Dear Editor,

we are grateful for the additional close reading and would like to document our changes below.

Following the request from Dr. Ali and Dr. Hussain, their respective order in the author list has been switched. They have both contributed equally, however Dr. Ali is up for tenure and this makes a difference in evaluation. We hope this is understandable.

We have also checked through the complete manuscript for minor edits (especially missing commas etc).

Line 15: Avoid the twice use of poorly in this sentence.

Thank you, amended accordingly

Line 63: remove comma after reference

Thank you, this has been removed

Line 65: The abbreviation NN is introduced here, but rarely (actually only in one paragraph starting in 385) used. Consider avoiding it because readers probably won't remember when reaching section 6.
Thank you, amended accordingly

Line 104: variety of different sources. Remove either variety or different.

Thank you, this has been adapted

Line 417: AWS - this abbreviation has not been introduced before. But there's no need becaused it's only used once. Hence, write "automated weather stations".

Thank you, amended accordingly

Line 656: Our database spans half a century between 1972 and 2022 and records ...

Thank you, amended accordingly

660: On average, each avalanche in our database killed 27 people... Note that otherwise, the sentence can be misinterpreted that each avalanche kills on average 27 people.

Thank you, this has been adapted

Fig. 3: The figure is quite difficult to read. Perhaps you can increase the readability by using an image in the background with less saturation. Since many of the circles and triangles overlap, it may also be advisable to use some transparency of the markers. This enables readers to appreciate how much these markers overlap. The last sentence in the caption could

be rephrased: "The black outline shows regional outlines of High Mountain Asia, with numbers referring to region-IDs (Bolch et al., 2019) used in the avalanche database."

The figure has now been updated as suggested, and the caption has been clarified.

Fig. 4: You may want use the start and end date of each decade as x-labels (e.g, 1970-79, 1980-89, ...) in panel B. This will also show that the last value for 2020 is aggregated only over a few years compared to the other bars. In C, I think that the relative number of events (Nmonth/Nyear) would provide better insights into the possibly variable seasonal frequency distribution in each region.

We have added the decadal ranges in panel B. We have also tried to standardize the seasonal occurrence by the number of years they have occurred in as we agree that in principle this would be a fairer comparison (Figure 1). However as is obvious this brings the 'mean' occurrence to 1 for all months and regions after April, as those months (per region) simply only had one event each. To underline this point (that avalanche seasonality beyond January to April can not be deduced due to the limited number of events) we have however added a line explaining at L275. In the process we also realized that Tian Shan was not consistently spelled, now amended.
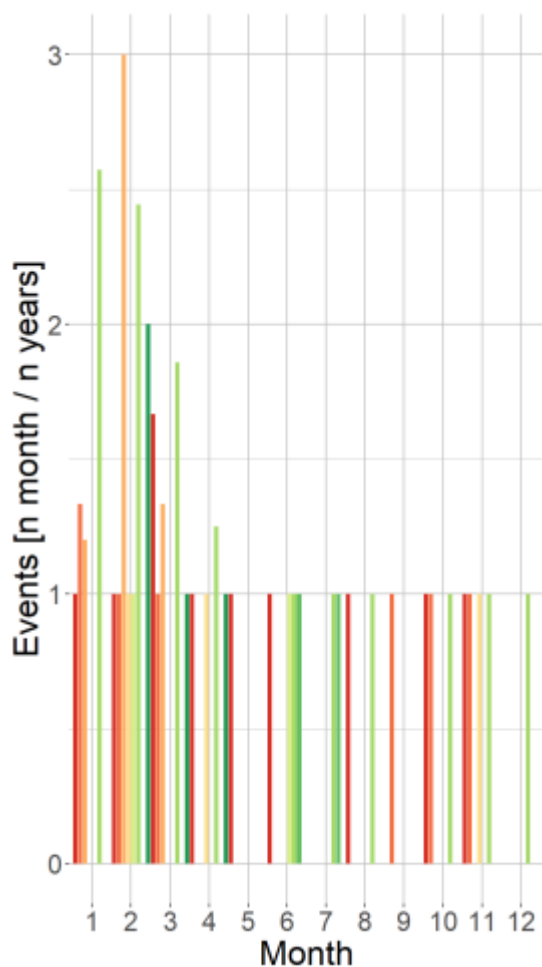

Figure 1: Seasonal avalanches per region, divided by the number of years any monthly avalanche has occurred.

In Line 646, some formatting error occurred. Please correct before resubmission.

Thank you, this has been adapted.

There has already been quite some interest for this publication in the last weeks and during one interview with a journalist who was completely focusing on climbing, we realized that during writeup of the manuscript a reference to a previous paper that discussed deaths in avalanches in climbing only had completely slipped (McClung 2016). As we already explained to one of the reviewers, it was important for us that this manuscript looks at avalanches primarily and does not overtly focus on climbing deaths, as we feel the earlier aspect had been completely missing. Hence there is no added discussion we have on the matter apart from the fact that the previous paper found a similar fraction of hired personnel affected and it also does not change anything in regard to our review of the issue. We have now added this in L363 and L571 again in the Discussion, and hope that this late addition will be acceptable. As you will see the numbers cited there are slightly higher than our record, however, as the documented cases where sources are given in (McClung 2016) match exactly with our records (not surprising as we rely on the same sources) we are unable to say where the added numbers come from, maybe emphasizing again the need for open data.

Kind Regards,

Anushilan Acharya

On behalf of all co-authors

References

McClung, D. M. 2016. "Avalanche Character and Fatalities in the High Mountains of Asia." *Annals of Glaciology* 57 (71): 114–18. https://doi.org/10.3189/2016AoG71A075.