



15282 - Transport of magnetic fields into the circumgalactic medium

Cycle: 25, Proposal Category: GO

(Availability Mode: SUPPORTED)

INVESTIGATORS

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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) ICRF-J013738.3-243053	ACS/WFC	1	30-Jun-2017 21:01:54.0	yes
02	(2) QSO-B0202-172	ACS/WFC	1	30-Jun-2017 21:01:55.0	yes
03	(3) 4C-20.24	ACS/WFC	1	30-Jun-2017 21:01:56.0	yes
04	(4) QSO-B1111+149	ACS/WFC	1	30-Jun-2017 21:01:56.0	yes
05	(5) 4C-05.64	ACS/WFC	1	30-Jun-2017 21:01:57.0	yes
06	(6) 4C-11.69	ACS/WFC	1	30-Jun-2017 21:01:57.0	yes
07	(7) QSO-B0332-403	ACS/WFC	1	30-Jun-2017 21:01:58.0	yes
08	(8) 4C-19.34	ACS/WFC	1	30-Jun-2017 21:01:58.0	yes
09	(9) 4C-13.46	ACS/WFC	1	30-Jun-2017 21:01:59.0	yes
10	(10) QSO-B1420-272	ACS/WFC	1	30-Jun-2017 21:01:59.0	yes

<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>
11	(11) QSO-J1423+1159	ACS/WFC	1	30-Jun-2017 21:02:00.0	yes
12	(12) QSO-J2047-1639	ACS/WFC	1	30-Jun-2017 21:02:01.0	yes
13	(13) QSO-B2204-54	ACS/WFC	1	30-Jun-2017 21:02:01.0	yes

13 Total Orbits Used

ABSTRACT

Supernova-driven winds are known to play a major role in galaxy evolution, and to drive metal-enriched material far out into the circum-galactic medium. We have demonstrated that magnetic fields in these winds are detectably modifying the polarization properties of background radio quasars with intervening MgII 2799 absorption in their spectra, through Faraday Rotation. We have obtained estimates of the disordered fields within these Faraday screens and wish to map how these vary around galaxies, e.g. whether they are maximal above the poles of the galaxies as we would expect for biconical outflows. We also want to compare our estimates quantitatively with magnetohydrodynamical models that we have been developing. For both investigations, we need to know where the lines of sight pass, relative to the galaxies. For this we need HST resolution images of the host galaxies to establish the orientation and inclination of the disks, and the general morphologies of the galaxies. We have in hand images for 17/30 quasars, and request here images for the remaining 13 sources.

OBSERVING DESCRIPTION

This is straightforward imaging of 13 quasar fields using the ACS

Proposal 15282 - Target 1 (01) - Transport of magnetic fields into the circumgalactic medium

Sat Jul 01 01:02:02 GMT 2017

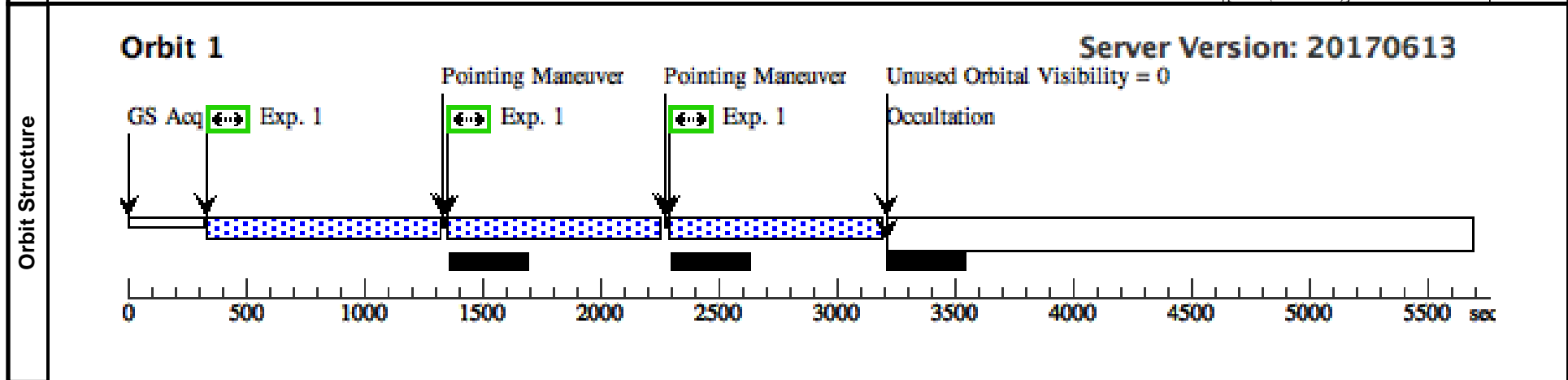
Visit	Proposal 15282, Target 1 (01)		
	Diagnostic Status: No Diagnostics		
	Scientific Instruments: ACS/WFC		
	Special Requirements: (none)		

Patterns	#	Primary Pattern	Secondary Pattern	Exposures
	(1)	Pattern Type=ACS-WFC-DITHER-LINE Purpose=DITHER Number Of Points=3 Point Spacing=3.034 Line Spacing=	Coordinate Frame=POS-TARG Pattern Orientation=85.29 Angle Between Sides= Center Pattern=false	

Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
	(1)	ICRF-J013738.3-243053	RA: 01 37 38.3647 (24.4098529d) Dec: -24 30 53.90 (-24.51497d) Equinox: J2000		V=17.33	Reference Frame: SIMBAD

Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.

Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
	1		(1) ICRF-J013738.3-243053	ACS/WFC, ACCUM, WFC	F814W				Pattern 1, Exps 1-1 in Target 1 (01) (1)	780 Secs (2340 Secs)
									[=>(Pattern 1)] [=>(Pattern 2)] [=>(Pattern 3)]	[1]



Proposal 15282 - Target 2 (02) - Transport of magnetic fields into the circumgalactic medium

Sat Jul 01 01:02:02 GMT 2017

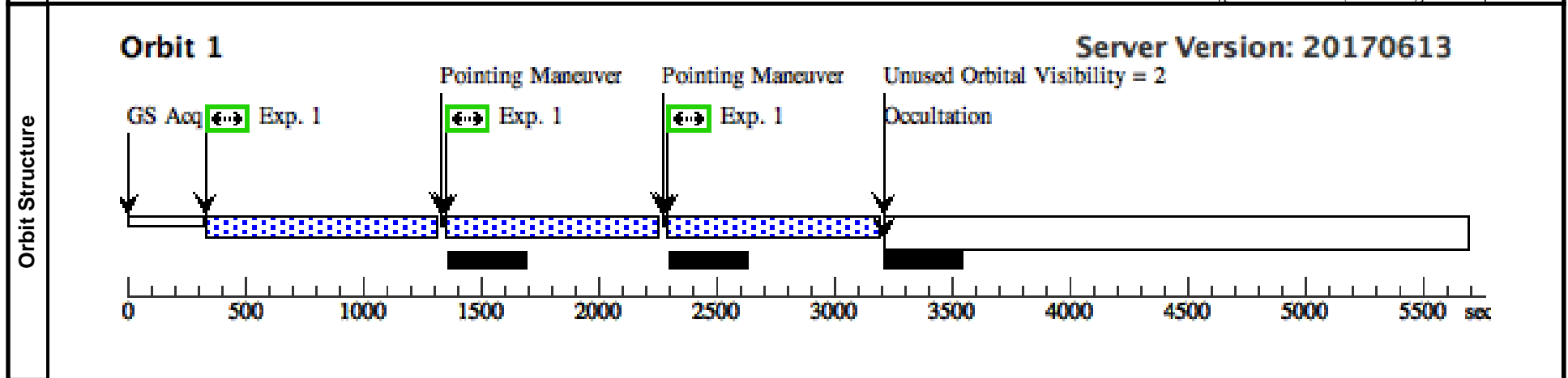
Visit	Proposal 15282, Target 2 (02) Diagnostic Status: No Diagnostics Scientific Instruments: ACS/WFC Special Requirements: (none)		
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Patterns	#	Primary Pattern	Secondary Pattern	Exposures
	(1)	Pattern Type=ACS-WFC-DITHER-LINE Purpose=DITHER Number Of Points=3 Point Spacing=3.034 Line Spacing= Coordinate Frame=POS-TARG Pattern Orientation=85.29 Angle Between Sides= Center Pattern=false		(1)

Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
	(2)	QSO-B0202-172	RA: 02 04 57.6724 (31.2403017d) Dec: -17 01 19.74 (-17.02215d) Equinox: J2000		V=18.0	Reference Frame: SIMBAD

Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.

Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
	1		(2) QSO-B0202-172	ACS/WFC, ACCUM, WFC	F814W				Pattern 1, Exps 1-1 i n Target 2 (02) (1)	775 Secs (2337 Secs) [=>779.0 Secs (Pattern 1)] [=>779.0 Secs (Pattern 2)] [=>779.0 Secs (Pattern 3)]



Proposal 15282 - Target 3 (03) - Transport of magnetic fields into the circumgalactic medium

