

13214 - WFC3 SS UVIS Image Quality

Cycle: 30, Proposal Category: CAL/WFC3

(Availability Mode: RESTRICTED)

INVESTIGATORS

Name	*Institution*
Dr. John W. MacKenty (PI) (Contact)	**Space Telescope Science Institute**
Heather Gunning (CoI)	Space Telescope Science Institute
Dr. Linda L. Dressel (CoI)	Space Telescope Science Institute

VISITS

Visit	*Targets used in Visit*	*Configurations used in Visit*	*Orbits Used*	*Last Orbit Planner Run*	*OP Current with Visit?*
01	(1) NGC188-58	WFC3/UVIS	3	12-Jun-2024 16:00:40.0	yes

3 Total Orbits Used

ABSTRACT

Part of side switch activities.

The UVIS imaging performance over field will be assessed in two passbands to verify PSF encircled energy CEI specifications and other performance metrics at 250 and 633 nm.

ID: WF23

OBSERVING DESCRIPTION

Part of side switch activities.

The UVIS imaging performance over field will be assessed in two passbands to verify PSF encircled energy CEI specifications at 250 and 633 nm. The observed field must be sufficiently dense to provide good sampling over the FOV while providing enough isolated stars to permit accurate PSF measurement. If the field is astrometric and astrometric guide stars are used, the plate scale and image orientation may also be determined. NGC-188 star 58 is a likely target, available year-round and used previously for ACS alignment. The F275W and F621M filters will be used. Full frame images will be obtained at each of 4 POS-TARG offset positions designed to improve sampling over the field.

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

The image quality of UVIS science data are assessed fully for the first time and at the CEI spec wavelengths.

Proposal 13214 - Visit 01 - WFC3 SS UVIS Image Quality

Visit

Proposal 13214, Visit 01, implementation Wed Jun 12 20:00:40 GMT 2024

Diagnostic Status: Warning

Scientific Instruments: WFC3/UVIS

Special Requirements: SCHED 100%

Diagnostics

(Visit 01) Warning (Orbit Planner): ORBITAL VISIBILITY OVERRUN

(Visit 01) Warning (Orbit Planner): ORBITAL VISIBILITY OVERRUN

(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

(Exposure 4 (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 5 (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 6 (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 7 (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 8 (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

