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Permanent Monitoring Solution based on 3D Terrestrial Laser Scanner

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RIEGL Laser Measurement Systems GmbH produces different laser scanners for a very wide range of applications. The technology is based on the time-of-flight principle and thus allows surfaces to be measured over a large distance in a very short time.

These devices are designed for use under difficult external conditions. Therefore terrestrial laser scanners have been used for many years for monitoring purposes e.g. landslides, erosion, avalanches etc. The effort to process the data and make it usable for further steps was left to the individual user.

We at RIEGL have taken on the topic and developed a solution how to achieve the mentioned results quickly and above all reliably.

In combination with increasingly efficient processors and communication technologies, it is possible to make the results of measurements, differences to previous measurements, available almost in real time for further interpretation via the Internet.

The current terrestrial laser scanners allow apps to be run directly on board. With the existing interfaces, the sensor can also be connected with the RIEGL V-Line CB23, a communication box, which ensures smooth 24/7 operation with SMS notification in case of a system failure and full remote operation of the system via LTE mobile network. The complete package, represents a very efficient monitoring solution for measuring surfaces, even at long distances and under demanding environmental conditions.