

### Division II – Seismic observation network



# December 24<sup>th</sup>, 2003 Earthquake Report

by

A. Aldea

S. Demetriu

E. Albota

O. Bogdan

L. Sonia



#### 1. General elements

Date & time	December 24 <sup>th</sup> , 2003; 13:44:59.00 UTC
Seismic source	Vrancea subcrustal
Magnitude	Mw=3.8 (moment magnitude)
Location	45.06 °N; 26.08 °E
Depth	86 km

Seismic event characteristics were compiled from *EMSC* (<u>www.emsc-csem.org</u>), *USGS* (<u>http://earthquake.usgs.gov/eqcenter/</u>) and *NIEP* (<u>http://www.infp.ro/</u>) websites

The earthquake was recorded by 1 *NCSRR* seismic station, in an instrumented building located in Bucharest.

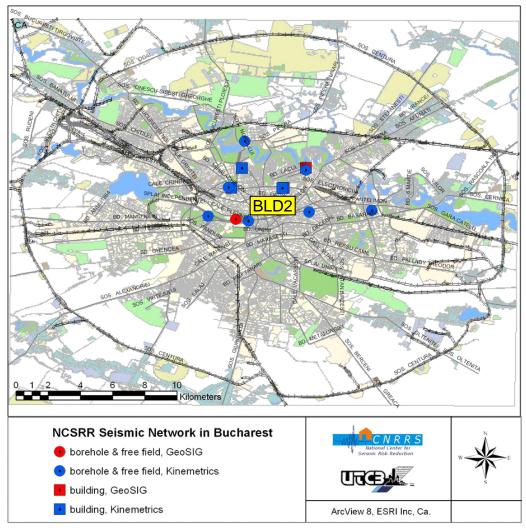


Figure 1. Bucharest - location of *NCSRR* station BLD2 with records during December 24<sup>th</sup>, 2003 Vrancea subcrustal earthquake



## 2. Earthquake record in NCSRR network

Table 1. Peak acceleration at *NCSRR* building seismic station BLD2 during December 24<sup>th</sup>, 2003 Vrancea subcrustal earthquake (L - longitudinal building direction, T - transversal building direction)

	Peak Acceleration (cm/s <sup>2</sup> )		
Station	BLD2		
Location / Comp.	Т	L	V
6 <sup>th</sup> floor	0.9	2.9	1.0
3 <sup>rd</sup> floor	0.3	1.1	0.7
S (Basement)	0.5	1.7	0.5



## 3. Example of NCSRR network recorded accelerograms

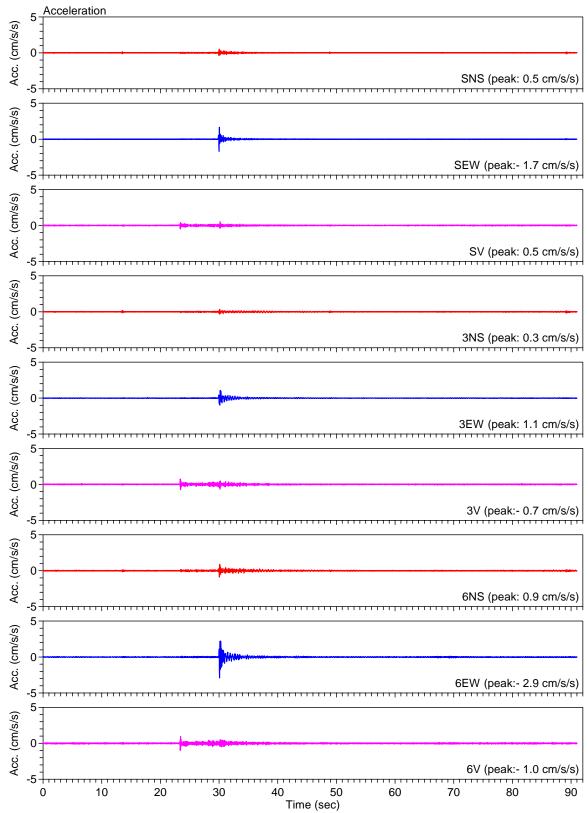


Figure 2. Accelerograms recorded at BLD2 building seismic station during December 24<sup>th</sup>, 2003 Vrancea subcrustal earthquake (*Mw*=3.8) (NS = Transversal, EW = Longitudinal)



#### 4. Acknowledgements

Acknowledgements to *Japan International Cooperation Agency JICA* for donation of seismic instrumentation, to *Ministry of Regional Development and Housing MDRL* for the budget for developing the seismic network and for maintenance, to all institutions that are kindly hosting *NCSRR* seismic stations, to all persons that supported the installation of the network, and to former *NCSRR* Division's II staff involved in earthquake records retrieval and processing. Thanks to the staff of *Building Research Institute, Tsukuba*, for their support related to *NCSRR* network.