



13635 - FUV Focus Sweep Enabling Program for COS at LP3 (LENA2)

Cycle: 21, Proposal Category: CAL/COS

(Availability Mode: RESTRICTED)

INVESTIGATORS

<i>Name</i>	<i>Institution</i>	<i>E-Mail</i>
Svea Hernandez (PI) (Contact)	Space Telescope Science Institute	shernand@stsci.edu

VISITS

<i>Visit</i>	<i>Targets used in Visit</i>	<i>Configurations used in Visit</i>	<i>Orbits Used</i>	<i>Last Orbit Planner Run</i>	<i>OP Current with Visit?</i>
01	(1) V-KL-UMA DARK NONE	COS COS/FUV COS/NUV S/C	5	09-Jul-2014 21:01:56.0	yes
02	(1) V-KL-UMA DARK NONE	COS COS/FUV COS/NUV S/C	4	09-Jul-2014 21:02:04.0	yes
03	(2) AZV75 DARK NONE	COS COS/FUV COS/NUV S/C	2	09-Jul-2014 21:02:10.0	yes
1A	(1) V-KL-UMA DARK NONE	COS COS/FUV COS/NUV S/C	5	09-Jul-2014 21:02:22.0	yes

<i>Visit</i>	<i>Targets used in Visit</i>	<i>Configurations used in Visit</i>	<i>Orbits Used</i>	<i>Last Orbit Planner Run</i>	<i>OP Current with Visit?</i>
2A	(1) V-KL-UMA DARK NONE	COS COS/FUV COS/NUV S/C	4	09-Jul-2014 21:02:28.0	yes
3A	(2) AZV75 DARK NONE	COS COS/FUV COS/NUV S/C	2	09-Jul-2014 21:02:33.0	yes

22 Total Orbits Used

ABSTRACT

This program verifies the focus at the new lifetime position by performing focus sweeps with the G130M (standard and blue mode), G160M, and G140L gratings.

Ray trace models predict that the best focus at the new position is within +/-200 focus steps from the current absolute focus for the standard modes G130M and G160M. It has been seen in the past that focus for the different modes move in the same direction and with the same magnitude.

The focus sweeps performed in this program scans the focus at 200 focus step increments from -800 to +1000 from the current LP2 focus for G130M/1309, G130M/1222 and G160M/1600. The focus sweep for G140L uses 100 focus step increments near the expected best focus (current LP2 focus) and 200 step intervals away from the expected best focus. The G140L focus offsets range from -800 to +800.

OBSERVING DESCRIPTION

A focus sweep with the G130M grating CENWAVEs = 1309 and 1222 settings is executed in visit 01. Observations taken with G130M/1309 used the different segments separately due to global count rate violations when using both segments at a time. Observations taken with G130M/1222 use segment B only as the spectral resolution is optimized for this segment alone.

In visit 02 a focus sweep with G160M/1600 is performed with both segments on. And visit 03 performs a focus sweep with G140L/1105 using only segment A, as this is the default configuration.

All three visits make use of the LIFETIME-POS= ALTERNATE optional parameter to move the spectra to the predefined LP3 location (-2.523" in XD). This program requires a special SIAF file to move the pointing of the telescope -2.523 arcseconds from the LP1 position for the FUV

ALTERNATE entries. This is a move of [-1.7866", -1.7846"] in [V2,V3] - see PR 78255. The lines to change are:

LFBOAA 2014.188:00:00:00 230.9384 -239.2996 0.022600 0.094300 135.0 45.0
LFPSAA 2014.188:00:00:00 230.9384 -239.2996 0.022600 0.094300 135.0 45.0
LAPTFBOAFA 2014.188:00:00:00 221.5642 -248.6738 0.022600 0.094300 135.0 45.0
LAPTFPSAFA 2014.188:00:00:00 240.3126 -229.9254 0.022600 0.094300 135.0 45.0

Additionally, this program will make use of the new HV commanding system. The corresponding HV values will be predefined for the different configurations. No special commanding (S/C) will be needed for the corresponding HV changes. The program will use a special HV Table with the following changes to the normal HV/Aperture table:

CENWAVE	Lifetime Position	HVA,HVB
-----	-----	-----
1309	Alternate (LP3)	167,163
1600	Alternate (LP3)	167,163
1222	Alternate (LP3)	171,167
1105	Alternate (LP3)	167,163

CONSTRAINTS:

The visits in this program should execute after LENA4 is observed. This program should be scheduled preferably in the SMS for the week of July 14 to allow for any adjustments of the "ALTERNATE" position for LP3.

Proposal 13635 - G130M focus (01) - FUV Focus Sweep Enabling Program for COS at LP3 (LENA2)

Visit	Proposal 13635, G130M_focus (01), scheduled Thu Jul 10 01:02:35 GMT 2014 Diagnostic Status: Warning Scientific Instruments: COS/NUV, S/C, COS/FUV, COS Special Requirements: SCHED 100%																													
	(G130M_focus (01)) Warning (Form): For the best data quality, it is strongly recommended that all four FP-POS positions be used when observing at a given COS CENWAVE setting. (G130M_focus (01)) Warning (Orbit Planner): ORBITAL VISIBILITY OVERRUN																													
Fixed Targets	<table border="1"> <thead> <tr> <th>#</th> <th>Name</th> <th>Target Coordinates</th> <th>Targ. Coord. Corrections</th> <th>Fluxes</th> <th>Miscellaneous</th> </tr> </thead> <tbody> <tr> <td>(1)</td> <td>V-KL-UMA</td> <td>RA: 11 47 14.4900 (176.8103750d)</td> <td>Proper Motion RA: 0.00333 sec of time/yr</td> <td>V=13.28</td> <td>Reference Frame: ICRS</td> </tr> <tr> <td></td> <td>Alt Name1: FEIGE48</td> <td>Dec: +61 15 31.80 (61.25883d)</td> <td>Proper Motion Dec: 0</td> <td></td> <td></td> </tr> <tr> <td></td> <td></td> <td>Equinox: J2000</td> <td>Epoch of Position: 2000</td> <td></td> <td></td> </tr> </tbody> </table>						#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous	(1)	V-KL-UMA	RA: 11 47 14.4900 (176.8103750d)	Proper Motion RA: 0.00333 sec of time/yr	V=13.28	Reference Frame: ICRS		Alt Name1: FEIGE48	Dec: +61 15 31.80 (61.25883d)	Proper Motion Dec: 0					Equinox: J2000	Epoch of Position: 2000		
	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous																								
(1)	V-KL-UMA	RA: 11 47 14.4900 (176.8103750d)	Proper Motion RA: 0.00333 sec of time/yr	V=13.28	Reference Frame: ICRS																									
	Alt Name1: FEIGE48	Dec: +61 15 31.80 (61.25883d)	Proper Motion Dec: 0																											
		Equinox: J2000	Epoch of Position: 2000																											
Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.																														

Proposal 13635 - G130M focus (01) - FUV Focus Sweep Enabling Program for COS at LP3 (LENA2)

#	Label (ETC Run)	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
Exposures	1	ACQ/IMAG E (COS.ta.607 556)	(1) V-KL-UMA	COS/NUV, ACQ/IMAGE, BOA	MIRRORA			16 Secs (16 Secs) [==>]	[1]
	<i>Comments: S/N=60.0</i>								
	2	Move to -80 0	NONE	COS, ALIGN/OSM		FOCUS=-800		0 Secs (0 Secs) [==>]	[1]
	3	1309_A_f-8 00 (COS.sp.606 970)	(1) V-KL-UMA	COS/FUV, TIME-TAG, PSA	G130M 1309 A	FP-POS=3; SEGMENT=A; BUFFER-TIME=11 1; LIFETIME-POS=A LTERNATE		200 Secs (200 Secs) [==>]	[1]
	<i>Comments: S/N=39 at wavelength 1366 A</i>								
	4	Move to -60 0	NONE	COS, ALIGN/OSM		FOCUS=-600		0 Secs (0 Secs) [==>]	[1]
	5	1309_A_f-6 00 (COS.sp.606 970)	(1) V-KL-UMA	COS/FUV, TIME-TAG, PSA	G130M 1309 A	FP-POS=3; SEGMENT=A; BUFFER-TIME=11 1; LIFETIME-POS=A LTERNATE		200 Secs (200 Secs) [==>]	[1]
	6	Move to -40 0	NONE	COS, ALIGN/OSM		FOCUS=-400		0 Secs (0 Secs) [==>]	[1]
	7	1309_A_f-4 00 (COS.sp.606 970)	(1) V-KL-UMA	COS/FUV, TIME-TAG, PSA	G130M 1309 A	FP-POS=3; SEGMENT=A; BUFFER-TIME=11 1; LIFETIME-POS=A LTERNATE		200 Secs (200 Secs) [==>]	[1]
	8	Move to -20 0	NONE	COS, ALIGN/OSM		FOCUS=-200		0 Secs (0 Secs) [==>]	[1]
	9	1309_A_f-2 00 (COS.sp.606 970)	(1) V-KL-UMA	COS/FUV, TIME-TAG, PSA	G130M 1309 A	FP-POS=3; SEGMENT=A; BUFFER-TIME=11 1; LIFETIME-POS=A LTERNATE		200 Secs (200 Secs) [==>]	[1]
10	Move to 0	NONE	COS, ALIGN/OSM		FOCUS=0		0 Secs (0 Secs) [==>]	[1]	
11	1309_A_f-0 (COS.sp.606 970)	(1) V-KL-UMA	COS/FUV, TIME-TAG, PSA	G130M 1309 A	FP-POS=3; SEGMENT=A; BUFFER-TIME=11 1; LIFETIME-POS=A LTERNATE		200 Secs (200 Secs) [==>]	[1]	

Proposal 13635 - G130M focus (01) - FUV Focus Sweep Enabling Program for COS at LP3 (LENA2)

12	Move to +20 0	NONE	COS, ALIGN/OSM		FOCUS=+200	0 Secs (0 Secs)	
						[==>]	[1]
13	1309_A_f+2 00 (COS.sp.606 970)	(1) V-KL-UMA	COS/FUV, TIME-TAG, PSA	G130M 1309 A	FP-POS=3; SEGMENT=A; BUFFER-TIME=11 1; LIFETIME-POS=A LTERNATE	200 Secs (200 Secs)	[2]
						[==>]	
14	Move to +40 0	NONE	COS, ALIGN/OSM		FOCUS=+400	0 Secs (0 Secs)	
						[==>]	[2]
15	1309_A_f+4 00 (COS.sp.606 970)	(1) V-KL-UMA	COS/FUV, TIME-TAG, PSA	G130M 1309 A	FP-POS=3; SEGMENT=A; BUFFER-TIME=11 1; LIFETIME-POS=A LTERNATE	200 Secs (200 Secs)	[2]
						[==>]	
16	Move to +60 0	NONE	COS, ALIGN/OSM		FOCUS=+600	0 Secs (0 Secs)	
						[==>]	[2]
17	1309_A_f+6 00 (COS.sp.606 970)	(1) V-KL-UMA	COS/FUV, TIME-TAG, PSA	G130M 1309 A	FP-POS=3; SEGMENT=A; BUFFER-TIME=11 1; LIFETIME-POS=A LTERNATE	200 Secs (200 Secs)	[2]
						[==>]	
18	Move to +80 0	NONE	COS, ALIGN/OSM		FOCUS=+800	0 Secs (0 Secs)	
						[==>]	[2]
19	1309_A_f+8 00 (COS.sp.606 970)	(1) V-KL-UMA	COS/FUV, TIME-TAG, PSA	G130M 1309 A	FP-POS=3; SEGMENT=A; BUFFER-TIME=11 1; LIFETIME-POS=A LTERNATE	200 Secs (200 Secs)	[2]
						[==>]	
20	Move to +10 00	NONE	COS, ALIGN/OSM		FOCUS=+1000	0 Secs (0 Secs)	
						[==>]	[2]
21	1309_A_f+1 000 (COS.sp.606 970)	(1) V-KL-UMA	COS/FUV, TIME-TAG, PSA	G130M 1309 A	FP-POS=3; SEGMENT=A; BUFFER-TIME=11 1; LIFETIME-POS=A LTERNATE	200 Secs (200 Secs)	[2]
						[==>]	
22	1309_B_f+1 000 (COS.sp.606 977)	(1) V-KL-UMA	COS/FUV, TIME-TAG, PSA	G130M 1309 A	FP-POS=3; SEGMENT=B; BUFFER-TIME=10 0; LIFETIME-POS=A LTERNATE	110 Secs (110 Secs)	[2]
						[==>]	
<i>Comments: Switch to segment B, this exposure is at a focus offset of +1000. S/N=37 at 1230 A</i>							
23	Move to +80 0	NONE	COS, ALIGN/OSM		FOCUS=+800	0 Secs (0 Secs)	
						[==>]	[2]

Proposal 13635 - G130M focus (01) - FUV Focus Sweep Enabling Program for COS at LP3 (LENA2)

24	1309_B_f+8 00 (COS.sp.606 977)	(1) V-KL-UMA	COS/FUV, TIME-TAG, PSA	G130M 1309 A	FP-POS=3; SEGMENT=B; BUFFER-TIME=10 0; LIFETIME-POS=A LTERNATE	110 Secs (110 Secs) [==>]	[3]
25	Move to +60 0	NONE	COS, ALIGN/OSM		FOCUS=+600	0 Secs (0 Secs) [==>]	[3]
26	1309_B_f+6 00 (COS.sp.606 977)	(1) V-KL-UMA	COS/FUV, TIME-TAG, PSA	G130M 1309 A	FP-POS=3; SEGMENT=B; BUFFER-TIME=10 0; LIFETIME-POS=A LTERNATE	110 Secs (110 Secs) [==>]	[3]
27	Move to +40 0	NONE	COS, ALIGN/OSM		FOCUS=+400	0 Secs (0 Secs) [==>]	[3]
28	1309_B_f+4 00 (COS.sp.606 975)	(1) V-KL-UMA	COS/FUV, TIME-TAG, PSA	G130M 1309 A	FP-POS=3; SEGMENT=B; BUFFER-TIME=10 0; LIFETIME-POS=A LTERNATE	120 Secs (120 Secs) [==>]	[3]
<i>Comments: S/N=39 at 1230A</i>							
29	Move to +20 0	NONE	COS, ALIGN/OSM		FOCUS=+200	0 Secs (0 Secs) [==>]	[3]
30	1309_B_f+2 00 (COS.sp.606 975)	(1) V-KL-UMA	COS/FUV, TIME-TAG, PSA	G130M 1309 A	FP-POS=3; SEGMENT=B; BUFFER-TIME=10 0; LIFETIME-POS=A LTERNATE	120 Secs (120 Secs) [==>]	[3]
31	Move to 0	NONE	COS, ALIGN/OSM		FOCUS=0	0 Secs (0 Secs) [==>]	[3]
32	1309_B_f-0 (COS.sp.606 975)	(1) V-KL-UMA	COS/FUV, TIME-TAG, PSA	G130M 1309 A	FP-POS=3; SEGMENT=B; BUFFER-TIME=10 0; LIFETIME-POS=A LTERNATE	120 Secs (120 Secs) [==>]	[3]
33	Move to -20 0	NONE	COS, ALIGN/OSM		FOCUS=-200	0 Secs (0 Secs) [==>]	[3]
34	1309_B_f-2 00 (COS.sp.606 975)	(1) V-KL-UMA	COS/FUV, TIME-TAG, PSA	G130M 1309 A	FP-POS=3; SEGMENT=B; BUFFER-TIME=10 0; LIFETIME-POS=A LTERNATE	120 Secs (120 Secs) [==>]	[3]
35	Move to -40 0	NONE	COS, ALIGN/OSM		FOCUS=-400	0 Secs (0 Secs) [==>]	[3]

Proposal 13635 - G130M focus (01) - FUV Focus Sweep Enabling Program for COS at LP3 (LENA2)

