

Interactive comment on “A 30-meter terrace mapping in China using Landsat 8 imagery and digital elevation model based on the Google Earth Engine” by Bowen Cao et al.

Anonymous Referee #1

Received and published: 22 January 2021

General comment:

Terrace extraction is one of the important applications in remote sensing imagery processing in recent decades. Very few research focuses on terrace extraction in large scale areas. The paper suggested a new strategy that collected national, regional and local training samples that could be applied to large-scale areas. However, the effectiveness of the strategy is needed to clarify (Please refer Specific comments, No. 4).

Specific comments:

1. Since the title of the paper is to classify terrace, the accuracy of terrace should be C1

mentioned in the abstract section.

2. Line 147-148: How did you use the national samples “for training general classification rules and identifying terraces with typical features” in the paper?
3. Line 168-169: What is “the feature number”? Is it the number of training samples?
4. Line 171-172: Is it necessary to collect national and regional training samples instead of only local training samples since you merged the three sample sets and applied each random forest model for each province individually? Please try to apply your model using only the local training samples and compare the results.
5. Table 2, 3; line 214-216: Please clarify your point by describing Statistically significant (P value) of the results of using the two test sample types.

Interactive comment on Earth Syst. Sci. Data Discuss., <https://doi.org/10.5194/essd-2020-157>, 2020.