

# Archaeology 3D Visualization -Italian examples using 3D CAD Data Integration</TITLE>

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## **ABSTRACT**

Presently, archaeologists are gaining interest and experience in applying GIS to their field. Especially in the context of remote archaeological sites, more cost effective ways of managing data collection and analysis need to be evolved. This paper presents two examples where ArcGIS was applied to two distinct archaeological sites in Italy during the July 2002. The first covers the Italian efforts cover Roman and pre-Roman sites, where GIS was used for data management and 3D visualization. Strategies for integration of Lidar/ ground penetration radar and GPS solutions was also incorporated into the work.

## **Restoring Ancient Stabiae- Castellammare di Stabia, Italy**

**Sangro Valley Pre-roman/Samnite**Sangro Valley, Abruzzo Region  
Tomareccio, Italy

[http://www.oberlin.edu/news-info/observations/observations\\_susan\\_kanel.html](http://www.oberlin.edu/news-info/observations/observations_susan_kanel.html)

<http://www.sangro.org/background/background.html>

## **Scope of work for both Projects**

1.Evaluation of existing GIS and geospatial resources & available data and quality.

General background and recommendation examples of GIS data development examples for archaeology.

Discussion of metadata and ISO standards

Lidar technology options

Imagery resources

5. 3D Visualization examples & assessment opportunities

## **Cad integration and 3D Visualization of the project**

As GIS/GPS and digital discovery solutions grow in ease of use and decrease in cost, these technologies will be applied in remote places and incorporated into the tools for archaeologists and historic site managers. 3D visualization helps not only in showing the supporters of a project the big picture, but also offers archaeologists and historians the ability to analyze the excavated information after the field work has been ended for the season.

This was an educational exercise and copies of the powerpoint and details of the work are available by request from the author.

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## REFERENCES OR ACKNOWLEDGMENTS

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“The Sangro Valley Project was initiated by John Lloyd in 1994, in collaboration with the Soprintendenza Archeologica for the Provincia di Abruzzo. The project operates under the auspices, and with the collaboration of the Soprintendenza, the archaeological superintendency for the region of Abruzzo, headed by Prof.ssa Anna-Maria Bietti-Sestieri, but organized to all intents and purposes with the help of the Ispettrice (Inspector for Antiquities) for the southern side of the Sangro Valley, Amalia Faustoferri. The actual fieldwork is coordinated by Ed Bispham and Dr. Susan Kane. Acknowledgments to both Dr. Susan Kane and Sam Carrier from Oberlin College for their support for their leap of faith in bringing me on-board on short notice is noted. A special note of thanks to Ray Johnston from the US Forest Service for making it happen!