Comment on essd-2022-16
Anonymous Referee #1

Referee comment on "Mapping photovoltaic power plants in China using Landsat, random forest, and Google Earth Engine" by Xunhe Zhang et al., Earth Syst. Sci. Data Discuss., https://doi.org/10.5194/essd-2022-16-RC1, 2022

In this manuscript, authors developed a workflow combining machine learning and visual interpretation methods to map the Photovoltaic power plants in China. This topic is very important to assess the environmental and social impacts of these established photovoltaic power plants. In fact, there are a number of papers on remote sensing target information extraction, the paper is not particularly novel. And, there are some problems in this paper:

1, The introduction is inconformity with the objectives of study. For example, the one and two paragraphs are talking about the Photovoltaic power plants, machine learning, which can be wrote in a more refined way and introduce the main topic quickly. The references in the Introduction section are too limited, the authors should refer more works of relation analysis on deep learning methods, PV power plants and Remote sensing images, about the mechanism of deep learning and remote sensing image extraction of PV power plants, this paper hasn't given more details description.

2, Figure 2 (page 7): the specific meanings of 1,2,3,4,5, and 6 in this figure should be explained.

3, There are too many texts in the discussion section and need to be further streamlined.

4, In addition, did the authors consider how to validate the results? how can we believe the results? e.g. what validation, more specific about ground truthing etc. Without this information, I can not trust the results of this paper.