



January 2004

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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. general information
- II. reports of IAG symposia
- III. reports by commissions, special commissions or study groups
- IV. symposia announcements
- V. book reviews
- VI. fast bibliography

Books for review are the responsibility of:

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General Announcements

New IAG internet site

IAG has got a new homepage. Please change your browser to <http://www.iag-aig.org> which contains the new updated IAG web pages and the most recent information.

New EUREF homepage address

IAG Sub-Commission SC 1.3a – Europe (EUREF, European Reference Frame) has got a new homepage. Please change your browser to <http://www.euref-iag.net> which contains the new updated IAG web pages and the most recent information.

International Centre of Global Earth Models (ICGEM) website

The International Centre of Global Earth Models (ICGEM) being one of the designated centres of the IAG International Gravity Field Service (IGFS), has constructed the centre's web site to serve as the user interface. The site offers a compilation of (published) global gravity field models and basic computational and graphical functionality. The site is now open for public access and is going to be completed step by step in order to cover all of the center's tasks.

Please have a look at <http://icgem.gfz-potsdam.de/ICGEM/ICGEM.html>.

Descartes Prize 2003

In 2003 the prestigious Descartes Prize has been awarded to Véronique Déhant and her research group specialized on nutation.

The Descartes Prize is the European prize for outstanding results from European collaborative research. Each year, it rewards excellent research teams for their achievements in all fields of scientific or technological endeavour including the social sciences and humanities. The award offers researchers an opportunity to gain recognition for their work and their European collaborative efforts.



Prof. Véronique Déhant of the Royal Observatory of Belgium in association with researchers from her institution and from the Bureau International des Poids et Mesures in Sevres, Institut de Mécanique Céleste et de Calcul des Ephémérides in Paris and the Observatory of Paris (France), the Space Research Centre of the Polish Academy of Sciences in Warsaw (Poland), Complutense University of Madrid, the Universities of Alicante and Valladolid (Spain), Technical Universities of Dresden and Munich and GeoForschungsZentrum Potsdam (Germany), the Technical University of Vienna (Austria), Astronomical Institute of the Academy of Sciences of Czech Republic in Prague (Czech Republic), the Main Astronomical Observatory of the National Academy of Sciences of Ukraine in Kiev (Ukraine) and the Sternberg State Astronomical Institute of Moscow State University (Russia) have received the Descartes Prize for the application:

Pinpoint positioning in a wobbly world

The IAG community would like to congratulate to the achievements of Prof. Dehant, and thanks the entire team for promoting our field of science so successfully.

IAG individual membership

IAG has recently introduced the individual membership as one of the new elements of the new IAG structure. The rights and privileges of individual members are listed in the IAG By-Laws. The Membership Application Form in PDF can be downloaded from the IAG website: <http://www.iag-aig.org>.

Meeting Announcements

10 Years IGS Workshop and Symposium

March 1-5, 2004, Berne, Switzerland

To celebrate its 10-year anniversary, the International GPS Service (IGS) is organizing a four-day workshop and one-day symposium in the first week of March, 2004.

visit <http://www.igs2004.unibe.ch> for more information.

Second International GOCE User Workshop

"GOCE, The Geoid and Oceanography"

ESA-ESRIN, Frascati (Rome), Italy, 8-9-10 March 2004

visit <http://www.esa.int/goce04/> for more information.

EGU 1st General Assembly

Nice, France, 25-30 April, 2004

The 1st General Assembly of the European Geosciences Union (EGU) is held at the Nice - Acropolis Congress Centre in Nice, France, from 25 - 30 April 2004.

visit <http://www.copernicus.org/EGU/ga/egu04/index.html> for more information.

EUREF - 2004, The EUREF 2004 Symposium of the IAG Subcommittee for Europe

2-5 June 2004, Bratislava, Slovakia

visit <http://web.gku.sk/euref2004/> for more information.

15th International Symposium on Earth Tides

2-6 August 2004, Ottawa, Canada

visit <http://www.yorku.ca/ets/ets.html> for more information.

Gravity, Geoid and Space Missions – GGSM2004

August 30 – Sept. 3, 2004, Porto, Portugal

IAG International Symposium

visit <http://www.fc.up.pt/ggsm2004/> for more information.

