

## Project Summary

Project Name	FortEllisTop
Processed On	8/14/2024 2:16 PM
Camera Model	M3E
Images	580 out of 580 images calibrated
Project Area	2.872 km <sup>2</sup> / 287.247 ha / 1.109 sq. mi. / 709.778 acres
Ground Resolution	0.031 (m)
Processing Time	01h:02m:12s

## Adjust Images

### Summary

Number of Tie Points	3,613,356
Number of Solution Points	1,157,586
RMSE of Reprojection Error / Sigma Naught (Pixel)	0.387 / 0.537
Check Points RMSE (m)	0.011, 0.022, 0.223
Initial Processing Time	45m:09s

### Processing Options

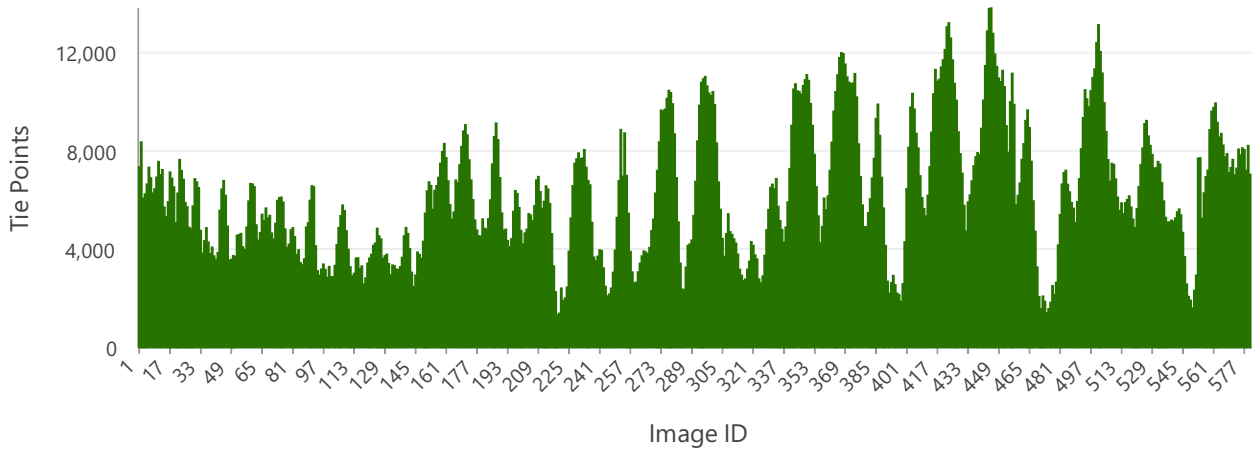
Initial Image Scale	1/4 (Quarter image size)
Refine Adjustment Scale	1 (Original image size)
Matching Neighborhood	Small (Optimized)

### Internal Camera Parameters

DJI M3E 12.3mm 5280x3956  
1581F5FHC244B00DG817

Focal Length	Principal Point X	Principal Point Y	K1	K2	K3	P1	P2
12.280	-0.057	0.105	-7.053e-004	-1.584e-007	-4.125e-009	-6.111e-006	2.834e-005

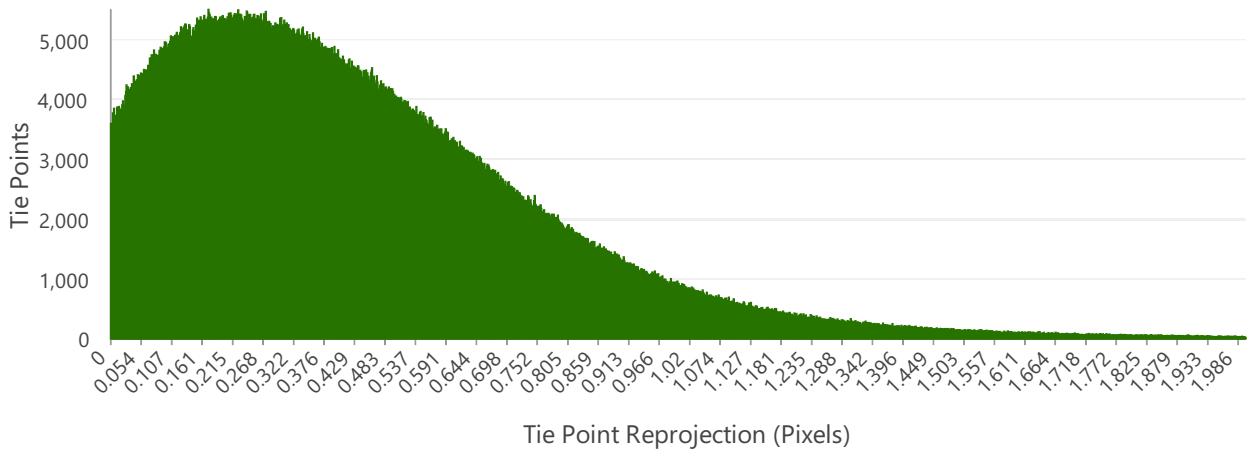
## Tie Points Per Image



Min	1,326
Max	13,803
Median	5,909
Mean	6,229
Total	3,613,356

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	2.000
Median	0.382
Mean	0.443
RMSE	0.387

