17148 - Preparing to find the sources of the reionization: Testing MgII as a Lyman Continuum tracer using a unique mock JWST sample

Cycle: 30, Proposal Category: GO

(UV Initiative)

(Availability Mode: SUPPORTED)

INVESTIGATORS

Name	*Institution*
Dr. Floriane Leclercq (PI) (Contact)	**University of Texas at Austin**
Prof. John Chisholm (CoI)	University of Texas at Austin
Thomas Jean Seive (CoI)	University of Texas at Austin
Dr. Gary J. Hill (CoI)	University of Texas at Austin
Dr. Greg Zeimann (CoI)	University of Texas at Austin
Dustin Davis (CoI)	University of Texas at Austin

VISITS

Visit	*Targets used in Visit*	*Configurations used in Visit*	*Orbits Used*	*Last Orbit Planner Run*	*OP Current with Visit?*
01	(1) J022512+001560	COS/FUV COS/NUV	4	17-Jun-2024 16:00:18.0	yes
62	(1) J022512+001560	COS/FUV COS/NUV	3	17-Jun-2024 16:00:19.0	yes
02	(1) J022512+001560	COS/FUV COS/NUV	4	17-Jun-2024 16:00:20.0	yes
63	(1) J022512+001560	COS/FUV COS/NUV	3	17-Jun-2024 16:00:21.0	yes

Visit	*Targets used in Visit*	*Configurations used in Visit*	*Orbits Used*	*Last Orbit Planner Run*	*OP Current with Visit?*
04	(2) J105308+515329	COS/FUV COS/NUV	4	17-Jun-2024 16:00:22.0	yes
06	(3) J105737+513116	COS/FUV COS/NUV	5	17-Jun-2024 16:00:23.0	yes
08	(3) J105737+513116	COS/FUV COS/NUV	2	17-Jun-2024 16:00:24.0	yes
60	(3) J105737+513116	COS/FUV COS/NUV	1	17-Jun-2024 16:00:25.0	yes
61	(3) J105737+513116	COS/FUV COS/NUV	1	17-Jun-2024 16:00:25.0	yes
09	(4) J012911+000525	COS/FUV COS/NUV	2	17-Jun-2024 16:00:27.0	yes
59	(4) J012911+000525	COS/FUV COS/NUV	1	17-Jun-2024 16:00:27.0	yes
10	(5) J110128+513357	COS/FUV COS/NUV	4	17-Jun-2024 16:00:28.0	yes
11	(5) J110128+513357	COS/FUV COS/NUV	4	17-Jun-2024 16:00:29.0	yes
13	(6) J154623+520708	COS/FUV COS/NUV	3	17-Jun-2024 16:00:30.0	yes
14	(7) J124730+561136	COS/FUV COS/NUV	3	17-Jun-2024 16:00:32.0	yes

44 Total Orbits Used

ABSTRACT

Understanding how galaxies contributed to reionize the universe is one of the principal science goals of the James Webb space telescope (JWST). Because the IGM is neutral at high-redshift, and therefore optically thick to ionizing radiation (LyC), JWST needs indirect LyC diagnostics calibrated on low redshift sources to unveil the sources of reionization. Here we propose the first sample selected based off their Mg II emission properties to

have predicted LyC escape fractions. These 35 orbits of COS/HST observations will stringently test the best current LyC escape tracer in exactly the conditions that JWST will use it to infer the sources of cosmic reionization. Our mock JWST sample is completely different than any LyC sample as it is selected to have low neutral gas column densities. By comparing the Lyman Alpha and Mg II profiles we will understand the conditions when Mg II is optically thin and inform when JWST observations can use Mg II to measure the LyC escape fraction. The diverse physical properties of our sample and predicted LyC escape fraction will enable us to constrain the impact of dust and gas-phase metallicity in the inferred LyC properties. Two proposed targets are predicted to be extremely rare strong LyC emitters, while being normal star forming galaxies. If confirmed, these objects will provide a novel window into the escape of LyC. Beyond a simple test of confirmation, we will treat these observations as if they were up-coming JWST observations to demonstrate whether future JWST observations can recover the LyC escape fraction.

OBSERVING DESCRIPTION

Our proposed targets are 7 confirmed Mg II emitters discovered in the ongoing HETDEX survey (Gebhardt et al. 2022). These galaxies were selected based on their Mg II emission strength and a comparison to the [O II] emission ([O II] has to be detected in the HETDEX spectrum to confirm the redshift, and therefore the Mg II identification). Follow-up observations using the HET/LRS2 IFS (private communication) were performed for 4 of our targets to obtain spectrally resolved optical + near IR lines (from Mg II to Ha). We extracted the lines within a 2.5 arcsecond diameter aperture, similarly to the COS aperture. The three other targets can be observe with IFS in the future; for this proposal we used the publicly available SDSS spectra to measure their optical lines and HETDEX spectra to measure their Mg II doublet. There are no previous HST observations of our proposed galaxies and no other bright galaxies within the COS safety limit.

NUV acquisition images of the targets will be obtained with the standard Mirror A and the ACQ/IMAGE mode to reach a S/N of 40 inside a 9x9 pixel box centered on the brightest part of the galaxy. We used the GALEX NUV magnitudes when available or the SDSS U-band to estimate exposure times. The galaxies are small with light concentrated in a 2" radius (in the HSC imaging), i.e. well within the 2.5" COS aperture. COS will observe the galaxy integrated properties. We therefore calculate the acquisition exposure times with the ETC for a S/N of 40, assuming a point-like source. To be conservative, we assume that half the GALEX NUV and SDSS/U flux is contained within this compact component by adding 0.75 magnitudes to the observed magnitudes. Since we plan to use the NUV imaging to estimate of the sizes of the UV-emitting regions, we then double the required acquisition exposure times to allow us to detect fainter emission. The total estimated acquisition times vary between 98s and 234s depending on the source.

The low-resolution G140L grating with central wavelength of 800A will be used to measure the LyC. The required number of orbits for each object

is calculated to detect the LyC at the 3sigma significance level by binning in the spectral direction by 400-pixels at the observed wavelength of 912A*(1 + z). We estimated the LyC flux using the equation 5 of Izotov et al. (2016b) with EW(Hb)=[70, 38, 84, 30, 59, 78, 116] A and the extinction corrected Hb fluxes of [5.3, 3.5, 6.9, 22.1, 4.8, 12.1, 23.0]x10^-16 erg s-1 cm-2 for our 7 galaxies, respectively. We assumed an escape fraction of 5% (corresponding to the lower bounds of the cosmologically relevant escape fractions according to models) and took into account the attenuation of the Milky Way. Using this method, we estimated the observed LyC flux densities to vary between 2.6 and 11.7x10^-18 erg s-1 cm-2 for our 7 targets. From 0.5 to 6 orbits are needed to detect the LyC of our targets.

For the medium-resolution Lyman alpha (Lya) spectroscopy, the G160M grating on COS will be used. The central wavelengths are chosen to optimize the signal-to-noise (S/N) and ensure that the Lya does not fall in the detector gaps. When available, the GALEX NUV magnitude is used to calculate the required number of orbits needed to obtain a S/N>3 in the continuum near Lya line by binning by 400-pixels. We used the SDSS U magnitude with a UV slope of -1.5 to estimate the continuum near Lya for two objects. Given the large Mg II EW (>3A) we expect our targets to be Lya emitters (EW>20A). This S/N in the continuum is thus sufficient to determine the shape of the Lya profile with ample accuracy. Between 0.5 and 2 orbits per object are needed for the medium-resolution G160M Lya spectrum.

We follow the COS handbook guidelines to determine the buffer times. We first calculate the buffer time from the spectroscopic ETC and GALEX FUV magnitude and multiply by 2/3. For all our targets, this re-scaled buffer time is longer than an individual FP-POS exposure and longer than 110 seconds. As recommended by the COS handbook, we therefore adopt the ETC buffer time multiplied by 2/3.

We schedule all of the objects in 2-3 orbit visits. Galaxies that require more than 3 orbits and can also have their science carried out in multiple visits, have been broken up into multiple visits. Our spectra requiring S/N < 20, we use at least 3 FP-POS per configuration and per visit.

Reduced-gyro operations will impact the measured fluxes of our targets leading to larger flux uncertainties that will moderately impact the science goals of our program. Moreover, the fact that not all orientations will be possible is not an issue because we do not have position angle restriction.

Visit

Proposal 17148, J022512+001560 visit 1 (01), failed Mon Jun 17 20:00:32 GMT 2024

Diagnostic Status: Warning

Scientific Instruments: COS/FUV, COS/NUV

Special Requirements: (none)

Comments: J022512+001560 requires 8 orbits. Thus, we split the object up into two visits. We use the standard SNR = 40 exposure times for the acquisition images, instead of the twice duration that we use for the objects that require a single visit.

Diagnostics

(J022512+001560 visit 1 (01)) Warning (Orbit Planner): ORBITAL VISIBILITY OVERRUN

(J022512+001560 visit 1 (01)) Warning (Orbit Planner): ORBITAL VISIBILITY OVERRUN

(J022512+001560 visit 1 (01)) Warning (Orbit Planner): ORBITAL VISIBILITY OVERRUN

(J022512+001560 visit 1 (01)) Warning (Orbit Planner): ORBITAL VISIBILITY OVERRUN

Fixed Targets

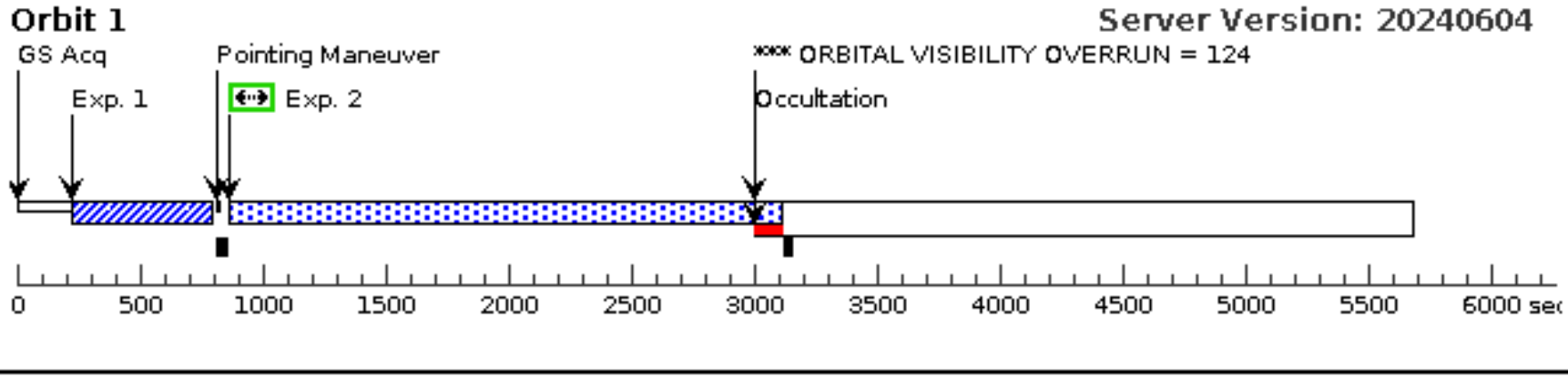
#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(1)	J022512+001560	RA: 02 25 12.2226 (36.3009275d) Dec: +00 15 59.75 (.26660d) Equinox: J2000		V=20.76 NUV=20.92	Reference Frame: ICRS

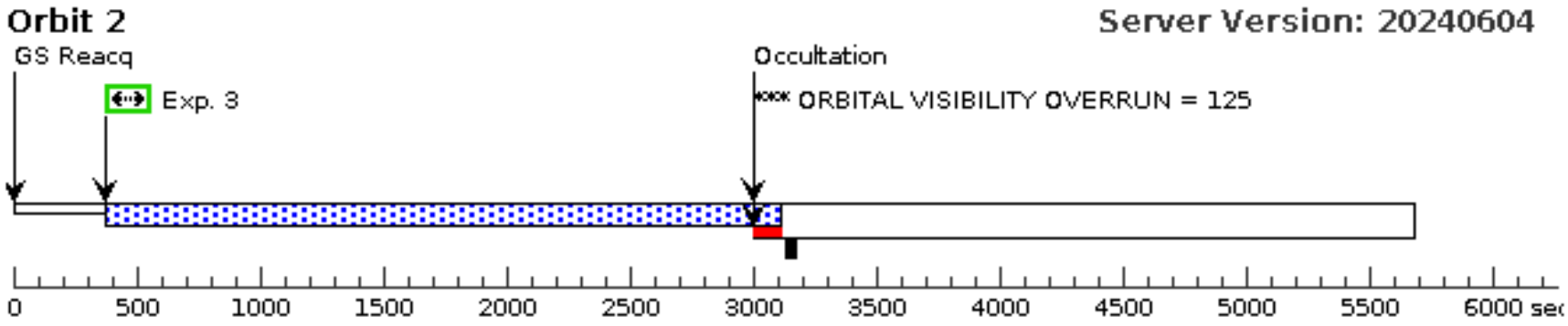
Comments:
Category=GALAXY
Description=[DWARF COMPACT, STARBURST]
Extended=NO

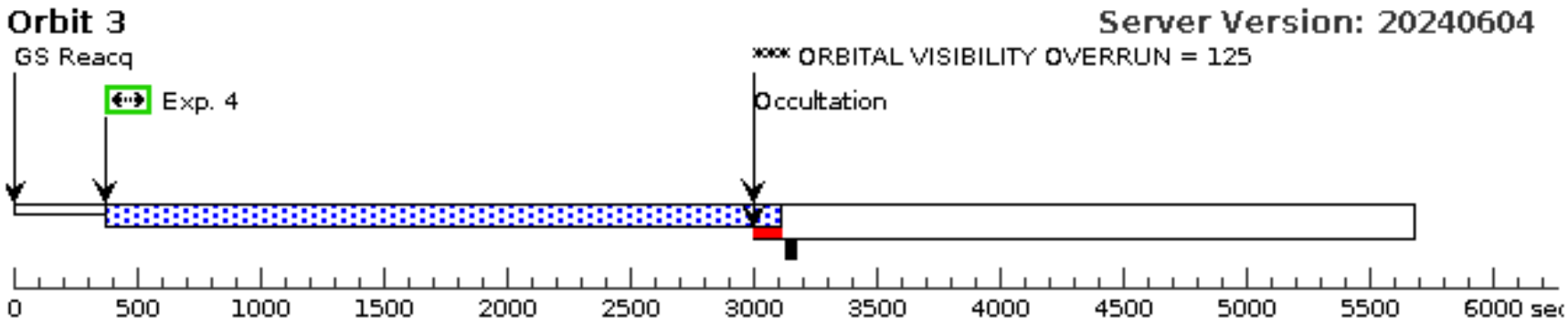
Exposures

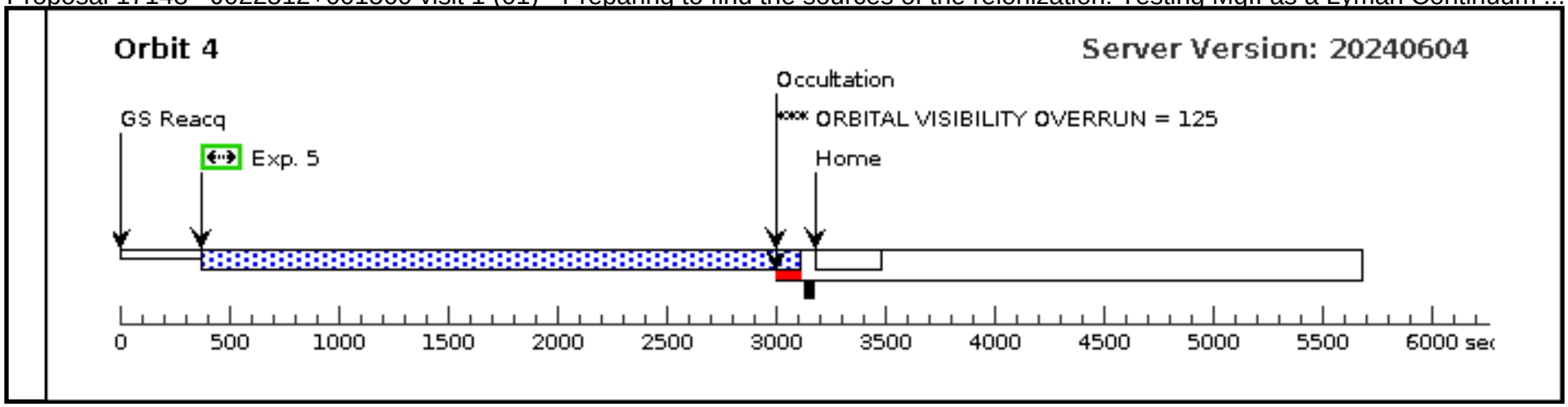
#	Label (ETC Run)	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
1	J022512+001560 acquisition (COS.ta.1814502)	(1) J022512+001560	COS/NUV, ACQ/IMAGE, PSA	MIRRORA				180 Secs (180 Secs) *[==>]*	***[1]***
2	J022512+001560 science L1 (COS.sp.1813961)	(1) J022512+001560	COS/FUV, TIME-TAG, PSA	G140L 800 A	BUFFER-TIME=9956; FP-POS=1			2090 Secs (2039 Secs) *[==>2039.0 Secs]*	***[1]***
3	J022512+001560 science L2 (COS.sp.1813961)	(1) J022512+001560	COS/FUV, TIME-TAG, PSA	G140L 800 A	BUFFER-TIME=9956; FP-POS=2			2500 Secs (2686 Secs) *[==>2686.0 Secs]*	***[2]***
4	J022512+001560 science L3 (COS.sp.1813961)	(1) J022512+001560	COS/FUV, TIME-TAG, PSA	G140L 800 A	BUFFER-TIME=9956; FP-POS=3			2500 Secs (2686 Secs) *[==>2686.0 Secs]*	***[3]***
5	J022512+001560 science L4 (COS.sp.1813961)	(1) J022512+001560	COS/FUV, TIME-TAG, PSA	G140L 800 A	BUFFER-TIME=9956; FP-POS=4			2500 Secs (2686 Secs) *[==>2686.0 Secs]*	***[4]***

Orbit Structure








Orbit 4
Server Version: 20240604
Occultation
GS Reacq
**** ORBITAL VISIBILITY OVERRUN = 125
Exp. 5
Home
0
500
1000
1500
2000
2500
3000
3500
4000
4500
5000
5500
6000 sec

Visit

Proposal 17148, J022512+001560 visit 1 (62), implementation Mon Jun 17 20:00:32 GMT 2024

Diagnostic Status: Warning

Scientific Instruments: COS/FUV, COS/NUV

Special Requirements: SCHED 100%

Comments: repeatition of 3 orbits of visit 01

Diagnostics

(J022512+001560 visit 1 (62)) Warning (Form): For the best data quality, it is generally required to use all four FP-POS positions when observing at a given COS cenwave.

