12542 - A Multispectral Survey of the Translucent Cloud in front of HD 204827

Cycle: 19, 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) HD-204827	COS/FUV	3	09-Jul-2011 21:09:26.0	yes
03	(1) HD-204827	COS/FUV	3	09-Jul-2011 21:09:36.0	yes
02	(1) HD-204827	STIS/CCD STIS/NUV-MAMA	4	09-Jul-2011 21:09:48.0	yes

Visit	*Targets used in Visit*	*Configurations used in Visit*	*Orbits Used*	*Last Orbit Planner Run*	*OP Current with Visit?*
04	(1) HD-204827	COS/FUV	3	09-Jul-2011 21:09:56.0	yes
05	(1) HD-204827	COS/FUV	3	09-Jul-2011 21:10:07.0	yes
06	(1) HD-204827	STIS/CCD STIS/NUV-MAMA	4	09-Jul-2011 21:10:19.0	yes
07	(1) HD-204827	COS/FUV	3	09-Jul-2011 21:10:26.0	yes
08	(1) HD-204827	COS/FUV	3	09-Jul-2011 21:10:35.0	yes
09	(1) HD-204827	STIS/CCD STIS/NUV-MAMA	4	09-Jul-2011 21:10:46.0	yes

30 Total Orbits Used

ABSTRACT

We propose to observe interstellar absorption toward the O V 9 star HD 204827 for 30 orbits in order to make a comprehensive survey of the prototypical translucent molecular cloud that lies in the direction of that star. The high throughput of COS at medium resolution will make it possible to overcome the effects of the extinction at the shorter UV wavelengths while STIS will be used to cover important features at longer wavelengths. These data will enable us to: test and refine chemical models; infer elemental depletions; estimate the density and radiation field intensity (by measuring the ionization balance and molecular excitation); and search for new molecules, including complex organics. We will use a combination of medium-resolution STIS and COS observations, and also a wide variety of ancillary instruments in space (the Spitzer Space Telescope) and on the ground (optical and infrared spectrographs, radio spectrometers, and laboratory spectroscopic measurements). The result of this program, including the ancillary observations, will be the most complete analysis of any isolated translucent interstellar cloud.

OBSERVING DESCRIPTION

30 Orbits on reddened point source target to study the cold ISM.

We will observe HD204827, a spectroscopic binary, in 3 "sessions" at 3 different phases in its orbit. We are interested in ISM absorption lines that do NOT change with orbit phase. Lines that DO change with phase can be safely assumed to be stellar lines.

The "50-100 days later" time contraints on visits 04 & 07 are necessary to acquire spectra at different phases.

Each session will involve 3 visits of 3, 3, & 4 orbits each. The visits within each session need to be within 2 days of each other to be close enough to

the same phase of the binary orbit, hence the time contraints of visits 02 & 03 after 01, 05 & 06 after 04 and 08 & 09 after 07.
The two 3-orbit visits will use COS. The 4-orbit visit will use STIS.

For all targets the STIS and COS online ETCs were run using Low resolution IUE and FOS data. ETC IDs are included in the comment sections of the exposures.

The special requirement of CVZ is requested as high signal to noise ratios are critical for measuring weak absorption lines.

Proposal 12542 - Visit 01 - A Multispectral Survey of the Translucent Cloud in front of HD 204827

Visit

Proposal 12542, Visit 01 Sun Jul 10 01:10:52 GMT 2011

Diagnostic Status: Warning

Scientific Instruments: COS/FUV

Special Requirements: CVZ

Comments: Uses multiple central wavelengths but only one FP-POS setting. A different FP-POS setting is used in the next COS visit in this session and then a different pair of settings is used in each of the other sessions.

Diagnostics

(Visit 01) Warning (Form): If the target coordinates are not known to 0.4" (or better) an ACQ/SEARCH should precede the ACQ/PEAKXD.

(Visit 01) Warning (Form): For the best data quality, it is strongly recommended that all four FP-POS positions be used when observing at a given COS CENWAVE setting.

Fixed Targets

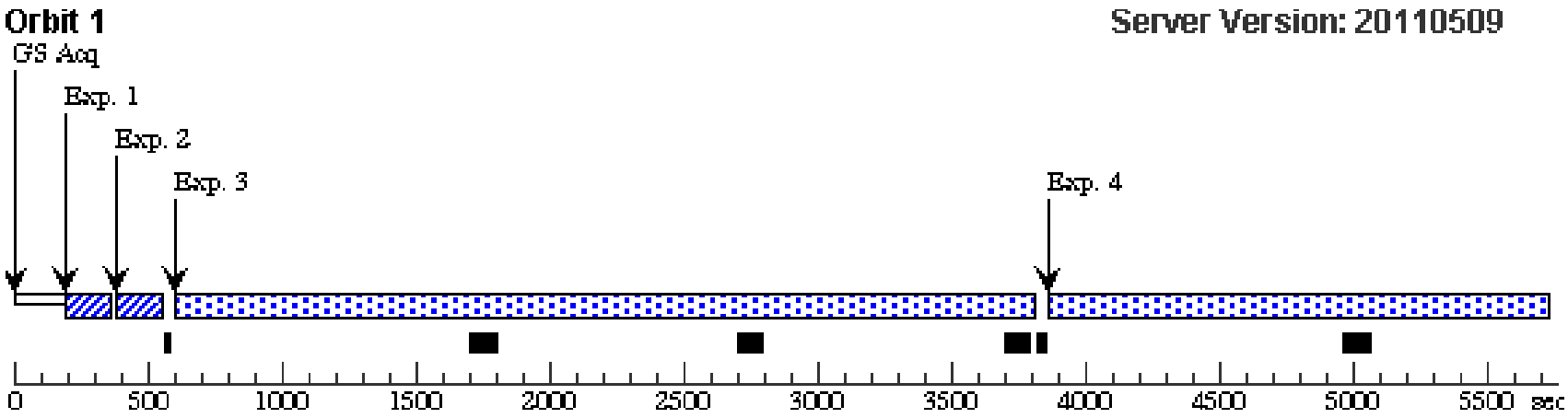
#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(1)	HD-204827	RA: 21 28 57.7610 (322.2406708d) Dec: +58 44 23.24 (58.73979d) Equinox: J2000		V=8.0	Reference Frame: ICRS

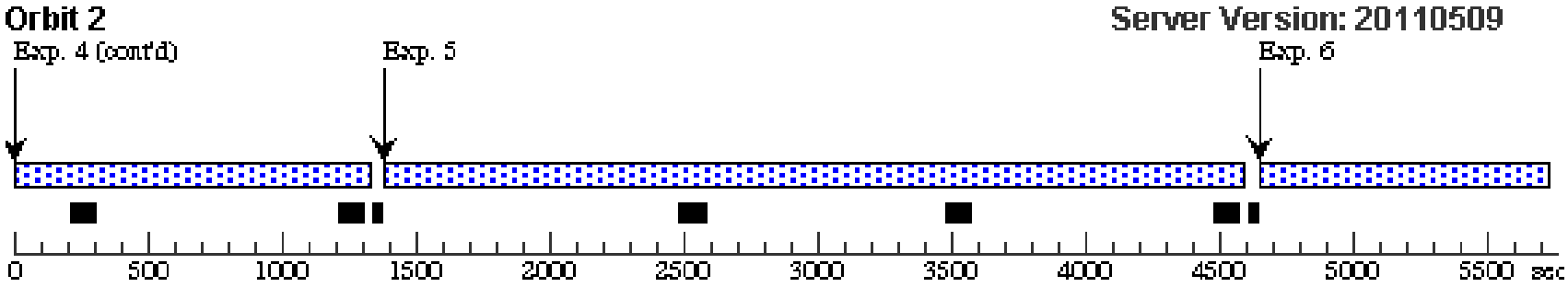
Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.

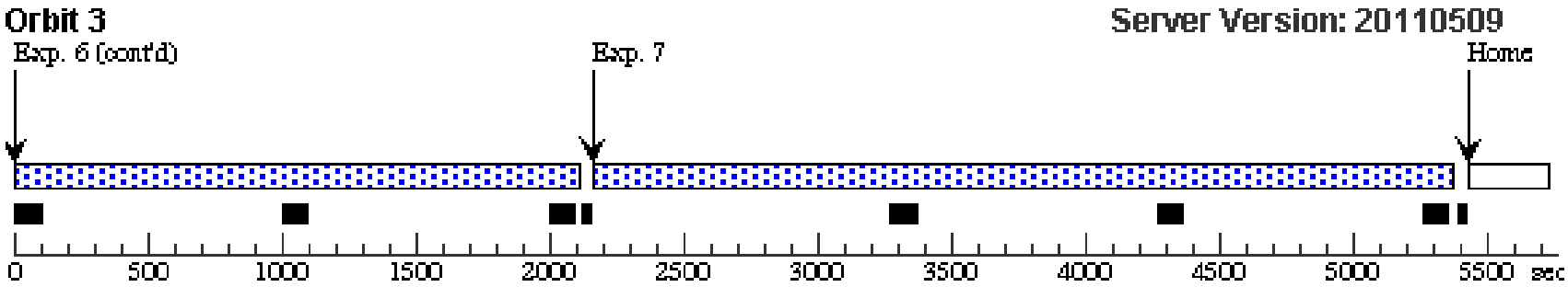
Exposures

#	Label (ETC Run)	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit
1	COS Target Acquisition (186459)	(1) HD-204827	COS/FUV, ACQ/PEAKXD, PSA	G130M 1291 A				2.8 Secs *[==>]*	***[1]***
	Comments: File: final_HD204827.dat *ETC ID:COS.sa.186459*								
2	COS Target Acquisition (186459)	(1) HD-204827	COS/FUV, ACQ/PEAKD, PSA	G130M 1291 A	NUM-POS=5; STEP-SIZE=0.9; CENTER=FLUX-WT-FLR			2.8 Secs *[==>]*	***[1]***
	Comments: File: final_HD204827.dat *ETC ID:COS.sa.186459*								
3	HD 204827 COS G130M (186429)	(1) HD-204827	COS/FUV, TIME-TAG, PSA	G130M 1291 A	BUFFER-TIME=998; FP-POS=1			3089 Secs *[==>]*	***[1]***
	Comments: File: final_HD204827.dat *ETC ID: COS.sp.186429* *ETC Buffer time 2000*								
4	HD 204827 COS G130M (186429)	(1) HD-204827	COS/FUV, TIME-TAG, PSA	G130M 1300 A	BUFFER-TIME=998; FP-POS=1			3089 Secs *[==>]*	***[1]***
	Comments: File: final_HD204827.dat *ETC ID: COS.sp.186429* *ETC Buffer time 2000*								
5	HD 204827 COS G130M (186429)	(1) HD-204827	COS/FUV, TIME-TAG, PSA	G130M 1309 A	BUFFER-TIME=998; FP-POS=1			3089 Secs *[==>]*	***[2]***
	Comments: File: final_HD204827.dat *ETC ID: COS.sp.186429* *ETC Buffer time 2000*								
6	HD 204827 COS G130M (186429)	(1) HD-204827	COS/FUV, TIME-TAG, PSA	G130M 1318 A	BUFFER-TIME=998; FP-POS=1			3089 Secs *[==>]*	***[2]***
	Comments: File: final_HD204827.dat *ETC ID: COS.sp.186429* *ETC Buffer time 2000*								
7	HD 204827 COS G130M (186429)	(1) HD-204827	COS/FUV, TIME-TAG, PSA	G130M 1327 A	BUFFER-TIME=998; FP-POS=1			3089 Secs *[==>]*	***[3]***
	Comments: File: final_HD204827.dat *ETC ID: COS.sp.186429* *ETC Buffer time 2000*								

Orbit Structure







Proposal 12542 - Visit 03 - A Multispectral Survey of the Translucent Cloud in front of HD 204827

Visit

Proposal 12542, Visit 03 Sun Jul 10 01:10:54 GMT 2011

Diagnostic Status: Warning

Scientific Instruments: COS/FUV

Special Requirements: CVZ; AFTER 01 BY 0 D TO 2 D

Comments: Uses multiple central wavelengths but only one FP-POS setting. For G130M, a different FP-POS setting was used in the previous COS visit in this session and then a different pair of settings is used in each of the other sessions. For G160M, we use a different FP-POS in the corresponding visits in the other sessions.

G160M exposures do not include the 1623 central wavelength because that puts some lines of interest near 1613A in the central gap.

Diagnostics

(Visit 03) Warning (Form): For the best data quality, it is strongly recommended that all four FP-POS positions be used when observing at a given COS CENWAVE setting.

