

Validity of the revised questionnaire seismic intensity method for the 2003 Tokachi-oki earthquake

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The validity of the revised questionnaire seismic intensity (RQSI) method of Fukuzumi et al. (2002) is examined using data for the 2003 Tokachi-oki earthquake. The new seismic intensity coefficient employed in the RQSI method was defined using data for the 1995 Hyogo-ken Nanbu (Kobe), 2000 Western Tottori prefecture and 2001 Geiyo earthquakes, and is shown in this study to additionally provide a better correlation between the questionnaire-based and measured seismic intensities for the 2003 Tokachi-oki earthquake compared to the previous methods. This result demonstrates that the RQSI method and new seismic intensity coefficient are valid for interplate earthquakes in addition to the intraplate and intraslab events on which it was defined.