Fixed Targets

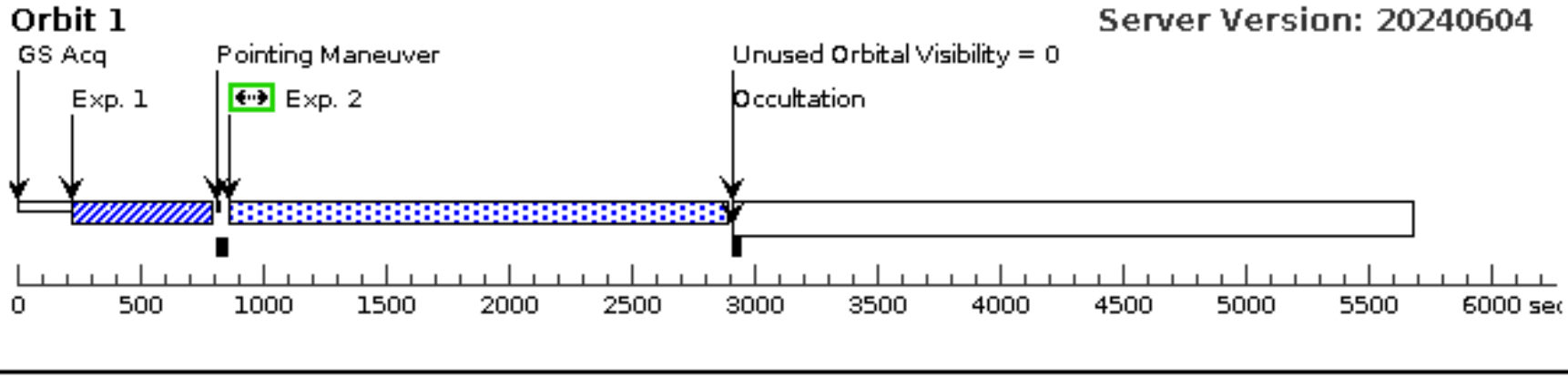
#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(1)	J022512+001560	RA: 02 25 12.2226 (36.3009275d) Dec: +00 15 59.75 (.26660d) Equinox: J2000		V=20.76 NUV=20.92	Reference Frame: ICRS

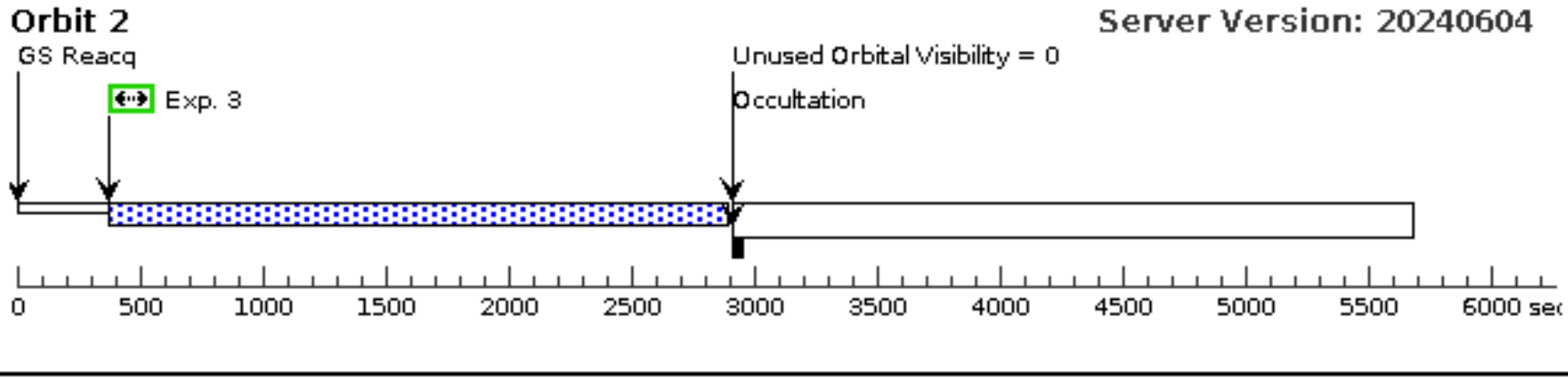
Comments:
Category=GALAXY
Description=[DWARF COMPACT, STARBURST]
Extended=NO

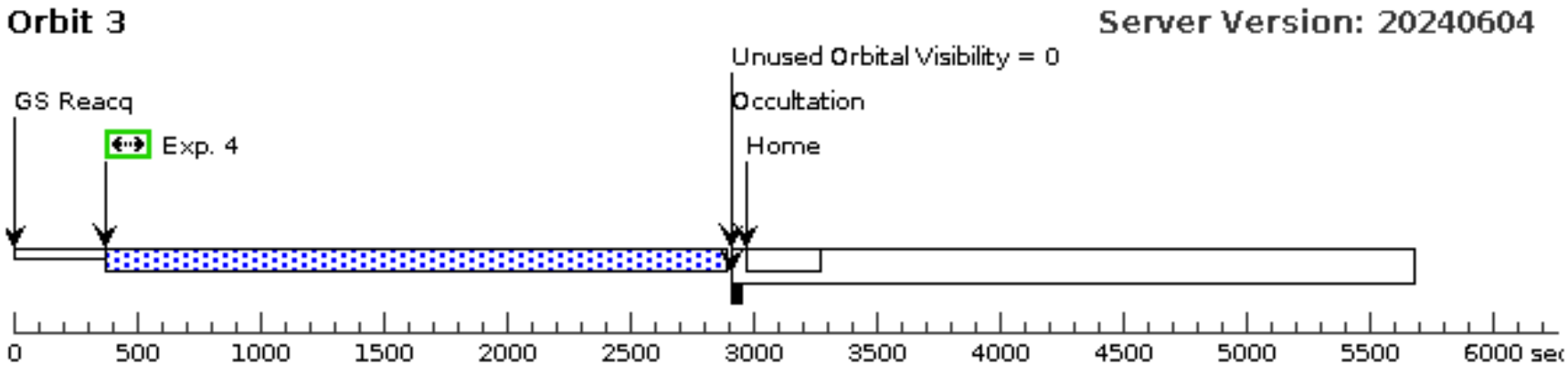
Exposures

#	Label (ETC Run)	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
1	J022512+001560 acquisition (COS.ta.1814502)	(1) J022512+001560	COS/NUV, ACQ/IMAGE, PSA	MIRRORA				180 Secs (180 Secs) *[==>]*	*[1]*
2	J022512+001560 science L2 (COS.sp.1813961)	(1) J022512+001560	COS/FUV, TIME-TAG, PSA	G140L 800 A	BUFFER-TIME=9956; FP-POS=2			2090 Secs (1823 Secs) *[==>1823 Secs]*	*[1]*
3	J022512+001560 science L3 (COS.sp.1813961)	(1) J022512+001560	COS/FUV, TIME-TAG, PSA	G140L 800 A	BUFFER-TIME=9956; FP-POS=3			2500 Secs (2469 Secs) *[==>2469 Secs]*	*[2]*
4	J022512+001560 science L4 (COS.sp.1813961)	(1) J022512+001560	COS/FUV, TIME-TAG, PSA	G140L 800 A	BUFFER-TIME=9956; FP-POS=4			2500 Secs (2469 Secs) *[==>2469 Secs]*	*[3]*

Orbit Structure







Visit

Proposal 17148, J022512+001560 visit 2 (02), failed Mon Jun 17 20:00:32 GMT 2024

Diagnostic Status: Warning

Scientific Instruments: COS/FUV, COS/NUV

Special Requirements: (none)

Comments: J022512+001560 requires 8 orbits. Thus, we split the object up into three visits. We use the standard SNR = 40 exposure times for the acquisition images, instead of the twice duration that we use for the objects that require a single visit.

Diagnostics

(J022512+001560 visit 2 (02)) Warning (Orbit Planner): ORBITAL VISIBILITY OVERRUN

(J022512+001560 visit 2 (02)) Warning (Orbit Planner): ORBITAL VISIBILITY OVERRUN

(J022512+001560 visit 2 (02)) Warning (Orbit Planner): ORBITAL VISIBILITY OVERRUN

(J022512+001560 visit 2 (02)) Warning (Orbit Planner): ORBITAL VISIBILITY OVERRUN

Fixed Targets

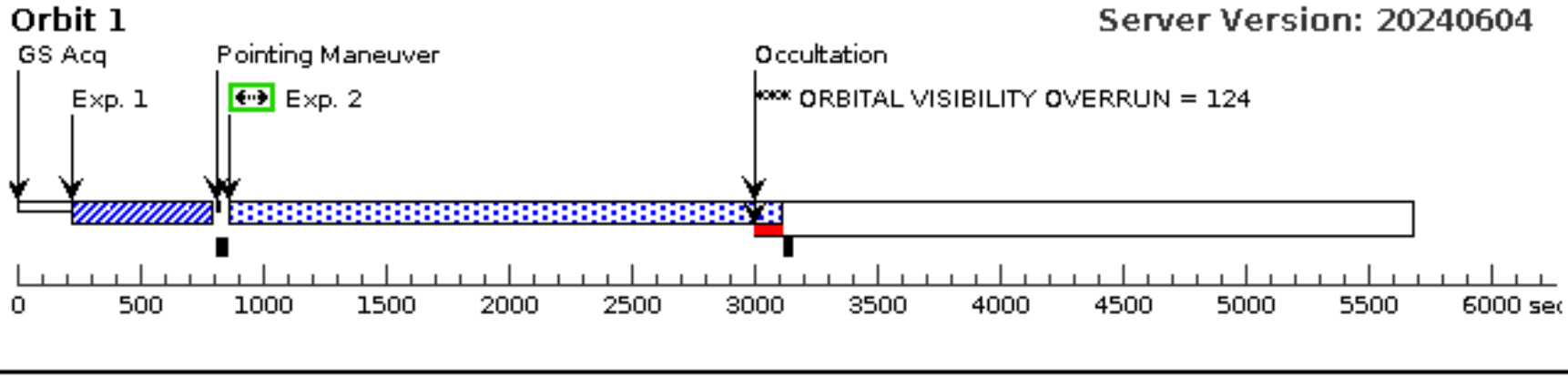
#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(1)	J022512+001560	RA: 02 25 12.2226 (36.3009275d) Dec: +00 15 59.75 (.26660d) Equinox: J2000		V=20.76 NUV=20.92	Reference Frame: ICRS

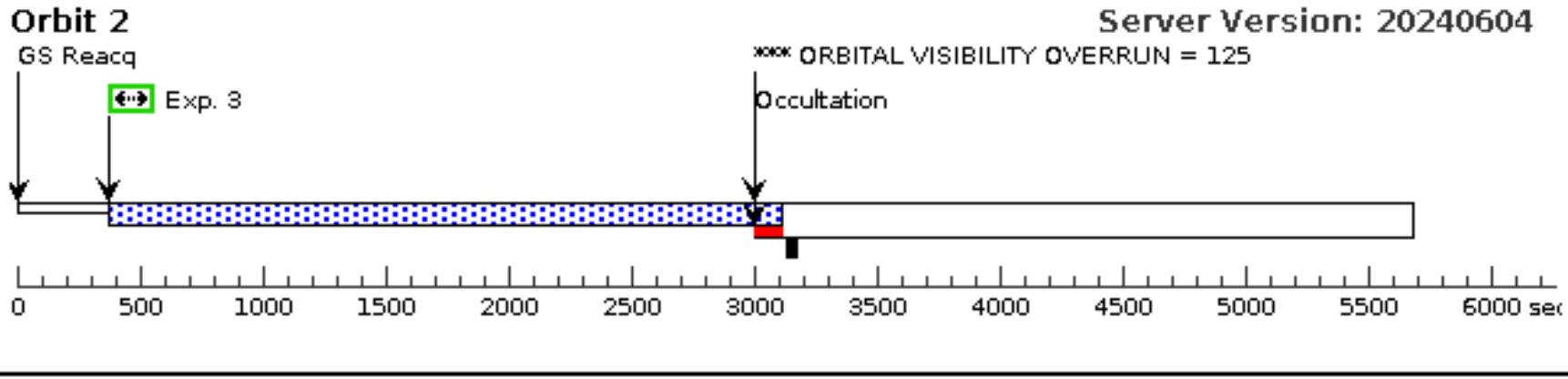
Comments:
Category=GALAXY
Description=[DWARF COMPACT, STARBURST]
Extended=NO