(Visit 03) Warning (Form): If the target coordinates are not known to 0.4" (or better) an ACQ/SEARCH should precede the ACQ/PEAKXD.

Fixed Targets

#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(1)	HD-204827	RA: 21 28 57.7610 (322.2406708d) Dec: +58 44 23.24 (58.73979d) Equinox: J2000		V=8.0	Reference Frame: ICRS

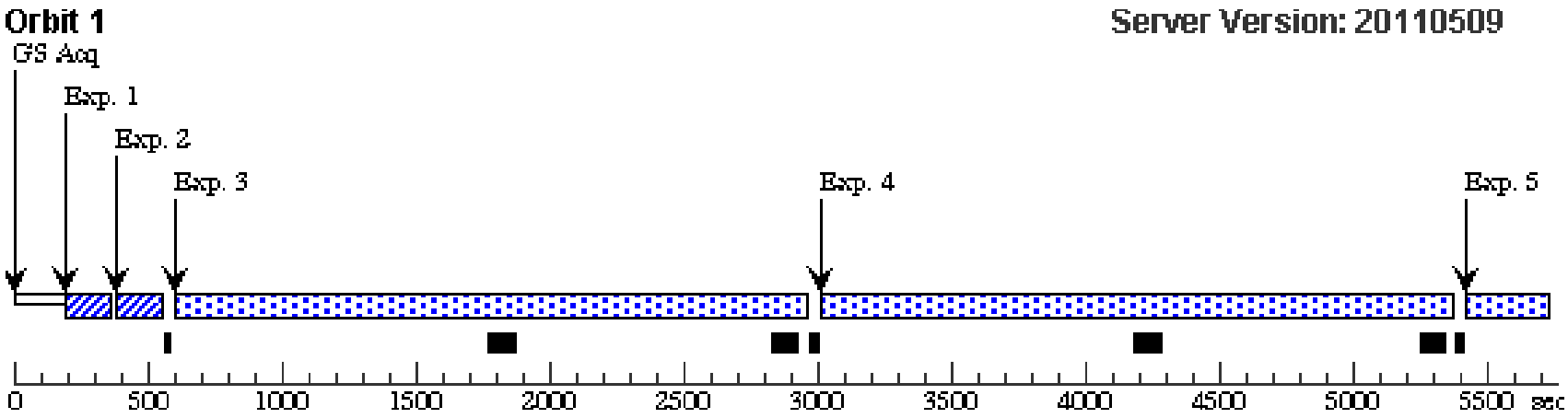
Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.

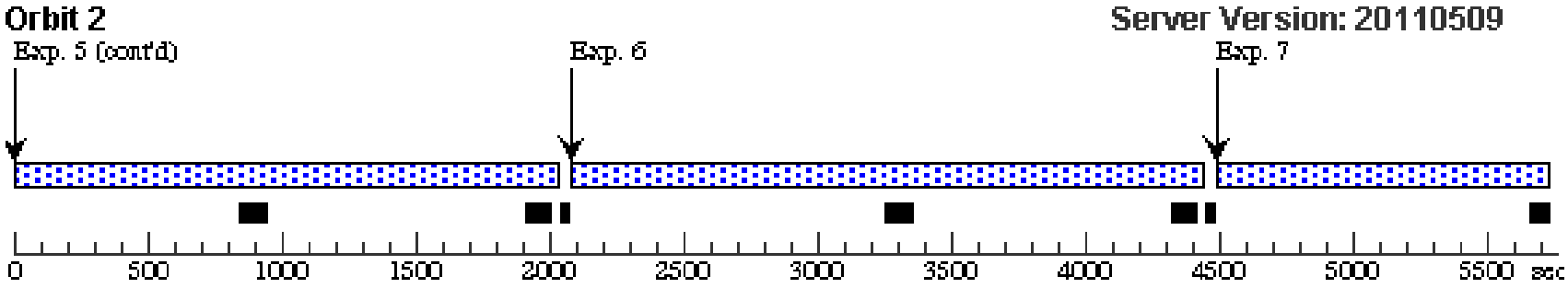
Exposures

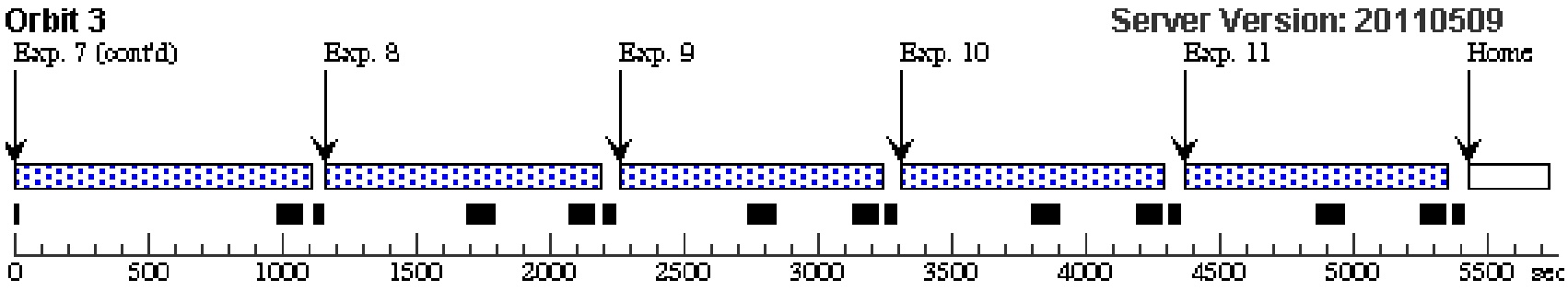
#	Label (ETC Run)	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit
1	COS Target Acquisition (186459)	(1) HD-204827	COS/FUV, ACQ/PEAKXD, PSA	G130M 1291 A				2.8 Secs *[==>]*	***[1]***
Comments: File: final_HD204827.dat *ETC ID:COS.sa.186459*									
2	COS Target Acquisition (186459)	(1) HD-204827	COS/FUV, ACQ/PEAKD, PSA	G130M 1291 A	NUM-POS=5; STEP-SIZE=0.9; CENTER=FLUX-WT-FLR			2.8 Secs *[==>]*	***[1]***
Comments: File: final_HD204827.dat *ETC ID:COS.sa.186459*									
3	HD 204827 COS G130M (186430)	(1) HD-204827	COS/FUV, TIME-TAG, PSA	G130M 1291 A	BUFFER-TIME=1066; FP-POS=2			2234 Secs *[==>]*	***[1]***
Comments: File: final_HD204827.dat *ETC ID: COS.sp.186430* *ETC Buffer Time 2000*									
4	HD 204827 COS G130M (186430)	(1) HD-204827	COS/FUV, TIME-TAG, PSA	G130M 1300 A	BUFFER-TIME=1066; FP-POS=2			2234 Secs *[==>]*	***[1]***
Comments: File: final_HD204827.dat *ETC ID: COS.sp.186430* *ETC Buffer Time 2000*									
5	HD 204827 COS G130M (186430)	(1) HD-204827	COS/FUV, TIME-TAG, PSA	G130M 1309 A	BUFFER-TIME=1066; FP-POS=2			2234 Secs *[==>]*	***[1]***
Comments: File: final_HD204827.dat *ETC ID: COS.sp.186430* *ETC Buffer Time 2000*									
6	HD 204827 COS G130M (186430)	(1) HD-204827	COS/FUV, TIME-TAG, PSA	G130M 1318 A	BUFFER-TIME=1066; FP-POS=2			2234 Secs *[==>]*	***[2]***
Comments: File: final_HD204827.dat *ETC ID: COS.sp.186430* *ETC Buffer Time 2000*									
7	HD 204827 COS G130M (186430)	(1) HD-204827	COS/FUV, TIME-TAG, PSA	G130M 1327 A	BUFFER-TIME=1066; FP-POS=2			2234 Secs *[==>]*	***[2]***
Comments: File: final_HD204827.dat *ETC ID: COS.sp.186430* *ETC Buffer Time 2000*									
8	HD 204827 COS G160M (186433)	(1) HD-204827	COS/FUV, TIME-TAG, PSA	G160M 1577 A	BUFFER-TIME=384; FP-POS=1			861 Secs *[==>]*	***[3]***
Comments: File: final_HD204827.dat *ETC ID: COS.sp.186433* *ETC Buffer Time 872*									

	9	HD 204827 COS G160 M (186433)	(1) HD-204827	COS/FUV, TIME-TAG, PSA	G160M 1589 A	BUFFER-TIME=384; FP-POS=1	861 Secs *[==>]*	***[3]***
		Comments: File: final_HD204827.dat *ETC ID: COS.sp.186433* *ETC Buffer Time 872*						
	10	HD 204827 COS G160 M (186433)	(1) HD-204827	COS/FUV, TIME-TAG, PSA	G160M 1600 A	BUFFER-TIME=384; FP-POS=1	861 Secs *[==>]*	***[3]***
		Comments: File: final_HD204827.dat *ETC ID: COS.sp.186433* *ETC Buffer Time 872*						
	11	HD 204827 COS G160 M (186433)	(1) HD-204827	COS/FUV, TIME-TAG, PSA	G160M 1611 A	BUFFER-TIME=384; FP-POS=1	861 Secs *[==>]*	***[3]***
		Comments: File: final_HD204827.dat *ETC ID: COS.sp.186433* *ETC Buffer Time 872*						

Orbit Structure







Visit

Proposal 12542, Visit 02 Sun Jul 10 01:10:54 GMT 2011

Diagnostic Status: No Diagnostics

Scientific Instruments: STIS/CCD, STIS/NUV-MAMA

Special Requirements: CVZ; AFTER 01 BY 0 D TO 2 D

Comments: BOT was run using the 0.2x0.2 aperture because BOT doesn't support the 0.2x0.2FP apertures. This was done on 2 representative exposures (one 1978, one 2707) and then changed back to 0.2x0.2FP*.*

Fixed Targets

#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(1)	HD-204827	RA: 21 28 57.7610 (322.2406708d) Dec: +58 44 23.24 (58.73979d) Equinox: J2000		V=8.0	Reference Frame: ICRS

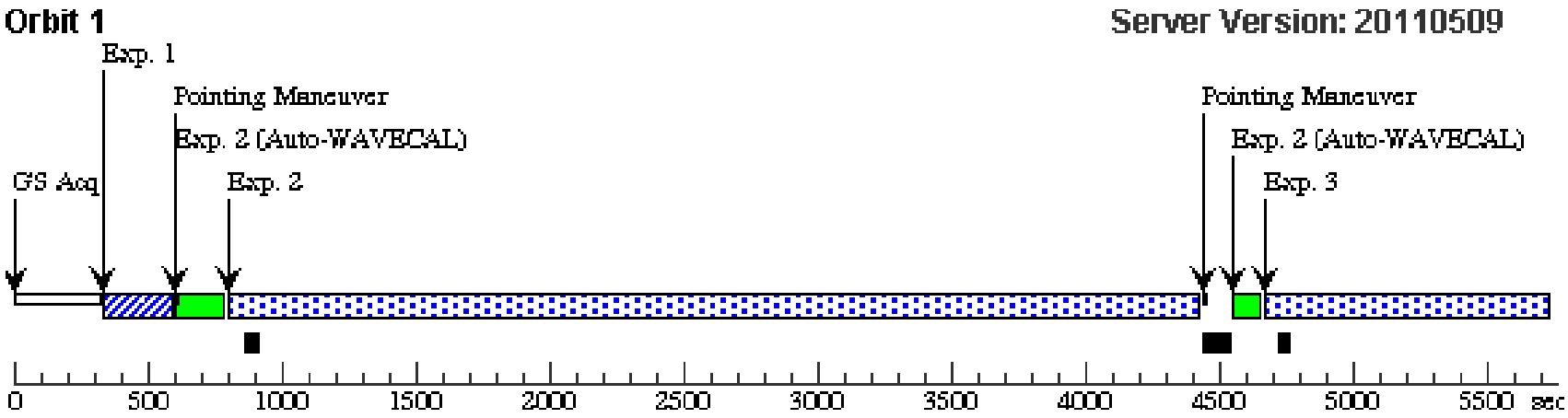
Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.

