

Fine seismic velocity structure beneath central part of Tohoku derived from 97 joint seismic observation in Tohoku Backborn Range

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We estimated the precise P and S velocity structure beneath central part of Tohoku by using a tomographic inversion technique. The P and S arrival time data was collected from 356 earthquakes recorded by the 1997 joint seismic observation in Tohoku Backborn Range. In the uppermost mantle, we detected the low VP and low VS zone which extends continuously in the north-south direction along the volcanic front. Such a characteristic was not seen in the previous studies. A high seismicity area at Ishidoriya, Iwate Prefecture is characterized by anomalously low VP/VS ratio.