



12268 - Production of the Heavy Elements in the Universe

Cycle: 18, Proposal Category: GO

(Availability Mode: SUPPORTED)

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) HD108317	STIS/CCD STIS/NUV-MAMA	5	10-Mar-2011 21:01:18.0	yes
02	(1) HD108317	STIS/CCD STIS/NUV-MAMA	5	10-Mar-2011 21:01:32.0	yes
03	(1) HD108317	STIS/CCD STIS/NUV-MAMA	5	10-Mar-2011 21:01:43.0	yes
04	(4) HD128279	STIS/CCD STIS/NUV-MAMA	5	10-Mar-2011 21:01:55.0	yes

Visit	Targets used in Visit	Configurations used in Visit	Orbits Used	Last Orbit Planner Run	OP Current with Visit?
05	(4) HD128279	STIS/CCD STIS/NUV-MAMA	5	10-Mar-2011 21:02:05.0	yes
06	(4) HD128279	STIS/CCD STIS/NUV-MAMA	5	10-Mar-2011 21:02:14.0	yes
07	(3) HD126238	STIS/CCD STIS/NUV-MAMA	5	10-Mar-2011 21:02:25.0	yes
08	(3) HD126238	STIS/CCD STIS/NUV-MAMA	5	10-Mar-2011 21:02:35.0	yes
09	(2) HD122563	STIS/CCD STIS/NUV-MAMA	4	10-Mar-2011 21:02:44.0	yes
10	(2) HD122563	STIS/CCD STIS/NUV-MAMA	4	10-Mar-2011 21:02:53.0	yes

48 Total Orbits Used

ABSTRACT

We propose to use STIS to observe a sample of 4 metal-poor stars that have been enriched by only a small amount of material produced by the rapid neutron-capture process (r-process). These "r-poor" stars have 10-100 times less r-process material than the "r-rich" stars at similar metallicities ($-2.5 < [\text{Fe}/\text{H}] < -1.7$). The r-poor stars fill in a crucial gap in our understanding of how the heavy elements were produced in the early Galaxy by revealing whether there is a continuous distribution of r-process abundance patterns between the most strongly r-enriched stars and those with only a trace of r-process enrichment. Guided by our previous STIS observing experience, we will obtain high S/N near-UV spectra ($S/N = 50$ near 230.0 nm and increasing to longer wavelengths) to derive abundances or meaningful upper limits for the heavy elements Ge, Zr, Cd, Lu, Os, Pt, and Pb. All of these elements (except Pb) can only be detected in very metal-poor stars in the near-UV using HST, and we have already made successful detections of them in r-rich stars. These elements are key to understanding the nature of the r-process in the first generations of stars that drive chemical evolution of the Galaxy. Our proposed observations also have the potential to determine more precise ages for the oldest Galactic halo stars. This work is supported by recent laboratory experiments and theoretical studies and will provide data of wider interest to the atomic, nuclear, and astrophysics communities.

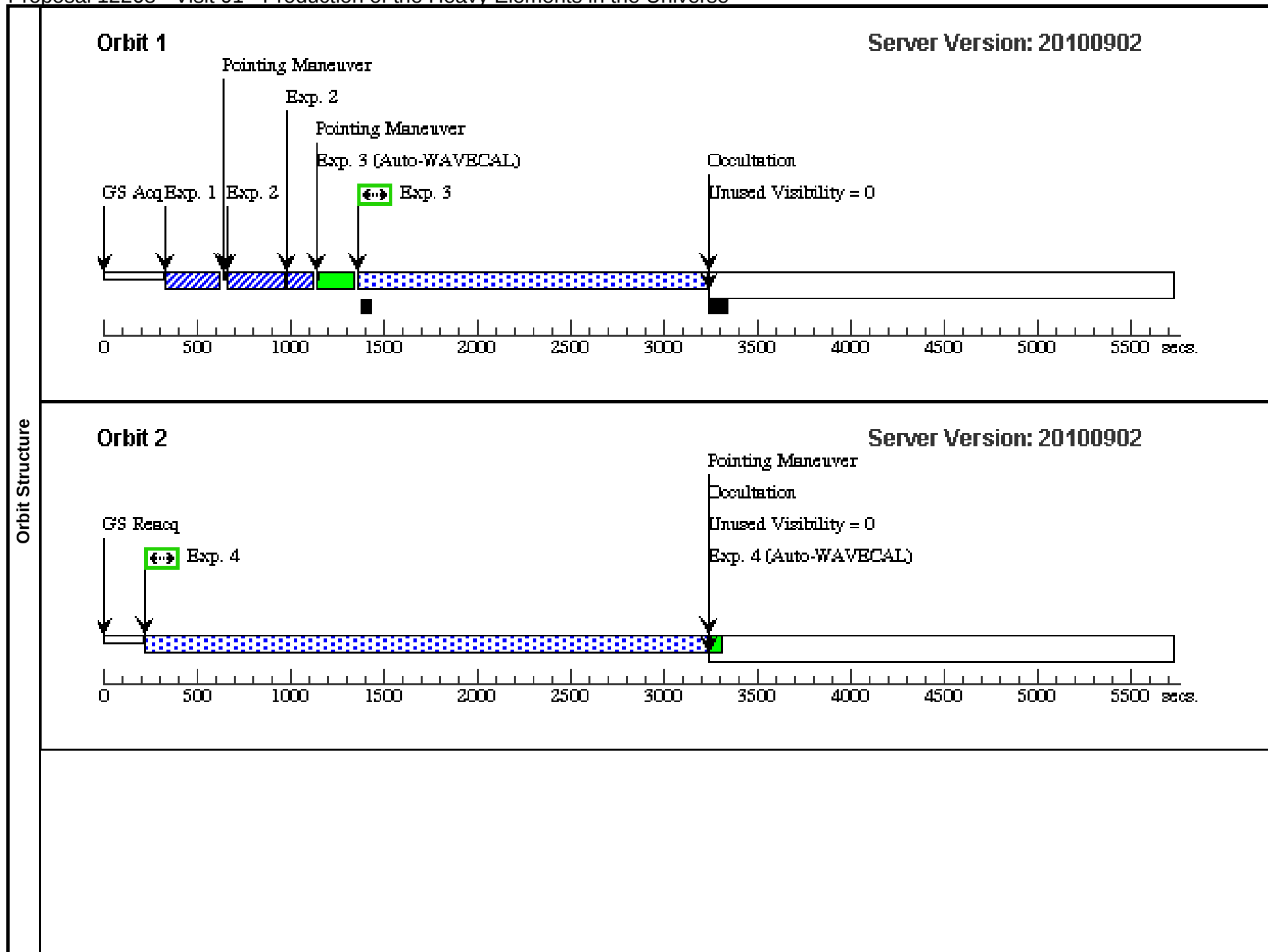
OBSERVING DESCRIPTION

We will use STIS to observe a sample of 4 metal-poor stars that have been enriched by only a small amount of material produced by the rapid neutron-capture process (r-process). All four target stars have been chosen on the basis of abundances derived from high-quality ground-based optical spectra and the stars' relative brightnesses.

The transitions of interest are spaced over a wide wavelength range of the near-UV (2282 to 3058 Angstroms). Our target S/N ($\sim 50/1$ per resolution element in the continuum near 2300 Angstroms) is based on our line strength predictions for relatively weak features. With this goal, the S/N will increase sufficiently to longer wavelengths to also detect weak features in other regions of the spectrum. We have estimated integration times using the current version of the STIS exposure time calculator for our setup based on MARCS models of the flux distribution predicted for our 4 target stars.

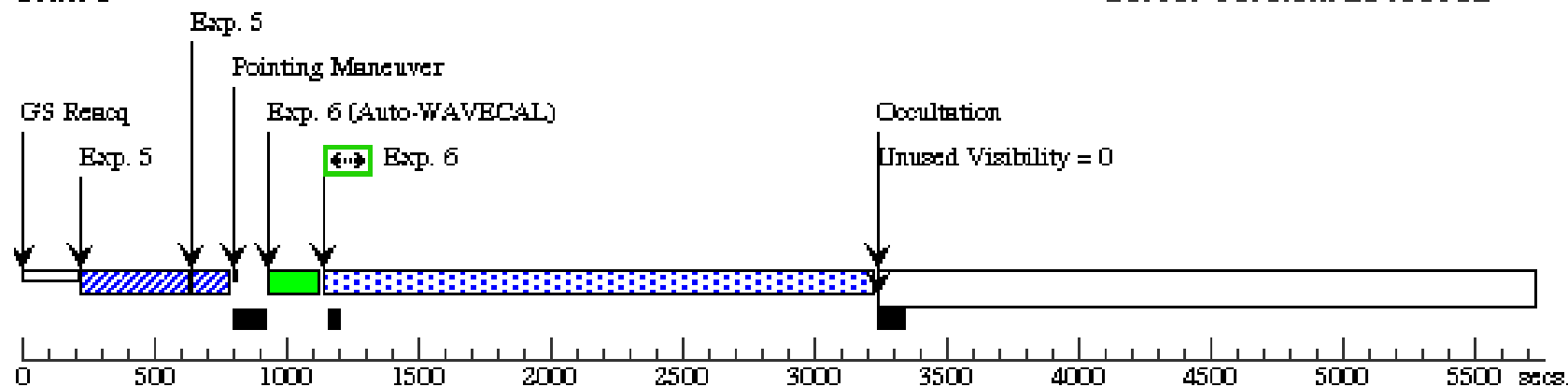
Proposal 12268 - Visit 01 - Production of the Heavy Elements in the Universe

Visit	Proposal 12268, Visit 01, implementation						Fri Mar 11 02:02:59 GMT 2011			
	Diagnostic Status: No Diagnostics									
	Scientific Instruments: STIS/CCD, STIS/NUV-MAMA									
	Special Requirements: (none)									
	Comments: hd108317 - visit 1									
Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous				
	(1)	HD108317	RA: 12 26 36.8500 (186.6535417d)	Proper Motion RA: -166.39 mas/yr	V=8.03+/-0.02	Reference Frame: ICRS				
		Alt Name1: GSC00288-00288	Dec: +05 18 9.00 (5.30250d)	Proper Motion Dec: -24.49 mas/yr	(B-V)=0.60+/-0.05,					
			Equinox: J2000	Parallax: 0.0057"	E(B-V)=0.02+/-0.02,					
				Epoch of Position: 2000.0	TYPE=G5III					
			Radial Velocity: +6.0 km/sec							
	Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.									
	Epoch (1991.25 --> 2000.0) updated 08mar2011 by iur using HIC from VizierR.									
	PM (re?)updated 08mar2011 by iur using Hipparcos 2007 rereduction (I/311) from VizierR.									
Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit
	1	hd108317 - 1 - ACQ	(1) HD108317	STIS/CCD, ACQ, F25ND3	MIRROR				1.0 Secs	
									[==>]	[1]
	2	hd108317 - 1 - ACQ/PEAK	(1) HD108317	STIS/CCD, ACQ/PEAK, 0.2X0.05ND	MIRROR				1.0 Secs	
									[==>]	[1]
	3	hd108317 - 1 - science1	(1) HD108317	STIS/NUV-MAMA, ACCUM, 0.2X0.06	E230M				2160 Secs	
					2707 A				[==>1852.0 Secs]	[1]
	4	hd108317 - 1 - science2	(1) HD108317	STIS/NUV-MAMA, ACCUM, 0.2X0.06	E230M				3000 Secs	
					2707 A				[==>2990.0 Secs]	[2]
	5	hd108317 - 1 - ACQ/PEAK	(1) HD108317	STIS/CCD, ACQ/PEAK, 0.2X0.05ND	MIRROR				1.0 Secs	
									[==>]	[3]
	6	hd108317 - 1 - science3	(1) HD108317	STIS/NUV-MAMA, ACCUM, 0.2X0.06	E230M				3000 Secs	
					2707 A				[==>2069.0 Secs]	[3]
	7	hd108317 - 1 - science4	(1) HD108317	STIS/NUV-MAMA, ACCUM, 0.2X0.06	E230M				2640 Secs	
					2707 A				[==>2990.0 Secs]	[4]
	8	hd108317 - 1 - science5	(1) HD108317	STIS/NUV-MAMA, ACCUM, 0.2X0.06	E230M				3000 Secs	
					2707 A				[==>2990.0 Secs]	[5]



