

The authors have constructed a much-needed dataset on the systematic collection of data on Italian river catchments. This unprecedented dataset at the national scale provides the most complete catchment attributes based on climate, geomorphology, soil, and land use features. This dataset opens opportunities for hydrological studies at regional and national scales such as the control of catchment attributes on the river flows. While the results look convincing and nicely presented, I have several comments that might be helpful for the authors to further improve the manuscript.

Line 28, is the name CAMELS an acronym? If so and if it is the first time you used it, please, provide the full meaning of it then you can use only the acronym in the rest of the text. There are several acronyms without the meaning at their first use (e.g., SIMN [line 76], VAPI [line 94], ...), please check and provide the meaning.

Lines 27 to 53, you started with examples of the dataset at the countries' levels. After that, you mentioned an example at the global scale (line 36), and then you returned with an example of Italy. To be consistent, I will suggest that you start with a global scale example, followed by examples at the countries' levels.

Line 32, for all the website links provided in the text (e.g., lines 82, 94, ...), please, could you mention the date at which these sites were accessed. This suggestion is valid for all the links in the rest of the text.

Lines 68 to 73, this part need to be rewritten. Please, provide a clear objective for each section. Things seem to be merged. In the text, sections 3 and 4 present the same things, even though they are from different sources. To allow readers to better understand the article, I suggest that section 3 presents all the datasets used to derive the different attributes. Section 4 highlights the methodology used to derive those attributes and finally, another section presents all the derived attributes from climate, geomorphology, soil, and land use features.

Line 120, I found this text " The database features are presented in two different sections. Section 3 discusses the determination and validation of the attributes depending only on the landforms. Section 4 presents various other features mainly obtained through spatial averaging of rasterized information. " redundant compared to the text at the end of the introduction part.

Line 124, section 3.1. What motivates the choice of SRTM and not the other DEM such as Multi-Error-Removed Improved Terrain (MERIT) or Forest And Buildings removed Copernicus DEM (FABDEM) which are considered as digital terrain model (DTM) while SRTM is a digital surface model (DSM) that includes trees and other artifacts? For catchment

delineation or geomorphology study in general, elevation is a crucial parameter. DSM refers to the upper surface of natural and built or artificial features of the environment such as buildings, artificial features, and trees while DTM represents the elevation of the Earth's surface with all natural and built features removed.

Line 185, the authors talk about 61 geomorphological attributes in the text, but the table presents almost 36 attributes. How can you explain this?

Line 189, the name of the table should be moved above the table not below. Please, check for the tables presented in the text.

Figure 5, Fig. 5a stands for the percentage of clc1, not the inverse. Please correct the caption.

Line 330, is there a difference between mean monthly rainfall depths and mean monthly precipitation? If there is one, please explain the meaning of each term.

Line 231, some typological errors in the sentences need to be corrected. Insert a comma after this sentence "To provide a robust set of catchment features ". Also in other sentences, such as in line 381, correct the word "thr in the". Please, cross-check the entire article.