

Controlled source seismic exploration of Izu-Oshima volcano in 1999: waveforms and seismic velocity structure

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A seismic experiment was conducted at Izu-Oshima volcano, Japan using controlled sources on October 31 and November 3. The main purpose of this experiment is to obtain the 2-D and 3-D seismic velocity structure of the volcano and to detect the pressure source using the reflection wave. The preliminary results from the travel-time analysis are as follows: the subsurface structure consists of materials with compressional wave speeds 1.4km/s, 2.9km/s and 4.2km/s layered from the top in north-western flank area, 1.1km/s, 3.7km/s and 4.3km/s in summit caldera area and 1.9km/s, 3.3km/s and 4.3km/s in south-eastern flank area. We will present some features of seismic records and seismic velocity structure of Izu-Oshima volcano.