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Controlled source seismic exploration of Izu-Oshima volcano in 1999: outline of the experiment

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We conducted the controlled-source seismic exploration of Izu-Oshima volcano in 1999, under the national project for the prediction of volcanic eruption. So far, the seismic exploration experiments were limited to inland volcanoes, and it is needed to expand the target to active volcano near/in the sea area. This is the first seismic exploration experiment at volcano on island, covering both the land and surrounding sea area. Major objectives include 1) the estimation of 3-D seismic velocity and attenuation structure at depths shallower than 2km, 2) the estimation of 2-D velocity profile, to a depth of 4km, in the NW-SE direction across the volcano, and 3) the detection of reflected/scattered waves from the anomalous region beneath the caldera. We will report the outline of the experiment.