17125 - Sharpening our High-z Toolset: Spatially Resolving UV Emission Line Diagnostics Throughout Pristine Gas

Cycle: 30, Proposal Category: GO

(UV Initiative)

(Availability Mode: SUPPORTED)

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) UGC-5340-1 (7) OFFSET-REGION	COS/FUV COS/NUV	6	14-Jun-2024 12:01:01.0	yes
02	(2) UGC-5340-2 (7) OFFSET-REGION	COS/NUV	5	14-Jun-2024 12:01:02.0	yes

Visit	*Targets used in Visit*	*Configurations used in Visit*	*Orbits Used*	*Last Orbit Planner Run*	*OP Current with Visit?*
03	(2) UGC-5340-2 (7) OFFSET-REGION	COS/FUV COS/NUV	3	14-Jun-2024 12:01:03.0	yes
04	(4) UGC-5340-4 (7) OFFSET-REGION	COS/FUV COS/NUV	7	14-Jun-2024 12:01:05.0	yes
54	(4) UGC-5340-4 (7) OFFSET-REGION	COS/NUV	4	14-Jun-2024 12:01:06.0	yes
64	(4) UGC-5340-4 (7) OFFSET-REGION	COS/FUV COS/NUV	3	14-Jun-2024 12:01:08.0	yes
05	(5) UGC-5340-6 (7) OFFSET-REGION	COS/NUV	5	14-Jun-2024 12:01:09.0	yes
06	(5) UGC-5340-6 (7) OFFSET-REGION	COS/FUV COS/NUV	3	14-Jun-2024 12:01:10.0	yes
07	(6) UGC-5340-7 (7) OFFSET-REGION	COS/NUV	5	14-Jun-2024 12:01:11.0	yes
08	(6) UGC-5340-7 (7) OFFSET-REGION	COS/FUV COS/NUV	3	14-Jun-2024 12:01:12.0	yes
58	(6) UGC-5340-7 (7) OFFSET-REGION	COS/FUV COS/NUV	3	14-Jun-2024 12:01:14.0	yes

47 Total Orbits Used

ABSTRACT

It is imperative that we enter the high-z era with a diagnostic toolset that enables us to decipher the chemical and physical conditions of a galaxy using primarily UV emission lines. Moreover, this toolset needs to be most effective in typical high-z environments (low metallicity, hard ionising fields). Unfortunately, current efforts to derive such a toolset suffer from severe paucity in the extremely metal-poor (XMP) regime (<5% Zsol), and - most importantly - globally integrated spectra that are prone to large observational biases. Local high-z analogs are rare, particularly in the XMP regime, and very few allow us to examine how integrated spectra can bias the derived diagnostics. Here we have a unique opportunity to solve these issues by observing 5 individual HII regions throughout a chemically inhomogeneous, XMP star-forming galaxy, DDO68, with HST/COS, covering all of the key UV diagnostic lines (CIV, HeII, OIII], & CIII]). Each region has MOS optical spectroscopy, providing the first spatially resolved UV-to-optical coverage across a range of metallicities and ionizing field strengths. The HII regions provide independent samples within DDO68 to

accurately calibrate UV lines using photoionization models for individual ionized nebulae, unlike integrated light studies. This exquisite dataset will allow us to first understand the physical properties driving UV lines, then harness this knowledge to provide stand-alone UV diagnostics for metallicity, density, and ionization source. Our parameter space ensures that we can accurately calibrate the UV diagnostics in a range of primordial-like environments, thereby providing the best UV toolset possible for the high-z era.

OBSERVING DESCRIPTION

The program observes 6 separate HII regions in the extremely metal poor galaxy, DDO68.

The combination of the COS G160M+G185M gratings covers all the UV emission lines necessary for robust metallicity and excitation determination (C iv, O iii], He ii, C iii]).
For the NUV, we utilize G185M/1913 to optimize the throughput coverage at the position of the emission line C iii] within stripe B.
In the FUV, G160M/1533 was chosen to optimize the throughput for the C iv, He ii and O iii] emission (on Segment B), with only a 100 A featureless gap until G185M/1913.

Following the COS IHB, our number of exposures per orbit are such that G160M will be executed at its new default lifetime position (LP6).
We will utilize 4 FP-POS positions for G185M and 3 FP-POS for G160M to maximize S/N. The use of 3 FP-POS for G160M is within the S/N guideline requirements set out in the IHB

ETCs: Exposure time calculations (ETCs) were based on obtaining S/N~3-5 (per spectral resolution element) in O iii] 1666A for G160M and C iii] 1909A for G185M.
Fluxes in O iii] 1666A and C iii] 1909A were predicted from Te values and [O iii] 5007A flux for each Hii region (accounting for E(B-V) values), and the observed C/O ratio of dwarf galaxies. Continuum fluxes of 8E-16 and 7E-16 erg/s/cm2/A at 1600 and 1900|A, respectively, measured using the archival G160M+G185M observations of DDO68-1 (PID: 13788), were used for G160M and G185M ETCs, respectively.
All fuxes used for the ETCs can be found in Table 2 of the Phase I document or the visit level comments
Owing to the faintness of our emission lines, the continuum levels are the main drivers of our exposure times.

ACQ/IMAGE target acquisition times were calculated for a (recommended) S/N~20. All targets will be offset from a compact HII region to ensure the COS aperture remains positioned on the ionized gas in each cluster rather than the cluster itself. After the ACQ/IMAGE on the 'offset region', we

take an NUV image of the target cluster to inspect the cross-dispersion profile of the cluster (required for any absorption line fitting) before taking the spectroscopic observations.
The 'offset region' has a flux measured within r=0.4" aperture on F275W WFC3 image of 4.873E-20 erg/s/cm^2/A, ABmag=20.2

The coordinates for each HII region were taken from the HAP processed images, which use GAIA astrometry. We used ACS F658N (for the G160M and G185M exposures) to align with the ionized gas. For the TACQ of the offset star, we utilized WFC3 UVIS F275W.

The ETC reported no warnings for violations of the local and/or global bright object limits.

Visit

Proposal 17125, UGC-5340-1 (01), completed Fri Jun 14 16:01:14 GMT 2024

Diagnostic Status: Warning

Scientific Instruments: COS/FUV, COS/NUV

Special Requirements: (none)

Comments: Predicted fluxes used for ETC:
3.64E-16 (1666A)
2.19E-15 (1909A)
continuum fux of 8x10^-16 and 7x10^-16 erg/s/cm2/A at 1600A and 1900A

Diagnostics

(UGC-5340-1 (01)) Warning (Orbit Planner): ORBITAL VISIBILITY OVERRUN

(UGC-5340-1 (01)) Warning (Orbit Planner): ORBITAL VISIBILITY OVERRUN

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(UGC-5340-1 (01)) Warning (Orbit Planner): ORBITAL VISIBILITY OVERRUN

(G160M.1.1 (01.007)) Warning (Form): COS FUV PSA science exposures with extended targets have special calibration limitations. See "Errors and Warnings" for more details.

(G160M.1.2 (01.008)) Warning (Form): COS FUV PSA science exposures with extended targets have special calibration limitations. See "Errors and Warnings" for more details.

(G160M.1.3 (01.009)) 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)	UGC-5340-1	Offset from OFFSET-REGION		V=21.0	Offset Position (UGC-5340-1)
		RA Offset: 0.0026709 Degrees		F@3600A 6e-17 erg/s/cm^2/A	
		Dec Offset: 2.814E-4 Degrees			

Comments: F275W WFC3 ABmag = 19.575
Category=GALAXY
Description=[DWARF COMPACT, STAR FORMING REGION]
Extended=YES

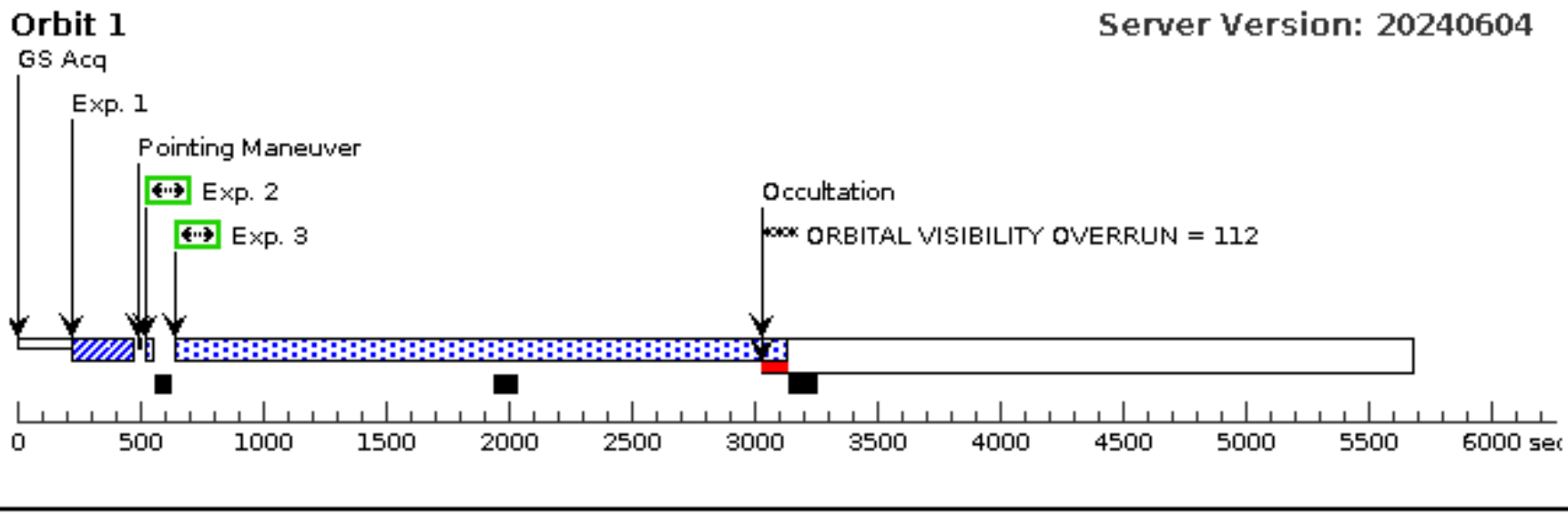
(7)	OFFSET-REGION	RA: 09 56 46.2144 (149.1925600d)		V=25.8	Reference Frame: ICRS
		Dec: +28 50 9.94 (28.83609d)			
		Equinox: J2000			

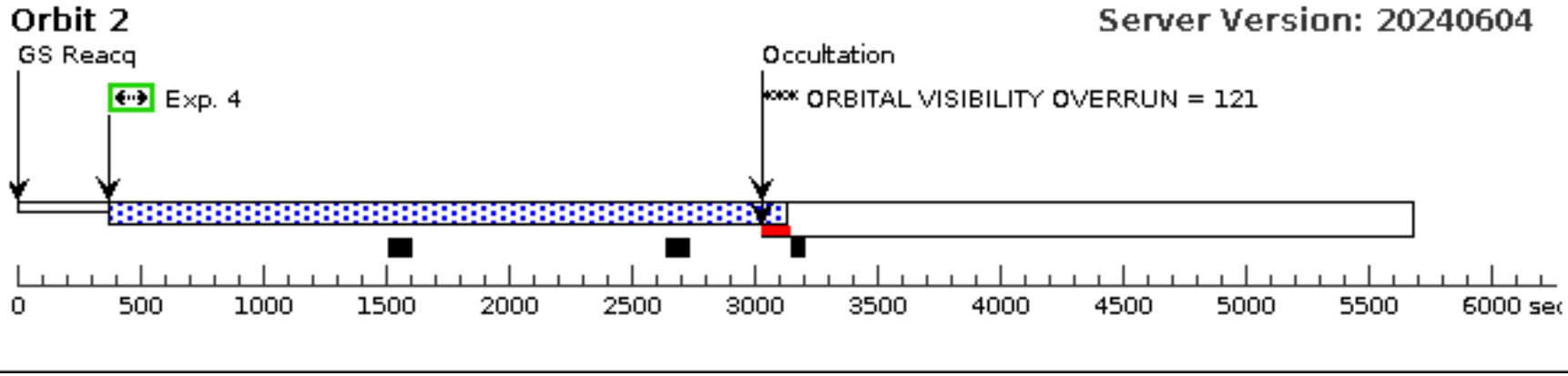
Comments: Flux measured within r=0.4" aperture on F275W WFC3 image: 4.873E-20 erg/s/cm^2/A
F275W WFC3 ABmag = 20.278
Category=ISM
Description=[HII REGION]
Extended=NO

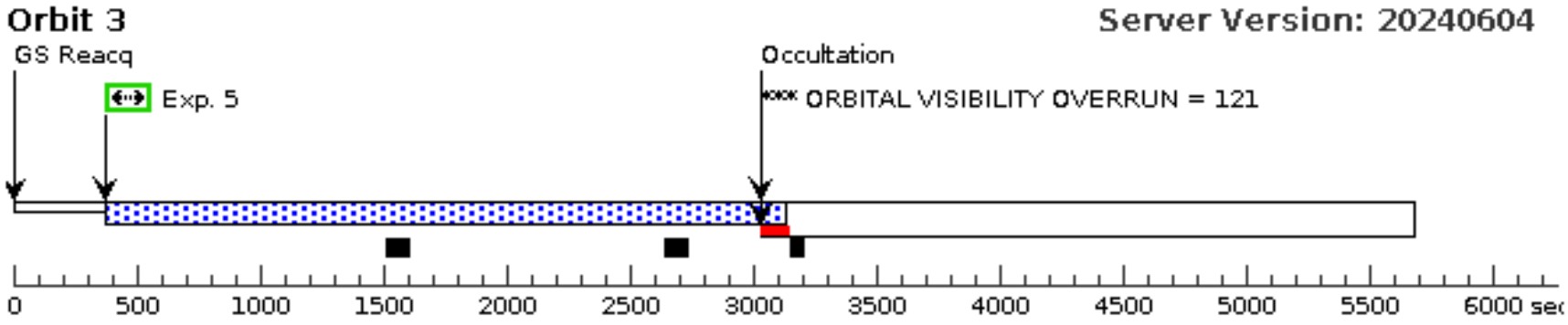
Exposures

#	Label (ETC Run)	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
1	offset ACQ (COS.im.1813487)	(7) OFFSET-REGION	COS/NUV, ACQ/IMAGE, PSA	MIRRORA				20 Secs (20 Secs) *[==>]*	*[1]*
2	NUV image -1 (COS.im.1813921)	(1) UGC-5340-1	COS/NUV, ACCUM, PSA	MIRRORA				20 Secs (20 Secs) *[==>]*	*[1]*
3	G185M.1.1 (COS.sp.1728639)	(1) UGC-5340-1	COS/NUV, TIME-TAG, PSA	G185M 1913 A	FP-POS=1; BUFFER-TIME=1132			2300 Secs (2300 Secs) *[==>]*	*[1]*
4	G185M.1.2 (COS.sp.1728639)	(1) UGC-5340-1	COS/NUV, TIME-TAG, PSA	G185M 1913 A	BUFFER-TIME=1132; FP-POS=2			2746 Secs (2746 Secs) *[==>]*	*[2]*
5	G185M.1.3 (COS.sp.1728639)	(1) UGC-5340-1	COS/NUV, TIME-TAG, PSA	G185M 1913 A	BUFFER-TIME=1132; FP-POS=3			2746 Secs (2746 Secs) *[==>]*	*[3]*
6	G185M.1.4 (COS.sp.1728639)	(1) UGC-5340-1	COS/NUV, TIME-TAG, PSA	G185M 1913 A	BUFFER-TIME=1132; FP-POS=4			2000 Secs (1997 Secs) *[==>1997.0 Secs]*	*[4]*
7	G160M.1.1 (COS.sp.1728727)	(1) UGC-5340-1	COS/FUV, TIME-TAG, PSA	G160M 1533 A	BUFFER-TIME=16800; FP-POS=1			300 Secs (297 Secs) *[==>297.0 Secs]*	*[4]*
8	G160M.1.2 (COS.sp.1728727)	(1) UGC-5340-1	COS/FUV, TIME-TAG, PSA	G160M 1533 A	BUFFER-TIME=16800; FP-POS=2			2707 Secs (2707 Secs) *[==>]*	*[5]*
9	G160M.1.3 (COS.sp.1728727)	(1) UGC-5340-1	COS/FUV, TIME-TAG, PSA	G160M 1533 A	BUFFER-TIME=16800; FP-POS=4			2707 Secs (2707 Secs) *[==>]*	*[6]*

