

Agisoft PhotoScan

Processing Report

16 April 2018



Survey Data

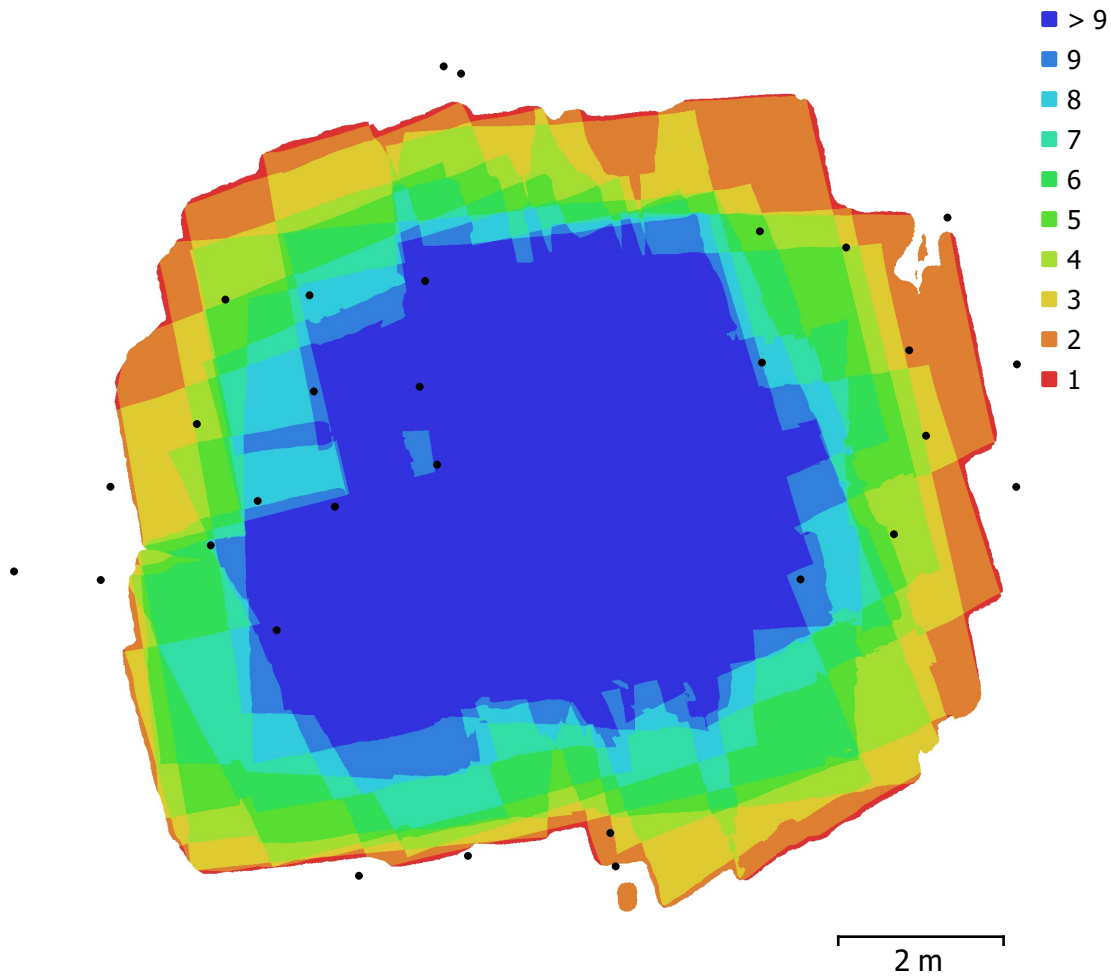


Fig. 1. Camera locations and image overlap.

Number of images:	30	Camera stations:	30
Flying altitude:	5.64 m	Tie points:	142,808
Ground resolution:	1.33 mm/pix	Projections:	395,580
Coverage area:	85.6 m ²	Reprojection error:	0.875 pix

Camera Model	Resolution	Focal Length	Pixel Size	Precalibrated
unknown	3905 x 2617	unknown	unknown	No
unknown	3925 x 2630	unknown	unknown	No

Table 1. Cameras.

