

Hydrol. Earth Syst. Sci. Discuss., author comment AC1 https://doi.org/10.5194/hess-2021-118-AC1, 2021 © Author(s) 2021. This work is distributed under the Creative Commons Attribution 4.0 License.

Reply on CC1

Michael Stoelzle and Lina Stein

Author comment on "Rainbow color map distorts and misleads research in hydrology – guidance for better visualizations and science communication" by Michael Stoelzle and Lina Stein, Hydrol. Earth Syst. Sci. Discuss., https://doi.org/10.5194/hess-2021-118-AC1, 2021

We appreciate the positive comment from Jens C. Refsgaard on our paper. It is good to have a first-hand account how much colour issues in science communication impact people with CVD. From this CC we extract three important points to improve our paper:

- Rainbow color map and red/green color use issues are not only relevant for published papers but also in (online) presentations where the audience has less time to encode data variability represented by color variation. We will incorporate this point in our reasoning against the rainbow color map/redgreen encoding.
- We absolutely agree that progress in this topic could only be done if more and more scientists are aware of the flaws of the rainbow color map and other colour issues. We think this paper contributes to this aim. However, we will revise the manuscript to give clear guidance how awareness can be increased.
- The discrepancy between recommendations and compliance is an important point that is also mentioned by other reviewers of this paper. We will make more precise suggestions for journals, editors and reviewers (and their roles) in order to ban visualizations with the above mentioned colour issues instead of having only (vague) recommendations to avoid those color maps.