Advanced Laser Scanning Solutions For Smart City

Fast | Accurate | Safe

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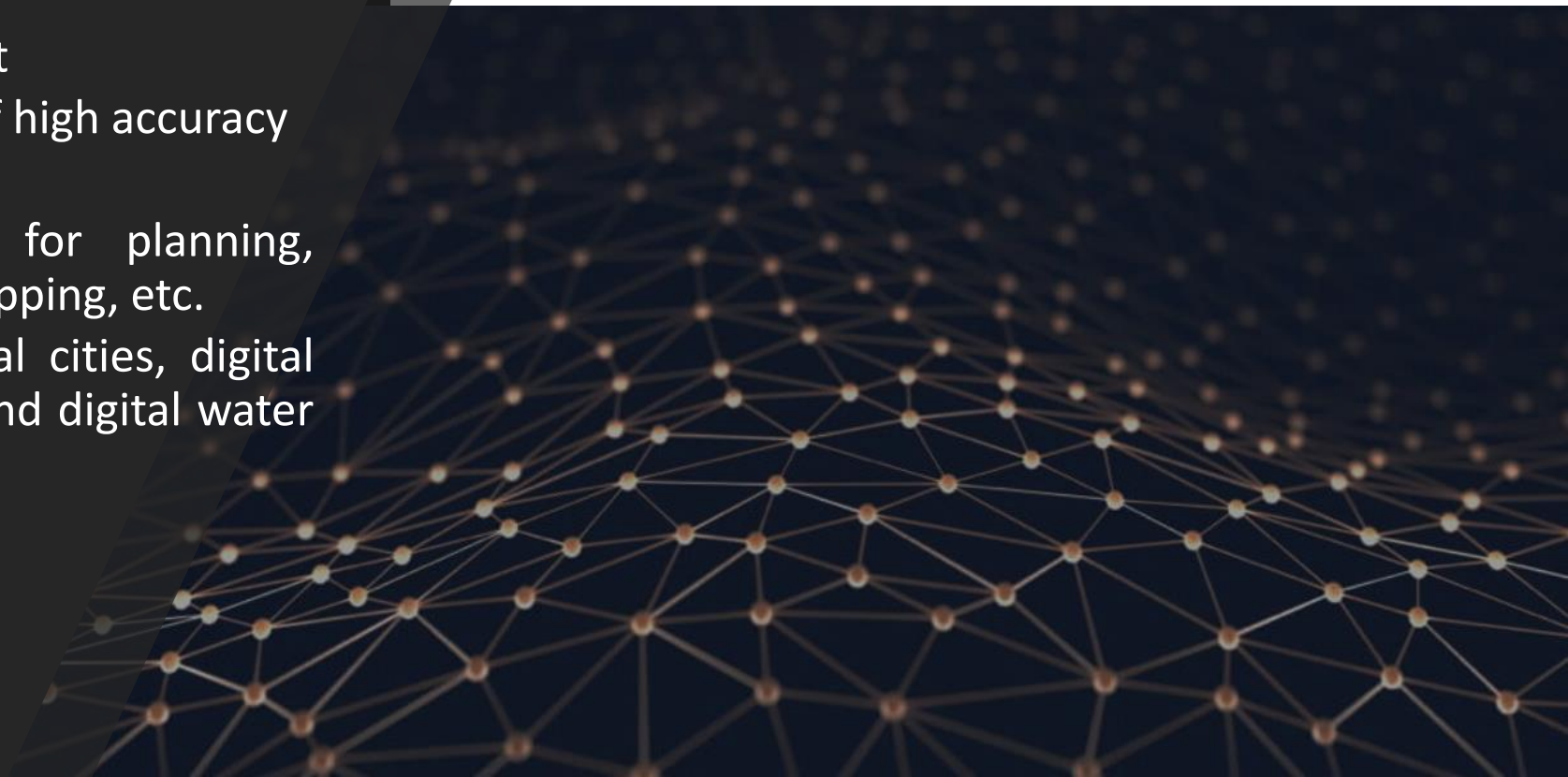
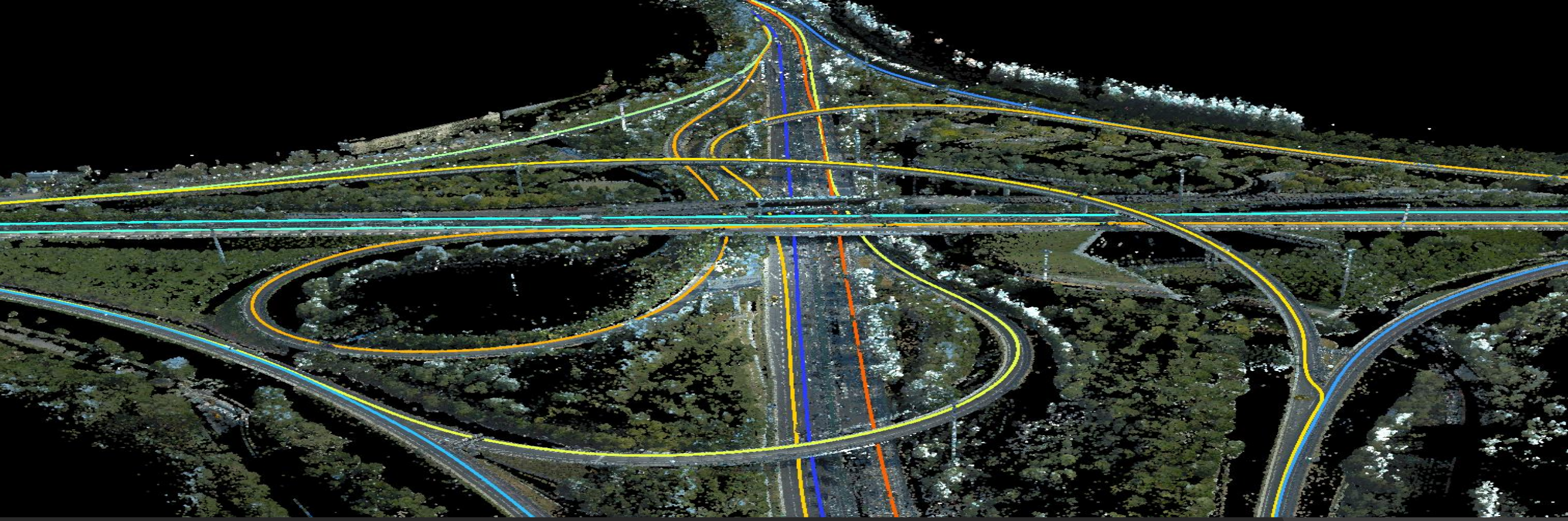
Advantages:

