We sincerely thank the editor and reviewers for their valuable feedback and comments during

the initial phase of our manuscript review. We have made every effort to incorporate their

suggestions into the revised manuscript. Below, we outline the key modifications made in

response to the reviewers' comments.

• We supplemented the information related to flood hazard modelling, highlighting key

aspects such as the adopted roughness coefficient and calibration process. Additionally, we

discussed the chosen digital elevation model resolution (5 meters) and its negligible impact

on hazard simulation compared to finer resolutions.

• The Section 2.2.2, Exposure at buildings scale, was reorganised, and additional

information, such as an example of the number of floors distribution, was included to

enhance the clarity of the applied methodology.

• We included additional information about the timeline of the warning system during the

2021 Ahr Valley event at the beginning of Section 2.2.3, Early warning and evacuation, to

enhance the context and understanding of the dynamics and implications of this process in

the occurred event.

• In the Results and Discussion section, we briefly explained the factors contributing to the

equifinality of the warning and evacuation inputs observed in the life loss simulations.

• In the Discussion of limitations section, we emphasised the sensitivity of the LifeSim model

to biases in the hydraulic modelling. Additionally, we included information on the expected

public response in the case of an ideal warning based on the survey findings, and we

justified the generalisation adopted to represent the warning system.

• Other minor adjustments were made throughout the text, including updates to maps and

minor text corrections and rearrangements, to improve flow, coherence, or clarity, as noted

by both the reviewers and ourselves.

Best regards,

André, Juian, Heiko and Heidi