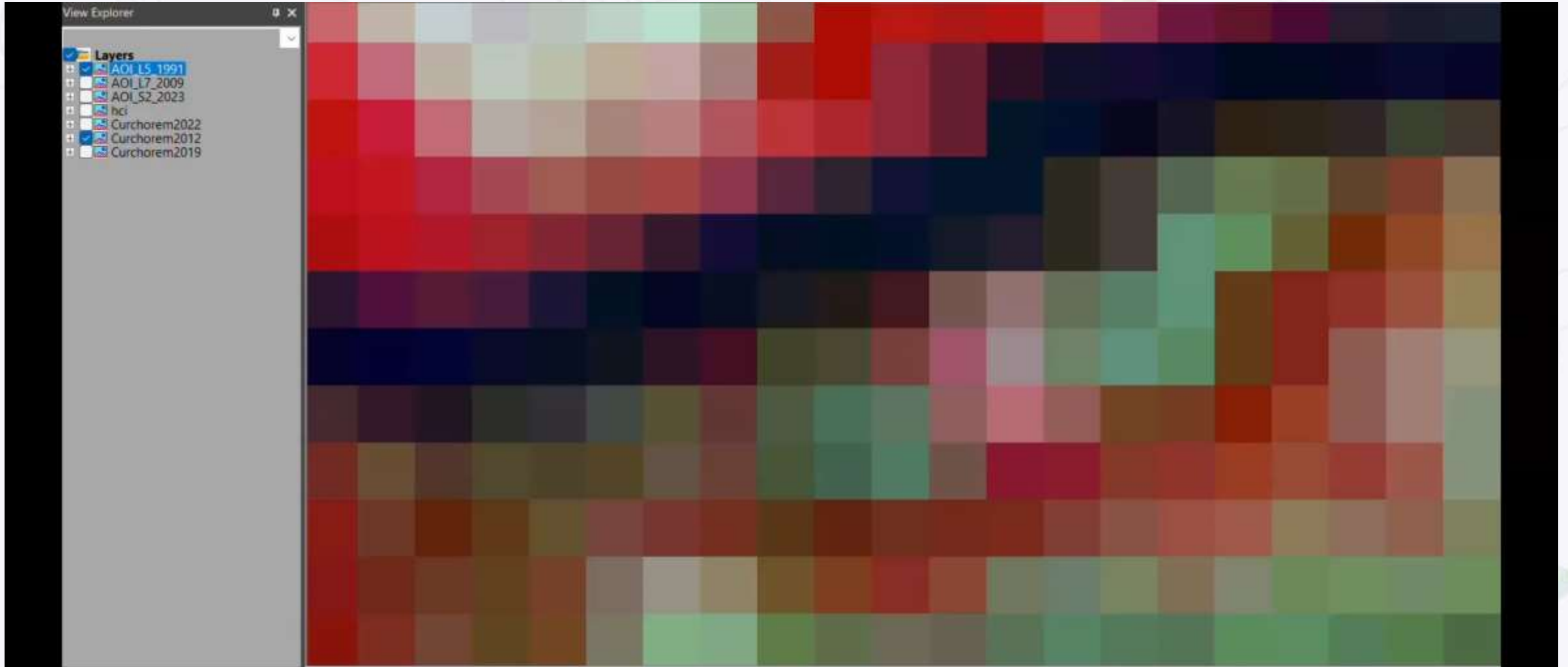


# Digital Transformation in Mining Industry – A Geospatial Way

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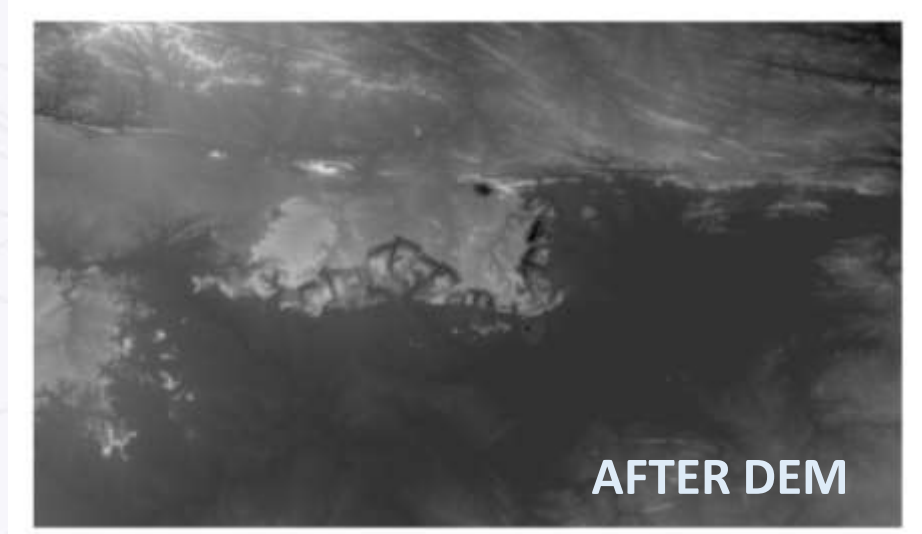
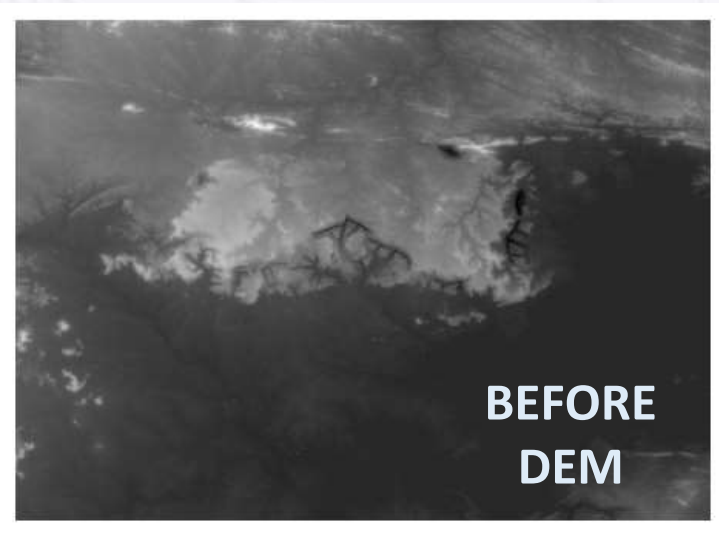
2023

2012



New Construction  
Modernized/Upgraded Construction

# Digital Transformation in Mining Industry – A Geospatial Way



**Cut and Fill Analysis**

**Input Details**

Before Image: D:\Mining\_use\_case\_Data\Singrauli coal mines\input\Before.tif  
Width: 1399 Height: 1084 Bands: 1 Data Type: Float 32 bit

After Image: D:\Mining\_use\_case\_Data\Singrauli coal mines\input\After.tif  
Width: 2189 Height: 1229 Bands: 1 Data Type: Float 32 bit

