



10510 - Morphology of massive early-type galaxies at $z > 1.2$: constraining galaxy formation models

Cycle: 14, Proposal Category: GO

(Availability Mode: SUPPORTED)

INVESTIGATORS

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VISITS

<i>Visit</i>	<i>Targets</i>	<i>Configurations</i>	<i>Orbits Used</i>	<i>Last Orbit Planner Run</i>	<i>OP Current with Visit?</i>
01	(1) GAL-030636-000301	NIC2	1	20-Jun-2005 11:21:54.0	yes
02	(2) GAL-030652-000009	NIC2	1	20-Jun-2005 11:22:00.0	yes
03	(3) GAL-030628+000031	NIC2	1	20-Jun-2005 11:22:04.0	yes
04	(4) GAL-030631+000113	NIC2	1	20-Jun-2005 11:22:07.0	yes

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<i>Visit</i>	<i>Targets</i>	<i>Configurations</i>	<i>Orbits Used</i>	<i>Last Orbit Planner Run</i>	<i>OP Current with Visit?</i>
05	(5) GAL-030634+000230	NIC2	1	20-Jun-2005 11:22:15.0	yes
06	(6) GAL-030643+000244	NIC2	1	20-Jun-2005 11:22:18.0	yes
07	(7) GAL-030635+000443	NIC2	1	20-Jun-2005 11:22:22.0	yes
08	(8) GAL-030621-001758	NIC2	1	20-Jun-2005 11:22:26.0	yes
09	(9) GAL-133459+164910	NIC2	1	20-Jun-2005 11:22:29.0	yes
10	(10) GAL-133424+164548	NIC2	1	20-Jun-2005 11:22:33.0	yes
11	(1) GAL-030636-000301	NIC2	1	20-Jun-2005 11:22:36.0	yes
12	(2) GAL-030652-000009	NIC2	1	20-Jun-2005 11:22:43.0	yes
13	(3) GAL-030628+000031	NIC2	1	20-Jun-2005 11:22:47.0	yes
14	(4) GAL-030631+000113	NIC2	1	20-Jun-2005 11:22:51.0	yes
15	(5) GAL-030634+000230	NIC2	1	20-Jun-2005 11:22:54.0	yes
16	(6) GAL-030643+000244	NIC2	1	20-Jun-2005 11:22:58.0	yes
17	(7) GAL-030635+000443	NIC2	1	20-Jun-2005 11:23:01.0	yes
18	(9) GAL-133459+164910	NIC2	1	20-Jun-2005 11:23:05.0	yes
19	(10) GAL-133424+164548	NIC2	1	20-Jun-2005 11:23:12.0	yes

19 Total Orbits Used

ABSTRACT

We ask for NICMOS-NIC2 H-band imaging of a sample of 10 massive early-type galaxies spectroscopically identified at $1.2 < z < 1.7$. Our aim is to look for possible relics of merging events of their formation/evolution in their morphology. The requested observations, sampling their rest-frame at $\lambda > 6500 \text{ \AA}$, would map the mass distribution of the bulk of their stellar content. The targets have been revealed by our group on the basis of near-IR spectroscopy obtained in the framework of a spectroscopic survey of a complete sample of bright EROs ($K_s < 18.5$). Optical and near-IR

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photometry is available for all the targets, and low resolution near-IR spectra have allowed their identification and redshift measurement. Spectroscopic and photometric data in our hands show that they have already assembled stellar masses greater than 3×10^{11} solar masses, and that the mean age of their stellar population is estimated older than 2-3 Gyr for 6 of them and about 1 Gyr for the other 4 galaxies. Thus, they are among the most luminous and massive evolved galaxies detected so far at $z > 1$. Other data are needed to infer how they have assembled such high stellar masses, i.e. to trace back their evolution. The requested observations would allow us to reveal signs of past interaction/merger event. A smooth $r^{1/m}$ profile, coupled with no other signs of interaction/merger (disturbed morphology), would place the possible merger event of formation 1-2 Gyr before their redshift $z \approx 1.5$, i.e. at $z > 2-3$. On the other hand, if signs of recent merger events will be found, the last merger event forming the local massive spheroids will be constrained at $1.5 < z < 2$. Thus, the requested HST observations will allow for the first time to see how massive early-type galaxies at $z \approx 1.5$ look like, constraining in any case the redshift of the possible merging event of their formation.

OBSERVING DESCRIPTION

We ask to perform H-band observations of 10 galaxies with the NICMOS-NIC2 camera in the F160W filter. This will allow us to exploit the resolution capabilities offered by NICMOS being the diffraction limit wavelength of NIC2 ($\lambda \sim 1.75 \mu\text{m}$) very close to central wavelength of the chosen filter.

Total H-band magnitudes of the targets are $\simeq 18.5-19.0$, and we expect to reach $S/N > 10$ down to $\mu_{\text{H}} = 20.5 \text{ mag arcsec}^{-2}$, i.e. one effective radius r_{e} from the center or more, and $S/N > 5$ down to $\mu_{\text{H}} = 21.0 \text{ mag arcsec}^{-2}$.

The ETC of NICMOS calculates the needed exposure times as about 70 minutes for each target with average Zodiacal Light and Earthshine illumination. One target (S2F5-109) is 1 mag brighter than the others and needs an exposure time of only 40 minutes to reach the same S/N of the others. Thus, two orbits are involved in the observation of each of the targets, while the observation of the brightest object can be fitted in a single orbit.

In order to obtain a good sky subtraction, and correction for bad pixels and cosmic rays, we choose to adopt the dither pattern NIC-SPIRAL-DITH with

a dithering size of 4 arcsec and to split the observations in each orbit into 8 shifted exposures. Adopting the MULTIACCUM Read Out Mode of the detector STEP16 and selecting 25 steps (NSAMP=25), each of the 8 exposures will be equivalent to 304 seconds, for a total exposure time of 2432

Proposal 10510 - Overview

seconds (about 40 minutes).

\noindent

The declination of 2 out of the 10 targets is about 16.8 degrees (north)

so that their Visibility is 54 minutes as reported in Table 6.1 of ``Primer for Cycle 14''. The other 8 targets are at $\delta=0$ degrees and their Visibility is 55 minutes.

No target acquisition is needed, and standard calibrations will be suitable for our project. In case HST will be switched from three-gyro to two-gyro mode operations, the Visibility of all the targets will still be 54 minutes, as reported in Table 6.1 of ``HST Two-Gyro Handbook'', and taking into account 14 minutes of overheads (due to 1 minute longer time for Guide Star Acquisition, as reported in section 6.5 of ``HST Two-Gyro Handbook') observations can be still performed with the same planning.

REAL TIME JUSTIFICATION

We do not need of realtime observations or of special scheduling requirements.

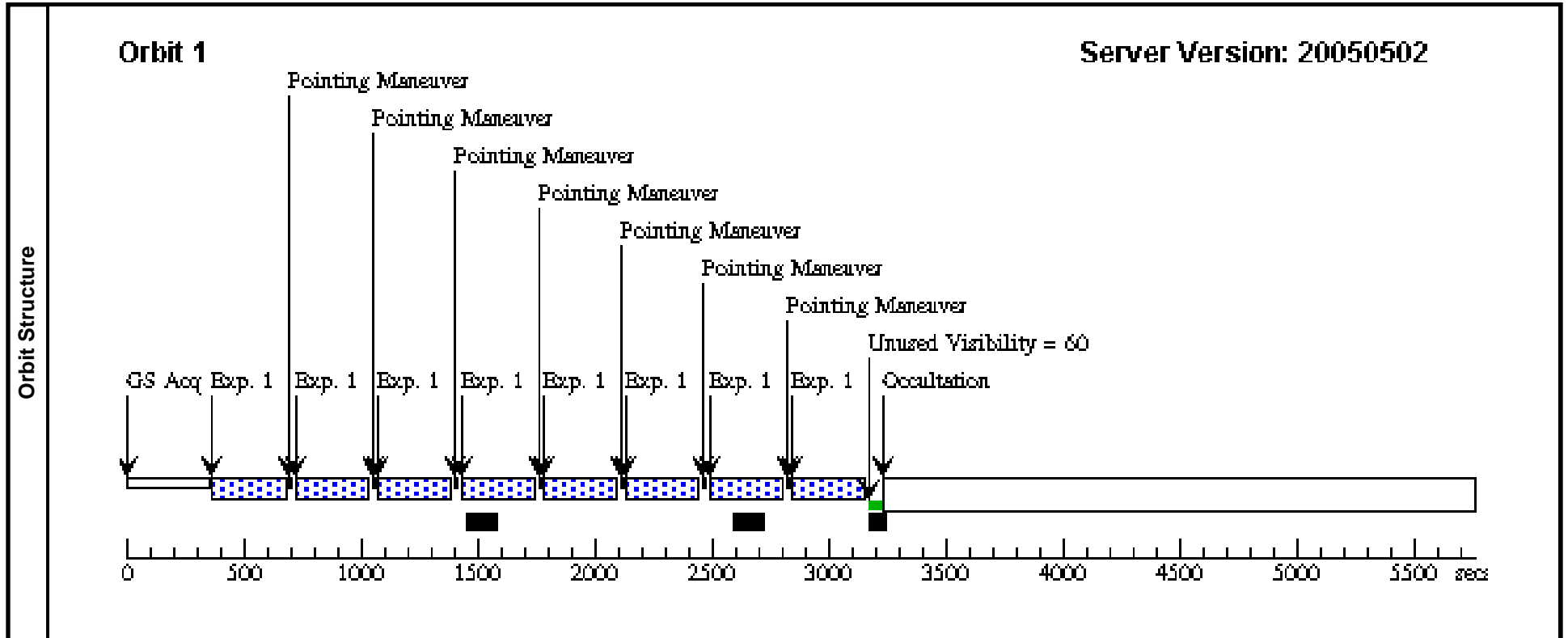
CALIBRATION JUSTIFICATION

Standard calibrations will be suitable for our project.

