

1-Meter Digital Surface Model & Digital Terrain Model

SATPALDA Geospatial Services objective is to provide very high resolution Digital Surface Model (DSM) / Digital Terrain Model (DTM) derived from stereo satellite imagery. We are capable of extracting both relative DTM/DSM (no ground control) or an absolute DTM/DSM (with ground control) as required by clients. Topographic data are basic to all aspects of land surface research including; cartography, Climate impact studies, Geophysics, Geological exploration, Geological and hydrological modeling, Geomorphology and landscape analysis.

OPTION 1

Source Imagery:	50 cm stereo satellite imagery
Grid Spacing:	1 meter
Accuracy:	
Horizontal Accuracy	With well defined GCPs <2.0 meters CE90 Without GCPs <10.0 meters CE90
Vertical Accuracy	With well defined GCPs <2.0 meters LE90 Without GCPs <10.0 meters LE90
Minimum Order Area:	100 sq km
Delivery File Format:	GeoTIFF

Deliverables will be: 1 meter Grid Spacing DTM in GeoTIFF format
50cm Orthorectified Seamless Colour Imagery in GeoTIFF format
Quality Layer(DTM) in DGN/DWG/SHP format

Projection: Geo WGS84 or UTM / WGS84 (custom projection on request)

Vertical Reference: Elevations above mean sea level (on request)

OPTION 2

Source Imagery: 50 cm stereo satellite imagery

Grid Spacing: 1 meter

Accuracy:

Horizontal Accuracy With well defined GCPs <0.7 meter CE90
Without GCPs <3.5 meters CE90

Vertical Accuracy With well defined GCPs <0.7 meter LE90
Without GCPs <3.5 meters LE90

Minimum Order Area: 100 sq km

Delivery File Format: GeoTIFF

Deliverables will be: 1 meter Grid Spacing DTM in GeoTIFF format
50cm Orthorectified Seamless Colour Imagery in GeoTIFF format
Quality Layer(DTM) in DGN/DWG/SHP format

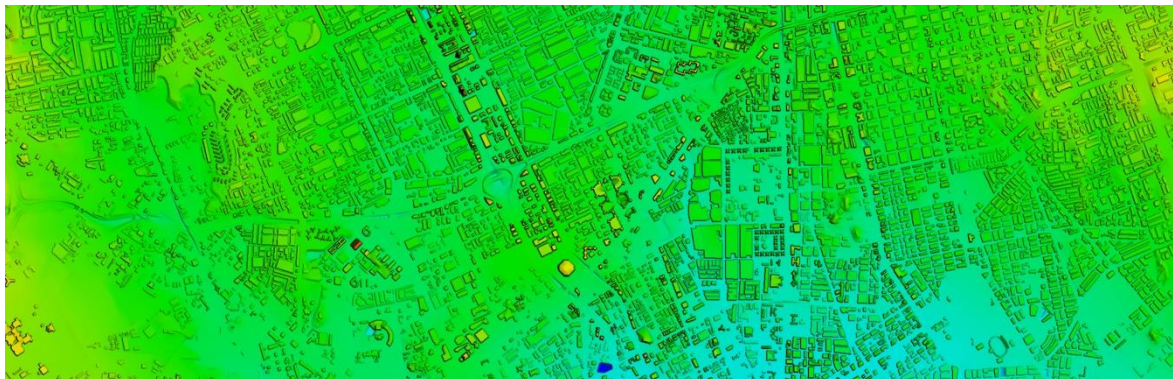
Projection: Geo WGS84 or UTM / WGS84 (custom projection on request)

Vertical Reference: Elevations above mean sea level (on request)

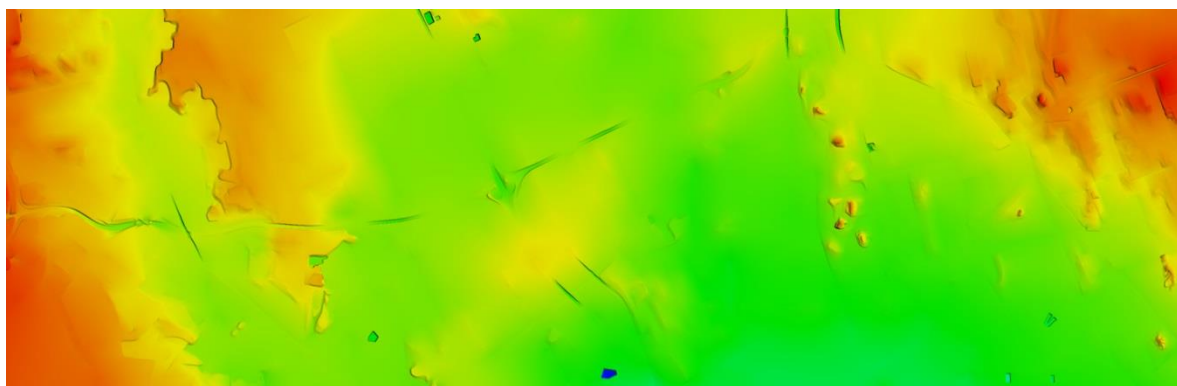
Flowchart for DTM/ DSM Extraction



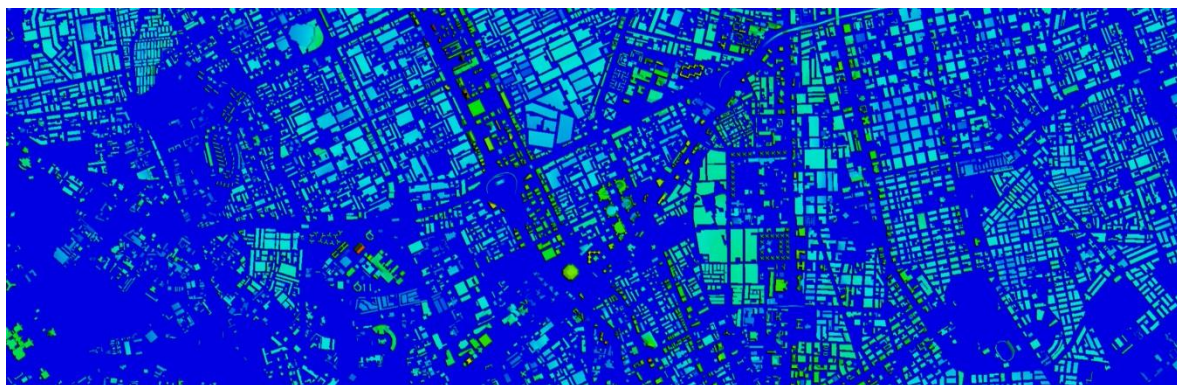
Beneath are some samples to demonstrate high quality product generated by SATPALDA.



1m DSM



1m DTM



1m nDSM