DJI Terra Quality Report

V5.1.1 | 2026-02-27 14:40 | Mission: Mather test 2d

Overview

📷 Proportion of Calibrated Images

100.00%

Number of Images	**504**
Image with Camera POS	**504**
Calibrated Image	**504**
Constrain with Image POS Data	**Yes**

🕐 Total Consumption Time

0h 43min 22s

● Aerotriangulation	**3min 36s**
● 2D Reconstruction	**10min 44s**
● 3D Reconstruction	**29min 2s**

Mission Parameters

⇄ Flight Parameters

Average Flight Altitude	**33.01 m**
GSD	**0.915 cm/px**
TDOM Mapping Coverage	**0.057452 km²**
Color	**3 bands, uint8**

⇄ Hardware Information Overview

CPU	**Intel Core(TM) i7-10700 CPU @ 2.90GHz 16 cores**
GPU Count	**1**
GPU 0	**NVIDIA GeForce RTX 4070 SUPER**
RAM	**32706 M**

Aerotriangulation

⇄ Reconstruction Accuracy

Connected Components	**1**
Max Components Images	**504**
Projections	**1684705**
Tie Point	**153601**
Reprojection Error RMS	**0.768 px**
Georeferencing RMSE	**0.022 m**

⇄ Reconstruction Parameters

Computation Method	**Standalone Computation**
Feature Point Density	**High**
Generate XML File	**Yes**

RTK Status

Status	Number of Images
Fix	504
Floating	0
Single	0
Other	0

RTK Positioning Accuracy

RTK Positioning Accuracy	Horizontal standard deviation	Elevation standard deviation
Maximum	0.384 cm	0.527 cm
Avg Value	0.367 cm	0.503 cm
Minimum	0.362 cm	0.493 cm

Camera Calibration Info (Camera 0)

