



17433 - HST UV Spectroscopy of High-accretion-rate AGNs and the Origin of Offset in the Broad-Line Region Size-Luminosity Relation

Cycle: 31, Proposal Category: GO

(UV Initiative)

(Availability Mode: SUPPORTED)

INVESTIGATORS

<i>Name</i>	<i>Institution</i>
Ms. Qiaoya Wu (PI) (Contact)	University of Illinois at Urbana - Champaign
Prof. Yue Shen (CoI) (CoPI) (Contact)	University of Illinois at Urbana - Champaign

VISITS

<i>Visit</i>	<i>Targets used in Visit</i>	<i>Configurations used in Visit</i>	<i>Orbits Used</i>	<i>Last Orbit Planner Run</i>	<i>OP Current with Visit?</i>
01	(1) IRAS04416+1215	COS/FUV COS/NUV	1	19-Dec-2024 19:00:12.0	yes
1A	(1) IRAS04416+1215	COS/FUV COS/NUV	1	19-Dec-2024 19:00:13.0	yes
1B	(1) IRAS04416+1215	COS/FUV COS/NUV	1	19-Dec-2024 19:00:14.0	yes
02	(2) IRASF12397+3333	COS/FUV COS/NUV	1	19-Dec-2024 19:00:14.0	yes
04	(4) SDSSJ075101.42+291419.1	COS/FUV COS/NUV	1	19-Dec-2024 19:00:15.0	yes
05	(5) SDSSJ080101.41+184840.7	COS/FUV COS/NUV	1	19-Dec-2024 19:00:15.0	yes

Proposal 17433 (STScI Edit Number: 5, Created: Thursday, December 19, 2024, 7:00:24PM Eastern Standard Time) - Overview

<i>Visit</i>	<i>Targets used in Visit</i>	<i>Configurations used in Visit</i>	<i>Orbits Used</i>	<i>Last Orbit Planner Run</i>	<i>OP Current with Visit?</i>
06	(6) SDSSJ080131.58+354436.4	COS/FUV COS/NUV	1	19-Dec-2024 19:00:16.0	yes
07	(7) SDSSJ083553.46+055317.1	COS/FUV COS/NUV	1	19-Dec-2024 19:00:17.0	yes
08	(8) SDSSJ084533.28+474934.5	STIS/CCD STIS/NUV-MAMA	1	19-Dec-2024 19:00:17.0	yes
09	(9) SDSSJ085946.35+274534.8	STIS/CCD STIS/NUV-MAMA	1	19-Dec-2024 19:00:18.0	yes
10	(10) SDSSJ093302.68+385228.0	COS/FUV COS/NUV	1	19-Dec-2024 19:00:19.0	yes
11	(11) SDSSJ102339.64+523349.6	COS/FUV COS/NUV	1	19-Dec-2024 19:00:19.0	yes
12	(12) RM300	STIS/CCD STIS/NUV-MAMA	2	19-Dec-2024 19:00:20.0	yes
13	(13) RM316	STIS/CCD STIS/NUV-MAMA	1	19-Dec-2024 19:00:21.0	yes
14	(14) RM746	STIS/CCD STIS/NUV-MAMA	2	19-Dec-2024 19:00:22.0	yes
15	(15) RM798	STIS/CCD STIS/NUV-MAMA	2	19-Dec-2024 19:00:23.0	yes
16	(16) RM822	STIS/CCD STIS/NUV-MAMA	1	19-Dec-2024 19:00:23.0	yes

20 Total Orbits Used

ABSTRACT

Nearly two decades of reverberation mapping (RM) studies on local broad-line AGNs have revealed a tight correlation between the broad-line region (BLR) size and the AGN optical luminosity (the R-L relation), which provides the foundation for single-epoch virial black hole mass recipes that estimate AGN black hole masses using single-epoch spectra. However, recent RM studies for AGNs with a more diverse range of accretion

parameters revealed an increased dispersion around the canonical R-L relation. In particular, high-accretion-rate (e.g., $L/L_{\text{Edd}} > 0.5$) AGNs show a significant lag offset by a factor of 3-4 at fixed optical luminosities. Understanding the origin of this dispersion/offset in the R-L relation is critically important for single-epoch mass recipes. One promising explanation for this dispersion/offset is that the underlying ionizing spectral energy distributions (SEDs) are different at different accretion rates.

Here we propose HST UV spectroscopy for 16 high-accretion AGNs at $0.05 < z < 0.7$ with RM measurements to test this hypothesis and to develop empirical corrections to tighten up the R-L relation. We will measure the rest-frame UV emission-line properties, and perform detailed photoionization calculations to constrain accretion disk models and SED predictions. The comparison of photoionization calculations and observed spectra for a unique high-accretion AGN sample would not only facilitate a better theoretical understanding of high-accretion disk models (e.g., the slim disk model), but also shed light on the physical driver of the R-L relation dispersion and enable better calibrations of single-epoch mass recipes.

OBSERVING DESCRIPTION

We have selected a sample of 16 low-redshift ($0.05 < z < 0.7$) high-accretion AGNs with GALEX NUV mag < 21 in this proposal.

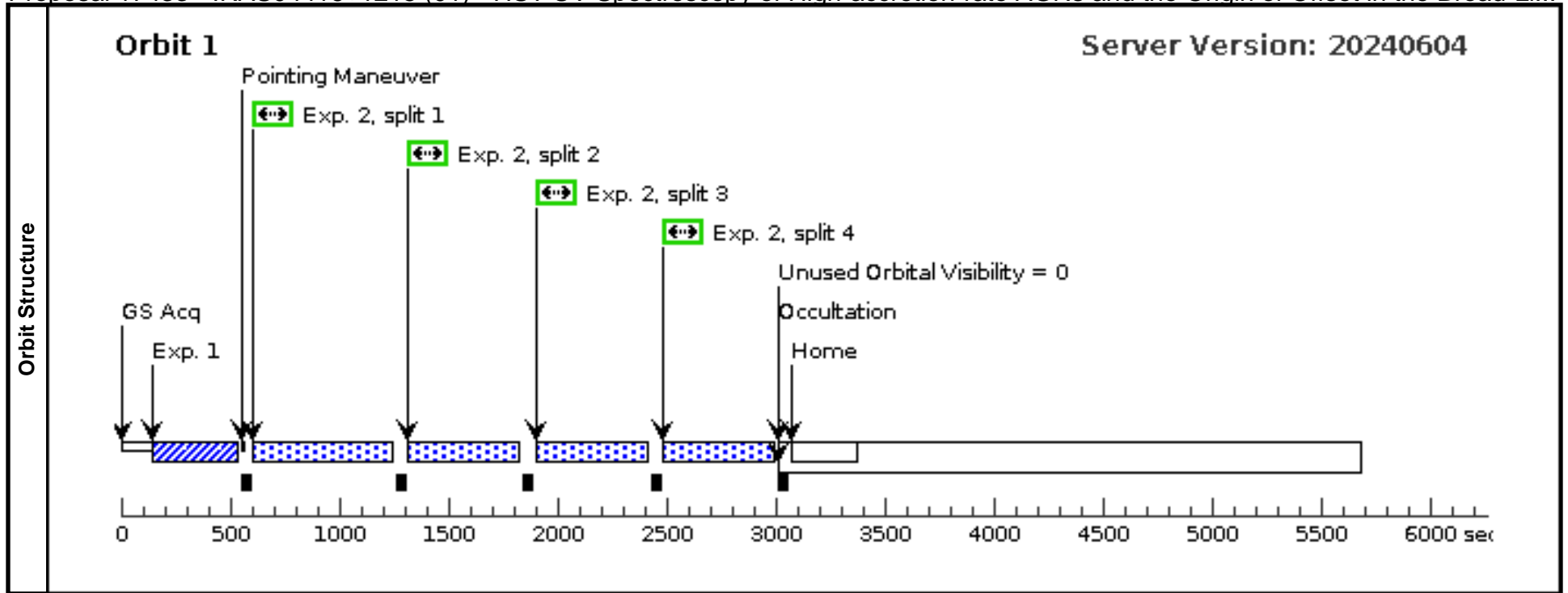
For 8 targets at $z < 0.2$, we choose the HST COS/FUV in spectroscopic mode with the G140L grating and a central wavelength of 1280 Å. Firstly, the NUV ACQ/IMAGE MirrorB is used for target acquisition to meet the safety limits. We calculate the acquisition exposure times with the ETC for a minimum SNR of 20 for PSA mode, assuming a point-like source. Then each FUV exposure will fit in the same orbit as the target acquisition and use all four FP-POS positions to obtain the spectra with SNR ~ 10 per resolution element. The BUFFER-TIME is set to be $2/3 \times \text{BFT}$ as recommended by the handbook.

For 8 targets at $z > 0.2$, we choose HST STIS/NUV-MAMA in spectroscopic mode with the G230L grating to optimize the need for spectral coverage. We will use the point-source mode and F28x50LP CCD aperture for target acquisition, and the acquisition exposure time is computed from ETC to obtain an SNR of at least 40. Then we will take one or two (depending on the orbit, 1 for 5 targets, 2 for 3 targets) MAMA exposures to reach SNR ~ 10 per resolution element, where 52" x 0.2" slit is used and BUFFER-TIME is set to be 300s.

Proposal 17433 - IRAS04416+1215 (01) - HST UV Spectroscopy of High-accretion-rate AGNs and the Origin of Offset in the Broad-Li...

