

## **Karst Development and its Tectonic Dynamization at the Sierra de Pan de Azúcar, Pinar del Río province, Cuba**

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The Sierra de Pan de Azúcar (Sugar loaf mountains) in the central zone of Sierra de los Organos range, is a mogote type chain of hills with a complex geomorphology and structure, because of the overimposition of a big amount of neotectonic faults upon the nappes that folds its carbonated rocks.

Grikes (karren, lapiaz), dolines, sinkholes, ouvals, karstic canyons, other surface karstic forms are well represented at this place, such as underground karst forms, all grouped with the name: Pan de Azúcar Cavernary System which have as main forms Cueva Grande de Pan de Azúcar (Sugar Loaf Big Cave) and Cueva Chiquita de Pan de Azúcar (Sugar Loaf Small Cave) both acting as emergences.

These cave storage and supplies to Pan de Azúcar river, the bigger amount of water to consume by crops, cattle and people on the valley.

On the top of the sierra, over the main underground galleries sector had been located a dry and naked river course, hanged because the fast neotectonic rising movements combine with glacieustatic changes of level.

Flanked by steep slopes, with a strong gradient itself, this dry river course drains through a narrow, very young gallery, excavated along a fault close to 45° of slope to reach the main Cueva Chiquita gallery, creating an extreme dynamization of the processes of corrosion, transport and deposition of sediments.