

Japan Geoscience Union Meeting 2011

(May 22-27 2011 at Makuhari, Chiba, Japan)

©2011. Japan Geoscience Union. All Rights Reserved.



HDS027-P15

Room:Convention Hall

Time:May 24 16:15-18:45

Characteristics of landslide hazard related to knick line distribution and premonitory phenomena of landslide occurrence

Shinjuro Komata^{1*}

¹Nippon Koei co.,ltd

Characteristics of landslide hazard related to knick line distribution and premonitory phenomena of landslide occurrence

Shinjuro KOMATA
Nippon Koei co., ltd.

Japanese archipelago situates in plates conjunction of subduction zone, which has many earthquakes and volcanic activities. Mountains also continue to upheaval under the stress space in tectonically active during quaternary. Moreover under the humid condition, rivers erode slopes currently to occur strains and micro failures in slope rock mass and form eroded geomorphology such as knick lines. Slope rock mass become fragile under long term weathering. These geologic, geomorphologic and humid conditions of Japan affect to erosion in low mountainous area in middle basin, and occurrences of mass movement such as landslide and failure.

This paper describes phenomena based on practices, such as the erosion process related to the increased flow after river capture of neighbor basin, the occurrence of rock slope deformation prior to the occurrence of landslides, and the mechanisms of landslides.

Keywords: Knick line, River capture, Mass movement, Loosen rock slope, Landslide