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The IAG Newsletter is under the editorial responsibility of the Communication and Outreach Branch (COB) of the IAG.

It is an open forum and contributors are welcome to send material (preferably in electronic form) to the IAG COB (newsletter@iag-aig.org). These contributions should complement information sent by IAG officials or by IAG symposia organizers (reports and announcements). The IAG Newsletter is published monthly. It is available in different formats from the IAG new internet site: http://www.iag-aig.org

Each IAG Newsletter includes several of the following topics:

I. news from the Bureau Members
II. general information
III. reports of IAG symposia
IV. reports by commissions, special commissions or study groups
V. symposia announcements
VI. book reviews
VII. fast bibliography

Books for review are the responsibility of:
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**General Announcements**

**IAG Young Authors Award**

The International Association of Geodesy (IAG) grants the Young Authors Award for important contributions of authors of 35 years of age or younger in the IAG Journal of Geodesy (JoG) (see [http://www.iag-aig.org/index.php?tpl=text&id_c=13&id_t=108](http://www.iag-aig.org/index.php?tpl=text&id_c=13&id_t=108)). Up to two awards are granted for each two-year period preceding a General Assembly or a Scientific Assembly. The next Scientific Assembly will be held in Potsdam, Germany, September 2013; therefore nominations are invited for publications in 2011 and 2012 (JoG volumes 85 and 86). At least three IAG Fellows or Associates may send a joint nomination by 1st of March 2013 to the IAG Secretary General ([iag@dgfi.badw.de](mailto:iag@dgfi.badw.de)). Fellows are listed in the Geodesist’s Handbook or online at [http://iag.dgfi.badw.de/fileadmin/IAG-docs/Fellows_1991-2011.pdf](http://iag.dgfi.badw.de/fileadmin/IAG-docs/Fellows_1991-2011.pdf); IAG Associates are all geodesists active in IAG (e.g. as an IAG officer or member, or by participation in an IAG General or Scientific Assembly).

HERMANN DREWES
IAG Secretary General

**Publication of the IAG Symposia series**

**IAG Symp. 140**

Following the International Symposium on Gravity, Geoid and Height Systems (GGHS 2012) in Venice, Italy from October 9-12, 2012, a new volume of peer-reviewed proceedings will be published by Springer in the IAG Symposia Series.

All submissions and reviews will be handled electronically through the following Springer Web site: [http://iags.edmgr.com/](http://iags.edmgr.com/)

Deadline for submissions is: **November 18, 2012**

Articles related to an oral or a poster presentation in any of the following sessions can be submitted and the peer-reviewed process will be handled by their respective editors:

- **S1 = Gravimetry and Gravity Networks:**
  - Herbert Wilmes

- **S2 = Global Gravity Field Modelling, Assessments and Applications:**
  - Jianliang Huang + Urs Marti

- **S3 = Future Gravity Field Missions:**
  - Isabelle Panet

- **S4 = Advances in Precise Local and Regional High-Resolution Geoid Modelling:**
  - Riccardo Barzaghi

- **S5 = Establishment and Unification of Vertical Reference Systems:**
  - Laura Sánchez

- **S6 = Gravity Field and Mass Transport Modelling:**
  - Shuanggen Jin

- **S7 = Modelling and Inversion of Gravity-Solid Earth Coupling:**
  - Carla Bräutenberg

- **S8 = Gravity Field of Planetary Bodies:**
  - Oliver Baur

Specifications to authors are provided on the submission Web site. In particular:

- LATEX and Word submissions are accepted, as well as several other formats.
- manuscripts do not need to be submitted in the final format for publication.
general contributions are limited to 6 pages, while invited abstracts in Melbourne are limited to 8 pages (a specific formula to estimate the length of the manuscript is provided on the Web site).

Accepted manuscripts will appear online on the Springer Web site for the IAG Symposium Series (http://www.springer.com/series/1345) and will be published in print in a single volume.

IAG Symp. 139

Following the IUGG General Assembly in Melbourne, Australia from June 28 to July 7, 2011, 109 manuscripts were submitted through the new Springer submission Web site (http://iags.edmgr.com/).

While the last manuscript was only submitted in April 2012, all reviews should have been completed by November 2012, allowing a possible publication by Springer in Spring 2013. More information will be provided in a future IAG Newsletter.

