14684 - What is a Galaxy Halo Really Like?

Cycle: 24, Proposal Category: GO

(UV Initiative)

(Availability Mode: AVAILABLE)

INVESTIGATORS

Name	*Institution*	*E-Mail*
Dr. David V. Bowen (PI) (Contact)	**Princeton University**	**dvb@astro.princeton.edu**
Dr. Doron Chelouche (CoI)	University of Haifa	doron@ias.edu
Prof. Todd M. Tripp (CoI)	University of Massachusetts - Amherst	tripp@astro.umass.edu
Prof. Max Pettini (CoI) (ESA Member)	University of Cambridge	pettini@ast.cam.ac.uk
Prof. Donald G. York (CoI)	University of Chicago	don@oddjob.uchicago.edu
Prof. Brenda Louise Frye (CoI)	University of Arizona	bfrye@as.arizona.edu
Dr. Edward B. Jenkins (CoI)	Princeton University	ebj@astro.princeton.edu

VISITS

Visit	*Targets used in Visit*	*Configurations used in Visit*	*Orbits Used*	*Last Orbit Planner Run*	*OP Current with Visit?*
01	(1) GALEXASCJ024613.67-302714	COS/FUV COS/NUV	3	19-Sep-2017 21:00:25.0	yes
02	(1) GALEXASCJ024613.67-302714	COS/FUV COS/NUV	4	19-Sep-2017 21:00:26.0	yes
03	(2) GALEXASCJ024446.57-301656	COS/FUV COS/NUV	3	19-Sep-2017 21:00:28.0	yes
04	(2) GALEXASCJ024446.57-301656	COS/FUV COS/NUV	3	19-Sep-2017 21:00:29.0	yes

Visit	*Targets used in Visit*	*Configurations used in Visit*	*Orbits Used*	*Last Orbit Planner Run*	*OP Current with Visit?*
05	(3) 2MASXJ02475105-3038350	COS/FUV COS/NUV	4	19-Sep-2017 21:00:31.0	yes
06	(4) 2DFGRSS394Z096	COS/FUV COS/NUV	5	19-Sep-2017 21:00:34.0	yes

22 Total Orbits Used

ABSTRACT

In Cycle 20 we used COS to map the baryons in the halo of NGC 1097 by recording the absorption lines towards 4 QSOs whose sightlines passed through the galaxy's circumgalactic medium (CGM). In this proposal we seek to extend the map by observing 4 new probes within the virial radius of the galaxy, thereby improving the `resolution' of our map. NGC 1097 is a nearby, bright (cz=1271 km/s, L~ 1.7L*) spiral galaxy, which has the highest density of UV-bright background objects behind it. Our mapping consists of detecting Lyman-alpha (Lya) lines, as well as low-ionization lines of Si II and C II, and higher ionization lines of Si III and Si IV, from the galaxy's CGM. The analysis of our Cycle 20 data suggested that the CGM was dominated by rotating gas falling in from the IGM, with perhaps some smaller contribution from an outflow at small radii. With 4 new probes, we would test this conclusion more vigorously, and produce the most extensive map of the physical conditions of the baryons in a galactic halo outside of the Local Group.

OBSERVING DESCRIPTION

We plan to use the G130M grating of COS to search for absorption lines from gas in the halo of NGC1097, towards 4 background UV probes. Exposures towards individual sightlines are split into two halves with different central wavelengths (1291 and 1327A) in order to cover the gap in the COS detectors whenever possible. For each central wavelength, we use FP-POS=ALL in all cases. The targets are bright star-forming galaxies, and have known GALEX FUV fluxes. Our allocation of 22 orbits is divided up between targets as:

target 1: 7 orbits
target 2: 6 orbits
target 3: 4 orbits
target 4: 5 orbits

Visit

Proposal 14684, TARG 1 - FIRST visit [3 orbits - 1291] (01), implementation Wed Sep 20 01:00:35 GMT 2017

Diagnostic Status: Warning

Scientific Instruments: COS/FUV, COS/NUV

Special Requirements: (none)

Comments: First visit to target 1, CENWAVE set to 1291, first 3 orbits of 7 in total

Diagnostics

(TARG 1 - FIRST visit [3 orbits - 1291] (01)) Warning (Orbit Planner): ORBITAL VISIBILITY OVERRUN

(TARG 1 - FIRST visit [3 orbits - 1291] (01)) Warning (Orbit Planner): ORBITAL VISIBILITY OVERRUN

(TARG 1 - FIRST visit [3 orbits - 1291] (01)) Warning (Orbit Planner): ORBITAL VISIBILITY OVERRUN

Fixed Targets

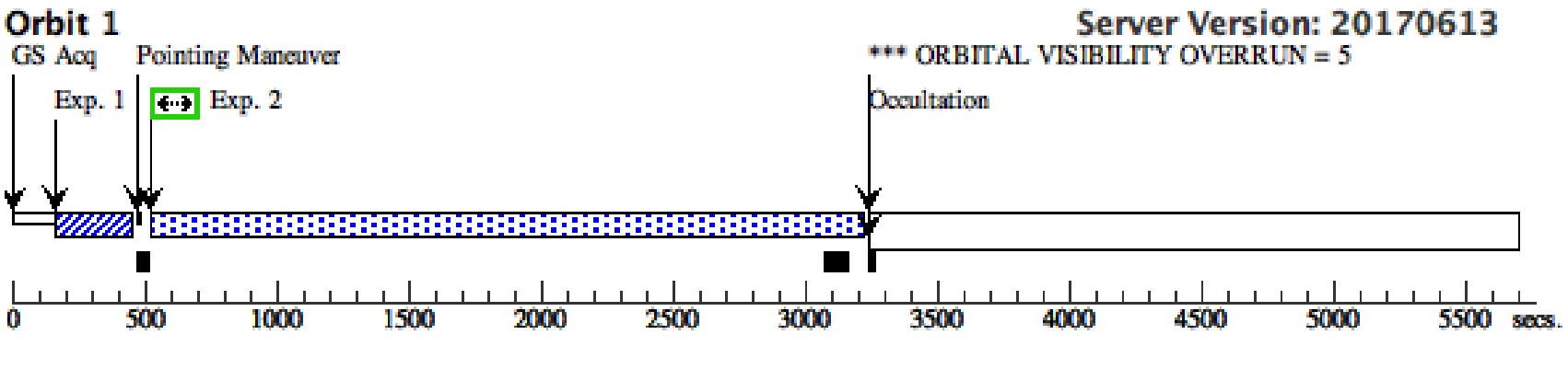
#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(1)	GALEXASCJ024613.67-302714	RA: 02 46 13.6350 (41.5568125d) Dec: -30 27 12.30 (-30.45342d) Equinox: J2000	Redshift: 0.099	V=18.3+/-0.1 GALEX FUV=55 micro-Jy	Reference Frame: ICRS

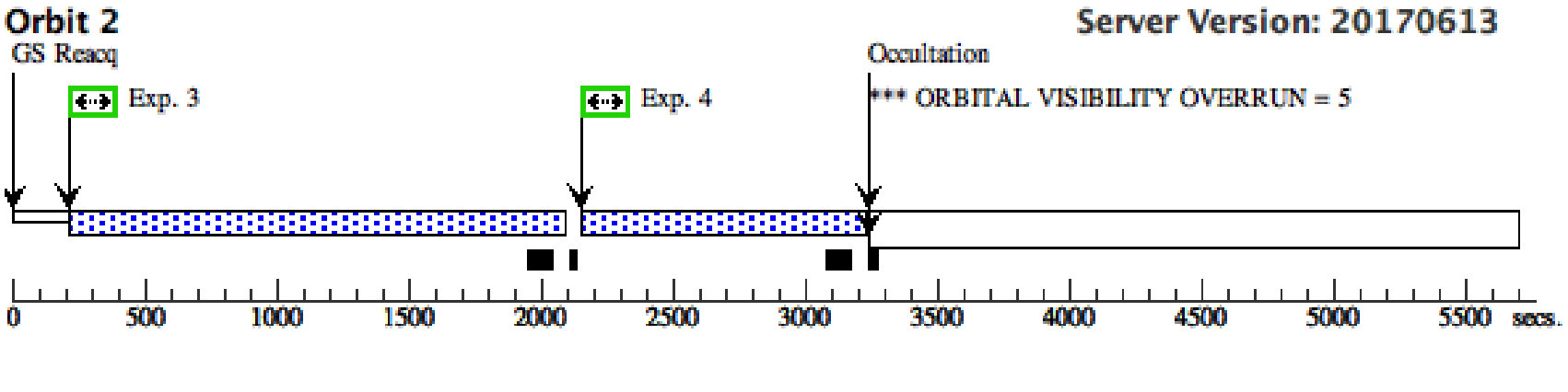
Comments: GALEX size: NUV_FWHM_WORLD = 8 arcsec; FUV_FHWM_WORLD = 7 arcsec
Extended=NO

