

# Photogrammetry Report

ruine merged (consolidated)

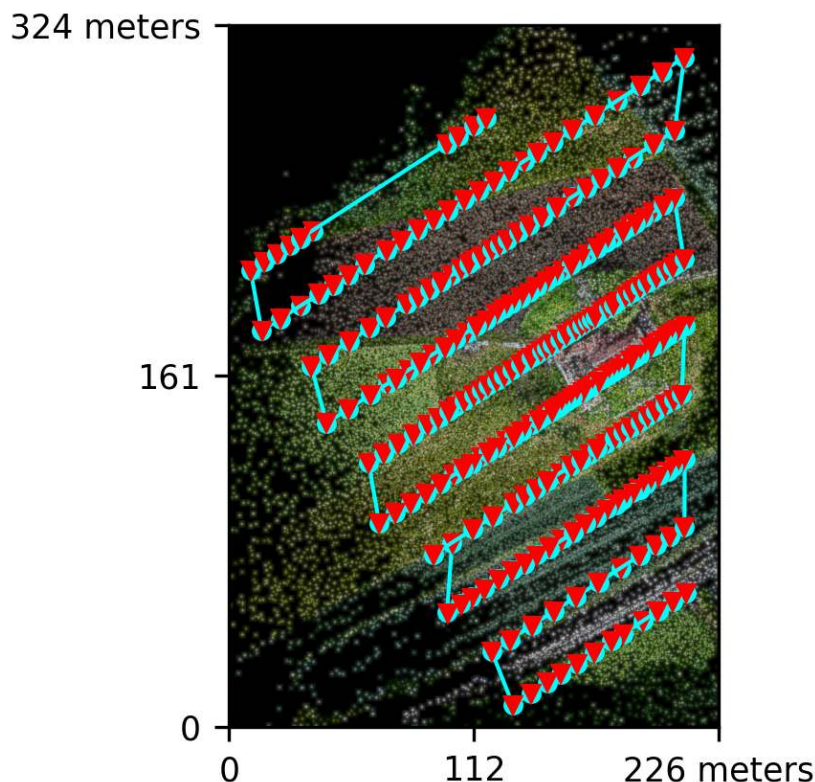
Generated: 2026-06-05 19:58 UTC

## Dataset Summary

Date	04/06/2026 at 21:50:45
Area Covered	0.059966 km <sup>2</sup>
Processing Time	3.0h:34.0m:42.0s
Capture Start	03/06/2026 at 11:19:05
Capture End	03/06/2026 at 11:25:03

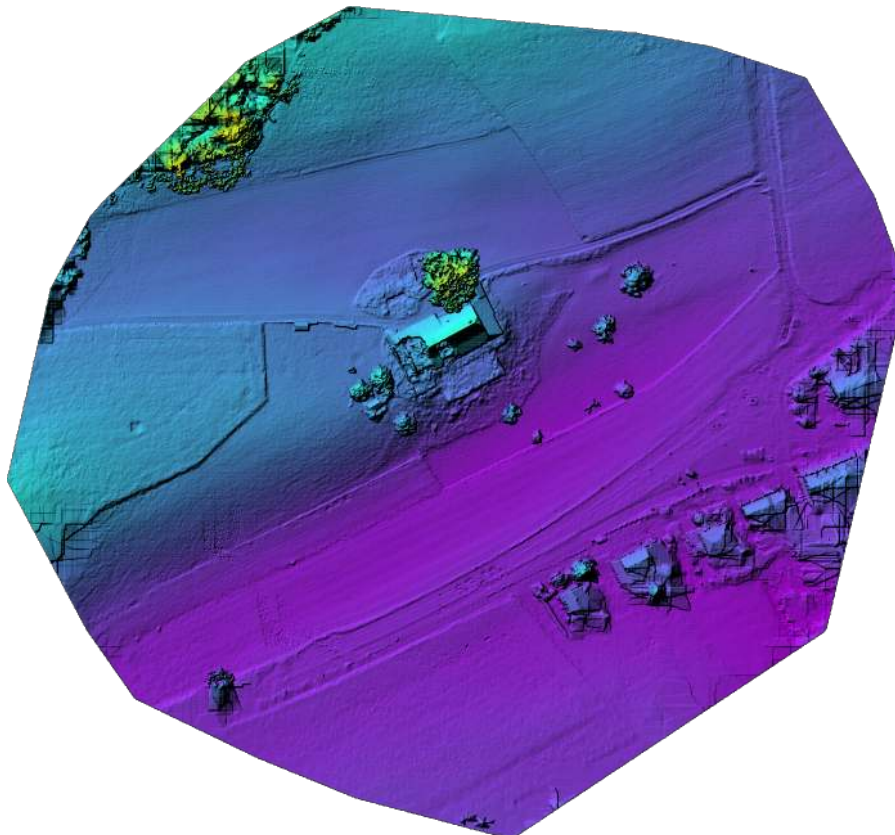
## Processing Summary

Reconstructed Images	255 over 255 shots (100.0%)
Reconstructed Points (Sparse)	476870 over 481765 points (99.0%)
Reconstructed Points (Dense)	147,949,435 points
Average Ground Sampling Distance (GSD)	2.5 cm
Detected Features	16,000 features
Reconstructed Features	6,829 features
Geographic Reference	GPS
GPS errors	0.18 meters



