



12082 - Extending COS/G130M Coverage Down to 900A with Two New Central Wavelengths.

Cycle: 17, Proposal Category: CAL/COS

(Calibration)

(Availability Mode: RESTRICTED)

INVESTIGATORS

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VISITS

<i>Visit</i>	<i>Targets used in Visit</i>	<i>Configurations used in Visit</i>	<i>Orbits Used</i>	<i>Last Orbit Planner Run</i>	<i>OP Current with Visit?</i>
01	(1) WD0320-539 DARK	COS/FUV COS/NUV S/C	1	09-Jul-2010 22:01:57.0	yes
21	(4) GD-561 DARK	COS/FUV COS/NUV S/C	1	09-Jul-2010 22:02:07.0	yes
22	(4) GD-561 DARK	COS/FUV COS/NUV S/C	2	09-Jul-2010 22:02:17.0	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>
30	(5) WD-0439+466 DARK	COS/FUV COS/NUV S/C	1	09-Jul-2010 22:02:26.0	yes
31	(5) WD-0439+466 DARK	COS/FUV COS/NUV S/C	1	09-Jul-2010 22:02:36.0	yes
32	(5) WD-0439+466 DARK	COS/FUV COS/NUV S/C	2	09-Jul-2010 22:02:44.0	yes

8 Total Orbits Used

ABSTRACT

These exploratory observations will provide sensitivity, wavelength range, and resolution measurements for two new COS FUV G130M central wavelength settings. These new settings will extend COS/G130M coverage down to 9050 in two new bandpasses; 940-1237A (HotBLUE) and 900-1196A (Super-BLUE). The modes are chosen to provide continuous coverage from 900A to the existing coverage in the G130M/1291A setting with sufficient overlap in each mode for cross-calibration purposes. No focus adjustments will be made for these settings, as this is deemed an unnecessary risk to COS.

These new modes have the potential to provide greater than FUSE sensitivity at moderate (1,000-5,000) resolution.

Three WD targets are defined;

- 1) GD50 (GSC-04717-00588; a well observed standard WD)
- 2) WD0320-539 (GSC-08493-00891, one of the targets used in exploring the G140L sensitivity),
- 3) REJ0503-289 (WD-5001-289 = GSC-04717-00588, a hot EUVE bright WD)
- 4) GD561
- 5) WD0439+466 (FUVB ONLY)

But only targets 2,4 and 5 are used at this time.

In the observations section, G130M/1291A is a placeholder for the new settings.

OBSERVING DESCRIPTION

After a NUV Imaging TA:

- 1) we switch to the FUV,
- 2) redefine the G130M/1291 setting to the one of the experimental settings
- 3) observe for N sec at four FP-POS positions using FP=AUTO
- 4) redefine the G130M/1291 setting to the other experimental setting
- 5) observe for M sec at four FP-POS positions using FP=AUTO
- 6) restore the G130M/1291 definition

----- Version 2 -----

In the new version, there are 5 new visits, but only 2 are scheduled to be used (21, one orbit & 32, two-orbits).

Visit 21: GD561, one orbit

Visit 22: GD561, original two-orbit version

Visit 30: WD0439+466, one-orbit version with ACQ/IMAGE only

Visit 31: WD0439+466, one-orbit version with ACQ/IMAGE+3x3 ACQ/SEARCH

Visit 32: WD0439+466, two-orbit version with ACQ/IMAGE+3x3 ACQ/SEARCH

The coordinates for WD0439+466 are uncertain, so an ACQ/SEARCH was added to Visit 30 to create Visit 31. However, there is probably not enough signal in Visit 31 to accurately measure the resolution. Visit 32 (two-orbit) was created to achieve sufficient S/N. WD0439 is too bright to have the A segments on, so we need the one-orbit version of GD561 to obtain information about the A segment.

Visit 21 should be executed first, with a 14-23 days delay before executing Visit 32

CALIBRATION JUSTIFICATION

These exploratory observations will provide sensitivity, wavelength range, and resolution measurements for two new COS FUV G130M central wavelength settings. These new settings will extend COS/G130M coverage down to 900A in two new bandpasses; 1021-1171A (BLUE) and 905-1055A (Super-BLUE). The modes are chosen to provide continuous coverage from 900A to the existing coverage in the G130M/1291A setting with approximately 30A of overlap in each mode for cross-calibration purposes. No focus adjustments will be made for these settings, as this is deemed an unnecessary risk to COS (we use the existing 1291A focus)

***** The setting have been adjusted for all visits after Visit 01, the new settings are G130M/1055 (900-1197A, SuperBLUE) and G130M/1096 (940-1237A, HotBlue). *****

ADDITIONAL COMMENTS

Expected Count Rates/Total Counts For Visit 01 (the other count rates are given in the Visit Comments)

Mode	Estimated CountRate	Time	Total Counts	Total per 20p-RE	S/N = sqrt(per 20p-RE)
SuperBLUE-B	60	888	5.3E+04	76.1	8.7
SuperBLUE-A	8400	888	7.5E+06	10656.0	103.2
BLUE-B	4800	80	3.8E+05	548.6	23.4
BLUE-A	10650	80	8.5E+05	1217.1	34.9

Total expected counts = 8.7e+06

Proposal 12082 (STScI Edit Number: 2, Created: Friday, July 9, 2010 9:02:48 PM EST) - Overview

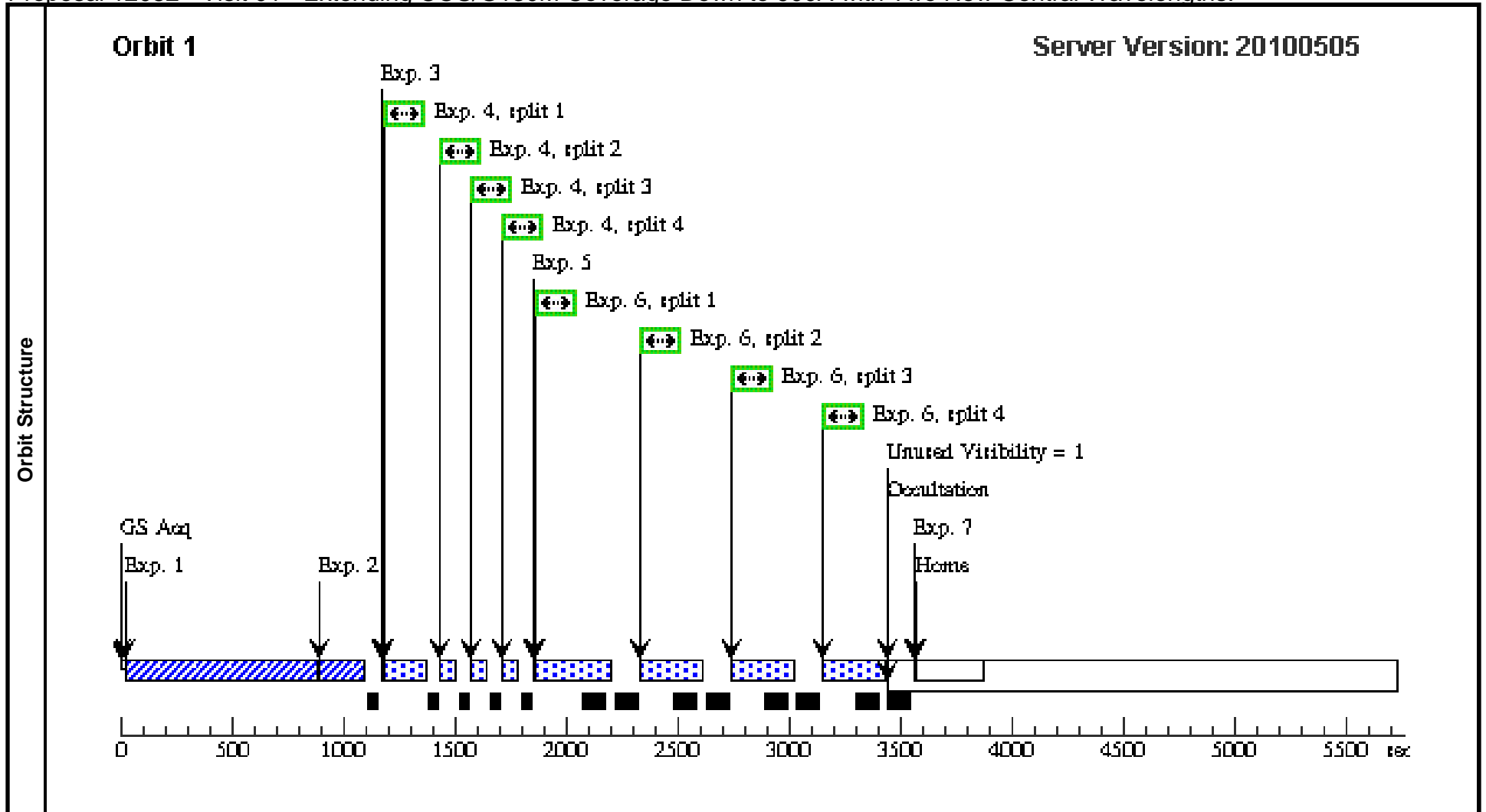
Visit	<p>Proposal 12082, Visit 01, completed Sat Jul 10 02:02:49 GMT 2010</p> <p>Diagnostic Status: Warning</p> <p>Scientific Instruments: COS/NUV, COS/FUV, S/C</p> <p>Special Requirements: (none)</p>																												
	<p>Diagnosics</p> <p>(Visit 01) Warning (Orbit Planner): INEFFICIENT ORDERING OF FP-POS POSITIONS</p> <p>(WD0320-539-BLUE (01.004)) Warning (Form): FP-POS=AUTO requires input of TOTAL exposure time for all four automatically-generated exposures. However, BUFFER-TIME must be specified for a single exposure, and will be applied to each of the four automatically-generated exposures.</p> <p>(WD030-539-SuperBLUE (01.006)) Warning (Form): FP-POS=AUTO requires input of TOTAL exposure time for all four automatically-generated exposures. However, BUFFER-TIME must be specified for a single exposure, and will be applied to each of the four automatically-generated exposures.</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>(1)</td> <td>WD0320-539</td> <td>RA: 03 22 14.8010 (50.5616708d)</td> <td>Proper Motion RA: 0.00101s/yr</td> <td>V=14.9</td> <td>Reference Frame: ICRS</td> </tr> <tr> <td></td> <td>Alt Name1: GSC-08493-00891</td> <td>Dec: -53 45 15.98 (-53.75444d)</td> <td>Proper Motion Dec: -0.066"/yr</td> <td>F(1000)=0.8E-12,</td> <td></td> </tr> <tr> <td></td> <td>Alt Name2: EUVEJ0322-53.7</td> <td>Equinox: J2000</td> <td>Epoch of Position: 2000</td> <td>F(1250)=0.5E-12</td> <td></td> </tr> </tbody> </table>					#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous	(1)	WD0320-539	RA: 03 22 14.8010 (50.5616708d)	Proper Motion RA: 0.00101s/yr	V=14.9	Reference Frame: ICRS		Alt Name1: GSC-08493-00891	Dec: -53 45 15.98 (-53.75444d)	Proper Motion Dec: -0.066"/yr	F(1000)=0.8E-12,			Alt Name2: EUVEJ0322-53.7	Equinox: J2000	Epoch of Position: 2000	F(1250)=0.5E-12	
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	Alt Name2: EUVEJ0322-53.7	Equinox: J2000	Epoch of Position: 2000	F(1250)=0.5E-12																									
<p><i>Comments: Flux from FUSE+STIS. Coordinates from 11491. Target previously observed in FUV with COS, so there should be no BOP constraints.</i></p>																													

