



The revision of the macroseismic maps for the Vrancea (Romania) subcrustal earthquakes, occurred on the 30th and 31st of May 1990

A. Pantea and A. Constantin

National Institute for Earth Physics, Seismological Dep, Bucharest, Romania (pantea@infp.ro)

As a result of intensifying and deepening, during the latest decades, of the research regarding the seismicity of the Romanian territory, we have obtained a relatively rich seismological reevaluated database, of historical and instrumental nature. In this aspect, there are especially pointed out, by completeness and veracity, the data taken out from the research made over the Vrancea subcrustal earthquakes occurred during the 20th century. This fact allowed the recent revision, within some national projects, of the old macroseismic maps made for the earthquakes occurred on November 10, 1940, March 4, 1977 and August 30, 1986.

The revision of the macroseismic maps was also imposed by the appearance of undermeaningful opinion of the seismologists regarding the veracity of the old macroseismic maps, opinion that appeared as a result of the huge loses of human lives and materials caused by the earthquake occurred on the 4th of March, 1977.

To revise the macroseismic maps, it was necessary the reconsideration (reevaluation) of the primary seismological data (macroseismic questionnaires), together with the results of the reinterpretation of the reports containing the expertize of the damages registered and evaluated in site by the seismologists and the projectant builders. The revision of the macroseismic maps was also imposed by the requests of the development and modernization of the construction and material industry, so that these research are also in accordance with the actual international orientations characterized by reevaluation, harmonization and unification of the research of the national and regional macroseismic maps.

The main objective of this study is represented by the revision of the macroseismic maps for the last significant subcrustal earthquakes occurred in the 20th century on the 30th and 31st of May, 1990.