

first observations of the Hungarian infrasound array

The Research Centre for Astronomy and Earth Sciences of Hungarian Academy of Sciences joined to the ARISE2 project in 2016. This year we received national funding for the deployment of an infrasound array in Hungary. After a long preparation process the array started its operation in Piskés-tető on 1st June 2017. The Piskés-tető Infrasound array (PSZI) consists of 4 elements, all equipped with a SeismoWave MB3d microbarometer, and star array wind-noise reduction system made of porous hoses. It has an aperture of approximately 250 m, and the central element is co-located with a broadband seismological station, thus it is able to detect regional seismo-acoustic events. The array improves the coverage of the ARISE infrasound network in the Eastern European region. The waveform data is available on GEOFON under the network code HN. In the first months the PSZI array detected different signals. It regularly detects the signals of aircrafts passing above the station, on the way between Western Europe and the Middle East. We identified signals from several known mine explosions, detected also seismically. In the future we plan to develop a method for the discrimination of earthquakes and mine explosions with the joint analysis of infrasound and seismic data.

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