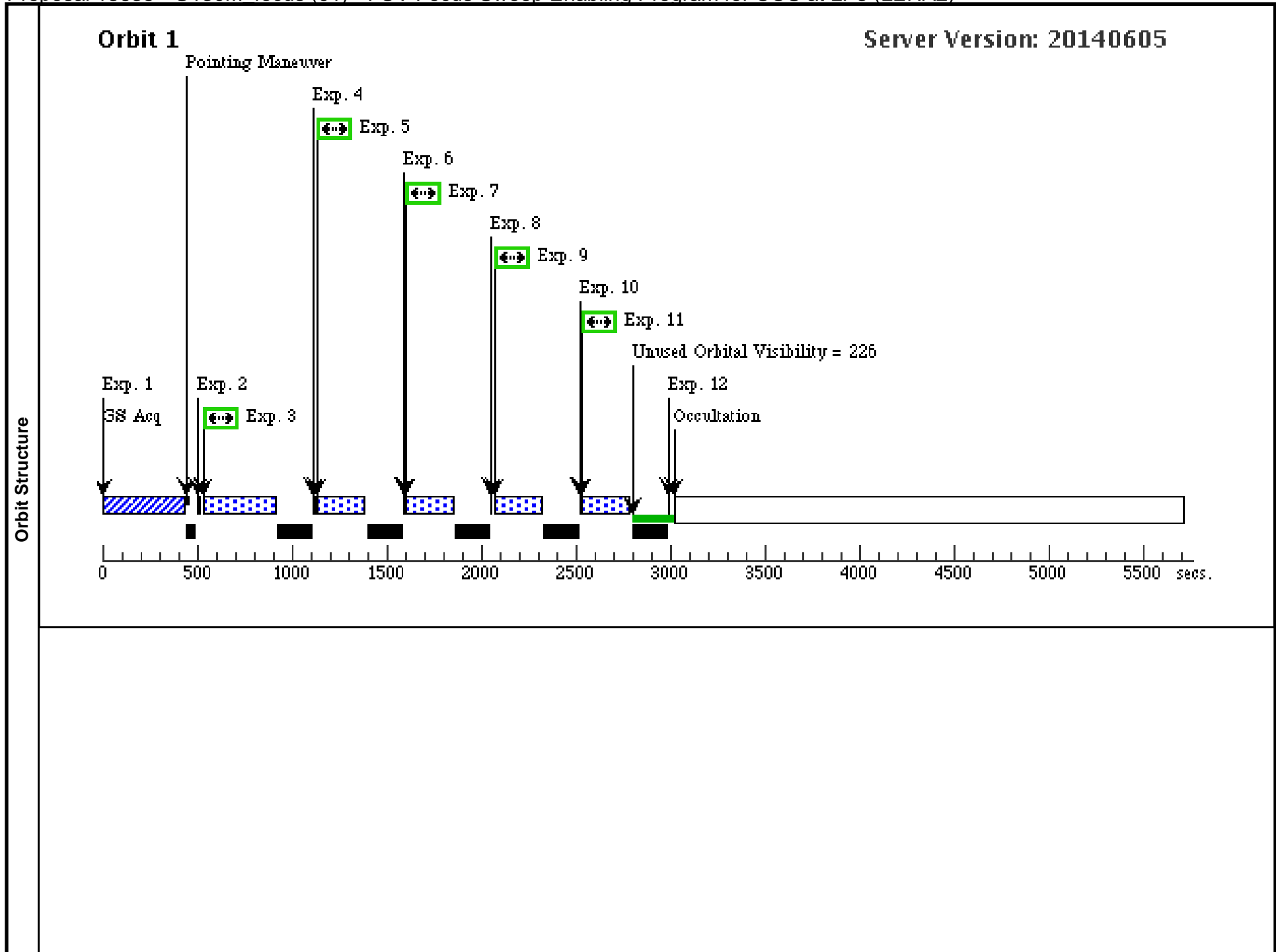
36	1309_B_f-4 00 (COS.sp.606 975)	(1) V-KL-UMA	COS/FUV, TIME-TAG, PSA	G130M 1309 A	FP-POS=3; SEGMENT=B; BUFFER-TIME=10 0; LIFETIME-POS=A LTERNATE	120 Secs (120 Secs) [==>]	[3]
37	Move to -60 0	NONE	COS, ALIGN/OSM		FOCUS=-600	0 Secs (0 Secs) [==>]	[3]
38	1309_B_f-6 00 (COS.sp.606 977)	(1) V-KL-UMA	COS/FUV, TIME-TAG, PSA	G130M 1309 A	FP-POS=3; SEGMENT=B; BUFFER-TIME=10 0; LIFETIME-POS=A LTERNATE	110 Secs (110 Secs) [==>]	[3]
<i>Comments: S/N=37 at 1230A</i>							
39	Move to -80 0	NONE	COS, ALIGN/OSM		FOCUS=-800	0 Secs (0 Secs) [==>]	[3]
40	1309_B_f-8 00 (COS.sp.606 977)	(1) V-KL-UMA	COS/FUV, TIME-TAG, PSA	G130M 1309 A	FP-POS=3; SEGMENT=B; BUFFER-TIME=10 0; LIFETIME-POS=A LTERNATE	110 Secs (110 Secs) [==>]	[3]
41	1222_B_f-8 00 (COS.sp.607 559)	(1) V-KL-UMA	COS/FUV, TIME-TAG, PSA	G130M 1222 A	FP-POS=3; SEGMENT=B; BUFFER-TIME=11 7; LIFETIME-POS=A LTERNATE	100 Secs (100 Secs) [==>]	[4]
<i>Comments: S/N = 30 Switching cenwave from 1309 to 1222.</i>							
42	Move to -60 0	NONE	COS, ALIGN/OSM		FOCUS=-600	0 Secs (0 Secs) [==>]	[4]
43	1222_B_f-6 00 (COS.sp.607 559)	(1) V-KL-UMA	COS/FUV, TIME-TAG, PSA	G130M 1222 A	FP-POS=3; SEGMENT=B; BUFFER-TIME=11 7; LIFETIME-POS=A LTERNATE	100 Secs (100 Secs) [==>]	[4]
<i>Comments: S/N = 30</i>							
44	Move to -40 0	NONE	COS, ALIGN/OSM		FOCUS=-400	0 Secs (0 Secs) [==>]	[4]
45	1222_B_f-4 00 (COS.sp.607 559)	(1) V-KL-UMA	COS/FUV, TIME-TAG, PSA	G130M 1222 A	FP-POS=3; SEGMENT=B; BUFFER-TIME=11 7; LIFETIME-POS=A LTERNATE	100 Secs (100 Secs) [==>]	[4]
<i>Comments: S/N = 30</i>							

Proposal 13635 - G130M focus (01) - FUV Focus Sweep Enabling Program for COS at LP3 (LENA2)

46	Move to -20 0	NONE	COS, ALIGN/OSM		FOCUS=-200	0 Secs (0 Secs)	
						[==>]	[4]
47	1222_B_f-2 00 (COS.sp.607 559)	(1) V-KL-UMA	COS/FUV, TIME-TAG, PSA	G130M 1222 A	FP-POS=3; SEGMENT=B; BUFFER-TIME=11 7; LIFETIME-POS=A LTERNATE	100 Secs (100 Secs)	[4]
						[==>]	
<i>Comments: S/N = 30</i>							
48	Move to 0	NONE	COS, ALIGN/OSM		FOCUS=0	0 Secs (0 Secs)	
						[==>]	[4]
49	1222_B_f-0 (COS.sp.607 559)	(1) V-KL-UMA	COS/FUV, TIME-TAG, PSA	G130M 1222 A	FP-POS=3; SEGMENT=B; BUFFER-TIME=11 7; LIFETIME-POS=A LTERNATE	100 Secs (100 Secs)	[4]
						[==>]	
<i>Comments: S/N = 30</i>							
50	Move to +20 0	NONE	COS, ALIGN/OSM		FOCUS=+200	0 Secs (0 Secs)	
						[==>]	[4]
51	1222_B_f+2 00 (COS.sp.607 559)	(1) V-KL-UMA	COS/FUV, TIME-TAG, PSA	G130M 1222 A	FP-POS=3; SEGMENT=B; BUFFER-TIME=11 7; LIFETIME-POS=A LTERNATE	100 Secs (100 Secs)	[4]
						[==>]	
<i>Comments: S/N = 30</i>							
52	Move to +40 0	NONE	COS, ALIGN/OSM		FOCUS=+400	0 Secs (0 Secs)	
						[==>]	[4]
53	1222_B_f+4 00 (COS.sp.607 559)	(1) V-KL-UMA	COS/FUV, TIME-TAG, PSA	G130M 1222 A	FP-POS=3; SEGMENT=B; BUFFER-TIME=11 7; LIFETIME-POS=A LTERNATE	100 Secs (100 Secs)	[4]
						[==>]	
<i>Comments: S/N = 30</i>							
54	Move to +60 0	NONE	COS, ALIGN/OSM		FOCUS=+600	0 Secs (0 Secs)	
						[==>]	[4]
55	1222_B_f+6 00 (COS.sp.607 559)	(1) V-KL-UMA	COS/FUV, TIME-TAG, PSA	G130M 1222 A	FP-POS=3; SEGMENT=B; BUFFER-TIME=11 7; LIFETIME-POS=A LTERNATE	100 Secs (100 Secs)	[4]
						[==>]	
<i>Comments: S/N = 30</i>							
56	Move to +80 0	NONE	COS, ALIGN/OSM		FOCUS=+800	0 Secs (0 Secs)	
						[==>]	[4]

Proposal 13635 - G130M focus (01) - FUV Focus Sweep Enabling Program for COS at LP3 (LENA2)

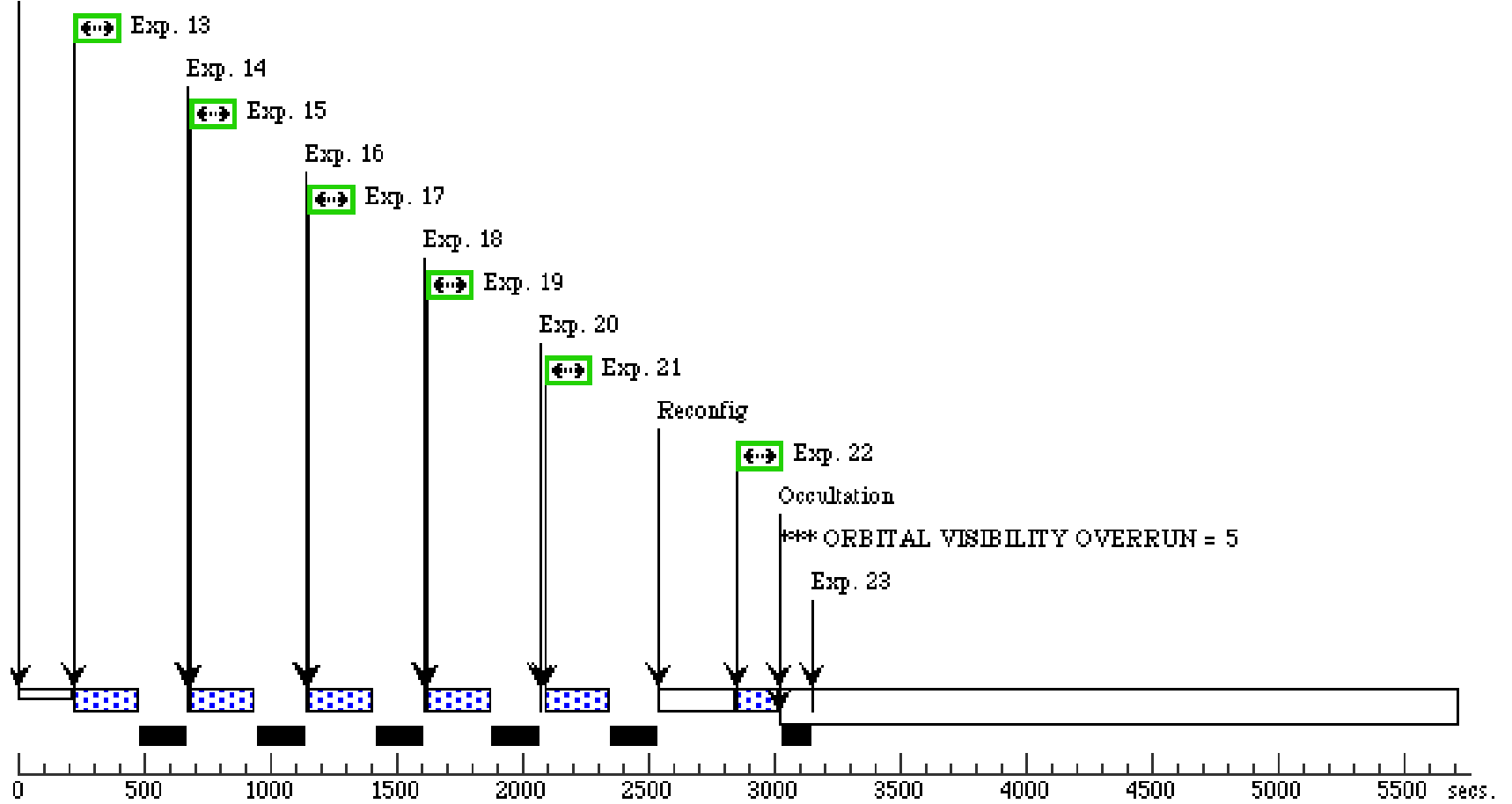
57	1222_B_f+8 (1) V-KL-UMA 00 (COS.sp.607 559)	COS/FUV, TIME-TAG, PSA	G130M 1222 A	FP-POS=3; SEGMENT=B; BUFFER-TIME=11 7; LIFETIME-POS=A LTERNATE	100 Secs (100 Secs) [==>]	[4]
<i>Comments: S/N = 30</i>						
58	Move to +10 NONE 00	COS, ALIGN/OSM		FOCUS=+1000	0 Secs (0 Secs) [==>]	[4]
59	1222_B_f+1 (1) V-KL-UMA 000 (COS.sp.607 559)	COS/FUV, TIME-TAG, PSA	G130M 1222 A	FP-POS=3; SEGMENT=B; BUFFER-TIME=11 7; LIFETIME-POS=A LTERNATE	100 Secs (100 Secs) [==>]	[4]
<i>Comments: This exposure time give a S/N=30 at 1150</i>						
60	Ramp Down DARK to HVLOW	S/C, DATA, NONE		NEW OBSET; QASISTATES COS SI OPERATE OPER ATE; QASISTATES COS FUV HVLOW HVL OW; QASISTATES COS NUV HVSAA HVS AA	1 Secs (1 Secs) [==>]	[5]
<i>Comments: Use this S/C to force a ramp down to HVLOW</i>						



