



Enterprise Mobile Mapping Program

Remote Sensing Technology and more...



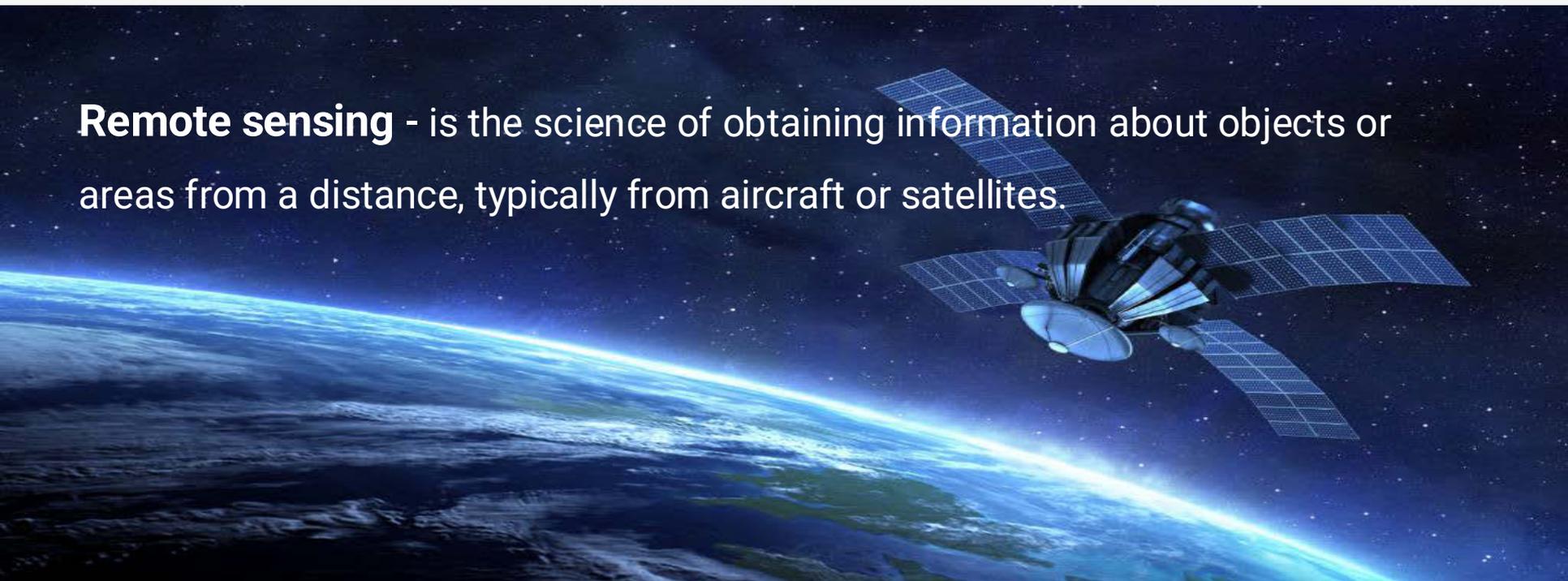
April 25, 2025

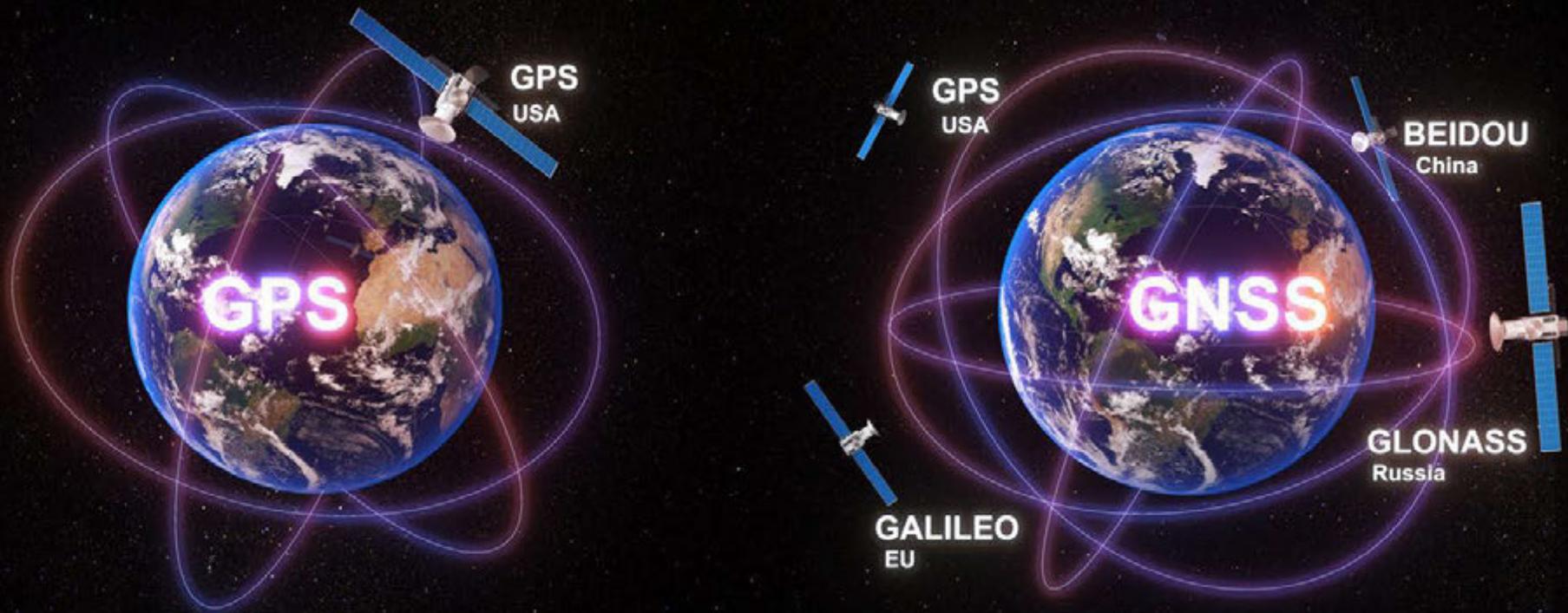
Remote Sensing is in all of us!



What is Remote Sensing?

Remote sensing - is the science of obtaining information about objects or areas from a distance, typically from aircraft or satellites.





GPS vs. GNSS

Let's make measurements more accurate.



