

Geophysical survey on Ibida

Eugen S. Teodor – Romanian National History Museum

Dan Ștefan – Digital Domain

Alexandra Teodor – University of Architecture & Urbanism “I. Mincu”

ABSTRACT

Late Roman city from Slava Rusă, identified by historians with the antique city of (*L*)*Ibida*, is the second human settlement in the range of surface, in Romanian Dobroudja, following the provincial capital, *Tomis* (around 60 hectares), and other two cities from southern *Scythia* (today in Bulgaria), *Dionysopolis* (36 ha) and *Zaldapa* (25 ha). Unlike the long-time excavated and more famous *Histria* and *Tropaeum*, the archaeological research is still in the initial stage, making a real progress only in the last decade or so. The investigated surface is today around only about 1000 m² intra-muros, from an overall of 21 hectares (only the city, without the adjoining fort), thus less than 0.5%. Most of the ruins that once made up this vast ancient city lay nowadays under the modern village of Slava Rusă; yet, a significant area, about 4.5 ha, behind the northern curtain, stands free of modern constructions and major disturbances, being a typical area for geophysical investigation.

In the perimeter between The Large Tower (no. 8) and the Archaeological Base 1 has been practiced our first survey, in September 2011. The investigated sector was divided into four polygons of 40 x 40 m, approximately aligned to the North-South direction. In the first survey phase, the entire target-surface (6400 m²) was explored using magnetic methods, the results being roughly processed on the spot. Taking in consideration those early results, a smaller area was selected for further investigation with other, more time-consuming, geophysical methods. Four adjoined profiles, 40 m long, were measured by electric tomography, in order to refine the layout of the buried structures as disclosed by the previous magnetic analysis and, correspondingly, in order to get a clearer idea about the thickness of the anthropic layers. The entire geophysical survey was complemented by rigorous topographic activities.

The main result, basically, is the identification of two types of street orientations, with a mutual deviation of 15°, suggesting two distinct stages of town-life. The first alignment is compatible with the archaeological situation from the test Trench 1, west of our survey, dated mainly for the fourth century AD. Our research is suggesting that in the area we have also a second major alignment, not seen yet by archaeological means, which could be the result of a major reconstruction from the sixth century.

As the geophysical exploration of Slava Rusă appeared promising from its very beginning, we are intending to extend the research area towards East, approaching the archaeological sector located behind the *Tower 10*, in order to be able to confirm the existence of the double street layout currently noticed.