- It can be equipped with different
- Data collected from LiDAR are of high accuracy
- Both under & above ground
- 3D modelling of enterprise for planning, controls, simulations, safety, mapping, etc.
- The data can be used in digital cities, digital forestry, digital cultural relics, and digital water conservancy.





Road and Highway Mapping

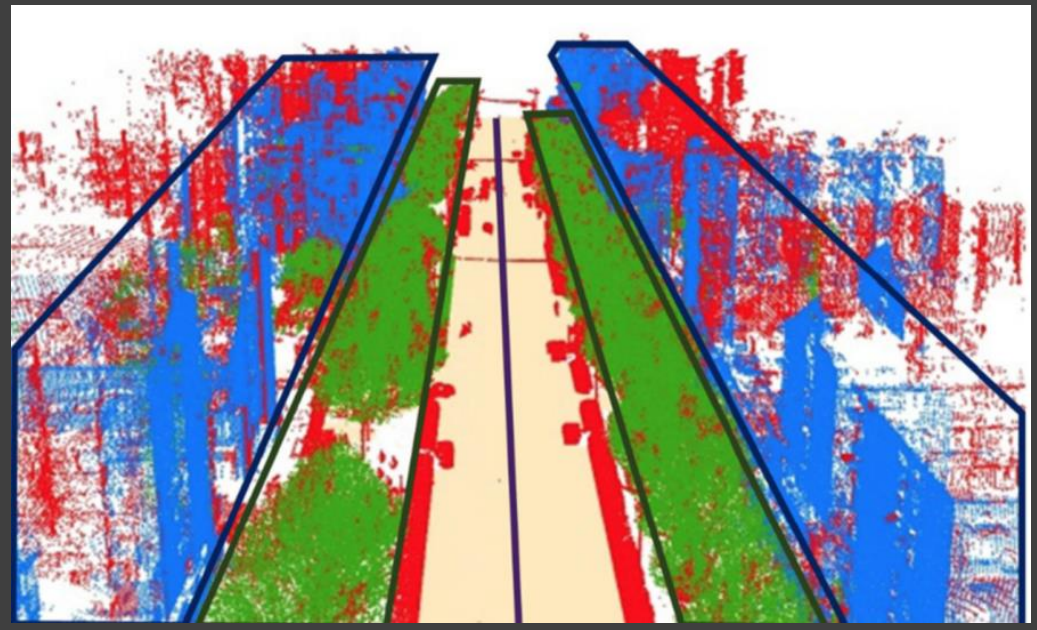
- High measurement accuracy
- wide detection range
- Making the initial map template of high-precision maps

