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Interactive comment on "CAMELS-BR: Hydrometeorological time series and landscape attributes for 897 catchments in Brazil" *by* Vinícius B. P. Chagas et al.

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Summary :

The authors present an open-source hydrometeorological data sets in Brazil with geomorphological and human influences attributes. The authors followed the CAMELS standard of data-sets and complemented already existing data sets in USA, Chile and UK (soon). Building such a rich and usefull data sets is time and energy consuming, given the numerous sources of informations to gather, compile and summarize. I would like to thank the authors for making this data set open source and so documented, it will be very usefull for students, the water resources community in Brazil and the re-

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searchers community worldwide. I really appreciate to see that CAMELS datasets become a standard, following Addor et al. (2019) recommandations. I hope that this standard will spread and that national datasets will be built worldwide.

In complement to the 2 previous reviews, I have very few comments. The manuscript is well structured and easy to read. I guess that the increasing use of CAMELS datasets might help to better assess the different sources of informations included. The Figures are very clear and give a good illustration of the information content of the datasets and spatial variability of indices. I particularly appreciated §9 Human intervention indices. These indices are particulary difficult to estimate. Even if they could be rather uncertain, these indices are at least a good basis to classify the level of human influences. These indices might be also usefull while working on Rainfall-Runoff model and understanding model performances/failures.

I clearly recommend this paper for publication in ESSD and encourage the community to use this data sets.

My few comments:

L227 : please clarify "The mean half-flow date".

To illustrate §4, 5 & 9, I encourage the authors to add a figure with Turc-Mezentsev water balance representation, with the runoff coefficient (Q/P) as a function of the humidity index (P/PET) (897 watersheds, 1990-2009 period). This figure would give a good representation of the water balance variability of the datasets, and the impact of some major human influences or uncertainties in the climatic/streamflow observations.

This datasets will probably be very usefull for Rainfall-Runoff model intercomparison studies (recently, Mathevet et al., 2020). In order to give a benchmark of hydrological model performances, I would encourage the authors to calibrate a commonly used conceptual Rainfall -Runoff model (such as GR4J model, freely available, Coron et al. 2017 or any other Rainfall-Runoff model). A very simple modeling framework might

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gives the expected level of model performances on this datasets and the spatial variability of model performances. Providing such a benchmark could slightly improve the paper.

Add the number of watershed represented in the Figure captions (such as indicated in Table 1).

Is there a possibility to improve the density of watersheds in the western part of the country ? I understand that the spatial density of observations/stations is lower and that these stations might have been excluded for some reasons ? But, hypotheses of exclusion might be relaxed in regions where station density is lower, in order to have a more homogeneous spatial coverage of the county ?

Coron, L., Thirel, G., Delaigue, O., Perrin, C., Andréassian, V., 2017: The Suite of Lumped GR Hydrological Models in an R package, Environmental Modelling & Software, 94, 166-171, DOI: 10.1016/j.envsoft.2017.05.002.

Mathevet, T., Gupta, H., Perrin, C., Andréassian, V., Le Moine, N., 2020: Assessing the performance and robustness of two conceptual rainfall-runoff models on a worldwide sample of watersheds, Journal of Hydrology (2020), doi: 10.1016/j.jhydrol.2020.124698.

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