

## An algorithm for estimating a dipping plane of a velocity discontinuity using a converted wave

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Last two decade depth distribution of velocity discontinuities such as the Moho and upper boundary of a subducting slab have been deduced by analysing some converted phases observed on the seismograms. In this paper we consider a problem to determine the location and tangential plane (facet) of a velocity discontinuity at which a converted phase has been generated from the horizontal slowness vector and travel time of the converted phase. We formulate this problem as a one-dimensional algebraic problem, and show a simple algorithm to solve it. The present algorithm employs vertically heterogeneous structure models different between the source and receiver sites.