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# of Mainshock and Aftershock Energy Release (Case Study: Earthquake in Sumatera and Java Subduction)

We calculated some devastating earthquakes energy which occurred in subduction zone and followed by aftershocks. We compared the amount of energy released between mainshock and aftershock with empirical formula from Guttenberg- Richter relation. Historical data with three months aftershocks after five major earthquake (Bengkulu, Pangandaran, Simeulue, West Sumatra, and Tasikmalaya) was obtained from International Seismological Center. From analysis and energy calculations of earthquake aftershocks on major earthquake with a magnitude of large than five, energy aftershocks ranging from 0.1% to 33%, with a random pattern. By comparing the energy aftershocks of earthquakes, the results are generally 10%, it is estimated that the earthquake with strike-slip mechanism having earthquake aftershocks with total energy less than 10%. The earthquakes which have aftershocks and thrust mechanism make a total energy more than 10%. By obtaining these comparisons, this research is based on scientific studies can be used as a reference to providing information on the possible impact of an occurrence of the earthquake and its aftershocks.

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