11564 - Optical and Ultraviolet Photometry of Isolated Neutron Stars

Cycle: 17, Proposal Category: GO

(Availability Mode: SUPPORTED)

INVESTIGATORS

Name	*Institution*	*E-Mail*
Dr. David L. Kaplan (PI)	**Massachusetts Institute of Technology**	**dlk@space.mit.edu**
Prof. Marten H. van Kerkwijk (CoI)	University of Toronto	mhvk@astro.utoronto.ca
Dr. Wynn C. G. Ho (CoI)	Harvard University	wynnho@slac.stanford.edu
Prof. Lars Bildsten (CoI) (AdminUSPI)	University of California - Santa Barbara	bildsten@kitp.ucsb.edu

VISITS

Visit	*Targets used in Visit*	*Configurations used in Visit*	*Orbits Used*	*Last Orbit Planner Run*	*OP Current with Visit?*
01	(1) RXJ1605.3+3249	ACS/SBC	1	04-Jun-2009 21:03:35.0	yes
02	(1) RXJ1605.3+3249	ACS/WFC	1	04-Jun-2009 21:03:39.0	yes
03	(5) RXJ0420.0-5022	ACS/SBC	1	04-Jun-2009 21:03:42.0	yes
04	(5) RXJ0420.0-5022	ACS/WFC	1	04-Jun-2009 21:03:44.0	yes
05	(2) RXJ1308.6+2127	ACS/SBC	2	04-Jun-2009 21:03:48.0	yes
06	(2) RXJ1308.6+2127	ACS/WFC	2	04-Jun-2009 21:03:52.0	yes
07	(4) RXJ0806.4-4123	ACS/SBC	2	04-Jun-2009 21:03:57.0	yes
08	(4) RXJ0806.4-4123	ACS/WFC	2	04-Jun-2009 21:04:01.0	yes
09	(3) RXJ2143.0+0654	ACS/SBC	3	04-Jun-2009 21:04:09.0	yes

Visit	*Targets used in Visit*	*Configurations used in Visit*	*Orbits Used*	*Last Orbit Planner Run*	*OP Current with Visit?*
10	(3) RXJ2143.0+0654	ACS/WFC	3	04-Jun-2009 21:04:16.0	yes

18 Total Orbits Used

ABSTRACT

We propose ultraviolet and B-band observations of 5 nearby, thermally emitting neutron stars. These data will measure the Rayleigh-Jeans tails of their spectra, providing a vital complement to X-ray spectroscopy and helping to constrain atmospheric models, working toward the ultimate goal of unraveling the physics of neutron stars. With these data we will have good-quality optical and UV data for the full sample of these objects, allowing detailed comparisons between them. Finally, the data should allow us to measure proper motions for one or two objects, and will serve as the reference data for the remaining objects; such proper motions allow ages to be determined for these objects by tracing them back to likely birth locations.

OBSERVING DESCRIPTION

We will be observing 5 different neutron stars in the optical (ACS/WFC/F475W) and UV (ACS/SBC/F140LP), to measure photometry and astrometry. For each object we will be observing for 1, 2, or 3 orbits in each band depending on how bright the objects are. We use the WFC1 aperture so that the source is not near the chip gap and we can have the largest number of astrometric references on the same CCD. We dither 4 times per orbit for good pixel-phase coverage, and then offset with POSTARGs in the subsequent orbits for even better coverage where applicable.

Visit

Proposal 11564, Visit 01, completed Fri Jun 05 01:04:21 GMT 2009

Diagnostic Status: Warning

Scientific Instruments: ACS/SBC

Special Requirements: GYRO MODE 2G

Comments: 1605

Diagnostics

(Visit 01) Warning (Orbit Planner): VISIBILITY OVERRUN

(Visit 01) Warning (Form): Gyro Mode overrides default value of 3GOBAD.

Patterns

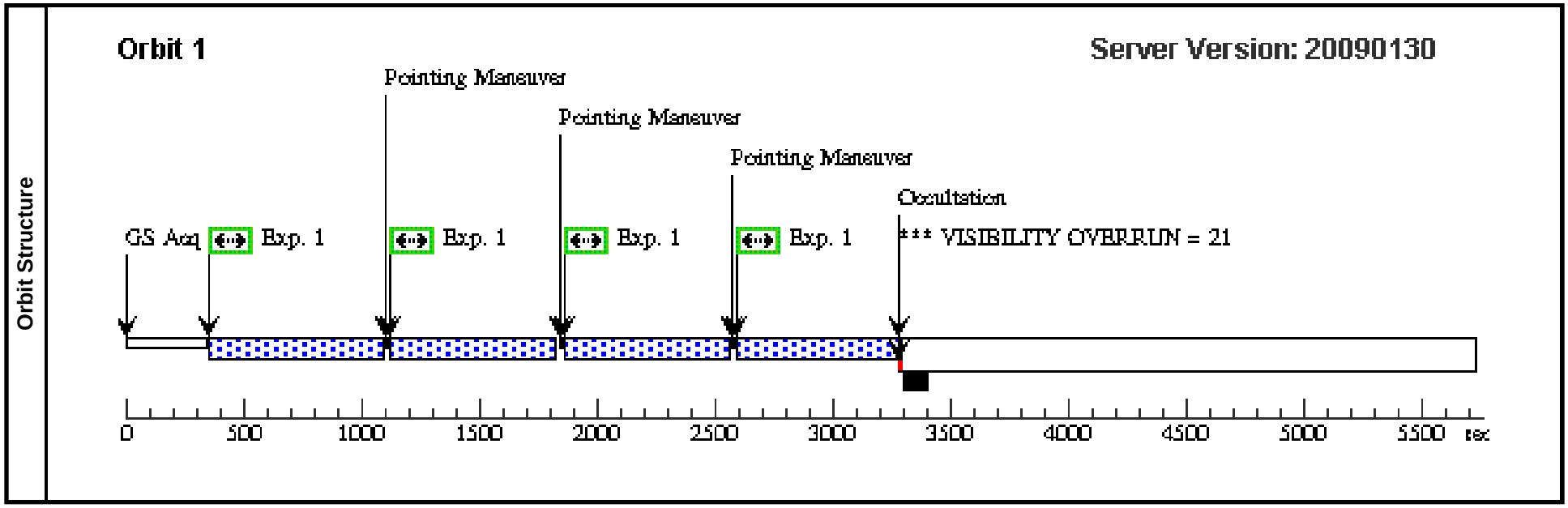
#	Primary Pattern		Secondary Pattern	Exposures
(1)	Pattern Type=ACS-SBC-DITHER-BOX Purpose=DITHER Number Of Points=4 Point Spacing=0.179 Line Spacing=0.116	Coordinate Frame=POS-TARG Pattern Orientation=20.02 Angle Between Sides=63.65 Center Pattern=false		(1)

Fixed Targets

#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(1)	RXJ1605.3+3249	RA: 16 05 18.5000 (241.3270833d) Dec: +32 49 17.40 (32.82150d) Equinox: J2000		V=27	Reference Frame: ICRS

Exposures

#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit
1	1605-SBC	(1) RXJ1605.3+3249	ACS/SBC, ACCUM, SBC	F140LP			Pattern 1, Exps 1-1 (1)	600 Secs	
								[==>672.0 Secs (Pattern 1)] *[==>672.0 Secs (Pattern 2)]* *[==>672.0 Secs (Pattern 3)]* *[==>672.0 Secs (Pattern 4)]*	***[1]***


Orbit Structure
Orbit 1
Server Version: 20090130
Pointing Maneuver
Pointing Maneuver
Pointing Maneuver
Occultation
GS Acq
Exp. 1
Exp. 1
Exp. 1
Exp. 1
*** VISIBILITY OVERRUN = 21
0
500
1000
1500
2000
2500
3000
3500
4000
4500
5000
5500
sec

Visit

Proposal 11564, Visit 02, implementation Fri Jun 05 01:04:21 GMT 2009

Diagnostic Status: No Diagnostics

Scientific Instruments: ACS/WFC

Special Requirements: (none)

