

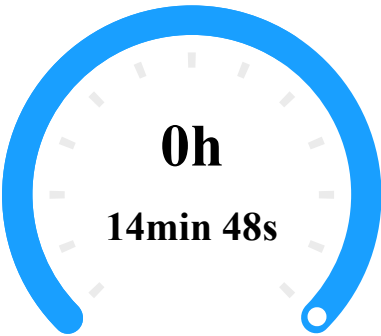


DJI Terra Quality Report

V5.1.1 | 2026-03-30 15:35 | Mission: 3 - Artesao Antonio e Jose Loureiro

Quality Report for LiDAR Point Cloud Processing

⌚ Aircraft Data Collection Time



POS Data Collection Time

12min 43s

Point Cloud Data Collection Time

12min 43s

⌚ Software Processing Time



POS Calculation

49s

Point Cloud Optimization Time ▼

32min 38s

- POS Calculation
- Point Cloud Accuracy Optimization Time
- Smoothing Point Cloud Time
- Point Cloud Colorization Time
- Output Saving Time
- Others

49s

2min 13s

10min 49s

38s

1min 47s

17min 12s

3D Mesh Generation Time

52min 7s

2D Map Generation Time

24min 42s

Ground Point Classification Time

1min 43s

DEM Generation Time

57s

Contour Generation Time

1s

Reconstruction Parameters

☰ Point Cloud Optimization Parameters

POS Calculation	Local PPK
Scenario	Point Cloud Processing
Point Cloud Density (By Percentage)	Medium(25%)
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	7
2D Map	Yes
2D Map Parameters	Resolution (Auto) ResolutionHigh
File Format	B3DM PLY
Quality	Medium
Reduce Model to	100%
Gaussian Splatting	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

⌘ 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	4.87m/s
Flight Height	71.61m
Ground Beam Diameter	85mm*28mm
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
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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	0.00007 m	0.00525 m	0.00006 m	0.00514 m	0.00007 m	0.00664 m
Attitude	0.0000032 rad	0.0000647 rad	0.0000034 rad	0.0000648 rad	0.0000291 rad	0.0002227 rad

Flight Strip Accuracy

Number of Flight Strips	Average Altitude Difference	Average Overlap Rate	Altitude Tolerance	Speed Consistency	Flight Route Curvature
1	65.3098 m	0%	65.3098 m	0.34%	0.11°

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	252points/m²	16points/m²	0.25 m	643604	7.21%
1:1000	252points/m²	4points/m²	0.5 m	166224	3.2%
1:2000	252points/m²	1points/m²	1 m	42168	1.45%

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	116points/m²	16points/m²	0.25 m	383956	18.71%
1:1000	116points/m²	4points/m²	0.5 m	116092	17.32%
1:2000	116points/m²	1points/m²	1 m	33924	14.45%

