



12238 - Supermassive Star Clusters in Supergiant Galaxies: Tracing the Enrichment of the Earliest Stellar Systems

Cycle: 18, Proposal Category: GO

(Availability Mode: SUPPORTED)

INVESTIGATORS

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VISITS

<i>Visit</i>	<i>Targets used in Visit</i>	<i>Configurations used in Visit</i>	<i>Orbits Used</i>	<i>Last Orbit Planner Run</i>	<i>OP Current with Visit?</i>
01	(5) NGC-6166	ACS/WFC WFC3/UVIS	2	08-Jun-2011 21:01:14.0	yes
03	(8) NGC-7720	ACS/WFC WFC3/UVIS	2	08-Jun-2011 21:01:21.0	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>
04	(8) NGC-7720	ACS/WFC WFC3/UVIS	2	08-Jun-2011 21:01:27.0	yes
06	(9) UGC-09799	ACS/WFC WFC3/UVIS	2	08-Jun-2011 21:01:33.0	yes
07	(10) UGC-10143	ACS/WFC WFC3/UVIS	4	08-Jun-2011 21:01:41.0	yes
08	(10) UGC-10143	ACS/WFC WFC3/UVIS	2	08-Jun-2011 21:01:48.0	yes
13	(5) NGC-6166	ACS/WFC WFC3/UVIS	2	08-Jun-2011 21:01:54.0	yes
09	(12) ESO383-G076	ACS/WFC WFC3/UVIS	4	08-Jun-2011 21:02:04.0	yes
10	(13) ESO444-G046	ACS/WFC WFC3/UVIS	4	08-Jun-2011 21:02:13.0	yes
14	(9) UGC-09799	ACS/WFC WFC3/UVIS	3	08-Jun-2011 21:02:21.0	yes
15	(13) ESO444-G046	ACS/WFC WFC3/UVIS	4	08-Jun-2011 21:02:31.0	yes
12	(14) ESO509-G008	ACS/WFC WFC3/UVIS	4	08-Jun-2011 21:02:40.0	yes

35 Total Orbits Used

ABSTRACT

The cD-type Brightest Cluster Galaxies contain the richest globular cluster systems (GCSs) that exist. The wealth of results gathered from previous HST imaging programs in many smaller galaxies show that GCSs are powerful and unique tracers that link to origin and evolution of structure in two directions simultaneously: one direction is inward to the structure of the protoglobular clouds, star formation in the densest known conditions, and their chemical enrichment history. The other direction is outward to constraining early galaxy formation history, the nature of the pregalactic dwarfs, or the spatial and dynamic structure of the halo. But we have not yet tapped the vast mine of GCS data waiting for exploitation in the most luminous

galaxies of all, the cDs. Surprisingly, we know little about these systems beyond the globular cluster populations in the nearby cDs M87 (Virgo) and NGC 1399 (Fornax), and these two cases no longer provide adequate tests of the new phenomena now being uncovered, such as the correlation between GC mass and metallicity, the strikingly different formation efficiencies of metal-poor and metal-rich clusters, the galaxy-to-galaxy differences in GC mass distribution, and connections to Ultra-Compact Dwarfs and dE nuclei.

We propose to image 7 cD-type systems within 200 Mpc that are representative of the very biggest galaxies known ($M_V < -23$). These lie in far richer Abell-cluster environments than we could ever probe in Virgo, Fornax, or nearer systems. We will use ACS/WFC and WFC3 to image their GCSs down to the turnover point of the GC luminosity function, using the B and I filters for an optimal combination of exposure time, field size, and metallicity sensitivity. Our complete survey will produce luminosities, metallicities, and spatial distribution functions for more than 35,000 GCs, the largest GC database in existence and an order of magnitude larger than even the recent Virgo Cluster Survey. The legacy value of our survey will supply a rich resource for a wide array of other GC science and the formation histories of these unique systems.

OBSERVING DESCRIPTION

Imaging with ACS/WFC will be carried out centered on 7 cD-type supergiant galaxies. Filters used are the broadband F475W, F814W. Coordinated Parallel imaging with WFC3 in the same filters will be done in each field. The primary scientific target is deep imaging of the globular cluster populations around each galaxy.

Proposal 12238 - Visit 01 - Supermassive Star Clusters in Supergiant Galaxies: Tracing the Enrichment of the Earliest Stellar Systems

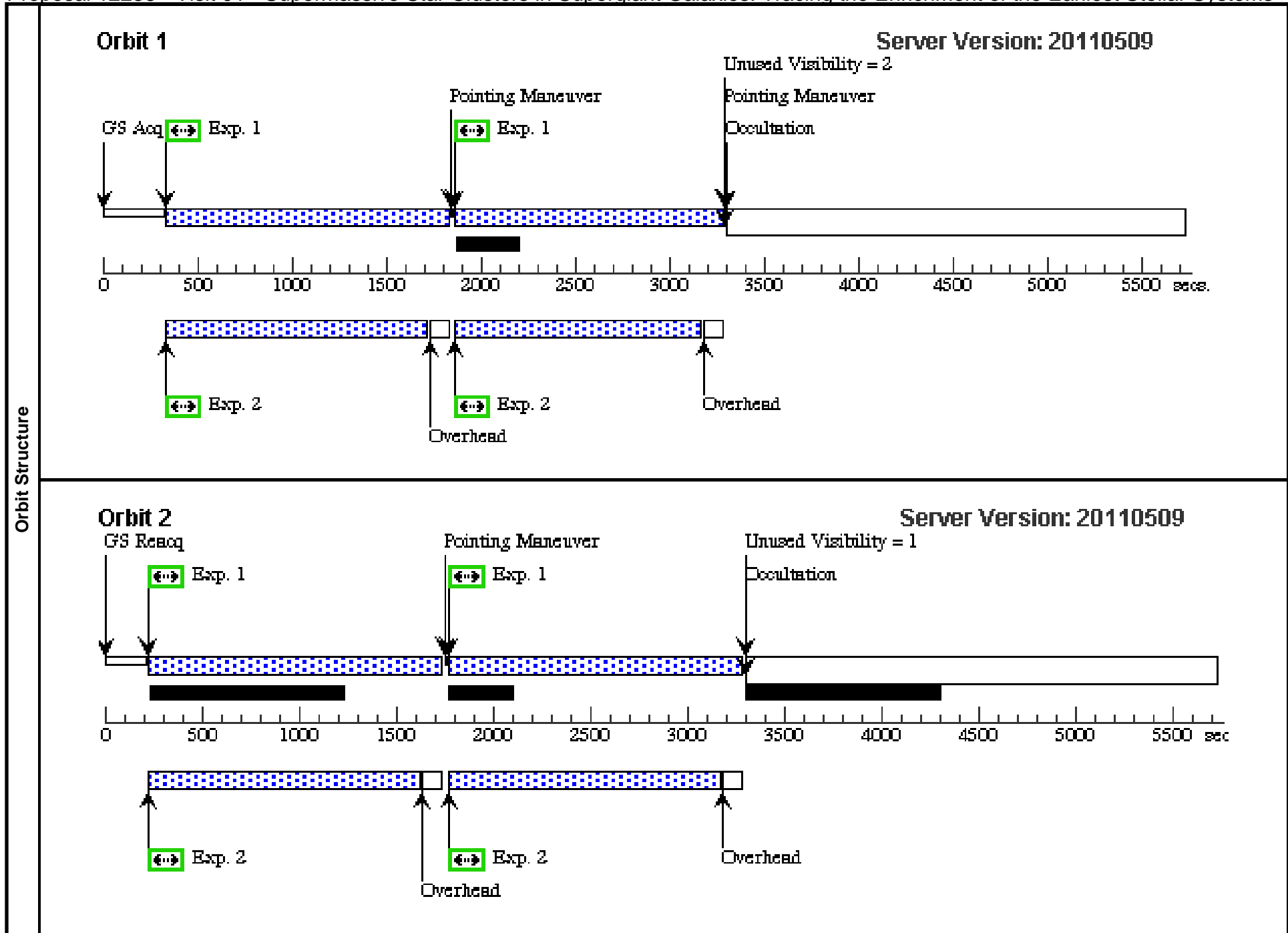
Thu Jun 09 01:02:47 GMT 2011

Visit	Proposal 12238, Visit 01, scheduling		
	Diagnostic Status: No Diagnostics		
	Scientific Instruments: WFC3/UVIS, ACS/WFC		
	Special Requirements: ORIENT 61D TO 79 D; ORIENT 113D TO 131 D		

Patterns	#	Primary Pattern	Secondary Pattern	Exposures
	(1)	Pattern Type=ACS-WFC-DITHER-BOX Purpose=DITHER Number Of Points=4 Point Spacing=0.264 Line Spacing=0.185	Coordinate Frame=POS-TARG Pattern Orientation=20.86 Angle Between Sides=69.07 Center Pattern=false	

Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
	(5)	NGC-6166	RA: 16 28 38.3790 (247.1599125d) Dec: +39 32 31.22 (39.54201d) Equinox: J2000		V=23.6+/-0.1	Reference Frame: NED
<i>Comments: This object was generated by the targetselector and retrieved from the NED database.</i>						

Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit
		1	(5) NGC-6166	ACS/WFC, ACCUM, WFC	F475W				Pattern 1, Exps 1-2 in Visit 01 (1)	1294 Secs
Prime + Parallel Group 1-2 in Pattern 1, Exps 1-2 in Visit 01									[==>(Pattern 1)]	[1]
									[==>(Pattern 2)]	
									[==>1391.0 Secs (Pattern 3)]	[2]
								[==>1391.0 Secs (Pattern 4)]		
	2	(5) NGC-6166	WFC3/UVIS, ACCUM, UVIS	F475W				Pattern 1, Exps 1-2 in Visit 01 (1)	1290 Secs	
								Prime + Parallel Group 1-2 in Pattern 1, Exps 1-2 in Visit 01	[==>1354.0 Secs (Pattern 1)]	[1]
									[==>1304.0 Secs (Pattern 2)]	
									[==>1401.0 Secs (Pattern 3)]	[2]
								[==>1401.0 Secs (Pattern 4)]		



Proposal 12238 - Visit 03 - Supermassive Star Clusters in Supergiant Galaxies: Tracing the Enrichment of the Earliest Stellar Systems

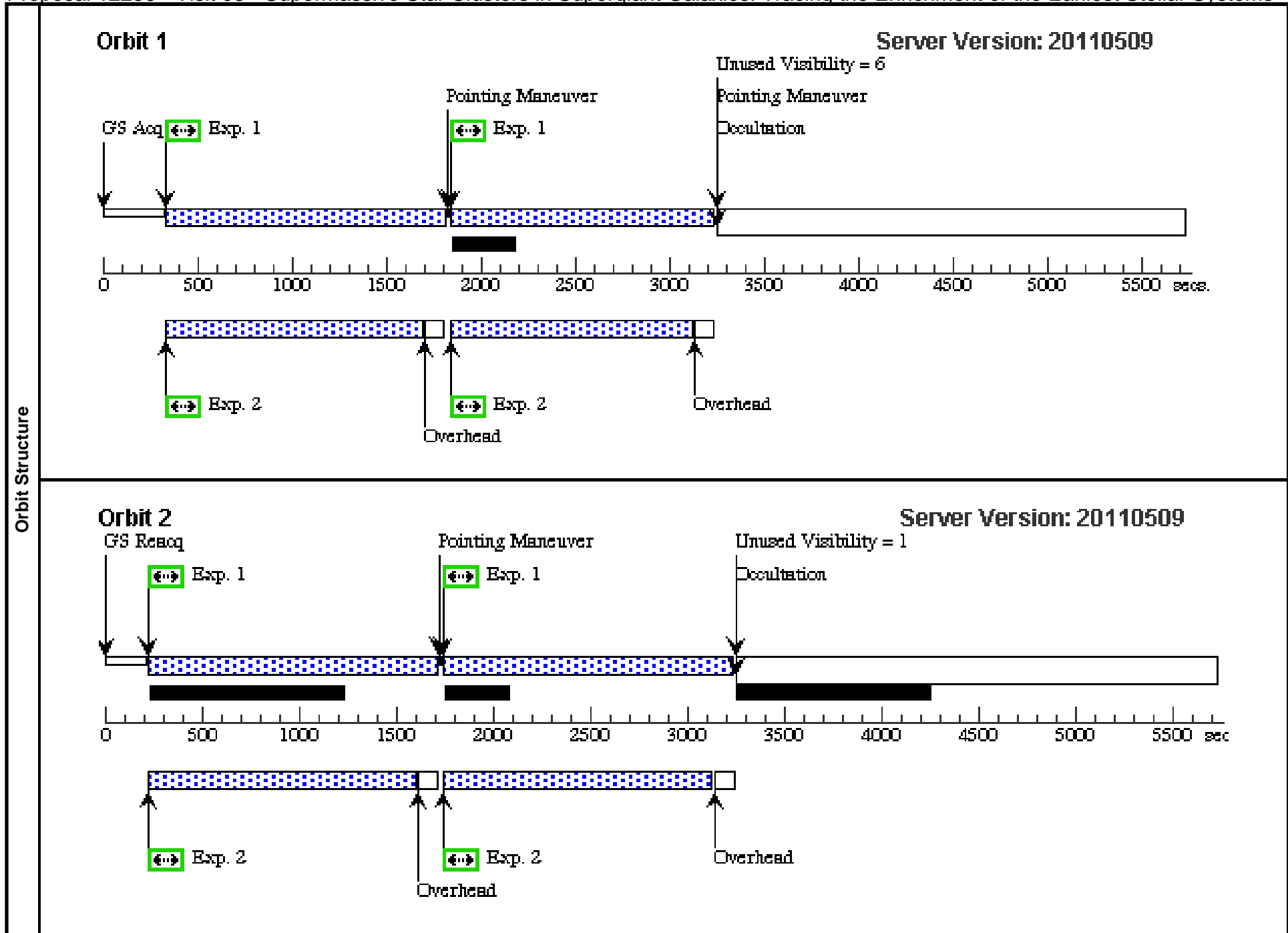
Thu Jun 09 01:02:48 GMT 2011

Visit	Proposal 12238, Visit 03, scheduled		
	Diagnostic Status: No Diagnostics		
	Scientific Instruments: WFC3/UVIS, ACS/WFC		
	Special Requirements: ORIENT 144D TO 185 D; ORIENT 252D TO 325 D		

