Dear Editor,

We thank you and the referee for the further assessment of our manuscript and for the helpful suggestions. We have addressed all the remaining points raised by the referee in the revised manuscript. We have also updated the Acknowledgements to thank the editor and both referees for their contributions to improving the manuscript (lines 445–447). In addition, the processed dataset and accompanying Python scripts previously made available to the referees for review are now publicly accessible through Zenodo (https://doi.org/10.5281/zenodo.23391913).

Detailed responses to the referee's comments are provided below, together with references to the corresponding revisions in the manuscript. The referee's comments are shown in black italics, our responses in blue, and quoted passages from the revised manuscript in red.

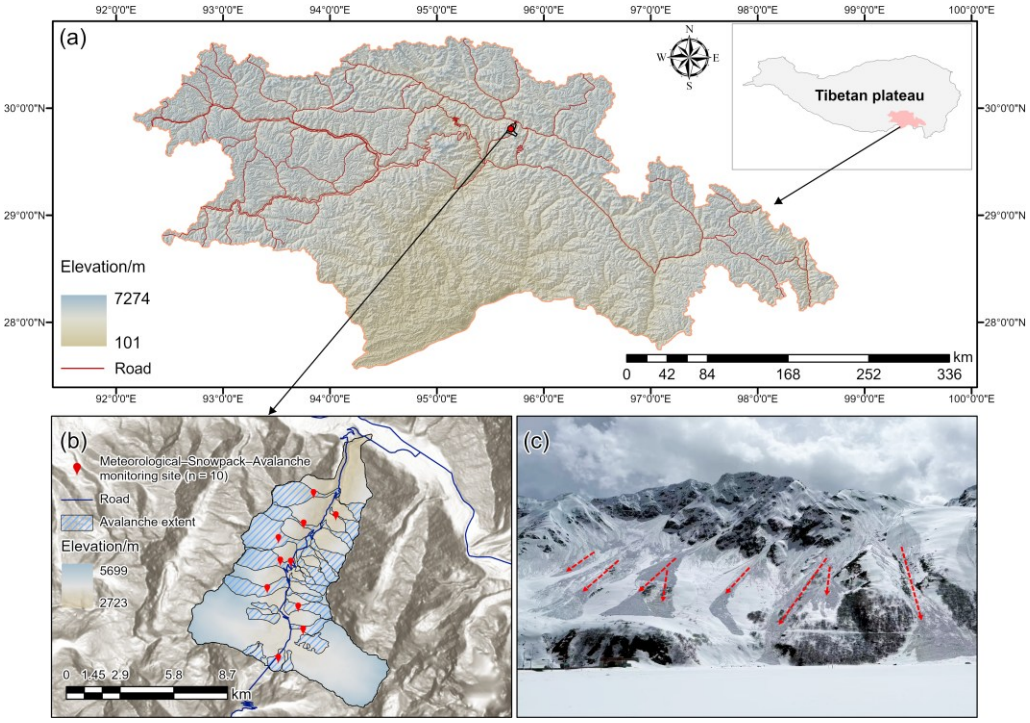
1. Please provide the number of monitoring stations in the study areas, e.g., in Fig. 1. Also, I assume that in Fig. 6, the means of these x stations are shown.

Response:

Thank you for these suggestions. We have clarified the number of monitoring stations in Fig. 1 and specified in the caption of Fig. 6 that the daily air-temperature and snow-depth values represent averages across the ten monitoring stations in Galongla Valley.