Proposal 10510 - Visit 01 - Morphology of massive early-type galaxies at z>1.2: constraining galaxy formation models

Mon Jun 20 15:23:14 GMT 2005

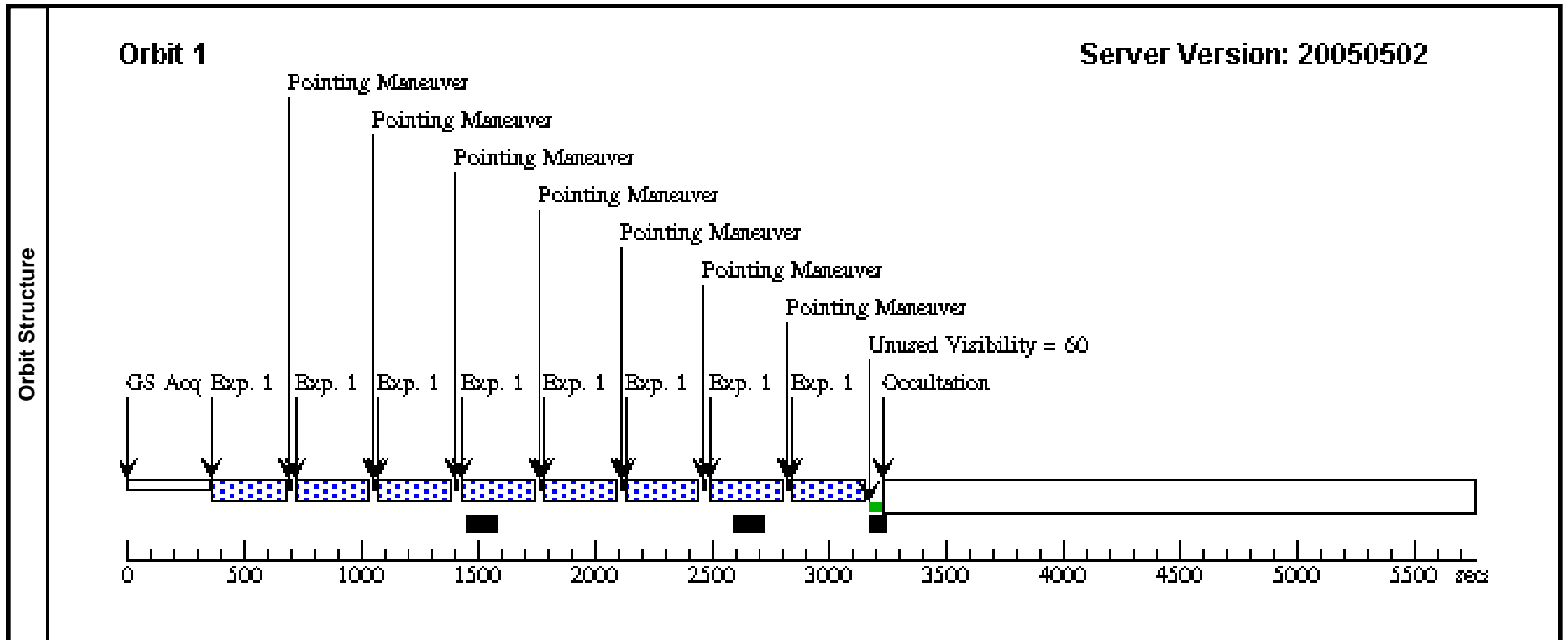
Visit	Proposal 10510, Visit 01 Diagnostic Status: No Diagnostics Scientific Instruments: NIC2 Special Requirements: (none)										
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(1)		Pattern Type=NIC-SPIRAL-DITH Purpose=DITHER Number Of Points=8 Point Spacing=4 Line Spacing=	Coordinate Frame=POS-TARG Pattern Orientation=0 Angle Between Sides= Center Pattern=false						(1)		
Fixed Targets	#	Name	Target Coordinates		Targ. Coord. Corrections	Fluxes		Miscellaneous			
	(1)	GAL-030636-000301	RA: 03 06 36.5100 (46.6521250d) Dec: -00 03 1.00 (-.05028d) Equinox: J2000 Plate Id: 03U0			V=(?) H=18.5		Coordinate Source: GUIDE_STAR_CATALOG			
<i>Comments: Coordinates and position of the target can be retrived at: http://www.usm.uni-muenchen.de/people/drory/munics/munics.html with the object identification S2F1-142</i>											
Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]		Orbit
	1	S2F1-142 - V1	(1) GAL-030636-000301	NIC2, MULTIACCUM, NIC2	F160W	SAMP-SEQ=STEP1 6; NSAMP=25		Pattern 1-1 (1)	[==>(Pattern 1)] [==>(Pattern 2)] [==>(Pattern 3)] [==>(Pattern 4)] [==>(Pattern 5)] [==>(Pattern 6)] [==>(Pattern 7)] [==>(Pattern 8)]		[1]



Proposal 10510 - Visit 02 - Morphology of massive early-type galaxies at z>1.2: constraining galaxy formation models

Mon Jun 20 15:23:16 GMT 2005

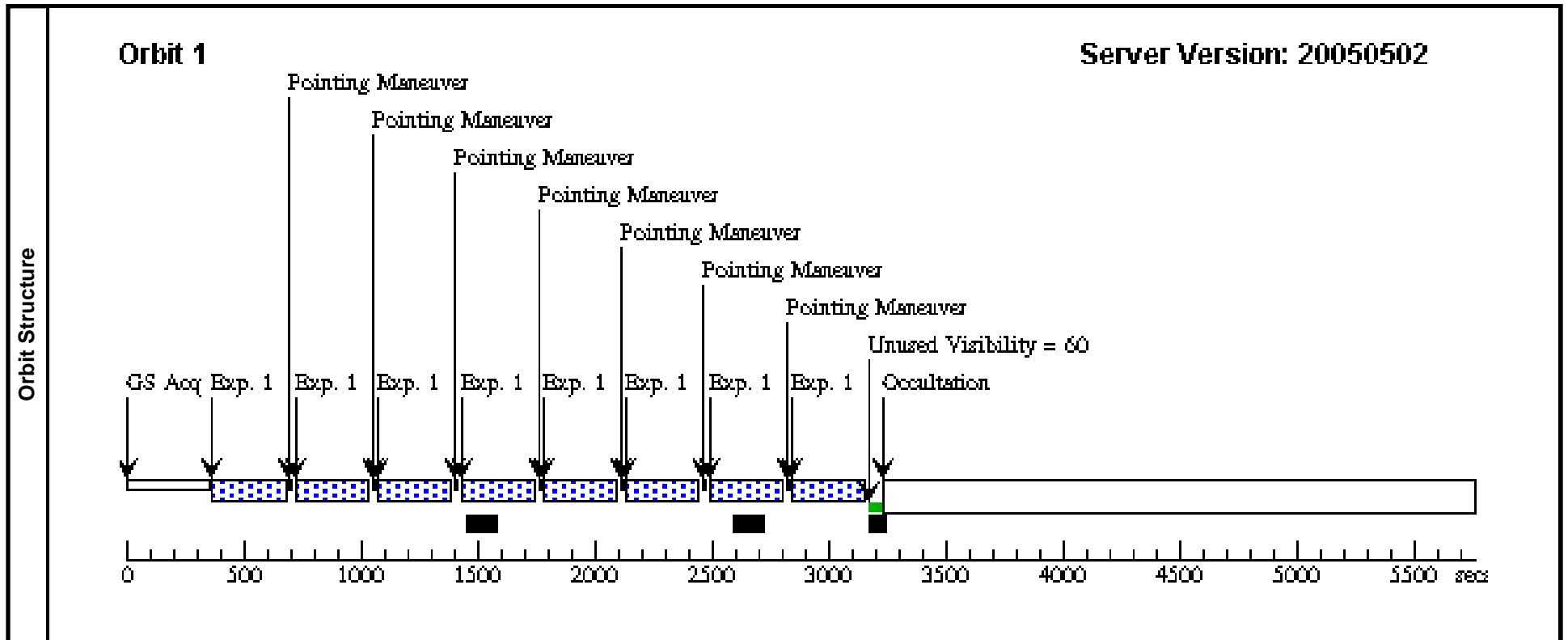
Visit	Proposal 10510, Visit 02 Diagnostic Status: No Diagnostics Scientific Instruments: NIC2 Special Requirements: (none)										
	Patterns	#	Primary Pattern				Secondary Pattern			Exposures	
(1)		Pattern Type=NIC-SPIRAL-DITH Purpose=DITHER Number Of Points=8 Point Spacing=4 Line Spacing=		Coordinate Frame=POS-TARG Pattern Orientation=0 Angle Between Sides= Center Pattern=false					(1)		
Fixed Targets	#	Name	Target Coordinates		Targ. Coord. Corrections		Fluxes		Miscellaneous		
	(2)	GAL-030652-000009	RA: 03 06 52.2500 (46.7177083d) Dec: -00 00 9.90 (-.00275d) Equinox: J2000 Plate Id: 03U0				V=? H=18.5		Coordinate Source: GUIDE_STAR_CATALOG		
<i>Comments: Coordinates and position of the target can be retrived at: http://www.usm.uni-muenchen.de/people/drory/munics/munics.html with the object identification S2F1-357</i>											
Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]		Orbit
	1	S2F1-357 - V1	(2) GAL-030652-000009	NIC2, MULTIACCUM, NIC2	F160W	SAMP-SEQ=STEP1 6; NSAMP=25		Pattern 1-1 (1)	[==>(Pattern 1)] [==>(Pattern 2)] [==>(Pattern 3)] [==>(Pattern 4)] [==>(Pattern 5)] [==>(Pattern 6)] [==>(Pattern 7)] [==>(Pattern 8)]		[1]



Proposal 10510 - Visit 03 - Morphology of massive early-type galaxies at z>1.2: constraining galaxy formation models

Mon Jun 20 15:23:17 GMT 2005

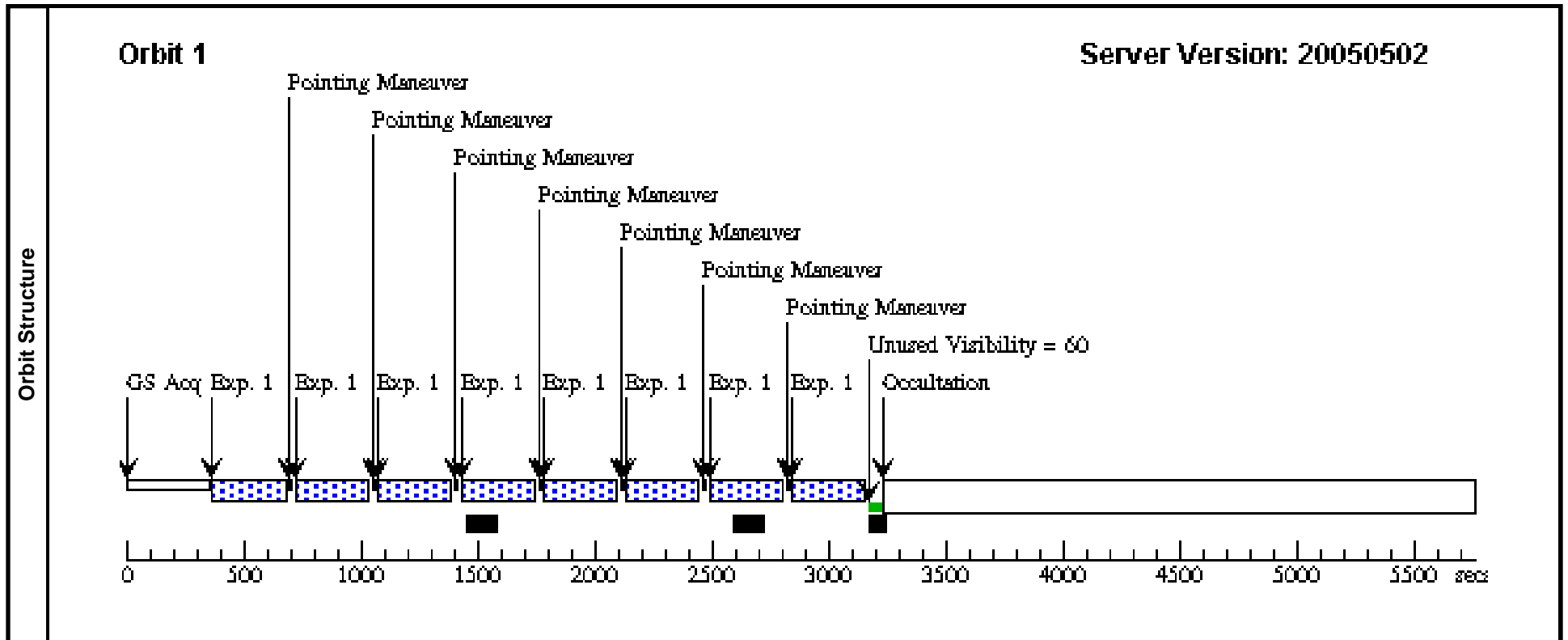
Visit	Proposal 10510, Visit 03 Diagnostic Status: No Diagnostics Scientific Instruments: NIC2 Special Requirements: (none)										
	Patterns	#	Primary Pattern				Secondary Pattern			Exposures	
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Fixed Targets	#	Name	Target Coordinates		Targ. Coord. Corrections		Fluxes		Miscellaneous		
	(3)	GAL-030628+000031	RA: 03 06 28.0300 (46.6167917d) Dec: +00 00 31.60 (.00878d) Equinox: J2000 Plate Id: 03U0				V=(?) H=19.0		Coordinate Source: GUIDE_STAR_CATALOG		
<i>Comments: Coordinates and position of the target can be retrived at: http://www.usm.uni-muenchen.de/people/drory/munics/munics.html with the object identification S2F1-389</i>											
Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]		Orbit
	1	S2F1-389 - V1	(3) GAL-030628+000031	NIC2, MULTIACCUM, NIC2	F160W	SAMP-SEQ=STEP1 6; NSAMP=25		Pattern 1-1 (1)	[==>(Pattern 1)] [==>(Pattern 2)] [==>(Pattern 3)] [==>(Pattern 4)] [==>(Pattern 5)] [==>(Pattern 6)] [==>(Pattern 7)] [==>(Pattern 8)]		[1]



