On behalf of all the co-authors, I would like to thank the reviewer, Anonymous Referee #1 and Rakesh Bhambri, for their thoughtful and constructive comments which helped us to improve our study. We have responded to comments as follows:

NOTE

Anonymous Referee #1 Comments (Black font)

Authors Responses (Red font)

Specific changes that were made in the manuscript (Blue italic)

Anonymous Referee #1

1. The manuscript deals with the compilation of a glacier inventory in the Karakoram region. The topic is of high interest to the scientific community, and not only. The manuscript is well written (there are a few typos to check, e.g. line 248), but there are some issues to be solved before its publication. First of all, authors need to describe all the, employed, data at the beginning of Section2; currently, ancillary data, which constitute an important part of the processed ones, are progressively introduced during the description of the various elaboration.

Response: Thank you for your valuable suggestions. We have made modifications according to your suggestions, including adding a section (Sec. 2.1) to introduce all the data used in this study, and described the data in detail in Table 1.

"*2.1 Datasets* ***(Partial content)***

This subsection lists all data sets covering the Karakoram that are used to produce and assist in the analysis of the multi-temporal glacier inventory, including optical images from different satellite sensor, digital elevation model (DEM), four previous glacier inventories, three supraglacial debris extents, two surge-type glacier inventories, two modelled ice thickness data, hydrological basins and river networks. Table 1 summarizes their key characteristics, presenting their sources, date, application in this study and access link.

At least 12 Landsat images are required ……

Table 1 Lists of data sets covering the Karakoram mountain that are used in this study. (***Partial content)***

Data Name	***Sources***	***Date***	***Access***
Satellite images	*Landsat TM, ETM and OLI +30-m/ 15-m images*	*1990, 1991, 1993, 1994; 2000, 2001; 2009, 2010; 2018, 2019, 2020 (details see Table S1)*	*GEE asset or https://earthexplorer.usgs.gov/*
	Sentinel-2 10-m images	*2020-08-25, 2020-08-23*	*GEE asset or https://scihub.copernicus.eu/*
	Planet 3-m images	*2019-05-29*	*Ordered and download via Planet's APIs*
DEM	*30-m ASTER GDEM V3*	*2000-2013*	*https://e4ftl01.cr.usgs.gov/ASTT/ASTGTM.003*
…	*…*	*…*	*…*

”

2. Concerning subsection 2.6, to improve readers' comprehension, a figure, like Fig. 4, should be added. Moreover, if applied to debris-covered glaciers, the discrepancies between the two methods highlight their proneness to errors in their mapping.

Response: Thank you for your suggestions. We added a figure (Fig. 5) and rephrased the text.

Among the feasible methods to determine accuracy and precision of glacier outlines(Paul et al., 2017), the buffer method (most used) and multiple digitizing (including area difference) are the most commonly used and effective methods (Mölg et al., 2018; Paul et al., 2020; Paul et al., 2017; Guo et al., 2015)(Mölg et al., 2018; Paul et al., 2020; Paul et al., 2017; Guo et al., 2015). The buffer method provides a minimum/maximum estimate of precision that scales with glacier size. Its overall value will thus vary with the size distribution of the selected sample. Due to the mapping uncertainty of the debris-covered glaciers is usually greater than clean ice, a 30m buffer was used to evaluate the uncertainty of the debris-covered part in this study, as in previous studies, it is also treated differently (e.g., ±2% for clean ice, ±5% for debris-covered, or±5%) (Paul et al., 2017; Mölg et al., 2018).