Patterns	#	Primary Pattern	Secondary Pattern	Exposures
	(1)	Pattern Type=ACS-WFC-DITHER-BOX Purpose=DITHER Number Of Points=4 Point Spacing=0.264 Line Spacing=0.185	Coordinate Frame=POS-TARG Pattern Orientation=20.86 Angle Between Sides=69.07 Center Pattern=false	

Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
	(8)	NGC-7720	RA: 23 38 32.3100 (354.6346250d) Dec: +27 01 23.80 (27.02328d) Equinox: J2000		V=23.6+/-0.1	Reference Frame: NED
<i>Comments: This object was generated by the targetselector and retrieved from the NED database.</i>						

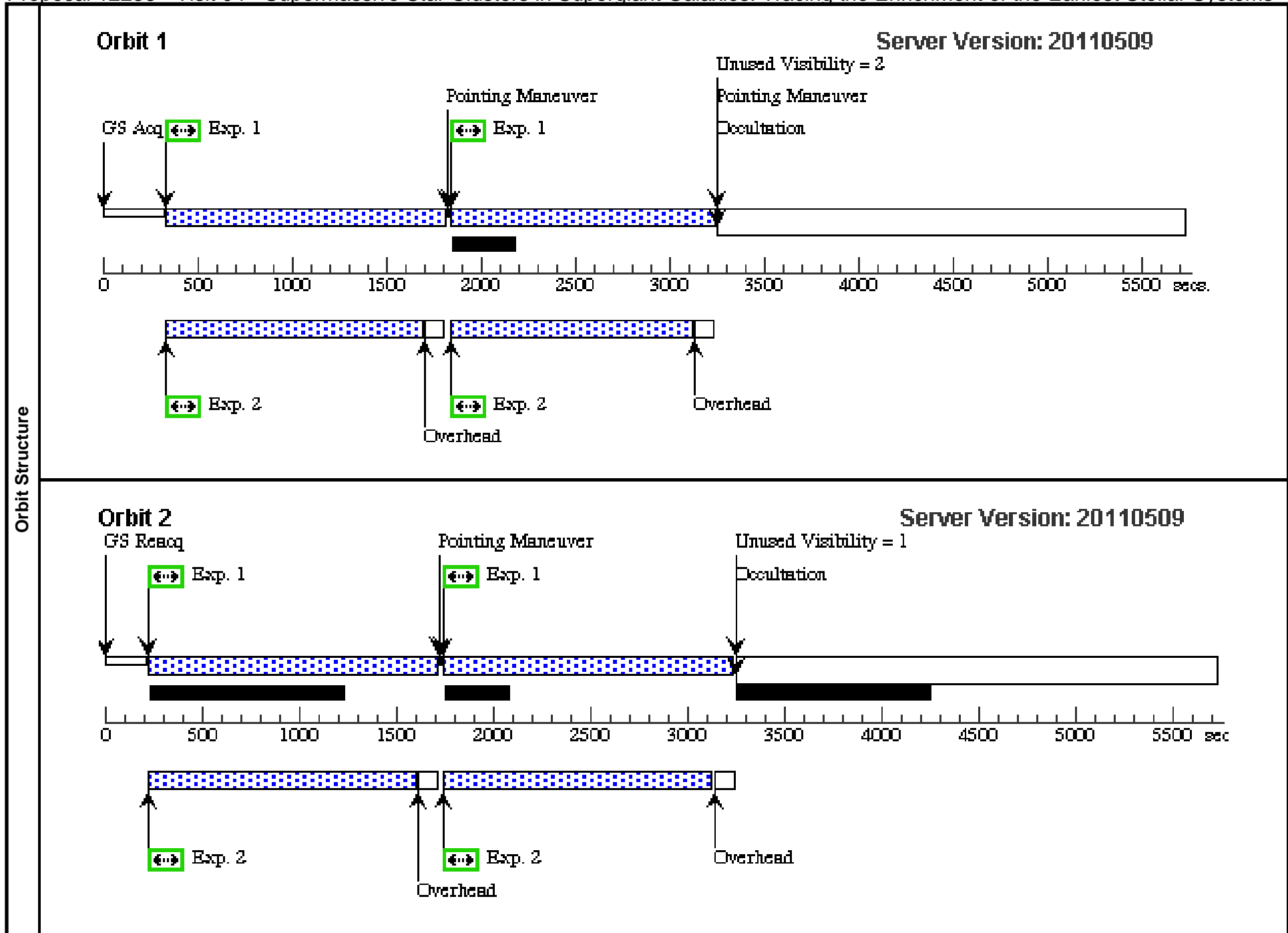
Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit
		1	(8) NGC-7720	ACS/WFC, ACCUM, WFC	F814W				Pattern 1, Exps 1-2 in Visit 03 (1)	1270 Secs
Prime + Parallel Group 1-2 in Pattern 1, Exps 1-2 in Visit 03									[==>(Pattern 1)]	[1]
2		(8) NGC-7720	WFC3/UVIS, ACCUM, UVIS	F814W				Pattern 1, Exps 1-2 in Visit 03 (1)	[==>(Pattern 2)]	[2]
								Prime + Parallel Group 1-2 in Pattern 1, Exps 1-2 in Visit 03	[==>1369.0 Secs (Pattern 3)]	[2]
	2	(8) NGC-7720	WFC3/UVIS, ACCUM, UVIS	F814W				Pattern 1, Exps 1-2 in Visit 03 (1)	[==>1369.0 Secs (Pattern 4)]	
								Prime + Parallel Group 1-2 in Pattern 1, Exps 1-2 in Visit 03	[==>1330.0 Secs (Pattern 1)]	[1]
									[==>1280.0 Secs (Pattern 2)]	[2]
									[==>1379.0 Secs (Pattern 3)]	[2]
									[==>1379.0 Secs (Pattern 4)]	



Proposal 12238 - Visit 04 - Supermassive Star Clusters in Supergiant Galaxies: Tracing the Enrichment of the Earliest Stellar Systems

Thu Jun 09 01:02:49 GMT 2011

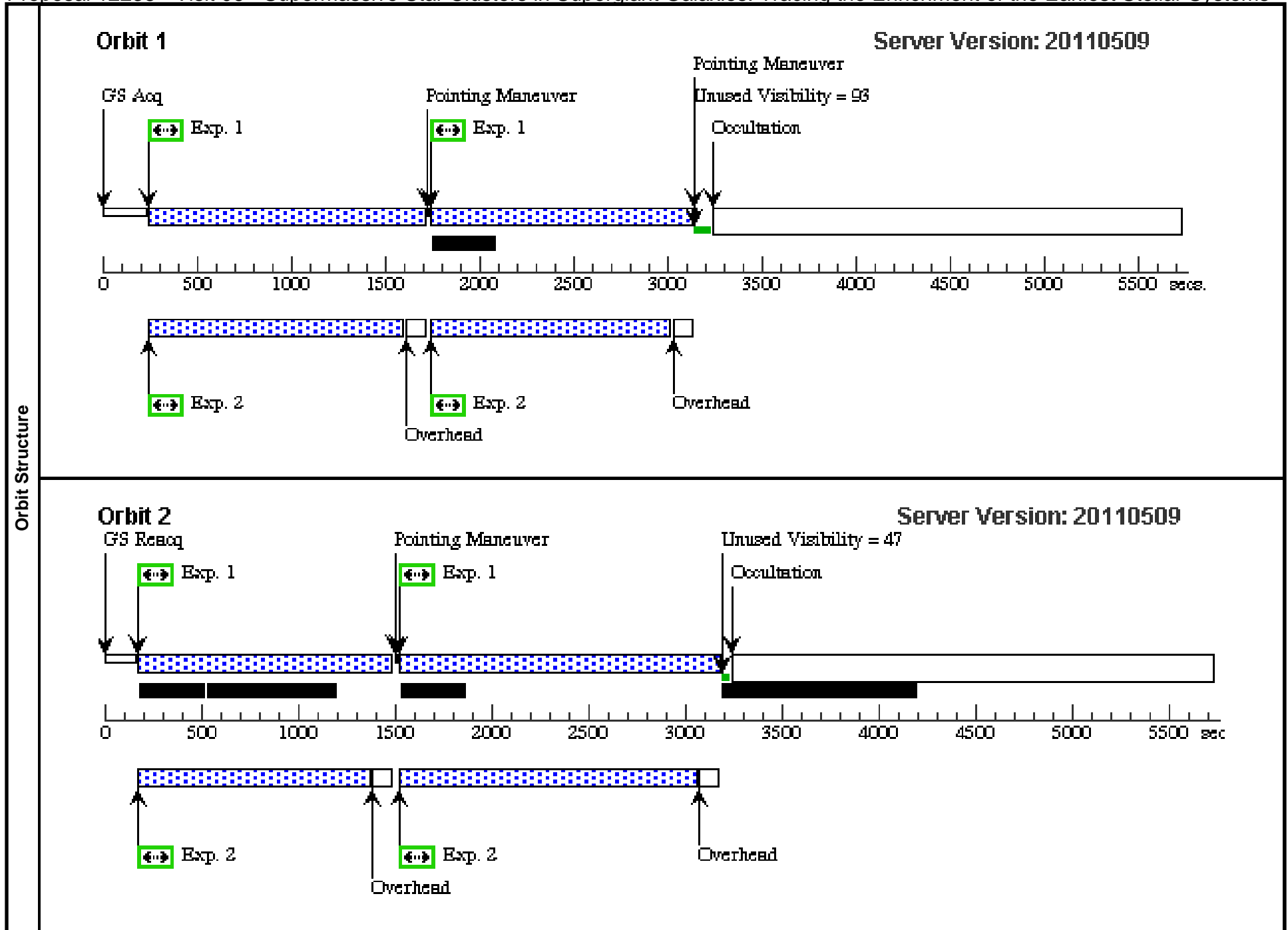
Visit	Proposal 12238, Visit 04, scheduled Diagnostic Status: No Diagnostics Scientific Instruments: WFC3/UVIS, ACS/WFC Special Requirements: SAME ORIENT AS 03									
	Patterns	#	Primary Pattern	Secondary Pattern	Exposures					
	(1)	Pattern Type=ACS-WFC-DITHER-BOX Purpose=DITHER Number Of Points=4 Point Spacing=0.264 Line Spacing=0.185	Coordinate Frame=POS-TARG Pattern Orientation=20.86 Angle Between Sides=69.07 Center Pattern=false		(1-2)					
Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous				
	(8)	NGC-7720	RA: 23 38 32.3100 (354.6346250d) Dec: +27 01 23.80 (27.02328d) Equinox: J2000		V=23.6+/-0.1	Reference Frame: NED				
<i>Comments: This object was generated by the targetselector and retrieved from the NED database.</i>										
Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit
	1		(8) NGC-7720	ACS/WFC, ACCUM, WFC	F475W				Pattern 1, Exps 1-2 in Visit 04 (1) Prime + Parallel Group 1-2 in Pattern 1, Exps 1-2 in Visit 04	1272 Secs [==>(Pattern 1)] [==>(Pattern 2)] [==>1369.0 Secs (Pattern 3)] [==>1369.0 Secs (Pattern 4)]
2		(8) NGC-7720	WFC3/UVIS, ACCUM, UVIS	F475W				Pattern 1, Exps 1-2 in Visit 04 (1) Prime + Parallel Group 1-2 in Pattern 1, Exps 1-2 in Visit 04	1100 Secs [==>1332.0 Secs (Pattern 1)] [==>1282.0 Secs (Pattern 2)] [==>1379.0 Secs (Pattern 3)] [==>1379.0 Secs (Pattern 4)]	[1] [2]



Proposal 12238 - Visit 06 - Supermassive Star Clusters in Supergiant Galaxies: Tracing the Enrichment of the Earliest Stellar Systems

