



Contents

General Announcements..... 3

- Publication of the IUGG Melbourne proceedings in the IAG Symposia series 3
- ILRS News 4
- IDS/DORIS Announcements..... 4

Meeting Announcements 5

- IAG Sponsored Meetings 5**
 - IAG Scientific Assembly..... 5
- IAG Related Meetings 5**
 - IGS Workshop on GNSS Biases..... 5
 - Galileo Applications Congress..... 5
 - 2nd International School on Least Squares Approach to Modeling the Geoid 5
 - IVS VLBI2010 Workshop on Technical Specifications (TecSpec)..... 5
 - 7th IVS General Meeting "Launching the Next-Generation IVS Network" 5
 - PPP-RTK & Open Standards..... 5
 - Munich Satellite Navigation Summit 2012 5
 - European Geosciences Union General Assembly 2012..... 6
 - 10th International Conference on Southern Hemisphere Meteorology and Oceanography..... 6
 - IUGG Conference on Mathematical Geophysics 6
 - SGEM 2012 6
 - 4th International Conference on Cartography and GIS..... 6
 - 39th COSPAR Scientific Assembly..... 6
 - IGS Analysis Center Workshop 2012 6
 - AOGS-AGU (WPGM) Joint Assembly 6
 - 20 Years of Progress in Radar Altimetry..... 6
 - International Symposium on Gravity, Geoid and Height Systems GGHS 2012..... 6
 - Pan Ocean Remote Sensing Conference (PORSEC-2012) 6
 - AGU 2012 Fall Meeting..... 6
 - European Geosciences Union General Assembly 2013..... 6
 - AGU 2013 Fall Meeting..... 6
- IAG Sister Societies' Meetings 7**
 - FIG Working Week 7
 - ESC 2012..... 7
 - International Astronomical Union General Assembly..... 7
 - Joint IAMAS-IACS Assembly 7
 - Joint IAHS-IAPSO-IASPEI Scientific Assembly 7
 - 12th IAGA Scientific Assembly..... 7

Obituary 7

- Soren Werner Henriksen (1916-2011)..... 7

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:

C.C Tscherning
University of Copenhagen
Dept. of Geophysics
Copenhagen, Denmark
Fax: +45 35365357
E-mail: cct@gfy.ku.dk

General Announcements

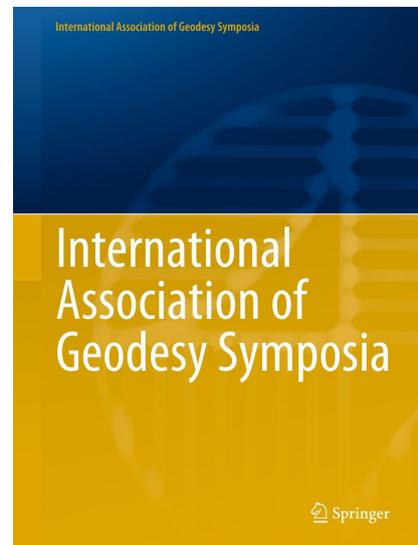
Publication of the IUGG Melbourne proceedings in the IAG Symposia series

Following the IUGG General Assembly in Melbourne, a volume of peer-reviewed proceedings will be published by Springer in the IAG Symposia series. This time, all submissions and all reviews will be handled electronically through the following Web site: <http://iags.edmgr.com/>

Deadline for submission is: **January 31, 2012**

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

- JG01: Space Geodesy-based Atmospheric Remote Sensing as a Synergistic Link between Geodesy and Meteorology
Marcelo Santos <msantos@unb.ca>, Jens Wickert <wickert@gfz-potsdam.de>
- JG02: Application of Geodetic Techniques in Cryospheric Studies
Reinhard Dietrich <dietrich@ipg.geo.tu-dresden.de>, Matt King <M.A.King@newcastle.ac.uk>
- JG03: History of Geosciences from Terrestrial to Spaceborne Observations
Jozsef Adam <jadam@sci.fgt.bme.hu>
- JG04: Structure and Deformation of Plate Interiors
John Dawson <john.dawson@ga.gov.au>
- JG05: Integrated Earth Observing Systems
Markus Rothacher <markus.rothacher@ethz.ch>
- JG06: Tectonic Geodesy and Earthquakes
Jeff Freymueller <jeff.freymueller@gi.alaska.edu>
- G01: Reference Frames from Regional to Global Scales
Zuheir Altamimi <zuheir.altamimi@ign.fr>, Athanasios Dermanis <dermanis@topo.auth.gr>, Joao Agria Torres <jatorres@iol.pt>
- G02: Monitoring and Modelling of Mass Distribution and Mass Displacements by Geodetic Methods
Yoichi Fukuda <fukuda@kugi.kyoto-u.ac.jp>, Richard Gross <richard.gross@jpl.nasa.gov>, Frank Lemoine <Frank.G.Lemoine@nasa.gov>, Nico Sneeuw <sneeuw@gis.uni-stuttgart.de>, Herbert Wilmes <herbert.wilmes@bkg.bund.de>
- G03: Monitoring and Modelling Earth Rotation
Richard Gross <richard.gross@jpl.nasa.gov>, Harald Schuh <harald.schuh@tuwien.ac.at>, Oleg Titov <oleg.titov@ga.gov.au>
- G04: Multisensor Systems for Engineering Geodesy
Dorota Brzezinska <dbrzezinska@osu.edu>, Hansjörg Kutterer <hansjoerg.kutterer@bkg.bund.de>
- G05: Geodetic Imaging Techniques
Sandra Verhagen <a.a.verhagen@tudelft.nl>, Xiaoli Ding <lsxlding@polyu.edu.hk>
- G06: Towards a Unified World Height System
Johannes Ihde <johannes.ihde@bkg.bund.de>, Matt Higgins <matt.higgins@derm.qld.gov.au>, Laura Sanchez <sanchez@dgfi.badw.de>
- G07: High Precision GNSS



