

ESRI - Map Plan ORTHO 20210410_SURFCAT



Captured: Apr 10, 2021, Processed: Apr 10, 2021

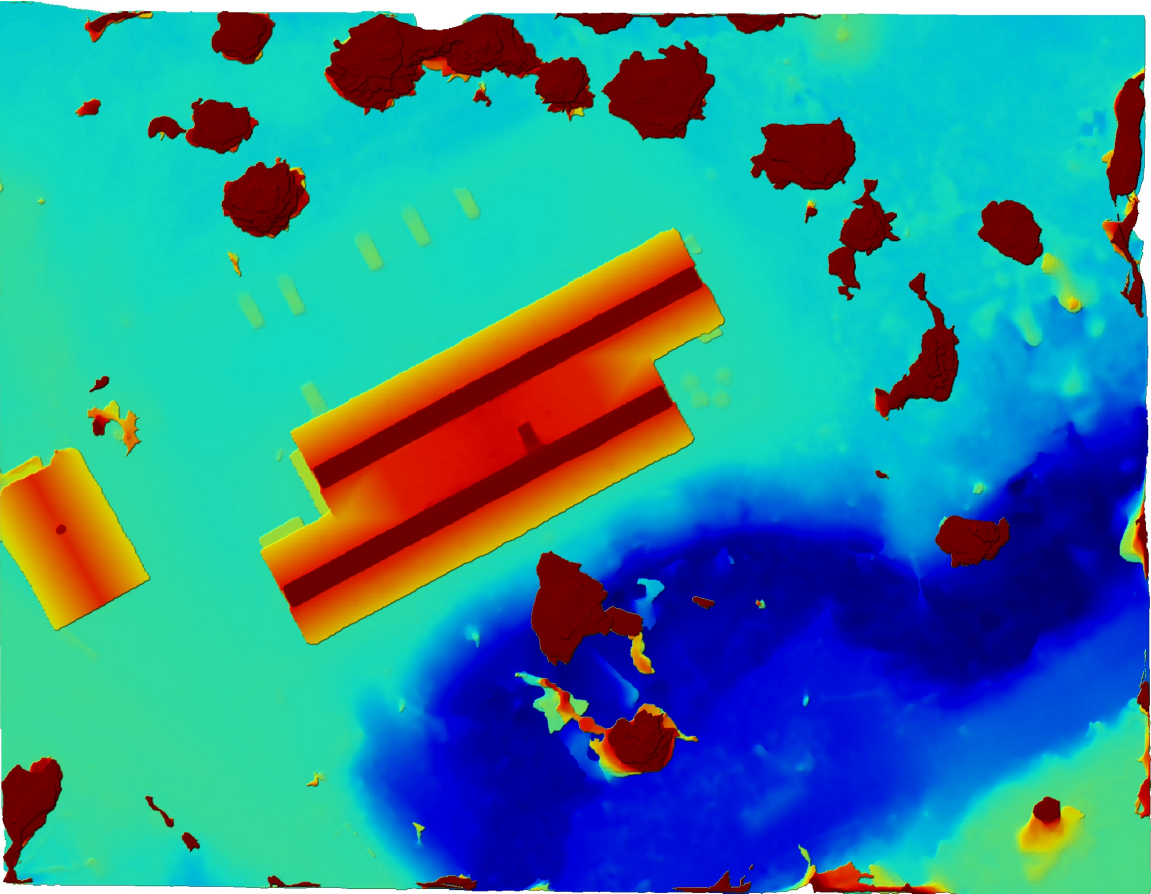
Map Details Summary (i)

Project Name	ESRI - Map Plan ORTHO 20210410_SURFCAT
Photogrammetry Engine	DroneDeploy Proprietary
Date Of Capture	Apr 10, 2021
Date Processed	Apr 10, 2021
Processing Mode	Standard
GSD Orthomosaic (GSD DEM)	1.88cm/px (DEM 7.53cm/px)
Area Bounds (Coverage)	11318.35m ² (119%)
Image Sensors	DJI - FC220

Quality & Accuracy Summary (i)