Orbit 2

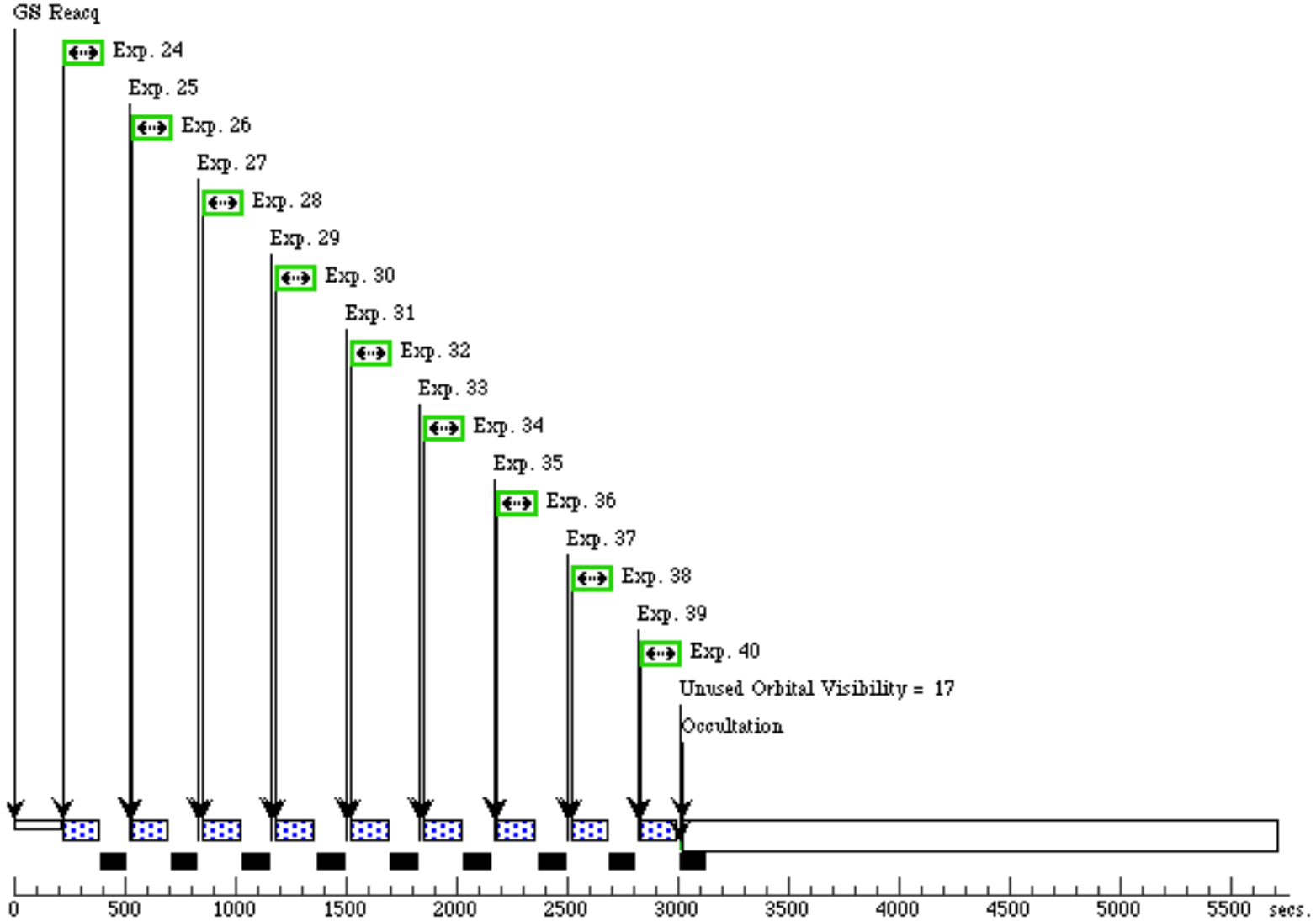
Server Version: 20140605

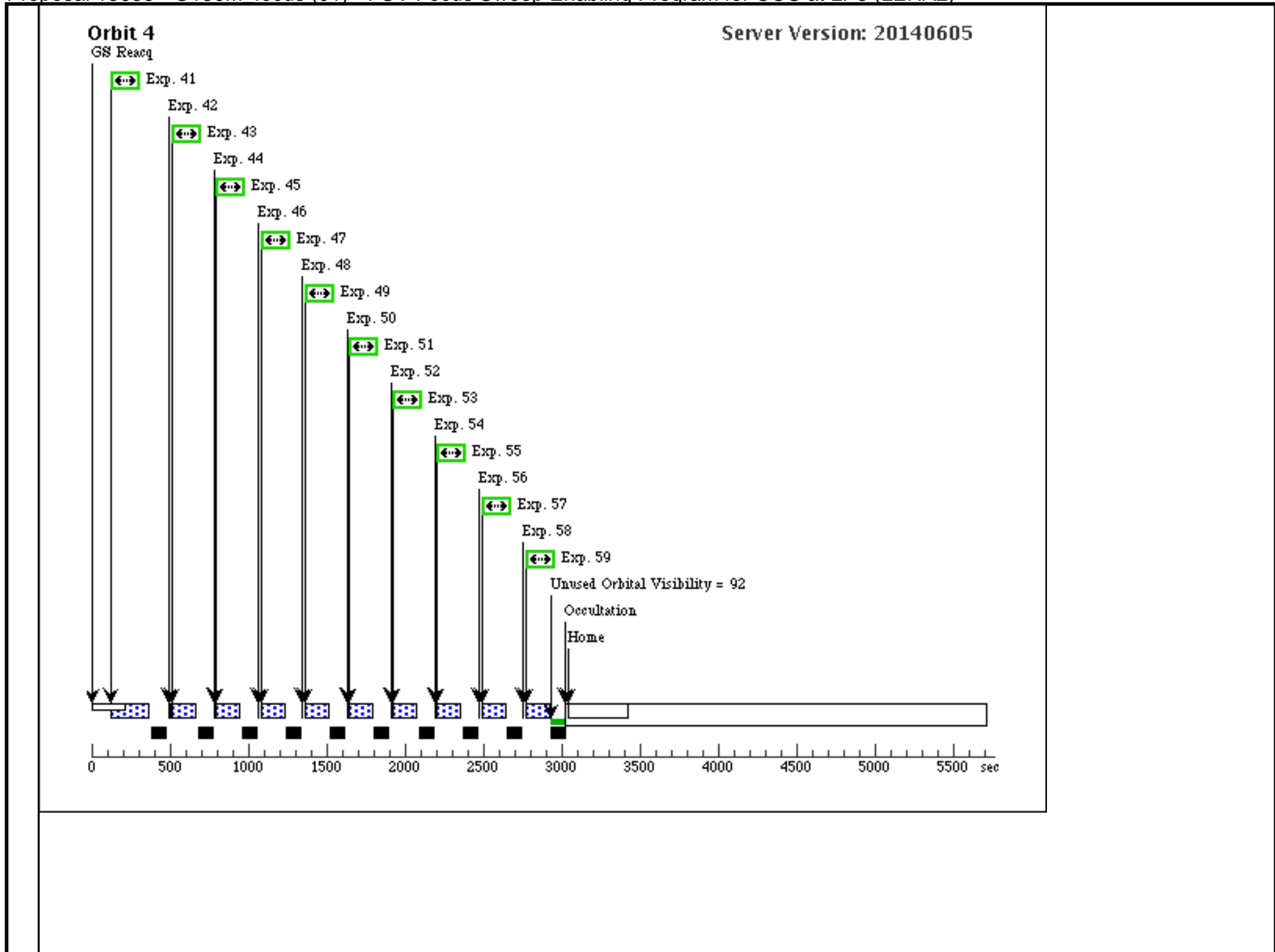
GS Reseq

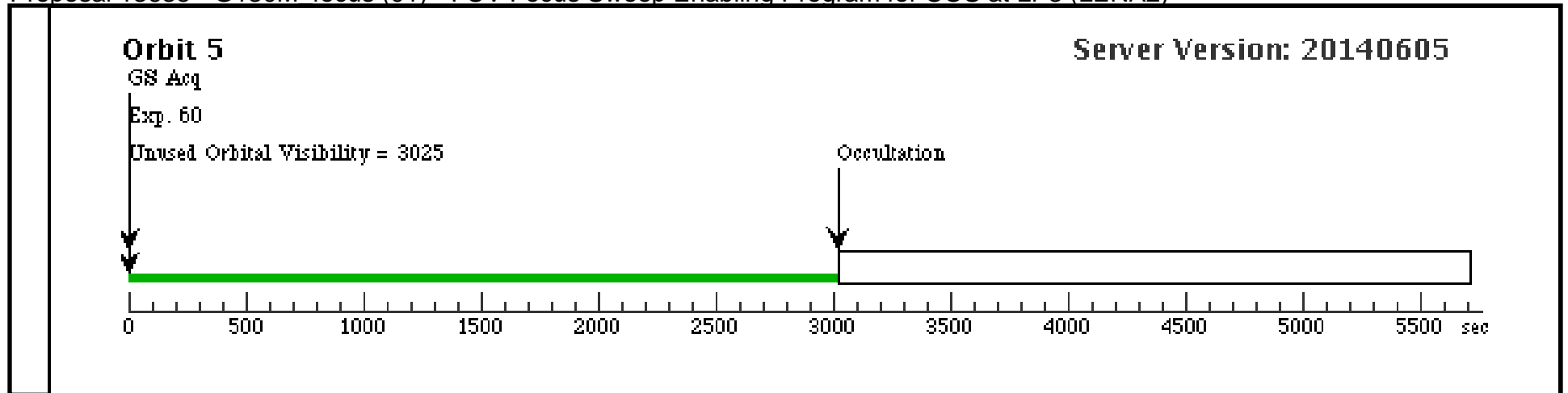


Orbit 3

Server Version: 20140605







Proposal 13635 - G160M focus (02) - FUV Focus Sweep Enabling Program for COS at LP3 (LENA2)

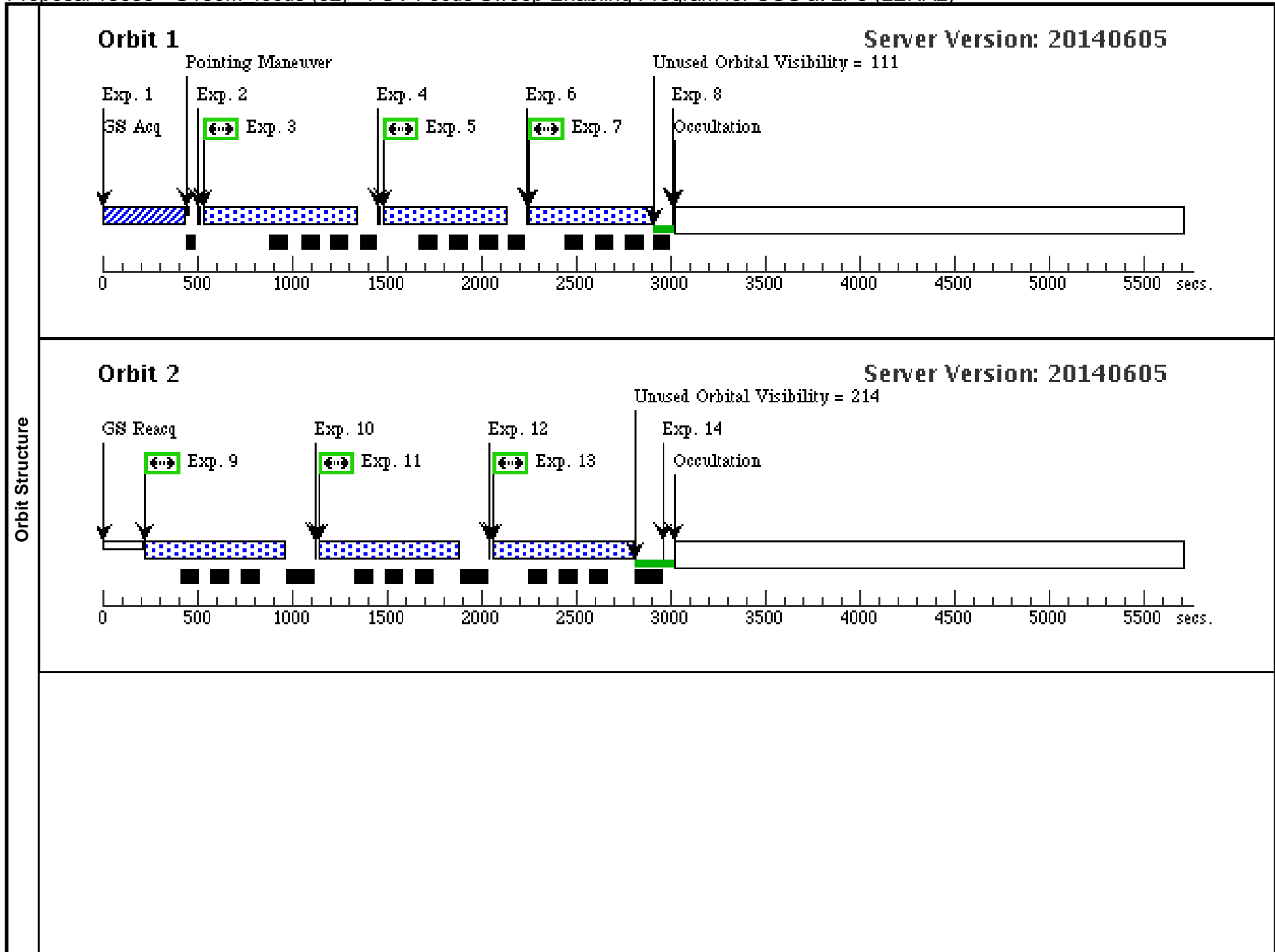
Visit	Proposal 13635, G160M_focus (02), scheduled Thu Jul 10 01:02:36 GMT 2014 Diagnostic Status: Warning Scientific Instruments: COS/NUV, S/C, COS/FUV, COS Special Requirements: SCHED 100%																													
	(G160M_focus (02)) Warning (Form): For the best data quality, it is strongly recommended that all four FP-POS positions be used when observing at a given COS CENWAVE setting.																													
Fixed Targets	<table border="1"> <thead> <tr> <th>#</th> <th>Name</th> <th>Target Coordinates</th> <th>Targ. Coord. Corrections</th> <th>Fluxes</th> <th>Miscellaneous</th> </tr> </thead> <tbody> <tr> <td>(1)</td> <td>V-KL-UMA</td> <td>RA: 11 47 14.4900 (176.8103750d)</td> <td>Proper Motion RA: 0.00333 sec of time/yr</td> <td>V=13.28</td> <td>Reference Frame: ICRS</td> </tr> <tr> <td></td> <td>Alt Name1: FEIGE48</td> <td>Dec: +61 15 31.80 (61.25883d)</td> <td>Proper Motion Dec: 0</td> <td></td> <td></td> </tr> <tr> <td></td> <td></td> <td>Equinox: J2000</td> <td>Epoch of Position: 2000</td> <td></td> <td></td> </tr> </tbody> </table>						#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous	(1)	V-KL-UMA	RA: 11 47 14.4900 (176.8103750d)	Proper Motion RA: 0.00333 sec of time/yr	V=13.28	Reference Frame: ICRS		Alt Name1: FEIGE48	Dec: +61 15 31.80 (61.25883d)	Proper Motion Dec: 0					Equinox: J2000	Epoch of Position: 2000		
	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous																								
(1)	V-KL-UMA	RA: 11 47 14.4900 (176.8103750d)	Proper Motion RA: 0.00333 sec of time/yr	V=13.28	Reference Frame: ICRS																									
	Alt Name1: FEIGE48	Dec: +61 15 31.80 (61.25883d)	Proper Motion Dec: 0																											
		Equinox: J2000	Epoch of Position: 2000																											
Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.																														

Proposal 13635 - G160M focus (02) - FUV Focus Sweep Enabling Program for COS at LP3 (LENA2)

#	Label (ETC Run)	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit	
Exposures	1	ACQ/IMAG E (COS.ta.607 556)	(1) V-KL-UMA	COS/NUV, ACQ/IMAGE, BOA	MIRRORA			16 Secs (16 Secs) [==>]	[1]	
	<i>Comments: S/N=60</i>									
	2	Move to -80 0	NONE		COS, ALIGN/OSM		FOCUS=-800		0 Secs (0 Secs) [==>]	[1]
	3	1600_f-800 (COS.sp.608 219)	(1) V-KL-UMA	COS/FUV, TIME-TAG, PSA	G160M 1600 A	FP-POS=3; BUFFER-TIME=15 9; LIFETIME-POS=A LTERNATE			600 Secs (600 Secs) [==>]	[1]
	<i>Comments: Replicating exposure time used in FENA3 (focus sweep for LP2). S/N=36 at wavelength 1607 A</i>									
	4	Move to -60 0	NONE		COS, ALIGN/OSM		FOCUS=-600		0 Secs (0 Secs) [==>]	[1]
	5	1600_f-600 (COS.sp.608 219)	(1) V-KL-UMA	COS/FUV, TIME-TAG, PSA	G160M 1600 A	FP-POS=3; BUFFER-TIME=15 9; LIFETIME-POS=A LTERNATE			600 Secs (600 Secs) [==>]	[1]
	6	Move to -40 0	NONE		COS, ALIGN/OSM		FOCUS=-400		0 Secs (0 Secs) [==>]	[1]
	7	1600_f-400 (COS.sp.608 219)	(1) V-KL-UMA	COS/FUV, TIME-TAG, PSA	G160M 1600 A	FP-POS=3; BUFFER-TIME=15 9; LIFETIME-POS=A LTERNATE			600 Secs (600 Secs) [==>]	[1]
	8	Move to -20 0	NONE		COS, ALIGN/OSM		FOCUS=-200		0 Secs (0 Secs) [==>]	[1]
	9	1600_f-200 (COS.sp.608 220)	(1) V-KL-UMA	COS/FUV, TIME-TAG, PSA	G160M 1600 A	FP-POS=3; BUFFER-TIME=15 9; LIFETIME-POS=A LTERNATE			690 Secs (690 Secs) [==>]	[2]
	<i>Comments: S/N=38 at wavelength 1607 A</i>									
10	Move to 0 0	NONE		COS, ALIGN/OSM		FOCUS=0		0 Secs (0 Secs) [==>]	[2]	
11	1600_f-0 (COS.sp.608 220)	(1) V-KL-UMA	COS/FUV, TIME-TAG, PSA	G160M 1600 A	FP-POS=3; BUFFER-TIME=15 9; LIFETIME-POS=A LTERNATE			690 Secs (690 Secs) [==>]	[2]	
12	Move to +20 0	NONE		COS, ALIGN/OSM		FOCUS=+200		0 Secs (0 Secs) [==>]	[2]	

