

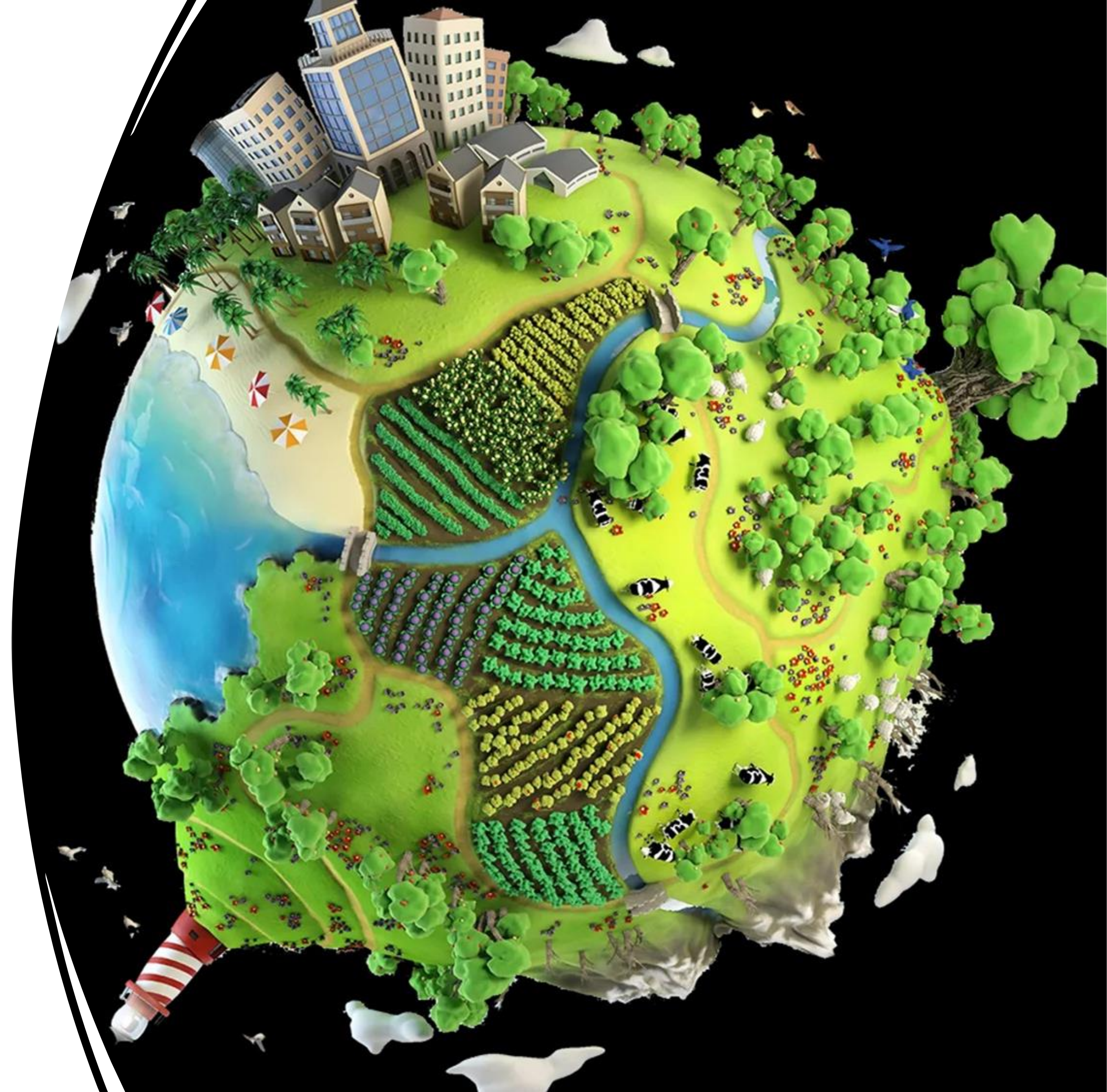


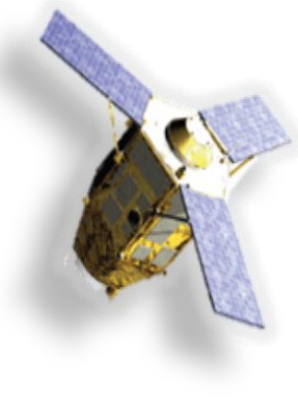
MICRONET
SOLUTIONS

CEO
DATA
& SERVICES

PRESENTED BY
DHEERAJ MEHRA
FOUNDER-CEO

info@micronetsolutions.in





Micronet Authorized Partners - INDIA



**Airbus Defence and Space
Intelligence Portfolio**



**MDA SPACE
RADARSAT CONSTELLATION**

Pléiades Neo

30 cm
Revisit capacity
twice daily, anywhere

Daily acquisition capacity:
2,000,000 km²

Pléiades 1a/1b

50 cm
Revisit capacity
daily, anywhere

Daily acquisition capacity:
700,000 km²

Vision-1

90 cm
Daily to 8 days, anywhere,
depending on latitude and
partner satellites

Daily acquisition capacity:
20,000 km²

SPOT 6/7

1.5 m
Revisit capacity
daily, anywhere

Daily acquisition capacity:
6,000,000 km²

RADAR Constellation

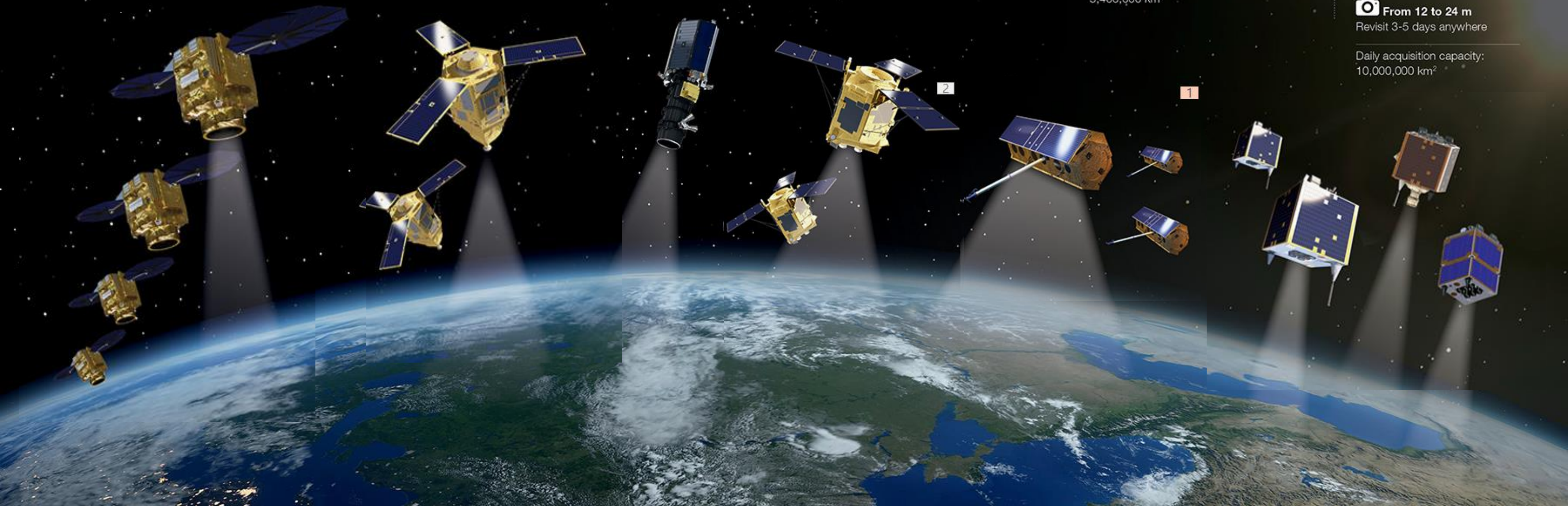
From 25cm to 40 m
Revisit capacity
daily for most latitudes

Daily acquisition capacity:
5,400,000 km²

DMC Constellation

From 12 to 24 m
Revisit 3-5 days anywhere

Daily acquisition capacity:
10,000,000 km²



DEFENCE AND SPACE

AIRBUS CONSTELLATION OF SATELLITES



DEFENCE AND SPACE

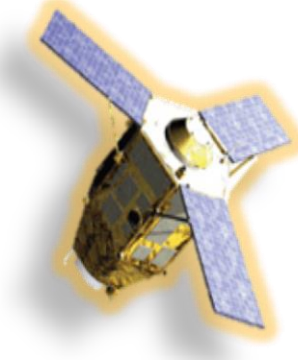
ONE TASKING

Committed to delivering imagery



June 2021

AIRBUS



DEFENCE AND SPACE

ONE PLAN










Obtain qualified coverage within an agreed timeframe

ONE NOW

Obtain the information you need in the shortest timeframe

ONE DAY

Choose your acquisition day

Timeframe	Number of acquisitions	Priority & Service Level
[8-365 days] 	All needed to complete full coverage 	
[1-7 days] 	Up to 	
1 day 		