⊡ **Image Residuals for Camera**
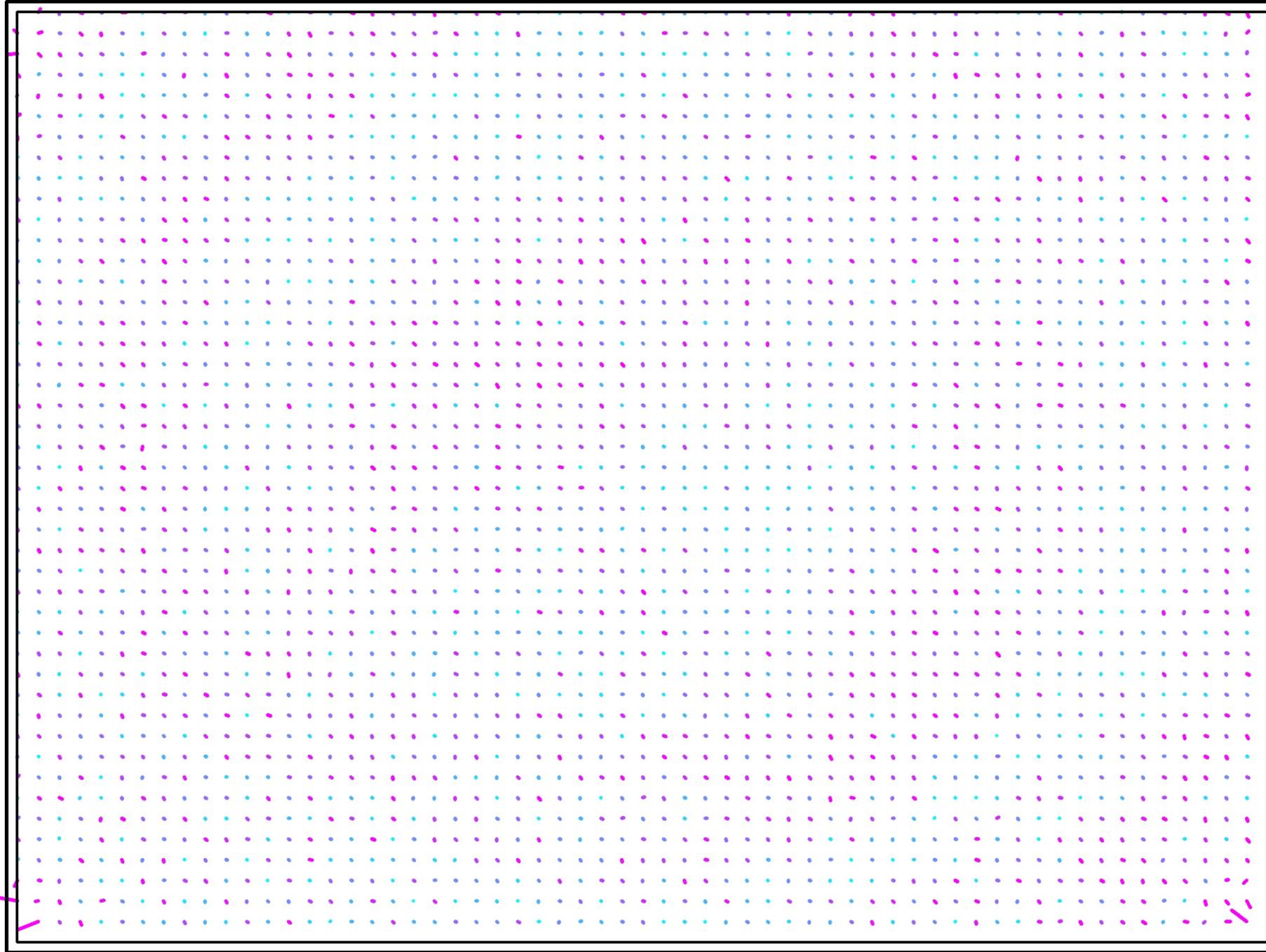
1 pix

⇄ Camera Info

Camera Model	**M4E_WideCamera**
Camera SN	**1581F7FVC25BG00D8CWF**
Camera Type	**Standard**
Fix Camera Parameters	**Not Fix**

Photo Resolution	**5280*3956**
Pre-calibration	**Yes**
Number of Photos	**433**

⊟ Camera Parameters (Block 0)

Camera Intrinsics

Parameters	Focal Length	Cx	Cy	K1	K2	K3	P1	P2
Initial	**3708.594**	**2666.158**	**1943.554**	**-0.111706214**	**0.007209531**	**-0.019092309**	**-0.000158844**	**-0.000004857**
Optimized	**3707.557**	**2667.399**	**1945.396**	**-0.105548107**	**-0.001692152**	**-0.017275868**	**-0.000382368**	**0.00018313**
Difference Value	**-1.037**	**1.241**	**1.842**	**0.006158107**	**-0.008901683**	**0.001816441**	**-0.000223524**	**0.000187987**

Covariance Matrix

	Error	Focal Length	Cx	Cy	K1	K2	K3	P1	P2
Focal Length	**0.067**	**1**	**0.054**	**-0.396**	**-0.242**	**0.122**	**-0.155**	**0.324**	**-0.034**
Cx	**0.032**	**0.054**	**1**	**-0.016**	**0.016**	**-0.024**	**0.025**	**0.02**	**-0.228**
Cy	**0.038**	**-0.396**	**-0.016**	**1**	**0.053**	**0.009**	**0.003**	**-0.533**	**0**
K1	**0.000026752**	**-0.242**	**0.016**	**0.053**	**1**	**-0.958**	**0.906**	**-0.063**	**0.019**
K2	**0.000066638**	**0.122**	**-0.024**	**0.009**	**-0.958**	**1**	**-0.983**	**0.005**	**-0.014**
K3	**0.000049392**	**-0.155**	**0.025**	**0.003**	**0.906**	**-0.983**	**1**	**-0.018**	**0.018**
P1	**0.0000015**	**0.324**	**0.02**	**-0.533**	**-0.063**	**0.005**	**-0.018**	**1**	**-0.006**
P2	**0.000001373**	**-0.034**	**-0.228**	**0**	**0.019**	**-0.014**	**0.018**	**-0.006**	**1**

