

Interactive comment on “Folding and necking across the scales: a review of theoretical and experimental results and their applications” by Stefan Markus Schmalholz and Neil Mancktelow

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We thank Boris Kaus for his helpful and constructive review.

We agree with Boris Kaus concerning his points 1) and 2) and we added a paragraph on the folding of Mohr-Coulomb layers and on crustal folding and fold-and-thrust belts. We also included the mentioned references. However, we kept it short because the review is already very long.

We modified the discussion of the LAF model.

We mentioned already the future challenges in the last paragraph of the summary and conclusions chapter (Lines 1441-1450). We extended this part a bit.

C1

Minor points

Line 17. Done.

Line 44. Done.

Line 182. Done.

Line 262. We removed the statement about the “amplification rate not going to zero”, because this statement applies actually to the variation of the maximal amplification rate with decreasing viscosity ratio and not to a variation of the amplification rate with varying ratio of wavelength to thickness as displayed in Fig. 12. Furthermore, the statement that the maximal amplification rate of the thin-plate approach does not tend to zero for a viscosity ratio of 1 is already given in line 203-205.

Line 275/Fig. 13c: We added a zoom in Fig. 13c and d. The numerical results show that the oscillation (i.e. negative amplification rates) disappear with finite amplitudes. We modified the text.

Fig. 15. Done.

Line 664. Done.

Line 997. Yes, because of comparison with numerical results. We modified the text.

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C2