14131 - Origin of double peaks in Lyman-alpha spectra: diffuse halos or Lyman continuum leakage?

Cycle: 23, Proposal Category: GO

(UV Initiative)

(Availability Mode: SUPPORTED)

INVESTIGATORS

Name	*Institution*	*E-Mail*
Dr. Ivana Orlitova (PI) (ESA Member) (Contact)	**Astronomical Institute, Academy of Sciences of CR**	**ivana.orlitova@unige.ch**
Dr. Anne Verhamme (CoI) (ESA Member)	Observatoire de Geneve	anne.verhamme@unige.ch
Prof. Goeran Oestlin (CoI) (ESA Member)	Stockholm University	ostlin@astro.su.se
Dr. Jens Melinder (CoI) (ESA Member)	Stockholm University	jens@astro.su.se
Dr. Matthew Hayes (CoI) (ESA Member)	Stockholm University	matthew@astro.su.se

VISITS

Visit	*Targets used in Visit*	*Configurations used in Visit*	*Orbits Used*	*Last Orbit Planner Run*	*OP Current with Visit?*
01	(1) SDSS-J121903.98+152608.5	ACS/SBC	2	23-Jan-2016 21:08:11.0	yes
02	(2) SDSS-J145735.13+223201.8	ACS/SBC	2	23-Jan-2016 21:08:13.0	yes
04	(4) SDSS-J113722.14+352426.6	ACS/SBC	2	23-Jan-2016 21:08:14.0	yes
05	(3) SDSS-J124834.63+123402.9	ACS/SBC	2	23-Jan-2016 21:08:15.0	yes
06	(3) SDSS-J124834.63+123402.9	ACS/SBC	2	23-Jan-2016 21:08:16.0	yes
07	(1) SDSS-J121903.98+152608.5	WFC3/UVIS	1	23-Jan-2016 21:08:17.0	yes
08	(2) SDSS-J145735.13+223201.8	WFC3/UVIS	1	23-Jan-2016 21:08:18.0	yes

Visit	*Targets used in Visit*	*Configurations used in Visit*	*Orbits Used*	*Last Orbit Planner Run*	*OP Current with Visit?*
09	(3) SDSS-J124834.63+123402.9	WFC3/UVIS	1	23-Jan-2016 21:08:20.0	yes
10	(4) SDSS-J113722.14+352426.6	WFC3/UVIS	1	23-Jan-2016 21:08:21.0	yes
11	(1) SDSS-J121903.98+152608.5	ACS/WFC	1	23-Jan-2016 21:08:22.0	yes
12	(2) SDSS-J145735.13+223201.8	ACS/WFC	1	23-Jan-2016 21:08:23.0	yes
13	(4) SDSS-J113722.14+352426.6	ACS/WFC	1	23-Jan-2016 21:08:24.0	yes
14	(3) SDSS-J124834.63+123402.9	ACS/WFC	1	23-Jan-2016 21:08:25.0	yes

18 Total Orbits Used

ABSTRACT

The Lyman-alpha (Lya) line of hydrogen is a tool of prominent cosmological importance. Most of the observed spectra show P-Cygni profiles, but a fraction of them are double-peaked, interpreted as radiative transfer effects in static media in the realm of the common expanding shell models. However, several studies indicate that this interpretation is inconsistent with ancillary data. We propose a new theoretical scheme for the origin of 2 types of double peaks: 1) Our simulations show that double peaks arise in Lya "halos", i.e. diffuse Lya emission in circum-galactic gas. 2) We predict that no Lya halos are expected at galaxies with escaping Lyman continuum (LyC), and in this case narrow Lya double peaks result from radiative transfer in low column density of neutral hydrogen. We propose testing these two schemes on Green Peas, a class of local, compact, low-mass, low-metallicity galaxies, which comprise some of the strongest candidates for LyC escape. Most of their HST/COS Lya spectra are double-peaked, carrying the signal from the entire galaxy and its Lya halo, thanks to the target compactness. We have selected 4 targets with very different Lya spectra: narrow and broad, strong and weak double-peaks, and one single-peak spectrum. We will image them in Lya, FUV continuum and H-alpha. We expect detecting 2 large halos (plus one available in the archive), while the other 2 targets are probable LyC leakers. We will search for connections between spatial Lya properties (halo extent, surface brightness profile, flux concentration) and spectral Lya signatures (peak separation, blue peak strength). Our results will have impact on Lya data interpretation both at low and high redshift.

OBSERVING DESCRIPTION

This program will image 4 compact dwarf galaxies with two ACS/SBC filters to synthesize a Lya bandpass (F140LP and F150LP - 2 orbits per target for z<0.2, or F150LP and F165LP - 4 orbits per target for z>0.2), with two WFC3/UVIS filters (F390W and F475W, 1 orbit per target), and with ACS/WFC (F850LP and ramp filters FR872N or FR853N, 1 orbit per target). This amounts to 18 orbits.

All SBC visits are kept to 2 orbits to prevent heatup of the detector and the associated increase in dark current. All SBC visits are safe with respect to the bright object limit. We have indicated ETC run numbers for the brightest (in FUV flux) target in all filters used, hence this is conservative and deemed safe by the BOT tool.

All SBC visits should be scheduled so that the SBC HAS NOT BEEN IN USE FOR THE PAST 24 hours to minimize the dark current.

All SBC visits use 4 dither positions per filter to improve photometric accuracy and to mitigate the effect of the detector stripe.

The WFC3/UVIS visits, 1 orbit per target, filters F390W and F475W, utilise a 3 point dither to step over droplets.

ACS/WFC is used for ramp filter imaging and F850LP, utilising SMALL pos-targs.

Visit

Proposal 14131, GP1219-SBC (01), scheduling Sun Jan 24 02:08:27 GMT 2016

Diagnostic Status: No Diagnostics

Scientific Instruments: ACS/SBC

Special Requirements: (none)

Comments: We request that the SBC not be used 24 hours before this visit in order to mitigate the effects of dark current.

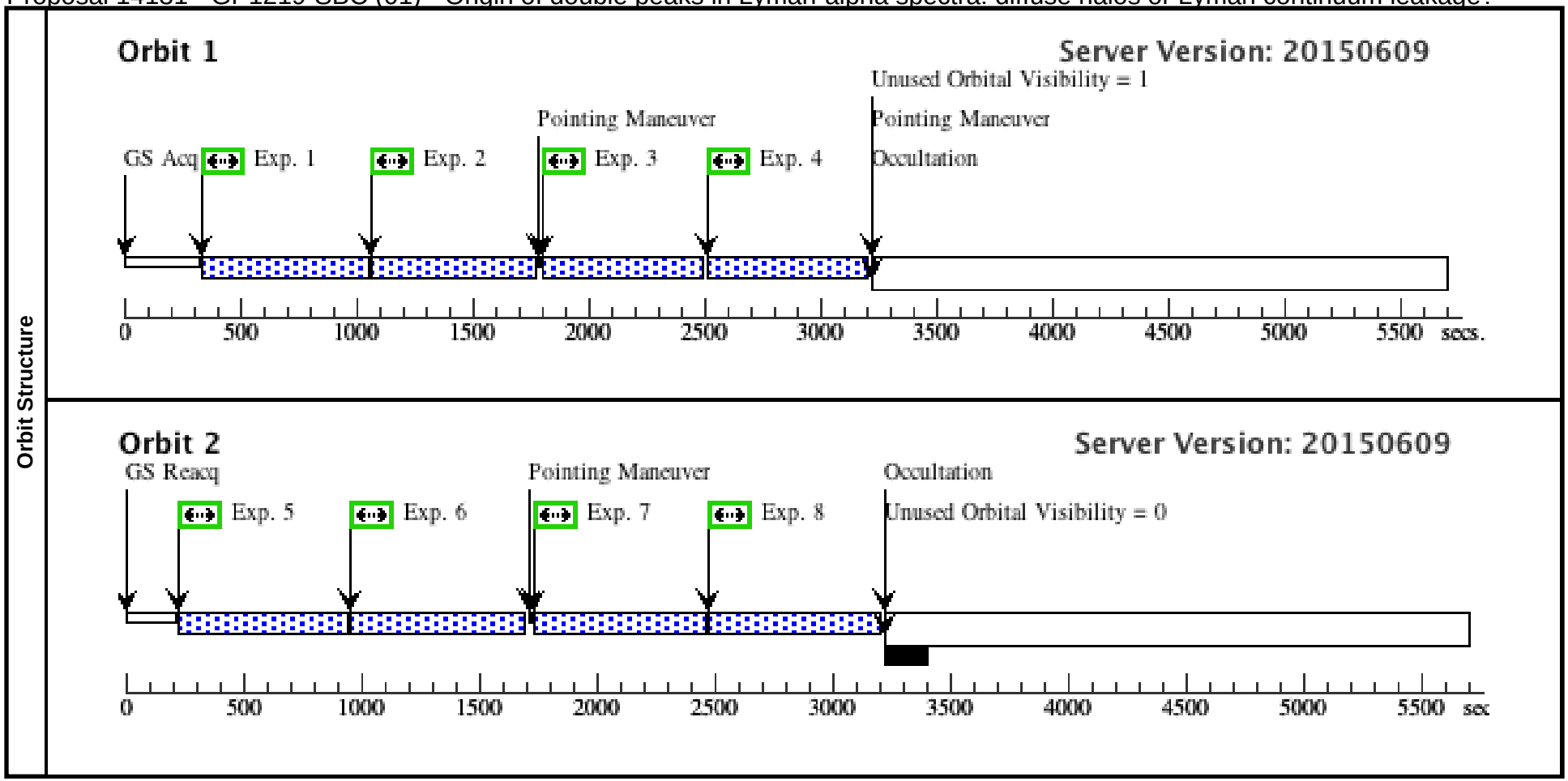
Fixed Targets

#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(1)	SDSS-J121903.98+152608.5	RA: 12 19 3.9840 (184.7666000d) Dec: +15 26 8.52 (15.43570d) Equinox: J2000	Redshift: 0.1956	V=19.6+/-0.1 FUV = 19.3 mag AB	Reference Frame: ICRS

