



13661 - A SHARP View of the Structure and Evolution of Normal and Compact Early-type Galaxies

Cycle: 22, Proposal Category: GO
(Availability Mode: SUPPORTED)

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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) SDSSJ0837+0801	ACS/WFC	1	14-Jul-2014 21:05:52.0	yes
02	(2) SDSSJ0901+2027	ACS/WFC	1	14-Jul-2014 21:05:53.0	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>
03	(3) SDSSJ0913+4237	ACS/WFC	1	14-Jul-2014 21:05:54.0	yes
04	(4) SDSSJ1125+3058	ACS/WFC	1	14-Jul-2014 21:05:54.0	yes
05	(5) SDSSJ1144+1540	ACS/WFC	1	14-Jul-2014 21:05:55.0	yes
06	(6) SDSSJ1218+5648	ACS/WFC	1	14-Jul-2014 21:05:56.0	yes
07	(7) SDSSJ1248+4711	ACS/WFC	1	14-Jul-2014 21:05:57.0	yes
08	(8) SDSSJ1323+3946	ACS/WFC	1	14-Jul-2014 21:05:57.0	yes
09	(9) SDSSJ1347-0101	ACS/WFC	1	14-Jul-2014 21:05:58.0	yes
10	(10) SDSSJ1446+3856	ACS/WFC	1	14-Jul-2014 21:05:58.0	yes
11	(11) SDSSJ1605+3811	ACS/WFC	1	14-Jul-2014 21:05:59.0	yes
12	(12) SDSSJ1606+2235	ACS/WFC	1	14-Jul-2014 21:06:00.0	yes
13	(13) SDSSJ1619+2024	ACS/WFC	1	14-Jul-2014 21:06:00.0	yes
14	(14) SDSSJ2228-0018	ACS/WFC	1	14-Jul-2014 21:06:01.0	yes

14 Total Orbits Used

ABSTRACT

We have recently discovered a new population of $z \sim 0.6$ strongly lensed 'red nuggets' -- massive, compact early-type galaxies (ETGs) -- that enable us to directly address two fundamental questions: how do red nuggets evolve into 'normal' ETGs, and how is dark matter distributed in ETGs? The lensing-magnified imaging of red nuggets at intermediate redshifts permits spectroscopic observations -- and therefore a characterization of the red nugget fundamental plane -- and yields the deepest constraints on low surface brightness features that are the hallmark of inside-out growth mechanisms. Furthermore, the background sources are extended, very bright objects that provide excellent signal-to-noise imaging of complex lensed features and therefore give an extremely precise measurement of the mass profile and amount of dark matter substructure. We have compiled a sample of fourteen of these systems, and we now require the deep, multi-band, high-resolution, and high-fidelity imaging that can only be achieved with HST in order to invert the lensing signal and unveil the luminous structure of red nuggets and the mass structure of normal ETGs.

OBSERVING DESCRIPTION

We will use the ACS/WFC camera to obtain deep images of each of the 14 systems in two filters, F555W/F606W and F814W. The choice of camera and broad filters allows us to reach faint surface brightness limits quickly, which is important for investigating claims that these compact ETGs might have extended low-surface brightness components. The choice of ACS over WFC3 is motivated by the better surface brightness sensitivity of ACS in the requested filters; given the size and brightness of the targets, we do not believe that CTE will be a problem. Two-band imaging (in conjunction with the SDSS spectroscopy) is also important to characterize the differences in stellar populations between the central core component and any extended envelope that might have formed via (wet or dry) mergers. We will use the F555W filter for the few lower-redshift sources ($z < 0.55$) and F606W for the rest so that the blue and red filters straddle the 4000Å break.

The observations will consist of two dithered exposures in each filter, a strategy that will provide robust cosmic ray and bad pixel rejection. The ACS exposure time calculator suggests that an 1100s integration in F606W yields a surface brightness limit of 24.7 mag arcsec² (pixel S/N of 1) while an 1100s integration with F814W obtains a surface brightness limit of 24.0 mag arcsec² (pixel S/N of 1). These integration times will provide very high quality data for the lensing reconstruction while simultaneously exploring the proposed low surface brightness envelope; the F814W surface brightness sensitivity of 24.0 mag arcsec² corresponds to $M_V = -18.8$ mag arcsec² for an ETG at $z = 0.6$. Assuming $M^*/L_V = 3.5$, this implies a surface mass sensitivity of $\sim 3 \times 10^8$ Msun kpc² per pixel. These estimates do not include the effects of CTE for the ACS/WFC instrument, but the decreased S/N due to CTE will not compromise our science goals.

The overhead is 6 minutes for guide star acquisition, 4 minutes for the first exposure and 2.5 minutes for the next exposure in a given band, followed by another 4 minute and 2.5 minute set of overheads for the second band; thus, the total overhead is 19 minutes.

Proposal 13661 - Visit 01 - A SHARP View of the Structure and Evolution of Normal and Compact Early-type Galaxies