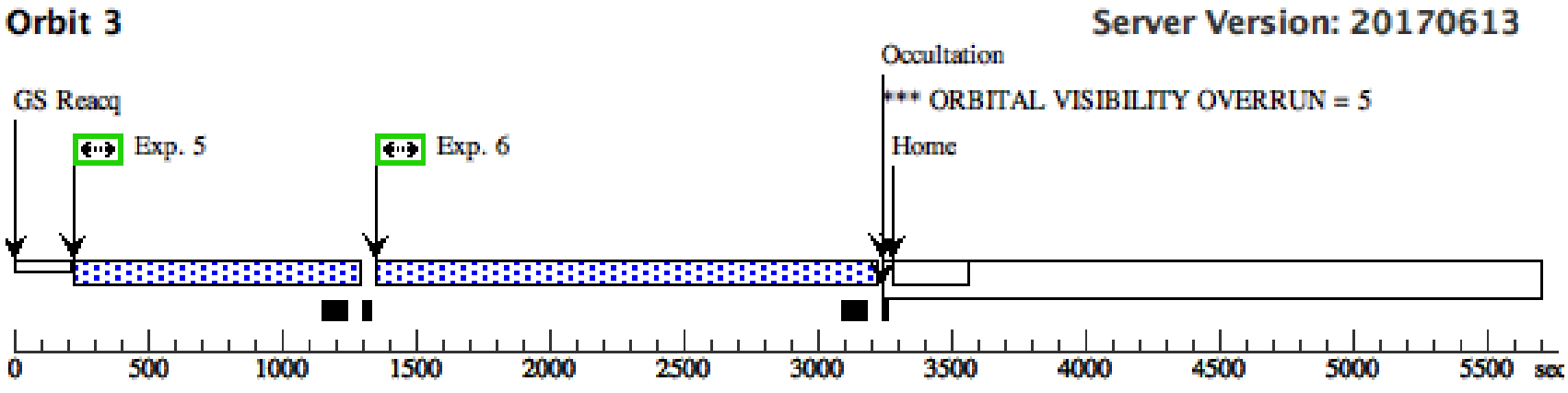
Exposures

#	Label (ETC Run)	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
1	ACQ (COS.ta.826150)	(1) GALEXASCJ024613.67-302714	COS/NUV, ACQ/IMAGE, PSA	MIRRORA				34 Secs (34 Secs) *[==>]*	***[1]***
Comments: Exposure time are calculated assuming GALEX NUV flux [m(NUV)=19.1] is half that expected [m=19.9] in order to account for possible flux variations									
2	orbit 1 - FP OS 1 (COS.sp.823748)	(1) GALEXASCJ024613.67-302714	COS/FUV, TIME-TAG, PSA	G130M 1291 A	FP-POS=1; BUFFER-TIME=2400; LIFETIME-POS=LP3			2500 Secs (2535 Secs) *[==>2535.0 Secs]*	***[1]***
3	orbit 2 - FP OS 2 (COS.sp.823750)	(1) GALEXASCJ024613.67-302714	COS/FUV, TIME-TAG, PSA	G130M 1291 A	FP-POS=2; BUFFER-TIME=1700; LIFETIME-POS=LP3			1800 Secs (1827 Secs) *[==>1827.0 Secs]*	***[2]***
4	orbit 2 - FP OS 3A (COS.sp.823750)	(1) GALEXASCJ024613.67-302714	COS/FUV, TIME-TAG, PSA	G130M 1291 A	FP-POS=3; BUFFER-TIME=900; LIFETIME-POS=LP3			1000 Secs (1027 Secs) *[==>1027.0 Secs]*	***[2]***
Comments: FP-POS =3 split across orbits to keep exposure times at each FP-POS similar in length									
5	orbit 3 - FP OS 3B (COS.sp.823750)	(1) GALEXASCJ024613.67-302714	COS/FUV, TIME-TAG, PSA	G130M 1291 A	FP-POS=3; BUFFER-TIME=900; LIFETIME-POS=LP3			1000 Secs (1022 Secs) *[==>1022.0 Secs]*	***[3]***
6	orbit 3 - FP OS 4 (COS.sp.823750)	(1) GALEXASCJ024613.67-302714	COS/FUV, TIME-TAG, PSA	G130M 1291 A	FP-POS=4; BUFFER-TIME=1700; LIFETIME-POS=LP3			1800 Secs (1822 Secs) *[==>1822.0 Secs]*	***[3]***

Orbit Structure







Visit

Proposal 14684, TARG 1 - SECOND visit [4 orbits - 1327] (02), implementation Wed Sep 20 01:00:35 GMT 2017

Diagnostic Status: Warning

Scientific Instruments: COS/FUV, COS/NUV

Special Requirements: (none)

Comments: Second visit to target 1, CENWAVE set to 1327 to fill GAP, final 4 orbits of 7 in total

Diagnostics

(TARG 1 - SECOND visit [4 orbits - 1327] (02)) Warning (Orbit Planner): ORBITAL VISIBILITY OVERRUN

(TARG 1 - SECOND visit [4 orbits - 1327] (02)) Warning (Orbit Planner): ORBITAL VISIBILITY OVERRUN

(TARG 1 - SECOND visit [4 orbits - 1327] (02)) Warning (Orbit Planner): ORBITAL VISIBILITY OVERRUN

(TARG 1 - SECOND visit [4 orbits - 1327] (02)) Warning (Orbit Planner): ORBITAL VISIBILITY OVERRUN

Fixed Targets

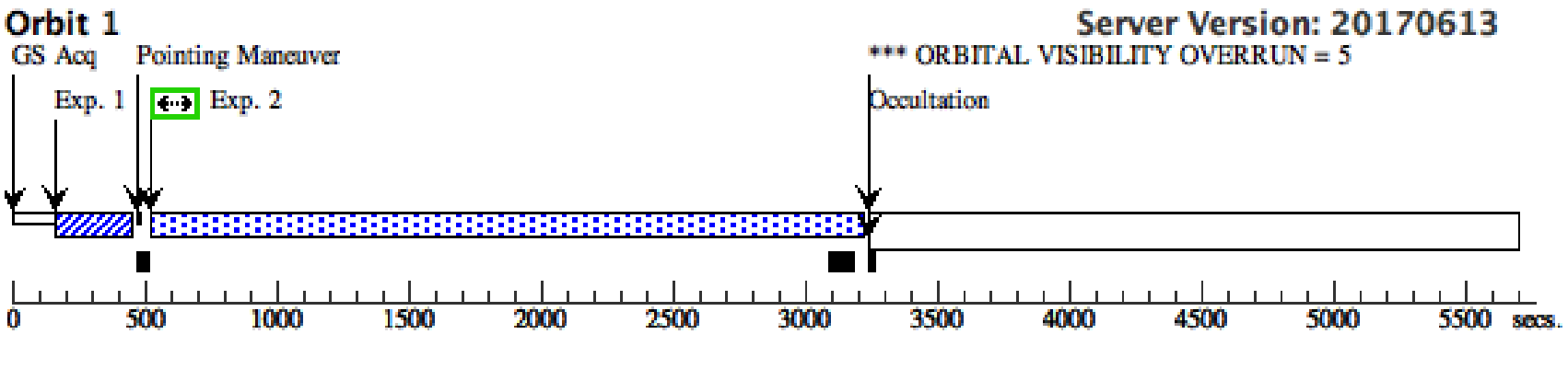
#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(1)	GALEXASCJ024613.67-302714	RA: 02 46 13.6350 (41.5568125d) Dec: -30 27 12.30 (-30.45342d) Equinox: J2000	Redshift: 0.099	V=18.3+/-0.1 GALEX FUV=55 micro-Jy	Reference Frame: ICRS

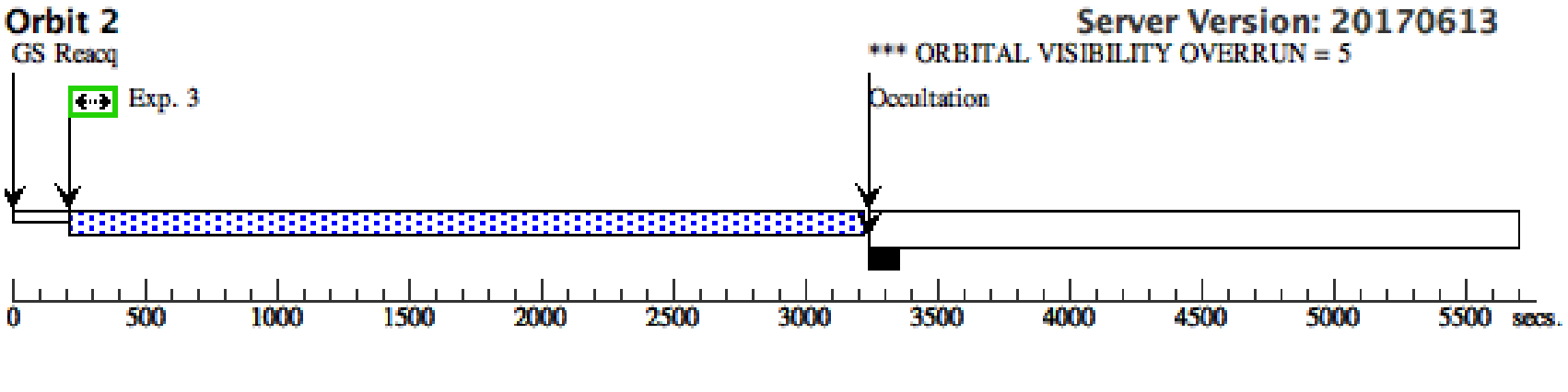
Comments: GALEX size: NUV_FWHM_WORLD = 8 arcsec; FUV_FHWM_WORLD = 7 arcsec
Extended=NO

