

Structure around Moho discontinuity and deep low-frequency earthquakes (1) P-SV conversions of teleseismic waves

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We identified P-SV conversions at Moho discontinuity in teleseismic three-components records for stations around Iwate Volcano. The P-SV conversions are unclear in half of the records for stations near the volcano. The P-SV conversions are unclear in most of teleseismic records whose ray-paths cross the region around Moho discontinuity from 5 to 15 km south of the Volcano. This region corresponds to the source region of deep low-frequency earthquakes. We suggest the existence of partial melts with about 5% melt fraction in upper mantle around the source region of deep low-frequency earthquakes.