

## GIS documentation for the Archaeology Data Service

Please fully document and record the GIS that you intend to submit to the ADS for archiving. The table below provides a template for generic information required for archiving GIS, examples are provided in greyed out italics below. Please be sure to also complete the accompanying document (*GIS\_file\_metadata.doc*) to provide us with a list of all layers within the project.

<b>Project Title</b>	Castelporziano: Rome's Maritime Façade; Laurentine Shore Project
<b>Hardware:</b>	
<b>Software:</b>	ArcGIS 9.2
<b>Date of Creation:</b>	25/02/2010
<b>Coverage</b>	Tiber Delta and lower Tiber valley, Lazio Italy. Incorporates the Castelporziano Estate and elements of northern Latium and the Alban Hills.
<b>Author:</b>	A. Bicket & J. Andrews.
<b>Data Sources:</b>	<ul style="list-style-type: none"> <li>• Bicket et al (2009). A multiscale geoarchaeological approach from the Laurentine Shore (Castelporziano, Lazio, Italy). Géomorphologie: relief, processus, environnement 4/2009, p 257-270.</li> <li>• Bicket, A.R. (2009). Reconstructing the Holocene coastal development of the Laurentine Shore. Ph.D thesis, Loughborough University, Dept of Geography.</li> <li>• Brown, F.S.J. (2009). Late Holocene environmental change at Castelporziano. Ph.D thesis, Loughborough University, Dept of Geography.</li> <li>• Heinzelmann, M. (1998). Beobachtungen zur surbanen Topographie Ostias, ein orthogonales Strassensystem im Bereich der Pianbella. Römische Mitteilungen, 105, p 175 – 225.</li> <li>• Keay, S.J. et al (2005). Portus: an archaeological survey of the port of Imperial Rome. Archaeologia monographs of the</li> </ul>

	<p>British School at Rome, 15. British School at Rome: Ministero per I beni e le attività culturali, Soprintendenza per I beni archeologici di Ostia, London.</p> <ul style="list-style-type: none"> <li>• Lauro M.G.&amp; Claridge A.J. (1998). Litus Laurentium: carta archeologica della zona litoranea a Castelporziano. In, Lauro M.G.&amp; Claridge A.J. (Editors), Castelporziano III: Campagne di scavo e restauro 1987-1991. Soprintendenza Archeologica di Ostia. Viella s.r.l., Roma. P 39 – 62.</li> <li>• USGS: Shuttle Radar Topography Mission (SRTM) 90m Digital Elevation Model (DEM). Website – <a href="http://srtm.usgs.gov/">http://srtm.usgs.gov/</a></li> </ul>
<b>Projection:</b>	UTM 33N, WGS'84 coordinate system, EGM'96 geoid model (accurate modern sea level proxy); <a href="http://cddis.nasa.gov/926/egm96/egm96.html">http://cddis.nasa.gov/926/egm96/egm96.html</a> ).
<b>Scale of data capture:</b>	
<b>Scale of data storage:</b>	
<b>Assessment of data quality:</b>	<ul style="list-style-type: none"> <li>• Post-processed D-GPS ground control points (GCPs) measurement accuracy is on the sub-centimetre scale for latitude, longitude and altitude (based on EGM'96 geoid model).</li> <li>• Garmin GPSmap 60csx (EGNOS/WAAS enabled) GPS positions of major sites and sampling locations are typically within 3 – 6m for latitude and longitude owing to dense forest cover over most of the site.</li> <li>• Georeferenced mapping and aerial photography is based on GCPs. Root-mean square error typically significant at 5 decimal places (e.g. 0.00004).</li> </ul>
<b>Method of original data capture:</b>	<ul style="list-style-type: none"> <li>• Post-processed D-GPS GCPs using a Leica SR20 system. Processed relative to the INGR-ROMA reference point.</li> <li>• Garmin GPSmap 60csx (EGNOS/WAAS enabled) GPS positions of major sites and sampling locations.</li> <li>• Leica total station measurements of duneridge transects, building plans.</li> <li>• Georeferencing and digitisation of mapping, site drawings and aerial photography (copyrighted material) using GCPs and tiepoints.</li> </ul>
<b>Purpose of data creation:</b>	Geomorphological reconstruction of Tiber delta during the last 5000 years, with focus on palaeo-shoreline and duneform development. Geoarchaeological interpretation of archaeological sites in the Castelporziano Estate with reference to the wider geomorphological and archaeological context of the Tiber delta.
<b>Ownership</b>	A.Bicket

**Comments**