April 25, 2025

Mobile Mapping Technology



Mobile Mapping System

MX90



Recent District Projects



Caprock Canyon CHL SH256 Roadway Improvement



Trinity Pro

Fixed Wing Mapping Drone



MX90

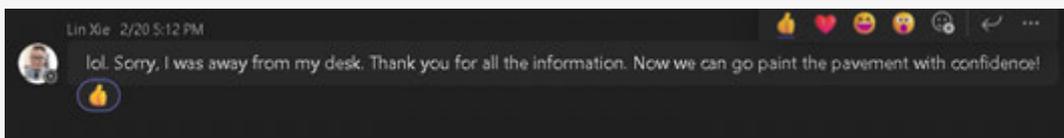
Mobile Mapping System



Target Specifications



<p>Always place PK nail at the tip</p> 	<p>2 Feet Long</p>  <p>6 Inches Wide</p>
<p>Never overlap Chevron on top of paintstripe</p>  	<p>Never place Chevrons 4 feet beyond edge of pavement</p> 



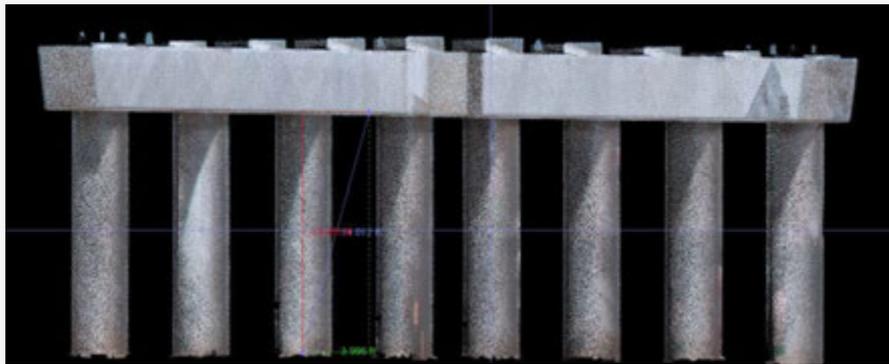


Bison Jam?



