



10535 - High Temperature Accretion Flows and Reprocessing in X-ray Binaries: The ADC Source 4U 1822-371

Cycle: 14, Proposal Category: GO

(Availability Mode: SUPPORTED)

INVESTIGATORS

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VISITS

<i>Visit</i>	<i>Targets</i>	<i>Configurations</i>	<i>Orbits Used</i>	<i>Last Orbit Planner Run</i>	<i>OP Current with Visit?</i>
01	(1) 4U1822-371	ACS/SBC	1	01-Feb-2006 21:01:40.0	yes
02	(1) 4U1822-371	ACS/SBC	1	01-Feb-2006 21:01:52.0	yes
03	(1) 4U1822-371	ACS/SBC	1	01-Feb-2006 21:02:06.0	yes
04	(1) 4U1822-371	ACS/SBC	1	01-Feb-2006 21:02:15.0	yes
05	(1) 4U1822-371	ACS/SBC	1	01-Feb-2006 21:02:24.0	yes
06	(1) 4U1822-371	ACS/SBC	1	01-Feb-2006 21:02:34.0	yes
07	(1) 4U1822-371	ACS/SBC	1	01-Feb-2006 21:02:48.0	yes
08	(1) 4U1822-371	ACS/SBC	1	01-Feb-2006 21:02:56.0	yes

Proposal 10535 - Overview

<i>Visit</i>	<i>Targets</i>	<i>Configurations</i>	<i>Orbits Used</i>	<i>Last Orbit Planner Run</i>	<i>OP Current with Visit?</i>
09	(1) 4U1822-371	ACS/SBC	1	01-Feb-2006 21:03:05.0	yes
10	(1) 4U1822-371	ACS/SBC	1	01-Feb-2006 21:03:14.0	yes

10 Total Orbits Used

ABSTRACT

The eclipsing low-mass X-ray binary 4U 1822-371 is the ideal system in which to observe hot accretion and the effects of strong irradiation. Its orbital period is 5.57~hr and its orbital inclination is high enough that flux from the neutron star is blocked by the edge-on accretion disk in the system. Because the neutron star is hidden its Accretion Disk Corona is visible. These ADCs are present in most if not all low-mass X-ray binaries but are generally not visible. 4U 1822-371 provides a unique opportunity to study an ADC and disk irradiation because the eclipse by the secondary star allows their geometry and flux to be mapped.

We will perform a multiwavelength light curve synthesis and eclipse analysis of 4U 1822-371. The scientific goal is to map the geometry and flux from its ADC and from its irradiated accretion disk. The crucial and irreplaceable role of HST is to provide the UV data needed to disentangle the ADC from the irradiated accretion disk. We will obtain time-resolved, objective-prism UV spectroscopy of 4U 1822-371 with the ACS/SBC with the PR130L prism, covering most of its orbit and all of the eclipse. This combination will yield excellent orbital light curves in the UV continuum and in the integrated line fluxes.

OBSERVING DESCRIPTION

We will use the ACS/SBC with the PR130L prism to obtain time-resolved spectroscopy of 4U 1822-371. The observations will consist of contiguous exposures, each with a 45-second integration, separated by a 40-second dead time. Every 16th exposure is 350 seconds long to allow the ACS buffer to dump. The UV eclipse should last about 1 hour, so this combination yields ~35 independent measurements through the eclipse. The UV spectrum of 4U 1822-371 has previously been measured with the FOS on HST (see Figure 4 in the Phase I proposal) and shows two strong emission lines, C IV at 1550 Å and He II at 1640 Å, superimposed on a blue continuum. Using fluxes measured from the FOS spectrum, the ACS

Proposal 10535 - Overview

Exposure Time Calculator yields $30 < S/N < 45$ in the continuum at 1500 Å in 45 seconds. This time resolution and S/N ratio are adequate to achieve our science goals.

The observations will take advantage of a coincidence: The orbital period of 4U 1822-371 is almost exactly 3.5 orbits of HST and, therefore, the fifth of 5 HST orbits precisely fills one of the gaps in the coverage of the star's light curve left by the first 4 HST orbits. The net effect is that one achieves the equivalent of ~146 minutes of continuous coverage of the 4U 1822-371 light curve plus ~50 minute samples of the rest of the orbit. Taking advantage of this coincidence imposes two scheduling constraints. First, the 60-minute eclipse of 4U 1822-371 must fall within the 146 minutes of continuous coverage. Second, each visit must consist of 5 consecutive orbits, the maximum allowed between SAA passages. We also strongly prefer that the visibility period be greater than 56 minutes to avoid gaps in the overlapped coverage of the 4U 1822-371 light curve.

We must visit 4U 1822-371 twice because the light curve is known to show rapid random variability ("flickering"). Two measurements of the light curve are necessary to insure that models are not responding to non-repeating fluctuations in the light curves. There are no constraints on the relative times of the two visits.

Finally, roll angle is irrelevant; there are no bright stars near enough to contaminate the spectrum. Observing techniques often used for other kinds of ACS observations (eg, drizzling) are irrelevant or inappropriate for our observations.

ADDITIONAL COMMENTS

We have assumed that 4U 1822-371 is visible for 56 minutes/orbit when using the orbit planner. If the visibility is greater than 56 minutes for any of the actual orbits, we prefer to fill the orbit by adding more short (45-second) exposures, not by lengthening the existing exposures.

4U 1822-371 is bright. We have performed extensive modeling to test whether the observations exceed the bright object limit. The worst-case model corresponds to the brightest flux ever measured in the UV and to the 3-gyro mode. According to the ACS ETC, the brightest pixel for the PR130L prism will occur at the peak of the C IV emission line. The flux at the peak is 3.5×10^{-14} ergs/sec/cm²/Å, which yields a count rate of 9.5 cps/pixel. 4U 1822-371 shows some rapid variability but its amplitude is always much less than 50% and would not raise the maximum count rate even to 14 cps/pixel. There is no evidence whatsoever for flares, outbursts, or sudden brightenings in either the continuum or the emission lines of 4U

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1822-371. There are no nearby bright objects, so there is no danger of exceeding the global limit. Bottom line: The proposed observation is safely within the 50 cps/pixel bright object limit.

