

عنوان مقاله:

DEAGGREGATION IN MAGNITUDE, DISTANCE AND AZIMUTH IN THE MAIN CITIES OF NORTHERN ALGERIA

محل انتشار:

ششمین کنفرانس بین المللی زلزله شناسی و مهندسی زلزله (سال: 1390)

تعداد صفحات اصل مقاله: 8

نویسندگان:

m Hamdache - *Departement Études et Surveillance Sismique, CRAAG, Algiers, Algeria*

,J.A Peláez - *Department of Physics, University of Jaén, Spain*

a Talbi - *Departement Études et Surveillance Sismique, CRAAG, Algiers, Algeria*

m Mobarki - *Departement Études et Surveillance Sismique, CRAAG, Algiers, Algeria*

خلاصه مقاله:

The present study deals with the ground motion deaggregation in the most important cities with the higher seismic hazard in the northern Algeria. Deaggregation was carried out based on obtained seismic hazard values in the studied region. Namely, taking into account peak ground accelerations with 10% probability of exceedance in 50 years. The deaggregation has been performed in two steps. First, in terms of magnitude and distance, secondly in terms of azimuth. The aim of both steps is the determination of the relative contribution of different sources, to the seismic hazard in a given location. The lack of seismotectonic data in the studied region does not allow us to derive the contribution of specific active faults. For the same reason, the characteristic earthquake model is not considered. Mean while, the spatially-smoothed seismicity approach used in this study, allows us to evaluate the contribution of different focus to seismic hazard at each location. As a results, the so-called control earthquake is estimated, that is, the most contributing earthquake to seismic hazard in a certain location from a probabilistic point of view. The analysis is performed for all main cities in northern Algeria, corresponding to the so-called 2D hazard disaggregation technique, in particular it allows us to derive the mean and modal scenario at each site. The obtained results reveal that in some cities the hazard is completely controlled by close sources. It is the case for example in Algiers, Oran Annaba, where the dominant earthquake is produced less than 50 km away from the site., and could reaches eventually 130 and 300 km as it is the case in Tebessa, Biskra and Laghouat respectively. The obtained results reveal also the existence of cases where sources contribute less or more to the seismic hazard , as for example in Batna, Djelfa, Bouira, Guelma and Jijel

کلمات کلیدی:

Probabilistic Seismic Hazard, Deaggregation, Probabilistic Seismic Hazard Curve, Stochastic Simulation Of
Accelograms, Algeria

لینک ثابت مقاله در پایگاه سیویلیکا:

<https://civilica.com/doc/115464>