Fri Dec 20 00:00:24 GMT 2024

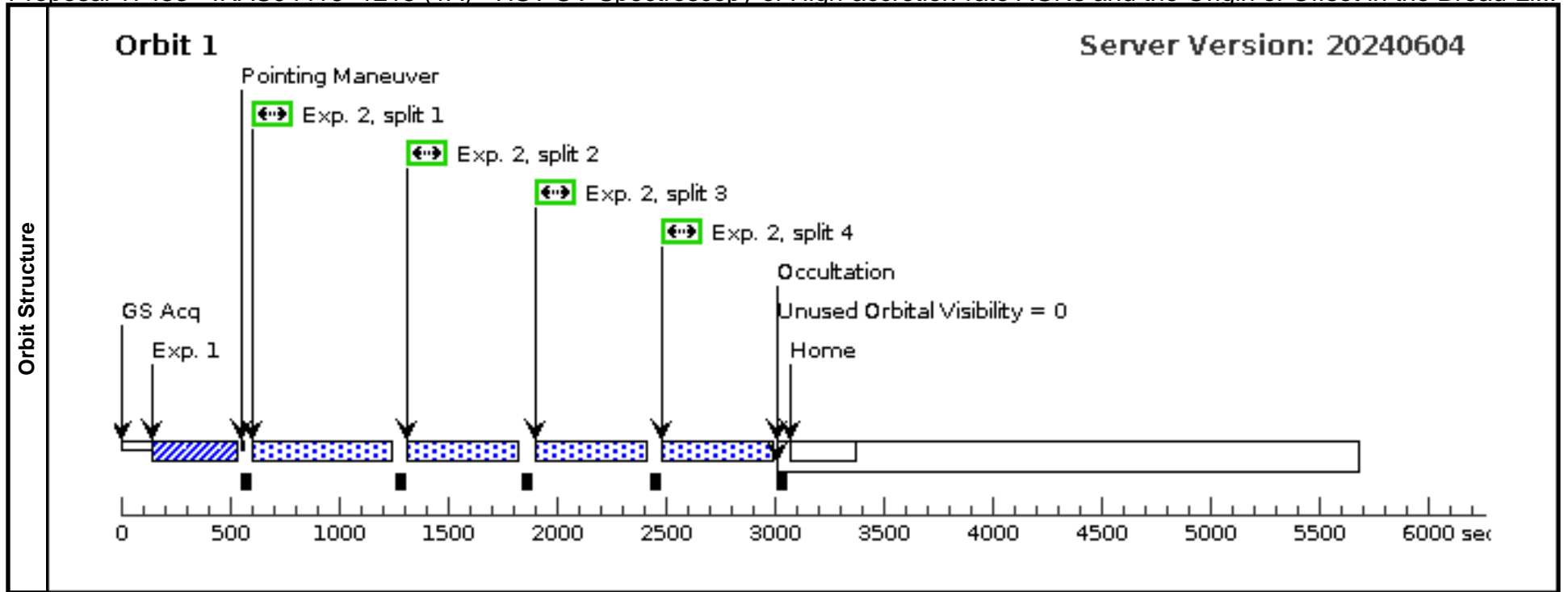
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Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous				
	(1)	IRAS04416+1215	RA: 04 44 28.7759 (71.1198996d) Dec: +12 21 11.72 (12.35326d) Equinox: J2000	Proper Motion RA: 1.4058835568345878E-5 sec of time/yr Proper Motion Dec: 1.01E-4 arcsec/yr Epoch of Position: 2015.5 Redshift: 0.089	V=16.4+/-0.1 FUV=18.7, NUV=18.6	Reference Frame: ICRS				
	<i>Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.</i> Category=GALAXY Description=[QSO, QUASAR] Extended=NO									
Exposures	#	Label (ETC Run)	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
	1	ACQ/IMAG E COS/NU V (1890121)	(1) IRAS04416+121 5	COS/NUV, ACQ/IMAGE, PSA	MIRRORB				50 Secs (50 Secs) [==>]	[1]
	2	EXP01 /FUV (1890041)	(1) IRAS04416+121 5	COS/FUV, TIME-TAG, PSA	G140L 1280 A	BUFFER-TIME=20 50; FP-POS=ALL			498 Secs (1844 Secs) [==>461.0 Secs (Split 1)] [==>461.0 Secs (Split 2)] [==>461.0 Secs (Split 3)] [==>461.0 Secs (Split 4)]	[1]



Proposal 17433 - IRAS04416+1215 (1A) - HST UV Spectroscopy of High-accretion-rate AGNs and the Origin of Offset in the Broad-Li...

Fri Dec 20 00:00:24 GMT 2024

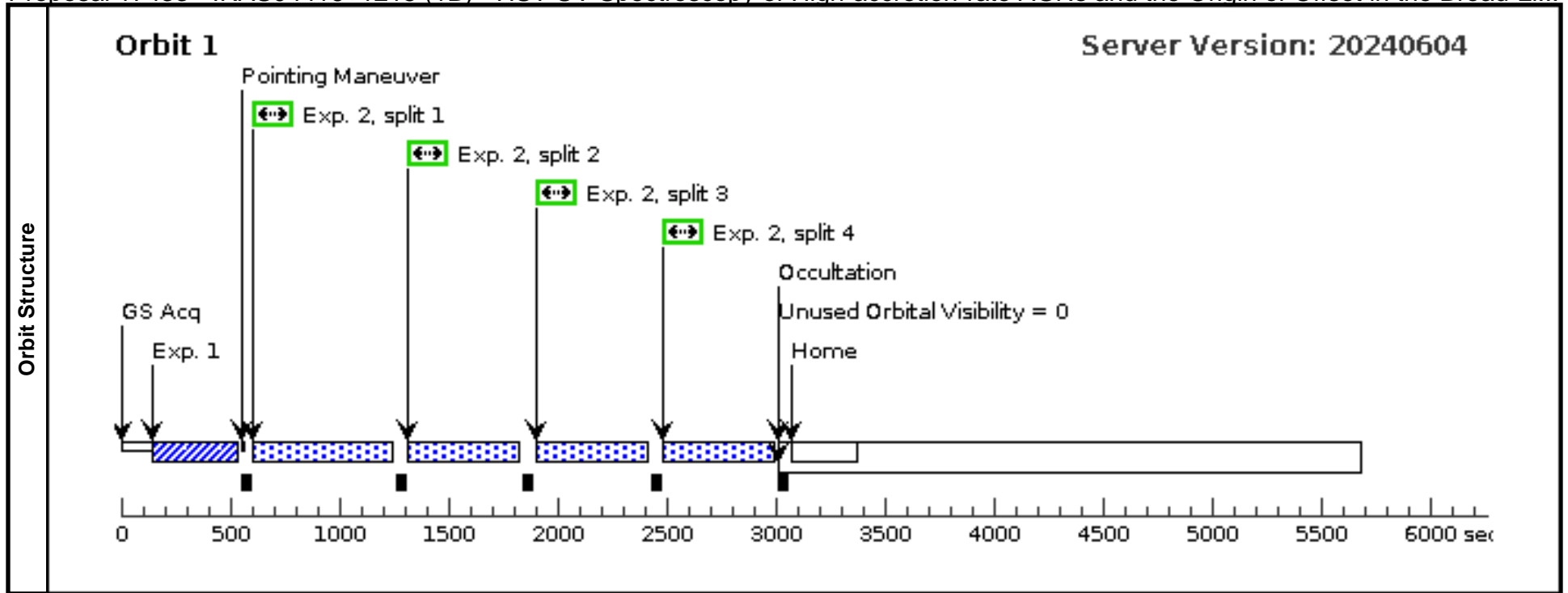
Visit	Proposal 17433, IRAS04416+1215 (1A), failed Diagnostic Status: No Diagnostics Scientific Instruments: COS/FUV, COS/NUV Special Requirements: (none)									
	Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous			
		(1)	IRAS04416+1215	RA: 04 44 28.7759 (71.1198996d) Dec: +12 21 11.72 (12.35326d) Equinox: J2000	Proper Motion RA: 1.4058835568345878E-5 sec of time/yr Proper Motion Dec: 1.01E-4 arcsec/yr Epoch of Position: 2015.5 Redshift: 0.089	V=16.4+/-0.1 FUV=18.7, NUV=18.6	Reference Frame: ICRS			
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Exposures	#	Label (ETC Run)	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
	1	ACQ/IMAG E COS/NUV (1890121)	(1) IRAS04416+1215	COS/NUV, ACQ/IMAGE, PSA	MIRRORB				50 Secs (50 Secs) [==>]	[1]
2	EXP01 COS /FUV (1890041)	(1) IRAS04416+1215	COS/FUV, TIME-TAG, PSA	G140L 1280 A	BUFFER-TIME=20 50; FP-POS=ALL			498 Secs (1844 Secs) [==>461.0 Secs (Split 1)] [==>461.0 Secs (Split 2)] [==>461.0 Secs (Split 3)] [==>461.0 Secs (Split 4)]	[1]	



Proposal 17433 - IRAS04416+1215 (1B) - HST UV Spectroscopy of High-accretion-rate AGNs and the Origin of Offset in the Broad-Li...

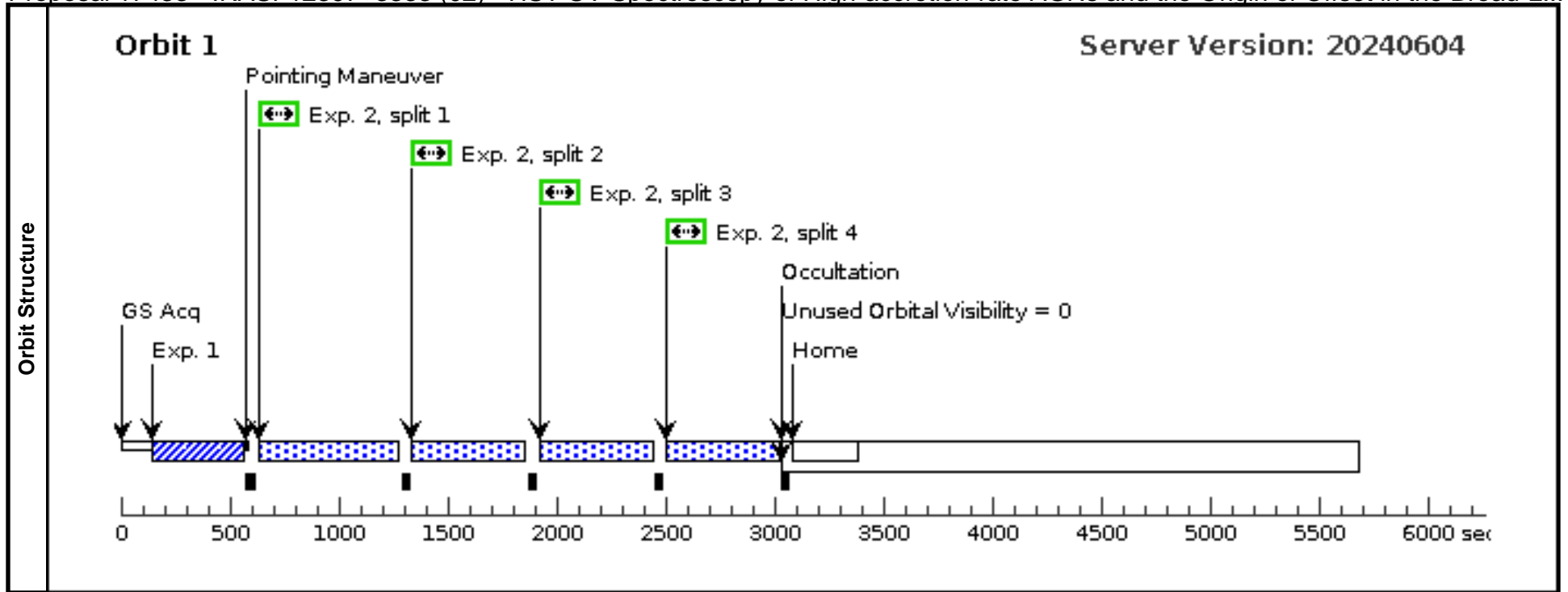
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Visit	Proposal 17433, IRAS04416+1215 (1B) Diagnostic Status: No Diagnostics Scientific Instruments: COS/FUV, COS/NUV Special Requirements: (none)									
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		(1)	IRAS04416+1215	RA: 04 44 28.7759 (71.1198996d) Dec: +12 21 11.72 (12.35326d) Equinox: J2000	Proper Motion RA: 1.4058835568345878E-5 sec of time/yr Proper Motion Dec: 1.01E-4 arcsec/yr Epoch of Position: 2015.5 Redshift: 0.089	V=16.4+/-0.1 FUV=18.7, NUV=18.6	Reference Frame: ICRS			
	<i>Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.</i> Category=GALAXY Description=[QSO, QUASAR] Extended=NO									
Exposures	#	Label (ETC Run)	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
	1	ACQ/IMAG E COS/NU V (1890121)	(1) IRAS04416+1215	COS/NUV, ACQ/IMAGE, PSA	MIRRORB					50 Secs (50 Secs) [==>]
2	EXP01 COS /FUV (1890041)	(1) IRAS04416+1215	COS/FUV, TIME-TAG, PSA	G140L 1280 A		BUFFER-TIME=20 50; FP-POS=ALL			498 Secs (1844 Secs) [==>461.0 Secs (Split 1)] [==>461.0 Secs (Split 2)] [==>461.0 Secs (Split 3)] [==>461.0 Secs (Split 4)]	[1]



