



12530 - Early-Time UV Spectroscopy of a Stripped-Envelope Supernova: A New Window

Cycle: 19, Proposal Category: GO
(Availability Mode: SUPPORTED)

INVESTIGATORS

<i>Name</i>	<i>Institution</i>	<i>E-Mail</i>
Prof. Alex V. Filippenko (PI) (Contact)	University of California - Berkeley	alex@astro.berkeley.edu
Dr. Avishay Gal-Yam (CoI)	Weizmann Institute of Science	avishay.gal-yam@weizmann.ac.il
Dr. Weidong Li (CoI)	University of California - Berkeley	wli@astro.berkeley.edu
Dr. Paolo Mazzali (CoI) (ESA Member)	INAF, Osservatorio Astronomico di Trieste	mazzali@ts.astro.it
Prof. Maryam Modjaz (CoI)	New York University	mmodjaz@nyu.edu
Dr. Thomas Matheson (CoI)	National Optical Astronomy Observatory, AURA	tmatheson@noao.edu
Dr. Daniel Sauer (CoI) (ESA Member)	Stockholm University	dsauer@astro.su.se
Mr. Jeffrey M. Silverman (CoI)	University of California - Berkeley	jsilverman@astro.berkeley.edu
Mr. Sagi Ben-Ami (CoI)	Weizmann Institute of Science	sagiba.ph@gmail.com
Dr. Ofer Yaron (CoI)	Weizmann Institute of Science	ofer.yaron@weizmann.ac.il
Dr. Nathan Smith (CoI)	University of Arizona	nathans@as.arizona.edu

VISITS

<i>Visit</i>	<i>Targets used in Visit</i>	<i>Configurations used in Visit</i>	<i>Orbits Used</i>	<i>Last Orbit Planner Run</i>	<i>OP Current with Visit?</i>
01	(2) PTF12GZK CCDFLAT	STIS/CCD STIS/NUV-MAMA	4	31-Jul-2012 21:19:58.0	yes
02	(2) PTF12GZK CCDFLAT	STIS/CCD STIS/NUV-MAMA	4	31-Jul-2012 21:20:29.0	yes

<i>Visit</i>	<i>Targets used in Visit</i>	<i>Configurations used in Visit</i>	<i>Orbits Used</i>	<i>Last Orbit Planner Run</i>	<i>OP Current with Visit?</i>
03	(2) PTF12GZK CCDFLAT	STIS/CCD STIS/NUV-MAMA	4	31-Jul-2012 21:20:57.0	yes
04	(2) PTF12GZK CCDFLAT	STIS/CCD STIS/NUV-MAMA	3	31-Jul-2012 21:21:24.0	yes
05	(2) PTF12GZK CCDFLAT	STIS/CCD STIS/NUV-MAMA	5	31-Jul-2012 21:21:50.0	yes
06	(2) PTF12GZK CCDFLAT	STIS/CCD STIS/NUV-MAMA	5	31-Jul-2012 21:22:18.0	yes
07	(2) PTF12GZK CCDFLAT	STIS/CCD STIS/NUV-MAMA	5	31-Jul-2012 21:22:46.0	yes

30 Total Orbits Used

ABSTRACT

We propose to obtain 5 epochs of UV spectroscopy of a Target of Opportunity stripped-envelope core-collapse supernova during 2 weeks roughly centered on maximum brightness. The underlying nature of these objects, from the mechanism by which they lose their envelopes to the details of their explosions, remains mysterious. Their connection to gamma-ray bursts and X-ray flashes only increases the importance of understanding these mechanisms. In addition, many supernovae of all types will be found in future high-redshift transient surveys, but the ability to distinguish between Type Ia (thermonuclear) supernovae and stripped-envelope supernovae will require a more thorough knowledge of the latter, especially at UV wavelengths. The spectra we propose to obtain will lead to several new insights. By comparing the evolution of the spectra as the photosphere recedes to deeper layers of the ejecta to our time series of spectral models, we will gain a better understanding of the explosion and possibly the progenitor star. Specifically, we may be able to determine the metal content of the progenitor through comparisons with our spectral models, and we should be able to probe the degree of mixing during the explosion. With coordinated observations of the SN in the optical and near-IR using our ground-based programs, we will be able to accurately characterize the nature of the emission radiated by these supernovae.