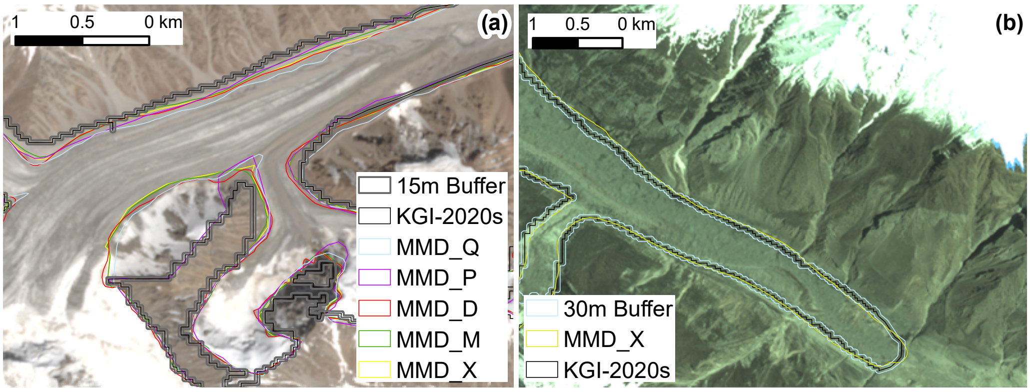

*Fig. 5. Overlaying of a 15m buffer (**a**) from the KGI-2020s glacier extent and a 30m buffer (**b**) from the supraglacial debris extent with MMD outlines on the base map of Sentinel-2 and Planet image*.

3. In Section 4, the authors should immediately state that due to the different approaches, data sources and methods cannot be compared without a high level of uncertainty and maybe, only qualitatively. Subsection 4.3 should be shortened and merged with the previous one.

Response: Thank you for your suggestions. We have stated this situation at the beginning of section 4.1. Subsection 4.3 has been shortened and merged into subsection 4.1 and subsection 4.2.

*“**However, due to the different approaches, data sources and methods among different glacier inventories, cannot be compared without a high level of uncertainty, so this is only a qualitative comparison.** The Karakoram boundary …”.*

Shortened subsection 4.3:

"Moreover, referring to the suggestions of Braithwaite and Raper (2009) and (Sakai et al., 2015), we assume that median glacier elevation could act as a proxy for long-term equilibrium line altitude, which is correlated with the glacier mass balance budget, that can be used to describe the state and fate of glaciers (Fujita and Nuimura, 2011). Among the five sub-basins in the Karakoram, as shown in Table S6, the median elevations of glaciers in the three basins with increasing glacier coverage decreased, while the altitudes increased in the basins with decreasing glacier area. Spatially, as pointed out by Bolch et al. (2012), the median elevations increase with the distance from the moisture source (Fig. S5). The glaciers in the northwest exposed to the westerlies and heavily debris-covered have a relatively low median elevation, while the glaciers north or northeast of the main ridge of the Karakoram have a clearly higher median elevation. On the whole, the median elevation of the Karakoram glaciers showed an increasing trend during 1990-2020, indicating that glacier melting likely is becoming more intense, with runoff moving towards peak water (Huss and Hock, 2018; Nie et al., 2021). Especially in the melt-dominated Tarim and Indus basins, accelerated glacier melt is the main contributor to rising 21st century streamflow, which increases before peak water, then declines (Huss and Hock, 2018; Rounce et al., 2020; Nie et al., 2021).

Multi-temporal glacier inventories are an important data source for either basic glacier outlies or as a validation set when computing glacier mass changes and associated runoff from projection models. Based on published ice thickness data, we calculated the ice volume in Karakoram is 2.03 ± 0.52 $\times 10^3$ *km^3 (Farinotti et al., 2019) or 2.81 ± 1.08* $\times 10^3$ *(Millan et al., 2022), which has a potential contribution to sea-level rise of 4.88 ± 1.27 mm or 7.11 ± 3.07 mm. Taking into account different glacier extents in different periods, these projections will produce a variable error of 0.36 ~ 0.49%. "*

4. Conclusions should mention that the processing is carried out by semiautomatically processing Landsat images and ancillary data.

Response: Thank you for your suggestion. We have stated in the conclusion.

*"In this study, first we generated inventories which allowed us to systematically detect glacier change patterns in the Karakoram range over the past three decades by using 186 Landsat scenes **and ancillary data** through a semi-automatic method based on the Google Earth Engine cloud-based platform."*

5. Additionally, some parts need rephrasing as they are unclear to the reader:

Response: Thanks. We rephrased the two sentences.

