



11735 - The LSD project: dynamics, merging and stellar populations of a sample of well-studied LBGs at $z \sim 3$

Cycle: 17, Proposal Category: GO

(Availability Mode: SUPPORTED)

INVESTIGATORS

<i>Name</i>	<i>Institution</i>	<i>E-Mail</i>
Dr. Filippo Mannucci (PI) (ESA Member)	INAF - IRA, Firenze	filippo@arcetri.astro.it
Dr. Roberto Maiolino (CoI) (ESA Member)	INAF, Osservatorio Astronomico di Roma	maiolino@oa-roma.inaf.it
Dr. Guido Risaliti (CoI) (AdminUSPI)	Harvard University	risaliti@cfa.harvard.edu
Prof. Alessandro Marconi (CoI) (ESA Member)	Universita di Firenze	marconi@arcetri.astro.it
Dr. Giovanni Cresci (CoI) (ESA Member)	Max-Planck-Institut fur extraterrestrische Physik	gcresci@mpe.mpg.de
Dr. Lucia Pozzetti (CoI) (ESA Member)	INAF, Osservatorio Astronomico di Bologna	luca@bo.astro.it

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>
A1	(1) SA22A-C30	ACS/WFC	1	29-May-2009 21:11:53.0	yes
A2	(1) SA22A-C30	WFC3/IR	1	29-May-2009 21:11:57.0	yes
B1	(2) SSA22A-C6M4	ACS/WFC	1	29-May-2009 21:12:00.0	yes
B2	(2) SSA22A-C6M4	WFC3/IR	1	29-May-2009 21:12:03.0	yes
C1	(4) DSF2237B-MD19	ACS/WFC	1	29-May-2009 21:12:05.0	yes
C2	(4) DSF2237B-MD19	WFC3/IR	1	29-May-2009 21:12:08.0	yes
D1	(5) Q0302-C131	ACS/WFC	1	29-May-2009 21:12:10.0	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>
D2	(5) Q0302-C131	WFC3/IR	1	29-May-2009 21:12:13.0	yes
E1	(6) Q0302-M80	ACS/WFC	1	29-May-2009 21:12:16.0	yes
E2	(6) Q0302-M80	WFC3/IR	1	29-May-2009 21:12:18.0	yes
F1	(7) Q0302-C171	ACS/WFC	1	29-May-2009 21:12:21.0	yes
F2	(7) Q0302-C171	WFC3/IR	1	29-May-2009 21:12:23.0	yes
G1	(8) SSA22A-M16	WFC3/IR	1	29-May-2009 21:12:25.0	yes
H1	(9) SSA22A-M38C48	WFC3/IR	1	29-May-2009 21:12:28.0	yes
L1	(3) SSA22B-C5	ACS/WFC	2	29-May-2009 21:12:30.0	yes
L2	(3) SSA22B-C5	WFC3/IR	2	29-May-2009 21:12:33.0	yes

18 Total Orbits Used

ABSTRACT

A large observational effort with the ground-based ESO/VLT telescopes allowed us to obtain deep, spatially-resolved, near-IR spectra of complete sample of 11 Lyman-Break Galaxies at $z \sim 3.1$. These observations were used to obtain, for the first time, the metallicity and the dynamical properties of a sample of objects that, albeit small, is representative of the total population of the LBGs.

We propose to use HST to obtain high-resolution optical and near-IR images of this sample of LBGs in order to study the broad-band morphology and the stellar light distribution of these galaxies. These images, exploiting the superior spatial resolution of HST images and the low-background : 1- will allow a precise measure of the dynamical mass from the velocity field derived with spectroscopy; 2- will permit a comparison of the distribution of star formation (from the line emission) with the underlying stellar population, and, 3- will be used to check if the complex velocity field and the multiple line-emitting regions detected in most targets can be ascribed to on-going mergers. This accurate study will shed light on a number of unsolved problems still affecting the knowledge of the LBGs.

OBSERVING DESCRIPTION

We want to obtain rest-frame UV and optical images of a sample of galaxies at $z \sim 3.1$.

Each galaxy will be observed with ACS/WFC in the F625W filter and with WFC3-IR with F160W. The filter F625W is preferred to the F775W filter requested during phase I as a slightly better sensitivity can be obtained.

In both cases, we will use the standard 4-position dither pattern, with default values of spacing. All galaxies, except one, will require 1 orbit per instrument. For the faintest galaxy we split the 4 position dither into two orbits.

REAL TIME JUSTIFICATION

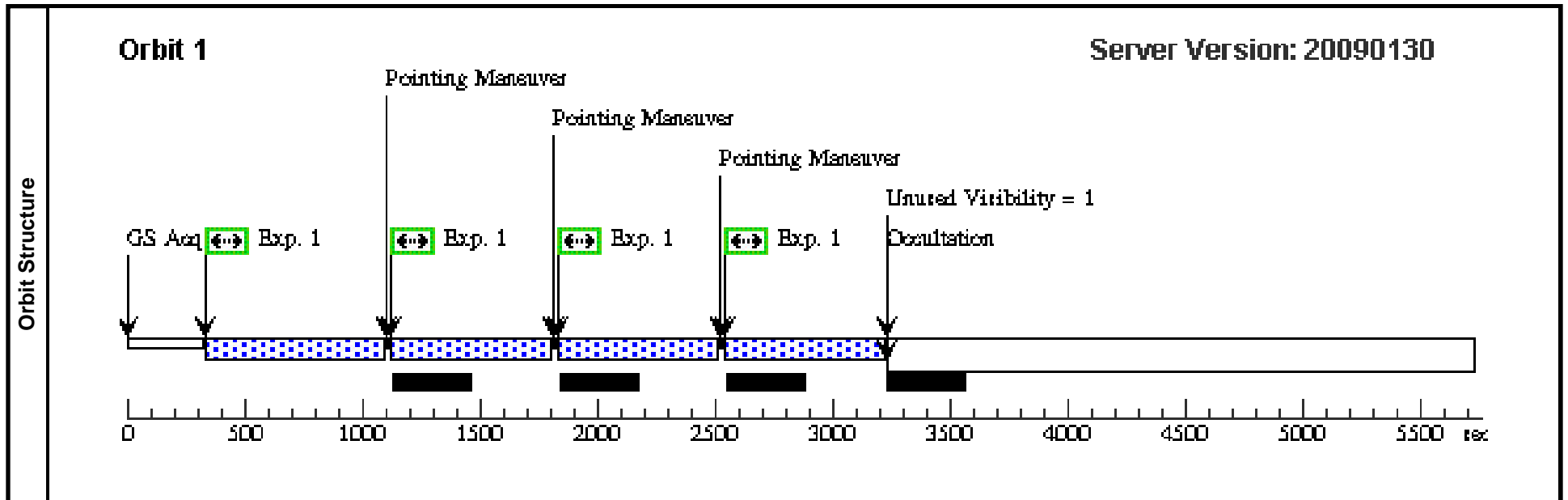
For the ACS observation, by using the ETC we estimated that 1 orbit (38 min each, assuming 53 minutes of orbits and overheads of 15 min) is enough to obtain $S/N \sim 30$ within an aperture of 1" for 7 out of 8 of our targets, having Vega R-band magnitudes between 23.0 and 24.3. Assuming a flat distribution of the light, this implies a S/N of 3-4 for each resolution element of $0.1'' \times 0.1''$, which is adequate to obtain a reliable morphological study. Only one target, having $R=24.8$, requires 2 orbits to reach the same SNR. Two targets already have deep ACS or WFPC2 archive images, and will not be observed. As a consequence, the total number of requested orbits with ACS is 8.

The requested exposure time for WFC3-IR can be estimated with a reasonable approximation as the total, integrated H-band magnitude is known for most of the objects, and average R-H colors can be used for the remaining objects. The Vega H-band magnitudes are between 21.7 and 22.5 for 10 out of the 11 targets, while one object is fainter ($H=22.9$). In this case, a total $S/N=30$ within 1", corresponding to $S/N=5-6$ per $0.2'' \times 0.2''$ resolution element, is obtained in 1 orbit for the brighter objects, and 2 orbits for the faintest one.

Proposal 11735 - Visit A1 - The LSD project: dynamics, merging and stellar populations of a sample of well-studied LB...

