

Studying the Suspected Site of Nuclear Test by Using Microtremor Method

Microtremor IS continues vibrations of the ground, having small amplitudes in the range of 0.1 to 1 micron. Their origin is related to natural and artificial disturbances, such as wind, sea waves, traffic industrial noise, and similar causes. Observation of microtremors can give useful information on dynamic properties of the site such as predominant period, and amplitude. By taking advantage of the change (Anomaly) in the dominant frequency measurements at the site of study, it is possible to develop a probability of identifying the area, where a nuclear test might occur. Microtremor observations are easy to perform, and inexpensive method. According to Nakamura (1989) methods, some assumptions are considered • The microtremor of frequency ranged between (0.5 to 20 Hz.). • The artificial noise is mostly propagated as Raleigh wave. • Horizontal and vertical motions are related to the soil conditions of the observation point and (AH/AV) is close to 1 for the firm soil. • The microtremor motion is due to nearby sources and all deep sources are Neglected

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