Travel time analysis of frequency response function acquired by ACROSS: 1. Dispersion of body waves between 10 and 30 Hz

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The travel time analysis is made on the observed data of frequency response function of seismic wave traveled over the distance of ~200 m at test site of Tono mine. The data is acquired from 5 Hz to 35 Hz by ACROSS source installed on the ground surface and a synchronized feedback accelerometer set at the depth of 190 m in a borehole. The analyzing method is the AR modeling (Sompi method) of discrete frequency series to decompose the plural travel times with high resolution as a function of frequency. The result of analysis showed significant dispersion amounting to ~10 0.000000or P, SV, and SH waves.