

Římský sarkofág 1

římský sarkofág - náhrobek (Cesarea), Izrael
21 May 2020



Survey Data

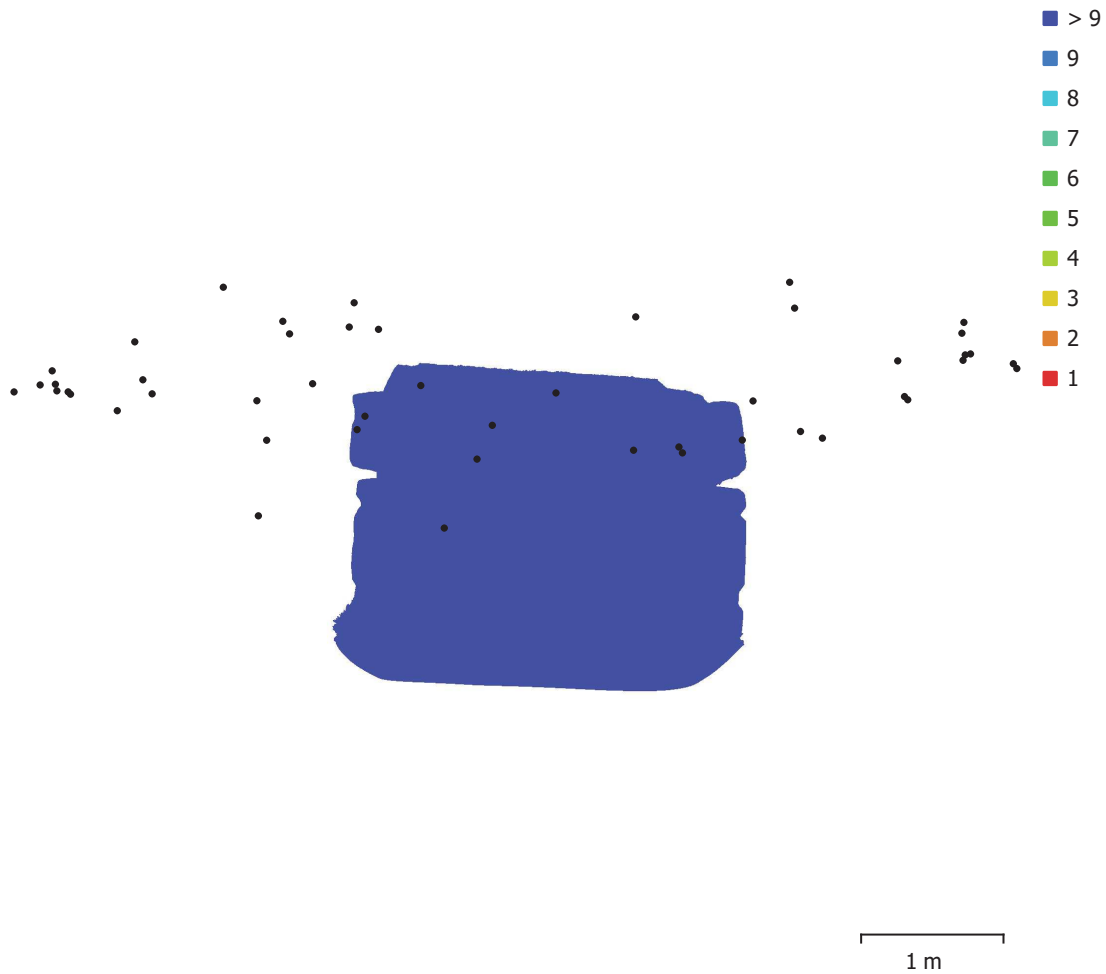


Fig. 1. Camera locations and image overlap.

| | | | |
|--------------------|---------------------|---------------------|-----------|
| Number of images: | 48 | Camera stations: | 48 |
| Flying altitude: | 2.6 m | Tie points: | 52,335 |
| Ground resolution: | 0.581 mm/pix | Projections: | 161,327 |
| Coverage area: | 5.87 m ² | Reprojection error: | 0.422 pix |

| Camera Model | Resolution | Focal Length | Pixel Size | Precalibrated |
|-----------------|-------------|--------------|------------|---------------|
| G700 SE (6.8mm) | 4000 x 3000 | 6.8 mm | unknown | No |

Table 1. Cameras.