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

Exposures

#	Label (ETC Run)	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
1	(733404)	(1) SDSS-J121903.98+152608.5	ACS/SBC, ACCUM, SBC	F140LP				650 Secs (650 Secs)	
								[==>]	***[1]***
2	(733405)	(1) SDSS-J121903.98+152608.5	ACS/SBC, ACCUM, SBC	F150LP		SAME POS AS 1		665 Secs (665 Secs)	
								[==>]	***[1]***
3	(733405)	(1) SDSS-J121903.98+152608.5	ACS/SBC, ACCUM, SBC	F150LP		POS TARG -0.5205 166987938966,-0.95 00606943305857		665 Secs (665 Secs)	
								[==>]	***[1]***
4	(733404)	(1) SDSS-J121903.98+152608.5	ACS/SBC, ACCUM, SBC	F140LP		SAME POS AS 3		650 Secs (650 Secs)	
								[==>]	***[1]***
5	(733404)	(1) SDSS-J121903.98+152608.5	ACS/SBC, ACCUM, SBC	F140LP		POS TARG 0.58424 73570133007,0.9493 177058268445		690 Secs (690 Secs)	
								[==>]	***[2]***
6	(733405)	(1) SDSS-J121903.98+152608.5	ACS/SBC, ACCUM, SBC	F150LP		SAME POS AS 5		700 Secs (700 Secs)	
								[==>]	***[2]***
7	(733405)	(1) SDSS-J121903.98+152608.5	ACS/SBC, ACCUM, SBC	F150LP		POS TARG 0.81203 3905790553,-1.4106 813371006068		700 Secs (700 Secs)	
								[==>]	***[2]***
8	(733404)	(1) SDSS-J121903.98+152608.5	ACS/SBC, ACCUM, SBC	F140LP		SAME POS AS 7		690 Secs (690 Secs)	
								[==>]	***[2]***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Orbit 1
Server Version: 20150609
Unused Orbital Visibility = 1
Pointing Maneuver
Pointing Maneuver
GS Acq
Exp. 1
Exp. 2
Exp. 3
Exp. 4
Occultation
0
500
1000
1500
2000
2500
3000
3500
4000
4500
5000
5500
secs.
Orbit 2
Server Version: 20150609
GS Reacq
Pointing Maneuver
Occultation
Exp. 5
Exp. 6
Exp. 7
Exp. 8
Unused Orbital Visibility = 0
0
500
1000
1500
2000
2500
3000
3500
4000
4500
5000
5500
sec

Visit

Proposal 14131, GP1457-SBC (02), scheduling Sun Jan 24 02:08:27 GMT 2016

Diagnostic Status: No Diagnostics

Scientific Instruments: ACS/SBC

Special Requirements: (none)

Comments: We request that the SBC not be used 24 hours before this visit in order to mitigate the effects of dark current

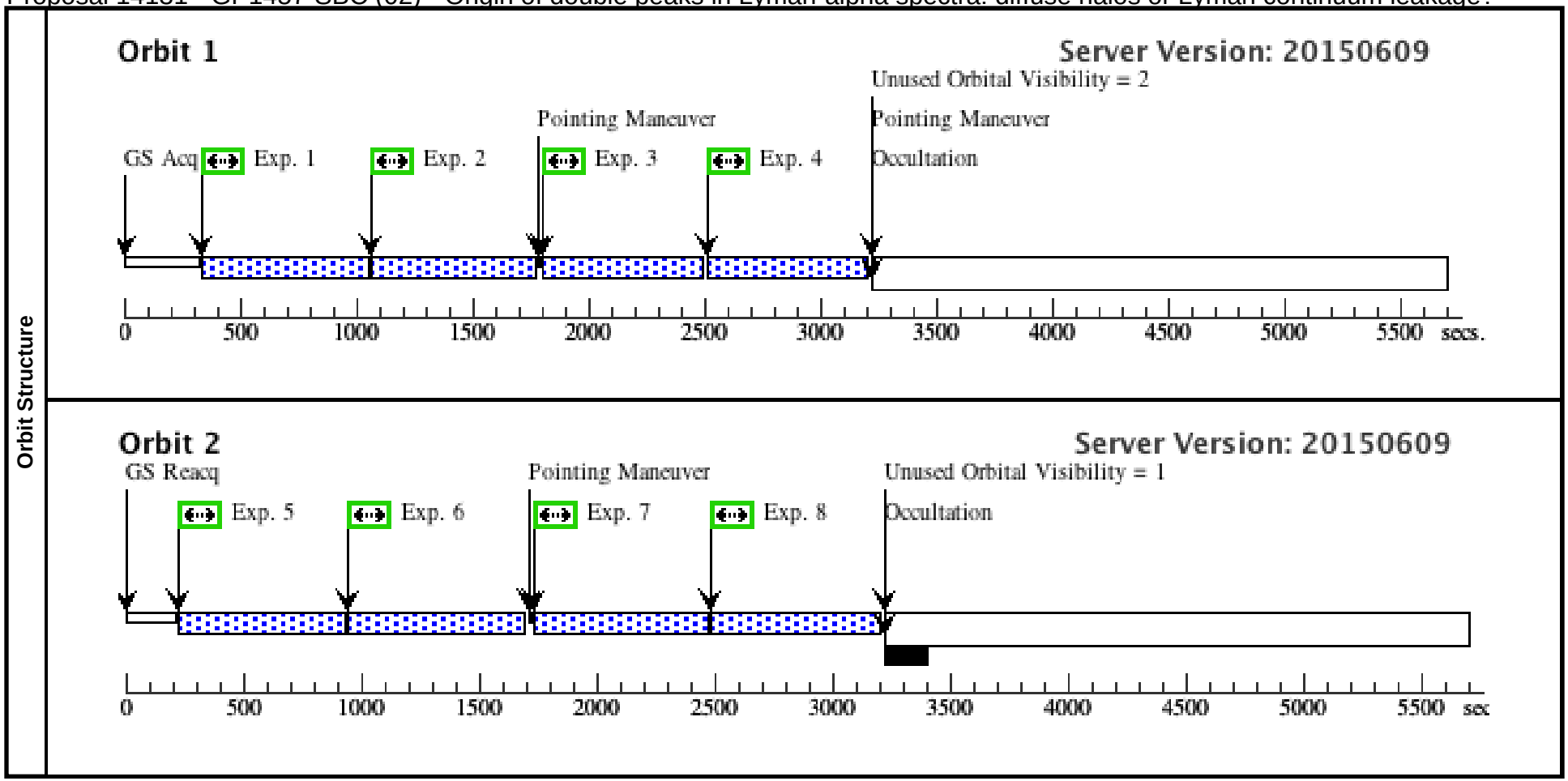
Fixed Targets

#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(2)	SDSS-J145735.13+223201.8	RA: 14 57 35.1390 (224.3964125d) Dec: +22 32 1.79 (22.53383d) Equinox: J2000	Redshift: 0.1487	V=19.3+/-0.1 FUV = 20.2 mag AB	Reference Frame: ICRS

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

Exposures

#	Label (ETC Run)	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
1	(733404)	(2) SDSS-J145735.13+223201.8	ACS/SBC, ACCUM, SBC	F140LP				650 Secs (650 Secs)	
								[==>]	***[1]***
2	(733405)	(2) SDSS-J145735.13+223201.8	ACS/SBC, ACCUM, SBC	F150LP		SAME POS AS 1		665 Secs (665 Secs)	
								[==>]	***[1]***
3	(733405)	(2) SDSS-J145735.13+223201.8	ACS/SBC, ACCUM, SBC	F150LP		POS TARG -0.5205 166987938966,-0.95 00606943305857		665 Secs (665 Secs)	
								[==>]	***[1]***
4	(733404)	(2) SDSS-J145735.13+223201.8	ACS/SBC, ACCUM, SBC	F140LP		SAME POS AS 3		650 Secs (650 Secs)	
								[==>]	***[1]***
5	(733404)	(2) SDSS-J145735.13+223201.8	ACS/SBC, ACCUM, SBC	F140LP		POS TARG 0.58424 73570133007,0.9493 177058268445		680 Secs (680 Secs)	
								[==>]	***[2]***
6	(733405)	(2) SDSS-J145735.13+223201.8	ACS/SBC, ACCUM, SBC	F150LP		SAME POS AS 5		710 Secs (710 Secs)	
								[==>]	***[2]***
7	(733405)	(2) SDSS-J145735.13+223201.8	ACS/SBC, ACCUM, SBC	F150LP		POS TARG 0.81203 3905790553,-1.4106 813371006068		710 Secs (710 Secs)	
								[==>]	***[2]***
8	(733404)	(2) SDSS-J145735.13+223201.8	ACS/SBC, ACCUM, SBC	F140LP		SAME POS AS 7		680 Secs (680 Secs)	
								[==>]	***[2]***


Orbit Structure
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Server Version: 20150609
Unused Orbital Visibility = 2
Pointing Maneuver
Pointing Maneuver
GS Acq
Exp. 1
Exp. 2
Exp. 3
Exp. 4
Occultation
0
500
1000
1500
2000
2500
3000
3500
4000
4500
5000
5500
secs.
Orbit 2
Server Version: 20150609
GS Reacq
Pointing Maneuver
Unused Orbital Visibility = 1
Exp. 5
Exp. 6
Exp. 7
Exp. 8
Occultation
0
500
1000
1500
2000
2500
3000
3500
4000
4500
5000
5500
sec

Visit

Proposal 14131, GP1137-SBC (04), scheduling Sun Jan 24 02:08:27 GMT 2016

Diagnostic Status: No Diagnostics

Scientific Instruments: ACS/SBC

Special Requirements: (none)

