

RESULTS OF PROSPECTING OF IMPACT CRATERS IN MOROCCO

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Introduction Morocco is one of the richest countries in the world geologically. This work is based to use satellite images of Google Earth and Yahoo-Maps scenes; we examined the surface of our country to be able to locate the structures that have a circular morphology such as impact craters, which potentially could be. But the most important step is to identify these structures and to confirm whether the structures previously detected are real impact craters or the result of another geological phenomenon.

Structures identified by geological data: *Semara structures*: they are bio-constructions as Givécien mud mound [1]. *Structures between Timahdit and Michelifene*: are circular structures of different sizes so they are volcanoes grouped on the plateau of Azrou [2]. *Structures of the Sahara*: They are superposed on a magnetic and radiometric anomaly of origin volcanic [3].

Structures identified by a field trip study: *Bir Anzarane structure*: From our field work we can conclude that the apparent rim structure on satellite imagery caused by the local pattern of vegetation (grass and bushes), erosion aprons from dark ferruginous country rock, and the pattern of prominent dunes. *Tetouan structure*: The testimony of the inhabitants and study of the structure confirm that the Tetouan structure is an old quarry gravel extraction. *Michlifene*: the ski station. It is known as a quaternary volcanic explosion crater [3]. *Idikel structures*: there are two structures. The first is very old quarry. A second smaller semi-circular depression turned out to preferential erosion within a major fault (E-W) zone. *Amsemrir*: From Taznakht Travelling to Imilchil, a small absolutely circular feature. It's a location of threshing wheat by a donkey rotating around the central axis of this feature.

Isli and Tislit lakes: The local geology is consistent with a formation of the lakes within a synclinal basin as a result of tectonics, as already published [4, 5, 6].

Conclusion We have been able identify all of the selected structures, which we revealed multiple origins and a large variety of geological effects producing circular structures not only impact craters.

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