

MAIS4D – An Example of Spatial and Temporal Visualization Methods for Urban Development in 4 Dimensions.

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ABSTRACT

Urban Development Strategies have always integrated spatial and temporal representations of regional structures. However a combined digital representation in 4 Dimensions (3 spatial and 1 temporal dimension) is very seldom used in urban planning. This paper will introduce a pilot project (MAIS4D), covering a region of Vienna called "Erdberger Mais", together with a large collection of planning documents for these region (3D models, aerial images, 2D plans, photographic and rendered images, metadata, etc). These planning documents have been combined to several interactive documents that represent the historical development, the present situation and the future development of this region. As the technological base, the 3D PDF file format (from Adobe) has been extended to represent 3D data together with temporal annotations as well as additional metadata. The resulting 4D planning documents provide a very suitable base to discuss planning intentions in a very broad sense.