



International Association of Geodesy (IAG) Annual Report 2012

Home: <http://www.iag-aig.org>

Office: <http://iag.dgfi.badw.de>

INTRODUCTION

Geodesy is the discipline that deals with the measurement and representation of the Earth's geometry and physics including its temporal variations. The history of IAG traces back to 1862, when the Prussian General Johann Jacob Baeyer initiated the "Mitteleuropäische Gradmessung". Its mission is the advancement of geodesy by furthering geodetic theory through research and teaching, by collecting, analysing, modelling and interpreting observational data, by stimulating technological development and by providing a consistent representation of the time-dependent figure, rotation, and gravity field of the Earth.

The IAG is structured in four Commissions, the Inter-Commission Committee on Theory (ICCT), fifteen International Scientific Services, the Global Geodetic Observing System (GGOS), and the Communication and Outreach Branch (COB). The Commissions are subdivided in Sub-commissions, Projects, Study and Working Groups. The ICCT investigates overall geodetic problems in Joint Study Groups with the Commissions. The Services provide scientific products employing Operation, Data and Analysis Centres. GGOS is to provide the observations needed to monitor, map and understand changes in the Earth's shape, rotation and mass distribution, as well as the global reference frame for measuring and consistently interpreting key global change processes based on the products of the Services. The COB provides communication, public information and outreach links, in particular via the monthly Newsletter and the IAG Website (<http://www.iag-aig.org>).

The administration of IAG is supervised by the Council and operated by the Executive Committee, the Bureau and the Office. The membership of the Council consists of delegates appointed by the adhering bodies; the Bureau is formed by the IAG President, Vice-President and Secretary General; and the Executive Committee includes the Bureau and other members elected by the Council; the Office is to assist the Secretary General. The detailed programme of IAG is published in the quadrennial Geodesist's Handbook, and reports are given in the bi-annual Travaux de l'AIG.

ADMINISTRATION

IAG Council

The IAG Council meets mainly during the IUGG General Assemblies. In the interim time it is informed by the Secretary General on current activities. Main topics in 2012 were the celebration of IAG's 150th anniversary and the IAG publications (IAG Symposia series, Journal of Geodesy).

IAG Executive Committee (EC)

The IAG EC held a meeting in August 2012 on the occasion of the AOGS – AGU (WPGM) Joint Assembly in Singapore. Most important topics were the reports of all IAG components (Commissions,

ICCT, Services, GGOS, COB) and the preparation of the IAG Scientific Assembly to be held as the official celebration of IAG's 150th anniversary in Potsdam, Germany, 1-6 September 2013.



Johann Jacob Baeyer, Founder of the IAG



Memorial in Berlin Müggelheim

IAG Bureau

The IAG Bureau held monthly teleconferences for the day-to-day decisions. The IAG President, the Vice-President and the Secretary represented IAG in various scientific meetings (see below) and gave oral presentations particularly with regard to the 150th anniversary.

ACTIVITIES

Scientific Assemblies, Symposia and Meetings

Important meetings of IAG components and IAG sponsored meetings were in 2012:

- IGS Workshop on GNSS Biases, Bern, Switzerland, January 18-19, 2012;
- IVS VLBI2010 Workshop on Technical Specifications (TecSpec), Bad Kötzing/Wetzell, Germany, March 1-2, 2012;
- 7th IVS General Meeting "Launching the Next-Generation IVS Network", Madrid, Spain, March 12-13, 2012;
- Symposium and Workshop on PPP-RTK and Open Standards, Frankfurt am Main, Germany, March 12-14, 2012;
- IERS Global Geophysical Fluids Center (GGFC) Workshop, Vienna, Austria, April 20, 2012;
- EUREF 2012 Symposium, Saint Mandé, France, June 6-8, 2012;
- IGS Analysis Center Workshop, Olsztyn, Poland, July 23-27, 2012;
- IAG Symposium at the AOGS-AGU (WPGM) Joint Assembly, Singapore, Singapore, August 13-17, 2012;
- International Symposium on Space Geodesy and Earth System (SGES2012), Shanghai, China, August 19-20, 2012;
- WEGENER 2012 Symposium, Strasbourg, France, September 17-20, 2012;
- 17th International Symposium on Earth Tides and Earth Rotation (ETS 2012), Cairo, Egypt, September 24-28, 2012;
- 20 Years of Progress in Radar Altimetry, Venice, Italy, September 24-29, 2012;
- IDS Workshop, Venice, Italy, September 25-26, 2012;

- 7th IAG-IHO ABLOS Conference, Salle du Ponant, Monaco, October 3-5, 2012;
- European VLBI Network (EVN) Symposium, Bordeaux, France, October 9-12, 2012;
- Workshop on Reflectometry using GNSS and Other Signals, Prudue University, West Lafayette, IN, USA, October 10-11, 2012;
- International Symposium on Gravity, Geoid and Height Systems GGHS 2012, Venice, Italy, October 10-12, 2012;
- SIRGAS Meeting 2012, Concepción, Chile, October 20-31, 2012;
- International VLBI Technology Workshop, Westford, Massachusetts, USA, October 22-24, 2012;
- International Technical Laser Workshop “Satellite, Lunar, and Planetary Laser Ranging: Characterizing the Space Segment”, Frascati, Italy, November 5-9, 2012.

