13218 - WFC3 SS FGS-UVIS Update

Cycle: 30, Proposal Category: CAL/WFC3

(Availability Mode: RESTRICTED)

INVESTIGATORS

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VISITS

Visit	*Targets used in Visit*	*Configurations used in Visit*	*Orbits Used*	*Last Orbit Planner Run*	*OP Current with Visit?*
01	(1) NGC-188-58	WFC3/UVIS	1	12-Jun-2024 17:00:14.0	yes

1 Total Orbits Used

ABSTRACT

Part of side switch activities.

Mapping of the WFC3 UVIS detector coordinate frame to the FGS frame will be determined from observations of an astrometric field with the WFC3 UVIS channel.

ID:WF29

OBSERVING DESCRIPTION

Part of side switch activities.

Images of an area near the center of the open cluster NGC-188, an astrometric field, will be obtained with the UVIS detector using astrometric guidestars. The target, previously used for the analogous ACS calibration, will be observed with POS-TARGs ~ (0,0), (0,-25), and (-15,0). The FGS (V2-V3) positions of the astrometric stars in each field will be computed by HST Flight Operations at GSFC. The POS-TARG offsets will be used to corroborate the plate scales and orientations of the images in the FGS frame. Measurement of stellar positions on the detector will be used to map the UVIS detector coordinate frame to the FGS frame.

A filter with a compact PSF (F410M) will be used.

------ Calibration Justification -------

WFC3/UVIS target acquisition and astrometric calibration are dependent on the successful implementation of this proposal.

Visit

Proposal 13218, Visit 01, implementation Wed Jun 12 21:00:15 GMT 2024

Diagnostic Status: Warning

Scientific Instruments: WFC3/UVIS

Special Requirements: SCHED 100%

Diagnostics

(Exposure 1 (Visit 01)) Warning (Form): FLASH level may be too low for this exposure or a short subexposure. See extended explanation in the diagnostic browser

(Exposure 2 (Visit 01)) Warning (Form): FLASH level may be too low for this exposure or a short subexposure. See extended explanation in the diagnostic browser

(Exposure 3 (Visit 01)) Warning (Form): FLASH level may be too low for this exposure or a short subexposure. See extended explanation in the diagnostic browser

Fixed Targets

#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(1)	NGC-188-58	RA: 00 47 4.4540 (11.7685583d) Dec: +85 16 32.70 (85.27575d) Equinox: J2000	Proper Motion RA: -0.00017 sec of time/yr Proper Motion Dec: -0.0112 arcsec/yr Parallax: 0.0" Epoch of Position: 2000	V=14.65+/-0.05	Reference Frame: ICRS

Comments:
Category=CALIBRATION
Description=[ASTROMETRIC]

Exposures

#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
1		(1) NGC-188-58	WFC3/UVIS, ACCUM, UVIS	F410M		GS ACQ SCENARIO BASE1O3		228 Secs (228 Secs) *[==>]*	 ***[1]***
2		(1) NGC-188-58	WFC3/UVIS, ACCUM, UVIS	F410M		POS TARG -15.0,0.0		228 Secs (228 Secs) *[==>]*	 ***[1]***
3		(1) NGC-188-58	WFC3/UVIS, ACCUM, UVIS	F410M		POS TARG 0.0,-25.0		228 Secs (228 Secs) *[==>]*	 ***[1]***

Orbit Structure