Orbit Structure



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Server Version: 20240604
GS Reacq
Exp. 5
Occultation
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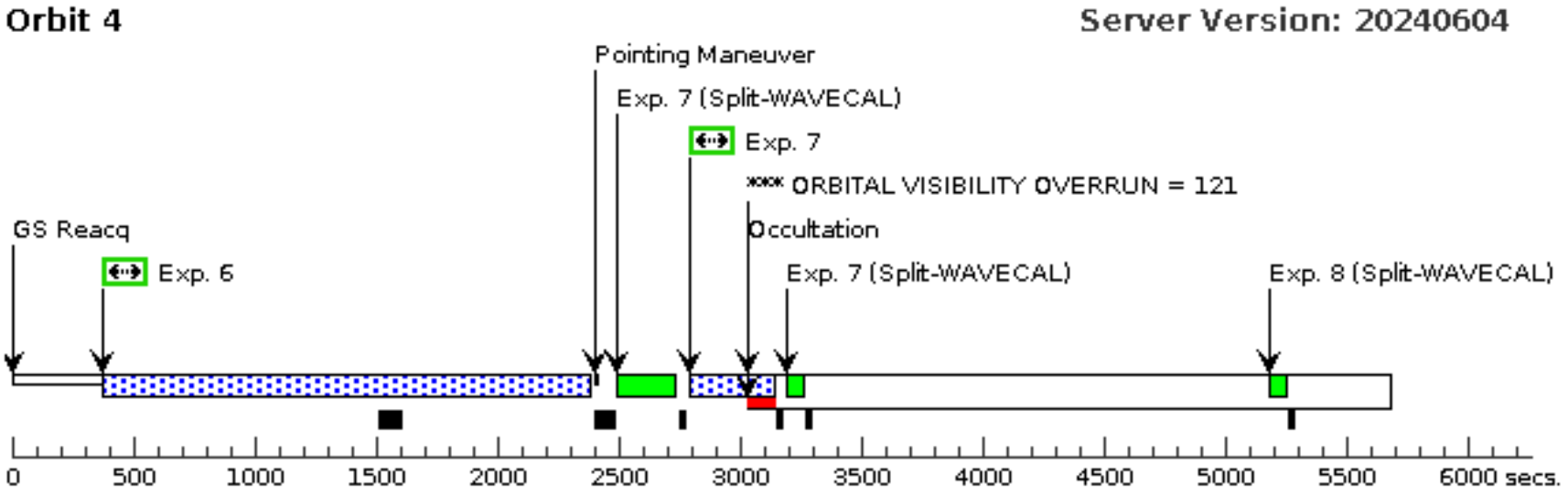
0
500
1000
1500
2000
2500
3000
3500
4000
4500
5000
5500
6000 sec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Pointing Maneuver
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Exp. 7
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Occultation
GS Reacq
Exp. 6
Exp. 7 (Split-WAVECAL)
Exp. 8 (Split-WAVECAL)
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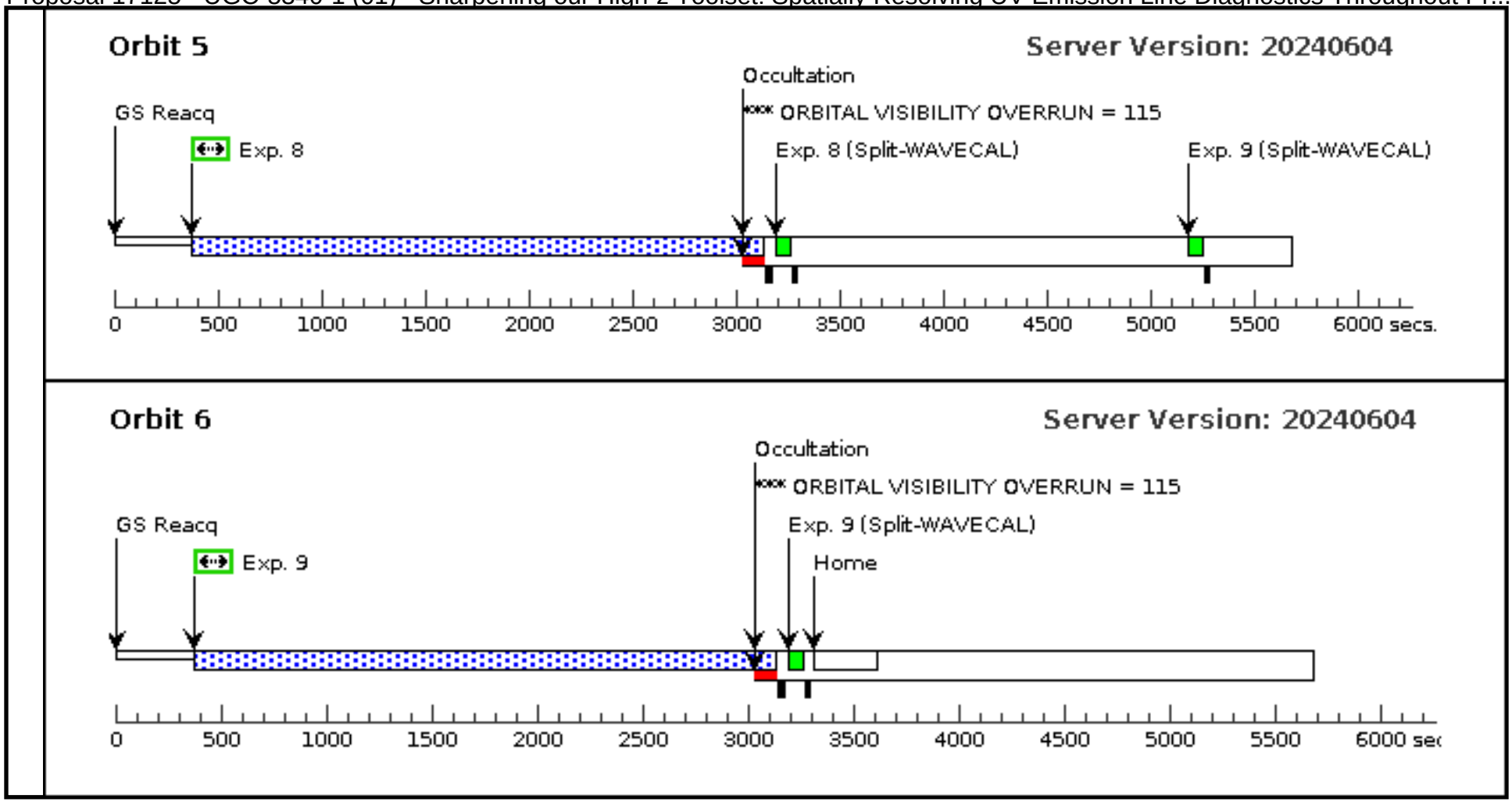
1000
1500
2000
2500
3000
3500
4000
4500
5000
5500
6000 secs.


Orbit 5
Server Version: 20240604
Occultation
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GS Reacq
Exp. 8
Exp. 8 (Split-WAVECAL)
Exp. 9 (Split-WAVECAL)
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Orbit 6
Server Version: 20240604
Occultation
**** ORBITAL VISIBILITY OVERRUN = 115
GS Reacq
Exp. 9
Exp. 9 (Split-WAVECAL)
Home
0 500 1000 1500 2000 2500 3000 3500 4000 4500 5000 5500 6000 sec

Visit

Proposal 17125, UGC-5340-2.1 (02), completed Fri Jun 14 16:01:14 GMT 2024

Diagnostic Status: Warning

Scientific Instruments: COS/NUV

Special Requirements: (none)

Comments: Predicted fluxes used for ETC:
9.32E-17 (1666A)
6.35E-16 (1909A)
continuum fux of 8x10^-16 and 7x10^-16 erg/s/cm2/A at 1600A and 1900A

Diagnostics

(UGC-5340-2.1 (02)) Warning (Orbit Planner): INEFFICIENT ORDERING OF FP-POS POSITIONS

(UGC-5340-2.1 (02)) Warning (Orbit Planner): ORBITAL VISIBILITY OVERRUN

(UGC-5340-2.1 (02)) Warning (Orbit Planner): ORBITAL VISIBILITY OVERRUN

(UGC-5340-2.1 (02)) Warning (Orbit Planner): ORBITAL VISIBILITY OVERRUN

(UGC-5340-2.1 (02)) Warning (Orbit Planner): ORBITAL VISIBILITY OVERRUN

(UGC-5340-2.1 (02)) Warning (Orbit Planner): ORBITAL VISIBILITY OVERRUN

Fixed Targets

#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(2)	UGC-5340-2	Offset from OFFSET-REGION		V=23.9	Offset Position (UGC-5340-2)
		RA Offset: 4.867E-4 Degrees		F@3600A 1e-16 erg/s/cm^2/A	
		Dec Offset: 0.0040006 Degrees			

Comments: F275W WFC3 ABmag = 20.375
Category=GALAXY
Description=[DWARF COMPACT, STAR FORMING REGION]
Extended=NO

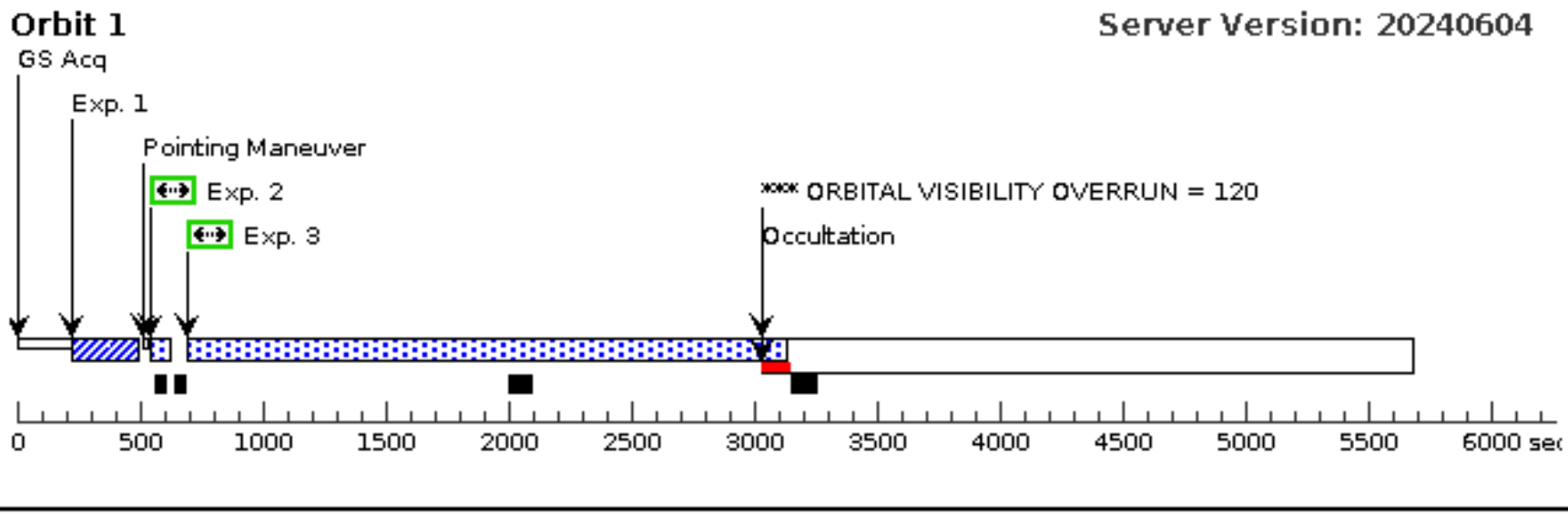
(7)	OFFSET-REGION	RA: 09 56 46.2144 (149.1925600d)		V=25.8	Reference Frame: ICRS
		Dec: +28 50 9.94 (28.83609d)			
		Equinox: J2000			

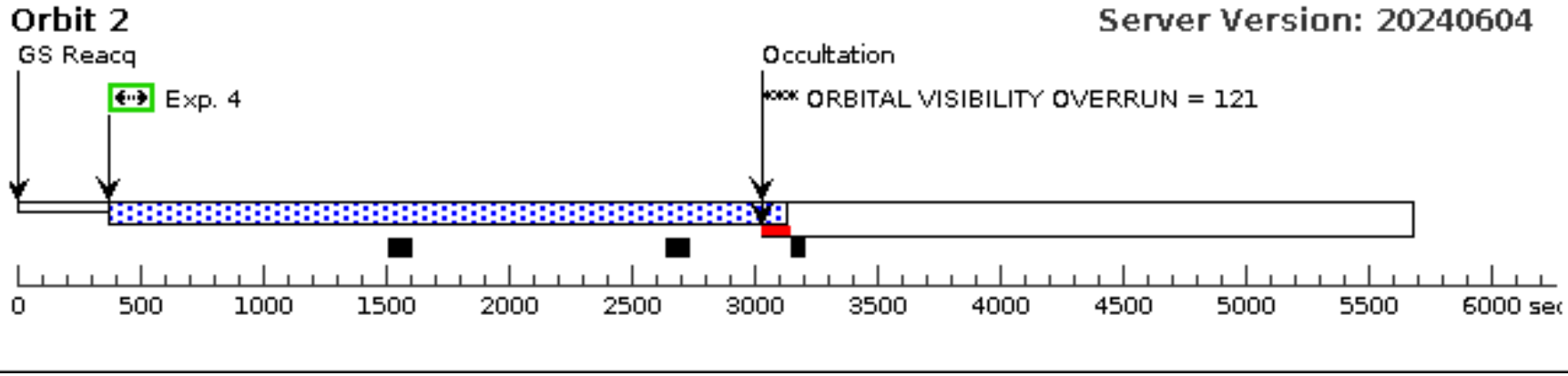
Comments: Flux measured within r=0.4" aperture on F275W WFC3 image: 4.873E-20 erg/s/cm^2/A
F275W WFC3 ABmag = 20.278
Category=ISM
Description=[HII REGION]
Extended=NO

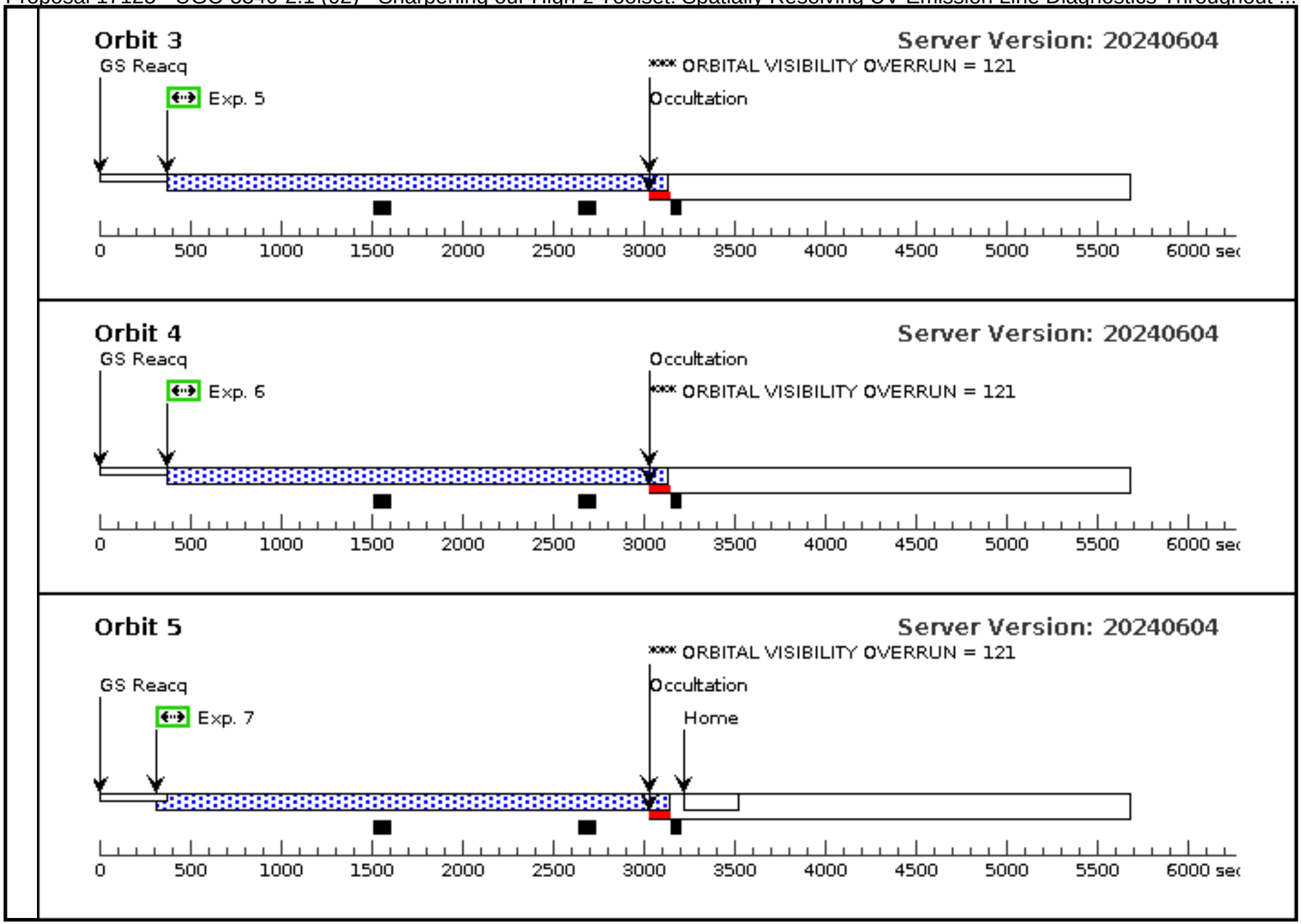
Exposures

#	Label (ETC Run)	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
1	offset ACQ (COS.ta.1811885)	(7) OFFSET-REGION	COS/NUV, ACQ/IMAGE, PSA	MIRRORA				30 Secs (30 Secs) *[==>]*	*[1]*
2	NUV image -2.1 (COS.ta.1811885)	(2) UGC-5340-2	COS/NUV, ACCUM, PSA	MIRRORA				25 Secs (74 Secs) *[==>74.0 Secs]*	*[1]*
3	G185M.2.1 (COS.sp.1728641)	(2) UGC-5340-2	COS/NUV, TIME-TAG, PSA	G185M 1913 A	FP-POS=1; BUFFER-TIME=1132			2200 Secs (2249 Secs) *[==>2249.0 Secs]*	*[1]*
4	G185M.2.2 (COS.sp.1728641)	(2) UGC-5340-2	COS/NUV, TIME-TAG, PSA	G185M 1913 A	BUFFER-TIME=1132; FP-POS=2			2746 Secs (2746 Secs) *[==>]*	*[2]*
5	G185M.2.3 (COS.sp.1728641)	(2) UGC-5340-2	COS/NUV, TIME-TAG, PSA	G185M 1913 A	FP-POS=3; BUFFER-TIME=1132			2746 Secs (2746 Secs) *[==>]*	*[3]*
6	G185M.2.4 (COS.sp.1728641)	(2) UGC-5340-2	COS/NUV, TIME-TAG, PSA	G185M 1913 A	BUFFER-TIME=1132; FP-POS=4			2746 Secs (2746 Secs) *[==>]*	*[4]*
7	G185M.2.5 (COS.sp.1728641)	(2) UGC-5340-2	COS/NUV, TIME-TAG, PSA	G185M 1913 A	BUFFER-TIME=1132; FP-POS=3			2746 Secs (2746 Secs) *[==>]*	*[5]*