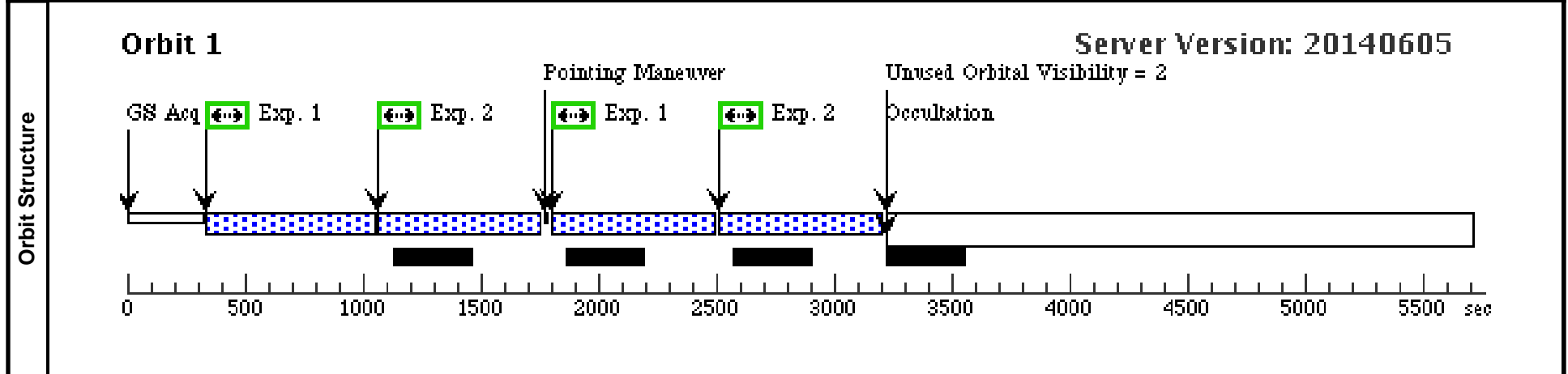
Tue Jul 15 01:06:02 GMT 2014

Visit	Proposal 13661, Visit 01, implementation		
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	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=2 Point Spacing=3.011 Line Spacing=	Coordinate Frame=POS-TARG Pattern Orientation=85.28 Angle Between Sides= Center Pattern=false	

Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
	(1)	SDSSJ0837+0801	RA: 08 37 1.2140 (129.2550583d) Dec: +08 01 17.89 (8.02164d) Equinox: J2000		V=20.61	Reference Frame: ICRS

Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
	1		(1) SDSSJ0837+0801	ACS/WFC, ACCUM, WFC1	F606W	GAIN=2.0	GS ACQ SCENARIO BASE1B3	Pattern 1, Exps 1-2 in Visit 01 (1)	500 Secs (1032 Secs)	
		1							[=>516.0 Secs (Pattern 1)] [=>516.0 Secs (Pattern 2)]	[1]
2		(1) SDSSJ0837+0801	ACS/WFC, ACCUM, WFC1	F814W	GAIN=2.0		Pattern 1, Exps 1-2 in Visit 01 (1)	500 Secs (1032 Secs)		
	1							[=>516.0 Secs (Pattern 1)] [=>516.0 Secs (Pattern 2)]	[1]	



Proposal 13661 - Visit 02 - A SHARP View of the Structure and Evolution of Normal and Compact Early-type Galaxies

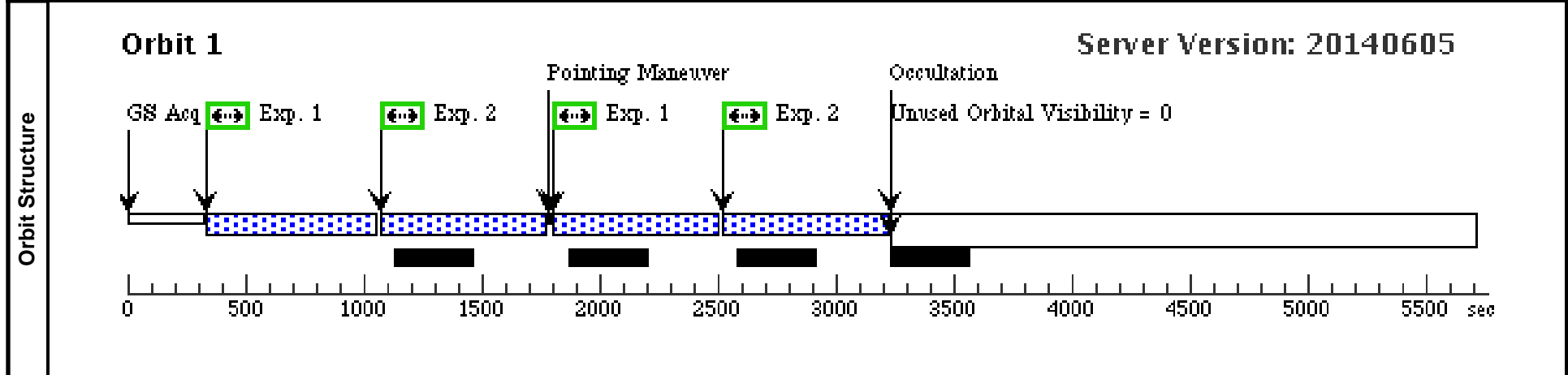
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Visit	Proposal 13661, Visit 02, implementation		
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	Scientific Instruments: ACS/WFC		
	Special Requirements: (none)		

Patterns	#	Primary Pattern	Secondary Pattern	Exposures
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Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
	(2)	SDSSJ0901+2027	RA: 09 01 21.2500 (135.3385417d) Dec: +20 27 40.41 (20.46122d) Equinox: J2000		V=21.1	Reference Frame: ICRS

Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
	1		(2) SDSSJ0901+2027	ACS/WFC, ACCUM, WFC1	F606W	GAIN=2.0		Pattern 1, Exps 1-2 in Visit 02 (1)	500 Secs (1038 Secs)	
		7							[=>519.0 Secs (Pattern 1)] [=>519.0 Secs (Pattern 2)]	[1]
2		(2) SDSSJ0901+2027	ACS/WFC, ACCUM, WFC1	F814W	GAIN=2.0		Pattern 1, Exps 1-2 in Visit 02 (1)	500 Secs (1038 Secs)		
	7							[=>519.0 Secs (Pattern 1)] [=>519.0 Secs (Pattern 2)]	[1]	



Proposal 13661 - Visit 03 - A SHARP View of the Structure and Evolution of Normal and Compact Early-type Galaxies

