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General Announcements

LAST CALL
Deadline extended to January 31, 2006

Dear Colleagues,

Two years ago, at its General Assembly in Japan, the IAG adopted and put into place new Statutes and By-laws which differed substantially from the old ones. In order to identify problems with this new administrative framework as soon as possible, the IAG Executive Committee decided to establish a Review Committee for the period between the General Assemblies in Japan and Italy. The Committee was charged with the task of detecting and fixing problems that have been encountered in working with the new Statutes and By-laws.

Since you are the ones who work most closely with the new Statutes and By-laws, we would like to address you first. If there is anything that needs to be improved, please let us know. Difficulties you may have encountered are:

- Definitions or formulations in the new Statutes and By-laws that are ambiguous
- Contradictions in the new Statutes and By-laws
- Procedures that simply do not work
- Procedures that introduce unnecessary bureaucracy
- Anything that hinders creativity and flexibility

To improve the system, we need to know where it is creaky. Please drop us a note if you have come across something that could be done in a simpler or more efficient way. The members of the Committee and their e-mail addresses are given below. Please send us an e-mail.

Kind regards,

KLAUS-PETER SCHWARZ
(for the committee)

Luiz Paulo Fortes	fortes@ibge.gov.br
Don B. Grant	dgrant@linz.govt.nz
Klaus-Peter Schwarz	kpschwar@telusplanet.net
Pascal Willis	Pascal.R.Willis@jpl.nasa.gov

IAG Membership Application Form 2006

The Membership Application Form 2006 in PDF can be downloaded from the IAG website: http://www.iag-aig.org. Those members, whose membership expires by the end of 2005 may consider renewing their membership for 2006 or longer period (2006-2009). The IAG Communication and Outreach Branch is continuing to improve the service, especially for the IAG individual members

Torben Krarup died

Torben Krarup at the age of 86, died on 24 November 2005 (an obituary will be published soon).

Meeting Announcements

1st International Symposium of the International Gravity Field Service

August 28 - September 1, 2006, Istanbul, Turkey
URL: http://www.igfs2006.org/

Dear Colleagues and Friends,

As the Local Organizing Committee, it gives us great pleasure to invite you to the first International Symposium of The International Gravity Field Service (IGFS), to be held August 28 - September 1,2006, in Istanbul / Turkey.

This is the first symposium of the International Gravity Field Service (IGFS) of the International Association of Geodesy (IAG), and it continues the series of symposia of the former International Gravity and Geoid Commission. IGFS is a unified "umbrella" service of the IAG, which coordinates services for the gravity field of the Earth (BGI - International Gravity Bureau, IGeS - International Geoid Service, ICET - International Center for Earth Tides, and ICGEM - International Center for Global Earth Models, DEM service.

Such scientific assemblies are held every two years, but in separate locations. Hence this symposium of the IGFS will offer opportunities to present and discuss earth's gravity field related research and applications.

The IAG Scientific Assembly will take place in Istanbul. Although thousands of years have passed, Istanbul still maintains its geographical importance. Today Istanbul is a huge metropolis connecting continents, cultures, religions, and being home to eleven million people and one of the greatest business and cultural center of the region.

Istanbul is submitting richness of first class hotels, resorts and conference facilities, easily transportation to main cities of the world with daily flights, beautiful decorations and unique panorama attraction in all seasons. A perfect climate, exotic atmosphere and less cost advantages compared to alternative destinations are added to all of these and makes Istanbul an ideal destination at the meeting point of Europe, Asia and Africa.

The venue for the Scientific Assembly will be The Cultural Center of Military Museum, Harbiye, Istanbul. The Cultural Center within the constitution of the Military Museum is fully equipped to serve as a venue for cultural, scientific and arts activities. All sort of activities such as scientific sessions, special meetings of work groups, exhibitions and so on will be held within the Cultural Center's meeting rooms and exhibition halls during IGFS 2006.

We are looking forward to seeing you in Istanbul.