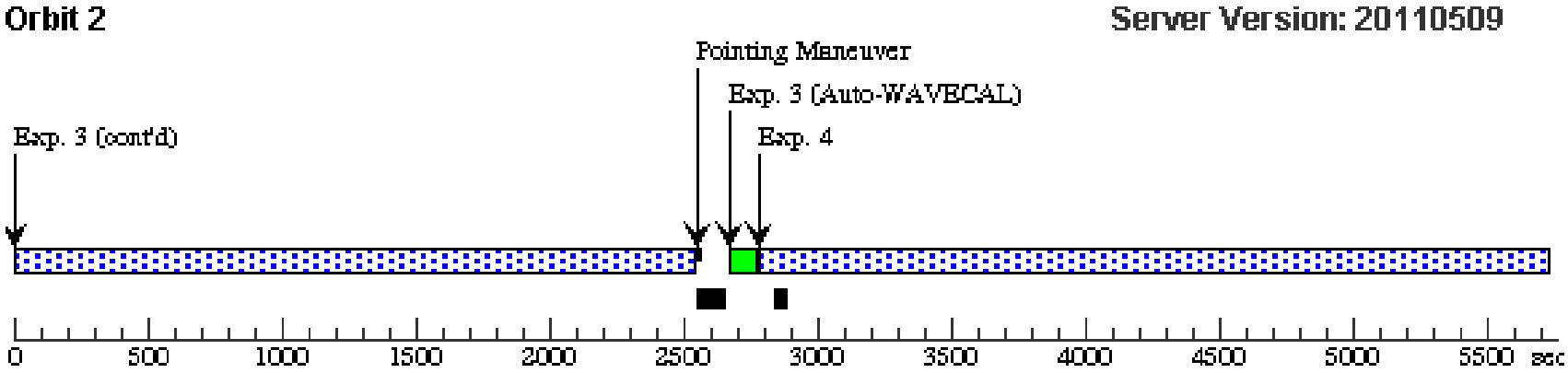
Exposures

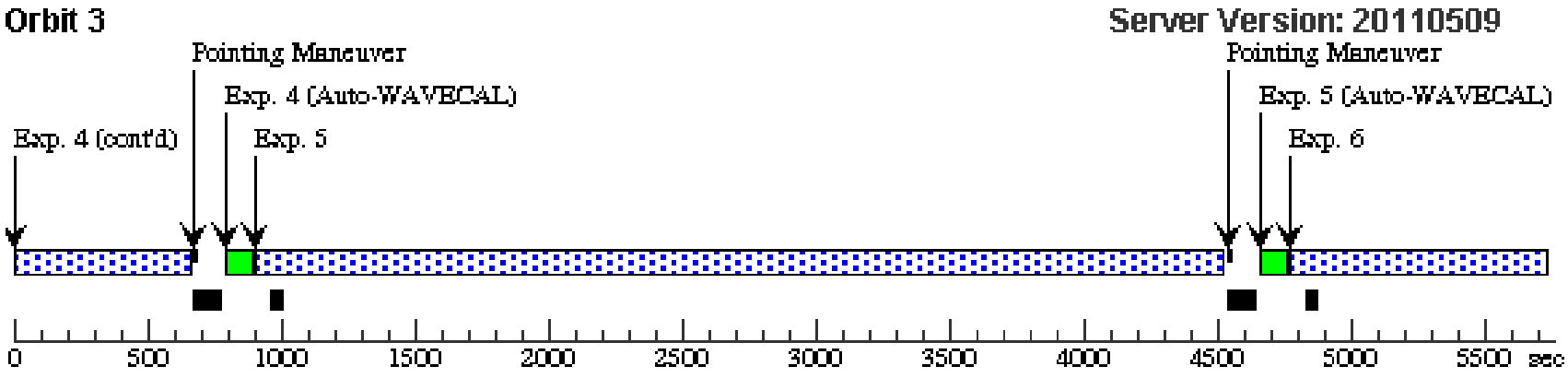
#	Label (ETC Run)	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit
1	STIS Target Acquisition (195661)	(1) HD-204827	STIS/CCD, ACQ, F28X50OII	MIRROR	ACQTYPE=POINT			0.1 Secs *[==>]*	***[1]***
	Comments: file: final_HD204827.dat *ETC ID: STIS.ta.195661*								
2	HD 204827 STIS E230 M (186476)	(1) HD-204827	STIS/NUV-MAMA, ACCUM, 0.2X0.2FPA	E230M 1978 A				3574 Secs *[==>]*	***[1]***
	Comments: file: final_HD204827.dat *ETC ID: STIS.sp.186476* *BOT was run by changing Aperture to 0.2X0.2 and then changing it back.*								
3	HD 204827 STIS E230 M (186476)	(1) HD-204827	STIS/NUV-MAMA, ACCUM, 0.2X0.2FPB	E230M 1978 A				3574 Secs *[==>]*	***[1]***
	Comments: file: final_HD204827.dat *ETC ID: STIS.sp.186476* *BOT was run by changing Aperture to 0.2X0.2 and then changing it back.*								
4	HD 204827 STIS E230 M (186476)	(1) HD-204827	STIS/NUV-MAMA, ACCUM, 0.2X0.2FPC	E230M 1978 A				3574 Secs *[==>]*	***[2]***
	Comments: file: final_HD204827.dat *ETC ID: STIS.sp.186476* *BOT was run by changing Aperture to 0.2X0.2 and then changing it back.*								
5	HD 204827 STIS E230 M (186476)	(1) HD-204827	STIS/NUV-MAMA, ACCUM, 0.2X0.2FPD	E230M 1978 A				3574 Secs *[==>]*	***[3]***
	Comments: file: final_HD204827.dat *ETC ID: STIS.sp.186476* *BOT was run by changing Aperture to 0.2X0.2 and then changing it back.*								
6	HD 204827 STIS E230 M (186476)	(1) HD-204827	STIS/NUV-MAMA, ACCUM, 0.2X0.2FPE	E230M 1978 A				3574 Secs *[==>]*	***[3]***
	Comments: file: final_HD204827.dat *ETC ID: STIS.sp.186476* *BOT was run by changing Aperture to 0.2X0.2 and then changing it back.*								
7	HD 204827 STIS E230 M (186480)	(1) HD-204827	STIS/NUV-MAMA, ACCUM, 0.2X0.2FPE	E230M 2707 A				363 Secs *[==>]*	***[4]***
	Comments: file: final_HD204827.dat *ETC ID: STIS.sp.186480* *BOT was run by changing Aperture to 0.2X0.2 and then changing it back.*								
8	HD 204827 STIS E230 M (186480)	(1) HD-204827	STIS/NUV-MAMA, ACCUM, 0.2X0.2FPD	E230M 2707 A				363 Secs *[==>]*	***[4]***
	Comments: file: final_HD204827.dat *ETC ID: STIS.sp.186480* *BOT was run by changing Aperture to 0.2X0.2 and then changing it back.*								

	9	HD 204827 STIS E230 M (186480)	(1) HD-204827	STIS/NUV-MAMA, ACCUM, 0.2X0.2FPC	E230M 2707 A	363 Secs *[==>]*	 ***[4]***
		Comments: file: final_HD204827.dat *ETC ID: STIS.sp.186480* *BOT was run by changing Aperture to 0.2X0.2 and then changing it back.*					
	10	HD 204827 STIS E230 M (186480)	(1) HD-204827	STIS/NUV-MAMA, ACCUM, 0.2X0.2FPB	E230M 2707 A	363 Secs *[==>]*	 ***[4]***
		Comments: file: final_HD204827.dat *ETC ID: STIS.sp.186480* *BOT was run by changing Aperture to 0.2X0.2 and then changing it back.*					
	11	HD 204827 STIS E230 M (186480)	(1) HD-204827	STIS/NUV-MAMA, ACCUM, 0.2X0.2FPA	E230M 2707 A	363 Secs *[==>]*	 ***[4]***
		Comments: file: final_HD204827.dat *ETC ID: STIS.sp.186480* *BOT was run by changing Aperture to 0.2X0.2 and then changing it back.*					

Orbit Structure






Orbit 3
Server Version: 20110509
Pointing Maneuver
Exp. 4 (Auto-WAVECAL)
Exp. 4 (cont'd)
Exp. 5
Pointing Maneuver
Exp. 5 (Auto-WAVECAL)
Exp. 6
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500
1000
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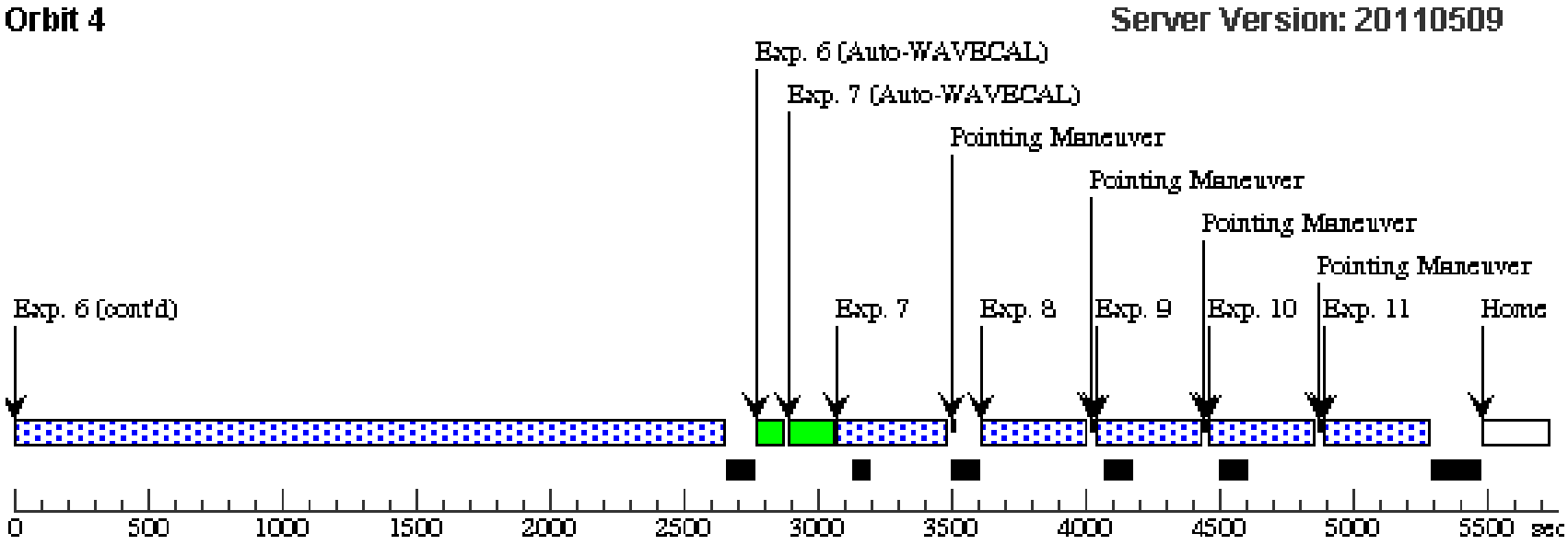
2000
2500
3000
3500
4000
4500
5000
5500
sec


Orbit 4
Server Version: 20110509
Exp. 6 (Auto-WAVECAL)
Exp. 7 (Auto-WAVECAL)
Pointing Maneuver
Pointing Maneuver
Pointing Maneuver
Pointing Maneuver
Exp. 6 (cont'd)
Exp. 7
Exp. 8
Exp. 9
Exp. 10
Exp. 11
Home
0
500
1000
1500
2000
2500
3000
3500
4000
4500
5000
5500
sec

Visit

Proposal 12542, Visit 04 Sun Jul 10 01:10:55 GMT 2011

Diagnostic Status: Warning

Scientific Instruments: COS/FUV

Special Requirements: CVZ; AFTER 03 BY 50 D TO 100 D

Comments: Uses multiple central wavelengths but only one FP-POS setting. A different FP-POS setting is used in the next COS visit in this session and then a different pair of settings is used in each of the other sessions.

Diagnostics

(Visit 04) Warning (Form): For the best data quality, it is strongly recommended that all four FP-POS positions be used when observing at a given COS CENWAVE setting.

(Visit 04) Warning (Form): If the target coordinates are not known to 0.4" (or better) an ACQ/SEARCH should precede the ACQ/PEAKXD.