Patterns

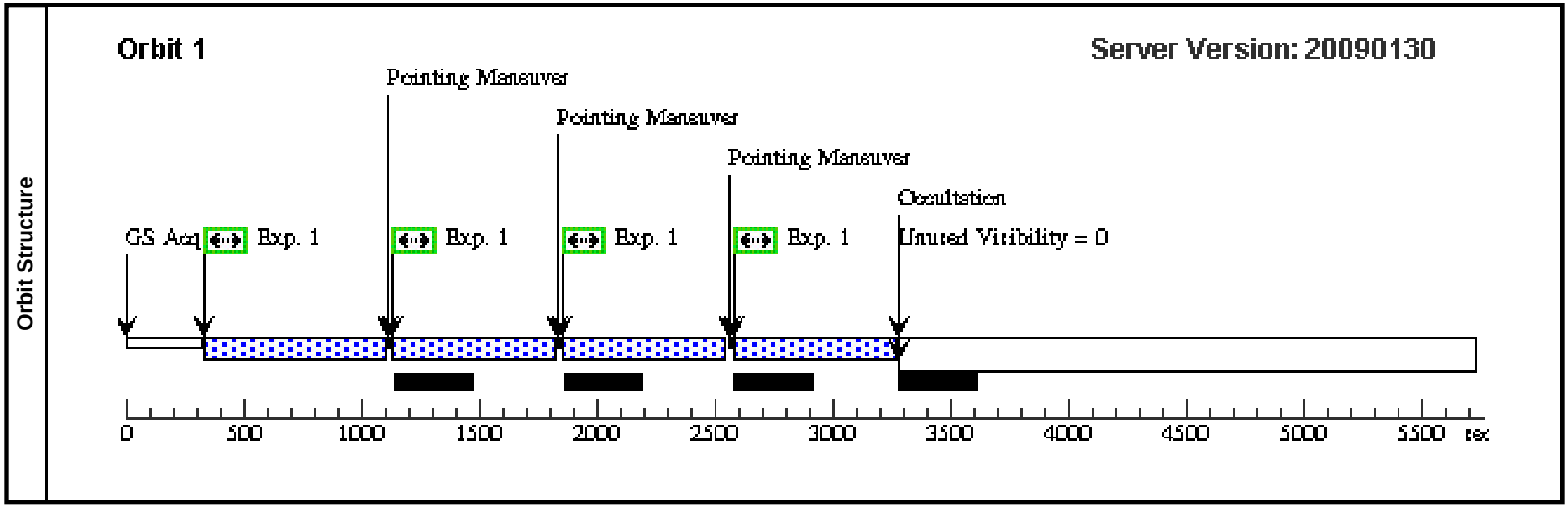
#	Primary Pattern		Secondary Pattern	Exposures
(2)	Pattern Type=ACS-WFC-DITHER-BOX Purpose=DITHER Number Of Points=4 Point Spacing=0.265 Line Spacing=0.187	Coordinate Frame=POS-TARG Pattern Orientation=20.67 Angle Between Sides=69.05 Center Pattern=false		(1)

Fixed Targets

#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(1)	RXJ1605.3+3249	RA: 16 05 18.5000 (241.3270833d) Dec: +32 49 17.40 (32.82150d) Equinox: J2000		V=27	Reference Frame: ICRS

Exposures

#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit
1	1605-WFC	(1) RXJ1605.3+3249	ACS/WFC, ACCUM, WFC1	F475W			Pattern 2, Exps 1-1 (2)	500 Secs	
								[==>564.0 Secs (Pattern 1)] *[==>564.0 Secs (Pattern 2)]* *[==>564.0 Secs (Pattern 3)]* *[==>564.0 Secs (Pattern 4)]*	***[1]***


Orbit Structure
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Server Version: 20090130
Pointing Maneuver
Pointing Maneuver
Pointing Maneuver
Occultation
GS Acq
Exp. 1
Exp. 1
Exp. 1
Exp. 1
Unused Visibility = 0
0
500
1000
1500
2000
2500
3000
3500
4000
4500
5000
5500
sec

Visit

Proposal 11564, Visit 03, implementation Fri Jun 05 01:04:22 GMT 2009

Diagnostic Status: No Diagnostics

Scientific Instruments: ACS/SBC

Special Requirements: (none)

Comments: 0420

Patterns

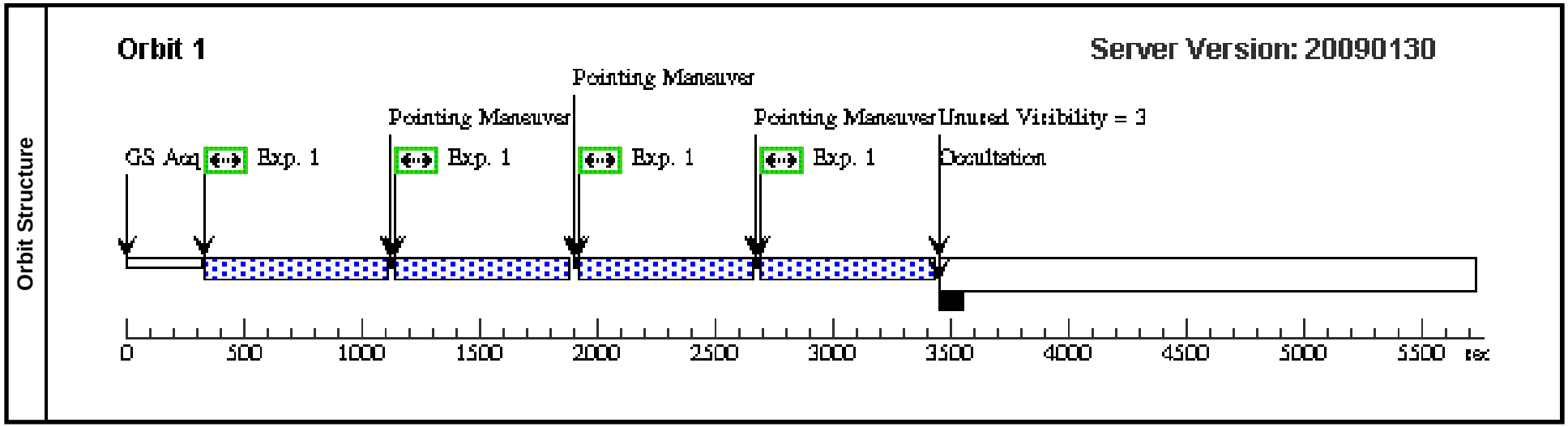
#	Primary Pattern		Secondary Pattern	Exposures
(1)	Pattern Type=ACS-SBC-DITHER-BOX Purpose=DITHER Number Of Points=4 Point Spacing=0.179 Line Spacing=0.116	Coordinate Frame=POS-TARG Pattern Orientation=20.02 Angle Between Sides=63.65 Center Pattern=false		(1)

Fixed Targets

#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(5)	RXJ0420.0-5022	RA: 04 20 1.9500 (65.0081250d) Dec: -50 22 48.10 (-50.38003d) Equinox: J2000		V=27	Reference Frame: ICRS

Exposures

#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit
1	0420-SBC	(5) RXJ0420.0-5022	ACS/SBC, ACCUM, SBC	F140LP			Pattern 1, Exps 1-1 (1)	600 Secs	
								[==>714.0 Secs (Pattern 1)] *[==>714.0 Secs (Pattern 2)]* *[==>714.0 Secs (Pattern 3)]* *[==>714.0 Secs (Pattern 4)]*	***[1]***


Orbit Structure
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Server Version: 20090130
Pointing Maneuver
Pointing Maneuver
Pointing Maneuver
Unused Visibility = 3
GS Acq
Exp. 1
Exp. 1
Exp. 1
Exp. 1
Occultation
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500
1000
1500
2000
2500
3000
3500
4000
4500
5000
5500
sec

Visit

Proposal 11564, Visit 04, implementation Fri Jun 05 01:04:22 GMT 2009

Diagnostic Status: No Diagnostics

Scientific Instruments: ACS/WFC

Special Requirements: (none)