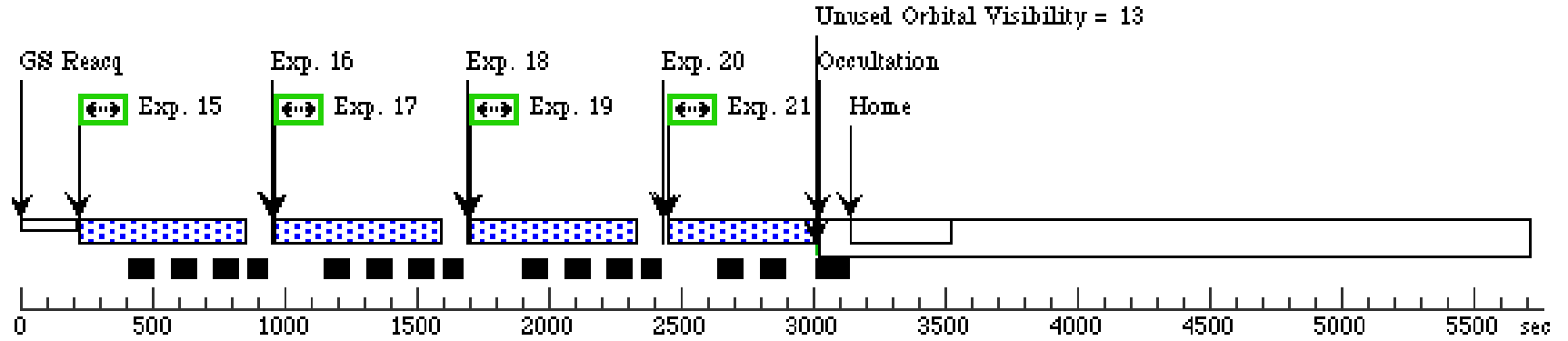
Proposal 13635 - G160M focus (02) - FUV Focus Sweep Enabling Program for COS at LP3 (LENA2)

13	1600_f+200 (COS.sp.608 220)	(1) V-KL-UMA	COS/FUV, TIME-TAG, PSA	G160M 1600 A	FP-POS=3; BUFFER-TIME=15 9; LIFETIME-POS=A LTERNATE	690 Secs (690 Secs) [==>]	[2]
14	Move to +40 0	NONE	COS, ALIGN/OSM		FOCUS=+400	0 Secs (0 Secs) [==>]	[2]
15	1600_f+400 (COS.sp.608 221)	(1) V-KL-UMA	COS/FUV, TIME-TAG, PSA	G160M 1600 A	FP-POS=3; BUFFER-TIME=15 9; LIFETIME-POS=A LTERNATE	580 Secs (580 Secs) [==>]	[3]
<i>Comments: S/N=35 at 1607 A</i>							
16	Move to +60 0	NONE	COS, ALIGN/OSM		FOCUS=+600	0 Secs (0 Secs) [==>]	[3]
17	1600_f+600 (COS.sp.608 221)	(1) V-KL-UMA	COS/FUV, TIME-TAG, PSA	G160M 1600 A	FP-POS=3; BUFFER-TIME=15 9; LIFETIME-POS=A LTERNATE	580 Secs (580 Secs) [==>]	[3]
18	Move to +80 0	NONE	COS, ALIGN/OSM		FOCUS=+800	0 Secs (0 Secs) [==>]	[3]
19	1600_f+800 (COS.sp.608 221)	(1) V-KL-UMA	COS/FUV, TIME-TAG, PSA	G160M 1600 A	FP-POS=3; BUFFER-TIME=15 9; LIFETIME-POS=A LTERNATE	580 Secs (580 Secs) [==>]	[3]
20	Move to +10 00	NONE	COS, ALIGN/OSM		FOCUS=+1000	0 Secs (0 Secs) [==>]	[3]
21	1600_f+100 0 (COS.sp.608 222)	(1) V-KL-UMA	COS/FUV, TIME-TAG, PSA	G160M 1600 A	FP-POS=3; BUFFER-TIME=15 9; LIFETIME-POS=A LTERNATE	500 Secs (500 Secs) [==>]	[3]
<i>Comments: S/N=33 at 1607</i>							
22	Ramp Down to HVLOW	DARK	S/C, DATA, NONE		NEW OBSET; QASISTATES COS SI OPERATE OPER ATE; QASISTATES COS FUV HVLOW HVL OW; QASISTATES COS NUV HVSAA HVS AA	1 Secs (1 Secs) [==>]	[4]
<i>Comments: Use this S/C to force a ramp down to HVLOW</i>							



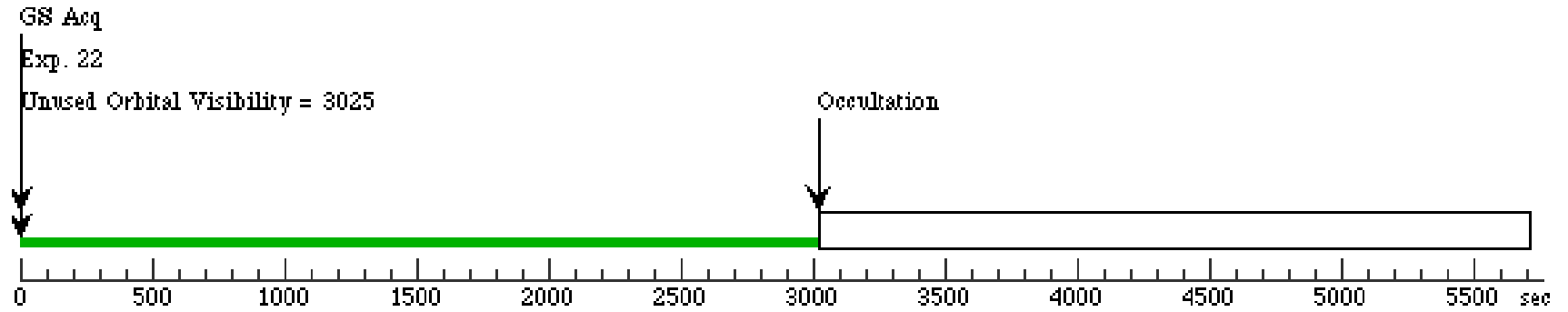
Orbit 3

Server Version: 20140605



Orbit 4

Server Version: 20140605



Proposal 13635 - G140L_focus (03) - FUV Focus Sweep Enabling Program for COS at LP3 (LENA2)

Thu Jul 10 01:02:36 GMT 2014

Visit	<p>Proposal 13635, G140L_focus (03), scheduled</p> <p>Diagnostic Status: Warning</p> <p>Scientific Instruments: COS/NUV, S/C, COS/FUV, COS</p> <p>Special Requirements: SCHED 100%</p> <p><i>Comments: Target count rates: In the G140L/1105 setting the target's local count rate is 0.75 cts/sec/pix which is above the local limit of 0.67 cts/sec/pix. This violation happens where the P-Cygni profile from N V falls. In this kind of stars the strength of the P-Cygni profile is not supposed to increase, if anything it is the absorption that changes. This target was observed in FENA3 with the same exposure time of 200s and it proved no damage to the detectors.</i></p>																
	<p>(G140L_focus (03)) Warning (Form): For the best data quality, it is strongly recommended that all four FP-POS positions be used when observing at a given COS CENWAVE setting.</p>																
Diagnosics																	
Fixed Targets	<table border="1"> <thead> <tr> <th>#</th> <th>Name</th> <th>Target Coordinates</th> <th>Targ. Coord. Corrections</th> <th>Fluxes</th> <th>Miscellaneous</th> </tr> </thead> <tbody> <tr> <td>(2)</td> <td>AZV75</td> <td>RA: 00 50 32.3900 (12.6349583d) Dec: -72 52 36.50 (-72.87681d) Equinox: J2000</td> <td></td> <td>V=12.79</td> <td>Reference Frame: ICRS</td> </tr> </tbody> </table>	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous	(2)	AZV75	RA: 00 50 32.3900 (12.6349583d) Dec: -72 52 36.50 (-72.87681d) Equinox: J2000		V=12.79	Reference Frame: ICRS				
	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous											
(2)	AZV75	RA: 00 50 32.3900 (12.6349583d) Dec: -72 52 36.50 (-72.87681d) Equinox: J2000		V=12.79	Reference Frame: ICRS												
<p><i>Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.</i></p>																	

Proposal 13635 - G140L focus (03) - FUV Focus Sweep Enabling Program for COS at LP3 (LENA2)

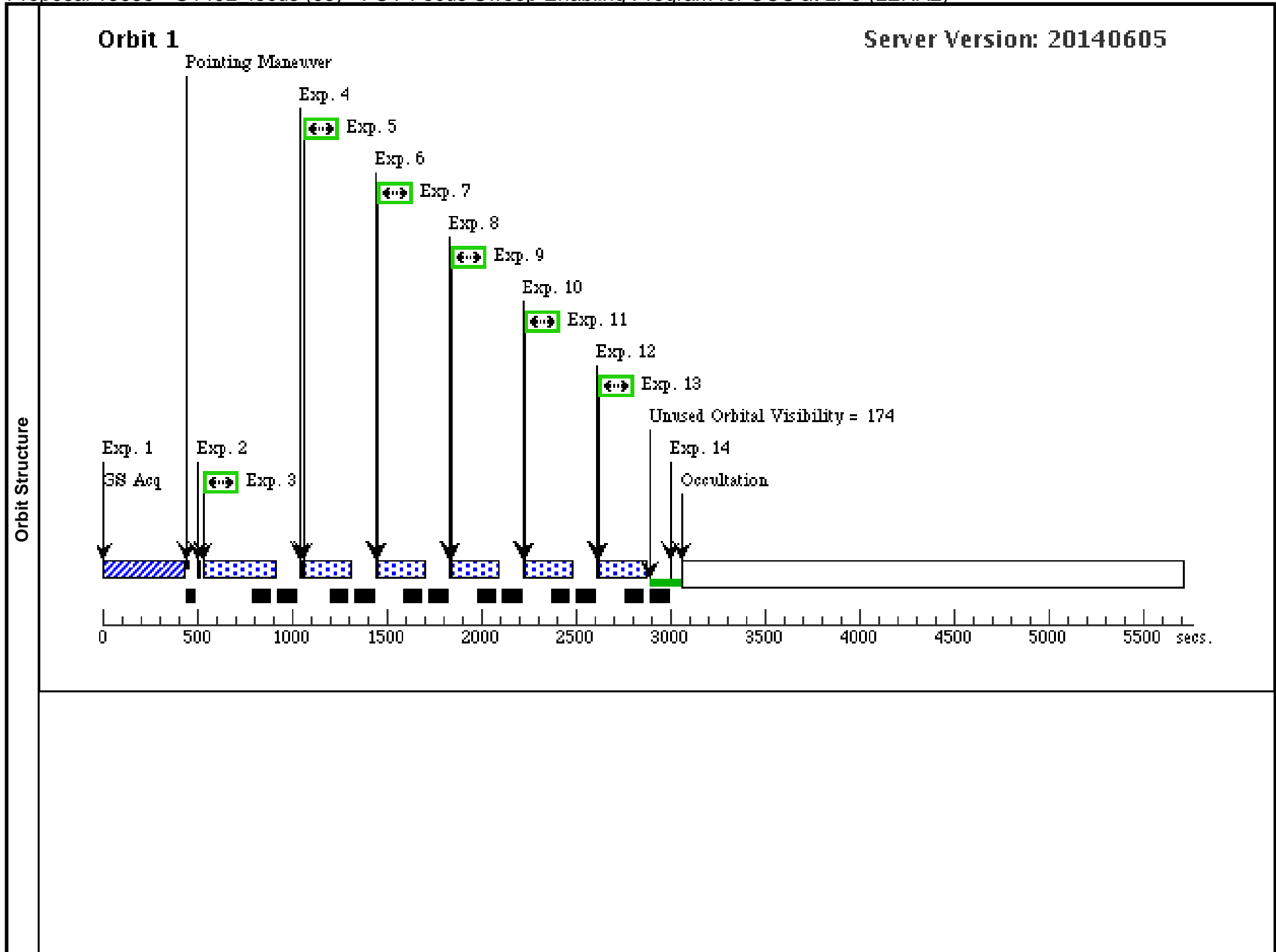
#	Label (ETC Run)	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit	
Exposures	1	ACQ/IMAG E (COS.ta.607 440)	(2) AZV75	COS/NUV, ACQ/IMAGE, BOA	MIRRORA			15 Secs (15 Secs) [==>]	[1]	
	2	Move to -80 0	NONE	COS, ALIGN/OSM		FOCUS=-800		0 Secs (0 Secs) [==>]	[1]	
	3	1105_f-800 (COS.sp.608 224)	(2) AZV75	COS/FUV, TIME-TAG, PSA	G140L 1105 A	BUFFER-TIME=10 0; FP-POS=3; LIFETIME-POS=A LTERNATE		200 Secs (200 Secs) [==>]	[1]	
	<i>Comments: These exposures use the same exposure time as the ones used in FENA3 for this same configuration.</i>									
	4	Move to -60 0	NONE	COS, ALIGN/OSM		FOCUS=-600		0 Secs (0 Secs) [==>]	[1]	
	5	1105_f-600 (COS.sp.608 224)	(2) AZV75	COS/FUV, TIME-TAG, PSA	G140L 1105 A	BUFFER-TIME=10 0; FP-POS=3; LIFETIME-POS=A LTERNATE		200 Secs (200 Secs) [==>]	[1]	
	6	Move to -40 0	NONE	COS, ALIGN/OSM		FOCUS=-400		0 Secs (0 Secs) [==>]	[1]	
	7	1105_f-400 (COS.sp.608 224)	(2) AZV75	COS/FUV, TIME-TAG, PSA	G140L 1105 A	BUFFER-TIME=10 0; FP-POS=3; LIFETIME-POS=A LTERNATE		200 Secs (200 Secs) [==>]	[1]	
	8	Move to -20 0	NONE	COS, ALIGN/OSM		FOCUS=-200		0 Secs (0 Secs) [==>]	[1]	
	9	1105_f-200 (COS.sp.608 224)	(2) AZV75	COS/FUV, TIME-TAG, PSA	G140L 1105 A	BUFFER-TIME=10 0; FP-POS=3; LIFETIME-POS=A LTERNATE		200 Secs (200 Secs) [==>]	[1]	
	10	Move to -10 0	NONE	COS, ALIGN/OSM		FOCUS=-100		0 Secs (0 Secs) [==>]	[1]	
	11	1105_f-100 (COS.sp.608 224)	(2) AZV75	COS/FUV, TIME-TAG, PSA	G140L 1105 A	BUFFER-TIME=10 0; FP-POS=3; LIFETIME-POS=A LTERNATE		200 Secs (200 Secs) [==>]	[1]	
	12	Move to 0	NONE	COS, ALIGN/OSM		FOCUS=0		0 Secs (0 Secs) [==>]	[1]	
13	1105_f-0 (COS.sp.608 224)	(2) AZV75	COS/FUV, TIME-TAG, PSA	G140L 1105 A	BUFFER-TIME=10 0; FP-POS=3; LIFETIME-POS=A LTERNATE		200 Secs (200 Secs) [==>]	[1]		