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#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit
1	WD0320-53 9-ACQ/SEA RCH	(1) WD0320-539	COS/NUV, ACQ/SEARCH, BOA	MIRRORA	SCAN-SIZE=3; CENTER=FLUX-W T-FLR; STEP-SIZE=1.767	GS ACQ SCENARI O BASE1B3		30 Secs [==>]	[1]
<i>Comments: S/N=40 in 20s (COS.A2858828)</i>									
2	WD0320-53 9-ACQ/IMA GE	(1) WD0320-539	COS/NUV, ACQ/IMAGE, BOA	MIRRORA				45 Secs [==>]	[1]
<i>Comments: S/N=60 for BOA+MIRRORA in 45s (COS.A285827)</i>									
3	Special Com manding to t urn 1291 int o BLUE	DARK	S/C, DATA, NONE			SPEC COM INSTR ELCENTPATCH; QESIPARM ACTIO N REPLACE; QESIPARM CENT WAVE 1291; QESIPARM TEST WAVE 1184; QESIPARM STEP 8 040; QESIPARM RES1 2 474; QESIPARM RES2 7 113		10 Secs [==>]	[1]
<i>Comments: Special Commanding to overwrite the G130M/1291 settings with the G130M/1184 (BLUE) settings. OSM1 should be set to position of 8040, +45 steps from the G130M-1300A position of 7995. This shifts the Segment B coverage to 1021-1171A, and segment A to 1184-1324A.</i>									
4	WD0320-53 9-BLUE	(1) WD0320-539	COS/FUV, TIME-TAG, PSA	G130M 1291 A	BUFFER-TIME=11 0; FLASH=S0030D02 0; FP-POS=AUTO			80 Secs [==>(Split 1)] [==>(Split 2)] [==>(Split 3)] [==>(Split 4)]	[1]
<i>Comments: This is the Blue setting exposure. Segment A is about 10,000 counts/s. Use the focus position for G130M/1291A. The lamp will be on for the entire 20 seconds of each exposure. BT=132 from COS.A285713 (*2/3=88)</i>									
<i>SQL is required to set qelogsheet.minwave to 1184</i>									
5	Special Com manding to t urn 1291 int o SuperBLU E	DARK	S/C, DATA, NONE			SPEC COM INSTR ELCENTPATCH; QESIPARM ACTIO N REPLACE; QESIPARM CENT WAVE 1291; QESIPARM TEST WAVE 1066; QESIPARM STEP 8 088; QESIPARM RES1 2 726; QESIPARM RES2 7 365		10 Secs [==>]	[1]
<i>Comments: Special Commanding to overwrite the G130M/1291 settings with the G130M/1066 (SuperBLUE) settings. Special commanding is used to move OSM1 to the position of 8088, this is +89 steps from the G130M-1300A position of 7995. This shifts the Segment B coverage to 905-1055A, and Segment A to cover 1066-1208A. Use the focus position for G130M/1291A.</i>									

Proposal 12082 (STScI Edit Number: 2, Created: Friday, July 9, 2010 9:02:48 PM EST) - Overview

6	WD030-539 (1) WD0320-539 -SuperBLU E	COS/FUV, TIME-TAG, PSA	G130M 1291 A	BUFFER-TIME=11 2; FLASH=S0200D03 0; FP-POS=AUTO	888 Secs [==>(Split 1)] [==>(Split 2)] [==>(Split 3)] [==>(Split 4)]	[1]
<p><i>Comments: This is the Super-Blue setting. Use the focus position for G130M/1291A. Thirty second lamp exposure every 200 seconds. BT=132 from COS.A285713 (*2/3=88)</i></p>						
<p><i>SQL is required to set qelogsheet.minwave to 1066.</i></p>						
7	Special Com DARK manding to RESTORE 1 291	S/C, DATA, NONE		SPEC COM INSTR ELCENTPATCH; QESIPARM ACTION RESTORE; QESIPARM CENT WAVE 1291	10 Secs [==>]	[1]
<p><i>Comments: Special Commanding to restore the G130M/1291 settings.</i></p>						



Proposal 12082 - Visit 01 - Extending COS/G130M Coverage Down to 900A with Two New Central Wavelengths.

Sat Jul 10 02:02:50 GMT 2010

Visit	<p>Proposal 12082, Visit 21, implementation</p> <p>Diagnostic Status: Warning</p> <p>Scientific Instruments: COS/NUV, COS/FUV, S/C</p> <p>Special Requirements: BEFORE 01-AUG-2010:00:00:00</p> <p><i>Comments: This is the original one-orbit version of the GD561 observation, both segments are on, but the intent here is to measure the resolution and wavelength scale of the FUV A segments. The expected count rates (based upon sensitivities measured in Visit 1) are:</i></p> <p><i>G130M/1055/FUVB : 77 counts/s</i></p> <p><i>G130M/1055/FUVA : 9600 counts/s</i></p> <p><i>G130M/1096/FUVB : 131 counts/s</i></p> <p><i>G130M/1096/FUVA : 16163 counts/s</i></p> <p><i>For 800s for G130M/1055 and 760s for G130M/1096, therefore, we expect</i></p> <p><i>G130M/1055/FUVB : 62000 counts / 2000 RE ~ 31 cts/RE ~ S/N = 5-6 per RE</i></p> <p><i>G130M/1055/FUVA : 7.8E6 counts / 2000 RE ~ 4000 cts/RE ~ S/N = 62 per RE</i></p> <p><i>G130M/1096/FUVB : 7.1 counts / 2000 RE ~ 50 cts/RE ~ S/N = 7 per RE</i></p> <p><i>G130M/1096/FUVA : 78.7 counts / 2000 RE ~ 6142 cts/RE ~ S/N = 78 per RE</i></p>																													
	<p>Diagnosics</p> <p>(Visit 21) Warning (Orbit Planner): INEFFICIENT ORDERING OF FP-POS POSITIONS</p> <p>(GD561-G130M/1096 (21.003)) Warning (Form): FP-POS=AUTO requires input of TOTAL exposure time for all four automatically-generated exposures. However, BUFFER-TIME must be specified for a single exposure, and will be applied to each of the four automatically-generated exposures.</p> <p>(GD561-G130M/1055 (21.005)) Warning (Form): FP-POS=AUTO requires input of TOTAL exposure time for all four automatically-generated exposures. However, BUFFER-TIME must be specified for a single exposure, and will be applied to each of the four automatically-generated exposures.</p>																													
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	Alt Name2: GSC04614- 01431	Equinox: J2000	Epoch of Position: 2000	F(1200)=8E-13, F(1100)=13E-13, F(900)=5E-13																										

