ID: Type: **Poster**

Seismic Hazard Assessment Using Empirical Attenuation Relationship for the Estimation of PGA in the Area of West Java

Peak Ground Acceleration (PGA) is very important for seismic hazard assessment and quick response. One of hazard assessment of potential damage from earthquake is to determine the effect or impact type of ground motion at the specific site. Seismic hazard assessment for quick determination has been developed by using relationship of attenuation of ground motion with site-distant and processed by linier least square fit method. We used observe data and prediction of displacement energy in the period of three second of P-wave. Empirical Attenuation relationship for the estimation of PGA in the area of west java provide the new formula for Earthquake Early Warning solution especially for Jakarta and Bandung. Number of seismic event about 69 data of velocity broadband seismogram, included Tasikmalaya earthquake, September 2, 2009 magnitude M = 7.2 Richter Scale, recorded at CISI Station, Cisompet, Garut, west of Java and their aftershocks. Simulation technique applied for acceleration broadband seismogram data by differential of velocity seismogram. Least square fit analysis calculated for attenuation of PGA such as : Log (PGA) = -3.88 +0.995 Mw − 1.324 log R. Quick Estimation of attenuation of PGA very urgent for EEW.

Primary author: GUNAWAN, hendar (Climatology, Meteorology and Geophysics Agency)

Presenter: GUNAWAN, hendar (Climatology, Meteorology and Geophysics Agency)

Track Classification: Theme 2: Events and Their Characterization