



Volcaniclastic successions in the Visegrád Mountains, Hungary: stratigraphy and facies relationships on 3D digital elevation models

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Mid-Miocene (Badenian) andesitic volcaniclastic deposits of the Visegrád Mountains, North Hungary, crop out in a large number due to Plio-Pleistocene tectonic movements as well as Pleistocene slides and slumps occurred under periglacial regime. These deposits represent various facies relationships of the debris avalanche – debris flow – fluvial streamflow continuum. Large (up to 50 m), well exposed, vertical outcrops (e.g. Szent Mihály Hill lower slopes, Vasas Gorge, Vaskapu Hill, rocks of Zsivány-sziklák) are ideal subject for sedimentological and stratigraphical studies. Most deposits include a number of flow units (from pyroclastic flows to differently reworked debris flows) and are characterized by monolithic to commonly heterolithic composition. Detailed volcanological and petrological investigation has been made in order to link the deposits to possible source areas. Stratigraphic constraints have been made by plotting the stratigraphy on 3D digital elevation models.