the Island of Kythera. Minor damage were also observed at the Prefecture of Chania (Creta Is.). This earthquake was the first strong intermediate depth earthquake in the southern Aegean area with epicentre located close to the August 11, 1993 earthquake (M=7.2) epicentre. In the first part of the present paper is the analysis of the seismological data. Then the analysis of the available accelerometric data is shown. The stations used are distributed at epicentral distances 42-500 km and the recorded PGA values had values between 130-0.5mg. The results on the attenuation of the peak ground acceleration of this earthquake are compared with previous published empirical relations and discussed. The acceleration spectra of the strongest recorded acceleration time histories are compared with previous strong earthquakes in Greece and the result are discussed. An attempt is made for the compilation of the macroseismic field which is compared with the one of the 1993 earthquake.

A SEISMIC RISK ANALYSIS IN THE MURCIA REGION (SE SPAIN). RISMRU PROJECT - ID 1754

B. Benito, Universidad Politécnica de Madrid, Spain
P. Murphy, Architect COAM 12714, Spain
M. Táge, Universidad Complutense de Madrid, Spain
J. J. Martínez-Díaz, Universidad Complutense de Madrid, Spain
M. E. Januza Peña, Universidad Politécnica de Madrid, Spain
M. J. García-Rodríguez, Universidad Politécnica de Madrid, Spain
J. M. Gaspar-Escribano, Universidad Politécnica de Madrid, Spain
J. García-Mayordomo, Universidad Politécnica de Madrid, Spain

The Murcia Region is one of the most active zones in Spain, where three recent earthquakes occurred recently. In spite of their low magnitudes these earthquakes caused important damages, reaching EMS89 intensities VI to VII. The RISMRU project aims at providing a general picture of the seismic risk, allowing the identification of zones requiring a more detailed analysis where prevention plans should be priorized. A multidisciplinary study has been carried out, involving the main aspects of the risk problem. In the first phase, a general study at regional scale has been carried out, starting with the seismic hazard assessment following the PSHA methodology, with a logic tree composed by two nodes: zonation and attenuation models. In a first step, the motion is predicted in generic rock sites. Additionally, a regional geotechnical study and a classification of eight types of soils have been proposed, with the corresponding amplification factors representing ground response to seismic shaking. The combination of the previous maps and factors, gives a new hazard map that includes local effects. In parallel, a vulnerability assessment of the building stock that distinguishes between rural and urban environments is carried out, based fundamentally on the construction age. In the definition of the seismic risk degrees and damages scenarios. Taking into account the expected ground motions and building vulnerabilities, the distribution of expected damage is estimated by the application of probability damage matrices. Several damage indexes are defined, and relative and total damage estimates at each location are derived. With these data, a suite of maps representing seismic risk in terms of damage parameters for the entire Region have been obtained. The interpretation of the different maps allow us identify the locations with higher expected damage, where specific hazard and damages scenarios must be carried out in a second phase of the project.

TIME-DEPENDENT SEISMIC HAZARD ASSESSMENT OF NORTHERN ITALY - ID 1857

V. Montaldo, Istituto Nazionale di Geofisica e Vulcanologia, Italy
F. Galadini, Istituto Nazionale di Geofisica e Vulcanologia, Italy

The seismic hazard of North-Eastern Italy has been assessed using a probabilistic, hybrid approach where the occurrence of large earthquakes follows a renewal model while the smaller events are stationary in time. The source model adopted in this study includes seismogenic sources capable of generating strong earthquakes basically related to thrust faulting. The geometry of the sources has been defined through a multi-stepped procedure in which a preliminary framework of seismogenic sources potentially responsible for destructive earthquakes was defined based on the available surficial/sub-surficial data. Subsequently, the different seismogenic sources were better constrained on the basis of seismological information. Hypotheses have been made for the sources which generated earthquakes in the magnitude range 5.5-6.0, based on the comparison between the damage distribution and the structural framework related to the present tectonic regime. The result of this procedure are ten main seismogenic sources potentially responsible for earthquakes with M≥6, and five minor sources which may be responsible for events with M between 5 and 6. These seismogenic sources are assumed to have a characteristic behaviour in that the magnitude distribution is a truncated normal, while the occurrence of the characteristic events in time is represented by a lognormal distribution. The parameters controlling the distribution are: the time elapsed since the previous event, the slip rate and the characteristic magnitude. Two background areas accounting for small events are treated in a conventional probabilistic approach, i.e. a Gutenberg-Richter relation models the frequency of the earthquakes under the hypothesis stationary seismicity. The results of the analysis are maps of peak ground acceleration for probability of exceedance of 1 and 10% in the next 50 years. These maps are compared with available poissonian maps and deaggregation is performed at selected localities to show the different contribution of the seismic sources to the overall hazard.

CONTRIBUTION TO SEISMIC HAZARD EVALUATION IN NORTHERN ALGERIA - ID 1106

A. Abdellahakia, CRAAG, Algeria

The Tellian Atlas, northern part of Algeria is known as one of the most seismic active area in the Mediterranean basin. Many have been reported to have occurred in different seismogenic areas, such as Mascara, Chlef basin (former El Amam), Mirtida basin (Algerian vicinity). On the basis of the available seismic data we have produced a map of maximum observed intensities which gives an overview of the hazard in the northern part of Algeria. We have also compiled the tectonic data from different geological studies to draw the tectonic map of northern Algeria. Intensity attenuation laws have been also established for specific regions where strong earthquakes occurred.

THE LAALAM (BEJAIA, NORTHEAST ALGERIA) MODERATE EARTHQUAKE OF MARCH 20TH, 2006, ML5.8 – ID 1968

H. Beldjoudi, CRAAG, Algeria
A. Kherroubi, CRAAG, Algeria
A. Guenache, CRAAG, Algeria
F. Semmane, CRAAG, Algeria
A. Haned, CRAAG, Algeria
A. Yelles, CRAAG, Algeria
H. Djellit, CRAAG, Algeria
S. A. Haned, CRAAG, Algeria
A. Deramchi, CRAAG, Algeria

On March 20th, 2006 at 19h44mn, a moderate earthquake of ML5.8 hit the region of Laalam (Bejaia, Northeast Algeria). This event is the second moderate one which happened in the region after the Beni Quariane earthquake of November 10th,2000 (ML5.4). The earthquake occurred in a region which is repeatedly shaken by the Kherrata fault. The earthquake caused the death of 4 persons and the injuries of 175 persons. The epicenter was located at 36.52N 5.40E, close to the village of Laalam (Bejaia). In this region, between Kherrata and Bejaia, several buildings and private houses suffered from the event, some of them collapsed totally. The earthquake with an intensity of VII was largely felt by the population of the eastern region of Algeria. In the epicentral area, some minor breaks and rockfalls have been observed. According to the local mechanism solution provided by the NEIC and the ETH seismological centers, the earthquake is associated with a sinistral fault with a NW-SE orientation. Few hours after the main shock, a seismological network of ten portable stations was deployed in the region to complete the coverage.