Comments: We request that the SBC not be used 24 hours before this visit in order to mitigate the effects of dark current

Fixed Targets

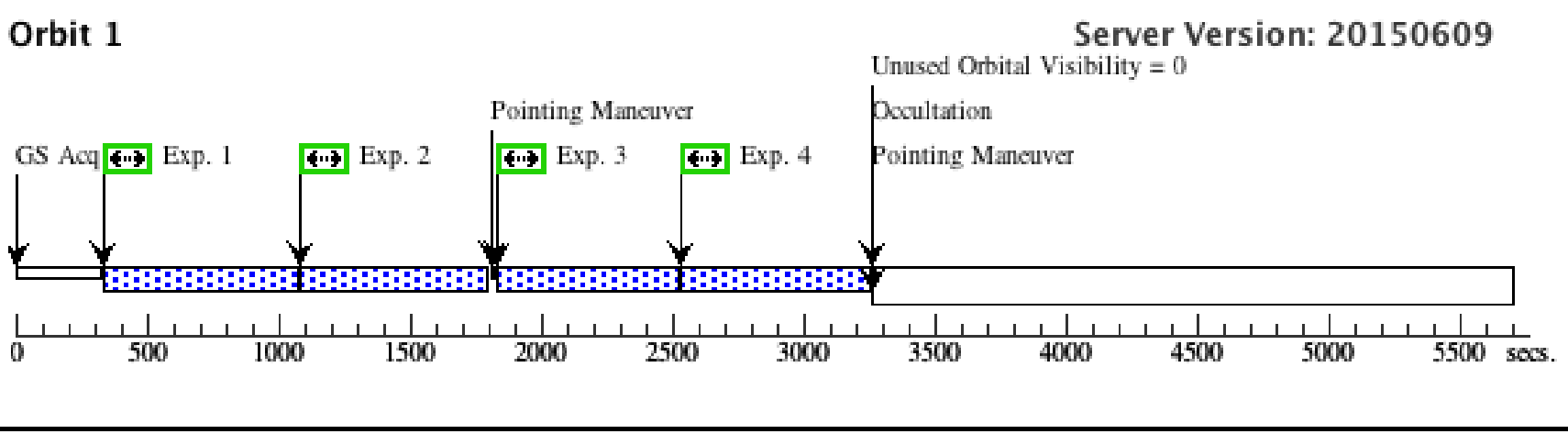
#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(4)	SDSS-J113722.14+352426.6	RA: 11 37 22.1450 (174.3422708d) Dec: +35 24 26.69 (35.40741d) Equinox: J2000	Redshift: 0.1944	V=18.9+/-0.1 FUV = 19.3 mag AB	Reference Frame: ICRS

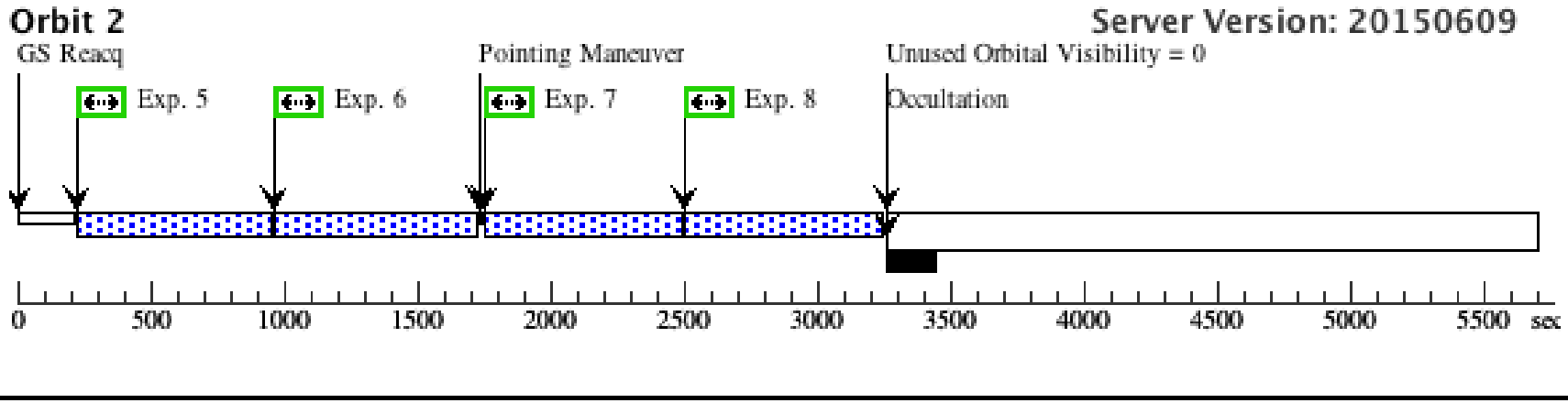
Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.

Exposures

#	Label (ETC Run)	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
1	(733404)	(4) SDSS-J113722.14+352426.6	ACS/SBC, ACCUM, SBC	F140LP				674 Secs (674 Secs)	
								[==>]	***[1]***
2	(733405)	(4) SDSS-J113722.14+352426.6	ACS/SBC, ACCUM, SBC	F150LP		SAME POS AS 1		669 Secs (669 Secs)	
								[==>]	***[1]***
3	(733405)	(4) SDSS-J113722.14+352426.6	ACS/SBC, ACCUM, SBC	F150LP		POS TARG -0.5205 166987938966,-0.95 00606943305857		660 Secs (660 Secs)	
								[==>]	***[1]***
4	(733404)	(4) SDSS-J113722.14+352426.6	ACS/SBC, ACCUM, SBC	F140LP		SAME POS AS 3		674 Secs (674 Secs)	
								[==>]	***[1]***
5	(733404)	(4) SDSS-J113722.14+352426.6	ACS/SBC, ACCUM, SBC	F140LP		POS TARG 0.58424 73570133007,0.9493 177058268445		700 Secs (700 Secs)	
								[==>]	***[2]***
6	(733405)	(4) SDSS-J113722.14+352426.6	ACS/SBC, ACCUM, SBC	F150LP		SAME POS AS 5		713 Secs (713 Secs)	
								[==>]	***[2]***
7	(733405)	(4) SDSS-J113722.14+352426.6	ACS/SBC, ACCUM, SBC	F150LP		POS TARG 0.81203 3905790553,-1.4106 813371006068		713 Secs (713 Secs)	
								[==>]	***[2]***
8	(733404)	(4) SDSS-J113722.14+352426.6	ACS/SBC, ACCUM, SBC	F140LP		SAME POS AS 7		700 Secs (700 Secs)	
								[==>]	***[2]***

Orbit Structure





Visit

Proposal 14131, GP1248-SBC-1 (05), scheduling Sun Jan 24 02:08:27 GMT 2016

Diagnostic Status: No Diagnostics

Scientific Instruments: ACS/SBC

Special Requirements: (none)

Comments: We request that the SBC not be used 24 hours before this visit in order to mitigate the effects of dark current.

SBC observations of GP1248 split in two visits to prevent heatup (and associated increase in dark current) of detector.

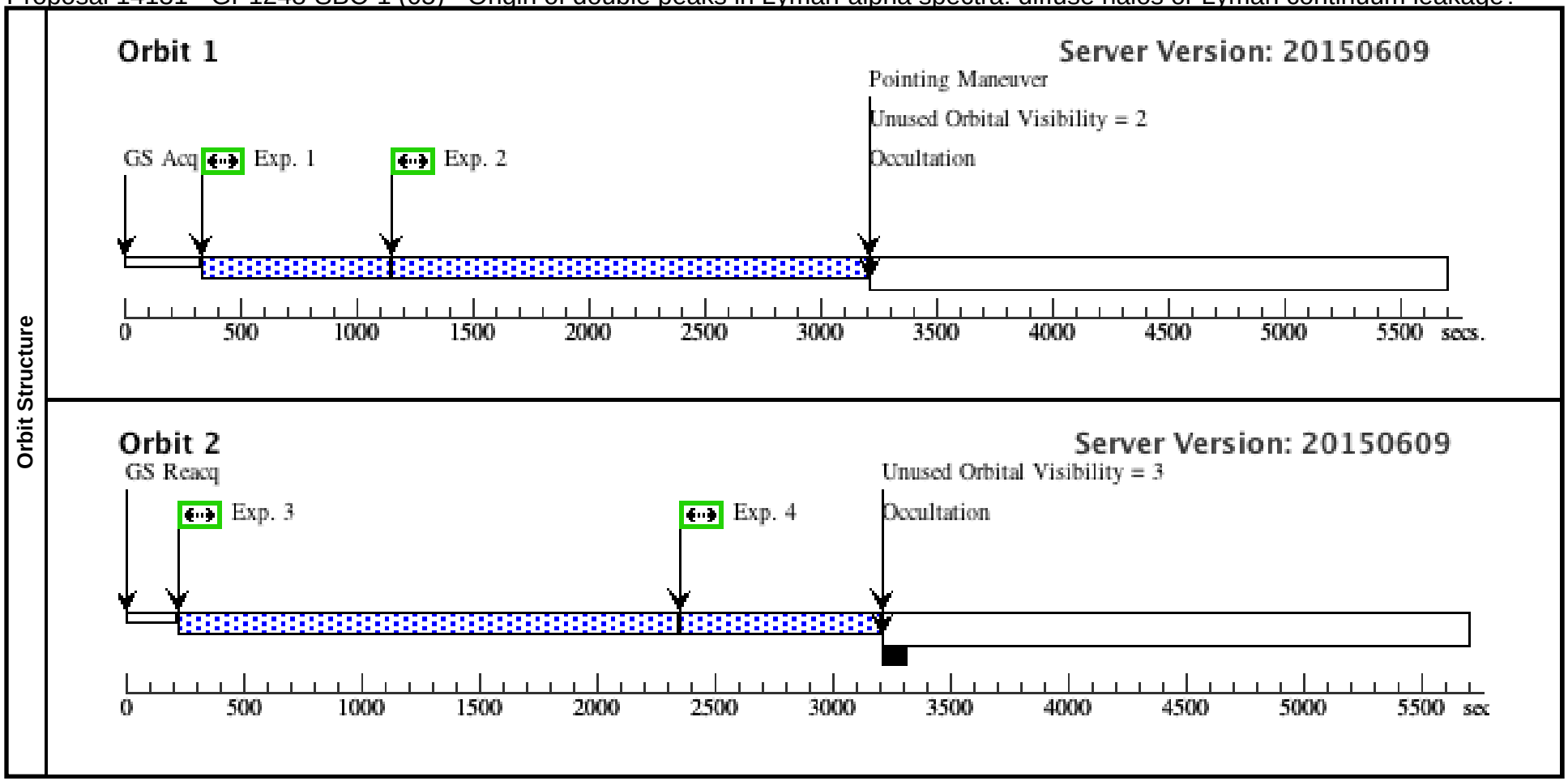
Fixed Targets

#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(3)	SDSS-J124834.63+123402.9	RA: 12 48 34.6360 (192.1443167d) Dec: +12 34 2.93 (12.56748d) Equinox: J2000	Redshift: 0.2634	V=20.0+/-0.1 FUV = 19.6 mag AB	Reference Frame: ICRS

