# The IUGG Electronic Journal

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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 Web site (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. Invitations to host the XXVI IUGG General Assembly in 2015

By the deadline of 27 December 2010, six invitations were received to hold the XXVI General Assembly of IUGG in 2015 in:

- *Athens, Greece*, from the Hellenic National Committee of Geodesy and Geophysics and the Research Center for Atmospheric Physics and Climatology of the Academy of Athens;
- **Buenos Aires, Argentina**, from the Instituto Geografico Nacional and the Argentinean National Committee for Geodesy and Geophysics;
- Copenhagen, Denmark, from the Danish National Committee for IUGG;
- *Honolulu, Hawaii, USA*, from the National Academy of Sciences and the American Geophysical Union;
- Hyderabad, India, from the Indian National Academy of Sciences; and
- *Prague, Czech Republic*, from the Institute of Geophysics of the Academy of Sciences of the Czech Republic and the Czech National Committee for Geodesy and Geophysics.

The bids were sent to the members of the reconstituted IUGG Site Evaluation Committee. The Danish member of the committee, Christian Tscherning, offered his resignation as a result of the perceived conflict of interest. The IUGG President Tom Beer, with the approval of the IUGG Bureau, reconstituted the Site Evaluation Committee: *Michel Beland* (Canada) as Chair; *Kiyoshi* 

Suyehiro (Japan) and Peter Suhadolc (Italy) as members. The Committee will analyse all bids and present its report to the IUGG Council for their vote at the 2011 General Assembly in Melbourne.

## 2. Report on the Business Meeting of the German National Committee for IUGG

The business meeting of the German National Committee for Geodesy and Geophysics (NKGG) was held on 12 November 2010 at the Alfred Wegener Institute for Polar and Marine Research (AWI) in Bremerhaven. The meeting was chaired by the NKGG President Rainer Kind. Heinrich Miller, head of the Glaciology Department of the Alfred Wegener Institute and host of the meeting, presented the Institute and spoke about the AWI history, the structure, and the scientific activities. Members of the Committee reported on their activities in the IUGG Associations, commissions, and working groups. IUGG Secretary General Alik Ismail-Zadeh attended the business meeting and informed the NKGG members about the current and planned IUGG activities, particularly about the preparations for the XXV IUGG General Assembly in Melbourne. The Committee discussed closer cooperation with the German National Committee for IUGS. A special lecture on the tsunami warning system in the Mediterranean was delivered by Peter Koltermann, former head of Section, UNESCO Tsunami unit. More information on the Committee can be found on the web page www.bgr.de/nkgg/ (in German).

Received from Thomas Plenefisch, NKGG Secretary

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

### Open Science Conference: Planet Under Pressure

The Executive Board decided that ICSU will join the global change programmes - Diversitas, the International Geosphere-Biosphere Programme, International Human Dimensions Programme of Global Environmental Change, and the World Climate Research Programme - and the Earth System Science Parnership as co-sponsor of the open science conference "Planet Under Pressure", taking place in London, 26–29 March 2012. The conference will provide a comprehensive update on the state of the planet, the pressure it is under and the societal transformations required to move to a more sustainable pathway. It will discuss solutions and provide scientific input to the UN Conference on Sustainable Development 2012 (Rio+20).

### Data and Information

The criteria for membership of the ICSU World Data System (WDS) and the certification process are now available on the WDS website (<a href="http://icsu-wds.org/">http://icsu-wds.org/</a>). An online application form will be available in January for organizations wishing to join WDS. The WDS Scientific Committee will evaluate all applications and provide accreditation for the successful organizations. *IUGG-related services and data centers are invited to submit an application*.

The ICSU Executive Board accepted the generous offer from the Japanese National Institute of Information and Communications Technology (NICT) to host and financially support the WDS International Programme Office. As requested by the Executive Board, a site visit took place in December and a Letter of Cooperation between ICSU and NICT is being finalized.

