



Kandidat

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Thermal Characterization of the Valencia Silo-Yard

Referent

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Keywords

Thermography, heritage, 3D model, 3d viewer, multispectral, cultural heritage

Zusammenfassung

This master thesis is part of the international project "Responsibility for Cultural Heritage" created by the universities Aristotle University of Thessaloniki, Hochschule Karlsruhe Technik und Wirtschaft and Polytechnic University of Valencia. Thermal Characterization of the Valencian Silo-Yard is the outcome of the work done in the Silos of Burjassot.

This project is focused on the Silos of Burjassot, an architecture and civil engineering work built as reservoir for the wheat that was consumed in Valencia, providing in shortage periods and keeping in prosperity times.

During the international campaign done between the 11th to 15th April an interior thermal characterization of different silos was performed, in order to create different documentation about the current state of conservation of the monument and pathologies that affect it. This thermal characterization was performed with low-cost hardware, developing software under Android operating system, to obtain images in the visible and infrared spectrum. After data collection, different 3D models of the silos were created from multispectral imagery with a viewer to freely view different parts of the Silos of Burjassot. Finally, different documentation of conditions and pathologies were did from the different products created.