
Performance Verification of Land Mobile Laser Scanner for Pre-Construction Surveys

Kojiro SAWAKI, Kentaro HAYAKAWA, Masahiro KURODAI and Seiji TAJIMA

One of the new measurement methods uses a land mobile laser scanner equipped with a 3D laser on a hand cart. Using this device, we measured the roads, corridors, and outdoor test sites in the Technical Research Institute as work areas that appeared in road works, tunnel works (small sections), and earthworks, and acquired 3D point cloud data. The accuracy was verified from the acquired data, and it was examined whether the ground mobile-mounted LS can be applied to the measurement of the finished type. As a result, it was possible to clarify items that satisfy the management standards of the Ministry of Land, Infrastructure, Transport and Tourism, and applicability of the ground mobile unit LS to each type of work could be confirmed. In addition, we could obtain future issues for improving measurement accuracy.
