Real-time Real Fast Deformation Analysis

Leica Geosystems has added a software module to its GeoMoS Monitoring Software. Leica GeoMoS HiSpeed is a professional software tool for deformation analysis of high-frequency data. Together with a high-precision tilt sensor, it provides fast and easy-to-understand interpretations of GNSS results for a broad range of monitoring applications.

Leica GeoMoS HiSpeed software detects, analyses, and visualises movements and deformations of bridges, high-rise buildings, dams, and oilrigs or other structures that require reliable deformation monitoring. As a standalone program or seamlessly integrated into Leica GeoMoS, the software allows management of high data volumes. Permanent, 24/7 control and insight into the health of a monitored object is supported by a specially developed software module based on predefined limits and tolerances.

Leica GeoMoS HiSpeed processes tilt data from Leica Nivel200 sensors and high-frequency data from Leica GNSS receivers or any third-party sensor that is capable of transmitting NMEA data.

Leica GeoMoS HiSpeed data can be processed in real-time or post-processed when current data needs to be compared with previously captured data. The smoothing functionality allows graphs of the data to be smoothed based on a median filter. Furthermore, tolerance limits can be displayed in the timeline graph. If a critical level is reached a message (e-mail, text message, GSM, etc.) is sent to the responsible persons.

GeoMoS HiSpeed offers a free version (freeware) for the online connection and data acquisition of Nivel200 sensors. The inclination and temperature data of the connected sensors is displayed in a real-time graph. The freeware can be downloaded from the Leica Geosystems web site.