



10394 - Deep imaging of newly discovered globular clusters in the outer halo of M31

Cycle: 13, Proposal Category: GO

(Availability Mode: SUPPORTED)

INVESTIGATORS

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VISITS

<i>Visit</i>	<i>Targets</i>	<i>Configurations</i>	<i>Orbits Used</i>	<i>Last Orbit Planner Run</i>	<i>OP Current with Visit?</i>
01	ANY (1) NGC224-002945+411310	ACS/WFC WFPC2	2	20-Jun-2005 21:01:36.0	yes
02	ANY (2) NGC224-003027+413620	ACS/WFC WFPC2	2	20-Jun-2005 21:01:47.0	yes
03	ANY (3) NGC224-003558+354104	ACS/WFC WFPC2	2	20-Jun-2005 21:01:59.0	yes
04	ANY (4) NGC224-003110+375400	ACS/WFC WFPC2	2	20-Jun-2005 21:02:07.0	yes

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<i>Visit</i>	<i>Targets</i>	<i>Configurations</i>	<i>Orbits Used</i>	<i>Last Orbit Planner Run</i>	<i>OP Current with Visit?</i>
05	ANY (5) NGC224-005425+394255	ACS/WFC WFPC2	2	20-Jun-2005 21:02:15.0	yes
06	ANY (6) NGC224-005544+424616	ACS/WFC WFPC2	2	20-Jun-2005 21:02:23.0	yes
07	ANY (7) NGC224-010726+354648	ACS/WFC WFPC2	2	20-Jun-2005 21:02:34.0	yes
08	ANY (8) NGC224-003849+422247	ACS/WFC WFPC2	2	20-Jun-2005 21:02:42.0	yes
09	ANY (9) NGC224-003820+414715	ACS/WFC WFPC2	2	20-Jun-2005 21:02:50.0	yes
10	ANY (10) NGC224-004255+435728	ACS/WFC WFPC2	2	20-Jun-2005 21:02:57.0	yes
11	ANY (11) NGC224-003805+404440	ACS/WFC WFPC2	2	20-Jun-2005 21:03:08.0	yes
12	ANY (12) NGC224-002648+394447	ACS/WFC WFPC2	2	20-Jun-2005 21:03:16.0	yes
13	ANY (13) NGC224-005815+380302	ACS/WFC WFPC2	2	20-Jun-2005 21:03:24.0	yes

26 Total Orbits Used

ABSTRACT

Globular clusters (GCs) are fossil relics with which we can investigate the processes of galaxy formation and growth. We have recently discovered a sample of GCs, as part of a very wide area CCD survey of M31. These clusters span a range in projected galactocentric distance of 20 - 80 kpc, more than double the radii of the previous most remote known GC. Here we apply for deep ACS images of 13 GCs, which will allow us to study their

stellar populations, line-of-sight distances and structural parameters. These will be used to:

- a) Investigate the merger history of M31, through an examination of variations in the RGB and HB morphologies, particularly to obtain metallicities and check for the presence of any second parameter effect in the HB.
- d) Determine, in conjunction with ground-based spectroscopy, the dynamical mass of M31 at large radius, providing a direct probe of the mass distribution of its dark halo.

OBSERVING DESCRIPTION

The high resolution and relatively wide field available to the ACS-WFC makes it an excellent instrument for the study of the stellar populations of the globular clusters in M31. We propose to obtain deep broad-V (~ 27) and broad-I (~ 26.5) band images of 13 newly discovered M31 globular clusters. The target GCs are all beyond 20 kpc, and will address the issues discussed in the science case above.

The large projected distances of our target GCs from the centre of M31 brings two significant advantages:

1. The reduction in the number of contaminating M31 field stars will allow for greater reliability in identifying colour-magnitude diagram (CMD) features - the large field of the ACS providing the necessary statistics on background/foreground contamination.
2. The large range of projected distances available in the GC sample, compared in previous studies, provides a considerable lever arm for both dynamical mass estimation, and searching for correlations of GC properties with galactocentric distance.

We aim for a depth of $V \sim 27$, which will take us to ~ 1.5 mag below the expected HB of the GCs, and ensure that we also obtain the fainter, and diagnostically significant, blue end of the HB. The ACS ETC gives an exposure of 1700 secs in V, to reach $V \sim 27$, and 2980 secs in I to reach ~ 26.5 , for SN of ~ 10 (with an aperture of 0.1 arcsec). With these exposures we have a SN of ~ 40 at the HB, which is adequate to obtain distances, even allowing for crowding, to < 30 kpc, comparable to the best previous studies of M31 dwarf satellites. (eg. Da Costa, Armandroff & Caldwell (2002) used the HB position of And III, obtained from WFPC2, to obtain the distance to this dwarf galaxy to ± 20 kpc.) Holland, Fahlman & Richer (1997) found tidal features from observation down to $V \sim 27$ mag, and hence we hope to observe any such tails in our targets. The exposure timings can be reached in 2 orbits, after allowance for overheads, per GC. That is, 26 orbits in total. Each orbit will be taken over a number of shorter exposures to avoid saturation from the bright centre of the clusters. We will use the 3 point dither pattern with default spacing to improve spatial resolution and remove both cosmic rays and hot pixels. We will use the ACS WFC, because it gives good statistics on which halo stars and background sources, which will be statistically subtracted as the WFC will also provide data on the halo region surrounding each cluster. Also, we will use these new halo

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fields to supplement those already observed in Cycle 11 (proposal 9458), and other halo fields taken as part of other HST proposals - pushing that study into the far halo of M31. Finally, the wide FOV of the WFC will capture any extended tidal tails. The expected tidal radius for a GC at the distance of M31 is ~ 10 -13 arcsec, and so any tail may stretch up to 40 arcsec in any direction. Hence, the target GCs will be placed in the centre of one of the WFC chips, except for the few cases where a bright object is nearby, in which case the FOV will be shifted and oriented to avoid it. We also request WFPC2 parallels in F606W and F814W for our ACS/WFC pointings; these will sample nearby halo populations, and, although somewhat shallower, will contribute important statistics for the brighter stars.

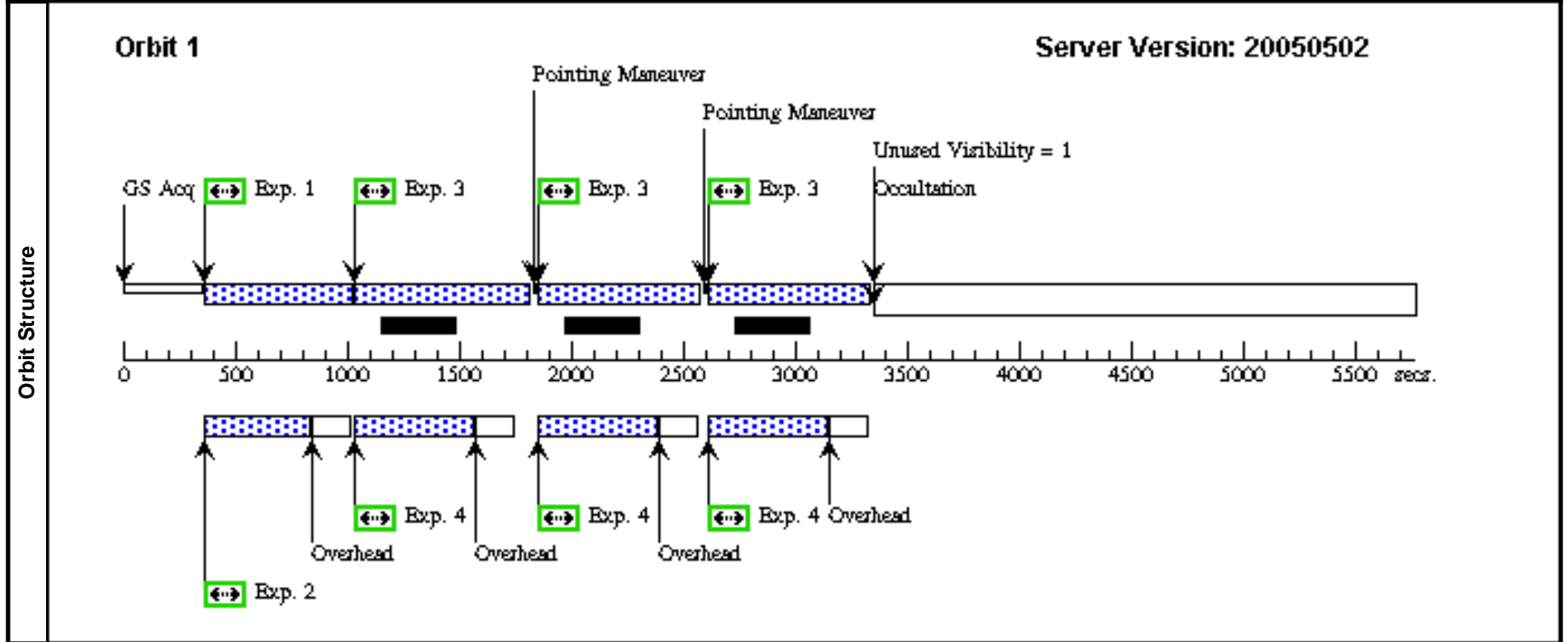
Proposal 10394 - Visit 01 - Deep imaging of newly discovered globular clusters in the outer halo of M31

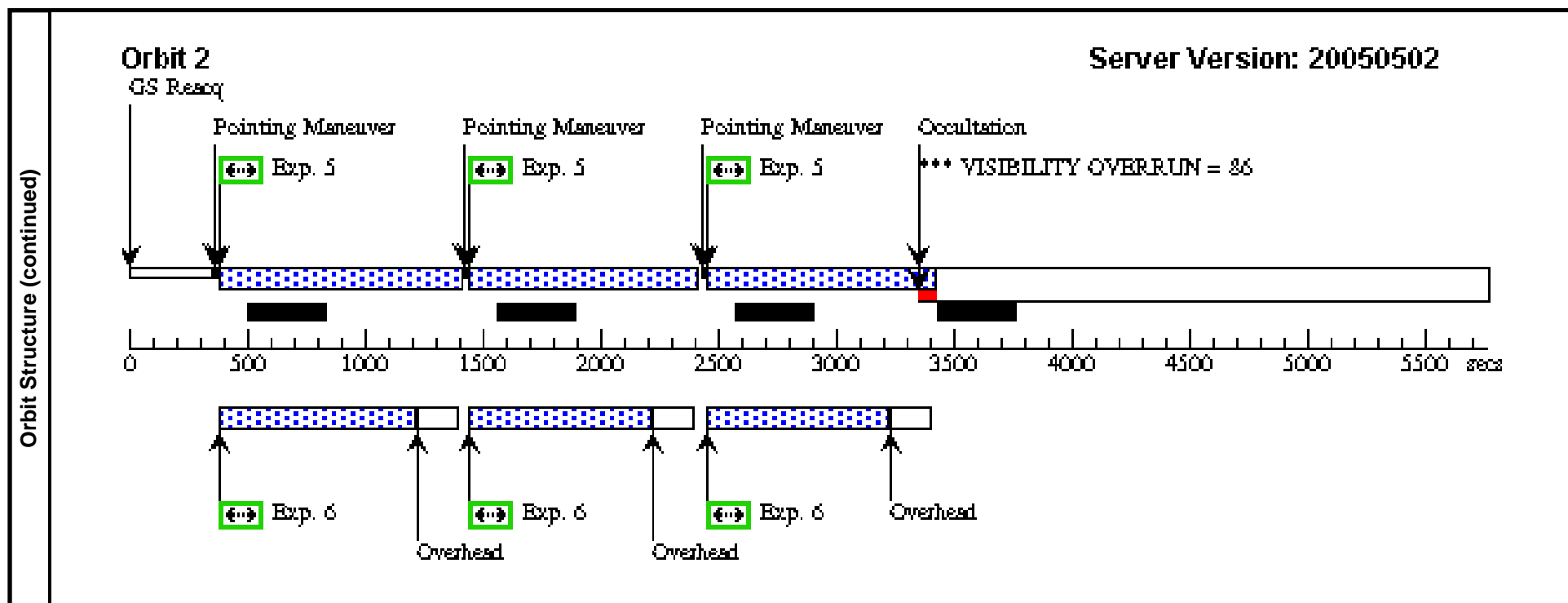
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Diagnosics											
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Fixed Targets	#	Name	Target Coordinates			Targ. Coord. Corrections		Fluxes	Miscellaneous		
	(1)	NGC224-002945+411310	RA: 00 29 43.0100 (7.4292083d)					V=16.9+/-0.1	Coordinate Source: APM/USNO1b		
Alt Name1: M31-GC-O Dec: +41 13 9.59 (41.21933d) Equinox: J2000 Plate Id: (?) <i>Comments: V magnitude is integrated magnitude of cluster.</i>											
Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]		Orbit
	1	GC-O/initial -I	(1) NGC224-002945 +411310	ACS/WFC, ACCUM, WFC2	F814W	CR-SPLIT=NO; GAIN=2; PAREXP=NONE		Prime + Parallel Gro up 1-2	400.0 Secs [=>453.0 Secs]		[1]
	2		ANY	WFPC2, IMAGE, WFALL	F814W	CR-SPLIT=NO; ATD-GAIN=7		Prime + Parallel Gro up 1-2	300.0 Secs [=>300.0 Secs]		[1]
	3	GC-O/V	(1) NGC224-002945 +411310	ACS/WFC, ACCUM, WFC2	F606W	CR-SPLIT=NO; GAIN=2; PAREXP=NONE		Pattern 3-4 (1) Prime + Parallel Gro up 3-4	550.0 Secs [=>603.0 Secs (Pattern 1)] [=>603.0 Secs (Pattern 2)] [=>603.0 Secs (Pattern 3)]		[1]
	4		ANY	WFPC2, IMAGE, WFALL	F606W	ATD-GAIN=7; CR-SPLIT=NO		Pattern 3-4 (1) Prime + Parallel Gro up 3-4	400.0 Secs [=>400.0 Secs (Pattern 1)] [=>400.0 Secs (Pattern 2)] [=>400.0 Secs (Pattern 3)]		[1]

Proposal 10394 - Visit 01 - Deep imaging of newly discovered globular clusters in the outer halo of M31

Exposures (continued)	#	Label	Target	Config, Mode, Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit
	5	GC-O/3xI	(1) NGC224-002945 +411310	ACS/WFC, ACCUM, WFC2	F814W	CR-SPLIT=NO; GAIN=2; PAREXP=NONE		Pattern 5-6 (1) Prime + Parallel Group 5-6	825.0 Secs [=>849.0 Secs (Pattern 1)] [=>849.0 Secs (Pattern 2)] [=>849.0 Secs (Pattern 3)]	[2]
	6		ANY	WFPC2, IMAGE, WFALL	F814W	CR-SPLIT=NO; ATD-GAIN=7		Pattern 5-6 (1) Prime + Parallel Group 5-6	500.0 Secs [=>700.0 Secs (Pattern 1)] [=>600.0 Secs (Pattern 2)] [=>600.0 Secs (Pattern 3)]	[2]