Changes in the revised manuscript:

In Fig. 1b, the legend entry has been revised to "Meteorological–Snowpack–Avalanche monitoring site (n = 10)" to explicitly indicate the number of monitoring stations. The captions of Figs. 1 and 6 have also been clarified. More details are shown in Figs. 1 and 6 (lines 90–92 and 218–220) of the revised manuscript:



"Figure 1. Overview of the study area and monitoring network. (a) Regional topography of the southeastern Tibetan Plateau, China, showing the location of the Galongla Valley. (b) Distribution of the ten monitoring stations and mapped avalanche extents within the Galongla Valley. (c) Field photograph of Galongla Mountain showing avalanche paths." (Fig. 1, lines 90–92)

"Figure 6. Time series of daily air temperature and snow depth averaged across the ten monitoring stations in the Galongla Valley during the 2024 and 2025 snow seasons. The red lines represent air temperature (°C), and the grey shaded areas indicate snow depth (m)." (Fig. 6, lines 218–220)

2. I find Figure R1 informative. I suggest adding it, e.g., as Fig. A1 in a new Appendix A.

Response:

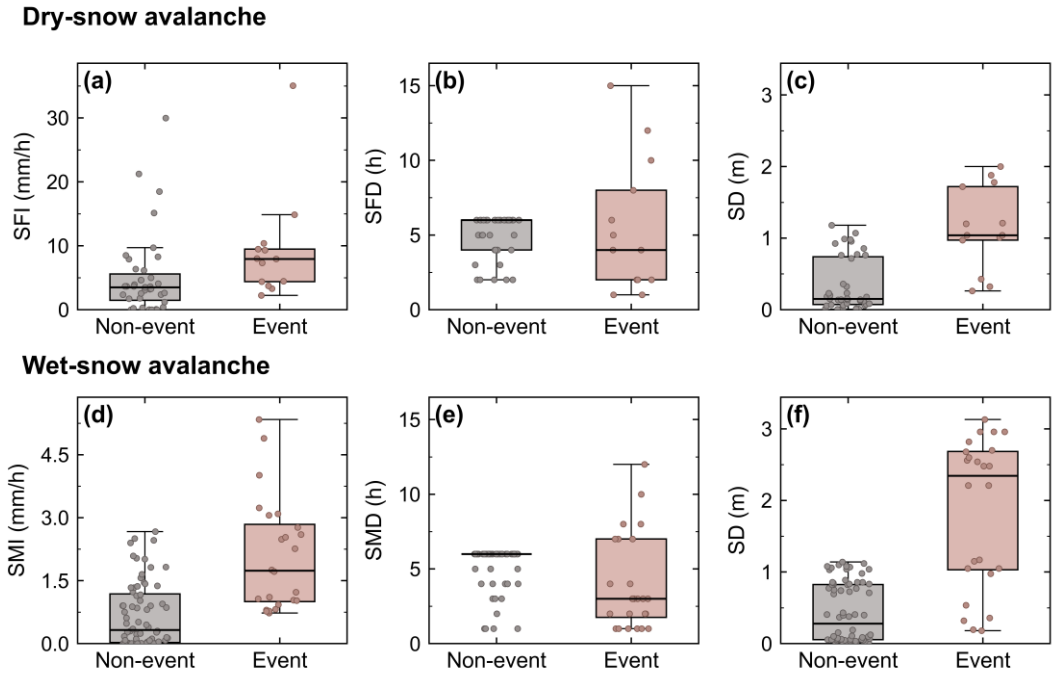
Thank you for this suggestion. We have incorporated Fig. R1 into the revised manuscript as Fig. A1 in a new Appendix A and added a corresponding reference in Sect. 2.4.

Changes in the revised manuscript:

The distributions of the predictor variables are now presented in Appendix A as Fig. A1, with a corresponding reference added to Sect. 2.4. More details are shown in Sect. 2.4 (lines 154–155) and Appendix A (lines 422–427) of the revised manuscript:

"The distributions of the predictor variables for positive and negative samples of both avalanche types are presented in Fig. A1." (Sect. 2.4, lines 154–155)

"Appendix A: Distributions of predictor variables" (Appendix A, line 422)



"Figure A1. Distributions of predictor variables for avalanche events and non-events. Panels (a–c) show SFI, SFD, and SD for dry-snow samples, and panels (d–f) show SMI, SMD, and SD for wet-snow samples. Boxes indicate the interquartile range, horizontal lines indicate the median, whiskers extend to the most extreme observations within 1.5 times the interquartile range of the lower and upper quartiles, and points represent individual observations." (Appendix A, lines 424–427)