11151 - Evaluating the Role of Photoevaporation of Protoplanetary Disk Dispersal

Cycle: 16, 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) RX-J1111.7-7620	ACS/SBC	1	03-Feb-2009 21:01:04.0	yes
04	(4) PZ99-J161411.0-230536	ACS/SBC	1	03-Feb-2009 21:01:08.0	yes
05	(5) BHS98-MHO-5	ACS/SBC	1	03-Feb-2009 21:01:10.0	yes
06	(6) 2MASS-J04390396+2544264	ACS/SBC	1	03-Feb-2009 21:01:12.0	yes
07	(7) 2MASS-J04141188+2811535	ACS/SBC	1	03-Feb-2009 21:01:14.0	yes
08	(8) 2MASS-J04414825+2534304	ACS/SBC	1	03-Feb-2009 21:01:15.0	yes
09	(9) 2MASS-J04442713+2512164	ACS/SBC	1	03-Feb-2009 21:01:17.0	yes
10	(10) HEN-3-600	ACS/SBC	1	03-Feb-2009 21:01:19.0	yes
11	(11) TWA-9	ACS/SBC	1	03-Feb-2009 21:01:21.0	yes

Visit	*Targets used in Visit*	*Configurations used in Visit*	*Orbits Used*	*Last Orbit Planner Run*	*OP Current with Visit?*
12	(12) TWA-8	ACS/SBC	1	03-Feb-2009 21:01:23.0	yes
13	(13) TWA-6	ACS/SBC	1	03-Feb-2009 21:01:25.0	yes
14	(14) SCHJ0518028+2327126	ACS/SBC	1	03-Feb-2009 21:01:28.0	yes
15	(15) EM-LKHA-330	ACS/SBC	1	03-Feb-2009 21:01:30.0	yes
16	(16) SCHJ0439016+2336030	ACS/SBC	1	03-Feb-2009 21:01:32.0	yes
17	(17) BHS98-MHO-6	ACS/SBC	1	03-Feb-2009 21:01:33.0	yes
18	(18) TWA-16	ACS/SBC	1	03-Feb-2009 21:01:35.0	yes
03	(3) RX-J1842.9-3532	ACS/SBC	1	03-Feb-2009 21:01:37.0	yes
02	(2) RX-J1852.3-3700	ACS/SBC	1	03-Feb-2009 21:01:39.0	yes
51	(1) RX-J1111.7-7620	ACS/SBC	1	03-Feb-2009 21:01:41.0	yes
53	(3) RX-J1842.9-3532	ACS/SBC	1	03-Feb-2009 21:01:43.0	yes
55	(5) BHS98-MHO-5	ACS/SBC	1	03-Feb-2009 21:01:45.0	yes
56	(16) SCHJ0439016+2336030	ACS/SBC	1	03-Feb-2009 21:01:46.0	yes
57	(19) 2MASSJ11321831-3019518	ACS/SBC	1	03-Feb-2009 21:01:48.0	yes

23 Total Orbits Used

ABSTRACT

Emission produced by accretion onto the central star leads to photoevaporation, which may play a fundamental role in disk dispersal. Models of disk photoevaporation by the central star are challenged by two potential problems: the emission produced by accretion will be substantially weaker for low-mass stars, and photoevaporation must continue as accretion slows. Existing FUV spectra of CTTSs are biased to solar-mass stars with high accretion rates, and are therefore insufficient to address these problems. We propose use HST/ACS SBC PR130L to obtain FUV spectra of WTTSs and of CTTSs at low masses and mass accretion rates to provide crucial data to evaluate photoevaporation models. We will estimate the FUV and

EUV luminosities of low-mass CTTSs with small mass accretion rates, CTTSs with transition disks and slowed accretion, and of magnetically-active WTTSs.

OBSERVING DESCRIPTION

ACS/SBC, 1 orbit per visit
Each visit consists of:
1) an 400-1000s SBC image with the F165LP, F150LP, or F125LP filter, depending on the target
2) a longer PR130L spectrum, with the goal of measuring C IV emission

In several cases, the image is long to be sure that both components of binaries are detected or to be sure that the source is detected even if the emission is much fainter than expected.

In Realtime Justification, I estimates the maximum local count rate in each image for safety checking. In Additional Comments, I go thru the sources flagged by the BOT safety check tool.

REAL TIME JUSTIFICATION

I've split up the safety check into three categories: non-accretors (WTTS), low-mass accretors, and solar-mass accretors.

Exposure Time Estimates: WTTSs based on HST and IUE spectra of AU Mic, scaled by L(C IV)=Lx^0.5. Cx is ROSAT count rate. Cts is the maximum cts per pixel (50=bright limit) for the listed filter. CTTSs are based on the template spectrum of TW Hya, scaled by C IV luminosity. The C IV luminosity is estimated based on the correlation between accretion rate and C IV line luminosity from previous IUE and STIS spectra.

WTTSs	Cx	Filter	Cts	
AU Mic	5.9	F150LP	10	TEMPLATE ONLY, not in program
TWA 8	0.3	F150LP	3	

TWA 7	0.3	F150LP	3
TWA 9	0.3	F150LP	3
TWA 16	0.1	F150LP	1.5

L(C IV): C IV luminosity
F(C IV): C IV flux
Av: extinction
Mdot: mass accretion rate
Cts: max cts/pixel in filter
Exposure time estimate: based on present correlation between Mdot and

LOW MASS ACCRETORS

CTTSs	Mdot	Av	L(C IV)	F(C IV)	Filter	Cts
TW Hya	-8.7	0.0	2e-5	3e-12	F125LP	300 TEMPLATE Only
					F140LP	219 TEMPLATE Only
					F150LP	173 TEMPLATE Only
					F165LP	61 TEMPLATE Only
MHO 5	-10.3	0.5	1e-5	4e-15	F125LP	0.4
MHO 6	-10.8	0.1	3e-6	4e-15	F125LP	0.4
0439+25	-11.3	0.2	8e-7	8e-16	F125LP	0.08
0414+28	-10.0	0.8	3e-5	7e-15	F140LP	0.5
0441+25	-11.3	0.8	3e-6	2e-16	F125LP	0.02
0444+25	-10.3	0.0	1.5e-5	2e-14	F125LP	0.2
0518+23	-9.7	0.0	4e-5	6e-14	F140LP	4.4
0439+23	-9.4	0.5	1e-4	5e-14	F140LP	3.7

SOLAR MASS ACCRETORS

Hen 3-600	-11	0.0	-	2e-14	F165LP	5.8	Flux from IUE spectrum
1111-7620	-8.8	1.3*	1e-4	7d-15	F165LP	0.14	
1852-3700	-8.8	0.9*	1e-4	2e-14	F165LP	0.4	
1842-3532	-8.5	1.0*	2d-4	3e-14	F165LP	0.6	
1614-2305	-9.0	1.5*	6d-5	2e-15	F150LP	0.12	
LkHa 330	???	please see discussion below					

*I don't trust these extinction estimates, they just feel too high to me. If Av=0, the largest C IV flux will be 3e-13, an order of magnitude lower than that from TW Hya. That would yield 6 cts/s, so that conservatively suggests that the detector will be safe.

****LkHa 330 is the toughest object in our sample to estimate the brightness. It's supposedly a reddened (Av=1.8) GV star at 300 pc, which would make it pretty FUV-faint. However, I don't necessarily trust those estimates. Plus, there's no actual mass accretion rate estimate, so getting an estimated FUV flux is rather difficult. We plan to do substantial follow-up on this target. However, TW Hya is the really the only CTTS that violates the bright limits with the F165LP detector. For Taurus (d=140 pc), no CTTS violates the F165LP bright limit. The STIS spectrum of RU Lupi is probably the brightest, and that still only yields 5 cts/s. Therefore, LkHa 330 is very likely to satisfy the local detector bright limits.

For this (and other potentially bright targets) the F165LP filter is selected over the F122M filter in case the Ly-alpha emission happens to be very bright. Most of the Ly-alpha emission is probably absorbed by interstellar H I, but the chances of underestimating that emission are probably larger than of underestimating the flux in other lines.

PR130L: TW Hya yields a maximum of 47 cts/s/pixel in C IV (the strongest line). Since all targets should be at least an order of magnitude fainter, all targets are safe.

CALIBRATION JUSTIFICATION

The image will serve to identify the location of the spectrum and as wavelength calibration.

ADDITIONAL COMMENTS

Below are targets flagged as potential threats to the detector safety by the BOT tool. Most are the science targets with S/N estimates discussed above. One target required some discussion to demonstrate that it is safe.

I did not perform the same analysis for the sources flagged as "unknown" because they seemed to generally be very faint.

==========

VISIT 1:

Health SBC S418000222 11 11 46.3550 -76 20 9.02 GSC2 --- --- --- 11.18 12.98 12.04 1.21 **O5V** 3.3454E3 counts/second Local Health and Safety (Exceeded)

This source is the target source (K1), and found to be safe in our S/N estimates.

VISIT 3:

Health SBC S9PA000072 18 42 57.9492 -35 32 42.69 GSC2 --- --- --- --- --- 11.78 1.13 **O5V** 4.2476E3 counts/second Local Health and Safety (Exceeded)

This source is the target source (K2), and found to be safe in our S/N estimates.

VISIT 4:

Health SBC S85C000321 16 14 11.0742 -23 05 36.21 GSC2 --- --- --- --- --- 10.71 1.20 **O5V** 3.9619E4 counts/second Local Health and Safety (Exceeded)

This source is is the target source (K0), and found to be safe in our S/N estimates.

Health SBC S85C006033 16 14 9.2322 -23 05 45.03 GSC2 --- --- --- 13.48 15.57 14.51 1.37 **O5V** 1.1964E3 counts/second Local Health and Safety (Exceeded)

If B-V=1.37, this source is either a K7 star (and therefore safe) or heavily reddened, which also means it should be safe.

VISIT 7:

Health SBC NCCT000511 04 14 12.9181 +28 12 12.32 GSC2 --- --- --- --- --- 10.74 1.25 **O5V** 1.0014E6 counts/second Global Health and Safety (Exceeded)

This source is V773 Tau, a K2 quadruple system. None of the stars are still accreting, so the FUV emission should be relatively faint. The safety is confirmed by IUE observations of V773 Tau that confirm it is FUV-faint.

VISIT 10:

Health SBC S5JM000853 11 10 27.9529 -37 31 51.92 GSC2 --- --- --- 11.01 13.13 12.05 1.23 **O5V** 3.2937E3 counts/second Local Health and Safety (Exceeded)

This is the target star (M3 binary), and is confirmed to be faint by IUE.

