

Project Summary

Project Name	TannerPark_Control
Processed On	7/20/23, 02:15 PM
Camera Model	XL705
Images	41 out of 41 images calibrated
Project Area	0.011 km ² / 1.115 ha / 0.004 sq. mi. / 2.756 acres
Ground Resolution	0.009 (m)
Processing Time	01h:12m:17s

Adjust Images

Summary

Number of Tie Points	247,641
Number of Solution Points	91,627
RMSE of Reprojection Error / Sigma Naught (Pixel)	0.463 / 0.694
Ground Control Points RMSE (m)	0.073, 0.030, 18.155
Initial Processing Time	27m:00s

Processing Options

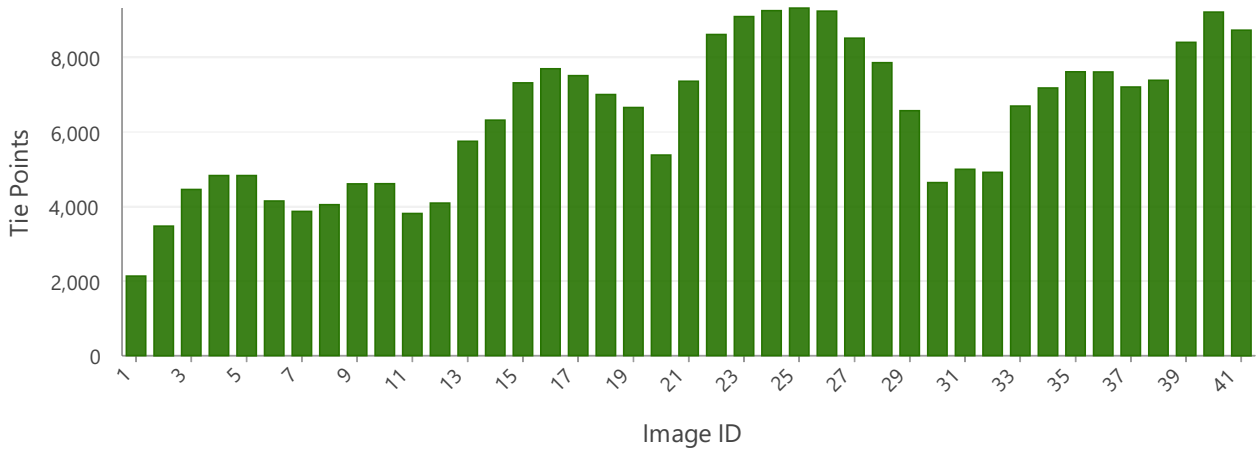
Initial Image Scale	1/2 (Half image size)
Refine Adjustment Scale	No
Matching Neighborhood	Small (Optimized)

Internal Camera Parameters

Autel Robotics XL705 10.2mm 5472x3648
HN7923051121

Focal Length	Principal Point X	Principal Point Y	K1	K2	K3	P1	P2
10.225	-0.103	0.139	6.107e-004	-2.150e-005	2.560e-007	-2.490e-004	1.354e-004

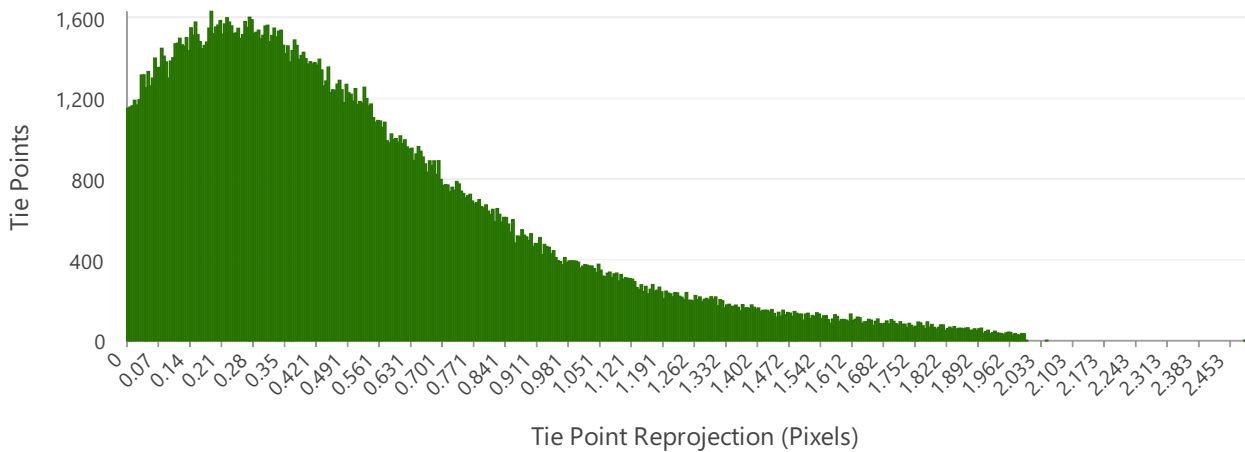
Tie Points Per Image



Min	2,002
Max	9,314
Median	6,175
Mean	6,040
Total	247,641

The total number of tie points that were detected in each image during the Adjust Images step. Images with low tie point counts may indicate problematic areas, such as areas with poor image quality, insufficient image overlap, or homogenous image textures.