The third meeting of the WDS Scientific Committee was held in September in Cape Town, South Africa in conjunction with the CODATA International Conference. The committee made progress

in planning the first ICSU WDS conference 'Global Data for Global Science', which will be held in Kyoto, Japan, 3–6 September 2011. The next meeting of the Scientific Committee will be held in Paris on 14–16 March 2011.

# Strategic Coordinating Committee on Information and Data (SCCID)

The third meeting of the Strategic Coordinating Committee for Information and Data (SCCID) was held in Paris in September. The committee discussed the Terms of Reference that had not yet been addressed and began drafting an interim report which will be finalized at the final SCCID meeting—scheduled to take place in Paris, 16-18 March 2011.

Source: ICSU Insight Newsletter, December 2010, Vol. 8, No. 3

# 4. Report on the Workshop "Electromagnetic Studies of Earthquakes and Volcanoes (EMSEV)"

The workshop was held at the Chapman University (Orange, California, USA) on 3-6 October 2010. About 55 participants from 12 countries (Japan, France, Italy, Romania, Poland, India, Russia, Ukraine, New Zealand, China, Mexico and US) attended the Workshop. At the opening ceremony Ramesh Singh, Vice Chair of the IUGG GeoRisk Commission and local organizer of the workshop, welcomed the participants and presented the background of the EMSEV Workshop organized at the Chapman University. Jacques Zlotnicki, Chair of the EMSEV Inter-Association Working Group of IUGG, presented the historical perspective of EMSEV. Catherine Clark, Associate Dean of the Schmid College of Science, and Daniele Struppa, Chancellor of the Chapman University, welcomed the participants and wished them a fruitful meeting.



Three keynote presentations were delivered at the workshop. Thomas Rockwell (University of California, San Diego) spoke about the Southern California Active Fault (Targetting Faults that are Near Failure for Precursor EM Studies). John Eichelberger (USGS) gave a talk entitled "Will Electromagnetic Techniques be the Key to Understanding Magmatic-Hydrothermal Systems". Karl Kappler (Lawrence Livermore Laboratory, Berkley, USA) presented an overview of the long–term monitoring of ultra-low frequency electromagnetic fields at Parkfield, California.

Two Panel Discussions were held at the workshop: "EM Precursors, Do they Really Exist?" and "What Next Related to Seismo-Electromagnetic Activities?" The discussion was focused on the future of seismo-electromagnetic studies, particularly on coordinated efforts in seismo-electromagnetic studies and on the free use of data collected by individual groups.

A business meeting of the EMSEV Working Group was held during the workshop. A proposal to carry out integrated EM studies in Kyrgyzstan was discussed, and the members of EMSEV supported this idea. Also two proposals were discussed to host the next EMSEV Workshop in Poland and Japan. The members endorsed that the EMSEV Bureau may take a decision about the next workshop.

The workshop was supported by USGS, EMSEV, IASPEI, IAGA, the Chancellor of the Chapman University, and the Schmid College of Science, Chapman University.

Received from Ramesh Singh, Chair, 2010 EMSEV Workshop

# 5. Report on the 2010 General Meeting of SIRGAS and on the Second IAG-PAIGH-SIRGAS School on Reference Systems

SIRGAS (Sistema de Referencia Geocéntrico para las Américas) is the geocentric reference system for Latin America and the Caribbean, including a gravity field-related vertical reference system. It is the Sub-commission 1.3b (Regional Reference Frame for South and Central America) of the International Association of Geodesy (IAG) and a Working Group of the Cartographic Commission of the Pan American Institute for Geography and History (PAIGH). The Second IAG-PAIGH-SIRGAS School on Reference Systems took place on 8-10 November 2010, and the SIRGAS 2010 General Meeting and the 42th Meeting of the PAIGH Directing Council on 11-12 November. The events were held in Lima, Peru and hosted by the Instituto Geográfico Nacional of Peru. IUGG cosponsored the events.

