18242 - Probing the UV to MIR spectra of local Little Red Dots

Cycle: 33, Proposal Category: GO

(Availability Mode: SUPPORTED)

INVESTIGATORS

Name	*Institution*
Dr. Franz Bauer (PI) (Contact)	**Space Science Institute**
Dr. Igor Chilingarian (CoI) (CoPI)	Smithsonian Institution Astrophysical Observatory
Mr. Arun Sasidharan Pillai (CoI)	Pontificia Universidad Catolica de Chile
Prof. Thomas H. Puzia (CoI)	Pontificia Universidad Catolica de Chile
Anastasia Shlentsova (CoI)	Pontificia Universidad Catolica de Chile

VISITS

Visit	*Targets used in Visit*	*Configurations used in Visit*	*Orbits Used*	*Last Orbit Planner Run*	*OP Current with Visit?*
01	(1) SCHG-2240-384	COS/FUV COS/NUV	4	04-May-2026 13:00:14.0	yes
02	(1) SCHG-2240-384	WFC3/UVIS	2	04-May-2026 13:00:15.0	yes
03	(2) SDSSJ1340+0211	COS/FUV COS/NUV	4	04-May-2026 13:00:16.0	yes
04	(2) SDSSJ1340+0211	WFC3/UVIS	2	04-May-2026 13:00:16.0	yes
05	(3) SDSSJ1717+3807	COS/FUV COS/NUV	4	04-May-2026 13:00:17.0	yes
08	(3) SDSSJ1717+3807	WFC3/UVIS	2	04-May-2026 13:00:18.0	yes

18 Total Orbits Used

ABSTRACT

JWST has uncovered a mysterious population of compact, red sources at z2-10 known as "Little Red Dots" (LRDs). Their observed properties defy nearly all typical AGN properties, leading researchers to hypothesize that they could be primordial supermassive stars or enshrouded supermassive black holes ('quasi-stars'), offering a direct window into heavy black hole seed formation. A small population of local analogs at z<0.5 have been recently identified, ~5-10 magnitudes brighter than those from JWST, providing an unparalleled window into the phenomena. We propose JWST/NIRSpec+MIRI + HST UV spectroscopy of six local LRD analogs to decipher their nature. Rest-frame 0.1-0.2 and 1-28 um spectra will probe key diagnostics: UV emission, absorption and outflows; dust continuum shape; silicate features; PAH emission; and fine-structure lines, and numerous absorption lines and bands. This sample will push further into the MIR than is possible for their distant cousins, thereby enabling novel insights into the enigmatic LRD population and their central power sources.

OBSERVING DESCRIPTION

We propose to observe the sample of 3 local LRDs with both HST COS GL130M + GL160M and WFC3 UVIS F300X, F475W, and F850LP. The proposed UV spectral and spatially resolved studies of faint compact emission are well-suited to HST's capabilities in space. Based on the high Balmer decrements, low metallicities and existing rest-frame UV spectra of BL-LRDs with JWST, we may expect that the UV regime of BL-BCDs may lack most broad and/or bright lines, aside from Ly-alpha and perhaps HeI and HeII. Instead, if the UV is dominated stellar light from a nuclear star cluster, we expect to see FUV signatures of very young stellar populations, namely, stellar absorptions.

For COS, we will use the two medium-resolution gratings, G130M and G160M (lam_cen=1291 and 1589, respectively) to cover the almost continuous spectral coverage between Ly-alpha and HeII (1640A), i.e., 1130--1780\AA with a few (short) gaps. We adopt a combination of G130M+G160M rather than a single setup with G140L because (i) each of them provides almost a 2x better throughput, so after binning along the wavelength we will get similar quality of continuum measurements; (ii) they provide much higher spectral resolution, which is crucial for the detection of narrow blue-shifted absorption lines associated with outflows, as we expect for our targets.

For UVIS WFC3, we will use F300X+F475W+F850LP to probe the faint extended emission associated with the underlying older stellar population, enabling constraints on the stellar mass, age, and morphology of the hosts. These particular filters were chosen so as to mitigate contamination from high-EW lines in the nucleus, the PSF of which we will need to model and remove. The latter motivates us to adopt 3 UVIS bands, which offer a somewhat better sampled PSF compared to the IR detector. Notably, F300X will probe young stars in the NUV, and is 3 times more efficient than F275W for the same exposure time. F850LP will probe a redder starlight to offer a useful upper limit on stellar mass, while avoiding H-alpha and

HeI 10830A. F850LP will also serve as the primary filter for the two-dimensional light profile decomposition to estimate structural properties (dust attenuation is not considered important here vs. the bluer bands, while the width of the instrumental PSF is still small). F475W (SDSS g) will be crucial for the analysis of stellar population properties of host galaxies in a combination with F850LP, while avoiding H-beta+[O III] and only suffering minor continuum contamination from weaker Balmer lines and [O II].

Visit

Proposal 18242, SCHG-2240-384_cos_1 (01), implementation Mon May 04 17:00:19 GMT 2026

Diagnostic Status: Warning

Scientific Instruments: COS/FUV, COS/NUV

Special Requirements: (none)

Comments: source shows mild asymmetric extension ~2" to NE.

Diagnostics

(SCHG-2240-384_cos_1 (01)) Warning (Form): For the best data quality, it is generally required to use all four FP-POS positions at a given COS cenwave (or 2 positions for certain exception cases). See extended explanation in the diagnostic browser.

(exp1 (01.002)) Warning (Form): COS FUV PSA science exposures with extended targets have special calibration limitations. See "Errors and Warnings" for more details.

(exp2 (01.003)) Warning (Form): COS FUV PSA science exposures with extended targets have special calibration limitations. See "Errors and Warnings" for more details.

(exp3 (01.004)) Warning (Form): COS FUV PSA science exposures with extended targets have special calibration limitations. See "Errors and Warnings" for more details.

(exp4 (01.005)) Warning (Form): COS FUV PSA science exposures with extended targets have special calibration limitations. See "Errors and Warnings" for more details.

Fixed Targets

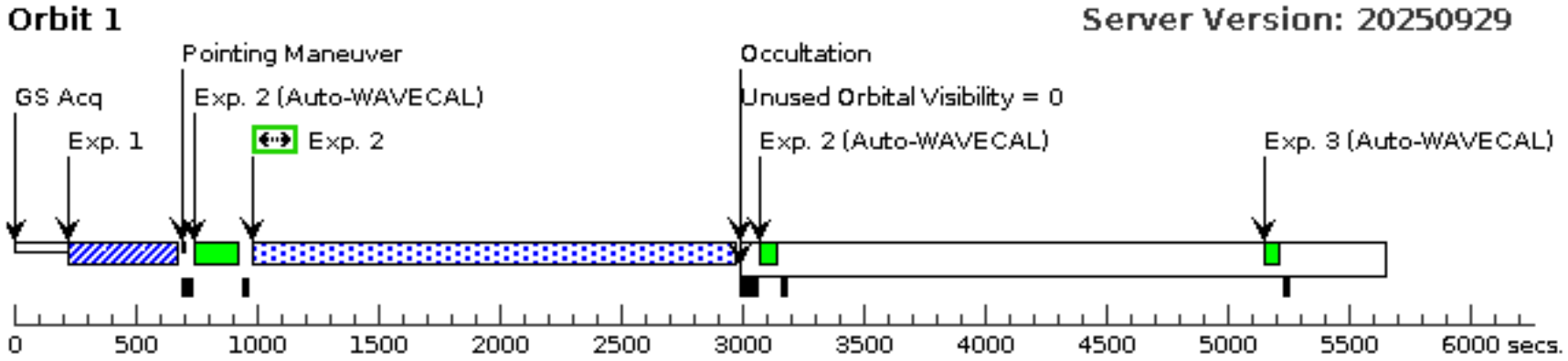
#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(1)	SCHG-2240-384	RA: 22 43 32.9452 (340.8872717d) Dec: -38 11 21.00 (-38.18917d) Equinox: J2000	Proper Motion RA: 0 Proper Motion Dec: 0 Epoch of Position: 2000 Redshift: 0.0759	V=17.4+/-0.1	Reference Frame: ICRS

