15869 - The Galactic Abundance Gradient for the Fe Group Elements in Early B Stars

Cycle: 27, Proposal Category: GO

(UV Initiative)

(Availability Mode: SUPPORTED)

INVESTIGATORS

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VISITS

Visit	*Targets used in Visit*	*Configurations used in Visit*	*Orbits Used*	*Last Orbit Planner Run*	*OP Current with Visit?*
01	(1) LS-5130	COS/FUV COS/NUV	3	26-Mar-2020 10:00:24.0	yes
02	(2) DSH279-8	COS/FUV COS/NUV	2	26-Mar-2020 10:00:27.0	yes
03	(3) DSH393-3	COS/FUV COS/NUV	3	26-Mar-2020 10:00:32.0	yes
04	(4) LSIV-13D30	COS/FUV COS/NUV	3	26-Mar-2020 10:00:35.0	yes

Visit	*Targets used in Visit*	*Configurations used in Visit*	*Orbits Used*	*Last Orbit Planner Run*	*OP Current with Visit?*
05	(5) CD-41D11034 WAVE	STIS/CCD STIS/FUV-MAMA STIS/NUV-MAMA	1	26-Mar-2020 10:00:36.0	yes
06	(6) CPD-57D3485	COS/FUV COS/NUV	2	26-Mar-2020 10:00:38.0	yes
07	(7) HD-14476 WAVE	STIS/CCD STIS/FUV-MAMA STIS/NUV-MAMA	1	26-Mar-2020 10:00:40.0	yes
08	(8) BD-21D1882 WAVE	STIS/CCD STIS/FUV-MAMA STIS/NUV-MAMA	1	26-Mar-2020 10:00:40.0	yes
09	(9) ALS15608	COS/FUV COS/NUV	3	26-Mar-2020 10:00:43.0	yes
10	(10) BD-00D1491	COS/FUV COS/NUV	2	26-Mar-2020 10:00:47.0	yes
11	(11) ALS86	COS/FUV COS/NUV	2	26-Mar-2020 10:00:50.0	yes
12	(12) ALS45	COS/FUV COS/NUV	3	26-Mar-2020 10:00:52.0	yes
50	(10) BD-00D1491	COS/FUV COS/NUV	2	26-Mar-2020 10:00:55.0	yes
60	(10) BD-00D1491	COS/FUV COS/NUV	2	26-Mar-2020 10:00:58.0	yes
52	(12) ALS45	COS/FUV COS/NUV	3	26-Mar-2020 10:01:01.0	yes

33 Total Orbits Used

ABSTRACT

We propose HST spectroscopic observations of twelve sharp-lined early B main-sequence stars with galactocentric distances ranging from 3-14 kpc in order to determine the metallicity gradient for the Fe group elements (Ti, V, Cr, Mn, Fe, Co, Ni) in our galaxy. This will be the first attempt to establish abundance gradients for all of the Fe-peak elements found in these young stars, that were formed <100 Myr ago. The result will be an assessment of the chemical evolution of our galaxy. Whereas the light elements are mostly delivered to the ISM by core-collapse supernovae (CCSNe), the Fe group elements are believed to primarily come from low/intermediate mass binaries containing white dwarfs that undergo SNe Ia explosions. According to some references, a single SNe Ia can deliver as much as 0.5 solar masses of pure Fe and Mn to the ISM compared with about 0.07 solar masses from a CCSNe. The older stellar populations were formed from an ISM that was enriched primarily by CCSNe, but the Fe group elements in B stars probably owe their origin mostly to SN Ia. Recently there has been a great deal of interest in using the observed Mn/Fe ratio to determine the progenitors of SNe Ia. Since the SNe models predict that Mn/Fe varies with metallicity, a good determination of the Mn abundance across our galaxy would also be useful for SN science. For each Fe group element we will determine its abundance relative to H and Fe. The unique spectra will have legacy value, as strong lines from the Fe group elements (except for a very few features of Fe itself) are found only in the FUV/NUV. Both COS and STIS will be used. The analysis will be carried through with TLUSTY/SYNSPEC.

OBSERVING DESCRIPTION

The twelve program stars (cf. Table 1) fall into two brightness categories. The more distant B stars, most of which are quite reddened, can be observed with COS (G130M, G185M gratings), but some of the brighter stars need to be observed with STIS (E140M, E230M gratings) as they exceed the COS bright limit. COS will provide spectra of higher S/N but at a slightly lower spectral resolution than STIS.

COS observations: LS 5130, DSH279-8, DSH393-3, NGC6611-ESL30, NGC3293- ESL43, Rup44-27, S285-6, S289-13, and ALS 45 will be observed with COS. The implemen- tation of the COS2025 initiative makes it somewhat more costly to get the best resolution and S/N over the full range of the COS FUV detector. While using the 1291 setting would obtain the best resolution over our desired wavelength range, having only 2 FP-POS posi- tions available with this setting would limit the obtainable S/N and make it more difficult to identify and remove detector artifacts. The longer G130M settings are now allowed only with the B segment, limiting wavelength coverage. We've chosen to use the COS G130M/1222 + G160M/1533 to maximize the S/N and wavelength coverage in the FUV region, although this means accepting somewhat lower spectra resolution in the 1300-1500 angstrom range. For our ETC calculations we assume Kurucz models of the spectral type and E(B-V) as specified in Table 2, normalizing to a UV measurement where available and to V otherwise. We targeted a baseline S/N of 30:1 at 1350 Angstroms for the 1222 setting, and at 1550 for the 1533 setting. These FUV observations should provide S/N > 30:1 between 1250 and 1550 A, covering numerous Ti iii, V iii, Cr

iii, and Mn iiilines, and > 20:1 over the whole range from about 1130 to 1700 A, with lower S/N down to 1070 A. In addition, we will use the G185M grating with central wavelengths of 1786 and 1817 to extend almost complete cover- age at S/N 30 up to 1933 A; this adds observations of many critical Co iii , N iii , Ni iii , and many strong Fe iii features. For some of our brighter targets where there is additional time in an orbit, we will also use the 1850 setting to fill in the remaining gaps in the NUV range and extend observations up to 1968 A. For a few of our fainter targets, we will reduce the baseline S/N requirements to 20:1-25:1 and/or omit the 1850 setting to keep down the overall orbit request. These cases are noted in Table 2.

STIS observations: The STIS E140M and E230M gratings will be used to observe CD-41 11034, HD 14476, and BD -21 1882 from 1150-2400 A, and will cover all of the spectral features/species mentioned above. The 0.2 x 0.2 arcsec aperture will be employed to eliminate light contamination from nearby cluster stars.

For ETC calculations, interpolate Kurucz SED to adopted spectral type, apply best estimate E(B-V), and then normalize to the available measurement closest to the observation band.
Exception are stars with IUE LGAP data, where the IUE observations are used instead. Details and raferences for the assumed ETC input parameters are discussed in the comments for each target.

Visit

Proposal 15869, LS 5130 (01), completed Thu Mar 26 14:01:01 GMT 2020

Diagnostic Status: No Diagnostics

Scientific Instruments: COS/FUV, COS/NUV

Special Requirements: (none)

Comments: The "unknown" star in BOT listings is the target itself. It is listed as "not a star" in GSC2, although it appears to be well resolved in 2MASS images

Fixed Targets

#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(1)	LS-5130	RA: 18 50 7.0219 (282.5292579d)	Proper Motion RA: -3.335 mas/yr	V=12.08+/-0.01	Reference Frame: ICRS
		Dec: -13 03 29.11 (-13.05809d)	Proper Motion Dec: -1.453 mas/yr	FLAMHST(2050)=3.0e-14,	
		Equinox: J2000	Epoch of Position: 2000	SpT=B2IV	

Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.
Updated to Gaia ICRS coordinates as given in SIMBAD.
Default SIMBAD name = LS IV -13 88
Has STIS G230M 2095 observations to normalize NUV flux (data sets O63O01); STIS TA image in F28X50LP shows only one source, as does 2MASS image, despite apparent confusion in GSC2 image and finding chart.*

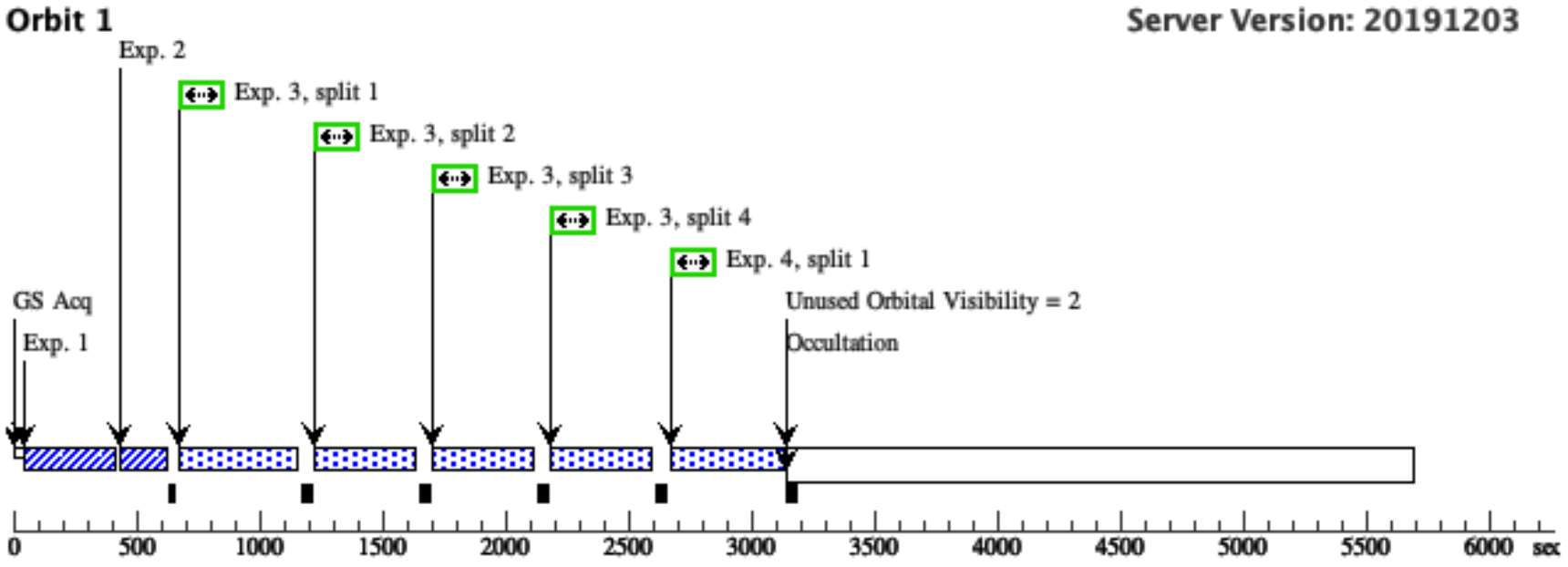
Reference for spectral type of B2IV is Smartt et al 2001 A&A 367, 86 who gives
Teff=21200, logg=3.5, vsini=35km/s, and B-V=0.24, implying E(B-V)=0.45

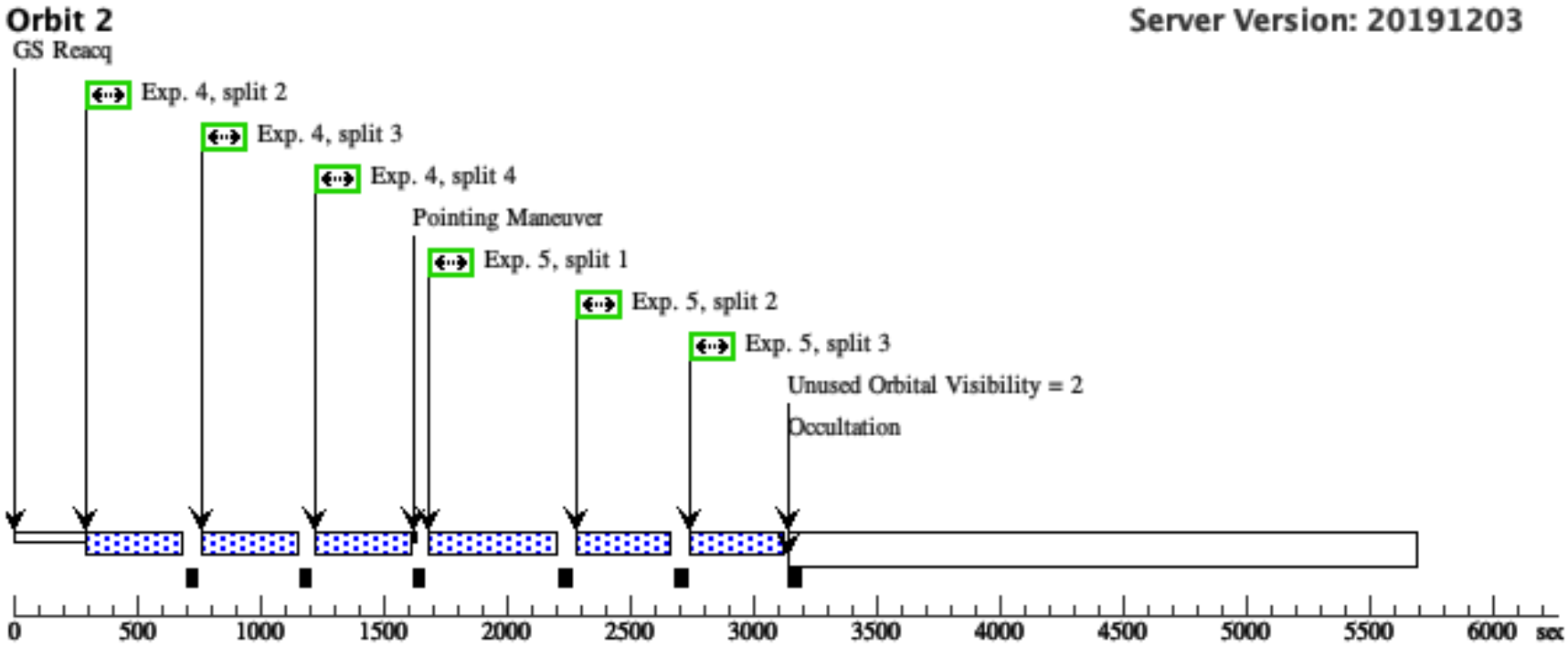
The "unknown" star in BOT listings is the target itself. It is listed as "not a star" in GSC2, although it appears to be a point source in 2MASS and STIS ACQ images.
Category=STAR
Description=[B0-B2 V-IV]
Extended=NO

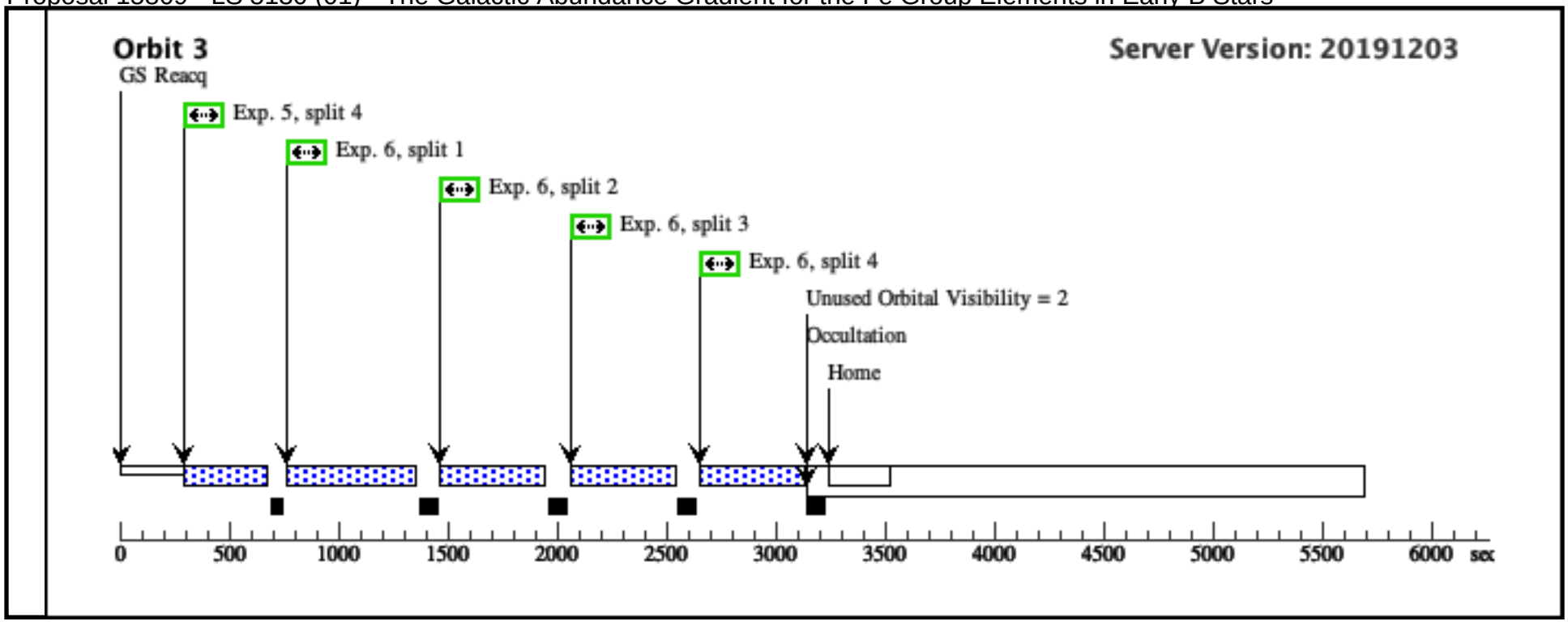
Exposures

#	Label (ETC Run)	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
1	ACQ/PEAKXD (COS.sa.1365266)	(1) LS-5130	COS/NUV, ACQ/PEAKXD, PSA	G185M 1921 A	STRIPE=DEF			8 Secs (8 Secs) *[==>]*	 ***[1]***
Comments: Spectra=B2V, E(B-V)=0.46, norm F2050=3.5e-14									
2	ACQ/PEAKD (COS.sa.1365266)	(1) LS-5130	COS/NUV, ACQ/PEAKD, PSA	G185M 1921 A	NUM-POS=5; STEP-SIZE=0.9; CENTER=FLUX-WT-FLR			8 Secs (8 Secs) *[==>]*	 ***[1]***
3	G185M 1817 (COS.sp.1369348)	(1) LS-5130	COS/NUV, TIME-TAG, PSA	G185M 1817 A	FP-POS=ALL; BUFFER-TIME=1230			394 Secs (1576 Secs) *[==>(Split 1)]* *[==>(Split 2)]* *[==>(Split 3)]* *[==>(Split 4)]*	 ***[1]***
Comments: S/N=27@1817, Spectra=B2V, E(B-V)=0.46, norm F2050=3.5e-14									
4	G185M 1786 (COS.sp.1369347)	(1) LS-5130	COS/NUV, TIME-TAG, PSA	G185M 1786 A	FP-POS=ALL; BUFFER-TIME=1230			375 Secs (1500 Secs) *[==>(Split 1)]* *[==>(Split 2)]* *[==>(Split 3)]* *[==>(Split 4)]*	 ***[1]*** ***[2]***
Comments: S/N=26@1817, Spectra=B2V, E(B-V)=0.46, norm F2050=3.5e-14									
5	G130M 1222 (COS.sp.1369345)	(1) LS-5130	COS/FUV, TIME-TAG, PSA	G130M 1222 A	FP-POS=ALL; BUFFER-TIME=800			332 Secs (1328 Secs) *[==>(Split 1)]* *[==>(Split 2)]* *[==>(Split 3)]* *[==>(Split 4)]*	 ***[2]*** ***[3]***
Comments: S/N=30@1350, Spectra=B2V, E(B-V)=0.46, norm F2050=3.5e-14									
6	G160M 1533 (COS.sp.1369344)	(1) LS-5130	COS/FUV, TIME-TAG, PSA	G160M 1533 A	BUFFER-TIME=576; FP-POS=ALL			429 Secs (1716 Secs) *[==>(Split 1)]* *[==>(Split 2)]* *[==>(Split 3)]* *[==>(Split 4)]*	 ***[3]***
Comments: S/N=26@1545, Spectra=B2V, E(B-V)=0.46, norm F2050=3.5e-14									

Orbit Structure




Orbit 2
Server Version: 20191203
GS Reacq
Exp. 4, split 2
Exp. 4, split 3
Exp. 4, split 4
Pointing Maneuver
Exp. 5, split 1
Exp. 5, split 2
Exp. 5, split 3
Unused Orbital Visibility = 2
Occultation
0
500
1000
1500
2000
2500
3000
3500
4000
4500
5000
5500
6000
sec


Orbit 3
Server Version: 20191203
GS Reacq
Exp. 5, split 4
Exp. 6, split 1
Exp. 6, split 2
Exp. 6, split 3
Exp. 6, split 4
Unused Orbital Visibility = 2
Occultation
Home
0
500
1000
1500
2000
2500
3000
3500
4000
4500
5000
5500
6000
sec

Visit

Proposal 15869, [DSH 2001] 279-8 (02), completed Thu Mar 26 14:01:02 GMT 2020

Diagnostic Status: No Diagnostics

Scientific Instruments: COS/FUV, COS/NUV

Special Requirements: (none)

Fixed Targets

#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(2)	DSH279-8 Alt Name1: TYC-8357-911-1	RA: 18 01 33.8176 (270.3909067d) Dec: -45 31 56.26 (-45.53229d) Equinox: J2000	Proper Motion RA: 1.597 mas/yr Proper Motion Dec: -2.161 mas/yr Epoch of Position: 2000	V=12.48 Galex NUV (Uncorrected)=13.02, Galex NUV(corrected for non-linearity)=12.668, V(TYC)=12.1	Reference Frame: ICRS

Comments: Updated to GAIA Coordinates
[DSH2001] 279-8

Galex catalog lists NUV abmag of 13.02; applying local linearity correction gives a corrected mag of 12.668.
This causes GALEX BOT to flag as unsafe assuming it is an unreddened O5 star. But we know this is a B2 star, and even adopting B1 in the ETC without any extinction shows this is safe (COS.sp.1365335), while adopted B2 and the estimated E(B-V) gives the ETC results linked in each exposure.