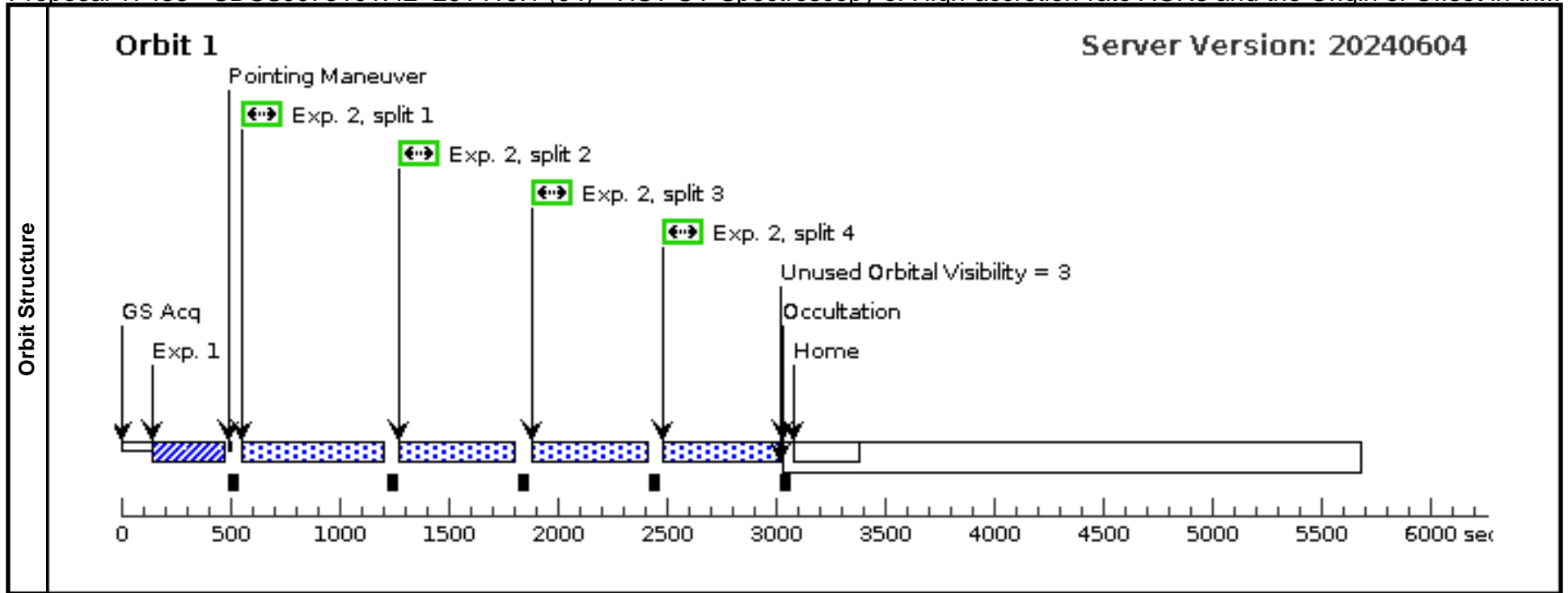
Proposal 17433 - IRASF12397+3333 (02) - HST UV Spectroscopy of High-accretion-rate AGNs and the Origin of Offset in the Broad-L...

Visit	Proposal 17433, IRASF12397+3333 (02), scheduling Fri Dec 20 00:00:24 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)		IRASF12397+3333	RA: 12 42 10.6050 (190.5441875d) Dec: +33 17 2.66 (33.28407d) Equinox: J2000	Proper Motion RA: -5.103912793187953E-6 sec of time/yr Proper Motion Dec: -3.300006028439384E-5 arcsec/yr Epoch of Position: 2015.5 Redshift: 0.044	V=15.65+/-0.1 FUV=19.7, NUV=18.9	Reference Frame: ICRS				
Comments: This object was generated by the targetselector and retrieved from the SIMBAD database. Category=GALAXY Description=[QSO, QUASAR] Extended=NO										
Exposures	#	Label (ETC Run)	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
	1	ACQ/IMAG E COS/NUV (1890257)	(2) IRASF12397+3333	COS/NUV, ACQ/IMAGE, PSA	MIRRORB				63 Secs (63 Secs) [==>]	[1]
	2	EXP01 /FUV (1890043)	(2) IRASF12397+3333	COS/FUV, TIME-TAG, PSA	G140L 1280 A	BUFFER-TIME=23 18; FP-POS=ALL			510 Secs (1864 Secs) [==>466.0 Secs (Split 1)] [==>466.0 Secs (Split 2)] [==>466.0 Secs (Split 3)] [==>466.0 Secs (Split 4)]	[1]



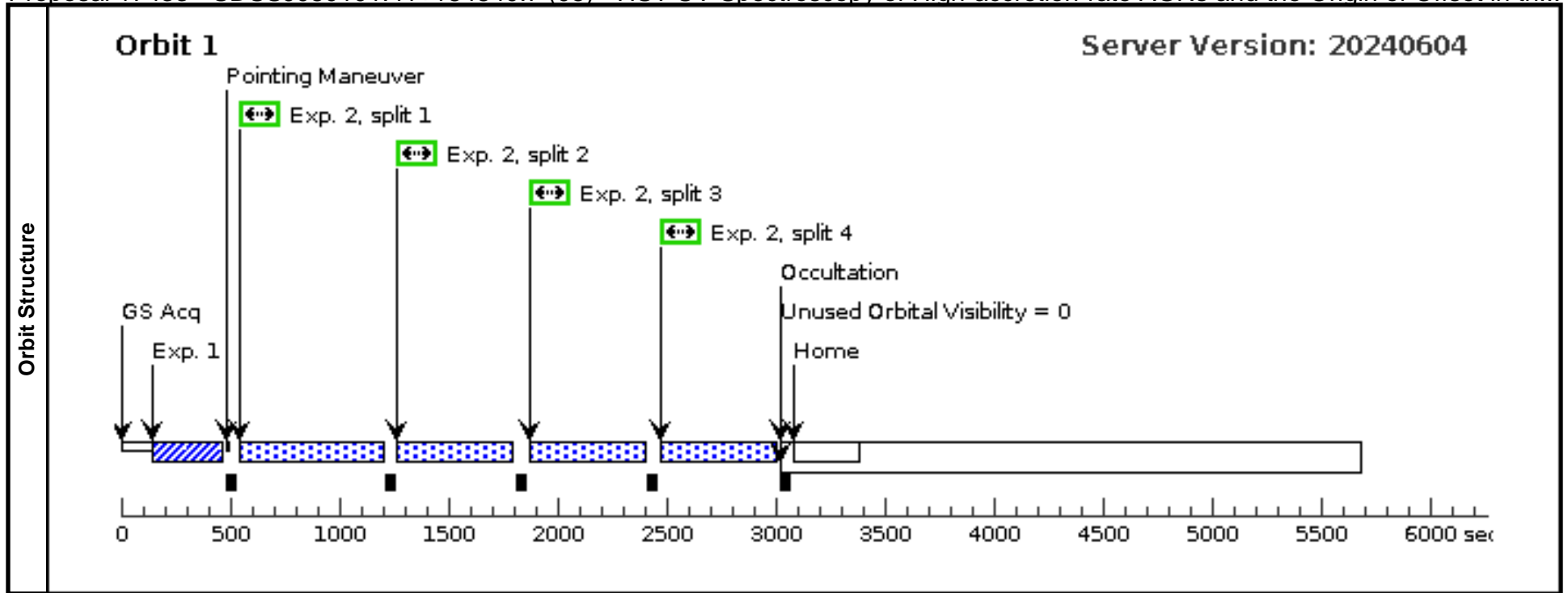
Proposal 17433 - SDSSJ075101.42+291419.1 (04) - HST UV Spectroscopy of High-accretion-rate AGNs and the Origin of Offset in th...

