

Response to editor

ESSD revision

CAMELS-FR dataset: A large-sample hydroclimatic dataset for France to explore hydrological diversity and support model benchmarking

Editor's comments are colored in green.

Editor answer

Dear authors of the CAMELS-FR data paper,

thank you for revising the manuscript and taking the referees' comments into account. As the (relatively minor) comments seem to be addressed satisfactorily, I will not send it out for another round of review again. However, the community comment by Joseph Janssen describes a valid point. It would indeed be good to provide the information about which criterion filtered out how many of the initially possible catchments for the dataset.

As the paper first and foremost refers to exactly this version of the dataset, you could give the numbers for this version and mention in the text that there will be updates of the dataset on the repository and the numbers might change in future versions.

Please revise the paper accordingly to also address the community comment.

Dear editor, thank you for your feedback. To address Joseph Janssen's community comment, we added information regarding the number of catchments selected at each stage of the criteria filters. We have slightly modified the text to add this information:

4 Selection of the catchment set

The second step to build the CAMELS-FR dataset was to select the catchments based on the following criteria: (i) hydrometric time series availability (Sect. 4.1), (ii) limited artificial reservoirs influences (Sect. 4.2), (iii) consistency in catchment areas (Sect. 4.3), (iv) sufficient streamflow quality (Sect. 4.4).

~~The application of the different criteria and analyses described in the following subsections resulted in the selection of~~
Starting from 4667 catchments, the successive application of these four selection criteria resulted in sub-sets of 1313, 1055, 1031 and 654 catchments, constituting the CAMELS-FR dataset v1 catchments respectively.

4.1 Selection on hydrometric time series availability

We excluded catchments with less than 30 years of complete data over the 1970-2021 period. This record length was arbitrarily chosen because it allows robust statistical analyses. A year was considered complete when it had less than 20 % of missing data. ~~This criteria was responsible for removing approximately 70 % of all stations available in France.~~

4.2 Artificial reservoirs influences