

Geosciences Platform of the Swiss Academy of Sciences

Swiss National Committee for the International Union of Geodesy and Geophysics (SNC-IUGG)

Minutes

of the

Annual SNC-IUGG Committee Meeting

16 November 2012, 11:15 – 12:30 University of Berne, Institute of Geography, Bern

Committee members present

Prof. Dr Marc Parlange, President		
Dr Charles Fierz, Secretary and Treasurer, IACS		
IAG	Mr Adrian Wiget	
IAGA	Prof. Dr Andrew Jackson	
IAHS	Prof. Dr Rolf Weingartner	
IAMAS	Dr Markus Furger	
IPA	Dr Marcia Phillips	

Committee members absent with regrets

IAVCEI Prof. Dr Peter Ulmer

Committee members absent

IAGA	Prof. Dr Peter Wurz
IAPSEI	no correspondent
IAPSO	Prof. Dr Thomas Stocker

Secretary C. Fierz opens the meeting and welcomes the committee members present. Prof. P. Ulmer excused himself for professional reasons. The necessary quorum required by the bylaws is attained.

1. Approval of the agenda

No modifications or additions are requested and the agenda is accepted as proposed in the invitation to the meeting.

2. Approval of the minutes of the committee meeting in Zürich, 11 November 2011

The minutes are accepted as is, with thanks to SNC-IUGG secretary C. Fierz.

President: Prof. Dr Marc Parlange, EPF Lausanne Secretary: Dr Charles Fierz WSL Institute for Snow and Avalanche Research SLF Flüelastrasse 11 | 7260 Davos Dorf | Switzerland Phone +41 (0)81 417 01 65 | Fax +41 (0)81 417 01 10 fierz@slf.ch | marc.parlange@epfl.ch snc-iugg.scnat.ch

3. Communications

Dr Boschi, the IASPEI correspondent, left ETHZ for Paris. The Swiss Geophysical Commission missed to notify our committee about this vacancy. An e-mail inquiry by Secretary C. Fierz was left unanswered up to date.

Action item: President M. Parlange to check with Prof. Dr Giardini, President of IASPEI.

The Schläfli Price was decerned to Julien Leuthold for his paper entitled "Time resolved construction of a bimodal laccolith (Torres del Paine, Patagonia)". Secretary Fierz served on the jury.

Secretary C. Fierz asks the members who did not have done it yet to please communicate him their dates of birth as to keep our records complete.

4. Reports on 2012 activities and events

IUGG

The Kingdom of Saudi Arabia became provisionally a Regular Member of IUGG, pending the approval by the IUGG council in 2015. The IUGG Secretariat received ballots from 31 Member countries – including Switzerland – eligible to vote, all votes being affirmative.

The Union Commission on Climatic and Environmental Change (<u>CCEC</u>) was established by the Executive Committee of IUGG in 2012.

The IUGG Bureau at its meeting in October 2012 considered the proposal to establish the IUGG Union Working Group on History. The Bureau approved the revised proposal and now asked the IUGG Executive Committee to endorse the proposal.

2013 will mark the 90th jubilee of the Swiss adherence to IUGG by SCNAT.

IACS

2012 marks the 100th jubilee of the traverse of Greenland by Alfred de Quervain, Swiss Glaciologist, Meteorologist, and Seismologist, and two companions. An informative exhibition was dedicated to this expedition at the ETHZ (Forum Terra) and SCNAT organized its annual meeting in Interlaken around the theme *"Höher und kälter – Forschung am geographischen Limit"*, well in line with Alfred de Quervain's achievements.

Dr Fierz just turned back from a IACS Bureau Meeting he attended in Sanya, China. The Chinese hosts welcomed IACS very warmly and Secretary Fierz was impressed by the number of scientists attending the concurrent meeting of the Chinese National Committee for IACS. An activity report of this committee is available on the IACS website.

