

Public justification (visible to the public if the article is accepted and published):

The manuscript and dataset present a very comprehensive case for ecohydrologic studies. Some revisions are required as stated to the authors directly.

Additional private note (visible to authors and reviewers only):

Dear Dörthe and co-workers,

I am sorry to keep asking for some revisions. Please be assured, that I really do not take it lightly to guide the process of publishing your data.

Dear Conrad,

Please find below and attached our 4th round of revision. All revisions were “with minor comments”. Again, we tried to respond to and address all comments carefully. Some of these comments were new and not raised in the 3 rounds before.

In addition we incorporated all the comments and suggestions received during our phonecall and subsequent email from the EiC. In summary:

We have heavily revised the data sheet and the meta data file.

We revised Tale 2 in the manuscript.

We revised Figures 2, 3 and 4. We revised the captions for Figures 5 and 6.

We also incorporated all final comments by the EiC and the final comments (via email) by yourself. We would like to thank the EiC and yourself for your time and efforts with our manuscript,

kind regards,

Doerthe Tetzlaff on behalf of all coauthors

I have discussed with other editors in ESSD and they too find it worthwhile to not simply waive the manuscript.

** this might be a “translation” issue but we are stunned that the Editor suggests that this paper would be “waived” in any way considering this is the 4th round of revision!

It appears that we have to become clearer in our submission guidelines, what we expect a data publication to be like and how they fill the niche between the documented dataset publication on a repository and the scientific papers arising from the data.

** we agree.

For the repository, I simply wanted to make sure that you double check our requirements

https://www.earth-system-science-data.net/policies/repository_criteria.html and the different links in both, the manuscript and your repository pointing to the old version are updated.

** we have done this.

It appears that I caused some confusion about the data description.

** we agree.

The misunderstanding might be, that the dataset itself requires a technical description which enables other researchers to technically understand what is to be found in the dataset and what is behind each of the data values. In that terms the "readme lines" have been much appreciated and went into the right direction and should be extended to really clarify all the tables. Complementary,

the ESSD manuscript can remain at the current level of detail summarising the scientific value of this dataset. And it makes it much easier to link to specific parts in your dataset in L154ff.

**we have done this. As with the editor's other comments, the authors have further elaborated on the header names and descriptions which additionally fulfil this request.

(I still neither technically nor aesthetically understand why the repeated citation of the whole dataset is chosen).

** corrected as this was based on a misunderstanding in the first round of reviews.

Since your data repository did not curate your submission, it is unfortunately at my side now to ask you for a technical description of your data. Basically the readme can include and extend the 19 lines suggested earlier plus it should clarify the technical content of each sheet and each column. This includes to decipher the chosen abbreviations etc. and is a basic requirement of the FAIR principles.

** addressed.

Fig. 3: Thank you for the clarification. Again, I might have sparked confusion: My issue in the first place is that the plot comes in rather poor quality so that I cannot see some of the details. From what I can read, there are more line colours than in the legend. I suspect that the green lines are the throughfall collectors in Forest A? Is precipitation Berkenbruck actually throughfall precip (see classification in Fig 2)? I am ok with weekly box plots, but I suspect that the plot will be much easier to read when the large whitespaces left and right are dropped. Moreover, I respect your decision to leave Fig 3 and 4 as separate plots – although I still think that the arrangement as in Fig 5 would be easier to read.

** we revised fig 3 and fig 4. The caption in fig 5 was clarified.

Tables: I could not find any link to the tables in your manuscript. While table 1 clearly can be linked in L128, I am not sure if table 2 is really required as substantial part of your manuscript. Since most of its content is depicted in Fig 2 it could become an appendix table? Or maybe simply a file/sheet in your dataset?

** included now (but again it would have been helpful to receive this comment / request in round 3). As in none of the previous rounds neither the editor nor the reviewers wanted us to remove table 2 we respectfully decided to leave that table in.

I hope that I could resolve some of the confusion which occurred meanwhile and I hope that you find my suggestions helpful and easy to incorporate. I am looking forward to the publication of your paper.

** You probably can not imagine how much we would look forward to ever seen this paper published.