VISIT 11:

Health SBC S55M000325 11 48 24.2139 -37 28 49.22 GSC2 --- --- --- --- --- 11.18 1.40 **O5V** 2.568E4 counts/second Local Health and Safety (Exceede

This is the target (TWA 9), which is a K5 binary.

VISIT 12:

Health SBC S579000247 11 32 41.3342 -26 51 55.70 GSC2 --- --- --- 11.25 13.08 12.12 1.07 **O5V** 1.0745E4 counts/second Local Health and Safety (Exceeded)

Health SBC S579003963 11 32 41.2354 -26 52 8.84 GSC2 --- --- --- 13.94 16.29 15.13 1.40 **O5V** 6.7417E2 counts/second Local Health and Safety (Exceeded)

These are the targets TWA 8A and TWA 8B, which are an M2/M5 pair.

VISIT 13:

Health SBC S5MK000237 10 18 26.9458 -31 49 47.91 GSC2 --- --- --- --- --- 10.87 0.71 **O5V** 2.4117E5 counts/second Global Health and Safety (Exceeded)

This is an unknown nearby star with B-V=0.7, which would make it roughly a G7 star. I use the spectrum of Kap Ceti (http://casa.colorado.edu/~ayres/CoolCAT/summaries/kapcet_summary.html), which is a V=4.83 star. Scaling by V magnitude indicates that the brightest pixel in an F150LP image will be 0.8 cts/s. This source was undetected with ROSAT, which means the transition/chromospheric FUV emission will be faint.

Health SBC S5MK000239 10 18 28.7000 -31 50 2.82 GSC2 --- --- --- --- --- 11.83 1.61 **O5V** 1.4067E4 counts/second Local Health and Safety (Exceeded)

This is the target TWA 6, which is an M7 star.

VISIT 15:

Health SBC NCGQ000589 03 45 48.2776 +32 24 11.84 GSC2 --- --- --- 11.25 13.28 12.22 1.21 **O5V** 2.8316E3 counts/second Local Health and Safety (Exceeded)

This is the target LkHa 330 (G2, V=10.97), and should be safe

VISIT 16:

Health SBC NA44010250 04 39 1.6589 +23 36 3.29 GSC2 --- --- --- 14.78 16.99 15.85 1.32 **O5V** 9.496E2 counts/second Local Health and Safety (Exceeded)

This is an M6 accretor (Slesnick et al. 2006, AJ, 132, 2665)

VISIT 17:

Health SBC NA4D000799 04 32 20.8740 +18 28 3.74 GSC2 --- --- --- 15.29 16.77 15.97 0.90 **O5V** 8.5331E2 counts/second Local Health and Safety (Exceeded)

This is an unknown target with B-V=0.9, which would make it about a K2 star.

VISIT 18:

Health SBC S939001128 12 34 56.3489 -45 38 7.50 GSC2 --- --- --- 11.83 13.73 12.74 1.36 **O5V** 6.5522E2 counts/second Local Health and Safety (Exceeded)

This is the target, TWA 16, which is an M1.5 star.

Visit

Proposal 11151, Visit 01, failed Wed Feb 04 02:01:51 GMT 2009

Diagnostic Status: No Diagnostics

Scientific Instruments: ACS/SBC

Special Requirements: (none)

Fixed Targets

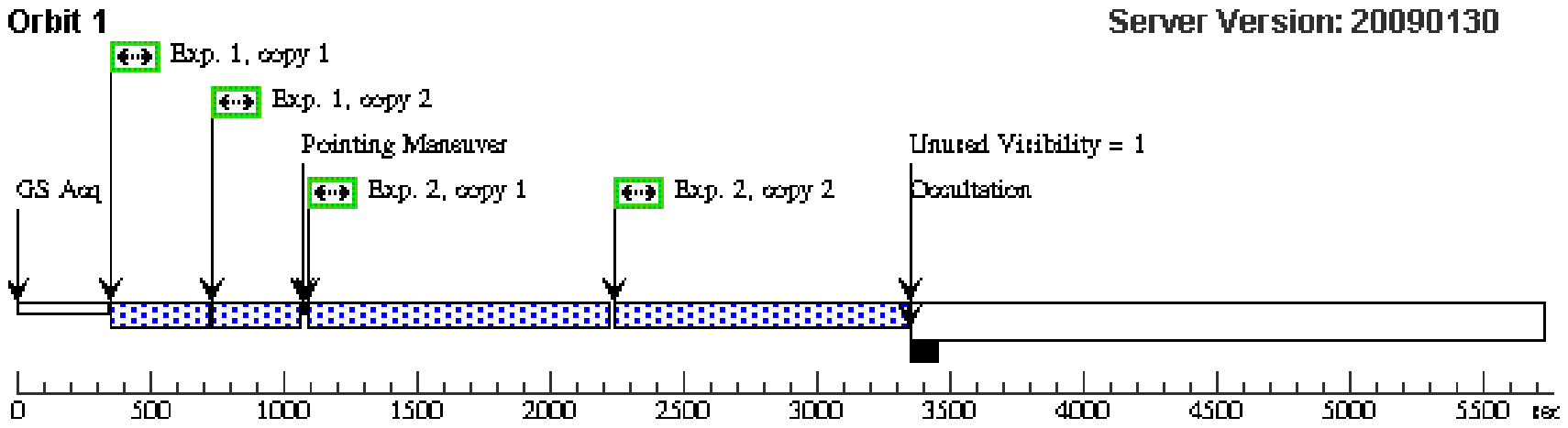
#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(1)	RX-J1111.7-7620	RA: 11 11 44.0000 (167.9333333d) Dec: -76 20 10.00 (-76.33611d) Equinox: J2000		V=12.05	Reference Frame: ICRS

Comments: The coordinates are offset by 8.4 arcsec from the star to place the nearby CTTS XX Cha in the image. We do not request a specific RA, but the PR130L image may also include the secondary target if the PA turns out to be favorable.

Exposures

#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit
1		(1) RX-J1111.7-7620	ACS/SBC, ACCUM, SBC	F165LP				73.0 Secs X 2 *[==>300.0 Secs (Copy 1)]* *[==>300.0 Secs (Copy 2)]*	*[1]*
2		(1) RX-J1111.7-7620	ACS/SBC, ACCUM, SBC	PR130L				1074.0 Secs X 2 *[==>(Copy 1)]* *[==>(Copy 2)]*	*[1]*

Orbit Structure



Visit

Proposal 11151, Visit 04, completed Wed Feb 04 02:01:52 GMT 2009

Diagnostic Status: No Diagnostics

Scientific Instruments: ACS/SBC

Special Requirements: (none)

Fixed Targets

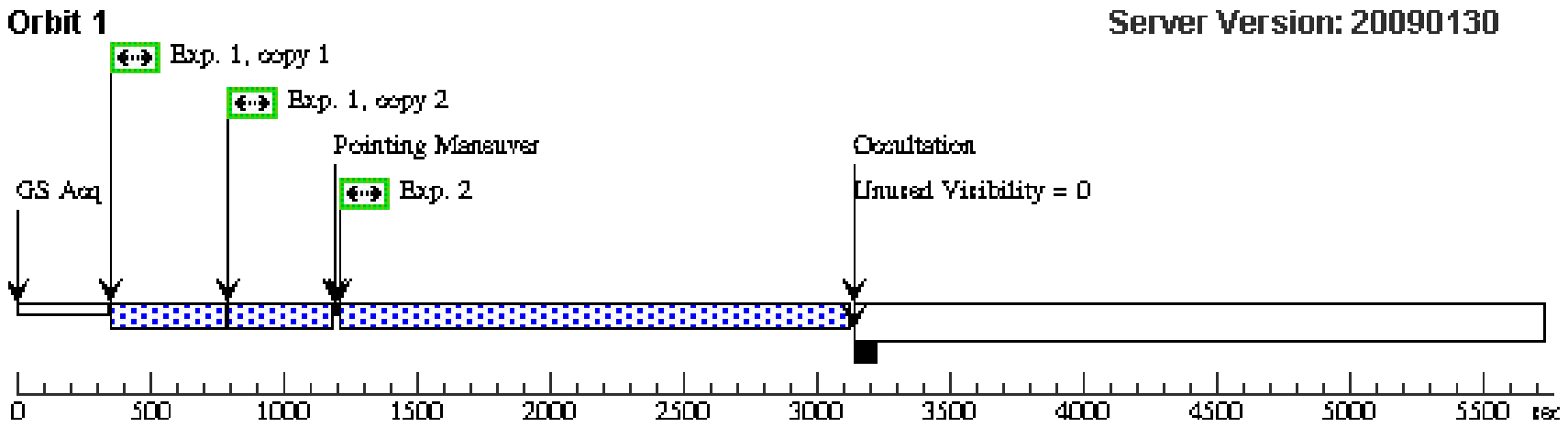
#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(4)	PZ99-J161411.0-230536	RA: 16 14 11.0700 (243.5461250d) Dec: -23 05 36.20 (-23.09339d) Equinox: J2000		V=10.8	Reference Frame: ICRS

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/[Actual Dur.]	Orbit
1		(4) PZ99-J161411.0-230536	ACS/SBC, ACCUM, SBC	F165LP				73.0 Secs X 2 *[==>360.0 Secs (Copy 1)]* *[==>360.0 Secs (Copy 2)]*	*[1]*
2		(4) PZ99-J161411.0-230536	ACS/SBC, ACCUM, SBC	PR130L				1300.0 Secs *[==>1861.0 Secs]*	*[1]*

Orbit Structure



Visit

Proposal 11151, Visit 05, failed Wed Feb 04 02:01:52 GMT 2009

Diagnostic Status: No Diagnostics

Scientific Instruments: ACS/SBC

Special Requirements: (none)

