

The manuscript titled „Various lithospheric deformation patterns derived from rheological contrasts between continental terranes: Insights from 2-D numerical simulations” by Renxian et al. addresses the topic of continental collision-dynamics in the presence of multiple terranes using two-dimensional thermo-mechanical numerical experiments.

This is my second round on the manuscript and I am generally happy to accept the changes to the text and the arguments put forward by the Authors. I only have minor comments about the modified text regarding the language that I picked up on and one more pertinent issue with the comparison to natural systems. I will start with this latter:

Adding extra cross-sections and improving the map helped quite a lot with this aspect of the text, but the comparison to South-eastern China still only references a solitary paper from 2009 and gives very little context. I am ever so sorry to write this, but I would strongly suggest the Authors to revisit this section and at least slightly expand on it.

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Minor comments on the language:

Line 76-78: “apply the simulations to better understand on going and past deformation histories of various orogenic belts in the global, especially in eastern Asia”: in the global makes no sense in this sentence. I would strongly suggest rephrasing this.

Lines 133-135: So there is sediment in the model-domain everywhere below 5 km? With the low sedimentation-rate employed, this is probably not a big deal, but I would like a line on justifying this choice of parametrization.

Lines 162-163: Nothing to be done here, I just wanted to note to the Authors, that Now I understand the boundary condition employed. I feel a bit silly that this was unclear for me the first time around.

Line 234: “starts to form folding” I would remove the word form.

Line 243: I would reintroduce the removed “how” into this sentence to make it grammatically correct again.

Line 387: I think influence should be singular here.

Line 391: “chosen” instead of “chose” and “they also have” instead of “they also has” would be the grammatically correct wording.

Lines 392-396: I think “some studies believe” is an inappropriate phrasing. These studies made scientific arguments. Belief has not much to do with that. Furthermore, the authors did not explore different convergent velocities (as far as I know) so stating that “the impact of the convergence rate

almost can be ignored" is just plain wrong. Unless the Authors have tested the model-behaviours for different velocities, they should just acknowledge that varying these parameters was beyond the scope of the study and have not been carried out. There is nothing wrong with that.

Figures: I am happy you have changed the colormaps. I would suggest acknowledging the source of the colormaps in the Acknowledgements section.