Tie Point Reprojection Error



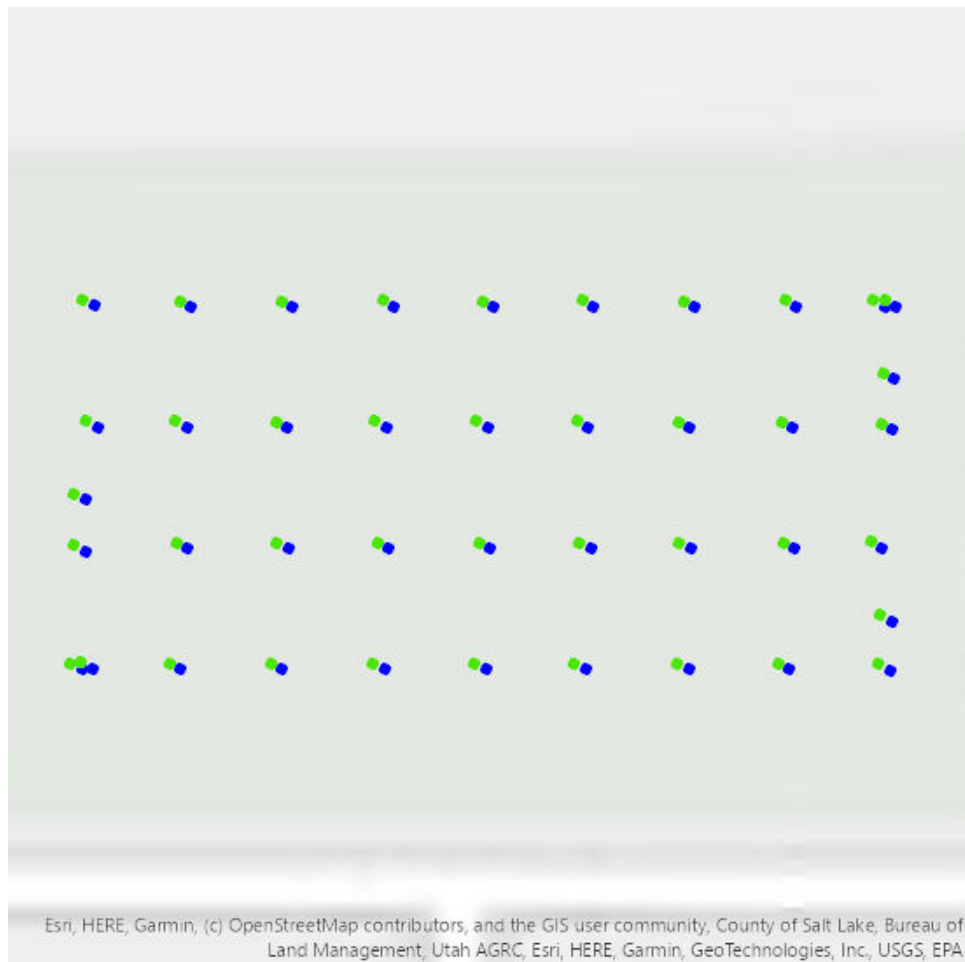
Min	0.000
Max	2.488
Median	0.428
Mean	0.520
RMSE	0.463

The distribution of the tie point reprojection errors across all adjusted images. The root mean square error (RMSE) of the reprojection error can be used to assess the overall quality of the Adjust Images processing step. Generally, an RMSE value closer to zero indicates a higher quality adjustment.

