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\HIGH RESOLUTION 3D MODELING OF THE BEHAIM GLOBE

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Abstract. The article describes the 3D surveying and modeling of the Behaim globe, the oldest still existing and intact globe of the earth, preserved at the German National Museum of Nuremberg, Germany. The work is primarily performed using high-resolution digital images and automatic photogrammetric techniques. Triangulation-based laser scanning is also employed to fill some gaps in the derived image-based 3D geometry and perform geometric comparisons. Major problems are encountered in texture mapping. The 3D modeling project and the creation of high-resolution mapprojections is performed for scientific, conservation, visualization and education purposes.

Conference Paper (PDF, 5556 KB)

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