



11724 - Direct Age Determination of the Local Group dE Galaxies NGC 147 and NGC 185

Cycle: 17, 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) NGC147 ANY	ACS/WFC WFC3/UVIS	2	21-Jul-2008 21:42:45.0	yes
02	(1) NGC147 ANY	ACS/WFC WFC3/UVIS	2	21-Jul-2008 21:42:51.0	yes
03	(1) NGC147 ANY	ACS/WFC WFC3/UVIS	2	21-Jul-2008 21:42:56.0	yes
04	(1) NGC147 ANY	ACS/WFC WFC3/UVIS	2	21-Jul-2008 21:43:05.0	yes
05	(1) NGC147 ANY	ACS/WFC WFC3/UVIS	2	21-Jul-2008 21:43:10.0	yes

Proposal 11724 (STScI Edit Number: 1, Created: Monday, July 21, 2008 8:45:02 PM EST) - Overview

<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>
06	(1) NGC147 ANY	ACS/WFC WFC3/UVIS	2	21-Jul-2008 21:43:16.0	yes
07	(1) NGC147 ANY	ACS/WFC WFC3/UVIS	2	21-Jul-2008 21:43:21.0	yes
08	(1) NGC147 ANY	ACS/WFC WFC3/UVIS	2	21-Jul-2008 21:43:26.0	yes
09	(1) NGC147 ANY	ACS/WFC WFC3/UVIS	2	21-Jul-2008 21:43:32.0	yes
10	(1) NGC147 ANY	ACS/WFC WFC3/UVIS	2	21-Jul-2008 21:43:36.0	yes
11	(1) NGC147 ANY	ACS/WFC WFC3/UVIS	2	21-Jul-2008 21:43:40.0	yes
12	(1) NGC147 ANY	ACS/WFC WFC3/UVIS	2	21-Jul-2008 21:43:45.0	yes
13	(1) NGC147 ANY	ACS/WFC WFC3/UVIS	2	21-Jul-2008 21:43:50.0	yes
14	(1) NGC147 ANY	ACS/WFC WFC3/UVIS	2	21-Jul-2008 21:43:54.0	yes
15	(1) NGC147 ANY	ACS/WFC WFC3/UVIS	2	21-Jul-2008 21:43:59.0	yes
16	(2) NGC185 ANY	ACS/WFC WFC3/UVIS	2	21-Jul-2008 21:44:07.0	yes
17	(2) NGC185 ANY	ACS/WFC WFC3/UVIS	2	21-Jul-2008 21:44:11.0	yes

<i>Visit</i>	<i>Targets used in Visit</i>	<i>Configurations used in Visit</i>	<i>Orbits Used</i>	<i>Last Orbit Planner Run</i>	<i>OP Current with Visit?</i>
18	(2) NGC185 ANY	ACS/WFC WFC3/UVIS	2	21-Jul-2008 21:44:16.0	yes
19	(2) NGC185 ANY	ACS/WFC WFC3/UVIS	2	21-Jul-2008 21:44:21.0	yes
20	(2) NGC185 ANY	ACS/WFC WFC3/UVIS	2	21-Jul-2008 21:44:25.0	yes
21	(2) NGC185 ANY	ACS/WFC WFC3/UVIS	2	21-Jul-2008 21:44:33.0	yes
22	(2) NGC185 ANY	ACS/WFC WFC3/UVIS	2	21-Jul-2008 21:44:36.0	yes
23	(2) NGC185 ANY	ACS/WFC WFC3/UVIS	2	21-Jul-2008 21:44:40.0	yes
24	(2) NGC185 ANY	ACS/WFC WFC3/UVIS	2	21-Jul-2008 21:44:44.0	yes
25	(2) NGC185 ANY	ACS/WFC WFC3/UVIS	2	21-Jul-2008 21:44:49.0	yes
26	(2) NGC185 ANY	ACS/WFC WFC3/UVIS	2	21-Jul-2008 21:44:53.0	yes
27	(2) NGC185 ANY	ACS/WFC WFC3/UVIS	1	21-Jul-2008 21:44:59.0	yes

53 Total Orbits Used

ABSTRACT

The origin of dwarf elliptical (dE) galaxies remains a mystery and the dE galaxies of the Local Group provide the best opportunity to study this galaxy class in detail. We propose to obtain ACS photometry of main sequence turnoff stars in the M31 dE satellites NGC 147 and NGC 185. Because these galaxies have little to no stars younger than 1 Gyr, resolving the main sequence turnoff is required to directly quantify their star formation histories. NGC 147 and NGC 185 are the only two dEs for which a clean measurement is feasible with the HST. This proposal was accepted in Cycle 15, but little data were taken before the failure of ACS. The main sequence turnoffs of NGC 147 and NGC 185 are expected to be at an apparent magnitude of $V=29$; we request F606W/F814W imaging one half magnitude fainter than this limit (three magnitudes fainter than the deepest previous dE observations). Quantifying the ratio of old to intermediate-age stars will allow us to discriminate between competing models of dE formation. On-going Keck/DEIMOS spectroscopy of several hundred red giant stars in each of these two dE galaxies, coupled with dynamical modeling and spectral synthesis, will complement the ACS measurement by providing information on chemical abundance patterns, dark matter content and internal dynamics. The proposed ACS data will be the first to directly quantify the onset and duration of star formation episodes in dE galaxies, and will thereby form the cornerstone in what promises to be the most comprehensive study of this class of galaxies.

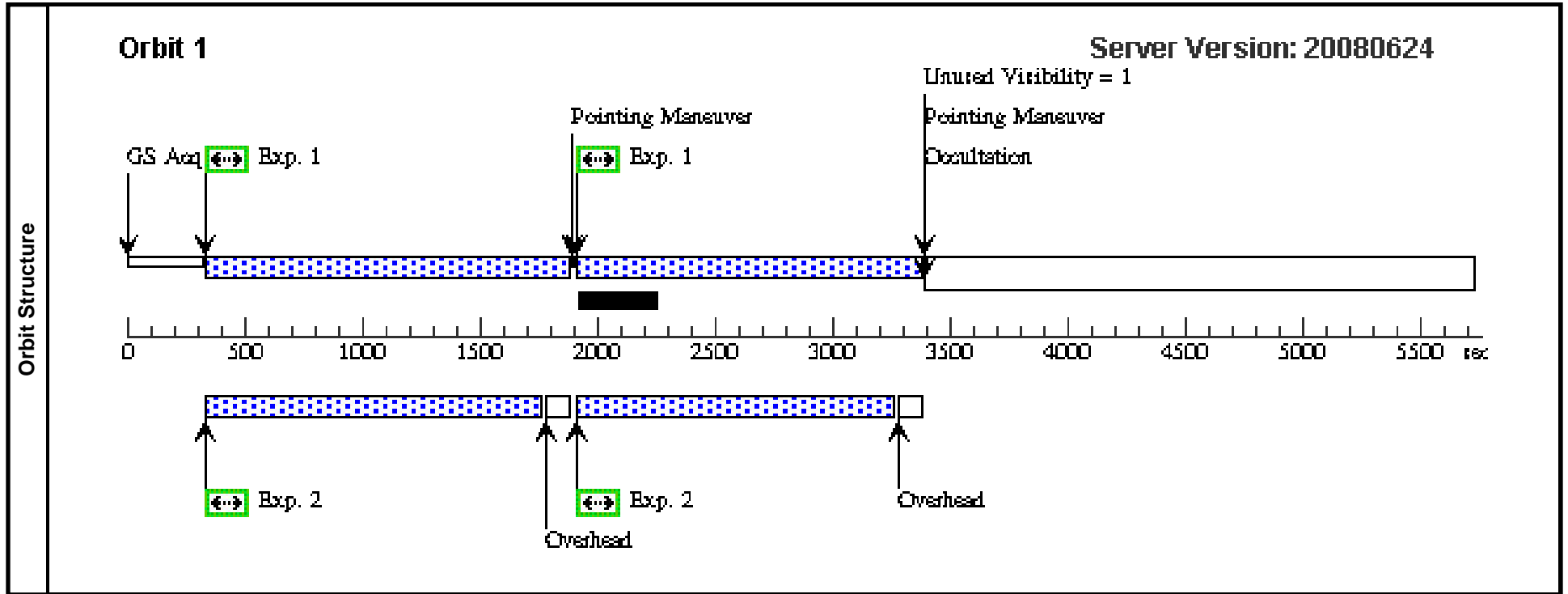
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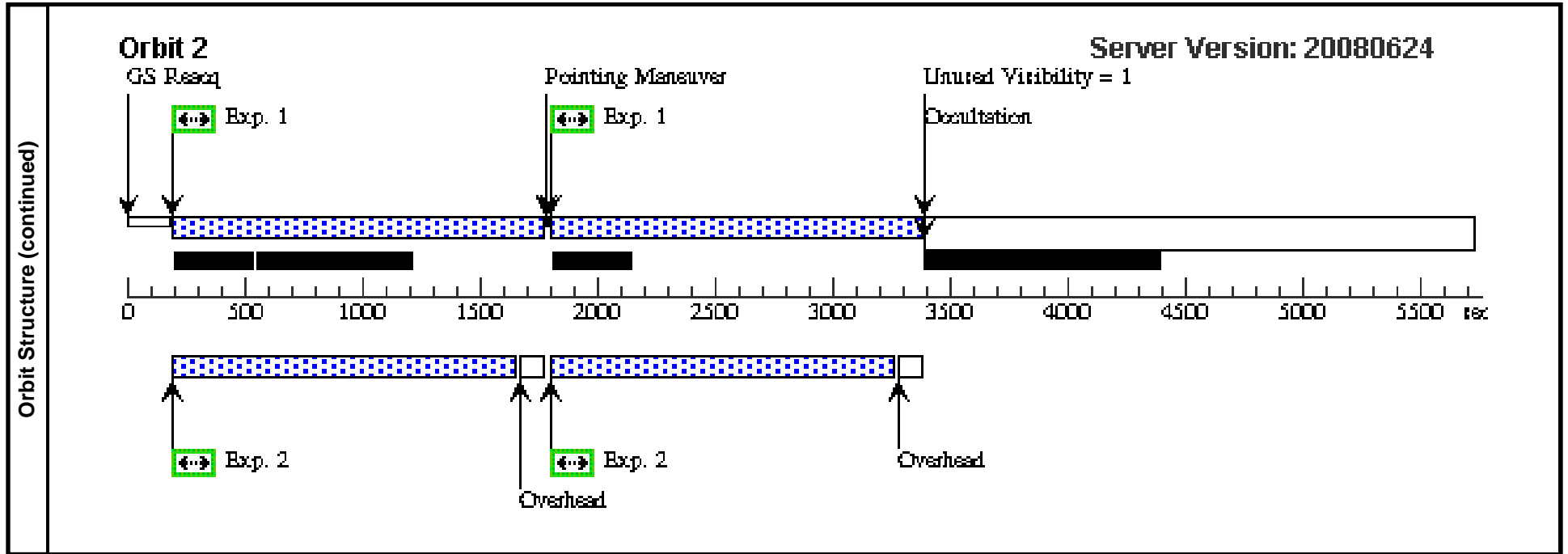
We will obtain a total of 53 orbits of deep ACS/WFC imaging in F606W (V-band) and F814W (I-band) in the Local Group dwarf elliptical galaxies NGC 147 and NGC 185. Our goal is to resolve the main sequence turn-off ($V\sim 29.5$) in these objects. We will obtain a single ACS pointing in each galaxy, plus a coordinated parallel field using the WFC3. We do not request a specific orient angle, however, all visits for a single galaxy should be scheduled at the same orient to maximize the sky coverage at the required depth. Most visits will consist of 4 exposures spanning 2 orbits in a single filter. Within a visit, each of the 4 exposures will be dithered to obtain good PSF sampling, with larger positional offsets between visits to dither the gap between chips. In addition, we will obtain 4x30s dithered image in each filter for each galaxy in order to obtain photometry for stars which will be saturated in the deep exposures. None of the exposures in any visit are CR-SPLIT. We request that the observations for each galaxy be obtained within a 40 day interval to minimize the effect of long-term variability on the resulting CMDs.

Proposal 11724 - Visit 01 - Direct Age Determination of the Local Group dE Galaxies NGC 147 and NGC 185

Tue Jul 22 01:45:03 GMT 2008

Visit	Proposal 11724, Visit 01, implementation Diagnostic Status: No Diagnostics Scientific Instruments: ACS/WFC, WFC3/UVIS Special Requirements: ORIENT 90D TO 190 D Comments: N147 F606W									
	Patterns	#	Primary Pattern			Secondary Pattern			Exposures	
		(1)	Pattern Type=ACS-WFC-DITHER-BOX Purpose=DITHER Number Of Points=4 Point Spacing=0.265 Line Spacing=0.187	Coordinate Frame=POS-TARG Pattern Orientation=20.67 Angle Between Sides=69.05 Center Pattern=false					(1-2)	
Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous				
	(1)	NGC147	RA: 00 32 51.0000 (8.2125000d) Dec: +48 22 40.00 (48.37778d) Equinox: J2000		V=10.5	Reference Frame: ICRS				
Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit
	1		(1) NGC147	ACS/WFC, ACCUM, WFC	F606W			Pattern 1-2 (1) Prime + Parallel Group 1-2	1000 Secs [==>1343.0 Secs (Pattern 1)] [==>1343.0 Secs (Pattern 2)] [==>1453.0 Secs (Pattern 3)] [==>1453.0 Secs (Pattern 4)]	[1] [2]
	2		ANY	WFC3/UVIS, ACCUM, UVIS	F606W	CR-SPLIT=NO		Pattern 1-2 (1) Prime + Parallel Group 1-2	1000 Secs [==>1403.0 Secs (Pattern 1)] [==>1353.0 Secs (Pattern 2)] [==>1463.0 Secs (Pattern 3)] [==>1463.0 Secs (Pattern 4)]	[1] [2]

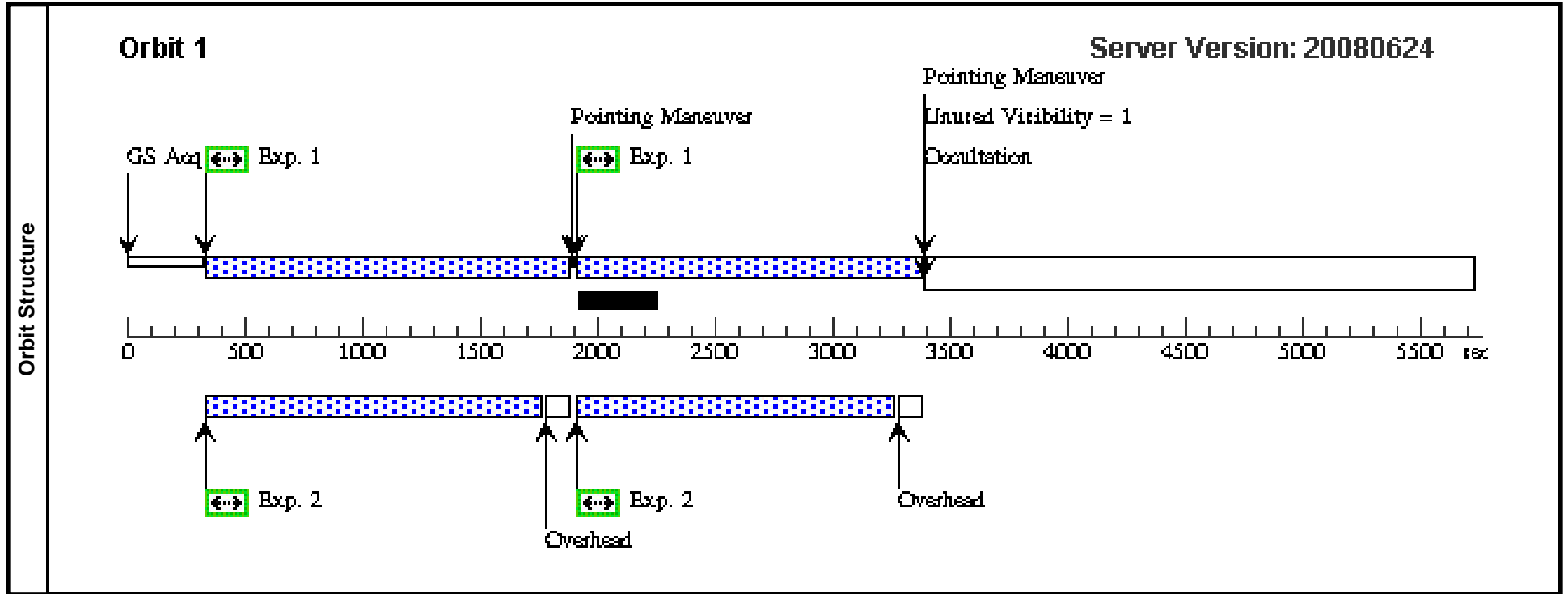


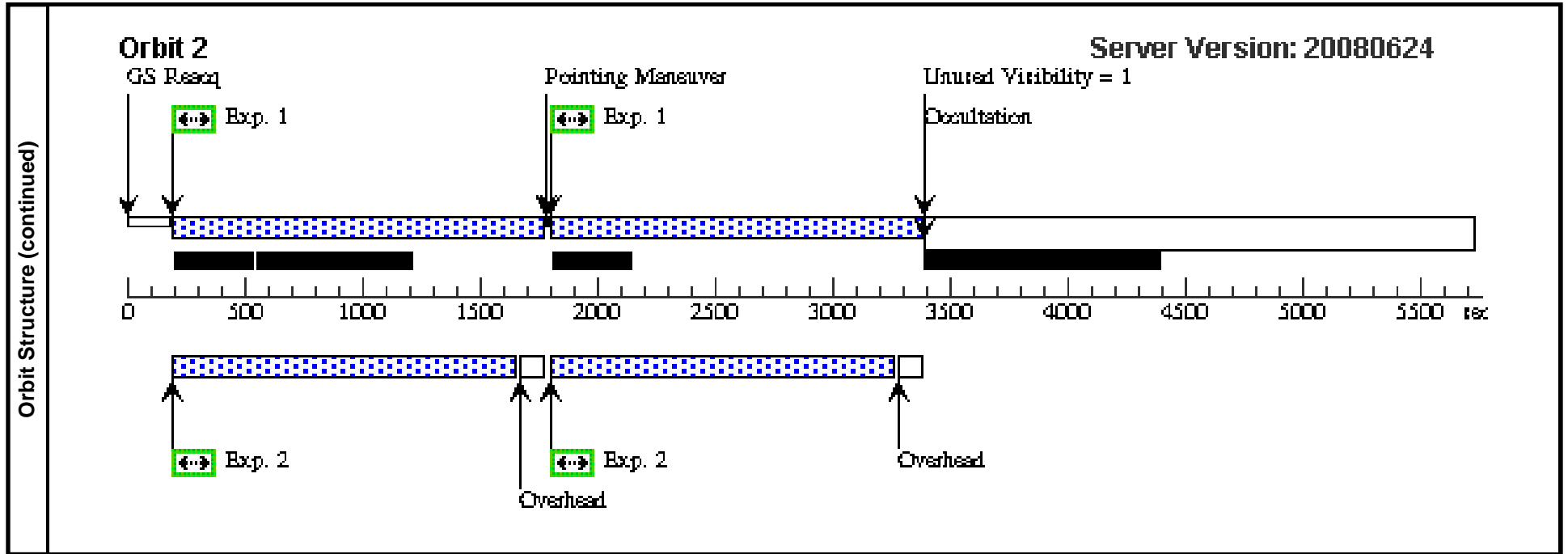


Proposal 11724 - Visit 02 - Direct Age Determination of the Local Group dE Galaxies NGC 147 and NGC 185

Tue Jul 22 01:45:03 GMT 2008

Visit	Proposal 11724, Visit 02, implementation Diagnostic Status: No Diagnostics Scientific Instruments: ACS/WFC, WFC3/UVIS Special Requirements: SAME ORIENT AS 01; AFTER 01 BY 0 D TO 40 D Comments: N147 F606W									
	Patterns	#	Primary Pattern			Secondary Pattern			Exposures	
		(1)	Pattern Type=ACS-WFC-DITHER-BOX Purpose=DITHER Number Of Points=4 Point Spacing=0.265 Line Spacing=0.187	Coordinate Frame=POS-TARG Pattern Orientation=20.67 Angle Between Sides=69.05 Center Pattern=false					(1-2)	
Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections		Fluxes	Miscellaneous			
	(1)	NGC147	RA: 00 32 51.0000 (8.2125000d) Dec: +48 22 40.00 (48.37778d) Equinox: J2000			V=10.5	Reference Frame: ICRS			
Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit
	1	(1) NGC147	ACS/WFC, ACCUM, WFC	F606W	CR-SPLIT=NO	POS TARG 0.2393,-0.002	Pattern 1-2 (1) Prime + Parallel Group 1-2	1000 Secs		
								[==>1343.0 Secs (Pattern 1)]	[1]	
								[==>1343.0 Secs (Pattern 2)]		
								[==>1453.0 Secs (Pattern 3)]	[2]	
			[==>1453.0 Secs (Pattern 4)]							
2	ANY	WFC3/UVIS, ACCUM, UVIS	F606W	CR-SPLIT=NO	POS TARG 0.2393,-0.002	Pattern 1-2 (1) Prime + Parallel Group 1-2	1000 Secs			
							[==>1403.0 Secs (Pattern 1)]	[1]		
							[==>1353.0 Secs (Pattern 2)]			
							[==>1463.0 Secs (Pattern 3)]	[2]		
		[==>1463.0 Secs (Pattern 4)]								

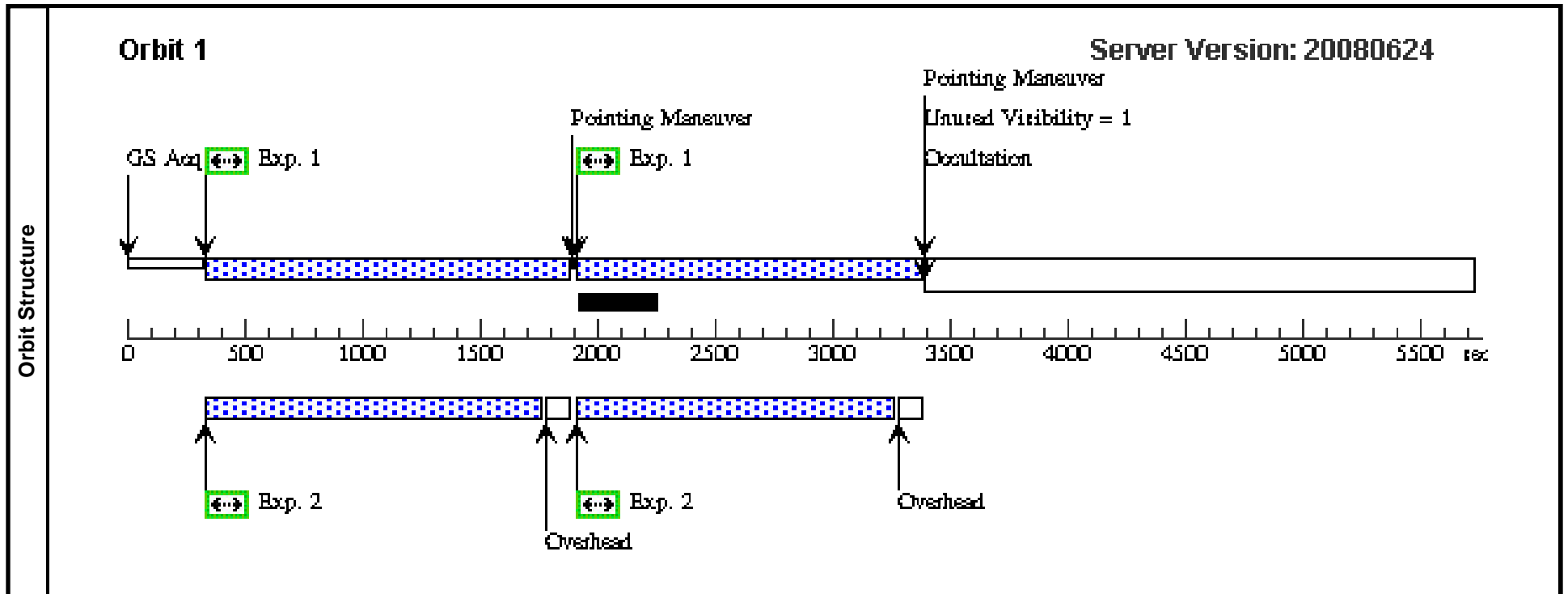


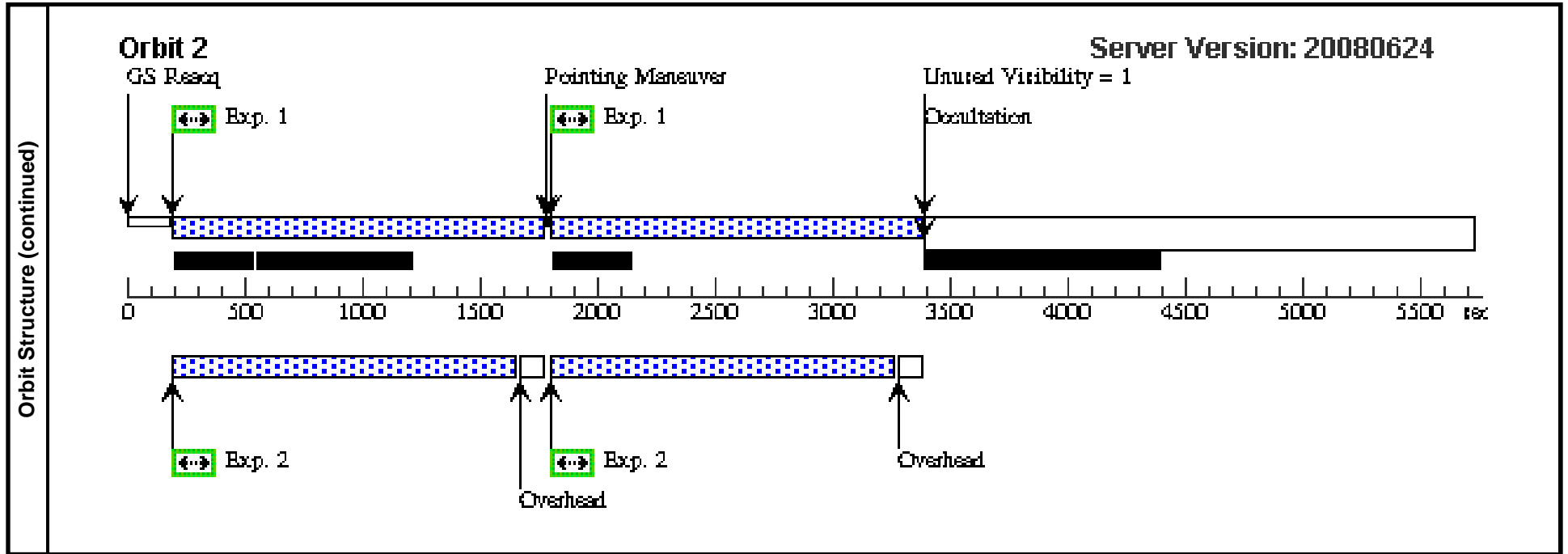


Proposal 11724 - Visit 03 - Direct Age Determination of the Local Group dE Galaxies NGC 147 and NGC 185