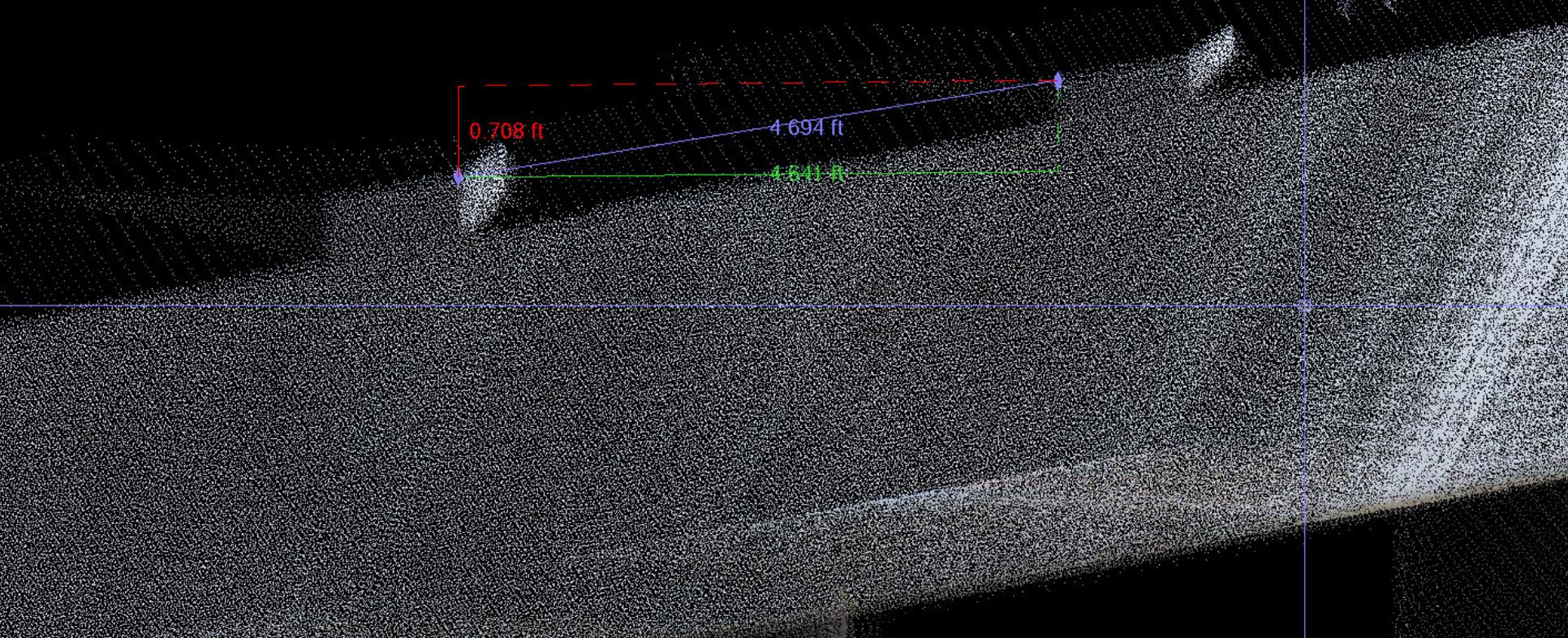
April 25, 2025

Unfinished Business LBB US87



Mobile Mapping System

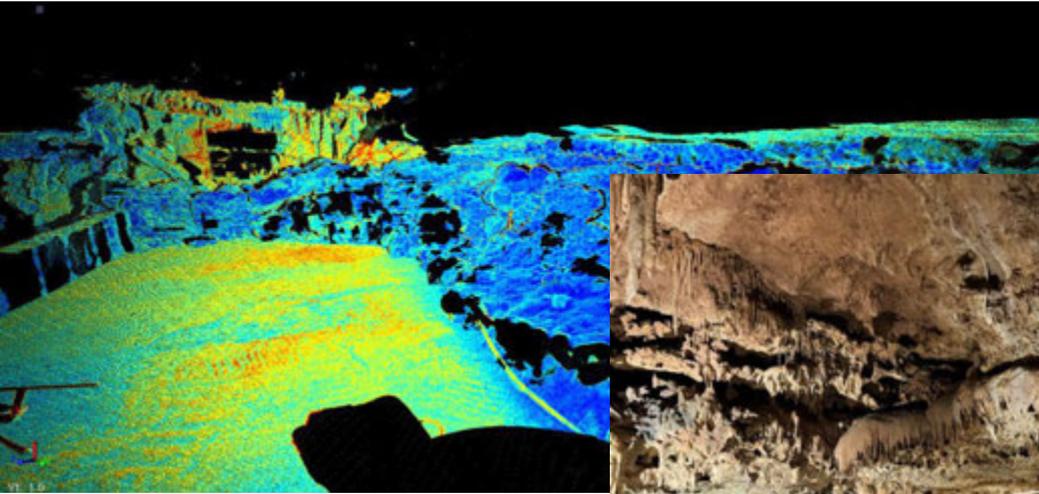
MX90



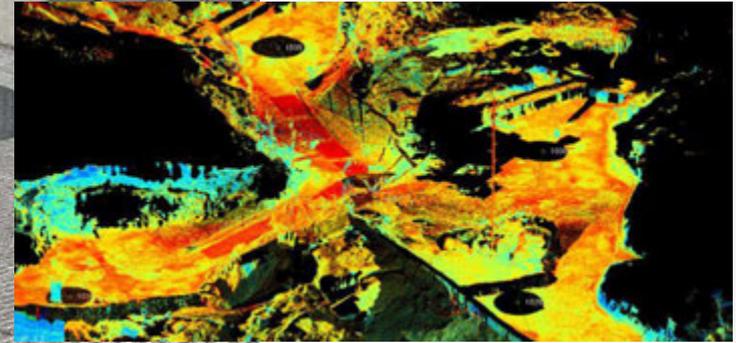
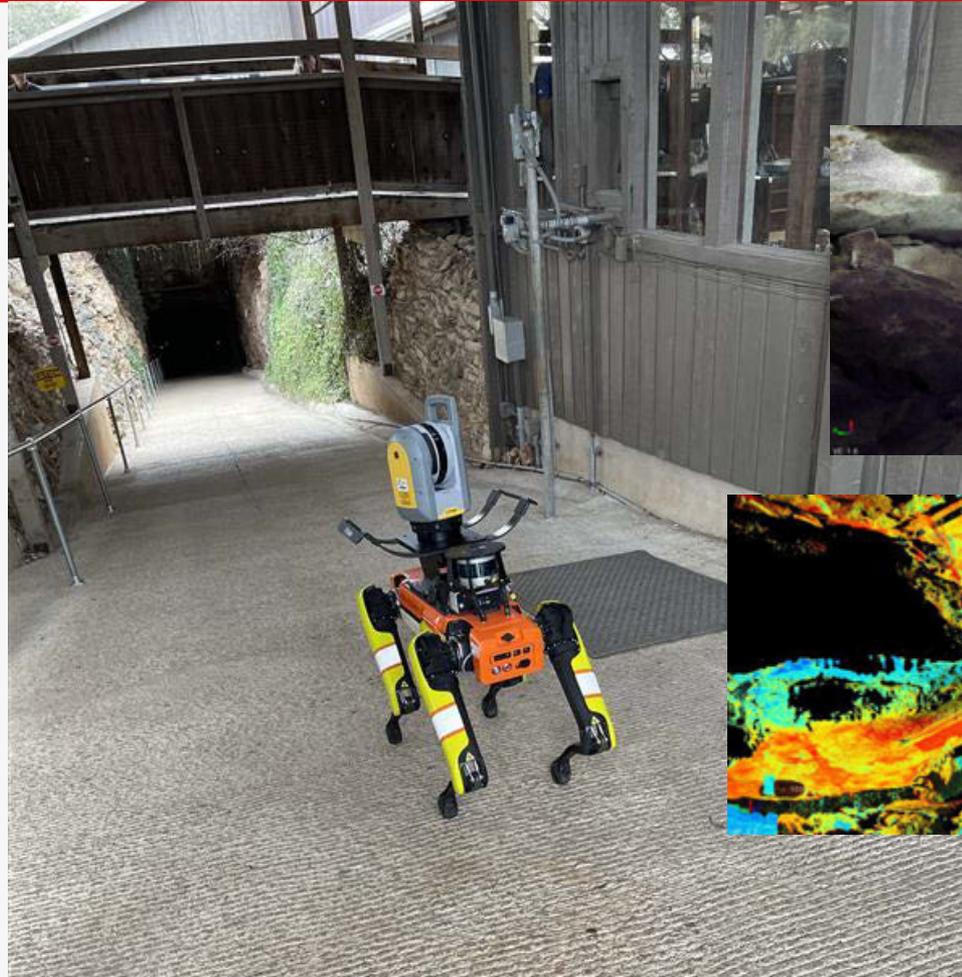
Bridge Seat Measurements

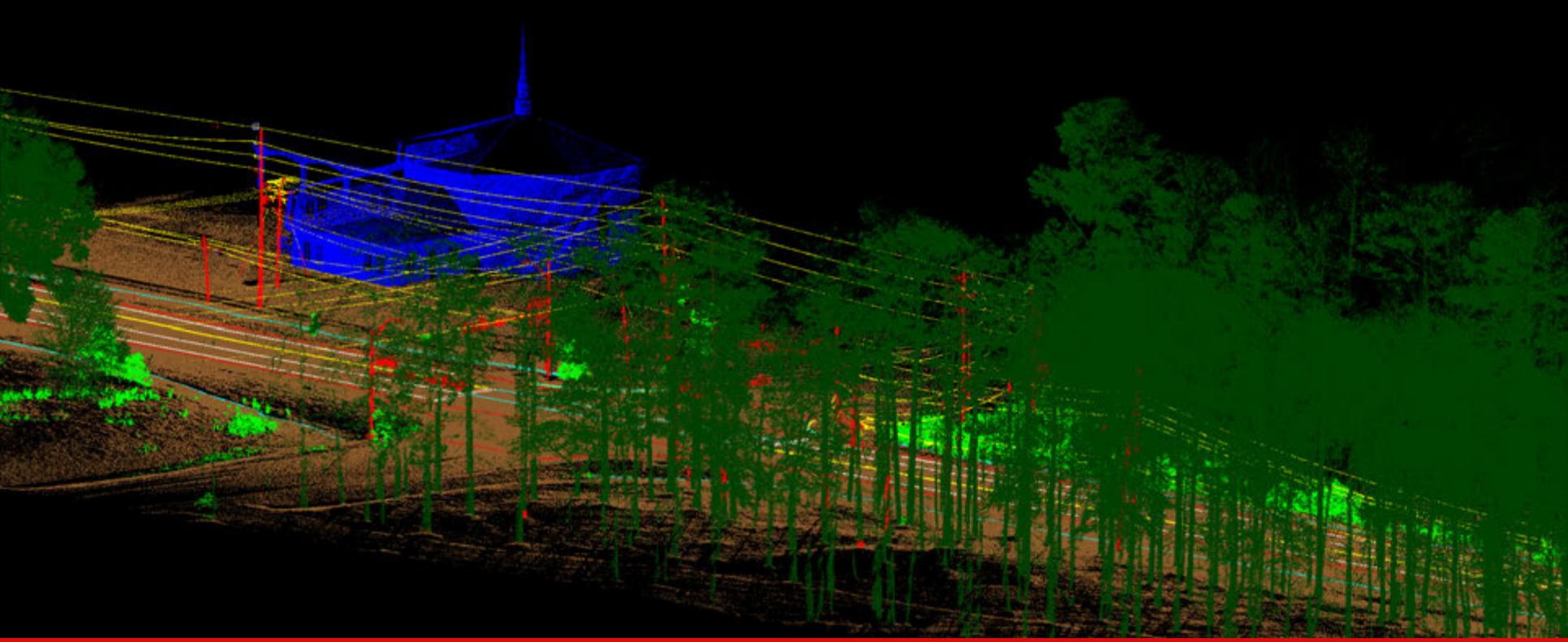


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SPOT Fetch!