Sat May 30 01:12:36 GMT 2009

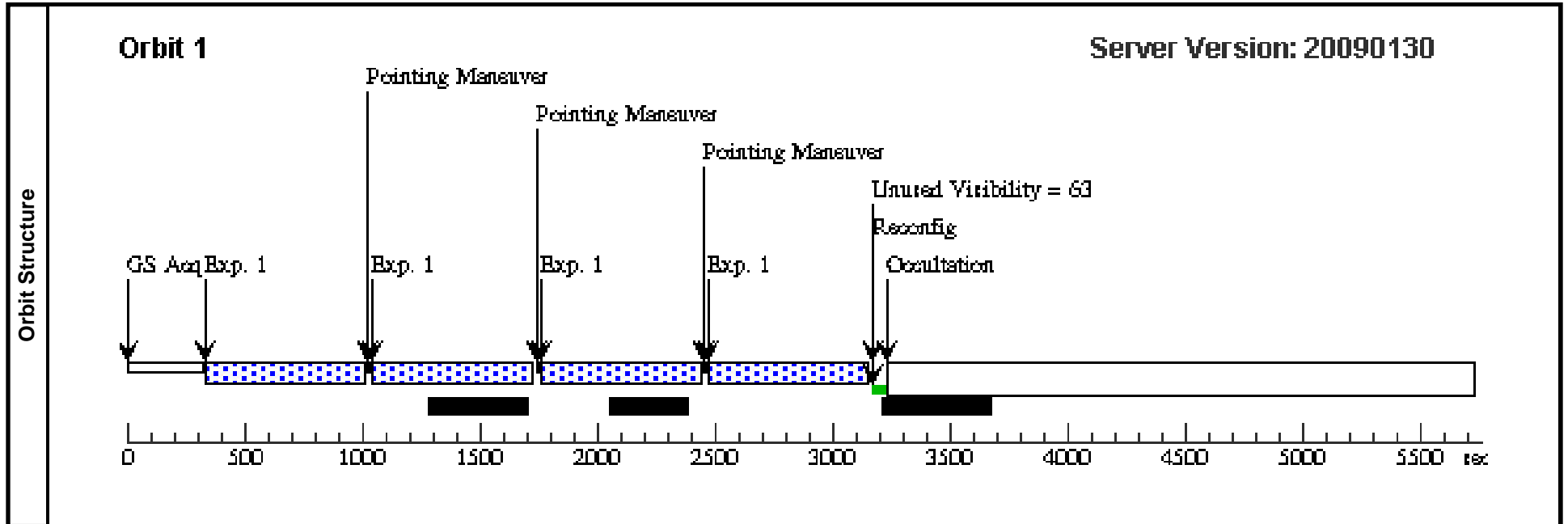
Visit	Proposal 11735, Visit A1, implementation Diagnostic Status: No Diagnostics Scientific Instruments: ACS/WFC Special Requirements: (none) Comments: C30 ACS										
	Patterns	#	Primary Pattern				Secondary Pattern			Exposures	
		(1)	Pattern Type=ACS-WFC-DITHER-BOX Purpose=DITHER Number Of Points=4 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)			
Fixed Targets	#	Name	Target Coordinates		Targ. Coord. Corrections		Fluxes		Miscellaneous		
	(1)	SA22A-C30	RA: 22 17 19.2800 (334.3303333d) Dec: +00 15 44.70 (.26242d) Equinox: J2000				V=(?) R=23.9 z=3.104		Reference Frame: ICRS		
Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]		Orbit
	1	C30 ACS	(1) SA22A-C30	ACS/WFC, ACCUM, WFC1	F625W			Pattern 1, Exps 1-1 (1)	400 Secs [==>552.0 Secs (Pattern 1)] [==>552.0 Secs (Pattern 2)] [==>552.0 Secs (Pattern 3)] [==>552.0 Secs (Pattern 4)]	[1]	



Proposal 11735 - Visit A2 - The LSD project: dynamics, merging and stellar populations of a sample of well-studied LB...

Sat May 30 01:12:37 GMT 2009

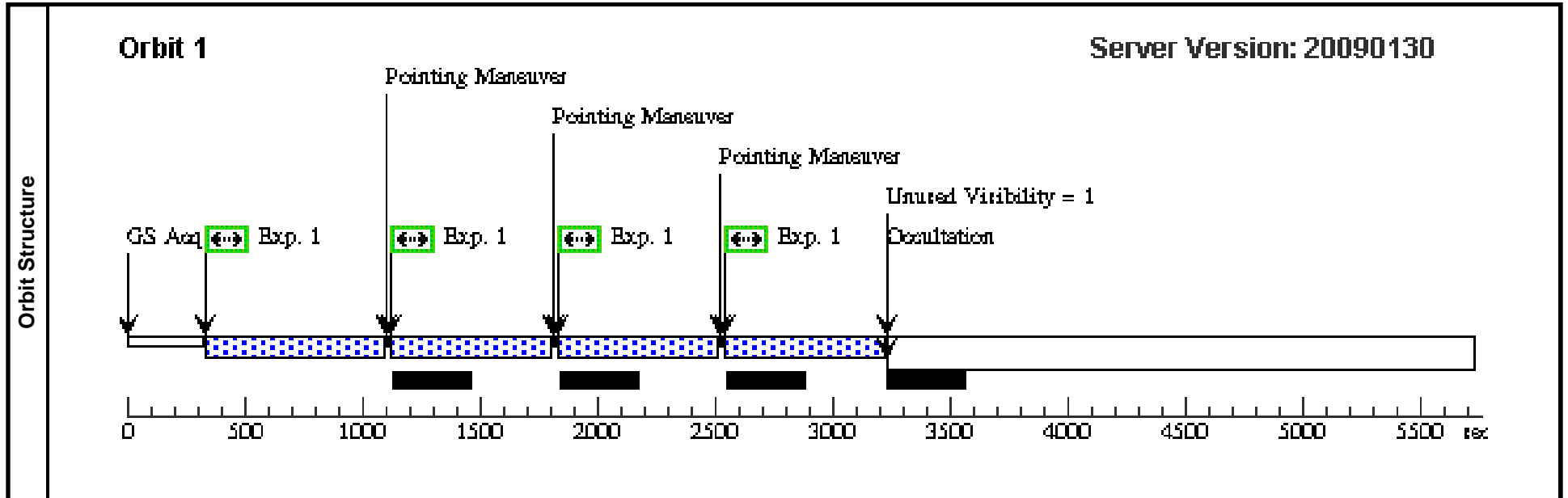
Visit	Proposal 11735, Visit A2, implementation Diagnostic Status: No Diagnostics Scientific Instruments: WFC3/IR Special Requirements: (none) Comments: C30 WPFC3									
	Patterns	#	Primary Pattern			Secondary Pattern			Exposures	
		(2)	Pattern Type=WFC3-IR-DITHER-BOX-MIN Purpose=DITHER Number Of Points=4 Point Spacing=0.572 Line Spacing=0.365	Coordinate Frame=POS-TARG Pattern Orientation=18.528 Angle Between Sides=74.653 Center Pattern=false					(1)	
Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous				
	(1)	SA22A-C30	RA: 22 17 19.2800 (334.3303333d) Dec: +00 15 44.70 (.26242d) Equinox: J2000		V=(?) R=23.9 z=3.104	Reference Frame: ICRS				
Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit
	1	C30 WFC3	(1) SA22A-C30	WFC3/IR, MULTIACCUM, IR	F160W	NSAMP=14; SAMP-SEQ=SPAR S50		Pattern 2, Exps 1-1 (2)	[=>(Pattern 1)] [=>(Pattern 2)] [=>(Pattern 3)] [=>(Pattern 4)]	[1]



Proposal 11735 - Visit B1 - The LSD project: dynamics, merging and stellar populations of a sample of well-studied LB...

