

Contents

Seismogeology of the Atotsugawa strike-slip fault system in the Hida mountains, central Japan—with the special reference to the investigation gallery across the branch Mozumi-Sukenobe fault	A. Takeuchi, A. Takebe, H. Ongirad, and R. Doke 1
Geomorphology and geology along the eastern part of the Ushikubi Fault of the Atotsugawa Fault System, central Japan	R. Doke and A. Takeuchi 11
Imaging of the Mozumi-Sukenobe fault, Hida district, central Japan, by the seismic reflection method	T. Ito, N. Tsumura, A. Takeuchi, T. Ishimaru, A. Takami, H. Ikawa, N. Komada, S. Yamamoto, S. Kikuchi, T. Miyauchi, T. Kawanaka, and T. Ikawa 17
Dense GPS Array Observations across the Atotsugawa Fault System in Central Japan	K. Hirahara, M. Ohzono, T. Sagiya, Y. Hosoi, Y. Wada, and M. Ando 25
Seismic activity from routine and temporary observations of earthquakes in the northwest Chubu district, central Honshu, Japan	K. Ito, H. Wada, S. Ohmi, N. Hirano, and T. Ueno 45
Crustal structure from seismic surveys and seismicity in the northern Chubu district with special reference to the Atotsugawa fault area	K. Ito, T. Ueno, H. Wada, and K. Matsumura 65
Properties of seismic scattering along the Atotsugawa fault system, central Japan: Preliminary analysis of the fault zone heterogeneous structure	K. Nishigami 79
Temporary seismic observation at the Atotsugawa fault, central Japan: Study on fault-zone trapped waves and attenuation of <i>S</i> waves	K. Nishigami, I. Fujisawa, K. Tadokoro, T. Mizuno, and Y. Mamada 85
Shallow structure of Mozumi-Sukenobe fault zone imaged by simulation of fault zone waves generated by near-fault explosion experiments	Y. Mamada, K. Nishigami, H. Ito, and Y. Kuwahara 93
Descriptions of meso- and microscopic structures of fault zone rocks obtained from tunnel penetrated across the Mozumi-Sukenobe fault, central Japan	H. Tanaka, T. Ito, T. Nohara, and M. Ando 103
Geochemical investigation around the Mozumi-Sukenobe fault survey tunnel	H. Satake, Y. Kita, H. Hayashi, and M. Murata 123
Observation of fault-zone trapped waves in the subsurface survey tunnel excavated through the Mozumi-Sukenobe fault, central Japan	K. Nishigami, H. Ito, Y. Kuwahara, T. Mizuno, and Y. Mamada 149
Interesting phenomena detected by the continuous observation of strain and in-situ stress measurements in the vicinity of the active Mozumi-Sukenobe Fault	H. Ishii, T. Yamauchi, Y. Asai, S. Matsumoto, and A. Mukai 157
Monitoring of pore pressure changes using closed borehole wells: Interpretations based on poroelasticity	Y. Kano, T. Yanagidani, Y. Kitagawa, and F. Yamashita 163
Variation in groundwater levels, pore pressures and crustal strain related to earthquakes in the upper granite and sedimentary formations in the area of western Tono, Japan	S. Azuma, H. Ishii, Y. Asai, Y. Kitagawa, H. Wakita, T. Yamauchi, and K. Asamori 173
In situ detection of resistivity changes produced by pressurized water-injection at the active fault zone using the AC dipole-dipole method with the GPS synchronized phase-sensitive-detection technique	T. Yanagidani and F. Yamashita 181