Berza- Santa Mare complex landslide

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Remarkable for the Moldavian Plateau is the large extension of landslides which cannot be attributed to a single genetic mechanism [1]. In many cases, a single type of movement is impossible to be assigned to a slope mass delimited and mapped in a polygonal manner. For these situations, [2] introduced the term of complex landslides, which can be detailed using a composite terminology [3].

This is the case of an impressive landslide located along the Prut Valley, in between Santa Mare and Berza localities, on a sector of more than 8 km.

The different types of movements can be recognized through the abundance of a large variety of micro-morphologic details of landslides (secondary scarps, lateral cracks, various roughness, micro-depressions, mounds). This morphological complexity is related to a long-term evolution. Generally, a fresh morphology is associated with the translational slides and flows and this issue emphasizes a clear differentiation between present and past processes and created landforms [4, 5]. A large part of this complex landslides, but also some event-based landslides are more wide than long, and this is due to the structural cuesta landforms. The evolution of this landslide seems to be close with a particular landform from Transylvanian Plateau, called “glimee” slides. Further detailed analyses are needed in order to better understand the mechanisms of the entire area of the landslide (more than 6 km²) and the recent evolution of their fresh parts.

This is the last our stop of the field trip, and we have chosen this point, a valuable geomorphologic lookout point,

in order to think, discuss and to find future directions in the research of landforms of the Moldavian Plateau.

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Fig. 1. Perspective view of LiDAR shading for the Santa Mare – Berza complex landslide.

Fig. 2. Aerial image of the Santa Mare – Berza complex landslide (2008) and location of topographic sections from Fig. 3.

Fig. 3. Topographic sections trough the Santa Mare – Berza complex landslide (for the locations of the sections see Fig. 2).