

HOW TO READ A DJI TERRA QUALITY REPORT FOR 3D MODELS

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 3D Quality Report

Process Parameters

Process Parameters	Value
Mapping Scene	Normal
Resolution	Medium

1. Mapping Scene: Choose among two mapping scenes: Normal, Circle

2. Resolution: image resolution for reconstruction

High: original image resolution

Medium: 1/2 of original image resolution

Low: 1/3 of original image resolution

Production

Production List	Production: the reconstruction result file
PLY File	PLY File
B3DM File	B3DM File
OBJ File	OBJ File
OSGB File	OSGB File
LAS File	LAS File

Performance Overview

Item	Value
MVS Time	115.430 min
MVS Block Count	1

Performance Overview

1. MVS Time: 3D reconstruction time in minutes
2. MVS Block Count: the number of 3D reconstruction blocks