11668 - Cosmo-chronometry and Elemental Abundance Distribution of the Ancient Star HE1523-0901

Cycle: 17, Proposal Category: GO

(Availability Mode: SUPPORTED)

INVESTIGATORS

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VISITS

Visit	*Targets used in Visit*	*Configurations used in Visit*	*Orbits Used*	*Last Orbit Planner Run*	*OP Current with Visit?*
01	(1) HE1523-0901	STIS/CCD STIS/NUV-MAMA	3	20-Sep-2010 21:03:32.0	yes
02	(1) HE1523-0901	STIS/CCD STIS/NUV-MAMA	3	20-Sep-2010 21:03:39.0	yes
03	(1) HE1523-0901	STIS/CCD STIS/NUV-MAMA	3	20-Sep-2010 21:03:45.0	yes
04	(1) HE1523-0901	STIS/CCD STIS/NUV-MAMA	3	20-Sep-2010 21:03:53.0	yes
05	(1) HE1523-0901	STIS/CCD STIS/NUV-MAMA	3	20-Sep-2010 21:03:58.0	yes

Visit	*Targets used in Visit*	*Configurations used in Visit*	*Orbits Used*	*Last Orbit Planner Run*	*OP Current with Visit?*
06	(1) HE1523-0901	STIS/CCD STIS/NUV-MAMA	3	20-Sep-2010 21:04:04.0	yes
07	(1) HE1523-0901	STIS/CCD STIS/NUV-MAMA	3	20-Sep-2010 21:04:09.0	yes
08	(1) HE1523-0901	STIS/CCD STIS/NUV-MAMA	3	20-Sep-2010 21:04:15.0	yes
58	(1) HE1523-0901	STIS/CCD STIS/NUV-MAMA	3	20-Sep-2010 21:04:20.0	yes
09	(1) HE1523-0901	STIS/CCD STIS/NUV-MAMA	2	20-Sep-2010 21:04:27.0	yes

29 Total Orbits Used

ABSTRACT

We propose to obtain near-UV HST/STIS spectroscopy of the extremely metal-poor, highly r-process-enhanced halo star HE 1523-0901, in order to produce the most complete abundance distribution of the heaviest stable elements, including platinum, osmium, and lead. These HST abundance data will then be used to estimate the initial abundances of the long-lived radioactive elements thorium and uranium, and by comparison with their observed abundances, enable an accurate age determination of this ancient star. The use of radioactive chronometers in stars provides an independent lower limit on the age of the Galaxy, which can be compared with alternative limits set by globular clusters and by analysis from WMAP. Our proposed observations of HE1523-0901 will also provide significant new information about the early chemical history of the Galaxy, specifically, the nature of the first generations of stars and the types of nucleosynthetic processes that occurred at the onset of Galactic chemical evolution.

OBSERVING DESCRIPTION

We propose to obtain 26 orbits of HE 1523-0901. The inital exposure times we employed adopted expected total overheads of 24 min for the first orbit (including guide star acquisition, target acquisition, peakup target acquisition, overheads -- 6 minutes each), and 11 min for all subsequent orbits (reacquisition time (5 min), overheads (6 min)), and a visibility time of 54 min per orbit. This is now slightly changed, but the total exposure time has not changed a lot. Each visit now contains 3 orbits to ensure that accurate pointing is maintained throughout the visit. All visits are straight forward since they are all the same and there is only one target. We have 9 visits in total, where the last visit contains only 2 orbits.

Our target S/N is set to 51/1 at 2900A, 45 at 2650A, and 26 at 2450A. The expected S/N ratios have been calculated by comparison with previous HST observations of the metal-poor star CS 22892-052, a star with similar physical parameters to HE 1523-0901. The physical parameters adopted for HE 1523-0901 are Teff/logg/[Fe/H] = 4630/1.0/-3.0, while those for CS 22892-052 are 4760/1.3/-3.1.

We use the STIS ETC as well as adopting previously measured HST fluxes for CS 228982-052 of 3.8x10^-15 (2900 A) and 5.5x10^-15 (3060A) in the following calculations. We increase the expected flux for
HE 1523-0901 (V = 11.1) by the V magnitude differences with respect to CS 22892-052 (V = 13.2), and use the STIS ETC to obtain the following estimates of S/N.

We are requesting full resolution in the original data because we hope to detect many weak, blended lines which will require the highest resolution possible. The star has a surprising rich optical spectrum, so we do not wish to miss the opportunity of detecting weak lines from unanticipated species by observing at less than the full resolution of the STIS Echelle. The wavelengths chosen for expected S/N correspond to local peaks in the continuum in various intervals, and the S/N estimates quoted are per resolution element.

ADDITIONAL COMMENTS

Peak up problems

Visit

Proposal 11668, Visit 01, completed Tue Sep 21 01:04:31 GMT 2010

Diagnostic Status: Warning

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

Special Requirements: PCS MODE FINE; GUID TOL 2"; GYRO MODE 3GOBAD

Comments: no dithering used. data should be inspected to see if bad flat field areas impact on importatn spectral lines.

Diagnostics

(Visit 01) Warning (Orbit Planner): VISIBILITY OVERRUN

(Visit 01) Warning (Orbit Planner): VISIBILITY OVERRUN

Fixed Targets

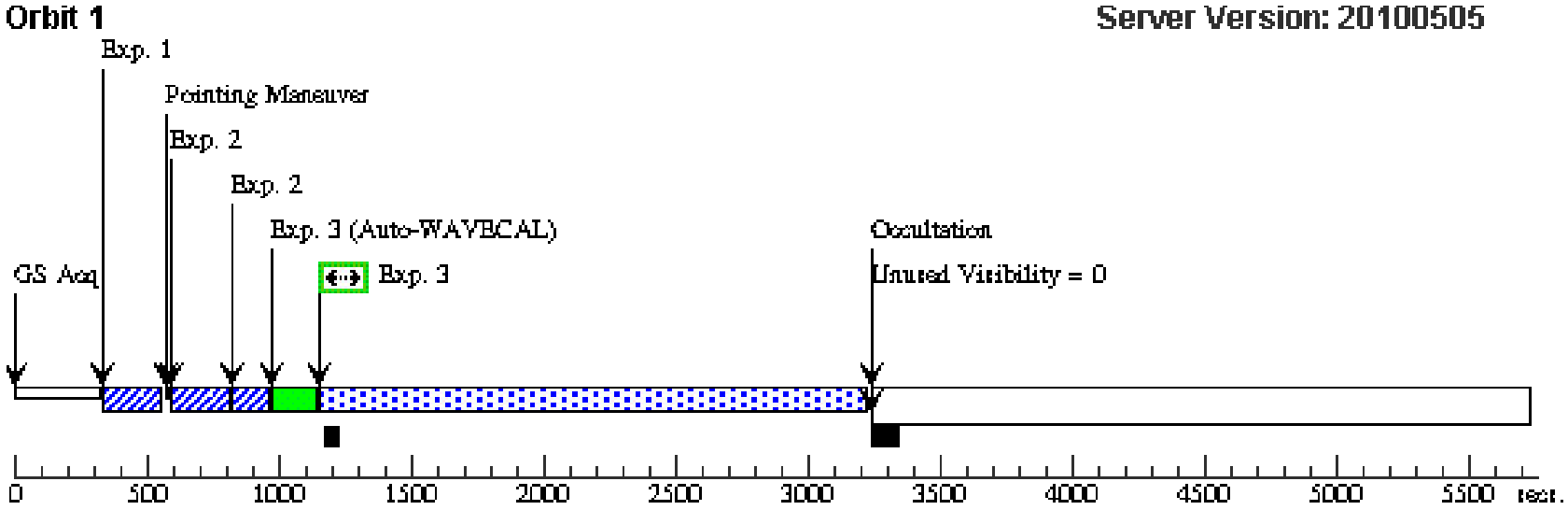
#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(1)	HE1523-0901	RA: 15 26 1.0723 (231.5044679d)	Proper Motion RA: -0.0299s/yr	V=11.1+/-0.05	Reference Frame: ICRS
	Alt Name1: S231023250	Dec: -09 11 38.94 (-9.19415d)	Proper Motion Dec: -0.0341"/yr	B=12.2+-0.05	
	Alt Name2: 2MASSJ15260106-0911388	Equinox: J2000	Epoch of Position: 1978.86		
			Radial Velocity: -162.3 km/sec		

