Review of: "Spatial Analysis of Soil Fertility Using Geostatistical Techniques And Artificial Neural Networks"

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Potential competing interests: No potential competing interests to declare.

The paper considers a very important topic for “soil management”, namley the spatial variability of soil fertility. It gives an example from a given area with data collected at regular intervals in 70 sampling points. However, I think that the paper fails in explaining in a clear way what are its aims. If it would be a methodological paper the Authors should explain why they apply the methods they have chosen and what are their advantage with respect other more traditional methods of hierarchical clustering and unsupervised fuzzy clustering and biplot ordinations (e.g. by PCA). The results in 5 classes of fertility are not well explained in terms of similarity between the classes and the variability of each variable within each of the 5 classes. The Authors also do not explain why in Fig 5 they have chosen to consider 5 intervals for each variable. My suggestion is that the paper needs a more accurate structure, more explanations on why the suggested methods and more explanations of the possible land uses of the area and the reasons why the study is relevant in that context. Also references to similar papers appeared in Catena are missing.