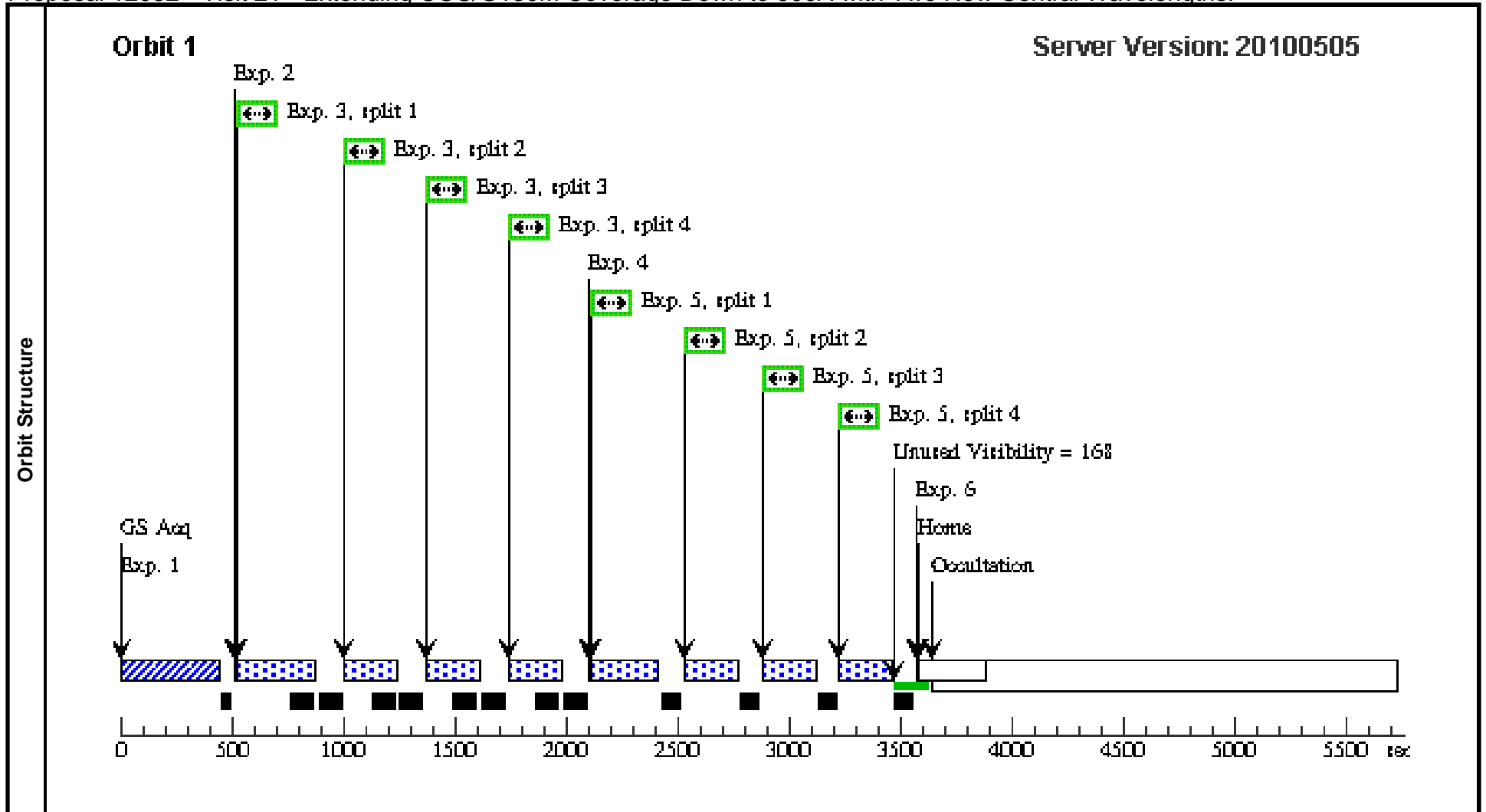
Proposal 12082 - Visit 01 - Extending COS/G130M Coverage Down to 900A with Two New Central Wavelengths.

#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit
1	GD561-AC Q/IMAGE	(4) GD-561	COS/NUV, ACQ/IMAGE, BOA	MIRRORA				21 Secs [==>]	[1]
<i>Comments: S/N=60 in 23s (COS.A322789) for BOA+MIRRORA</i>									
2	Special Commanding to turn 1291 into G130M/1096	DARK	S/C, DATA, NONE			SPEC COM INSTR ELCENTPATCH; QESIPARM ACTION REPLACE; QESIPARM CENT WAVE 1291; QESIPARM TEST WAVE 1096; QESIPARM STEP 8078; QESIPARM RES1 2665; QESIPARM RES2 7312		10 Secs [==>]	[1]
<i>Comments: Special Commanding to overwrite the G130M/1291 settings with the G130M/1096A (HotBLUE) settings. Special commanding is used to move OSM1 to the position of 8078, this is +83 steps from the G130M-1300A position of 7995. This shifts the Segment B coverage to 940-1081A, and Segment A to cover 1096-1238A. Use the focus position for G130M/1291A. RES1=2665, RES2=7312</i>									
3	GD561-G130M/1096	(4) GD-561	COS/FUV, TIME-TAG, PSA	G130M 1291 A	BUFFER-TIME=91; FLASH=S0140D030; FP-POS=AUTO			728 Secs [==>(Split 1)] [==>(Split 2)] [==>(Split 3)] [==>(Split 4)]	[1]
<i>Comments: This is the Blue setting exposure. Segment B is about 130 counts/s. Segment A is about 16,163 counts/s. Use the focus position for G130M/1291A. The lamp will be on twice for 30 seconds of each exposure. BT=132 from COS.A (*2/3=88)</i>									
<i>SQL is required to set qelogsheet.minwave to 1096</i>									
4	Special Commanding to turn 1291 into G130M/1055	DARK	S/C, DATA, NONE			SPEC COM INSTR ELCENTPATCH; QESIPARM ACTION REPLACE; QESIPARM CENT WAVE 1291; QESIPARM TEST WAVE 1055; QESIPARM STEP 8095; QESIPARM RES1 2750; QESIPARM RES2 7402		10 Secs [==>]	[1]
<i>Comments: Special commanding to overwrite the G130M/1291 settings with the G130M/1055A (SuperBLUE) settings. OSM1 should be set to position of 8095, +100 steps from the G130M-1300A position of 7995. This shifts the Segment B coverage to 900-1041A, and Segment A to 1055-1196A. RES1= 2750, RES2= 7402</i>									

Exposures

Proposal 12082 - Visit 01 - Extending COS/G130M Coverage Down to 900A with Two New Central Wavelengths.

5	GD561-G13 (4) GD-561 0M/1055	COS/FUV, TIME-TAG, PSA	G130M 1291 A	BUFFER-TIME=23 6; FLASH=S0150D03 0; FP-POS=AUTO	728 Secs [==>(Split 1)] [==>(Split 2)] [==>(Split 3)] [==>(Split 4)]	[1]
<p><i>Comments: This is the Super-Blue setting. Use the focus position for G130M/1291A. Thirty second lamp exposure every 150 seconds. Simulations based upon the measured sensitivity of Visit 1 indicates a maximum flux of 80 cts/s (Segment B) and < 10000 (Segment A). Total predicted count rate is 9675 cts/s. Maximum BT = 2.35E6/9675 = 243s. We are using BT=238, so there is a very real chance that the buffer will overflow, we are ok with this.</i></p>						
<p><i>SQL is required to set qelogsheet.minwave to 1055.</i></p>						
6	Special Com DARK manding to RESTORE 1 291	S/C, DATA, NONE		SPEC COM INSTR ELCENTPATCH; QESIPARM ACTION RESTORE; QESIPARM CENT WAVE 1291	10 Secs [==>]	[1]
<p><i>Comments: Special Commanding to restore the G130M/1291 settings.</i></p>						



Proposal 12082 - Visit 21 - Extending COS/G130M Coverage Down to 900A with Two New Central Wavelengths.