Fixed Targets

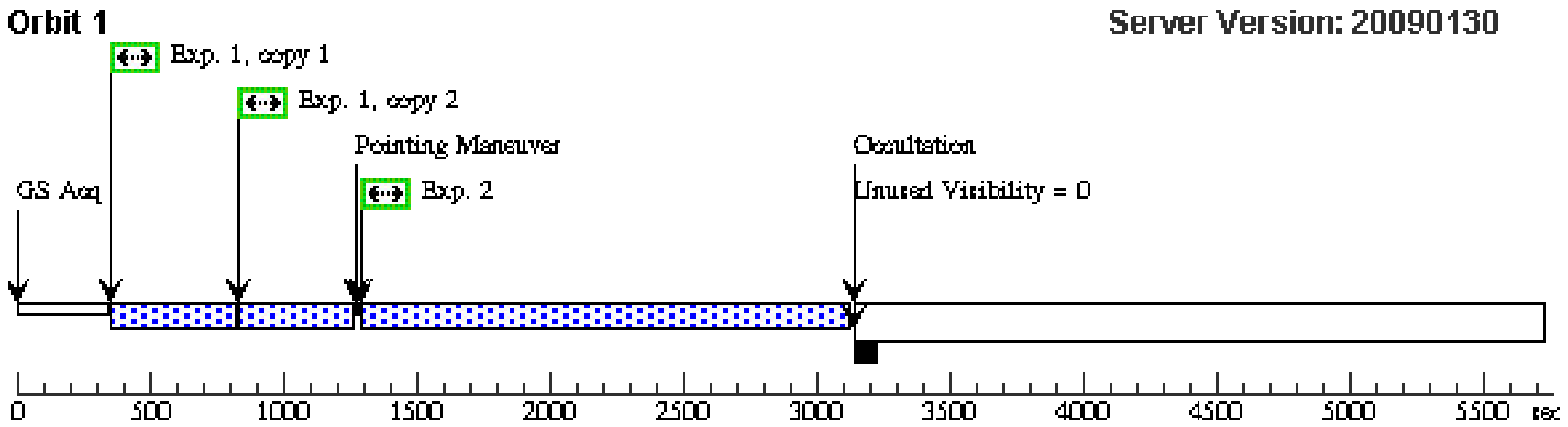
#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(5)	BHS98-MHO-5	RA: 04 32 16.0600 (68.0669167d) Dec: +18 12 46.40 (18.21289d) Equinox: J2000		V=16.9	Reference Frame: ICRS

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/[Actual Dur.]	Orbit
1		(5) BHS98-MHO-5	ACS/SBC, ACCUM, SBC	F125LP				73.0 Secs X 2	
								[==>400.0 Secs (Copy 1)] *[==>400.0 Secs (Copy 2)]*	***[1]***
2		(5) BHS98-MHO-5	ACS/SBC, ACCUM, SBC	PR130L				1300.0 Secs	
								[==>1773.0 Secs]	***[1]***

Orbit Structure



Visit

Proposal 11151, Visit 06, completed Wed Feb 04 02:01:52 GMT 2009

Diagnostic Status: Warning

Scientific Instruments: ACS/SBC

Special Requirements: (none)

Diagnostics

(Visit 06) Warning (Orbit Planner): ILLEGAL GS ACQ SCENARIO USED WITH ACS/SBC

Fixed Targets

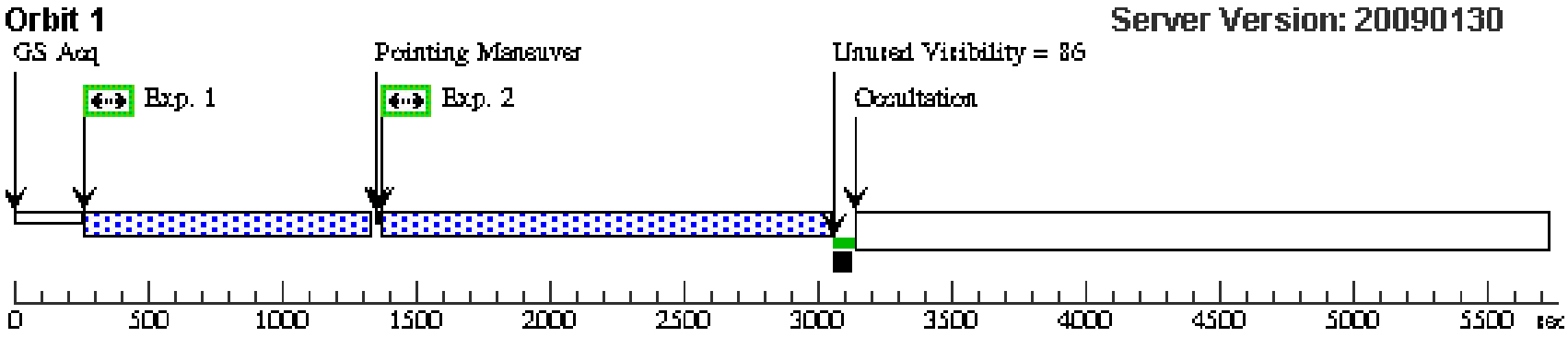
#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(6)	2MASS-J04390396+2544264	RA: 04 39 3.9600 (69.7665000d) Dec: +25 44 26.40 (25.74067d) Equinox: J2000		V=19.5	Reference Frame: SIMBAD

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/[Actual Dur.]	Orbit
1		(6) 2MASS-J04390396+2544264	ACS/SBC, ACCUM, SBC	F125LP		GS ACQ SCENARIO SINGLE		73.0 Secs *[==>1000.0 Secs]*	 ***[1]***
2		(6) 2MASS-J04390396+2544264	ACS/SBC, ACCUM, SBC	PR130L				1300.0 Secs *[==>1618.0 Secs]*	 ***[1]***

Orbit Structure



Visit

Proposal 11151, Visit 07, completed Wed Feb 04 02:01:53 GMT 2009

Diagnostic Status: No Diagnostics

Scientific Instruments: ACS/SBC

Special Requirements: (none)

Fixed Targets

#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(7)	2MASS-J04141188+2811535	RA: 04 14 11.9800 (63.5499167d) Dec: +28 12 0.20 (28.20006d) Equinox: J2000		V=18	Reference Frame: SIMBAD

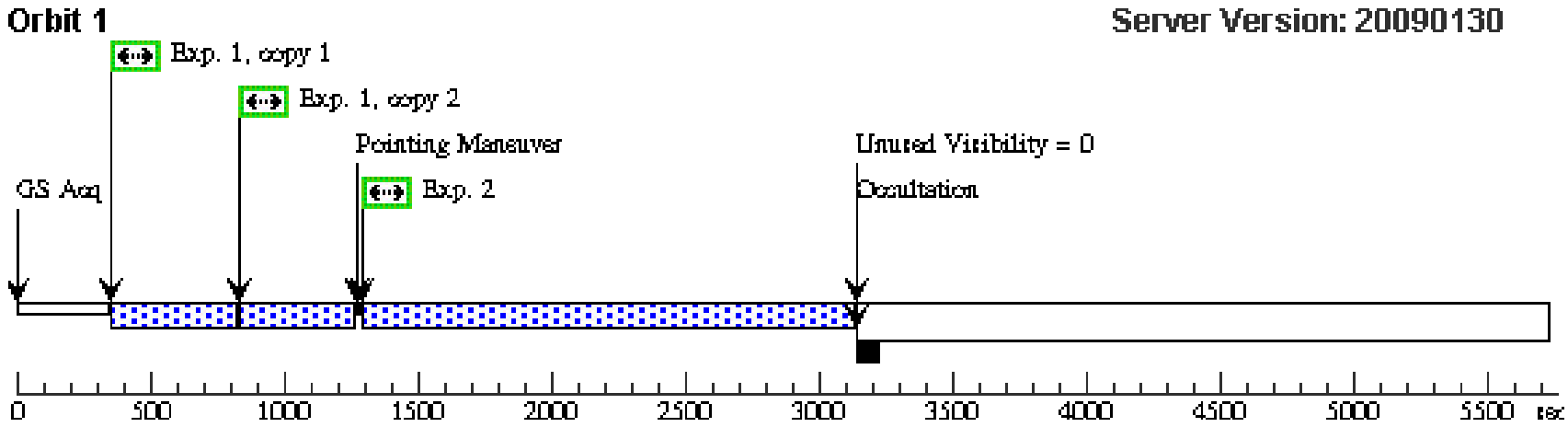
Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.

Offset by 7 arcsec from star to place V773 Tau in field

Exposures

#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit
1		(7) 2MASS-J04141188+2811535	ACS/SBC, ACCUM, SBC	F140LP				73.0 Secs X 2 *[==>400.0 Secs (Copy 1)]* *[==>400.0 Secs (Copy 2)]*	*[1]*
2		(7) 2MASS-J04141188+2811535	ACS/SBC, ACCUM, SBC	PR130L				1300.0 Secs *[==>1769.0 Secs]*	*[1]*

Orbit Structure



Visit

Proposal 11151, Visit 08, completed Wed Feb 04 02:01:53 GMT 2009

Diagnostic Status: Warning

Scientific Instruments: ACS/SBC

Special Requirements: (none)

Diagnostics

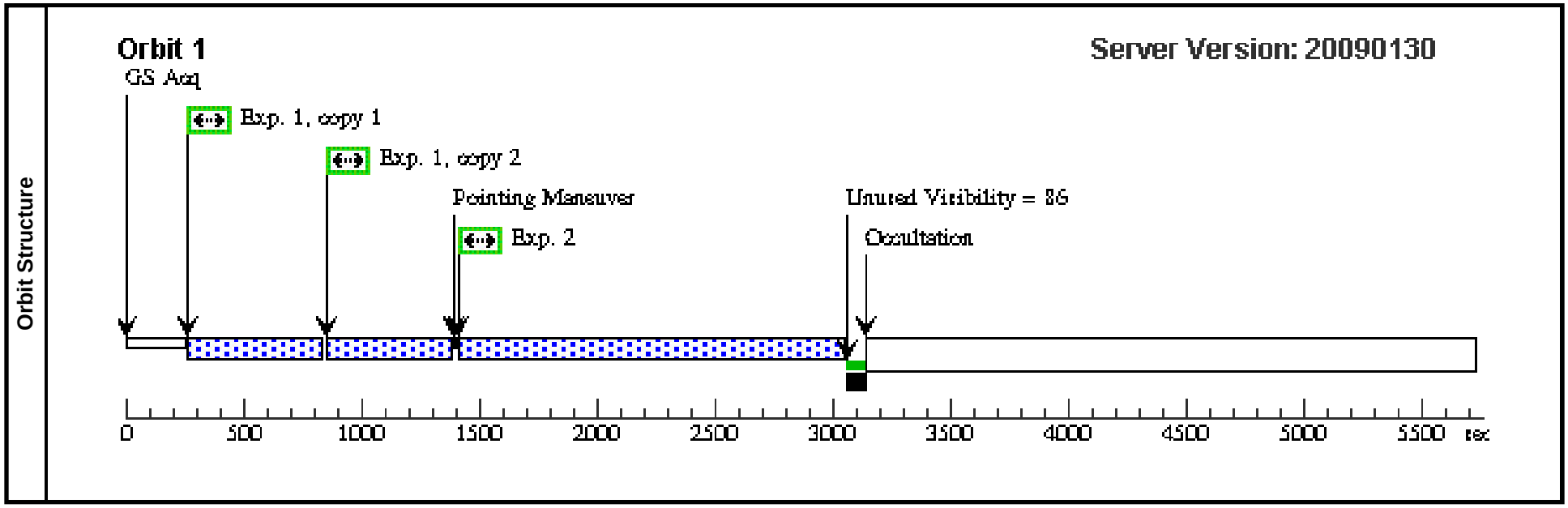
(Visit 08) Warning (Orbit Planner): ILLEGAL GS ACQ SCENARIO USED WITH ACS/SBC

