$$x_2 = x_1 - \Delta x_{fr} \frac{p_1 - p_0}{p_1} ,$$

$$p_{y2} = p_{y1} + y_1 \frac{\Delta y_{fr} - \Delta y_{fra} y_1^2}{p_1^2} ,$$

$$z_2 = z_1 + \frac{-\Delta x_{fr} p_{x1} + (\Delta y_{fr} - \Delta y_{fra} y_1^2/2) y_1^2/(2p_1)}{p_1} - \Delta z_{fr} ,$$

where $\Delta z_{fr} \equiv \Delta x_{fr} \left(\sin(\texttt{ANGLE E1} + \texttt{AE1}) + \sin(\texttt{ANGLE E2} + \texttt{AE2})\right)$.