Building up an Archeological GIS based on the excavation of the Diana sanctuary in Nemi, Italy

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Abstract. Surveying archeological records is an essential part of the archeological documentation. The archeological records itself can either be single objects or a wider area. The survey must account for the records' respective geometric shape as well as their spatial relations to each other and the topographic and geographic situation of the find spot (Böhler & Heinz). In this work an Archeological Geographic Information System (A-GIS) is build up, in order to support archeological investigations on the Diana sanctuary in Nemi, Italy. The A-GIS is based on an excavation of the site and thereby generated traditional archeological information (trench sketches, photographs, horizontal/vertical slices as well as longitudinal and cross sections). On the other hand the A-GIS is based on a precise geodetic survey of the site, its topography and of all relevant archeological objects. The A-GIS enable interactive exploration of archeological data. Objects and object attributes can be interactively displayed with appropriate symbology in 2D or 3D. Due to collected object time information, a time-slider helps to animate different stages of the sanctuary.

The Poster will present the established workflow, the A-GIS conceptual schema (UML class diagram according to the ISO 19100 series of standards) and the A-GIS implementation as well as exemplary map outputs relevant for archeological research of the sanctuary. Furthermore a future step will be addressed: using Laser scan data for building up a 3D-model which will include the alignment of the A-GIS conceptual schema with the schema of CityGML (Gröger et al. 2008).

References