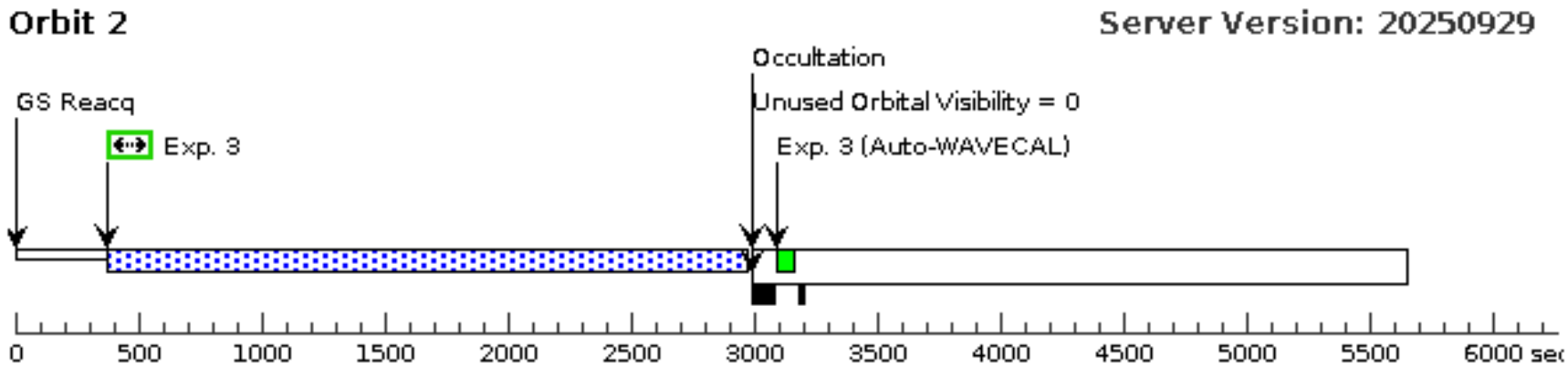
Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.
Category=GALAXY
Description=[DWARF COMPACT]
Extended=YES

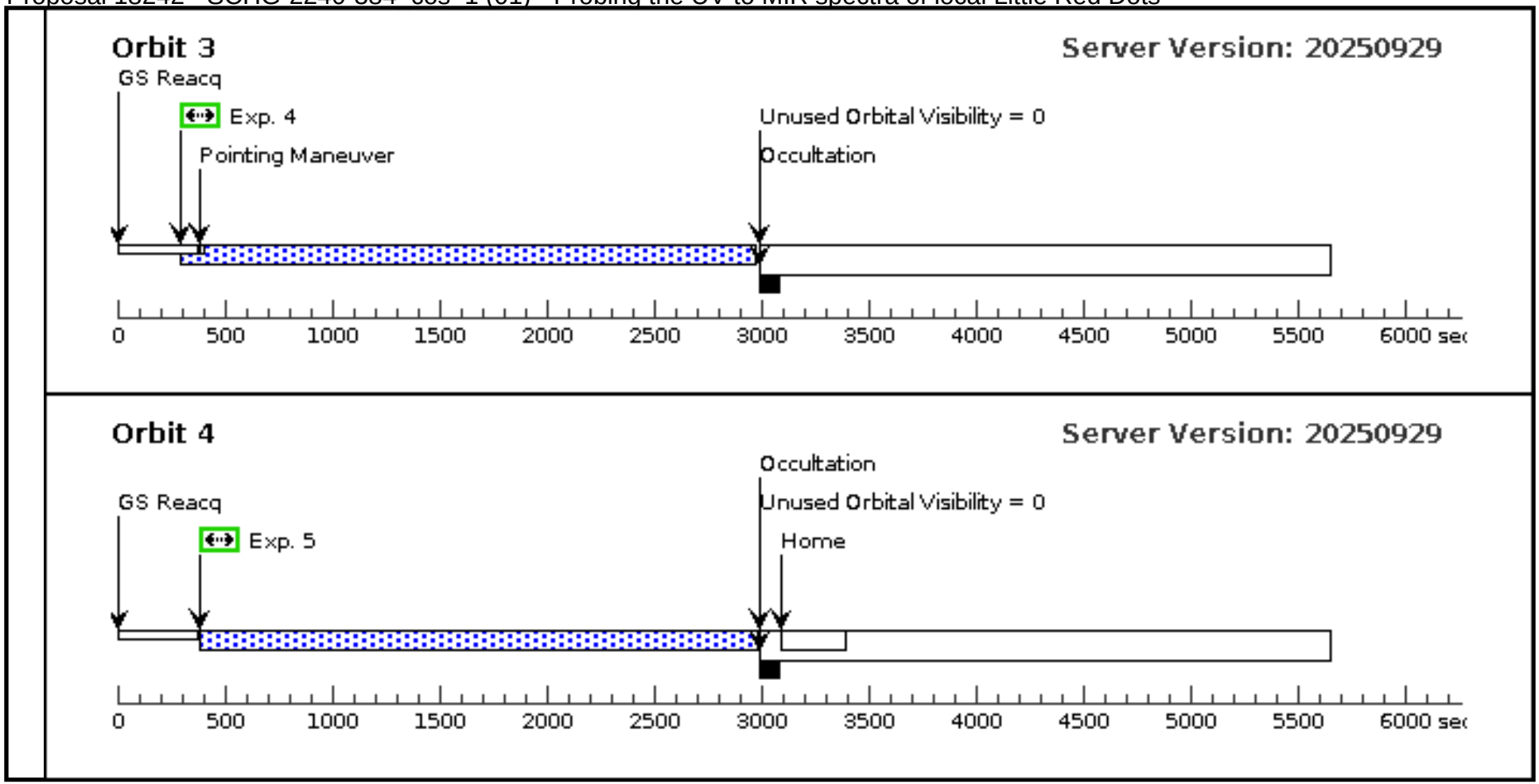
Exposures

#	Label (ETC Run)	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
1	acq (COS.sp.1919964)	(1) SCHG-2240-384	COS/NUV, ACQ/IMAGE, PSA	MIRRORA				120 Secs (120 Secs) *[==>]*	***[1]***
2	exp1 (COS.sp.1919964)	(1) SCHG-2240-384	COS/FUV, TIME-TAG, PSA	G130M 1291 A	SEGMENT=BOTH; BUFFER-TIME=3000; FLASH=YES; FP-POS=3			2000 Secs (1942 Secs) *[==>1942.0 Secs]*	***[1]***
3	exp2 (COS.sp.1919964)	(1) SCHG-2240-384	COS/FUV, TIME-TAG, PSA	G130M 1291 A	SEGMENT=BOTH; BUFFER-TIME=3000; FLASH=YES; FP-POS=3			2400 Secs (2552 Secs) *[==>2552.0 Secs]*	***[2]***
4	exp3 (COS.sp.1919964)	(1) SCHG-2240-384	COS/FUV, TIME-TAG, PSA	G160M 1589 A	BUFFER-TIME=3000; FP-POS=1			2400 Secs (2510 Secs) *[==>2510.0 Secs]*	***[3]***
5	exp4 (COS.sp.1919964)	(1) SCHG-2240-384	COS/FUV, TIME-TAG, PSA	G160M 1589 A	BUFFER-TIME=3000; FP-POS=1			2400 Secs (2548 Secs) *[==>2548.0 Secs]*	***[4]***

Orbit Structure






Orbit 3
Server Version: 20250929
GS Reacq
Exp. 4
Pointing Maneuver
Unused Orbital Visibility = 0
Occultation
0
500
1000
1500
2000
2500
3000
3500
4000
4500
5000
5500
6000 sec
Orbit 4
Server Version: 20250929
Occultation
GS Reacq
Unused Orbital Visibility = 0
Exp. 5
Home
0
500
1000
1500
2000
2500
3000
3500
4000
4500
5000
5500
6000 sec

Visit

Proposal 18242, SCHG-2240-384_wfc3 (02), implementation Mon May 04 17:00:19 GMT 2026

Diagnostic Status: No Diagnostics

Scientific Instruments: WFC3/UVIS

Special Requirements: (none)

Patterns

#	Primary Pattern		Secondary Pattern	Exposures
(1)	Pattern Type=WFC3-UVIS-DITHER-BOX Purpose=DITHER Number Of Points=4 Point Spacing=0.173 Line Spacing=0.112	Coordinate Frame=POS-TARG Pattern Orientation=23.884 Angle Between Sides=81.785 Center Pattern=false		(1), (2), (3)

