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HIGH RESOLUTION SURVEY OF PHAISTOS PALACE (CRETE) BY TLS AND TERRESTRI AL PHOTOGRAMMETRY

M. Fabris¹, V. Achilli¹, G. Artese², D. Bragagnolo¹, and A. Menin¹ ¹DCEAE-LRG, Department of Civil Environmental and Architectural Engineering, University of Padua, 35131 Padua, Italy ²Department of Environmental Planning, University of Calabria, 87036 Arcavacata di Rende, Italy

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Abstract. Three-dimensional methodologies as Terrestrial Laser Scanning (TLS) and digital photogrammetry, are used to extract digital models of surfaces. In this paper, the two different approaches, integrated with classical topographic methodologies, were applied in the 3D survey of a portion of Phaistos Palace in Crete island. The archaeological site represents one of the most important document of the Minoan civilization. Leica HDS2500 Time of Flight laser scanner, Canon EOS 1 DS Mark II digital metric camera and Leica TC2003 total station were used. The aim is to evaluate if data with very different methodologies can be accurately co-registered, integrated and what are the limits of applicability. Results show the co-registration of data (average differences in the order of some centimetres) and a better capacity of laser scanning surfaces to describe the corrugated portions of the walls of Phaistos Palace.

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