

San Benito Paleo-Structure. Raport and Reflexions About the Detection of a Paleogenic Volcanic Landscape in Eastern Cuba.

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The interpretation of aerial panchromatic photos at 1:37 000 scale no far from San Benito village, in Santiago de Cuba province, permitted to detect a very peculiar structure of almost perfect symmetric and conic shape, whose characteristics and interpretation indexes remind a volcanic edifice.

For the first time in Cuba, the results of photogeological interpretation; the relief analysis made out with the aim of sophisticated methods (like digital processing of different georeferenced images and data); the analysis of the pre-existing geological maps of the region; and also the petrographic description of collected samples in the area, permitted arrive to the conclusion (with a high degree of certainty), that this structure was a part of an ancient effusive center of the Paleogenic Volcanic Arc (PVA).

The mentioned structure seems to be one of the best preserved and exposed paleovolcanic landscapes in the region, likely, because of the shield-protection effect of sedimentary rocks, that covered the area at the end of Medium Eocene, at once, the approximate date of the extinction of the PVA. Some reflections are made upon the significance of detection, study and classification of paleovolcanic landscapes on the spreading areas of both the Cretaceous and Paleogenic volcanic arcs and their interrelationships with possible ore deposits.