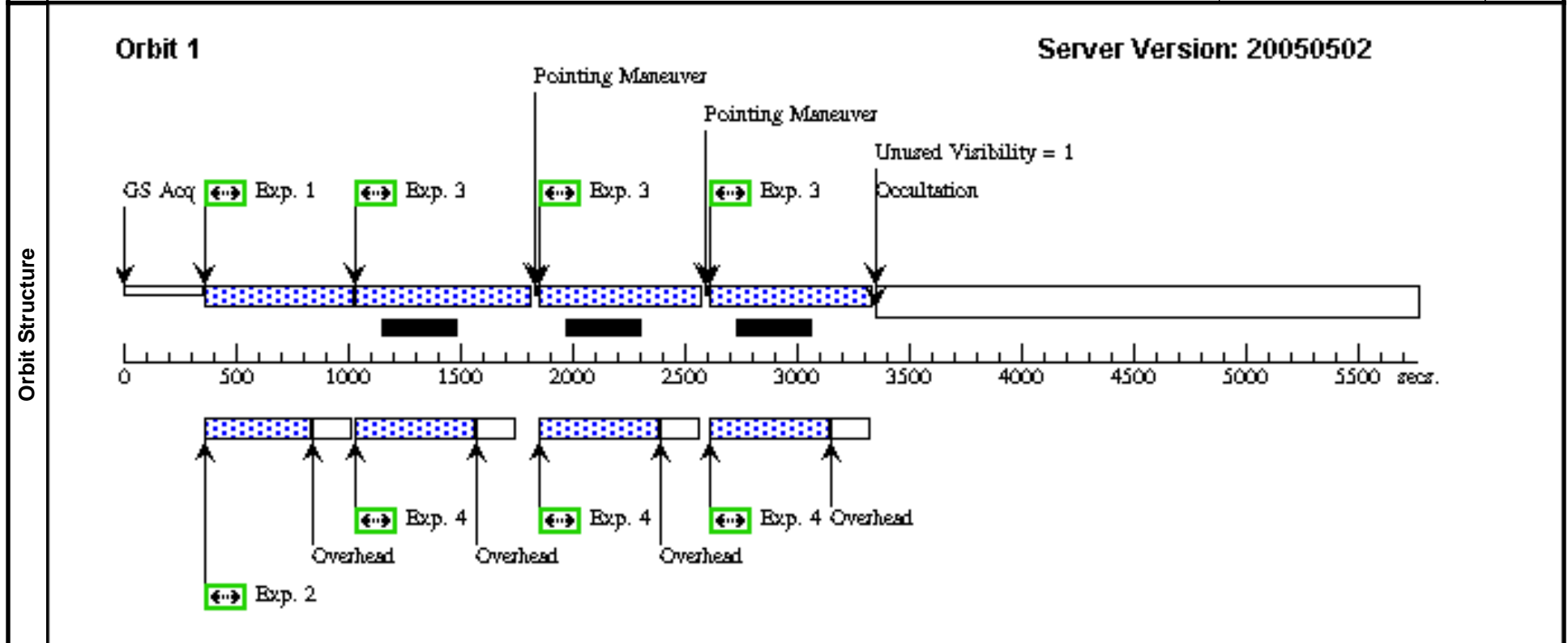
Proposal 10394 - Visit 02 - Deep imaging of newly discovered globular clusters in the outer halo of M31

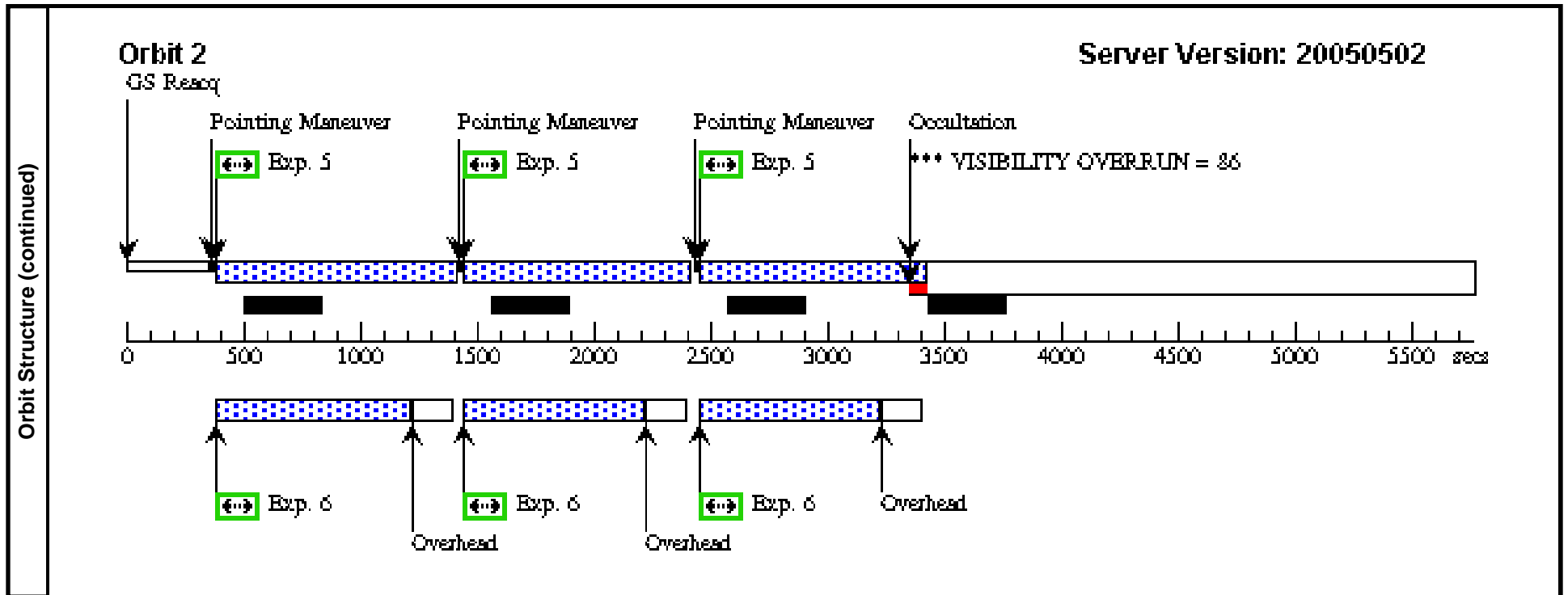
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Diagnosics											
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Fixed Targets	#	Name	Target Coordinates		Targ. Coord. Corrections		Fluxes		Miscellaneous		
	(2)	NGC224-003027+413620	RA: 00 30 27.3000 (7.6137500d)				V=16.27+/-0.1		Coordinate Source: APM/USNO1b		
Alt Name1: M31-GC-B Dec: +41 36 20.00 (41.60556d) Equinox: J2000 Plate Id: (?) <i>Comments: V magnitude is integrated magnitude of cluster.</i>											
Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit	
	1	GC-B/initial -I	(2) NGC224-003027 +413620	ACS/WFC, ACCUM, WFC2	F814W	CR-SPLIT=NO; GAIN=2; PAREXP=NONE		Prime + Parallel Gro up 1-2	400.0 Secs [=>453.0 Secs]	[1]	
	2		ANY	WFPC2, IMAGE, WFALL	F814W	CR-SPLIT=NO; ATD-GAIN=7		Prime + Parallel Gro up 1-2	300.0 Secs [=>300.0 Secs]	[1]	
	3	GC-B/V	(2) NGC224-003027 +413620	ACS/WFC, ACCUM, WFC2	F606W	CR-SPLIT=NO; GAIN=2; PAREXP=NONE		Pattern 3-4 (1) Prime + Parallel Gro up 3-4	550.0 Secs [=>603.0 Secs (Pattern 1)] [=>603.0 Secs (Pattern 2)] [=>603.0 Secs (Pattern 3)]	[1]	
	4		ANY	WFPC2, IMAGE, WFALL	F606W	ATD-GAIN=7; CR-SPLIT=NO		Pattern 3-4 (1) Prime + Parallel Gro up 3-4	400.0 Secs [=>400.0 Secs (Pattern 1)] [=>400.0 Secs (Pattern 2)] [=>400.0 Secs (Pattern 3)]	[1]	

Proposal 10394 - Visit 02 - Deep imaging of newly discovered globular clusters in the outer halo of M31

Exposures (continued)	#	Label	Target	Config, Mode, Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit
	5	GC-B/3xI	(2) NGC224-003027 +413620	ACS/WFC, ACCUM, WFC2	F814W	CR-SPLIT=NO; GAIN=2; PAREXP=NONE		Pattern 5-6 (1) Prime + Parallel Group 5-6	825.0 Secs [=>849.0 Secs (Pattern 1)] [=>849.0 Secs (Pattern 2)] [=>849.0 Secs (Pattern 3)]	[2]
	6	ANY		WFPC2, IMAGE, WFALL	F814W	CR-SPLIT=NO; ATD-GAIN=7		Pattern 5-6 (1) Prime + Parallel Group 5-6	500.0 Secs [=>700.0 Secs (Pattern 1)] [=>600.0 Secs (Pattern 2)] [=>600.0 Secs (Pattern 3)]	[2]





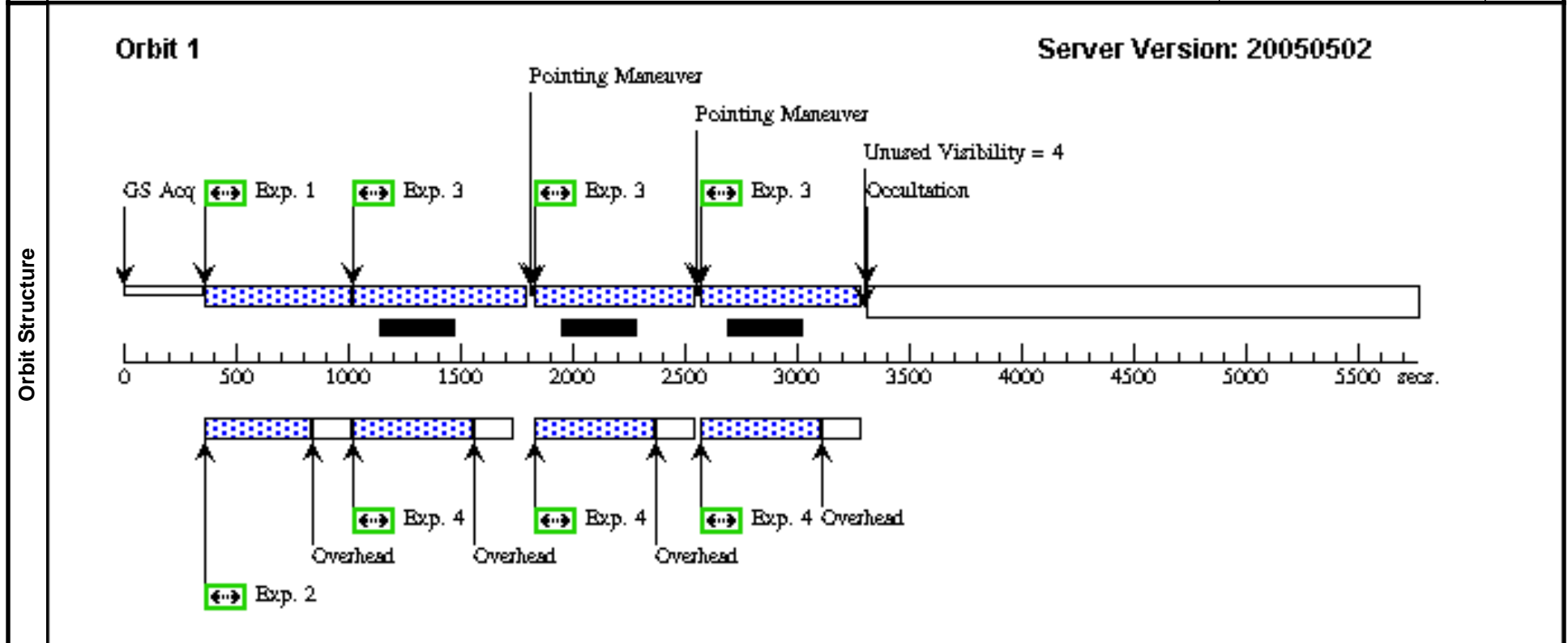
Proposal 10394 - Visit 03 - Deep imaging of newly discovered globular clusters in the outer halo of M31

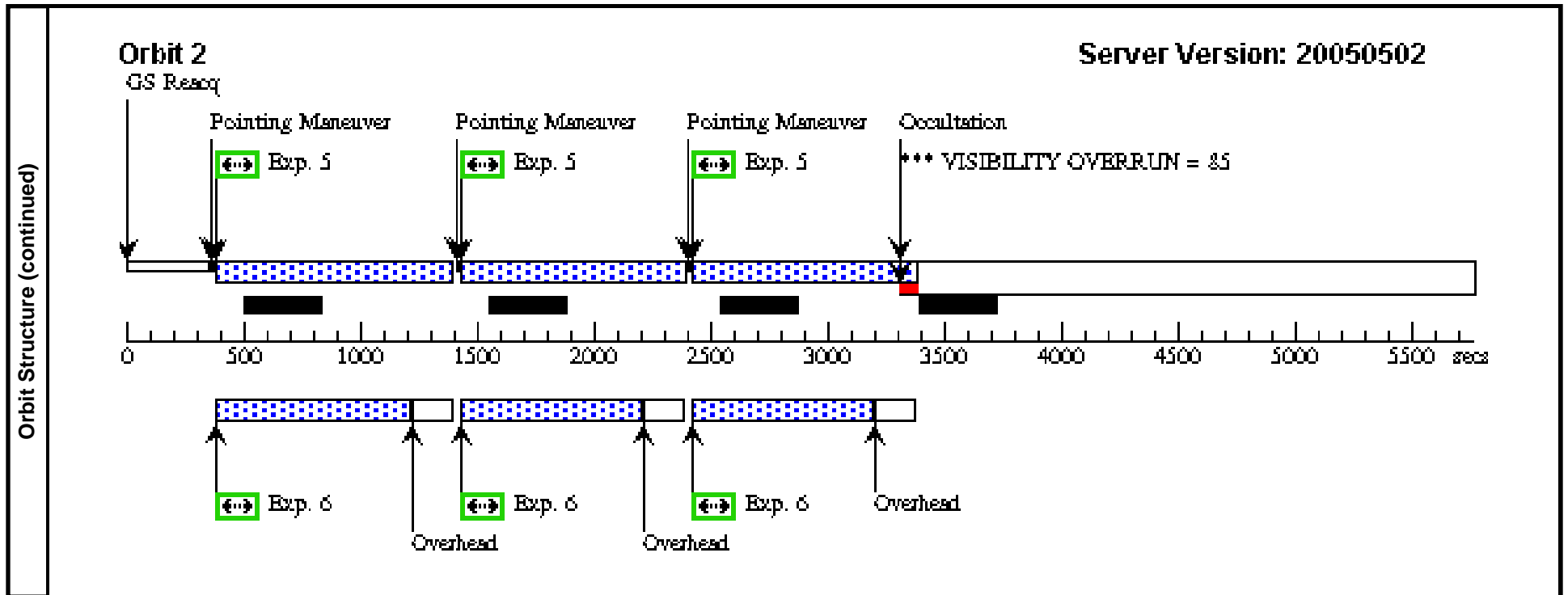
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Visit	Proposal 10394, Visit 03 Diagnostic Status: Warning Scientific Instruments: ACS/WFC, WFPC2 Special Requirements: (none)									
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Diagnosics										
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Fixed Targets	#	Name	Target Coordinates		Targ. Coord. Corrections		Fluxes	Miscellaneous		
	(3)	NGC224-003558+354104 Alt Name1: M31-GC-C	RA: 00 35 59.7600 (8.9990000d) Dec: +35 41 3.95 (35.68443d) Equinox: J2000 Plate Id: (?)				V=16.0+/-0.1	Coordinate Source: APM/USNO1b		
<i>Comments: V magnitude is integrated magnitude of cluster.</i>										
Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit
	1	GC-C/initial-I	(3) NGC224-003558+354104	ACS/WFC, ACCUM, WFC2	F814W	CR-SPLIT=NO; GAIN=2; PAREXP=NONE		Prime + Parallel Group 1-2	400.0 Secs [=>442.0 Secs]	[1]
	2		ANY	WFPC2, IMAGE, WFALL	F814W	CR-SPLIT=NO; ATD-GAIN=7		Prime + Parallel Group 1-2	300.0 Secs [=>]	[1]
	3	GC-C/V	(3) NGC224-003558+354104	ACS/WFC, ACCUM, WFC2	F606W	CR-SPLIT=NO; GAIN=2; PAREXP=NONE		Pattern 3-4 (1) Prime + Parallel Group 3-4	550.0 Secs [=>592.0 Secs (Pattern 1)] [=>592.0 Secs (Pattern 2)] [=>592.0 Secs (Pattern 3)]	[1]
	4		ANY	WFPC2, IMAGE, WFALL	F606W	ATD-GAIN=7; CR-SPLIT=NO		Pattern 3-4 (1) Prime + Parallel Group 3-4	400.0 Secs [=>400.0 Secs (Pattern 1)] [=>(Pattern 2)] [=>(Pattern 3)]	[1]