Proposal 10510 - Visit 04 - Morphology of massive early-type galaxies at z>1.2: constraining galaxy formation models

Mon Jun 20 15:23:18 GMT 2005

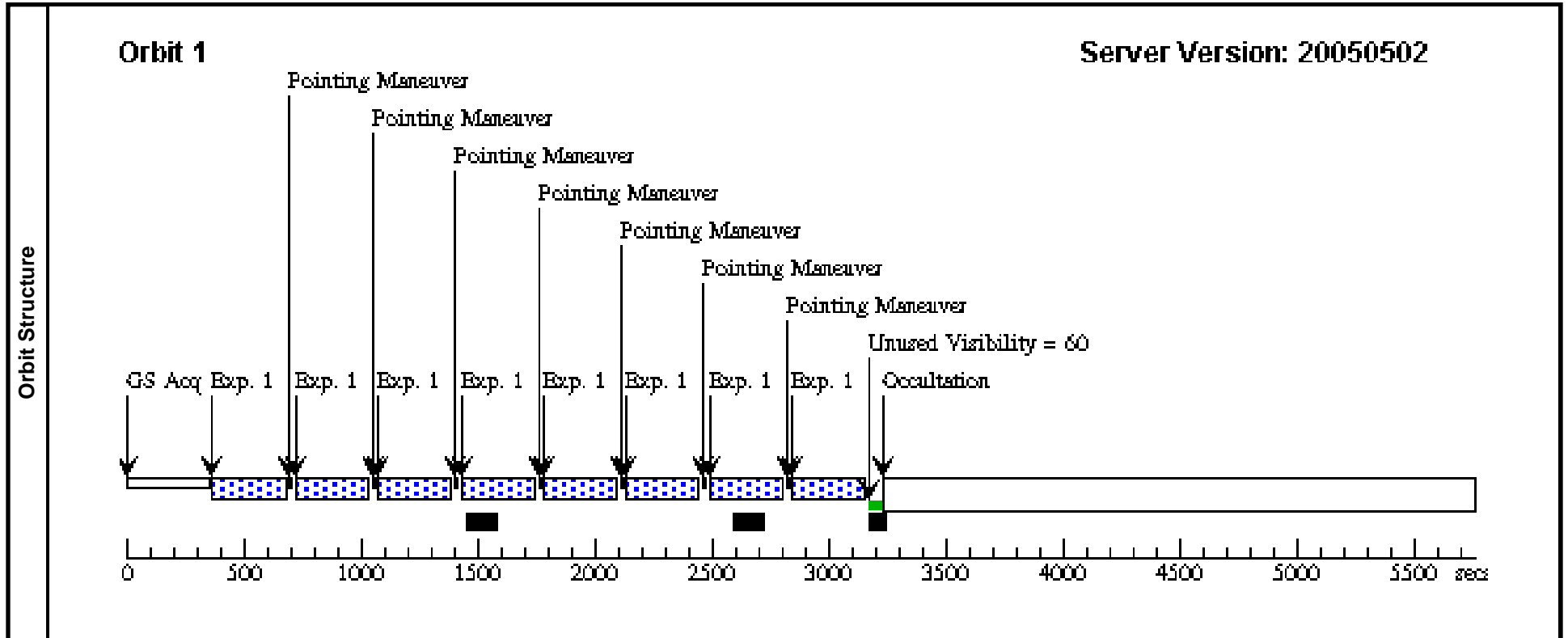
Visit	Proposal 10510, Visit 04 Diagnostic Status: No Diagnostics Scientific Instruments: NIC2 Special Requirements: (none)										
	Patterns	#	Primary Pattern				Secondary Pattern				Exposures
(1)		Pattern Type=NIC-SPIRAL-DITH Purpose=DITHER Number Of Points=8 Point Spacing=4 Line Spacing=		Coordinate Frame=POS-TARG Pattern Orientation=0 Angle Between Sides= Center Pattern=false						(1)	
Fixed Targets	#	Name	Target Coordinates		Targ. Coord. Corrections		Fluxes		Miscellaneous		
	(4)	GAL-030631+000113	RA: 03 06 31.7600 (46.6323333d) Dec: +00 01 13.40 (.02039d) Equinox: J2000 Plate Id: 03U0				V=(?) H=19.4		Coordinate Source: GUIDE_STAR_CATALOG		
<i>Comments: Coordinates and position of the target can be retrived at: http://www.usm.uni-muenchen.de/people/drory/munics/munics.html with the object identification S2F1-443</i>											
Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]		Orbit
	1	S2F1-443 - V1	(4) GAL-030631+000113	NIC2, MULTIACCUM, NIC2	F160W	SAMP-SEQ=STEP1 6; NSAMP=25		Pattern 1-1 (1)	[==>(Pattern 1)] [==>(Pattern 2)] [==>(Pattern 3)] [==>(Pattern 4)] [==>(Pattern 5)] [==>(Pattern 6)] [==>(Pattern 7)] [==>(Pattern 8)]		[1]



Proposal 10510 - Visit 05 - Morphology of massive early-type galaxies at z>1.2: constraining galaxy formation models

Mon Jun 20 15:23:19 GMT 2005

Visit	Proposal 10510, Visit 05 Diagnostic Status: No Diagnostics Scientific Instruments: NIC2 Special Requirements: (none)										
	Patterns	#	Primary Pattern				Secondary Pattern				Exposures
(1)		Pattern Type=NIC-SPIRAL-DITH Purpose=DITHER Number Of Points=8 Point Spacing=4 Line Spacing=		Coordinate Frame=POS-TARG Pattern Orientation=0 Angle Between Sides= Center Pattern=false						(1)	
Fixed Targets	#	Name	Target Coordinates		Targ. Coord. Corrections		Fluxes		Miscellaneous		
	(5)	GAL-030634+000230	RA: 03 06 34.0400 (46.6418333d) Dec: +00 02 30.90 (.04192d) Equinox: J2000 Plate Id: 03U0				V=(?) H=19.0		Coordinate Source: GUIDE_STAR_CATALOG		
<i>Comments: Coordinates and position of the target can be retrived at: http://www.usm.uni-muenchen.de/people/drory/munics/munics.html with the object identification S2F1-511</i>											
Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]		Orbit
	1	S2F1-511 - V1	(5) GAL-030634+000230	NIC2, MULTIACCUM, NIC2	F160W	SAMP-SEQ=STEP1 6; NSAMP=25		Pattern 1-1 (1)	[==>(Pattern 1)] [==>(Pattern 2)] [==>(Pattern 3)] [==>(Pattern 4)] [==>(Pattern 5)] [==>(Pattern 6)] [==>(Pattern 7)] [==>(Pattern 8)]		[1]



Proposal 10510 - Visit 06 - Morphology of massive early-type galaxies at z>1.2: constraining galaxy formation models

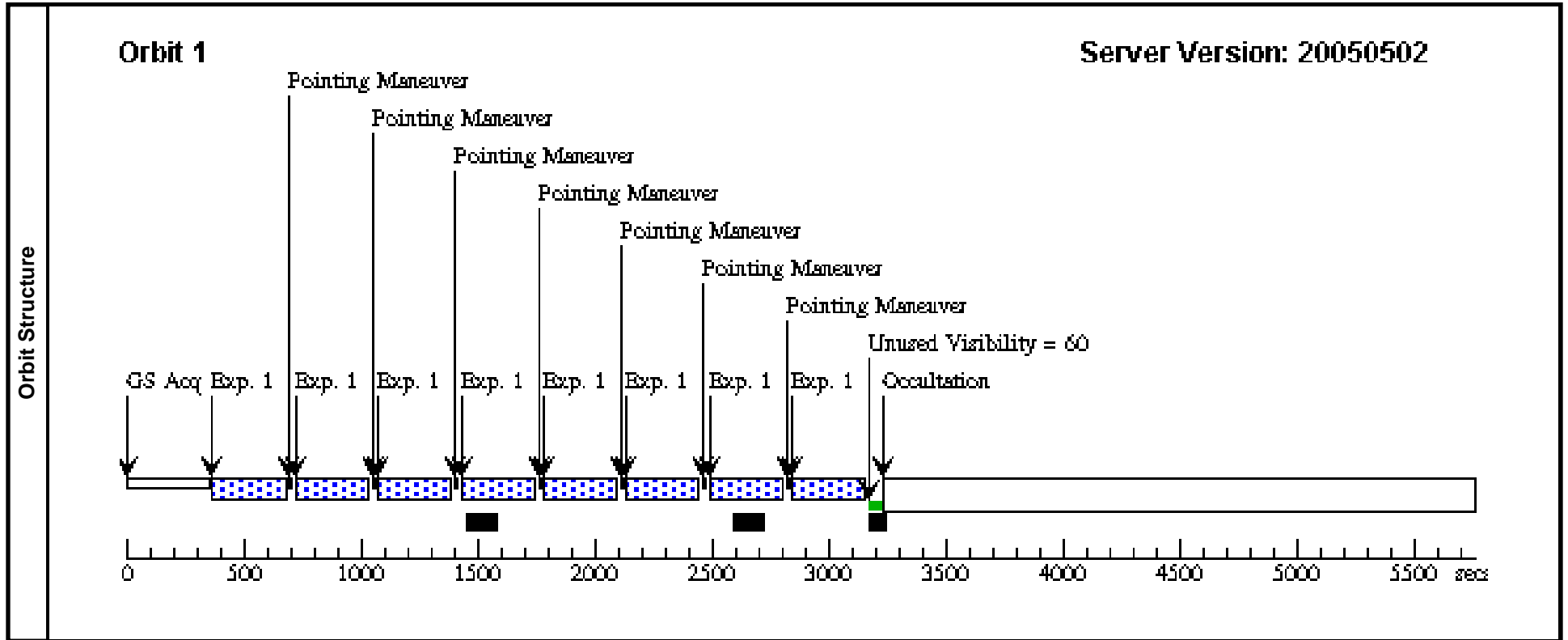
Mon Jun 20 15:23:20 GMT 2005

Visit	Proposal 10510, Visit 06 Diagnostic Status: No Diagnostics Scientific Instruments: NIC2 Special Requirements: (none)										
	Patterns	#	Primary Pattern				Secondary Pattern			Exposures	
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Fixed Targets	#	Name	Target Coordinates		Targ. Coord. Corrections	Fluxes		Miscellaneous			
	(6)	GAL-030643+000244	RA: 03 06 34.0400 (46.6418333d) Dec: +00 02 44.80 (.04578d) Equinox: J2000 Plate Id: 03U0			V=(?) H=19.1		Coordinate Source: GUIDE_STAR_CATALOG			
<i>Comments: Coordinates and position of the target can be retrived at: http://www.usm.uni-muenchen.de/people/drory/munics/munics.html with the object identification S2F1-527</i>											
Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]		Orbit
	1	S2F1-527 - V1	(6) GAL-030643+00 0244	NIC2, MULTIACCUM, NIC2	F160W	SAMP-SEQ=STEP1 6; NSAMP=25		Pattern 1-1 (1)	[==>(Pattern 1)] [==>(Pattern 2)] [==>(Pattern 3)] [==>(Pattern 4)] [==>(Pattern 5)] [==>(Pattern 6)] [==>(Pattern 7)] [==>(Pattern 8)]		[1]

