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Contributions of LiDAR data to the knowledge of the ancient territory of Poreč-Parentium (Croatia)

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► **To cite this version:**

Ninon Basuau. Contributions of LiDAR data to the knowledge of the ancient territory of Poreč-Parentium (Croatia). TRAIL 2022 Archaeological interpretation across scales – learning about landscapes using lidar, Apr 2022, Postojna, Slovenia. , 2022. halshs-03788804

HAL Id: halshs-03788804

<https://shs.hal.science/halshs-03788804>

Submitted on 27 Sep 2022

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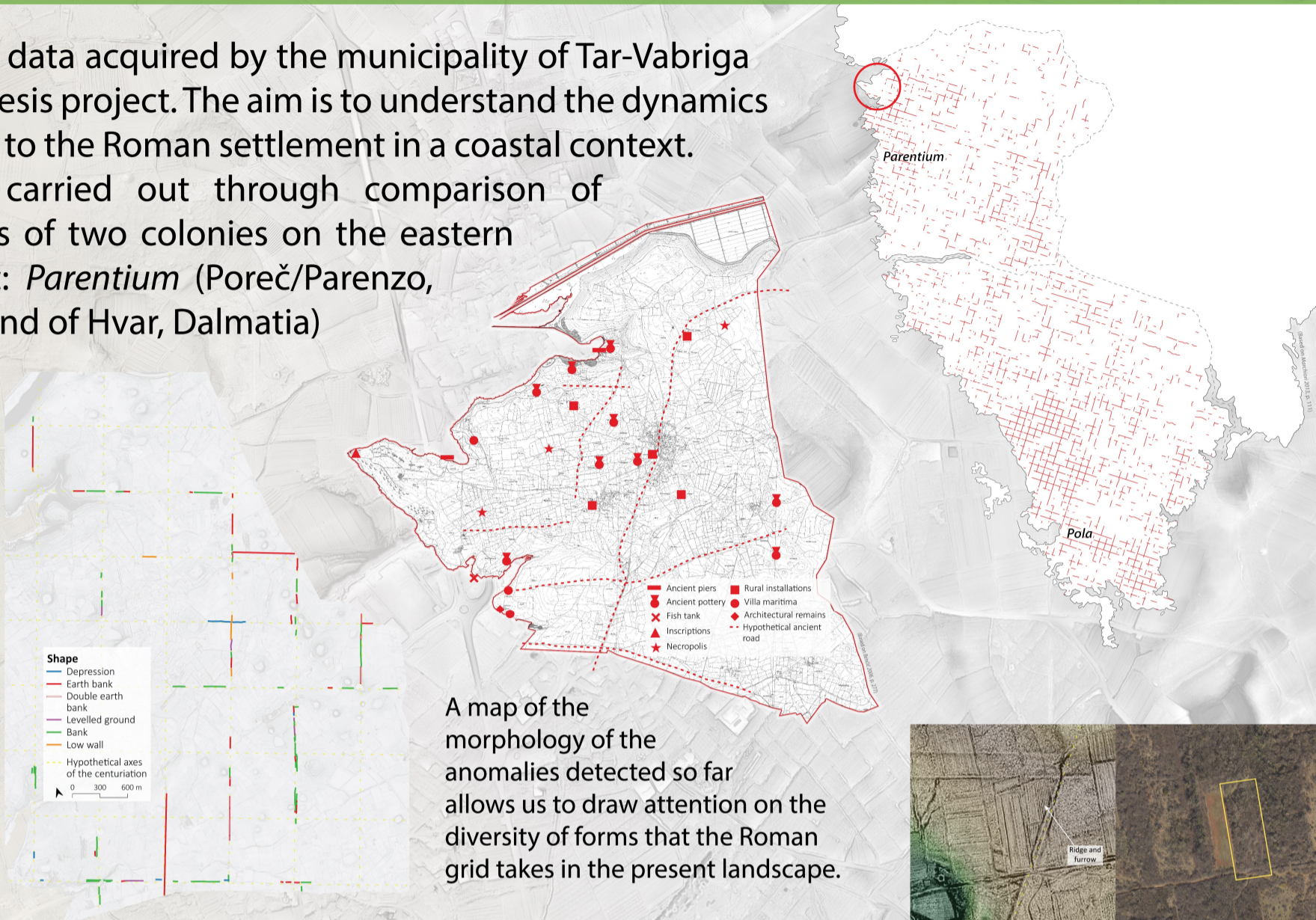
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CONTRIBUTIONS OF LIDAR DATA TO THE KNOWLEDGE OF THE ANCIENT TERRITORY OF POREČ-PARENTIUM (CROATIA)