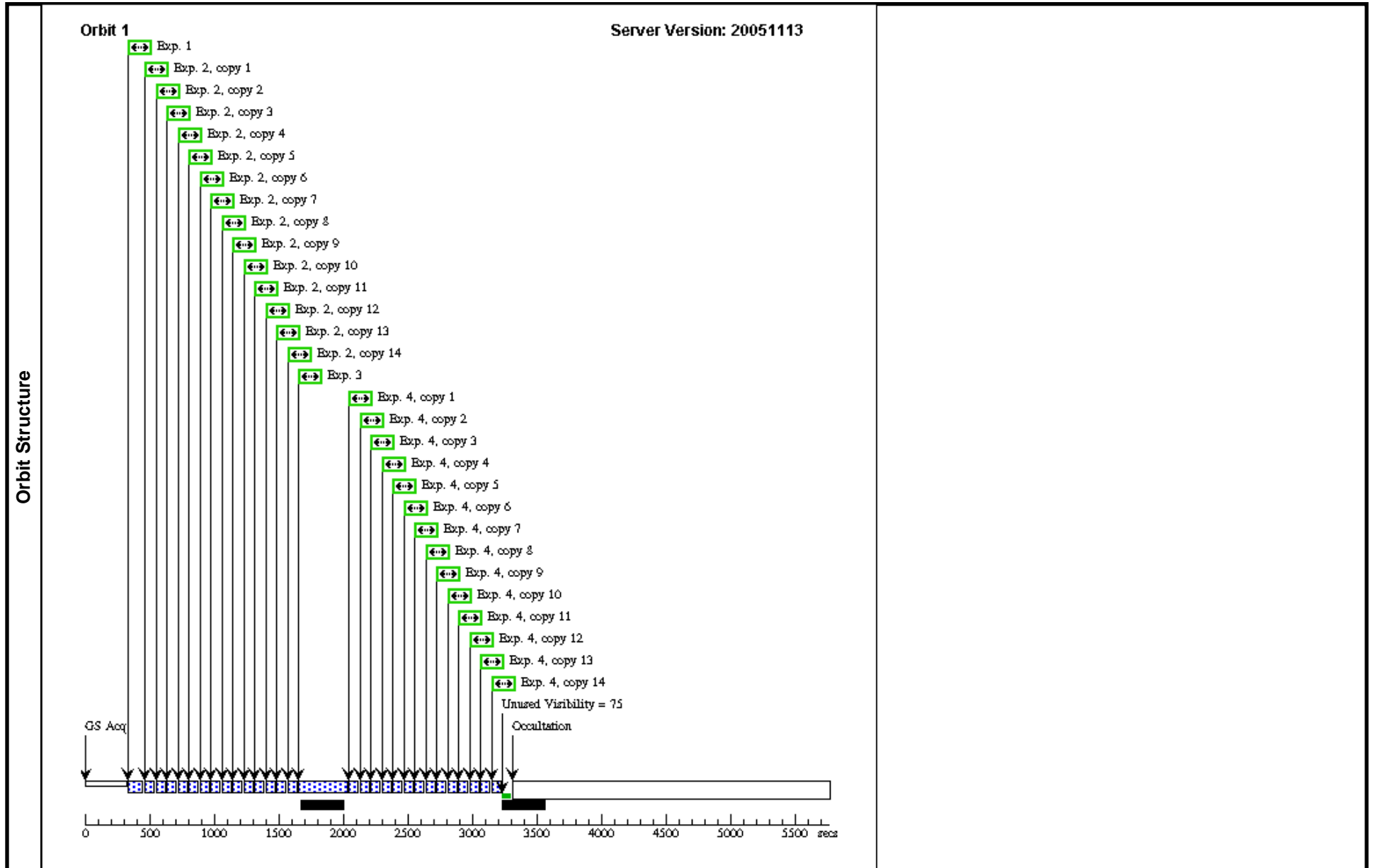
Proposal 10535 - Visit 01 - High Temperature Accretion Flows and Reprocessing in X-ray Binaries: The ADC Source 4U 1822-371

Thu Feb 02 02:03:23 GMT 2006

Visit		Proposal 10535, Visit 01 Diagnostic Status: No Diagnostics Scientific Instruments: ACS/SBC Special Requirements: Period 0.23211019 D AND ZERO-PHASE JD2453507.0321; SEQ 01,02,03,04,05 WITHIN 4.8 Orbits									
Fixed Targets		#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous				
Exposures		#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit
		1	Visit 1, Exposure 1	(1) 4U1822-371	ACS/SBC, ACCUM, SBC	PR130L		PHASE 0.75 TO 0.9 5		45.0 Secs [==>]	[1]
		2	Visit 1, Exposure 2	(1) 4U1822-371	ACS/SBC, ACCUM, SBC	PR130L				45.0 Secs X 14 [==>(Copy 1)] [==>(Copy 2)] [==>(Copy 3)] [==>(Copy 4)] [==>(Copy 5)] [==>(Copy 6)] [==>(Copy 7)] [==>(Copy 8)] [==>(Copy 9)] [==>(Copy 10)] [==>(Copy 11)] [==>(Copy 12)] [==>(Copy 13)] [==>(Copy 14)]	[1]
		3	Visit 1, Exposure 3	(1) 4U1822-371	ACS/SBC, ACCUM, SBC	PR130L				350.0 Secs [==>]	[1]

Proposal 10535 - Visit 01 - High Temperature Accretion Flows and Reprocessing in X-ray Binaries: The ADC Source 4U 1822-371

#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit	
Exposures (continued)	4	Visit 1, Exp osure 4	(1) 4U1822-371 ACS/SBC, ACCUM, SBC	PR130L				45.0 Secs X 14		



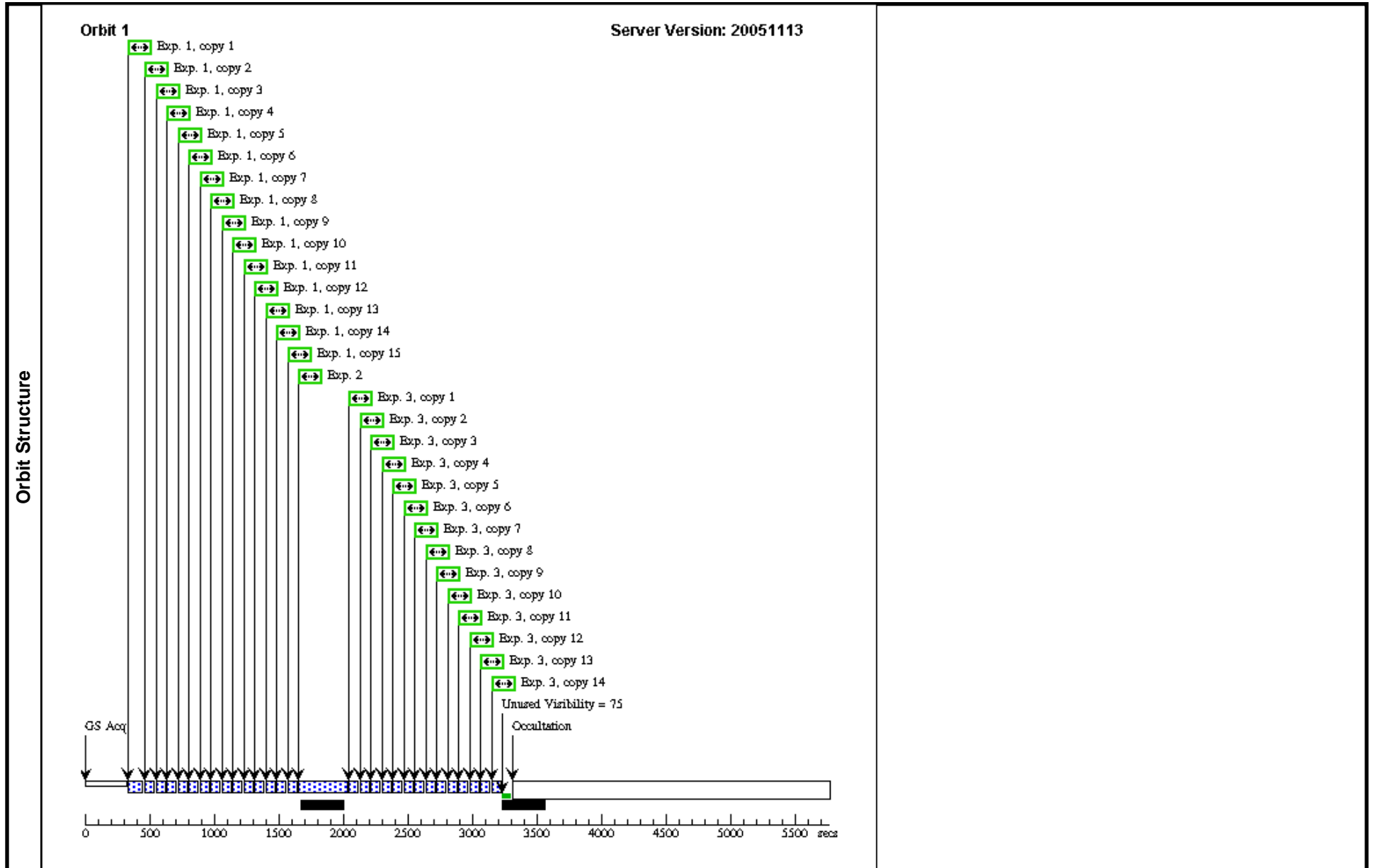
Proposal 10535 - Visit 02 - High Temperature Accretion Flows and Reprocessing in X-ray Binaries: The ADC Source 4U 1822-371

