

Measurement performance of Home-seismometer and its demonstration test in house

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Earthquake early warning information (EEW) for the public is stated in October 2007. This information for mitigating disasters is realized by applying new methods of quickly estimating earthquake parameters (ex. Horiuchi *et al.*, 2005) to real-time data observed in the seismic observation network of NIED and JMA. On the other hand, several important problems for using EEW are given as follow. 1) EEW is sometimes sent after S wave arrival. 2) The accuracy of estimating seismic intensity is not enough. 3) False alarm is sent rarely.

To solve these problems, we have developed an inexpensive, compact and user-friendly EEW intelligent system, named Home-seismometer, that can receive EEW and observe shaking by a built-in MEMS accelerometer. We will compare data observed by Home-seismometer with seismic intensity meter using shaking tables to test measurement performance. For spreading Home-seismometer, we need to grasp its performance under various conditions. So we start demonstration test in house to observe seismic signal and noise.