

Interactive comment on “Spatial sensitivity analysis of snow cover data in a distributed rainfall–runoff model” by T. Berezowski et al.

Anonymous Referee #1

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The paper addresses an interesting scientific issue and is certainly appropriate for HESS. There is a huge amount of information presented in the paper; the question is if this is presented in such a way that it is readable for most of the readers of HESS. The paper contains numerous abbreviations and is therefore more difficult to read.

Comments: Figure 3 shows as well numerous lakes, which are present in the basin. In the paper there is no information how these lakes influence the hydrology in the basin. Are the lake levels and discharges regulated in reality and how is this modelled using WetSpa.

Snow accumulation was not calculated, but replaced with the input SCF. SCF is just a ratio of the area, but it's for me unclear what the magnitude is of k_{snow} and k_{rain} .

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In Fig. 6 the comparison of measured and calculated discharge is shown. It looks that the calculated discharge is underestimated. Perhaps discuss this and give reason: accuracy of Gauging station, too high actual evapotranspiration, or other ..

Fig. 7 should be described in the text a bit more, what are the highlights and why do I see a pattern for the mean simulated snowmelt.

Figure 9 should be described in the section on the study area.

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