Orbit Structure



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GS Reacq
Exp. 5
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Orbit 4
Server Version: 20240604
GS Reacq
Exp. 6
Occultation
**** ORBITAL VISIBILITY OVERRUN = 121
0 500 1000 1500 2000 2500 3000 3500 4000 4500 5000 5500 6000 sec
Orbit 5
Server Version: 20240604
**** ORBITAL VISIBILITY OVERRUN = 121
GS Reacq
Exp. 7
Occultation
Home
0 500 1000 1500 2000 2500 3000 3500 4000 4500 5000 5500 6000 sec

Visit

Proposal 17125, UGC-5340-2.2 (03), implementation Fri Jun 14 16:01:15 GMT 2024

Diagnostic Status: No Diagnostics

Scientific Instruments: COS/FUV, COS/NUV

Special Requirements: (none)

Comments: Predicted fluxes used for ETC:
9.32E-17 (1666A)
6.35E-16 (1909A)
continuum fux of 8x10^-16 and 7x10^-16 erg/s/cm2/A at 1600A and 1900A

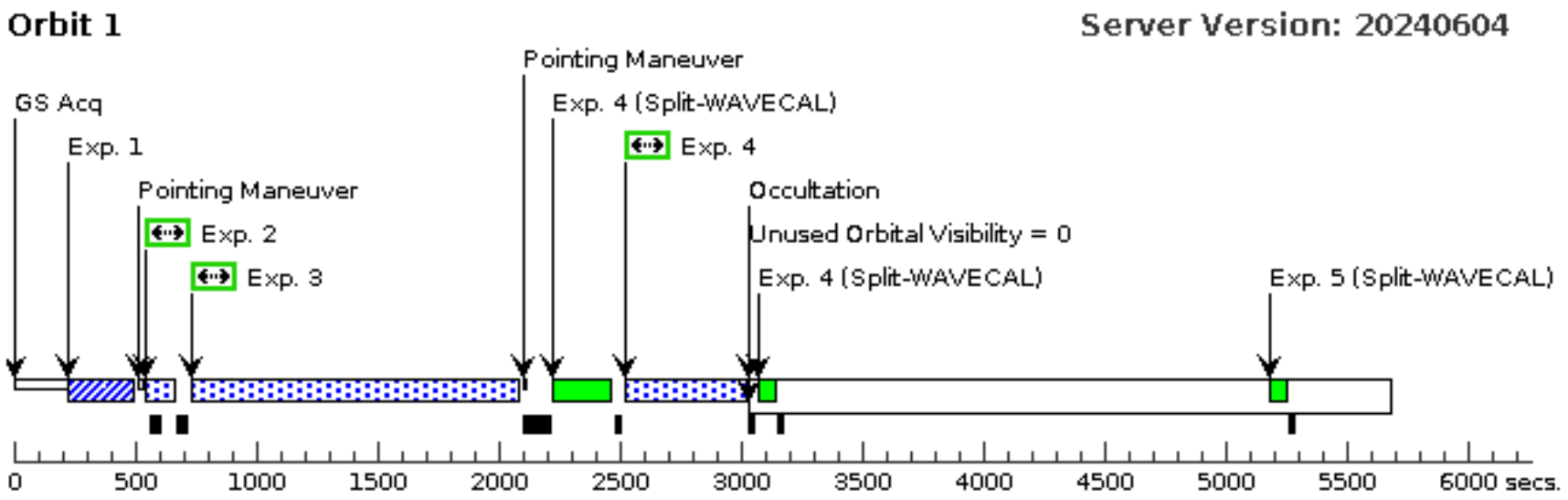
Fixed Targets

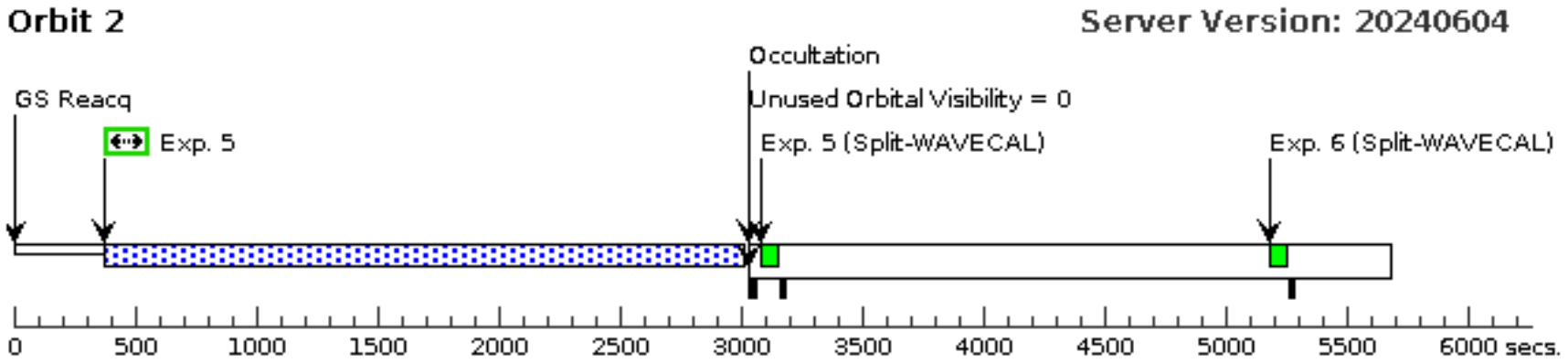
#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(2)	UGC-5340-2	Offset from OFFSET-REGION RA Offset: 4.867E-4 Degrees Dec Offset: 0.0040006 Degrees		V=23.9 F@3600A 1e-16 erg/s/cm^2/A	Offset Position (UGC-5340-2)
		Comments: F275W WFC3 ABmag = 20.375 *Category=GALAXY* *Description=[DWARF COMPACT, STAR FORMING REGION]* *Extended=NO*			
(7)	OFFSET-REGION	RA: 09 56 46.2144 (149.1925600d) Dec: +28 50 9.94 (28.83609d) Equinox: J2000		V=25.8	Reference Frame: ICRS
		Comments: Flux measured within r=0.4" aperture on F275W WFC3 image: 4.873E-20 erg/s/cm^2/A *F275W WFC3 ABmag = 20.278* *Category=ISM* *Description=[HII REGION]* *Extended=NO*			

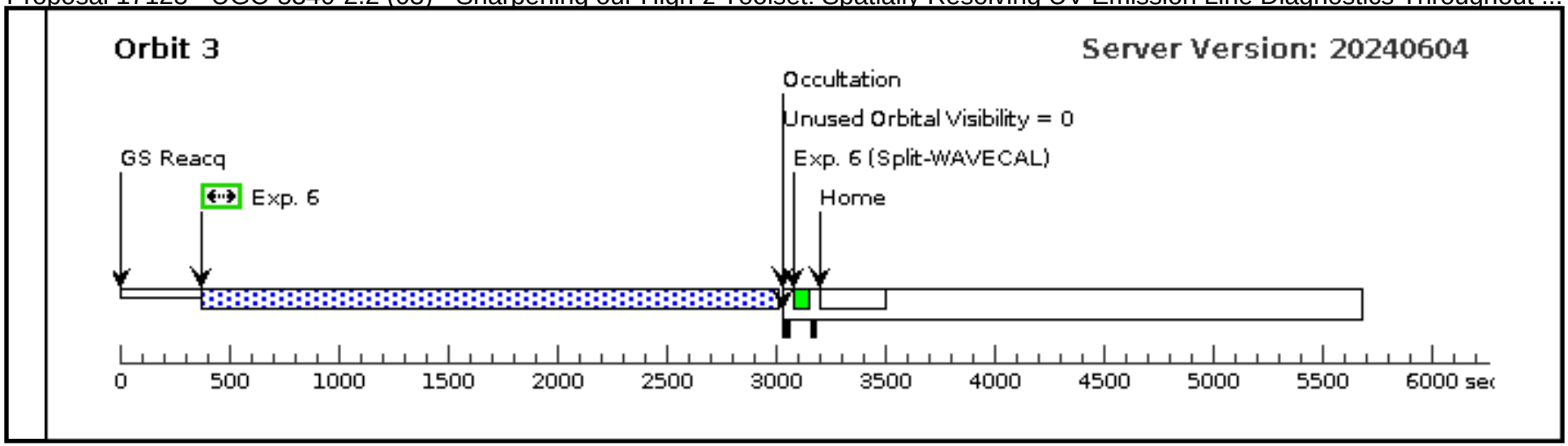
Exposures

#	Label (ETC Run)	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
1	offset ACQ (COS.ta.1811885)	(7) OFFSET-REGION	COS/NUV, ACQ/IMAGE, PSA	MIRRORA				30 Secs (30 Secs) *[==>]*	 ***[1]***
2	NUV image -2.2 (COS.ta.1811885)	(2) UGC-5340-2	COS/NUV, ACCUM, PSA	MIRRORA				25 Secs (110 Secs) *[==>110.0 Secs]*	 ***[1]***
3	G185M.2.6 (COS.sp.1728641)	(2) UGC-5340-2	COS/NUV, TIME-TAG, PSA	G185M 1913 A	BUFFER-TIME=1132; FP-POS=4			1200 Secs (1165 Secs) *[==>1165.0 Secs]*	 ***[1]***
4	G160M.2.1 (COS.sp.1728689)	(2) UGC-5340-2	COS/FUV, TIME-TAG, PSA	G160M 1533 A	BUFFER-TIME=16800; FP-POS=1			400 Secs (447 Secs) *[==>447.0 Secs]*	 ***[1]***
5	G160M.2.2 (COS.sp.1728689)	(2) UGC-5340-2	COS/FUV, TIME-TAG, PSA	G160M 1533 A	BUFFER-TIME=16800; FP-POS=2			2592 Secs (2592 Secs) *[==>]*	 ***[2]***
6	G160M.2.4 (COS.sp.1728689)	(2) UGC-5340-2	COS/FUV, TIME-TAG, PSA	G160M 1533 A	BUFFER-TIME=16800; FP-POS=4			2592 Secs (2592 Secs) *[==>]*	 ***[3]***

Orbit Structure



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Occultation
Unused Orbital Visibility = 0
GS Reacq
Exp. 6 (Split-WAVECAL)
Exp. 6
Home
0
500
1000
1500
2000
2500
3000
3500
4000
4500
5000
5500
6000 sec

Visit

Proposal 17125, UGC-5340-4 (04), failed Fri Jun 14 16:01:15 GMT 2024

Diagnostic Status: Warning

Scientific Instruments: COS/FUV, COS/NUV

Special Requirements: (none)

Comments: Predicted fluxes used for ETC:
2.89E-17 (1666A)
1.50E-15 (1909A)
continuum fux of 8x10^-16 and 7x10^-16 erg/s/cm2/A at 1600A and 1900A

Diagnostics

(UGC-5340-4 (04)) Warning (Orbit Planner): INEFFICIENT ORDERING OF FP-POS POSITIONS
(UGC-5340-4 (04)) Warning (Orbit Planner): ORBITAL VISIBILITY OVERRUN
(UGC-5340-4 (04)) Warning (Orbit Planner): ORBITAL VISIBILITY OVERRUN
(UGC-5340-4 (04)) Warning (Orbit Planner): ORBITAL VISIBILITY OVERRUN
(UGC-5340-4 (04)) Warning (Orbit Planner): ORBITAL VISIBILITY OVERRUN
(UGC-5340-4 (04)) Warning (Orbit Planner): ORBITAL VISIBILITY OVERRUN
(UGC-5340-4 (04)) Warning (Orbit Planner): ORBITAL VISIBILITY OVERRUN
(UGC-5340-4 (04)) Warning (Orbit Planner): ORBITAL VISIBILITY OVERRUN
(G160M.4.1 (04.008)) Warning (Form): COS FUV PSA science exposures with extended targets have special calibration limitations. See "Errors and Warnings" for more details.
(G160M.4.2 (04.009)) Warning (Form): COS FUV PSA science exposures with extended targets have special calibration limitations. See "Errors and Warnings" for more details.
(G160M.4.3 (04.010)) Warning (Form): COS FUV PSA science exposures with extended targets have special calibration limitations. See "Errors and Warnings" for more details.

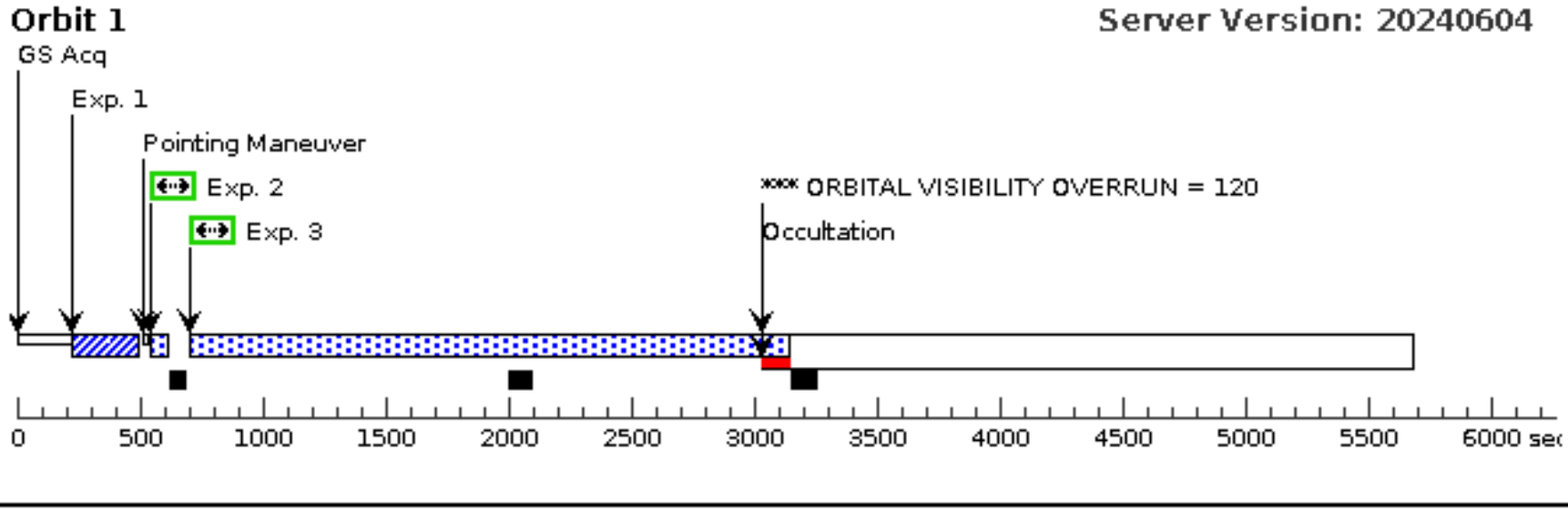
Fixed Targets

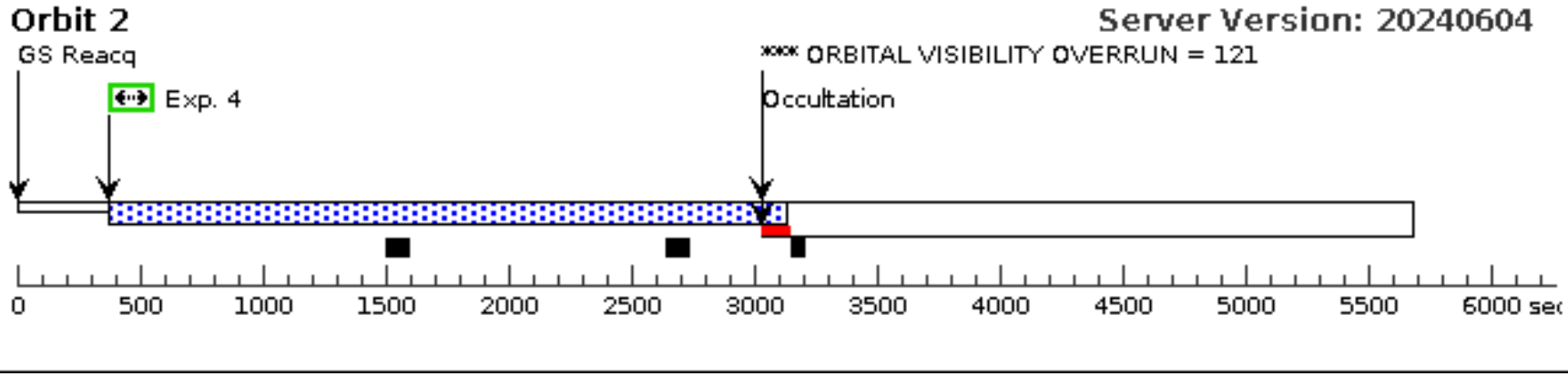
#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(4)	UGC-5340-4	Offset from OFFSET-REGION RA Offset: 0.0022575 Degrees Dec Offset: 0.0032272 Degrees		V=23.5 F@3600A 2.5e-17 erg/s/cm^2/A	Offset Position (UGC-5340-4)
Comments: F275W WFC3 ABmag = 21.014 Category=GALAXY Description=[DWARF COMPACT, STAR FORMING REGION] Extended=YES					
(7)	OFFSET-REGION	RA: 09 56 46.2144 (149.1925600d) Dec: +28 50 9.94 (28.83609d) Equinox: J2000		V=25.8	Reference Frame: ICRS
Comments: Flux measured within r=0.4" aperture on F275W WFC3 image: 4.873E-20 erg/s/cm^2/A F275W WFC3 ABmag = 20.278 Category=ISM Description=[HII REGION] Extended=NO					