- Lines 174-181;

"A similar threshold was also used for generating glacier inventories for large regions elsewhere (e.g. Ke et al. (2016)). Second, since many pixels outside of the glacier extent are considered to be supraglacial debris in the initial debris-covered data, glacier outlines from previous glacier inventories were used as a mask to eliminate them, as suggested in similar studies (Bolch et al., 2010; Scherler et al., 2018; Baumann et al., 2020). We combined two earlier glacier inventories (90% CCI

+ 10% GGI18, to fully cover Karakoram glaciers) as the mask layer for KGI-1990s, and the subsequent KGI-2000s, KGI-2010s, and KGI-2020s rely on the earlier revision of the glacier inventory (KGI-1990s, KGI-2000s and KGI-2010s in that order).”

- Lines 292-307.

"*As a second measure of uncertainty, we applied the buffer method (Bolch et al., 2010; Granshaw and G. Fountain, 2006) on the contiguous glacier polygons. Accordingly, a buffer of ± 1/2 pixel (i.e., 15 m) for the KGI outlines (Fig. 5a) were generated and the area difference between the area of the KGI buffer and the KGI was used as the uncertainty measure. The uncertainty for the four periods KGI data are ± 5.31%, ± 5.18%, ± 5.12% and ±5.21%, with an average of ±5.21%. In terms of the debris-covered areas, generally, a buffer of ± 1 or 2 pixels (30 or 60 m) buffer was suggested in previous research (Mölg et al., 2018; Paul et al., 2020). The uncertainty of the debris portion in this study was evaluated through the ratio of the glacier area to the debris cover area multiplied by the uncertainty of ± 1 pixel (30m) buffer (Fig. 5b), resulting in uncertainty of ±27.89%, ±29.39%, ±28.20%, and ±29.76% for the four periods, with a mean value of ± 28.81%.*

For the whole glacier, the mapping uncertainty based on the "round robin" experiment is within the estimation range based on the buffer method, indicating that the 'round robin' value can be used as a reasonable estimation of the uncertainty. Hence, we used this value ($\sigma = \pm$ 3.68%) as the uncertainty value for all KGI data in this study. The area change uncertainty (σ_Δ) was estimated according to the standard error propagation, as root sum square of the uncertainty for outlines mapped from different periods, but only consider the glacier parts which showed change in the 1990s and 2020s (ΔA_{1990s} and ΔA_{2020s}) (Bhambri et al., 2011; Zhang et al., 2018; Li et al., 2022), calculated as : $\sigma_\Delta = \sqrt{(\Delta A_{1990s} * \sigma)^2 + (\Delta A_{2020s} * \sigma)^2}$.”

6. In the data repository, the uncertainty statement is different from the one cited in the paper [±5.03% ≠ ±3.68%], please clarify.

Response: Thank you for pointing out the mistake. Due to the manuscript was revised twice according to the editor's suggestions before the interactive discussion, the uncertainty evaluation result changed. We neglected to synchronize the description of data assets. It has been revised now, and we will update all the information of the data assets when the revision of the manuscript is finished.

There are also minor comments as follows:

7. Subsection 2.5 is written in the wrong format;

Response: Thank you. We have revised it.

8. Line 485, please mention rockfalls in addition to avalanches;

Response: Thank you for your advice. The influence of rockfalls have been mentioned in this sentence.

*"Increased snow avalanche activity and **rockfalls** at high altitudes may have brought more debris to the glacier (Hewitt, 2005), thus…"*

9. when regression or correlation analyses are cited statistical significance (p value) and the correct parameter should be cited;

Response: Thank you for your suggestion. Correct and reasonable parameters (including correlation coefficient *r* and *p* value for evaluating significance) are updated and used for correlation and regression analysis in the revised manuscript. And the involved figures have been redrawn.

10. Maps should be improved by removing the north arrow and scale (the coordinates in the outline give the same information) or by placing them in the same area of the legend (i.e. unique white background).

Response: Thank you. According to your suggestion, we have improved all the figures (including supplementary figures) in the manuscript.