Fixed Targets

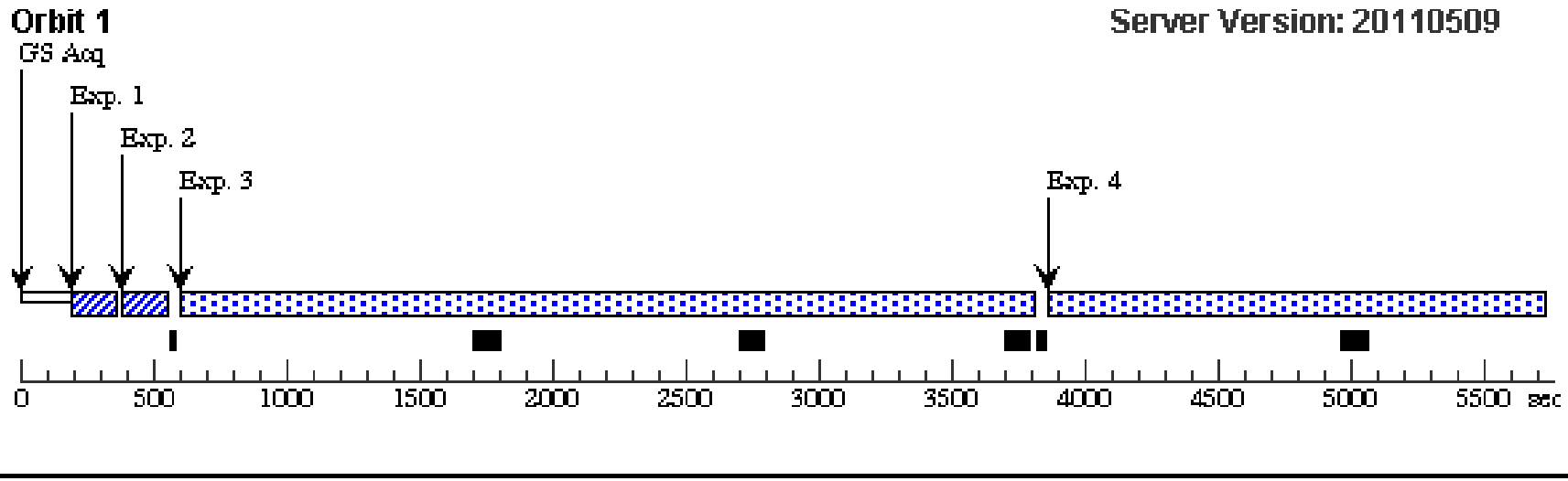
#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(1)	HD-204827	RA: 21 28 57.7610 (322.2406708d) Dec: +58 44 23.24 (58.73979d) Equinox: J2000		V=8.0	Reference Frame: ICRS

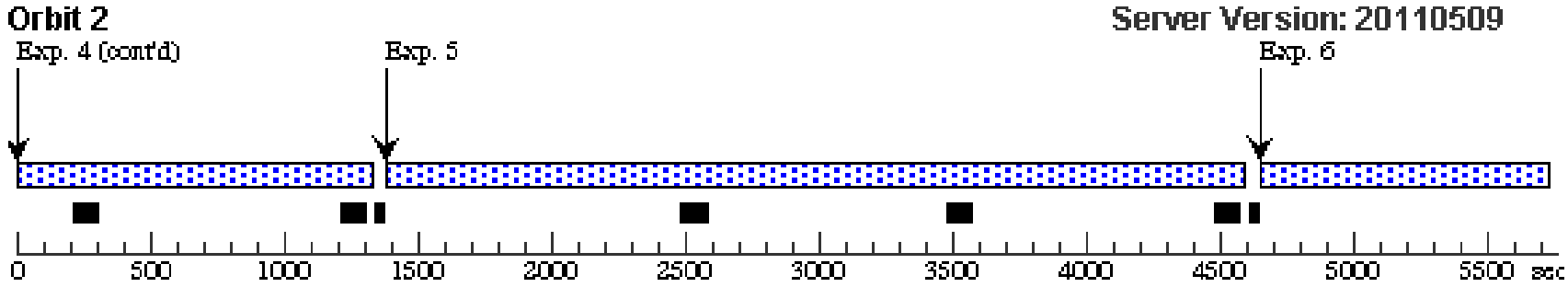
Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.

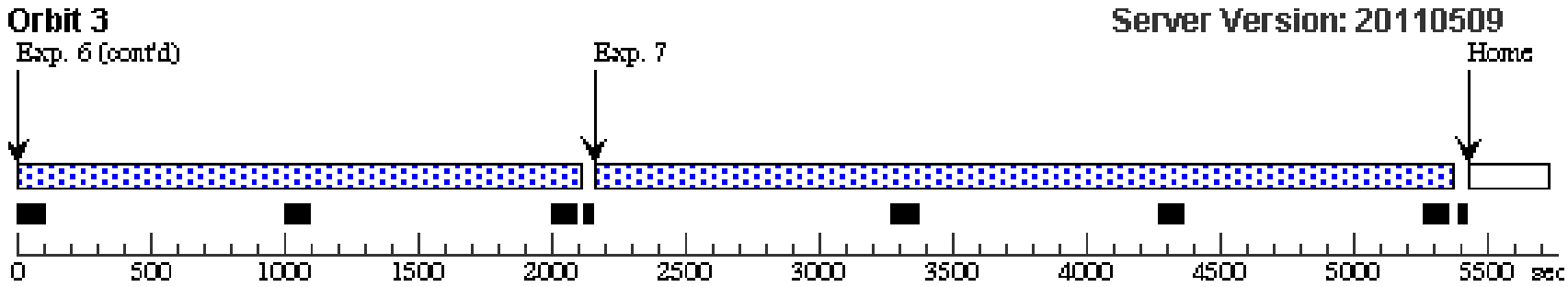
Exposures

#	Label (ETC Run)	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit
1	COS Target Acquisition (186459)	(1) HD-204827	COS/FUV, ACQ/PEAKXD, PSA	G130M 1291 A				2.8 Secs *[==>]*	***[1]***
	Comments: File: final_HD204827.dat *ETC ID:COS.sa.186459*								
2	COS Target Acquisition (186459)	(1) HD-204827	COS/FUV, ACQ/PEAKD, PSA	G130M 1291 A	NUM-POS=5; STEP-SIZE=0.9; CENTER=FLUX-WT-FLR			2.8 Secs *[==>]*	***[1]***
	Comments: File: final_HD204827.dat *ETC ID:COS.sa.186459*								
3	HD 204827 COS G130 M (186429)	(1) HD-204827	COS/FUV, TIME-TAG, PSA	G130M 1291 A	BUFFER-TIME=998; FP-POS=2			3089 Secs *[==>]*	***[1]***
	Comments: File: final_HD204827.dat *ETC ID: COS.sp.186429* *ETC Buffer time 2000*								
4	HD 204827 COS G130 M (186429)	(1) HD-204827	COS/FUV, TIME-TAG, PSA	G130M 1300 A	BUFFER-TIME=998; FP-POS=2			3089 Secs *[==>]*	***[1]***
	Comments: File: final_HD204827.dat *ETC ID: COS.sp.186429* *ETC Buffer time 2000*								
5	HD 204827 COS G130 M (186429)	(1) HD-204827	COS/FUV, TIME-TAG, PSA	G130M 1309 A	BUFFER-TIME=998; FP-POS=2			3089 Secs *[==>]*	***[2]***
	Comments: File: final_HD204827.dat *ETC ID: COS.sp.186429* *ETC Buffer time 2000*								
6	HD 204827 COS G130 M (186429)	(1) HD-204827	COS/FUV, TIME-TAG, PSA	G130M 1318 A	BUFFER-TIME=998; FP-POS=2			3089 Secs *[==>]*	***[2]***
	Comments: File: final_HD204827.dat *ETC ID: COS.sp.186429* *ETC Buffer time 2000*								
7	HD 204827 COS G130 M (186429)	(1) HD-204827	COS/FUV, TIME-TAG, PSA	G130M 1327 A	BUFFER-TIME=998; FP-POS=2			3089 Secs *[==>]*	***[3]***
	Comments: File: final_HD204827.dat *ETC ID: COS.sp.186429* *ETC Buffer time 2000*								

Orbit Structure







Visit

Proposal 12542, Visit 05 Sun Jul 10 01:10:56 GMT 2011

Diagnostic Status: Warning

Scientific Instruments: COS/FUV

Special Requirements: CVZ; AFTER 04 BY 0 D TO 2 D

Comments: Uses multiple central wavelengths but only one FP-POS setting. For G130M, a different FP-POS setting was used in the previous COS visit in this session and then a different pair of settings is used in each of the other sessions. For G160M, we use a different FP-POS in the corresponding visits in the other sessions.

G160M exposures do not include the 1623 central wavelength because that puts some lines of interest near 1613A in the central gap.

Diagnostics

(Visit 05) Warning (Form): For the best data quality, it is strongly recommended that all four FP-POS positions be used when observing at a given COS CENWAVE setting.

(Visit 05) Warning (Form): If the target coordinates are not known to 0.4" (or better) an ACQ/SEARCH should precede the ACQ/PEAKXD.

Fixed Targets

#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(1)	HD-204827	RA: 21 28 57.7610 (322.2406708d) Dec: +58 44 23.24 (58.73979d) Equinox: J2000		V=8.0	Reference Frame: ICRS

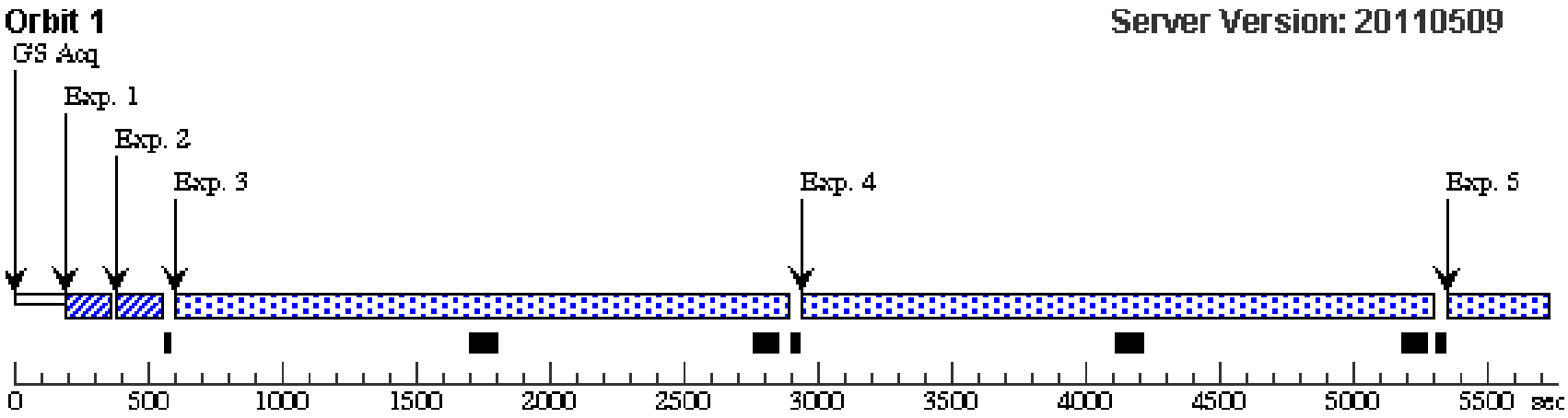
Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.

