

Input parameters

Rayparameter

$$\frac{R \cdot \sin i}{c(R)} [1/s]$$

where i is an incident angle, R is radius [km] (= Earth radius – Event depth) and $c(R)$ is a velocity at R [km/s].

Model

A model which contains spherically symmetric density and velocity structure. Conditions for a model is detailed in Konishi *et al.*, 2014.

PREM

Preliminary reference Earth model (Dziewonski & Anderson, 1984). 1 sec model. The surface is replaced by solid (not ocean).

AK135

Kennet *et al.* 1995. Improved model of IASP91 (Kennett & Engdahl, 1991).

Polynomial file

User file written in polynomial format.

Named discontinuity file

User file written in named discontinuity format.

Depth

A depth for a seismic source. If it is 0, the event occurs at the Earth surface.

SH/SV

Mode of S polarization

Phase

You can identify the name of phase (ex. ScS, PKP...). The parsing is detailed in Konishi *et al.*, 2014.

Others

DO NOT NEED TO TOUCH (see Konishi *et al.*, 2014 for detail)

Integration interval

Intervals of each integration. Default value is 10 km.

allowable error of turning depth

Radius range for the computation by a device of Jeffreys & Jeffreys (1956).