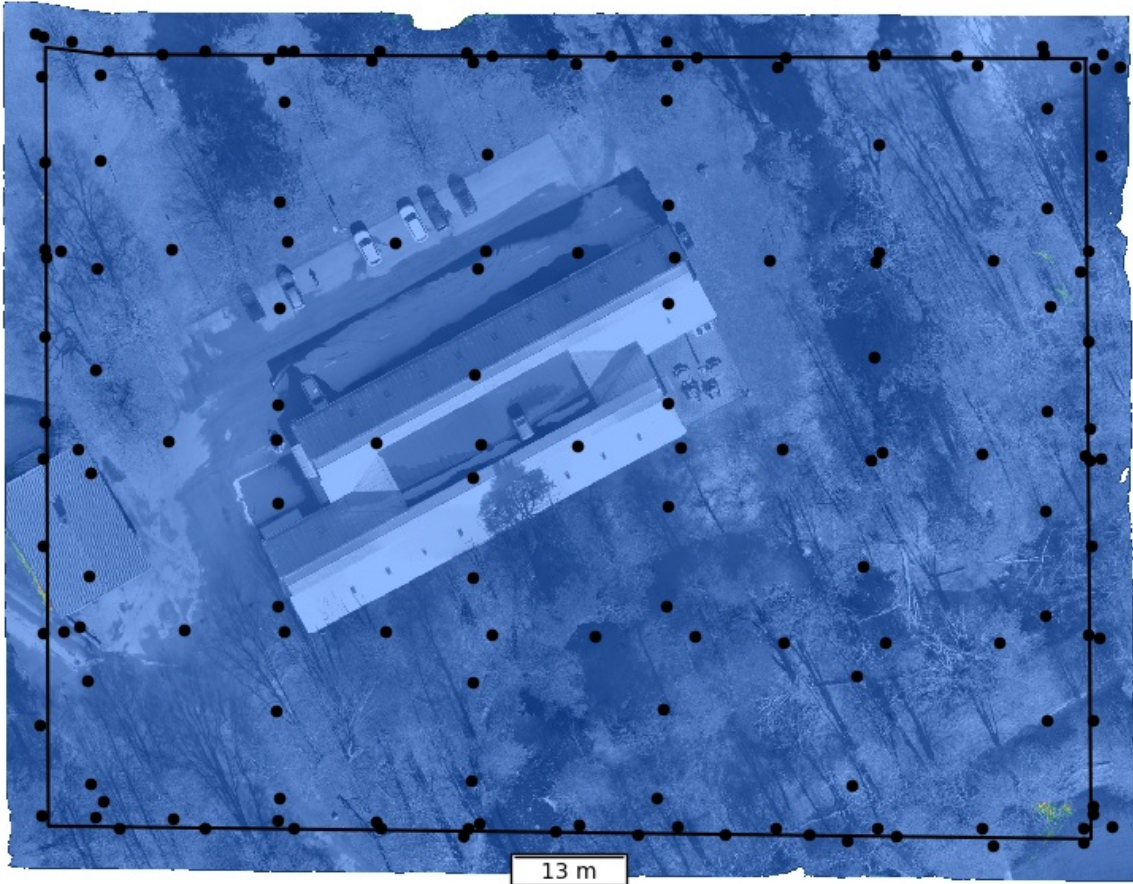
Image Quality	High texture images
Median Shutter Speed	1/637
Processing Mode	[Standard Mode - Designed to produce the best photogrammetry output based on the input imagery. Include predominantly nadir imagery for most efficient mapping of large fields and crops, natural open terrain, and generating topographical maps. Entirely nadir collects are not recommended for reconstructing the sides of buildings, overhangs, or complex equipment. Include horizontal and oblique imagery to optimize processing for high resolution 3D reconstruction of buildings, pipework & conveyors.]
Images Uploaded (Aligned %)	161 (100%)
Camera Optimization	0.03% variation from reference intrinsics

Preview (i)

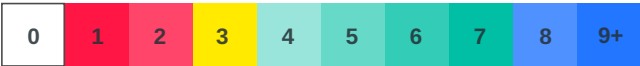


Dataset Quality Review ⁽ⁱ⁾

Orthomosaic Coverage ⁽ⁱ⁾



- ROI
- Aligned



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 - FC220
Image Count (by sensor)	161
Image Resolution	4000x3000 (~12MP)
Orthomosaic coverage (% of area of interest)	119.46
Average Orthomosaic Image Density within Structured Area	55 images/pixel
Median Shutter Speed	1/637

