Summary of marine geological survey in the Indian sector of the Southern Ocean: Preliminary reports of KH-16-1 cruise

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Marin geological survey in the Indian sector of the Southern Ocean have been done during the KH-16-1 expedition by R/V Hakuho-maru. Multichannel seismic (MCS) reflection survey was conducted in the Del Cano Rise and the Conrad Rise to prepare the future IODP proposal. It is interpreted that sediment waves in the Conrad Rise were originally formed by the Antarctic Circumpoar Current (Oiwane et al., 2014). Sediment waves were also observed under the seafloor on the Del Cano Rise, suggesting main axis of the ACC was occasionally fluctuated to north during past glacial stages.

Keywords: Southern Ocean of the Indian sector, ACC, Multichannel seismic reflection survey, KH-16-1 cruise, Del Cano Rise, Conrad Rise