Proposal 10510 - Visit 07 - Morphology of massive early-type galaxies at z>1.2: constraining galaxy formation models

Mon Jun 20 15:23:21 GMT 2005

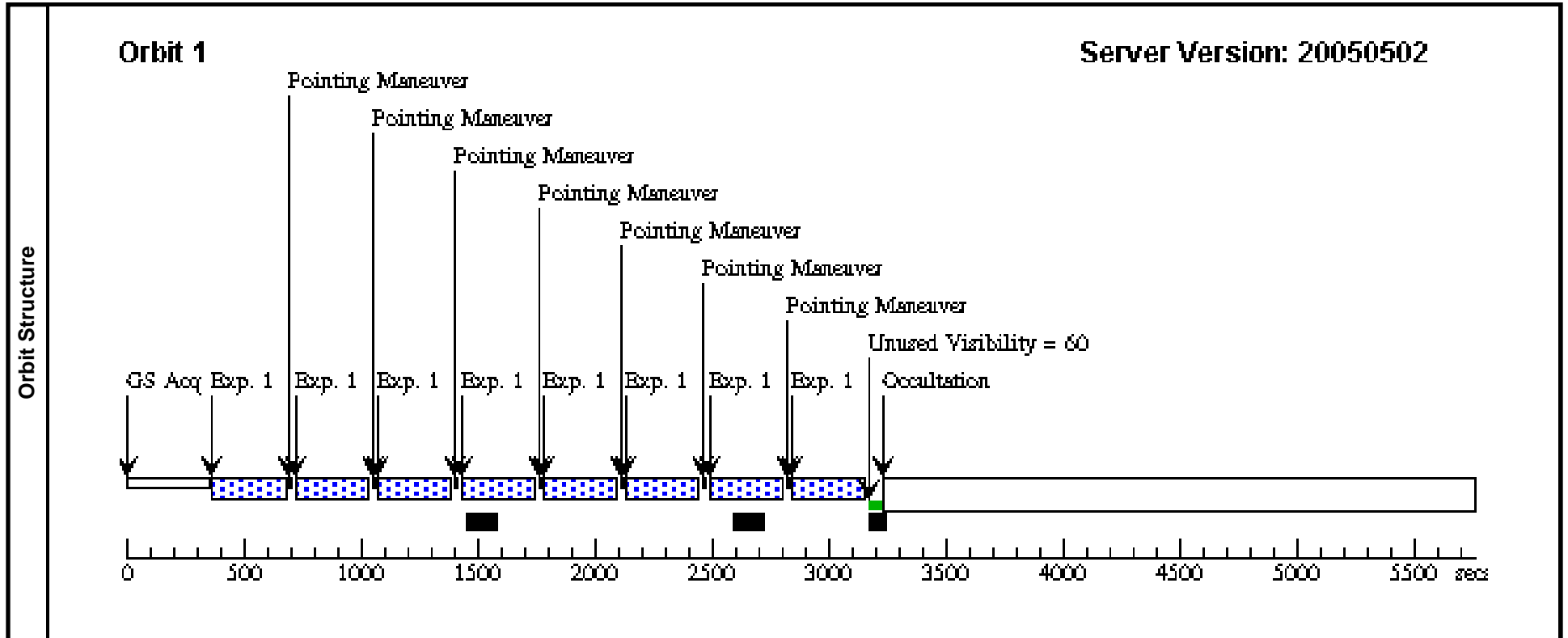
Visit	Proposal 10510, Visit 07 Diagnostic Status: No Diagnostics Scientific Instruments: NIC2 Special Requirements: (none)										
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Fixed Targets	#	Name	Target Coordinates		Targ. Coord. Corrections		Fluxes		Miscellaneous		
	(7)	GAL-030635+000443	RA: 03 06 35.1000 (46.6462500d) Dec: +00 04 43.60 (.07878d) Equinox: J2000 Plate Id: 03U0			V=(?) H=18.9	Coordinate Source: GUIDE_STAR_CATALOG				
<i>Comments: Coordinates and position of the target can be retrived at: http://www.usm.uni-muenchen.de/people/drory/munics/munics.html with the object identification S2F1-633</i>											
Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]		Orbit
	1	S2F1-633 - V1	(7) GAL-030635+000443	NIC2, MULTIACCUM, NIC2	F160W	SAMP-SEQ=STEP1 6; NSAMP=25		Pattern 1-1 (1)	[==>(Pattern 1)] [==>(Pattern 2)] [==>(Pattern 3)] [==>(Pattern 4)] [==>(Pattern 5)] [==>(Pattern 6)] [==>(Pattern 7)] [==>(Pattern 8)]		[1]



Proposal 10510 - Visit 08 - Morphology of massive early-type galaxies at z>1.2: constraining galaxy formation models

Mon Jun 20 15:23:22 GMT 2005

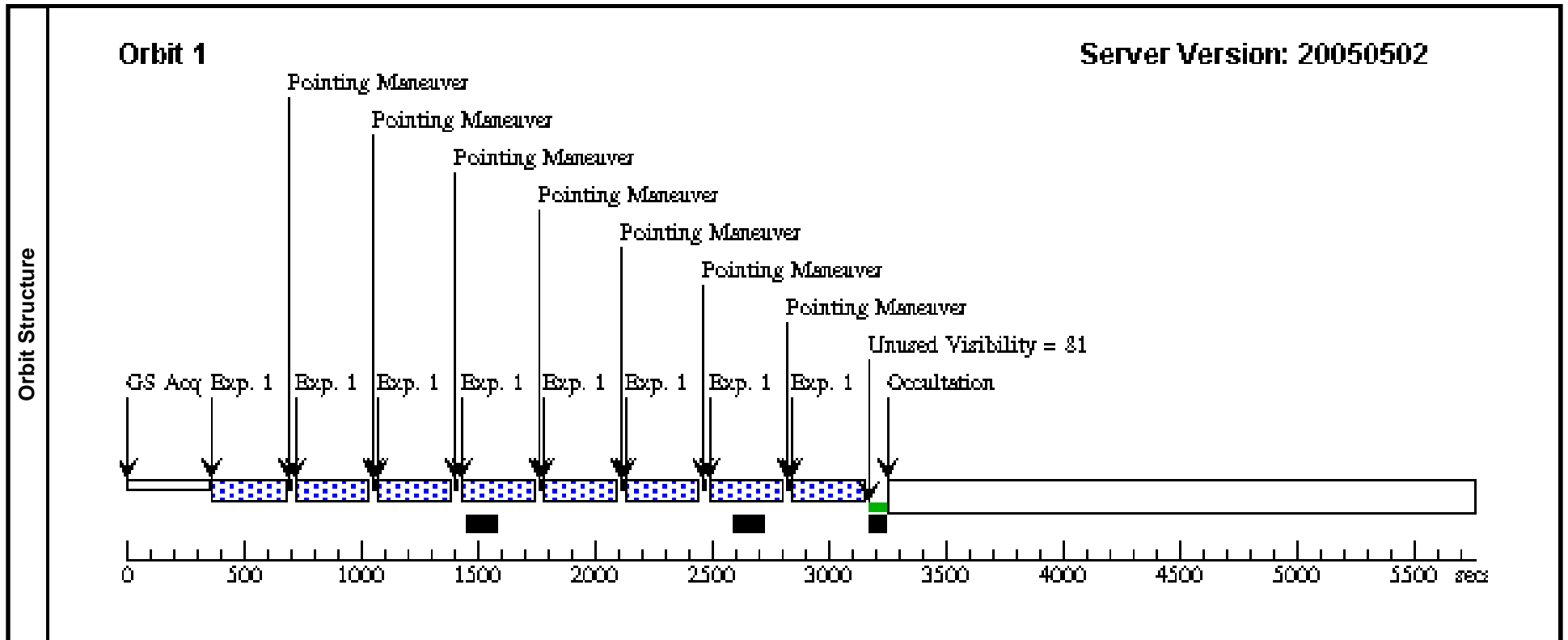
Visit	Proposal 10510, Visit 08 Diagnostic Status: No Diagnostics Scientific Instruments: NIC2 Special Requirements: (none)									
	Patterns	#	Primary Pattern				Secondary Pattern			Exposures
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Fixed Targets	#	Name	Target Coordinates		Targ. Coord. Corrections		Fluxes		Miscellaneous	
	(8)	GAL-030621-001758	RA: 03 06 21.0800 (46.5878333d) Dec: -00 17 58.00 (-.29944d) Equinox: J2000 Plate Id: 03U0			V=(?) H=17.4		Coordinate Source: GUIDE_STAR_CATALOG		
<i>Comments: Coordinates and position of the target can be retrived at: http://www.usm.uni-muenchen.de/people/drory/munics/munics.html with the object identification S2F5-109</i>										
Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit
	1	S2F5-109 - V1	(8) GAL-030621-001758	NIC2, MULTIACCUM, NIC2	F160W	SAMP-SEQ=STEP1 6; NSAMP=25		Pattern 1-1 (1)	[==>(Pattern 1)] [==>(Pattern 2)] [==>(Pattern 3)] [==>(Pattern 4)] [==>(Pattern 5)] [==>(Pattern 6)] [==>(Pattern 7)] [==>(Pattern 8)]	[1]
<i>Comments: This is the only target for which a single visit - orbit is planned.</i>										



Proposal 10510 - Visit 09 - Morphology of massive early-type galaxies at z>1.2: constraining galaxy formation models