Proposal 10394 - Visit 03 - Deep imaging of newly discovered globular clusters in the outer halo of M31

Exposures (continued)	#	Label	Target	Config, Mode, Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit
	5	GC-C/3xI	(3) NGC224-003558 +354104	ACS/WFC, ACCUM, WFC2	F814W	CR-SPLIT=NO; GAIN=2; PAREXP=NONE		Pattern 5-6 (1) Prime + Parallel Group 5-6	825.0 Secs [==>835.0 Secs (Pattern 1)] [==>835.0 Secs (Pattern 2)] [==>835.0 Secs (Pattern 3)]	[2]
	6	ANY		WFPC2, IMAGE, WFALL	F814W	CR-SPLIT=NO; ATD-GAIN=7		Pattern 5-6 (1) Prime + Parallel Group 5-6	500.0 Secs [==>700.0 Secs (Pattern 1)] [==>600.0 Secs (Pattern 2)] [==>600.0 Secs (Pattern 3)]	[2]





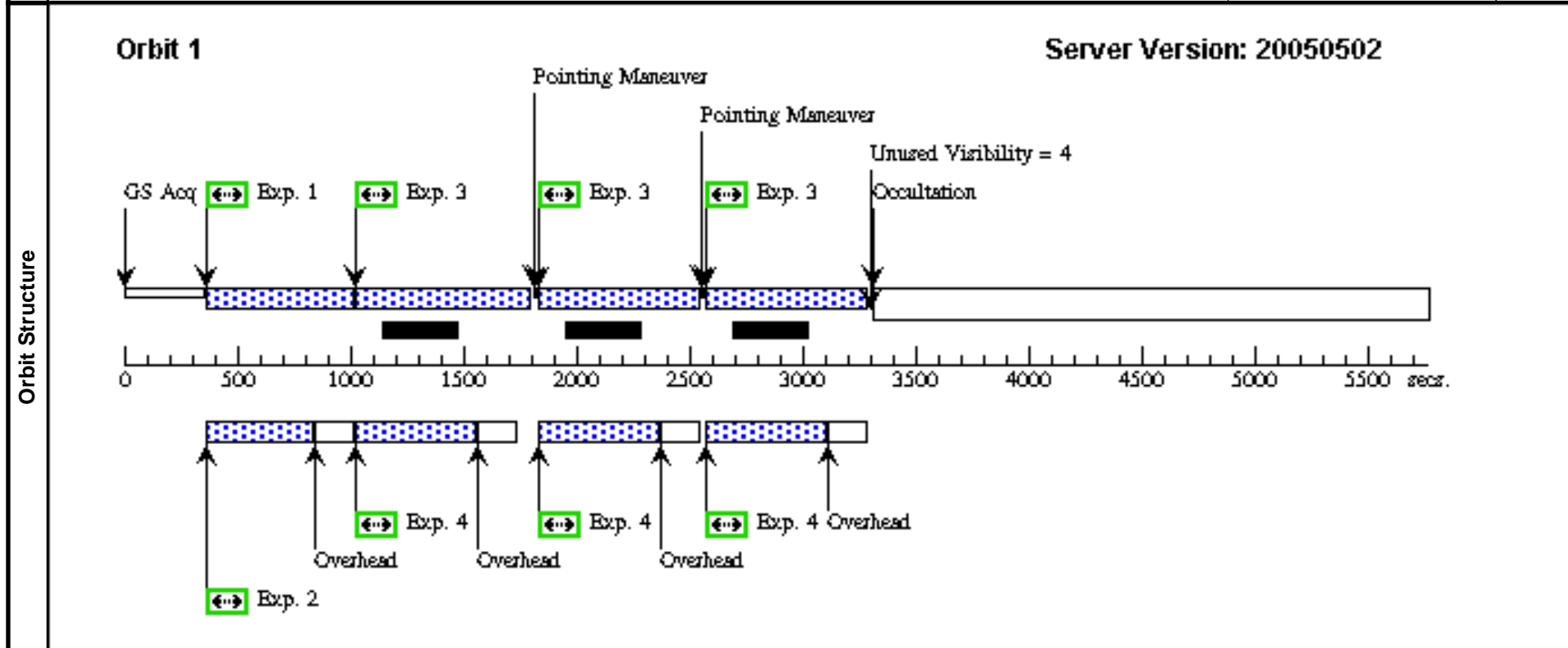
Proposal 10394 - Visit 04 - Deep imaging of newly discovered globular clusters in the outer halo of M31

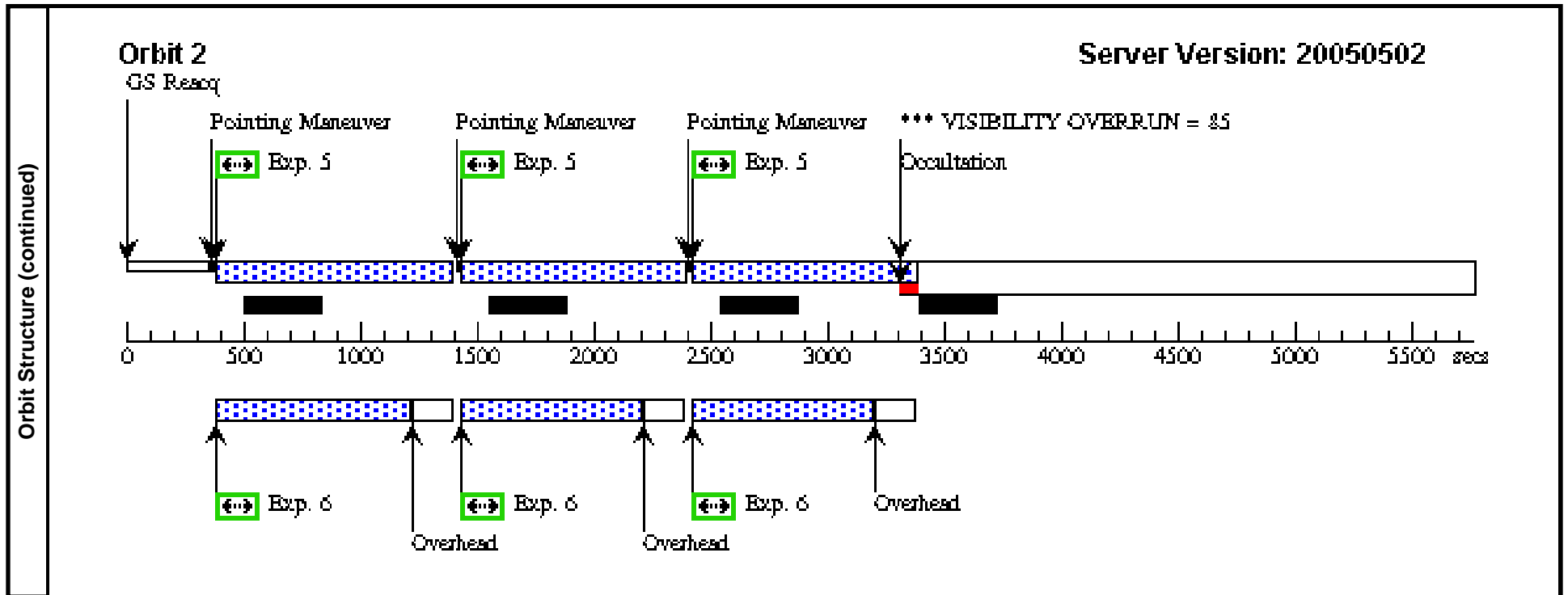
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Fixed Targets	#	Name	Target Coordinates		Targ. Coord. Corrections		Fluxes	Miscellaneous			
	(4)	NGC224-003110+375400 Alt Name1: M31-GC-A	RA: 00 31 9.8600 (7.7910833d) Dec: +37 54 0.40 (37.90011d) Equinox: J2000 Plate Id: (?)				V=15.7+/-0.1	Coordinate Source: APM/USNO1b			
<i>Comments: V magnitude is integrated magnitude of cluster.</i>											
Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]		Orbit
	1	GC-A/initial -I	(4) NGC224-003110 +375400	ACS/WFC, ACCUM, WFC1	F814W	CR-SPLIT=NO; GAIN=2; PAREXP=NONE		Prime + Parallel Gro up 1-2	400.0 Secs [==>442.0 Secs]		[1]
	2		ANY	WFPC2, IMAGE, WFALL	F814W	CR-SPLIT=NO; ATD-GAIN=7		Prime + Parallel Gro up 1-2	300.0 Secs [==>]		[1]
	3	GC-A/V	(4) NGC224-003110 +375400	ACS/WFC, ACCUM, WFC1	F606W	CR-SPLIT=NO; GAIN=2; PAREXP=NONE		Pattern 3-4 (1) Prime + Parallel Gro up 3-4	550.0 Secs [==>592.0 Secs (Pattern 1)] [==>592.0 Secs (Pattern 2)] [==>592.0 Secs (Pattern 3)]		[1]
	4		ANY	WFPC2, IMAGE, WFALL	F606W	ATD-GAIN=7; CR-SPLIT=NO		Pattern 3-4 (1) Prime + Parallel Gro up 3-4	400.0 Secs [==>400.0 Secs (Pattern 1)] [==>(Pattern 2)] [==>(Pattern 3)]		[1]

Proposal 10394 - Visit 04 - Deep imaging of newly discovered globular clusters in the outer halo of M31

Exposures (continued)	#	Label	Target	Config, Mode, Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit
	5	GC-A/3xI	(4) NGC224-003110 +375400	ACS/WFC, ACCUM, WFC1	F814W	CR-SPLIT=NO; GAIN=2; PAREXP=NONE		Pattern 5-6 (1) Prime + Parallel Group 5-6	825.0 Secs [==>835.0 Secs (Pattern 1)] [==>835.0 Secs (Pattern 2)] [==>835.0 Secs (Pattern 3)]	[2]
	6	ANY		WFPC2, IMAGE, WFALL	F814W	CR-SPLIT=NO; ATD-GAIN=7		Pattern 5-6 (1) Prime + Parallel Group 5-6	500.0 Secs [==>700.0 Secs (Pattern 1)] [==>600.0 Secs (Pattern 2)] [==>600.0 Secs (Pattern 3)]	[2]





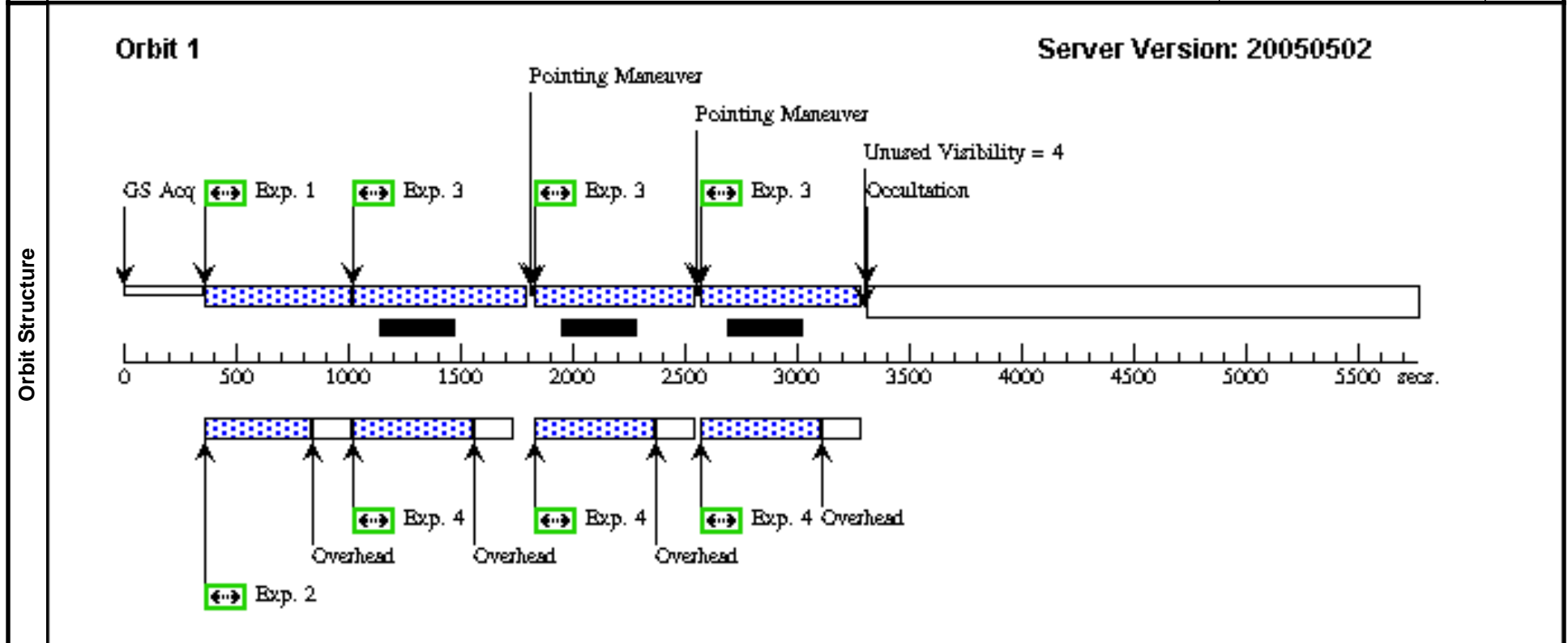
Proposal 10394 - Visit 05 - Deep imaging of newly discovered globular clusters in the outer halo of M31

