

TCRMP20241014_3D_BWR_T1_step1.pdf

Processing Report
19 March 2025



Survey Data

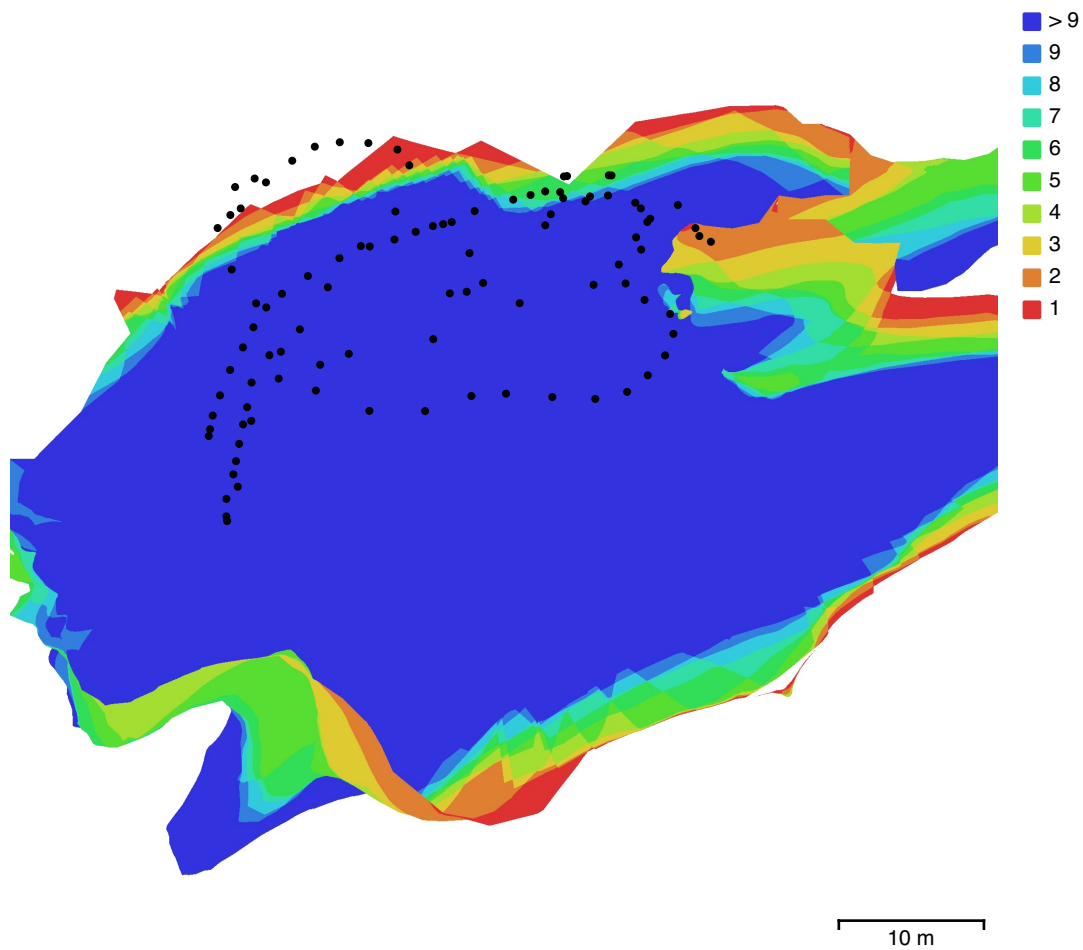


Fig. 1. Camera locations and image overlap.

Number of images:	100	Camera stations:	98
Flying altitude:	19.8 m	Tie points:	13,530
Ground resolution:	1.8 cm/pix	Projections:	37,152
Coverage area:	2.48e+03 m ²	Reprojection error:	1.18 pix

Camera Model	Resolution	Focal Length	Pixel Size	Precalibrated
unknown	720 x 1280	unknown	unknown	No

Table 1. Cameras.

Camera Calibration

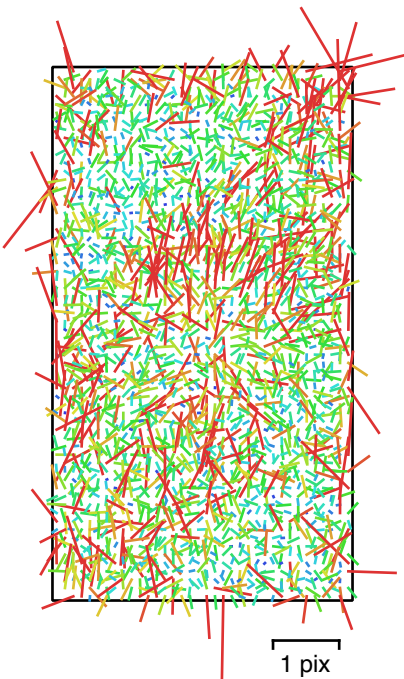


Fig. 2. Image residuals for unknown.

unknown

100 images

Type	Resolution	Focal Length	Pixel Size
Frame	720 x 1280	unknown	unknown

	Value	Error	F
F	1105.54	0.75	1.00

Table 2. Calibration coefficients and correlation matrix.