Thu Feb 02 02:03:25 GMT 2006

Visit	Proposal 10535, Visit 02 Diagnostic Status: No Diagnostics Scientific Instruments: ACS/SBC Special Requirements: (none)									
	Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous			
	(1)	4U1822-371 Alt Name1: V691CRA	RA: 18 25 46.7800 (276.4449167d) Dec: -37 06 19.70 (-37.10547d) Equinox: J2000 Plate Id: 060G		V=15.9 Continuum flux at 1500 A is 3 X 10 ⁻¹⁴ ergs/cm/sec/A	Coordinate Source: GSC_SURVEY_PLATE				
Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit
	1	Visit 2, Exposure 1	(1) 4U1822-371	ACS/SBC, ACCUM, SBC	PR130L					45.0 Secs X 15 [=>(Copy 1)] [=>(Copy 2)] [=>(Copy 3)] [=>(Copy 4)] [=>(Copy 5)] [=>(Copy 6)] [=>(Copy 7)] [=>(Copy 8)] [=>(Copy 9)] [=>(Copy 10)] [=>(Copy 11)] [=>(Copy 12)] [=>(Copy 13)] [=>(Copy 14)] [=>(Copy 15)]
	2	Visit 2, Exposure 2	(1) 4U1822-371	ACS/SBC, ACCUM, SBC	PR130L				350.0 Secs [=>]	[1]

Proposal 10535 - Visit 02 - High Temperature Accretion Flows and Reprocessing in X-ray Binaries: The ADC Source 4U 1822-371

#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit	
Exposures (continued)	3	Visit 2, Exp osure 3	(1) 4U1822-371 ACS/SBC, ACCUM, SBC	PR130L				45.0 Secs X 14		



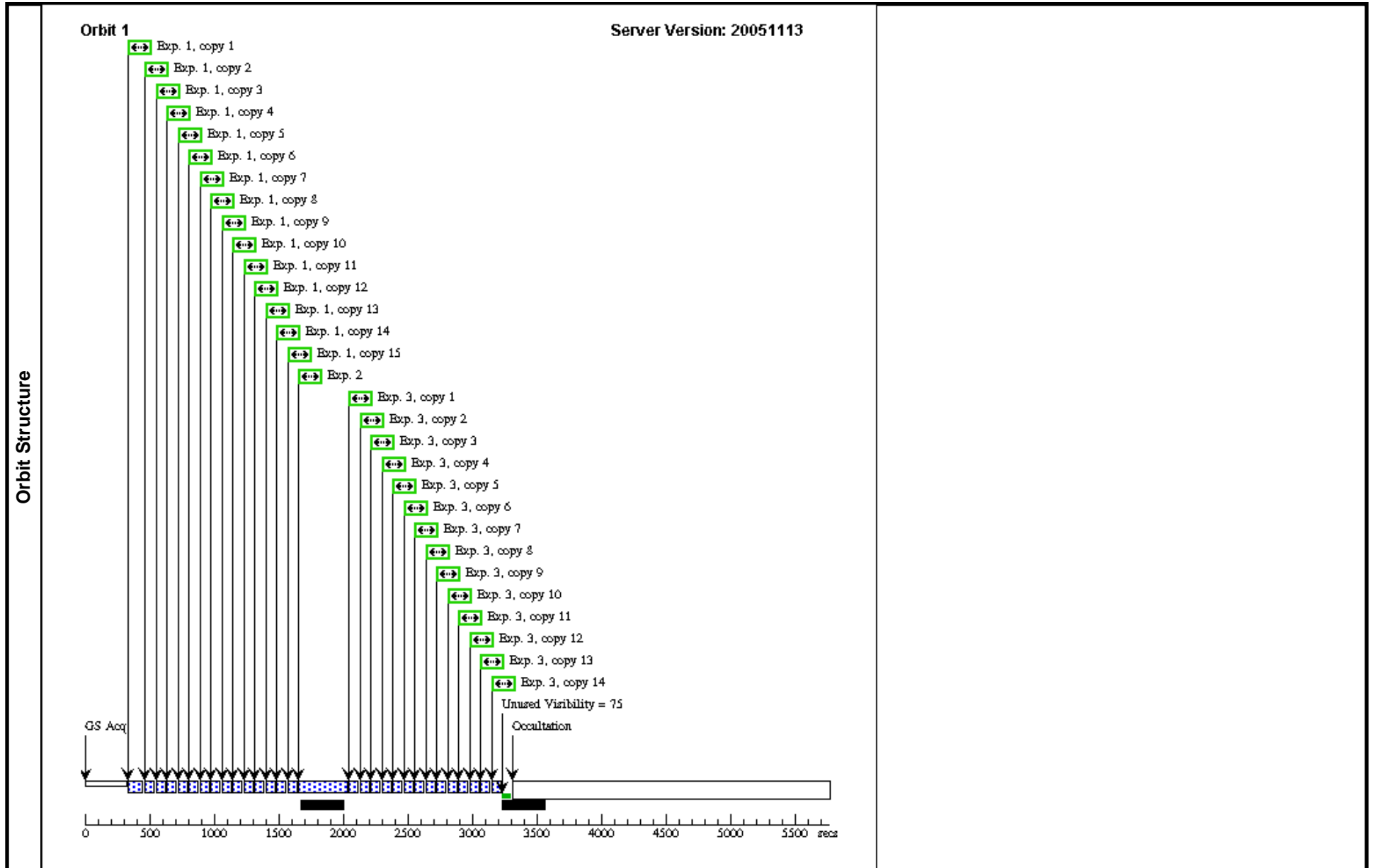
Proposal 10535 - Visit 03 - High Temperature Accretion Flows and Reprocessing in X-ray Binaries: The ADC Source 4U 1822-371

Thu Feb 02 02:03:26 GMT 2006

Visit	Proposal 10535, Visit 03 Diagnostic Status: No Diagnostics Scientific Instruments: ACS/SBC Special Requirements: (none)									
	Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous			
	(1)	4U1822-371 Alt Name1: V691CRA	RA: 18 25 46.7800 (276.4449167d) Dec: -37 06 19.70 (-37.10547d) Equinox: J2000 Plate Id: 060G		V=15.9 Continuum flux at 1500 A is 3 X 10 ⁻¹⁴ ergs/cm/sec/A	Coordinate Source: GSC_SURVEY_PLATE				
Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit
	1	Visit 3, Exposure 1	(1) 4U1822-371	ACS/SBC, ACCUM, SBC	PR130L					45.0 Secs X 15 [=>(Copy 1)] [=>(Copy 2)] [=>(Copy 3)] [=>(Copy 4)] [=>(Copy 5)] [=>(Copy 6)] [=>(Copy 7)] [=>(Copy 8)] [=>(Copy 9)] [=>(Copy 10)] [=>(Copy 11)] [=>(Copy 12)] [=>(Copy 13)] [=>(Copy 14)] [=>(Copy 15)]
	2	Visit 3, Exposure 2	(1) 4U1822-371	ACS/SBC, ACCUM, SBC	PR130L				350.0 Secs [=>]	[1]