Dr Fierz also reports on the preparation of DACA-13 (see Appendix A) and tables the budget of this second major IUGG event to take place in Switzerland after the 1967 IUGG Assembly in Zürich, Luzern, Bern, and St. Gallen. The support of SCNAT (CHF 30000.-) and MeteoSwiss (CHF 15000) will allow to keep registration fees low. Contributions from both WMO (CHF 10 000.-) and IUGG (USD 3416.-) will be used to support students, early career scientists, and scientists from developing countries. We gratefully acknowledge all these generous contributions towards a successful DACA-13.S

IAG

A. Wiget tables his report (see Appendix A).

IAGA

Prof Dr Jackson tables his report (see Appendix B).

IAHS

Prof. Dr Weingartner reports on activities of CHy, the Swiss Hydrological Commission. 250 participants attended the closing meeting of the project "Klimaänderung und Hydrologie in der Schweiz (CCHydro)", organized 8 June 2012 in Berne by CHy. Prof. Weingartner also noted that SCNAT will fund a web portal "Water".

IAHS celebrated its 90th anniversary in the framework of the completion of the IAHS decade on Prediction in Ungauged Basins and the way ahead, 23-24 October 2012, Delft, The Netherlands.

IAMAS

Dr Furger tables his report (see Appendix C).

IAPSO

No correspondent, no report.

IASPEI

No correspondent (see Agenda Item 3), no report.

IAVCEI

Prof. Dr Ulmer will provide a written report to be appended to these minutes.

IPA

Dr Phillips reports on the Tenth International Conference On Permafrost TICOP that was held June 2012 in Salekhard, Russia. The meeting provided good opportunities for lively discussions and good talks. The next conference will take place 2016 in Potsdam, the date reflecting the new 4 year pace adopted 2008 in Fairbanks.

During TICOP, Dr Phillips attended the International Permafrost Association Council meeting on behalf of Prof. Dr R. Delaloye, the official Swiss representative. Switzerland intervened as no Swiss representative was member of the Global Terrestrial Network for Permafrost GTN-P within the framework of Global Climate Observing System GCOS. This lapse has now been corrected for by IPA.

5. Treasurer's report

The treasurer tables his report. The report displays an income of CHF 11505.40 – including a left over from 2010 of CHF 500.-, and an expenditure of CHF 11468.60, resulting in a surplus of CHF 36.80. The bank account balance on 31 December 2011 amounted to CHF 116.20 with no surplus to be returned.

The report is accepted by the members present with thanks to the treasurer.

6. Budget 2012 and 2013

2012

We expect not to use up the sum allocated to support preparation activities for DACA-13 this year. The treasurer will ask to transfer the left over to 2013. This year accounting will thus close with a small expected surplus that will help cover future administrative fees.

2013

Our requests for Union Lecture and travel assistance were all accepted without cuts. PF Geosciences further allocates the DACA-13 conference CHF 10 000.-, totalling now in CHF 30 000.sponsoring contribution. Note that this sponsoring does not affect our other requests.

7. Website

The secretary notes that we are now online since April 2012. He reminds the members that new or additional pictures can be provided anytime (preferred format: portrait). He will then ask the IT of SCNAT to put the picture online.

8. Union Lecture

2013

The next SGM will take place in Lausanne, home to Prof. Dr K. Föllmi, President of our sister committee SNC-IUGS and Chair of the Local Organizing Committee. We will again co-sponsor the joint Union Lecture but leave it to SNC-IUGS to decide on who will deliver this keynote.

9. Activities 2013

Major events will surely be the DACA-13 conference in Davos (<u>www.daca-23.org</u>) as well as the <u>Hydrology Day 2013</u>: Water Resources and Global Change to take place in Berne, 4-6 April 2013.

Another important IUGG related activity is the 150th anniversary of IAG. More on this can be found under (<u>www.iag2013.org/IAG_2013</u>).

Further 2013 activities are covered by the annexed reports.

10. Varia

IAGA correspondent Prof. Dr Andy Jackson asks about the IUGG plans to professionalize the IUGG Secretariat as announced in Melbourne by IUGG Past President Dr Tom Beer. He questions whether this is opportune in time of reduced financial support. All members present agreed that we should keep an eye on this evolution, getting back to the Associations and SCNAT if needed. Note, how-ever, that part of the financial burden rests with the organization hosting the secretariat, currently GFZ in Potsdam, Germany.