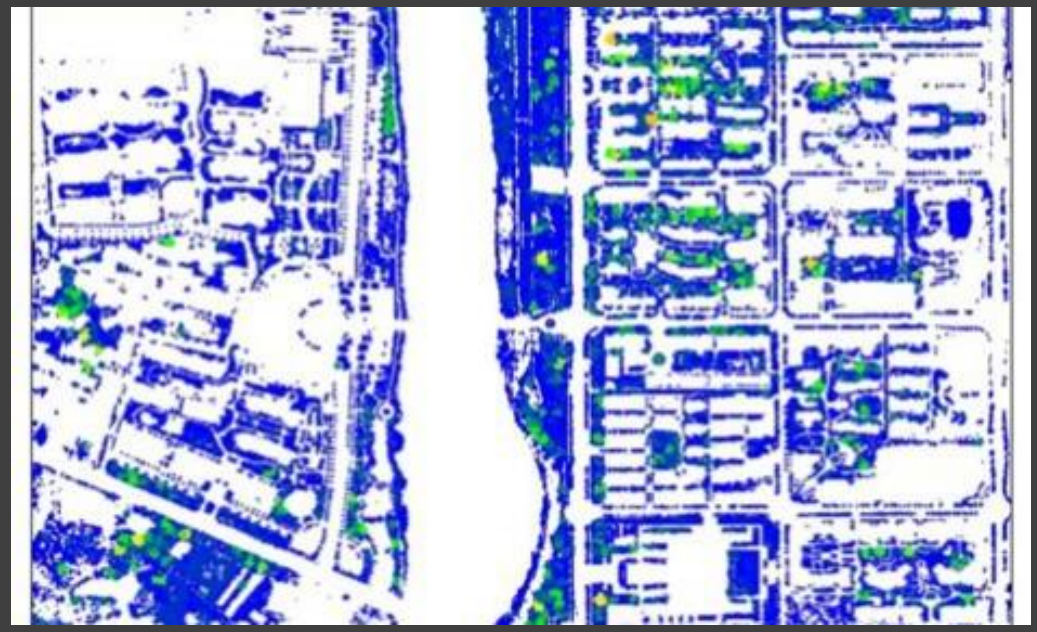
Building Information Model (BIM)

LiBackpack can quickly obtain indoor 3D point cloud data, and the detailed information is rich, which can be used for high-precision modeling of indoor environment and facility management, etc.

Urban Area Spatial Analysis

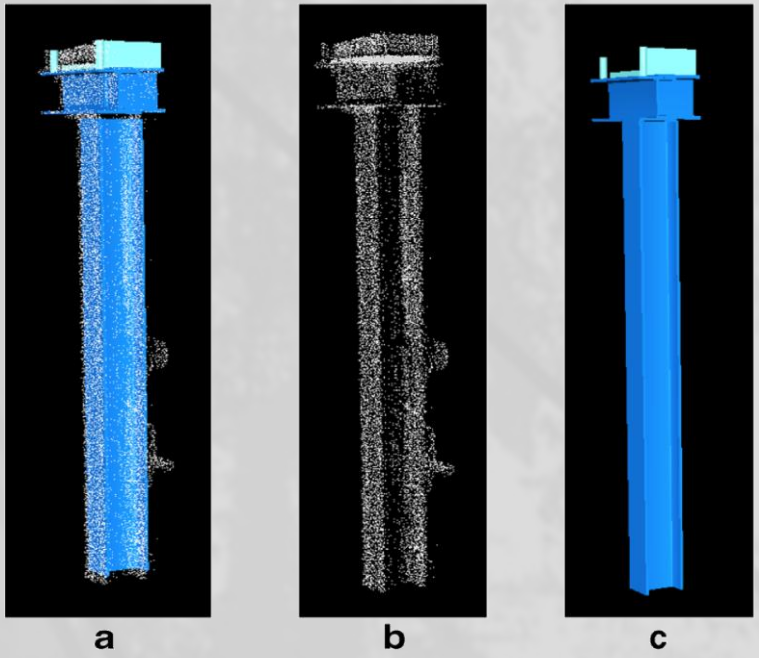
- Location distance
- Number of space facilities
- Density of landscape facilities
- Building enclosure.