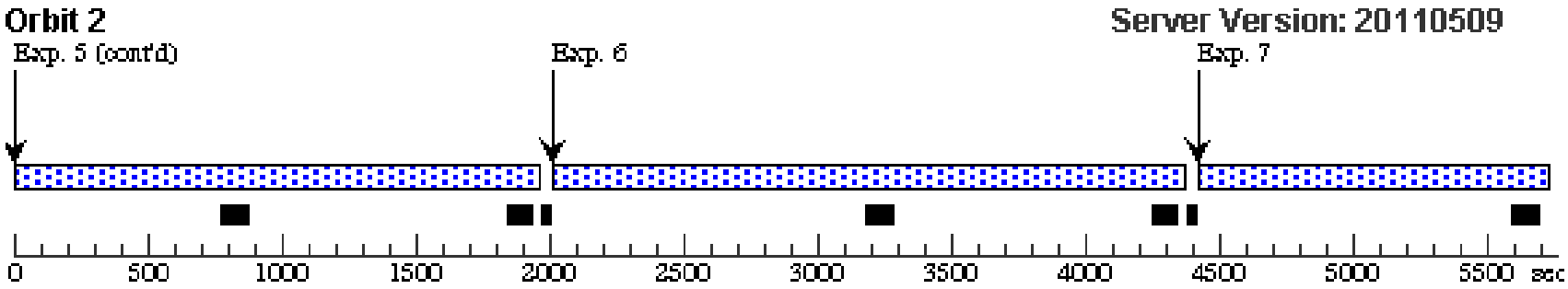
Exposures

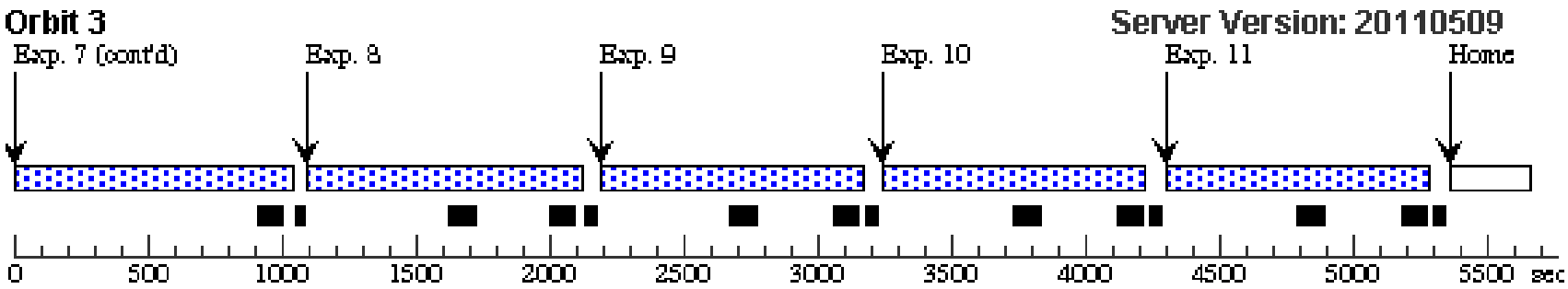
#	Label (ETC Run)	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit
1	COS Target Acquisition (186459)	(1) HD-204827	COS/FUV, ACQ/PEAKXD, PSA	G130M 1291 A				2.8 Secs *[==>]*	***[1]***
Comments: File: final_HD204827.dat *ETC ID:COS.sa.186459*									
2	COS Target Acquisition (186459)	(1) HD-204827	COS/FUV, ACQ/PEAKD, PSA	G130M 1291 A	NUM-POS=5; STEP-SIZE=0.9; CENTER=FLUX-WT-FLR			2.8 Secs *[==>]*	***[1]***
Comments: File: final_HD204827.dat *ETC ID:COS.sa.186459*									
3	HD 204827 COS G130M (186430)	(1) HD-204827	COS/FUV, TIME-TAG, PSA	G130M 1291 A	BUFFER-TIME=1066; FP-POS=3			2234 Secs *[==>]*	***[1]***
Comments: File: final_HD204827.dat *ETC ID: COS.sp.186430* *ETC Buffer Time 2000*									
4	HD 204827 COS G130M (186430)	(1) HD-204827	COS/FUV, TIME-TAG, PSA	G130M 1300 A	BUFFER-TIME=1066; FP-POS=3			2234 Secs *[==>]*	***[1]***
Comments: File: final_HD204827.dat *ETC ID: COS.sp.186430* *ETC Buffer Time 2000*									
5	HD 204827 COS G130M (186430)	(1) HD-204827	COS/FUV, TIME-TAG, PSA	G130M 1309 A	BUFFER-TIME=1066; FP-POS=3			2234 Secs *[==>]*	***[1]***
Comments: File: final_HD204827.dat *ETC ID: COS.sp.186430* *ETC Buffer Time 2000*									
6	HD 204827 COS G130M (186430)	(1) HD-204827	COS/FUV, TIME-TAG, PSA	G130M 1318 A	BUFFER-TIME=1066; FP-POS=3			2234 Secs *[==>]*	***[2]***
Comments: File: final_HD204827.dat *ETC ID: COS.sp.186430* *ETC Buffer Time 2000*									
7	HD 204827 COS G130M (186430)	(1) HD-204827	COS/FUV, TIME-TAG, PSA	G130M 1327 A	BUFFER-TIME=1066; FP-POS=3			2234 Secs *[==>]*	***[2]***
Comments: File: final_HD204827.dat *ETC ID: COS.sp.186430* *ETC Buffer Time 2000*									
8	HD 204827 COS G160M (186433)	(1) HD-204827	COS/FUV, TIME-TAG, PSA	G160M 1577 A	BUFFER-TIME=384; FP-POS=2			861 Secs *[==>]*	***[3]***
Comments: File: final_HD204827.dat *ETC ID: COS.sp.186433* *ETC Buffer Time 872*									

	9	HD 204827 COS G160 M (186433)	(1) HD-204827	COS/FUV, TIME-TAG, PSA	G160M 1589 A	BUFFER-TIME=384; FP-POS=2	861 Secs *[==>]*	**[3]**
		Comments: File: final_HD204827.dat *ETC ID: COS.sp.186433* *ETC Buffer Time 872*						
	10	HD 204827 COS G160 M (186433)	(1) HD-204827	COS/FUV, TIME-TAG, PSA	G160M 1600 A	BUFFER-TIME=384; FP-POS=2	861 Secs *[==>]*	**[3]**
		Comments: File: final_HD204827.dat *ETC ID: COS.sp.186433* *ETC Buffer Time 872*						
	11	HD 204827 COS G160 M (186433)	(1) HD-204827	COS/FUV, TIME-TAG, PSA	G160M 1611 A	BUFFER-TIME=384; FP-POS=2	861 Secs *[==>]*	**[3]**
		Comments: File: final_HD204827.dat *ETC ID: COS.sp.186433* *ETC Buffer Time 872*						

Orbit Structure







Visit

Proposal 12542, Visit 06 Sun Jul 10 01:10:56 GMT 2011

Diagnostic Status: No Diagnostics

Scientific Instruments: STIS/CCD, STIS/NUV-MAMA

Special Requirements: CVZ; AFTER 04 BY 0 D TO 2 D

Comments: BOT was run using the 0.2x0.2 aperture because BOT doesn't support the 0.2x0.2FP apertures. This was done on 2 representative exposures (one 1978, one 2707) in Visit 02 and then changed back to 0.2x0.2FP*.*

Fixed Targets

#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(1)	HD-204827	RA: 21 28 57.7610 (322.2406708d) Dec: +58 44 23.24 (58.73979d) Equinox: J2000		V=8.0	Reference Frame: ICRS

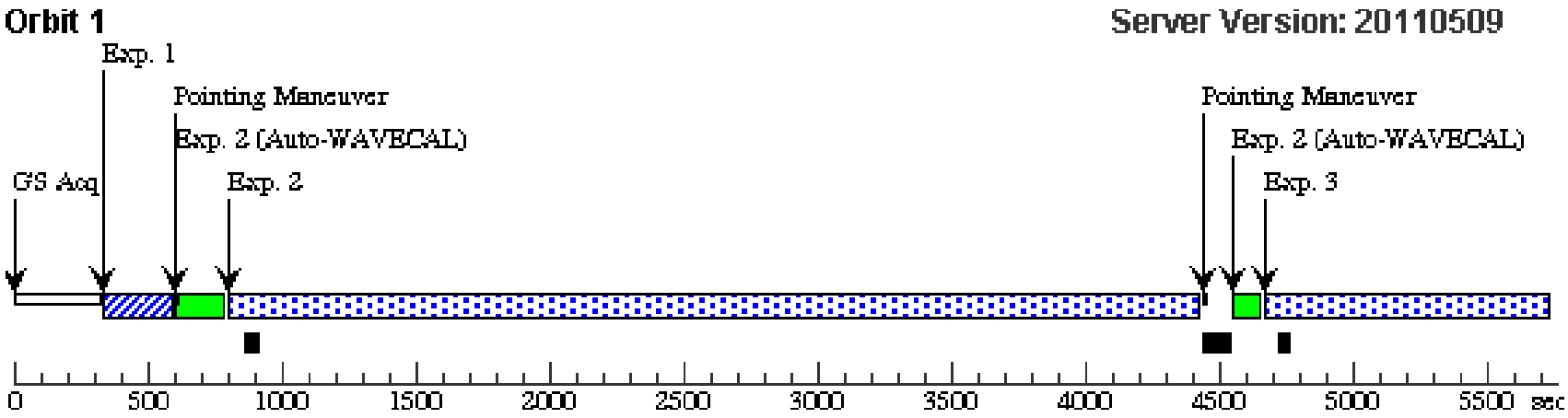
Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.

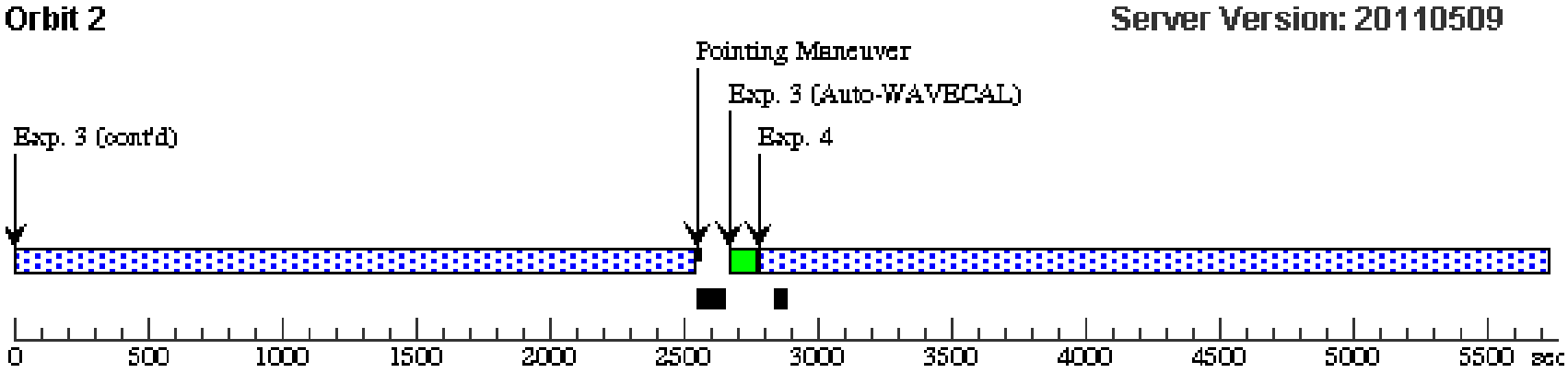
Exposures

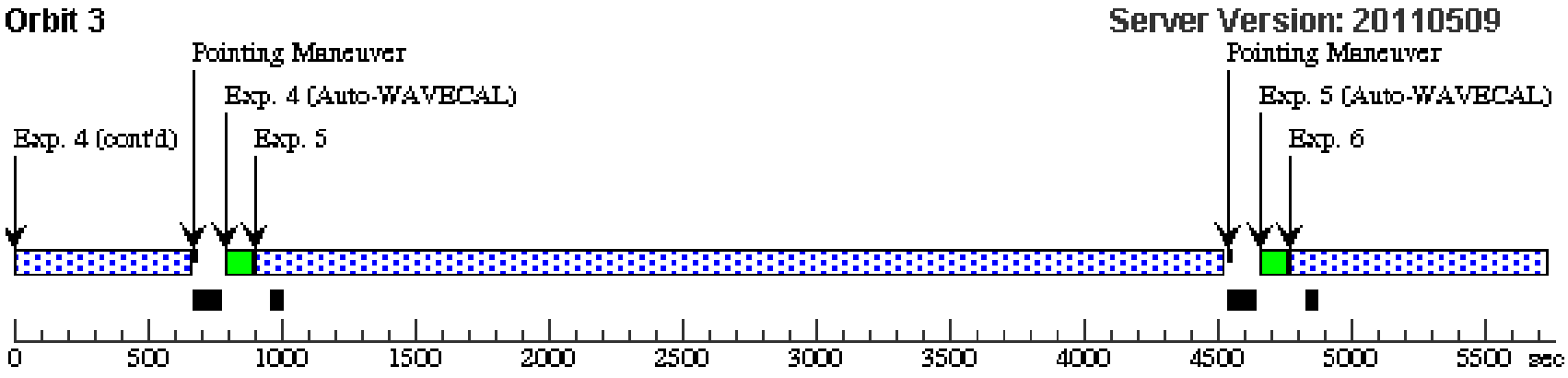
#	Label (ETC Run)	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit
1	STIS Target Acquisition (195661)	(1) HD-204827	STIS/CCD, ACQ, F28X50OII	MIRROR	ACQTYPE=POINT			0.1 Secs *[==>]*	***[1]***
	Comments: file: final_HD204827.dat *ETC ID: STIS.ta.195661*								
2	HD 204827 STIS E230 M (186476)	(1) HD-204827	STIS/NUV-MAMA, ACCUM, 0.2X0.2FPA	E230M 1978 A				3574 Secs *[==>]*	***[1]***
	Comments: file: final_HD204827.dat *ETC ID: STIS.sp.186476*								
3	HD 204827 STIS E230 M (186476)	(1) HD-204827	STIS/NUV-MAMA, ACCUM, 0.2X0.2FPB	E230M 1978 A				3574 Secs *[==>]*	***[1]***
	Comments: file: final_HD204827.dat *ETC ID: STIS.sp.186476*								
4	HD 204827 STIS E230 M (186476)	(1) HD-204827	STIS/NUV-MAMA, ACCUM, 0.2X0.2FPC	E230M 1978 A				3574 Secs *[==>]*	***[2]***
	Comments: file: final_HD204827.dat *ETC ID: STIS.sp.186476*								
5	HD 204827 STIS E230 M (186476)	(1) HD-204827	STIS/NUV-MAMA, ACCUM, 0.2X0.2FPD	E230M 1978 A				3574 Secs *[==>]*	***[3]***
	Comments: file: final_HD204827.dat *ETC ID: STIS.sp.186476*								
6	HD 204827 STIS E230 M (186476)	(1) HD-204827	STIS/NUV-MAMA, ACCUM, 0.2X0.2FPE	E230M 1978 A				3574 Secs *[==>]*	***[3]***
	Comments: file: final_HD204827.dat *ETC ID: STIS.sp.186476*								
7	HD 204827 STIS E230 M (186480)	(1) HD-204827	STIS/NUV-MAMA, ACCUM, 0.2X0.2FPE	E230M 2707 A				363 Secs *[==>]*	***[4]***
	Comments: file: final_HD204827.dat *ETC ID: STIS.sp.186480*								
8	HD 204827 STIS E230 M (186480)	(1) HD-204827	STIS/NUV-MAMA, ACCUM, 0.2X0.2FPD	E230M 2707 A				363 Secs *[==>]*	***[4]***
	Comments: file: final_HD204827.dat *ETC ID: STIS.sp.186480*								
9	HD 204827 STIS E230 M (186480)	(1) HD-204827	STIS/NUV-MAMA, ACCUM, 0.2X0.2FPC	E230M 2707 A				363 Secs *[==>]*	***[4]***
	Comments: file: final_HD204827.dat *ETC ID: STIS.sp.186480*								