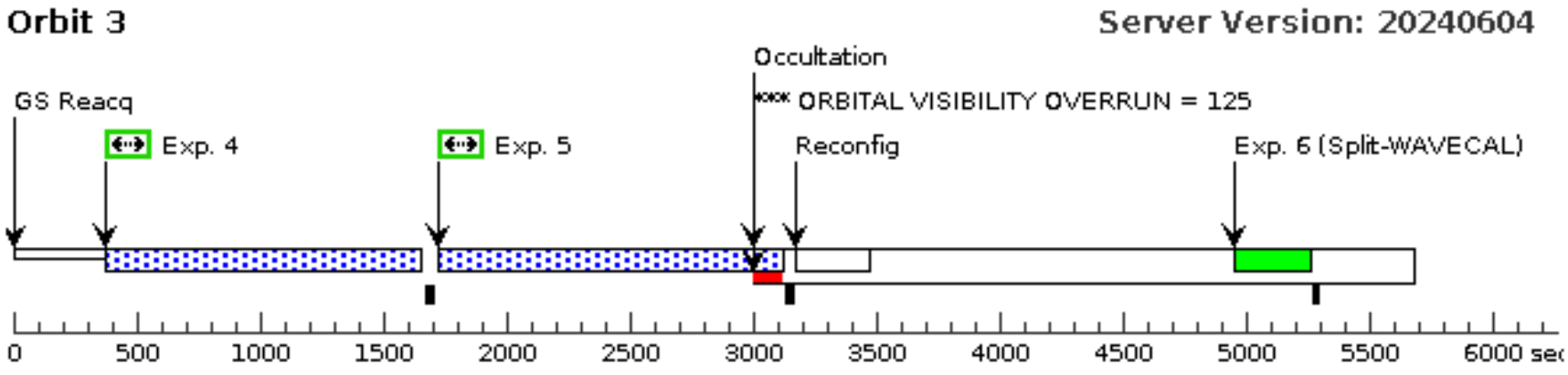
Exposures

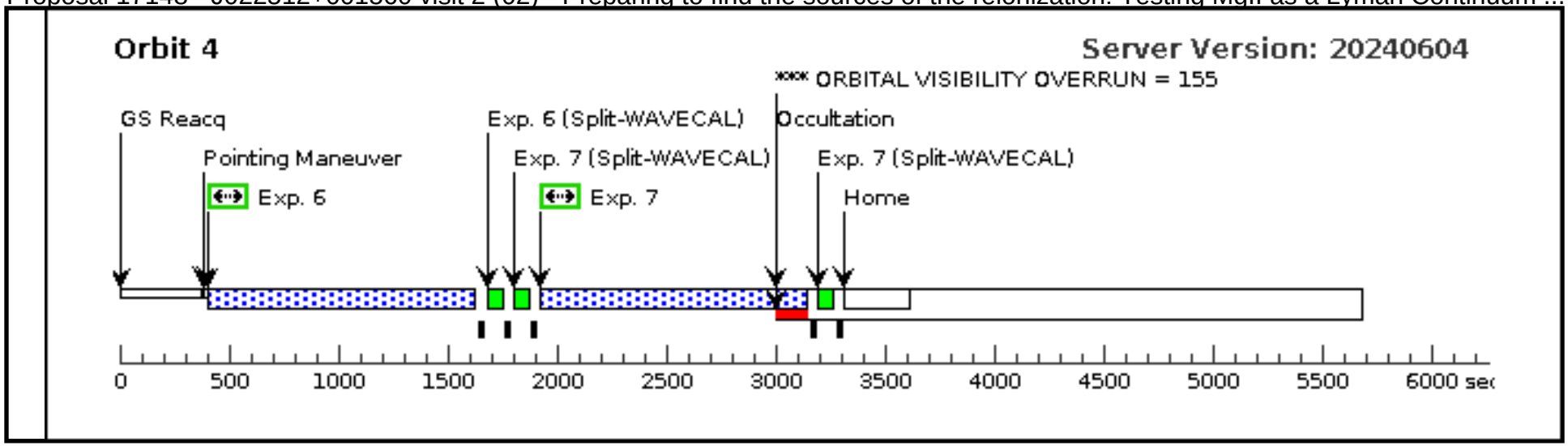
#	Label (ETC Run)	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
1	J022512+001560 acquisition (COS.ta.1814502)	(1) J022512+001560	COS/NUV, ACQ/IMAGE, PSA	MIRRORA				180 Secs (180 Secs) *[==>]*	***[1]***
2	J022512+001560 science L1 (COS.sp.1813961)	(1) J022512+001560	COS/FUV, TIME-TAG, PSA	G140L 800 A	BUFFER-TIME=9956; FP-POS=1			2090 Secs (2039 Secs) *[==>2039.0 Secs]*	***[1]***
3	J022512+001560 science L2 (COS.sp.1813961)	(1) J022512+001560	COS/FUV, TIME-TAG, PSA	G140L 800 A	BUFFER-TIME=9956; FP-POS=2			2500 Secs (2686 Secs) *[==>2686.0 Secs]*	***[2]***
4	J022512+001560 science L3 (COS.sp.1813961)	(1) J022512+001560	COS/FUV, TIME-TAG, PSA	G140L 800 A	BUFFER-TIME=9956; FP-POS=3			2500 Secs (1228 Secs) *[==>1228.0 Secs]*	***[3]***
5	J022512+001560 science L4 (COS.sp.1813961)	(1) J022512+001560	COS/FUV, TIME-TAG, PSA	G140L 800 A	BUFFER-TIME=9956; FP-POS=4			2500 Secs (1343 Secs) *[==>1343.0 Secs]*	***[3]***
6	J022512+001560 science M1 (COS.sp.1826123)	(1) J022512+001560	COS/FUV, TIME-TAG, PSA	G160M 1600 A	BUFFER-TIME=20435; FP-POS=1			280 Secs (1174 Secs) *[==>1174.0 Secs]*	***[4]***
7	J022512+001560 science M2 (COS.sp.1826123)	(1) J022512+001560	COS/FUV, TIME-TAG, PSA	G160M 1600 A	BUFFER-TIME=20435; FP-POS=4			280 Secs (1174 Secs) *[==>1174.0 Secs]*	***[4]***

Orbit Structure








Orbit 4
Server Version: 20240604
**** ORBITAL VISIBILITY OVERRUN = 155
GS Reacq
Pointing Maneuver
Exp. 6
Exp. 6 (Split-WAVECAL)
Exp. 7 (Split-WAVECAL)
Exp. 7
Occultation
Exp. 7 (Split-WAVECAL)
Home
0
500
1000
1500
2000
2500
3000
3500
4000
4500
5000
5500
6000 sec

Visit

Proposal 17148, J022512+001560 visit 2 (63), implementation Mon Jun 17 20:00:32 GMT 2024

Diagnostic Status: Warning

Scientific Instruments: COS/FUV, COS/NUV

Special Requirements: SCHED 100%

Comments: J022512+001560 requires 8 orbits. Thus, we split the object up into three visits. We use the standard SNR = 40 exposure times for the acquisition images, instead of the twice duration that we use for the objects that require a single visit.

Diagnostics

(J022512+001560 visit 2 (63)) Warning (Form): For the best data quality, it is generally required to use all four FP-POS positions when observing at a given COS cenwave.

Fixed Targets

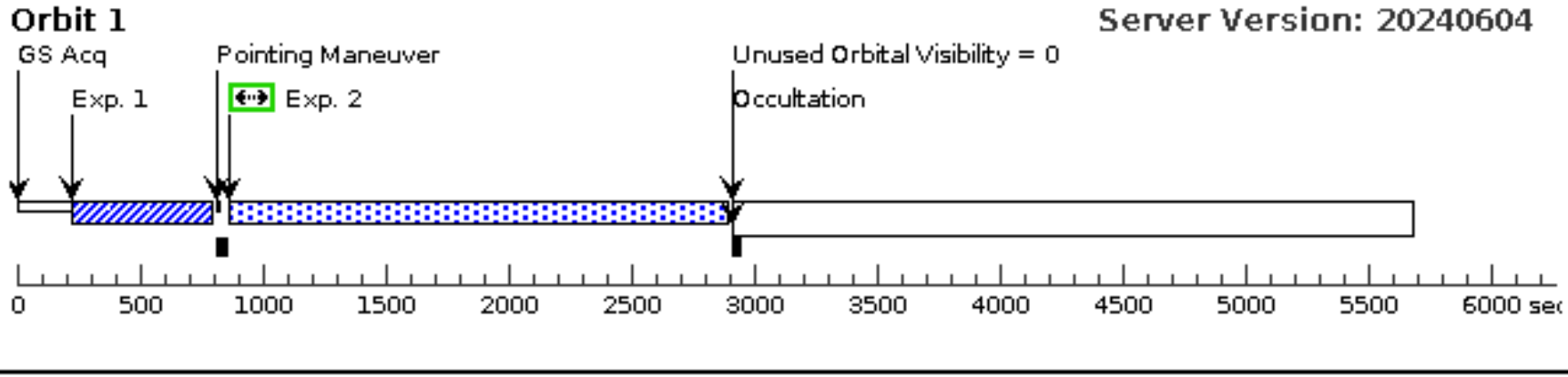
#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(1)	J022512+001560	RA: 02 25 12.2226 (36.3009275d) Dec: +00 15 59.75 (.26660d) Equinox: J2000		V=20.76 NUV=20.92	Reference Frame: ICRS

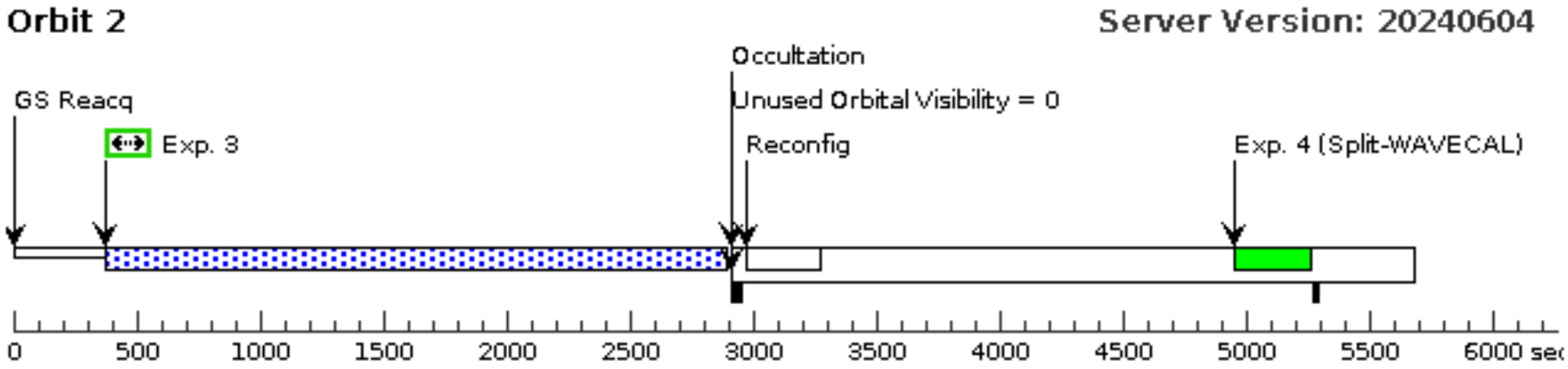
Comments:
Category=GALAXY
Description=[DWARF COMPACT, STARBURST]
Extended=NO

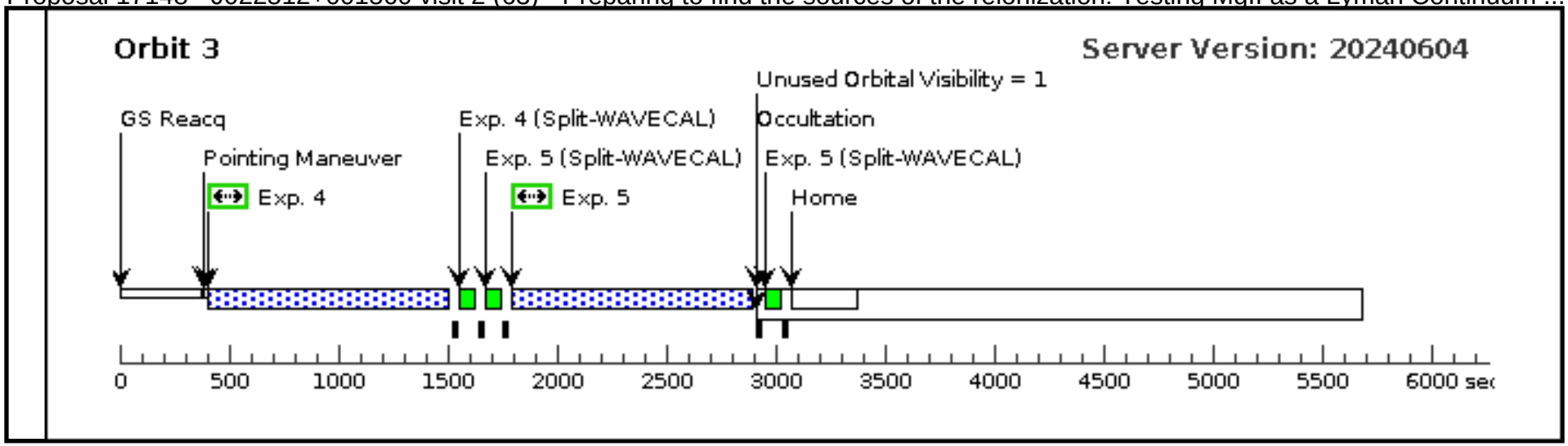
Exposures

#	Label (ETC Run)	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
1	J022512+001560 acquisition (COS.ta.1814502)	(1) J022512+001560	COS/NUV, ACQ/IMAGE, PSA	MIRRORA				180 Secs (180 Secs) *[==>]*	***[1]***
2	J022512+001560 science L1 (COS.sp.1813961)	(1) J022512+001560	COS/FUV, TIME-TAG, PSA	G140L 800 A	BUFFER-TIME=9956; FP-POS=1			2090 Secs (1823 Secs) *[==>1823 Secs]*	***[1]***
3	J022512+001560 science L2 (COS.sp.1813961)	(1) J022512+001560	COS/FUV, TIME-TAG, PSA	G140L 800 A	BUFFER-TIME=9956; FP-POS=2			2500 Secs (2469 Secs) *[==>2469 Secs]*	***[2]***
4	J022512+001560 science M1 (COS.sp.1826123)	(1) J022512+001560	COS/FUV, TIME-TAG, PSA	G160M 1600 A	BUFFER-TIME=20435; FP-POS=1			280 Secs (1050 Secs) *[==>1050.0 Secs]*	***[3]***
5	J022512+001560 science M2 (COS.sp.1826123)	(1) J022512+001560	COS/FUV, TIME-TAG, PSA	G160M 1600 A	BUFFER-TIME=20435; FP-POS=4			280 Secs (1050 Secs) *[==>1050.0 Secs]*	***[3]***

Orbit Structure






Orbit 3
Server Version: 20240604
Unused Orbital Visibility = 1
GS Reacq
Pointing Maneuver
Exp. 4
Exp. 4 (Split-WAVECAL)
Exp. 5 (Split-WAVECAL)
Exp. 5
Occultation
Exp. 5 (Split-WAVECAL)
Home
0
500
1000
1500
2000
2500
3000
3500
4000
4500
5000
5500
6000 sec

Visit

Proposal 17148, J105308+515329 (04), scheduling Mon Jun 17 20:00:33 GMT 2024

Diagnostic Status: No Diagnostics

Scientific Instruments: COS/FUV, COS/NUV

Special Requirements: (none)

Fixed Targets

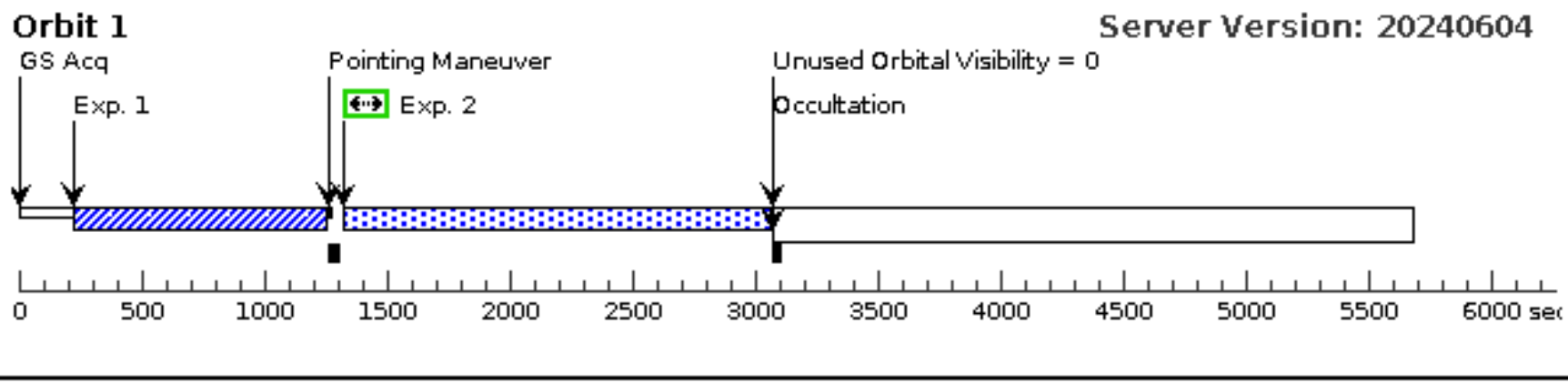
#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(2)	J105308+515329	RA: 10 53 8.4535 (163.2852229d) Dec: +51 53 28.94 (51.89137d) Equinox: J2000		V=20.72	Reference Frame: ICRS

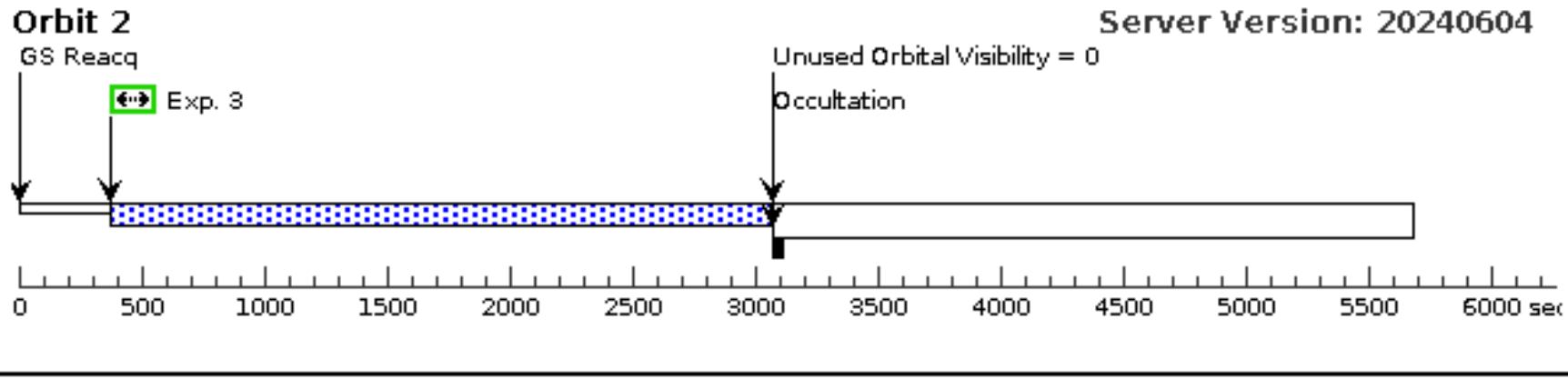
Comments:
Category=GALAXY
Description=[DWARF COMPACT, STARBURST]
Extended=NO