Thu Jun 09 01:02:49 GMT 2011

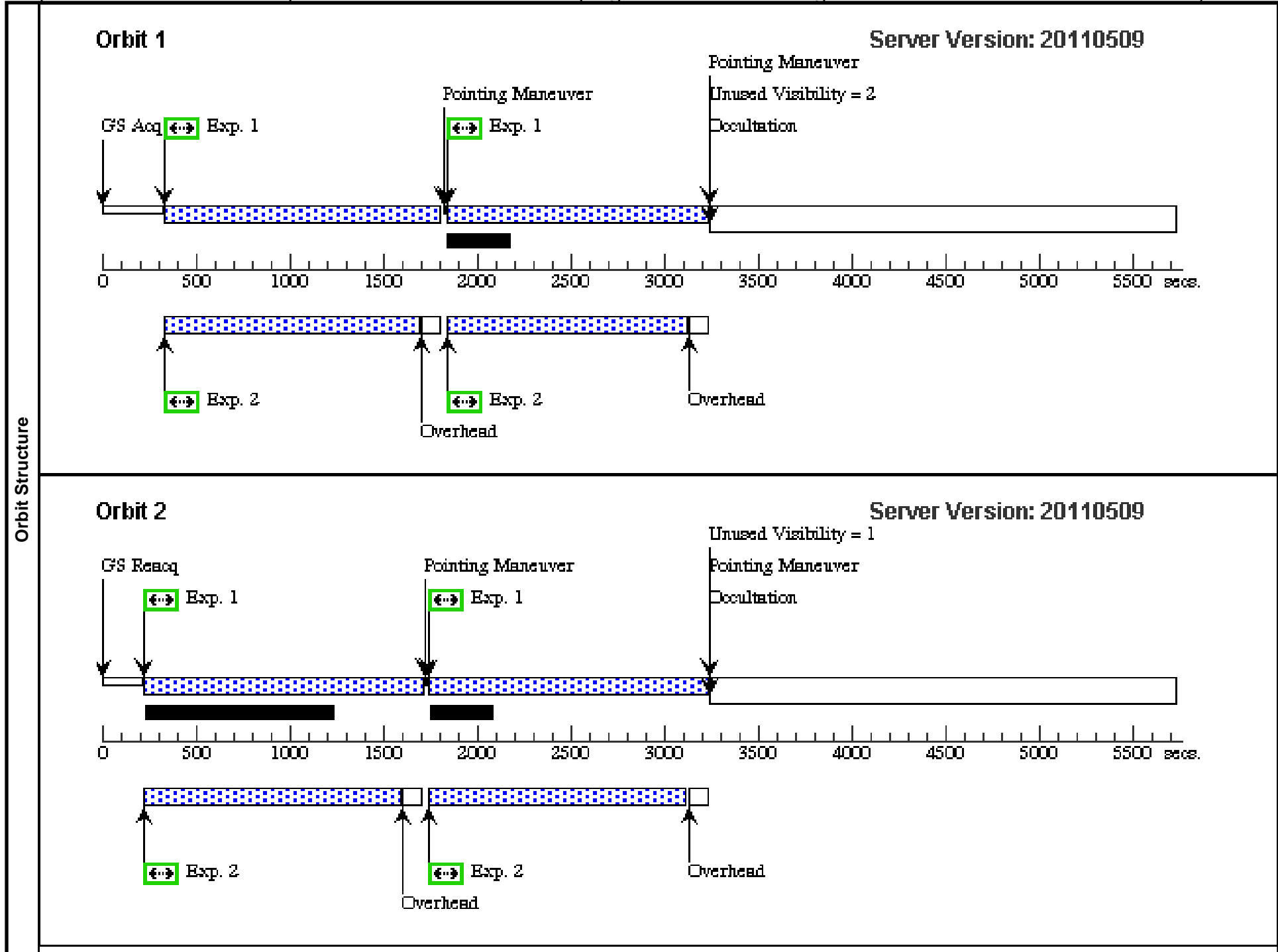
Visit	Proposal 12238, Visit 06, scheduling Diagnostic Status: No Diagnostics Scientific Instruments: WFC3/UVIS, ACS/WFC Special Requirements: SAME ORIENT AS 14									
	Patterns	#	Primary Pattern	Secondary Pattern	Exposures					
	(1)	Pattern Type=ACS-WFC-DITHER-BOX Purpose=DITHER Number Of Points=4 Point Spacing=0.264 Line Spacing=0.185	Coordinate Frame=POS-TARG Pattern Orientation=20.86 Angle Between Sides=69.07 Center Pattern=false		(1-2)					
Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous				
	(9)	UGC-09799	RA: 15 16 45.6300 (229.1901250d) Dec: +07 01 18.55 (7.02182d) Equinox: J2000		V=23.9+/-0.1	Reference Frame: NED				
<i>Comments: This object was generated by the targetselector and retrieved from the NED database.</i>										
Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit
	1		(9) UGC-09799	ACS/WFC, ACCUM, WFC	F814W		GS ACQ SCENARIO SINGLE	Pattern 1, Exps 1-2 in Visit 06 (1) Prime + Parallel Group 1-2 in Pattern 1, Exps 1-2 in Visit 06	1200 Secs [==>1265.0 Secs (Pattern 1)] [==>1265.0 Secs (Pattern 2)] [==>1189.0 Secs (Pattern 3)] [==>1534.0 Secs (Pattern 4)]	[1] [2]
2		(9) UGC-09799	WFC3/UVIS, ACCUM, UVIS	F814W			Pattern 1, Exps 1-2 in Visit 06 (1) Prime + Parallel Group 1-2 in Pattern 1, Exps 1-2 in Visit 06	1000 Secs [==>1325.0 Secs (Pattern 1)] [==>1275.0 Secs (Pattern 2)] [==>1199.0 Secs (Pattern 3)] [==>1544.0 Secs (Pattern 4)]	[1] [2]	



Proposal 12238 - Visit 07 - Supermassive Star Clusters in Supergiant Galaxies: Tracing the Enrichment of the Earliest Stellar Systems

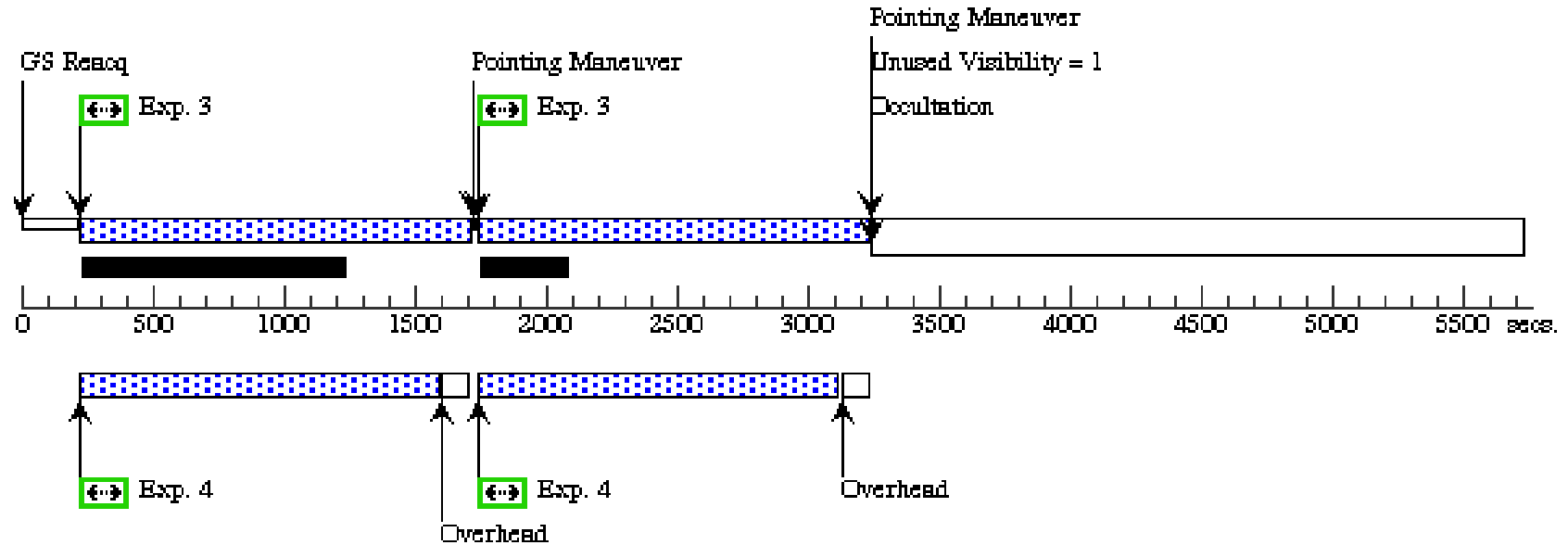
Thu Jun 09 01:02:50 GMT 2011

Visit	Proposal 12238, Visit 07, scheduling Diagnostic Status: No Diagnostics Scientific Instruments: WFC3/UVIS, ACS/WFC Special Requirements: ORIENT 137D TO 359 D; ORIENT 0.0D TO 90 D									
	Patterns	#	Primary Pattern	Secondary Pattern	Exposures					
	(1)	Pattern Type=ACS-WFC-DITHER-BOX Purpose=DITHER Number Of Points=4 Point Spacing=0.264 Line Spacing=0.185	Coordinate Frame=POS-TARG Pattern Orientation=20.86 Angle Between Sides=69.07 Center Pattern=false		(1-2), (3-4)					
Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous				
	(10)	UGC-10143	RA: 16 02 16.4590 (240.5685792d) Dec: +15 58 5.87 (15.96830d) Equinox: J2000		V=24./-0.1	Reference Frame: NED				
<i>Comments: This object was generated by the targetselector and retrieved from the NED database.</i>										
Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit
	1		(10) UGC-10143	ACS/WFC, ACCUM, WFC	F475W			Pattern 1, Exps 1-2 in Visit 07 (1) Prime + Parallel Group 1-2 in Pattern 1, Exps 1-2 in Visit 07	1268 Secs [==>(Pattern 1)] [==>(Pattern 2)] [==>1365.0 Secs (Pattern 3)] [==>1365.0 Secs (Pattern 4)]	[1] [2]
	2		(10) UGC-10143	WFC3/UVIS, ACCUM, UVIS	F475W			Pattern 1, Exps 1-2 in Visit 07 (1) Prime + Parallel Group 1-2 in Pattern 1, Exps 1-2 in Visit 07	1100 Secs [==>1328.0 Secs (Pattern 1)] [==>1278.0 Secs (Pattern 2)] [==>1375.0 Secs (Pattern 3)] [==>1375.0 Secs (Pattern 4)]	[1] [2]
	3		(10) UGC-10143	ACS/WFC, ACCUM, WFC	F475W		POS TARG 0.12,0.12	Pattern 1, Exps 3-4 in Visit 07 (1) Prime + Parallel Group 3-4 in Pattern 1, Exps 3-4 in Visit 07	1200 Secs [==>1365.0 Secs (Pattern 1)] [==>1365.0 Secs (Pattern 2)] [==>1365.0 Secs (Pattern 3)] [==>1365.0 Secs (Pattern 4)]	[3] [4]
	4		(10) UGC-10143	WFC3/UVIS, ACCUM, UVIS	F475W			Pattern 1, Exps 3-4 in Visit 07 (1) Prime + Parallel Group 3-4 in Pattern 1, Exps 3-4 in Visit 07	1100 Secs [==>1375.0 Secs (Pattern 1)] [==>1375.0 Secs (Pattern 2)] [==>1375.0 Secs (Pattern 3)] [==>1375.0 Secs (Pattern 4)]	[3] [4]



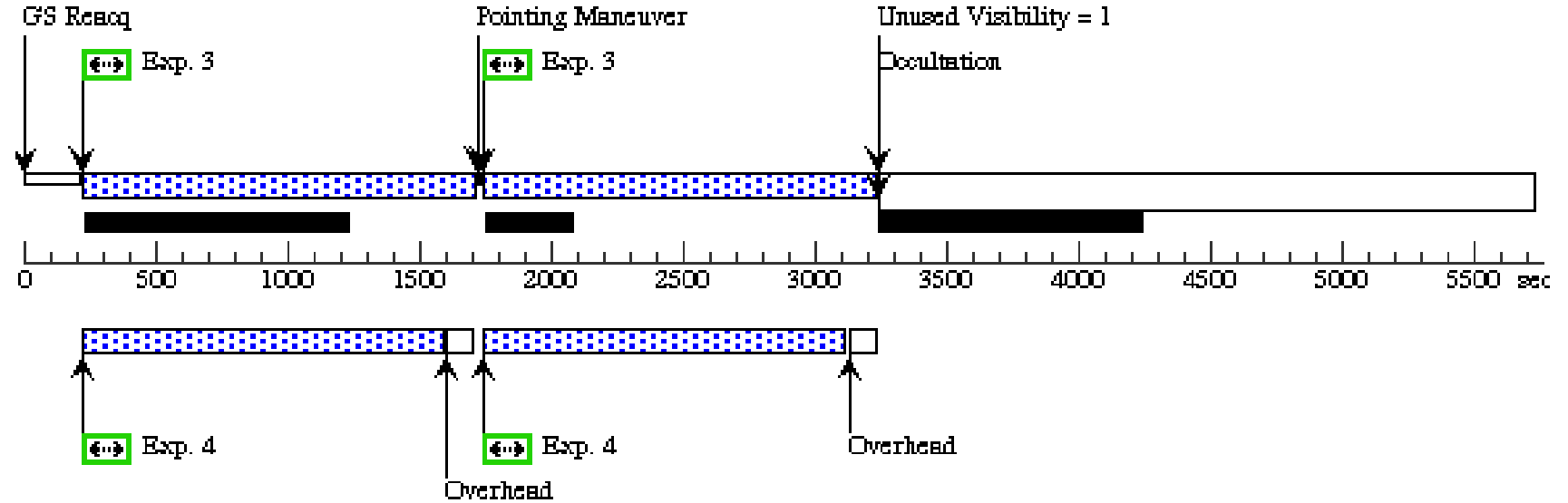
Orbit 3

Server Version: 20110509



Orbit 4

Server Version: 20110509



Proposal 12238 - Visit 08 - Supermassive Star Clusters in Supergiant Galaxies: Tracing the Enrichment of the Earliest Stellar Systems