Proposal 10535 - Visit 03 - High Temperature Accretion Flows and Reprocessing in X-ray Binaries: The ADC Source 4U 1822-371

#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit	
Exposures (continued)	3	Visit 3, Exp osure 3	(1) 4U1822-371 ACS/SBC, ACCUM, SBC	PR130L				45.0 Secs X 14		



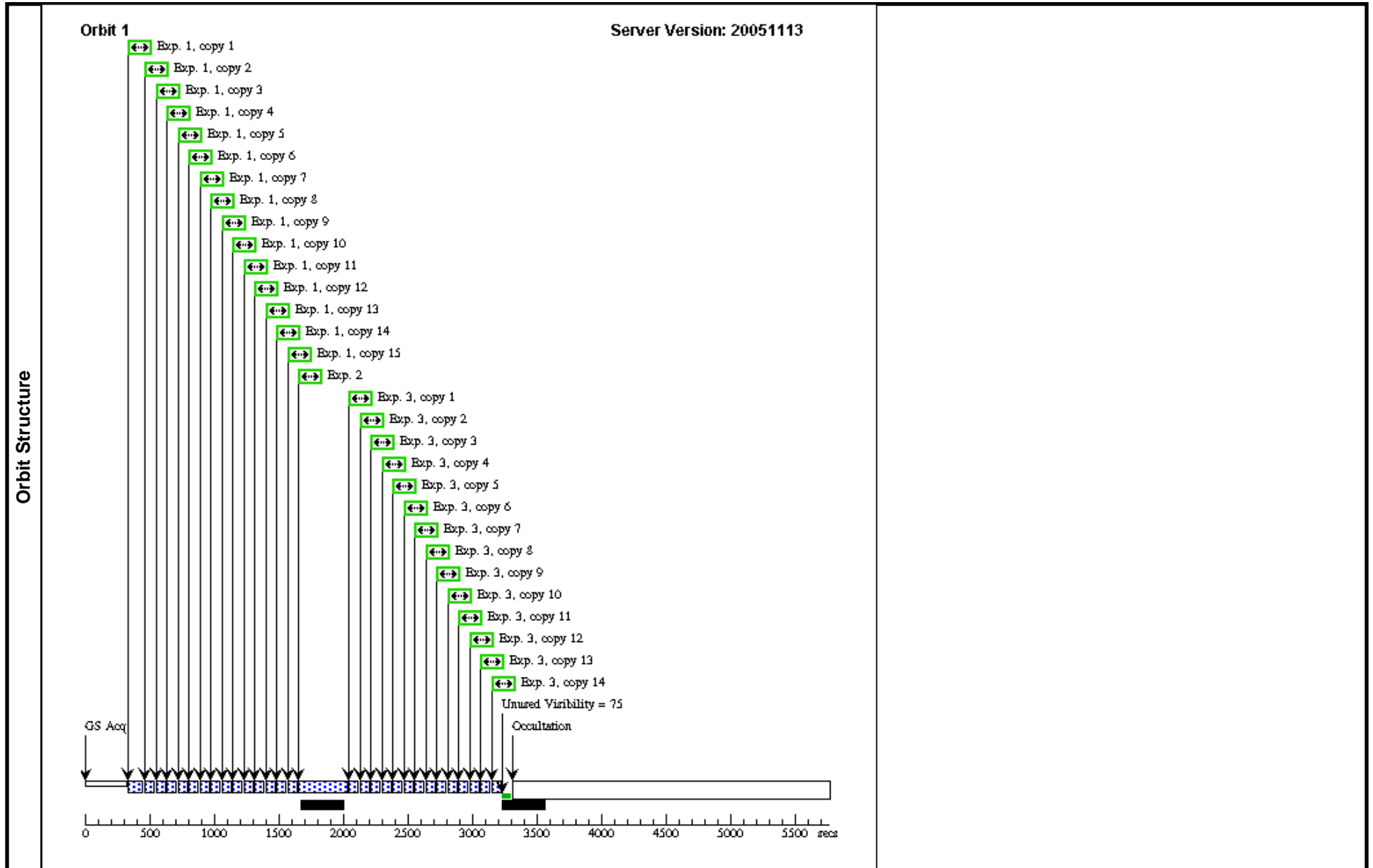
Proposal 10535 - Visit 04 - High Temperature Accretion Flows and Reprocessing in X-ray Binaries: The ADC Source 4U 1822-371

Thu Feb 02 02:03:27 GMT 2006

Visit	Proposal 10535, Visit 04 Diagnostic Status: No Diagnostics Scientific Instruments: ACS/SBC Special Requirements: (none)									
	Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous			
	(1)	4U1822-371 Alt Name1: V691CRA	RA: 18 25 46.7800 (276.4449167d) Dec: -37 06 19.70 (-37.10547d) Equinox: J2000 Plate Id: 060G		V=15.9 Continuum flux at 1500 A is 3 X 10 ⁻¹⁴ ergs/cm/sec/A	Coordinate Source: GSC_SURVEY_PLATE				
Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit
	1	Visit 4, Exposure 1	(1) 4U1822-371	ACS/SBC, ACCUM, SBC	PR130L					45.0 Secs X 15 [=>(Copy 1)] [=>(Copy 2)] [=>(Copy 3)] [=>(Copy 4)] [=>(Copy 5)] [=>(Copy 6)] [=>(Copy 7)] [=>(Copy 8)] [=>(Copy 9)] [=>(Copy 10)] [=>(Copy 11)] [=>(Copy 12)] [=>(Copy 13)] [=>(Copy 14)] [=>(Copy 15)]
	2	Visit 4, Exposure 2	(1) 4U1822-371	ACS/SBC, ACCUM, SBC	PR130L				350.0 Secs [=>]	[1]

Proposal 10535 - Visit 04 - High Temperature Accretion Flows and Reprocessing in X-ray Binaries: The ADC Source 4U 1822-371

#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit	
Exposures (continued)	3	Visit 4, Exp osure 3	(1) 4U1822-371	ACS/SBC, ACCUM, SBC	PR130L			45.0 Secs X 14		



