S-wave tomography beneath the Japane Islands

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The structure under Japan Island is very complicated, and many researches have done. But in most of these cases P-wave travel time is used, the research exsamples about S-wave are not seen so many. S-wave velocity structure is very usefull in verious seismic wave analyses including the surface wave. So I obtain the S-wave velocity structure under Japan Island on the basis of the method by Zhao(1992).

Seeing the result of the 3-D S-wave velocity structure, not only Pacific plate in northeastern Japan, but also the high velocity zone corresponing to Phillipin sea plate can be seen. In addition clear agreement with the low velocity zone near the depth 40km and distribution of the volcano.