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

Exposures

#	Label (ETC Run)	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
1	(732688)	(3) SDSS-J124834.63+123402.9	ACS/SBC, ACCUM, SBC	F150LP				740 Secs (740 Secs) *[==>]*	 ***[1]***
2	(732687)	(3) SDSS-J124834.63+123402.9	ACS/SBC, ACCUM, SBC	F165LP		SAME POS AS 1		2000 Secs (2000 Secs) *[==>]*	 ***[1]***
3	(732687)	(3) SDSS-J124834.63+123402.9	ACS/SBC, ACCUM, SBC	F165LP		POS TARG -0.5205 166987938966,-0.95 00606943305857		2090 Secs (2090 Secs) *[==>]*	 ***[2]***
4	(732688)	(3) SDSS-J124834.63+123402.9	ACS/SBC, ACCUM, SBC	F150LP		SAME POS AS 3		800 Secs (800 Secs) *[==>]*	 ***[2]***


Orbit Structure
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Server Version: 20150609
Pointing Maneuver
Unused Orbital Visibility = 2
GS Acq
Exp. 1
Exp. 2
Occultation
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500
1000
1500
2000
2500
3000
3500
4000
4500
5000
5500
secs.
Orbit 2
Server Version: 20150609
GS Reacq
Unused Orbital Visibility = 3
Exp. 3
Exp. 4
Occultation
0
500
1000
1500
2000
2500
3000
3500
4000
4500
5000
5500
sec

Visit

Proposal 14131, GP1248-SBC-2 (06), scheduling Sun Jan 24 02:08:27 GMT 2016

Diagnostic Status: No Diagnostics

Scientific Instruments: ACS/SBC

Special Requirements: (none)

Comments: We request that the SBC not be used 24 hours before this visit in order to mitigate the effects of dark current.

SBC observations of GP1248 split in two visits to prevent heatup (and associated increase in dark current) of detector.

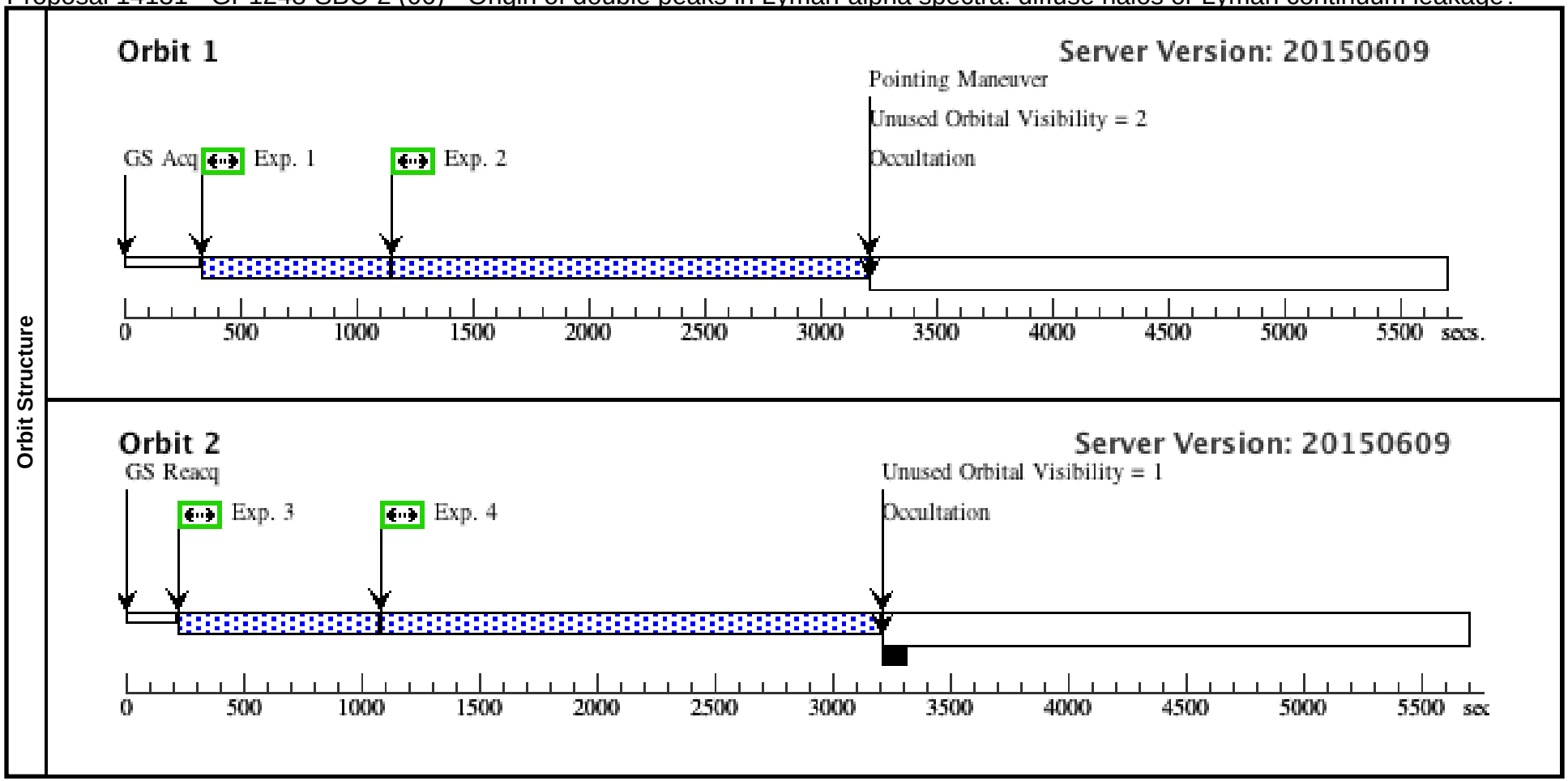
Fixed Targets

#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(3)	SDSS-J124834.63+123402.9	RA: 12 48 34.6360 (192.1443167d) Dec: +12 34 2.93 (12.56748d) Equinox: J2000	Redshift: 0.2634	V=20.0+/-0.1 FUV = 19.6 mag AB	Reference Frame: ICRS

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

Exposures

#	Label (ETC Run)	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
1	(732688)	(3) SDSS-J124834.63+123402.9	ACS/SBC, ACCUM, SBC	F150LP		POS TARG 0.58424 73570133007,0.9493 177058268445		740 Secs (740 Secs) *[==>]*	 ***[1]***
2	(732687)	(3) SDSS-J124834.63+123402.9	ACS/SBC, ACCUM, SBC	F165LP		SAME POS AS 1		2000 Secs (2000 Secs) *[==>]*	 ***[1]***
3	(732688)	(3) SDSS-J124834.63+123402.9	ACS/SBC, ACCUM, SBC	F150LP		SAME POS AS 4		800 Secs (800 Secs) *[==>]*	 ***[2]***
4	(732687)	(3) SDSS-J124834.63+123402.9	ACS/SBC, ACCUM, SBC	F165LP		POS TARG 0.81203 3905790553,-1.4106 813371006068		2070 Secs (2070 Secs) *[==>]*	 ***[2]***


Orbit Structure
Orbit 1
Server Version: 20150609
Pointing Maneuver
Unused Orbital Visibility = 2
GS Acq
Exp. 1
Exp. 2
Occultation
0
500
1000
1500
2000
2500
3000
3500
4000
4500
5000
5500
secs.
Orbit 2
Server Version: 20150609
GS Reacq
Unused Orbital Visibility = 1
Exp. 3
Exp. 4
Occultation
0
500
1000
1500
2000
2500
3000
3500
4000
4500
5000
5500
sec

Visit

Proposal 14131, GP1219-UVIS (07), scheduling Sun Jan 24 02:08:27 GMT 2016

Diagnostic Status: No Diagnostics

Scientific Instruments: WFC3/UVIS

Special Requirements: (none)

