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# PHOTOGRAMMETRIC AND LIDAR DOCUMENTATION OF THE ROYAL CHAPEL (CATHEDRAL-MOSQUE OF CORDOBA, SPAIN)

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Abstract. At present, cultural heritage documentation projects use a variety of spatial data acquisition techniques such as conventional surveying, photogrammetry and terrestrial laser scanning. This paper deals with a full documentation project based on all those techniques in the Royal Chapel located in the Cathedral-Mosque of Cordoba in Spain, declared World Heritage Site by UNESCO. At present, the Royal Chapel is under study for a detailed diagnostic analysis in order to evaluate the actual state of the chapel, pathologies, construction phases, previous restoration works, material analysis, etc. So in order to assist the evaluation, a documentation project with photogrammetric and laser scanner techniques (TLS) has been carried out. With this purpose, accurate cartographic and 3D products, by means of the integration of both image and laser based techniques, were needed to register all data collected during the diagnostic analysis.

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