

Comment on **essd-2021-211**

Anonymous Referee #1

Referee comment on "NESEA-Rice10: high-resolution annual paddy rice maps for Northeast and Southeast Asia from 2017 to 2019" by Jichong Han et al., Earth Syst. Sci. Data Discuss., <https://doi.org/10.5194/essd-2021-211-RC1>, 2021

The authors mapped the first 10m-AsiaRice from 2017-2019 by integrating time-series Sentinel-1 and MODIS data. The rice maps have been compared with several products including agricultural statistics, and the results have substantiated its high quality and resolution of the AsiaRiceMap10m dataset. Their study does provide an accurate paddy rice map, and their job highly benefit the related studies focused on food security, resource management, rice growth, and yield monitoring. The author's study falls closely within the scope of the journal ESSD. The method used in the study is robust. Their findings in the study are interesting and will attract many potential readers in the field. Therefore, I recommend the paper could be accepted for publication in the journal after a minor revision.

The main concerns of mine is below:

- (1) I suggest revising the name of the data set in the title since the dataset proposed in this work covers Southeast Asia and Northeast Asia. You may consider covering more countries or regions of Asia in the future.
- (2) I noticed that the author showed the time series of spectral indices and backscattering coefficients of typical rice planting areas in the manuscript. I suggest that the authors add some figures of the spectral index time series for other land types in the supplement.
- (3) Please explain the meaning of the curve distribution around the Figures 4-6 in their captions.
- (4) I suggest that the authors should add some descriptions about the future development of the rice map data set in the discussion section.
- (5) The map boundaries of Figure 9m and Figure 9p are not the same, please revise Figure 9p.