

Velocity structures and S-wave reflectors in and around the Hida Mountains

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We determined three-dimensional P and S-wave velocity structures and distribution of S-wave reflectors in and around the Hida mountain region, central Honshu, Japan, to derive detailed inhomogeneous structure concerning volcanoes and large inland earthquakes. Obtained velocities are generally low along the summit of the mountains, but a few relatively high velocity zones are found along the mountain range. The reflectors are located in the north, east and southwest of the Volcano Ontake at depths of 8-15km below the seismogenic layer. The reflectors seem to be located at the boundary of high and low V_p/V_s distribution, suggesting existence of fluid.