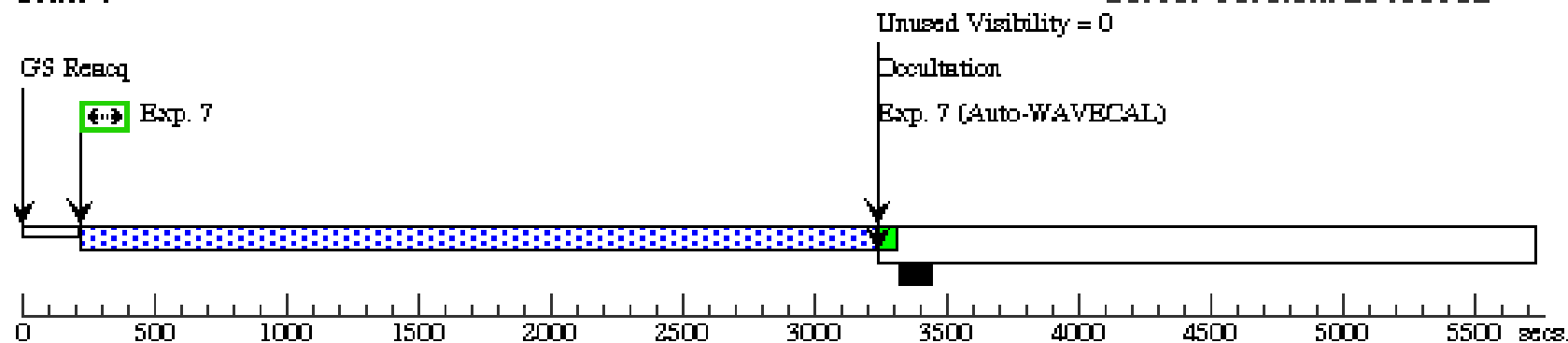
Orbit 3

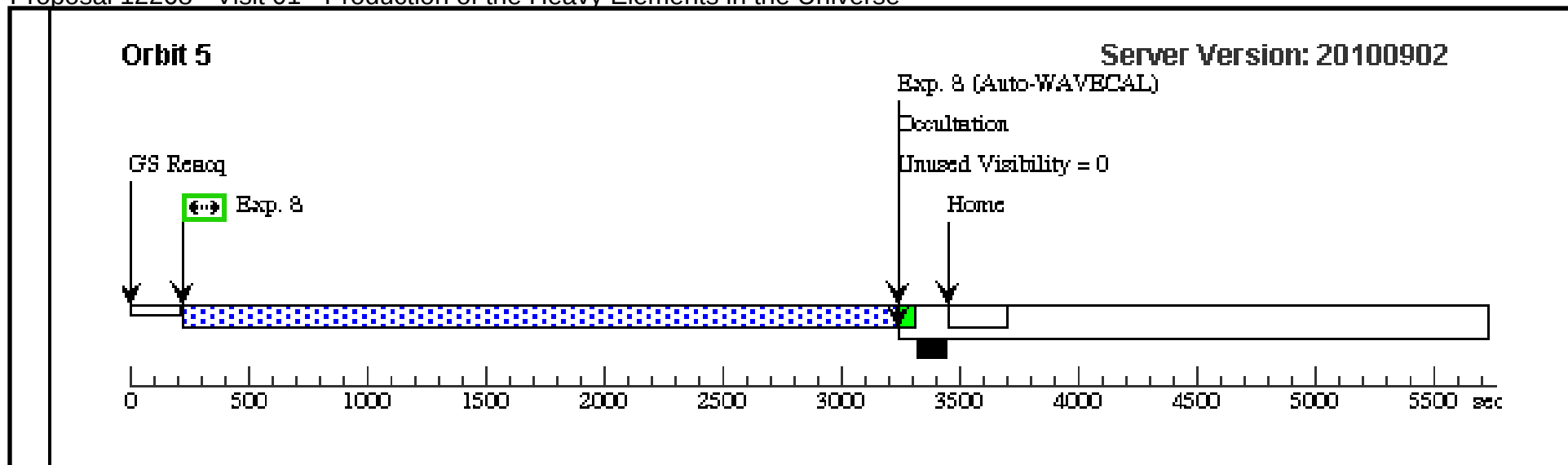
Server Version: 20100902



Orbit 4

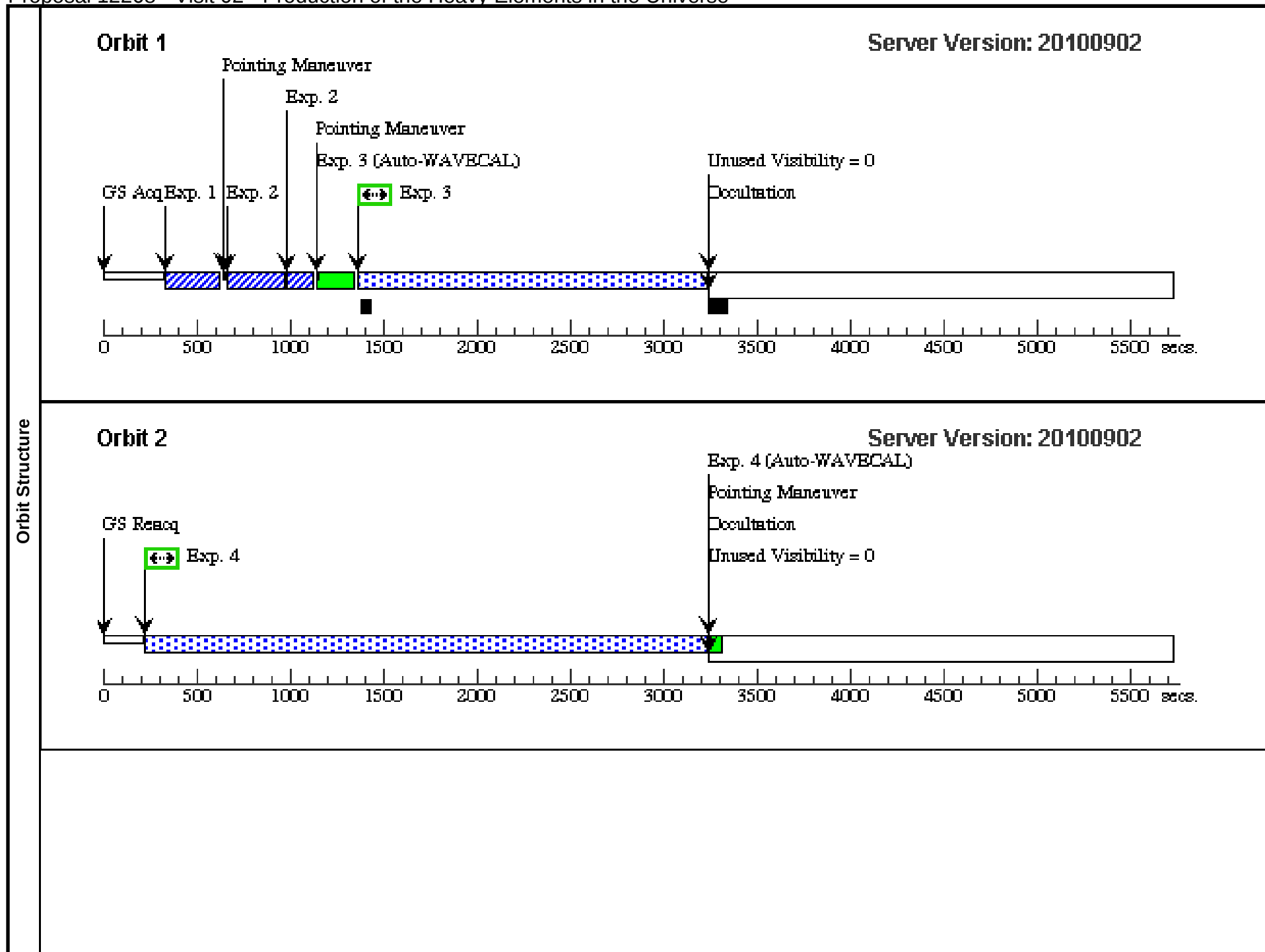
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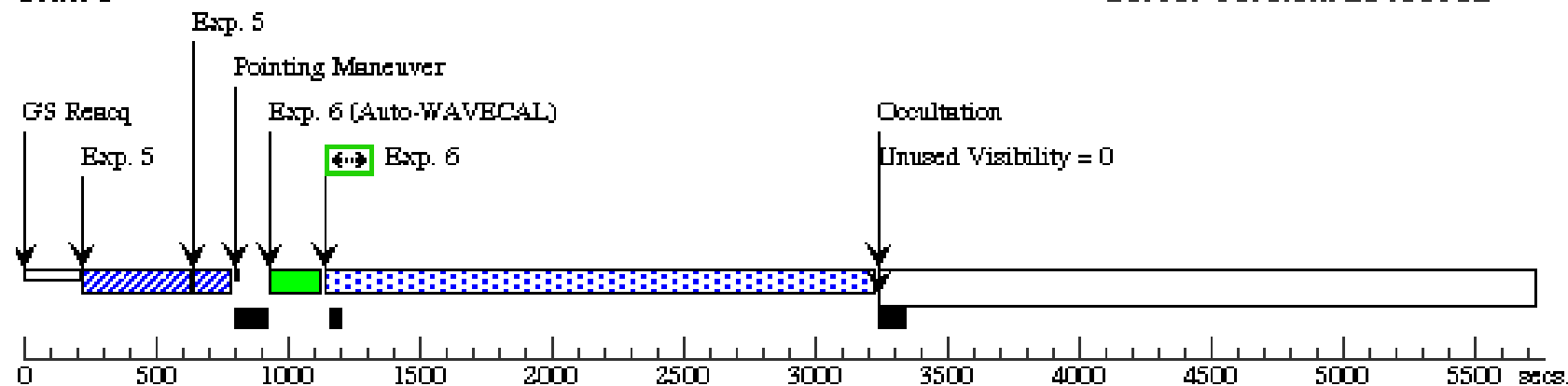
Proposal 12268 - Visit 02 - Production of the Heavy Elements in the Universe

Visit	Proposal 12268, Visit 02, implementation										Fri Mar 11 02:03:00 GMT 2011
	Diagnostic Status: No Diagnostics										
	Scientific Instruments: STIS/CCD, STIS/NUV-MAMA										
	Special Requirements: (none)										
	Comments: hd108317 - visit 2										
Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous					
	(1)	HD108317	RA: 12 26 36.8500 (186.6535417d)	Proper Motion RA: -166.39 mas/yr	V=8.03+/-0.02	Reference Frame: ICRS					
		Alt Name1: GSC00288-00288	Dec: +05 18 9.00 (5.30250d)	Proper Motion Dec: -24.49 mas/yr	(B-V)=0.60+/-0.05,						
			Equinox: J2000	Parallax: 0.0057"	E(B-V)=0.02+/-0.02,						
				Epoch of Position: 2000.0	TYPE=G5III						
				Radial Velocity: +6.0 km/sec							
	Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.										
	Epoch (1991.25 --> 2000.0) updated 08mar2011 by iur using HIC from VizieR.										
	PM (re?)updated 08mar2011 by iur using Hipparcos 2007 rereduction (I/311) from VizieR.										
Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]		Orbit
	1	hd108317 - 2 - ACQ	(1) HD108317	STIS/CCD, ACQ, F25ND3	MIRROR				1.0 Secs		
									[==>]		[1]
	2	hd108317 - 2 - ACQ/PEAK	(1) HD108317	STIS/CCD, ACQ/PEAK, 0.2X0.05ND	MIRROR				1.0 Secs		
									[==>]		[1]
	3	hd108317 - 2 - science1	(1) HD108317	STIS/NUV-MAMA, ACCUM, 0.2X0.06	E230M				2160 Secs		
					2707 A				[==>1852.0 Secs]		[1]
	4	hd108317 - 2 - science2	(1) HD108317	STIS/NUV-MAMA, ACCUM, 0.2X0.06	E230M				3000 Secs		
					2707 A				[==>2990.0 Secs]		[2]
	5	hd108317 - 2 - ACQ/PEAK	(1) HD108317	STIS/CCD, ACQ/PEAK, 0.2X0.05ND	MIRROR				1.0 Secs		
									[==>]		[3]
	6	hd108317 - 2 - science3	(1) HD108317	STIS/NUV-MAMA, ACCUM, 0.2X0.06	E230M				3000 Secs		
					2707 A				[==>2069.0 Secs]		[3]
	7	hd108317 - 2 - science4	(1) HD108317	STIS/NUV-MAMA, ACCUM, 0.2X0.06	E230M				2640 Secs		
					2707 A				[==>2990.0 Secs]		[4]
	8	hd108317 - 2 - science5	(1) HD108317	STIS/NUV-MAMA, ACCUM, 0.2X0.06	E230M				3000 Secs		
					2707 A				[==>2990.0 Secs]		[5]



