Dear Authors, dear Editor,

I find the manuscript updated according to my recommendations. Thank you for that.

Your additions helped me to understand better the method you apply. You are not modelling the stress state (the actual or expectable one) but merely the stresses you show, e.g. in Figs. 8 and 9, are stresses at which failure and plastic deformation occurs, right? This has not been clear to me before.

From my side, the manuscript is acceptable after considering some small remarks in the following:

Lines 75, 88, 98, 138 in the new version: is it really velocity or should it be displacement or strain?

Line 133/134 in the new version: I think the sentence „Beyond 100000 elements, the meshing process …" can be omitted.

Line 230 new version: I would add an s: follows

My comment to line 3 in the original version: Contrary to your statement you didn`t follow my suggestion. A model does not develop over a basal detachment.

My comment to line 20/21 in the original version: The references are modified not in all cases (e.g. Lines 22, 26, 27, 28, 30, 31, 33, etc. in the NEW version)

My comment to line 236 in the original version: what I meant was just to speak of deviatoric stress instead of stress.

Captions Figs. 8 and 9: Still not correct, b and d refer to SD

My comment to line Line 515 in the original version: I don't see any changes. Comparing with the reference below it seems that it should read Krabbenhøft, K., Lyamin, A., instead of K. Krabbenhøft, A. L.

I just have a final remark considering the purpose and capability of models in general (I expect no action on this one). I'm starting with three citations of yours:

In line 266/267 of the new version you write: „We remind the reader that the values obtained may seem very high but they are merely the results of an optimization process through the use of realistic parameters. Nevertheless, these values remain possible in theory."

Your comment to my comment to Line 364 in the original version: „In theory they are valid and so they should be found in reality (not considering different aspects that might alter their behavior)."

Your comment to my comment on Fig. 11 in the original version: „It is normal for these values to be higher than the ones observed in reality."

I think it is valid to draw conclusions from models within the framework the model is defined. And this is what you did and have inteded. But caution is needed if conclusions on nature are made based on models. The motivation for a model of course is nature. So I find it important to draw conclusions within the model set up and then discuss in what aspects the results and conclusions may or may not reflect nature and if not what may be reasons for that (wrong asumptions, omission of relevant processes, etc.). I like the following two phrases:

"Essentially, all models are wrong, but some models are useful." (George Box)

„The purpose of models is not to fit the data but to sharpen the questions." (Samuel Karlin)