MAGNETIC SURVEYING IN THE ROMAN AGE TOWN POROLISSUM (NW ROMANIA)

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We present the results of magnetic surveys carried out in a Roman age town Porolissum (NW Romania). Porolissum was the capital of the province Dacia Porolissensis in the 2nd and 3rd centuries, and it had 20000 inhabitants. After the Romans left Dacia the town was deserted. The buildings in the town were built from dacite mined in nearby quarries. The dacite has large magnetic susceptibility compared to the soil, which allows the detection of the ruins by magnetic measurements. We made magnetic surveying using GSM-19 Overhauser magnetometers in the fortress, the town and the cemetery. We were able to map streets, foundations of different buildings: houses, sanctuaries, and in the cemetery roads, graves and graveyards. The geophysical surveys help to reconstruct the structure of the archeological objects, and on large scale the structure of the town. Based upon our results, the archeologists dug more trenches, which confirmed the interpretation of geophysical measurements.

Geomagnetic surveying, archeology

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