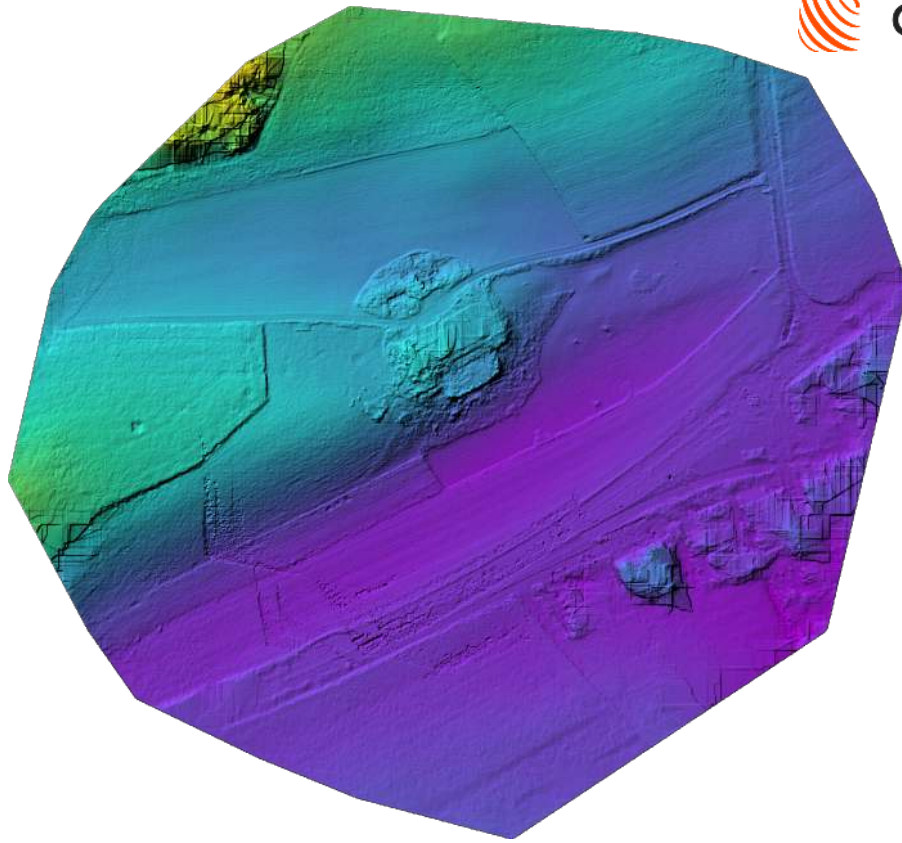


Orthophoto



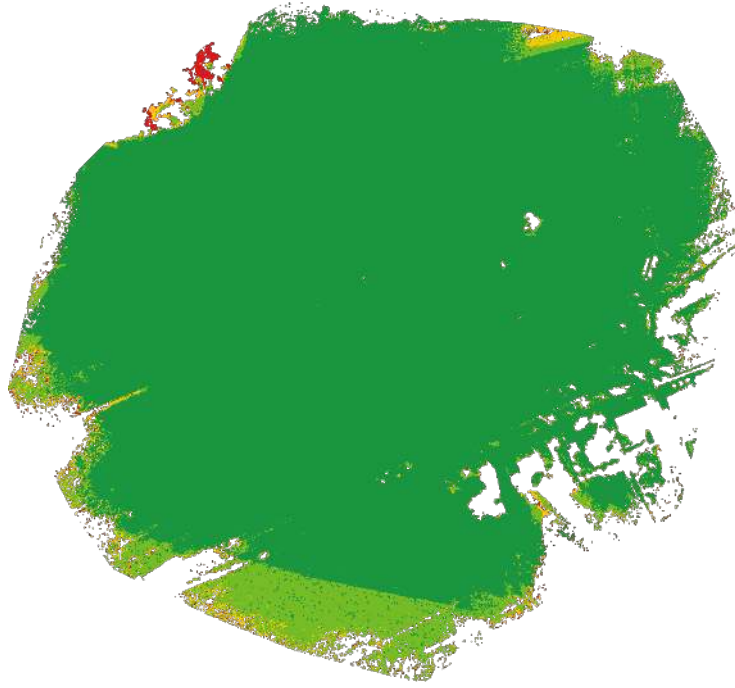
Digital Surface Model





Digital Terrain Model





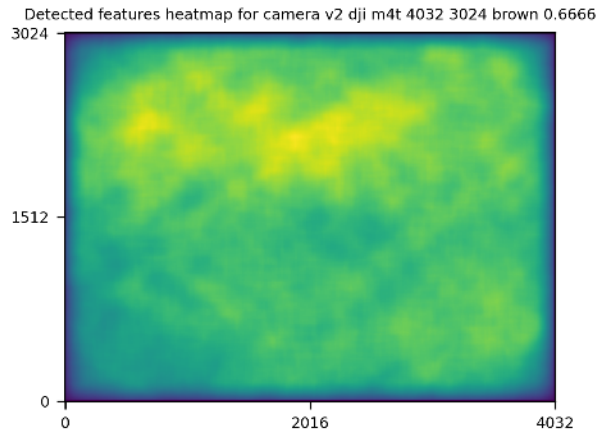
■ 2 ■ 3 ■ 4 ■ 5+

## GPS/GCP/3D Errors Details

GPS	Mean	Standard Deviation	RMS Error
X Error (meters)	-0.000	0.141	0.141
Y Error (meters)	-0.000	0.144	0.144
Z Error (meters)	0.000	0.140	0.140
Total			0.180

3D	Mean	Standard Deviation	RMS Error
X Error (meters)	0.098	0.251	0.270
Y Error (meters)	0.150	0.391	0.419
Z Error (meters)	0.146	0.274	0.310
Total			0.257

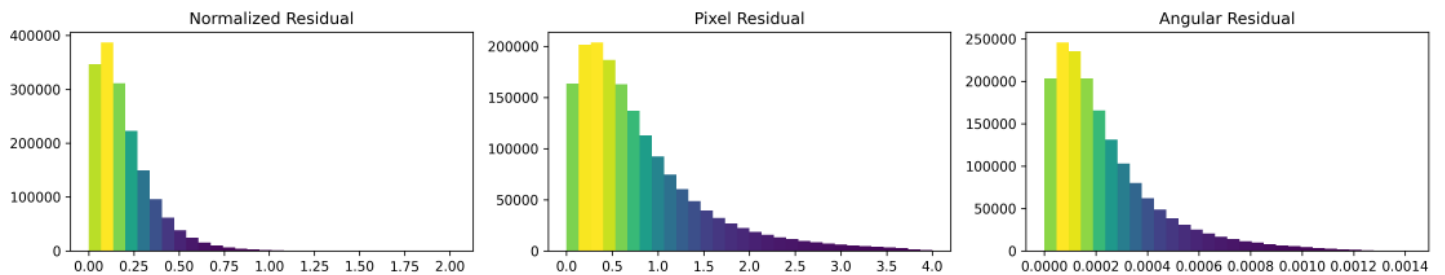
	Absolute	Relative
Horizontal Accuracy CE90 (meters)	0.346	0.440
Vertical Accuracy LE90 (meters)	0.190	0.290

