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Rockmagnetic and archaeomagnetic investigations of ceramics of the multilayer archaeological site Ivanovskoe III

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Rockmagnetic and archaeomagnetic investigations were carried out for four fragments of ceramics from two cultural layers of the multilayer archaeological site Ivanovskoe III. The site of ancient people was located in the Pereslavl district of the Yaroslavl region, approximately 4 km southeast of the village Ivanovskoe. Based on correlation with the author's VADM data obtained for the central part of the Russian Plain, the age of two ceramic fragments from the first cultural layer, determined by archaeological and radiocarbon methods, was confirmed as the Bronze Age. For two other fragments of ceramics from the second cultural layer of the archaeological site Ivanovskoye III, a Neolithic age has been proposed. These archaeomagnetic age determinations, when correlated with generalized VADM data, are in good agreement with the radiocarbon ages of undecomposed wood found in the peat layer located under the second cultural layer, as Neolithic, and are not consistent with the archaeological age determination - the Bronze Age. Presumably, the low VADM values for the ceramic fragment from the second cultural layer are due to the fact that the main carrier of thermoremanent magnetization is thermally unstable maghemite. A possible explanation for the presence of Neolithic ceramics in the second cultural layer, whose age is the Bronze Age, is the mixing of the contents of cultural layers as a result of the economic activities of people who repeatedly inhabited this territory. Archaeomagnetic and rockmagnetic studies were carried out at the Center of Shared Research Facilities “Petrophysics, Geomechanics and Paleomagnetism” of the Schmidt Institute of Physics of the Earth RAS with the financial support of the State. assignment No. FMWU-2022-0005 IPE RAS.