Camera Calibration

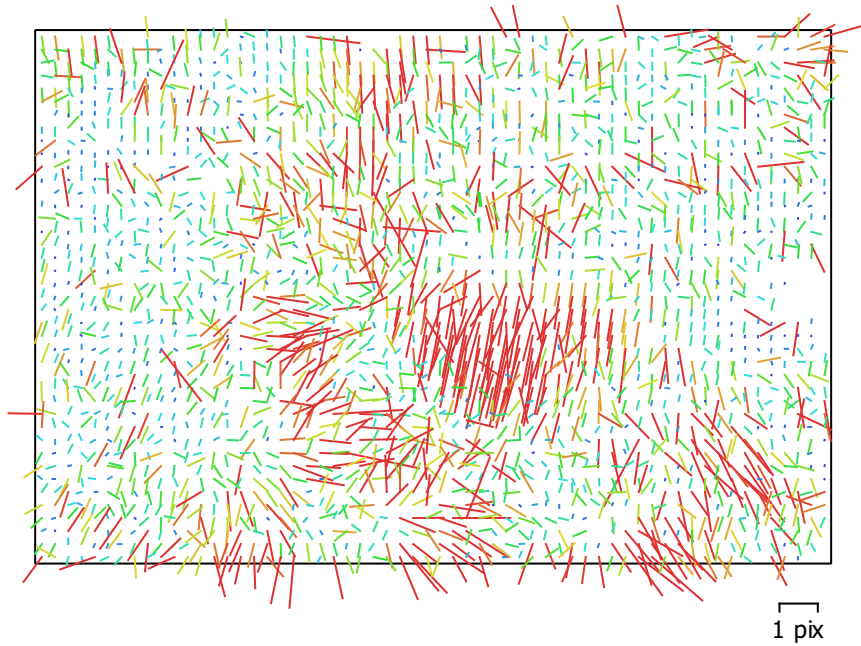


Fig. 2. Image residuals for unknown.

unknown

1 images

Type	Resolution	Focal Length	Pixel Size
Frame	3905 x 2617	unknown	unknown
F:	5019.64		
Cx:	-16.2432	B1:	7.11162
Cy:	28.2524	B2:	4.24931
K1:	0.123563	P1:	8.58359e-06
K2:	-0.896264	P2:	-0.00079581
K3:	1.93132	P3:	0
K4:	0	P4:	0

Camera Calibration

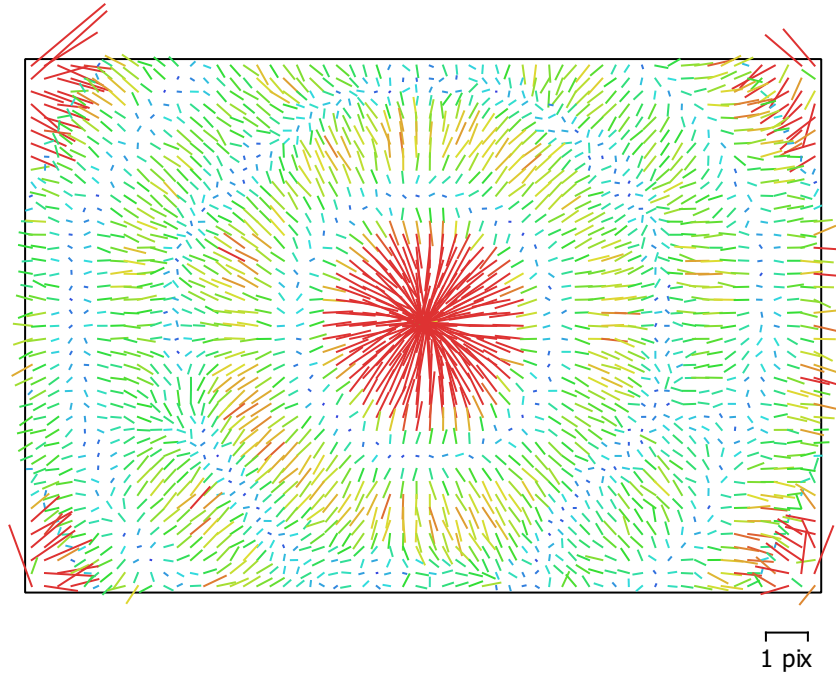


Fig. 3. Image residuals for unknown.

unknown

29 images

Type	Resolution	Focal Length	Pixel Size
Frame	3925 x 2630	unknown	unknown
F:	4034.68		
Cx:	-6.98021	B1:	0.0521717
Cy:	9.18561	B2:	1.79424
K1:	-0.378563	P1:	0.000818175
K2:	2.07128	P2:	0.000379336
K3:	-3.53727	P3:	0
K4:	0	P4:	0