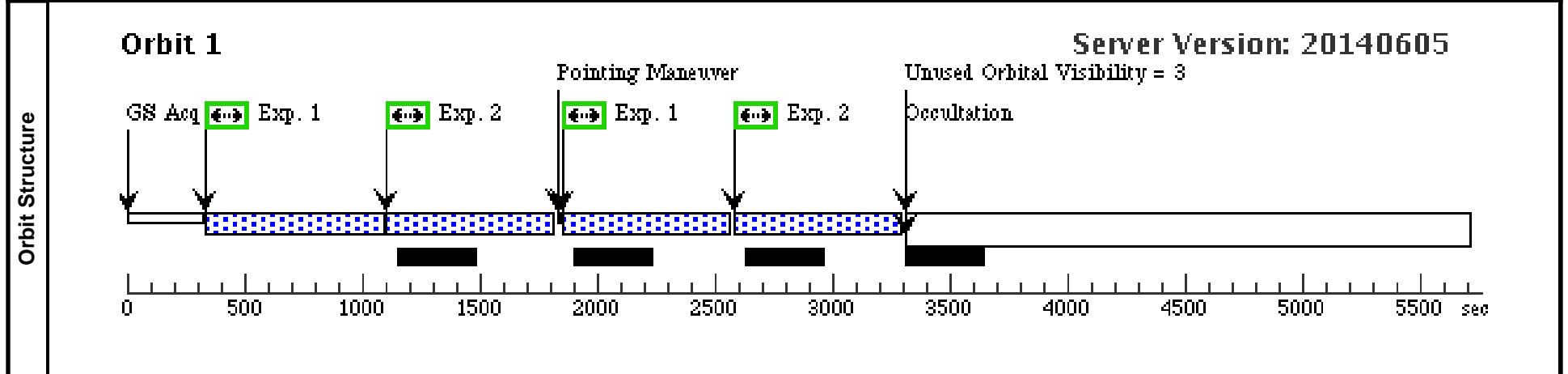
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Visit	Proposal 13661, Visit 03, implementation		
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	Scientific Instruments: ACS/WFC		
	Special Requirements: (none)		

Patterns	#	Primary Pattern	Secondary Pattern	Exposures
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Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
	(3)	SDSSJ0913+4237	RA: 09 13 45.6500 (138.4402083d) Dec: +42 37 30.80 (42.62522d) Equinox: J2000		V=20.9	Reference Frame: ICRS

Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
	1		(3) SDSSJ0913+4237	ACS/WFC, ACCUM, WFC1	F555W	GAIN=2.0		Pattern 1, Exps 1-2 in Visit 03 (1)	500 Secs (1102 Secs)	
		7							[=>551.0 Secs (Pattern 1)] [=>551.0 Secs (Pattern 2)]	[1]
2		(3) SDSSJ0913+4237	ACS/WFC, ACCUM, WFC1	F814W	GAIN=2.0		Pattern 1, Exps 1-2 in Visit 03 (1)	500 Secs (1102 Secs)		
	7							[=>551.0 Secs (Pattern 1)] [=>551.0 Secs (Pattern 2)]	[1]	



Proposal 13661 - Visit 04 - A SHARP View of the Structure and Evolution of Normal and Compact Early-type Galaxies

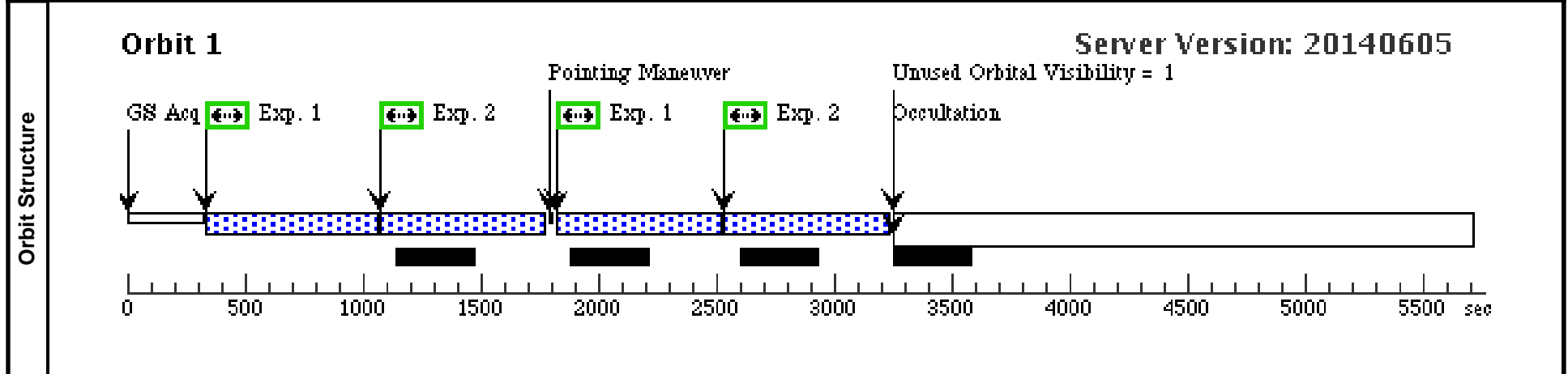
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Visit	Proposal 13661, Visit 04, implementation		
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	Scientific Instruments: ACS/WFC		
	Special Requirements: (none)		

Patterns	#	Primary Pattern	Secondary Pattern	Exposures
	(1)	Pattern Type=ACS-WFC-DITHER-LINE Purpose=DITHER Number Of Points=2 Point Spacing=3.011 Line Spacing=	Coordinate Frame=POS-TARG Pattern Orientation=85.28 Angle Between Sides= Center Pattern=false	(1-2)

Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
	(4)	SDSSJ1125+3058	RA: 11 25 13.8900 (171.3078750d) Dec: +30 58 5.50 (30.96819d) Equinox: J2000		V=20.6	Reference Frame: ICRS

Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
	1		(4) SDSSJ1125+3058	ACS/WFC, ACCUM, WFC1	F606W	GAIN=2.0		Pattern 1, Exps 1-2 in Visit 04 (1)	500 Secs (1050 Secs)	
		8							[==>525.0 Secs (Pattern 1)] [==>525.0 Secs (Pattern 2)]	[1]
	2		(4) SDSSJ1125+3058	ACS/WFC, ACCUM, WFC1	F814W	GAIN=2.0		Pattern 1, Exps 1-2 in Visit 04 (1)	500 Secs (1050 Secs)	
		8							[==>525.0 Secs (Pattern 1)] [==>525.0 Secs (Pattern 2)]	[1]



Proposal 13661 - Visit 05 - A SHARP View of the Structure and Evolution of Normal and Compact Early-type Galaxies

