

## The subducting effect and characteristics of crustal structure in the east side of Shikoku Basin obtained by seismic ref

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The Shikoku Basin which locates the north part of Philippine Sea Plate between the Kyushu-Palau ridge and Izu-Bonin (Ogasawara) ridge is an important area to understand the evolution of the backarc basin. The Shikoku Basin is also subducting to Nankai Trough at the north region. The Shikoku Basin was in backarc rifting and spreading stage during 30-15Ma (Okino et al., 1994). Many seismic reflection surveys have been conducted in the Shikoku Basin. There were rarely reflectors of Moho discontinuity and internal crust. Nankai Trough is important region to understand large disaster earthquake.

Japan Agency for Marine-Earth Science and Technology has been carried out the multi-channel seismic reflection (MCS) surveys in 2011 and 2012 using new MCS system in order to understand the linkage mechanism of large disaster earthquake along the Nankai Trough. Total length of survey line is over 1800 km in these surveys. From obtained results, we recognized clear Moho reflector which obtained by newest seismic reflection survey in 2011 and 2012. We discuss about the spatial characteristics of Moho and crustal reflectors using the mapping results along the Nankai Trough.

Keywords: MCS survey, paleo-arc, backarc basin