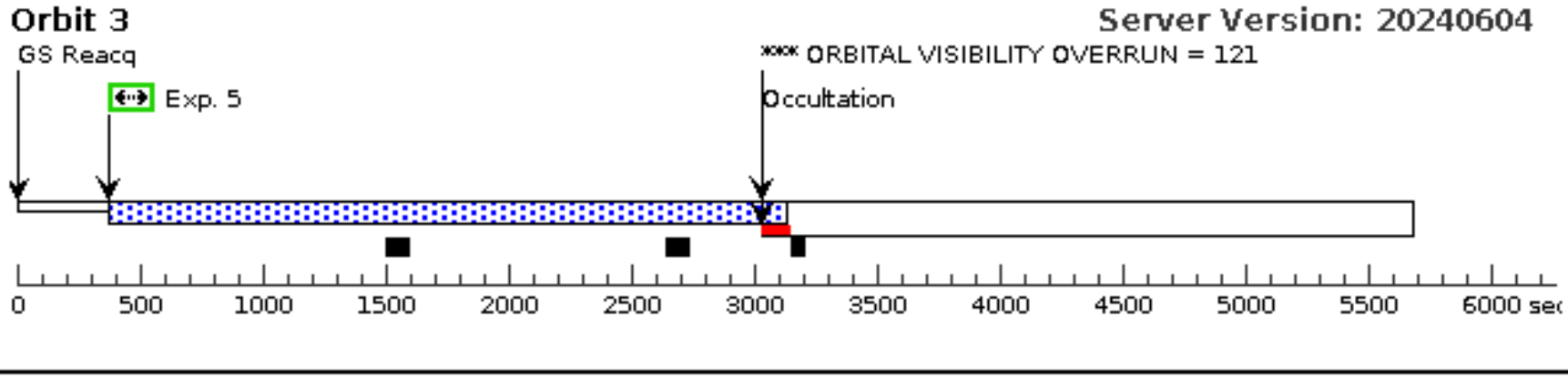
Exposures

#	Label (ETC Run)	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
1	offset ACQ - 4 (COS.ta.1811885)	(7) OFFSET-REGION	COS/NUV, ACQ/IMAGE, PSA	MIRRORA				30 Secs (30 Secs) *[==>]*	***[1]***
2	NUV image -4 (COS.im.1813923)	(4) UGC-5340-4	COS/NUV, ACCUM, PSA	MIRRORA				45 Secs (57 Secs) *[==>57.0 Secs]*	***[1]***
3	G185M.4.1 (COS.sp.1728643)	(4) UGC-5340-4	COS/NUV, TIME-TAG, PSA	G185M 1913 A	FP-POS=1; BUFFER-TIME=1129			2235 Secs (2247 Secs) *[==>2247.0 Secs]*	***[1]***
4	G185M.4.2 (COS.sp.1728643)	(4) UGC-5340-4	COS/NUV, TIME-TAG, PSA	G185M 1913 A	BUFFER-TIME=1129; FP-POS=2			2746 Secs (2746 Secs) *[==>]*	***[2]***
5	G185M.4.3 (COS.sp.1728643)	(4) UGC-5340-4	COS/NUV, TIME-TAG, PSA	G185M 1913 A	FP-POS=3; BUFFER-TIME=1129			2746 Secs (2746 Secs) *[==>]*	***[3]***
6	G185M.4.4 (COS.sp.1728643)	(4) UGC-5340-4	COS/NUV, TIME-TAG, PSA	G185M 1913 A	BUFFER-TIME=1129; FP-POS=4			2746 Secs (2746 Secs) *[==>]*	***[4]***
7	G185M.4.5 (COS.sp.1728643)	(4) UGC-5340-4	COS/NUV, TIME-TAG, PSA	G185M 1913 A	BUFFER-TIME=1129; FP-POS=3			1200 Secs (1182 Secs) *[==>1182.0 Secs]*	***[5]***
8	G160M.4.1 (COS.sp.1728730)	(4) UGC-5340-4	COS/FUV, TIME-TAG, PSA	G160M 1533 A	BUFFER-TIME=16800; FP-POS=1			1100 Secs (1082 Secs) *[==>1082.0 Secs]*	***[5]***
9	G160M.4.2 (COS.sp.1728730)	(4) UGC-5340-4	COS/FUV, TIME-TAG, PSA	G160M 1533 A	BUFFER-TIME=16800; FP-POS=2			2707 Secs (2707 Secs) *[==>]*	***[6]***
10	G160M.4.3 (COS.sp.1728730)	(4) UGC-5340-4	COS/FUV, TIME-TAG, PSA	G160M 1533 A	BUFFER-TIME=16800; FP-POS=4			2707 Secs (2707 Secs) *[==>]*	***[7]***

Orbit Structure



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Server Version: 20240604
GS Reacq
Exp. 5
*** ORBITAL VISIBILITY OVERRUN = 121
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1000
1500
2000
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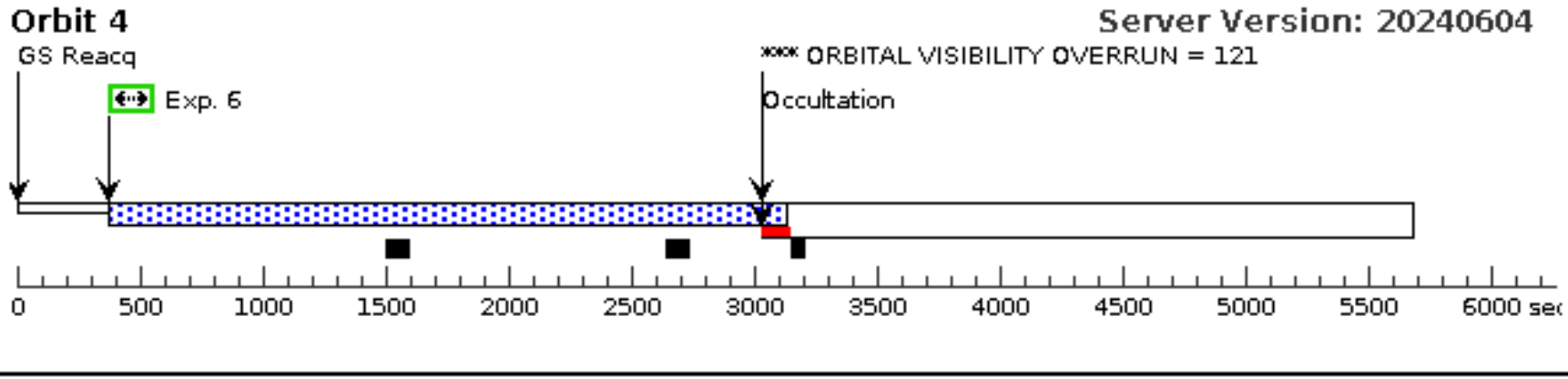
4000
4500
5000
5500
6000 sec


Orbit 4
Server Version: 20240604
GS Reacq
Exp. 6
*** ORBITAL VISIBILITY OVERRUN = 121
Occultation
0
500
1000
1500
2000
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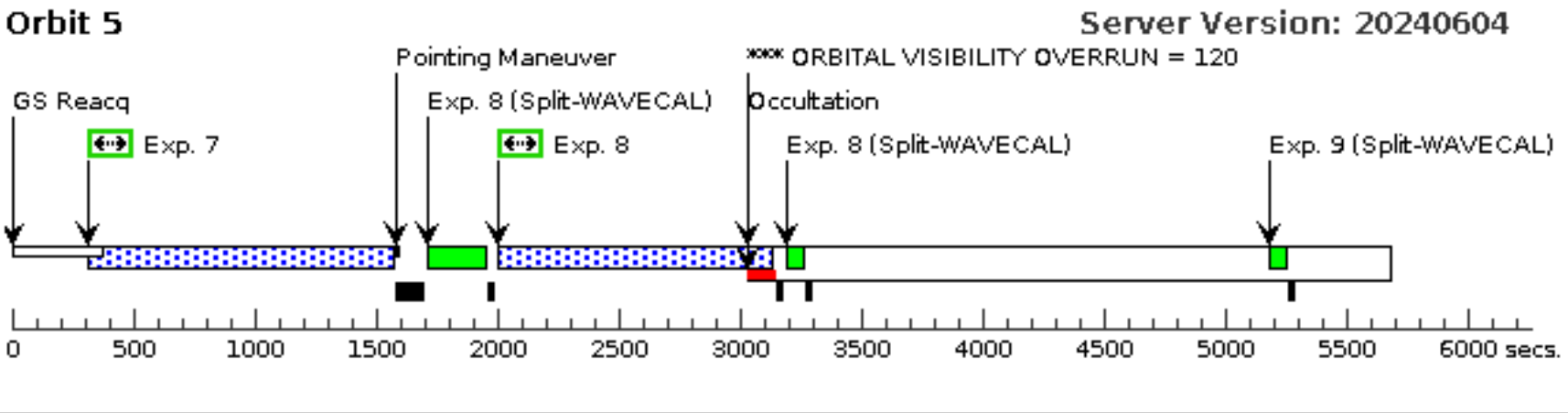
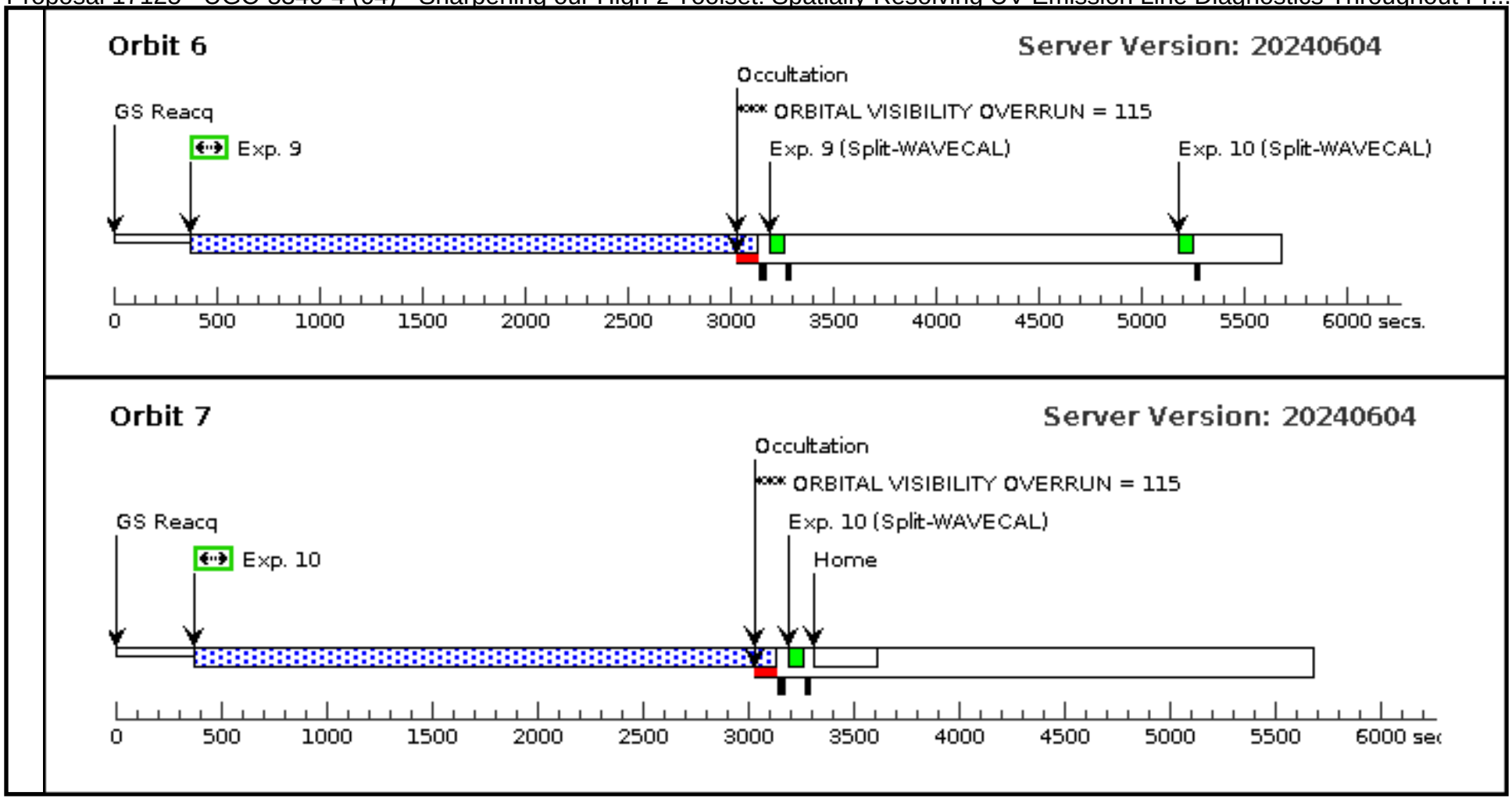
4000
4500
5000
5500
6000 sec


Orbit 5
Server Version: 20240604
Pointing Maneuver
*** ORBITAL VISIBILITY OVERRUN = 120
GS Reacq
Exp. 8 (Split-WAVECAL)
Occultation
Exp. 7
Exp. 8
Exp. 8 (Split-WAVECAL)
Exp. 9 (Split-WAVECAL)
0
500
1000
1500
2000
2500
3000
3500
4000
4500
5000
5500
6000 secs.


Orbit 6
Server Version: 20240604
Occultation
**** ORBITAL VISIBILITY OVERRUN = 115
GS Reacq
Exp. 9
Exp. 9 (Split-WAVECAL)
Exp. 10 (Split-WAVECAL)
0
500
1000
1500
2000
2500
3000
3500
4000
4500
5000
5500
6000 secs.
Orbit 7
Server Version: 20240604
Occultation
**** ORBITAL VISIBILITY OVERRUN = 115
GS Reacq
Exp. 10
Exp. 10 (Split-WAVECAL)
Home
0
500
1000
1500
2000
2500
3000
3500
4000
4500
5000
5500
6000 sec

Visit

Proposal 17125, UGC-5340-4-REPEAT (54) Fri Jun 14 16:01:15 GMT 2024

Diagnostic Status: No Diagnostics

Scientific Instruments: COS/NUV

Special Requirements: SAME ORIENT AS 64

Comments: Predicted fluxes used for ETC:
2.89E-17 (1666A)
1.50E-15 (1909A)
continuum fux of 8x10^-16 and 7x10^-16 erg/s/cm2/A at 1600A and 1900A

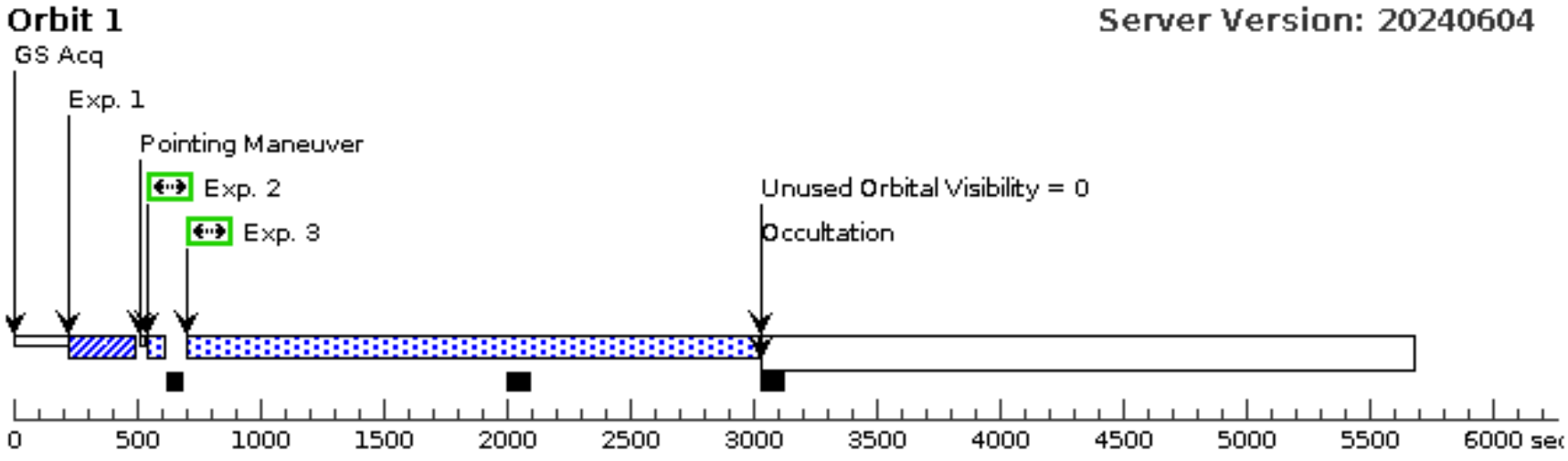
Fixed Targets

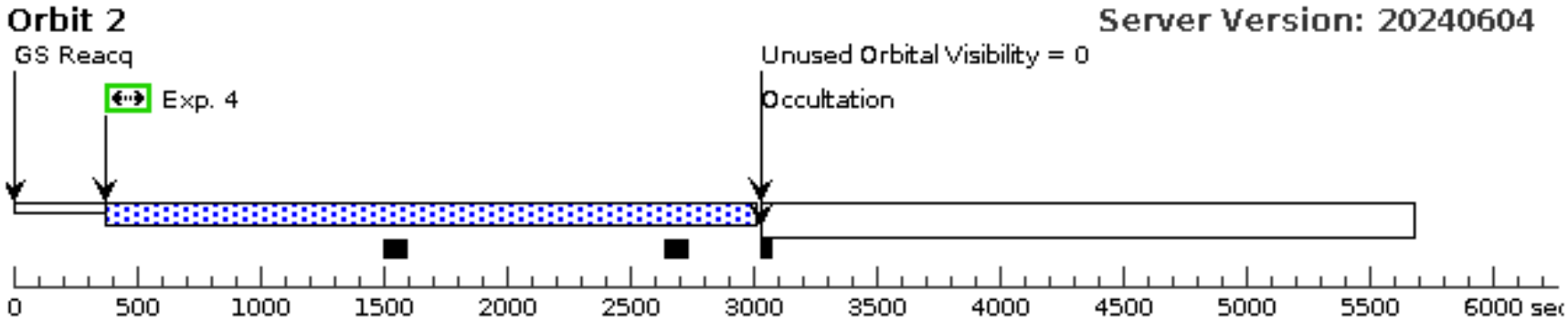
#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(4)	UGC-5340-4	Offset from OFFSET-REGION RA Offset: 0.0022575 Degrees Dec Offset: 0.0032272 Degrees		V=23.5 F@3600A 2.5e-17 erg/s/cm^2/A	Offset Position (UGC-5340-4)
Comments: F275W WFC3 ABmag = 21.014 *Category=GALAXY* *Description=[DWARF COMPACT, STAR FORMING REGION]* *Extended=YES*					
(7)	OFFSET-REGION	RA: 09 56 46.2144 (149.1925600d) Dec: +28 50 9.94 (28.83609d) Equinox: J2000		V=25.8	Reference Frame: ICRS
Comments: Flux measured within r=0.4" aperture on F275W WFC3 image: 4.873E-20 erg/s/cm^2/A *F275W WFC3 ABmag = 20.278* *Category=ISM* *Description=[HII REGION]* *Extended=NO*					