Ground Control Points

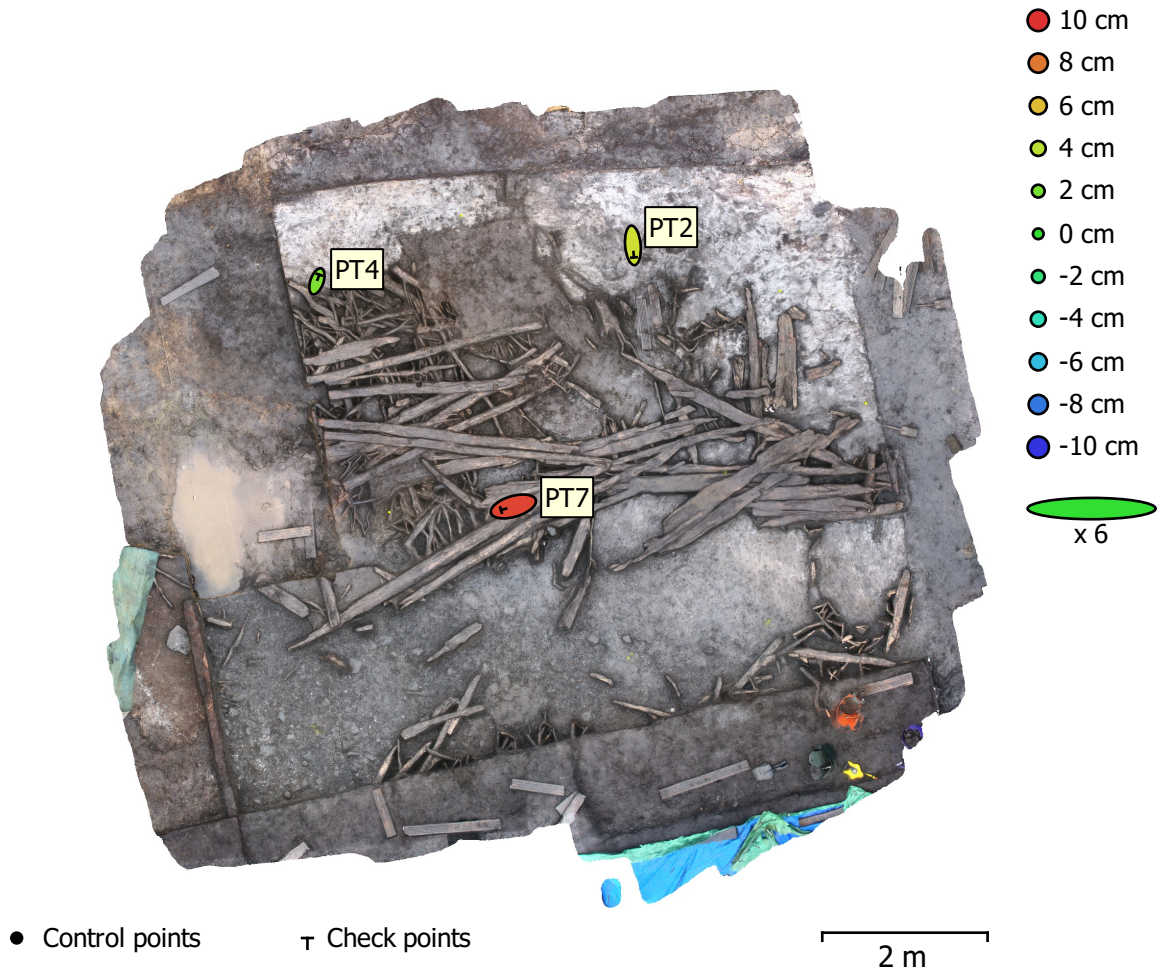


Fig. 4. GCP locations and error estimates.

Z error is represented by ellipse color. X,Y errors are represented by ellipse shape.

Estimated GCP locations are marked with a dot or crossing.

Count	X error (cm)	Y error (cm)	Z error (cm)	XY error (cm)	Total (cm)
3	2.94607	3.30914	6.21298	4.43055	7.63092

Table 2. Check points RMSE.

Label	X error (cm)	Y error (cm)	Z error (cm)	Total (cm)	Image (pix)
PT2	0.416678	-4.84369	4.57483	6.67563	0.444 (11)
PT4	0.9334	2.69374	2.25803	3.63678	0.735 (8)
PT7	-4.99931	-1.4607	9.47501	10.8121	0.640 (16)
Total	2.94607	3.30914	6.21298	7.63092	0.610

Table 3. Check points.

