

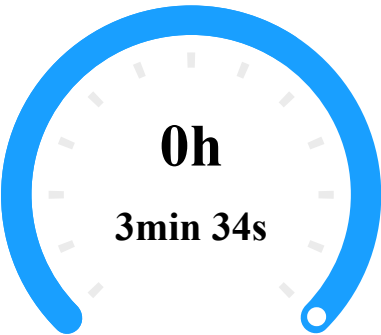


# DJI Terra Quality Report

V4.0.1 | 2024-03-12 14:16 | Mission: Mirna

## Quality Report for LiDAR Point Cloud Processing

### 🕒 Aircraft Data Collection Time



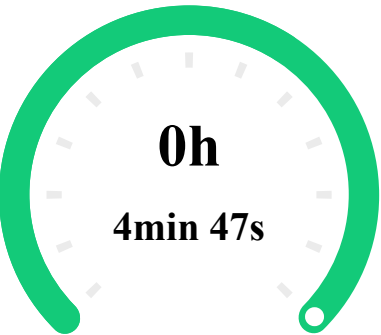
POS Data Collection Time

3min 34s

Point Cloud Data Collection Time

2min 1s

### 🕒 Software Processing Time



Point Cloud Optimization Time ^

3min 41s

• Point Cloud Accuracy Optimization Time

1min 8s

• Point Cloud Colorization Time

10s

• Output Saving Time

19s

• Others

2min 2s

Ground Point Classification Time

47s

DEM Generation Time

18s

### Reconstruction Parameters

#### ☰ Point Cloud Optimization Parameters

Use custom base station data	No
Scenario	Point Cloud Processing
Point Cloud Density (By Percentage)	High
Point Cloud Effective Distance Range	3-300 m
Accuracy Control and Check	No
Optimize Point Cloud Accuracy	Yes
Smooth Point Cloud	No

#### ☰ Point Cloud Output Parameters

Ground Point Classification	Yes
Ground Point Classification Parameters	Gentle Slope   20 m   6°   0.5 m
DEM	Yes
DEM Parameters	By Scale   1:500
Contour	No
Point Cloud Format	PNTS   LAS
Merged Output	No
LiDAR Point Cloud Block Count	1
Output Coordinate System	Slovenia 1996 / Slovene National Grid (Koper)   Default

### Warning Message

Mission Parameters

✂ Aircraft Parameters (Aircraft 1)

Hardware Parameters

Payload	DJI Zenmuse L2
Payload SN	6U3DLBJ004JU67
LiDAR Parameters	<a href="https://enterprise.dji.com/zenmuse-l2/specs">https://enterprise.dji.com/zenmuse-l2/specs</a>

LiDAR and IMU Calibration Parameters

Parameters	X (m)	Y (m)	Z (m)	roll (rad)	pitch (rad)	yaw (rad)
Before Calibration	0.02667	0.0145	-0.04615	-3.1381495	0.0028019	0.0003704

Flight Parameters (1 Flights)

Average Flight Speed	4.24m/s
Flight Height	70.9m
Ground Beam Diameter	85mm*28mm
FOV	70°*75°
Pulse Rate	240kHz
Scan Rate	1200kHz
Scan Mode	Non-repetitive