Tue Jul 22 01:45:04 GMT 2008

Visit	Proposal 11724, Visit 03, implementation Diagnostic Status: No Diagnostics Scientific Instruments: ACS/WFC, WFC3/UVIS Special Requirements: SAME ORIENT AS 01; AFTER 01 BY 0 D TO 40 D Comments: N147 F606W									
	Patterns	#	Primary Pattern			Secondary Pattern			Exposures	
		(1)	Pattern Type=ACS-WFC-DITHER-BOX Purpose=DITHER Number Of Points=4 Point Spacing=0.265 Line Spacing=0.187	Coordinate Frame=POS-TARG Pattern Orientation=20.67 Angle Between Sides=69.05 Center Pattern=false					(1-2)	
Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous				
	(1)	NGC147	RA: 00 32 51.0000 (8.2125000d) Dec: +48 22 40.00 (48.37778d) Equinox: J2000		V=10.5	Reference Frame: ICRS				
Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit
	1		(1) NGC147	ACS/WFC, ACCUM, WFC	F606W		POS TARG -0.0178, 0.2433	Pattern 1-2 (1) Prime + Parallel Group 1-2	1000 Secs [==>1343.0 Secs (Pattern 1)] [==>1343.0 Secs (Pattern 2)] [==>1453.0 Secs (Pattern 3)] [==>1453.0 Secs (Pattern 4)]	[1] [2]
	2		ANY	WFC3/UVIS, ACCUM, UVIS	F606W	CR-SPLIT=NO		Pattern 1-2 (1) Prime + Parallel Group 1-2	1000 Secs [==>1403.0 Secs (Pattern 1)] [==>1353.0 Secs (Pattern 2)] [==>1463.0 Secs (Pattern 3)] [==>1463.0 Secs (Pattern 4)]	[1] [2]

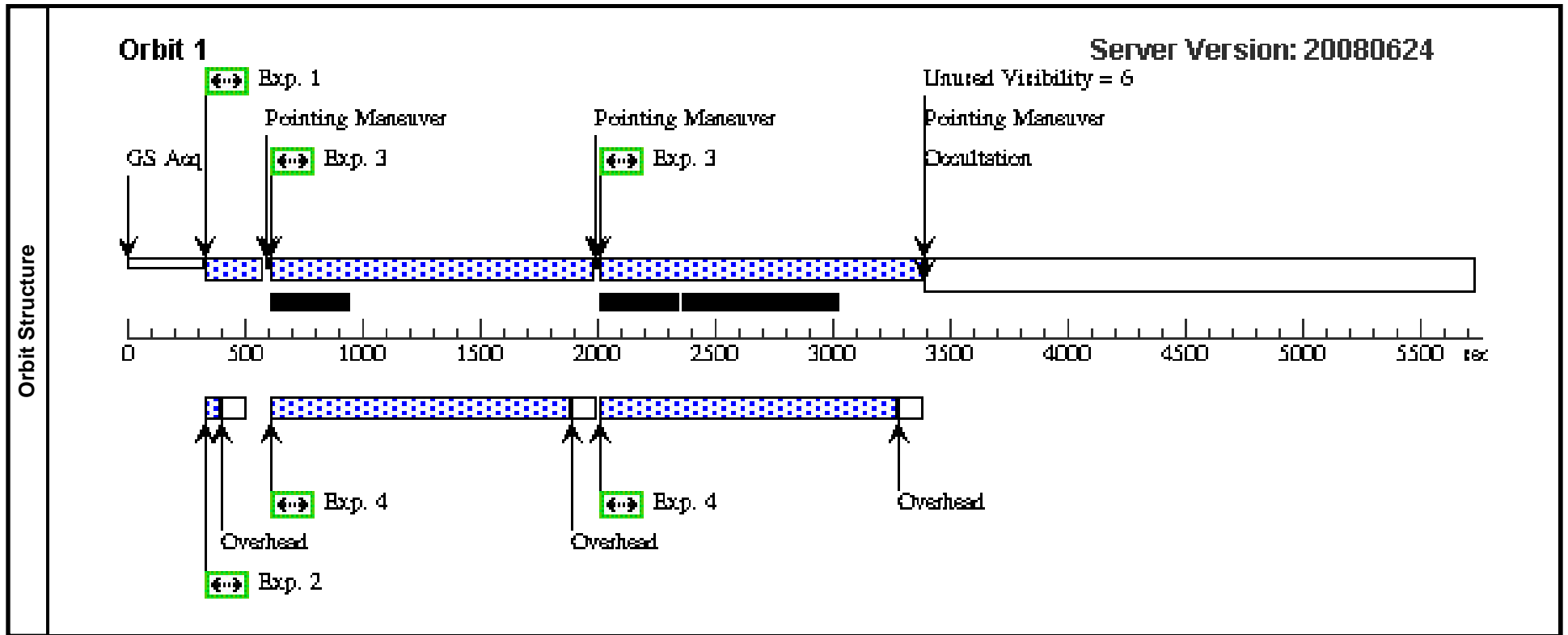


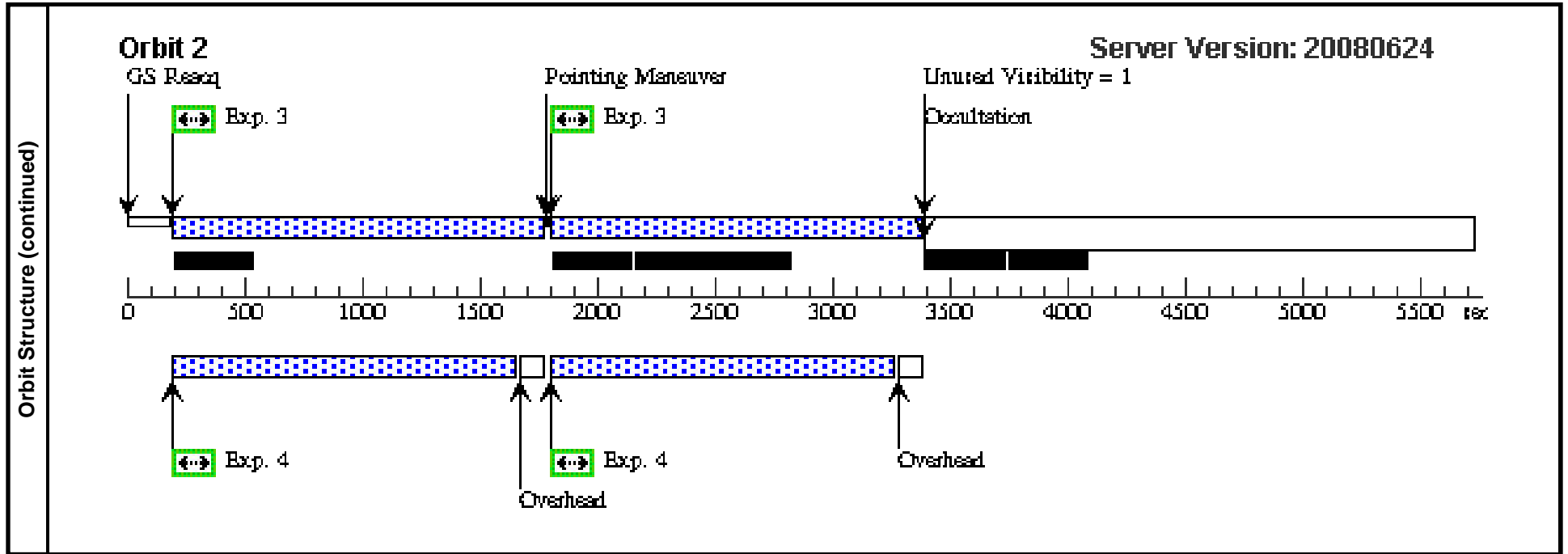


Proposal 11724 - Visit 04 - Direct Age Determination of the Local Group dE Galaxies NGC 147 and NGC 185

Tue Jul 22 01:45:04 GMT 2008

Visit	Proposal 11724, Visit 04, implementation Diagnostic Status: No Diagnostics Scientific Instruments: ACS/WFC, WFC3/UVIS Special Requirements: SAME ORIENT AS 01; AFTER 01 BY 0 D TO 40 D Comments: N147 F606W + short1										
	Patterns	#	Primary Pattern			Secondary Pattern			Exposures		
		(1)	Pattern Type=ACS-WFC-DITHER-BOX Purpose=DITHER Number Of Points=4 Point Spacing=0.265 Line Spacing=0.187	Coordinate Frame=POS-TARG Pattern Orientation=20.67 Angle Between Sides=69.05 Center Pattern=false							(3-4)
Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous					
	(1)	NGC147	RA: 00 32 51.0000 (8.2125000d) Dec: +48 22 40.00 (48.37778d) Equinox: J2000		V=10.5	Reference Frame: ICRS					
Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]		Orbit
	1		(1) NGC147	ACS/WFC, ACCUM, WFC	F606W			Prime + Parallel Group 1-2	30 Secs		
									[==>33.0 Secs]		[1]
	2		ANY	WFC3/UVIS, ACCUM, UVIS	F606W	CR-SPLIT=NO		Prime + Parallel Group 1-2	30 Secs		
									[==>30.0 Secs]		[1]
	3		(1) NGC147	ACS/WFC, ACCUM, WFC	F606W		POS TARG -0.2512, -0.0061	Pattern 3-4 (1) Prime + Parallel Group 3-4	1240 Secs		
									[==>1243.0 Secs (Pattern 1)]		[1]
									[==>1243.0 Secs (Pattern 2)]		
								[==>1453.0 Secs (Pattern 3)]		[2]	
								[==>1453.0 Secs (Pattern 4)]			
4		ANY	WFC3/UVIS, ACCUM, UVIS	F606W	CR-SPLIT=NO		Pattern 3-4 (1) Prime + Parallel Group 3-4	1260 Secs			
								[==>1270.0 Secs (Pattern 1)]		[1]	
								[==>1260.0 Secs (Pattern 2)]			
								[==>1463.0 Secs (Pattern 3)]		[2]	
								[==>1463.0 Secs (Pattern 4)]			

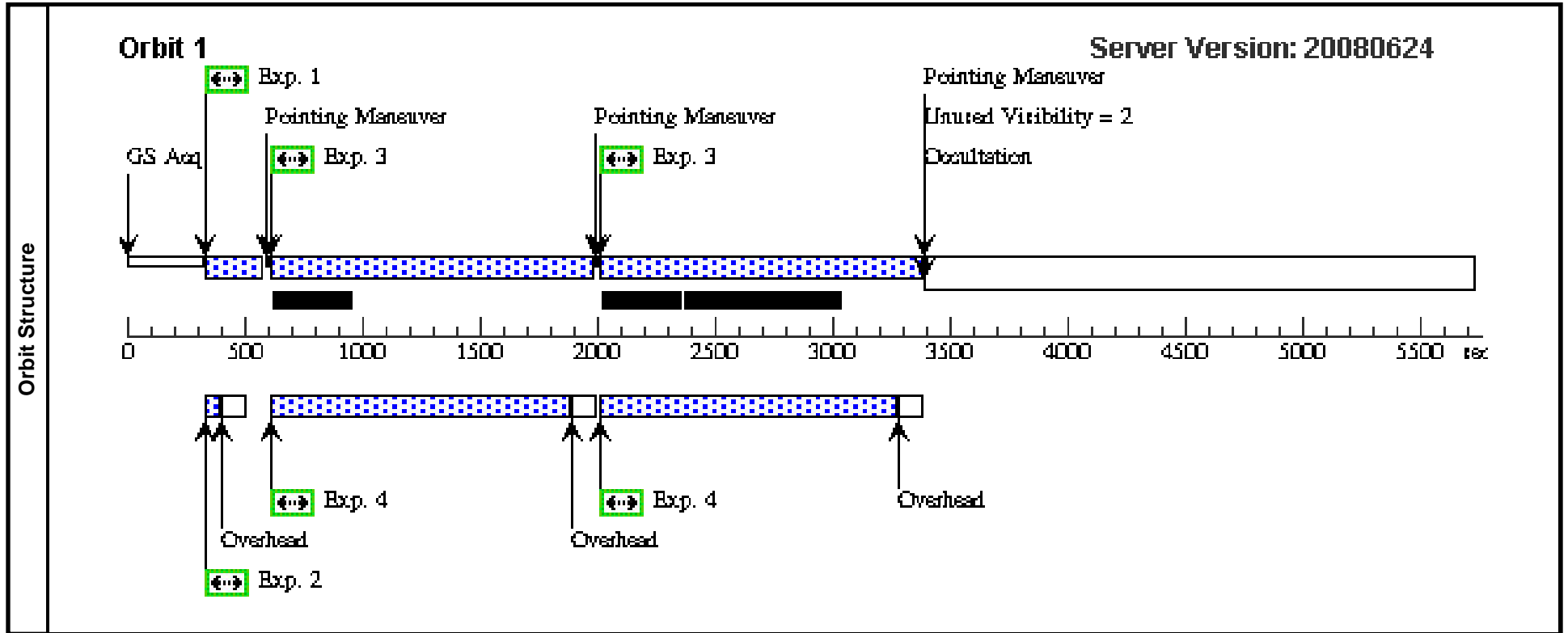


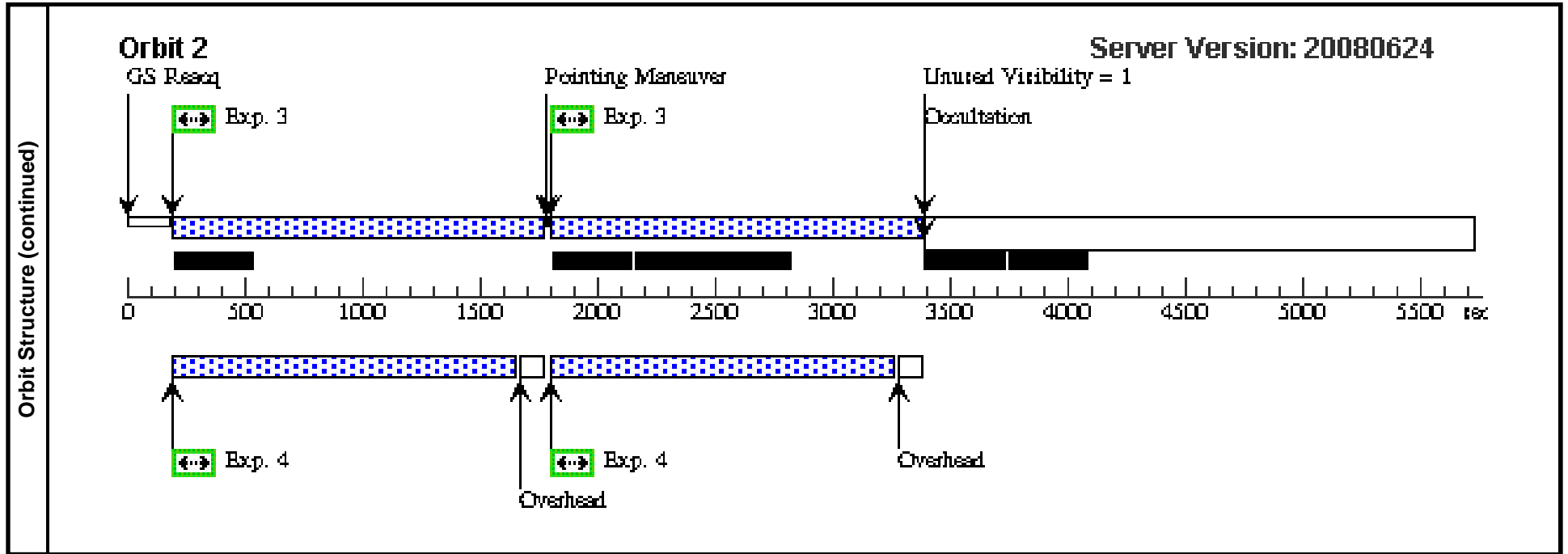


Proposal 11724 - Visit 05 - Direct Age Determination of the Local Group dE Galaxies NGC 147 and NGC 185

Tue Jul 22 01:45:05 GMT 2008

Visit		Proposal 11724, Visit 05, implementation Diagnostic Status: No Diagnostics Scientific Instruments: ACS/WFC, WFC3/UVIS Special Requirements: SAME ORIENT AS 01; AFTER 01 BY 0 D TO 40 D Comments: N147 F606W + short2								
Patterns	#	Primary Pattern			Secondary Pattern			Exposures		
	(1)	Pattern Type=ACS-WFC-DITHER-BOX Purpose=DITHER Number Of Points=4 Point Spacing=0.265 Line Spacing=0.187	Coordinate Frame=POS-TARG Pattern Orientation=20.67 Angle Between Sides=69.05 Center Pattern=false						(3-4)	
Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous				
	(1)	NGC147	RA: 00 32 51.0000 (8.2125000d) Dec: +48 22 40.00 (48.37778d) Equinox: J2000		V=10.5	Reference Frame: ICRS				
Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit
	1		(1) NGC147	ACS/WFC, ACCUM, WFC	F606W		POS TARG 0.1235,0 .0841	Prime + Parallel Group 1-2	30 Secs [=>33.0 Secs]	[1]
	2		ANY	WFC3/UVIS, ACCUM, UVIS	F606W	CR-SPLIT=NO		Prime + Parallel Group 1-2	30 Secs [=>30.0 Secs]	[1]
	3		(1) NGC147	ACS/WFC, ACCUM, WFC	F606W		POS TARG 0.4712,3 .0254	Pattern 3-4 (1) Prime + Parallel Group 3-4	1240 Secs [=>1243.0 Secs (Pattern 1)] [=>1243.0 Secs (Pattern 2)] [=>1453.0 Secs (Pattern 3)] [=>1453.0 Secs (Pattern 4)]	[1] [2]
	4		ANY	WFC3/UVIS, ACCUM, UVIS	F606W	CR-SPLIT=NO		Pattern 3-4 (1) Prime + Parallel Group 3-4	1260 Secs [=>1270.0 Secs (Pattern 1)] [=>1260.0 Secs (Pattern 2)] [=>1463.0 Secs (Pattern 3)] [=>1463.0 Secs (Pattern 4)]	[1] [2]

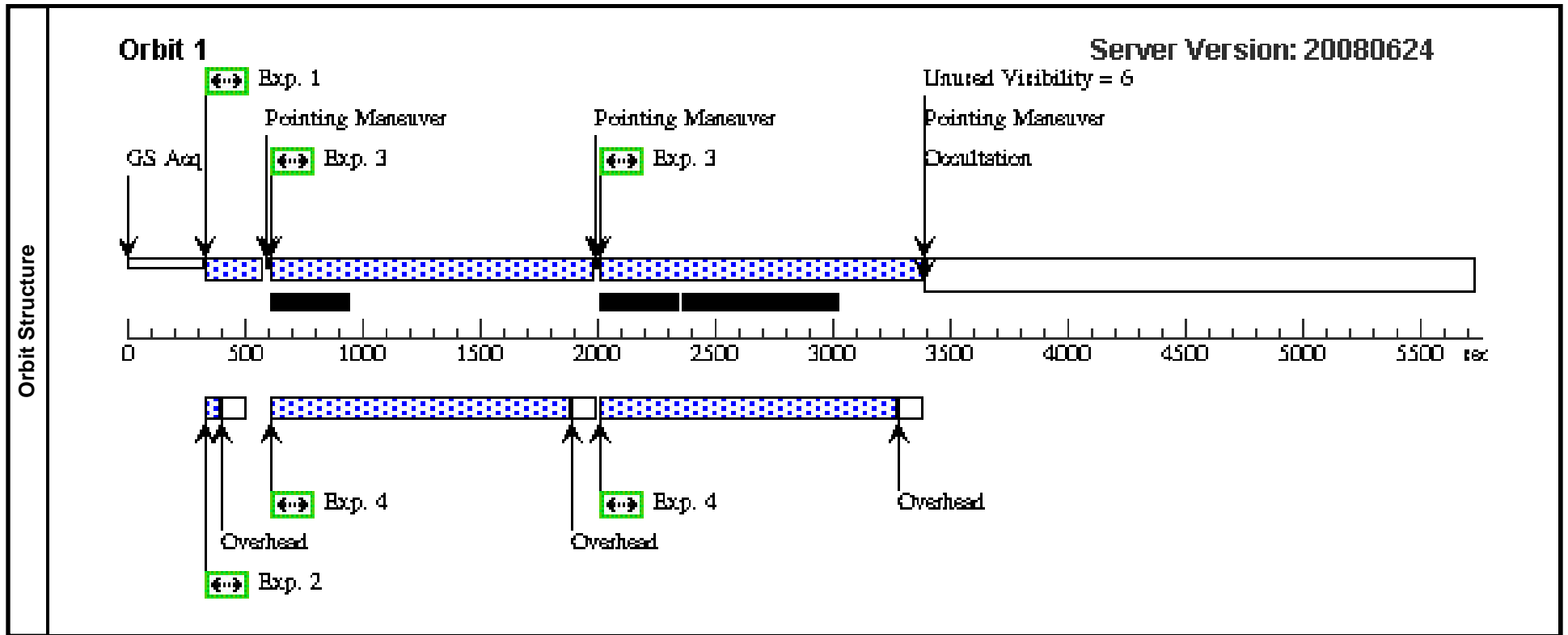


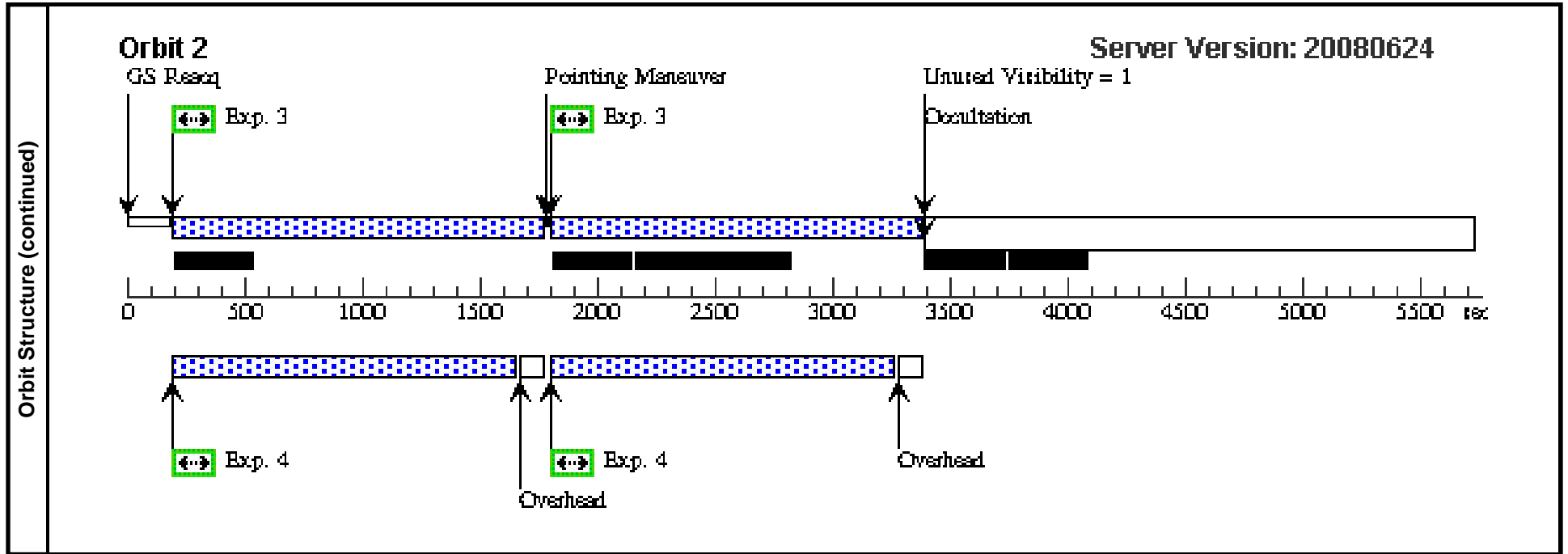


Proposal 11724 - Visit 06 - Direct Age Determination of the Local Group dE Galaxies NGC 147 and NGC 185

Tue Jul 22 01:45:05 GMT 2008

Visit	Proposal 11724, Visit 06, implementation Diagnostic Status: No Diagnostics Scientific Instruments: ACS/WFC, WFC3/UVIS Special Requirements: SAME ORIENT AS 01; AFTER 01 BY 0 D TO 40 D Comments: N147 F606W + short3									
	Patterns	#	Primary Pattern			Secondary Pattern			Exposures	
		(1)	Pattern Type=ACS-WFC-DITHER-BOX Purpose=DITHER Number Of Points=4 Point Spacing=0.265 Line Spacing=0.187	Coordinate Frame=POS-TARG Pattern Orientation=20.67 Angle Between Sides=69.05 Center Pattern=false					(3-4)	
Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous				
	(1)	NGC147	RA: 00 32 51.0000 (8.2125000d) Dec: +48 22 40.00 (48.37778d) Equinox: J2000		V=10.5	Reference Frame: ICRS				
Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit
	1		(1) NGC147	ACS/WFC, ACCUM, WFC	F606W		POS TARG 0.2470,2 .9840	Prime + Parallel Group 1-2	30 Secs [=>33.0 Secs]	[1]
	2		ANY	WFC3/UVIS, ACCUM, UVIS	F606W	CR-SPLIT=NO		Prime + Parallel Group 1-2	30 Secs [=>30.0 Secs]	[1]
	3		(1) NGC147	ACS/WFC, ACCUM, WFC	F606W		POS TARG 0.4712,3 .0254	Pattern 3-4 (1) Prime + Parallel Group 3-4	1240 Secs [=>1243.0 Secs (Pattern 1)] [=>1243.0 Secs (Pattern 2)] [=>1453.0 Secs (Pattern 3)] [=>1453.0 Secs (Pattern 4)]	[1] [2]
	4		ANY	WFC3/UVIS, ACCUM, UVIS	F606W	CR-SPLIT=NO		Pattern 3-4 (1) Prime + Parallel Group 3-4	1260 Secs [=>1270.0 Secs (Pattern 1)] [=>1260.0 Secs (Pattern 2)] [=>1463.0 Secs (Pattern 3)] [=>1463.0 Secs (Pattern 4)]	[1] [2]

