

of Tsunamigenic Earthquake in Indonesia Using Ratio of Seismic Energy and Moment

Since July 1991 s.d. April 2012 has occurred 27 earthquakes generated tsunami with magnitude $M_w > 6.5$. The aim of this study is to characterize these events based on the ratio (Q) between seismic waves radiated energy (E) and seismic moment (M_0), source duration (T_0), tsunami height (H), focal mechanism of focus and the depth. The authors obtain the vertical component broadband seismometers from global network of IRIS with a total number of 783 teleseismic station. The frequency is 0001 Hz 5.0 Hz. Almost earthquakes as 24 events were characterized as tsunamigenic earthquakes which vary tsunami height depend on its magnitude. The others were tsunami earthquakes with moderate magnitude but caused high tsunami, low ratio of energy and moment, long rupture duration and thrusting focal mechanism.

Primary author: PRIBADI, Sugeng (NDC Meteorology Climatology and Geophysics Agency (BMKG))

Presenter: PRIBADI, Sugeng (NDC Meteorology Climatology and Geophysics Agency (BMKG))

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