



The mineralogical and geochemical characteristics of cave deposits from archaeological sites of Caucasus.

M.A. Kulkova (1), S.A. Kulakov (2), and K.F. Shavrina (1)

(1) Herzen State Pedagogical University, St.Petersburg, Russian Federation (kulkova@mail.ru), (2) Institute for the History of Material Culture RAS, St.Petersburg, Russian Federation (kulkova@mail.ru)

The cave sites of prehistoric people are especially interesting for the studying. The caves were natural ecological niches and have saved the information not only about ancient inhabitancies, but about geological history and paleoclimatic changes. The investigations of mineralogical and geochemical characteristics of cave deposits can give the important results for assessment of the condition of sedimentation and anthropogenic impact on the ecosystem. The Akhshtyrskaya cave is the one of the interesting objects in Caucasus mountain region. This cave-ponora is located in the Dzihrinskoe canyon, on the right site of Mzimata rive. The cave was occupied by people during Mousterian-Upper Paleolithic-Middle Ages periods.

The mineralogical composition of cave deposits was determined by X-ray diffraction analysis. The chemical composition of deposits was determined by means of XRF analysis. The sediments were studied by size test too. The remains of volcanic ash were registered in the composition of layer 3/2. The geomagnetic anomaly in this layer was determined with help of paleomagnetic investigations and it correlates to Kargapolovo geomagnetic field excursion, dated on the time 45000-39000 years BP (Pospelova et al., 2007). The volcanic ash of same geochemical composition was fixed in Mezmaiskaya (Northern Caucasus) cave deposits and it has dates about 40000 years BP. The volcanic ash from loess deposits of Don river has analogical age (Hoffecker J.F. et al., 2006). In this period, probably, the volcanic activity was very intensive and it had impact on the prehistoric people. The investigations were support by RFFI, grant 07-06-00133-.

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