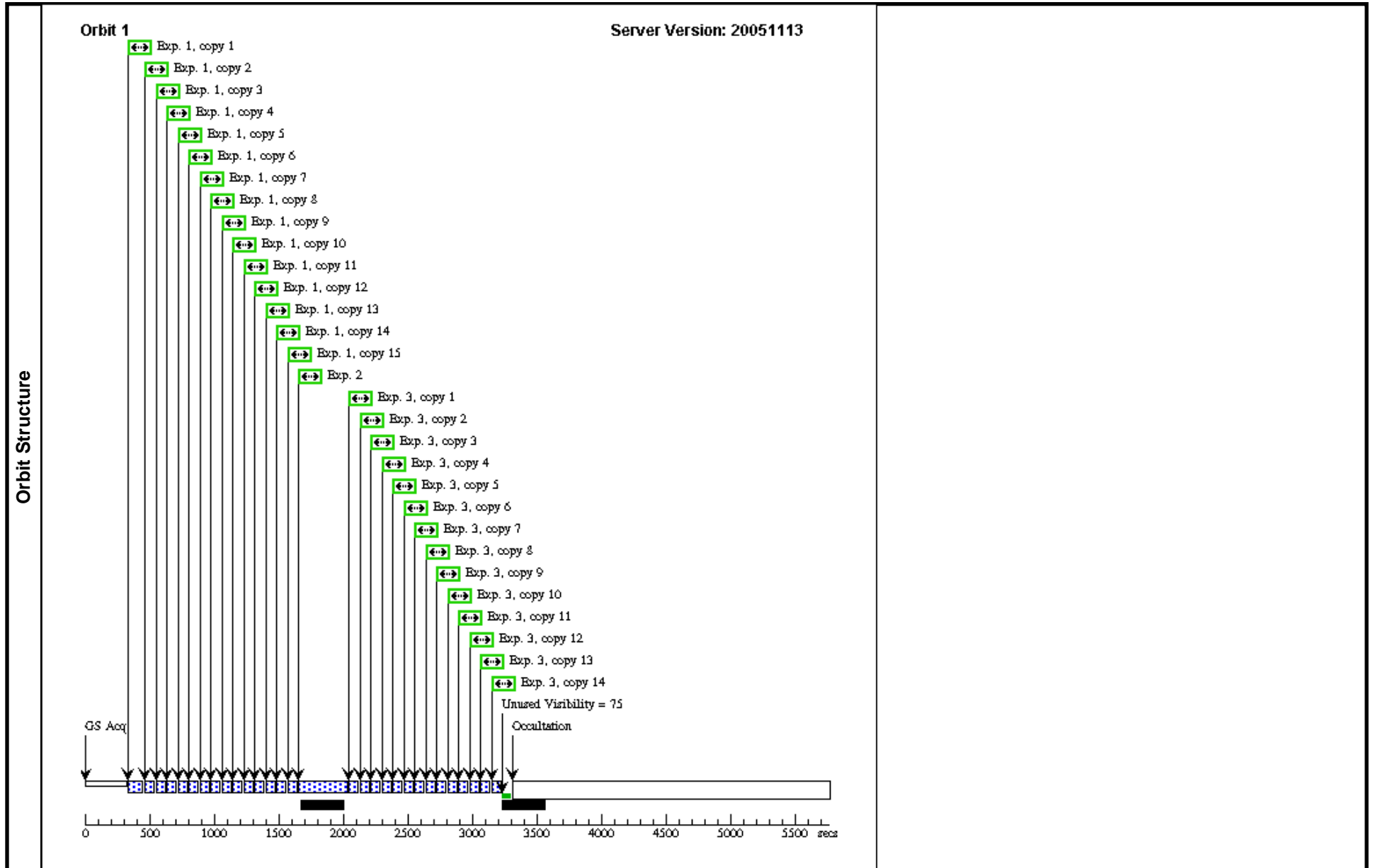
Proposal 10535 - Visit 05 - High Temperature Accretion Flows and Reprocessing in X-ray Binaries: The ADC Source 4U 1822-371

Thu Feb 02 02:03:28 GMT 2006

Visit	Proposal 10535, Visit 05 Diagnostic Status: No Diagnostics Scientific Instruments: ACS/SBC Special Requirements: (none)									
	Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous			
	(1)	4U1822-371 Alt Name1: V691CRA	RA: 18 25 46.7800 (276.4449167d) Dec: -37 06 19.70 (-37.10547d) Equinox: J2000 Plate Id: 060G		V=15.9 Continuum flux at 1500 A is 3 X 10 ⁻¹⁴ ergs/cm/sec/A	Coordinate Source: GSC_SURVEY_PLATE				
Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit
	1	Visit 5, Exposure 1	(1) 4U1822-371	ACS/SBC, ACCUM, SBC	PR130L					45.0 Secs X 15 [=>(Copy 1)] [=>(Copy 2)] [=>(Copy 3)] [=>(Copy 4)] [=>(Copy 5)] [=>(Copy 6)] [=>(Copy 7)] [=>(Copy 8)] [=>(Copy 9)] [=>(Copy 10)] [=>(Copy 11)] [=>(Copy 12)] [=>(Copy 13)] [=>(Copy 14)] [=>(Copy 15)]
	2	Visit 5, Exposure 2	(1) 4U1822-371	ACS/SBC, ACCUM, SBC	PR130L				350.0 Secs [=>]	[1]

Proposal 10535 - Visit 05 - High Temperature Accretion Flows and Reprocessing in X-ray Binaries: The ADC Source 4U 1822-371

#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit	
Exposures (continued)	3	Visit 5, Exp osure 3	(1) 4U1822-371 ACS/SBC, ACCUM, SBC	PR130L				45.0 Secs X 14		



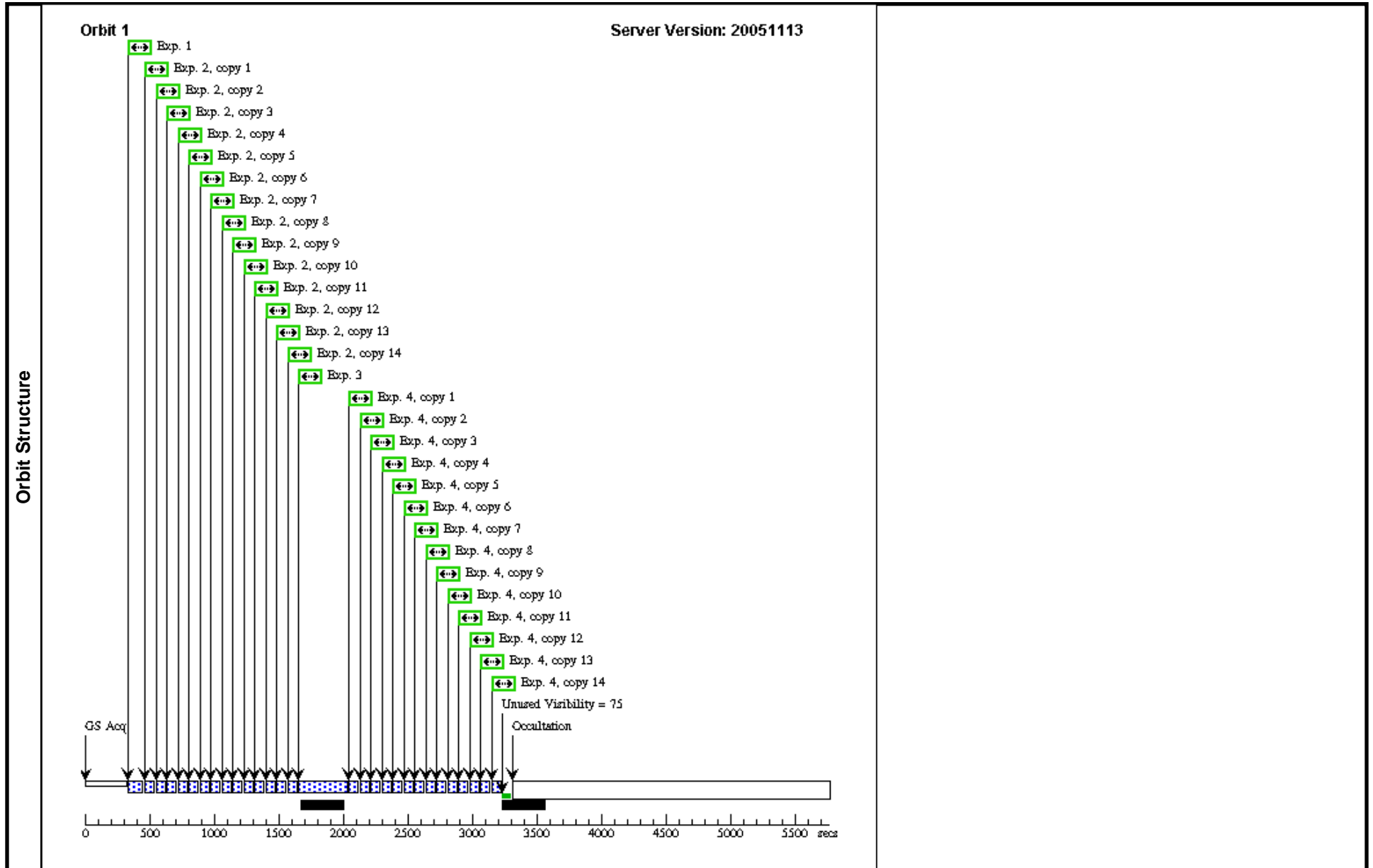
Proposal 10535 - Visit 06 - High Temperature Accretion Flows and Reprocessing in X-ray Binaries: The ADC Source 4U 1822-371

