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HGM22-P05 Room:Poster Time:April 30 18:15-19:30

Timing of sediment discharge events on a welded tuff slope in Chugoku Mountains, Japan

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Many slope disasters were occurred by a heavy rain on July 28, 2013 in Yamaguchi and Shimane Prefectures. In particular, a number of shallow slope failures and debris flows occurred on mountain slopes underlain by rhyolite-dacite welded tuff in the Tsuwano Town, Shimane Prefecture and the adjacent Ato District, Yamaguchi City. The debris flows eroded the sidewalls and the riverbed of the flow channel, and outcrops of deposits accumulated by sediment discharge events older than 2013 appeared intermittently. From five outcrops along two channels, we collected 11 chip samples of the woods that may have buried and died at the time of the sedimentation. We performed 14C dating of them, and the calendar-calibrated radiocarbon ages showed a 0.6 - 52 Ka BP. Sedimentary structures suggest that these ages correspond to the occurrence time of debris flows and slope failures in the past.

Keywords: 14C dating, debris flow, slope failure, soil slip