Fixed Targets

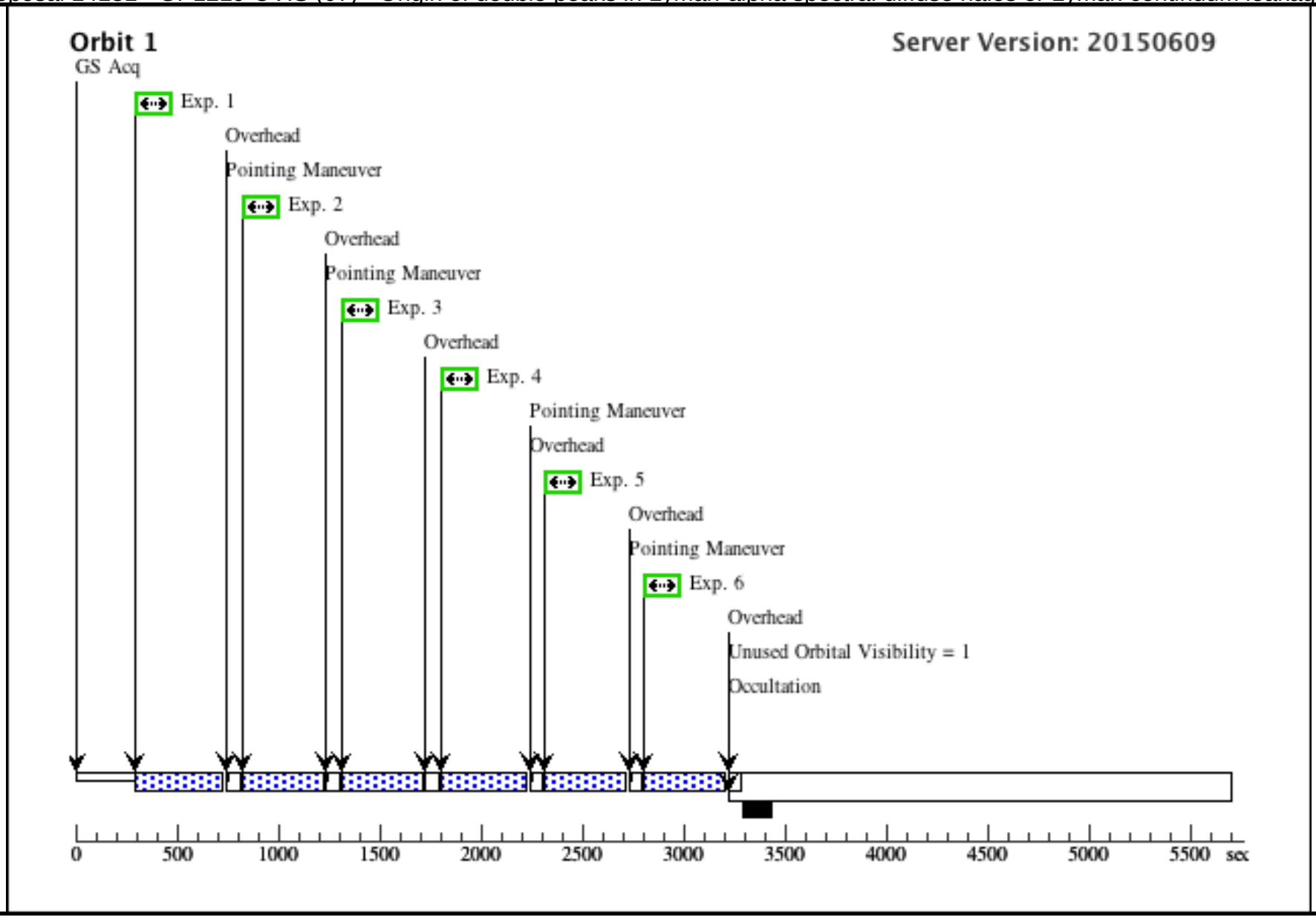
#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(1)	SDSS-J121903.98+152608.5	RA: 12 19 3.9840 (184.7666000d) Dec: +15 26 8.52 (15.43570d) Equinox: J2000	Redshift: 0.1956	V=19.6+/-0.1 FUV = 19.3 mag AB	Reference Frame: ICRS

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

Exposures

#	Label (ETC Run)	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
1	(WFC3UVIS.im.750173)	(1) SDSS-J121903.98+152608.5	WFC3/UVIS, ACCUM, UVIS2-C1K1C-SUB	F438W	FLASH=8			400 Secs (400 Secs) *[==>]*	 ***[1]***
2	(WFC3UVIS.im.750173)	(1) SDSS-J121903.98+152608.5	WFC3/UVIS, ACCUM, UVIS2-C1K1C-SUB	F438W	FLASH=8	POS TARG 2.9568,2.9568		400 Secs (400 Secs) *[==>]*	 ***[1]***
3	(WFC3UVIS.im.750173)	(1) SDSS-J121903.98+152608.5	WFC3/UVIS, ACCUM, UVIS2-C1K1C-SUB	F438W	FLASH=8	POS TARG 5.9136,5.9136		400 Secs (400 Secs) *[==>]*	 ***[1]***
4	(WFC3UVIS.im.750178)	(1) SDSS-J121903.98+152608.5	WFC3/UVIS, ACCUM, UVIS2-C1K1C-SUB	F475W	FLASH=4	SAME POS AS 3		400 Secs (400 Secs) *[==>]*	 ***[1]***
5	(WFC3UVIS.im.750178)	(1) SDSS-J121903.98+152608.5	WFC3/UVIS, ACCUM, UVIS2-C1K1C-SUB	F475W	FLASH=4	SAME POS AS 2		400 Secs (400 Secs) *[==>]*	 ***[1]***
6	(WFC3UVIS.im.750181)	(1) SDSS-J121903.98+152608.5	WFC3/UVIS, ACCUM, UVIS2-C1K1C-SUB	F475W	FLASH=4	SAME POS AS 1		400 Secs (400 Secs) *[==>]*	 ***[1]***

Orbit Structure



Visit

Proposal 14131, GP1457-UVIS (08), scheduling Sun Jan 24 02:08:27 GMT 2016

Diagnostic Status: No Diagnostics

Scientific Instruments: WFC3/UVIS

Special Requirements: (none)

Fixed Targets

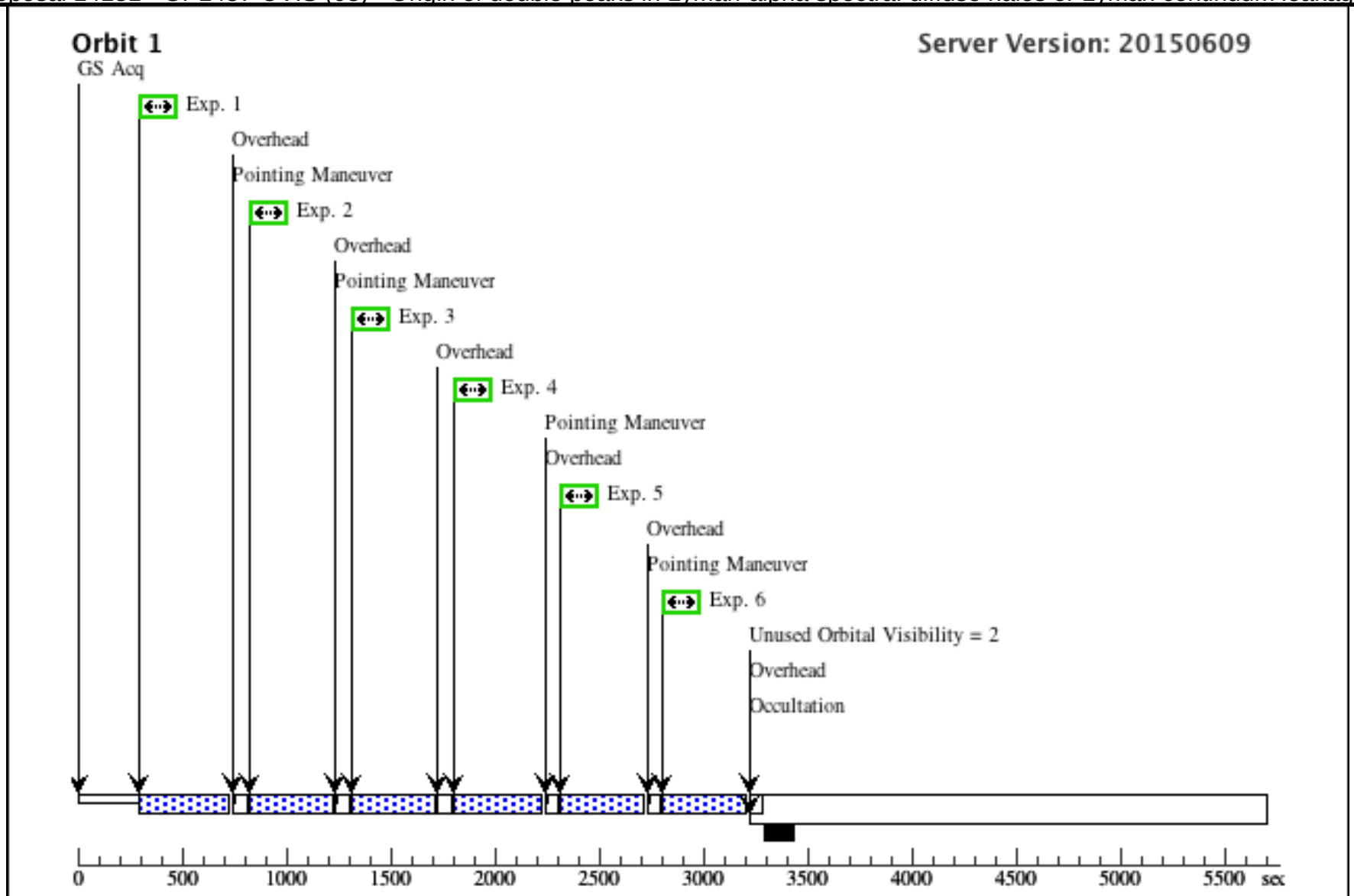
#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(2)	SDSS-J145735.13+223201.8	RA: 14 57 35.1390 (224.3964125d) Dec: +22 32 1.79 (22.53383d) Equinox: J2000	Redshift: 0.1487	V=19.3+/-0.1 FUV = 20.2 mag AB	Reference Frame: ICRS

