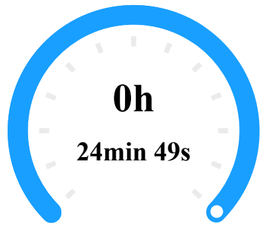
DJI Terra Quality Report

V5.2.5 | 2026-05-20 14:25 | Mission: Scharnitz-Simulation

Quality Report for LiDAR Point Cloud Processing

Aircraft Data Collection Time



POS Data Collection Time	18min 49s
Point Cloud Data Collection Time	18min 48s

Software Processing Time



POS Calculation	1min 58s
Point Cloud Optimization Time	51min 48s
• POS Calculation	1min 58s
• Point Cloud Accuracy Optimization Time	17min 37s
• Point Cloud Colorization Time	2min 54s
• Output Saving Time	7min 14s
• Others	24min 2s
Ground Point Classification Time	10min 25s

Reconstruction Parameters

Point Cloud Optimization Parameters

POS Calculation	Data POS
Scenario	Point Cloud Processing
LiDAR Calibration	Yes
Point Cloud Density (By Percentage)	High (100%)
Computation Method	Standalone Computation | Efficiency Mode:Standard(Single-Core)

Point Cloud Output Parameters

Point Cloud Format	PNTS | LAS
Merged Output	No
LiDAR Point Cloud Block Count	1
2D Map	No
Gaussian Splatting	No
Output Coordinate System	WGS 84 / UTM zone 32N | Default

Mission Parameters

Flight Parameters (1 Flights)

Hardware Parameters

Payload	DJI Zenmuse L2
Payload SN	6U3DM4N0050Z8J
LiDAR Parameters	https://enterprise.dji.com/zenmuse-l2/specs

LiDAR and IMU Calibration Parameters

Parameters	X	Y	Z	roll	pitch	yaw
Before Calibration	**0.02667m**	**0.0145m**	**-0.04615m**	**-3.1385732 rad**	**0.0029999 rad**	**0.0125964 rad**
After Calibration	**0.02667m**	**0.0145m**	**-0.04615m**	**-3.1379111 rad**	**0.0031529 rad**	**0.0129142 rad**

Flight Parameters

Average Flight Speed	**3.01m/s**
Flight Height	**79.45m**
Ground Beam Diameter	**95mm*31mm**
FOV	**70°*3°**
Pulse Rate	**240kHz**
Scan Rate	**1200kHz**
Scan Mode	**Linear**

⌘ Flight Parameters (2 Flights)

Hardware Parameters

Payload	**DJI Zenmuse L2**
Payload SN	**6U3DM4N0050Z8J**
LiDAR Parameters	**https://enterprise.dji.com/zenmuse-l2/specs**

LiDAR and IMU Calibration Parameters

Parameters	X	Y	Z	roll	pitch	yaw
Before Calibration	**0.02667m**	**0.0145m**	**-0.04615m**	**-3.1385732 rad**	**0.0029999 rad**	**0.0125964 rad**
After Calibration	**0.02667m**	**0.0145m**	**-0.04615m**	**-3.1379111 rad**	**0.0031529 rad**	**0.0129142 rad**

Flight Parameters

Average Flight Speed	**2.99m/s**
Flight Height	**72.41m**
Ground Beam Diameter	**86mm*28mm**
FOV	**70°*3°**
Pulse Rate	**240kHz**
Scan Rate	**1200kHz**
Scan Mode	**Linear**

⌘ Flight Parameters (3 Flights)

Hardware Parameters

Payload	**DJI Zenmuse L2**
Payload SN	**6U3DM4N0050Z8J**
LiDAR Parameters	**https://enterprise.dji.com/zenmuse-l2/specs**

LiDAR and IMU Calibration Parameters

Parameters	X	Y	Z	roll	pitch	yaw
Before Calibration	**0.02667m**	**0.0145m**	**-0.04615m**	**-3.1385732 rad**	**0.0029999 rad**	**0.0125964 rad**
After Calibration	**0.02667m**	**0.0145m**	**-0.04615m**	**-3.1379111 rad**	**0.0031529 rad**	**0.0129142 rad**