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

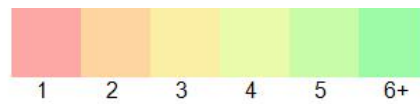
	X (m)	Y (m)	Z (m)	Omega (degrees)	Phi (degrees)	Kappa (degrees)
Min	0.000	0.000	0.000	0.000	0.000	0.000
Max	0.000	0.000	0.000	0.001	0.001	0.002

## Adjusted Image Positions



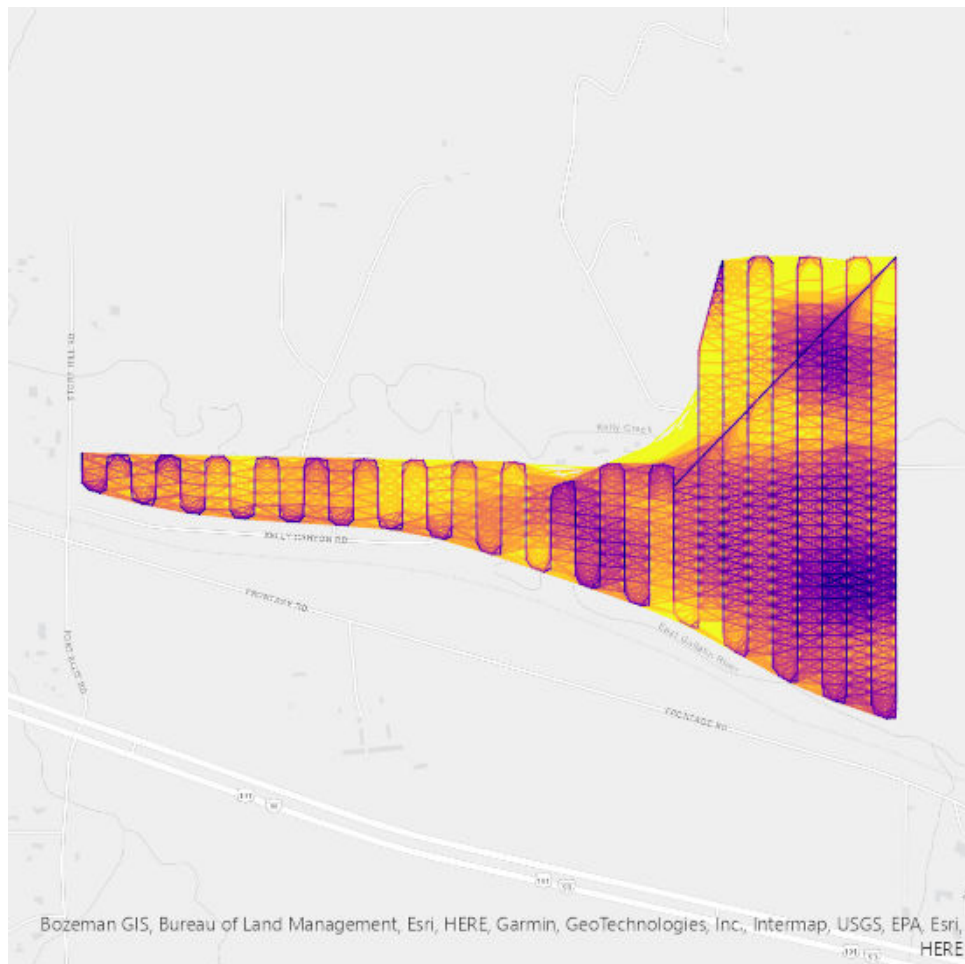
The initial image locations (blue points) and their adjusted positions (green points) after processing.

## 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	709,299
3 Images	201,198
4 Images	87,882
5 Images	47,863
6 Images	30,068
7 Images	19,954
8 Images	14,397
9 Images	10,781
10 Images	8,366
11 Images	6,334
12 Images	4,997
13 Images	4,070
14 Images	3,250
15 Images	2,782
16 Images	1,815
17 Images	1,378
18 Images	1,005
19 Images	771
20 Images	549
21 Images	362
22 Images	198
23 Images	119
24 Images	76
25 Images	32
26 Images	16
27 Images	14
28 Images	5
29 Images	1
30 Images	2
31 Images	1
32 Images	0
33 Images	0
34 Images	1

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





## Check Points

	dX (m)	dY (m)	dZ (m)	Projection Error (pixels)	Status
1	0.017	-0.016	0.205	0.775	18/18
2	0.009	0.002	0.154	0.470	15/15
3	0.001	0.035	0.290	0.875	10/10
<b>RMSE</b>	0.011	0.022	0.223		
<b>Min</b>	0.001	-0.016	0.154		
<b>Max</b>	0.017	0.035	0.290		
<b>Median</b>	0.009	0.002	0.205		
<b>Mean</b>	0.009	0.007	0.216		

## Project Settings

### System Information

Hardware	CPU: 13th Gen Intel(R) Core(TM) i9-13900H RAM: 32GB GPU: NVIDIA GeForce RTX 4060 Laptop GPU (Driver: 31.0.15.4680)
Operating System	Microsoft Windows 11 Enterprise, 64-bit
ArcGIS Drone2Map Version	2024.1.1

### Coordinate Information

Image Coordinate System	GCS_WGS_1984/VCS:WGS 1984
Project Coordinate System	WGS_1984_UTM_Zone_12N/VCS:WGS 1984

### Project Resolution

Project Resolution	Automatic 1 x GSD (0.031 m)
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### Pre-Processing

Project Area	No
Waterbody Mask	No
Correction Feature	No

## 2D Product

### 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