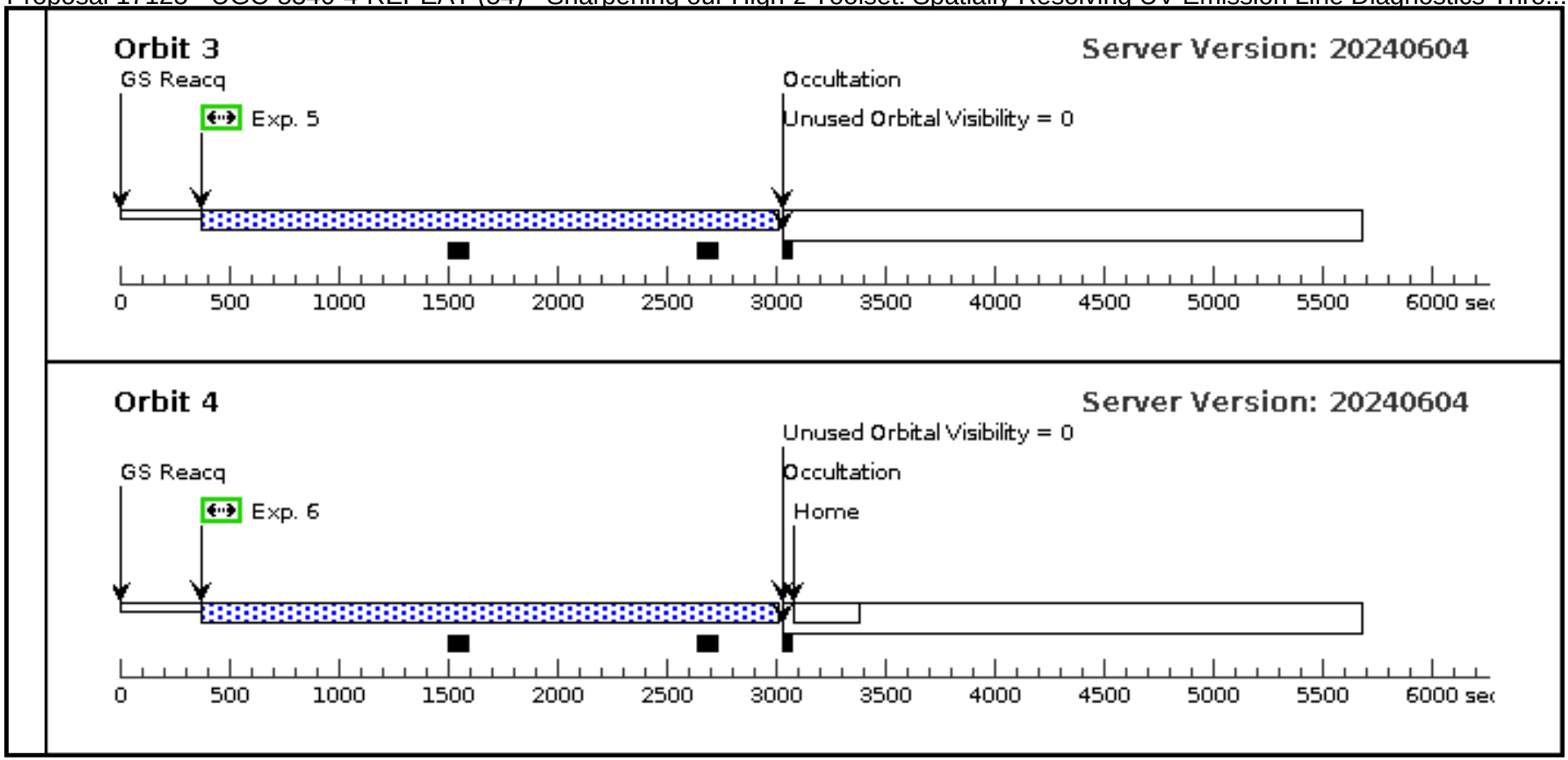
Exposures

#	Label (ETC Run)	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
1	offset ACQ - 4 (COS.ta.1811885)	(7) OFFSET-REGION	COS/NUV, ACQ/IMAGE, PSA	MIRRORA				30 Secs (30 Secs) *[==>]*	 ***[1]***
2	NUV image -4 (COS.im.1813923)	(4) UGC-5340-4	COS/NUV, ACCUM, PSA	MIRRORA				45 Secs (57 Secs) *[==>57.0 Secs]*	 ***[1]***
3	G185M.4.1 (COS.sp.1728643)	(4) UGC-5340-4	COS/NUV, TIME-TAG, PSA	G185M 1913 A	FP-POS=1; BUFFER-TIME=1129			2235 Secs (2127 Secs) *[==>2127.0 Secs]*	 ***[1]***
4	G185M.4.2 (COS.sp.1728643)	(4) UGC-5340-4	COS/NUV, TIME-TAG, PSA	G185M 1913 A	BUFFER-TIME=1129; FP-POS=2			2625 Secs (2625 Secs) *[==>]*	 ***[2]***
5	G185M.4.3 (COS.sp.1728643)	(4) UGC-5340-4	COS/NUV, TIME-TAG, PSA	G185M 1913 A	FP-POS=3; BUFFER-TIME=1129			2625 Secs (2625 Secs) *[==>]*	 ***[3]***
6	G185M.4.4 (COS.sp.1728643)	(4) UGC-5340-4	COS/NUV, TIME-TAG, PSA	G185M 1913 A	BUFFER-TIME=1129; FP-POS=4			2625 Secs (2625 Secs) *[==>]*	 ***[4]***

Orbit Structure



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Server Version: 20240604
GS Reacq
Exp. 5
Occultation
Unused Orbital Visibility = 0
0
500
1000
1500
2000
2500
3000
3500
4000
4500
5000
5500
6000 sec
Orbit 4
Server Version: 20240604
Unused Orbital Visibility = 0
GS Reacq
Exp. 6
Occultation
Home
0
500
1000
1500
2000
2500
3000
3500
4000
4500
5000
5500
6000 sec

Visit

Proposal 17125, UGC-5340-4-REPEAT (64) Fri Jun 14 16:01:15 GMT 2024

Diagnostic Status: Warning

Scientific Instruments: COS/FUV, COS/NUV

Special Requirements: (none)

Comments: Predicted fluxes used for ETC:
2.89E-17 (1666A)
1.50E-15 (1909A)
continuum fux of 8x10^-16 and 7x10^-16 erg/s/cm2/A at 1600A and 1900A

Diagnostics

(G160M.4.1 (64.003)) Warning (Form): COS FUV PSA science exposures with extended targets have special calibration limitations. See "Errors and Warnings" for more details.

(G160M.4.2 (64.004)) Warning (Form): COS FUV PSA science exposures with extended targets have special calibration limitations. See "Errors and Warnings" for more details.

(G160M.4.3 (64.005)) Warning (Form): COS FUV PSA science exposures with extended targets have special calibration limitations. See "Errors and Warnings" for more details.

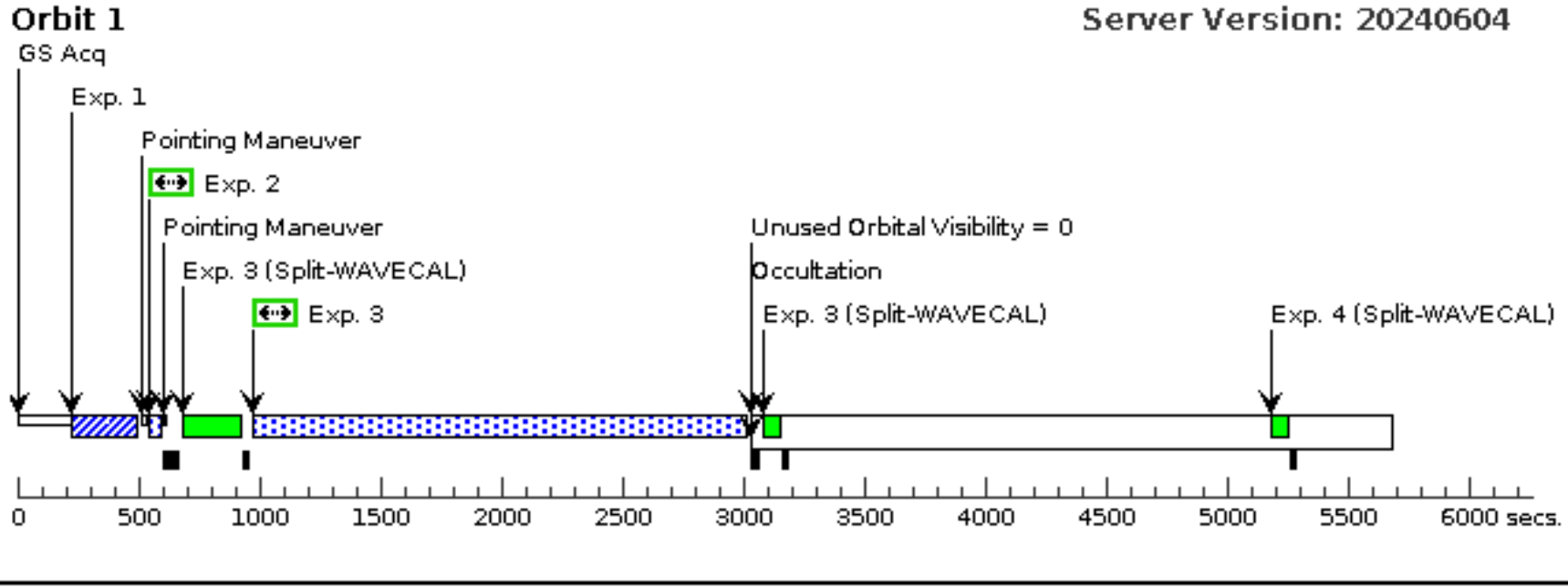
Fixed Targets

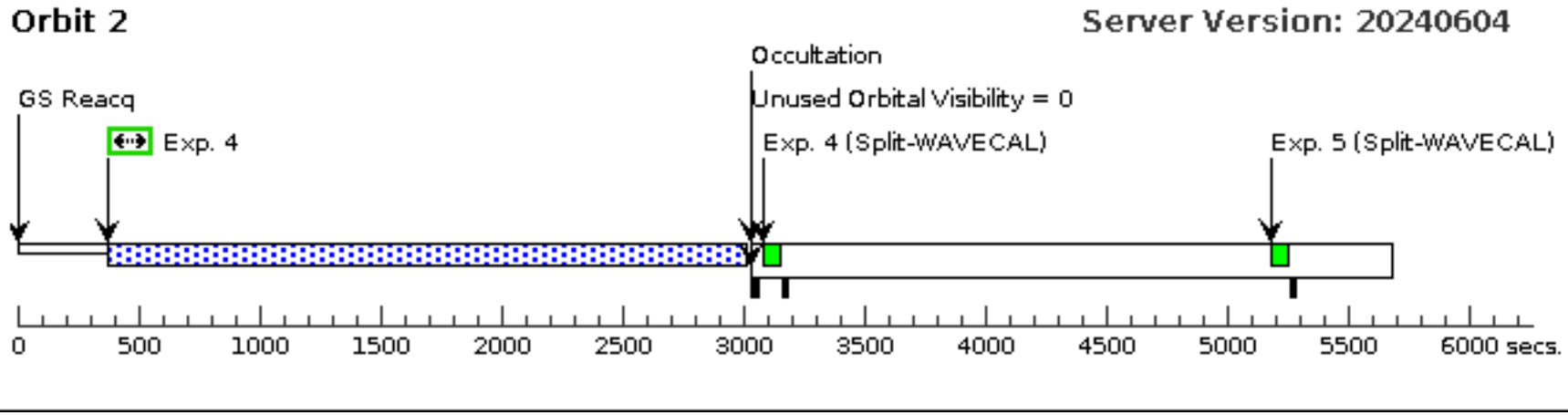
#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(4)	UGC-5340-4	Offset from OFFSET-REGION RA Offset: 0.0022575 Degrees Dec Offset: 0.0032272 Degrees		V=23.5 F@3600A 2.5e-17 erg/s/cm^2/A	Offset Position (UGC-5340-4)
Comments: F275W WFC3 ABmag = 21.014 *Category=GALAXY* *Description=[DWARF COMPACT, STAR FORMING REGION]* *Extended=YES*					
(7)	OFFSET-REGION	RA: 09 56 46.2144 (149.1925600d) Dec: +28 50 9.94 (28.83609d) Equinox: J2000		V=25.8	Reference Frame: ICRS
Comments: Flux measured within r=0.4" aperture on F275W WFC3 image: 4.873E-20 erg/s/cm^2/A *F275W WFC3 ABmag = 20.278* *Category=ISM* *Description=[HII REGION]* *Extended=NO*					

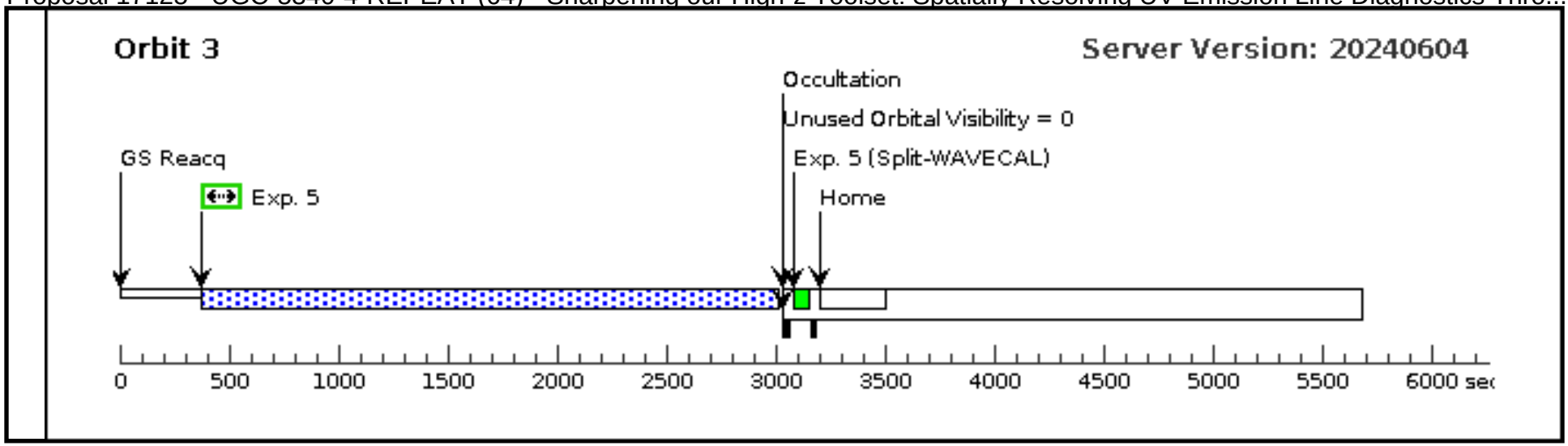
Exposures

#	Label (ETC Run)	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
1	offset ACQ - 4 (COS.ta.1811885)	(7) OFFSET-REGION	COS/NUV, ACQ/IMAGE, PSA	MIRRORA				30 Secs (30 Secs) *[==>]*	*[1]*
2	NUV image -4 (COS.im.1813923)	(4) UGC-5340-4	COS/NUV, ACCUM, PSA	MIRRORA				45 Secs (38 Secs) *[==>38.0 Secs]*	*[1]*
3	G160M.4.1 (COS.sp.1728730)	(4) UGC-5340-4	COS/FUV, TIME-TAG, PSA	G160M 1533 A	BUFFER-TIME=16800; FP-POS=1			2000 Secs (1993 Secs) *[==>1993.0 Secs]*	*[1]*
4	G160M.4.2 (COS.sp.1728730)	(4) UGC-5340-4	COS/FUV, TIME-TAG, PSA	G160M 1533 A	BUFFER-TIME=16800; FP-POS=2			2592 Secs (2592 Secs) *[==>]*	*[2]*
5	G160M.4.3 (COS.sp.1728730)	(4) UGC-5340-4	COS/FUV, TIME-TAG, PSA	G160M 1533 A	BUFFER-TIME=16800; FP-POS=4			2592 Secs (2592 Secs) *[==>]*	*[3]*

Orbit Structure



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Server Version: 20240604
Occultation
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GS Reacq
Exp. 5 (Split-WAVECAL)
Exp. 5
Home
0
500
1000
1500
2000
2500
3000
3500
4000
4500
5000
5500
6000 sec

Visit

Proposal 17125, UGC-5340-6.1 (05), implementation Fri Jun 14 16:01:15 GMT 2024

Diagnostic Status: Warning

Scientific Instruments: COS/NUV

Special Requirements: (none)

Comments: Predicted fluxes used for ETC:
3.76E-17 (1666A)
2.97E-16 (1909A)
continuum fux of 8x10^-16 and 7x10^-16 erg/s/cm2/A at 1600A and 1900A

Diagnostics

(UGC-5340-6.1 (05)) Warning (Orbit Planner): INEFFICIENT ORDERING OF FP-POS POSITIONS

