IAG Commission 3.1 – Earth Rotation and Earth Tides

Business Meeting, IUGG Melbourne, July 1, 2011

Agenda:

- 1. Welcome, agenda
- 2. Reports
 - a. President
 - b. Working groups
 - i. Earth Tides in Geodetic Space Techniques (H. Schuh)
 - ii. Analysis of Environmental Data for the interpretation of Gravity Measurements (C. Kroner)
 - iii. Precise Tidal Prediction (Y. Tamura)
- 3. Report ICET (J.-P. Barriot)
- 4. Discussion
- 5. Election of a new president
- 6. Other business

Participants:

Gerhard Jentzsch (Germany), Jacques Hinderer (France), David Crossley (USA), Harald Schuh (Austria), Spiros Pagiatakis (Canada), Markku Poutanen (Finland) (until 19.00), Bernd Richter (Germany), Jean-Pierre Barriot (France / Tahiti), Severine Rosat (France), Janos Bogusz (Poland), Yves Rogister (France), Thomas Jahr (Germany), Herbert Wilmes (Germany), Johannes Ihde (Germany) (until 18.50), Peter Schindler (Germany), and about 5 more people.

- 1. No additions, comments.
- 2. Reports
 - President's report
 - -During ETS 2008, Jena, Earth Tide Medal to two scientists awarded: T. Sato (laudation by W. Zürn), B. Ducarme (laudation by D. Crossley); laudations published in BIM.
 - -proceedings of ETS2008 in Special Volume of Journal of Geodesy.
 - -more publications in BIM 144 and next two volumes 145 and 146.
 - -new location of ICET: University of French Polynesia, Tahiti; J.-P. Barriot as new director.
 - -discussion on future of GGP as a service of IAG.
 - -renamed Earth Tide Commission medal to Paul Melchior medal (family agreed).
 - -next symposium will be organized by the National Research Institute for Astronomy and Geophysics (NRIAG), Helwan, Cairo (Egypt), Sept. 24-28, 2012; "The response of the Earth on external and internal forces, including the 17th symposium on Earth Tides"; all subcommissions of commission 3 and inter-commission groups as well as GGP are invited to participate.
 - -no questions asked.

- i. Report of C. Kroner read by president:
 - at BKG it is discussed to offer a service of 3D reductions of atmospheric influences on SG stations
 - if sufficient hydrologic observations are available, a reduction of these effects for SG stations is possible
- ii. Report on Earth Tides in Geodetic Space Techniques (H. Schuh):
 - deformation of the Earth's crust due to atmospheric pressure loading: Vienna model
 - Love and Shida numbers and FCN period from VLBI measurements
 - Tidal variations in earth rotation from VLBI
 - WG should be continued, but maybe another chair more interested in it should be found
- iii. Report on Precise Tidal Prediction (Y. Tamura): No report available
- 3. Report on ICET (J.-P. Barriot)
 - Also available as poster on Sunday 3.
 - New ICET database now available at <u>www.bim-icet.org</u>, <u>www.upf.pf/ICET</u> and <u>maregraph-renater.upf.pf</u>
 - GGP one-minute filtered and manually validated data are routinely processed at ICET and uploaded to ICET and GFZ database; as soon as possible an automated validation shall start. Ideas and Critics on how to improve this tool requested.
 - All BIM issues online at <u>www.bim-icet.org</u>, 25 papers in BIM 144-146 published, 23 related to Jena meeting (server in Paris → broad-band connection.)
- 4. Discussion
 - ICET directing board will meet again on Monday 4, at noon at the registration desk.
- 5. Election/Proposal of a new president
 - Gerhard Jentzsch will soon retire and finish his term as president; Spiros Pagiatakis is also not far from retirement and refuses to become new president.
 - Jacques Hinderer refuses.
 - Severine Rosat and Janos Bogusz are asked.
 - G. Jentzsch explains the tasks of president.
 - H Schuh explains problems of decision: president of Comm. 3 has to decide, but Comm. 3 has no new president yet as nominated R. Gross is also nominated for GGOS chair.
 - After discussion Spiros Pagiatakis and Janos Bogusz are nominated as president and vice-president.
- 6. Other business
 - All other sub-commissions of commission 3 as well as inter-commission study groups as well as GGP are invited to participate the next symposium in Cairo.
 - GGP meeting will be Sat 2.
 - GGP will finish after eight years; new proposal to IAG to continue as a service under IGFS considered.

International Association of Geodesy

Commission 3, sub-commission 3.1 Earth Tides and Geodynamics

Directoring Board of the International Centre for Earth Tides

Minutes of the meeting held in Melbourne on July 4th, 2011

Note: The name of the subcommission was changed to Earth Tides and Geodynamics

Members of the Directing Board:

Gerhard Jentzsch, past President of the subcommission 3.1 Jean-Pierre Barriot, Director of ICET

Trevor Baker David Crossley Olivier Francis Ruth Neilan Harald Schuh Bernard Ducarme Houtze Xu

1. Present at the meeting were: Barriot, Crossley, Jentzsch, and Schuh.

Baker, Ducarme and Xu as well as Francis were not in Melbourne.

Schuh was again appointed as representative of IAG in the ICET directing board.

All members present agreed, that the Ruth Neilan (rep. of FAGS which does not exist anymore) should be released from her membership, as well as Baker and Hsu because of retirement and no demonstration of interest.

Spiros Pagiatakis as new president of subcomm. 3.1 will become member of the board after reconfirmation by the new president of commission 3.

2. Status of meeting

Those present agreed: Under the above mentioned circumstances this meeting of the Directing Board is a regular meeting.

3. Future of ICET

The future tasks of ICET were discussed as well as the relations to GGP: Barriot explained that funding of ICET was only possible on a yearly basis. He illustrated that he would continue the development of an algorithm for automatic correction of GGP data. A technician was sent to Brussels to study the available software for manual correction. Further, he claimed that the data flow should be standardised. Here, a standard meta data file should be developed.

Barriot reported that he will attend a meeting in September 2011 in Kyoto where the role of ICET as a world data centre would be discussed.

Crossley reported that the groups should correct there 1-minute data of the SG recordings themselves for tidal analyses. IRIS people are interested in the second data. They have created a meta file for seismic stations which should be used as a template for such files for

GGP stations, including calibration history. The long-period data should be corrected either in Strasbourg or at BKG; a one-year test should be started.

Further, the old data should be made available by ICET; here, Ducarme should be involved. Long-term data is a product of GGP.

Concerning BIM, Barriot explained the problems due to different electronic formats. It was agreed that these problems should be solved in the digital way, not by printing the pages and scanning them afterwards, because then all electronic advantages will be lost (like search functions). BIM should be made more attractive by short publication times and at least two volumes per year. Only in this way BIM will regain the old status of a fast information platform for those involved in Earth Tides, ocean tides and geodynamics – in all aspects of theory and experiment.

The website of ICET should be removed from ORB with only a link to the new place, and it should provide links to other related websites.

Schuh pointed out that the terms of reference as well as the size and the names of the members of the directing board should be considered until the next meeting in Cairo. In any case, the role and missions of ICET should be also re-examined until the Cairo meeting.

4. Other business

No other business

5. Next meeting

The next meeting of the Directing Board will take place during the 17th symposium in Cairo, September 24 to 28, 2012.

July 12, 2011

Gerhard Jentzsch