Sat May 30 01:12:37 GMT 2009

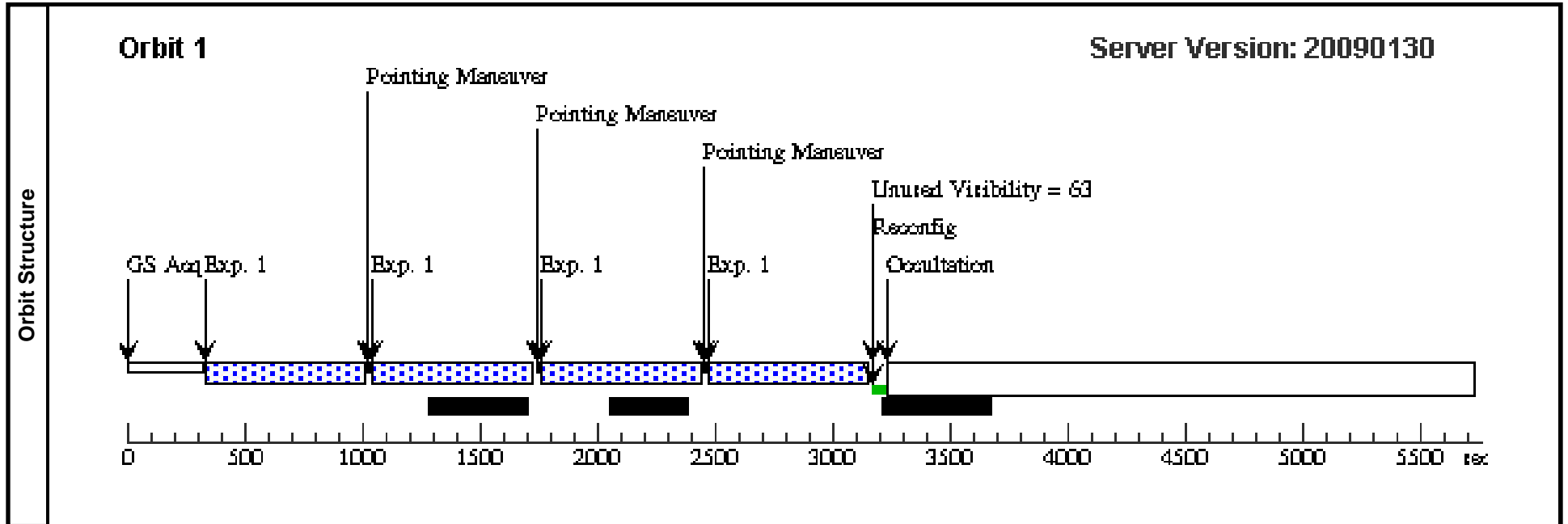
Visit	Proposal 11735, Visit B1, implementation Diagnostic Status: No Diagnostics Scientific Instruments: ACS/WFC Special Requirements: (none) Comments: C6M4 ACS									
	Patterns	#	Primary Pattern			Secondary Pattern			Exposures	
		(1)	Pattern Type=ACS-WFC-DITHER-BOX Purpose=DITHER Number Of Points=4 Point Spacing=0.265 Line Spacing=0.187	Coordinate Frame=POS-TARG Pattern Orientation=20.67 Angle Between Sides=69.05 Center Pattern=false						
Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous				
	(2)	SSA22A-C6M4	RA: 22 17 40.9200 (334.4205000d) Dec: +00 11 26.90 (.19081d) Equinox: J2000		V=(?) R=23.1, 24.5 z=3.098, 3.093	Reference Frame: ICRS				
Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit
	1	C6M4 ACS	(2) SSA22A-C6M4	ACS/WFC, ACCUM, WFC1	F625W			Pattern 1, Exps 1-1 (1)	400 Secs [=>552.0 Secs (Pattern 1)] [=>552.0 Secs (Pattern 2)] [=>552.0 Secs (Pattern 3)] [=>552.0 Secs (Pattern 4)]	[1]



Proposal 11735 - Visit B2 - The LSD project: dynamics, merging and stellar populations of a sample of well-studied LB...

Sat May 30 01:12:37 GMT 2009

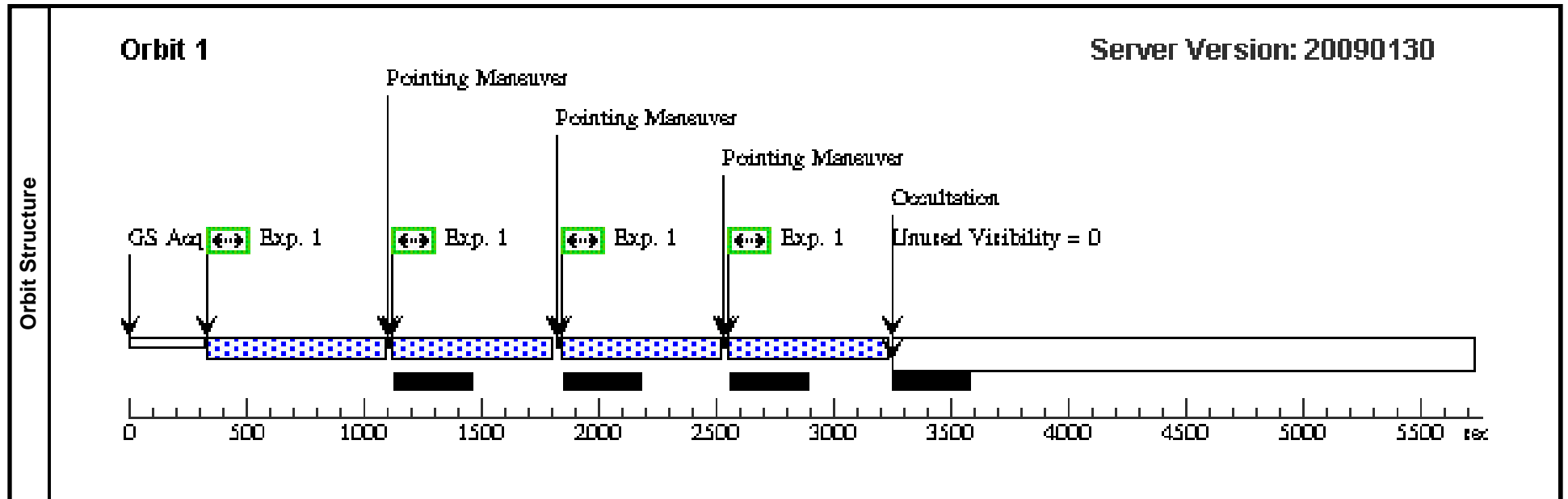
Visit	Proposal 11735, Visit B2, implementation Diagnostic Status: No Diagnostics Scientific Instruments: WFC3/IR Special Requirements: (none) Comments: C6M4 WFC3									
	Patterns	#	Primary Pattern			Secondary Pattern			Exposures	
		(2)	Pattern Type=WFC3-IR-DITHER-BOX-MIN Purpose=DITHER Number Of Points=4 Point Spacing=0.572 Line Spacing=0.365	Coordinate Frame=POS-TARG Pattern Orientation=18.528 Angle Between Sides=74.653 Center Pattern=false					(1)	
Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections		Fluxes		Miscellaneous		
	(2)	SSA22A-C6M4	RA: 22 17 40.9200 (334.4205000d) Dec: +00 11 26.90 (.19081d) Equinox: J2000			V=(?) R=23.1, 24.5 z=3.098, 3.093	Reference Frame: ICRS			
Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit
	1	C6M4 WFC 3	(2) SSA22A-C6M4	WFC3/IR, MULTIACCUM, IR	F160W	NSAMP=14; SAMP-SEQ=SPAR S50		Pattern 2, Exps 1-1 (2)	[=>(Pattern 1)] [=>(Pattern 2)] [=>(Pattern 3)] [=>(Pattern 4)]	[1]



Proposal 11735 - Visit C1 - The LSD project: dynamics, merging and stellar populations of a sample of well-studied LB...

