

# Development of the data-processing-software for NIED-Hi-net data users

# Yoshikatsu Haryu[1]; Kazushige Obara[1]; Keiji Kasahara[2]; Akihiko Ito[3]

[1] NIED; [2] N.I.E.D.; [3] Utsunomiya Univ.

<http://www.hinet.bosai.go.jp>

National Research Institute for Earth Science and Disaster Prevention are collecting continuous seismic data from stations of High Sensitivity Seismograph Network (NIED Hi-net). On June 2002, real-time exchange of high sensitivity seismic observation data was started between Japan Meteorological Agency, National Universities and NIED. Now, all waveform data can be downloaded from the Hi-net website. It is expected that these data is not only used for seismologists, but also is available to school teachers for science education program and public users for various purposes. In order to support their data handling we have developed a data-processing-software working under the Windows environment which is the most popular computers. This software is written in Tcl/Tk language for interactive visualization and basic analysis of earthquake seismograms.

Feature of the software include:

- reading data in WIN32 format
- zooming, scaling and transformation of the seismograms
- rotation of horizontal component traces
- time and amplitude picking
- mean-removal, integration and differentiation in the time domain
- signal processing (filtering and fourier transform) in the frequency domain
- 2D particle motion viewing

This software will be introduced to the public as freeware.