Comment on hess-2021-614
Anonymous Referee #1


Review report

Thank you for submitting your manuscript on Deep Learning Methods for Flood Mapping: A Review of Existing Applications and Future Research Directions. There are a lot of text should be improved such as introduction, validation and discussion. Therefore, I give some suggestion and question which I hope useful to the author, I give major revision to the author.

1\frac{1}{4}\square It was difficult to see the justification for the need of this research. The literature review is poor. The paper needs to clearly state what are the problems with the existing works (these types of approaches) and what problem(s) this particularly paper was going to address. Without this clearly problem statement readers would have difficulty to see the merit of this paper. The author only lists some references, I did not find the problem with the exist method. The problem of the existing method is not clear. The author should show us deep analysis about the gap between existing method.

2\frac{1}{4}\square A Review of flood mapping or Deep Learning? This is confused for me.
3) The flowchart of the method should be inserted.

4) There were very few discussions of previous studies.

Other comment:

Figure: The resolution of figure should be improved.

Reference:

There are a lot of latest articles that should be updated.