# TCRMP20241014\_3D\_BWR\_T2\_step1.pdf

Processing Report 19 March 2025



### Survey Data

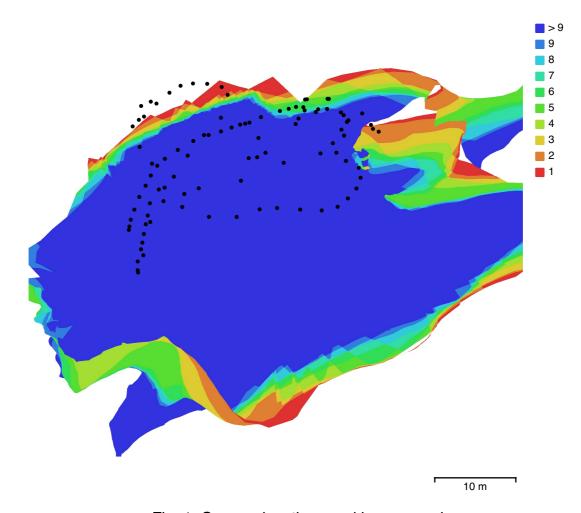


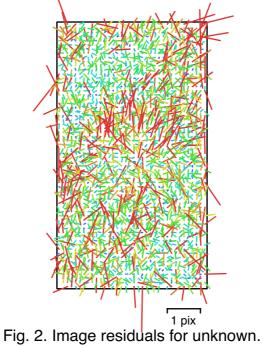
Fig. 1. Camera locations and image overlap.

Number of images: 100 Camera stations: 98 Flying altitude: 17.7 m Tie points: 13,533 1.6 cm/pix Projections: 37,137 Ground resolution: Reprojection error: Coverage area: 1.95e+03 m<sup>2</sup> 1.18 pix

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

Table 1. Cameras.

### **Camera Calibration**



#### unknown

100 images

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

	Value	Error	F
F	1105.1	0.73	1.00

Table 2. Calibration coefficients and correlation matrix.

## **Digital Elevation Model**

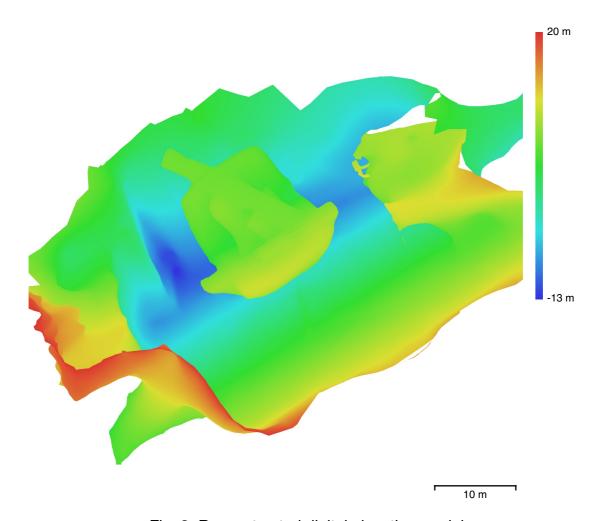


Fig. 3. Reconstructed digital elevation model.

Resolution: 13.2 cm/pix
Point density: 57.1 points/m²

# **Processing Parameters**

General		
Cameras	100	
Aligned cameras	98	
Coordinate system	Local Coordinates (m)	
Rotation angles	Yaw, Pitch, Roll	
Tie Points		
Points	13,533 of 29,626	
RMS reprojection error	0.336339 (1.18382 pix)	
Max reprojection error	0.999966 (19.8151 pix)	
Mean key point size	3.36759 pix	
Point colors	3 bands, uint8	
Key points	No	
Average tie point multiplicity	3.08813	
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	186.27 MB	
Alignment time	20 seconds	
Alignment memory usage	62.14 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 20:42:11	
Software version	2.1.1.17821	
File size	4.60 MB	
Depth Maps		
Count	91	
Depth maps generation parameters		
Quality	Medium	
Filtering mode	Disabled	
Max neighbors	16	
Processing time	10 seconds	
File size	6.99 MB	
Model		
Faces	63,928	
Vertices	32,110	
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	

16

Max neighbors

Processing time 10 seconds

**Reconstruction parameters** 

Surface type Arbitrary
Source data Depth maps
Interpolation Enabled
Strict volumetric masks No

Processing time 5 seconds
Memory usage 257.98 MB

**Texturing parameters** 

Mapping modeGenericBlending modeMosaicTexture size16,384Enable hole fillingYesEnable ghosting filterYes

UV mapping time 19 seconds UV mapping memory usage 1.43 GB

Blending time 6 minutes 57 seconds

Blending memory usage 35.48 GB

Date created 2025:03:19 20:42:53

Software version 2.1.1.17821 File size 191.42 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