Flight Parameters

Average Flight Speed	**4.64m/s**
Flight Height	**42.55m**
Ground Beam Diameter	**51mm*17mm**
FOV	**70°*3°**
Pulse Rate	**240kHz**
Scan Rate	**1200kHz**
Scan Mode	**Linear**

System Parameters

CPU	**Intel Xeon 24 cores**
GPU Count	**1**
GPU 0	**NVIDIA GeForce RTX 4090**
RAM	**523780 M**

Accuracy Parameters

POS Status

Fix	**100.00%**
Other	**0.00%**

PPK 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	**0.0001 m**	**0.00577 m**	**0.00008 m**	**0.00514 m**	**0.0001 m**	**0.00664 m**
Attitude	**0.0000046 rad**	**0.0000645 rad**	**0.0000038 rad**	**0.0000655 rad**	**0.0000624 rad**	**0.0002676 rad**

Flight Strip Accuracy

Number of Flight Strips	Average Altitude Difference	Average Overlap Rate	Altitude Tolerance	Speed Consistency	Flight Route Curvature
3	**63.577 m**	**60.95%**	**88.3734 m**	**0.19%**	**0.13°**

Flight strip accuracy file is in the report/flight_strip_accuracy folder under the project folder

Point Cloud Accuracy

Point Cloud Control Point Error

Parameters	No. of Control Points	Average Altitude	Average Altitude Difference	Min Altitude Difference	Max Altitude Difference	Average Absolute Value of Altitude Difference	Root Mean Square	Standard Deviation
Value	**5**	**1036.40258 m**	**0 m**	**-0.020117 m**	**0.017883 m**	**0.011279 m**	**0.013154 m**	**0.014707 m**

Point Cloud Control Point List

ID	Control Point Latitude(Y/N)	Control Point Longitude(X/E)	Control Point Altitude(Z/U)	Reconstruction Altitude	Altitude Difference	Max Altitude Difference	Average Altitude Difference	Reconstruction Altitude Standard Deviation	Altitude Difference RMSE	Intensity
target-1	**47.38217454°**	**11.27968913°**	**1025.07 m**	**1025.071273 m**	**-0.003126 m**	**0.127138 m**	**-0.003126 m**	**0.034097 m**	**0.034233 m**	**66.21**
target-2	**47.3825816°**	**11.27914424°**	**1026.12 m**	**1026.096483 m**	**-0.020117 m**	**0.063332 m**	**-0.020117 m**	**0.030878 m**	**0.036847 m**	**58.27**
target-4	**47.38293543°**	**11.279284°**	**1043.12 m**	**1043.128913 m**	**0.010313 m**	**0.183036 m**	**0.010313 m**	**0.03495 m**	**0.036427 m**	**52.39**
target-5	**47.38256872°**	**11.27982386°**	**1039.55 m**	**1039.543245 m**	**-0.004955 m**	**0.186053 m**	**-0.004955 m**	**0.038834 m**	**0.039136 m**	**57.44**
target-6	**47.38238603°**	**11.28014785°**	**1048.16 m**	**1048.172983 m**	**0.017883 m**	**0.127371 m**	**0.017883 m**	**0.039479 m**	**0.043321 m**	**35.69**

Terrain Result Accuracy

Ground Point Cloud Density

Scale	Point Cloud Average Density	Point Cloud Standard Density	Grid Side Length	Total Grid Number	Non-conforming Grid Ratio

1:500	590points/m²	16points/m²	0.25 m	3005072	11.43%
1:1000	590points/m²	4points/m²	0.5 m	832044	9.71%
1:2000	590points/m²	1points/m²	1 m	223756	7.04%

Output Parameters

Output List

Point Cloud PNTS LAS LAZ

2D Map GeoTIFF