Comments: 0420

Patterns

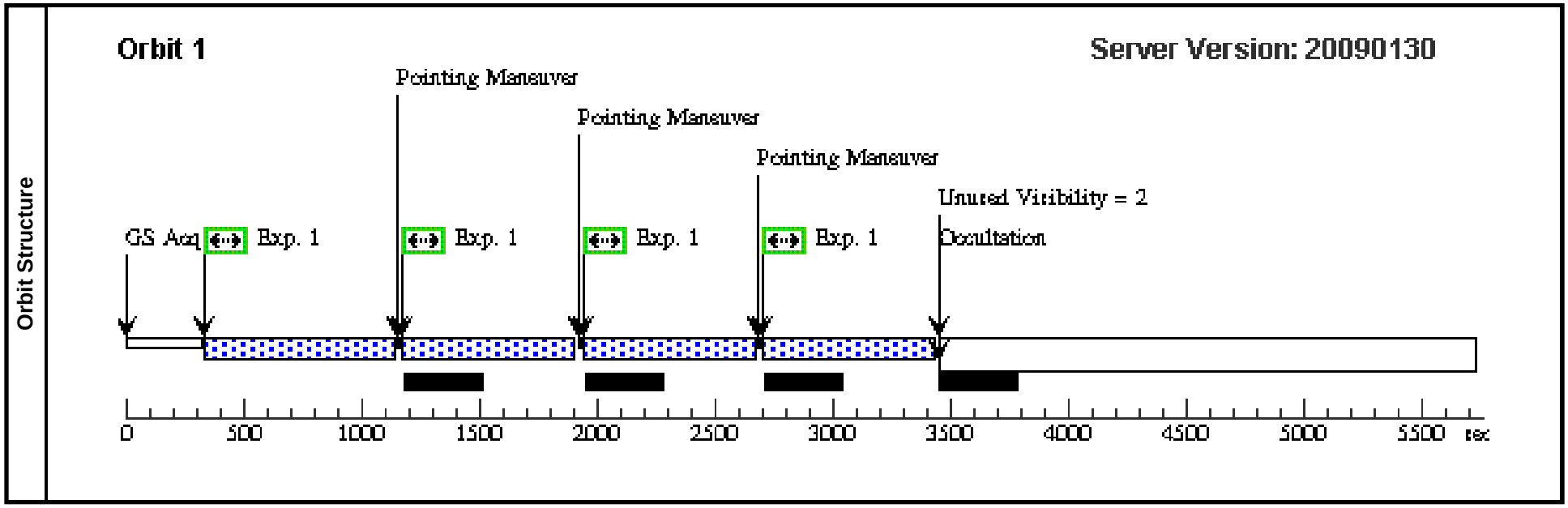
#	Primary Pattern		Secondary Pattern	Exposures
(2)	Pattern Type=ACS-WFC-DITHER-BOX Purpose=DITHER Number Of Points=4 Point Spacing=0.265 Line Spacing=0.187	Coordinate Frame=POS-TARG Pattern Orientation=20.67 Angle Between Sides=69.05 Center Pattern=false		(1)

Fixed Targets

#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(5)	RXJ0420.0-5022	RA: 04 20 1.9500 (65.0081250d) Dec: -50 22 48.10 (-50.38003d) Equinox: J2000		V=27	Reference Frame: ICRS

Exposures

#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit
1	0420-WFC	(5) RXJ0420.0-5022	ACS/WFC, ACCUM, WFC1	F475W			Pattern 2, Exps 1-1 (2)	500 Secs	
								[==>606.0 Secs (Pattern 1)] *[==>606.0 Secs (Pattern 2)]* *[==>606.0 Secs (Pattern 3)]* *[==>606.0 Secs (Pattern 4)]*	***[1]***


Orbit Structure
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Server Version: 20090130
Pointing Maneuver
Pointing Maneuver
Pointing Maneuver
Unused Visibility = 2
GS Acq
Exp. 1
Exp. 1
Exp. 1
Exp. 1
Occultation
0
500
1000
1500
2000
2500
3000
3500
4000
4500
5000
5500
sec

Visit

Proposal 11564, Visit 05, scheduling Fri Jun 05 01:04:22 GMT 2009

Diagnostic Status: No Diagnostics

Scientific Instruments: ACS/SBC

Special Requirements: (none)

Comments: 1308

Patterns

#	Primary Pattern		Secondary Pattern	Exposures
(1)	Pattern Type=ACS-SBC-DITHER-BOX Purpose=DITHER Number Of Points=4 Point Spacing=0.179 Line Spacing=0.116	Coordinate Frame=POS-TARG Pattern Orientation=20.02 Angle Between Sides=63.65 Center Pattern=false		(1), (2)

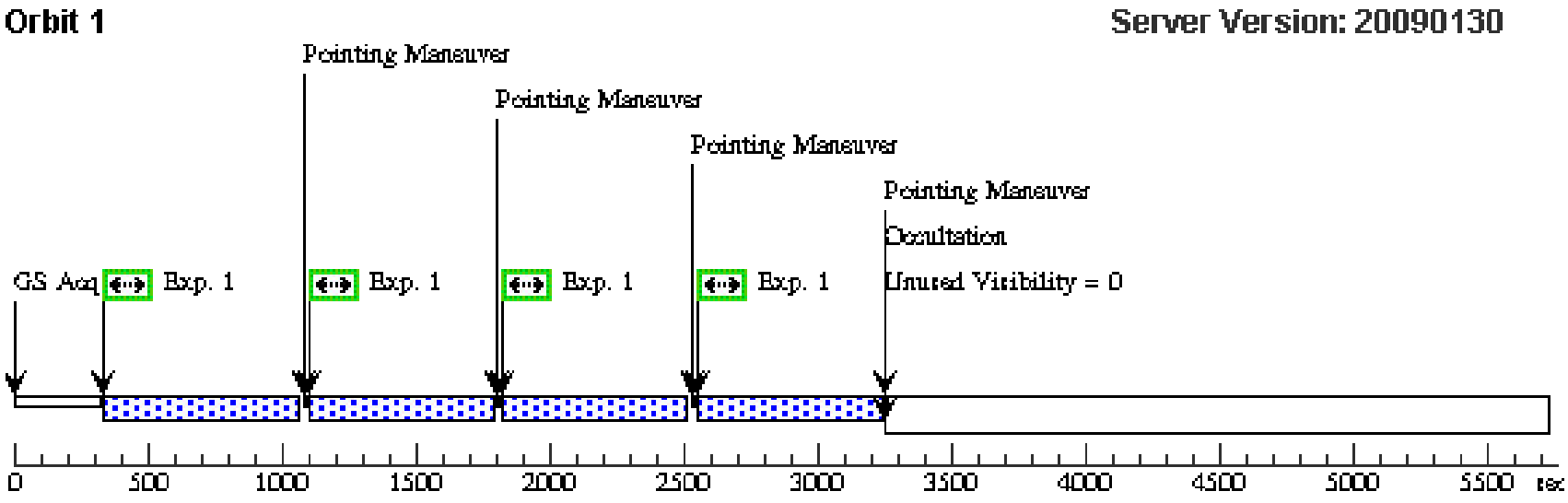
Fixed Targets

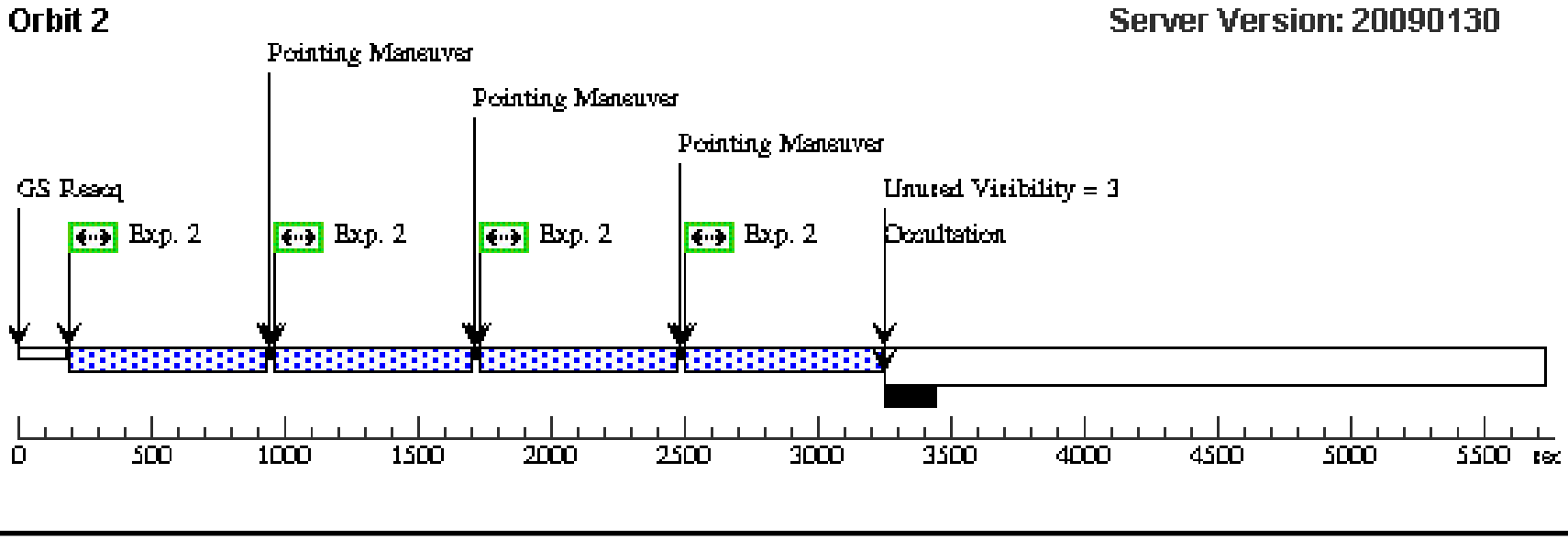
#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(2)	RXJ1308.6+2127	RA: 13 08 48.2700 (197.2011250d) Dec: +21 27 6.80 (21.45189d) Equinox: J2000		V=28	Reference Frame: ICRS

