

A Method for Precaution against Avalanches Based on Stability Indices of the Slope Snow Cover

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In order to ensure the safety of train operation in snowy areas, it is essential to establish a method for precaution against avalanches based on stability indices. In this study, we examined the judgment methods for monitoring slopes and patrol period for avalanche hazards. In the following two steps: First, we extracted monitoring slopes, based on the elevation angle, slope angle and vegetation. Secondly, we determined patrol period, based on stability of snow estimated by air temperature and precipitation. The proposed methods are possible to evaluate monitoring slopes and patrol period, irrespective of areas.