- provide a short summary about the sub-working group (status, contributions, achievements, plans)

Status

Currently the sub-working group is working on the establishment of benchmark campaign location and data provision scheme. We are also discussing what are the methodological advancements required in tomography processing to facilitate the needs of NWP and Nowcasting community.

[Add here what you did in tomography for the last 6 months]

Achievements

R. J. Norman, J. Le Marshall, W. Rohm, B. A. Carter, G. Kirchengast, S. Alexander, C. Liu, and K. Zhang (2014) Simulating the Impact of Refractive Transverse Gradients Resulting From a Severe Troposphere Weather Event on GPS Signal Propagation, accepted for publication in: Selected Topics in Applied Earth Observations and Remote Sensing, IEEE Journal of

[Add here your publications linked with tomography]

Plans

Organise workshop on tomography campaign data processing and interpretation in late 2014

[Add here what you think we should do in the next 6 – 12 months]

- if you consider any needs for a specific discussion outside the sub-group - at plenary (e.g. exploitations, requirements, ..)

[WR]

We should ask meteorologists if in the non-NWP Nowcasting system there is a need for tomography products (or by-products) like vertical/horizontal dynamics of wet refractivity/ water vapour and what would be the horizontal/vertical resolution of interest.

[HB]

We should certainly ask also people from HyMeX community to know if they have some data that could be used (like the one of their golden campaigns). The UK network is also a good candidate with the BIGF www.bigf.ac.uk.

[AG]

As you mention additional data would be of importance (ground meteo, balloon, nwp, radar...) It might be of interest to also consider comedie-software for comparison

[Add here what else we should discuss with other WG and sub- groups]

- how you foresee the utilization of the benchmark campaign for stimulating (validating, inter-comparing, ...) developments within the sub-group activity

We are hoping to use it as a fundamental data in our activities to run and validate our results.

[Add here what else we can do with data from benchmark]

- would you suggest to organize any particular topical meeting covering more sub-WGs from different WGs?

We are thinking of organising workshop at which we will run the final processing step of the tomography software, compare results from different tomography models, discuss quality of the obtained solution. We should look, with meteorologist involved in the process, at the usability of our products for NWP and Nowcasting. At the end of the workshop we should be able to answer if we are ready to provide tomography profiles/fields to other WG (sub-WG), or we need to improve our processing methodology.

[Add here what else we can do at the workshop or what else you suggest to do]