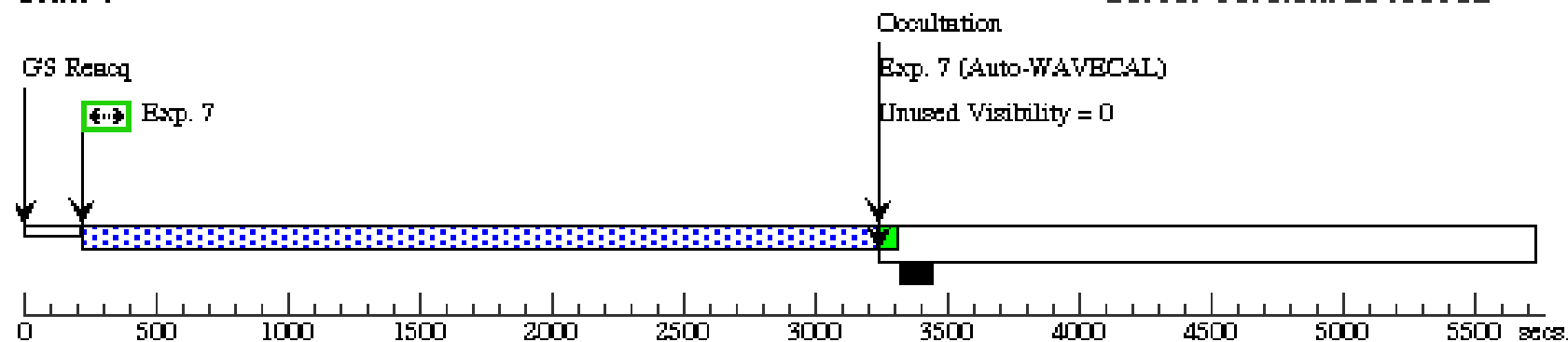
Orbit 3

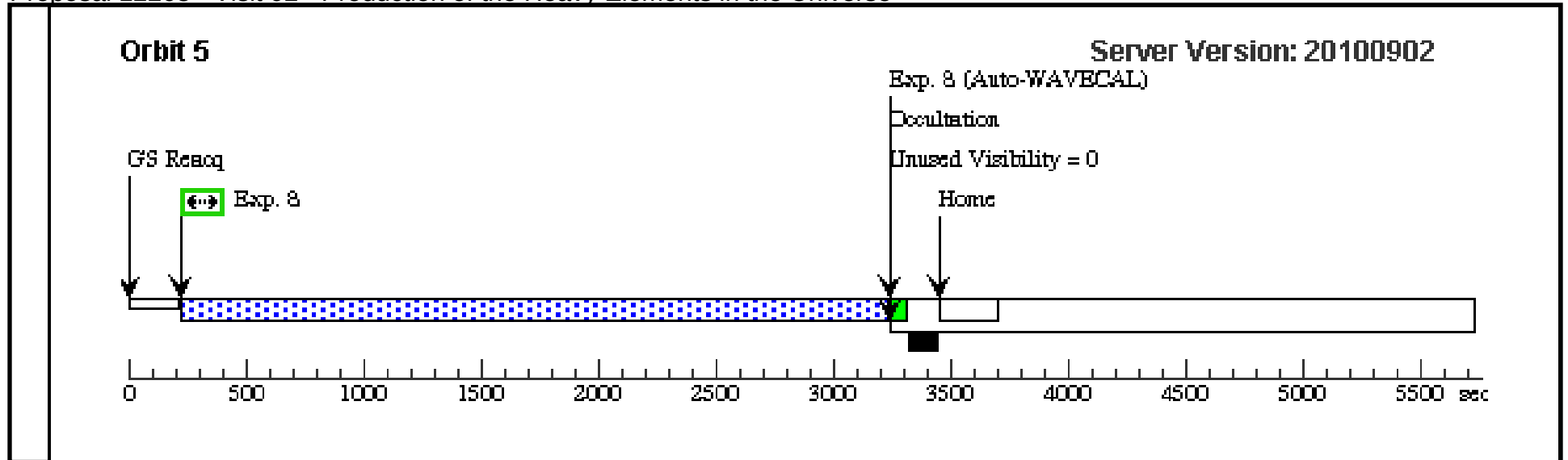
Server Version: 20100902



Orbit 4

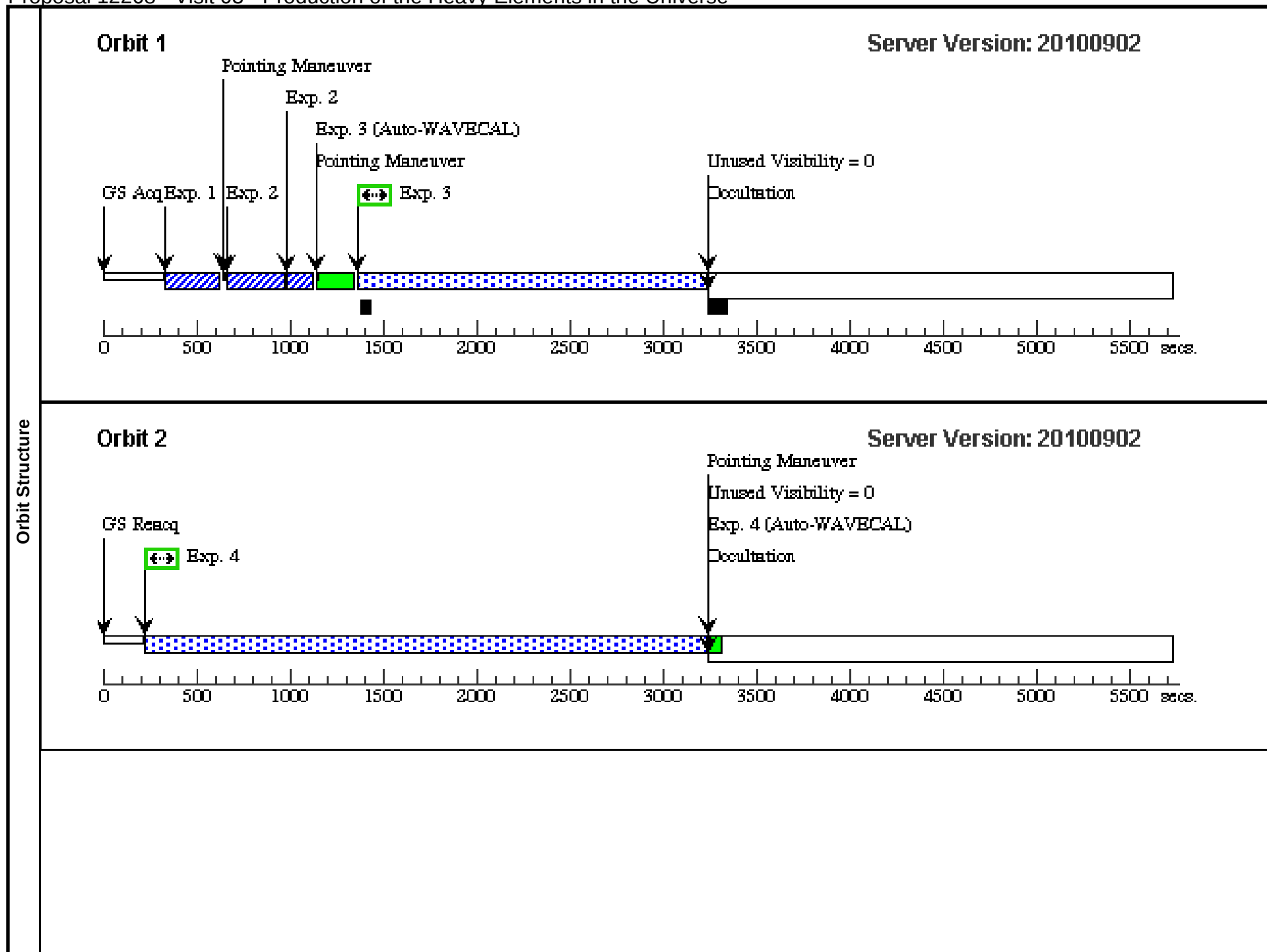
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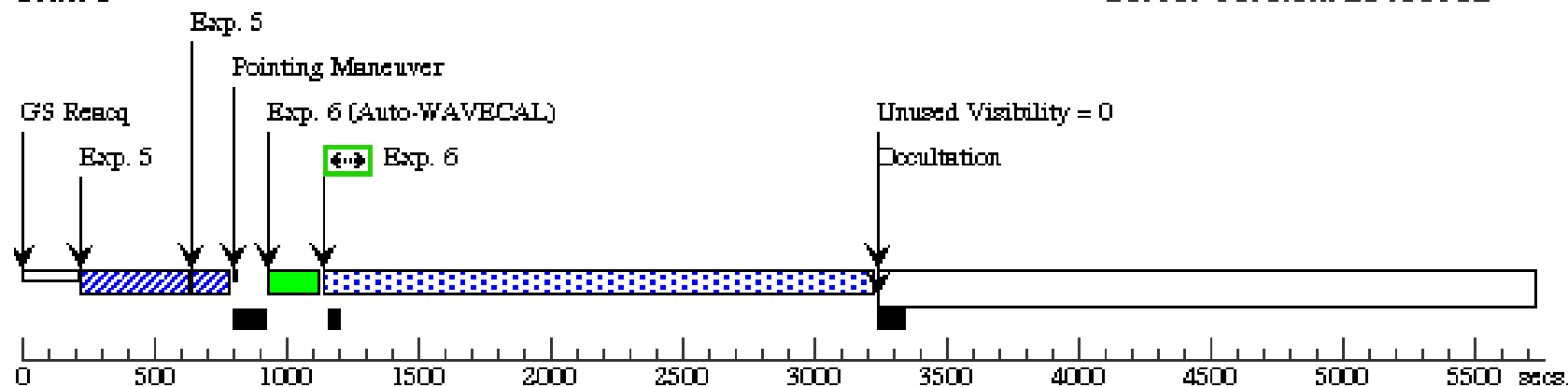
Proposal 12268 - Visit 03 - Production of the Heavy Elements in the Universe

Visit	Proposal 12268, Visit 03, implementation					Fri Mar 11 02:03:02 GMT 2011					
	Diagnostic Status: No Diagnostics										
	Scientific Instruments: STIS/CCD, STIS/NUV-MAMA										
	Special Requirements: (none)										
	Comments: hd108317 - visit 3										
Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections		Fluxes		Miscellaneous			
	(1)	HD108317	RA: 12 26 36.8500 (186.6535417d)	Proper Motion RA: -166.39 mas/yr		V=8.03+/-0.02		Reference Frame: ICRS			
		Alt Name1: GSC00288-00288	Dec: +05 18 9.00 (5.30250d)	Proper Motion Dec: -24.49 mas/yr		(B-V)=0.60+/-0.05,					
			Equinox: J2000	Parallax: 0.0057"		E(B-V)=0.02+/-0.02,					
				Epoch of Position: 2000.0		TYPE=G5III					
	Radial Velocity: +6.0 km/sec										
	Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.										
	Epoch (1991.25 --> 2000.0) updated 08mar2011 by iur using HIC from VizieR.										
	PM (re?)updated 08mar2011 by iur using Hipparcos 2007 rereduction (I/311) from VizieR.										
Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]		Orbit
	1	hd108317 - 3 - ACQ	(1) HD108317	STIS/CCD, ACQ, F25ND3	MIRROR				1.0 Secs		
									[==>]		[1]
	2	hd108317 - 3 - ACQ/PEAK	(1) HD108317	STIS/CCD, ACQ/PEAK, 0.2X0.05ND	MIRROR				1.0 Secs		
									[==>]		[1]
	3	hd108317 - 3 - science1	(1) HD108317	STIS/NUV-MAMA, ACCUM, 0.2X0.06	E230M				2160 Secs		
					2707 A				[==>1852.0 Secs]		[1]
	4	hd108317 - 3 - science2	(1) HD108317	STIS/NUV-MAMA, ACCUM, 0.2X0.06	E230M				3000 Secs		
					2707 A				[==>2990.0 Secs]		[2]
	5	hd108317 - 3 - ACQ/PEAK	(1) HD108317	STIS/CCD, ACQ/PEAK, 0.2X0.05ND	MIRROR				1.0 Secs		
									[==>]		[3]
	6	hd108317 - 3 - science3	(1) HD108317	STIS/NUV-MAMA, ACCUM, 0.2X0.06	E230M				3000 Secs		
					2707 A				[==>2069.0 Secs]		[3]
7	hd108317 - 3 - science4	(1) HD108317	STIS/NUV-MAMA, ACCUM, 0.2X0.06	E230M				2640 Secs			
				2707 A				[==>2990.0 Secs]		[4]	
8	hd108317 - 3 - science5	(1) HD108317	STIS/NUV-MAMA, ACCUM, 0.2X0.06	E230M				3000 Secs			
				2707 A				[==>2990.0 Secs]		[5]	



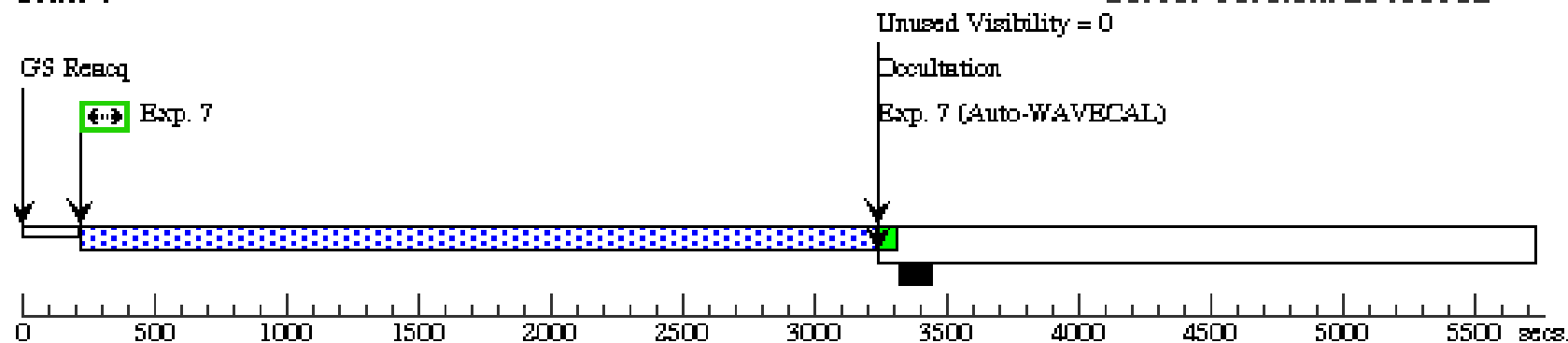
Orbit 3

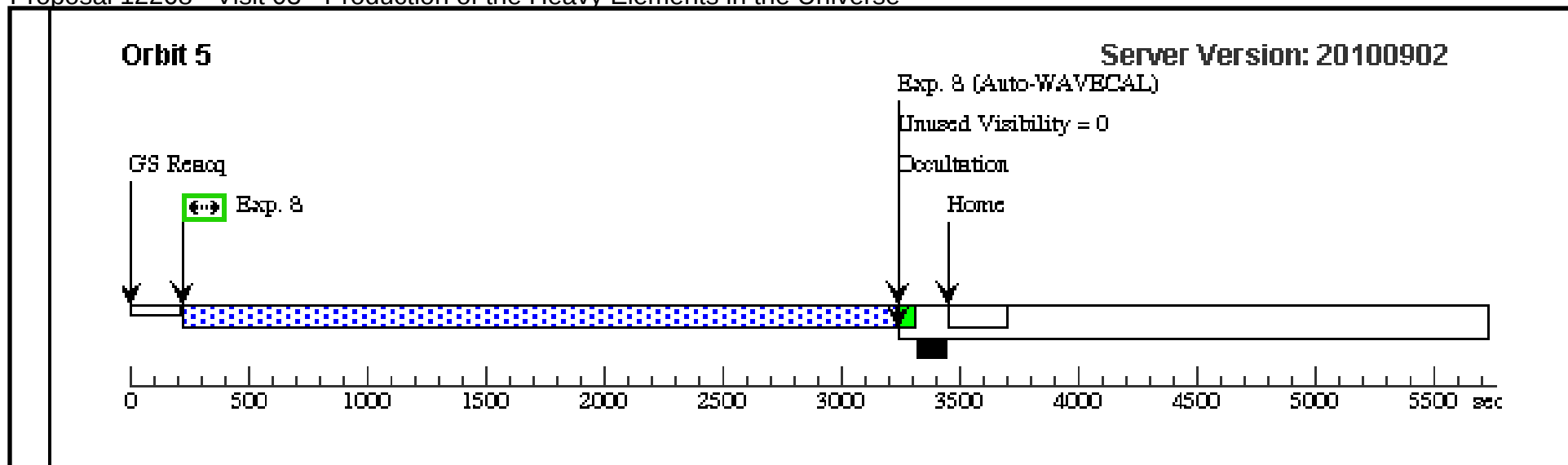
Server Version: 20100902



Orbit 4

Server Version: 20100902



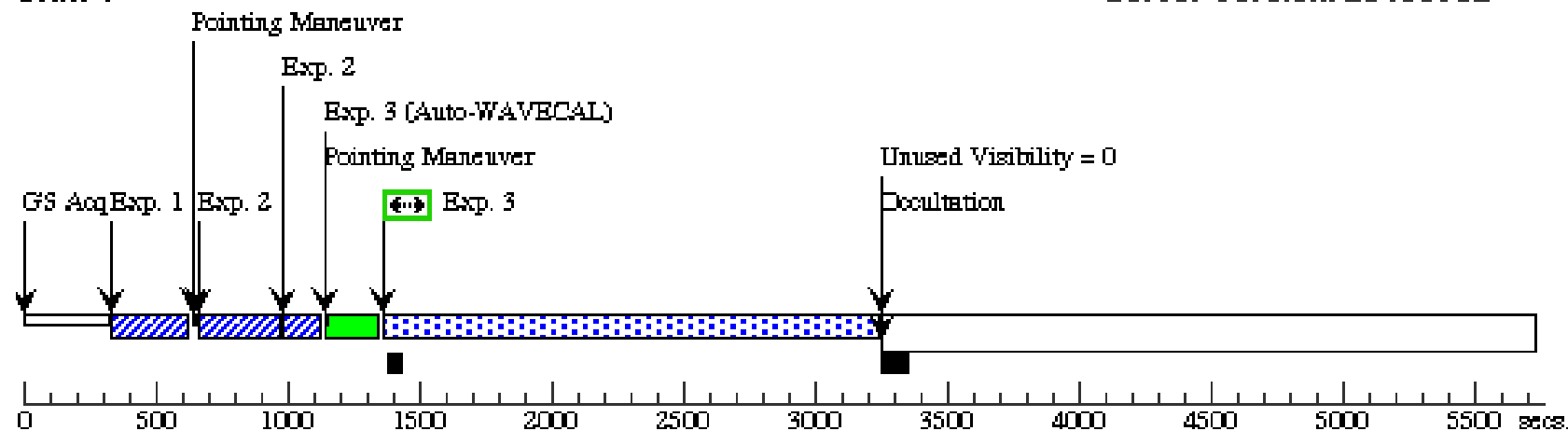


Proposal 12268 - Visit 04 - Production of the Heavy Elements in the Universe

Visit	Proposal 12268, Visit 04, implementation								Fri Mar 11 02:03:03 GMT 2011	
	Diagnostic Status: No Diagnostics									
	Scientific Instruments: STIS/CCD, STIS/NUV-MAMA									
	Special Requirements: (none)									
	Comments: hd128279 - visit 1									
Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous				
	(4)	HD128279	RA: 14 36 48.5000 (219.2020833d) Dec: -29 06 46.20 (-29.11283d) Equinox: J2000	Proper Motion RA: 62.11 mas/yr Proper Motion Dec: -342.6 mas/yr Parallax: 0.0061" Epoch of Position: 2000.0 Radial Velocity: -76.0 km/sec	V=7.97+/-0.05 (B-V)=0.60+/-0.05, E(B-V)=0.10+/-0.05, TYPE=G5III	Reference Frame: ICRS				
	Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.									
	Epoch (1991.25 --> 2000.0) updated 08mar2011 by iur using HIC from VizieR.									
	PM (re?)updated 08mar2011 by iur using Hipparcos 2007 rereduction (I/311) from VizieR.									
Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit
	1	hd128279 - 1 - ACQ	(4) HD128279	STIS/CCD, ACQ, F25ND3	MIRROR				1.0 Secs	
									[==>]	[1]
	2	hd128279 - 1 - ACQ/PEAK	(4) HD128279	STIS/CCD, ACQ/PEAK, 0.2X0.05ND	MIRROR				1.0 Secs	
									[==>]	[1]
	3	hd128279 - 1 - science1	(4) HD128279	STIS/NUV-MAMA, ACCUM, 0.2X0.06	E230M 2707 A				2160 Secs	
									[==>1867.0 Secs]	[1]
	4	hd128279 - 1 - science2	(4) HD128279	STIS/NUV-MAMA, ACCUM, 0.2X0.06	E230M 2707 A				3000 Secs	
									[==>3005.0 Secs]	[2]
	5	hd128279 - 1 - ACQ/PEAK	(4) HD128279	STIS/CCD, ACQ/PEAK, 0.2X0.05ND	MIRROR				1.0 Secs	
									[==>]	[3]
	6	hd128279 - 1 - science3	(4) HD128279	STIS/NUV-MAMA, ACCUM, 0.2X0.06	E230M 2707 A				3000 Secs	
									[==>2084.0 Secs]	[3]
	7	hd128279 - 1 - science4	(4) HD128279	STIS/NUV-MAMA, ACCUM, 0.2X0.06	E230M 2707 A				2640 Secs	
									[==>3005.0 Secs]	[4]
	8	hd128279 - 1 - science5	(4) HD128279	STIS/NUV-MAMA, ACCUM, 0.2X0.06	E230M 2707 A				3000 Secs	
									[==>3005.0 Secs]	[5]

