

Caption for supplemental online movie

Animation of a suite of cross-sections through the migration volume for the data (left column), synthetics for the preferred velocity models (second column) and synthetics for the IASP91 reference model (third column) (one cross section is shown in Fig. 3). The map in the upper-right shows the relative location of the great circle path along which the cross-section is made (heavy black line), the location of the PcP CMB reflection points for the data set (blue dots) and the maximum number of seismograms contributing to the migration images along each great circle path. The map at the bottom-right shows the number and relative location of earthquakes that contributed to the data set used to form these images. The color scales are held constant for all sections. The dominant feature in the upper row (the CMB reflector formed by PcP arrivals) appears shallower along great circle paths that are out of the dominant source receiver plane, i.e. on profiles offset from where the CMB reflection points are. This is a result of the scattering ellipsoids not having destructive interference due to the limited azimuthal sampling provided by the data corridor. The raypaths through D" of our data set are at near grazing-angles and thus there is lateral streaking as in the S-wave migrations of (13).