

Snowpack modeling revisited: Summary from the EGU splinter meeting

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Why discussion initiated by SLF-WSL/CEN-Meteo France?

Things that likewise apply to CROCUS or SNOWPACK:

- ▶ Need to get rid of obvious limitations
- ▶ Need for considerable resources for maintenance
- ▶ Need for flexibility in incorporating new processes

Synergies?

Splinter meeting @EGU 2016

Participants:

- ▶ 30 People (from snow physics, ice cores, climate modeling, hydrology,...)

Some points raised during the discussion:

- ▶ As physical as possible
- ▶ Wishlist: snow microstructure and liquid water flow, water vapour exchange, lateral transport, generic transport, snow on sea ice, polar mass balance, isotope changes and chemical processes, firn, detailed treatment of mass and energy exchange at the interfaces (e.g. permafrost), detailed.... **in short: everything :-)**
- ▶ Computational requirements (e.g. set by climate models) should not be a primary issue, rather a reference model
- ▶ Community developments yes, but strict code policy
- ▶ Modularity, user-friendly,...

The long route ahead

Short term:

- ▶ Shape a draft-strategy for further, concrete discussions with the community
- ▶ Aim at new IACS working group as overarching entity

Mid term:

- ▶ Find funding for necessary (non-scientific) efforts

Time frame:

- ▶ Depends on funding

Feedback welcome, at any time:

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