13324 - Where cores are no more: assessing the role of dissipation in the assembly of early-type galaxies

Cycle: 21, Proposal Category: GO

(Availability Mode: SUPPORTED)

INVESTIGATORS

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VISITS

Visit	*Targets used in Visit*	*Configurations used in Visit*	*Orbits Used*	*Last Orbit Planner Run*	*OP Current with Visit?*
01	(1) NGC-661 ANY	ACS/WFC WFC3/UVIS	1	12-Jun-2013 21:43:32.0	yes
02	(2) NGC-1222 ANY	ACS/WFC WFC3/UVIS	1	12-Jun-2013 21:43:46.0	yes
03	(3) NGC-1289 ANY	ACS/WFC WFC3/UVIS	1	12-Jun-2013 21:43:58.0	yes
04	(4) NGC-3522 ANY	ACS/WFC WFC3/UVIS	1	12-Jun-2013 21:44:09.0	yes
05	(5) NGC-4191 ANY	ACS/WFC WFC3/UVIS	1	12-Jun-2013 21:44:19.0	yes
06	(6) NGC-4690 ANY	ACS/WFC WFC3/UVIS	1	12-Jun-2013 21:44:30.0	yes
07	(7) NGC-5481 ANY	ACS/WFC WFC3/UVIS	1	12-Jun-2013 21:44:40.0	yes
08	(8) NGC-5631 ANY	ACS/WFC WFC3/UVIS	1	12-Jun-2013 21:44:51.0	yes
09	(9) NGC-7454 ANY	ACS/WFC WFC3/UVIS	1	12-Jun-2013 21:45:01.0	yes
10	(10) PGC028887 ANY	ACS/WFC WFC3/UVIS	1	12-Jun-2013 21:45:12.0	yes
11	(11) PGC050395 ANY	ACS/WFC WFC3/UVIS	1	12-Jun-2013 21:45:22.0	yes
12	(12) UGC-3960 ANY	ACS/WFC WFC3/UVIS	1	12-Jun-2013 21:45:32.0	yes

12 Total Orbits Used

ABSTRACT

Outcomes of violent dissipative and non-dissipative galaxy mergers are predicted to have different dynamical states and different nuclear profiles. The current paradigm is that flat (core) light profiles are results of coalescence of supermassive black holes in non-dissipative mergers of galaxies. These merger are also thought to produce remnants with low angular momentum (slow rotators) within a half-light radius. Matching the archival HST imaging with the volume-limited Atlas3D sample of nearby early-type galaxies (with integral-field stellar kinematics), indicates that the current paradigm is not complete. A recent study revealed the existence of fast rotating galaxies with core nuclear light profiles, and, more significantly, it postulated the existence of core-less slow rotators. The implication on galaxy formation scenarios of the latter finding is straightforward: dissipative mergers can create dynamically different galaxies both of high and low angular momentum. Unfortunately, the sample of Atlas3D galaxies with HST imaging misses a key set of low angular momentum objects with intermediate masses which provide the unique opportunity to (i) determine to what extent and to what upper mass limit dissipative processes dominate the formation of ETGs and (ii) to conclusively test the connection between nuclear structure and global parameters such as the stellar angular momentum, total mass and stellar velocity dispersion. We ask to observe the 12 carefully selected galaxies in this category.

OBSERVING DESCRIPTION

Each target is to be observed during one orbit. The observations during the orbit comprise the Primary observations with WFC3/UVIS in F814W and F475W filters and Parallel observatios with ACS/WFC in the same filters. The observations with each filter are split in two separate observations which are dithetered to improve the final resolution and remove the cosmic rays. There is also a third and much shorter exposure with F814W filter to ensure a good quality data at the very nucleus (which could be saturated during the longer exposures).

Visit

Proposal 13324, Visit 01, implementation Thu Jun 13 01:45:42 GMT 2013

Diagnostic Status: No Diagnostics

Scientific Instruments: WFC3/UVIS, ACS/WFC

Special Requirements: SCHED 50%

Comments: Applies to NGC 661

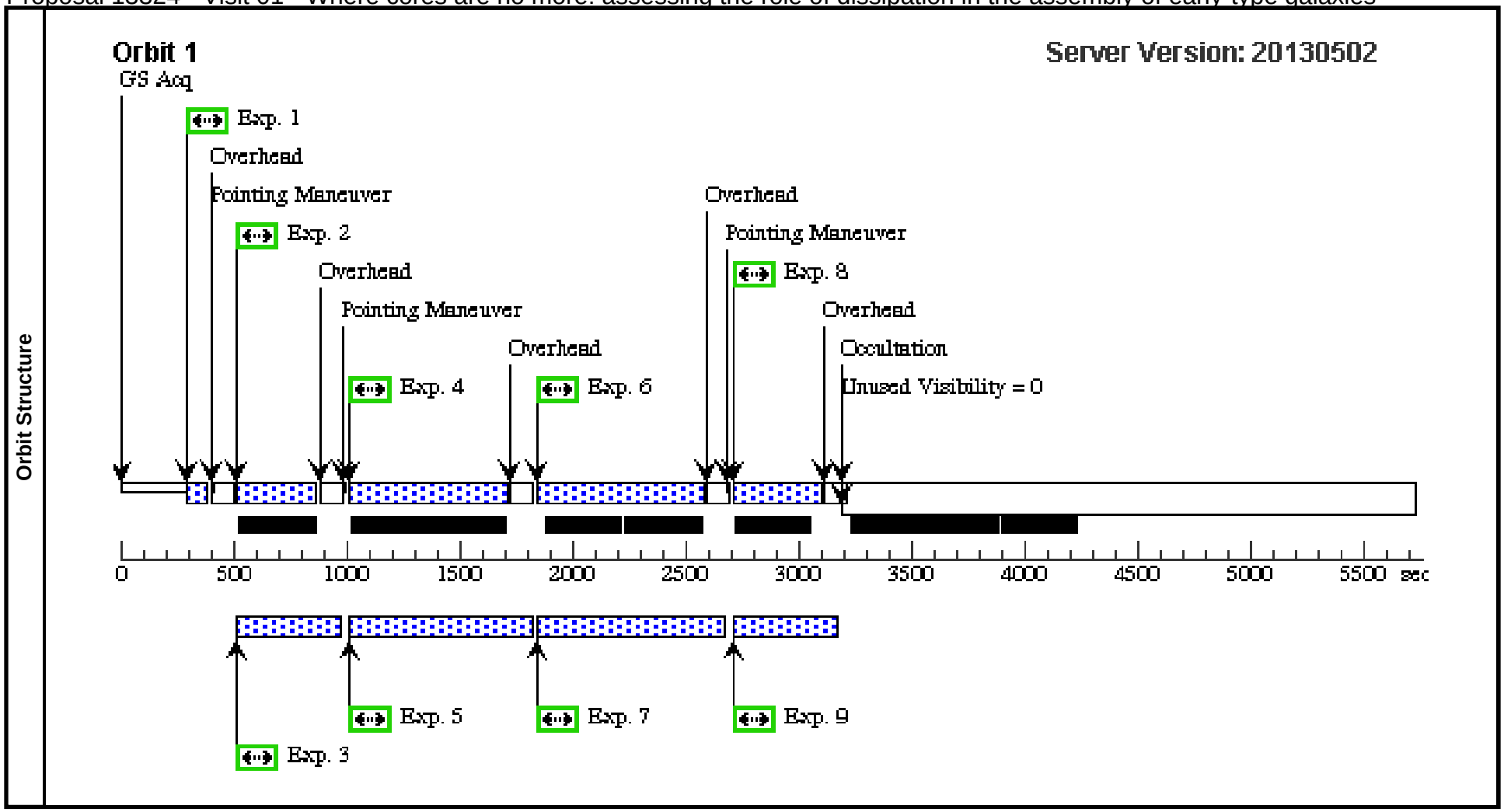
Fixed Targets

#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(1)	NGC-661	RA: 01 44 14.6340 (26.0609750d) Dec: +28 42 21.56 (28.70599d) Equinox: J2000		V=12.50	Reference Frame: ICRS

Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.

Exposures

#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
1		(1) NGC-661	WFC3/UVIS, ACCUM, UVIS-CENTER	F814W	CR-SPLIT=NO	POS TARG 0.0,21.12		60 Secs (60 Secs) *[==>60.0 Secs]*	 ***[1]***
2		(1) NGC-661	WFC3/UVIS, ACCUM, UVIS-CENTER	F814W	CR-SPLIT=NO	POS TARG 0.38,21.5	Prime + Parallel Group 2-3 in Visit 01	350 Secs (350 Secs) *[==>350.0 Secs]*	 ***[1]***
3		ANY	ACS/WFC, ACCUM, WFC	F814W			Prime + Parallel Group 2-3 in Visit 01	250 Secs (250 Secs) *[==>]*	 ***[1]***
4		(1) NGC-661	WFC3/UVIS, ACCUM, UVIS-CENTER	F814W	CR-SPLIT=NO	POS TARG 0.558,23.92	Prime + Parallel Group 4-5 in Visit 01	700 Secs (700 Secs) *[==>700.0 Secs]*	 ***[1]***
5		ANY	ACS/WFC, ACCUM, WFC	F814W			Prime + Parallel Group 4-5 in Visit 01	650 Secs (690 Secs) *[==>690.0 Secs]*	 ***[1]***
6		(1) NGC-661	WFC3/UVIS, ACCUM, UVIS-CENTER	F475W	CR-SPLIT=NO	SAME POS AS 4	Prime + Parallel Group 6-7 in Visit 01	720 Secs (720 Secs) *[==>720.0 Secs]*	 ***[1]***
7		ANY	ACS/WFC, ACCUM, WFC	F475W			Prime + Parallel Group 6-7 in Visit 01	620 Secs (670 Secs) *[==>670.0 Secs]*	 ***[1]***
8		(1) NGC-661	WFC3/UVIS, ACCUM, UVIS-CENTER	F475W	CR-SPLIT=NO	SAME POS AS 2	Prime + Parallel Group 8-9 in Visit 01	390 Secs (390 Secs) *[==>390.0 Secs]*	 ***[1]***
9		ANY	ACS/WFC, ACCUM, WFC	F475W			Prime + Parallel Group 8-9 in Visit 01	360 Secs (340 Secs) *[==>340.0 Secs]*	 ***[1]***


Orbit Structure
Orbit 1
Server Version: 20130502
GS Acq
Exp. 1
Overhead
Pointing Maneuver
Exp. 2
Overhead
Pointing Maneuver
Exp. 4
Overhead
Exp. 6
Overhead
Pointing Maneuver
Exp. 8
Overhead
Occultation
Unused Visibility = 0
0
500
1000
1500
2000
2500
3000
3500
4000
4500
5000
5500
sec
Exp. 5
Exp. 7
Exp. 9
Exp. 3

