

portable array I67RO in the framework of the Romanian infrasound monitoring network

PTS portable infrasound array (I67RO) has been deployed in western Romania for one year, starting with late September 2016, within a collaboration project between National Institute for Earth Physics (NIEP) and PTS of the Preparatory Commission for CTBTO. The four-element array of 0.9 km aperture is equipped with CEA/DAM MB2005 microbarometers and Reftek RT 130 data loggers. Currently, I67RO array is operated and maintained in the framework of Romanian infrasound monitoring network, which comprises two other stations: IPLOR 6-element array of 2.5 km aperture, installed by NIEP in 2009, in the central part of the country, and BURARI, a four-element research array of 1.2 km aperture, deployed in July 2016, in the northern Romania, under a joint effort of Air Force Technical Application Center AFTAC (USA) and NIEP. We present results of processing of the data recorded by the three infrasound arrays deployed in Romania. CEA/DASE PMCC algorithm embedded in DTK-GPMCC (NDC-in-a-box) was applied to obtain detection arrival bulletins for each station. DTK-DIVA software (NDC-in-a-box) was used to plot and to analyze the results, in order to assess station detectability and capacity of fusing detections into support of NIEP efforts for infrasound monitoring of both natural and anthropogenic acoustic sources.

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