Mon Jun 20 15:23:23 GMT 2005

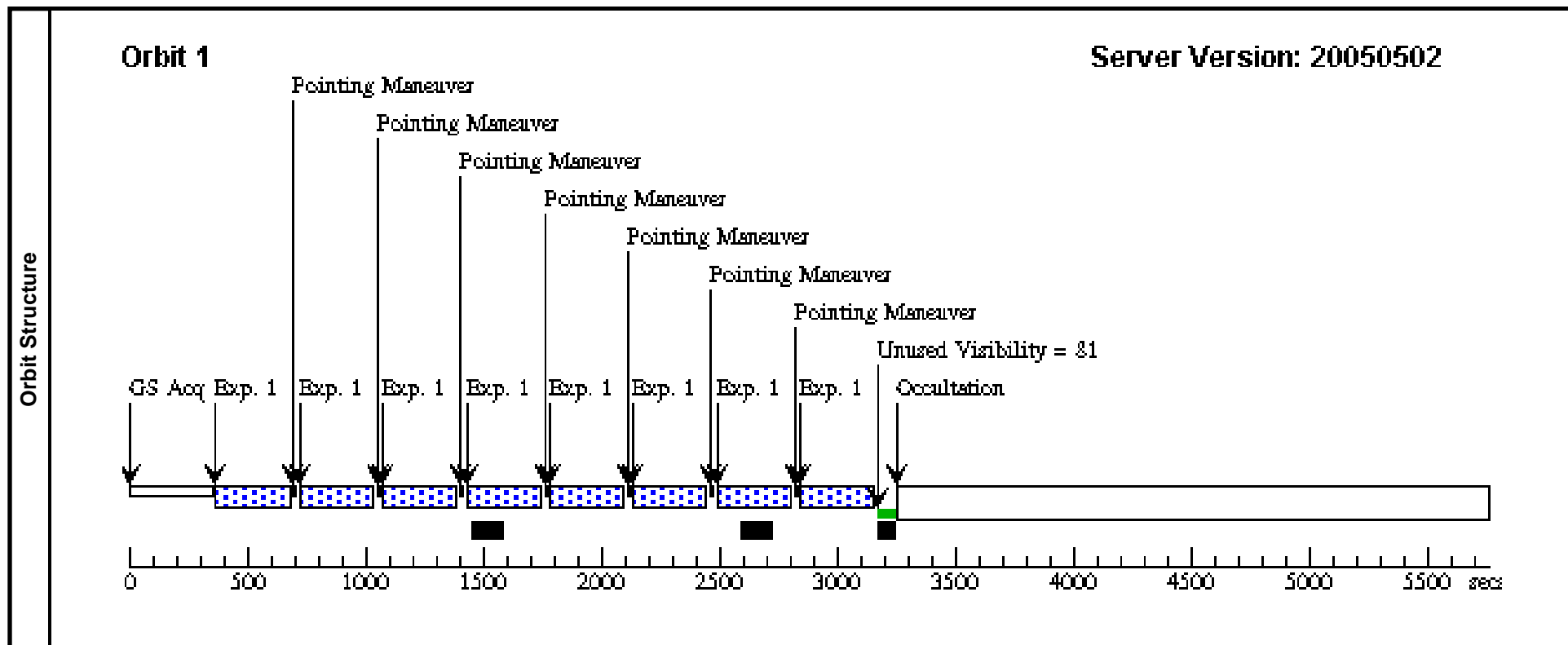
Visit	Proposal 10510, Visit 09 Diagnostic Status: No Diagnostics Scientific Instruments: NIC2 Special Requirements: (none)										
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(1)		Pattern Type=NIC-SPIRAL-DITH Purpose=DITHER Number Of Points=8 Point Spacing=4 Line Spacing=		Coordinate Frame=POS-TARG Pattern Orientation=0 Angle Between Sides= Center Pattern=false						(1)	
Fixed Targets	#	Name	Target Coordinates		Targ. Coord. Corrections		Fluxes		Miscellaneous		
	(9)	GAL-133459+164910	RA: 13 34 59.6400 (203.7485000d) Dec: +16 49 10.70 (16.81964d) Equinox: J2000 Plate Id: 01TF				V=(?) H=18.7		Coordinate Source: GUIDE_STAR_CATALOG		
<i>Comments: Coordinates and position of the target can be retrived at: http://www.usm.uni-muenchen.de/people/drory/munics/munics.html with the object identification S7F5-254</i>											
Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]		Orbit
	1	S7F5-254 - V1	(9) GAL-133459+164910	NIC2, MULTIACCUM, NIC2	F160W	SAMP-SEQ=STEP1 6; NSAMP=25		Pattern 1-1 (1)	[==>(Pattern 1)] [==>(Pattern 2)] [==>(Pattern 3)] [==>(Pattern 4)] [==>(Pattern 5)] [==>(Pattern 6)] [==>(Pattern 7)] [==>(Pattern 8)]		[1]



Proposal 10510 - Visit 10 - Morphology of massive early-type galaxies at z>1.2: constraining galaxy formation models

Mon Jun 20 15:23:24 GMT 2005

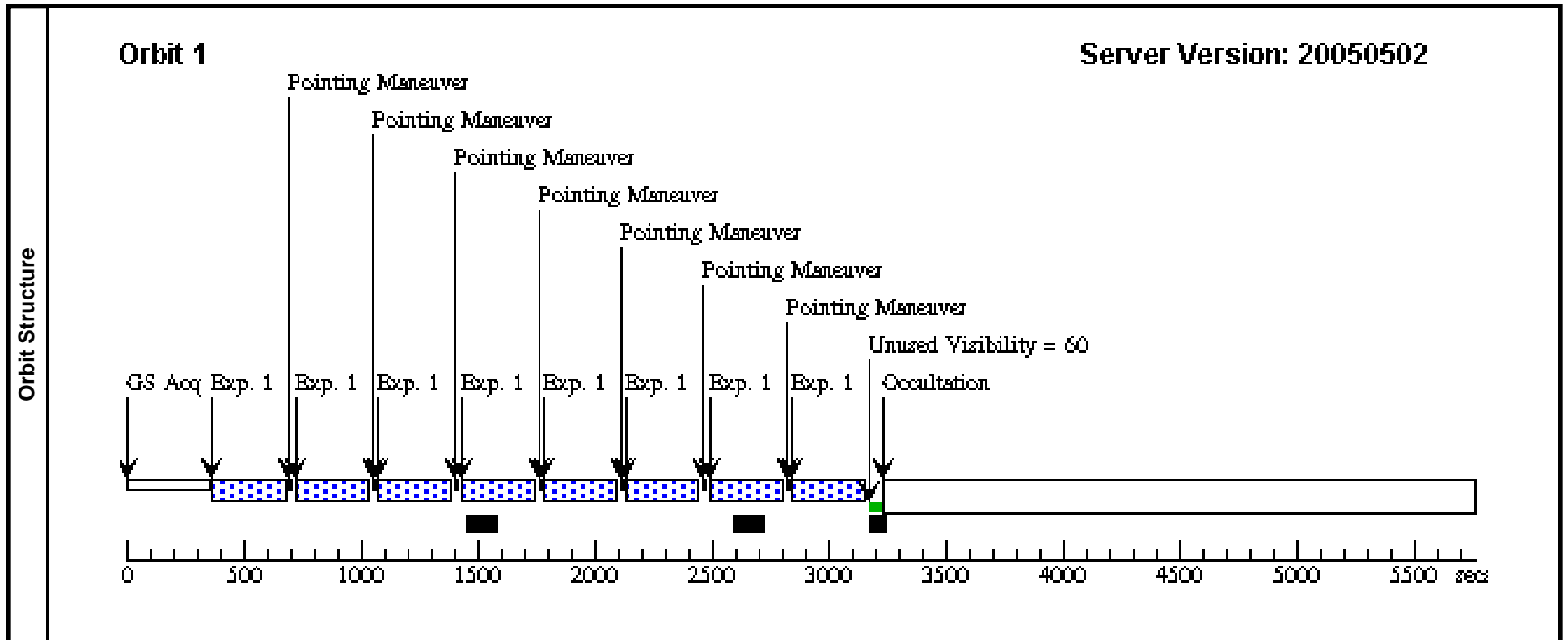
Visit	Proposal 10510, Visit 10 Diagnostic Status: No Diagnostics Scientific Instruments: NIC2 Special Requirements: (none)										
	Patterns	#	Primary Pattern				Secondary Pattern				Exposures
(1)		Pattern Type=NIC-SPIRAL-DITH Purpose=DITHER Number Of Points=8 Point Spacing=4 Line Spacing=		Coordinate Frame=POS-TARG Pattern Orientation=0 Angle Between Sides= Center Pattern=false						(1)	
Fixed Targets	#	Name	Target Coordinates		Targ. Coord. Corrections		Fluxes		Miscellaneous		
	(10)	GAL-133424+164548	RA: 13 34 24.9800 (203.6040833d) Dec: +16 45 48.60 (16.76350d) Equinox: J2000 Plate Id: 01TF				V=(?) H=18.5		Coordinate Source: GUIDE_STAR_CATALOG		
<i>Comments: Coordinates and position of the target can be retrived at: http://www.usm.uni-muenchen.de/people/drory/munics/munics.html with the object identification S7F5-45</i>											
Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]		Orbit
	1	S7F5-45 - V 1	(10) GAL-133424+1 64548	NIC2, MULTIACCUM, NIC2	F160W	SAMP-SEQ=STEP1 6; NSAMP=25		Pattern 1-1 (1)	[==>(Pattern 1)] [==>(Pattern 2)] [==>(Pattern 3)] [==>(Pattern 4)] [==>(Pattern 5)] [==>(Pattern 6)] [==>(Pattern 7)] [==>(Pattern 8)]		[1]



Proposal 10510 - Visit 11 - Morphology of massive early-type galaxies at z>1.2: constraining galaxy formation models

Mon Jun 20 15:23:26 GMT 2005

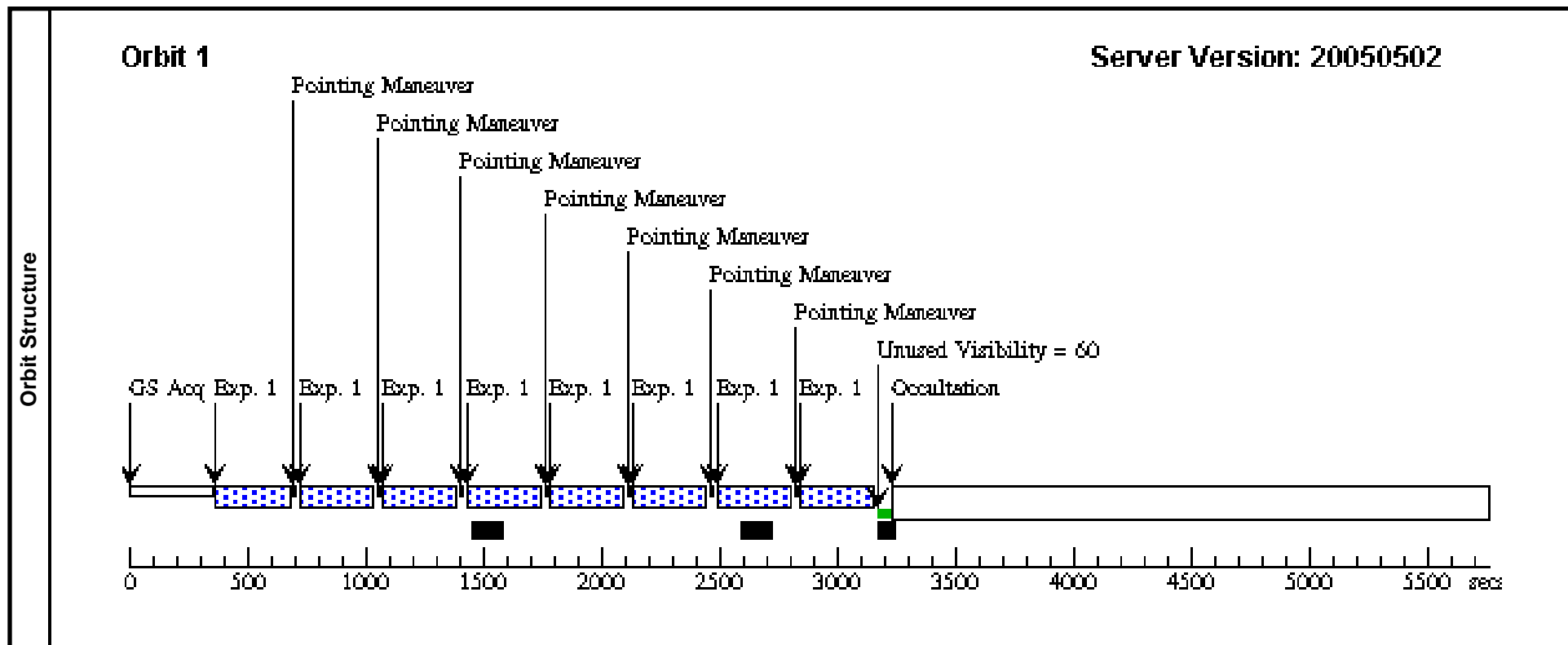
Visit	Proposal 10510, Visit 11 Diagnostic Status: No Diagnostics Scientific Instruments: NIC2 Special Requirements: (none)										
	Patterns	#	Primary Pattern				Secondary Pattern				Exposures
(1)		Pattern Type=NIC-SPIRAL-DITH Purpose=DITHER Number Of Points=8 Point Spacing=4 Line Spacing=		Coordinate Frame=POS-TARG Pattern Orientation=0 Angle Between Sides= Center Pattern=false						(1)	
Fixed Targets	#	Name	Target Coordinates		Targ. Coord. Corrections		Fluxes		Miscellaneous		
	(1)	GAL-030636-000301	RA: 03 06 36.5100 (46.6521250d) Dec: -00 03 1.00 (-.05028d) Equinox: J2000 Plate Id: 03U0				V=(?) H=18.5		Coordinate Source: GUIDE_STAR_CATALOG		
<i>Comments: Coordinates and position of the target can be retrived at: http://www.usm.uni-muenchen.de/people/drory/munics/munics.html with the object identification S2F1-142</i>											
Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]		Orbit
	1	S2F1-142 - V2	(1) GAL-030636-000301	NIC2, MULTIACCUM, NIC2	F160W	SAMP-SEQ=STEP1 6; NSAMP=25		Pattern 1-1 (1)	[==>(Pattern 1)] [==>(Pattern 2)] [==>(Pattern 3)] [==>(Pattern 4)] [==>(Pattern 5)] [==>(Pattern 6)] [==>(Pattern 7)] [==>(Pattern 8)]		[1]



