Linear fit Camera $cam = 1$

Data from proposal 8982.
Target NGC1850

$$M = \begin{pmatrix} -0.03003 \\ -0.03079 \\ 0.03083 \\ -0.03019 \end{pmatrix} \quad \begin{matrix} a10 \\ a11 \\ b10 \\ b11 \end{matrix}$$

Extracted parameters

$xscale := \sqrt{(M_2)^2 + (M_4)^2}$ $xscale = 0.04312$

$yscale := \sqrt{(M_1)^2 + (M_3)^2}$ $yscale = 0.04304$

$\beta x := angle(M_4, M_2)$ $\beta x = 225.564deg$ $\beta x - 2\cdot\pi = -134.436deg$

$\beta y := angle(M_3, M_1)$ $\beta y = 315.756deg$ $\beta y - 2\cdot\pi = -44.244deg$

$\beta y - \beta x = 90.192deg$

Quadratic fit Camera $c = "1"$

$$M = \begin{pmatrix} -0.02997 \\ -0.03058 \\ -2.33361\times 10^{-7} \\ 2.20324\times 10^{-9} \\ -8.95984\times 10^{-7} \\ 0.03089 \\ -0.03007 \\ -2.96246\times 10^{-7} \\ 1.07246\times 10^{-8} \\ -5.32685\times 10^{-7} \end{pmatrix} \quad \begin{matrix} a10 \\ a11 \\ a20 \\ a21 \\ a22 \\ b10 \\ b11 \\ b20 \\ b21 \\ b22 \end{matrix}$$

Extracted parameters

$xscale := \sqrt{(M_2)^2 + (M_7)^2}$ $xscale = 0.042886$

$yscale := \sqrt{(M_1)^2 + (M_6)^2}$ $yscale = 0.043040$

$\beta x := angle(M_6, M_1)$ $\beta x = 315.87deg$

$\beta y := angle(M_7, M_2)$ $\beta y = 225.488deg$

Linear fit Camera $cam = 2$

$$M = \begin{pmatrix} -0.05353 \\ -0.05348 \\ 0.05306 \\ -0.05383 \end{pmatrix} \quad \begin{matrix} a10 \\ a11 \\ b10 \\ b11 \end{matrix}$$

Extracted parameters

$xscale := \sqrt{(M_2)^2 + (M_4)^2}$ $xscale = 0.07588$

$yscale := \sqrt{(M_1)^2 + (M_3)^2}$ $yscale = 0.07537$

$\beta x := angle(M_4, M_2)$ $\beta x = 224.815deg$ $\beta x - 2\cdot\pi = -135.185deg$

$\beta y := angle(M_3, M_1)$ $\beta y = 314.747deg$ $\beta y - 2\cdot\pi = -45.253deg$

$\beta y - \beta x = 89.932deg$

Quadratic fit Camera $cam = 2$

$$M = \begin{pmatrix} -0.05371 \\ -0.05362 \\ 6.00480\times 10^{-7} \\ 1.04885\times 10^{-8} \\ 5.86256\times 10^{-7} \\ 0.05295 \\ -0.05411 \\ 4.08142\times 10^{-7} \\ -4.82528\times 10^{-9} \\ 1.20380\times 10^{-6} \end{pmatrix} \quad \begin{matrix} a10 \\ a11 \\ a20 \\ a21 \\ a22 \\ b10 \\ b11 \\ b20 \\ b21 \\ b22 \end{matrix}$$

Extracted parameters

$xscale := \sqrt{(M_2)^2 + (M_7)^2}$ $xscale = 0.076175$

$yscale := \sqrt{(M_1)^2 + (M_6)^2}$ $yscale = 0.075425$

$\beta x := angle(M_6, M_1)$ $\beta x = 314.591deg$

$\beta y := angle(M_7, M_2)$ $\beta y = 224.74deg$

Linear fit Camera $cam = 3$

$$M = \begin{pmatrix} -0.14267 \\ -0.14378 \\ 0.14384 \\ -0.14347 \end{pmatrix} \quad \begin{matrix} a10 \\ a11 \\ b10 \\ b11 \end{matrix}$$

Extracted parameters

$xscale := \sqrt{(M_2)^2 + (M_4)^2}$ $xscale = 0.20312$

$yscale := \sqrt{(M_1)^2 + (M_3)^2}$ $yscale = 0.20259$

$\beta x := angle(M_4, M_2)$ $\beta x = 225.062deg$ $\beta x - 2\cdot\pi = -134.938deg$

$\beta y := angle(M_3, M_1)$ $\beta y = 315.234deg$ $\beta y - 2\cdot\pi = -44.766deg$

$\beta y - \beta x = 90.172deg$

Quadratic fit Camera $cam = 3$

$$M = \begin{pmatrix} -0.14142 \\ -0.14366 \\ -4.65995\times 10^{-6} \\ -4.35227\times 10^{-8} \\ -5.32277\times 10^{-7} \\ 0.14311 \\ -0.14286 \\ 2.67906\times 10^{-6} \\ 3.26543\times 10^{-8} \\ -2.50191\times 10^{-6} \end{pmatrix} \quad \begin{matrix} a10 \\ a11 \\ a20 \\ a21 \\ a22 \\ b10 \\ b11 \\ b20 \\ b21 \\ b22 \end{matrix}$$

Extracted parameters

$xscale := \sqrt{(M_2)^2 + (M_7)^2}$ $xscale = 0.202599$

$yscale := \sqrt{(M_1)^2 + (M_6)^2}$ $yscale = 0.201198$

$\beta x := angle(M_6, M_1)$ $\beta x = 315.339deg$

$\beta y := angle(M_7, M_2)$ $\beta y = 225.159deg$