Visit	Proposal 17433, SDSSJ075101.42+291419.1 (04), completed Fri Dec 20 00:00:24 GMT 2024 Diagnostic Status: No Diagnostics Scientific Instruments: COS/FUV, COS/NUV Special Requirements: (none)																																							
Fixed Targets	<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th>#</th> <th>Name</th> <th>Target Coordinates</th> <th>Targ. Coord. Corrections</th> <th>Fluxes</th> <th>Miscellaneous</th> </tr> </thead> <tbody> <tr> <td>(4)</td> <td>SDSSJ075101.42+291419.1</td> <td>RA: 07 51 1.4236 (117.7559317d) Dec: +29 14 19.16 (29.23866d) Equinox: J2000</td> <td>Proper Motion RA: 5.806450627030955E-6 sec of time/yr Proper Motion Dec: 1.9E-5 arcsec/yr Epoch of Position: 2015.5 Redshift: 0.120</td> <td>V=17.25+/-0.1 FUV=18.4, NUV=17.7</td> <td>Reference Frame: ICRS</td> </tr> </tbody> </table> <p><i>Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.</i> Category=GALAXY Description=[QSO, QUASAR] Extended=NO</p>										#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous	(4)	SDSSJ075101.42+291419.1	RA: 07 51 1.4236 (117.7559317d) Dec: +29 14 19.16 (29.23866d) Equinox: J2000	Proper Motion RA: 5.806450627030955E-6 sec of time/yr Proper Motion Dec: 1.9E-5 arcsec/yr Epoch of Position: 2015.5 Redshift: 0.120	V=17.25+/-0.1 FUV=18.4, NUV=17.7	Reference Frame: ICRS																		
#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous																																			
(4)	SDSSJ075101.42+291419.1	RA: 07 51 1.4236 (117.7559317d) Dec: +29 14 19.16 (29.23866d) Equinox: J2000	Proper Motion RA: 5.806450627030955E-6 sec of time/yr Proper Motion Dec: 1.9E-5 arcsec/yr Epoch of Position: 2015.5 Redshift: 0.120	V=17.25+/-0.1 FUV=18.4, NUV=17.7	Reference Frame: ICRS																																			
Exposures	<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th>#</th> <th>Label (ETC Run)</th> <th>Target</th> <th>Config,Mode,Aperture</th> <th>Spectral Els.</th> <th>Opt. Params.</th> <th>Special Reqs.</th> <th>Groups</th> <th>Exp. Time (Total)/[Actual Dur.]</th> <th>Orbit</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>ACQ/IMAG E COS/NUV (1890124)</td> <td>(4) SDSSJ075101.42 +291419.1</td> <td>COS/NUV, ACQ/IMAGE, PSA</td> <td>MIRRORB</td> <td></td> <td></td> <td></td> <td>21 Secs (21 Secs) [==>]</td> <td>[1]</td> </tr> <tr> <td>2</td> <td>EXP01 COS /FUV (1890047)</td> <td>(4) SDSSJ075101.42 +291419.1</td> <td>COS/FUV, TIME-TAG, PSA</td> <td>G140L 1280 A</td> <td>BUFFER-TIME=19 74; FP-POS=ALL</td> <td></td> <td></td> <td>501 Secs (1916 Secs) [==>479.0 Secs (Split 1)] [==>479.0 Secs (Split 2)] [==>479.0 Secs (Split 3)] [==>479.0 Secs (Split 4)]</td> <td>[1]</td> </tr> </tbody> </table>										#	Label (ETC Run)	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit	1	ACQ/IMAG E COS/NUV (1890124)	(4) SDSSJ075101.42 +291419.1	COS/NUV, ACQ/IMAGE, PSA	MIRRORB				21 Secs (21 Secs) [==>]	[1]	2	EXP01 COS /FUV (1890047)	(4) SDSSJ075101.42 +291419.1	COS/FUV, TIME-TAG, PSA	G140L 1280 A	BUFFER-TIME=19 74; FP-POS=ALL			501 Secs (1916 Secs) [==>479.0 Secs (Split 1)] [==>479.0 Secs (Split 2)] [==>479.0 Secs (Split 3)] [==>479.0 Secs (Split 4)]	[1]
#	Label (ETC Run)	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit																															
1	ACQ/IMAG E COS/NUV (1890124)	(4) SDSSJ075101.42 +291419.1	COS/NUV, ACQ/IMAGE, PSA	MIRRORB				21 Secs (21 Secs) [==>]	[1]																															
2	EXP01 COS /FUV (1890047)	(4) SDSSJ075101.42 +291419.1	COS/FUV, TIME-TAG, PSA	G140L 1280 A	BUFFER-TIME=19 74; FP-POS=ALL			501 Secs (1916 Secs) [==>479.0 Secs (Split 1)] [==>479.0 Secs (Split 2)] [==>479.0 Secs (Split 3)] [==>479.0 Secs (Split 4)]	[1]																															



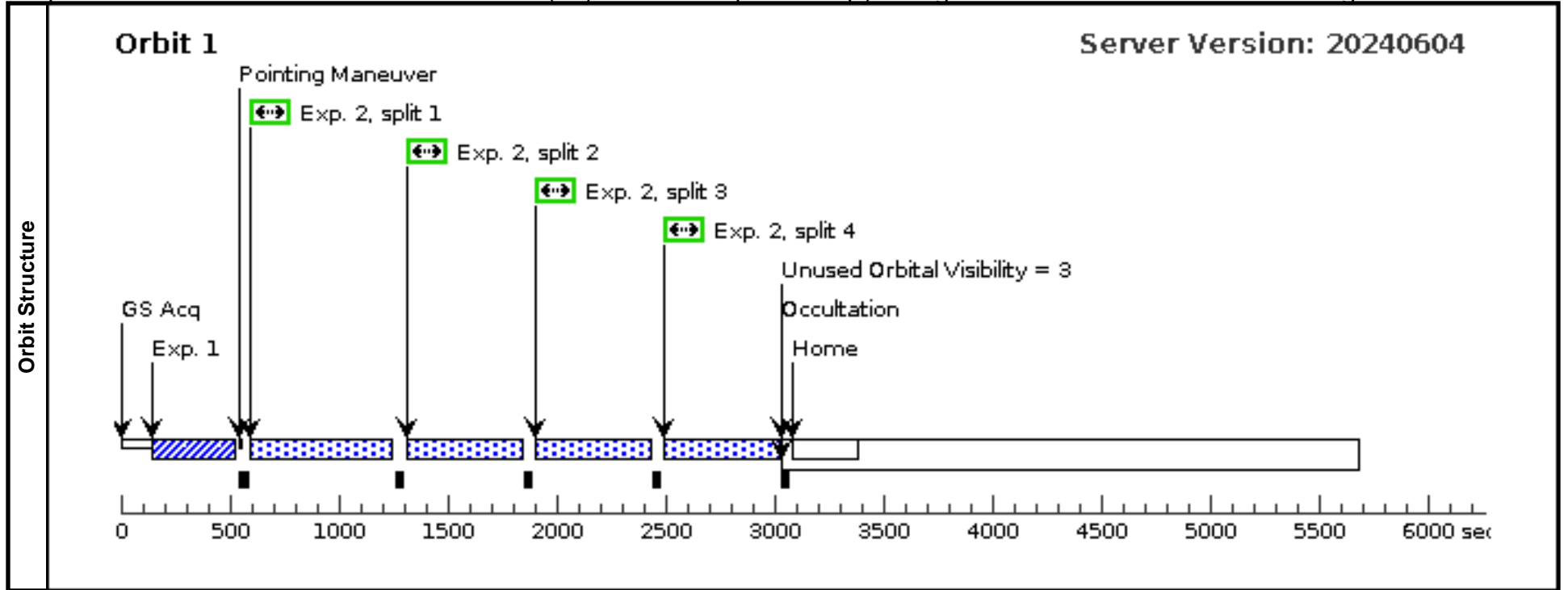
Proposal 17433 - SDSSJ080101.41+184840.7 (05) - HST UV Spectroscopy of High-accretion-rate AGNs and the Origin of Offset in th...

Visit		Proposal 17433, SDSSJ080101.41+184840.7 (05), completed Fri Dec 20 00:00:24 GMT 2024									
Fixed Targets		Diagnostic Status: No Diagnostics Scientific Instruments: COS/FUV, COS/NUV Special Requirements: (none)									
#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous						
(5)	SDSSJ080101.41+184840.7	RA: 08 01 1.4078 (120.2558658d) Dec: +18 48 40.85 (18.81135d) Equinox: J2000	Proper Motion RA: 5.070857775023197E-6 sec of time/yr Proper Motion Dec: 3.8E-5 arcsec/yr Epoch of Position: 2015.5 Redshift: 0.140	V=16.88+/-0.1	Reference Frame: ICRS						
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		1	ACQ/IMAG E COS/NUV (1890125)	(5) SDSSJ080101.41 +184840.7	COS/NUV, ACQ/IMAGE, PSA	MIRRORB				16 Secs (16 Secs)	
		[==>]									[1]
		2	EXP01 COS /FUV (1890049)	(5) SDSSJ080101.41 +184840.7	COS/FUV, TIME-TAG, PSA	G140L 1280 A	BUFFER-TIME=16 12; FP-POS=ALL			455 Secs (1920 Secs)	
		[==>480.0 Secs (Split 1)]									[1]
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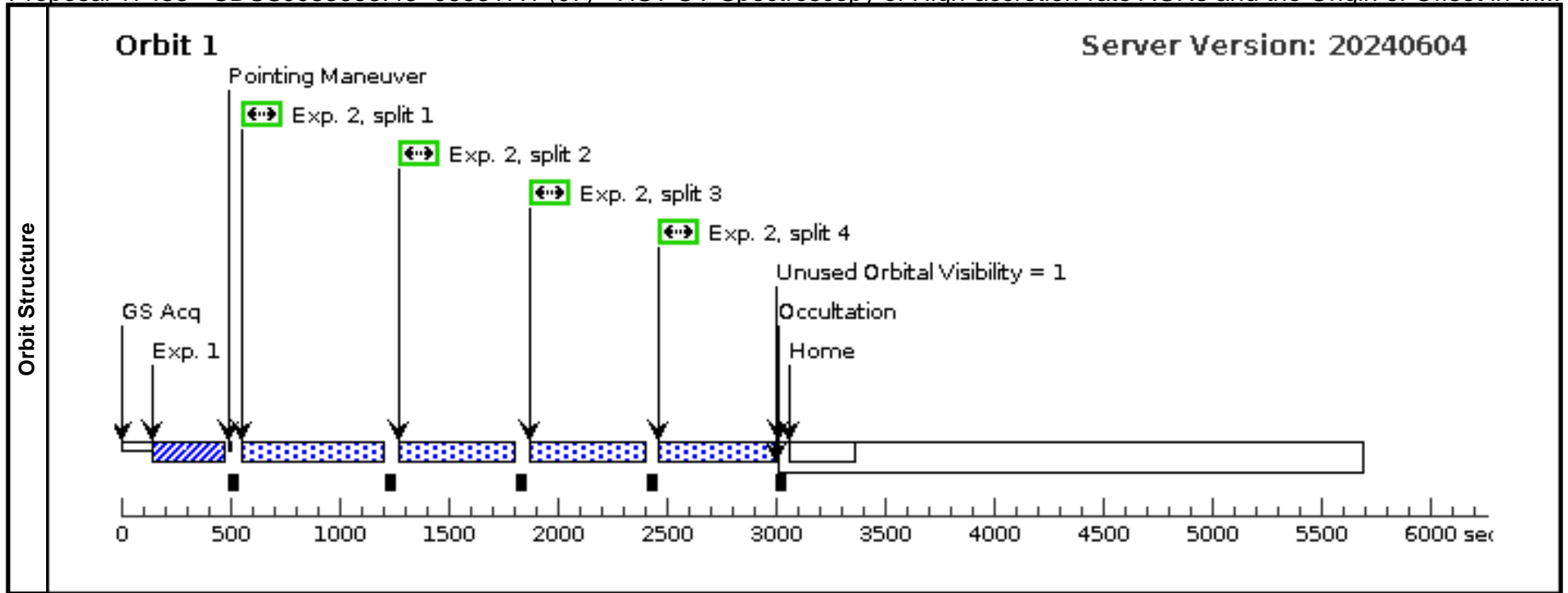
Proposal 17433 - SDSSJ080131.58+354436.4 (06) - HST UV Spectroscopy of High-accretion-rate AGNs and the Origin of Offset in th...