The School was attended by 112 participants from 13 countries. It comprised the themes: Types of coordinates, their definitions, relations and transformations; geodetic reference systems and frames (ICRS/ICRF, ITRS/ITRF, regional and national densifications of ITRF); determination of precise coordinates (station positions and velocities) using GNSS techniques, including network adjustment and alignment to ITRF; vertical reference systems (geometrical and physical heights, reference surfaces, unification of heights systems); and definition, realization, and use of SIRGAS in practice and science.

The SIRGAS General Meeting was attended by 89 participants. In 37 oral presentations and 13 posters, the following SIRGAS issues were presented: Enlargement/densification and analysis of the continuously operating network SIRGAS-CON; the SIRGAS reference frame and the impacts caused by the recently occurred earthquakes in Latin America and the Caribbean; studies of the atmosphere (ionosphere and troposphere) based on the SIRGAS infrastructure; achievements related to the use of GNSS data in real time in the SIRGAS area; national reports about the SIRGAS activities in the Latin American and Caribbean countries; SIRGAS vertical reference system; and contribution of SIRGAS to GGOS (Global Geodetic Observing System). Presentations and extended abstracts of the contributions are available at the SIRGAS web site: http://www.sirgas.org.

Received from William Martinez, Instituto Geográfico Agustín Codazzi, Bogotá, Colombia

### 6. Report on the eGY-Africa Workshop

eGY-Africa is a bottom-up initiative by African geoscientists and others to secure better Internet connectivity in their institutions. IUGG and IAGA are currently the main sponsors. The Association of African Universities (<a href="http://www.aau.org">http://www.aau.org</a>) and ICSU Regional Office for Africa are expanding their commitment to eGYAfrica. This planning workshop was held in Accra (Ghana) on 24-25 November 2010. The workshop was attended by a core of 12 persons from 7 countries with the twin objectives of reviewing National Research and Education Network (NREN) developments in Africa and planning the next steps for eGYAfrica: (1) raise awareness about the digital divide issue and the cost-benefits of investing in Internet connectivity in higher education and research institutions, (2) develop national groups of concerned scientists and others who will engage with decision makers, (3) collaborate with other bodies and programs who share the objective of reducing the digital divide, and (4) collect information and measurements of Internet performance via the PingER Project to be used as the basis for making the case for better interconnectivity.

Received from Charles Barton, leader of the eGY-Africa initiative

### 7. Honors and Awards

*Trevor McDougall* (CSIRO Marine and Atmospheric Research, Hobart, Australia) will be the recipient of the 2011 Prince Albert I Medal of IAPSO. The medal will be given for "his outstanding work on (1) important and fundamental problems of ocean fluid dynamics over the full range of ocean scales, and (2) the thermodynamic properties of seawater". The Award ceremony will take place at the IUGG2011 General Assembly in Melbourne, 1 July, at 10:30.

Gordon McBean (The University of Western Ontario, London, Canada) is awarded the Order of Ontario, Ontario's highest honor. He is a leading scientist and authority on climate change and natural disasters. Gordon is a former IUGG Bureau Member (1987-1995) and current Chair of the Scientific Program "Integrated Research on Disaster Risk".

**Roland Schlich** (member of the French National Committee for IUGG and former IUGG liaison to SCAR) is elected Treasurer of the European Geosciences Union (EGU) for the term 2011–2013. He will be inaugurated during the next EGU Plenary meeting on 4 April 2011 in Vienna, Austria.

# 8. Obituary

### Gilbert Brian TUCKER (1930-2010)



Brian Tucker, who played a major role in forging the current landscape of atmospheric and environmental research in Australia and who also contributed seminally to a range of IUGG-related activities, died on 25 November 2010 in Mornington, Victoria.

Born in South Wales in 1930, Brian graduated from the University College of Wales in Aberystwyth in 1950. Thereafter he undertook post-graduate study at Imperial College in London gaining the Diploma of Imperial College (DIC) and a University of London PhD in 1954.