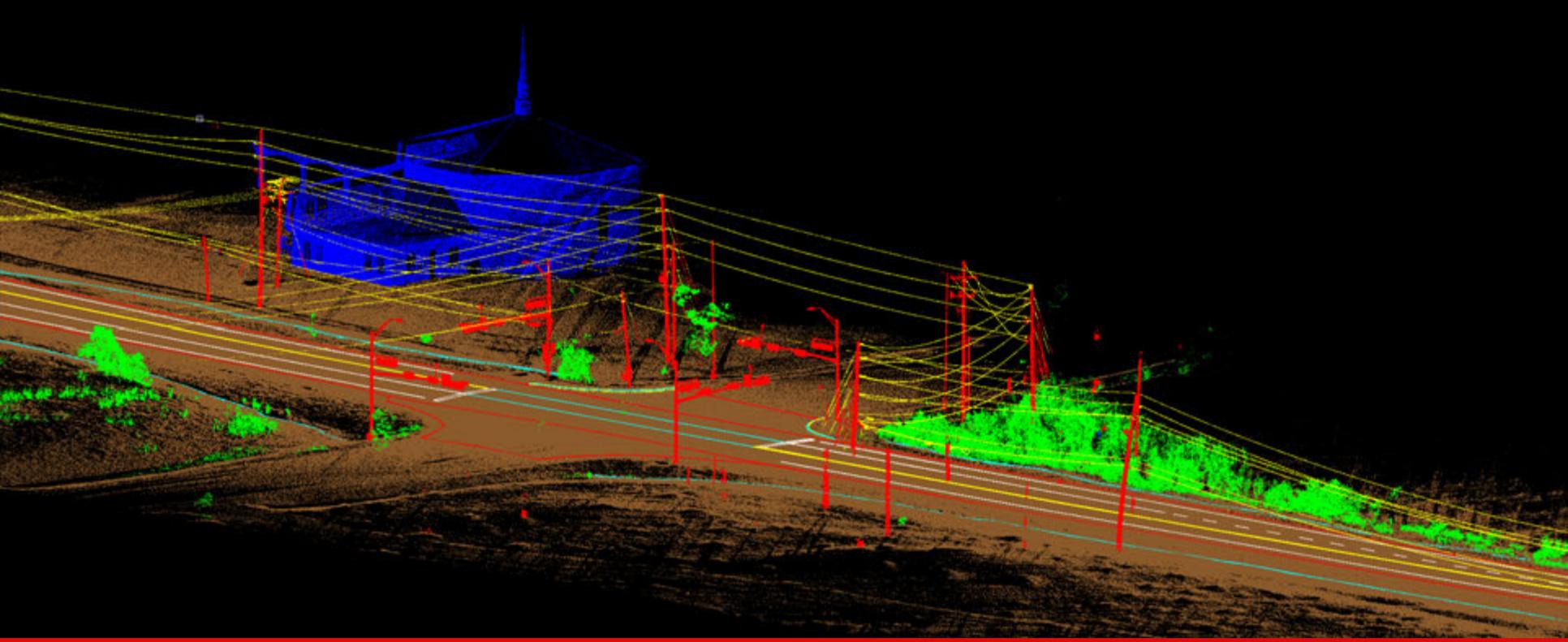


Atlanta FM1297

Point Cloud Region Classification.



April 25, 2025

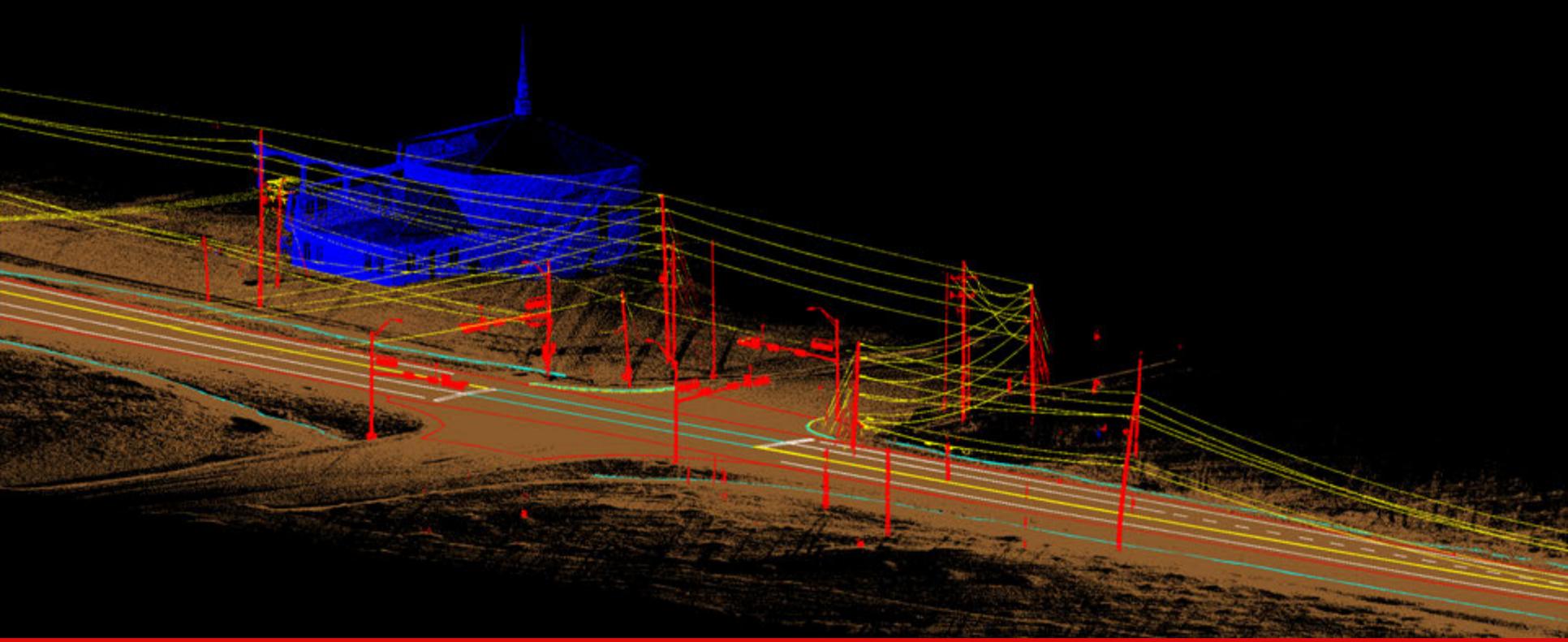


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Point Cloud Region Classification.