Proposal 10510 - Visit 12 - Morphology of massive early-type galaxies at z>1.2: constraining galaxy formation models

Mon Jun 20 15:23:27 GMT 2005

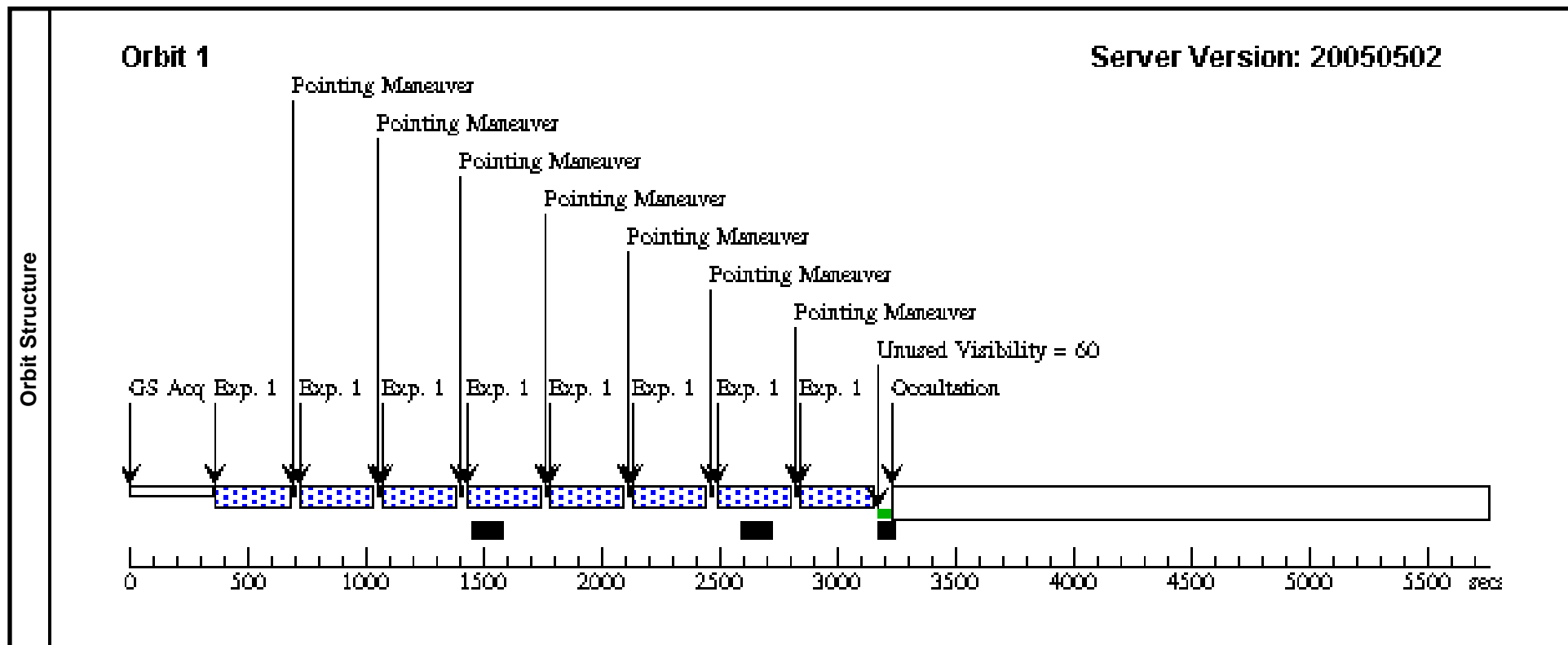
Visit	Proposal 10510, Visit 12 Diagnostic Status: No Diagnostics Scientific Instruments: NIC2 Special Requirements: (none)										
	Patterns	#	Primary Pattern				Secondary Pattern				Exposures
(1)		Pattern Type=NIC-SPIRAL-DITH Purpose=DITHER Number Of Points=8 Point Spacing=4 Line Spacing=		Coordinate Frame=POS-TARG Pattern Orientation=0 Angle Between Sides= Center Pattern=false						(1)	
Fixed Targets	#	Name	Target Coordinates		Targ. Coord. Corrections		Fluxes		Miscellaneous		
	(2)	GAL-030652-000009	RA: 03 06 52.2500 (46.7177083d) Dec: -00 00 9.90 (-.00275d) Equinox: J2000 Plate Id: 03U0				V=(?) H=18.5		Coordinate Source: GUIDE_STAR_CATALOG		
<i>Comments: Coordinates and position of the target can be retrived at: http://www.usm.uni-muenchen.de/people/drory/munics/munics.html with the object identification S2F1-357</i>											
Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]		Orbit
	1	S2F1-357 - V2	(2) GAL-030652-000009	NIC2, MULTIACCUM, NIC2	F160W	SAMP-SEQ=STEP1 6; NSAMP=25		Pattern 1-1 (1)	[==>(Pattern 1)] [==>(Pattern 2)] [==>(Pattern 3)] [==>(Pattern 4)] [==>(Pattern 5)] [==>(Pattern 6)] [==>(Pattern 7)] [==>(Pattern 8)]		[1]



Proposal 10510 - Visit 13 - Morphology of massive early-type galaxies at z>1.2: constraining galaxy formation models

Mon Jun 20 15:23:28 GMT 2005

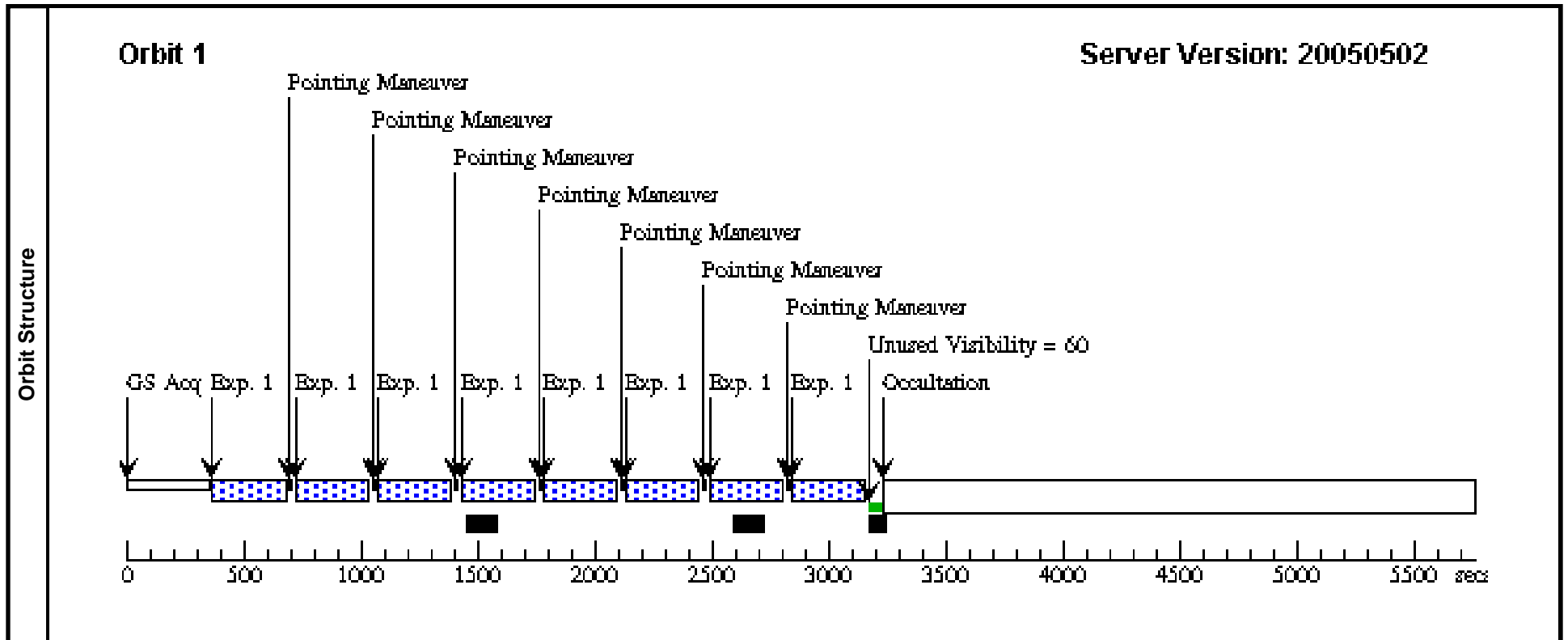
Visit	Proposal 10510, Visit 13 Diagnostic Status: No Diagnostics Scientific Instruments: NIC2 Special Requirements: (none)									
	Patterns	#	Primary Pattern				Secondary Pattern			
(1)		Pattern Type=NIC-SPIRAL-DITH Purpose=DITHER Number Of Points=8 Point Spacing=4 Line Spacing=	Coordinate Frame=POS-TARG Pattern Orientation=0 Angle Between Sides= Center Pattern=false					(1)		
Fixed Targets	#	Name	Target Coordinates		Targ. Coord. Corrections		Fluxes		Miscellaneous	
	(3)	GAL-030628+000031	RA: 03 06 28.0300 (46.6167917d) Dec: +00 00 31.60 (.00878d) Equinox: J2000 Plate Id: 03U0			V=(?) H=19.0	Coordinate Source: GUIDE_STAR_CATALOG			
<i>Comments: Coordinates and position of the target can be retrived at: http://www.usm.uni-muenchen.de/people/drory/munics/munics.html with the object identification S2F1-389</i>										
Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit
	1	S2F1-389 - V2	(3) GAL-030628+000031	NIC2, MULTIACCUM, NIC2	F160W	SAMP-SEQ=STEP1 6; NSAMP=25		Pattern 1-1 (1)	[==>(Pattern 1)] [==>(Pattern 2)] [==>(Pattern 3)] [==>(Pattern 4)] [==>(Pattern 5)] [==>(Pattern 6)] [==>(Pattern 7)] [==>(Pattern 8)]	[1]



Proposal 10510 - Visit 14 - Morphology of massive early-type galaxies at z>1.2: constraining galaxy formation models