Geier et al 2019 estimates E(B-V)=0.1282 from Gaia data
Munn et al 2003 A&A 419, 713 gives V=12.48, B-V=-0.127, T=20000, logg=4.5, vsini<10
So adopt B2V spectral type and E(B-V) about 0.1
Category=STAR
Description=[B0-B2 V-IV]
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/PEAKXD (COS.sa.1365367)	(2) DSH279-8	COS/NUV, ACQ/PEAKXD, PSA	G185M 1921 A	STRIPE=DEF			1.5 Secs (1.5 Secs) *[==>]*	*[1]*
	Comments: Spectra=B2V, E(B-V)=0.1, B=12.1								
2	ACQ/PEAKD (COS.sa.1365367)	(2) DSH279-8	COS/NUV, ACQ/PEAKD, PSA	G185M 1921 A	NUM-POS=5; STEP-SIZE=0.9; CENTER=FLUX-WT-FLR			1.5 Secs (1.5 Secs) *[==>]*	*[1]*
	Comments: Spectra=B2V, E(B-V)=0.1, B=12.1 *Galex catalog lists NUV abmag of 13.02; applying linearity correction gives a corrected mag of 12.668.* *This causes BOT to flag as unsafe assuming an unreddened O5 star. But we know this is a B2 star, and even adopting B1 in the ETC without any extinction shows this is safe (COS.sp.1365335)*								
3	G185M 1786 (COS.sp.1365347)	(2) DSH279-8	COS/NUV, TIME-TAG, PSA	G185M 1786 A	FP-POS=ALL; BUFFER-TIME=453			200 Secs (800 Secs) *[==>(Split 1)]* *[==>(Split 2)]* *[==>(Split 3)]* *[==>(Split 4)]*	*[1]*
	Comments: Spectra=B2V, E(B-V)=0.1, Galex(NUV)=12.668 *S/N=30 at 1700* *Galex catalog lists NUV abmag of 13.02; applying linearity correction gives a corrected mag of 12.668.* *This causes BOT to flag as unsafe assuming an unreddened O5 star. But we know this is a B2 star, and even adopting B1 in the ETC without any extinction shows this is safe (COS.sp.1365335)*								
4	G185M 1817 (COS.sp.1365349)	(2) DSH279-8	COS/NUV, TIME-TAG, PSA	G185M 1817 A	FP-POS=ALL; BUFFER-TIME=624			182 Secs (728 Secs) *[==>(Split 1)]* *[==>(Split 2)]* *[==>(Split 3)]* *[==>(Split 4)]*	*[1]*
	Comments: Spectra=B2V, E(B-V)=0.1, Galex(NUV)=12.668 *S/N=34@1817* *Galex catalog lists NUV abmag of 13.02; applying linearity correction gives a corrected mag of 12.668.* *This causes BOT to flag as unsafe assuming an unreddened O5 star. But we know this is a B2 star, and even adopting B1 in the ETC without any extinction shows this is safe (COS.sp.1365335)*								
5	G185M 1850 (COS.sp.1365344)	(2) DSH279-8	COS/NUV, TIME-TAG, PSA	G185M 1850 A	FP-POS=ALL; BUFFER-TIME=619			138 Secs (552 Secs) *[==>(Split 1)]* *[==>(Split 2)]* *[==>(Split 3)]* *[==>(Split 4)]*	*[1]* *[2]*
	Comments: Spectra=B2V, E(B-V)=0.1, B=12.1 *Galex catalog lists NUV abmag of 13.02; applying linearity correction gives a corrected mag of 12.668.* *This causes BOT to flag as unsafe assuming an unreddened O5 star. But we know this is a B2 star, and even adopting B1 in the ETC without any extinction shows this is safe (COS.sp.1365335)*								

	6	G130M 1222 A 2 (COS.sp.1365354)	(2) DSH279-8	COS/FUV, TIME-TAG, PSA	G130M 1222 A	FP-POS=ALL; BUFFER-TIME=111	61 Secs (244 Secs) *[==>(Split 1)]* *[==>(Split 2)]* *[==>(Split 3)]* *[==>(Split 4)]*	***[2]***

Comments: Spectra=B2V, E(B-V)=0.1, Galex(NUV)=12.668

Galex catalog lists NUV abmag of 13.02; applying local linearity correction gives a corrected mag of 12.668.
This causes GALEX BOT to flag as unsafe assuming it is an unreddened O5 star. But we know this is a B2 star, and even adopting B1 in the ETC without any extinction shows this is safe (COS.sp.1365335), while adpo pting B2 and the estimated E(B-V) gives the ETC results linked in each exposure.

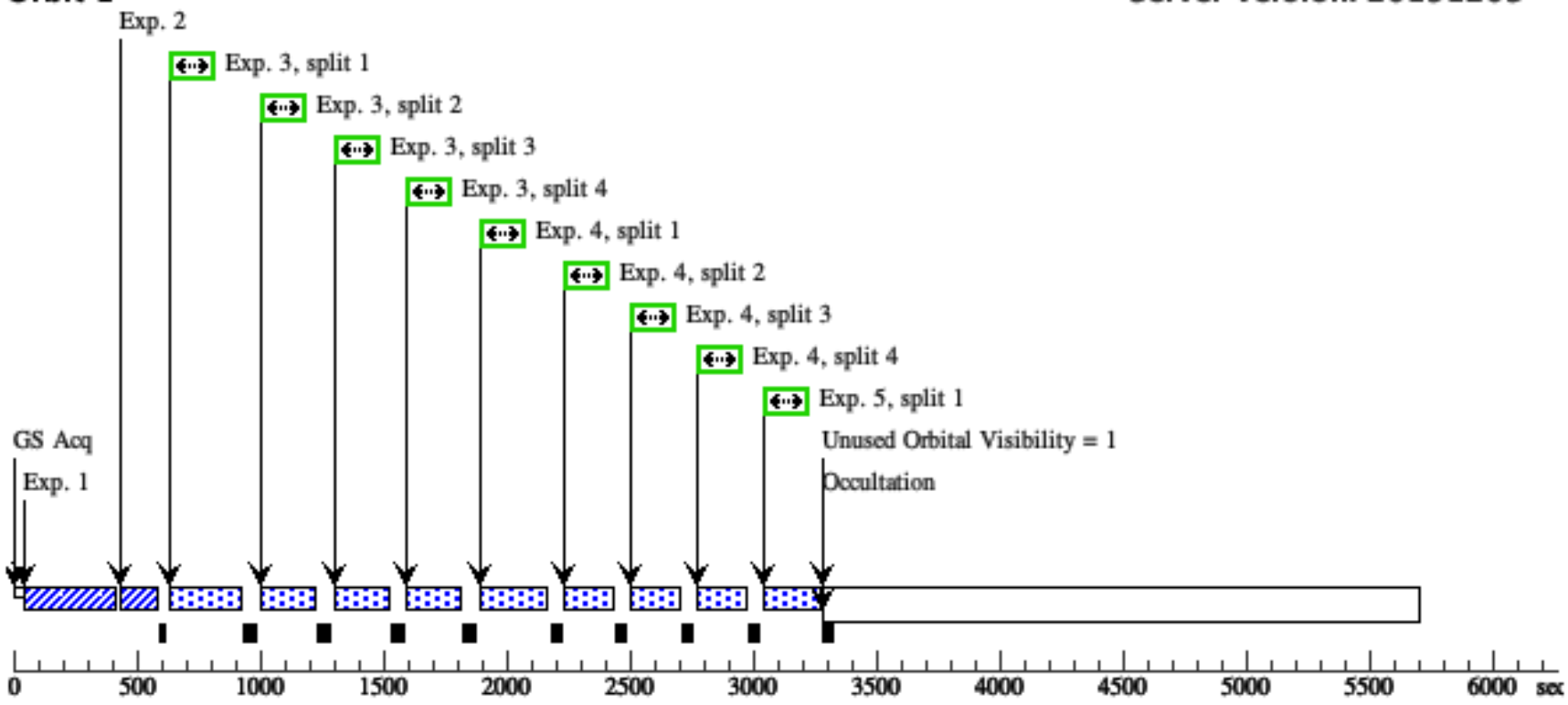
Munn et al 2003 A&A 419, 713 gives V=12.48, B-V=-0.127, T=20000, logg=4.5, vsini<10
So adopt B2V spectral type and E(B-V) about 0.1

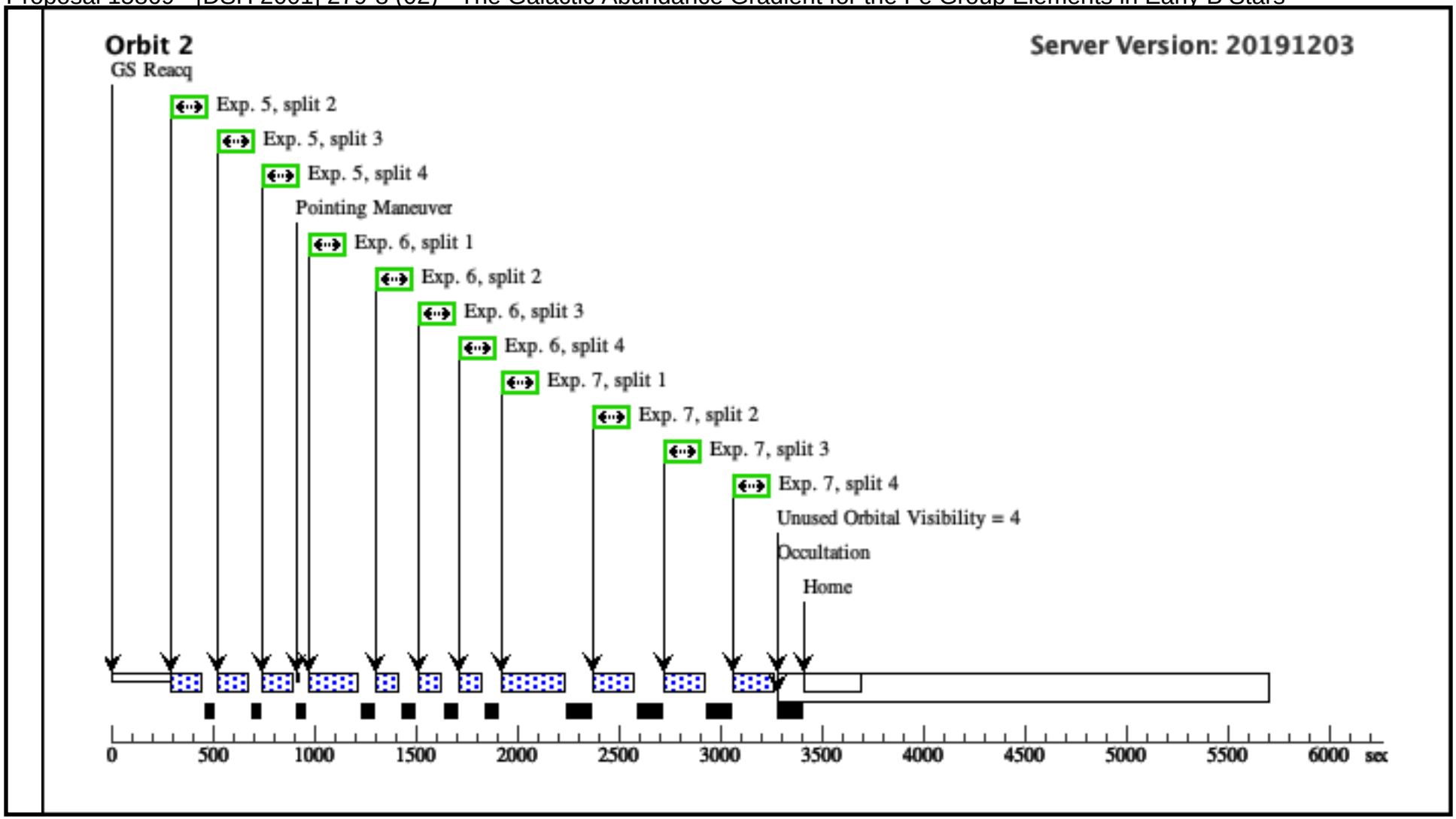
	7	G160M 1533 A 3 (COS.sp.1365314)	(2) DSH279-8	COS/FUV, TIME-TAG, PSA	G160M 1533 A	BUFFER-TIME=124; FP-POS=ALL	145 Secs (580 Secs) *[==>(Split 1)]* *[==>(Split 2)]* *[==>(Split 3)]* *[==>(Split 4)]*	***[2]***

Comments: Spectra=B2V, E(B-V)=0.1, Galex(NUV)=12.668
S/N=25.8@1550

Galex catalog lists NUV abmag of 13.02; applying linearity correction gives a corrected mag of 12.668.
This causes BOT to flag as unsafe assuming an unreddened O5 star. But we know this is a B2 star, and even adopting B1 in the ETC without any extinction shows this is safe (COS.sp.1365335)

Orbit Structure




Orbit 2
Server Version: 20191203
GS Reacq
Exp. 5, split 2
Exp. 5, split 3
Exp. 5, split 4
Pointing Maneuver
Exp. 6, split 1
Exp. 6, split 2
Exp. 6, split 3
Exp. 6, split 4
Exp. 7, split 1
Exp. 7, split 2
Exp. 7, split 3
Exp. 7, split 4
Unused Orbital Visibility = 4
Occultation
Home
0
500
1000
1500
2000
2500
3000
3500
4000
4500
5000
5500
6000
sec

Visit

Proposal 15869, [DSH99] 393-3 (03), scheduling Thu Mar 26 14:01:02 GMT 2020

Diagnostic Status: No Diagnostics

Scientific Instruments: COS/FUV, COS/NUV

Special Requirements: (none)

Fixed Targets

#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(3)	DSH393-3	RA: 17 49 59.9007 (267.4995862d)	Proper Motion RA: -1.532 mas/yr	V=12.45	Reference Frame: ICRS
		Dec: -35 32 40.74 (-35.54465d)	Proper Motion Dec: -10.220 mas/yr	SpT=B1.5V	
		Equinox: J2000	Epoch of Position: 2000		

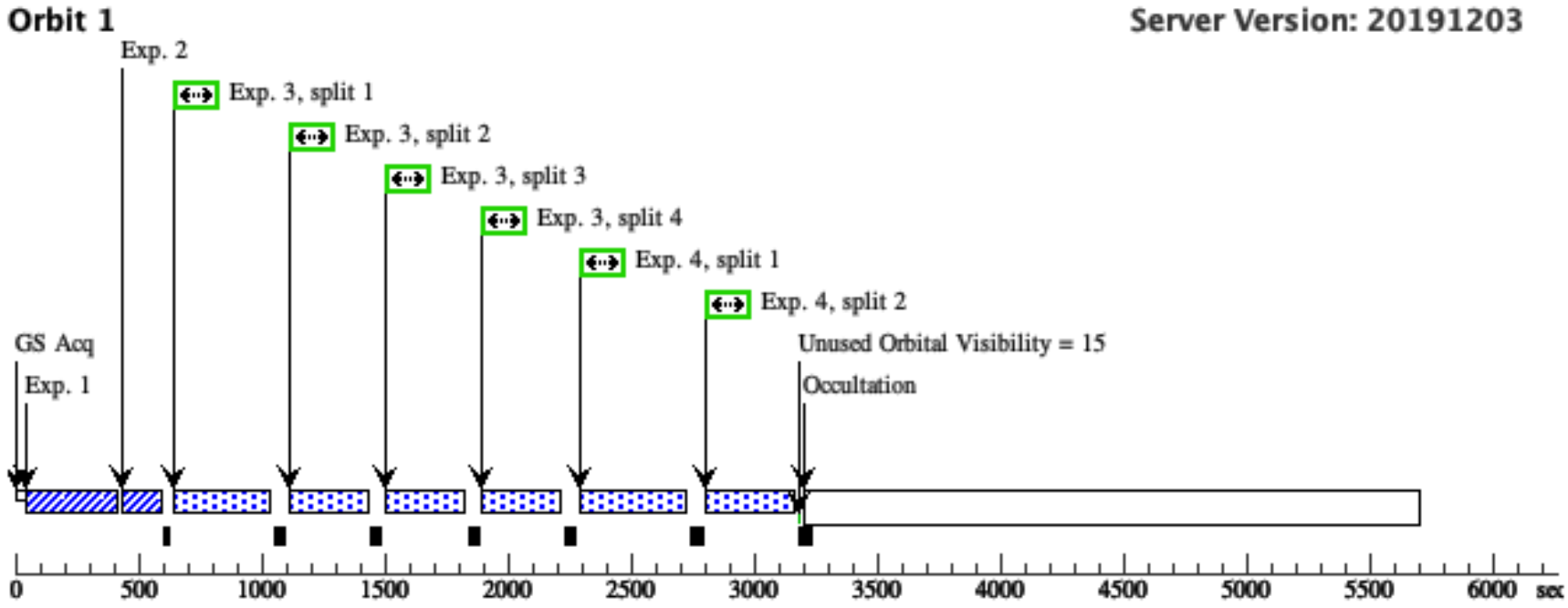
Comments: Simbad Name [DSH99] 393-3
Munn et al 2003 A&A 419, 713 found V=12.49, B-V=0.214, vsini=30, Teff=23000K, log g = 4.5,
implies SpT=B1.6V, B-V = -0.24, E(B-V) about 0.45

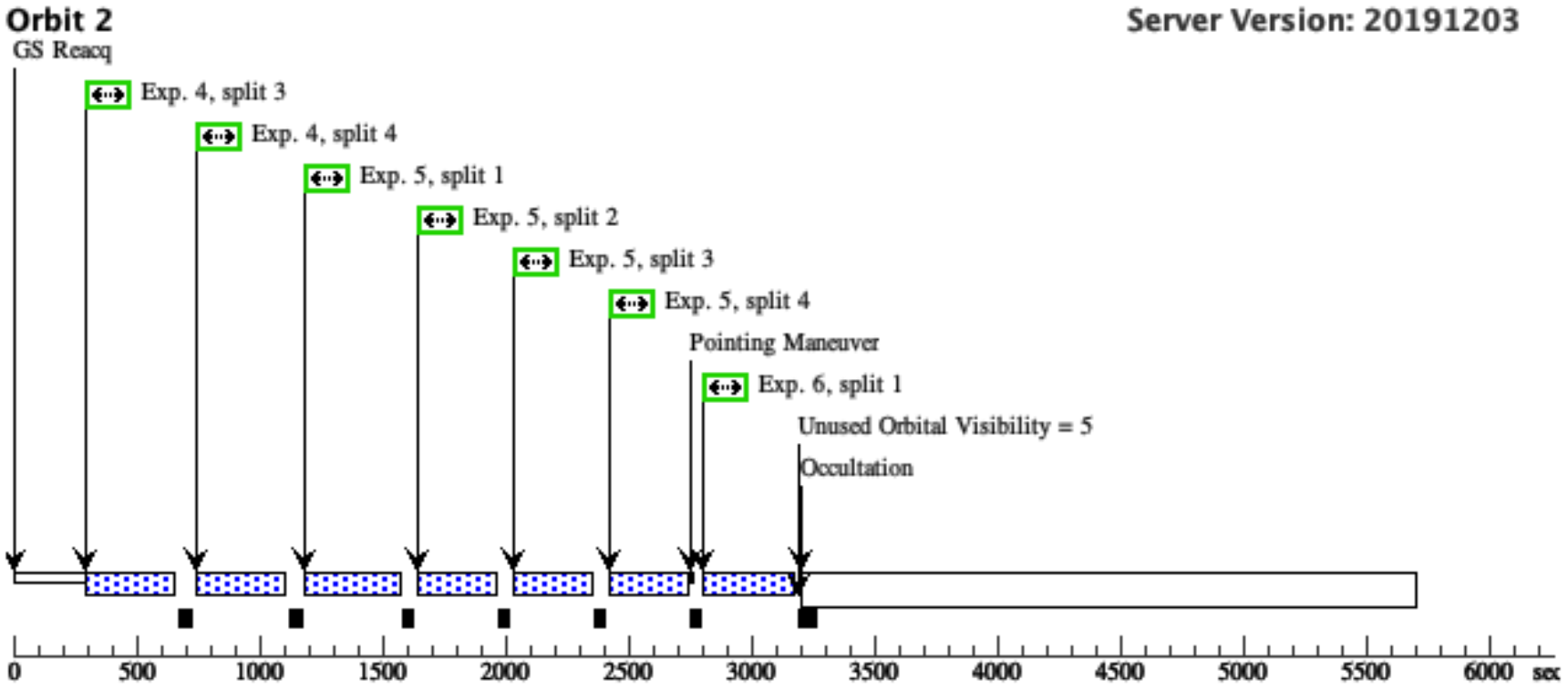
3 unknowns in BOT - look up in GSC 2.4.1 at http://gsss.stsci.edu/webservices/GSC2/WebForm.aspx
All are very faint
S8BJ192511, Gaia G =17.11, Nplate=16.9283
S8BJ192559, Gaia G = 18.13, Nplate = 17.6085
S8BJ192571, Gaia G = 17.76, Nplate = 17.3887
N plate is very close to Cousins I band
Category=STAR
Description=[B0-B2 V-IV]
Extended=NO

