

## Locked Model of the Atotsugawa Fault Deduced from Cross-Fault GPS Observations

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In addition to GEONET observations by GSI, our dense GPS array observations crossing the Atotsugawa fault, central Japan, has revealed the displacement velocity field around the Atotsugawa fault. The GPS stations located 25 km each apart from the fault are converging east-westwards with a rate of 10 mm/yr. However, approaching the Atotsugawa fault, the station displacement velocities relative to the station one on the fault are decreasing. We propose a simple locked model of the Atotsugawa fault, where the Atotsugawa fault is almost locked down to a depth of 15 km and the east and west blocks are east-westwardly converging with a rate of 20 mm/yr.