Standard Deviation of Exterior Orientation

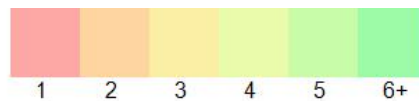
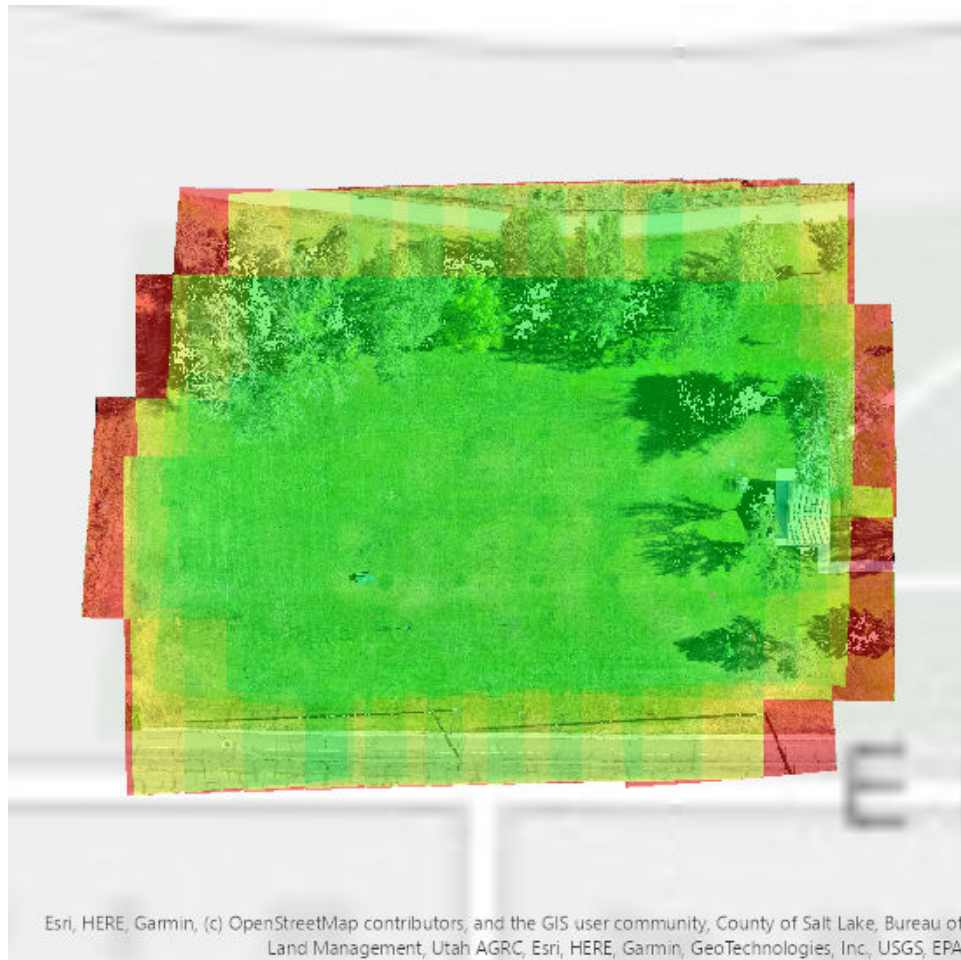
	X (m)	Y (m)	Z (m)	Omega (degrees)	Phi (degrees)	Kappa (degrees)
Min	0.000	0.000	0.000	0.001	0.001	0.001
Max	0.000	0.000	0.000	0.002	0.002	0.002

Adjusted Image Positions



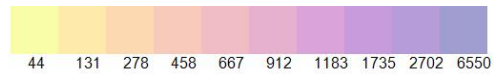
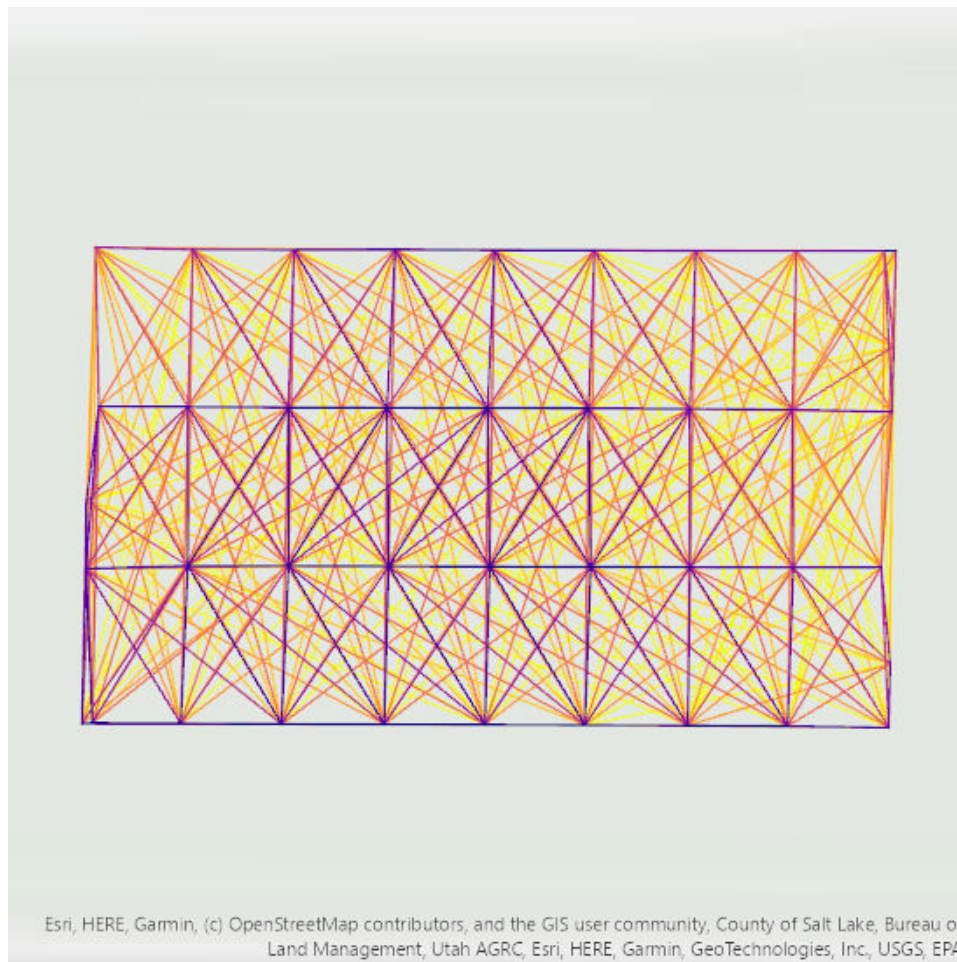
The initial image locations (blue points) and their adjusted positions (green points) after processing.