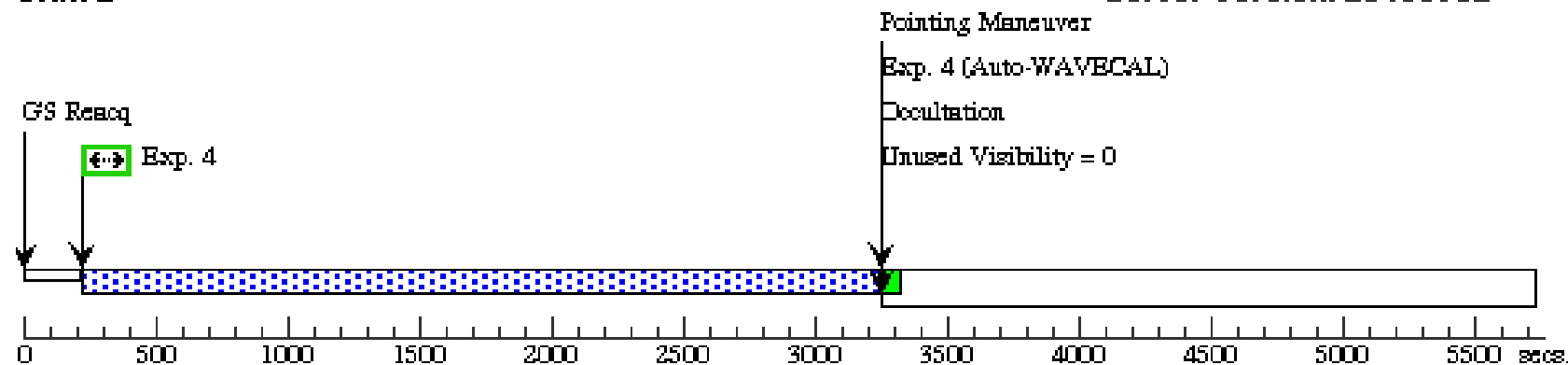
Orbit 1

Server Version: 20100902



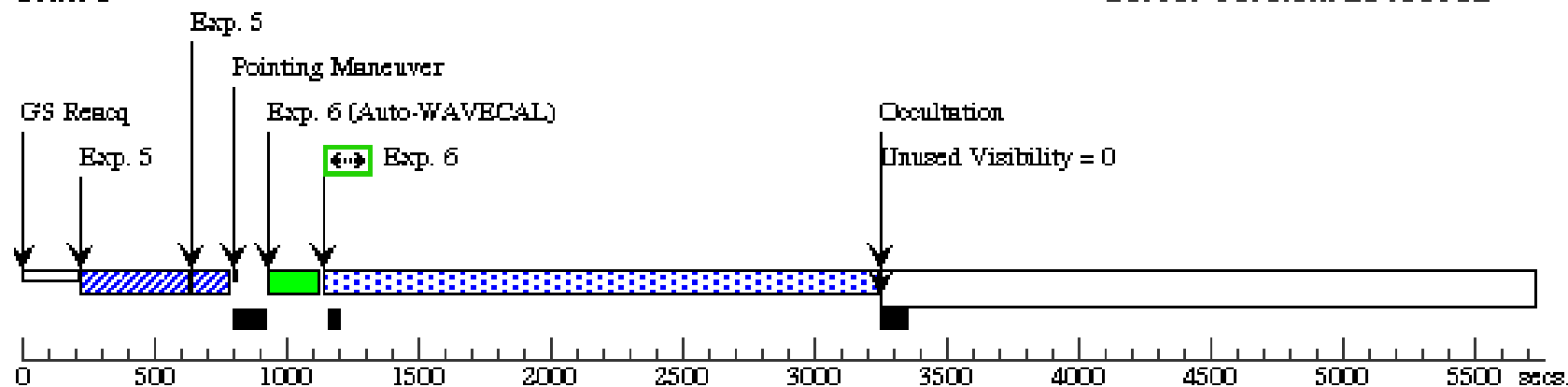
Orbit 2

Server Version: 20100902



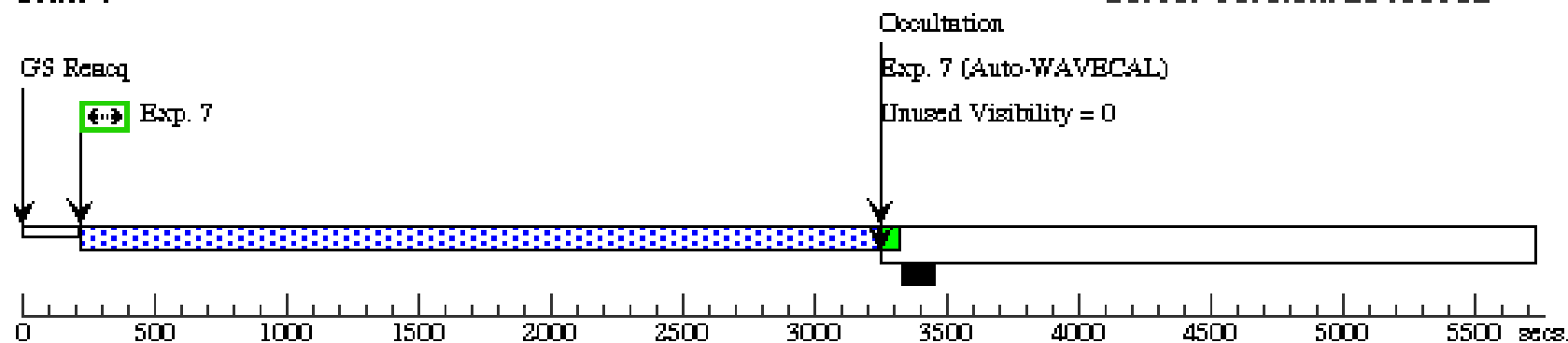
Orbit 3

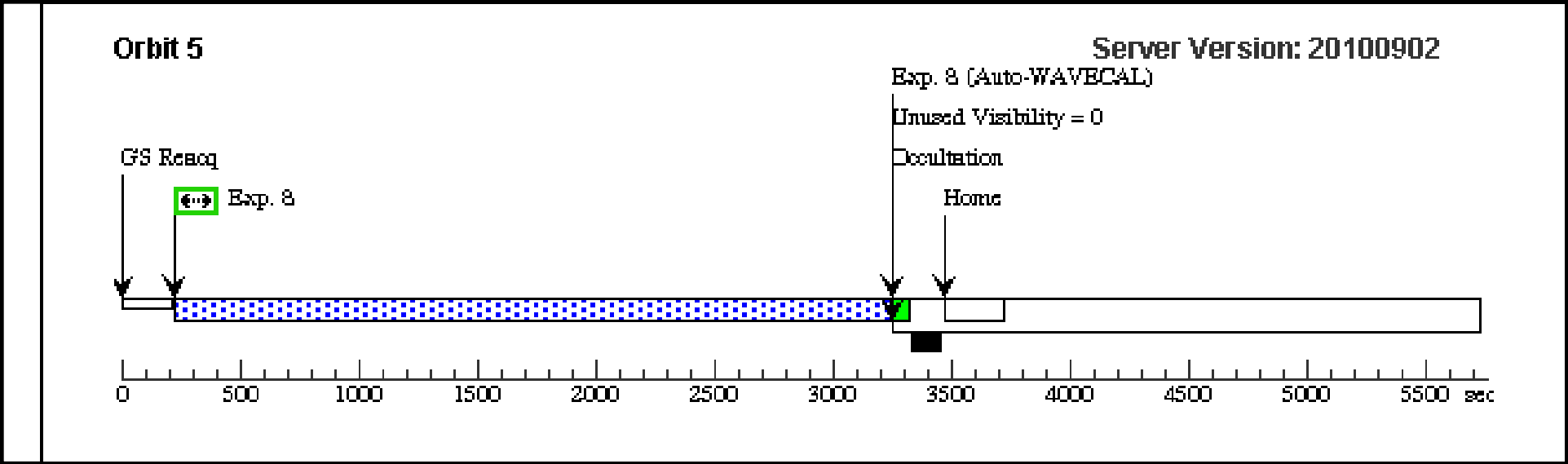
Server Version: 20100902



Orbit 4

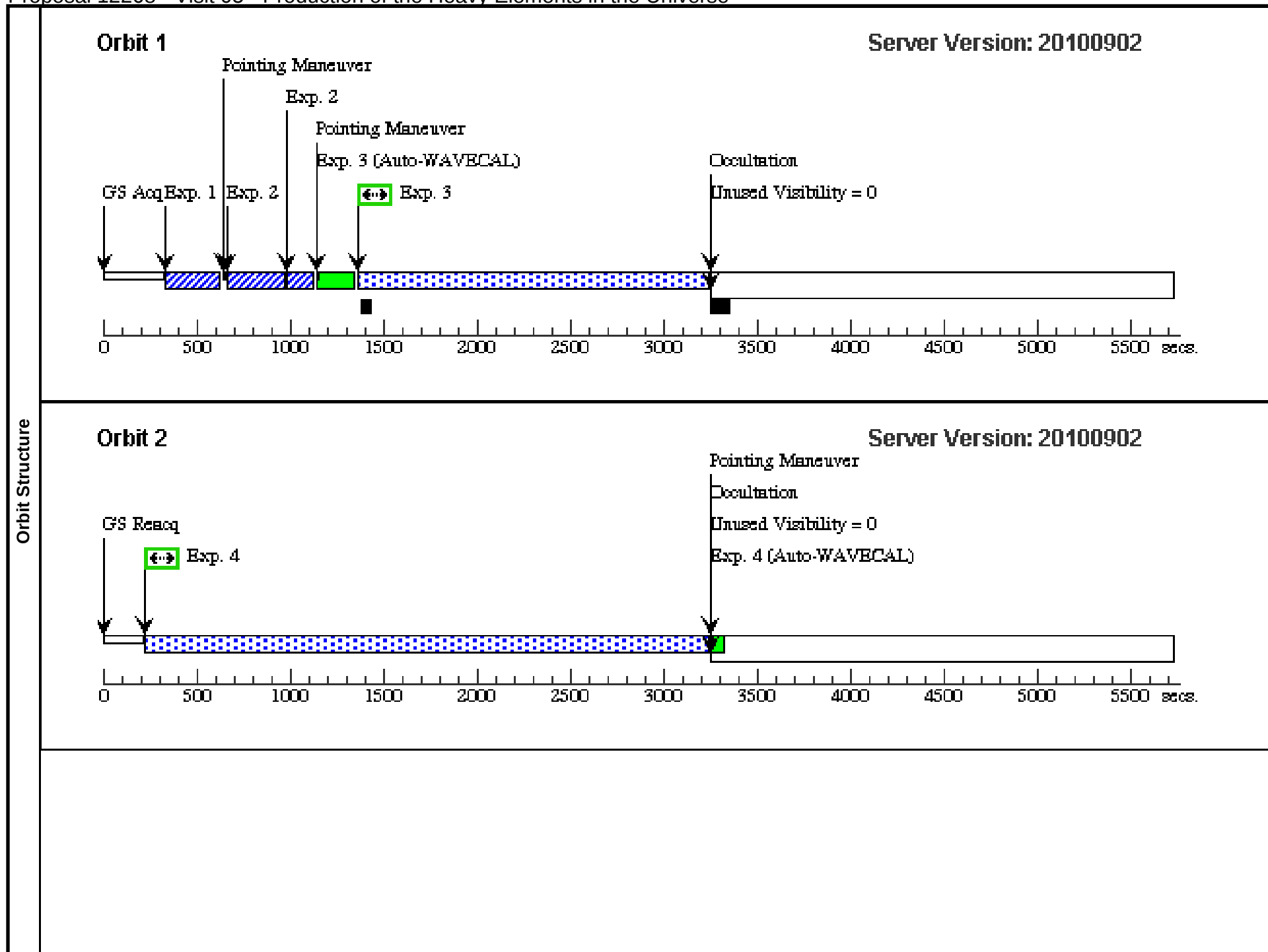
Server Version: 20100902





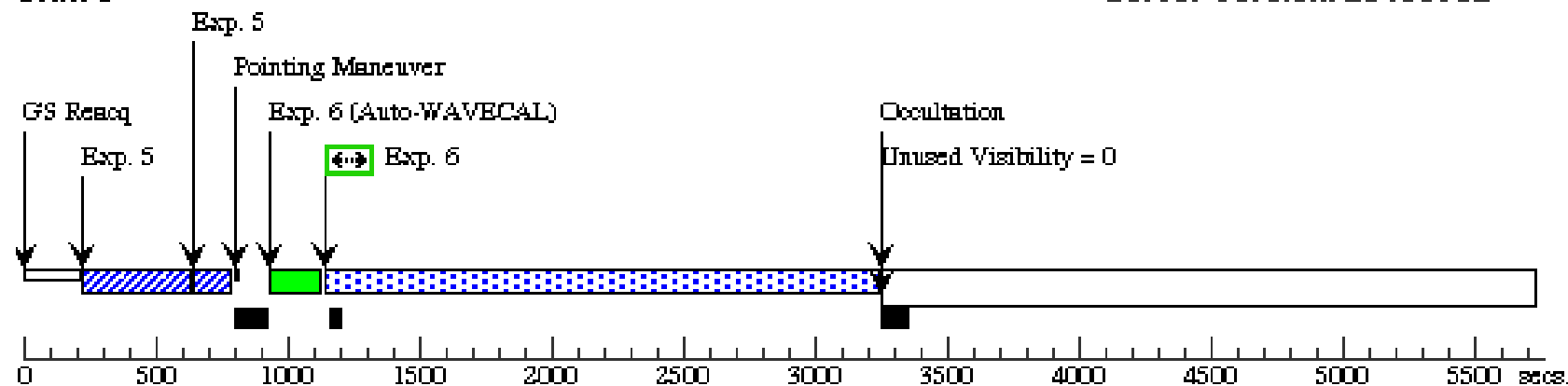
Proposal 12268 - Visit 05 - Production of the Heavy Elements in the Universe

Visit	Proposal 12268, Visit 05, implementation										Fri Mar 11 02:03:04 GMT 2011
	Diagnostic Status: No Diagnostics										
	Scientific Instruments: STIS/CCD, STIS/NUV-MAMA										
	Special Requirements: (none)										
	Comments: hd128279 - visit 2										
Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous					
	(4)	HD128279	RA: 14 36 48.5000 (219.2020833d) Dec: -29 06 46.20 (-29.11283d) Equinox: J2000	Proper Motion RA: 62.11 mas/yr Proper Motion Dec: -342.6 mas/yr Parallax: 0.0061" Epoch of Position: 2000.0 Radial Velocity: -76.0 km/sec	V=7.97+/-0.05 (B-V)=0.60+/-0.05, E(B-V)=0.10+/-0.05, TYPE=G5III	Reference Frame: ICRS					
	Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.										
	Epoch (1991.25 --> 2000.0) updated 08mar2011 by iur using HIC from VizieR.										
	PM (re?)updated 08mar2011 by iur using Hipparcos 2007 rereduction (I/311) from VizieR.										
Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit	
	1	hd128279 - 2 - ACQ	(4) HD128279	STIS/CCD, ACQ, F25ND3	MIRROR				1.0 Secs		
									[==>]	[1]	
	2	hd128279 - 2 - ACQ/PEAK	(4) HD128279	STIS/CCD, ACQ/PEAK, 0.2X0.05ND	MIRROR				1.0 Secs		
									[==>]	[1]	
	3	hd128279 - 2 - science1	(4) HD128279	STIS/NUV-MAMA, ACCUM, 0.2X0.06	E230M 2707 A				2160 Secs		
									[==>1867.0 Secs]	[1]	
	4	hd128279 - 2 - science2	(4) HD128279	STIS/NUV-MAMA, ACCUM, 0.2X0.06	E230M 2707 A				3000 Secs		
									[==>3005.0 Secs]	[2]	
	5	hd128279 - 2 - ACQ/PEAK	(4) HD128279	STIS/CCD, ACQ/PEAK, 0.2X0.05ND	MIRROR				1.0 Secs		
									[==>]	[3]	
	6	hd128279 - 2 - science3	(4) HD128279	STIS/NUV-MAMA, ACCUM, 0.2X0.06	E230M 2707 A				3000 Secs		
									[==>2084.0 Secs]	[3]	
	7	hd128279 - 2 - science4	(4) HD128279	STIS/NUV-MAMA, ACCUM, 0.2X0.06	E230M 2707 A				2640 Secs		
									[==>3005.0 Secs]	[4]	
	8	hd128279 - 2 - science5	(4) HD128279	STIS/NUV-MAMA, ACCUM, 0.2X0.06	E230M 2707 A				3000 Secs		
									[==>3005.0 Secs]	[5]	



