CYCLES OF SEISMIC ACTIVITY IN THE SECOND HALF OF HOLOCENE IN THE WESTERN CAUCASUS AND THEIR CORRELATION WITH STAGES OF CIVILIZATION DEVELOPMENT (A CASE STUDY OF UPPER PART OF THE MZYMTA RIVER)

A.N. Ovsuchenko¹, M.Yu. Menshikov², E.A. Rogozhin¹, A.M. Korzhenkov¹

¹ Schmidt Institute of Physics of the Earth, Russian Academy of Sciences, Moscow, Russia ² LLC «Capital Archaeological Bureau», Moscow, Russia

Abstract. The results of comprehensive research in the upstream flow region of the Mzymta river (Western Caucasus) are presented. Evidences of strong earthquakes through the history of that region are studied. Periods of the related mud and rockslides were identified which occurred between 3100–4000 and 700–1200 years ago. Palaeoseismological results were correlated to the results of archaeological excavations. As a result, we revealed that the periods of tectonic disasters coincided with the territory being uninhabited. The results of this comprehensive research give us additional information about the seismic risks and history of the settlements in the region.

Keywords: palaeoseismic deformation, archaeoseismology, archaeology, Western Caucasus, Mzymta river, Krasnaya Polyana settlement, Roza stow, megaliths, landslide formation, radiocarbon dating.