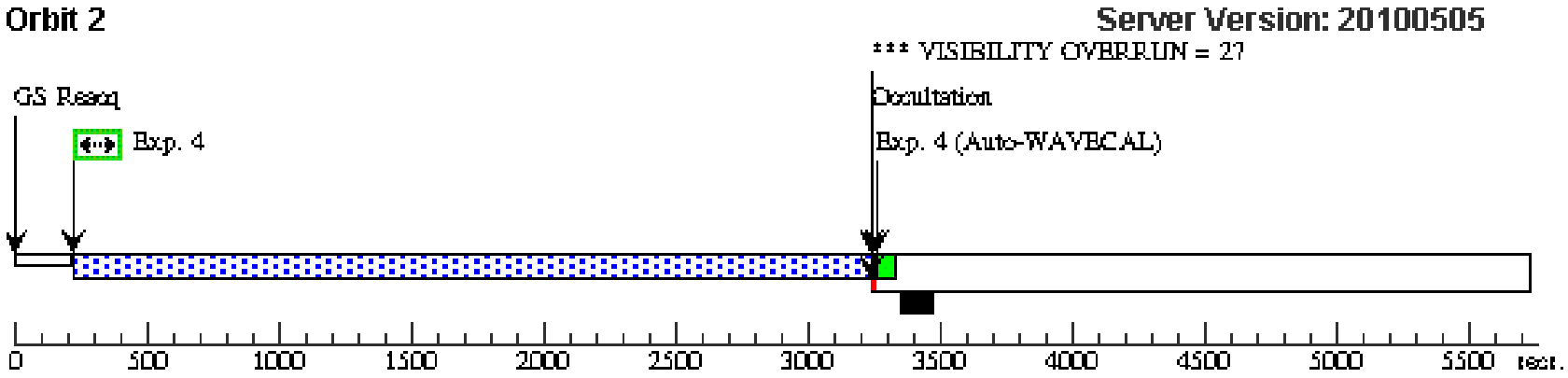
Comments: Coordinates are from GSC2.2

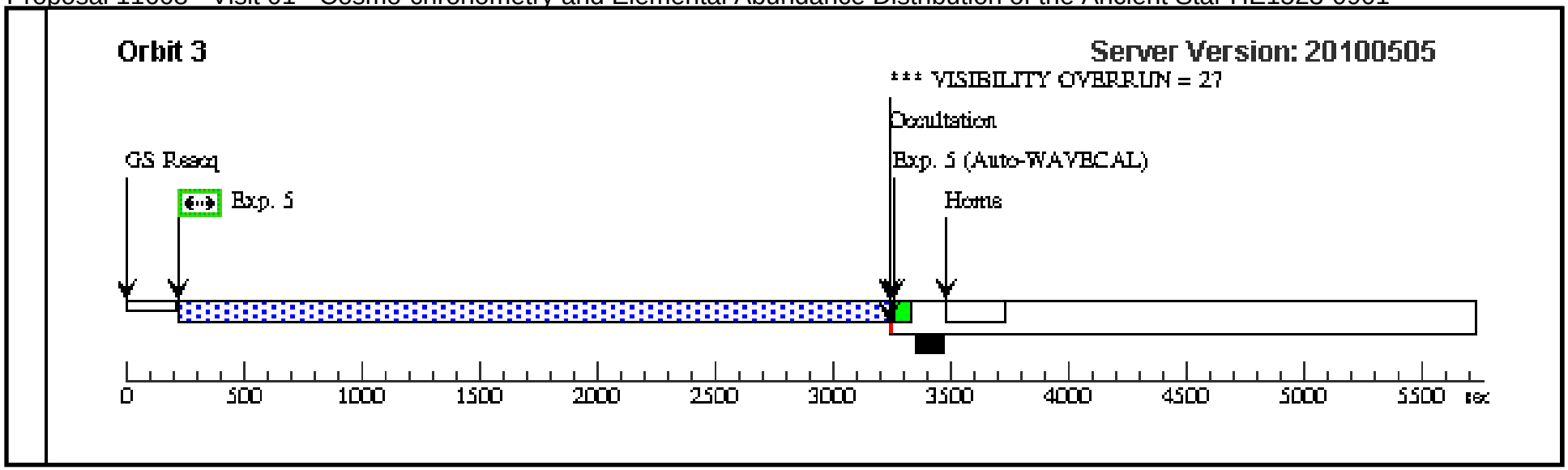
Exposures

#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit
1	acq	(1) HE1523-0901	STIS/CCD, ACQ, F28X50LP	MIRROR				0.1 Secs	
								[==>]	***[1]***
2	acqpeak	(1) HE1523-0901	STIS/CCD, ACQ/PEAK, 0.2X0.06	MIRROR				0.1 Secs	
								[==>]	***[1]***
3	obs	(1) HE1523-0901	STIS/NUV-MAMA, ACCUM, 0.2X0.06	E230M 2707 A				1920 Secs	
								[==>2058.0 Secs]	***[1]***
4	obs	(1) HE1523-0901	STIS/NUV-MAMA, ACCUM, 0.2X0.06	E230M 2707 A				3017 Secs	
								[==>3017.0 Secs]	***[2]***
5	obs	(1) HE1523-0901	STIS/NUV-MAMA, ACCUM, 0.2X0.06	E230M 2707 A				3017 Secs	
								[==>3017.0 Secs]	***[3]***

Orbit Structure



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Occultation
GS Reacq
Exp. 5
Exp. 5 (Auto-WAVECAL)
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1000
1500
2000
2500
3000
3500
4000
4500
5000
5500
sec

Visit

Proposal 11668, Visit 02, completed Tue Sep 21 01:04:32 GMT 2010

Diagnostic Status: Warning

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

Special Requirements: PCS MODE FINE; GUID TOL 2"; GYRO MODE 3GOBAD

Comments: dithering with FP-slits A,B,C used. data should be inspected to see if bad flat issues have ben resolved.

Diagnostics

(Visit 02) Warning (Orbit Planner): VISIBILITY OVERRUN

(Visit 02) Warning (Orbit Planner): VISIBILITY OVERRUN

Fixed Targets

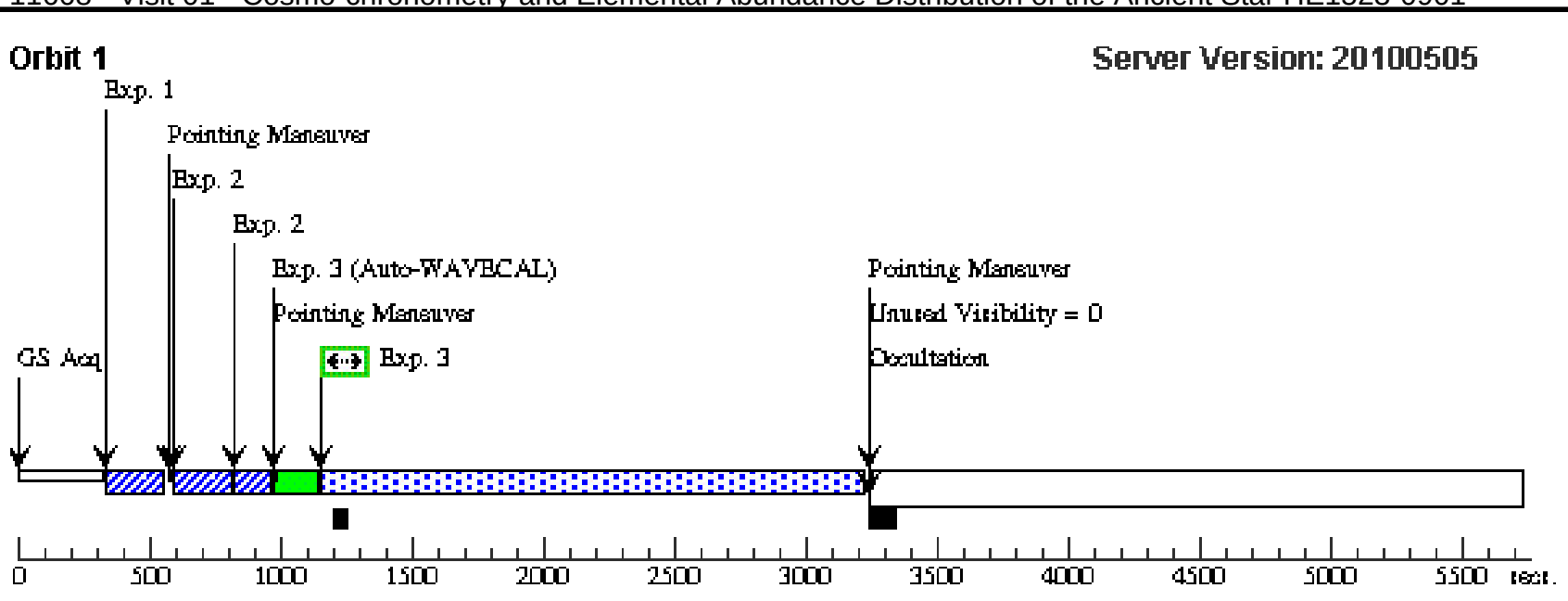
#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(1)	HE1523-0901	RA: 15 26 1.0723 (231.5044679d)	Proper Motion RA: -0.0299s/yr	V=11.1+/-0.05	Reference Frame: ICRS
	Alt Name1: S231023250	Dec: -09 11 38.94 (-9.19415d)	Proper Motion Dec: -0.0341"/yr	B=12.2+-0.05	
	Alt Name2: 2MASSJ15260106-0911388	Equinox: J2000	Epoch of Position: 1978.86		
			Radial Velocity: -162.3 km/sec		

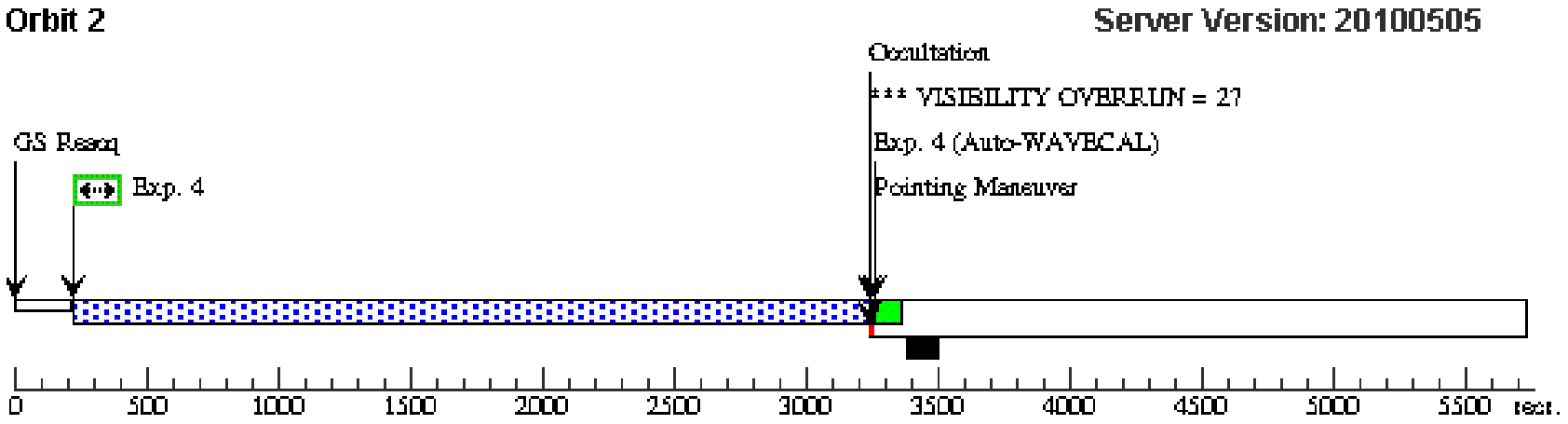
Comments: Coordinates are from GSC2.2

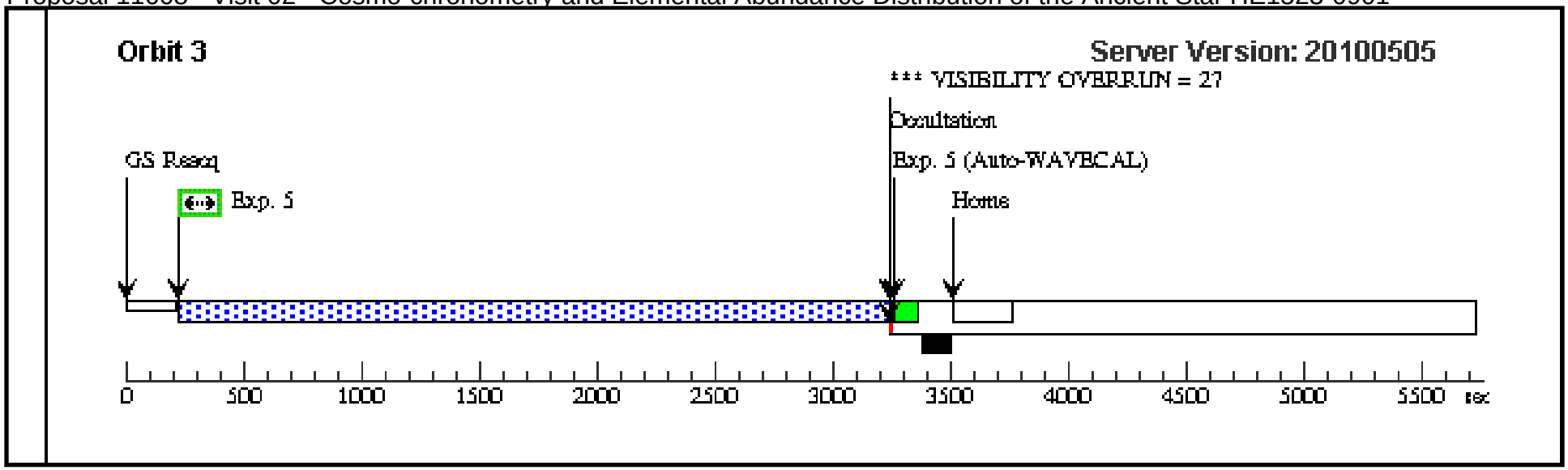
Exposures

#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit
1	acq	(1) HE1523-0901	STIS/CCD, ACQ, F28X50LP	MIRROR				0.1 Secs	
								[==>]	***[1]***
2	acqpeak	(1) HE1523-0901	STIS/CCD, ACQ/PEAK, 0.2X0.06	MIRROR				0.1 Secs	
								[==>]	***[1]***
3	obsA	(1) HE1523-0901	STIS/NUV-MAMA, ACCUM, 0.2X0.06FPA	E230M 2707 A				1920 Secs	
								[==>2027.0 Secs]	***[1]***
4	obsE	(1) HE1523-0901	STIS/NUV-MAMA, ACCUM, 0.2X0.06FPE	E230M 2707 A				3017 Secs	
								[==>3005.0 Secs]	***[2]***
5	obsB	(1) HE1523-0901	STIS/NUV-MAMA, ACCUM, 0.2X0.06FPB	E230M 2707 A				3017 Secs	
								[==>2986.0 Secs]	***[3]***