Visit	Proposal 17433, SDSSJ080131.58+354436.4 (06), completed Fri Dec 20 00:00:24 GMT 2024 Diagnostic Status: No Diagnostics Scientific Instruments: COS/FUV, COS/NUV Special Requirements: (none)									
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(6)		SDSSJ080131.58+354436.4	RA: 08 01 31.5900 (120.3816250d) Dec: +35 44 36.36 (35.74343d) Equinox: J2000	Proper Motion RA: -6.899602783229938E-6 sec of time/yr Proper Motion Dec: -6.500006293208571E-5 arcsec/yr Epoch of Position: 2015.5 Redshift: 0.179	V=17.95+/-0.1 FUV=18.8, NUV=18.5	Reference Frame: ICRS				
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Exposures	#	Label (ETC Run)	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
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	2	EXP01 COS /FUV (1890053)	(6) SDSSJ080131.58 +354436.4	COS/FUV, TIME-TAG, PSA	G140L 1280 A	BUFFER-TIME=21 79; FP-POS=ALL			466 Secs (1904 Secs) [==>476.0 Secs (Split 1)] [==>476.0 Secs (Split 2)] [==>476.0 Secs (Split 3)] [==>476.0 Secs (Split 4)]	[1]



Proposal 17433 - SDSSJ083553.46+055317.1 (07) - HST UV Spectroscopy of High-accretion-rate AGNs and the Origin of Offset in th...

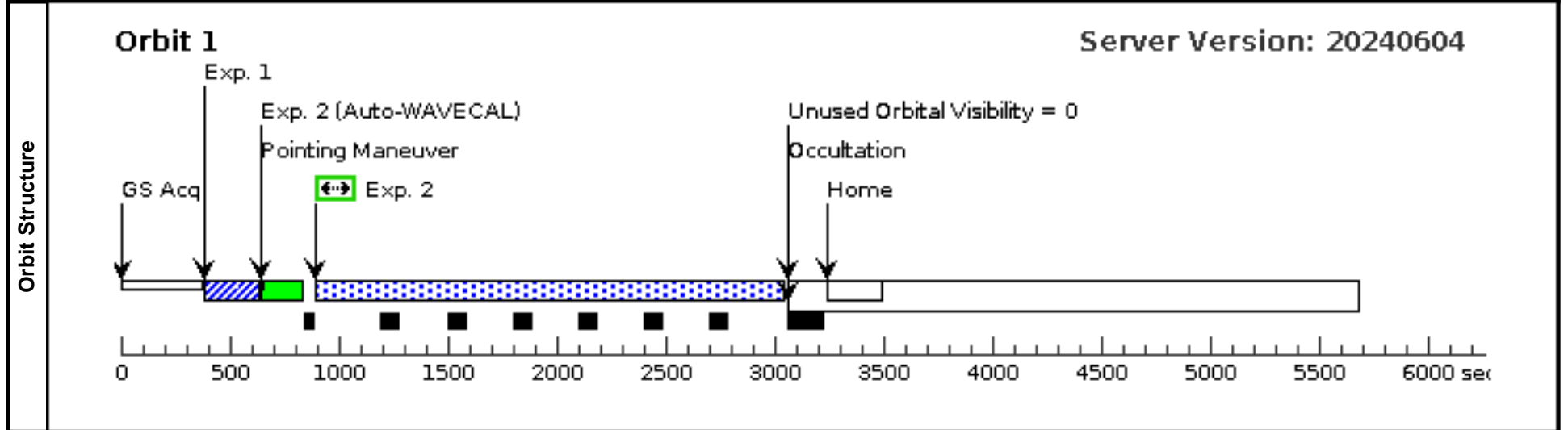
Visit		Proposal 17433, SDSSJ083553.46+055317.1 (07), completed Fri Dec 20 00:00:24 GMT 2024 Diagnostic Status: No Diagnostics Scientific Instruments: COS/FUV, COS/NUV Special Requirements: (none)									
Fixed Targets		#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous				
		(7)	SDSSJ083553.46+055317.1	RA: 08 35 53.4636 (128.9727650d) Dec: +05 53 17.12 (5.88809d) Equinox: J2000	Proper Motion RA: -3.552073479578971E-6 sec of time/yr Proper Motion Dec: 4.4999999999999996E-5 arcsec/yr Epoch of Position: 2015.5 Redshift: 0.205	V=17.39+/-0.1 NUV=17.7	Reference Frame: ICRS				
		Comments: This object was generated by the targetselector and retrieved from the SIMBAD database. Category=GALAXY Description=[QSO, QUASAR] Extended=NO									
Exposures		#	Label (ETC Run)	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
		1	ACQ/IMAG E COS/NUV V (1890130)	(7) SDSSJ083553.46 +055317.1	COS/NUV, ACQ/IMAGE, PSA	MIRRORB				21 Secs (21 Secs) [==>]	[1]
		2	EXP01 COS /FUV (1890055)	(7) SDSSJ083553.46 +055317.1	COS/FUV, TIME-TAG, PSA	G140L 1280 A	BUFFER-TIME=18 62; FP-POS=ALL			455 Secs (1896 Secs) [==>474.0 Secs (Split 1)] [==>474.0 Secs (Split 2)] [==>474.0 Secs (Split 3)] [==>474.0 Secs (Split 4)]	[1]



Visit	Proposal 17433, SDSSJ084533.28+474934.5 (08), completed Fri Dec 20 00:00:24 GMT 2024				
	Diagnostic Status: No Diagnostics				
	Scientific Instruments: STIS/NUV-MAMA, STIS/CCD				
	Special Requirements: (none)				

Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
	(8)	SDSSJ084533.28+474934.5	RA: 08 45 33.2907 (131.3887113d) Dec: +47 49 34.53 (47.82626d) Equinox: J2000	Proper Motion RA: -1.290871594608827E-5 sec of time/yr Proper Motion Dec: 1.16E-4 arcsec/yr Epoch of Position: 2015.5 Redshift: 0.308	V=17.98+/-0.1 FUV=18.7, NUV=18.5	Reference Frame: ICRS
	<i>Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.</i>					
	Category=GALAXY Description=[QSO, QUASAR] Extended=NO					

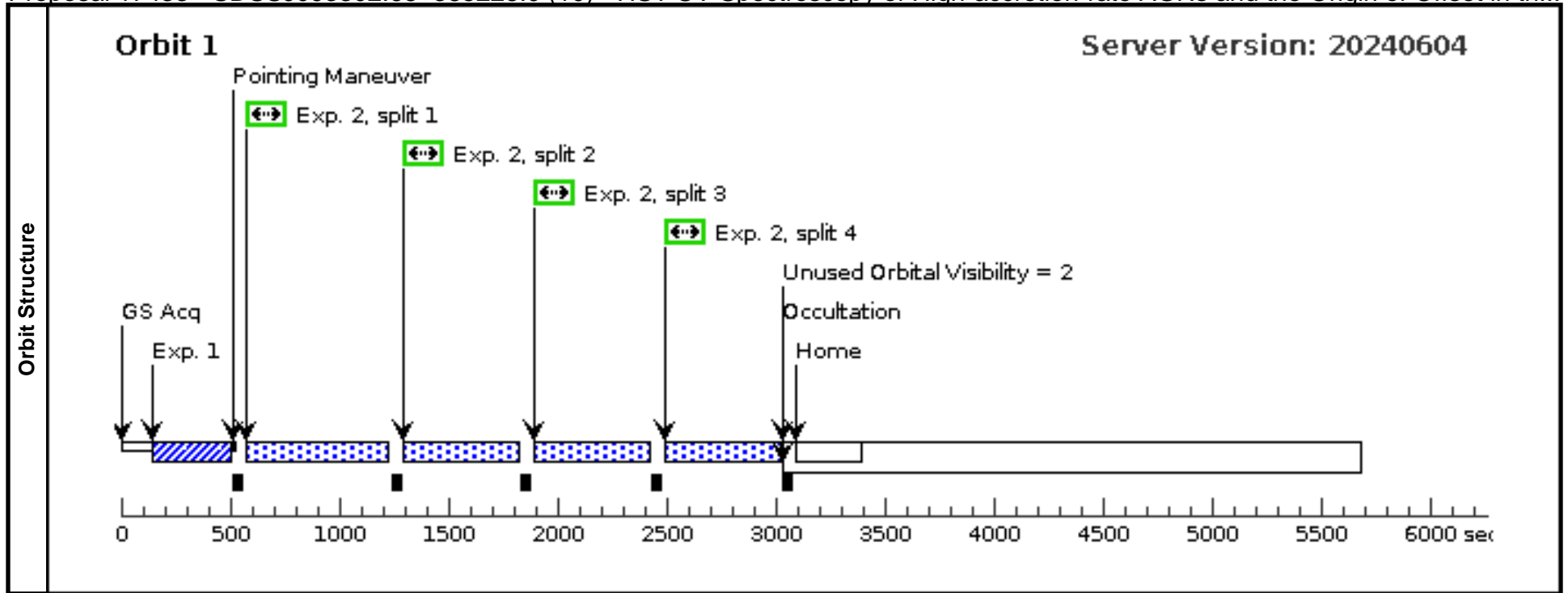
Exposures	#	Label (ETC Run)	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
	1	ACQ STIS (1890056)	(8) SDSSJ084533.28 +474934.5	STIS/CCD, ACQ, F28X50LP	MIRROR	ACQTYPE=POINT			5 Secs (5 Secs)	
									[==>]	[1]
	2	EXP01 STIS (1890058)	(8) SDSSJ084533.28 +474934.5	STIS/NUV-MAMA, TIME-TAG, 52X0.2	G230L 2376 A	BUFFER-TIME=30 0			2273 Secs (2135 Secs)	
									[==>2135.0 Secs]	[1]



