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INTENSITY SITE EFFECTS OF SELECTED EVENTS OF THE CENTRAL AND WESTERN GREECE AND EARTHQUAKE HAZARD ASSESSMENT

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The macroseismic observations of 17 strong earthquakes occurred in the Central and Western Greece in the period 1973-2001 were analyzed. Macroseismic intensities of every earthquake were processed by a numerical smoothing algorithm that allowed leveled isoseismal maps to be drawn. Shapes of individual isoseismals on these maps are often related to geological phenomena and/or tectonic zones of the area. Differences between originally observed and numerically smoothed intensities (residuals) were correlated to geological site conditions and relations for intensity site corrections were evaluated. Preliminary earthquake hazard calculations for a part of the Western Greece were accomplished in which evaluated corrections of the site effects were considered. The presented investigations were realized in the frame of Czech-Greek R+T cooperation in the years 2000 - 2001.