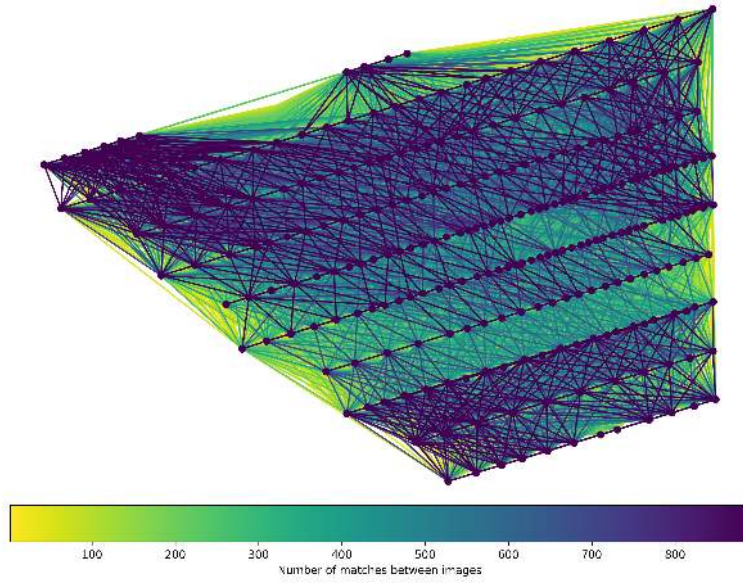


	Min.	Max.	Mean	Median
Detected	16000	16000	16000	16000
Reconstructed	2112	11984	6796	6829

## Reconstruction Details

Average Reprojection Error (normalized / pixels / angular)	0.20 / 0.79 / 0.00024
Average Track Length	3.63 images
Average Track Length (> 2)	5.54 images



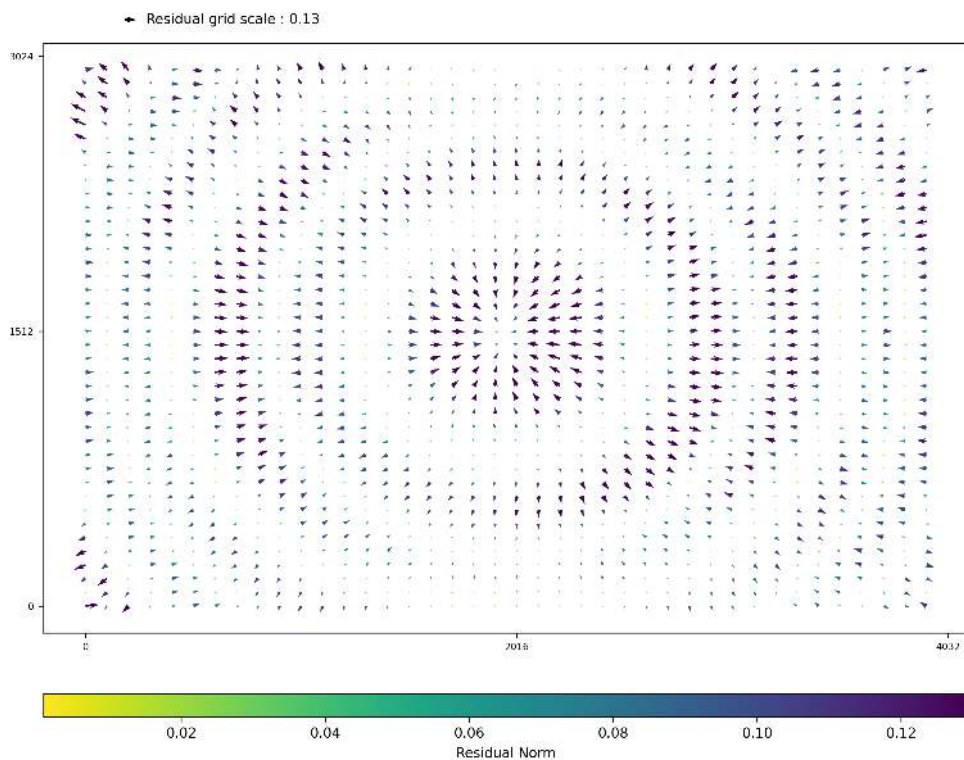


Length	2	3	4	5	6	7	8	9	10
Count	256914	90663	43911	24854	15444	9866	7312	5314	3847

## Camera Models Details

**v2 dji m4t 4032 3024 brown 0.6666**

	k1	k2	k3	p1	p2	focal	aspect_ratio	cx	cy
Initial	0.0000	0.0000	0.0000	0.0000	0.0000	0.6667	1.0000	0.0000	0.0000
Optimized	0.0944	-0.1490	0.0998	0.0003	-0.0004	0.6969	1.0000	-0.0002	-0.0004