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

Exposures

#	Label (ETC Run)	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
1	(WFC3UVIS.im.750187)	(2) SDSS-J145735.13+223201.8	WFC3/UVIS, ACCUM, UVIS2-C1K1C-SUB	F390W	FLASH=9			400 Secs (400 Secs) *[==>]*	 ***[1]***
2	(WFC3UVIS.im.750187)	(2) SDSS-J145735.13+223201.8	WFC3/UVIS, ACCUM, UVIS2-C1K1C-SUB	F390W	FLASH=9	POS TARG 2.9568,2.9568		400 Secs (400 Secs) *[==>]*	 ***[1]***
3	(WFC3UVIS.im.750187)	(2) SDSS-J145735.13+223201.8	WFC3/UVIS, ACCUM, UVIS2-C1K1C-SUB	F390W	FLASH=9	POS TARG 5.9136,5.9136		400 Secs (400 Secs) *[==>]*	 ***[1]***
4	(WFC3UVIS.im.750236)	(2) SDSS-J145735.13+223201.8	WFC3/UVIS, ACCUM, UVIS2-C1K1C-SUB	F475W	FLASH=5	SAME POS AS 3		400 Secs (400 Secs) *[==>]*	 ***[1]***
5	(WFC3UVIS.im.750236)	(2) SDSS-J145735.13+223201.8	WFC3/UVIS, ACCUM, UVIS2-C1K1C-SUB	F475W	FLASH=5	SAME POS AS 2		400 Secs (400 Secs) *[==>]*	 ***[1]***
6	(WFC3UVIS.im.750238)	(2) SDSS-J145735.13+223201.8	WFC3/UVIS, ACCUM, UVIS2-C1K1C-SUB	F475W	FLASH=6	SAME POS AS 1		400 Secs (400 Secs) *[==>]*	 ***[1]***

Orbit Structure



Visit

Proposal 14131, GP1248-UVIS (09), scheduling Sun Jan 24 02:08:27 GMT 2016

Diagnostic Status: No Diagnostics

Scientific Instruments: WFC3/UVIS

Special Requirements: (none)

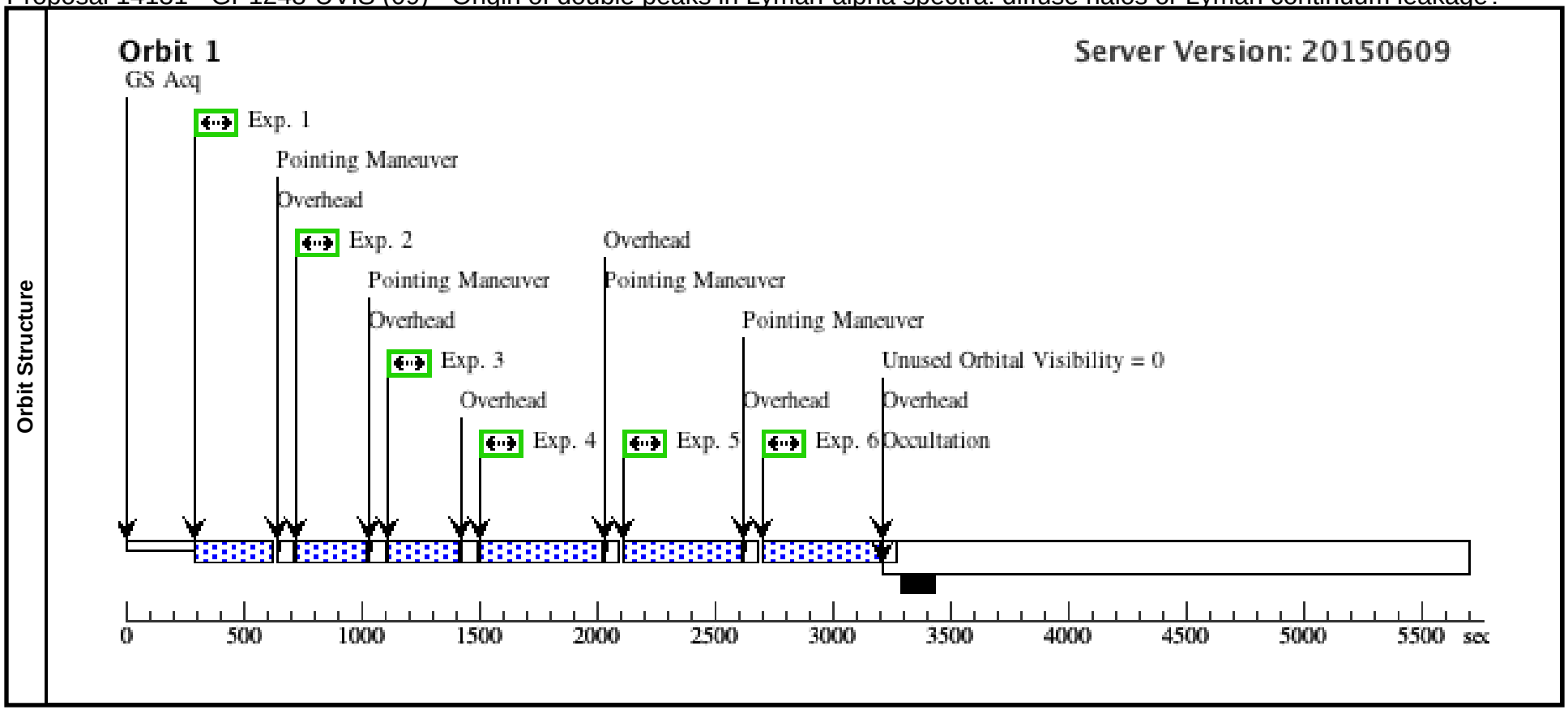
Fixed Targets

#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(3)	SDSS-J124834.63+123402.9	RA: 12 48 34.6360 (192.1443167d) Dec: +12 34 2.93 (12.56748d) Equinox: J2000	Redshift: 0.2634	V=20.0+/-0.1 FUV = 19.6 mag AB	Reference Frame: ICRS

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

Exposures

#	Label (ETC Run)	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
1	(WFC3UVIS.im.750243)	(3) SDSS-J124834.63+123402.9	WFC3/UVIS, ACCUM, UVIS2-C1K1C-SUB	F438W	FLASH=9			300 Secs (300 Secs) *[==>]*	*[1]*
2	(WFC3UVIS.im.750243)	(3) SDSS-J124834.63+123402.9	WFC3/UVIS, ACCUM, UVIS2-C1K1C-SUB	F438W	FLASH=9	POS TARG 2.9568,2.9568		300 Secs (300 Secs) *[==>]*	*[1]*
3	(WFC3UVIS.im.750243)	(3) SDSS-J124834.63+123402.9	WFC3/UVIS, ACCUM, UVIS2-C1K1C-SUB	F438W	FLASH=9	POS TARG 5.9136,5.9136		300 Secs (300 Secs) *[==>]*	*[1]*
4	(WFC3UVIS.im.750247)	(3) SDSS-J124834.63+123402.9	WFC3/UVIS, ACCUM, UVIS2-C1K1C-SUB	F547M	FLASH=6	SAME POS AS 3		500 Secs (500 Secs) *[==>]*	*[1]*
5	(WFC3UVIS.im.750247)	(3) SDSS-J124834.63+123402.9	WFC3/UVIS, ACCUM, UVIS2-C1K1C-SUB	F547M	FLASH=6	SAME POS AS 2		500 Secs (500 Secs) *[==>]*	*[1]*
6	(WFC3UVIS.im.750249)	(3) SDSS-J124834.63+123402.9	WFC3/UVIS, ACCUM, UVIS2-C1K1C-SUB	F547M	FLASH=6	SAME POS AS 1		499 Secs (499 Secs) *[==>]*	*[1]*


Orbit Structure
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GS Acq
Exp. 1
Pointing Maneuver
Overhead
Exp. 2
Pointing Maneuver
Overhead
Exp. 3
Overhead
Exp. 4
Overhead
Pointing Maneuver
Exp. 5
Pointing Maneuver
Overhead
Exp. 6
Unused Orbital Visibility = 0
Overhead
Occultation
0
500
1000
1500
2000
2500
3000
3500
4000
4500
5000
5500
sec

Visit

Proposal 14131, GP1137-UVIS (10), scheduling Sun Jan 24 02:08:27 GMT 2016

Diagnostic Status: No Diagnostics

Scientific Instruments: WFC3/UVIS

Special Requirements: (none)

