



**International
Association of
Geodesy**

Newsletter

August 2008

Editor: Gyula Tóth

IAG Communication and Outreach Branch
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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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University of Copenhagen
Dept. of Geophysics
Copenhagen, Denmark
Fax: +45 35365357
E-mail: cct@gfy.ku.dk

General Announcements

Calls for Proposals for new GGOS Components

Dear Colleagues,

at the IUGG General Assembly 2007 in Perugia the new Terms of Reference (ToR) of the Global Geodetic Observing System (GGOS) were accepted by the IAG Executive Committee. According to these new ToR, the following new components of GGOS are going to be established:

- GGOS Coordination Office and GGOS Portal
- Bureau for Networks and Communication
- Bureau for Standards and Conventions
- Bureau for Satellite Missions

In the GGOS website <http://ggos.gfz-potsdam.de/ggos/index.php?id=20> you will find the Calls for Proposals (CFP) for these new components. The deadline for submitting your proposal is

October 15, 2008.

More details are given in the documents mentioned.

Please consider this unique opportunity to contribute with your institution, possibly in cooperation with other institutions, to these important activities of GGOS.

Looking forward to your proposals,
with best regards,

MARKUS ROTHACHER
Chair of GGOS

Geodesy for Planet Earth

*IAG 2009 Scientific Assembly, Buenos Aires, Argentine
August 31 to September 4, 2009*

Dear Colleagues and Friends,

It is both our privilege and our pleasure to invite you to the International Association of Geodesy Scientific Assembly IAG2009 that will be hosted by the IUGG National Committee together with the Argentine Association of Geophysics and Geodesy, and will take place in the exciting city of Buenos Aires. Buenos Aires, cradle of tango and gate to Argentina, is the most European city in Latin America. It is a singular, open and integrating destination that allows visitors not only to view the city but also to live an exceptional urban adventure. Buenos Aires is the leader in Latin America regarding to art, culture and tradition. Its night is a legend of its own, filled with lights, magic and mystery. You can choose from a diversity of art expositions, museums and entertainment, including a typical and exciting football game.

IAG2009 will be an event that covers the whole of geodesy in an exciting social environment that extends our knowledge, improves our practice, and widens our friendship networks. Following the long outstanding tradition of these scientific assemblies, IAG2009 will be a major scientific event, bringing together geodesists from all over the world, and demonstrating the vital role that geodesy plays in our society. This will be the main geodetic meeting in 2009. We do hope that you will make it a priority to attend.

The Scientific Programme

The scientific programme will be developed under the theme of "Geodesy for Planet Earth" referencing the International Year of Planet Earth (IYPE). It will provide an opportunity to present the latest research in



Geodesy and will be enriched by a focus on Geodesy in South America to discuss all the research and projects in this zone.

Please monitor the web site for conference details: www.iag2009.com.ar

Welcome to our site and see you in Buenos Aires!

Important information: The *Scientific Program* for the IAG 2009 Scientific Assembly "Geodesy of Planet Earth" is currently being finalized and will be included in the 2nd Circular which will be sent out in **September 2008**.

Local Organizing Committee:
MARÍA CRISTINA PACINO
ALFREDO AUGUSTO STAHLSCHMIDT
EDUARDO ANDRÉS LAURÍA
CLAUDIA NOEMÍ TOCHO
SERGIO RUBÉN CIMBARO

Assembly Secretary:
HERMANN DREWES

Meeting Announcements

14th General Assembly of WEGENER - WEGENER 2008

September 15-18, 2008
Darmstadt, Germany

The Institute of Physical Geodesy (IPGD) of the Technische Universität Darmstadt is pleased to announce that the 14th General Assembly of WEGENER - **WEGENER 2008 will take place in Darmstadt, Germany, from September 15-18, 2008**. The conference venue will be *darmstadtium*, the new Science and Conference Center in Darmstadt.