AIRBUS



PLEIADES NEO 30cm IMAGERY

AIRBUS



POLICE PHQ
MUMBAI

WANKEDE STADIUM
MUMBAI



New Delhi
@ 30cm



New Delhi
@ 30cm

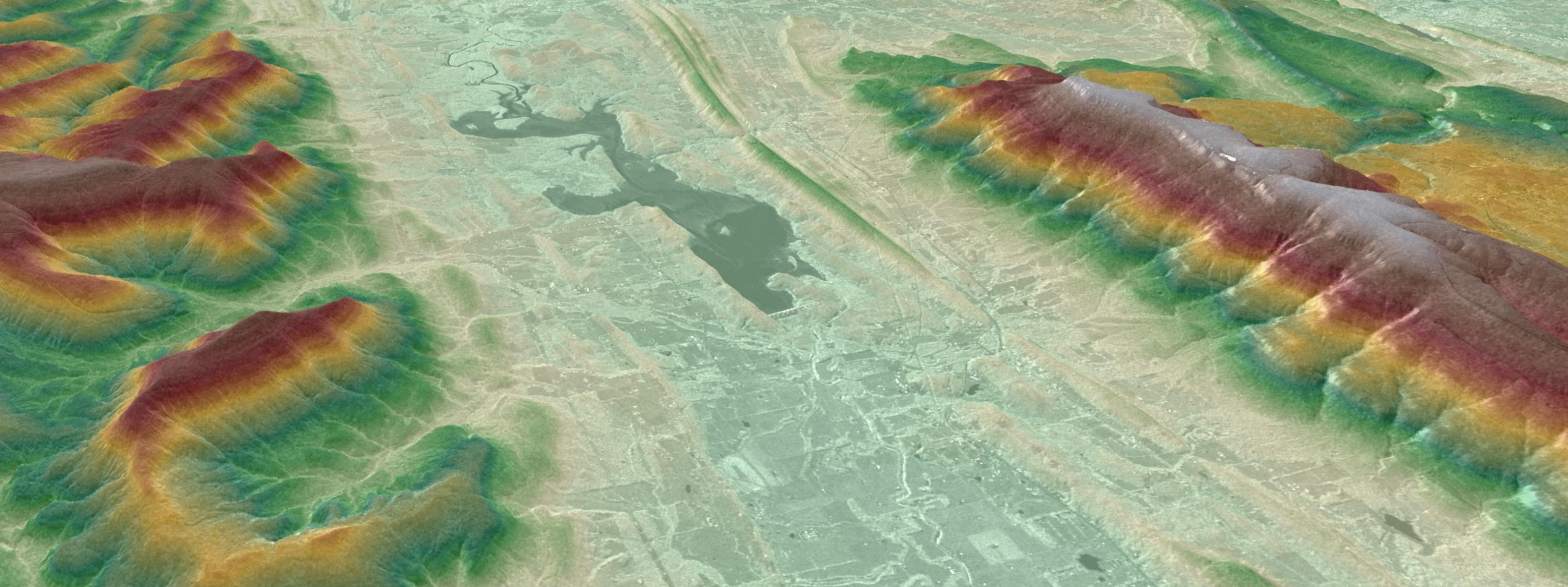


GOSIKHURD
@ 30cm



New Delhi
@ 15cm HD



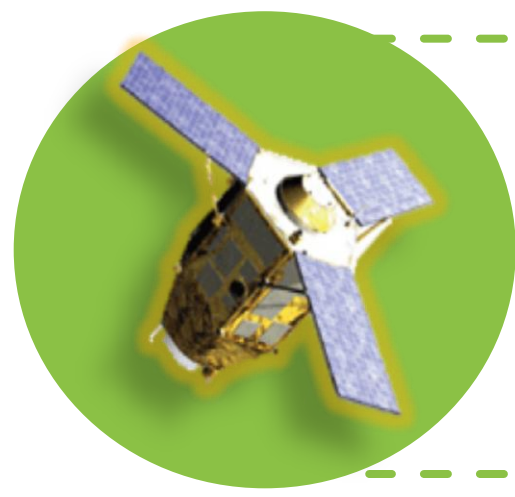


MICRONET
SOLUTIONS

WorldDEM™

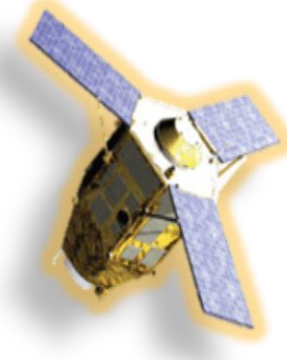
Products

AIRBUS

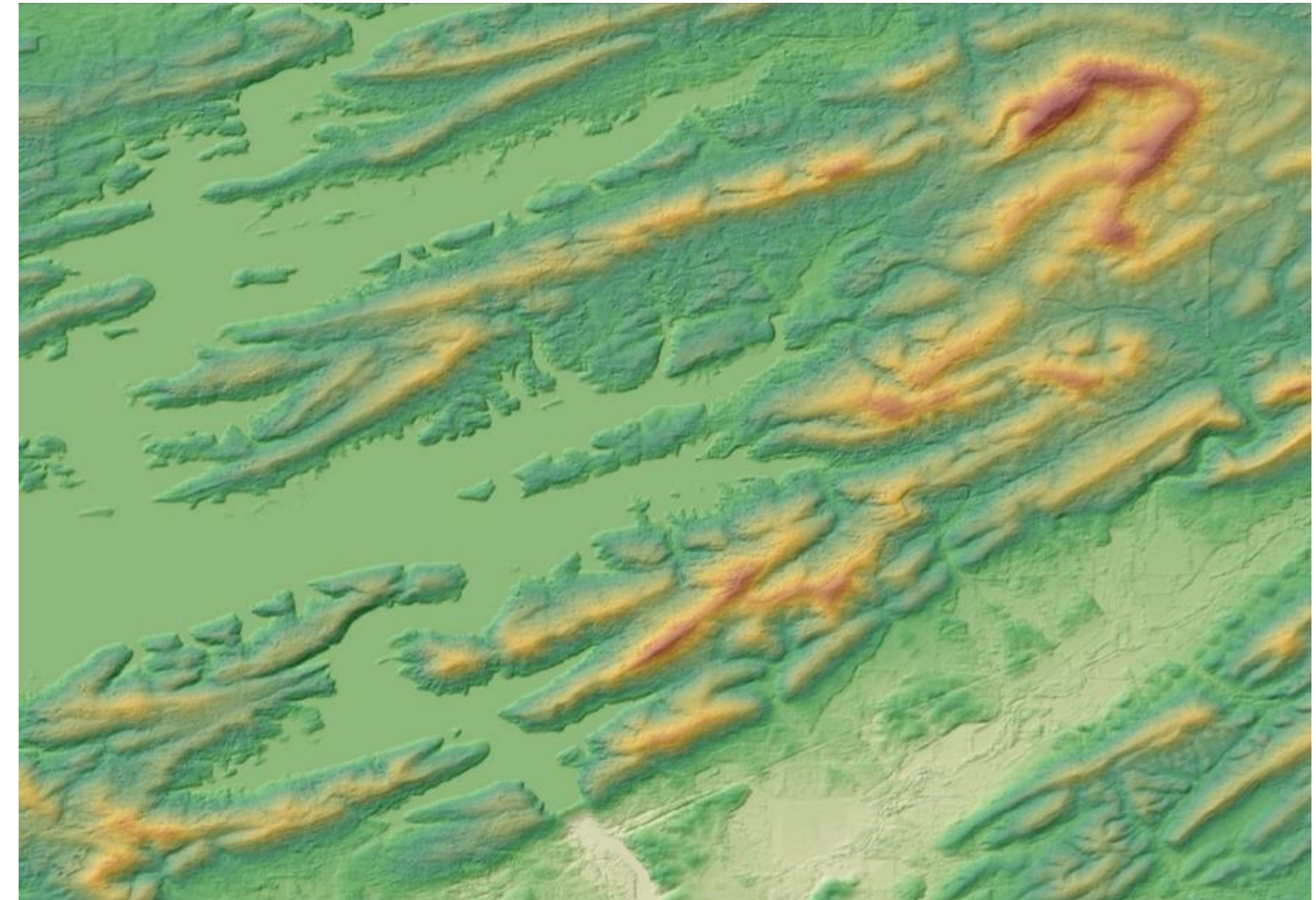


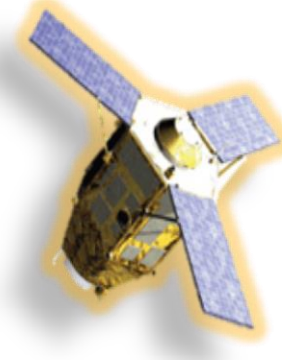
AIRBUS

WorldDEM Neo DSM & DTM



WorldDEM™ Neo Specification		
Specification Parameter	Value	
File Format	GeoTIFF	
Data Type	32 Bit, floating	
NoData Value	-32767	
Projection	Geographic coordinates	
Coordinate Reference System	Horizontal	WGS84-G1150
	Vertical	EGM2008
Pixel Spacing	2m	
Vertical Unit	Meter	
Absolute Vertical Accuracy	< 2.5m (90% linear error)	
Relative Vertical Accuracy	< 2m (slope ≤20%)	
	< 4m (slope > 20%)	
Absolute Horizontal Accuracy	< 6m (90% circular error)	
Vintage	2021	
Product Available	DSM, DTM & Bundle	
Coverage	Homogeneous, seamless, pole-to-pole coverage	
Availability	Globally off-the-shelf available	