Fixed Targets

#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(8)	2MASS-J04414825+2534304	RA: 04 41 48.2500 (70.4510417d) Dec: +25 34 30.50 (25.57514d) Equinox: J2000		V=20	Reference Frame: SIMBAD

Exposures

#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit
1		(8) 2MASS-J04414825+2534304	ACS/SBC, ACCUM, SBC	F125LP		GS ACQ SCENARIO SINGLE		73.0 Secs X 2 *[==>500.0 Secs (Copy 1)]* *[==>500.0 Secs (Copy 2)]*	***[1]***
2		(8) 2MASS-J04414825+2534304	ACS/SBC, ACCUM, SBC	PR130L				1300.0 Secs *[==>1578.0 Secs]*	***[1]***


Orbit Structure
Orbit 1
Server Version: 20090130
GS Acq
Exp. 1, copy 1
Exp. 1, copy 2
Pointing Maneuver
Exp. 2
Unused Visibility = 86
Occultation
0
500
1000
1500
2000
2500
3000
3500
4000
4500
5000
5500
sec

Visit

Proposal 11151, Visit 09, completed Wed Feb 04 02:01:53 GMT 2009

Diagnostic Status: No Diagnostics

Scientific Instruments: ACS/SBC

Special Requirements: (none)

Fixed Targets

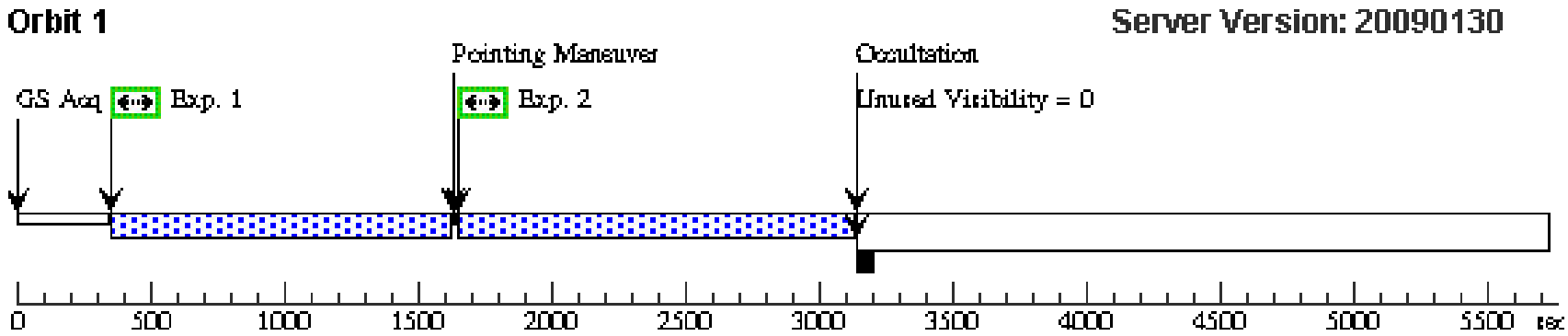
#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(9)	2MASS-J04442713+2512164	RA: 04 44 27.1300 (71.1130417d) Dec: +25 12 16.40 (25.20456d) Equinox: J2000		V=17.9	Reference Frame: SIMBAD

Comments: 1.2 arcsec separation, PA=-95.5 deg.

Exposures

#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit
1		(9) 2MASS-J04442713+2512164	ACS/SBC, ACCUM, SBC	F125LP				1000.0 Secs	
								[==>1200.0 Secs]	***[1]***
2		(9) 2MASS-J04442713+2512164	ACS/SBC, ACCUM, SBC	PR130L				1418.0 Secs	
								[==>]	***[1]***

Orbit Structure



Visit

Proposal 11151, Visit 10, completed Wed Feb 04 02:01:54 GMT 2009

Diagnostic Status: No Diagnostics

Scientific Instruments: ACS/SBC

Special Requirements: ORIENT 96.0D TO 253.0 D; ORIENT 276.0D TO 73.0 D

Comments: Orientation can either be between 96-253 or between 276-73 degrees.

Fixed Targets

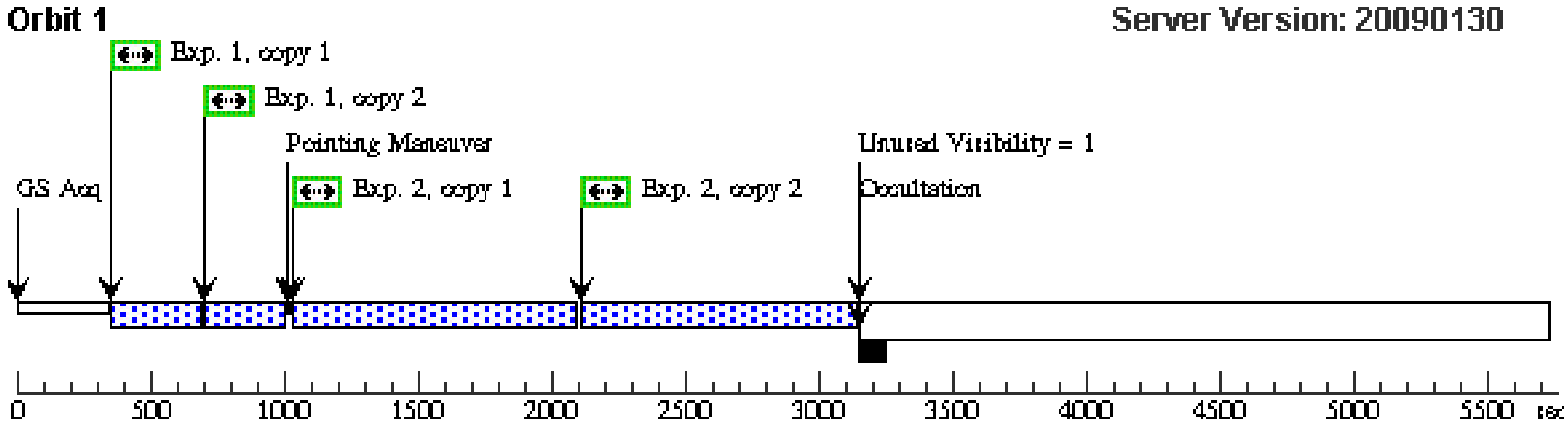
#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(10)	HEN-3-600	RA: 11 10 27.8800 (167.6161667d) Dec: -37 31 52.00 (-37.53111d) Equinox: J2000		V=12.06	Reference Frame: ICRS

Comments: TWA 3A: 1.5 arcsec, PA=-95.5 degrees

Exposures

#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit
1		(10) HEN-3-600	ACS/SBC, ACCUM, SBC	F165LP				300.0 Secs X 2 *[==>270.0 Secs (Copy 1)]* *[==>270.0 Secs (Copy 2)]*	*[1]*
2		(10) HEN-3-600	ACS/SBC, ACCUM, SBC	PR130L				1006.0 Secs X 2 *[==>(Copy 1)]* *[==>(Copy 2)]*	*[1]*

Orbit Structure



Visit

Proposal 11151, Visit 11, completed Wed Feb 04 02:01:54 GMT 2009

Diagnostic Status: No Diagnostics

Scientific Instruments: ACS/SBC

Special Requirements: (none)

Fixed Targets

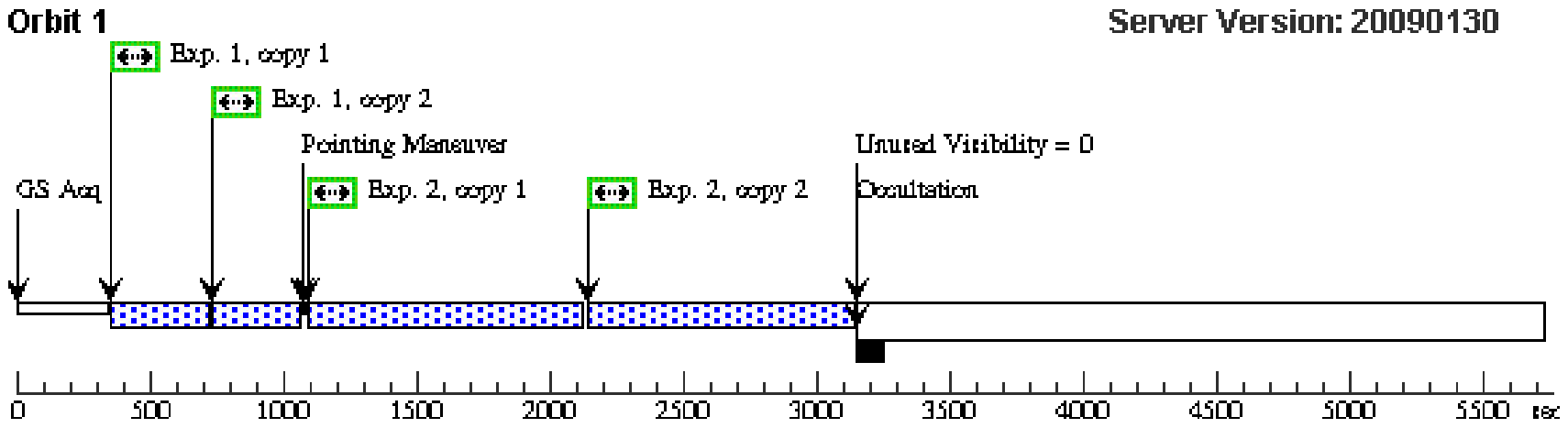
#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(11)	TWA-9	RA: 11 48 24.2200 (177.1009167d) Dec: -37 28 49.20 (-37.48033d) Equinox: J2000		V=11.26	Reference Frame: ICRS

Comments: 6 arcsec separation, PA=150.8. Spectra will not overlap

Exposures

#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit
1		(11) TWA-9	ACS/SBC, ACCUM, SBC	F150LP				73.0 Secs X 2 *[==>300.0 Secs (Copy 1)]* *[==>300.0 Secs (Copy 2)]*	*[1]*
2		(11) TWA-9	ACS/SBC, ACCUM, SBC	PR130L				1300.0 Secs X 2 *[==>972.0 Secs (Copy 1)]* *[==>972.0 Secs (Copy 2)]*	*[1]*