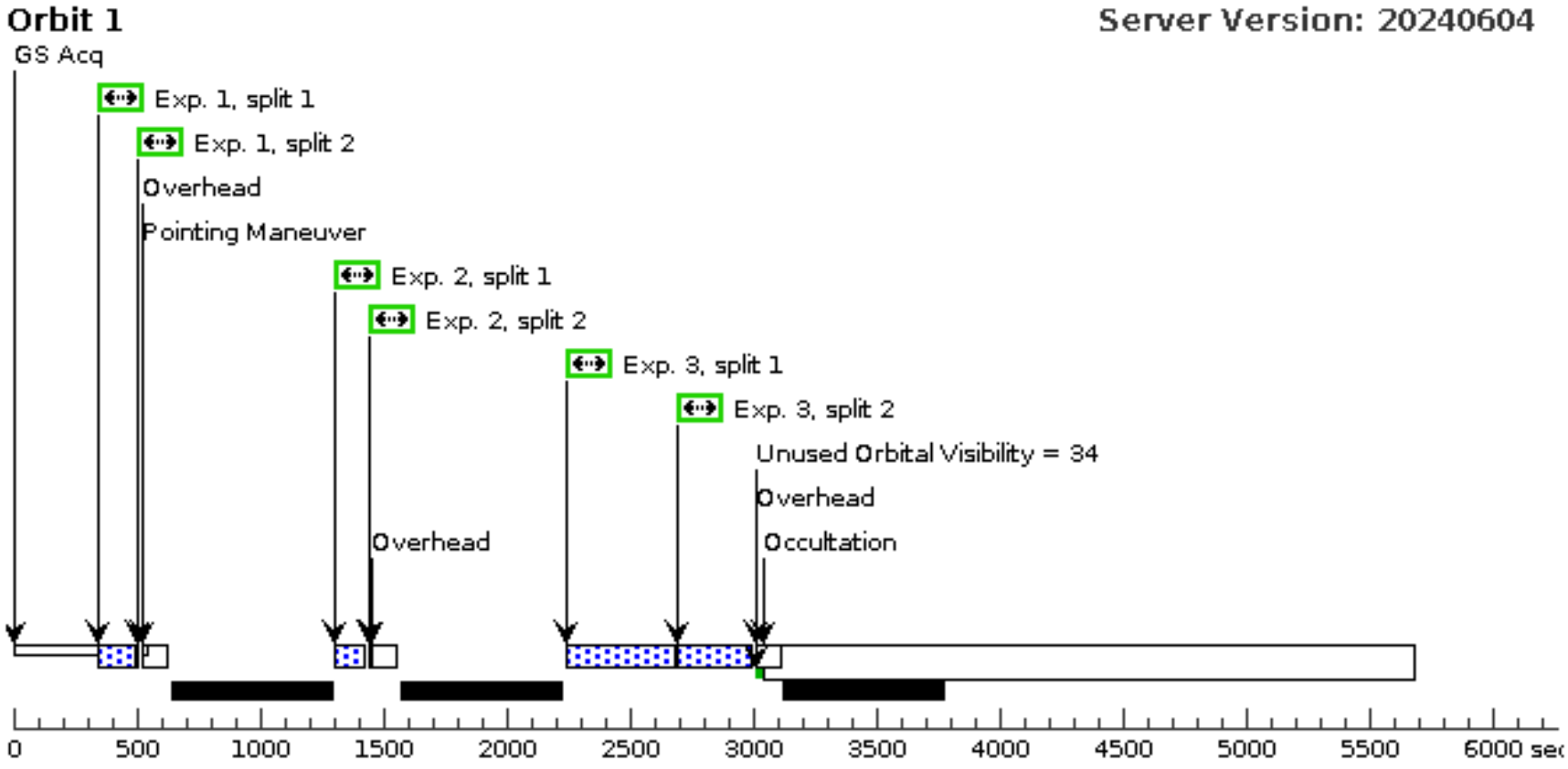
#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(1)	NGC188-58	RA: 00 47 4.4540 (11.7685583d) Dec: +85 16 32.70 (85.27575d) Equinox: J2000	Proper Motion RA: -0.00257 sec of time/yr Proper Motion Dec: -0.0112 