

Fig. S1 Diagram of possible propagation ray paths for PmPPmP phases and PxPPmP phases. Solid line represents the P wave ray path and dash line shows the S wave ray path. (a) Possible ray paths for the PmPPmP phases. (b) and (c) are possible ray paths for the PxPPmP phases.

![图表

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Fig. S2 The original seismic section of profile 1 displayed with trace-normalized amplitude and a reduction velocity of 8 km/s without crustal correction. The purple short line shows the picked travel time of the PmP pahses. The red line represents the theoretical arrival time of PmP phases calculated based on a 1D model, whose crustal thickness is 30 km, and average velocity is 6.05 km/s. The blue line represents the theoretical arrival time of PmP phases calculated based on a 1D model, whose crustal thickness is 30 km, and average velocity is 6.25 km/s.

![日程表

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Fig. S3 a) Elevation of the seismic profile 1 and location of different terranes (color line). b) Crustal P-wave velocity structure interpolated from NCcrust model (Xia et al, 2017) along our seismic profile.