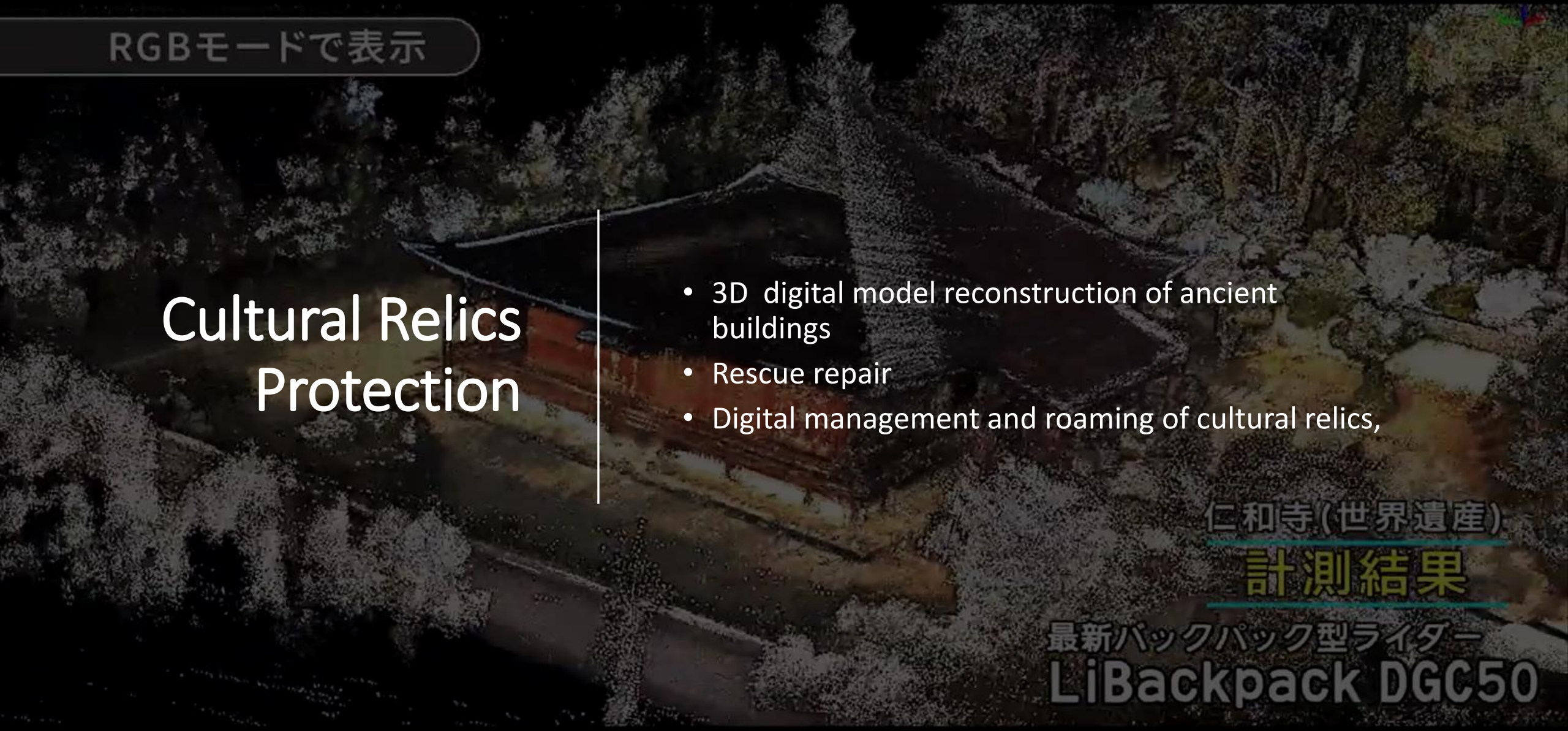


Construction

- Working condition progress monitoring
- Construction deviation correction
- Real-time construction control
- Completion acceptance
- Building deformation detection

