

## ***Interactive comment on “Quantitative experimental monitoring of molecular diffusion in clay with positron emission tomography” by Johannes Kulenkampff et al.***

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The suggestions helped to improve the manuscript and - hopefully - to reduce some ambiguity. Thank you!

".. explanation of the results could be improved.." (The referee pointed out some sketchiness of the images and corresponding text)

We admit that our “results” section was too compressed and omitted some necessary explanations (and even found some mistakes). It appears that the referee was partly misled by the different cutting planes of our 3D-data set. We therefore explained it in more detail in the text of the results section. We also marked the air bubble in Fig. 7.

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“... also I feel that the CT technique need not be disregarded in the introduction...”

This is an effect of our attempt to compress the paper size. We think, there is no competition between PET and CT, rather they should be applied as mutual complements. We are thankful for this comment, and added some more introductory text on the specifics of these methods with respect to diffusion parameters. We like to spare the discussion about pro and cons, because this is based on opinions (e.g. “CT and other modalities providing structural images is principally unsuitable for deriving diffusion parameters” vs. “the low resolution of the PET method is senseless for clarifying processes on the pore scale”).

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Interactive comment on Solid Earth Discuss., doi:10.5194/se-2016-34, 2016.

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