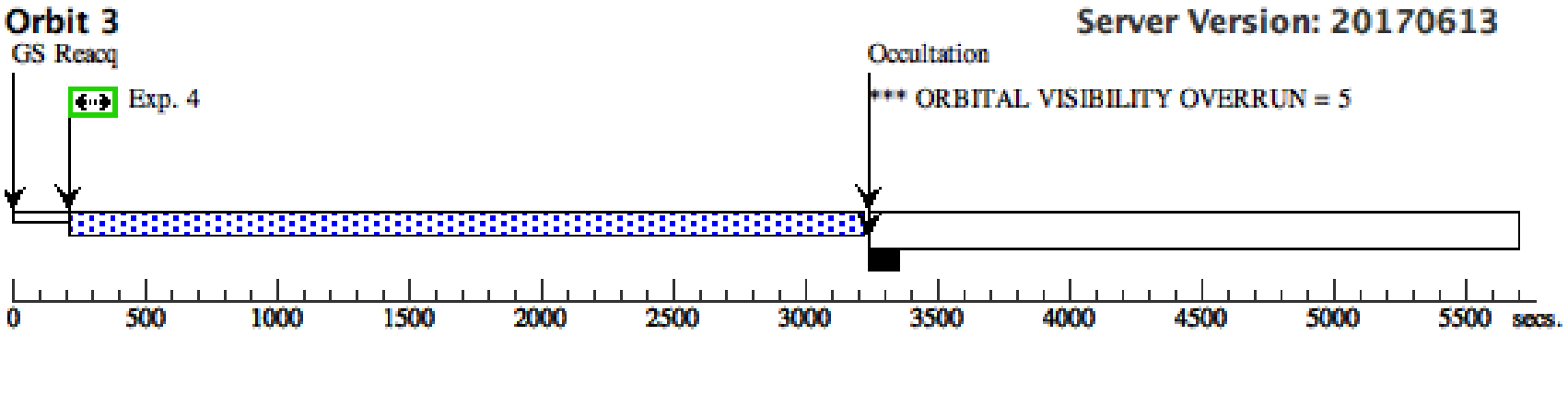
Exposures

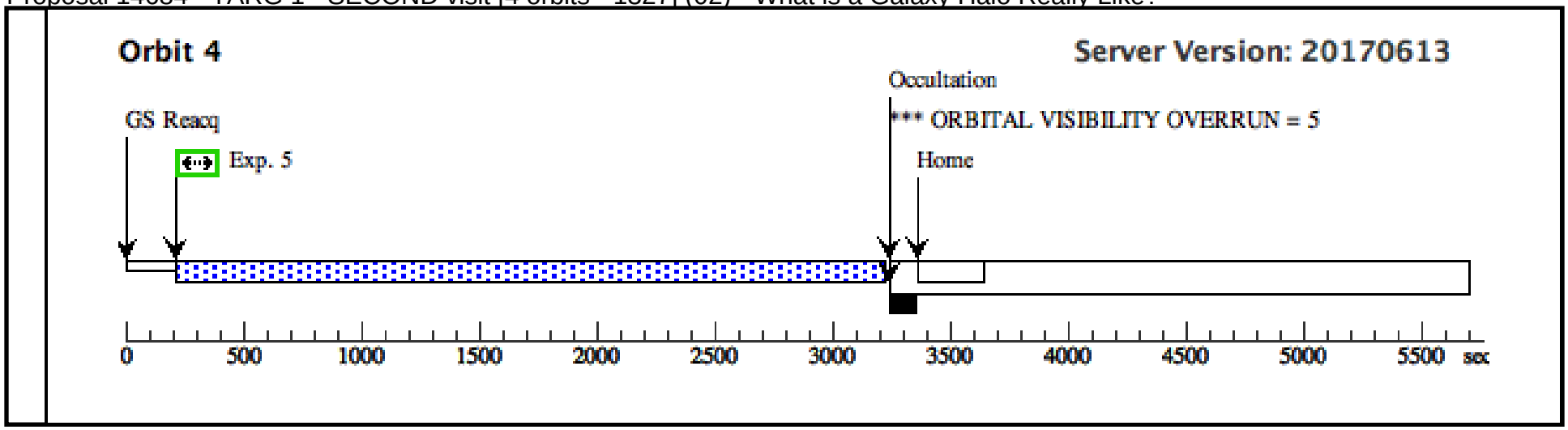
#	Label (ETC Run)	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
1	ACQ (COS.ta.826150)	(1) GALEXASCJ024613.67-302714	COS/NUV, ACQ/IMAGE, PSA	MIRRORA				34 Secs (34 Secs) *[==>]*	***[1]***
Comments: Exposure time are calculated assuming GALEX NUV flux [m(NUV)=19.1] is half that expected [m=19.9] in order to account for possible flux variations									
2	orbit 1 FPOS 1 (COS.sp.823751)	(1) GALEXASCJ024613.67-302714	COS/FUV, TIME-TAG, PSA	G130M 1327 A	FP-POS=1; BUFFER-TIME=2400; LIFETIME-POS=LP3			2500 Secs (2521 Secs) *[==>2521.0 Secs]*	***[1]***
3	orbit 2 FPOS 2 (COS.sp.823751)	(1) GALEXASCJ024613.67-302714	COS/FUV, TIME-TAG, PSA	G130M 1327 A	FP-POS=2; BUFFER-TIME=2900; LIFETIME-POS=LP3			3000 Secs (2959 Secs) *[==>2959.0 Secs]*	***[2]***
4	orbit 2 FPOS 3 (COS.sp.823751)	(1) GALEXASCJ024613.67-302714	COS/FUV, TIME-TAG, PSA	G130M 1327 A	FP-POS=3; BUFFER-TIME=2900; LIFETIME-POS=LP3			3000 Secs (2959 Secs) *[==>2959.0 Secs]*	***[3]***
5	orbit 4 FPOS 4 (COS.sp.823751)	(1) GALEXASCJ024613.67-302714	COS/FUV, TIME-TAG, PSA	G130M 1327 A	FP-POS=4; BUFFER-TIME=2900; LIFETIME-POS=LP3			3000 Secs (2959 Secs) *[==>2959.0 Secs]*	***[4]***

Orbit Structure








Orbit 4
Server Version: 20170613
Occultation
GS Reacq
*** ORBITAL VISIBILITY OVERRUN = 5
Exp. 5
Home
0
500
1000
1500
2000
2500
3000
3500
4000
4500
5000
5500
sec

Visit

Proposal 14684, TARG 2 - FIRST visit [3 orbits -1291] (03), implementation Wed Sep 20 01:00:36 GMT 2017

Diagnostic Status: Warning

Scientific Instruments: COS/FUV, COS/NUV

Special Requirements: (none)

Comments: First visit to target 2, first 3 orbits of 6, CENWAVE set to 1291

Diagnostics

(TARG 2 - FIRST visit [3 orbits -1291] (03)) Warning (Orbit Planner): ORBITAL VISIBILITY OVERRUN

(TARG 2 - FIRST visit [3 orbits -1291] (03)) Warning (Orbit Planner): ORBITAL VISIBILITY OVERRUN

Fixed Targets

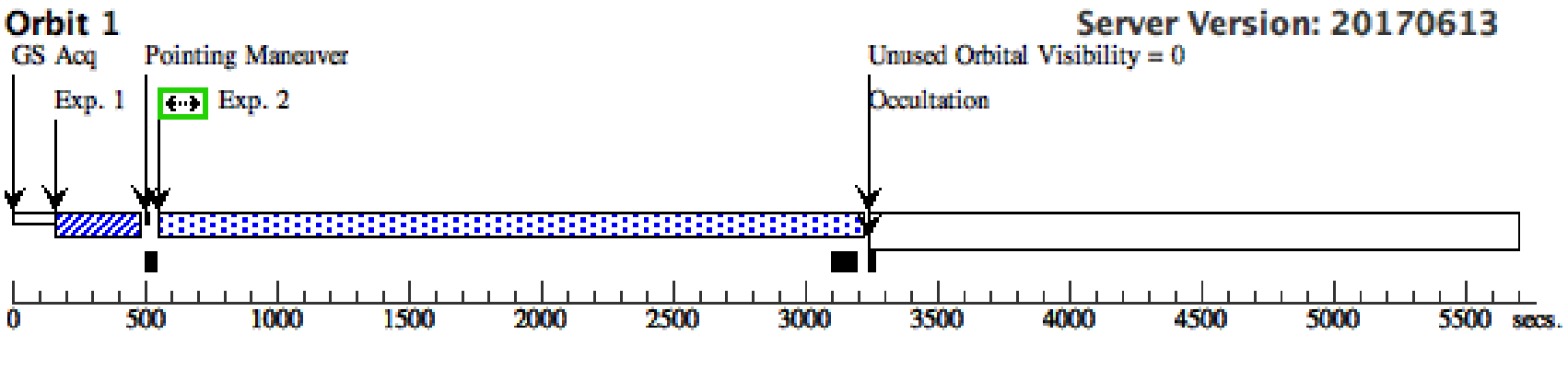
#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(2)	GALEXASCJ024446.57-301656	RA: 02 44 46.4570 (41.1935708d) Dec: -30 16 55.70 (-30.28214d) Equinox: J2000	Redshift: 0.145	V=18.8+/-0.2 GALEX FUV=60 micro-Jy	Reference Frame: ICRS