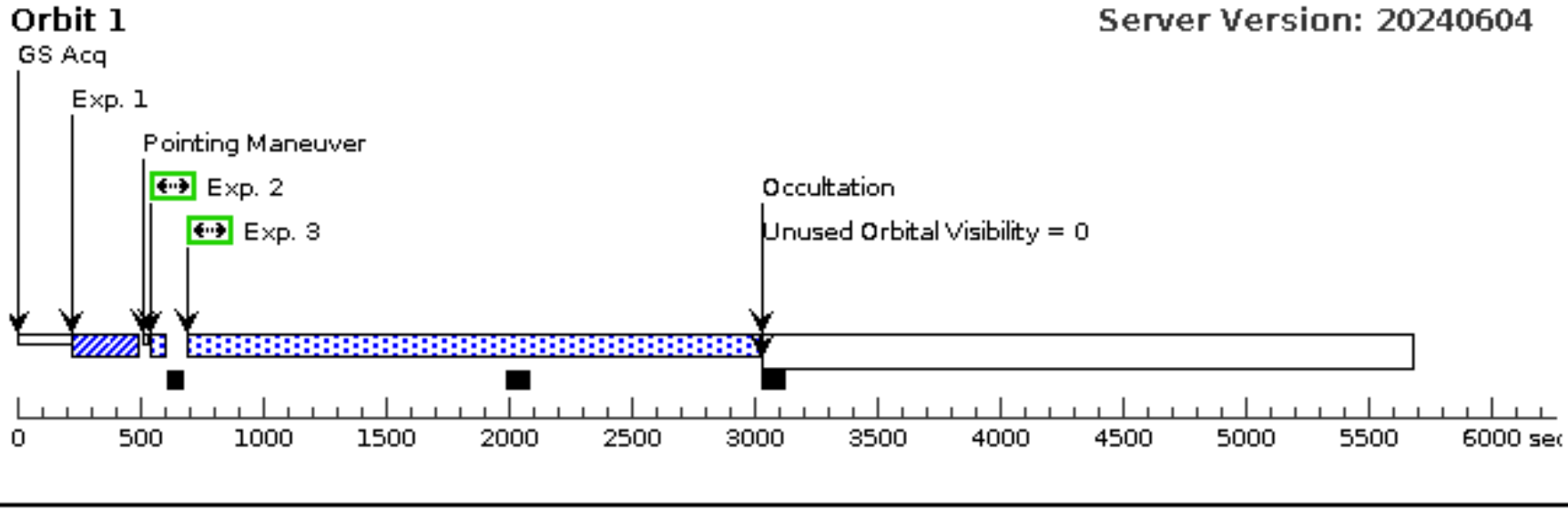
Fixed Targets

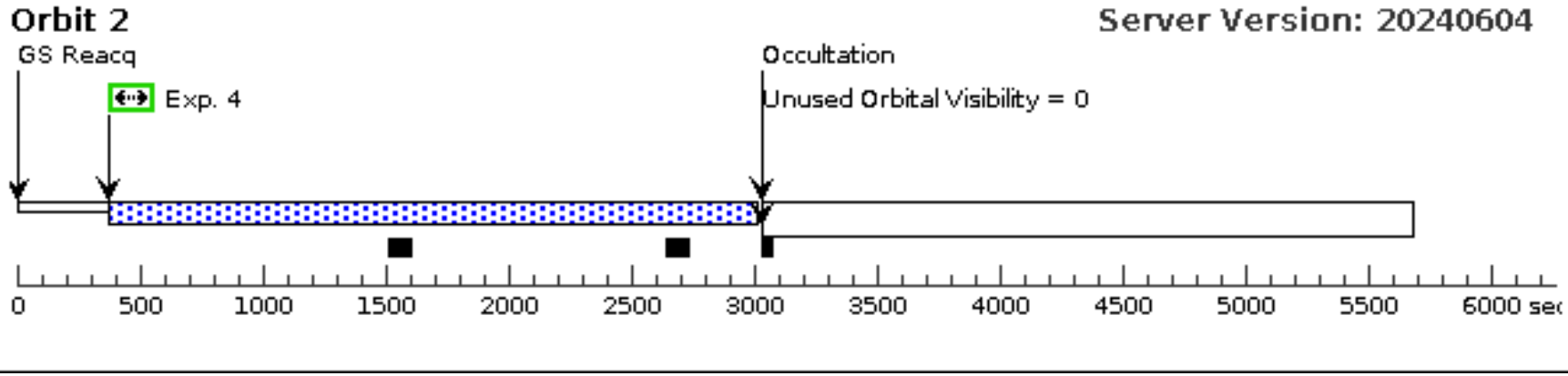
#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(5)	UGC-5340-6	Offset from OFFSET-REGION		V=23.2	Offset Position (UGC-5340-6)
		RA Offset: -0.0024808 Degrees		F@3600A 2e-17 erg/s/cm^2/A	
		Dec Offset: 0.0018031 Degrees			
Comments: F275W WFC3 ABmag = 20.46 *Category=GALAXY* *Description=[DWARF COMPACT, STAR FORMING REGION]* *Extended=NO*					
(7)	OFFSET-REGION	RA: 09 56 46.2144 (149.1925600d)		V=25.8	Reference Frame: ICRS
		Dec: +28 50 9.94 (28.83609d)			
		Equinox: J2000			
Comments: Flux measured within r=0.4" aperture on F275W WFC3 image: 4.873E-20 erg/s/cm^2/A *F275W WFC3 ABmag = 20.278* *Category=ISM* *Description=[HII REGION]* *Extended=NO*					

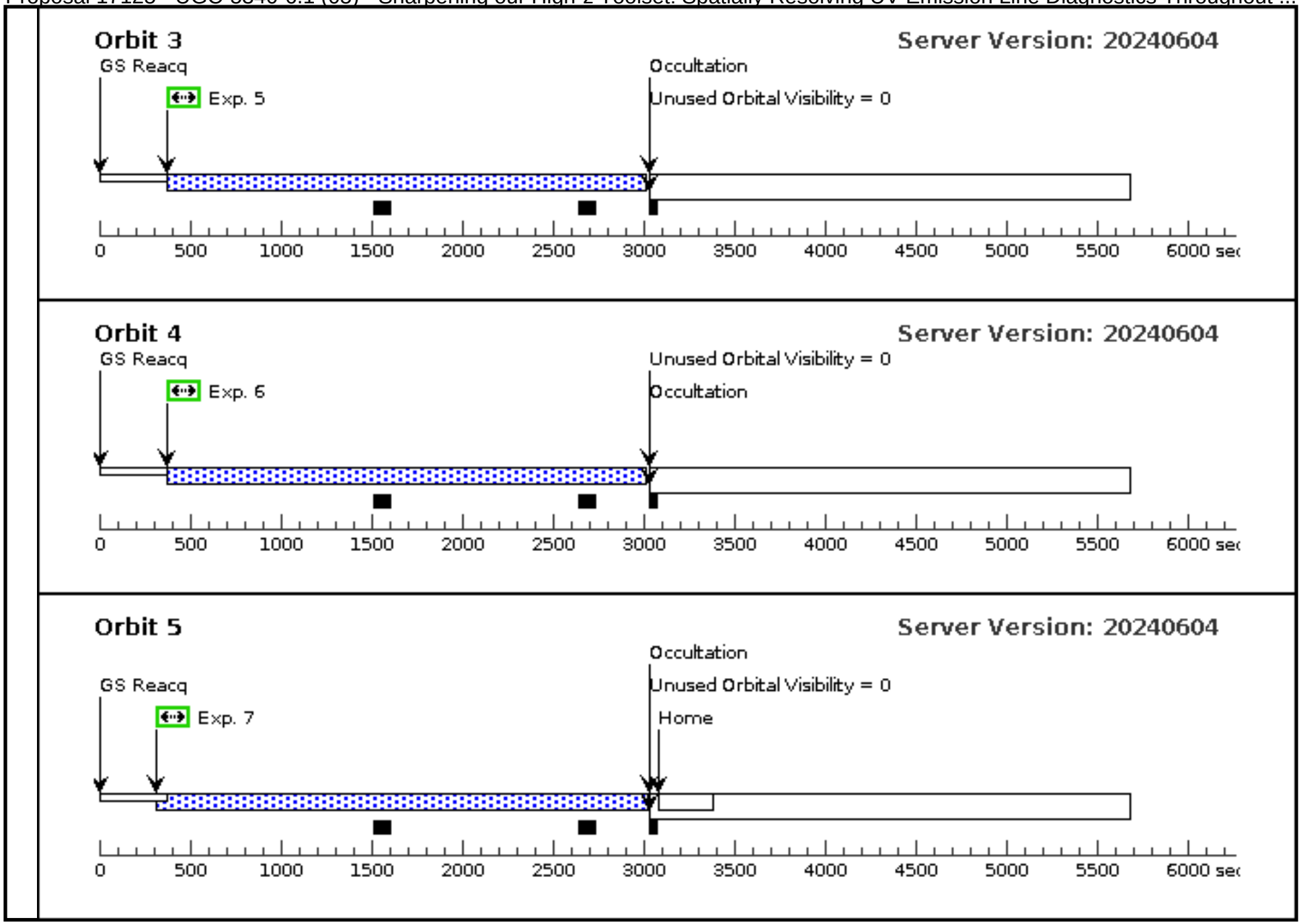
Exposures

#	Label (ETC Run)	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
1	offset ACQ (COS.ta.1811885)	(7) OFFSET-REGION	COS/NUV, ACQ/IMAGE, PSA	MIRRORA				30 Secs (30 Secs) *[==>]*	*[1]*
2	NUV image-6 (COS.im.1813924)	(5) UGC-5340-6	COS/NUV, ACCUM, PSA	MIRRORA				25 Secs (48 Secs) *[==>48.0 Secs]*	*[1]*
3	G185M.6.1 (COS.sp.1728645)	(5) UGC-5340-6	COS/NUV, TIME-TAG, PSA	G185M 1913 A	FP-POS=1; BUFFER-TIME=1132			2235 Secs (2138 Secs) *[==>2138.0 Secs]*	*[1]*
4	G185M.6.2 (COS.sp.1728645)	(5) UGC-5340-6	COS/NUV, TIME-TAG, PSA	G185M 1913 A	BUFFER-TIME=1132; FP-POS=2			2625 Secs (2625 Secs) *[==>]*	*[2]*
5	G185M.6.3 (COS.sp.1728645)	(5) UGC-5340-6	COS/NUV, TIME-TAG, PSA	G185M 1913 A	FP-POS=3; BUFFER-TIME=1132			2625 Secs (2625 Secs) *[==>]*	*[3]*
6	G185M.6.4 (COS.sp.1728645)	(5) UGC-5340-6	COS/NUV, TIME-TAG, PSA	G185M 1913 A	BUFFER-TIME=1132; FP-POS=4			2625 Secs (2625 Secs) *[==>]*	*[4]*
7	G185M.6.5 (COS.sp.1728645)	(5) UGC-5340-6	COS/NUV, TIME-TAG, PSA	G185M 1913 A	BUFFER-TIME=1132; FP-POS=3			2625 Secs (2625 Secs) *[==>]*	*[5]*

Orbit Structure



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GS Reacq
Exp. 5
Occultation
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Orbit 4
Server Version: 20240604
GS Reacq
Exp. 6
Unused Orbital Visibility = 0
Occultation
0 500 1000 1500 2000 2500 3000 3500 4000 4500 5000 5500 6000 sec
Orbit 5
Server Version: 20240604
Occultation
GS Reacq
Unused Orbital Visibility = 0
Exp. 7
Home
0 500 1000 1500 2000 2500 3000 3500 4000 4500 5000 5500 6000 sec

Visit

Proposal 17125, UGC-5340-6.2 (06), implementation Fri Jun 14 16:01:15 GMT 2024

Diagnostic Status: No Diagnostics

Scientific Instruments: COS/FUV, COS/NUV

Special Requirements: (none)

Comments: Predicted fluxes used for ETC:
3.76E-17 (1666A)
2.97E-16 (1909A)
continuum fux of 8x10^-16 and 7x10^-16 erg/s/cm2/A at 1600A and 1900A

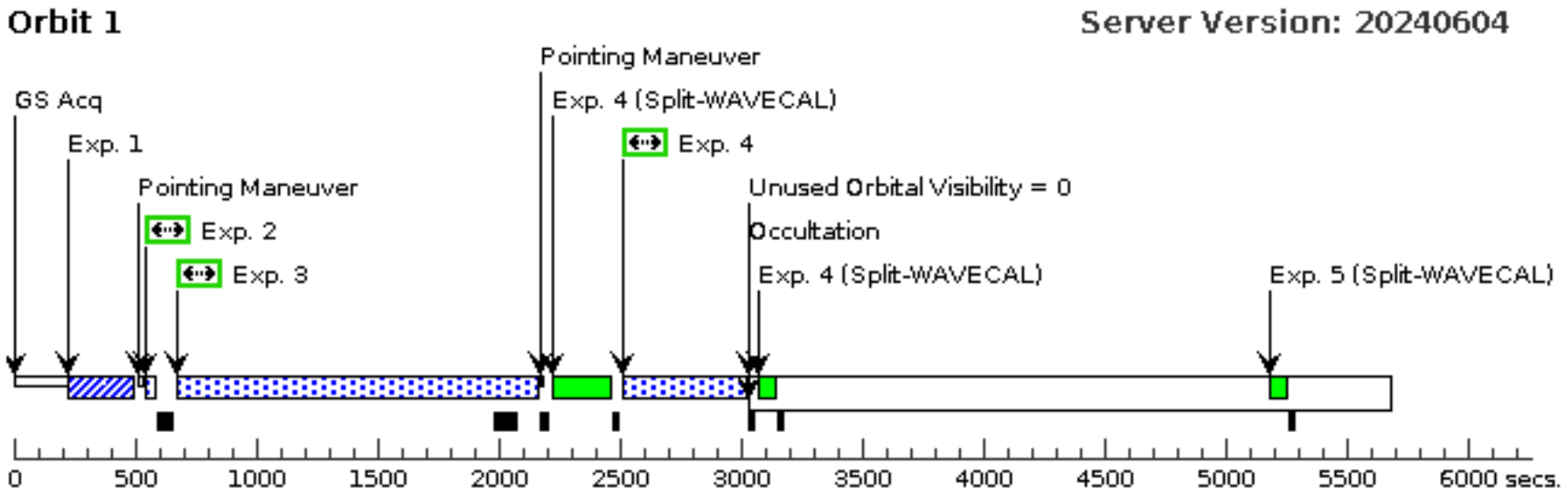
Fixed Targets

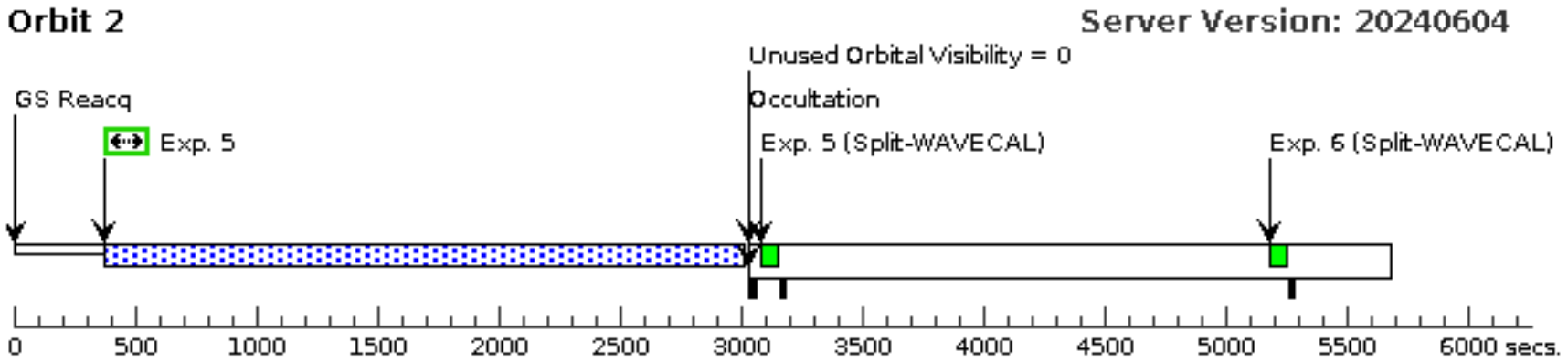
#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(5)	UGC-5340-6	Offset from OFFSET-REGION RA Offset: -0.0024808 Degrees Dec Offset: 0.0018031 Degrees		V=23.2 F@3600A 2e-17 erg/s/cm^2/A	Offset Position (UGC-5340-6)
		Comments: F275W WFC3 ABmag = 20.46 *Category=GALAXY* *Description=[DWARF COMPACT, STAR FORMING REGION]* *Extended=NO*			
(7)	OFFSET-REGION	RA: 09 56 46.2144 (149.1925600d) Dec: +28 50 9.94 (28.83609d) Equinox: J2000		V=25.8	Reference Frame: ICRS
		Comments: Flux measured within r=0.4" aperture on F275W WFC3 image: 4.873E-20 erg/s/cm^2/A *F275W WFC3 ABmag = 20.278* *Category=ISM* *Description=[HII REGION]* *Extended=NO*			