Digital Elevation Model

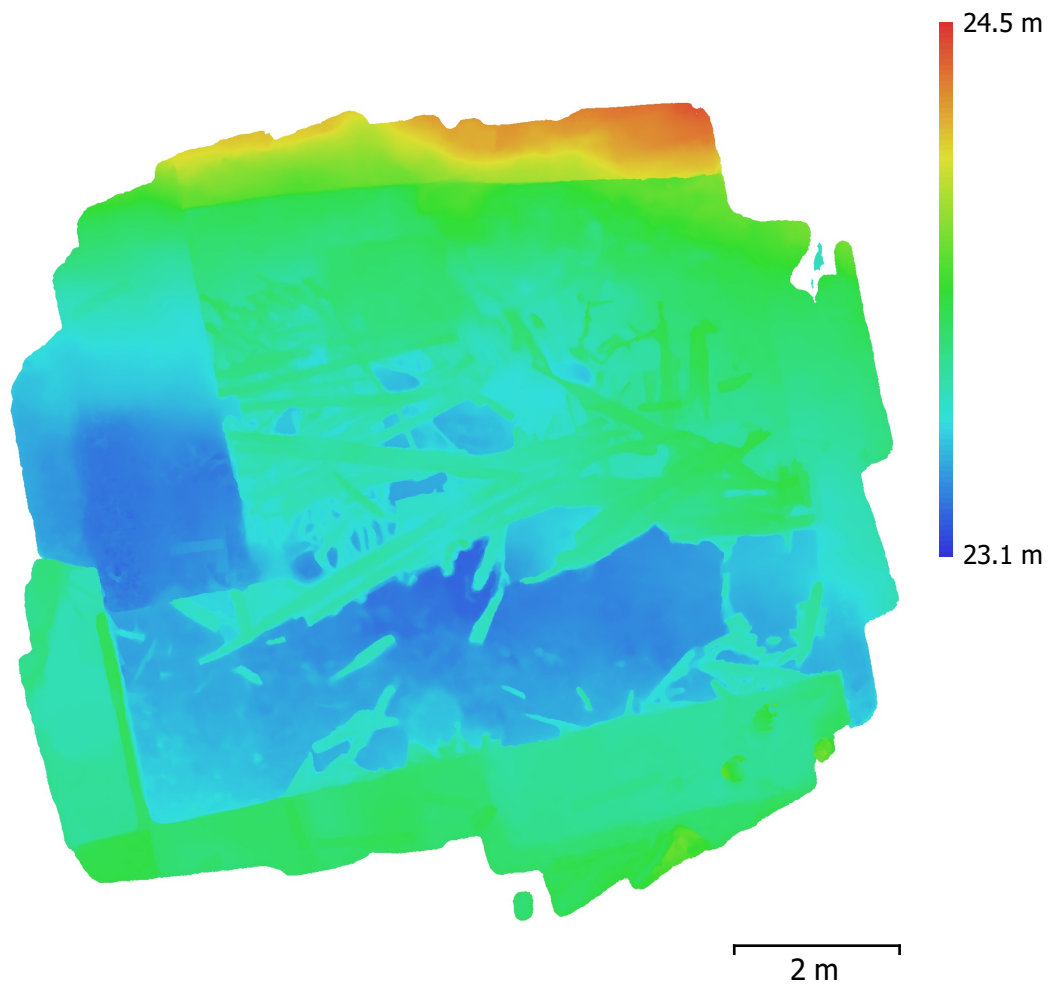


Fig. 5. Reconstructed digital elevation model.

Resolution: 2.67 mm/pix
Point density: 1.41e+03 points/cm²

Processing Parameters

General

Cameras	30
Aligned cameras	30
Markers	3
Coordinate system	Local Coordinates (m)
Rotation angles	Yaw, Pitch, Roll

Point Cloud

Points	142,808 of 171,959
Point colors	3 bands, uint8
Reprojection error	0.874604 (3.08185 max)
Effective overlap	2.99338

Alignment parameters

Accuracy	High
Generic preselection	Yes
Reference preselection	No
Key point limit	40,000
Filter points by mask	Yes
Matching time	1 minutes 59 seconds
Alignment time	38 seconds

Depth Maps

Count	30
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Reconstruction parameters

Quality	High
Filtering mode	Moderate
Processing time	30 minutes 12 seconds

Dense Point Cloud

Points	15,048,818
Point colors	3 bands, uint8

Reconstruction parameters

Quality	High
Depth filtering	Moderate
Dense cloud generation time	1 minutes 34 seconds

Model

Faces	100,000
Vertices	51,265
Vertex colors	3 bands, uint8
Texture	4,096 x 4,096, 4 bands, uint8

Reconstruction parameters

Surface type	Arbitrary
Source data	Dense
Interpolation	Enabled
Quality	High
Depth filtering	Moderate
Face count	0
Processing time	18 minutes 44 seconds

Texturing parameters

Mapping mode	Generic
Blending mode	Mosaic
Texture size	4,096 x 4,096
Enable hole filling	Yes
Enable ghosting filter	No
UV mapping time	40 seconds
Blending time	47 seconds

Software

Version	1.4.1 build 5925
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