Improvement of the Seismic Parameters Estimation and the Noise Discrimination for the Earthquake Early Warning

Naoyasu IWATA Shunroku YAMAMOTO Masahiro KORENAGA Shunta NODA

We updated the algorithm of the earthquake early warning, and implemented the performance validation for the actual use. The new algorithm has high ability for the estimation accuracy and quickness of seismic parameters in comparison with the current one. The improvement of the train operation safety at the time of earthquakes can be produced by using these advanced techniques. And we developed the superior algorithm of the discrimination between the earthquake ground motions and the train-induced ground vibrations for seismographs installed along railway lines. The improvement of the reliability of earthquake early warning by those seismographs is expected.