Visit

Proposal 13324, Visit 02, implementation Thu Jun 13 01:45:44 GMT 2013

Diagnostic Status: No Diagnostics

Scientific Instruments: WFC3/UVIS, ACS/WFC

Special Requirements: SCHED 50%; ORIENT 60D TO 90 D; ORIENT 240D TO 270 D

Comments: Applies to NGC 1222

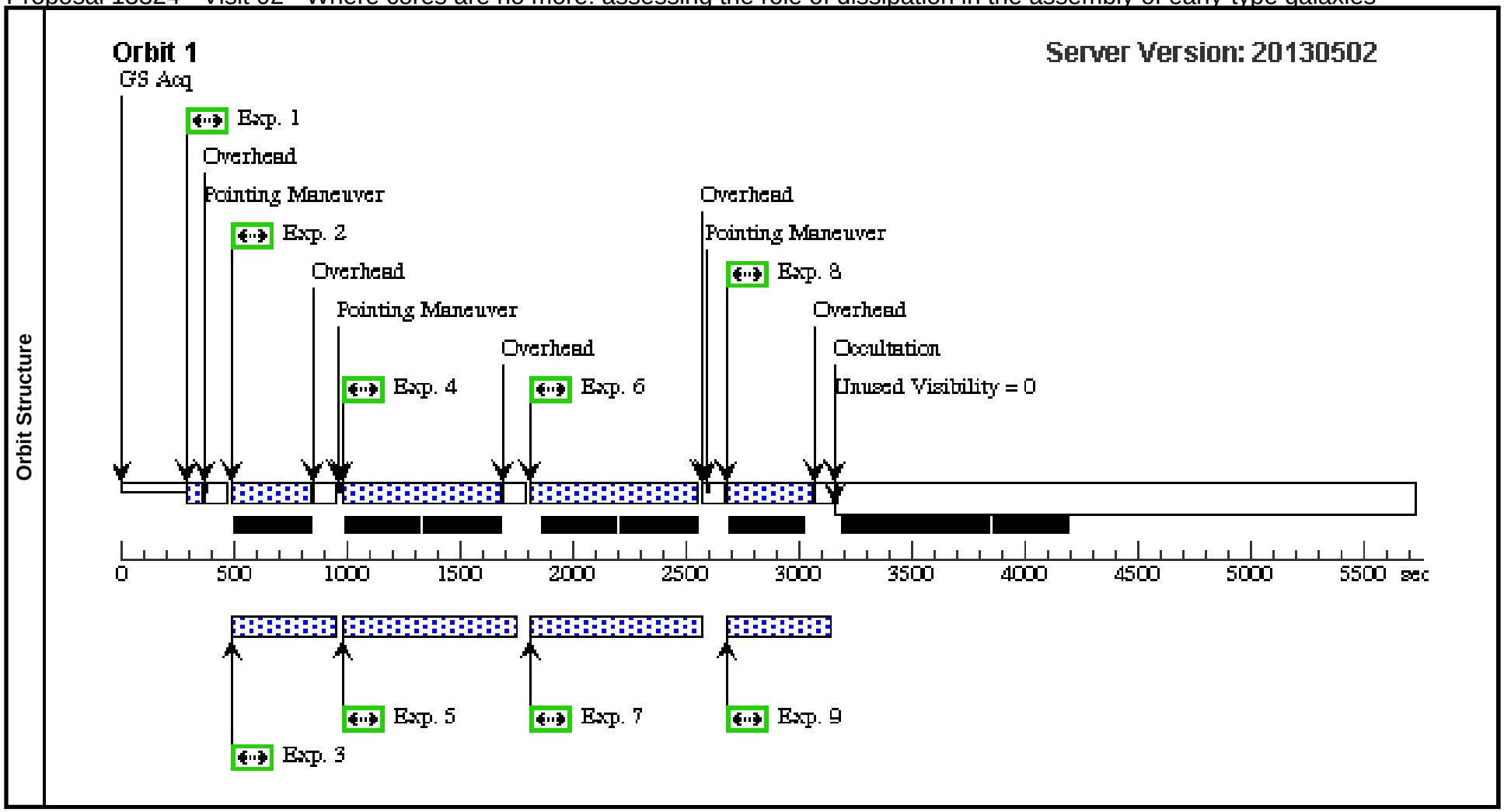
Fixed Targets

#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(2)	NGC-1222	RA: 03 08 56.7470 (47.2364458d) Dec: -02 57 18.76 (-2.95521d) Equinox: J2000		V=12.3	Reference Frame: ICRS

Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.

Exposures

#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
1		(2) NGC-1222	WFC3/UVIS, ACCUM, UVIS-CENTER	F814W	CR-SPLIT=NO	POS TARG 0.0,21.12		35 Secs (35 Secs) *[==>]*	 ***[1]***
2		(2) NGC-1222	WFC3/UVIS, ACCUM, UVIS-CENTER	F814W	CR-SPLIT=NO	POS TARG 0.38,21.5	Prime + Parallel Group 2-3 in Visit 02	350 Secs (350 Secs) *[==>]*	 ***[1]***
3		ANY	ACS/WFC, ACCUM, WFC	F814W			Prime + Parallel Group 2-3 in Visit 02	250 Secs (250 Secs) *[==>]*	 ***[1]***
4		(2) NGC-1222	WFC3/UVIS, ACCUM, UVIS-CENTER	F814W	CR-SPLIT=NO	POS TARG 0.558,23.92	Prime + Parallel Group 4-5 in Visit 02	700 Secs (700 Secs) *[==>]*	 ***[1]***
5		ANY	ACS/WFC, ACCUM, WFC	F814W			Prime + Parallel Group 4-5 in Visit 02	650 Secs (650 Secs) *[==>]*	 ***[1]***
6		(2) NGC-1222	WFC3/UVIS, ACCUM, UVIS-CENTER	F475W	CR-SPLIT=NO	SAME POS AS 4	Prime + Parallel Group 6-7 in Visit 02	720 Secs (720 Secs) *[==>]*	 ***[1]***
7		ANY	ACS/WFC, ACCUM, WFC	F475W			Prime + Parallel Group 6-7 in Visit 02	600 Secs (600 Secs) *[==>]*	 ***[1]***
8		(2) NGC-1222	WFC3/UVIS, ACCUM, UVIS-CENTER	F475W	CR-SPLIT=NO	SAME POS AS 2	Prime + Parallel Group 8-9 in Visit 02	390 Secs (378 Secs) *[==>378.0 Secs]*	 ***[1]***
9		ANY	ACS/WFC, ACCUM, WFC	F475W			Prime + Parallel Group 8-9 in Visit 02	350 Secs (338 Secs) *[==>338.0 Secs]*	 ***[1]***


Orbit Structure
Orbit 1
Server Version: 20130502
GS Acq
Exp. 1
Overhead
Pointing Maneuver
Exp. 2
Overhead
Pointing Maneuver
Exp. 4
Overhead
Exp. 6
Overhead
Pointing Maneuver
Exp. 8
Overhead
Occultation
Unused Visibility = 0
0
500
1000
1500
2000
2500
3000
3500
4000
4500
5000
5500
sec
Exp. 5
Exp. 7
Exp. 9
Exp. 3

Visit

Proposal 13324, Visit 03, implementation Thu Jun 13 01:45:46 GMT 2013

Diagnostic Status: No Diagnostics

Scientific Instruments: WFC3/UVIS, ACS/WFC

Special Requirements: SCHED 50%; ORIENT 260D TO 280 D; ORIENT 30D TO 90 D

Comments: Applies to NGC 1289

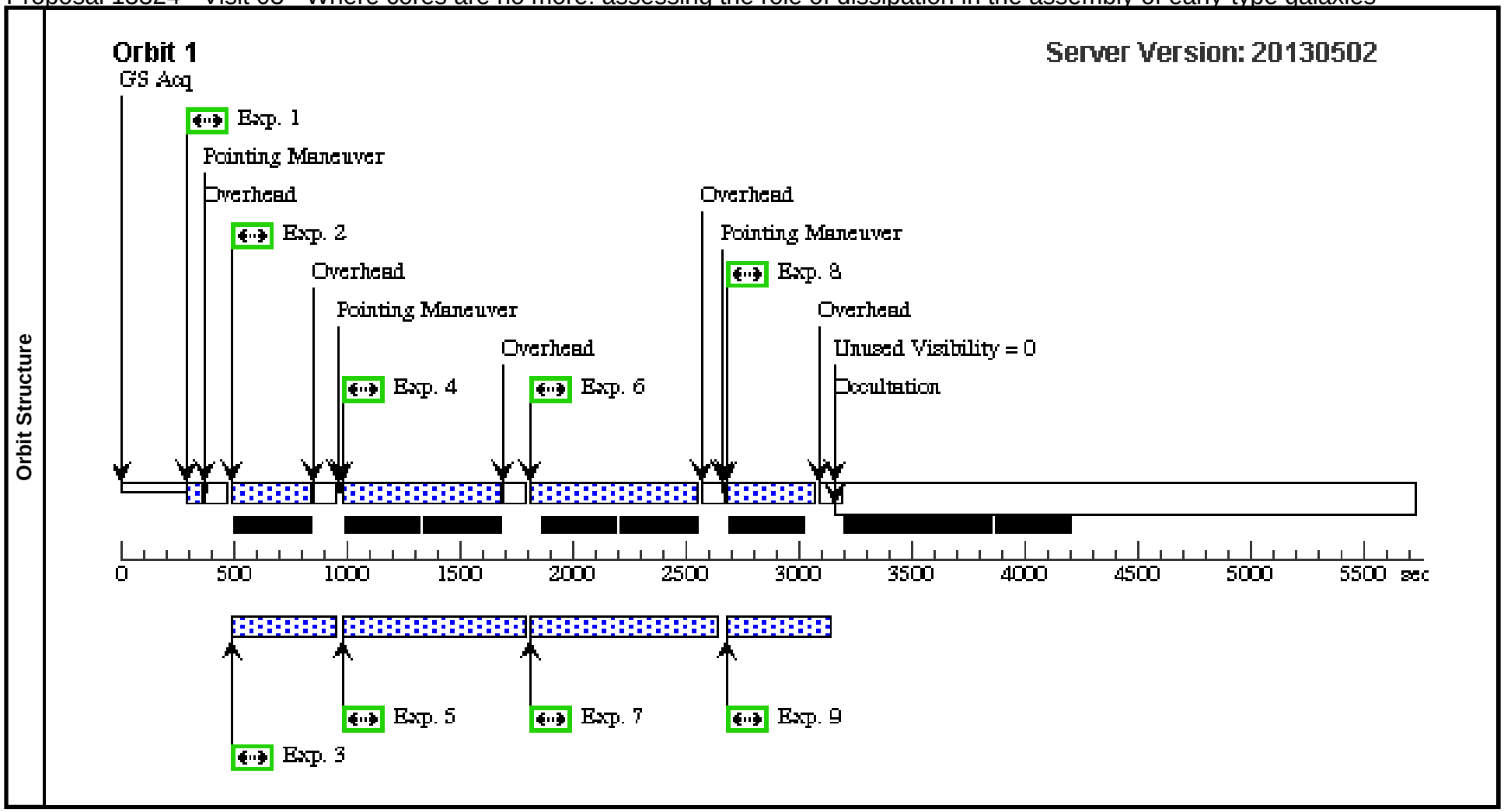
Fixed Targets

#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(3)	NGC-1289	RA: 03 18 49.8220 (49.7075917d) Dec: -01 58 24.07 (-1.97335d) Equinox: J2000		V=12.4	Reference Frame: ICRS

Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.

