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Simple microtremor measurement using HVSr method by using smartphone as sensor, case study: Hasanuddin University campus

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Hasanuddin University campus is one from many location in south sulawesi that have significant building plant. That condition make building resilience and other infrastructure need to be considered, one of them is about earthquake susceptance factor. The method that is used to measure earthquake susceptance factor is HVSr method, that is, comparasion between horizontal component and vertical component. The measurement to know horizontal components means, east-west and north-sout and also vertical component, up and down by using smartphone as a sensor to detect displacement in x,y and z, representing horizontal and vertical components. The frequency that was found was about 100 Hz for every component with more than 150 samples per second by measuring at eight places. By this one can determine the susceptibility of earthquake.

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