The Wegener project aims to bring together geoscientists interested in using geodetic techniques to measure and understand the 3D surface motion in Europe and the Mediterranean. The 14th Assembly of WEGENER will provide a forum for presentation, discussion, coordination and scientific support for geoscientists interested in unravelling the kinematics and mechanisms of the broad Eurasian/African/Arabian collision zone. Contributions on new aspects arising from the global observing system GGOS and the new satellite missions for gravity, SAR and Laser Altimetry are welcome in particular. The threat by Natural Hazards to the Mediterranean is addressed in a special session on geohazards.

2nd Circular with Call for Abstracts and additional information available at <http://www.ipg.tu-darmstadt.de/wegener/>.

MATTHIAS BECKER

International IGeS School "THE DETERMINATION AND USE OF THE GEOID"

Organized by Politecnico di Milano, Campus Como
COMO, Italy, 15 -19 September 2008.

PRELIMINARY PROGRAM

Local Organizing Committee:

Fernando Sansò

Riccardo Barzaghi

Giovanna Sona

e-mail : iges@polimi.it

web : www.iges.polimi.it

Tel : +39 - 02-2399.6527 / 02-2399.7520

Fax : +39 - 02-2399.7519

Preliminary Program:**1st day (15 September 2008) Prof. F. Sansò and R. Barzaghi**

Lecture 1 – General Introduction to Physical Geodesy

Lecture 2 – General Theory for Geoid Computation

Lecture 3 – The Remove Restores Concept and Collocation

2nd day (16 September 2008)Lecture 4 – The Global Geopotential Models **Prof. N. Pavlis**

Exercises 1 on Global Models

Exercises 2 on Global Models

3rd day (17 September 2008) Prof. C. Tscherning

Lecture 5 - The Collocation Method in Geodesy

Exercises 1 on Collocation

Exercises 2 on Collocation

BGI Seminar

4th day (18 September 2008)Lecture 7 – The Terrain Effect in Geoid Estimation **Prof. R. Forsberg**

Exercises

5th day (19 September 2008) Prof. I. Tsiavos

Lecture 6 – The FFT Methods to Geodesy

Exercises 1

Exercises 2

Note: All the software used during the school will be made available on CD for the participants

F. SANSO – R. BARZAGHI – G. SONA

ILP workshop at Ensenada, Baja California*(Mexico), 21-26 September 2008:*

Volcanism, mantle, paleo-stress and sedimentary basins;. A joint International Lithosphere Programme Task Force conference.

The conference will be held at the Corall Hotel in Ensenada, facing the Ocean, 200 m away from the Earth Science building. A 2 days pre-conference field trip (September 22-23) is scheduled. Already approved sessions comprise: Volcanism and geodynamics: insights from studies of eroded volcanic systems; Long-term evolution of volcanoes and volcanic systems recording lithospheric processes; Lithosphere-asthenosphere interactions; Temporal and spatial changes of stress and strain; Baby plumes; Architecture and evolution of the Gulf of Mexico and other Mexican basins; Sub-Andean basins and Circum-Pacific margins.

On-line abstract submission, hotel infos, and registration are available on the web site of the Mexican Geophysical Union (www.ugm.org.mx), with a deadline for submission on 2 June 2008.

Other contacts: Dr L. Delgado-Argote (ldelgado@cicese.mx), Dr F. Ortuño-Arzate (fortuno@imp.mx), Prof. A. Tibaldi (alessandro.tibaldi@unimib.it).

A. TIBALDI

GNSS Reflectometry Course and Workshop*ESTEC Noordwijk, Netherlands, September 24-25, 2008.*

This is to announce the forthcoming GNSS-R workshop and one-day course on GNSS-R organized by the European Space Agency and to be held on 24-25 September at ESTEC in Noordwijk, The Netherlands.