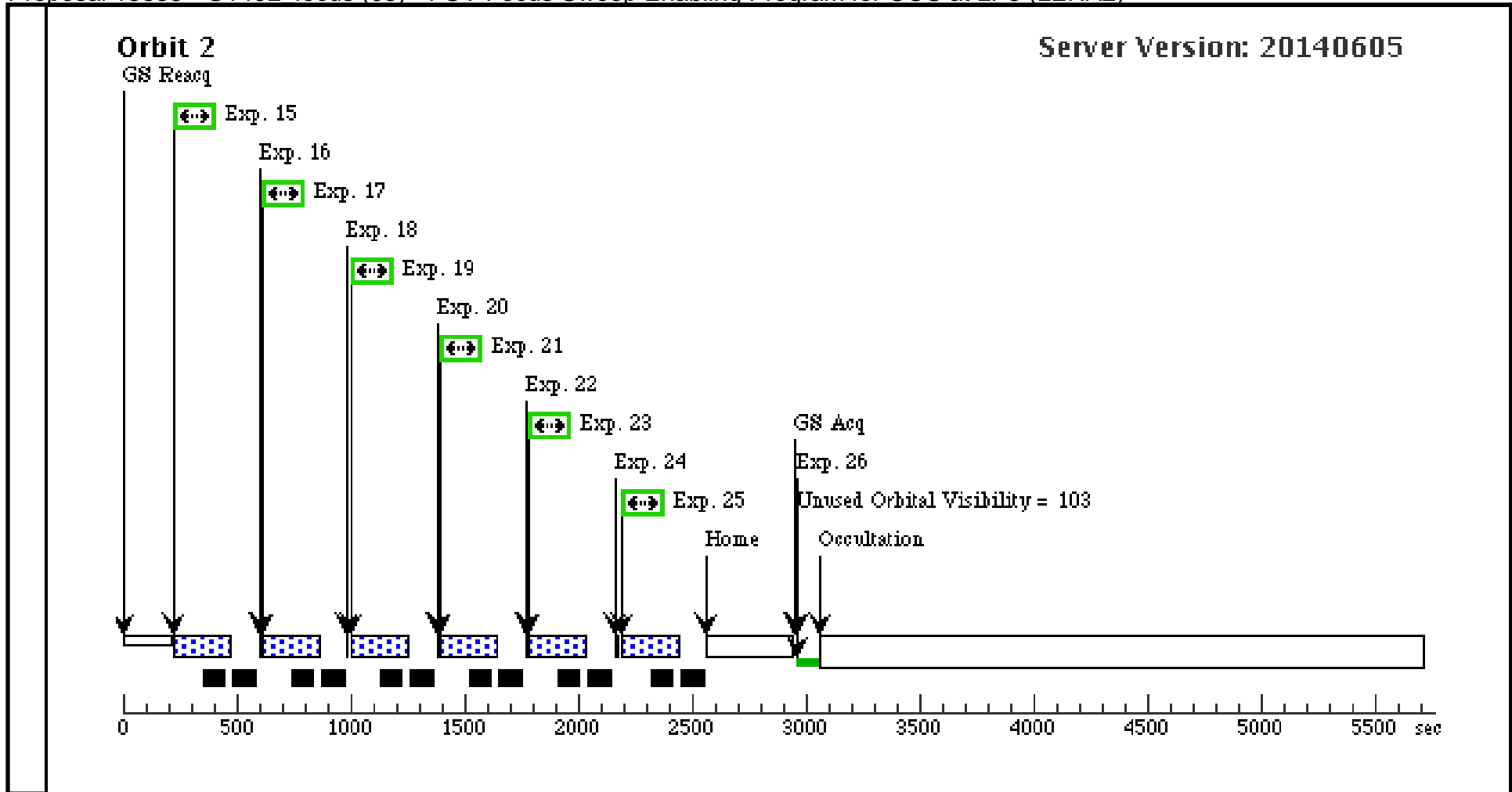
Proposal 13635 - G140L focus (03) - FUV Focus Sweep Enabling Program for COS at LP3 (LENA2)

14	Move to +10 0	NONE	COS, ALIGN/OSM		FOCUS=+100	0 Secs (0 Secs)	[1]
15	1105_f+100 (COS.sp.608 224)	(2) AZV75	COS/FUV, TIME-TAG, PSA	G140L 1105 A	BUFFER-TIME=10 0; FP-POS=3; LIFETIME-POS=A LTERNATE	200 Secs (200 Secs)	[2]
16	Move to +20 0	NONE	COS, ALIGN/OSM		FOCUS=+200	0 Secs (0 Secs)	[2]
17	1105_f+200 (COS.sp.608 224)	(2) AZV75	COS/FUV, TIME-TAG, PSA	G140L 1105 A	BUFFER-TIME=10 0; FP-POS=3; LIFETIME-POS=A LTERNATE	200 Secs (200 Secs)	[2]
18	Move to +40 0	NONE	COS, ALIGN/OSM		FOCUS=+400	0 Secs (0 Secs)	[2]
19	1105_f+400 (COS.sp.608 224)	(2) AZV75	COS/FUV, TIME-TAG, PSA	G140L 1105 A	BUFFER-TIME=10 0; FP-POS=3; LIFETIME-POS=A LTERNATE	200 Secs (200 Secs)	[2]
20	Move to +60 0	NONE	COS, ALIGN/OSM		FOCUS=+600	0 Secs (0 Secs)	[2]
21	1105_f+600 (COS.sp.608 224)	(2) AZV75	COS/FUV, TIME-TAG, PSA	G140L 1105 A	BUFFER-TIME=10 0; FP-POS=3; LIFETIME-POS=A LTERNATE	200 Secs (200 Secs)	[2]
22	Move to +80 0	NONE	COS, ALIGN/OSM		FOCUS=+800	0 Secs (0 Secs)	[2]
23	1105_f+800 (COS.sp.608 224)	(2) AZV75	COS/FUV, TIME-TAG, PSA	G140L 1105 A	BUFFER-TIME=10 0; FP-POS=3; LIFETIME-POS=A LTERNATE	200 Secs (200 Secs)	[2]
24	Move to 0	NONE	COS, ALIGN/OSM		FOCUS=0	0 Secs (0 Secs)	[2]
25	1105_f-0 (COS.sp.608 224)	(2) AZV75	COS/FUV, TIME-TAG, PSA	G140L 1105 A	BUFFER-TIME=10 0; FP-POS=3; LIFETIME-POS=A LTERNATE	200 Secs (200 Secs)	[2]

Proposal 13635 - G140L focus (03) - FUV Focus Sweep Enabling Program for COS at LP3 (LENA2)

26	Ramp Down DARK to HVLOW	S/C, DATA, NONE	NEW OBSET; QASISTATES COS SI OPERATE OPER ATE; QASISTATES COS FUV HVLOW HVL OW; QASISTATES COS NUV HVSAA HVS AA	1 Secs (1 Secs) [==>]	[2]
<i>Comments: Use this S/C to force a ramp down to HVLOW</i>					





Proposal 13635 - G130M focus (1A) - FUV Focus Sweep Enabling Program for COS at LP3 (LENA2)

Thu Jul 10 01:02:37 GMT 2014

Visit	<p>Proposal 13635, G130M_focus (1A)</p> <p>Diagnostic Status: Warning</p> <p>Scientific Instruments: COS/NUV, S/C, COS/FUV, COS</p> <p>Special Requirements: SCHED 100%</p>					
	<p>(G130M_focus (1A)) Warning (Form): For the best data quality, it is strongly recommended that all four FP-POS positions be used when observing at a given COS CENWAVE setting.</p> <p>(G130M_focus (1A)) Warning (Orbit Planner): ORBITAL VISIBILITY OVERRUN</p> <p>(1309_A_initial (1A.002)) Warning (Form): Sensitive exposures should have an ETC run number provided.</p> <p>(1222_B_initial (1A.042)) Warning (Form): Sensitive exposures should have an ETC run number provided.</p>					
Diagnosics						
Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
	(1)	V-KL-UMA Alt Name1: FEIGE48	RA: 11 47 14.4900 (176.8103750d) Dec: +61 15 31.80 (61.25883d) Equinox: J2000	Proper Motion RA: 0.00333 sec of time/yr Proper Motion Dec: 0 Epoch of Position: 2000	V=13.28	Reference Frame: ICRS
<p><i>Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.</i></p>						

Proposal 13635 - G130M focus (1A) - FUV Focus Sweep Enabling Program for COS at LP3 (LENA2)

#	Label (ETC Run)	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
1	ACQ/IMAG E (COS.ta.607 556)	(1) V-KL-UMA	COS/NUV, ACQ/IMAGE, BOA	MIRRORA				16 Secs (16 Secs) [==>]	[1]
<i>Comments: S/N=60.0</i>									
2	1309_A_init ial	(1) V-KL-UMA	COS/FUV, TIME-TAG, PSA	G130M 1309 A	FP-POS=3; SEGMENT=A; BUFFER-TIME=10 00; LIFETIME-POS=A LTERNATE; FLASH=NO; WAVECAL=NO			0.1 Secs (0.1 Secs) [==>]	[1]
<i>Comments: This exposure is used to set the instrument to the right configuration, G130M/1309 Seg A</i>									
3	Move to -80 0	NONE	COS, ALIGN/OSM		FOCUS=-800			0 Secs (0 Secs) [==>]	[1]
4	1309_A_f-8 00 (COS.sp.606 970)	(1) V-KL-UMA	COS/FUV, TIME-TAG, PSA	G130M 1309 A	FP-POS=3; SEGMENT=A; BUFFER-TIME=11 1; LIFETIME-POS=A LTERNATE			200 Secs (200 Secs) [==>]	[1]
<i>Comments: S/N=39 at wavelength 1366 A</i>									
5	Move to -60 0	NONE	COS, ALIGN/OSM		FOCUS=-600			0 Secs (0 Secs) [==>]	[1]
6	1309_A_f-6 00 (COS.sp.606 970)	(1) V-KL-UMA	COS/FUV, TIME-TAG, PSA	G130M 1309 A	FP-POS=3; SEGMENT=A; BUFFER-TIME=11 1; LIFETIME-POS=A LTERNATE			200 Secs (200 Secs) [==>]	[1]
7	Move to -40 0	NONE	COS, ALIGN/OSM		FOCUS=-400			0 Secs (0 Secs) [==>]	[1]
8	1309_A_f-4 00 (COS.sp.606 970)	(1) V-KL-UMA	COS/FUV, TIME-TAG, PSA	G130M 1309 A	FP-POS=3; SEGMENT=A; BUFFER-TIME=11 1; LIFETIME-POS=A LTERNATE			200 Secs (200 Secs) [==>]	[1]
9	Move to -20 0	NONE	COS, ALIGN/OSM		FOCUS=-200			0 Secs (0 Secs) [==>]	[1]
10	1309_A_f-2 00 (COS.sp.606 970)	(1) V-KL-UMA	COS/FUV, TIME-TAG, PSA	G130M 1309 A	FP-POS=3; SEGMENT=A; BUFFER-TIME=11 1; LIFETIME-POS=A LTERNATE			200 Secs (200 Secs) [==>]	[1]

Exposures

Proposal 13635 - G130M focus (1A) - FUV Focus Sweep Enabling Program for COS at LP3 (LENA2)

11	Move to 0	NONE	COS, ALIGN/OSM		FOCUS=0	0 Secs (0 Secs)	
						[==>]	[1]
12	1309_A_f-0 (COS.sp.606 970)	(1) V-KL-UMA	COS/FUV, TIME-TAG, PSA	G130M 1309 A	FP-POS=3; SEGMENT=A; BUFFER-TIME=11 1; LIFETIME-POS=A LTERNATE	200 Secs (200 Secs)	[1]
						[==>]	
13	Move to +20 0	NONE	COS, ALIGN/OSM		FOCUS=+200	0 Secs (0 Secs)	
						[==>]	[1]
14	1309_A_f+2 00 (COS.sp.606 970)	(1) V-KL-UMA	COS/FUV, TIME-TAG, PSA	G130M 1309 A	FP-POS=3; SEGMENT=A; BUFFER-TIME=11 1; LIFETIME-POS=A LTERNATE	200 Secs (200 Secs)	[2]
						[==>]	
15	Move to +40 0	NONE	COS, ALIGN/OSM		FOCUS=+400	0 Secs (0 Secs)	
						[==>]	[2]
16	1309_A_f+4 00 (COS.sp.606 970)	(1) V-KL-UMA	COS/FUV, TIME-TAG, PSA	G130M 1309 A	FP-POS=3; SEGMENT=A; BUFFER-TIME=11 1; LIFETIME-POS=A LTERNATE	200 Secs (200 Secs)	[2]
						[==>]	
17	Move to +60 0	NONE	COS, ALIGN/OSM		FOCUS=+600	0 Secs (0 Secs)	
						[==>]	[2]
18	1309_A_f+6 00 (COS.sp.606 970)	(1) V-KL-UMA	COS/FUV, TIME-TAG, PSA	G130M 1309 A	FP-POS=3; SEGMENT=A; BUFFER-TIME=11 1; LIFETIME-POS=A LTERNATE	200 Secs (200 Secs)	[2]
						[==>]	
19	Move to +80 0	NONE	COS, ALIGN/OSM		FOCUS=+800	0 Secs (0 Secs)	
						[==>]	[2]
20	1309_A_f+8 00 (COS.sp.606 970)	(1) V-KL-UMA	COS/FUV, TIME-TAG, PSA	G130M 1309 A	FP-POS=3; SEGMENT=A; BUFFER-TIME=11 1; LIFETIME-POS=A LTERNATE	200 Secs (200 Secs)	[2]
						[==>]	
21	Move to +10 00	NONE	COS, ALIGN/OSM		FOCUS=+1000	0 Secs (0 Secs)	
						[==>]	[2]
22	1309_A_f+1 000 (COS.sp.606 970)	(1) V-KL-UMA	COS/FUV, TIME-TAG, PSA	G130M 1309 A	FP-POS=3; SEGMENT=A; BUFFER-TIME=11 1; LIFETIME-POS=A LTERNATE	200 Secs (200 Secs)	[2]
						[==>]	

Proposal 13635 - G130M focus (1A) - FUV Focus Sweep Enabling Program for COS at LP3 (LENA2)

23	1309_B_f+1 000 (COS.sp.606 977)	(1) V-KL-UMA	COS/FUV, TIME-TAG, PSA	G130M 1309 A	FP-POS=3; SEGMENT=B; BUFFER-TIME=10 0; LIFETIME-POS=A LTERNATE	110 Secs (110 Secs) [==>]	[2]
<i>Comments: Switch to segment B, this exposure is at a focus offset of +1000. S/N=37 at 1230 A</i>							
24	Move to +80 0	NONE	COS, ALIGN/OSM		FOCUS=+800	0 Secs (0 Secs) [==>]	[2]
25	1309_B_f+8 00 (COS.sp.606 977)	(1) V-KL-UMA	COS/FUV, TIME-TAG, PSA	G130M 1309 A	FP-POS=3; SEGMENT=B; BUFFER-TIME=10 0; LIFETIME-POS=A LTERNATE	110 Secs (110 Secs) [==>]	[3]
26	Move to +60 0	NONE	COS, ALIGN/OSM		FOCUS=+600	0 Secs (0 Secs) [==>]	[3]
27	1309_B_f+6 00 (COS.sp.606 977)	(1) V-KL-UMA	COS/FUV, TIME-TAG, PSA	G130M 1309 A	FP-POS=3; SEGMENT=B; BUFFER-TIME=10 0; LIFETIME-POS=A LTERNATE	110 Secs (110 Secs) [==>]	[3]
28	Move to +40 0	NONE	COS, ALIGN/OSM		FOCUS=+400	0 Secs (0 Secs) [==>]	[3]
29	1309_B_f+4 00 (COS.sp.606 975)	(1) V-KL-UMA	COS/FUV, TIME-TAG, PSA	G130M 1309 A	FP-POS=3; SEGMENT=B; BUFFER-TIME=10 0; LIFETIME-POS=A LTERNATE	120 Secs (120 Secs) [==>]	[3]
<i>Comments: S/N=39 at 1230A</i>							
30	Move to +20 0	NONE	COS, ALIGN/OSM		FOCUS=+200	0 Secs (0 Secs) [==>]	[3]
31	1309_B_f+2 00 (COS.sp.606 975)	(1) V-KL-UMA	COS/FUV, TIME-TAG, PSA	G130M 1309 A	FP-POS=3; SEGMENT=B; BUFFER-TIME=10 0; LIFETIME-POS=A LTERNATE	120 Secs (120 Secs) [==>]	[3]
32	Move to 0	NONE	COS, ALIGN/OSM		FOCUS=0	0 Secs (0 Secs) [==>]	[3]
33	1309_B_f-0 (COS.sp.606 975)	(1) V-KL-UMA	COS/FUV, TIME-TAG, PSA	G130M 1309 A	FP-POS=3; SEGMENT=B; BUFFER-TIME=10 0; LIFETIME-POS=A LTERNATE	120 Secs (120 Secs) [==>]	[3]

Proposal 13635 - G130M focus (1A) - FUV Focus Sweep Enabling Program for COS at LP3 (LENA2)