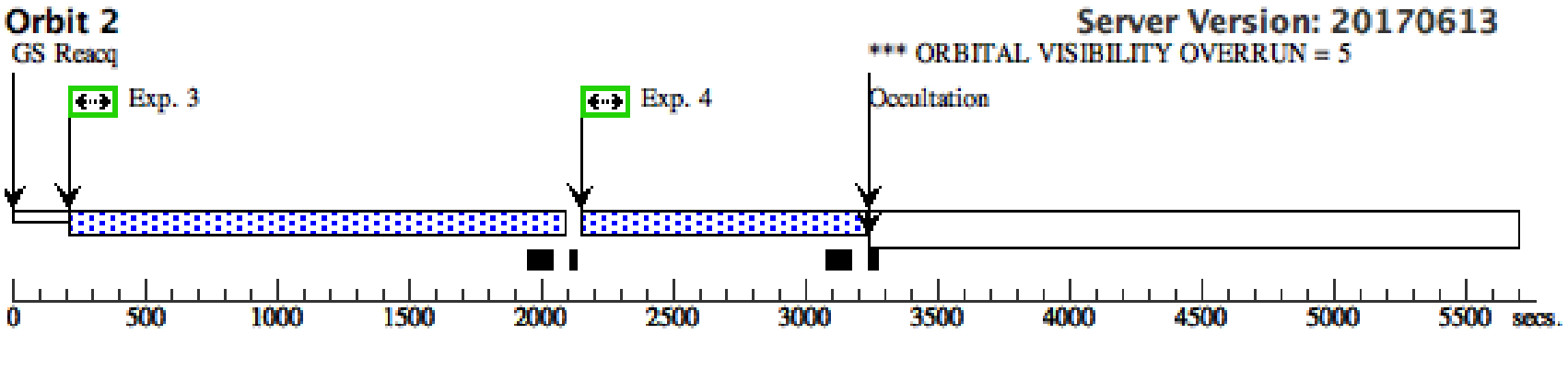
Comments: GALEX sizes: NUV_FWHM_WORLD = 7 arcsec; FUV_FWHM_WORLD = 8 arcsec Extended=NO

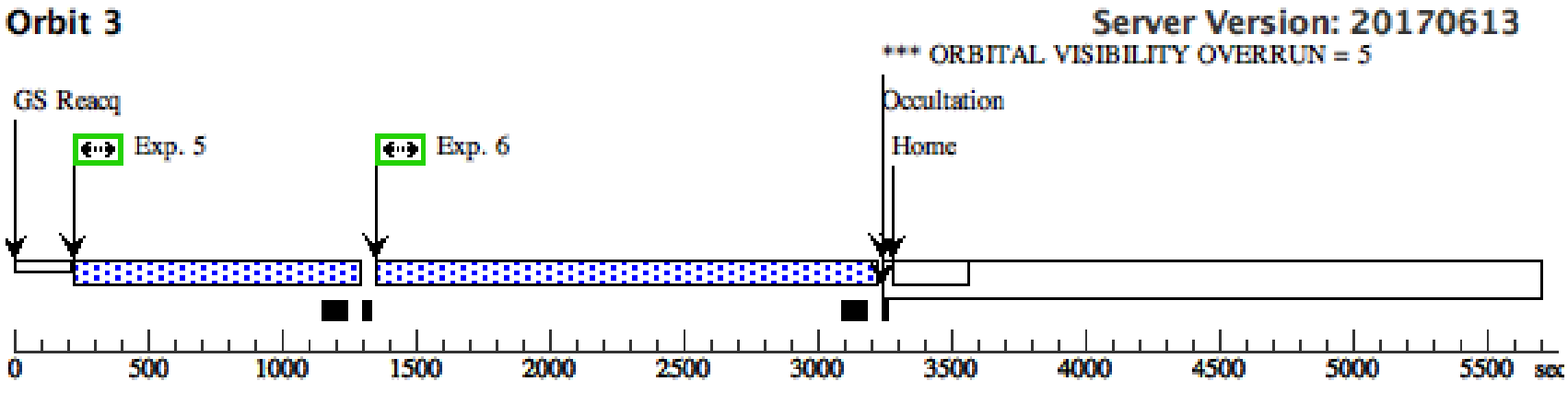
Exposures

#	Label (ETC Run)	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
1	ACQ (COS.ta.826151)	(2) GALEXASCJ024446.57-301656	COS/NUV, ACQ/IMAGE, PSA	MIRRORA				49 Secs (49 Secs) *[==>]*	***[1]***
Comments: Exposure time are calculated assuming GALEX NUV flux [m(NUV)=19.5] is half that expected [m=20.3] in order to account for possible flux variations.									
2	orbit 1 - FP OS 1 (COS.sp.823753)	(2) GALEXASCJ024446.57-301656	COS/FUV, TIME-TAG, PSA	G130M 1291 A	FP-POS=1; BUFFER-TIME=2400; LIFETIME-POS=LP3			2500 Secs (2500 Secs) *[==>]*	***[1]***
3	orbit 2 - FP OS 2 (COS.sp.823754)	(2) GALEXASCJ024446.57-301656	COS/FUV, TIME-TAG, PSA	G130M 1291 A	FP-POS=2; BUFFER-TIME=1700; LIFETIME-POS=LP3			1800 Secs (1827 Secs) *[==>1827.0 Secs]*	***[2]***
4	orbit 2 - FP OS 3A (COS.sp.823754)	(2) GALEXASCJ024446.57-301656	COS/FUV, TIME-TAG, PSA	G130M 1291 A	FP-POS=3; BUFFER-TIME=900; LIFETIME-POS=LP3			1000 Secs (1027 Secs) *[==>1027.0 Secs]*	***[2]***
Comments: FP-POS =3 split across orbits to keep exposure times at each FP-POS similar in length									
5	orbit 3 - FP OS 3B (COS.sp.823754)	(2) GALEXASCJ024446.57-301656	COS/FUV, TIME-TAG, PSA	G130M 1291 A	FP-POS=3; BUFFER-TIME=900; LIFETIME-POS=LP3			1000 Secs (1022 Secs) *[==>1022.0 Secs]*	***[3]***
6	orbit 3 - FP OS 4 (COS.sp.823754)	(2) GALEXASCJ024446.57-301656	COS/FUV, TIME-TAG, PSA	G130M 1291 A	FP-POS=4; BUFFER-TIME=1700; LIFETIME-POS=LP3			1800 Secs (1822 Secs) *[==>1822.0 Secs]*	***[3]***

Orbit Structure







Visit

Proposal 14684, TARG 2 - SECOND visit [3 orbits -1327] (04), implementation Wed Sep 20 01:00:36 GMT 2017

Diagnostic Status: Warning

Scientific Instruments: COS/FUV, COS/NUV

Special Requirements: (none)

Comments: Second visit to target 2, second 3 orbits of 6, CENWAVE set to 1327

Diagnostics

(TARG 2 - SECOND visit [3 orbits -1327] (04)) Warning (Orbit Planner): ORBITAL VISIBILITY OVERRUN

(TARG 2 - SECOND visit [3 orbits -1327] (04)) Warning (Orbit Planner): ORBITAL VISIBILITY OVERRUN

(TARG 2 - SECOND visit [3 orbits -1327] (04)) Warning (Orbit Planner): ORBITAL VISIBILITY OVERRUN