11. Next Meeting

15 November 2013 in Lausanne (SGM 2013), time to be announced.

2013-04-17 / C. Fierz

Swiss Geodetic Commission

Annual report 2012

1. IUGG / IAG in general

In the intermediate year between the XXV IUGG/IAG General Assembly 2011 in Melbourne and the next IAG Scientific Assembly 2013 in Potsdam there were less activities on the Association level. Dr. Urs Marti, President of Commission 2 of the IAG, attended the meeting of the IAG Executive Committee, which was held on August 15 in Singapore during the AOGS Conference. He organized a Commission 2 conference "Gravity, Geoid and Height Systems", which was held in Venice Italy from October 9 to 12. In addition he acted as co-editor of the Proceedings of the 2009 IAG Symposium "Geodesy for Planet Earth", which were published by Springer in 2012 (IAG Symposia Series vol. 136).

It should be mentioned that the IAG Scientific Assembly shall be organized on the occasion of the 150th anniversary of the IAG in co-operation with the Helmholtz Centre Potsdam – GFZ German Research Centre for Geosciences in 2013 in Potsdam (Germany): <u>http://www.iag2013.org/IAG_2013/Welcome.html</u>. Urs Marti is a member of the Scientific Organizing Committee.

2. Swiss Geodetic Commission meetings

After the jubilee activities in the year 2011, in which the Swiss Geodetic Commission (SGC) was celebrating its 150 year anniversary, the year 2012 was more calm. The commission met twice for the standard spring and autumn meetings.

- 02.05.: 187th meeting of the SGC. University of Bern, Astronomical Institute (AIUB). Presentations of the activities and projects of the AIUB; ordinary spring meeting of the commission
- 09.11.: 188th meeting of the SGC. Diessenhofen. Presentations of all member organizations on their activities and projects during 2012.

3. Joint meeting of the German, the Austrian and the Swiss Geodetic Commission, 07. – 09. 11. 2012 in Diessenhofen (CH)

Following a recent tradition, the German Geodetic Commission (DGK), the Austrian Geodetic Commission (ÖGK) and the Swiss Geodetic Commission (SGK) met again after five years for a two day joint meeting in Diessenhofen (CH). Topics of the presentations and discussions were the situation, advances and problems of Geodesy and Geoinformation in teaching, in research, in studies as well as in practice. Some 70 professors and leading persons of the administrative bodies in the three countries exchanged and discussed their visions and experiences in presentations, in open panel discussions and in personal conversations.

4. EUREF 2012 Symposium 06. - 08.06.2012 in Saint-Mandé, France

Dr. E. Brockmann, swisstopo, member of the EUREF Technical Working Group (TWG), was convenor of the session on Multi-GNSS the symposium of the IAG Sub-commission EUREF. He presented the Swiss national report 2012 to EUREF and provided information on the quality of the official national ETRF coordinates with respect to the generated multi-annual combination of the European Permanent Network (EPN), were swisstopo contributed with providing GNSS data as well as providing coordinate results as one of several other analysis centers. A poster was prepared showing the results of the local ties on the geostation Zimmerwald.

For more information please visit the websites: \rightarrow <u>http://euref2012.ign.fr/</u>

5. EUREF Technical Working Group Meetings:

The Technical Working Group (TWG) of EUREF is responsible, in general, for the control of EUREF activities and policy. Its tasks are described in <u>http://www.euref-iag.net/-euref_twg_info.html</u>. Representative for Switzerland is E. Brockmann (swisstopo). In 2012 the TWG met three times:

- Brussels (Belgium), 27.-28. 02. 2012
- Saint-Mandé (France), 06.-08. 06. 2012
- Wabern (Switzerland), 12.-14. 11. 2012

For more information please visit the website → <u>http://www.euref-iag.net/euref_twg_meetings.html</u>

6. IAG/EC and AOGS Conference, 05. - 09.09.2012, Singapore

As president of IAG Commission 2 - Gravity Field, Dr. U. Marti (swisstopo and vicepresident SGC) participated at the joint Assembly of AOGS (Asia-Oceania Geoscience Society) and AGU (American Geophysical Society). There were several geodetic sessions at this conference (Reference Frames, GNSS Infrastructure Developments, High Precision GNSS, Space Geodesy, the Earth's Gravity Field, Earth Rotation, Monitoring the Large Scale Mass Redistribution, Unification of the Vertical Datum, Gravity Field and Mass Transport, GNSS/InSAR/Altimetry Remote Sensing). Urs Marti was convener and chairperson of the session " Gravity Field and Mass Transport". During this conference the 3rd meeting of the IAG Executive Committee took place and Urs Marti gave a status report of the Commission.

