

Dear Editor, Dear Authors,

I would like to acknowledge the work done on the manuscript. All my concerns have been satisfactorily addressed (either by incorporating my recommendations or by clear responses). The additional text and figures improve the manuscript. I have only a few remaining minor points, which are listed below.

Best regards,  
Adrien Michel

I fully agree with the extended argumentation on the contradiction between non-linearity and the use of a linear indicator (%/°C) to facilitate interpretation and comparison between massifs and with other studies. I appreciate the more detailed analysis between massifs, which 1) confirms the main results and 2) strengthens the analysis.

I would only recommend adding some details on the PCA. It is not clear to me on which sets of variables the PCA is performed. The two references given did not allow me to fully understand. Just one or two sentences explaining exactly on which data set the PCA is performed would be very helpful.

Finally, in the conclusion (l.628) you say: "[...] in this region, a 10% increase of precipitation, as suggested by many climate projections over the eastern regions of this range, could compensate for temperature increases on the order of about  $< 1^{\circ}\text{C}$ . " However, the only references I can find in the text are on line 96: "an increase (decrease) of precipitation by about 10% for the eastern (western) regions during winter and spring (Amblar-Francés et al., 2020)" and on line 479: "Snow sensitivity in the easternmost areas could decline during the winter because of a trend for an increase of about 10% in precipitation in this area (Amblar-Francés et al., 2020)". A single reference is not enough to state: "as suggested by many climate projections". You could add some references or rephrase this sentence.