



X-ray computed micro-tomography: study on accretionary lapilli from Zelve eruption (Cappadocia-Central Anatolia, Turkey)

Orkun Ersøy

Hacettepe University, Geological Engineering, Beytepe, Ankara, Turkey (oersoy@hacettepe.edu.tr)

Morphology of aggregates formed in pyroclastic clouds may convey information about the modes of eruption, transport and deposition. However, ash aggregates were characterized on two-dimensional SEM micrographs or thin-sections to date. Three-dimensional reconstruction often reveals information about the morphology and composition of a system that can otherwise be obscured or misinterpreted by two-dimensional images. In this study, I present the morphology of accretionary lapilli from Zelve eruption in Cappadocia (Central Anatolia-Turkey) obtained using X-ray computed micro-tomography (CMT). CMT, a non-destructive method providing three-dimensional data enabled the quantification of some properties which provide the estimation of the style of transportation and deposition.