Sat Jul 01 01:02:02 GMT 2017

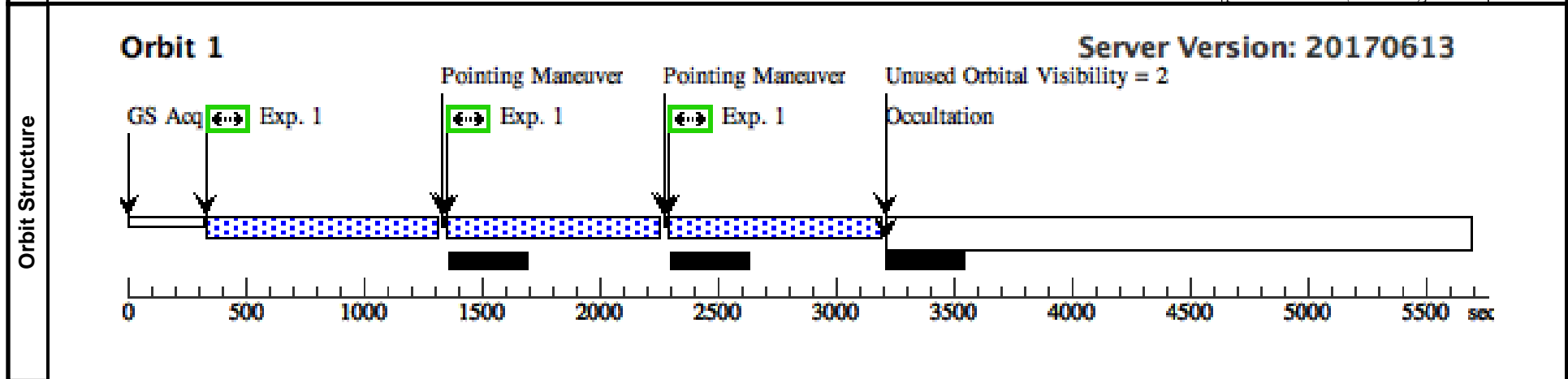
Visit	Proposal 15282, Target 3 (03) Diagnostic Status: No Diagnostics Scientific Instruments: ACS/WFC Special Requirements: (none)		
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Patterns	#	Primary Pattern	Secondary Pattern	Exposures
	(1)	Pattern Type=ACS-WFC-DITHER-LINE Purpose=DITHER Number Of Points=3 Point Spacing=3.034 Line Spacing=	Coordinate Frame=POS-TARG Pattern Orientation=85.29 Angle Between Sides= Center Pattern=false	(1)

Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
	(3)	4C-20.24	RA: 10 58 17.9008 (164.5745867d) Dec: +19 51 50.87 (19.86413d) Equinox: J2000		V=17.07	Reference Frame: SIMBAD

Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.

Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
	1		(3) 4C-20.24	ACS/WFC, ACCUM, WFC	F814W				Pattern 1, Exps 1-1 in Target 3 (03) (1) [==>779.0 Secs (Pattern 1)] [==>779.0 Secs (Pattern 2)] [==>779.0 Secs (Pattern 3)]	[1]



Proposal 15282 - Target 4 (04) - Transport of magnetic fields into the circumgalactic medium

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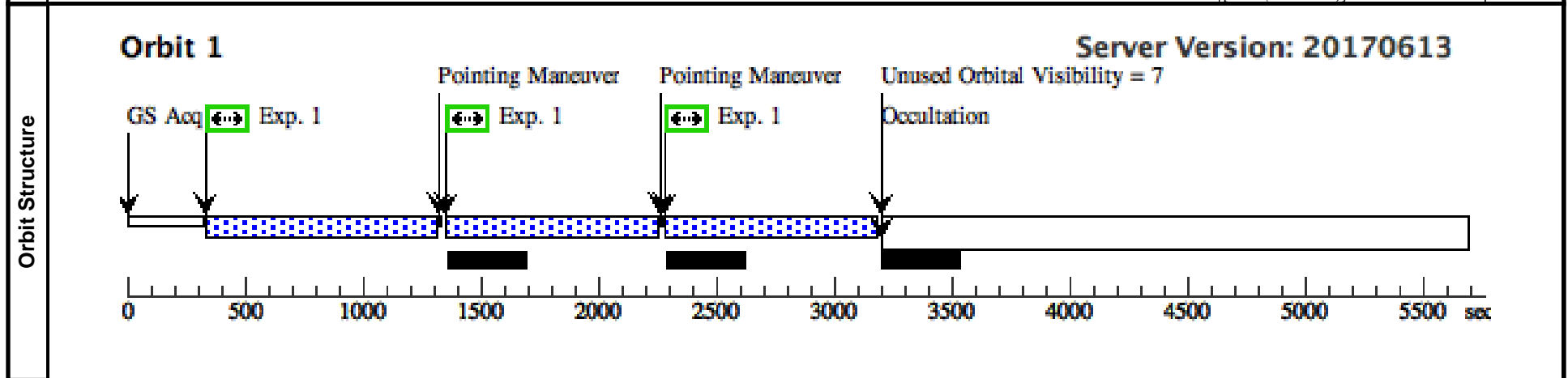
Visit	Proposal 15282, Target 4 (04)		
	Diagnostic Status: No Diagnostics		
	Scientific Instruments: ACS/WFC		
	Special Requirements: (none)		

Patterns	#	Primary Pattern	Secondary Pattern	Exposures
	(1)	Pattern Type=ACS-WFC-DITHER-LINE Purpose=DITHER Number Of Points=3 Point Spacing=3.034 Line Spacing=	Coordinate Frame=POS-TARG Pattern Orientation=85.29 Angle Between Sides= Center Pattern=false	

Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
	(4)	QSO-B1111+149	RA: 11 13 58.6954 (168.4945642d) Dec: +14 42 26.95 (14.70749d) Equinox: J2000			V=17.57

Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.

Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
	1		(4) QSO-B1111+149	ACS/WFC, ACCUM, WFC	F814W				Pattern 1, Exps 1-1 in Target 4 (04) (1)	775 Secs (2325 Secs)
									[=>(Pattern 1)] [=>(Pattern 2)] [=>(Pattern 3)]	[1]



Proposal 15282 - Target 5 (05) - Transport of magnetic fields into the circumgalactic medium

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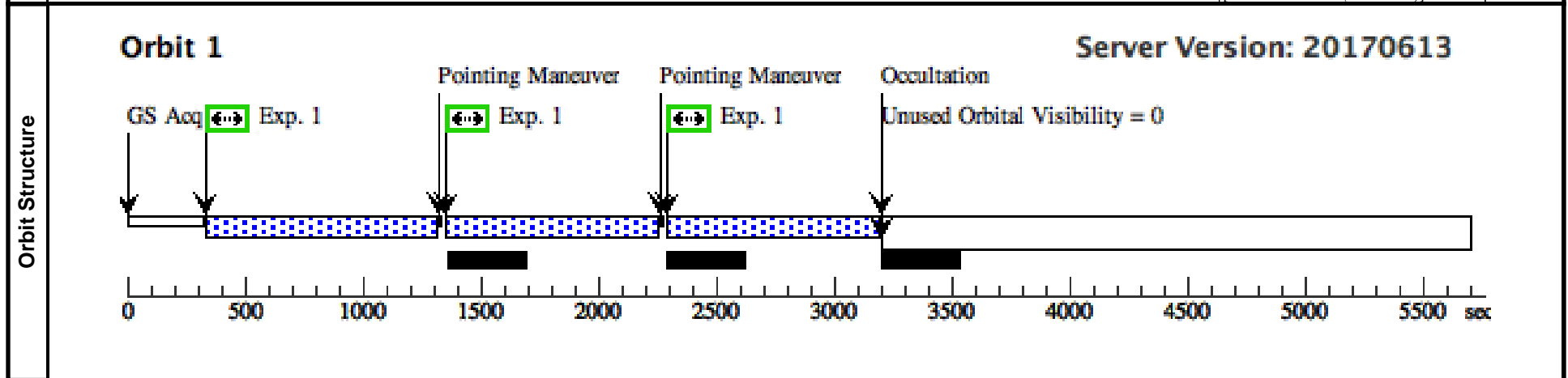
Visit	Proposal 15282, Target 5 (05)		
	Diagnostic Status: No Diagnostics		
	Scientific Instruments: ACS/WFC		
	Special Requirements: (none)		

Patterns	#	Primary Pattern	Secondary Pattern	Exposures
	(1)	Pattern Type=ACS-WFC-DITHER-LINE Purpose=DITHER Number Of Points=3 Point Spacing=3.034 Line Spacing=	Coordinate Frame=POS-TARG Pattern Orientation=85.29 Angle Between Sides= Center Pattern=false	

Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
	(5)	4C-05.64	RA: 15 10 53.5914 (227.7232975d) Dec: -05 43 7.42 (-5.71873d) Equinox: J2000		V=17.21	Reference Frame: SIMBAD

Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.

Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
	1		(5) 4C-05.64	ACS/WFC, ACCUM, WFC	F814W				Pattern 1, Exps 1-1 in Target 5 (05) (1)	770 Secs (2328 Secs) [==>776.0 Secs (Pattern 1)] [==>776.0 Secs (Pattern 2)] [==>776.0 Secs (Pattern 3)]



Proposal 15282 - Target 6 (06) - Transport of magnetic fields into the circumgalactic medium

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Visit	Proposal 15282, Target 6 (06)		
	Diagnostic Status: No Diagnostics		
	Scientific Instruments: ACS/WFC		
	Special Requirements: (none)		

Patterns	#	Primary Pattern	Secondary Pattern	Exposures
	(1)	Pattern Type=ACS-WFC-DITHER-LINE Purpose=DITHER Number Of Points=3 Point Spacing=3.034 Line Spacing=	Coordinate Frame=POS-TARG Pattern Orientation=85.29 Angle Between Sides= Center Pattern=false	

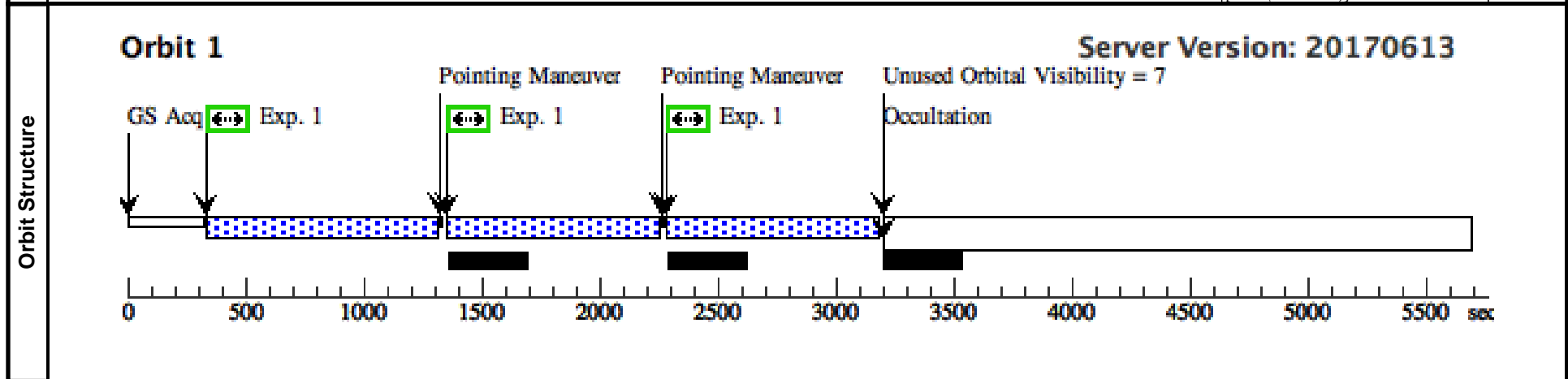
Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
	(6)	4C-11.69	RA: 22 32 36.4000 (338.1516667d) Dec: +11 43 51.00 (11.73083d) Equinox: J2000		V=17.33	Reference Frame: SIMBAD

Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.

Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
	1		(6) 4C-11.69	ACS/WFC, ACCUM, WFC	F814W				Pattern 1, Exps 1-1 in Target 6 (06) (1)	775 Secs (2325 Secs)

[=>(Pattern 1)]
[=>(Pattern 2)]
[=>(Pattern 3)]

[1]



Proposal 15282 - Target 7 (07) - Transport of magnetic fields into the circumgalactic medium

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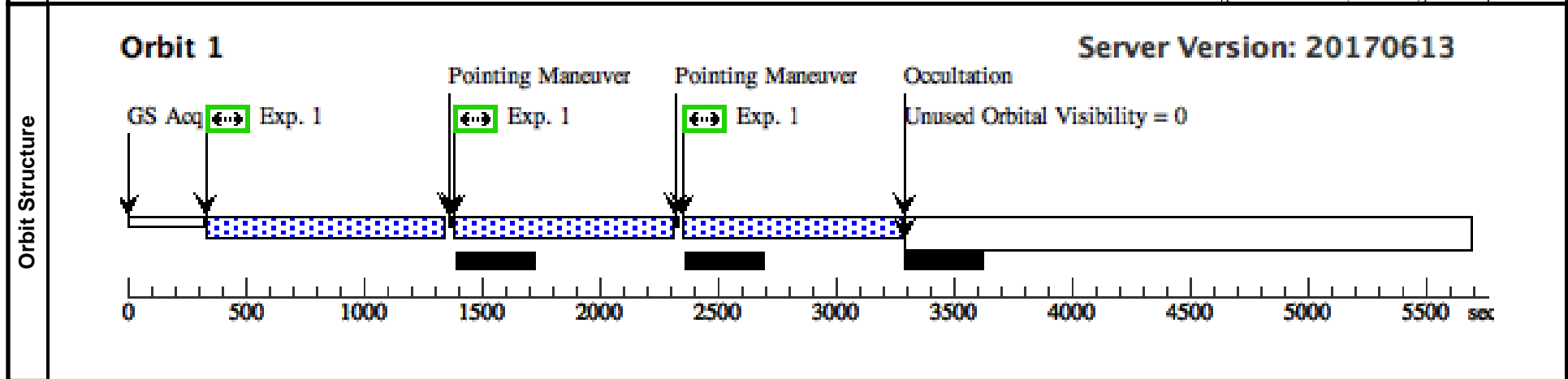
Visit	Proposal 15282, Target 7 (07)		
	Diagnostic Status: No Diagnostics		
	Scientific Instruments: ACS/WFC		
	Special Requirements: (none)		

Patterns	#	Primary Pattern	Secondary Pattern	Exposures
	(1)	Pattern Type=ACS-WFC-DITHER-LINE Purpose=DITHER Number Of Points=3 Point Spacing=3.034 Line Spacing=	Coordinate Frame=POS-TARG Pattern Orientation=85.29 Angle Between Sides= Center Pattern=false	

Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
	(7)	QSO-B0332-403	RA: 03 34 13.6553 (53.5568971d) Dec: -40 08 25.41 (-40.14039d) Equinox: J2000		V=17.87	Reference Frame: SIMBAD

Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.

Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
	1		(7) QSO-B0332-403	ACS/WFC, ACCUM, WFC	F814W				Pattern 1, Exps 1-1 in Target 7 (07) (1)	800 Secs (2421 Secs) [=>807.0 Secs (Pattern 1)] [=>807.0 Secs (Pattern 2)] [=>807.0 Secs (Pattern 3)]



Proposal 15282 - Target 8 (08) - Transport of magnetic fields into the circumgalactic medium

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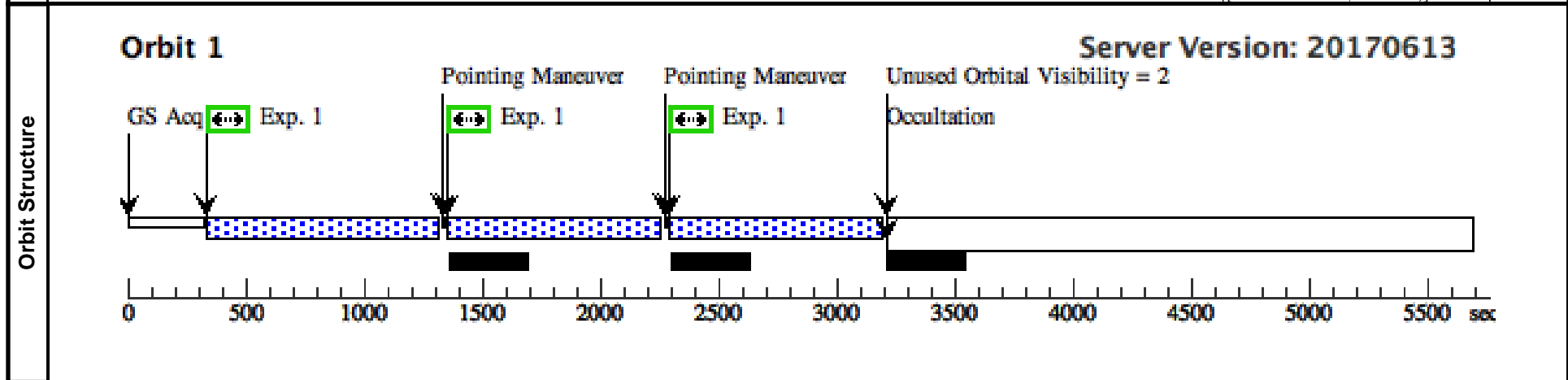
Visit	Proposal 15282, Target 8 (08)		
	Diagnostic Status: No Diagnostics		
	Scientific Instruments: ACS/WFC		
	Special Requirements: (none)		

