The authors have satisfactorily addressed all of the comments of my previous review.
I congratulate them on all the work they did to finalize this study! Even if it was a long process since the first submission, the result is very well worth it. I hope this dataset will be useful to many users, and I'm sure it will be durable thanks to their detailed error analysis.

I only noted some minor edits to adjust in the text before publication, see below:
(lines refer to the PDF with track changes)
L27: “temporal specific” → “period-specific”?
L28: “applied DEMs” → “used DEMs”?
L32: “gridded formats at resolutions”: change to singular “gridded format at resolution”
L60: and snow melt?
L62: Add Pritchard (2019)?
L73: “Recent research” singular
Spell-out acronyms on first usage in the data section: SRTM, KH-9, ICESat-2, etc
L159: “to estimate ice sheet mass changes”
L192: “could be adjusted” → were they? if yes, need to be clearer!
L212: “hardly possible”?
L260: Add citation to Dowd (1984)
L292-294: It’s probably too much detail to cite the name of the function in the package here, could be shortened into “… using xDEM (citation)”. Given that xDEM is already cited in the code availability at the bottom, this sentence could also be removed altogether.
L457: Here you could mention that your estimations of long-range spatial correlations for KH-9 DEMs are in line with those of Dehecq et al. (2020).
Fig. 6: Specify that “before” and “after” relate to the coregistration in the caption.
L515 and 518: “Nonetheless/Nevertheless” used twice a row
Additional references
Pritchard, H. D. (2019). Asia’s shrinking glaciers protect large populations from drought stress. Nature, 569(7758), 649–654. https://doi.org/10.1038/s41586-019-1240-1
Dowd, P. A. (1984). The Variogram and Kriging: Robust and Resistant Estimators. In G. Verly, M. David, A. G. Journel, & A. Marechal (Eds.), Geostatistics for Natural Resources Characterization (pp. 91–106). Springer Netherlands. https://doi.org/10.1007/978-94-009-3699-7_6
Dehecq, A., Gardner, A. S., Alexandrov, O., McMichael, S., Hugonnet, R., Shean, D., & Marty, M. (2020). Automated Processing of Declassified KH-9 Hexagon Satellite Images for Global Elevation Change Analysis Since the 1970s. Frontiers of Earth Science, 8, 516. https://doi.org/10.3389/feart.2020.566802

Responses to reviewer #1

Thank you for pointing out all the formatting issues—we have carefully addressed each one. We have also added the necessary citations for the referenced literature.
Regarding your comment on L192 needing to be clearer, we were actually referring to the discussion in Gardelle (2012) but had missed the citation. We have now added it accordingly.
We truly appreciate your thorough review and valuable suggestions!