Geophysical Research Abstracts, Vol. 7, 01774, 2005
SRef-ID: 1607-7962/gra/EGU05-A-01774

Observation of Present-day Tectonic Motions in Romania: Geodetic Results of the ISES/CRC-461 GPS Measurements

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This presentation shows the geodetic results from the GPS measurements performed by ISES (Netherlands Research Center for Integrated Solid Earth Science) and CRC-461 (Collaborative Research Center 461 'Strong Earthquakes: A Challenge for Geosciences and Civil Engineering') between 1997 and 2004. The GPS data from a 50+ station network observed during 6 field campaigns organized by ISES and CRC-461 and 7 field campaigns organized by the Central European GPS Geodynamic Reference Network (CEGRN) and the University of Savoie, France (funded by NATO) were analyzed by DEOS using the GIPSY-OASIS software package and precise point positioning analysis strategy. The repeatabilities of the different campaign solutions were in the order of 1-4 mm for the horizontal, and 3-8 mm for the vertical component. These campaign solutions were mapped onto an ITRF-2000 reference frame. The velocity estimates generated by these measurements will provide more information about the tectonic background of the area.