



Minutes of the GGP meeting, April 28 2005, EGU Vienna Austria	2
1.1 Status of the GGP stations	2
1.2 GGP Data for Seismology	3
1.3 AG data at GGP sites	3
1. 4 Next GGP meeting	4
1.5 Various	4
2. Email Listing of GGP Members	4

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Participants : T. Sato (NAO Japan), H. Virtanen (FGI, Finland), H. Wilmes (BKG, Germany), B. Richter (BKG, Germany), B. Pettersen (IMT/UMB, Norway), B. Ritschel (GFZ, Germany), J. Kim (Sejong University, South Korea), I. Woo (Sejong University, South Korea), B. Meurers (University of Vienna, Austria), M. Matova (Geological Institute, Sofia, Bulgaria), T. Baker (Proudman Oceanographic Lab., UK), J. Bogusz (Warsaw University, Poland), C. Hwang (National Chiao University, Taiwan), S. Zerbini (University of Bologna, Italy), S. Kahn (Danish National Space Center, Denmark), S. Rosat (NAO, Japan), L. Rivera (IPGS, France), J. Hinderer (IPGS, France), G. Jentzsch (U. Jena, Germany), T. Jahr (U. Jena, Germany).

J. Hinderer welcomed the participants to the GGP meeting and presented the agenda.

1.1 Status of the GGP stations

A brief review of the existing stations of the GGP network is done. A new point is that there are two more stations to be added to the network namely a station in South Korea already installed and another one in Taiwan planned to be installed later this year. J. Hinderer welcomes the representatives of these two stations and stresses the importance of increasing the number of stations of our network.

Stations BA, CB, ES, KY, MA, NA, and SY

T. Sato presented a review for the Japanese stations. NY (Ny-Alesund, Svalbard) station is working fine and investigations concerning the seasonal hydrological contribution are undertaken. In ES (Esashi) station, the noise level has increased due to coldhead vibrations and/or problems in the tilt compensation system. MA (Matsushiro station) is running fine. KY (Kyoto) station had a problem with the GEP2 electronics. The BA (Bandung) station in Indonesia was stopped in 2004 due to its submergence in water after heavy rains and will be reinstalled at another location in Indonesia (Cibinong, at the National Coordinating Agency for Surveys and Mapping) as soon as possible, depending on funds available.

CB (Canberra, Australia) station is trouble free. The SY (Syowa, Antarctica) station was exchanged in 2003 by a new compact type gravimeter and the old instrument could be successfully installed in Kamioka (Japan) in October 2004 where there is the Kamiokande facility for the neutrino search. To increase the chances for detecting small signals from the Earth's core (core modes + translation of the inner core), a barometric array has been set up with barometers distant by some tens of km to improve the pressure corrections in the seismic and sub-seismic bands.

Stations BH, CO, MC, WE

H. Wilmes gave the status review for the 4 SGs belonging to BKG namely BH (Bad Homburg, Germany), WE (Wetzell, Germany), MC (Medicina, Italy) and CO (Conception, Chile). He insisted on two points : one is the need for regular AG measurements at SG sites and BKG makes a big effort in this way (almost monthly values in BH and twice per year in WE, MC) ; the second one is the need for monitoring the environmental factors such as rainfall and water level. Also important is the fact to have collocated measurements of the vertical displacements with geodetic techniques like GPS, SLR, VLBI and SAR.

B. Meurers gave the present status of the VI (Vienna, Austria) instrument. This one will be moved later this year to the CONRAD Observatory which is 60 km away from the city which is a very low noise site. The instrument has a 4K cooling system but preliminary tests showed no improvement in the helium loss rate which might indicate a problem.

G. Jentzsch gave more details on the hydrological tests conducted presently in MO (Moxa, Germany) and including both active and passive experiments.