	10	HD 204827 STIS E230 M (186480)	(1) HD-204827	STIS/NUV-MAMA, ACCUM, 0.2X0.2FPB	E230M 2707 A	363 Secs *[==>]*	***[4]***
		Comments: file: final_HD204827.dat *ETC ID: STIS.sp.186480*					
	11	HD 204827 STIS E230 M (186480)	(1) HD-204827	STIS/NUV-MAMA, ACCUM, 0.2X0.2FPA	E230M 2707 A	363 Secs *[==>]*	***[4]***
		Comments: file: final_HD204827.dat *ETC ID: STIS.sp.186480*					

Orbit Structure



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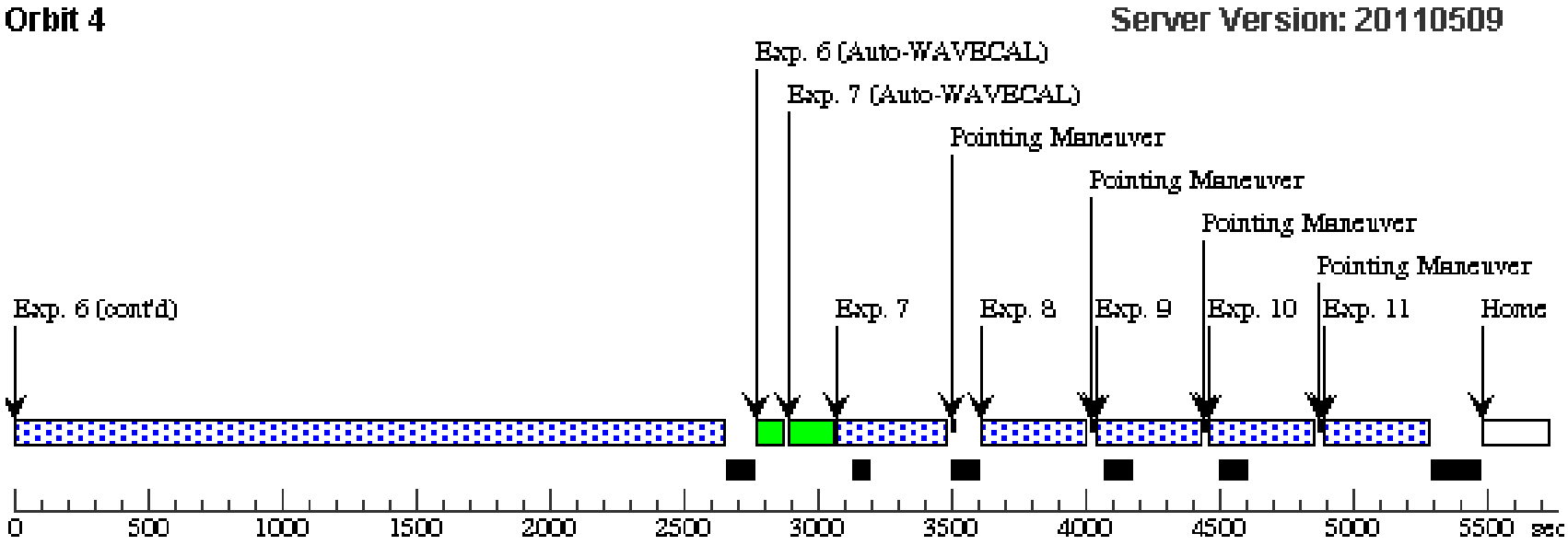
Server Version: 20110509
Pointing Maneuver
Exp. 4 (Auto-WAVECAL)
Exp. 4 (cont'd)
Exp. 5
Pointing Maneuver
Exp. 5 (Auto-WAVECAL)
Exp. 6
0
500
1000
1500
2000
2500
3000
3500
4000
4500
5000
5500
sec


Orbit 4
Server Version: 20110509
Exp. 6 (Auto-WAVECAL)
Exp. 7 (Auto-WAVECAL)
Pointing Maneuver
Pointing Maneuver
Pointing Maneuver
Pointing Maneuver
Exp. 6 (cont'd)
Exp. 7
Exp. 8
Exp. 9
Exp. 10
Exp. 11
Home
0
500
1000
1500
2000
2500
3000
3500
4000
4500
5000
5500
sec

Proposal 12542 - Visit 07 - A Multispectral Survey of the Translucent Cloud in front of HD 204827

Visit

Proposal 12542, Visit 07 Sun Jul 10 01:10:57 GMT 2011

Diagnostic Status: Warning

Scientific Instruments: COS/FUV

Special Requirements: CVZ; AFTER 06 BY 50 D TO 100 D

Comments: Uses multiple central wavelengths but only one FP-POS setting. A different FP-POS setting is used in the next COS visit in this session and then a different pair of settings is used in each of the other sessions.

Diagnostics

(Visit 07) Warning (Form): If the target coordinates are not known to 0.4" (or better) an ACQ/SEARCH should precede the ACQ/PEAKXD.

(Visit 07) Warning (Form): For the best data quality, it is strongly recommended that all four FP-POS positions be used when observing at a given COS CENWAVE setting.

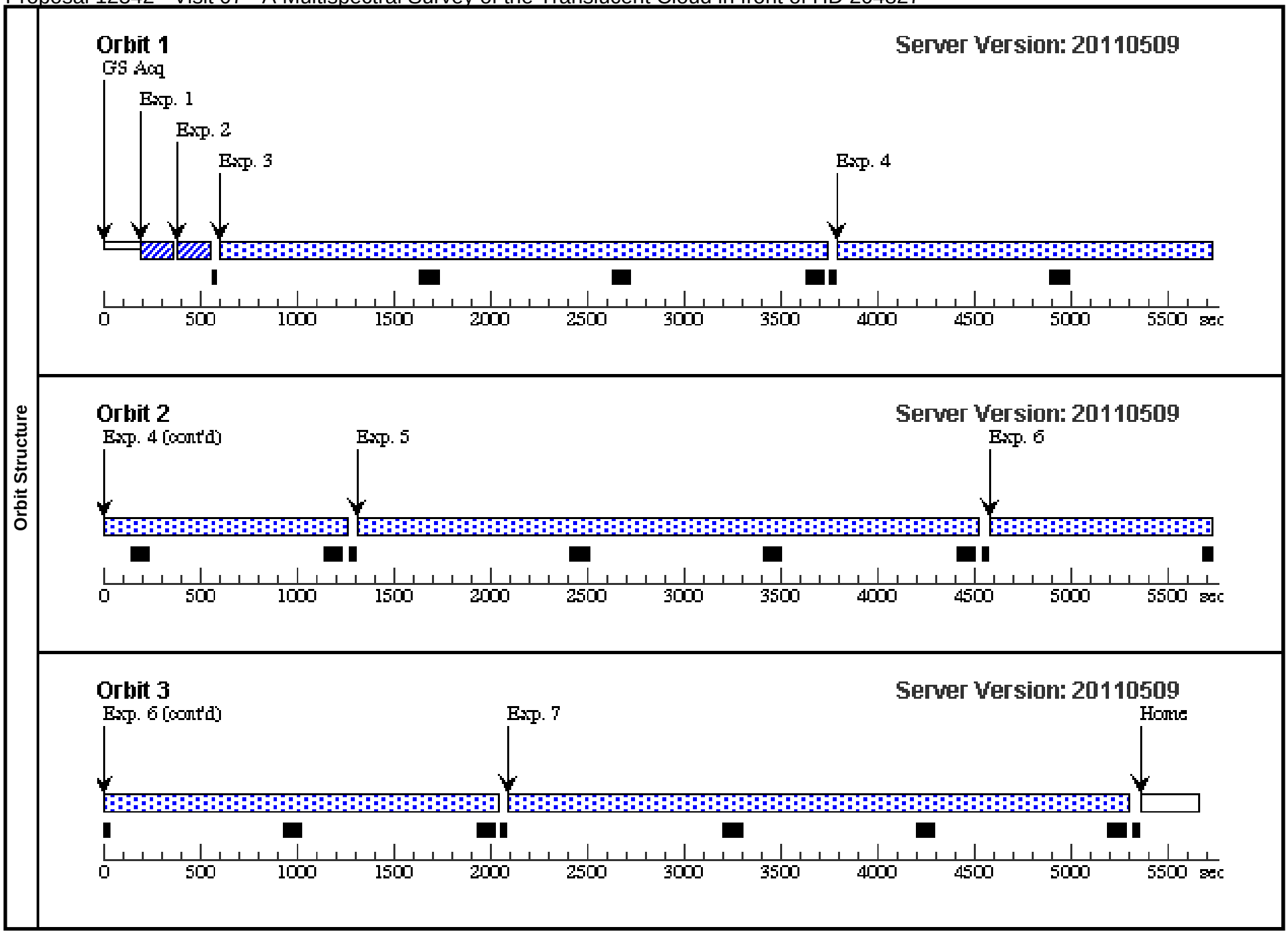
Fixed Targets

#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(1)	HD-204827	RA: 21 28 57.7610 (322.2406708d) Dec: +58 44 23.24 (58.73979d) Equinox: J2000		V=8.0	Reference Frame: ICRS

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

Exposures

#	Label (ETC Run)	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit
1	COS Target Acquisition (186459)	(1) HD-204827	COS/FUV, ACQ/PEAKXD, PSA	G130M 1291 A				2.8 Secs *[==>]*	***[1]***
	Comments: File: final_HD204827.dat *ETC ID:COS.sa.186459*								
2	COS Target Acquisition (186459)	(1) HD-204827	COS/FUV, ACQ/PEAKD, PSA	G130M 1291 A	NUM-POS=5; STEP-SIZE=0.9; CENTER=FLUX-WT-FLR			2.8 Secs *[==>]*	***[1]***
	Comments: File: final_HD204827.dat *ETC ID:COS.sa.186459*								
3	HD 204827 COS G130 M (186429)	(1) HD-204827	COS/FUV, TIME-TAG, PSA	G130M 1291 A	BUFFER-TIME=998; FP-POS=3			3089 Secs *[==>]*	***[1]***
	Comments: File: final_HD204827.dat *ETC ID: COS.sp.186429* *ETC Buffer time 2000*								
4	HD 204827 COS G130 M (186429)	(1) HD-204827	COS/FUV, TIME-TAG, PSA	G130M 1300 A	BUFFER-TIME=998; FP-POS=3			3089 Secs *[==>]*	***[1]***
	Comments: File: final_HD204827.dat *ETC ID: COS.sp.186429* *ETC Buffer time 2000*								
5	HD 204827 COS G130 M (186429)	(1) HD-204827	COS/FUV, TIME-TAG, PSA	G130M 1309 A	BUFFER-TIME=998; FP-POS=3			3089 Secs *[==>]*	***[2]***
	Comments: File: final_HD204827.dat *ETC ID: COS.sp.186429* *ETC Buffer time 2000*								
6	HD 204827 COS G130 M (186429)	(1) HD-204827	COS/FUV, TIME-TAG, PSA	G130M 1318 A	BUFFER-TIME=998; FP-POS=3			3089 Secs *[==>]*	***[2]***
	Comments: File: final_HD204827.dat *ETC ID: COS.sp.186429* *ETC Buffer time 2000*								
7	HD 204827 COS G130 M (186429)	(1) HD-204827	COS/FUV, TIME-TAG, PSA	G130M 1327 A	BUFFER-TIME=998; FP-POS=3			3089 Secs *[==>]*	***[3]***
	Comments: File: final_HD204827.dat *ETC ID: COS.sp.186429* *ETC Buffer time 2000*								


Orbit Structure
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Server Version: 20110509
GS Acq
Exp. 1
Exp. 2
Exp. 3
Exp. 4
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500
1000
1500
2000
2500
3000
3500
4000
4500
5000
5500
sec
Orbit 2
Server Version: 20110509
Exp. 4 (cont'd)
Exp. 5
Exp. 6
0
500
1000
1500
2000
2500
3000
3500
4000
4500
5000
5500
sec
Orbit 3
Server Version: 20110509
Exp. 6 (cont'd)
Exp. 7
Home
0
500
1000
1500
2000
2500
3000
3500
4000
4500
5000
5500
sec

Proposal 12542 - Visit 08 - A Multispectral Survey of the Translucent Cloud in front of HD 204827

Visit

Proposal 12542, Visit 08 Sun Jul 10 01:10:57 GMT 2011

Diagnostic Status: Warning

Scientific Instruments: COS/FUV

Special Requirements: CVZ; AFTER 07 BY 0 D TO 2 D

Comments: Uses multiple central wavelengths but only one FP-POS setting. For G130M, a different FP-POS setting was used in the previous COS visit in this session and then a different pair of settings is used in each of the other sessions. For G160M, we use a different FP-POS in the corresponding visits in the other sessions.

