

Earth Syst. Sci. Data Discuss., author comment AC1
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Reply on RC1

Zhen Hao et al.

Author 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-AC1>, 2021

Thanks!

We hope that this work will promote hydrological research in China, especially the code we are about to open source for generating the data for any watershed.

Specific response to the review:

Source code: the source code is now under development in this GitHub repository:

<https://github.com/haozhen315/catchment-attributes-and-meteorology-for-large-sample-study-in-contiguous-china>.

Part of the codes has been made public. We are currently sorting out others. The existing codes may also be updated. The goal is to make the proposed code easy to use and accurate.

Runoff data: The advice to calculate the length of the complete (continuous) streamflow records is great. We will definitely make up for this, which will be added to the JSON file of the Yellow River basins as a new attribute. Regarding the normalization of runoff data, this is mainly for confidentiality reasons. It isn't easy to release the original runoff data in China due to management reasons. The proposed work is the best effort we can make regarding the Yellow River Basin, which can support the development of machine learning models and hopefully much other research. As for the inability to calculate the annual runoff, we may consider adding annual runoff as new attributes to the JSON file.

Specific Comments: Thanks. We will rewrite those sentences, correct the reference style, and redraw some of the figures. The purpose of correlation analysis is to provide an overall understanding of the proposed dataset. Assumptions behind using Pearson's correlation coefficient may not apply to all static attributes. We may change the method of analysis or add an explanation to the current result.

New comments will be submitted once there is further progress.