$$x_2 = \frac{x_1}{\cos \psi_1 - (p_{x1}/p_{z1}) \sin \psi_1} \, ,$$

$$p_{x2} = p_{x1} \cos \psi_1 + p_{z1} \sin \psi_1 \, ,$$

$$y_2 = y_1 + \frac{p_{y1}}{p_{z1}} x_2 \sin \psi_1 \, , \tag{94}$$

$$z_2 = z_1 - \frac{p_1}{p_{z1}} x_2 \sin \psi_1 \, ,$$

where $\psi_1 \equiv \texttt{ANGLE} \times \texttt{E1} + \texttt{AE1}$