## GSA Data Repository Item 2017082

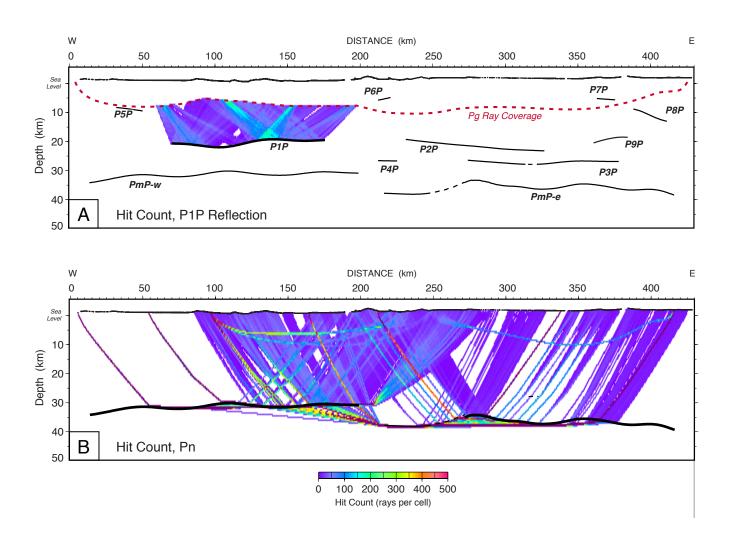


Figure S1. (A) Example of the model region constrained by a reflected phase. Velocities in the overlying Pg ray coverage area are locked in prior to modeling the reflections, so the P1P ray paths shown here constrain the velocity between the Pg and the P1P reflector. Colors represent hit counts in 0.5 km grid cells. (B) Uppermost mantle refracted rays (Pn) illustrated by hit count in 0.5 km grid cells.