Edited Digital Surface Model - incl. heights of all objects (natural & man-made)

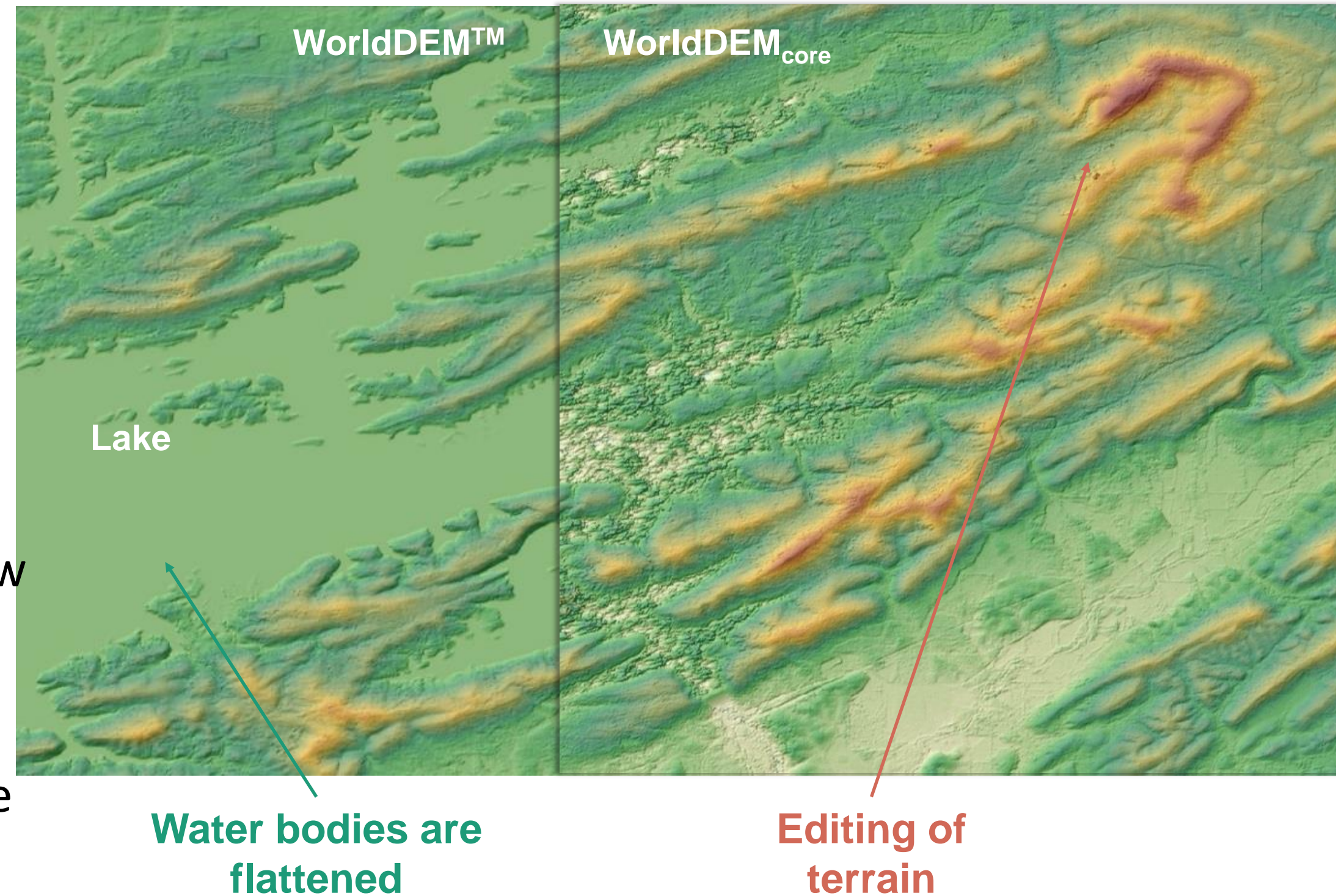
Terrain editing

- Removal of radar-typical artefacts (single pixel: “spikes” and “wells”)
- Interpolation and filling of voids

Water body editing*

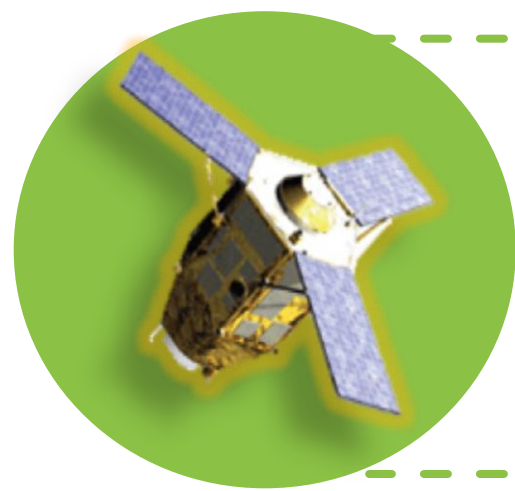
- **Lakes & reservoirs:** set to single elevation
- Water bodies: width: **>50m**, length: **>150m**
- **Rivers & canals:** flattened with monotonic flow
- Water bodies: width: **>50m**, length: **>300m**
- **Ocean** elevation is set to 0 m
- Coastal infrastructure features and **bridges** are removed

*Extraction of water body features derived from radar image

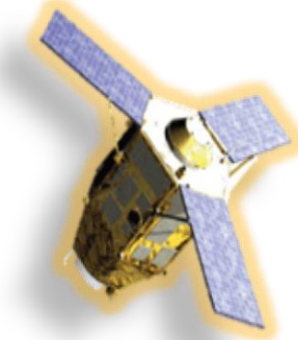


WorldDEM delivery includes:

