

Central and Eastern European Infrasound Network

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We introduce the Central and Eastern European Infrasound Network (CEEIN) established in 2018 as a collaboration between the Zentralanstalt für Meteorologie und Geodynamik, Vienna, Austria; the Institute of Atmospheric Physics of the Czech Academy of Sciences, Prague, Czech Republic; the Research Centre for Astronomy and Earth Sciences of the Eötvös Loránd Research Network, Budapest, Hungary; the National Institute for Earth Physics, Magurele, Romania and the Main Centre of Special Monitoring National Center for Control and Testing of Space Facilities, State Agency of Ukraine. Waveform data of the CEEIN stations are archived at the NIEP EIDA node, and can be downloaded from www.ceein.eu.

We demonstrate that CEEIN improves infrasound event detection capabilities in Southern and Eastern Europe, and show that adding infrasound observations to seismic data in the location algorithm improves location accuracy. We identify coherent noise sources observed at CEEIN stations. We present the biannual CEEIN bulletin of infrasound and seismo-acoustic events, our contribution to the European infrasound catalogue. Many of the events in the CEEIN bulletin are ground truth events that can be used in the validation of atmospheric models.

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Promotional text

CEEIN improves both the event detection and location capabilities of the European infrasound network by filling a gap in station coverage in the region. The CEEIN bulletin represent major contributions of infrasound and seismo-acoustic events in Central and Eastern Europe.

Oral preference format

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