

Reply to Editor's comments

We are grateful for quick response to our major revisions from referee Dr. Karsten Müller and editor Dr. Masashi Niwano. Our responses to Dr. Niwano's comments and corrections are found below. Editor comments are displayed below in **bold**, author responses are in standard text.

L. 173: “~ AAI represents the sum of all observed avalanches ~” -> “~ AAI represents the total number of observed avalanches ~”

Thank you for this suggestion. The sentence now reads:

The daily AAI represents the total number of all observed avalanches, with each individual avalanche's contribution to the daily sum weighted based on the avalanche's destructive size and trigger type.

L. 190: “We based our decision to use 0.4 as the threshold to differentiate between low and high activity days on ~” -> “The decision to use 0.4 as the threshold value to differentiate between low and high activity days is made based on ~”

We appreciate the editorial suggestion to modify this sentence. We rearranged the sentence to hopefully address the editor's suggestion while still maintaining the active voice. The sentence now reads:

Knowledge of Svalbard's avalanche regime (where avalanche activity is generally more limited relative to other locations) and an analysis of the daily AAI distribution (Fig. 3) formed the basis for our use of an AAI value of 0.4 as the threshold to differentiate between low and high activity days.

L. 283 & 284: “non-avalanche” -> “no observed activity”; Consider consistency of the choice of a technical word throughout the manuscript. * “non-avalanche” is used in L. 193; however, it is OK in this context.

Thank you. The sentence comprising lines 283 and 284 now reads:

Precipitation at the Svalbard Airport AWS is greater on high activity days than on low activity days and days without observed avalanches but does not statistically differ between avalanche days and days without observed avalanches.

L. 498: “avalanche cycle” -> “high activity day”?

Thank you! Yes, we missed this one. The sentence has been changed to read:

One Type 9 (W+NWc) high activity day contained only dry avalanches, however, indicating this synoptic situation is not necessarily diagnostic of wet avalanche activity.

Please note the only other change to the manuscript is an adjustment in the acknowledgements to include the editor.