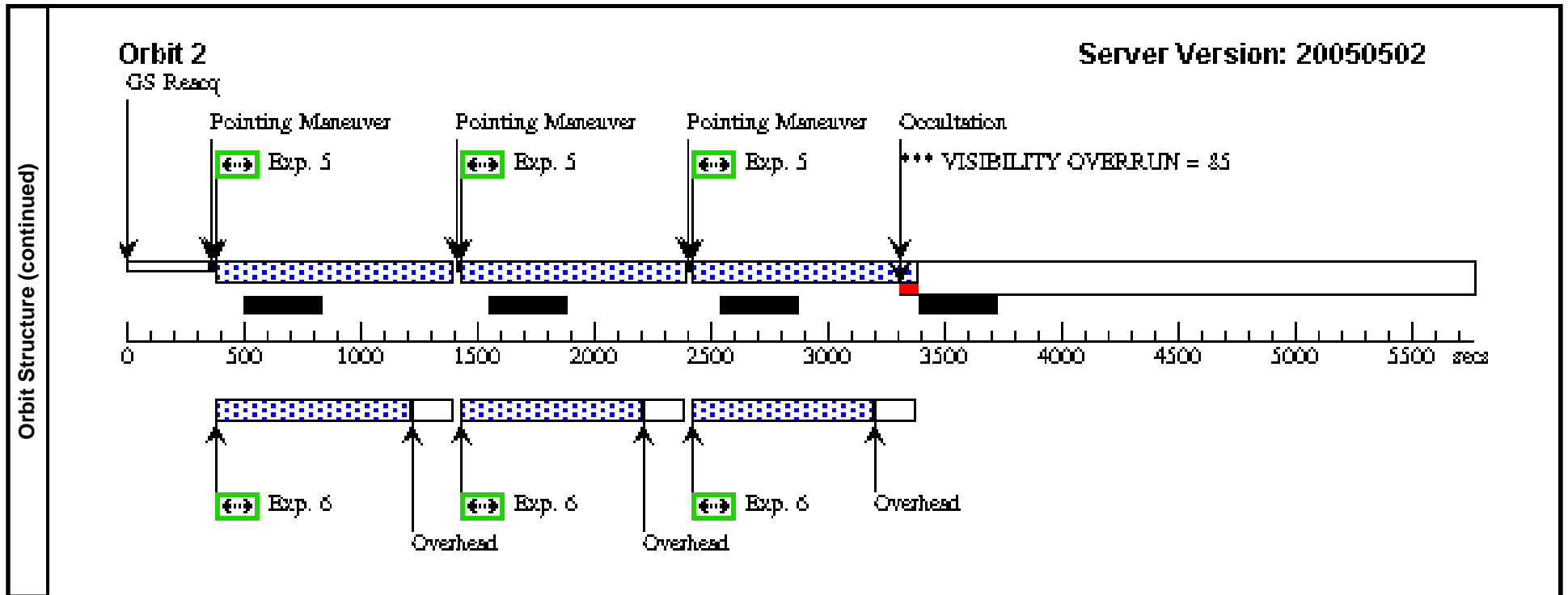
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Diagnosics											
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Fixed Targets	#	Name	Target Coordinates		Targ. Coord. Corrections		Fluxes	Miscellaneous			
	(5)	NGC224-005425+394255	RA: 00 54 25.0200 (13.6042500d)				V=16.7+/-0.1	Coordinate Source: APM/USNO1b			
Alt Name1: M31-GC-E Dec: +39 43 15.30 (39.72092d) Equinox: J2000 Plate Id: (?) <i>Comments: V magnitude is integrated magnitude of cluster.</i>											
Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]		Orbit
	1	GC-E/initial -I	(5) NGC224-005425 +394255	ACS/WFC, ACCUM, WFC1	F814W	CR-SPLIT=NO; GAIN=2; PAREXP=NONE		Prime + Parallel Gro up 1-2	400.0 Secs [==>442.0 Secs]	[1]	
	2		ANY	WFPC2, IMAGE, WFALL	F814W	CR-SPLIT=NO; ATD-GAIN=7		Prime + Parallel Gro up 1-2	300.0 Secs [==>]	[1]	
	3	GC-E/V	(5) NGC224-005425 +394255	ACS/WFC, ACCUM, WFC1	F606W	CR-SPLIT=NO; GAIN=2; PAREXP=NONE		Pattern 3-4 (1) Prime + Parallel Gro up 3-4	550.0 Secs [==>592.0 Secs (Pattern 1)] [==>592.0 Secs (Pattern 2)] [==>592.0 Secs (Pattern 3)]	[1]	
	4		ANY	WFPC2, IMAGE, WFALL	F606W	ATD-GAIN=7; CR-SPLIT=NO		Pattern 3-4 (1) Prime + Parallel Gro up 3-4	400.0 Secs [==>400.0 Secs (Pattern 1)] [==>(Pattern 2)] [==>(Pattern 3)]	[1]	

Proposal 10394 - Visit 05 - Deep imaging of newly discovered globular clusters in the outer halo of M31

Exposures (continued)	#	Label	Target	Config, Mode, Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit
	5	GC-E/3xI	(5) NGC224-005425 +394255	ACS/WFC, ACCUM, WFC1	F814W	CR-SPLIT=NO; GAIN=2; PAREXP=NONE		Pattern 5-6 (1) Prime + Parallel Group 5-6	825.0 Secs [=>835.0 Secs (Pattern 1)] [=>835.0 Secs (Pattern 2)] [=>835.0 Secs (Pattern 3)]	[2]
6		ANY	WFPC2, IMAGE, WFALL	F814W	CR-SPLIT=NO; ATD-GAIN=7		Pattern 5-6 (1) Prime + Parallel Group 5-6	500.0 Secs [=>700.0 Secs (Pattern 1)] [=>600.0 Secs (Pattern 2)] [=>600.0 Secs (Pattern 3)]	[2]	





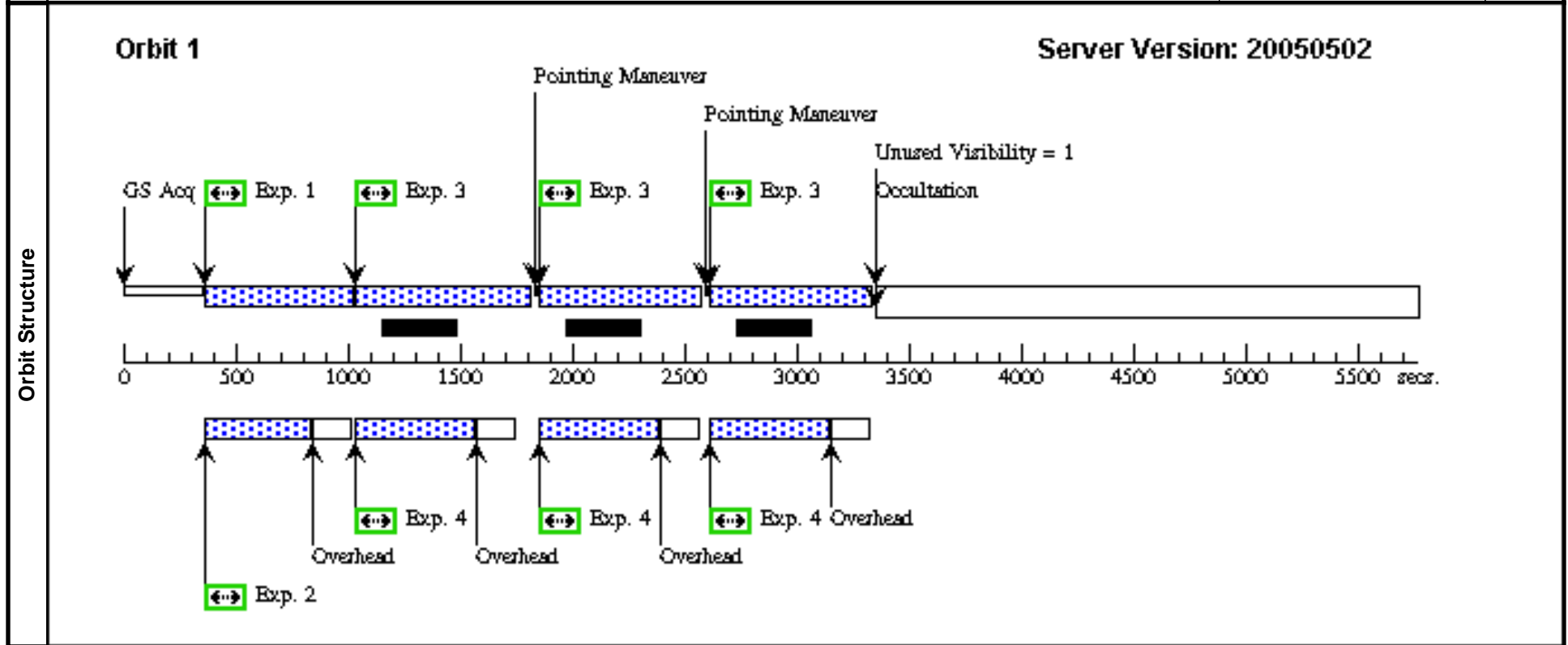
Proposal 10394 - Visit 06 - Deep imaging of newly discovered globular clusters in the outer halo of M31

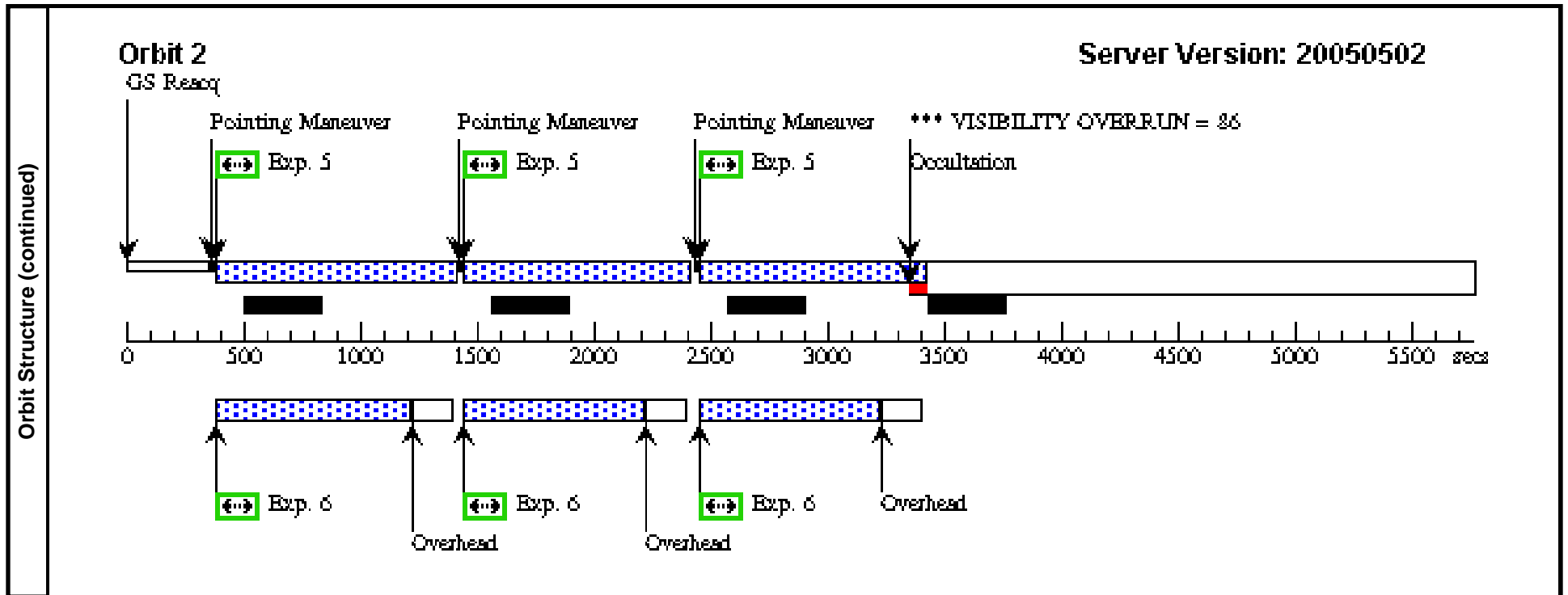
Tue Jun 21 01:03:32 GMT 2005

Visit	Proposal 10394, Visit 06 Diagnostic Status: Warning Scientific Instruments: ACS/WFC, WFPC2 Special Requirements: (none)										
	(Visit 06) Warning: VISIBILITY OVERRUN										
Diagnosics											
Patterns	#	Primary Pattern				Secondary Pattern				Exposures	
	(1)	Pattern Type=ACS-WFC-DITHER- LINE Purpose=DITHER Number Of Points=3 Point Spacing=0.365 Line Spacing=				Coordinate Frame=POS-TARG Pattern Orientation=47.2 Angle Between Sides= Center Pattern=false				(3-4), (5-6)	
Fixed Targets	#	Name	Target Coordinates		Targ. Coord. Corrections		Fluxes	Miscellaneous			
	(6)	NGC224-005544+424616	RA: 00 55 44.9400 (13.9372500d)				V=17.8+/-0.1	Coordinate Source: APM/USNO1b			
Alt Name1: M31-GC-H Dec: +42 46 35.20 (42.77644d) Equinox: J2000 Plate Id: (?) <i>Comments: V magnitude is integrated magnitude of cluster.</i>											
Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]		Orbit
	1	GC-H/initial -I	(6) NGC224-005544 +424616	ACS/WFC, ACCUM, WFC1	F814W	CR-SPLIT=NO; GAIN=2; PAREXP=NONE		Prime + Parallel Gro up 1-2	400.0 Secs [=>453.0 Secs]	[1]	
	2		ANY	WFPC2, IMAGE, WFALL	F814W	CR-SPLIT=NO; ATD-GAIN=7		Prime + Parallel Gro up 1-2	300.0 Secs [=>300.0 Secs]	[1]	
	3	GC-H/V	(6) NGC224-005544 +424616	ACS/WFC, ACCUM, WFC1	F606W	CR-SPLIT=NO; GAIN=2; PAREXP=NONE		Pattern 3-4 (1) Prime + Parallel Gro up 3-4	550.0 Secs [=>603.0 Secs (Pattern 1)] [=>603.0 Secs (Pattern 2)] [=>603.0 Secs (Pattern 3)]	[1]	
	4		ANY	WFPC2, IMAGE, WFALL	F606W	ATD-GAIN=7; CR-SPLIT=NO		Pattern 3-4 (1) Prime + Parallel Gro up 3-4	400.0 Secs [=>400.0 Secs (Pattern 1)] [=>400.0 Secs (Pattern 2)] [=>400.0 Secs (Pattern 3)]	[1]	

Proposal 10394 - Visit 06 - Deep imaging of newly discovered globular clusters in the outer halo of M31

Exposures (continued)	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit
	5	GC-H/3xI	(6) NGC224-005544 +424616	ACS/WFC, ACCUM, WFC1	F814W	CR-SPLIT=NO; GAIN=2; PAREXP=NONE		Pattern 5-6 (1) Prime + Parallel Group 5-6	825.0 Secs [=>849.0 Secs (Pattern 1)] [=>849.0 Secs (Pattern 2)] [=>849.0 Secs (Pattern 3)]	[2]
	6		ANY	WFPC2, IMAGE, WFALL	F814W	CR-SPLIT=NO; ATD-GAIN=7		Pattern 5-6 (1) Prime + Parallel Group 5-6	500.0 Secs [=>700.0 Secs (Pattern 1)] [=>600.0 Secs (Pattern 2)] [=>600.0 Secs (Pattern 3)]	[2]

