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Terrestrial scanning or digital images in inventory of monumental objects? – case study

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Abstract. Cultural heritage is the evidence of the past; monumental objects create the important part of the cultural heritage. Selection of a method to be applied depends on many factors, which include: the objectives of inventory, the object's volume, sumptuousness of architectural design, accessibility to the object, required terms and accuracy of works. The paper presents research and experimental works, which have been performed in the course of development of architectural documentation of elements of the external facades and interiors of the Wilanów Palace Museum in Warszawa. Point clouds, acquired from terrestrial laser scanning (Z+F 5003h) and digital images taken with Nikon D3X and Hasselblad H4D cameras were used. Advantages and disadvantages of utilisation of these technologies of measurements have been analysed with consideration of the influence of the structure and reflectance of investigated monumental surfaces on the quality of generation of photogrammetric products. The geometric quality of surfaces obtained from terrestrial laser scanning data and from point clouds resulting from digital images, have been compared.

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