



Gothenburg geomagnetic excursion of the geomagnetic field as a chronological marker of the archaeological site Podol III/1 in the Middle-Russian plain

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The palaeomagnetic method was used to date the sediments related to the archaeological site Podol III/1 (55° N, 33° E) located in the North-Western part of the Middle-Russian plain. The use of the palaeomagnetic method for determination of a chronological position of the lower cultural layer in the sediments related to the site Podol III/1 proved extremely useful. The geomagnetic Gothenburg excursion (11-13 Kyr BP) was identified inside the deposits of the lower fossil soil with cultural remains of Bromme-Lyngly cultural affiliation. Earlier, the Allerød age of this soil was defined by the palynological analysis. The archaeological method based on existence of Bromme projectile points in a cultural layer has also shown that the chronological frameworks of Allerød-Middle Drias (11 - 12 Kyr BP) seems to be the most probable age for the lower cultural layer of the site. Thus the palaeomagnetic method was the third dating method that gave the same age of the cultural layer at the site Podol III/1. The obtained result speaks in favor of the hypothesis of simultaneous existence of Bromme technocomplex on a large area of Northern Europe from Jutland to Valdai (North-West of the Middle-Russian plain). This work was supported by RFBR (projects 03-05-65063 and 02-06-80497) and General Physics Department of RAS (program N 16).