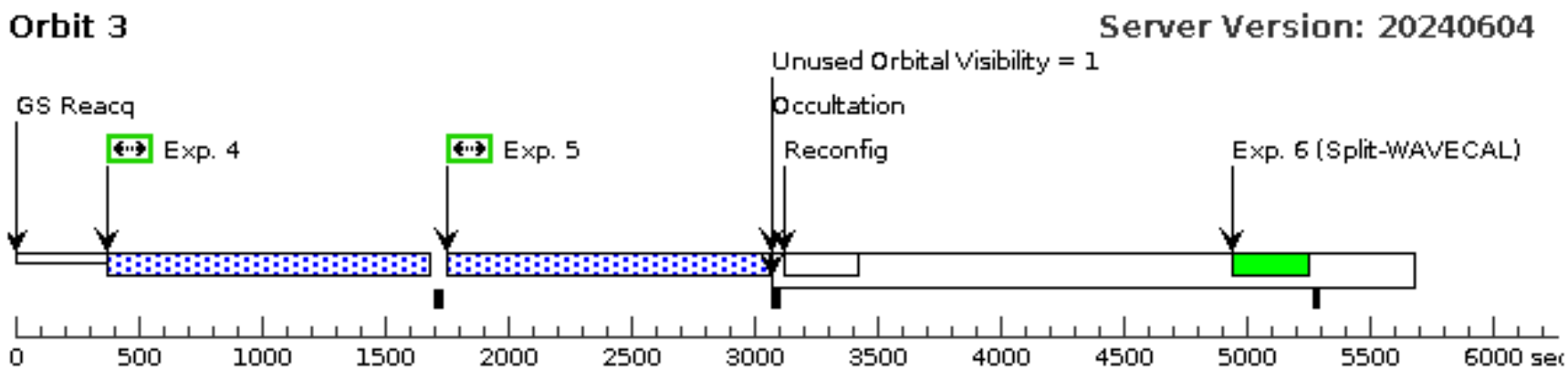
Exposures

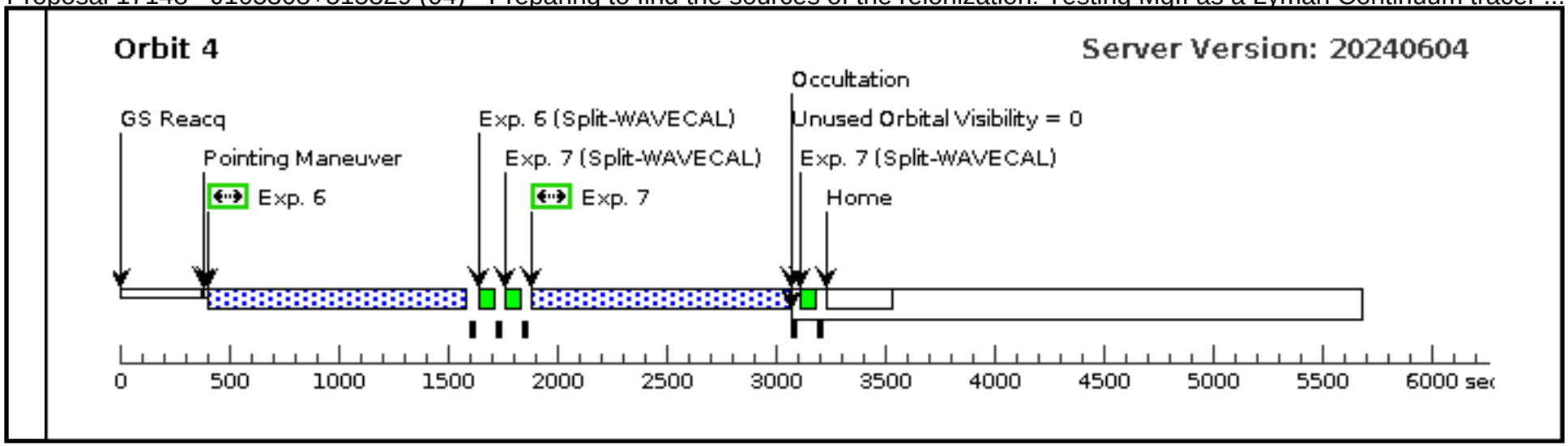
#	Label (ETC Run)	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
1	J105308+515329 acquisition (COS.ta.1814504)	(2) J105308+515329	COS/NUV, ACQ/IMAGE, PSA	MIRRORA				407 Secs (407 Secs) *[==>]*	***[1]***
2	J105308+515329 science L1 (COS.sp.1813993)	(2) J105308+515329	COS/FUV, TIME-TAG, PSA	G140L 800 A	BUFFER-TIME=9951; FP-POS=1			2090 Secs (1534 Secs) *[==>1534.0 Secs]*	***[1]***
3	J105308+515329 science L2 (COS.sp.1813993)	(2) J105308+515329	COS/FUV, TIME-TAG, PSA	G140L 800 A	BUFFER-TIME=9951; FP-POS=2			1200 Secs (2634 Secs) *[==>2634.0 Secs]*	***[2]***
4	J105308+515329 science L3 (COS.sp.1813993)	(2) J105308+515329	COS/FUV, TIME-TAG, PSA	G140L 800 A	BUFFER-TIME=9951; FP-POS=3			1200 Secs (1259 Secs) *[==>1259.0 Secs]*	***[3]***
5	J105308+515329 science L4 (COS.sp.1813993)	(2) J105308+515329	COS/FUV, TIME-TAG, PSA	G140L 800 A	BUFFER-TIME=9951; FP-POS=4			1200 Secs (1259 Secs) *[==>1259.0 Secs]*	***[3]***
6	J105308+515329 science M1 (COS.sp.1826125)	(2) J105308+515329	COS/FUV, TIME-TAG, PSA	G160M 1611 A	BUFFER-TIME=20750; FP-POS=1			450 Secs (1133 Secs) *[==>1133.0 Secs]*	***[4]***
7	J105308+515329 science M2 (COS.sp.1826125)	(2) J105308+515329	COS/FUV, TIME-TAG, PSA	G160M 1611 A	BUFFER-TIME=20750; FP-POS=4			450 Secs (1133 Secs) *[==>1133.0 Secs]*	***[4]***

Orbit Structure








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

Visit

Proposal 17148, J105737+513116 visit 1 (06), completed Mon Jun 17 20:00:33 GMT 2024

Diagnostic Status: Warning

Scientific Instruments: COS/FUV, COS/NUV

Special Requirements: (none)

Comments: J105737+513116 requires 7 orbits. Thus, we split the object up into two visits. We use the standard SNR = 40 exposure times for the acquisition images, instead of the twice duration that we use for the objects that require a single visit.

Diagnostics

(J105737+513116 visit 1 (06)) Warning (Orbit Planner): ORBITAL VISIBILITY OVERRUN

(J105737+513116 visit 1 (06)) Warning (Orbit Planner): ORBITAL VISIBILITY OVERRUN

(J105737+513116 visit 1 (06)) Warning (Orbit Planner): ORBITAL VISIBILITY OVERRUN

(J105737+513116 visit 1 (06)) Warning (Orbit Planner): ORBITAL VISIBILITY OVERRUN

(J105737+513116 visit 1 (06)) Warning (Orbit Planner): ORBITAL VISIBILITY OVERRUN

Fixed Targets

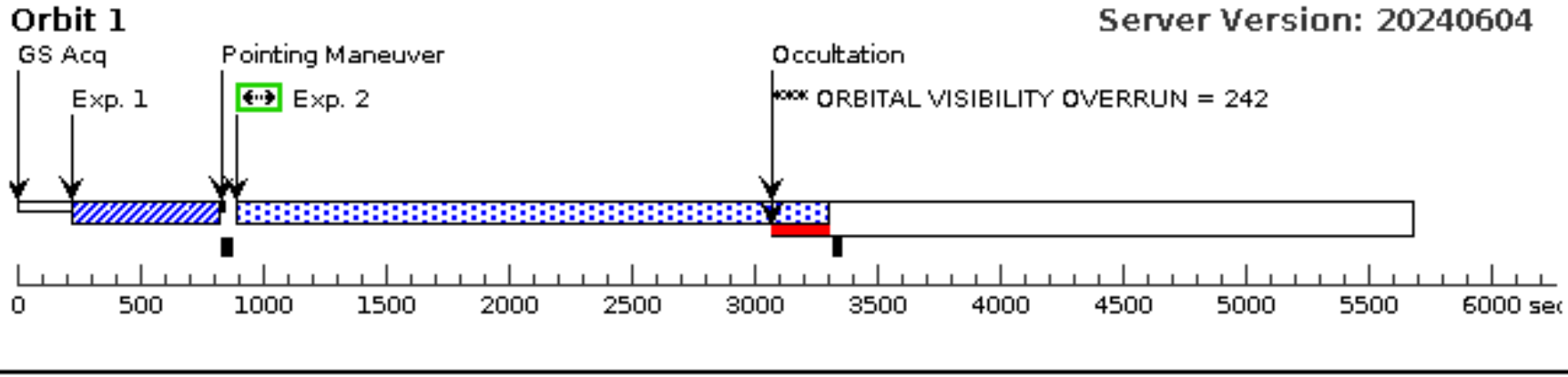
#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(3)	J105737+513116	RA: 10 57 37.5281 (164.4063671d) Dec: +51 31 16.20 (51.52117d) Equinox: J2000		V=21.44	Reference Frame: ICRS

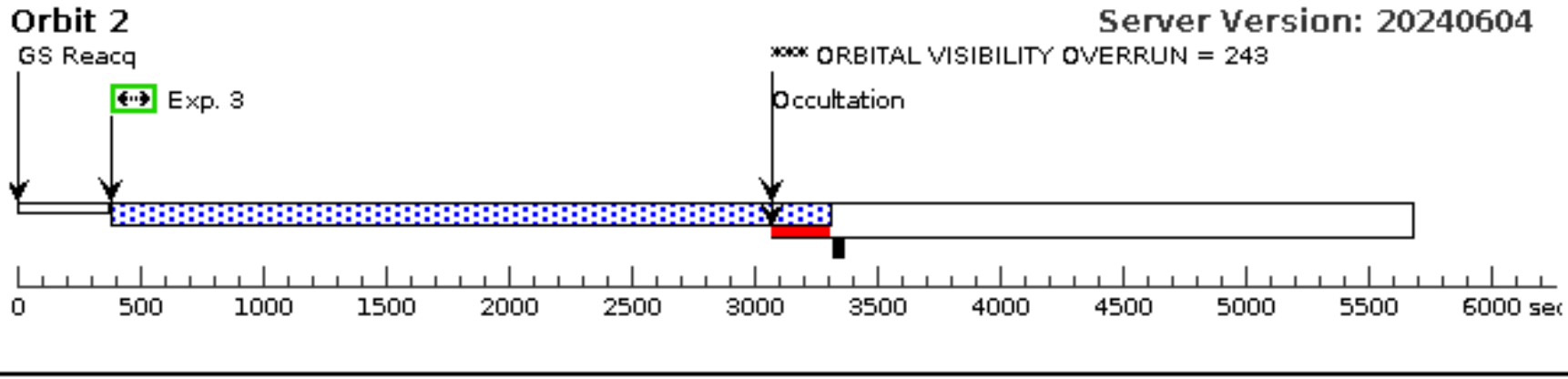
Comments:
Category=GALAXY
Description=[DWARF COMPACT, STARBURST]
Extended=NO

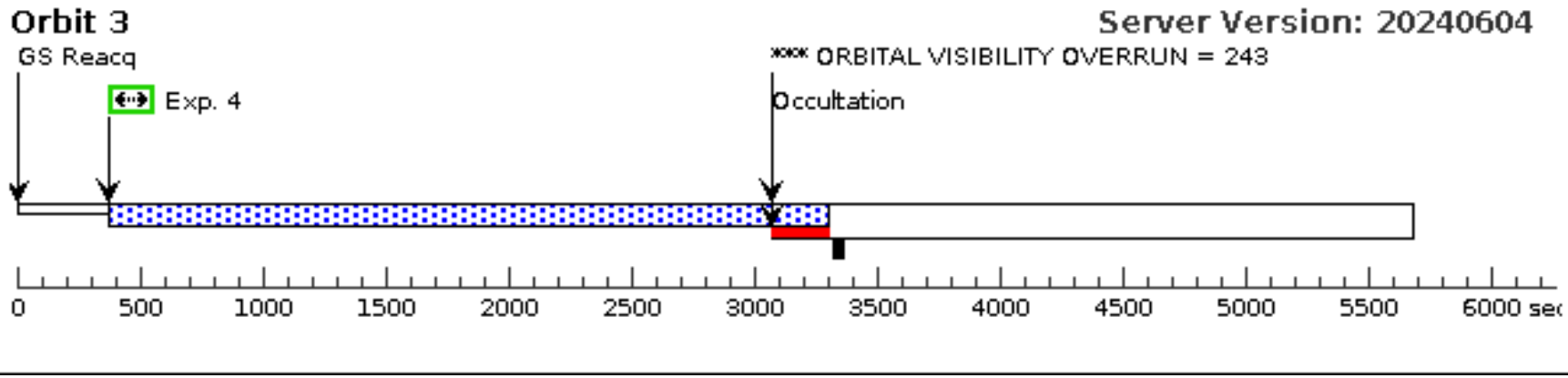
Exposures

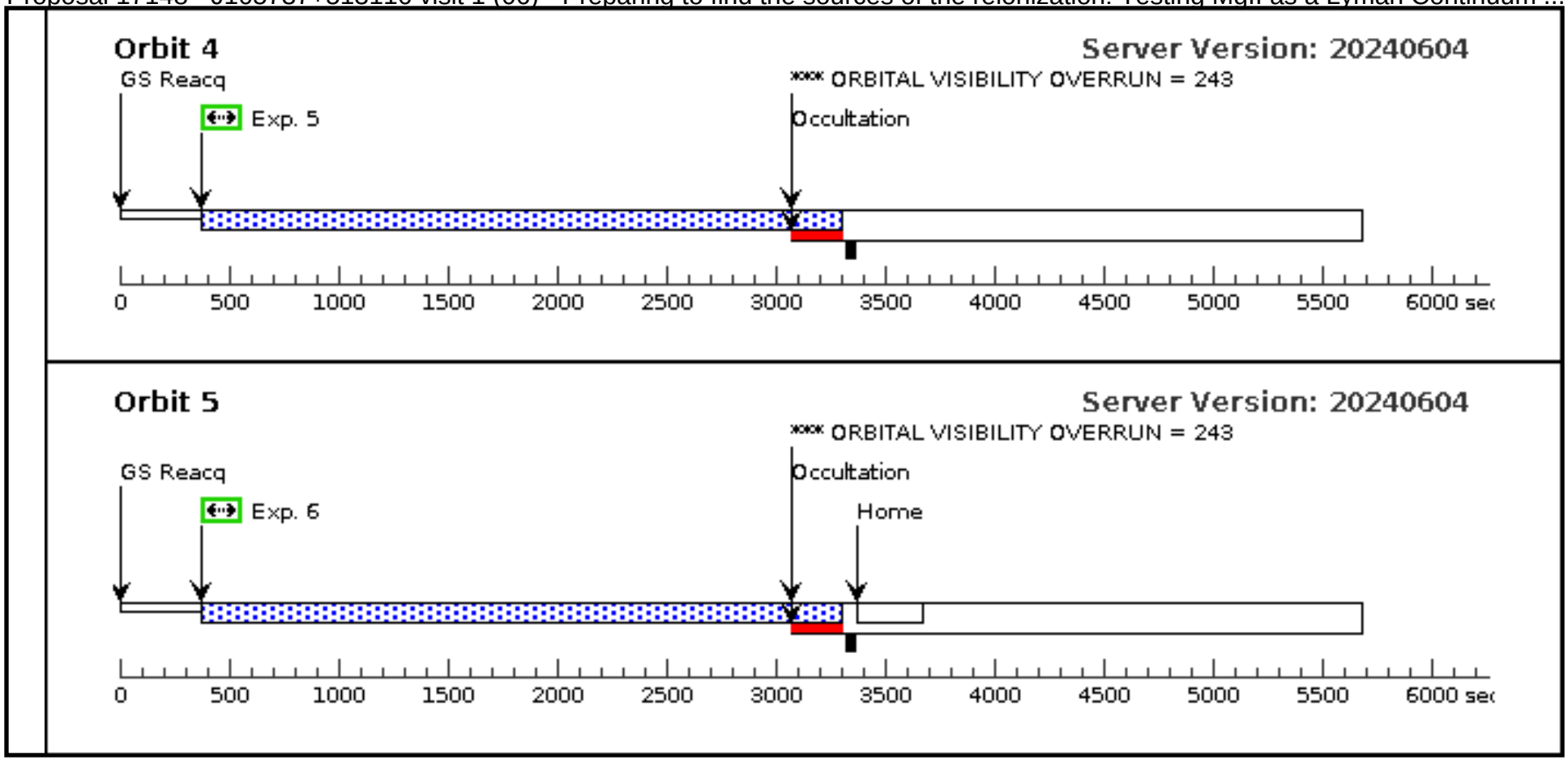
#	Label (ETC Run)	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
1	J105737+513116 acquisition (COS.ta.1814506)	(3) J105737+513116	COS/NUV, ACQ/IMAGE, PSA	MIRRORA				192 Secs (192 Secs) *[==>]*	***[1]***
2	J105737+513116 science L1 (COS.sp.1813994)	(3) J105737+513116	COS/FUV, TIME-TAG, PSA	G140L 800 A	BUFFER-TIME=9954; FP-POS=1			2090 Secs (2206 Secs) *[==>2206.0 Secs]*	***[1]***
3	J105737+513116 science L2 (COS.sp.1813994)	(3) J105737+513116	COS/FUV, TIME-TAG, PSA	G140L 800 A	BUFFER-TIME=9954; FP-POS=1			2500 Secs (2877 Secs) *[==>2877.0 Secs]*	***[2]***
4	J105737+513116 science L3 (COS.sp.1813994)	(3) J105737+513116	COS/FUV, TIME-TAG, PSA	G140L 800 A	BUFFER-TIME=9954; FP-POS=2			2500 Secs (2877 Secs) *[==>2877.0 Secs]*	***[3]***
5	J105737+513116 science L4 (COS.sp.1813994)	(3) J105737+513116	COS/FUV, TIME-TAG, PSA	G140L 800 A	BUFFER-TIME=9954; FP-POS=3			2090 Secs (2877 Secs) *[==>2877.0 Secs]*	***[4]***
6	J105737+513116 science L5 (COS.sp.1813994)	(3) J105737+513116	COS/FUV, TIME-TAG, PSA	G140L 800 A	BUFFER-TIME=9954; FP-POS=4			2500 Secs (2877 Secs) *[==>2877.0 Secs]*	***[5]***

