

A differentiated statistic of building damages in a macroseismic analysis after the Turkish earthquakes in the year of 1999

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ABSTRACT

The engineers of the German TaskForce carried out a macroseismic study after the Izmit (Kocaeli) earthquake of August 17 and the Düsze earthquake of November 17, 1999. The criteria of the study in different locations was the degree of building damages according the EMS-98 and the properties of the building like the kind of the structure, the used materials and the dimensioning of the houses. Furthermore, a quarter of the City Düsze was analysed, which was affected by two strong earthquake, the progression of the damage could be observed.

In the end, the results of the damage statistic, the assessment of the intensity and a estimation of the natural frequency of groups of buildings was compared with the results of a simple analysis of strong motion records.