

## Comparison of seismic waveforms observed by co-located seismometer and barometer installed indoors –characteristics of waveform –

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Surface vertical vibration due to earthquake is considered to excite sound, and it has been observed by barometer or microphone. In recent years it has been reported that it is possible to discuss the difference of the ground condition around the observation station from the infrasound waveform wave excited by the earthquake. Earthquakes were frequently detected by the barometers installed in three junior high school buildings in Ofunato City, Iwate-prefecture for the study of tsunami detection. The barometer at one station showed different characteristic from the other barometers. When we started observation with co-located seismometer, it showed the same characteristic in the horizontal component. We will introduce the characteristic of waveforms.

We are operating barometers also in Isumi, Chiba-prefecture. This array observation system is comprised of six barometers. Mt. Moto-Shirane in Kusatsu, Gunma-prefecture erupted at around 10 a.m. on January 23 2018 (JST). The observation system in Isumi detected infrasound signals which seems to be derived from the eruption of Mt. Moto-Shirane. We introduce some remarkable infrasound waveforms.

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