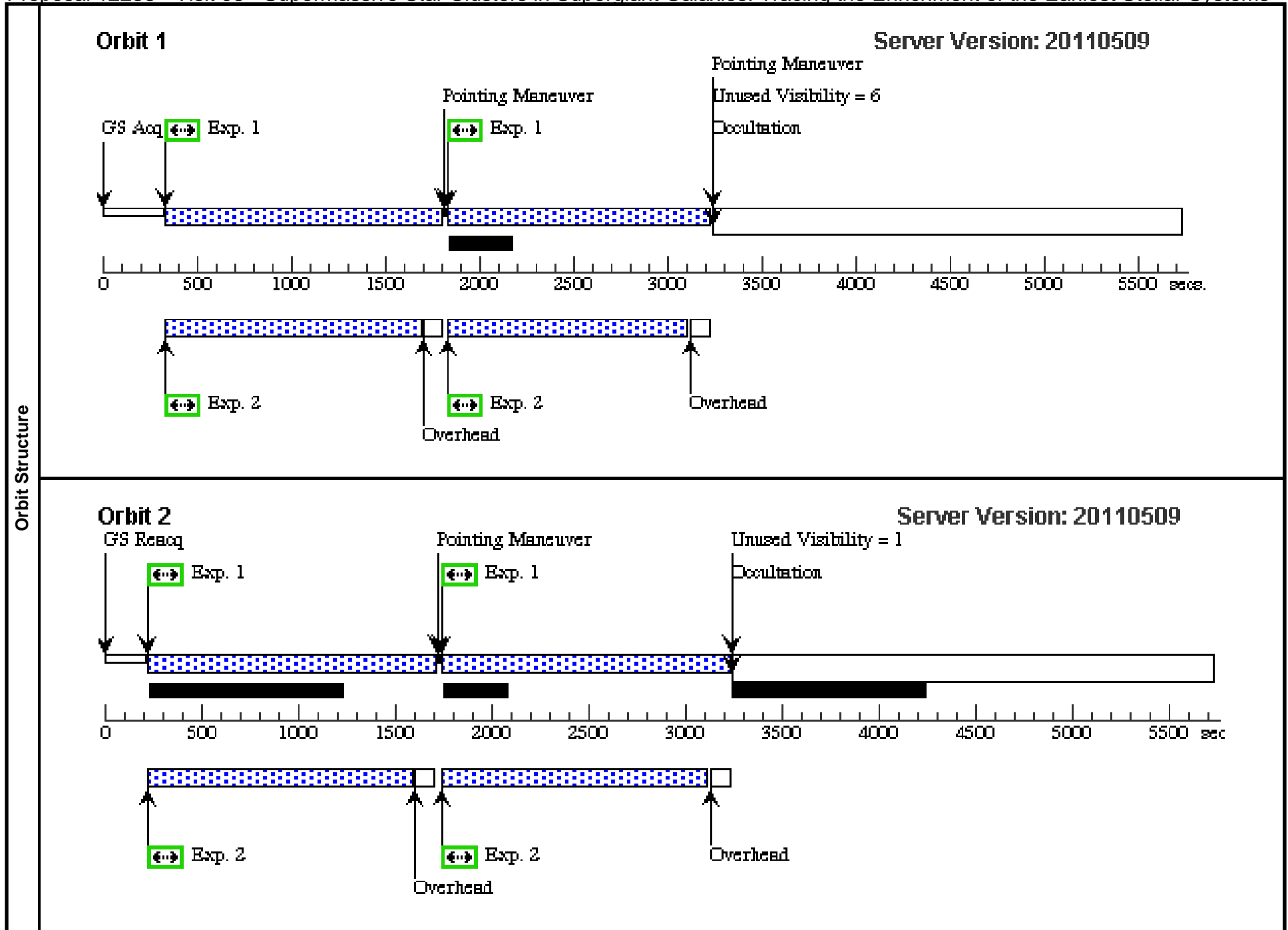
Thu Jun 09 01:02:51 GMT 2011

Visit	Proposal 12238, Visit 08, scheduling		
	Diagnostic Status: No Diagnostics		
	Scientific Instruments: WFC3/UVIS, ACS/WFC		
	Special Requirements: SAME ORIENT AS 07		

Patterns	#	Primary Pattern	Secondary Pattern	Exposures
	(1)	Pattern Type=ACS-WFC-DITHER-BOX Purpose=DITHER Number Of Points=4 Point Spacing=0.264 Line Spacing=0.185	Coordinate Frame=POS-TARG Pattern Orientation=20.86 Angle Between Sides=69.07 Center Pattern=false	

Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
	(10)	UGC-10143	RA: 16 02 16.4590 (240.5685792d) Dec: +15 58 5.87 (15.96830d) Equinox: J2000		V=24./-0.1	Reference Frame: NED
<i>Comments: This object was generated by the targetselector and retrieved from the NED database.</i>						

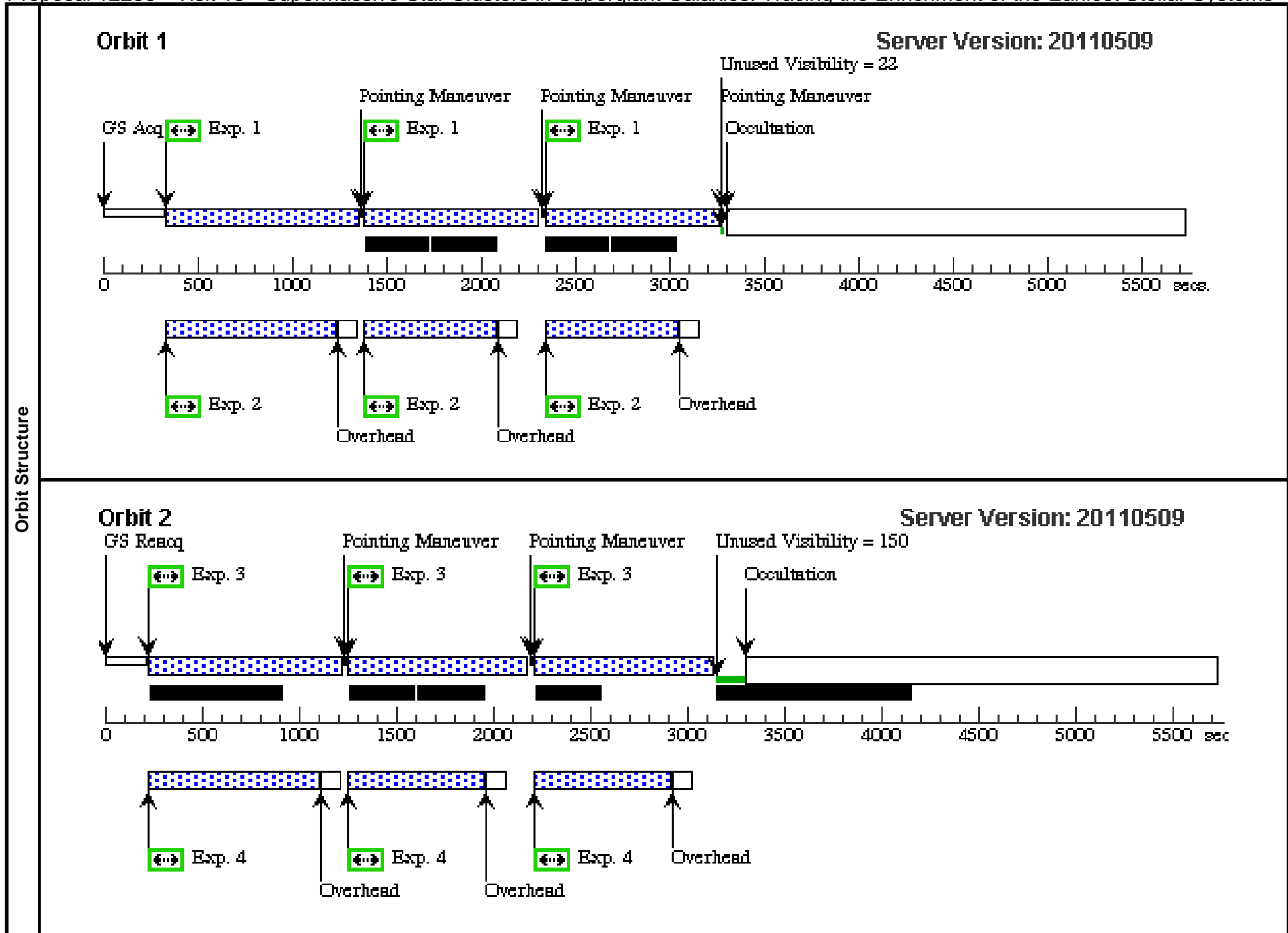
Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit
		1	(10) UGC-10143	ACS/WFC, ACCUM, WFC	F814W				Pattern 1, Exps 1-2 in Visit 08 (1)	1266 Secs
Prime + Parallel Group 1-2 in Pattern 1, Exps 1-2 in Visit 08									[==>(Pattern 1)]	[1]
2		(10) UGC-10143	WFC3/UVIS, ACCUM, UVIS	F814W				Pattern 1, Exps 1-2 in Visit 08 (1)	[==>(Pattern 2)]	[2]
								Prime + Parallel Group 1-2 in Pattern 1, Exps 1-2 in Visit 08	[==>1365.0 Secs (Pattern 3)]	[2]
	2	(10) UGC-10143	WFC3/UVIS, ACCUM, UVIS	F814W				Pattern 1, Exps 1-2 in Visit 08 (1)	[==>1365.0 Secs (Pattern 4)]	
								Prime + Parallel Group 1-2 in Pattern 1, Exps 1-2 in Visit 08	[==>1326.0 Secs (Pattern 1)]	[1]
									[==>1276.0 Secs (Pattern 2)]	[1]
									[==>1375.0 Secs (Pattern 3)]	[2]
									[==>1375.0 Secs (Pattern 4)]	



Proposal 12238 - Visit 13 - Supermassive Star Clusters in Supergiant Galaxies: Tracing the Enrichment of the Earliest Stellar Systems

Thu Jun 09 01:02:51 GMT 2011

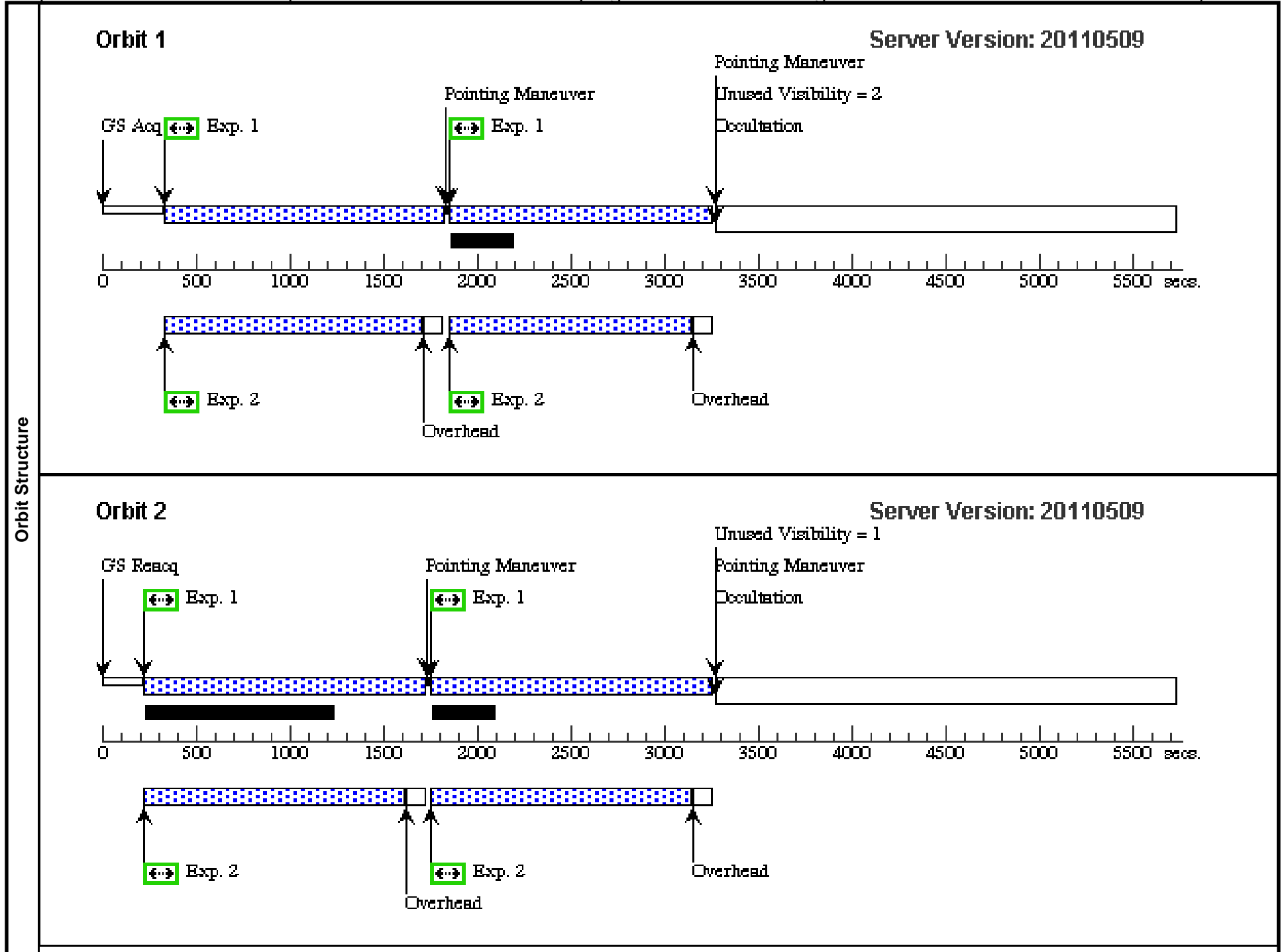
Visit	Proposal 12238, Visit 13, scheduling Diagnostic Status: No Diagnostics Scientific Instruments: WFC3/UVIS, ACS/WFC Special Requirements: SAME ORIENT AS 01										
	Patterns	#	Primary Pattern	Secondary Pattern	Exposures						
		(5)	Pattern Type=ACS-WFC-DITHER-LINE Purpose=DITHER Number Of Points=3 Point Spacing=0.166 Line Spacing=	Coordinate Frame=POS-TARG Pattern Orientation=47.23 Angle Between Sides= Center Pattern=false		(1-2), (3-4)					
Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous					
	(5)	NGC-6166	RA: 16 28 38.3790 (247.1599125d) Dec: +39 32 31.22 (39.54201d) Equinox: J2000		V=23.6+/-0.1	Reference Frame: NED					
<i>Comments: This object was generated by the targetselector and retrieved from the NED database.</i>											
Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit	
	1		(5) NGC-6166	ACS/WFC, ACCUM, WFC	F814W			Pattern 5, Exps 1-2 in Visit 13 (5) Prime + Parallel Group 1-2 in Pattern 5, Exps 1-2 in Visit 13	800 Secs [==>810.0 Secs (Pattern 1)] [==>(Pattern 2)] [==>(Pattern 3)]	[1]	
	2		(5) NGC-6166	WFC3/UVIS, ACCUM, UVIS	F814W			Pattern 5, Exps 1-2 in Visit 13 (5) Prime + Parallel Group 1-2 in Pattern 5, Exps 1-2 in Visit 13	700 Secs [==>870.0 Secs (Pattern 1)] [==>(Pattern 2)] [==>(Pattern 3)]	[1]	
	3		(5) NGC-6166	ACS/WFC, ACCUM, WFC	F814W		POS TARG 0.12,0.12		Pattern 5, Exps 3-4 in Visit 13 (5) Prime + Parallel Group 3-4 in Pattern 5, Exps 3-4 in Visit 13	800 Secs [==>875.0 Secs (Pattern 1)] [==>(Pattern 2)] [==>(Pattern 3)]	[2]
	4		(5) NGC-6166	WFC3/UVIS, ACCUM, UVIS	F814W				Pattern 5, Exps 3-4 in Visit 13 (5) Prime + Parallel Group 3-4 in Pattern 5, Exps 3-4 in Visit 13	700 Secs [==>885.0 Secs (Pattern 1)] [==>(Pattern 2)] [==>(Pattern 3)]	[2]