The analysis of LiDAR data acquired by the municipality of Tar-Vabriga (31 km²) is part of a thesis project. The aim is to understand the dynamics of occupation related to the Roman settlement in a coastal context. This study will be carried out through comparison of centuriated territories of two colonies on the eastern coast of the Adriatic: *Parentium* (Poreč/Parenzo, Istria) and *Pharos* (island of Hvar, Dalmatia)

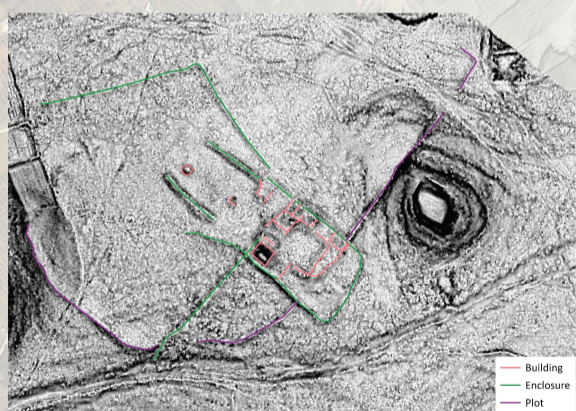
Covering a sector that has been relatively little studied, this LiDAR survey allows us to refine our knowledge of the Istrian centuriation, which has been known since the 19th century thanks to its petrification in the landscape, notably in the form of dry-stone walls.



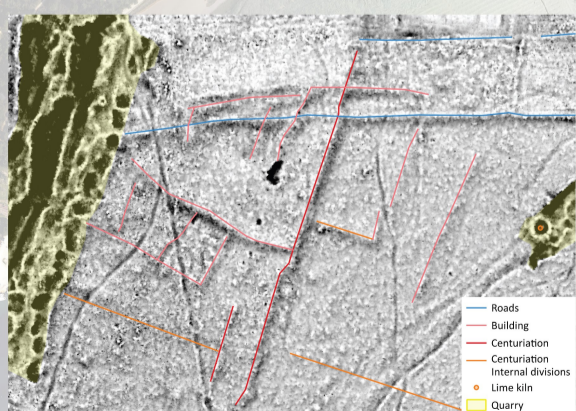
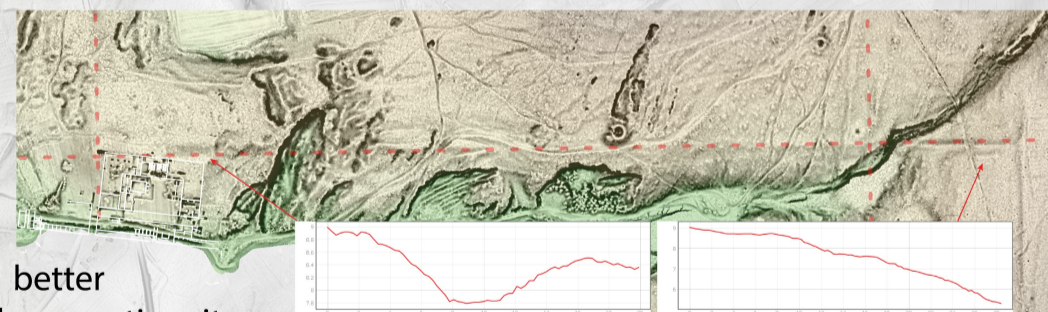
A map of the morphology of the anomalies detected so far allows us to draw attention on the diversity of forms that the Roman grid takes in the present landscape.



Field verifications and the study of old maps allow us to question the transmission of the ancient field system in the present planimetry and changes in land exploitation.



The detection of all the evidences of settlements (enclosure, isolated building, villa, burial mound, etc.), natural resources exploitation (lime kiln, quarries, etc.) and ancient roads allows us to better understand the organization of rural occupation, its evolution and its dynamic.



These detection works are accompanied by field verifications - surveys or excavations - in order to check the identification of the structures and to propose a date.



The structures identified from the analysis of ALS data will complete the rich archaeological documentation concerning the territory of Parentium. This corpus will constitute the basis for our reflection which aims at a better understanding of the development and the economic impacts of the Roman settlement in a coastal context.