Orbit Structure



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Occultation
GS Reacq
Exp. 5
Exp. 5 (Auto-WAVECAL)
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Visit

Proposal 11668, Visit 03, completed Tue Sep 21 01:04:33 GMT 2010

Diagnostic Status: Warning

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

Special Requirements: PCS MODE FINE; GUID TOL 2"; GYRO MODE 3GOBAD

Comments: no dithering used

Diagnostics

(Visit 03) Warning (Orbit Planner): VISIBILITY OVERRUN

(Visit 03) Warning (Orbit Planner): VISIBILITY OVERRUN

Fixed Targets

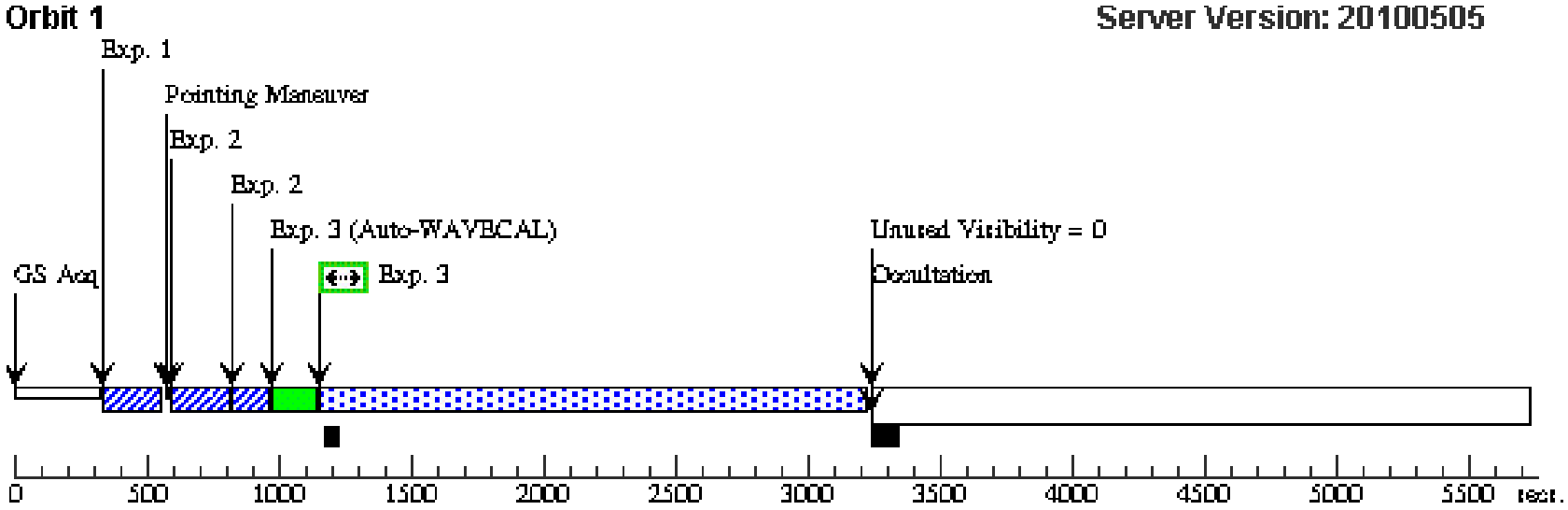
#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(1)	HE1523-0901	RA: 15 26 1.0723 (231.5044679d)	Proper Motion RA: -0.0299s/yr	V=11.1+/-0.05	Reference Frame: ICRS
	Alt Name1: S231023250	Dec: -09 11 38.94 (-9.19415d)	Proper Motion Dec: -0.0341"/yr	B=12.2+-0.05	
	Alt Name2: 2MASSJ15260106-0911388	Equinox: J2000	Epoch of Position: 1978.86		
			Radial Velocity: -162.3 km/sec		

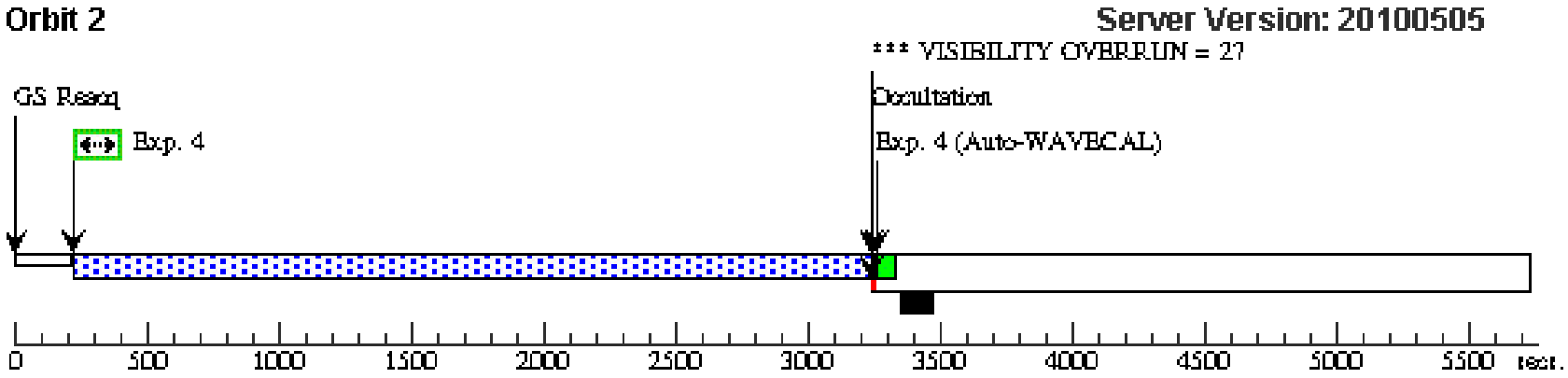
Comments: Coordinates are from GSC2.2

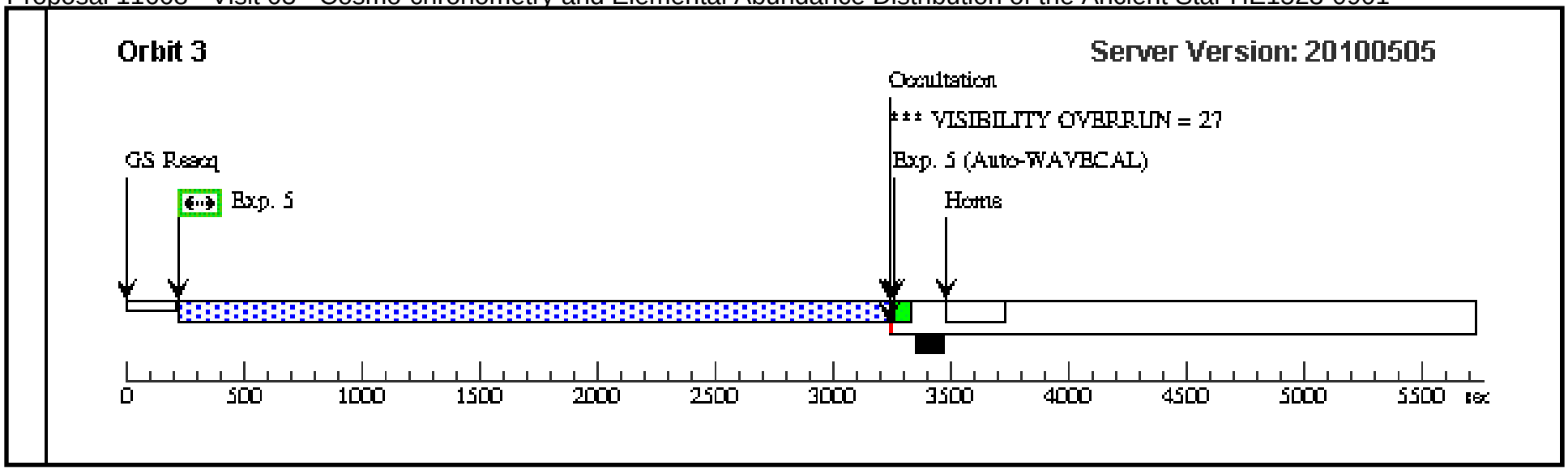
Exposures

#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit
1	acq	(1) HE1523-0901	STIS/CCD, ACQ, F28X50LP	MIRROR				0.1 Secs	
								[==>]	***[1]***
2	acqpeak	(1) HE1523-0901	STIS/CCD, ACQ/PEAK, 0.2X0.06	MIRROR				0.1 Secs	
								[==>]	***[1]***
3	obs	(1) HE1523-0901	STIS/NUV-MAMA, ACCUM, 0.2X0.06	E230M 2707 A				1920 Secs	
								[==>2058.0 Secs]	***[1]***
4	obs	(1) HE1523-0901	STIS/NUV-MAMA, ACCUM, 0.2X0.06	E230M 2707 A				3017 Secs	
								[==>3017.0 Secs]	***[2]***
5	obs	(1) HE1523-0901	STIS/NUV-MAMA, ACCUM, 0.2X0.06	E230M 2707 A				3017 Secs	
								[==>3017.0 Secs]	***[3]***

Orbit Structure



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Occultation
*** VISIBILITY OVERRUN = 27
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Exp. 5
Exp. 5 (Auto-WAVECAL)
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sec