Mon Jun 20 15:23:29 GMT 2005

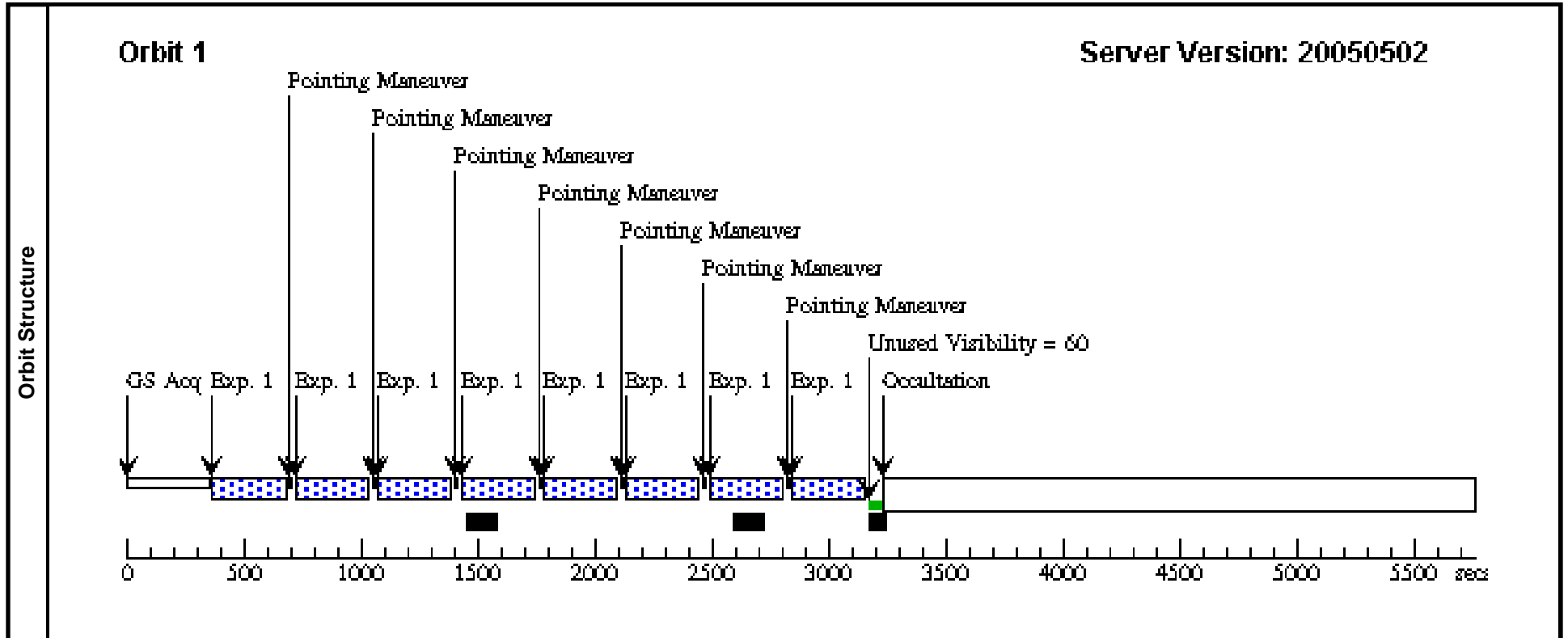
Visit	Proposal 10510, Visit 14 Diagnostic Status: No Diagnostics Scientific Instruments: NIC2 Special Requirements: (none)										
	Patterns	#	Primary Pattern				Secondary Pattern				Exposures
(1)		Pattern Type=NIC-SPIRAL-DITH Purpose=DITHER Number Of Points=8 Point Spacing=4 Line Spacing=		Coordinate Frame=POS-TARG Pattern Orientation=0 Angle Between Sides= Center Pattern=false						(1)	
Fixed Targets	#	Name	Target Coordinates			Targ. Coord. Corrections		Fluxes		Miscellaneous	
	(4)	GAL-030631+000113	RA: 03 06 31.7600 (46.6323333d) Dec: +00 01 13.40 (.02039d) Equinox: J2000 Plate Id: 03U0					V=(?) H=19.4		Coordinate Source: GUIDE_STAR_CATALOG	
<i>Comments: Coordinates and position of the target can be retrived at: http://www.usm.uni-muenchen.de/people/drory/munics/munics.html with the object identification S2F1-443</i>											
Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]		Orbit
	1	S2F1-443 - V2	(4) GAL-030631+00 0113	NIC2, MULTIACCUM, NIC2	F160W	SAMP-SEQ=STEP1 6; NSAMP=25		Pattern 1-1 (1)	[==>(Pattern 1)] [==>(Pattern 2)] [==>(Pattern 3)] [==>(Pattern 4)] [==>(Pattern 5)] [==>(Pattern 6)] [==>(Pattern 7)] [==>(Pattern 8)]		[1]



Proposal 10510 - Visit 15 - Morphology of massive early-type galaxies at z>1.2: constraining galaxy formation models

Mon Jun 20 15:23:30 GMT 2005

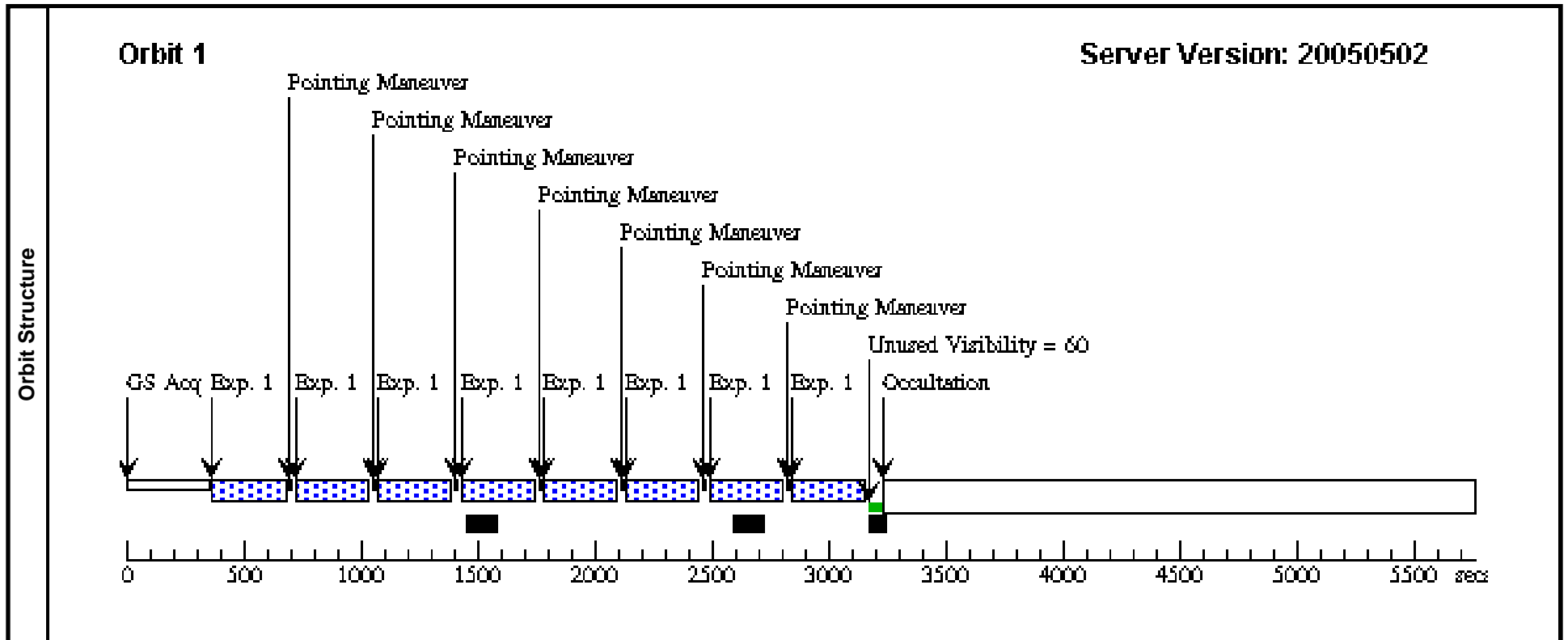
Visit	Proposal 10510, Visit 15 Diagnostic Status: No Diagnostics Scientific Instruments: NIC2 Special Requirements: (none)										
	Patterns	#	Primary Pattern				Secondary Pattern				Exposures
(1)		Pattern Type=NIC-SPIRAL-DITH Purpose=DITHER Number Of Points=8 Point Spacing=4 Line Spacing=		Coordinate Frame=POS-TARG Pattern Orientation=0 Angle Between Sides= Center Pattern=false						(1)	
Fixed Targets	#	Name	Target Coordinates		Targ. Coord. Corrections		Fluxes		Miscellaneous		
	(5)	GAL-030634+000230	RA: 03 06 34.0400 (46.6418333d) Dec: +00 02 30.90 (.04192d) Equinox: J2000 Plate Id: 03U0				V=(?) H=19.0		Coordinate Source: GUIDE_STAR_CATALOG		
<i>Comments: Coordinates and position of the target can be retrived at: http://www.usm.uni-muenchen.de/people/drory/munics/munics.html with the object identification S2F1-511</i>											
Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]		Orbit
	1	S2F1-511 - V2	(5) GAL-030634+00 0230	NIC2, MULTIACCUM, NIC2	F160W	SAMP-SEQ=STEP1 6; NSAMP=25		Pattern 1-1 (1)	[==>(Pattern 1)] [==>(Pattern 2)] [==>(Pattern 3)] [==>(Pattern 4)] [==>(Pattern 5)] [==>(Pattern 6)] [==>(Pattern 7)] [==>(Pattern 8)]		[1]



Proposal 10510 - Visit 16 - Morphology of massive early-type galaxies at z>1.2: constraining galaxy formation models

