# Imaging of seismic structure by receiver function analysis with local SVD analysis

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It is for a purpose of this study to get fine seismic structure by use of receiver function analysis with modified SVD technique. We estimated the velocity structures beneath Kyushu by receiver function analysis of waveform data of broadband seismic stations and Hi-net (e.g. Murakoshi et al. 2007). The general receiver function analysis uses stacked receiver functions of different ray parameter and back azimuth events in each station. However receiver functions in difference ray parameter and back azimuth are the difference greatly, when the horizontal variation of subsurface structure is large. So it is difficult to stack simply the receiver functions in each station. In this study, we investigate the use of local SVD technique to enhance the S/N in PS converted phase of receiver functions and then discuss on performance for the proposed technique.