Fixed Targets

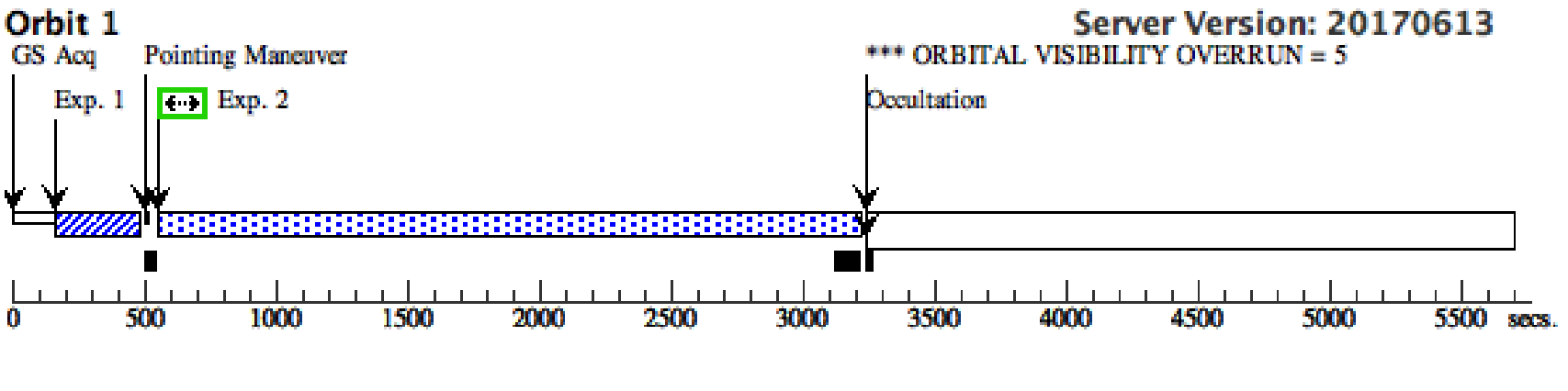
#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(2)	GALEXASCJ024446.57-301656	RA: 02 44 46.4570 (41.1935708d) Dec: -30 16 55.70 (-30.28214d) Equinox: J2000	Redshift: 0.145	V=18.8+/-0.2 GALEX FUV=60 micro-Jy	Reference Frame: ICRS

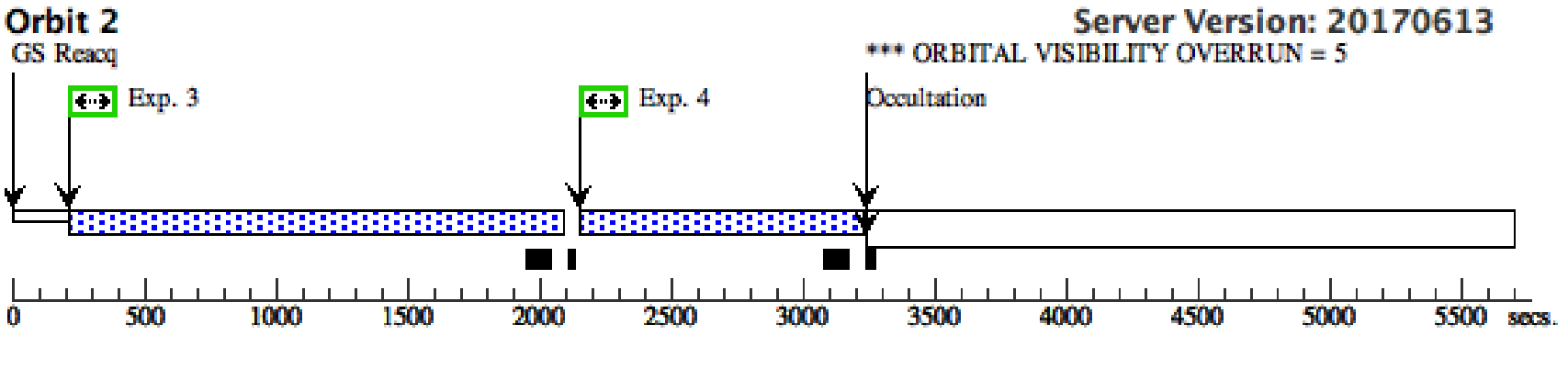
Comments: GALEX sizes: NUV_FWHM_WORLD = 7 arcsec; FUV_FWHM_WORLD = 8 arcsec
Extended=NO

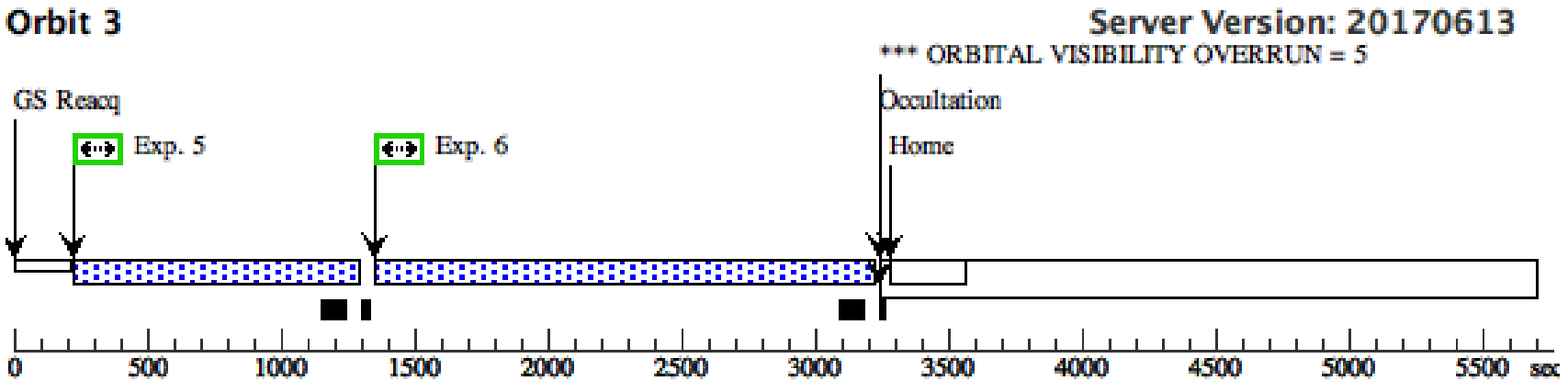
Exposures

#	Label (ETC Run)	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
1	ACQ (COS.ta.826151)	(2) GALEXASCJ024446.57-301656	COS/NUV, ACQ/IMAGE, PSA	MIRRORA				49 Secs (49 Secs) *[==>]*	***[1]***
Comments: Exposure time are calculated assuming GALEX NUV flux [m(NUV)=19.5] is half that expected [m=20.3] in order to account for possible flux variations.									
2	orbit 1 - FP OS 1 (COS.sp.823753)	(2) GALEXASCJ024446.57-301656	COS/FUV, TIME-TAG, PSA	G130M 1327 A	FP-POS=1; BUFFER-TIME=2400; LIFETIME-POS=LP3			2500 Secs (2491 Secs) *[==>2491.0 Secs]*	***[1]***
3	orbit 2 - FP OS 2 (COS.sp.823754)	(2) GALEXASCJ024446.57-301656	COS/FUV, TIME-TAG, PSA	G130M 1327 A	FP-POS=2; BUFFER-TIME=1700; LIFETIME-POS=LP3			1800 Secs (1827 Secs) *[==>1827.0 Secs]*	***[2]***
4	orbit 2 - FP OS 3A (COS.sp.823754)	(2) GALEXASCJ024446.57-301656	COS/FUV, TIME-TAG, PSA	G130M 1327 A	FP-POS=3; BUFFER-TIME=900; LIFETIME-POS=LP3			1000 Secs (1027 Secs) *[==>1027.0 Secs]*	***[2]***
Comments: FP-POS =3 split across orbits to keep exposure times at each FP-POS similar in length									
5	orbit 3 - FP OS 3B (COS.sp.823754)	(2) GALEXASCJ024446.57-301656	COS/FUV, TIME-TAG, PSA	G130M 1327 A	FP-POS=3; BUFFER-TIME=900; LIFETIME-POS=LP3			1000 Secs (1022 Secs) *[==>1022.0 Secs]*	***[3]***
6	orbit 3 - FP OS 4 (COS.sp.823754)	(2) GALEXASCJ024446.57-301656	COS/FUV, TIME-TAG, PSA	G130M 1327 A	FP-POS=4; BUFFER-TIME=1700; LIFETIME-POS=LP3			1800 Secs (1822 Secs) *[==>1822.0 Secs]*	***[3]***

Orbit Structure







Visit

Proposal 14684, TARG 3 - [4 orbits] (05), completed Wed Sep 20 01:00:36 GMT 2017

Diagnostic Status: Error

Scientific Instruments: COS/FUV, COS/NUV

Special Requirements: (none)

Comments: Only visit to target 3 (4 orbits), CENWAVE set to 1291 for first 2 orbits, then 1327 for final 2 orbits, to span GAP.

Diagnostics

(orbit 1 - FPOS 1 - 1291 (05.002)) Error (Form): LIFETIME-POS is required with G130M when not in Supported mode.

(orbit 1 - FPOS 2 - 1291 (05.003)) Error (Form): LIFETIME-POS is required with G130M when not in Supported mode.

(orbit 2 - FPOS 3 - 1291 (05.004)) Error (Form): LIFETIME-POS is required with G130M when not in Supported mode.

(orbit 2 - FPOS 4 - 1291 (05.005)) Error (Form): LIFETIME-POS is required with G130M when not in Supported mode.

(orbit 3 & 4 - FPOS ALL - 1327 (05.006)) Error (Form): LIFETIME-POS is required with G130M when not in Supported mode.