Orbit Structure








Orbit 4
Server Version: 20240604
GS Reacq
**** ORBITAL VISIBILITY OVERRUN = 243
Exp. 5
Occultation
0
500
1000
1500
2000
2500
3000
3500
4000
4500
5000
5500
6000 sec
Orbit 5
Server Version: 20240604
**** ORBITAL VISIBILITY OVERRUN = 243
GS Reacq
Occultation
Exp. 6
Home
0
500
1000
1500
2000
2500
3000
3500
4000
4500
5000
5500
6000 sec

Visit

Proposal 17148, J105737+513116 visit 2 (08), failed Mon Jun 17 20:00:33 GMT 2024

Diagnostic Status: Warning

Scientific Instruments: COS/FUV, COS/NUV

Special Requirements: (none)

Comments: J105737+5131160 requires 7 orbits. Thus, we split the object up into two visits. We use the standard SNR = 40 exposure times for the acquisition images, instead of the twice duration that we use for the objects that require a single visit.

Diagnostics

(J105737+513116 visit 2 (08)) Warning (Orbit Planner): ORBITAL VISIBILITY OVERRUN

(J105737+513116 visit 2 (08)) Warning (Orbit Planner): ORBITAL VISIBILITY OVERRUN

Fixed Targets

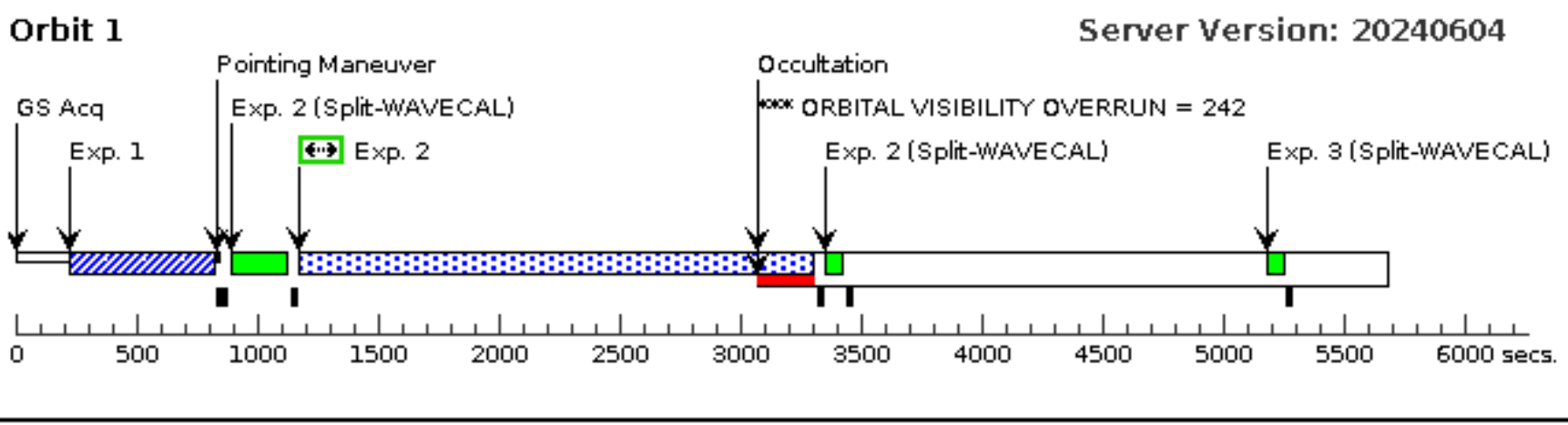
#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(3)	J105737+513116	RA: 10 57 37.5281 (164.4063671d) Dec: +51 31 16.20 (51.52117d) Equinox: J2000		V=21.44	Reference Frame: ICRS

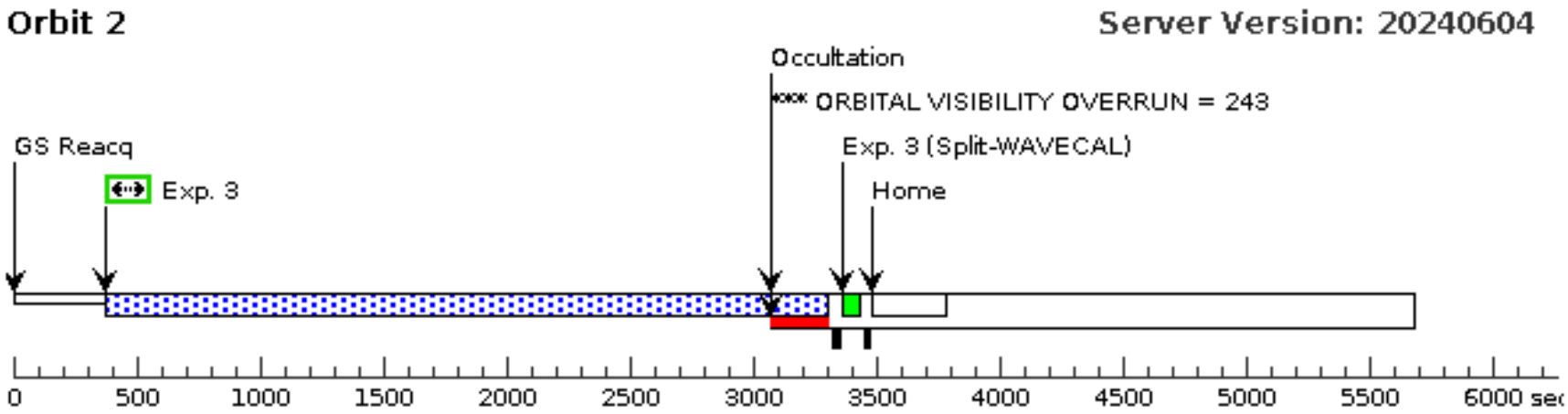
Comments:
Category=GALAXY
Description=[DWARF COMPACT, STARBURST]
Extended=NO

Exposures

#	Label (ETC Run)	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
1	J105737+513116 acquisition (COS.ta.1814506)	(3) J105737+513116	COS/NUV, ACQ/IMAGE, PSA	MIRRORA				192 Secs (192 Secs) *[==>]*	*[1]*
2	J105737+513116 science M1 (COS.sp.1814024)	(3) J105737+513116	COS/FUV, TIME-TAG, PSA	G160M 1623 A	BUFFER-TIME=21386; FP-POS=1			400 Secs (2076 Secs) *[==>2076.0 Secs]*	*[1]*
3	J105737+513116 science M2 (COS.sp.1814024)	(3) J105737+513116	COS/FUV, TIME-TAG, PSA	G160M 1623 A	BUFFER-TIME=21386; FP-POS=4			400 Secs (2881 Secs) *[==>2881.0 Secs]*	*[2]*

Orbit Structure





Visit

Proposal 17148, J105737+513116 visit 2 (60), failed Mon Jun 17 20:00:33 GMT 2024

Diagnostic Status: Warning

Scientific Instruments: COS/FUV, COS/NUV

Special Requirements: (none)

Comments: J105737+5131160 requires 7 orbits. Thus, we split the object up into two visits. We use the standard SNR = 40 exposure times for the acquisition images, instead of the twice duration that we use for the objects that require a single visit.

Diagnostics

(J105737+513116 visit 2 (60)) Warning (Orbit Planner): ORBITAL VISIBILITY OVERRUN

Fixed Targets

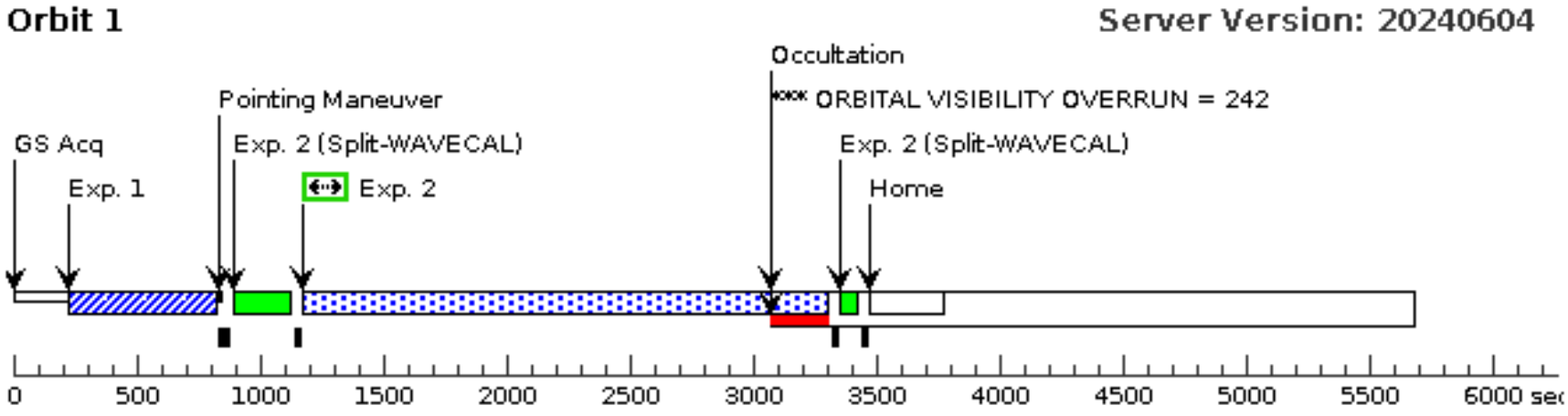
#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(3)	J105737+513116	RA: 10 57 37.5281 (164.4063671d) Dec: +51 31 16.20 (51.52117d) Equinox: J2000		V=21.44	Reference Frame: ICRS

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

Exposures

#	Label (ETC Run)	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
1	J105737+513116 acquisition (COS.ta.1814506)	(3) J105737+513116	COS/NUV, ACQ/IMAGE, PSA	MIRRORA				192 Secs (192 Secs) *[==>]*	*[1]*
2	J105737+513116 science M1 (COS.sp.1814024)	(3) J105737+513116	COS/FUV, TIME-TAG, PSA	G160M 1623 A	BUFFER-TIME=21386; FP-POS=1			400 Secs (2076 Secs) *[==>2076.0 Secs]*	*[1]*

Orbit Structure



Visit

Proposal 17148, J105737+513116 visit 2 (61), completed Mon Jun 17 20:00:33 GMT 2024

Diagnostic Status: Warning

Scientific Instruments: COS/FUV, COS/NUV

Special Requirements: (none)

Comments: J105737+5131160 requires 7 orbits. Thus, we split the object up into two visits. We use the standard SNR = 40 exposure times for the acquisition images, instead of the twice duration that we use for the objects that require a single visit.

Diagnostics

(J105737+513116 visit 2 (61)) Warning (Orbit Planner): ORBITAL VISIBILITY OVERRUN

Fixed Targets

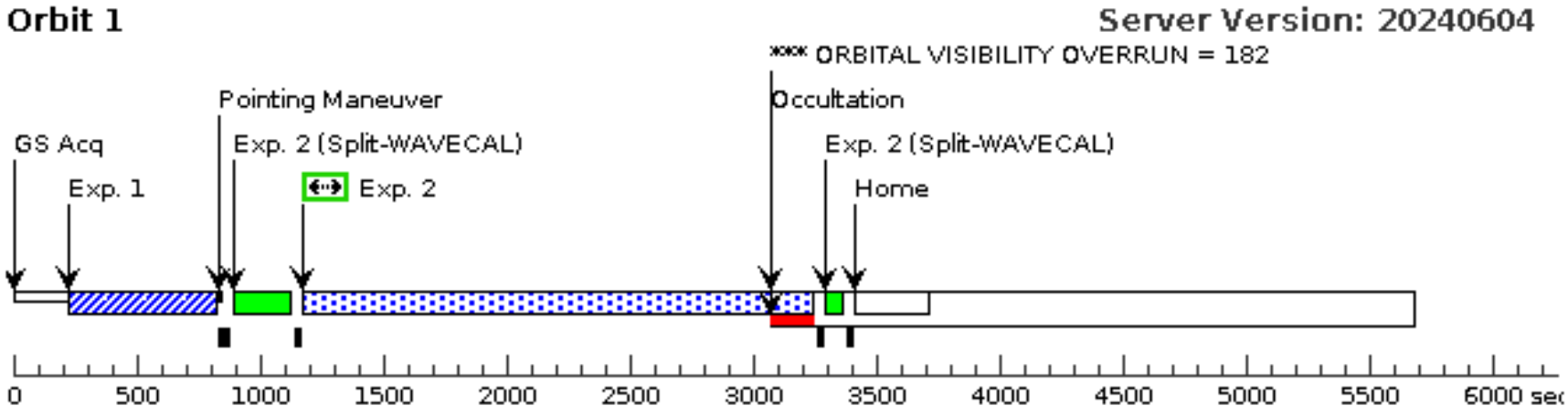
#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(3)	J105737+513116	RA: 10 57 37.5281 (164.4063671d) Dec: +51 31 16.20 (51.52117d) Equinox: J2000		V=21.44	Reference Frame: ICRS

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

Exposures

#	Label (ETC Run)	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
1	J105737+513116 acquisition (COS.ta.1814506)	(3) J105737+513116	COS/NUV, ACQ/IMAGE, PSA	MIRRORA				192 Secs (192 Secs) *[==>]*	 ***[1]***
2	J105737+513116 science M1 (COS.sp.1814024)	(3) J105737+513116	COS/FUV, TIME-TAG, PSA	G160M 1623 A	BUFFER-TIME=21386; FP-POS=1			400 Secs (2016 Secs) *[==>2016.0 Secs]*	 ***[1]***

Orbit Structure



Visit

Proposal 17148, J012911+000525 (09), failed Mon Jun 17 20:00:33 GMT 2024

Diagnostic Status: Warning

Scientific Instruments: COS/FUV, COS/NUV

Special Requirements: (none)

