Evaluation of the potential risk of a sediment disaster at Kiyomizu-dera Temple area

*MASAMITSU FUJIMOTO¹, KENICHIROU TODA², YOSHIFUMI SATOFUKA¹

1. RITSUMEIKANN UNIVERSITY, 2. Nagano Prefecture Forestry Research Center

To evaluate the potential risk of sediment disasters at Kiyomizu-dera Temple, we investigated the spatial distribution of springs based on a topographical analysis using a Curvature and Slope (CS) topographical map. The study area was divided into two areas, erosion and non-erosion, divided by a fault line. We observed springs with small slope collapse at numerous points in the erosion area. Our results suggest deep infiltration of groundwater in the non-erosion area, and exfiltration of groundwater in the erosion area, leading to the occurrence of slope collapse.

Keywords: slope failure, sediment disaster, spring, CS (Curvature and Slope) topographical map