

Internal structure of the Moho by seismic exploration on the Mizuho Plateau, Antarctica

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Seismic exploration is conducted by the 41st Japanese Antarctic Research Expedition along Mizuho route. Shot records with clear later arrivals are obtained from this survey. Amplitude spectrum suggest the difference for frequency of seismic source and PmP-reflectiInternal structure is estimated from amplitude spectral ratios of reflected PmP-waves to source P-waves. Observed spectral ratios show that the thickness of reflector is 700-800m in case of one layer of reflector by estimation of reflected velocity is lower than velocity of Moho. Moreover, internal components are estimated by high-pressure rock experiments.