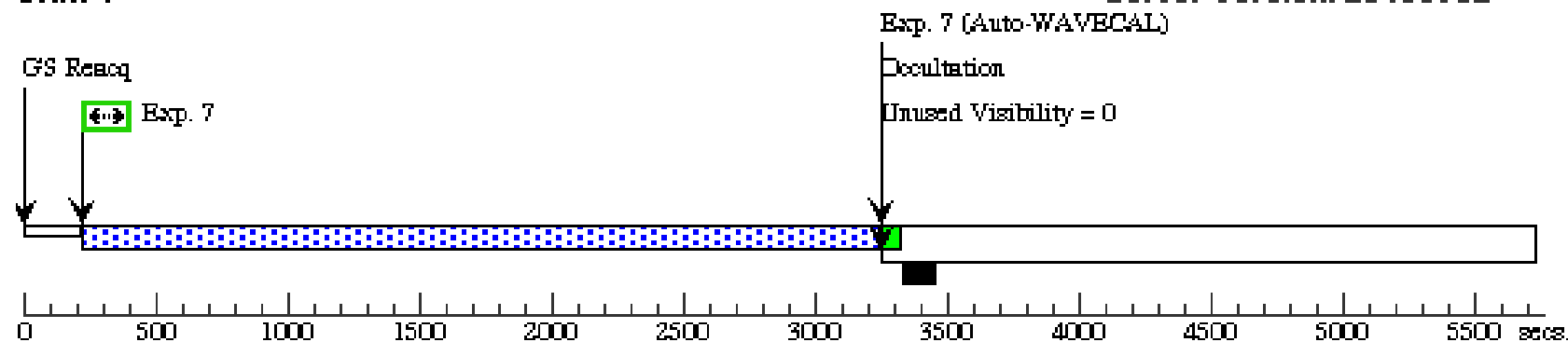
Orbit 3

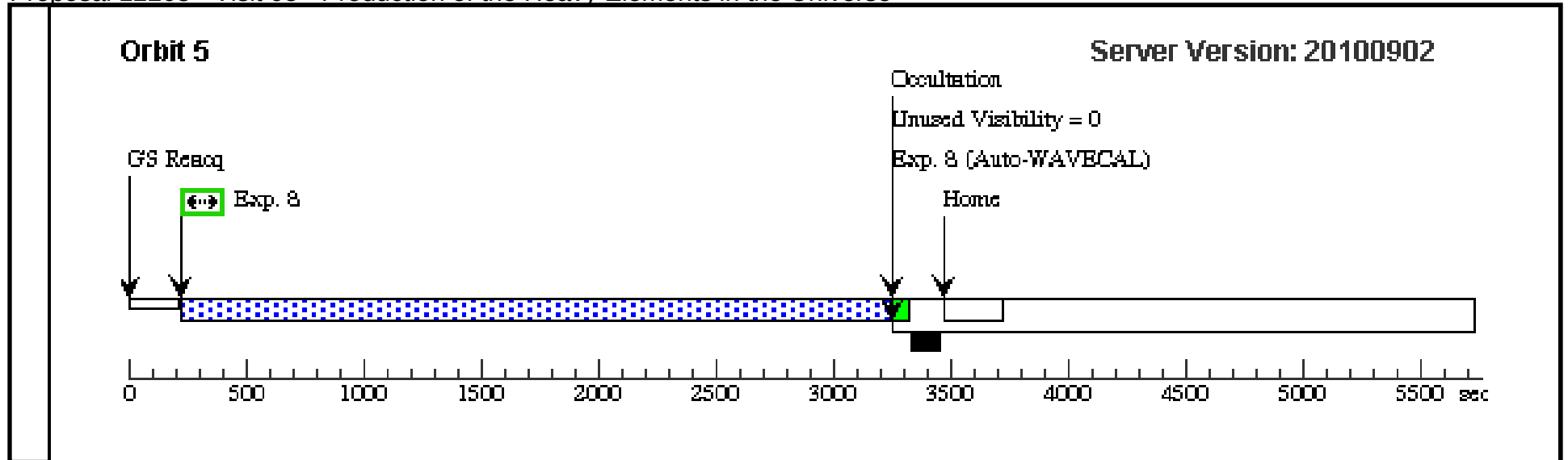
Server Version: 20100902



Orbit 4

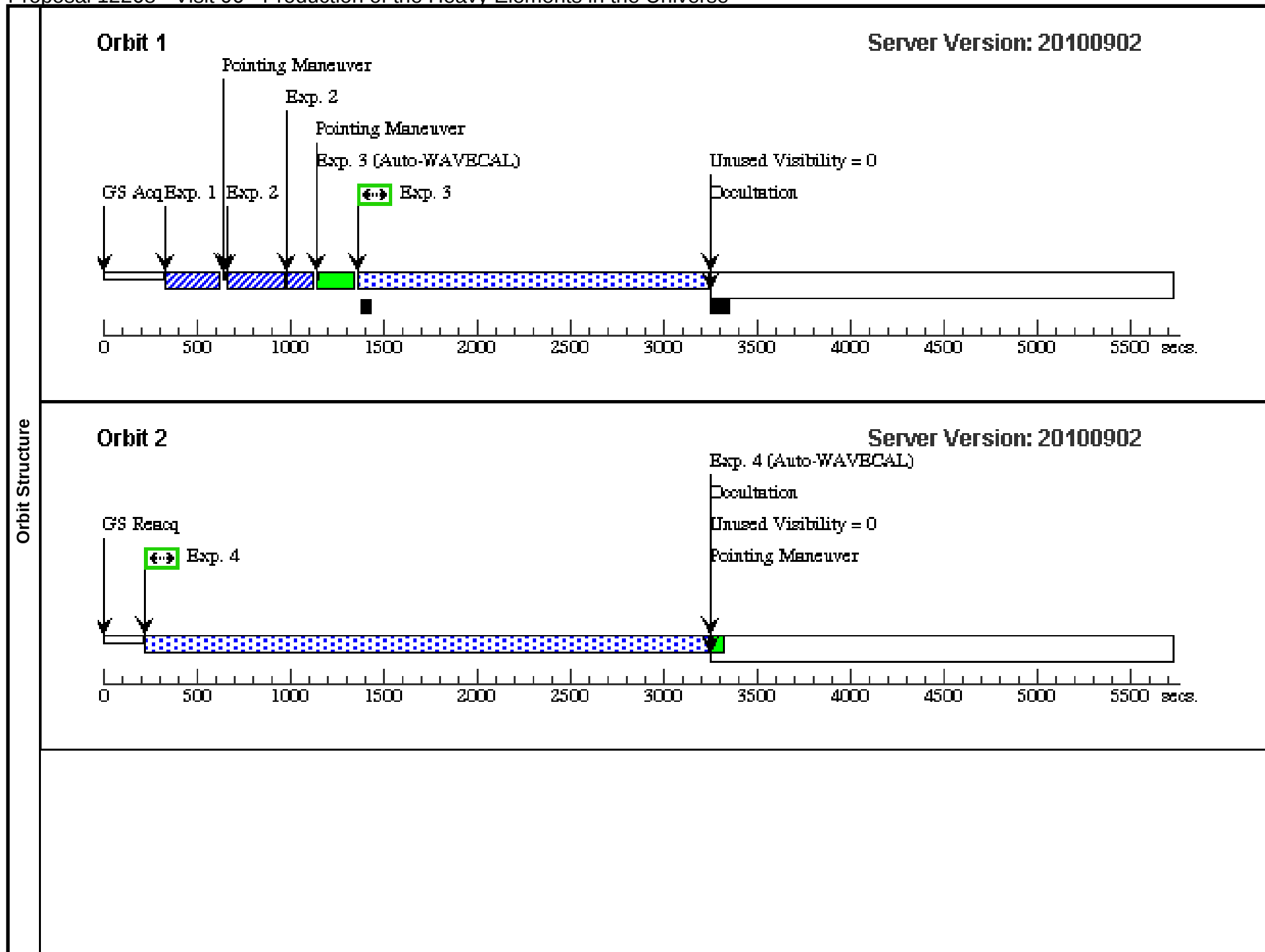
Server Version: 20100902





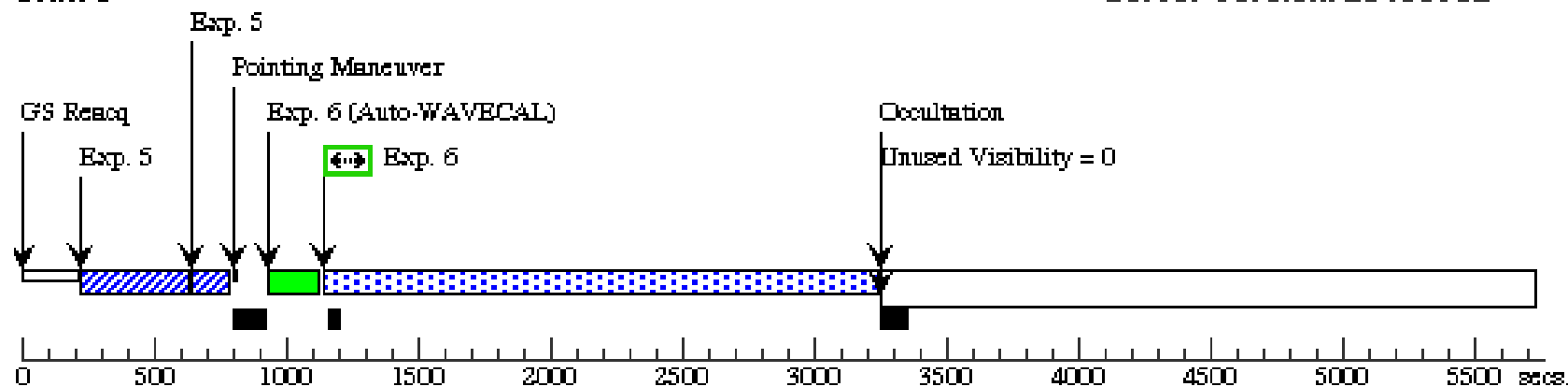
Proposal 12268 - Visit 06 - Production of the Heavy Elements in the Universe

Visit	Proposal 12268, Visit 06, implementation										Fri Mar 11 02:03:05 GMT 2011
	Diagnostic Status: No Diagnostics										
	Scientific Instruments: STIS/CCD, STIS/NUV-MAMA										
	Special Requirements: (none)										
	Comments: hd128279 - visit 3										
Fixed Targets	#	Name	Target Coordinates		Targ. Coord. Corrections		Fluxes		Miscellaneous		
	(4)	HD128279	RA: 14 36 48.5000 (219.2020833d) Dec: -29 06 46.20 (-29.11283d) Equinox: J2000		Proper Motion RA: 62.11 mas/yr Proper Motion Dec: -342.6 mas/yr Parallax: 0.0061" Epoch of Position: 2000.0 Radial Velocity: -76.0 km/sec		V=7.97+/-0.05 (B-V)=0.60+/-0.05, E(B-V)=0.10+/-0.05, TYPE=G5III		Reference Frame: ICRS		
	Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.										
	Epoch (1991.25 --> 2000.0) updated 08mar2011 by iur using HIC from VizieR.										
	PM (re?)updated 08mar2011 by iur using Hipparcos 2007 rereduction (I/311) from VizieR.										
Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]		Orbit
	1	hd128279 - 3 - ACQ	(4) HD128279	STIS/CCD, ACQ, F25ND3	MIRROR				1.0 Secs		
									[==>]		[1]
	2	hd128279 - 3 - ACQ/PEAK	(4) HD128279	STIS/CCD, ACQ/PEAK, 0.2X0.05ND	MIRROR				1.0 Secs		
									[==>]		[1]
	3	hd128279 - 3 - science1	(4) HD128279	STIS/NUV-MAMA, ACCUM, 0.2X0.06	E230M 2707 A				2160 Secs		
									[==>1867.0 Secs]		[1]
	4	hd128279 - 3 - science2	(4) HD128279	STIS/NUV-MAMA, ACCUM, 0.2X0.06	E230M 2707 A				3000 Secs		
									[==>3005.0 Secs]		[2]
	5	hd128279 - 3 - ACQ/PEAK	(4) HD128279	STIS/CCD, ACQ/PEAK, 0.2X0.05ND	MIRROR				1.0 Secs		
									[==>]		[3]
	6	hd128279 - 3 - science3	(4) HD128279	STIS/NUV-MAMA, ACCUM, 0.2X0.06	E230M 2707 A				3000 Secs		
									[==>2084.0 Secs]		[3]
	7	hd128279 - 3 - science4	(4) HD128279	STIS/NUV-MAMA, ACCUM, 0.2X0.06	E230M 2707 A				2640 Secs		
									[==>3005.0 Secs]		[4]
	8	hd128279 - 3 - science5	(4) HD128279	STIS/NUV-MAMA, ACCUM, 0.2X0.06	E230M 2707 A				3000 Secs		
									[==>3005.0 Secs]		[5]