Structure from Motion i

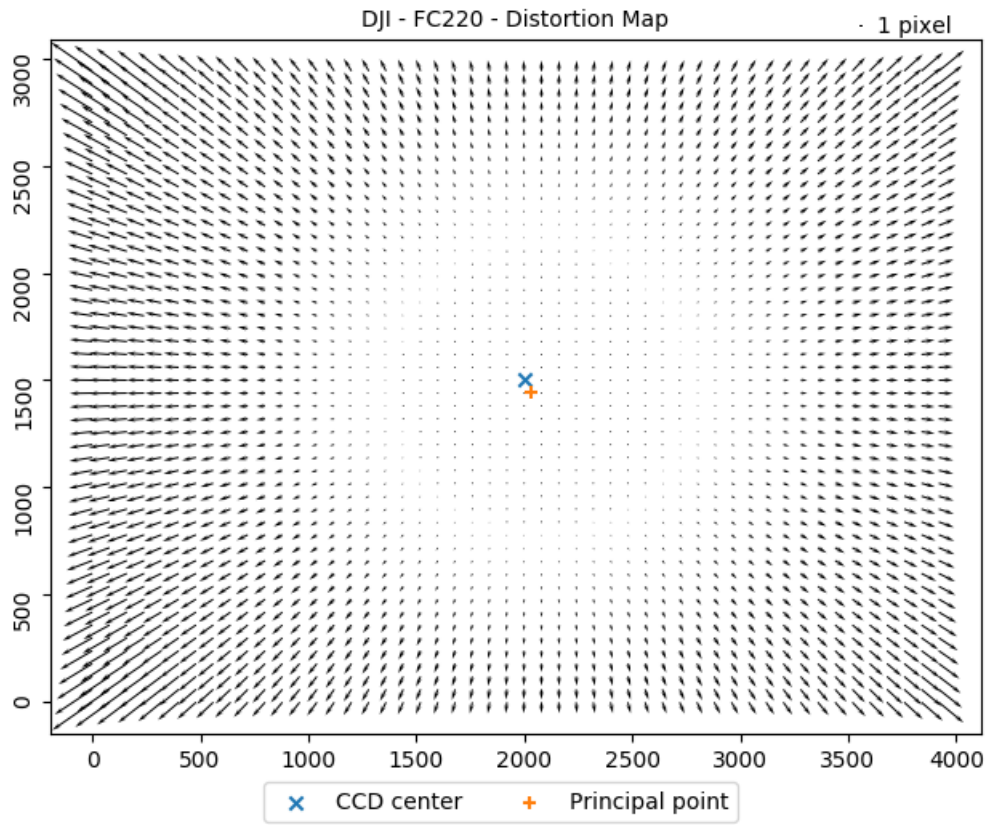


Aligned Cameras	100% 161/161
RMSE of Camera GPS Location	X 0.37m Y 0.47m Z 0.70m RMSE 0.53m

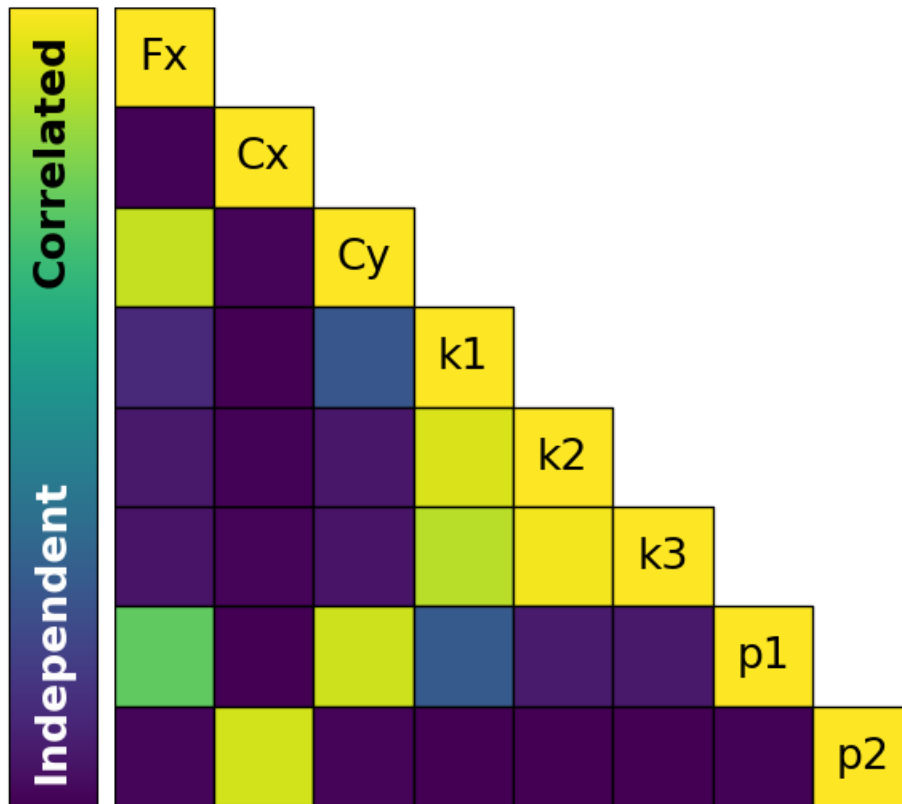
Camera Calibration i

Camera Optimization	0.03% variation from reference intrinsics
---------------------	---

DJI - FC220



	Fx	Cx	Cy	k1	k2	k3	p1	p2
Value	3077.74	2029.06	1446.24	0.0443357	-0.118098	0.123221	-0.000175178	-0.000550935
Error	0.297489	0.124298	0.312698	0.838511	3.02671	3.42783	0.106019	0.058532

