

Future Danger of Seismogenically Activated Rockfalls and Landslides in “Horseman of Madara” (NE Bulgaria)

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The historical cultural monument “Horseman of Madara” is situated on the western slope of the Madara Plateau near to the boundary of the Moesian Platform and the Fore-Balkan zone. The monument (VIII-IX c.) glorifies the first official recognition of the Bulgarian State.

The monument is placed in a region of rare, but considerable moderate earthquakes with magnitude $M=6-6.5$ according the last research for the national seismic zoning. The local paleoseismic and archaeological investigations show the presence of certain manifestations of earthquakes with destructive effects. There are seismic active structures and traces of seismic events. Some more, a part of the largely developed rockfalls and landslides in the vicinity of the monument are of seismogenic origin.

The position of the monument is vulnerable. That is a rocky relief, sculptured in a Cenomanian sandy limestone in a height of 23 m on the vertical and recent active slope.

The presence of the destructive earthquakes in the past, of a great number of rockfalls and landslides could be interpreted as an indication of not excluded next similar seismic manifestations. The seismic potential of the locality creates a new possibilities for the appearance of seismogenic rockfalls and landslides.