

Dear editor and reviewer,

Many thanks for your positive comments on our revised version of the manuscript

**“Semi-automated calibration method for modelling of mountain permafrost evolution in Switzerland”**

by

A. Marmy, J. Rajczak, R. Delaloye, C. Hilbich, M. Hoelzle, S. Kotlarski, C. Lambiel, J. Noetzli, M. Phillips, N. Salzmann, B. Staub and C. Hauck.

We now adapted the manuscript according to your comments (technical corrections), which we all adopted. Besides the small typographic corrections, we added the following added two sentences:

**Section 3.2:** *"Borehole data in mountainous terrain are also influenced by 3-dimensional thermal and hydrological processes (cf. Gruber et al. 2004. Lüthi et al. 2016) which are a source of additional uncertainty in 1-dimensional model studies, especially in areas with large topographic variability."*

and

**P13, l14ff:** *"Model tests with longer spin-up times showed only negligible differences with respect to the procedure described above, which may also be due to low ice contents in the bedrock layers at larger depths, which exert no large cooling effect to the surface from below during thawing."*

Thank you very much again for the very useful and constructive reviews and comments. We are looking forward to the publishing in the Special Issue of The Cryosphere very much.

With our best regards,

Antoine Marmy & Co-authors