



International Association of Geodesy (IAG) Annual Report 2011

Home: <http://www.iag-aig.org>, Office: <http://iag.dgfi.badw.de>

INTRODUCTION

The mission of the IAG is the advancement of geodesy. The mission is implemented 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 figure, rotation, and gravity field of the Earth and planets, and their temporal variations.

The components of IAG are 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 frame of reference 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 IAG Website (<http://www.iag-aig.org>) and the monthly Newsletters.

The IAG administration is supervised by the Council and operated by the Bureau, the Executive Committee 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. All these entities inform each other at the Executive Committee meetings. The detailed programme 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 met twice in 2011 during the IUGG General Assembly in Melbourne, Australia. Main topics were the election process of the new IAG officers, the auditing and approval of the IAG budget, the approval of IAG resolutions, and the election of the venue of the Scientific Assembly 2013, which will be held on the occasion of the 150th anniversary of IAG at the place of its creation in Berlin/Potsdam, Germany.

IAG Executive Committee (EC)

The old IAG EC (2007-2011) met four times in 2011 during the IUGG General Assembly in Melbourne. Most important topics were the final reports of all IAG components (Commissions, ICCT, Services, GGOS, COB) and of the Editor in Chief of IAG's Journal of Geodesy. The IAG resolutions were discussed and the new Chairs of ICCT and GGOS were appointed. The new IAG EC (2011-2015) held its constituting meeting at the end of the General Assembly on July 7, 2011. The summaries of all EC meetings are published in the IAG Newsletter in the IAG Journal of Geodesy (Springer Verlag), and in the Homepages of IAG (<http://www.iag-aig.org>) and IAG Office (<http://iag.dgfi.badw.de>).

IAG Bureau

The IAG Bureau made the day-to-day decisions via Internet and held regular teleconferences. Formal meetings were held during the IUGG General Assembly in Melbourne. The IAG President and the Vice-President represented IAG in various international meetings (see below). The IAG Secretary General represented IAG at the 150th anniversary of the Swiss Geodetic Commission, Zürich, Switzerland, June 10, 2011.

ACTIVITIES

Scientific Assemblies, Symposia and Meetings

IAG organized 14 symposia (1 Union Symposium, 6 Joint Symposia, and 7 IAG Symposia) and co-sponsored other 15 symposia (8 Union Symposia and 7 Joint Symposia) during the IUGG General Assembly in Melbourne, June 29 – July 6, 2011. In addition, 19 business meetings of IAG components (Commissions, Services) and sub-components (Projects, Study and Working Groups) were held. The proceedings with the accepted papers will be published in the IAG Symposia Series, Springer-Verlag.

Other important meetings of IAG components and IAG sponsored meetings were in 2011:

- Cryosat Validation Workshop, Frascati, Italy, February 1-3, 2011.
- 20th EVGA Meetg. & 12th VLBI Analysis Workshop, Bonn, Germany, March 29-31, 2011.
- 4th GOCE User Workshop, Munich, Germany, March 31 - April 1, 2011.
- 1st International Workshop "The Quality of Geodetic Observation and Monitoring Systems" (QuGOMS), Garching/Munich, Germany, April 13-15, 2011.
- Third Conference "Earth Observation for Global Changes (EOGC2011)", Munich, Germany, April 13-15, 2011.
- Meeting of the Working Group on Gravimetry (WGG) of the BIPM Consultative Committee for Mass and Related Quantities (CCM), May 10, 2011.
- 17th International Workshop on Laser Ranging and 23rd General Assembly of the International Laser Ranging Service (ILRS), May 15-20, 2011, Bad Kötzing, Germany.
- Sub-Commission 1.3a "EUREF" Symposium, Chisinau, Republic of Moldova, May 25-28, 2011.
- 2nd GIA Modeling Training School, Gävle, Sweden, 13-17th June 2011.
- International Workshop on GNSS Remote Sensing for Future Missions and Sciences, Shanghai, China, August 7-9, 2011.
- Sub-Commission 1.3b "SIRGAS" General Meeting, Heredia, Costa Rica, Aug. 8-10, 2011.
- 3rd International Colloquium "Scientific and Fundamental Aspects of the Galileo Programme, Copenhagen, Denmark, August 31 - September 2, 2011.
- Joint International Symposium on Deformation Monitoring, Hong Kong, China, November 2-4, 2011.

