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 main goal of the study is to study the spatial variation of soil fertility through thematic maps of individual properties and the subsequent integration into a digital mapping model of local fertility classes. Based on a study of 10 variables measured at a case study site, soil property maps were produced by geostatistical analysis and interpolation by ordinary kriging, and artificial intelligence techniques based on an artificial neural network classificationsystem were applied to generate soil fertility classes using the Fuzzy Kohonen Clustering Network (FKCN)algorithm.

The topic and findings of this manuscript may be of interest of Qeios journal readers. The manuscript is well structured and easy to follow. I agree to accept the manuscript after minor revisions. My main concerns are the following:

1. The authors explain*:" The manual representation of soil fertility classes requires the elaboration of individual maps for each of the variables, and the subsequent superimposition of these maps to obtain homogeneous areas and similar patterns that facilitate management, which implies biases and low precision in the final result."* Why does the manual representation provide more bias and inaccuracy than other techniques? It is mainly a problem of analysis time... Can the authors clarify their thinking?
2. Figure 3: replace “membreship” with "membership layers”.
3. Please provide precisions concerning Figure 4: How have been computed the averaged values of the graphs figure 4? The models were fitted on these values or on the binned values?
4. Figure 8 “Clase de suelo” please translate