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## Establishment of Digital mapping for Slope Maintenance

Wooseok Kim<sup>1</sup>, Kiyoung Koo<sup>2</sup>, Oil Kwon<sup>1</sup>, and Jinhwan Kim<sup>1</sup>

<sup>1</sup>Korea Institute of Civil Engineering and Building Technology, Goyang-si, Gyeonggi-do, Korea, Republic of (kws@kict.re.kr)

<sup>2</sup>College of Engineering, Mathematics and Physical Sciences, University of Exeter

In Korea, basic safety management and maintenance are performed with budget support and done systematically in the case of common general national road, highway and railroad slopes. However, in the case of local governments with a low fiscal self-reliance ratio, even the current state of slopes is not assessed. With this in mind, research development for the maintenance of various slopes to enable analysis within a budget and management automation is required.

This research aims to build an digital mapping production platform to be used as a part of the slope investigation and maintenance on slopes affecting national highways. Digital mapping produced through this platform are used as input data for the automatic identification of slope weak points. For this, an analysis was performed for the adaptability of the drawing products using Open-source photogrammetry S/W which is known to have excellent performance. The performance of this S/W was verified using LIDAR data for small size bedrock, and its adaptability was verified using measured data for actual slopes.

The utilization of the results of this research are adjudged and made available for actual slope image data. The results also are available for the foundation of utilizing operation guidelines for supporting using multiple resolutions (Project Number: 20SCIP-C151408-02).