

## The seismic structure of the crust beneath Japan Islands inferred from receiver function analysis

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We are constructing receiver functions (RFs) from teleseismic waveforms recorded by FREESIA and J-array. The obtained RF detects P-to-S converted phases at the Moho and the plate interface underneath stations. Assuming a background velocity, the travel times of Ps converted phases relative to P can be converted to these discontinuity depths. In addition to broadband seismic waveforms, we used many short period ones of J-array, so that we could make RFs all over the Japan Islands. The individual traces have produced clear images of the crust and upper mantle, which is similar to the reflection seismic imaging. Especially, we have determined a detailed depth distribution of Moho discontinuities all over the Japan Islands using RFs from 250 stations in total.