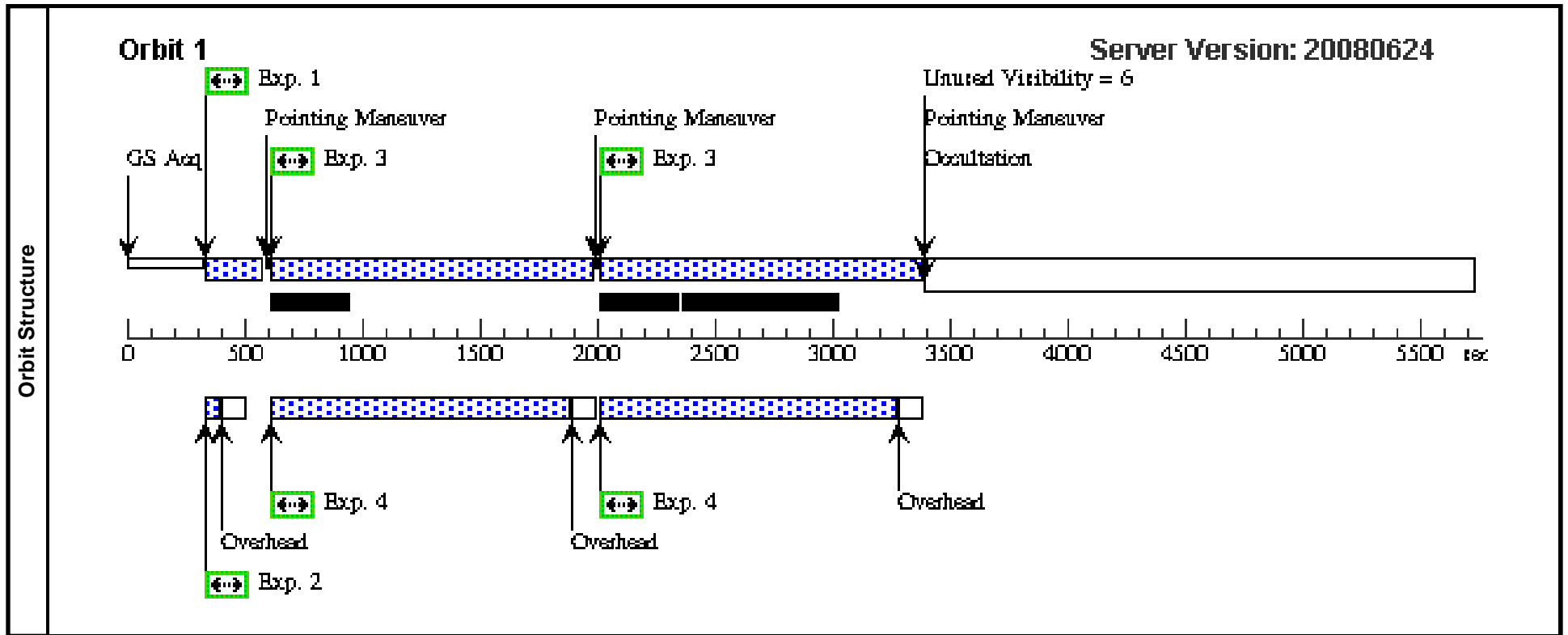


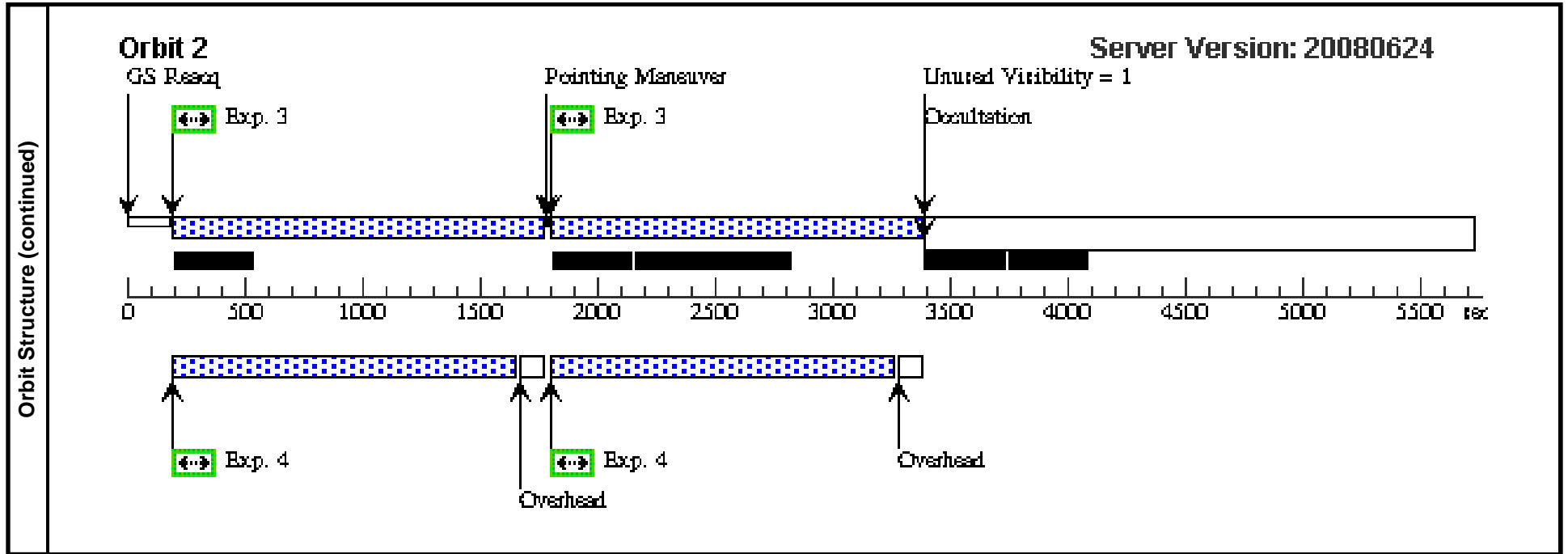


Proposal 11724 - Visit 07 - Direct Age Determination of the Local Group dE Galaxies NGC 147 and NGC 185

Tue Jul 22 01:45:06 GMT 2008

Visit	Proposal 11724, Visit 07, implementation Diagnostic Status: No Diagnostics Scientific Instruments: ACS/WFC, WFC3/UVIS Special Requirements: SAME ORIENT AS 01; AFTER 01 BY 0 D TO 40 D Comments: N147 F606W + short4									
	Patterns	#	Primary Pattern			Secondary Pattern			Exposures	
		(1)	Pattern Type=ACS-WFC-DITHER-BOX Purpose=DITHER Number Of Points=4 Point Spacing=0.265 Line Spacing=0.187	Coordinate Frame=POS-TARG Pattern Orientation=20.67 Angle Between Sides=69.05 Center Pattern=false					(3-4)	
Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous				
	(1)	NGC147	RA: 00 32 51.0000 (8.2125000d) Dec: +48 22 40.00 (48.37778d) Equinox: J2000		V=10.5	Reference Frame: ICRS				
Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit
	1	(1) NGC147		ACS/WFC, ACCUM, WFC	F606W		POS TARG 0.3705,3 .0681	Prime + Parallel Group 1-2	30 Secs [=>33.0 Secs]	[1]
	2	ANY		WFC3/UVIS, ACCUM, UVIS	F606W	CR-SPLIT=NO		Prime + Parallel Group 1-2	30 Secs [=>30.0 Secs]	[1]
	3	(1) NGC147		ACS/WFC, ACCUM, WFC	F606W		POS TARG 0.2253,3 .2058	Pattern 3-4 (1)	1240 Secs	
								Prime + Parallel Group 3-4	[=>1243.0 Secs (Pattern 1)]	[1]
									[=>1243.0 Secs (Pattern 2)]	
									[=>1453.0 Secs (Pattern 3)]	[2]
									[=>1453.0 Secs (Pattern 4)]	
4	ANY		WFC3/UVIS, ACCUM, UVIS	F606W	CR-SPLIT=NO		Pattern 3-4 (1)	1260 Secs		
							Prime + Parallel Group 3-4	[=>1270.0 Secs (Pattern 1)]	[1]	
								[=>1260.0 Secs (Pattern 2)]		
								[=>1463.0 Secs (Pattern 3)]		
								[=>1463.0 Secs (Pattern 4)]	[2]	

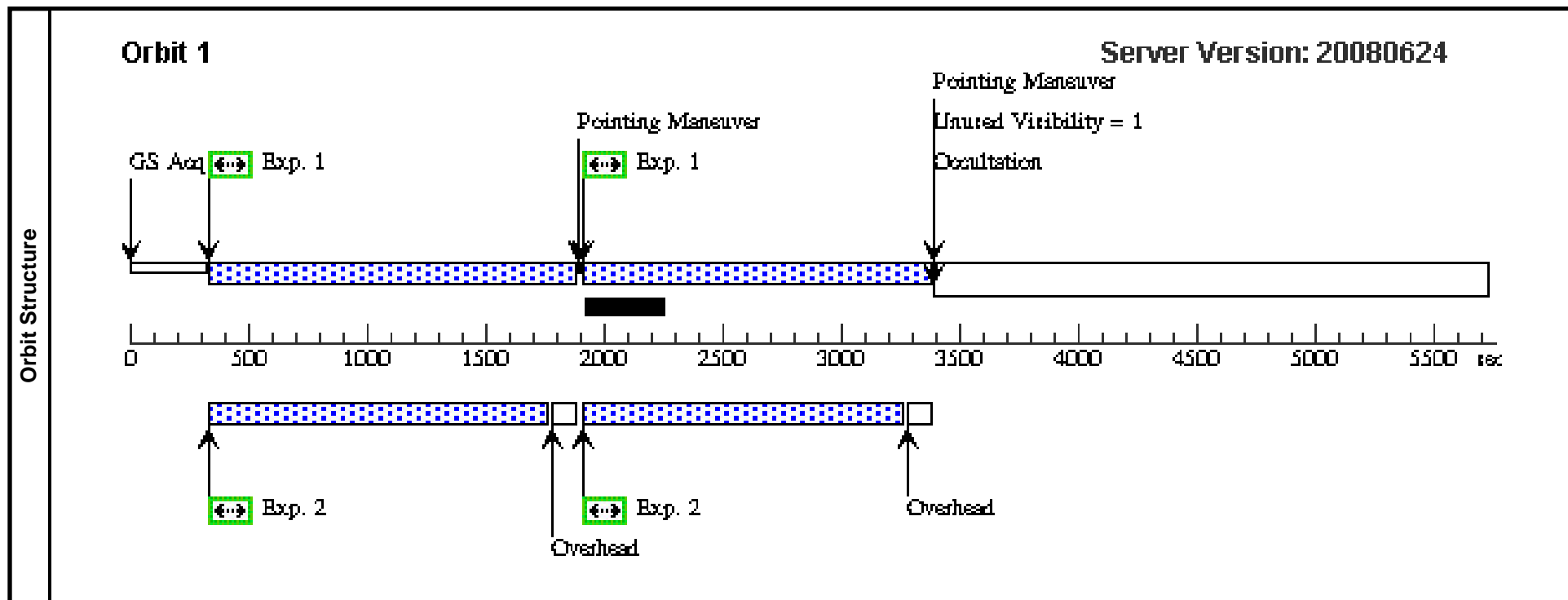


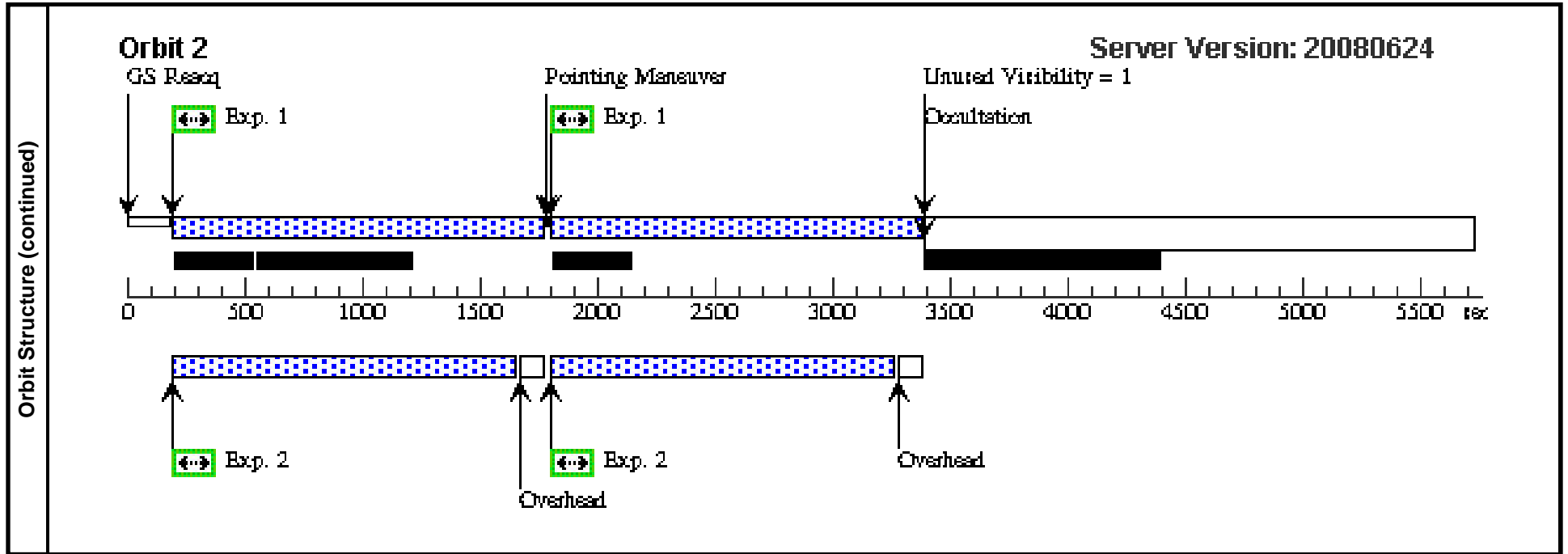


Proposal 11724 - Visit 08 - Direct Age Determination of the Local Group dE Galaxies NGC 147 and NGC 185

Tue Jul 22 01:45:06 GMT 2008

Visit	Proposal 11724, Visit 08, implementation Diagnostic Status: No Diagnostics Scientific Instruments: ACS/WFC, WFC3/UVIS Special Requirements: SAME ORIENT AS 01; AFTER 01 BY 0 D TO 40 D Comments: N147 F814W									
	Patterns	#	Primary Pattern			Secondary Pattern			Exposures	
		(1)	Pattern Type=ACS-WFC-DITHER-BOX Purpose=DITHER Number Of Points=4 Point Spacing=0.265 Line Spacing=0.187	Coordinate Frame=POS-TARG Pattern Orientation=20.67 Angle Between Sides=69.05 Center Pattern=false					(1-2)	
Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous				
	(1)	NGC147	RA: 00 32 51.0000 (8.2125000d) Dec: +48 22 40.00 (48.37778d) Equinox: J2000		V=10.5	Reference Frame: ICRS				
Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit
	1	(1) NGC147	ACS/WFC, ACCUM, WFC	F814W				Pattern 1-2 (1) Prime + Parallel Group 1-2	1000 Secs	
									[==>1343.0 Secs (Pattern 1)]	[1]
									[==>1343.0 Secs (Pattern 2)]	
									[==>1453.0 Secs (Pattern 3)]	[2]
									[==>1453.0 Secs (Pattern 4)]	
2	ANY	WFC3/UVIS, ACCUM, UVIS	F814W		CR-SPLIT=NO		Pattern 1-2 (1) Prime + Parallel Group 1-2	1000 Secs		
								[==>1403.0 Secs (Pattern 1)]	[1]	
								[==>1353.0 Secs (Pattern 2)]		
								[==>1463.0 Secs (Pattern 3)]	[2]	
								[==>1463.0 Secs (Pattern 4)]		

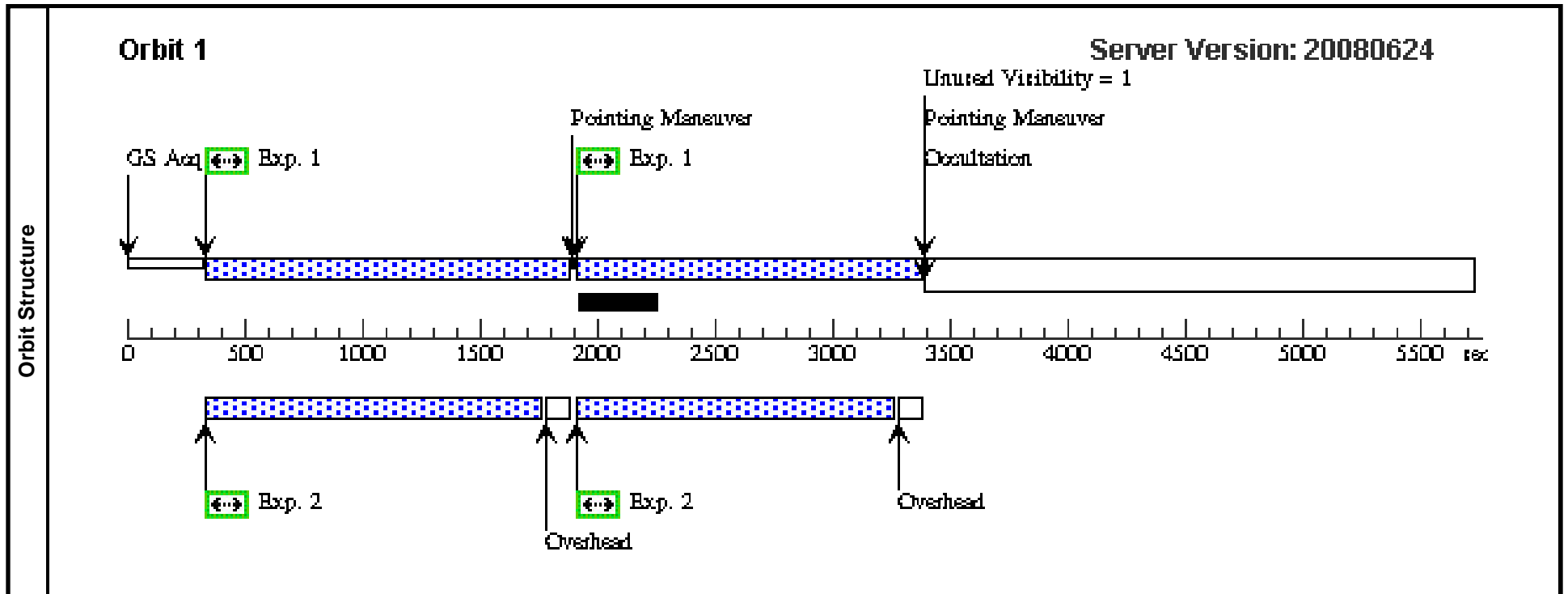


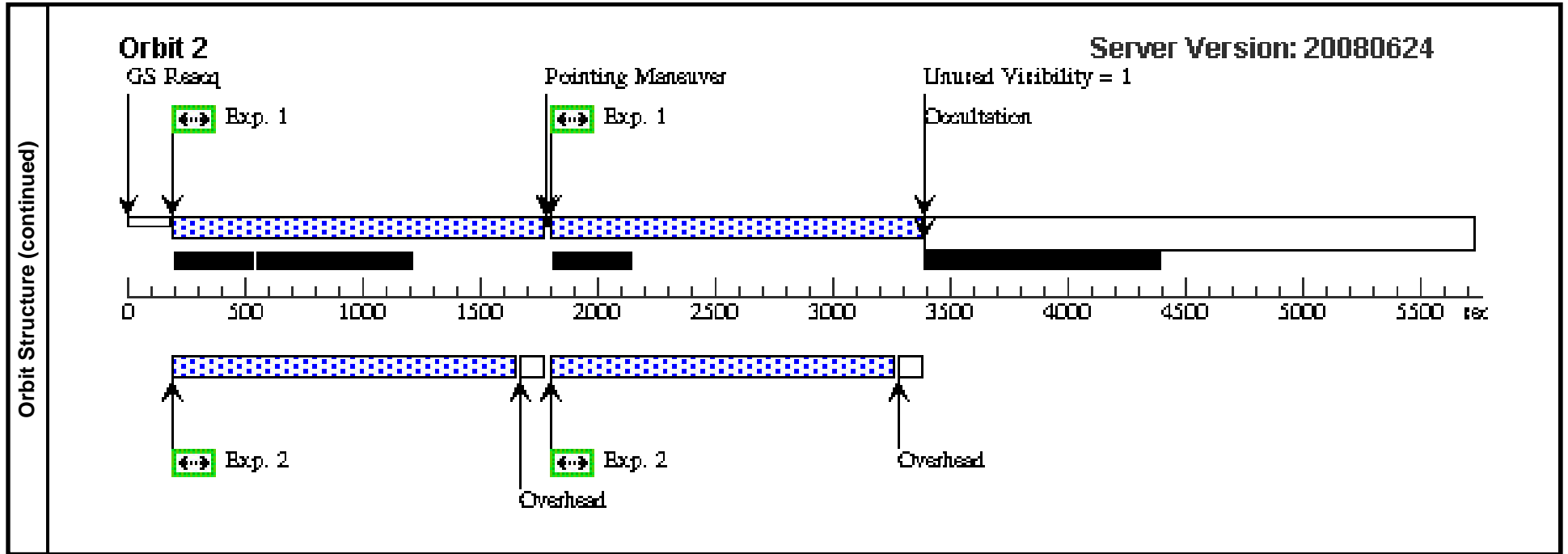


Proposal 11724 - Visit 09 - Direct Age Determination of the Local Group dE Galaxies NGC 147 and NGC 185

Tue Jul 22 01:45:07 GMT 2008

Visit	Proposal 11724, Visit 09, implementation Diagnostic Status: No Diagnostics Scientific Instruments: ACS/WFC, WFC3/UVIS Special Requirements: SAME ORIENT AS 01; AFTER 01 BY 0 D TO 40 D Comments: N147 F814W									
	Patterns	#	Primary Pattern			Secondary Pattern			Exposures	
		(1)	Pattern Type=ACS-WFC-DITHER-BOX Purpose=DITHER Number Of Points=4 Point Spacing=0.265 Line Spacing=0.187	Coordinate Frame=POS-TARG Pattern Orientation=20.67 Angle Between Sides=69.05 Center Pattern=false					(1-2)	
Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous				
	(1)	NGC147	RA: 00 32 51.0000 (8.2125000d) Dec: +48 22 40.00 (48.37778d) Equinox: J2000		V=10.5	Reference Frame: ICRS				
Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit
	1		(1) NGC147	ACS/WFC, ACCUM, WFC	F814W		POS TARG 0.2695,0.0025	Pattern 1-2 (1) Prime + Parallel Group 1-2	1000 Secs [==>1343.0 Secs (Pattern 1)] [==>1343.0 Secs (Pattern 2)] [==>1453.0 Secs (Pattern 3)] [==>1453.0 Secs (Pattern 4)]	[1] [2]
	2		ANY	WFC3/UVIS, ACCUM, UVIS	F814W	CR-SPLIT=NO		Pattern 1-2 (1) Prime + Parallel Group 1-2	1000 Secs [==>1403.0 Secs (Pattern 1)] [==>1353.0 Secs (Pattern 2)] [==>1463.0 Secs (Pattern 3)] [==>1463.0 Secs (Pattern 4)]	[1] [2]