B. Ritschel confirmed the good state of the SU (Sutherland, South Africa) instrument operated by GFZ Potsdam. H. Virtanen did the same for ME (Metsahovi, Finland). Finally **J. Hinderer** mentioned that the ST (Strasbourg, France) stations is running fine and that a monitoring of environmental parameters like rainfall and soil moisture will be set up in the next months in addition to the existing water table level sensor already installed.

O. Francis indicated by email that data from station Walferdange (WA) is still not available.

Stations BO, CA

As previously reported, the Boulder SG stopped recording last year due to a lightning strike that seriously affected the computer system and hardware. It was not possible to re-start the system and another solution to the data acquisition had to be found. **D. Robertson** now reports by email that there is a new data acquisition system in place that has re-started the recording (the instrument refrigeration had been continued through the interruption). It is hoped that the data stream can be restored soon to bring the instrument back on line.

The operation of the Cantley SG will be taken over by the Geological Survey of Canada, effective almost immediately. **J. Merriam** will continue to supply data to the GGP. The GPS clock at Cantley failed last fall and as the data acquisition ran an older operating system on a 486 micro computer we experienced considerable delay in resuming operations because expertise to write a new clock into the software was not available. It was therefore decided to write new software running on a modern platform. The GSC is currently revising the data acquisition software and we should be back on line shortly.

New Stations in Korea, Taiwan

J. Kim gave a presentation on the new SG installation in Mungyung Observatory in South Korea within the frame of an ambitious interdisciplinary project for geological hazards in Korea. The instrument is one of the latest models of GWR Instruments (with reliquifier and remote control). J. Kim showed a map where a dense cluster of 7 instruments is now present in South Asia (China, Korea, Taiwan, Japan).

1.2 GGP Data for Seismology

After the huge earthquake of magnitude 9.3 in Sumatra on December 26, 2004, there was a call for data sent to the GGP members urging them to upload the gravity and pressure rapid samples for December 2004 and January 2005. Many of the GGP stations agreed and made their data available on the GGP web site (either min or second data). We had 12 stations reporting on March 18, 2005 out of 17 in operation. We are still missing data from MB (Membach, Belgium), Walferdange (Luxemburg), Syowa (Antarctica), Kyoto (Japan), and Matsushiro (Japan). We hope to receive the missing data in the near future.

The point of how to transfer GGP data to IRIS was discussed again and **B. Ritschel** indicated that he will spend some time with seismologists from GFZ Potsdam to address this point.

D. Crossley had communicated again with Rick Benton (IRIS) and it appears that IRIS is now testing its conversion of the data from the GGP website directly to SEED. A further proposal to the SG community is expected this summer to finalize the details of this process for the future.

1.3 AG data at GGP sites

There are two main objectives for using AG data at GGP stations: one is the calibration of the SG; it is clear that calibration is of the responsibility of the owner of each instrument and users should take the scale factor listed in the header of the GGP files; the second one is the search for the long term evolution of the gravity field. Despite the contradictory opinions emitted during the last ET Symposium in Ottawa in

2004, the GGP community understands the need for having access to the AG data in order to investigate the long period band of geophysical phenomena and to be able to remove the SG instrumental drift.

A further survey of opinions of the SG groups will be done this summer to assess support for this activity.

1. 4 Next GGP meeting

G. Jentzsch indicated that there will be a GGP meeting during the IAG assembly in Cairns (Australia) next August that he proposed to convene in the absence of the Chair and of the secretary of the GGP.

It was also agreed that the 2006 GGP meeting should be held again during the EGU meeting in Vienna. Further discussions with Corinna Kroner suggest that the best time for the GGP Workshop will be at the end of the week (March 27-31) of the meeting of the Working Group on "Analysis of Environmental Data for the Interpretation of Gravity Measurements". This will enable participants to travel to Vienna after the Workshop to attend the 2006 EGU meeting (April 2-7).

1.5 Various

At the end of the meeting, we had a short presentation by Dr. Tamura to launch a proposal for establishing a new working group on precise tidal prediction which would be beneficial for number of fields.

2. Email Listing of GGP Members

Members of list 'ggpmail':

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