IAG Symp. 138

Volume related to meeting on Reference Frames for Applications in Geosciences (REFAG 2010), held in Marnela-Vallée, France from October 4 to 8, 2010, will soon be published by Springer as IAG Symp. 138 (Eds. Z. Altamimi, X. Collilieux), 360 pages, 181 illustrations.

Articles will be available online on December 31, 2012 at the following URL: http://www.springer.com/earth+sciences+and+geography/book/978-3-642-32997-5, ISBN 978-3-642-32997-5

CHRIS RIZOS (Editor)
PASCAL WILLIS (assistant Editor-in-Chief)

New series of global gravity anomaly maps released by the BGI

The Bureau Gravimétrique International (BGI) has recently computed and released a series of global maps of gravity anomalies (complete spherical Bouguer, Isostatic and surface free-air). This new "World Gravity Map" (WGM) products represent the first gravity anomaly maps computed in spherical geometry at a global scale that take into account rigorous geodetic definitions and a realistic Earth model (including gravity corrections for most of surfaces masses : lands, seas, inner seas, lakes, ice caps...). The computations have been done using spherical harmonic modeling at ultra-high degrees (d/o 10800) especially performed at BGI for this project and recently published in Journal of Geodesy (Balmino, G., Vales, N., Bonvalot, S. and Briais, A., 2011. Spherical harmonic modeling to ultra-high degree of Bouguer and isostatic anomalies. Journal of Geodesy. DOI 10.1007/s00190-011-0533-4).

The WGM project has been conducted and led by BGI in the frame of IAG/IGFS activities with the support of several international organizations (IAG/IGFS, IUGG, IUGS, UNESCO). It is aimed to contribute to the geological and geophysical maps distributed by the Commission for the Geological Map of the World (CGMW) and UNESCO as well as to IAG/GGOS. The printed maps, are distributed at low cost for educational and research purposes at the CGMW website. Hereafter are the relevant websites:

Bureau Gravimétrique International (BGI) : http://bgi.obs-mip.fr/
Commission for the Geological Map of the World (CGMW) : www.ccgm.org

Reference of the maps:

SYLVAIN BONVALOT
Director of BGI

IGS Workshop 2012 - Poland, Presentations Available

The proceedings of the IGS 2012 Workshop in Olsztyn, Poland at the University of Warmia and Mazury are now available as a web archive of the workshop content. The session videos, presentations, posters and images are all linked to: http://www.igs.org/presents.

RUTH NEILAN
**ILRS News**

**New ILRS Website Released**

The ILRS Central Bureau is pleased to announce the implementation of a new design for the ILRS website, http://ilrs.gsfc.nasa.gov. The redesign process has allowed for a review of the organization of the site and its contents, ensuring information is current and useful. Comments and suggestions are welcome and should be directed to the ILRS web team at ilrs-web@lists.nasa.gov. We would like to acknowledge the efforts of the website development team as well as members of the Central Bureau and the ILRS community for their contributions to the site content.

**Passing of Steve Klosko**

On August 4, 2012, our colleague Steve Klosko passed away surrounded by family and loved ones. We will greatly miss his immense contributions to the field of satellite laser ranging, space geodesy, and other scientific research areas.

**Carey Noll**
Secretary, ILRS Central Bureau

**Invitation for proposals for changes to the IAG Statutes and Bylaws**

Article 16 of IAG’s Statutes specifies that the Association shall review its Statutes and Bylaws to ensure an up-to-date structure of its scientific organization every eight years. The last time such a review was initiated was about eight years ago under the presidency of Gerard Beutler. It is now therefore time that we again take a fresh look at our Statutes and Bylaws. To achieve this goal, a Review Committee (traditionally called the Cassinis Committee) was appointed in the fall of 2011 by the IAG Executive. The committee is chaired by Michael Sideris and includes as members Harald Schuh, Ruth Neilan and Yoichi Fukuda. A proposal with all suggested revisions will be made by the Cassinis Committee for consideration by the IAG Executive and possibly the Council at the 2013 Scientific Assembly. In this way, we are hoping to get the Council’s reaction and input to the proposed changes before these are finalized and approved at the next IUGG General Assembly in 2015.

