

Dear Editor of Solid Earth,

Please find enclosed to this letter a corrected version of the manuscript “Strike-slip faulting affecting vertical domains of contrasting brittle strength in the upper crust: Insights from analogue models”. Please note that the manuscript has been substantially revised to enhance its quality. In the following, we comment point-by-point how the specific concerns and recommendations of the two reviewers have been met. We have made all the recommendations and changes suggested by the reviewers. Concerning each point, we refer to the place in the track-changes manuscript, where the text has been revised. The corresponding revisions are colored in the annotated manuscript. Below, the reviewer's comments are shown in black, while our comments and replies to the corresponding points are marked in blue.

We are grateful to the reviewers for their constructive feedback, which has significantly improved our manuscript.

Following the most relevant comments, the main changes in the new manuscript are:

1. In response to the reviewers’ advice, we have updated the title to “Strike-slip Faulting Affecting Vertical Domains of Contrasting Brittle Strength in the Upper Crust: Insights from Analogue Models”.
2. In response to the feedback from the first two reviewers, we have refined the description of our model setup. This includes a more detailed explanation of the model construction and our analysis methodology. Furthermore, Figures 1 and 2 have been revised to complement and enhance the clarity of these changes. This ensures a comprehensive understanding of our approach and findings.
3. We have extensively revised the results and discussion sections. This includes updating all figures with model surface pictures as suggested by the third reviewer, and systematically reorganizing the description of the results for clarity.
4. The discussion section has been thoroughly revised in accordance with the reviewers’ suggestions. We have restructured the model discussions and introduced a new segment that delves into the occurrence of fault linkage through the central domain. To enhance clarity, we have incorporated new figures across various sections of the discussion. Moreover, we have updated the figure for the natural example, refocusing it to underscore the potential application of our model results.

Given the substantial modifications made, we hope that our manuscript now aligns with the rigorous publication standards set by the reviewers and Solid Earth journal.

Yours sincerely,

Sandra González Muñoz