

WG3 on Microwave Radiometers - Summary

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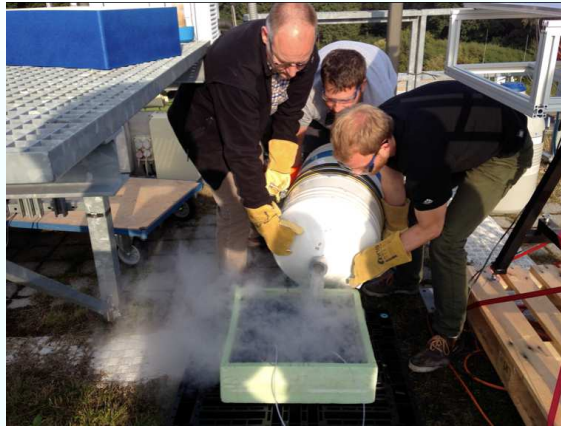
General priorities

Current MWR limitation for network applications

- “limited” spatial instrument number density
- no *centralized* data collection, processing and dissemination
- weak “visibility” of the MWR potential
- weak “availability” of MWR prototype data
- non-homogenized level1 and level2 data
- no calibration harmonization, error characterization
- no common qc (wetted radome...)
- no operational gb-RTTOV (yet)

TOPROF influence:
hardly any
“towards” networking
strong

Establish protocols for providing QC MWR data



Evaluation of J-CAL

- agreed on common error descriptors for level1 data
- improved calibration loads for HATPRO (RPG)
- software update for calibration monitoring (RPG)
- software update for instrument noise characterization (Pospichal/Güldner/RPG)
- calibration guideline document planned – best form as part of a wiki?

SWG (J-CAL2) planned at RPG in June 2015, 6 people (in correspondence to Objective 6) to evaluate the improved calibration schemes

Coordinate the data processing chain

Preparing and carrying out O-B statistics

- agreed on common format (netcdf CF-1.6) for level1 and level2 data
- distribute example files & writing tools (Löhnert)
- create and make available by end of year: one year of level1 (Tb) and level2 data (T, q /IWV& LWP) for Cabauw, JOYCE, MOL and Payerne

SWG (O-B stats) planned at DWD with 6 people: create O-B stats (level1 with gb-RTTOV and level2 with multivariate regression) over 2013, February 2015 (Objective 9)

Engaging with DA community

RTTOV developments

- finalize gb-RTTOV for clear-sky and cloudy conditions (Cimini/DeAngelis)
- adaption of crucial frequencies and angles
- carry out extensive evaluation
- commence developments on RTTOV-k and implement in 1DVAR (DeAngelis/Martinet)

SWG (RTTOV) planned at MetOffice with 6 people from WG3 & WG4 & MO (Objectives 8 & 9) ~ April 15, 2015

Harmonized formats beyond WGs?

Towards easy-usable ground-based datas

- find common data format, file contents, variable naming, file naming throughout TOPROF
- recommendations for evolving networks (including NWS and research institutions)
- could be based on development started in HD(CP)2 – “Observation Data Standard”; continuously evolving

SWG (including WG1-WG3 and other experts, users)

??? separate meeting or connected to next MC/WG ??