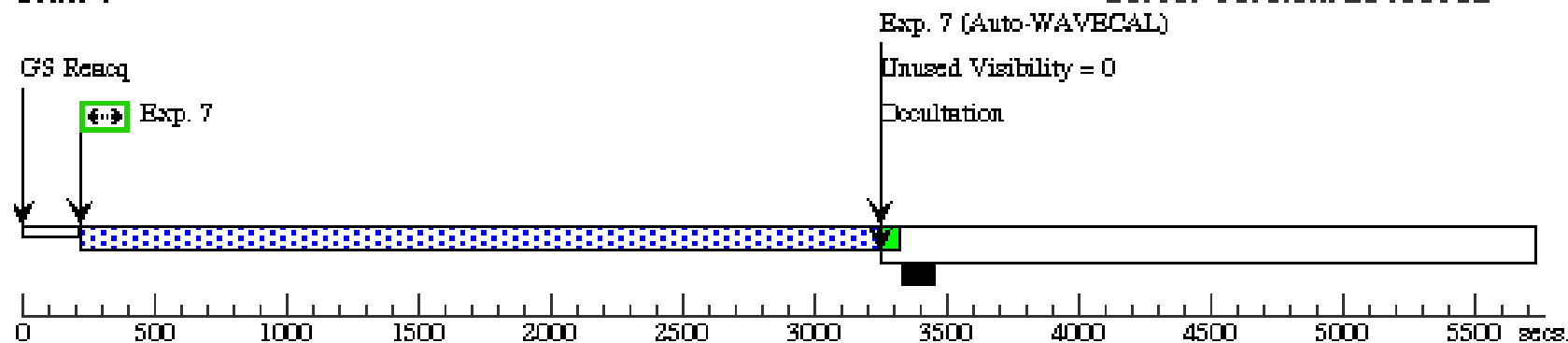
Orbit 3

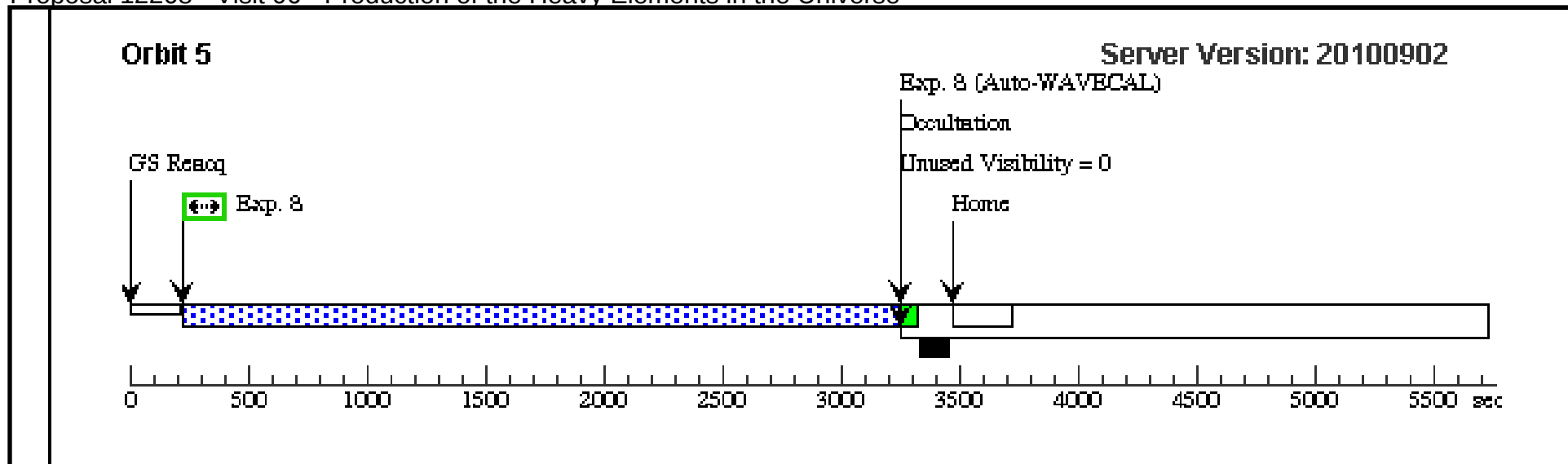
Server Version: 20100902



Orbit 4

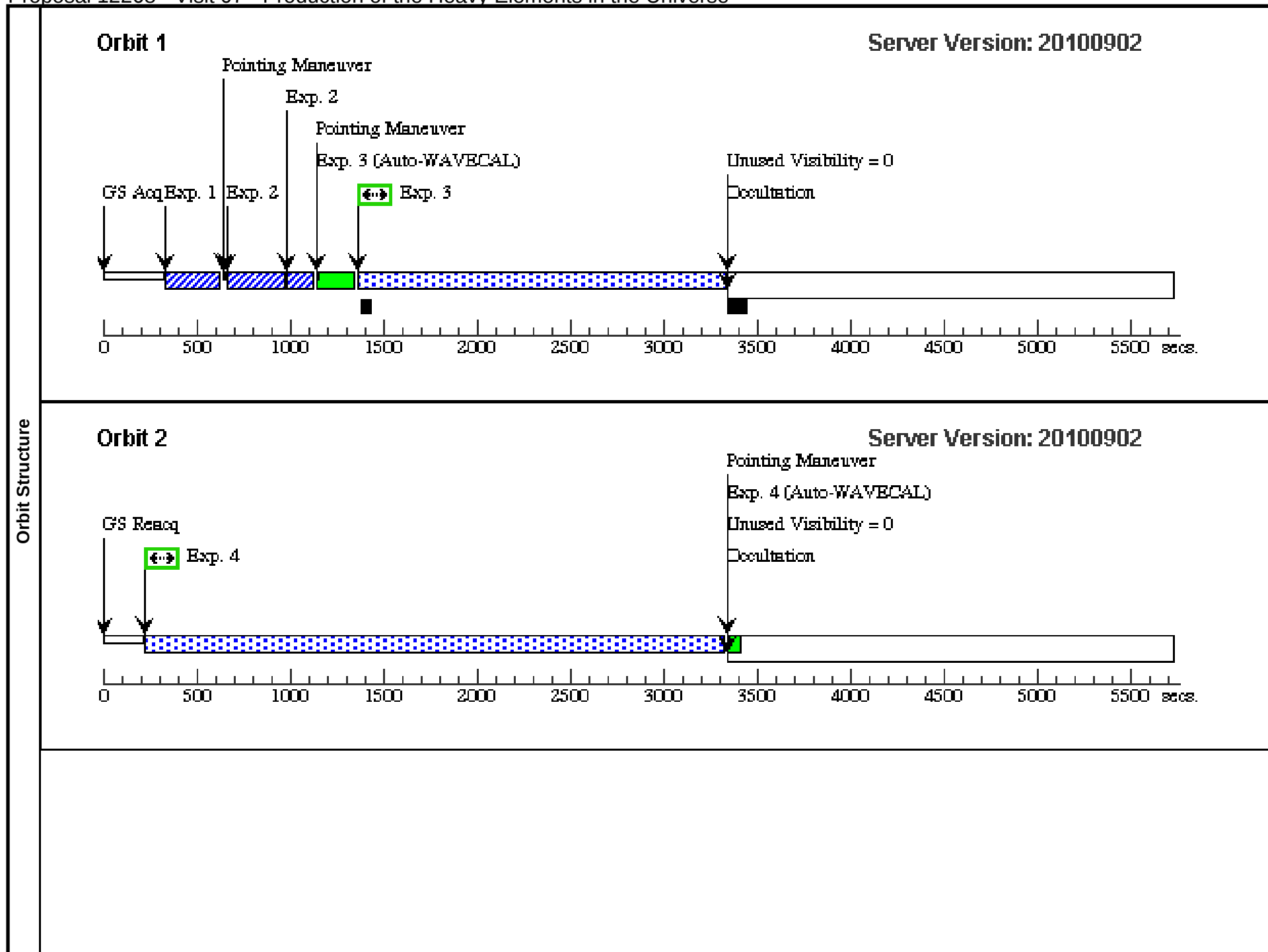
Server Version: 20100902





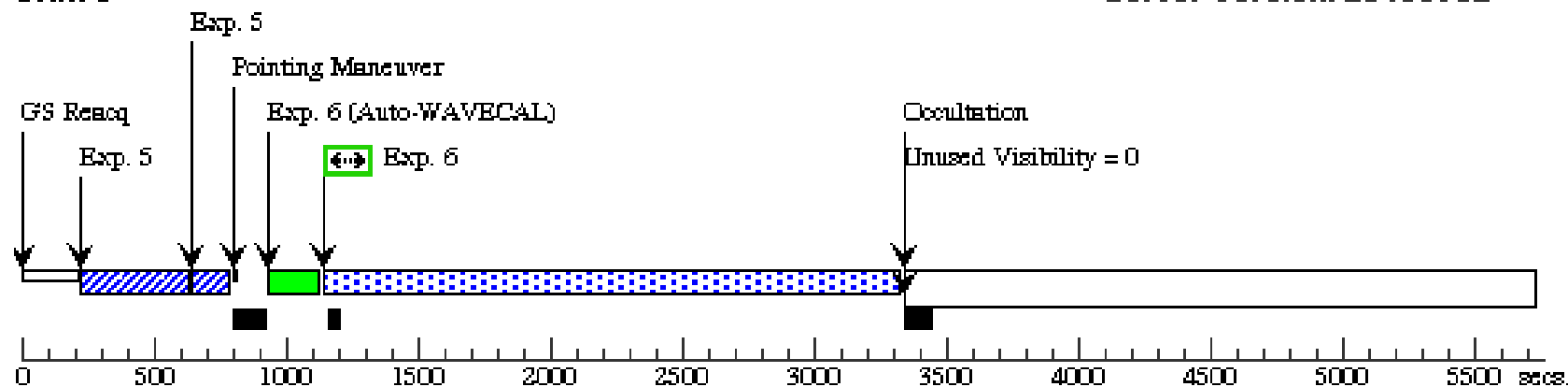
Proposal 12268 - Visit 07 - Production of the Heavy Elements in the Universe

Visit	Proposal 12268, Visit 07, implementation						Fri Mar 11 02:03:06 GMT 2011			
	Diagnostic Status: No Diagnostics									
	Scientific Instruments: STIS/CCD, STIS/NUV-MAMA									
	Special Requirements: (none)									
Comments: hd126238 - visit 1										
Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous				
	(3)	HD126238	RA: 14 25 30.0000 (216.3750000d)	Proper Motion RA: 25.31 mas/yr	V=7.68+/-0.05	Reference Frame: ICRS				
		Alt Name1: GSC07817-00861	Dec: -43 38 37.00 (-43.64361d)	Proper Motion Dec: -105.69 mas/yr	(B-V)=0.76+/-0.05,					
			Equinox: J2000	Parallax: 0.0038"	E(B-V)=0.11+/-0.05,					
Epoch of Position: 2000.0										
Radial Velocity: +253.0 km/sec										
Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.										
Epoch (1991.25 --> 2000.0) updated 08mar2011 by iur using HIC from VizieR.										
PM (re?)updated 08mar2011 by iur using Hipparcos 2007 rereduction (I/311) from VizieR.										
Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit
	1	hd126238 - 1 - ACQ	(3) HD126238	STIS/CCD, ACQ, F25ND3	MIRROR				1.0 Secs	
									[==>]	[1]
	2	hd126238 - 1 - ACQ/PEAK	(3) HD126238	STIS/CCD, ACQ/PEAK, 0.2X0.05ND	MIRROR				1.0 Secs	
									[==>]	[1]
	3	hd126238 - 1 - science1	(3) HD126238	STIS/NUV-MAMA, ACCUM, 0.2X0.06	E230M				2160 Secs	
					2707 A				[==>1951.0 Secs]	[1]
	4	hd126238 - 1 - science2	(3) HD126238	STIS/NUV-MAMA, ACCUM, 0.2X0.06	E230M				3000 Secs	
					2707 A				[==>3089.0 Secs]	[2]
	5	hd126238 - 1 - ACQ/PEAK	(3) HD126238	STIS/CCD, ACQ/PEAK, 0.2X0.05ND	MIRROR				1.0 Secs	
									[==>]	[3]
	6	hd126238 - 1 - science3	(3) HD126238	STIS/NUV-MAMA, ACCUM, 0.2X0.06	E230M				3000 Secs	
				2707 A				[==>2168.0 Secs]	[3]	
7	hd126238 - 1 - science4	(3) HD126238	STIS/NUV-MAMA, ACCUM, 0.2X0.06	E230M				2640 Secs		
				2707 A				[==>3089.0 Secs]	[4]	
8	hd126238 - 1 - science5	(3) HD126238	STIS/NUV-MAMA, ACCUM, 0.2X0.06	E230M				3000 Secs		
				2707 A				[==>3089.0 Secs]	[5]	