Output Preview

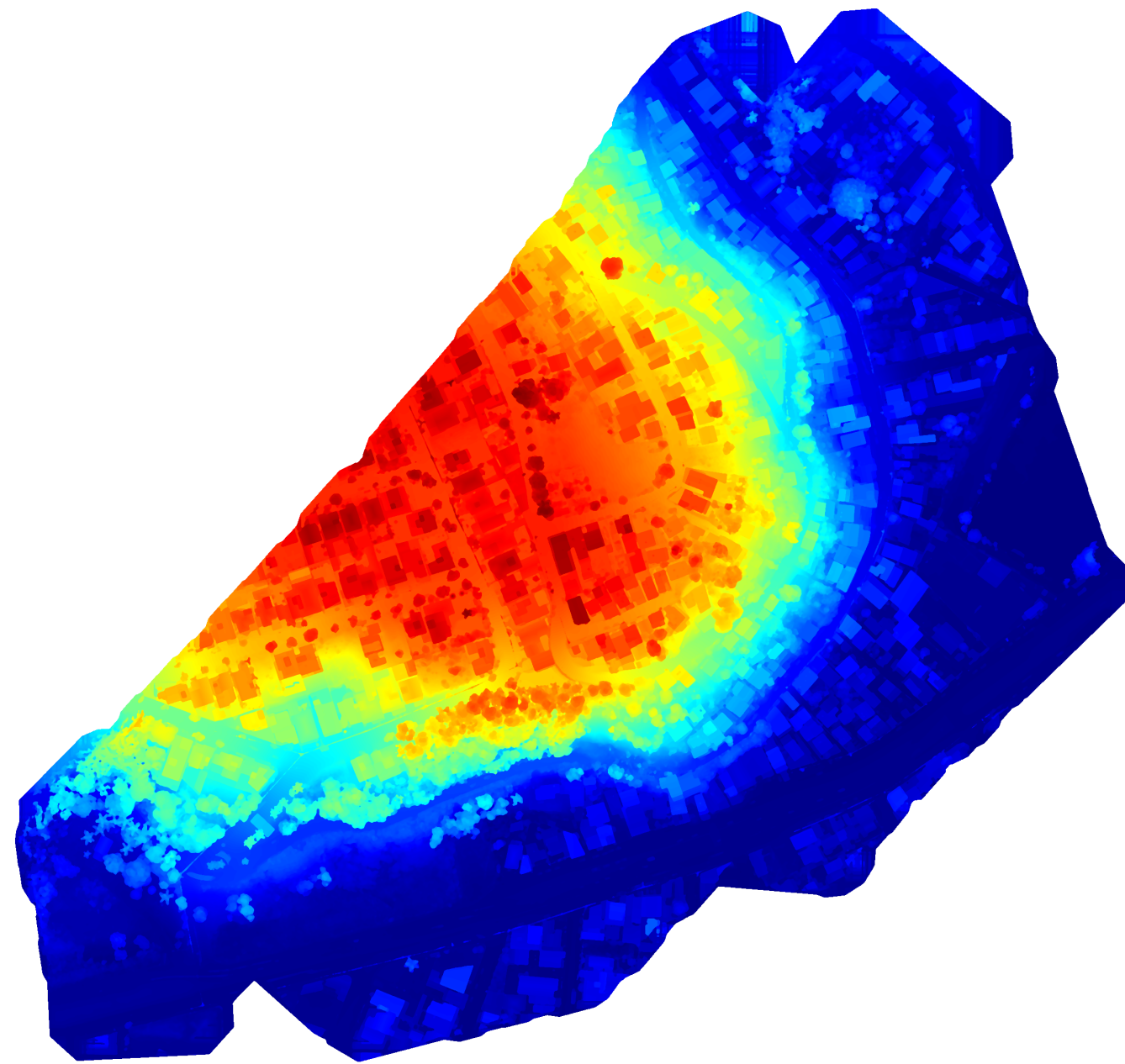
TDOM Preview



TDOM GSD	2.07 cm/px
TDOM Mapping Coverage	0.183231 km²

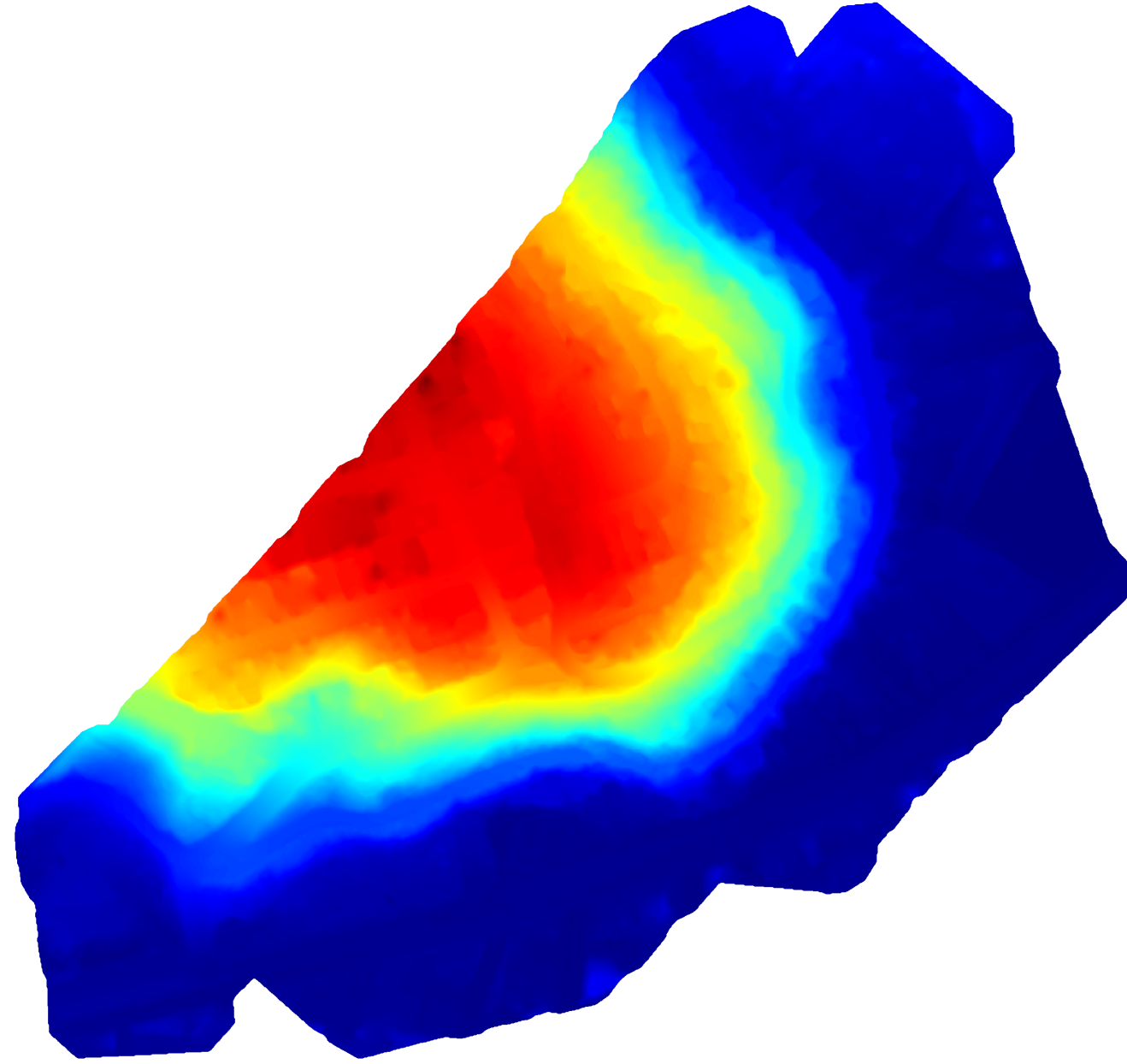