Exposures

#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit
1	1308-SBC	(2) RXJ1308.6+2127	ACS/SBC, ACCUM, SBC	F140LP		POS TARG 0,0.0	Pattern 1, Exps 1-1 (1)	600 Secs	
								[==>666.0 Secs (Pattern 1)] *[==>666.0 Secs (Pattern 2)]* *[==>666.0 Secs (Pattern 3)]* *[==>666.0 Secs (Pattern 4)]*	***[1]***
2	1308-SBC	(2) RXJ1308.6+2127	ACS/SBC, ACCUM, SBC	F140LP		POS TARG 0.5,0.5	Pattern 1, Exps 2-2 (1)	600 Secs	
								[==>710.0 Secs (Pattern 1)] *[==>710.0 Secs (Pattern 2)]* *[==>710.0 Secs (Pattern 3)]* *[==>710.0 Secs (Pattern 4)]*	***[2]***

Orbit Structure





Visit

Proposal 11564, Visit 06, implementation Fri Jun 05 01:04:23 GMT 2009

Diagnostic Status: No Diagnostics

Scientific Instruments: ACS/WFC

Special Requirements: (none)

Comments: 1308

Patterns

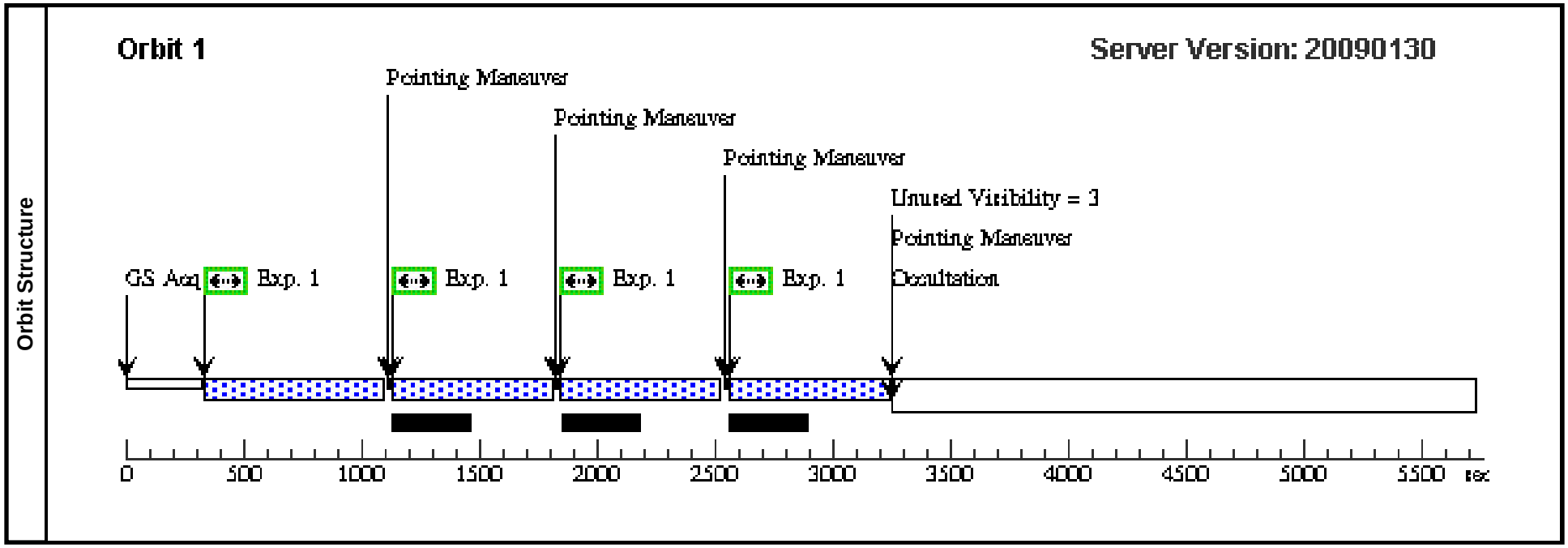
#	Primary Pattern		Secondary Pattern	Exposures
(2)	Pattern Type=ACS-WFC-DITHER-BOX Purpose=DITHER Number Of Points=4 Point Spacing=0.265 Line Spacing=0.187	Coordinate Frame=POS-TARG Pattern Orientation=20.67 Angle Between Sides=69.05 Center Pattern=false		(1), (2)

Fixed Targets

#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(2)	RXJ1308.6+2127	RA: 13 08 48.2700 (197.2011250d) Dec: +21 27 6.80 (21.45189d) Equinox: J2000		V=28	Reference Frame: ICRS

Exposures

#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit
1	1308-WFC	(2) RXJ1308.6+2127	ACS/WFC, ACCUM, WFC1	F475W		POS TARG 0,0	Pattern 2, Exps 1-1 (2)	500 Secs	
								[==>557.0 Secs (Pattern 1)] *[==>557.0 Secs (Pattern 2)]* *[==>557.0 Secs (Pattern 3)]* *[==>557.0 Secs (Pattern 4)]*	***[1]***
2	1308-WFC	(2) RXJ1308.6+2127	ACS/WFC, ACCUM, WFC1	F475W		POS TARG 0.5,0.5	Pattern 2, Exps 2-2 (2)	500 Secs	
								[==>612.0 Secs (Pattern 1)] *[==>612.0 Secs (Pattern 2)]* *[==>612.0 Secs (Pattern 3)]* *[==>612.0 Secs (Pattern 4)]*	***[2]***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Pointing Maneuver
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Pointing Maneuver
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Pointing Maneuver
Occultation
GS Acq
Exp. 1
Exp. 1
Exp. 1
Exp. 1
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4000
4500
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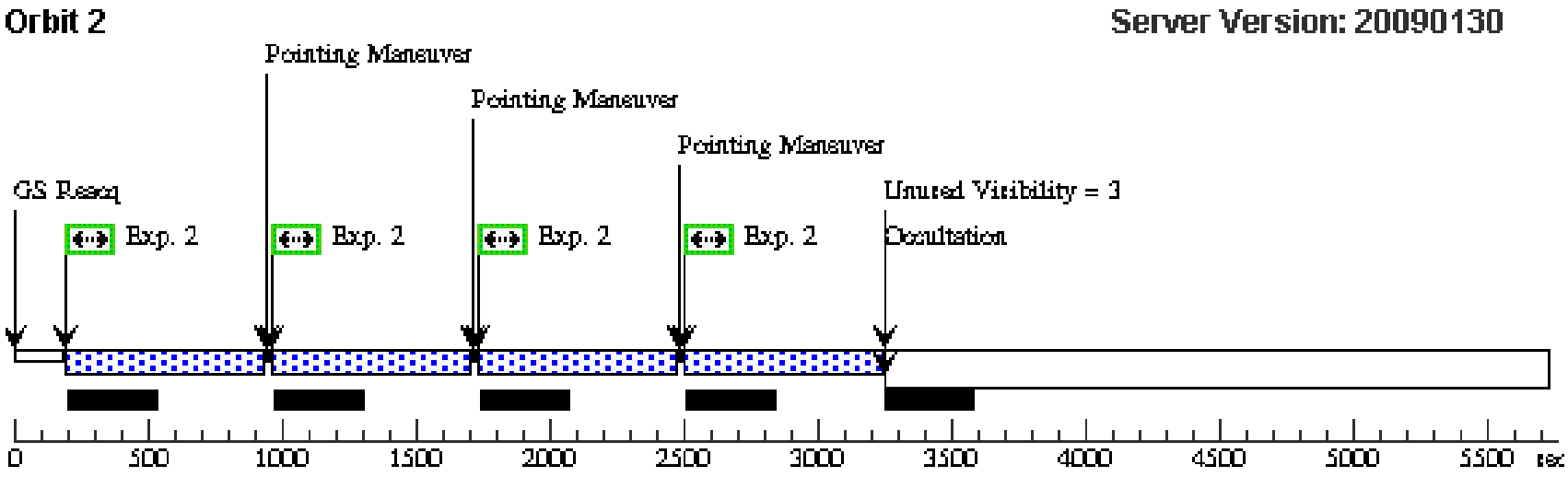
5500
sec

