deformation. Web: <https://www.arcus.org/events/arctic-calendar/27197>
- 10-15, IUGG, IACS, IAPSO, SCAR, Trieste, Italy, Past Antarctic Ice Sheet Dynamics (PAIS) Conference. Web: <http://pais-conference-2017.inogs.it/>
- 11-15, GFZ, Potsdam, Germany, EGSiEM Autumn School for Satellite Gravimetry Applications. Web: <http://www.egsiem.eu/autumn-school>
- 11-15, IGU, IUSS, WMO, Prague, Czech Republic, WMESS 2017. World Multidisciplinary Earth Sciences Symposium. Web: <http://www.mess-earth.org/>
- 18-22, COSPAR, Jeju Island, Republic of Korea, 3rd COSPAR Symposium. Web: <http://cospar2017.org/>
- 18-22, ISPRS, Wuhan, China, ISPRS Geospatial Week 2017. Web: <http://gsw2017.3snews.net/>
- 18-23, IUGG, IAGA, L'Aquila, Italy, International School of Space Science. Advanced Course on Complexity and Turbulence in Space Plasmas. Web: <http://www.cifs-iss.org/futurecourses.asp>
- 19-21, IAG, Bonn, Germany, IAG Workshop: Satellite Geodesy for Climate Studies. Web: <http://geodesy-for-climate.org/>
- 21-22, IAHS, Warsaw, Poland, STAHY 2017. Web: <http://www.stahy2017.org/>
- 24 September – 3 October, IAVCEI, Ecuador, 13th Gas Workshop. Web: <http://www.iavcei-ccvg.org/workshops/>
- 25-27, IAG, IAU, Alicante, Spain, Journées des Systèmes de Référence et de la Rotation Terrestre. Furthering our knowledge of Earth Rotation. Web: <https://web.ua.es/journees2017/>

- 25-29, UNESCO/IGCP, Ibadan, Nigeria, Second Workshop and Field Trip "Long and short-term geodynamic interaction in tropical Africa". Contact: lgcp646sec@yahoo.fr
- 30 September - 7 October, IUGG, IAGA, Hekla, Iceland, 8th Nordic Workshop - Paleogeography, Paleoclimate and the Geomagnetic Field.

October

- 1-4, ICTP, IUGG, Trieste, Italy, Workshop-Conference on Near-Fault Observations and Models for Earthquake Hazard Assessment. Web: <http://indico.ictp.it/event/8294/>
- 2-5, IAG, Riga, Latvia, ILRS Technical Workshop 2017. Web: <http://www.ilrstw2017.lu.lv/>
- 2-6, IASPEI, Cargèse, Corsica, France, Earthquakes: nucleation, triggering, rupture and relationship with aseismic processes. Web: <https://earthquakes2.sciencesconf.org/>
- 8-13, CODATA, IUGG, Saint Petersburg, Russia, CODATA 2017 Conference – "Global Challenges and Data-Driven Science". Web: <http://codata2017.gcras.ru/>
- 10-11, IAG, Monaco, 9th ABLOS Conference. Web: <http://www.ablosconference.com/>
- 16-18, IAG, Strasbourg, France, International workshop on the inter-comparison of space and ground gravity and geometric spatial measurements. Web: <https://geodesy.sciencesconf.org/>
- 18-22, NC VIETNAM, Hanoi, Vietnam, VIET-GEOPHYS-2017. The International Conference on Research Development and Cooperation in Geophysics. Web: <http://www.igp-vast.vn/vgp17/>
- 23-26, ICSU, Taipei, ROC, 32nd General Assembly of the International Council for Science including a joint meeting with the International Social Science Council
- 23-29, IUGG, IAMAS, Camaguey, Cuba, Aerosol Training School as part of the Caribbean Aerosol-Health Network (CAHN). Web: <http://www.igacproject.org/working-groups/AmericasWG/2017School>

November

- 20-22, IAHS, Gorgan, Iran, The Second IAHS Panta Rhei International Workshop on Water System Knowledge Innovation and its Practices in Developing Countries. Web: http://iahs.info/news/?news_id=215#.WUPGetxpzDB
- 22-24, IAG, Mendoza, Argentina, Workshop on Real-Time GNSS Positioning. Web: <http://ingenieria.uncuyo.edu.ar/sirgas2017/en/>
- 27-29, IAG, Mendoza, Argentina, SIRGAS 2017 Symposium. Web: <http://ingenieria.uncuyo.edu.ar/sirgas2017/en/>
- 29 November - 1 December, IUGG, IAPSO, Venice, Italy, THEMES 2017.
- 30 November - 1 December, IAG, Mendoza, Argentina, Workshop on SLR in Latin America. Web: <http://ingenieria.uncuyo.edu.ar/sirgas2017/en/>

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