 Scene Overlapping





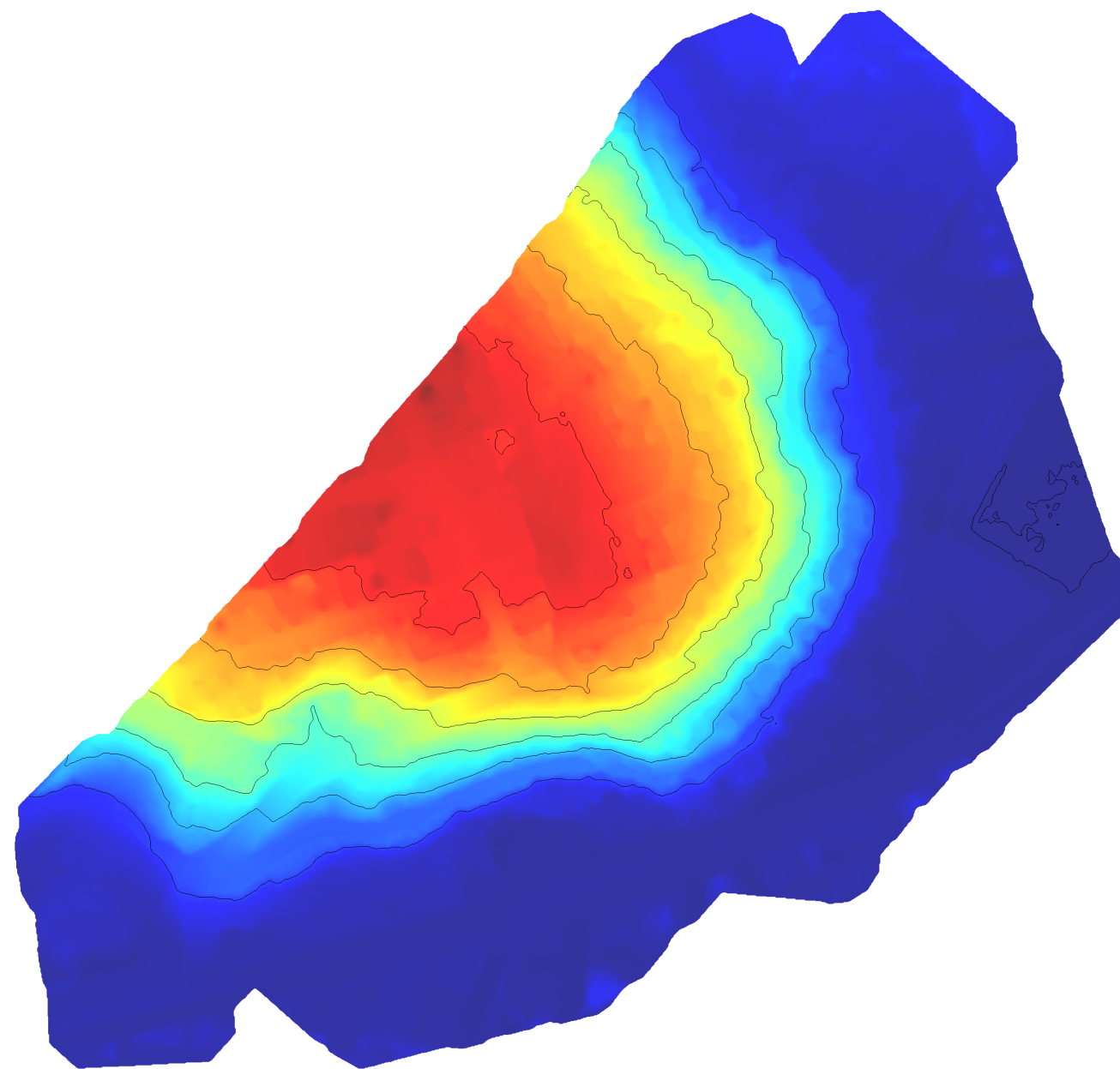


DEM





Contour



Output Parameters

Output List

Point Cloud PNTS LAS

Model B3DM PLY

DEM GeoTIFF

Contour SHP DXF