Orbit Structure (continued)



Visit

Proposal 11564, Visit 07, implementation Fri Jun 05 01:04:24 GMT 2009

Diagnostic Status: No Diagnostics

Scientific Instruments: ACS/SBC

Special Requirements: (none)

Comments: 1308

Patterns

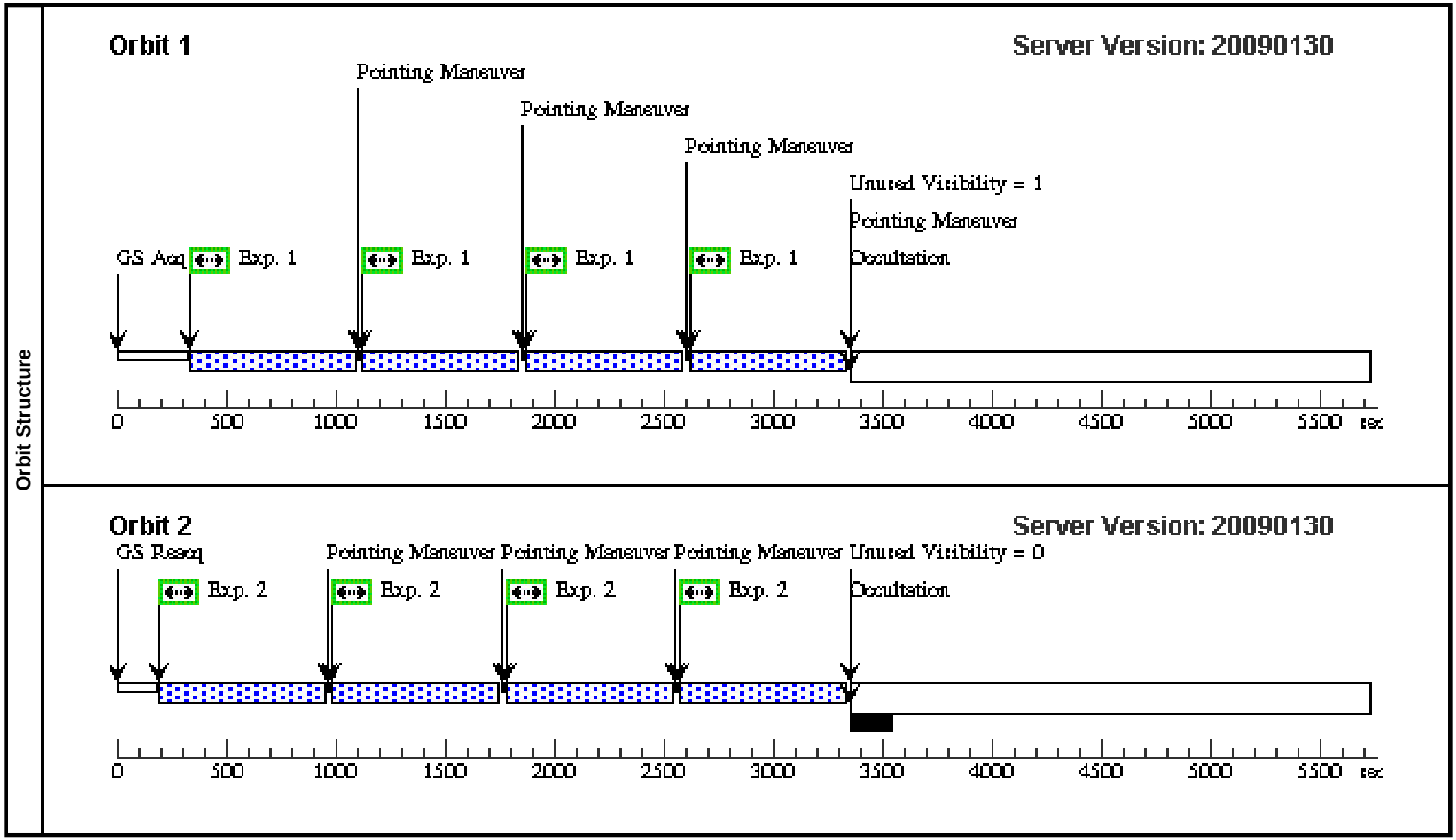
#	Primary Pattern		Secondary Pattern	Exposures
(1)	Pattern Type=ACS-SBC-DITHER-BOX Purpose=DITHER Number Of Points=4 Point Spacing=0.179 Line Spacing=0.116	Coordinate Frame=POS-TARG Pattern Orientation=20.02 Angle Between Sides=63.65 Center Pattern=false		(1), (2)

Fixed Targets

#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(4)	RXJ0806.4-4123	RA: 08 06 23.4000 (121.5975000d) Dec: -41 22 30.90 (-41.37525d) Equinox: J2000		V=28	Reference Frame: ICRS

Exposures

#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit
1	0806-SBC	(4) RXJ0806.4-4123	ACS/SBC, ACCUM, SBC	F140LP		POS TARG 0,0	Pattern 1, Exps 1-1 (1)	600 Secs	
								[==>689.0 Secs (Pattern 1)] *[==>689.0 Secs (Pattern 2)]* *[==>689.0 Secs (Pattern 3)]* *[==>689.0 Secs (Pattern 4)]*	***[1]***
2	0806-SBC	(4) RXJ0806.4-4123	ACS/SBC, ACCUM, SBC	F140LP		POS TARG 0.5,0.5	Pattern 1, Exps 2-2 (1)	600 Secs	
								[==>734.0 Secs (Pattern 1)] *[==>734.0 Secs (Pattern 2)]* *[==>734.0 Secs (Pattern 3)]* *[==>734.0 Secs (Pattern 4)]*	***[2]***


Orbit Structure
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Pointing Maneuver
Pointing Maneuver
Pointing Maneuver
Unused Visibility = 1
Pointing Maneuver
GS Acq
Exp. 1
Exp. 1
Exp. 1
Exp. 1
Occultation
0
500
1000
1500
2000
2500
3000
3500
4000
4500
5000
5500
sec
Orbit 2
Server Version: 20090130
GS Reacq
Pointing Maneuver
Pointing Maneuver
Pointing Maneuver
Unused Visibility = 0
Exp. 2
Exp. 2
Exp. 2
Exp. 2
Occultation
0
500
1000
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2000
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3500
4000
4500
5000
5500
sec

Visit

Proposal 11564, Visit 08, implementation Fri Jun 05 01:04:24 GMT 2009

Diagnostic Status: No Diagnostics

Scientific Instruments: ACS/WFC

Special Requirements: (none)