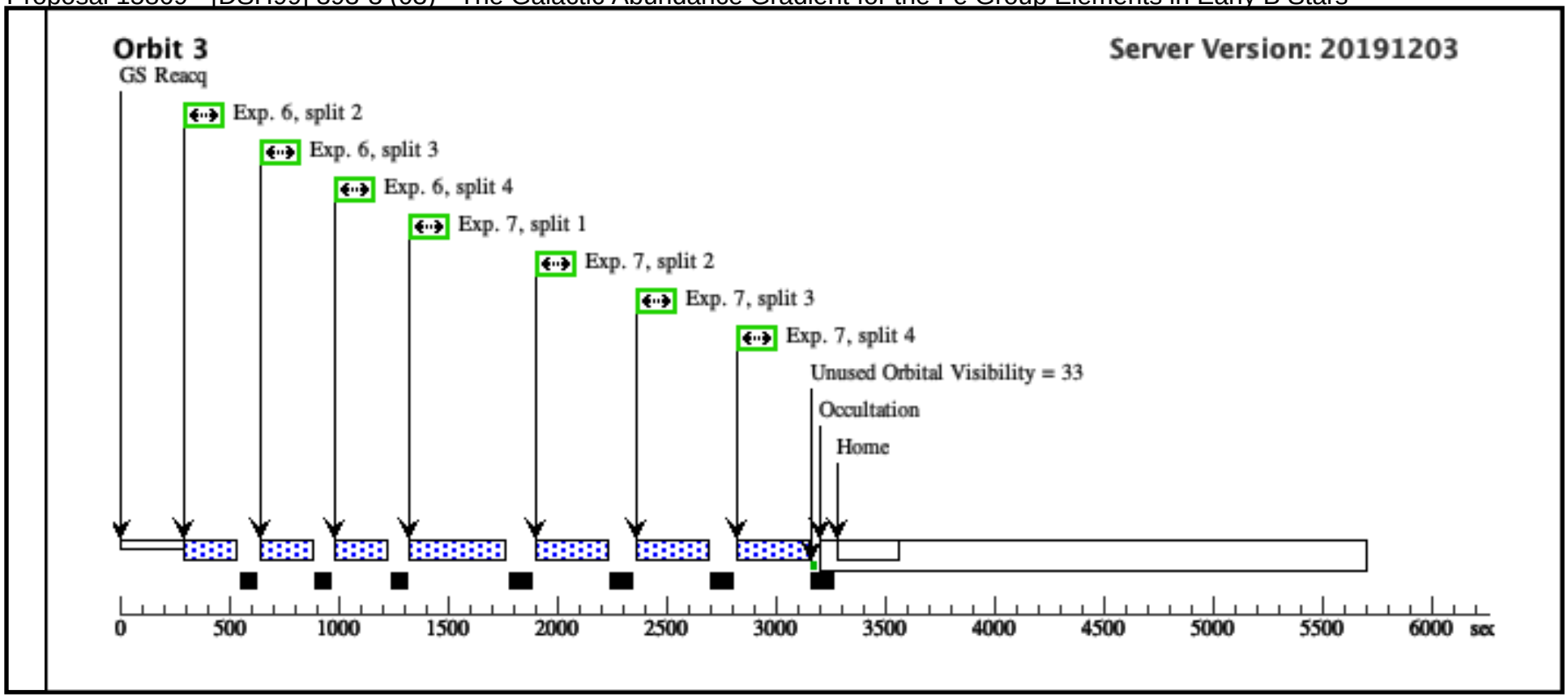
Exposures

#	Label (ETC Run)	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
1	ACQ?PEAKXD (COS.sa.1365390)	(3) DSH393-3	COS/NUV, ACQ/PEAKXD, PSA	G185M 1921 A				3 Secs (3 Secs) *[==>]*	 ***[1]***
Comments: B2V, E(B-V)=0.31, V=12.45									
2	ACQ/PEAKD (COS.sa.1365390)	(3) DSH393-3	COS/NUV, ACQ/PEAKD, PSA	G185M 1921 A	NUM-POS=5; STEP-SIZE=0.9; CENTER=FLUX-WT-FLR			3 Secs (3 Secs) *[==>]*	 ***[1]***
Comments: B2V, E(B-V)=0.31, V=12.45									
3	G185M 1786 (COS.sp.1365405)	(3) DSH393-3	COS/NUV, TIME-TAG, PSA	G185M 1786 A	FP-POS=ALL; BUFFER-TIME=924			307 Secs (1228 Secs) *[==>(Split 1)]* *[==>(Split 2)]* *[==>(Split 3)]* *[==>(Split 4)]*	 ***[1]***
Comments: B2V, E(B-V)=0.31, V=12.45									
4	G185M 1817 (COS.sp.1365407)	(3) DSH393-3	COS/NUV, TIME-TAG, PSA	G185M 1817 A	FP-POS=ALL; BUFFER-TIME=916			347 Secs (1388 Secs) *[==>(Split 1)]* *[==>(Split 2)]* *[==>(Split 3)]* *[==>(Split 4)]*	 ***[1]*** ***[2]***
Comments: B2V, E(B-V)=0.31, V=12.45									
5	G185M 1850 (COS.sp.1365408)	(3) DSH393-3	COS/NUV, TIME-TAG, PSA	G185M 1850 A	FP-POS=ALL; BUFFER-TIME=916			300 Secs (1200 Secs) *[==>(Split 1)]* *[==>(Split 2)]* *[==>(Split 3)]* *[==>(Split 4)]*	 ***[2]***
Comments: B2V, E(B-V)=0.31, V=12.45									
6	G130M 1222 (COS.sp.1365410)	(3) DSH393-3	COS/FUV, TIME-TAG, PSA	G130M 1222 A	FP-POS=ALL; BUFFER-TIME=330			190 Secs (760 Secs) *[==>(Split 1)]* *[==>(Split 2)]* *[==>(Split 3)]* *[==>(Split 4)]*	 ***[2]*** ***[3]***
Comments: B2V, E(B-V)=0.31, V=12.45									
7	G160M 1533 (COS.sp.1365414)	(3) DSH393-3	COS/FUV, TIME-TAG, PSA	G160M 1533 A	BUFFER-TIME=279; FP-POS=ALL			279 Secs (1116 Secs) *[==>(Split 1)]* *[==>(Split 2)]* *[==>(Split 3)]* *[==>(Split 4)]*	 ***[3]***
Comments: B2V, E(B-V)=0.31, V=12.45									

Orbit Structure




Orbit 2
Server Version: 20191203
GS Reacq
Exp. 4, split 3
Exp. 4, split 4
Exp. 5, split 1
Exp. 5, split 2
Exp. 5, split 3
Exp. 5, split 4
Pointing Maneuver
Exp. 6, split 1
Unused Orbital Visibility = 5
Occultation
0
500
1000
1500
2000
2500
3000
3500
4000
4500
5000
5500
6000
sec


Orbit 3
Server Version: 20191203
GS Reacq
Exp. 6, split 2
Exp. 6, split 3
Exp. 6, split 4
Exp. 7, split 1
Exp. 7, split 2
Exp. 7, split 3
Exp. 7, split 4
Unused Orbital Visibility = 33
Occultation
Home
0
500
1000
1500
2000
2500
3000
3500
4000
4500
5000
5500
6000
sec

Visit

Proposal 15869, LS IV -13 30 (04), scheduled Thu Mar 26 14:01:02 GMT 2020

Diagnostic Status: No Diagnostics

Scientific Instruments: COS/FUV, COS/NUV

Special Requirements: (none)

Fixed Targets

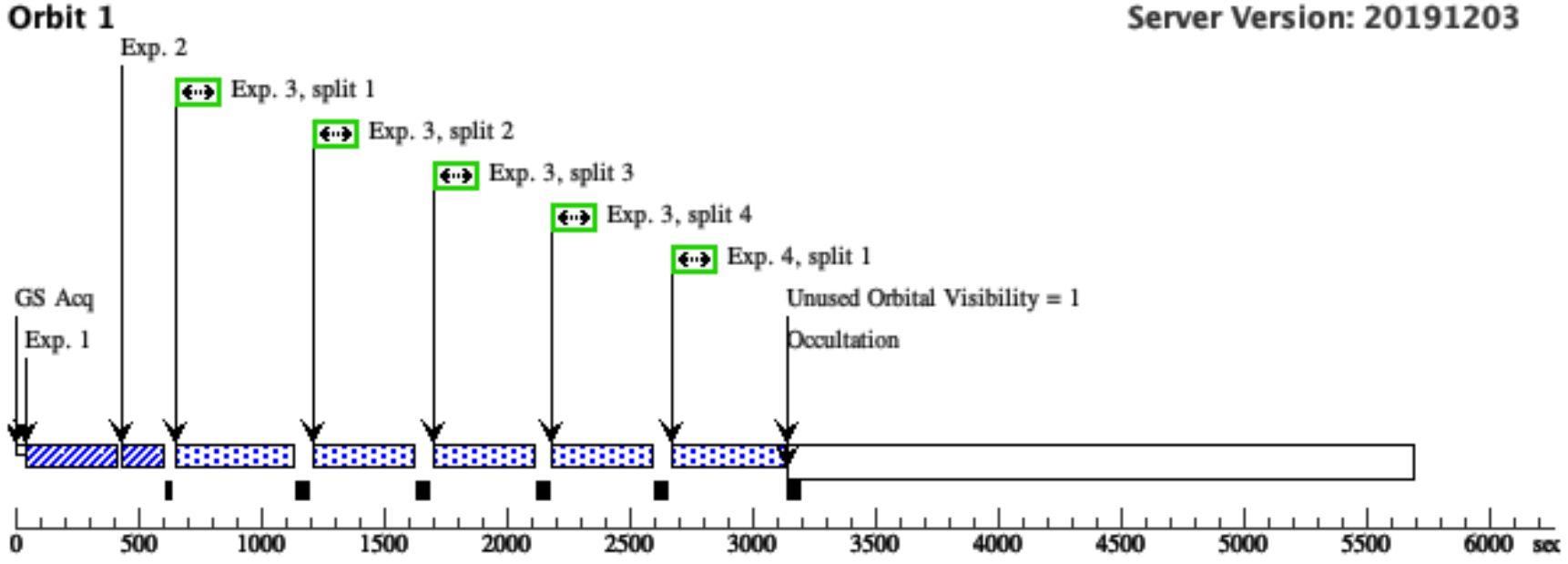
#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(4)	LSIV-13D30	RA: 18 19 18.4808 (274.8270033d)	Proper Motion RA: 0.124 mas/yr	V=11.42	Reference Frame: ICRS
	Alt Name1: NGC6611-ESL30	Dec: -13 55 40.09 (-13.92780d)	Proper Motion Dec: -1.479 mas/yr		
		Equinox: J2000	Epoch of Position: 2000		

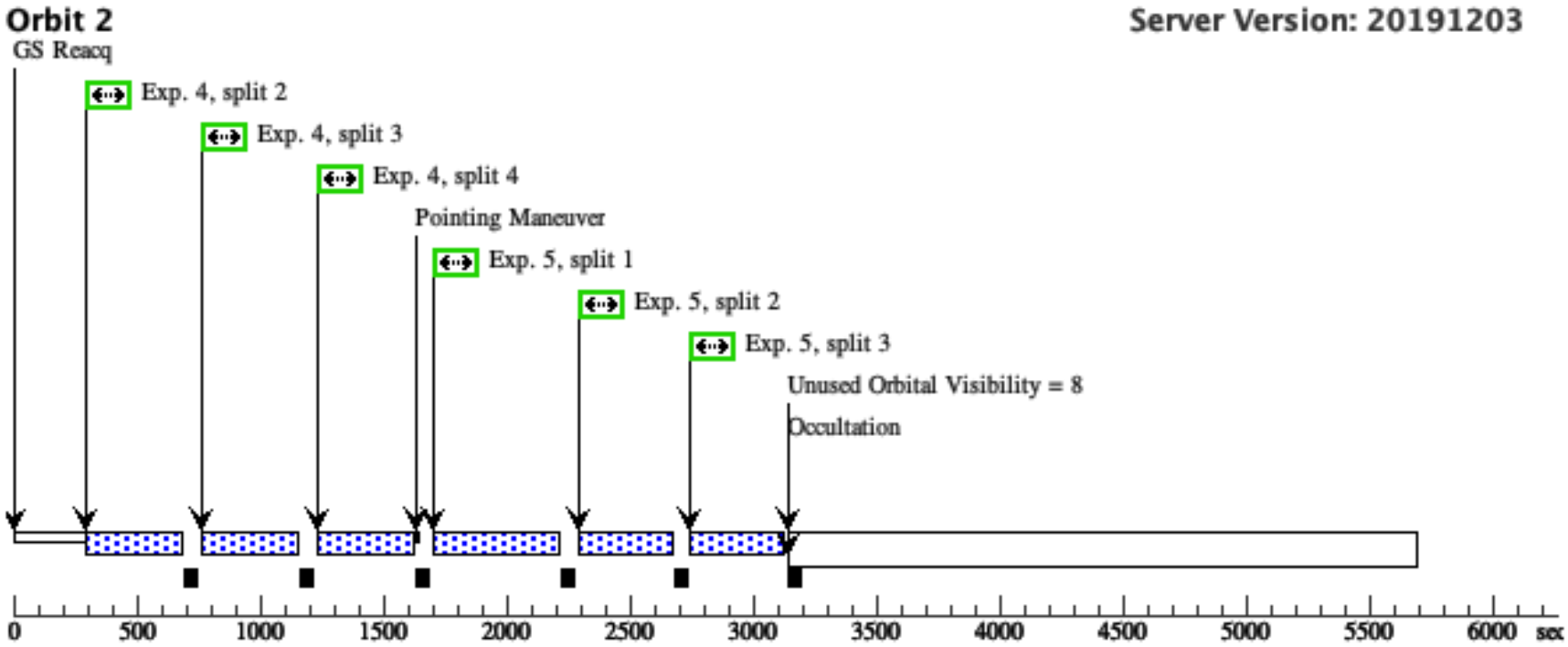
Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.
Coordinates updated to Gaia DR2 numbers in SIMBAD
SpT=B2V
Only object flagged by BOT is the target. See detailed ETC calculations
Trundle et al found B1.5V, implying E(B-V)=0.61 with SIMBAD B, V values
http://vizier.u-strasbg.fr/viz-bin/VizieR-3?-source=J/A%2bA/471/625/stars
Category=STAR
Description=[B0-B2 V-IV]
Extended=NO

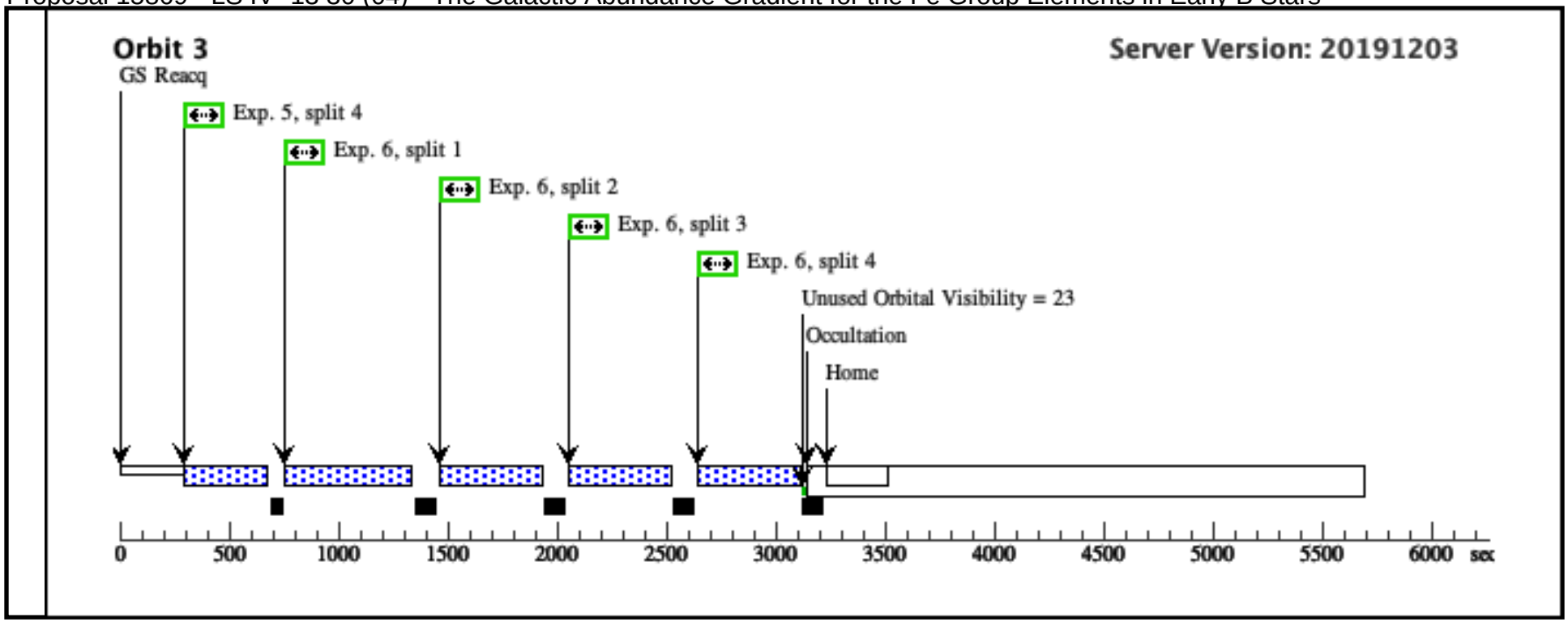
Exposures

#	Label (ETC Run)	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
1	ACQ/PEAKXD (COS.sa.1369156)	(4) LSIV-13D30	COS/NUV, ACQ/PEAKXD, PSA	G185M 1921 A				5 Secs (5 Secs)	
								[==>]	***[1]***
	Comments: V=11.42, B1.5V, E(B-V)=0.61								
2	ACQ/PEAKD (COS.sa.1369156)	(4) LSIV-13D30	COS/NUV, ACQ/PEAKD, PSA	G185M 1921 A	CENTER=FLUX-WT-FLR; NUM-POS=5; STEP-SIZE=0.9			5 Secs (5 Secs)	
								[==>]	***[1]***
	Comments: V=11.42, B1.5V, E(B-V)=0.61								
3	G185M 1817 (COS.sp.1369154)	(4) LSIV-13D30	COS/NUV, TIME-TAG, PSA	G185M 1817 A	FP-POS=ALL; BUFFER-TIME=1071			390 Secs (1560 Secs)	
								[==>(Split 1)]	***[1]***
								[==>(Split 2)]	
								[==>(Split 3)]	
								[==>(Split 4)]	
	Comments: V=11.42, B1.5V, E(B-V)=0.61								
4	G185M 1786 (COS.sp.1369153)	(4) LSIV-13D30	COS/NUV, TIME-TAG, PSA	G185M 1786 A	FP-POS=ALL; BUFFER-TIME=1074			370 Secs (1480 Secs)	
								[==>(Split 1)]	***[1]***
								[==>(Split 2)]	***[2]***
								[==>(Split 3)]	
								[==>(Split 4)]	
	Comments: V=11.42, B1.5V, E(B-V)=0.61								
5	G130M 1222 (COS.sp.1369150)	(4) LSIV-13D30	COS/FUV, TIME-TAG, PSA	G130M 1222 A	FP-POS=ALL; BUFFER-TIME=855			325 Secs (1300 Secs)	
								[==>(Split 1)]	
								[==>(Split 2)]	***[2]***
								[==>(Split 3)]	
								[==>(Split 4)]	***[3]***
	Comments: V=11.42, B1.5V, E(B-V)=0.61								
6	G160M 1533 (COS.sp.1369155)	(4) LSIV-13D30	COS/FUV, TIME-TAG, PSA	G160M 1533 A	FP-POS=ALL; BUFFER-TIME=471			418 Secs (1672 Secs)	
								[==>(Split 1)]	
								[==>(Split 2)]	***[3]***
								[==>(Split 3)]	
								[==>(Split 4)]	
	Comments: V=11.42, B1.5V, E(B-V)=0.61								

Orbit Structure




Orbit 2
Server Version: 20191203
GS Reacq
Exp. 4, split 2
Exp. 4, split 3
Exp. 4, split 4
Pointing Maneuver
Exp. 5, split 1
Exp. 5, split 2
Exp. 5, split 3
Unused Orbital Visibility = 8
Occultation
0
500
1000
1500
2000
2500
3000
3500
4000
4500
5000
5500
6000
sec


Orbit 3
Server Version: 20191203
GS Reacq
Exp. 5, split 4
Exp. 6, split 1
Exp. 6, split 2
Exp. 6, split 3
Exp. 6, split 4
Unused Orbital Visibility = 23
Occultation
Home
0
500
1000
1500
2000
2500
3000
3500
4000
4500
5000
5500
6000
sec

Visit

Proposal 15869, CD -41 11034 (05), scheduled Thu Mar 26 14:01:02 GMT 2020

Diagnostic Status: No Diagnostics

Scientific Instruments: STIS/NUV-MAMA, STIS/CCD, STIS/FUV-MAMA

Special Requirements: (none)

Fixed Targets

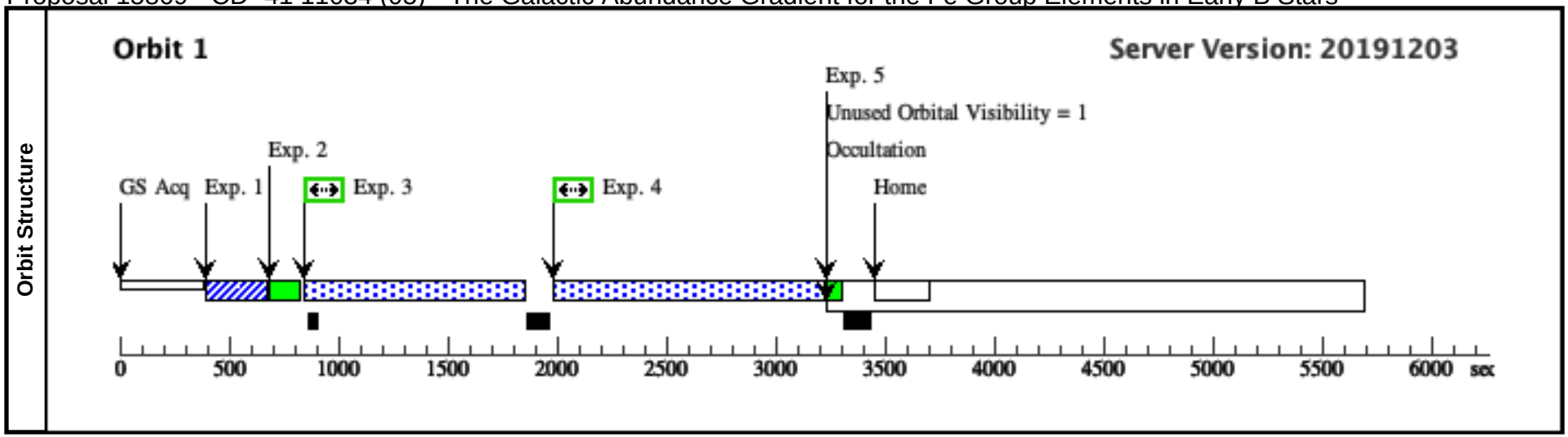
#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(5)	CD-41D11034 Alt Name1: 2MASS-J16541130-4148538 Alt Name2: NGC6231-SBL403	RA: 16 54 11.3120 (253.5471333d) Dec: -41 48 53.97 (-41.81499d) Equinox: J2000	Proper Motion RA: -0.670 mas/yr Proper Motion Dec: -2.360 mas/yr Epoch of Position: 2000	V=9.275	Reference Frame: ICRS

Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.
PPM coordinates are listed in SIMBAD; we have substituted 2MASS coordinates from II/246/out as these should be significantly more accurate and proper motion, which PPM incluldes but 2MASS does not, should be small
Cl NGC 6231 SBL 403*
IUE spectra SWP19380 + LWR15416
Updated coordinates to Gaia DR2. (For some reason SIMBAD doesn't pick up the GAIA ID and measurements for this one, but the star is clearly in Gaia.