OBSERVING DESCRIPTION

Obtain STIS UV spectra of one bright ($V_{\max} < 15.5$ mag), nearby, stripped-envelope SN as soon as possible after discovery (preferably at $t < -6$ d, relative to maximum brightness), with subsequent spectra taken at predetermined intervals as follows, for a total of 5 epochs (15 orbits):

Proposal 12530 (STScI Edit Number: 3, Created: Tuesday, July 31, 2012 8:23:01 PM EST) - Overview

Epoch(days)	-6	-2	2	6
V(mag)	15.56	15.23	15.12	15.16
Orbits	4	4	4	3
S/N(2376Ang)	9	9	8.5	5
S/N(4300Ang)	47	54	56	52
S/N(7751Ang)	50	62	68	69

The cadence of the spectral observations is determined from the timescale over which significant changes are observed in ground-based optical/near-UV spectra.

REAL TIME JUSTIFICATION

This is a disruptive ToO observation of a single bright SN.

However, it is not an ultra-rapid (< 2 day turnaround) ToO. We will work with STScI staff to expedite the observations, and we will try to choose an object that minimizes the time between ToO activation and observations. If our object is found 14 days before maximum brightness, and we have a turnaround time of 8 days (i.e., significantly longer than the 2-5 day minimum), the first observation will commence about 6 days before maximum light.

Our observations use both the STIS CCD and MAMA detectors in order to provide full wavelength coverage. The CCD observations do not need an entire orbit, and can be done during the final MAMA orbit of each epoch.

The requirement described in the STIS Instrument Handbook for Cycle 19 that such observations be split into separate visits presents a substantial problem for our program.

The spectra of SNe change rapidly (on a time scale of 1-2 days) at these early phases; temporally separating pieces of the spectrum might seriously compromise our ability to model it. Our program would greatly benefit if the whole spectrum were obtained in a single visit. Therefore, we request an exception to the rule as outlined in Section 2.6 of the STIS Instrument Handbook. However, if this request cannot be accommodated, we request visits not more than 1 day from each other.

CALIBRATION JUSTIFICATION

Our SN, which is optically bright, will have ground-based astrometry with respect to HST guide stars accurate to better than 0.2". Using the STIS Acquisition ETC we find acquisition times of less than 1 min for all epochs, for the 0.2" slit. Previously, we have successfully acquired SNe with STIS in this manner.

