



Comment on **essd-2021-44**

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Community comment on "A biomass equation dataset for common shrub species in China" by Yang Wang et al., Earth Syst. Sci. Data Discuss., <https://doi.org/10.5194/essd-2021-44-CC1>, 2021

In the present study, the authors developed the first biomass equation dataset for common shrub species in China. This impressive dataset is systematic and comprehensive, providing the critical base for the terrestrial ecosystem biomass and carbon sink capacity evaluation in China for future studies.

Here I have some comments:

- The dataset needs more clarifications. 1) in the "Description" page, there are two identical symbols named "n" with different meanings, and two identical symbols named "R2[R]" with different meanings. 2) in the "General" page, what do the "xx" and "mx" mean? 3) in the "Equation" page, symbol "H", "C", "Ac", "D", and "M" have not been defined. 4) the year of the raw data acquired should be mentioned for each equation. 5) the longitude and latitude, or the longitude and latitude range in which the raw data was collected and corresponding equation was generated, should be provided. The last two points are important, because the journal has one principle for the data description: "Specify the temporal and geographical scopes, and temporal and spatial resolutions of your data wherever appropriate".
- The text to explain the dataset needs some revisions. 1) line 40, "Representative researches" should be "Representative researches in China". 2) line 100, it is good if a schematic diagram could be presented to show the difference among the three types of shrub species. 3) the style of parameters in functions should be 4) line 148, the word "Consequently" can be replaced by "Collectively". 5) Line 176, "The sample size varied from 5 and 312 shrubs", this means in some samples data cannot be split into 10% and 90%, and the 90% part cannot be split into 75% and 25% for accuracy test. How many of them? And what's the lowest limit of the sample size which can satisfy the statistical requirement of the recommended method? 6) line 183 and later, "valve" should be "value".