Preliminary Programme:Day One – Course on GNSS Reflectometry

08:30 - 09:00 Registration

09:00 Welcome

Basic Principles of GNSS-R

Requirements of the Oceanographic Community

Coverage

Advanced Processing

Information Contained in Reflected Signal

Altimetric Accuracy and Precision
Sources of Error
Ionosphere
Troposphere
Speckle
Instrument Calibration
12:30 Lunch
13:30 In-Orbit Demonstrator
System Concept
Preliminary Design
Link Budget
Performance
On-board Processing
Downlink
Launcher
Realization
Practical Results from Campaigns and Lessons Learnt
Galileo Signal Structure
Other Applications
Scatterometry
Ice Freeboard
Soil Moisture
Biomass
17:00 Discussion

Day Two – Workshop

08:30 Presentations of papers on any topic related to GNSS-R
Abstracts to be submitted by 1 September 2008
12:30 Lunch
13:30 More Presentations
17:00 Wrap-up
17:30 Close

There will be no cost for participation in the workshop and course. To register or send an abstract (accepted up until 1 September 2008) please send an e-mail to Christopher.Buck@esa.int. Note that there is only a small number of places left so to reserve your place please register soon.

CHRISTOPHER BUCK
Payload Engineer
ESA/ESTEC

16th International Workshop on Laser Ranging – Updated Announcement *Poznan Poland, October 13-17, 2008.*

The Space Research Centre of the Polish Academy of Sciences will host the next International Workshop on Laser Ranging in Poznan Poland (15 km from the Borowiec SLR station) on October 13-17, 2008 (note new dates). The theme of this year's workshop is "SLR, The Next Generation". The first circular will be issued soon. In the meantime, we ask you to reserve these dates on your calendars and plan to attend what will surely be another exciting laser workshop.

We are also pleased to announce that the proceedings from the 15th International Workshop on Laser Ranging, held in Canberra Australia in October 2006, have been completed. All presentations and papers from this workshop will also be accessible through the ILRS Web site at: <http://cddis.gsfc.nasa.gov/lw15/index.html>.

CAREY NOLL
Crustal Dynamics Data Information System (CDDIS)

Colloquium to honour Helmut Moritz *on November 14, 2008 at Berlin (Germany)* (Extract of the Second Circular)

Invitation

On November 1, 2008, Prof. Dr. techn. Dr. h.c. mult. Helmut Moritz, Graz, Member of the Leibniz Society of Sciences at Berlin, Full Member of the Austrian Academy of Sciences (ÖAW), foreign member of over ten national academies of sciences, is reaching the age of 75.

On this occasion the Leibniz Society, to honour its standing member of many years', is organising an all-day Colloquium on the theme "Scientific Geodesy" on November 14, 2008, at Berlin. This colloquium is supported by the Austrian Academy of Sciences (ÖAW), the International Association of Geodesy (IAG) and the Graz Technical University.

We invite warmly all the friends of Helmut Moritz, his colleagues, coworkers and scholars, as well as all the persons, interested in the theme of the colloquium, to attend.

A registration fee for the colloquium is not requested. We ask to apply for registration in time using the application form.

Provisional Programme

Pre-programme on November 13, 2008

- 10.00 to 16.00 h Scientific sessions of the Leibniz Society on themes of theoretical physics to honour Hans-Jürgen Treder, Member of Leibniz Society, who passed away on November 18, 2006, on the occasion of his 80 th birthday (Programme enclosed)
- 18.00 h Informal meeting of the contributors to the Colloquium „Scientific Geodesy“

November 14, 2008 Colloquium „Scientific Geodesy“

Location of the sessions: Otto-Suhr-Saal in Neues Stadthaus at Berlin-Mitte, Parochialstr. 1-3, near by the stations S- und U-Bahnhof Alexanderplatz.

Registration for attendance is requested.

The contributions will be presented in the language used in the title. Summaries in German and English will be available during the meeting.