**Processing Options**

Z factor: 1

As Percent  As Value

Before Layer: 1  Increases more than: 0

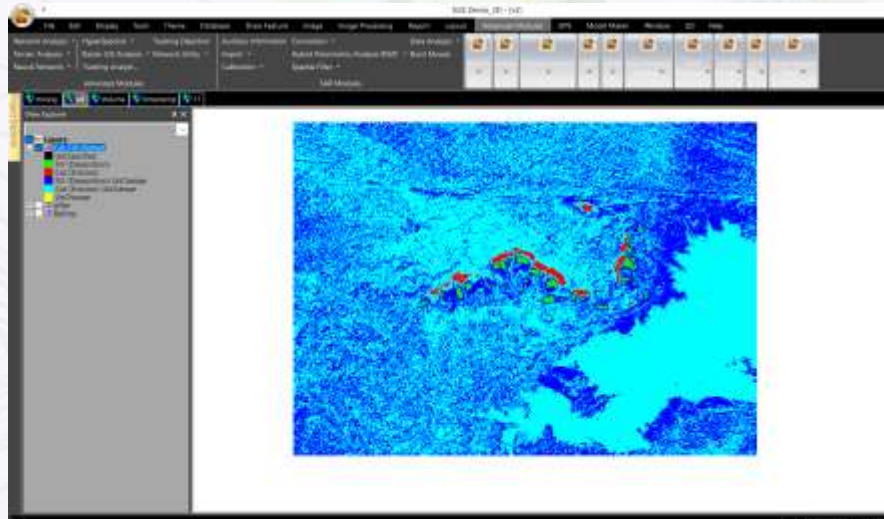
After Layer: 1  Decreases more than: 0

**Output Options**

Output Image: D:\Mining\_use\_case\_Data\Singrauli coal mines\input\temp\_1.tif

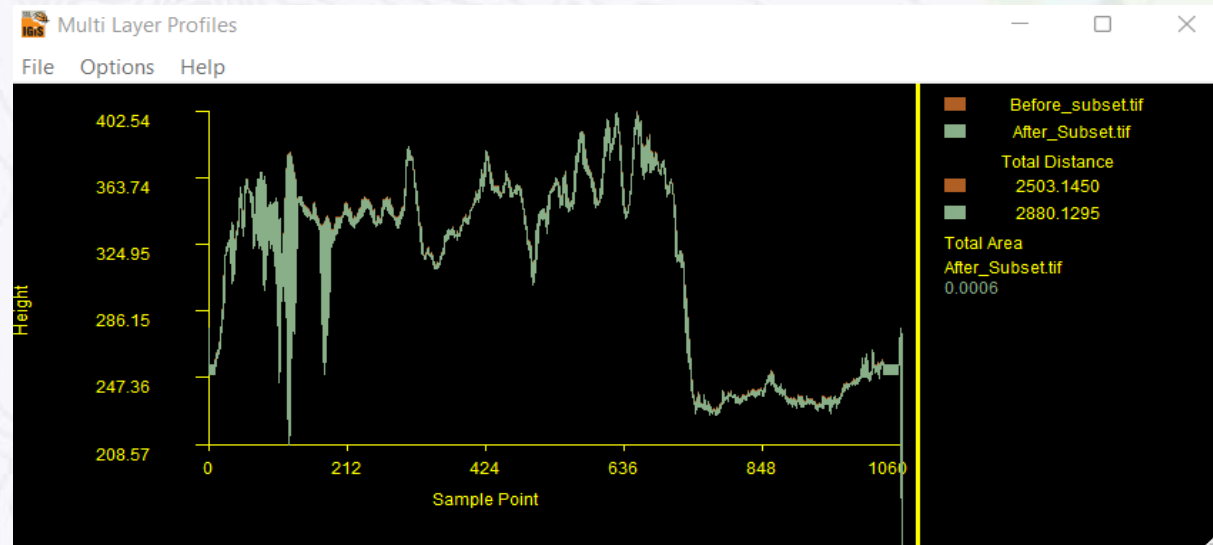
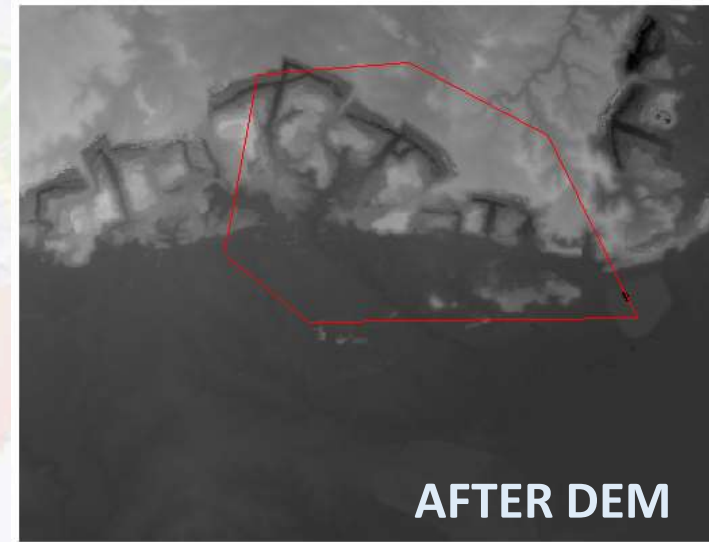
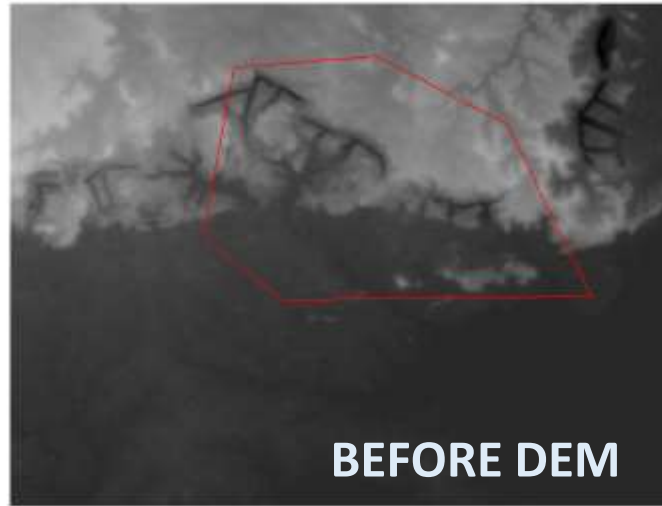
Report File:

OK Cancel Stop Help Save/Restore Parameters

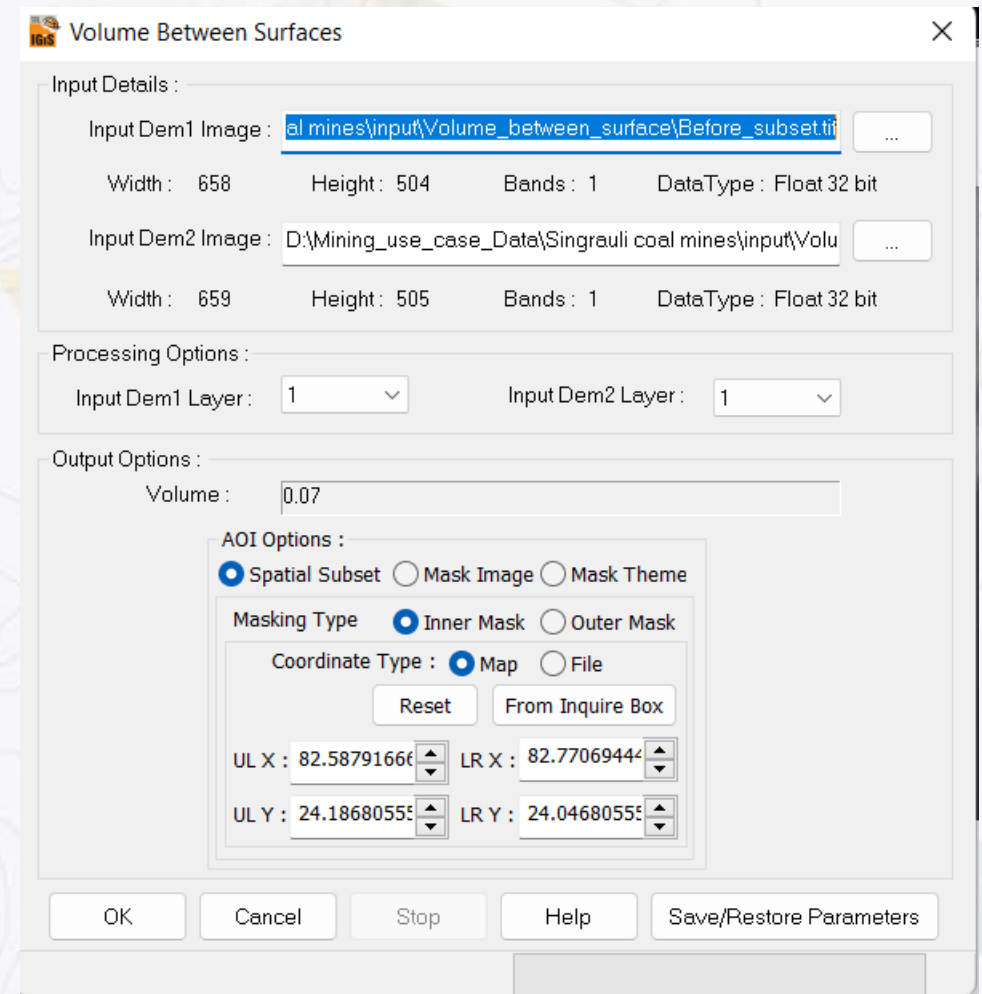
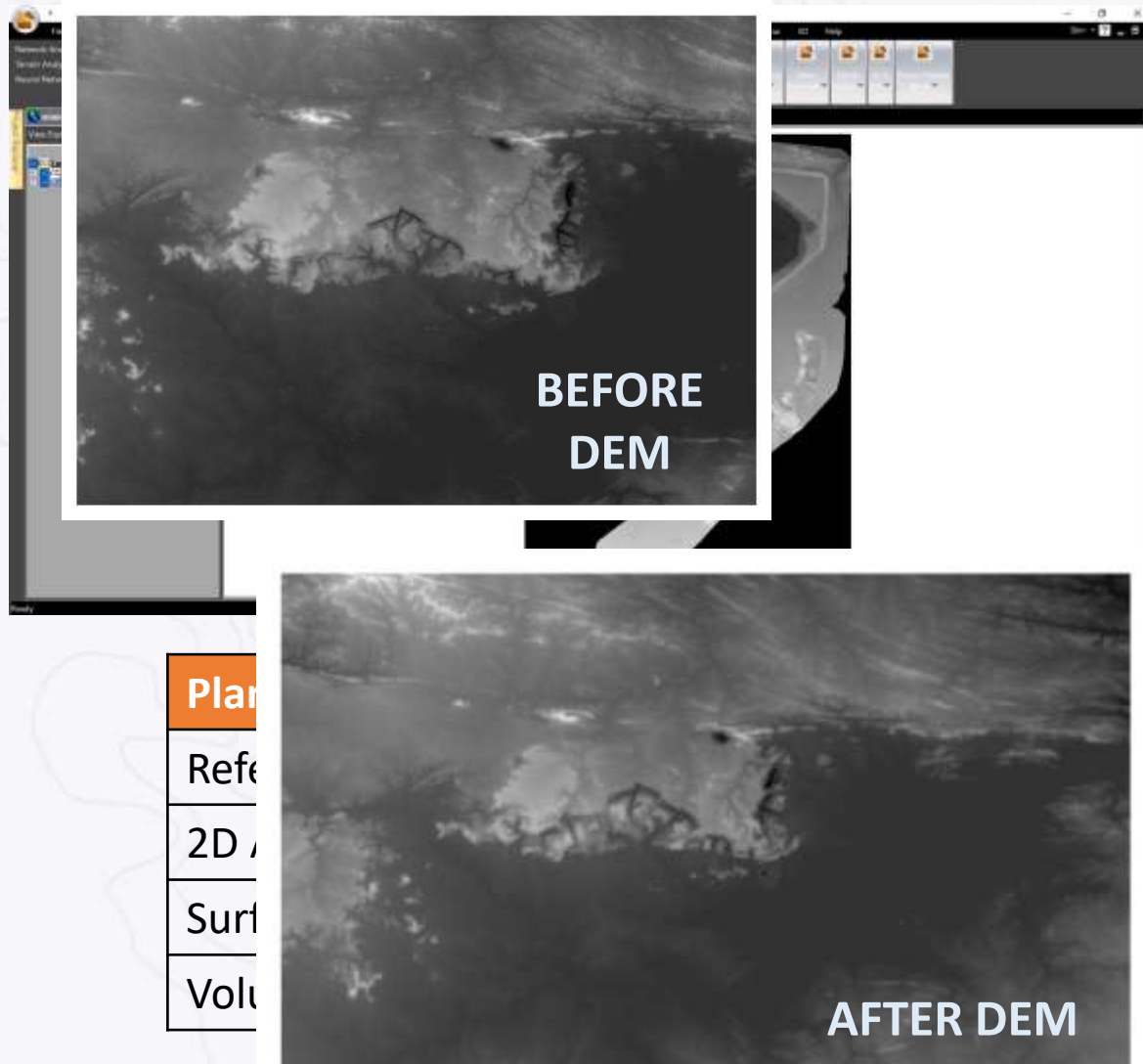