- Metadata (ISO compliant), Stylesheets
 - Quicklooks
- Optional: Quality Layers



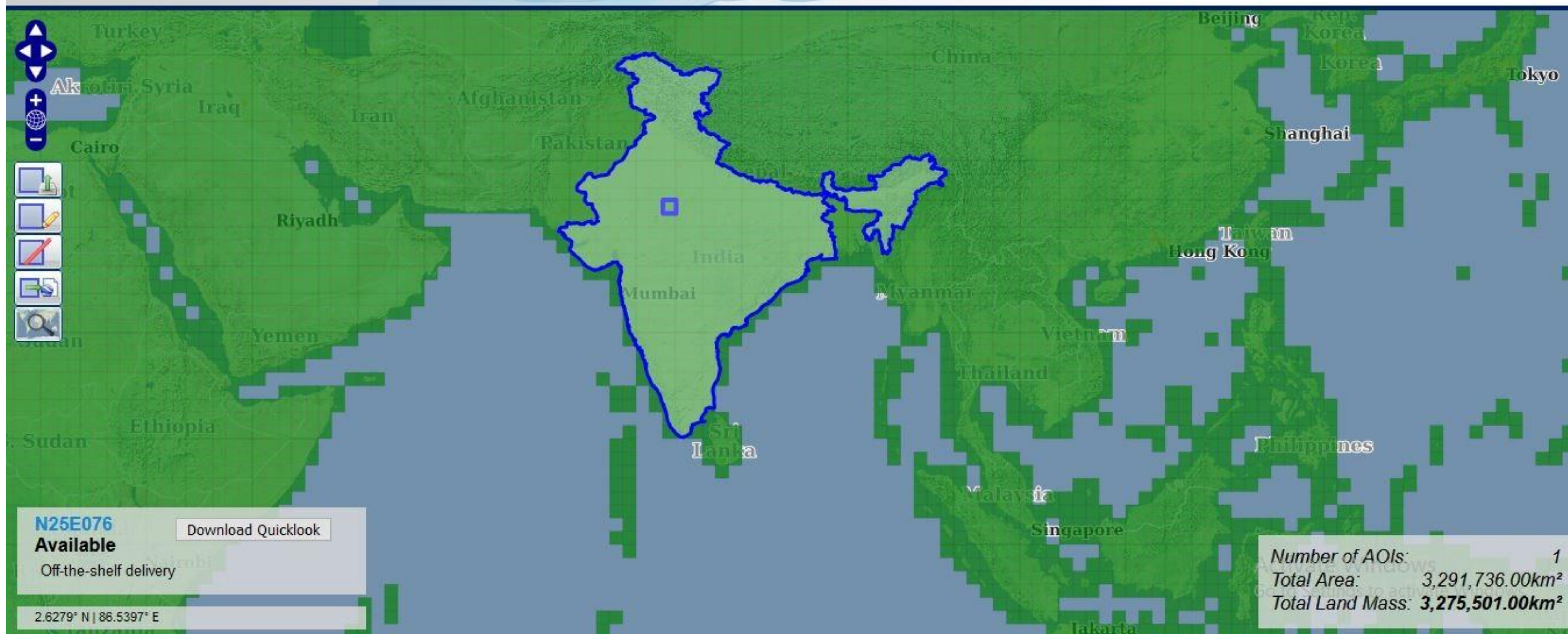
AIRBUS: WorldDEM Global Converge



AIRBUS

WorldDEM™ - Reaching New Heights

WorldDEM™ Info



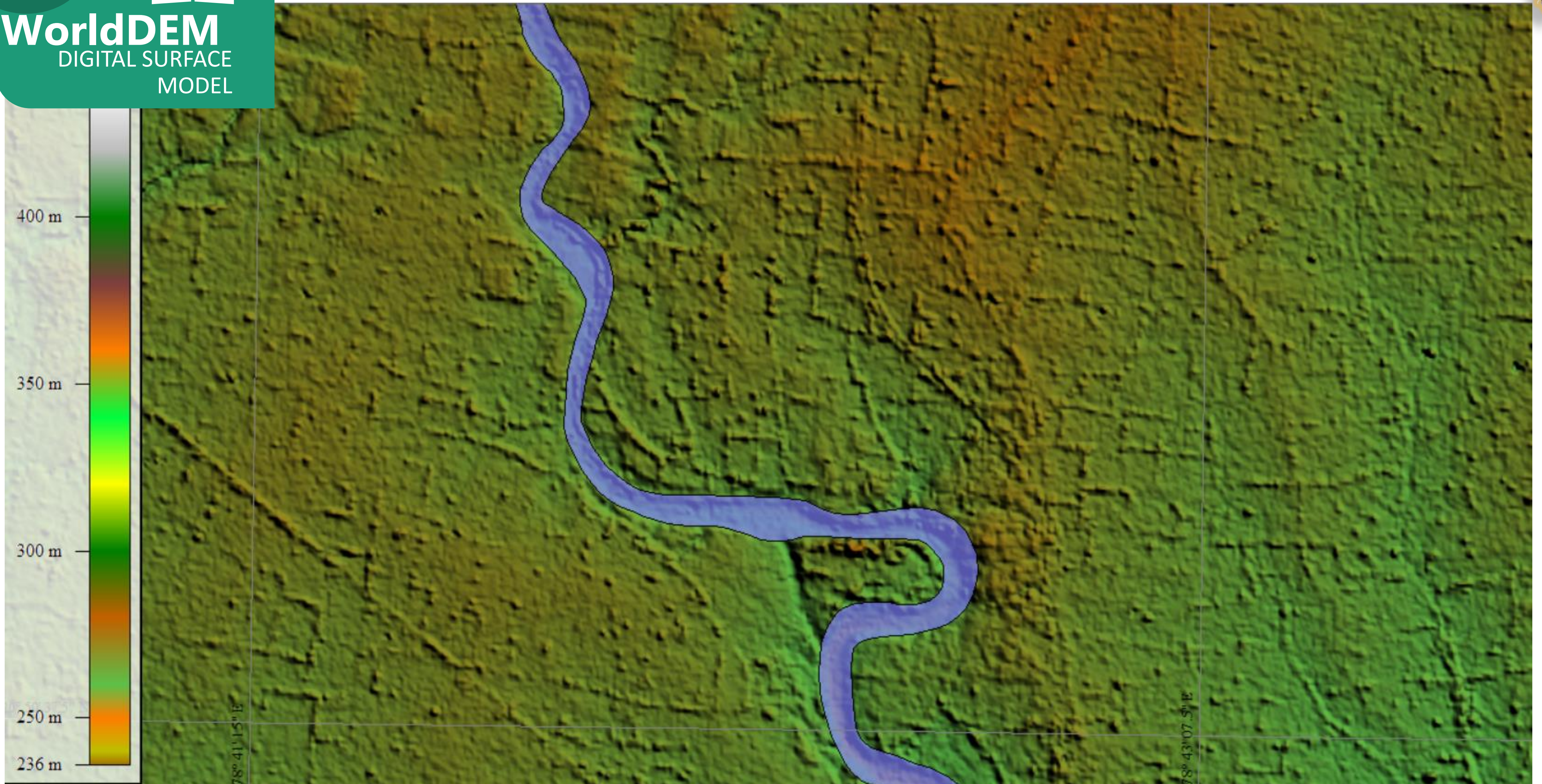
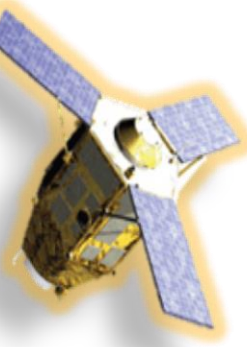
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01



