

Seismic trapped wave observation in the fault zone of the Western Tottori earthquake of 2000

Yasuto Kuwahara[1], Kazutoshi Imanishi[1], Hisao Ito[2]

[1] AIST, [2] Geological Survey of Japan

Clear surface ruptures have not been observed after the Western Tottori earthquake of 2000. A temporal surface array observation was conducted across the inferred fault at depth to record fault zone trapped waves for such the embedded fault. We have observed fault zone trapped waves with distinct low frequency phases of 3-5 Hz and long duration of about 1s following the S wave only for the stations close to the inferred fault for the aftershocks whose hypocenters are in the dense distribution of the aftershock area. The trapped waves are most obvious in the vertical component.