

Interactive comment on “Frictional slip weakening and shear-enhanced crystallinity in simulated coal fault gouges at subseismic slip rates” by Caiyuan Fan et al.

Jianye Chen (Editor)

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Dear Autors,

We have received two reviews which agree on the high importance, quantity, and timeliness as well as clear writing of your manuscript. In agreement with the reviewers, I certainly recommend publication after addressing the comments and formatting issues, which are considered to be both minor.

Two additional comments which may be helpful: 1. I agree that there is rare data available on the friction strength, stability and healing of carbonaceous materials. The

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authors could dig a bit on this and give a short review on or comparison with previous studies.

2. In your microstructures, you have marked many 'fractures'. If I understand correctly, you are analyzing fragments not thin section. I suggest being careful about the fractures. Some may form when you split the sample.

Jianye Chen

Interactive comment on Solid Earth Discuss., <https://doi.org/10.5194/se-2020-43>, 2020.

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