

Ref: Interactive comment on “Modeling the snow surface temperature with a one-layer energy balance snowmelt model” by J. You et al.

Response to Anonymous Referee #1:

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We thank reviewer 1 for his comments. Addressing them has helped improve the paper. We have addressed these comments in the revisions that we have submitted.

Minor revisions:

1. In the first lines of the abstract, I would stress the coupled dynamics of snow surface temperature and energy exchanges in a more explicit way;

We accept the suggestion and the abstract has been revised to express the coupled dynamics of snow surface temperature and energy changes in a more explicit way.

2. You could consider splitting Section 2 in subsections, since it could orient the reader in this great amount of relevant information;

We accept this suggestion and have reorganized the section 2.

3. In Section 4, it could be useful to provide some details about the resolutions and the accuracies of the instruments used;

We have added some details about the resolutions and the accuracies of the instruments used.

4. Lines 4-26 page 15092 seem out of context here, since they mainly deal with previous results;

We have removed the text referring to previous results.

5. Fig 4, 5 6, 7, 8, 10, 11, 12, 13 and 14: please consider using colors to differentiate lines, since at this stage it is very difficult to discern the different results;

We have revised the figures using colors.