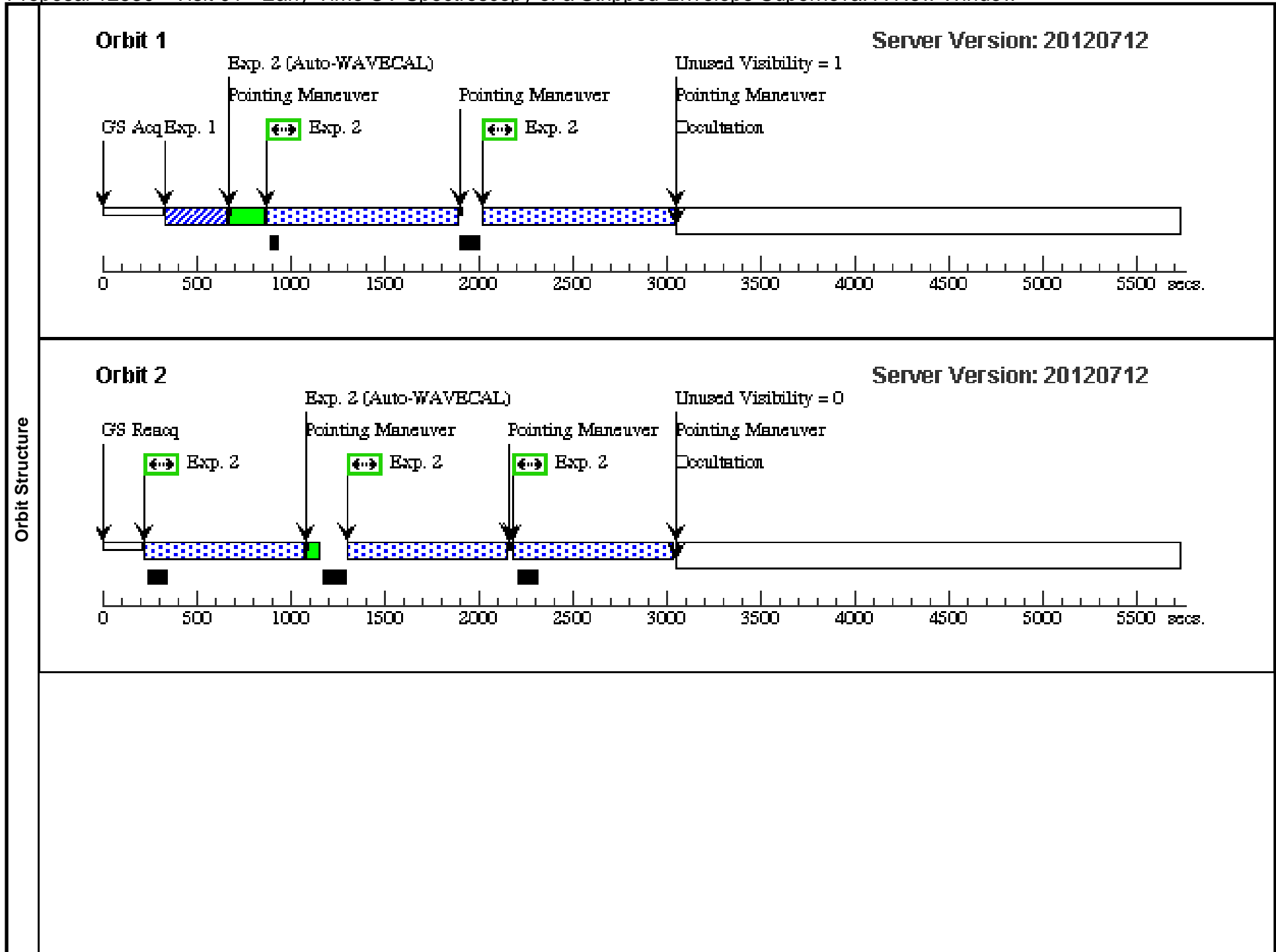
ADDITIONAL COMMENTS

This is a ToO proposal. We will update our phase 2 with the supernova coordinates as they become available.

Proposal 12530 - Visit 01 - Early-Time UV Spectroscopy of a Stripped-Envelope Supernova: A New Window