Fixed Targets

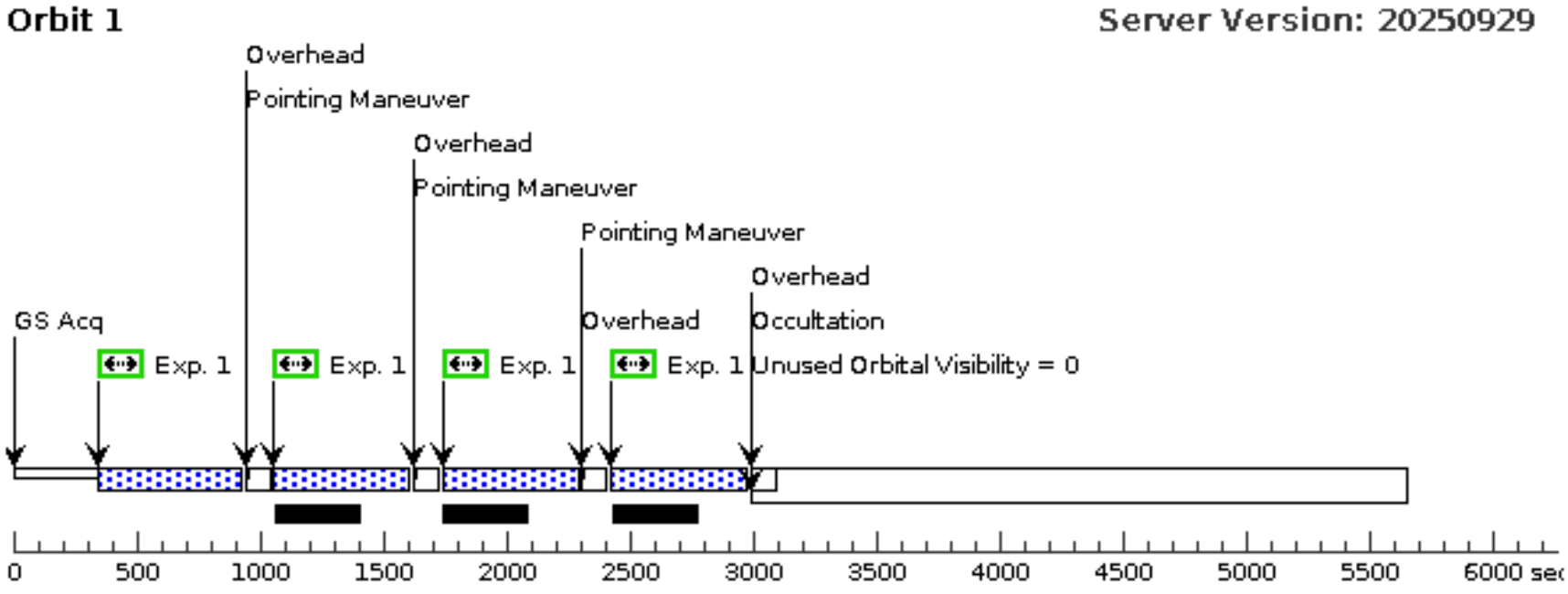
#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(1)	SCHG-2240-384	RA: 22 43 32.9452 (340.8872717d) Dec: -38 11 21.00 (-38.18917d) Equinox: J2000	Proper Motion RA: 0 Proper Motion Dec: 0 Epoch of Position: 2000 Redshift: 0.0759	V=17.4+/-0.1	Reference Frame: ICRS

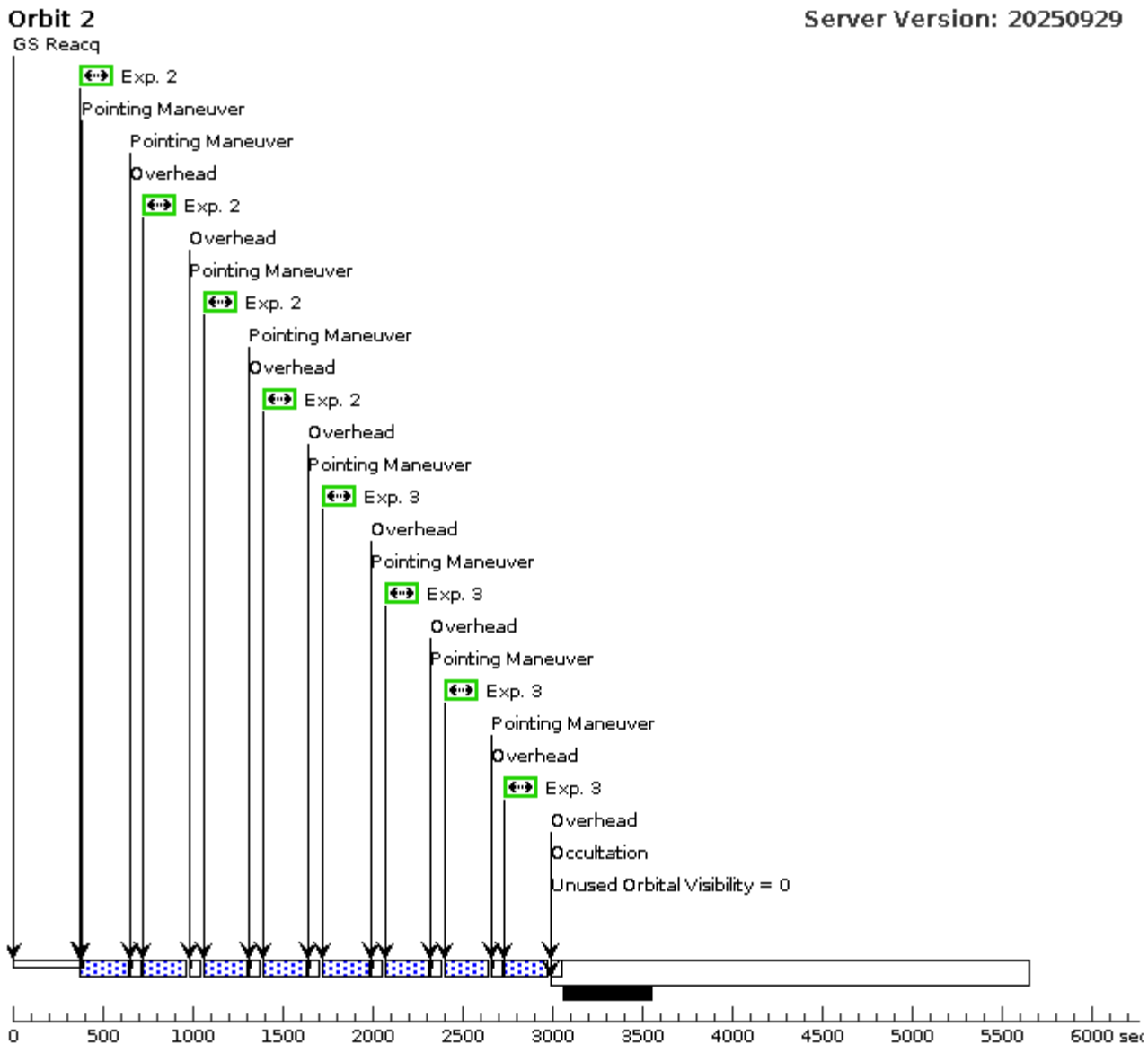
Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.
Category=GALAXY
Description=[DWARF COMPACT]
Extended=YES

Exposures

#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
1		(1) SCHG-2240-384	WFC3/UVIS, ACCUM, UVIS2-C1K1C-CTE	F300X	FLASH=14		Pattern 1, Exps 1-1 in SCHG-2240-384_wfc3 (02) (1)	500 Secs (2211 Secs) *[==>552.0 Secs (Pattern 1)]* *[==>553.0 Secs (Pattern 2)]* *[==>553.0 Secs (Pattern 3)]* *[==>553.0 Secs (Pattern 4)]*	***[1]***
2		(1) SCHG-2240-384	WFC3/UVIS, ACCUM, UVIS2-C1K1C-SUB	F475W	FLASH=14		Pattern 1, Exps 2-2 in SCHG-2240-384_wfc3 (02) (1)	500 Secs (972 Secs) *[==>243.0 Secs (Pattern 1)]* *[==>243.0 Secs (Pattern 2)]* *[==>243.0 Secs (Pattern 3)]* *[==>243.0 Secs (Pattern 4)]*	***[2]***
3		(1) SCHG-2240-384	WFC3/UVIS, ACCUM, UVIS2-C1K1C-SUB	F850LP	FLASH=21		Pattern 1, Exps 3-3 in SCHG-2240-384_wfc3 (02) (1)	500 Secs (972 Secs) *[==>243.0 Secs (Pattern 1)]* *[==>243.0 Secs (Pattern 2)]* *[==>243.0 Secs (Pattern 3)]* *[==>243.0 Secs (Pattern 4)]*	***[2]***

