



International Association of Geodesy

Newsletter

September 2012

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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

IGAG 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). 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). Fellows are listed in the Geodesist's Handbook or online at 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

ILRS News

The International Laser Ranging Service, the Frascati National Laboratories of the INFN-LNF, and the Agenzia Spaziale Italiana are together organising an ILRS Technical Workshop with the theme "Satellite, Lunar, and Planetary Laser Ranging: Characterizing the Space Segment" at INFN in Frascati, Italy, November 5 - 9, 2012. Sessions will include results on existing array performance, Lunar ranging experience, satellite signatures, laboratory testing and designs of novel arrays and progress with in-space receivers, transponders and time-transfer experiments.

A special session on the ASI-INFN ETRUSCO Project of Technological Development of SLR Payloads for GNSS, focusing on the importance of the multiple GNSS constellations, will be held on November 7. The meeting will also include a tour of the INFN retroreflector test facilities.

More details on the program can be found at: <http://www.lnf.infn.it/conference/laser2012/>.

Communicated by:

DR GRAHAM APPLEBY
Chair ILRS Governing Board.

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

Meetings Calendar

14th IAIN Congress

October 1-3, 2012, Cairo, Egypt

14th International Congress for the International Association of Institutes of Navigation

URL: <http://www.ainegypt.org/site/pages.php?ids=4>

7th ABLOS Conference

October 3-5, 2012, Salle du Ponant, Monaco

URL: http://www.iho.int/mtg_docs/com_wg/ABLOS/ABLOS_Conf7/ABLOS_Conf7.htm

Geodätische Woche 2012

October 9-11, 2012, Hannover, Germany

URL: <http://www.iapg.bv.tum.de/gw>

European VLBI Network (EVN) Symposium

October 9-12, 2012, Bordeaux, France

URL: <http://evn2012.obs.u-bordeaux1.fr/>

International Symposium on Gravity, Geoid and Height Systems GGHS 2012

October 9-12, 2012, Venice, Italy

URL: <http://www.gravityfield.org/>

Workshop on Reflectometry using GNSS and Other Signals

October 10-11, 2012, Prudue University, West Lafayette, IN, USA

URL: <http://www.gnssr2012.org/>

GOCE Solid Earth Workshop

October 16-17, 2012, Enschede, The Netherlands

URL: <http://www.itc.nl/gocesolidearth/>

International VLBI Technology Workshop

October 22-24, 2012, Westford, Massachusetts, USA

URL: <http://www.haystack.mit.edu/workshop/ivtw/index.html>

25th CODATA General Assembly

October 26-27, 2012, Beijing, China

URL: <http://www.codata.org>

SIRGAS Meeting 2012

October 29-31, 2012, Concepción, Chile

URL: <http://www.sirgas.org/index.php?id=193&L=2>

Pan Ocean Remote Sensing Conference (PORSEC-2012)

November 5-9, 2012, Kochi, Kerala, India

URL: <http://www.porsec2012.incois.gov.in/>

Satellite, Lunar, and Planetary Laser Ranging: Characterizing the Space Segment

November 5-9, 2012, Frascati, Italy

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/>

GNSS PhD Summit 2012

November 21-22, 2012, Munich, Germany

URL: <http://ifn.bauw.unibw.de/snun/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

URL: http://bit.ly/FIG3_Athens2012

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>

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>

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>

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.iaspei.org/meetings/forthcoming.html#iaspei2013>

26th International Cartographic Conference

August 25-30, 2013, Dresden, Germany

URL: <http://www.icc2013.org/>

12th IAGA Scientific Assembly

August 26-31, 2013, Mérida, Mexico

URL: www.iaga2013.org.mx

IAG Scientific Assembly

September 1-6, 2013, Potsdam, Germany

URL: <http://www.iag2013.org>

TGSMM 2013

September 11-20, 2013, St Petersburg, Russian Federation

IAG Third Symposium "Terrestrial Gravimetry: Static and Mobile Measurements - TGSMM-2013"

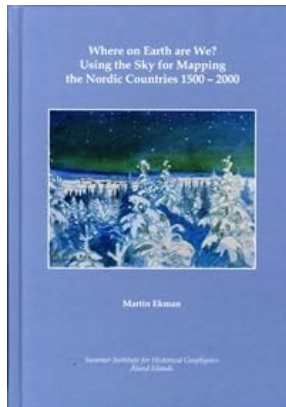
AGU 2013 Fall Meeting

December 9-13, 2013, San Francisco, USA

URL: <http://www.agu.org/cgi-bin/gycal?details=1&file=2013120900320182043&li>

Book Review

Martin Ekman: Where on Earth are We? Using the Sky for Mapping the Nordic Countries 1500-2000