Sat Jul 10 02:02:51 GMT 2010

Visit	<p>Proposal 12082, Visit 22, implementation</p> <p>Diagnostic Status: Warning</p> <p>Scientific Instruments: COS/NUV, COS/FUV, S/C</p> <p>Special Requirements: ON HOLD</p> <p><i>Comments: This is the original two-orbit version of the GD561 observation. This has been replaced by Visit 21, but is retained for possible future use.</i></p> <p><i>On Hold Comments: This two-orbit visit is on hold for possible future use.</i></p>					
Diagnostics	<p>(Visit 22) Warning (Orbit Planner): INEFFICIENT ORDERING OF FP-POS POSITIONS</p> <p>(GD561-G130M/1096 (22.003)) Warning (Form): FP-POS=AUTO requires input of TOTAL exposure time for all four automatically-generated exposures. However, BUFFER-TIME must be specified for a single exposure, and will be applied to each of the four automatically-generated exposures.</p> <p>(GD561-G130M/1055 (22.005)) Warning (Form): FP-POS=AUTO requires input of TOTAL exposure time for all four automatically-generated exposures. However, BUFFER-TIME must be specified for a single exposure, and will be applied to each of the four automatically-generated exposures.</p>					
Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
	(4)	GD-561 Alt Name1: WD2342+806 Alt Name2: GSC04614-01431	RA: 23 45 2.2600 (356.2594167d) Dec: +80 56 59.70 (80.94992d) Equinox: J2000	Proper Motion RA: -0.011867089769517026s/yr Proper Motion Dec: 0.0040"/yr Epoch of Position: 2000	V=14.52 F(1350)=7E-13, F(1200)=8E-13, F(1100)=13E-13, F(900)=5E-13	Reference Frame: ICRS
	<p><i>Comments: F(1200,1350) from IUE, F(900, 1100) from FUSE</i></p> <p><i>There are no other targets in the field of GD561, no BOT constraints.</i></p> <p><i>The Proper motions come from 2005ApJS..161..394F (Farihi et al) as reported by SIMBAD.</i></p>					

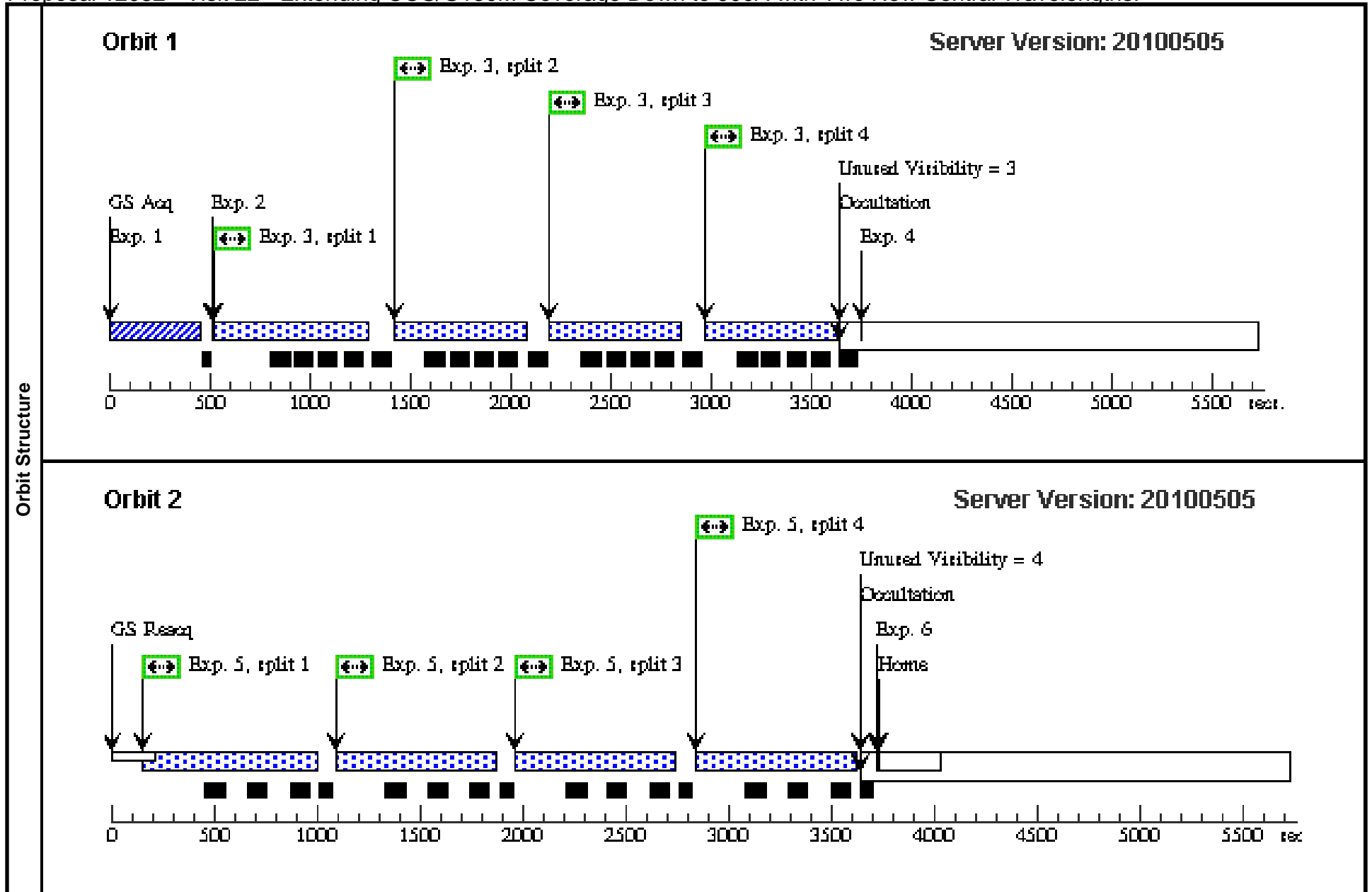
Proposal 12082 - Visit 21 - Extending COS/G130M Coverage Down to 900A with Two New Central Wavelengths.

#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit
1	GD561-AC Q/IMAGE	(4) GD-561	COS/NUV, ACQ/IMAGE, BOA	MIRRORA				23 Secs [==>]	[1]
<i>Comments: S/N=60 in 23s (COS.A322789) for BOA+MIRRORA</i>									
2	Special Commanding to turn 1291 into G130M/1096	DARK	S/C, DATA, NONE			SPEC COM INSTR ELCENTPATCH; QESIPARM ACTION REPLACE; QESIPARM CENT WAVE 1291; QESIPARM TEST WAVE 1096; QESIPARM STEP 8078; QESIPARM RES1 2665; QESIPARM RES2 7312		10 Secs [==>]	[1]
<i>Comments: Special Commanding to overwrite the G130M/1291 settings with the G130M/1096 (HotBLUE) settings. Special commanding is used to move OSM1 to the position of 8078, this is +83 steps from the G130M-1300A position of 7995. This shifts the Segment B coverage to 940-1081A, and Segment A to cover 1096-1238A. Use the focus position for G130M/1291A. RES1=2665, RES2=7312</i>									
3	GD561-G130M/1096	(4) GD-561	COS/FUV, TIME-TAG, PSA	G130M 1291 A	BUFFER-TIME=123; FLASH=S0500D020; FP-POS=AUTO			2404 Secs [==>(Split 1)] [==>(Split 2)] [==>(Split 3)] [==>(Split 4)]	[1]
<i>Comments: This is the Blue setting exposure. Segment B is about 130 counts/s. Segment A is about 16,163 counts/s. Use the focus position for G130M/1291A. The lamp will be on 20 seconds at the start, and again every at 500s. BT=123 for efficiency.</i>									
<i>SQL is required to set qelogsheet.minwave to 1096</i>									
4	Special Commanding to turn 1291 into G130M/1055	DARK	S/C, DATA, NONE			SPEC COM INSTR ELCENTPATCH; QESIPARM ACTION REPLACE; QESIPARM CENT WAVE 1291; QESIPARM TEST WAVE 1055; QESIPARM STEP 8095; QESIPARM RES1 2750; QESIPARM RES2 7402		10 Secs [==>]	[1]
<i>Comments: Special Commanding to overwrite the G130M/1291 settings with the G130M/1055 (SuperBLUE) settings. OSM1 should be set to position of 8095, +100 steps from the G130M-1300A position of 7995. This shifts the Segment B coverage to 940-1081A, and segment A to 1096-1238A. RES1= 2750, RES2= 7402</i>									

Exposures

Proposal 12082 - Visit 21 - Extending COS/G130M Coverage Down to 900A with Two New Central Wavelengths.

