

***Interactive comment on “3-D visualisation of palaeoseismic trench stratigraphy and trench logging using terrestrial remote sensing and GPR – combining techniques towards an objective multiparametric interpretation” by S. Schneiderwind et al.***

**Anonymous Referee #2**

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This paper deals with the interesting topic of giving a more quantitative support to the analysis and interpretation of paleoseismic trenches, which is in many case a major concern during such studies. In this paper, remote sensing (t-Lidar) together with geophysical (GPR) acquisitions was performed in two natural and artificial trenches in Greece.

In general, the main subject of this communication is not treated as directly as it needs,

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so that it is difficult to grasp the benefit that could be provided by this study. Thus, the many references dealing with classical techniques in paleoseismology, as well as their impact on seismic hazard should be gathered and condensed in order to represent only a single paragraph of the introduction.

This done, it is essential to focus as fast as possible onto the problematic parameters that paleoseismologists have to face during classical trench logging (particle size, color etc, 3d extrapolation...), and so on the geophysical and remote sensing methods that have been chosen to help remove these ambiguities, and why. As soon as the introduction or methodological section, a diagram in the form of a flow chart for example should help explaining very quickly the implemented procedure and the main sought parameters, simplifying consequently the entire speech .

Similarly, it is necessary that the methodological part comes right after the introduction. From this point of view, the geological descriptions of the sites are here in a large part superfluous and should represent only few lines in a first paragraph of the results section. Finally, the discussion would benefit from emphasizing the scope of applicability of the employed methodology and suggest possible strategies using other complementary methods in order to get information when the local context is not suitable.

Given the above observations, it seems to me that a first stage of reorganization is necessary during major revisions.

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Interactive comment on Solid Earth Discuss., 7, 2697, 2015.

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