His meteorological career began as a weather forecaster for the Royal Air Force and continued as a researcher at the UK Met Office. After emigrating to Australia in 1965 Brian served successively as Assistant Director for Research and Development in the Bureau of Meteorology (1965-1969), Officer-in-Charge at the Commonwealth Meteorology Research Centre (1969-1973) and Chief of CSIRO's Division of Atmospheric Physics / Research (1973-1992). His contribution to directing and strengthening Australian atmospheric and climate research was formally recognized in 1989 with his election to Fellowship of the Australian Academy of Technological Sciences and Engineering.

On the international scene he was a member for the ten key formative years of the Scientific Committee of the World Climate Research Programme, and he also served as President of the IUGG's International Association of Meteorology and Atmospheric Physics (1987-1991). In the latter capacity he both oversaw a name change of the association with the final word 'Physics' being replaced by 'Sciences', and in the same vein he forcibly championed the Association's broadening vision of its central role within the environmental sciences in general and within the IUGG in particular.

His own research was creative in character and eclectic in scope. It extended from observational studies of local Alpine cloud formations, to modeling considerations of regional air dispersion and pollution, and the diagnostic elucidation of global transport processes and chemistry research. Brian Tucker was a courteous individual, a visionary manager, a considerate and encouraging leader, and an enthusiastic communicator. It is these attributes that enabled him to operate effectively and successfully as an inspirational prompter, guide and advocate of atmospheric research, and for which he will be remembered with both a sense of loss and with warm appreciation.

Huw C. Davies, Past IAMAS President (1999-2003)

## 9. IUGG-related meetings occurring during February - April 2011

A calendar of meetings of interest to IUGG disciplines (especially those organized by IUGG Associations) is posted on the IUGG web site (<a href="http://www.IUGG.org/calendar">http://www.IUGG.org/calendar</a>). Specific information about these meetings can be found there. Individual Associations also list more meetings on their web sites according to their disciplines.

### **February**

- 7–9, IAHS, Bern, Switzerland, 6th LISSIG Workshop "Remote Sensing of Snow and Glaciers: Cryosphere, Hydrology and Climate Interactions".
- 14-18, IUGG, IAGA, Prague, Czech Republic, 4th IAGA/ICMA/CAWSES-II Workshop on "Vertical Coupling in the Atmosphere-Ionosphere System".
- 21-23, IAHS, UNESCO, Algiers, Algeria 4<sup>th</sup> International Symposium "Water Resources and Sustainable Development (CIREDD'4).
- February 27 March 4, AGU, Fairbanks, USA, Chapman Conference: Relationship Between Auroral Phenomenology and Magnetospheric Processes.
- February 28 March 4, AGU, Honolulu, USA, Chapman Conference: Atmospheric Gravity Waves and Their Effects on General Circulation and Climate.

### March

- 19-23, IUGG, IAGA, Luxor, Egypt, 3rd IAGA Symposium "Heliospheric Physics during and after a deep solar minimum".
- 21-25, IUGG, IAPSO, SCOR, WCRP, Mauritius, "Towards an Observing System for the Greater Agulhas System: Building links and capacity for East African participation".
- 21–25, AGU, Santa Fe, USA, Chapman Conference: Climates, Past Landscapes, and Civilizations.
- March 27 April 1, IAHS, Monaco, International Symposium on Isotopes in Hydrology, Marine Ecosystems, and Climate Change Studies

### April

- 3-8, EGU, Vienna, Austria, General Assembly of the European Geosciences Union,
- 11-14, IAHS, UNESCO, Vienna, Austria, International Conference: The Status and Future of the World's Large Rivers
- 18-21, IAHS, WMO, Exeter, UK, International Symposium "Weather Radar and Hydrology"
- 20-21, IAHS, Nanjing, China, International Symposium on Climate Change and Water

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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 by the Editor.