Sat May 30 01:12:38 GMT 2009

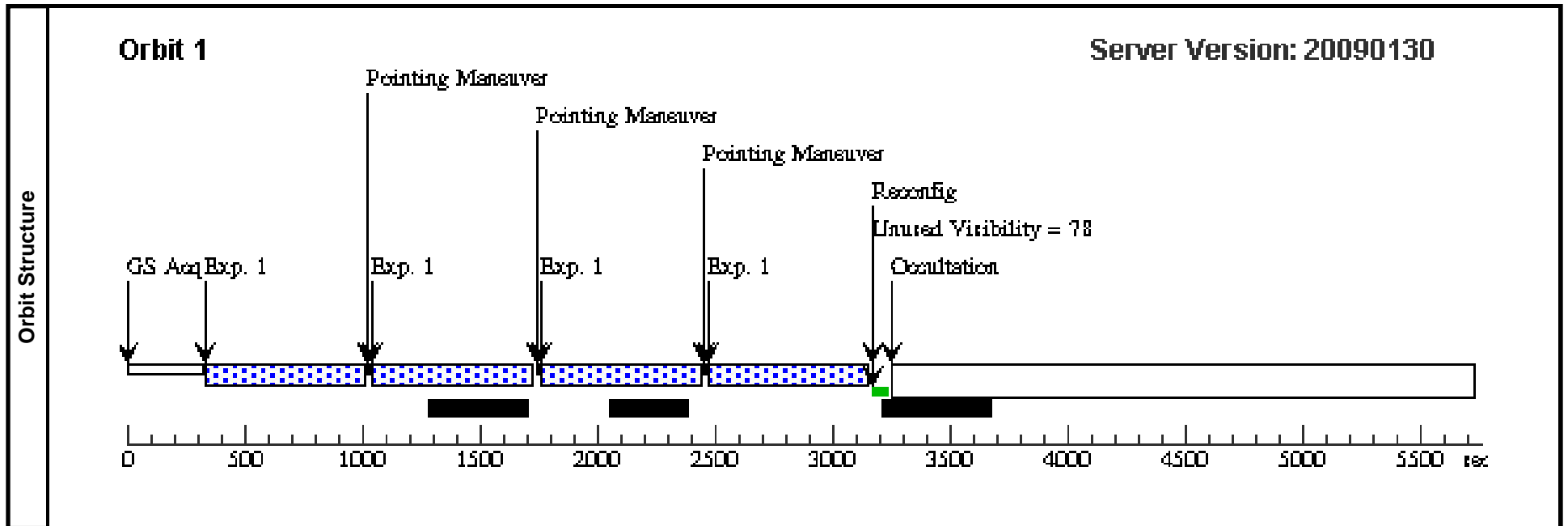
Visit	Proposal 11735, Visit C1, implementation Diagnostic Status: No Diagnostics Scientific Instruments: ACS/WFC Special Requirements: (none) Comments: MD19 ACS									
	Patterns	#	Primary Pattern			Secondary Pattern			Exposures	
		(1)	Pattern Type=ACS-WFC-DITHER-BOX Purpose=DITHER Number Of Points=4 Point Spacing=0.265 Line Spacing=0.187	Coordinate Frame=POS-TARG Pattern Orientation=20.67 Angle Between Sides=69.05 Center Pattern=false						
Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous				
	(4)	DSF2237B-MD19	RA: 22 39 21.0800 (339.8378333d) Dec: +11 48 27.70 (11.80769d) Equinox: J2000		V=(?) R=24.2 z=2.616	Reference Frame: ICRS				
Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit
	1	MD19 ACS	(4) DSF2237B-MD19	ACS/WFC, ACCUM, WFC1	F625W			Pattern 1, Exps 1-1 (1)	400 Secs [=>556.0 Secs (Pattern 1)] [=>556.0 Secs (Pattern 2)] [=>556.0 Secs (Pattern 3)] [=>556.0 Secs (Pattern 4)]	[1]



Proposal 11735 - Visit C2 - The LSD project: dynamics, merging and stellar populations of a sample of well-studied LB...

Sat May 30 01:12:38 GMT 2009

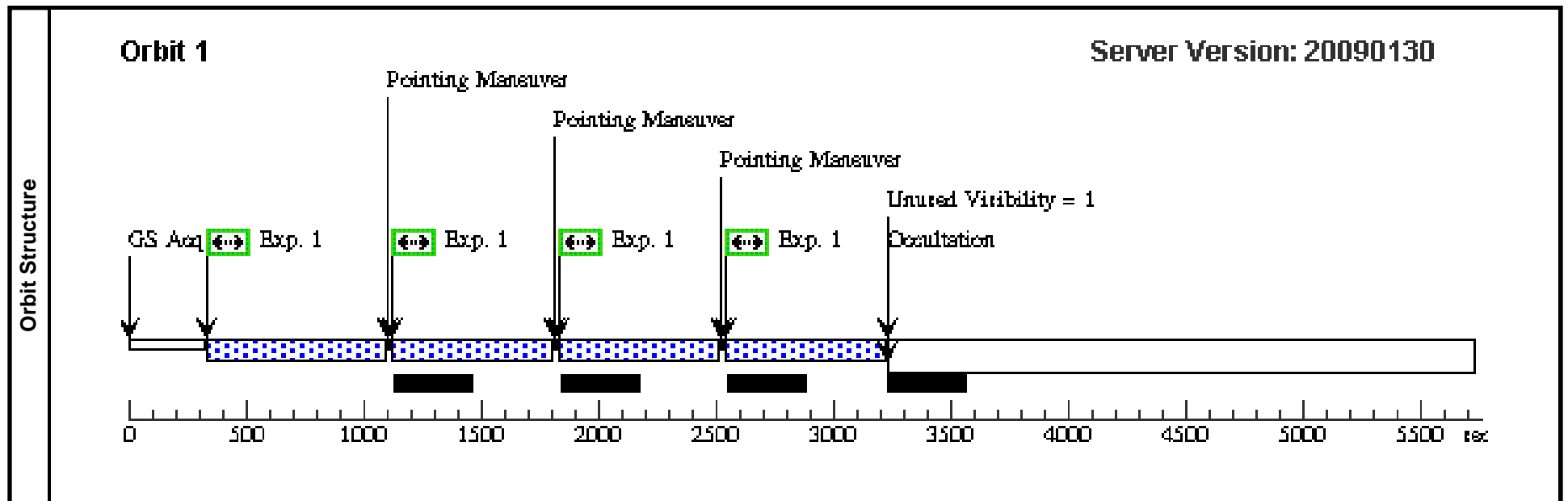
Visit	Proposal 11735, Visit C2, implementation Diagnostic Status: No Diagnostics Scientific Instruments: WFC3/IR Special Requirements: (none) Comments: MD19 WFC3									
	Patterns	#	Primary Pattern			Secondary Pattern			Exposures	
		(2)	Pattern Type=WFC3-IR-DITHER-BOX-MIN Purpose=DITHER Number Of Points=4 Point Spacing=0.572 Line Spacing=0.365	Coordinate Frame=POS-TARG Pattern Orientation=18.528 Angle Between Sides=74.653 Center Pattern=false					(1)	
Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections		Fluxes	Miscellaneous			
	(4)	DSF2237B-MD19	RA: 22 39 21.0800 (339.8378333d) Dec: +11 48 27.70 (11.80769d) Equinox: J2000			V=(?) R=24.2 z=2.616	Reference Frame: ICRS			
Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit
	1	MD19 WFC3	(4) DSF2237B-MD19	WFC3/IR, MULTIACCUM, IR	F160W	NSAMP=14; SAMP-SEQ=SPAR S50		Pattern 2, Exps 1-1 (2)	[=>(Pattern 1)] [=>(Pattern 2)] [=>(Pattern 3)] [=>(Pattern 4)]	[1]



Proposal 11735 - Visit D1 - The LSD project: dynamics, merging and stellar populations of a sample of well-studied LB...