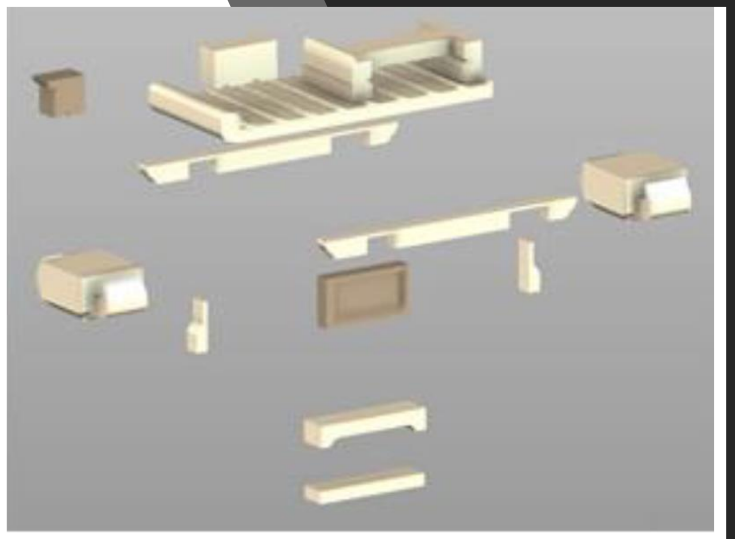


a: Fitting effect between design model and actual construction drawing
b: Construction point cloud data
c: Designed model



Cultural Relics Protection

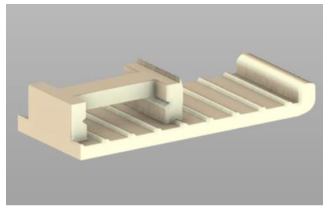
- 3D digital model reconstruction of ancient buildings
- Rescue repair
- Digital management and roaming of cultural relics,

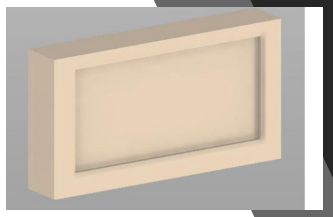


Preservation Of Building Components

By cutting and measuring the 3D point cloud model, various data needed in construction can be obtained.

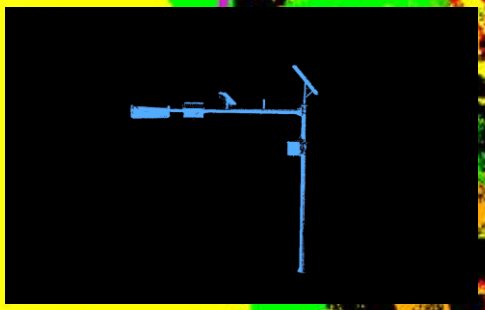
- quickly establish a 3D model of the building
- Repair of parts of ancient building facilities

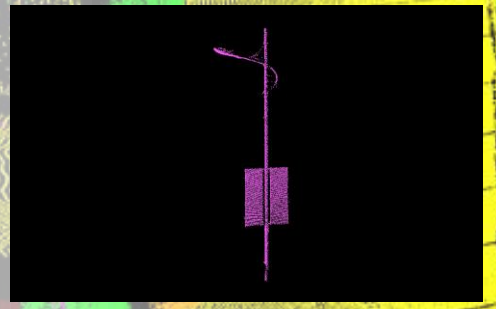


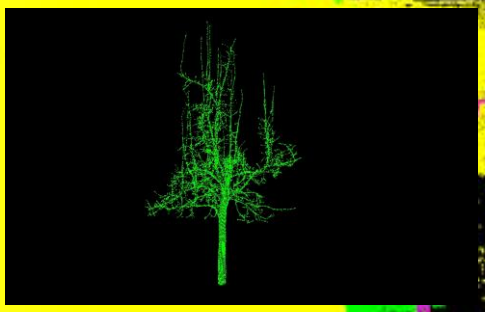


Quantification Of The 3D Shape Of The City

LiDAR can provide true 3D street view indicators, providing a true basis for the analysis and evaluation of urban livability.







Hardware Recommended

- **LiAir V70**

LiAir V70 can be mounted on the commonly used DJI M300. With the help of the UAV system, LiAir V can map a large area rapidly and accurately.

