Dear Anonymous Reviewer #1,

The authors would like to express their gratitude for your comprehensive comments. We acknowledge the feedback regarding writing style, table formatting, and figure layout, which will be applied after the comment of Anonymous Reviewer #2. We would like to provide a brief response to specific content-related comments:

1. Terminology: Danger Zone and Shadow Zone: We agree that the usage of these terms lacks clear definitions and coherence. Therefore, we also find it necessary to revise the use of these terms and provide a clear definition.

2. The local weather station used (l. 89-90) is a relatively cheep Holfuy-Station installed 2m above ground. The temperature senor has a radiation shield. Details are given in https://holfuy.com/de.

3. Temperature correction (l. 113): We apologize for the inclusion of this text sequence from an earlier draft. No temperature correction was applied to the local weather data.

4. Snow depth elevation correction (l. 119): The data utilized in this study originated from an unpublished study conducted by the SLF. The snow depth measurements were obtained through extensive LIDAR measurements using helicopter surveys, where in the end an accumulation field could be calculated. Hence, a very detailed actual snow depth distribution was received for the used time period.

5. Methods by Geopraevent AG (l. 146-150): The methods employed by Geopraevent AG are not intended for public disclosure and are subject to confidentiality agreements. As a result, we are not authorized to publish sensitive data or descriptions. We will provide a more detailed explanation of the public disclosure in the text to ensure complete transparency.

6. Activity parameter A (l. 346-349): The frequency analyses can display the cumulative or the non-cumulative distribution of the rockfall volumes. These distributions are usually fitted by a power law for the volume range where the inventory is exhaustive (e.g. Gardner, 1970; Hungr et al., 1999). Then the spatio-temporal frequency F of rockfalls bigger than a volume V can be expressed as:

$$F = A(V_0)(\frac{V}{V_0})^{-B} \qquad (1)$$

Where A is the frequency of rockfalls with a volume bigger than V_0 (an activity parameter) and B is a uniformity coefficient, which reflects the decrease of the frequency when the volume increases. V_0 is the minimal value of the considered volume range or a minimal volume of interest, which depends on the context of the analysis. See Loew et al. 2021.

Thank you for your valuable feedback, which will significantly contribute to improving the clarity and accuracy of our manuscript.

Sincerely,
The Authors