

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.

CONTEXT. Soil fertility is fundamental in soil classification. Actually there several techniques like Fuzzy Kohonen Clustering Network. The research question is how representative of soil classes would be this thematic map obtained by a combination of soil sampling and data interpolation?

By combining soil sampling and interpolation techniques, you can achieve a broader spatial coverage compared to relying solely on point data from soil samples. This allows for a more comprehensive representation of the landscape. At this point the authors are correct in using this advantage. The output map is of finer and continuous spatial resolution, and the FKCEN was successfully applied to obtain the soil strata. However, the manuscript contains many issues that authors omit to discuss. i.e. the representative of sampling density, Interpolation Uncertainty, Temporal Variability, Scale Considerations, Expert Validation, and local heterogeneity. While a thematic map obtained through a combination of soil sampling and interpolation can provide valuable insights into soil classes, it's essential to carefully plan the sampling strategy, choose appropriate interpolation methods, and acknowledge the inherent uncertainties in the process. Expert validation and field verification play crucial roles in ensuring the reliability and representativeness of the resulting map. Another suggestion is to improve English, it was difficult to read it.