Proposal 12238 - Visit 09 - Supermassive Star Clusters in Supergiant Galaxies: Tracing the Enrichment of the Earliest Stellar Systems

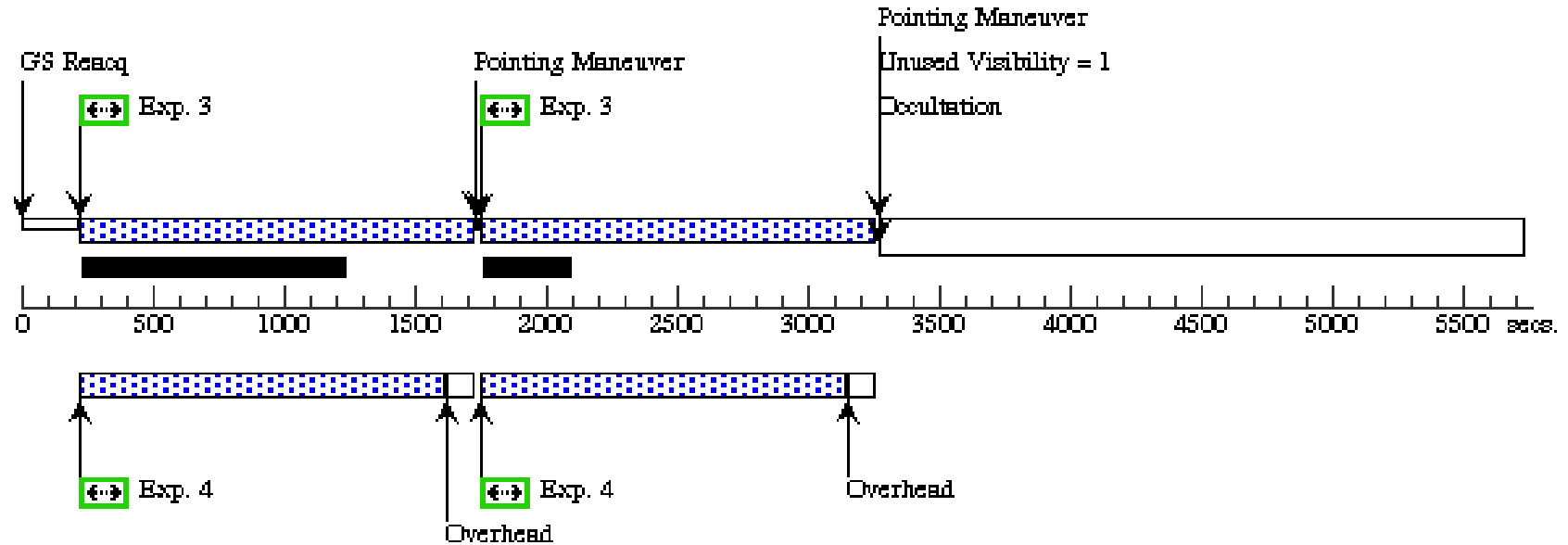
Thu Jun 09 01:02:51 GMT 2011

Visit	Proposal 12238, Visit 09, scheduling Diagnostic Status: No Diagnostics Scientific Instruments: WFC3/UVIS, ACS/WFC Special Requirements: ORIENT 286.0D TO 296 D									
	Patterns	#	Primary Pattern	Secondary Pattern	Exposures					
	(1)	Pattern Type=ACS-WFC-DITHER-BOX Purpose=DITHER Number Of Points=4 Point Spacing=0.264 Line Spacing=0.185	Coordinate Frame=POS-TARG Pattern Orientation=20.86 Angle Between Sides=69.07 Center Pattern=false		(1-2), (3-4)					
Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous				
	(12)	ESO383-G076	RA: 13 47 30.0000 (206.8750000d) Dec: -32 51 59.70 (-32.86658d) Equinox: J2000		V=25.0+/-0.2	Reference Frame: ICRS				
Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit
	1	(12) ESO383-G076	ACS/WFC, ACCUM, WFC	F475W				Pattern 1, Exps 1-2 in Visit 09 (1) Prime + Parallel Group 1-2 in Pattern 1, Exps 1-2 in Visit 09	1281 Secs [==>(Pattern 1)] [==>(Pattern 2)] [==>1378.0 Secs (Pattern 3)] [==>1378.0 Secs (Pattern 4)]	[1] [2]
	2	(12) ESO383-G076	WFC3/UVIS, ACCUM, UVIS	F475W				Pattern 1, Exps 1-2 in Visit 09 (1) Prime + Parallel Group 1-2 in Pattern 1, Exps 1-2 in Visit 09	1100 Secs [==>1341.0 Secs (Pattern 1)] [==>1291.0 Secs (Pattern 2)] [==>1388.0 Secs (Pattern 3)] [==>1388.0 Secs (Pattern 4)]	[1] [2]
	3	(12) ESO383-G076	ACS/WFC, ACCUM, WFC	F475W			POS TARG 0.12,0.12	Pattern 1, Exps 3-4 in Visit 09 (1) Prime + Parallel Group 3-4 in Pattern 1, Exps 3-4 in Visit 09	1200 Secs [==>1378.0 Secs (Pattern 1)] [==>1378.0 Secs (Pattern 2)] [==>1378.0 Secs (Pattern 3)] [==>1378.0 Secs (Pattern 4)]	[3] [4]
	4	(12) ESO383-G076	WFC3/UVIS, ACCUM, UVIS	F475W				Pattern 1, Exps 3-4 in Visit 09 (1) Prime + Parallel Group 3-4 in Pattern 1, Exps 3-4 in Visit 09	1100 Secs [==>1388.0 Secs (Pattern 1)] [==>1388.0 Secs (Pattern 2)] [==>1388.0 Secs (Pattern 3)] [==>1388.0 Secs (Pattern 4)]	[3] [4]



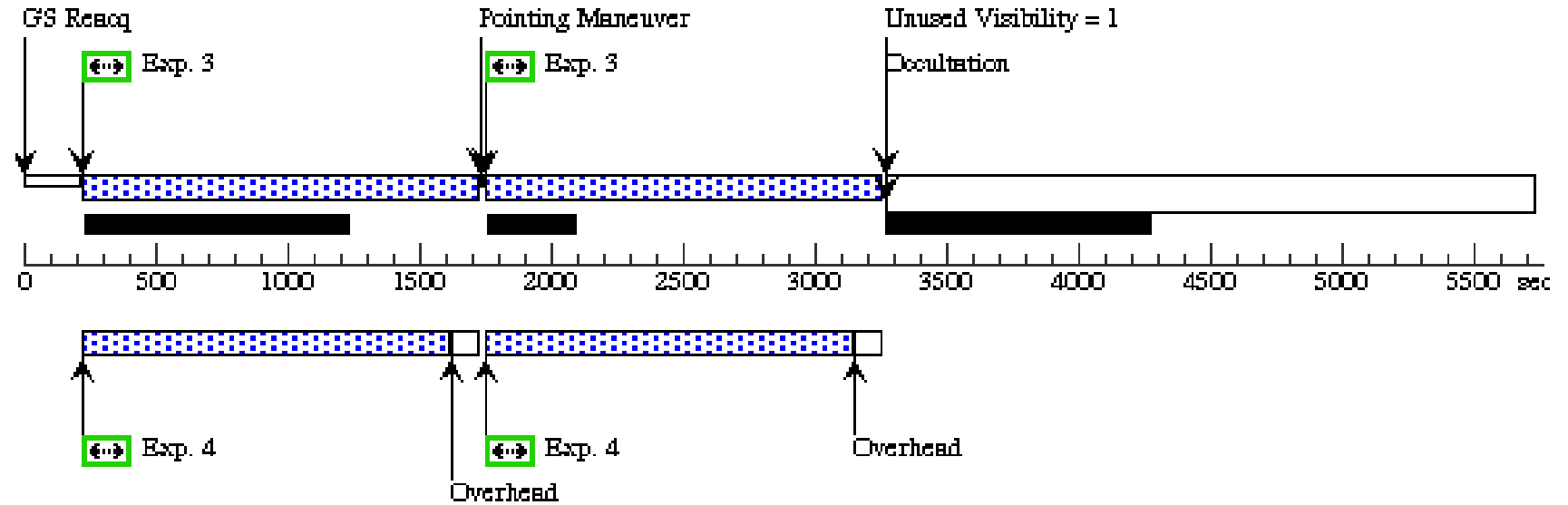
Orbit 3

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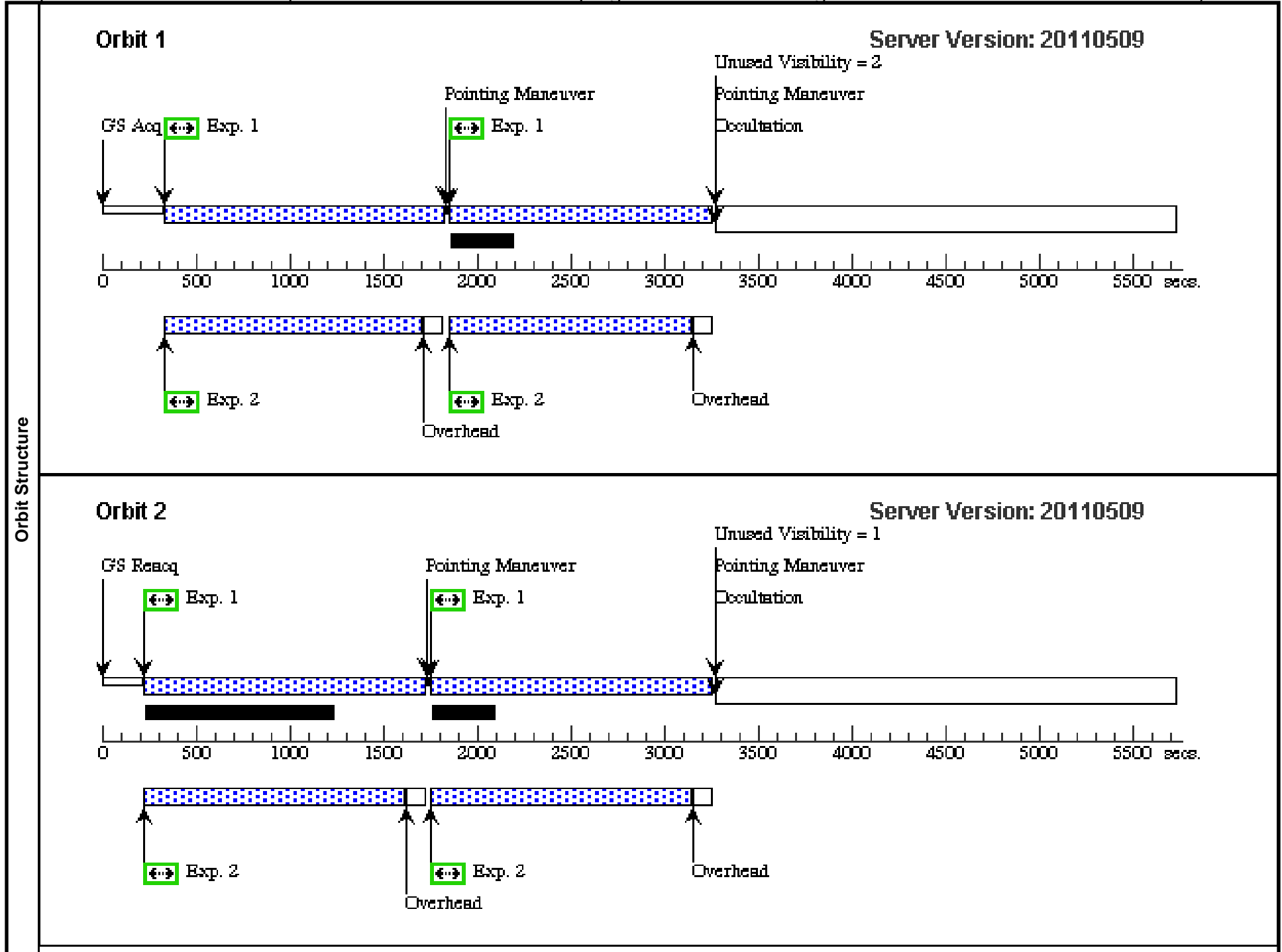
Server Version: 20110509