Title: Where on Earth are We? Using the Sky for Mapping the Nordic Countries 1500 – 2000
Author: Ekman, Martin
Publisher: Summer Institute for Historical Geophysics, Åland Islands
ISBN: 978-952-92-9137-3
Year: 2011
Price: 261 SEK
Details: Hard cover, 138 pages, 17 tables, 25 figures

The author, Martin Ekman, is the head of the one-person Summer Institute for Historical Geophysics based on the Åland Islands in between Sweden and Finland. The Institute has over the years published many interesting publications, taking advantage of the geodetic and geophysical information present at these Islands, see <http://www.historicalgeophysics.ax>.

The publication under review is of more general interest dealing with the mapping of the Nordic Countries over the last 500 years. However, the book includes a section dealing with the publication of the Icelandic Viking Oddi Helgason, (c. 1150) who had compiled a table of the daily maximum altitude of the sun during a year. This table was used by the Viking sailors to determine the latitude.

The results of latitude determinations based on observation of the sun are collected in a table where the values are compared with modern results, showing typical differences of 30' or 55 km.

The Danish astronomer (and geodesist) Tycho Brahe based on the island of Hven close to Copenhagen, made remarkable improvements (before the telescope) in instruments and methods. His results were precise to within 0.6' or c. 1 km.

With the advent of the telescope and improved clocks results were improved in the following centuries, by for example Celsius. Also the Åland Islands became part of a triangulation chain between Finland and Sweden, 1748-52. But a problem still was the longitude determinations, which first were improved using massive clock transports between England, the Nordic Countries and Russia.

Progress was achieved due to the French latitude expedition in Lapland lead by P.L.M.Mopertuis around 1740, where the flattening of the Earth was determined, leading to the definition of the metre and the nautical mile.

The use of satellites and distant galaxies (where the Onsala observatory in Sweden has been a main actor) is well treated and leads up to a discussion of modern reference systems, such as the ITRF. The book contains many interesting Tables with comparisons of old and new positions, showing the great progress in position determinations since the Vikings.

The book is very interesting, not only for geophysicists in the Nordic Countries, but for everybody knowing (as they should) what went before GPS on your mobile phone. The book is very much recommended.

C.C. TSCHERNING
University of Copenhagen

Reports

International Symposium on Space Geodesy and Earth System (SGES2012) *August 18-21, 2012, Shanghai, China*

Mass redistribution and transport in the Earth system, including the atmosphere, hydrosphere, lithosphere, cryosphere and the interior of the solid Earth affect the Earth's shape, gravity field and rotation (the three pillars of geodesy). Space geodetic techniques, including VLBI, SLR, DORIS, GNSS, InSAR, LiDAR, ICESat, satellite radar and laser altimetry, satellite gravimetry (particularly CHAMP/GRACE/GOCE) and GNSS Reflectometry & Radio Occultation, are capable of measuring and monitoring such small changes with high accuracy and spatial-temporal resolution. These provide a unique opportunity to investigate mass transport associated with geodynamics, natural hazards, and climate change, and to better understand these processes and their interaction within the Earth system.



The International Symposium on Space Geodesy and Earth System (SGES2012) was held in Shanghai, China, August 18-21, 2012, which was hosted by the Shanghai Astronomical Observatory, Chinese Academy of Sciences. Prof. Shuanggen Jin was the chair of the symposium. About 180 participants from over 15 countries or districts attended the SGES2012. Topics include data retrieval of space geodetic techniques, reference frame, atmospheric-ionospheric sounding and disturbance, gravity field, crustal deformation and earthquake geodesy, GIA, Earth rotation, hydrological cycle, ocean circulation, sea level change, and ice sheet mass balance as well as their coupling in the Earth system. This SGES symposium was sponsored by the International Association of Geodesy (IAG) and Global Geodetic Observing System (GGOS).



The SGES2012 provided a forum for assessing current technological capabilities and presenting recent results of space geodetic observations and understanding the physical processes and coupling in the Earth system, and future impacts on climate. More information can be found at <http://www.shao.ac.cn/meetings>.

SHUANGGEN JIN