Ruth Neilan <ruth.e.neilan@jpl.nasa.gov>, Urs Hugentobler <urs.hugentobler@bv.tu-muenchen.de>, Mikael Lilje <mikael.lilje@lm.se>

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 Symp. series (<http://www.springer.com/series/1345>) and will be published in print in a single volume related to the Melbourne presentations.

Authors are encouraged to contact their respective editor before submission and will be regularly informed on the review and publication process.

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

ILRS News

The International Laser Ranging Service (ILRS) has obtained first observations from several new missions. The RadioAstron Space Observatory (the Spectr-R project, led by the Astro Space Center of Lebedev Physical Institute in Moscow, Russia) was launched in an elliptical orbit (between 500 km - 350000 km) on July 18, 2011. The satellite is equipped with a 10-m VLBI antenna and will investigate a variety of astronomical objects with an unprecedented angular resolution up to several millionth of arcsec. Only a small subset of stations in the ILRS network have the ability to obtain ranges from RadioAstron because of its very high orbit; furthermore, tracking opportunities are limited to one hour sessions when the spacecraft is in the proper orientation. On November 15, 2011, the laser ranging station in Grasse France successfully obtained first observations to the satellite.

The ILRS also began laser ranging tracking support of the first two Galileo satellites, Galileo-101 and -102. These satellites were launched on October 21, 2011. The TIGO laser ranging system in Concepcion Chile obtained the first ranges to Galileo-102 on November 29, 2011, shortly after the satellites achieved their operational orbit configuration. Since that time, twelve stations in the ILRS network have tracked the satellites, yielding over 70 passes.

CAREY NOLL
MICHAEL PEARLMAN
GRAHAM APPELBY

IDS/DORIS Announcements

1. May 2012 : IDS analysis Working Group meeting, 2 days in Prague, Czech Republic. This working group will bring together representatives from all DORIS analysts (IDS Analysis Centers and other groups). It will be a platform for exchanges and technical discussions on the following topics:
 - recent improvement in DORIS data processing for Precise Orbit Determination and Geodesy
 - IDS combined products
 - Results of recent DORIS Analysis Campaign.
2. September 25-26, 2012: The Symposium on "20 Years of Progress in Radar Altimetry" organised by the European Space Agency and the French Space Agency, CNES, will be held over 6 days, from 24 to 29 of September 2012, in Venice-Lido, Italy. Several related events will take place on the same week, including the annual meeting of the Ocean Surface Topography Science Team (OSTST), the next International DORIS Service (IDS) workshop as well as other thematic workshops, such as, Sea Level for Climate, Coastal Zone, Space for Hydrology, Argo, etc. The website for the Symposium is now online at: <http://www.altimetry2012.org/>. The IDS workshop (24-26 September) will provide a forum to review the progress in the DORIS technique and provide perspectives for the contributions of DORIS to GGOS. Topics that are of particular interest are:
 - the status of analyses by the DORIS analysis centers,
 - the contribution of new DORIS satellites (including Jason-2, Cryosat-2, SARAL/Altika), and
 - the progress in DORIS analyses since the construction of the IDS combination to ITRF2008.

We also welcome papers that describe the progress of the activities pertaining to the DORIS operational combination. POD modelling issues related to radiation pressure, atmospheric drag, geocenter motion model, tropospheric delay and mapping functions, and phase center corrections affect the quality of the DORIS products and papers that review progress in these areas will be especially welcome.

