Group 1 - Project 3 - RLA Project 3

Captured: Mar 24, 2024, Processed: Mar 24, 2024



Map Details Summary ①

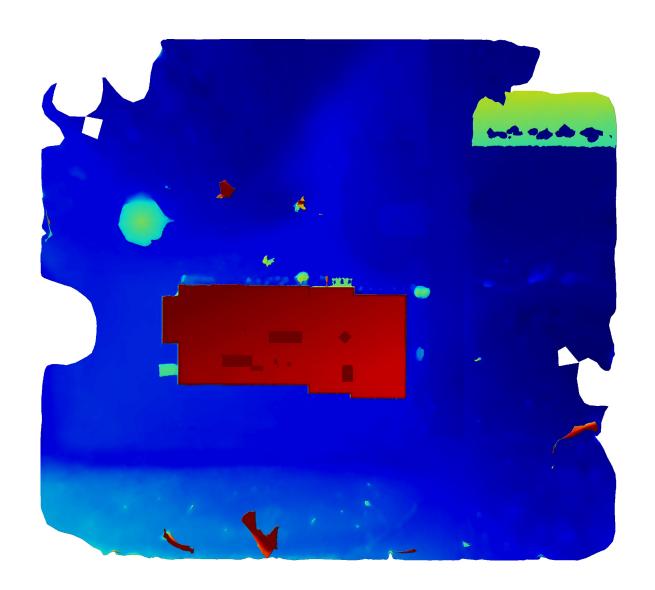
Project Name	Group 1 - Project 3 - RLA Project 3
Photogrammetry Engine	DroneDeploy Proprietary
Date Of Capture	Mar 24, 2024
Date Processed	Mar 24, 2024
GSD Orthomosaic (GSD DEM)	0.37in/px (DEM 1.48in/px)
Area Bounds (Coverage)	421007.90ft ² (30%)
Image Sensors	DJI - FC7303
Average GPS Trust	32.81ft

Quality & Accuracy Summary ①

Image Quality	High texture images
Median Shutter Speed	Low shutter speed 1/60 - motion blur likely.
Images Uploaded (Aligned %)	73 (100%)
Camera Optimization	0.01% variation from reference intrinsics

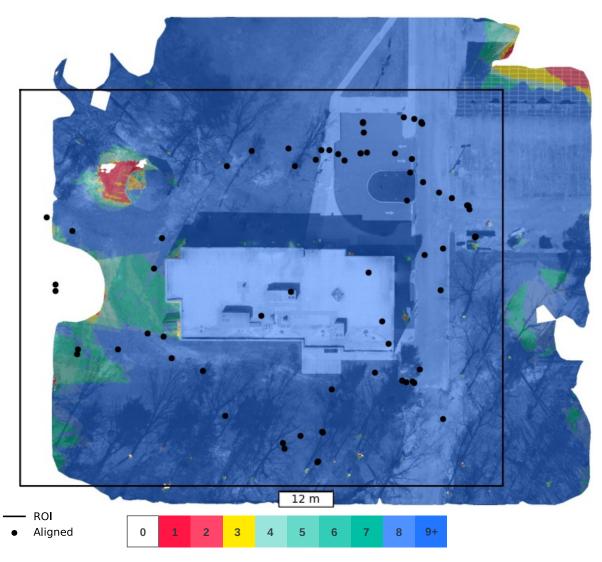
Preview (i)





Dataset Quality Review

Orthomosaic Coverage (i)



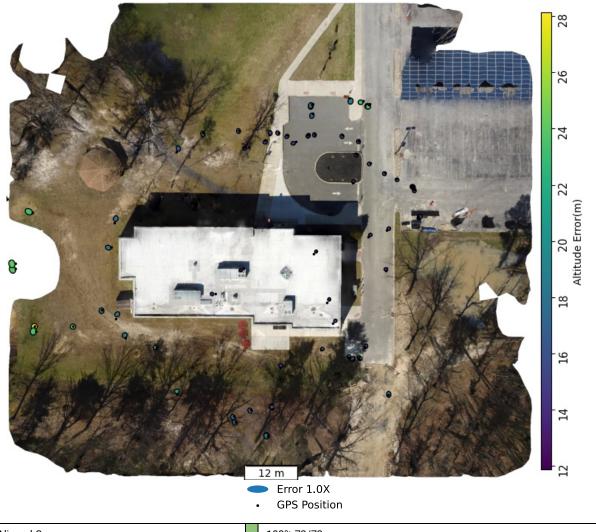
Insufficient coverage, expect large holes in the map, and low accuracy.

Marginal coverage, expect distortion or holes on buildings or sharp edges, and lower accuracy measurements.

Good coverage, expect a high quality reconstruction

Sensor(s) Used	DJI - FC7303
Image Count (by sensor)	73
Image Resolution	4000x3000 (~12MP)
Orthomosaic coverage (% of area of interest)	30.80
Average Orthomosaic Image Density within Structured Area	18 images/pixel
Median Shutter Speed	Low shutter speed 1/60 - motion blur likely.

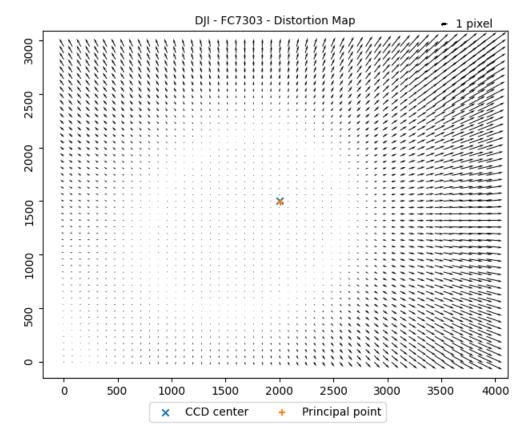
Structure from Motion (i)



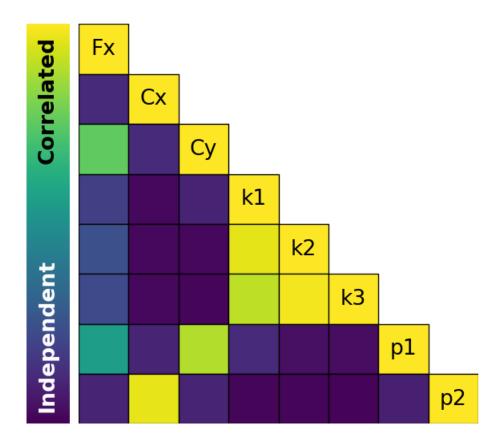
Aligned Cameras	100% 73/73
RMSE of Camera GPS Location	X 1.18ft Y 1.19ft Z 2.66ft RMSE 1.82ft

Camera Calibration (i)

Camera Optimization	0.01% variation from reference intrinsics



	Fx	Сх	Су	k1	k2	k3	p1	p2
Value	3022.66	2006.48	1489.29	0.00452375	-0.00745163	0.00414389	0.000196882	0.000316821
Error	0.245357	0.310677	0.391408	1.29615	4.8949	5.68243	0.12466	0.134611



Densification and Meshing $\hat{\textit{U}}$

Nadir Images	0% Nadir images are needed to make a good orthomosaic	
Oblique images	0%	
Horizontal images	100% Horizontal images can cause problem with reconstruction if they view the sky.	
Total Points	4.7 million	
Point Cloud Density 36.59 points/ft ²		
Mesh Triangles	353.1 thousand	

Digital Elevation Model (i)

Mode	Generated from Mesh	
DEM GSD	DEM 1.48in/px	
Relative/Absolute	Relative Altitude vs Drone takeoff	

