

Dear Referee #2,

Thank you for your time and the detailed review of our manuscript “X-Ray CT analyses, models and numerical simulations – a comparison with common analytical methods of an experimental CO₂ study”.

It is correct that the title of the manuscript is not self-explaining. We will consider a more detailed version, like: ... a comparison with petrophysical analyses in an experimental CO₂ study.

We also thank you for your hint on the quality of the style.

The Abstract and the Introduction will be reorganized following the suggestions of referee #1. Also a more detailed explanation why this research was done will be adapted in the Introduction.

It would be very helpful if you can give us an example or illustration regarding the copy and paste criticism or any information according to not referred “summary reports of different groups”. Indeed the research fields of our working group/the authors are diverse which may lead to such an impression to some extent. However the manuscript also passes a plagiarism check during the upload process which confirmed no matches to any none mentioned citations, either. Therefore your allegation is not reasonable for us at this time.

We will increase the quality of the figures 2, 5 and 6 (e.g.: font size, data symbols, etc.), also following the suggestions of referee #1.

According to your comment, a section “Discussion” will be included and the Conclusions will be shortened.