

Dear Reviewer 2,

Thank you for your time and for reviewing our manuscript. We have carefully addressed the points you raised and revised the manuscript accordingly. In particular, we have modified Figure 1 to better illustrate the approximate extent of the volcanic forearc, and we have added a brief discussion explaining why our model does not extend to the NOAM–COCO–CARI triple junction. We also mention its approximate location based on Legrand et al. (2025). We believe that these changes improve the clarity and robustness of the manuscript.

This study uses GNSS and InSAR data to examine the deformation at the triple junction where the Cocos, North American, and Caribbean plates meet. The kinematic block model results for El Salvador are particularly interesting for this complex region as they also identify the distribution of the different zones of coupling. As the results are consistent with most of the data, presenting a new kinematic block model for El Salvador is useful for understanding the region. The work appears to be well executed and I have no specific comments.

Just two minor comments:

1. Could you please highlight the Forearc Sliver (FORE) in Figure 1, perhaps by coloring it differently, even if its borders are not be well defined?

We have coloured the approximate extent of the Forearc Sliver and indicated it in the caption. Please note that this figure has also undergone minor changes, as suggested by Reviewer 1.

1. You terminated your IPAL block until 91.8°W. However, based on seismicity, Legrand et al. (2025) have suggested that the Jalpatagua fault may extend westwards to the Tacaná volcano (at ~92.1°W), with the triple junction located close to this volcano (the first of the CAVA). Could you discuss this hypothesis? You decided to place the triple junction further to the east. Why?

Legrand D., Perton M., Spica Z., Jon J., Alatorre M., Peiffer L., Campion R., Valdés C., Caballero-Jiménez G., Vargas-Zamudio K., Espíndola J.M., De la Cruz-Reyna S., 2025: The Magma plumbing system and seismo-tectonics of the Guatemala-Mexico triple junction as revealed by the seismicity of the Tacaná volcano before and after the 2017 Mw8.2 Chiapas earthquake. *Geophysical Journal International*, 242, 1-14, <https://doi.org/10.1093/gji/ggaf167>

Since our data (Fig. 2) only extends to central Guatemala (and the InSAR coverage is even smaller) we are not modelling the triple junction. Therefore, we just extend the end of the Jalpatagua fault towards the west. Note that the Triple Junction is not modelled, neither the NOAM-IPAL boundary (they are left to creep freely). Following your suggestions, we have

added the corresponding explanation in section 2.3.1. (Geometry definition), making reference to the provided publication. Moreover, we have displaced the TJ label in Figure 1 to make it coincide with the Tacana volcano approximately (and we also extended the shadowed area representing the Forearc Sliver to that point).