Orbit Structure




Orbit 2
Server Version: 20250929
GS Reacq
Exp. 2
Pointing Maneuver
Pointing Maneuver
Overhead
Exp. 2
Overhead
Pointing Maneuver
Exp. 2
Pointing Maneuver
Overhead
Exp. 2
Overhead
Pointing Maneuver
Exp. 3
Overhead
Pointing Maneuver
Exp. 3
Overhead
Pointing Maneuver
Exp. 3
Pointing Maneuver
Overhead
Exp. 3
Overhead
Occultation
Unused Orbital Visibility = 0
0
500
1000
1500
2000
2500
3000
3500
4000
4500
5000
5500
6000 sec

Visit

Proposal 18242, SDSSJ1340+0211_cos_1 (03), implementation Mon May 04 17:00:19 GMT 2026

Diagnostic Status: Warning

Scientific Instruments: COS/FUV, COS/NUV

Special Requirements: (none)

Comments: source should mild symmetric extension ~1-2"

Diagnostics

(SDSSJ1340+0211_cos_1 (03)) Warning (Form): For the best data quality, it is generally required to use all four FP-POS positions at a given COS cenwave (or 2 positions for certain exception cases). See extended explanation in the diagnostic browser.

(exp1 (03.002)) Warning (Form): COS FUV PSA science exposures with extended targets have special calibration limitations. See "Errors and Warnings" for more details.

(exp2 (03.003)) Warning (Form): COS FUV PSA science exposures with extended targets have special calibration limitations. See "Errors and Warnings" for more details.

(exp3 (03.004)) Warning (Form): COS FUV PSA science exposures with extended targets have special calibration limitations. See "Errors and Warnings" for more details.

(exp4 (03.005)) Warning (Form): COS FUV PSA science exposures with extended targets have special calibration limitations. See "Errors and Warnings" for more details.

Fixed Targets

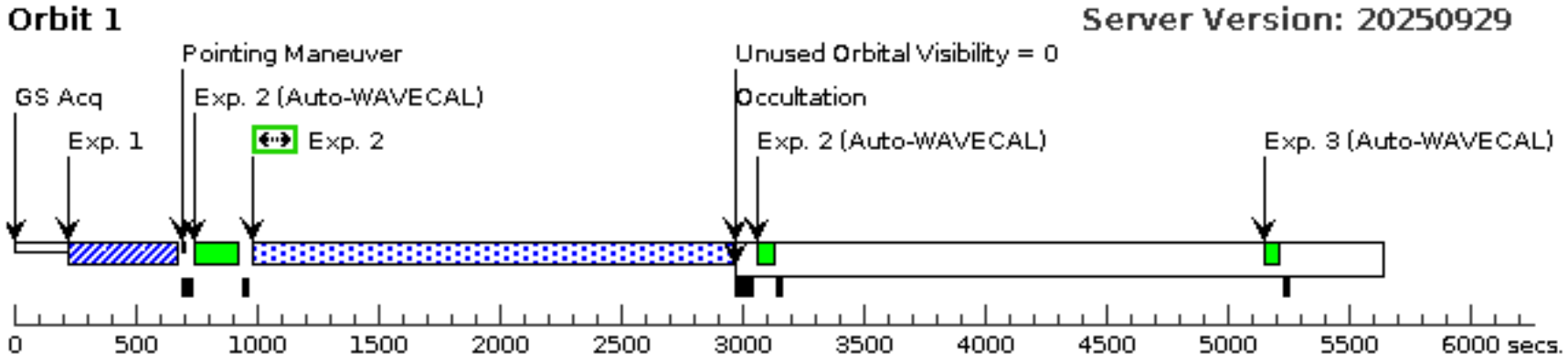
#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(2)	SDSSJ1340+0211	RA: 13 40 52.0334 (205.2168058d) Dec: +02 11 57.27 (2.19924d) Equinox: J2000	Proper Motion RA: 0 Proper Motion Dec: 0 Redshift: 0.0783	V=19.0+/-0.2	Reference Frame: ICRS

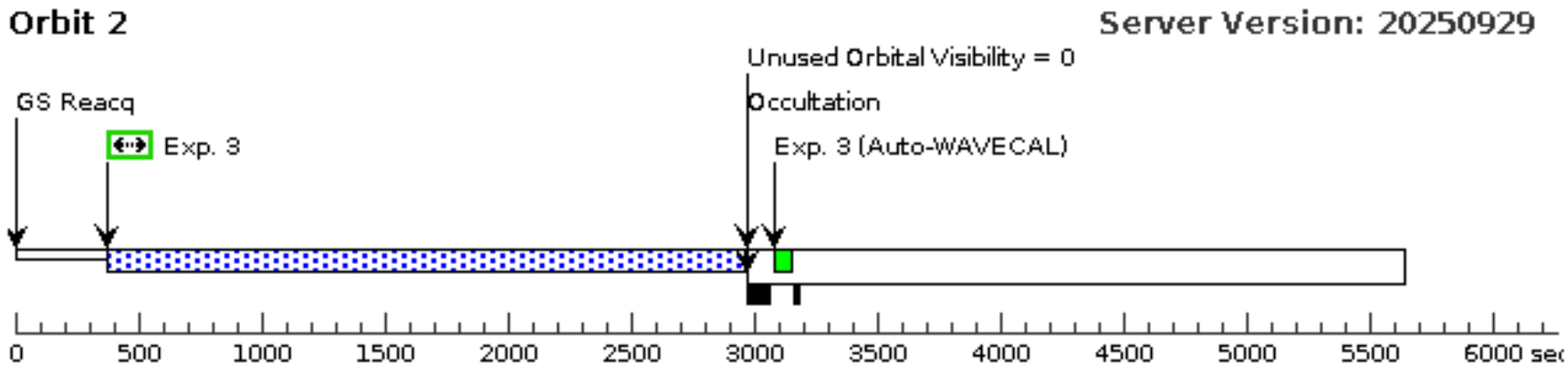
Comments:
Category=GALAXY
Description=[DWARF COMPACT]
Extended=YES

