Analisis resiko gempa di Batuan Dasar

Abstrak

Seismic hazard map in Indonesian bedrock was part of the Indonesian standard describeng seismic hazard for Indonesia territory and used as one of significant load in structure design. Recent earthquake with big intensity surely can effect the seismic hazard in Indonesia. Therefore, seismic hazard map in Sumatera, Java-Sumba and Kalimantan was developed as part of seismic hazard analysis in Indonesia using the latest data, 3D seismic source model and PSHA-07-USGS software and publicized in this paper. The seismic hazard analysis was refer to Unified Building Code 97 and represent the 475 year return period seismic hazard map in Sumatera, Java-Sumba and Kalimantan. The result showed that maximum PGA for Sumatera ranges between 0.02-0.65 g, Java- Sumba 0.02-0.65 g and Kalimantan 0.005 - 0.2 g. All result showed a larger value than seismic hazard map in the than Indonesian Standar (SNI 03-1726-2002). Comparison with the other studies showed a comparative result only in Sumatera, while in Java-Sumba and Kalimantan shown a disagree result. Some factors can affect the result, such as seismic data, seismic source model and attenuation function selection.