ID: Type: **Poster**

A Simple Filter Design for Noise in CTBTO Lembang Seismological Station (West Java, Indonesia)

Lembang Seismological Station (LEM) is one of CTBTO's stations network located in West Java, Indonesia. This station integrated in Indonesia Tsunami Early Warning System (InaTEWS) since June 2007 and have important role to analyze earthquake in West Java and surroundings area. Therefore, the quality of waveform is very important to localized the earthquake accurately. This research have purpose to determine a simple filter design for noise in LEM seismological station based on analyze Z/H spectra ratio of pre-seismic, co-seismic, and post-seismic signal. The filter design can influence performance of waveform data in a seismological station. We have analyzed seismic waveform of 20 earthquakes that recorded in LEM station. The results show that the dominant peak of noise stable on 0.08 – 0.1 Hz. Based on the result we suggest to using Bandpass filter or Notch filter to get best performance of seismic waveform.

Primary author: YATIMANTORO, Tatok (Indonesian Agency for Meteorology, Climatology and Geophysics (BMKG))

Presenter: YATIMANTORO, Tatok (Indonesian Agency for Meteorology, Climatology and Geophysics (BMKG))

Track Classification: Theme 1: The Earth as a Complex System