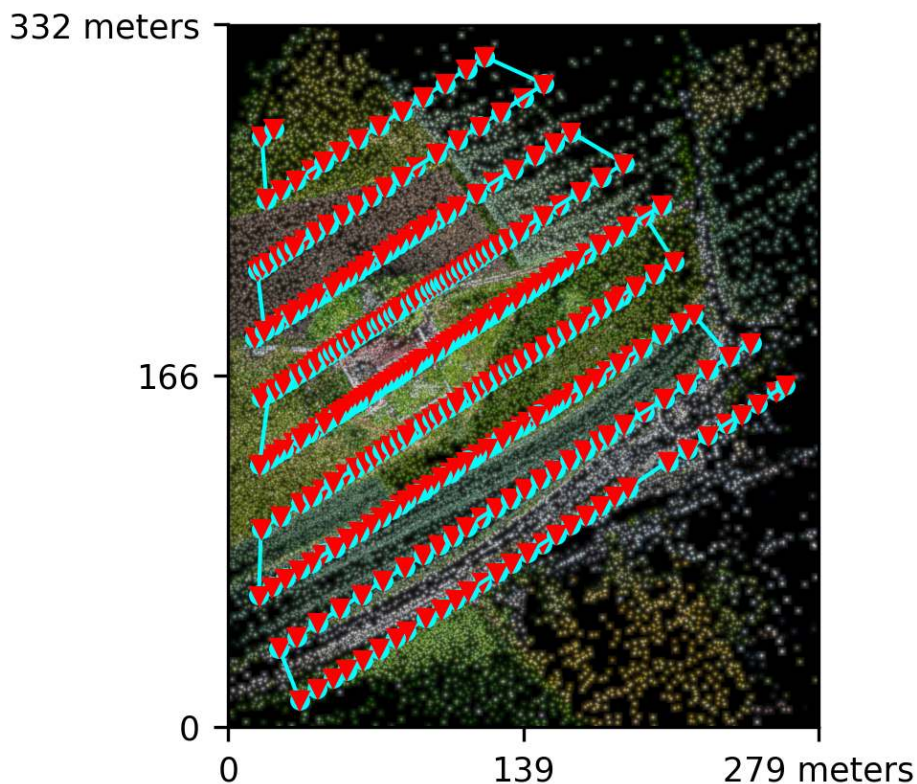


## Dataset Summary

Date	04/06/2026 at 22:37:26
Area Covered	0.076402 km <sup>2</sup>
Processing Time	4.0h:44.0m:50.0s
Capture Start	03/06/2026 at 11:18:50
Capture End	03/06/2026 at 11:25:03

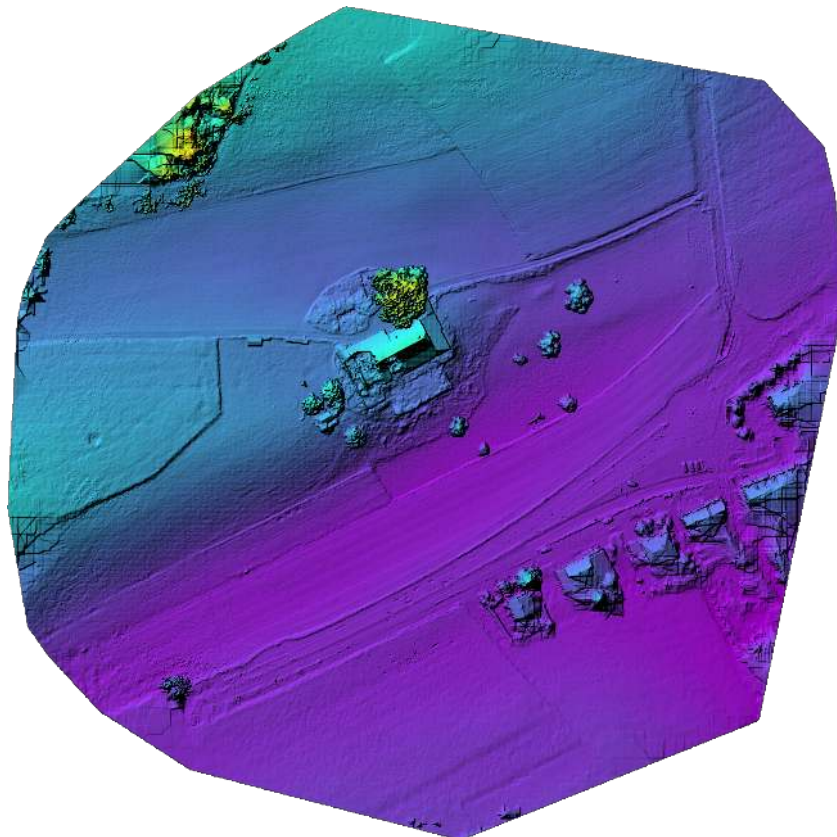
## Processing Summary

Reconstructed Images	326 over 327 shots (99.7%)
Reconstructed Points (Sparse)	613088 over 630123 points (97.3%)
Reconstructed Points (Dense)	186,942,743 points
Average Ground Sampling Distance (GSD)	2.5 cm
Detected Features	16,000 features
Reconstructed Features	6,849 features
Geographic Reference	GPS
GPS errors	0.22 meters



