Analysis of slope failures occuring after the peak of rainfall

*Yamato SUZUKI¹, Joko KAMIYAMA¹, Hikaru TODATE¹, Tomoyuki NORO¹, Kousuke YOSHINO², Reiko AKIYAMA², Masayuki MATSUDA²

1. National Institute for Land and Infrastructure Management Ministry of Land, Infrastructure and Transport, 2. Asia Air Survey Co., Ltd.

Slope failure may occur after the peak of rainfall, such as after the rainfall has stopped or during a lull in the rain. As a recent example, a slope failure occurred at Rausu Town, Hokkaido, in August 2016 more than 30 hours after the rain stopped. Such time zones may overlap with the time when residents return to their homes from shelters or when staff from fire station, police, MLIT, etc. are working on the site immediately after occurrence of the disaster. Thus, timely and appropriate watching and response are required in order to prevent secondary disasters even after the peak of rainfall. Therefore, in order to clarify actual status of such slope failures, we analyzed actual status of slope failures that occurred after the peak of rainfall, including forms of phenomena and characteristics, etc. We also studied the factors and mechanism of slope failures that occur after the peak of rainfall.

Keywords: slope failure, delayed slope failure, prevent secondary disasters