Proposal 12238 - Visit 10 - Supermassive Star Clusters in Supergiant Galaxies: Tracing the Enrichment of the Earliest Stellar Systems

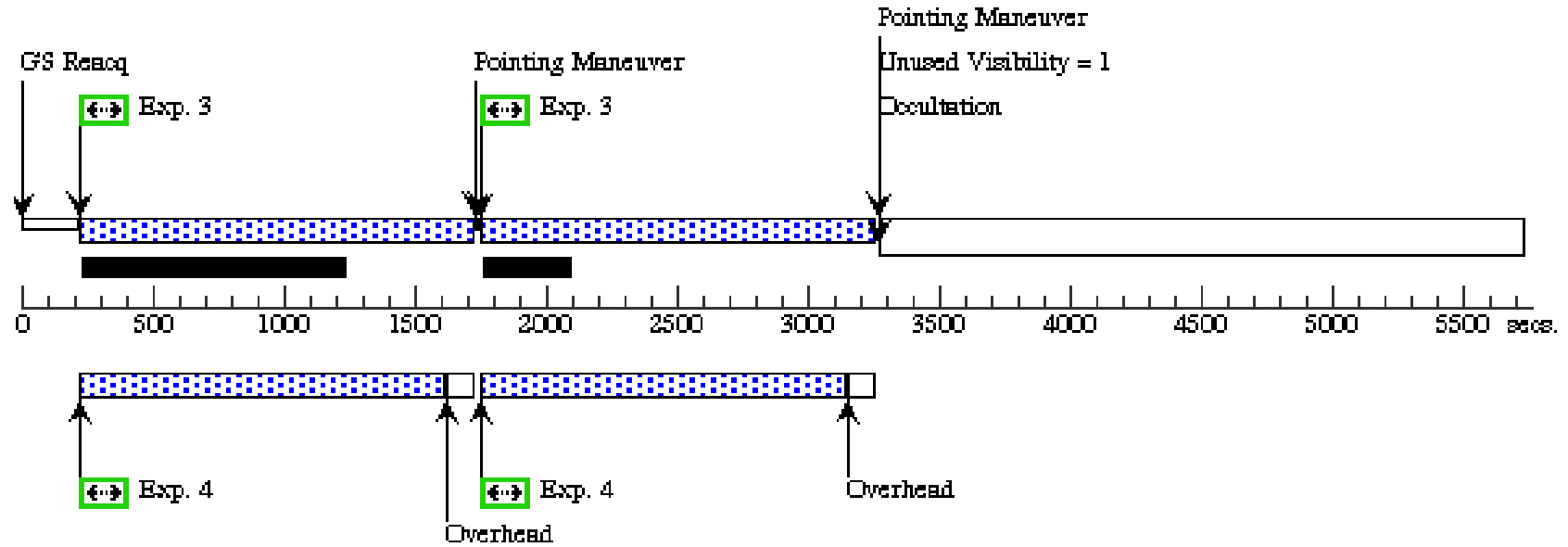
Thu Jun 09 01:02:52 GMT 2011

Visit	Proposal 12238, Visit 10, completed Diagnostic Status: No Diagnostics Scientific Instruments: WFC3/UVIS, ACS/WFC Special Requirements: ORIENT 43.0D TO 53.0 D									
	Patterns	#	Primary Pattern	Secondary Pattern	Exposures					
	(1)	Pattern Type=ACS-WFC-DITHER-BOX Purpose=DITHER Number Of Points=4 Point Spacing=0.264 Line Spacing=0.185	Coordinate Frame=POS-TARG Pattern Orientation=20.86 Angle Between Sides=69.07 Center Pattern=false		(1-2), (3-4)					
Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous				
	(13)	ESO444-G046	RA: 13 27 57.4300 (201.9892917d) Dec: -31 29 44.00 (-31.49556d) Equinox: J2000		V=25.0+/-0.2	Reference Frame: ICRS				
Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit
	1	(13) ESO444-G046	ACS/WFC, ACCUM, WFC1	F475W			POS TARG null,-8.0 ; GS ACQ SCENARIO BASE1B3	Pattern 1, Exps 1-2 in Visit 10 (1) Prime + Parallel Group 1-2 in Pattern 1, Exps 1-2 in Visit 10	1281 Secs [==>(Pattern 1)] [==>(Pattern 2)] [==>1378.0 Secs (Pattern 3)] [==>1378.0 Secs (Pattern 4)]	[1] [2]
	2	(13) ESO444-G046	WFC3/UVIS, ACCUM, UVIS	F475W				Pattern 1, Exps 1-2 in Visit 10 (1) Prime + Parallel Group 1-2 in Pattern 1, Exps 1-2 in Visit 10	1100 Secs [==>1341.0 Secs (Pattern 1)] [==>1291.0 Secs (Pattern 2)] [==>1388.0 Secs (Pattern 3)] [==>1388.0 Secs (Pattern 4)]	[1] [2]
	3	(13) ESO444-G046	ACS/WFC, ACCUM, WFC1	F475W			POS TARG 0.12,-7.80	Pattern 1, Exps 3-4 in Visit 10 (1) Prime + Parallel Group 3-4 in Pattern 1, Exps 3-4 in Visit 10	1200 Secs [==>1378.0 Secs (Pattern 1)] [==>1378.0 Secs (Pattern 2)] [==>1378.0 Secs (Pattern 3)] [==>1378.0 Secs (Pattern 4)]	[3] [4]
	4	(13) ESO444-G046	WFC3/UVIS, ACCUM, UVIS	F475W				Pattern 1, Exps 3-4 in Visit 10 (1) Prime + Parallel Group 3-4 in Pattern 1, Exps 3-4 in Visit 10	1100 Secs [==>1388.0 Secs (Pattern 1)] [==>1388.0 Secs (Pattern 2)] [==>1388.0 Secs (Pattern 3)] [==>1388.0 Secs (Pattern 4)]	[3] [4]



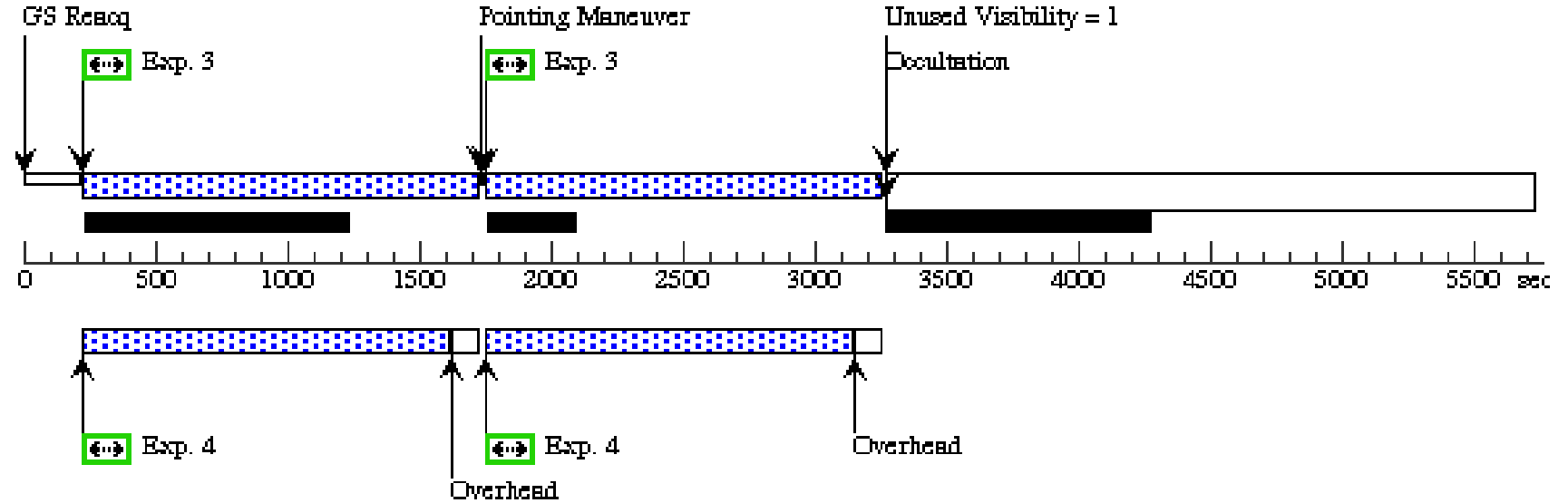
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Proposal 12238 - Visit 14 - Supermassive Star Clusters in Supergiant Galaxies: Tracing the Enrichment of the Earliest Stellar Systems

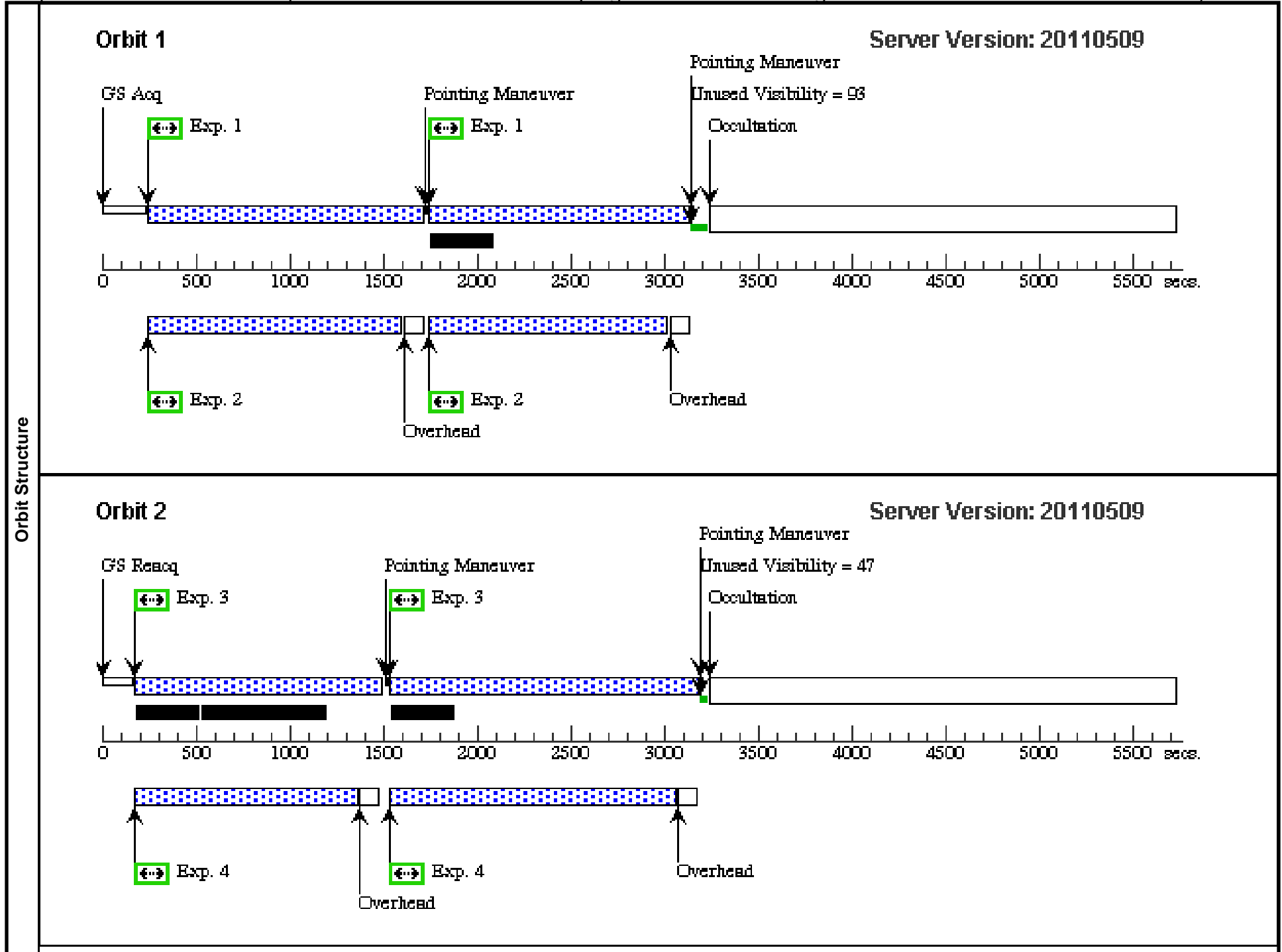
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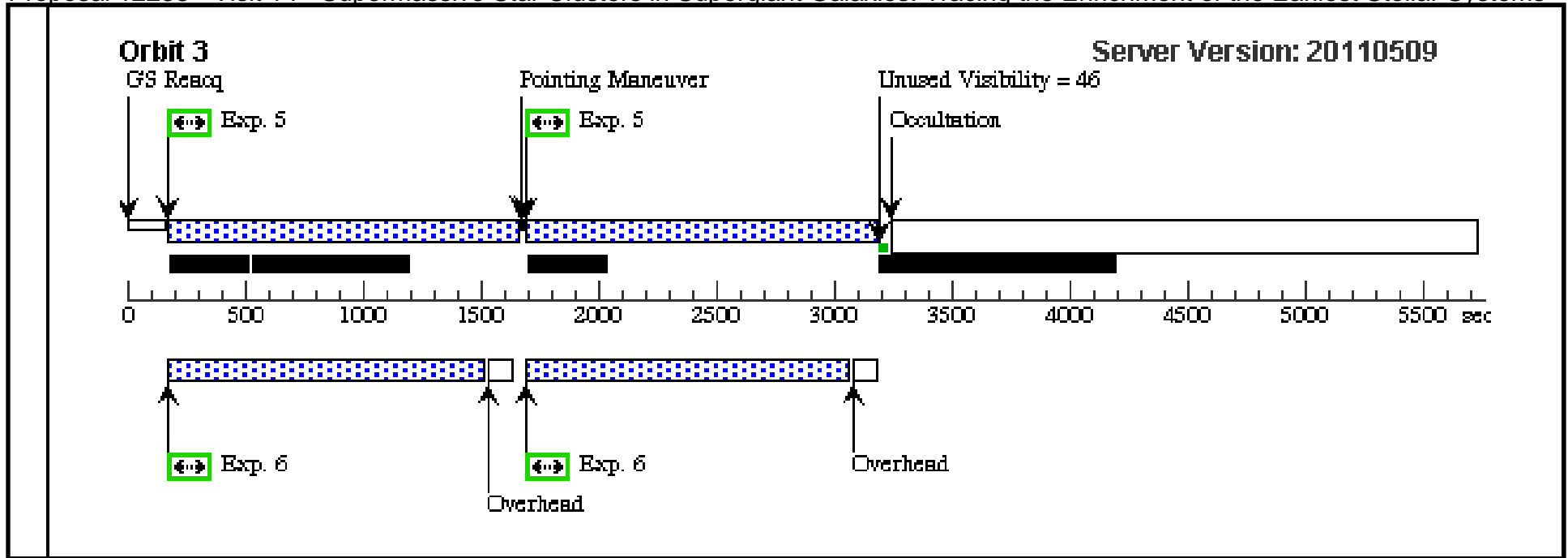
Visit	Proposal 12238, Visit 14, scheduling		
	Diagnostic Status: No Diagnostics		
	Scientific Instruments: WFC3/UVIS, ACS/WFC		
	Special Requirements: ORIENT 95D TO 115 D		

