

Interactive comment on “Teleseismic P-waves at the AlpArray seismic network: Wave fronts, absolute traveltimes and traveltime residuals” by Marcel Heinz Paffrath et al.

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That is an interesting study.

Regarding steeply incident (e.g. vertical) wavefronts, this study is maybe of interest to compare:

<https://pubs.geoscienceworld.org/ssa/srl/article-abstract/89/5/1698/531026/Reflections-from-the-Inner-Core-Recorded-during-a>

It uses a reflection from the inner core on an ultra-dense network in the center of AlpArray, and corrects the arrival times for known mantle and crustal structure (fig 7).

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The variations would be of interest to compare to your results, and may help with a geological interpretation.

Interactive comment on Solid Earth Discuss., <https://doi.org/10.5194/se-2020-189>, 2020.

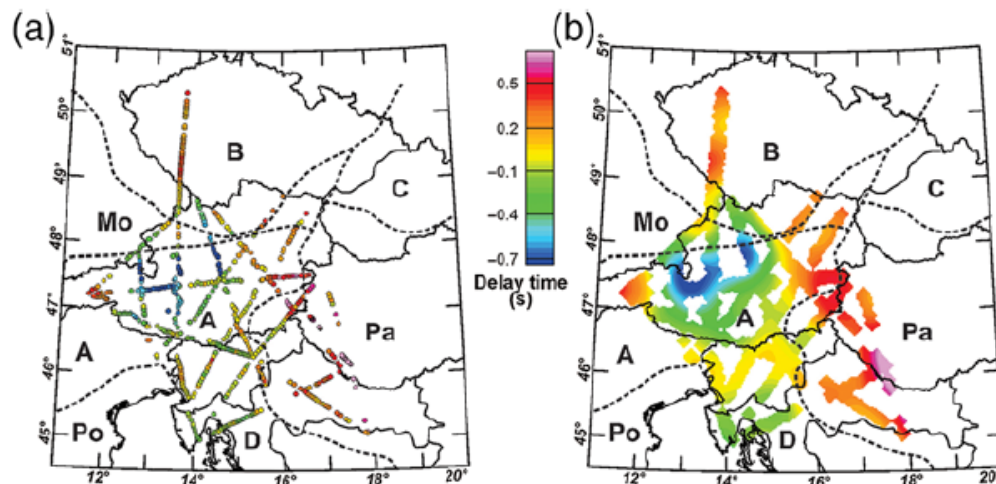
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▲ **Figure 7.** Travel-time delays as picked from time-corrected *PKiKP* arrivals. Time corrections include *ak135* *PKiKP* travel times and additional corrections for topography, crustal, and mantle structure (e.g., Fig. 5b). (a) Individual delay time at each station; (b) interpolated and low-pass filtered delay-time variation. Dashed black lines separate large-scale geologic/tectonic domains. A, alpine; B, Bohemian massif (Paleozoic orogenesis); C, Carpathian; D, Dinaric domains (Cenozoic orogenesis); Pa, Po, Mo, deep tertiary sedimentary basin systems (Pannonian, Po, and Molasse basins). The color version of this figure is available only in the electronic edition.

Fig. 1.

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