Digital Elevation Model

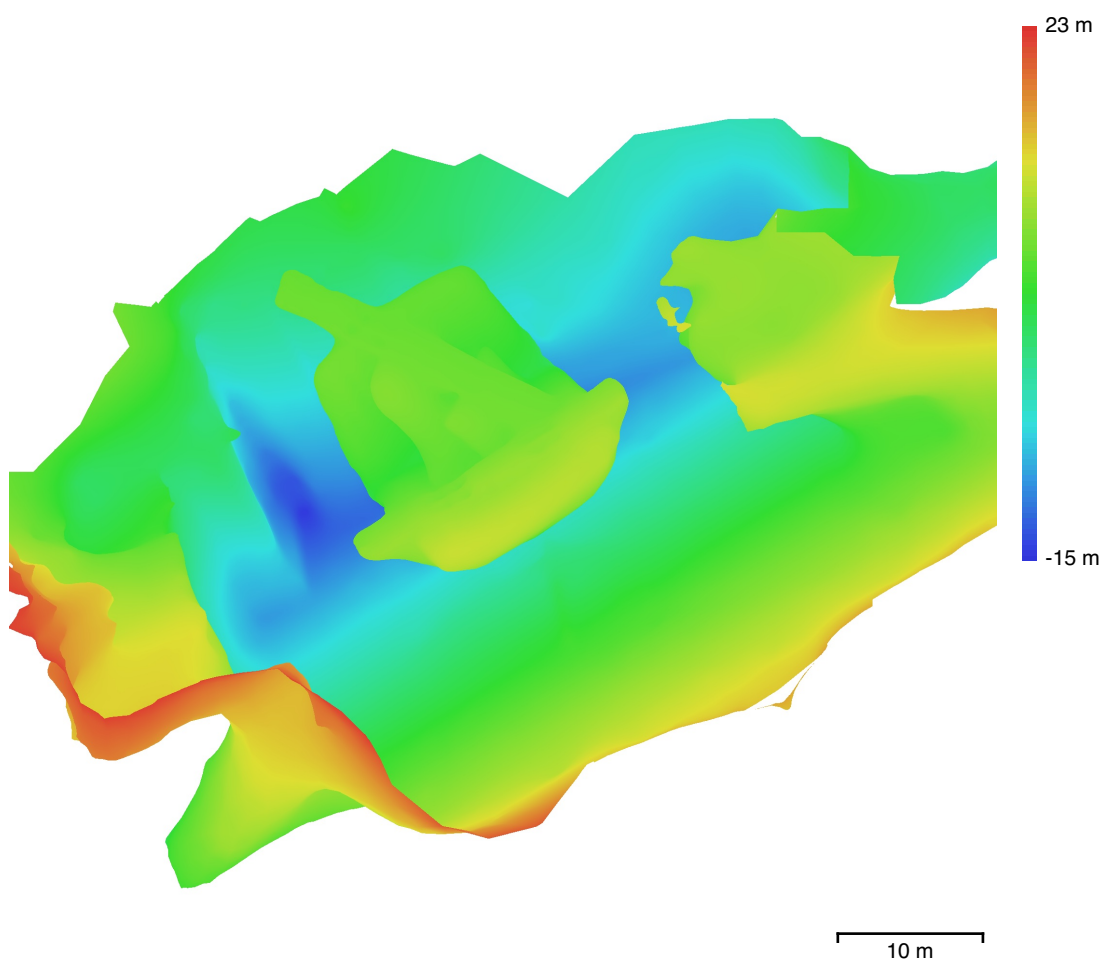


Fig. 3. Reconstructed digital elevation model.

Resolution: 14.9 cm/pix
Point density: 44.8 points/m²

Processing Parameters

General

Cameras	100
Aligned cameras	98
Coordinate system	Local Coordinates (m)
Rotation angles	Yaw, Pitch, Roll

Tie Points

Points	13,530 of 29,583
RMS reprojection error	0.336354 (1.18088 pix)
Max reprojection error	0.999931 (20.0326 pix)
Mean key point size	3.36168 pix
Point colors	3 bands, uint8
Key points	No
Average tie point multiplicity	3.08667

Alignment parameters

Accuracy	High
Generic preselection	Yes
Reference preselection	Source
Key point limit	40,000
Key point limit per Mpx	1,000
Tie point limit	4,000
Exclude stationary tie points	No
Guided image matching	No
Adaptive camera model fitting	Yes
Matching time	6 seconds
Matching memory usage	100.17 MB
Alignment time	18 seconds
Alignment memory usage	25.61 MB

Optimization parameters

Parameters	f, cx, cy, k1-k4, p1, p2
Adaptive camera model fitting	Yes
Optimization time	0 seconds
Date created	2025:03:19 20:50:46
Software version	2.1.1.17821
File size	4.59 MB

Depth Maps

Count	92
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Depth maps generation parameters

Quality	Medium
Filtering mode	Disabled
Max neighbors	16
Processing time	11 seconds
File size	7.02 MB

Model

Faces	63,750
Vertices	32,024
Vertex colors	3 bands, uint8
Texture	16,384 x 16,384 x 4, 4 bands, uint8

Depth maps generation parameters

Quality	Medium
Filtering mode	Disabled
Max neighbors	16

Processing time	11 seconds
Reconstruction parameters	
Surface type	Arbitrary
Source data	Depth maps
Interpolation	Enabled
Strict volumetric masks	No
Processing time	4 seconds
Memory usage	122.97 MB
Texturing parameters	
Mapping mode	Generic
Blending mode	Mosaic
Texture size	16,384
Enable hole filling	Yes
Enable ghosting filter	Yes
UV mapping time	17 seconds
UV mapping memory usage	1.57 GB
Blending time	5 minutes 54 seconds
Blending memory usage	50.39 GB
Date created	2025:03:19 20:51:26
Software version	2.1.1.17821
File size	189.62 MB
System	
Software name	Agisoft Metashape Professional
Software version	2.1.1 build 17821
OS	Mac OS 64 bit
RAM	96.00 GB
CPU	VirtualApple @ 2.50GHz
GPU(s)	Apple M3 Max