Orbit Structure



Visit

Proposal 11151, Visit 12, completed Wed Feb 04 02:01:54 GMT 2009

Diagnostic Status: No Diagnostics

Scientific Instruments: ACS/SBC

Special Requirements: (none)

Fixed Targets

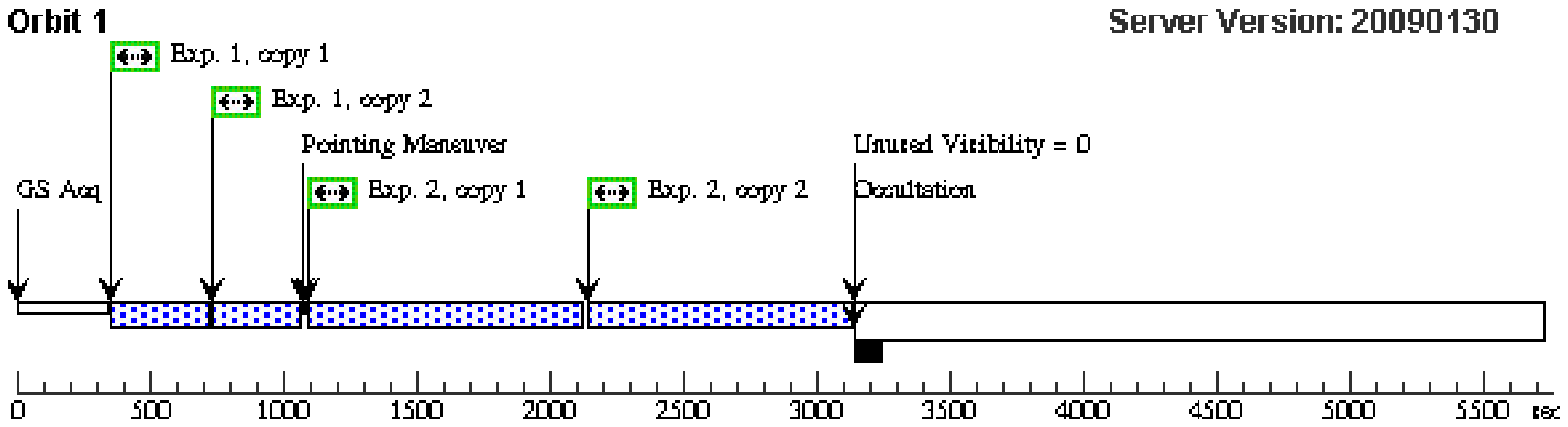
#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(12)	TWA-8	RA: 11 32 41.2000 (173.1716667d) Dec: -26 52 2.50 (-26.86736d) Equinox: J2000		V=12.125	Reference Frame: ICRS

Comments: Center of field between TWA 8A and TWA 8B. Both stars are about 6.5 arcsec from center of field. PA=-125.5. Spectra will not overlap and will both fit in field

Exposures

#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit
1		(12) TWA-8	ACS/SBC, ACCUM, SBC	F150LP				73.0 Secs X 2 *[==>300.0 Secs (Copy 1)]* *[==>300.0 Secs (Copy 2)]*	*[1]*
2		(12) TWA-8	ACS/SBC, ACCUM, SBC	PR130L				1300.0 Secs X 2 *[==>967.0 Secs (Copy 1)]* *[==>967.0 Secs (Copy 2)]*	*[1]*

Orbit Structure



Visit

Proposal 11151, Visit 13, completed Wed Feb 04 02:01:54 GMT 2009

Diagnostic Status: No Diagnostics

Scientific Instruments: ACS/SBC

Special Requirements: (none)

Fixed Targets

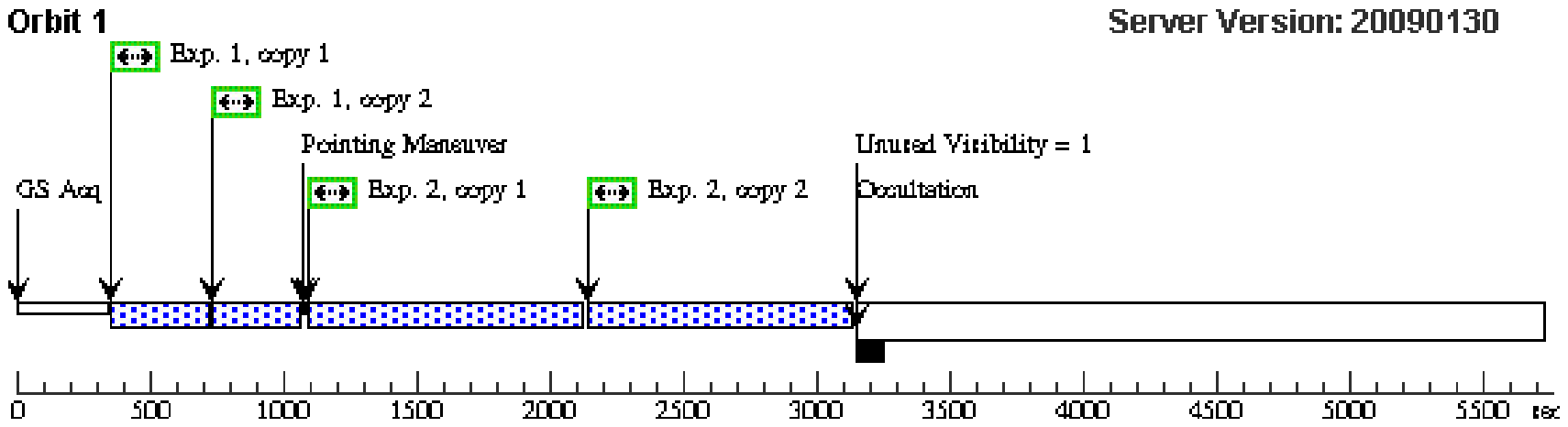
#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(13)	TWA-6	RA: 10 18 28.7000 (154.6195833d) Dec: -31 50 2.85 (-31.83412d) Equinox: J2000		V=11.62	Reference Frame: ICRS

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/[Actual Dur.]	Orbit
1		(13) TWA-6	ACS/SBC, ACCUM, SBC	F150LP				73.0 Secs X 2 *[==>300.0 Secs (Copy 1)]* *[==>300.0 Secs (Copy 2)]*	*[1]*
2		(13) TWA-6	ACS/SBC, ACCUM, SBC	PR130L				1300.0 Secs X 2 *[==>968.0 Secs (Copy 1)]* *[==>968.0 Secs (Copy 2)]*	*[1]*

Orbit Structure



Visit

Proposal 11151, Visit 14, completed Wed Feb 04 02:01:54 GMT 2009

Diagnostic Status: No Diagnostics

Scientific Instruments: ACS/SBC

Special Requirements: (none)

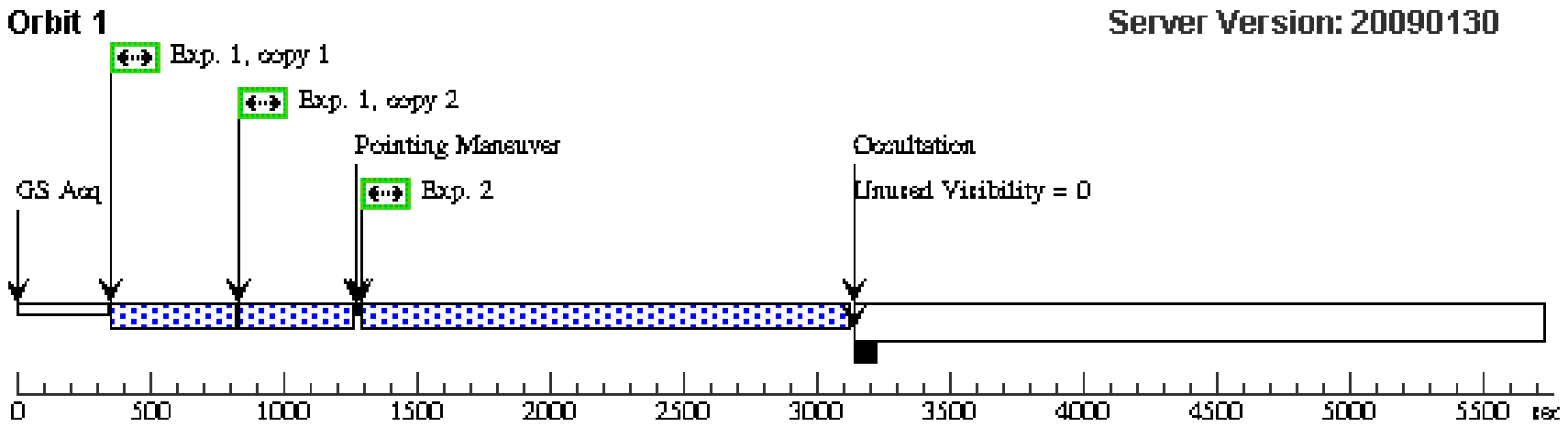
Fixed Targets

#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(14)	SCHJ0518028+2327126	RA: 05 18 2.8500 (79.5118750d) Dec: +23 27 12.70 (23.45353d) Equinox: J2000		V=17	Reference Frame: ICRS

Exposures

#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit
1		(14) SCHJ0518028+2327126	ACS/SBC, ACCUM, SBC	F140LP				73.0 Secs X 2	
								[==>400.0 Secs (Copy 1)] *[==>400.0 Secs (Copy 2)]*	***[1]***
2		(14) SCHJ0518028+2327126	ACS/SBC, ACCUM, SBC	PR130L				1300.0 Secs	
								[==>1767.0 Secs]	***[1]***

Orbit Structure



Visit

Proposal 11151, Visit 15, completed Wed Feb 04 02:01:55 GMT 2009

Diagnostic Status: No Diagnostics

Scientific Instruments: ACS/SBC

Special Requirements: (none)