Visit

Proposal 11668, Visit 04, completed Tue Sep 21 01:04:34 GMT 2010

Diagnostic Status: Warning

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

Special Requirements: PCS MODE FINE; GUID TOL 2"; GYRO MODE 3GOBAD

Comments: dithering with FP-slits A,B,C used

Diagnostics

(Visit 04) Warning (Orbit Planner): VISIBILITY OVERRUN

(Visit 04) Warning (Orbit Planner): VISIBILITY OVERRUN

Fixed Targets

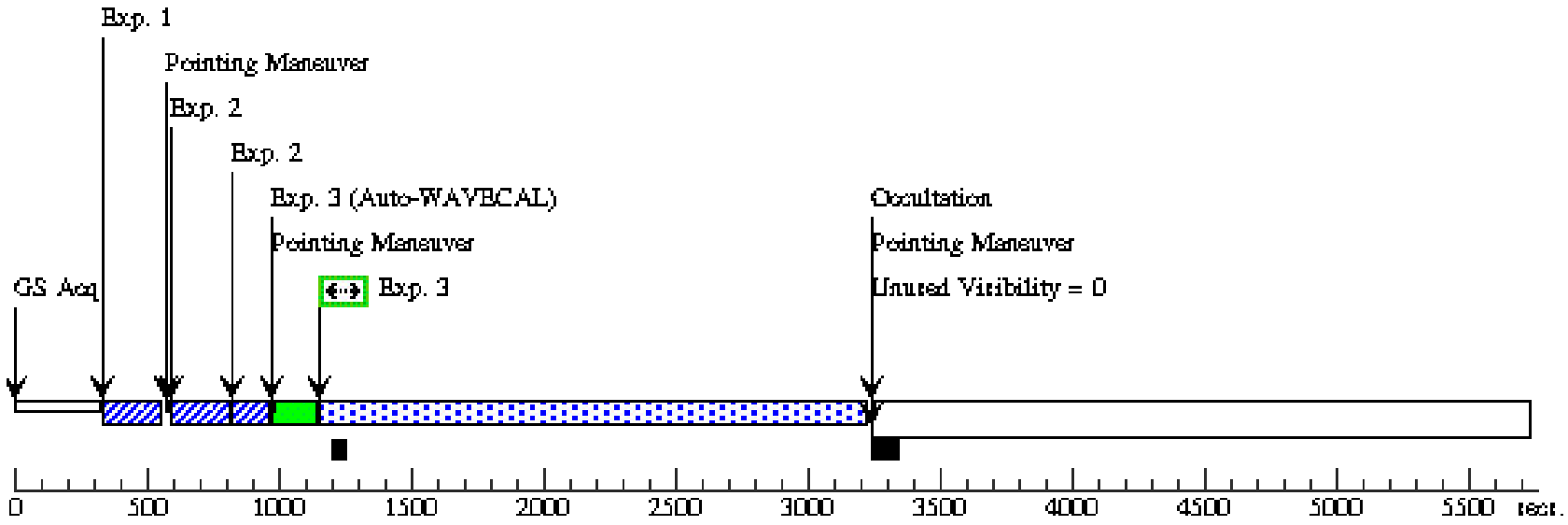
#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(1)	HE1523-0901	RA: 15 26 1.0723 (231.5044679d)	Proper Motion RA: -0.0299s/yr	V=11.1+/-0.05	Reference Frame: ICRS
	Alt Name1: S231023250	Dec: -09 11 38.94 (-9.19415d)	Proper Motion Dec: -0.0341"/yr	B=12.2+-0.05	
	Alt Name2: 2MASSJ15260106-0911388	Equinox: J2000	Epoch of Position: 1978.86		
			Radial Velocity: -162.3 km/sec		

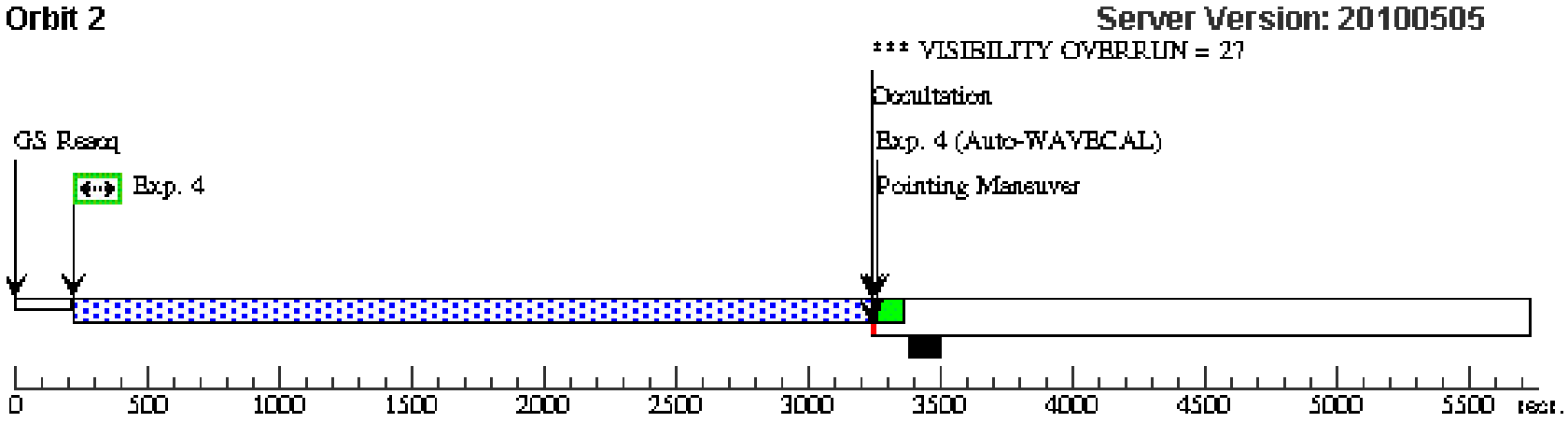
Comments: Coordinates are from GSC2.2

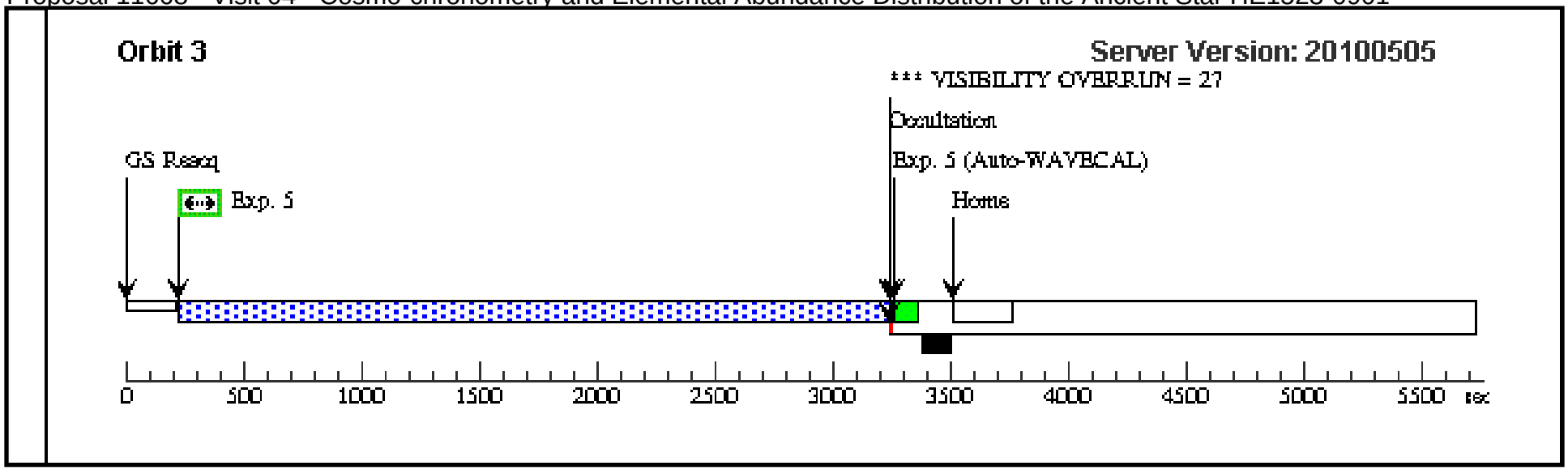
Exposures

#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit
1	acq	(1) HE1523-0901	STIS/CCD, ACQ, F28X50LP	MIRROR				0.1 Secs	
								[==>]	***[1]***
2	acqpeak	(1) HE1523-0901	STIS/CCD, ACQ/PEAK, 0.2X0.06	MIRROR				0.1 Secs	
								[==>]	***[1]***
3	obsA	(1) HE1523-0901	STIS/NUV-MAMA, ACCUM, 0.2X0.06FPA	E230M 2707 A				1920 Secs	
								[==>2027.0 Secs]	***[1]***
4	obsE	(1) HE1523-0901	STIS/NUV-MAMA, ACCUM, 0.2X0.06FPE	E230M 2707 A				3017 Secs	
								[==>3005.0 Secs]	***[2]***
5	obsB	(1) HE1523-0901	STIS/NUV-MAMA, ACCUM, 0.2X0.06FPB	E230M 2707 A				3017 Secs	
								[==>2986.0 Secs]	***[3]***

Orbit Structure



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Server Version: 20100505
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Occultation
GS Reacq
Exp. 5
Exp. 5 (Auto-WAVECAL)
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5500
sec

Visit

Proposal 11668, Visit 05, completed Tue Sep 21 01:04:34 GMT 2010

Diagnostic Status: Warning

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

Special Requirements: PCS MODE FINE; GUID TOL 2"; GYRO MODE 3GOBAD

Comments: no dithering used

Diagnostics

(Visit 05) Warning (Orbit Planner): VISIBILITY OVERRUN

(Visit 05) Warning (Orbit Planner): VISIBILITY OVERRUN

Fixed Targets

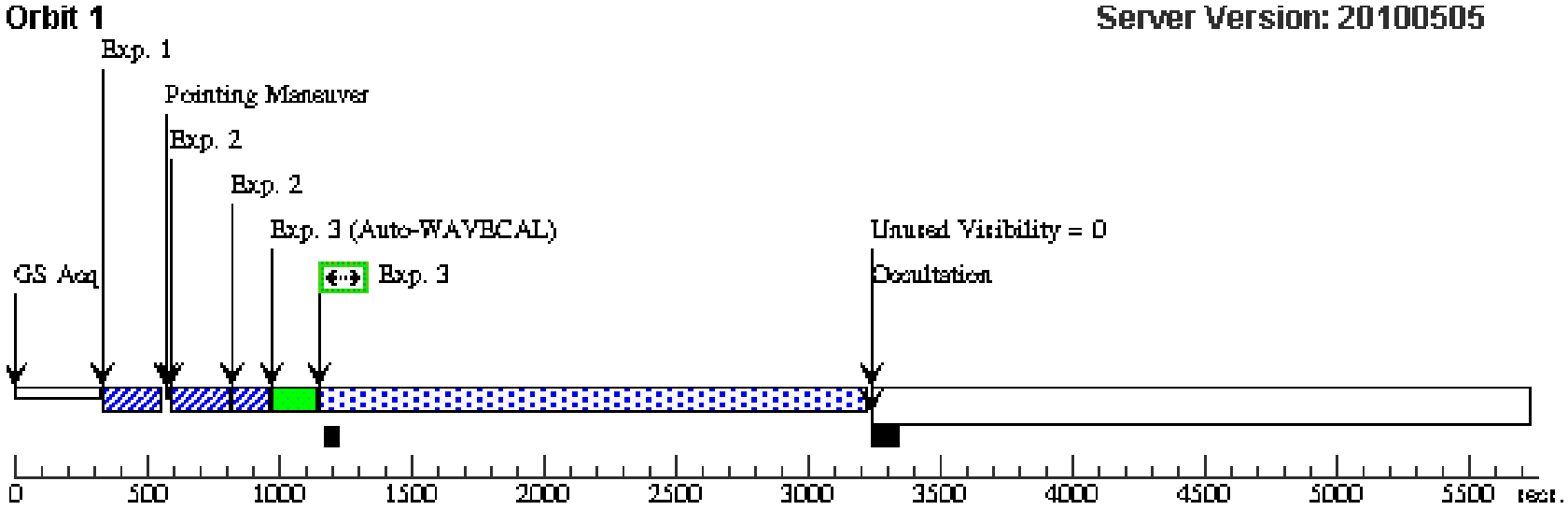
#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(1)	HE1523-0901	RA: 15 26 1.0723 (231.5044679d)	Proper Motion RA: -0.0299s/yr	V=11.1+/-0.05	Reference Frame: ICRS
	Alt Name1: S231023250	Dec: -09 11 38.94 (-9.19415d)	Proper Motion Dec: -0.0341"/yr	B=12.2+-0.05	
	Alt Name2: 2MASSJ15260106-0911388	Equinox: J2000	Epoch of Position: 1978.86		
			Radial Velocity: -162.3 km/sec		

