

SURVEY AND REPRESENTATION OF HISTORICAL GLOBES

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ABSTRACT

In the research activities of the photogrammetrical laboratory of CIRCE – IUAV is being developed a study about survey and representation of historical globes maintained in some Italian museums, such as in the Marciana Museum in Venice. The globe, for the Geomatics, is a matter of great interest just because its survey puts out all the typical questions of close range photogrammetry applied to a round object.

Its representation proposes instead all the problems about cartographical projection because what it is to be represented on a plane is a “earth” miniaturized. Moreover there are some important questions due to their representation contents because it is about, as a matter of fact, in the studied examples, historical cartography (think about the difficulties in reading the semantic content of an old map, or the differences in land description regard to geographical discovery. A very accurate study about this question is necessary before starting all the analytical treatment).

The aim of the research is the construction of 3D virtual globes, where the cartographical contents of old globes are mapped and their possible cartographical projection.

In the paper all the steps of the research and all the necessary procedures to pass from the real globe to the virtual one will be described.