

## Volcanic eruption gave any impact on the Teotihuacan, in the Basin of Central Mexico

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Teotihuacan is situated some 50 km north-east of Mexico City and has the pre-urban structures of ancient Mexico. Human occupation of the valley of Teotihuacan began before the Christian era, but it was only between the 2nd centuries B.C. and the 6th centuries A.D. that the settlement developed into one of the largest ancient cities in the Americas.

Prior to the development of Teotihuacan, the southern part of the Mexico Basin include with Cuicuilco that was the important archaeological site located in the southwestern part of the Mexico Basin, was destroyed and abandoned following the eruption of the volcano Popocatepetl, Chichinautzin, and Xitle, causing migrations and changes to the population. It is believed that the Intermittent immigrant concentrated on Teotihuacan, which led to the subsequent development of the ancient urban city. The purpose of this study is to assess the impact of the volcanic eruption to the Teotihuacan civilization to represent the Mesoamerica. In the volcanic eruption, not only lava flow but also pyroclastic flow and descending ash falls, and the extent and duration of the influence on the topography and the environment largely depends on the eruption form.

In this research, the period before and after Teotihuacan civilization was targeted. And the distribution map showing the location and form of settlements and volcanic eruptions in the Mexican Central Plateau during this period was organized. A read relief image map was created from SRTM elevation data and showed traces of volcanic eruption and distribution of ruins shown in previous research. Furthermore, the location of five pre-Hispanic lakes of the Basin of Mexico which extends about 65 km north and south was arranged. Field survey was conducted in the summer of 2017. Based on these results, we attempted a more concrete discussion on the relationship between the fate of Teotihuacan civilization and volcanic eruption.

Keywords: Teotihuacan, Volcanic eruption, read relief image map

