Research about Detecting Method of Vulnerable Spots Concerning Snowmelt Disasters

Tsuyoshi TAKAYANAGI      Osamu NUNOKAWA

In snowy areas, slope failure triggered by snowmelt water (hereinafter a snowmelt disaster) occasionally occurs. In this paper, we analyzed 45 cases of snowmelt disasters that occurred along railway slopes. As a detecting method of the vulnerable spots concerning snowmelt disasters, we focus on the risk assessment criteria of rainfall for the slope failure used in Japanese railway and compared the evaluation score of that criteria in case of snowmelt disasters with ones in case of no-disaster. The result of the comparison shows that the evaluation scores of disaster cases tend to be lower and this confirms that the proposed detecting method of vulnerable spots can be effective.