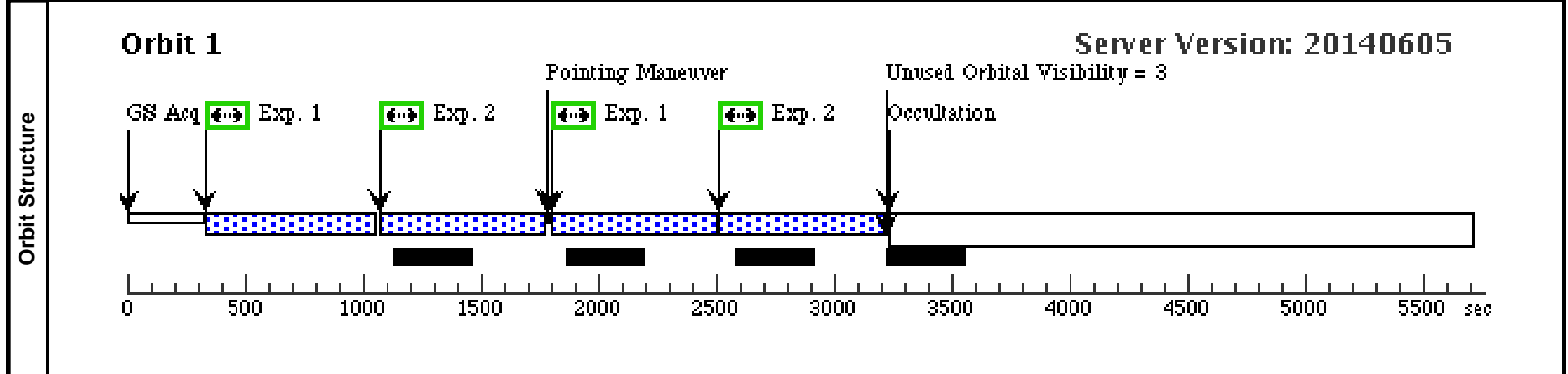
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Visit	Proposal 13661, Visit 05, implementation		
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	Scientific Instruments: ACS/WFC		
	Special Requirements: (none)		

Patterns	#	Primary Pattern	Secondary Pattern	Exposures
	(1)	Pattern Type=ACS-WFC-DITHER-LINE Purpose=DITHER Number Of Points=2 Point Spacing=3.011 Line Spacing=	Coordinate Frame=POS-TARG Pattern Orientation=85.28 Angle Between Sides= Center Pattern=false	

Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
	(5)	SDSSJ1144+1540	RA: 11 44 28.4000 (176.1183333d) Dec: +15 40 39.30 (15.67758d) Equinox: J2000		V=20.9	Reference Frame: ICRS

Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
	1		(5) SDSSJ1144+1540	ACS/WFC, ACCUM, WFC1	F606W	GAIN=2.0		Pattern 1, Exps 1-2 in Visit 05 (1)	500 Secs (1036 Secs)	
		0							[=>518.0 Secs (Pattern 1)] [=>518.0 Secs (Pattern 2)]	[1]
2		(5) SDSSJ1144+1540	ACS/WFC, ACCUM, WFC1	F814W	GAIN=2.0		Pattern 1, Exps 1-2 in Visit 05 (1)	500 Secs (1036 Secs)		
	0							[=>518.0 Secs (Pattern 1)] [=>518.0 Secs (Pattern 2)]	[1]	



Proposal 13661 - Visit 06 - A SHARP View of the Structure and Evolution of Normal and Compact Early-type Galaxies

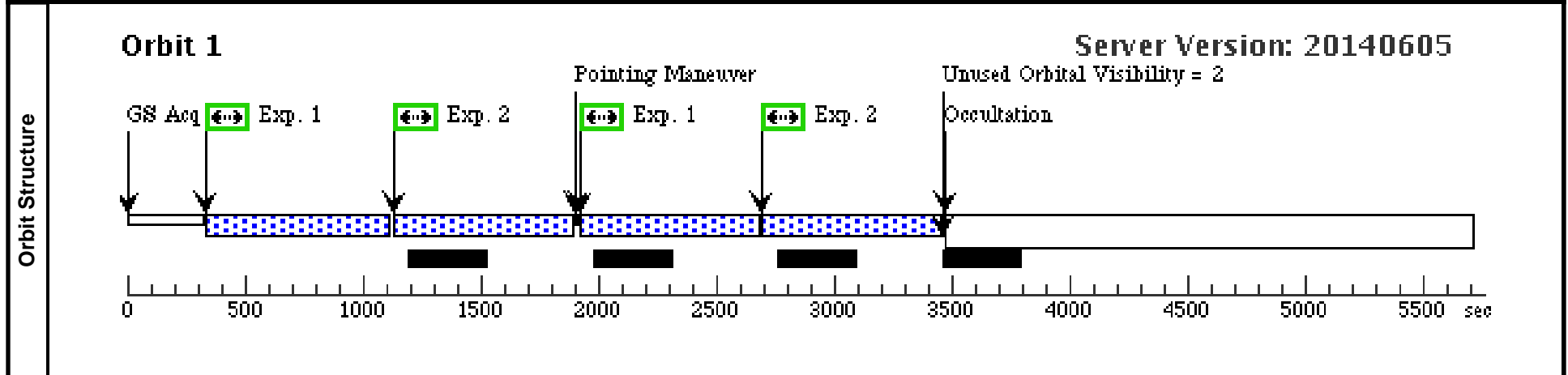
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Visit	Proposal 13661, Visit 06, implementation		
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	Scientific Instruments: ACS/WFC		
	Special Requirements: (none)		

Patterns	#	Primary Pattern	Secondary Pattern	Exposures
	(1)	Pattern Type=ACS-WFC-DITHER-LINE Purpose=DITHER Number Of Points=2 Point Spacing=3.011 Line Spacing=	Coordinate Frame=POS-TARG Pattern Orientation=85.28 Angle Between Sides= Center Pattern=false	

Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
	(6)	SDSSJ1218+5648	RA: 12 18 6.6700 (184.5277917d) Dec: +56 48 5.10 (56.80142d) Equinox: J2000		V=20.3	Reference Frame: ICRS

Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
	1		(6) SDSSJ1218+5648	ACS/WFC, ACCUM, WFC1	F606W	GAIN=2.0		Pattern 1, Exps 1-2 in Visit 06 (1)	500 Secs (1156 Secs)	
		8							[=>578.0 Secs (Pattern 1)] [=>578.0 Secs (Pattern 2)]	[1]
2		(6) SDSSJ1218+5648	ACS/WFC, ACCUM, WFC1	F814W	GAIN=2.0		Pattern 1, Exps 1-2 in Visit 06 (1)	500 Secs (1156 Secs)		
	8							[=>578.0 Secs (Pattern 1)] [=>578.0 Secs (Pattern 2)]	[1]	