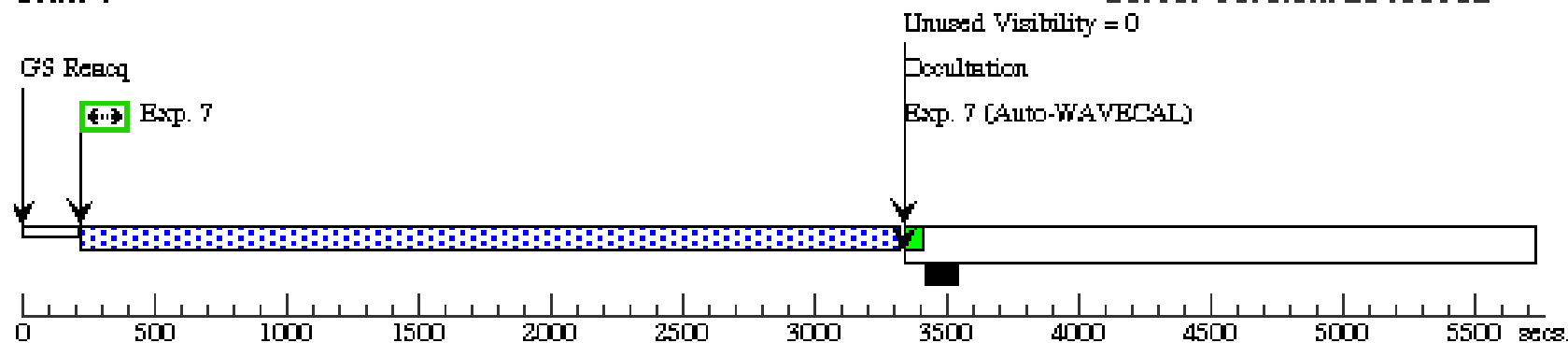
Orbit 3

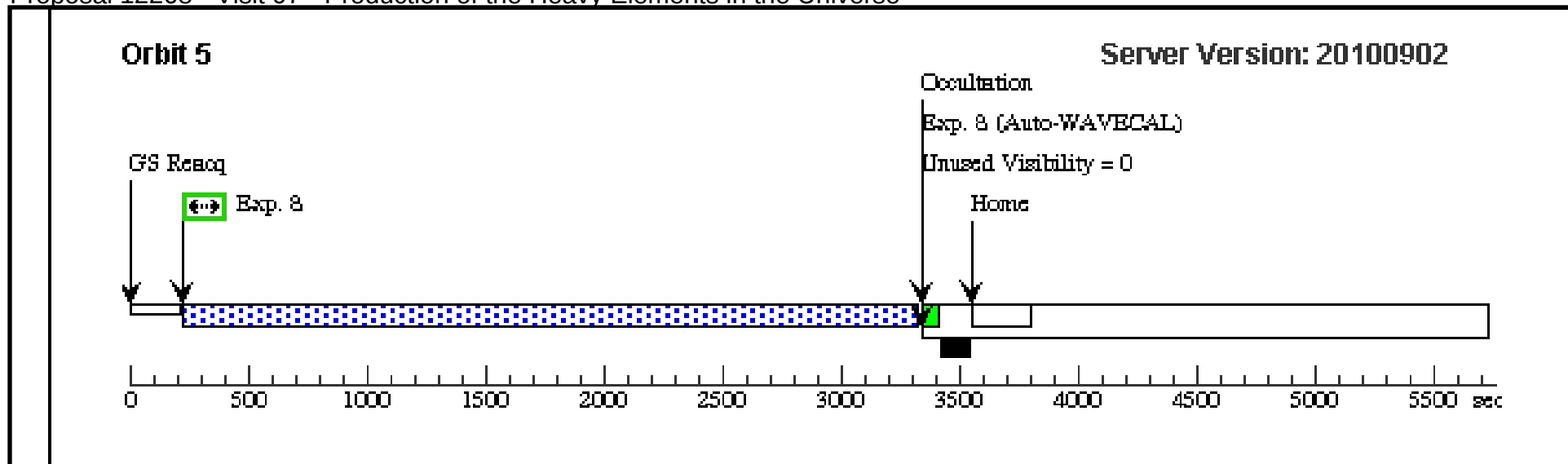
Server Version: 20100902



Orbit 4

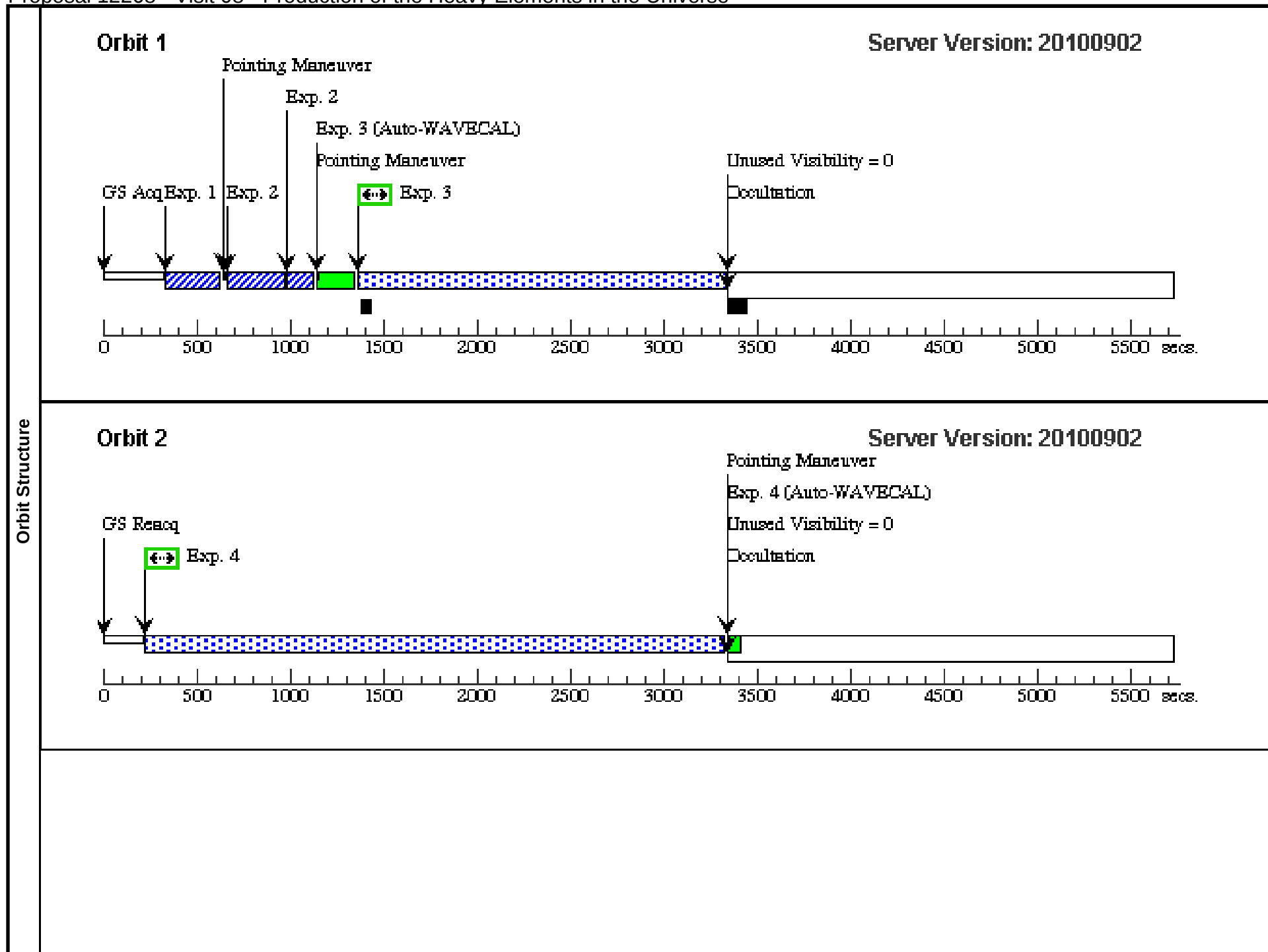
Server Version: 20100902





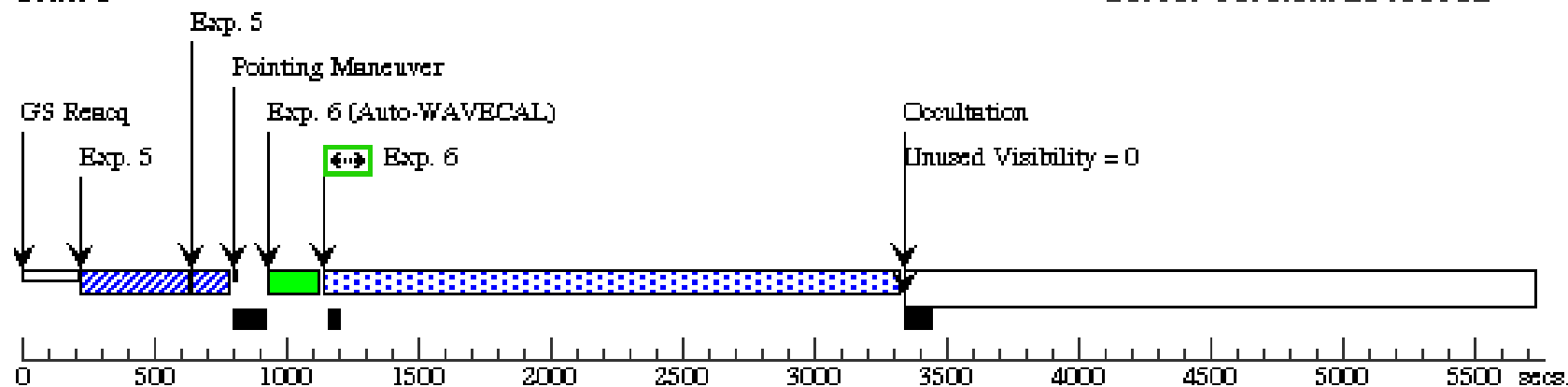
Proposal 12268 - Visit 08 - Production of the Heavy Elements in the Universe

Visit	Proposal 12268, Visit 08, implementation										Fri Mar 11 02:03:07 GMT 2011
	Diagnostic Status: No Diagnostics										
	Scientific Instruments: STIS/CCD, STIS/NUV-MAMA										
	Special Requirements: (none)										
	Comments: hd126238 - visit 2										
Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous					
	(3)	HD126238	RA: 14 25 30.0000 (216.3750000d)	Proper Motion RA: 25.31 mas/yr	V=7.68+/-0.05	Reference Frame: ICRS					
		Alt Name1: GSC07817-00861	Dec: -43 38 37.00 (-43.64361d)	Proper Motion Dec: -105.69 mas/yr	(B-V)=0.76+/-0.05,						
			Equinox: J2000	Parallax: 0.0038"	E(B-V)=0.11+/-0.05,						
				Epoch of Position: 2000.0	TYPE=G5III						
				Radial Velocity: +253.0 km/sec							
	Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.										
	Epoch (1991.25 --> 2000.0) updated 08mar2011 by iur using HIC from VizierR.										
	PM (re?)updated 08mar2011 by iur using Hipparcos 2007 rereduction (I/311) from VizierR.										
Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]		Orbit
	1	hd126238 - 2 - ACQ	(3) HD126238	STIS/CCD, ACQ, F25ND3	MIRROR				1.0 Secs		
									[==>]		[1]
	2	hd126238 - 2 - ACQ/PEAK	(3) HD126238	STIS/CCD, ACQ/PEAK, 0.2X0.05ND	MIRROR				1.0 Secs		
									[==>]		[1]
	3	hd126238 - 2 - science1	(3) HD126238	STIS/NUV-MAMA, ACCUM, 0.2X0.06	E230M				2160 Secs		
					2707 A				[==>1951.0 Secs]		[1]
	4	hd126238 - 2 - science2	(3) HD126238	STIS/NUV-MAMA, ACCUM, 0.2X0.06	E230M				3000 Secs		
					2707 A				[==>3089.0 Secs]		[2]
	5	hd126238 - 2 - ACQ/PEAK	(3) HD126238	STIS/CCD, ACQ/PEAK, 0.2X0.05ND	MIRROR				1.0 Secs		
									[==>]		[3]
	6	hd126238 - 2 - science3	(3) HD126238	STIS/NUV-MAMA, ACCUM, 0.2X0.06	E230M				3000 Secs		
					2707 A				[==>2168.0 Secs]		[3]
	7	hd126238 - 2 - science4	(3) HD126238	STIS/NUV-MAMA, ACCUM, 0.2X0.06	E230M				2640 Secs		
					2707 A				[==>3089.0 Secs]		[4]
	8	hd126238 - 2 - science5	(3) HD126238	STIS/NUV-MAMA, ACCUM, 0.2X0.06	E230M				3000 Secs		
					2707 A				[==>3089.0 Secs]		[5]



