

## The evolution and prospect of digital management in slopeland

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Taipei basin is a populated urban region. To ensure the safety of life and property of citizens, the management of the slopeland is one of the most important works of disaster prevention. In the past few years, Geotechnical Engineering Office of Taipei City Government (GEO) had started investigating, patrolling, and monitoring 396 landslide geologically sensitive areas and 34,356 man-made slopes. Also, GEO had devised an information system for data entry, storage and analysis.

GEO had built automatic system for monitoring, feedback and early warning notification through monitored data of

slopeland. The automatic system precisely captures the current slope situation, and provides instant references for slopeland improvements, which effectively boosts the ability of disaster prevention and mitigation. Besides, GEO had used the unmanned aerial vehicles in creating digital terrain model at different periods to record and compare the terrain differences, a great tool for landslide potential analysis and improvement design. Moreover, the use of combination of the digital terrain models and post-disaster images is really a powerful support for emergency response plan and decision making