Fixed Targets

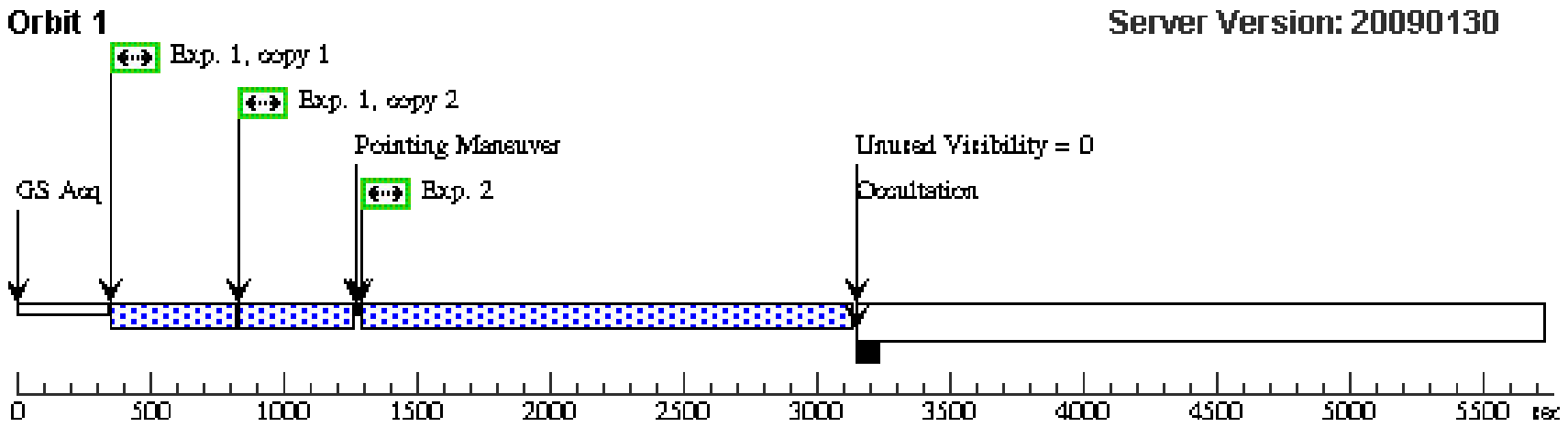
#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(15)	EM-LKHA-330	RA: 03 45 48.2800 (56.4511667d) Dec: +32 24 11.80 (32.40328d) Equinox: J2000		V=10.97	Reference Frame: ICRS

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/[Actual Dur.]	Orbit
1		(15) EM-LKHA-330	ACS/SBC, ACCUM, SBC	F165LP				73.0 Secs X 2	
								[==>400.0 Secs (Copy 1)] *[==>400.0 Secs (Copy 2)]*	***[1]***
2		(15) EM-LKHA-330	ACS/SBC, ACCUM, SBC	PR130L				1300.0 Secs	
								[==>1786.0 Secs]	***[1]***

Orbit Structure



Visit

Proposal 11151, Visit 16, failed Wed Feb 04 02:01:55 GMT 2009

Diagnostic Status: No Diagnostics

Scientific Instruments: ACS/SBC

Special Requirements: (none)

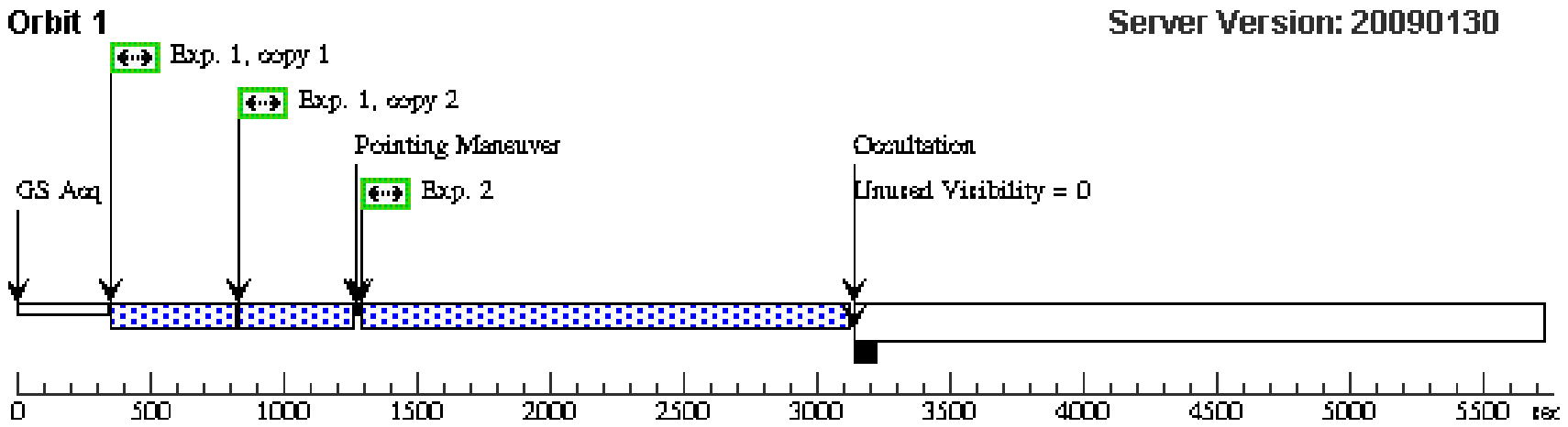
Fixed Targets

#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(16)	SCHJ0439016+2336030	RA: 04 39 1.6300 (69.7567917d) Dec: +23 36 2.90 (23.60081d) Equinox: J2000		V=15.9	Reference Frame: ICRS

Exposures

#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit
1		(16) SCHJ0439016+2336030	ACS/SBC, ACCUM, SBC	F140LP				73.0 Secs X 2 *[==>400.0 Secs (Copy 1)]* *[==>400.0 Secs (Copy 2)]*	*[1]*
2		(16) SCHJ0439016+2336030	ACS/SBC, ACCUM, SBC	PR130L				1300.0 Secs *[==>1767.0 Secs]*	*[1]*

Orbit Structure



Visit

Proposal 11151, Visit 17, completed Wed Feb 04 02:01:55 GMT 2009

Diagnostic Status: No Diagnostics

Scientific Instruments: ACS/SBC

Special Requirements: (none)

Fixed Targets

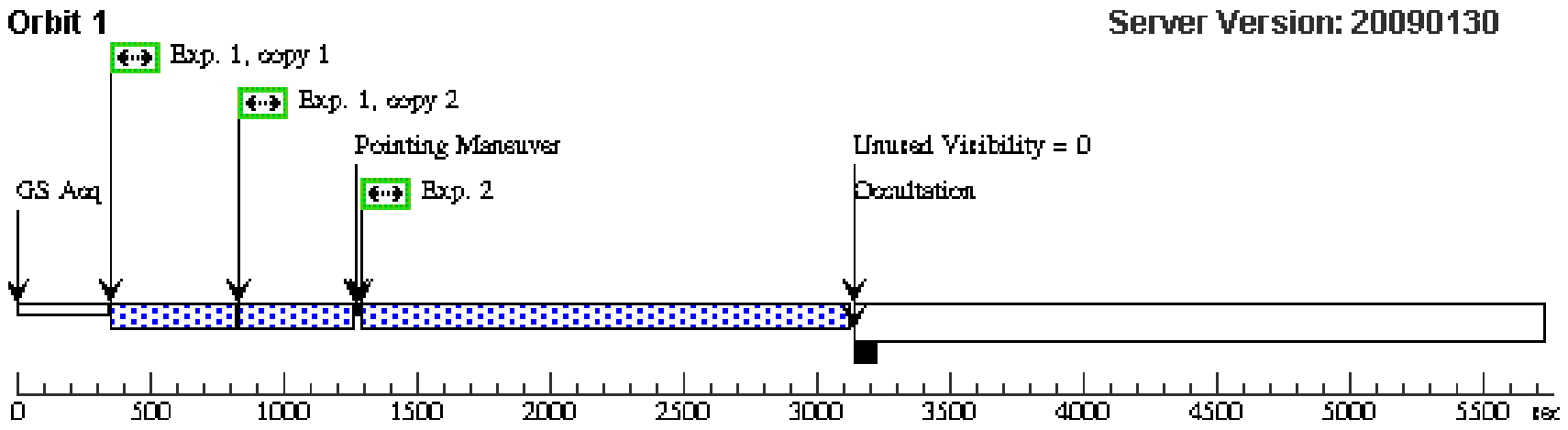
#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(17)	BHS98-MHO-6	RA: 04 32 22.1000 (68.0920833d) Dec: +18 27 42.60 (18.46183d) Equinox: J2000		V=16.8	Reference Frame: ICRS

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/[Actual Dur.]	Orbit
1		(17) BHS98-MHO-6	ACS/SBC, ACCUM, SBC	F125LP				73.0 Secs X 2	
								[==>400.0 Secs (Copy 1)] *[==>400.0 Secs (Copy 2)]*	***[1]***
2		(17) BHS98-MHO-6	ACS/SBC, ACCUM, SBC	PR130L				1300.0 Secs	
								[==>1773.0 Secs]	***[1]***

Orbit Structure



Visit

Proposal 11151, Visit 18, completed Wed Feb 04 02:01:55 GMT 2009

Diagnostic Status: No Diagnostics

Scientific Instruments: ACS/SBC

Special Requirements: (none)

Fixed Targets

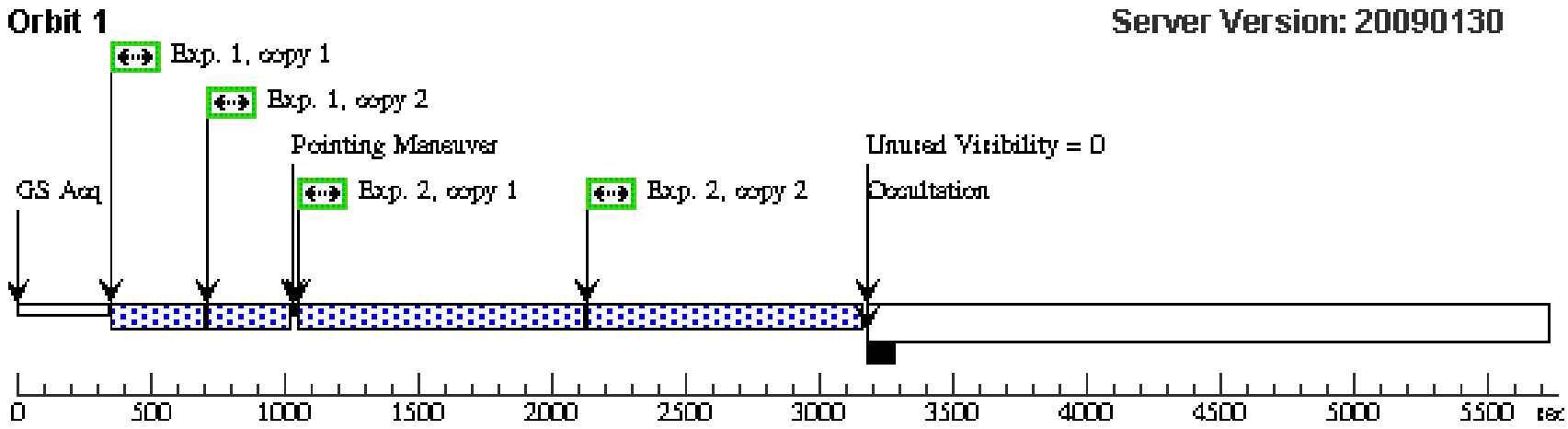
#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(18)	TWA-16	RA: 12 34 56.2900 (188.7345417d) Dec: -45 38 7.50 (-45.63542d) Equinox: J2000		V=12.3	Reference Frame: ICRS