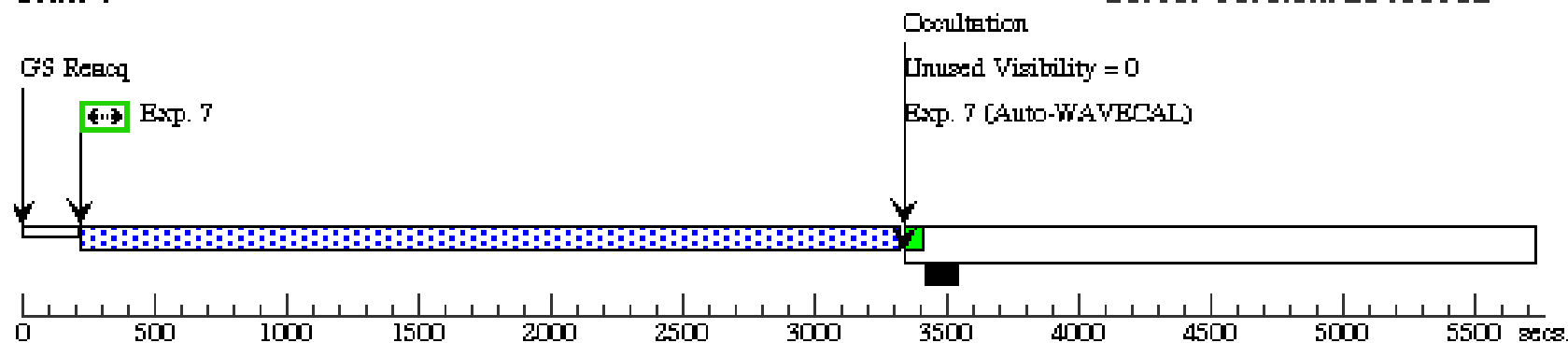
Orbit 3

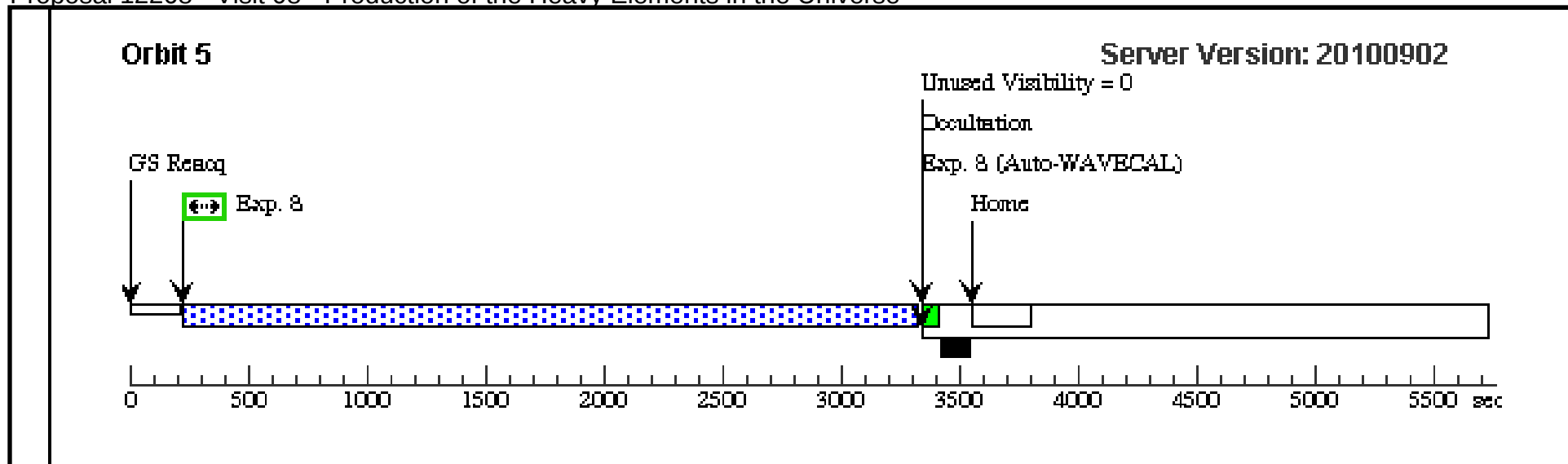
Server Version: 20100902



Orbit 4

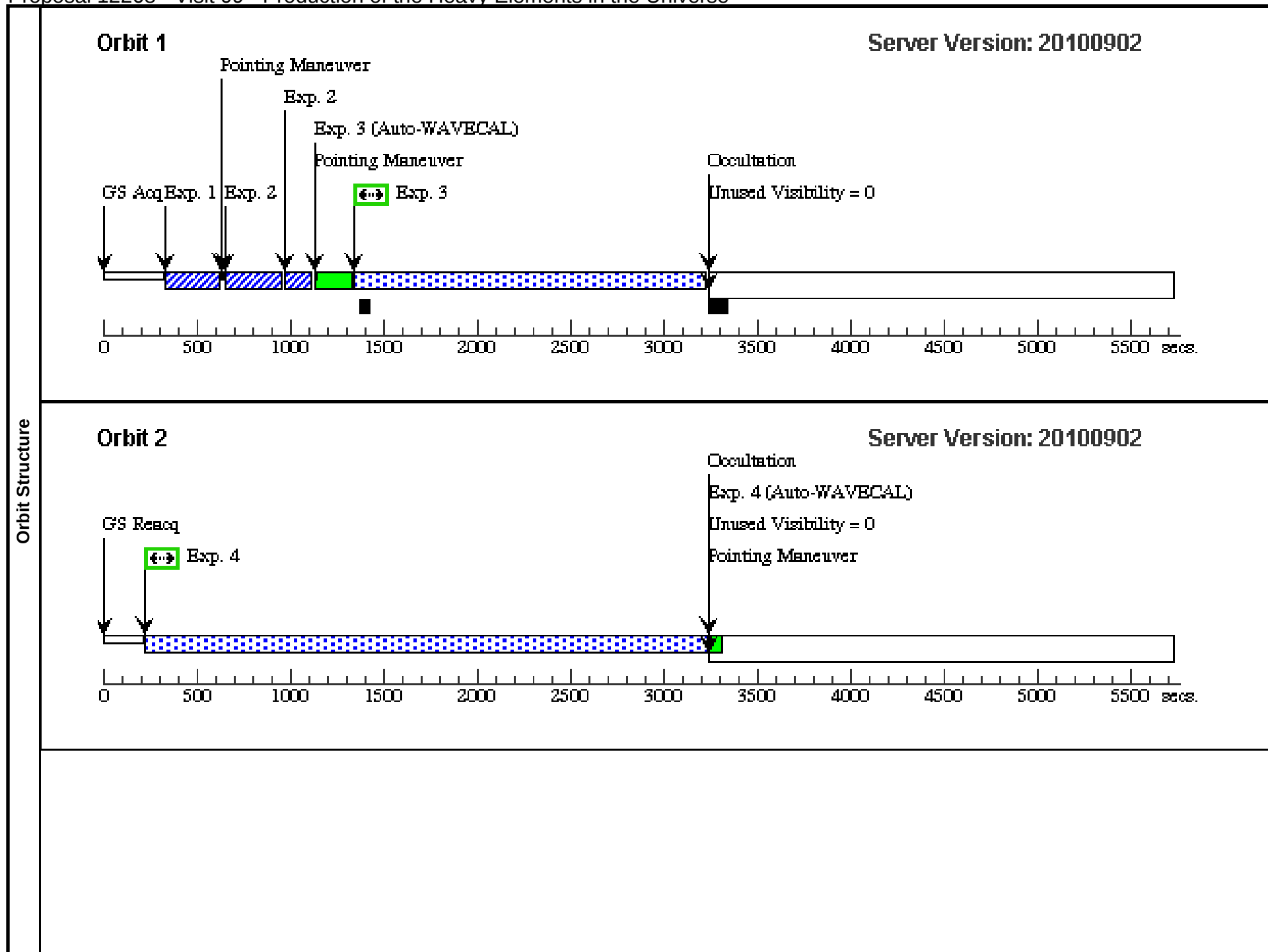
Server Version: 20100902





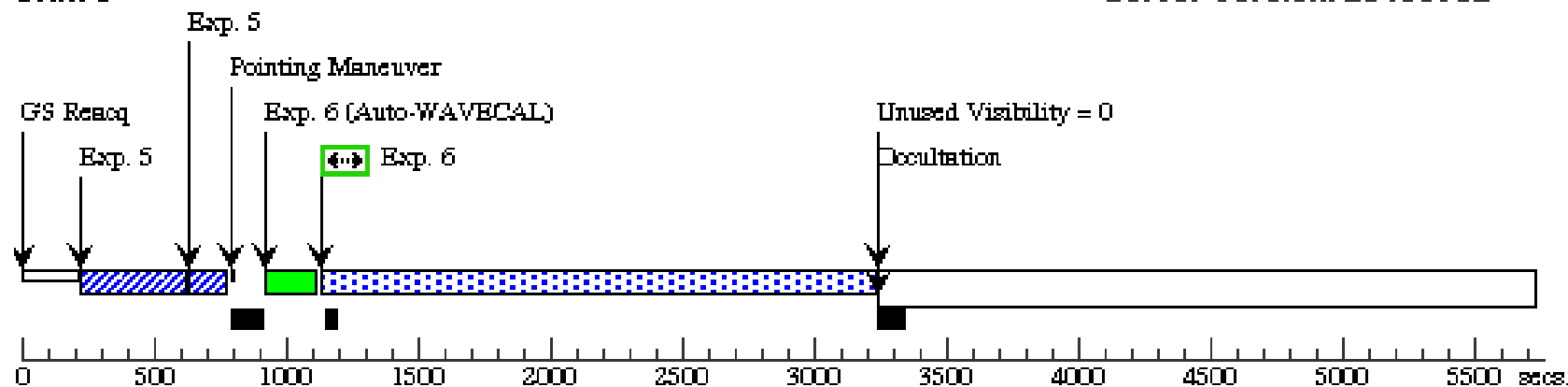
Proposal 12268 - Visit 09 - Production of the Heavy Elements in the Universe

Visit	Proposal 12268, Visit 09, implementation							Fri Mar 11 02:03:07 GMT 2011		
	Diagnostic Status: No Diagnostics									
	Scientific Instruments: STIS/CCD, STIS/NUV-MAMA									
	Special Requirements: (none)									
	Comments: hd122563 - visit 1									
Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous				
	(2)	HD122563	RA: 14 02 31.8400 (210.6326667d) Dec: +09 41 9.70 (9.68603d) Equinox: J2000	Proper Motion RA: -189.86 mas/yr Proper Motion Dec: -69.67 mas/yr Parallax: 0.0042" Epoch of Position: 2000.0 Radial Velocity: -26.0 km/sec	V=6.20+/-0.1 (B-V)=0.90+/-0.05, E(B-V)=0.03+/-0.03, TYPE=K2II	Reference Frame: ICRS				
	Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.									
	Epoch (1991.25 --> 2000.0) updated 08mar2011 by iur using HIC from VizierR. PM (re?)updated 08mar2011 by iur using Hipparcos 2007 rereduction (I/311) from VizierR.									
Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit
	1	hd122563 - 1 - ACQ	(2) HD122563	STIS/CCD, ACQ, F25ND3	MIRROR				0.5 Secs	
									[==>]	[1]
	2	hd122563 - 1 - ACQ/PEAK	(2) HD122563	STIS/CCD, ACQ/PEAK, 0.2X0.05ND	MIRROR				0.5 Secs	
									[==>]	[1]
	3	hd122563 - 1 - science1	(2) HD122563	STIS/NUV-MAMA, ACCUM, 0.2X0.06	E230M 2707 A				2160 Secs	
									[==>1866.0 Secs]	[1]
	4	hd122563 - 1 - science2	(2) HD122563	STIS/NUV-MAMA, ACCUM, 0.2X0.06	E230M 2707 A				3000 Secs	
									[==>2990.0 Secs]	[2]
	5	hd122563 - 1 - ACQ/PEAK	(2) HD122563	STIS/CCD, ACQ/PEAK, 0.2X0.05ND	MIRROR				0.5 Secs	
									[==>]	[3]
	6	hd122563 - 1 - science3	(2) HD122563	STIS/NUV-MAMA, ACCUM, 0.2X0.06	E230M 2707 A				3000 Secs	
									[==>2081.0 Secs]	[3]
	7	hd122563 - 1 - science4	(2) HD122563	STIS/NUV-MAMA, ACCUM, 0.2X0.06	E230M 2707 A				2640 Secs	
								[==>2990.0 Secs]	[4]	



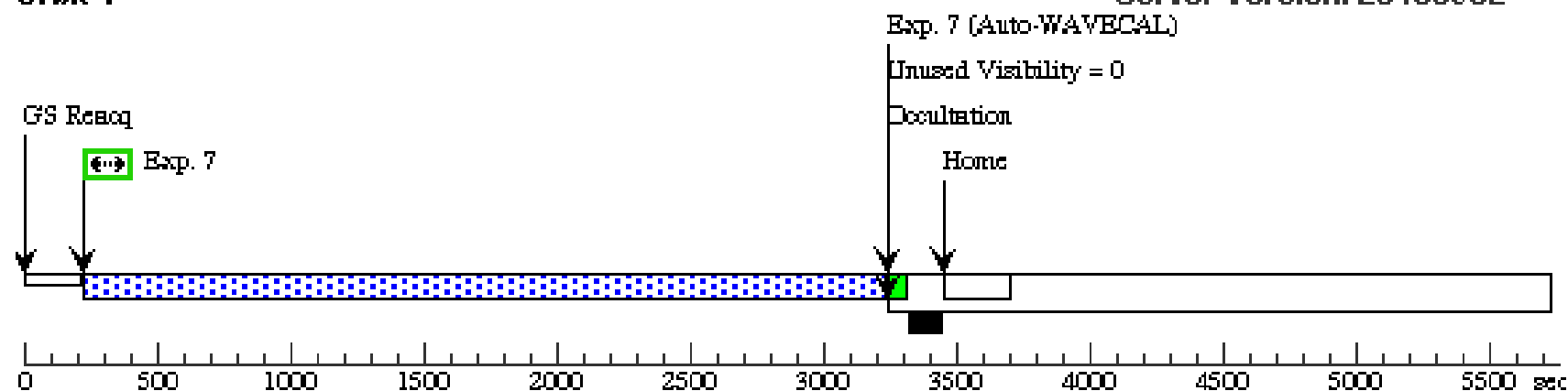
Orbit 3

Server Version: 20100902



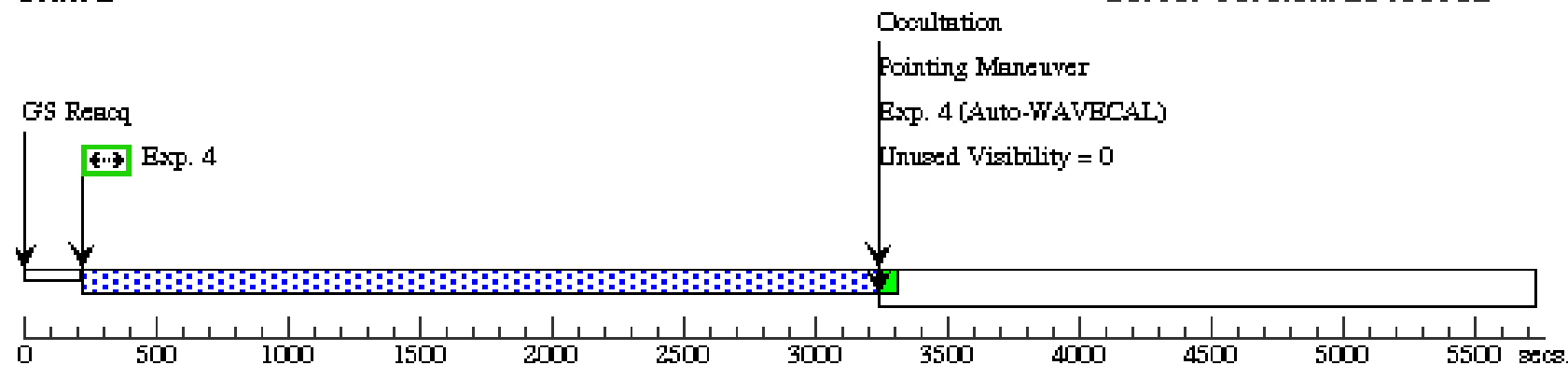
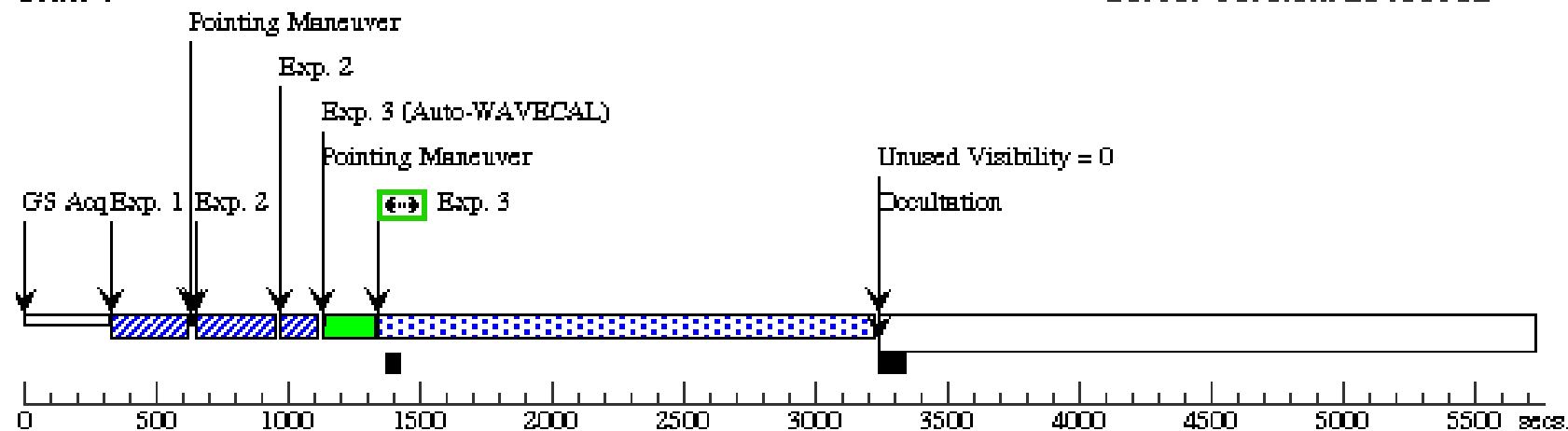
Orbit 4

Server Version: 20100902



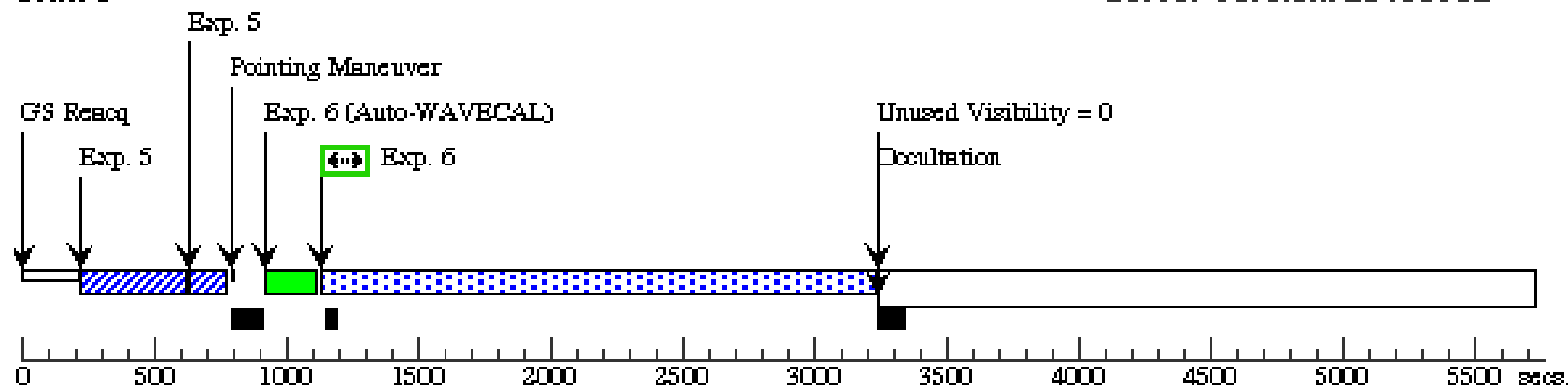
Proposal 12268 - Visit 10 - Production of the Heavy Elements in the Universe

Visit	Proposal 12268, Visit 10, implementation							Fri Mar 11 02:03:08 GMT 2011		
	Diagnostic Status: No Diagnostics									
	Scientific Instruments: STIS/CCD, STIS/NUV-MAMA									
	Special Requirements: (none)									
	Comments: hd122563 - visit 2									
Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous				
	(2)	HD122563	RA: 14 02 31.8400 (210.6326667d) Dec: +09 41 9.70 (9.68603d) Equinox: J2000	Proper Motion RA: -189.86 mas/yr Proper Motion Dec: -69.67 mas/yr Parallax: 0.0042" Epoch of Position: 2000.0 Radial Velocity: -26.0 km/sec	V=6.20+/-0.1 (B-V)=0.90+/-0.05, E(B-V)=0.03+/-0.03, TYPE=K2II	Reference Frame: ICRS				
	Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.									
	Epoch (1991.25 --> 2000.0) updated 08mar2011 by iur using HIC from VizierR.									
	PM (re?)updated 08mar2011 by iur using Hipparcos 2007 rereduction (I/311) from VizieR.									
Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit
	1	hd122563 - 2 - ACQ	(2) HD122563	STIS/CCD, ACQ, F25ND3	MIRROR				0.5 Secs	
									[==>]	[1]
	2	hd122563 - 2 - ACQ/PEAK	(2) HD122563	STIS/CCD, ACQ/PEAK, 0.2X0.05ND	MIRROR				0.5 Secs	
									[==>]	[1]
	3	hd122563 - 2 - science1	(2) HD122563	STIS/NUV-MAMA, ACCUM, 0.2X0.06	E230M 2707 A				2160 Secs	
									[==>1866.0 Secs]	[1]
	4	hd122563 - 2 - science2	(2) HD122563	STIS/NUV-MAMA, ACCUM, 0.2X0.06	E230M 2707 A				3000 Secs	
									[==>2990.0 Secs]	[2]
	5	hd122563 - 2 - ACQ/PEAK	(2) HD122563	STIS/CCD, ACQ/PEAK, 0.2X0.05ND	MIRROR				0.5 Secs	
									[==>]	[3]
	6	hd122563 - 2 - science3	(2) HD122563	STIS/NUV-MAMA, ACCUM, 0.2X0.06	E230M 2707 A				3000 Secs	
									[==>2081.0 Secs]	[3]
	7	hd122563 - 2 - science4	(2) HD122563	STIS/NUV-MAMA, ACCUM, 0.2X0.06	E230M 2707 A				2640 Secs	
								[==>2990.0 Secs]	[4]	



Orbit 3

Server Version: 20100902



Orbit 4

Server Version: 20100902