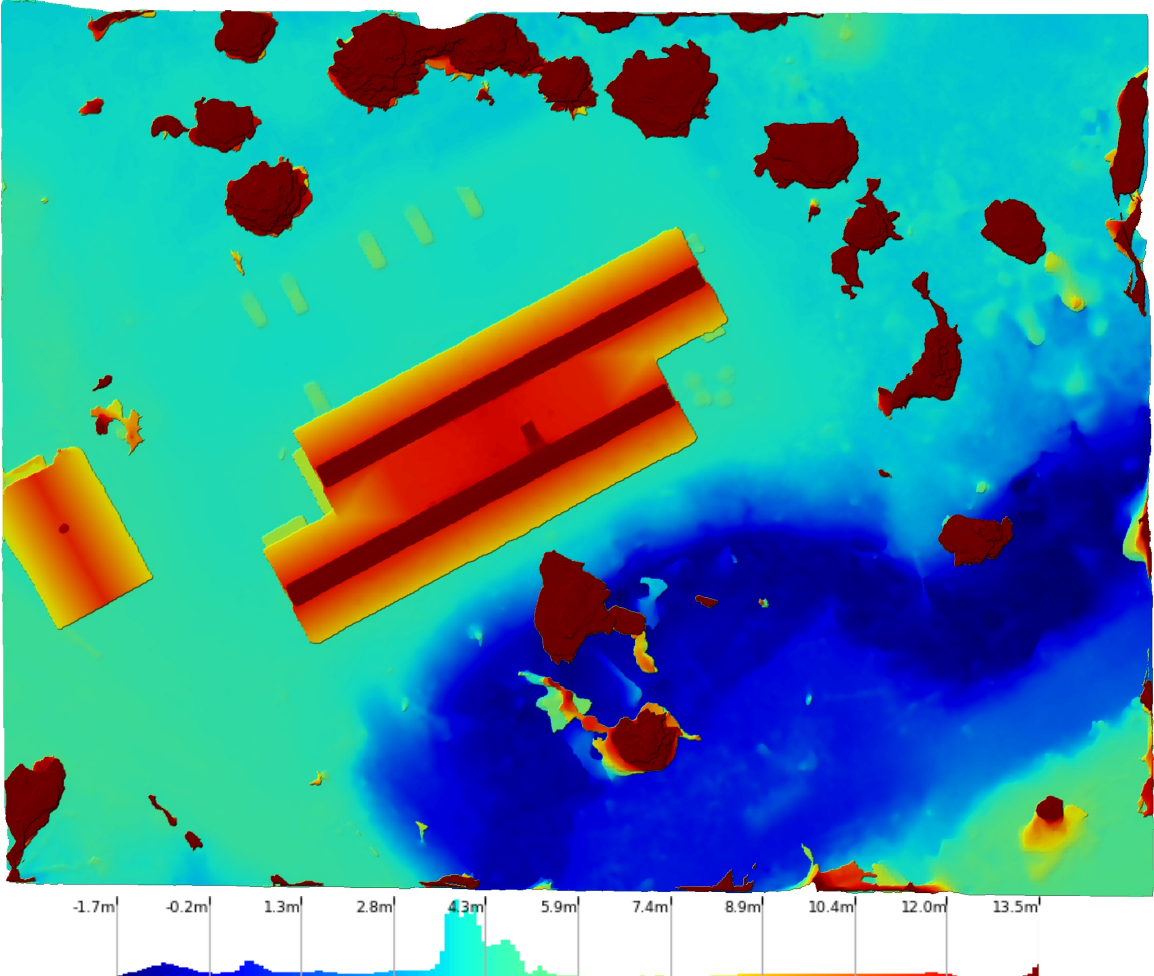


Densification and Meshing ⁽ⁱ⁾

Processing Mode	[Standard Mode - Designed to produce the best photogrammetry output based on the input imagery. Include predominantly nadir imagery for most efficient mapping of large fields and crops, natural open terrain, and generating topographical maps. Entirely nadir collects are not recommended for reconstructing the sides of buildings, overhangs, or complex equipment. Include horizontal and oblique imagery to optimize processing for high resolution 3D reconstruction of buildings, pipework & conveyors.]
Processing Mode Quality	High
Nadir Images	0% Include predominantly nadir images to optimize processing for natural terrain.
Oblique images	100%
Horizontal images	0%
Total Points	6.2 million
Point Cloud Density	457.18 points/m ²
Mesh Triangles	251906

Digital Elevation Model

Mode	Generated from Mesh
DEM GSD	DEM 7.53cm/px
Relative/Absolute	Relative Altitude vs Drone takeoff



DroneDeploy

This map and report was produced with proprietary cloud photogrammetry software from DroneDeploy. [Provide feedback to improve this report](#)