Diagnostics

(J012911+000525 (09)) Warning (Orbit Planner): ORBITAL VISIBILITY OVERRUN

(J012911+000525 (09)) Warning (Orbit Planner): ORBITAL VISIBILITY OVERRUN

Fixed Targets

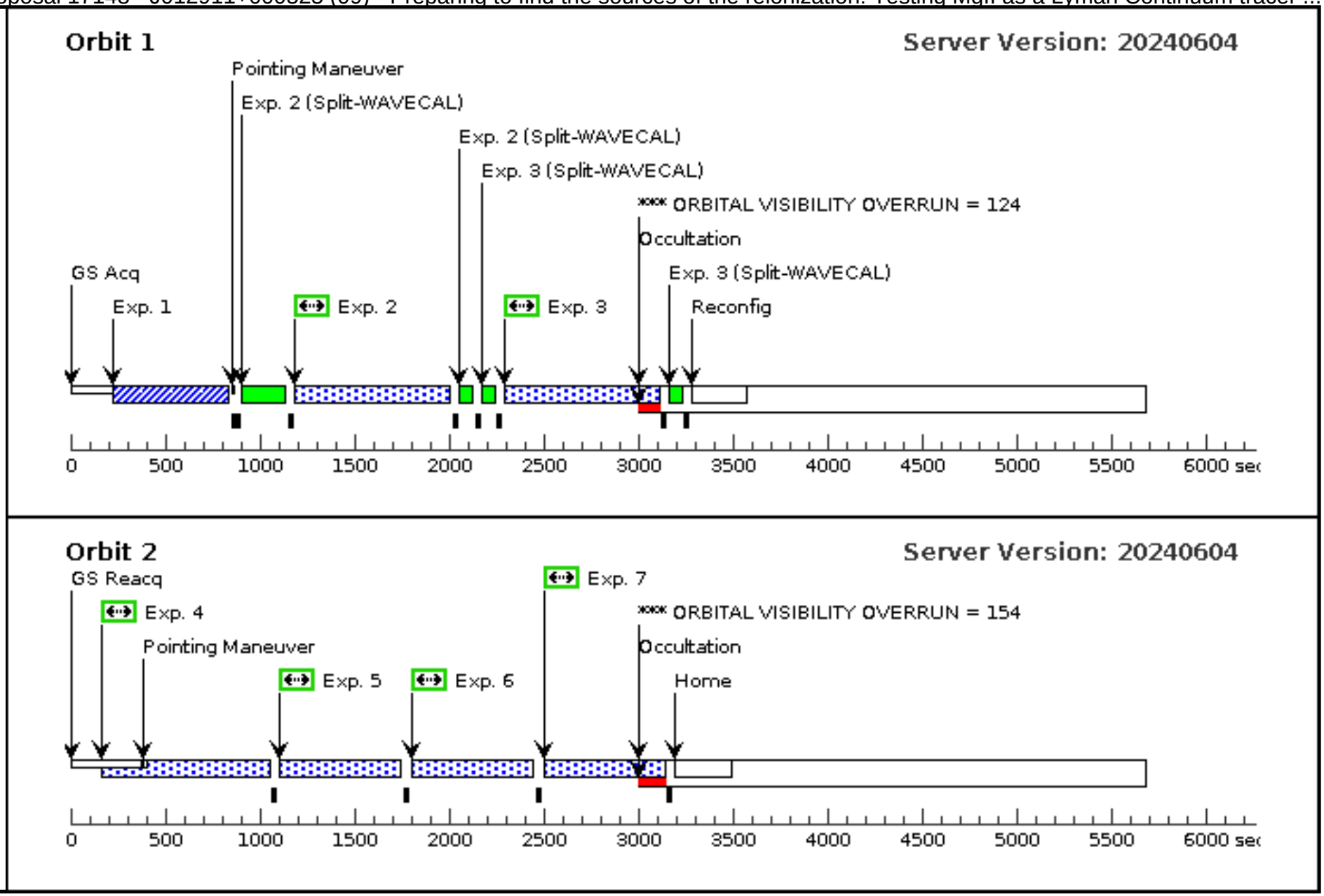
#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(4)	J012911+000525	RA: 01 29 10.7648 (22.2948533d) Dec: +00 05 24.59 (.09016d) Equinox: J2000		V=20.43	Reference Frame: ICRS

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

Exposures

#	Label (ETC Run)	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
1	J012911+000525 acquisition (COS.ta.1814507)	(4) J012911+000525	COS/NUV, ACQ/IMAGE, PSA	MIRRORA				200 Secs (200 Secs) *[==>]*	***[1]***
2	J012911+000525 science M1 (COS.sp.1826132)	(4) J012911+000525	COS/FUV, TIME-TAG, PSA	G160M 1600 A	BUFFER-TIME=19967; FP-POS=1			250 Secs (767 Secs) *[==>767.0 Secs]*	***[1]***
3	J012911+000525 science M2 (COS.sp.1826132)	(4) J012911+000525	COS/FUV, TIME-TAG, PSA	G160M 1600 A	BUFFER-TIME=19967; FP-POS=4			250 Secs (767 Secs) *[==>767.0 Secs]*	***[1]***
4	J012911+000525 science L1 (COS.sp.1813996)	(4) J012911+000525	COS/FUV, TIME-TAG, PSA	G140L 800 A	BUFFER-TIME=9940; FP-POS=1			600 Secs (592 Secs) *[==>592.0 Secs]*	***[2]***
5	J012911+000525 science L2 (COS.sp.1813996)	(4) J012911+000525	COS/FUV, TIME-TAG, PSA	G140L 800 A	BUFFER-TIME=9940; FP-POS=2			600 Secs (592 Secs) *[==>592.0 Secs]*	***[2]***
6	J012911+000525 science L3 (COS.sp.1813996)	(4) J012911+000525	COS/FUV, TIME-TAG, PSA	G140L 800 A	BUFFER-TIME=9940; FP-POS=3			600 Secs (592 Secs) *[==>592.0 Secs]*	***[2]***
7	J012911+000525 science L4 (COS.sp.1813996)	(4) J012911+000525	COS/FUV, TIME-TAG, PSA	G140L 800 A	BUFFER-TIME=9940; FP-POS=4			600 Secs (592 Secs) *[==>592.0 Secs]*	***[2]***

Orbit Structure



Visit

Proposal 17148, J012911+000525 (59), completed Mon Jun 17 20:00:33 GMT 2024

Diagnostic Status: Warning

Scientific Instruments: COS/FUV, COS/NUV

Special Requirements: (none)

Diagnostics

(J012911+000525 (59)) Warning (Orbit Planner): ORBITAL VISIBILITY OVERRUN

Fixed Targets

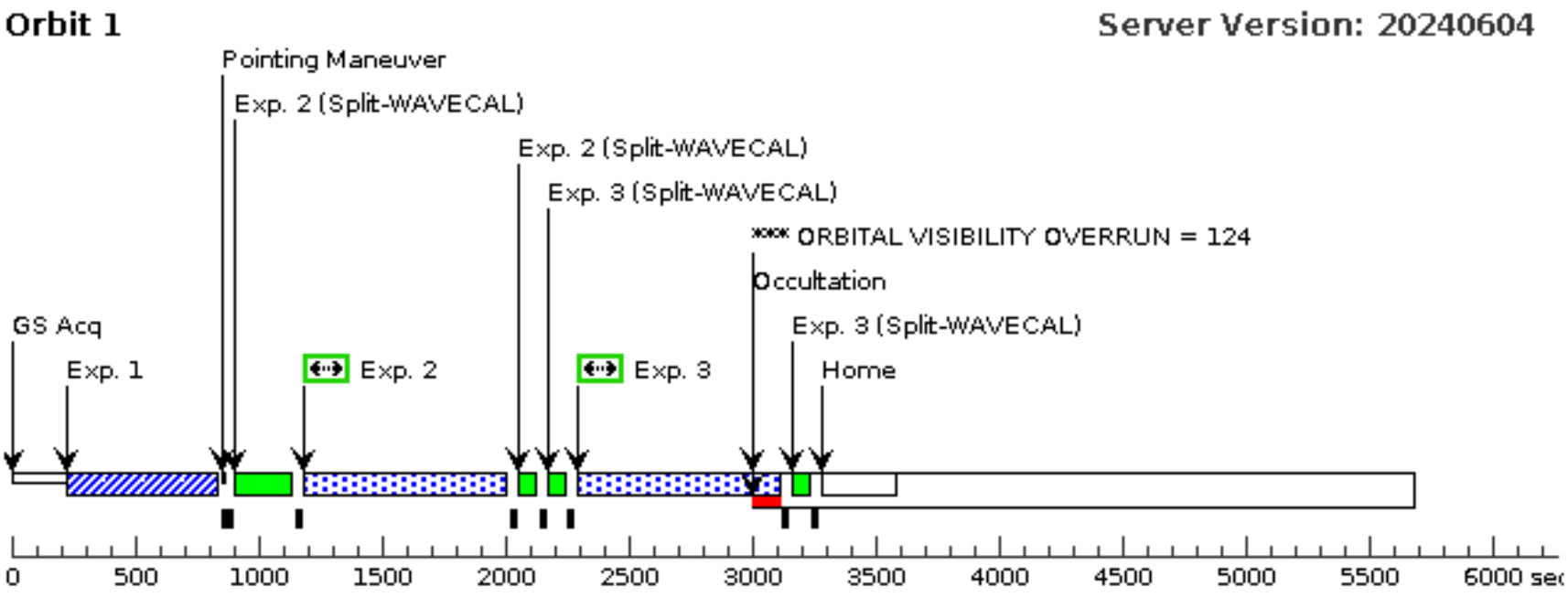
#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(4)	J012911+000525	RA: 01 29 10.7648 (22.2948533d) Dec: +00 05 24.59 (.09016d) Equinox: J2000		V=20.43	Reference Frame: ICRS

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

Exposures

#	Label (ETC Run)	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
1	J012911+000525 acquisition (COS.ta.1814507)	(4) J012911+000525	COS/NUV, ACQ/IMAGE, PSA	MIRRORA				200 Secs (200 Secs) *[==>]*	***[1]***
2	J012911+000525 science M1 (COS.sp.1826132)	(4) J012911+000525	COS/FUV, TIME-TAG, PSA	G160M 1600 A	BUFFER-TIME=19967; FP-POS=1			250 Secs (767 Secs) *[==>767.0 Secs]*	***[1]***
3	J012911+000525 science M2 (COS.sp.1826132)	(4) J012911+000525	COS/FUV, TIME-TAG, PSA	G160M 1600 A	BUFFER-TIME=19967; FP-POS=4			250 Secs (767 Secs) *[==>767.0 Secs]*	***[1]***

Orbit Structure



Visit

Proposal 17148, J110128+513357 visit 1 (10), completed Mon Jun 17 20:00:33 GMT 2024

Diagnostic Status: Warning

Scientific Instruments: COS/FUV, COS/NUV

Special Requirements: (none)

Comments: J110128+513357 requires 8 orbits. Thus, we split the object up into two visits. We use the standard SNR = 40 exposure times for the acquisition images, instead of the twice duration that we use for the objects that require a single visit.

Diagnostics

(J110128+513357 visit 1 (10)) Warning (Orbit Planner): ORBITAL VISIBILITY OVERRUN

(J110128+513357 visit 1 (10)) Warning (Orbit Planner): ORBITAL VISIBILITY OVERRUN

(J110128+513357 visit 1 (10)) Warning (Orbit Planner): ORBITAL VISIBILITY OVERRUN

(J110128+513357 visit 1 (10)) Warning (Orbit Planner): ORBITAL VISIBILITY OVERRUN

Fixed Targets

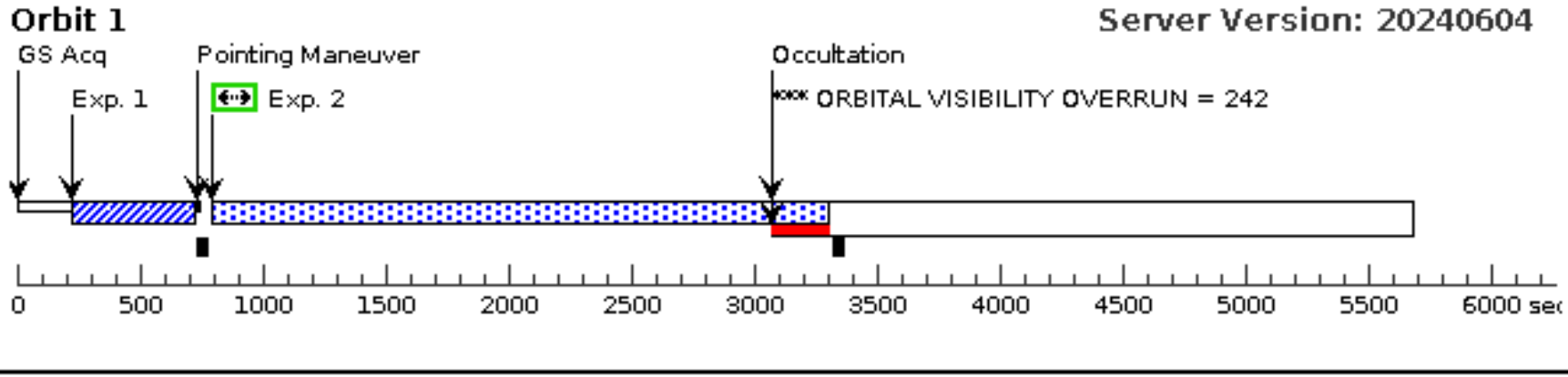
#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(5)	J110128+513357	RA: 11 01 27.5781 (165.3649088d) Dec: +51 33 57.26 (51.56591d) Equinox: J2000		V=20.43	Reference Frame: ICRS

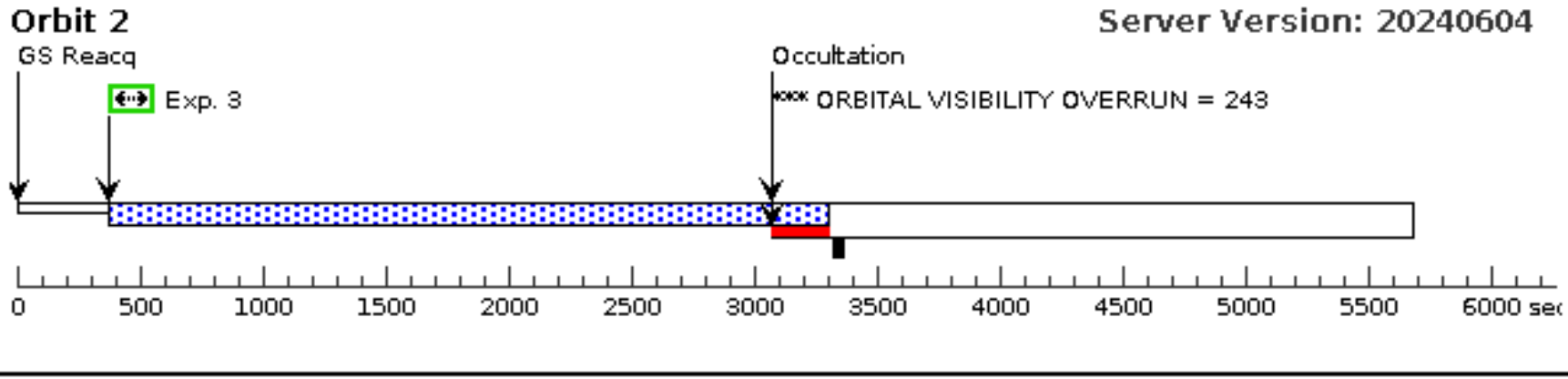
Comments:
Category=GALAXY
Description=[DWARF COMPACT, STARBURST]
Extended=NO

