I would like to thank the authors for the additional effort they put in the revision of the manuscript. Readability and completeness were much improved. I particularly like section A.3 which is now very detailed and comprehensible. I have only some minor additional comments (the page and line number refer to the latest manuscript version with track changes).

Point comments

L55: I find "after accounting for elevation" a bit odd. Do you mean trends of the same elevation bin differ amongst regions?

L145-146: I don't understand this sentence. Why is synthesizing studies into a common Alpine view relevant for providing snow cover information at the regional scale?

L331-332: I'm not sure if I understand this correctly: you tested the clustering with 2 – 8 PCs, right? It's a bit confusing because a couple of lines above, you write that you only retain the first five PCs.

L373-374: Why do you only filter time series based on the months April and May?

L390-391: You state that GLS performed better than OLS (but only for a small model fraction). But this would already justify the application of GLS – or not?

L540: Trends were not discussed yet → I would rephrase the beginning of this sentence

L547: The term "station" might be ambiguous here. It refers to snow stations, right? And not meteorological stations that measure e.g. air temperature and precipitation.

L568-571: I'm still struggling with this sentence. Also because trends have not been discussed.

L701-703: Do you have an idea what could cause this difference?

L704-705: I'm confused by this sentence. Do you mean that in terms of absolute values, your study and the one from Bach et al. (2018) do not agree?

L718: I would replace "spatial and elevation" by "horizontal and elevation"

L727: I would be careful with the statement "their significance is limited for hydrological applications" because higher elevations typically store more snow than lower elevations (hence the 0.7% can be misleading)

L794: Are depth of snowfall (HN) not used at all in this study? Somehow, I had the feeling they were used for quality control of the data. Or were they only processed for the harmonized data set?

L892: I guess some horizontal distance was used to select appropriate stations, right?

L965: What does "halving distance 250 m" mean?

L994: What does "non-zero true values" mean?

L1000: This sentence is oddly stated: How can the gap filling be unbiased with an overall non-zero daily bias?

Stylistic comments and typos

L228: "merged to" → "merged with"?

L235: "used for the" → "used from the"

L283: "some sources ended some date in between" → "some sourced ended in between"?

L360: "made sense" → "are meaningful"

L491-493: This sentence is still a bit hard to read. Maybe one could write: "and see if an additional third cluster would emerge (as in the north)…"

L770: "gridded area" → "gridded product"

L786: remove "one of those" or write "SCD and maxHS are amongst indicators least affected"

L976: "Visualization of some steps of the gap filling algorithm."

L1226-1227: change to "which includes scripts for the following tasks: reading in different data sources, performing all data pre-processing, quality checking, gap filling and statistical analysis."

Figures and tables

Figure B1: The figure caption is maybe missing

Table B2 → caption: correct "Empty cells no stations with…"