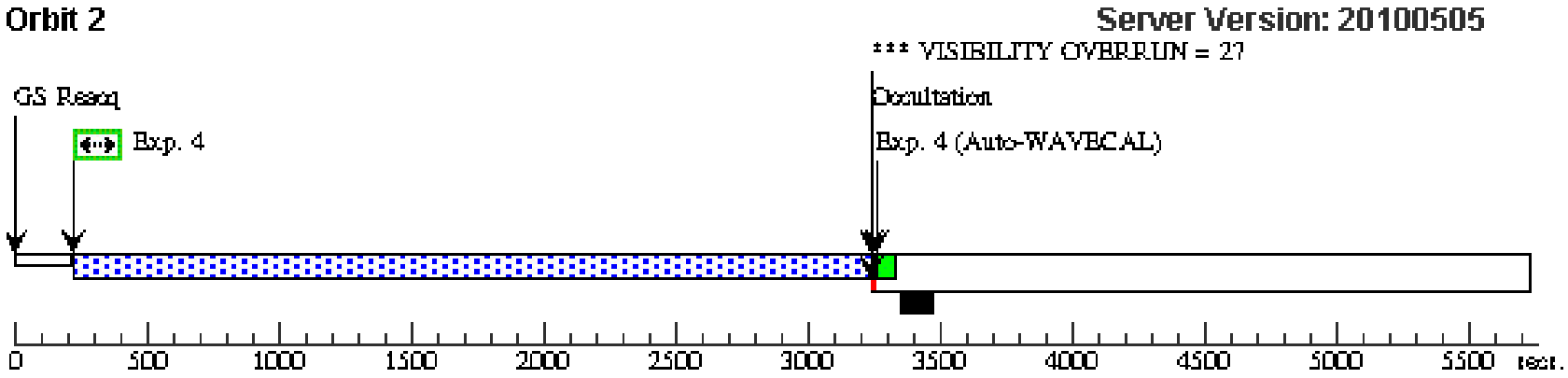
Comments: Coordinates are from GSC2.2

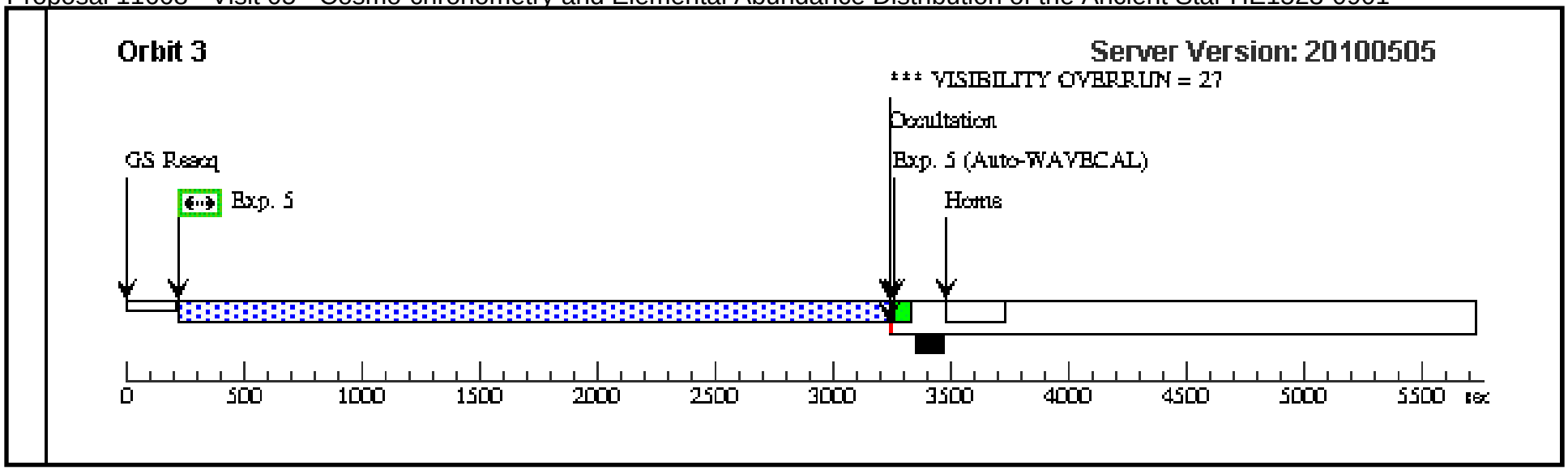
Exposures

#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit
1	acq	(1) HE1523-0901	STIS/CCD, ACQ, F28X50LP	MIRROR				0.1 Secs	
								[==>]	***[1]***
2	acqpeak	(1) HE1523-0901	STIS/CCD, ACQ/PEAK, 0.2X0.06	MIRROR				0.1 Secs	
								[==>]	***[1]***
3	obs	(1) HE1523-0901	STIS/NUV-MAMA, ACCUM, 0.2X0.06	E230M 2707 A				1920 Secs	
								[==>2058.0 Secs]	***[1]***
4	obs	(1) HE1523-0901	STIS/NUV-MAMA, ACCUM, 0.2X0.06	E230M 2707 A				3017 Secs	
								[==>3017.0 Secs]	***[2]***
5	obs	(1) HE1523-0901	STIS/NUV-MAMA, ACCUM, 0.2X0.06	E230M 2707 A				3017 Secs	
								[==>3017.0 Secs]	***[3]***

Orbit Structure



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GS Reacq
Exp. 5
Exp. 5 (Auto-WAVECAL)
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1000
1500
2000
2500
3000
3500
4000
4500
5000
5500
sec

Visit

Proposal 11668, Visit 06, completed Tue Sep 21 01:04:35 GMT 2010

Diagnostic Status: Warning

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

Special Requirements: PCS MODE FINE; GUID TOL 2"; GYRO MODE 3GOBAD

Comments: dithering with FP-slits A,B,C used

Diagnostics

(Visit 06) Warning (Orbit Planner): VISIBILITY OVERRUN

(Visit 06) Warning (Orbit Planner): VISIBILITY OVERRUN

Fixed Targets

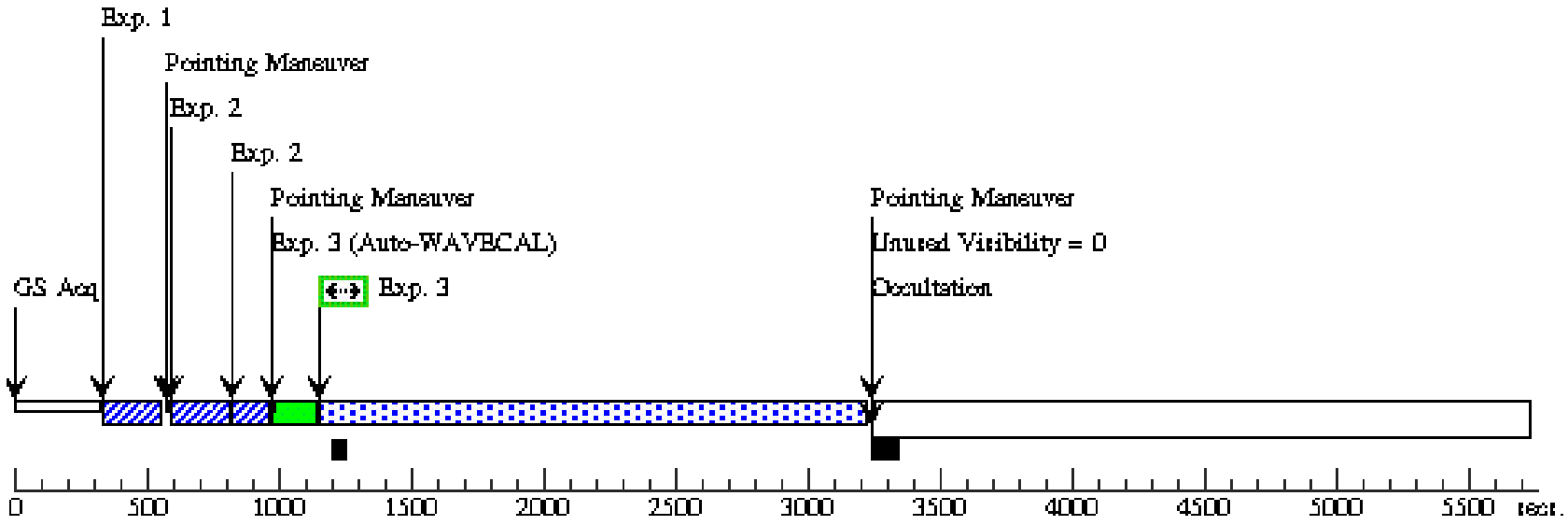
#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(1)	HE1523-0901	RA: 15 26 1.0723 (231.5044679d)	Proper Motion RA: -0.0299s/yr	V=11.1+/-0.05	Reference Frame: ICRS
	Alt Name1: S231023250	Dec: -09 11 38.94 (-9.19415d)	Proper Motion Dec: -0.0341"/yr	B=12.2+-0.05	
	Alt Name2: 2MASSJ15260106-0911388	Equinox: J2000	Epoch of Position: 1978.86		
			Radial Velocity: -162.3 km/sec		

