

Current status of K-NET

*Takashi Kunugi¹, Wataru Suzuki¹, Hisahiko Kubo¹, Shin Aoi¹, Hiromitsu Nakamura¹, Shohei Naito¹, Hiroyuki Fujiwara¹

1. National Research Institute for Earth Science and Disaster Prevention

National Research Institute for Earth Science and Disaster Prevention (NIED) has installed K-NET95, K-NET02/02A, K-NET11/11A strong motion seismographs to observatories of K-NET. These seismographs were developed by NIED, employing state-of-the-art technologies. One of the features of K-NET02 and later models is their operating systems (Linux). Due to the OS, these seismographs are able to perform multi-functional operations. The operations are easily re-programmable. K-NET02/02A and K-NET11/11A share almost all of their programs.

NIED started a feasibility study for continuous monitoring of strong motion. As a part of this study, NIED had added new functions for continuous calculations and transmissions of strong motion to seismographs at observatories in Kanto and Tokai areas. Continuous monitoring of strong motion is useful for research and development of "Earthquake area alarm" (Nakamura et al, 2014). Also continuous transmissions are useful for robust recording of strong motion data.

In this presentation we will introduce current status of K-NET, focusing on K-NET11/11A seismographs and new observation system.

Acknowledgements

This work was supported by the Council for Science, Technology and Innovation (CSTI) through the Cross-ministerial Strategic Innovation Promotion Program (SIP), titled "Enhancement of societal resiliency against natural disasters" (Funding agency:JST).

Keywords: K-NET, Strong motion seismographs, Continuous monitoring of strong motion, Earthquake damage estimation, Earthquake early warning