Minutes of the 2nd General Meeting of the AOV

Participants:

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Dates: July 31 - Tuesday 1 August 2017,

Place: The KOBE Chamber of Commerce and Industry, Conference Room 1

Agenda:

- Regular sessions in 2018 and observing issues
- Collaboration with ILRS and UN-GGIM-AP
- VGOS observations
- Future meetings

Regular sessions in 2018

An increase of the number of AOV sessions in 2018 was agreed. There will be 12 sessions, 6 for geodetic purpose with a large network as before and 6 for R&D purpose with a volunteer network. The R&D sessions are open for all institutes and each session is coordinated by someone who gives a proposal. Geodetic sessions will keep 1 Gbps sampling basically, but details are coordinated in each time. Schedulers and correlators are kept as before, but more contribution especially to correlation is encouraged for load balancing.

Observing issues

Useful information such as available frequency range, RFI condition or catalog information for each station should be gathered and uploaded to the AOV website in order to avoid missing stations with a scheduling problem.

Collaboration with ILRS and UN-GGIM-AP

Dr. Toshimichi Otsubo, who is an ILRS Governing Board member, presented SLR activities in the AO region. The ILRS has a similar network to AOV called WPLTN (Western Pacific Laser Tracking Network), which covers Russia, India, and Saudi

Arabia in addition to East Asia and Australia. Each institute is active but not so much as WPLTN. Main technical problems for SLR are the difficulty in packaging whole Laser Ranging observing facility and the automation of observation. Yarragadee is working on the automation of observation. There is a blank in the equatorial region as with AOV.

Dr. John Dawson, who is the chair of UN-GGIM-AP WG1, presented the overview of UN-GGIM. UN-GGIM-AP WG1 recognizes the importance of regional cooperation such as AOV and is willing to support the activity of AOV in a coordinating aspect. The activities in Antarctica are significant for the improvement and maintenance of GGRF. A major problem is inhomogeneity of observing facilities. A clue to address this problem is accelerating a momentum by related activities such as hosting a conference. GSI will ask Harald Schuh who received contact a few years ago about the contact person related to VLBI in Indonesia. Fengchun also has a connection with people related to VLBI in Thailand.

VGOS observations

NICT and UTAS start tests with Hb-Kb baseline this year and GSI will participate in them after replacing the receiver of Ishioka. A new VGOS station in Shanghai will be ready next year and Yarragadee and Katherine will also be available in turn in the second half of next year meanwhile the repair of Kashima 34 m is planned in the first half. There are a lot of research tasks associated with VGOS such as the combination of linear and circular polarization and source structures. Producing results for these tasks by AOV resources makes the region more visible. NICT has knowledge of how to handle broadband data. UTAS also has interest in the correlation of broadband data. One concern is the storage capacity of enormous data for correlation, and the cloud correlation studied at AUT has the potential to address this issue.

Future meetings

It was agreed that the next face-to-face meeting would be around November 2018. There are three candidates - 1. ILRS-WS in Canberra, Australia in November, 2. The 17th IVS NICT Technology Development Center Symposium in Kashima, Japan around November (adjustable), 3. UN-GGIM-AP Plenary Meeting in Indonesia in October (provisional).

A regular teleconference every two or three months was approved. GSI will look into a web conference system to host it.