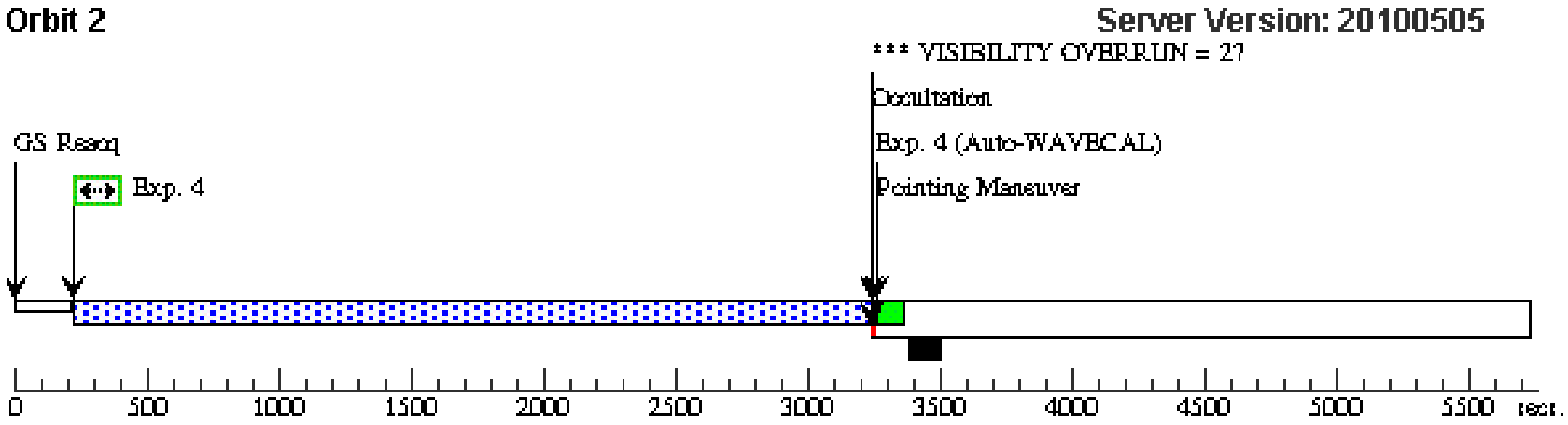
Comments: Coordinates are from GSC2.2

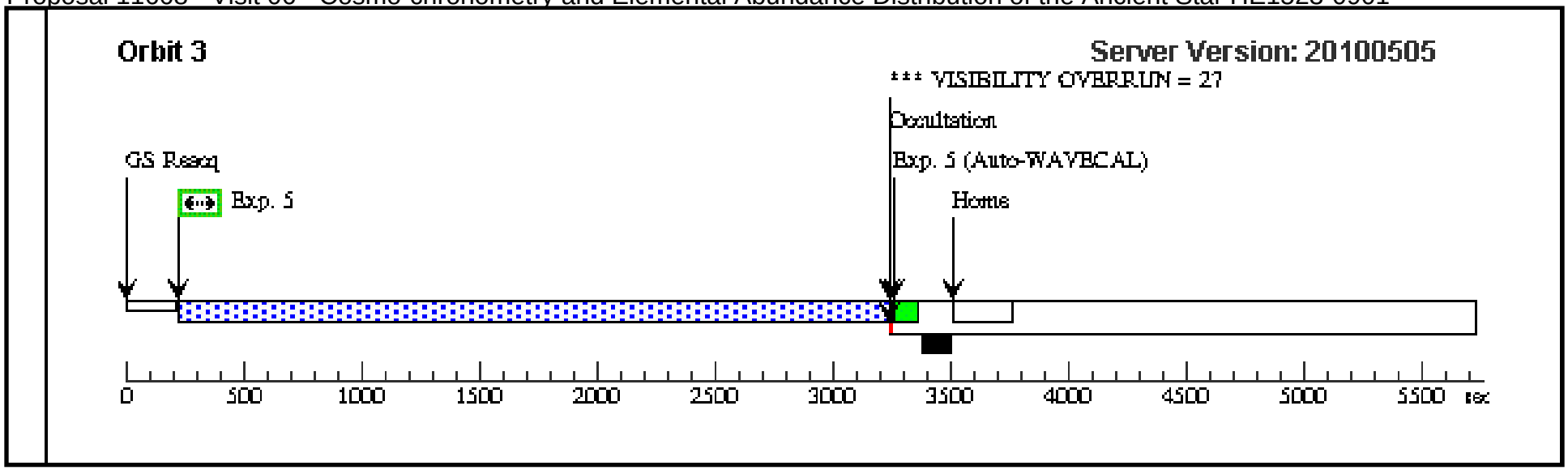
Exposures

#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit
1	acq	(1) HE1523-0901	STIS/CCD, ACQ, F28X50LP	MIRROR				0.1 Secs	
								[==>]	***[1]***
2	acqpeak	(1) HE1523-0901	STIS/CCD, ACQ/PEAK, 0.2X0.06	MIRROR				0.1 Secs	
								[==>]	***[1]***
3	obsA	(1) HE1523-0901	STIS/NUV-MAMA, ACCUM, 0.2X0.06FPA	E230M 2707 A				1920 Secs	
								[==>2027.0 Secs]	***[1]***
4	obsE	(1) HE1523-0901	STIS/NUV-MAMA, ACCUM, 0.2X0.06FPE	E230M 2707 A				3017 Secs	
								[==>3005.0 Secs]	***[2]***
5	obsB	(1) HE1523-0901	STIS/NUV-MAMA, ACCUM, 0.2X0.06FPB	E230M 2707 A				3017 Secs	
								[==>2986.0 Secs]	***[3]***

Orbit Structure






Orbit 3
Server Version: 20100505
*** VISIBILITY OVERRUN = 27
Occultation
GS Reacq
Exp. 5
Exp. 5 (Auto-WAVECAL)
Home
0
500
1000
1500
2000
2500
3000
3500
4000
4500
5000
5500
sec

Visit

Proposal 11668, Visit 07, scheduling Tue Sep 21 01:04:36 GMT 2010

Diagnostic Status: Warning

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

Special Requirements: PCS MODE FINE; GUID TOL 2"; GYRO MODE 3GOBAD

Comments: dithering with FP-slits A,B,C used

Diagnostics

(Visit 07) Warning (Orbit Planner): VISIBILITY OVERRUN

(Visit 07) Warning (Orbit Planner): VISIBILITY OVERRUN

Fixed Targets

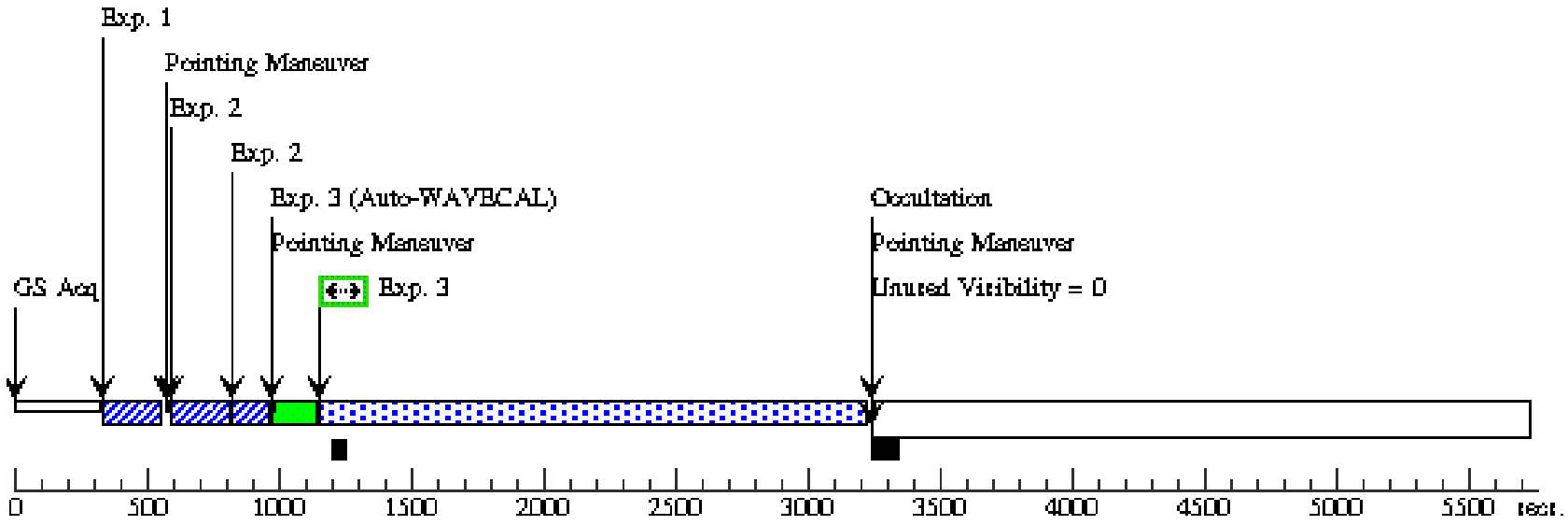
#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(1)	HE1523-0901	RA: 15 26 1.0723 (231.5044679d)	Proper Motion RA: -0.0299s/yr	V=11.1+/-0.05	Reference Frame: ICRS
	Alt Name1: S231023250	Dec: -09 11 38.94 (-9.19415d)	Proper Motion Dec: -0.0341"/yr	B=12.2+-0.05	
	Alt Name2: 2MASSJ15260106-0911388	Equinox: J2000	Epoch of Position: 1978.86		
			Radial Velocity: -162.3 km/sec		

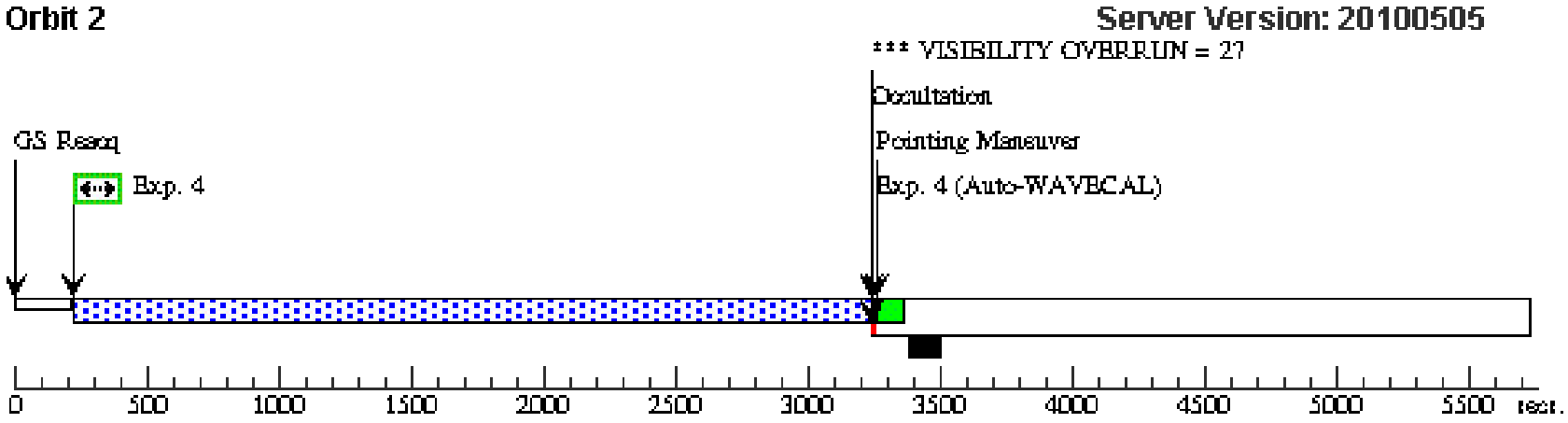
Comments: Coordinates are from GSC2.2

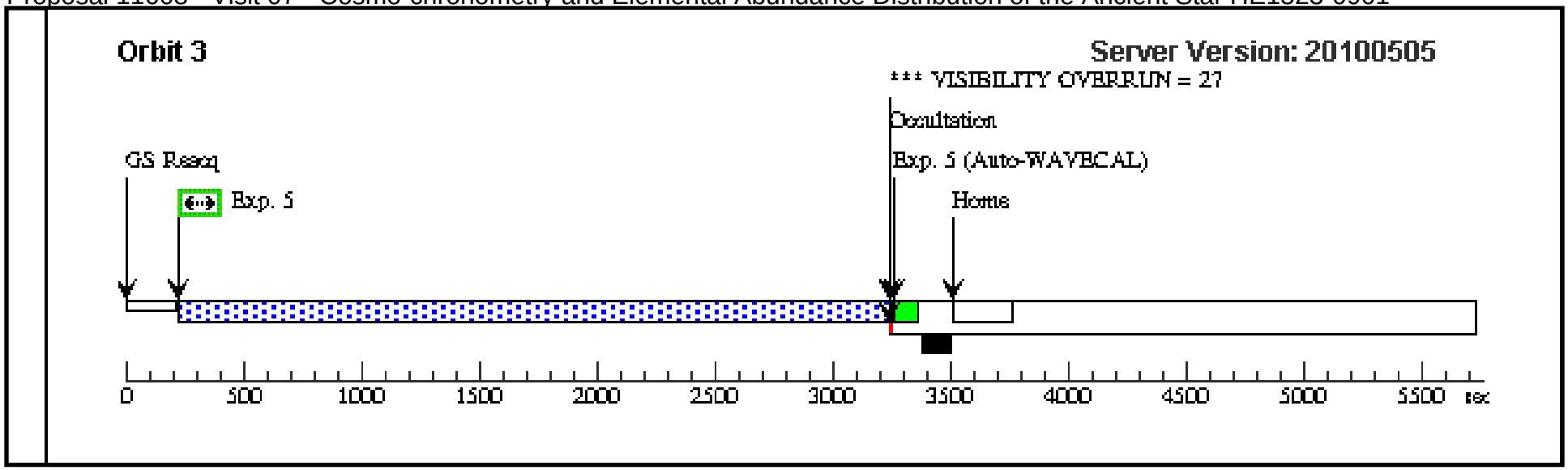
Exposures

#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit
1	acq	(1) HE1523-0901	STIS/CCD, ACQ, F28X50LP	MIRROR				0.1 Secs	
								[==>]	***[1]***
2	acqpeak	(1) HE1523-0901	STIS/CCD, ACQ/PEAK, 0.2X0.06	MIRROR				0.1 Secs	
								[==>]	***[1]***
3	obsA	(1) HE1523-0901	STIS/NUV-MAMA, ACCUM, 0.2X0.06FPA	E230M 2707 A				1920 Secs	
								[==>2027.0 Secs]	***[1]***
4	obsE	(1) HE1523-0901	STIS/NUV-MAMA, ACCUM, 0.2X0.06FPE	E230M 2707 A				3017 Secs	
								[==>3005.0 Secs]	***[2]***
5	obsB	(1) HE1523-0901	STIS/NUV-MAMA, ACCUM, 0.2X0.06FPB	E230M 2707 A				3017 Secs	
								[==>2986.0 Secs]	***[3]***