Patterns	#	Primary Pattern	Secondary Pattern	Exposures
	(1)	Pattern Type=ACS-WFC-DITHER-LINE Purpose=DITHER Number Of Points=3 Point Spacing=3.034 Line Spacing=	Coordinate Frame=POS-TARG Pattern Orientation=85.29 Angle Between Sides= Center Pattern=false	

Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
	(8)	4C-19.34	RA: 10 24 44.8096 (156.1867067d) Dec: +19 12 20.42 (19.20567d) Equinox: J2000		V=17.49	Reference Frame: SIMBAD

Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.

Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
	1		(8) 4C-19.34	ACS/WFC, ACCUM, WFC	F814W				Pattern 1, Exps 1-1 in Target 8 (08) (1)	775 Secs (2337 Secs) [=>779.0 Secs (Pattern 1)] [=>779.0 Secs (Pattern 2)] [=>779.0 Secs (Pattern 3)]



Proposal 15282 - Target 9 (09) - Transport of magnetic fields into the circumgalactic medium

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Visit	Proposal 15282, Target 9 (09)		
	Diagnostic Status: No Diagnostics		
	Scientific Instruments: ACS/WFC		
	Special Requirements: (none)		

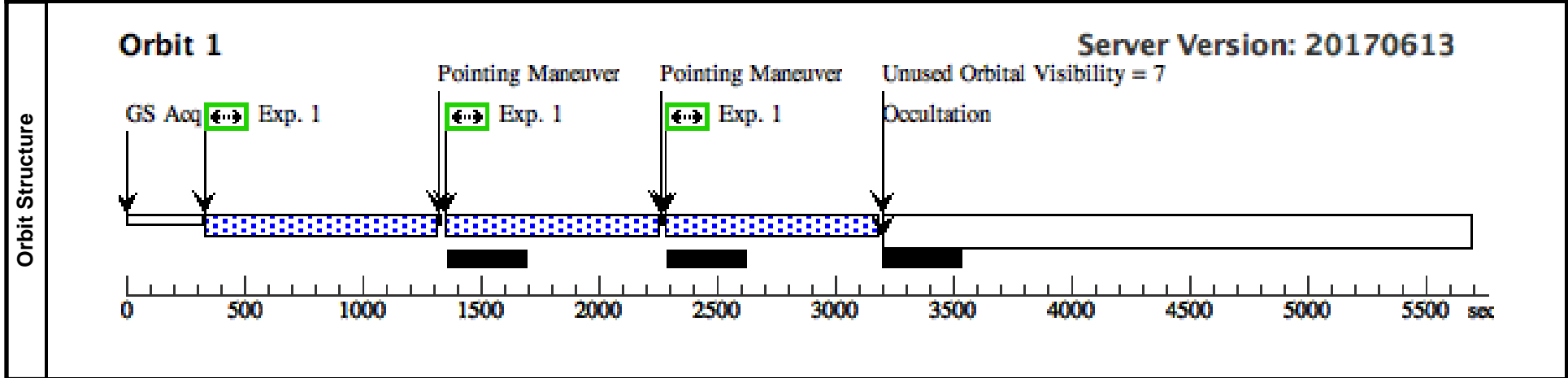
Patterns	#	Primary Pattern	Secondary Pattern	Exposures
	(1)	Pattern Type=ACS-WFC-DITHER-LINE Purpose=DITHER Number Of Points=3 Point Spacing=3.034 Line Spacing=	Coordinate Frame=POS-TARG Pattern Orientation=85.29 Angle Between Sides= Center Pattern=false	

Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
	(9)	4C-13.46	RA: 12 13 32.1412 (183.3839217d) Dec: +13 07 20.37 (13.12233d) Equinox: J2000		V=18.53	Reference Frame: SIMBAD

Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.

Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
	1		(9) 4C-13.46	ACS/WFC, ACCUM, WFC	F814W				Pattern 1, Exps 1-1 in Target 9 (09) (1)	775 Secs (2325 Secs)

[=>(Pattern 1)]
[=>(Pattern 2)]
[=>(Pattern 3)]



Proposal 15282 - Target 10 (10) - Transport of magnetic fields into the circumgalactic medium

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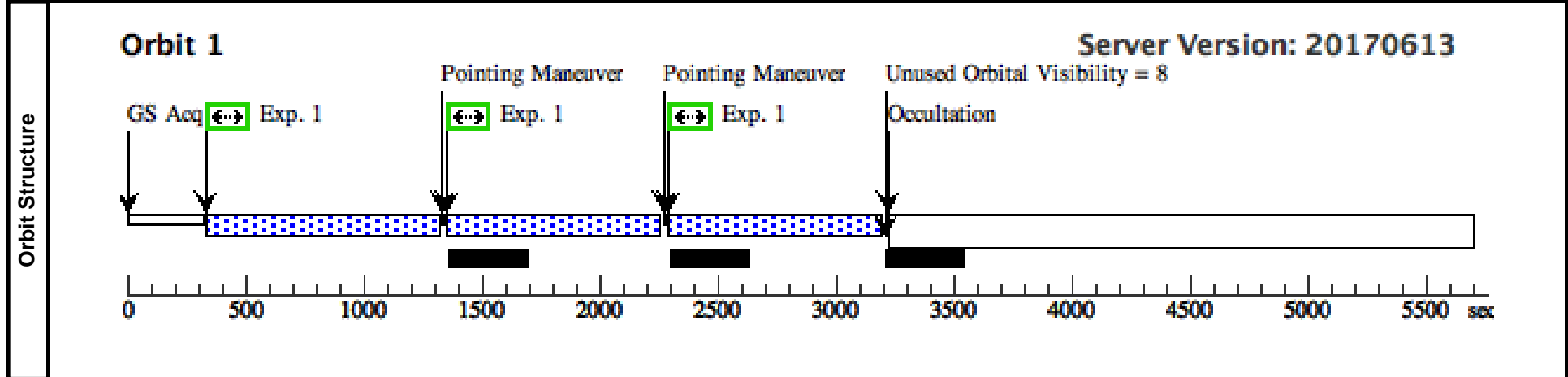
Visit	Proposal 15282, Target 10 (10) Diagnostic Status: No Diagnostics Scientific Instruments: ACS/WFC Special Requirements: (none)		
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Patterns	#	Primary Pattern	Secondary Pattern	Exposures
	(1)	Pattern Type=ACS-WFC-DITHER-LINE Purpose=DITHER Number Of Points=3 Point Spacing=3.034 Line Spacing= Coordinate Frame=POS-TARG Pattern Orientation=85.29 Angle Between Sides= Center Pattern=false		(1)

Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
	(10)	QSO-B1420-272	RA: 14 22 49.2317 (215.7051321d) Dec: -27 27 56.86 (-27.46579d) Equinox: J2000		V=18.0	Reference Frame: SIMBAD

Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.

Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
	1		(10) QSO-B1420-272	ACS/WFC, ACCUM, WFC	F814W				Pattern 1, Exps 1-1 in Target 10 (10) (1) [==>(Pattern 1)] [==>(Pattern 2)] [==>(Pattern 3)]	780 Secs (2340 Secs)



Proposal 15282 - Target 11 (11) - Transport of magnetic fields into the circumgalactic medium

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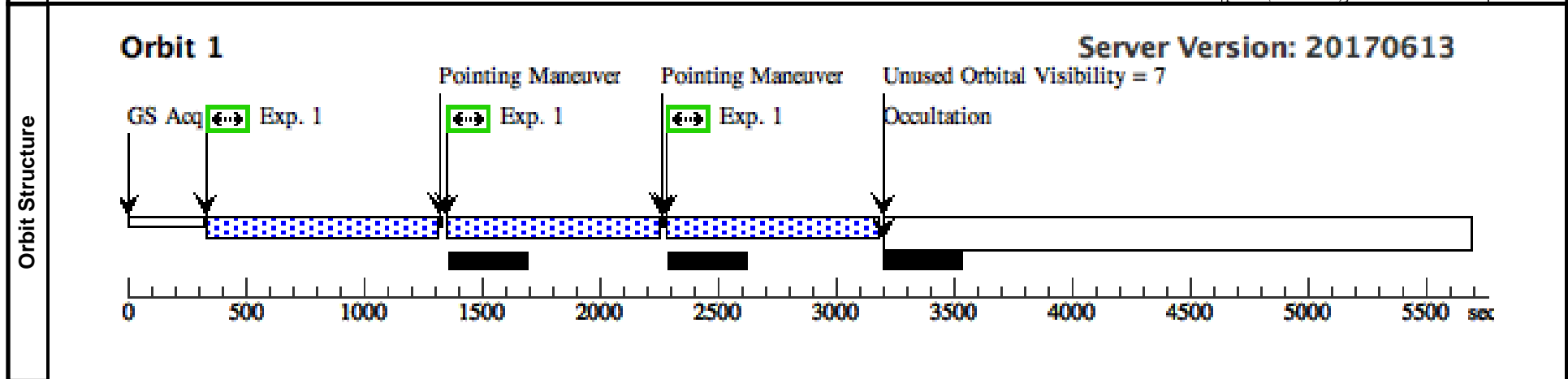
Visit	Proposal 15282, Target 11 (11) Diagnostic Status: No Diagnostics Scientific Instruments: ACS/WFC Special Requirements: (none)		
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Patterns	#	Primary Pattern	Secondary Pattern	Exposures
	(1)	Pattern Type=ACS-WFC-DITHER-LINE Purpose=DITHER Number Of Points=3 Point Spacing=3.034 Line Spacing=	Coordinate Frame=POS-TARG Pattern Orientation=85.29 Angle Between Sides= Center Pattern=false	(1)

Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
	(11)	QSO-J1423+1159	RA: 14 23 30.1028 (215.8754283d) Dec: +11 59 51.24 (11.99757d) Equinox: J2000		V=18.04	Reference Frame: SIMBAD

Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.

Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
	1		(11) QSO-J1423+1159	ACS/WFC, ACCUM, WFC	F814W				Pattern 1, Exps 1-1 in Target 11 (11) (1) [==>(Pattern 1)] [==>(Pattern 2)] [==>(Pattern 3)]	[1]



Proposal 15282 - Target 12 (12) - Transport of magnetic fields into the circumgalactic medium

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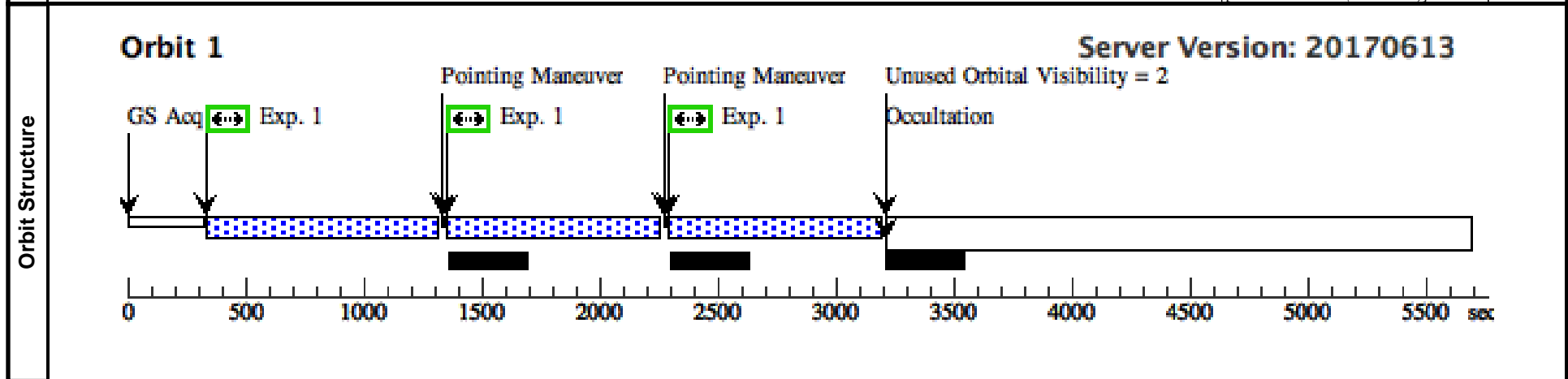
Visit	Proposal 15282, Target 12 (12) Diagnostic Status: No Diagnostics Scientific Instruments: ACS/WFC Special Requirements: (none)		
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Patterns	#	Primary Pattern	Secondary Pattern	Exposures
	(1)	Pattern Type=ACS-WFC-DITHER-LINE Purpose=DITHER Number Of Points=3 Point Spacing=3.034 Line Spacing= Coordinate Frame=POS-TARG Pattern Orientation=85.29 Angle Between Sides= Center Pattern=false		(1)

Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
	(12)	QSO-J2047-1639	RA: 20 47 19.6670 (311.8319458d) Dec: -16 39 5.84 (-16.65162d) Equinox: J2000		V=17.36	Reference Frame: SIMBAD

Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.

Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
	1		(12) QSO-J2047-1639	ACS/WFC, ACCUM, WFC	F814W				Pattern 1, Exps 1-1 in Target 12 (12) (1) 775 Secs (2337 Secs) [=>779.0 Secs (Pattern 1)] [=>779.0 Secs (Pattern 2)] [=>779.0 Secs (Pattern 3)]	[1]



Proposal 15282 - Target 13 (13) - Transport of magnetic fields into the circumgalactic medium

Sat Jul 01 01:02:03 GMT 2017

Visit	Proposal 15282, Target 13 (13) Diagnostic Status: No Diagnostics Scientific Instruments: ACS/WFC Special Requirements: (none)		
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Patterns	#	Primary Pattern	Secondary Pattern	Exposures
	(1)	Pattern Type=ACS-WFC-DITHER-LINE Purpose=DITHER Number Of Points=3 Point Spacing=3.034 Line Spacing= Coordinate Frame=POS-TARG Pattern Orientation=85.29 Angle Between Sides= Center Pattern=false		(1)

Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
	(13)	QSO-B2204-54	RA: 22 07 43.7420 (331.9322583d) Dec: -53 46 33.83 (-53.77606d) Equinox: J2000		V=18.0	Reference Frame: SIMBAD

Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.

Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
	1		(13) QSO-B2204-54	ACS/WFC, ACCUM, WFC	F814W				Pattern 1, Exps 1-1 in Target 13 (13) (1) [=>838.0 Secs (Pattern 1)] [=>838.0 Secs (Pattern 2)] [=>838.0 Secs (Pattern 3)]	[1]