5	GD561-G13 (4) GD-561 0M/1055	COS/FUV, TIME-TAG, PSA	G130M 1291 A	BUFFER-TIME=20 6; FLASH=S0500D03 0; FP-POS=AUTO	2914 Secs [==>(Split 1)] [==>(Split 2)] [==>(Split 3)] [==>(Split 4)]	[2]
<p><i>Comments: This is the Super-Blue setting. Use the focus position for G130M/1291A. Thirty second lamp exposure every 500 seconds. Simulations based upon the measured sensitivity of Visit 1 indicate a maximum flux of 80 cts/s (Segment B) and < 10000 (Segment A). BT is short, so no chance of overflowing.</i></p>						
<p><i>SQL is required to set qelogsheet.minwave to 1055.</i></p>						
6	Special Com DARK manding to RESTORE 1 291	S/C, DATA, NONE		SPEC COM INSTR ELCENTPATCH; QESIPARM ACTION RESTORE; QESIPARM CENT WAVE 1291	10 Secs [==>]	[2]
<p><i>Comments: Special Commanding to restore the G130M/1291 settings.</i></p>						



Proposal 12082 - Visit 22 - Extending COS/G130M Coverage Down to 900A with Two New Central Wavelengths.

Sat Jul 10 02:02:51 GMT 2010

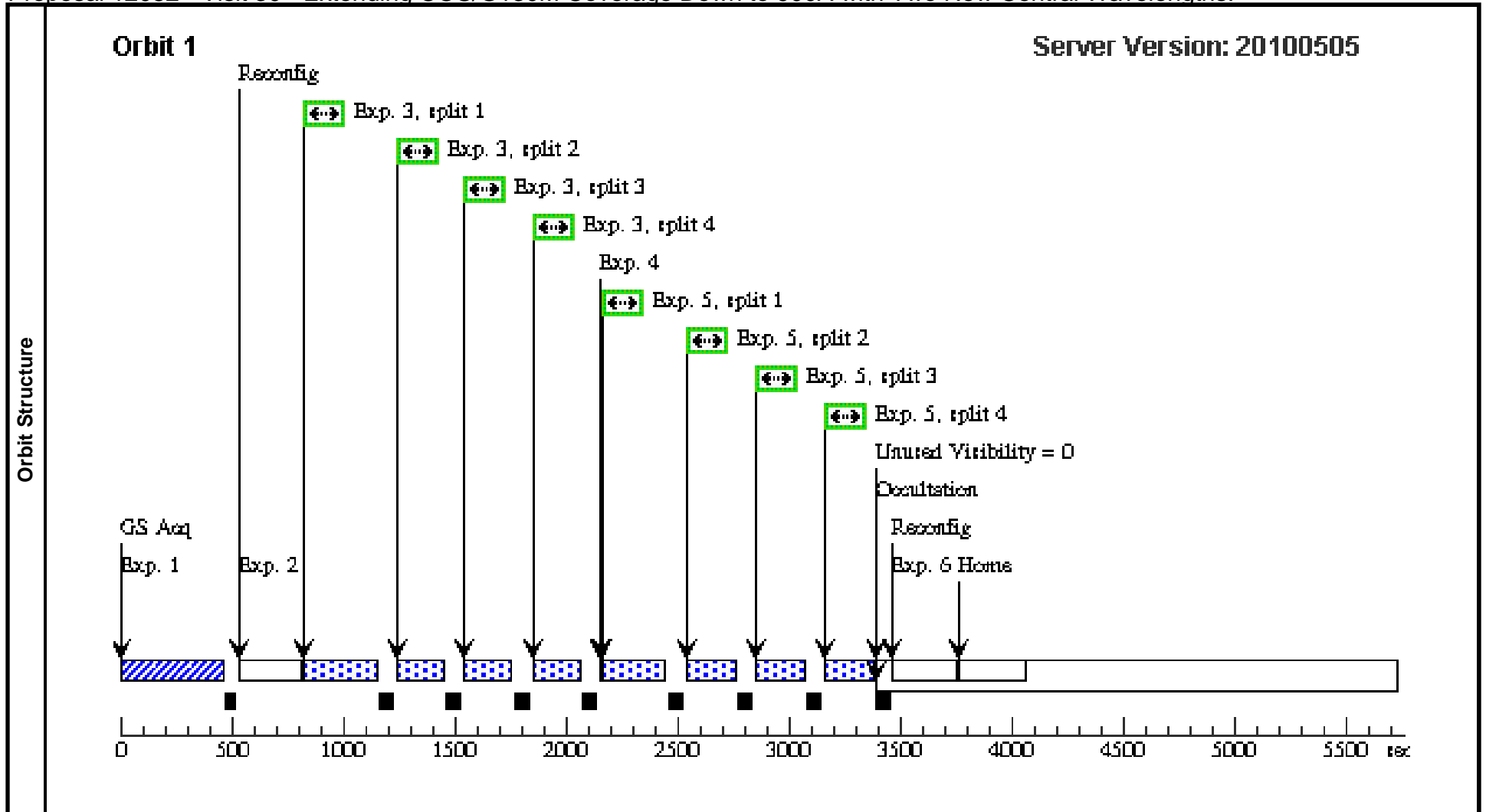
Visit	<p>Proposal 12082, Visit 30, implementation</p> <p>Diagnostic Status: Warning</p> <p>Scientific Instruments: COS/NUV, COS/FUV, S/C</p> <p>Special Requirements: ON HOLD</p> <p><i>Comments: This is the one-orbit, ACQ/IMAGE only version for WD0439+366. This visit is on-hold and is not to be executed at this time, but may be executed at a later date once the coordinates are better known.</i></p> <p><i>G130M/1055/FUVB : 549 counts/s</i> <i>G130M/1055/FUVA : 60690 counts/s</i> <i>G130M/1096/FUVB : 932 counts/s</i> <i>G130M/1096/FUVA : 90866 counts/s</i></p> <p><i>Therefore, we need to turn the FUVA segment off.</i></p> <p><i>We are able to get 646s for G130M/1055 and 630s for G130M/1096, therefore, we expect:</i></p> <p><i>G130M/1055/FUVB : 560,000 counts / 2000 RE ~ 294 cts/RE ~ S/N = 13 per RE</i> <i>G130M/1096/FUVB : 350,000 counts / 2000 RE ~ 177 cts/RE ~ S/N = 17 per RE</i></p> <p><i>On Hold Comments: This Visit is on hold for possible future use (after target coordinates are better understood).</i></p>																												
	<p>Diagnosics</p> <p>(Visit 30) Warning (Orbit Planner): INEFFICIENT ORDERING OF FP-POS POSITIONS</p> <p>(WD0439-G130M/1096 (30.003)) Warning (Form): FP-POS=AUTO requires input of TOTAL exposure time for all four automatically-generated exposures. However, BUFFER-TIME must be specified for a single exposure, and will be applied to each of the four automatically-generated exposures.</p> <p>(WD0439-G130M/1055 (30.005)) Warning (Form): FP-POS=AUTO requires input of TOTAL exposure time for all four automatically-generated exposures. However, BUFFER-TIME must be specified for a single exposure, and will be applied to each of the four automatically-generated exposures.</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>(5)</td> <td>WD-0439+466</td> <td>RA: 04 43 21.0840 (70.8378500d)</td> <td>Proper Motion RA: 0.002284439000557604s/yr</td> <td>V=12.67</td> <td>Reference Frame: ICRS</td> </tr> <tr> <td></td> <td>Alt Name1: CSI+46-04397</td> <td>Dec: +46 42 5.40 (46.70150d)</td> <td>Proper Motion Dec: - 0.013349999999999999"/yr</td> <td>F(920)=6E-12,</td> <td></td> </tr> <tr> <td></td> <td>Alt Name2: SH2-216</td> <td>Equinox: J2000</td> <td>Epoch of Position: 2000</td> <td>F(1160)=7.3E-12 (FUSE), F(1260)=6E-12 (STIS)</td> <td></td> </tr> </tbody> </table>					#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous	(5)	WD-0439+466	RA: 04 43 21.0840 (70.8378500d)	Proper Motion RA: 0.002284439000557604s/yr	V=12.67	Reference Frame: ICRS		Alt Name1: CSI+46-04397	Dec: +46 42 5.40 (46.70150d)	Proper Motion Dec: - 0.013349999999999999"/yr	F(920)=6E-12,			Alt Name2: SH2-216	Equinox: J2000	Epoch of Position: 2000	F(1160)=7.3E-12 (FUSE), F(1260)=6E-12 (STIS)	
	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous																							
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	Alt Name2: SH2-216	Equinox: J2000	Epoch of Position: 2000	F(1160)=7.3E-12 (FUSE), F(1260)=6E-12 (STIS)																									
<p><i>Comments: The coordinates of this target are a bit uncertain:</i></p> <p><i>04 43 21.268 +46 42 05.80 from Kerber et al. 2003 using GSCII</i> <i>04 43 21.27 +46 42 06.10 STIS Coordinates for E140M observation</i> <i>04 43 21.36 +46 42 04.7 FUSE coordinates</i> <i>04 43 20.9 +46 42 05 SIMBAD coordinates for CS</i> <i>04 43 21.268 +46 42 05.80 SIMABD coordinates for center of PN</i></p> <p><i>We are using the average of Kerber 2003 and SIMBAD/CS.</i> <i>04 43 21.0840 +46 42 05.40</i></p> <p><i>Proper Motions are from Kerber 2008</i></p> <p><i>F(920)=6E-12, F(1160)=7.3E-12 (FUSE), F(1260)=6E-12 (STIS)</i></p>																													