≡ System Parameters

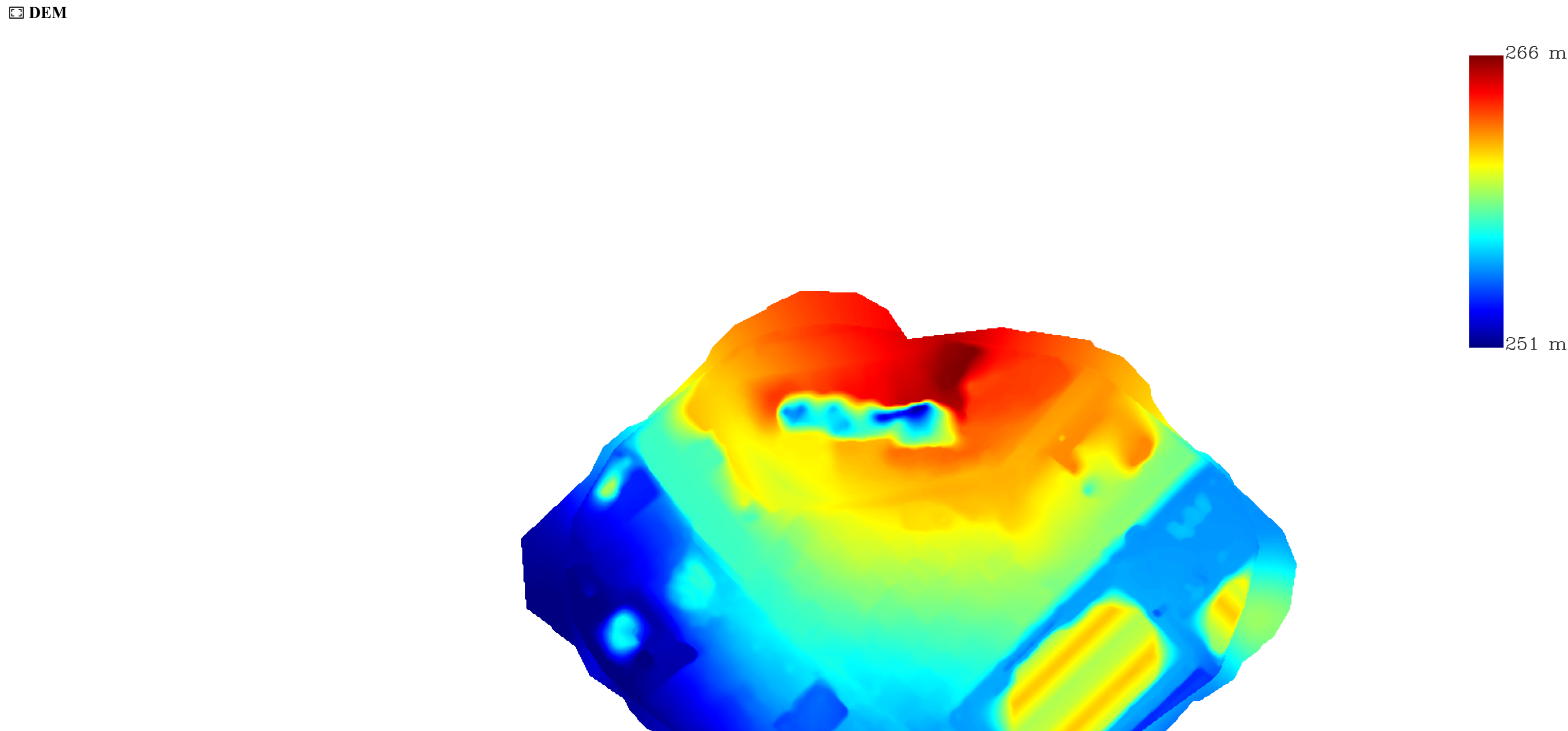
CPU	Intel 12th Gen Intel(R) Core(TM) i9-12900KF 24 cores
GPU Count	1
GPU 0	NVIDIA GeForce RTX 3080
RAM	65349 M

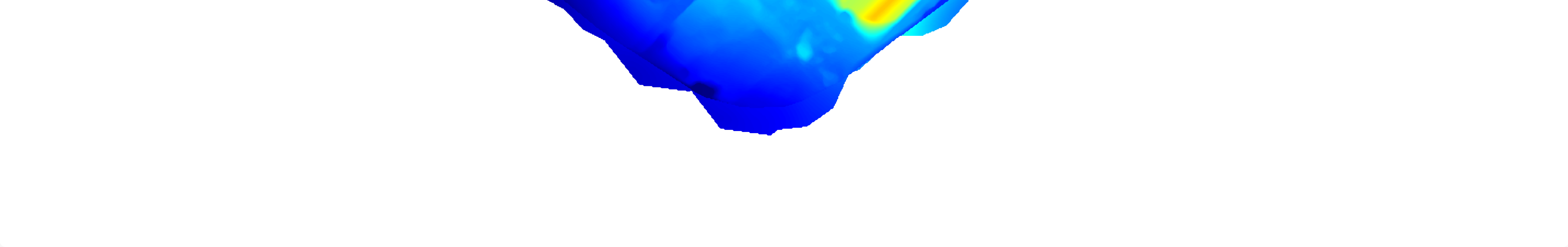
Accuracy Parameters

⊕ POS Status						
Fix	100.00%					
Other	0.00%					

⊕ IMU Trajectory Error						
Parameters	X(E) RMSE	Average X(E)	Y(N) RMSE	Average Y(N)	Z(U) RMSE	Average Z(U)
Location	0.00012 m	0.00575 m	0.00011 m	0.00517 m	0.00014 m	0.00667 m
Attitude	0.0000025 rad	0.0000659 rad	0.0000027 rad	0.000067 rad	0.0000617 rad	0.0002278 rad

Output Preview





Output Parameters

☰ Point Cloud Density

Scale	Point Cloud Average Density	Point Cloud Standard Density	Grid Side Length	Total Grid Number	Non-conforming Grid Ratio
1:500	841points/m²	16points/m²	0.25 m	561184	2.26%
1:1000	841points/m²	4points/m²	0.5 m	143360	2.14%
1:2000	841points/m²	1points/m²	1 m	36932	2.96%

📄 Output List

- PNTS
- LAS
- DEM TIF
- DEM Tile