IDS GeoRadar Upgrades GPR Data Analysis Software

IDS GeoRadar, part of Hexagon, has enhanced IQMaps, its post-processing software application for advanced GPR data analysis. The updated version includes new functionalities that improve the visualization of radar data and extend the application fields to void detection and archaeology.

Thanks to these new functionalities, IQMaps now allows to multi-shape area picking for 3D mapping of sinkholes, inspection chambers and other generic buried objects. Another feature is automatic exporting of radar map sections with user defined length and statistical data for comprehensive reporting functionality. Overlaying of multiple vector layers such as cadastral, as-built and DBYD plans onto the tomography drawings, also is one of the new possibilities, while the same goes for improving initial survey positioning by using external survey data.

Data analysis and interpretation

The main advantage of multi-shape area picking is the ability to mark a 3D area both on the B-scan radar map and the tomography. This feature allows the user to select areas for 3D mapping of all identified voids and anomalies. The software now allows for the simultaneous export of multiple radar maps with user-defined lengths with detected features on these maps also exported in .csv format. This allows for more streamlined reporting and statistical analysis.

The ability to import multiple overlapping vector layers such as DBYD plans and as-built drawings over the tomographic map, greatly aids the user during data analysis and interpretation.

Users can now import external trajectories such as Inertial Measurement Unit (IMU) corrected GNSS or post-processed GNSS data into IQMaps after the survey is completed. This enables the user to correct positioning data that may originally have been inaccurate due to poor floating GNSS signal in tunnels or under bridges.

“IQMaps has reached a significant milestone in its evolution,” says Davide Morandi, director GPR product management at IDS GeoRadar. “With this update, IQMaps stays ahead of the curve, offering new functionalities that make 3D mapping even easier and more efficient for our existing customers, and allows specialists in new fields to benefit from its seamless mapping workflow.”

See here for more information.