With this announcement, the Cassinis Committee is inviting proposals for changes of any article of the Statutes and Bylaws. Proposals can be submitted through the IAG website Forum (www.iag-aig.org/proposals). The actual Statutes and By-laws can be found on the IAG website. All proposals submitted between March 1, 2012 and February 1, 2013 will be considered by the Cassinis Committee.

We are very much looking forward to receiving your contributions.

**Michael Sideris, Harald Schuh, Ruth Neilan, Yoichi Fukuda**

**Meeting Announcements**

**IAG Scientific Assembly 2013 in Potsdam Germany**

Dear colleagues,

We cordially invite you to join the IAG 2013 conference IAG Scientific Assembly 2013 on the occasion of the 150th anniversary of the IAG in co-operation with the GFZ Potsdam to be held September 1-6, 2013, in Potsdam, Germany.

Deadline for abstract submission is April 21, 2013. For technical instructions how to prepare your abstracts and for further conference information, please see our homepage http://www.iag2013.org. IAG 2013 will offer you an interesting and comprehensive scientific program together with a variety of unique cultural events. Please do not hesitate to get in contact with our conference secretary Ms. Ogarit Uhlmann and Ms. Susanne Lange if there are any questions.

We are looking forward to hearing from you soon!
Best regards,
on behalf of the IAG 2013 LOC

SUSANNE LANGE

17th International Symposium on Earth Tides ETS 2013
15-19 April, 2013, Warsaw, Poland

Commission 3 (Earth Rotation and Geodynamics), the Sub-Commissions on:

- Earth Tides and Geodynamics (3.1)
- Crustal Deformation (3.2)
- Earth Rotation and Geophysical Fluids (3.3)
- Cryospheric Deformation (3.4)
- Tectonics and Earthquake Geodesy (3.5)

and the Global Geodynamics Project (GGP) organize a joint meeting which will include the 17th International Symposium on Earth Tides. The assembly will provide an opportunity to discuss tidal processes such as solid Earth and ocean loading tides, crust and mantle deformations associated with tectonic motions, glacial isostatic adjustment as well as the entire range of phenomena related to Earth rotation.

Major topics:

- New observation techniques
- Geodynamics in polar regions
- Tidal theory
- Tides on planets
- Clinometry and extensometry
- Studies in tectonically active regions
- Ocean and atmosphere loading
- Global water distribution
- Earth rotation and geophysical fluids
- Sea level changes and post-glacial rebound
- Superconducting gravimetry
- Tidal effects in the framework of the Global Geodetic Observing System (GGOS)
- GNSS and tides

More information is available on the symposium website at http://www.cgs.wat.edu.pl/ETS2013/

SPIROS PAGIATKIS
Chair, IAG Sub-commission 3.1

Meetings Calendar

Pan Ocean Remote Sensing Conference (PORSEC-2012)
November 5-9, 2012, Kochi, Kerala, India
URL: http://www.porsec2012.incois.gov.in/

International Technical Laser Workshop 2012 (ITLW-12)
November 5-9, 2012, Frascati, Italy
Satellite, Lunar, and Planetary Laser Ranging: Characterizing the Space Segment
URL: http://www.lnf.infn.it/conference/laser2012/

Seventh Meeting of the International Committee on Global Navigation Satellite Systems (ICG)
November 5-9, 2012, Beijing, China
URL: http://www.icg2012.cn/
Pan Ocean Remote Sensing Conference (PORSEC-2012)
November 5-9, 2012, Kochi, Kerala, India
URL: http://www.porsec2012.incois.gov.in/

ACM SIGSPATIAL GIS 2012
November 6-9, 2012, Redondo Beach, California, USA
URL: http://acmgis2012.cs.umd.edu/

Workshop "Geodäsie und Geophysik auf fliegenden Plattformen (insbes. auf HALO)"
November 8-9, 2012, Potsdam, Germany
URL: http://tpg.geo.tu-dresden.de/geohalo/

Earth Observation and Cryosphere Science Conference
November 13-16, 2012, Frascati, Italy
URL: http://eo4cryosphere.info/

GNSS PhD Summit 2012
November 21-22, 2012, Munich, Germany
URL: http://ifen.bauv.unibw.de/s nun/index.php?gnss-phd-summit

SOMAP 2012
November 22-23, 2012, Vienna, Austria
URL: http://somap.cartography.at/

