ID: Type: **Poster**

1.5-P12. Determination of Local Magnitude Scale for West Java Region, Indonesia

We determine the empirical formula for local magnitude scale in West Java region, Indonesia. We used amplitude data from 10 network station of InaTEWS, including LEM station from CTBTO network. There is 162 local earthquakes that occurred during 2010 – 2014. The magnitude range is between 3.0 – 6.0. We derived –log A0 distance correction function for ML based on its original definition. We obtained the following formula for determining ML in West Java region : ML = log A – 1.13 log (r/100) + 0.00067 (r – 100) + 3 where A is the maximum amplitude (mm) observed on the horizontal component, r is the hypocentral distance (km). We found that the residual of magnitude determined using above formula do not have a significant epicentral dependence. The magnitude determined by the above formula are slightly larger (is around 0.18) than magnitude of InaTEWS system.

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