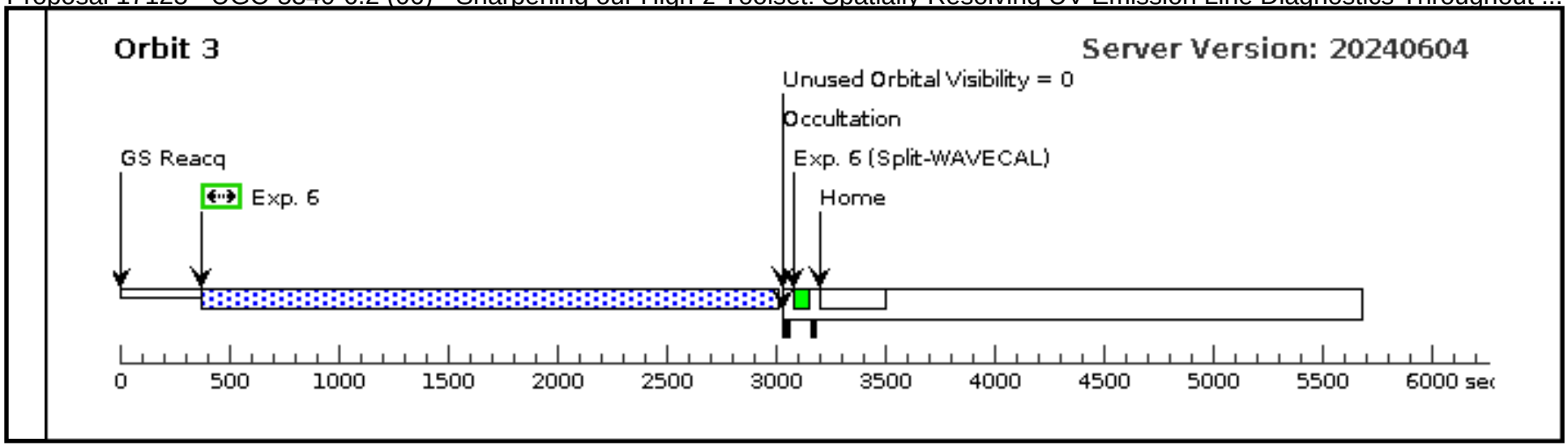
Exposures

#	Label (ETC Run)	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
1	offset ACQ (COS.ta.1811885)	(7) OFFSET-REGION	COS/NUV, ACQ/IMAGE, PSA	MIRRORA				30 Secs (30 Secs) *[==>]*	*[1]*
2	NUV image-6 (COS.im.1813924)	(5) UGC-5340-6	COS/NUV, ACCUM, PSA	MIRRORA				25 Secs (30 Secs) *[==>30.0 Secs]*	*[1]*
3	G185M.6.6 (COS.sp.1728645)	(5) UGC-5340-6	COS/NUV, TIME-TAG, PSA	G185M 1913 A	BUFFER-TIME=1132; FP-POS=4			1400 Secs (1296 Secs) *[==>1296.0 Secs]*	*[1]*
4	G160M.6.1 (COS.sp.1728734)	(5) UGC-5340-6	COS/FUV, TIME-TAG, PSA	G160M 1533 A	BUFFER-TIME=16800; FP-POS=1			450 Secs (455 Secs) *[==>455.0 Secs]*	*[1]*
5	G160M.6.2 (COS.sp.1728734)	(5) UGC-5340-6	COS/FUV, TIME-TAG, PSA	G160M 1533 A	BUFFER-TIME=16800; FP-POS=2			2592 Secs (2592 Secs) *[==>]*	*[2]*
6	G160M.6.3 (COS.sp.1728734)	(5) UGC-5340-6	COS/FUV, TIME-TAG, PSA	G160M 1533 A	BUFFER-TIME=16800; FP-POS=4			2592 Secs (2592 Secs) *[==>]*	*[3]*

Orbit Structure






Orbit 3
Server Version: 20240604
Unused Orbital Visibility = 0
Occultation
GS Reacq
Exp. 6
Exp. 6 (Split-WAVECAL)
Home
0
500
1000
1500
2000
2500
3000
3500
4000
4500
5000
5500
6000 sec

Visit

Proposal 17125, UGC-5340-7.1 (07), completed Fri Jun 14 16:01:15 GMT 2024

Diagnostic Status: Warning

Scientific Instruments: COS/NUV

Special Requirements: (none)

Comments: Predicted fluxes used for ETC: erg/s/cm^2/A
2.48E-17 (1666A)
1.31E-16 (1909A)

continuum fux of 8x10^-16 and 7x10^-16 erg/s/cm2/A at 1600A and 1900A

Diagnostics

(UGC-5340-7.1 (07)) Warning (Orbit Planner): INEFFICIENT ORDERING OF FP-POS POSITIONS
(UGC-5340-7.1 (07)) Warning (Orbit Planner): ORBITAL VISIBILITY OVERRUN
(UGC-5340-7.1 (07)) Warning (Orbit Planner): ORBITAL VISIBILITY OVERRUN
(UGC-5340-7.1 (07)) Warning (Orbit Planner): ORBITAL VISIBILITY OVERRUN
(UGC-5340-7.1 (07)) Warning (Orbit Planner): ORBITAL VISIBILITY OVERRUN
(UGC-5340-7.1 (07)) Warning (Orbit Planner): ORBITAL VISIBILITY OVERRUN

Fixed Targets

#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(6)	UGC-5340-7	Offset from OFFSET-REGION		V=24.7	Offset Position (UGC-5340-7)
		RA Offset: -2.087E-4 Degrees		F@3600A 1e-17 erg/s/cm^2/A	
		Dec Offset: -0.0332514 Degrees			

Comments: F275W WFC3 ABmag = 21.29
Category=GALAXY
Description=[DWARF COMPACT, STAR FORMING REGION]
Extended=NO

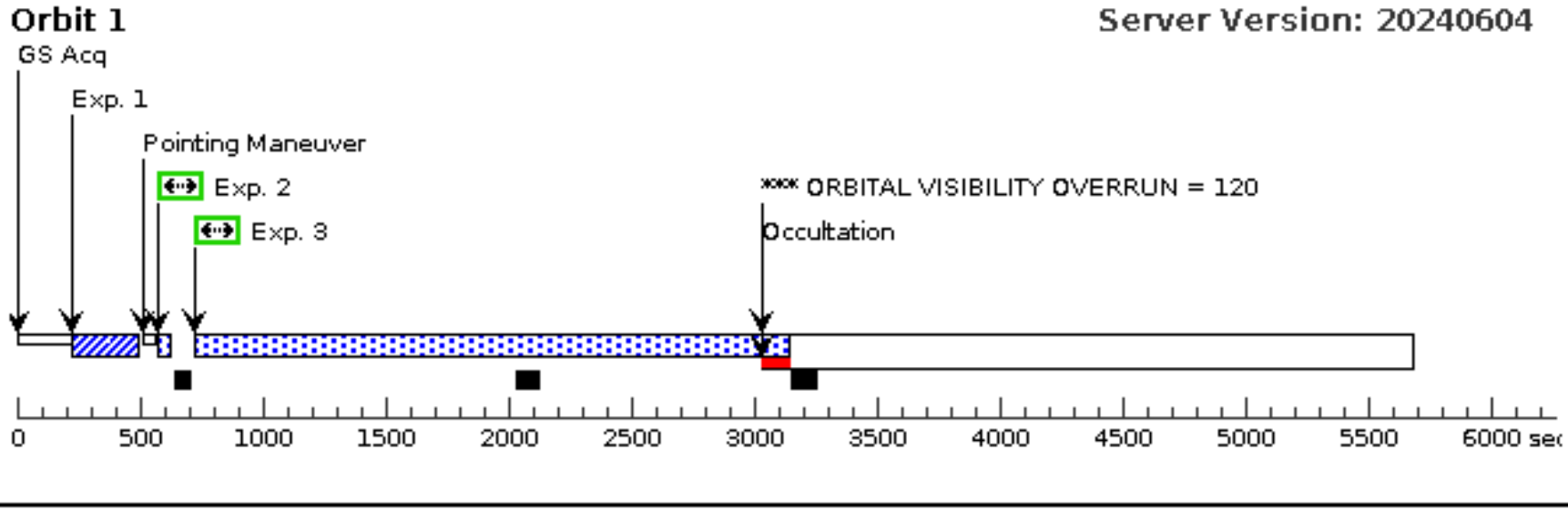
(7)	OFFSET-REGION	RA: 09 56 46.2144 (149.1925600d)		V=25.8	Reference Frame: ICRS
		Dec: +28 50 9.94 (28.83609d)			
		Equinox: J2000			

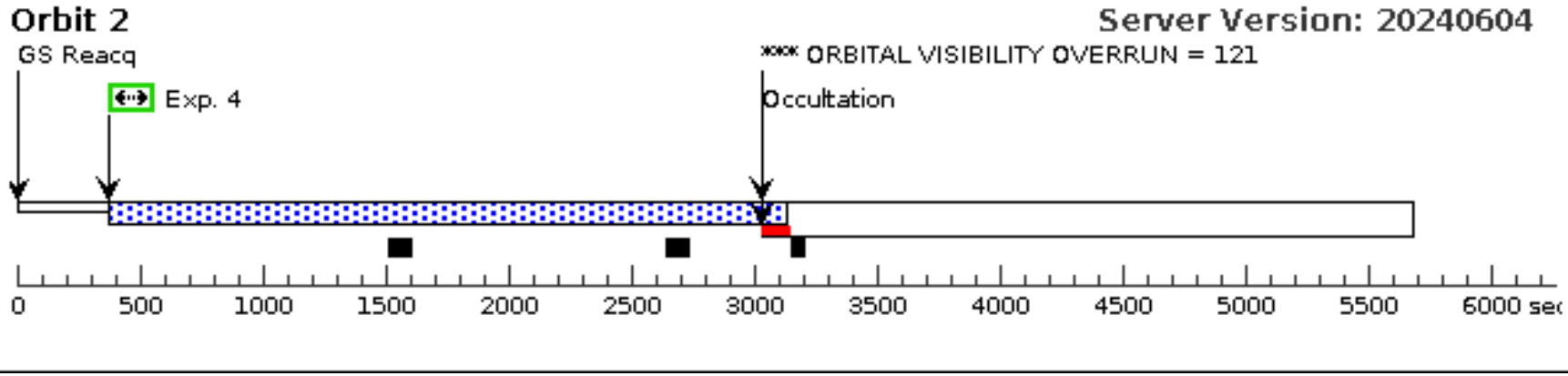
Comments: Flux measured within r=0.4" aperture on F275W WFC3 image: 4.873E-20 erg/s/cm^2/A
F275W WFC3 ABmag = 20.278
Category=ISM
Description=[HII REGION]
Extended=NO

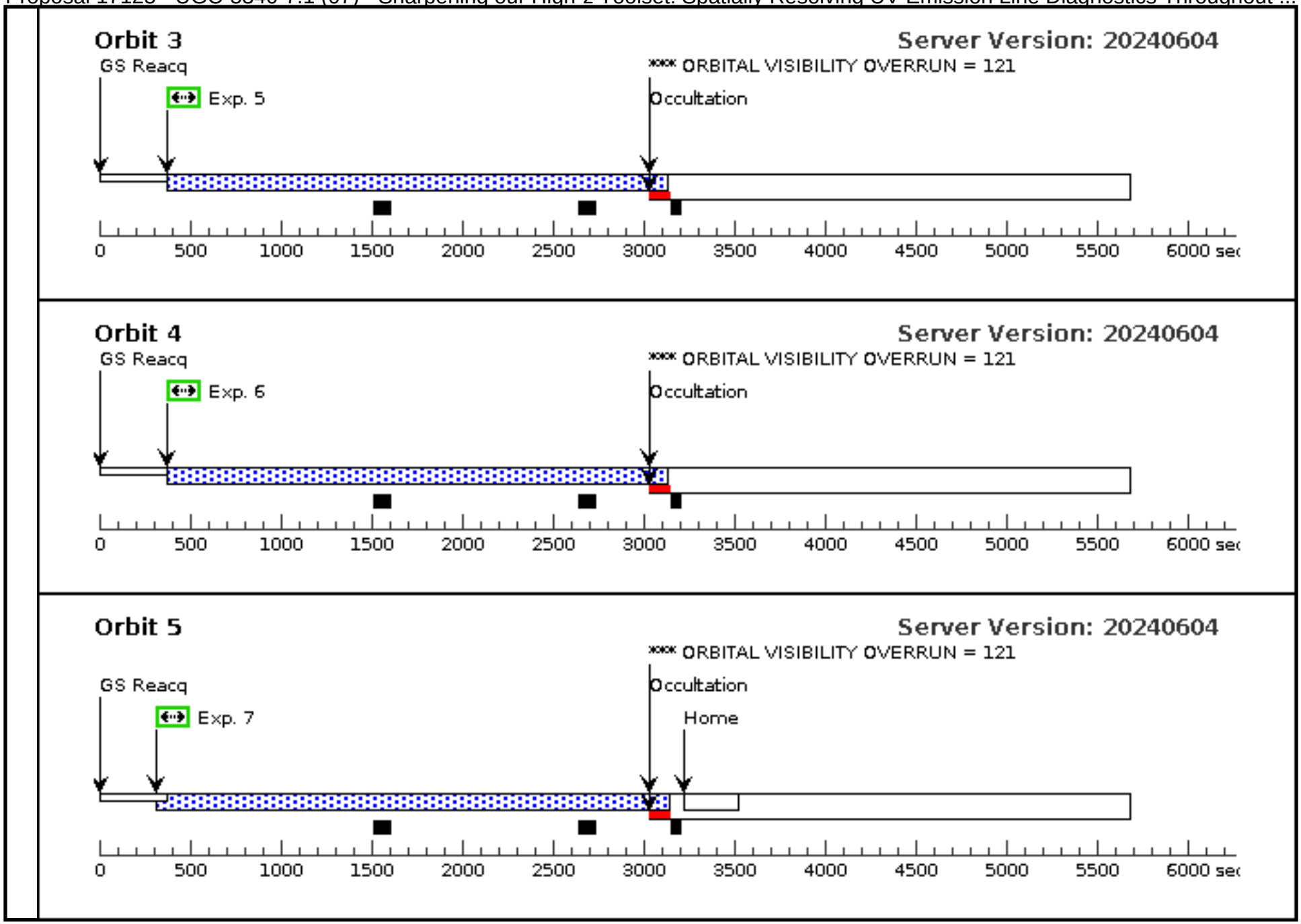
Exposures

#	Label (ETC Run)	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
1	(COS.ta.1811885)	(7) OFFSET-REGION	COS/NUV, ACQ/IMAGE, PSA	MIRRORA				30 Secs (30 Secs) *[==>]*	 ***[1]***
2	NUV image-7 (COS.im.1813929)	(6) UGC-5340-7	COS/NUV, ACCUM, PSA	MIRRORA				55 Secs (46 Secs) *[==>46.0 Secs]*	 ***[1]***
3	G185M.7.1 (COS.sp.1728646)	(6) UGC-5340-7	COS/NUV, TIME-TAG, PSA	G185M 1913 A	FP-POS=1; BUFFER-TIME=1132			2235 Secs (2226 Secs) *[==>2226.0 Secs]*	 ***[1]***
4	G185M.7.2 (COS.sp.1728646)	(6) UGC-5340-7	COS/NUV, TIME-TAG, PSA	G185M 1913 A	BUFFER-TIME=1132; FP-POS=2			2746 Secs (2746 Secs) *[==>]*	 ***[2]***
5	G185M.7.3 (COS.sp.1728646)	(6) UGC-5340-7	COS/NUV, TIME-TAG, PSA	G185M 1913 A	FP-POS=3; BUFFER-TIME=1132			2746 Secs (2746 Secs) *[==>]*	 ***[3]***
6	G185M.7.4 (COS.sp.1728646)	(6) UGC-5340-7	COS/NUV, TIME-TAG, PSA	G185M 1913 A	BUFFER-TIME=1132; FP-POS=4			2746 Secs (2746 Secs) *[==>]*	 ***[4]***
7	G185M.7.5 (COS.sp.1728646)	(6) UGC-5340-7	COS/NUV, TIME-TAG, PSA	G185M 1913 A	BUFFER-TIME=1132; FP-POS=3			2746 Secs (2746 Secs) *[==>]*	 ***[5]***

Orbit Structure






Orbit 3
Server Version: 20240604
GS Reacq
Exp. 5
*** ORBITAL VISIBILITY OVERRUN = 121
Occultation
0 500 1000 1500 2000 2500 3000 3500 4000 4500 5000 5500 6000 sec
Orbit 4
Server Version: 20240604
GS Reacq
Exp. 6
*** ORBITAL VISIBILITY OVERRUN = 121
Occultation
0 500 1000 1500 2000 2500 3000 3500 4000 4500 5000 5500 6000 sec
Orbit 5
Server Version: 20240604
*** ORBITAL VISIBILITY OVERRUN = 121
GS Reacq
Occultation
Exp. 7
Home
0 500 1000 1500 2000 2500 3000 3500 4000 4500 5000 5500 6000 sec

Visit

Proposal 17125, UGC-5340-7.2 (08), failed Fri Jun 14 16:01:15 GMT 2024

Diagnostic Status: Warning

Scientific Instruments: COS/FUV, COS/NUV

Special Requirements: (none)