Camera Calibration Info (Camera 1)

⊡ Image Residuals for Camera
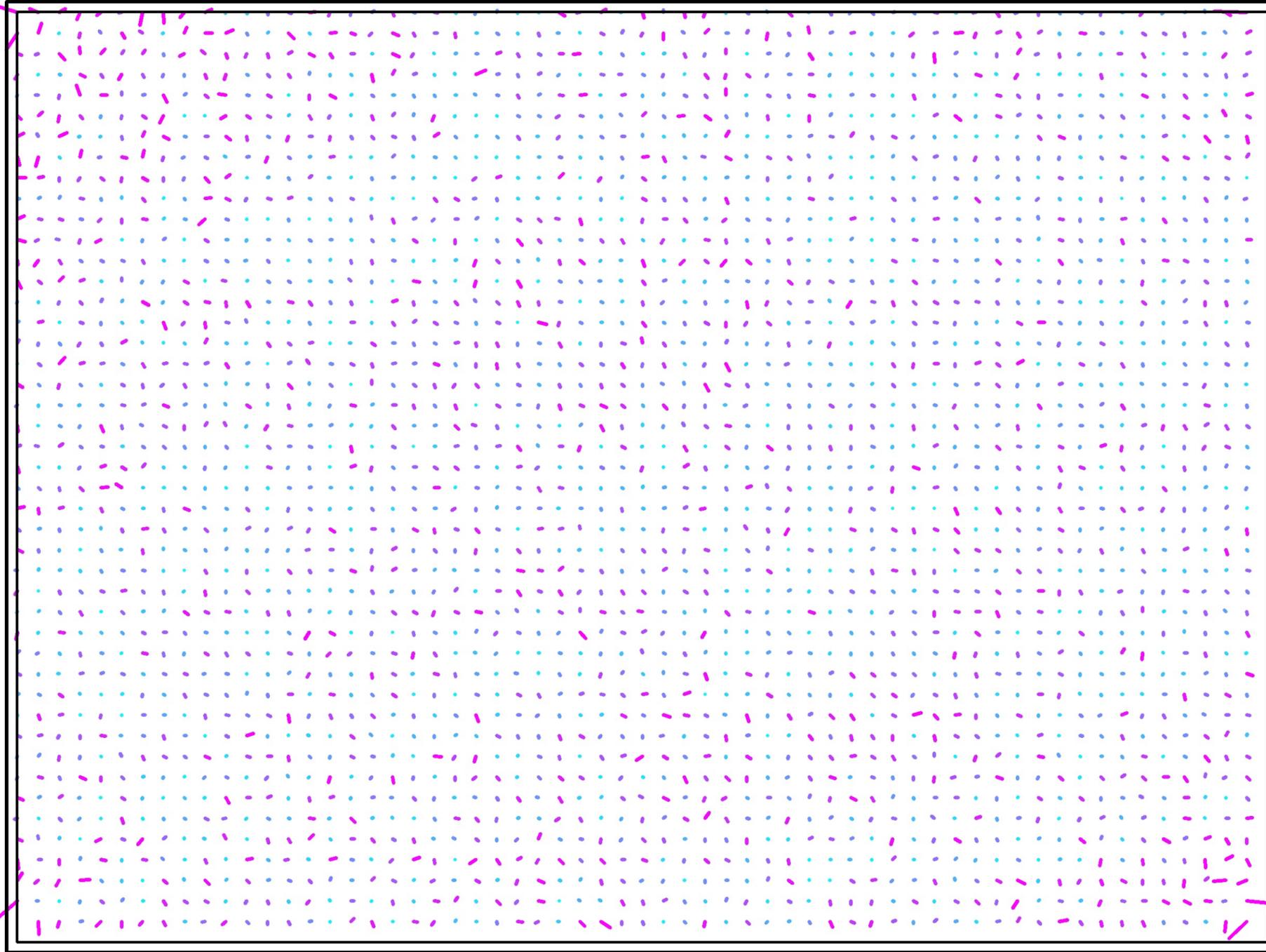
1 pix

⚙ Camera Info

Camera Model	**M4E_WideCamera**
Camera SN	**1581F7FVC25BG00D8CWF**
Camera Type	**Standard**
Fix Camera Parameters	**Not Fix**

Photo Resolution	5280*3956
Pre-calibration	Yes
Number of Photos	71

⊞ Camera Parameters (Block 0)

Camera Intrinsics

Parameters	Focal Length	Cx	Cy	K1	K2	K3	P1	P2
Initial	3707.834	2666.158	1943.554	-0.111706214	0.007209531	-0.019092309	-0.000158844	-0.000004857
Optimized	3705.064	2667.929	1946.392	-0.105770339	-0.000322049	-0.018255881	-0.000395818	0.000184795
Difference Value	-2.77	1.772	2.838	0.005935875	-0.00753158	0.000836428	-0.000236973	0.000189652

Covariance Matrix

	Error	Focal Length	Cx	Cy	K1	K2	K3	P1	P2
Focal Length	0.19	1	0.054	-0.036	-0.213	0.056	-0.097	0.021	-0.046
Cx	0.103	0.054	1	-0.014	0.008	-0.029	0.03	0.005	-0.494
Cy	0.102	-0.036	-0.014	1	0	0.012	-0.014	-0.484	0.01
K1	0.00006776	-0.213	0.008	0	1	-0.949	0.894	-0.004	0.016
K2	0.000167691	0.056	-0.029	0.012	-0.949	1	-0.981	-0.001	-0.007
K3	0.000123013	-0.097	0.03	-0.014	0.894	-0.981	1	-0.001	0.011
P1	0.000004108	0.021	0.005	-0.484	-0.004	-0.001	-0.001	1	0
P2	0.000004243	-0.046	-0.494	0.01	0.016	-0.007	0.011	0	1

| Other Info

ⓘ **Camera POS residuals are generated in the Report folder under the project file, and the default name of the file is "POS_residual_of_camera.csv".**

2D Reconstruction

⏱ 2D Reconstruction Consumption Time

0h

10min 44s

Image Distortion Correction and Color Correction	1min 19s
Densification	2min 36s

⇄ Reconstruction Parameters

Scenario	**Mapping**
Computation Method	**Standalone Computation**
Resolution	**Resolution (Auto) │ High**