Visit	Proposal 17433, SDSSJ085946.35+274534.8 (09), completed Fri Dec 20 00:00:24 GMT 2024 Diagnostic Status: No Diagnostics Scientific Instruments: STIS/NUV-MAMA, STIS/CCD Special Requirements: (none)									
	Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous			
(9)		SDSSJ085946.35+274534.8	RA: 08 59 46.3539 (134.9431412d) Dec: +27 45 34.86 (27.75968d) Equinox: J2000	Proper Motion RA: -6.780358729638599E-7 sec of time/yr Proper Motion Dec: 1.0E-6 arcsec/yr Epoch of Position: 2015.5 Redshift: 0.244	V=17.80+/-0.1 FUV=18.5, NUV=18.4	Reference Frame: ICRS				
Comments: This object was generated by the targetselector and retrieved from the SIMBAD database. Category=GALAXY Description=[QSO, QUASAR] Extended=NO										
Exposures	#	Label (ETC Run)	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
	1	ACQ STIS (1890059)	(9) SDSSJ085946.35 +274534.8	STIS/CCD, ACQ, F28X50LP	MIRROR	ACQTYPE=POINT			5 Secs (5 Secs)	
	2	EXP01 STIS (1890060)	(9) SDSSJ085946.35 +274534.8	STIS/NUV-MAMA, TIME-TAG, 52X0.2	G230L 2376 A	BUFFER-TIME=30 0			2154 Secs (2105 Secs)	[1]
Orbit Structure	Server Version: 20240604									
	<p>The diagram shows the timeline for Orbit 1. Key events are marked with arrows: GS Acq (~200s), Exp. 1 (~400s), Pointing Maneuver (~600s), Exp. 2 (Auto-WAVECAL) (~700s), Occultation (~3000s), and Home (~3200s). A note indicates 'Unused Orbital Visibility = 0'. The x-axis represents time in seconds from 0 to 6000.</p>									

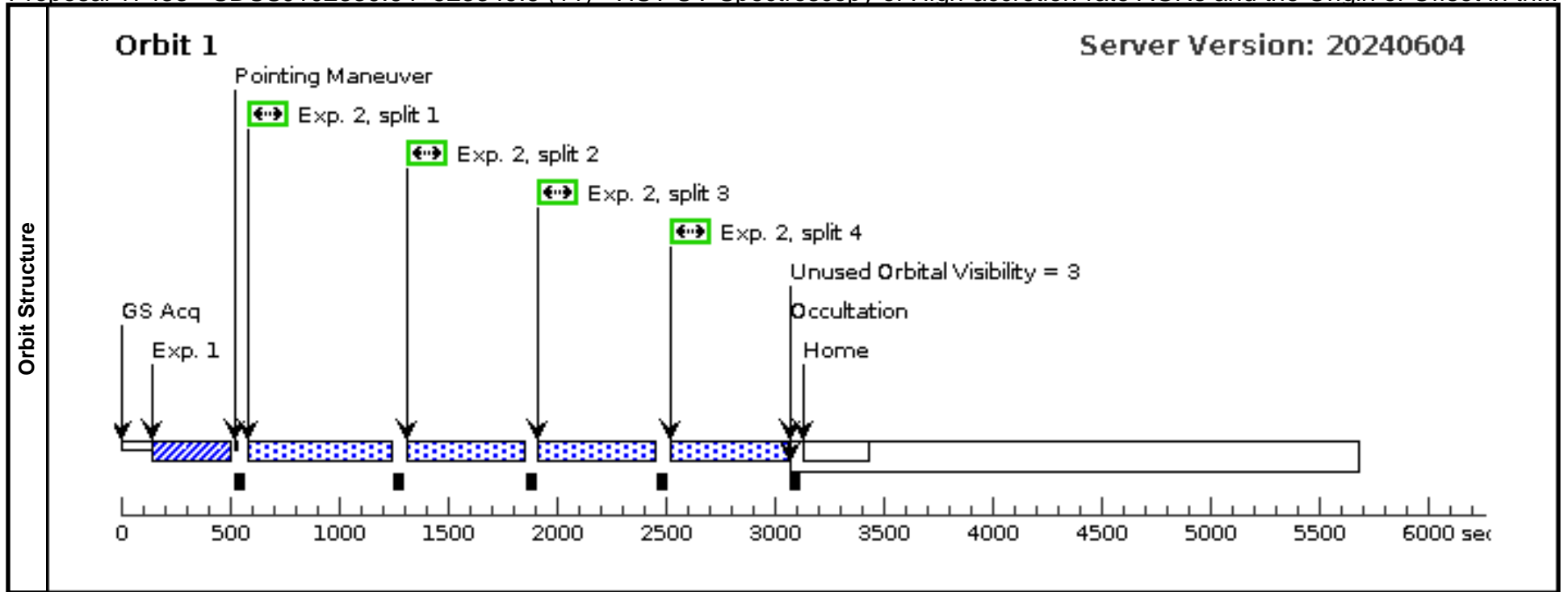
Proposal 17433 - SDSSJ093302.68+385228.0 (10) - HST UV Spectroscopy of High-accretion-rate AGNs and the Origin of Offset in th...

Visit		Proposal 17433, SDSSJ093302.68+385228.0 (10), completed Fri Dec 20 00:00:24 GMT 2024							
Fixed Targets		Diagnostic Status: No Diagnostics Scientific Instruments: COS/FUV, COS/NUV Special Requirements: (none)							
#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous				
(10)	SDSSJ093302.68+385228.0	RA: 09 33 2.6852 (143.2611883d) Dec: +38 52 28.01 (38.87445d) Equinox: J2000	Proper Motion RA: 9.162647884496686E-6 sec of time/yr Proper Motion Dec: -2.1100008780194912E-4 arcsec/yr Epoch of Position: 2015.5 Redshift: 0.177	V=17.72+/-0.1 FUV=18.3, NUV=18.2	Reference Frame: ICRS				
<i>Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.</i> Category=GALAXY Description=[QSO, QUASAR] Extended=NO									
#	Label (ETC Run)	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
1	ACQ/IMAG E COS/NUV (1890127)	(10) SDSSJ093302.68+385228.0	COS/NUV, ACQ/IMAGE, PSA	MIRRORB				33 Secs (33 Secs) [==>]	[1]
2	EXP01 COS /FUV (1890062)	(10) SDSSJ093302.68+385228.0	COS/FUV, TIME-TAG, PSA	G140L 1280 A	BUFFER-TIME=20 32; FP-POS=ALL			467 Secs (1900 Secs) [==>475.0 Secs (Split 1)] [==>475.0 Secs (Split 2)] [==>475.0 Secs (Split 3)] [==>475.0 Secs (Split 4)]	[1]



Proposal 17433 - SDSSJ102339.64+523349.6 (11) - HST UV Spectroscopy of High-accretion-rate AGNs and the Origin of Offset in th...

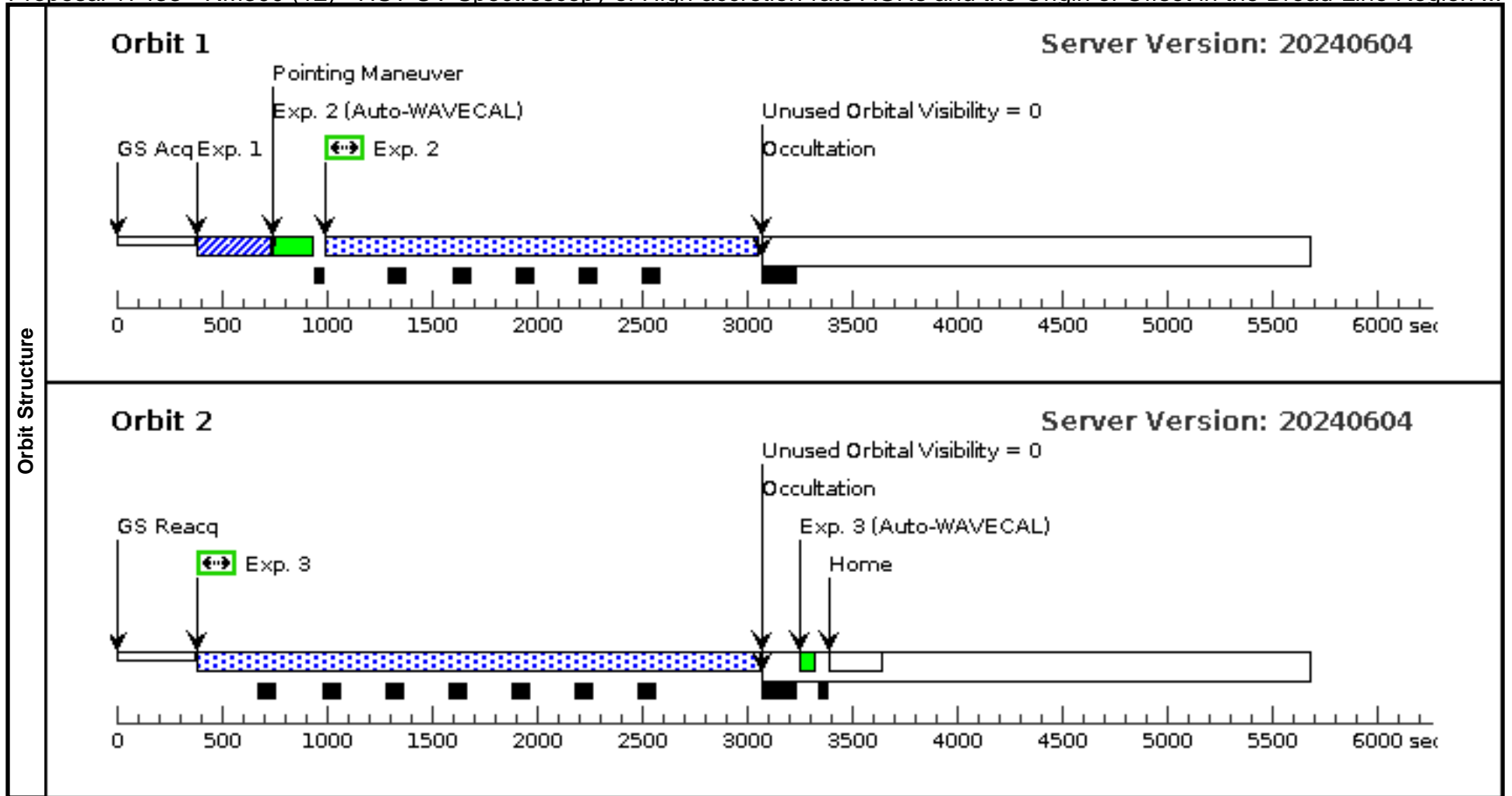
Visit	Proposal 17433, SDSSJ102339.64+523349.6 (11), completed Fri Dec 20 00:00:24 GMT 2024 Diagnostic Status: No Diagnostics Scientific Instruments: COS/FUV, COS/NUV Special Requirements: (none)																														
	Fixed Targets	<table border="1"> <thead> <tr> <th>#</th> <th>Name</th> <th>Target Coordinates</th> <th>Targ. Coord. Corrections</th> <th>Fluxes</th> <th>Miscellaneous</th> </tr> </thead> <tbody> <tr> <td>(11)</td> <td>SDSSJ102339.64+523349.6</td> <td> RA: 10 23 39.6569 (155.9152371d) Dec: +52 33 49.67 (52.56380d) Equinox: J2000 </td> <td> Proper Motion RA: 3.301102718356809E-5 sec of time/yr Proper Motion Dec: 1.089999999999998E-4 arcsec/yr Epoch of Position: 2015.5 Redshift: 0.136 </td> <td> V=17.27+/-0.1 FUV=18.2, NUV=18.3 </td> <td>Reference Frame: ICRS</td> </tr> </tbody> </table> <p><i>Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.</i> Category=GALAXY Description=[QSO, QUASAR] Extended=NO</p>	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous	(11)	SDSSJ102339.64+523349.6	RA: 10 23 39.6569 (155.9152371d) Dec: +52 33 49.67 (52.56380d) Equinox: J2000	Proper Motion RA: 3.301102718356809E-5 sec of time/yr Proper Motion Dec: 1.089999999999998E-4 arcsec/yr Epoch of Position: 2015.5 Redshift: 0.136	V=17.27+/-0.1 FUV=18.2, NUV=18.3	Reference Frame: ICRS																	
#		Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous																									
(11)	SDSSJ102339.64+523349.6	RA: 10 23 39.6569 (155.9152371d) Dec: +52 33 49.67 (52.56380d) Equinox: J2000	Proper Motion RA: 3.301102718356809E-5 sec of time/yr Proper Motion Dec: 1.089999999999998E-4 arcsec/yr Epoch of Position: 2015.5 Redshift: 0.136	V=17.27+/-0.1 FUV=18.2, NUV=18.3	Reference Frame: ICRS																										
Exposures	<table border="1"> <thead> <tr> <th>#</th> <th>Label (ETC Run)</th> <th>Target</th> <th>Config,Mode,Aperture</th> <th>Spectral Els.</th> <th>Opt. Params.</th> <th>Special Reqs.</th> <th>Groups</th> <th>Exp. Time (Total)/[Actual Dur.]</th> <th>Orbit</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>ACQ/IMAG E COS/NUV (1890126)</td> <td>(11) SDSSJ102339.64+523349.6</td> <td>COS/NUV, ACQ/IMAGE, PSA</td> <td>MIRRORB</td> <td></td> <td></td> <td></td> <td>36 Secs (36 Secs) [==>]</td> <td>[1]</td> </tr> <tr> <td>2</td> <td>EXP01 COS /FUV (1890065)</td> <td>(11) SDSSJ102339.64+523349.6</td> <td>COS/FUV, TIME-TAG, PSA</td> <td>G140L 1280 A</td> <td>BUFFER-TIME=19 12; FP-POS=ALL</td> <td></td> <td></td> <td>503 Secs (1932 Secs) [==>483.0 Secs (Split 1)] [==>483.0 Secs (Split 2)] [==>483.0 Secs (Split 3)] [==>483.0 Secs (Split 4)]</td> <td>[1]</td> </tr> </tbody> </table>	#	Label (ETC Run)	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit	1	ACQ/IMAG E COS/NUV (1890126)	(11) SDSSJ102339.64+523349.6	COS/NUV, ACQ/IMAGE, PSA	MIRRORB				36 Secs (36 Secs) [==>]	[1]	2	EXP01 COS /FUV (1890065)	(11) SDSSJ102339.64+523349.6	COS/FUV, TIME-TAG, PSA	G140L 1280 A	BUFFER-TIME=19 12; FP-POS=ALL			503 Secs (1932 Secs) [==>483.0 Secs (Split 1)] [==>483.0 Secs (Split 2)] [==>483.0 Secs (Split 3)] [==>483.0 Secs (Split 4)]	[1]
	#	Label (ETC Run)	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit																					
1	ACQ/IMAG E COS/NUV (1890126)	(11) SDSSJ102339.64+523349.6	COS/NUV, ACQ/IMAGE, PSA	MIRRORB				36 Secs (36 Secs) [==>]	[1]																						
2	EXP01 COS /FUV (1890065)	(11) SDSSJ102339.64+523349.6	COS/FUV, TIME-TAG, PSA	G140L 1280 A	BUFFER-TIME=19 12; FP-POS=ALL			503 Secs (1932 Secs) [==>483.0 Secs (Split 1)] [==>483.0 Secs (Split 2)] [==>483.0 Secs (Split 3)] [==>483.0 Secs (Split 4)]	[1]																						



