Rayinvr format description

The velocity model is specified as follows:

  (a) the layer number, the x-coordinates (km) of a layer
      boundary entered from left to right (format: I2, 1X,
      10F7.2)
  (b) the z-coordinates (km) of a layer boundary corresponding
      to the x-coordinates listed above (format: 3X, 10F7.2)
  (c) a 0, 1 or -1 for each z-coordinate listed above
      depending on whether (1) or not (0) partial derivatives
      are to be calculated for a particular boundary node or the
      boundary depth is to be determined by fixing the thickness
      of the layer above at that x-coordinate (-1) (format:
      3X, 10I7)
  (d) the layer number, the x-coordinates (km) of the points
      at which the upper layer velocity is specified entered
      from left to right (format: I2, 1X, 10F7.2)
  (e) the upper layer P-wave velocities (km/s) corresponding
      to the x-coordinates listed above (format: 3X, 10F7.2)
  (f) a 0 or 1 for each velocity listed above depending on
      whether (1) or not (0) partial derivatives are to be
      calculated for a particular velocity (format: 3X, 10I7)
  (g) the layer number, the x-coordinates (km) of the points
      at which the lower layer velocity is specified entered
      from left to right (format: I2, 1X, 10F7.2)
  (h) the lower layer P-wave velocities (km/s) corresponding
      to the x-coordinates listed above (format: 3X, 10F7.2)
  (i) a 0, 1 or -1 for each velocity listed above depending on
      whether (1) or not (0) partial derivatives are to be
      calculated for a particular velocity or the lower velocity
      is to be determined be fixing the vertical velocity
      gradient at that x-coordinate (-1) (format: 3X, 10I7)

The above sequence of nine lines is repeated for each model
layer, the top-most layer specified first, the bottom-most
last, and is ended by specifying the bottom layer boundary of
the model as in (a) and (b) above. If the number of points
defining a boundary or the upper or lower velocity of a layer
must exceed 10 then the points can be continued onto subsequent
lines of the file as follows: line (b), (e) or (h) of the
particular parameter to be extended is modified to include a 1
in the second column so the complete format of the line becomes
I2, 1X, 10F7.2. The sequence of three lines (a)-(c), (d)-(f) or
(g)-(i) is then repeated as many times as is necessary using
the same format described above.