

Hydrol. Earth Syst. Sci. Discuss., author comment AC3 https://doi.org/10.5194/hess-2021-500-AC3, 2022 © Author(s) 2022. This work is distributed under the Creative Commons Attribution 4.0 License.

Reply on RC3

Yongmei Gong et al.

Author comment on "Synopsis of the uncertainties introduced by bias-adjusted climate forcings in regional glacier surface mass balance evolution studies - A case study using a CORDEX chain envelope in western Norway" by Yongmei Gong et al., Hydrol. Earth Syst. Sci. Discuss., https://doi.org/10.5194/hess-2021-500-AC3, 2022

Dear editor and referee #3,

We thank referee #3 for his/her constructive comments and suggestions of interesting directions in which this manuscript can and will develop to become a stronger scientific study. Whether or not these comments were meant to set a stage for manuscript modifications, we conclude that some issues raised by referee #3 deserve a thorough investigation to make a definitive case on the general applicability limits of downscaled, bias-corrected climate products, both during instrumental periods and future decades, for glacier surface mass balance (SMB) impact studies in Norway.

Please find attached the response to the referee's comments in detail.

Sincerely,

Yongmei Gong and Irina Rogozhina

Please also note the supplement to this comment:

https://hess.copernicus.org/preprints/hess-2021-500/hess-2021-500-AC3-supplement.pdf