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/[Actual Dur.]	Orbit
1		(18) TWA-16	ACS/SBC, ACCUM, SBC	F150LP				73.0 Secs X 2 *[==>280.0 Secs (Copy 1)]* *[==>280.0 Secs (Copy 2)]*	*[1]*
2		(18) TWA-16	ACS/SBC, ACCUM, SBC	PR130L				1300.0 Secs X 2 *[==>1004.0 Secs (Copy 1)]* *[==>1004.0 Secs (Copy 2)]*	*[1]*

Orbit Structure



Visit

Proposal 11151, Visit 03, failed Wed Feb 04 02:01:55 GMT 2009

Diagnostic Status: No Diagnostics

Scientific Instruments: ACS/SBC

Special Requirements: (none)

Fixed Targets

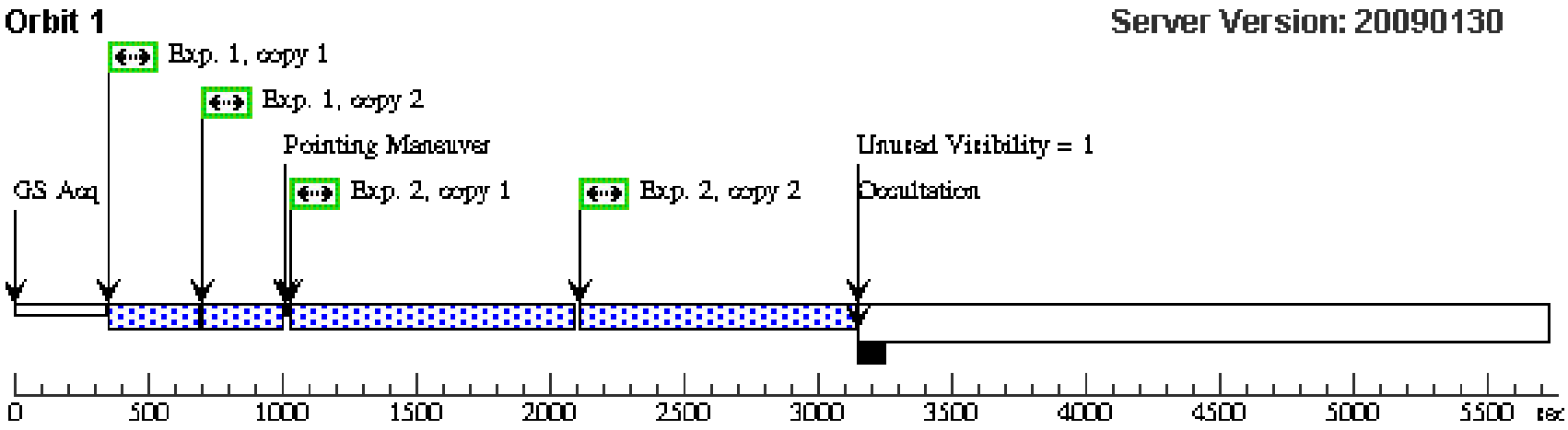
#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(3)	RX-J1842.9-3532	RA: 18 42 57.9700 (280.7415417d) Dec: -35 32 42.69 (-35.54519d) Equinox: J2000		V=12.28	Reference Frame: ICRS

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/[Actual Dur.]	Orbit
1		(3) RX-J1842.9-3532	ACS/SBC, ACCUM, SBC	F165LP				73.0 Secs X 2 *[==>270.0 Secs (Copy 1)]* *[==>270.0 Secs (Copy 2)]*	*[1]*
2		(3) RX-J1842.9-3532	ACS/SBC, ACCUM, SBC	PR130L				1300.0 Secs X 2 *[==>1006.0 Secs (Copy 1)]* *[==>1006.0 Secs (Copy 2)]*	*[1]*

Orbit Structure



Visit

Proposal 11151, Visit 02, completed Wed Feb 04 02:01:56 GMT 2009

Diagnostic Status: No Diagnostics

Scientific Instruments: ACS/SBC

Special Requirements: (none)

Fixed Targets

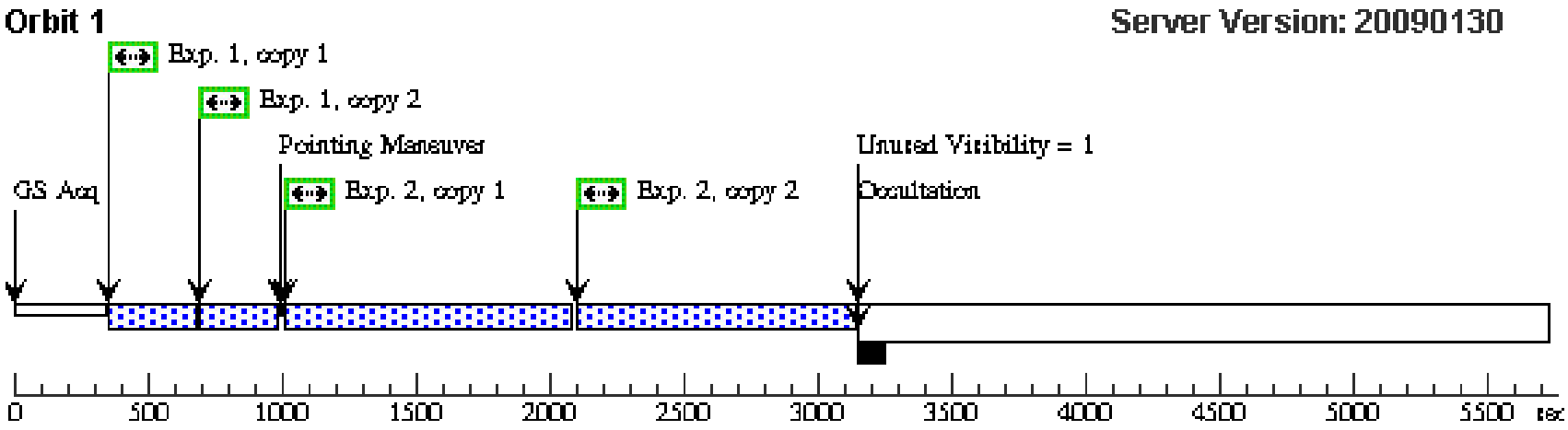
#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(2)	RX-J1852.3-3700	RA: 18 52 17.2990 (283.0720792d) Dec: -37 00 11.95 (-37.00332d) Equinox: J2000		V=12.35	Reference Frame: ICRS

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/[Actual Dur.]	Orbit
1		(2) RX-J1852.3-3700	ACS/SBC, ACCUM, SBC	F165LP				73.0 Secs X 2 *[==>260.0 Secs (Copy 1)]* *[==>260.0 Secs (Copy 2)]*	*[1]*
2		(2) RX-J1852.3-3700	ACS/SBC, ACCUM, SBC	PR130L				1300.0 Secs X 2 *[==>1016.0 Secs (Copy 1)]* *[==>1016.0 Secs (Copy 2)]*	*[1]*

Orbit Structure



Visit

Proposal 11151, Visit 51, completed Wed Feb 04 02:01:56 GMT 2009

Diagnostic Status: No Diagnostics

Scientific Instruments: ACS/SBC

Special Requirements: (none)

Comments: This is a copy of failed visit 1.

Fixed Targets

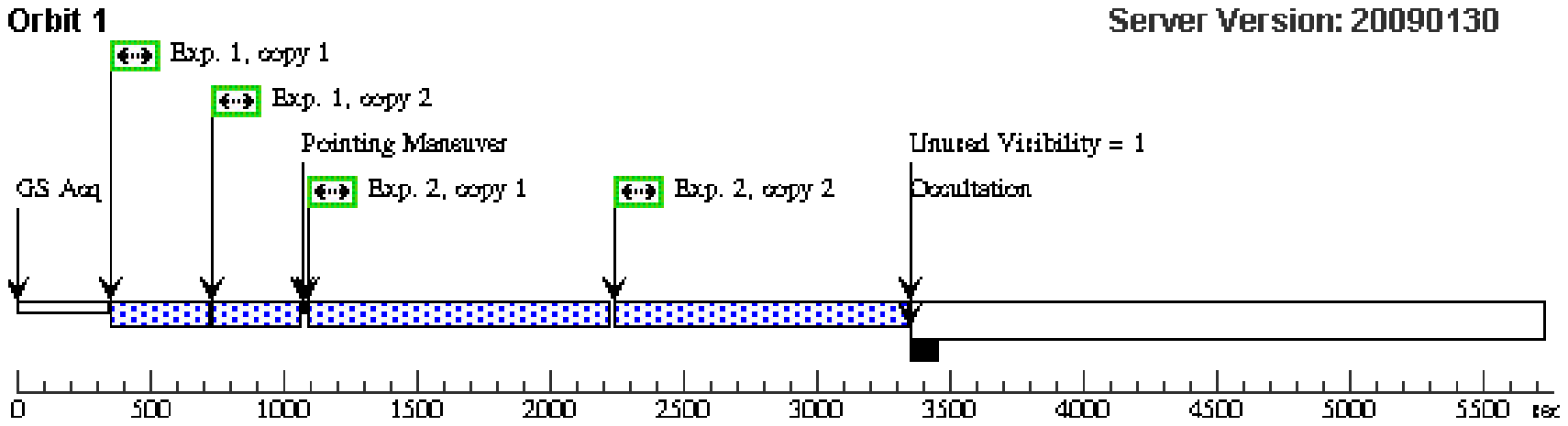
#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(1)	RX-J1111.7-7620	RA: 11 11 44.0000 (167.9333333d) Dec: -76 20 10.00 (-76.33611d) Equinox: J2000		V=12.05	Reference Frame: ICRS

Comments: The coordinates are offset by 8.4 arcsec from the star to place the nearby CTTS XX Cha in the image. We do not request a specific RA, but the PR130L image may also include the secondary target if the PA turns out to be favorable.

Exposures

#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit
1		(1) RX-J1111.7-7620	ACS/SBC, ACCUM, SBC	F165LP				73.0 Secs X 2	
								[==>300.0 Secs (Copy 1)] *[==>300.0 Secs (Copy 2)]*	***[1]***
2		(1) RX-J1111.7-7620	ACS/SBC, ACCUM, SBC	PR130L				1074.0 Secs X 2	
								[==>(Copy 1)] *[==>(Copy 2)]*	***[1]***

Orbit Structure



Visit

Proposal 11151, Visit 53, completed Wed Feb 04 02:01:56 GMT 2009

Diagnostic Status: No Diagnostics

Scientific Instruments: ACS/SBC

Special Requirements: (none)

Comments: This is a repeat of failed visit 03.

