

JMA intensity distribution of the 1943 Tottori earthquake derived from immediately conducted questionnaire survey

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Questionnaire surveys were conducted by university of Tokyo immediately after five disastrous earthquakes in 1940s to evaluate modified Mercalli (MM) intensity scale. The raw data of the surveys had been stored long time without following analyses. We have studied explanation of each item in the Questionnaire sheet and developed the relational expressions between MM and JMA intensity scales. Finally, we derived JMA intensities at 1935 sites in southwest Japan, and estimated JMA intensity distributions with almost same resolution as modern intensity observation network. The distribution map suggests radiation pattern of strike slip fault and effect of surface geology. The result is worth of basic information for earthquake disaster prevention.

Keywords: the 1943 Tottori earthquake, questionnaire survey, JMA intensity scale, modified Mercalli scale