Proposal 17433 - RM300 (12) - HST UV Spectroscopy of High-accretion-rate AGNs and the Origin of Offset in the Broad-Line Region ...

Fri Dec 20 00:00:24 GMT 2024

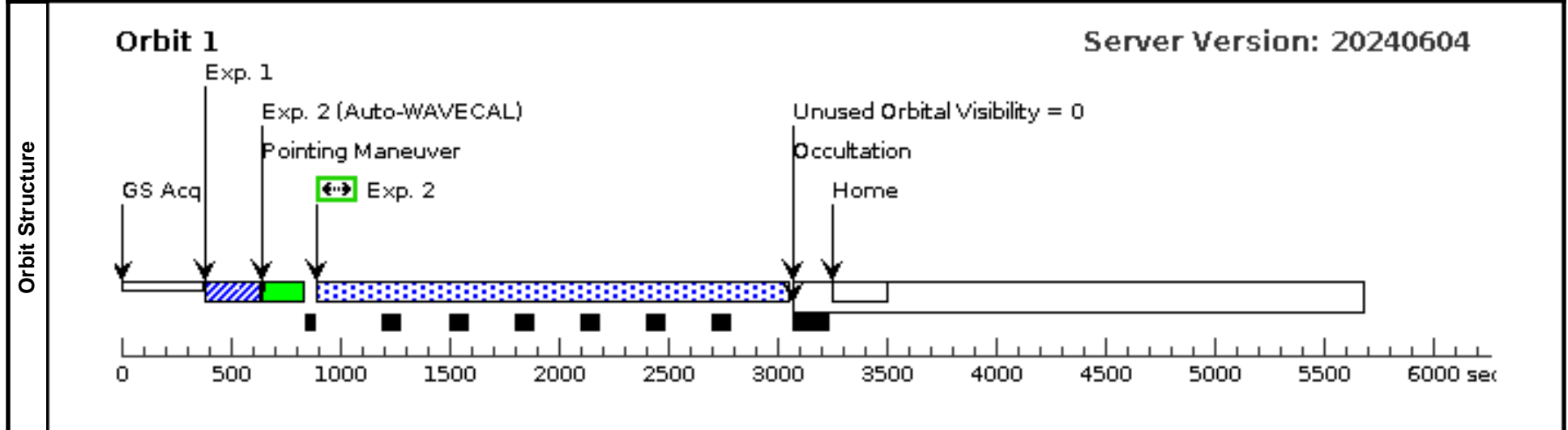
Visit	Proposal 17433, RM300 (12), completed Diagnostic Status: No Diagnostics Scientific Instruments: STIS/NUV-MAMA, STIS/CCD Special Requirements: (none)									
	Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous			
		(12)	RM300	RA: 14 19 41.1083 (214.9212846d) Dec: +53 36 49.62 (53.61378d) Equinox: J2000	Proper Motion RA: 3.618636698386317E-5 sec of time/yr Proper Motion Dec: 6.8E-5 arcsec/yr Epoch of Position: 2015.5 Redshift: 0.646	V=19.5+/-0.1 NUV=20.0	Reference Frame: ICRS			
	<i>Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.</i> Category=GALAXY Description=[QSO, QUASAR] Extended=NO									
Exposures	#	Label (ETC Run)	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
	1	ACQ STIS (1890077)	(12) RM300	STIS/CCD, ACQ, F28X50LP	MIRROR	ACQTYPE=POINT			30 Secs (30 Secs)	
									[==>]	[1]
	2	EXP01 STIS (1890078)	(12) RM300	STIS/NUV-MAMA, TIME-TAG, 52X0.2	G230L 2376 A	BUFFER-TIME=30 0			2233 Secs (2051 Secs)	
								[==>2051.0 Secs]	[1]	
3	EXP02 STIS (1890078)	(12) RM300	STIS/NUV-MAMA, TIME-TAG, 52X0.2	G230L 2376 A	BUFFER-TIME=30 0			2903 Secs (2670 Secs)		
								[==>2670.0 Secs]	[2]	



Visit	Proposal 17433, RM316 (13), scheduling				
	Diagnostic Status: No Diagnostics				
	Scientific Instruments: STIS/NUV-MAMA, STIS/CCD				
	Special Requirements: (none)				

Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
	(13)	RM316	RA: 14 20 52.4387 (215.2184946d) Dec: +52 56 22.39 (52.93955d) Equinox: J2000	Proper Motion RA: -1.803125505360705E-5 sec of time/yr Proper Motion Dec: 8.0E-6 arcsec/yr Epoch of Position: 2015.5 Redshift: 0.676	V=18.30+/-0.1 NUV=18.3	Reference Frame: ICRS
	<i>Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.</i>					
	Category=GALAXY Description=[QSO, QUASAR] Extended=NO					