34	Move to -20 0	NONE	COS, ALIGN/OSM		FOCUS=-200	0 Secs (0 Secs)	[3]
						[==>]	
35	1309_B_f-2 00 (COS.sp.606 975)	(1) V-KL-UMA	COS/FUV, TIME-TAG, PSA	G130M 1309 A	FP-POS=3; SEGMENT=B; BUFFER-TIME=10 0; LIFETIME-POS=A LTERNATE	120 Secs (120 Secs)	[3]
						[==>]	
36	Move to -40 0	NONE	COS, ALIGN/OSM		FOCUS=-400	0 Secs (0 Secs)	[3]
						[==>]	
37	1309_B_f-4 00 (COS.sp.606 975)	(1) V-KL-UMA	COS/FUV, TIME-TAG, PSA	G130M 1309 A	FP-POS=3; SEGMENT=B; BUFFER-TIME=10 0; LIFETIME-POS=A LTERNATE	120 Secs (120 Secs)	[3]
						[==>]	
38	Move to -60 0	NONE	COS, ALIGN/OSM		FOCUS=-600	0 Secs (0 Secs)	[3]
						[==>]	
39	1309_B_f-6 00 (COS.sp.606 977)	(1) V-KL-UMA	COS/FUV, TIME-TAG, PSA	G130M 1309 A	FP-POS=3; SEGMENT=B; BUFFER-TIME=10 0; LIFETIME-POS=A LTERNATE	110 Secs (110 Secs)	[3]
						[==>]	
<i>Comments: S/N=37 at 1230A</i>							
40	Move to -80 0	NONE	COS, ALIGN/OSM		FOCUS=-800	0 Secs (0 Secs)	[3]
						[==>]	
41	1309_B_f-8 00 (COS.sp.606 977)	(1) V-KL-UMA	COS/FUV, TIME-TAG, PSA	G130M 1309 A	FP-POS=3; SEGMENT=B; BUFFER-TIME=10 0; LIFETIME-POS=A LTERNATE	110 Secs (110 Secs)	[3]
						[==>]	
42	1222_B_init ial	(1) V-KL-UMA	COS/FUV, TIME-TAG, PSA	G130M 1222 A	FP-POS=3; SEGMENT=B; BUFFER-TIME=10 00; LIFETIME-POS=A LTERNATE; FLASH=NO; WAVECAL=NO	0.1 Secs (0.1 Secs)	[4]
						[==>]	
<i>Comments: Setting up the instrument for G130M/1222 Seg B</i>							
43	Move to -80 0	NONE	COS, ALIGN/OSM		FOCUS=-800	0 Secs (0 Secs)	[4]
						[==>]	

Proposal 13635 - G130M focus (1A) - FUV Focus Sweep Enabling Program for COS at LP3 (LENA2)

44	1222_B_f-8 00 (COS.sp.607 559)	(1) V-KL-UMA	COS/FUV, TIME-TAG, PSA	G130M 1222 A	FP-POS=3; SEGMENT=B; BUFFER-TIME=11 7; LIFETIME-POS=A LTERNATE	100 Secs (100 Secs) [==>]	[4]
<i>Comments: S/N = 30 Switching cenwave from 1309 to 1222.</i>							
45	Move to -60 0	NONE	COS, ALIGN/OSM		FOCUS=-600	0 Secs (0 Secs) [==>]	[4]
46	1222_B_f-6 00 (COS.sp.607 559)	(1) V-KL-UMA	COS/FUV, TIME-TAG, PSA	G130M 1222 A	FP-POS=3; SEGMENT=B; BUFFER-TIME=11 7; LIFETIME-POS=A LTERNATE	100 Secs (100 Secs) [==>]	[4]
<i>Comments: S/N = 30</i>							
47	Move to -40 0	NONE	COS, ALIGN/OSM		FOCUS=-400	0 Secs (0 Secs) [==>]	[4]
48	1222_B_f-4 00 (COS.sp.607 559)	(1) V-KL-UMA	COS/FUV, TIME-TAG, PSA	G130M 1222 A	FP-POS=3; SEGMENT=B; BUFFER-TIME=11 7; LIFETIME-POS=A LTERNATE	100 Secs (100 Secs) [==>]	[4]
<i>Comments: S/N = 30</i>							
49	Move to -20 0	NONE	COS, ALIGN/OSM		FOCUS=-200	0 Secs (0 Secs) [==>]	[4]
50	1222_B_f-2 00 (COS.sp.607 559)	(1) V-KL-UMA	COS/FUV, TIME-TAG, PSA	G130M 1222 A	FP-POS=3; SEGMENT=B; BUFFER-TIME=11 7; LIFETIME-POS=A LTERNATE	100 Secs (100 Secs) [==>]	[4]
<i>Comments: S/N = 30</i>							
51	Move to 0	NONE	COS, ALIGN/OSM		FOCUS=0	0 Secs (0 Secs) [==>]	[4]
52	1222_B_f-0 (COS.sp.607 559)	(1) V-KL-UMA	COS/FUV, TIME-TAG, PSA	G130M 1222 A	FP-POS=3; SEGMENT=B; BUFFER-TIME=11 7; LIFETIME-POS=A LTERNATE	100 Secs (100 Secs) [==>]	[4]
<i>Comments: S/N = 30</i>							
53	Move to +20 0	NONE	COS, ALIGN/OSM		FOCUS=+200	0 Secs (0 Secs) [==>]	[4]

Proposal 13635 - G130M focus (1A) - FUV Focus Sweep Enabling Program for COS at LP3 (LENA2)

54	1222_B_f+2 (1) V-KL-UMA 00 (COS.sp.607 559)	COS/FUV, TIME-TAG, PSA	G130M 1222 A	FP-POS=3; SEGMENT=B; BUFFER-TIME=11 7; LIFETIME-POS=A LTERNATE	100 Secs (100 Secs) [==>]	[4]
<i>Comments: S/N = 30</i>						
55	Move to +40 NONE 0	COS, ALIGN/OSM		FOCUS=+400	0 Secs (0 Secs) [==>]	[4]
56	1222_B_f+4 (1) V-KL-UMA 00 (COS.sp.607 559)	COS/FUV, TIME-TAG, PSA	G130M 1222 A	FP-POS=3; SEGMENT=B; BUFFER-TIME=11 7; LIFETIME-POS=A LTERNATE	100 Secs (100 Secs) [==>]	[4]
<i>Comments: S/N = 30</i>						
57	Move to +60 NONE 0	COS, ALIGN/OSM		FOCUS=+600	0 Secs (0 Secs) [==>]	[4]
58	1222_B_f+6 (1) V-KL-UMA 00 (COS.sp.607 559)	COS/FUV, TIME-TAG, PSA	G130M 1222 A	FP-POS=3; SEGMENT=B; BUFFER-TIME=11 7; LIFETIME-POS=A LTERNATE	100 Secs (100 Secs) [==>]	[4]
<i>Comments: S/N = 30</i>						
59	Move to +80 NONE 0	COS, ALIGN/OSM		FOCUS=+800	0 Secs (0 Secs) [==>]	[4]
60	1222_B_f+8 (1) V-KL-UMA 00 (COS.sp.607 559)	COS/FUV, TIME-TAG, PSA	G130M 1222 A	FP-POS=3; SEGMENT=B; BUFFER-TIME=11 7; LIFETIME-POS=A LTERNATE	100 Secs (100 Secs) [==>]	[4]
<i>Comments: S/N = 30</i>						
61	Move to +10 NONE 00	COS, ALIGN/OSM		FOCUS=+1000	0 Secs (0 Secs) [==>]	[4]
62	1222_B_f+1 (1) V-KL-UMA 000 (COS.sp.607 559)	COS/FUV, TIME-TAG, PSA	G130M 1222 A	FP-POS=3; SEGMENT=B; BUFFER-TIME=11 7; LIFETIME-POS=A LTERNATE	100 Secs (100 Secs) [==>]	[5]
<i>Comments: This exposure time give a S/N=30 at 1150</i>						

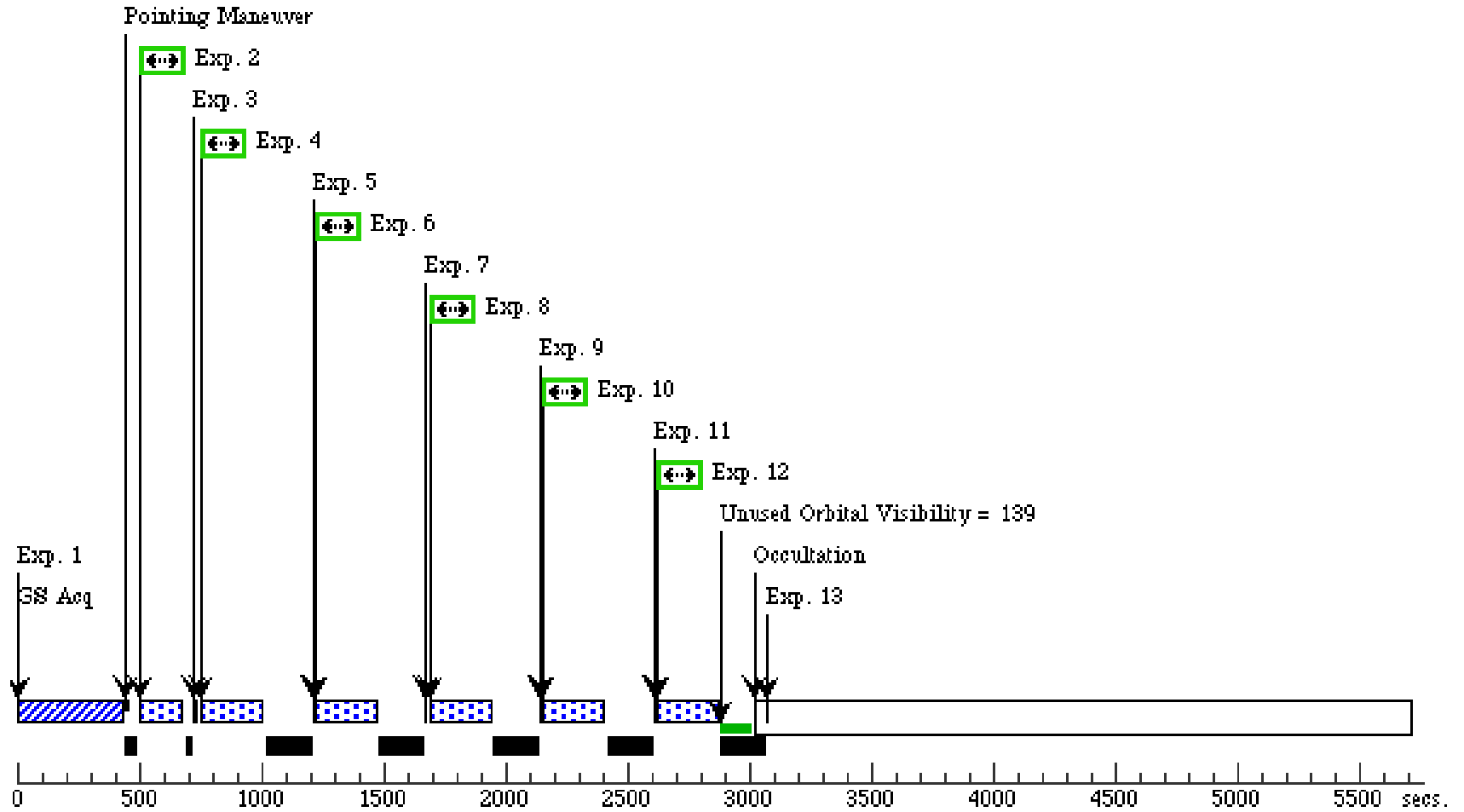
Proposal 13635 - G130M focus (1A) - FUV Focus Sweep Enabling Program for COS at LP3 (LENA2)

63	Ramp Down DARK to HVLOW	S/C, DATA, NONE	NEW OBSET; QASISTATES COS SI OPERATE OPER ATE; QASISTATES COS FUV HVLOW HVL OW; QASISTATES COS NUV HVSAA HVS AA	1 Secs (1 Secs) [==>]	[5]
<i>Comments: Use this S/C to force a ramp down to HVLOW</i>					