Comments: 1308

Patterns

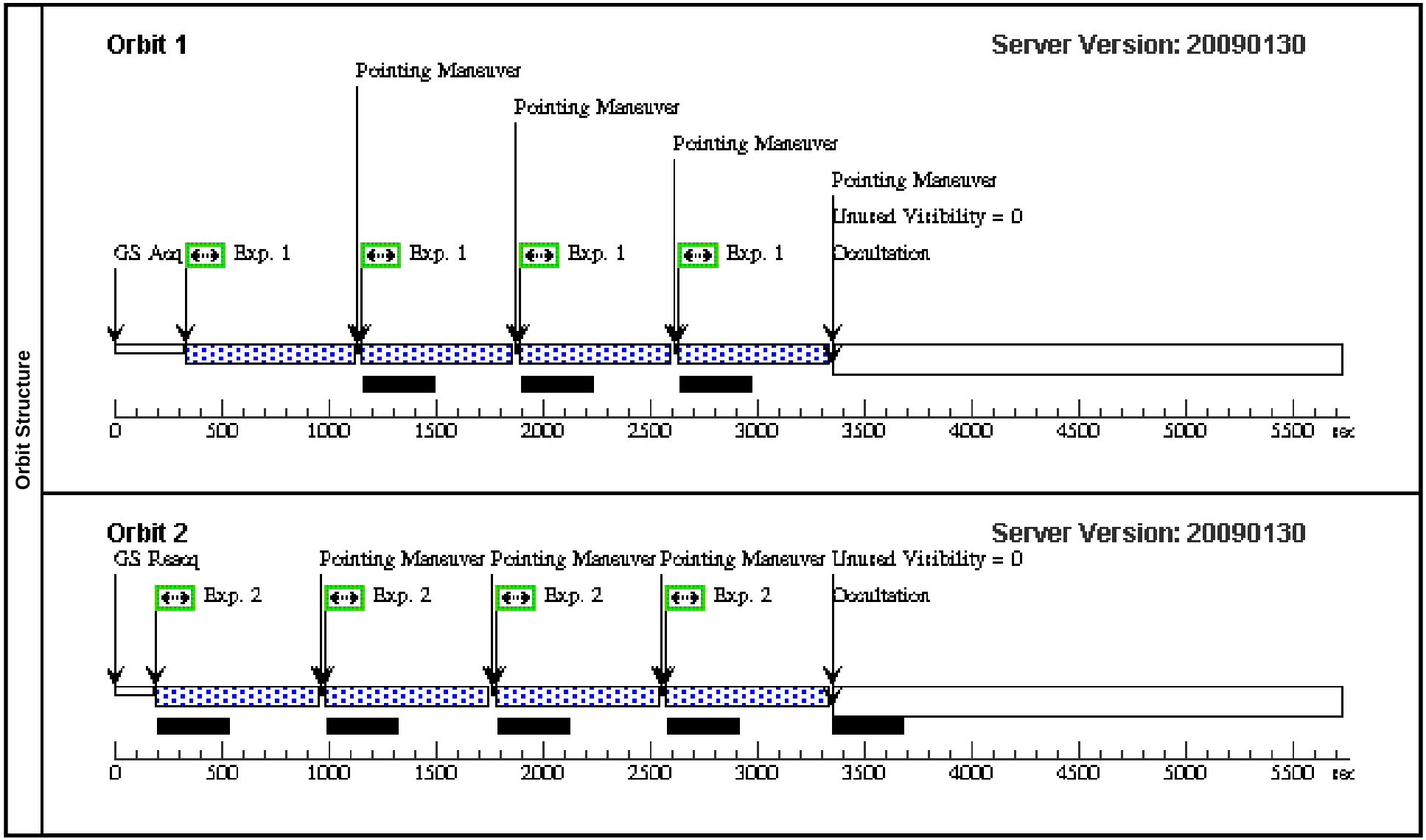
#	Primary Pattern		Secondary Pattern	Exposures
(2)	Pattern Type=ACS-WFC-DITHER-BOX Purpose=DITHER Number Of Points=4 Point Spacing=0.265 Line Spacing=0.187	Coordinate Frame=POS-TARG Pattern Orientation=20.67 Angle Between Sides=69.05 Center Pattern=false		(1), (2)

Fixed Targets

#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(4)	RXJ0806.4-4123	RA: 08 06 23.4000 (121.5975000d) Dec: -41 22 30.90 (-41.37525d) Equinox: J2000		V=28	Reference Frame: ICRS

Exposures

#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit
1	0806-WFC	(4) RXJ0806.4-4123	ACS/WFC, ACCUM, WFC1	F475W		POS TARG 0,0	Pattern 2, Exps 1-1 (2)	500 Secs	
								[==>581.0 Secs (Pattern 1)] *[==>581.0 Secs (Pattern 2)]* *[==>581.0 Secs (Pattern 3)]* *[==>581.0 Secs (Pattern 4)]*	***[1]***
2	0806-WFC	(4) RXJ0806.4-4123	ACS/WFC, ACCUM, WFC1	F475W		POS TARG 0.5,0.5	Pattern 2, Exps 2-2 (2)	500 Secs	
								[==>636.0 Secs (Pattern 1)] *[==>636.0 Secs (Pattern 2)]* *[==>636.0 Secs (Pattern 3)]* *[==>636.0 Secs (Pattern 4)]*	***[2]***


Orbit Structure
Orbit 1
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Pointing Maneuver
Pointing Maneuver
Pointing Maneuver
Pointing Maneuver
Unused Visibility = 0
GS Acq
Exp. 1
Exp. 1
Exp. 1
Exp. 1
Occultation
0
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1500
2000
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3500
4000
4500
5000
5500
sec
Orbit 2
Server Version: 20090130
GS Reacq
Pointing Maneuver
Pointing Maneuver
Pointing Maneuver
Unused Visibility = 0
Exp. 2
Exp. 2
Exp. 2
Exp. 2
Occultation
0
500
1000
1500
2000
2500
3000
3500
4000
4500
5000
5500
sec

Visit

Proposal 11564, Visit 09, implementation Fri Jun 05 01:04:24 GMT 2009

Diagnostic Status: No Diagnostics

Scientific Instruments: ACS/SBC

Special Requirements: (none)

Comments: 1308

Patterns

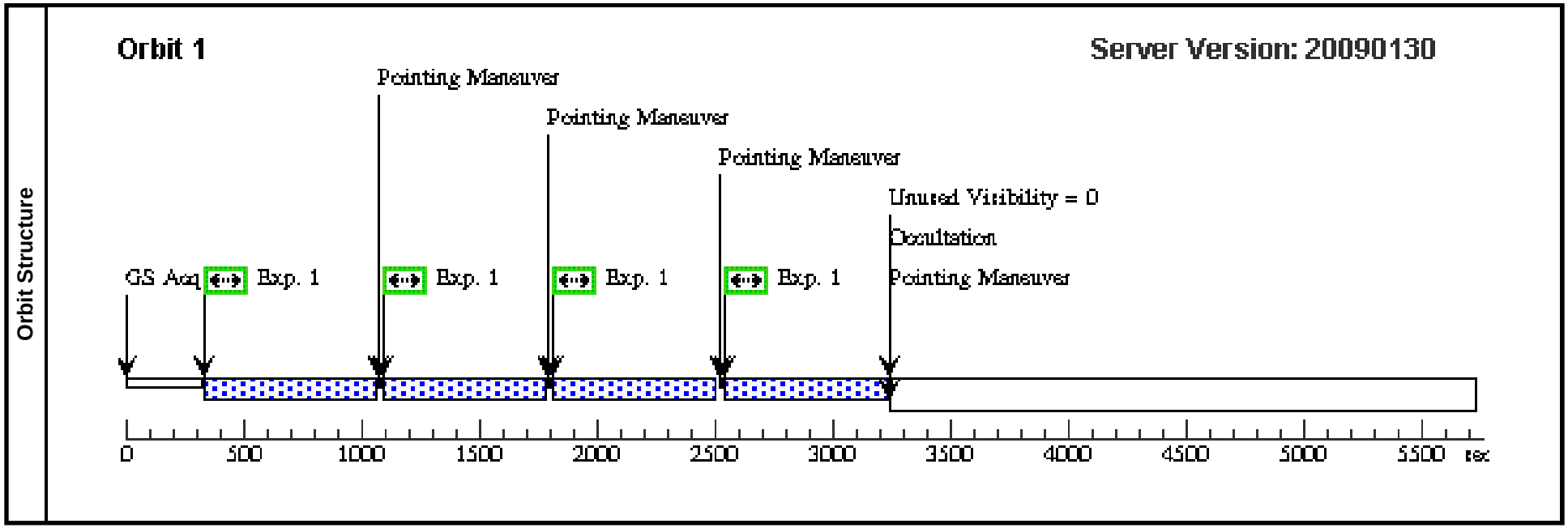
#	Primary Pattern		Secondary Pattern	Exposures
(1)	Pattern Type=ACS-SBC-DITHER-BOX Purpose=DITHER Number Of Points=4 Point Spacing=0.179 Line Spacing=0.116	Coordinate Frame=POS-TARG Pattern Orientation=20.02 Angle Between Sides=63.65 Center Pattern=false		(1), (2), (3)

