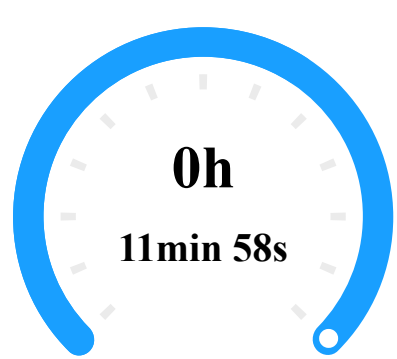


DJI Terra Quality Report

V4.1.0 | 2024-07-01 16:27 | Mission: Sander_2022-02-17_L1_NoPPP

Quality Report for LiDAR Point Cloud Processing

Aircraft Data Collection Time



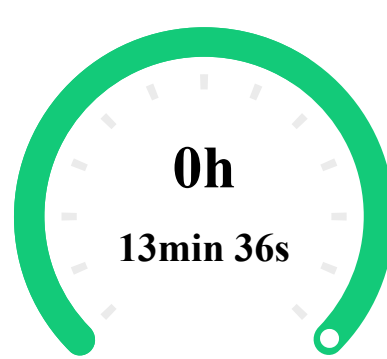
POS Data Collection Time

11min 58s

Point Cloud Data Collection Time

9min 19s

Software Processing Time



Point Cloud Optimization Time ^

- Point Cloud Accuracy Optimization Time
- Point Cloud Colorization Time
- Output Saving Time
- Others

7min 33s

2min 22s

18s

1min 18s

3min 33s

Ground Point Classification Time

2min 5s

DEM Generation Time

3min 57s

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 GSD 0.1 m
Contour	No
Point Cloud Format	PNTS LAS
Merged Output	No
LiDAR Point Cloud Block Count	1
Output Coordinate System	WGS 84 / UTM zone 32N NN2000 height

Mission Parameters

Aircraft Parameters (Aircraft 1)

Hardware Parameters

Payload	DJI Zenmuse L1
Payload SN	3FCDJ9N00455MK
LiDAR Parameters	https://enterprise.dji.com/zenmuse-l1/specs

LiDAR and IMU Calibration Parameters

Parameters	X (m)	Y (m)	Z (m)	roll (rad)	pitch (rad)	yaw (rad)
Before Calibration	0.03508	0.01694	-0.04644	3.1261957	-0.0003296	0.0035991

Flight Parameters (1 Flights)

Average Flight Speed	6.61m/s
Flight Height	74.15m
Ground Beam Diameter	370mm*37mm
Pulse Rate	240kHz
Scan Rate	720kHz

System Parameters

CPU	AMD Ryzen 9 7950X 16-Core Processor 32 cores
GPU Count	1
GPU 0	NVIDIA GeForce RTX 4090
RAM	130805 M

Accuracy Parameters

POS Status

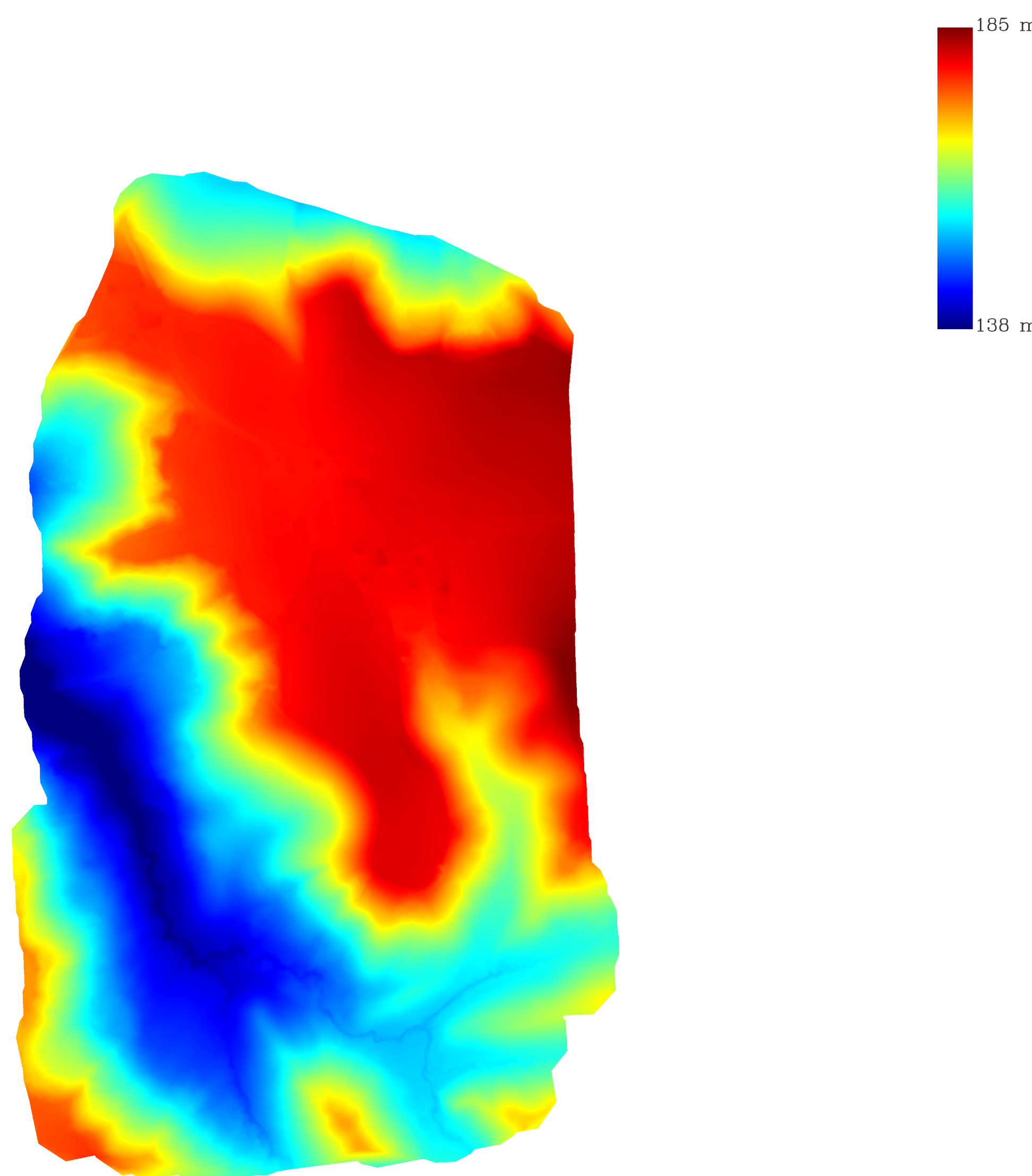
Fix	100.00%
Other	0.00%

IMU Trajectory Error

Parameters	X(E) RMSE	Average X(E)	Y(N) RMSE	Average Y(N)	Z(U) RMSE	Average Z(U)
Location	0.00014 m	0.00699 m	0.00008 m	0.00562 m	0.00009 m	0.00577 m
Attitude	0.0000072 rad	0.0001777 rad	0.0000042 rad	0.0001842 rad	0.0000636 rad	0.0005055 rad

Output Preview

DEM



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	740points/m²	16points/m²	0.25 m	2598016	1.06%
1:1000	740points/m²	4points/m²	0.5 m	654232	0.72%
1:2000	740points/m²	1points/m²	1 m	165012	0.88%

Output List

PNTS LAS DEM TIF DEM Tile