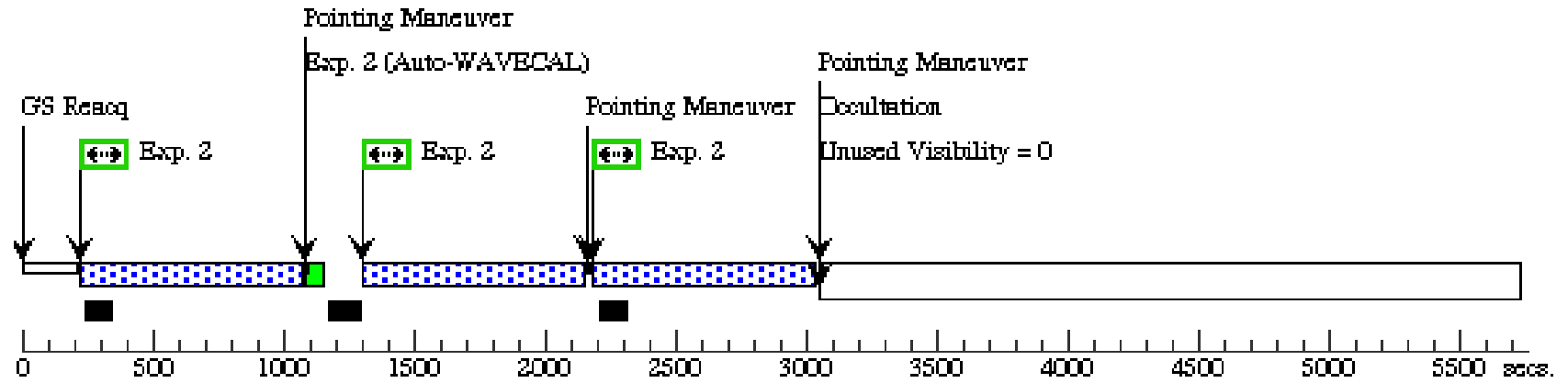
Wed Aug 01 01:23:02 GMT 2012

Visit	Proposal 12530, Visit 01, withdrawn Diagnostic Status: No Diagnostics Scientific Instruments: STIS/CCD, STIS/NUV-MAMA Special Requirements: BEFORE 09-AUG-2012; ON HOLD ; VISIBILITY INTERVAL 50.9 M <i>On Hold Comments: Target of Opportunity</i>									
	Patterns	#	Primary Pattern			Secondary Pattern			Exposures	
		(1)	Pattern Type=STIS-ALONG-SLIT	Coordinate Frame=POS-TARG						
		Purpose=DITHER	Pattern Orientation=90.0							
		Number Of Points=10	Angle Between Sides=							
		Point Spacing=1.1	Center Pattern=false							
		Line Spacing=								
Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous				
	(2)	PTF12GZK	RA: 22 12 41.5300 (333.1730417d) Dec: +00 30 43.10 (.51197d) Equinox: J2000		V=16+/-0.2	Reference Frame: ICRS				
Exposures	#	Label (ETC Run)	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit
	1	TargetAcquisition	(2) PTF12GZK	STIS/CCD, ACQ, F28X50LP	MIRROR				25 Secs	
									[==>]	[1]
	2	SpectroscopyNUV (STIS.sp.179872)	(2) PTF12GZK	STIS/NUV-MAMA, ACCUM, 52X0.2	G230L 2376 A			Pattern 1, Exps 2-2 in Visit 01 (1)	816 Secs	
									[==>1005.0 Secs (Pattern 1)]	[1]
									[==>1005.0 Secs (Pattern 2)]	
									[==>837.0 Secs (Pattern 3)]	
									[==>837.0 Secs (Pattern 4)]	[2]
									[==>837.0 Secs (Pattern 5)]	
									[==>837.0 Secs (Pattern 6)]	
								[==>837.0 Secs (Pattern 7)]	[3]	
								[==>837.0 Secs (Pattern 8)]		
								[==>698.0 Secs (Pattern 9)]	[4]	
								[==>698.0 Secs (Pattern 10)]		
3	SpectroscopyG430L	(2) PTF12GZK	STIS/CCD, ACCUM, 52X0.2E1	G430L 4300 A				100 Secs		
								[==>203.0 Secs (Split 1)]		
								[==>203.0 Secs (Split 2)]	[4]	
4	SpectroscopyG750L	(2) PTF12GZK	STIS/CCD, ACCUM, 52X0.2E1	G750L 7751 A				50 Secs		
								[==>85.0 Secs (Split 1)]		
								[==>85.0 Secs (Split 2)]	[4]	
5	G750LFringsFlats	CCDFLAT	STIS/CCD, ACCUM, 52X0.1	G750L 7751 A				[==>(Copy 1)]		
								[==>(Copy 2)]	[4]	