Orbit 1

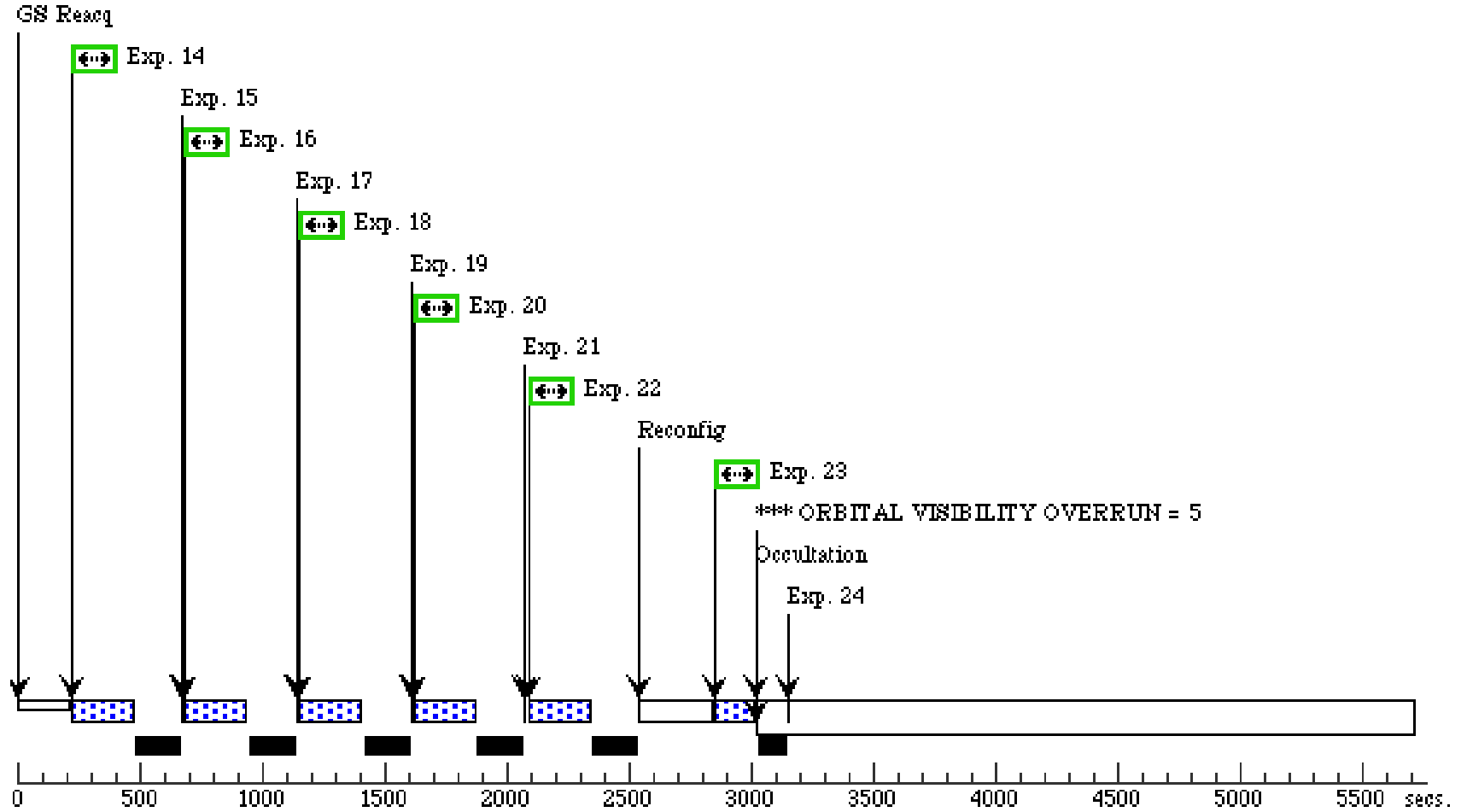
Server Version: 20140605

Orbit Structure



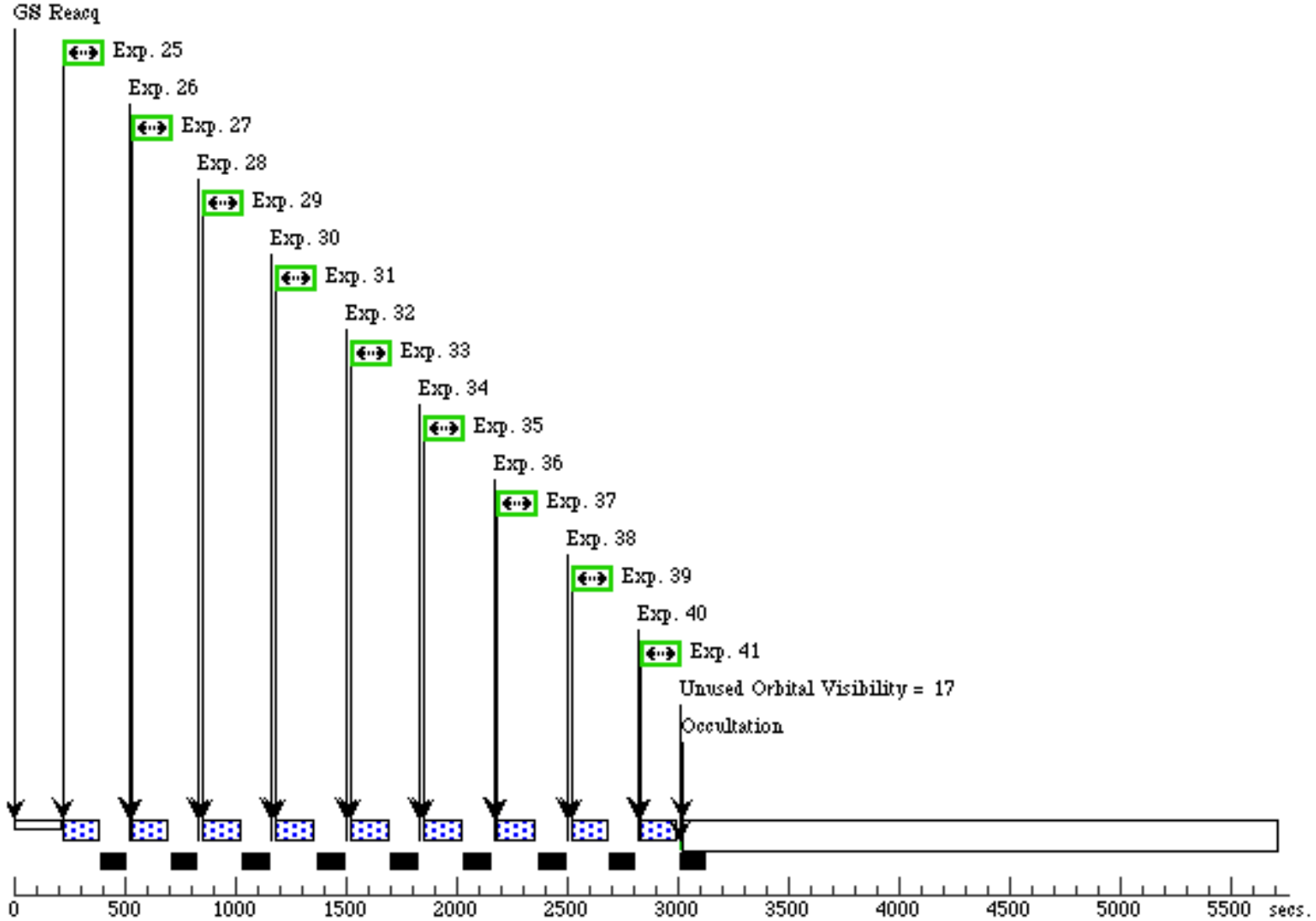
Orbit 2

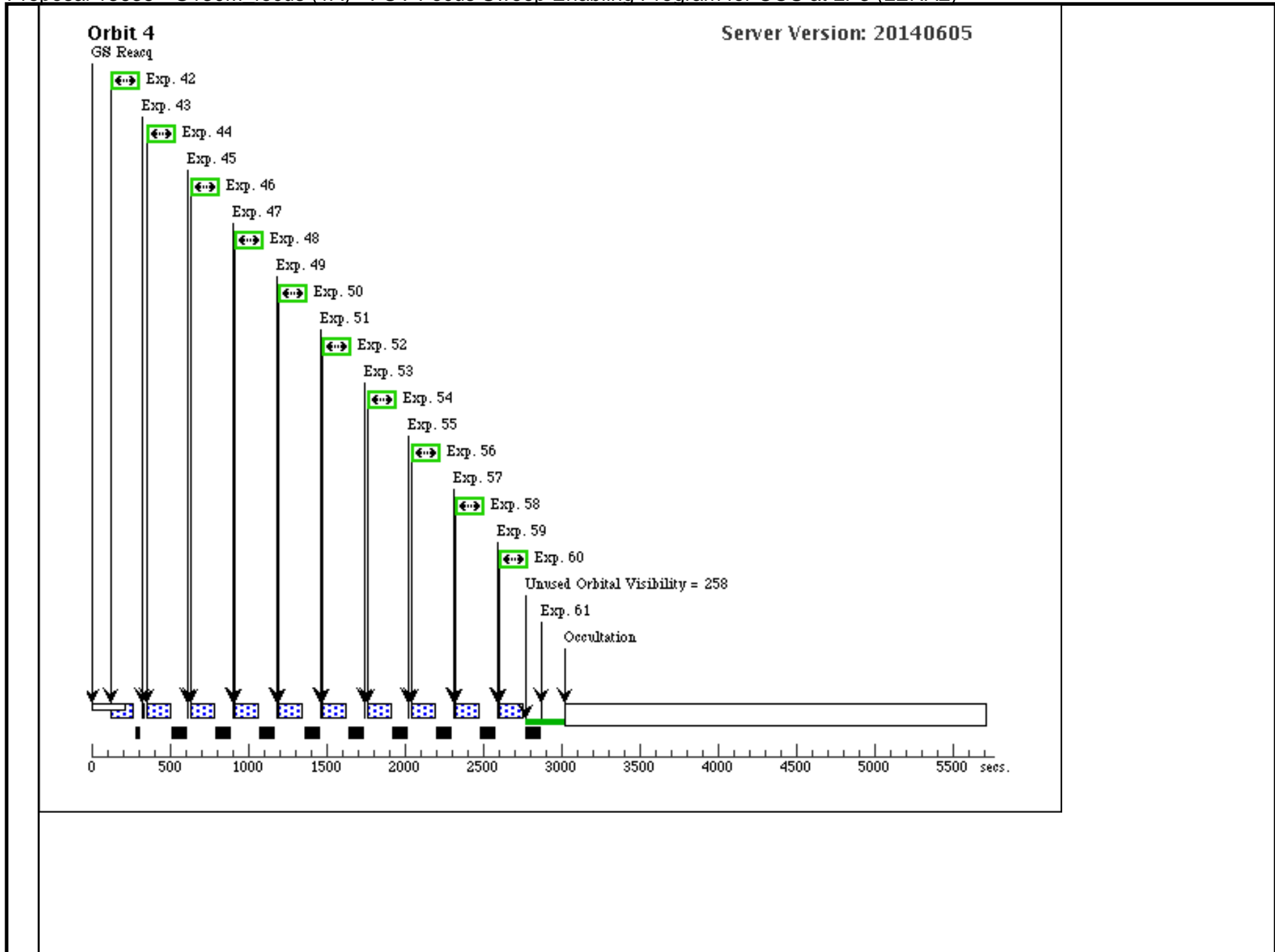
Server Version: 20140605

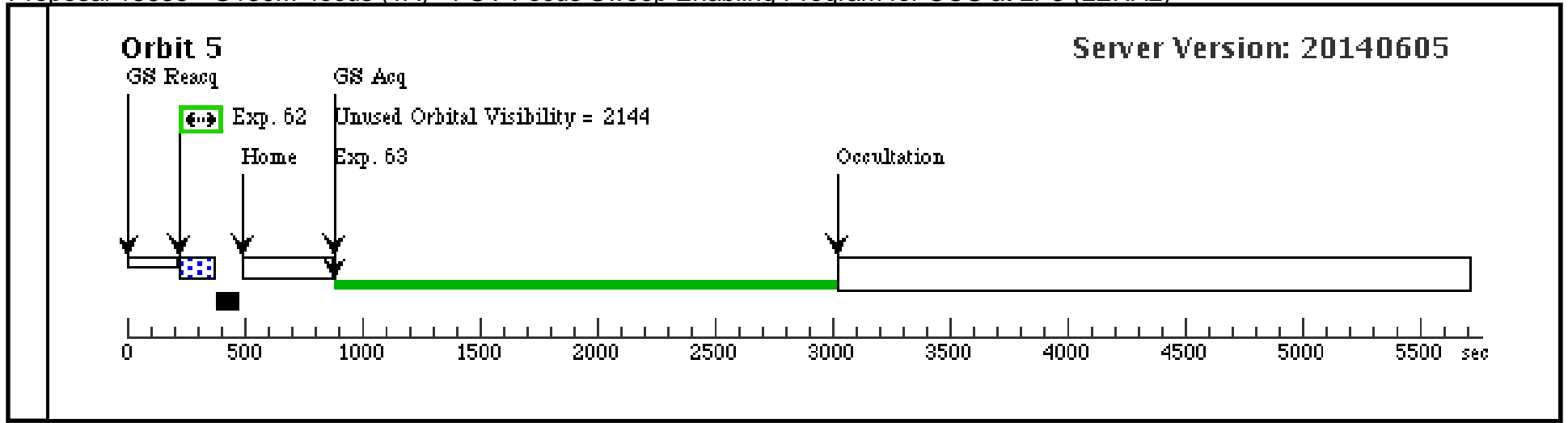


Orbit 3

Server Version: 20140605







Proposal 13635 - G160M focus (2A) - FUV Focus Sweep Enabling Program for COS at LP3 (LENA2)

Thu Jul 10 01:02:37 GMT 2014

Visit	<p>Proposal 13635, G160M_focus (2A)</p> <p>Diagnostic Status: Warning</p> <p>Scientific Instruments: COS/NUV, S/C, COS/FUV, COS</p> <p>Special Requirements: SCHED 100%</p>					
	<p>(G160M_focus (2A)) Warning (Form): For the best data quality, it is strongly recommended that all four FP-POS positions be used when observing at a given COS CENWAVE setting.</p> <p>(1600_initial (2A.002)) Warning (Form): Sensitive exposures should have an ETC run number provided.</p>					
Diagnosics						
Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
	(1)	V-KL-UMA Alt Name1: FEIGE48	RA: 11 47 14.4900 (176.8103750d) Dec: +61 15 31.80 (61.25883d) Equinox: J2000	Proper Motion RA: 0.00333 sec of time/yr Proper Motion Dec: 0 Epoch of Position: 2000	V=13.28	Reference Frame: ICRS
<p><i>Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.</i></p>						

Proposal 13635 - G160M focus (2A) - FUV Focus Sweep Enabling Program for COS at LP3 (LENA2)

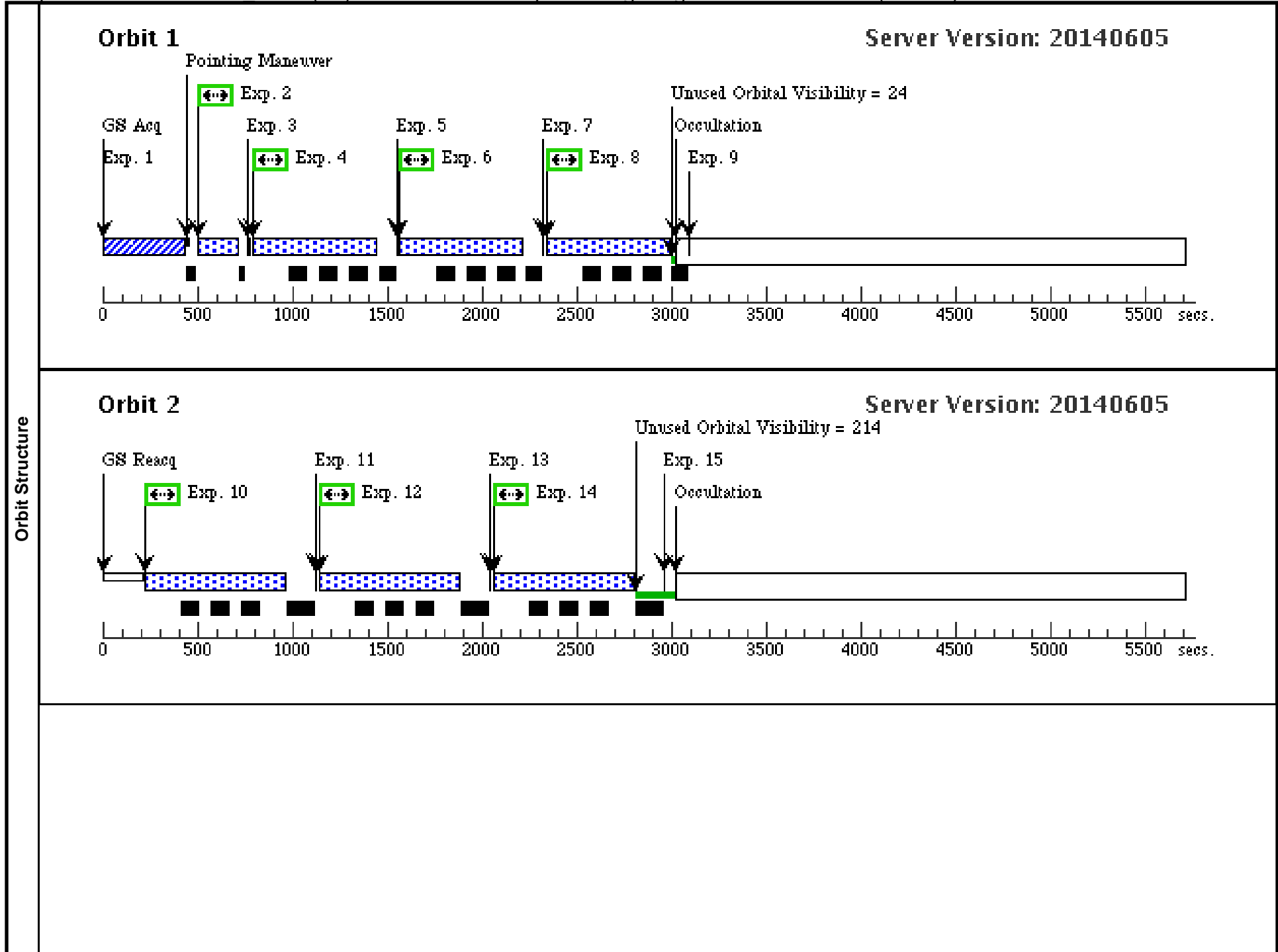
#	Label (ETC Run)	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit	
Exposures	1	ACQ/IMAG E (COS.ta.607 556)	(1) V-KL-UMA	COS/NUV, ACQ/IMAGE, BOA	MIRRORA			16 Secs (16 Secs) [==>]	[1]	
	<i>Comments: S/N=60</i>									
	2	1600_initial	(1) V-KL-UMA	COS/FUV, TIME-TAG, PSA	G160M 1600 A	FP-POS=3; BUFFER-TIME=10 00; LIFETIME-POS=A LTERNATE; WAVECAL=NO; FLASH=NO			0.1 Secs (0.1 Secs) [==>]	[1]
	<i>Comments: Setting configuration of G160M/1600</i>									
	3	Move to -80 0	NONE		COS, ALIGN/OSM		FOCUS=-800		0 Secs (0 Secs) [==>]	[1]
	4	1600_f-800 (COS.sp.608 219)	(1) V-KL-UMA	COS/FUV, TIME-TAG, PSA	G160M 1600 A	FP-POS=3; BUFFER-TIME=15 9; LIFETIME-POS=A LTERNATE			600 Secs (600 Secs) [==>]	[1]
	<i>Comments: Replicating exposure time used in FENA3 (focus sweep for LP2). S/N=36 at wavelength 1607 A</i>									
	5	Move to -60 0	NONE		COS, ALIGN/OSM		FOCUS=-600		0 Secs (0 Secs) [==>]	[1]
	6	1600_f-600 (COS.sp.608 219)	(1) V-KL-UMA	COS/FUV, TIME-TAG, PSA	G160M 1600 A	FP-POS=3; BUFFER-TIME=15 9; LIFETIME-POS=A LTERNATE			600 Secs (600 Secs) [==>]	[1]
	7	Move to -40 0	NONE		COS, ALIGN/OSM		FOCUS=-400		0 Secs (0 Secs) [==>]	[1]
	8	1600_f-400 (COS.sp.608 219)	(1) V-KL-UMA	COS/FUV, TIME-TAG, PSA	G160M 1600 A	FP-POS=3; BUFFER-TIME=15 9; LIFETIME-POS=A LTERNATE			600 Secs (600 Secs) [==>]	[1]
9	Move to -20 0	NONE		COS, ALIGN/OSM		FOCUS=-200		0 Secs (0 Secs) [==>]	[1]	
10	1600_f-200 (COS.sp.608 220)	(1) V-KL-UMA	COS/FUV, TIME-TAG, PSA	G160M 1600 A	FP-POS=3; BUFFER-TIME=15 9; LIFETIME-POS=A LTERNATE			690 Secs (690 Secs) [==>]	[2]	
<i>Comments: S/N=38 at wavelength 1607 A</i>										
11	Move to 0	NONE		COS, ALIGN/OSM		FOCUS=0		0 Secs (0 Secs) [==>]	[2]	