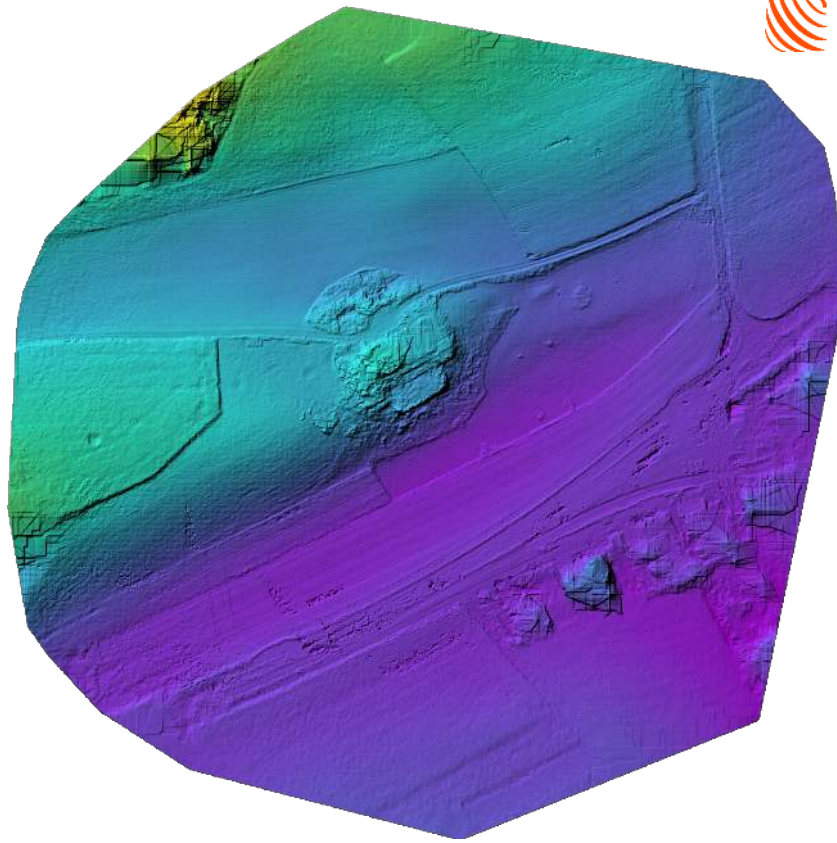


Orthophoto



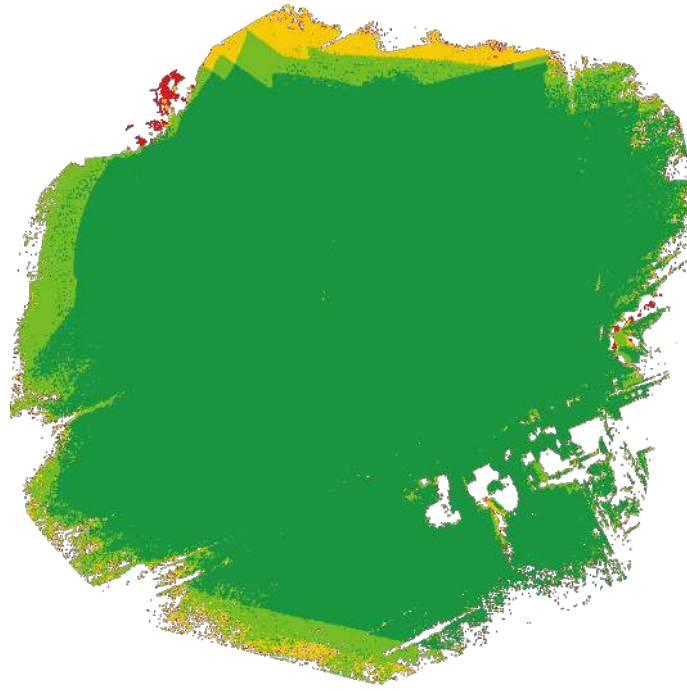
Digital Surface Model





Digital Terrain Model





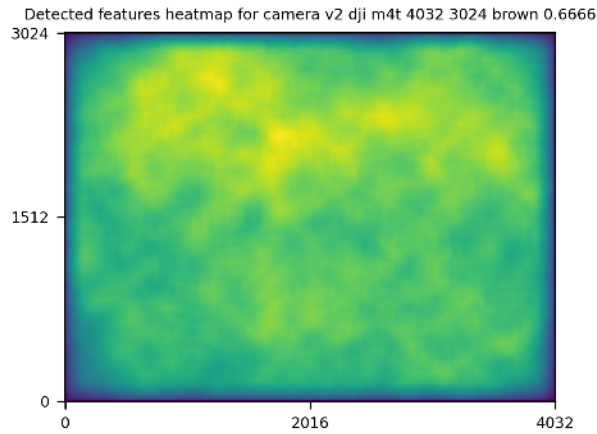
■ 2 ■ 3 ■ 4 ■ 5+

## GPS/GCP/3D Errors Details

GPS	Mean	Standard Deviation	RMS Error
X Error (meters)	0.000	0.178	0.178
Y Error (meters)	0.000	0.144	0.144
Z Error (meters)	0.000	0.167	0.167
Total			0.217

3D	Mean	Standard Deviation	RMS Error
X Error (meters)	0.115	0.270	0.293
Y Error (meters)	0.130	0.474	0.491
Z Error (meters)	0.157	0.320	0.356
Total			0.265

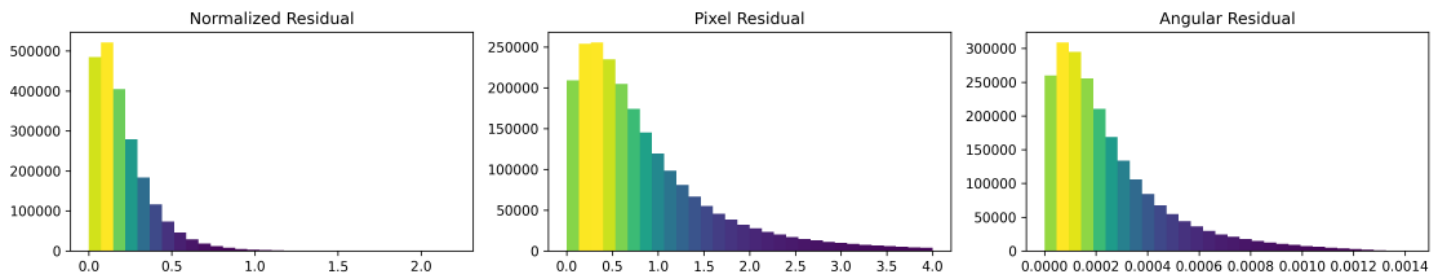
	Absolute	Relative
Horizontal Accuracy CE90 (meters)	0.390	0.432
Vertical Accuracy LE90 (meters)	0.215	0.304

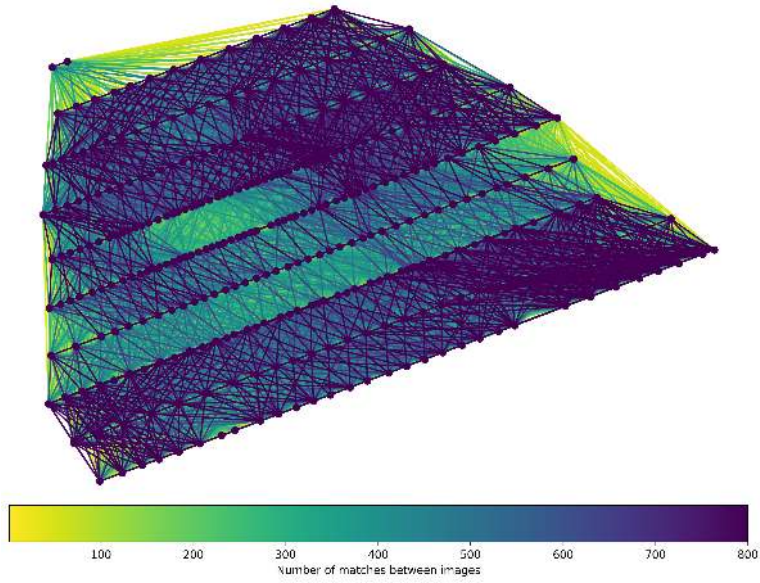


	Min.	Max.	Mean	Median
Detected	592	16000	15685	16000
Reconstructed	12	12384	6924	6849