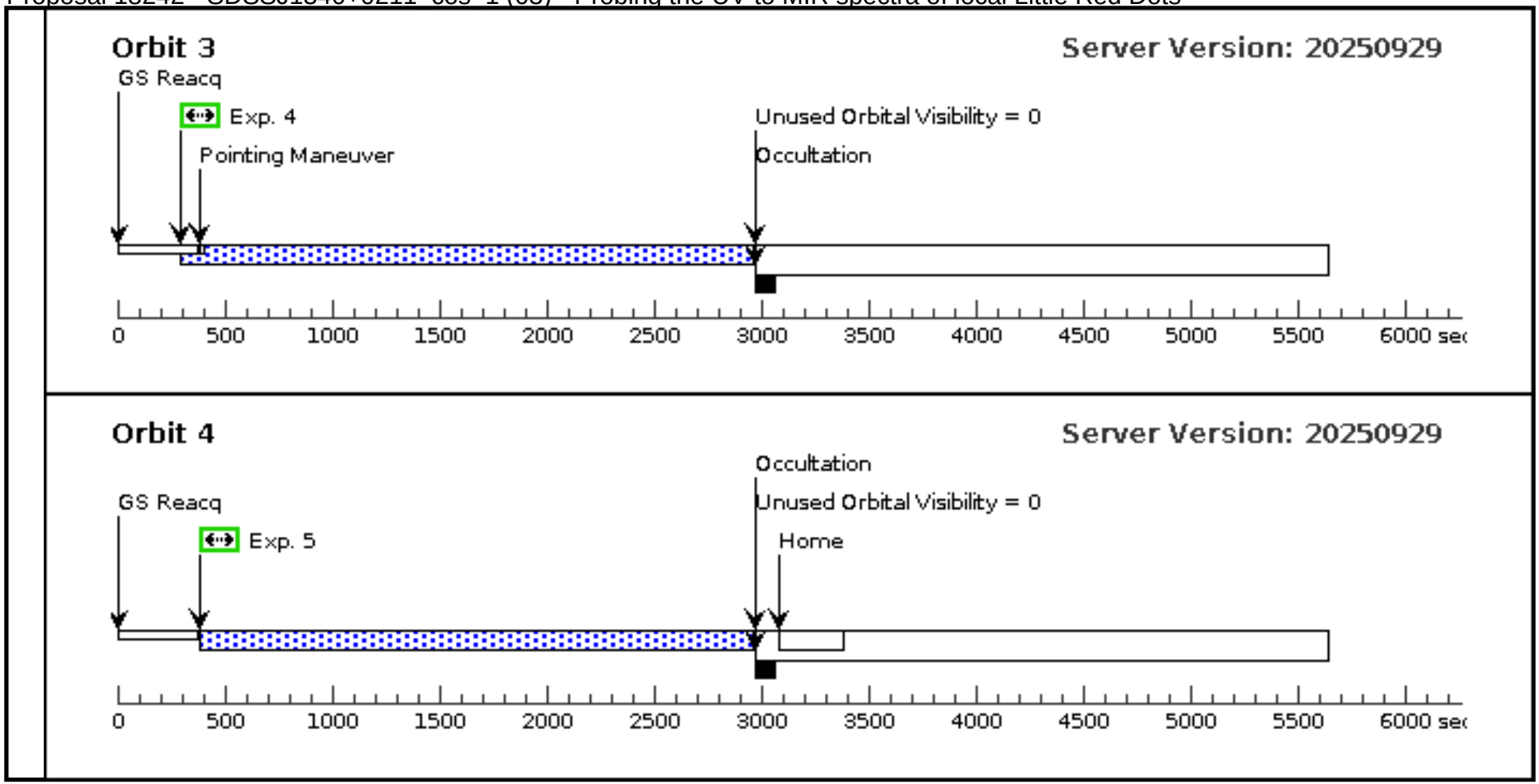
Exposures

#	Label (ETC Run)	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
1	acq (COS.sp.1919964)	(2) SDSSJ1340+0211	COS/NUV, ACQ/IMAGE, PSA	MIRRORA				120 Secs (120 Secs) *[==>]*	***[1]***
2	exp1 (COS.sp.1919964)	(2) SDSSJ1340+0211	COS/FUV, TIME-TAG, PSA	G130M 1291 A	SEGMENT=BOTH; BUFFER-TIME=3000; FLASH=YES; FP-POS=3			2000 Secs (1929 Secs) *[==>1929.0 Secs]*	***[1]***
3	exp2 (COS.sp.1919964)	(2) SDSSJ1340+0211	COS/FUV, TIME-TAG, PSA	G130M 1291 A	SEGMENT=BOTH; BUFFER-TIME=3000; FLASH=YES; FP-POS=3			2400 Secs (2539 Secs) *[==>2539.0 Secs]*	***[2]***
4	exp3 (COS.sp.1919964)	(2) SDSSJ1340+0211	COS/FUV, TIME-TAG, PSA	G160M 1589 A	BUFFER-TIME=3000; FP-POS=1			2400 Secs (2497 Secs) *[==>2497.0 Secs]*	***[3]***
5	exp4 (COS.sp.1919964)	(2) SDSSJ1340+0211	COS/FUV, TIME-TAG, PSA	G160M 1589 A	BUFFER-TIME=3000; FP-POS=1			2400 Secs (2535 Secs) *[==>2535.0 Secs]*	***[4]***

Orbit Structure






Orbit 3
Server Version: 20250929
GS Reacq
Exp. 4
Pointing Maneuver
Unused Orbital Visibility = 0
Occultation
0
500
1000
1500
2000
2500
3000
3500
4000
4500
5000
5500
6000 sec
Orbit 4
Server Version: 20250929
Occultation
GS Reacq
Unused Orbital Visibility = 0
Exp. 5
Home
0
500
1000
1500
2000
2500
3000
3500
4000
4500
5000
5500
6000 sec

Visit

Proposal 18242, SDSSJ1340+0211_wfc3 (04), implementation Mon May 04 17:00:19 GMT 2026

Diagnostic Status: No Diagnostics

Scientific Instruments: WFC3/UVIS

Special Requirements: (none)

Patterns

#	Primary Pattern		Secondary Pattern	Exposures
(1)	Pattern Type=WFC3-UVIS-DITHER-BOX Purpose=DITHER Number Of Points=4 Point Spacing=0.173 Line Spacing=0.112	Coordinate Frame=POS-TARG Pattern Orientation=23.884 Angle Between Sides=81.785 Center Pattern=false		(1), (2), (3)

Fixed Targets

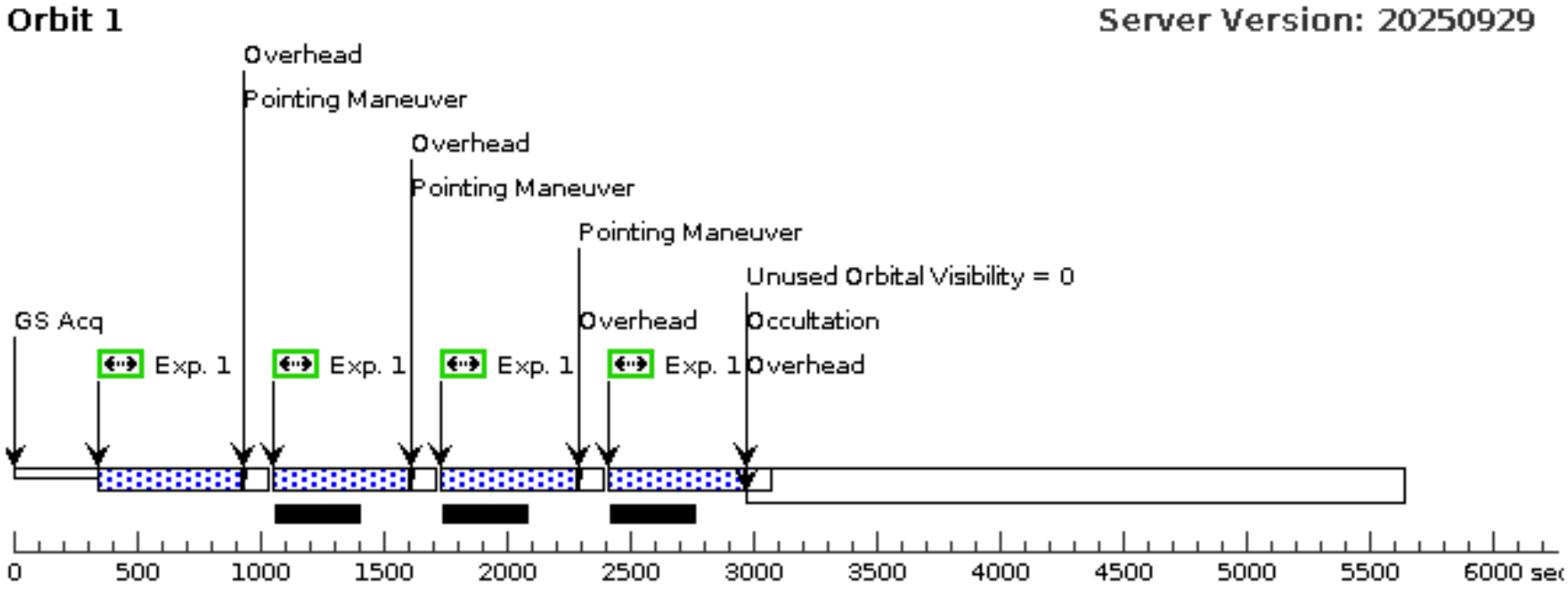
#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(2)	SDSSJ1340+0211	RA: 13 40 52.0334 (205.2168058d) Dec: +02 11 57.27 (2.19924d) Equinox: J2000	Proper Motion RA: 0 Proper Motion Dec: 0 Redshift: 0.0783	V=19.0+/-0.2	Reference Frame: ICRS