Exposures

#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
1		(3) NGC-1289	WFC3/UVIS, ACCUM, UVIS-CENTER	F814W	CR-SPLIT=NO	POS TARG 0.0,21.12		35 Secs (35 Secs) *[==>35.0 Secs]*	 ***[1]***
2		(3) NGC-1289	WFC3/UVIS, ACCUM, UVIS-CENTER	F814W	CR-SPLIT=NO	POS TARG 0.38,21.5	Prime + Parallel Group 2-3 in Visit 03	350 Secs (350 Secs) *[==>350.0 Secs]*	 ***[1]***
3		ANY	ACS/WFC, ACCUM, WFC	F814W			Prime + Parallel Group 2-3 in Visit 03	250 Secs (250 Secs) *[==>]*	 ***[1]***
4		(3) NGC-1289	WFC3/UVIS, ACCUM, UVIS-CENTER	F814W	CR-SPLIT=NO	POS TARG 0.558,23.92	Prime + Parallel Group 4-5 in Visit 03	700 Secs (700 Secs) *[==>700.0 Secs]*	 ***[1]***
5		ANY	ACS/WFC, ACCUM, WFC	F814W			Prime + Parallel Group 4-5 in Visit 03	650 Secs (690 Secs) *[==>690.0 Secs]*	 ***[1]***
6		(3) NGC-1289	WFC3/UVIS, ACCUM, UVIS-CENTER	F475W	CR-SPLIT=NO	SAME POS AS 4	Prime + Parallel Group 6-7 in Visit 03	720 Secs (720 Secs) *[==>720.0 Secs]*	 ***[1]***
7		ANY	ACS/WFC, ACCUM, WFC	F475W			Prime + Parallel Group 6-7 in Visit 03	620 Secs (670 Secs) *[==>670.0 Secs]*	 ***[1]***
8		(3) NGC-1289	WFC3/UVIS, ACCUM, UVIS-CENTER	F475W	CR-SPLIT=NO	SAME POS AS 2	Prime + Parallel Group 8-9 in Visit 03	390 Secs (390 Secs) *[==>390.0 Secs]*	 ***[1]***
9		ANY	ACS/WFC, ACCUM, WFC	F475W			Prime + Parallel Group 8-9 in Visit 03	360 Secs (338 Secs) *[==>338.0 Secs]*	 ***[1]***


Orbit Structure
Orbit 1
Server Version: 20130502
GS Acq
Exp. 1
Pointing Maneuver
Overhead
Exp. 2
Overhead
Pointing Maneuver
Exp. 4
Overhead
Exp. 6
Overhead
Pointing Maneuver
Exp. 8
Overhead
Unused Visibility = 0
Occultation
0
500
1000
1500
2000
2500
3000
3500
4000
4500
5000
5500
sec
Exp. 5
Exp. 7
Exp. 9
Exp. 3

Visit

Proposal 13324, Visit 04, implementation Thu Jun 13 01:45:47 GMT 2013

Diagnostic Status: No Diagnostics

Scientific Instruments: WFC3/UVIS, ACS/WFC

Special Requirements: SCHED 50%; ORIENT 245D TO 285 D; ORIENT 90D TO 115 D

Comments: Applies to NGC 3522

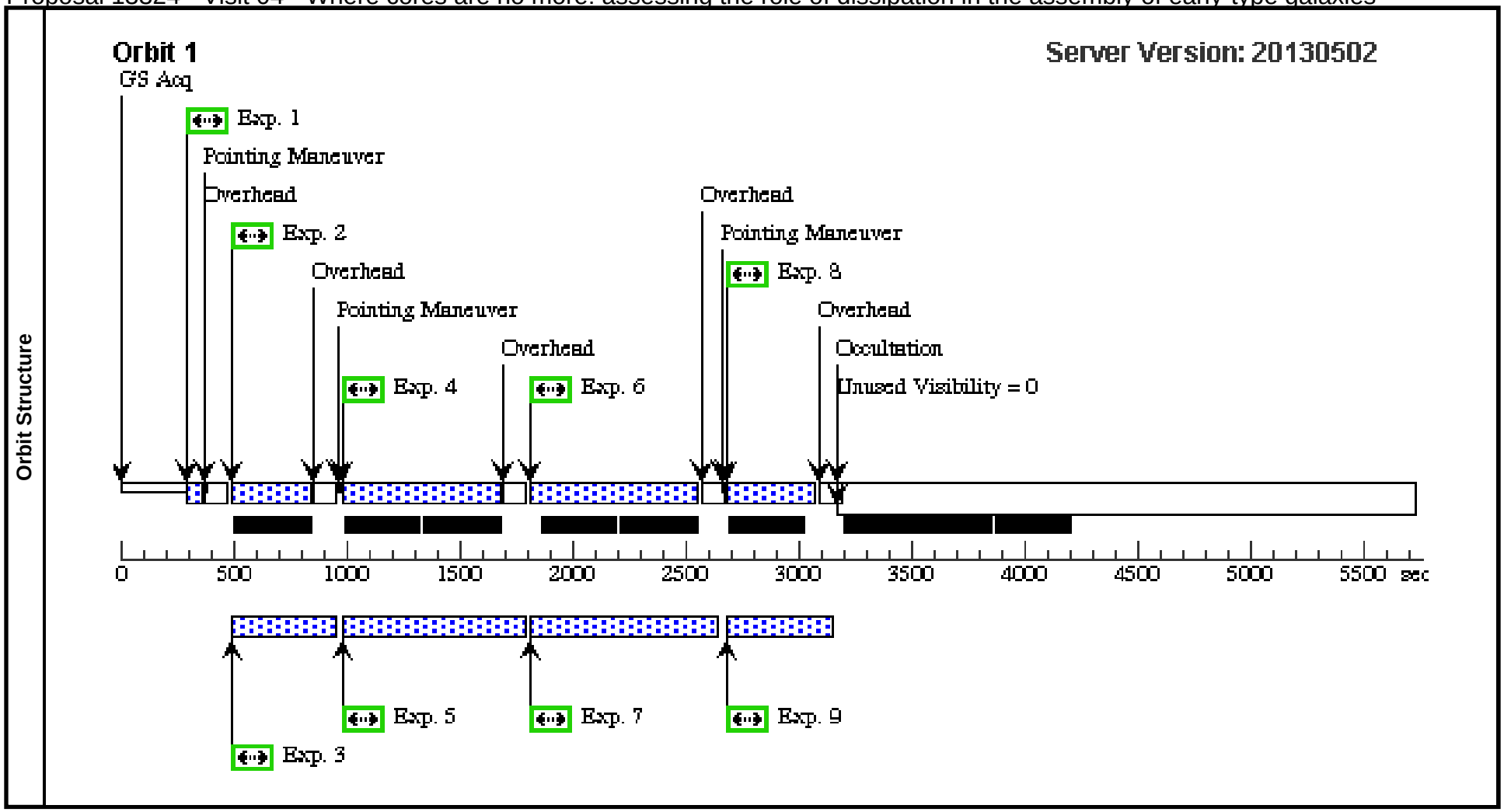
Fixed Targets

#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(4)	NGC-3522	RA: 11 06 40.4520 (166.6685500d) Dec: +20 05 8.24 (20.08562d) Equinox: J2000		V=13.8	Reference Frame: ICRS

Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.

Exposures

#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
1		(4) NGC-3522	WFC3/UVIS, ACCUM, UVIS-CENTER	F814W	CR-SPLIT=NO	POS TARG 0.0,21.12		35 Secs (35 Secs) *[==>35.0 Secs]*	 ***[1]***
2		(4) NGC-3522	WFC3/UVIS, ACCUM, UVIS-CENTER	F814W	CR-SPLIT=NO	POS TARG 0.38,21.5	Prime + Parallel Group 2-3 in Visit 04	350 Secs (350 Secs) *[==>350.0 Secs]*	 ***[1]***
3		ANY	ACS/WFC, ACCUM, WFC	F814W			Prime + Parallel Group 2-3 in Visit 04	250 Secs (250 Secs) *[==>]*	 ***[1]***
4		(4) NGC-3522	WFC3/UVIS, ACCUM, UVIS-CENTER	F814W	CR-SPLIT=NO	POS TARG 0.558,23.92	Prime + Parallel Group 4-5 in Visit 04	700 Secs (700 Secs) *[==>700.0 Secs]*	 ***[1]***
5		ANY	ACS/WFC, ACCUM, WFC	F814W			Prime + Parallel Group 4-5 in Visit 04	650 Secs (690 Secs) *[==>690.0 Secs]*	 ***[1]***
6		(4) NGC-3522	WFC3/UVIS, ACCUM, UVIS-CENTER	F475W	CR-SPLIT=NO	SAME POS AS 4	Prime + Parallel Group 6-7 in Visit 04	720 Secs (720 Secs) *[==>720.0 Secs]*	 ***[1]***
7		ANY	ACS/WFC, ACCUM, WFC	F475W			Prime + Parallel Group 6-7 in Visit 04	620 Secs (670 Secs) *[==>670.0 Secs]*	 ***[1]***
8		(4) NGC-3522	WFC3/UVIS, ACCUM, UVIS-CENTER	F475W	CR-SPLIT=NO	SAME POS AS 2	Prime + Parallel Group 8-9 in Visit 04	390 Secs (390 Secs) *[==>390.0 Secs]*	 ***[1]***
9		ANY	ACS/WFC, ACCUM, WFC	F475W			Prime + Parallel Group 8-9 in Visit 04	360 Secs (349 Secs) *[==>349.0 Secs]*	 ***[1]***


Orbit Structure
Orbit 1
Server Version: 20130502
GS Acq
Exp. 1
Pointing Maneuver
Overhead
Exp. 2
Overhead
Pointing Maneuver
Exp. 4
Overhead
Exp. 6
Overhead
Pointing Maneuver
Exp. 8
Overhead
Occultation
Unused Visibility = 0
0
500
1000
1500
2000
2500
3000
3500
4000
4500
5000
5500
sec
Exp. 5
Exp. 7
Exp. 9
Exp. 3