10.00 h – 12.30 h Morning Session

10.00 h Opening, Laudationes, Addresses

Dieter B. Herrmann, President of the Leibniz Society,

Begrüßung und Eröffnung des Kolloquiums

Herbert Mang, Former President of the Austrian Academy of Sciences,

Laudatio auf Helmut Moritz

Heinz Kautzleben, Member of the Leibniz Society,

Die Geodäsie ab dem IGJ und Helmut Moritz

Herrmann Drewes, General Secretary of the International Association of Geodesy,

Address to Helmut Moritz from the IAG

Hans Sünkel, Rector of the Graz Technical University,

Grußadresse der TU Graz

Addresses from the Austrian Geodetic Commission and the German Geodetic Commission

Bogdan Ney, Member of the Presidium of the Polish Academy of Sciences,

Address to Helmut Moritz from the Polish Academy of Sciences

Yury M. Neyman, Moscow State University of Geodesy and Cartography,

The Russian Geodesy and Helmut Moritz. Address from MIIGAİK

Announcement of the other addresses from Academies, Scientific Societies and Universities, which has elected Helmut Moritz for Foreign Member or Doctor honoris causa, respectively

11.30 h Start of presenting the scientific papers

Fernando Sansò & G. Venuti, Milano,

The convergence problem for the collocation solution; a return

Christian C. Tscherning, Copenhagen,

The use of least-squares collocation for the processing of GOCE data

Petr Holota, Prague,

Problems of potential theory in gravity field studies

Elena Mazurova, Moscow,

Corrections for ellipsoidality

12.30 h to 14.30h Lunch break

14.30 h to 17.00 h Afternoon session

14.30 h Continuation of presenting the scientific papers

Erik W. Grafarend, Stuttgart,

Helmut Moritz, das Somigliana-Pizetti-Referenz-Schwerefeld und „Mars“, die Referenz-Äquipotentialfläche

Jürgen Müller, Hannover,

Moderne Geodäsie – eine Herausforderung für Gravitations- und Quantenphysik

Bernhard Hofmann-Wellenhof, Graz,

Galileo Galilei und Helmut Moritz im Diskurs

Bogdan Ney, Warsaw,

Integration of geoinformations

Victor P. Savinykh, Moscow,

Space monitoring for nature and antropogenic disasters

Juhani Kakkuri, Helsinki,

Weikko Heiskanen and Helmut Moritz

Markku Poutanen, Helsinki,

From Maupertuis to GRACE. Finnish contributions to the global geodesy

Günter Leonhardt, Gera,

Der Dresdener Geodät Horst Peschel (1909-1989)

Dieter Lelgemann, Berlin,

Eratosthenes von Kyrene und das heliozentrische Konzept des Planetensystems

Herbert Hörz, Berlin,

Unbestimmtheit und Exaktheit in der Wissenschaft – Anmerkungen zu wissenschaftsmethodologischen Überlegungen von Helmut Moritz

Helmut Moritz, Graz,

Schlusswort zum Kolloquium

Große Mathematiker und die Geowissenschaften. Von Pythagoras zu Einstein und Hilbert

17.00 h End of the scientific meeting

18.00 h Informal meeting of the participants to the Colloquium “Scientific Geodesy” to honour Helmut Moritz

Addresses for Questions:

Leibniz-Sozietät der Wissenschaften zu Berlin e.V.

Langenbeck-Virchow-Haus, Luisenstr. 58/59, D-10117 Berlin

www.leibniz-sozietat.de

Prof. Dr. Heinz Kautzleben

Schneewittchenstr. 18, D-12524 Berlin

e-mail: kautzleben.leibniz-sozietat@t-online.de

HEINZ KAUTZLEBEN

Geodesy for Planet Earth

IAG 2009 Scientific Assembly, Buenos Aires, Argentine

August 31 to September 4, 2009

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SERGIO RUBÉN CIMBARO

Assembly Secretary:
HERMANN DREWES

IAG Sponsored Meetings

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September 15-18, 2008, Darmstadt, Germany

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IAG Related Meetings

1st GNSS Vulnerabilities and Solutions Conference

September 7 – 9, 2008, Baška, Krk Island, Croatia

The conference will address the most important aspects of the GNSS that have a huge impact not only to a numerous technical systems already deployed in our everyday life, but also to global economy and geostrategy. Recognised GNSS experts from 11 countries will discuss both core GNSS vulnerabilities issues and their effects on a various applications and services, providing an excellent opportunity to discuss top-priority issues. For more details please visit <http://www.rin.org.uk/node/9901>.

