The characteristics of crustal structure in Shikoku Basin obtained by seismic exploration

YAMASHITA, Mikiya1*, KODAIRA, Shuichi1, TAKAHASHI, Narumi1, PARK, Jin-Oh1, NAKANISHI, Ayako1, MIURA, Seiichi1, KANEDA, Yoshiyuki1

1JAMSTEC

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 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. However, we recognized clear Moho reflector which obtained by newest seismic reflection survey in 2011. We discuss about the spatial characteristics of Moho and crustal reflectors using the mapping results of attribute analysis for through legacy data in Shikoku Basin.

Keywords: MCS survey, paleo-arc, rifting