



## **RISMUR II: New seismic hazard and risk study in Murcia Region after the Lorca Earthquake, 2011**

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The Murcia Region, is one of the highest seismic activity of Spain, located SE Iberian Peninsula. A system of active faults are included in the región, where the most recent damaging earthquakes took place in our country: 1999, 2002, 2005 and 2011. The last one occurred in Lorca, causing 9 deaths and notably material losses, including the artistic stock.

The seismic emergency plan of the Murcia Region was developed in 2006, based of the results of the risk Project RISMUR I, which among other conclusions pointed out Lorca as one of the municipalities with highest risk in the province,.

After the Lorca earthquake in 2011, a revision of the previous study has been developed through the Project RISMUR II, including data of this earthquake, as well as updated Data Base of: seismicity, active faults, strong motion records, cadastre, vulnerability, etc. In addition, the new study includes, some methodology innovations: modelization of faults as independent units for hazard assessment, analytic methods for risk estimations using data of the earthquake for calibration of capacity and fragility curves.

In this work the results of RISMUR II are presented, which are compared with those reached in RISMUR I. The main conclusions are: Increasing of the hazard along the central system fault SW-NE (Alhama de Murcia, Totana and Carracoy), which involve highest expected damages in the nearest populations to these faults: Lorca, Totana, Alcantarilla and Murcia.