

Report #1

Authors: Authors are thankful to the reviewer for the thoughtful comments. As suggested, we have included a brief description of trend analysis with suitable references. We are hopeful that the Reviewer and Editor would find the updated content responsive to the valuable comments/suggestions by the reviewer.

I think the revision made many points much more clear.

What I am still missing a bit, is more insight into trend analysis based on the 18years long period of observation - this should be mentioned and discussed more detailed in the text.

Response: As mentioned by the reviewer, we have now added a short description about the linear trend analysis (LIN, TS and MK) in 2.3 Methodology section along with relevant references.

As for chapter 3 - the changed structure is better for readiness, but my previous point regarding discussion of the results was not reflected - as can be see in pdf with tracked changes ...

I am not sure about the point "Does the author give proper credit to related work and does he/she

indicate clearly his/her own contribution?" - I cannot see any reactions from authors' side.

Response: The conclusion section summarizes the findings over the Himalayan region which is in consonance with earlier studies as mentioned in the manuscript and cited references. Authors had tried to highlight altitude-wise variability and trend analysis of snow cover using suitable graphs and tabular data to emphasize importance of the region in terms of significant changes in snow cover in recent decades that warrant further attention and analysis of snow cover dynamics vis-à-vis climate change (temperature change).

Authors: Authors are thankful to the reviewer for the invaluable comments. We have revised the manuscript as per the suggestions. To make colour figures friendly and accessible for readers with colour vision deficiencies (CVD), we have now updated the figures with necessary adjustments in colour using the given colour simulator and as per the guidelines of the journal,

We are hopeful that the Reviewer and Editor would find the updated content satisfactory.

Report #2

Authors: Authors are thankful to the reviewer for the suggested corrections and thoughtful comments. The formatting of data and units have been made to be consistent along with other additions/corrections as suggested by the reviewer. We are hopeful that the Reviewer and Editor would find the updated content responsive to the valuable comments/suggestions by the reviewer.

Dear authors,

here are some comments that I think will improve the quality of the manuscript:

Line 43: The year of the citation should be in brackets ("2021")

Response: We have made the correction in the revised manuscript, as suggested by the reviewer.

Line 44: "Except for one exception" should be "With one exception", if that is what you meant.

Response: We have made the correction in the revised manuscript, as suggested by the reviewer.

Line 55: Two times "various types", I suggest to remove it in this line. And don't you mean geomorphologic parameters instead of geomorphic?

Response: We have made the change in the revised manuscript, as suggested by the reviewer.

Line 59: Rewrite the sentence to "... at relatively coarser temporal (monthly) and spatial (5km) resolution (Hall, Riggs, ...".

Response: We have revised the sentence in the revised manuscript, as suggested by the reviewer.

Line 63 (onwards): I would suggest using the unit Kelvin (K) for temperature according to the International System of Units (SI). Especially when you describe trends or developments, "K/year" is much more common than "°C/year". Also, the format should be consistent over the whole manuscript (sometimes there is a blank, sometimes none).

Response: We are thankful to the reviewer for this suggestion and we have made the formatting consistent (number and its unit, without space) across the manuscript. As most of the cited studies had used °C for the temperature related data, we have chosen to keep the same for consistency throughout the manuscript.

Line 85: Add a "+" sign to both values.

Response: We have made the correction in the revised manuscript, as suggested by the reviewer.

Line 98: Use "elevation" instead of "DEM".

Response: We have made the correction in the revised manuscript, as suggested by the reviewer.

Lines 103-104: Adapt font size.

Response: We have made the correction in the revised manuscript, as suggested by the reviewer.

Line 147: Don't you mean "altitude-wise variation"?

Response: We have made the correction in the revised manuscript, as suggested by the reviewer.

Line 159: Redundant information, use either "collection 6, product MOD10CM" or "MOD10CM v6".

Response: We have made the correction in the revised manuscript, as suggested by the reviewer.

Line 162: You should also explain the other possible values ranges of the product, also explain which layer from the Hdfdataset you are using.

Response: We have added the name of layer and range of values in the revised manuscript, as suggested by the reviewer.

Line 171: Better use "accumulation season" instead of "growing".

Response: We have made the correction in the revised manuscript, as suggested by the reviewer.

Line 211 onwards: I suggest to use the term "snow coverage" when directly speaking of percentages.

Response: We have shown snow cover in percentage for consistency across the manuscript.

Line 220: I suggest using "... decreases with altitude" instead of "reduced with altitude".

Response: We have made the correction in the revised manuscript, as suggested by the reviewer.

Line 240-241: Better use "it is found that the variability is minimal".

Response: We have kept the suggested sentence as it is.

Line 251: Remove one of the doubled brackets.

Response: We have made the correction in the revised manuscript, as suggested by the reviewer.

Line 263: Use "km²" instead of "Km²" and add space.

Response: We have made the correction in the revised manuscript, as suggested by the reviewer.

Line 280: Use the same format as above "(MK, Mann-Kendall statistics; ...)".

Response: We have made the correction in the revised manuscript, as suggested by the reviewer.

Line 334: I would not use the word "better" since longer time series are requested.

Response: We have made the correction in the revised manuscript, as suggested by the reviewer.

Line 545: Can you introduce the abbreviation SCPC?

Response: We have made the correction and added the abbreviation for SCP in the revised manuscript, as suggested by the reviewer.

If you incorporate these changes, I'll see the manuscript ready for publication.

Authors: Authors are thankful to the reviewer for the list of suggested changes. We have revised the manuscript as per the suggestions. To make colour figures friendly and accessible for readers with colour vision deficiencies (CVD), we have now updated the figures with necessary adjustments in colour using the given colour simulator and as per the guidelines of the journal,

We are hopeful that the Reviewer and Editor would find the updated content satisfactory.