We thank the reviewer# 1 for the review and the comments. All comments (in italics) are addressed below (in bold).

This revision is greatly improved. I have some minor points:
Thank you very much for your second review.

10 It is not clear what these errors respectively refer to.
We rewrote the description of the data sets and errors.

38 Were any of these fSCA parameterizations *not* heuristically developed? What is the intended point here?
We rephrased this to focus on the heuristic $tanh$-form for $fSCA$ from Yang et al. (1997) a form which was later theoretically confirmed by Essery and Pomeroy (2004). In fact, the parameterizations of Swenson and Lawrence (2012) and Niu and Yang (2007) were empirically based.

43 "allowing empirical parameterization of"
Thanks. Changed.

129 Reference to Eq. (3) should be (2).
Corrected. Thanks.

166 "computationally efficient"
Corrected. Thanks.

Table 2 Spatial coverage for the camera is incorrect.
The spatial coverage for the camera data set of 931 km^2 is correct and was obtained by summing all valid 1 km^2 grid cells over the 5 seasons. This is described in Section 3.3 and is referred to in the caption of Table 2.

321 "after snowfall events"
Corrected.

327 worst overall performances"
Corrected.

Figure 8 The Swenson model results have been added in revision and listed at the end of the figure legend; this would make more sense above "camera" and "Sentinel". Putting the figure letters in the lower left would avoid overlap with data points in (c). I don't understand why the last sentence has been added to the figure caption.
We changed the order of the legend entries (as well as for Fig. 4 and 5) and put the figure letters in the lower left corner. The last sentence of the figure

caption was removed. It appeared due to a copy error. We apologize for this.

Could much better performance of the Swenson algorithm be obtained by simply changing the Nmelt parameter? (I haven't checked, but max would seem to make more sense than min in the denominator of Lawrence et al. equation 8.3)

We evaluated the Community Land Model (CLM5.0) $fSCA$ algorithm as it is described in Lawrence et al. (2018) and which is based on the Swenson and Lawrence (2012) algorithm. We have not checked if modifications of the presented algorithm implementation would improve its performance.

418 "likely also due to"
Corrected.

457 "poorer than those"
Corrected.

References

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G. Y. Niu and Z. L. Yang. An observation-based formulation of snow cover fraction and its evaluation over large North American river basins. *J. Geophys. Res.*, 112(D21), 2007. doi: 10.1029/2007JD008674.

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