(TARG 3 - [4 orbits] (05)) Warning (Orbit Planner): ORBITAL VISIBILITY OVERRUN

(TARG 3 - [4 orbits] (05)) Warning (Orbit Planner): ORBITAL VISIBILITY OVERRUN

(TARG 3 - [4 orbits] (05)) Warning (Orbit Planner): ORBITAL VISIBILITY OVERRUN

(orbit 1 - FPOS 1 - 1291 (05.002)) Warning (Form): Defaults for SEGMENT have changed in APT25.2 for use of LP4 with G130M. See full description for details.

(orbit 1 - FPOS 2 - 1291 (05.003)) Warning (Form): Defaults for SEGMENT have changed in APT25.2 for use of LP4 with G130M. See full description for details.

(orbit 3 & 4 - FPOS ALL - 1327 (05.006)) Warning (Form): Defaults for SEGMENT have changed in APT25.2 for use of LP4 with G130M. See full description for details.

Fixed Targets

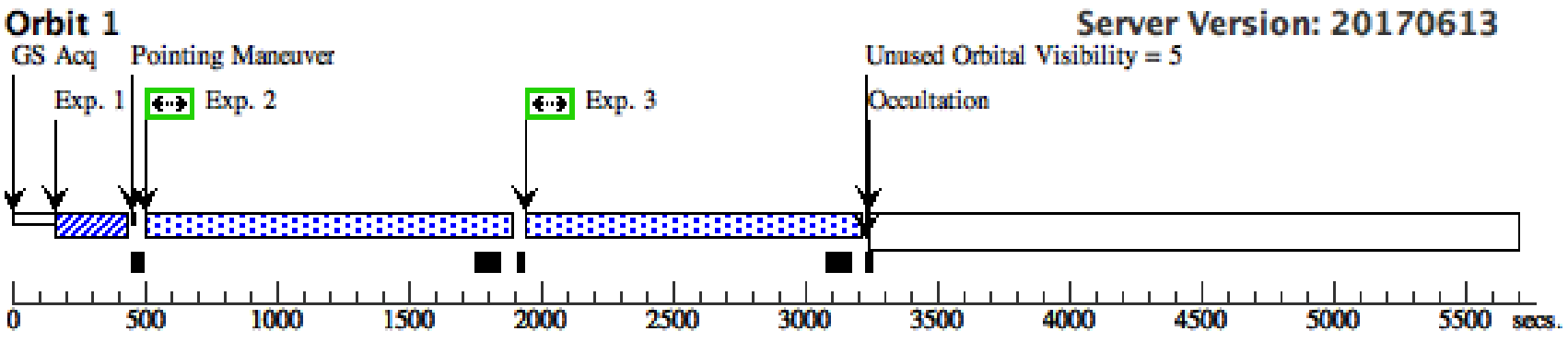
#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(3)	2MASXJ02475105-3038350	RA: 02 47 51.0790 (41.9628292d) Dec: -30 38 34.90 (-30.64303d) Equinox: J2000	Redshift: 0.188	V=18.2+/-0.2 GALEX FUV=103 micro-Jy	Reference Frame: ICRS

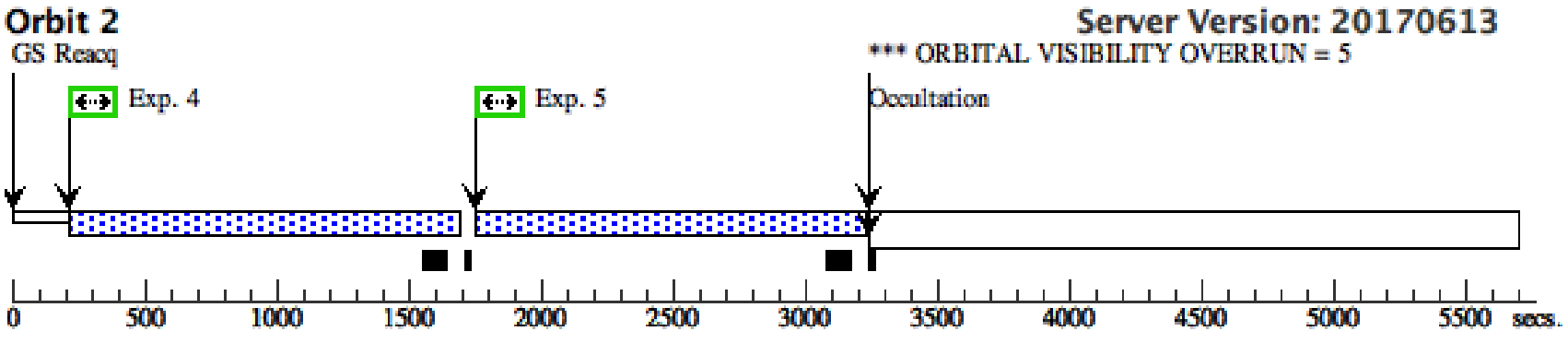
Comments: GALEX size: NUV_FWHM_WORLD = 13 arcsec; FUV_FWHM_WORLD = 5 arcsec
Extended=NO

