

## ***Interactive comment on “ChinaCropPhen1km: A high-resolution crop phenological dataset for three staple crops in China during 2000–2015 based on LAI products” by Yuchuan Luo et al.***

### **Anonymous Referee #1**

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Accurate crop phenological dataset at the large regional scale is of great importance to various agricultural applications. This paper established the ChinaCropPhen1km, which consists of high-resolution gridded-phenology product for three major staple crops of China, i.e., wheat, maize, rice. Several comments for this paper are listed as follows.

1) As the authors pointed out, the study area of this study (i.e., the China mainland) possesses complex environments and crop planting patterns, diverse cropping intensity and cultivation habits. Therefore, according to previous studies, I suggest the practice of separating the whole study area into sub agro-climatic zones, and estab-

C1

lishing model for each crop type from each zone, might further improve the model's performance and dataset accuracy.

2) Another issue is that how the authors determine the spatial distribution of each crop type. Any crop mask have been used in your study?

3) Besides, the uncertainty of the developed dataset should be further discussed. As the proposed dataset are based on the GLASS LAI, it is suggested that the accuracy of GLASS LAI should also be provided. And the authors had better analyze the impact of the uncertainties of GLASS LAI on ChinaCropPhen1km.

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C2