This paper presents a review of the applications of deep learning models for flood inundation, susceptibility, and hazard mapping in a period between 2010 and 2021, leading to reviewing a total of 58 papers. The manuscript is well-rewritten and organized and provides information for international readers. However, two important weaknesses exist; these can both be strengthened relatively easily. (1) The objectives should be better presented. A numbered list of objectives would work better. (2) The conclusions section should be rewritten and further improved to address the objectives. This section should also include the limitations of the current work and suggestions for further research in the future. For example, the authors can suggest a more systematic Bibliometric/scientometric analysis and the use of several well-established metrics for future research. See https://www.mdpi.com/2071-1050/13/15/8261/htm are the references therein.