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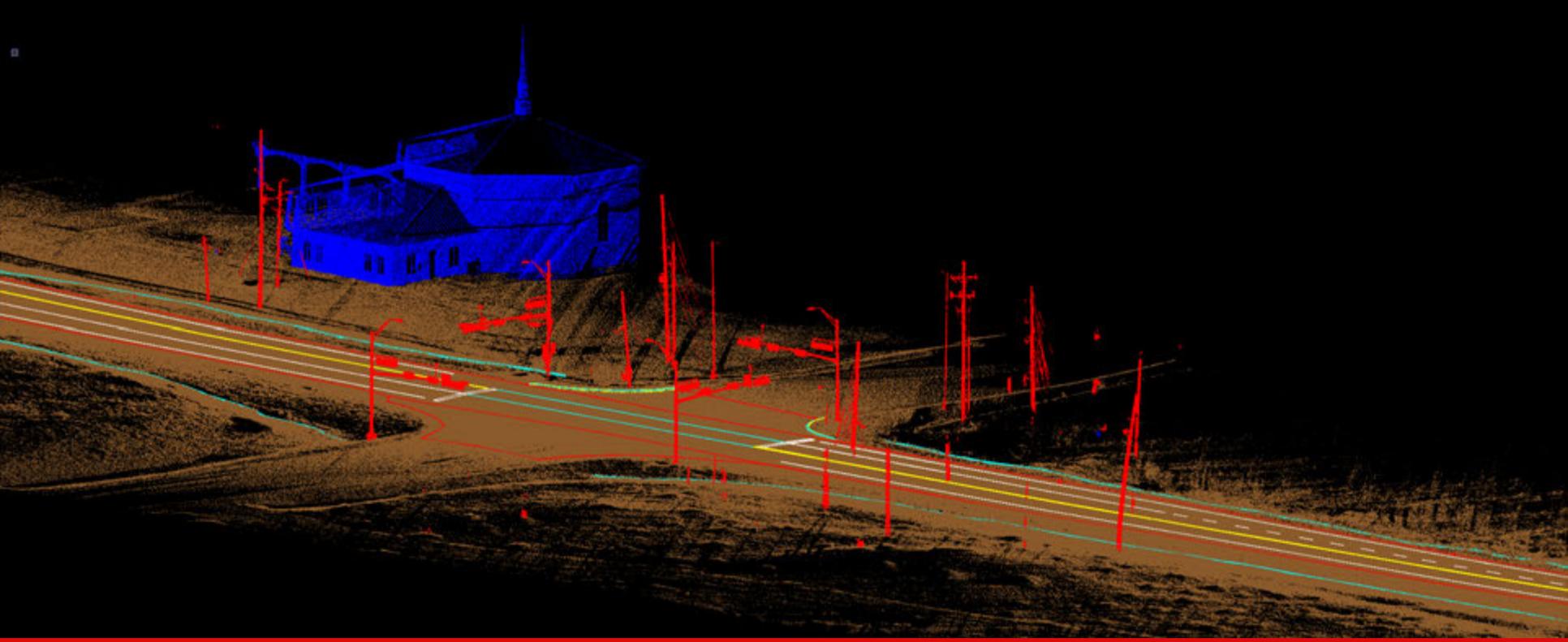


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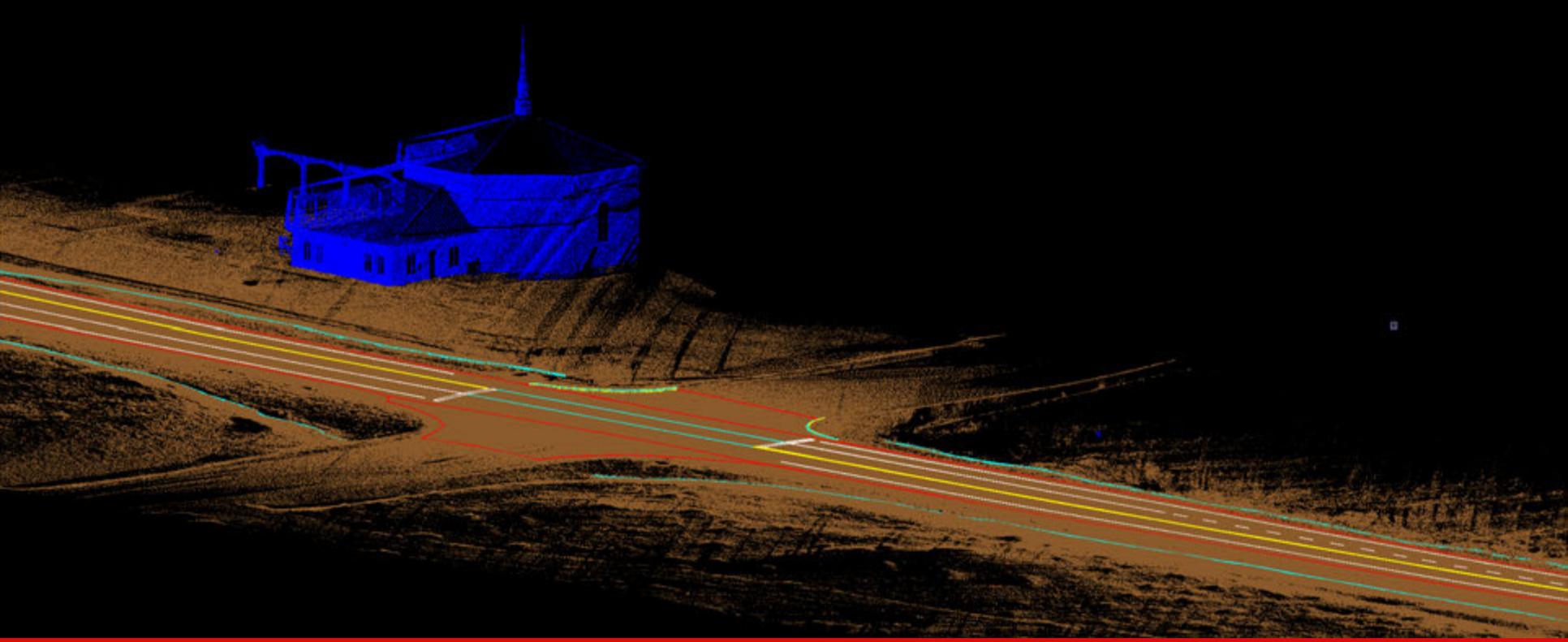


