

DJI Terra Quality Report

V5.1.1 | 2026-03-30 15:30 | Mission: 4 - Curva da Misericórdia

Quality Report for LiDAR Point Cloud Processing

0h

5min 44s

POS Data Collection Time

3min 49s

Point Cloud Data Collection Time

3min 49s

0h

34min 30s

POS Calculation

24s

Point Cloud Optimization Time

9min 53s

• POS Calculation

24s

• Point Cloud Accuracy Optimization Time

50s

• Smoothing Point Cloud Time

3min 8s

• Point Cloud Colorization Time

7s

• Output Saving Time

24s

• Others

5min 25s

3D Mesh Generation Time

16min 46s

2D Map Generation Time

7min 13s

Ground Point Classification Time

26s

DEM Generation Time

12s

Contour Generation Time

1s

Reconstruction Parameters

Point Cloud Optimization Parameters

POS Calculation

Local FPK

Scenario

Point Cloud Processing

Point Cloud Density (By Sample Distance)

10 cm

Accuracy Control and Check

No

Optimize Point Cloud Accuracy

Yes

Smooth Point Cloud

Yes

Computation Method

Standalone Computation

Point Cloud Output Parameters

Point Cloud Format

PNTS | LAS

Merged Output

No

LiDAR Point Cloud Block Count

1

2D Map

Yes

2D Map Parameters

Resolution (Auto) | ResolutionHigh

File Format

B3DM | PLY

Quality

High

Reduce Model to

50%

Gaussian Splating

No

Ground Point Classification

Yes

Ground Point Classification Parameters

Gentle Slope | Building Max Diagonal 20m | Iteration Angle 6° | Iteration Distance 0.5m

DEM

Yes

DEM Parameters

Size (Scale) | 1:500

Contour

Yes

Contour Parameters

Interval 10m | Datum 0m | Elevation Annotation Radius 15m | Min Contour Length 0m

Output Coordinate System

WGS 84 / UTM zone 23S | Default

Mission Parameters

Flight Parameters (1 Flights)

Hardware Parameters

Payload

DJI Zenmuse L2

Payload SN

6U3DN47005X8W3

LiDAR Parameters

https://enterprise.dji.com/zenmuse-l2/specs

LiDAR and IMU Calibration Parameters

Parameters

X

Y

Z

roll

pitch

yaw

Default

0.02667m

0.0145m

-0.04615m

0.0028269 rad

3.1364627 rad

3.1301875 rad

Flight Parameters

Average Flight Speed

4.54m/s

Flight Height

60.65m

Ground Beam Diameter

72mm*24mm

FOV

70°*3°

Pulse Rate

240kHz

Scan Rate

720kHz

Scan Mode

Linear

System Parameters

CPU

Intel Core(TM) i9-10900X CPU @ 3.70GHz 20 cores

GPU Count

1

GPU 0

Quadro RTX 5000

RAM

32475 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

0.00009 m

0.00528 m

0.00011 m

0.00515 m

0.00012 m

0.00665 m

Attitude

0.000026 rad

0.000057 rad

0.000077 rad

0.000071 rad

0.000057 rad

0.000219 rad

Flight Strip Accuracy

Number of Flight Strips

Average Altitude Difference

Average Overlap Rate

Altitude Tolerance

Speed Consistency

Flight Route Curvature

1

0.2538 m

0%

0.2538 m

0.38%

0.12°

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

Point Cloud Accuracy

Point Cloud Density

Scale

Point Cloud Average Density

Point Cloud Standard Density

Grid Side Length

Total Grid Number

Non-conforming Grid Ratio

1:500

186points/m²

16points/m²

0.25 m

1142272

5.82%

1:1000

186points/m²

4points/m²

0.5 m

295468

3.35%

1:2000

186points/m²

1points/m²

1 m

75996

2.8%

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

62points/m²

16points/m²

0.25 m

622472

17.36%

1:1000

62points/m²

4points/m²

0.5 m

189236

17.77%

1:2000

62points/m²

1points/m²

1 m

56792

16.7%

Output Preview

TDOM Preview

TDOM GSD

2.26 cm/px

TDOM Mapping Coverage

0.049201 km²

Scene Overlapping

DSM Preview

DEM

Contour

Output Parameters

 Output List

- Point Cloud [PNTS](#) [LAS](#)
- Model [B3DM](#) [PLY](#)
- DEM [GeoTIF](#)
- Contour [SHP](#) [DXF](#)