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Comment on essd-2022-171

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Community comment on "A global terrestrial evapotranspiration product based on the three-temperature model with fewer input parameters and no calibration requirement" by Leiyu Yu et al., Earth Syst. Sci. Data Discuss., https://doi.org/10.5194/essd-2022-171-CC1, 2022

This manuscript describes an actual evapotranspiration dataset with high spatial resolution, no parameter calibration, and good accuracy, which is particularly important in the context of increased extreme climate hazards. However, this paper needs to further verify the accuracy of its product, which will be more appropriate.

- Based on the Conclusion part, it seems the authors produced ET with a resolution of 3-hour. However, the current validations against the observed ET and ET from water balance are mostly at the monthly or annual scales. For this reason, it is not clear the accuracy of the 3-hour ET data. Therefore, it is suggested that the new product have validations against the observed ET at the 3-hour scale.
- In addition, the authors claim that the new ET product has a good accuracy compared with other ET products. Yet, such a conclusion is also mostly based on the validations at the monthly or annual scales. It is appropriate to compare with other ET products at the 3-hour scale, such as GLDAS and ERA5.

Therefore, it will be more rigorous to add content for validations against observation data of 3-hour and comparison with other ET products at the 3-hour scale.