G160M exposures do not include the 1623 central wavelength because that puts some lines of interest near 1613A in the central gap.

Diagnostics

(Visit 08) Warning (Form): If the target coordinates are not known to 0.4" (or better) an ACQ/SEARCH should precede the ACQ/PEAKXD.

(Visit 08) Warning (Form): For the best data quality, it is strongly recommended that all four FP-POS positions be used when observing at a given COS CENWAVE setting.

Fixed Targets

#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(1)	HD-204827	RA: 21 28 57.7610 (322.2406708d) Dec: +58 44 23.24 (58.73979d) Equinox: J2000		V=8.0	Reference Frame: ICRS

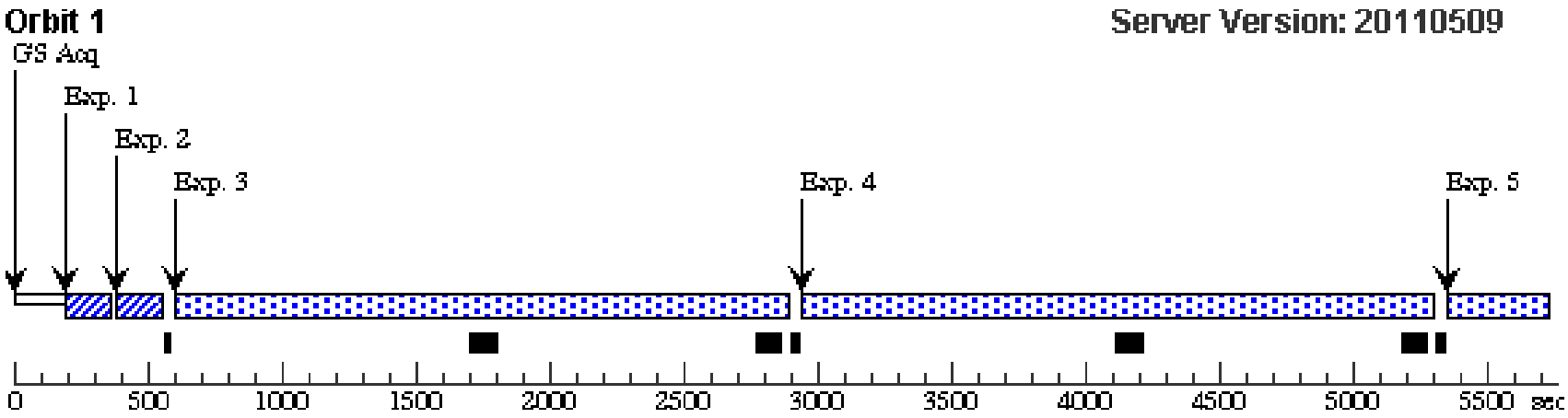
Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.

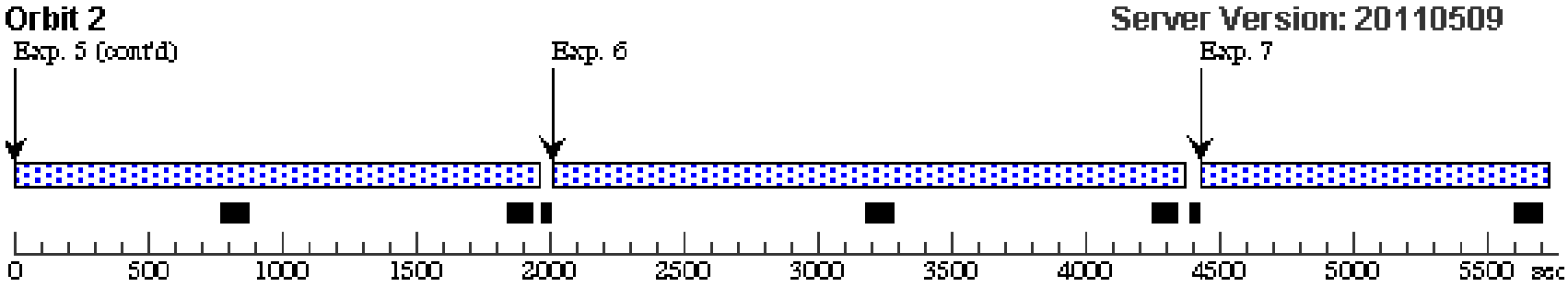
Exposures

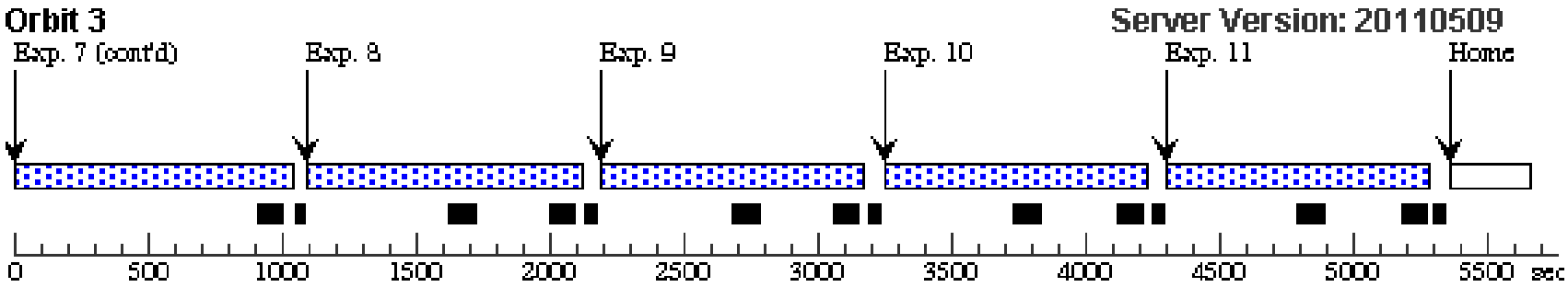
#	Label (ETC Run)	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit
1	COS Target Acquisition (186459)	(1) HD-204827	COS/FUV, ACQ/PEAKXD, PSA	G130M 1291 A				2.8 Secs *[==>]*	***[1]***
	Comments: File: final_HD204827.dat *ETC ID:COS.sa.186459*								
2	COS Target Acquisition (186459)	(1) HD-204827	COS/FUV, ACQ/PEAKD, PSA	G130M 1291 A	NUM-POS=5; STEP-SIZE=0.9; CENTER=FLUX-WT-FLR			2.8 Secs *[==>]*	***[1]***
	Comments: File: final_HD204827.dat *ETC ID:COS.sa.186459*								
3	HD 204827 COS G130M (186430)	(1) HD-204827	COS/FUV, TIME-TAG, PSA	G130M 1291 A	BUFFER-TIME=1066; FP-POS=4			2234 Secs *[==>]*	***[1]***
	Comments: File: final_HD204827.dat *ETC ID: COS.sp.186430* *ETC Buffer Time 2000*								
4	HD 204827 COS G130M (186430)	(1) HD-204827	COS/FUV, TIME-TAG, PSA	G130M 1300 A	BUFFER-TIME=1066; FP-POS=4			2234 Secs *[==>]*	***[1]***
	Comments: File: final_HD204827.dat *ETC ID: COS.sp.186430* *ETC Buffer Time 2000*								
5	HD 204827 COS G130M (186430)	(1) HD-204827	COS/FUV, TIME-TAG, PSA	G130M 1309 A	BUFFER-TIME=1066; FP-POS=4			2234 Secs *[==>]*	***[1]***
	Comments: File: final_HD204827.dat *ETC ID: COS.sp.186430* *ETC Buffer Time 2000*								
6	HD 204827 COS G130M (186430)	(1) HD-204827	COS/FUV, TIME-TAG, PSA	G130M 1318 A	BUFFER-TIME=1066; FP-POS=4			2234 Secs *[==>]*	***[2]***
	Comments: File: final_HD204827.dat *ETC ID: COS.sp.186430* *ETC Buffer Time 2000*								
7	HD 204827 COS G130M (186430)	(1) HD-204827	COS/FUV, TIME-TAG, PSA	G130M 1327 A	BUFFER-TIME=1066; FP-POS=4			2234 Secs *[==>]*	***[2]***
	Comments: File: final_HD204827.dat *ETC ID: COS.sp.186430* *ETC Buffer Time 2000*								
8	HD 204827 COS G160M (186433)	(1) HD-204827	COS/FUV, TIME-TAG, PSA	G160M 1577 A	BUFFER-TIME=3844; FP-POS=3			861 Secs *[==>]*	***[3]***
	Comments: File: final_HD204827.dat *ETC ID: COS.sp.186433* *ETC Buffer Time 872*								

	9	HD 204827 COS G160 M (186433)	(1) HD-204827	COS/FUV, TIME-TAG, PSA	G160M 1589 A	BUFFER-TIME=384; FP-POS=3	861 Secs *[==>]*	 ***[3]***
		Comments: File: final_HD204827.dat *ETC ID: COS.sp.186433* *ETC Buffer Time 872*						
	10	HD 204827 COS G160 M (186433)	(1) HD-204827	COS/FUV, TIME-TAG, PSA	G160M 1600 A	BUFFER-TIME=384; FP-POS=3	861 Secs *[==>]*	 ***[3]***
		Comments: File: final_HD204827.dat *ETC ID: COS.sp.186433* *ETC Buffer Time 872*						
	11	HD 204827 COS G160 M (186433)	(1) HD-204827	COS/FUV, TIME-TAG, PSA	G160M 1611 A	BUFFER-TIME=384; FP-POS=3	861 Secs *[==>]*	 ***[3]***
		Comments: File: final_HD204827.dat *ETC ID: COS.sp.186433* *ETC Buffer Time 872*						

Orbit Structure







Proposal 12542 - Visit 09 - A Multispectral Survey of the Translucent Cloud in front of HD 204827

Visit

Proposal 12542, Visit 09 Sun Jul 10 01:10:58 GMT 2011

Diagnostic Status: No Diagnostics

Scientific Instruments: STIS/CCD, STIS/NUV-MAMA

Special Requirements: CVZ; AFTER 07 BY 0 D TO 2 D

Comments: BOT was run using the 0.2x0.2 aperture because BOT doesn't support the 0.2x0.2FP apertures. This was done on 2 representative exposures (one 1978, one 2707) in Visit 02 and then changed back to 0.2x0.2FP*.*

Fixed Targets

#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(1)	HD-204827	RA: 21 28 57.7610 (322.2406708d) Dec: +58 44 23.24 (58.73979d) Equinox: J2000		V=8.0	Reference Frame: ICRS

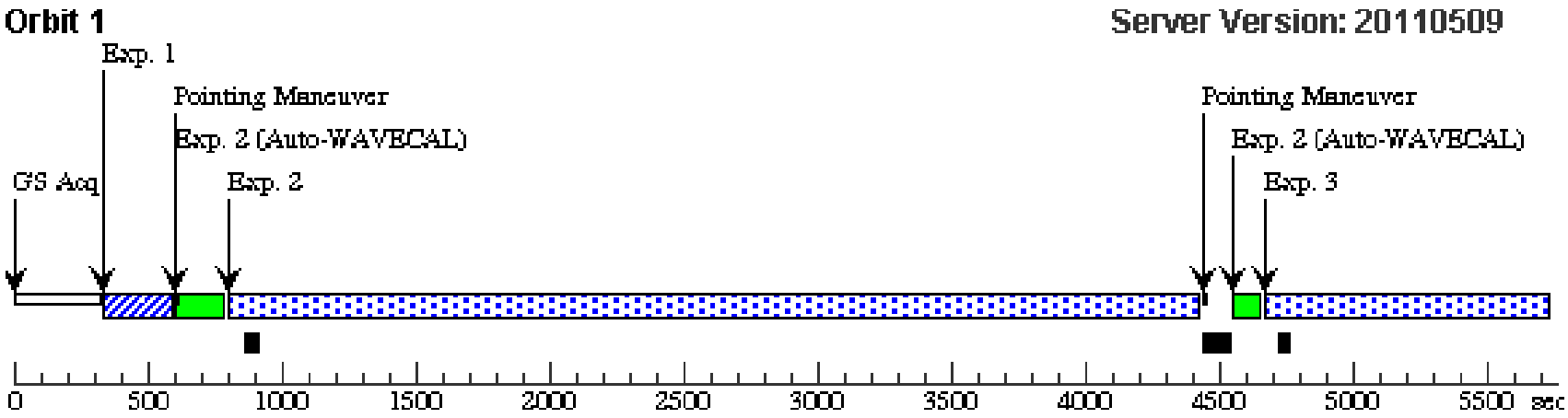
Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.

