

21 May 2025

Re: egusphere-2024-4033

Title: Will landscape responses reduce glacier sensitivity to climate change in High Mountain Asia?

Dear Dr Delaney

Thank you for your recent suggestions and comments on our paper. We have now added a paragraph which discusses the contested issue of rock glaciers and ice-debris landforms. The paragraph is below and is now in lines 325-334.

“We can see then that the rock glacier response to deglaciation envisioned by the PT scenario is likely to be highly complex, with the full suite of rock glaciers (‘periglacial’ and ‘glacier-derived’) and other ice-debris landforms developing in different locations, regions and over different timescales. This complex response will be driven by climate change as a first order control, and debris supply and glaciological factors as secondary factors. Separate from rock glaciers, the evolution of undifferentiated ice-debris landforms during glacier recession has hardly been discussed in the cryosphere literature from HMA (although see Bolch et al. (2019). As a result, there is uncertainty in evaluating precisely how the PT scenario would develop, how quickly and what form the equilibrium landscape might present”.

We hope that our paper is now suitable for publication.

Best wishes,

Stephan (on behalf of the authors)

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