## Reconstruction Details

Average Reprojection Error (normalized / pixels / angular)	0.21 / 0.83 / 0.00025
Average Track Length	3.68 images
Average Track Length (> 2)	5.56 images



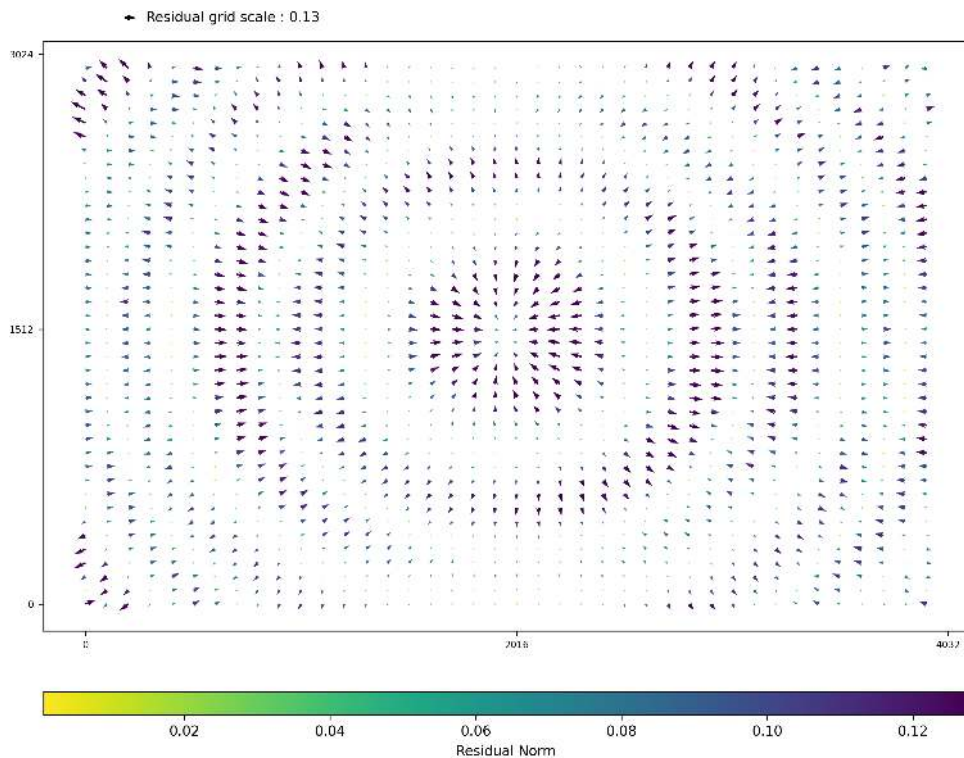


Length	2	3	4	5	6	7	8	9	10
Count	323383	119163	58561	33483	20366	13380	9160	6539	4963

## Camera Models Details

**v2 dji m4t 4032 3024 brown 0.6666**

	k1	k2	k3	p1	p2	focal	aspect_ratio	cx	cy
Initial	0.0000	0.0000	0.0000	0.0000	0.0000	0.6667	1.0000	0.0000	0.0000
Optimized	0.0922	-0.1470	0.0988	0.0004	-0.0004	0.6976	1.0000	-0.0002	-0.0002

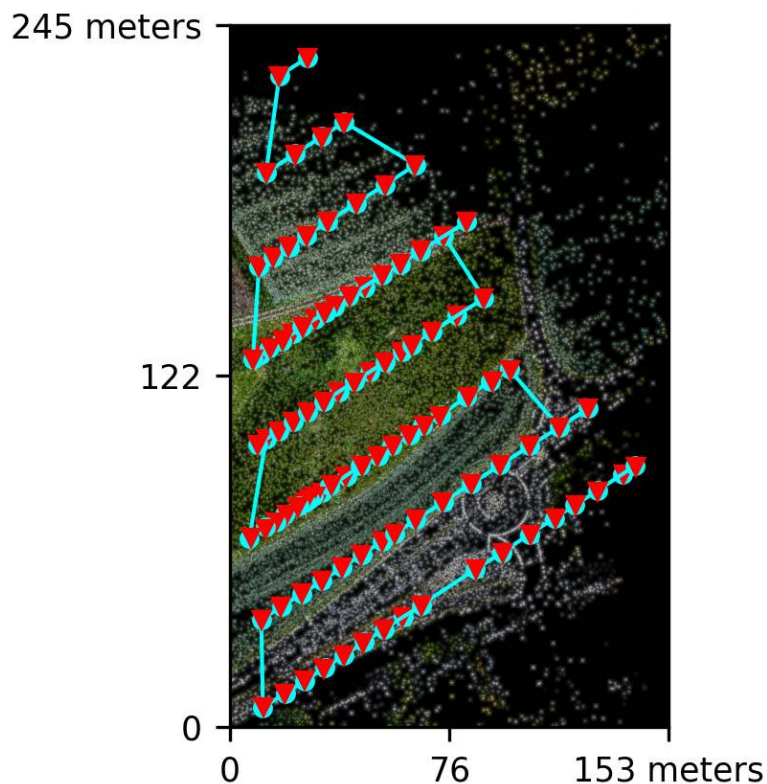


## Dataset Summary

Date	04/06/2026 at 21:08:03
Area Covered	0.030501 km <sup>2</sup>
Processing Time	2.0h:51.0m:52.0s
Capture Start	03/06/2026 at 11:18:50
Capture End	03/06/2026 at 11:24:05