Meeting Reports

Report on roundtable discussion on surveying education in Africa

1. Introduction

A roundtable discussion on the problems facing surveying/GIS education in Africa was convened by the Fédération Internationale des Géomètres (FIG) at the 2nd FIG Regional Conference, which took place in Marrakech, Morocco, over the period 2-5 December 2003. The International Association of Geodesy (IAG) was invited to send a representative to this meeting and I was requested by the Secretary-General to attend on behalf of the IAG.

2. Roundtable discussion

The FIG decided to hold the discussion largely in response to a document produced by Prof. Heinz Rüther, a council member of the International Society for Photogrammetry and Remote Sensing (ISPRS), and coincidentally a colleague of mine at the University of Cape Town. In this document (attached separately as a .pdf file) he outlines his concerns regarding the status of surveying/geomatics education in sub-Saharan Africa.

Prior to the meeting I had e-mailed 22 African colleagues based at universities and national survey agencies, largely in sub-Saharan Africa, asking them for feedback on education in geodesy in Africa. I received two undelivered mail messages and three replies - either reflecting a lack of interest or poor communication facilities (I suspect both, but mainly the latter).

The discussion was chaired by Prof Holger Magel, president of FIG, and attended by about 20 interested persons, including representatives of three UN agencies, Heinz R  ther and myself. Heinz summarised his concerns, which largely related to resources - inadequate salaries, no or outdated equipment, inadequate access to the internet, limited access to books and journals, no research funds. I was then given an opportunity to give the geodetic viewpoint. Based upon my e-mail survey and personal discussions I have had with colleagues over a number of years, it appears to me that although African geodesists suffer the same problems as other surveying educators in Africa, the one of most concern is a lack of access to GPS equipment. Many four and five year degree programmes taught in sub-Saharan Africa have no access to any form of GPS equipment. In addition, internet and e-mail access is difficult, with most lecturers having to share computers and having to use a dial-up connection to services such as hotmail and yahoo in order to access e-mail. The lack of GPS equipment was confirmed by a student from Kenya, who stated that although they are taught GPS concepts and theory, no receivers are available.

It was noteworthy that, other than the Kenyan student and Heinz and myself, there were no representatives from sub-Saharan universities at the meeting. Overall, about 350 persons attended the congress - of these there were no more than eight from sub-Saharan Africa, principally from government or UN agencies. This reflects the lack of travel support for African academics.

A general discussion followed, in which it became abundantly clear that wide disparities exist within Africa. The North African countries (Morocco, Algeria, Tunisia, Libya, Egypt) do not see that a crisis exists - they have reasonable funding and equipment, with good student and staff numbers. South African universities are reasonably well-equipped, but have shortages of staff and students (over the past two decades the number of independent university surveying departments has dropped from five to zero, and there are now only two degree programmes taught, within schools of architecture and civil engineering). For all of Africa in between North and South Africa, the university survey departments are in very poor positions, with all the problems outlined earlier in this report and also described in Heinz' paper.

Following the discussion, a small working group with the title "FIG-African Network for Education" was formed consisting of Pedro Cavero (chairman of the FIG education commission), Heinz R  ther and Prof El Hassan Semlali from Morocco. The group has the task of carrying out a more detailed survey of the problems at survey departments in sub-saharan Africa, and of proposing ameliorating steps to the FIG executive.

3. Second FIG regional conference

Although I was primarily in Marrakech to attend the roundtable discussion, I also participated in the conference. There were approximately 350 participants, with more than half of them from Morocco. The theme of the conference was "Urban-Rural Interrelationship for Sustainable Development" - not a subject of great interest to me. However there were two sessions on reference frames which were of interest to me. Unfortunately the first of these clashed with the roundtable discussion, and I was unable to listen to Zuheir Altamimi's presentation on the ITRF and AFREF. In the second session I presented a paper on the African Geoid Project, which I hope made the attendees aware of the need for more gravity data in Africa. I was also able to meet with a colleague from Algeria who is working with me on this project.

I wish to thank the International Association of Geodesy and the University of Cape Town for making travel funds available to enable me to attend this meeting.

ASSOC. PROF. CHARLES L MERRY