

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

Ismaguil Hanadé Houmma¹

¹ Aix-Marseille Université

Potential competing interests: No potential competing interests to declare.

In this study, the authors produced a digital map of soil fertility by combining several approaches (in situ measurements, statistical interpolation and the FKCN neuro-fuzzy algorithm). The methodological framework developed and the results obtained are scientifically sound.

However, I do have a few comments:

1. In the sentence "The final model of digital soil fertility classes presented a reliability equivalent to 86%, which indicated a high degree of homogeneity within the soil classes obtained for fertility purposes", it should be specified that 86% is the Value of accuracy, confidence level, or another indicator for measuring concordance or precision?
2. The first three paragraphs of the introduction could be improved by illustrating with references rather than a single reference.
3. Study area, there is no information on the biophysical and climatic characteristics and spatial extent of the study area.
4. In the Soil sampling section: You should explain why systematic sampling was chosen instead of random sampling.
5. The results section is well analysed but the discussion of the results is weak.