

Location of a scatterer in and around the source region of the 2000 western Tottori earthquake by a semblance analysis

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Spatial distribution of scatterers in and around the source region of the 2000 Western Tottori earthquake are estimated by a small-aperture array observation at Hino town. We acquire 136 records and apply a band-pass filter between 8 and 16 Hz to vertical components, prior to the semblance analysis. In 27 records, several coherent phases are contained in P coda part. Arrival directions and apparent velocities of these phases are comparable with that of the direct P waves. This result indicates S to P and/or P to P converted phases are generated around hypocenter of each record. Hypocenters of these events are mainly distributed in the northern part of the source region, and suggesting that small-scale heterogeneity is distributed in and around the northern source region of the mainshock.