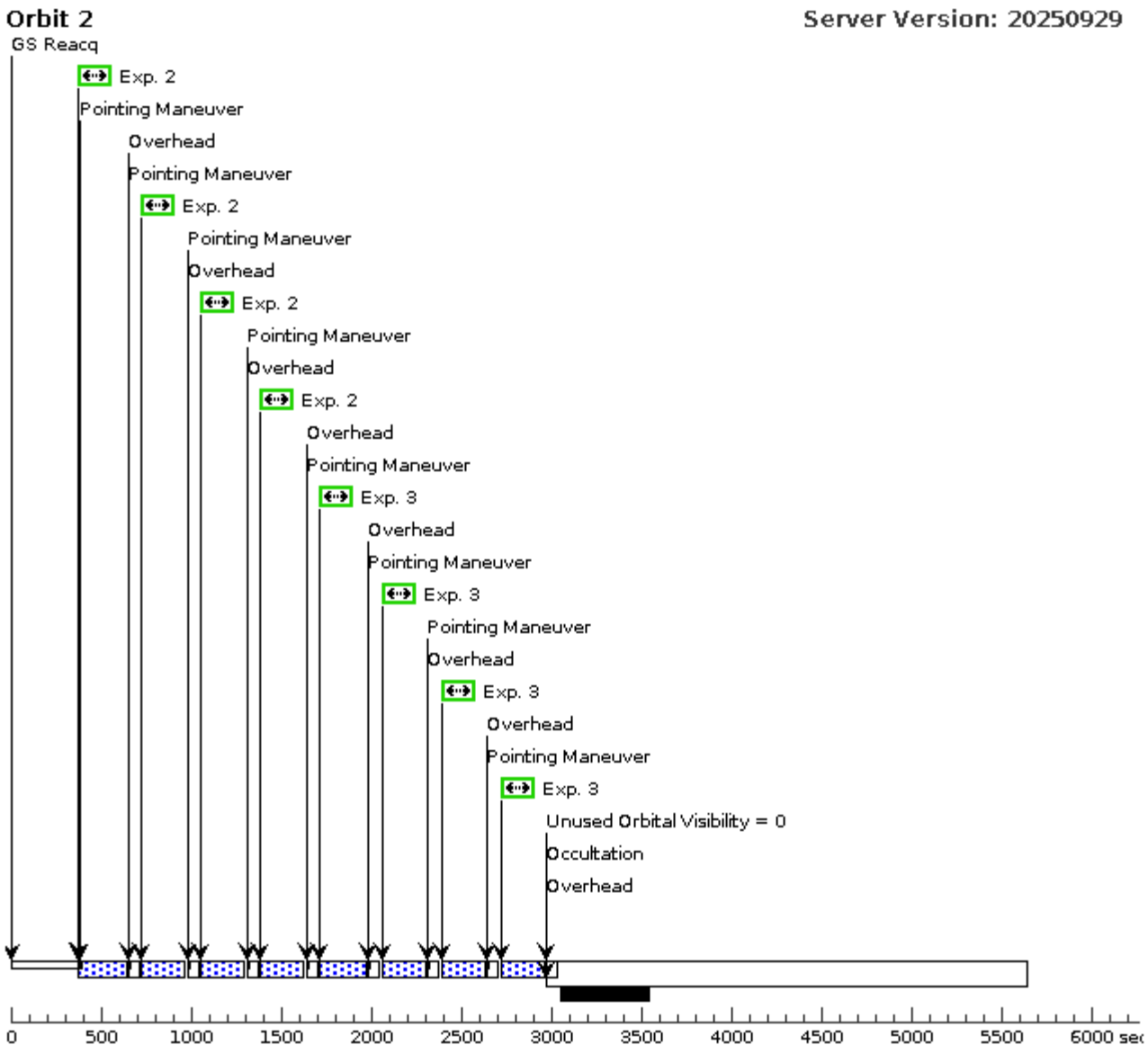
Comments:
Category=GALAXY
Description=[DWARF COMPACT]
Extended=YES

Exposures

#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
1		(2) SDSSJ1340+0211	WFC3/UVIS, ACCUM, UVIS2-C1K1C-CTE	F300X	FLASH=14		Pattern 1, Exps 1-1 in SDSSJ1340+0211_wfc3 (04) (1)	500 Secs (2198 Secs) *[==>550.0 Secs (Pattern 1)]* *[==>550.0 Secs (Pattern 2)]* *[==>549.0 Secs (Pattern 3)]* *[==>549.0 Secs (Pattern 4)]*	***[1]***
2		(2) SDSSJ1340+0211	WFC3/UVIS, ACCUM, UVIS2-C1K1C-SUB	F475W	FLASH=14		Pattern 1, Exps 2-2 in SDSSJ1340+0211_wfc3 (04) (1)	500 Secs (967 Secs) *[==>243.0 Secs (Pattern 1)]* *[==>242.0 Secs (Pattern 2)]* *[==>241.0 Secs (Pattern 3)]* *[==>241.0 Secs (Pattern 4)]*	***[2]***
3		(2) SDSSJ1340+0211	WFC3/UVIS, ACCUM, UVIS2-C1K1C-SUB	F850LP	FLASH=21		Pattern 1, Exps 3-3 in SDSSJ1340+0211_wfc3 (04) (1)	500 Secs (964 Secs) *[==>241.0 Secs (Pattern 1)]* *[==>241.0 Secs (Pattern 2)]* *[==>241.0 Secs (Pattern 3)]* *[==>241.0 Secs (Pattern 4)]*	***[2]***

Orbit Structure




Orbit 2
Server Version: 20250929
GS Reacq
Exp. 2
Pointing Maneuver
Overhead
Pointing Maneuver
Exp. 2
Pointing Maneuver
Overhead
Exp. 2
Pointing Maneuver
Overhead
Exp. 2
Overhead
Pointing Maneuver
Exp. 3
Overhead
Pointing Maneuver
Exp. 3
Pointing Maneuver
Overhead
Exp. 3
Overhead
Pointing Maneuver
Exp. 3
Unused Orbital Visibility = 0
Occultation
Overhead
0
500
1000
1500
2000
2500
3000
3500
4000
4500
5000
5500
6000 sec

Visit

Proposal 18242, SDSSJ1717+3807_cos_1 (05), implementation Mon May 04 17:00:19 GMT 2026

Diagnostic Status: Warning

Scientific Instruments: COS/FUV, COS/NUV

Special Requirements: (none)

Diagnostics

(SDSSJ1717+3807_cos_1 (05)) Warning (Form): For the best data quality, it is generally required to use all four FP-POS positions at a given COS cenwave (or 2 positions for certain exception cases). See extended explanation in the diagnostic browser.

Fixed Targets

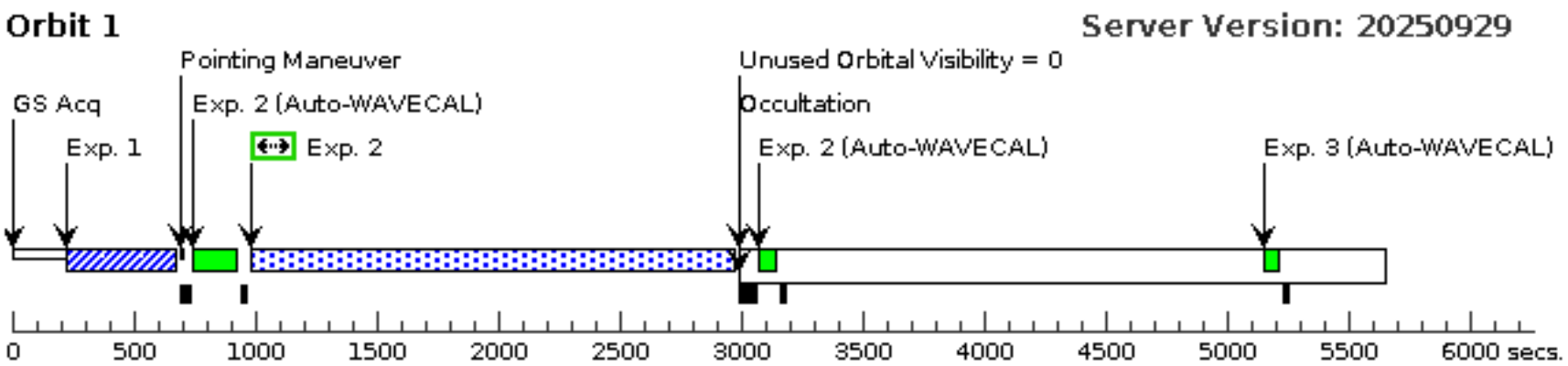
#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(3)	SDSSJ1717+3807	RA: 17 17 41.7363 (259.4239013d) Dec: +38 07 52.47 (38.13124d) Equinox: J2000	Proper Motion RA: 0 Proper Motion Dec: 0 Redshift: 0.196046	V=19.5+/-0.2	Reference Frame: ICRS

