

## **Characteristics of flood disaster and evacuation activities of residents at Amami Oshima Island, Japan**

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**Abstract** This paper describes the characteristics of the flood disaster and the evacuation activities of residents in the Sumiyo River basin in Amami Oshima Island, Kagoshima Prefecture, Japan, on 20 October 2010. A record-breaking rainfall amount was observed at the raingauge of the Sumiyo sub-office located in the southern part of Amami Oshima Island. The hourly precipitation exceeded 130 mm for the time period between 11:00 and 13:00 h on 20 October 2011. This torrential rain caused disasters such as flood inundation, landslides and debris flows all over Amami Oshima Island. There were three casualties, who were elderly people, in this heavy rainfall. A hearing investigation was carried out in the Sumiyo River basin in order to find out the reasons why the number of victims was low despite the record torrential rain. According to the hearing investigation, the local community worked so effectively that residents helped each other and urged themselves to evacuate in its early stage.

**Key words** Amami Oshima Island, Japan; Sumiyo River, Japan; torrential rainfall; flood disaster; evacuation; local community