Interactive comment on "Presentation and discussion of the high resolution atmosphere-land surface subsurface simulation dataset of the virtual Neckar catchment for the period 2007–2015" *by* Bernd Schalge et al.

Anonymous Referee #2

Received and published: 20 April 2021

The paper titled "Presentation and discussion of the high resolution atmosphere-land-surface-subsurface simulation dataset of the virtual Neckar catchment for the period 2007-2015" introduces a comprehensive simulation of the land/atmosphere using the TerrSysMP dataset over the Neckar catchment between 2007-2015. My first impression of the paper was that indeed the authors have put in extensive work to create a comprehensive virtual reality of the Neckar catchment. The methods are comprehensive and the results are sufficiently developed. However, I still am left with the question

of what is this data going to be used for beyond the work done by the authors. From my understanding, a publication in ESSD should be a dataset that one could expect to be used extensively by the larger community. If this covered the entire country or Europe then that would be a different story, but I just don't see it as is. I still believe the work should be published but the paper would greatly benefit by putting it all in a greater context. I suggest the discussion provide a much more detailed overview of what this data could be used for and why it is necessary to have a unique dataset instead of just having each researcher rerun the simulations. In essence, it would be nice to know what this dataset could provide the larger scientific community 5-10 years from now. Unless that argument is compelling, it is hard to argue for the need for this dataset to be published.

Interactive comment on Earth Syst. Sci. Data Discuss., https://doi.org/10.5194/essd-2020-24, 2020.