Referee #2 Rakesh Bhambri

1. This study presented a new glacier inventory for four time periods (1990, 2000, 2010, 2020) covering the Karakoram and surrounding region (upper Shyok basin) using Landsat satellite imagery and reported insignificant area loss in the study area. The manuscript is very well-written and nicely structured. I have given some minor suggestions for improvement. The important issue is an outline of the Karakoram region. The present study modified the extent of Karakoram (L131) presented by Bhambri et al. (2017) but did not mention the reasons for this change. Bhambri et al. (2022) recently reported no international standardization on the Karakoram extent. Therefore, consistency in the spatial extent of the Karakoram region is needed to quantify, analyze, and compare databases of natural and cultural resources for scientific investigation on a common platform and harmonization of scientific studies. Comparing glacier numbers and area statistics with previous studies is impractical (section 4.1) as all the studies on Karakoram glaciers have different area coverage. Bhambri et al. (2022) provided a most appropriate digital outline of the Karakoram region based on two decades (1920s and 1930s) long discussions and descriptive enumerations of the Royal Geographical Society (RGS) and the Survey of India (SoI). I suggest using this most common outline (open access) for the extent of the Karakoram and using the same outline to extract previous glacier inventory data on the same platform for comparison and modify section 4.1. If you do not want to use this outline, for the sake of harmonizing scientific studies, you can change the title to "Interdecadal glacier inventories in the Karakoram and the surrounding region since the 1990s".

Response: Thank you for your valuable comments. We noticed that there are several boundaries in the Karakoram Mountains with subtle differences in extent. The Karakoram boundary we used is a revised version with reference to Bhambri et al. (2017) developed by our team (can be freely accessed with the link "https://github.com/1923xfmingynu/Subdivision-Of-High-mountain-Asia") (see Figure 1).

In section 4.1, we make comparison between our glacier inventory with others at the same region scales, for instance, when we compared with SCGI, we identified the minimum part based on glaciers in SCGI contained in our Karakoram boundary to ensure the comparison has practical significance. We hold that the original title "Interdecadal glacier inventories in the Karakoram since the 1990s" is more reasonable.

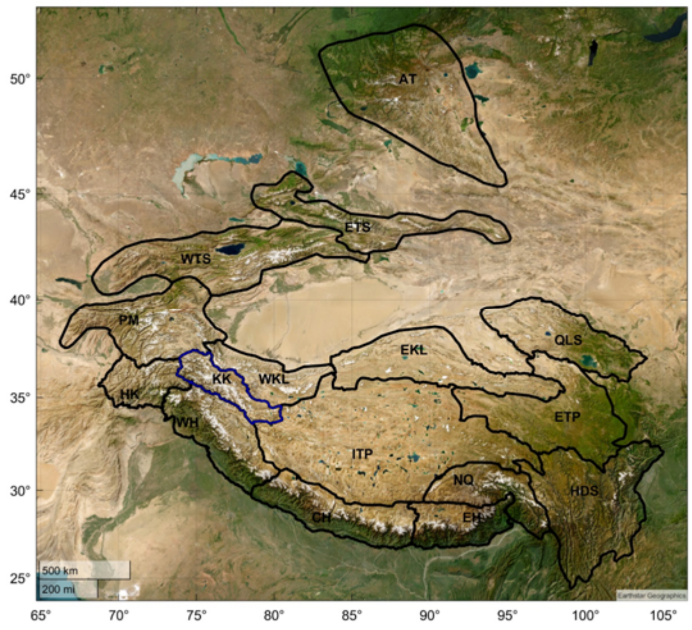

Figure 1 Sub-divisions of high mountain Asia

Suggestions

2. L41-42 Uncertainty is the same ±3.68 in two sentences. If it is the same, write accordingly. You can write ±3.7.

Response: Thank you for pointing out the mistake. Actually, it's different. We corrected it.

"*Our assessments using independent multiple digitization of 37 glaciers show that the KGI is sufficiently accurate, with an overall uncertainty of* ***±3.68%****. We also performed uncertainty evaluation for the contiguous glacier polygons using a buffer of half a pixel, which resulted in an average mapping uncertainty of* ***±5.21%****.*"

3. L50 Present results in single-digit after the point (23.4 ± 28.8 km2). Please carefully check the entire manuscript. In some places, it is single-digit (e.g., L300), and in others in double-digit.

Response: Thank you for your suggestion. We have modified the results in the whole paper to retain the two-digit decimal accuracy.