Patterns	#	Primary Pattern	Secondary Pattern	Exposures
	(6)	Pattern Type=ACS-WFC-DITHER-LINE Purpose=DITHER Number Of Points=2 Point Spacing=0.149 Line Spacing=	Coordinate Frame=POS-TARG Pattern Orientation=34.25 Angle Between Sides= Center Pattern=false	

Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
	(9)	UGC-09799	RA: 15 16 45.6300 (229.1901250d) Dec: +07 01 18.55 (7.02182d) Equinox: J2000		V=23.9+/-0.1	Reference Frame: NED
<i>Comments: This object was generated by the targetselector and retrieved from the NED database.</i>						

Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit
	1	(9) UGC-09799	ACS/WFC, ACCUM, WFC	F475W			GS ACQ SCENARIO SINGLE	Pattern 6, Exps 1-2 in Visit 14 (6) Prime + Parallel Group 1-2 in Pattern 6, Exps 1-2 in Visit 14	1265 Secs [==>1265 Secs (Pattern 1)] [==>1265 Secs (Pattern 2)]	[1]
2	(9) UGC-09799	WFC3/UVIS, ACCUM, UVIS	F475W				Pattern 6, Exps 1-2 in Visit 14 (6) Prime + Parallel Group 1-2 in Pattern 6, Exps 1-2 in Visit 14	700 Secs [==>1325.0 Secs (Pattern 1)] [==>1275.0 Secs (Pattern 2)]	[1]	
3	(9) UGC-09799	ACS/WFC, ACCUM, WFC	F475W			POS TARG 0.125,0.125	Pattern 6, Exps 3-4 in Visit 14 (6) Prime + Parallel Group 3-4 in Pattern 6, Exps 3-4 in Visit 14	1200 Secs [==>1199.0 Secs (Pattern 1)] [==>1524.0 Secs (Pattern 2)]	[2]	
4	(9) UGC-09799	WFC3/UVIS, ACCUM, UVIS	F475W				Pattern 6, Exps 3-4 in Visit 14 (6) Prime + Parallel Group 3-4 in Pattern 6, Exps 3-4 in Visit 14	700 Secs [==>1189.0 Secs (Pattern 1)] [==>1534.0 Secs (Pattern 2)]	[2]	
5	(9) UGC-09799	ACS/WFC, ACCUM, WFC	F475W			POS TARG 0.24,0.24	Pattern 6, Exps 5-6 in Visit 14 (6) Prime + Parallel Group 5-6 in Pattern 6, Exps 5-6 in Visit 14	1200 Secs [==>1362.0 Secs (Pattern 1)] [==>1362.0 Secs (Pattern 2)]	[3]	
6	(9) UGC-09799	WFC3/UVIS, ACCUM, UVIS	F475W				Pattern 6, Exps 5-6 in Visit 14 (6) Prime + Parallel Group 5-6 in Pattern 6, Exps 5-6 in Visit 14	800 Secs [==>1346.0 Secs (Pattern 1)] [==>1372.0 Secs (Pattern 2)]	[3]	

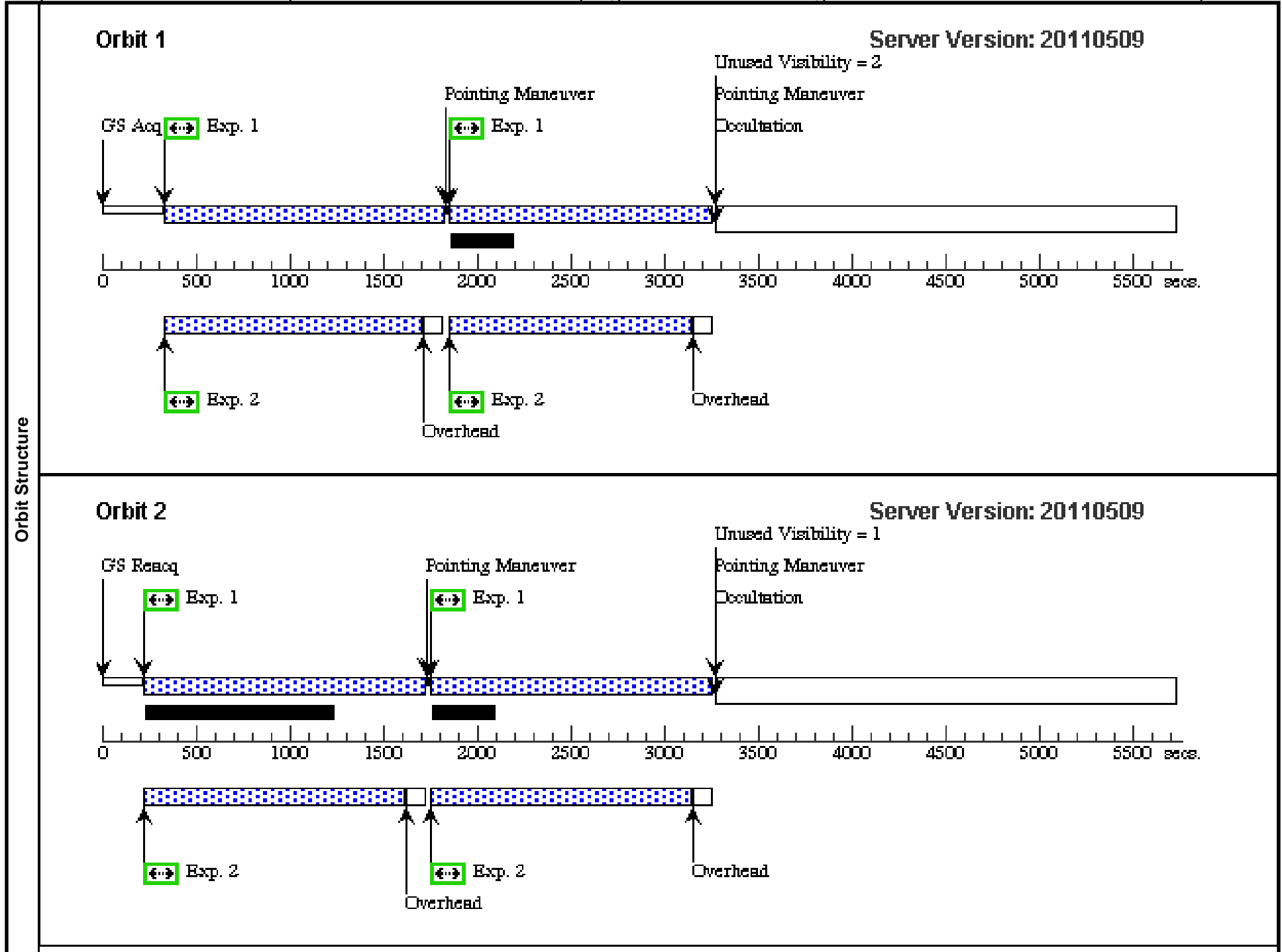




Proposal 12238 - Visit 15 - Supermassive Star Clusters in Supergiant Galaxies: Tracing the Enrichment of the Earliest Stellar Systems

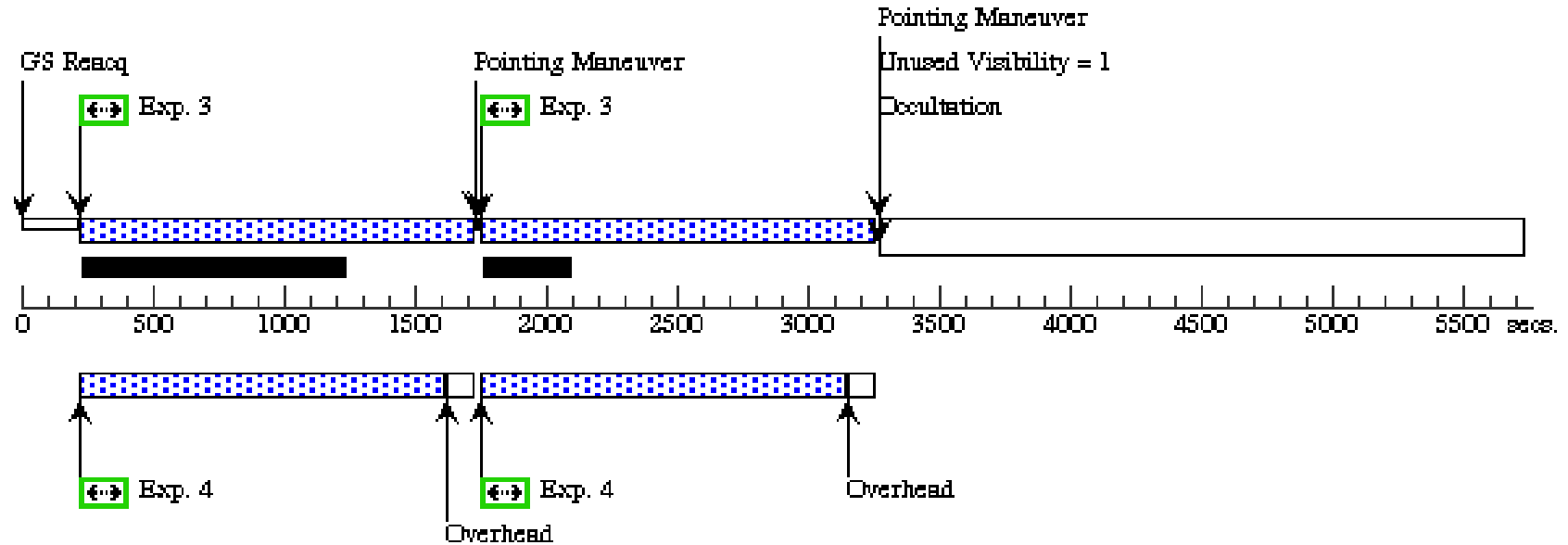
Thu Jun 09 01:02:53 GMT 2011

Visit	Proposal 12238, Visit 15, completed Diagnostic Status: No Diagnostics Scientific Instruments: WFC3/UVIS, ACS/WFC Special Requirements: ORIENT 43.0D TO 53.0 D									
	Patterns	#	Primary Pattern	Secondary Pattern	Exposures					
	(1)	Pattern Type=ACS-WFC-DITHER-BOX Purpose=DITHER Number Of Points=4 Point Spacing=0.264 Line Spacing=0.185	Coordinate Frame=POS-TARG Pattern Orientation=20.86 Angle Between Sides=69.07 Center Pattern=false		(1-2), (3-4)					
Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous				
	(13)	ESO444-G046	RA: 13 27 57.4300 (201.9892917d) Dec: -31 29 44.00 (-31.49556d) Equinox: J2000		V=25.0+/-0.2	Reference Frame: ICRS				
Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit
	1	(13) ESO444-G046	ACS/WFC, ACCUM, WFC1	F475W			POS TARG null,-8.0 ; GS ACQ SCENARIO BASE1B3	Pattern 1, Exps 1-2 in Visit 15 (1) Prime + Parallel Group 1-2 in Pattern 1, Exps 1-2 in Visit 15	1281 Secs [==>(Pattern 1)] [==>(Pattern 2)] [==>1378.0 Secs (Pattern 3)] [==>1378.0 Secs (Pattern 4)]	[1] [2]
	2	(13) ESO444-G046	WFC3/UVIS, ACCUM, UVIS	F475W				Pattern 1, Exps 1-2 in Visit 15 (1) Prime + Parallel Group 1-2 in Pattern 1, Exps 1-2 in Visit 15	1100 Secs [==>1341.0 Secs (Pattern 1)] [==>1291.0 Secs (Pattern 2)] [==>1388.0 Secs (Pattern 3)] [==>1388.0 Secs (Pattern 4)]	[1] [2]
	3	(13) ESO444-G046	ACS/WFC, ACCUM, WFC1	F475W			POS TARG 0.12,-7.80	Pattern 1, Exps 3-4 in Visit 15 (1) Prime + Parallel Group 3-4 in Pattern 1, Exps 3-4 in Visit 15	1200 Secs [==>1378.0 Secs (Pattern 1)] [==>1378.0 Secs (Pattern 2)] [==>1378.0 Secs (Pattern 3)] [==>1378.0 Secs (Pattern 4)]	[3] [4]
	4	(13) ESO444-G046	WFC3/UVIS, ACCUM, UVIS	F475W				Pattern 1, Exps 3-4 in Visit 15 (1) Prime + Parallel Group 3-4 in Pattern 1, Exps 3-4 in Visit 15	1100 Secs [==>1388.0 Secs (Pattern 1)] [==>1388.0 Secs (Pattern 2)] [==>1388.0 Secs (Pattern 3)] [==>1388.0 Secs (Pattern 4)]	[3] [4]