Proposal 13635 - G160M focus (2A) - FUV Focus Sweep Enabling Program for COS at LP3 (LENA2)

12	1600_f-0 (COS.sp.608 220)	(1) V-KL-UMA	COS/FUV, TIME-TAG, PSA	G160M 1600 A	FP-POS=3; BUFFER-TIME=15 9; LIFETIME-POS=A LTERNATE	690 Secs (690 Secs) [==>]	[2]
13	Move to +20 0	NONE	COS, ALIGN/OSM		FOCUS=+200	0 Secs (0 Secs) [==>]	[2]
14	1600_f+200 (COS.sp.608 220)	(1) V-KL-UMA	COS/FUV, TIME-TAG, PSA	G160M 1600 A	FP-POS=3; BUFFER-TIME=15 9; LIFETIME-POS=A LTERNATE	690 Secs (690 Secs) [==>]	[2]
15	Move to +40 0	NONE	COS, ALIGN/OSM		FOCUS=+400	0 Secs (0 Secs) [==>]	[2]
16	1600_f+400 (COS.sp.608 221)	(1) V-KL-UMA	COS/FUV, TIME-TAG, PSA	G160M 1600 A	FP-POS=3; BUFFER-TIME=15 9; LIFETIME-POS=A LTERNATE	580 Secs (580 Secs) [==>]	[3]
<i>Comments: S/N=35 at 1607 A</i>							
17	Move to +60 0	NONE	COS, ALIGN/OSM		FOCUS=+600	0 Secs (0 Secs) [==>]	[3]
18	1600_f+600 (COS.sp.608 221)	(1) V-KL-UMA	COS/FUV, TIME-TAG, PSA	G160M 1600 A	FP-POS=3; BUFFER-TIME=15 9; LIFETIME-POS=A LTERNATE	580 Secs (580 Secs) [==>]	[3]
19	Move to +80 0	NONE	COS, ALIGN/OSM		FOCUS=+800	0 Secs (0 Secs) [==>]	[3]
20	1600_f+800 (COS.sp.608 221)	(1) V-KL-UMA	COS/FUV, TIME-TAG, PSA	G160M 1600 A	FP-POS=3; BUFFER-TIME=15 9; LIFETIME-POS=A LTERNATE	580 Secs (580 Secs) [==>]	[3]
21	Move to +10 00	NONE	COS, ALIGN/OSM		FOCUS=+1000	0 Secs (0 Secs) [==>]	[3]
22	1600_f+100 (COS.sp.608 222)	(1) V-KL-UMA	COS/FUV, TIME-TAG, PSA	G160M 1600 A	FP-POS=3; BUFFER-TIME=15 9; LIFETIME-POS=A LTERNATE	500 Secs (500 Secs) [==>]	[3]
<i>Comments: S/N=33 at 1607</i>							

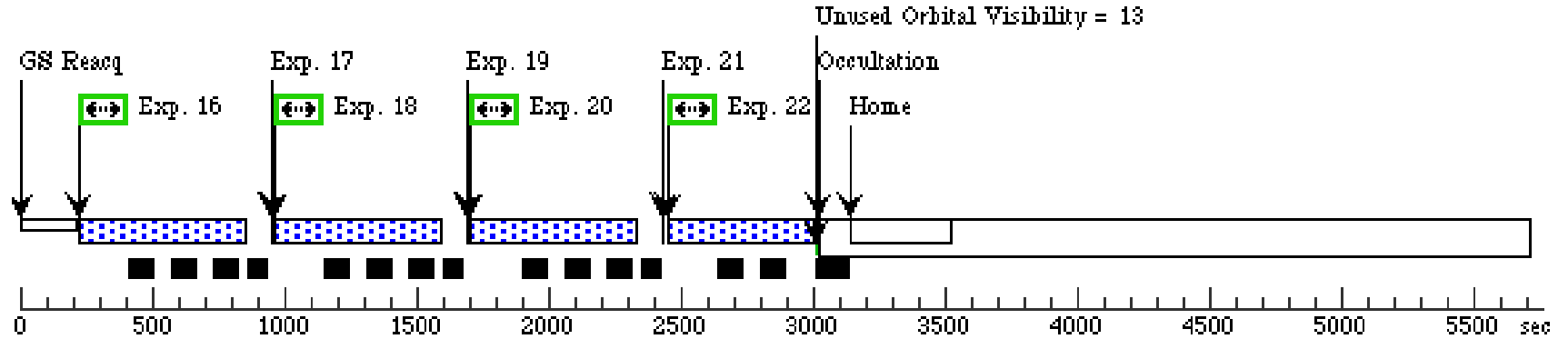
Proposal 13635 - G160M focus (2A) - FUV Focus Sweep Enabling Program for COS at LP3 (LENA2)

	23 Ramp Down DARK to HVLOW	S/C, DATA, NONE	NEW OBSET; QASISTATES COS SI OPERATE OPER ATE; QASISTATES COS FUV HVLOW HVL OW; QASISTATES COS NUV HVSAA HVS AA	1 Secs (1 Secs) [==>]	[4]
<i>Comments: Use this S/C to force a ramp down to HVLOW</i>					



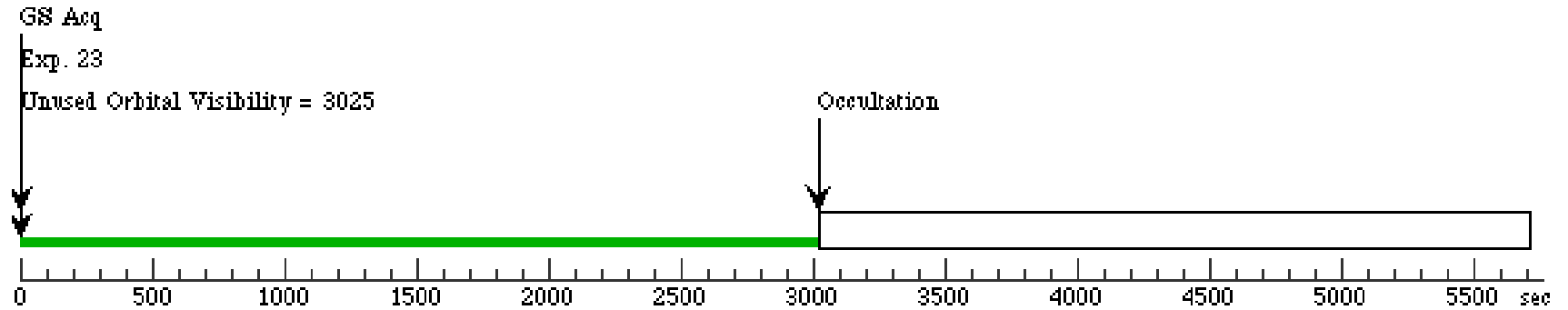
Orbit 3

Server Version: 20140605



Orbit 4

Server Version: 20140605



Proposal 13635 - G140L focus (3A) - FUV Focus Sweep Enabling Program for COS at LP3 (LENA2)

Thu Jul 10 01:02:37 GMT 2014

Visit	<p>Proposal 13635, G140L_focus (3A)</p> <p>Diagnostic Status: Warning</p> <p>Scientific Instruments: COS/NUV, S/C, COS/FUV, COS</p> <p>Special Requirements: SCHED 100%</p> <p><i>Comments: Target count rates: In the G140L/1105 setting the target's local count rate is 0.75 cts/sec/pix which is above the local limit of 0.67 cts/sec/pix. This violation happens where the P-Cygni profile from N V falls. In this kind of stars the strength of the P-Cygni profile is not supposed to increase, if anything it is the absorption that changes. This target was observed in FENA3 with the same exposure time of 200s and it proved no damage to the detectors.</i></p>																
	<p>(G140L_focus (3A)) Warning (Form): For the best data quality, it is strongly recommended that all four FP-POS positions be used when observing at a given COS CENWAVE setting.</p> <p>(1105_initial (3A.002)) Warning (Form): Sensitive exposures should have an ETC run number provided.</p>																
Fixed Targets	<table border="1"> <thead> <tr> <th>#</th> <th>Name</th> <th>Target Coordinates</th> <th>Targ. Coord. Corrections</th> <th>Fluxes</th> <th>Miscellaneous</th> </tr> </thead> <tbody> <tr> <td>(2)</td> <td>AZV75</td> <td>RA: 00 50 32.3900 (12.6349583d) Dec: -72 52 36.50 (-72.87681d) Equinox: J2000</td> <td></td> <td>V=12.79</td> <td>Reference Frame: ICRS</td> </tr> </tbody> </table> <p><i>Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.</i></p>					#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous	(2)	AZV75	RA: 00 50 32.3900 (12.6349583d) Dec: -72 52 36.50 (-72.87681d) Equinox: J2000		V=12.79	Reference Frame: ICRS
	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous											
(2)	AZV75	RA: 00 50 32.3900 (12.6349583d) Dec: -72 52 36.50 (-72.87681d) Equinox: J2000		V=12.79	Reference Frame: ICRS												

Proposal 13635 - G140L focus (3A) - FUV Focus Sweep Enabling Program for COS at LP3 (LENA2)

#	Label (ETC Run)	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit	
Exposures	1	ACQ/IMAG E (COS.ta.607 440)	(2) AZV75	COS/NUV, ACQ/IMAGE, BOA	MIRRORA			15 Secs (15 Secs) [==>]	[1]	
	2	1105_initial	(2) AZV75	COS/FUV, TIME-TAG, PSA	G140L 1105 A	BUFFER-TIME=10 00; FP-POS=3; LIFETIME-POS=A LTERNATE; FLASH=NO; WAVECAL=NO		0.1 Secs (0.1 Secs) [==>]	[1]	
	<i>Comments: Setting instrument configuration to G140L/1105</i>									
	3	Move to -80 0	NONE		COS, ALIGN/OSM		FOCUS=-800		0 Secs (0 Secs) [==>]	[1]
	4	1105_f-800 (COS.sp.608 224)	(2) AZV75	COS/FUV, TIME-TAG, PSA	G140L 1105 A	BUFFER-TIME=10 0; FP-POS=3; LIFETIME-POS=A LTERNATE			200 Secs (200 Secs) [==>]	[1]
	<i>Comments: These exposures use the same exposure time as the ones used in FENA3 for this same configuration.</i>									
	5	Move to -60 0	NONE		COS, ALIGN/OSM		FOCUS=-600		0 Secs (0 Secs) [==>]	[1]
	6	1105_f-600 (COS.sp.608 224)	(2) AZV75	COS/FUV, TIME-TAG, PSA	G140L 1105 A	BUFFER-TIME=10 0; FP-POS=3; LIFETIME-POS=A LTERNATE			200 Secs (200 Secs) [==>]	[1]
	7	Move to -40 0	NONE		COS, ALIGN/OSM		FOCUS=-400		0 Secs (0 Secs) [==>]	[1]
	8	1105_f-400 (COS.sp.608 224)	(2) AZV75	COS/FUV, TIME-TAG, PSA	G140L 1105 A	BUFFER-TIME=10 0; FP-POS=3; LIFETIME-POS=A LTERNATE			200 Secs (200 Secs) [==>]	[1]
	9	Move to -20 0	NONE		COS, ALIGN/OSM		FOCUS=-200		0 Secs (0 Secs) [==>]	[1]
	10	1105_f-200 (COS.sp.608 224)	(2) AZV75	COS/FUV, TIME-TAG, PSA	G140L 1105 A	BUFFER-TIME=10 0; FP-POS=3; LIFETIME-POS=A LTERNATE			200 Secs (200 Secs) [==>]	[1]
11	Move to -10 0	NONE		COS, ALIGN/OSM		FOCUS=-100		0 Secs (0 Secs) [==>]	[1]	
12	1105_f-100 (COS.sp.608 224)	(2) AZV75	COS/FUV, TIME-TAG, PSA	G140L 1105 A	BUFFER-TIME=10 0; FP-POS=3; LIFETIME-POS=A LTERNATE			200 Secs (200 Secs) [==>]	[1]	

Proposal 13635 - G140L focus (3A) - FUV Focus Sweep Enabling Program for COS at LP3 (LENA2)

13	Move to 0	NONE	COS, ALIGN/OSM		FOCUS=0	0 Secs (0 Secs)	
						[==>]	[1]
14	1105_f-0 (COS.sp.608 224)	(2) AZV75	COS/FUV, TIME-TAG, PSA	G140L 1105 A	BUFFER-TIME=10 0; FP-POS=3; LIFETIME-POS=A LTERNATE	200 Secs (200 Secs)	[1]
15	Move to +10 0	NONE	COS, ALIGN/OSM		FOCUS=+100	0 Secs (0 Secs)	
						[==>]	[1]
16	1105_f+100 (COS.sp.608 224)	(2) AZV75	COS/FUV, TIME-TAG, PSA	G140L 1105 A	BUFFER-TIME=10 0; FP-POS=3; LIFETIME-POS=A LTERNATE	200 Secs (200 Secs)	[2]
17	Move to +20 0	NONE	COS, ALIGN/OSM		FOCUS=+200	0 Secs (0 Secs)	
						[==>]	[2]
18	1105_f+200 (COS.sp.608 224)	(2) AZV75	COS/FUV, TIME-TAG, PSA	G140L 1105 A	BUFFER-TIME=10 0; FP-POS=3; LIFETIME-POS=A LTERNATE	200 Secs (200 Secs)	[2]
19	Move to +40 0	NONE	COS, ALIGN/OSM		FOCUS=+400	0 Secs (0 Secs)	
						[==>]	[2]
20	1105_f+400 (COS.sp.608 224)	(2) AZV75	COS/FUV, TIME-TAG, PSA	G140L 1105 A	BUFFER-TIME=10 0; FP-POS=3; LIFETIME-POS=A LTERNATE	200 Secs (200 Secs)	[2]
21	Move to +60 0	NONE	COS, ALIGN/OSM		FOCUS=+600	0 Secs (0 Secs)	
						[==>]	[2]
22	1105_f+600 (COS.sp.608 224)	(2) AZV75	COS/FUV, TIME-TAG, PSA	G140L 1105 A	BUFFER-TIME=10 0; FP-POS=3; LIFETIME-POS=A LTERNATE	200 Secs (200 Secs)	[2]
23	Move to +80 0	NONE	COS, ALIGN/OSM		FOCUS=+800	0 Secs (0 Secs)	
						[==>]	[2]
24	1105_f+800 (COS.sp.608 224)	(2) AZV75	COS/FUV, TIME-TAG, PSA	G140L 1105 A	BUFFER-TIME=10 0; FP-POS=3; LIFETIME-POS=A LTERNATE	200 Secs (200 Secs)	[2]
25	Move to 0	NONE	COS, ALIGN/OSM		FOCUS=0	0 Secs (0 Secs)	
						[==>]	[2]
26	1105_f-0 (COS.sp.608 224)	(2) AZV75	COS/FUV, TIME-TAG, PSA	G140L 1105 A	BUFFER-TIME=10 0; FP-POS=3; LIFETIME-POS=A LTERNATE	200 Secs (200 Secs)	[2]

Proposal 13635 - G140L focus (3A) - FUV Focus Sweep Enabling Program for COS at LP3 (LENA2)

27	Ramp Down DARK to HVLOW	S/C, DATA, NONE	NEW OBSET; QASISTATES COS SI OPERATE OPER ATE; QASISTATES COS FUV HVLOW HVL OW; QASISTATES COS NUV HVSAA HVS AA	1 Secs (1 Secs) [==>]	[2]
<i>Comments: Use this S/C to force a ramp down to HVLOW</i>					