Fixed Targets

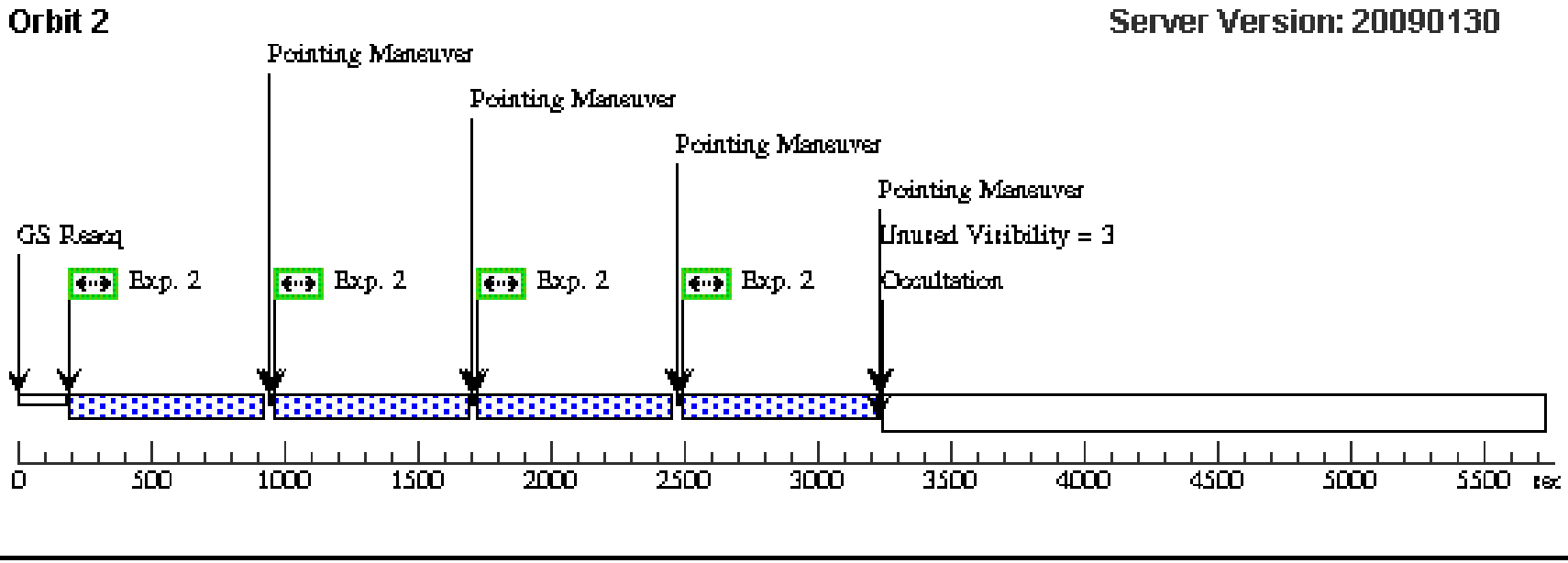
#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(3)	RXJ2143.0+0654	RA: 21 43 3.3000 (325.7637500d) Dec: +06 54 17.00 (6.90472d) Equinox: J2000		V=29	Reference Frame: ICRS

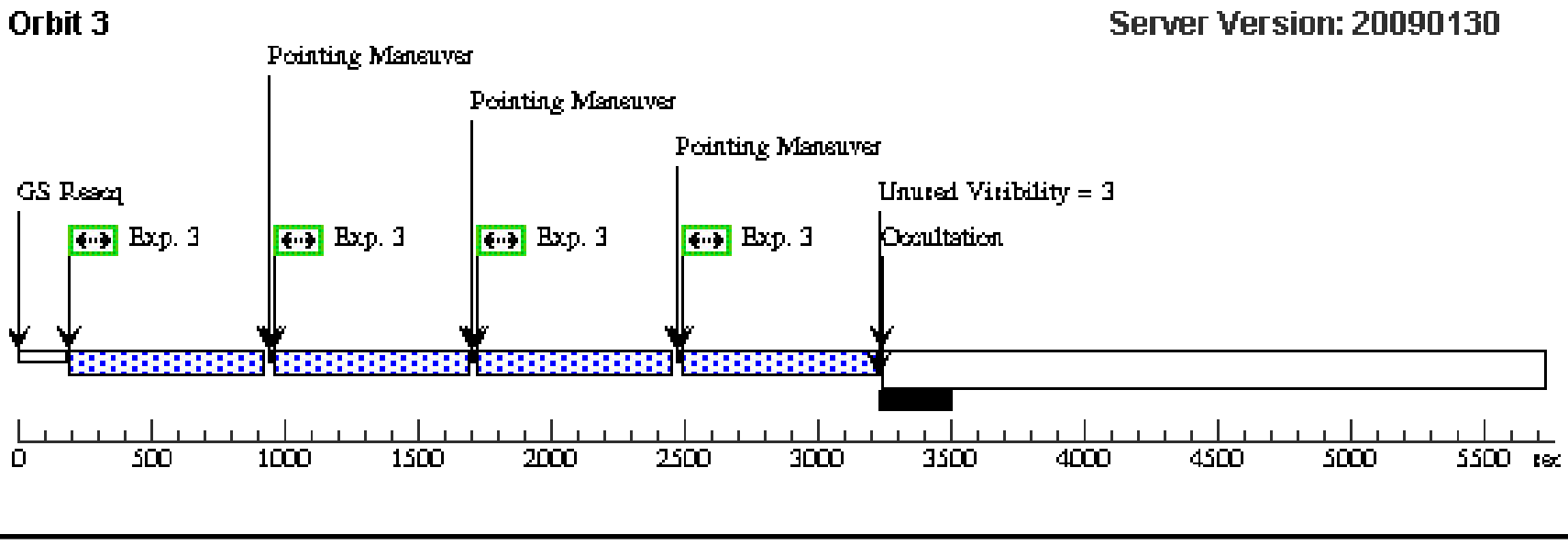
Exposures

#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit
1	2143-SBC	(3) RXJ2143.0+0654	ACS/SBC, ACCUM, SBC	F140LP		POS TARG 0,0	Pattern 1, Exps 1-1 (1)	600 Secs	
								[==>662.0 Secs (Pattern 1)] *[==>662.0 Secs (Pattern 2)]* *[==>662.0 Secs (Pattern 3)]* *[==>662.0 Secs (Pattern 4)]*	***[1]***
2	2143-SBC	(3) RXJ2143.0+0654	ACS/SBC, ACCUM, SBC	F140LP		POS TARG 0.5,0.5	Pattern 1, Exps 2-2 (1)	600 Secs	
								[==>706.0 Secs (Pattern 1)] *[==>706.0 Secs (Pattern 2)]* *[==>706.0 Secs (Pattern 3)]* *[==>706.0 Secs (Pattern 4)]*	***[2]***
3	2143-SBC	(3) RXJ2143.0+0654	ACS/SBC, ACCUM, SBC	F140LP		POS TARG -0.5,-0.5	Pattern 1, Exps 3-3 (1)	600 Secs	
								[==>706.0 Secs (Pattern 1)] *[==>706.0 Secs (Pattern 2)]* *[==>706.0 Secs (Pattern 3)]* *[==>706.0 Secs (Pattern 4)]*	***[3]***


Orbit Structure
Orbit 1
Server Version: 20090130
Pointing Maneuver
Pointing Maneuver
Pointing Maneuver
Unused Visibility = 0
Occultation
GS Acq
Exp. 1
Exp. 1
Exp. 1
Exp. 1
Pointing Maneuver
0
500
1000
1500
2000
2500
3000
3500
4000
4500
5000
5500
sec

Orbit Structure (continued)





Visit

Proposal 11564, Visit 10, implementation Fri Jun 05 01:04:25 GMT 2009

Diagnostic Status: No Diagnostics

Scientific Instruments: ACS/WFC

Special Requirements: (none)

