

## Explosion seismic survey along the Atotsugawa fault system, Central Honshu, Japan

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Explosions aiming at surveying fault gauge by trapped waves were conducted at the Mozumi fault, central Honshu, Japan in October 2000. We observed seismic waves of the explosions at 40 stations in about 40km line along the Atotsugawa fault system. The result of first arrival analysis shows that the thickness of surface layer roughly corresponds to that of sediment. No remarkable changes caused by surface faults were found in the areas where the observation line crosses the faults. However, from an analysis of later arrivals we found clear reflected phases at 4-5 and 7-8 seconds of two-way travel-times. The crust deeper than 15km, beneath the seismogenic layer is reflective as a whole and there exist strong reflective layers at about 15 and 25km depth in the reflective crust.