

Applicability of 2sSPAC method to microtremor

Hitoshi Morikawa[1], Ken Miyakoshi[2], Boming Zhao[3], Hideki Oka[4], Sumio Sawada[5]

[1] Dep. of Civil Eng., Tottori Univ., [2] G.R.I., [3] G.R.I, [4] Dept. Civil Engrg., Tottori Univ., [5] DPRI, Kyoto Univ.

Authors have developed a simple method for estimation of phase velocity using microseisms. The method was named 2sSPAC (2-site spatial auto-correlation) method which is based on the SPAC method. This method requires the stationarity of microtremor during the observation. However, it is difficult for the microtremor in high frequency range to satisfy this requirement. Thus, we will discuss applicability of the 2sSPAC method to microtremor including high frequency components on the basis of the observation data. As a result, this method can apply to microtremor of high frequency range, if we do not require the strict accuracy in estimated ground structure.