



## **The uncertainties in the final results on macroseismic intensities for October 27, 2004 earthquake (M=6) from Vrancea seismogenic zone (Romania).**

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Vrancea seismogenic zone (VSZ) is situated on Romanian territory, in the region of the bow of Oriental Carpathians or more precise where the Carpathian arc bends, in a well-confined focal volume. The Vrancea seismogenic zone (VSZ) is one of the most conspicuous earthquake-prone zones and extremely peculiar seismic source worldwide, as well as the Romania's main seismic hazard source and consequently focused the attention of numerous seismologists (Marza et al., 2002). The Vrancea seismogenic zone (VSZ) is centred upon the triple junction of three tectonic units: the East - European plate, the Inter-Alpine subplate and the Moesian subplate. This situation, is interesting as a particular seismotectonic process in itself and leads to the generation of crustal and subcrustal or intermediate depth (the 60 to 200 km. deep) earthquakes. During the last sixty years, Romania was struck by two destructive intermediate earthquakes occurred in the Vrancea region on November 10, 1940 (MGR=7.4) and on March 4, 1977 (MGR=7.2). These was among the most damaging earthquakes in Romania originated in the Vrancea region. On October 27, 2004, a moderate size earthquake of magnitude  $M_w = 6.0$ , occurred in the north-eastern part of the Vrancea seismogenic zone, at 100 km depth. The intensity in epicenter area was VII. The quake was felt in several cities located NE and S from epicenter (Iasi, Bacau, Focsani, Bucharest) and also felt in the Republic of Moldova, Ukraine, Bulgaria and Turkey.