Fixed Targets

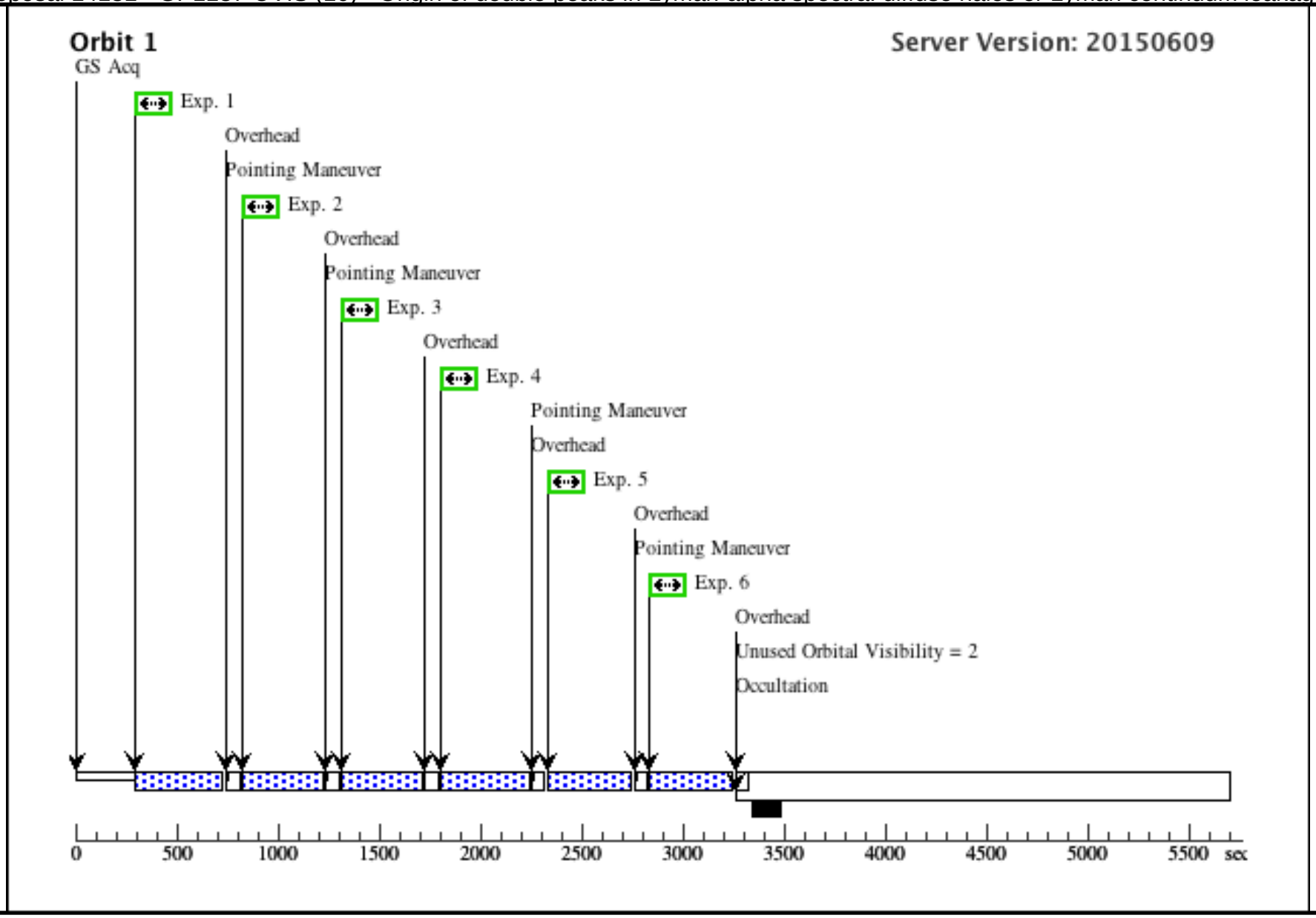
#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(4)	SDSS-J113722.14+352426.6	RA: 11 37 22.1450 (174.3422708d) Dec: +35 24 26.69 (35.40741d) Equinox: J2000	Redshift: 0.1944	V=18.9+/-0.1 FUV = 19.3 mag AB	Reference Frame: ICRS

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

Exposures

#	Label (ETC Run)	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
1	(WFC3UVIS.im.750255)	(4) SDSS-J113722.14+352426.6	WFC3/UVIS, ACCUM, UVIS2-C1K1C-SUB	F390W	FLASH=9			400 Secs (400 Secs) *[==>]*	 ***[1]***
2	(WFC3UVIS.im.750255)	(4) SDSS-J113722.14+352426.6	WFC3/UVIS, ACCUM, UVIS2-C1K1C-SUB	F390W	FLASH=9	POS TARG 2.9568,2.9568		400 Secs (400 Secs) *[==>]*	 ***[1]***
3	(WFC3UVIS.im.750255)	(4) SDSS-J113722.14+352426.6	WFC3/UVIS, ACCUM, UVIS2-C1K1C-SUB	F390W	FLASH=9	POS TARG 5.9136,5.9136		400 Secs (400 Secs) *[==>]*	 ***[1]***
4	(WFC3UVIS.im.750259)	(4) SDSS-J113722.14+352426.6	WFC3/UVIS, ACCUM, UVIS2-C1K1C-SUB	F475W	FLASH=4	SAME POS AS 3		415 Secs (415 Secs) *[==>]*	 ***[1]***
5	(WFC3UVIS.im.750259)	(4) SDSS-J113722.14+352426.6	WFC3/UVIS, ACCUM, UVIS2-C1K1C-SUB	F475W	FLASH=4	SAME POS AS 2		415 Secs (415 Secs) *[==>]*	 ***[1]***
6	(WFC3UVIS.im.750260)	(4) SDSS-J113722.14+352426.6	WFC3/UVIS, ACCUM, UVIS2-C1K1C-SUB	F475W	FLASH=4	SAME POS AS 1		415 Secs (415 Secs) *[==>]*	 ***[1]***

Orbit Structure



Visit

Proposal 14131, GP1219-ACS-WFC (11), scheduling Sun Jan 24 02:08:28 GMT 2016

Diagnostic Status: Warning

Scientific Instruments: ACS/WFC

Special Requirements: (none)

Diagnostics

(Exposure 2 (GP1219-ACS-WFC (11))) Warning (Form): POS TARG & PATTERN should be used carefully with ACS ramp or WFC3 quad filters as central wavelengths & transmission efficiencies vary within the apertures.

(Exposure 3 (GP1219-ACS-WFC (11))) Warning (Form): POS TARG & PATTERN should be used carefully with ACS ramp or WFC3 quad filters as central wavelengths & transmission efficiencies vary within the apertures.

Fixed Targets

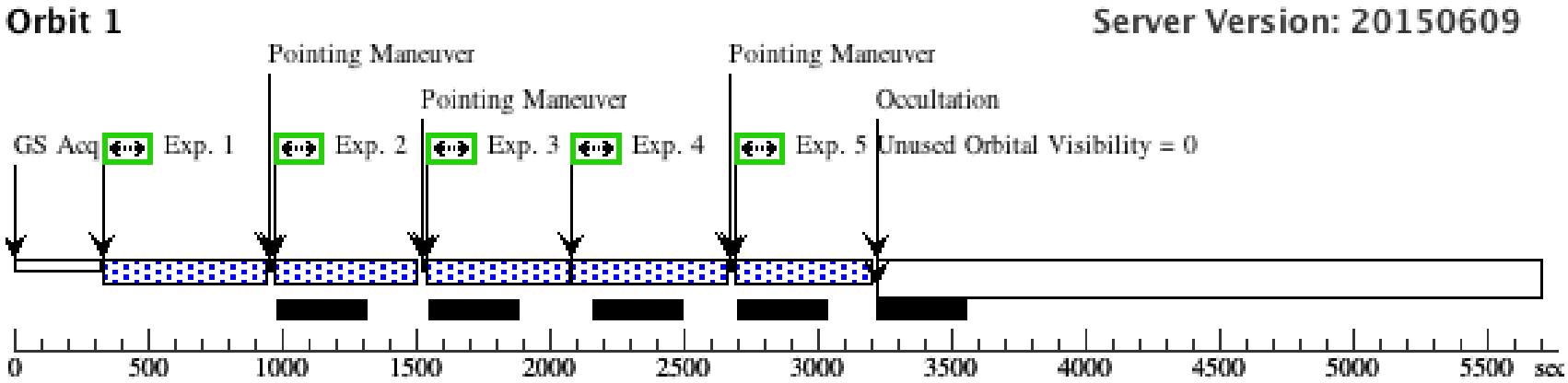
#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(1)	SDSS-J121903.98+152608.5	RA: 12 19 3.9840 (184.7666000d) Dec: +15 26 8.52 (15.43570d) Equinox: J2000	Redshift: 0.1956	V=19.6+/-0.1 FUV = 19.3 mag AB	Reference Frame: ICRS

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

Exposures

#	Label (ETC Run)	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
1	(ACS.rf.750 268)	(1) SDSS-J121903.98+152608.5	ACS/WFC, ACCUM, WFC2-ORAMP	FR782N 7849 A	FLASH=15			400 Secs (400 Secs) *[==>]*	*[1]*
2	(ACS.rf.750 268)	(1) SDSS-J121903.98+152608.5	ACS/WFC, ACCUM, WFC2-ORAMP	FR782N 7849 A	FLASH=15	POS TARG 0.115,0.125		400 Secs (400 Secs) *[==>]*	*[1]*
3	(ACS.rf.750 268)	(1) SDSS-J121903.98+152608.5	ACS/WFC, ACCUM, WFC2-ORAMP	FR782N 7849 A	FLASH=15	POS TARG 0.231,0.259		400 Secs (400 Secs) *[==>]*	*[1]*
4	(ACS.im.75 0311)	(1) SDSS-J121903.98+152608.5	ACS/WFC, ACCUM, WFC2-ORAMP	F850LP	FLASH=1	SAME POS AS 3		380 Secs (380 Secs) *[==>]*	*[1]*
5	(ACS.im.75 0311)	(1) SDSS-J121903.98+152608.5	ACS/WFC, ACCUM, WFC2-ORAMP	F850LP	FLASH=1	SAME POS AS 1		380 Secs (380 Secs) *[==>]*	*[1]*

Orbit Structure



Visit

Proposal 14131, GP1457-ACS-WFC (12), scheduling Sun Jan 24 02:08:28 GMT 2016

Diagnostic Status: Warning

Scientific Instruments: ACS/WFC

Special Requirements: (none)

Diagnostics

(Exposure 2 (GP1457-ACS-WFC (12))) Warning (Form): POS TARG & PATTERN should be used carefully with ACS ramp or WFC3 quad filters as central wavelengths & transmission efficiencies vary within the apertures.

(Exposure 3 (GP1457-ACS-WFC (12))) Warning (Form): POS TARG & PATTERN should be used carefully with ACS ramp or WFC3 quad filters as central wavelengths & transmission efficiencies vary within the apertures.

