

## Interactive comment on "Non-linear effects of pore pressure increase on seismic event generation in multi-degree-of-freedom rate-and-state model of tectonic fault sliding" by Sergey B. Turuntaev and Vasily Y.Riga

## Anonymous Referee #1

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The paper presents simulations of the fault movement caused by the spatial friction variations modelling fluid injection. The paper is interesting and I would recommend it for publication subject to minor revision to address the following:

1. Figures 27, 28 are almost empty, that is small variations in velocities are not seen. Possibly, using log scale in the velocity axis could help. 2. Captions to Figs. 16-22, should be dependence of .... of rather than ...on. 3. Discussion, line 11, "considered spring-block system"; line 14, "affects" rather than "affect"

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