DORIS being a dual-frequency radio technique, provides a mean to sound the ionosphere, and we welcome papers that use or compare the DORIS measurements with models or to calibrate the performance of satellite radar altimeters or make other uses of these ionosphere data. Finally the DORIS workshop will provide a forum to discuss IDS Combined products and multi-technique combinations involving DORIS data.

PASCALE FERRAGE

Meeting Announcements

IAG Sponsored Meetings

IAG Scientific Assembly

September 1-16, 2013, Potsdam, Germany

URL: <http://iag.dgfi.badw.de/index.php?id=291>

IAG Related Meetings

IGS Workshop on GNSS Biases

January 18-19, 2012, Bern, Switzerland

URL: <http://www.biasws2012.unibe.ch/>

Galileo Applications Congress

January 26-27, 2012, Prague, Czech Republic

URL: http://www.espi.or.at/index.php?option=com_content&view=article&id=99&Itemid=42

2nd International School on Least Squares Approach to Modeling the Geoid

February 27- March 2, 2012, Johor Bahru, Malaysia

Theoretical lectures in the mornings are followed by practical computer exercises in the afternoons.

URL: <http://www.infra.kth.se/geo/events/IGS-2012.pdf>

IVS VLBI2010 Workshop on Technical Specifications (TecSpec)

March 1-2, 2012, Bad Kötzting/Wetzell, Germany

URL: <http://www.fs.wetzell.de/veranstaltungen/vlbi/tecspec2012/>

7th IVS General Meeting "Launching the Next-Generation IVS Network"

March 4-9, 2012, Madrid, Spain

URL: <http://www.oan.es/gm2012/>

PPP-RTK & Open Standards

March 12-13, 2012, Frankfurt, Germany

URL: <http://igs.bkg.bund.de/ntrip/symp>

Munich Satellite Navigation Summit 2012

March 13-15, 2012, Munich, Germany

URL: <http://www.munich-satellite-navigation-summit.org>

European Geosciences Union General Assembly 2012

April 22-27, 2012, Vienna, Austria

URL: <http://meetings.copernicus.org/egu2012/>

10th International Conference on Southern Hemisphere Meteorology and Oceanography

April 23-27, 2012, Noumea, New-Caledonia

URL: <http://www.colloque.ird.fr/icshmo-2012>

IUGG Conference on Mathematical Geophysics

June 18-22, 2012, Edinburgh, Scotland

URL: <http://www.cmgedinburgh2012.org.uk/>

SGEM 2012

June 17-23, 2012, Albena Summer Resort, Bulgaria

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

4th International Conference on Cartography and GIS

June 18-22, 2012, Albena Summer Resort, Bulgaria

URL: <http://www.cartography-gis.com/4thConference/Index.html>

39th COSPAR Scientific Assembly

July 14-22, 2012, Mysore, India

URL: <http://www.cospar-assembly.org/>

IGS Analysis Center Workshop 2012

July 23-27, 2012, Olsztyn, Poland

URL: <http://igs.cb.jpl.nasa.gov/pipermail/igsmail/2011/006436.html>

AOGS-AGU (WPGM) Joint Assembly

August 13-17, 2012, Singapore, Singapore

URL: <http://www.asiaoceania.org/aogs2012/>

20 Years of Progress in Radar Altimetry

September 24-29, 2012, Venice, Italy

URL: <http://www.altimetry2012.org/>

International Symposium on Gravity, Geoid and Height Systems GGHS 2012

October 10-12, 2012, Venice, Italy

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

Pan Ocean Remote Sensing Conference (PORSEC-2012)

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

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

AGU 2012 Fall Meeting

December 6-10, 2012, San Francisco, USA

URL: <http://www.agu.org/meetings/>

European Geosciences Union General Assembly 2013

April 7-12, 2013, Vienna, Austria

URL: <http://www.egu.eu/meetings/meeting-overview.html>

AGU 2013 Fall Meeting

December 9-13, 2013, San Francisco, USA

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

IAG Sister Societies' Meetings

FIG Working Week

May 6-12, 2012, Rome, Italy

URL: <http://www.fig.net/fig2012/>

ESC 2012

August 19-24, 2012, Moscow, Russia

European Seismological Commission 33rd General Assembly

URL: www.esc2012-moscow.org

International Astronomical Union General Assembly

August 20-31, 2012, Beijing, China

URL: <http://www.astronomy2012.org/>

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>

12th IAGA Scientific Assembly

August 26-31, 2013, Mérida, Mexico

URL: www.iaga2013.org.mx

Obituary

Soren Werner Henriksen (1916-2011)

Soren Werner Henriksen, one of the first to apply space age data to the mapping sciences, died September 5, 2011, at the age of 95. He was a polymath in the fields of geodesy, surveying, photogrammetry, cartography, and astronomy, his culminating achievement being "Glossary of the Mapping Sciences", a 581 page compendium published in 1994.

