

Change in the crustal structure before and after the northern Iwate Prefecture earthquake, M6.1, on September 3, 1998

Naoki Uchida [1], Takeshi Nishimura [2], Satoru Tanaka [3], Haruo Sato [4], Masakazu Ohtake [1], Hiroyuki Hamaguchi [5], Eisuke Fujita [6]

[1] Dept. of Geophysics, Tohoku Univ, [2] Geophysics, Science, Tohoku Univ., [3] Graduate School of Sci. Tohoku Univ, [4] Geophysics, Science, Tohoku University, [5] Res. Centr. Pred. Earthq. Volc. Erupt., Grad. Sch. Sci., Tohoku Univ., [6] NIED

We analyze seismic waveform data excited by two artificial chemical explosions conducted before and after the northern Iwate Prefecture earthquake, M6.1, on September 3, 1998. Coherence and phases of seismic coda waves recorded at three stations located at the southern part of Iwate Volcano show that the seismic wave velocity and scatterer distributions changed around the earthquake fault and the volcano.