The screenshot shows the ArcGIS interface with a map of the mining site. The map is color-coded, with blue representing lower elevations and red/yellow representing higher elevations. The interface includes a menu bar at the top, a toolbar, and a legend on the left side.

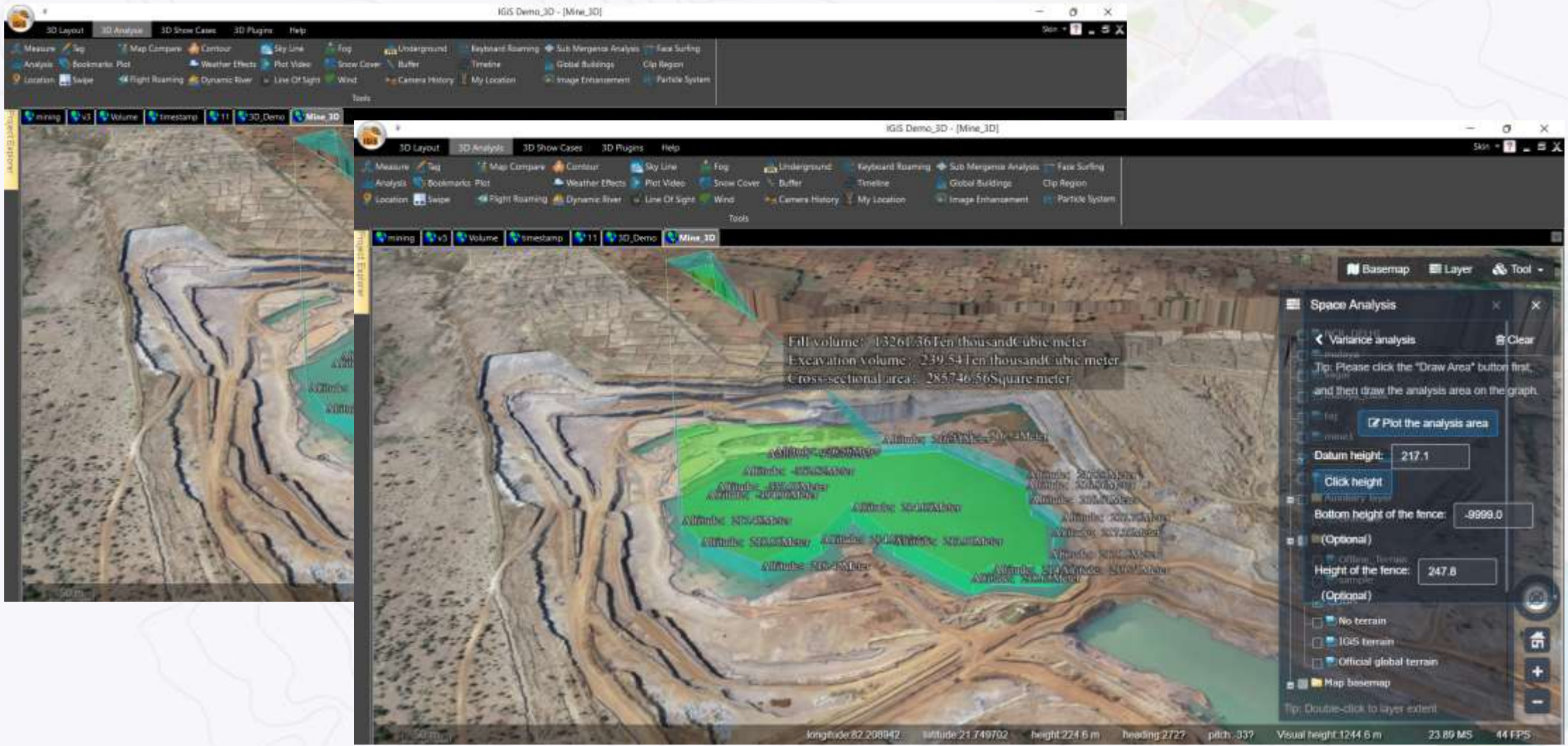
# Digital Transformation in Mining Industry – A Geospatial Way



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# Digital Transformation in Mining Industry – A Geospatial Way



The screenshot displays the IGIS Demo\_3D software interface. The main view shows a 3D terrain model with a green analysis area. A text box in the center of the model provides the following data:

- Fill volume: 13261.36 Ten thousand Cubic meter
- Excavation volume: 239.54 Ten thousand Cubic meter
- Cross-sectional area: 285746.56 Square meter

The 'Space Analysis' panel on the right side of the interface includes the following settings:

- Analysis: Variance analysis
- Tip: Please click the "Draw Area" button first, and then draw the analysis area on the graph.
- Plot the analysis area:
- Datum height: 217.1
- Click height: [button]
- Bottom height of the fence: -9999.0
- Height of the fence: 247.8
- Map basemap:

At the bottom of the interface, the following coordinates and parameters are displayed: longitude: 82.208942, latitude: 21.749702, height: 224.6 m, heading: 2727, pitch: 337, Visual height: 1244.6 m, 23.89 MS, 44 FPS.