Thu Feb 02 02:03:29 GMT 2006

Visit		Proposal 10535, Visit 06 Diagnostic Status: No Diagnostics Scientific Instruments: ACS/SBC Special Requirements: Period 0.23211019 D AND ZERO-PHASE JD2453507.0321; SEQ 06,07,08,09,10 WITHIN 4.8 Orbits									
Fixed Targets		#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous				
Exposures		#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit
		1	Visit 6, Exposure 1	(1) 4U1822-371	ACS/SBC, ACCUM, SBC	PR130L		PHASE 0.75 TO 0.9 5		45.0 Secs [==>]	[1]
		2	Visit 6, Exposure 2	(1) 4U1822-371	ACS/SBC, ACCUM, SBC	PR130L				45.0 Secs X 14 [==>(Copy 1)] [==>(Copy 2)] [==>(Copy 3)] [==>(Copy 4)] [==>(Copy 5)] [==>(Copy 6)] [==>(Copy 7)] [==>(Copy 8)] [==>(Copy 9)] [==>(Copy 10)] [==>(Copy 11)] [==>(Copy 12)] [==>(Copy 13)] [==>(Copy 14)]	[1]
		3	Visit 6, Exposure 3	(1) 4U1822-371	ACS/SBC, ACCUM, SBC	PR130L				350.0 Secs [==>]	[1]

Proposal 10535 - Visit 06 - High Temperature Accretion Flows and Reprocessing in X-ray Binaries: The ADC Source 4U 1822-371

#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit	
Exposures (continued)	4	Visit 6, Exp osure 4	(1) 4U1822-371 ACS/SBC, ACCUM, SBC	PR130L				45.0 Secs X 14		



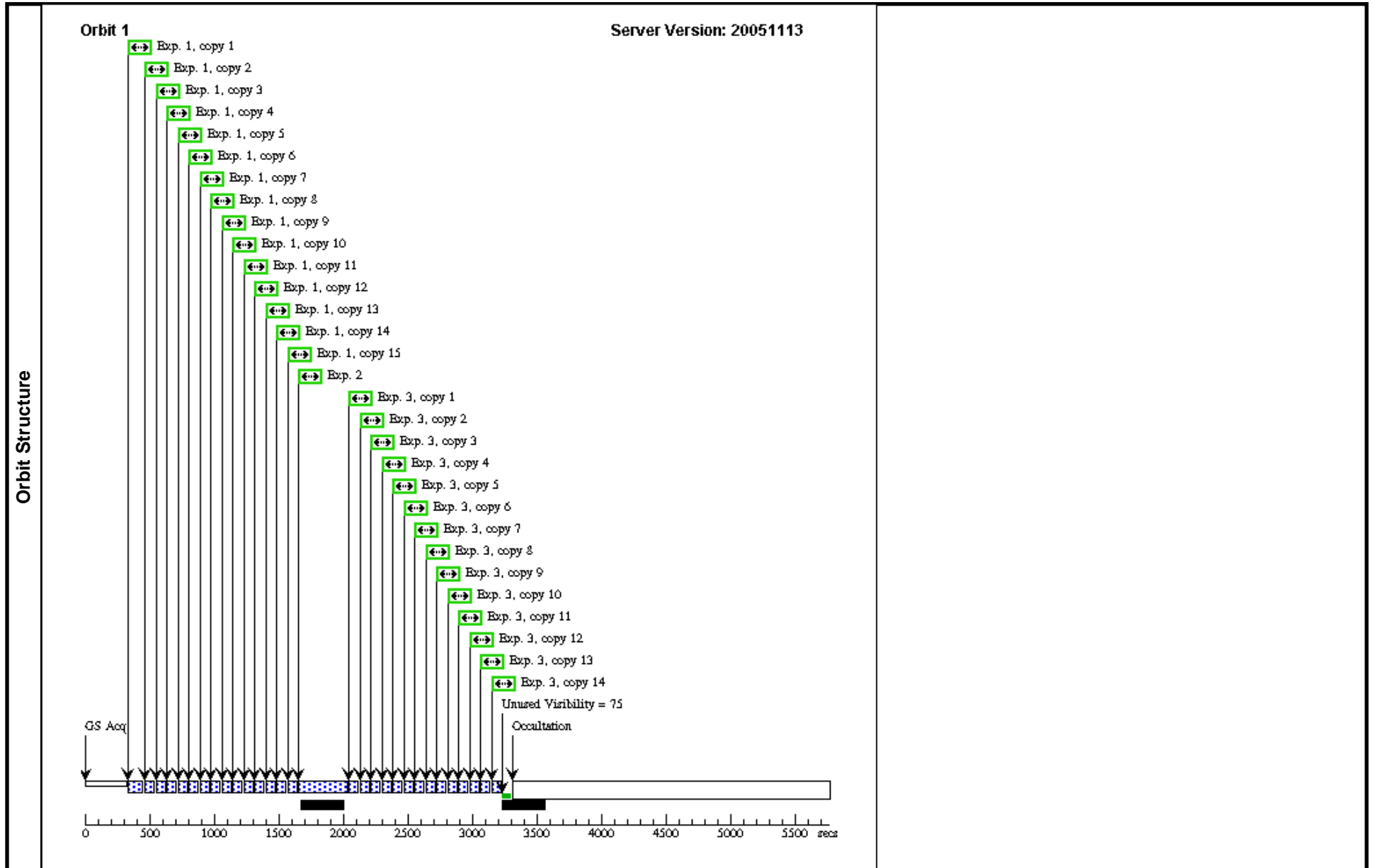
Proposal 10535 - Visit 07 - High Temperature Accretion Flows and Reprocessing in X-ray Binaries: The ADC Source 4U 1822-371