Soren was born in New York, New York, on August 5, 1916, and grew up in Chicago, Illinois. In 1938 he joined the Illinois National Guard, and transferred in 1941 to the U. S. Army. He served until August 1945, after being severely wounded in the Philippines that summer. He entered the Illinois Institute of Technology next year, earning a Bachelor's degree in 1949 in mathematics. A Master's degree from the University of Illinois in 1950, continuing in mathematics, followed.

The U. S. Army Map Service (AMS), a component of the Army Corps of Engineers, was actively recruiting mathematicians at that time. The exigencies of the Cold War required improvements in knowledge of the figure of the Earth, intercontinental connections, and the Earth's gravity field. Soren joined AMS in 1951 and was assigned to the Occultation Section of the Research and Analysis Branch in the Geodetic Division. This was his fortuitous introduction to professional astronomy. He was lucky to have a first-rate mentor in John O'Keefe (BAAS, 2000. 32, 1683), the head of the Branch, whose expertise lay in the application of astronomical methods for position determination, in particular, lunar occultations and solar eclipses. Soren rapidly applied his mathematical skills to this area, and in 1955 was promoted to Chief of the Section. In addition to his operational duties of analyzing and reducing observational data, he authored the definitive manual on the subject: "The Application of Occultations to Geodesy", published as AMS Technical Report 46 in 1962.

Well before the first artificial satellite launch in 1957 O'Keefe had realized the tremendous advantage of observations from this source for geodesy and laid the groundwork for their utilization at AMS. Soren turned the attention of his Section to the development of satellite observing systems. He was largely responsible for the employment of Minitrack II and SECOR, mobile satellite tracking systems that could be readily shifted from one set of sites to another.

In 1960 he was promoted to Chief of Research and Analysis. The administrative and supervisory duties this entailed limited his opportunities for individual research, and at the beginning of 1965 he left for a position at Raytheon Autometric where he was able to apply his experience in satellite data analysis to the demands of various contractors. A typical contract report of this period coauthored by him was "Modes of Satellite Triangulation Adjustment". During his seven years at Autometric he received its Outstanding Author Award twice.

He helped organize the Third International Symposium on the Use of Artificial Satellites for Geodesy held in Washington, D. C., in April 1971, and coedited the proceedings, published as Geophysical Monograph 15 by the American Geophysical Union (AGU). Based on this accomplishment, in 1972 AGU asked him to serve as editor for a collection of articles covering NASA's National Geodetic Satellite Project. This turned out to be a two year task, during which Soren carried the load of assembling the 1030 page, two volume, compilation. After completion Soren returned to the Federal government as a research geodesist in the Geodetic Research and Development Laboratory at NOAA in 1974.

His work there covered a variety of topics including determination of polar motion, utilization of geocenter observations, and photogrammetric applications. He applied his editorial skills to the 1980 edition of the "Manual of Photogrammetry" as an associate editor, and authored the entry on field surveys for photogrammetry. But the major efforts of his ten year stint at NOAA were devoted to the preparation of a glossary to supplant the classic "Definition of Terms Used in Geodetic and Other Surveys" by Hugh Mitchell published in 1948. Soren envisaged not just a revision and update, but a vastly increased encyclopedic dictionary, encompassing in addition to geodesy and surveying the related fields of cartography, map production, photogrammetry, and remote sensing. This ambitious scheme proved to be controversial, and the resulting publication "Geodetic Glossary", issued in 1986 by the National Geodetic Survey of NOAA, omitted many of the entries not directly related to geodesy.

Before then, Soren decided to leave and continue work on his own version. He took advantage of his eligibility for retirement in 1984, and in 1988 submitted his manuscript to a joint committee of the American Society of Photogrammetry and Remote Sensing (ASPRS), the American Congress of Surveying and Mapping, and the American Society of Civil Engineers (ASCE). Publication followed under the auspices of ASCE.

Soren participated actively in the life of several professional societies. He was a member of AGU, ASPRS, Institute of Electrical and Electronic Engineers, Royal Astronomical Society, and American Astronomical Society.

A prominent trait of Soren's was his competitiveness, both in and outside of his profession. Two of his favorite forms of recreation were duplicate bridge and the ancient Chinese board game, Go. After age limited his mobility, he turned to the challenge of computer games like Myst. He retained an interest in updating his glossary to the end. He is survived by his wife of 59 years, Pamela, a daughter, Kirsten, and two grandchildren. A son, Donn, predeceased him.

BERNARD CHOVITZ
(Retired, National Geodetic Survey)

(Republished with permission of the Bulletin of the American Astronomical Society, 2011, 43, 41)