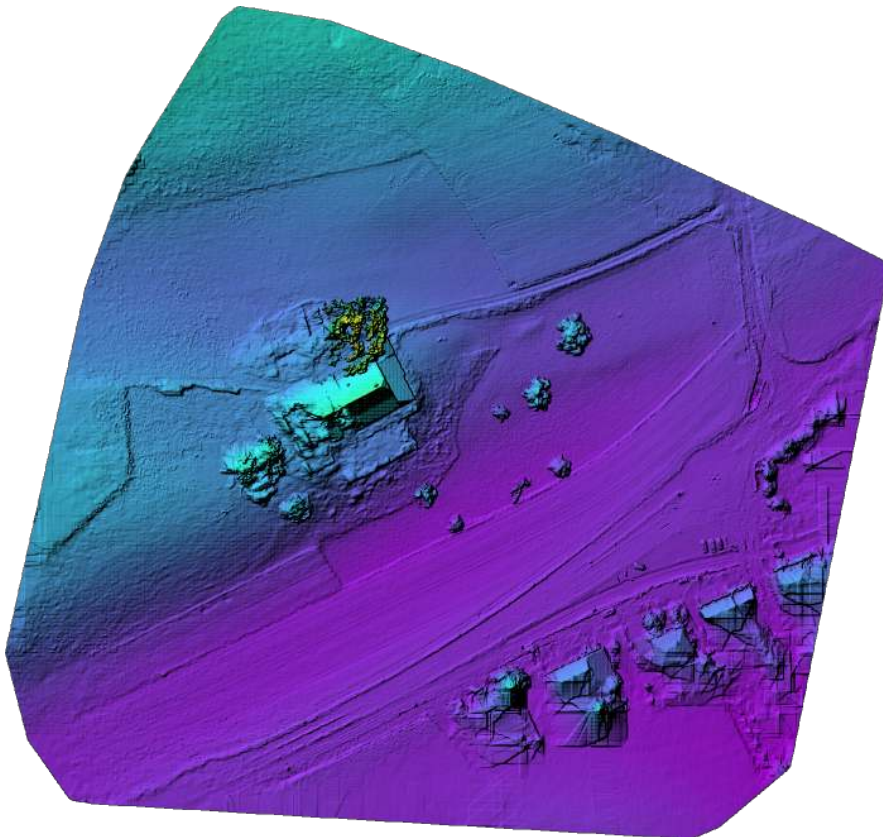
## Processing Summary

Reconstructed Images	97 over 97 shots (100.0%)
Reconstructed Points (Sparse)	200540 over 202372 points (99.1%)
Reconstructed Points (Dense)	52,963,143 points
Average Ground Sampling Distance (GSD)	2.5 cm
Detected Features	16,000 features
Reconstructed Features	7,219 features
Geographic Reference	GPS
GPS errors	0.27 meters



