

Review of: "Ancient Trails of the Surigao Gold District: A Preliminary Baseline Predictive Model"

Polina Lemenkova¹

¹ Universität Salzburg

Potential competing interests: No potential competing interests to declare.

Review of the manuscript '***Ancient Trails of the Surigao Gold District: A Preliminary Baseline Predictive Model***' by *Canilao* submitted to *Qeios*.

The article successfully articulates its main objectives which aimed to process the satellite imagery and remote sensing data (SRTM) using various approaches: creating DEM, plotting slope/aspect maps, estimating the distance and creating color composites. The author processed the data covering the Philippines and used the ArcGIS software by Esri.

This paper follows the presentation given by the author in the Conference on Early Philippine and Southeast Asian Boat Building and Gold Crafting Technology. The author aimed on the issue of various techniques of ArcGIS aimed at geospatial data processing which presents the research goals achieved by the author using ArcGIS.

The methodologies employed in the paper are standard and based on the ArcGIS spatial analysis and raster processing tools. The author did not comment much on the images presented in Figures 1 to 11. However, both the methods and the results are generally clear: all maps include the legends and standard annotations explaining the color and symbol meanings, scale and titles. The article presented the results of the exercises in spatial data analysis, some of the ArcGIS methods and their relevance to the research questions are explained briefly in pp. 2-3.

The discussion appears to be logically derived from the analysis of maps and comments on some of them. However, the conclusions of the Secondary Analysis section (the last section) are limited and could be elaborated more.

The paper does contribute a new study on using ArcGIS for some mapping exercises covering the selected area of Philippines. It furthermore presents some perspectives to the discourse on spatial data processing and visualization. However, it could benefit from better highlighting its contributions and increasing with some more texts which would more explicitly comment on the results.

The article is generally well-written and structured but I would recommend to add more texts with detailed explanations near each map to increase its value. Furthermore, adding a proper Conclusion section could be beneficial for the clarity and coherence of the manuscript.

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With kind regards, - Polina Lemenkova