Proposal 12082 - Visit 22 - Extending COS/G130M Coverage Down to 900A with Two New Central Wavelengths.

#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit
1	WD0439-A CQ/IMAGE	(5) WD-0439+466	COS/NUV, ACQ/IMAGE, BOA	MIRRORB				15 Secs [==>]	[1]
<p>Comments: COS.A324825: Signal/Noise Ratio = 60.00 -> Time = 13.2691</p> <p>Detailed Information Count rate Total counts Associated noise (counts/s) (counts) (counts) Counts in box of 9 x 9 pixels Source 271.331 3,600.32 60.00 Background 0.024 0.32 0.57 Sky 8.823E-5 1.17E-3 0.03 Dark Current 0.024 0.32 0.57 Total in selected region 271.356 3,600.65 60.01 Brightest pixel 37.661 Count rate entire detector 716.153</p>									
2	Special Com manding to t urn 1291 int o G130M/10 96	DARK	S/C, DATA, NONE			SPEC COM INSTR ELCENTPATCH; QESIPARM ACTIO N REPLACE; QESIPARM CENT WAVE 1291; QESIPARM TEST WAVE 1096; QESIPARM STEP 8 078; QESIPARM RES1 2 665; QESIPARM RES2 7 312		10 Secs [==>]	[1]
<p>Comments: Special Commanding to overwrite the G130M/1291 settings with the G130M/1096A (HotBLUE) settings. Special commanding is used to move OSM1 to the position of 8078, this is +83 steps from the G130M-1300A position of 7995. This shifts the Segment B coverage to 940-1081A, and Segment A to cover 1096-1238A. Use the focus position for G130M/1291A. RES1=2665, RES2=7312</p>									
3	WD0439-G 130M/1096	(5) WD-0439+466	COS/FUV, TIME-TAG, PSA	G130M 1291 A	BUFFER-TIME=30 0; FLASH=S0100D02 0; FP-POS=AUTO; SEGMENT=B			630 Secs [==>(Split 1)] [==>(Split 2)] [==>(Split 3)] [==>(Split 4)]	[1]
<p>Comments: This is the HotBlue (G130M/1096) setting exposure. Segment B is about 932 counts/s. Segment A is about >90000 counts/s/ AND must be turned off. Use the focus position for G130M/1291A. The lamp will be on for 20 seconds, twice. BT is long for efficiency.</p> <p>SQL is required to set qelogsheet.minwave to 1096</p>									

Proposal 12082 - Visit 22 - Extending COS/G130M Coverage Down to 900A with Two New Central Wavelengths.

4	Special Com DARK manding to t urn 1291 int o G130M/10 55	S/C, DATA, NONE	SPEC COM INSTR ELCENTPATCH; QESIPARM ACTIO N REPLACE; QESIPARM CENT WAVE 1291; QESIPARM TEST WAVE 1055; QESIPARM STEP 8 095; QESIPARM RES1 2 750; QESIPARM RES2 7 402	10 Secs	[==>]	[1]	
<p>Comments: Special Commanding to overwrite the G130M/1291 settings with the G130M/940 (SuperBLUE) settings. OSM1 should be set to position of 8095, +100 steps from the G130M-1300A position of 7995. This shifts the Segment B coverage to 940-1081A, and segment A to 1096-1238A. RES1= 2750, RES2= 7402</p>							
5	WD0439-G (5) WD-0439+466 130M/1055	COS/FUV, TIME-TAG, PSA	G130M 1291 A	BUFFER-TIME=30 0; FLASH=S0100D02 0; FP-POS=AUTO; SEGMENT=B	646 Secs	[==>(Split 1)] [==>(Split 2)] [==>(Split 3)] [==>(Split 4)]	[1]
<p>Comments: This is the Super-Blue setting (G130M/1055). Use the focus postion for G130M/1291A. Twenty second lamp exposure every 100 seconds. Simulations based upon the measured sensitivity of Visit 1 indicate a maximum flux of 140 cts/s (Segment B) and > 60000 (Segment A, which must be turned off). BT is long for efficiency. SQL is required to set qelogsheet.minwave to 1055.</p>							
6	Special Com DARK manding to RESTORE 1 291	S/C, DATA, NONE	SPEC COM INSTR ELCENTPATCH; QESIPARM ACTIO N RESTORE; QESIPARM CENT WAVE 1291	10 Secs	[==>]	[1]	
<p>Comments: Special Commanding to restore the G130M/1291 settings.</p>							



Proposal 12082 - Visit 30 - Extending COS/G130M Coverage Down to 900A with Two New Central Wavelengths.