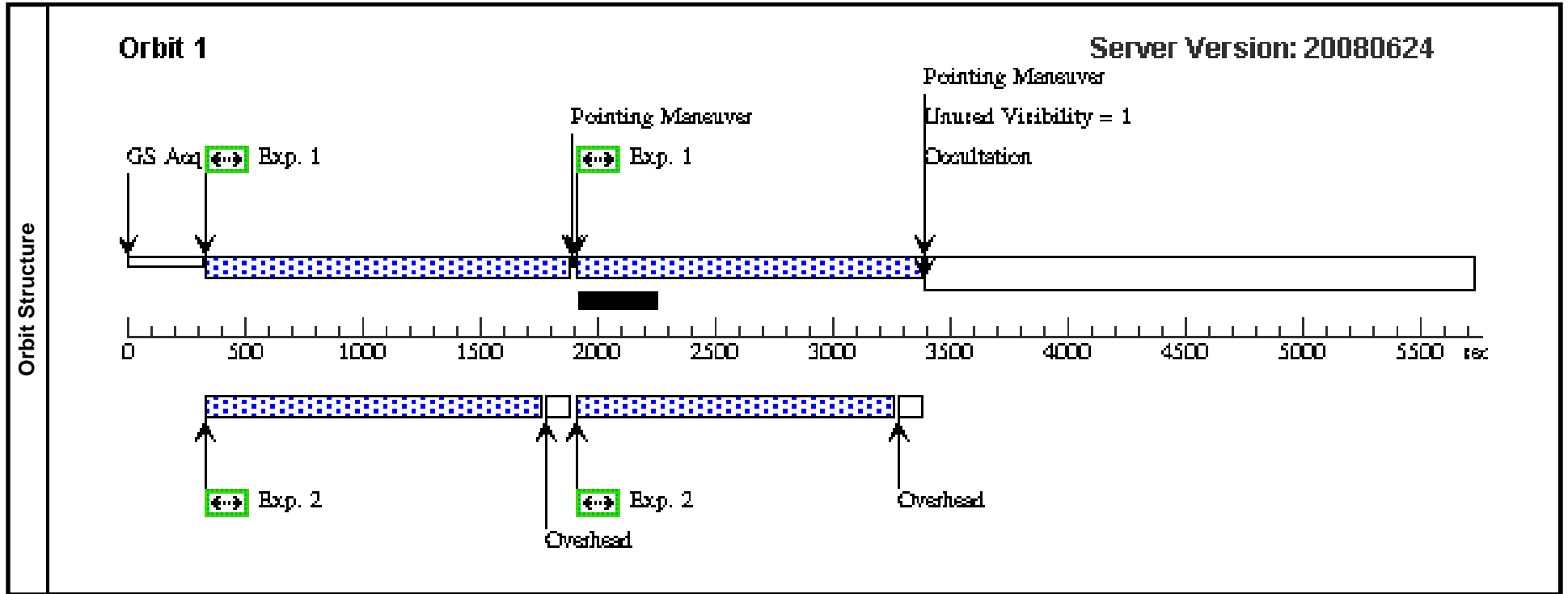


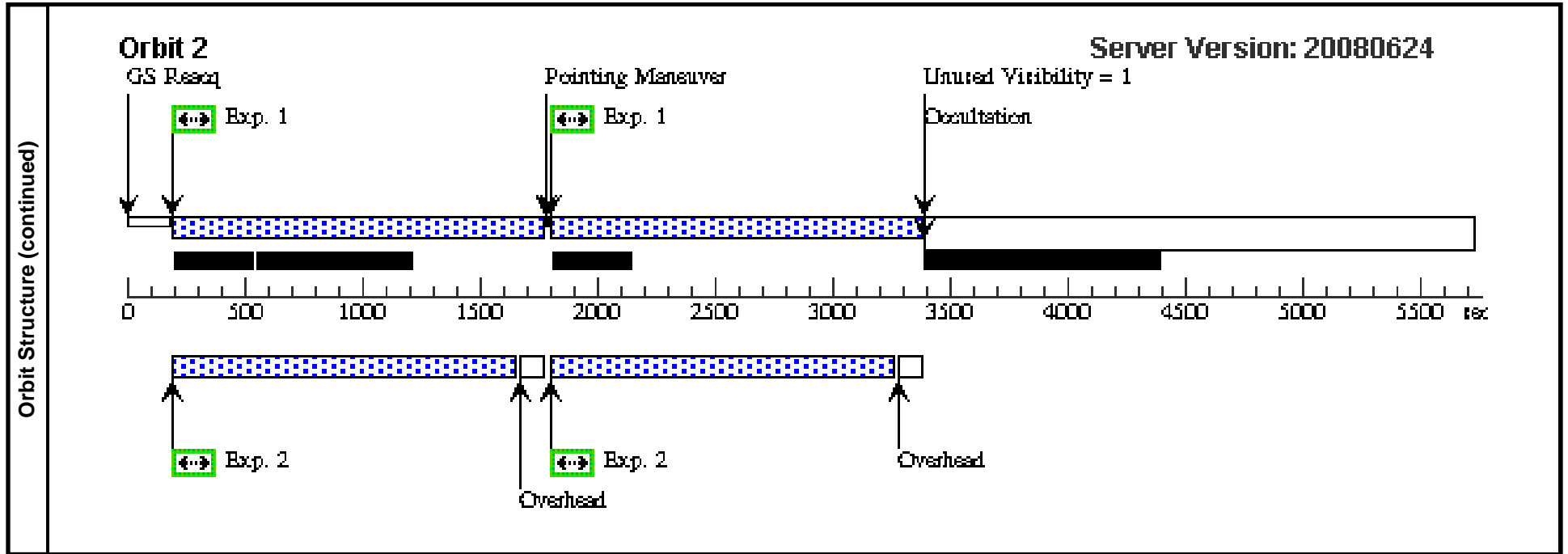


Proposal 11724 - Visit 10 - Direct Age Determination of the Local Group dE Galaxies NGC 147 and NGC 185

Tue Jul 22 01:45:07 GMT 2008

Visit	Proposal 11724, Visit 10, implementation Diagnostic Status: No Diagnostics Scientific Instruments: ACS/WFC, WFC3/UVIS Special Requirements: SAME ORIENT AS 01; AFTER 01 BY 0 D TO 40 D Comments: N147 F814W									
	Patterns	#	Primary Pattern			Secondary Pattern			Exposures	
		(1)	Pattern Type=ACS-WFC-DITHER-BOX Purpose=DITHER Number Of Points=4 Point Spacing=0.265 Line Spacing=0.187	Coordinate Frame=POS-TARG Pattern Orientation=20.67 Angle Between Sides=69.05 Center Pattern=false					(1-2)	
Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections		Fluxes	Miscellaneous			
	(1)	NGC147	RA: 00 32 51.0000 (8.2125000d) Dec: +48 22 40.00 (48.37778d) Equinox: J2000			V=10.5	Reference Frame: ICRS			
Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit
	1		(1) NGC147	ACS/WFC, ACCUM, WFC	F814W		POS TARG -0.0084, 0.2516	Pattern 1-2 (1) Prime + Parallel Group 1-2	1000 Secs [==>1343.0 Secs (Pattern 1)] [==>1343.0 Secs (Pattern 2)] [==>1453.0 Secs (Pattern 3)] [==>1453.0 Secs (Pattern 4)]	[1] [2]
	2		ANY	WFC3/UVIS, ACCUM, UVIS	F814W	CR-SPLIT=NO		Pattern 1-2 (1) Prime + Parallel Group 1-2	1000 Secs [==>1403.0 Secs (Pattern 1)] [==>1353.0 Secs (Pattern 2)] [==>1463.0 Secs (Pattern 3)] [==>1463.0 Secs (Pattern 4)]	[1] [2]

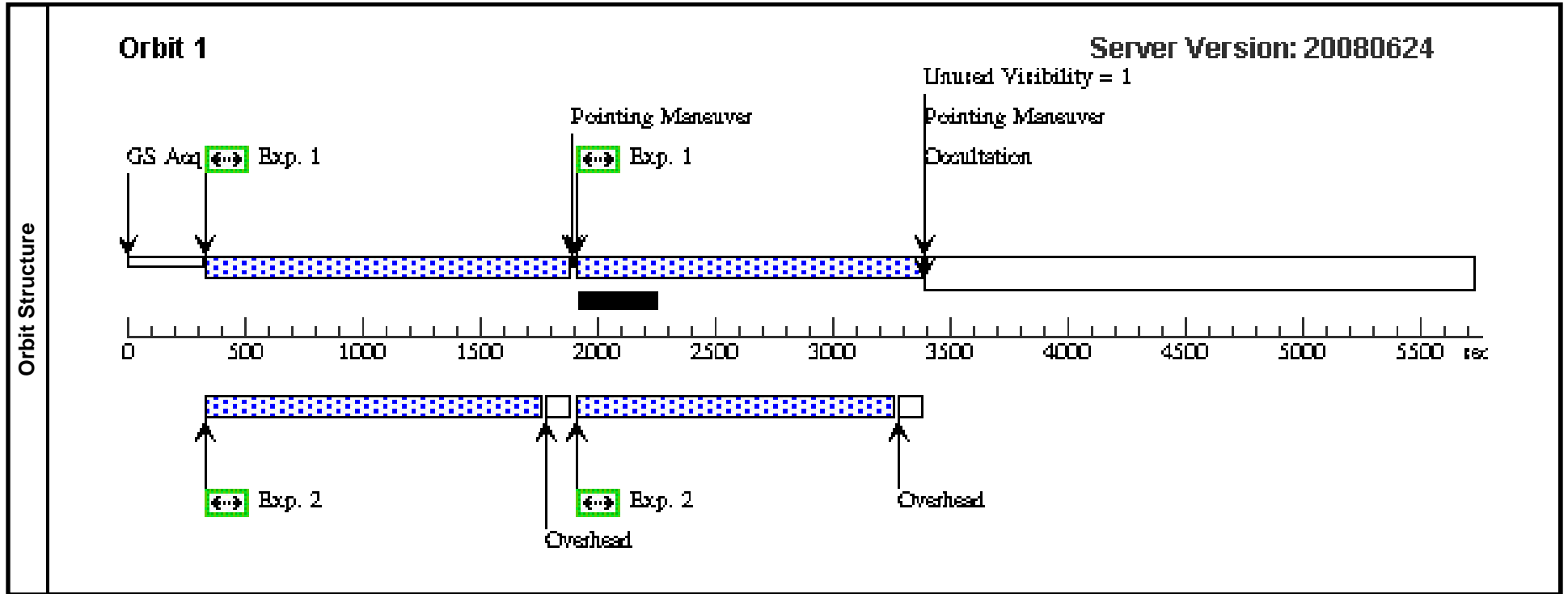


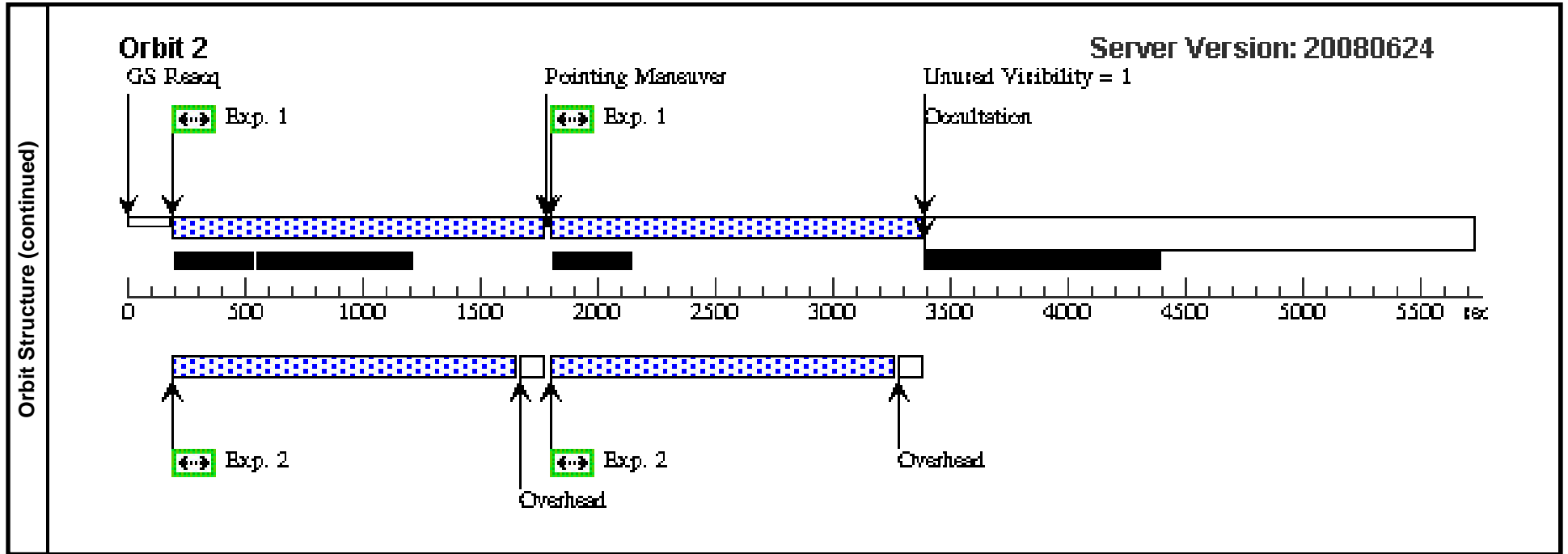


Proposal 11724 - Visit 11 - Direct Age Determination of the Local Group dE Galaxies NGC 147 and NGC 185

Tue Jul 22 01:45:07 GMT 2008

Visit	Proposal 11724, Visit 11, implementation Diagnostic Status: No Diagnostics Scientific Instruments: ACS/WFC, WFC3/UVIS Special Requirements: SAME ORIENT AS 01; AFTER 01 BY 0 D TO 40 D Comments: N147 F814W									
	Patterns	#	Primary Pattern			Secondary Pattern			Exposures	
		(1)	Pattern Type=ACS-WFC-DITHER-BOX Purpose=DITHER Number Of Points=4 Point Spacing=0.265 Line Spacing=0.187	Coordinate Frame=POS-TARG Pattern Orientation=20.67 Angle Between Sides=69.05 Center Pattern=false					(1-2)	
Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous				
	(1)	NGC147	RA: 00 32 51.0000 (8.2125000d) Dec: +48 22 40.00 (48.37778d) Equinox: J2000		V=10.5	Reference Frame: ICRS				
Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit
	1		(1) NGC147	ACS/WFC, ACCUM, WFC	F814W		POS TARG -0.2706, -0.0322	Pattern 1-2 (1) Prime + Parallel Group 1-2	1000 Secs [==>1343.0 Secs (Pattern 1)] [==>1343.0 Secs (Pattern 2)] [==>1453.0 Secs (Pattern 3)] [==>1453.0 Secs (Pattern 4)]	[1] [2]
	2		ANY	WFC3/UVIS, ACCUM, UVIS	F814W	CR-SPLIT=NO		Pattern 1-2 (1) Prime + Parallel Group 1-2	1000 Secs [==>1403.0 Secs (Pattern 1)] [==>1353.0 Secs (Pattern 2)] [==>1463.0 Secs (Pattern 3)] [==>1463.0 Secs (Pattern 4)]	[1] [2]

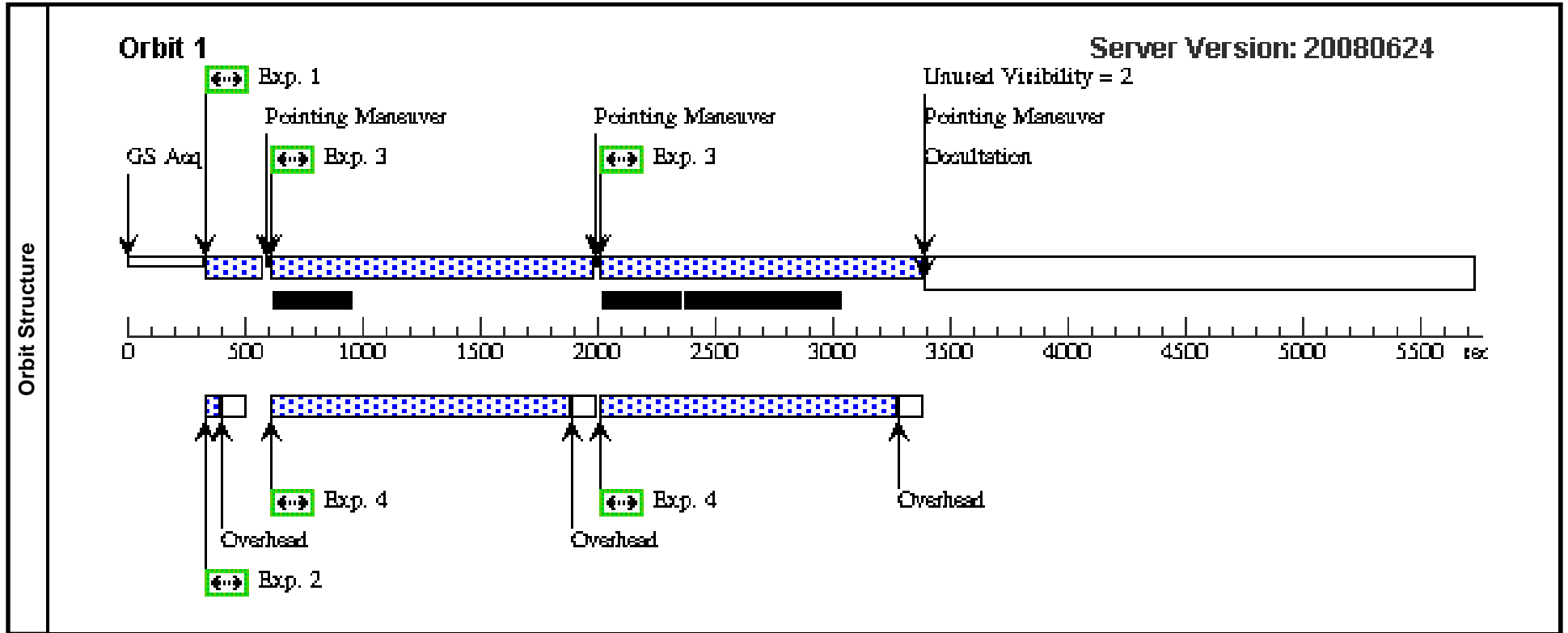


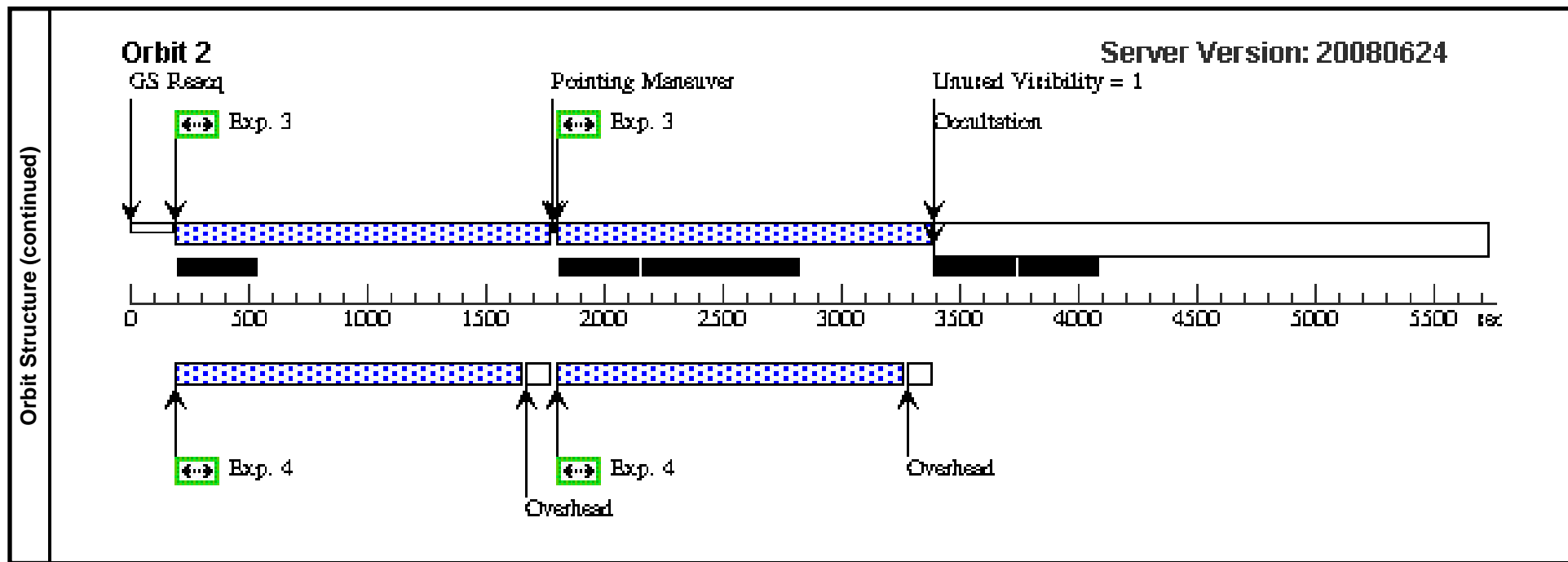


Proposal 11724 - Visit 12 - Direct Age Determination of the Local Group dE Galaxies NGC 147 and NGC 185

Tue Jul 22 01:45:08 GMT 2008

Visit	Proposal 11724, Visit 12, implementation Diagnostic Status: No Diagnostics Scientific Instruments: ACS/WFC, WFC3/UVIS Special Requirements: SAME ORIENT AS 01; AFTER 01 BY 0 D TO 40 D Comments: N147 F814W + short1									
	Patterns	#	Primary Pattern			Secondary Pattern			Exposures	
		(1)	Pattern Type=ACS-WFC-DITHER-BOX Purpose=DITHER Number Of Points=4 Point Spacing=0.265 Line Spacing=0.187	Coordinate Frame=POS-TARG Pattern Orientation=20.67 Angle Between Sides=69.05 Center Pattern=false					(3-4)	
Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous				
	(1)	NGC147	RA: 00 32 51.0000 (8.2125000d) Dec: +48 22 40.00 (48.37778d) Equinox: J2000		V=10.5	Reference Frame: ICRS				
Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit
	1		(1) NGC147	ACS/WFC, ACCUM, WFC	F814W		POS TARG 0,0	Prime + Parallel Group 1-2	30 Secs [=>33.0 Secs]	[1]
	2		ANY	WFC3/UVIS, ACCUM, UVIS	F814W	CR-SPLIT=NO		Prime + Parallel Group 1-2	30 Secs [=>30.0 Secs]	[1]
	3		(1) NGC147	ACS/WFC, ACCUM, WFC	F814W		POS TARG 0.2459,2.9705	Pattern 3-4 (1) Prime + Parallel Group 3-4	1240 Secs [=>1243.0 Secs (Pattern 1)] [=>1243.0 Secs (Pattern 2)] [=>1453.0 Secs (Pattern 3)] [=>1453.0 Secs (Pattern 4)]	[1] [2]
	4		ANY	WFC3/UVIS, ACCUM, UVIS	F814W	CR-SPLIT=NO		Pattern 3-4 (1) Prime + Parallel Group 3-4	1260 Secs [=>1270.0 Secs (Pattern 1)] [=>1260.0 Secs (Pattern 2)] [=>1463.0 Secs (Pattern 3)] [=>1463.0 Secs (Pattern 4)]	[1] [2]

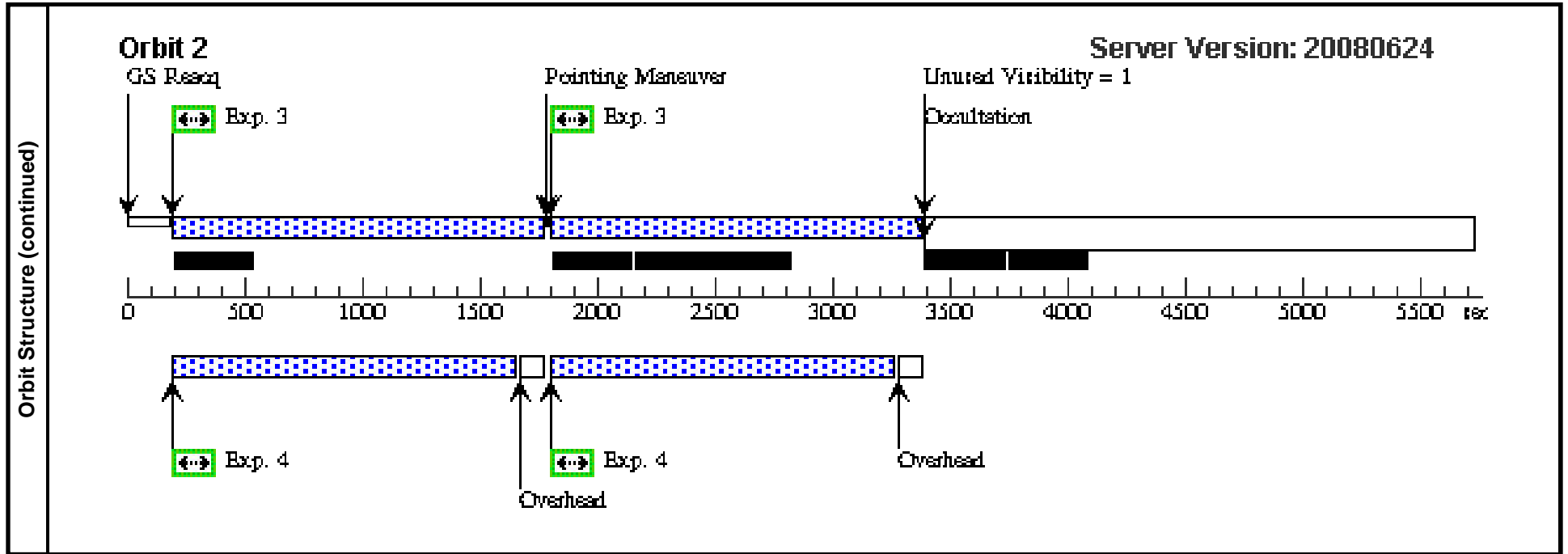




Proposal 11724 - Visit 13 - Direct Age Determination of the Local Group dE Galaxies NGC 147 and NGC 185