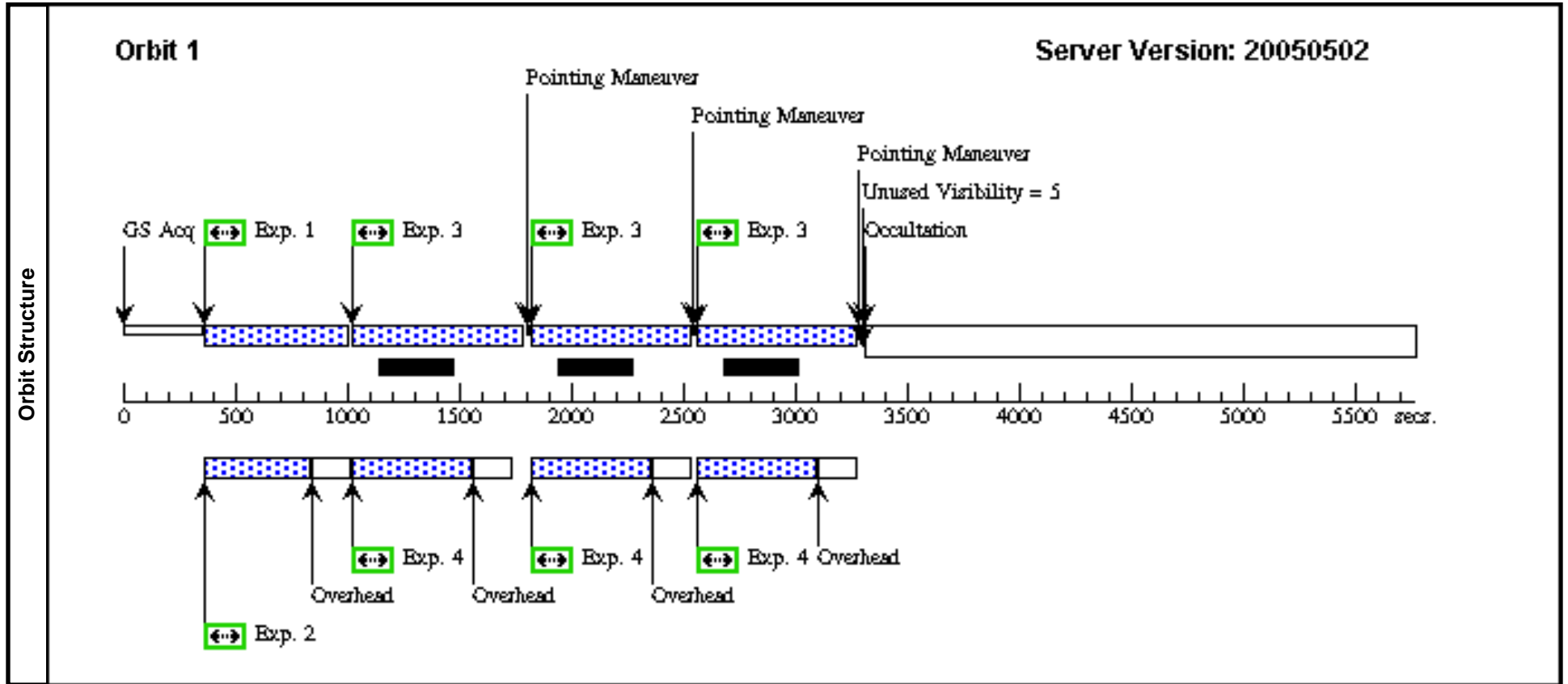


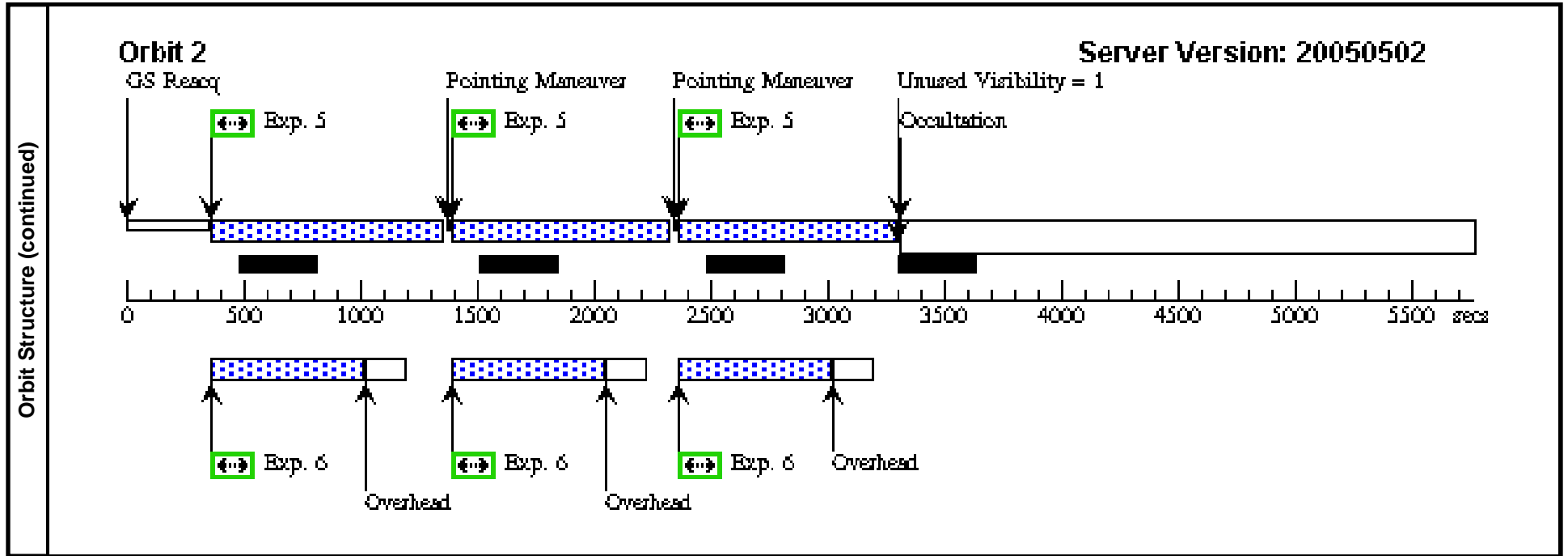


Proposal 10394 - Visit 07 - Deep imaging of newly discovered globular clusters in the outer halo of M31

Tue Jun 21 01:03:33 GMT 2005

Visit	Proposal 10394, Visit 07 Diagnostic Status: No Diagnostics Scientific Instruments: ACS/WFC, WFPC2 Special Requirements: (none)									
	Patterns	#	Primary Pattern	Secondary Pattern			Exposures			
		(1)	Pattern Type=ACS-WFC-DITHER-LINE Purpose=DITHER Number Of Points=3 Point Spacing=0.365 Line Spacing=	Coordinate Frame=POS-TARG Pattern Orientation=47.2 Angle Between Sides= Center Pattern=false				(3-4), (5-6)		
Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous				
	(7)	NGC224-010726+354648 Alt Name1: M31-GC-I	RA: 01 07 26.3000 (16.8595833d) Dec: +35 46 48.00 (35.78000d) Equinox: J2000 Plate Id: (?)		V=18.1+/-0.1	Coordinate Source: APM/USNO1b				
<i>Comments: V magnitude is integrated magnitude of cluster.</i>										
Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit
	1	GC-I/initial-I	(7) NGC224-010726+354648	ACS/WFC, ACCUM, WFC1	F814W	CR-SPLIT=NO; GAIN=2; PAREXP=NONE		Prime + Parallel Group 1-2	435.0 Secs [==>]	[1]
	2		ANY	WFPC2, IMAGE, WFALL	F814W	CR-SPLIT=NO; ATD-GAIN=7		Prime + Parallel Group 1-2	300.0 Secs [==>300.0 Secs]	[1]
	3	GC-I/V	(7) NGC224-010726+354648	ACS/WFC, ACCUM, WFC1	F606W	CR-SPLIT=NO; GAIN=2; PAREXP=NONE		Pattern 3-4 (1) Prime + Parallel Group 3-4	585.0 Secs [==>(Pattern 1)] [==>(Pattern 2)] [==>(Pattern 3)]	[1]
	4		ANY	WFPC2, IMAGE, WFALL	F606W	ATD-GAIN=7; CR-SPLIT=NO		Pattern 3-4 (1) Prime + Parallel Group 3-4	400.0 Secs [==>400.0 Secs (Pattern 1)] [==>400.0 Secs (Pattern 2)] [==>400.0 Secs (Pattern 3)]	[1]
	5	GC-I/3xI	(7) NGC224-010726+354648	ACS/WFC, ACCUM, WFC1	F814W	CR-SPLIT=NO; GAIN=2; PAREXP=NONE		Pattern 5-6 (1) Prime + Parallel Group 5-6	813.0 Secs [==>(Pattern 1)] [==>(Pattern 2)] [==>(Pattern 3)]	[2]
	6		ANY	WFPC2, IMAGE, WFALL	F814W	CR-SPLIT=NO; ATD-GAIN=7		Pattern 5-6 (1) Prime + Parallel Group 5-6	500.0 Secs [==>(Pattern 1)] [==>(Pattern 2)] [==>(Pattern 3)]	[2]





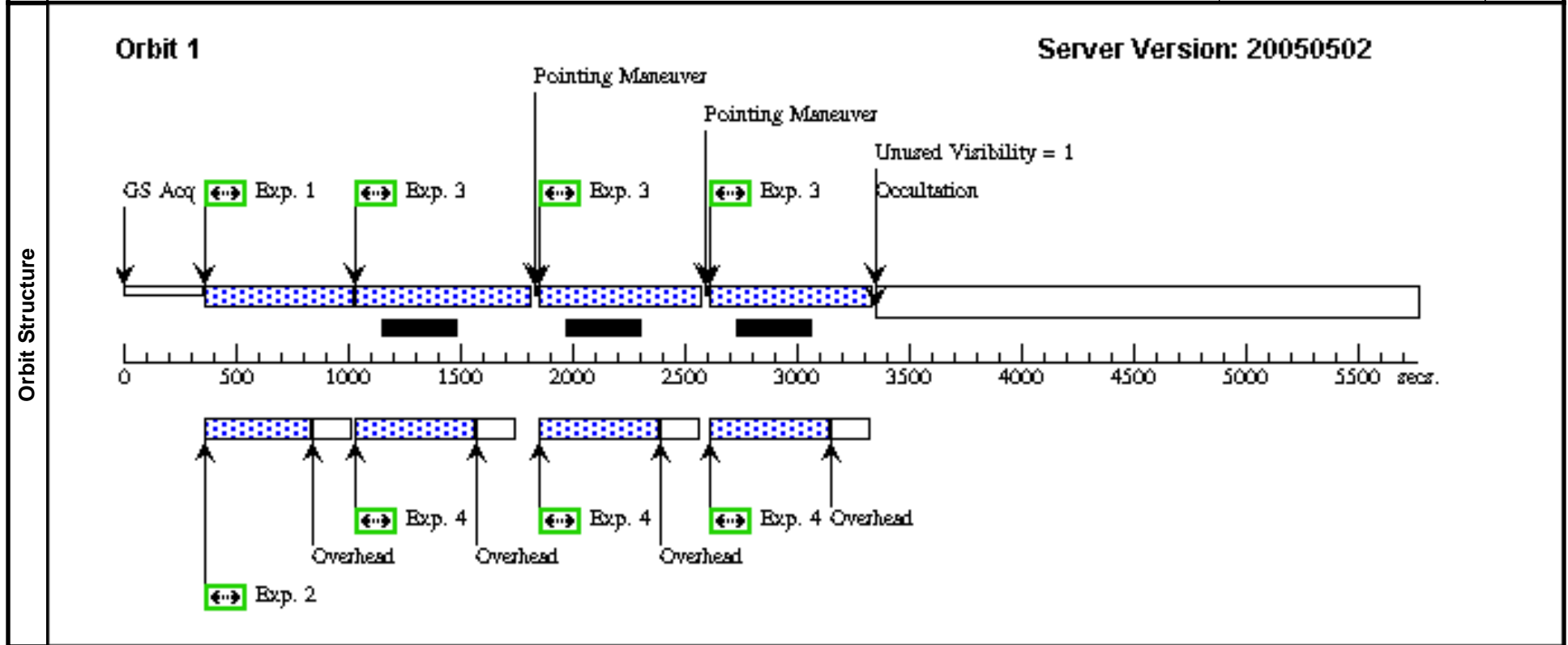
Proposal 10394 - Visit 08 - Deep imaging of newly discovered globular clusters in the outer halo of M31

