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

Anonymous Referee #1

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The authors present a platform where the aftershock data can be visualized well, including the 3D view, fault plane fitting and outliers removal. Although the platform may be helpful to researchers that have crucial demands on 3D data visualization, it is not that clear why this platform is new and important in finding new fault planes or aftershock migrations. The proposed procedure of determining fault planes in principle relies heavily on the amount and accuracy of the catalog, which plays a much more important role. Below are some line comments:

p1, line 24: ‘where they are divided into a number of subparallel segments with the lengths of approximately 10-25 km’, is this true for all types of faults?

p2, line 2, again, the complex fault geometry most directly results from an accurate catalog p2, lines 15-25, it is not clear why the interactive visual analysis represents an ‘emerging field’, I think it’s only a good way to help visually understand the data

p2, line 16: assists -> assist

p5, line 19, from point p (to) the k-th

p8, line 7, any references for the triggering relationship?

p9, line 12, is should -> should

p10, line 3, the migration of aftershocks could also be related to afterslip and/or pressure transients

p10, line 9, the northward trend is not obvious in Figure 7a