Comments: Predicted fluxes used for ETC: erg/s/cm^2/A
2.48E-17 (1666A)
1.31E-16 (1909A)

continuum fux of 8x10^-16 and 7x10^-16 erg/s/cm2/A at 1600A and 1900A

Diagnostics

(UGC-5340-7.2 (08)) Warning (Orbit Planner): ORBITAL VISIBILITY OVERRUN

(UGC-5340-7.2 (08)) Warning (Orbit Planner): ORBITAL VISIBILITY OVERRUN

(UGC-5340-7.2 (08)) Warning (Orbit Planner): ORBITAL VISIBILITY OVERRUN

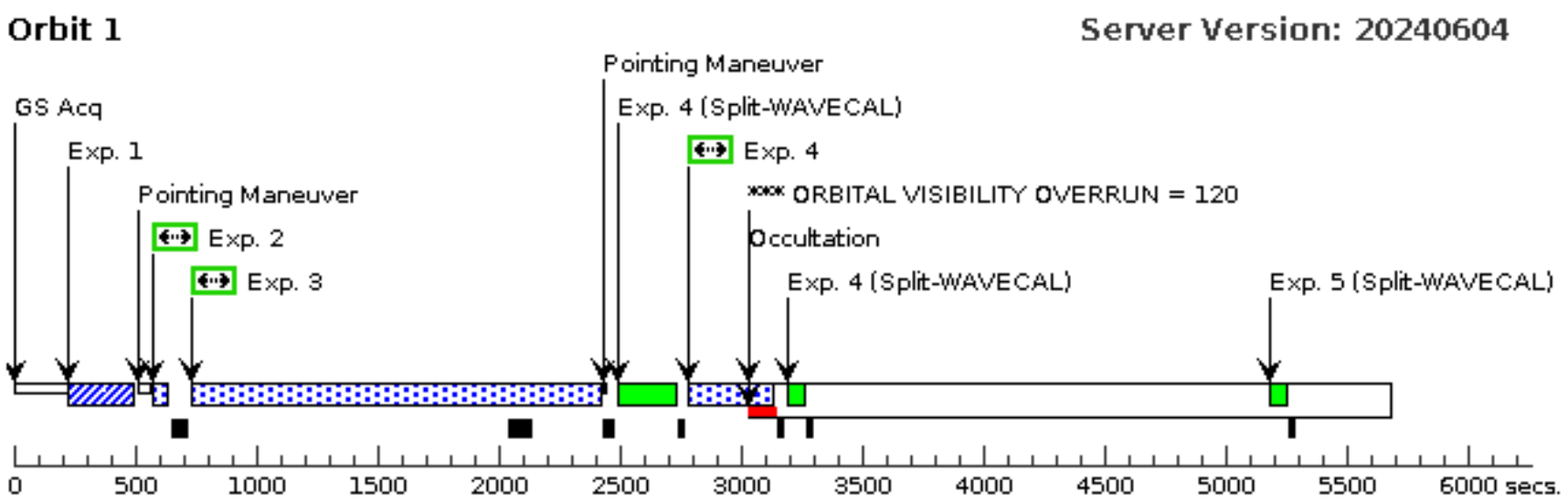
Fixed Targets

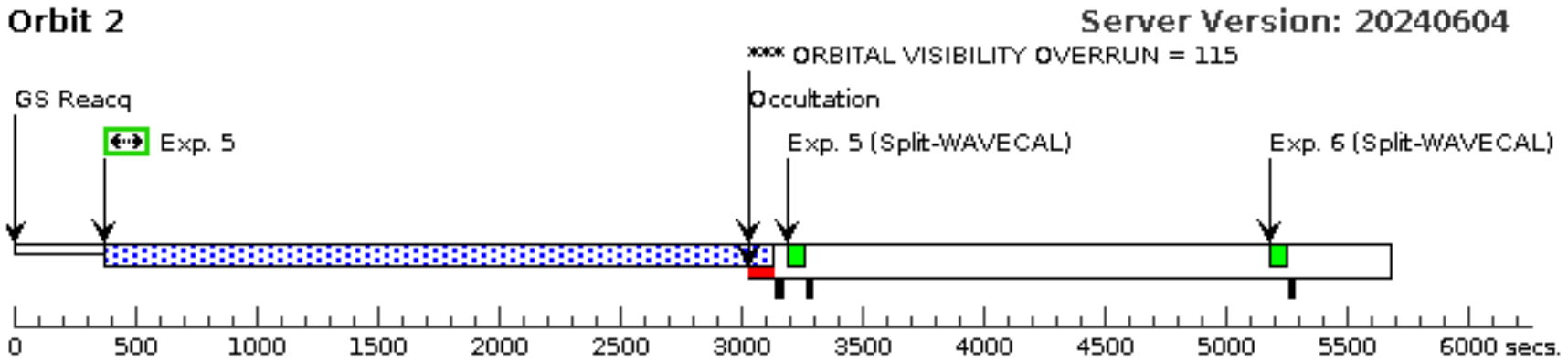
#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(6)	UGC-5340-7	Offset from OFFSET-REGION RA Offset: -2.087E-4 Degrees Dec Offset: -0.0332514 Degrees		V=24.7 F@3600A 1e-17 erg/s/cm^2/A	Offset Position (UGC-5340-7)
Comments: F275W WFC3 ABmag = 21.29 *Category=GALAXY* *Description=[DWARF COMPACT, STAR FORMING REGION]* *Extended=NO*					
(7)	OFFSET-REGION	RA: 09 56 46.2144 (149.1925600d) Dec: +28 50 9.94 (28.83609d) Equinox: J2000		V=25.8	Reference Frame: ICRS
Comments: Flux measured within r=0.4" aperture on F275W WFC3 image: 4.873E-20 erg/s/cm^2/A *F275W WFC3 ABmag = 20.278* *Category=ISM* *Description=[HII REGION]* *Extended=NO*					

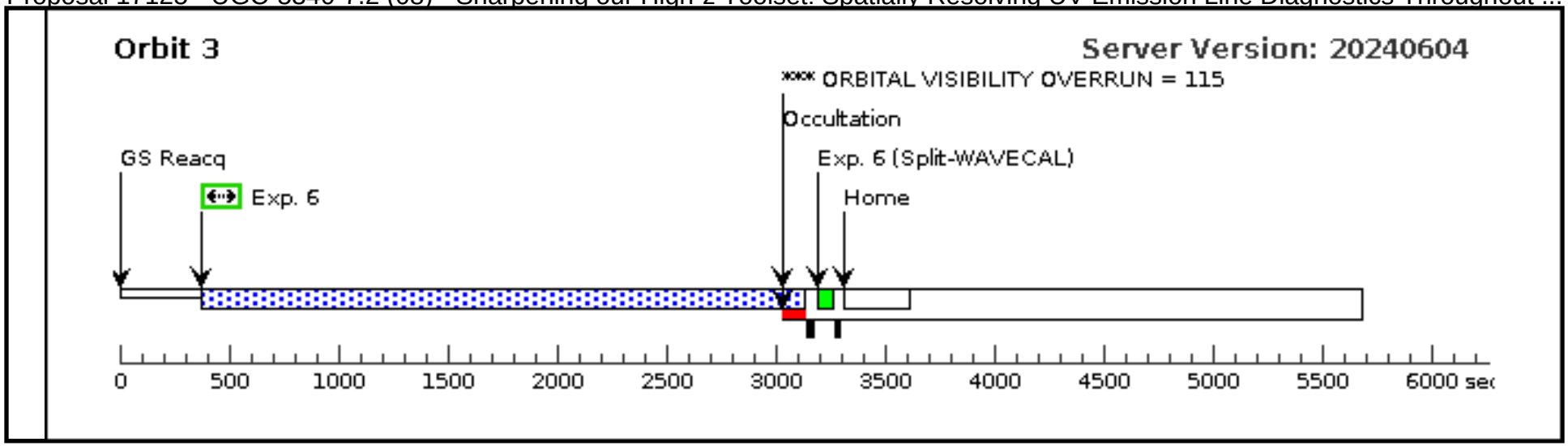
Exposures

#	Label (ETC Run)	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
1	(COS.ta.1811885)	(7) OFFSET-REGION	COS/NUV, ACQ/IMAGE, PSA	MIRRORA				30 Secs (30 Secs) *[==>]*	 ***[1]***
2	NUV image-7 (COS.im.1813929)	(6) UGC-5340-7	COS/NUV, ACCUM, PSA	MIRRORA				55 Secs (56 Secs) *[==>56.0 Secs]*	 ***[1]***
3	G185M.7.6 (COS.sp.1728646)	(6) UGC-5340-7	COS/NUV, TIME-TAG, PSA	G185M 1913 A	BUFFER-TIME=1132; FP-POS=4			1500 Secs (1501 Secs) *[==>1501.0 Secs]*	 ***[1]***
4	G160M.7.1 (COS.sp.1728736)	(6) UGC-5340-7	COS/FUV, TIME-TAG, PSA	G160M 1533 A	BUFFER-TIME=16800; FP-POS=1			300 Secs (301 Secs) *[==>301.0 Secs]*	 ***[1]***
5	G160M.7.2 (COS.sp.1728736)	(6) UGC-5340-7	COS/FUV, TIME-TAG, PSA	G160M 1533 A	BUFFER-TIME=16800; FP-POS=2			2707 Secs (2707 Secs) *[==>]*	 ***[2]***
6	G160M.7.3 (COS.sp.1728736)	(6) UGC-5340-7	COS/FUV, TIME-TAG, PSA	G160M 1533 A	BUFFER-TIME=16800; FP-POS=4			2707 Secs (2707 Secs) *[==>]*	 ***[3]***

Orbit Structure






Orbit 3
Server Version: 20240604
*** ORBITAL VISIBILITY OVERRUN = 115
Occultation
GS Reacq
Exp. 6
Exp. 6 (Split-WAVECAL)
Home
0
500
1000
1500
2000
2500
3000
3500
4000
4500
5000
5500
6000 sec

Visit

Proposal 17125, UGC-5340-7.2-REPEAT (58), implementation Fri Jun 14 16:01:15 GMT 2024

Diagnostic Status: No Diagnostics

Scientific Instruments: COS/FUV, COS/NUV

Special Requirements: (none)

Comments: Predicted fluxes used for ETC: erg/s/cm^2/A
2.48E-17 (1666A)
1.31E-16 (1909A)

continuum fux of 8x10^-16 and 7x10^-16 erg/s/cm2/A at 1600A and 1900A

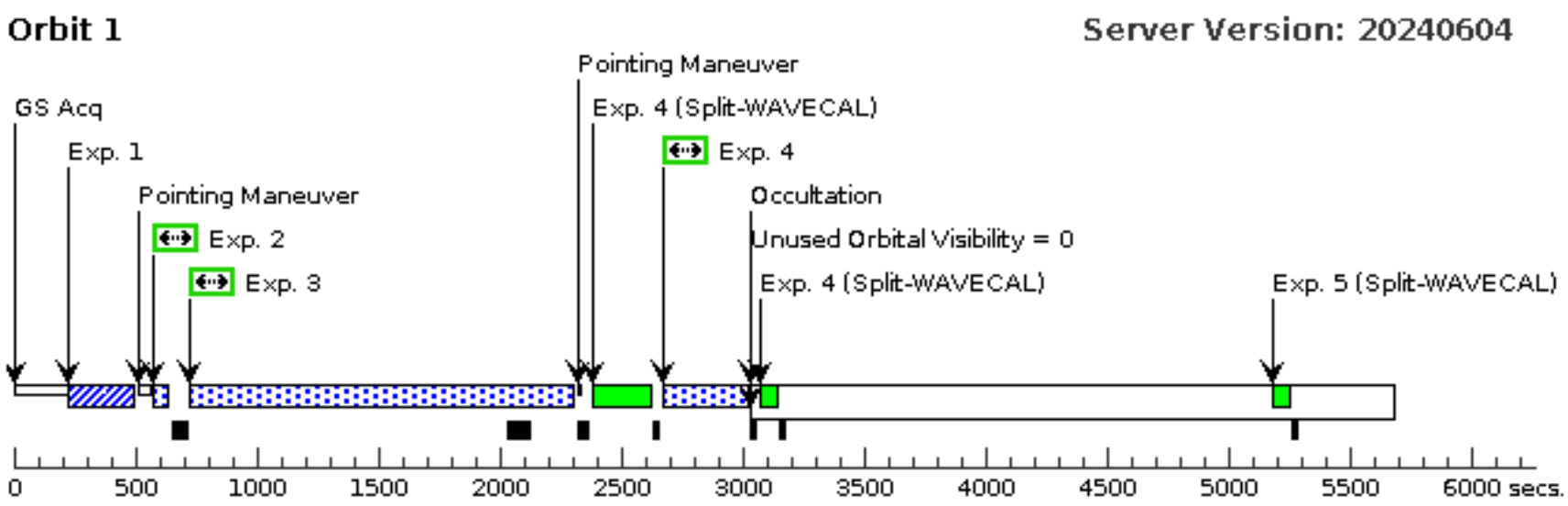
Fixed Targets

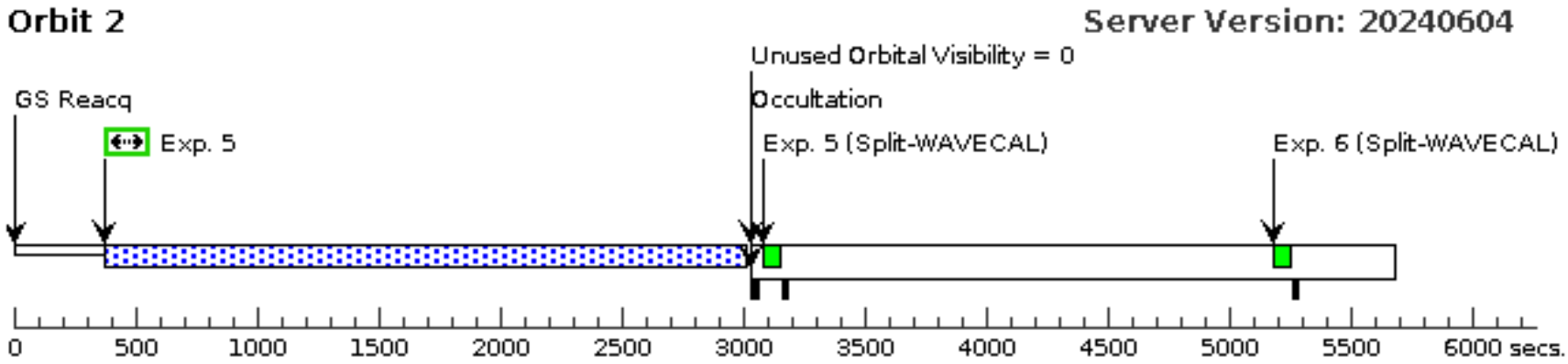
#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(6)	UGC-5340-7	Offset from OFFSET-REGION RA Offset: -2.087E-4 Degrees Dec Offset: -0.0332514 Degrees		V=24.7 F@3600A 1e-17 erg/s/cm^2/A	Offset Position (UGC-5340-7)
Comments: F275W WFC3 ABmag = 21.29 *Category=GALAXY* *Description=[DWARF COMPACT, STAR FORMING REGION]* *Extended=NO*					
(7)	OFFSET-REGION	RA: 09 56 46.2144 (149.1925600d) Dec: +28 50 9.94 (28.83609d) Equinox: J2000		V=25.8	Reference Frame: ICRS
Comments: Flux measured within r=0.4" aperture on F275W WFC3 image: 4.873E-20 erg/s/cm^2/A *F275W WFC3 ABmag = 20.278* *Category=ISM* *Description=[HII REGION]* *Extended=NO*					

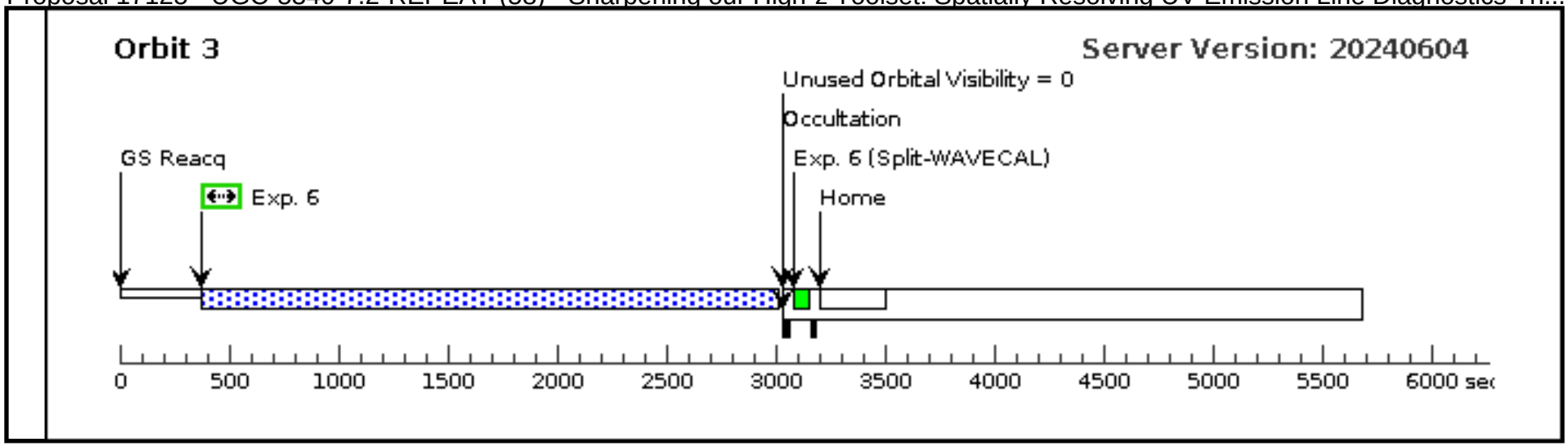
Exposures

#	Label (ETC Run)	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
1	(COS.ta.1811885)	(7) OFFSET-REGION	COS/NUV, ACQ/IMAGE, PSA	MIRRORA				30 Secs (30 Secs) *[==>]*	*[1]*
2	NUV image-7 (COS.im.1813929)	(6) UGC-5340-7	COS/NUV, ACCUM, PSA	MIRRORA				55 Secs (53 Secs) *[==>53.0 Secs]*	*[1]*
3	G185M.7.6 (COS.sp.1728646)	(6) UGC-5340-7	COS/NUV, TIME-TAG, PSA	G185M 1913 A	BUFFER-TIME=1132; FP-POS=4			1500 Secs (1390 Secs) *[==>1390.0 Secs]*	*[1]*
4	G160M.7.1 (COS.sp.1728736)	(6) UGC-5340-7	COS/FUV, TIME-TAG, PSA	G160M 1533 A	BUFFER-TIME=16800; FP-POS=1			300 Secs (295 Secs) *[==>295.0 Secs]*	*[1]*
5	G160M.7.2 (COS.sp.1728736)	(6) UGC-5340-7	COS/FUV, TIME-TAG, PSA	G160M 1533 A	BUFFER-TIME=16800; FP-POS=2			2592 Secs (2592 Secs) *[==>]*	*[2]*
6	G160M.7.3 (COS.sp.1728736)	(6) UGC-5340-7	COS/FUV, TIME-TAG, PSA	G160M 1533 A	BUFFER-TIME=16800; FP-POS=4			2592 Secs (2592 Secs) *[==>]*	*[3]*

Orbit Structure






Orbit 3
Server Version: 20240604
Unused Orbital Visibility = 0
Occultation
GS Reacq
Exp. 6 (Split-WAVECAL)
Exp. 6
Home
0
500
1000
1500
2000
2500
3000
3500
4000
4500
5000
5500
6000 sec