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Seismic discontinuities of the mantle as inferred from a receiver function method

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We estimated depths of `410 km' and `660 km' seismic discontinuities beneath Indonesia and the South Pacific with the Pto-S converted phases extracted by a receiver function method from broadband teleseismic records at seismic networks of the JISNET, SPANET and LDG. In the calculation of receiver functions we considered difference of anelastic attenuation between P and S waves which causes a serious bias on the estimated discontinuity depths but never been considered so far. Results are as follows: The both depths of `410 km' and `660 km' discontinuities are estimated around its global average. There is a negative correlation of the depth variations between the `410 km' and the `660 km' discontinuities. The depth variations of the `410 km' is greater than those of `660 km'.