GSC2 BOT returns no stars, so as substitute for default BOT look for other 2MASS and Gaia entries within 10" of target and use these magnitudes to check safety
Target has J=8.796 and J-K=+0.041
field star at 7.07" has J=13.957 and J-K=+0.814
field star at 8.00" has J=14.479 and J=K=+0.981
GAIA search finds one closer star to target.
Target has Gmag=9.28
field star at 1.36" has Gmag=12.06 (no color info, but would have been in IUE LGAP aperture, so flux already included)
field star at 7.60" has Gmag=16.38
field star at 7.60" had Gmag=19.15
field star at 9.06" has Gmag=19.61
field star at 9.55" has Gmag=19.55
field star at 10.02"has Gmag=18.67
So all close stars are are much fainter than the target.
Category=STAR
Description=[B0-B2 V-IV]
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 OIII (STIS.ta.1365446)	(5) CD-41D11034	STIS/CCD, ACQ, F28X50OIII	MIRROR				2.5 Secs (2.5 Secs) *[==>]*	***[1]***
	Comments: B1V, V=9.28, E(B-V)=0.43, F(2050)=3.5e-13								
2	E140M Wave	WAVE	STIS/FUV-MAMA, ACCUM, 0.2X0.2	E140M 1425 A				*[==>]*	***[1]***
3	E140M (STIS.sp.1366028)	(5) CD-41D11034	STIS/FUV-MAMA, ACCUM, 0.2X0.2	E140M 1425 A	WAVECAL=NO			1000 Secs (1000 Secs) *[==>]*	***[1]***
	Comments: B1V, V=9.28, E(B-V)=0.43 *IUE spectra SWP19380 + LWR15416 have this target name listed by GO, but the IUE listed coordinates are off by ~15" so the data bases do not link these observations to this star despite it being listed as the target. These have mean F(2050) flux of 1.1e-12* *STIS.sp.1366028 (e140m) + STIS.sp.1366029 (E230M 1978) give good S/N in 1000 s each.* *Fitzpatrick 2007 used these IUE spectra to derive Teff=26418, logg=4.15, E(B-V)=0.42.* *Normalizing to these parameters and optical V=9.275, gives very similar results STIS.sp.1366033 + STIS.sp.1366030 to using IUE spectra* *THis suggests IUE observed the correct star despite the error in the listed coordinates. Remember IUE pointing was done using a visual finding image several arc-minutes in extent* *GSC2 BOT returns no stars, so as substitute for default BOT look for other 2MASS and Gaia entries within 10" of target and use these magnitudes to check safety* *Target has J=8.796 and J-K=+0.041* *field star at 7.07" has J=13.957 and J-K=+0.814* *field star at 8.00" has J=14.479 and J=K=+0.981* *GAIA search finds one closer star to target.* *Target has Gmag=9.28* *field star at 1.36" has Gmag=12.06 (no color info, but would have been in IUE LGAP aperture, so flux already included)* *field star at 7.60" has Gmag=16.38* *field star at 7.60" had Gmag=19.15* *field star at 9.06" has Gmag=19.61* *field star at 9.55" has Gmag=19.55* *field star at 10.02"has Gmag=18.67* *So all close stars are are much fainter than the target.*								
4	E230M 1978 (STIS.sp.1366029)	(5) CD-41D11034	STIS/NUV-MAMA, ACCUM, 0.2X0.2	E230M 1978 A	WAVECAL=NO			1088 Secs (1088 Secs) *[==>]*	***[1]***
	Comments: UE spectra SWP19380 + LWR15416 have this target name listed by GO, but the supplied coordinates are off by ~15" so the data bases do not link these observations to this star despite it being listed as the target. These have mean F(2050) flux of 1 1e-12 *STIS.sp.1366028 (e140m) + STIS.sp.1366029 (E230M 1978) give good S/N in 1000 s each.* *Fitzpatrick 2007 used these IUE spectra to derive Teff=26418, logg=4.15, E(B-V)=0.42.* *Normalizing to these parameters and optical V=9.275, gives very similar results STIS.sp.1366033 + STIS.sp.1366030 to using IUE spectra*								
5	E230M Wave	WAVE	STIS/NUV-MAMA, ACCUM, 0.2X0.2	E230M 1978 A				*[==>]*	***[1]***


Orbit Structure
Orbit 1
Server Version: 20191203
Exp. 5
Unused Orbital Visibility = 1
Occultation
Exp. 2
GS Acq
Exp. 1
Exp. 3
Exp. 4
Home
0
500
1000
1500
2000
2500
3000
3500
4000
4500
5000
5500
6000
sec

Visit

Proposal 15869, CPD -57 3485 (06), scheduling Thu Mar 26 14:01:02 GMT 2020

Diagnostic Status: No Diagnostics

Scientific Instruments: COS/FUV, COS/NUV

Special Requirements: (none)

Fixed Targets

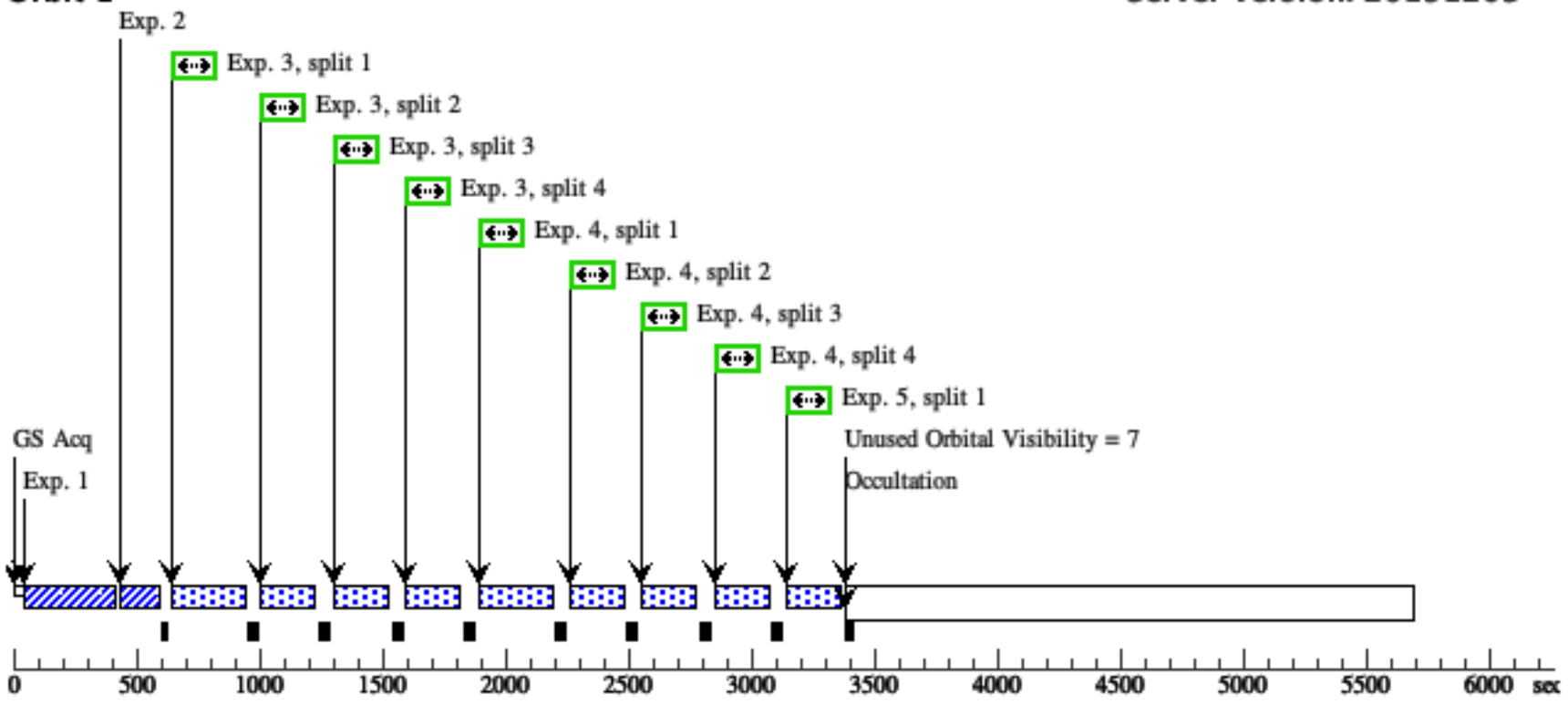
#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(6)	CPD-57D3485	RA: 10 35 28.4889 (158.8687038d)	Proper Motion RA: -7.795 mas/yr	V=11.32	Reference Frame: ICRS
		Dec: -58 12 49.85 (-58.21385d)	Proper Motion Dec: 3.402 mas/yr	SpT=B3V	
		Equinox: J2000	Epoch of Position: 2000		

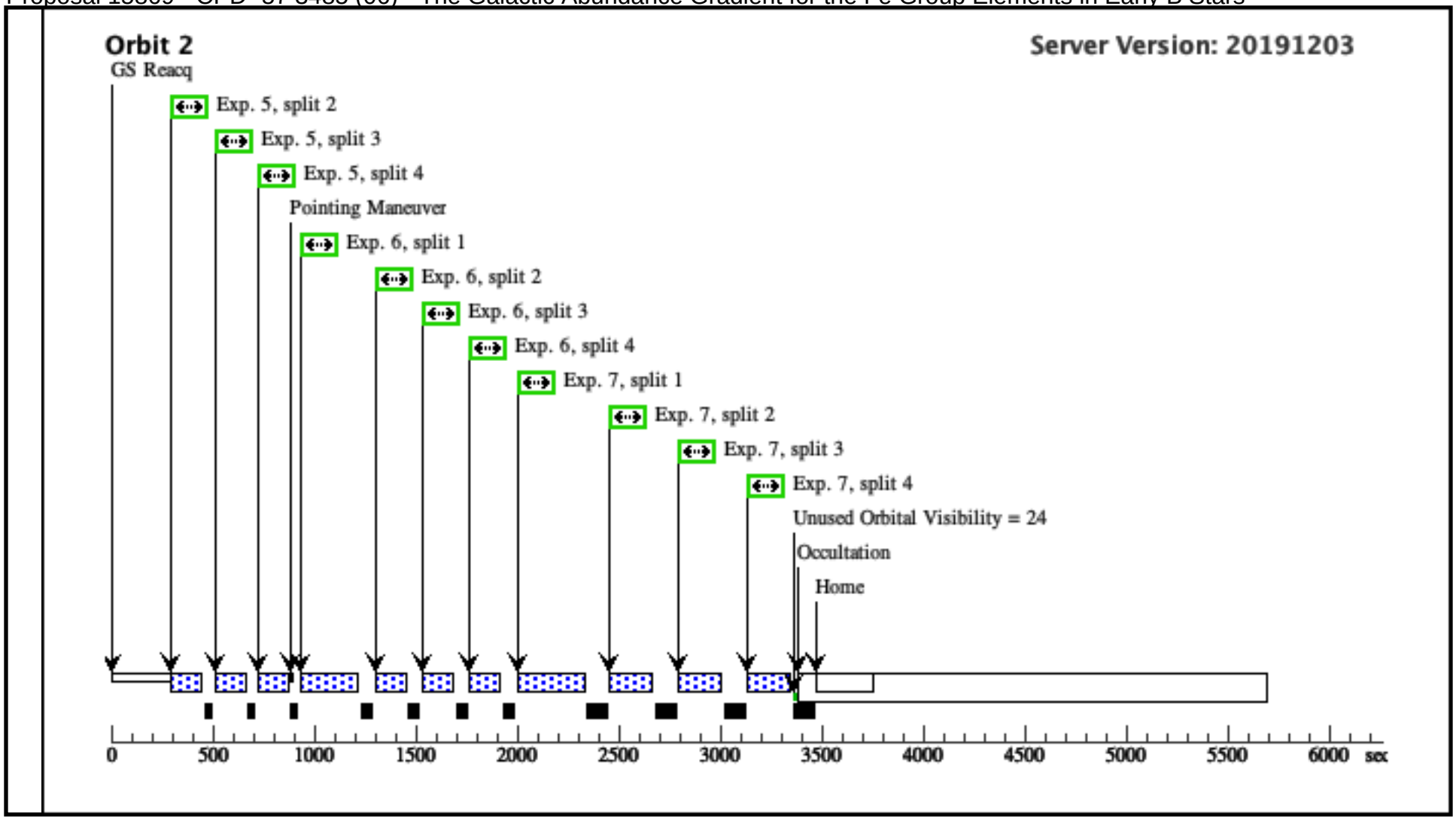
Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.
Updated with GAIA DR2 coordinates from SIMBAD
BOT lists the target itself as unknown, but otherwise clear - see detailed ETC calcualtions for each exposure
Category=STAR
Description=[B3-B5 V-IV]
Extended=NO

Exposures

#	Label (ETC Run)	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
1	ACQ/PEAKXD (COS.sa.1365795)	(6) CPD-57D3485	COS/NUV, ACQ/PEAKXD, PSA	G185M 1921 A				2.5 Secs (2.5 Secs) *[==>]*	***[1]***
Comments: V=11.32 B3 V E(B-V)=0.31 ETC gives ACQ time of 1.3 seconds									
2	ACQ/PEAKD (COS.sa.1365795)	(6) CPD-57D3485	COS/NUV, ACQ/PEAKD, PSA	G185M 1921 A	CENTER=FLUX-WT-FLR; NUM-POS=5; STEP-SIZE=0.9			2.5 Secs (2.5 Secs) *[==>]*	***[1]***
Comments: V=11.32 B3 V E(B-V)=0.31 ETC gives ACQ time of 1.3 seconds									
3	1786 (COS.sp.1365875)	(6) CPD-57D3485	COS/NUV, TIME-TAG, PSA	G185M 1786 A	FP-POS=ALL; BUFFER-TIME=628			208 Secs (832 Secs) *[==>(Split 1)]* *[==>(Split 2)]* *[==>(Split 3)]* *[==>(Split 4)]*	***[1]***
Comments: V=11.32 B3 V E(B-V)=0.31									
4	1817 (COS.sp.1365876)	(6) CPD-57D3485	COS/NUV, TIME-TAG, PSA	G185M 1817 A	FP-POS=ALL; BUFFER-TIME=628			208 Secs (832 Secs) *[==>(Split 1)]* *[==>(Split 2)]* *[==>(Split 3)]* *[==>(Split 4)]*	***[1]***
5	1850 (COS.sp.1365878)	(6) CPD-57D3485	COS/NUV, TIME-TAG, PSA	G185M 1850 A	FP-POS=ALL; BUFFER-TIME=628			134 Secs (536 Secs) *[==>(Split 1)]* *[==>(Split 2)]* *[==>(Split 3)]* *[==>(Split 4)]*	***[1]*** ***[2]***
6	G130M 1222 (COS.sp.1365880)	(6) CPD-57D3485	COS/FUV, TIME-TAG, PSA	G130M 1222 A	FP-POS=ALL; BUFFER-TIME=230			100 Secs (400 Secs) *[==>(Split 1)]* *[==>(Split 2)]* *[==>(Split 3)]* *[==>(Split 4)]*	***[2]***
Comments: V=11.32 B3 V E(B-V)=0.31									
7	G160M 1533 (COS.sp.1365881)	(6) CPD-57D3485	COS/FUV, TIME-TAG, PSA	G160M 1533 A	FP-POS=ALL; BUFFER-TIME=160			160 Secs (640 Secs) *[==>(Split 1)]* *[==>(Split 2)]* *[==>(Split 3)]* *[==>(Split 4)]*	***[2]***
Comments: V=11.32 B3 V E(B-V)=0.31									

Orbit Structure




Orbit 2
Server Version: 20191203
GS Reacq
Exp. 5, split 2
Exp. 5, split 3
Exp. 5, split 4
Pointing Maneuver
Exp. 6, split 1
Exp. 6, split 2
Exp. 6, split 3
Exp. 6, split 4
Exp. 7, split 1
Exp. 7, split 2
Exp. 7, split 3
Exp. 7, split 4
Unused Orbital Visibility = 24
Occultation
Home
0
500
1000
1500
2000
2500
3000
3500
4000
4500
5000
5500
6000
sec

Visit

Proposal 15869, HD 14476 (STIS) (07), scheduled Thu Mar 26 14:01:02 GMT 2020

Diagnostic Status: No Diagnostics

Scientific Instruments: STIS/NUV-MAMA, STIS/CCD, STIS/FUV-MAMA

Special Requirements: (none)

Fixed Targets

#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(7)	HD-14476 Alt Name1: 2MASS-J02221695+5716189 Alt Name2: NGC884-LAV2049	RA: 02 22 16.9645 (35.5706854d) Dec: +57 16 18.94 (57.27193d) Equinox: J2000		V=8.75 FLAM_IUE(1450)=1.75e-12, V=8.1914, SpT=B1IV	Reference Frame: ICRS

Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.
2MASS ICRS coordinates, also a TYCHO target
Cl NGC 884 LAV 2049*
BOT with GALEX shows target safe, no other concerns

V=8.75, B1V, E(B-V)=0.552 from Currie et al, 2010
http://vizier.u-strasbg.fr/viz-bin/VizieR-3?-source=J/ApJS/186/191/table3

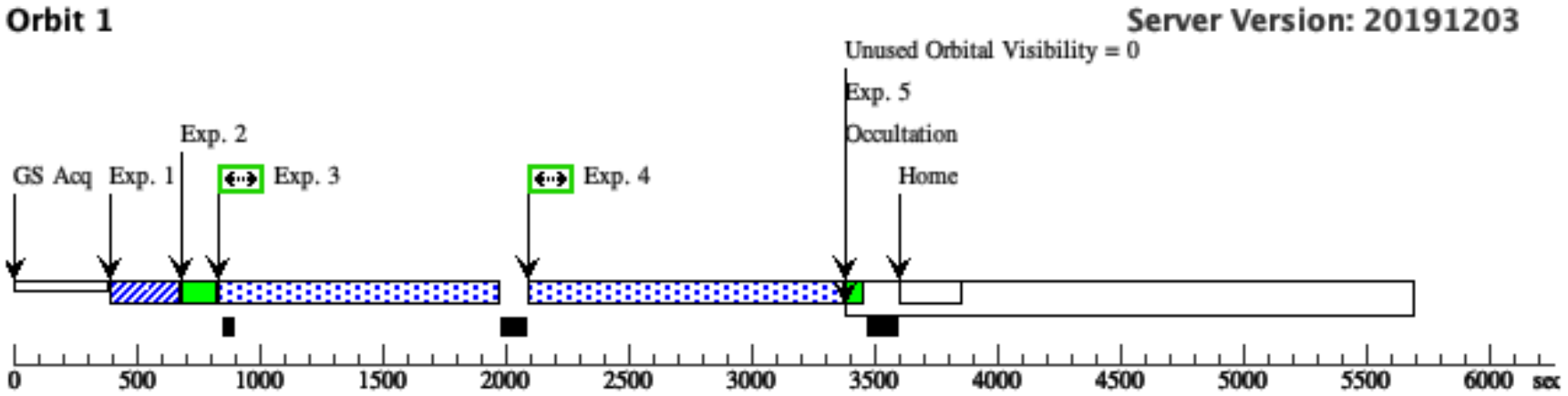
V=8.776, B0.5III, E(B-V)=0.600 from Wegner 2003
http://vizier.u-strasbg.fr/viz-bin/VizieR-3?-source=J/AN/324/219/table1

SIMBAD: B=9.13, V=8.1914, B1.5I
Category=STAR
Description=[B0-B2 V-IV]
Extended=NO

Exposures

#	Label (ETC Run)	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
1	ACQ (STIS.ta.1365708)	(7) HD-14476	STIS/CCD, ACQ, F28X50OIII	MIRROR				1 Secs (1 Secs) *[==>]*	*[1]*
Comments: V=8.19, Spec=B1V, E(B-V)=0.63									
2	E140M Wavecal	WAVE	STIS/FUV-MAMA, ACCUM, 0.2X0.2	E140M 1425 A				*[==>]*	*[1]*
3	E140M (STIS.sp.1365451)	(7) HD-14476	STIS/FUV-MAMA, ACCUM, 0.2X0.2	E140M 1425 A	WAVECAL=NO			1123 Secs (1123 Secs) *[==>]*	*[1]*
Comments: IUE SWP52232 *HD 14476, B1IV, F(1450)=1.5e-12, F(1700) = 1.4e-12* *SIMBAD: B=9.13, V=8.1914, B1.5I*									
4	E230M (STIS.sp.1366080)	(7) HD-14476	STIS/NUV-MAMA, ACCUM, 0.2X0.2	E230M 1978 A	WAVECAL=NO			1123 Secs (1123 Secs) *[==>]*	*[1]*
5	E230M Wave	WAVE	STIS/NUV-MAMA, ACCUM, 0.2X0.2	E230M 1978 A				*[==>]*	*[1]*

Orbit Structure



Visit

Proposal 15869, BD -21 1882 (STIS) (08), scheduling Thu Mar 26 14:01:02 GMT 2020

Diagnostic Status: No Diagnostics

Scientific Instruments: STIS/NUV-MAMA, STIS/CCD, STIS/FUV-MAMA

Special Requirements: (none)

Fixed Targets

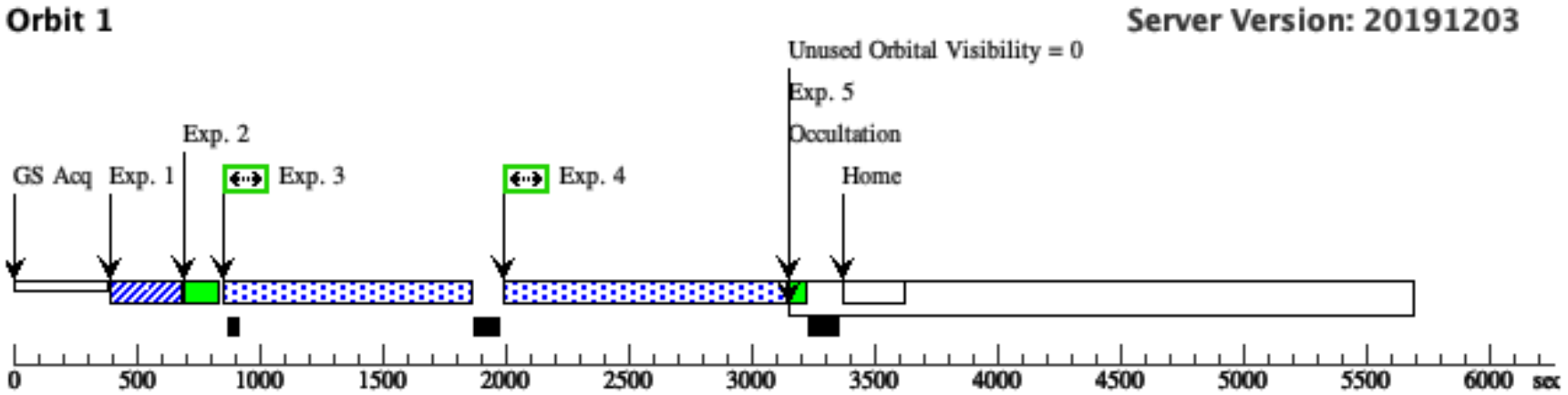
#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(8)	BD-21D1882	RA: 07 20 10.1646 (110.0423525d)	Proper Motion RA: -1.908 mas/yr	V=10.32	Reference Frame: ICRS
	Alt Name1: NGC2367-3	Dec: -21 53 27.16 (-21.89088d)	Proper Motion Dec: 2.717 mas/yr	SpT=B2IV	
		Equinox: J2000	Epoch of Position: 2000		

Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.
Updated to GAIA DR2 coordinates taken from SIMBAD
BOT shows target as safe with no concerns
V=10.32, B2IV, E(B-V)=0.33, vsini=17km/s from Garmany et al 2015, AJ, 150, 41
http://vizier.u-strasbg.fr/viz-bin/VizieR?-source=J/AJ/150/41
Category=STAR
Description=[B0-B2 V-IV]
Extended=NO

