

1-Project Description

Project Name	Virtual Amarna Project
Name of monument, survey area, or object	NA
Monument/Object Number	39425
Monument/Object Description	Possible grave marker fragment
Survey Location	Amarna, Egypt
Survey Date(s)	26-Feb-2009
Survey Conditions	Indoors
Scanner Details	Konica Minolta VIVID 9i; mm; Serial No: 1001198
Company/Operator Name	Center for Advanced Spatial Technologies, Katie Simon
Control data collected?	No
Turntable used?	No
RGB data capture. IF Yes, provide details.	Yes. The VIVID 9i uses internal RGB capture. A three point lighting system was used to illuminate the object from the top and from both sides; this minimized shadows on the object. Each light in the system had 1-3 white light (5000k) flicker free fluorescent bulbs. A 2/2/2 bulb configuration was used throughout the scanning process.
Estimated Data Resolution	0.498
Total Number of Scans in Project	10
Description of final datasets for archive	Original scans, registered dataset, premesh dataset, mesh dataset, decimated mesh dataset, images
Planimetric map of scan coverage areas	No
Additional project notes	NA
Images from survey	39425_01.jpg, 39425_02.jpg, , , , ,

* All Project Information is REQUIRED.

2-Scan Metadata

*Scan Filename	Scan Transformation Matrix	Matrix Applied to Scans?	* Name of monument/object area	* Survey Date	Number of Points in Scan	Additional Scan Notes	* Scanner Technology	Data Resolution	Lense or FOV Details (Triangulation scans only)
39425_01	39425_mtrx_01	Yes	39425	26-Feb-2009	138388	NA	Triangulation	0.629098	Mid
39425_02	39425_mtrx_02	Yes	39425	26-Feb-2009	106054	NA	Triangulation	0.543442	Mid
39425_03	39425_mtrx_03	Yes	39425	26-Feb-2009	109165	NA	Triangulation	0.484678	Mid
39425_04	39425_mtrx_04	Yes	39425	26-Feb-2009	153074	NA	Triangulation	0.442378	Mid
39425_05	39425_mtrx_05	Yes	39425	26-Feb-2009	49446	NA	Triangulation	0.518539	Mid
39425_06	39425_mtrx_06	Yes	39425	26-Feb-2009	19097	NA	Triangulation	0.42204	Mid
39425_07	39425_mtrx_07	Yes	39425	26-Feb-2009	26913	NA	Triangulation	0.567191	Mid
39425_08	39425_mtrx_08	Yes	39425	26-Feb-2009	10843	NA	Triangulation	0.438722	Mid
39425_09	39425_mtrx_09	Yes	39425	26-Feb-2009	14467	NA	Triangulation	0.451009	Mid
39425_10	39425_mtrx_10	Yes	39425	26-Feb-2009	63026	NA	Triangulation	0.480596	Mid

3-Registration Metadata

Name of Registered Dataset	Global Registration Error in units	Total number of points in final registration
39425_GR.txt	0.140	690325
* All Registration Information is REQUIRED.		

4-Mesh Metadata

Pre-Meshing Metadata

Name of Pre-Mesh Dataset	39425_GRE.txt	
Number of Points in File		558656
Overlap Reduction	Y	
Smoothing	N	
Subsampling	N	
Color Editions	N	
Point Deletion Summary	Overlap reduction was computed in Polyworks software. Following overlap reduction, floating data points were also deleted. Data remnants from overlap reduction were also deleted as necessary.	

Polygonal Mesh Metadata:

Name of Mesh Dataset	39425_hi.obj	
Holes Filled	Y	
Smoothing	Y	
Color Editions	N	
Healing/despiking	Y	
Total Triangle Count (post editing, predecimation)		804972
RGB Color Included	Y	
Data Reduction	N	
Coordinate System Adjustment	Y	
CS Adjustment Matrix	Cannot export from software	
Additional processing notes	NA	

Decimated Polygonal Mesh Metadata:

Name of Decimated Mesh Dataset	39425_lo.obj	
Total Original Triangle Count		804972
Decimated Triangle Count		25000
RGB Color Preserved from original dataset	Y	

Image Metadata

Identifier (Image File Name)	Title / Caption	Description of Image	Creator	Date	Rights	Keywords	Location
39425_01.jpg	NA	Image of Amarna Object 39425, possible grave marker fragment	Center for Advanced Spatial Technologies, Katie Simon	26-Feb-2009	Creative Commons 3.0	Amarna, Akhenaten, 3D model	Amarna, Egypt
39425_02.jpg	NA	Image of Amarna Object 39425, possible grave marker fragment	Center for Advanced Spatial Technologies, Katie Simon	26-Feb-2009	Creative Commons 3.0	Amarna, Akhenaten, 3D model	Amarna, Egypt