

## Rockslide and debris flow at Mochiyamadani, Miyagawa River, Mie Prefecture induced by heavy rain of the Typhoon No.1112

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Typhoon Talas (No.1112) in September, 2011 brought heavy rain into many landslides mainly to Kii Peninsula. A case of the rockslide and debris flow at Mochiyamadani, Miyagawa River is described.

The rockslide occurred near the ridge, two kilometers upper course from the confluence of the Miyagawa main stream. Volume of the landslide is estimated at 200 thousand cubic meters, which is relatively small in the landslides collapsed in this rainfall. Geology of the source area is weathered sandstone which belongs to Chichibu belt. While the slope is dip slope, the structure contributes little to the landslide. It is characteristic that the debris flow involved the landslide dam deposit formed in 2004 Typhoon Meari (No.0419). Volume of transported sediment increased at least 10 thousand cubic meters by this dragging. Debris flowed down with destroying check dam and bridge along the watercourse, reached the confluence, and dammed up the Miyagawa main stream. Estimated flow velocity at the upper course of the confluence is 18 m/s, based on the measurement of superelevation.

Keywords: Typhoon No.1112, Miyagawa, sediment removal, landslide dam