

Interactive comment on "The effects of ice and hillslope erosion and detrital transport on the form of detrital thermochronological age probability distributions from glacial settings" by Maxime Bernard et al.

Jean Braun (Editor)

jean.braun@gfz-potsdam.de

Received and published: 20 April 2020

The two reviewers have provided extensive reviews of the manuscript and both agree that it contains interesting material that should be published in ESurf. They both note, however, that the method used requires to be better explained. One important point raised by the anonymous reviewer concerns the efficiency of transport by subglacial water flow and how it might affect the authors' conclusion regarding the time it takes for detrital distributions to reach "steady-state". There is a need too, as suggested by T Ehlers, to show how sensitive the results presented here are to the rather arbitrarily

C1

chosen set of model parameters. I also agree with the anonymous reviewer that the manuscript would greatly improve its potential impact if it made a better use of existing data (form the study area) to show its robustness. I strongly encourage the authors to provide us with a response to the two reviewers' comments, based on which I would like to recommend that they prepare a revised version.

Interactive comment on Earth Surf. Dynam. Discuss., https://doi.org/10.5194/esurf-2020-7, 2020.