WorldDEM

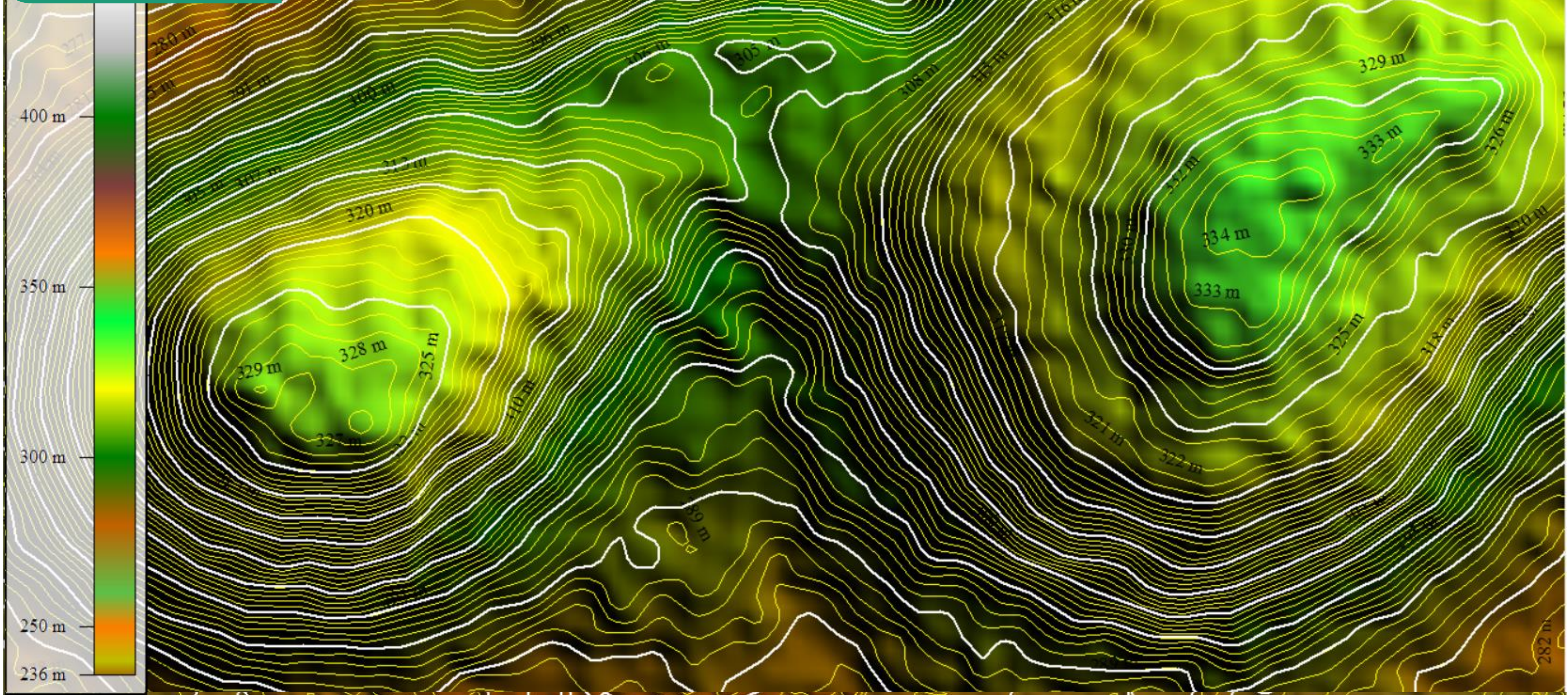
DIGITAL SURFACE MODEL
MODEL



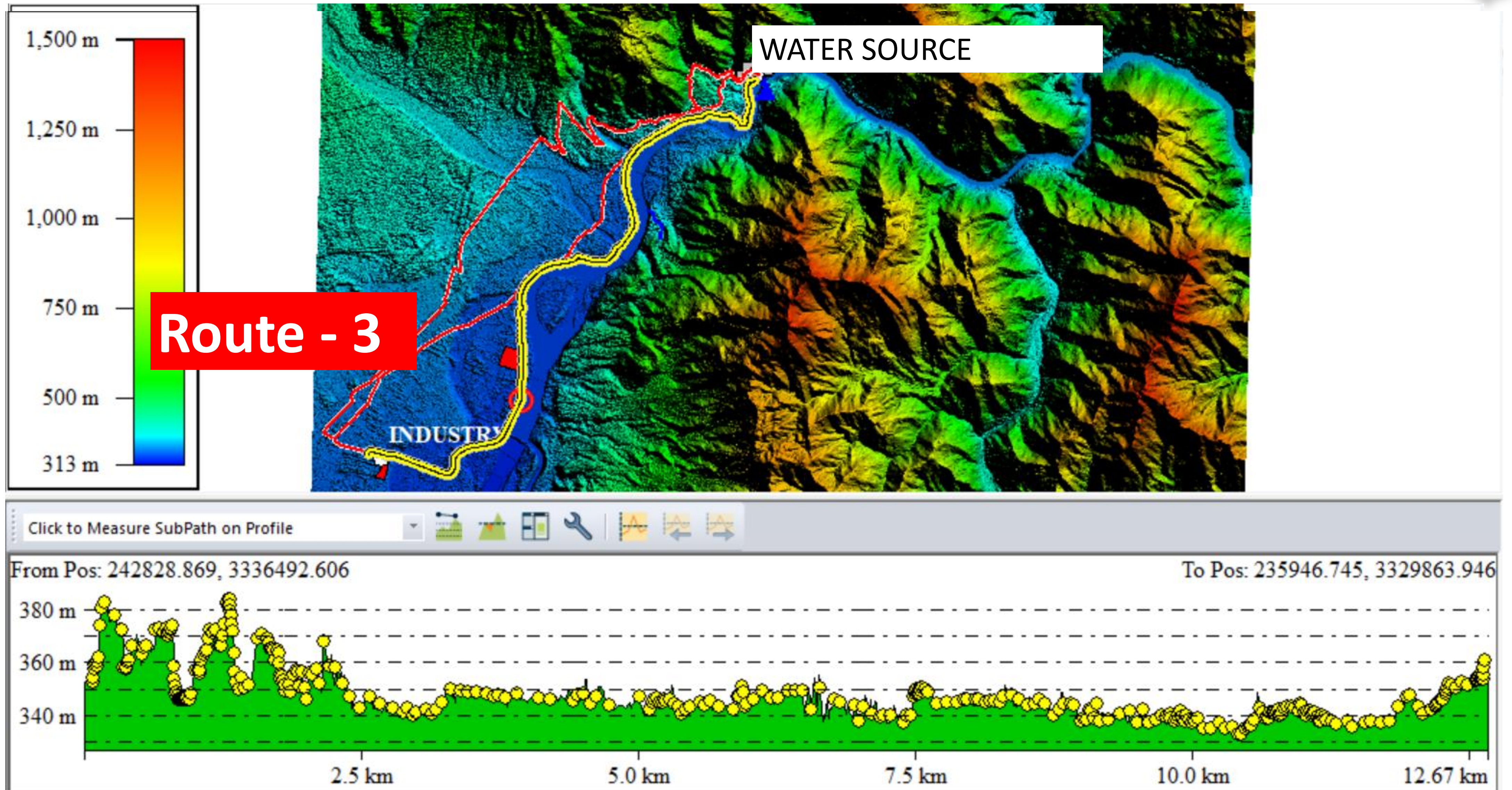
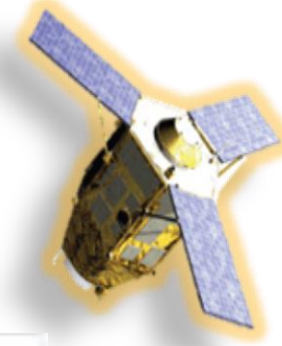


WorldDEM

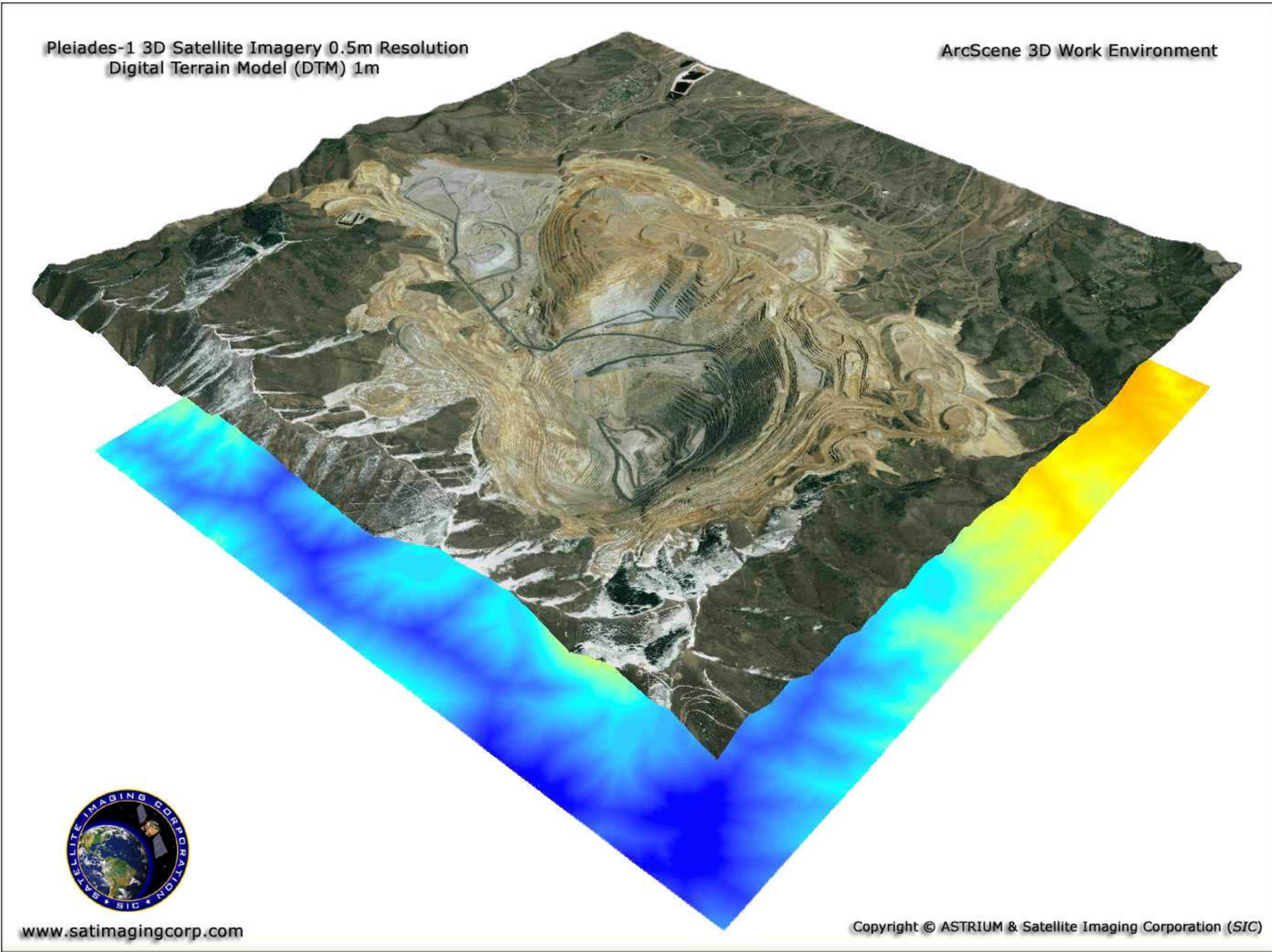
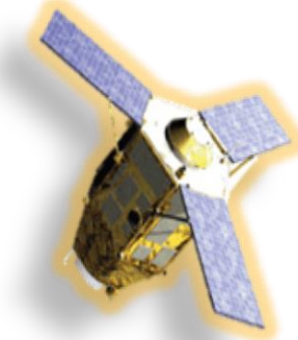
CONTOURS



Optimum Route Analysis using 3-D WorldDEM



Correction of viewing angle and ground effects so that the image may be superimposed on a map





