

Features and distribution of landslides triggered by heavy rainfall in the northern part of Kyushu in July 2012

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Many landslides occurred in the northern part of Kyushu island, following the heavy rainfall in July 2012. In this research, we aim to define the features and distribution of landslides triggered by the heavy rain. Moreover, we also contrived new application of the Landslide map published by NIED, by comparing features and distribution of landslides and the Landslide map.

Many landslide occurred in Aso area, Kumamoto Prefecture and Hoshino area, Fukuoka Prefecture which observed the total rainfall over 800 mm. Almost landslides occurred in Aso area were shallow landslide with less than 1m of thicknesses. On the other hand, in the Hoshino area, the landslide to which not less than 5 m in thickness and width exceed 100 m occurred although there is little number compared with Aso area. As a result of comparing the distribution and the features of landslide in both areas, it was revealed that the landslide occurred in both area differs in the scale and the morphology. The causes are considered to be geological units and the density of landslide topography. Therefore we can suppose the landslide susceptibility by combining the geological units and the Landslide map.

Keywords: Landslide, heavy rainfall in the northern part of Kyushu in July 2012, the Landslide map