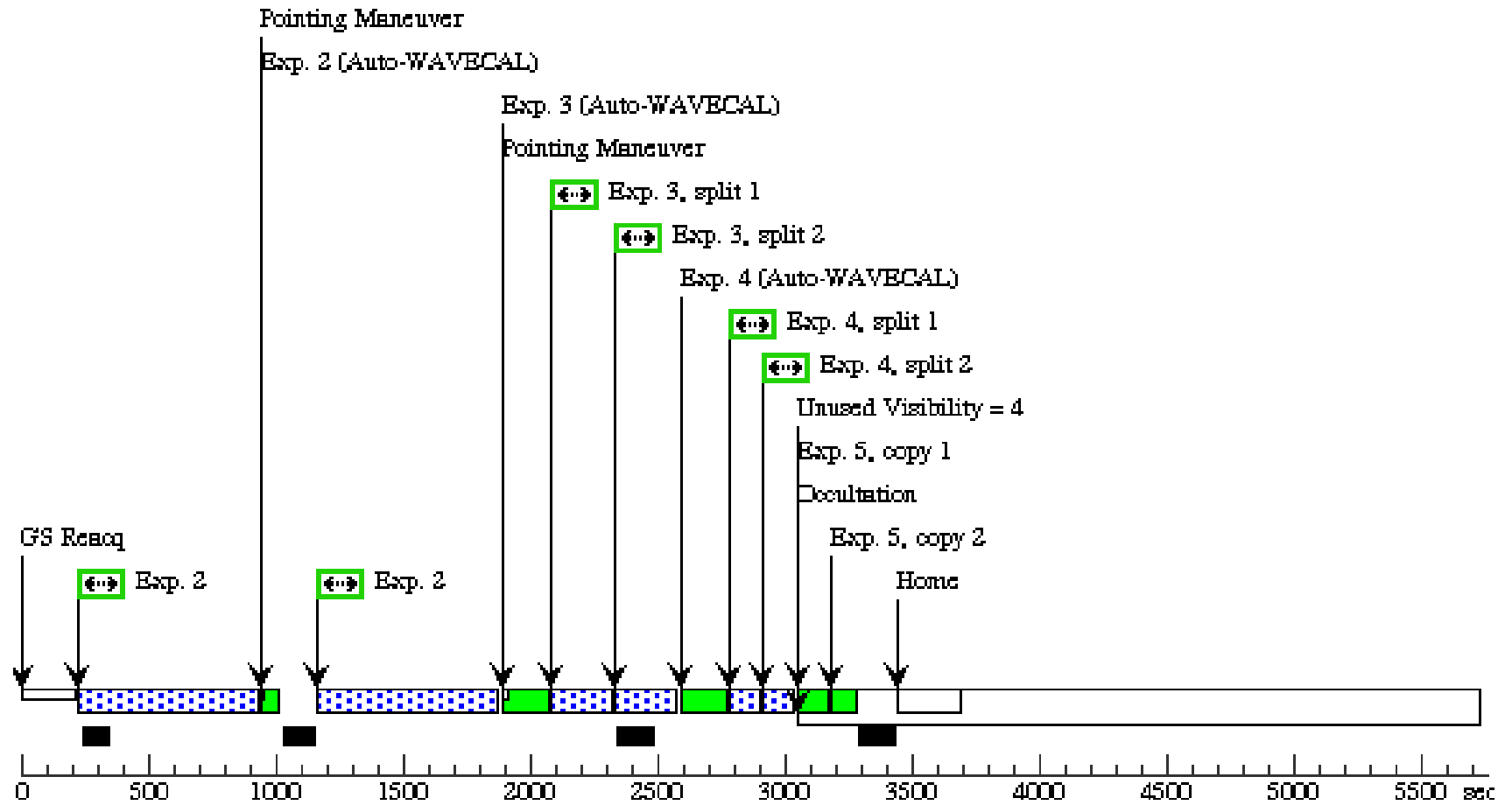
Orbit 3

Server Version: 20120712



Orbit 4

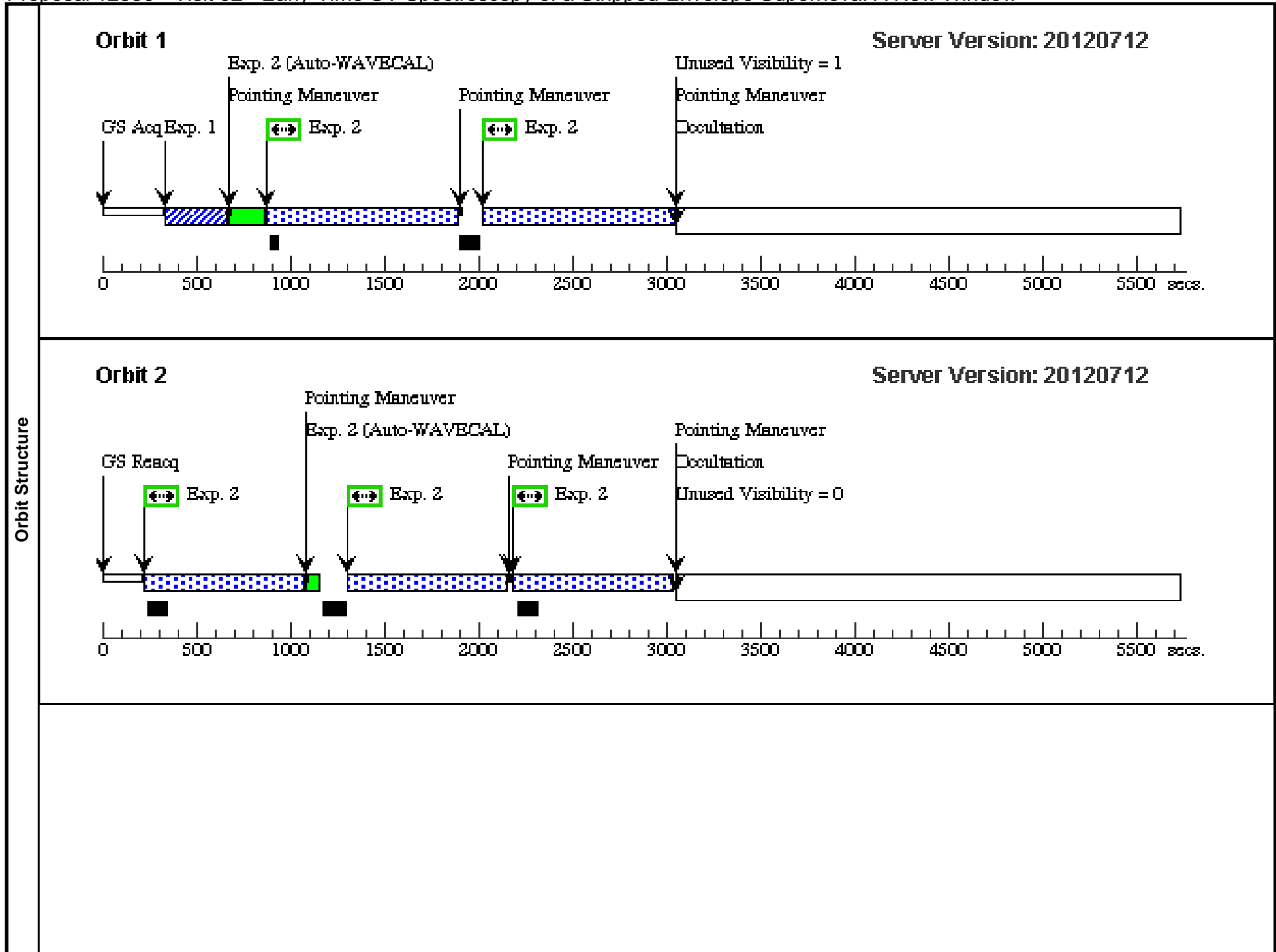
Server Version: 20120712



Proposal 12530 - Visit 02 - Early-Time UV Spectroscopy of a Stripped-Envelope Supernova: A New Window