Visit

Proposal 13324, Visit 05, implementation Thu Jun 13 01:45:48 GMT 2013

Diagnostic Status: No Diagnostics

Scientific Instruments: WFC3/UVIS, ACS/WFC

Special Requirements: SCHED 50%; ORIENT 110D TO 150 D; ORIENT 250D TO 330 D

Comments: Applies to NGC 4191

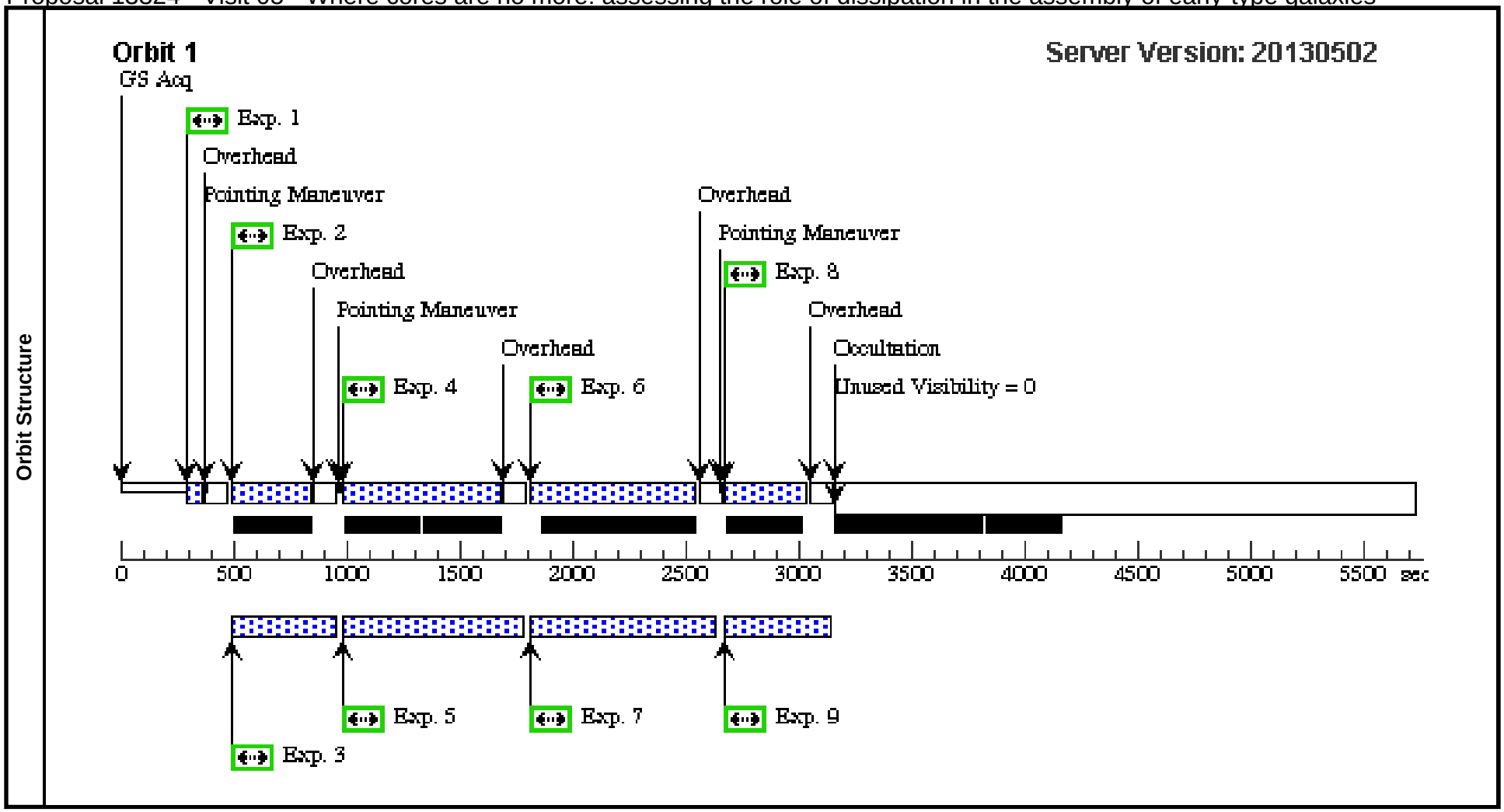
Fixed Targets

#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(5)	NGC-4191	RA: 12 13 50.3800 (183.4599167d) Dec: +07 12 3.03 (7.20084d) Equinox: J2000		V=13.3	Reference Frame: ICRS

Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.

Exposures

#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
1		(5) NGC-4191	WFC3/UVIS, ACCUM, UVIS-CENTER	F814W	CR-SPLIT=NO	POS TARG 0.0,21.12; GS ACQ SCENARIO BASE1B3		35 Secs (35 Secs) *[==>35.0 Secs]*	 ***[1]***
2		(5) NGC-4191	WFC3/UVIS, ACCUM, UVIS-CENTER	F814W	CR-SPLIT=NO	POS TARG 0.38,21.5	Prime + Parallel Group 2-3 in Visit 05	348 Secs (348 Secs) *[==>348.0 Secs]*	 ***[1]***
3		ANY	ACS/WFC, ACCUM, WFC	F814W			Prime + Parallel Group 2-3 in Visit 05	250 Secs (250 Secs) *[==>]*	 ***[1]***
4		(5) NGC-4191	WFC3/UVIS, ACCUM, UVIS-CENTER	F814W	CR-SPLIT=NO	POS TARG 0.558,23.92	Prime + Parallel Group 4-5 in Visit 05	698 Secs (698 Secs) *[==>698.0 Secs]*	 ***[1]***
5		ANY	ACS/WFC, ACCUM, WFC	F814W			Prime + Parallel Group 4-5 in Visit 05	650 Secs (680 Secs) *[==>680.0 Secs]*	 ***[1]***
6		(5) NGC-4191	WFC3/UVIS, ACCUM, UVIS-CENTER	F475W	CR-SPLIT=NO	SAME POS AS 4	Prime + Parallel Group 6-7 in Visit 05	711 Secs (711 Secs) *[==>711.0 Secs]*	 ***[1]***
7		ANY	ACS/WFC, ACCUM, WFC	F475W			Prime + Parallel Group 6-7 in Visit 05	620 Secs (660 Secs) *[==>660.0 Secs]*	 ***[1]***
8		(5) NGC-4191	WFC3/UVIS, ACCUM, UVIS-CENTER	F475W	CR-SPLIT=NO	SAME POS AS 2	Prime + Parallel Group 8-9 in Visit 05	360 Secs (360 Secs) *[==>360.0 Secs]*	 ***[1]***
9		ANY	ACS/WFC, ACCUM, WFC	F475W			Prime + Parallel Group 8-9 in Visit 05	360 Secs (346 Secs) *[==>346.0 Secs]*	 ***[1]***


Orbit Structure
Orbit 1
Server Version: 20130502
GS Acq
Exp. 1
Overhead
Pointing Maneuver
Exp. 2
Overhead
Pointing Maneuver
Exp. 4
Overhead
Exp. 6
Overhead
Pointing Maneuver
Exp. 8
Overhead
Occultation
Unused Visibility = 0
0
500
1000
1500
2000
2500
3000
3500
4000
4500
5000
5500
sec
Exp. 5
Exp. 7
Exp. 9
Exp. 3

Visit

Proposal 13324, Visit 06, implementation Thu Jun 13 01:45:49 GMT 2013

Diagnostic Status: No Diagnostics

Scientific Instruments: WFC3/UVIS, ACS/WFC

Special Requirements: SCHED 50%; ORIENT 270D TO 290 D; ORIENT 95D TO 120 D

Comments: Applies to NGC 4690

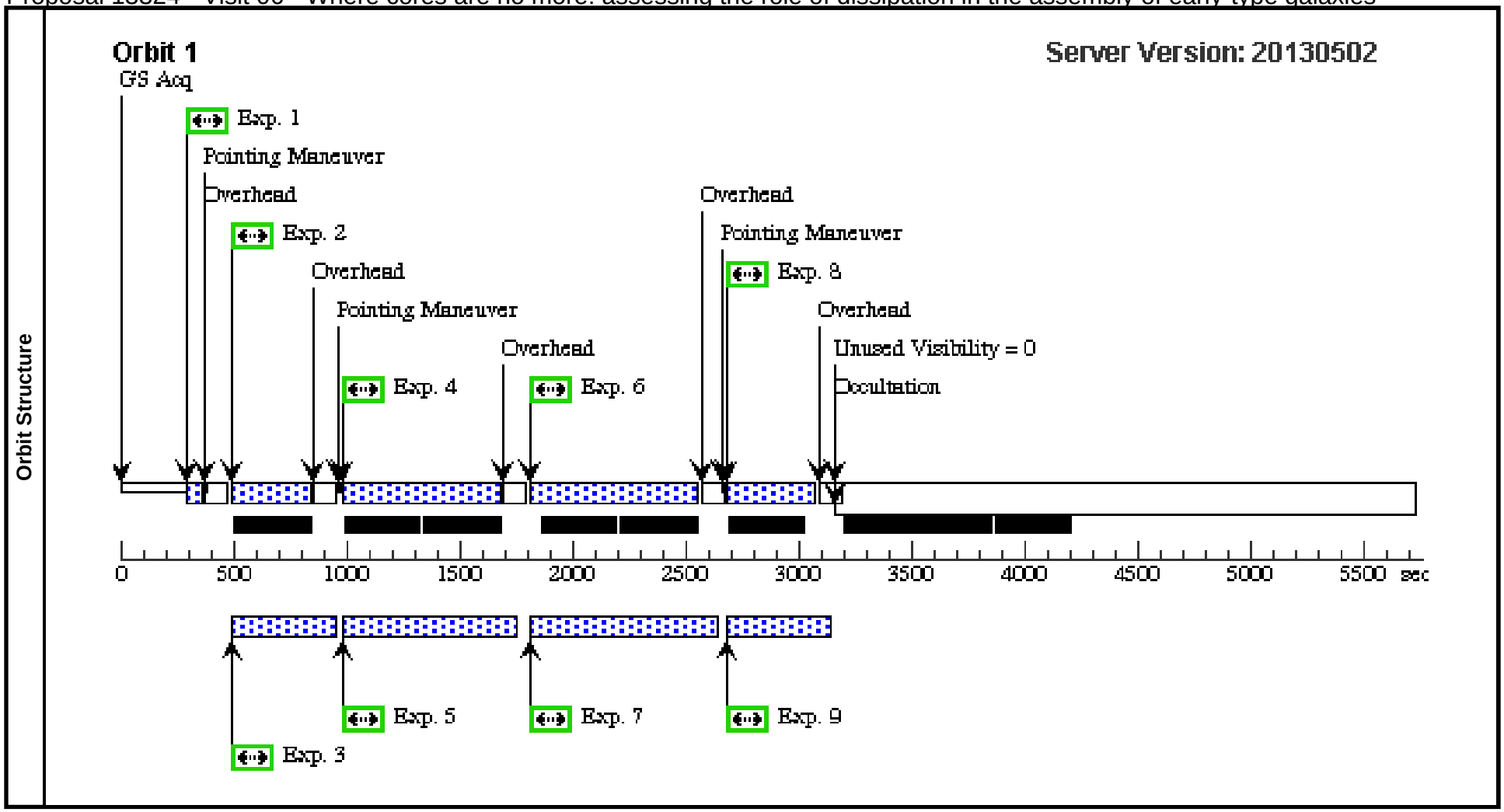
Fixed Targets

#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(6)	NGC-4690	RA: 12 47 55.6527 (191.9818862d) Dec: -01 39 22.52 (-1.65626d) Equinox: J2000		V=13.5	Reference Frame: ICRS

Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.

