

Spectral-Analysis-of-Surface-Waves method: an initial assessment and its potential use in geology

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The Spectral-Analysis-of-Surface-Waves (SASW) method for profiling the subsurface non-destructively is discussed. The method assumes that the subsurface structures consist of a stack of horizontally homogeneous layers. Transient impact source on the ground surface is used to generate Rayleigh wave of different frequencies into the medium. From analysis of phase information for each frequency, the velocity of the waves is determined between two receivers. Initial results of the SASW measurements on flexible and rigid pavement systems are presented.
