

## Author's response to Technical Corrections

I 106 accounting for firn density (missing reference which model was used)

*We have specified the firn model used.*

Reference Zinck et al. 2023 is by now peer reviewed and out of the discussion phase. Unless you are referring to content exclusively available in the Discussion I suggest you cite the peer-reviewed version.

*Thanks for catching this. Peer-reviewed version is now cited.*

Reference to Topo-Toolbox appears incorrect. Looking briefly at their website it appears you should credit:

"Schwanghart, W., Scherler, D. (2014): TopoToolbox 2 – MATLAB-based software for topographic analysis and modeling in Earth surface sciences. Earth Surface Dynamics, 2, 1-7. [DOI: 10.5194/esurf-2-1-2014]"

*Thanks for catching this. Corrected.*

Figure 2 has no scalebar

*We have added a scalebar and north arrow to the middle panel, consistent with Figs. 3-5.*

Figure 4 b needs label on colorbar (year)

*We have added a label to all HB colorbars.*