Proposal 13661 - Visit 07 - A SHARP View of the Structure and Evolution of Normal and Compact Early-type Galaxies

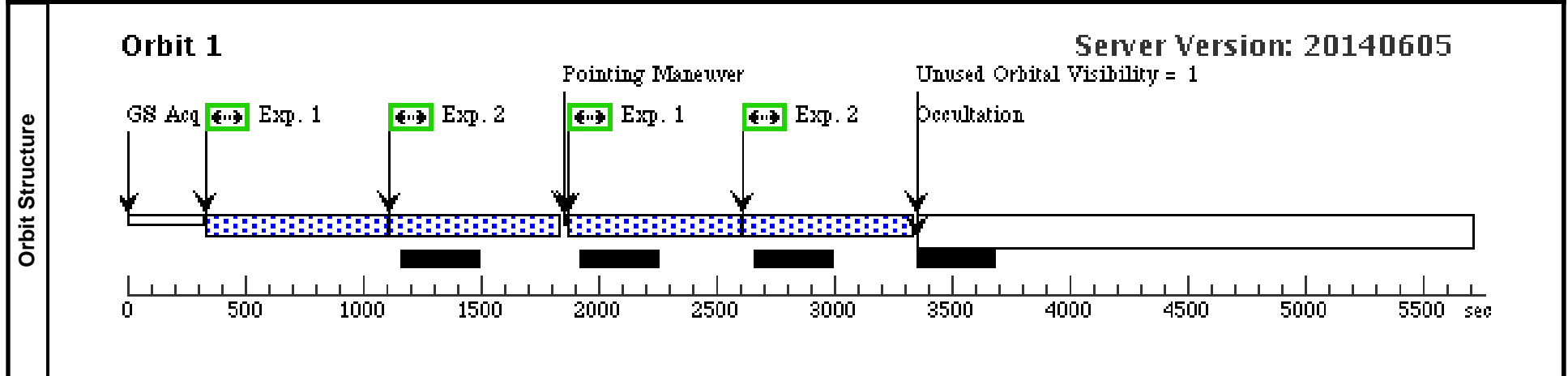
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Visit	Proposal 13661, Visit 07, implementation		
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	Scientific Instruments: ACS/WFC		
	Special Requirements: (none)		

Patterns	#	Primary Pattern	Secondary Pattern	Exposures
	(1)	Pattern Type=ACS-WFC-DITHER-LINE Purpose=DITHER Number Of Points=2 Point Spacing=3.011 Line Spacing=	Coordinate Frame=POS-TARG Pattern Orientation=85.28 Angle Between Sides= Center Pattern=false	

Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
	(7)	SDSSJ1248+4711	RA: 12 48 47.8200 (192.1992500d) Dec: +47 11 5.80 (47.18494d) Equinox: J2000		V=20.3	Reference Frame: ICRS

Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
	1		(7) SDSSJ1248+4711 1	ACS/WFC, ACCUM, WFC1	F555W	GAIN=2.0		Pattern 1, Exps 1-2 in Visit 07 (1)	500 Secs (1124 Secs)	
									[=>562.0 Secs (Pattern 1)] [=>562.0 Secs (Pattern 2)]	[1]
2		(7) SDSSJ1248+4711 1	ACS/WFC, ACCUM, WFC1	F814W	GAIN=2.0		Pattern 1, Exps 1-2 in Visit 07 (1)	500 Secs (1124 Secs)		
								[=>562.0 Secs (Pattern 1)] [=>562.0 Secs (Pattern 2)]	[1]	



Proposal 13661 - Visit 08 - A SHARP View of the Structure and Evolution of Normal and Compact Early-type Galaxies

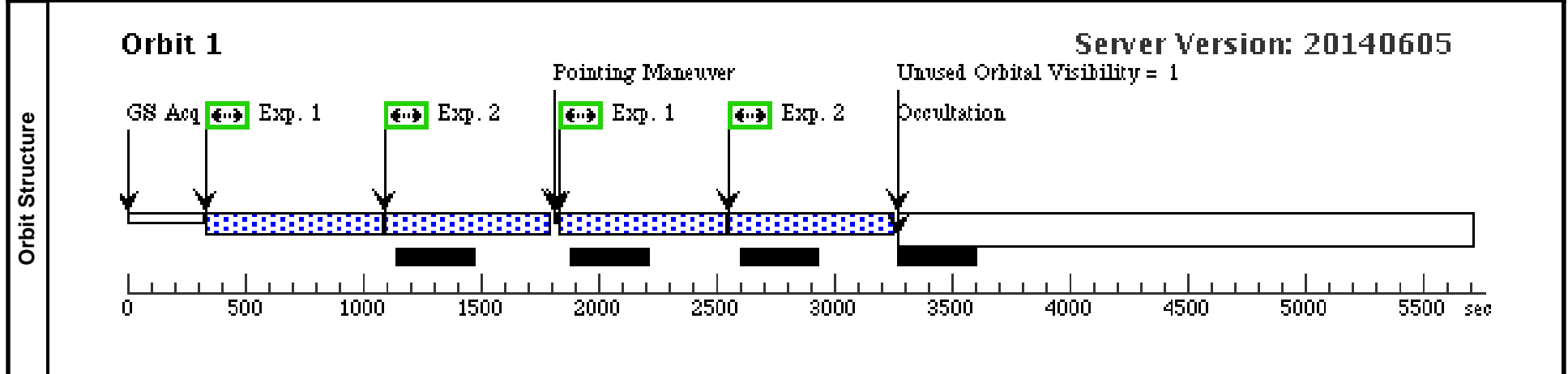
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Visit	Proposal 13661, Visit 08, implementation		
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	Scientific Instruments: ACS/WFC		
	Special Requirements: (none)		

Patterns	#	Primary Pattern	Secondary Pattern	Exposures
	(1)	Pattern Type=ACS-WFC-DITHER-LINE Purpose=DITHER Number Of Points=2 Point Spacing=3.011 Line Spacing=	Coordinate Frame=POS-TARG Pattern Orientation=85.28 Angle Between Sides= Center Pattern=false	

Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
	(8)	SDSSJ1323+3946	RA: 13 23 59.0700 (200.9961250d) Dec: +39 46 33.20 (39.77589d) Equinox: J2000		V=20.3	Reference Frame: ICRS

Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
	1		(8) SDSSJ1323+3946 6	ACS/WFC, ACCUM, WFC1	F555W	GAIN=2.0		Pattern 1, Exps 1-2 in Visit 08 (1)	500 Secs (1084 Secs)	
									[=>542.0 Secs (Pattern 1)] [=>542.0 Secs (Pattern 2)]	[1]
2		(8) SDSSJ1323+3946 6	ACS/WFC, ACCUM, WFC1	F814W	GAIN=2.0		Pattern 1, Exps 1-2 in Visit 08 (1)	500 Secs (1084 Secs)		
								[=>542.0 Secs (Pattern 1)] [=>542.0 Secs (Pattern 2)]	[1]	



Proposal 13661 - Visit 09 - A SHARP View of the Structure and Evolution of Normal and Compact Early-type Galaxies

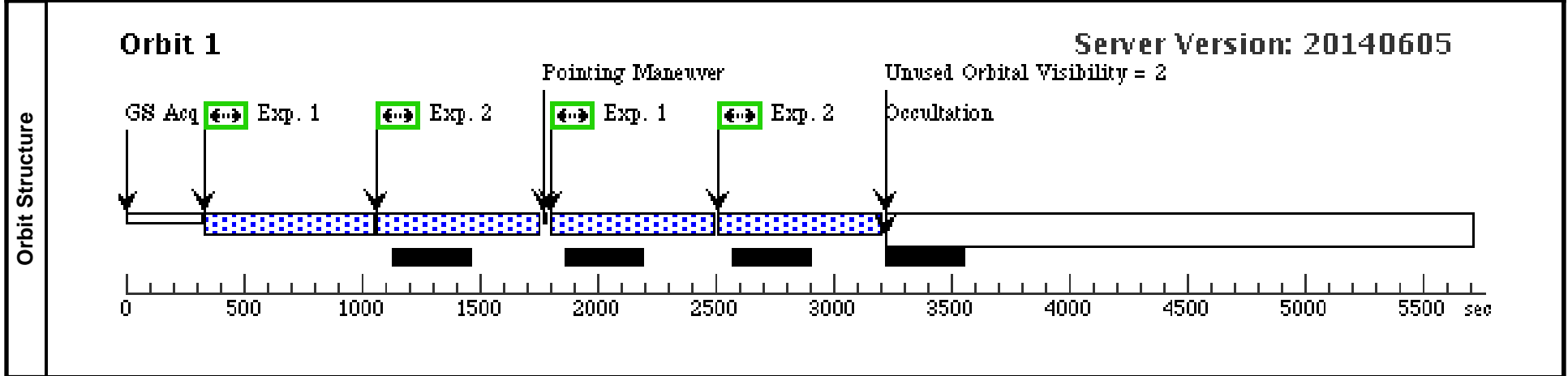
Tue Jul 15 01:06:03 GMT 2014

Visit	Proposal 13661, Visit 09, implementation		
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	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=2 Point Spacing=3.011 Line Spacing=	Coordinate Frame=POS-TARG Pattern Orientation=85.28 Angle Between Sides= Center Pattern=false	

Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
	(9)	SDSSJ1347-0101	RA: 13 47 4.9600 (206.7706667d) Dec: -01 01 3.50 (-1.01764d) Equinox: J2000		V=21.1	Reference Frame: ICRS

Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
	1		(9) SDSSJ1347-0101	ACS/WFC, ACCUM, WFC1	F606W	GAIN=2.0	GS ACQ SCENARIO BASE1B3	Pattern 1, Exps 1-2 in Visit 09 (1)	500 Secs (1032 Secs)	
									[=>516.0 Secs (Pattern 1)] [=>516.0 Secs (Pattern 2)]	[1]
2		(9) SDSSJ1347-0101	ACS/WFC, ACCUM, WFC1	F814W	GAIN=2.0		Pattern 1, Exps 1-2 in Visit 09 (1)	500 Secs (1032 Secs)		
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Proposal 13661 - Visit 10 - A SHARP View of the Structure and Evolution of Normal and Compact Early-type Galaxies

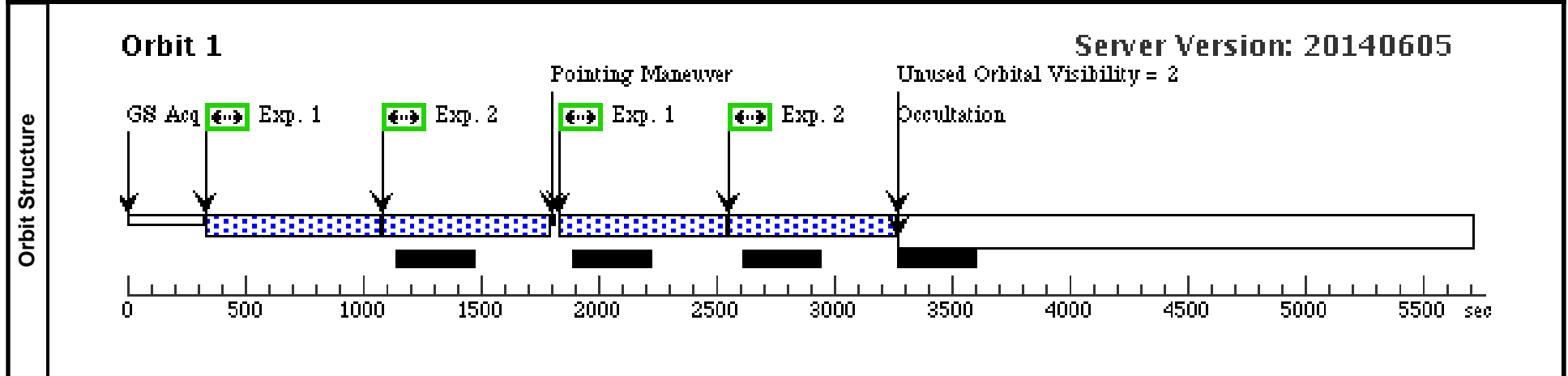
Tue Jul 15 01:06:03 GMT 2014

Visit	Proposal 13661, Visit 10, implementation		
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	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=2 Point Spacing=3.011 Line Spacing=	Coordinate Frame=POS-TARG Pattern Orientation=85.28 Angle Between Sides= Center Pattern=false	

Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
	(10)	SDSSJ1446+3856	RA: 14 46 30.2000 (221.6258333d) Dec: +38 56 56.40 (38.94900d) Equinox: J2000		V=20.9	Reference Frame: ICRS

Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
	1		(10) SDSSJ1446+3856	ACS/WFC, ACCUM, WFC1	F606W	GAIN=2.0		Pattern 1, Exps 1-2 in Visit 10 (1)	500 Secs (1060 Secs)	
									[=>530.0 Secs (Pattern 1)] [=>530.0 Secs (Pattern 2)]	[1]
2		(10) SDSSJ1446+3856	ACS/WFC, ACCUM, WFC1	F814W	GAIN=2.0		Pattern 1, Exps 1-2 in Visit 10 (1)	500 Secs (1060 Secs)		
								[=>530.0 Secs (Pattern 1)] [=>530.0 Secs (Pattern 2)]	[1]	



Proposal 13661 - Visit 11 - A SHARP View of the Structure and Evolution of Normal and Compact Early-type Galaxies

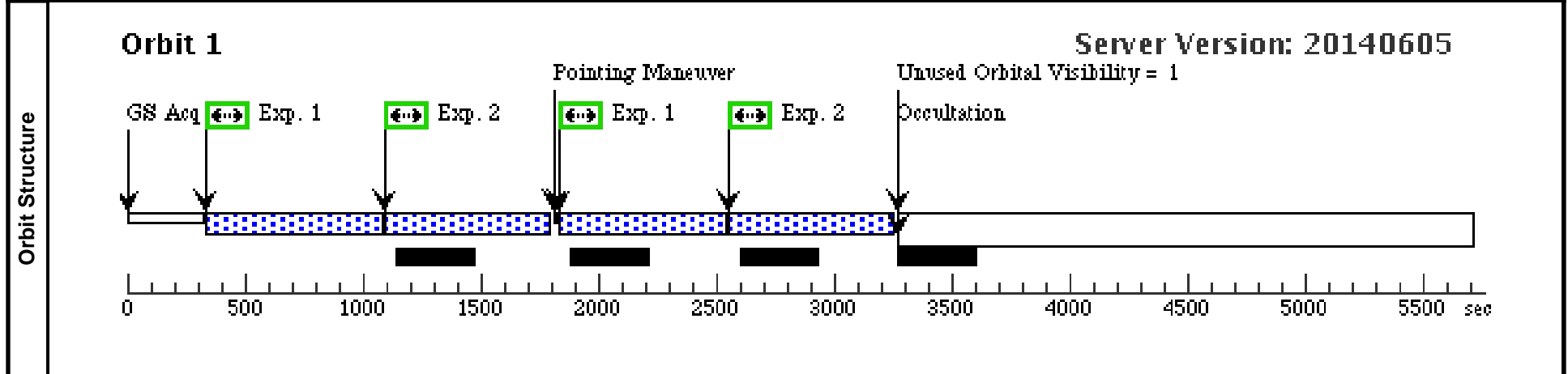
Tue Jul 15 01:06:03 GMT 2014

Visit	Proposal 13661, Visit 11, implementation		
	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=2 Point Spacing=3.011 Line Spacing=	Coordinate Frame=POS-TARG Pattern Orientation=85.28 Angle Between Sides= Center Pattern=false	

Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
	(11)	SDSSJ1605+3811	RA: 16 05 23.2800 (241.3470000d) Dec: +38 11 53.90 (38.19831d) Equinox: J2000		V=20.3	Reference Frame: ICRS

Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
	1		(11) SDSSJ1605+3811	ACS/WFC, ACCUM, WFC1	F555W	GAIN=2.0		Pattern 1, Exps 1-2 in Visit 11 (1)	500 Secs (1084 Secs)	
									[=>542.0 Secs (Pattern 1)] [=>542.0 Secs (Pattern 2)]	[1]
2		(11) SDSSJ1605+3811	ACS/WFC, ACCUM, WFC1	F814W	GAIN=2.0		Pattern 1, Exps 1-2 in Visit 11 (1)	500 Secs (1084 Secs)		
								[=>542.0 Secs (Pattern 1)] [=>542.0 Secs (Pattern 2)]	[1]	



Proposal 13661 - Visit 12 - A SHARP View of the Structure and Evolution of Normal and Compact Early-type Galaxies

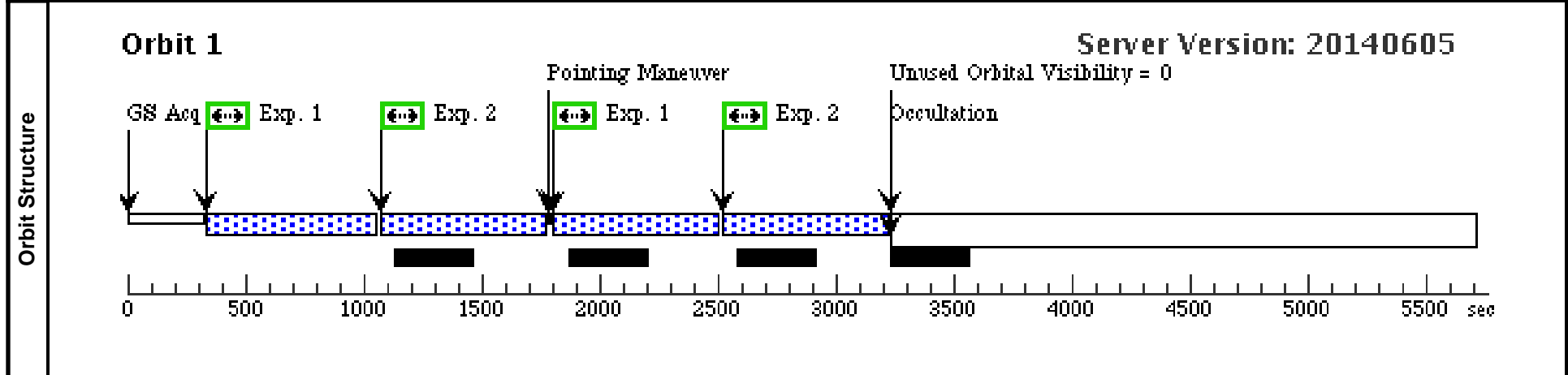
Tue Jul 15 01:06:03 GMT 2014

Visit	Proposal 13661, Visit 12, implementation		
	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=2 Point Spacing=3.011 Line Spacing=	Coordinate Frame=POS-TARG Pattern Orientation=85.28 Angle Between Sides= Center Pattern=false	

Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
	(12)	SDSSJ1606+2235	RA: 16 06 7.0900 (241.5295417d) Dec: +22 35 11.30 (22.58647d) Equinox: J2000		V=20.8	Reference Frame: ICRS

Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
	1		(12) SDSSJ1606+2235	ACS/WFC, ACCUM, WFC1	F606W	GAIN=2.0		Pattern 1, Exps 1-2 in Visit 12 (1)	500 Secs (1038 Secs)	
									[==>519.0 Secs (Pattern 1)] [==>519.0 Secs (Pattern 2)]	[1]
2		(12) SDSSJ1606+2235	ACS/WFC, ACCUM, WFC1	F814W	GAIN=2.0		Pattern 1, Exps 1-2 in Visit 12 (1)	500 Secs (1038 Secs)		
								[==>519.0 Secs (Pattern 1)] [==>519.0 Secs (Pattern 2)]	[1]	



Proposal 13661 - Visit 13 - A SHARP View of the Structure and Evolution of Normal and Compact Early-type Galaxies

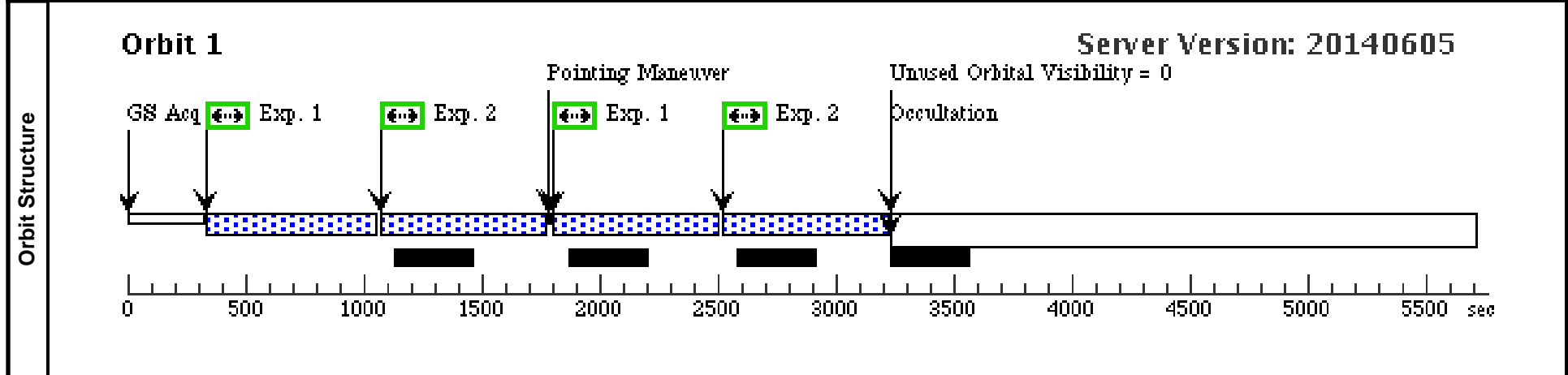
Tue Jul 15 01:06:03 GMT 2014

Visit	Proposal 13661, Visit 13, implementation		
	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=2 Point Spacing=3.011 Line Spacing=	Coordinate Frame=POS-TARG Pattern Orientation=85.28 Angle Between Sides= Center Pattern=false	

Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
	(13)	SDSSJ1619+2024	RA: 16 19 12.6300 (244.8026250d) Dec: +20 24 27.90 (20.40775d) Equinox: J2000		V=21.0	Reference Frame: ICRS

Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
	1		(13) SDSSJ1619+2024	ACS/WFC, ACCUM, WFC1	F606W	GAIN=2.0		Pattern 1, Exps 1-2 in Visit 13 (1)	500 Secs (1038 Secs)	
									[=>519.0 Secs (Pattern 1)] [=>519.0 Secs (Pattern 2)]	[1]
2		(13) SDSSJ1619+2024	ACS/WFC, ACCUM, WFC1	F814W	GAIN=2.0		Pattern 1, Exps 1-2 in Visit 13 (1)	500 Secs (1038 Secs)		
								[=>519.0 Secs (Pattern 1)] [=>519.0 Secs (Pattern 2)]	[1]	



Proposal 13661 - Visit 14 - A SHARP View of the Structure and Evolution of Normal and Compact Early-type Galaxies

Tue Jul 15 01:06:03 GMT 2014

Visit	Proposal 13661, Visit 14, implementation		
	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=2 Point Spacing=3.011 Line Spacing=	Coordinate Frame=POS-TARG Pattern Orientation=85.28 Angle Between Sides= Center Pattern=false	(1-2)

Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
	(14)	SDSSJ2228-0018	RA: 22 28 40.8000 (337.1700000d) Dec: -00 18 16.80 (-.30467d) Equinox: J2000		V=19.6	Reference Frame: ICRS

Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
	1		(14) SDSSJ2228-0018	ACS/WFC, ACCUM, WFC1	F555W	GAIN=2.0		Pattern 1, Exps 1-2 in Visit 14 (1)	500 Secs (1056 Secs)	
		8							[=>528.0 Secs (Pattern 1)] [=>528.0 Secs (Pattern 2)]	[1]
	2		(14) SDSSJ2228-0018	ACS/WFC, ACCUM, WFC1	F814W	GAIN=2.0		Pattern 1, Exps 1-2 in Visit 14 (1)	500 Secs (1056 Secs)	
		8							[=>528.0 Secs (Pattern 1)] [=>528.0 Secs (Pattern 2)]	[1]

