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Assessing the paleoenvironmental context of Paleolithic settlement - the fluvial dynamics in the Lesser Caucasus during the late Pleistocene

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The volcanic Lesser Caucasus is located at the interface between eastern Europe and western Asia, and first human traces originate from the early Quaternary. During the late Pleistocene this high mountain region was settled by Middle and Upper Paleolithic humans, and their settlements are a focus of intensive archaeologic research. However, regional paleoenvironmental conditions that should have exerted a certain influence on human settlement patterns during the late Pleistocene are only about to emerge.
Besides other factors, the dynamics of rivers is strongly influenced by climatic and environmental factors. Thus, fluvial sediments can be very sensitive recorders of environmental conditions and changes during the past. During this study we studied the late Pleistocene fluvial dynamics of several Lesser Caucasus-derived rivers in the Kvemo Kartli Plain at the northern foothill of the central Lesser Caucasus that were characterized by periods of aggradation, stability and incision. The identified fluvial pattern was compared with available regional and over-regional paleoenvironmental and human settlement data. This comparison helps to identify the dominant factors that influenced the regional fluvial dynamics through time, what allows conclusions about the prevailing paleoenvironmental conditions in the Lesser Caucasus during the late Pleistocene and thus helps to establish the environmental context of Middle and Late Paleolithic settlement in the region.