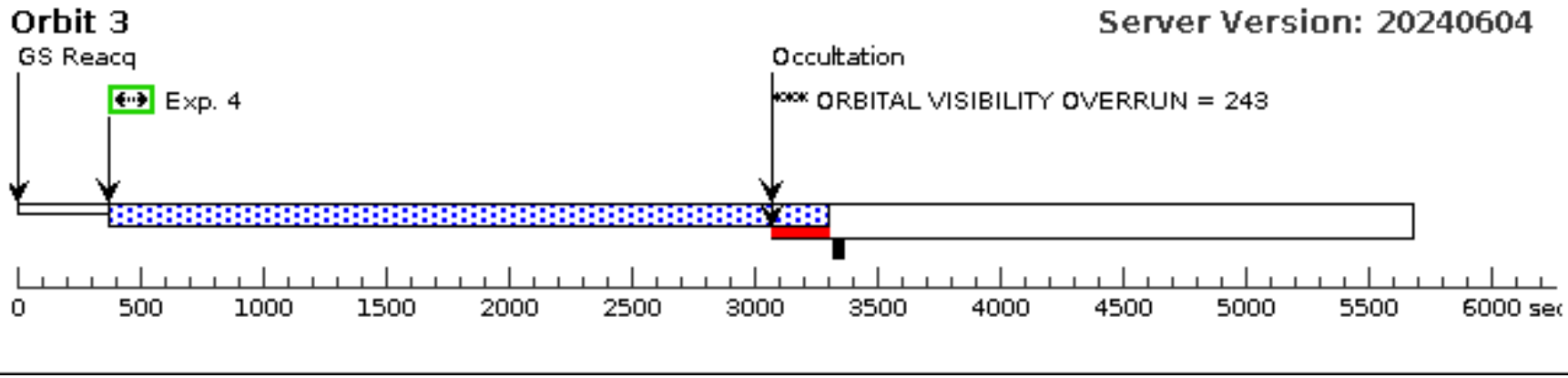
Exposures

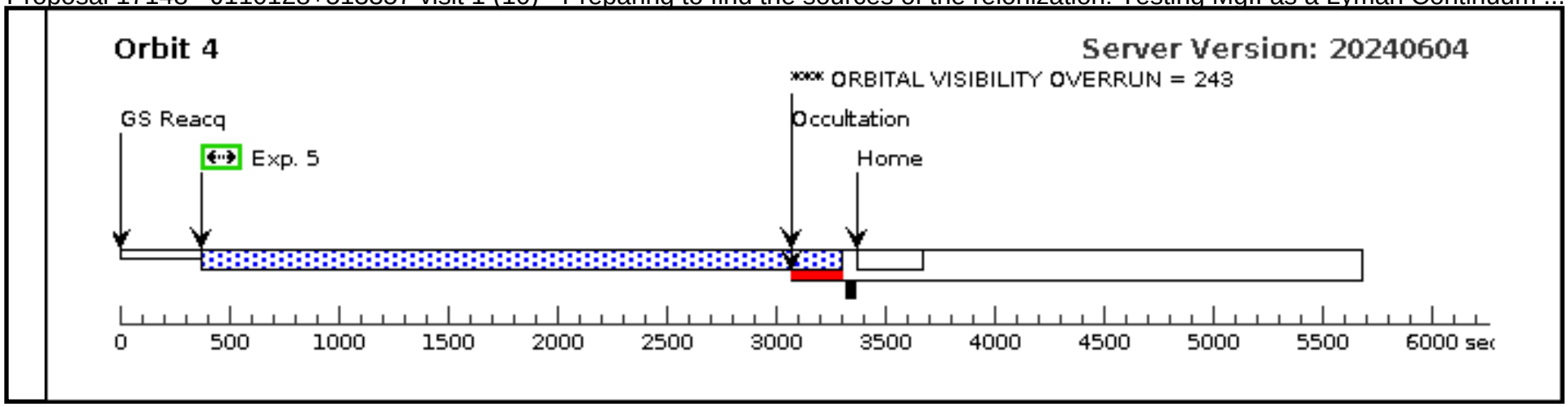
#	Label (ETC Run)	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
1	J110128+513357 acquisition (COS.ta.1814508)	(5) J110128+513357	COS/NUV, ACQ/IMAGE, PSA	MIRRORA				143 Secs (143 Secs) *[==>]*	***[1]***
2	J110128+513357 science L1 (COS.sp.1813998)	(5) J110128+513357	COS/FUV, TIME-TAG, PSA	G140L 800 A	BUFFER-TIME=9955; FP-POS=1			2090 Secs (2304 Secs) *[==>2304.0 Secs]*	***[1]***
3	J110128+513357 science L2 (COS.sp.1813998)	(5) J110128+513357	COS/FUV, TIME-TAG, PSA	G140L 800 A	BUFFER-TIME=9955; FP-POS=2			2500 Secs (2877 Secs) *[==>2877.0 Secs]*	***[2]***
4	J110128+513357 science L3 (COS.sp.1813998)	(5) J110128+513357	COS/FUV, TIME-TAG, PSA	G140L 800 A	BUFFER-TIME=9955; FP-POS=3			2500 Secs (2877 Secs) *[==>2877.0 Secs]*	***[3]***
5	J110128+513357 science L4 (COS.sp.1813998)	(5) J110128+513357	COS/FUV, TIME-TAG, PSA	G140L 800 A	BUFFER-TIME=9955; FP-POS=4			2090 Secs (2877 Secs) *[==>2877.0 Secs]*	***[4]***

Orbit Structure








Orbit 4
Server Version: 20240604
**** ORBITAL VISIBILITY OVERRUN = 243
GS Reacq
Exp. 5
Occultation
Home
0
500
1000
1500
2000
2500
3000
3500
4000
4500
5000
5500
6000 sec

Visit

Proposal 17148, J110128+513357 visit 2 (11), completed Mon Jun 17 20:00:33 GMT 2024

Diagnostic Status: Warning

Scientific Instruments: COS/FUV, COS/NUV

Special Requirements: (none)

Comments: J110128+513357 requires 8 orbits. Thus, we split the object up into three visits. We use the standard SNR = 40 exposure times for the acquisition images, instead of the twice duration that we use for the objects that require a single visit.

Diagnostics

(J110128+513357 visit 2 (11)) Warning (Orbit Planner): ORBITAL VISIBILITY OVERRUN

(J110128+513357 visit 2 (11)) Warning (Orbit Planner): ORBITAL VISIBILITY OVERRUN

(J110128+513357 visit 2 (11)) Warning (Orbit Planner): ORBITAL VISIBILITY OVERRUN

(J110128+513357 visit 2 (11)) Warning (Orbit Planner): ORBITAL VISIBILITY OVERRUN

Fixed Targets

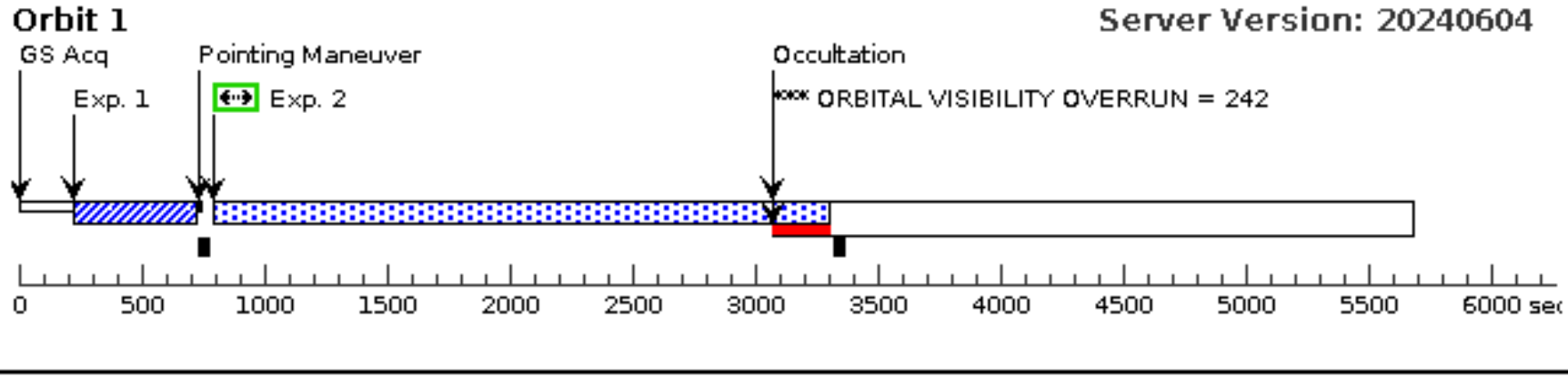
#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(5)	J110128+513357	RA: 11 01 27.5781 (165.3649088d) Dec: +51 33 57.26 (51.56591d) Equinox: J2000		V=20.43	Reference Frame: ICRS

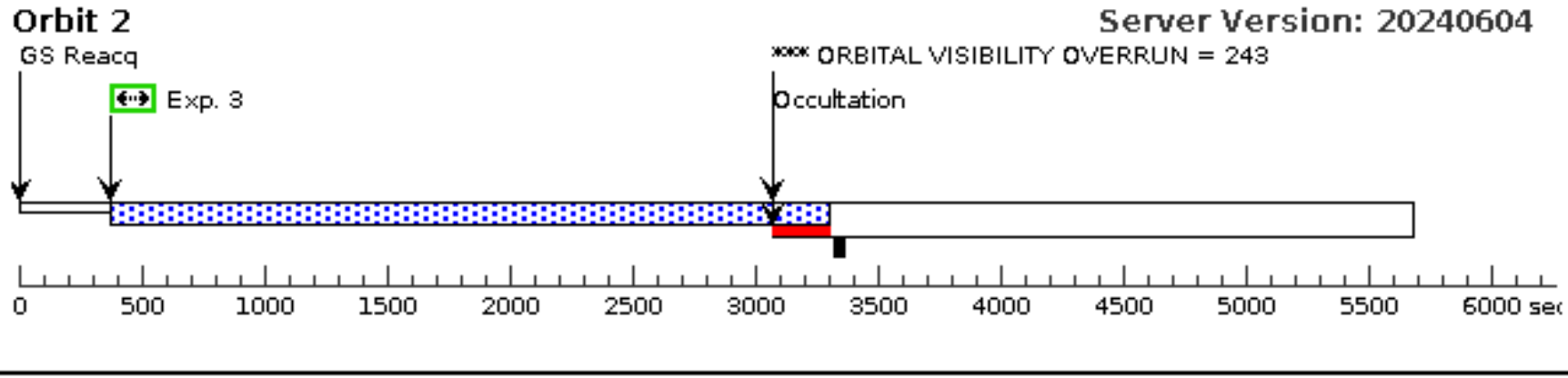
Comments:
Category=GALAXY
Description=[DWARF COMPACT, STARBURST]
Extended=NO

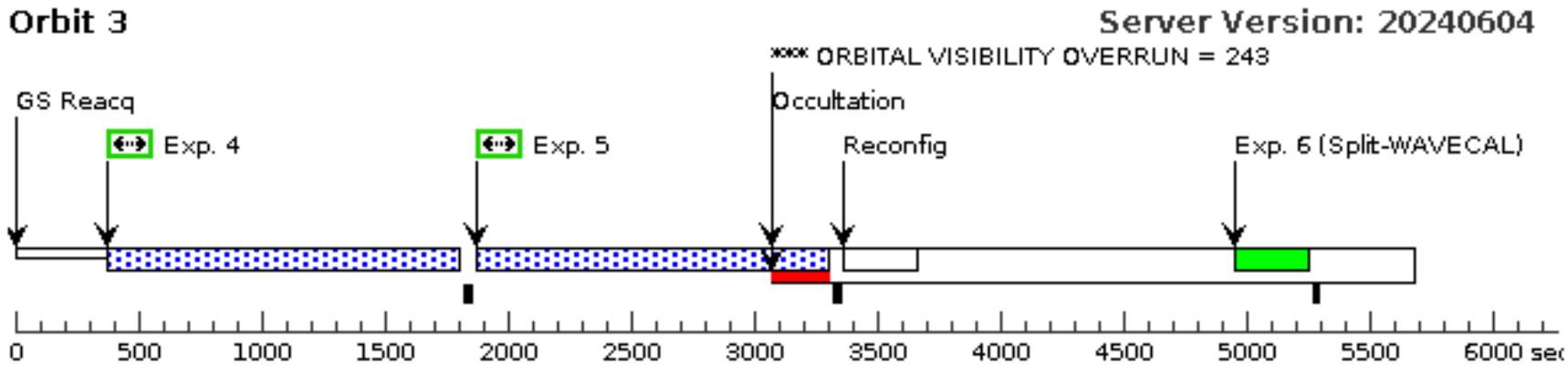
Exposures

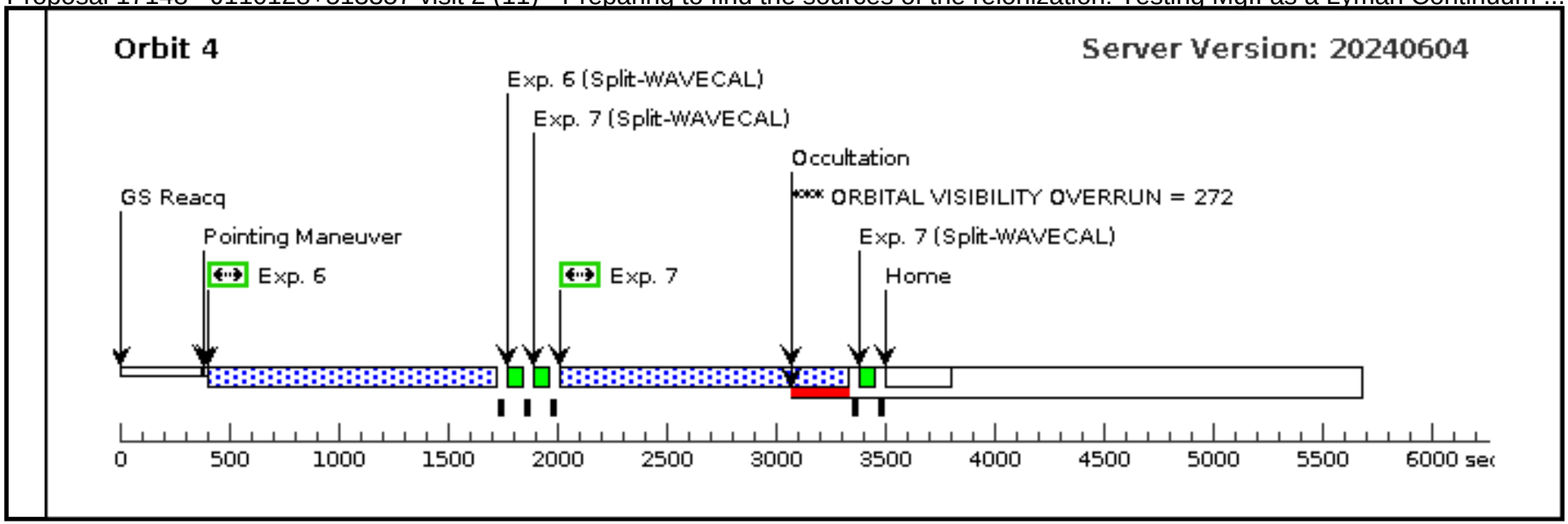
#	Label (ETC Run)	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
1	J110128+513357 acquisition (COS.ta.1814508)	(5) J110128+513357	COS/NUV, ACQ/IMAGE, PSA	MIRRORA				143 Secs (143 Secs) *[==>]*	***[1]***
2	J110128+513357 science L1 (COS.sp.1813998)	(5) J110128+513357	COS/FUV, TIME-TAG, PSA	G140L 800 A	BUFFER-TIME=9955; FP-POS=1			2500 Secs (2304 Secs) *[==>2304.0 Secs]*	***[1]***
3	J110128+513357 science L2 (COS.sp.1813998)	(5) J110128+513357	COS/FUV, TIME-TAG, PSA	G140L 800 A	BUFFER-TIME=9955; FP-POS=2			2500 Secs (2877 Secs) *[==>2877.0 Secs]*	***[2]***
4	J110128+513357 science L3 (COS.sp.1813998)	(5) J110128+513357	COS/FUV, TIME-TAG, PSA	G140L 800 A	BUFFER-TIME=9955; FP-POS=3			2500 Secs (1381 Secs) *[==>1381.0 Secs]*	***[3]***
5	J110128+513357 science L4 (COS.sp.1813998)	(5) J110128+513357	COS/FUV, TIME-TAG, PSA	G140L 800 A	BUFFER-TIME=9955; FP-POS=4			2500 Secs (1381 Secs) *[==>1381.0 Secs]*	***[3]***
6	J110128+513357 science M1 (COS.sp.1826135)	(5) J110128+513357	COS/FUV, TIME-TAG, PSA	G160M 1577 A	BUFFER-TIME=20838; FP-POS=1			280 Secs (1269 Secs) *[==>1269.0 Secs]*	***[4]***
7	J110128+513357 science M2 (COS.sp.1826135)	(5) J110128+513357	COS/FUV, TIME-TAG, PSA	G160M 1577 A	BUFFER-TIME=20838; FP-POS=4			280 Secs (1269 Secs) *[==>1269.0 Secs]*	***[4]***

Orbit Structure








Orbit 4
Server Version: 20240604
Exp. 6 (Split-WAVECAL)
Exp. 7 (Split-WAVECAL)
Occultation
GS Reacq
*** ORBITAL VISIBILITY OVERRUN = 272
Pointing Maneuver
Exp. 7 (Split-WAVECAL)
Exp. 6
Exp. 7
Home
0
500
1000
1500
2000
2500
3000
3500
4000
4500
5000
5500
6000 sec

Visit

Proposal 17148, J154623+520708 (13), completed Mon Jun 17 20:00:33 GMT 2024

Diagnostic Status: Warning

Scientific Instruments: COS/FUV, COS/NUV

Special Requirements: (none)

Diagnostics

(J154623+520708 (13)) Warning (Orbit Planner): ORBITAL VISIBILITY OVERRUN

(J154623+520708 (13)) Warning (Orbit Planner): ORBITAL VISIBILITY OVERRUN

(J154623+520708 (13)) Warning (Orbit Planner): ORBITAL VISIBILITY OVERRUN

Fixed Targets

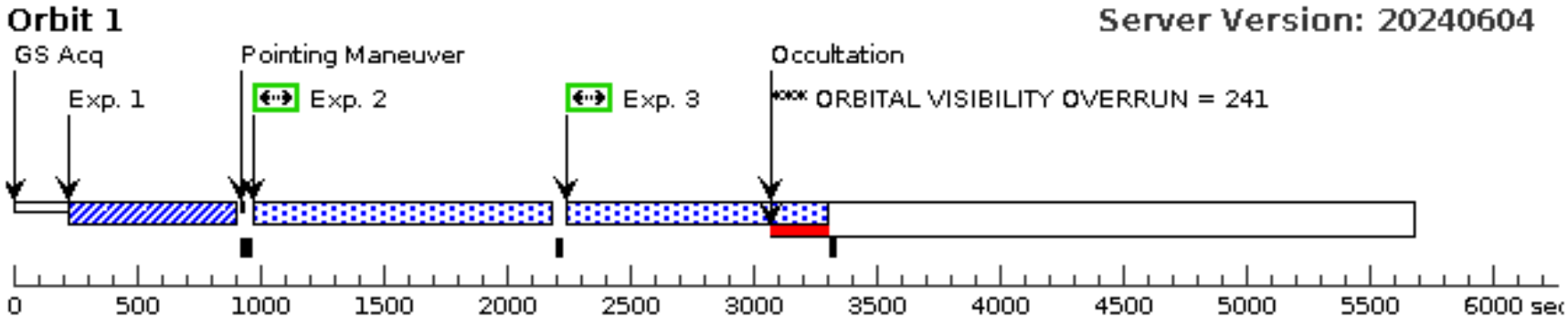
#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(6)	J154623+520708	RA: 15 46 23.0311 (236.5959629d) Dec: +52 07 8.12 (52.11892d) Equinox: J2000		V=20.26	Reference Frame: ICRS