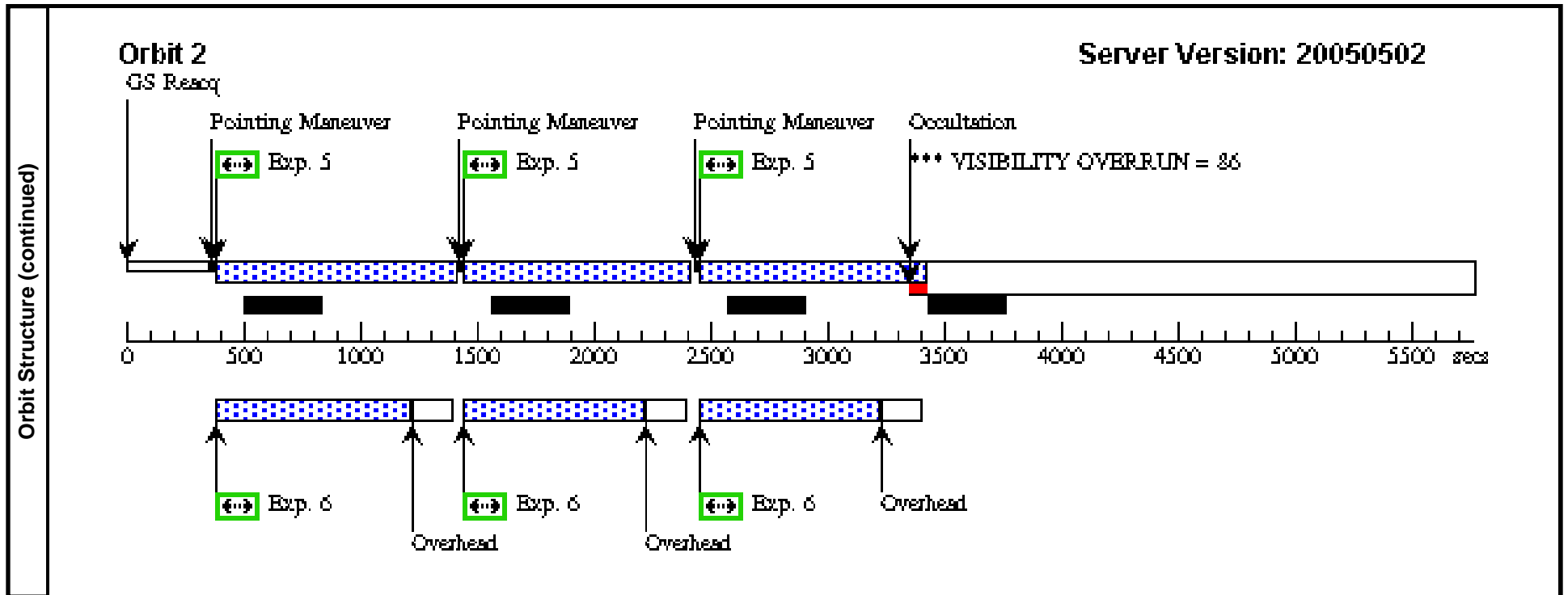
Tue Jun 21 01:03:34 GMT 2005

Visit	Proposal 10394, Visit 08 Diagnostic Status: Warning Scientific Instruments: ACS/WFC, WFPC2 Special Requirements: (none)									
	(Visit 08) Warning: VISIBILITY OVERRUN									
Diagnosics										
Patterns	#	Primary Pattern				Secondary Pattern			Exposures	
	(1)	Pattern Type=ACS-WFC-DITHER- LINE Purpose=DITHER Number Of Points=3 Point Spacing=0.365 Line Spacing=				Coordinate Frame=POS-TARG Pattern Orientation=47.2 Angle Between Sides= Center Pattern=false			(3-4), (5-6)	
Fixed Targets	#	Name	Target Coordinates		Targ. Coord. Corrections		Fluxes	Miscellaneous		
	(8)	NGC224-003849+422247	RA: 00 38 49.3900 (9.7057917d)				V=18.2+/-0.1	Coordinate Source: APM/USNO1b		
Alt Name1: M31-GC-M Dec: +42 22 47.10 (42.37975d) Equinox: J2000 Plate Id: (?) <i>Comments: V magnitude is integrated magnitude of cluster.</i>										
Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit
	1	GC-M/initia l-I	(8) NGC224-003849 +422247	ACS/WFC, ACCUM, WFC2	F814W	CR-SPLIT=NO; GAIN=2; PAREXP=NONE		Prime + Parallel Gro up 1-2	400.0 Secs [=>453.0 Secs]	[1]
	2		ANY	WFPC2, IMAGE, WFALL	F814W	CR-SPLIT=NO; ATD-GAIN=7		Prime + Parallel Gro up 1-2	300.0 Secs [=>300.0 Secs]	[1]
	3	GC-M/V	(8) NGC224-003849 +422247	ACS/WFC, ACCUM, WFC2	F606W	CR-SPLIT=NO; GAIN=2; PAREXP=NONE		Pattern 3-4 (1) Prime + Parallel Gro up 3-4	550.0 Secs [=>603.0 Secs (Pattern 1)] [=>603.0 Secs (Pattern 2)] [=>603.0 Secs (Pattern 3)]	[1]
	4		ANY	WFPC2, IMAGE, WFALL	F606W	ATD-GAIN=7; CR-SPLIT=NO		Pattern 3-4 (1) Prime + Parallel Gro up 3-4	400.0 Secs [=>400.0 Secs (Pattern 1)] [=>400.0 Secs (Pattern 2)] [=>400.0 Secs (Pattern 3)]	[1]

Proposal 10394 - Visit 08 - Deep imaging of newly discovered globular clusters in the outer halo of M31

Exposures (continued)	#	Label	Target	Config, Mode, Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit
	5	GC-M/3xI	(8) NGC224-003849 +422247	ACS/WFC, ACCUM, WFC2	F814W	CR-SPLIT=NO; GAIN=2; PAREXP=NONE		Pattern 5-6 (1) Prime + Parallel Group 5-6	825.0 Secs [=>849.0 Secs (Pattern 1)] [=>849.0 Secs (Pattern 2)] [=>849.0 Secs (Pattern 3)]	[2]
	6	ANY		WFPC2, IMAGE, WFALL	F814W	CR-SPLIT=NO; ATD-GAIN=7		Pattern 5-6 (1) Prime + Parallel Group 5-6	500.0 Secs [=>700.0 Secs (Pattern 1)] [=>600.0 Secs (Pattern 2)] [=>600.0 Secs (Pattern 3)]	[2]





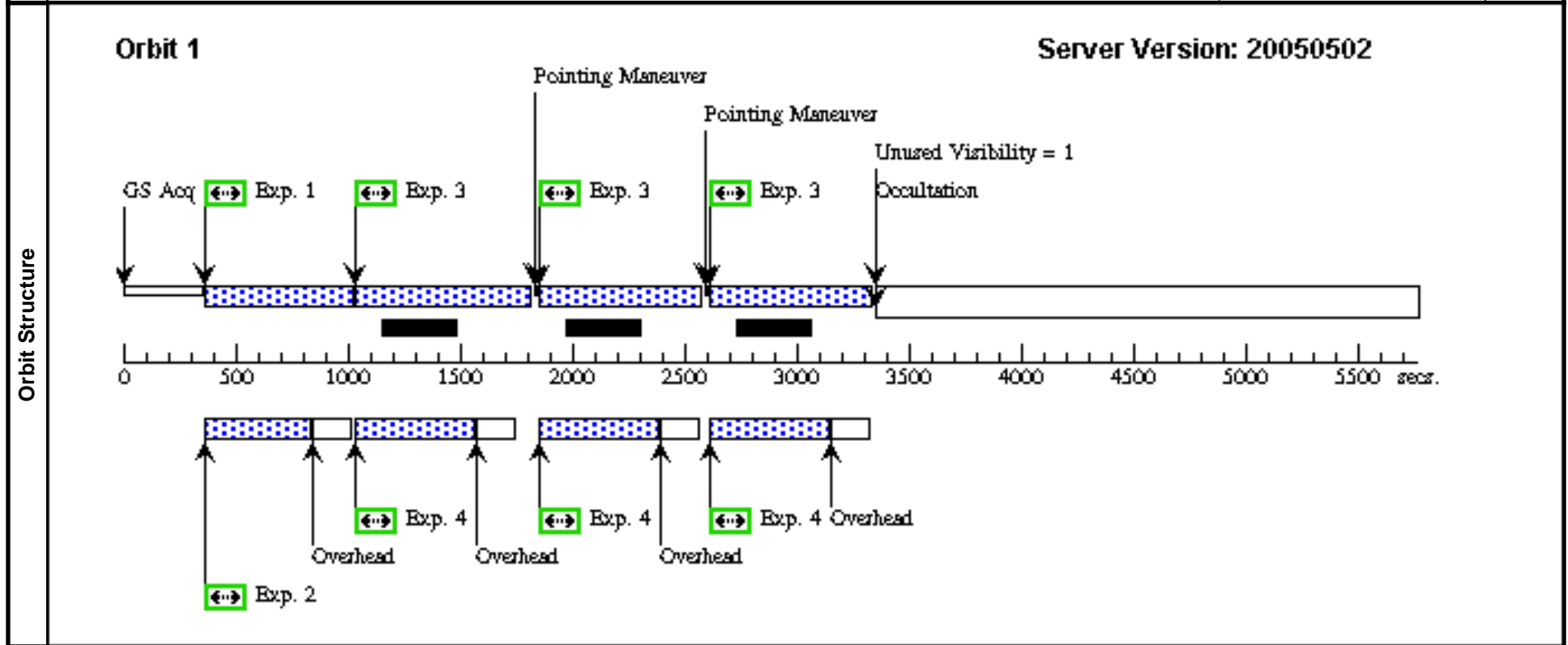
Proposal 10394 - Visit 09 - Deep imaging of newly discovered globular clusters in the outer halo of M31

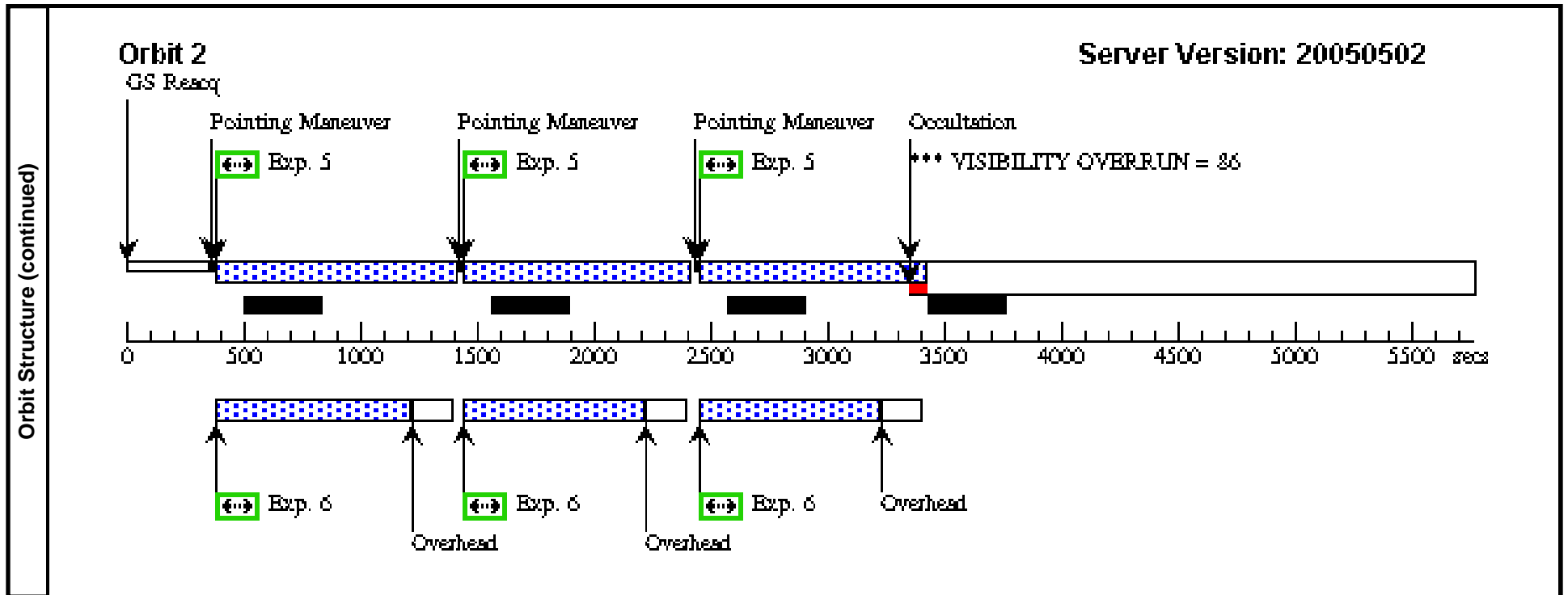
Tue Jun 21 01:03:34 GMT 2005

Visit	Proposal 10394, Visit 09 Diagnostic Status: Warning Scientific Instruments: ACS/WFC, WFPC2 Special Requirements: (none)									
	(Visit 09) Warning: VISIBILITY OVERRUN									
Diagnosics										
Patterns	#	Primary Pattern				Secondary Pattern			Exposures	
	(1)	Pattern Type=ACS-WFC-DITHER- LINE Purpose=DITHER Number Of Points=3 Point Spacing=0.365 Line Spacing=				Coordinate Frame=POS-TARG Pattern Orientation=47.2 Angle Between Sides= Center Pattern=false			(3-4), (5-6)	
Fixed Targets	#	Name	Target Coordinates		Targ. Coord. Corrections		Fluxes	Miscellaneous		
	(9)	NGC224-003820+414715	RA: 00 38 19.4800 (9.5811667d)				V=17.59+/-0.1	Coordinate Source: APM/USNO1b		
Alt Name1: M31-GC-R Dec: +41 47 15.40 (41.78761d) Equinox: J2000 Plate Id: (?) <i>Comments: V magnitude is integrated magnitude of cluster.</i>										
Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit
	1	GC-R/initial -I	(9) NGC224-003820 +414715	ACS/WFC, ACCUM, WFC2	F814W	CR-SPLIT=NO; GAIN=2; PAREXP=NONE		Prime + Parallel Gro up 1-2	400.0 Secs [=>453.0 Secs]	[1]
	2		ANY	WFPC2, IMAGE, WFALL	F814W	CR-SPLIT=NO; ATD-GAIN=7		Prime + Parallel Gro up 1-2	300.0 Secs [=>300.0 Secs]	[1]
	3	GC-R/V	(9) NGC224-003820 +414715	ACS/WFC, ACCUM, WFC2	F606W	CR-SPLIT=NO; GAIN=2; PAREXP=NONE		Pattern 3-4 (1) Prime + Parallel Gro up 3-4	550.0 Secs [=>603.0 Secs (Pattern 1)] [=>603.0 Secs (Pattern 2)] [=>603.0 Secs (Pattern 3)]	[1]
	4		ANY	WFPC2, IMAGE, WFALL	F606W	ATD-GAIN=7; CR-SPLIT=NO		Pattern 3-4 (1) Prime + Parallel Gro up 3-4	400.0 Secs [=>400.0 Secs (Pattern 1)] [=>400.0 Secs (Pattern 2)] [=>400.0 Secs (Pattern 3)]	[1]

Proposal 10394 - Visit 09 - Deep imaging of newly discovered globular clusters in the outer halo of M31

Exposures (continued)	#	Label	Target	Config, Mode, Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit
	5	GC-R/3xI	(9) NGC224-003820 +414715	ACS/WFC, ACCUM, WFC2	F814W	CR-SPLIT=NO; GAIN=2; PAREXP=NONE		Pattern 5-6 (1) Prime + Parallel Group 5-6	825.0 Secs [=>849.0 Secs (Pattern 1)] [=>849.0 Secs (Pattern 2)] [=>849.0 Secs (Pattern 3)]	[2]
	6	ANY		WFPC2, IMAGE, WFALL	F814W	CR-SPLIT=NO; ATD-GAIN=7		Pattern 5-6 (1) Prime + Parallel Group 5-6	500.0 Secs [=>700.0 Secs (Pattern 1)] [=>600.0 Secs (Pattern 2)] [=>600.0 Secs (Pattern 3)]	[2]





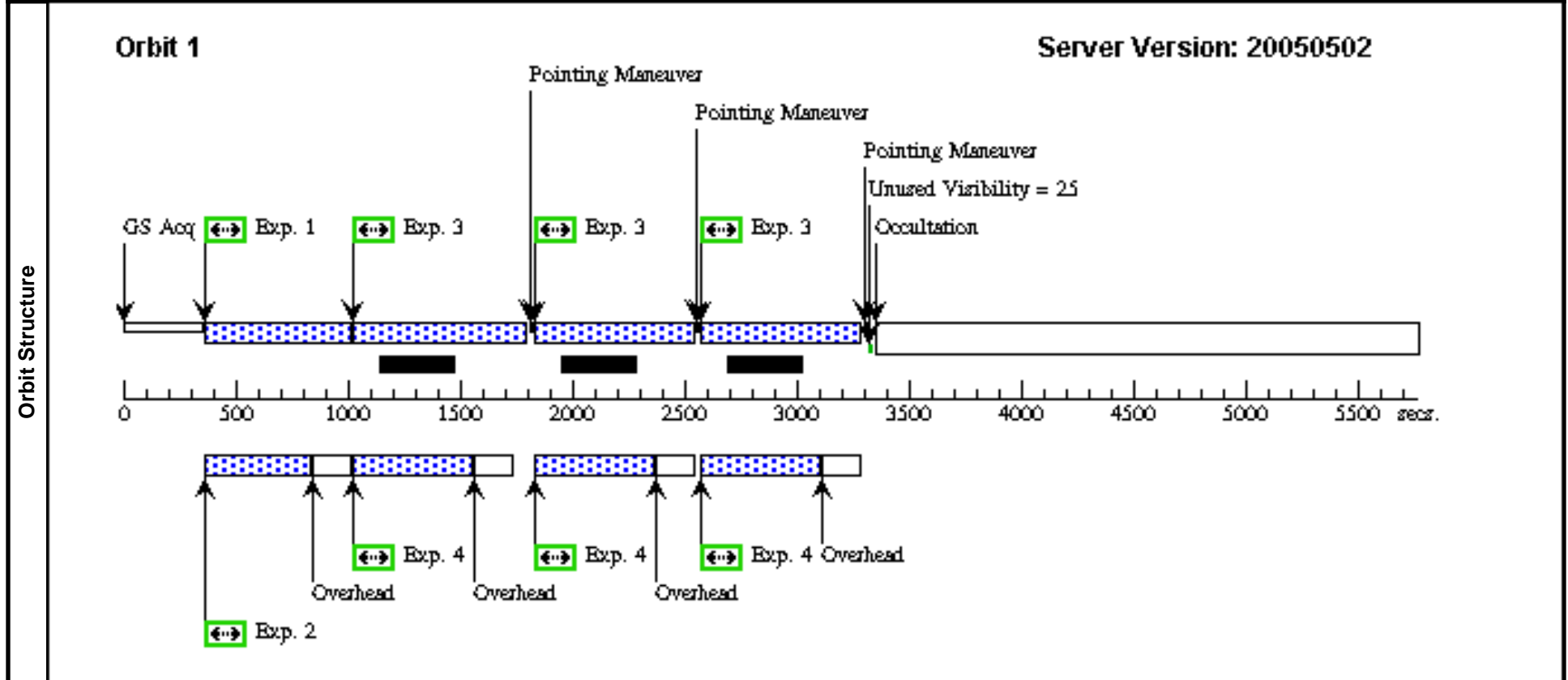
Proposal 10394 - Visit 10 - Deep imaging of newly discovered globular clusters in the outer halo of M31