Tue Jul 22 01:45:08 GMT 2008

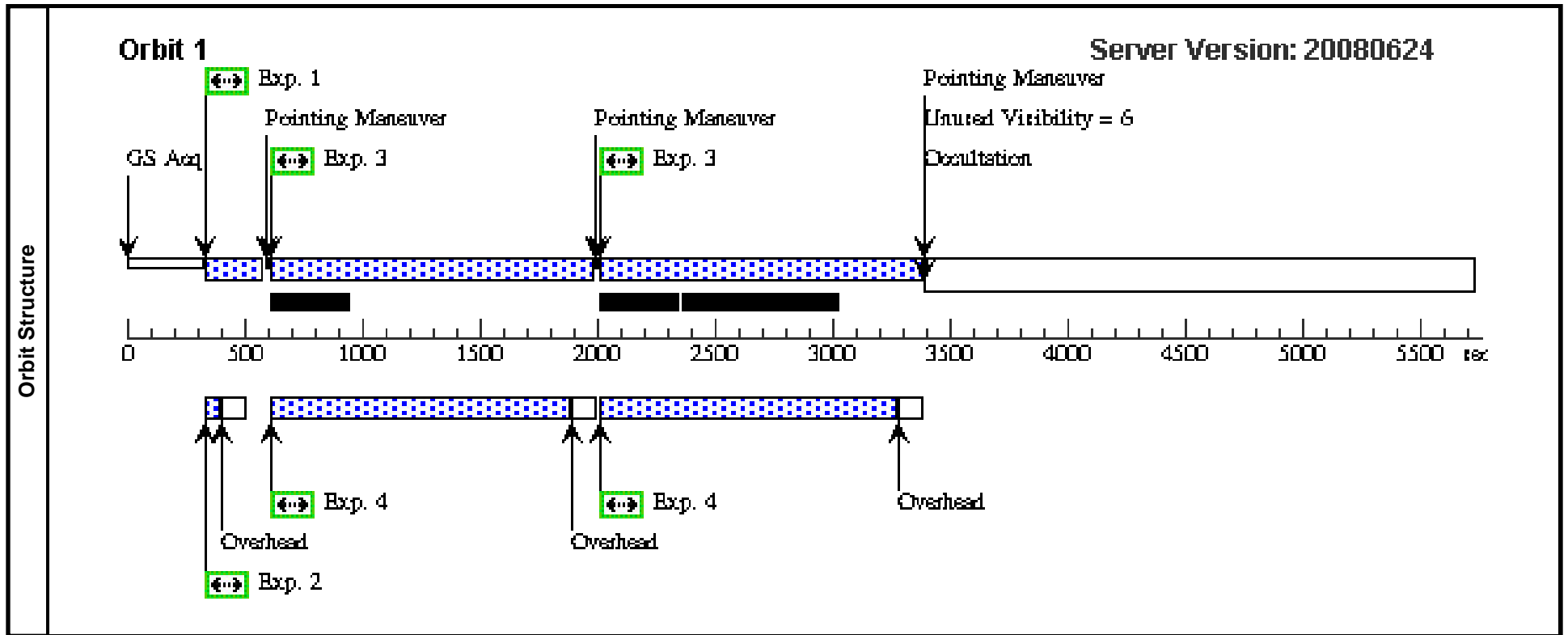
Visit	Proposal 11724, Visit 13, implementation Diagnostic Status: No Diagnostics Scientific Instruments: ACS/WFC, WFC3/UVIS Special Requirements: SAME ORIENT AS 01; AFTER 01 BY 0 D TO 40 D Comments: N147 F814W + short2									
	Patterns	#	Primary Pattern			Secondary Pattern			Exposures	
		(1)	Pattern Type=ACS-WFC-DITHER-BOX Purpose=DITHER Number Of Points=4 Point Spacing=0.265 Line Spacing=0.187	Coordinate Frame=POS-TARG Pattern Orientation=20.67 Angle Between Sides=69.05 Center Pattern=false					(3-4)	
Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous				
	(1)	NGC147	RA: 00 32 51.0000 (8.2125000d) Dec: +48 22 40.00 (48.37778d) Equinox: J2000		V=10.5	Reference Frame: ICRS				
Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit
	1	(1) NGC147		ACS/WFC, ACCUM, WFC	F814W		POS TARG 0.1235,0 .0841	Prime + Parallel Group 1-2	30 Secs [=>33.0 Secs]	[1]
	2	ANY		WFC3/UVIS, ACCUM, UVIS	F814W	CR-SPLIT=NO		Prime + Parallel Group 1-2	30 Secs [=>30.0 Secs]	[1]
	3	(1) NGC147		ACS/WFC, ACCUM, WFC	F814W		POS TARG 0.5047,3 .0227	Pattern 3-4 (1)	1240 Secs	
								Prime + Parallel Group 3-4	[=>1243.0 Secs (Pattern 1)]	[1]
									[=>1243.0 Secs (Pattern 2)]	
									[=>1453.0 Secs (Pattern 3)]	[2]
									[=>1453.0 Secs (Pattern 4)]	
4	ANY		WFC3/UVIS, ACCUM, UVIS	F814W	CR-SPLIT=NO		Pattern 3-4 (1)	1260 Secs		
							Prime + Parallel Group 3-4	[=>1270.0 Secs (Pattern 1)]	[1]	
								[=>1260.0 Secs (Pattern 2)]		
								[=>1463.0 Secs (Pattern 3)]		
								[=>1463.0 Secs (Pattern 4)]	[2]	

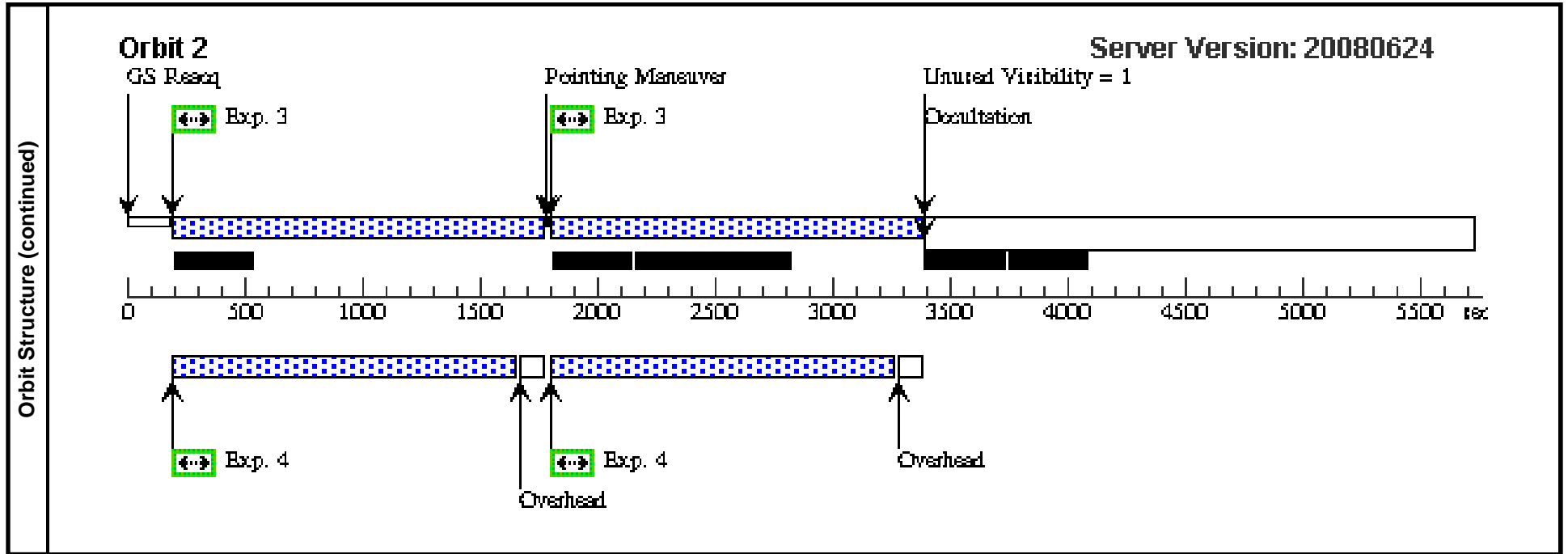


Proposal 11724 - Visit 14 - Direct Age Determination of the Local Group dE Galaxies NGC 147 and NGC 185

Tue Jul 22 01:45:09 GMT 2008

Visit	Proposal 11724, Visit 14, implementation Diagnostic Status: No Diagnostics Scientific Instruments: ACS/WFC, WFC3/UVIS Special Requirements: SAME ORIENT AS 01; AFTER 01 BY 0 D TO 40 D Comments: N147 F814W + short3									
	Patterns	#	Primary Pattern			Secondary Pattern			Exposures	
		(1)	Pattern Type=ACS-WFC-DITHER-BOX Purpose=DITHER Number Of Points=4 Point Spacing=0.265 Line Spacing=0.187	Coordinate Frame=POS-TARG Pattern Orientation=20.67 Angle Between Sides=69.05 Center Pattern=false					(3-4)	
Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous				
	(1)	NGC147	RA: 00 32 51.0000 (8.2125000d) Dec: +48 22 40.00 (48.37778d) Equinox: J2000		V=10.5	Reference Frame: ICRS				
Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit
	1		(1) NGC147	ACS/WFC, ACCUM, WFC	F814W		POS TARG 0.247,2.984	Prime + Parallel Group 1-2	30 Secs [=>33.0 Secs]	[1]
	2		ANY	WFC3/UVIS, ACCUM, UVIS	F814W	CR-SPLIT=NO		Prime + Parallel Group 1-2	30 Secs [=>30.0 Secs]	[1]
	3		(1) NGC147	ACS/WFC, ACCUM, WFC	F814W		POS TARG 0.2513,3.2160	Pattern 3-4 (1) Prime + Parallel Group 3-4	1240 Secs [=>1243.0 Secs (Pattern 1)] [=>1243.0 Secs (Pattern 2)] [=>1453.0 Secs (Pattern 3)] [=>1453.0 Secs (Pattern 4)]	[1] [2]
	4		ANY	WFC3/UVIS, ACCUM, UVIS	F814W	CR-SPLIT=NO		Pattern 3-4 (1) Prime + Parallel Group 3-4	1260 Secs [=>1270.0 Secs (Pattern 1)] [=>1260.0 Secs (Pattern 2)] [=>1463.0 Secs (Pattern 3)] [=>1463.0 Secs (Pattern 4)]	[1] [2]

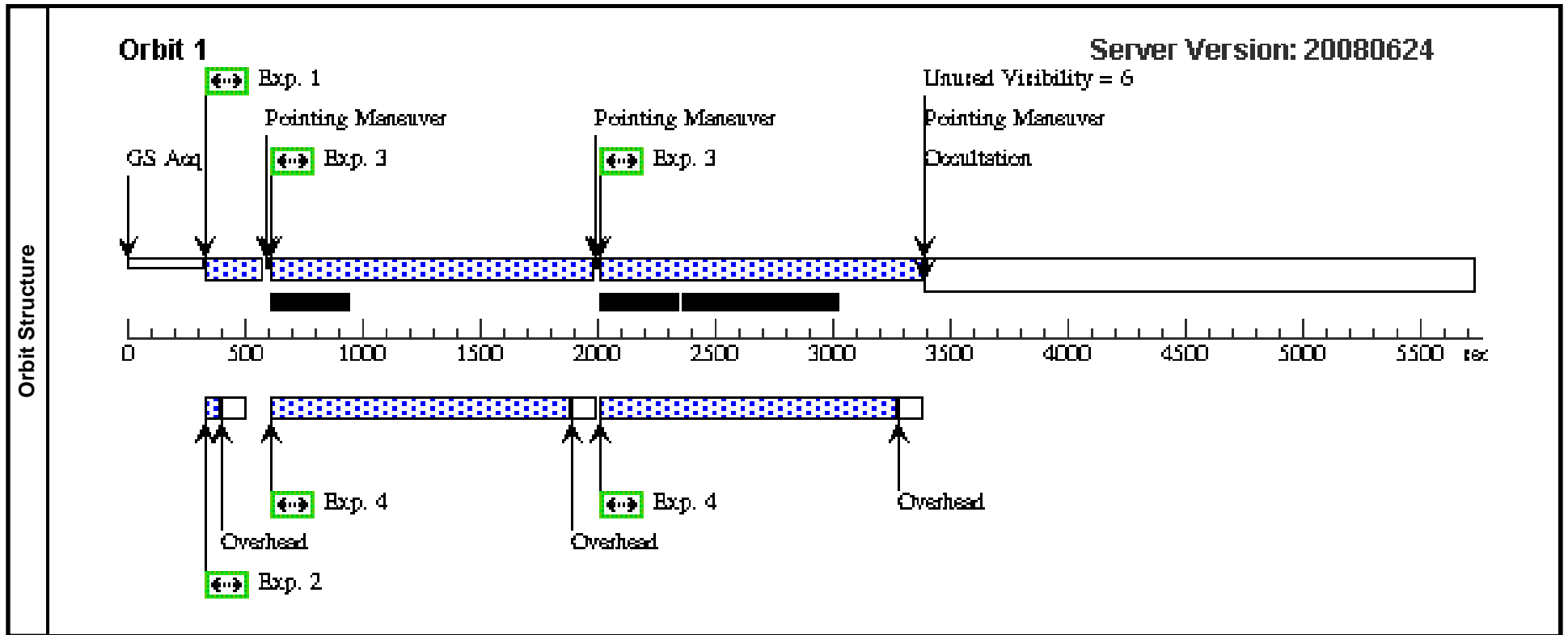


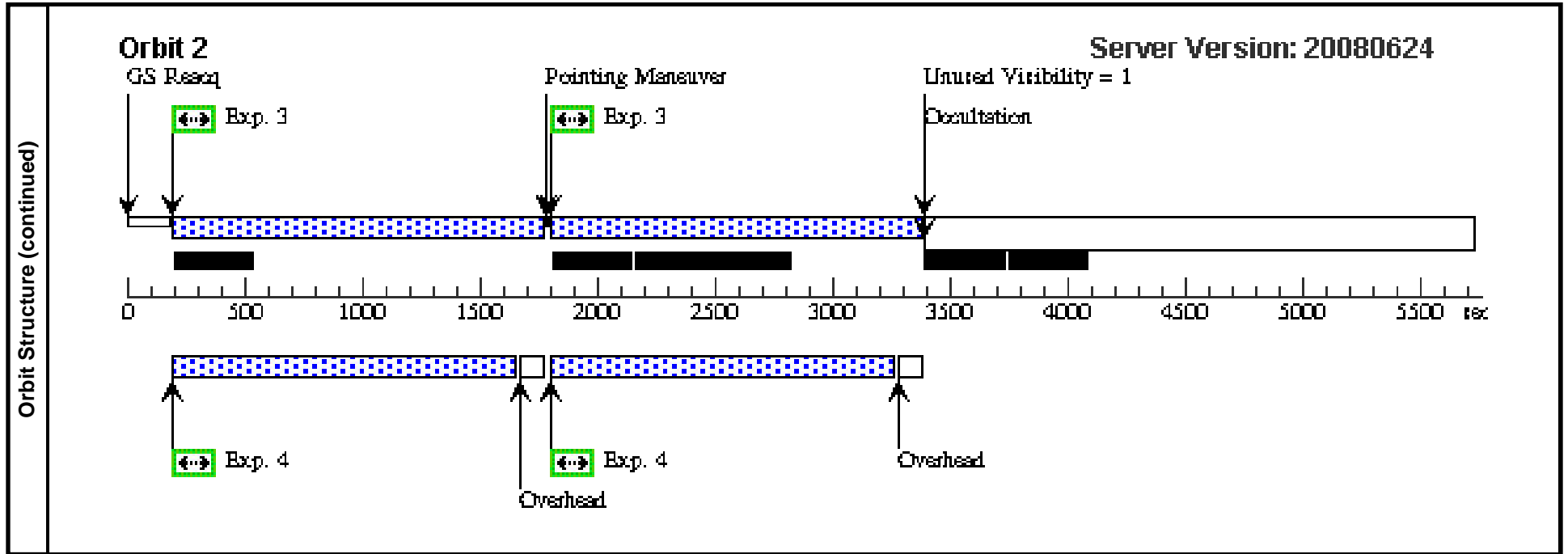


Proposal 11724 - Visit 15 - Direct Age Determination of the Local Group dE Galaxies NGC 147 and NGC 185

Tue Jul 22 01:45:09 GMT 2008

Visit	Proposal 11724, Visit 15, implementation Diagnostic Status: No Diagnostics Scientific Instruments: ACS/WFC, WFC3/UVIS Special Requirements: SAME ORIENT AS 01; AFTER 01 BY 0 D TO 40 D Comments: N147 F814W + short4									
	Patterns	#	Primary Pattern			Secondary Pattern			Exposures	
		(1)	Pattern Type=ACS-WFC-DITHER-BOX Purpose=DITHER Number Of Points=4 Point Spacing=0.265 Line Spacing=0.187	Coordinate Frame=POS-TARG Pattern Orientation=20.67 Angle Between Sides=69.05 Center Pattern=false					(3-4)	
Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous				
	(1)	NGC147	RA: 00 32 51.0000 (8.2125000d) Dec: +48 22 40.00 (48.37778d) Equinox: J2000		V=10.5	Reference Frame: ICRS				
Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit
	1		(1) NGC147	ACS/WFC, ACCUM, WFC	F814W		POS TARG 0.3705,3 .0681	Prime + Parallel Group 1-2	30 Secs [=>33.0 Secs]	[1]
	2		ANY	WFC3/UVIS, ACCUM, UVIS	F814W	CR-SPLIT=NO		Prime + Parallel Group 1-2	30 Secs [=>30.0 Secs]	[1]
	3		(1) NGC147	ACS/WFC, ACCUM, WFC	F814W		POS TARG 0.023,2. 9822	Pattern 3-4 (1)	1240 Secs	
								Prime + Parallel Group 3-4	[=>1243.0 Secs (Pattern 1)]	[1]
									[=>1243.0 Secs (Pattern 2)]	
									[=>1453.0 Secs (Pattern 3)]	[2]
									[=>1453.0 Secs (Pattern 4)]	
4		ANY	WFC3/UVIS, ACCUM, UVIS	F814W	CR-SPLIT=NO		Pattern 3-4 (1)	1260 Secs		
							Prime + Parallel Group 3-4	[=>1270.0 Secs (Pattern 1)]	[1]	
								[=>1260.0 Secs (Pattern 2)]		
								[=>1463.0 Secs (Pattern 3)]		
								[=>1463.0 Secs (Pattern 4)]	[2]	

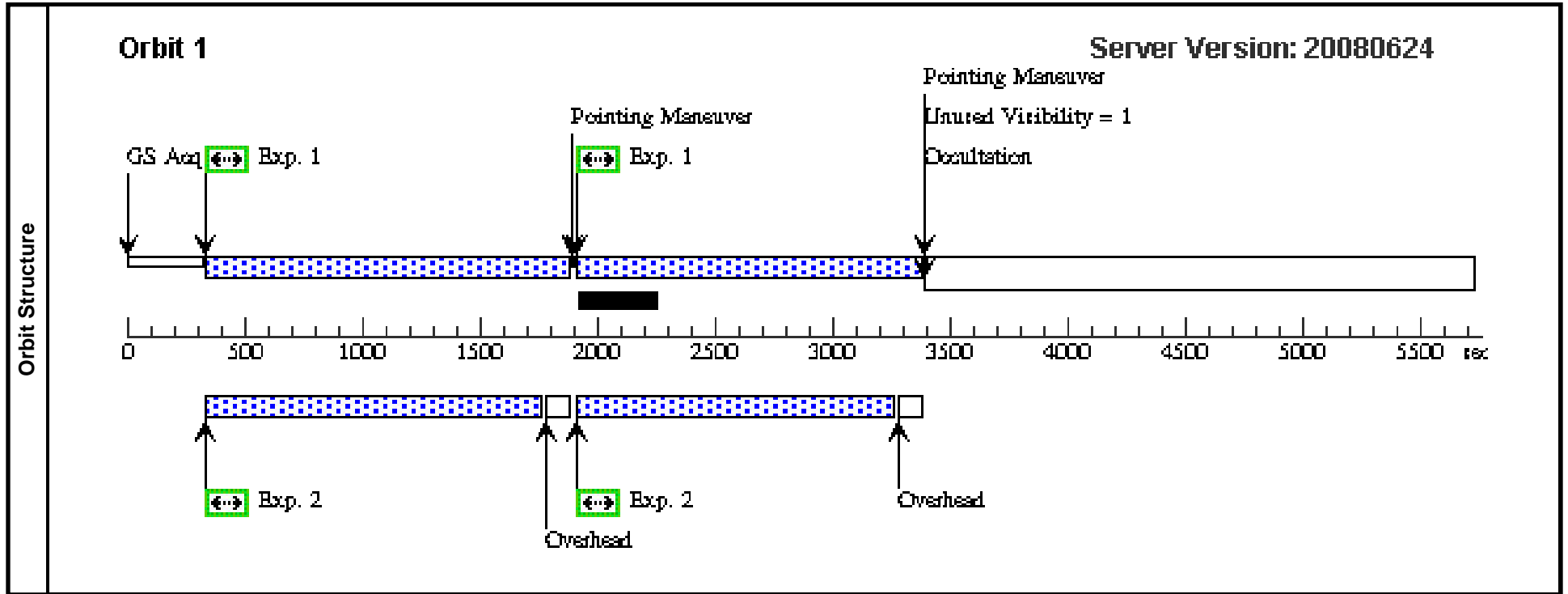


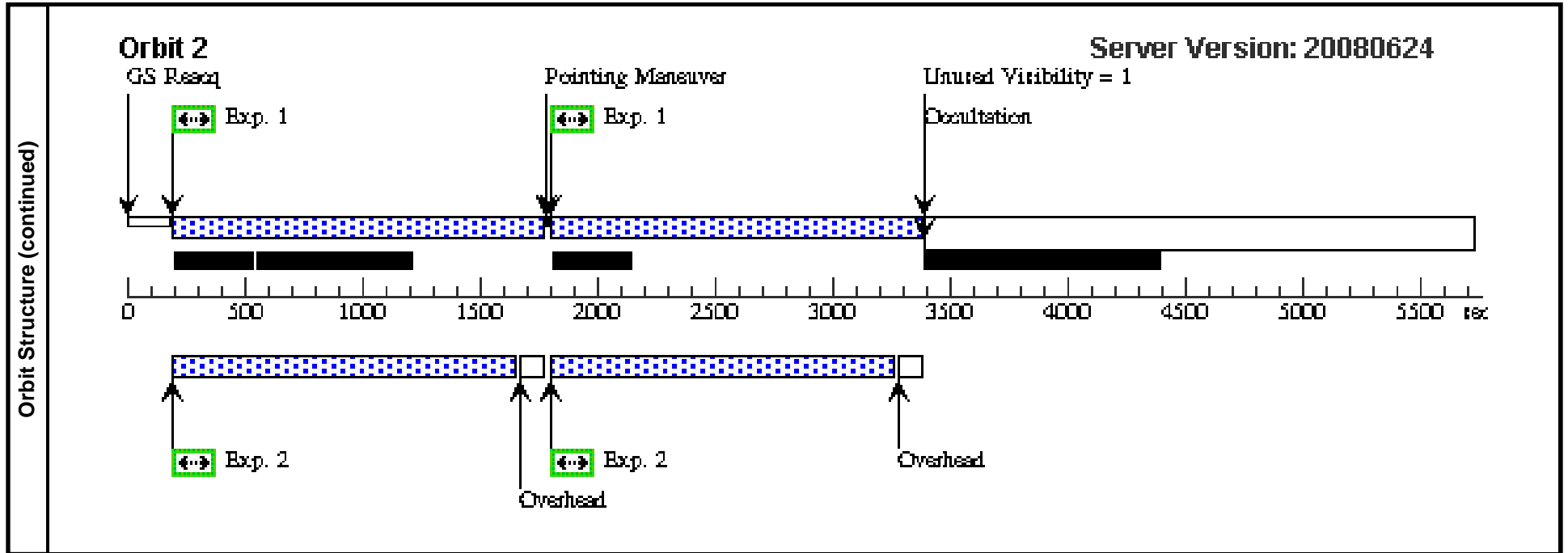


Proposal 11724 - Visit 16 - Direct Age Determination of the Local Group dE Galaxies NGC 147 and NGC 185

Tue Jul 22 01:45:10 GMT 2008

Visit	Proposal 11724, Visit 16, implementation Diagnostic Status: No Diagnostics Scientific Instruments: ACS/WFC, WFC3/UVIS Special Requirements: ORIENT 310D TO 60 D Comments: N185 F606W									
	Patterns	#	Primary Pattern			Secondary Pattern			Exposures	
		(1)	Pattern Type=ACS-WFC-DITHER-BOX Purpose=DITHER Number Of Points=4 Point Spacing=0.265 Line Spacing=0.187	Coordinate Frame=POS-TARG Pattern Orientation=20.67 Angle Between Sides=69.05 Center Pattern=false					(1-2)	
Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous				
	(2)	NGC185	RA: 00 39 10.7000 (9.7945833d) Dec: +48 26 37.80 (48.44383d) Equinox: J2000		V=10.0	Reference Frame: ICRS				
Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit
	1		(2) NGC185	ACS/WFC, ACCUM, WFC	F606W			Pattern 1-2 (1) Prime + Parallel Group 1-2	1000 Secs [==>1343.0 Secs (Pattern 1)] [==>1343.0 Secs (Pattern 2)] [==>1453.0 Secs (Pattern 3)] [==>1453.0 Secs (Pattern 4)]	[1] [2]
	2		ANY	WFC3/UVIS, ACCUM, UVIS	F606W	CR-SPLIT=NO		Pattern 1-2 (1) Prime + Parallel Group 1-2	1000 Secs [==>1403.0 Secs (Pattern 1)] [==>1353.0 Secs (Pattern 2)] [==>1463.0 Secs (Pattern 3)] [==>1463.0 Secs (Pattern 4)]	[1] [2]