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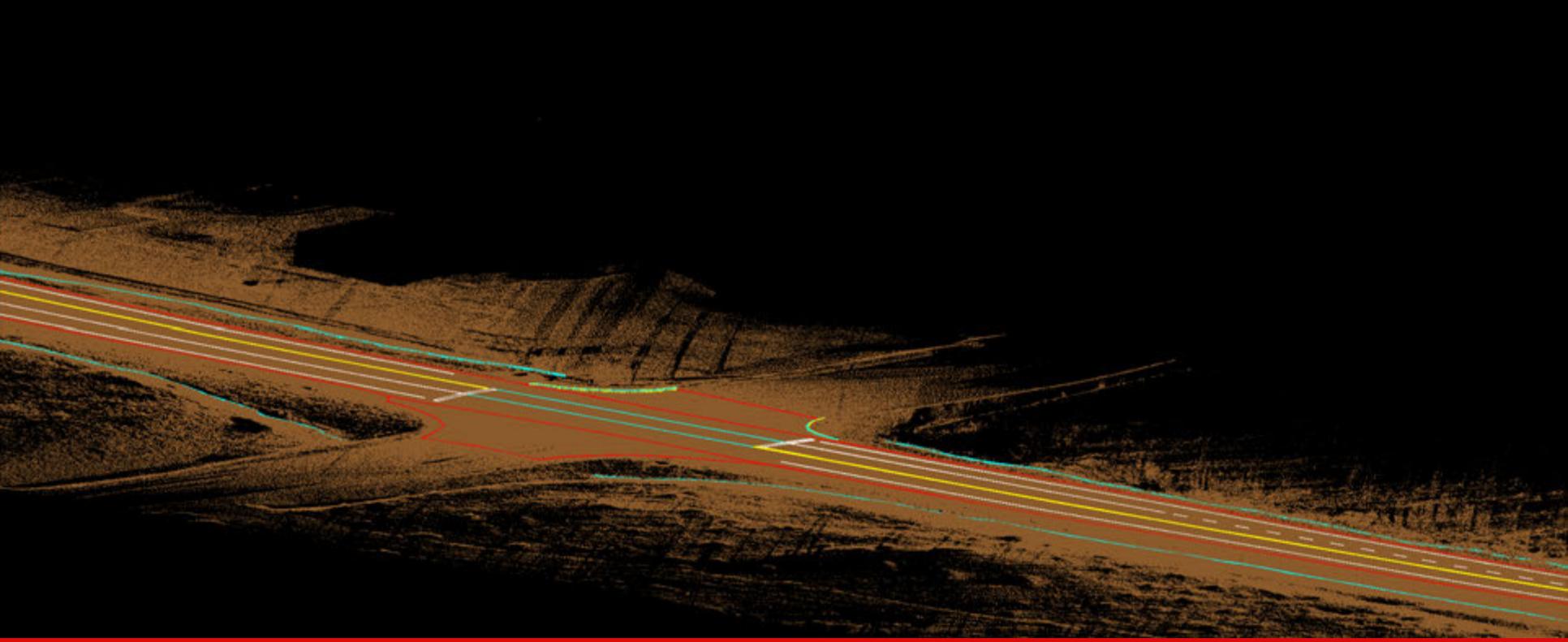


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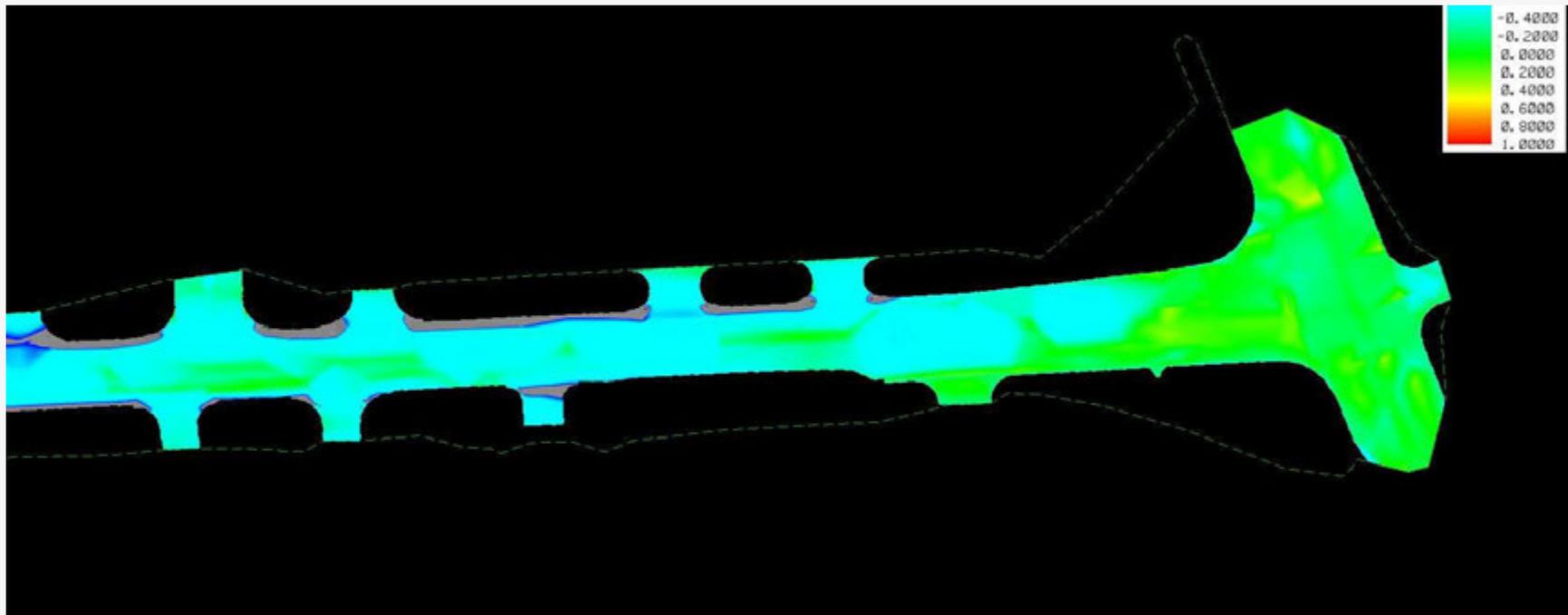
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Point Cloud Region Classification.