Fixed Targets

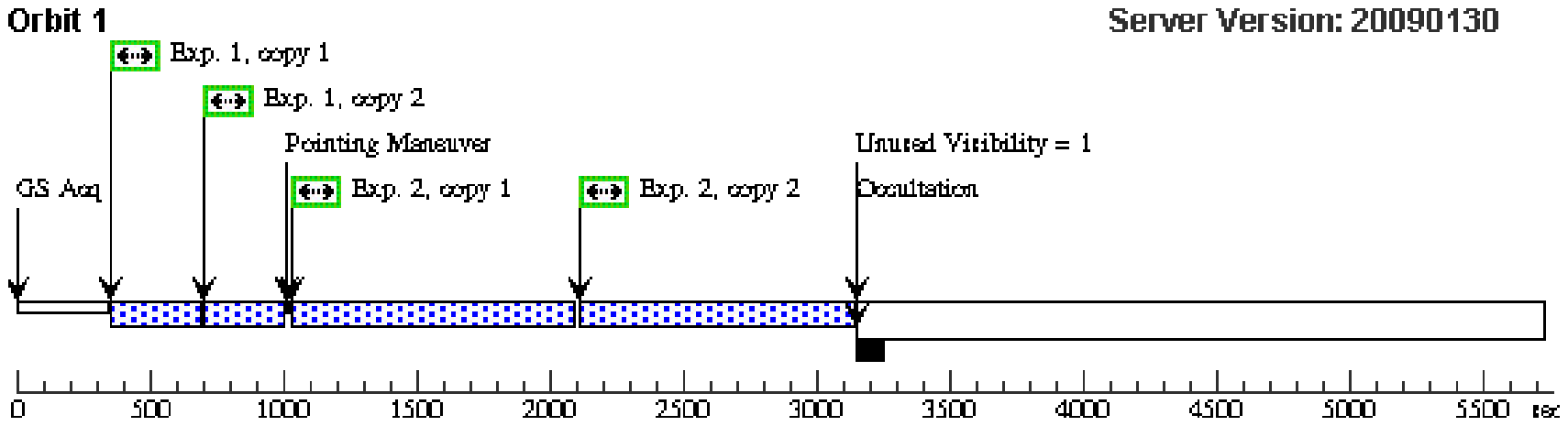
#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(3)	RX-J1842.9-3532	RA: 18 42 57.9700 (280.7415417d) Dec: -35 32 42.69 (-35.54519d) Equinox: J2000		V=12.28	Reference Frame: ICRS

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/[Actual Dur.]	Orbit
1		(3) RX-J1842.9-3532	ACS/SBC, ACCUM, SBC	F165LP				73.0 Secs X 2 *[==>270.0 Secs (Copy 1)]* *[==>270.0 Secs (Copy 2)]*	*[1]*
2		(3) RX-J1842.9-3532	ACS/SBC, ACCUM, SBC	PR130L				1300.0 Secs X 2 *[==>1006.0 Secs (Copy 1)]* *[==>1006.0 Secs (Copy 2)]*	*[1]*

Orbit Structure



Visit

Proposal 11151, Visit 55, failed Wed Feb 04 02:01:56 GMT 2009

Diagnostic Status: No Diagnostics

Scientific Instruments: ACS/SBC

Special Requirements: (none)

Comments: This is a repeat of failed visit 05.

Fixed Targets

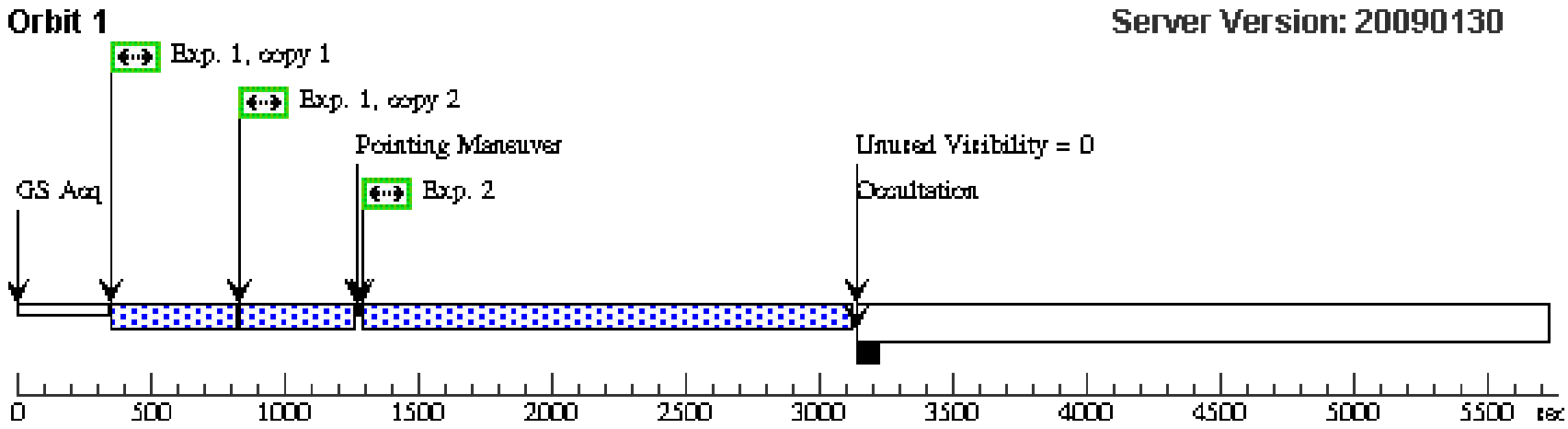
#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(5)	BHS98-MHO-5	RA: 04 32 16.0600 (68.0669167d) Dec: +18 12 46.40 (18.21289d) Equinox: J2000		V=16.9	Reference Frame: ICRS

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/[Actual Dur.]	Orbit
1		(5) BHS98-MHO-5	ACS/SBC, ACCUM, SBC	F125LP				73.0 Secs X 2 *[==>400.0 Secs (Copy 1)]* *[==>400.0 Secs (Copy 2)]*	*[1]*
2		(5) BHS98-MHO-5	ACS/SBC, ACCUM, SBC	PR130L				1300.0 Secs *[==>1773.0 Secs]*	*[1]*

Orbit Structure



Visit

Proposal 11151, Visit 56, completed Wed Feb 04 02:01:57 GMT 2009

Diagnostic Status: No Diagnostics

Scientific Instruments: ACS/SBC

Special Requirements: (none)

Comments: This is a copy of failed visit 16.

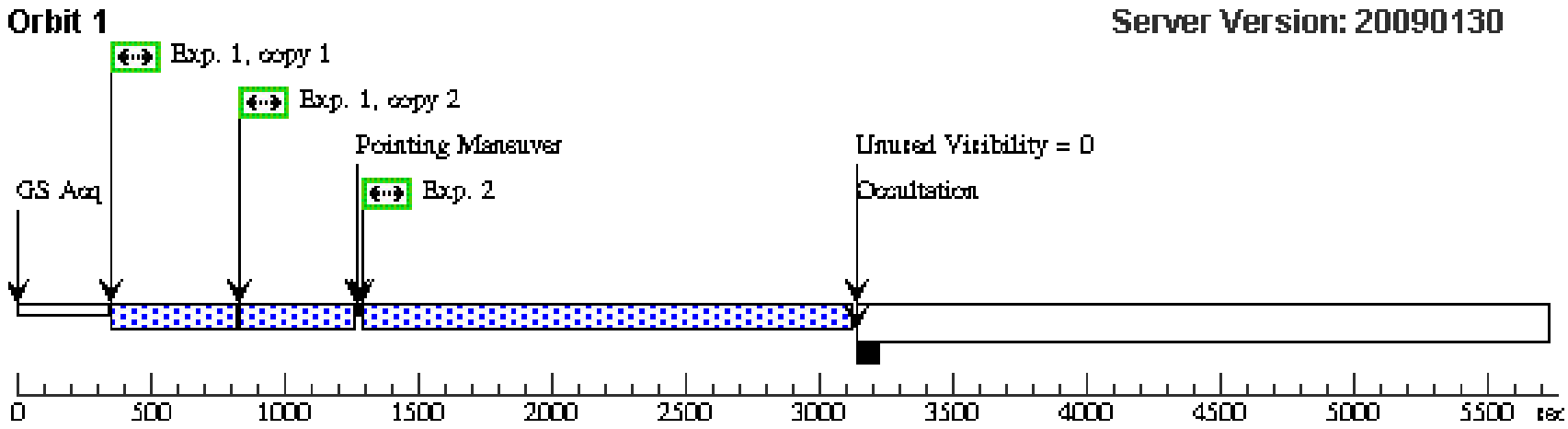
Fixed Targets

#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(16)	SCHJ0439016+2336030	RA: 04 39 1.6300 (69.7567917d) Dec: +23 36 2.90 (23.60081d) Equinox: J2000		V=15.9	Reference Frame: ICRS

Exposures

#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit
1		(16) SCHJ0439016+2336030	ACS/SBC, ACCUM, SBC	F140LP				73.0 Secs X 2 *[==>400.0 Secs (Copy 1)]* *[==>400.0 Secs (Copy 2)]*	*[1]*
2		(16) SCHJ0439016+2336030	ACS/SBC, ACCUM, SBC	PR130L				1300.0 Secs *[==>1767.0 Secs]*	*[1]*

Orbit Structure



Visit

Proposal 11151, Visit 57

Wed Feb 04 02:01:57 GMT 2009

Diagnostic Status: No Diagnostics

Scientific Instruments: ACS/SBC

Special Requirements: (none)

Comments: This is a visit for a new target as a replacement for failed Visit 55.

Fixed Targets

#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(19)	2MASSJ11321831-3019518	RA: 11 32 18.3100 (173.0762917d) Dec: -30 19 51.80 (-30.33106d) Equinox: J2000		V=16	Reference Frame: ICRS

Exposures

#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit
1		(19) 2MASSJ11321831-3019518	ACS/SBC, ACCUM, SBC	F125LP				650.0 Secs X 2 *[==>640.0 Secs (Copy 1)]* *[==>640.0 Secs (Copy 2)]*	*[1]*
2		(19) 2MASSJ11321831-3019518	ACS/SBC, ACCUM, SBC	PR130L				1300.0 Secs *[==>1100.0 Secs]*	*[1]*

Orbit Structure