

## Interactive comment on "Spatial variability and sampling density of chemical attributes in archaeological black earths under pasture in southern Amazonas, Brazil" by Alan F. L. de Lima et al.

## **Anonymous Referee #2**

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The paper presents a spatial analysis based on variograms for several soil properties in black earths in Amazonas. Although I agree with the authors that this is an interesting soil type, with relevance for agriculture and climate change, I found the paper very descriptive and only of local relevance. The spatial variability for a specific micro test site on pasture was assessed, but it is unclear how representative this site is. Furthermore, the spatial variability seems to be controlled topography (fig 4), suggesting but the factors controlling spatial patterns of soil properties are not addressed here. As such, the paper is not ready for publication because of (i) the lack of specific scientific questions

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and hypothesis to be tested, and (ii) the local focus, without any consideration for the broader significance.

Interactive comment on SOIL Discuss., https://doi.org/10.5194/soil-2019-26, 2019.