

Slovakia

Providing rapid, high-resolution data for users across Slovakia

“The open provision of very accurate Airborne Laser Scanning products has triggered a wave of innovation, accelerated research and development; the possibilities for their use seem unlimited.”

Ján Mrva
President, Geodesy,
Cartography and Cadastre Authority
of the Slovak Republic (UGKK SR)

High-resolution data collected using a rapid and highly accurate measurement method is being used by a wider range of organisations across Slovakia.

The Geodesy, Cartography and Cadastre Authority is providing the Airborne Laser Scanning (ALS) data free of charge. The high quality and up to date products – Digital Elevation Model, Digital Surface Model and Classified Point Cloud – have brought many benefits to sectors which deal with environmental monitoring, emergency planning, archaeology, and climate change.



Mining activities - monitoring of cracks



Newly discovered fortified settlement of Pajštún Castle

Zdroj produktov LLS: ÚGKK, Vizualizácie: TL (STU BA), JZ (PÚ SR)

Benefits

- Enables the creation of geological maps for inspecting polluted areas and environmental burdens, emergency landslides and other geodynamic phenomena by the State Geological Institute.
- Enables the Mountain Rescue Service to analyse avalanche situation as well as field orientation and facilitating search work.
- Enables the observation of slope deformations, landslides, gravitational slips and monitoring of cracks and abysses due to mining activities.
- Enables hydrodynamic modelling on streams, precipitation run-off models of river basins and creating of flood risk maps for water management.
- Identifies and interprets new archaeological sites and facilitates research into the historical structures of the agricultural landscape.
- Detects greenery, enables analysis of brown bear hibernation sites in relation to the inclination of the relief, and mapping of potential mosquito hatcheries to protect nature.
- Enables municipalities to model solar, noise spread modelling, prepare zoning plans and orienteering maps.