

We thank the editor for the review and the constructive comments! All editor comments (in italics) are addressed below.

*Line 30: “fSCA is also parameter in hydrological models to scale water discharges in the different model grid cells managing in this way appropriately basins water supply” – add “a” between “also” and “parameter”; the second half of the sentence “in the different model grid cells managing in this way appropriately basins water supply” is unclear as written. Maybe something like “scale water discharges appropriately to help manage basins water supply”?*

Thanks. Changed.

*Line 79: “Snow depth data at these high resolutions now allow to statistically analyze spatial snow depth patterns for various purposes” – missing a word between “allow” and “to”*

Rewritten.

*Line 381: Change “(about 17 % respectively 45 % larger)” to “(about 17% and 45%, respectively)”*

Changed.

*Line 403: Similarly, change “12 % respectively 38 %” to “12% and 38%, respectively”*

Changed.

*Both reviewers indicated that it was unclear from the text whether a sigma snow depth parameter derived at peak of winter could be used to develop an fSCA curve throughout the season. The text is improved with the removal of “peak of winter” to describe fSCA and in the conclusion (lines 475-487), but I suggest additional explanation in the introduction may help reduce any confusion as readers go through the paper (e.g. at line 74, at the end of the paragraph where the parameter is introduced).*

We added additional information on a seasonal model implementation at the end of the introduction.

*The summer terrain parameters are defined in section 3.3, but a discussion on the variability of those characteristics in the pooled data is given in section 3.1. Is it possible to rearrange the text so the parameter definition comes first?*

We agree and put Section 3.3 at the beginning of the Methods section.