7. International Symposium on Gravity, Geoid and Height Systems GGHS2012, 09. - 12. 10. 2012, Venice, Italy

U. Marti, swisstopo, was co-organizing the international symposium "Gravity, Geoid and Height Systems GGHS2012" which was organized by IAG Commission 2 "Gravity Field" with the assistance of the International Gravity Field Service (IGFS) and GGOS Theme 1 "Unified Global Height System". It was arranged by the OGS (Istituto Nazionale di Oceanografia e di Geofisica Sperimentale) which has presently the role of the Central Bureau of the IGFS. The symposium was successfully held on the island of San Servolo in the Venetian Lagoon from October 9 to 12 with 140 participants. 30 of them were registered as students.

A total of 89 oral presentations and 64 posters were presented in 8 sessions (Gravimetry and Gravity Networks, Global Gravity Field Modeling, Future Gravity Field Missions, Advances in Precise Local and Regional High-Resolution Geoid Modeling, Establishment and Unification of Vertical Reference Systems, Gravity Field and Mass Transport Modeling, Modeling and Inversion of Gravity-Solid Earth Coupling, Gravity Field of Planetary Bodies). The conference covered all activities of IAG Commission 2 - except from satellite altimetry which was covered in a special symposium just 2 weeks before the GGHS2012. It is planned to publish peer-reviewed proceedings of the conference in the IAG Symposia series with Springer.

For more information please visit the websites $\rightarrow \underline{\text{http://www.gravityfield.org}}$ and $\underline{\text{http://www.iag-commission2.ch}}$

8. 200 years fundamental station in Berne, 20. 10. 2012

The Astronomical Institute of the University of Bern (AIUB) und the Federal Office of Topography swisstopo have organized this meeting on Oct. 20, 2012 (09:30h – 12:30h) at the university in the building "Exakte Wissenschaften (EXWI)", which is located at the spot of this historical site. The meeting was co-sponsored by the Swiss Geodetic Commission (SGC), by the Society for the history of Geodesy in Switzerland (GGGS) und by the working group for the history of cartography of the Swiss Society of Cartography (SGK). It was organized to mark the jubilee of the first measurements in the year 1812 on the site of the "Alte Sternwarte Bern", the fundamental station of the Swiss national geodetic survey. In four talks the history and the actual situation were presented:

- Dr. M. Rickenbacher: "Die französischen Ingenieur-Geographen in Bern 1803-1812"
- Dr. A. Verdun: "Die Geschichte der alten Sternwarte Bern 1812 bis 1876"
- Prof. A. Jäggi: "Das Astronomische Institut der Universität Bern heute"
- A. Wiget: "Der Fundamentalpunkt der neuen Landesvermessung LV95"

After the presentations the historical site of the fundamental station, marked by a pillar in the patio of the EXWI-building, could be visited. With more than 60 participants the meeting was quite a success. Some 30 of them joined for a common lunch in a nearby restaurant to continue the discussions on Geodesy and its history.

9. Swiss Geoscience Meeting 2012 at the University of Bern, 16. - 17.11.2012

At the SGM 2012 (this year's theme is "Mountains – Up and Down") the Swiss Geodetic Commission is supporting and co-organizing two sessions (<u>http://www.geoscience-meeting.scnatweb.ch/sgm2012/</u>):

Session 19: Geoscience and Geoinformation - From data acquisition to modelling and visualisation.

Session 20: Earth System Science related Earth Observation.

10. Publications

The minutes of the two annual meetings of the Swiss Geodetic Commission are published in the "Proces-Verbaux" (<u>http://www.sgc.ethz.ch/publications#verbaux</u>).