UN-SPIDER Workshop

September 16-19 2008, Suva, Fiji

United Nations Regional UN-SPIDER Workshop: Building Upon Regional Space-based Solutions for Disaster Management and Emergency Response for the Pacific Region will take place in Suva, Fiji from 16 - 19 September 2008. More information on the workshop is available from the following website: <http://www.unoosa.org/oosa/en/unspider/workshops.html>.

Conference on Remote Sensing Techniques in Disaster Management

22-24 September 2008, Zadar, Croatia

The First International Conference on Remote Sensing Techniques in Disaster Management and Emergency Response in the Mediterranean Region will take place in Zadar, Croatia. The subject "Disaster Management and Emergency Response" is a high-priority topic in the Mediterranean region. Risk reduction using remote sensing techniques may be very helpful in various applications. Identification of relevant space-based and airborne information for Disaster Management Support and Emergency Response is a major priority issue. The webpage of the conference is <http://www.earsel.geosat.hr/>.

Third World Congress "Aviation in the XXI-st Century"

22-24 September 2008, Kyiv, Ukraine

The Third World Congress "Aviation in the XXI-st Century" - "Safety in Aviation and Space Technology", will be held at the National Aviation University, Kiev, Ukraine, September 22-24, 2008. For more information please visit <http://congress.nau.edu.ua/>.

GNSS Reflectometry Course and Workshop

24-25 September 2008, ESTEC in Noordwijk, Netherlands

The forthcoming GNSS-R workshop and one-day course on GNSS-R is organized by the European Space Agency and will be held on 24-25 September at ESTEC in Noordwijk, The Netherlands. There will be no cost for participation in the workshop and course. To register or to submit abstract (up until 1 September 2008), please contact Christopher.Buck@esa.int.

16th International Workshop on Laser Ranging

13-17 October 2008, Poznan, Poland

The next International Workshop on Laser Ranging will be held in Poznan Poland (15 km from the Borowiec SLR station) on October 13-17, 2008. (note new dates). The theme of this year's workshop is "SLR, The Next Generation". The first circular will be issued soon.

HydroChange 2008

October 1-3, 2008, Kyoto, Japan

The HydroChange 2008 Symposium "Hydrological changes and management from headwater to the ocean" will be held at Kyoto Garden Palace, Kyoto, Japan. Please visit the official web site of the Symposium at http://www.chikyu.ac.jp/HC_2008.

21st CODATA International Conference

5-8 October 2008, Kyiv, Ukraine

CODATA - International Council for Science : Committee on Data for Science and Technology's 21st International Conference: "Scientific Information for Society - from Today to the Future" will be held in Kyiv, Ukraine. Visit <http://www.codata.org/08conf/index.html> for more information.

UN-SPIDER Bonn Workshop

October 13-15 2008, Bonn, Germany

The Second United Nations International UN-SPIDER Bonn Workshop: “Disaster Management and Space Technology – Bridging the Gap” to be held in Bonn, Germany from 13-15 October 2008. The workshop will be organised by the United Nations Office for Outer Space Affairs (UNOOSA) and the German Aerospace Center (DLR) and will build on top of the first workshop held in Bonn last year. More information on the workshop is available on the website www.unspider.org.

The Role of Hydrology in Water Resources Management

October 13-16 2008, Isle of Capri, Naples, Italy

A joint IAHS UNESCO Symposium on The Role of Hydrology in Water Resources Management will be held in Naples, Italy. The purpose of the Symposium "The Role of Hydrology in Water Resources Management" is to discuss ways in which hydrologists can contribute most effectively to the planning and management of freshwater projects, including the efficient operation of existing systems faced with new socio-political situations. Web page of the Symposium is www.ihp2008capri.it.

XXXVI IAH Congress

October 26-31, 2008, Toyama, Japan

“Integrating Groundwater Science and Human Well-being” congress is planned to be held in Toyama, Japan. Please visit <http://www.envr.tsukuba.ac.jp/~IAH2008>.

