Minutes from snow analysis & model session, WG3b meeting, ICCARUS 2021

Part 1: Snow Analysis

- Three 'different' approaches, i.e. statistical based (DWD), physical based (MCH), hybrid approach using SNOWE and machine learning algorithm (RHM)
- Comparison/Validation of different approaches (at least DWD/MCH) in common domain planed
- All approaches have their advantages and disadvantages but could also be combined into a common snow analysis in the future.

Part 2: Snow model

- SNOWPOLINO, i.e. the new multi-layer snow cover scheme is in a good state producing good results locally as well as regionally.
- It is almost ready to be merged into COSMO 6.0
- Implementation of SNOWPOLINO in ICON starts in May 2021 with support of DWD colleagues (implementation as well as global testing)
- Implementation will be done in TERRA, but also as modular as possible to ensure a smoother transition to JSBACH
- TERRA stand-alone is considered a valuable tool for developing new schemes and should be kept up to date with the latest TERRA code in COSMO/ICON