

HOW TO READ A DJI TERRA QUALITY REPORT FOR 2D MAPS

DJI Terra Aerial Triangulation Quality Report

Image Information Overview

Item	Value
Input Images	1119
Calibrated Images	1119
Use Priority Position	False
SFM Time	26.649 min

Image Information Overview

1. Input Images: the number of images which have been captured and input into the software for reconstruction
2. Calibrated Images: the number of images reconstructed
3. Use Priority Position: using specific format of ppk data as priority position
4. SFM Time: Structure from motion time

GCP Information Overview

Ground Control Point

ID	dx(m)	dy(m)	dz(m)
4	-0.004485	0.009190	-0.014095
5	-0.014598	0.008998	-0.017303
6	-0.000789	0.011663	-0.002902
9	-0.009201	0.005609	-0.012178
19	0.002876	-0.006967	-0.001428

Control Point RMSE

dx(m)	dy(m)	dz(m)
0.008084	0.008734	0.011461

Ground Check Point

ID	dx(m)	dy(m)	dz(m)
1	0.002513	-0.013376	-0.084288
15	0.006684	-0.023639	-0.010804

Check Point RMSE

dx(m)	dy(m)	dz(m)
0.005049	0.019205	0.060088

RTK Status

Status	Number of Images
FIX	1119
FLOAT	0
SINGLE	0
NONE	0

RTK Status

1. FIX: fix solution, where positioning is within centimeter accuracy
2. FLOAT: float solution, where positioning is within decimeter accuracy
3. SINGLE: single solution, where positioning is within meter accuracy
4. NONE: not using RTK

Camera Calibration Information

Camera Model FC6310R

Item	Focal	Cx	Cy	K1	K2	K3	P1	P2
Initial	3682.30	2423.08	1823.10	-0.26321300	0.11568700	-0.04491990	0.00107242	-0.00052538
Optimized	3673.94	2424.00	1827.55	-0.26595992	0.10988015	-0.03206699	0.00035873	-0.00043435

Camera Calibration Information

1. Camera Model

2. Initial: internal camera parameters

3. Optimized: optimized internal camera parameters

4. Focal: focal length of camera in pixel

5. Cx, Cy: principal point coordinates of photograph in pixel

6. K1, K2, K3: camera radial distortion parameters

7. P1, P2: camera tangential distortion parameters

Coefficients and correlation matrix

Matrix for measuring the coefficients and correlation of camera internal parameters

	Error	F	Cx	Cy	K1	K2	K3	P1	P2
F	0.01429022	1.00000000	0.01934982	-0.61049952	-0.35157843	0.31504547	-0.28359061	0.50146992	-0.00440416
Cx	0.01336107	0.00386075	1.00000000	-0.02324432	-0.00006828	-0.00004430	0.00021491	0.00457739	-0.05607488
Cy	0.01435064	-0.22795695	-0.02215738	1.00000000	0.00116116	-0.00059518	0.00072616	-0.18538668	0.00133082
K1	0.00001162	-0.49547731	-0.00642516	0.05694237	1.00000000	-0.97163986	0.91906360	-0.09935557	-0.00541749
K2	0.00002822	0.36399576	0.00544822	-0.02276564	-0.97527695	1.00000000	-0.98348841	0.03352836	0.00776033
K3	0.00001984	-0.31443590	-0.00727562	0.02188253	0.92317953	-0.98420871	1.00000000	-0.02648467	-0.01196153
P1	0.00000056	0.54066939	0.03905561	-0.41219857	-0.00377832	0.00066860	-0.00337103	1.00000000	-0.00397253
P2	0.00000036	-0.02782030	0.16945228	0.01281755	-0.00636394	0.00695452	-0.00950727	-0.02111529	1.00000000

Hardware Information

- CPU: Intel(R) Core(TM) i7-6700 CPU @ 3.40GHz
- GPU: GeForce GTX 1050 Ti
- RAM: 32672 M

DJI Terra 2D Quality Report

Process Parameters

Process Parameters	Value
Mapping Scene	Urban
Resolution	Medium
Coordinate Correct	Yes

1. Mapping Scene: Choose among three mapping scenarios: Urban, Field, and Fruit Tree

2. Resolution: image resolution for reconstruction

High: original image resolution

Medium: 1/2 of original image resolution

Low: 1/3 of original image resolution

3. Coordinate Correct: coordinates of mapping result have / have not been corrected

TDOM Preview



Map Information Overview

Item	Value
TDOM GSD	0.047 m
Coverage Area	0.228009 sq km
Average Flight Altitude	87.643 m

Map Information Overview

1. TDOM GSD: the distance between adjacent pixel centers in TDOM measured on the ground in meters

2. Coverage Area: coverage area in square kilometers

3. Average Flight Altitude: the aircraft’ s flight height relative to the ground of the surveying area in meters

Performance Overview

Pipeline	time cost (min)
Points Cloud Generate	8.733
TDOM Generate	3.333

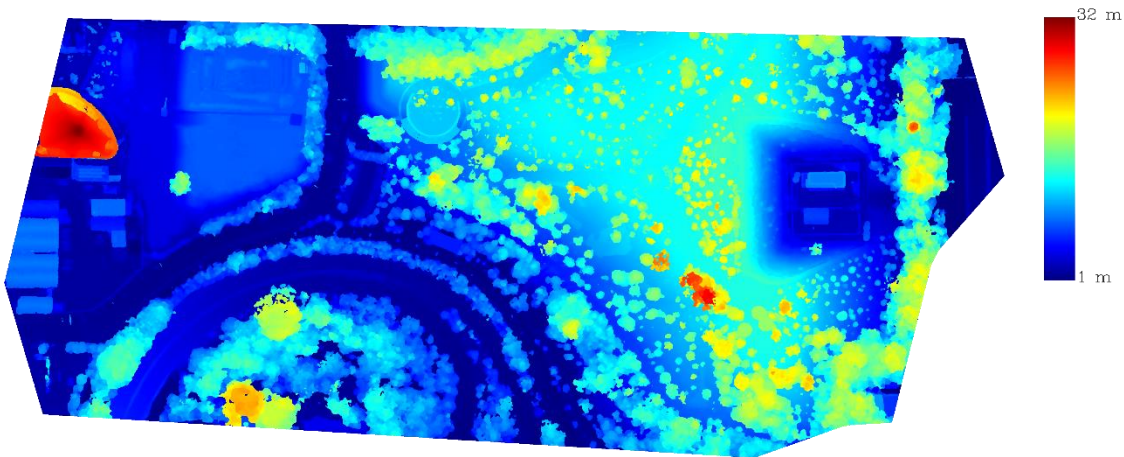
Performance Overview

1. Point Cloud Generate: point cloud generation time in minutes

2. TDOM Generate: TDOM generation time in minutes

DSM Preview

Digital Surface Model Preview



Scene Overlap Analyze

Scene Overlap Coverage: the number of images covering different areas of the scene. Different color corresponding with different number of images.