The members of the Swiss Geodetic Commission are publishing scientific articles and reports as well as general publications related to their working field on a regular basis. The following reports have been published in 2012 (up to now; some other reports may be added until the end of the year) in the SGC-series called "Geodätisch-geophysikalische Arbeiten in der Schweiz" (http://www.sgc.ethz.ch/publications#geodgeophys):

Nr. 84: Donat Perler: Water Vapor Tomography using Global Navigation Satellite Systems. ISBN 978-3-908440-30-7.

Nr. 85: Hannes Eugster: Echtzeit-Georegistrierung von Videodaten mit Hilfe von Navigationssensoren geringer Qualität und digitalen 3D-Landschaftsmodellen. ISBN 978-3-908440-29-1.

Nr. 86: Rainer Mautz: Indoor Positioning Technologies. ISBN 978-3-908440-31-4.

16.11.2012, A. Wiget and B. Bürki

Date: Mon, 12 Nov 2012 12:52:44 +0100 From: Andy Jackson <a jackson@ethz.ch>

IAGA - Geomagnetism:

ESA's Swarm magnetometry mission (3 satellites in LEO) is delayed yet again. New expected launch date is May 2013.

A session for IAGA 2013 (Mexico) is being organised by Andy Jackson.

ETHZ is a member of the International GDR (dynamo consortium between France, Germany, UK) promoting idea interchange on magnetic field generation and MHD.

In addition to the variometer at Neuchatel, run by UniNe, magnetometers with absolute control are run by ETHZ

at Cocos Keeling Island (Aus) and Gan (Maldives). Applications for Intermagnet status are pending. A long-running station at Apia (W. Samoa) has been helped with new variometers, theodolites and installations by a consortium of ETH, USGS and GNS (New Zealand).

ISSI (Berne) continues to be active in hosting international geomagnetic workshops.

Representatives of space geomagnetism from ETHZ attend planning meetings concerning the Swiss Space Centre at EPFL,

which is receiving an injection of funding and revising its directions.

2012 Annual Report of the Swiss Representative of IAMAS

Markus Furger, National Correspondent of IAMAS

Activities 2012

2011 was dominated by preparations of the DACA-13, the Davos Atmosphere and Cryosphere Assembly in 2013. The International Radiation Symposium in Berlin attracted a number of Swiss scientists.

DACA-13 in Davos

The SNOC (Swiss National Organizing Committee), chaired by Prof. Heini Wernli of ETHZ, met 7 times during the reporting period. Meetings were held in Zurich and Davos in a loosely alternating sequence. Preparations for the conference are well on track. Conference information can be found on the webpage http://http://www.daca-13.org. After a call for session proposals the Scientific Steering Committee put together a program with 20 symposia, and the 2nd circular (call for abstracts) was issued on 1 Oct 2012.

International Radiation Symposium 6 – 10 August 2012 in Berlin The IRC held its quadrennial symposium in Berlin, Germany. Among the 533 participants from 33 countries were roughly 10 Swiss.

Swiss People with IAMAS duties

- Prof. Werner Schmutz, PMOD/WRC
- Prof. Dr. Martin Wild, ETHZ
- Dr. Julian Groebner, PMOD/WRC
- PD Dr. Christof Appenzeller, MeteoSwiss
- Prof. Olivia Romppainen-Martius, Uni Bern
- Dr. Eugene Rozanov, PMOD/WRC
- Dr. Geir Braathen, WMO
- Dr. Olaf Stetzer, ETHZ
- Dr. Markus Furger, PSI

President of IRC

Co-chair of the Global Energy Balance WG of IRC Co-chair of the Ultra-Violet WG of IRC Member of ICCL Member of ICDM Member of ICMA Member of IOC Member of CNAA Swiss National Correspondent of IAMAS

eMail list for IAMAS-CH

An eMail list exists to quickly distribute IAMAS information relevant to potentially interested people in Switzerland. At present, this informal list contains 33 persons from universities and research institutions active in atmospheric sciences.

Budget 2013

Because of the upcoming DACA-13 no further financial support for other IAMAS activities in 2013 has been requested.