



Figure S3. Example of tests for Line 8 models with sharp Moho. The green and purple curves show predicted arrival times (a) and raypaths (b) of pre-critical and post-critical PmP reflections from a sharp Moho. The reversed portion of the record-section for the same instrument shown in Figure 2 is shown here in gray. The Pn and Pmp arrivals predicted for a sharp Moho are not seen in these data nor for any other Line 8 instrument. At the edges of the model, sparse data allow a step-wise increase but other models show this is not required by the data. The inversion in b has overall $\chi^2 \sim 1$. Minor cleaning up of the picks shown here (dots on travel-time plots) was done prior to inverting for a final model (Figures 2, preferred, and S5).