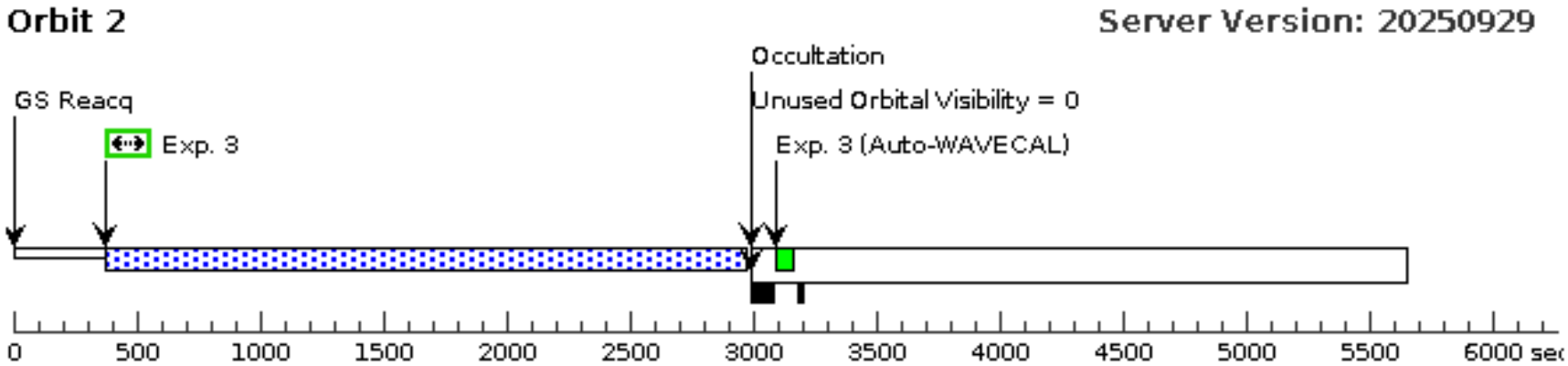
Comments:
Category=GALAXY
Description=[DWARF COMPACT]
Extended=NO

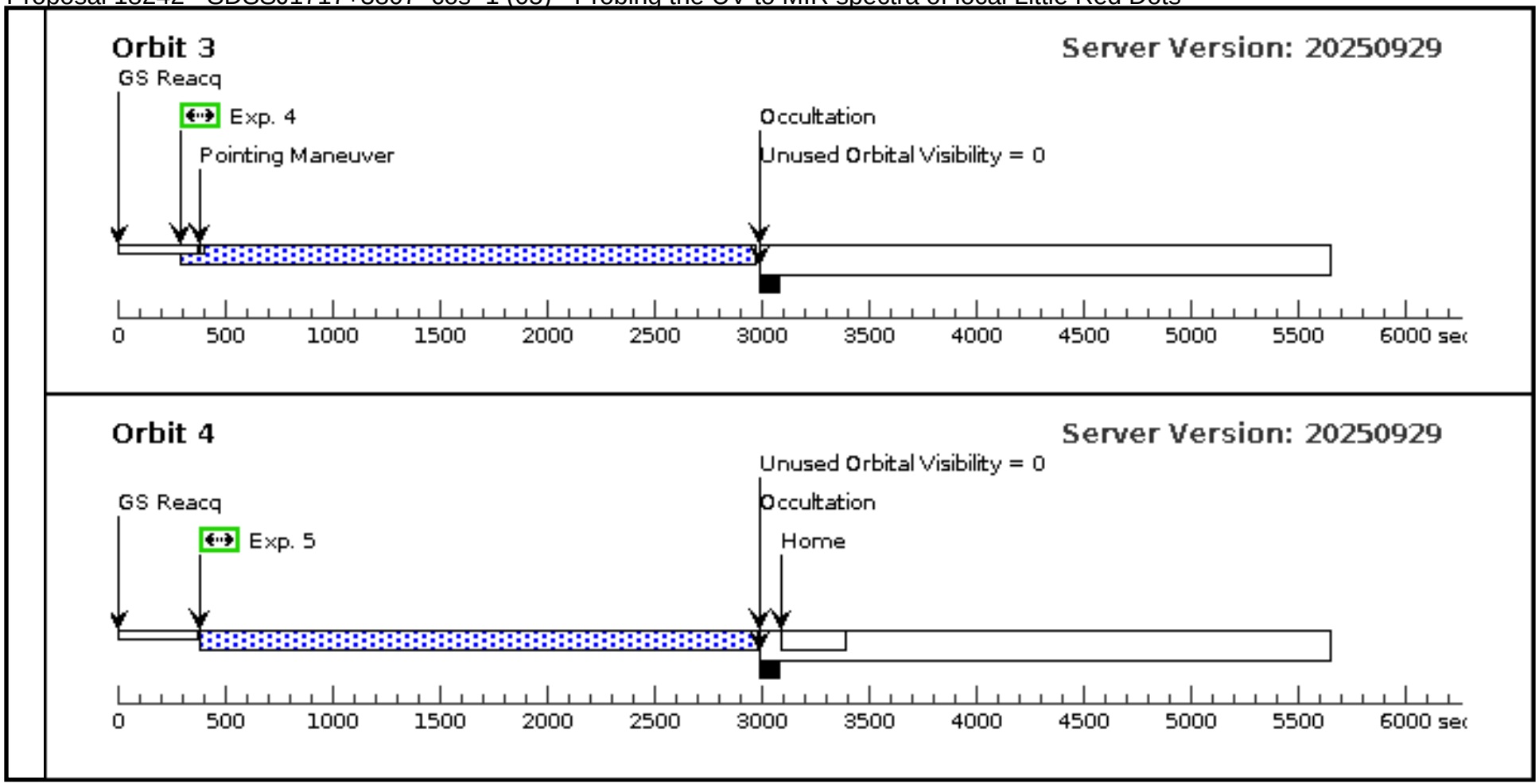
Exposures

#	Label (ETC Run)	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
1	acq (COS.sp.1919964)	(3) SDSSJ1717+3807	COS/NUV, ACQ/IMAGE, PSA	MIRRORA				120 Secs (120 Secs) *[==>]*	*[1]*
2	exp1 (COS.sp.1919964)	(3) SDSSJ1717+3807	COS/FUV, TIME-TAG, PSA	G130M 1291 A	SEGMENT=BOTH; BUFFER-TIME=3000; FLASH=YES; FP-POS=3			2000 Secs (1942 Secs) *[==>1942.0 Secs]*	*[1]*
3	exp2 (COS.sp.1919964)	(3) SDSSJ1717+3807	COS/FUV, TIME-TAG, PSA	G130M 1291 A	SEGMENT=BOTH; BUFFER-TIME=3000; FLASH=YES; FP-POS=3			2400 Secs (2552 Secs) *[==>2552.0 Secs]*	*[2]*
4	exp3 (COS.sp.1919964)	(3) SDSSJ1717+3807	COS/FUV, TIME-TAG, PSA	G160M 1589 A	BUFFER-TIME=3000; FP-POS=1			2400 Secs (2510 Secs) *[==>2510.0 Secs]*	*[3]*
5	exp4 (COS.sp.1919964)	(3) SDSSJ1717+3807	COS/FUV, TIME-TAG, PSA	G160M 1589 A	BUFFER-TIME=3000; FP-POS=1			2400 Secs (2548 Secs) *[==>2548.0 Secs]*	*[4]*

Orbit Structure






Orbit 3
Server Version: 20250929
GS Reacq
Exp. 4
Pointing Maneuver
Occultation
Unused Orbital Visibility = 0
0
500
1000
1500
2000
2500
3000
3500
4000
4500
5000
5500
6000 sec
Orbit 4
Server Version: 20250929
Unused Orbital Visibility = 0
GS Reacq
Exp. 5
Occultation
Home
0
500
1000
1500
2000
2500
3000
3500
4000
4500
5000
5500
6000 sec

Visit

Proposal 18242, SDSSJ1717+3807_wfc3 (08), implementation Mon May 04 17:00:19 GMT 2026

Diagnostic Status: No Diagnostics

Scientific Instruments: WFC3/UVIS

Special Requirements: (none)

Patterns

#	Primary Pattern		Secondary Pattern	Exposures
(1)	Pattern Type=WFC3-UVIS-DITHER-BOX Purpose=DITHER Number Of Points=4 Point Spacing=0.173 Line Spacing=0.112	Coordinate Frame=POS-TARG Pattern Orientation=23.884 Angle Between Sides=81.785 Center Pattern=false		(1), (2), (3)