ACM GIS 2008

November 5-7, 2008, Irvine, CA, USA

The ACM SIGSPATIAL International Conference on Advances in Geographic Information Systems 2008 (ACM GIS 2008) is the sixteenth event of a series of symposia and workshops that began in 1993 with the aim of bringing together researchers, developers, users, and practitioners carrying out research and development in novel systems based on geo-spatial data and knowledge, and fostering interdisciplinary discussions and research in all aspects of geographic information systems. Additional information is available through the webpage <http://acmgis08.cs.umn.edu/>.

Digital Earth Summit on Geoinformatics: Tools for Global Change Research

November, 12-14, 2008, Potsdam, Germany

The summit will be held in Wissenschaftspark Albert Einstein, Potsdam, Germany from 12-14 November 2008. It will bring together leading scientists from Geoinformatics and Global Change research and will foster the exchange of ideas, cooperation between so-far disjoint scientific fields and provide time for in-depth discussion. For details please visit the webpage of conference, www.isde-summit-2008.org.

GEOWS 2009

February, 1-6, 2009, Cancun, Mexico

GEOWS 2009, The International Conference on Advanced Geographic Information Systems & Web Services will be held in Cancun, Mexico between 1-6 February 2009. Conference details and call for papers are reachable from the webpage <http://www.iaia.org/conferences2009/GEOWS09.html>.

6th International Symposium on Mobile Mapping Technology – MMT’09

July 21-24, 2009, Presidente Prudente, São Paulo, Brazil

The 6th International Symposium on Mobile Mapping Technology “Mobile Mapping Serving the Information Society” will take place in Presidente Prudente, São Paulo, Brazil, July 21-24, 2009. The main objective of the conference is to discuss the most recent technology and its application, to exchange experiences and to promote future research aiming at the development and the production in the fields related to mobile mapping. You may want to check out the website <http://www.fct.unesp.br/eventos/simposio/mmt09/ingles> to get preliminary information on MMT’09.

IAG Sister Societies’ General Assemblies

Associations’ Scientific Assemblies of the IUGG

- IUGG/IAGA, August 23-30, 2009, Sopron, Hungary
- IUGG/IAHS, September 7-12, 2009, Hyderabad, India

- IUGG/IASPEI, January 10-16, 2009, Cape Town, South Africa
- IUGG/IAG, August 31-September 4, 2009, Buenos Aires, Argentina
- IUGG/IACS-IAMAS-IAPSO, July 19-29, 2009, Montreal, Canada

Reports

Report on the 18th Symposium of the IAG Reference Frame Sub-commission for Europe (EUREF)

Brussels, June 18 – 21, 2008



By invitation of the Royal Observatory of Belgium (ROB), the Royal Military Academy (RMA) and the National Geographic Institute (NGI), the EUREF Sub-commission held its 18th Symposium from June 18-21, 2008 in Brussels/Belgium. The EUREF Technical Working Group (TWG) met as usual the day before the beginning of the symposium, i.e. on June 17.

The symposium took place in the conference hall of the Royal Military Academy. More than 132 geodesists representing 28 countries met for this 2008 annual EUREF symposium. The attendees mainly represent universities, research centres and the NMCA's (national mapping and cadastre agencies). The EUREF [Symposia](#) are an open forum and may be attended by any person interested in the work of the Sub-commission.

The symposium was opened by Col BAM J. Marsia, DEAO Royal Military Academy. Welcome addresses were given by representatives of the host organisations and IAG.

The results and recommendations proceeding from EUREF support the use of the European Reference Systems in all scientific and practical activities related to precise geo-referencing and navigation, Earth Sciences research and multidisciplinary applications. EUREF makes use of the most accurate and reliable terrestrial and space-borne techniques available, and develops the necessary scientific background and methodology. Special attention is also given to (near) real time positioning. The long-term objective of EUREF, as defined in its [Terms of Reference](#), "is the definition, realization and maintenance of the European Reference Systems, in close cooperation with the pertinent IAG components (Services, Commissions, and Inter-Commission projects) as well as *EuroGeographics*".