Fixed Targets

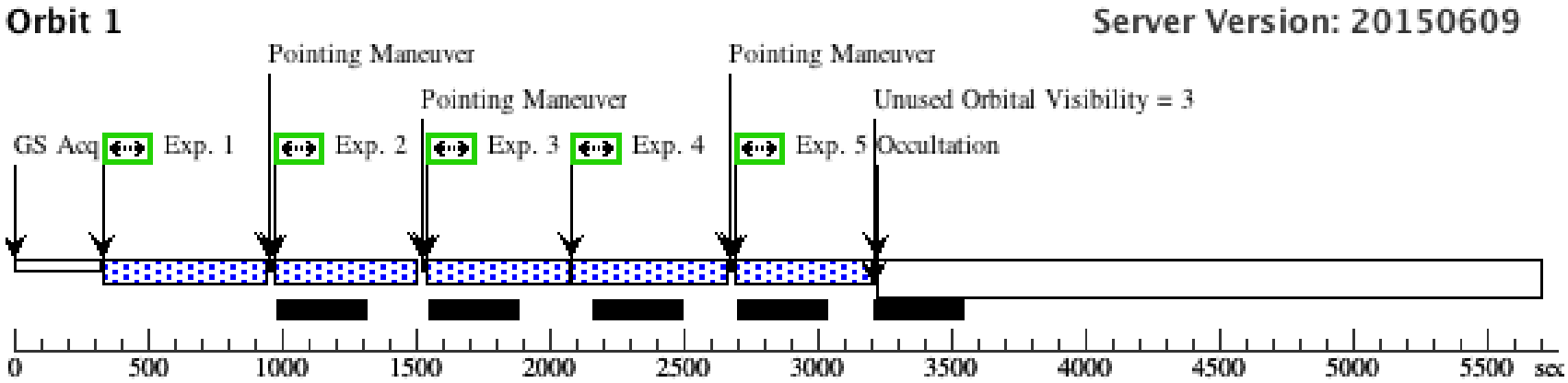
#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(2)	SDSS-J145735.13+223201.8	RA: 14 57 35.1390 (224.3964125d) Dec: +22 32 1.79 (22.53383d) Equinox: J2000	Redshift: 0.1487	V=19.3+/-0.1 FUV = 20.2 mag AB	Reference Frame: ICRS

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

Exposures

#	Label (ETC Run)	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
1	(ACS.rf.750 270)	(2) SDSS-J145735.13+223201.8	ACS/WFC, ACCUM, WFC2-ORAMP	FR782N 7541 A	FLASH=16			400 Secs (400 Secs) *[==>]*	*[1]*
2	(ACS.rf.750 270)	(2) SDSS-J145735.13+223201.8	ACS/WFC, ACCUM, WFC2-ORAMP	FR782N 7541 A	FLASH=16	POS TARG 0.115,0.125		400 Secs (400 Secs) *[==>]*	*[1]*
3	(ACS.rf.750 270)	(2) SDSS-J145735.13+223201.8	ACS/WFC, ACCUM, WFC2-ORAMP	FR782N 7541 A	FLASH=16	POS TARG 0.231,0.259		400 Secs (400 Secs) *[==>]*	*[1]*
4	(ACS.im.75 0296)	(2) SDSS-J145735.13+223201.8	ACS/WFC, ACCUM, WFC2-ORAMP	F850LP	FLASH=6	SAME POS AS 3		379 Secs (379 Secs) *[==>]*	*[1]*
5	(ACS.im.75 0296)	(2) SDSS-J145735.13+223201.8	ACS/WFC, ACCUM, WFC2-ORAMP	F850LP	FLASH=6	SAME POS AS 1		379 Secs (379 Secs) *[==>]*	*[1]*

Orbit Structure



Visit

Proposal 14131, GP1137-ACS-WFC (13), scheduling Sun Jan 24 02:08:28 GMT 2016

Diagnostic Status: Warning

Scientific Instruments: ACS/WFC

Special Requirements: (none)

Diagnostics

(Exposure 2 (GP1137-ACS-WFC (13))) Warning (Form): POS TARG & PATTERN should be used carefully with ACS ramp or WFC3 quad filters as central wavelengths & transmission efficiencies vary within the apertures.

(Exposure 3 (GP1137-ACS-WFC (13))) Warning (Form): POS TARG & PATTERN should be used carefully with ACS ramp or WFC3 quad filters as central wavelengths & transmission efficiencies vary within the apertures.

Fixed Targets

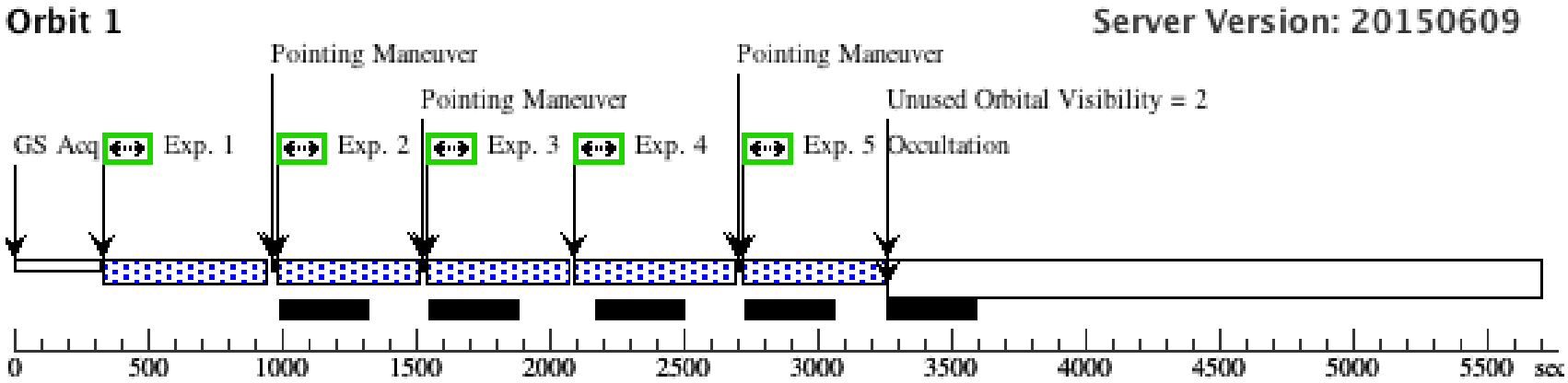
#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(4)	SDSS-J113722.14+352426.6	RA: 11 37 22.1450 (174.3422708d) Dec: +35 24 26.69 (35.40741d) Equinox: J2000	Redshift: 0.1944	V=18.9+/-0.1 FUV = 19.3 mag AB	Reference Frame: ICRS

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

Exposures

#	Label (ETC Run)	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
1	(ACS.rf.750273)	(4) SDSS-J113722.14+352426.6	ACS/WFC, ACCUM, WFC2-ORAMP	FR782N 7841 A	FLASH=16			402 Secs (402 Secs) *[==>]*	*[1]*
2	(ACS.rf.750273)	(4) SDSS-J113722.14+352426.6	ACS/WFC, ACCUM, WFC2-ORAMP	FR782N 7841 A	FLASH=16	POS TARG 0.115,0.125		402 Secs (402 Secs) *[==>]*	*[1]*
3	(ACS.rf.750273)	(4) SDSS-J113722.14+352426.6	ACS/WFC, ACCUM, WFC2-ORAMP	FR782N 7841 A	FLASH=16	POS TARG 0.231,0.259		402 Secs (402 Secs) *[==>]*	*[1]*
4	(ACS.im.750318)	(4) SDSS-J113722.14+352426.6	ACS/WFC, ACCUM, WFC2-ORAMP	F850LP	FLASH=4	SAME POS AS 3		399 Secs (399 Secs) *[==>]*	*[1]*
5	(ACS.im.750318)	(4) SDSS-J113722.14+352426.6	ACS/WFC, ACCUM, WFC2-ORAMP	F850LP	FLASH=4	SAME POS AS 1		399 Secs (399 Secs) *[==>]*	*[1]*

Orbit Structure



Visit

Proposal 14131, GP1248-ACS-WFC (14), scheduling Sun Jan 24 02:08:28 GMT 2016

Diagnostic Status: Warning

Scientific Instruments: ACS/WFC

Special Requirements: (none)

Diagnostics

(Exposure 2 (GP1248-ACS-WFC (14))) Warning (Form): POS TARG & PATTERN should be used carefully with ACS ramp or WFC3 quad filters as central wavelengths & transmission efficiencies vary within the apertures.

(Exposure 3 (GP1248-ACS-WFC (14))) Warning (Form): POS TARG & PATTERN should be used carefully with ACS ramp or WFC3 quad filters as central wavelengths & transmission efficiencies vary within the apertures.

Fixed Targets

#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(3)	SDSS-J124834.63+123402.9	RA: 12 48 34.6360 (192.1443167d) Dec: +12 34 2.93 (12.56748d) Equinox: J2000	Redshift: 0.2634	V=20.0+/-0.1 FUV = 19.6 mag AB	Reference Frame: ICRS

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

Exposures

#	Label (ETC Run)	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
1	(ACS.rf.750 276)	(3) SDSS-J124834.63+123402.9	ACS/WFC, ACCUM, WFC1-IRAMP	FR853N 8294 A	FLASH=16			400 Secs (400 Secs) *[==>]*	*[1]*
2	(ACS.rf.750 276)	(3) SDSS-J124834.63+123402.9	ACS/WFC, ACCUM, WFC1-IRAMP	FR853N 8294 A	FLASH=16	POS TARG 0.115,0.125		400 Secs (400 Secs) *[==>]*	*[1]*
3	(ACS.rf.750 276)	(3) SDSS-J124834.63+123402.9	ACS/WFC, ACCUM, WFC1-IRAMP	FR853N 8294 A	FLASH=16	POS TARG 0.231,0.259		400 Secs (400 Secs) *[==>]*	*[1]*
4	(ACS.im.75 0322)	(3) SDSS-J124834.63+123402.9	ACS/WFC, ACCUM, WFC1-IRAMP	F850LP	FLASH=2	SAME POS AS 3		382 Secs (382 Secs) *[==>]*	*[1]*
5	(ACS.im.75 0322)	(3) SDSS-J124834.63+123402.9	ACS/WFC, ACCUM, WFC1-IRAMP	F850LP	FLASH=2	SAME POS AS 1		382 Secs (382 Secs) *[==>]*	*[1]*

Orbit Structure