

Propagation characteristics of long-period seismic waves in Tottori-ken Seibu earthquake 2000

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The MJMA(MJ) and M_w of the Tottori-ken Seibu earthquake were 7.3 and 6.7, respectively. This difference is the largest among M6-7 class shallow earthquakes occurring since 1970 in Japan. To find the cause of this large value of MJ, we investigated propagation characteristics of long-period seismic waves using seismograms recorded at 298 K-NET stations within 500km from the epicenter. Following the MJ estimation, we obtained the maximum horizontal displacement (Hmax) at each station. The Hmax attenuates with about -0.85 power of the epicentral distance. Distribution of the Hmax has azimuthal dependency which is expected as SH/Love radiation from the source. Those results show the dominance of Love waves. The waveform simulation will be shown for explaining the wave propagation phenomena.