Exposures

#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
1		(6) NGC-4690	WFC3/UVIS, ACCUM, UVIS-CENTER	F814W	CR-SPLIT=NO	POS TARG 0.0,21.12		35 Secs (35 Secs) *[==>]*	 ***[1]***
2		(6) NGC-4690	WFC3/UVIS, ACCUM, UVIS-CENTER	F814W	CR-SPLIT=NO	POS TARG 0.38,21.5	Prime + Parallel Group 2-3 in Visit 06	350 Secs (350 Secs) *[==>]*	 ***[1]***
3		ANY	ACS/WFC, ACCUM, WFC	F814W			Prime + Parallel Group 2-3 in Visit 06	250 Secs (250 Secs) *[==>]*	 ***[1]***
4		(6) NGC-4690	WFC3/UVIS, ACCUM, UVIS-CENTER	F814W	CR-SPLIT=NO	POS TARG 0.558,23.92	Prime + Parallel Group 4-5 in Visit 06	700 Secs (700 Secs) *[==>]*	 ***[1]***
5		ANY	ACS/WFC, ACCUM, WFC	F814W			Prime + Parallel Group 4-5 in Visit 06	650 Secs (650 Secs) *[==>]*	 ***[1]***
6		(6) NGC-4690	WFC3/UVIS, ACCUM, UVIS-CENTER	F475W	CR-SPLIT=NO	SAME POS AS 4	Prime + Parallel Group 6-7 in Visit 06	720 Secs (720 Secs) *[==>720.0 Secs]*	 ***[1]***
7		ANY	ACS/WFC, ACCUM, WFC	F475W			Prime + Parallel Group 6-7 in Visit 06	620 Secs (670 Secs) *[==>670.0 Secs]*	 ***[1]***
8		(6) NGC-4690	WFC3/UVIS, ACCUM, UVIS-CENTER	F475W	CR-SPLIT=NO	SAME POS AS 2	Prime + Parallel Group 8-9 in Visit 06	390 Secs (390 Secs) *[==>390.0 Secs]*	 ***[1]***
9		ANY	ACS/WFC, ACCUM, WFC	F475W			Prime + Parallel Group 8-9 in Visit 06	360 Secs (338 Secs) *[==>338.0 Secs]*	 ***[1]***


Orbit Structure
Orbit 1
Server Version: 20130502
GS Acq
Exp. 1
Pointing Maneuver
Overhead
Exp. 2
Overhead
Pointing Maneuver
Exp. 4
Overhead
Exp. 6
Overhead
Pointing Maneuver
Exp. 8
Overhead
Unused Visibility = 0
Occultation
0
500
1000
1500
2000
2500
3000
3500
4000
4500
5000
5500
sec
Exp. 5
Exp. 7
Exp. 9
Exp. 3

Visit

Proposal 13324, Visit 07, implementation Thu Jun 13 01:45:50 GMT 2013

Diagnostic Status: No Diagnostics

Scientific Instruments: WFC3/UVIS, ACS/WFC

Special Requirements: SCHED 50%; ORIENT 200D TO 240 D; ORIENT 275D TO 295 D; ORIENT 90D TO 115 D

Comments: Applies to NGC 5481

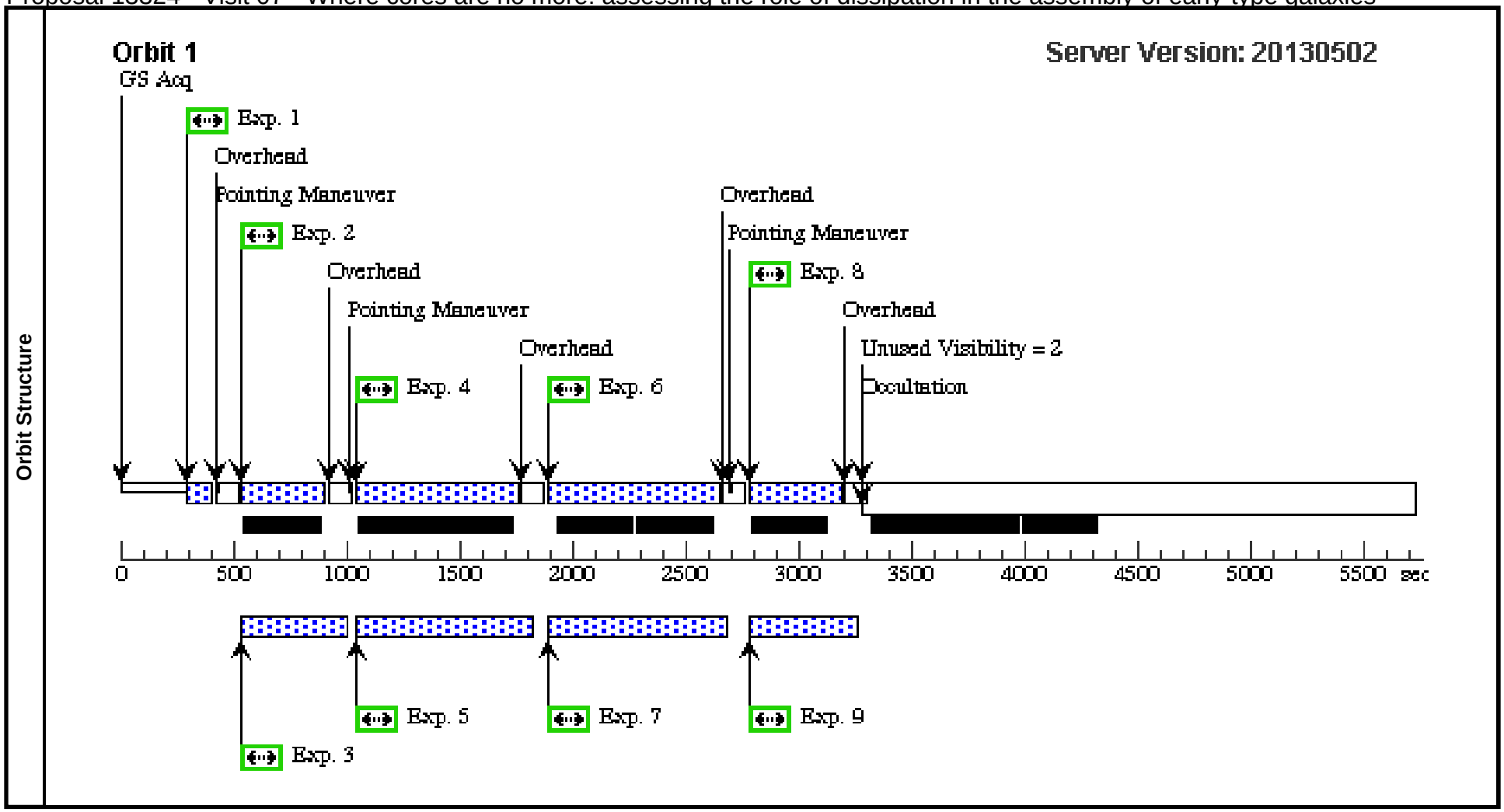
Fixed Targets

#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(7)	NGC-5481	RA: 14 06 41.6379 (211.6734912d) Dec: +50 43 23.90 (50.72331d) Equinox: J2000		V=13.2	Reference Frame: ICRS

Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.

Exposures

#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
1		(7) NGC-5481	WFC3/UVIS, ACCUM, UVIS-CENTER	F814W	CR-SPLIT=NO	POS TARG 0.0,21.12; GS ACQ SCENARIO BASE1B3		60 Secs (80 Secs) *[==>80.0 Secs]*	 ***[1]***
2		(7) NGC-5481	WFC3/UVIS, ACCUM, UVIS-CENTER	F814W	CR-SPLIT=NO	POS TARG 0.38,21.5	Prime + Parallel Group 2-3 in Visit 07	350 Secs (370 Secs) *[==>370.0 Secs]*	 ***[1]***
3		ANY	ACS/WFC, ACCUM, WFC	F814W			Prime + Parallel Group 2-3 in Visit 07	250 Secs (260 Secs) *[==>260.0 Secs]*	 ***[1]***
4		(7) NGC-5481	WFC3/UVIS, ACCUM, UVIS-CENTER	F814W	CR-SPLIT=NO	POS TARG 0.558,23.92	Prime + Parallel Group 4-5 in Visit 07	700 Secs (720 Secs) *[==>720.0 Secs]*	 ***[1]***
5		ANY	ACS/WFC, ACCUM, WFC	F814W			Prime + Parallel Group 4-5 in Visit 07	650 Secs (660 Secs) *[==>660.0 Secs]*	 ***[1]***
6		(7) NGC-5481	WFC3/UVIS, ACCUM, UVIS-CENTER	F475W	CR-SPLIT=NO	SAME POS AS 4	Prime + Parallel Group 6-7 in Visit 07	720 Secs (740 Secs) *[==>740.0 Secs]*	 ***[1]***
7		ANY	ACS/WFC, ACCUM, WFC	F475W			Prime + Parallel Group 6-7 in Visit 07	620 Secs (630 Secs) *[==>630.0 Secs]*	 ***[1]***
8		(7) NGC-5481	WFC3/UVIS, ACCUM, UVIS-CENTER	F475W	CR-SPLIT=NO	SAME POS AS 2	Prime + Parallel Group 8-9 in Visit 07	390 Secs (410 Secs) *[==>410.0 Secs]*	 ***[1]***
9		ANY	ACS/WFC, ACCUM, WFC	F475W			Prime + Parallel Group 8-9 in Visit 07	360 Secs (360 Secs) *[==>]*	 ***[1]***


Orbit Structure
Orbit 1
Server Version: 20130502
GS Acq
Exp. 1
Overhead
Pointing Maneuver
Exp. 2
Overhead
Pointing Maneuver
Exp. 4
Overhead
Exp. 6
Overhead
Pointing Maneuver
Exp. 8
Overhead
Unused Visibility = 2
Occultation
0
500
1000
1500
2000
2500
3000
3500
4000
4500
5000
5500
sec
Exp. 5
Exp. 7
Exp. 9
Exp. 3

Visit

Proposal 13324, Visit 08, implementation Thu Jun 13 01:45:51 GMT 2013

Diagnostic Status: No Diagnostics

Scientific Instruments: WFC3/UVIS, ACS/WFC

Special Requirements: SCHED 50%; ORIENT 0D TO 50 D; ORIENT 65D TO 70 D; ORIENT 95D TO 125 D; ORIENT 200D TO 300 D; ORIENT 350D TO 359 D

