



Task Team 5 (Ancillary Measurements, TT-AM) 2015 Report

Thierry Leblanc (JPL)

Tony Reale (NOAA)







Annual Refresher: TT-AM Terms of Reference



- 1. Interface with other expert teams (such as NDACC, MWRNet, TCCON, etc.)
- 2. Evaluate the data products (uncertainty budget etc.) and bring in missing knowledge
- 3. Inventory potential instruments (and interface with other GRUAN-Task Teams if needed)
- 4. Establish campaign rationales for the validation of data from multiple platforms
- 5. Establish a system for the routine collection and display of data from multiple platforms
- 6. Guidance on the type and amount of data and associated metadata needed to be stored from the instruments, as needed
- 7. Draw conclusions on the suitability of the deployed equipment and advise accordingly to GRUAN Task Team on Site Assessment
- 8. Report to WG-ARO on all above duties







Updated (2014) List of TT-AM Members



| Name | Affiliation | AM | Community |
|---------------|-----------------|------------------|---------------|
| J. Hannigan | NCAR | FTIR | NDACC, TCCON |
| M. De Mazière | IASB/BIRA | FTIR | NDACC, TCCON |
| M. Schneider | IMK-ASF | FTIR | NDACC, TCCON |
| N. Cimini | IMAA/CNR | Microwave | MWRNet |
| N. Kämpfer | Univ. Bern | Microwave | NDACC, MWRNet |
| A. Haefele | MeteoSwiss | Microwave, Lidar | NDACC, MWRNet |
| A. Apituley | KNMI | Lidar | EARLINET |
| T. Leblanc | JPL/Caltech | Lidar | NDACC, TOLNet |
| D. Whiteman | NASA/GSFC | Lidar | NDACC |
| T. Reale | NOAA/NESDIS | Satellite | |
| M. Schröder | DWD | Satellite | GEWEX |
| D. Tobin | Univ. Wisconsin | Radiance | |
| J. Gero | Univ. Wisconsin | AERI | ARM |







FTIR



GRUAN Best Measurement Practices and Guidelines for FTIR:

Currently being written

MUSICA H2O data and uncertianty budget:

See presentation by M. Schneider Tuesday afternoon

New SFIT4 data processing software

- FTIR data processing software SFIT2 upgraded to SFIT4
- Update includes module for the evaluation of the uncertainty budget.
- New SFIT4 software implemented in several stations

NORS Project (nors.aeronomie.be) new deliverables:

- Deliverable meant to better characterize the NORS data Data User Guide
 - 'Uncertainty Budgets' document'
 - 'Spatial representativeness of NORS observations' document:
 - All docs publicly available at http://nors.aeronomie.be/index.php/documents







Lidar



GRUAN Best Measurement Practices and Guidelines for lidar

- On hold: will resume as complete GRUAN lidar data stream is fully linked (2015)

GRUAN Lidar Data Stream: LidarRunClient

- No progress in 2014
- Activity to resume now
- First operational version expected summer 2015

GRUAN Lidar Data Stream: Data processing (GLASS)

- Good progress on the GLASS: Raw data from 3 potential GRUAN lidar raw data can be analyzed (Payerne, Potenza, and Ny Alesund)
- Plan is to extend this to Cabauw and Beltsville







Microwave



Contributors: Cimini, Kämpfer, Haefele, Navas, Löhnert, Gülder, Pospichal

Microwave Radiometer Guidelines (GRUAN AI #24)

- Version 0.8 delivered just before ICM-7
- Sections 1, 2, 3 are nearly completed. Sections 4-9 are being drafted.
- Complete draft expected by June 2015.

Action Item (26): Validation Strategies and Results ((GRUAN AI #26)

- Validation statistics available for some GRUAN sites (in GRUAN MWR guidelines).
- Other activities planned within the EU COST Action TOPROF:
 - Review of instrument and retrieval accuracy
 - Observation minus model background (O-B) statistics







AERI



GRUAN Action I tem #39: Inventory of AERI instruments to be compiled for TTAM consideration and report to GRUAN community on viability to bring AERI into GRUAN)

- No inventory at the moment (no feedback received from J. Gero this year)
- TT-AM co-chairs to contact Gero for follow-up in 2015.







Anticipated activities for 2015



2015 = Year of the GRUAN Ancillary data streams?

- All GB techniques: Guides/Best Practices documents to be completed mid-2015
- Lidar: GLASS expected to produce GRUAN products for 3+ sites
- Other techniques: data stream setup expected

→ Hopefully, YES!