4. L59 Most glaciological studies usually avoid referring to countries' names for the Karakoram region. If you mention Pakistan in the first sentence of the introduction, then India and China must also be mentioned for the sake of neutrality. If you like, you can refer to the contested nature of this particular mountain region with different territorial claims between the different nation-states in a

very general way. This is one aspect which creates continuous problems for ground truthing and field measurements. See Baghel and Nüsser (2015).

Response: Thank you for your suggestion. We have revised it to avoid referring to countries' names for the Karakoram region.

"*The Karakoram mountains are centred in **western Tibetan Plateau** (see Fig. 1a and 1b) and host more than 20000 km^2 of glaciers, making this region one of the most glacierized areas outside of the polar regions.*"

5. L89 "Moreover, the presented areas of glacier coverage differ partially substantially for the different available inventories (Bolch, 2019; Bolch et al., 2019)." Here you can mention Bhambri et al. (2022).

Response: Thank you. We have updated the corresponding references.

6. L91 "delineation with the exclusion of glacierized areas in glaciated areas steeper than 40°." Here two terms, ' glacierized' and 'glaciated', are used, and I could not understand them. Please see Cogley et al. (2010) for these terms.

Response: Thank you for your suggestion. We revised this sentence and unified the use of professional terms.

*"The two versions of the GAMDAM inventory (GGI15 and GGI18) were generated by manual delineation with the exclusion of **glacierised areas steeper than 40°.**"*

7. L133 "The data were identified and processed using Google Earth Engine." For image processing or glacier mapping?

Response: This refers to image processing. We have modified this sentence. The preliminary extraction of glacier outlines is implemented on GEE, while the manual revision and statistical analysis are finished on the local computer.

"The satellite images were identified and processed using Google Earth Engine (GEE)."

8. L153 for Karakoram boundary modified…. Please see my comment above.

Response: Referring to the reply to the first comment, we changed the statement to "*The Karakoram boundary is a reasonable revised boundary with reference to Bhambri et al. (2017) and can be accessed freely via "https://github.com/1923xfmingynu/Subdivision-Of-High-mountain-Asia*". And we will add boundary data to the data assets.

9. L175 Bolch et al. (2010) used TM3/TM5 band ratio instead of NDSI. Therefore, Bolch et al. (2010) TM3/TM5 band ratio threshold must be different from NDSI.

Response: Thank you for your suggestion. We corrected the references.

“*A similar threshold was also used for generating glacier inventories for large regions elsewhere (e.g.* ***Ke et al. (2016)****)*”

10. L201 Please omit etc.

Response: Thank you for your suggestion. "etc." has been removed

11. L218 Double space between can be

Response: Thanks. The error has been corrected.

12. L223 Double space between developed processing

Response: Thanks. The error has been corrected.

13. L293 This paper was published in 2006 (Granshaw and G. Fountain, 2017). Please check.

Response: Thank you for pointing out the mistake. The corresponding references have been updated and the references in the entire manuscript have been checked.

14. L394 between 0 "and" 50°

Response: Thank you, it has been revised.

15. L414 "Karakoram boundary used by us is a little different from that in previous studies (Bolch et al., 2019; Bolch et al., 2012)," I don't think this is little difference. Also, please see my suggestions for the Karakoram boundary above.

Response: As stated in the reply to the first comment. Here we have made further modifications and clarifications.

“However, due to the different approaches, data sources and methods among different glacier inventories, cannot be compared without a high level of uncertainty, so this is only a qualitative comparison. The Karakoram boundary used by us is different from that in previous studies (Bolch et al., 2019; Bolch et al., 2012; Bhambri et al., 2022), so the qualitative comparison is also only for areas covered by both inventories.”

16. L438 Scherler et al., (2018)

Response: Thank you. We have corrected the citation format of the references.

References

Baghel, R. and Nüsser, M., 2015. Securing the heights: The vertical dimension of the Siachen conflict between India and Pakistan in the Eastern Karakoram. Political Geography 48, pp. 24-36.

