## 1-Project Description

| Project Name | Virtual Amarna Museum |
| :---: | :---: |
| Name of monument, survey area, or object | NA |
| Monument/Object Number | 6155 |
| Monument/Object Description | Architectural element |
| Survey Location | Amarna, Egypt |
| Survey Date(s) | 4-Mar-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? | Yes |
| 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 ( 5000 k ) flicker free fluorescent bulbs. A $2 / 2 / 2$ bulb configuration was used throughout the scanning process. |
| Estimated Data Resolution | 0.414 |
| Total Number of Scans in Project | 20 |
| 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 | 6155_01.jpg, 6155_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 <br> 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) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 6155_01 | 6155_mtrx_01 | Yes | 6155 | 4-Mar-2009 | 168798 | NA | Triangulation | 0.399249 |  |  |  |  | Mid |
| 6155_02 | 6155_mtrx_02 | Yes | 6155 | 4-Mar-2009 | 63171 |  | Triangulation | 0.369143 |  |  |  |  | Mid |
| 6155_03 | 6155_mtrx_03 | Yes | 6155 | 4-Mar-2009 | 166865 |  | Triangulation | 0.392927 |  |  |  |  | Mid |
| 6155_04 | 6155_mtrx_04 | Yes | 6155 | 4-Mar-2009 | 179632 |  | Triangulation | 0.396729 |  |  |  |  | Mid |
| 6155_05 | 6155_mtrx_05 | Yes | 6155 | 4-Mar-2009 | 65589 |  | Triangulation | 0.371803 |  |  |  |  | Mid |
| 6155_06 | 6155_mtrx_06 | Yes | 6155 | 4-Mar-2009 | 152281 |  | Triangulation | 0.398834 |  |  |  |  | Mid |
| 6155_07 | 6155_mtrx_07 | Yes | 6155 | 4-Mar-2009 | 123845 |  | Triangulation | 0.413872 |  |  |  |  | Mid |
| 6155_08 | 6155_mtrx_08 | Yes | 6155 | 4-Mar-2009 | 73000 |  | Triangulation | 0.386517 |  |  |  |  | Mid |
| 6155_09 | 6155_mtrx_09 | Yes | 6155 | 4-Mar-2009 | 69926 |  | Triangulation | 0.381871 |  |  |  |  | Mid |
| 6155_10 | 6155_mtrx_10 | Yes | 6155 | 4-Mar-2009 | 120896 |  | Triangulation | 0.397736 |  |  |  |  | Mid |
| 6155_11 | 6155_mtrx_11 | Yes | 6155 | 4-Mar-2009 | 68945 |  | Triangulation | 0.408395 |  |  |  |  | Mid |
| 6155_12 | 6155_mtrx_12 | Yes | 6155 | 4-Mar-2009 | 110893 |  | Triangulation | 0.412328 |  |  |  |  | Mid |
| 6155_13 | 6155_mtrx_13 | Yes | 6155 | 4-Mar-2009 | 54659 |  | Triangulation | 0.377959 |  |  |  |  | Mid |
| 6155_14 | 6155_mtrx_14 | Yes | 6155 | 4-Mar-2009 | 139854 |  | Triangulation | 0.412546 |  |  |  |  | Mid |
| 6155_15 | 6155_mtrx_15 | Yes | 6155 | 4-Mar-2009 | 89883 |  | Triangulation | 0.402965 |  |  |  |  | Mid |
| 6155_16 | 6155_mtrx_16 | Yes | 6155 | 4-Mar-2009 | 63700 |  | Triangulation | 0.379305 |  |  |  |  | Mid |
| 6155_17 | 6155_mtrx_17 | Yes | 6155 | 4-Mar-2009 | 102349 |  | Triangulation | 0.389196 |  |  |  |  | Mid |
| 6155_18 | 6155_mtrx_18 | Yes | 6155 | 4-Mar-2009 | 68657 | NA | Triangulation | 0.393184 |  |  |  |  | Mid |
| 6155_19 | 6155_mtrx_19 | Yes | 6155 | 4-Mar-2009 | 107788 |  | Triangulation | 0.406521 |  |  |  |  | Mid |
| 6155_20 | 6155_mtrx_20 | Yes | 6155 | 4-Mar-2009 | 70648 |  | Triangulation | 0.366398 |  |  |  |  | Mid |


| Name of Registered <br> Dataset | Global <br> Registration <br> Error in units | Total number of <br> points in final <br> registration |
| :--- | :--- | :--- |
| 6155 GR.txt | 0.197 | 2061168 |
| * All Registration Information is REQUIRED. |  |  |

Pre-Meshing Metadata

| Name of Pre-Mesh Dataset | 6155_GRE.txt |
| :--- | :--- |
| Number of Points in File | Y |
| Overlap Reduction | N |
| Smoothing | N |
| Subsampling | N |
| Color Editions | Overlap reduction was computed in Polyworks software. Following overlap reduction, floating data points were also |
| Point Deletion Summary | deleted. Data remnants from overlap reduction were also deleted as necessary. |

## Polygonal Mesh Metadata:

| Name of Mesh Dataset | 6155 _hi.obj |
| :--- | :--- |
| Holes Filled | Y |
| Smoothing | Y |
| Color Editions | N |
| Healing/despiking | Y |
| Total Triangle Count (post editing, |  |
| predecimation) | Y |
| RGB Color Included | N |
| Data Reduction | Y |
| Coordinate System Adjustment | Cannot export from software |
| CS Adjustment Matrix | NA |
| Additional processing notes | 426778 |

Decimated Polygonal Mesh Metadata:

| Name of Decimated Mesh Dataset | 6155_lo.obj | 426778 |
| :--- | :--- | ---: |
| Total Original Triangle Count |  | 25000 |
| Decimated Triangle Count  <br> RGB Color Preserved from original  <br> dataset Y $\mathbf{l}$ |  |  |

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