

COST ES1404 WG meeting minutes

21 September 2017 13:00-16:30

Smolenice, Slovakia

Chair: Jürgen Helmert and Leena Leppänen

- Presentation by M. Lange (DWD): Snow observation monitoring in DWD
 - o Time evolution of reported snow observations in Europe show impact of the COST action (ECMWF, UK MetOffice) on reporting practice (format, zero-snow issue)
 - o Visible gaps in the observation maps trigger new collaboration between services to fill the missing observations in the data assimilation system (e.g. Germany, Poland) - COST impact.
- Presentation by L. Holko (SAS): Report about the 2nd field campaign in Reykjavik, Iceland
 - o Power plant site had enough measurements to provide comparison; variability of snow depth, SWE and density were presented for each instrument and measurement location in both trenches in north and south location
 - o Ski area site had only few instruments used and proper comparison is not possible; anyhow similar figures of variability were presented as for power plant site
 - o Discussion of results variability and accuracy
 - Observer related error is not possible to separate from instrument error and spatial variability of snowpack
 - The bulk snow density, that is, the ratio of SWE to snow depth, shows much less variability across the trenches. Accordingly, one 'representative' measurement of SWE and snow depth can be used along with several snow depth measurements to estimate the mass of snow over a larger area.
 - o Report of the campaign is on progress, D. Finger provides report of his students to be included to the report. D. Finger also provides pictures of the field site without snow.
 - o If another field campaign would be organized, it could be addressed to problematic snow, e.g. snow with multiple ice layers, which was noticed to affect measurement accuracy during SPICE, or deeper snowpack with larger SWE like ski area site in Reykjavik.
 - o D. Finger proposed that his students could repeat the campaign in ski area site, and several devices could be included if e.g. STSM funding is used.
 - o Instrument comparison by sending the devices to one location as presented in Granada meeting was discussed again
 - o A field campaign/instrument comparison could be included to training school in Italy (12-16 March 2018) or WG meeting in France (9-11 February 2018)
- L. Leppänen (FMI) showed draft of the guidelines prepared with N. Lopez Moreno and B. Luks. Guidelines should include description of the instruments used in the both field campaigns and recommendations of suitable weather and snow conditions. In addition, accuracy of the instrument at

home location could be measured and added to the instrument descriptions. Content of the guidelines will be finalized when preliminary content of GCW best practices are known.

- L. Leppänen (FMI) presented slides from R. Pirazzini about POLAR2018 conference for discussion of COST participation to Snow and firm session
- WG leaders: Presentation of new Wiki content to support the work on the deliverables
 - o RACI method is used to structure the work on the deliverables by COST countries
 - o WG leaders will finish the Wiki time schedule of their deliverables (deadline September, 30)
 - o MC members have to comment content and send names of persons, responsible for specific tasks (deadline, October, 25)
 - o Evaluation and discussion in Helsinki meeting (October, 30-31)
 - o WGs concentrates to execute deliverables and related WG tasks (unrelated tasks are necessarily not finalized)