Hydrol. Earth Syst. Sci. Discuss., https://doi.org/10.5194/hess-2018-64-RC1, 2018 © Author(s) 2018. This work is distributed under the Creative Commons Attribution 4.0 License.



Interactive comment on "Forest harvesting impacts on micrometeorological conditions and sediment transport activities in a humid periglacial environment" by F. Imaizumi et al.

Anonymous Referee #1

Received and published: 26 March 2018

In general, this study is a very interesting. The article has a clear idea. The research method is reasonable, the content is detailed and data is reliable. However, there are still some places that need to be revised, and I will mention it and suggest that the author supplement it. So I suggested that this manuscript should be published after minor modifications. 1.I suggest that the author add "Sediment transport activities in the periglacial environment are controlled by hillslopes micrometeorological conditions (i.e., air and ground temperatures, ground water content), which are highly affected by vegetation cover. Thus, there is a possibility that forest harvesting, which is the most dramatic change to vegetation cover in mountain areas, may severely impact sediment transport activities in periglacial areas (i.e., soil creep, dry ravel). Knowledge

C

of the effects of forest harvesting on sediment transport are needed to protect aquatic ecosystems as well as to develop better mitigation measures for preventing sediment disasters." in abstract part into introduction. 2.I suggest that the author add the main conclusions (including specific change indicators) into the abstract part. 3.Although various changes have been put forward before and after forest harvesting in this paper, there is no specific quantitative index and data explanation. 4.There are a lot of pictures in this article, but some of the graphs are a little messy. I suggest the author revise the picture. When the reader sees the picture, they will understand the scientific meaning of this picture. 5.The conclusion part is only of a list of the results. I recommend its refining. 6.There are many problems in the language of this article. Please modify carefully.

Interactive comment on Hydrol. Earth Syst. Sci. Discuss., https://doi.org/10.5194/hess-2018-64, 2018.