LOCAL ORGANIZING COMMITTEE, IGFS2006

For further details, please visit the conference website at: http://www.igfs2006.org

IAG Sponsored Meetings

Fifteen Years of Progress in Radar Altimetry Symposium

13-18 March 2006, Venice, Italy
Fifteen years after the launch of ERS-1 and TOPEX/POSEIDON, the European Space Agency, in collaboration with the French Space Agency, CNES, is organising an exceptional Symposium on "15 Years of Progress in Radar Altimetry". For further information visit the website http://www.esa.int/venice06.

3rd IAG Symposium on Geodesy for Geotechnical and Structural Engineering and 12th FIG Symposium on Deformation Measurements

22-24 May, 2006, Baden, Austria
The FIG symposia on deformation measurements and analysis have a long tradition dated back to 1975. The IAG Symposium was established in 1998 and held twice. It will be the first time that the two symposia will be held together as a joint conference. Researchers, engineers, educators, designers, manufacturers, contractors, public authorities, and other professionals are cordially invited to attend this international event. Please also visit the symposium website for further details: http://info.tuwien.ac.at/ingeo/sc4/baden.

VI Hotine-Marussi Symposium of Theoretical and Computational Geodesy: Challenge and Role of Modern Geodesy

29 May - 2 June 2006, Wuhan University, PR China

The symposium will be held at Wuhan University, PR China, 29 May - 2 June 2006. More information will be circulated as soon as available and can be found at the website: http://www.sgg.whu.edu.cn/icct_hm.html

"Gravity Field of the Earth" – 1st International Symposium of the IGFS

28 August - 1 September 2006, Istanbul, Turkey

The 1st symposium of IGFS as being a continuation of the symposia series of the former International Gravity and Geoid Commission will be held in Istanbul, Turkey. The major objective is to bring together the geoscientists working in general areas of modeling the Earth's gravity field. For more information visit the website: www.igfs2006.org.

Geodetic Reference Frames GRF2006

9-13 October 2006, Munich, Germany

The Commission 1 „Reference Frames" of the International Association of Geodesy (IAG) invites scientists and experts from all countries to participate in the Symposium "Geodetic Reference Frames". The symposium shall give the opportunity to present new ideas, discuss improved models and approaches, and report on latest results of the definition and realization of geodetic reference frames. Detailed information is available at the symposium website: http://iag.dgfi.badw.de/?grf2006.

IAG Related Meetings

4th IVS General Meeting

January 9-13, 2006, Concepción, Chile

The fourth General Meeting of the International VLBI Service for Geodesy and Astrometry (IVS) will be held January 9-13, 2006, in Concepción, Chile. The purpose of the meeting is to assemble representatives from all IVS components to share information, hear reports, and plan future activities. The meeting also provides a forum for interaction with other members of the VLBI and Earth science communities. For further details visit the webpage http://ivscc.gsfc.nasa.gov/meetings/gm2006.

5th FIG Regional Conference – Promoting Land Administration and Good Governance

March 8-11, 2006, Accra, Ghana

The focus of the 5th FIG Regional Conference will be on land administration and good governance as conditions for sustainable development. It will discuss these topics also through the technical tools that modern surveying technology can offer in promoting these main goals. More information on the conference web site: www.fig.net/accra .

Asia Oceania Geosciences Society's 3rd Annual Meeting (AOGS 2006)

July 10-14, 2006, Singapore, Malaysia

The AOGS mission is to promote geophysical science for the benefit of humanity in Asia and Oceania. Hence, AOGS 2006 will once again bring together geoscientists from all over Asia, Oceania and the rest of the world to present their works and ideas. AOGS invites all geoscientists to convene their own sessions and present their findings at AOGS 2006 in Singapore. For further details, visit http://www.asiaoceania-conference.org/.