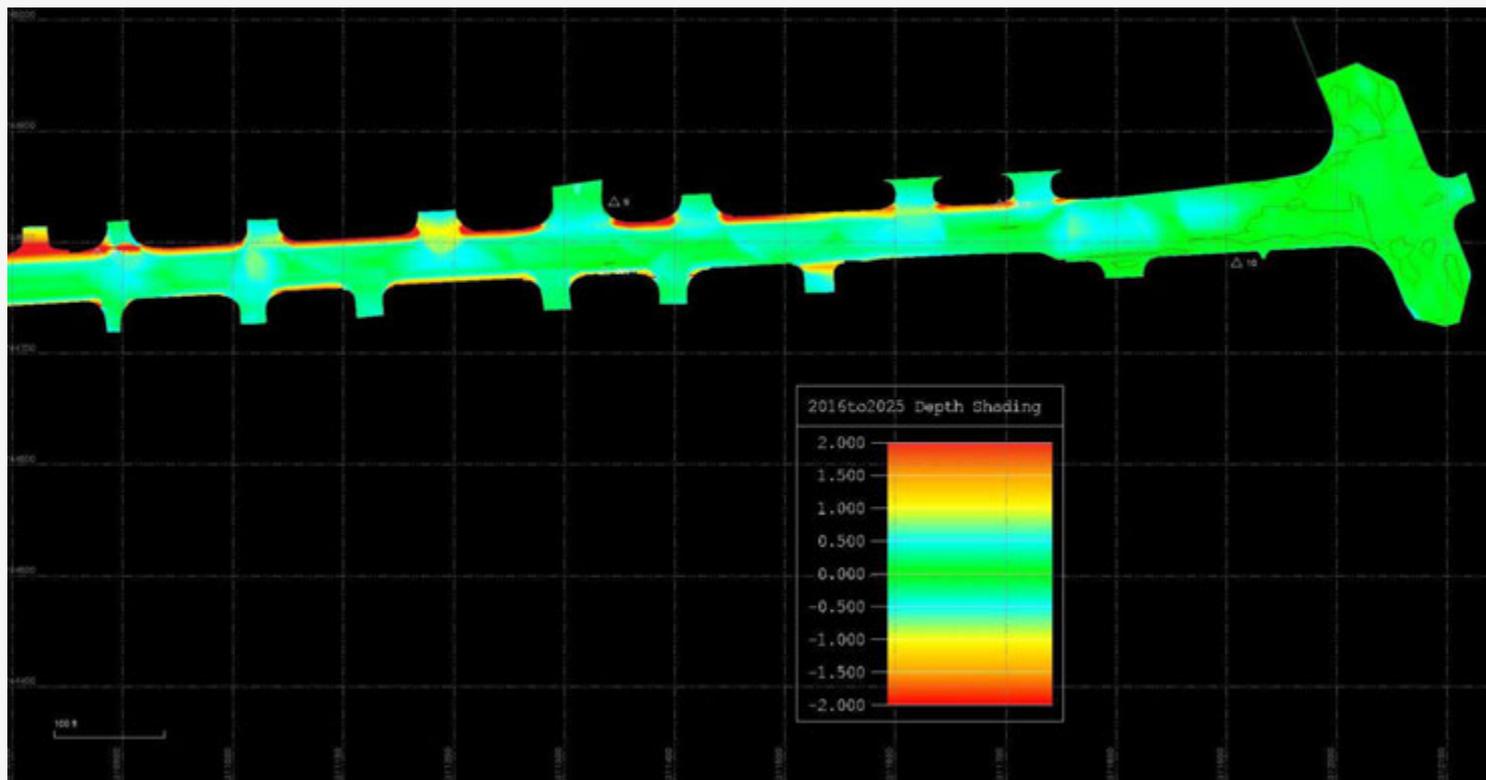


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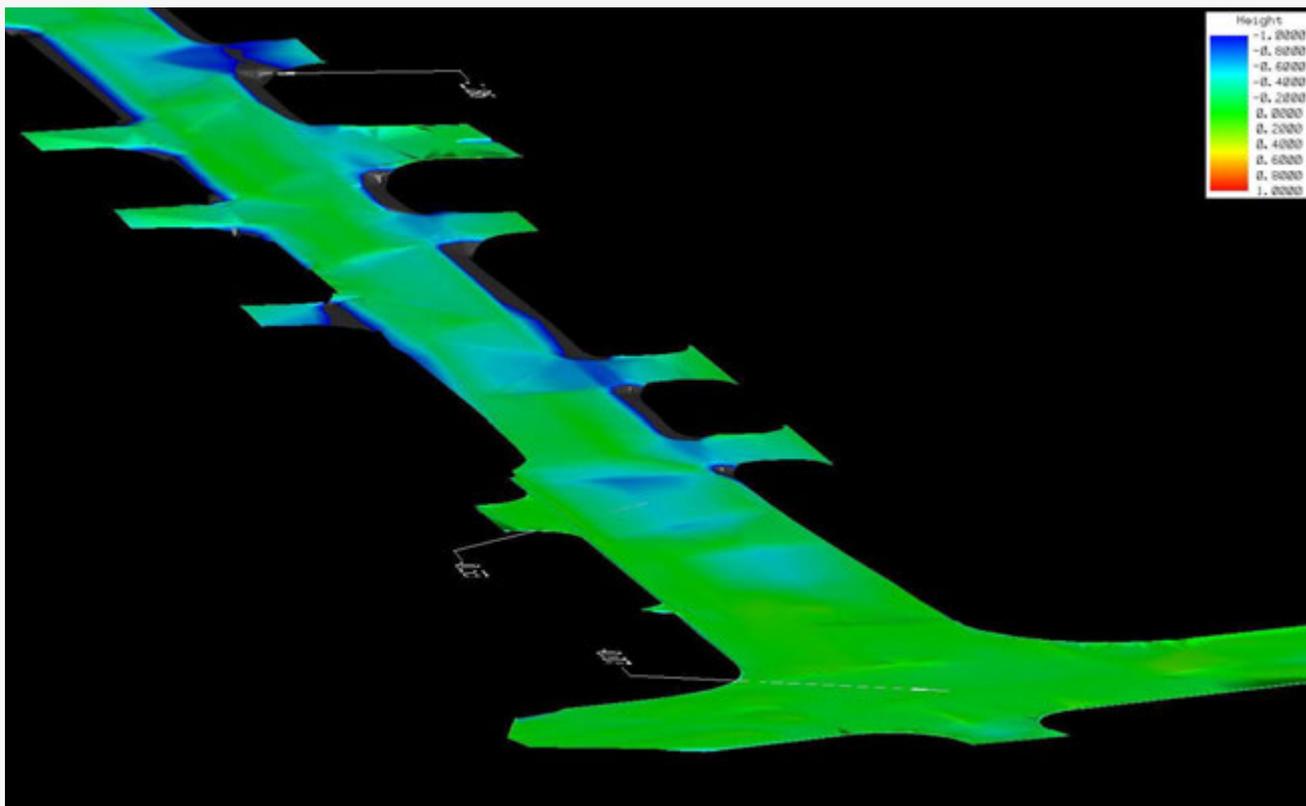
Pre-Letting and Surface Comparisons (Heat Map)