| TDOM Generation | 6min 49s | Fill Hole Intelligently | Yes |

Image Info

◻ TDOM Preview

| TDOM GSD | 0.95 cm/px |

⬚ **Scene Overlapping**

⬚ **DSM Preview**

187 m

166 m
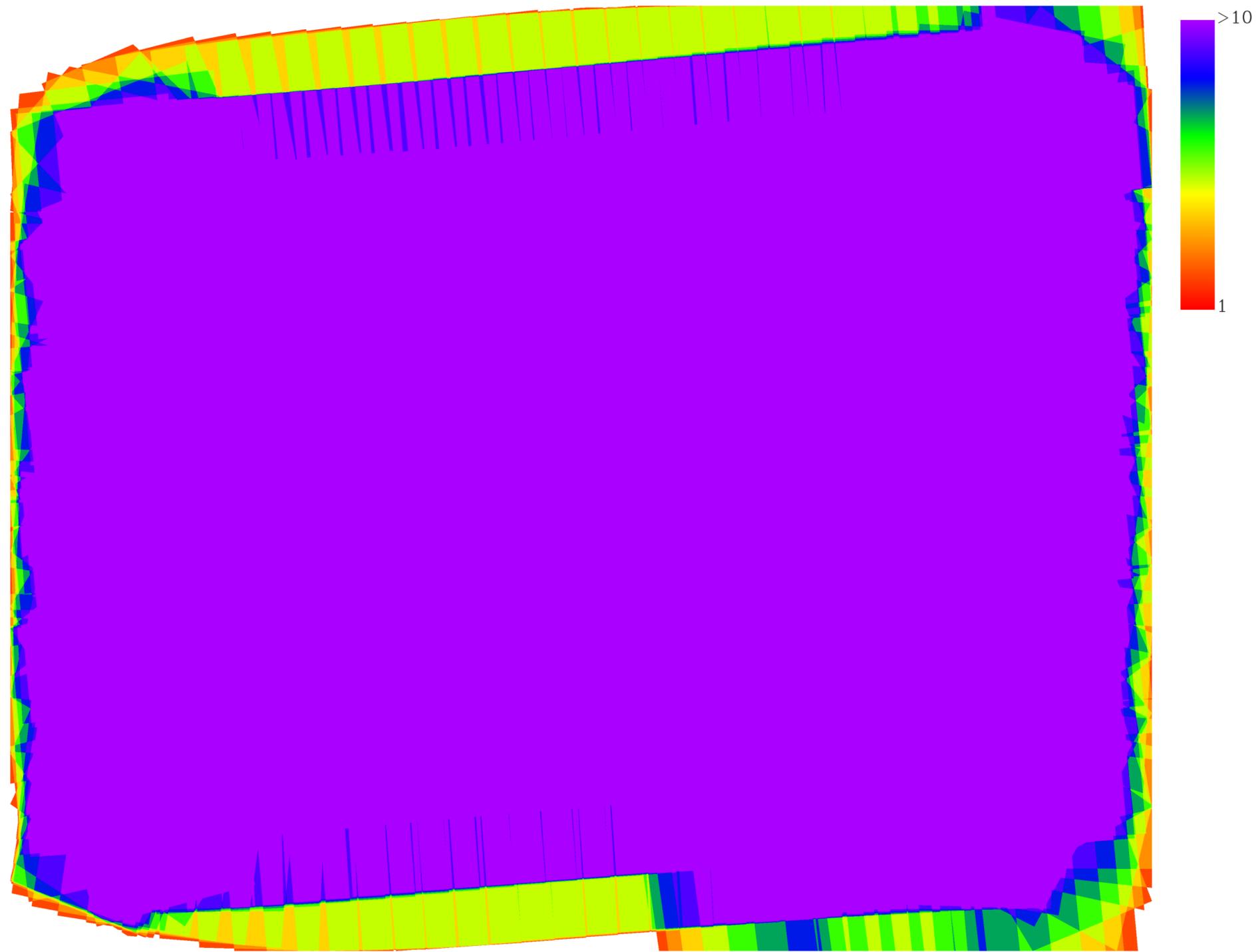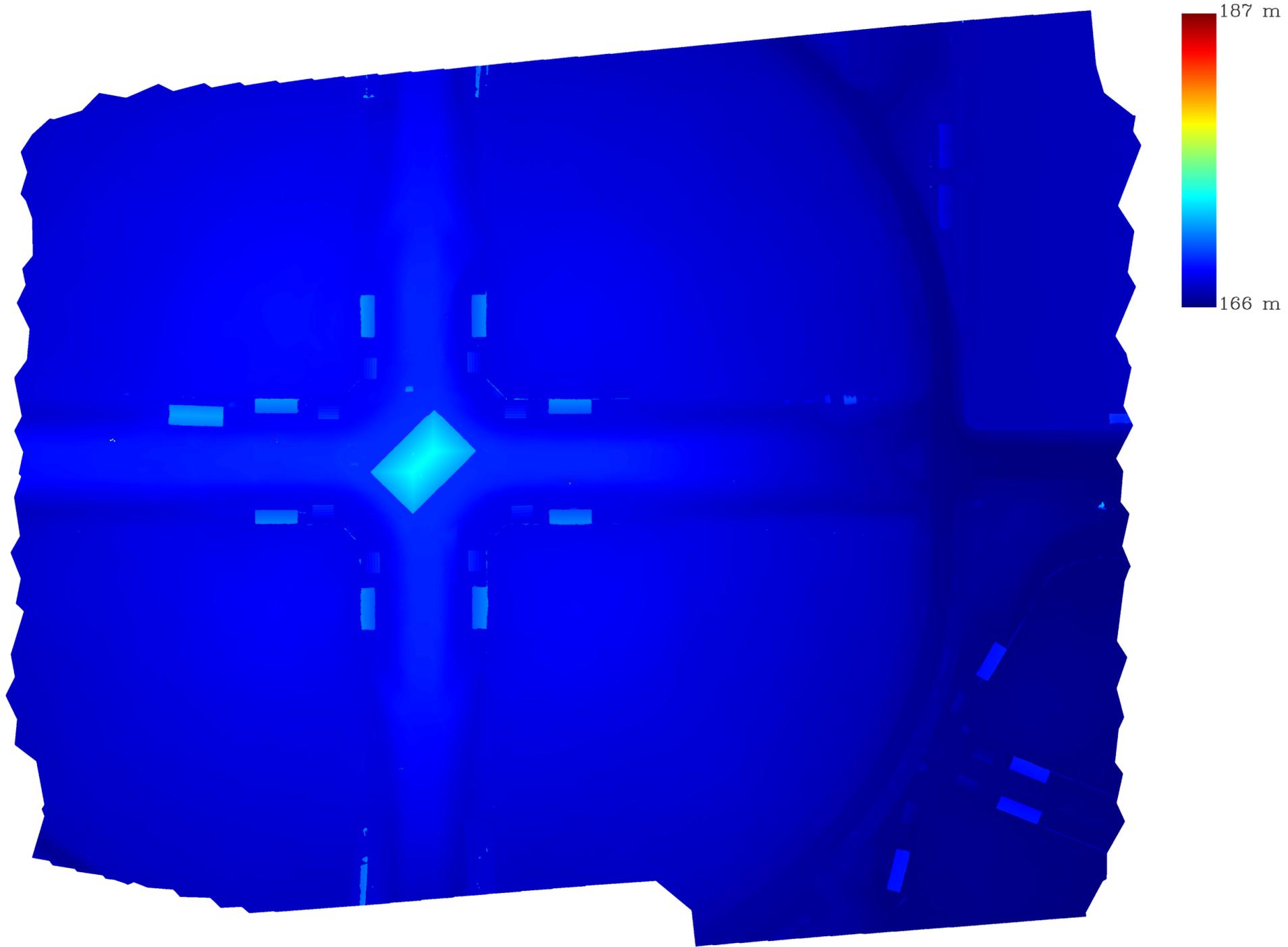
3D Reconstruction

⏱ 3D Reconstruction Consumption Time

0h

29min 2s

Preprocessing Time	**27min 5s**
Point Cloud Generation Time	**28s**
Others	**1min 29s**

⇄ Block Overview

MVS Divide Mode	**Auto (Performance-based)**
MVS Block Count	**2**

⇄ Reconstruction Parameters

Scenario	**Normal**
Computation Method	**Standalone Computation**
Quality	**High**
Refine Water Surface	**No**
Reduce Model to	**50%**
Point Cloud	**Yes**
Point Cloud Parameters	**Medium(25%)**
Gaussian Splatting	**No**
Ground Point Classification	**No**
DEM	**No**
Contour	**No**
Grid of Points & TIN	**No**

🗋 Output List

Aerotriangulation XML

Point Cloud PNTS LAS