So the scientific Symposium programme was focused on a continuous innovation and on the changing user needs, as well as on the maintenance of an active network of people and organizations, and may be summarized as follows:

- to maintain the [ETRS89](#) (European Terrestrial Reference System) and the EVRS [EVRS](#) (European Vertical Reference System) and upgrade the respective realizations;
- to refine the EUREF Permanent Network ([EPN](#)) in close cooperation with the [IGS](#) (International GNSS Service);
- to improve the Unified European Levelling Network ([UELN](#));
- to contribute to the IAG Project [GGOS](#) (Global Geodetic Observing System) using the installed infrastructures managed by the EUREF members.

The schedule of the scientific programme was subdivided into 7 sessions for oral presentations. The sessions were dedicated as usual to the topics

1. Activities of the EUREF Technical Working Group (5 contributions)
2. Permanent GNSS Networks: New developments (10)
3. Systematic errors in GNSS (6)
4. Improvements and densifications of the ETRS89 (5)
5. Height, Gravity, Geoid, GGOS (5)
6. National Reports (25)

Moreover 23 posters to the topics 1 - 5 were presented. Altogether five resolutions were approved.

The scientific sessions were accompanied by a social programme with impressive arrangements of Belgian hospitality and culture.

A detailed overview on this symposium (programme, participants, ppt-files of presentations, photo gallery etc.) can be found in the [EUREF homepage](#) – see symposia. There also the previous symposia are documented.

The EUREF Sub-commission acknowledges the financial support given by EuroGeographics for the enabling the participation of delegates from economical weak countries.

By courtesy of the Italian colleagues the EUREF Sub-commission is invited to hold its 2009 symposium at the Istituto Geografico Militare in Florence.

Resolutions of the EUREF Symposium in Brussels, 18 – 21 June 2008

Resolution no. 1

The IAG Reference Frame Sub-commission for Europe (EUREF)

recognising the quality of:

- the combined tropospheric zenith path delays produced weekly by the EPN Troposphere Special Project, and
- the time series of station positions and velocities generated regularly by the EPN Time Series Special Project,

noting that both projects have reached a level of maturity where their results are now being used in routine EPN operations

recommends the transition of both projects to operational status and that their products are used as standard in routine EPN operations.

Resolution no. 2

The IAG Reference Frame Sub-commission for Europe (EUREF)

recognising the necessity of improving the geodetic infrastructure in Africa coordinated by the IAG sub-commission AFREF

encourages the EUREF community to actively support the development of AFREF geodetic activities..

Resolution no. 3

The IAG Reference Frame Sub-commission for Europe (EUREF)

recognising the requirement of the European Commission for harmonisation of the vertical reference system for geo-information

noting the availability of a new realisation of the European Vertical Reference System (EVRS) in agreement with the EVRS2007 conventions

recommends to adopt this new realisation of the EVRS under the name EVRF2007 and to exchange the results between all participating countries and

proposes to the European Commission that this solution is adopted as the vertical reference for pan-European geo-information.

Resolution no. 4

The IAG Reference Frame Sub-commission for Europe (EUREF)

noting the response to resolution 5, 2007 asking for userfeedback on the realisation of ETRS89 and

recognising the importance of ETRS89 to the user community and

recognising the investigations done so far regarding different ways to realise ETRS89

asks the TWG that future ETRS89 realisations be optimised with respect to stability, accuracy and consistency in order to meet the long term requirements of high precision European geo-referencing.

Resolution no. 5

The IAG Reference Frame Sub-commission for Europe (EUREF)

which held its eighteenth symposium in Brussels from June 18 – 21 2008

expresses its heartfelt thanks to the Local Organising Committee especially Carine Bruyninx, Pierre Voet and Alain Muls for organising the symposium and for the excellent arrangements resulting in a very successful meeting and for the support given by:

- Royal Military Academy
- National Geographic Institute
- Royal Observatory of Belgium
- Septentrio Satellite Navigation
- Minister of Scientific Research of the Brussels Capital Region

J. IHDE, H. HORNIK

FIG 2008 Commission 5 Working Week Report Stockholm - Sweden

The Working attracted almost 1000 delegates from 95 different countries and nations. Two (2) General Assemblies were held on the 15 and 19 June 2008 at the Stockholm City Conference Centre – Norra Latin, Stockholm – Sweden.

