

Searching for scattering body beneath Kilauea, Hawaii using seismic arrays.

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We searched for scattering bodies for seismic wave underneath the Kilauea caldera in Hawaii island. The data of dense seismic arrays which were temporarily installed in February of 1997 with a US-Japan joint experiment team are used for the analysis. We used 94 earthquakes which occurred in the very shallow part of the caldera during the period of our experiment. Coherence analysis using semblance for coda parts which corresponds to the travel time from assumed scattered body revealed that scattering body lies at about 2.5 to 3 km below sea level beneath Halemaumau crater.