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Solid Earth Discussions

Interactive comment on "Visual analytics of the aftershock point cloud data in complex fault systems" *by* C. Wang et al.

Anonymous Referee #2

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Wang, et al. developed an interface to easily visualize aftershock distribution in a 3D setting. They produced a Matlab GUI that allows common processing and visualization techniques when interpreting aftershock temporal and spatial distributions.

In my opinion, this paper is peculiar as it does not produce any news scientific results, but offers a new computational tool to visualize and evaluate datasets. In that sense, I am not completely sure it fits within the traditional scope of SE. Now, we have to admit that a lot of the publications on data analysis only plot the data sets in different way to describe and understand them. So I understand the need for a simple tool to do so. I really appreciate that the tool if freely accessible and has 1) a GUI and 2) a GUI that is easy to use. The tool is still at a prototype stage but can be already used to start analyzing real dataset, as shown in the manuscript.

Although the main goal of such tool is to analyze complex aftershock sequence, I would advise the authors to not neglect the educational potential of such approach. Additionally, point clouds can also be used for analyzing tremor migration, and for tracking aseismic slip more generally. I would be interested to see how this tool could be used for tremors too.

Few comments: Page 1 line 25: "along the up-dip or along the down-dip" directions? Page 2 line 9 mainshock, not "the mains shocks" Page 9 line 12 should, not "is should" Figure 3 need labels on the x and y axes Figure 7 a colorbar would be useful for the time evolution The captions of Figures 3,6 and 7 should describe more what we see, so that we understand the approach and the plotted results while reading the caption.

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