December 12, 2024

Editor-in-Chief

Natural Hazards and Earth System Sciences

Dear Editor,

I am pleased to submit this cover letter regarding the original research article (nhess-2024-102) entitled "How can seismo-volcanic catalogues be improved or created using robust neural networks through weakly supervised approaches?" by Titos M., et al., for consideration in NHESS. We have carefully reviewed the feedback from **all eight reviewers** and greatly appreciate the time and effort they have invested in evaluating our work.

Creating a detailed response letter for this revision process has proven highly challenging due to the number of reviewers and the varied nature of their suggestion, which often overlap or conflict with one another. Furthermore, in our previous response within the discussion forum, we addressed each reviewer's feedback comprehensively.

In this letter, our goal is to highlight that we have made every effort to implement as many of the suggested changes as possible. Rather than responding separately to each reviewer again, we are submitting a revised manuscript alongside a detailed version highlighting the changes compared to the previous version. This approach enables each reviewer to directly assess the scope and impact of the modifications made.

Many of the reviewers' comments focused on improving the clarity of the methodology, enhancing the quality of the figures, and incorporating additional datasets for analysis. In response:

1. **Writing and Structure**: The manuscript has undergone significant revisions, including restructured sections, to improve clarity and readability.
2. **Figures**: All images have been updated to vector formats to preserve resolution and ensure high-quality visuals.
3. **Additional Data**: Despite our efforts to contact multiple observatories and colleagues, only the Canary Islands Volcanological Observatory provided a response. Consequently, we have included data from the 2021 La Palma eruption period.

We hope that these revisions, alongside the provided documentation of changes, meet the reviewers' expectations and adequately address their feedback.

Thank you for the opportunity to improve our work. We look forward to your advice.

Yours sincerely

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