

Slope failures caused by heavy rainfall associated with Typhoon 0410 in Naka-gawa Area, Tokushima Prefecture

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Many slope failures and debris flows triggered by heavy rainfall associated with Typhoon 0410 occurred in Naka-gawa area, Tokushima, Japan on July 31st to August 1st, 2004. Many slope failures occurred at mountain slopes consists of accretionary complex sedimentary and volcanic rocks such as greenstone and phyllite. Greenstone consist of mountain slopes are weathered to blocky materials. This factor seems to be the major cause of slope failures of weathered greenstone. Deformations of rocks by gravitational mass rock creep are observed in source area of slope failures at weathered phyllite. Mass rock creep makes various kinds of non-tectonic structures, and degradates mountain rock slopes to make favorable conditions for slope failures caused by heavy rainfall disaster.