Overall there were 70 technical sessions with almost 350 presentations at the Stockholm 2008 Working Week. At this symposium FIG Commission 5 was once again very popular and thus busy as it attracted and facilitated 83 related technical papers and posters. There was also a Plenary Session for the technical FIG Commissions. At this session, “Technical and Organisational Innovations”, delegates heard interesting and thought provoking speeches from Mr David Zilkoski the Director of NOAA – NGS, Mr Frank Udnaes from the Galileo Unit of the European Commission and Stig Jönsson, Director General of Lantmäteriet (National Land Survey of Sweden).

For the first time in FIG history a Peer Review System was implemented for the Technical Papers. Nine (9) FIG Commission 5 papers out of 65 were peer reviewed.

The following is a list of the majority of Commission 5 technical sessions. To view most of these papers, presentations and posters from the Stockholm Working Week please navigate to the web site - <http://www.fig.net/pub/fig2008/techprog.htm>.

- TS 1C - Development in GNSS Measurement Technologies and Techniques
- TS 1H - Developments in Scanner and Sensor Technologies
- TS 1I – Imaging Data Applications
- TS 2A - Geodetic Networks, Reference Frames and Systems I
- TS 2D – Calibration of Instruments
- TS 3A – Geodetic Networks, Reference Frames and Systems II
- TS 3D – GNSS Reference Stations
- TS 3H – Reliability of Positioning and Measurement Technology
- TS 4C – GNSS Standards
- TS 4G – Processing of Geodetic Data
- TS 5F – Geoid
- TS 5G - GNSS Antenna Calibration and Accuracy Assessment
- TS 6F - Posters Associated with Discussion Forum in TS 7F on Real Time GNSS CORS
- TS 7F - Discussion Forum on Real Time GNSS CORS (Related to Special Poster Session TS 6F)
- TS 8F - New Positioning Techniques Forum

The Commission 5 Steering Committee held several meetings whilst in Stockholm. They involved fruitful discussions with other FIG Commission Chairs, the Vice President of IAG Prof. Chris Rizos, IAG Commission 4 Chair Dr Sandra Verhagen, representatives from National Geodetic Survey (USA) - Mr Neil Weston, Mr Dave Doyle and Mr Dave Zilkoski ; Mr Brent Jones (ESRI), Mr Neil Ashcroft (Leica Geosystems) and other Commission delegates. The main purpose of the meetings was to discuss the workings (technical sessions and forums) at Stockholm and also future projects, workplans and events. Minutes from these meetings can be found on the FIG Commission 5 web site. Refer to - http://www.fig.net/commission5/steering_committee/steeringcommittee.htm.



The FIG Comm 5 Steering Committee with FIG President

For FIG Commission 5 the Working Week 2008 in Stockholm was a very successful event. The participation at the Technical Programme was excellent and our numerous meetings very productive. The successful introduction of the Peer Review System has showed positive first results and that the overall quality of the papers is increasing.

ACKNOWLEDGEMENT

It is acknowledged that the information in this short summary report came from FIG Commission 5 - Position and Measurement and that the full report and other related information can be sourced from the website <http://www.fig.net/commission5/index.htm>.

SOURCE: WWW.FIG.NET

Fast Bibliography

The fast bibliography consists of a listing of papers relevant to Geodesy that has been collected by the IAG Bibliographic Service (IBS) since previous issue of the fast bibliography (IAG Newsletter May 2008). The IBS is based on the literature data base GEOPHOKA, which is maintained by BKG (Bundesamt für Kartographie und Geodäsie) at the Branch Office Leipzig, Karl-Rothe Strasse 10-14, 04105 Leipzig, Germany. The IBS can be reached at the following Internet address: <http://www.bkg.bund.de> or furthermore through the homepage of IAG: <http://www.iag-aig.org>.

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