arcsec/yr Parallax: 0.0" Epoch of Position: 2000	V=14.65+/-0.05	Reference Frame: ICRS

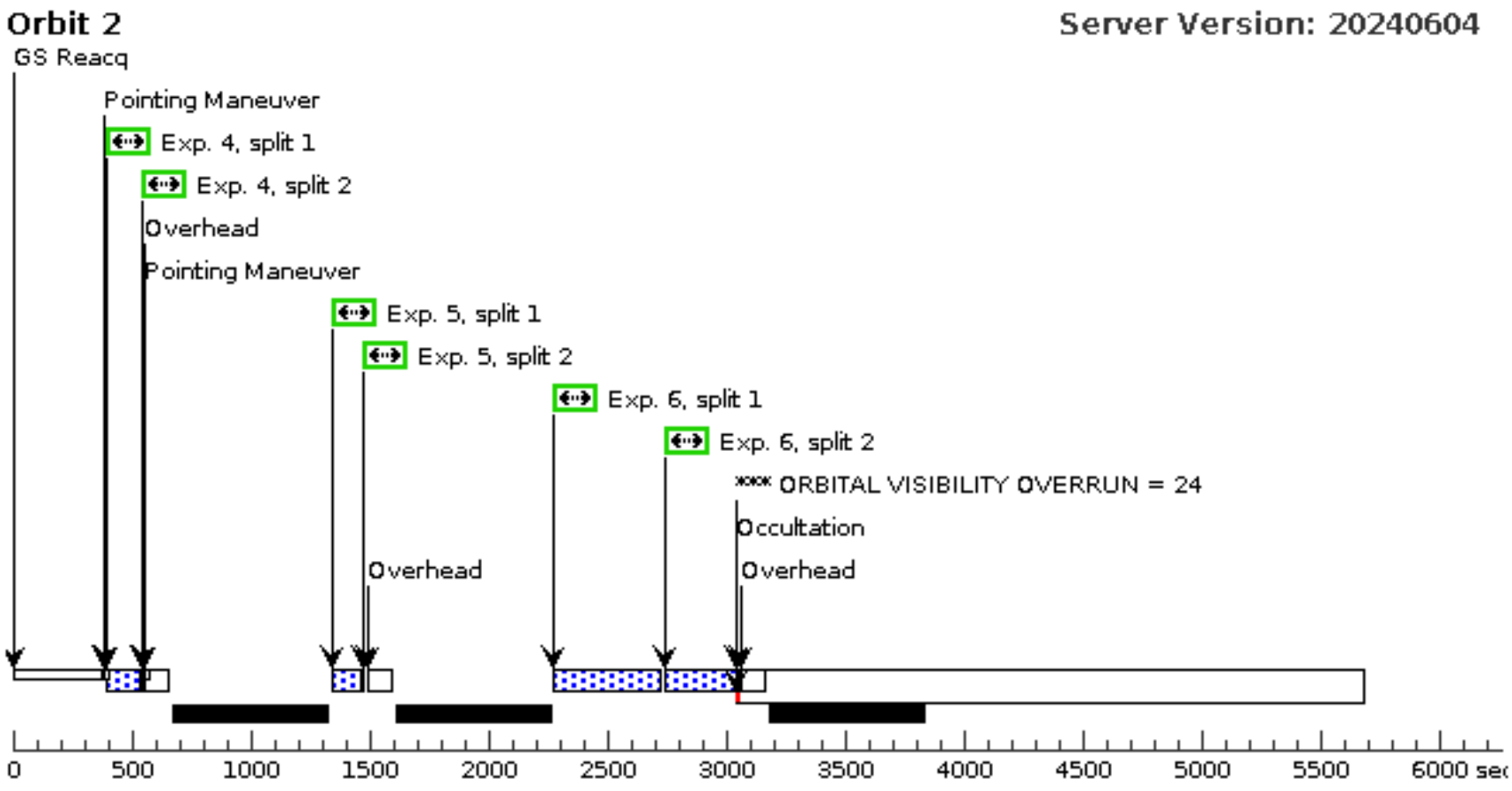
Comments: Use guide stars from the NGC188 Astrometric Catalog (Plate-ID ZZZZ)
Category=STELLAR CLUSTER
Description=[OPEN CLUSTER]

