

THE RELATIONSHIP BETWEEN CHANGE OF SOIL MOISTURE RESULTED FROM RAINFALLS AND SEISMIC RESPONSE CHARACTERISTICS IN THE VALLEY FILL GROUND

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ABSTRACT: The fill ground has higher risk of seismic damages comparing to the cut ground. However, few attempts have been made so far to measure actual seismic responses and to investigate the difference of seismic responses between the fill ground and the cut ground. Authors performed in-situ array seismic observation in the fill ground and the cut ground for two years. This paper shows differences of seismic responses between the fill ground and the cut ground. And influences of the soil moisture to the seismic responses are studied.

Key Words: Fill ground, Cut ground, In-situ observation, Soil moisture, Seismic response