

Interactive comment on “Seismicity characterization of oceanic earthquakes in the Mexican territory” by Quetzalcoatl Rodríguez-Pérez et al.

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Response to comments by reviewer 2

We appreciate the comments by reviewer2, which have allowed us to improve the manuscript. Overall, we have followed all the suggestions. We highlight in yellow color the changes made to the manuscript. We now give a response to the individual points raised:

Major comments 1. The authors should include more information about their stress inversion results. Namely, I miss plots of the focal sphere with the P/T axes and with

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the optimum positions of the principal stress axes for individual sub-regions. Similarly, it would be interesting to show the Mohr's circle diagrams and focal sphere plots showing the principal stress axes with their uncertainties for individual sub-regions. All these plots are produced by the STRESSINVERSE code used by the authors. If it is too much to include all plot into the main paper, some of them can be included in the supplement.

We included information regarding P/T axes, Mohr's circle, and uncertainties of the principal axes in the manuscript.

2. The Discussion section should be compacted. The authors should discuss only the most interesting and relevant issues. The discussion should mostly be devoted to their results but not to providing an extensive review of results of other authors. The review of previously published results should be in the Introduction section and not repeated again in the Discussion section.

We modified this section of the manuscript.

Minor comments

1. The paper needs some minor improvements of English, see the attached annotated manuscript.

We take into consideration the observations of the reviewer to improve the manuscript.

2. Units of quantities in tables should be specified (e.g. M_0 in Table 1, SH_{max} in Table 4).

We correct tables 1 and 4.

3. Some other minor suggestions are indicated in the annotated manuscript.

We followed the suggestions of the annotated manuscript.