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Supporting Information for

Evaluating the resolution of deep mantle plumes in teleseismic traveltime tomography

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Introduction

We include two supplemental datasets. S1 includes tables describing the temperature and seismic velocity structure of the geodynamic plume models. S2 includes cross-correlation traveltime delays computed for each model.

Data Set S1. The dataset `ds01.zip` contains tables describing the axisymmetric temperature and seismic velocity structure of each plume model shown in Figure 1. The first two columns give distance from the plume axis (in degrees) and radius (in km). The next four columns give T (in K), δV_P (in %), δV_S (in %), and $\delta\rho$ (in %).

Data Set S2. The dataset `ds02.zip` contains tables of cross-correlation travel time delays computed for each plume structure. The files are named according to plume structure, seismic phase, and distance between the event in plume axis (in degrees). For each plume structure, we provide tables for P, S, and SKS delays for plume-to-event distances between 30 and 120 degrees, every 10 degrees. Files named `r1c_upper` give delay times for the upper mantle expression of the plume R1c (see Figure 10).The columns of each file give X (in degrees), Y (in degrees), and ΔT (in s). The plume is centered at X = 0, Y = 0.