Sat May 30 01:12:39 GMT 2009

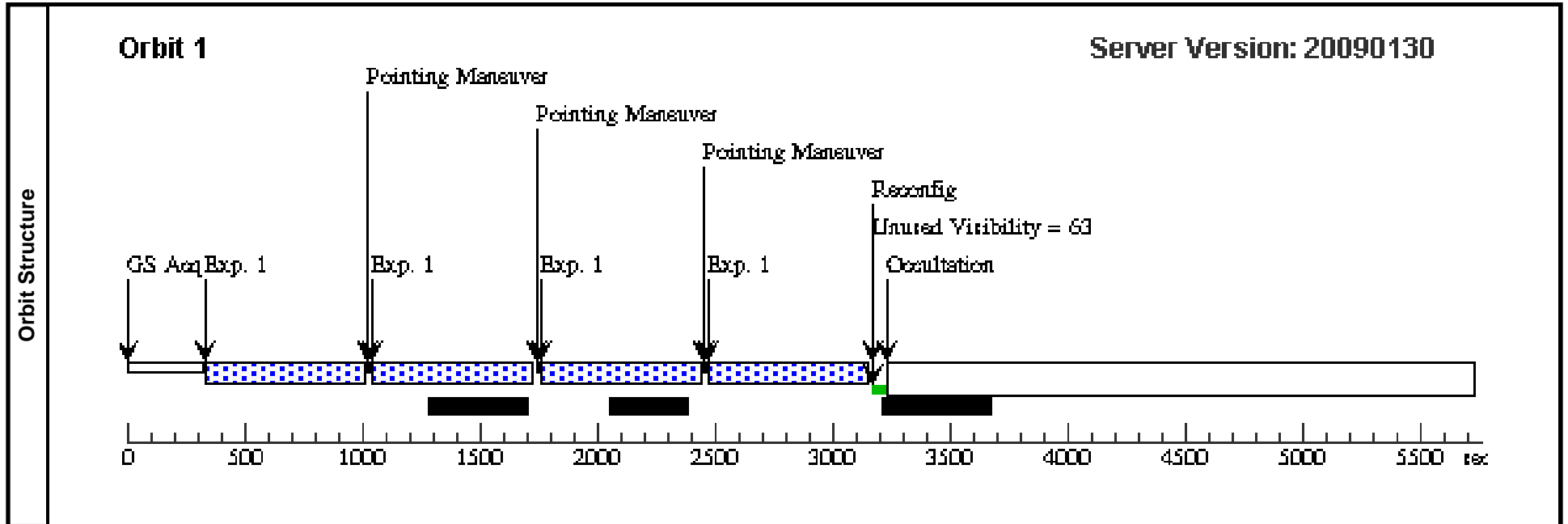
Visit	Proposal 11735, Visit D1, implementation Diagnostic Status: No Diagnostics Scientific Instruments: ACS/WFC Special Requirements: (none) Comments: C131 ACS									
	Patterns	#	Primary Pattern			Secondary Pattern			Exposures	
		(1)	Pattern Type=ACS-WFC-DITHER-BOX Purpose=DITHER Number Of Points=4 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)	
Fixed Targets	#	Name	Target Coordinates		Targ. Coord. Corrections		Fluxes		Miscellaneous	
	(5)	Q0302-C131	RA: 03 04 35.0400 (46.1460000d) Dec: -00 11 18.30 (-.18842d) Equinox: J2000				V=(?) R=24.1 z=3.240	Reference Frame: ICRS		
Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit
	1	C131 ACS	(5) Q0302-C131	ACS/WFC, ACCUM, WFC1	F625W				Pattern 1, Exps 1-1 (1) 400 Secs [=>552.0 Secs (Pattern 1)] [=>552.0 Secs (Pattern 2)] [=>552.0 Secs (Pattern 3)] [=>552.0 Secs (Pattern 4)]	[1]



Proposal 11735 - Visit D2 - The LSD project: dynamics, merging and stellar populations of a sample of well-studied LB...

Sat May 30 01:12:39 GMT 2009

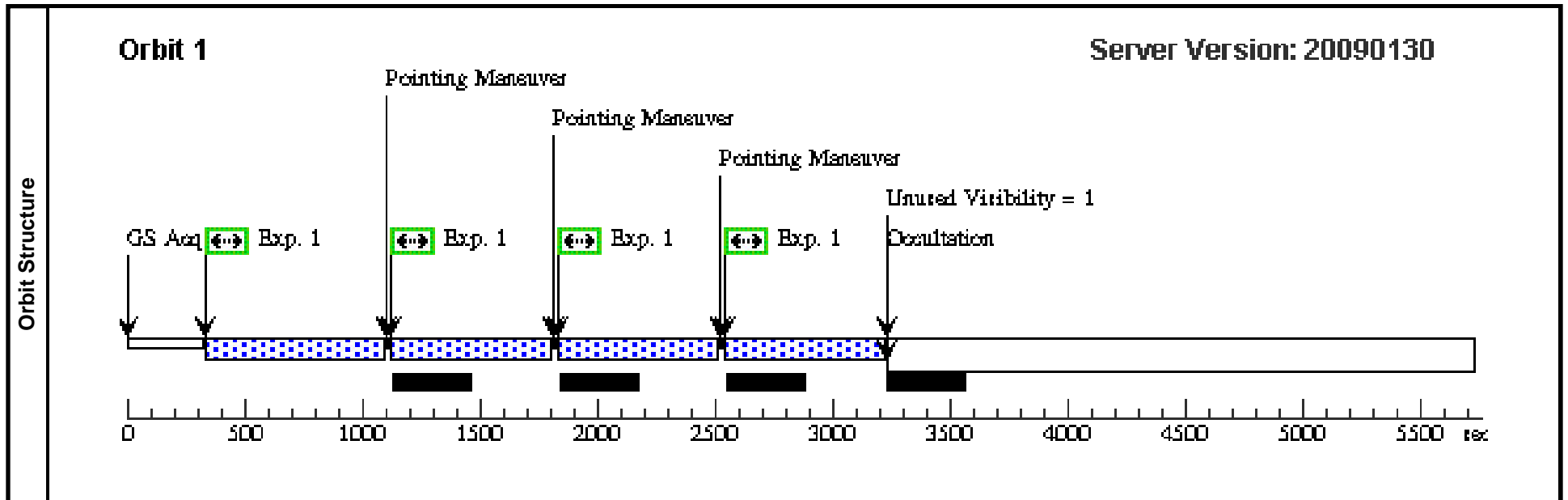
Visit	Proposal 11735, Visit D2, implementation Diagnostic Status: No Diagnostics Scientific Instruments: WFC3/IR Special Requirements: (none) Comments: C131 WFC3									
	Patterns	#	Primary Pattern			Secondary Pattern			Exposures	
		(2)	Pattern Type=WFC3-IR-DITHER-BOX-MIN Purpose=DITHER Number Of Points=4 Point Spacing=0.572 Line Spacing=0.365	Coordinate Frame=POS-TARG Pattern Orientation=18.528 Angle Between Sides=74.653 Center Pattern=false						
Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous				
	(5)	Q0302-C131	RA: 03 04 35.0400 (46.1460000d) Dec: -00 11 18.30 (-.18842d) Equinox: J2000		V=(?) R=24.1 z=3.240	Reference Frame: ICRS				
Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit
	1	C131 WFC3	(5) Q0302-C131	WFC3/IR, MULTIACCUM, IR	F160W	NSAMP=14; SAMP-SEQ=SPAR S50		Pattern 2, Exps 1-1 (2)	[=>(Pattern 1)] [=>(Pattern 2)] [=>(Pattern 3)] [=>(Pattern 4)]	[1]



Proposal 11735 - Visit E1 - The LSD project: dynamics, merging and stellar populations of a sample of well-studied LB...

Sat May 30 01:12:39 GMT 2009

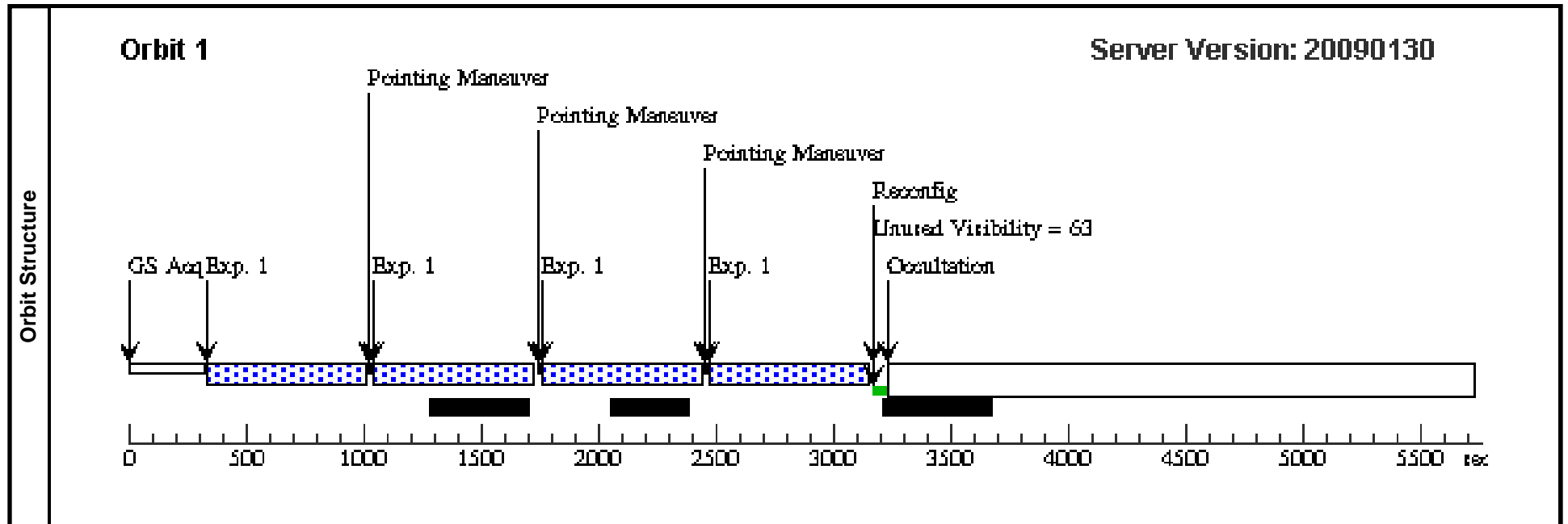
Visit	Proposal 11735, Visit E1, implementation Diagnostic Status: No Diagnostics Scientific Instruments: ACS/WFC Special Requirements: (none) Comments: M80 ACS									
	Patterns	#	Primary Pattern			Secondary Pattern			Exposures	
		(1)	Pattern Type=ACS-WFC-DITHER-BOX Purpose=DITHER Number Of Points=4 Point Spacing=0.265 Line Spacing=0.187	Coordinate Frame=POS-TARG Pattern Orientation=20.67 Angle Between Sides=69.05 Center Pattern=false						
Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous				
	(6)	Q0302-M80	RA: 03 04 45.7000 (46.1904167d) Dec: -00 13 40.60 (-.22794d) Equinox: J2000		V=(?) R=23.8 z=3.416	Reference Frame: ICRS				
Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit
	1	M80 ACS	(6) Q0302-M80	ACS/WFC, ACCUM, WFC1	F625W			Pattern 1, Exps 1-1 (1)	400 Secs [==>552.0 Secs (Pattern 1)] [==>552.0 Secs (Pattern 2)] [==>552.0 Secs (Pattern 3)] [==>552.0 Secs (Pattern 4)]	[1]



