

Identification of Paleogeomorphology at Kedulan Temple, Sleman, Yogyakarta

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Abstract : Kedulan Temple is located in Dusun Kedulan, Sleman, Yogyakarta, Indonesia at coordinates S 07° 44' 57", E 110° 28' 17". Kedulan Temple is a trace of the relics of life in the 3 century AD. The Kedulan Temple including exhumed landforms, which the primordial landform is first surface topography, then buried under cover mass and exposed or re-inscribed. Recognized by the existence of ancient soil (paleosol) and ancient objects. Seen from the type of soil that closes the temple, there are 13 layers of lava type, so it is estimated that the lava that buried the temple came from 13 times the eruption of Mount Merapi. The material that buries the base of this temple is the pyroclastic surge deposits in 3 layers, each of which is limited by a thin layer of paleosol, the sediments are 1445 \pm 50 yBP, 1175 \pm 50 yBP, and 1060 \pm 40 yBP. This temple is buried and dug again at 940 \pm 100 yBP. Furthermore, the temple affected by earthquake, so the floor and foundation becomes bumpy and most of the temple stone are thrown. The temple is left alone, until exposed to hot clouds at 1285 M (740 \pm 50yBP). Next, repeatedly buried lava in 4 periods, in 1587 M (360 \pm 50 yBP, 240 \pm 50 yBP, 200 \pm 50 yBP and unknown date). From studying this temple, can be known paleogeomorphology process that occurred in Yogyakarta, especially related to the volcanic activity of Mount Merapi. Until now, the water is still flowing around the temple so there is a fluvial process that began to take a role in the temple.

Keywords : Kedulan temple, paleogeomorphology, buried, mount Merapi, Yogyakarta

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