IAG Office

A main activity of the IAG Office in 2011 was the preparation of IAG's participation in the IUGG General Assembly 2011 (see above). Publication of the Journal of Geodesy and the IAG Symposia series, both in Springer-Verlag, was administered, and reports of IAG's activities were prepared. Travel grants were assigned to young scientists for participation in symposia. The individual IAG membership was regularly updated and the fee was collected. 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 COB maintained the IAG Homepage and published the monthly Newsletters online and in the Journal of Geodesy. The IAG Newsletter is also sent to the Presidents and Secretaries General of the IUGG Associations and members of the Joint Board of Geospatial Information Societies (JBGIS). Another main outreach activity is the compilation and distribution of the IAG leaflet and IAG brochure among institutions and at meetings.

Commissions and Inter-Commission Committee

The four IAG Commissions and the Inter-Commission Committee on Theory (ICCT) are maintaining their individual Homepages. They organized symposia and business meetings, and participated in joint symposia at the IUGG General Assembly and during the year 2011. Several sub-components (Sub-Commissions, Working and Study Groups) held their own symposia (see above: EUREF, SIRGAS, GOCE, GIA, GNSS RS, QuGOMS).

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 participated in the symposia at the IUGG General Assembly 2011. Several Services participated in international meetings during the year 2011 (see above: Galileo, EVGA, ILRS, GOCE, Cryosat, BIPM).

Global Geodetic Observing System (GGOS)

A complete review of the structure of GGOS during a retreat in February 2011 gave rise to new Terms of Reference and a new structure which were adopted by the IAG Executive Committee. The new structure includes 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 scientific work of GGOS is structured by Themes, Working Groups and Bureaus. The outreach is done by the GGOS Portal, Webpages (www.ggos.org), an exhibit booth, 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). The GGOS Inter-Agency Committee (GIAC) held its first meeting in April 2011 with 16 participating agencies.

Cooperation with other Organisations

IAG maintains close cooperation with several organizations outside IUGG. In 2011 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 Scientific Assembly 2009 (IAG Symposia Series Vol. 136) and the book “System Earth via Geodetic-Geophysical Space Techniques” were published in Springer-Verlag. The IAG Reports 2011 (Travaux de l’AIG Vol. 37) were published online in the IAG Homepages.

Awards, anniversaries, obituaries

The following medals and prizes were awarded during the IUGG General Assembly 2011:

- Levallois Medal for distinguished service to IAG and geodesy in general to Ruth Neilan, USA;
- Bomford Prize for outstanding contributions to geodetic studies to Johannes Boehm, Austria;
- Young Author Award for important contributions in the Journal of Geodesy to Elizabeth Petrie, UK.

Several travel awards were granted to young scientists (not older than 35 years), in particular for participation in the IUGG General Assembly.

Obituaries were written and published in the IAG Newsletters for former IAG officers and outstanding geodesists who passed away:

- Arne Bjerhammar, Sweden;
- István Fejes, Hungary;
- Andry Finkelstein, Russia;
- Soren Henriksen, USA;

PLANNED AND FUTURE ACTIVITIES

Important activities for the next years are related to the celebration of the 150th anniversary of IAG with the culmination in the IAG Scientific Assembly 2013 in Potsdam, Germany. A focus will be laid on GGOS, whose new structure with the three principal themes “Unified Height System”, “Geohazards Monitoring”, and “Sea Level Change” has to be consolidated. The IAG Services will continue in providing regularly 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, e.g. of the Fédération Internationale des Géomètres (FIG), the International Astronomical Union (IAU), the Committee on Space Research (COSPAR), the American Geophysical Union (AGU), the Asia Oceania Geosciences Society (AOGS), and the European Geosciences Union (EGU).

Hermann Drewes, IAG Secretary General