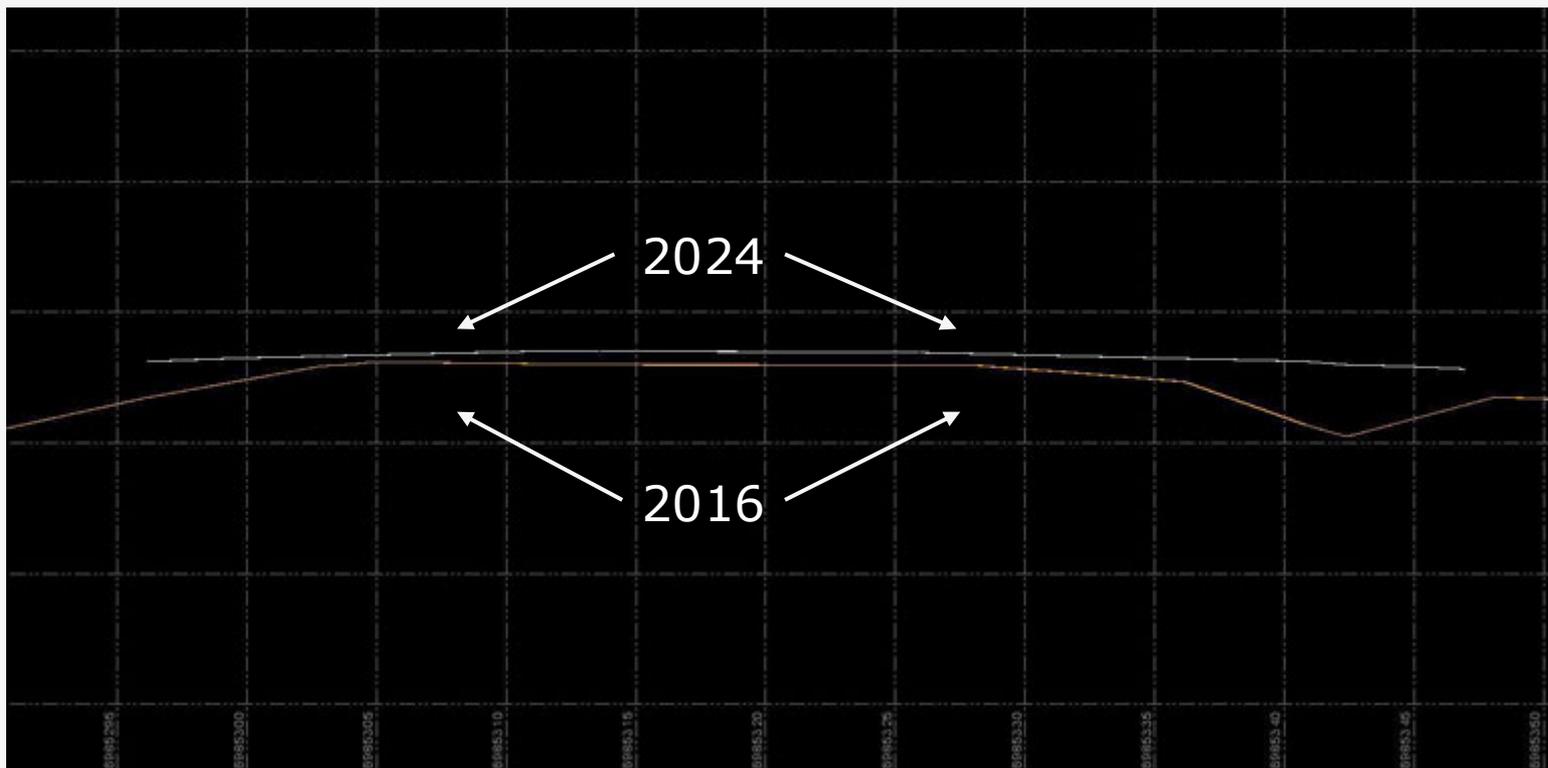
Pre-Letting and Surface Comparisons (2016-2025)



Pre-Letting and Surface Comparisons (Height Change)



Pre-Letting and Surface Comparisons



Pre-Letting and Surface Comparisons

Bank Areas Based on Surface Geometry Alone

Cut area	32,829.1 ft ²
Fill area	320,296.2 ft ²
Zero volume area	8.1 ft ²
Total	353,133.4 ft ²



Project File Data	Coordinate System
Name: N:\oldatlanta\texascau202405-ATL_FM_1297_surface_to_surface.vce	Name: United States/NAD83
Size: 5 MB	Zone: Texas North Central 4202 (BCS)
Modified: 4/2/2025 1:45:28 PM (UTC-5)	Datum: NAD83(2011)
Time zone: Central Standard Time	Global reference status: NAD83(2011)
Reference number:	Global reference epoch: 2010
Description:	Grid: GEOD18 (Conts)
Comment 1:	Vertical datum: Default
Comment 2:	Calibrated site: Default
Comment 3:	

Additional Coordinate System Details

Local Site Settings			
Project latitude:	N13°49'11.45166"	Ground scale factor:	1.00012
Project longitude:	W103°43'50.35789"	False northing offset:	0.000 ft
Project height:	0.000 ft	False easting offset:	0.000 ft

Earthwork Volume Report

Original surface compared to Original surface

Surfaces	
DTM_2016	Classification: Original
EMM_2025	Classification: Original

Bank Volumes Based on Surface Geometry Alone

Cut material	189.6 yd ³
Fill material	4,291.8 yd ³
Deficit	4,102.2 yd ³

Bank Areas Based on Surface Geometry Alone

Cut area	32,829.1 ft ²
Fill area	320,296.2 ft ²
Zero volume area	8.1 ft ²
Total	353,133.4 ft ²

Depth summary

Maximum depth of cut material	2.252 ft
Maximum depth of fill material	5.338 ft

Note: 'Cut Material' is defined as material where [EMM_2025] is lower than [DTM_2016]. 'Fill Material' is defined as the volume of material where [EMM_2025] is higher than [DTM_2016].

Note: The above volumes are calculated solely from the geometries of the selected surfaces. No material properties are applied to the above numbers.

Date: 4/2/2025 3:37:56 PM	Project: N:\oldatlanta\texascau202405-ATL_FM_1297_surface_to_surface.vce	Trimble Business Center
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Pre-Letting and Surface Comparisons





Safety



April 25, 2025



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Q&A



April 25, 2025

HELP
#EndTheStreakTX

End the streak of daily deaths on Texas roadways.

TxDOT.gov
#EndTheStreakTX Toolkit