Proposal 11735 - Visit E2 - The LSD project: dynamics, merging and stellar populations of a sample of well-studied LB...

Sat May 30 01:12:40 GMT 2009

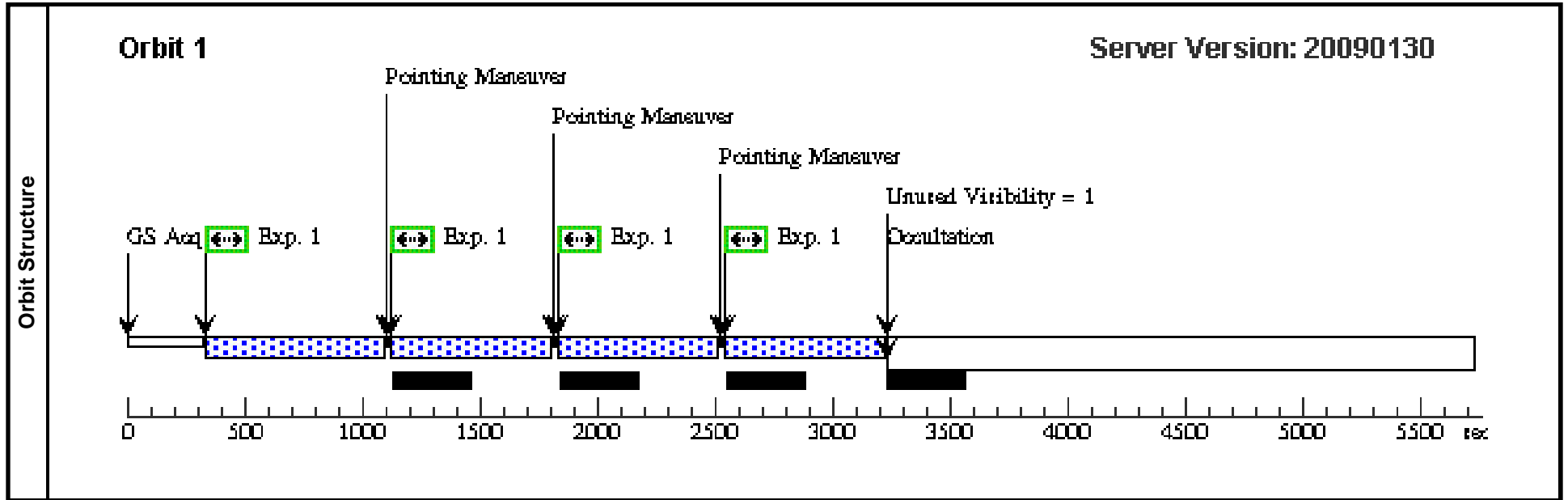
Visit	Proposal 11735, Visit E2, implementation Diagnostic Status: No Diagnostics Scientific Instruments: WFC3/IR Special Requirements: (none) Comments: M80 FC3									
	Patterns	#	Primary Pattern			Secondary Pattern			Exposures	
		(2)	Pattern Type=WFC3-IR-DITHER-BOX-MIN Purpose=DITHER Number Of Points=4 Point Spacing=0.572 Line Spacing=0.365	Coordinate Frame=POS-TARG Pattern Orientation=18.528 Angle Between Sides=74.653 Center Pattern=false						
Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous				
	(6)	Q0302-M80	RA: 03 04 45.7000 (46.1904167d) Dec: -00 13 40.60 (-.22794d) Equinox: J2000		V=(?) R=23.8 z=3.416	Reference Frame: ICRS				
Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit
	1	M80 WFC3	(6) Q0302-M80	WFC3/IR, MULTIACCUM, IR	F160W	NSAMP=14; SAMP-SEQ=SPAR S50		Pattern 2, Exps 1-1 (2)	[=>(Pattern 1)] [=>(Pattern 2)] [=>(Pattern 3)] [=>(Pattern 4)]	[1]



Proposal 11735 - Visit F1 - The LSD project: dynamics, merging and stellar populations of a sample of well-studied LB...

Sat May 30 01:12:40 GMT 2009

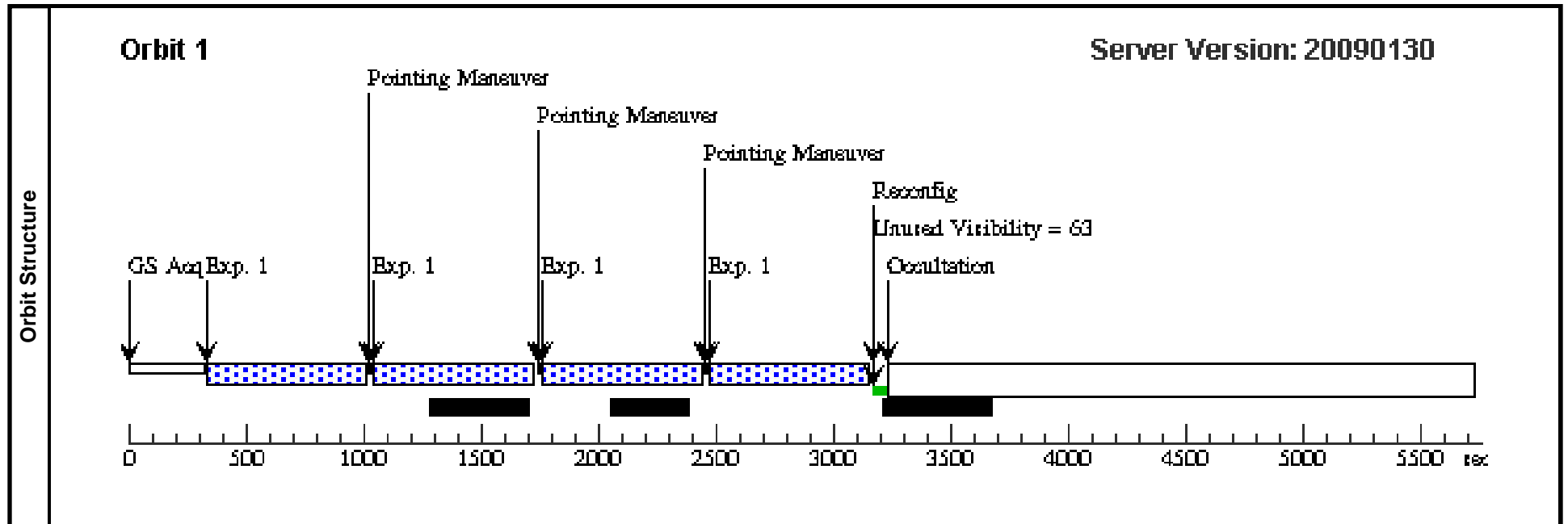
Visit	Proposal 11735, Visit F1, implementation Diagnostic Status: No Diagnostics Scientific Instruments: ACS/WFC Special Requirements: (none) Comments: C171 ACS										
	Patterns	#	Primary Pattern			Secondary Pattern			Exposures		
		(1)	Pattern Type=ACS-WFC-DITHER-BOX Purpose=DITHER Number Of Points=4 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)
Fixed Targets	#	Name	Target Coordinates		Targ. Coord. Corrections		Fluxes		Miscellaneous		
	(7)	Q0302-C171	RA: 03 04 44.3100 (46.1846250d) Dec: -00 08 23.20 (-.13978d) Equinox: J2000				V=(?) R=24.3 z=3.342		Reference Frame: ICRS		
Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]		Orbit
	1	C171 ACS	(7) Q0302-C171	ACS/WFC, ACCUM, WFC1	F625W				Pattern 1, Exps 1-1 (1)	400 Secs [==>552.0 Secs (Pattern 1)] [==>552.0 Secs (Pattern 2)] [==>552.0 Secs (Pattern 3)] [==>552.0 Secs (Pattern 4)]	[1]



Proposal 11735 - Visit F2 - The LSD project: dynamics, merging and stellar populations of a sample of well-studied LB...