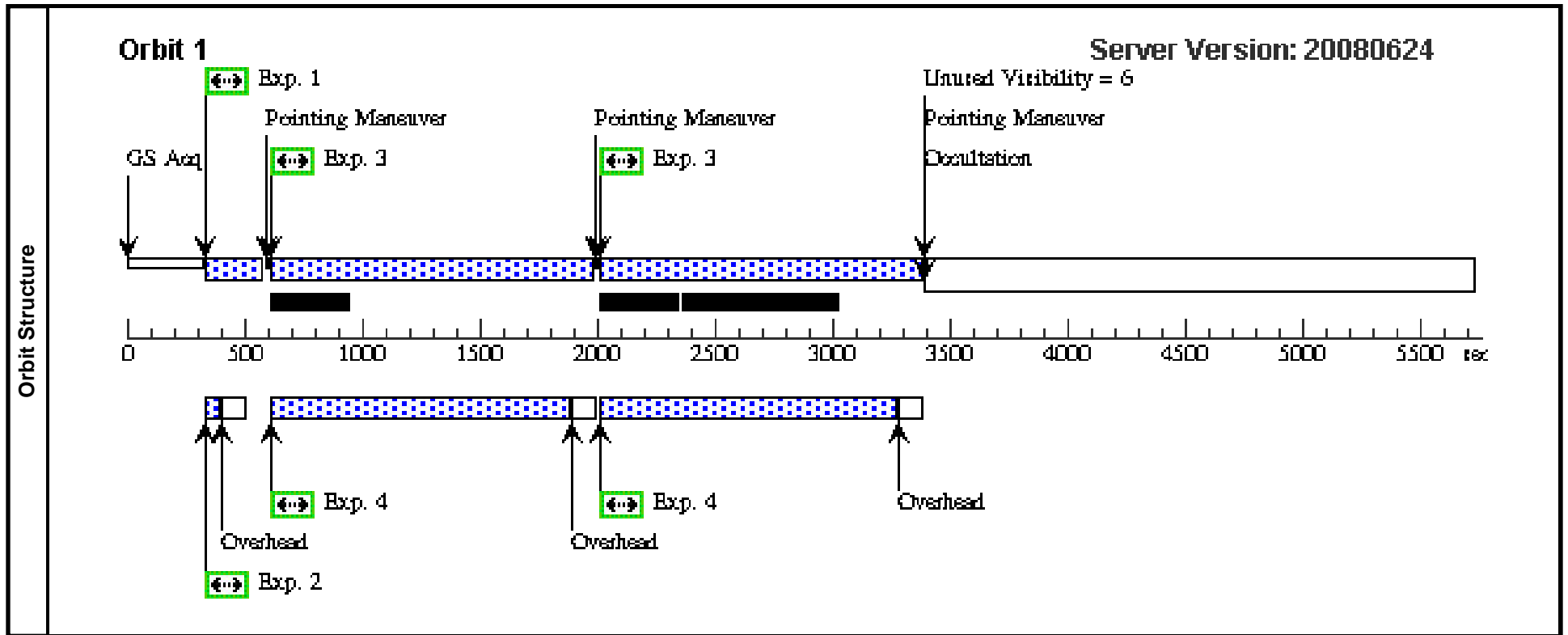


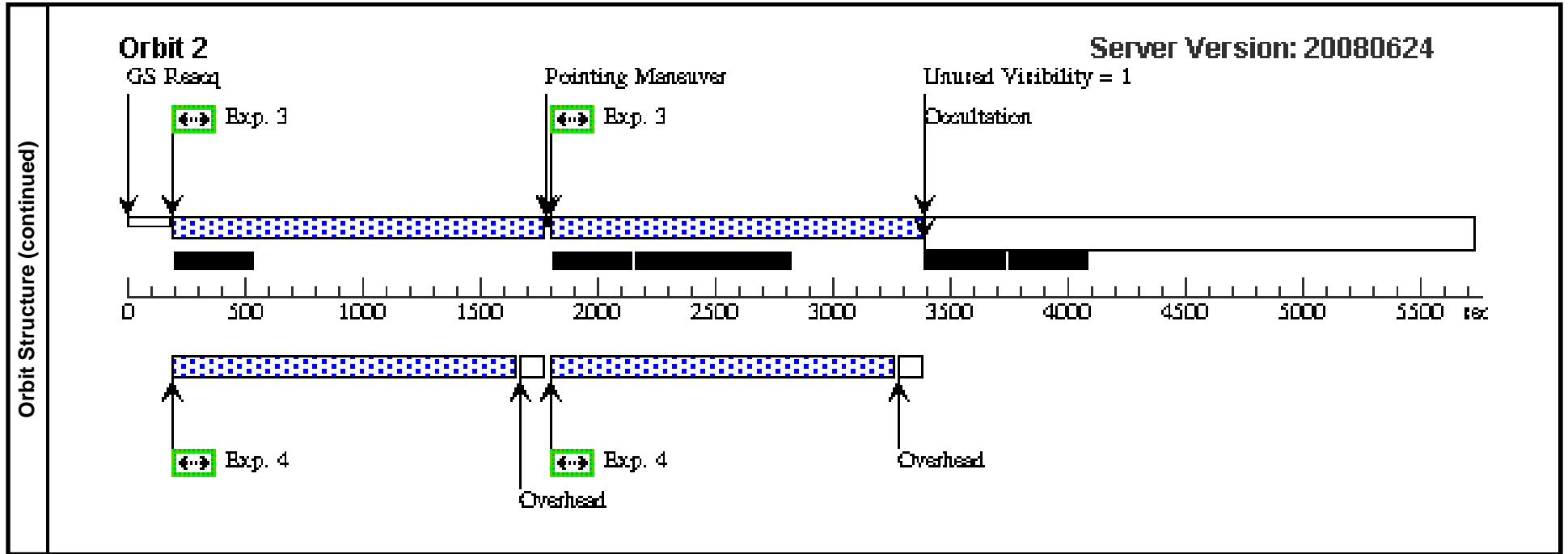


Proposal 11724 - Visit 17 - Direct Age Determination of the Local Group dE Galaxies NGC 147 and NGC 185

Tue Jul 22 01:45:10 GMT 2008

Visit										
Proposal 11724, Visit 17, implementation Diagnostic Status: No Diagnostics Scientific Instruments: ACS/WFC, WFC3/UVIS Special Requirements: SAME ORIENT AS 16; AFTER 16 BY 0 D TO 40 D Comments: N185 F606W + short1										
Patterns	#	Primary Pattern			Secondary Pattern			Exposures		
	(1)	Pattern Type=ACS-WFC-DITHER-BOX Purpose=DITHER Number Of Points=4 Point Spacing=0.265 Line Spacing=0.187	Coordinate Frame=POS-TARG Pattern Orientation=20.67 Angle Between Sides=69.05 Center Pattern=false					(3-4)		
Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections		Fluxes	Miscellaneous			
	(2)	NGC185	RA: 00 39 10.7000 (9.7945833d) Dec: +48 26 37.80 (48.44383d) Equinox: J2000			V=10.0	Reference Frame: ICRS			
Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit
	1		(2) NGC185	ACS/WFC, ACCUM, WFC	F606W			Prime + Parallel Group 1-2	30 Secs [=>33.0 Secs]	[1]
	2		ANY	WFC3/UVIS, ACCUM, UVIS	F606W	CR-SPLIT=NO		Prime + Parallel Group 1-2	30 Secs [=>30.0 Secs]	[1]
	3		(2) NGC185	ACS/WFC, ACCUM, WFC	F606W		POS TARG 0.2697,0.0236	Pattern 3-4 (1) Prime + Parallel Group 3-4	1240 Secs [=>1243.0 Secs (Pattern 1)] [=>1243.0 Secs (Pattern 2)] [=>1453.0 Secs (Pattern 3)] [=>1453.0 Secs (Pattern 4)]	[1] [2]
	4		ANY	WFC3/UVIS, ACCUM, UVIS	F606W	CR-SPLIT=NO		Pattern 3-4 (1) Prime + Parallel Group 3-4	1260 Secs [=>1270.0 Secs (Pattern 1)] [=>1260.0 Secs (Pattern 2)] [=>1463.0 Secs (Pattern 3)] [=>1463.0 Secs (Pattern 4)]	[1] [2]

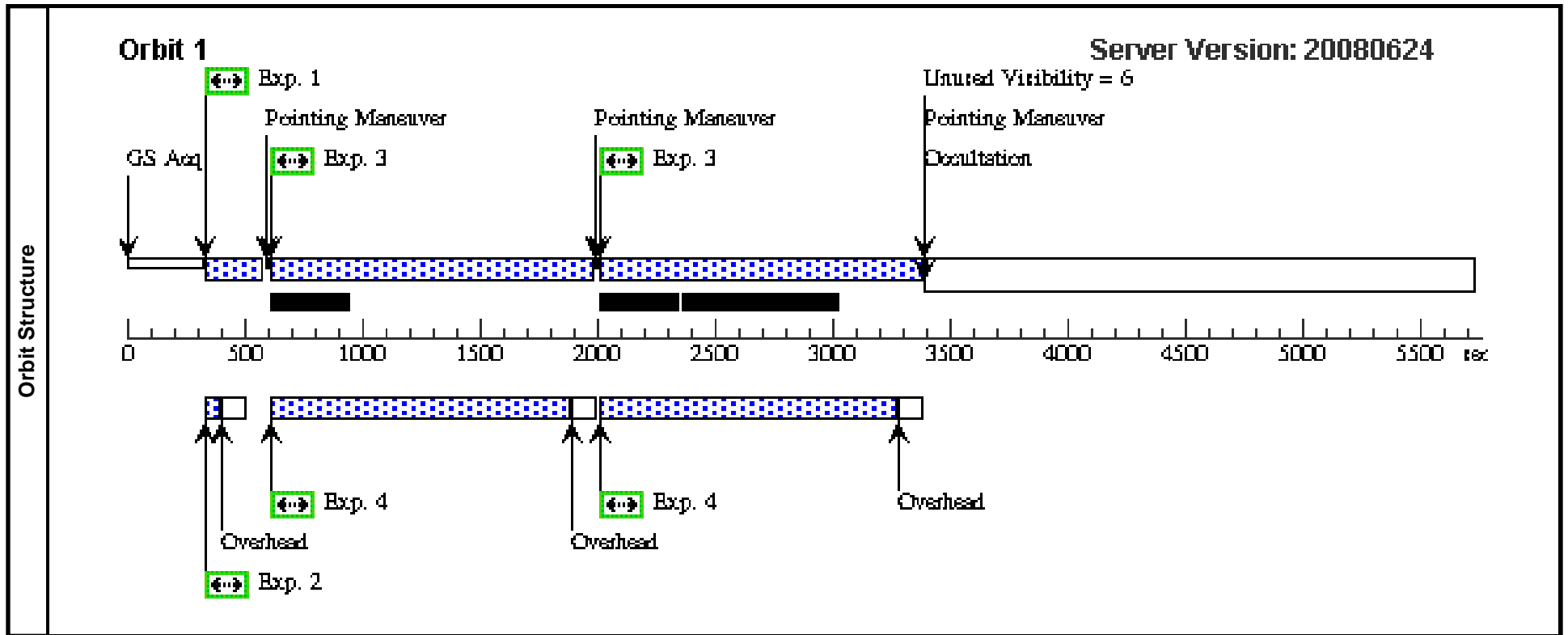


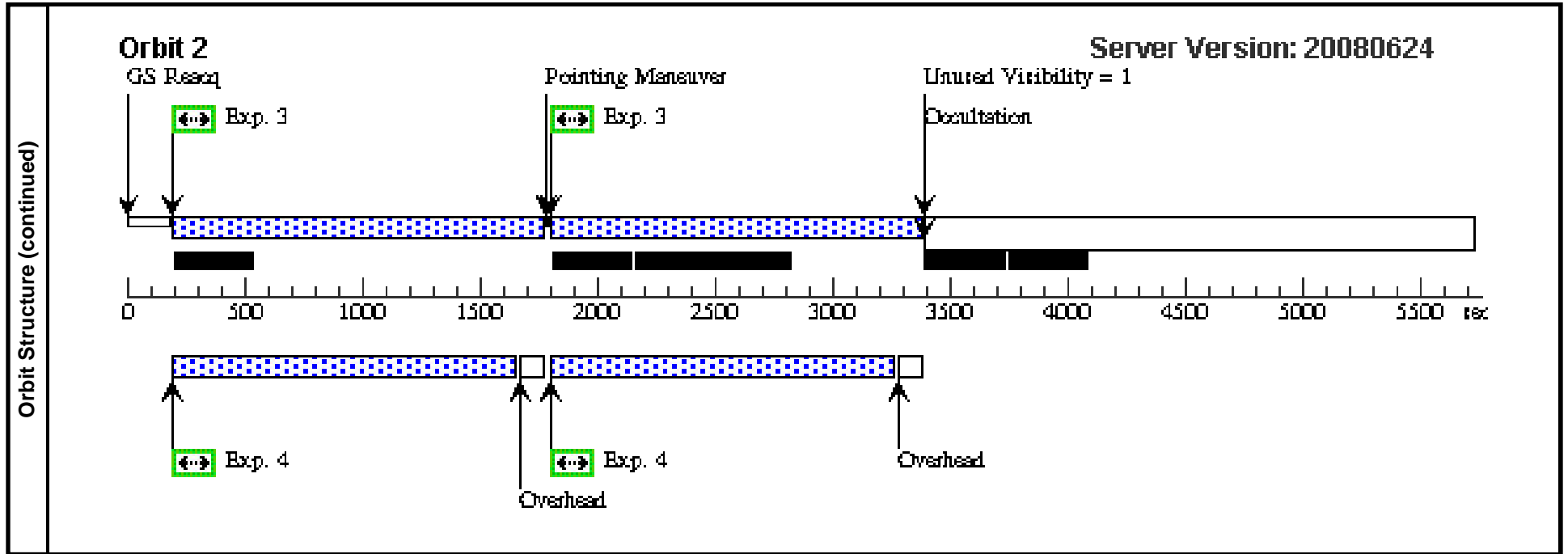


Proposal 11724 - Visit 18 - Direct Age Determination of the Local Group dE Galaxies NGC 147 and NGC 185

Tue Jul 22 01:45:10 GMT 2008

Visit	Proposal 11724, Visit 18, implementation Diagnostic Status: No Diagnostics Scientific Instruments: ACS/WFC, WFC3/UVIS Special Requirements: SAME ORIENT AS 16; AFTER 16 BY 0 D TO 40 D Comments: N185 F606W + short2									
	Patterns	#	Primary Pattern			Secondary Pattern			Exposures	
		(1)	Pattern Type=ACS-WFC-DITHER-BOX Purpose=DITHER Number Of Points=4 Point Spacing=0.265 Line Spacing=0.187	Coordinate Frame=POS-TARG Pattern Orientation=20.67 Angle Between Sides=69.05 Center Pattern=false					(3-4)	
Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous				
	(2)	NGC185	RA: 00 39 10.7000 (9.7945833d) Dec: +48 26 37.80 (48.44383d) Equinox: J2000		V=10.0	Reference Frame: ICRS				
Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit
	1		(2) NGC185	ACS/WFC, ACCUM, WFC	F606W		POS TARG 0.1235,0 .0841	Prime + Parallel Group 1-2	30 Secs [=>33.0 Secs]	[1]
	2		ANY	WFC3/UVIS, ACCUM, UVIS	F606W	CR-SPLIT=NO		Prime + Parallel Group 1-2	30 Secs [=>30.0 Secs]	[1]
	3		(2) NGC185	ACS/WFC, ACCUM, WFC	F606W		POS TARG -0.002,0 .2518	Pattern 3-4 (1) Prime + Parallel Group 3-4	1240 Secs [=>1243.0 Secs (Pattern 1)] [=>1243.0 Secs (Pattern 2)] [=>1453.0 Secs (Pattern 3)] [=>1453.0 Secs (Pattern 4)]	[1] [2]
	4		ANY	WFC3/UVIS, ACCUM, UVIS	F606W	CR-SPLIT=NO		Pattern 3-4 (1) Prime + Parallel Group 3-4	1260 Secs [=>1270.0 Secs (Pattern 1)] [=>1260.0 Secs (Pattern 2)] [=>1463.0 Secs (Pattern 3)] [=>1463.0 Secs (Pattern 4)]	[1] [2]

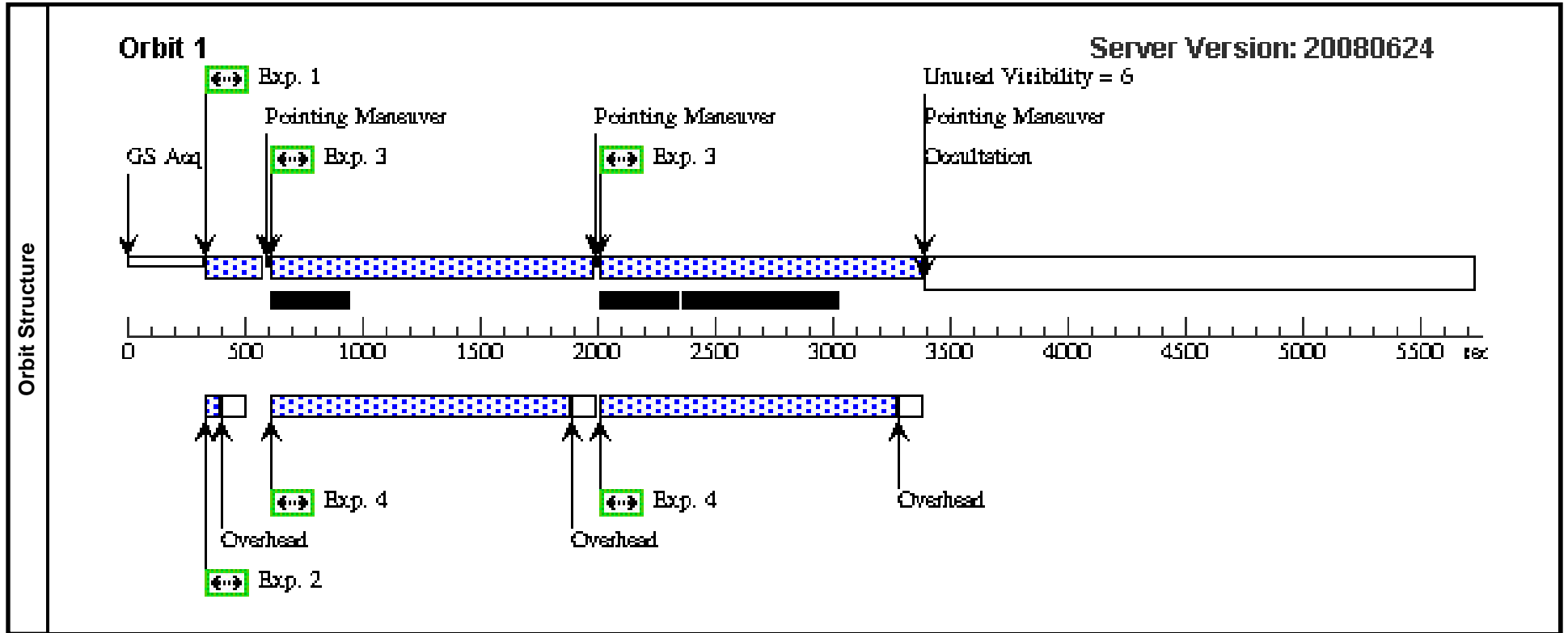


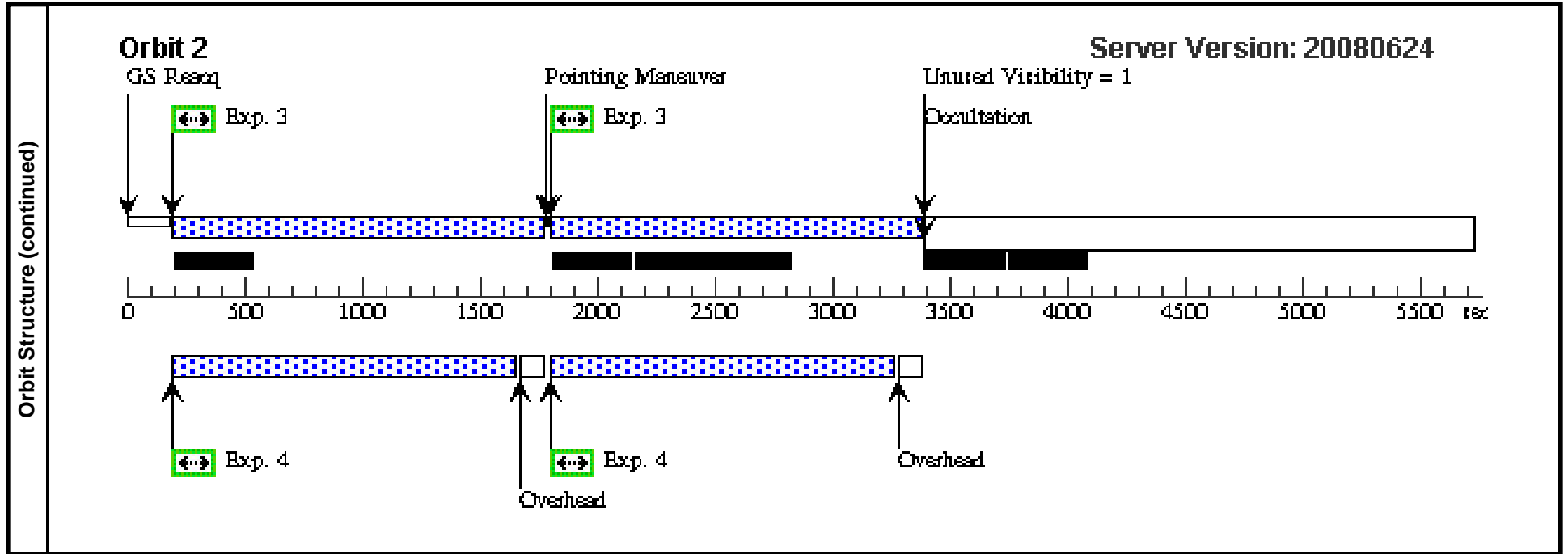


Proposal 11724 - Visit 19 - Direct Age Determination of the Local Group dE Galaxies NGC 147 and NGC 185

Tue Jul 22 01:45:11 GMT 2008

Visit	Proposal 11724, Visit 19, implementation Diagnostic Status: No Diagnostics Scientific Instruments: ACS/WFC, WFC3/UVIS Special Requirements: SAME ORIENT AS 16; AFTER 16 BY 0 D TO 40 D Comments: N185 F606W + short3									
	Patterns	#	Primary Pattern			Secondary Pattern			Exposures	
		(1)	Pattern Type=ACS-WFC-DITHER-BOX Purpose=DITHER Number Of Points=4 Point Spacing=0.265 Line Spacing=0.187	Coordinate Frame=POS-TARG Pattern Orientation=20.67 Angle Between Sides=69.05 Center Pattern=false					(3-4)	
Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous				
	(2)	NGC185	RA: 00 39 10.7000 (9.7945833d) Dec: +48 26 37.80 (48.44383d) Equinox: J2000		V=10.0	Reference Frame: ICRS				
Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit
	1		(2) NGC185	ACS/WFC, ACCUM, WFC	F606W		POS TARG 0.247,2.984	Prime + Parallel Group 1-2	30 Secs [=>33.0 Secs]	[1]
	2		ANY	WFC3/UVIS, ACCUM, UVIS	F606W	CR-SPLIT=NO		Prime + Parallel Group 1-2	30 Secs [=>30.0 Secs]	[1]
	3		(2) NGC185	ACS/WFC, ACCUM, WFC	F606W		POS TARG 0.229,2.9882	Pattern 3-4 (1) Prime + Parallel Group 3-4	1240 Secs [=>1243.0 Secs (Pattern 1)] [=>1243.0 Secs (Pattern 2)] [=>1453.0 Secs (Pattern 3)] [=>1453.0 Secs (Pattern 4)]	[1] [2]
	4		ANY	WFC3/UVIS, ACCUM, UVIS	F606W	CR-SPLIT=NO		Pattern 3-4 (1) Prime + Parallel Group 3-4	1260 Secs [=>1270.0 Secs (Pattern 1)] [=>1260.0 Secs (Pattern 2)] [=>1463.0 Secs (Pattern 3)] [=>1463.0 Secs (Pattern 4)]	[1] [2]

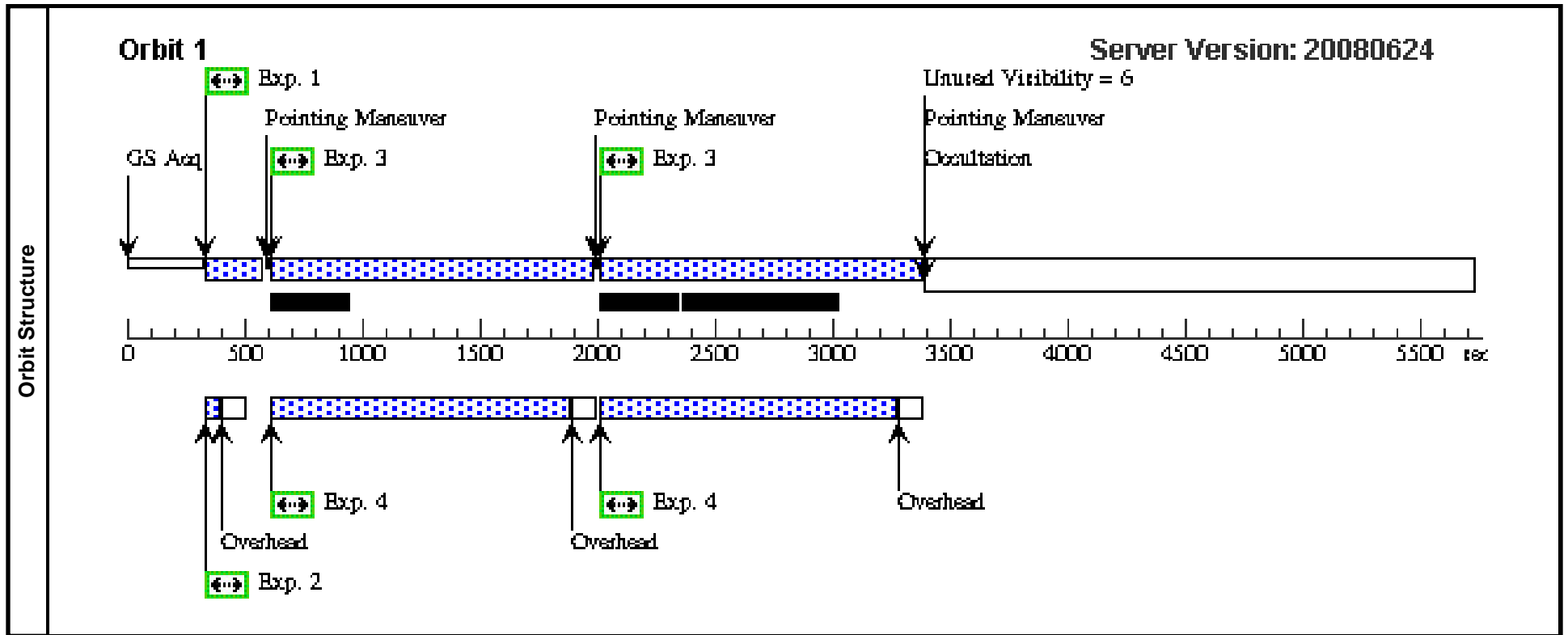


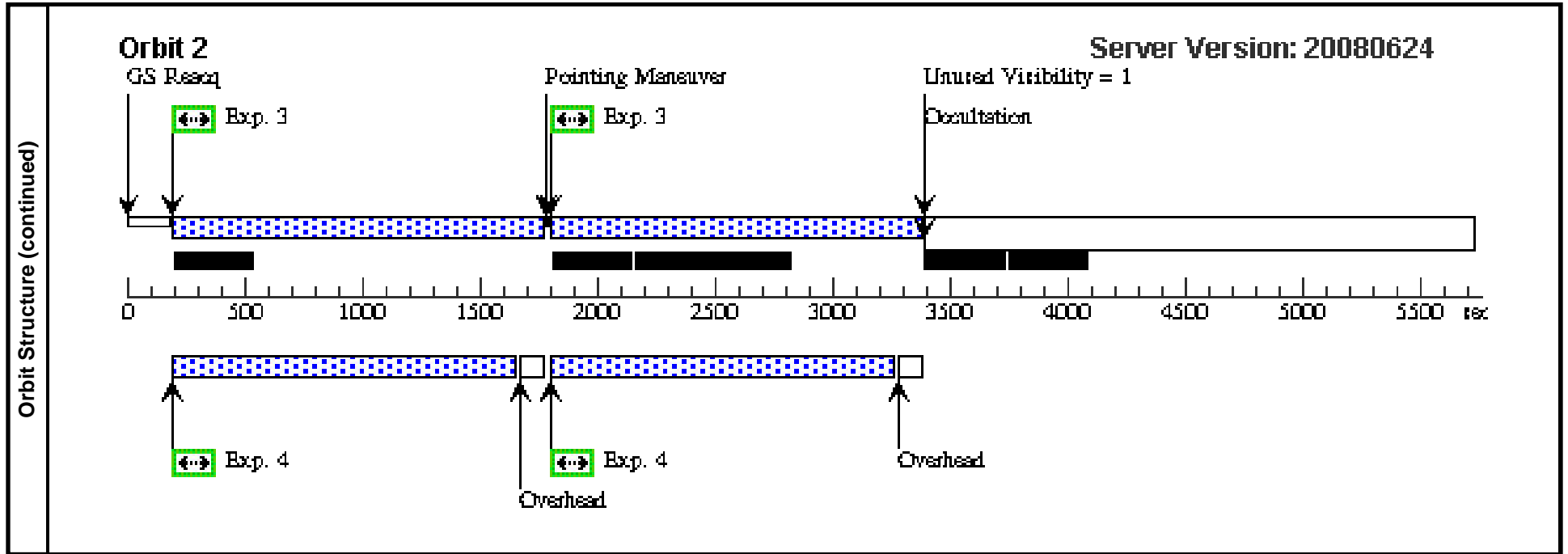


Proposal 11724 - Visit 20 - Direct Age Determination of the Local Group dE Galaxies NGC 147 and NGC 185

