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(Quality Seismic Data Assessment): On line Web Base of Power Spectral Density for Seismic Noise Quantification

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The development of the seismograph network in Indonesia has been massive in the last two years. As more and more seismographs are installed, it is hoped that continuous data and high-quality data will be obtained. The presence of noise in seismic waveforms greatly disrupts the identification of earthquake events. Various potential sources of seismic noise exist, such as: ocean waves, meteorological effects and human activities. Choosing a location for a sensor that has a low noise level is very important to get a high quality earthquake data recording. Therefore, we developed a power spectral density application to identify and to quantify seismic noise. This web-based Power Spectral Density (PSD) application operates online and flexible time window. The principle of seismic quantification used in this method is the Peterson Noise Model. This application can be used to determine the quality of data from all seismograph stations on a regular weekly or monthly basis.

Keywords: seismic noise, waveform, PSD

Promotional text

To get the accurate result of hypocenter location, focal mechanisme, stress drop, amd other analysis we need high quality seismic waveform data. Seismic waveform data usually content noise. Seismic noise came from environmental and electrical noise. We need to quantify the noise.

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