Exposures

#	Label (ETC Run)	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
1	ACQ (STIS.ta.1365730)	(8) BD-21D1882	STIS/CCD, ACQ, F28X50OIII	MIRROR				5 Secs (5 Secs)	
								[==>]	***[1]***
Comments: V=10.31, B0.5V E(B-V)=0.33									
2	E140M Wavecal	WAVE	STIS/FUV-MAMA, ACCUM, 0.2X0.2	E140M 1425 A				*[==>]*	***[1]***
3	E140M (STIS.sp.1369146)	(8) BD-21D1882	STIS/FUV-MAMA, ACCUM, 0.2X0.2	E140M 1425 A	WAVECAL=NO			999 Secs (999 Secs)	
								[==>]	***[1]***
Comments: V=10.32, B2IV, E(B-V)=0.33									
4	E230M (STIS.sp.1369147)	(8) BD-21D1882	STIS/NUV-MAMA, ACCUM, 0.2X0.2	E230M 1978 A	WAVECAL=NO			999 Secs (999 Secs)	
								[==>]	***[1]***
Comments: V=10.32, B2IV, E(B-V)=0.33									
5	E230M Wave	WAVE	STIS/NUV-MAMA, ACCUM, 0.2X0.2	E230M 1978 A				*[==>]*	***[1]***

Orbit Structure



Visit

Proposal 15869, ALS 15608 (09), scheduled Thu Mar 26 14:01:02 GMT 2020

Diagnostic Status: No Diagnostics

Scientific Instruments: COS/FUV, COS/NUV

Special Requirements: (none)

Fixed Targets

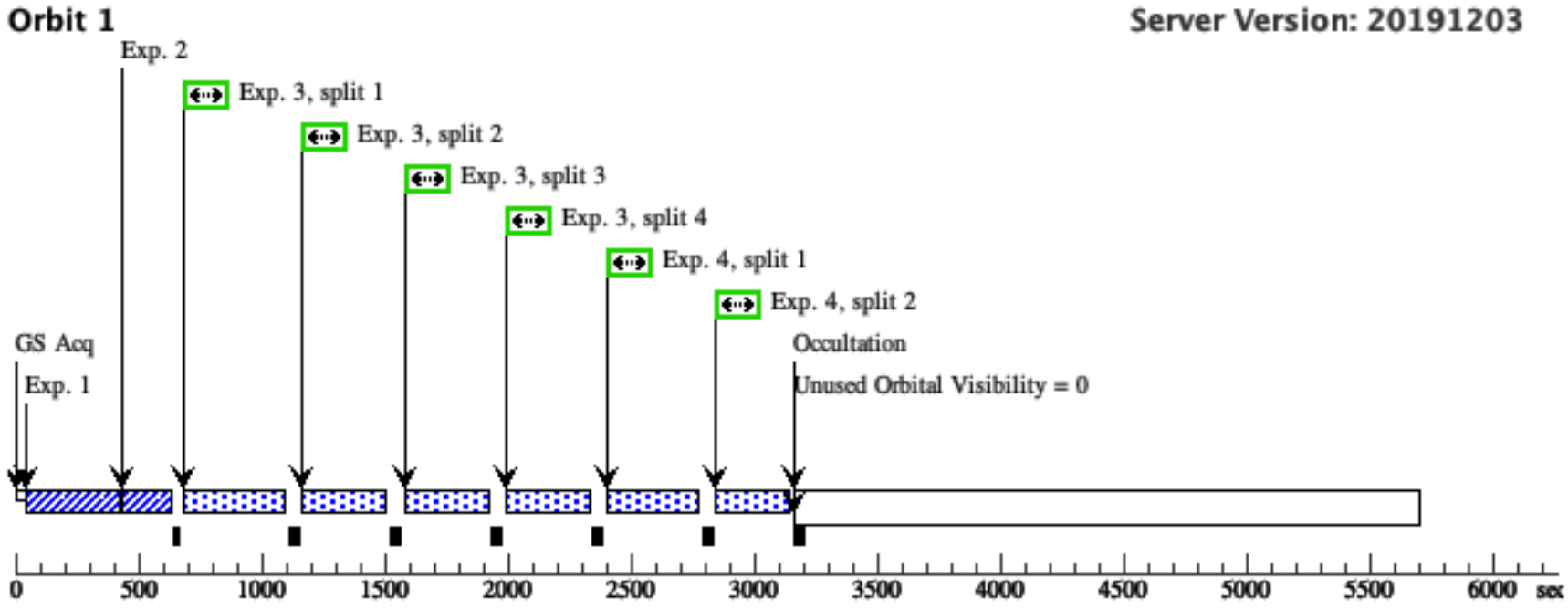
#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(9)	ALS15608	RA: 07 58 55.5297 (119.7313738d)	Proper Motion RA: -2.198 mas/yr	V=11.91	Reference Frame: ICRS
	Alt Name1: RUPRECHT44-27	Dec: -28 35 23.87 (-28.58996d)	Proper Motion Dec: 2.907 mas/yr	SpT=B0.5V,	
		Equinox: J2000	Epoch of Position: 2000	U=11.72	

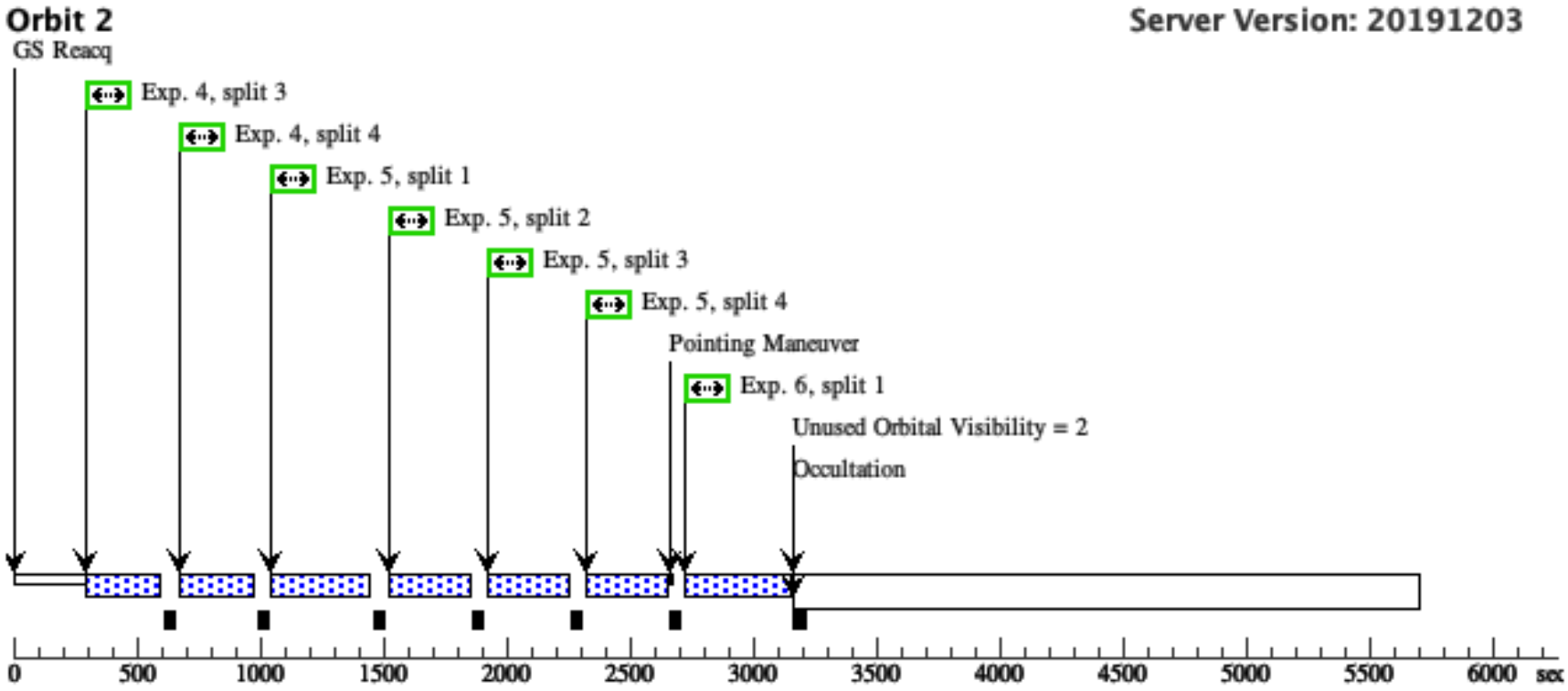
Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.
Coordianates updated to GAIA DR2 as taken from SIMBAD
Cl Ruprecht 44 27
BOT only flags target. See detailed ETC calculations.
V=11.91, B0.5V E(B-V)=0.63, vsini=4km/s, from Garmany et al 2015, AJ, 150, 41
http://vizier.u-strasbg.fr/viz-bin/VizieR?-source=J/AJ/150/41
Category=STAR
Description=[B0-B2 V-IV]
Extended=NO

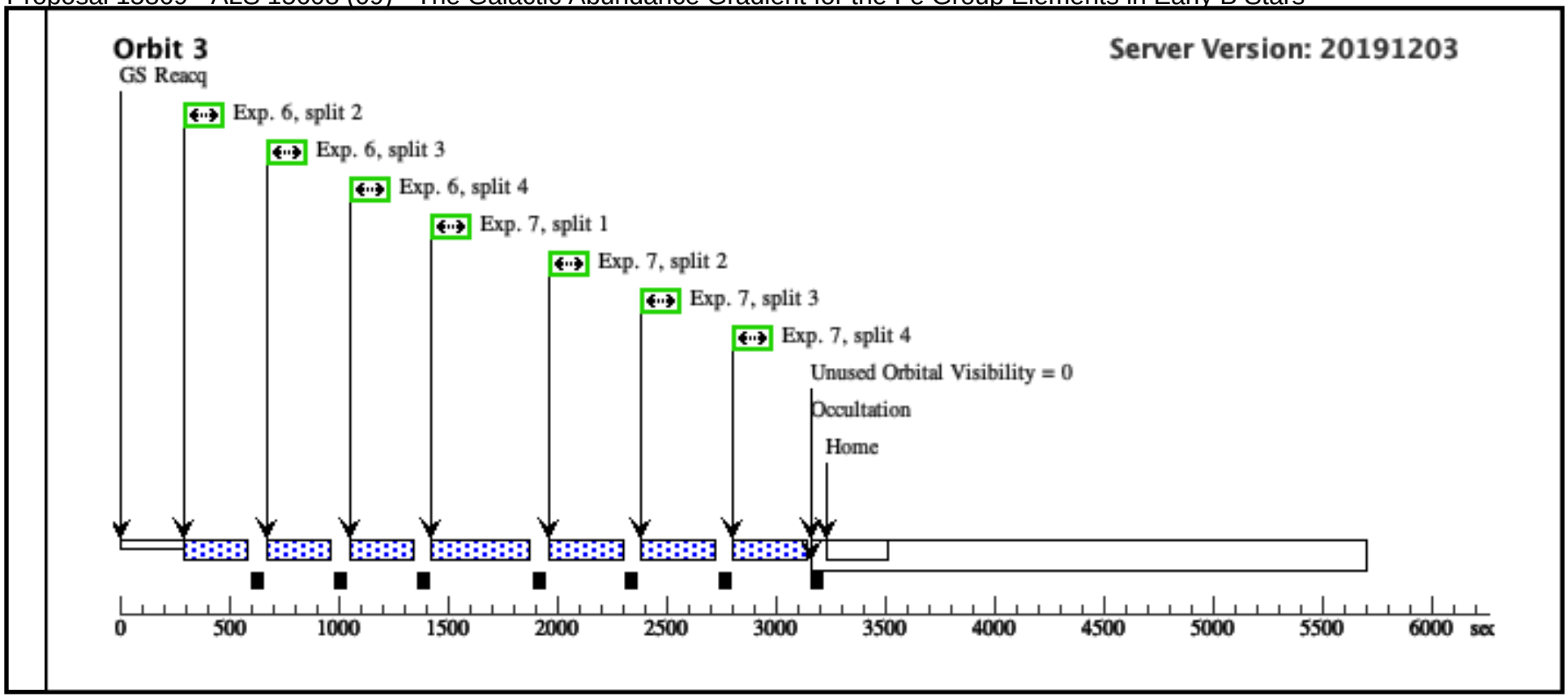
Exposures

#	Label (ETC Run)	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
1	ACQ/PEAKXD (COS.sa.1365736)	(9) ALS15608	COS/NUV, ACQ/PEAKXD, PSA	G185M 1921 A				10 Secs (10 Secs) *[==>]*	*[1]*
Comments: V=11.91, B0.5V E(B-V)=0.63, ETC gives 4 seconds for spectroscopic ACQ S/N=40									
2	ACQ/PEAKD (COS.sa.1365736)	(9) ALS15608	COS/NUV, ACQ/PEAKD, PSA	G185M 1921 A	CENTER=FLUX-WT-FLR; NUM-POS=5; STEP-SIZE=0.9			10 Secs (10 Secs) *[==>]*	*[1]*
Comments: V=11.91, B0.5V E(B-V)=0.63, ETC gives 4 seconds for spectroscopic ACQ S/N=40									
3	1817 (COS.sp.1365757)	(9) ALS15608	COS/NUV, TIME-TAG, PSA	G185M 1817 A	FP-POS=ALL; BUFFER-TIME=1027			324 Secs (1296 Secs) *[==>(Split 1)]* *[==>(Split 2)]* *[==>(Split 3)]* *[==>(Split 4)]*	*[1]*
Comments: V=11.91, B0.5V E(B-V)=0.63,									
4	1850 (COS.sp.1365760)	(9) ALS15608	COS/NUV, TIME-TAG, PSA	G185M 1850 A	FP-POS=ALL; BUFFER-TIME=1027			287 Secs (1148 Secs) *[==>(Split 1)]* *[==>(Split 2)]* *[==>(Split 3)]* *[==>(Split 4)]*	*[1]* *[2]*
Comments: V=11.91, B0.5V E(B-V)=0.63									
5	1786 (COS.sp.1365762)	(9) ALS15608	COS/NUV, TIME-TAG, PSA	G185M 1786 A	FP-POS=ALL; BUFFER-TIME=1027			314 Secs (1256 Secs) *[==>(Split 1)]* *[==>(Split 2)]* *[==>(Split 3)]* *[==>(Split 4)]*	*[2]*
Comments: V=11.91, B0.5V E(B-V)=0.63									
6	G130M 1222 (COS.sp.1365764)	(9) ALS15608	COS/FUV, TIME-TAG, PSA	G130M 1222 A	FP-POS=ALL; BUFFER-TIME=661			242 Secs (968 Secs) *[==>(Split 1)]* *[==>(Split 2)]* *[==>(Split 3)]* *[==>(Split 4)]*	*[2]* *[3]*
Comments: V=11.91, B0.5V E(B-V)=0.63									
7	G160M 1533 (COS.sp.1365766)	(9) ALS15608	COS/FUV, TIME-TAG, PSA	G160M 1533 A	FP-POS=ALL; BUFFER-TIME=661			289 Secs (1156 Secs) *[==>(Split 1)]* *[==>(Split 2)]* *[==>(Split 3)]* *[==>(Split 4)]*	*[3]*
Comments: V=11.91, B0.5V E(B-V)=0.63									

Orbit Structure




Orbit 2
Server Version: 20191203
GS Reacq
Exp. 4, split 3
Exp. 4, split 4
Exp. 5, split 1
Exp. 5, split 2
Exp. 5, split 3
Exp. 5, split 4
Pointing Maneuver
Exp. 6, split 1
Unused Orbital Visibility = 2
Occultation
0
500
1000
1500
2000
2500
3000
3500
4000
4500
5000
5500
6000
sec


Orbit 3
Server Version: 20191203
GS Reacq
Exp. 6, split 2
Exp. 6, split 3
Exp. 6, split 4
Exp. 7, split 1
Exp. 7, split 2
Exp. 7, split 3
Exp. 7, split 4
Unused Orbital Visibility = 0
Occultation
Home
0
500
1000
1500
2000
2500
3000
3500
4000
4500
5000
5500
6000
sec

Visit

Proposal 15869, BD -00 1491 (10), failed Thu Mar 26 14:01:03 GMT 2020

Diagnostic Status: No Diagnostics

Scientific Instruments: COS/FUV, COS/NUV

Special Requirements: (none)

Fixed Targets

#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(10)	BD-00D1491	RA: 06 55 17.3700 (103.8223750d)	Proper Motion RA: -0.336 mas/yr	V=11.17	Reference Frame: ICRS
	Alt Name1: ALS9209	Dec: -00 33 40.93 (-.56137d)	Proper Motion Dec: 0.250 mas/yr	FLAMIUE(1300)=5.0e-13,	
		Equinox: J2000	Epoch of Position: 2000	U=11.66,	
				SpT=B0.5V	

Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.
Updated to GAIA DR2 coordinates in SIMBAD
BOT only flags target. See detailed ETC calcuations using IUE spectra

V=11.17, E(B-V)=0.50, B0V, vsin(i)=6 km/s from Garmany et al 2015, AJ, 150, 41
http://vizier.u-strasbg.fr/viz-bin/VizieR?-source=J/AJ/150/41
But primary ETC input is IUE swp35501 + lwp07914
For LWP 07914 used 2X SMAP to patch saturated wavelengths in LGAP.
Category=STAR
Description=[B0-B2 V-IV]
Extended=NO