Tue Jul 22 01:45:11 GMT 2008

Visit	Proposal 11724, Visit 20, implementation Diagnostic Status: No Diagnostics Scientific Instruments: ACS/WFC, WFC3/UVIS Special Requirements: SAME ORIENT AS 16; AFTER 16 BY 0 D TO 40 D Comments: N185 F606W + short4									
	Patterns	#	Primary Pattern			Secondary Pattern			Exposures	
		(1)	Pattern Type=ACS-WFC-DITHER-BOX Purpose=DITHER Number Of Points=4 Point Spacing=0.265 Line Spacing=0.187	Coordinate Frame=POS-TARG Pattern Orientation=20.67 Angle Between Sides=69.05 Center Pattern=false					(3-4)	
Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous				
	(2)	NGC185	RA: 00 39 10.7000 (9.7945833d) Dec: +48 26 37.80 (48.44383d) Equinox: J2000		V=10.0	Reference Frame: ICRS				
Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit
	1		(2) NGC185	ACS/WFC, ACCUM, WFC	F606W		POS TARG 0.3705,3 .0681	Prime + Parallel Group 1-2	30 Secs [=>33.0 Secs]	[1]
	2		ANY	WFC3/UVIS, ACCUM, UVIS	F606W	CR-SPLIT=NO		Prime + Parallel Group 1-2	30 Secs [=>30.0 Secs]	[1]
	3		(2) NGC185	ACS/WFC, ACCUM, WFC	F606W		POS TARG 0.4811,3 .003	Pattern 3-4 (1) Prime + Parallel Group 3-4	1240 Secs [=>1243.0 Secs (Pattern 1)] [=>1243.0 Secs (Pattern 2)] [=>1453.0 Secs (Pattern 3)] [=>1453.0 Secs (Pattern 4)]	[1] [2]
	4		ANY	WFC3/UVIS, ACCUM, UVIS	F606W	CR-SPLIT=NO		Pattern 3-4 (1) Prime + Parallel Group 3-4	1260 Secs [=>1270.0 Secs (Pattern 1)] [=>1260.0 Secs (Pattern 2)] [=>1463.0 Secs (Pattern 3)] [=>1463.0 Secs (Pattern 4)]	[1] [2]

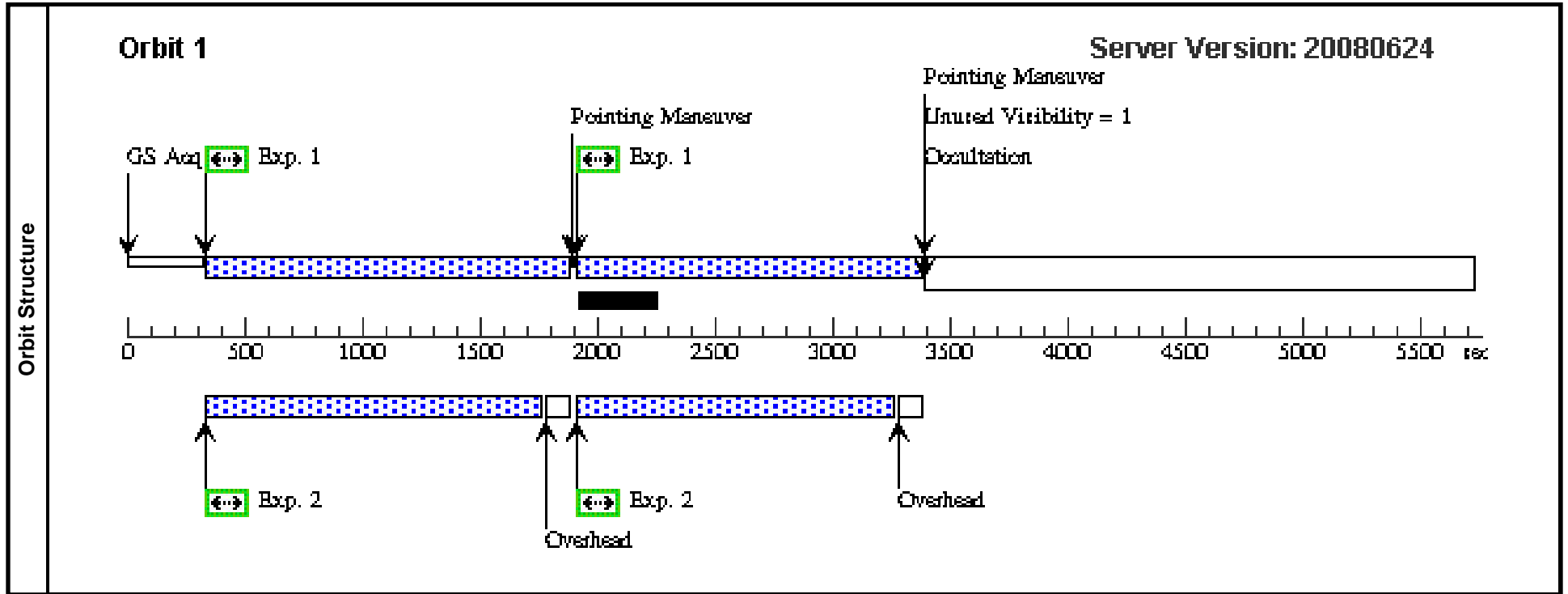


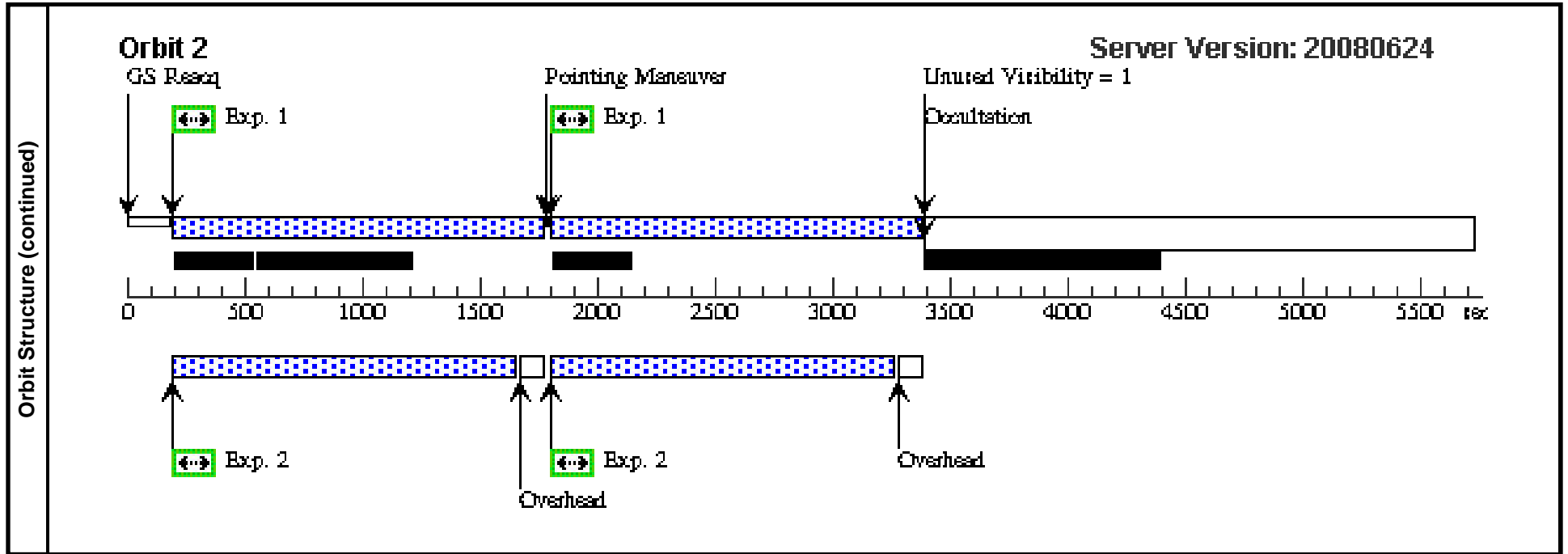


Proposal 11724 - Visit 21 - Direct Age Determination of the Local Group dE Galaxies NGC 147 and NGC 185

Tue Jul 22 01:45:11 GMT 2008

Visit	Proposal 11724, Visit 21, implementation Diagnostic Status: No Diagnostics Scientific Instruments: ACS/WFC, WFC3/UVIS Special Requirements: SAME ORIENT AS 16; AFTER 16 BY 0 D TO 40 D Comments: N185 F814W										
	Patterns	#	Primary Pattern			Secondary Pattern			Exposures		
		(1)	Pattern Type=ACS-WFC-DITHER-BOX Purpose=DITHER Number Of Points=4 Point Spacing=0.265 Line Spacing=0.187	Coordinate Frame=POS-TARG Pattern Orientation=20.67 Angle Between Sides=69.05 Center Pattern=false					(1-2)		
Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections		Fluxes	Miscellaneous				
	(2)	NGC185	RA: 00 39 10.7000 (9.7945833d) Dec: +48 26 37.80 (48.44383d) Equinox: J2000			V=10.0	Reference Frame: ICRS				
Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]		Orbit
	1	(2) NGC185	ACS/WFC, ACCUM, WFC	F814W				Pattern 1-2 (1) Prime + Parallel Group 1-2	1000 Secs		
									[==>1343.0 Secs (Pattern 1)]		[1]
									[==>1343.0 Secs (Pattern 2)]		
									[==>1453.0 Secs (Pattern 3)]		[2]
			[==>1453.0 Secs (Pattern 4)]								
2	ANY	WFC3/UVIS, ACCUM, UVIS	F814W		CR-SPLIT=NO		Pattern 1-2 (1) Prime + Parallel Group 1-2	1000 Secs			
								[==>1403.0 Secs (Pattern 1)]		[1]	
								[==>1353.0 Secs (Pattern 2)]			
								[==>1463.0 Secs (Pattern 3)]		[2]	
		[==>1463.0 Secs (Pattern 4)]									

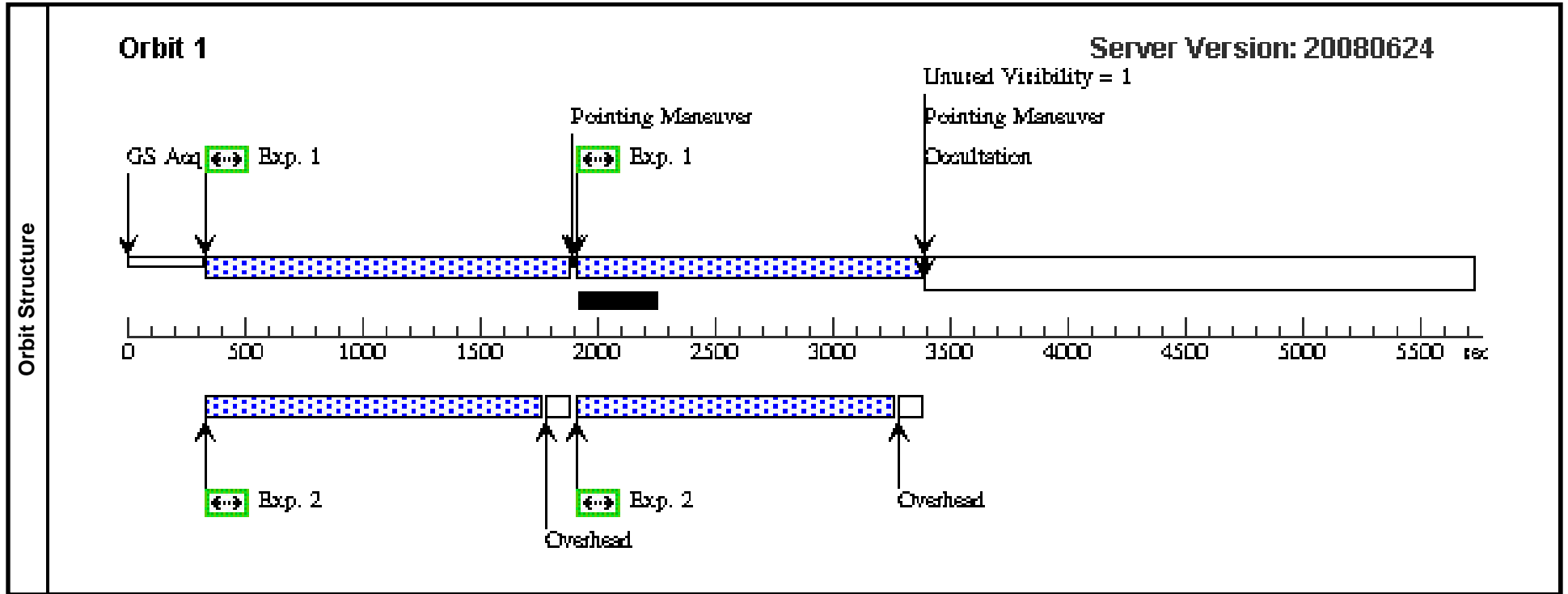


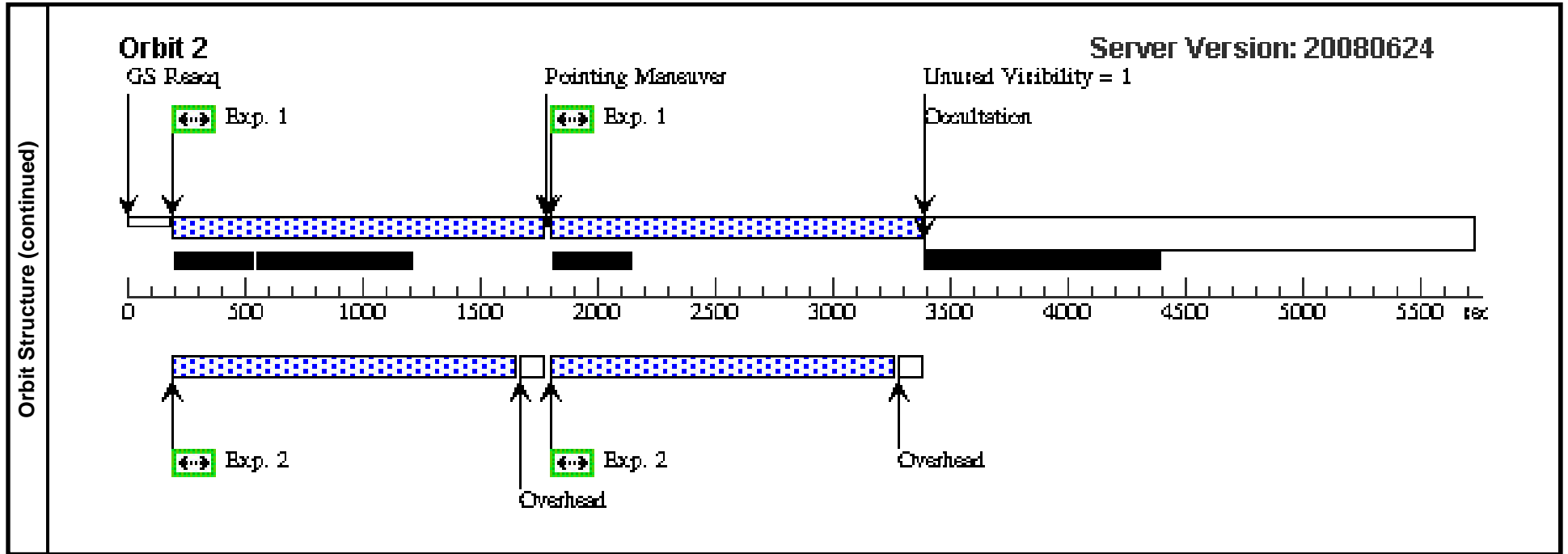


Proposal 11724 - Visit 22 - Direct Age Determination of the Local Group dE Galaxies NGC 147 and NGC 185

Tue Jul 22 01:45:12 GMT 2008

Visit	Proposal 11724, Visit 22, implementation Diagnostic Status: No Diagnostics Scientific Instruments: ACS/WFC, WFC3/UVIS Special Requirements: SAME ORIENT AS 16; AFTER 16 BY 0 D TO 40 D Comments: N185 F814W									
	Patterns	#	Primary Pattern			Secondary Pattern			Exposures	
		(1)	Pattern Type=ACS-WFC-DITHER-BOX Purpose=DITHER Number Of Points=4 Point Spacing=0.265 Line Spacing=0.187	Coordinate Frame=POS-TARG Pattern Orientation=20.67 Angle Between Sides=69.05 Center Pattern=false					(1-2)	
Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections		Fluxes	Miscellaneous			
	(2)	NGC185	RA: 00 39 10.7000 (9.7945833d) Dec: +48 26 37.80 (48.44383d) Equinox: J2000			V=10.0	Reference Frame: ICRS			
Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit
	1		(2) NGC185	ACS/WFC, ACCUM, WFC	F814W		POS TARG -0.2537, -0.0334	Pattern 1-2 (1) Prime + Parallel Group 1-2	1000 Secs [==>1343.0 Secs (Pattern 1)] [==>1343.0 Secs (Pattern 2)] [==>1453.0 Secs (Pattern 3)] [==>1453.0 Secs (Pattern 4)]	[1] [2]
	2		ANY	WFC3/UVIS, ACCUM, UVIS	F814W	CR-SPLIT=NO		Pattern 1-2 (1) Prime + Parallel Group 1-2	1000 Secs [==>1403.0 Secs (Pattern 1)] [==>1353.0 Secs (Pattern 2)] [==>1463.0 Secs (Pattern 3)] [==>1463.0 Secs (Pattern 4)]	[1] [2]

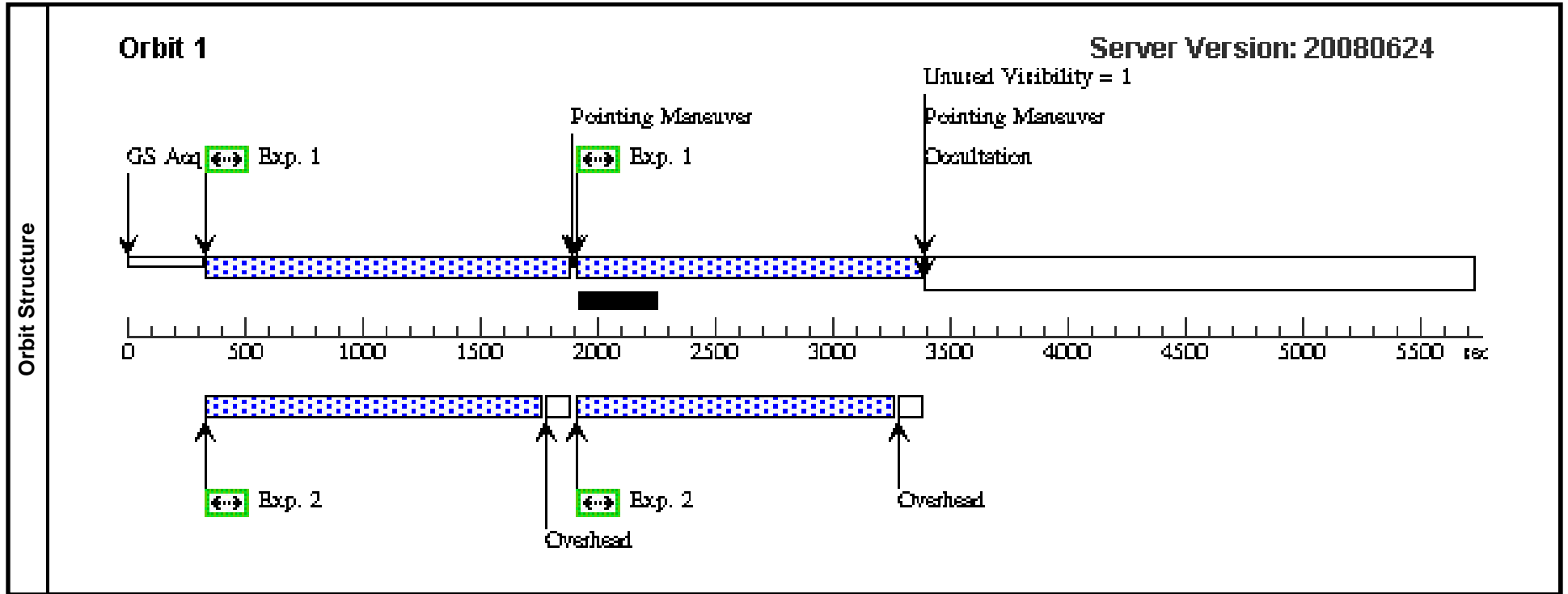


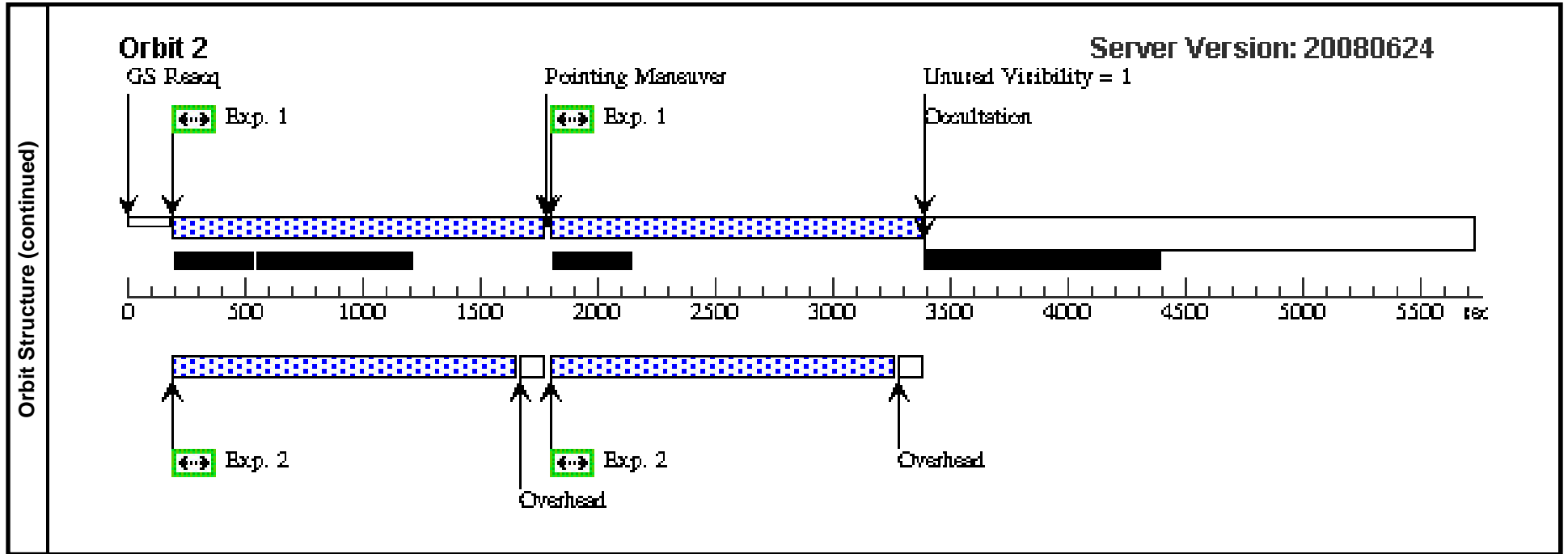


Proposal 11724 - Visit 23 - Direct Age Determination of the Local Group dE Galaxies NGC 147 and NGC 185

Tue Jul 22 01:45:12 GMT 2008

Visit										
Proposal 11724, Visit 23, implementation Diagnostic Status: No Diagnostics Scientific Instruments: ACS/WFC, WFC3/UVIS Special Requirements: SAME ORIENT AS 16; AFTER 16 BY 0 D TO 40 D Comments: N185 F814W										
Patterns	#	Primary Pattern			Secondary Pattern			Exposures		
	(1)	Pattern Type=ACS-WFC-DITHER-BOX Purpose=DITHER Number Of Points=4 Point Spacing=0.265 Line Spacing=0.187	Coordinate Frame=POS-TARG Pattern Orientation=20.67 Angle Between Sides=69.05 Center Pattern=false					(1-2)		
Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections		Fluxes	Miscellaneous			
	(2)	NGC185	RA: 00 39 10.7000 (9.7945833d) Dec: +48 26 37.80 (48.44383d) Equinox: J2000			V=10.0	Reference Frame: ICRS			
Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit
	1		(2) NGC185	ACS/WFC, ACCUM, WFC	F814W		POS TARG -0.0245, 0.2351	Pattern 1-2 (1) Prime + Parallel Group 1-2	1000 Secs [==>1343.0 Secs (Pattern 1)] [==>1343.0 Secs (Pattern 2)] [==>1453.0 Secs (Pattern 3)] [==>1453.0 Secs (Pattern 4)]	[1] [2]
	2		ANY	WFC3/UVIS, ACCUM, UVIS	F814W	CR-SPLIT=NO		Pattern 1-2 (1) Prime + Parallel Group 1-2	1000 Secs [==>1403.0 Secs (Pattern 1)] [==>1353.0 Secs (Pattern 2)] [==>1463.0 Secs (Pattern 3)] [==>1463.0 Secs (Pattern 4)]	[1] [2]