Thu Feb 02 02:03:29 GMT 2006

Visit	Proposal 10535, Visit 07									
	Diagnostic Status: No Diagnostics									
Fixed Targets	Scientific Instruments: ACS/SBC									
	Special Requirements: (none)									
#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous					
(1)	4U1822-371 Alt Name1: V691CRA	RA: 18 25 46.7800 (276.4449167d) Dec: -37 06 19.70 (-37.10547d) Equinox: J2000 Plate Id: 060G		V=15.9 Continuum flux at 1500 A is 3 X 10 ⁻¹⁴ ergs/cm/sec/A	Coordinate Source: GSC_SURVEY_PLATE					
Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit
	1	Visit 7, Exposure 1	(1) 4U1822-371	ACS/SBC, ACCUM, SBC	PR130L					45.0 Secs X 15 [=>(Copy 1)] [=>(Copy 2)] [=>(Copy 3)] [=>(Copy 4)] [=>(Copy 5)] [=>(Copy 6)] [=>(Copy 7)] [=>(Copy 8)] [=>(Copy 9)] [=>(Copy 10)] [=>(Copy 11)] [=>(Copy 12)] [=>(Copy 13)] [=>(Copy 14)] [=>(Copy 15)]
2	Visit 7, Exposure 2	(1) 4U1822-371	ACS/SBC, ACCUM, SBC	PR130L					350.0 Secs [=>]	[1]

Proposal 10535 - Visit 07 - High Temperature Accretion Flows and Reprocessing in X-ray Binaries: The ADC Source 4U 1822-371

#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit	
Exposures (continued)	3	Visit 7, Exp osure 3	(1) 4U1822-371 ACS/SBC, ACCUM, SBC	PR130L				45.0 Secs X 14		



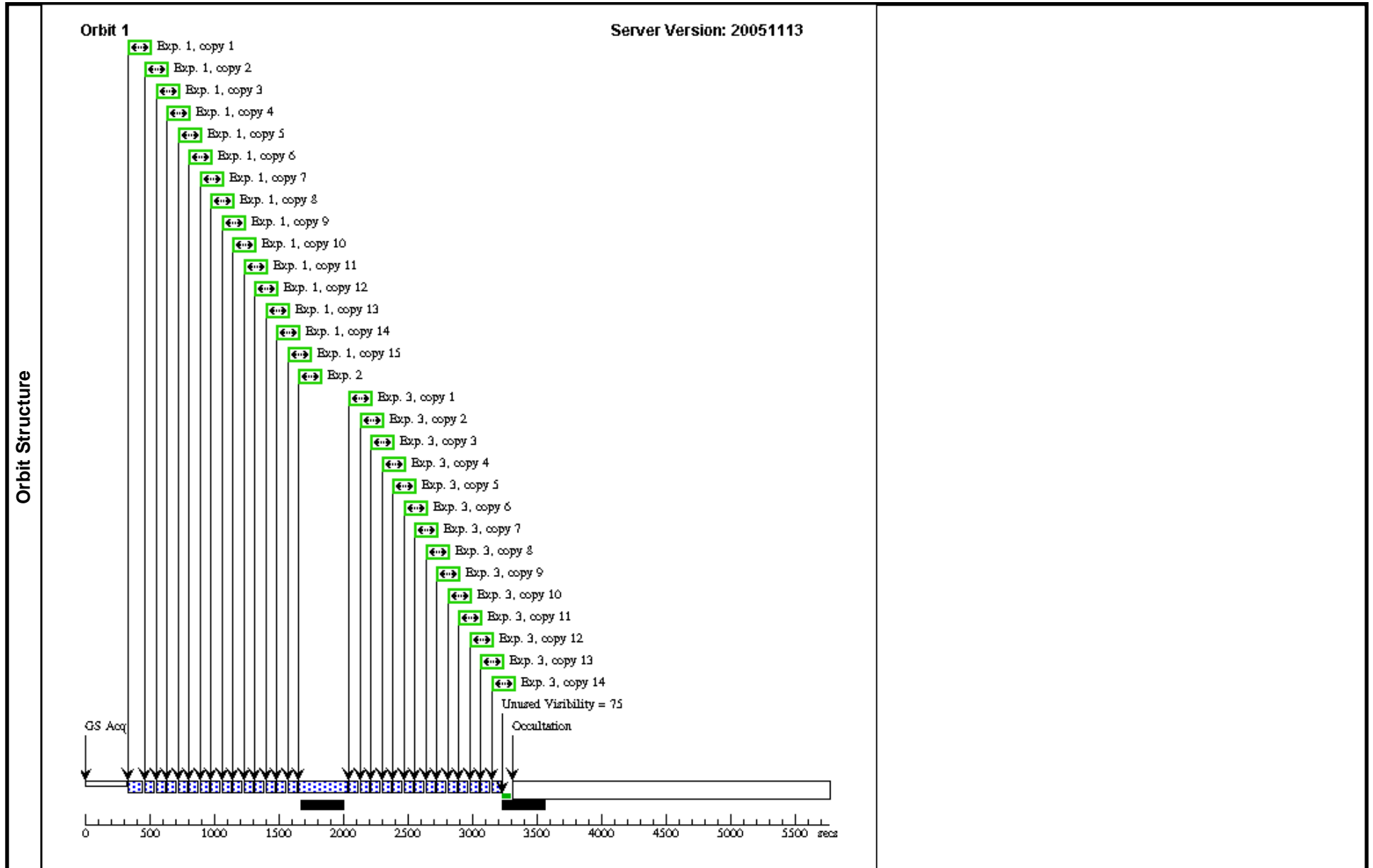
Proposal 10535 - Visit 08 - High Temperature Accretion Flows and Reprocessing in X-ray Binaries: The ADC Source 4U 1822-371

Thu Feb 02 02:03:30 GMT 2006

Visit	Proposal 10535, Visit 08 Diagnostic Status: No Diagnostics Scientific Instruments: ACS/SBC Special Requirements: (none)									
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	(1)	4U1822-371 Alt Name1: V691CRA	RA: 18 25 46.7800 (276.4449167d) Dec: -37 06 19.70 (-37.10547d) Equinox: J2000 Plate Id: 060G		V=15.9 Continuum flux at 1500 A is 3 X 10 ⁻¹⁴ ergs/cm/sec/A	Coordinate Source: GSC_SURVEY_PLATE				
Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit
	1	Visit 8, Exposure 1	(1) 4U1822-371	ACS/SBC, ACCUM, SBC	PR130L					45.0 Secs X 15 [=>(Copy 1)] [=>(Copy 2)] [=>(Copy 3)] [=>(Copy 4)] [=>(Copy 5)] [=>(Copy 6)] [=>(Copy 7)] [=>(Copy 8)] [=>(Copy 9)] [=>(Copy 10)] [=>(Copy 11)] [=>(Copy 12)] [=>(Copy 13)] [=>(Copy 14)] [=>(Copy 15)]
	2	Visit 8, Exposure 2	(1) 4U1822-371	ACS/SBC, ACCUM, SBC	PR130L				350.0 Secs [=>]	[1]

Proposal 10535 - Visit 08 - High Temperature Accretion Flows and Reprocessing in X-ray Binaries: The ADC Source 4U 1822-371

#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit	
Exposures (continued)	3	Visit 8, Exp osure 3	(1) 4U1822-371 ACS/SBC, ACCUM, SBC	PR130L				45.0 Secs X 14		