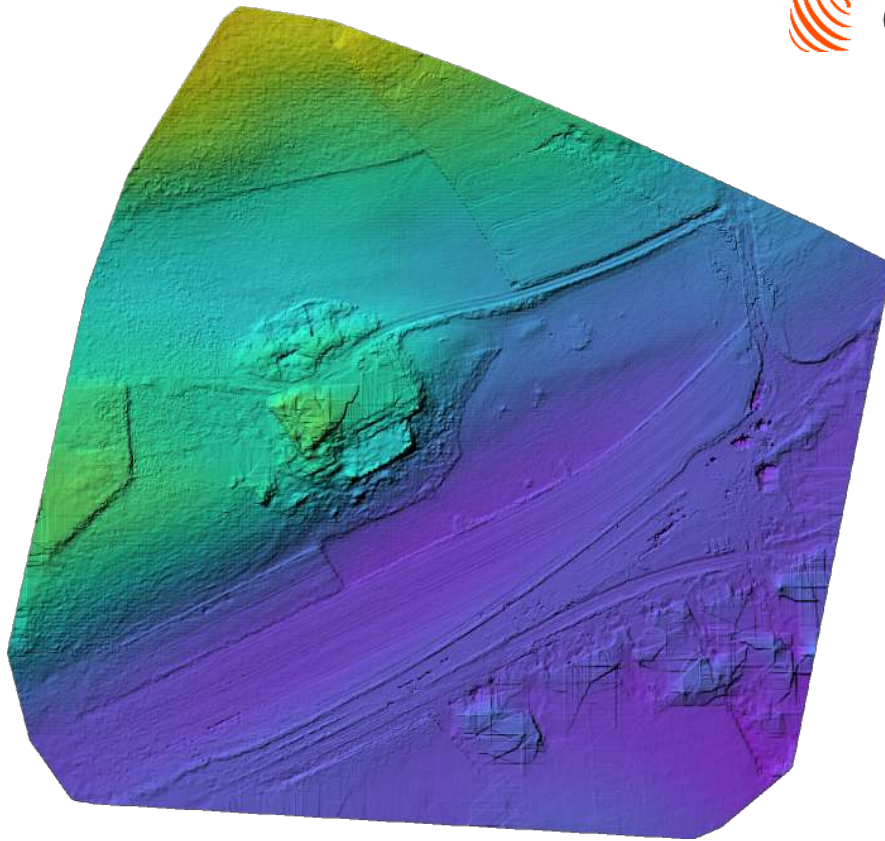


Orthophoto



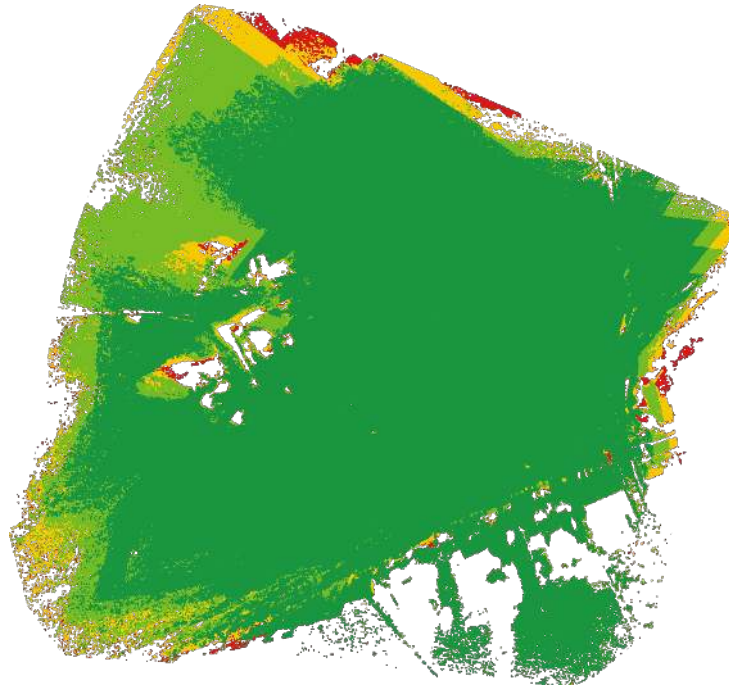
Digital Surface Model





Digital Terrain Model





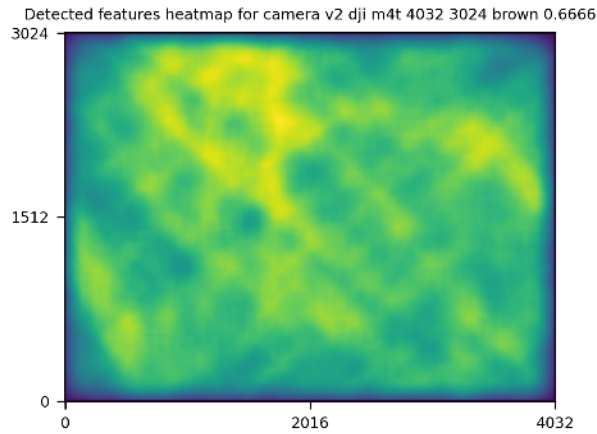
■ 2 ■ 3 ■ 4 ■ 5+

## GPS/GCP/3D Errors Details

GPS	Mean	Standard Deviation	RMS Error
X Error (meters)	-0.000	0.223	0.223
Y Error (meters)	0.000	0.124	0.124
Z Error (meters)	0.000	0.202	0.202
Total			0.274

3D	Mean	Standard Deviation	RMS Error
X Error (meters)	0.161	0.757	0.773
Y Error (meters)	0.308	2.732	2.750
Z Error (meters)	0.220	1.520	1.535
Total			0.452

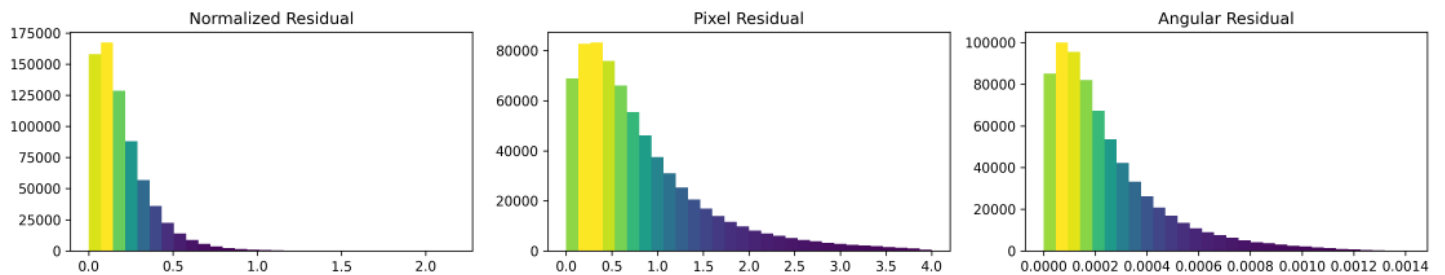
	Absolute	Relative
Horizontal Accuracy CE90 (meters)	0.529	0.678
Vertical Accuracy LE90 (meters)	0.278	0.367

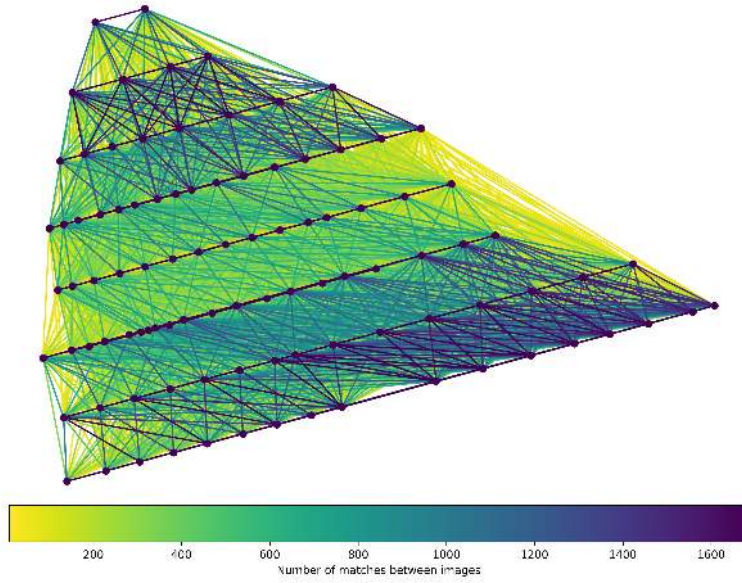


	Min.	Max.	Mean	Median
Detected	14952	16000	15984	16000
Reconstructed	4407	12471	7385	7219

## Reconstruction Details

Average Reprojection Error (normalized / pixels / angular)	0.20 / 0.81 / 0.00024
Average Track Length	3.57 images
Average Track Length (> 2)	5.33 images





Length	2	3	4	5	6	7	8	9	10
Count	105731	38555	19725	11084	7005	4468	3061	2136	1593

## Camera Models Details

### v2 dji m4t 4032 3024 brown 0.6666

	k1	k2	k3	p1	p2	focal	aspect_ratio	cx	cy
Initial	0.0000	0.0000	0.0000	0.0000	0.0000	0.6667	1.0000	0.0000	0.0000
Optimized	0.0877	-0.1382	0.0918	0.0005	-0.0004	0.6986	1.0000	-0.0002	0.0005

