

## Highlights

### **Varying the Spatial Resolution of LiDAR Derived Elevations to Balance Skill and Computational Costs for Flood Inundation Mapping Applications**

Fernando Aristizabal, Fernando Salas, Taher Chegini, Gregory Petrochenkov, Jasmeet Judge

- Continental-scale flood inundation mapping requires simplifying assumptions
- Utilizing LiDAR derived data from the USGS 3DEP program enhances the skill on flood inundation maps produced from HAND.
- Varying the spatial resolution provides no skill enhancement when evaluated at large scales across three study sites and benchmark datasets.

# Varying the Spatial Resolution of LiDAR Derived Elevations to Balance Skill and Computational Costs for Flood Inundation Mapping Applications

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## Abstract

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**OWP** Office of Water Prediction

## 1. Introduction

Floods are among the most frequent, damaging, and deadly of natural disasters Doocy et al. [1]. The Office of Water Prediction (OWP).

## References

- [1] S. Doocy, A. Daniels, S. Murray, T. D. Kirsch, The human impact of floods: a historical review of events 1980-2009 and systematic literature review, PLoS currents 5 (2013).