Risk Evaluation of Debris Flow using Digital Terrain Model

Osamu NUNOKAWA Naoyuki OTA Satoshi ISHIKAWA

In order to ensure the safe train operation, it is necessary to identify beforehand the area along the railways where the risk of various kinds of slope collapse is high at the time of rainfall. The movement of the water in a slope at the rainfall time has a big influence on various kinds of slope collapse. We have calculated the movement of the water in a slope in consideration of three-dimensional geographical feature, and developed the calculation method of risk evaluation of debris flow based on this result. In this paper, we described the concept of the developed method, and a calculation example using this model.