1-Project Description

Project Name	Virtual Amarna Project
Name of monument, survey area, or object	NA
Monument/Object Number	39433
Monument/Object Description	Grave marker
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	0.501
Total Number of Scans in Project	26
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	39433_01.jpg, 39433_02.jpg, 39433_03.jpg, 39433_04.jpg, 39433_05.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)
39433_01	39433_mtrx_01	Yes	39433	26-Feb-2009	151514	NA	Triangulation	0.507846	Mid
39433_02	39433_mtrx_02	Yes	39433	26-Feb-2009	164431	NA	Triangulation	0.518877	Mid
39433_03	39433_mtrx_03	Yes	39433	26-Feb-2009	121670	NA	Triangulation	0.507394	Mid
39433_04	39433_mtrx_04	Yes	39433	26-Feb-2009	165193	NA	Triangulation	0.525972	Mid
39433_05	39433_mtrx_05	Yes	39433	26-Feb-2009	133583	NA	Triangulation	0.513757	Mid
39433_06	39433_mtrx_06	Yes	39433	26-Feb-2009	146875	NA	Triangulation	0.518946	Mid
39433_07	39433_mtrx_07	Yes	39433	26-Feb-2009	116901	NA	Triangulation	0.501074	Mid
39433_08	39433_mtrx_08	Yes	39433	26-Feb-2009	142567	NA	Triangulation	0.507439	Mid
39433_09	39433_mtrx_09	Yes	39433	26-Feb-2009	95357	NA	Triangulation	0.523828	Mid
39433_10	39433_mtrx_10	Yes	39433	26-Feb-2009	113321	NA	Triangulation	0.54259	Mid
39433_11	39433_mtrx_11	Yes	39433	26-Feb-2009	89686	NA	Triangulation	0.533165	Mid
39433_12	39433_mtrx_12	Yes	39433	26-Feb-2009	113270	NA	Triangulation	0.545014	Mid
39433_13	39433_mtrx_13	Yes	39433	26-Feb-2009	86513	NA	Triangulation	0.528165	Mid
39433_14	39433_mtrx_14	Yes	39433	26-Feb-2009	110165	NA	Triangulation	0.538367	Mid
39433_15	39433_mtrx_15	Yes	39433	26-Feb-2009	80485	NA	Triangulation	0.518844	Mid
39433_16	39433_mtrx_16	Yes	39433	26-Feb-2009	105753	NA	Triangulation	0.537108	Mid
39433_17	39433_mtrx_17	Yes	39433	26-Feb-2009	34316	NA	Triangulation	0.452614	Mid
39433_18	39433_mtrx_18	Yes	39433	26-Feb-2009	146004	NA	Triangulation	0.515602	Mid
39433_19	39433_mtrx_19	Yes	39433	26-Feb-2009	144916	NA	Triangulation	0.525479	Mid
39433_20	39433_mtrx_20	Yes	39433	26-Feb-2009	168100	NA	Triangulation	0.447385	Mid
39433_21	39433_mtrx_21	Yes	39433	26-Feb-2009	144167	NA	Triangulation	0.527476	Mid
39433_22	39433_mtrx_22	Yes	39433	26-Feb-2009	166946	NA	Triangulation	0.443204	Mid
39433_23	39433_mtrx_23	Yes	39433	26-Feb-2009	197483	NA	Triangulation	0.432517	Mid
39433_24	39433_mtrx_24	Yes	39433	26-Feb-2009	184038	NA	Triangulation	0.448015	Mid
39433_25	39433_mtrx_25	Yes	39433	26-Feb-2009	173132	NA	Triangulation	0.431902	Mid
39433_26	39433_mtrx_26	Yes	39433	26-Feb-2009	174666	NA	Triangulation	0.441611	Mid

Name of Registered Dataset	Global Registration Error in units	Total number of points in final registration
39433_GR.txt	0.115	3389969

*** All Registration Information is REQUIRED.**

Pre-Meshing Metadata

Name of Pre-Mesh Dataset	39433_GRE.txt
Number of Points in File	2468709
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	39433_hi.obj
Holes Filled	Y
Smoothing	Y
Color Editions	N
Healing/despiking	Y
Total Triangle Count (post editing, predecimation)	1821894
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	39433_lo.obj
Total Original Triangle Count	1821894
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
39433_01.jpg	NA	Image of Amarna Object 39433, grave marker	Center for Advanced Spatial Technologies, Katie Simon	26-Feb-2009	Creative Commons 3.0	Amarna, Akhenaten, 3D model	Amarna, Egypt
39433_02.jpg	NA	Image of Amarna Object 39433, grave marker	Center for Advanced Spatial Technologies, Katie Simon	26-Feb-2009	Creative Commons 3.0	Amarna, Akhenaten, 3D model	Amarna, Egypt
39433_03.jpg	NA	Image of Amarna Object 39433, grave marker	Center for Advanced Spatial Technologies, Katie Simon	26-Feb-2009	Creative Commons 3.0	Amarna, Akhenaten, 3D model	Amarna, Egypt
39433_04.jpg	NA	Image of Amarna Object 39433, grave marker	Center for Advanced Spatial Technologies, Katie Simon	26-Feb-2009	Creative Commons 3.0	Amarna, Akhenaten, 3D model	Amarna, Egypt
39433_05.jpg	NA	Image of Amarna Object 39433, grave marker	Center for Advanced Spatial Technologies, Katie Simon	26-Feb-2009	Creative Commons 3.0	Amarna, Akhenaten, 3D model	Amarna, Egypt