AGU 2012 Fall Meeting
December 3-7, 2012, San Francisco, USA
URL: http://www.agu.org/meetings/

FIG Commission 3 Workshop and Annual Meeting 2012
December 10-14, 2012, Athens, Greece

ION International Technical Meeting (ITM) 2013
January 28-30, 2013, San Diego, CA, USA
URL: http://www.ion.org/meetings/?conf=itm

17. Internationale Geodätische Woche 2013
February 17-23, 2013, Obergurgl, Austria
URL: http://www.mplusm.at/ifg/programm2013.htm

Munich Satellite Navigation Summit 2013
February 26-28, 2013, Munich, Germany
URL: http://www.munich-satellite-navigation-summit.org

EGU-IVS Training School for the Next Generation Geodetic and Astrometric VLBI
March 2-5, 2013, Helsinki, Finland
URL: http://www.evga.org/vlbi_school.html

21st European VLBI for Geodesy and Astrometry (EVGA) Working Meeting
March 6-8, 2013, Helsinki, Finland

Cryosat 3rd User Workshop
March 12-14, 2013, Dresden, Germany
URL: http://www.cryosat2013.org/
European Geosciences Union General Assembly 2013
April 7-12, 2013, Vienna, Austria
URL: http://www.egu.eu/meetings/meeting-overview.html

ETS 2013
April 15-19, 2013, Warsaw, Poland
17th International Symposium on Earth Tides „Understand the Earth”
URL: http://www.cgs.wat.edu.pl/ETS2013/

The European Navigation Conference ENC 2013
April 23-25, 2013, Vienna, Austria
URL: www.enc2013.org

International Symposium on Mobile Mapping Technology 2013
April 30 - May 2, 2013, Tainan, Taiwan
URL: http://conf.ncku.edu.tw/mmt2013/wm02.htm

Seventh IVS Technical Operations Workshop
May 6-9, 2013, Westford, MA, USA

5th International Conference on Spacecraft Formation Flying Missions and Technologies (SFFMT)
May 29 - 31, 2013, Munich, Germany
URL: http://www.sffmt2013.org/

SGEM 2013
June 16-22, 2013, Albena, Bulgaria
URL: http://www.sgem.org

TransNav 2013
June 19-21, 2013, Gdynia, Poland
URL: http://transnav2013.am.gdynia.pl

ICEO-SI 2013
June 23-25, 2013, Tainan City, Taiwan
URL: http://www.iceo-si2012.com/ (announcement)

Joint IAMAS-IACS Assembly
July 8-12, 2013, Davos, Switzerland
Davos Atmosphere and Cryosphere Assembly 2013, Ice & Air – Process Interactions
URL: www.daca-13.org

Joint IAHS-IAPSO-IASPEI Scientific Assembly
July 22-26, 2013, Gothenburg, Sweden
URL: http://www.iaspe.org/meetings/forthcoming.html#iaspei2013

26th International Cartographic Conference
August 25-30, 2013, Dresden, Germany
URL: http://www.icc2013.org/

ISDE 2013
August 26-29, 2013, Kuching, Sarawak, Malaysia
8th International Symposium on Digital Earth 2013
URL: http://isde2013.utm.my/

12th IAGA Scientific Assembly
August 26-31, 2013, Mérida, Mexico
In 1862, a meeting by invitation of the Prussian General Johann Jacob Baeyer took place in Berlin. There representatives from Prussia, the Austrian Monarchy and Saxony discussed the “Proposal for a Central European Arc Measurement” (Entwurf zu einer mitteleuropäischen Gradmessung) by Johann Jacob Baeyer. These talks were very successful, thus the work for the arc measurement could be started in these 3 countries already in 1862. In addition 16 European countries had agreed to participate in this work by the end of 1862. That means, 1862 was the starting point for the “Central European Arc Measurement” and the origin of the International Association of Geodesy (IAG).

This 150th Anniversary was the reason why the Austrian Geodetic Commission (ÖGK) in cooperation with the Federal Office of Metrology and Surveying (BEV) and the Austrian Society for Surveying and Geoinformation (OVG) organized an international ceremony in Vienna on the 12th of September 2012. More than 100 participants from neighbouring countries and from Austria attended this meeting.