Orbit Structure






Orbit 3
Server Version: 20100505
*** VISIBILITY OVERRUN = 27
Occultation
GS Reacq
Exp. 5
Exp. 5 (Auto-WAVECAL)
Home
0
500
1000
1500
2000
2500
3000
3500
4000
4500
5000
5500
sec

Visit

Proposal 11668, Visit 08, failed Tue Sep 21 01:04:36 GMT 2010

Diagnostic Status: Warning

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

Special Requirements: PCS MODE FINE; GUID TOL 2"; GYRO MODE 3GOBAD

Comments: dithering with FP-slits A,B,C used

Diagnostics

(Visit 08) Warning (Orbit Planner): VISIBILITY OVERRUN

(Visit 08) Warning (Orbit Planner): VISIBILITY OVERRUN

Fixed Targets

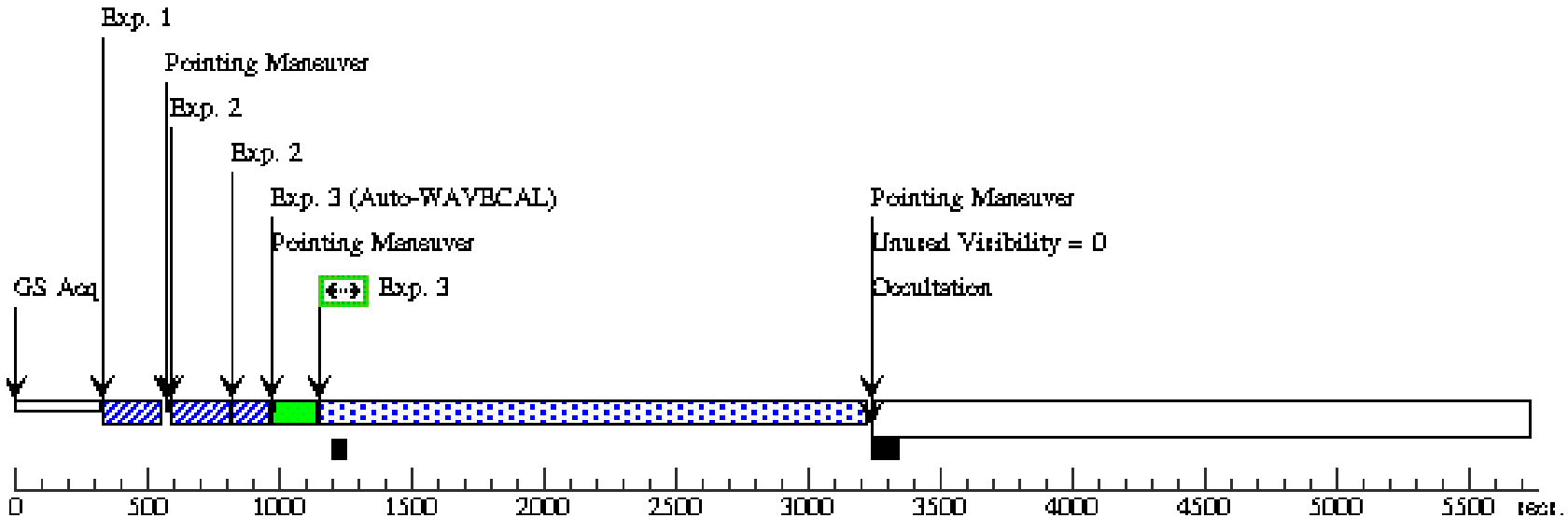
#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(1)	HE1523-0901	RA: 15 26 1.0723 (231.5044679d)	Proper Motion RA: -0.0299s/yr	V=11.1+/-0.05	Reference Frame: ICRS
	Alt Name1: S231023250	Dec: -09 11 38.94 (-9.19415d)	Proper Motion Dec: -0.0341"/yr	B=12.2+-0.05	
	Alt Name2: 2MASSJ15260106-0911388	Equinox: J2000	Epoch of Position: 1978.86		
			Radial Velocity: -162.3 km/sec		

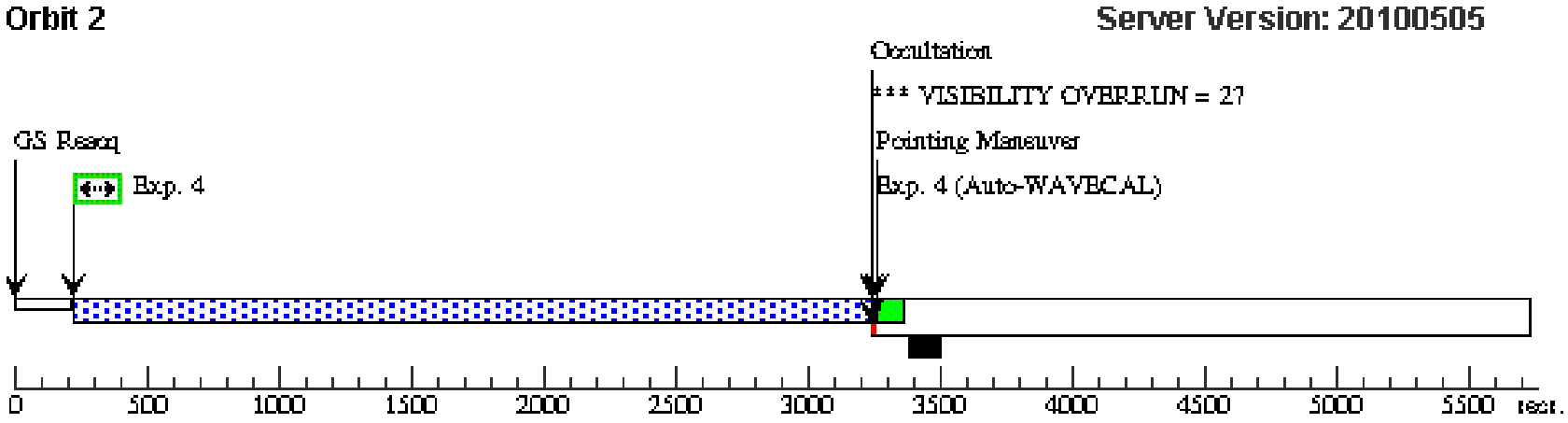
Comments: Coordinates are from GSC2.2

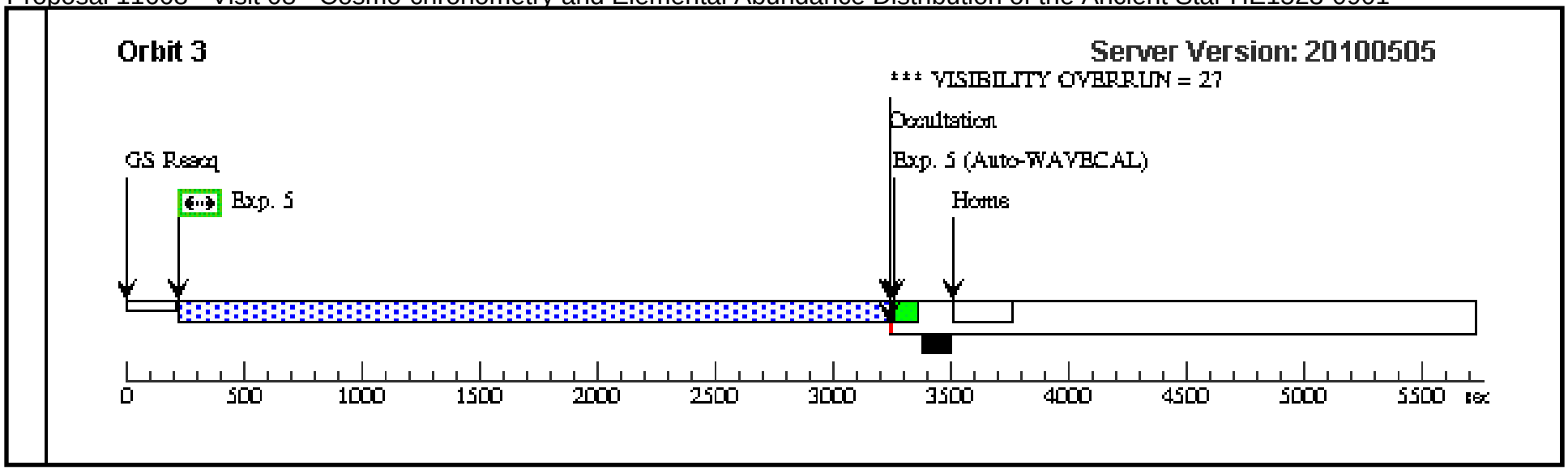
Exposures

#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit
1	acq	(1) HE1523-0901	STIS/CCD, ACQ, F28X50LP	MIRROR				0.1 Secs	
								[==>]	***[1]***
2	acqpeak	(1) HE1523-0901	STIS/CCD, ACQ/PEAK, 0.2X0.06	MIRROR				0.1 Secs	
								[==>]	***[1]***
3	obsA	(1) HE1523-0901	STIS/NUV-MAMA, ACCUM, 0.2X0.06FPA	E230M 2707 A				1920 Secs	
								[==>2027.0 Secs]	***[1]***
4	obsE	(1) HE1523-0901	STIS/NUV-MAMA, ACCUM, 0.2X0.06FPE	E230M 2707 A				3017 Secs	
								[==>3005.0 Secs]	***[2]***
5	obsB	(1) HE1523-0901	STIS/NUV-MAMA, ACCUM, 0.2X0.06FPB	E230M 2707 A				3017 Secs	
								[==>2986.0 Secs]	***[3]***

Orbit Structure






Orbit 3
Server Version: 20100505
*** VISIBILITY OVERRUN = 27
Occultation
GS Reacq
Exp. 5
Exp. 5 (Auto-WAVECAL)
Home
0
500
1000
1500
2000
2500
3000
3500
4000
4500
5000
5500
sec