Bhambri R., Chand, P., Nüsser, M., Kawishwar, P., Kumar, A., Gupta, A.K., Verma, A., Tiwari, S.K., 2022. Reassessing the Karakoram Through Historical Archives - Environmental Change in South Asia: Essays in Honor of Mohammed Taher, in: Saikia, A., Thapa, P. (Eds.),. Springer International Publishing, Cham, pp. 139–169. https://doi.org/10.1007/978-3-030-47660-1_8

Bolch, T., Menounos, B. and Wheate, R., 2010. Landsat-based inventory of glaciers in western Canada, 1985–2005. Remote sensing of Environment, 114(1), pp.127-137.

Cogley, J.G., Arendt, A.A., Bauder, A., Braithwaite, R.J., Hock, R., Jansson, P., Kaser, G., Moller, M., Nicholson, L., Rasmussen, L.A. and Zemp, M., 2010. Glossary of glacier mass balance and related terms.

Granshaw, F.D. and Fountain, A.G., 2006. Glacier change (1958–1998) in the north Cascades national park complex, Washington, USA. Journal of Glaciology, 52(177), pp.251-256.

Baumann, S., Anderson, B., Chinn, T., Mackintosh, A., Collier, C., Lorrey, A. M., Rack, W., Purdie, H., and Eaves, S.: Updated inventory of glacier ice in New Zealand based on 2016 satellite imagery, Journal of Glaciology, 1-14, 10.1017/jog.2020.78, 2020.

Bhambri, R., Bolch, T., and Chaujar, R. K.: Mapping of debris-covered glaciers in the Garhwal Himalayas using ASTER DEMs and thermal data, International Journal of Remote Sensing, 32, 8095-8119, 10.1080/01431161.2010.532821, 2011.

Bhambri, R., Chand, P., Nüsser, M., Kawishwar, P., Kumar, A., Gupta, A. K., Verma, A., and Tiwari, S. K.: Reassessing the Karakoram Through Historical Archives, in: Environmental Change in South Asia: Essays in Honor of Mohammed Taher, edited by: Saikia, A., and Thapa, P., Springer International Publishing, Cham, 139-169, 10.1007/978-3-030-47660-1_8, 2022.

Bolch, T., Menounos, B., and Wheate, R.: Landsat-based inventory of glaciers in western Canada, 1985–2005, Remote Sensing of Environment, 114, 127-137, 10.1016/j.rse.2009.08.015, 2010.

Bolch, T., Kulkarni, A., Kääb, A., Huggel, C., Paul, F., Cogley, J. G., Frey, H., Kargel, J. S., Fujita, K., Scheel, M., Bajracharya, S., and Stoffel, M.: The State and Fate of Himalayan Glaciers, Science, 336, 310-315, 10.1126/science.1215828, 2012.

Bolch, T., Shea, J. M., Liu, S., Azam, F. M., Gao, Y., Gruber, S., Immerzeel, W. W., Kulkarni, A., Li, H., Tahir, A. A., Zhang, G., and Zhang, Y.: Status and Change of the Cryosphere in the Extended Hindu Kush Himalaya Region, in: The Hindu Kush Himalaya Assessment, edited by: Bolch, T., Shea, J. M., Liu, S., Azam, F. M., Gao, Y., Gruber, S., Immerzeel, W. W., Kulkarni, A., Li, H., Tahir, A. A., Zhang, G., and Zhang, Y., 209-255, 10.1007/978-3-319-92288-1_7, 2019.

Braithwaite, R. J. and Raper, S. C. B.: Estimating equilibrium-line altitude (ELA) from glacier inventory data, Annals of Glaciology, 50, 10.3189/172756410790595930, 2009.

Farinotti, D., Huss, M., Fürst, J. J., Landmann, J., Machguth, H., Maussion, F., and Pandit, A.: A consensus estimate for the ice thickness distribution of all glaciers on Earth, Nature Geoscience, 12, 168-173, 10.1038/s41561-019-0300-3, 2019.

Fujita, K. and Nuimura, T.: Spatially heterogeneous wastage of Himalayan glaciers, Proc Natl Acad Sci U S A, 108, 14011-14014, 10.1073/pnas.1106242108, 2011.