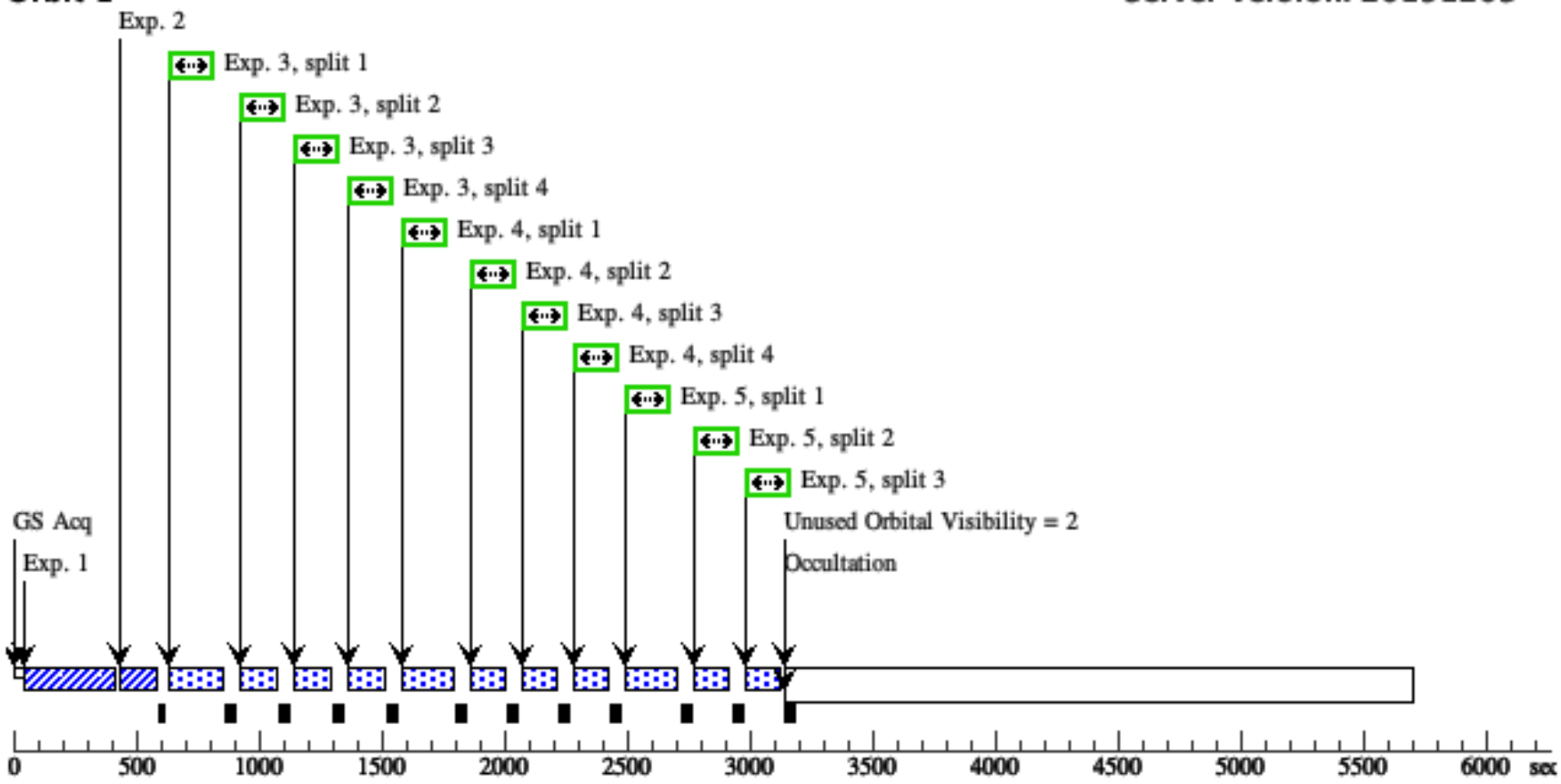
Exposures

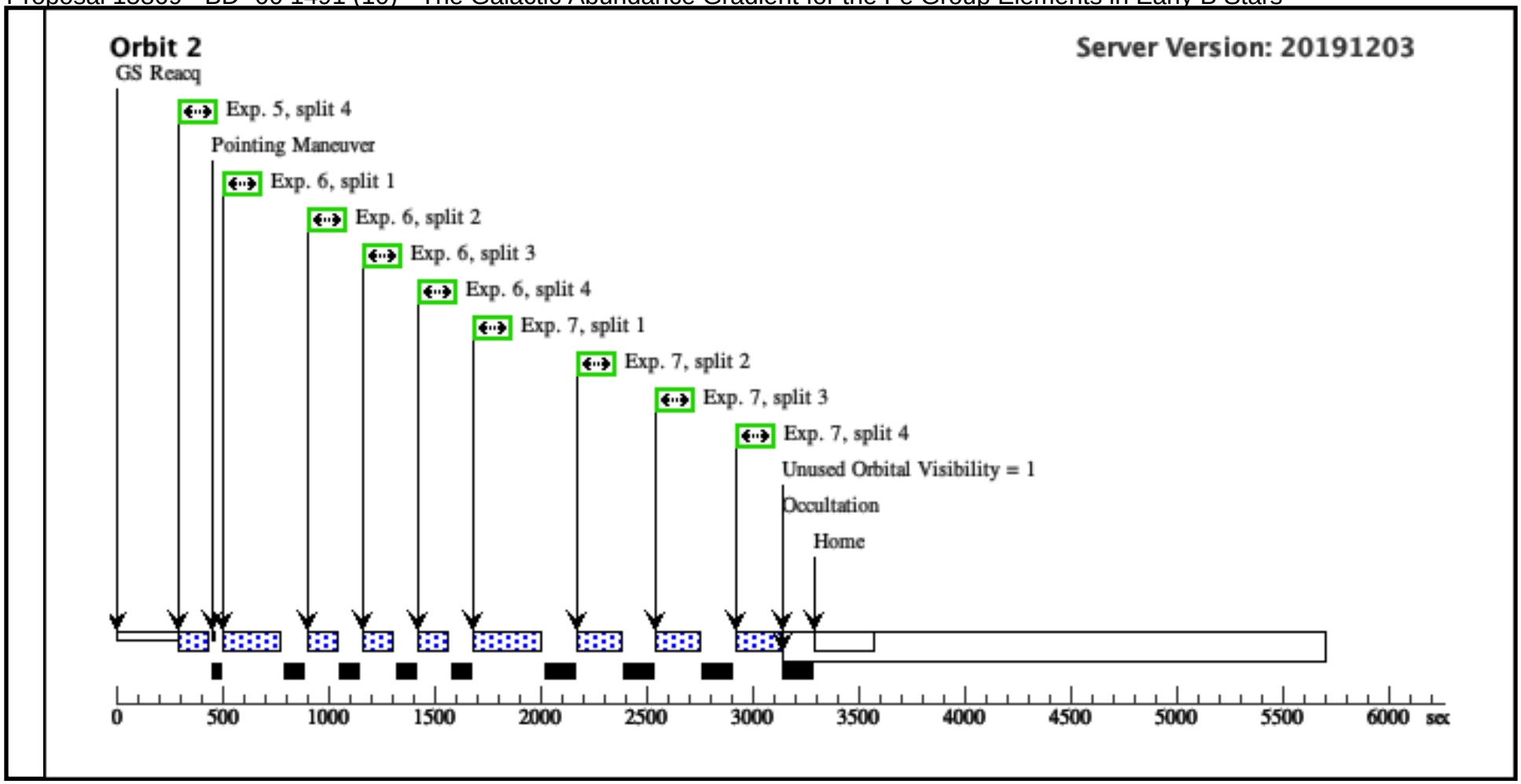
#	Label (ETC Run)	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
1	ACQ/PEAKXD (COS.sa.1365778)	(10) BD-00D1491	COS/NUV, ACQ/PEAKXD, PSA	G185M 1921 A	STRIPE=DEF			0.8 Secs (0.8 Secs) *[==>]*	***[1]***
	Comments: IUE swp35501 + lwp07914 *In LWP 07914 used 2X SMAP to patch saturated wavelengths in LGAP.*								
2	ACQ/PEAKD (COS.sa.1365778)	(10) BD-00D1491	COS/NUV, ACQ/PEAKD, PSA	G185M 1921 A	NUM-POS=5; STEP-SIZE=0.9; CENTER=FLUX-WT-FLR			0.8 Secs (0.8 Secs) *[==>]*	***[1]***
	Comments: IUE swp35501 + lwp07914 *In LWP 07914 used 2X SMAP to patch saturated wavelengths in LGAP.*								
3	G185M 1786 (COS.sp.1365783)	(10) BD-00D1491	COS/NUV, TIME-TAG, PSA	G185M 1786 A	FP-POS=ALL; BUFFER-TIME=450			133 Secs (532 Secs) *[==>(Split 1)]* *[==>(Split 2)]* *[==>(Split 3)]* *[==>(Split 4)]*	***[1]***
	Comments: IUE swp35501 + lwp07914 *In LWP 07914 used 2X SMAP to patch saturated wavelengths in LGAP.*								
4	G185M 1850 (COS.sp.1365344)	(10) BD-00D1491	COS/NUV, TIME-TAG, PSA	G185M 1850 A	FP-POS=ALL; BUFFER-TIME=440			123 Secs (492 Secs) *[==>(Split 1)]* *[==>(Split 2)]* *[==>(Split 3)]* *[==>(Split 4)]*	***[1]***
	Comments: IUE swp35501 + lwp07914 *In LWP 07914 used 2X SMAP to patch saturated wavelengths in LGAP.*								
5	G185M 1817 (COS.sp.1365784)	(10) BD-00D1491	COS/NUV, TIME-TAG, PSA	G185M 1817 A	FP-POS=ALL; BUFFER-TIME=442			123 Secs (492 Secs) *[==>(Split 1)]* *[==>(Split 2)]* *[==>(Split 3)]* *[==>(Split 4)]*	***[1]*** ***[2]***
	Comments: IUE swp35501 + lwp07914 *In LWP 07914 used 2X SMAP to patch saturated wavelengths in LGAP.*								
6	G130M 1222 (COS.sp.1365788)	(10) BD-00D1491	COS/FUV, TIME-TAG, PSA	G130M 1222 A	FP-POS=ALL; BUFFER-TIME=111			90 Secs (360 Secs) *[==>(Split 1)]* *[==>(Split 2)]* *[==>(Split 3)]* *[==>(Split 4)]*	***[2]***
	Comments: IUE swp35501 + lwp07914 *In LWP 07914 used 2X SMAP to patch saturated wavelengths in LGAP.*								

	7	G160M 1533 A	(10) BD-00D1491 (COS.sp.1365789)	COS/FUV, TIME-TAG, PSA	G160M	BUFFER-TIME=111; FP-POS=ALL	154 Secs (616 Secs) *[==>(Split 1)]* *[==>(Split 2)]* *[==>(Split 3)]* *[==>(Split 4)]*	***[2]***

Comments: IUE swp35501 + lwp07914
In LWP 07914 used 2X SMAP to patch saturated wavelengths in LGAP.
ETC buffer time is only 123 seconds. Almost too bright for time-tag!!!

Orbit Structure




Orbit 2
Server Version: 20191203
GS Reacq
Exp. 5, split 4
Pointing Maneuver
Exp. 6, split 1
Exp. 6, split 2
Exp. 6, split 3
Exp. 6, split 4
Exp. 7, split 1
Exp. 7, split 2
Exp. 7, split 3
Exp. 7, split 4
Unused Orbital Visibility = 1
Occultation
Home
0
500
1000
1500
2000
2500
3000
3500
4000
4500
5000
5500
6000
sec

Visit

Proposal 15869, ALS 86 (11), completed Thu Mar 26 14:01:03 GMT 2020

Diagnostic Status: No Diagnostics

Scientific Instruments: COS/FUV, COS/NUV

Special Requirements: (none)

Fixed Targets

#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(11)	ALS86 Alt Name1: MFJ-SH-2-289-13 Alt Name2: TYC-4812-3777-1	RA: 06 46 25.8756 (101.6078150d) Dec: -07 29 14.81 (-7.48745d) Equinox: J2000	Proper Motion RA: 0.023 mas/yr Proper Motion Dec: 0.840 mas/yr Epoch of Position: 2000	V=11.37 U=10.8, SpT=B0.5V	Reference Frame: ICRS

Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.
MFJ SH 2-289 13
BOT only flags target. See detailed ETC calcuations.

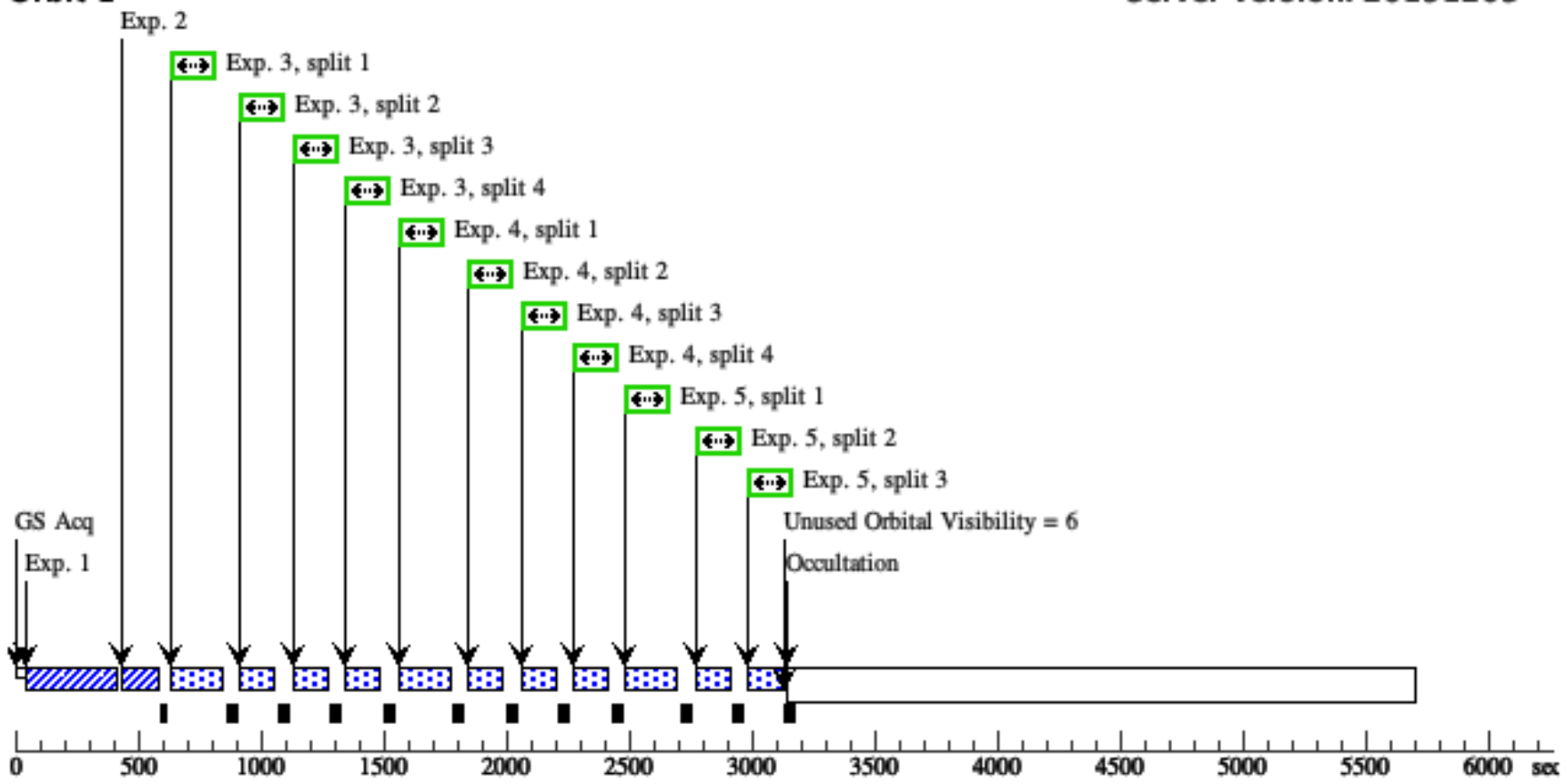
Adopted E(B-V)=0.50, SpT=B0.5V, v sin(i)=4km/s from Garmany et al 2015, AJ, 150, 41
http://vizier.u-strasbg.fr/viz-bin/VizieR?-source=J/AJ/150/41
Category=STAR
Description=[B0-B2 V-IV]
Extended=NO

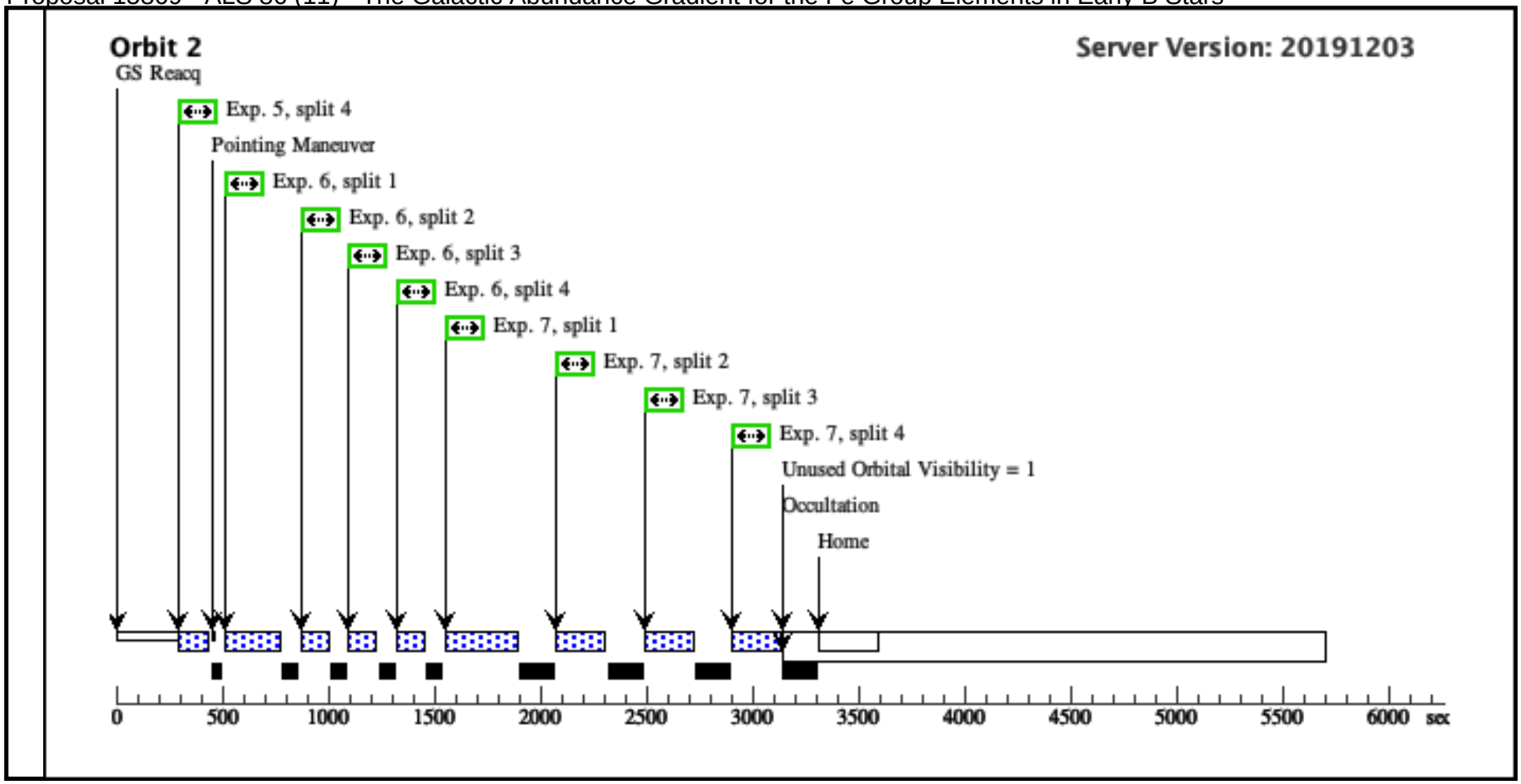
Exposures

#	Label (ETC Run)	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
1	ACQ/PEAKXD (COS.sa.1365886)	(11) ALS86	COS/NUV, ACQ/PEAKXD, PSA	G185M 1921 A				1 Secs (1 Secs) *[==>]*	 ***[1]***
	Comments: V=11.35 B0.5V E(B-V)=0.50 IUE SWP33406, LWP13138								
2	ACQ/PEAKD (COS.sa.1365886)	(11) ALS86	COS/NUV, ACQ/PEAKD, PSA	G185M 1921 A	CENTER=FLUX-WT-FLR; NUM-POS=5; STEP-SIZE=0.9			1 Secs (1 Secs) *[==>]*	 ***[1]***
	Comments: V=11.35 B0.5V E(B-V)=0.50 IUE SWP33406, LWP13138								
3	G185M 1786 (COS.sp.1365897)	(11) ALS86	COS/NUV, TIME-TAG, PSA	G185M 1786 A	FP-POS=ALL; BUFFER-TIME=455			127 Secs (508 Secs) *[==>(Split 1)]* *[==>(Split 2)]* *[==>(Split 3)]* *[==>(Split 4)]*	 ***[1]***
	Comments: V=11.35 B0.5V E(B-V)=0.50 IUE SWP33406, LWP13138								
4	G185M 1817 (COS.sp.1365895)	(11) ALS86	COS/NUV, TIME-TAG, PSA	G185M 1817 A	FP-POS=ALL; BUFFER-TIME=450			127 Secs (508 Secs) *[==>(Split 1)]* *[==>(Split 2)]* *[==>(Split 3)]* *[==>(Split 4)]*	 ***[1]***
	Comments: V=11.35 B0.5V E(B-V)=0.50 IUE SWP33406, LWP13138								
5	G185M 1850 (COS.sp.1365898)	(11) ALS86	COS/NUV, TIME-TAG, PSA	G185M 1850 A	FP-POS=ALL; BUFFER-TIME=450			125 Secs (500 Secs) *[==>(Split 1)]* *[==>(Split 2)]* *[==>(Split 3)]* *[==>(Split 4)]*	 ***[1]*** ***[2]***
	Comments: V=11.35 B0.5V E(B-V)=0.50 IUE SWP33406, LWP13138								
6	G130M 1222 (1335770)	(11) ALS86	COS/FUV, TIME-TAG, PSA	G130M 1222 A	FP-POS=ALL; BUFFER-TIME=116			75 Secs (300 Secs) *[==>(Split 1)]* *[==>(Split 2)]* *[==>(Split 3)]* *[==>(Split 4)]*	 ***[2]***
7	G160M 1533 (1335767)	(11) ALS86	COS/FUV, TIME-TAG, PSA	G160M 1533 A	FP-POS=ALL; BUFFER-TIME=111			174 Secs (696 Secs) *[==>(Split 1)]* *[==>(Split 2)]* *[==>(Split 3)]* *[==>(Split 4)]*	 ***[2]***

*Comments: Recommeded buffer time of 2/3 * 123 is too small*
Almost too bright for time-tag, but we have IUE spectra so flux should be reliable

Orbit Structure




Orbit 2
Server Version: 20191203
GS Reacq
Exp. 5, split 4
Pointing Maneuver
Exp. 6, split 1
Exp. 6, split 2
Exp. 6, split 3
Exp. 6, split 4
Exp. 7, split 1
Exp. 7, split 2
Exp. 7, split 3
Exp. 7, split 4
Unused Orbital Visibility = 1
Occultation
Home
0
500
1000
1500
2000
2500
3000
3500
4000
4500
5000
5500
6000
sec

Visit

Proposal 15869, ALS 45 (12), failed Thu Mar 26 14:01:03 GMT 2020

Diagnostic Status: No Diagnostics

Scientific Instruments: COS/FUV, COS/NUV

Special Requirements: (none)

Fixed Targets

#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(12)	ALS45	RA: 06 24 55.6210 (96.2317542d)	Proper Motion RA: -0.298 mas/yr	V=12.55	Reference Frame: ICRS
	Alt Name1: BO1-SLS45	Dec: +19 45 54.64 (19.76518d)	Proper Motion Dec: -0.400 mas/yr	U=12.29,	
		Equinox: J2000	Epoch of Position: 2000	SpT=B1.5V	

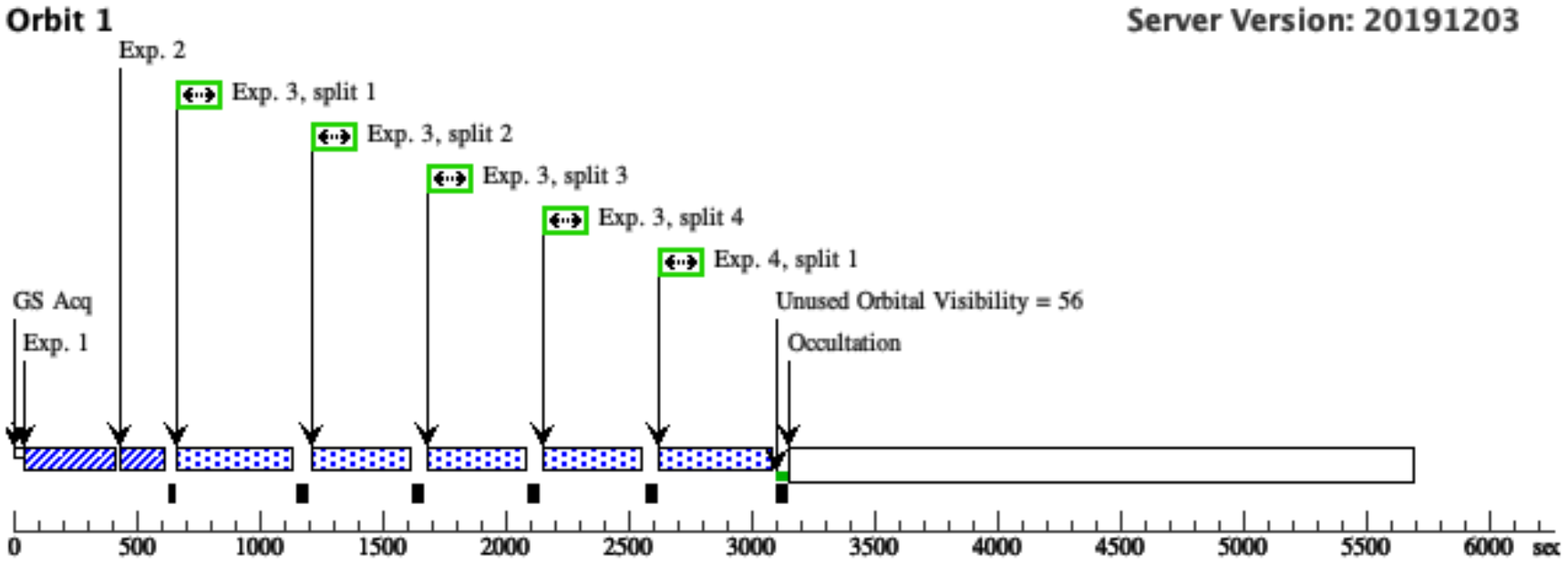
Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.
Updated to GAIA DR2 coordinates from SIMBAD
Bo1-SLS45
BOT clears field, but see detailed ETC calcuations.