Visit

Proposal 11668, Visit 58 Tue Sep 21 01:04:37 GMT 2010

Diagnostic Status: No Diagnostics

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

Special Requirements: PCS MODE FINE; GUID TOL 2"; GYRO MODE 3GOBAD

Comments: dithering with FP-slits A,B,C used

Fixed Targets

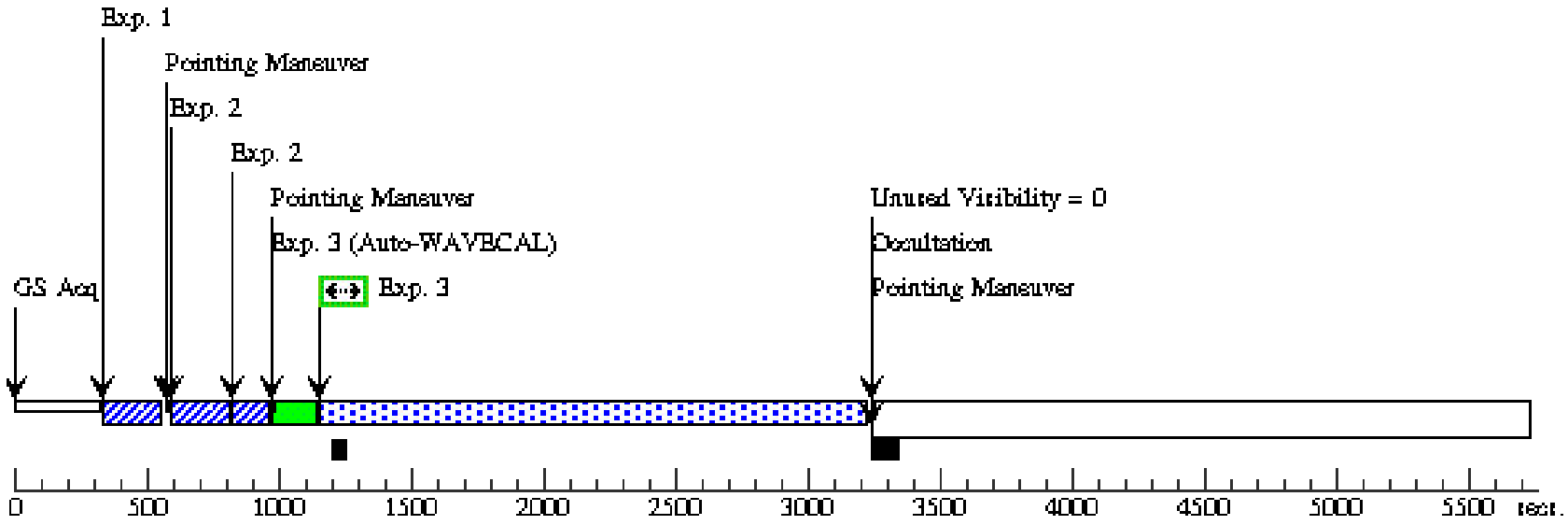
#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(1)	HE1523-0901	RA: 15 26 1.0723 (231.5044679d)	Proper Motion RA: -0.0299s/yr	V=11.1+/-0.05	Reference Frame: ICRS
	Alt Name1: S231023250	Dec: -09 11 38.94 (-9.19415d)	Proper Motion Dec: -0.0341"/yr	B=12.2+-0.05	
	Alt Name2: 2MASSJ15260106-0911388	Equinox: J2000	Epoch of Position: 1978.86		
			Radial Velocity: -162.3 km/sec		

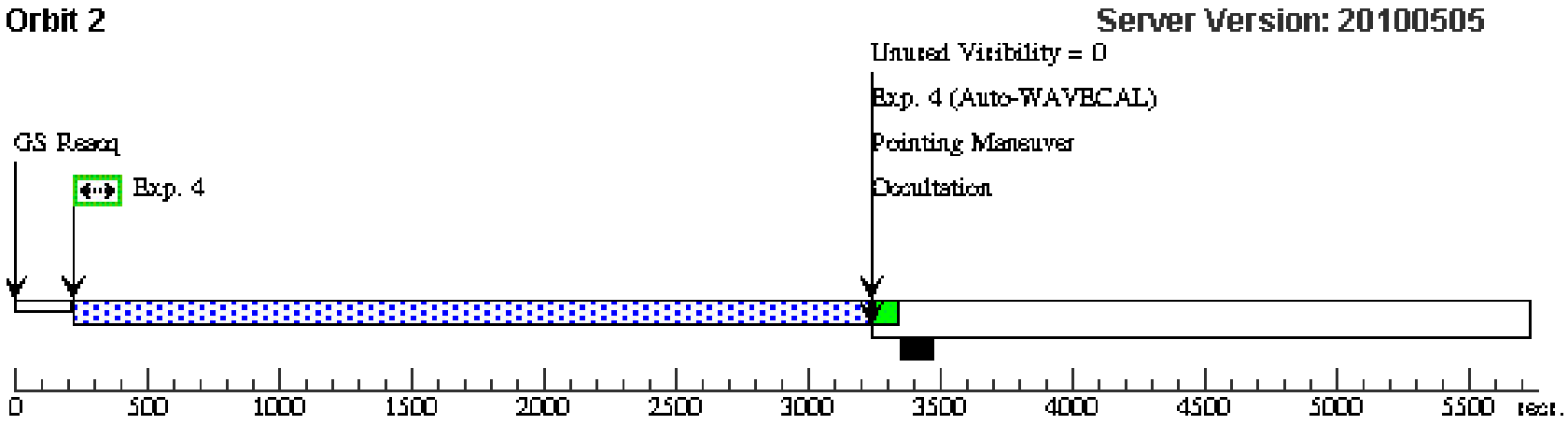
Comments: Coordinates are from GSC2.2

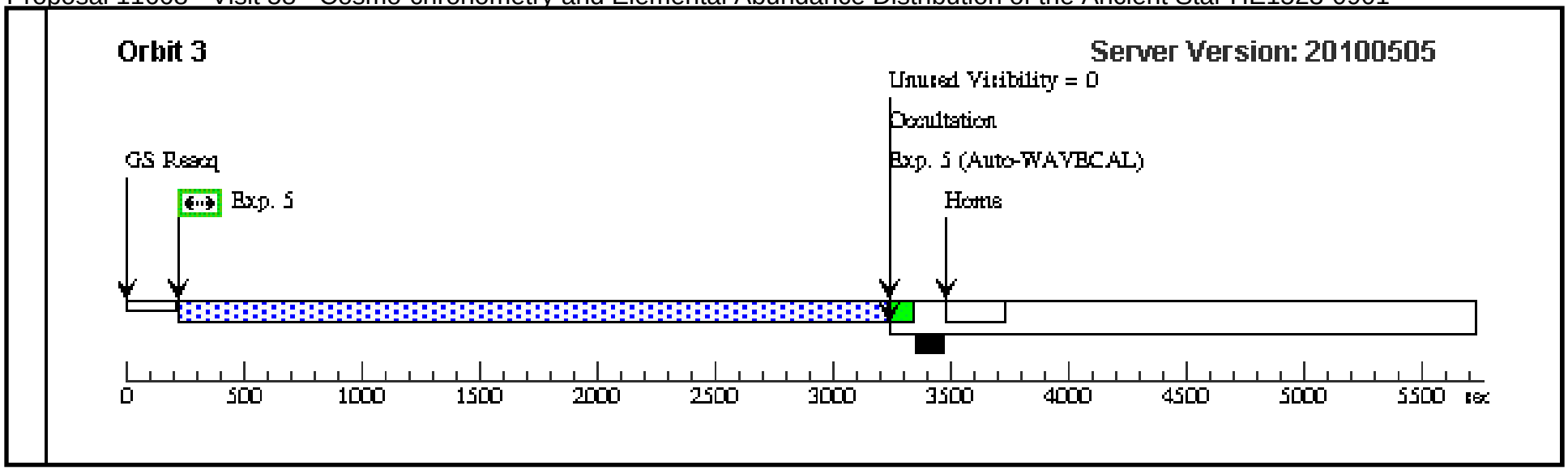
Exposures

#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit
1	acq	(1) HE1523-0901	STIS/CCD, ACQ, F28X50LP	MIRROR				0.1 Secs	
								[==>]	***[1]***
2	acqpeak	(1) HE1523-0901	STIS/CCD, ACQ/PEAK, 0.2X0.06	MIRROR				0.1 Secs	
								[==>]	***[1]***
3	obsA	(1) HE1523-0901	STIS/NUV-MAMA, ACCUM, 0.2X0.06FPA	E230M 2707 A				1920 Secs	
								[==>2027.0 Secs]	***[1]***
4	obsE	(1) HE1523-0901	STIS/NUV-MAMA, ACCUM, 0.2X0.06FPE	E230M 2707 A				3017 Secs	
								[==>2978.0 Secs]	***[2]***
5	obsB	(1) HE1523-0901	STIS/NUV-MAMA, ACCUM, 0.2X0.06FPB	E230M 2707 A				3017 Secs	
								[==>2959.0 Secs]	***[3]***

Orbit Structure






Orbit 3
Server Version: 20100505
Unused Visibility = 0
Occultation
Exp. 5 (Auto-WAVECAL)
GS Reacq
Exp. 5
Home
0
500
1000
1500
2000
2500
3000
3500
4000
4500
5000
5500
sec

Proposal 11668 - Visit 58 - Cosmo-chronometry and Elemental Abundance Distribution of the Ancient Star HE1523-0901

Visit

Proposal 11668, Visit 09, completed Tue Sep 21 01:04:37 GMT 2010

Diagnostic Status: Warning

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

Special Requirements: PCS MODE FINE; GUID TOL 2"; GYRO MODE 3GOBAD

Comments: dithering with FP-slits A,B,C used

Diagnostics

(Visit 09) Warning (Orbit Planner): VISIBILITY OVERRUN

Fixed Targets

#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(1)	HE1523-0901	RA: 15 26 1.0723 (231.5044679d)	Proper Motion RA: -0.0299s/yr	V=11.1+/-0.05	Reference Frame: ICRS
	Alt Name1: S231023250	Dec: -09 11 38.94 (-9.19415d)	Proper Motion Dec: -0.0341"/yr	B=12.2+-0.05	
	Alt Name2: 2MASSJ15260106-0911388	Equinox: J2000	Epoch of Position: 1978.86		
			Radial Velocity: -162.3 km/sec		

Comments: Coordinates are from GSC2.2

Exposures

#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit
1	acq	(1) HE1523-0901	STIS/CCD, ACQ, F28X50LP	MIRROR				0.1 Secs	
								[==>]	***[1]***
2	acqpeak	(1) HE1523-0901	STIS/CCD, ACQ/PEAK, 0.2X0.06	MIRROR				0.1 Secs	
								[==>]	***[1]***
3	obsA	(1) HE1523-0901	STIS/NUV-MAMA, ACCUM, 0.2X0.06FPA	E230M 2707 A				1920 Secs	
								[==>2027.0 Secs]	***[1]***
4	obsE	(1) HE1523-0901	STIS/NUV-MAMA, ACCUM, 0.2X0.06FPE	E230M 2707 A				3017 Secs	
								[==>3005.0 Secs]	***[2]***

Orbit Structure