Comments: Applies to NGC 5631

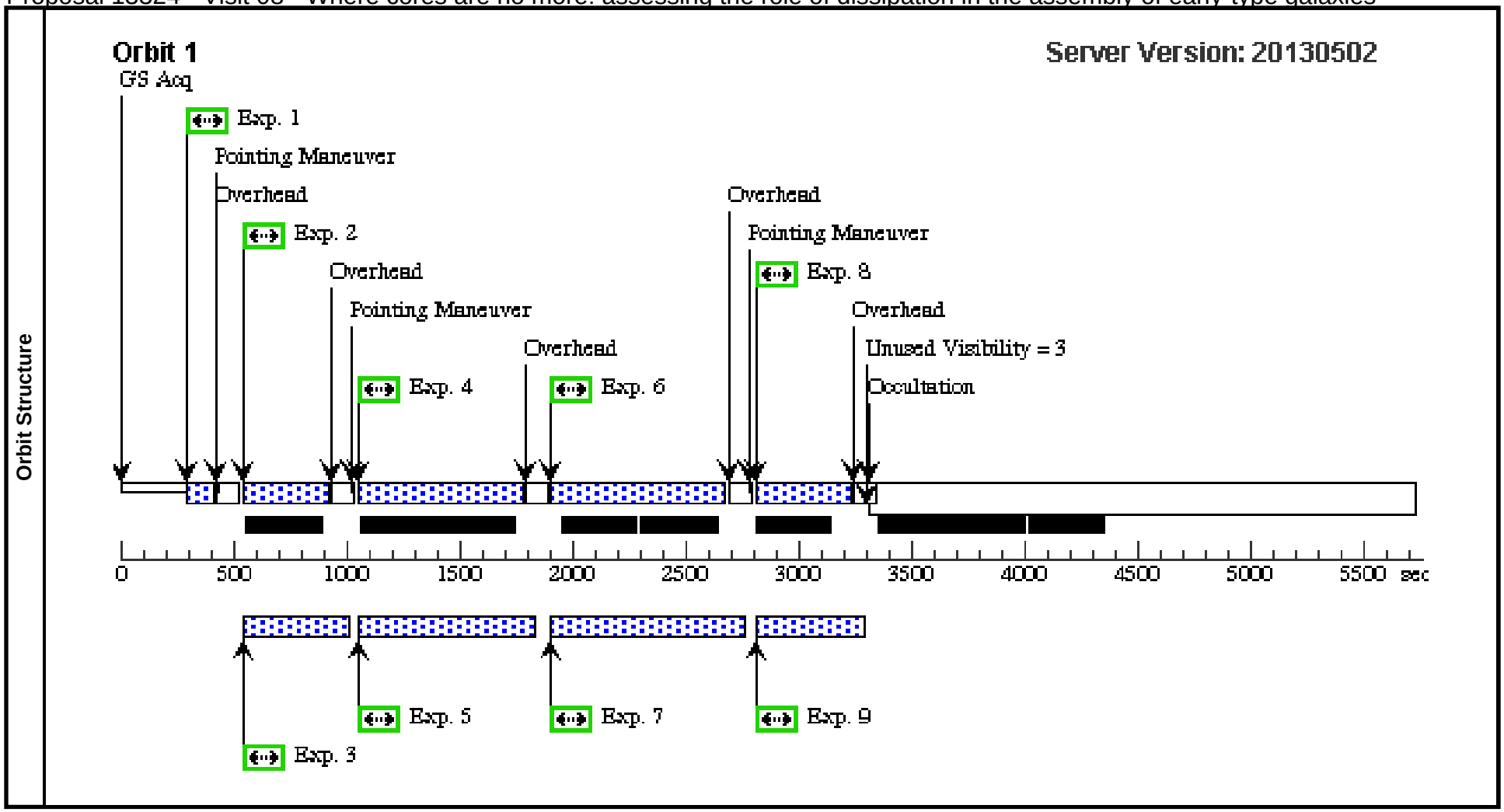
Fixed Targets

#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(8)	NGC-5631	RA: 14 26 33.2850 (216.6386875d) Dec: +56 34 57.59 (56.58266d) Equinox: J2000		V=12.55	Reference Frame: ICRS

Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.

Exposures

#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
1		(8) NGC-5631	WFC3/UVIS, ACCUM, UVIS-CENTER	F814W	CR-SPLIT=NO	POS TARG 0.0,21.12		60 Secs (88 Secs) *[==>88.0 Secs]*	 ***[1]***
2		(8) NGC-5631	WFC3/UVIS, ACCUM, UVIS-CENTER	F814W	CR-SPLIT=NO	POS TARG 0.38,21.5	Prime + Parallel Group 2-3 in Visit 08	350 Secs (378 Secs) *[==>378.0 Secs]*	 ***[1]***
3		ANY	ACS/WFC, ACCUM, WFC	F814W			Prime + Parallel Group 2-3 in Visit 08	250 Secs (260 Secs) *[==>260.0 Secs]*	 ***[1]***
4		(8) NGC-5631	WFC3/UVIS, ACCUM, UVIS-CENTER	F814W	CR-SPLIT=NO	POS TARG 0.558,23.92	Prime + Parallel Group 4-5 in Visit 08	700 Secs (728 Secs) *[==>728.0 Secs]*	 ***[1]***
5		ANY	ACS/WFC, ACCUM, WFC	F814W			Prime + Parallel Group 4-5 in Visit 08	650 Secs (660 Secs) *[==>660.0 Secs]*	 ***[1]***
6		(8) NGC-5631	WFC3/UVIS, ACCUM, UVIS-CENTER	F475W	CR-SPLIT=NO	SAME POS AS 4	Prime + Parallel Group 6-7 in Visit 08	720 Secs (748 Secs) *[==>748.0 Secs]*	 ***[1]***
7		ANY	ACS/WFC, ACCUM, WFC	F475W			Prime + Parallel Group 6-7 in Visit 08	620 Secs (700 Secs) *[==>700.0 Secs]*	 ***[1]***
8		(8) NGC-5631	WFC3/UVIS, ACCUM, UVIS-CENTER	F475W	CR-SPLIT=NO	SAME POS AS 2	Prime + Parallel Group 8-9 in Visit 08	390 Secs (418 Secs) *[==>418.0 Secs]*	 ***[1]***
9		ANY	ACS/WFC, ACCUM, WFC	F475W			Prime + Parallel Group 8-9 in Visit 08	360 Secs (360 Secs) *[==>]*	 ***[1]***


Orbit Structure
Orbit 1
Server Version: 20130502
GS Acq
Exp. 1
Pointing Maneuver
Overhead
Exp. 2
Overhead
Pointing Maneuver
Exp. 4
Overhead
Exp. 6
Overhead
Pointing Maneuver
Exp. 8
Overhead
Unused Visibility = 3
Occultation
0
500
1000
1500
2000
2500
3000
3500
4000
4500
5000
5500
sec
Exp. 5
Exp. 7
Exp. 9
Exp. 3

Visit

Proposal 13324, Visit 09, implementation Thu Jun 13 01:45:52 GMT 2013

Diagnostic Status: No Diagnostics

Scientific Instruments: WFC3/UVIS, ACS/WFC

Special Requirements: SCHED 50%; ORIENT 65D TO 85 D

Comments: Applies to NGC 7454
(Special position on CCD + orient angle due to a bright star)

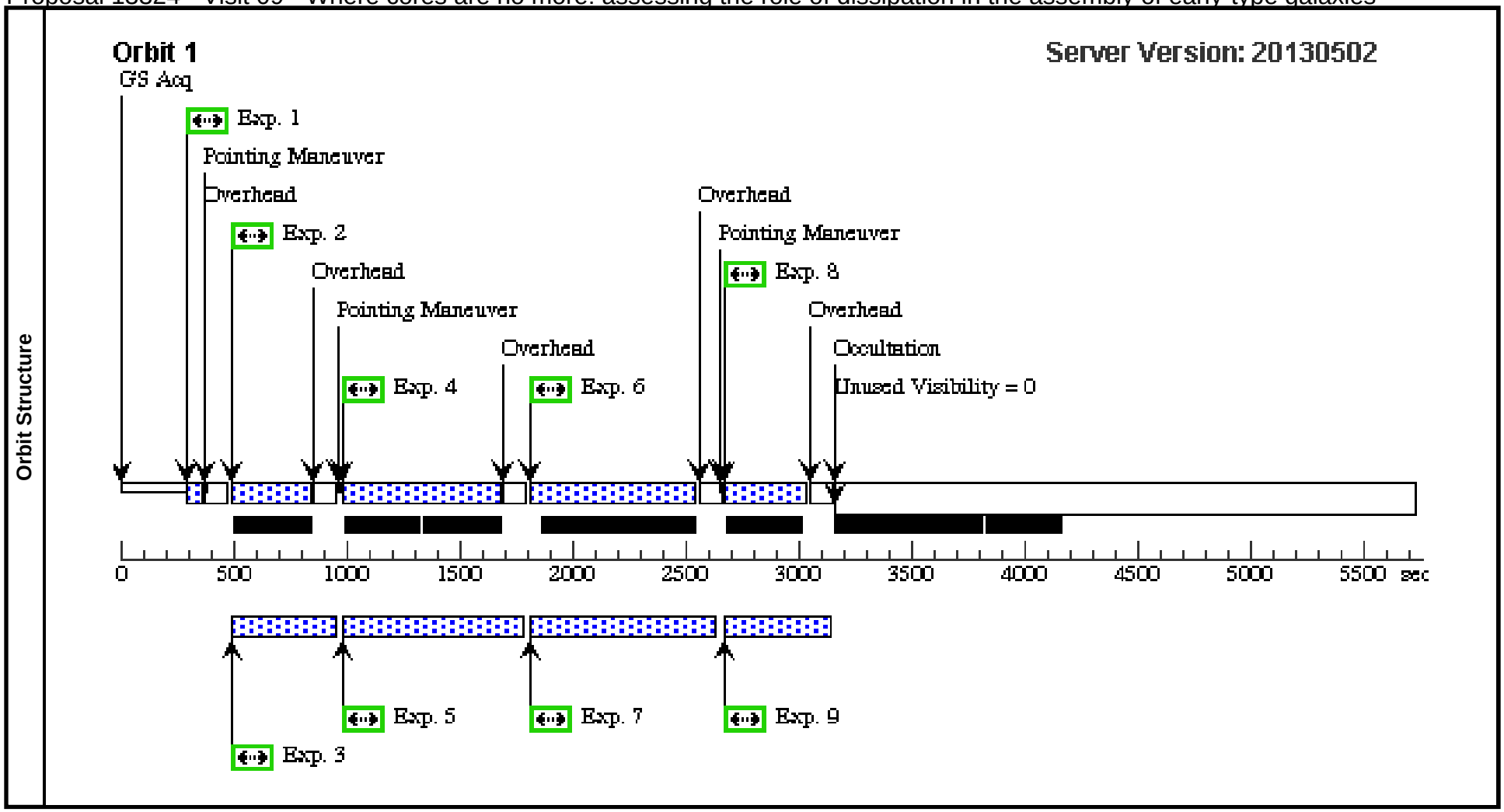
Fixed Targets

#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(9)	NGC-7454	RA: 23 01 6.5110 (345.2771292d) Dec: +16 23 18.14 (16.38837d) Equinox: J2000		V=11.8	Reference Frame: ICRS

Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.