Camera Calibration

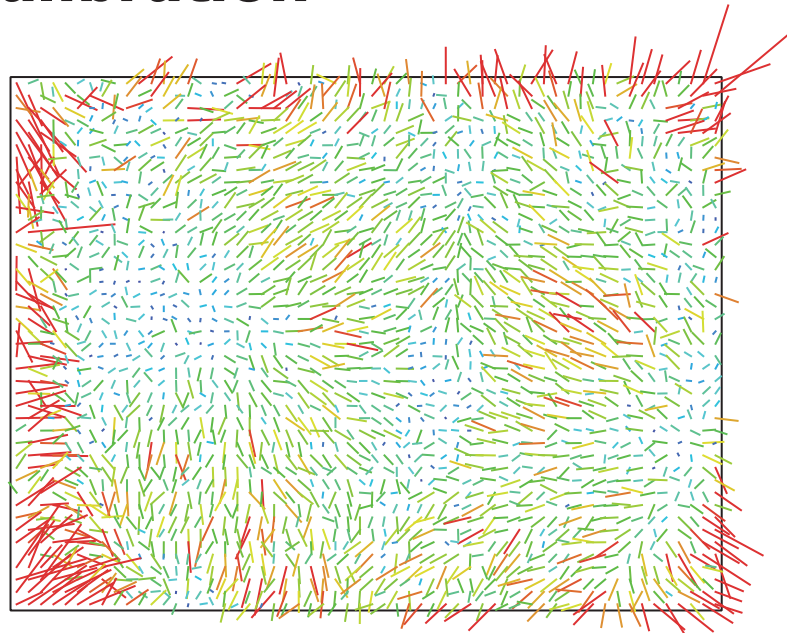


Fig. 2. Image residuals for G700 SE (6.8mm).

G700 SE (6.8mm)

48 images

| | | | |
|--------------|--------------------|---------------|----------------|
| Type | Resolution | Focal Length | Pixel Size |
| Frame | 4000 x 3000 | 6.8 mm | unknown |

| | Value | Error | F | Cx | Cy | K1 | K2 | K3 | P1 | P2 |
|-----------|--------------------|----------|------|------|-------|-------|-------|-------|-------|-------|
| F | 4464.09 | 0.11 | 1.00 | 0.01 | -0.03 | -0.29 | 0.27 | -0.22 | 0.00 | -0.05 |
| Cx | 12.3799 | 0.11 | | 1.00 | -0.19 | 0.02 | -0.02 | 0.03 | 0.93 | -0.16 |
| Cy | -3.01813 | 0.091 | | | 1.00 | -0.02 | 0.04 | -0.02 | -0.17 | 0.86 |
| K1 | 0.00814847 | 0.00017 | | | | 1.00 | -0.95 | 0.88 | 0.01 | -0.01 |
| K2 | 0.00481952 | 0.0012 | | | | | 1.00 | -0.98 | -0.03 | 0.03 |
| K3 | -0.0275824 | 0.0028 | | | | | | 1.00 | 0.04 | -0.02 |
| P1 | 0.000180442 | 1e-005 | | | | | | | 1.00 | -0.11 |
| P2 | 0.00143513 | 8.2e-006 | | | | | | | | 1.00 |

Table 2. Calibration coefficients and correlation matrix.

Processing Parameters

General

| | |
|-------------------|---------------------|
| Cameras | 48 |
| Aligned cameras | 48 |
| Coordinate system | WGS 84 (EPSG::4326) |
| Rotation angles | Yaw, Pitch, Roll |

Point Cloud

| | |
|--------------------------------|-------------------------|
| Points | 52,335 of 64,775 |
| RMS reprojection error | 0.153007 (0.422336 pix) |
| Max reprojection error | 0.469772 (16.3446 pix) |
| Mean key point size | 2.96725 pix |
| Point colors | 3 bands, uint8 |
| Key points | No |
| Average tie point multiplicity | 3.06195 |

Alignment parameters

| | |
|-------------------------------|----------------------|
| Accuracy | Highest |
| Generic preselection | Yes |
| Reference preselection | No |
| Key point limit | 40,000 |
| Tie point limit | 4,000 |
| Adaptive camera model fitting | No |
| Matching time | 1 minutes 25 seconds |
| Alignment time | 19 seconds |
| Software version | 1.5.2.7838 |

Depth Maps

| | |
|-----------------------------------------|----------------------|
| Count | 48 |
| Depth maps generation parameters | |
| Quality | High |
| Filtering mode | Mild |
| Processing time | 9 minutes 19 seconds |

Dense Point Cloud

| | |
|------------------------------------------|----------------------|
| Points | 15,506,889 |
| Point colors | 3 bands, uint8 |
| Depth maps generation parameters | |
| Quality | High |
| Filtering mode | Mild |
| Processing time | 9 minutes 19 seconds |
| Dense cloud generation parameters | |
| Processing time | 5 minutes 20 seconds |
| Software version | 1.5.2.7838 |

Model

| | |
|-----------------------------------------|-------------------------------|
| Faces | 3,048,821 |
| Vertices | 1,524,110 |
| Vertex colors | 3 bands, uint8 |
| Texture | 4,096 x 4,096, 4 bands, uint8 |
| Depth maps generation parameters | |
| Quality | High |
| Filtering mode | Mild |
| Processing time | 9 minutes 19 seconds |
| Reconstruction parameters | |
| Surface type | Arbitrary |
| Source data | Dense cloud |

General

| | |
|-------------------------|-----------------------|
| Interpolation | Extrapolated |
| Strict volumetric masks | No |
| Processing time | 11 minutes 38 seconds |

Texturing parameters

| | |
|------------------------|----------------------|
| Blending mode | Mosaic |
| Texture size | 4,096 |
| Enable hole filling | Yes |
| Enable ghosting filter | Yes |
| UV mapping time | 1 minutes 45 seconds |
| Blending time | 4 minutes 36 seconds |
| Software version | 1.5.2.7838 |

Software

| | |
|----------|------------------|
| Version | 1.5.2 build 7838 |
| Platform | Windows 64 |