Comment on essd-2022-263
Anonymous Referee #3


This work reconstructed a historical, annual N fertilizers use dataset in China at 5 km × 5 km resolution covering the period of 1952 to 2018 by integrating improved cropland maps. The dataset is useful for many purposes. Generally the paper is well-written, I have several concerns for authors to improve it before accepting for publication.

1) The Figure 1. Methodology flowchart of nitrogen (N) fertilizer map reconstruction is not detailed enough to illustrate the methods used. Need to be improved by inclisuign the major methods used.

2) Are the spatial pattern of N fertilizers use in each of the major crop types planted in China available? Why not resported in the main text? Are the data are availbale?

3) It is good that the authors compare the datasets wiith previous datasets. It is ture that the newly constructed datasets are different but may need evidence that this data is more robust.