**Comment on nhess-2021-275**

Guy J.-P. Schumann (Referee)

This paper describes a DEM-based interpolation method to estimate flood depth from a flood extent, using the HANDS approach and GIS interpolation operations.

I think this paper is generally well written and follows a clear structure. It is technically sound and the method seems fairly straightforward to implement and apply elsewhere.

The authors present the methods and validate their results, so, in essence I see nothing wrong with this paper.

My only concern is that this reads as (yet) another interpolation method for flood depth from flood extent. In my opinion, the authors need to much better justify why there should be yet another method out there. To make this argument even stronger, the authors should do some kind of sensitivity analysis using different DEMs with varying degrees of accuracy.

I do very much appreciate the fact that the authors compare their method to that of Cohen et al but I do not see much difference in performance. Is this correct? This should be explained better.

Other than the comments above, I think this is a valid application paper that could be of interest to the community.