- **LiBackpack DGC50**

LiBackpack DGC50 integrates a GNSS module, which can be positioned correctly on site. It is an ideal tool for indoor building surveying and digital city high-precision map data upgrading.

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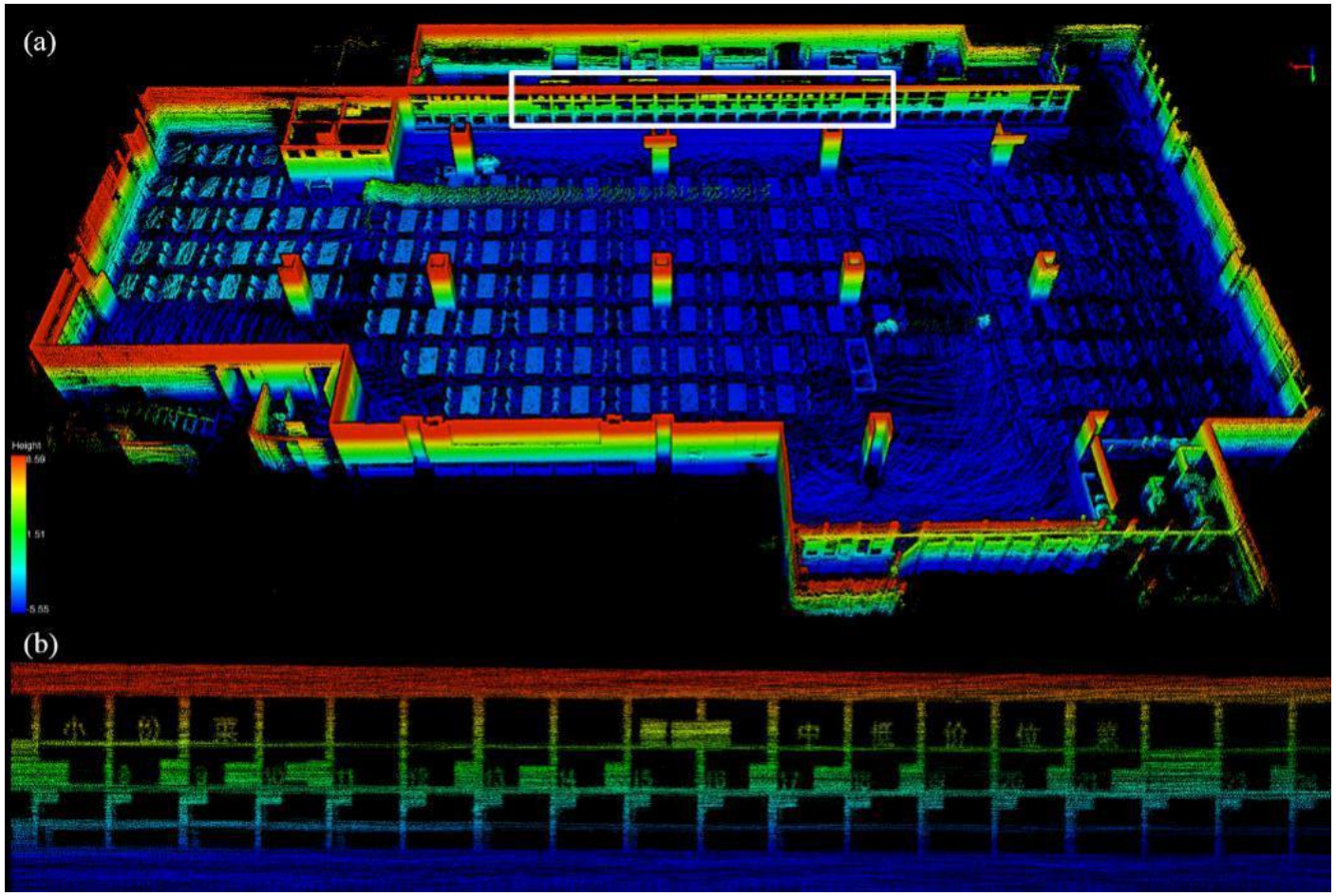
Hardware Recommended