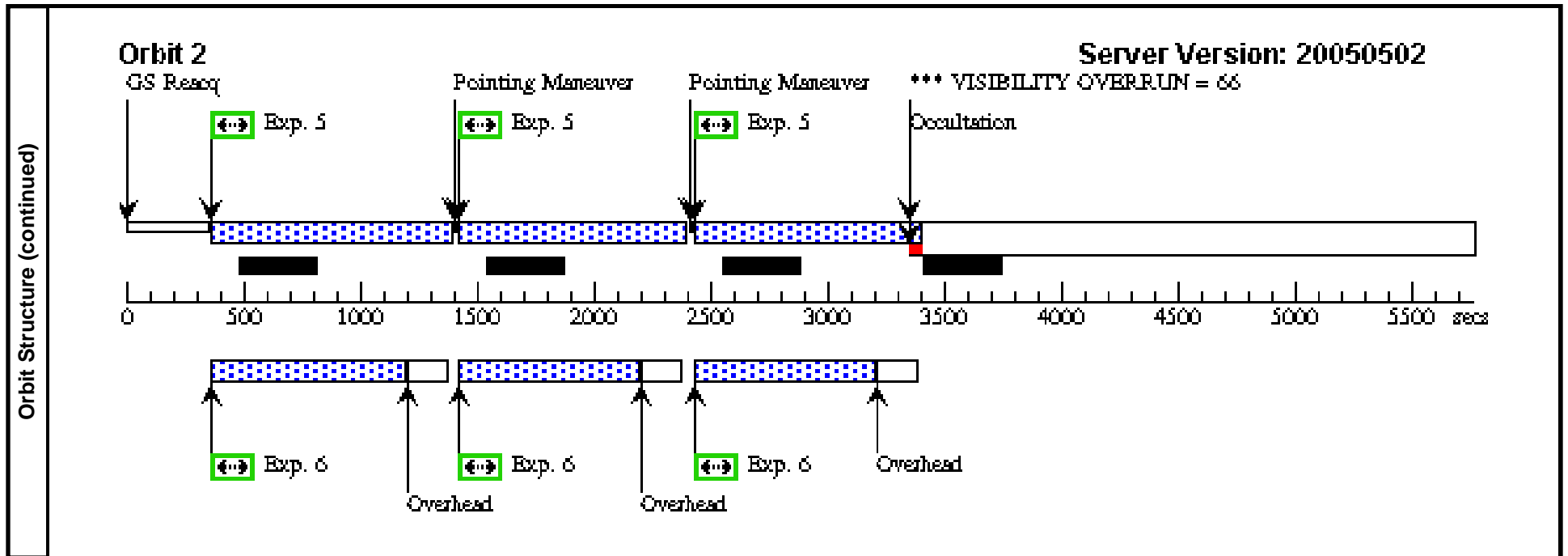
Tue Jun 21 01:03:35 GMT 2005

Visit	Proposal 10394, Visit 10 Diagnostic Status: Warning Scientific Instruments: ACS/WFC, WFPC2 Special Requirements: (none)									
	(Visit 10) Warning: VISIBILITY OVERRUN									
Diagnosics										
Patterns	#	Primary Pattern				Secondary Pattern			Exposures	
	(1)	Pattern Type=ACS-WFC-DITHER- LINE Purpose=DITHER Number Of Points=3 Point Spacing=0.365 Line Spacing=				Coordinate Frame=POS-TARG Pattern Orientation=47.2 Angle Between Sides= Center Pattern=false			(3-4), (5-6)	
Fixed Targets	#	Name	Target Coordinates		Targ. Coord. Corrections		Fluxes	Miscellaneous		
	(10)	NGC224-004255+435728	RA: 00 42 54.9200 (10.7288333d)				V=18.34+/-0.1	Coordinate Source: APM/USNO1b		
Alt Name1: M31-GC-S Dec: +43 57 28.10 (43.95781d) Equinox: J2000 Plate Id: (?) <i>Comments: V magnitude is integrated magnitude of cluster.</i>										
Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit
	1	GC-S/initial -I	(10) NGC224-00425 5+435728	ACS/WFC, ACCUM, WFC2	F814W	CR-SPLIT=NO; GAIN=2; PAREXP=NONE		Prime + Parallel Gro up 1-2	400.0 Secs [==>442.0 Secs]	[1]
	2		ANY	WFPC2, IMAGE, WFALL	F814W	CR-SPLIT=NO; ATD-GAIN=7		Prime + Parallel Gro up 1-2	300.0 Secs [==>]	[1]
	3	GC-S/V	(10) NGC224-00425 5+435728	ACS/WFC, ACCUM, WFC2	F606W	CR-SPLIT=NO; GAIN=2; PAREXP=NONE		Pattern 3-4 (1) Prime + Parallel Gro up 3-4	550.0 Secs [==>592.0 Secs (Pattern 1)] [==>592.0 Secs (Pattern 2)] [==>592.0 Secs (Pattern 3)]	[1]
	4		ANY	WFPC2, IMAGE, WFALL	F606W	ATD-GAIN=7; CR-SPLIT=NO		Pattern 3-4 (1) Prime + Parallel Gro up 3-4	400.0 Secs [==>400.0 Secs (Pattern 1)] [==>(Pattern 2)] [==>(Pattern 3)]	[1]

Proposal 10394 - Visit 10 - Deep imaging of newly discovered globular clusters in the outer halo of M31

Exposures (continued)	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit
	5	GC-S/3xI	(10) NGC224-00425 5+435728	ACS/WFC, ACCUM, WFC2	F814W	CR-SPLIT=NO; GAIN=2; PAREXP=NONE		Pattern 5-6 (1) Prime + Parallel Group 5-6	825.0 Secs [=>849.0 Secs (Pattern 1)] [=>849.0 Secs (Pattern 2)] [=>849.0 Secs (Pattern 3)]	[2]
6		ANY	WFPC2, IMAGE, WFALL	F814W	CR-SPLIT=NO; ATD-GAIN=7		Pattern 5-6 (1) Prime + Parallel Group 5-6	500.0 Secs [=>700.0 Secs (Pattern 1)] [=>600.0 Secs (Pattern 2)] [=>600.0 Secs (Pattern 3)]	[2]	





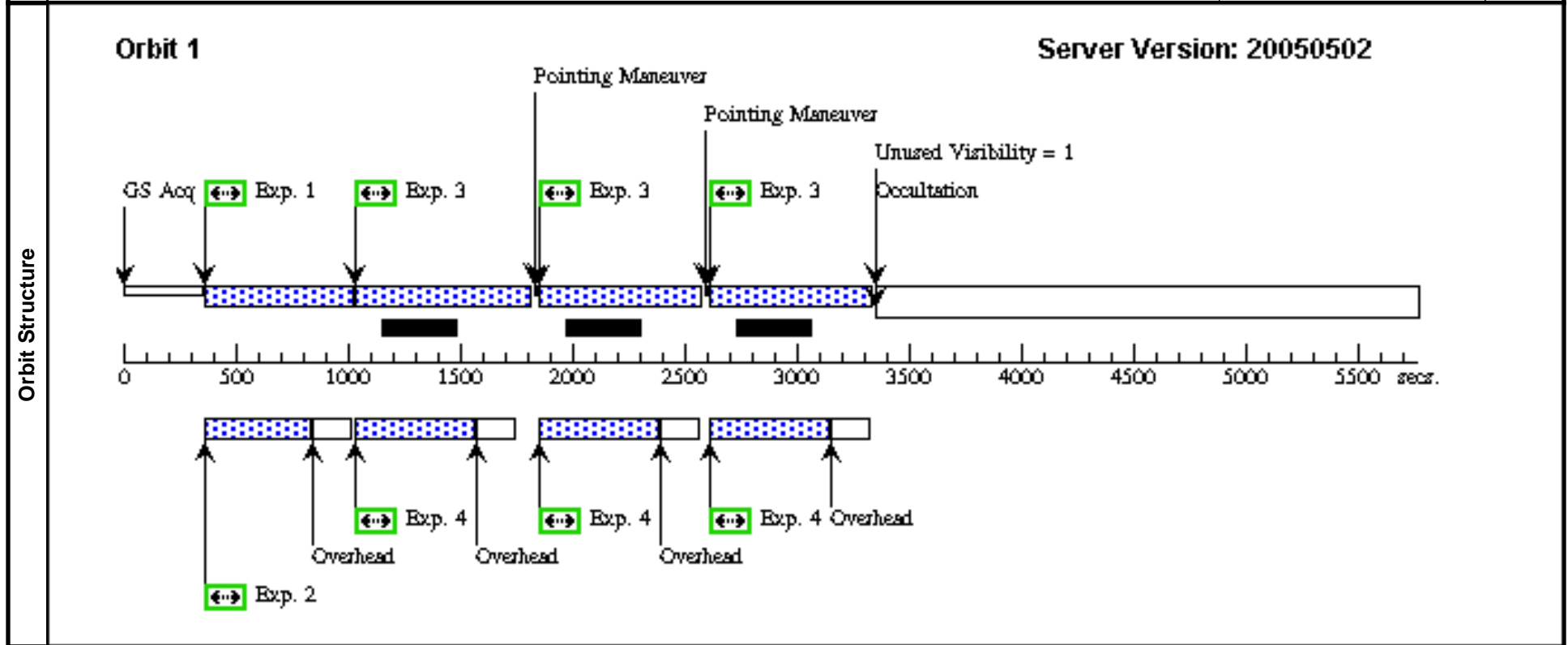
Proposal 10394 - Visit 11 - Deep imaging of newly discovered globular clusters in the outer halo of M31

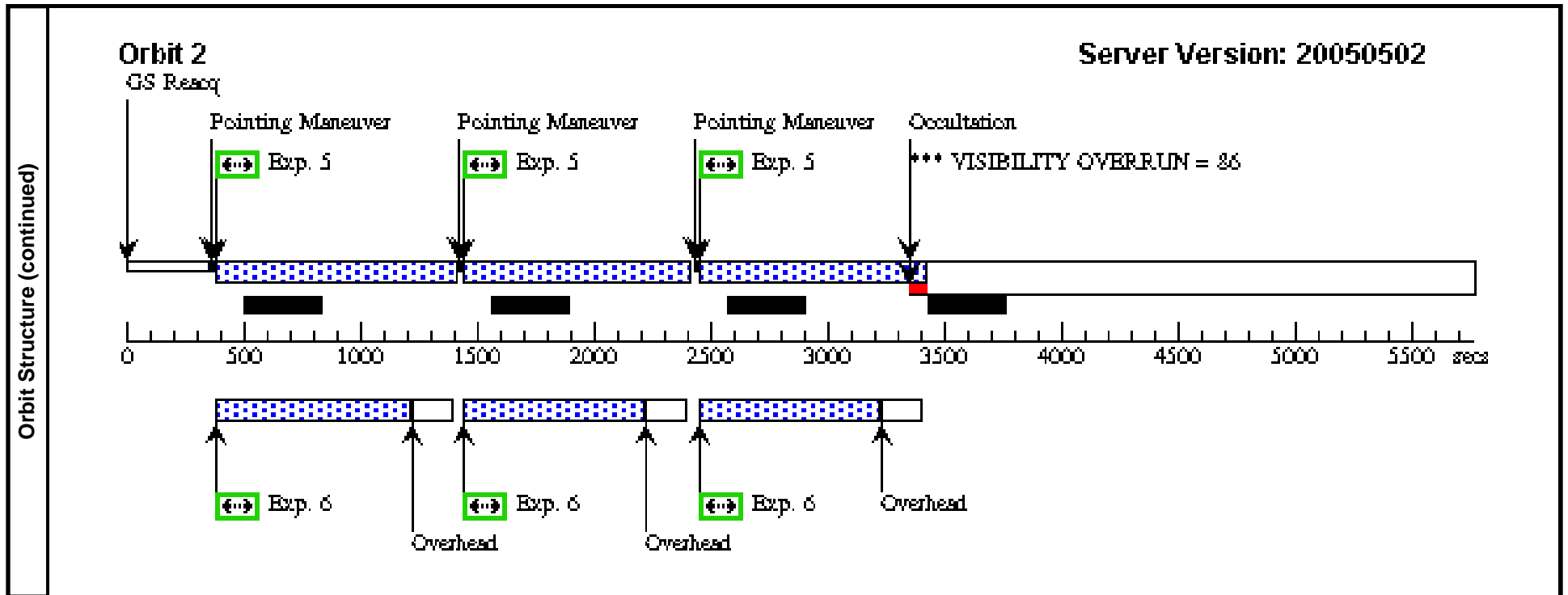
Tue Jun 21 01:03:35 GMT 2005

Visit	Proposal 10394, Visit 11 Diagnostic Status: Warning Scientific Instruments: ACS/WFC, WFPC2 Special Requirements: (none)									
	(Visit 11) Warning: VISIBILITY OVERRUN									
Diagnosics										
Patterns	#	Primary Pattern				Secondary Pattern			Exposures	
	(1)	Pattern Type=ACS-WFC-DITHER- LINE Purpose=DITHER Number Of Points=3 Point Spacing=0.365 Line Spacing=				Coordinate Frame=POS-TARG Pattern Orientation=47.2 Angle Between Sides= Center Pattern=false			(3-4), (5-6)	
Fixed Targets	#	Name	Target Coordinates		Targ. Coord. Corrections		Fluxes	Miscellaneous		
	(11)	NGC224-003805+404440	RA: 00 38 4.5800 (9.5190833d)				V=17.92+/-0.1	Coordinate Source: APM/USNO1b		
Alt Name1: M31-GC-T Dec: +40 44 39.80 (40.74439d) Equinox: J2000 Plate Id: (?) <i>Comments: V magnitude is integrated magnitude of cluster.</i>										
Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit
	1	GC-T/initial -I	(11) NGC224-00380 5+404440	ACS/WFC, ACCUM, WFC2	F814W	CR-SPLIT=NO; GAIN=2; PAREXP=NONE		Prime + Parallel Gro up 1-2	400.0 Secs [=>453.0 Secs]	[1]
	2		ANY	WFPC2, IMAGE, WFALL	F814W	CR-SPLIT=NO; ATD-GAIN=7		Prime + Parallel Gro up 1-2	300.0 Secs [=>300.0 Secs]	[1]
	3	GC-T/V	(11) NGC224-00380 5+404440	ACS/WFC, ACCUM, WFC2	F606W	CR-SPLIT=NO; GAIN=2; PAREXP=NONE		Pattern 3-4 (1) Prime + Parallel Gro up 3-4	550.0 Secs [=>603.0 Secs (Pattern 1)] [=>603.0 Secs (Pattern 2)] [=>603.0 Secs (Pattern 3)]	[1]
	4		ANY	WFPC2, IMAGE, WFALL	F606W	ATD-GAIN=7; CR-SPLIT=NO		Pattern 3-4 (1) Prime + Parallel Gro up 3-4	400.0 Secs [=>400.0 Secs (Pattern 1)] [=>400.0 Secs (Pattern 2)] [=>400.0 Secs (Pattern 3)]	[1]

