

Seismic information of the Jourdanne segment, Southwest Indian ridge

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In this study, ocean bottom seismic observation was carried out in addition to bathymetry and gravity survey in and around the Jourdanne segment, Southwest Indian ridge and deduced three dimensional crustal structure. The crustal thickness is less than 6km in the Jourdanne segment deduced from refraction study using controlled source and gravity data. This thin crust shows that tectonic process is more dominant than magmatic process in this segment similar to the other segments in the SWIR. Especially beneath segment end, extremely thin and high velocity crust shows tectonic process is more dominant and very rare magmatic activity.