Sat May 30 01:12:40 GMT 2009

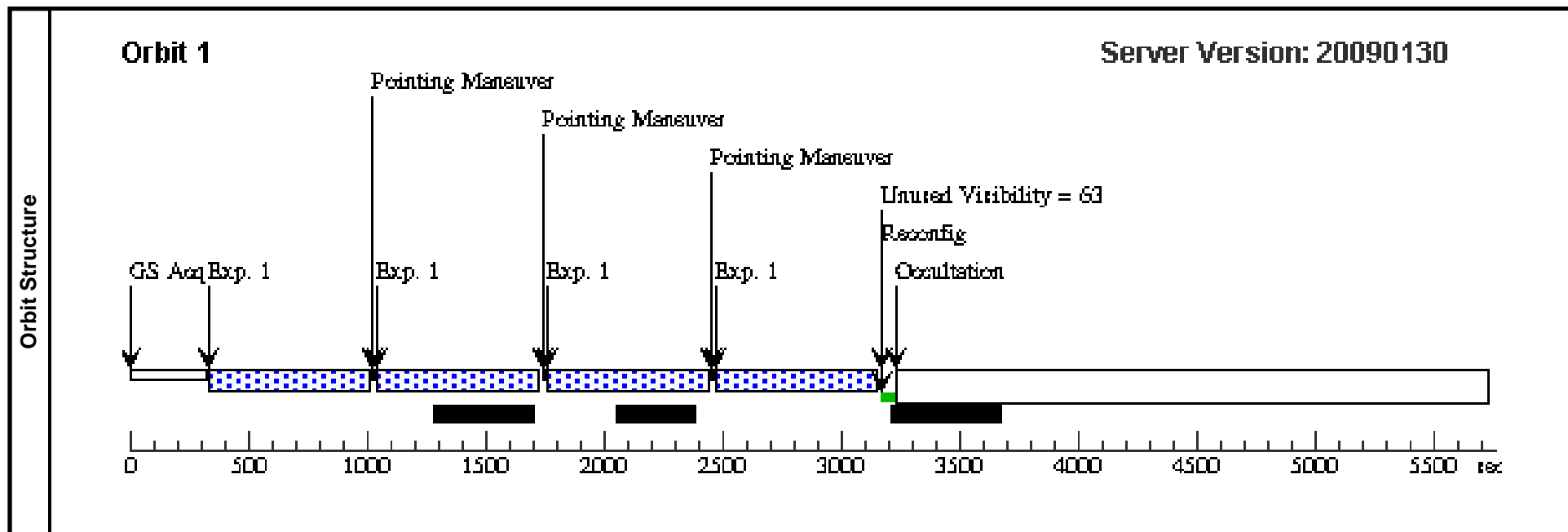
Visit	Proposal 11735, Visit F2, implementation Diagnostic Status: No Diagnostics Scientific Instruments: WFC3/IR Special Requirements: (none) Comments: C171 WFC3									
	Patterns	#	Primary Pattern			Secondary Pattern			Exposures	
(2)		Pattern Type=WFC3-IR-DITHER-BOX-MIN Purpose=DITHER Number Of Points=4 Point Spacing=0.572 Line Spacing=0.365	Coordinate Frame=POS-TARG Pattern Orientation=18.528 Angle Between Sides=74.653 Center Pattern=false					(1)		
Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections		Fluxes	Miscellaneous			
	(7)	Q0302-C171	RA: 03 04 44.3100 (46.1846250d) Dec: -00 08 23.20 (-.13978d) Equinox: J2000			V=(?) R=24.3 z=3.342	Reference Frame: ICRS			
Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit
	1	C171 WFC3	(7) Q0302-C171	WFC3/IR, MULTIACCUM, IR	F160W	NSAMP=14; SAMP-SEQ=SPAR S50		Pattern 2, Exps 1-1 (2)	[=>(Pattern 1)] [=>(Pattern 2)] [=>(Pattern 3)] [=>(Pattern 4)]	[1]



Proposal 11735 - Visit G1 - The LSD project: dynamics, merging and stellar populations of a sample of well-studied LB...

Sat May 30 01:12:40 GMT 2009

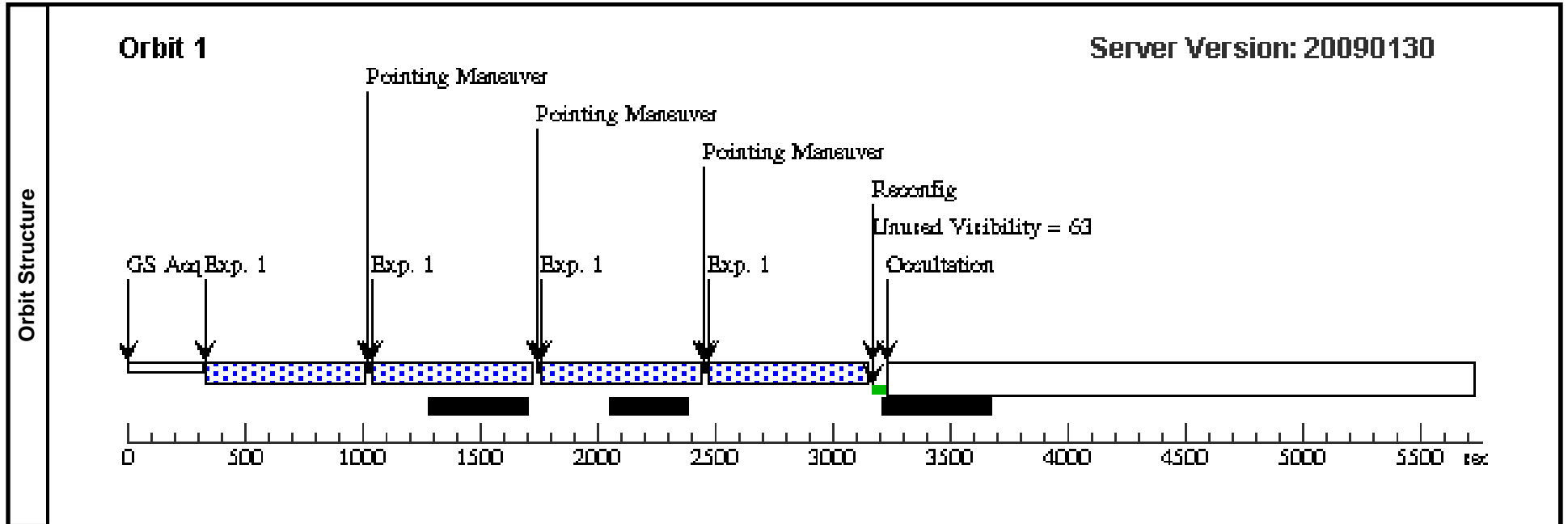
Visit	Proposal 11735, Visit G1, implementation Diagnostic Status: No Diagnostics Scientific Instruments: WFC3/IR Special Requirements: (none) Comments: M16									
	Patterns	#	Primary Pattern			Secondary Pattern			Exposures	
		(2)	Pattern Type=WFC3-IR-DITHER-BOX-MIN Purpose=DITHER Number Of Points=4 Point Spacing=0.572 Line Spacing=0.365	Coordinate Frame=POS-TARG Pattern Orientation=18.528 Angle Between Sides=74.653 Center Pattern=false					(1)	
Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections		Fluxes		Miscellaneous		
	(8)	SSA22A-M16	RA: 22 17 30.8500 (334.3785417d) Dec: +00 13 10.00 (.21944d) Equinox: J2000			V=(?) R=23.5 z=3.285		Reference Frame: ICRS		
Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit
	1	M16 WFC3	(8) SSA22A-M16	WFC3/IR, MULTIACCUM, IR	F160W	NSAMP=14; SAMP-SEQ=SPAR S50		Pattern 2, Exps 1-1 (2)	[=>(Pattern 1)] [=>(Pattern 2)] [=>(Pattern 3)] [=>(Pattern 4)]	[1]



Proposal 11735 - Visit H1 - The LSD project: dynamics, merging and stellar populations of a sample of well-studied LB...

