

1-Project Description

Project Name	Virtual Amarna Project
Name of monument, survey area, or object	NA
Monument/Object Number	22
Monument/Object Description	Large offering table
Survey Location	Amarna, Egypt
Survey Date(s)	27-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?	Not recorded
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	0.62
Total Number of Scans in Project	14
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	22_01.jpg, 22_02.jpg, 22_03.jpg, 22_04.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	First or Last Return (TOF scans only)	Frequency Settings (Phase scans only)	Noise Settings (Phase scans only)	Camera Exposure Settings (If RGB acquired)(Phase scans only)	Lense or FOV Details (Triangulation scans only)
22_01	22_mtrx_01	Yes		22 27-Feb-2009	175501	NA	Triangulation	0.639792					Mid
22_02	22_mtrx_02	Yes		22 27-Feb-2009	126080	NA	Triangulation	0.614618					Mid
22_03	22_mtrx_03	Yes		22 27-Feb-2009	39128	NA	Triangulation	0.560574					Mid
22_04	22_mtrx_04	Yes		22 27-Feb-2009	124975	NA	Triangulation	0.609716					Mid
22_05	22_mtrx_05	Yes		22 27-Feb-2009	159583	NA	Triangulation	0.628261					Mid
22_06	22_mtrx_06	Yes		22 27-Feb-2009	58837	NA	Triangulation	0.588267					Mid
22_07	22_mtrx_07	Yes		22 27-Feb-2009	43055	NA	Triangulation	0.569033					Mid
22_08	22_mtrx_08	Yes		22 27-Feb-2009	124546	NA	Triangulation	0.641471					Mid
22_09	22_mtrx_09	Yes		22 27-Feb-2009	35556	NA	Triangulation	0.540393					Mid
22_10	22_mtrx_10	Yes		22 27-Feb-2009	56316	NA	Triangulation	0.540069					Mid
22_11	22_mtrx_11	Yes		22 27-Feb-2009	64494	NA	Triangulation	0.524878					Mid
22_12	22_mtrx_12	Yes		22 27-Feb-2009	49045	NA	Triangulation	0.529271					Mid
22_13	22_mtrx_13	Yes		22 27-Feb-2009	66893	NA	Triangulation	0.546366					Mid
22_14	22_mtrx_14	Yes		22 27-Feb-2009	75472	NA	Triangulation	0.529228					Mid

3-Registration Metadata

Name of Registered Dataset	Global Registration Error in units	Total number of points in final registration
22_GR.txt	0.012	1199300
* All Registration Information is REQUIRED.		

4-Mesh Metadata

Pre-Meshing Metadata

Name of Pre-Mesh Dataset	22_GRE.txt	
Number of Points in File		701980
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	22_hi.obj	
Holes Filled	Y	
Smoothing	Y	
Color Editions	N	
Healing/despiking	Y	
Total Triangle Count (post editing, predecimation)		1697676
RGB Color Included	Y	
Data Reduction	N	
Coordinate System Adjustment	Y	
CS Adjustment Matrix	Cannot export from software	
Additional processing notes	Mesh was post processed (including hole filling and smoothing operations) in Rapidform XOR.	

Decimated Polygonal Mesh Metadata:

Name of Decimated Mesh Dataset	22_lo.obj	
Total Original Triangle Count		1697676
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
22_01.jpg	NA	Image of Amarna Object 22, a large offering table	Center for Advanced Spatial Technologies, Katie Simon	27-Feb-2009	Creative Commons 3.0	Amarna, Akhenaten, 3D model	Amarna, Egypt
22_02.jpg	NA	Image of Amarna Object 22, a large offering table	Center for Advanced Spatial Technologies, Katie Simon	27-Feb-2009	Creative Commons 3.0	Amarna, Akhenaten, 3D model	Amarna, Egypt
22_03.jpg	NA	Image of Amarna Object 22, a large offering table	Center for Advanced Spatial Technologies, Katie Simon	27-Feb-2009	Creative Commons 3.0	Amarna, Akhenaten, 3D model	Amarna, Egypt
22_04.jpg	NA	Image of Amarna Object 22, a large offering table	Center for Advanced Spatial Technologies, Katie Simon	27-Feb-2009	Creative Commons 3.0	Amarna, Akhenaten, 3D model	Amarna, Egypt