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Session 3

Task Team progress report for April 2016 – GNSS-PW

(Submitted by June Wang and Kalev Rannat)

Summary and Purpose of Document

Progress report from the task team GNSS-PW.

Task Team progress report for April 2016 – GNSS-PW TT

SUMMARY

The TT has worked on topics listed on the GRUAN Master Action Item list:

#15 Manuscript describing the derivation of uncertainty estimates for GNSS-PW measurements submitted to a peer reviewed journal (planned Sept 2015, FINISHED & published in January 2016. Ning, T., Wang, J., Elgered, G., Dick, G., Wickert, J., Bradke, M., Sommer, M., Querel, R., and Smale, D., 2016: The uncertainty of the atmospheric integrated water vapour estimated from GNSS observations, *Atmos. Meas. Tech.,* **9**, 79-92, doi:10.5194/amt-9-79-2016.)

#24 Develop a GRUAN GNSS-PW product. Technical documentation completed for GNSSPW measurements (GNSS-PW Guide – "Omnibus"), Planned for December 2015 – IN PROGRESS. In general ca 75% complete, but needs additional effort on GNSS-data processing and data flow and site maintenance issues. Needs extensive work with GFZ and LC, expected "new deadline" – December 2016

#29 Define the GNSSPW data collection client requirement, initiate data flow (TT GNSS-PW + LC, Planned March 2016) - IN PROGRESS. Data flow (sites to GFZ/LC) initiated for a subset of sites. Data Collection Client (for monitoring data flow) discussed with LC, at mockup level. Further development depends on refinement of practical issues related to GNSS-data flow, following technical requirements for operational data processing by GFZ. Expected "new deadline" – December 2016.

Besides working on the tasks listed below, the GNSS-PW TT has also been involved in the following activities:

1. The GNSS-PW TT recruited new members, Rosa Pacione from e-GEOS S.p.A., Matera Space Center, Italy.
2. Kalev Rannat with GFZ, LC -- Introducing connections to Russian CAO (Moscow, Dolgorudny) for discussion and practical steps for a next GRUAN site (in progress).
3. TT contributes to GNSS PW Omnibus and had technical discussions on several issues.
4. Technical discussions (TT-emails) on GNSS-PW data formats – as a result, GRUAN-PW will be delivered in 2 formats – COST716 and Tropospheric SINEX.