Proposal 10394 - Visit 11 - Deep imaging of newly discovered globular clusters in the outer halo of M31

Exposures (continued)	#	Label	Target	Config, Mode, Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit
	5	GC-T/3xI	(11) NGC224-00380 5+404440	ACS/WFC, ACCUM, WFC2	F814W	CR-SPLIT=NO; GAIN=2; PAREXP=NONE		Pattern 5-6 (1) Prime + Parallel Group 5-6	825.0 Secs [=>849.0 Secs (Pattern 1)] [=>849.0 Secs (Pattern 2)] [=>849.0 Secs (Pattern 3)]	[2]
	6	ANY		WFPC2, IMAGE, WFALL	F814W	CR-SPLIT=NO; ATD-GAIN=7		Pattern 5-6 (1) Prime + Parallel Group 5-6	500.0 Secs [=>700.0 Secs (Pattern 1)] [=>600.0 Secs (Pattern 2)] [=>600.0 Secs (Pattern 3)]	[2]





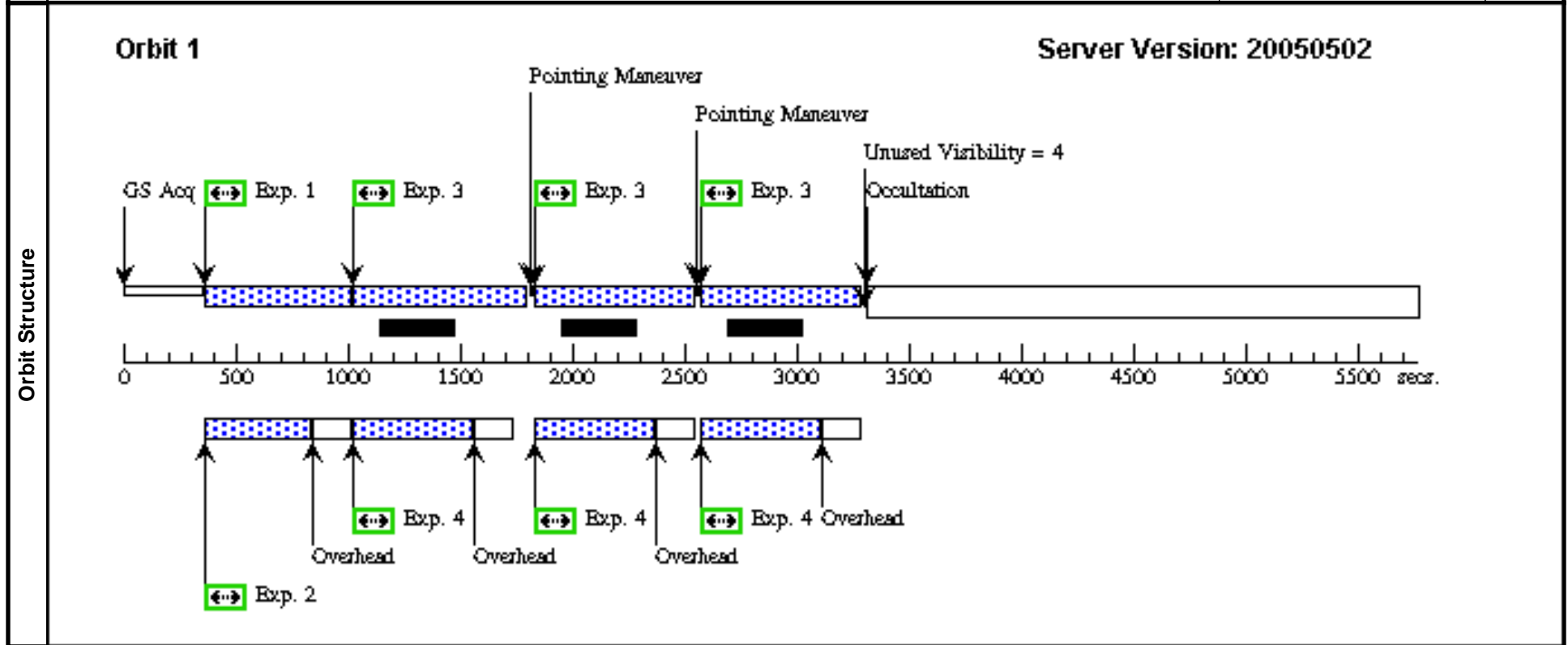
Proposal 10394 - Visit 12 - Deep imaging of newly discovered globular clusters in the outer halo of M31

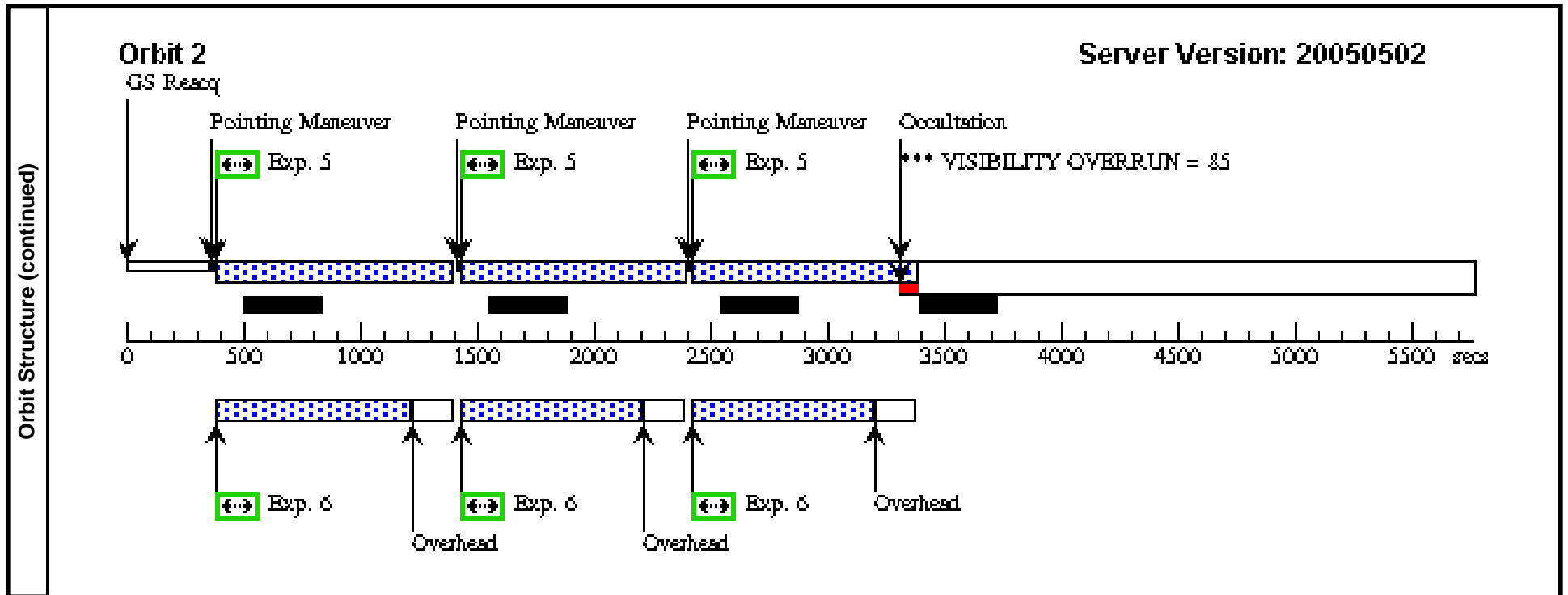
Tue Jun 21 01:03:36 GMT 2005

Visit	Proposal 10394, Visit 12 Diagnostic Status: Warning Scientific Instruments: ACS/WFC, WFPC2 Special Requirements: (none)									
	(Visit 12) Warning: VISIBILITY OVERRUN									
Diagnosics										
Patterns	#	Primary Pattern				Secondary Pattern			Exposures	
	(1)	Pattern Type=ACS-WFC-DITHER- LINE Purpose=DITHER Number Of Points=3 Point Spacing=0.365 Line Spacing=				Coordinate Frame=POS-TARG Pattern Orientation=47.2 Angle Between Sides= Center Pattern=false			(3-4), (5-6)	
Fixed Targets	#	Name	Target Coordinates		Targ. Coord. Corrections		Fluxes	Miscellaneous		
	(12)	NGC224-002648+394447	RA: 00 26 47.8000 (6.6991667d)				V=16.0+/-0.1	Coordinate Source: APM/USNO1b		
Alt Name1: M31-GC-U Dec: +39 44 46.66 (39.74629d) Equinox: J2000 Plate Id: (?) <i>Comments: V magnitude is integrated magnitude of cluster.</i>										
Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit
	1	GC-U/initial -I	(12) NGC224-00264 8+394447	ACS/WFC, ACCUM, WFC2	F814W	CR-SPLIT=NO; GAIN=2; PAREXP=NONE		Prime + Parallel Gro up 1-2	400.0 Secs [==>442.0 Secs]	[1]
	2		ANY	WFPC2, IMAGE, WFALL	F814W	CR-SPLIT=NO; ATD-GAIN=7		Prime + Parallel Gro up 1-2	300.0 Secs [==>]	[1]
	3	GC-U/V	(12) NGC224-00264 8+394447	ACS/WFC, ACCUM, WFC2	F606W	CR-SPLIT=NO; GAIN=2; PAREXP=NONE		Pattern 3-4 (1) Prime + Parallel Gro up 3-4	550.0 Secs [==>592.0 Secs (Pattern 1)] [==>592.0 Secs (Pattern 2)] [==>592.0 Secs (Pattern 3)]	[1]
	4		ANY	WFPC2, IMAGE, WFALL	F606W	ATD-GAIN=7; CR-SPLIT=NO		Pattern 3-4 (1) Prime + Parallel Gro up 3-4	400.0 Secs [==>400.0 Secs (Pattern 1)] [==>(Pattern 2)] [==>(Pattern 3)]	[1]

Proposal 10394 - Visit 12 - Deep imaging of newly discovered globular clusters in the outer halo of M31

Exposures (continued)	#	Label	Target	Config, Mode, Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit
	5	GC-U/3xI	(12) NGC224-00264 8+394447	ACS/WFC, ACCUM, WFC2	F814W	CR-SPLIT=NO; GAIN=2; PAREXP=NONE		Pattern 5-6 (1) Prime + Parallel Gro up 5-6	825.0 Secs [==>835.0 Secs (Pattern 1)] [==>835.0 Secs (Pattern 2)] [==>835.0 Secs (Pattern 3)]	[2]
	6	ANY		WFPC2, IMAGE, WFALL	F814W	CR-SPLIT=NO; ATD-GAIN=7		Pattern 5-6 (1) Prime + Parallel Gro up 5-6	500.0 Secs [==>700.0 Secs (Pattern 1)] [==>600.0 Secs (Pattern 2)] [==>600.0 Secs (Pattern 3)]	[2]





Proposal 10394 - Visit 13 - Deep imaging of newly discovered globular clusters in the outer halo of M31

Tue Jun 21 01:03:36 GMT 2005

Visit	Proposal 10394, Visit 13 Diagnostic Status: Warning Scientific Instruments: ACS/WFC, WFPC2 Special Requirements: (none)										
	(Visit 13) Warning: VISIBILITY OVERRUN										
Diagnosics											
Patterns	#	Primary Pattern				Secondary Pattern				Exposures	
	(1)	Pattern Type=ACS-WFC-DITHER- LINE Purpose=DITHER Number Of Points=3 Point Spacing=0.365 Line Spacing=				Coordinate Frame=POS-TARG Pattern Orientation=47.2 Angle Between Sides= Center Pattern=false				(3-4), (5-6)	
Fixed Targets	#	Name	Target Coordinates		Targ. Coord. Corrections		Fluxes		Miscellaneous		
	(13)	NGC224-005815+380302	RA: 00 58 15.4200 (14.5642500d)				V=17.6+/-0.1		Coordinate Source: APM/USNO1b		
Alt Name1: M31-GC-W Dec: +38 02 40.00 (38.04444d) Equinox: J2000 Plate Id: (?) <i>Comments: V magnitude is integrated magnitude of cluster.</i>											
Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]		Orbit
	1	GC-W/initia l-I	(13) NGC224-00581 5+380302	ACS/WFC, ACCUM, WFC1	F814W	CR-SPLIT=NO; GAIN=2; PAREXP=NONE		Prime + Parallel Gro up 1-2	400.0 Secs [==>442.0 Secs]	[1]	
	2		ANY	WFPC2, IMAGE, WFALL	F814W	CR-SPLIT=NO; ATD-GAIN=7		Prime + Parallel Gro up 1-2	300.0 Secs [==>]	[1]	
	3	GC-W/V	(13) NGC224-00581 5+380302	ACS/WFC, ACCUM, WFC1	F606W	CR-SPLIT=NO; GAIN=2; PAREXP=NONE		Pattern 3-4 (1) Prime + Parallel Gro up 3-4	550.0 Secs [==>592.0 Secs (Pattern 1)] [==>592.0 Secs (Pattern 2)] [==>592.0 Secs (Pattern 3)]	[1]	
	4		ANY	WFPC2, IMAGE, WFALL	F606W	ATD-GAIN=7; CR-SPLIT=NO		Pattern 3-4 (1) Prime + Parallel Gro up 3-4	400.0 Secs [==>400.0 Secs (Pattern 1)] [==>(Pattern 2)] [==>(Pattern 3)]	[1]	

Proposal 10394 - Visit 13 - Deep imaging of newly discovered globular clusters in the outer halo of M31

Exposures (continued)	#	Label	Target	Config, Mode, Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit
	5	GC-W/3xI	(13) NGC224-00581 5+380302	ACS/WFC, ACCUM, WFC1	F814W	CR-SPLIT=NO; GAIN=2; PAREXP=NONE		Pattern 5-6 (1) Prime + Parallel Gro up 5-6	825.0 Secs [==>835.0 Secs (Pattern 1)] [==>835.0 Secs (Pattern 2)] [==>835.0 Secs (Pattern 3)]	[2]
	6		ANY	WFPC2, IMAGE, WFALL	F814W	CR-SPLIT=NO; ATD-GAIN=7		Pattern 5-6 (1) Prime + Parallel Gro up 5-6	500.0 Secs [==>700.0 Secs (Pattern 1)] [==>600.0 Secs (Pattern 2)] [==>600.0 Secs (Pattern 3)]	[2]

