

FGS2R2

Y_{POS TARG}
X_{POS TARG}
Y_{POS 4800}
X_{POS 4800}

Notes:

- All numbers given are approximate, $\pm 30^\circ$. Values may evolve.
- Pixel counts are for the active pixel range and do not include overcan.
- Coordinate frames are drawn at their approximate origins unless otherwise noted.
- Contours drawn are only approximations but include any significant 1 σ order geometric distortions.
- See www.stsci.edu/hst for more detailed and accurate SII-specific information.

~840"

~285"

STIS

WFC3

COS

~620"

~825"

FGS1R (ASTROMETER)

Y_{POS TARG}
X_{POS TARG}
Y_{POS 4800}
X_{POS 4800}

~160"

~130"

~120"

~110"

~100"

~90"

~80"

~70"

~60"

~50"

~40"

~30"

~20"

~10"

~0"

~10"

~20"

~30"

~40"

~50"

~60"

~70"

~80"

~90"

~100"

~110"

~120"

~130"

~160"

~180"

~200"

~220"

~240"

~260"

~280"

~300"

~320"

~340"

~360"

~380"

~400"

~420"

~440"

~460"

~480"

~500"

~520"

~540"

~560"

~580"

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~6040"

~6060"

~6080"

~6100"

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~6160"

~6180"

~6200"

~6220"

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Note: See 575 TB 99-02 for Complete Details

1.5' Primary Science Aperture as Weight Object Aperture
are identical to 100' Fixed Plane when at 100' 1.5'

RESULTS

1

- $X_{\text{new}} = \text{Axis1} \times Y_{\text{new}} + Y_{\text{new}} = \text{Axis2} \times Y_{\text{new}} = Y_{\text{new}}$
- $X_{\text{new}} = X_{\text{new}} \times Y_{\text{new}}$ (units: arcsseconds)
- PA_V3: N to V_3 through E , at the V_3 axis (commanded)
- ROLL_AVE: N to V_3 through E , at the aperture reference point (computed)
- PA_APER: N to V_3 through E , at the aperture reference point (commanded)
- ORIENTAT: N to $Y_{\text{new}}(Y_{\text{new}})$ through E , at the aperture reference point (commanded)

Note: SIA5 frame is aligned with pixels and need not be orthogonal. SICS is orthogonal and aligned with the aperture. Aperture and detector need not be aligned.

- ORIENT: N to U through E , at the aperture reference (commanded)
- P_1 : V_3 to X_{new} through V_3 (database lookup)
- P_2 : V_3 to Y_{new} through V_3 (database lookup)
- P_3 : V_3 to Y_{new} through V_3 (database lookup)

Version 4 Mar 09: added POS TARG frame for V1 "aperture" (config=S/C)
updated FGS replacement as FGS2Rr