
Flint procurement and exploitation in the Middle Paleolithic of the Northern Caucasus

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Résumé

In the Northern Caucasus, special studies of lithic raw materials exploited in the Palaeolithic have started only since 2007, including surveying of outcrops that could be used in the Palaeolithic and study of petrographic characteristics of flint samples and artifacts (e.g., Doronicheva, Kulkova, Grégoire 2012; Doronicheva, Kulkova, Shackley 2013; Doronicheva et al. 2016; Doronicheva et al., 2019; 2020).

Since 2007, we create the reference collection of lithic raw materials source standards (lithotheque) of mainly siliceous rocks from outcrops in the Northern Caucasus, which now consists of more than 1000 samples from 60 outcrops and is stored in the Laboratory of Prehistory in St.Petersburg, Russia. Excepting 7 outcrops from the Elbrus region in the north-central Caucasus, 53 outcrops are from the north-western Caucasus. Flint outcrops from the north-eastern Caucasus are not studied yet. Most of the flint outcrops analyzed are related to primary geological contexts, although some are of secondary origin from redeposited geological contexts or from alluvial deposits.

Because flints can vary within the same outcrop, whereas flints from different outcrops often have a similar composition, we collected several visually distinguishable flint samples from different parts of each outcrop. Petrographic and geochemical analyses were done for the samples collected from different parts of each outcrop.

To identify groups of flint samples from geological outcrops and artifacts from MP sites that are characterized by a similar composition of chemical elements and originate from the same type of geological deposits, the data obtained using XRF and SEM were processed using statistical methods.

Our research provides new data on flint procurement and exploitation in the Middle Paleolithic in the Northern Caucasus.

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Mots-Clés: petroarchaeology, flint, geochemistry, Xray fluorescence (XRF), scanning electron microscopy (SEM), petrography, Middle Paleolithic, Northern Caucasus.