Minutes

of the 1st AOV Meeting, held in Hobart (AUS) on Nov 19-20, 2015

Agreed priorities for the group:

- ***The AOV sessions are important for the visibility of the group; our target is to make them better (organisation, scheduling, data and shared-work flow) and establish them as a standard within the IVS observing program.***
- ***Trigger VGOS development through close collaboration within the AOV.***
- ***Balance the interests of each institute; enhance collaboration; enable inter-operability within the group.***
- ***Use knowledge and observations to improve the ICRF (observe weak and/or new sources), and ITRF (with a possible contribution to APREF).***
- ***Strengthen interactions with global organisations (UN, IVS).***
- ***Distribute scientific ideas on an informal basis within the AOV.***
- ***Make the AO region visible globally.***

Observing Program

There will be 6 AOV sessions in 2016. The final decisions on contributing antennas as well as the responsible institutions for scheduling (GSI+SHAO+UTAS) and correlation (GSI+SHAO+NGII – not confirmed) are pending. The purpose of these sessions is Geodesy and they will be run in legacy (S/X) mode.

R&D sessions are also possible and encouraged within the AOV. They will be organised on short notice with a PI distributing an idea via email and AOV stations to join in according to their availabilities.

Membership

According to the AOV terms of reference, AOV is a sub-organisation of the IVS and membership follows IVS rules.

For non-IVS members, there is the possibility to become part of the AOV as *Corresponding member*.

Non-AOV members/stations are welcome to join the AOV sessions.

AOV meetings

To keep momentum, another meeting around this time next year would be good. Auckland volunteers for early December 2016. SHAO is also happy to host the meeting. In order to keep travel load equal, having the next meeting in the northern Hemisphere would be fair. A decision on this has to be made soon.

There will be a splinter meeting during the IVS GM in SA in March 2016.

Open Discussion

The following topics were discussed, illustrating some of the actual research targets of the AOV members:

- New uses for legacy systems
- VGOS-Legacy tie
- Collaboration in the VGOS era
    - ➔ Broadband test observations within 2016. Ishioka is operational for broadband in Aug/Sep 2016. Hobart 12 & AuScope should be ready also mid/late 2016. There may be a chance for test observations earlier in the year. Sh VGOS could join Dec 2016. Possible Ww as well. NICT is ready – has broadband feed suitable for S/X antennas. Backends (NICT) available for borrowing/sharing for test observations.
    - ➔ **Share the information of findings would be helpful.**
    - ➔ Broadband / single band combination (Takefuji-san)
    - ➔ Shared observations: just monitoring. GSI would be interested to act as operation center.
        - very first stage attempt between AuScope and GSI during one of AOV sessions. Security issues.
        - Ww will discuss internally first; fear of losing science/technical knowledge and become a service place.
        - Chin: prefers control over antennas; run commercial network. Technical issues.
    - ➔ Prove compatibility of different systems; play a role in frequency allocation
    - ➔ Correlation: needs development. Some stations do not consider shipment of disks at all.
        - Eg. data sent to Ww (has huge connection) and then correlated there (from remote operator). Ww is willing to do this.
- Collaboration with UN-GGIM
    - ➔ UN-GGIM-AP: “supports observation, analysis and development of VLBI”;
    - ➔ APREF only GNSS at the moment

    - ➔ 5 years of data necessary at least (Jungho); possible start with AUSTRAL sessions?
    - ➔ Jungho could deliver formal expression of interest from AOV. Email will follow.
- Short-notice R&D sessions with specific research target
    - ➔ AOV is open for suggestions; if somebody has ideas for special experiments, communicate to group and maybe other antennas join in.
- EOP rapids / real time observations / correlations
    - ➔ Resume experiments (Kawabata-san manages)
- Coordinate backup / maintenance plans
- Atmospheric monitoring and calibration
    - ➔ Jungho: sharing WVR data. No extra campaign. GNSS, Radio-sonde, WVR data.
- Useage of astrometric antennas / Parkes / Tianma65
- Fringe test 2 Gbps
    - ➔ Test observations between SHAO & UTAS, possibly others?