The Vice-President of the BEV, Dr. Pacher, welcomed the guests of honour and the participants and started his speech with a short historical overview of all work done by the Militär-Geographische Institut (MGI) concerning the “Gradmessungsnetz”. Dr. Pacher pointed out, that partly results of the “Gradmessungsnetz” are still in use in Austria today.

From the Hungarian point of view, Prof. Dr. József Ádám/Budapest gave his lecture titled "Geodesy in Hungary and the Relation to the European Arc Measurement – A Short Historical Review".

As keynote speaker, o.Univ. Prof. Dr. Hans Sünkel (retired rector) gave his presentation with the title "Eine Reverenz dem Referenzsystem – Neugier und Notwendigkeit" – “A Reverence to the Reference System – Curiosity and Necessity”. He emphasised the growing importance of precise reference systems all over the world, for a huge variety of technical applications:

- Astrometry
- Space research (satellite missions, space debris)
- World height system
- Satellite navigation
- Geoinformation and location based services
- Telecommunication
IDS WORKSHOP 2012
September 25-26, 2012, Venice-Lido, Italy

The International DORIS Service (IDS) Workshop 2012 was successfully held in Venice-Lido, 25-26 September 2012, Italy, in conjunction with the symposium "20 years of progress in radar altimetry" (www.altimetry2012.org).

This workshop is organized every two years, and is an opportunity for exchange of information between the DORIS system operators and the scientific users of DORIS data. The main topic of the workshop is to report on the progress on analysis of data by IDS analysis centers and prepare for future activities.

This year participants included, five IDS Analysis Centers (of 8 total) IDS Combination Center representatives, many people involved in the DORIS system management, and other scientific groups interested in the DORIS data/products. We were pleased to welcome some new users and potential partners with promising results and perspectives. The discussions identified possible improvements of IDS solutions in line with the DORIS system, and important actions for preparing the IDS submission for inclusion in the next ITRF realization (ITRF2013).

Main topics discussed included the following:
1. Since DGXX and DORIS data are now available in RINEX format, there is an increased interest in the DORIS data to study the ionosphere;
2. An onboard DORIS receiver (DIRGO) is under consideration at the ARL / University of Texas (USA) to observe the ionosphere;
3. Discussions are underway between NASA participants and CNES & IGN to conduct studies on DORIS/VLBI2010 signal interference at Greenbelt/GGAO site;
4. Progress in the estimation of the EOP parameters has been achieved with DORIS, thanks to the contribution of the new receiver DGXX (on board Jason2, Cryosat2, HY2A);
5. Calibration of DORIS / STAREC antennas in anachoeic chambers suggests the need to apply a STAREC antenna phase center model that may have possible impact on future IDS solutions;
6. IDS Analysis Centers are actively preparing their contribution for the next ITRF (2013) realization.

Presentations and posters are posted on the IDS website at:

PASCALE FERRAGE
IDS Central Bureau

International Symposium on Gravity, Geoid and Height Systems GGHS2012
October 9-12, 2012, Venice, Italy

The symposium "Gravity, Geoid and Height Systems GGHS2012" was organized by IAG Commission 2 “Gravity Field” with the assistance of the International Gravity Field Service (IGFS) and GGOS Theme 1 “Unified Global Height System”. It was arranged by the OGS (IstitutoNazionale di Oceanografia e di GeofisicaSperimentale) which has presently the role of the Central Bureau of the IGFS. The symposium was successfully held on the island of San Servolo in the Venetian Lagoon from October 9 to 12 with 140 participants. 30 of them were registered as students.

A total of 89 oral presentations and 64 posters were presented in 8 sessions (Gravimetry and Gravity Networks, Global Gravity Field Modeling, Future Gravity Field Missions, Advances in Precise Local and Regional High-Resolution Geoid Modeling, Establishment and Unification of Vertical Reference Systems, Gravity Field and Mass Transport Modeling, Modeling and Inversion of Gravity-Solid Earth Coupling, Gravity Field of Planetary Bodies). The conference covered all activities of IAG Commission 2 except from satellite altimetry which was covered in a special symposium just 2 weeks before the GGHS2012. It is planned to publish peer-reviewed proceedings of the conference in the IAG Symposia series with Springer. Deadline for paper submission is November 18, 2012.

More information can be found on the conference website (www.gravityfield.org) and the website of IAG Commission 2 (www.iag-commission2.ch).

URS MARTI and IGONIO MARSON