

3Dsurvey 2.11 processing productivity benchmarks

Project parameters (drone aerial survey):

Camera - FC6310 (8.8mm); Image size – 16 MP (4864 x 3648); File size (JPG) – 7.5 MB

Number of images - 100

Side/Forward overlap - 70%; Flight altitude – 320m; GSD – 8 cm; Area - 1.35 sq.km;

							29-08-20	23-08-20	23-08-20	23-08-20	23-08-20
	Quality	PPP (Point per pixel)	Average Points /sq.m	Number of Points	GPU	CPU	Local PC	3Dsurvey 200	3Dsurvey 200	3Dsurvey 500	3Dsurvey 500
OS							Windows 10	Windows	Windows	Windows	Windows
Storage							Local disk	Storage X enhanced	Local D Project D	Storage X enhanced	Local D Project D
GPU							1 x GeForce GTX 1080	1 x TESLA T4	1 x TESLA T4	1 x TESLA T4	1 x TESLA T4
CPU							Intel(R) Xeon(R) W-2123 CPU 3.60GHz	Cascade Lake 24C 8 vCPU 2.5GHz	Cascade Lake 24C 8 vCPU 2.5GHz	Cascade Lake 24C 32 vCPU 2.5GHz	Cascade Lake 24C 32 vCPU 2.5GHz
RAM							16	32	32	128	128
Bundle Adjustment	Normal					v	18m	11m	17m	6m	6m
Dense Reconstruction	Low	1point / 64 (8x8) pix	4	338,716	v		6m	5m	5m	5m	6m
Dense Reconstruction	Medium	1point / 16 (4x4) pix	16	17,275,121	v		1h 32m	49m	47m	47m	40m
Dense Reconstruction	High	1point / 4 (2x2) pix	20	21,679,089	v		2h 42m	1h 21m	1h 18m	1h 14m	1h 4m
Dense Reconstruction	Extreme	1point / 1 pix	64	69,504,567	v		5h 48m	2h 33m	2h 30m	2h 12m	1h 55m
Full 3D Mesh	High-High					v	1h 0m	54m	49m	40m	30m

							24-08-20	24-08-20
	Quality	PPP (Point per pixel)	Average Points /sq.m	Number of Points	GPU	CPU	3Dsurvey 3000	3Dsurvey 3000
OS							Windows	Windows
Storage							Storage X enhanced	Local D Project D
GPU							4 x TESLA T4	4 x TESLA T4
CPU							Cascade Lake 24C 48 vCPU 2.5GHz	Cascade Lake 24C 48 vCPU 2.5GHz
RAM							192	192
Bundle Adjustment	Normal					v	7m	15m
Dense Reconstruction	Low	1point / 64 (8x8) pix	4	338,716	v		5m	5m
Dense Reconstruction	Medium	1point / 16 (4x4) pix	16	17,275,121	v		45m	41m
Dense Reconstruction	High	1point / 4 (2x2) pix	20	21,679,089	v		1h 11m	1h 6m
Dense Reconstruction	Extreme	1point / 1 pix	64	69,504,567	v		2h 21m	2h 0m
Full 3D Mesh	High-High					v	29m	31m