Book Review

Gligorije Perovic: Least Squares

Title:	Least Squares (Monograph in English)
Author:	Gligorije Perovic
Publisher:	published by the author, University of Belgrade, Faculty of Civil Engineering, Belgrade
ISBN:	86-907409-0-2
Year:	2005
Price:	Euro 120 (including postage)
Pages:	648
Details:	Hardcover, 87 Figures and 90 Tables, nicely typeset on high-quality paper

This book is a very comprehensive introduction to least-squares methods, including classical topics such as least-squares adjustment, but also contemporary methods such as statistical tests, Bayes estimation, Kalman filtering, least-squares collocation, time series, and optimal planning of experiments. Thus it has the character of an encyclopaedic monograph.

The book is intended for all scientists and engineers who perform highly precise measurements and who wish to analyze them by sophisticated linear models of mathematical data processing, in particular for geodetic scientists and engineers.

The required mathematics is on the level of a graduate engineering student. Generalized matrix inverses are playing a basic role, but they are introduced in the text. Many numerical examples are given to facilitate understanding essentially.

Part I recalls the basic MATHEMATICAL BACKGROUND of linear algebra: vectors, matrices, and statistical distribution of vectors. It is seen how naturally the normal (Gaussian) distribution matches with linear algebra.

Part II, BASIC LEAST-SQUARES MODELS, is a modern presentation of classical least-squares adjustment (by parameters and by conditions).

Part III considers SINGULAR LS MODELS and is a remarkable modern treatment by means of generalised matrix inverses. It also contains in great detail the important topic of hypothesis testing. Bayesian methods are also treated here.

Part IV, STUDY OF RELATIONSHIPS, gives a comprehensive representation of the various linear regression methods and covariance analysis, as well as an elementary introduction to least-squares collocation and stochastic processes, Kalman filtering and time series.

Part V treats FUNCTIONAL RELATIONSHIPS AND NON-LINEAR LEAST SQUARES, a topic which is becoming increasingly more important.

Part VI, OPTIMAL PLANNING OF EXPERIMENTS, is of particular value for the experimenter. It is an adequate conclusion of the book.

The book is of particular value since it includes much, hitherto unpublished, personal research of the author such as the methods PEROBML, PEROBLS D, MINQE-PERG, PERMODMINQE, PERVCV1 etc. Having been devised by an excellent scientist with a view to practical application, they considerably increase its value both for the senior scientist and the practical engineer.

This is really a unique book. It is fully up to date concerning mathematical tools (matrices and their generalized inverses). It is, however, written in the patient and leisurely style of a good old-style professor who cares about being understood by practically oriented engineering students. In a modern expression, it is very "reader-friendly" but requires (and rewards) serious study. Many particular cases and examples elaborated in great detail illustrate the procedures.

For me, it is comforting that such books exist in our hurried and short-lived time (the book was written in the course of 12 years!). It can be unreservedly recommended to graduate students, as well as to scientists and engineers looking for reliable advice in advanced statistical applications occurring in geodetic and surveying practice.

May I add a personal note. When the author gave me his monograph "Singular-Adjustment Theory" (in Serbo-Croatian, Naucna Knjiga, Beograd 1986), I spontaneously wrote a review for the basic geodetic journal "Bulletin Geodesique" (now "Journal of Geodesy"), although it is customary to

review only books written in one of the two official languages (English and French) of the International Union of Geodesy and Geophysics, and I recommended its translation into English.

Originally, the present book was intended to appear in 1998, 200 years after C. F. Gauss said to have found least squares on a probabilistic basis. However, in the meantime, the tragic war in Yugoslavia had broken out.

The book is on an international contemporary level, with a list of 241 references, in English or with their titles translated into English.

The book looks very fine and stable, hardbound and typeset on high quality paper. The author spared no efforts in making it an excellent book, not only as regards the contents, but also regarding the form. From this point of view, the relatively high price of the book is fully justified.

It should not be missing in any geodetic, statistical or mathematical library. Interested scientists might wish to have this unusual book also on their private bookshelf. It is worth it.

The book should be ordered directly from the author by email <perg@grf.bg.ac.yu> or by fax to (++381)11 3370-293 (Prof. Gligorije Perovic, University of Belgrade)".

HELMUT MORITZ, GRAZ
helmut.moritz@tugraz.at