

Dear Dr. van Natijne and co-authors,

Thank you for submitting your manuscript to our Special Issue on the use of Machine Learning in Natural Hazards Risk Assessment. We have received comments from two reviewers who commend the manuscript for its clarity and the account of the difficulties in pursuing Machine Learning for predicting slow deformation but would like to see major revisions made to ensure the manuscript can be accepted for publication. To be considered for future publication in this SI, the following points from the reviewers must be addressed, as you highlight in your initial response file.

- **Providing evidence to support justification in response to both reviewers' comments on the coarse resolution of environmental predictors.** Both reviewers pointed out that the coarse resolution of the environmental predictor data could be the cause for poor performance in the model used by the authors. The authors should provide evidence that the resolution is not too large for this problem and/or that the neural network would address these issues.
- **Justifying the use of the deformation data in this study.** Reviewer 2 points out concerns with trusting the deformation data that was used in this study. The authors should provide evidence as to why the deformation data are suitable for building an ML model.
- **Making a stronger connection to previous studies.** Both reviewers point out Table C.1 and other studies, desiring more detailed comparisons and references of the findings of this study with that of previous studies in the main text of the article (perhaps in the discussion).

Sabine Loos, PhD

Editor | NHESS Special Issue on Advances in machine learning for natural hazards risk assessment