Granshaw, F. D. and G. Fountain, A.: Glacier change (1958–1998) in the North Cascades National Park Complex, Washington, USA, Journal of Glaciology, 52, 251-256, 10.3189/172756506781828782, 2006.

Guo, W., Liu, S., Xu, J., Wu, L., Shangguan, D., Yao, X., Wei, J., Bao, W., Yu, P., Liu, Q., and Jiang, Z.: The second Chinese glacier inventory: data, methods and results, Journal of Glaciology, 61, 357-372, 10.3189/2015JoG14J209, 2015.

Huss, M. and Hock, R.: Global-scale hydrological response to future glacier mass loss, Nature Climate Change, 8, 135-140, 10.1038/s41558-017-0049-x, 2018.

Ke, L., Ding, X., Zhang, L. E. I., Hu, J. U. N., Shum, C. K., and Lu, Z.: Compiling a new glacier inventory for southeastern Qinghai–Tibet Plateau from Landsat and PALSAR data, Journal of Glaciology, 62, 579-592, 10.1017/jog.2016.58, 2016.

Li, Z., Wang, N., Chen, A. a., Liang, Q., and Yang, D.: Slight change of glaciers in the Pamir over the period 2000–2017, Arctic, Antarctic, and Alpine Research, 54, 13-24, 10.1080/15230430.2022.2028475, 2022.

Millan, R., Mouginot, J., Rabatel, A., and Morlighem, M.: Ice velocity and thickness of the world's glaciers, Nature Geoscience, 15, 124-129, 10.1038/s41561-021-00885-z, 2022.

Mölg, N., Bolch, T., Rastner, P., Strozzi, T., and Paul, F.: A consistent glacier inventory for Karakoram and Pamir derived from Landsat data: distribution of debris cover and mapping challenges, Earth Syst. Sci. Data, 10, 1807-1827, 10.5194/essd-10-1807-2018, 2018.

Nie, Y., Pritchard, H. D., Liu, Q., Hennig, T., Wang, W., Wang, X., Liu, S., Nepal, S., Samyn, D., Hewitt, K., and Chen, X.: Glacial change and hydrological implications in the Himalaya and Karakoram, Nature Reviews Earth & Environment, 2, 91-106, 10.1038/s43017-020-00124-w, 2021.

Paul, F., Bolch, T., Briggs, K., Kääb, A., McMillan, M., McNabb, R., Nagler, T., Nuth, C., Rastner, P., Strozzi, T., and Wuite, J.: Error sources and guidelines for quality assessment of glacier area, elevation change, and velocity products derived from satellite data in the Glaciers_cci project, Remote Sensing of Environment, 203, 10.1016/j.rse.2017.08.038, 2017.

Paul, F., Rastner, P., Azzoni, R. S., Diolaiuti, G., Fugazza, D., Le Bris, R., Nemec, J., Rabatel, A., Ramusovic, M., Schwaizer, G., and Smiraglia, C.: Glacier shrinkage in the Alps continues unabated as revealed by a new glacier inventory from Sentinel-2, Earth System Science Data, 12, 1805-1821, 10.5194/essd-12-1805-2020, 2020.

Rounce, D. R., Hock, R., and Shean, D. E.: Glacier Mass Change in High Mountain Asia Through 2100 Using the Open-Source Python Glacier Evolution Model (PyGEM), Frontiers in Earth Science, 7, 10.3389/feart.2019.00331, 2020.

Sakai, A., Nuimura, T., Fujita, K., Takenaka, S., Nagai, H., and Lamsal, D.: Climate regime of Asian glaciers revealed by GAMDAM glacier inventory, The Cryosphere, 9, 865-880, 10.5194/tc-9-865-2015, 2015.

Scherler, D., Wulf, H., and Gorelick, N.: Global Assessment of Supraglacial Debris-Cover Extents, Geophysical Research Letters, 45, 11,798-711,805, 10.1029/2018gl080158, 2018.

Zhang, Z., Liu, S., Zhang, Y., Wei, J., Jiang, Z., and Wu, K.: Glacier variations at Aru Co in western Tibet from 1971 to 2016 derived from remote-sensing data, Journal of Glaciology, 64, 397-406, 10.1017/jog.2018.34, 2018.