Image Overlap



The amount of overlap between image projections after processing. Areas with high overlap produce the most accurate results. Avoid placing control points in areas of low overlap, as this could affect their accuracy.

Cross Matches



The adjusted image positions with links showing the number of tie points between matched images after the Adjust Images processing step. Darker links indicate a higher number of tie points between the images. Images with a greater number of links generally produce more accurate results.

Solution Points

2 Images	58,663
3 Images	18,041
4 Images	7,159
5 Images	3,491
6 Images	1,992
7 Images	1,113
8 Images	585
9 Images	312
10 Images	166
11 Images	73
12 Images	19
13 Images	4
14 Images	8
15 Images	1

The frequency of solution points per image observations. Solution points with a higher number of image observations generally produce more accurate results.

Ground Control Points

	dX (m)	dY (m)	dZ (m)	Projection Error (pixels)	Status
ground control 1	0.116	0.033	-18.187	1.172	7/7
ground control 2	-0.038	0.009	-18.166	0.852	6/6
ground control 3	-0.068	-0.053	-18.128	0.740	6/6
ground control 4	0.009	-0.022	-18.135	0.683	6/6
ground control 5	0.084	-0.013	-18.156	1.441	6/6
RMSE	0.073	0.030	18.155		
Min	-0.068	-0.053	-18.187		
Max	0.116	0.033	-18.128		
Median	0.009	-0.013	-18.156		
Mean	0.021	-0.009	-18.155		

Summary

Point Cloud Density	High
Number of Tiles	40
Processing Time	10m:56s

Project Settings

System Information

Hardware	CPU: Intel(R) Core(TM) i7-10750H CPU @ 2.60GHz RAM: 32GB GPU: NVIDIA GeForce GTX 1650 Ti (Driver: 31.0.15.2879)
Operating System	Microsoft Windows 10 Pro, 64-bit
ArcGIS Drone2Map Version	2023.1.1

Coordinate Information

Image Coordinate System	GCS_WGS_1984/VCS:EGM96 Geoid
Project Coordinate System	NAD_1983_2011_StatePlane_Utah_Central_FIPS_4302/VCS:NAVD 1988
Control Points Coordinate System	NAD_1983_2011_StatePlane_Utah_Central_FIPS_4302/VCS:NAVD 1988

Project Resolution

Project Resolution	Automatic 1 x GSD (0.009 m)
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Pre-Processing

Project Area	No
Waterbody Mask	No
Correction Feature	No

2D Product

Summary

Processing Time for Point Cloud Classification	05m:57s
Processing time for True Ortho	13m:13s

Processing Options

Create True Ortho	Yes
Create Digital Surface Model	No
Create Digital Terrain Model	No
Color Balance	Yes
Enhance True Ortho	Yes
Merge Tiles	Yes

3D Product

Summary

Processing Time for 3D Mesh Generation	08m:11s
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Processing Options

Create Point Cloud	Yes
Merge LAS Tiles	No
Create DSM Textured Mesh	No
Create 3D Textured Mesh	Yes
Enhance Textured Mesh	Yes