

Earth Syst. Sci. Data Discuss., referee comment RC2
<https://doi.org/10.5194/essd-2021-179-RC2>, 2021
© Author(s) 2021. This work is distributed under
the Creative Commons Attribution 4.0 License.



Comment on **essd-2021-179**

Anonymous Referee #2

Referee comment on "A high-accuracy rainfall dataset by merging multiple satellites and dense gauges over the southern Tibetan Plateau for 2014–2019 warm seasons" by Kunbiao Li et al., Earth Syst. Sci. Data Discuss., <https://doi.org/10.5194/essd-2021-179-RC2>, 2021

The manuscript presents a daily rainfall dataset merged from three different satellite products and ground rain gauge data from the southern Tibetan Plateau for the warm season. The manuscript is well written and provides a relevant high-quality data set. I only have few minor comments.

Specific comments:

Limitation to warm season. Please explain the reasons for limiting the data set to the range of June 10 to October 31. What would be needed for a year round product?

Why does the number of rain gauges vary over the different years? Please add an explanation. Line 74 mentions 440 new rain gauges, but Figure 1 shows less than 400 in each year. Is 440 the number of different gauge locations? Please specify.

Training data set: Lines 157-159 state that the training period is 40 days. Which 40 days were used? Then later (lines 171-173) mention that the training set consisted of 85% of the gauges. Is this the same training data set? Please make this clearer.

Data Availability: Is the underlying rain gauge data as well as the streamflow data publicly available?