

Dear Reviewer,

Thank you very much for your feedback. We are pleased that you like our work.

Regarding your two suggestions we are confident that we can address these issues in a revised version:

*I am missing a short section at the start of the modelling methods where you lay out the complete model chain, all domains on one fig, vertical levels, parameterisations used, simulation duration, and integration time. [...]*

1. Concerning the overview of the experiment and model setups: we have already planned, given the feedback from the other reviewers that we got so far, that it is not entirely clear how the different domains are set up, how the models have been used and we think it is very important to show exactly what has been done and why. We will condense all the information which is currently too much scattered throughout the manuscript.

*To me the authors' use of the term Virtual Reality, sounds almost like it should have a Trademark (TM) after it, and suggests that something completely new is being done by running a catchment simulation – which we know is simply not true. I would suggest at least not mentioning this term as much.*

2. The overuse of the term “Virtual Reality” is certainly obvious and can be corrected easily. In most cases it is not necessary and “simulation” will indeed be sufficient.

With kind regards,

The Authors