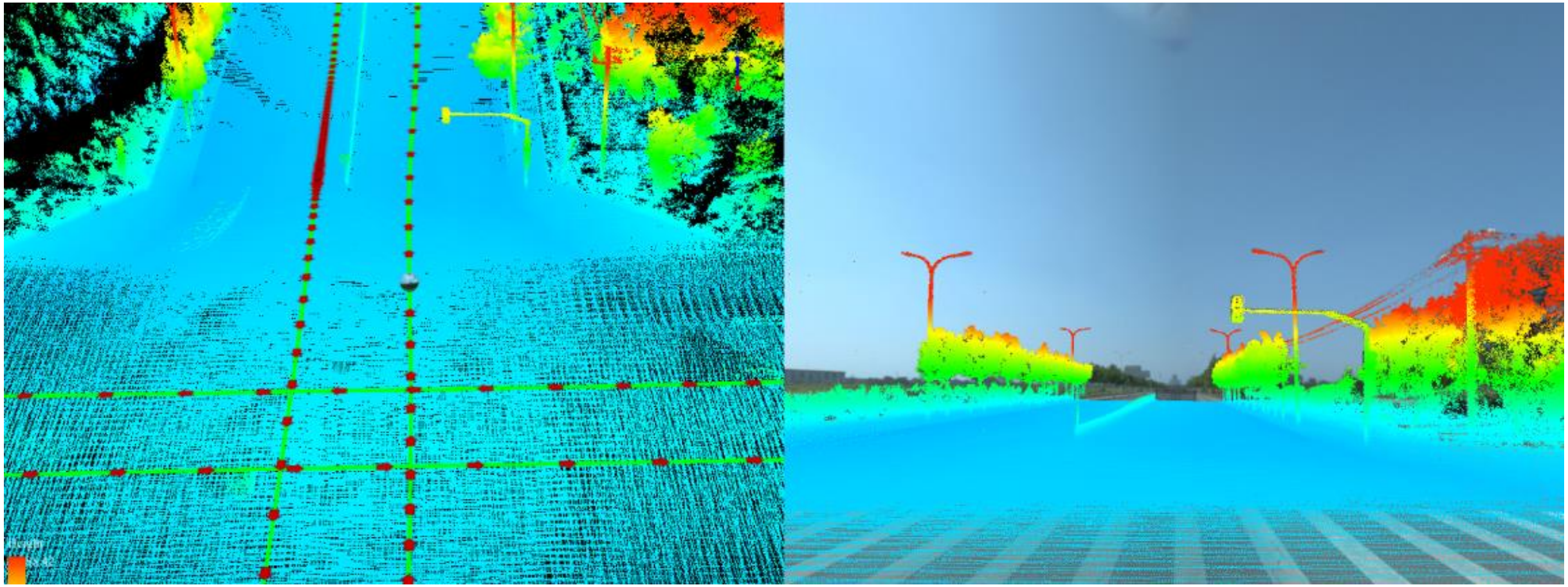
- **LiMobile**

Road and highway mapping is carried out to support many transportation planning and maintenance projects.



LiAir V70/LiBackpack DGC50 Usage At Building Surveying

LiAir V70 and LiBackpack DGC50 are deployed in complex urban complexes to collect comprehensive 3D measurement data of complex and expanded buildings in the air and on the ground.



LiMobile Usage At High-precision Mapping

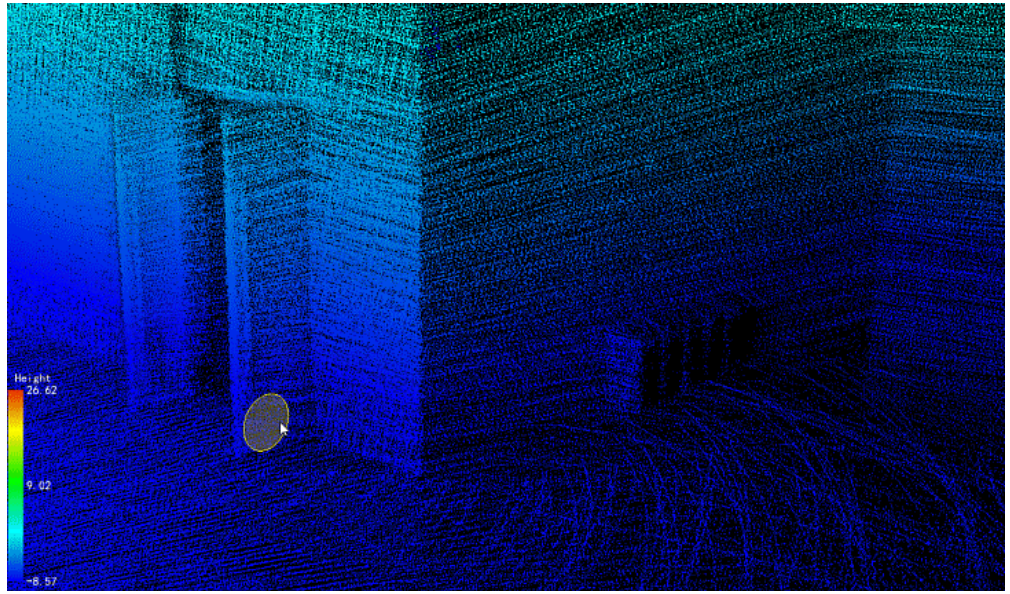
- Automatic feature extraction of road peripheral components
- High-precision vehicle positioning
- Road information collection