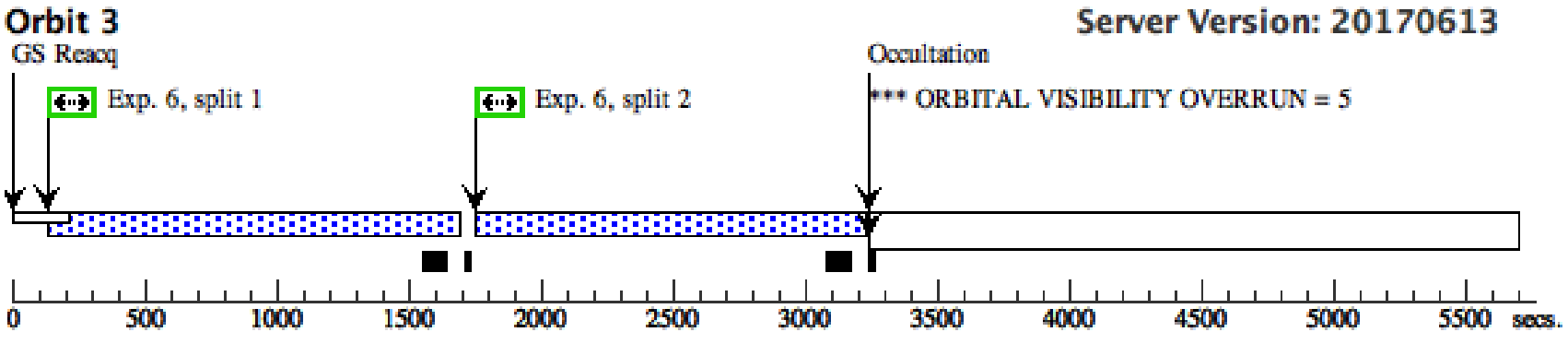
Exposures

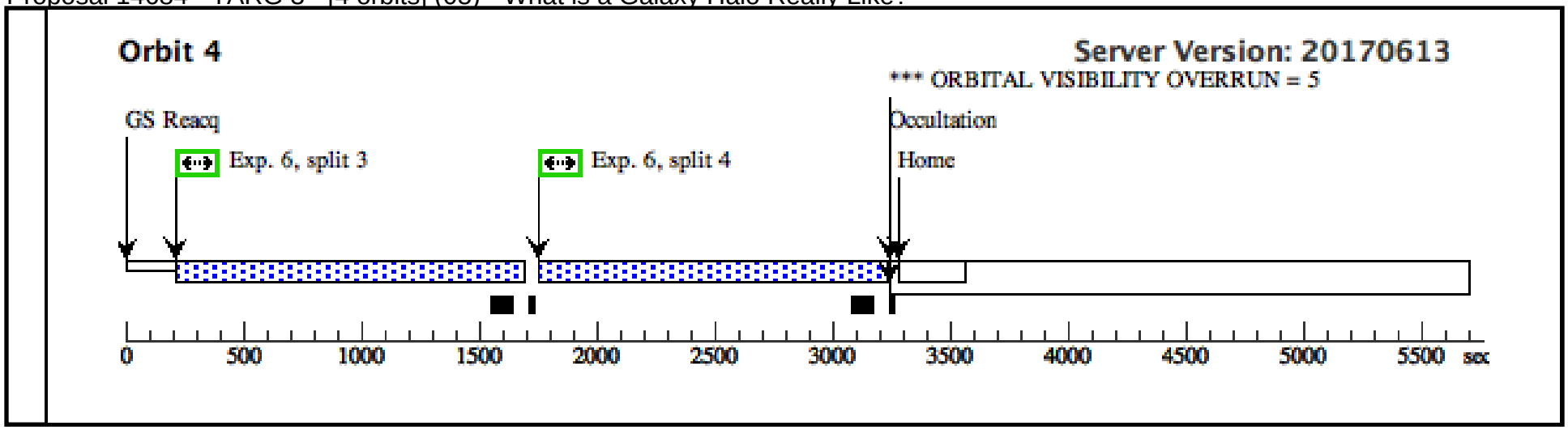
#	Label (ETC Run)	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
1	ACQ (COS.ta.826152)	(3) 2MASXJ02475105-3038350	COS/NUV, ACQ/IMAGE, PSA	MIRRORA				24 Secs (24 Secs) *[==>]*	***[1]***
Comments: Exposure time are calculated assuming GALEX NUV flux [m(NUV)=18.8] is half that expected [m=19.5] in order to account for possible flux variations.									
2	orbit 1 - FPOS 1 - 1291 (COS.sp.823757)	(3) 2MASXJ02475105-3038350	COS/FUV, TIME-TAG, PSA	G130M 1291 A	FP-POS=1; BUFFER-TIME=1100			1200 Secs (1220 Secs) *[==>1220.0 Secs]*	***[1]***
3	orbit 1 - FPOS 2 - 1291 (COS.sp.823757)	(3) 2MASXJ02475105-3038350	COS/FUV, TIME-TAG, PSA	G130M 1291 A	FP-POS=2; BUFFER-TIME=1100			1200 Secs (1220 Secs) *[==>1220.0 Secs]*	***[1]***
4	orbit 2 - FPOS 3 - 1291 (COS.sp.823757)	(3) 2MASXJ02475105-3038350	COS/FUV, TIME-TAG, PSA	G130M 1291 A	FP-POS=3; BUFFER-TIME=1300			1400 Secs (1427 Secs) *[==>1427.0 Secs]*	***[2]***
5	orbit 2 - FPOS 4 - 1291 (COS.sp.823757)	(3) 2MASXJ02475105-3038350	COS/FUV, TIME-TAG, PSA	G130M 1291 A	FP-POS=4; BUFFER-TIME=1300			1400 Secs (1427 Secs) *[==>1427.0 Secs]*	***[2]***
6	orbit 3 & 4 - FPOS ALL - 1327 (COS.sp.82378)	(3) 2MASXJ02475105-3038350	COS/FUV, TIME-TAG, PSA	G130M 1327 A	FP-POS=ALL; BUFFER-TIME=1300			1400 Secs (5708 Secs) *[==>1427.0 Secs (Split 1)]* *[==>1427.0 Secs (Split 2)]* *[==>1427.0 Secs (Split 3)]* *[==>1427.0 Secs (Split 4)]*	***[3]*** ***[4]***

Orbit Structure








Orbit 4
Server Version: 20170613
*** ORBITAL VISIBILITY OVERRUN = 5
GS Reacq
Exp. 6, split 3
Exp. 6, split 4
Occultation
Home
0
500
1000
1500
2000
2500
3000
3500
4000
4500
5000
5500
sec

Visit

Proposal 14684, TARG 4 - [5 orbits] (06), implementation Wed Sep 20 01:00:36 GMT 2017

Diagnostic Status: Warning

Scientific Instruments: COS/FUV, COS/NUV

Special Requirements: (none)

Comments: Ony visit to target 4 (5 orbits), CENWAVE set to 1291 for orbits 1 & 2, then 1327 for 3 & 4 orbits to fill GAP. Return to CENWAVE = 1291 for final orbit.

We're aware that 5 orbits is the maximum recommended for a single visit. The visit planner suggets that the 5 orbit visit is not difficult to schedule, so we're leaving this as a single visit unless instructed to break the visit into two separate visits.

Diagnostics

(TARG 4 - [5 orbits] (06)) Warning (Orbit Planner): ORBITAL VISIBILITY OVERRUN

(TARG 4 - [5 orbits] (06)) Warning (Orbit Planner): ORBITAL VISIBILITY OVERRUN

(TARG 4 - [5 orbits] (06)) Warning (Orbit Planner): ORBITAL VISIBILITY OVERRUN

(TARG 4 - [5 orbits] (06)) Warning (Orbit Planner): ORBITAL VISIBILITY OVERRUN

(TARG 4 - [5 orbits] (06)) Warning (Orbit Planner): ORBITAL VISIBILITY OVERRUN

Fixed Targets

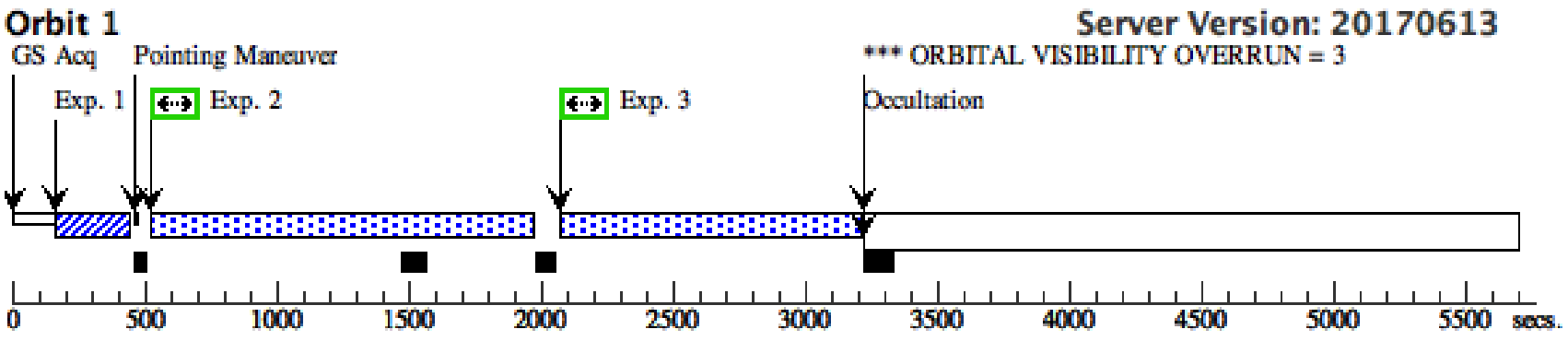
#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(4)	2DFGRSS394Z096	RA: 02 49 31.6490 (42.3818708d) Dec: -29 57 31.30 (-29.95869d) Equinox: J2000	Redshift: 0.306	V=19.1+/-0.2 GALEX FUV=78 micro-Jy	Reference Frame: ICRS

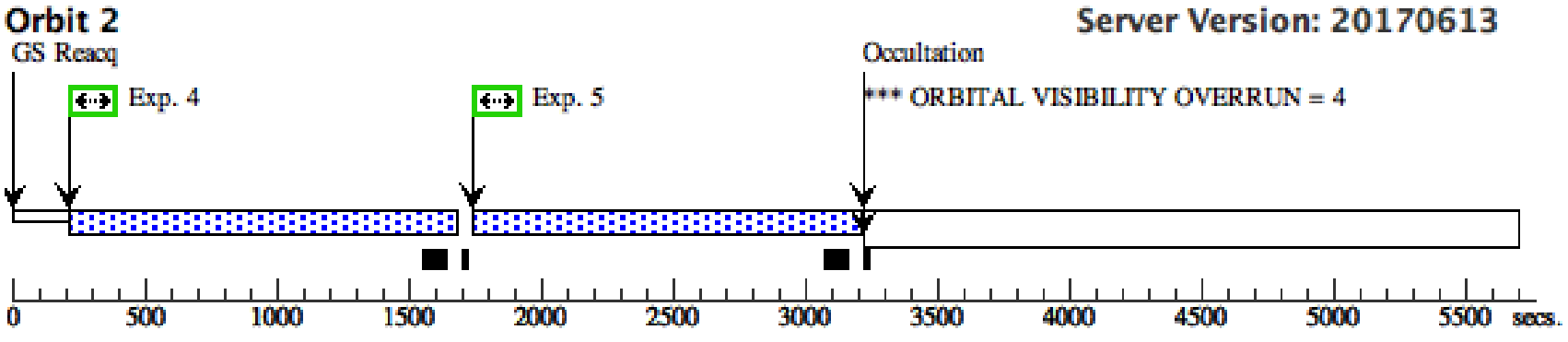
Comments: GALEX size: NUV_FWHM_WORLD = 6 arcsec; FUV_FWHM_WORLD = 5 arcsec
Extended=NO