Fixed Targets

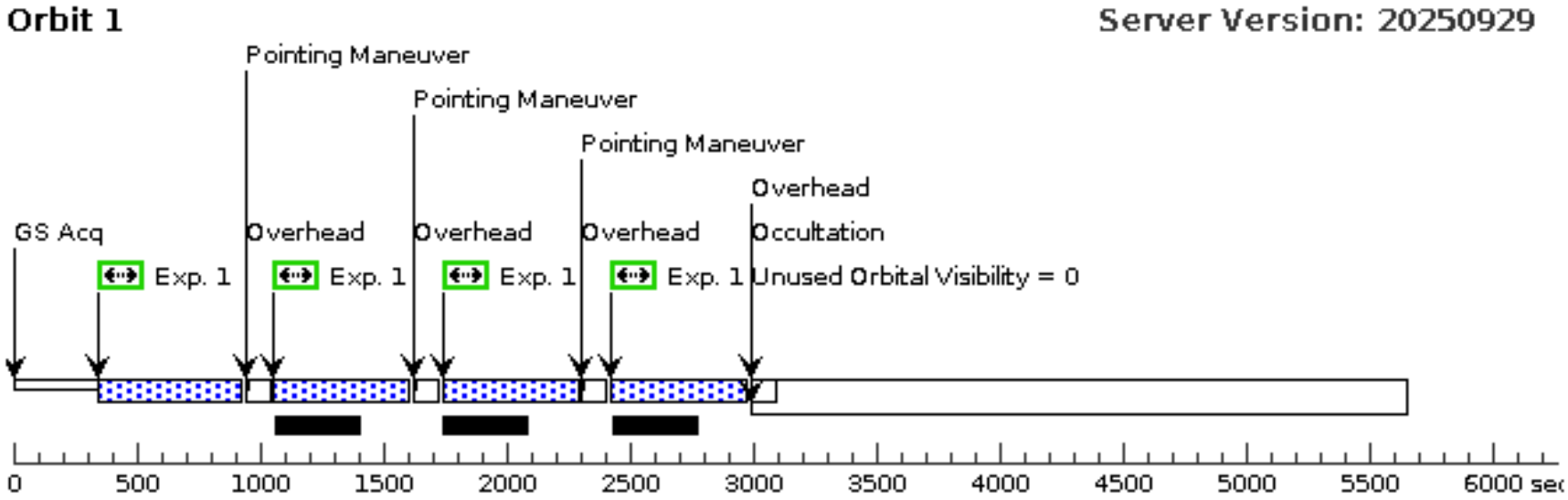
#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(3)	SDSSJ1717+3807	RA: 17 17 41.7363 (259.4239013d) Dec: +38 07 52.47 (38.13124d) Equinox: J2000	Proper Motion RA: 0 Proper Motion Dec: 0 Redshift: 0.196046	V=19.5+/-0.2	Reference Frame: ICRS

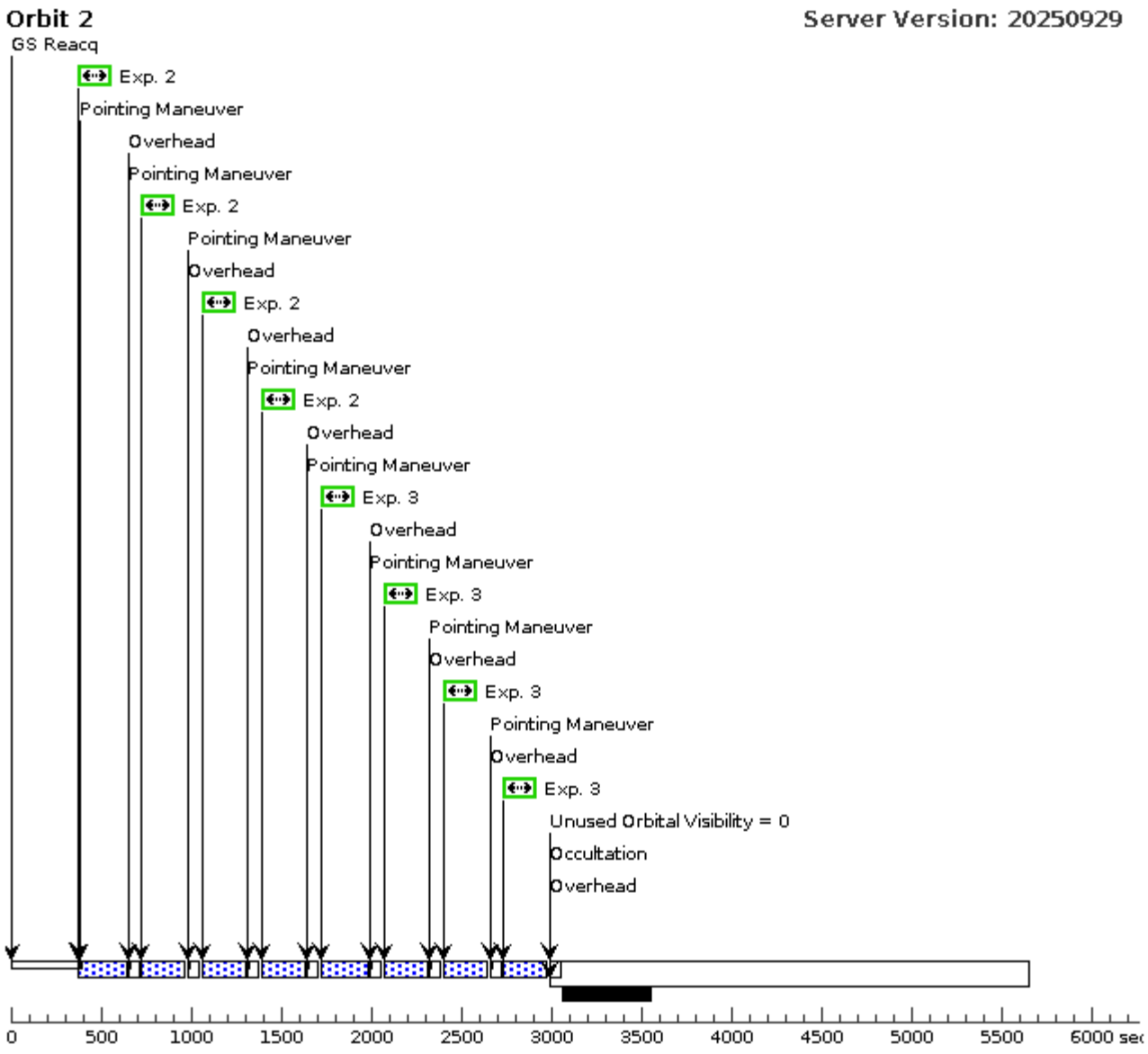
Comments:
Category=GALAXY
Description=[DWARF COMPACT]
Extended=NO

Exposures

#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
1		(3) SDSSJ1717+3807	WFC3/UVIS, ACCUM, UVIS2-C1K1C-CTE	F300X	FLASH=14		Pattern 1, Exps 1-1 in SDSSJ1717+3807_wfc3 (08) (1)	500 Secs (2211 Secs) *[==>552.0 Secs (Pattern 1)]* *[==>553.0 Secs (Pattern 2)]* *[==>553.0 Secs (Pattern 3)]* *[==>553.0 Secs (Pattern 4)]*	***[1]***
2		(3) SDSSJ1717+3807	WFC3/UVIS, ACCUM, UVIS2-C1K1C-SUB	F475W	FLASH=14		Pattern 1, Exps 2-2 in SDSSJ1717+3807_wfc3 (08) (1)	500 Secs (972 Secs) *[==>243.0 Secs (Pattern 1)]* *[==>243.0 Secs (Pattern 2)]* *[==>243.0 Secs (Pattern 3)]* *[==>243.0 Secs (Pattern 4)]*	***[2]***
3		(3) SDSSJ1717+3807	WFC3/UVIS, ACCUM, UVIS2-C1K1C-SUB	F850LP	FLASH=21		Pattern 1, Exps 3-3 in SDSSJ1717+3807_wfc3 (08) (1)	500 Secs (972 Secs) *[==>243.0 Secs (Pattern 1)]* *[==>243.0 Secs (Pattern 2)]* *[==>243.0 Secs (Pattern 3)]* *[==>243.0 Secs (Pattern 4)]*	***[2]***

Orbit Structure




Orbit 2
Server Version: 20250929
GS Reacq
Exp. 2
Pointing Maneuver
Overhead
Pointing Maneuver
Exp. 2
Pointing Maneuver
Overhead
Exp. 2
Overhead
Pointing Maneuver
Exp. 2
Overhead
Pointing Maneuver
Exp. 3
Overhead
Pointing Maneuver
Exp. 3
Pointing Maneuver
Overhead
Exp. 3
Pointing Maneuver
Overhead
Exp. 3
Unused Orbital Visibility = 0
Occultation
Overhead
0
500
1000
1500
2000
2500
3000
3500
4000
4500
5000
5500
6000 sec