Mon Jun 20 15:23:31 GMT 2005

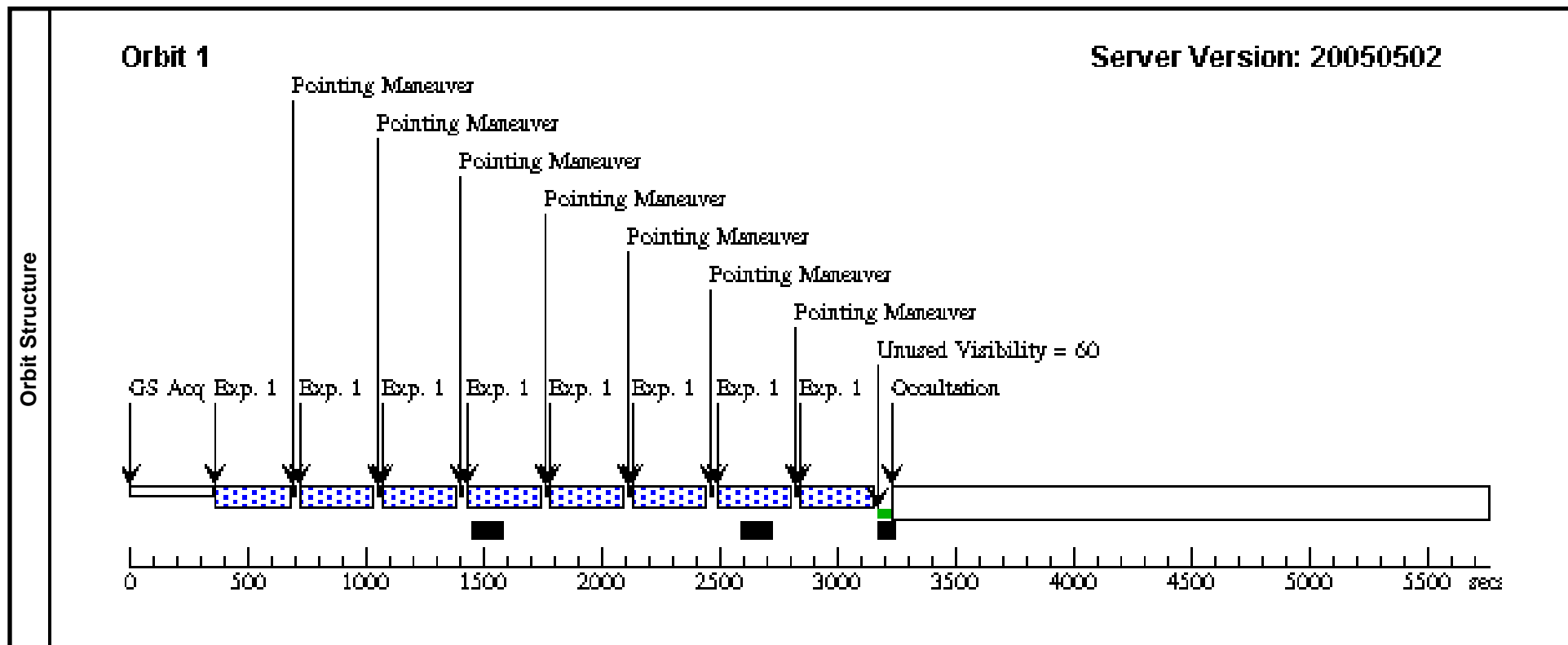
Visit	Proposal 10510, Visit 16 Diagnostic Status: No Diagnostics Scientific Instruments: NIC2 Special Requirements: (none)										
	Patterns	#	Primary Pattern				Secondary Pattern			Exposures	
(1)		Pattern Type=NIC-SPIRAL-DITH Purpose=DITHER Number Of Points=8 Point Spacing=4 Line Spacing=	Coordinate Frame=POS-TARG Pattern Orientation=0 Angle Between Sides= Center Pattern=false						(1)		
Fixed Targets	#	Name	Target Coordinates		Targ. Coord. Corrections	Fluxes		Miscellaneous			
	(6)	GAL-030643+000244	RA: 03 06 34.0400 (46.6418333d) Dec: +00 02 44.80 (.04578d) Equinox: J2000 Plate Id: 03U0			V=(?) H=19.1		Coordinate Source: GUIDE_STAR_CATALOG			
<i>Comments: Coordinates and position of the target can be retrived at: http://www.usm.uni-muenchen.de/people/drory/munics/munics.html with the object identification S2F1-527</i>											
Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]		Orbit
	1	S2F1-527 - V2	(6) GAL-030643+00 0244	NIC2, MULTIACCUM, NIC2	F160W	SAMP-SEQ=STEP1 6; NSAMP=25		Pattern 1-1 (1)	[==>(Pattern 1)] [==>(Pattern 2)] [==>(Pattern 3)] [==>(Pattern 4)] [==>(Pattern 5)] [==>(Pattern 6)] [==>(Pattern 7)] [==>(Pattern 8)]		[1]



Proposal 10510 - Visit 17 - Morphology of massive early-type galaxies at z>1.2: constraining galaxy formation models

Mon Jun 20 15:23:32 GMT 2005

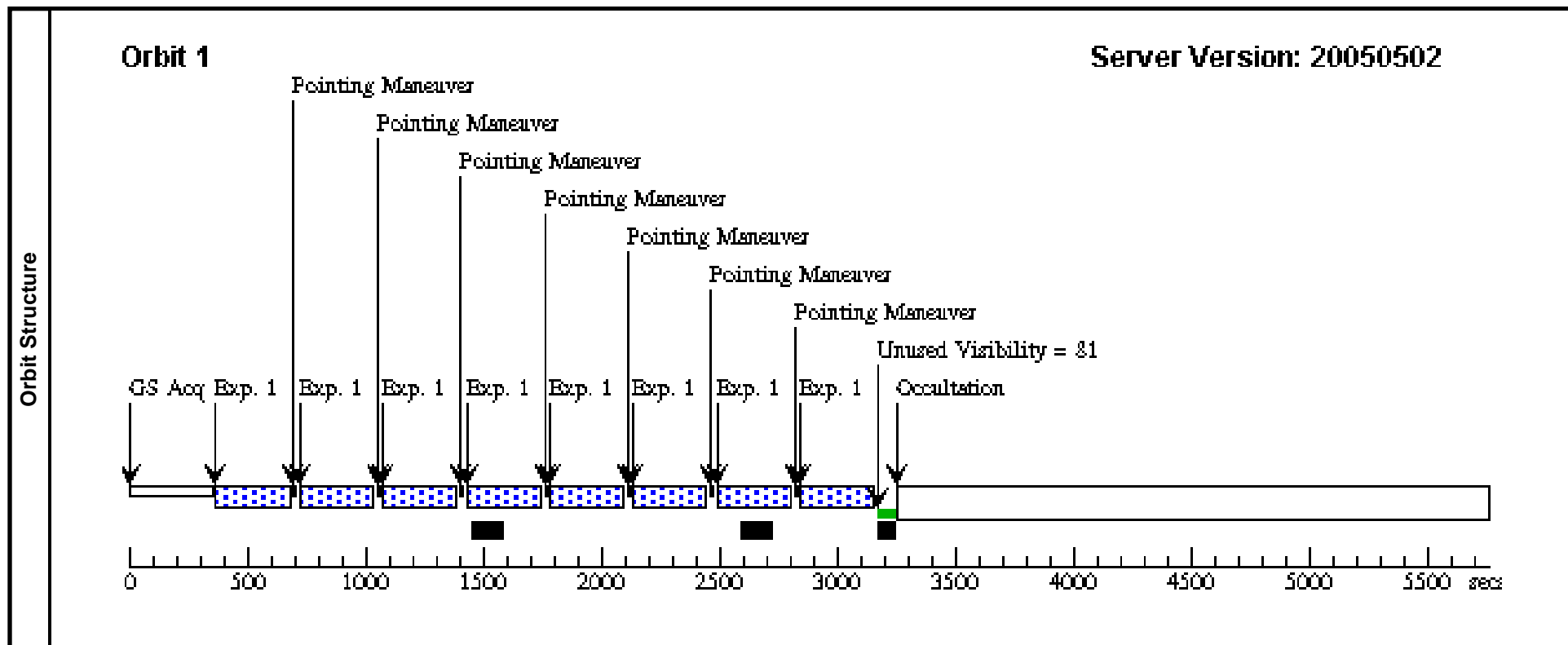
Visit	Proposal 10510, Visit 17 Diagnostic Status: No Diagnostics Scientific Instruments: NIC2 Special Requirements: (none)										
	Patterns	#	Primary Pattern				Secondary Pattern			Exposures	
(1)		Pattern Type=NIC-SPIRAL-DITH Purpose=DITHER Number Of Points=8 Point Spacing=4 Line Spacing=	Coordinate Frame=POS-TARG Pattern Orientation=0 Angle Between Sides= Center Pattern=false						(1)		
Fixed Targets	#	Name	Target Coordinates		Targ. Coord. Corrections		Fluxes		Miscellaneous		
	(7)	GAL-030635+000443	RA: 03 06 35.1000 (46.6462500d) Dec: +00 04 43.60 (.07878d) Equinox: J2000 Plate Id: 03U0			V=(?) H=18.9		Coordinate Source: GUIDE_STAR_CATALOG			
<i>Comments: Coordinates and position of the target can be retrived at: http://www.usm.uni-muenchen.de/people/drory/munics/munics.html with the object identification S2F1-633</i>											
Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]		Orbit
	1	S2F1-633 - V2	(7) GAL-030635+000443	NIC2, MULTIACCUM, NIC2	F160W	SAMP-SEQ=STEP1 6; NSAMP=25		Pattern 1-1 (1)	[==>(Pattern 1)] [==>(Pattern 2)] [==>(Pattern 3)] [==>(Pattern 4)] [==>(Pattern 5)] [==>(Pattern 6)] [==>(Pattern 7)] [==>(Pattern 8)]		[1]



Proposal 10510 - Visit 18 - Morphology of massive early-type galaxies at z>1.2: constraining galaxy formation models

Mon Jun 20 15:23:33 GMT 2005

Visit	Proposal 10510, Visit 18 Diagnostic Status: No Diagnostics Scientific Instruments: NIC2 Special Requirements: (none)										
	Patterns	#	Primary Pattern				Secondary Pattern			Exposures	
(1)		Pattern Type=NIC-SPIRAL-DITH Purpose=DITHER Number Of Points=8 Point Spacing=4 Line Spacing=		Coordinate Frame=POS-TARG Pattern Orientation=0 Angle Between Sides= Center Pattern=false					(1)		
Fixed Targets	#	Name	Target Coordinates		Targ. Coord. Corrections		Fluxes		Miscellaneous		
	(9)	GAL-133459+164910	RA: 13 34 59.6400 (203.7485000d) Dec: +16 49 10.70 (16.81964d) Equinox: J2000 Plate Id: 01TF				V=(?) H=18.7		Coordinate Source: GUIDE_STAR_CATALOG		
<i>Comments: Coordinates and position of the target can be retrived at: http://www.usm.uni-muenchen.de/people/drory/munics/munics.html with the object identification S7F5-254</i>											
Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]		Orbit
	1	S7F5-254 - V2	(9) GAL-133459+164910	NIC2, MULTIACCUM, NIC2	F160W	SAMP-SEQ=STEP1 6; NSAMP=25		Pattern 1-1 (1)	[==>(Pattern 1)] [==>(Pattern 2)] [==>(Pattern 3)] [==>(Pattern 4)] [==>(Pattern 5)] [==>(Pattern 6)] [==>(Pattern 7)] [==>(Pattern 8)]		[1]



Proposal 10510 - Visit 19 - Morphology of massive early-type galaxies at z>1.2: constraining galaxy formation models

Mon Jun 20 15:23:34 GMT 2005

Visit	Proposal 10510, Visit 19 Diagnostic Status: No Diagnostics Scientific Instruments: NIC2 Special Requirements: (none)										
	Patterns	#	Primary Pattern				Secondary Pattern			Exposures	
(1)		Pattern Type=NIC-SPIRAL-DITH	Coordinate Frame=POS-TARG						(1)		
		Purpose=DITHER	Pattern Orientation=0								
		Number Of Points=8	Angle Between Sides=								
		Point Spacing=4	Center Pattern=false								
		Line Spacing=									
Fixed Targets	#	Name	Target Coordinates		Targ. Coord. Corrections		Fluxes		Miscellaneous		
	(10)	GAL-133424+164548	RA: 13 34 24.9800 (203.6040833d)	Dec: +16 45 48.60 (16.76350d)			V=(?)	H=18.5	Coordinate Source: GUIDE_STAR_CATALOG		
			Equinox: J2000	Plate Id: 01TF							
	<i>Comments: Coordinates and position of the target can be retrived at: http://www.usm.uni-muenchen.de/people/drory/munics/munics.html with the object identification S7F5-45</i>										
Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit	
	1	S7F5-45 - V	(10) GAL-133424+164548	NIC2, MULTIACCUM, NIC2	F160W	SAMP-SEQ=STEP1 6; NSAMP=25		Pattern 1-1 (1)	[==>(Pattern 1)] [==>(Pattern 2)] [==>(Pattern 3)] [==>(Pattern 4)] [==>(Pattern 5)] [==>(Pattern 6)] [==>(Pattern 7)] [==>(Pattern 8)]	[1]	

