

# Enhanced Graphical Presentation of Railway Profiles



Leica Geosystems, Switzerland, has released an update of Leica GeoMoS Web, providing an advanced graphical representation of monitoring data along transversal and longitudinal profiles such as railways, thus further enhancing the visualisation and analysis capabilities.

Product manager Michael Rutschmann says that the newly implemented features, especially the graphical presentation of axis related objects, will further enhance the usability of this new release. As Leica GeoMoS Web is Software as a Service (SaaS), existing and new customers will benefit immediately from all the new features.

Profile graphs are a graphical representation of the monitoring data along the transversal and longitudinal profiles. They display numerical values based on user specified profiles, available on the site and the overview level. Elongated objects such as roads, train tracks, river banks, bridges, dams, etc. are common monitoring objects and by creating longitudinal and/or transversal profiles, users now have a more compact overview of the deformation of the points related to such objects. In particular, this graph type is often required by railway companies to display the change in torsion along a railway axis.

Often, monitoring projects start when the structure already has some deformation against the design. Further deformation changes can still improve the situation, if the object (e.g. railway) is moved into a different shape that better fits the original design. The new null bar graphs represent the monitoring data in the form of vertical bars with lengths proportional to the measured data. They complement the already existing bar graph by providing three bars for each point showing the null, first and last measurements in the selected time frame. The null epoch is visualised as the actual deformation of the object against the design.

With the updated version of GeoMoS Web it is now possible to add overview and site images, which users can upload to the dashboard. These images can also be added to the report.

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<https://www.gim-international.com/content/article/enhanced-graphical-presentation-of-railway-profiles>

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