

150 Years of International Co-operation: Scientific Assembly of the International Association of Geodesy



In 1862, the Prussian General Johann Jacob Baeyer initiated the Central European Arc Measurement (*Mitteuropäische Gradmessung*) project. By the end of that year 15 countries had affirmed their participation, and in 1864 the first General Conference was held in Berlin. General Baeyer's project is considered the forerunner of today's International Association of Geodesy (IAG). The IAG celebrated its 150th anniversary with a Scientific Assembly in Potsdam, Germany, from 2-6 September 2013.

Over 500 scientists from 50 countries attended the Assembly, which was held in the Hotel Dorint Sanssouci. The conference opened with several welcome speeches, including one by Christian Heipke on behalf of the Joint Board of Geospatial Information Societies (JBGIS) and one by Michael Sideris, vice-president of the International Union of Geodesy and Geophysics (IUGG). The JBGIS includes the IAG's sister geospatial organisations such as the ISPRS, FIG, ICA and GSDI. The IAG is also a foundation association of the IUGG, which today comprises eight associations covering all fields of the geosciences.

A programme of 241 presentations and 234 posters highlighted the contributions of modern geodesy to science and society, under the following themes:

- Theme 1: Definition, Implementation and Scientific Applications of Reference Frames
- Theme 2: Gravity Field Determination and Applications
- Theme 3: Observing, Understanding and Assessing Earth Hazards
- Theme 4: Science and Applications of Earth Rotation and Dynamics
- Theme 5: Observation Systems and Services
- Theme 6: Imaging & Positioning Techniques and Applications

There were 40 oral presentations in the following Theme 1 sessions: Interaction Between the Celestial & Terrestrial Reference Frames; Regional Reference Frames; Reference Frames (Theory, History, Realisation); Strengths, Weaknesses, Modelling Standards & Processing Strategies of Space Geodetic Techniques; Scientific & Other Applications of Terrestrial Reference Frames.

There were 75 oral presentations in the following Theme 2 sessions: Regional Gravity & Geoid Studies (Developments in the Gravity Field Theory / Gravimetry / Improvements in Gravity Field Methodology / Developments in Approaches Related to Geoid Determination / Regional & Local Geoid Determination); Unification of Height Systems; Global Gravity Field Models; Satellite Altimetry Analysis & Applications; Mass Transport Studies; Actual & Future Satellite Gravity Missions (GOCE / GRACE / Future Missions & General Studies).

There were 31 oral presentations in the following Theme 3 sessions: Technologies & Methodologies of Hazard Warning Systems; Geometric & Gravimetric Techniques in Observing & Assessing Earthquake Hazards; Geodetic Imaging for Regional & Local Case Studies; Innovative Use of Geodetic Techniques for Volcanic & Meteorological Hazards; The Challenges of Assessing Hazards From Geodetic (and Other) Observations.

There were 11 oral presentations in the Theme 4 session Science & Applications of Earth Rotation & Dynamics.

There were 18 oral presentations in the following Theme 5 sessions: Observation Systems & Services (Services / Services & Infrastructure / GGOS).

There were 40 oral presentations in the following Theme 6 sessions: GNSS Algorithms & Methods; Trends in GNSS Positioning, Navigation & Timing; Multi-Constellation GNSS & Emerging GNSS; Imaging & RF Sensor Integration & Modelling.

A future article will cover some of the highlights of the Scientific Assembly. In the meantime the IAG is looking forward to another 150

exciting years!

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