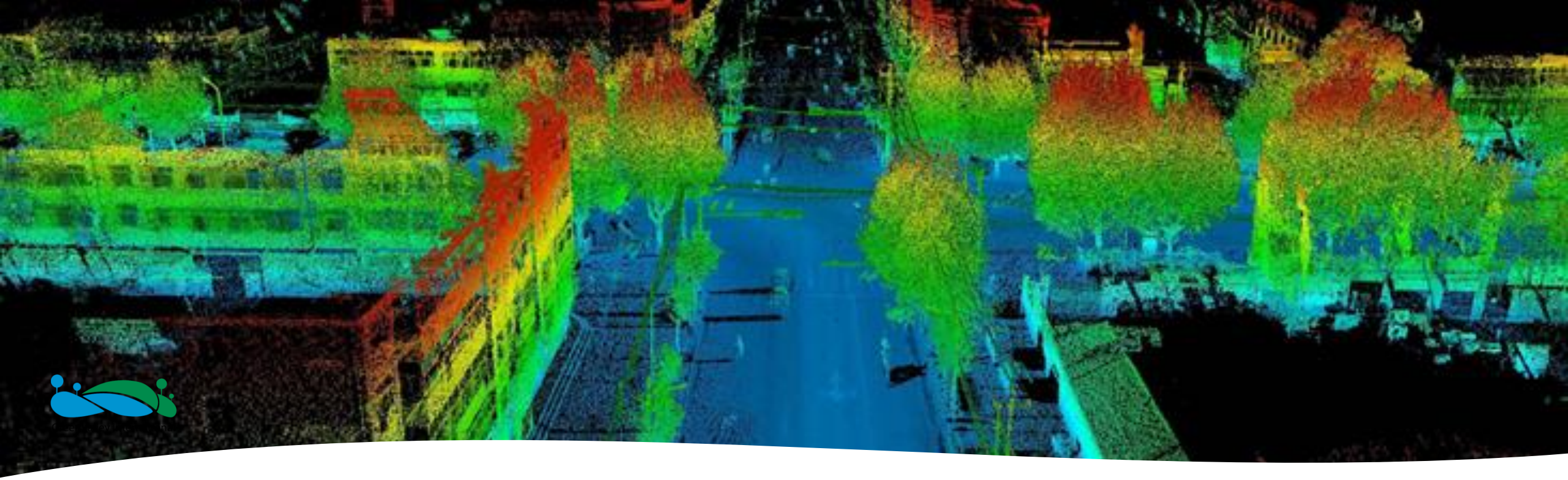
LiGeoreference Software Ensures The Fast And Accurate Result Of LiAir

- Use the built-in LiNav module to solve PPK trajectory data.
- Automatically perform strip alignment to correct the data to improve the accuracy of the software.
- A variety of point cloud formats can be exported

Lifuser-BP Softeare Ensures The Best Results Of Libackpack

- Automatic processing of trajectory data
- Precisely filter point clouds
- Coloring of point clouds (for LiBackpack C50, LiBackpack DGC50 models)
- Synchronize operations on point clouds, trajectories and panoramic images
- Georeference in the user's local coordinate system using geotags
- Easily carry out metric measurement of length, area, volume, cross section, angle, etc.





Lidar 360 Software Ensures Complex Point Cloud Post-processing

Lidar services offered by GVI include boresight calibration, point cloud classification, terrain product (e.g. DEM, DSM & DTM) generation, and more.

GVI data-post-processing experts can handle LiDAR captured from airborne, backpack and mobile platforms.

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Thanks For Your Attention