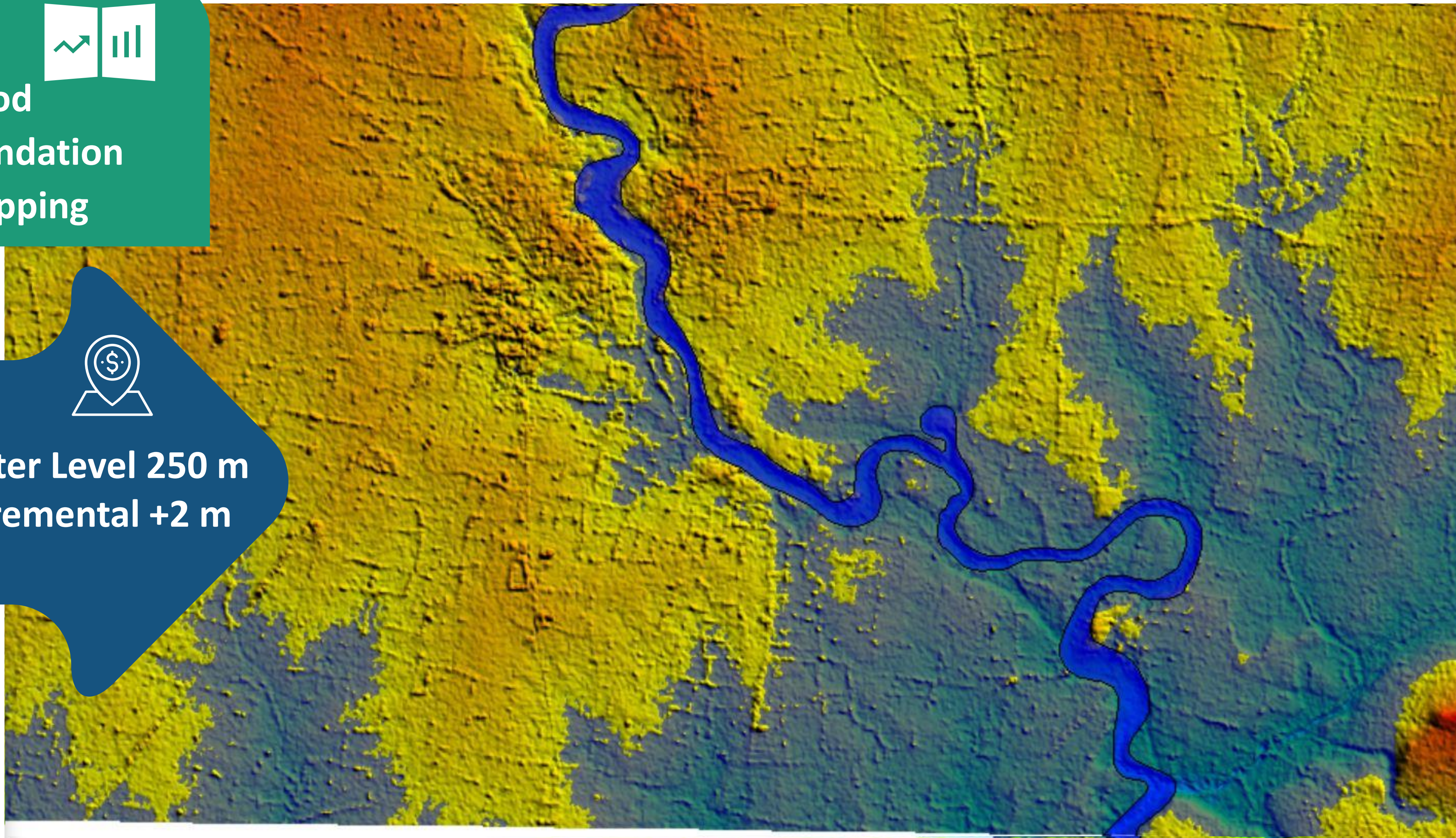
01



Flood Inundation Mapping



Water Level 250 m
Incremental +2 m

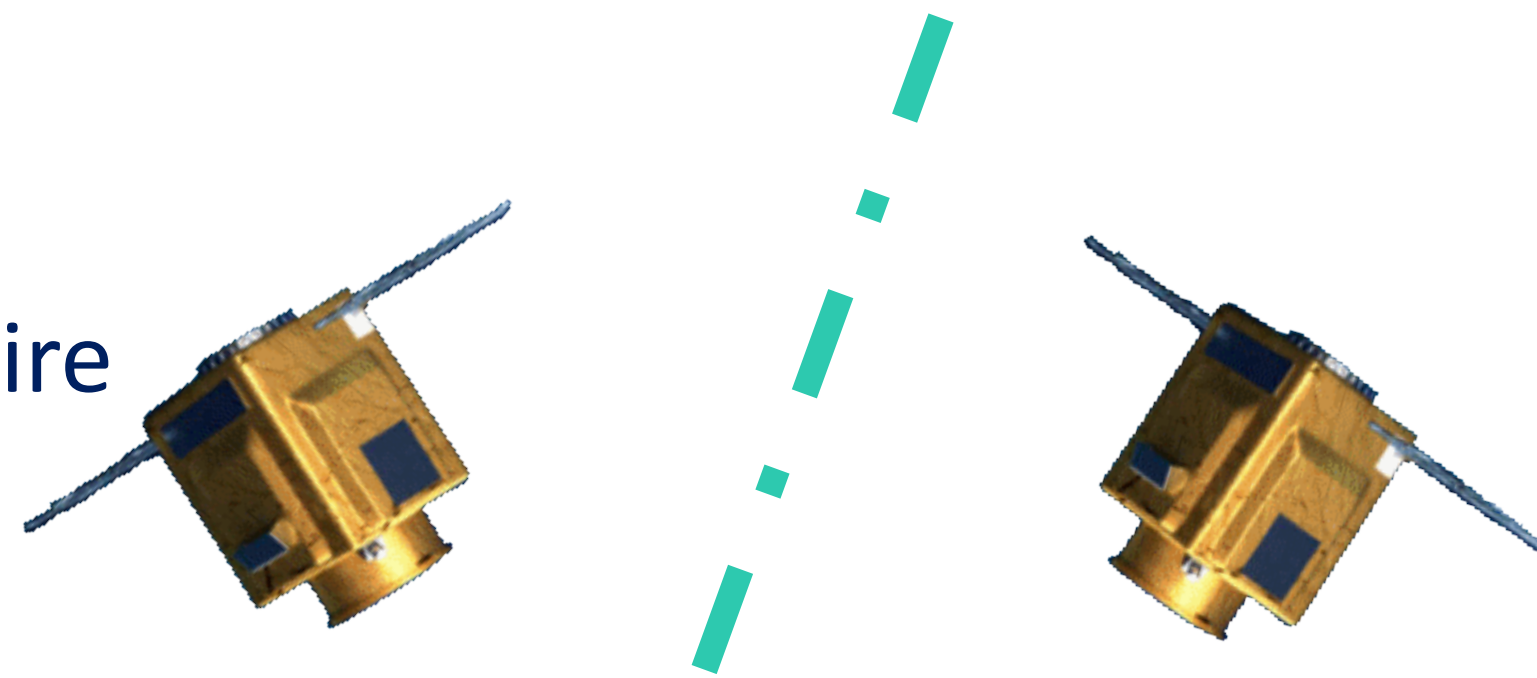




Single Pass Stereo / Tri-Stereo

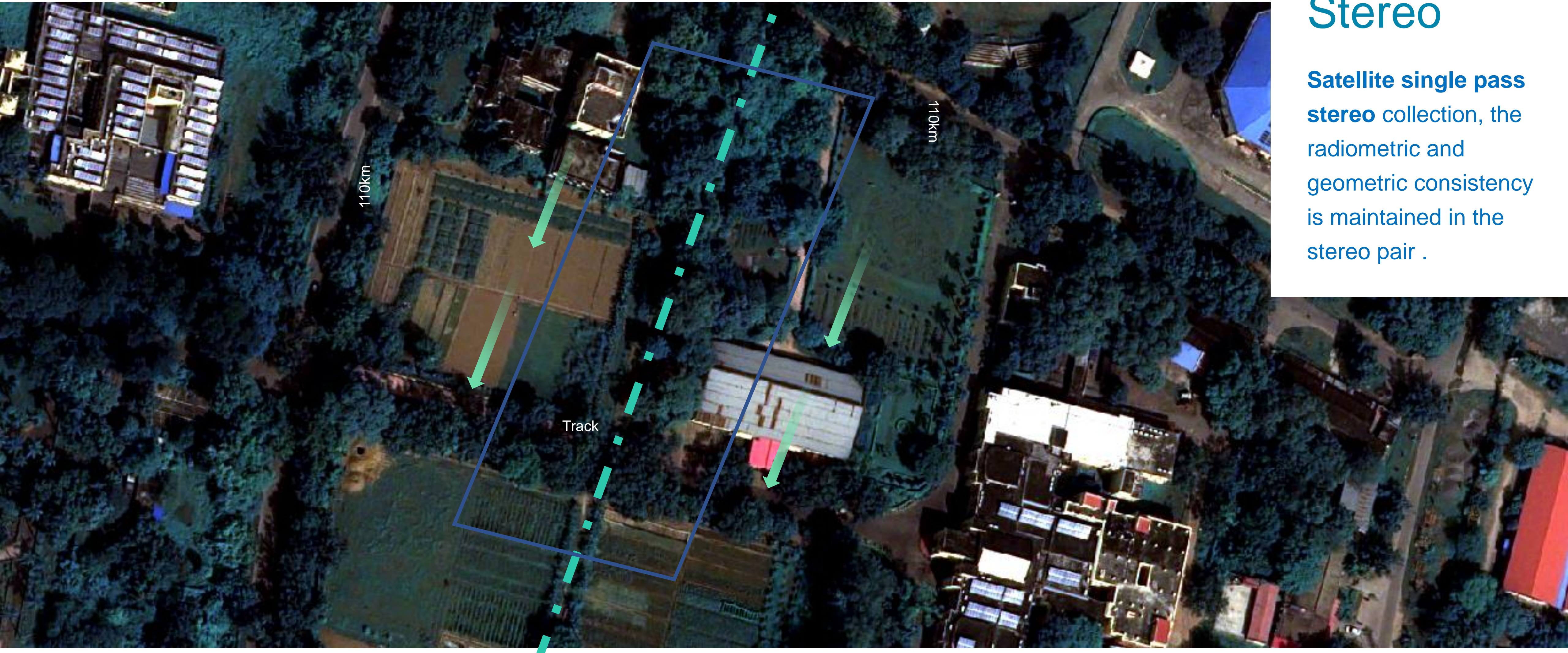
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The sun illumination , angle and other parameters remains same during the entire acquisition process thereby delivering a **good quality** stereo pair images.