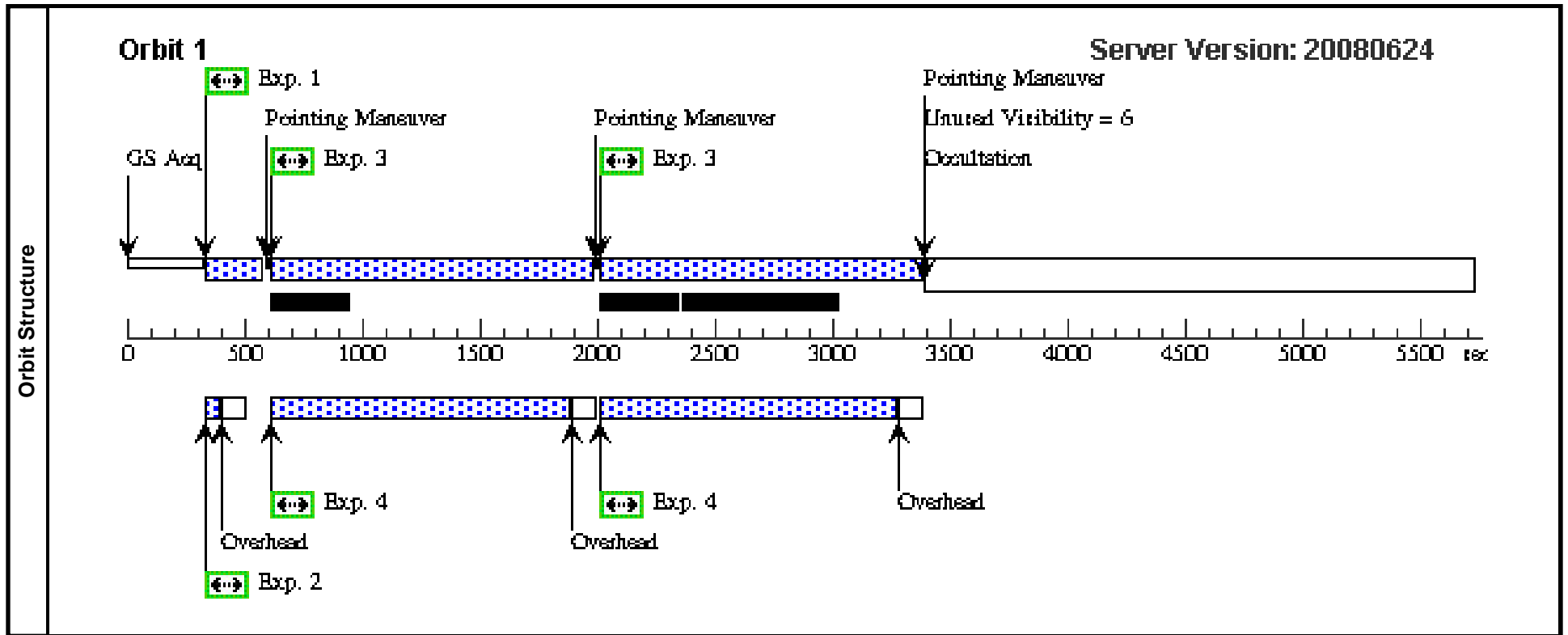


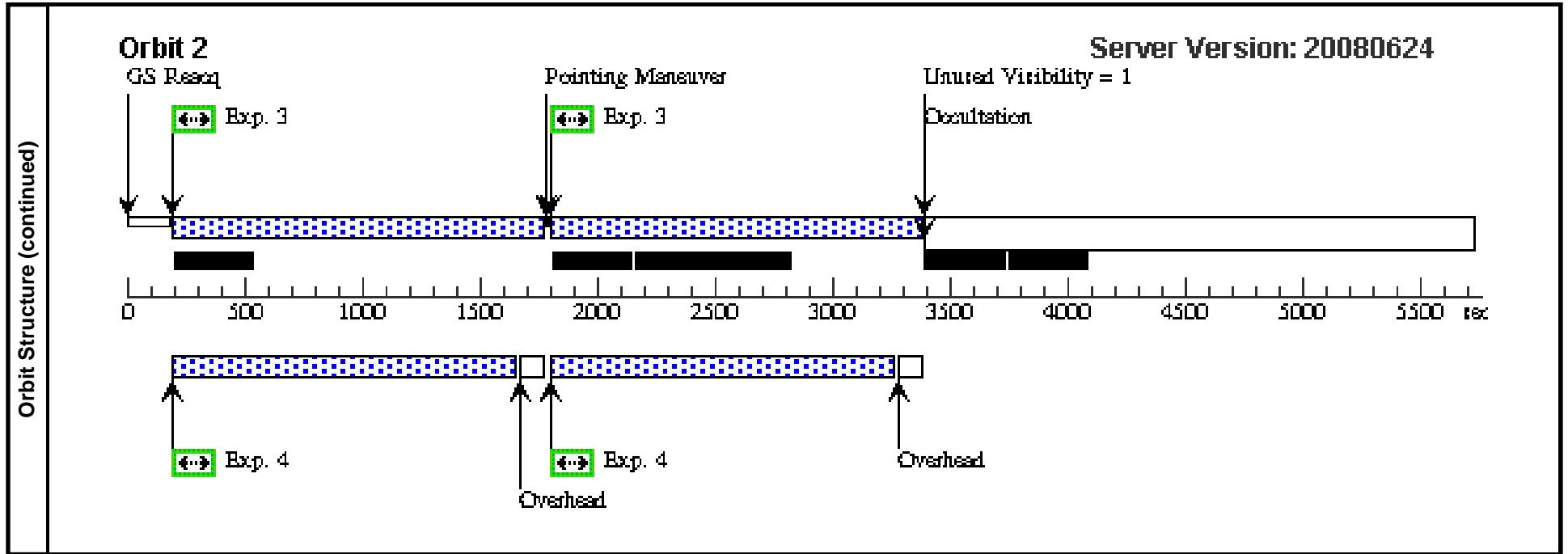


Proposal 11724 - Visit 24 - Direct Age Determination of the Local Group dE Galaxies NGC 147 and NGC 185

Tue Jul 22 01:45:12 GMT 2008

Visit	Proposal 11724, Visit 24, implementation Diagnostic Status: No Diagnostics Scientific Instruments: ACS/WFC, WFC3/UVIS Special Requirements: SAME ORIENT AS 16; AFTER 16 BY 0 D TO 40 D Comments: N185 F814W + short1									
	Patterns	#	Primary Pattern			Secondary Pattern			Exposures	
		(1)	Pattern Type=ACS-WFC-DITHER-BOX Purpose=DITHER Number Of Points=4 Point Spacing=0.265 Line Spacing=0.187	Coordinate Frame=POS-TARG Pattern Orientation=20.67 Angle Between Sides=69.05 Center Pattern=false					(3-4)	
Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous				
	(2)	NGC185	RA: 00 39 10.7000 (9.7945833d) Dec: +48 26 37.80 (48.44383d) Equinox: J2000		V=10.0	Reference Frame: ICRS				
Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit
	1		(2) NGC185	ACS/WFC, ACCUM, WFC	F814W			Prime + Parallel Group 1-2	30 Secs [=>33.0 Secs]	[1]
	2		ANY	WFC3/UVIS, ACCUM, UVIS	F814W	CR-SPLIT=NO		Prime + Parallel Group 1-2	30 Secs [=>30.0 Secs]	[1]
	3		(2) NGC185	ACS/WFC, ACCUM, WFC	F814W		POS TARG -0.2512, -0.0061	Pattern 3-4 (1) Prime + Parallel Group 3-4	1240 Secs [=>1243.0 Secs (Pattern 1)] [=>1243.0 Secs (Pattern 2)] [=>1453.0 Secs (Pattern 3)] [=>1453.0 Secs (Pattern 4)]	[1] [2]
	4		ANY	WFC3/UVIS, ACCUM, UVIS	F814W	CR-SPLIT=NO		Pattern 3-4 (1) Prime + Parallel Group 3-4	1260 Secs [=>1270.0 Secs (Pattern 1)] [=>1260.0 Secs (Pattern 2)] [=>1463.0 Secs (Pattern 3)] [=>1463.0 Secs (Pattern 4)]	[1] [2]

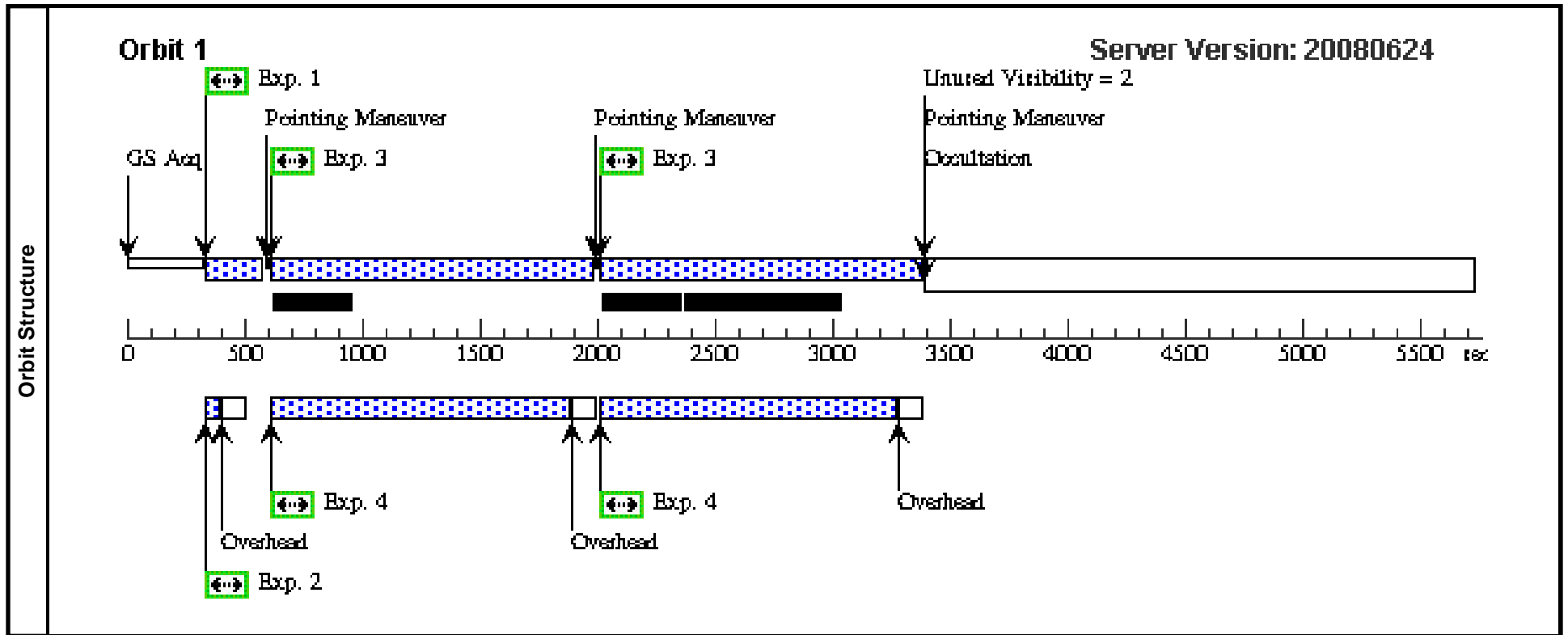


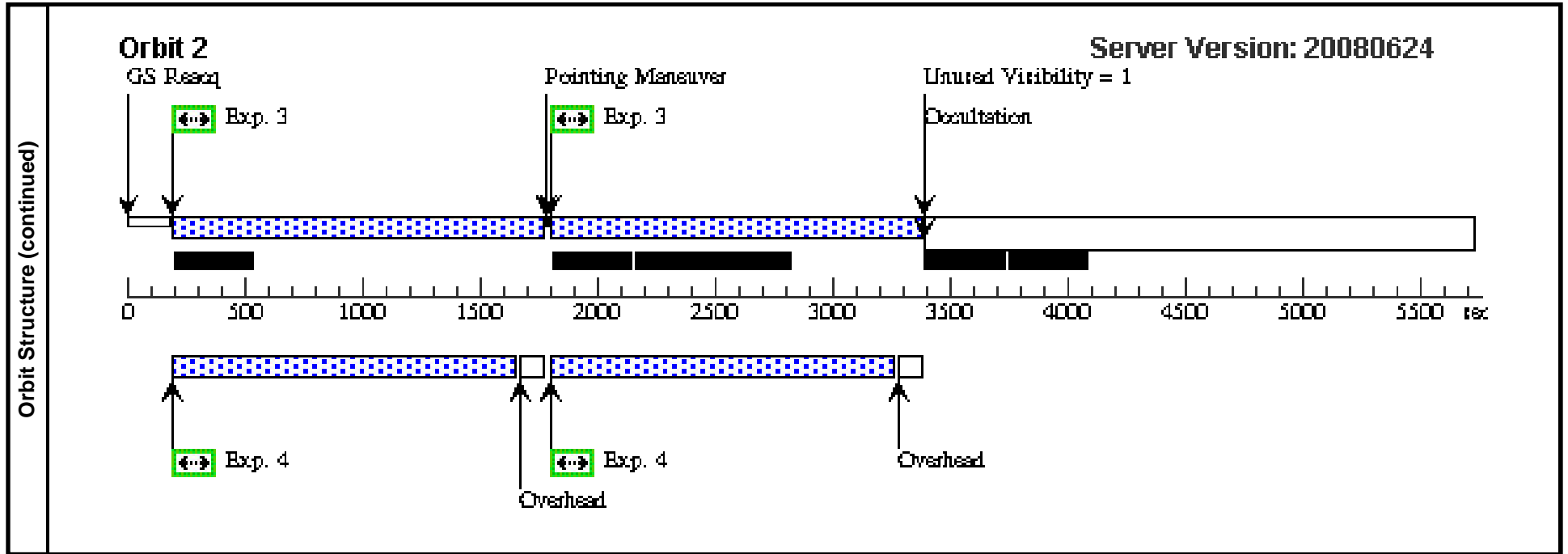


Proposal 11724 - Visit 25 - Direct Age Determination of the Local Group dE Galaxies NGC 147 and NGC 185

Tue Jul 22 01:45:13 GMT 2008

Visit	Proposal 11724, Visit 25, implementation Diagnostic Status: No Diagnostics Scientific Instruments: ACS/WFC, WFC3/UVIS Special Requirements: SAME ORIENT AS 16; AFTER 16 BY 0 D TO 40 D Comments: N185 F814W + short2									
	Patterns	#	Primary Pattern			Secondary Pattern			Exposures	
		(1)	Pattern Type=ACS-WFC-DITHER-BOX Purpose=DITHER Number Of Points=4 Point Spacing=0.265 Line Spacing=0.187	Coordinate Frame=POS-TARG Pattern Orientation=20.67 Angle Between Sides=69.05 Center Pattern=false					(3-4)	
Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous				
	(2)	NGC185	RA: 00 39 10.7000 (9.7945833d) Dec: +48 26 37.80 (48.44383d) Equinox: J2000		V=10.0	Reference Frame: ICRS				
Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit
	1		(2) NGC185	ACS/WFC, ACCUM, WFC	F814W		POS TARG 0.1235,0.0841	Prime + Parallel Group 1-2	30 Secs [=>33.0 Secs]	[1]
	2		ANY	WFC3/UVIS, ACCUM, UVIS	F814W	CR-SPLIT=NO		Prime + Parallel Group 1-2	30 Secs [=>30.0 Secs]	[1]
	3		(2) NGC185	ACS/WFC, ACCUM, WFC	F814W		POS TARG 0.2603,2.9731	Pattern 3-4 (1)	1240 Secs	
								Prime + Parallel Group 3-4	[=>1243.0 Secs (Pattern 1)]	[1]
									[=>1243.0 Secs (Pattern 2)]	
									[=>1453.0 Secs (Pattern 3)]	[2]
									[=>1453.0 Secs (Pattern 4)]	
4		ANY	WFC3/UVIS, ACCUM, UVIS	F814W	CR-SPLIT=NO		Pattern 3-4 (1)	1260 Secs		
							Prime + Parallel Group 3-4	[=>1270.0 Secs (Pattern 1)]	[1]	
								[=>1260.0 Secs (Pattern 2)]		
								[=>1463.0 Secs (Pattern 3)]		
								[=>1463.0 Secs (Pattern 4)]	[2]	

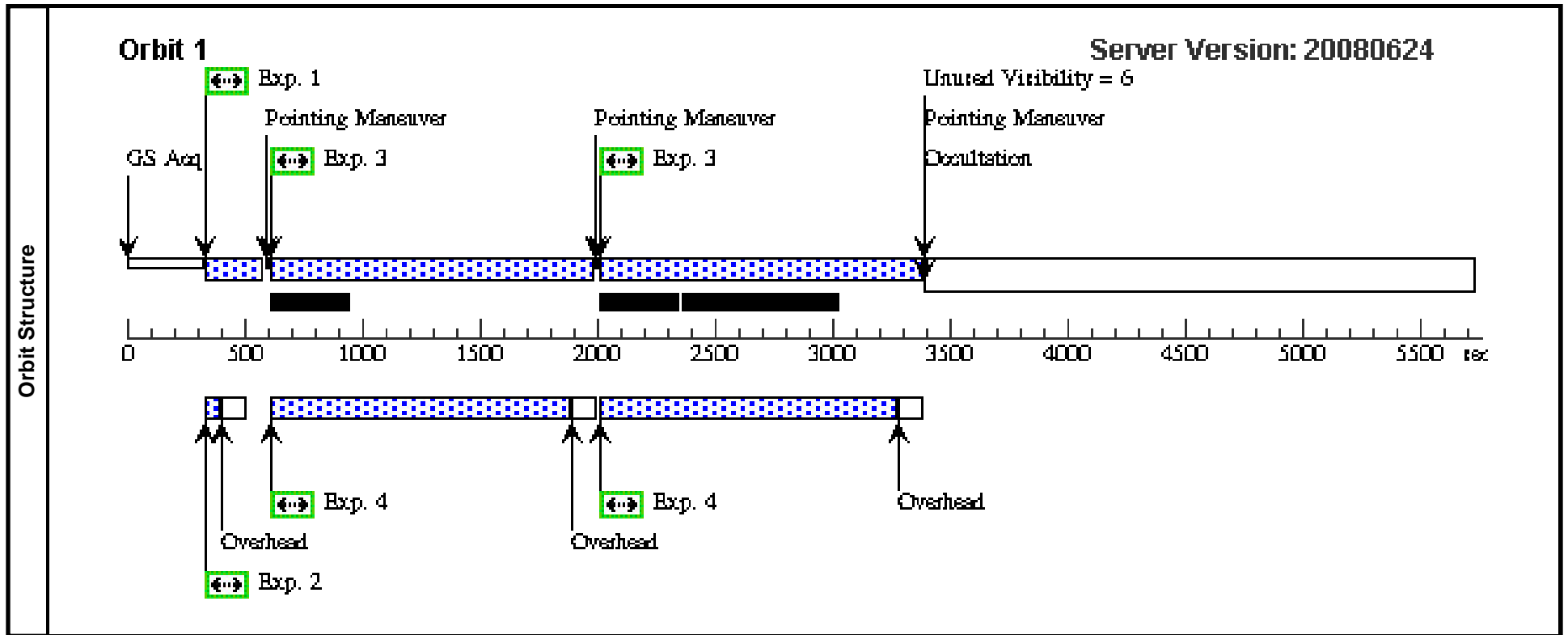


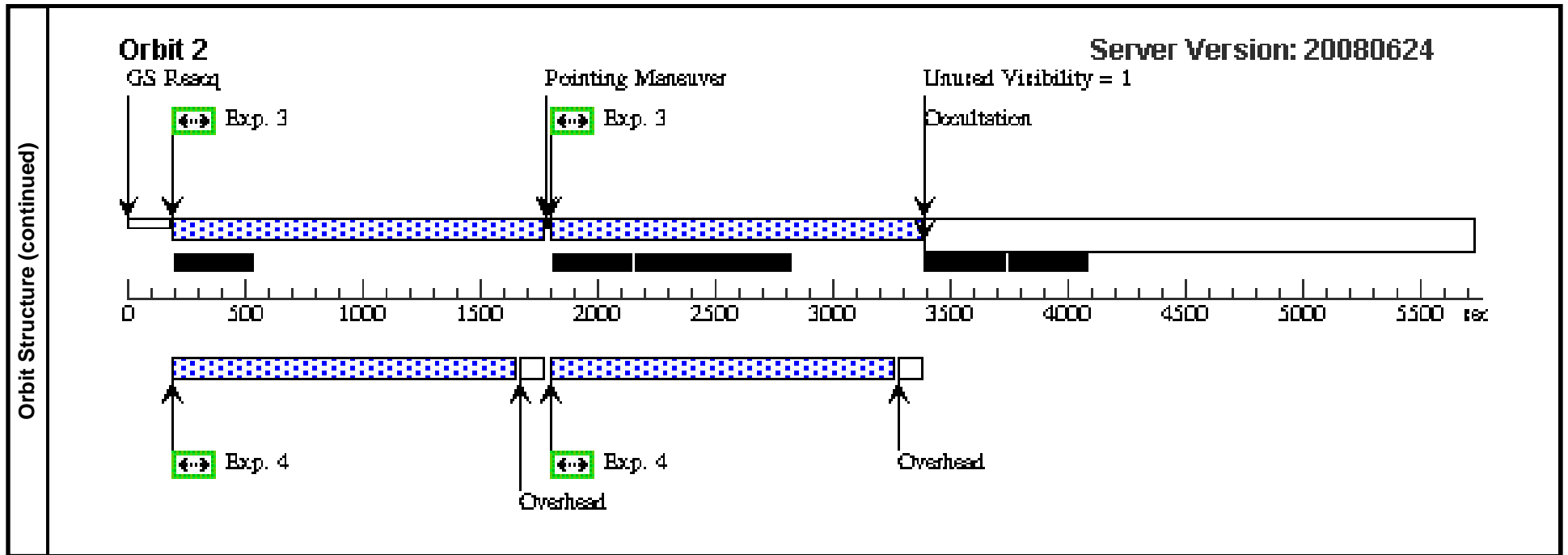


Proposal 11724 - Visit 26 - Direct Age Determination of the Local Group dE Galaxies NGC 147 and NGC 185

Tue Jul 22 01:45:13 GMT 2008

Visit	Proposal 11724, Visit 26, implementation Diagnostic Status: No Diagnostics Scientific Instruments: ACS/WFC, WFC3/UVIS Special Requirements: SAME ORIENT AS 16; AFTER 16 BY 0 D TO 40 D Comments: N185 F814W + short3									
	Patterns	#	Primary Pattern			Secondary Pattern			Exposures	
		(1)	Pattern Type=ACS-WFC-DITHER-BOX Purpose=DITHER Number Of Points=4 Point Spacing=0.265 Line Spacing=0.187	Coordinate Frame=POS-TARG Pattern Orientation=20.67 Angle Between Sides=69.05 Center Pattern=false					(3-4)	
Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous				
	(2)	NGC185	RA: 00 39 10.7000 (9.7945833d) Dec: +48 26 37.80 (48.44383d) Equinox: J2000		V=10.0	Reference Frame: ICRS				
Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit
	1		(2) NGC185	ACS/WFC, ACCUM, WFC	F814W		POS TARG 0.247,2.984	Prime + Parallel Group 1-2	30 Secs [=>33.0 Secs]	[1]
	2		ANY	WFC3/UVIS, ACCUM, UVIS	F814W	CR-SPLIT=NO		Prime + Parallel Group 1-2	30 Secs [=>30.0 Secs]	[1]
	3		(2) NGC185	ACS/WFC, ACCUM, WFC	F814W		POS TARG 0.4802,3.0007	Pattern 3-4 (1) Prime + Parallel Group 3-4	1240 Secs [=>1243.0 Secs (Pattern 1)] [=>1243.0 Secs (Pattern 2)] [=>1453.0 Secs (Pattern 3)] [=>1453.0 Secs (Pattern 4)]	[1] [2]
	4		ANY	WFC3/UVIS, ACCUM, UVIS	F814W	CR-SPLIT=NO		Pattern 3-4 (1) Prime + Parallel Group 3-4	1260 Secs [=>1270.0 Secs (Pattern 1)] [=>1260.0 Secs (Pattern 2)] [=>1463.0 Secs (Pattern 3)] [=>1463.0 Secs (Pattern 4)]	[1] [2]





Proposal 11724 - Visit 27 - Direct Age Determination of the Local Group dE Galaxies NGC 147 and NGC 185

Tue Jul 22 01:45:13 GMT 2008

Visit	Proposal 11724, Visit 27, implementation Diagnostic Status: No Diagnostics Scientific Instruments: ACS/WFC, WFC3/UVIS Special Requirements: SAME ORIENT AS 16; AFTER 16 BY 0 D TO 40 D Comments: <i>NI85 F814W (1orbit) + short4</i>									
	Patterns	#	Primary Pattern			Secondary Pattern			Exposures	
		(2)	Pattern Type=ACS-WFC-DITHER-LINE Purpose=DITHER Number Of Points=2 Point Spacing=3.011 Line Spacing=	Coordinate Frame=POS-TARG Pattern Orientation=85.28 Angle Between Sides= Center Pattern=false					(3-4)	
Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous				
	(2)	NGC185	RA: 00 39 10.7000 (9.7945833d) Dec: +48 26 37.80 (48.44383d) Equinox: J2000		V=10.0	Reference Frame: ICRS				
Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit
	1		(2) NGC185	ACS/WFC, ACCUM, WFC	F814W		POS TARG 0.3705,3 .0681	Prime + Parallel Group 1-2	30 Secs [=>33.0 Secs]	[1]
	2		ANY	WFC3/UVIS, ACCUM, UVIS	F814W	CR-SPLIT=NO		Prime + Parallel Group 1-2	30 Secs [=>30.0 Secs]	[1]
	3		(2) NGC185	ACS/WFC, ACCUM, WFC	F814W		POS TARG 0.2497,2 .7265	Pattern 3-4 (2) Prime + Parallel Group 3-4	1240 Secs [=>1243.0 Secs (Pattern 1)] [=>1243.0 Secs (Pattern 2)]	[1]
	4		ANY	WFC3/UVIS, ACCUM, UVIS	F814W	CR-SPLIT=NO		Pattern 3-4 (2) Prime + Parallel Group 3-4	1260 Secs [=>1270.0 Secs (Pattern 1)] [=>1260.0 Secs (Pattern 2)]	[1]

