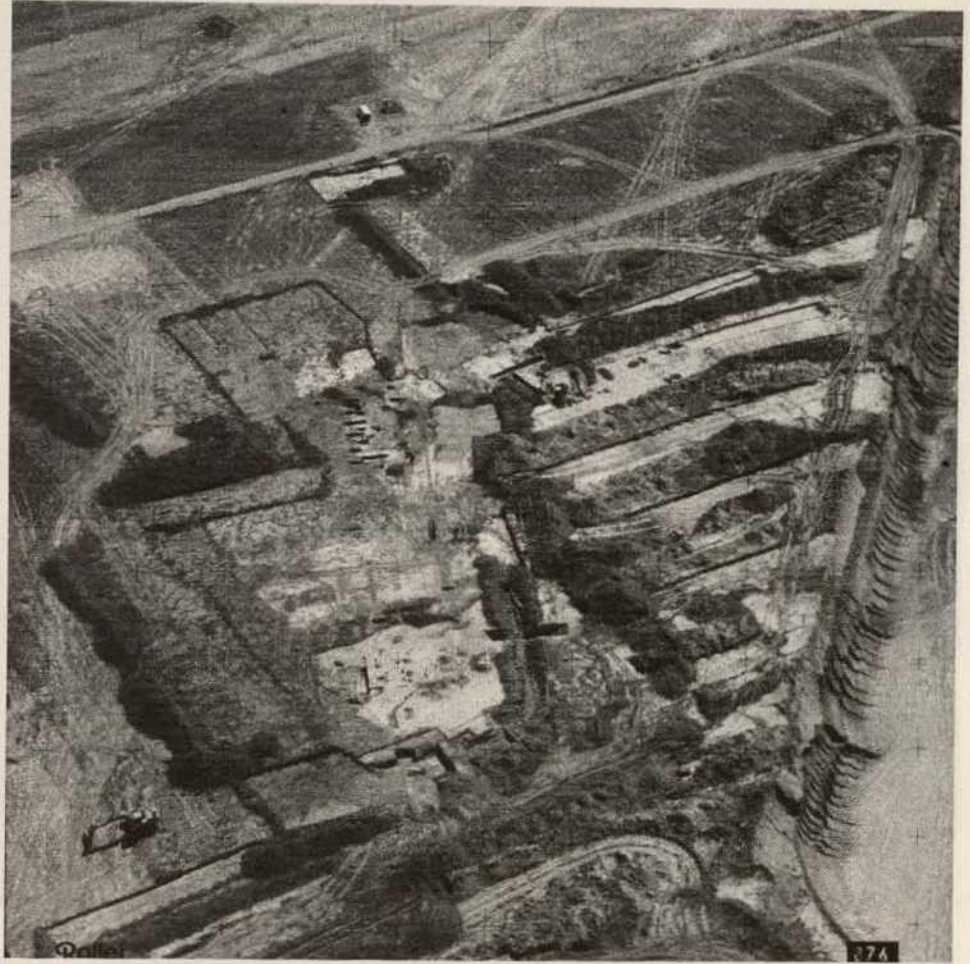


Fig. 3. Excavation on the site short before cole-mining comes (A03286/MSBE95 LVR/RAB/Zantopp, R.)



M. Zupancic, D. Najdovski

Decoding an Invisible Late Roman Inscription using GPR imaging and EM modeling

In a late Roman city wall of Celje in Slovenia there is, among other secondarily used stone material, a block with a Roman inscription. A part of an inscription is visible. The other part is hidden.

A preservation ethics indicates a nondestructive approach, used by the authors.

To read a hidden part of an inscription we used electromagnetic (EM) modeling for Ground Penetrating Radar (GPR) imaging with a Finite Difference Time Domain modeling (FDTD).

The purpose of our experimental and modeling efforts is to achieve a pre-processed data base for 3D image reconstruction algorithm.

We present a rendering in three-dimensions with high resolution detail visualization.

Keywords: 3D FDTD EM modeling, GPR, 3D radar imaging, visualization.