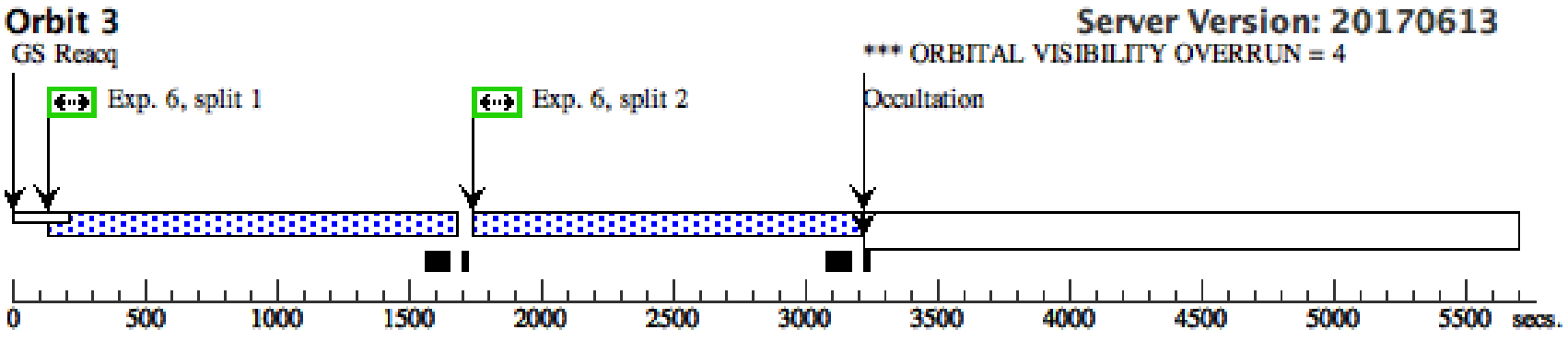
Exposures

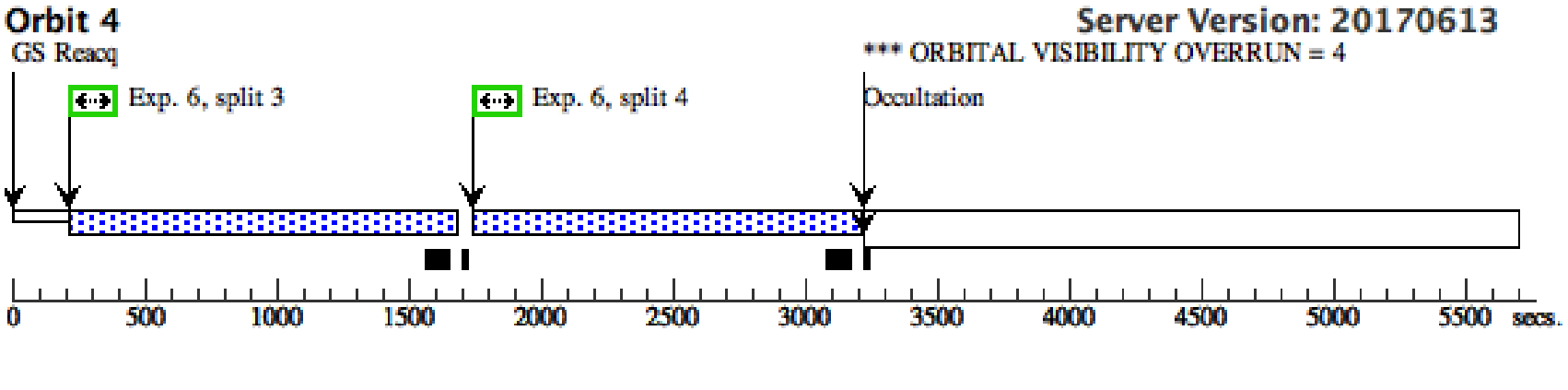
#	Label (ETC Run)	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
1	ACQ (COS.ta.826153)	(4) 2DFGRSS394Z096	COS/NUV, ACQ/IMAGE, PSA	MIRRORA				31 Secs (31 Secs) *[==>]*	 ***[1]***
Comments: Exposure time are calculated assuming GALEX NUV flux [m(NUV)=19.0] is half that expected [m=19.8] in order to account for possible flux variations.									
2	orbit 1 - FPOS 1 - 1291 (COS.sp.823759)	(4) 2DFGRSS394Z096	COS/FUV, TIME-TAG, PSA	G130M 1291 A	FP-POS=1; BUFFER-TIME=8000; LIFETIME-POS=LP3			900 Secs (1281 Secs) *[==>1281.0 Secs]*	 ***[1]***
3	orbit 1 - FPOS 2 - 1291 (COS.sp.823759)	(4) 2DFGRSS394Z096	COS/FUV, TIME-TAG, PSA	G130M 1291 A	FP-POS=2; BUFFER-TIME=1000; LIFETIME-POS=LP3			1100 Secs (1090 Secs) *[==>1090.0 Secs]*	 ***[1]***
4	orbit 2 - FPOS 3 - 1291 (COS.sp.823759)	(4) 2DFGRSS394Z096	COS/FUV, TIME-TAG, PSA	G130M 1291 A	FP-POS=3; BUFFER-TIME=1300; LIFETIME-POS=LP3			1400 Secs (1419 Secs) *[==>1419.0 Secs]*	 ***[2]***
5	orbit 2 - FPOS 4 - 1291 (COS.sp.823759)	(4) 2DFGRSS394Z096	COS/FUV, TIME-TAG, PSA	G130M 1291 A	FP-POS=4; BUFFER-TIME=1300; LIFETIME-POS=LP3			1400 Secs (1419 Secs) *[==>1419.0 Secs]*	 ***[2]***
6	orbit 3 & 4 - FPOS ALL - 1327 (COS.sp.823761)	(4) 2DFGRSS394Z096	COS/FUV, TIME-TAG, PSA	G130M 1327 A	FP-POS=ALL; BUFFER-TIME=1309; LIFETIME-POS=LP3			1409 Secs (5676 Secs) *[==>1419.0 Secs (Split 1)]* *[==>1419.0 Secs (Split 2)]* *[==>1419.0 Secs (Split 3)]* *[==>1419.0 Secs (Split 4)]*	 ***[3]*** ***[4]***
7	orbit 5 - FPOS ALL - 1291 (COS.sp.823760)	(4) 2DFGRSS394Z096	COS/FUV, TIME-TAG, PSA	G130M 1291 A	FP-POS=ALL; BUFFER-TIME=537; LIFETIME-POS=LP3			637 Secs (2596 Secs) *[==>649.0 Secs (Split 1)]* *[==>649.0 Secs (Split 2)]* *[==>649.0 Secs (Split 3)]* *[==>649.0 Secs (Split 4)]*	 ***[5]***

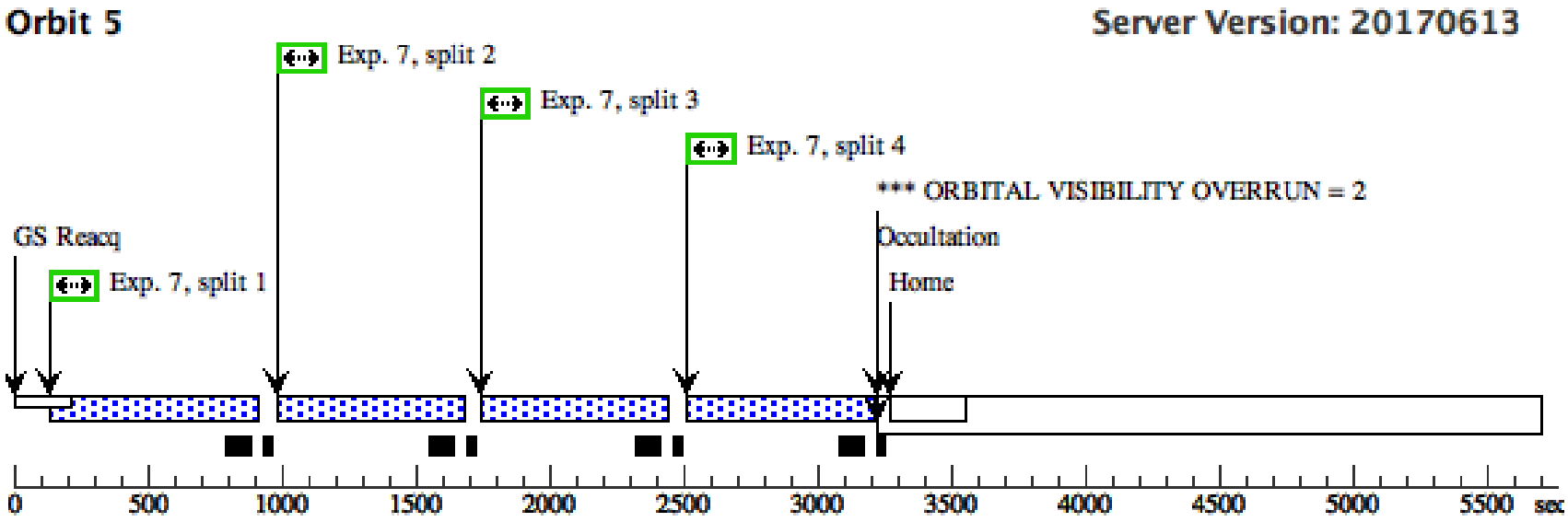
Orbit Structure








Orbit 4
Server Version: 20170613
GS Reacq
*** ORBITAL VISIBILITY OVERRUN = 4
Exp. 6, split 3
Exp. 6, split 4
Occultation
0
500
1000
1500
2000
2500
3000
3500
4000
4500
5000
5500
secs.


Orbit 5
Server Version: 20170613
Exp. 7, split 2
Exp. 7, split 3
Exp. 7, split 4
*** ORBITAL VISIBILITY OVERRUN = 2
GS Reacq
Occultation
Exp. 7, split 1
Home
0
500
1000
1500
2000
2500
3000
3500
4000
4500
5000
5500
sec