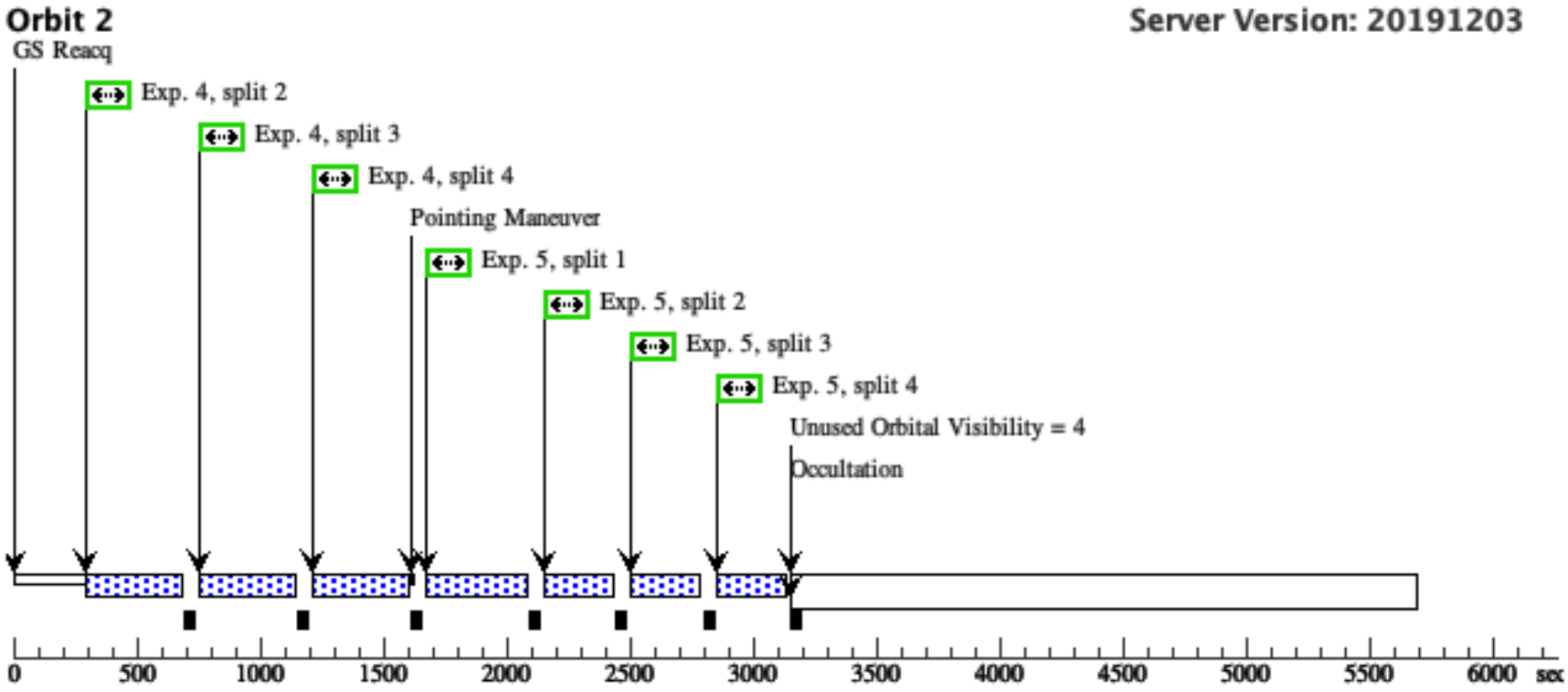
Adopted V=12.59 B1.5V E(B-V)=0.49, v sin(i)=11km/s, from Garmany et al 2015, AJ, 150, 41
http://vizier.u-strasbg.fr/viz-bin/VizieR?-source=J/AJ/150/41
Category=STAR
Description=[B0-B2 V-IV]
Extended=NO

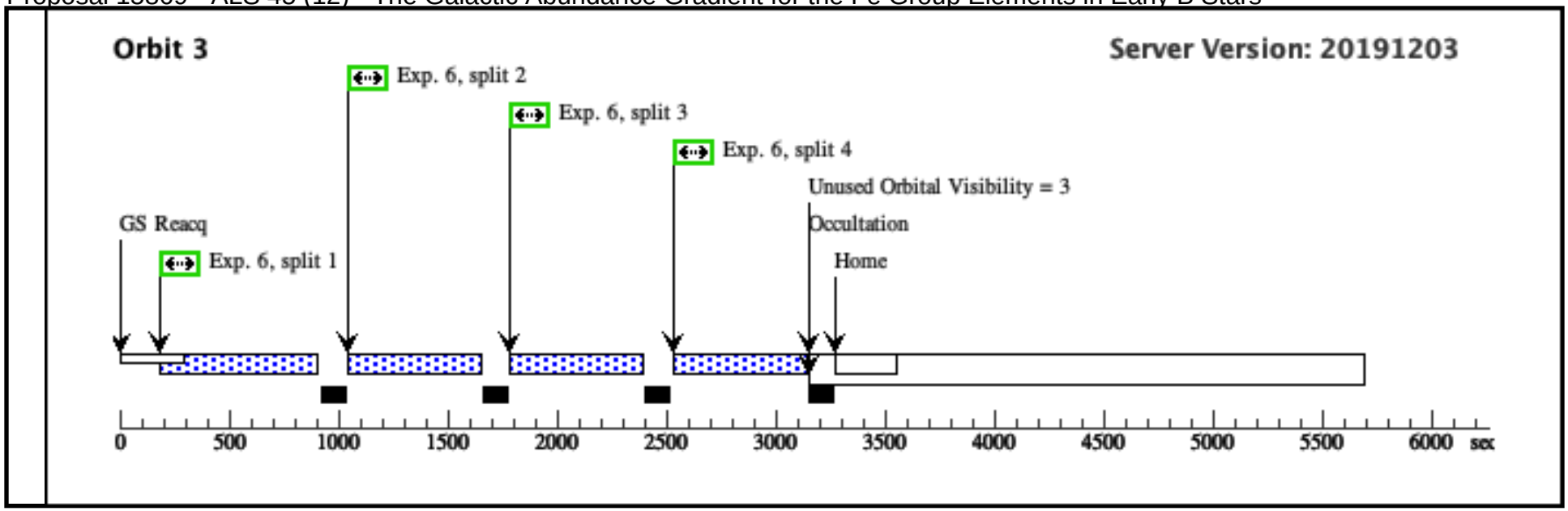
Exposures

#	Label (ETC Run)	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
1	ACQ/PEAKXD (COS.sa.1365900)	(12) ALS45	COS/NUV, ACQ/PEAKXD, PSA	G185M 1921 A				7 Secs (7 Secs) *[==>]*	*[1]*
	Comments: V=12.59 B1.5V E(B-V)=0.49								
2	ACQ/PEAKD (COS.sa.1365900)	(12) ALS45	COS/NUV, ACQ/PEAKD, PSA	G185M 1921 A	CENTER=FLUX-WT-FLR; NUM-POS=5; STEP-SIZE=0.9			7 Secs (7 Secs) *[==>]*	*[1]*
	Comments: V=12.59 B1.5V E(B-V)=0.49								
3	G185M 1817 (COS.sp.1365902)	(12) ALS45	COS/NUV, TIME-TAG, PSA	G185M 1817 A	BUFFER-TIME=1155; FP-POS=ALL			385 Secs (1540 Secs) *[==>(Split 1)]* *[==>(Split 2)]* *[==>(Split 3)]* *[==>(Split 4)]*	*[1]*
	Comments: V=12.59 B1.5V E(B-V)=0.49 from Garmany et al 2015, AJ, 150, 141 http://vizier.u-strasbg.fr/viz-bin/VizieR?-source=J/AJ/150/41								
4	G185M 1786 (COS.sp.1365903)	(12) ALS45	COS/NUV, TIME-TAG, PSA	G185M 1786 A	BUFFER-TIME=1155; FP-POS=ALL			370 Secs (1480 Secs) *[==>(Split 1)]* *[==>(Split 2)]* *[==>(Split 3)]* *[==>(Split 4)]*	*[1]* *[2]*
	Comments: V=12.59 B1.5V E(B-V)=0.49								
5	G130M 1222 (COS.sp.1365904)	(12) ALS45	COS/FUV, TIME-TAG, PSA	G130M 1222 A	FP-POS=ALL; BUFFER-TIME=726			228 Secs (912 Secs) *[==>(Split 1)]* *[==>(Split 2)]* *[==>(Split 3)]* *[==>(Split 4)]*	*[2]*
	Comments: V=12.59 B1.5V E(B-V)=0.49								
6	G160M 1533 (COS.sp.1365905)	(12) ALS45	COS/FUV, TIME-TAG, PSA	G160M 1533 A	FP-POS=ALL; BUFFER-TIME=529			553 Secs (2212 Secs) *[==>(Split 1)]* *[==>(Split 2)]* *[==>(Split 3)]* *[==>(Split 4)]*	*[3]*
	Comments: V=12.59 B1.5V E(B-V)=0.49								

Orbit Structure




Orbit 2
Server Version: 20191203
GS Reacq
Exp. 4, split 2
Exp. 4, split 3
Exp. 4, split 4
Pointing Maneuver
Exp. 5, split 1
Exp. 5, split 2
Exp. 5, split 3
Exp. 5, split 4
Unused Orbital Visibility = 4
Occultation
0
500
1000
1500
2000
2500
3000
3500
4000
4500
5000
5500
6000
sec


Orbit 3
Server Version: 20191203
Exp. 6, split 2
Exp. 6, split 3
Exp. 6, split 4
Unused Orbital Visibility = 3
GS Reacq
Occultation
Exp. 6, split 1
Home
0
500
1000
1500
2000
2500
3000
3500
4000
4500
5000
5500
6000
sec

Visit

Proposal 15869, BD -00 1491 (50), failed Thu Mar 26 14:01:03 GMT 2020

Diagnostic Status: No Diagnostics

Scientific Instruments: COS/FUV, COS/NUV

Special Requirements: (none)

Comments: Duplicate of visit 10

Fixed Targets

#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(10)	BD-00D1491	RA: 06 55 17.3700 (103.8223750d)	Proper Motion RA: -0.336 mas/yr	V=11.17	Reference Frame: ICRS
	Alt Name1: ALS9209	Dec: -00 33 40.93 (-.56137d)	Proper Motion Dec: 0.250 mas/yr	FLAMIUE(1300)=5.0e-13,	
		Equinox: J2000	Epoch of Position: 2000	U=11.66,	
				SpT=B0.5V	

Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.
Updated to GAIA DR2 coordinates in SIMBAD
BOT only flags target. See detailed ETC calcuations using IUE spectra

V=11.17, E(B-V)=0.50, B0V, vsin(i)=6 km/s from Garmany et al 2015, AJ, 150, 41
http://vizier.u-strasbg.fr/viz-bin/VizieR?-source=J/AJ/150/41
But primary ETC input is IUE swp35501 + lwp07914
For LWP 07914 used 2X SMAP to patch saturated wavelengths in LGAP.
Category=STAR
Description=[B0-B2 V-IV]
Extended=NO

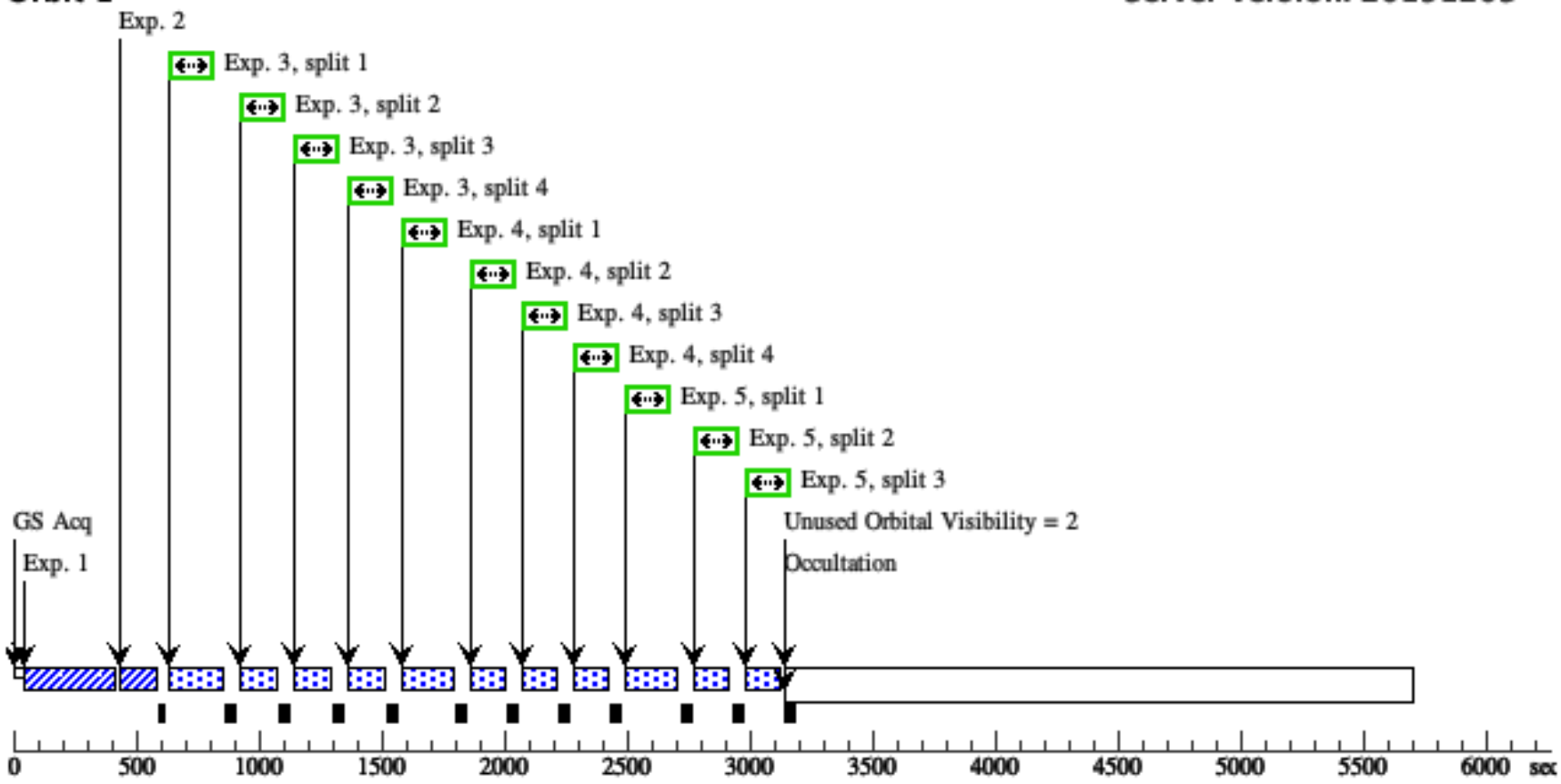
Exposures

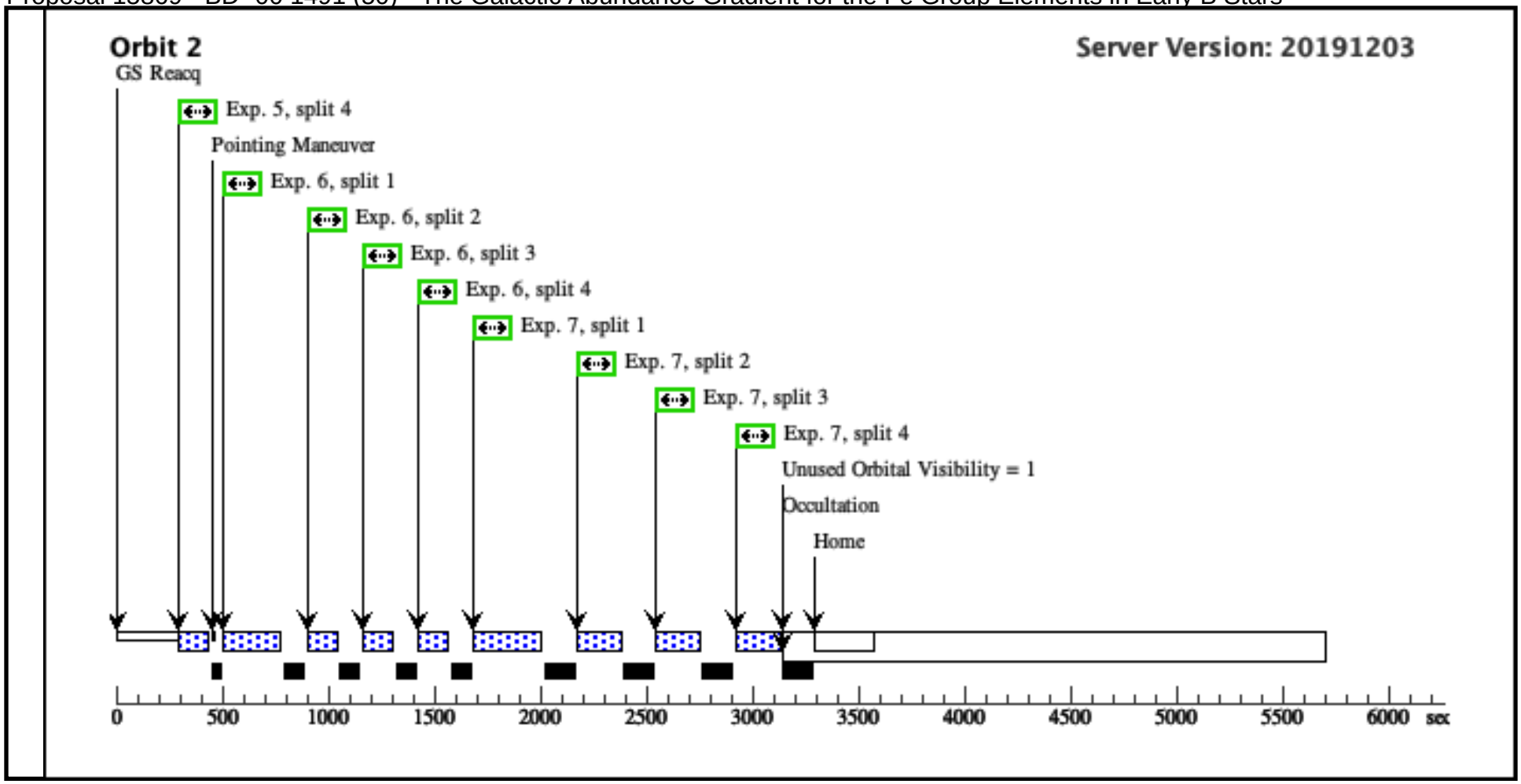
#	Label (ETC Run)	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
1	ACQ/PEAKXD (COS.sa.1365778)	(10) BD-00D1491	COS/NUV, ACQ/PEAKXD, PSA	G185M 1921 A	STRIPE=DEF			0.8 Secs (0.8 Secs) *[==>]*	***[1]***
	Comments: IUE swp35501 + lwp07914 *In LWP 07914 used 2X SMAP to patch saturated wavelengths in LGAP.*								
2	ACQ/PEAKD (COS.sa.1365778)	(10) BD-00D1491	COS/NUV, ACQ/PEAKD, PSA	G185M 1921 A	NUM-POS=5; STEP-SIZE=0.9; CENTER=FLUX-WT-FLR			0.8 Secs (0.8 Secs) *[==>]*	***[1]***
	Comments: IUE swp35501 + lwp07914 *In LWP 07914 used 2X SMAP to patch saturated wavelengths in LGAP.*								
3	G185M 1786 (COS.sp.1365783)	(10) BD-00D1491	COS/NUV, TIME-TAG, PSA	G185M 1786 A	FP-POS=ALL; BUFFER-TIME=450			133 Secs (532 Secs) *[==>(Split 1)]* *[==>(Split 2)]* *[==>(Split 3)]* *[==>(Split 4)]*	***[1]***
	Comments: IUE swp35501 + lwp07914 *In LWP 07914 used 2X SMAP to patch saturated wavelengths in LGAP.*								
4	G185M 1850 (COS.sp.1365344)	(10) BD-00D1491	COS/NUV, TIME-TAG, PSA	G185M 1850 A	FP-POS=ALL; BUFFER-TIME=440			123 Secs (492 Secs) *[==>(Split 1)]* *[==>(Split 2)]* *[==>(Split 3)]* *[==>(Split 4)]*	***[1]***
	Comments: IUE swp35501 + lwp07914 *In LWP 07914 used 2X SMAP to patch saturated wavelengths in LGAP.*								
5	G185M 1817 (COS.sp.1365784)	(10) BD-00D1491	COS/NUV, TIME-TAG, PSA	G185M 1817 A	FP-POS=ALL; BUFFER-TIME=442			123 Secs (492 Secs) *[==>(Split 1)]* *[==>(Split 2)]* *[==>(Split 3)]* *[==>(Split 4)]*	***[1]*** ***[2]***
	Comments: IUE swp35501 + lwp07914 *In LWP 07914 used 2X SMAP to patch saturated wavelengths in LGAP.*								
6	G130M 1222 (COS.sp.1365788)	(10) BD-00D1491	COS/FUV, TIME-TAG, PSA	G130M 1222 A	FP-POS=ALL; BUFFER-TIME=111			90 Secs (360 Secs) *[==>(Split 1)]* *[==>(Split 2)]* *[==>(Split 3)]* *[==>(Split 4)]*	***[2]***
	Comments: IUE swp35501 + lwp07914 *In LWP 07914 used 2X SMAP to patch saturated wavelengths in LGAP.*								

	7	G160M 1533 A	(10) BD-00D1491 (COS.sp.1365789)	COS/FUV, TIME-TAG, PSA	G160M	BUFFER-TIME=111; FP-POS=ALL	154 Secs (616 Secs) *[==>(Split 1)]* *[==>(Split 2)]* *[==>(Split 3)]* *[==>(Split 4)]*	***[2]***

Comments: IUE swp35501 + lwp07914
In LWP 07914 used 2X SMAP to patch saturated wavelengths in LGAP.
ETC buffer time is only 123 seconds. Almost too bright for time-tag!!!

Orbit Structure




Orbit 2
Server Version: 20191203
GS Reacq
Exp. 5, split 4
Pointing Maneuver
Exp. 6, split 1
Exp. 6, split 2
Exp. 6, split 3
Exp. 6, split 4
Exp. 7, split 1
Exp. 7, split 2
Exp. 7, split 3
Exp. 7, split 4
Unused Orbital Visibility = 1
Occultation
Home
0
500
1000
1500
2000
2500
3000
3500
4000
4500
5000
5500
6000
sec

Visit

Proposal 15869, BD -00 1491 (60) Thu Mar 26 14:01:03 GMT 2020

Diagnostic Status: No Diagnostics

Scientific Instruments: COS/FUV, COS/NUV

Special Requirements: SCHED 100%

Comments: Duplicate of visit 50 (which was a duplicate of visit 10), with changes to account for partial success of visit 50
Removed successful c1817 observation
Changed c1222 observation to only repeat failed FP-POS=4 exposure
Changed to SCHED=100
Expanded NUV exposures to fill available SCHED100 visibility in first orbit, but made only modest increases in FUV exposures to keep within this proposal's phase 2 S/N requirements and limit charge extraction on the FUV detectors, even though this leaves a good bit of unused time in the 2nd orbit.