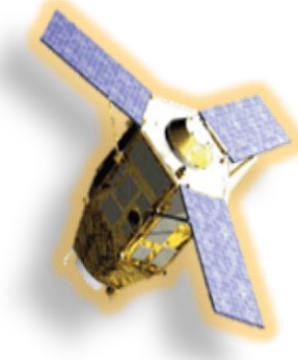


Single Pass Stereo

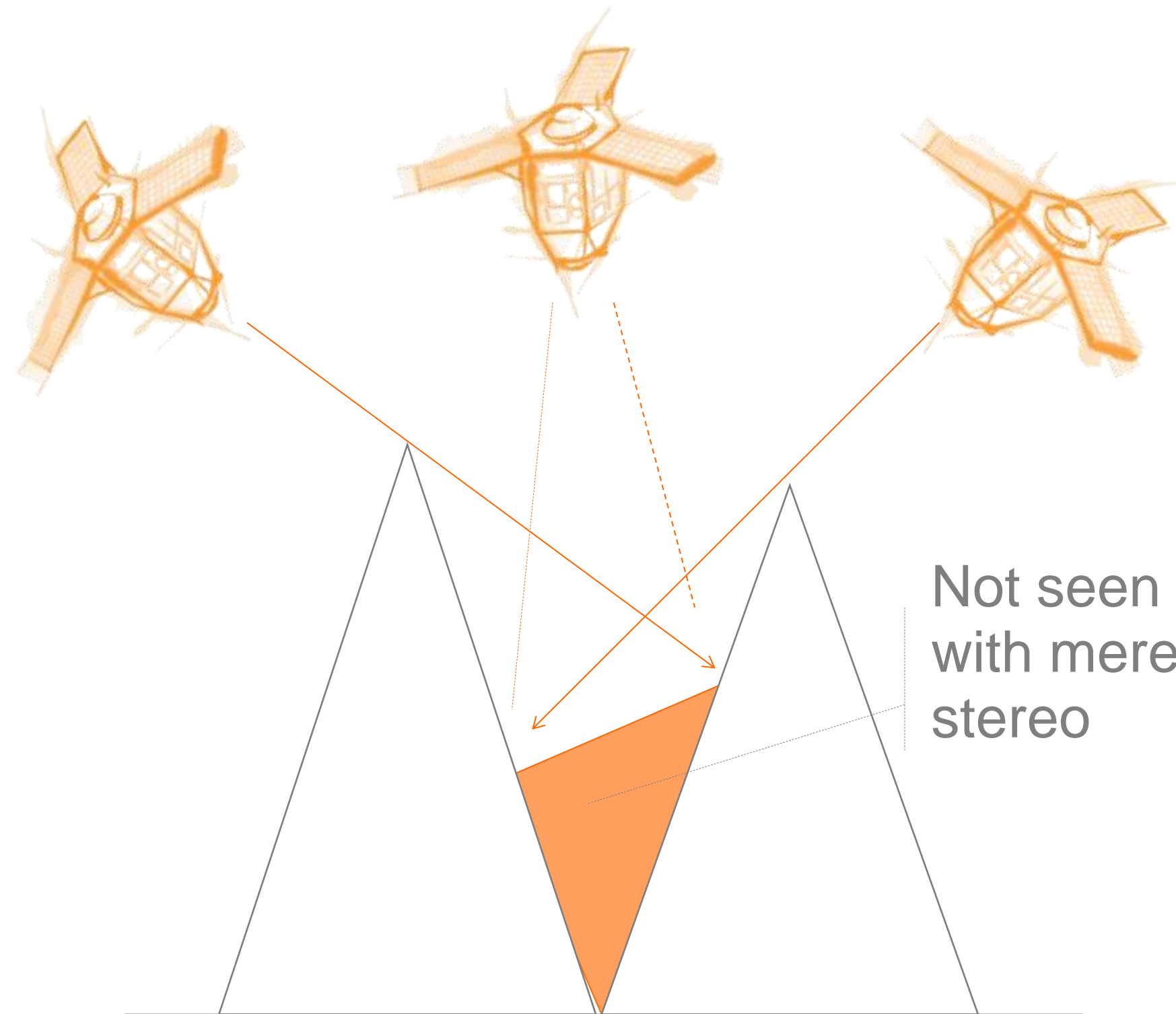
Satellite single pass stereo collection, the radiometric and geometric consistency is maintained in the stereo pair .



3-D MAPPING

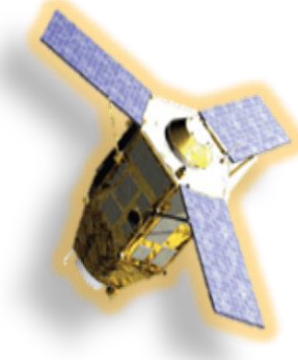


Stereo or Tristereoo?



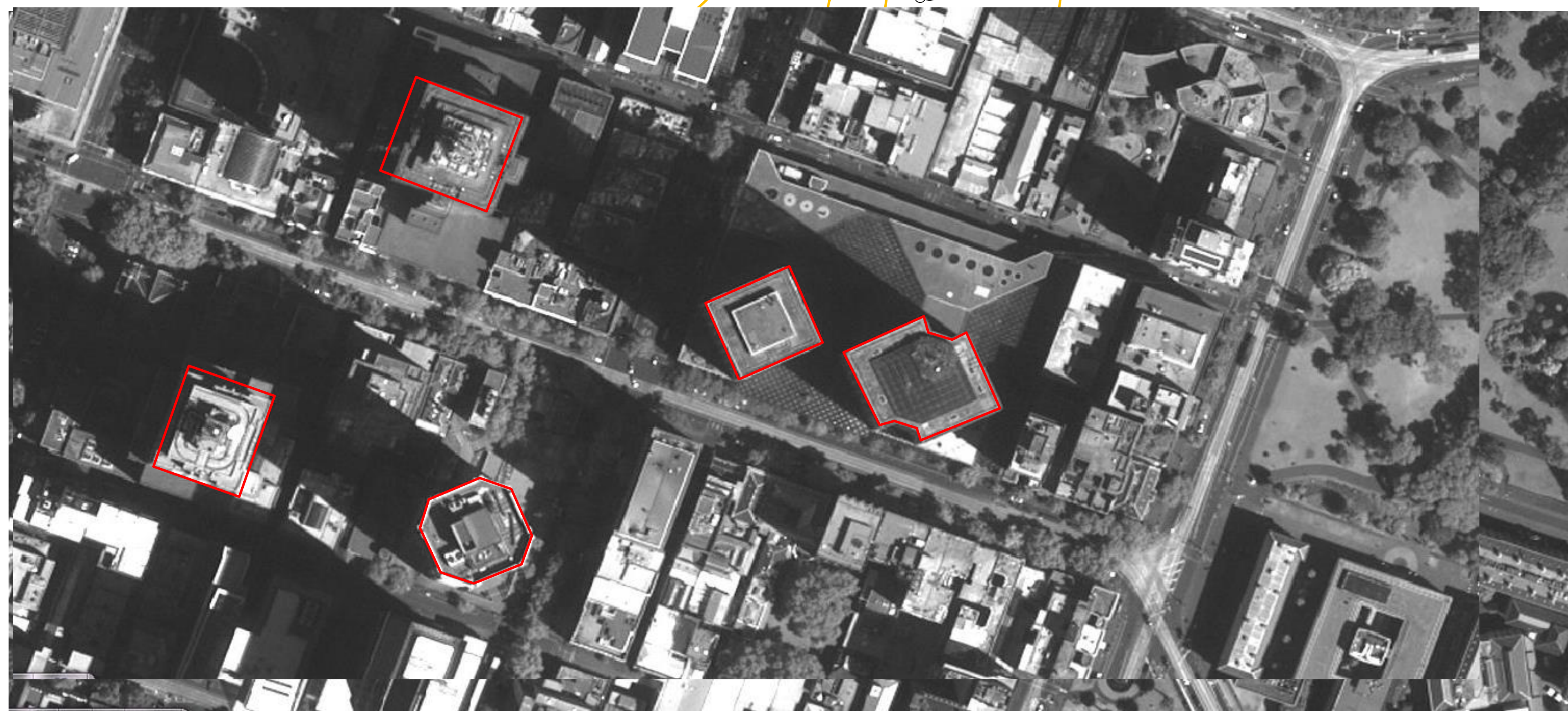
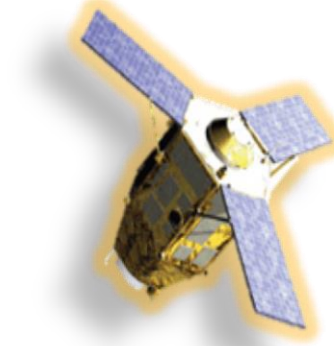
Tristereoo reduces the risk of getting **hidden objects** in difficult areas (relief, dense urban, high objects).