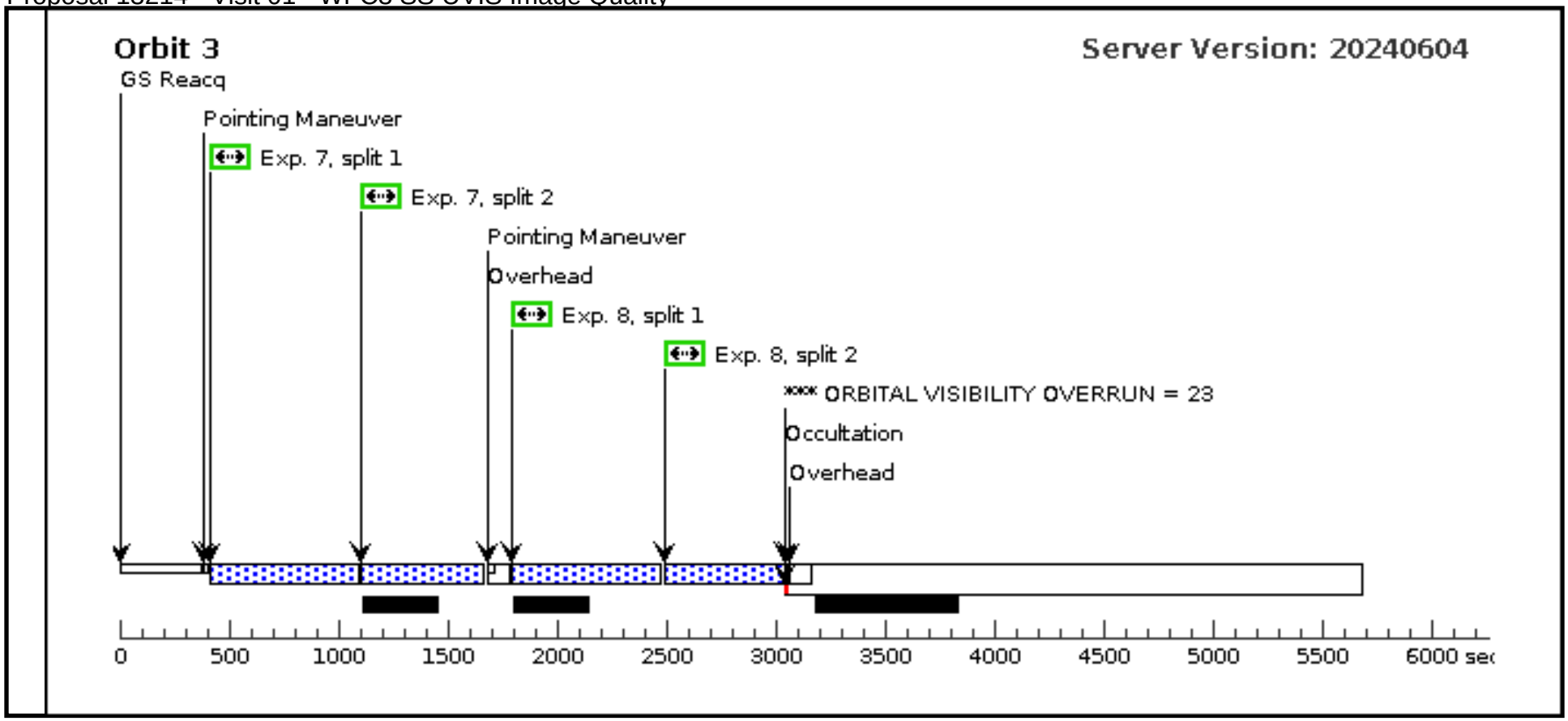
Exposures

#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
1		(1) NGC188-58	WFC3/UVIS, ACCUM, UVIS	F621M	CR-SPLIT=2	POS TARG 0.,20.; GS ACQ SCENARIO BASE1O3		60 Secs (1 Secs) *[==>0.5 Secs (Split 1)]* *[==>0.5 Secs (Split 2)]*	***[1]***
2		(1) NGC188-58	WFC3/UVIS, ACCUM, UVIS	F621M	CR-SPLIT=2			60 Secs (1 Secs) *[==>0.5 Secs (Split 1)]* *[==>0.5 Secs (Split 2)]*	***[1]***
3		(1) NGC188-58	WFC3/UVIS, ACCUM, UVIS	F275W	CR-SPLIT=2	POS TARG 0,0		1360 Secs (600 Secs) *[==>300.0 Secs (Split 1)]* *[==>300.0 Secs (Split 2)]*	***[1]***
4		(1) NGC188-58	WFC3/UVIS, ACCUM, UVIS	F621M	CR-SPLIT=2	POS TARG 20.00,0.		60 Secs (1 Secs) *[==>0.5 Secs (Split 1)]* *[==>0.5 Secs (Split 2)]*	***[2]***
5		(1) NGC188-58	WFC3/UVIS, ACCUM, UVIS	F621M	CR-SPLIT=2	POS TARG 20.00,20.00		60 Secs (1 Secs) *[==>0.5 Secs (Split 1)]* *[==>0.5 Secs (Split 2)]*	***[2]***
6		(1) NGC188-58	WFC3/UVIS, ACCUM, UVIS	F275W	CR-SPLIT=2	POS TARG 20.00,20.		1360 Secs (622 Secs) *[==>311.0 Secs (Split 1)]* *[==>311.0 Secs (Split 2)]*	***[2]***
7		(1) NGC188-58	WFC3/UVIS, ACCUM, UVIS	F275W	CR-SPLIT=2	POS TARG 20.00,0.		1280 Secs (1130 Secs) *[==>565.0 Secs (Split 1)]* *[==>565.0 Secs (Split 2)]*	***[3]***
8		(1) NGC188-58	WFC3/UVIS, ACCUM, UVIS	F275W	CR-SPLIT=2	POS TARG 0.,20.		1280 Secs (1130 Secs) *[==>565.0 Secs (Split 1)]* *[==>565.0 Secs (Split 2)]*	***[3]***

Orbit Structure




Orbit 2
Server Version: 20240604
GS Reacq
Pointing Maneuver
Exp. 4, split 1
Exp. 4, split 2
Overhead
Pointing Maneuver
Exp. 5, split 1
Exp. 5, split 2
Exp. 6, split 1
Exp. 6, split 2
*** ORBITAL VISIBILITY OVERRUN = 24
Occultation
Overhead
Overhead
0
500
1000
1500
2000
2500
3000
3500
4000
4500
5000
5500
6000 sec


Orbit 3
Server Version: 20240604
GS Reacq
Pointing Maneuver
Exp. 7, split 1
Exp. 7, split 2
Pointing Maneuver
Overhead
Exp. 8, split 1
Exp. 8, split 2
**** ORBITAL VISIBILITY OVERRUN = 23
Occultation
Overhead
0
500
1000
1500
2000
2500
3000
3500
4000
4500
5000
5500
6000 sec