Fixed Targets

#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(10)	BD-00D1491	RA: 06 55 17.3700 (103.8223750d)	Proper Motion RA: -0.336 mas/yr	V=11.17	Reference Frame: ICRS
	Alt Name1: ALS9209	Dec: -00 33 40.93 (-.56137d)	Proper Motion Dec: 0.250 mas/yr	FLAMIUE(1300)=5.0e-13,	
		Equinox: J2000	Epoch of Position: 2000	U=11.66,	
				SpT=B0.5V	

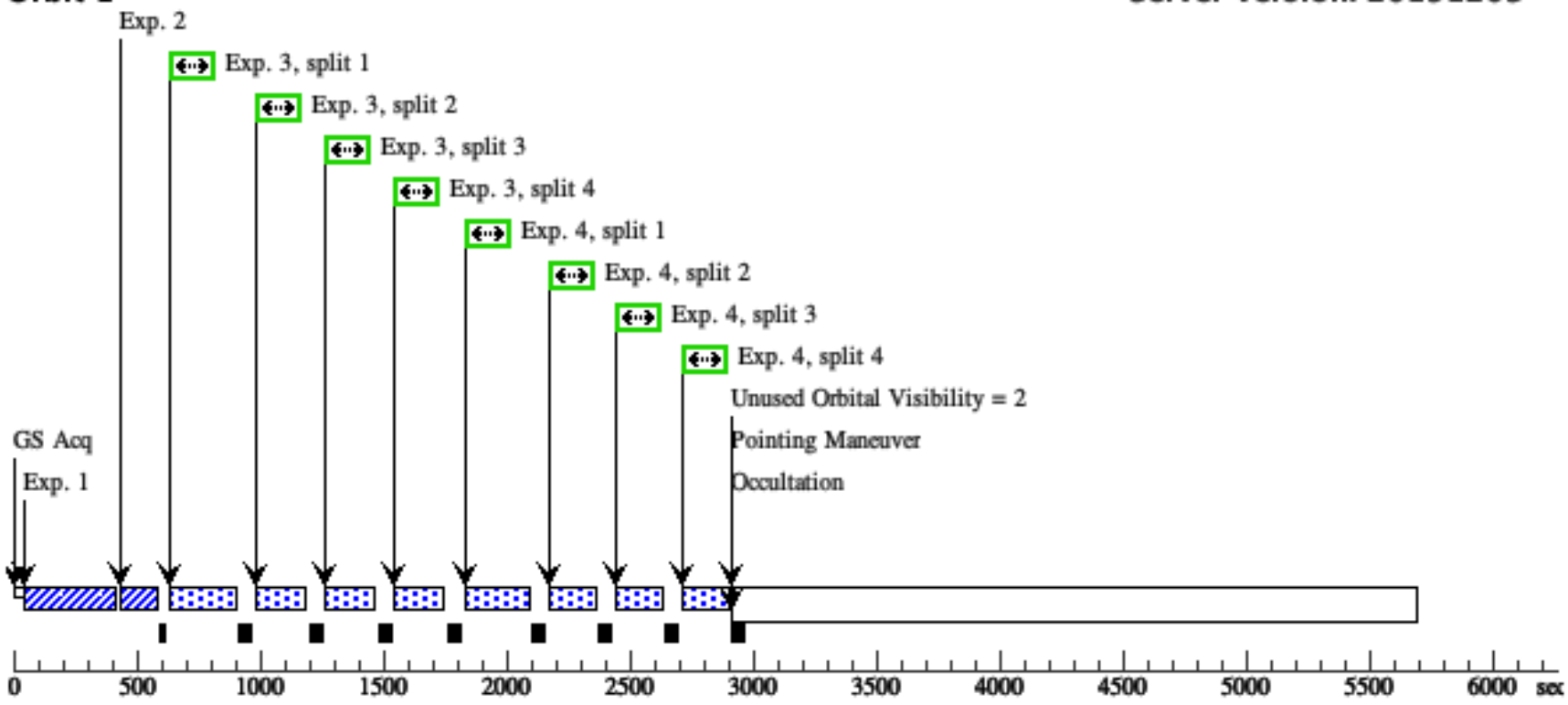
Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.
Updated to GAIA DR2 coordinates in SIMBAD
BOT only flags target. See detailed ETC calcuations using IUE spectra

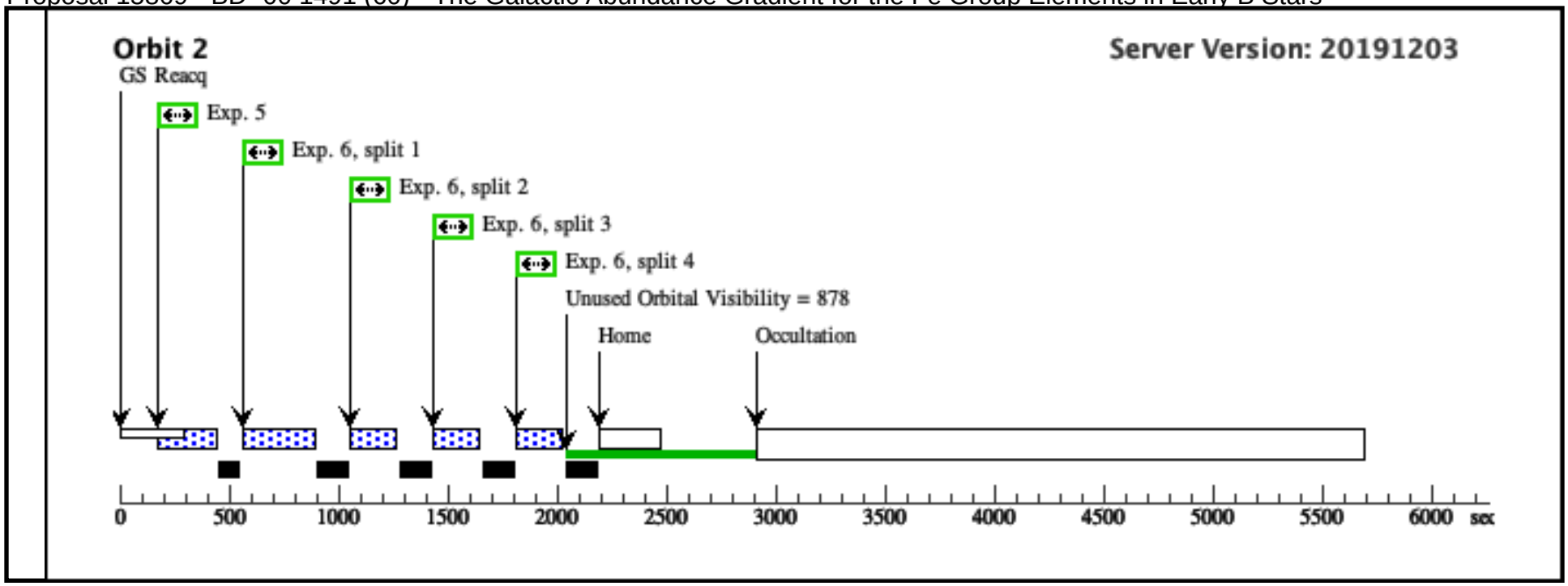
V=11.17, E(B-V)=0.50, B0V, vsin(i)=6 km/s from Garmany et al 2015, AJ, 150, 41
http://vizier.u-strasbg.fr/viz-bin/VizieR?-source=J/AJ/150/41
But primary ETC input is IUE swp35501 + lwp07914
For LWP 07914 used 2X SMAP to patch saturated wavelengths in LGAP.
Category=STAR
Description=[B0-B2 V-IV]
Extended=NO

Exposures

#	Label (ETC Run)	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
1	ACQ/PEAKXD (COS.sa.1365778)	(10) BD-00D1491	COS/NUV, ACQ/PEAKXD, PSA	G185M 1921 A	STRIPE=DEF			0.8 Secs (0.8 Secs) *[==>]*	*[1]*
	Comments: IUE swp35501 + lwp07914 *In LWP 07914 used 2X SMAP to patch saturated wavelengths in LGAP.*								
2	ACQ/PEAKD (COS.sa.1365778)	(10) BD-00D1491	COS/NUV, ACQ/PEAKD, PSA	G185M 1921 A	NUM-POS=5; STEP-SIZE=0.9; CENTER=FLUX-WT-FLR			0.8 Secs (0.8 Secs) *[==>]*	*[1]*
	Comments: IUE swp35501 + lwp07914 *In LWP 07914 used 2X SMAP to patch saturated wavelengths in LGAP.*								
3	G185M 1786 (COS.sp.1365783)	(10) BD-00D1491	COS/NUV, TIME-TAG, PSA	G185M 1786 A	FP-POS=ALL; BUFFER-TIME=450			185 Secs (740 Secs) *[==>(Split 1)]* *[==>(Split 2)]* *[==>(Split 3)]* *[==>(Split 4)]*	*[1]*
	Comments: IUE swp35501 + lwp07914 *In LWP 07914 used 2X SMAP to patch saturated wavelengths in LGAP.*								
4	G185M 1850 (COS.sp.1365344)	(10) BD-00D1491	COS/NUV, TIME-TAG, PSA	G185M 1850 A	FP-POS=ALL; BUFFER-TIME=440			173 Secs (692 Secs) *[==>(Split 1)]* *[==>(Split 2)]* *[==>(Split 3)]* *[==>(Split 4)]*	*[1]*
	Comments: IUE swp35501 + lwp07914 *In LWP 07914 used 2X SMAP to patch saturated wavelengths in LGAP.*								
5	G130M 1222 (COS.sp.1365788)	(10) BD-00D1491	COS/FUV, TIME-TAG, PSA	G130M 1222 A	FP-POS=4; BUFFER-TIME=111			90 Secs (90 Secs) *[==>]*	*[2]*
	Comments: IUE swp35501 + lwp07914 *In LWP 07914 used 2X SMAP to patch saturated wavelengths in LGAP.*								
6	G160M 1533 (COS.sp.1365789)	(10) BD-00D1491	COS/FUV, TIME-TAG, PSA	G160M 1533 A	BUFFER-TIME=111; FP-POS=ALL			160 Secs (640 Secs) *[==>(Split 1)]* *[==>(Split 2)]* *[==>(Split 3)]* *[==>(Split 4)]*	*[2]*
	Comments: IUE swp35501 + lwp07914 *In LWP 07914 used 2X SMAP to patch saturated wavelengths in LGAP.* *ETC buffer time is only 123 seconds. Almost too bright for time-tag!!!*								

Orbit Structure




Orbit 2
Server Version: 20191203
GS Reacq
Exp. 5
Exp. 6, split 1
Exp. 6, split 2
Exp. 6, split 3
Exp. 6, split 4
Unused Orbital Visibility = 878
Home
Occultation
0
500
1000
1500
2000
2500
3000
3500
4000
4500
5000
5500
6000
sec

Visit

Proposal 15869, ALS 45 (52), scheduled Thu Mar 26 14:01:03 GMT 2020

Diagnostic Status: No Diagnostics

Scientific Instruments: COS/FUV, COS/NUV

Special Requirements: (none)

Comments: Duplicate of visit 12

Fixed Targets

#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(12)	ALS45	RA: 06 24 55.6210 (96.2317542d)	Proper Motion RA: -0.298 mas/yr	V=12.55	Reference Frame: ICRS
	Alt Name1: BO1-SLS45	Dec: +19 45 54.64 (19.76518d)	Proper Motion Dec: -0.400 mas/yr	U=12.29,	
		Equinox: J2000	Epoch of Position: 2000	SpT=B1.5V	

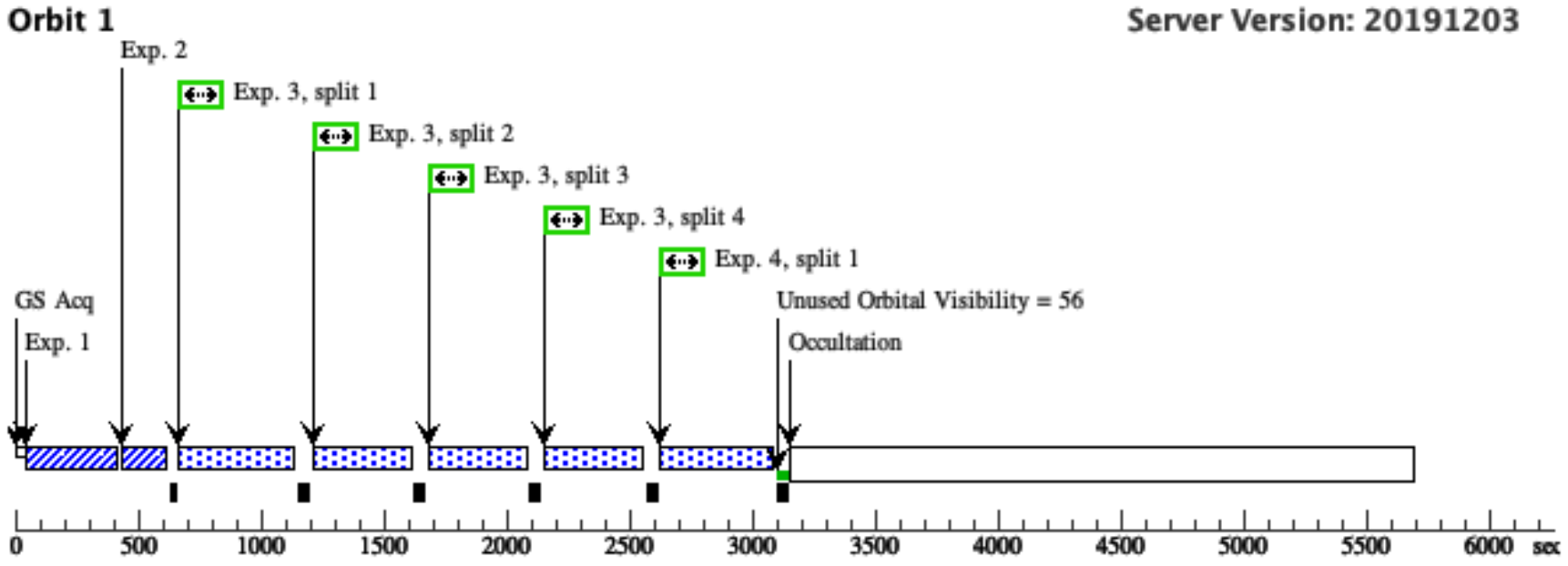
Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.
Updated to GAIA DR2 coordinates from SIMBAD
Bo1-SLS45
BOT clears field, but see detailed ETC calcuations.

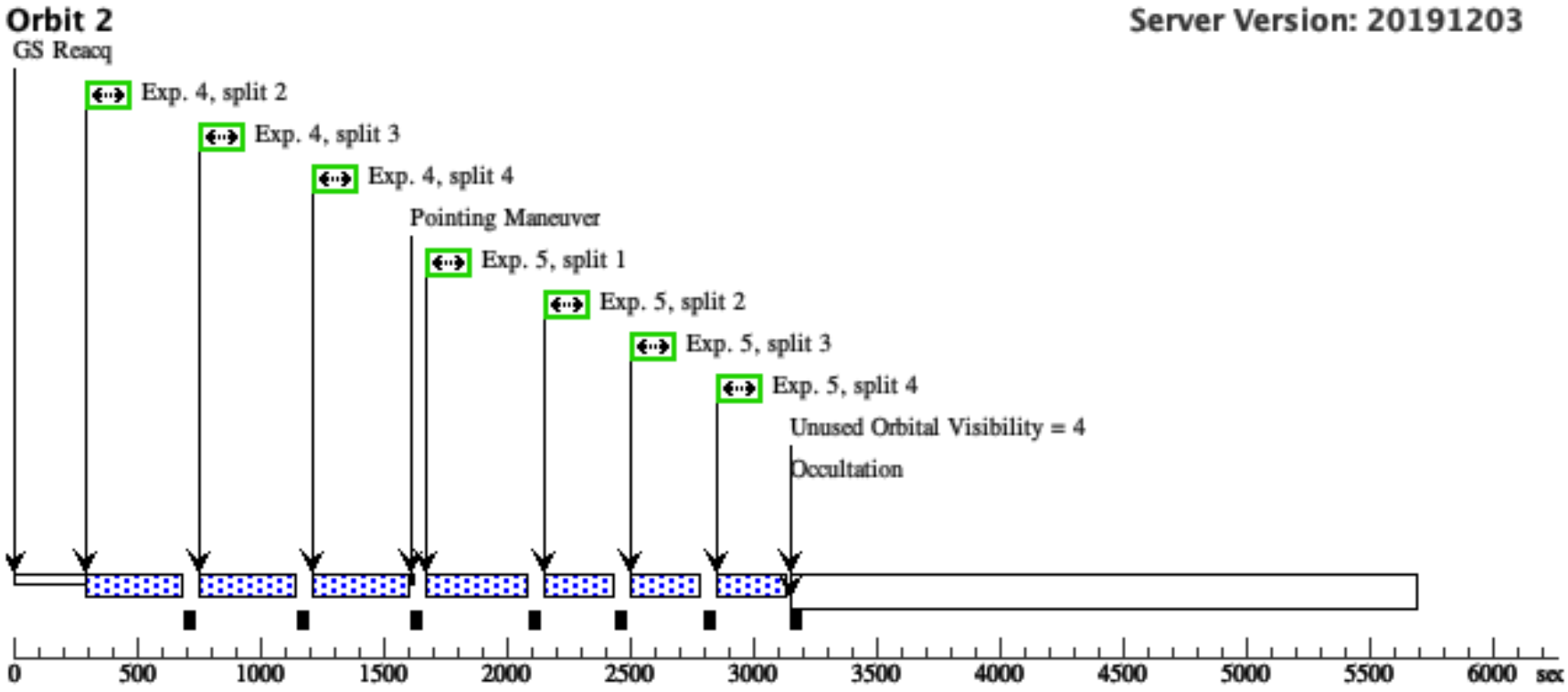
Adopted V=12.59 B1.5V E(B-V)=0.49, v sin(i)=11km/s, from Garmany et al 2015, AJ, 150, 41
http://vizier.u-strasbg.fr/viz-bin/VizieR?-source=J/AJ/150/41
Category=STAR
Description=[B0-B2 V-IV]
Extended=NO

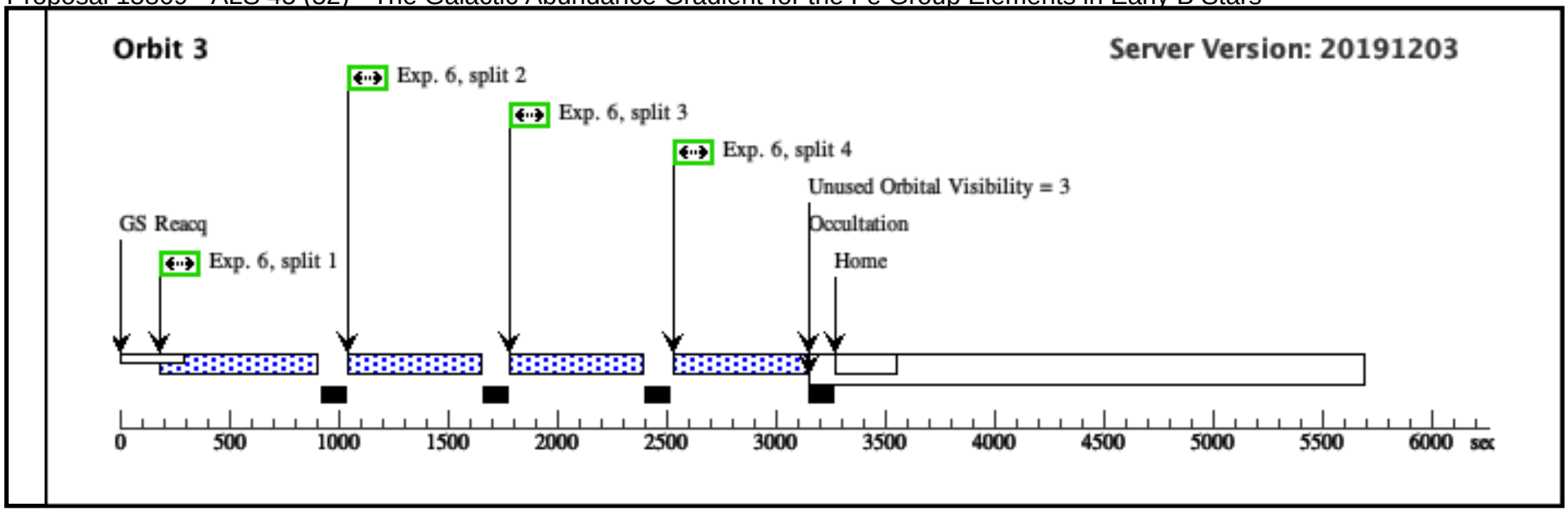
Exposures

#	Label (ETC Run)	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
1	ACQ/PEAKXD (COS.sa.1365900)	(12) ALS45	COS/NUV, ACQ/PEAKXD, PSA	G185M 1921 A				7 Secs (7 Secs) *[==>]*	*[1]*
	Comments: V=12.59 B1.5V E(B-V)=0.49								
2	ACQ/PEAKD (COS.sa.1365900)	(12) ALS45	COS/NUV, ACQ/PEAKD, PSA	G185M 1921 A	CENTER=FLUX-WT-FLR; NUM-POS=5; STEP-SIZE=0.9			7 Secs (7 Secs) *[==>]*	*[1]*
	Comments: V=12.59 B1.5V E(B-V)=0.49								
3	G185M 1817 (COS.sp.1365902)	(12) ALS45	COS/NUV, TIME-TAG, PSA	G185M 1817 A	BUFFER-TIME=1155; FP-POS=ALL			385 Secs (1540 Secs) *[==>(Split 1)]* *[==>(Split 2)]* *[==>(Split 3)]* *[==>(Split 4)]*	*[1]*
	Comments: V=12.59 B1.5V E(B-V)=0.49 from Garmany et al 2015, AJ, 150, 141 http://vizier.u-strasbg.fr/viz-bin/VizieR?-source=J/AJ/150/41								
4	G185M 1786 (COS.sp.1365903)	(12) ALS45	COS/NUV, TIME-TAG, PSA	G185M 1786 A	BUFFER-TIME=1155; FP-POS=ALL			370 Secs (1480 Secs) *[==>(Split 1)]* *[==>(Split 2)]* *[==>(Split 3)]* *[==>(Split 4)]*	*[1]* *[2]*
	Comments: V=12.59 B1.5V E(B-V)=0.49								
5	G130M 1222 (COS.sp.1365904)	(12) ALS45	COS/FUV, TIME-TAG, PSA	G130M 1222 A	FP-POS=ALL; BUFFER-TIME=726			228 Secs (912 Secs) *[==>(Split 1)]* *[==>(Split 2)]* *[==>(Split 3)]* *[==>(Split 4)]*	*[2]*
	Comments: V=12.59 B1.5V E(B-V)=0.49								
6	G160M 1533 (COS.sp.1365905)	(12) ALS45	COS/FUV, TIME-TAG, PSA	G160M 1533 A	FP-POS=ALL; BUFFER-TIME=529			553 Secs (2212 Secs) *[==>(Split 1)]* *[==>(Split 2)]* *[==>(Split 3)]* *[==>(Split 4)]*	*[3]*
	Comments: V=12.59 B1.5V E(B-V)=0.49								

Orbit Structure




Orbit 2
Server Version: 20191203
GS Reacq
Exp. 4, split 2
Exp. 4, split 3
Exp. 4, split 4
Pointing Maneuver
Exp. 5, split 1
Exp. 5, split 2
Exp. 5, split 3
Exp. 5, split 4
Unused Orbital Visibility = 4
Occultation
0
500
1000
1500
2000
2500
3000
3500
4000
4500
5000
5500
6000
sec


Orbit 3
Server Version: 20191203
Exp. 6, split 2
Exp. 6, split 3
Exp. 6, split 4
Unused Orbital Visibility = 3
GS Reacq
Occultation
Exp. 6, split 1
Home
0
500
1000
1500
2000
2500
3000
3500
4000
4500
5000
5500
6000
sec