

ES1206 – GNSS4SWEC Meeting

(Wroclaw, September 29-30, 2015)

WG2 session, 29 September, 09:00-13:00

Oral presentations

09:30 - 09:35 – Siebren de Haan, Eric Pottiaux: Introduction

09:35 - 09:50 – Henrik Vedel: “E-GVAP: Overview”

09:50 - 10:05 – Guergana Guerova: “Report of the Last EMS Meeting”

10:05 - 10:20 - Krystof Eben, Jaroslav Resler: “Assimilation of ZTD in the framework of downscaled GEFS ensemble”

10:20 - 10:35 - Magnus Lindskog, Sigurdur Ážorsteinsson: “Evaluation VARBC in HARMONIE: Status and Plans”

10:35 – 10:50 – Guergana Guerova et al.: “Fog forecast impact studies for Sofia Airport: Numerical Weather Prediction simulation and use of GNSS tropospheric products”

10:50 – 11:05 - Impact of ground-based GNSS Precipitable Water assimilation on weather forecasts: a WRF-WRFDA example for Poland, Central Europe (Guzikowski et al.)

11:05 – 11:30 – Break

11:30 - 12:50 - sub-WG Discussions

12:50 - 13:00 – R. Van Malderen: “Presentation of the COST ES1206 Special Issue”

Possible topics for discussion are:

- Exploitation of the Benchmark campaign
- Evaluation of new operational GNSS tropospheric products
- Exploitation of RT/UR Products for Nowcasting
- Severe Weather Case Studies and development of operational tools for severe weather forecasting
- Quality checking of operational GNSS tropospheric products
- Organisation of a joint topical meeting on nowcasting and NWP (goals, venue=Brussels?, deadlines...)

13:00 – 14:00 – Lunch

WG3 session, 29 September, 14:00-18:00

Oral presentations

14:00 - 14:15 - Bock & Pacione : Report on WG3 activities

14:15 - 14:30 - Bordi, I.: On the potential of ground-based GPS measurements for climatological and hydrological applications

14:30 - 14:45 - Bock O., et al.: Study of integrated water vapour trends and variability using ground-based GPS data and climate models

14:45 - 15:00 - Ning T. and G. Elgered: Ground-based GNSS for climate research: 17 year long time series of IWV obtained from homogeneously processed GNSS data

15:00 - 15:15 - Pacione R., EPN Repro2: a reference ZTD dataset over Europe. First Results

15:15 - 15:30 - Brockmann, E.: Impact of GLONASS on reprocessed Zenith Total Delay Estimates

15:30 - 15:45 - Ning et al.: Homogeneous integrated water vapor time series derived from the GFZ reprocessed GNSS data

15:45 – 16:00 - F. Ahmed et al.: Development of new segmentation algorithms for the homogenisation of GNSS IWV data

16:00 – 16:30 - Break

16:30 - 18:00 Discussion

- sub-WP3.1 & WG1: GNSS data processing
- sub-WP3.2: Post-processing (screening, conversion to IWV, homogenisation)
- sub-WP3.3: IWV intercomparisons*
- sub-WP3.4: On the use of GNSS data for climate research

Posters

Balidakis, K., et al.: Investigating the impact of mapping functions and homogenized in situ meteorological data on geodetic and tropospheric VLBI products

* short oral presentation: E. Fionda et al.,: Evaluation of uncertainties affecting the estimation of tropospheric parameters due to radiosondes instrumental errors

19:00 - ... – Icebreaker Reception

WG1 session, 30 September, 09:00-13:00

Oral presentations

09:00-09:05 - Jan Douša, Galina Dick: Introduction

09:05-09:30 – Michal Kačmařík, Jan Douša, Galina Dick: Benchmark: Status Summary

09:30-09:45 – Michal Kačmařík, Jan Douša, Galina Dick, Florian Zus: Benchmark: first validation results – slant delays

09:45-10:45 – reports of sub-groups, WG1 summary

- Zhiguo Deng and sub-group “Multi-GNSS”: current status
- Karolina Szafranek and sub-group ‘NEW’: current status
- Florian Zus and sub-group ‘MODEL’: NWM based tropospheric models and parameters for GNSS applications
- Pavel Václavovic, Norman Teferle and sub-groups ‘Real-time’, ‘PPP’: Status of the Real-time Demonstration campaign
- WG1 summary and discussions

10:45-11:15 – Break

Oral presentations

11:15 - 11:30 – Jan Kaplon: Estimation of NRT troposphere parameters from ASG-EUPOS and SmartNet GBAS networks in Poland

11:30 - 11:45 – Gokhan Gurbuz, Cetin Mekik: NRT ZTD Estimations in Turkey

11:45 - 12:00 – Furqan Ahmed, Wenwu Ding, Norman Teferle, Denis Laurichesse: Real-time and Multi-GNSS ZTD products: Contribution to GNSS4SWEC WG1 Real-Time Demonstration Campaign and Developments

12:00 - 12:15 – Tomas Hadaś, Jan Kaplon, Jarosław Bosy: Towards a real-time ZTD service in Poland – current status

12:15 - 12:30 – Ilke Deniz, Cetin Mekik, Gokhan Gurbuz : Spherical harmonics functions modelling of meteorological parameters in PWV estimation

12:30 - 12:45 – Karina Wilgan, Witold Rohm, Jarosław Bosy: Total refractivity and GNSS path delay models based on numerical weather prediction model and GNSS data in Poland

12:45 - 13:00 – Gregor Möller, Robert Weber, Johannes Böhm: Reconstruction of the anisotropic part of Slant Tropospheric Delays

13:00 – 14:00 Lunch

14:00 - 15:45 - Sub-WG Splinter Meetings

Topics for inter-WG discussion:

Planned Session

- Homogenisation, chaired by E. Pottiaux and R. Van Malderen

Other topics for discussion

- The benchmark (plans/groups/topics) + exploitation by WG2 members
- Products for SWEC (slant delays, gradients, tomography, ultra-fast production etc.) and (nowcasting/NWP) case studies : plans/groups/topics/database
- Multi-GNSS processing/products
- NWM tropo modelling (RT (positioning) applications, NWM assessment, database, etc.)
- ZTD2IWV conversion (sensitivity, methods, for climate, for RT applications...)
- ZTD/IWV/GRD/Slant delay screening and quality checks (for climate?, for NRT/RT operational applications)
- GNSS data processing/reprocessing (reprocessing of long time series, processing methodological tests - cutoff angle, tropo model, PPP vs. DD, day boundary effects...) + data assimilation in climate models
- Databases (case studies, NWP data for RT positioning...)
- Sub-WG topical meetings (preparation/groups/venue...)

15:45 – 16:00 - Break

16:00 – 18:00 - Sub-WG Splinter Meetings contd...

19:00 - ... - Scientific Boat Trip