Patterns

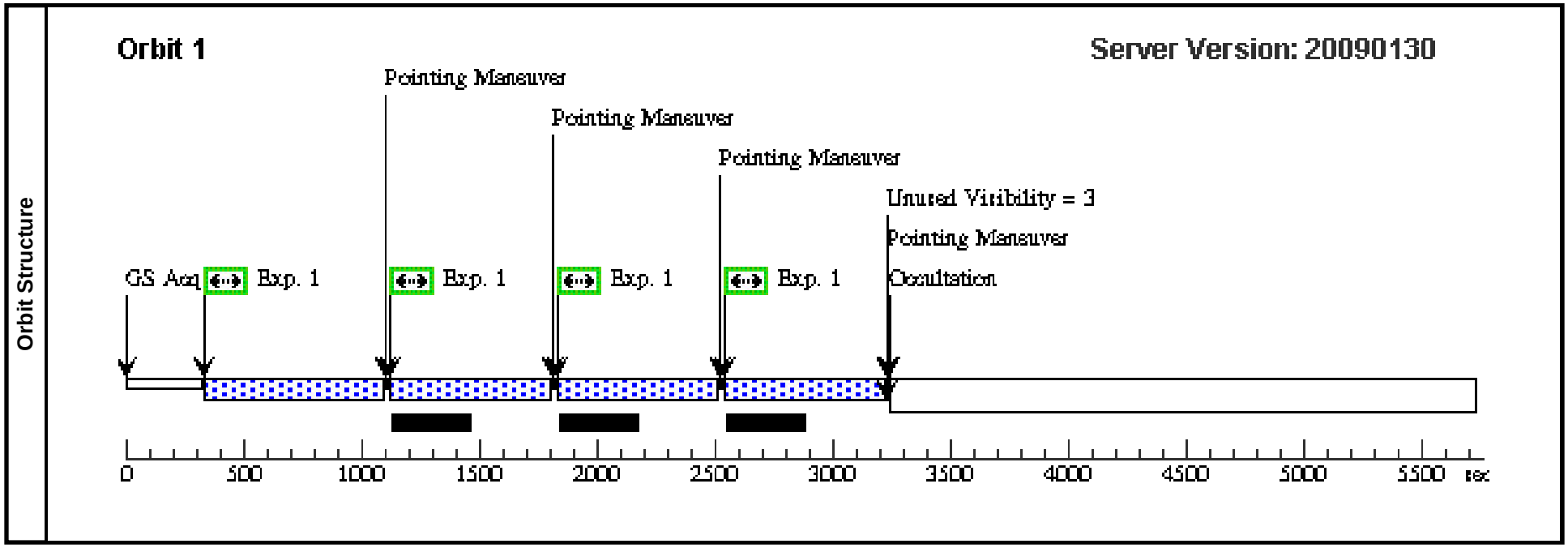
#	Primary Pattern		Secondary Pattern	Exposures
(2)	Pattern Type=ACS-WFC-DITHER-BOX Purpose=DITHER Number Of Points=4 Point Spacing=0.265 Line Spacing=0.187	Coordinate Frame=POS-TARG Pattern Orientation=20.67 Angle Between Sides=69.05 Center Pattern=false		(1), (2), (3)

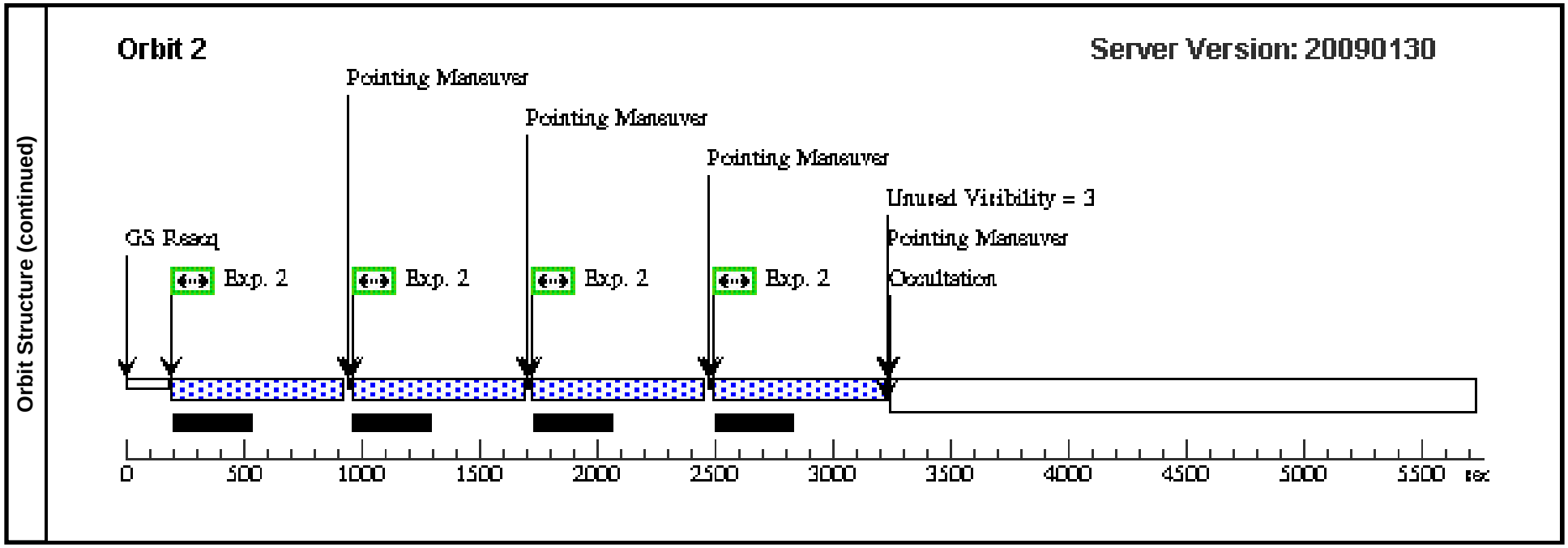
Fixed Targets

#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(3)	RXJ2143.0+0654	RA: 21 43 3.3000 (325.7637500d) Dec: +06 54 17.00 (6.90472d) Equinox: J2000		V=29	Reference Frame: ICRS

Exposures

#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit
1	2143-WFC	(3) RXJ2143.0+0654	ACS/WFC, ACCUM, WFC1	F475W			Pattern 2, Exps 1-1 (2)	500 Secs	
								[==>553.0 Secs (Pattern 1)] *[==>553.0 Secs (Pattern 2)]* *[==>553.0 Secs (Pattern 3)]* *[==>553.0 Secs (Pattern 4)]*	***[1]***
2	2143-WFC	(3) RXJ2143.0+0654	ACS/WFC, ACCUM, WFC1	F475W		POS TARG 0.5,0.5	Pattern 2, Exps 2-2 (2)	500 Secs	
								[==>608.0 Secs (Pattern 1)] *[==>608.0 Secs (Pattern 2)]* *[==>608.0 Secs (Pattern 3)]* *[==>608.0 Secs (Pattern 4)]*	***[2]***
3	2143-WFC	(3) RXJ2143.0+0654	ACS/WFC, ACCUM, WFC1	F475W		POS TARG -0.5,-0.5	Pattern 2, Exps 3-3 (2)	500 Secs	
								[==>608.0 Secs (Pattern 1)] *[==>608.0 Secs (Pattern 2)]* *[==>608.0 Secs (Pattern 3)]* *[==>608.0 Secs (Pattern 4)]*	***[3]***


Orbit Structure
Orbit 1
Server Version: 20090130
Pointing Maneuver
Pointing Maneuver
Pointing Maneuver
Unused Visibility = 3
Pointing Maneuver
Occultation
GS Acq
Exp. 1
Exp. 1
Exp. 1
Exp. 1
0
500
1000
1500
2000
2500
3000
3500
4000
4500
5000
5500
sec


Orbit Structure (continued)
Orbit 2
Server Version: 20090130
Pointing Maneuver
Pointing Maneuver
Pointing Maneuver
Unused Visibility = 3
Pointing Maneuver
GS Reacq
Occultation
Exp. 2
Exp. 2
Exp. 2
Exp. 2
0
500
1000
1500
2000
2500
3000
3500
4000
4500
5000
5500
sec

Orbit Structure (continued)