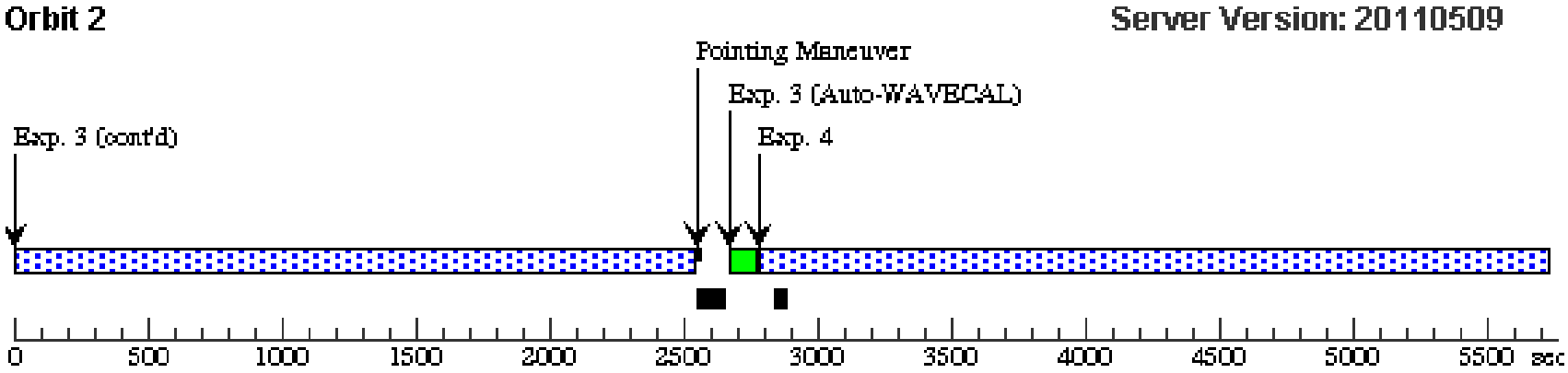
Exposures

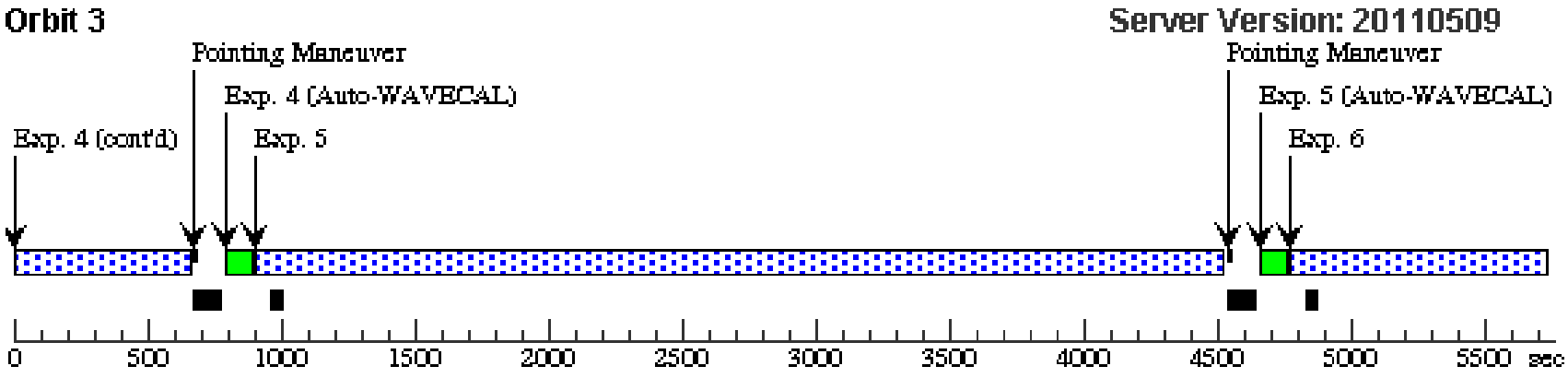
#	Label (ETC Run)	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit
1	STIS Target Acquisition (195661)	(1) HD-204827	STIS/CCD, ACQ, F28X50OII	MIRROR	ACQTYPE=POINT			0.1 Secs *[==>]*	***[1]***
	Comments: file: final_HD204827.dat *ETC ID: STIS.ta.195661*								
2	HD 204827 STIS E230 M (186476)	(1) HD-204827	STIS/NUV-MAMA, ACCUM, 0.2X0.2FPA	E230M 1978 A				3574 Secs *[==>]*	***[1]***
	Comments: file: final_HD204827.dat *ETC ID: STIS.sp.186476*								
3	HD 204827 STIS E230 M (186476)	(1) HD-204827	STIS/NUV-MAMA, ACCUM, 0.2X0.2FPB	E230M 1978 A				3574 Secs *[==>]*	***[1]***
	Comments: file: final_HD204827.dat *ETC ID: STIS.sp.186476*								
4	HD 204827 STIS E230 M (186476)	(1) HD-204827	STIS/NUV-MAMA, ACCUM, 0.2X0.2FPC	E230M 1978 A				3574 Secs *[==>]*	***[2]***
	Comments: file: final_HD204827.dat *ETC ID: STIS.sp.186476*								
5	HD 204827 STIS E230 M (186476)	(1) HD-204827	STIS/NUV-MAMA, ACCUM, 0.2X0.2FPD	E230M 1978 A				3574 Secs *[==>]*	***[3]***
	Comments: file: final_HD204827.dat *ETC ID: STIS.sp.186476*								
6	HD 204827 STIS E230 M (186476)	(1) HD-204827	STIS/NUV-MAMA, ACCUM, 0.2X0.2FPE	E230M 1978 A				3574 Secs *[==>]*	***[3]***
	Comments: file: final_HD204827.dat *ETC ID: STIS.sp.186476*								
7	HD 204827 STIS E230 M (186480)	(1) HD-204827	STIS/NUV-MAMA, ACCUM, 0.2X0.2FPE	E230M 2707 A				363 Secs *[==>]*	***[4]***
	Comments: file: final_HD204827.dat *ETC ID: STIS.sp.186480*								
8	HD 204827 STIS E230 M (186480)	(1) HD-204827	STIS/NUV-MAMA, ACCUM, 0.2X0.2FPD	E230M 2707 A				363 Secs *[==>]*	***[4]***
	Comments: file: final_HD204827.dat *ETC ID: STIS.sp.186480*								
9	HD 204827 STIS E230 M (186480)	(1) HD-204827	STIS/NUV-MAMA, ACCUM, 0.2X0.2FPC	E230M 2707 A				363 Secs *[==>]*	***[4]***
	Comments: file: final_HD204827.dat *ETC ID: STIS.sp.186480*								

	10	HD 204827 STIS E230 M (186480)	(1) HD-204827	STIS/NUV-MAMA, ACCUM, 0.2X0.2FPB	E230M 2707 A	363 Secs *[==>]*	***[4]***
		Comments: file: final_HD204827.dat *ETC ID: STIS.sp.186480*					
	11	HD 204827 STIS E230 M (186480)	(1) HD-204827	STIS/NUV-MAMA, ACCUM, 0.2X0.2FPA	E230M 2707 A	363 Secs *[==>]*	***[4]***
		Comments: file: final_HD204827.dat *ETC ID: STIS.sp.186480*					

Orbit Structure



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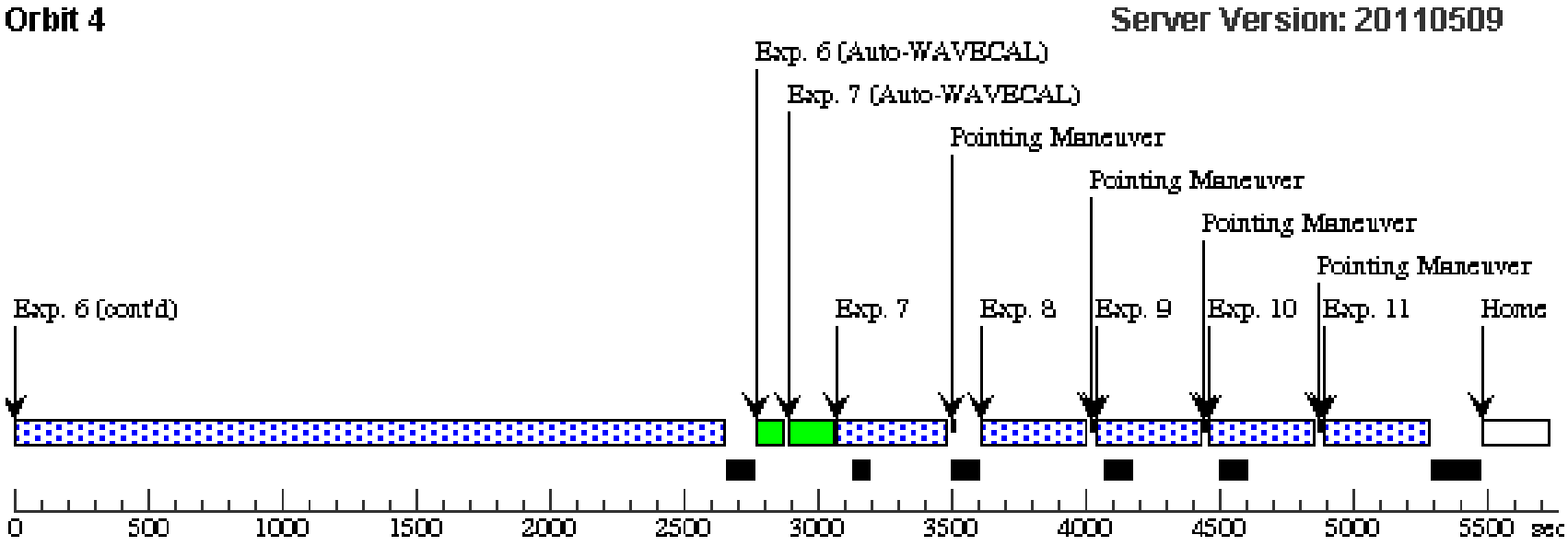
Pointing Maneuver
Exp. 4 (Auto-WAVECAL)
Exp. 4 (cont'd)
Exp. 5
Pointing Maneuver
Exp. 5 (Auto-WAVECAL)
Exp. 6
0
500
1000
1500
2000
2500
3000
3500
4000
4500
5000
5500
sec


Orbit 4
Server Version: 20110509
Exp. 6 (Auto-WAVECAL)
Exp. 7 (Auto-WAVECAL)
Pointing Maneuver
Pointing Maneuver
Pointing Maneuver
Pointing Maneuver
Exp. 6 (cont'd)
Exp. 7
Exp. 8
Exp. 9
Exp. 10
Exp. 11
Home
0
500
1000
1500
2000
2500
3000
3500
4000
4500
5000
5500
sec