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Stereo or Tristereoo?

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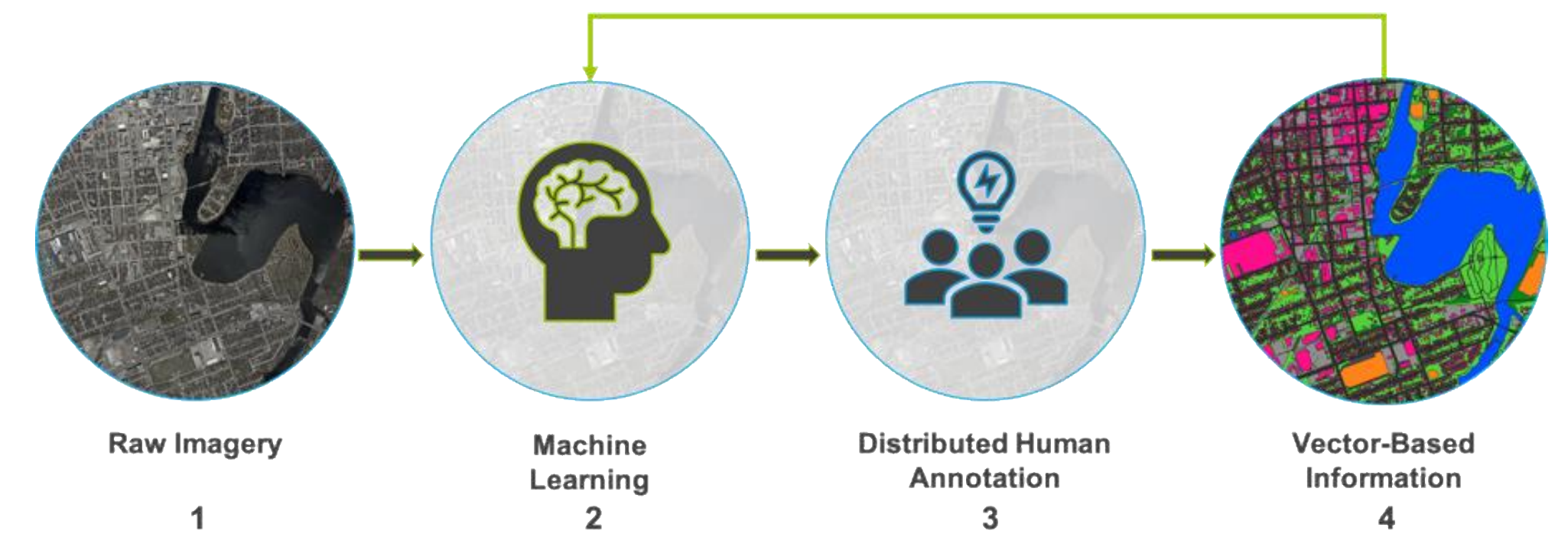
Stereo or Tristereo?

3-D MODELLING

AI & ML

AIRBUS PLEIDES NEO 30
CM

TRI-STEREO IMAGERY



This data is done by using the AI & ML
Airbus Pleiades Tri-stereo Mumbai Area

Bombay_2D buildings

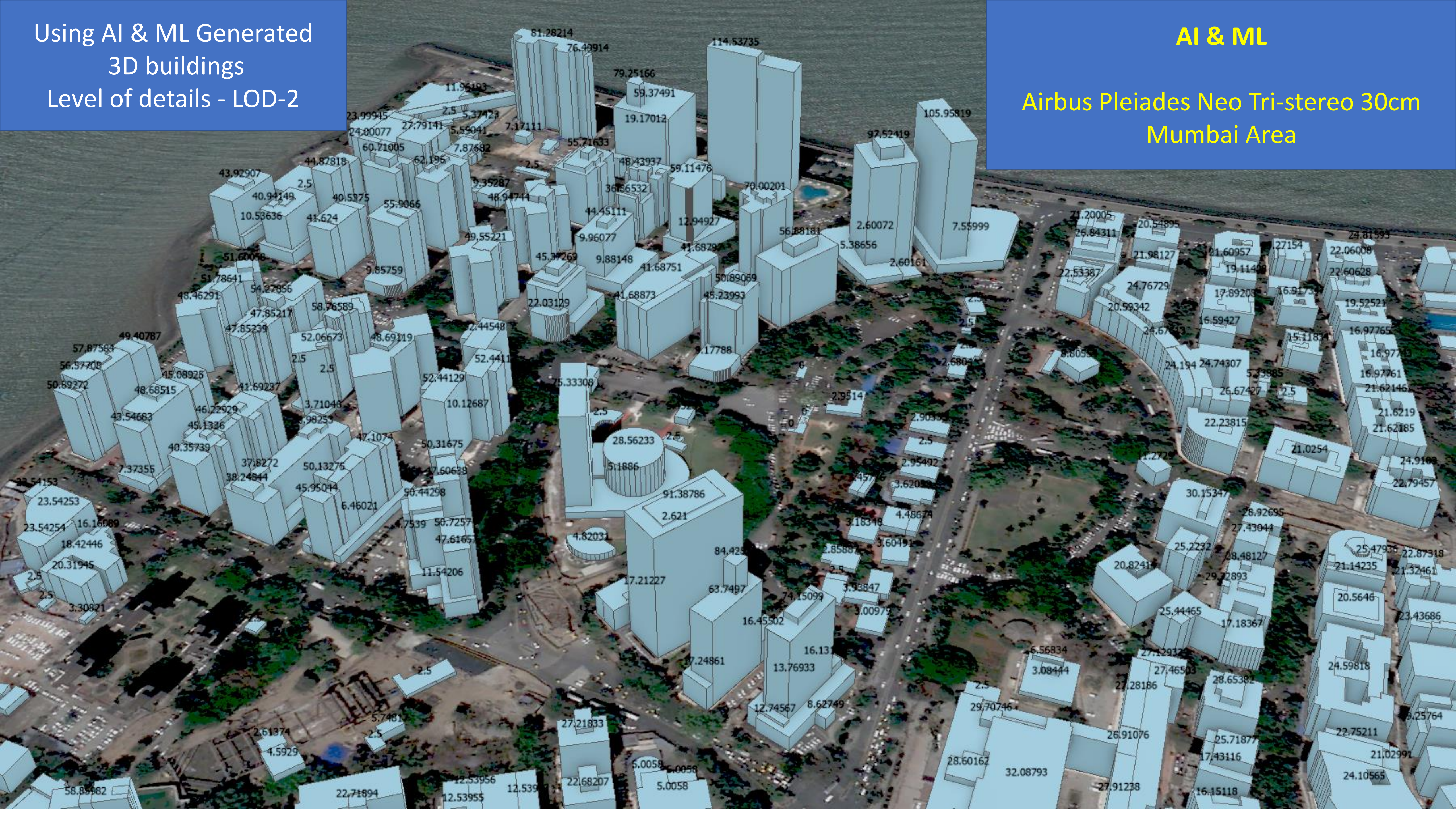
Bombay_3D buildings



Using AI & ML Generated
3D buildings
Level of details - LOD-2

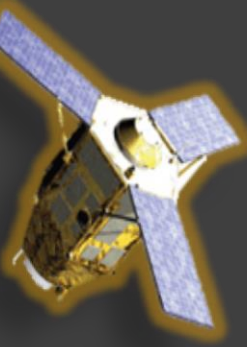
AI & ML

Airbus Pleiades Neo Tri-stereo 30cm
Mumbai Area





Mumbai 3D Buildings using AIRBUS Pleiades NEO 30cm Very high resolution Tri-stereo data



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