



The Late Quaternary fluvial dynamics of the Marneuli depression in eastern Georgia

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The Marneuli depression, located in the southeastern part of the Republic of Georgia, is a tectonic basin at the transition of the Lesser Caucasus Mountains towards the Transcaucasian depression in the north. It is filled with several decameters of loose Quaternary deposits of marine, fluvial, colluvial and aeolian origin, and crossed by the lower reaches of five rivers that left several meters of fluvial sediments along their courses. Stratigraphic, sedimentologic and chronologic investigations of these naturally outcropped sediments along two of the rivers (Algeti, Shulavericai) demonstrate a strong fluvial dynamics during the Holocene, leading to the formation of several morphological terrace levels encompassing different time slices. Causes of this active dynamics can only be assumed yet, but a comparison with palaeoclimatic and archaeological data possibly hints at a mostly climatic trigger. Furthermore, morphologic and stratigraphic data indicate a young westward shift of the course of the Kura river, the main receiving stream of all rivers of the Marneuli depression. This shift is thought to be caused by recent tectonic activity along the western margin of the Kura thrust-and-fold-belt, and had probably also influenced the fluvial dynamics of the investigated rivers by a change of their erosion base.