

Earth Syst. Sci. Data Discuss., community comment CC1
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Comment on visuals and color maps

Michael Stoelzle

Community comment on "CCAM: China Catchment Attributes and Meteorology dataset" by Zhen Hao et al., Earth Syst. Sci. Data Discuss., <https://doi.org/10.5194/essd-2021-71-CC1>, 2021

Good to see that more and more datasets are published that can be used for hydrological modelling. Would be interesting to see how the community will evaluate this datasets in comparison to former CAMELS datasets.

However, regarding the visualizations some improvements could be recommended. The maps could be improved with larger labels (i.e. increased font size), I cannot read the labels even if i zoom in. Regarding the often used rainbow color map in the mapping, I suggest to follow the suggestions from the journal (<https://www.earth-system-science-data.net/submission.html>, Figure and Tables, 7.). The rainbow color map should be avoided as it is not perceptually uniform. More details about the flaws of the rainbow color map are given in Crameri et al. (2020) or in our preprint available in HESS-D (<https://hess.copernicus.org/preprints/hess-2021-118/>). Changing the color map in the visualizations will improve the data representation of this important study and data set.

Michael Stoelzle

Crameri, F., Shephard, G. E. and Heron, P. J. (2020) 'The misuse of colour in science communication', Nature Communications, 11(1), p. 5444. doi: 10.1038/s41467-020-19160-7.

Stoelzle, M. and Stein, L. (2021): Rainbow colors distort and mislead research in hydrology – guidance for better visualizations and science communication, Hydrol. Earth Syst. Sci. Discuss. [preprint], <https://doi.org/10.5194/hess-2021-118>, in review.