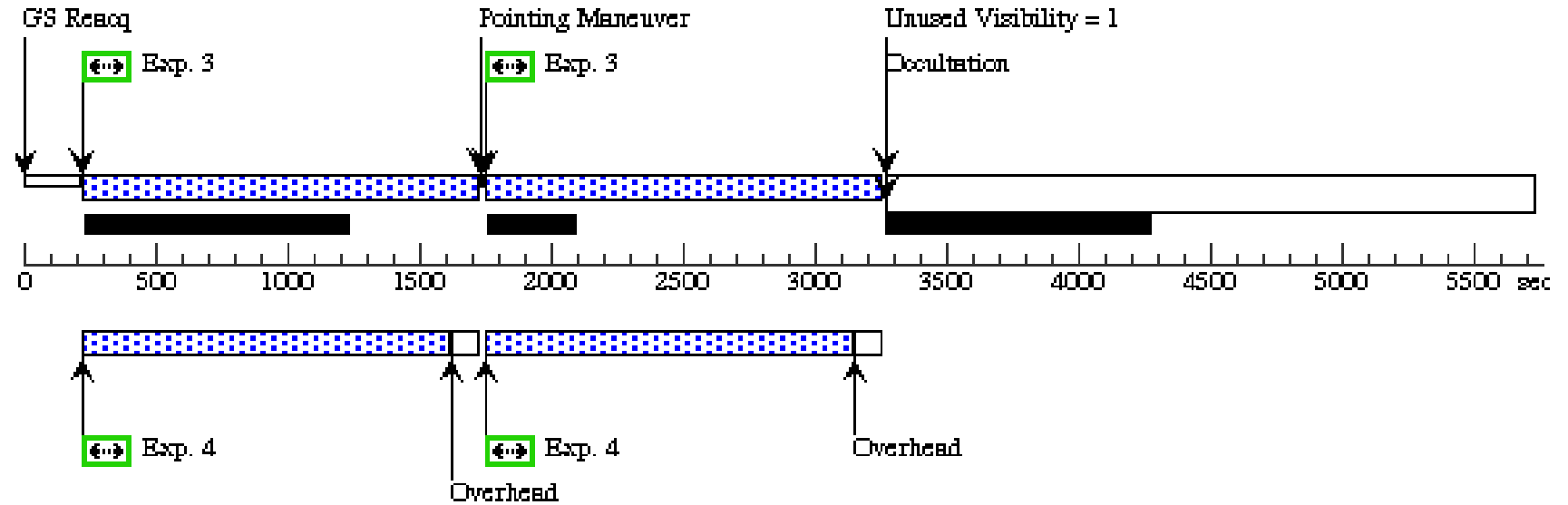
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Orbit 4

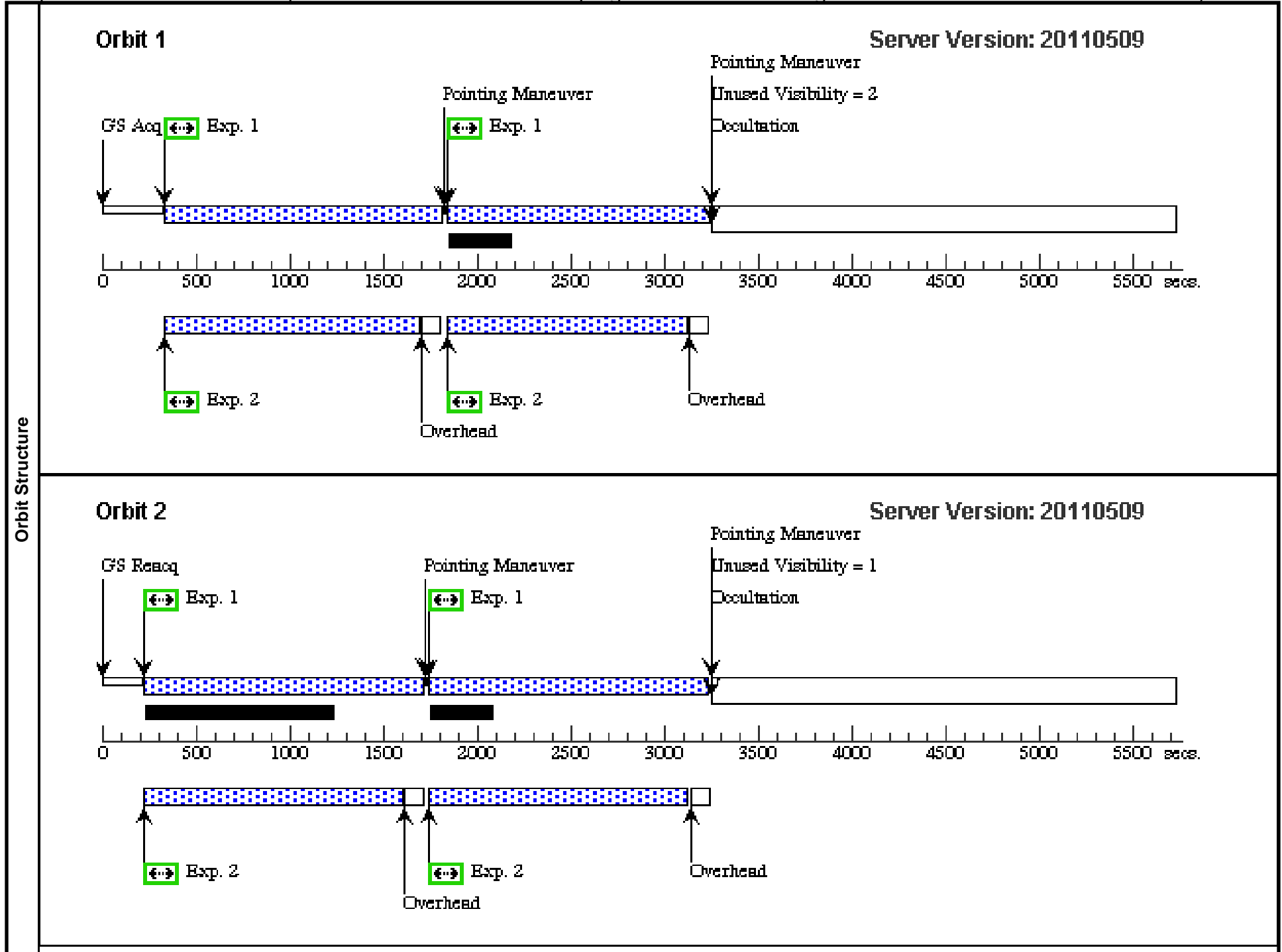
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Proposal 12238 - Visit 12 - Supermassive Star Clusters in Supergiant Galaxies: Tracing the Enrichment of the Earliest Stellar Systems

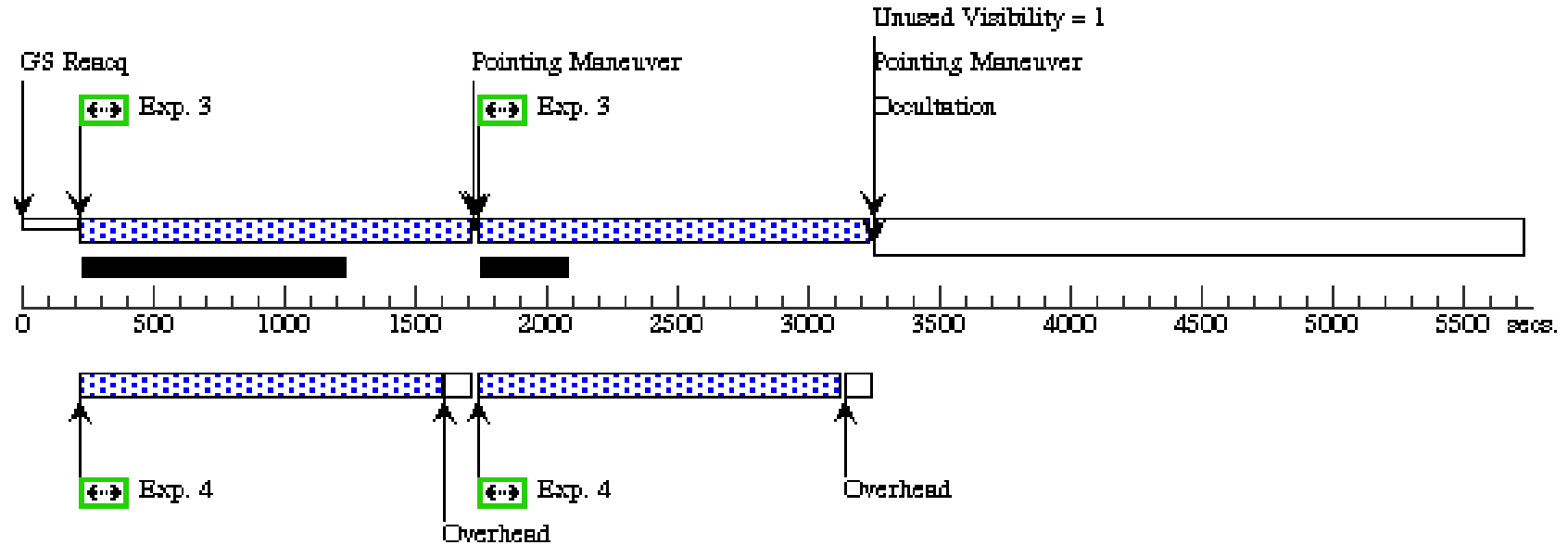
Thu Jun 09 01:02:54 GMT 2011

Visit	Proposal 12238, Visit 12, completed Diagnostic Status: No Diagnostics Scientific Instruments: WFC3/UVIS, ACS/WFC Special Requirements: ORIENT 289.0D TO 299.0 D									
	#	Primary Pattern	Secondary Pattern	Exposures						
Patterns	(1)	Pattern Type=ACS-WFC-DITHER-BOX Purpose=DITHER Number Of Points=4 Point Spacing=0.264 Line Spacing=0.185	Coordinate Frame=POS-TARG Pattern Orientation=20.86 Angle Between Sides=69.07 Center Pattern=false	(1-2), (3-4)						
	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous				
Fixed Targets	(14)	ESO509-G008	RA: 13 26 44.1000 (201.6837500d) Dec: -27 26 22.00 (-27.43944d) Equinox: J2000		V=24.0+/-0.2	Reference Frame: ICRS				
	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit
Exposures	1	(14) ESO509-G008	ACS/WFC, ACCUM, WFC	F475W			POS TARG null,20.0	Pattern 1, Exps 1-2 in Visit 12 (1) Prime + Parallel Group 1-2 in Pattern 1, Exps 1-2 in Visit 12	1272 Secs [==>(Pattern 1)] [==>(Pattern 2)] [==>1369.0 Secs (Pattern 3)] [==>1369.0 Secs (Pattern 4)]	[1] [2]
	2	(14) ESO509-G008	WFC3/UVIS, ACCUM, UVIS	F475W				Pattern 1, Exps 1-2 in Visit 12 (1) Prime + Parallel Group 1-2 in Pattern 1, Exps 1-2 in Visit 12	1100 Secs [==>1332.0 Secs (Pattern 1)] [==>1282.0 Secs (Pattern 2)] [==>1379.0 Secs (Pattern 3)] [==>1379.0 Secs (Pattern 4)]	[1] [2]
	3	(14) ESO509-G008	ACS/WFC, ACCUM, WFC	F475W			POS TARG 0.12,-7.8	Pattern 1, Exps 3-4 in Visit 12 (1) Prime + Parallel Group 3-4 in Pattern 1, Exps 3-4 in Visit 12	1200 Secs [==>1369.0 Secs (Pattern 1)] [==>1369.0 Secs (Pattern 2)] [==>1369.0 Secs (Pattern 3)] [==>1369.0 Secs (Pattern 4)]	[3] [4]
	4	(14) ESO509-G008	WFC3/UVIS, ACCUM, UVIS	F475W				Pattern 1, Exps 3-4 in Visit 12 (1) Prime + Parallel Group 3-4 in Pattern 1, Exps 3-4 in Visit 12	1100 Secs [==>1379.0 Secs (Pattern 1)] [==>1379.0 Secs (Pattern 2)] [==>1379.0 Secs (Pattern 3)] [==>1379.0 Secs (Pattern 4)]	[3] [4]



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