

General Statement

The authors have made a considerable effort in answering both reviewers' comments in a very neat, convincing, and rigorous manner. The scientific quality of the paper, which was excellent, is even improved.

My only concern at this stage is the fact that the readability of Sec. 3 is unchanged, in my humble opinion (see my minor comment #2.2 in the author's answers). Only marginal reformulations and adjustments have been made and the following comments, rejected (#2.10, #2.13, #2.70, #2.73, #2.79, #2.85, #2.91, the latter being the most prominent one). I think that the level of justification is sufficient for me to leave that up to editorial decision.

Below are some comments on discussion points which could seem subject to controversy but that the authors have perfectly addressed. Points 1 and 3 might require tiny technical changes.

Comments/Technical changes

1. #2.8: Agreed. The apparent disagreement comes from the fact that I was thinking about representativeness errors coming from a scale mismatch between point observations and model grid points but did not state this properly. I apologize for this lack of clarity. The answer to #2.108/#2.112 makes it clear that there is no scale mismatch between observations and the model, since observations are abundant (@1m) and can be aggregated into the model geometry (@5m). I suggest adding a short sentence about this aggregation in the beginning of Sec. 4.1
2. #2.14: Misunderstanding, my statement was that the way the authors described the message of Largeron et al., (2020) was misleading. I agree with the authors and am very much satisfied with the changes to the corresponding part of Sec. 6.
3. #2.22: Thanks for the addition to the caption. I understand that the chosen date corresponds to the maximal snow depth observation of Fig. 3 and 4. Please consider pointing that out for the curious readers.
4. #2.35: OK
5. #2.57: OK (not important)
6. #2.78: OK, yes of course in the case of state variable perturbations one can introduce physical inconsistencies.
7. #2.115: OK