Reconstruction of the building damages caused by the Typhoon Kathleen and analyses of their land conditions at the southern foot of the Akagi Volcano using U.S. military aerial photographs

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We reconstructed building damages caused by the Typhoon Kathleen and analyses of their land conditions at the southern foot of the Akagi Volcano using U.S. military aerial photographs and GIS. Flood inundation area were identified based on the building damages and flood deposits by using U.S. military aerial photos. Building damages due to the flood concentrated in the former river channel and valley bottom plain. Several schools (25%) in the study area located in the inundation area of the Typhoon Kathleen.

Keywords: Typhoon Kathleen, flood risk assessment, building damage, U.S. military aerial photographs, southern foot of the Akagi Volcano