



# Publisher Correction: Self-Calibration and Crosshair Tracking with Modular Digital Imaging Total Station

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**Publisher Correction:**  
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The original version of this article unfortunately contained mistakes. There are errors in some equations, please see the correct equations below.

$$\begin{bmatrix} x' \\ y' \\ c \end{bmatrix} = \begin{bmatrix} x'_p - x'_0 - \Delta x' \\ y'_p - y'_0 - \Delta y' \\ c \end{bmatrix}. \quad (1)$$

$$\begin{bmatrix} \bar{X}_p \\ \bar{Y}_p \\ \bar{Z}_p \end{bmatrix} = D R_{IP_p} R_{IA_p} R_{IP_p}^T R_{H_p} R_{V_p} R_K \frac{1}{[[\dots]]} \begin{bmatrix} x' \\ y' \\ c \end{bmatrix}, \quad (2)$$

$$R_K = \begin{bmatrix} \cos \kappa & -\sin \kappa & 0 \\ \sin \kappa & \cos \kappa & 0 \\ 0 & 0 & 1 \end{bmatrix}. \quad (4)$$

$$R_{H_p} = \begin{bmatrix} \cos H_p & -\sin H_p & 0 \\ \sin H_p & \cos H_p & 0 \\ 0 & 0 & 1 \end{bmatrix}, \quad (5)$$

$$R_{V_p} = \begin{bmatrix} 1 & 0 & 0 \\ 0 & \sin V_p & \cos V_p \\ 0 & \cos V_p & -\sin V_p \end{bmatrix}, \quad (6)$$

$$\bar{H}_p - \tilde{H} = 0 + v_{\bar{H}_p}, \quad (9)$$

$$\bar{V}_p - \tilde{V} = 0 + v_{\bar{V}_p}. \quad (10)$$

$$R_{\bar{H}} R_{\bar{V}} R_K \frac{1}{[[\dots]]} \begin{bmatrix} x'_{Ch} - x'_0 - 0 \\ y'_{Ch} - y'_0 - 0 \\ c \end{bmatrix} = R_{\bar{H}} R_{\bar{V}} \begin{bmatrix} 0 \\ 0 \\ 1 \end{bmatrix}. \quad (11)$$

$$x^T A^T P l = l^T P l - v^T P v < 0.00000001. \quad (13)$$

The original article has been corrected.

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