Sat May 30 01:12:41 GMT 2009

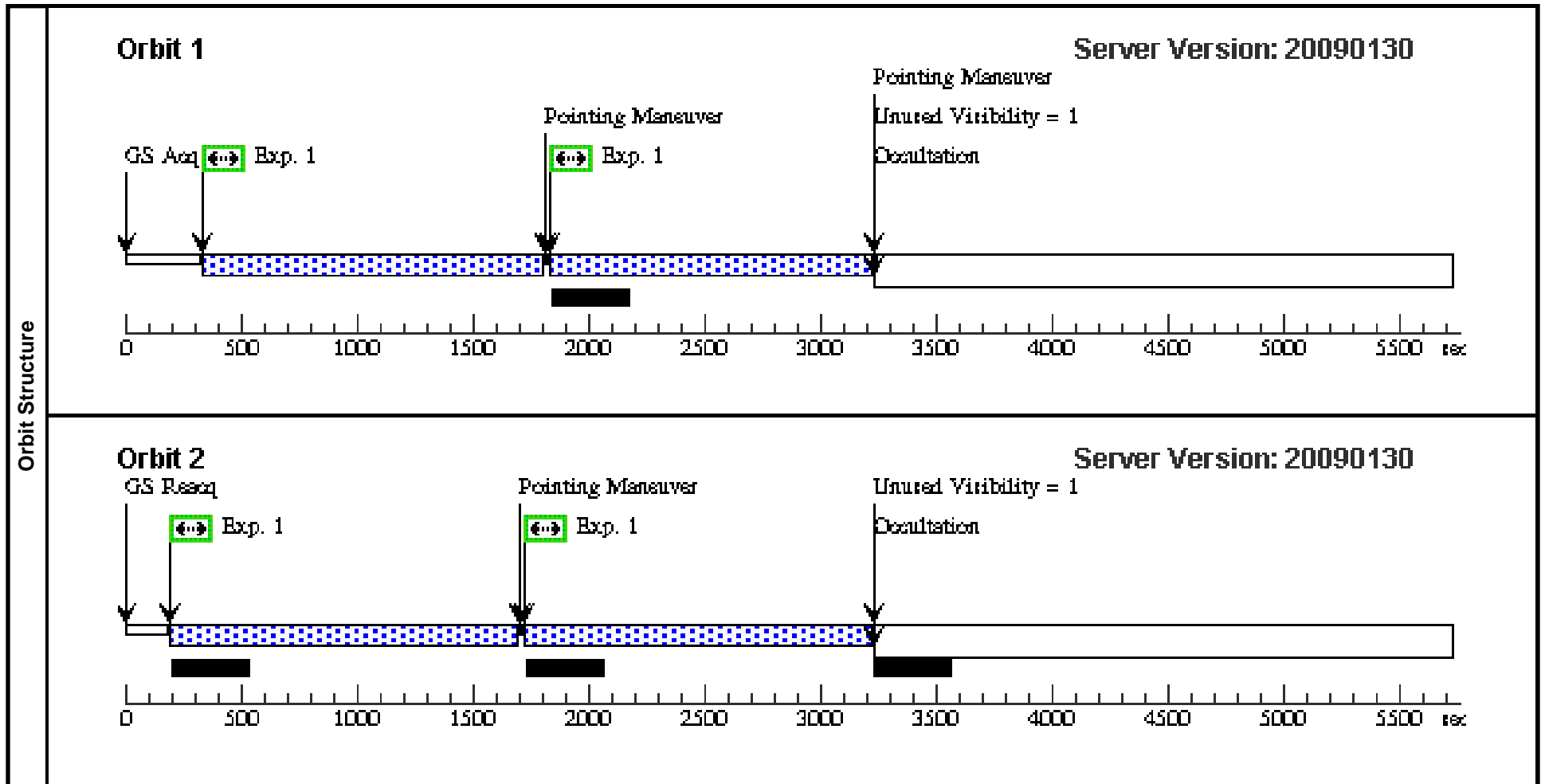
Visit	Proposal 11735, Visit H1, implementation Diagnostic Status: No Diagnostics Scientific Instruments: WFC3/IR Special Requirements: (none) Comments: M38C48										
	Patterns	#	Primary Pattern			Secondary Pattern			Exposures		
		(2)	Pattern Type=WFC3-IR-DITHER-BOX-MIN Purpose=DITHER Number Of Points=4 Point Spacing=0.572 Line Spacing=0.365	Coordinate Frame=POS-TARG Pattern Orientation=18.528 Angle Between Sides=74.653 Center Pattern=false							(1)
Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections		Fluxes		Miscellaneous			
	(9)	SSA22A-M38C48	RA: 22 17 18.3000 (334.3262500d) Dec: +00 18 39.10 (.31086d) Equinox: J2000			V=(?) R=23.8, 24.4 z=3.288, 3.079		Reference Frame: ICRS			
Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]		Orbit
	1	M38C48 W FC3	(9) SSA22A-M38C4 8	WFC3/IR, MULTIACCUM, IR	F160W	NSAMP=14; SAMP-SEQ=SPAR S50		Pattern 2, Exps 1-1 (2)	[=>(Pattern 1)] [=>(Pattern 2)] [=>(Pattern 3)] [=>(Pattern 4)]		[1]



Proposal 11735 - Visit L1 - The LSD project: dynamics, merging and stellar populations of a sample of well-studied LB...

Sat May 30 01:12:41 GMT 2009

Visit	Proposal 11735, Visit L1, implementation Diagnostic Status: No Diagnostics Scientific Instruments: ACS/WFC Special Requirements: (none) Comments: C5 ACS										
	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)
Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous					
	(3)	SSA22B-C5	RA: 22 17 47.0600 (334.4460833d) Dec: +00 04 25.70 (.07381d) Equinox: J2000		V=(?) R=24.9 z=3.117	Reference Frame: ICRS					
Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]		Orbit
	1	C5 ACS	(3) SSA22B-C5	ACS/WFC, ACCUM, WFC1	F625W			Pattern 1, Exps 1-1 (1)	1200 Secs		
									[==>1262.0 Secs (Pattern 1)]		[1]
									[==>1262.0 Secs (Pattern 2)]		
									[==>1372.0 Secs (Pattern 3)]		[2]
									[==>1372.0 Secs (Pattern 4)]		



Visit	Proposal 11735, Visit L2, implementation Diagnostic Status: No Diagnostics Scientific Instruments: WFC3/IR Special Requirements: (none) <i>Comments: C5 WFC3</i>									
	Patterns	#	Primary Pattern				Secondary Pattern			
(2)		Pattern Type=WFC3-IR-DITHER-BOX-MIN Purpose=DITHER Number Of Points=4 Point Spacing=0.572 Line Spacing=0.365		Coordinate Frame=POS-TARG Pattern Orientation=18.528 Angle Between Sides=74.653 Center Pattern=false						(1)
Fixed Targets	#	Name	Target Coordinates		Targ. Coord. Corrections		Fluxes		Miscellaneous	
	(3)	SSA22B-C5	RA: 22 17 47.0600 (334.4460833d) Dec: +00 04 25.70 (.07381d) Equinox: J2000				V=(?) R=24.9 z=3.117		Reference Frame: ICRS	
Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit
	1	C5 WFC3	(3) SSA22B-C5	WFC3/IR, MULTIACCUM, IR	F160W	SAMP-SEQ=SPARS 100; NSAMP=14		Pattern 2, Exps 1-1 (2)	[=>(Pattern 1)] [=>(Pattern 2)] [=>(Pattern 3)] [=>(Pattern 4)]	[1] [2]
Orbit Structure	Orbit 1 Server Version: 20090130									
	<p>The diagram shows a timeline for Orbit 1 from 0 to 5500 seconds. Key events are marked with arrows: GS Acq (around 200s), Exp. 1 (around 400s), Pointing Maneuver (around 1700s), another Pointing Maneuver (around 3100s), and Occultation (around 3200s). A blue checkered bar indicates the observation period from approximately 400s to 3100s. A green bar indicates the occultation period from approximately 3200s to 3300s. A black bar is present between 2500s and 2800s. The text 'Unused Visibility = 193' is shown above the timeline.</p>									

