Comment on essd-2021-34

Anonymous Referee #1

Referee comment on "The RapeseedMap10 database: annual maps of rapeseed at a spatial resolution of 10 m based on multi-source data" by Jichong Han et al., Earth Syst. Sci. Data Discuss., https://doi.org/10.5194/essd-2021-34-RC1, 2021

Rapeseed is a major oilseed crop and an important biofuel, has been increasingly concerned in recent decades for climate change adaptation and mitigation. Its value and importance are increasing, but the information on its distribution and planting area has been rarely. The authors designed a new pixel- and phenology-based algorithm and produced a new data product for rapeseed planting area (2017-2019) over 33 countries at 10-m spatial resolution based on the multiple data. The study is timely and important, and the produced datasets are useful for many purposes.

In general, the paper developed a sound algorithm, produced a new data product for rapeseed planting area over broad regions at a high resolution based on multiple datasets. The results have been carefully validated and have a high F1-scores of spatial consistency in comparing the reliable data in different countries, suggesting the derived rapeseed planting areas should be reliable for use. The paper fits well with the scope the ESSD, therefore, I recommend it to be accepted with some revisions.

The English language need to be improved thoroughly. The authors need check the text carefully to avoid some confusing sentences.

Specific comments:

- It is better to have a name for the datasets, for example, RapeseedPA10m
- In line 21, 'overexploiting fossil fuels will exposure human increasing risks' should be 'overexploiting fossil fuels will expose human increasing risks'
- In line 81, 'This work identified rapeseed planting areas' should be 'We identified rapeseed planting areas'
- The legend in Fig3c is confusing, is it a time range? the caption does not explain clearly either, please use an example to clarify it.