Exposures

#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
1		(9) NGC-7454	WFC3/UVIS, ACCUM, UVIS-CENTER	F814W	CR-SPLIT=NO	POS TARG 0.0,36.12; GS ACQ SCENARIO BASE1B3		35 Secs (35 Secs) *[==>35.0 Secs]*	 ***[1]***
2		(9) NGC-7454	WFC3/UVIS, ACCUM, UVIS-CENTER	F814W	CR-SPLIT=NO	POS TARG 0.38,36.5	Prime + Parallel Group 2-3 in Visit 09	348 Secs (348 Secs) *[==>348.0 Secs]*	 ***[1]***
3		ANY	ACS/WFC, ACCUM, WFC	F814W			Prime + Parallel Group 2-3 in Visit 09	250 Secs (250 Secs) *[==>]*	 ***[1]***
4		(9) NGC-7454	WFC3/UVIS, ACCUM, UVIS-CENTER	F814W	CR-SPLIT=NO	POS TARG 0.558,38.92	Prime + Parallel Group 4-5 in Visit 09	698 Secs (698 Secs) *[==>698.0 Secs]*	 ***[1]***
5		ANY	ACS/WFC, ACCUM, WFC	F814W			Prime + Parallel Group 4-5 in Visit 09	650 Secs (680 Secs) *[==>680.0 Secs]*	 ***[1]***
6		(9) NGC-7454	WFC3/UVIS, ACCUM, UVIS-CENTER	F475W	CR-SPLIT=NO	SAME POS AS 4	Prime + Parallel Group 6-7 in Visit 09	711 Secs (711 Secs) *[==>711.0 Secs]*	 ***[1]***
7		ANY	ACS/WFC, ACCUM, WFC	F475W			Prime + Parallel Group 6-7 in Visit 09	620 Secs (660 Secs) *[==>660.0 Secs]*	 ***[1]***
8		(9) NGC-7454	WFC3/UVIS, ACCUM, UVIS-CENTER	F475W	CR-SPLIT=NO	SAME POS AS 2	Prime + Parallel Group 8-9 in Visit 09	360 Secs (360 Secs) *[==>360.0 Secs]*	 ***[1]***
9		ANY	ACS/WFC, ACCUM, WFC	F475W			Prime + Parallel Group 8-9 in Visit 09	360 Secs (347 Secs) *[==>347.0 Secs]*	 ***[1]***


Orbit Structure
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Server Version: 20130502
GS Acq
Exp. 1
Pointing Maneuver
Overhead
Exp. 2
Overhead
Pointing Maneuver
Exp. 4
Overhead
Exp. 6
Overhead
Pointing Maneuver
Exp. 8
Overhead
Occultation
Unused Visibility = 0
0
500
1000
1500
2000
2500
3000
3500
4000
4500
5000
5500
sec
Exp. 5
Exp. 7
Exp. 9
Exp. 3

Visit

Proposal 13324, Visit 10, implementation Thu Jun 13 01:45:53 GMT 2013

Diagnostic Status: No Diagnostics

Scientific Instruments: WFC3/UVIS, ACS/WFC

Special Requirements: SCHED 50%; ORIENT 270D TO 300 D

Comments: Applies to PGC 28887

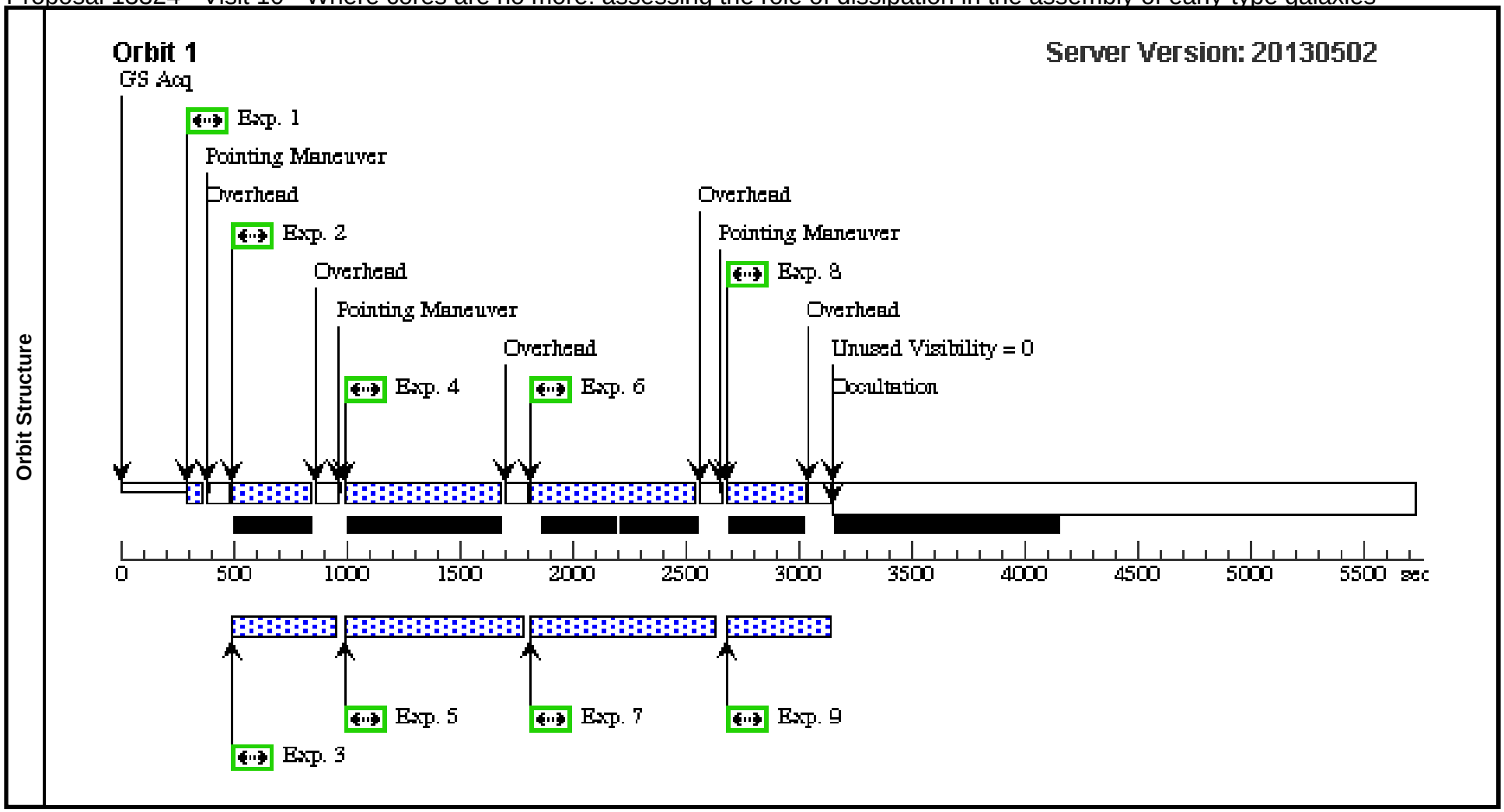
Fixed Targets

#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(10)	PGC028887	RA: 09 59 43.5790 (149.9315792d) Dec: +11 39 35.90 (11.65997d) Equinox: J2000		V=14.2	Reference Frame: ICRS

Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.

Exposures

#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
1		(10) PGC028887	WFC3/UVIS, ACCUM, UVIS-CENTER	F814W	CR-SPLIT=NO	POS TARG 0.0,21.12; GS ACQ SCENARIO BASE1B3		40 Secs (40 Secs) *[==>40.0 Secs]*	 ***[1]***
2		(10) PGC028887	WFC3/UVIS, ACCUM, UVIS-CENTER	F814W	CR-SPLIT=NO	POS TARG 0.38,21.5	Prime + Parallel Group 2-3 in Visit 10	350 Secs (350 Secs) *[==>350.0 Secs]*	 ***[1]***
3		ANY	ACS/WFC, ACCUM, WFC	F814W			Prime + Parallel Group 2-3 in Visit 10	250 Secs (250 Secs) *[==>]*	 ***[1]***
4		(10) PGC028887	WFC3/UVIS, ACCUM, UVIS-CENTER	F814W	CR-SPLIT=NO	POS TARG 0.558,23.92	Prime + Parallel Group 4-5 in Visit 10	697 Secs (697 Secs) *[==>697.0 Secs]*	 ***[1]***
5		ANY	ACS/WFC, ACCUM, WFC	F814W			Prime + Parallel Group 4-5 in Visit 10	650 Secs (670 Secs) *[==>670.0 Secs]*	 ***[1]***
6		(10) PGC028887	WFC3/UVIS, ACCUM, UVIS-CENTER	F475W	CR-SPLIT=NO	SAME POS AS 4	Prime + Parallel Group 6-7 in Visit 10	711 Secs (711 Secs) *[==>711.0 Secs]*	 ***[1]***
7		ANY	ACS/WFC, ACCUM, WFC	F475W			Prime + Parallel Group 6-7 in Visit 10	620 Secs (660 Secs) *[==>660.0 Secs]*	 ***[1]***
8		(10) PGC028887	WFC3/UVIS, ACCUM, UVIS-CENTER	F475W	CR-SPLIT=NO	SAME POS AS 2	Prime + Parallel Group 8-9 in Visit 10	350 Secs (350 Secs) *[==>350.0 Secs]*	 ***[1]***
9		ANY	ACS/WFC, ACCUM, WFC	F475W			Prime + Parallel Group 8-9 in Visit 10	360 Secs (338 Secs) *[==>338.0 Secs]*	 ***[1]***


Orbit Structure
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Server Version: 20130502
GS Acq
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Pointing Maneuver
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Exp. 2
Overhead
Pointing Maneuver
Exp. 4
Overhead
Exp. 6
Overhead
Pointing Maneuver
Exp. 8
Overhead
Unused Visibility = 0
Occultation
0
500
1000
1500
2000
2500
3000
3500
4000
4500
5000
5500
sec
Exp. 5
Exp. 7
Exp. 9
Exp. 3

Visit

Proposal 13324, Visit 11, implementation Thu Jun 13 01:45:54 GMT 2013

Diagnostic Status: No Diagnostics

Scientific Instruments: WFC3/UVIS, ACS/WFC

Special Requirements: SCHED 50%; ORIENT 190D TO 330 D

Comments: Applies to PGC 50395

Fixed Targets

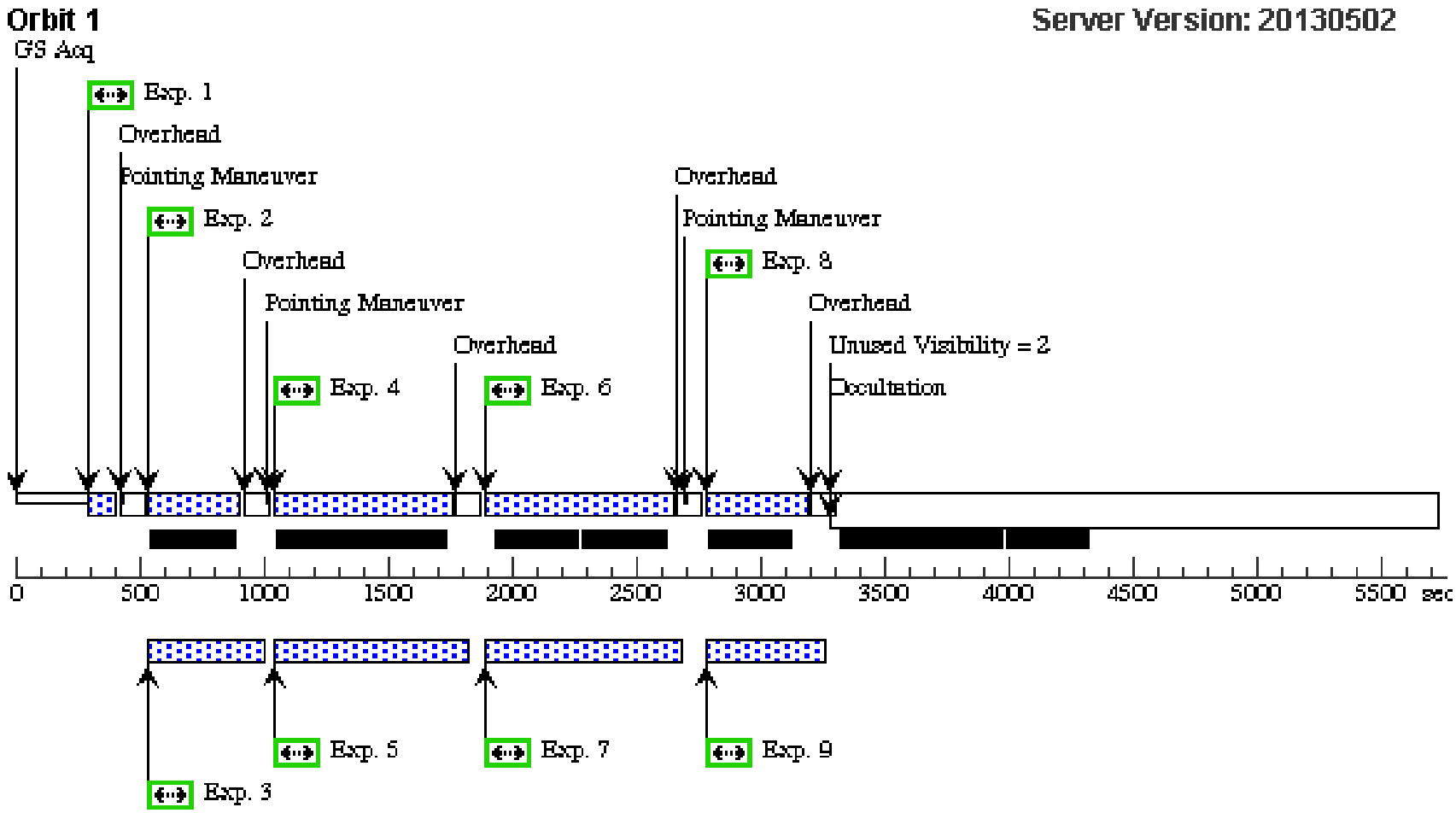
#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(11)	PGC050395	RA: 14 07 39.2510 (211.9135458d) Dec: +54 47 40.47 (54.79457d) Equinox: J2000		V=14.4	Reference Frame: ICRS

Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.

Exposures

#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
1		(11) PGC050395	WFC3/UVIS, ACCUM, UVIS-CENTER	F814W	CR-SPLIT=NO	POS TARG 0.0,21.12		60 Secs (80 Secs) *[==>80.0 Secs]*	 ***[1]***
2		(11) PGC050395	WFC3/UVIS, ACCUM, UVIS-CENTER	F814W	CR-SPLIT=NO	POS TARG 0.38,21.5	Prime + Parallel Group 2-3 in Visit 11	350 Secs (370 Secs) *[==>370.0 Secs]*	 ***[1]***
3		ANY	ACS/WFC, ACCUM, WFC	F814W			Prime + Parallel Group 2-3 in Visit 11	250 Secs (260 Secs) *[==>260.0 Secs]*	 ***[1]***
4		(11) PGC050395	WFC3/UVIS, ACCUM, UVIS-CENTER	F814W	CR-SPLIT=NO	POS TARG 0.558,23.92	Prime + Parallel Group 4-5 in Visit 11	700 Secs (720 Secs) *[==>720.0 Secs]*	 ***[1]***
5		ANY	ACS/WFC, ACCUM, WFC	F814W			Prime + Parallel Group 4-5 in Visit 11	650 Secs (660 Secs) *[==>660.0 Secs]*	 ***[1]***
6		(11) PGC050395	WFC3/UVIS, ACCUM, UVIS-CENTER	F475W	CR-SPLIT=NO	SAME POS AS 4	Prime + Parallel Group 6-7 in Visit 11	720 Secs (740 Secs) *[==>740.0 Secs]*	 ***[1]***
7		ANY	ACS/WFC, ACCUM, WFC	F475W			Prime + Parallel Group 6-7 in Visit 11	620 Secs (630 Secs) *[==>630.0 Secs]*	 ***[1]***
8		(11) PGC050395	WFC3/UVIS, ACCUM, UVIS-CENTER	F475W	CR-SPLIT=NO	SAME POS AS 2	Prime + Parallel Group 8-9 in Visit 11	390 Secs (410 Secs) *[==>410.0 Secs]*	 ***[1]***
9		ANY	ACS/WFC, ACCUM, WFC	F475W			Prime + Parallel Group 8-9 in Visit 11	360 Secs (360 Secs) *[==>]*	 ***[1]***

Orbit Structure



Visit

Proposal 13324, Visit 12, implementation Thu Jun 13 01:45:55 GMT 2013

Diagnostic Status: No Diagnostics

Scientific Instruments: WFC3/UVIS, ACS/WFC

Special Requirements: SCHED 50%; ORIENT 80D TO 120 D; ORIENT 270D TO 300 D

Comments: Applies to NGC 3960

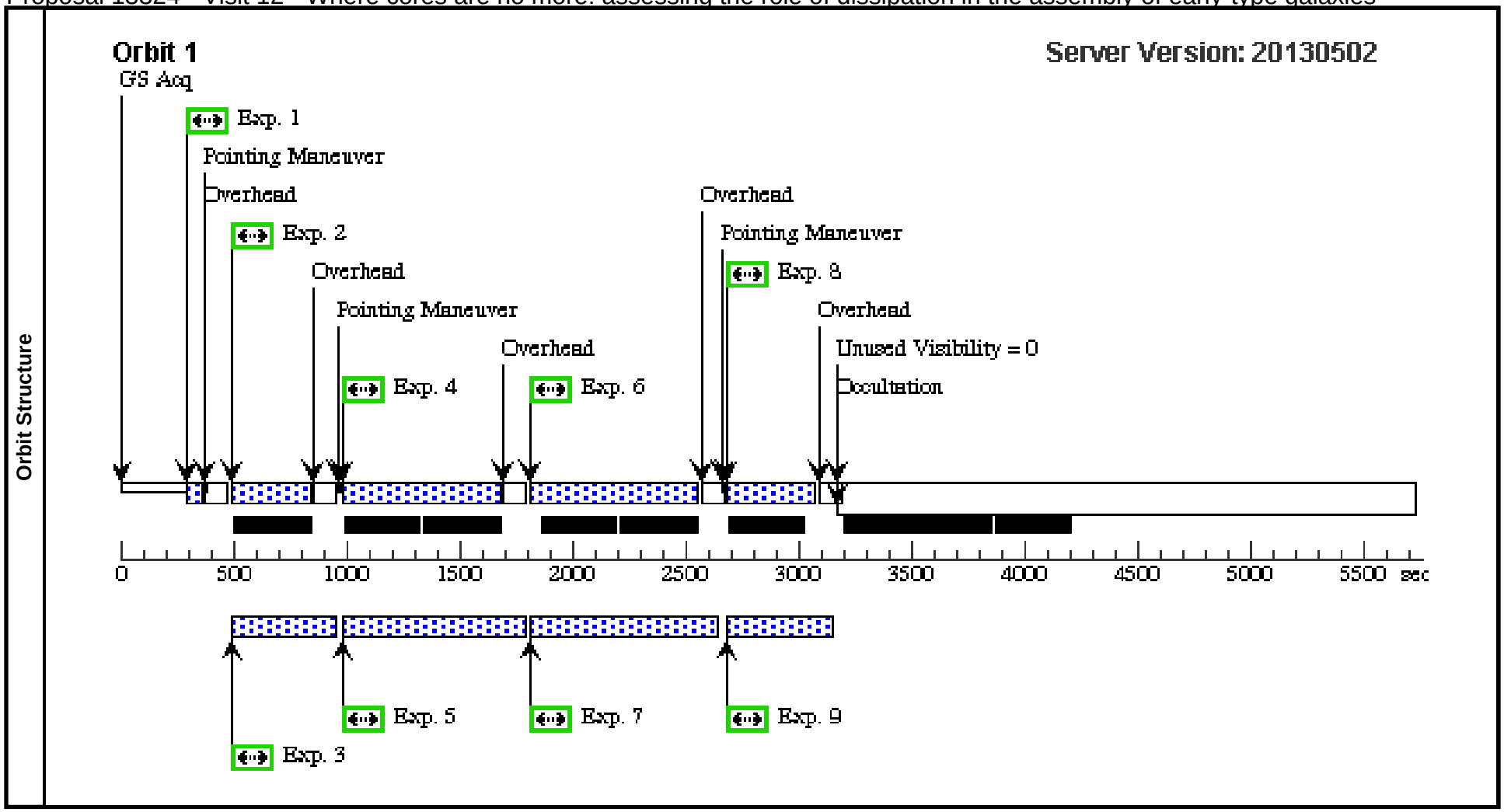
Fixed Targets

#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(12)	UGC-3960	RA: 07 40 22.7650 (115.0948542d) Dec: +23 16 30.32 (23.27509d) Equinox: J2000		V=14.2	Reference Frame: ICRS

Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.

Exposures

#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
1		(12) UGC-3960	WFC3/UVIS, ACCUM, UVIS-CENTER	F814W	CR-SPLIT=NO	POS TARG 0.0,21.12		35 Secs (35 Secs) *[==>35.0 Secs]*	 ***[1]***
2		(12) UGC-3960	WFC3/UVIS, ACCUM, UVIS-CENTER	F814W	CR-SPLIT=NO	POS TARG 0.38,21.5	Prime + Parallel Group 2-3 in Visit 12	350 Secs (350 Secs) *[==>350.0 Secs]*	 ***[1]***
3		ANY	ACS/WFC, ACCUM, WFC	F814W			Prime + Parallel Group 2-3 in Visit 12	250 Secs (250 Secs) *[==>]*	 ***[1]***
4		(12) UGC-3960	WFC3/UVIS, ACCUM, UVIS-CENTER	F814W	CR-SPLIT=NO	POS TARG 0.558,23.92	Prime + Parallel Group 4-5 in Visit 12	700 Secs (700 Secs) *[==>700.0 Secs]*	 ***[1]***
5		ANY	ACS/WFC, ACCUM, WFC	F814W			Prime + Parallel Group 4-5 in Visit 12	650 Secs (690 Secs) *[==>690.0 Secs]*	 ***[1]***
6		(12) UGC-3960	WFC3/UVIS, ACCUM, UVIS-CENTER	F475W	CR-SPLIT=NO	SAME POS AS 4	Prime + Parallel Group 6-7 in Visit 12	720 Secs (720 Secs) *[==>720.0 Secs]*	 ***[1]***
7		ANY	ACS/WFC, ACCUM, WFC	F475W			Prime + Parallel Group 6-7 in Visit 12	620 Secs (670 Secs) *[==>670.0 Secs]*	 ***[1]***
8		(12) UGC-3960	WFC3/UVIS, ACCUM, UVIS-CENTER	F475W	CR-SPLIT=NO	SAME POS AS 2	Prime + Parallel Group 8-9 in Visit 12	390 Secs (390 Secs) *[==>390.0 Secs]*	 ***[1]***
9		ANY	ACS/WFC, ACCUM, WFC	F475W			Prime + Parallel Group 8-9 in Visit 12	360 Secs (349 Secs) *[==>349.0 Secs]*	 ***[1]***


Orbit Structure
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Server Version: 20130502
GS Acq
Exp. 1
Pointing Maneuver
Overhead
Exp. 2
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Pointing Maneuver
Exp. 4
Overhead
Exp. 6
Overhead
Pointing Maneuver
Exp. 8
Overhead
Unused Visibility = 0
Occultation
0
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2500
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4000
4500
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5500
sec
Exp. 5
Exp. 7
Exp. 9
Exp. 3