

Reflectors beneath Unzen Volcano, detected from local earthquakes

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In Unzen Volcano, many reflectors are detected by using artificial seismic source (e.g. Yamaguchi et al., 1999; Kuriyama et al., 2001; Takahashi et al., 2002; Watanabe et al., 2003). We detected crustal reflectors from seismograms of local earthquakes occurring around Shimabara peninsula.

Some later phases are recognized in the seismograms at several seismic stations of Kyushu University. We gave attention to the later phase right behind of S phase, and estimated reflectors, assuming these phases as S to S reflection phases. Preliminary result shows the reflectors are located at a depth of 8 to 10 and a few km beneath Shimabara peninsula, which corresponds to the location of a main pressure source inferred from geodesic data. Therefore the reflectors may have relation to the magma supply system of Unzen volcano.