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Nonlinear Processes in Geophysics
Discussions
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Interactive comment on "Inhomogeneous precursor characteristics of rock with prefabricated cracks before fracture and its implication for earthquake monitoring" *by* Andong Xu et al.

Anonymous Referee #2

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The investigation carried out by the authors is interesting in its attempt to identify shared features in laboratory and real-world seismicity. There a some minor but recurrent issues in grammar/vocabulary throughout the article that I believe need to be addressed. Presentation of some figures could be improved (some have unnecessary empty space and/or labels may be hard to read if printed).

Comments and questions: In sec 2.4 the authors choose magnitudes of 2.5 and above for the catalogue, but it is not clear why this particular choice was made and how this pertains to the completeness of the catalog in space and time, i.e., is the chosen SAF

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catalog complete above this magnitude? (in other words, what is the magnitude of completeness for the chosen catalog and does changing these minimum magnitudes change the conclusions?) are there variations in time for this completeness specially after the larger events? Since the authors are speaking of links between experiment and 'natural' seismicity, it could be good to perhaps highlight/discuss the issues particular to each of the cases and where significant differences may lie between the two. For example; how would various types of incompletnesses (short-term aftershock incompleteness, catalog incompleteness etc.) affect their statements/conclusions? Within the context of the experimental setup, how are these incompletenesses accounted for? Given the brevity of the conclusions perhaps that section could be expanded to include some of these points along with a more elaborate synthesis of the statements in Sec.4.2. In Sec. 5, it could also be instructive and clearer to understand the overall message of the study by elaborating under which parameters/conditions the "... attempt to link the experiment with the nature" is made.

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