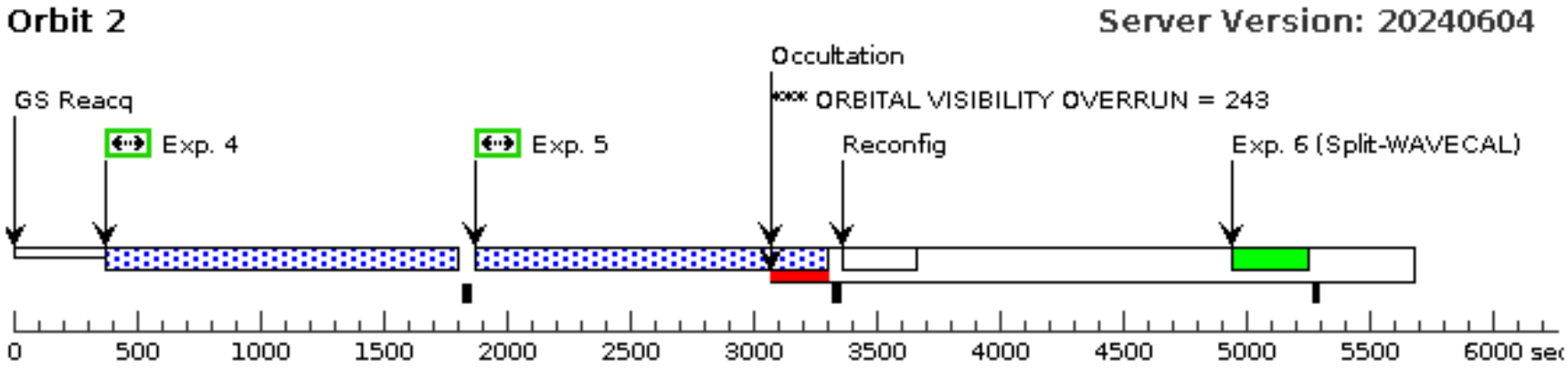
Comments:
Category=GALAXY
Description=[DWARF COMPACT, STARBURST]
Extended=NO

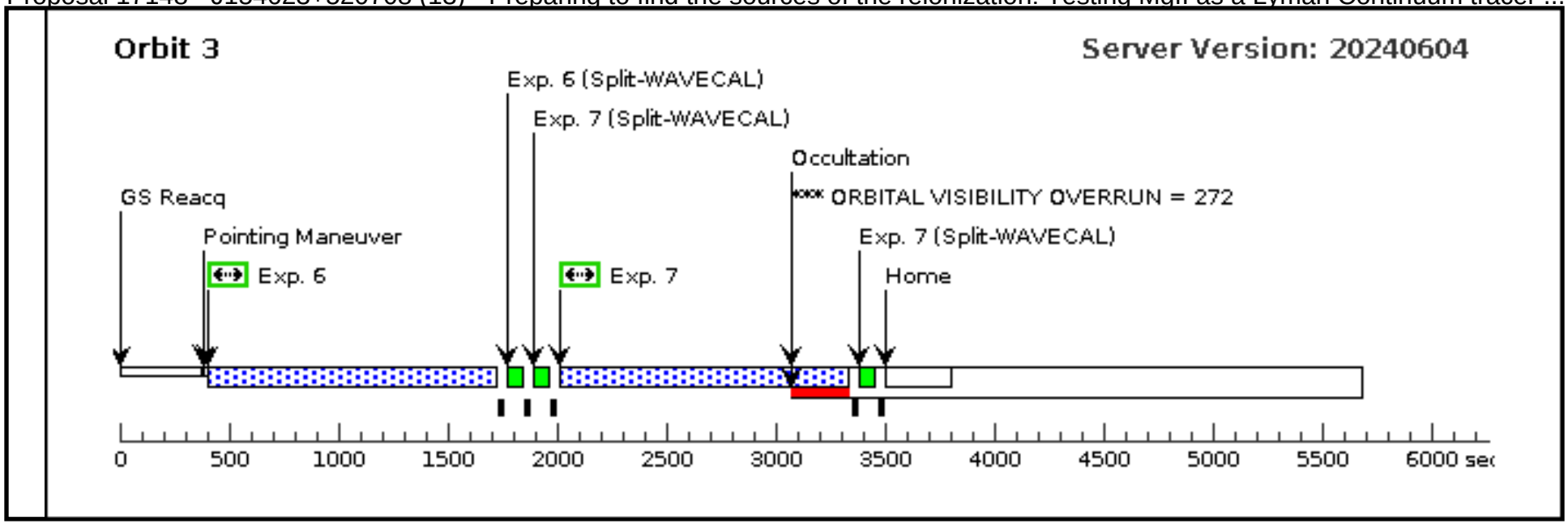
Exposures

#	Label (ETC Run)	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
1	J154623+520708 acquisition (COS.ta.1814510)	(6) J154623+520708	COS/NUV, ACQ/IMAGE, PSA	MIRRORA				235 Secs (235 Secs) *[==>]*	***[1]***
2	J154623+520708 science L1 (COS.sp.1814000)	(6) J154623+520708	COS/FUV, TIME-TAG, PSA	G140L 800 A	BUFFER-TIME=9949; FP-POS=1			2090 Secs (1007 Secs) *[==>1007.0 Secs]*	***[1]***
3	J154623+520708 science L2 (COS.sp.1814000)	(6) J154623+520708	COS/FUV, TIME-TAG, PSA	G140L 800 A	BUFFER-TIME=9949; FP-POS=2			2090 Secs (1007 Secs) *[==>1007.0 Secs]*	***[1]***
4	J154623+520708 science L3 (COS.sp.1814000)	(6) J154623+520708	COS/FUV, TIME-TAG, PSA	G140L 800 A	BUFFER-TIME=9949; FP-POS=3			1200 Secs (1381 Secs) *[==>1381.0 Secs]*	***[2]***
5	J154623+520708 science L4 (COS.sp.1814000)	(6) J154623+520708	COS/FUV, TIME-TAG, PSA	G140L 800 A	BUFFER-TIME=9949; FP-POS=4			1200 Secs (1381 Secs) *[==>1381.0 Secs]*	***[2]***
6	J154623+520708 science M1 (COS.sp.1826145)	(6) J154623+520708	COS/FUV, TIME-TAG, PSA	G160M 1623 A	BUFFER-TIME=20838; FP-POS=1			280 Secs (1269 Secs) *[==>1269.0 Secs]*	***[3]***
7	J154623+520708 science M2 (COS.sp.1826145)	(6) J154623+520708	COS/FUV, TIME-TAG, PSA	G160M 1623 A	BUFFER-TIME=20838; FP-POS=4			280 Secs (1269 Secs) *[==>1269.0 Secs]*	***[3]***

Orbit Structure






Orbit 3
Server Version: 20240604
Exp. 6 (Split-WAVECAL)
Exp. 7 (Split-WAVECAL)
Occultation
GS Reacq
*** ORBITAL VISIBILITY OVERRUN = 272
Pointing Maneuver
Exp. 7 (Split-WAVECAL)
Exp. 6
Exp. 7
Home
0
500
1000
1500
2000
2500
3000
3500
4000
4500
5000
5500
6000 sec

Visit

Proposal 17148, J124730+561136 (14), completed Mon Jun 17 20:00:33 GMT 2024

Diagnostic Status: Warning

Scientific Instruments: COS/FUV, COS/NUV

Special Requirements: (none)

Diagnostics

(J124730+561136 (14)) Warning (Orbit Planner): ORBITAL VISIBILITY OVERRUN

(J124730+561136 (14)) Warning (Orbit Planner): ORBITAL VISIBILITY OVERRUN

(J124730+561136 (14)) Warning (Orbit Planner): ORBITAL VISIBILITY OVERRUN

Fixed Targets

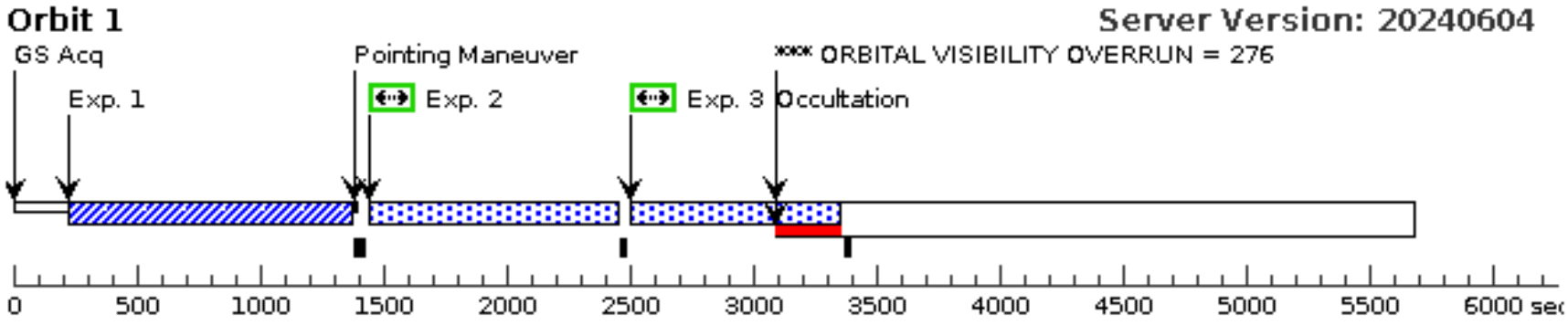
#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(7)	J124730+561136	RA: 12 47 30.1018 (191.8754242d) Dec: +56 11 36.12 (56.19337d) Equinox: J2000		V=20.96	Reference Frame: ICRS

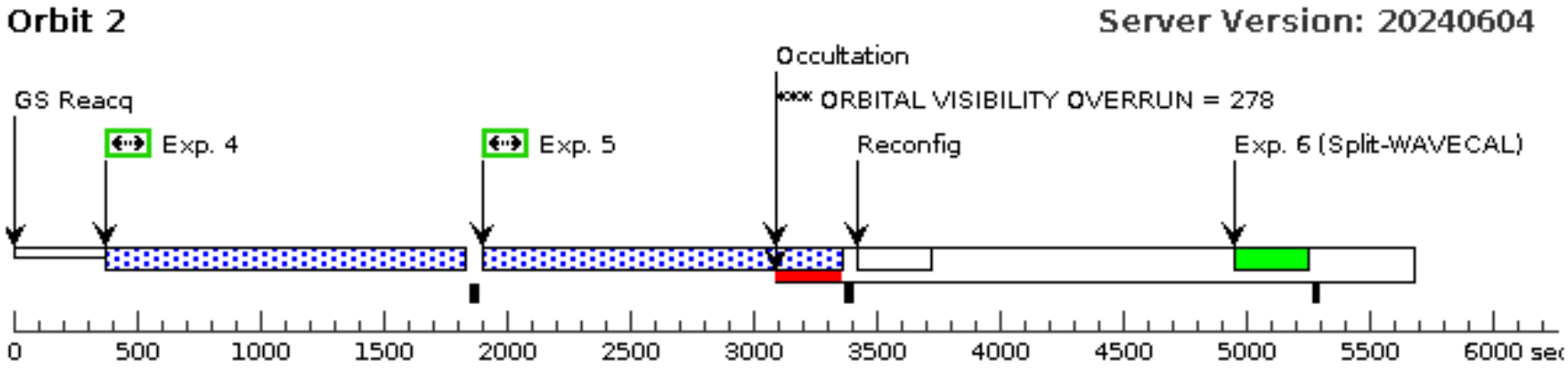
Comments:
Category=GALAXY
Description=[DWARF COMPACT, STARBURST]
Extended=NO

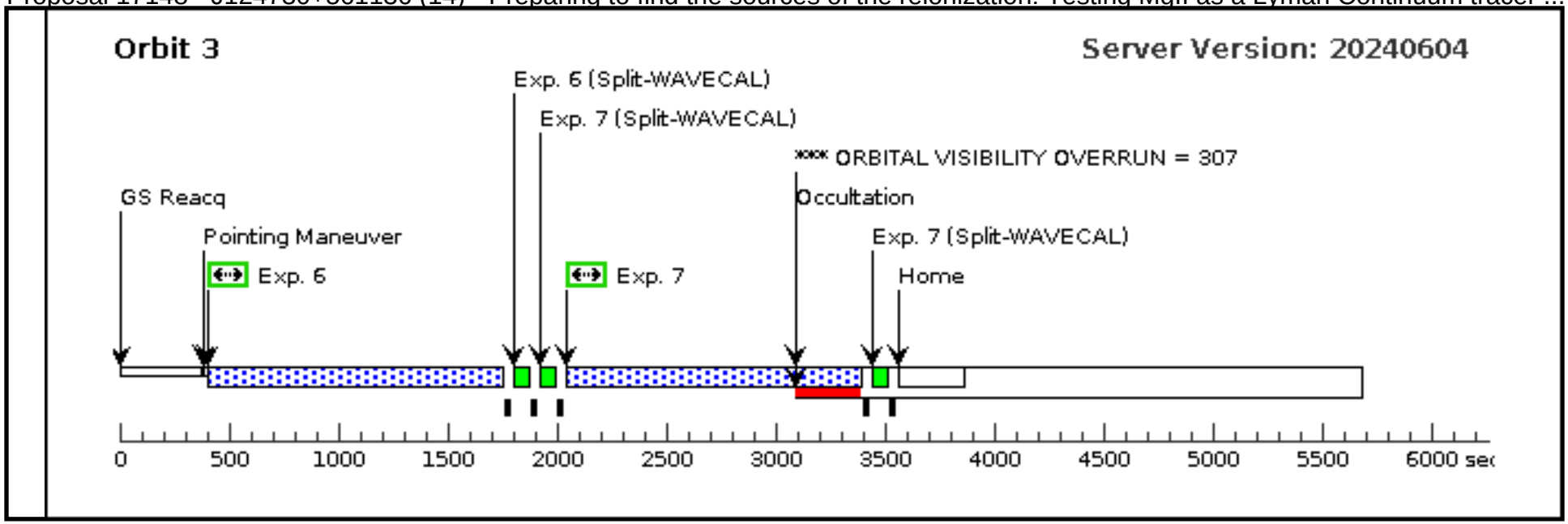
Exposures

#	Label (ETC Run)	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
1	J124730+561136 acquisition (COS.ta.1814511)	(7) J124730+561136	COS/NUV, ACQ/IMAGE, PSA	MIRRORA				468 Secs (468 Secs) *[==>]*	***[1]***
2	J124730+561136 science L1 (COS.sp.1814001)	(7) J124730+561136	COS/FUV, TIME-TAG, PSA	G140L 800 A	BUFFER-TIME=9943; FP-POS=1			2090 Secs (802 Secs) *[==>802.0 Secs]*	***[1]***
3	J124730+561136 science L2 (COS.sp.1814001)	(7) J124730+561136	COS/FUV, TIME-TAG, PSA	G140L 800 A	BUFFER-TIME=9943; FP-POS=2			2090 Secs (802 Secs) *[==>802.0 Secs]*	***[1]***
4	J124730+561136 science L3 (COS.sp.1814001)	(7) J124730+561136	COS/FUV, TIME-TAG, PSA	G140L 800 A	BUFFER-TIME=9943; FP-POS=3			1200 Secs (1409 Secs) *[==>1409.0 Secs]*	***[2]***
5	J124730+561136 science L4 (COS.sp.1814001)	(7) J124730+561136	COS/FUV, TIME-TAG, PSA	G140L 800 A	BUFFER-TIME=9943; FP-POS=4			1200 Secs (1409 Secs) *[==>1409.0 Secs]*	***[2]***
6	J124730+561136 science M1 (COS.sp.1826147)	(7) J124730+561136	COS/FUV, TIME-TAG, PSA	G160M 1577 A	BUFFER-TIME=20845; FP-POS=1			280 Secs (1297 Secs) *[==>1297.0 Secs]*	***[3]***
7	J124730+561136 science M2 (COS.sp.1826147)	(7) J124730+561136	COS/FUV, TIME-TAG, PSA	G160M 1577 A	BUFFER-TIME=20845; FP-POS=4			280 Secs (1297 Secs) *[==>1297.0 Secs]*	***[3]***

Orbit Structure






Orbit 3
Server Version: 20240604
Exp. 6 (Split-WAVECAL)
Exp. 7 (Split-WAVECAL)
**** ORBITAL VISIBILITY OVERRUN = 307
GS Reacq
Occultation
Pointing Maneuver
Exp. 7 (Split-WAVECAL)
Exp. 6
Exp. 7
Home
0
500
1000
1500
2000
2500
3000
3500
4000
4500
5000
5500
6000 sec