Schools organized by IAG

- GNSS School, Hong Kong, China, May 14-15, 2012;
- International Summer School on Space Geodesy and Earth System, Shanghai, China, August 21-25, 2012;
- SIRGAS School on Real Time GNSS Positioning, Concepción, Chile, Oct., 24-26, 2012.

IAG Office

Main activities of the IAG Office in 2012 were the publication of the Geodesist’s Handbook with the complete programme of IAG, and the preparation of IAG’s 150th anniversary. Travel grants were assigned to young scientists for participation in symposia. The individual IAG membership was regularly updated. IAG Council and EC meetings were prepared including detailed minutes for the participants and meeting summaries for publication in the Internet and in the IAG Newsletters.

Communication and Outreach Branch (COB)

The publication of the Geodesist’s Handbook, the monthly Newsletters (online and in the Journal of Geodesy) and the maintenance of the IAG Homepage were the main activities of the COB. The IAG Newsletter is sent to the IAG members, to the Presidents and Secretaries General of the IUGG Associations, and to the members of the Joint Board of Geospatial Information Societies (JBGIS). A meeting of the COB Steering Committee was held in Budapest, 19-20 November, 2013.

Commissions and Inter-Commission Committee

The four IAG Commissions and the Inter-Commission Committee on Theory (ICCT) are maintaining their individual Homepages (all accessible via the IAG Homepages). Several sub-components (Sub-Commissions, Working and Study Groups) held their own symposia and workshops in 2012 (see above: EUREF, SGES, WEGENER, ETS, GGHS, SIRGAS).

Services

The fifteen IAG Services are maintaining their own Homepages (all accessible via the IAG Homepages) and data servers. They held their regular administrative meetings (Coordinating Board, Directing Board or Governing Board, respectively) and organized their own symposia and workshops (see above: IGS, IVS, IERS, IDS, IGFS).

Global Geodetic Observing System (GGOS)

GGOS established in 2012 its new structure including the Consortium composed by representatives of the Commissions and Services, the Coordinating Board as the decision-making body, the Executive Committee, and the Science Panel. The outreach is done by the GGOS Portal, Webpages (www.ggos.org), brochures and books. GGOS is representing IAG in the Group on Earth Observation (GEO) and contributes to the GEO Work Plan and GEO System of Systems (GEOSS). A strategic retreat was held in Frankfurt, Germany, 26-28 June, and meetings of the GGOS Consortium and the Coordinating Board took place on 27 April in Vienna and 1 December 2012 in San Francisco.

Cooperation with other Organisations

Close cooperation of IAG is maintained with several organizations outside IUGG. In 2012 there were meetings with the Advisory Board on the Law of the Sea (ABLOS, together with IHO), Group on Earth Observation (GEO, with IAG as a participating organization), International Standards Organization (ISO, with IAG represented in TC211 Geographic Information / Geomatics), Joint Board of Geospatial Information Societies (JBGIS), United Nations Offices for Outer Space Affairs (UN-OOSA, with participation in Space-based Information for Disaster Management and Emergency Response, UN-SPIDER, and International Committee on Global Navigation Satellite Systems, ICG).

Publications

The monthly issues of the Journal of Geodesy, the proceedings of the IAG Assembly “Geodesy for Planet Earth” (IAG Symposia Series Vol. 136) and of the VII Hotine-Marussi Symposium on Mathematical Geodesy (IAG Symposia Series Vol. 137) were the main publications in 2012.

Awards, anniversaries, obituaries

A total of 11 travel awards were granted to young scientists (not older than 35 years) for participation in 4 different symposia 2012.

An obituary was written and published in the IAG Newsletters for former IAG President Klaus-Peter Schwarz, Canada;

PLANNED AND FUTURE ACTIVITIES

The most important activity for the next year is related to the celebration of the 150th anniversary of IAG with the culmination in the IAG Scientific Assembly 2013 in Potsdam, Germany. The three principal themes of IAG’s Global Geodetic Observing System, namely the Unified Height System, Geohazards Monitoring and Sea Level Change will be the focus of the scientific work in the coming years. The IAG Services will continue in providing their products for use in science and practice, and for the benefit of society in general. IAG Commissions and Services will hold their own and actively participate in IUGG and other interdisciplinary symposia and meetings.

IAG will continue intensely its cooperation with other international scientific bodies, e.g. the Joint Board of Geospatial Information Societies (JBGIS), the Fédération Internationale des Géomètres (FIG), the International Astronomical Union (IAU), the International Hydrographic Organization (IHO), the International Standards Organization (ISO), the United Nations Office of Outer Space Affairs (UNOOSA), the Committee on Space Research (COSPAR), the Group on Earth Observation (GEO), the American Geophysical Union (AGU), the Asia Oceania Geosciences Society (AOGS), and the European Geosciences Union (EGU).

Submitted by
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