

Review of the data set and manuscript “CAMELS-GB v2: hydrometeorological time series and landscape attributes for 671 catchments in Great Britain”, submitted to ESSD by Gemma Coxon et al.

General comments

Many thanks to the authors for their efforts that they put into the creation of this new dataset version. Indeed, this dataset offers exciting new opportunities for hydrological modelling, as stated in the conclusions! I enjoyed reading the manuscript and exploring the dataset a lot and I think that both the manuscript and the dataset have been very carefully and well designed.

My main suggestion for improvement is that the authors could give some guidance on which of the data should be used when there are several options available for the same variable (especially for the hydrometeorological time series), if possible. While the users of the dataset can still use a different option, this would lead to less random decisions and thus more comparability among different studies using the dataset. As the meteorological data used in CAMELS-GB v1 are not updated anymore, I assume that users should use HadUK whenever possible. Maybe this (or some other guidance) can be stated clearly in the text and / or in a read me file.

Furthermore, I think that it is great that in many instances in the manuscript, users are made aware of potential issues and what to take care of when working with the data. For an easier access to all these ‘warnings’, I would suggest to include one table, list, or graphic that summarizes them. I can imagine that users tend to be more aware of all these important points when they are well visible and all listed in one place.

Minor comments regarding the dataset

- When clicking the link to the dataset via ‘Assets’, ‘Datasets’, I ended up at the CAMELS-GB (v1) archive. The link given in the abstract is fine, but currently not clickable (see technical corrections).
- I think that a simpler bulk download option (other than via WGET) would be helpful for users that quickly want to get all the data, without any detours. Maybe, the different directories in which the single files are currently accessible could be made available as zip files. Especially for the timeseries files, this would make things easier.
- For the groundwater wells, I would suggest to also add the latitude and longitude in addition to the easting and northing currently given (as done for the gauges).

Minor comments regarding the manuscript

The manuscript is easy to understand and clearly structured. Below, I list some minor suggestions for improvement in chronological order:

- L47: I would split this sentence, as I think it contains two points. On the one hand, an increasing number of LSH datasets, and on the other hand large LSH projects such as Caravan that would also not be possible without the FAIR principles.
- L57: The catchments of CAMELS-GB are not only part of Caravan, but also of EStreams. This could be added here, alternatively, I would take out the plural form ‘datasets’.
- Figure 1: I would suggest to add the full words to the titles of b) and c) and I think it would be easier to grasp the figure if the variable itself was noted again on the axes of the plots (instead of just the dataset with the units).
- Caption of Figure 1 as well as L116: I would stick to ‘precipitation’ instead of using ‘rainfall’.

- L169: How did you handle the shifts from and to daylight saving time? This could be added here.
- Figure 2: In b), it could be helpful to add to the axes labels that this is the fraction of wet hours, so one does not have to search for it in the caption first. In c), 'Elevation' should probably not be capitalized, and I would suggest to give the unit of the elevation as m a.s.l. instead of just as m.
- L294: I appreciate that you clearly state that the PET data without interception loss were used for the calculations. I think this paragraph would benefit from an explanation why you decided to do so.
- L323: I think it would be better to write something like 'a trend for increasing urban land cover' instead of just 'increasing land cover' here, as the latter may be confusing when read without the preceding sentence.

Technical corrections

- L29, L157, L448: These links are currently not clickable (I think because parts of the link are not linked).
- L37+: Since 'Caravan' is not an abbreviation, the name of this dataset is not capitalized.
- L45: 'finable' instead of 'findable'.
- L85: I think this 'is' should be a 'was'.
- L89: Subtitle should not be in title-case, and you write 'timeseries' as one word elsewhere.
- L130+: space missing before 'km'. Happens also for other units, e.g., L144 before 'mm'.
- L300: 'half low date' instead of 'half flow date'.
- L399: The hyphen after 'high' should be a dash.
- L418: Should this then be 'abstraction and discharges data'?