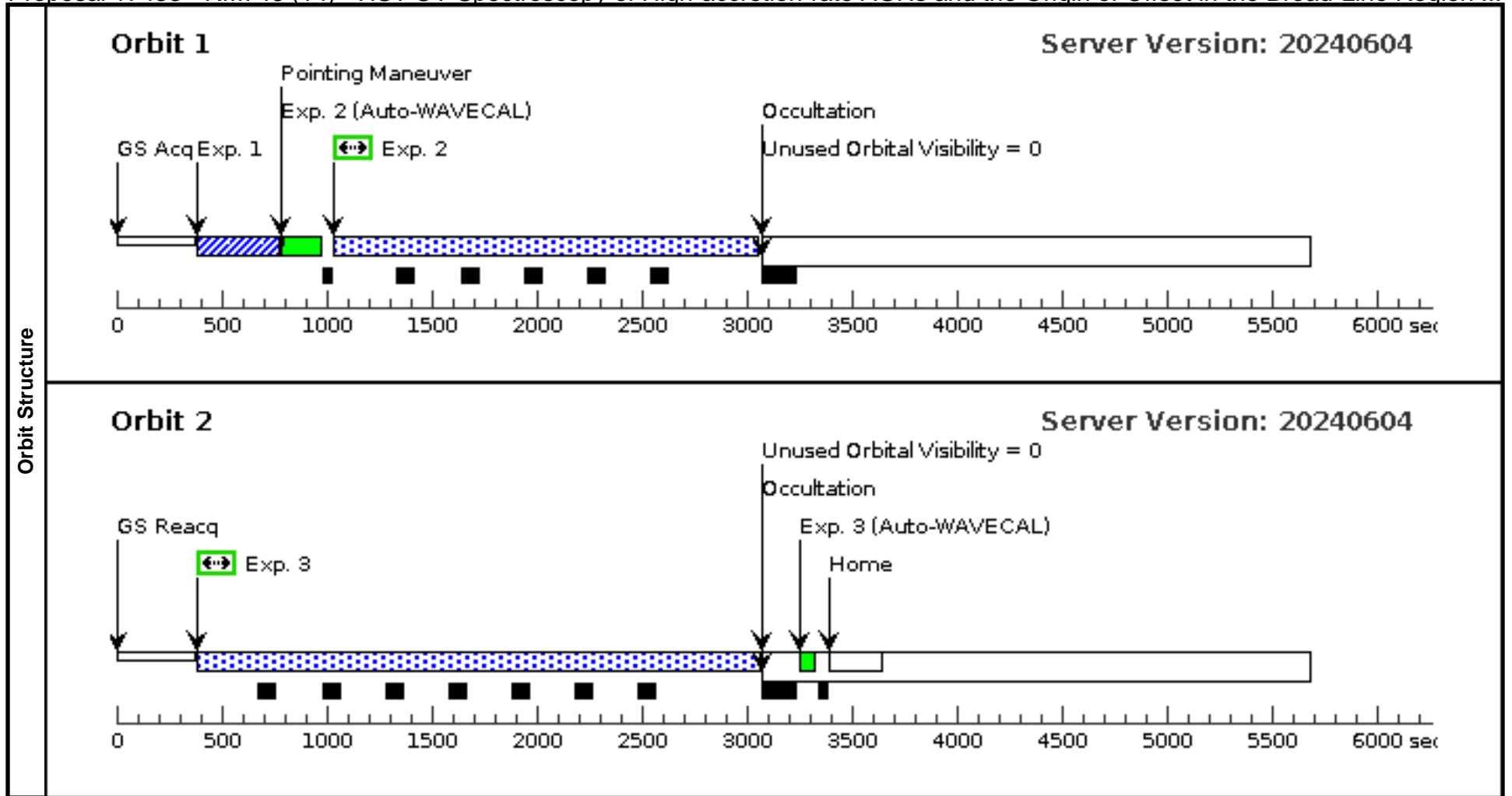
Exposures	#	Label (ETC Run)	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
	1	ACQ STIS (1890068)	(13) RM316	STIS/CCD, ACQ, F28X50LP	MIRROR	ACQTYPE=POINT			5 Secs (5 Secs) [=>]	[1]
	2	EXP01 STIS (1890069)	(13) RM316	STIS/NUV-MAMA, TIME-TAG, 52X0.2	G230L 2376 A	BUFFER-TIME=30 0			2333 Secs (2151 Secs) [=>2151.0 Secs]	[1]



Proposal 17433 - RM746 (14) - HST UV Spectroscopy of High-accretion-rate AGNs and the Origin of Offset in the Broad-Line Region ...

Fri Dec 20 00:00:24 GMT 2024

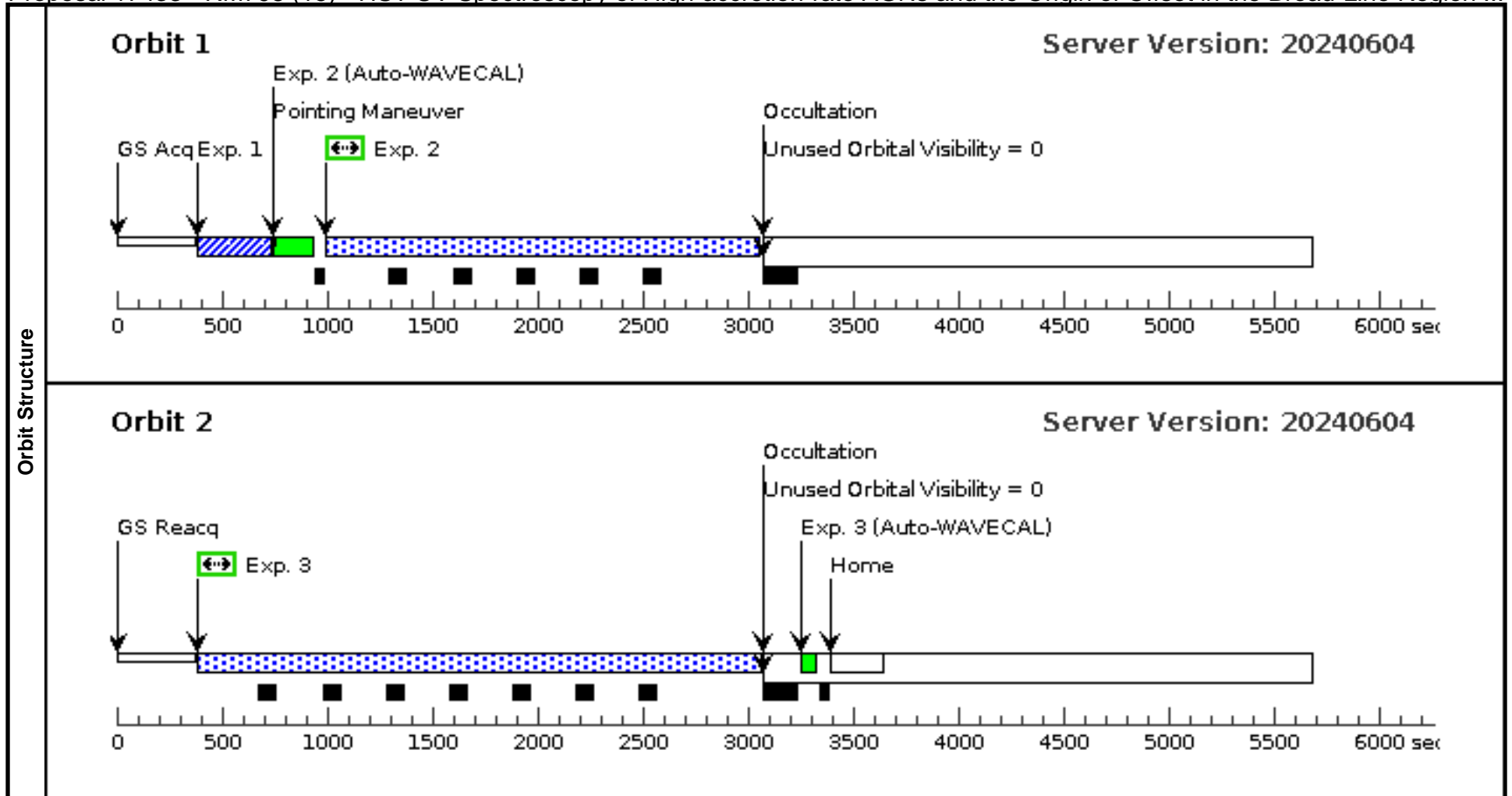
Visit	Proposal 17433, RM746 (14), completed Diagnostic Status: No Diagnostics Scientific Instruments: STIS/NUV-MAMA, STIS/CCD Special Requirements: (none)									
	Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous			
		(14)	RM746	RA: 14 17 20.2998 (214.3345825d) Dec: +51 40 32.28 (51.67563d) Equinox: J2000	Proper Motion RA: -2.6984341761293542E-5 sec of time/yr Proper Motion Dec: 2.3500000000000002E-4 arcsec/yr Epoch of Position: 2015.5 Redshift: 0.683	V=19.9+/-0.1 NUV=20.6	Reference Frame: ICRS			
	<i>Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.</i> Category=GALAXY Description=[QSO, QUASAR] Extended=NO									
Exposures	#	Label (ETC Run)	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
	1	ACQ STIS (1890071)	(14) RM746	STIS/CCD, ACQ, F28X50LP	MIRROR	ACQTYPE=POINT			40 Secs (40 Secs)	
									[==>]	[1]
	2	EXP01 STIS (1890073)	(14) RM746	STIS/NUV-MAMA, TIME-TAG, 52X0.2	G230L 2376 A	BUFFER-TIME=30 0			2193 Secs (2011 Secs)	
								[==>2011.0 Secs]	[1]	
3	EXP02 STIS (1890073)	(14) RM746	STIS/NUV-MAMA, TIME-TAG, 52X0.2	G230L 2376 A	BUFFER-TIME=30 0			2903 Secs (2670 Secs)		
								[==>2670.0 Secs]	[2]	



Proposal 17433 - RM798 (15) - HST UV Spectroscopy of High-accretion-rate AGNs and the Origin of Offset in the Broad-Line Region ...

Fri Dec 20 00:00:24 GMT 2024

Visit	Proposal 17433, RM798 (15), completed Diagnostic Status: No Diagnostics Scientific Instruments: STIS/NUV-MAMA, STIS/CCD Special Requirements: (none)									
	Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous			
		(15)	RM798	RA: 14 12 2.8741 (213.0119754d) Dec: +52 20 26.08 (52.34058d) Equinox: J2000	Proper Motion RA: -8.696603061408824E-5 sec of time/yr Proper Motion Dec: -3.2599996302451473E-4 arcsec/yr Epoch of Position: 2015.5 Redshift: 0.423	V=19.4+/-0.1 NUV=20.3	Reference Frame: ICRS			
	<i>Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.</i> Category=GALAXY Description=[QSO, QUASAR] Extended=NO									
Exposures	#	Label (ETC Run)	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
	1	ACQ STIS (1890081)	(15) RM798	STIS/CCD, ACQ, F28X50LP	MIRROR	ACQTYPE=POINT			30 Secs (30 Secs)	
									[==>]	[1]
	2	EXP01 STIS (1890083)	(15) RM798	STIS/NUV-MAMA, TIME-TAG, 52X0.2	G230L 2376 A	BUFFER-TIME=30 0			2233 Secs (2051 Secs)	
								[==>2051.0 Secs]	[1]	
3	EXP02 STIS (1890083)	(15) RM798	STIS/NUV-MAMA, TIME-TAG, 52X0.2	G230L 2376 A	BUFFER-TIME=30 0			2903 Secs (2670 Secs)		
								[==>2670.0 Secs]	[2]	



Visit	Proposal 17433, RM822 (16), completed				
	Diagnostic Status: No Diagnostics				
	Scientific Instruments: STIS/NUV-MAMA, STIS/CCD				
	Special Requirements: (none)				

Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
	(16)	RM822	RA: 14 13 8.1018 (213.2837575d) Dec: +51 52 10.43 (51.86956d) Equinox: J2000	Proper Motion RA: 4.351202686702596E-5 sec of time/yr Proper Motion Dec: 2.12E-4 arcsec/yr Epoch of Position: 2015.5 Redshift: 0.2886	V=19.4+/-0.1 i=19.2	Reference Frame: ICRS
	<i>Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.</i>					
	Category=GALAXY Description=[QSO, QUASAR] Extended=NO					

Exposures	#	Label (ETC Run)	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
	1	ACQ STIS (1890084)	(16) RM822	STIS/CCD, ACQ, F28X50LP	MIRROR	ACQTYPE=POINT			20 Secs (20 Secs) [==>]	[1]
	2	(1890085)	(16) RM822	STIS/NUV-MAMA, TIME-TAG, 52X0.2	G230L 2376 A	BUFFER-TIME=30 0			2273 Secs (2091 Secs) [==>2091.0 Secs]	[1]