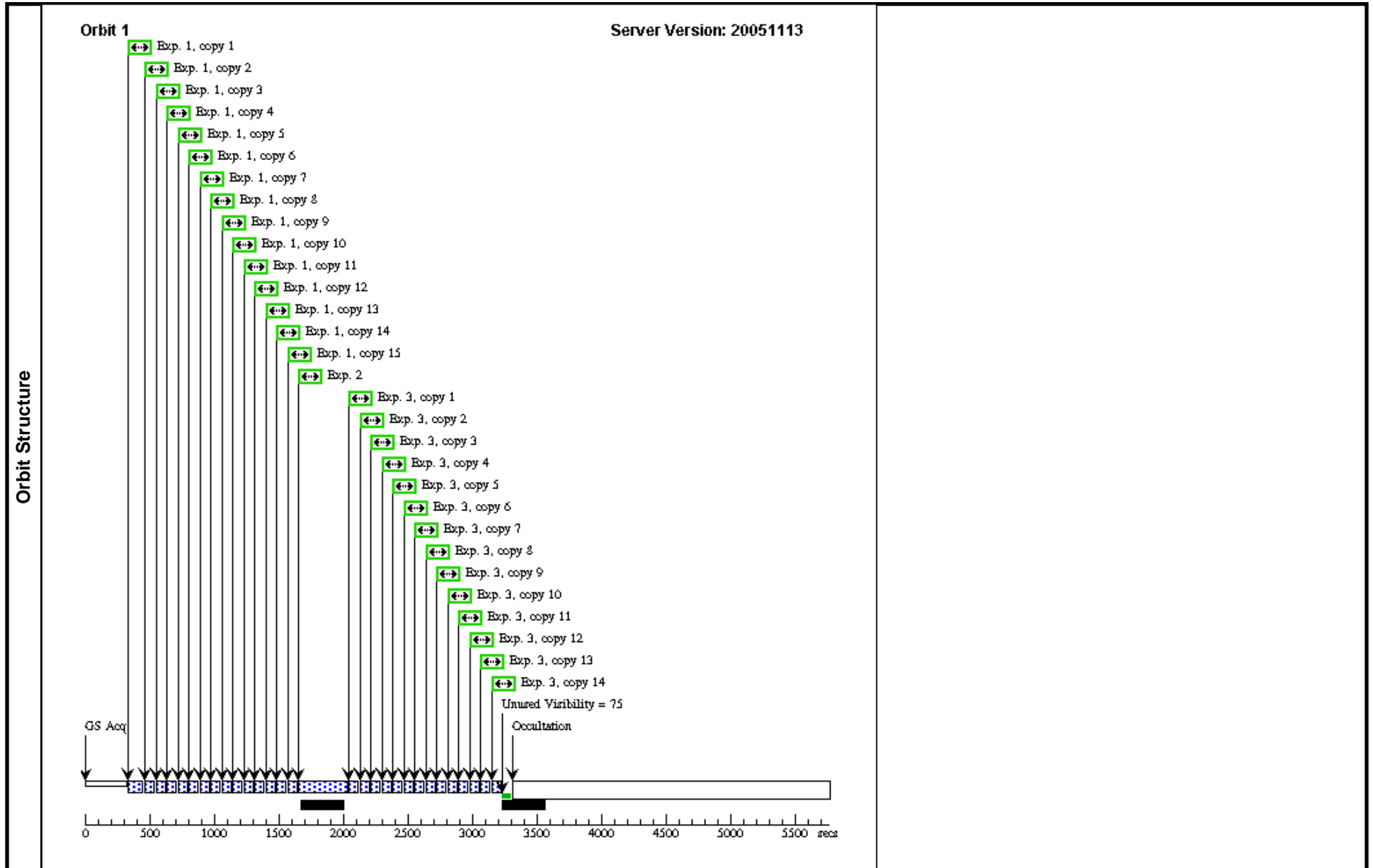
Proposal 10535 - Visit 09 - High Temperature Accretion Flows and Reprocessing in X-ray Binaries: The ADC Source 4U 1822-371

Thu Feb 02 02:03:32 GMT 2006

Visit	Proposal 10535, Visit 09									
	Diagnostic Status: No Diagnostics									
Fixed Targets	Scientific Instruments: ACS/SBC									
	Special Requirements: (none)									
#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous					
(1)	4U1822-371 Alt Name1: V691CRA	RA: 18 25 46.7800 (276.4449167d) Dec: -37 06 19.70 (-37.10547d) Equinox: J2000 Plate Id: 060G		V=15.9 Continuum flux at 1500 A is 3 X 10 ⁻¹⁴ ergs/cm/sec/A	Coordinate Source: GSC_SURVEY_PLATE					
Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit
	1	Visit 9, Exposure 1	(1) 4U1822-371	ACS/SBC, ACCUM, SBC	PR130L					45.0 Secs X 15 [=>(Copy 1)] [=>(Copy 2)] [=>(Copy 3)] [=>(Copy 4)] [=>(Copy 5)] [=>(Copy 6)] [=>(Copy 7)] [=>(Copy 8)] [=>(Copy 9)] [=>(Copy 10)] [=>(Copy 11)] [=>(Copy 12)] [=>(Copy 13)] [=>(Copy 14)] [=>(Copy 15)]
2	Visit 9, Exposure 2	(1) 4U1822-371	ACS/SBC, ACCUM, SBC	PR130L					350.0 Secs [=>]	[1]

Proposal 10535 - Visit 09 - High Temperature Accretion Flows and Reprocessing in X-ray Binaries: The ADC Source 4U 1822-371

#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit	
Exposures (continued)	3 Visit 9, Exposure 3	(1) 4U1822-371	ACS/SBC, ACCUM, SBC	PR130L				45.0 Secs X 14		



Proposal 10535 - Visit 10 - High Temperature Accretion Flows and Reprocessing in X-ray Binaries: The ADC Source 4U 1822-371

Thu Feb 02 02:03:33 GMT 2006

Visit	Proposal 10535, Visit 10									
	Diagnostic Status: No Diagnostics									
Fixed Targets	Scientific Instruments: ACS/SBC									
	Special Requirements: (none)									
#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous					
(1)	4U1822-371 Alt Name1: V691CRA	RA: 18 25 46.7800 (276.4449167d) Dec: -37 06 19.70 (-37.10547d) Equinox: J2000 Plate Id: 060G		V=15.9 Continuum flux at 1500 A is 3 X 10 ⁻¹⁴ ergs/cm/sec/A	Coordinate Source: GSC_SURVEY_PLATE					
Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit
	1	Visit 10, Exposure 1	(1) 4U1822-371	ACS/SBC, ACCUM, SBC	PR130L					45.0 Secs X 15 [=>(Copy 1)] [=>(Copy 2)] [=>(Copy 3)] [=>(Copy 4)] [=>(Copy 5)] [=>(Copy 6)] [=>(Copy 7)] [=>(Copy 8)] [=>(Copy 9)] [=>(Copy 10)] [=>(Copy 11)] [=>(Copy 12)] [=>(Copy 13)] [=>(Copy 14)] [=>(Copy 15)]
2	Visit 10, Exposure 2	(1) 4U1822-371	ACS/SBC, ACCUM, SBC	PR130L					350.0 Secs [=>]	[1]

Proposal 10535 - Visit 10 - High Temperature Accretion Flows and Reprocessing in X-ray Binaries: The ADC Source 4U 1822-371

#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit
Exposures (continued)	3	Visit 10, Ex (1) 4U1822-371	ACS/SBC, ACCUM, SBC	PR130L				45.0 Secs X 14	
		posure 3						[==>(Copy 1)]	
								[==>(Copy 2)]	
								[==>(Copy 3)]	
								[==>(Copy 4)]	
								[==>(Copy 5)]	
								[==>(Copy 6)]	
								[==>(Copy 7)]	
								[==>(Copy 8)]	[1]
								[==>(Copy 9)]	
								[==>(Copy 10)]	
								[==>(Copy 11)]	
								[==>(Copy 12)]	
								[==>(Copy 13)]	
							[==>(Copy 14)]		