Sat Jul 10 02:02:52 GMT 2010

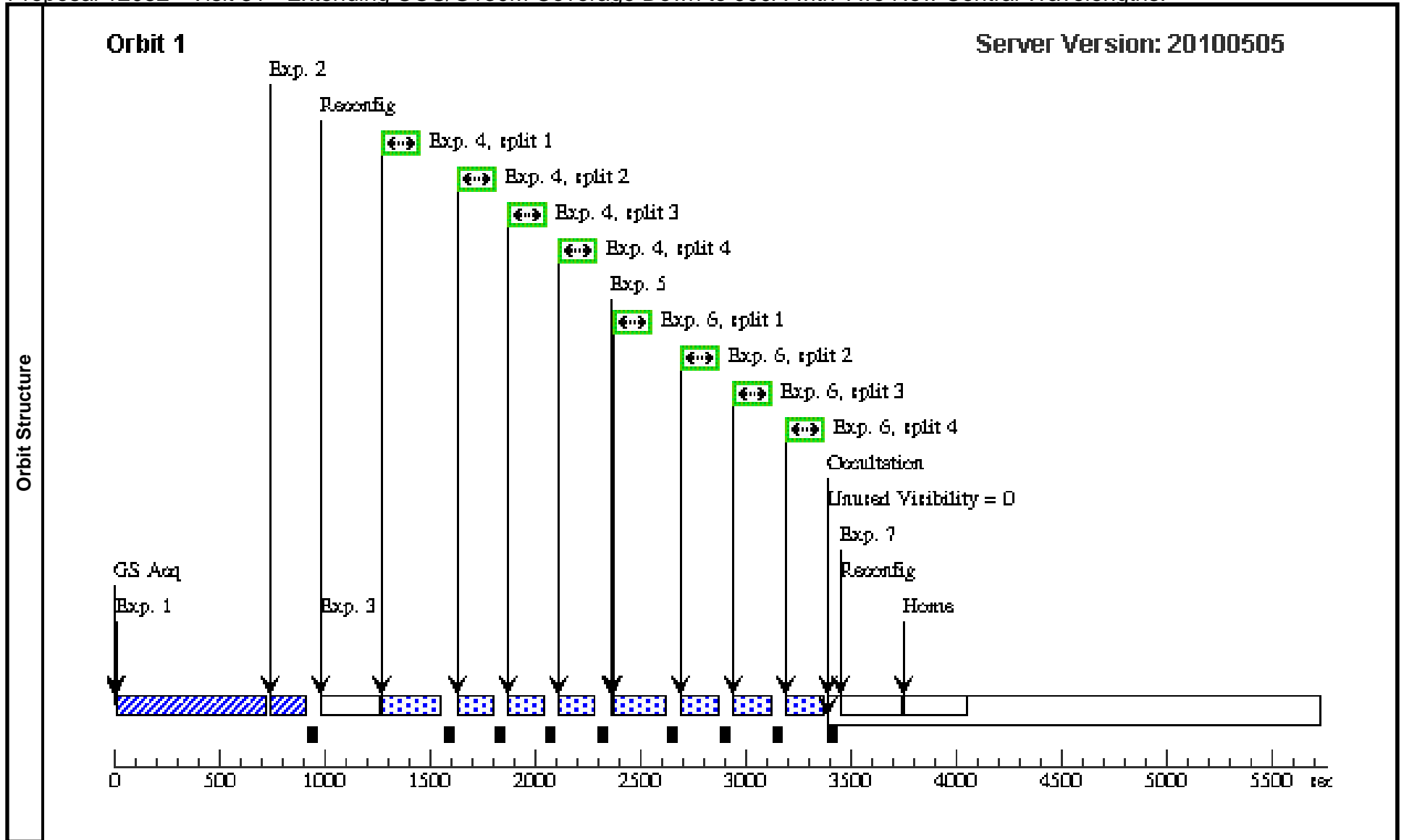
Visit	<p>Proposal 12082, Visit 31, implementation</p> <p>Diagnostic Status: Warning</p> <p>Scientific Instruments: COS/NUV, COS/FUV, S/C</p> <p>Special Requirements: ON HOLD</p> <p><i>Comments: This is the one-orbit, ACQ/IMAGE+3x3 ACQ/SEARCH version for WD0439+366. This visit is on-hold and is not to be executed at this time, but may be used based upon the results of the GD561 observations.</i></p> <p><i>G130M/1055/FUVB : 549 counts/s</i> <i>G130M/1055/FUVA : 60690 counts/s</i> <i>G130M/1096/FUVB : 932 counts/s</i> <i>G130M/1096/FUVA : 90866 counts/s</i></p> <p><i>Therefore, we need to turn the FUVB segment off.</i></p> <p><i>We are able to get 500s for G130M/1055 and 460s for G130M/1096, therefore, we expect:</i></p> <p><i>G130M/1055/FUVB : 4.3E5 counts / 2000 RE ~ 137 cts/RE ~S/N = 11 per RE</i> <i>G130M/1096/FUVB : 2.7E5 counts / 2000 RE ~ 214 cts/RE ~S/N = 15 per RE</i></p> <p><i>A S/N of 11/RE may not allow us to measure the resolution and wavelength scale to sufficient accuracy.</i></p> <p><i>On Hold Comments: This visit is a repeat of Visit 30, but with a 3x3 ACO/Search. It is possible that this visit will be substituted for visit 32 if the results of Visit 21 result is lower resolution than expected.</i></p>																												
	<p>Diagnosics</p> <p>(Visit 31) Warning (Orbit Planner): INEFFICIENT ORDERING OF FP-POS POSITIONS</p> <p>(WD0439-G130M/1096 (31.004)) Warning (Form): FP-POS=AUTO requires input of TOTAL exposure time for all four automatically-generated exposures. However, BUFFER-TIME must be specified for a single exposure, and will be applied to each of the four automatically-generated exposures.</p> <p>(WD0439-G130M/1055 (31.006)) Warning (Form): FP-POS=AUTO requires input of TOTAL exposure time for all four automatically-generated exposures. However, BUFFER-TIME must be specified for a single exposure, and will be applied to each of the four automatically-generated exposures.</p>																												
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	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous																							
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<p>Fixed Targets</p>																													

Proposal 12082 - Visit 30 - Extending COS/G130M Coverage Down to 900A with Two New Central Wavelengths.

#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit
1	WD0439-A CQ/SEARC H	(5) WD-0439+466	COS/NUV, ACQ/SEARCH, BOA	MIRRORB	SCAN-SIZE=3; STEP-SIZE=1.767			13 Secs [==>]	[1]
<p>Comments: COS.A324825: Signal/Noise Ratio = 60.00 -> Time = 13.2691</p> <p>Detailed Information Count rate Total counts Associated noise (counts/s) (counts) (counts) Counts in box of 9 x 9 pixels Source 271.331 3,600.32 60.00 Background 0.024 0.32 0.57 Sky 8.823E-5 1.17E-3 0.03 Dark Current 0.024 0.32 0.57 Total in selected region 271.356 3,600.65 60.01 Brightest pixel 37.661 Count rate entire detector 716.153</p>									
2	WD0439-A CQ/IMAGE	(5) WD-0439+466	COS/NUV, ACQ/IMAGE, BOA	MIRRORB				15 Secs [==>]	[1]
<p>Comments: COS.A324825: Signal/Noise Ratio = 60.00 -> Time = 13.2691</p>									
3	Special Com manding to t urn 1291 int o G130M/10 96	DARK	S/C, DATA, NONE			SPEC COM INSTR ELCENTPATCH; QESIPARM ACTIO N REPLACE; QESIPARM CENT WAVE 1291; QESIPARM TEST WAVE 1096; QESIPARM STEP 8 078; QESIPARM RES1 2 665; QESIPARM RES2 7 312		10 Secs [==>]	[1]
<p>Comments: Special Commanding to overwrite the G130M/1291 settings with the G130M/1096A (HotBLUE) settings. Special commanding is used to move OSM1 to the position of 8078, this is +83 steps from the G130M-1300A position of 7995. This shifts the Segment B coverage to 940-1081A, and Segment A to cover 1096-1238A. Use the focus position for G130M/1291A. RES1=2665, RES2=7312</p>									
4	WD0439-G 130M/1096	(5) WD-0439+466	COS/FUV, TIME-TAG, PSA	G130M 1291 A	BUFFER-TIME=40 0; FLASH=S0090D02 0; FP-POS=AUTO; SEGMENT=B			460 Secs [==>(Split 1)] [==>(Split 2)] [==>(Split 3)] [==>(Split 4)]	[1]
<p>Comments: This is the HotBlue (G130M/1096) setting exposure. Segment B is about 932 counts/s. Segment A is about >90000 counts/s/ AND must be turned off. Use the focus position for G130M/1291A. The lamp will be on for 20 seconds, twice. BT is long for efficiency.</p> <p>SQL is required to set qelogsheet.minwave to 1096</p>									

Proposal 12082 - Visit 30 - Extending COS/G130M Coverage Down to 900A with Two New Central Wavelengths.

5	Special Com DARK manding to t urn 1291 int o G130M/10 55	S/C, DATA, NONE	SPEC COM INSTR ELCENTPATCH; QESIPARM ACTIO N REPLACE; QESIPARM CENT WAVE 1291; QESIPARM TEST WAVE 1055; QESIPARM STEP 8 095; QESIPARM RES1 2 750; QESIPARM RES2 7 402	10 Secs	[==>]	[1]	
<p>Comments: Special Commanding to overwrite the G130M/1291 settings with the G130M/940 (SuperBLUE) settings. OSM1 should be set to position of 8095, +100 steps from the G130M-1300A position of 7995. This shifts the Segment B coverage to 940-1081A, and segment A to 1096-1238A. RES1= 2750, RES2= 7402</p>							
6	WD0439-G (5) WD-0439+466 130M/1055	COS/FUV, TIME-TAG, PSA	G130M 1291 A	BUFFER-TIME=40 0; FLASH=S0100D02 0; FP-POS=AUTO; SEGMENT=B	500 Secs	[==>(Split 1)] [==>(Split 2)] [==>(Split 3)] [==>(Split 4)]	[1]
<p>Comments: This is the Super-Blue setting (G130M/1055). Use the focus postion for G130M/1291A. Twenty second lamp exposure every 100 seconds. Simulations based upon the measured sensitivity of Visit 1 indicate a maximum flux of 140 cts/s (Segment B) and > 60000 (Segment A, which must be turned off). BT is long for efficiency. SQL is required to set qelogsheet.minwave to 1055.</p>							
7	Special Com DARK manding to RESTORE 1 291	S/C, DATA, NONE	SPEC COM INSTR ELCENTPATCH; QESIPARM ACTIO N RESTORE; QESIPARM CENT WAVE 1291	10 Secs	[==>]	[1]	
<p>Comments: Special Commanding to restore the G130M/1291 settings.</p>							



Proposal 12082 - Visit 31 - Extending COS/G130M Coverage Down to 900A with Two New Central Wavelengths.

