Hydrology and
Earth System
Sciences

Discussions

Interactive comment on "Projected decrease in wintertime bearing capacity on different forest and soil types in Finland under a warming climate" by Ilari Lehtonen et al.

Anonymous Referee #1

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The paper presents the results of a study aimed to evaluate the projected decrease in the bearing capacity of Finnish soils in function of the changing climate during the 21st century. The paper appears well written and the results are interesting for the scientific community, even if related to the specific territory of Finland. The method is general and can be applied also in other nations in which the wood harvesting is economically important. However, a lack in this paper is the detail related to the choices of parameters performed in the model used, the description of the pre-processing procedures (inclusive of the choices of the several parameters used in this study), the statistical comment about the values (especially those selected as a result of several simulations), and in general a too short description about the consequences and the

limitations of these choices on the interpretation of the results. In my opinion, this part deserves a deepening, because it could help to evaluate the results and also give more strength and robustness to the conclusions. This is the reason for which I do not think that this paper could be accepted in the present form, but requires some modifications that, in my view, can be intended as minor. The list of requirements can be understood better by looking at the specific comments here listed page by page (see supplement file).

Please also note the supplement to this comment:
https://www.hydrol-earth-syst-sci-discuss.net/hess-2017-727/hess-2017-727-RC1-supplement.pdf

Interactive comment on Hydrol. Earth Syst. Sci. Discuss., https://doi.org/10.5194/hess-2017-727, 2018.