Selected Ortho Projection Report

Project: uav

Tue, Apr 22, 2025 17:06:47 RealityCapture 1.5.1.118081 RC

| Ortho projection name | Ortho projection 1 | | | |
|-------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|--|--|
| Component name | Component 0 | | | |
| Geo-referenced | True | | | |
| Has Digital Terrain Model | False | | | |
| Rendering method | True ortho from a textured model | | | |
| Width [pixels] | 29613 | | | |
| Height [pixels] | 28708 | | | |
| Units per column pixel | 0.016918 | | | |
| Units per row pixel | 0.016918 | | | |
| Bounding box depth (length in the x direction) | 500.988929 m | | | |
| Bounding box width (length in the y direction) | 485.694056 m | | | |
| Bounding box height (length in the z direction) | 47.886570 m | | | |
| Cut Volume | 3947651.80 m ³ | | | |
| Fill Volume | 7685801.98 m ³ | | | |
| Area 2D | 242920.07 m ² | | | |
| Area 3D | 500549.26 m ² | | | |
| Coordinate system | epsg:4326 - GPS (WGS 84) | | | |
| Ortho projection type | Arbitrary | | | |
| Projection | Lat/long (Geodetic alias) | | | |
| Bounding box centre in epsg:4326 - GPS (WGS 84) Coordinate system | lat: 29° 51' 46.1099" N lon: 77° 53' 55.3373" E alt: 282.031514 m | | | |
| Corners in epsg:4326 - GPS (WGS 84) Coordinate system | NW: lat: 29° 51' 53.9964" N , lon: 77° 53' 46.004" E NE: lat: 29° 51' 53.9963" N , lon: 77° 54' 4.6704" I SE: lat: 29° 51' 38.2234" N , lon: 77° 54' 4.67048" E SW: lat: 29° 51' 38.2235" N , lon: 77° 53' 46.0041" | | | |
| Prime meridian | greenwich | | | |
| Units | Meter | | | |
| Image and DSM rasterization time | 00h:06m:03s | | | |

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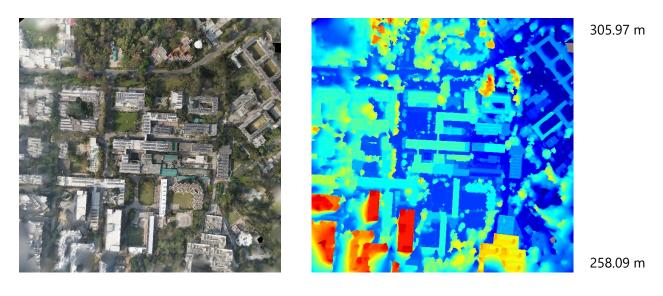
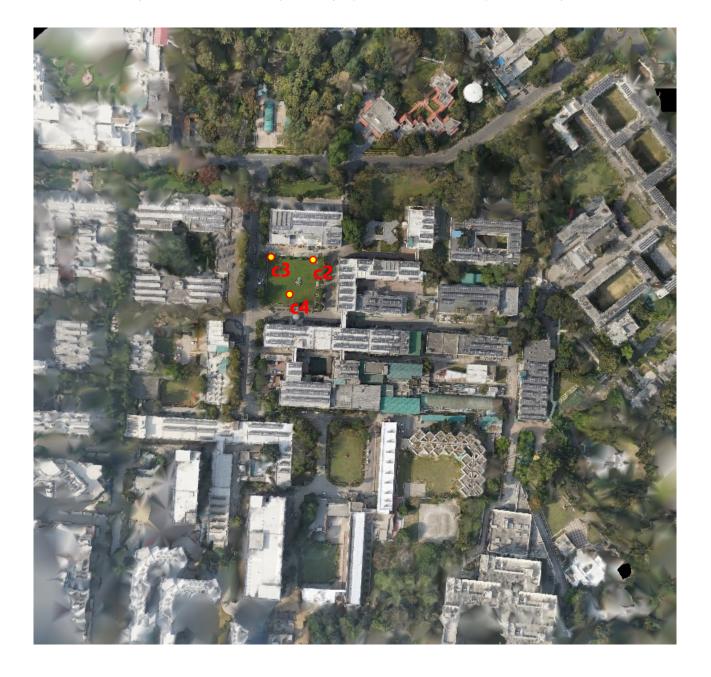


Figure 1: Preview of the ortho projection Image layer (left) and DSM Altitude layer with scale (right)



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Figure 2: Distribution of the control points on the Image layer of the ortho projection

Control Points

| Name | Туре | Weight | Coordinate system | Imported coordinates | Actual position | # Images | Total deviation (Error X; Error Y; Error Z) [m] | Maximal projection error [pixels] |
|------|-------------------|--------|---------------------------------------|-----------------------------------------------------|-----------------------------------------------------------|-------------|-------------------------------------------------|-----------------------------------|
| c2 | Ground control | 10 | epsg:32643 - WGS 84 / UTM zone 43N | x: 779985.866 m y: 3307171.934 m z: 266.349 m | x: 779985.866 m y: 3307171.937 m z: 266.345 m | 12 | 0.005 (0.000; -0.003; 0.004) | 0.52 |
| c3 | Ground control | 10 | epsg:32643 - WGS 84 / UTM zone 43N | x: 779952.781 m y: 3307173.191 m z: 266.272 m | x: 779952.785 m y: 3307173.189 m z: 266.275 m | 11 | 0.005 (-0.004; 0.002; -0.003) | 0.74 |
| c4 | Ground control | 10 | epsg:32643 - WGS 84 / UTM zone 43N | x: 779968.104 m y: 3307144.199 m z: 266.320 m | x: 779968.103 m y: 3307144.195 m z: 266.324 m | 11 | 0.005 (0.001; 0.004; -0.004) | 0.38 |

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