Sat Jul 10 02:02:53 GMT 2010

Visit	<p>Proposal 12082, Visit 32, implementation</p> <p>Diagnostic Status: Warning</p> <p>Scientific Instruments: COS/NUV, COS/FUV, S/C</p> <p>Special Requirements: SCHED 40%; AFTER 21 BY 13 D TO 25 D</p> <p><i>Comments: This is the two-orbit, ACQ/IMAGE+3x3 ACQ/SEARCH version for WD0439+366.</i></p> <p><i>G130M/1055/FUVB : 549 counts/s</i></p> <p><i>G130M/1055/FUVA : 60690 counts/s</i></p> <p><i>G130M/1096/FUVB : 932 counts/s</i></p> <p><i>G130M/1096/FUVA : 90866 counts/s</i></p> <p><i>Therefore, we need to turn the FUVA segment off.</i></p> <p><i>We are able to get 2630s for G130M/1055 and 1404s for G130M/1096, therefore, we expect:</i></p> <p><i>G130M/1055/FUVB : 1.4E6 counts / 2000 RE ~ 722cts/RE ~S/N = 27 per RE</i></p> <p><i>G130M/1096/FUVB : 78.7 counts / 2000 RE ~ 654cts/RE ~S/N = 26 per RE</i></p> <p><i>At this S/N, we should be able to adequately determine the resolution and wavelength scale.</i></p>																													
	<p>Diagnosics</p> <p>(Visit 32) Warning (Orbit Planner): INEFFICIENT ORDERING OF FP-POS POSITIONS</p> <p>(WD0439-G130M/1096 (32.004)) Warning (Form): FP-POS=AUTO requires input of TOTAL exposure time for all four automatically-generated exposures. However, BUFFER-TIME must be specified for a single exposure, and will be applied to each of the four automatically-generated exposures.</p> <p>(WD0439-G130M/1055 (32.006)) Warning (Form): FP-POS=AUTO requires input of TOTAL exposure time for all four automatically-generated exposures. However, BUFFER-TIME must be specified for a single exposure, and will be applied to each of the four automatically-generated exposures.</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>(5)</td> <td>WD-0439+466</td> <td>RA: 04 43 21.0840 (70.8378500d)</td> <td>Proper Motion RA: 0.002284439000557604s/yr</td> <td>V=12.67</td> <td>Reference Frame: ICRS</td> </tr> <tr> <td></td> <td>Alt Name1: CSI+46-04397</td> <td>Dec: +46 42 5.40 (46.70150d)</td> <td>Proper Motion Dec: -0.013349999999999999"/yr</td> <td>F(920)=6E-12, F(1160)=7.3E-12 (FUSE), F(1260)=6E-12 (STIS)</td> <td></td> </tr> <tr> <td></td> <td>Alt Name2: SH2-216</td> <td>Equinox: J2000</td> <td>Epoch of Position: 2000</td> <td></td> <td></td> </tr> </tbody> </table> <p><i>Comments: The coordinates of this target are a bit uncertain:</i></p> <p><i>04 43 21.268 +46 42 05.80 from Kerber et al. 2003 using GSCII</i></p> <p><i>04 43 21.27 +46 42 06.10 STIS Coordinates for E140M observation</i></p> <p><i>04 43 21.36 +46 42 04.7 FUSE coordinates</i></p> <p><i>04 43 20.9 +46 42 05 SIMBAD coordinates for CS</i></p> <p><i>04 43 21.268 +46 42 05.80 SIMABD coordinates for center of PN</i></p> <p><i>We are using the average of Kerber 2003 and SIMBAD/CS.</i></p> <p><i>04 43 21.0840 +46 42 05.40</i></p> <p><i>Proper Motions are from Kerber 2008</i></p> <p><i>F(920)=6E-12, F(1160)=7.3E-12 (FUSE), F(1260)=6E-12 (STIS)</i></p>						#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous	(5)	WD-0439+466	RA: 04 43 21.0840 (70.8378500d)	Proper Motion RA: 0.002284439000557604s/yr	V=12.67	Reference Frame: ICRS		Alt Name1: CSI+46-04397	Dec: +46 42 5.40 (46.70150d)	Proper Motion Dec: -0.013349999999999999"/yr	F(920)=6E-12, F(1160)=7.3E-12 (FUSE), F(1260)=6E-12 (STIS)			Alt Name2: SH2-216	Equinox: J2000	Epoch of Position: 2000		
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Proposal 12082 - Visit 31 - Extending COS/G130M Coverage Down to 900A with Two New Central Wavelengths.

#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit
1	WD0439-A CQ/SEARC H	(5) WD-0439+466	COS/NUV, ACQ/SEARCH, BOA	MIRRORB	SCAN-SIZE=3; STEP-SIZE=1.767			13 Secs [==>]	[1]
<p>Comments: COS.A324825: Signal/Noise Ratio = 60.00 -> Time = 13.2691</p> <p>Detailed Information Count rate Total counts Associated noise (counts/s) (counts) (counts) Counts in box of 9 x 9 pixels Source 271.331 3,600.32 60.00 Background 0.024 0.32 0.57 Sky 8.823E-5 1.17E-3 0.03 Dark Current 0.024 0.32 0.57 Total in selected region 271.356 3,600.65 60.01 Brightest pixel 37.661 Count rate entire detector 716.153</p>									
2	WD0439-A CQ/IMAGE	(5) WD-0439+466	COS/NUV, ACQ/IMAGE, BOA	MIRRORB				16 Secs [==>]	[1]
<p>Comments: COS.A324825: Signal/Noise Ratio = 60.00 -> Time = 13.2691</p>									
3	Special Com manding to t urn 1291 int o G130M/10 96	DARK	S/C, DATA, NONE			SPEC COM INSTR ELCENTPATCH; QESIPARM ACTIO N REPLACE; QESIPARM CENT WAVE 1291; QESIPARM TEST WAVE 1096; QESIPARM STEP 8 078; QESIPARM RES1 2 665; QESIPARM RES2 7 312		10 Secs [==>]	[1]
<p>Comments: Special Commanding to overwrite the G130M/1291 settings with the G130M/1096A (HotBLUE) settings. Special commanding is used to move OSM1 to the position of 8078, this is +83 steps from the G130M-1300A position of 7995. This shifts the Segment B coverage to 940-1081A, and Segment A to cover 1096-1238A. Use the focus position for G130M/1291A. RES1=2665, RES2=7312</p>									
4	WD0439-G 130M/1096	(5) WD-0439+466	COS/FUV, TIME-TAG, PSA	G130M 1291 A	BUFFER-TIME=25 6; FLASH=S0200D02 0; FP-POS=AUTO; SEGMENT=B			1436 Secs [==>(Split 1)] [==>(Split 2)] [==>(Split 3)] [==>(Split 4)]	[1]
<p>Comments: This is the HotBlue (G130M/1096) setting exposure. Segment B is about 932 counts/s. Segment A is about >90000 counts/s AND must be turned off. Use the focus position for G130M/1291A. The lamp will be on for 20 seconds each 200. BT is long for efficiency.</p> <p>SQL is required to set qelogsheet.minwave to 1096</p>									

Proposal 12082 - Visit 31 - Extending COS/G130M Coverage Down to 900A with Two New Central Wavelengths.

5	Special Com DARK manding to t urn 1291 int o G130M/10 55	S/C, DATA, NONE	SPEC COM INSTR ELCENTPATCH; QESIPARM ACTIO N REPLACE; QESIPARM CENT WAVE 1291; QESIPARM TEST WAVE 1055; QESIPARM STEP 8 095; QESIPARM RES1 2 750; QESIPARM RES2 7 402	10 Secs [==>]	[1]	
<p>Comments: Special Commanding to overwrite the G130M/1291 settings with the G130M/940 (SuperBLUE) settings. OSM1 should be set to position of 8095, +100 steps from the G130M-1300A position of 7995. This shifts the Segment B coverage to 940-1081A, and segment A to 1096-1238A. RES1= 2750, RES2= 7402</p>						
6	WD0439-G (5) WD-0439+466 130M/1055	COS/FUV, TIME-TAG, PSA	G130M 1291 A	BUFFER-TIME=50 1; FLASH=S0500D02 0; FP-POS=AUTO; SEGMENT=B	2638 Secs [==>(Split 1)] [==>(Split 2)] [==>(Split 3)] [==>(Split 4)]	[2]
<p>Comments: This is the Super-Blue setting (G130M/1055). Use the focus postion for G130M/1291A. Twenty second lamp exposure every 500 seconds. Simulations based upon the measured sensitivity of Visit 1 indicate a maximum flux of 140 cts/s (Segment B) and > 60000 (Segment A, which must be turned off). BT is long for efficiency.</p>						
<p>SQL is required to set qelogsheet.minwave to 1055.</p>						
7	Special Com DARK manding to RESTORE 1 291	S/C, DATA, NONE	SPEC COM INSTR ELCENTPATCH; QESIPARM ACTIO N RESTORE; QESIPARM CENT WAVE 1291	10 Secs [==>]	[2]	
<p>Comments: Special Commanding to restore the G130M/1291 settings.</p>						