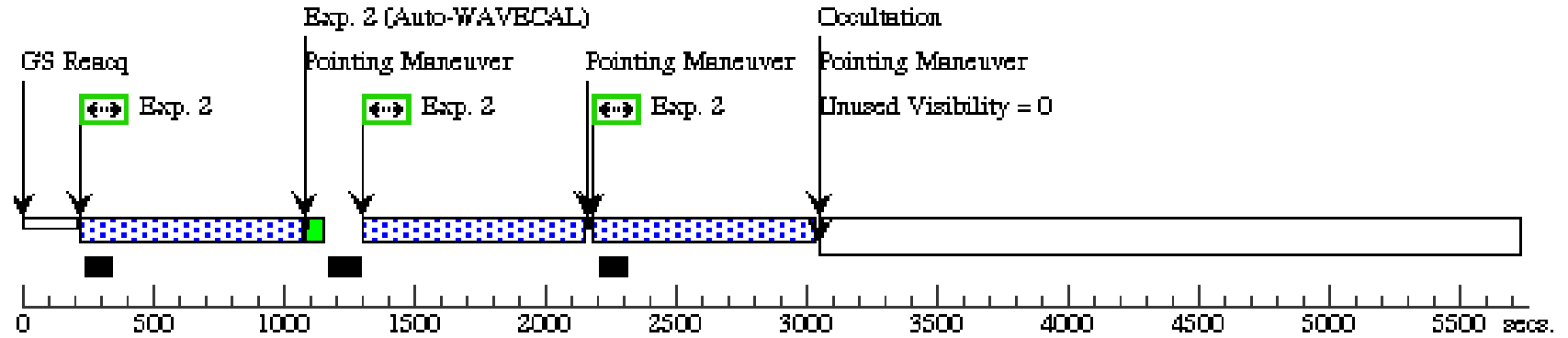
Wed Aug 01 01:23:08 GMT 2012

Visit	Proposal 12530, Visit 02, withdrawn Diagnostic Status: No Diagnostics Scientific Instruments: STIS/CCD, STIS/NUV-MAMA Special Requirements: AFTER 01 BY 3 D TO 5 D; ON HOLD ; VISIBILITY INTERVAL 50.9 M <i>On Hold Comments: Target of Opportunity</i>									
	Patterns	#	Primary Pattern			Secondary Pattern			Exposures	
		(1)	Pattern Type=STIS-ALONG-SLIT	Coordinate Frame=POS-TARG						
		Purpose=DITHER	Pattern Orientation=90.0							
		Number Of Points=10	Angle Between Sides=							
		Point Spacing=1.1	Center Pattern=false							
		Line Spacing=								
Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous				
	(2)	PTF12GZK	RA: 22 12 41.5300 (333.1730417d) Dec: +00 30 43.10 (.51197d) Equinox: J2000		V=16+/-0.2	Reference Frame: ICRS				
Exposures	#	Label (ETC Run)	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit
	1	TargetAcquisition	(2) PTF12GZK	STIS/CCD, ACQ, F28X50LP	MIRROR				25 Secs	
									[==>]	[1]
	2	SpectroscopyNUV (STIS.sp.179873)	(2) PTF12GZK	STIS/NUV-MAMA, ACCUM, 52X0.2	G230L 2376 A			Pattern 1, Exps 2-2 in Visit 02 (1)	816 Secs	
									[==>1005.0 Secs (Pattern 1)]	[1]
									[==>1005.0 Secs (Pattern 2)]	
									[==>837.0 Secs (Pattern 3)]	
									[==>837.0 Secs (Pattern 4)]	[2]
									[==>837.0 Secs (Pattern 5)]	
									[==>837.0 Secs (Pattern 6)]	
								[==>837.0 Secs (Pattern 7)]	[3]	
								[==>837.0 Secs (Pattern 8)]		
								[==>698.0 Secs (Pattern 9)]	[4]	
								[==>698.0 Secs (Pattern 10)]		
3	SpectroscopyG430L	(2) PTF12GZK	STIS/CCD, ACCUM, 52X0.2E1	G430L 4300 A				100 Secs		
								[==>203.0 Secs (Split 1)]	[4]	
								[==>203.0 Secs (Split 2)]		
4	SpectroscopyG750L	(2) PTF12GZK	STIS/CCD, ACCUM, 52X0.2E1	G750L 7751 A				50 Secs		
								[==>85.0 Secs (Split 1)]	[4]	
								[==>85.0 Secs (Split 2)]		
5	G750LFringsFlats	CCDFLAT	STIS/CCD, ACCUM, 52X0.1	G750L 7751 A				[==>(Copy 1)]	[4]	
								[==>(Copy 2)]		



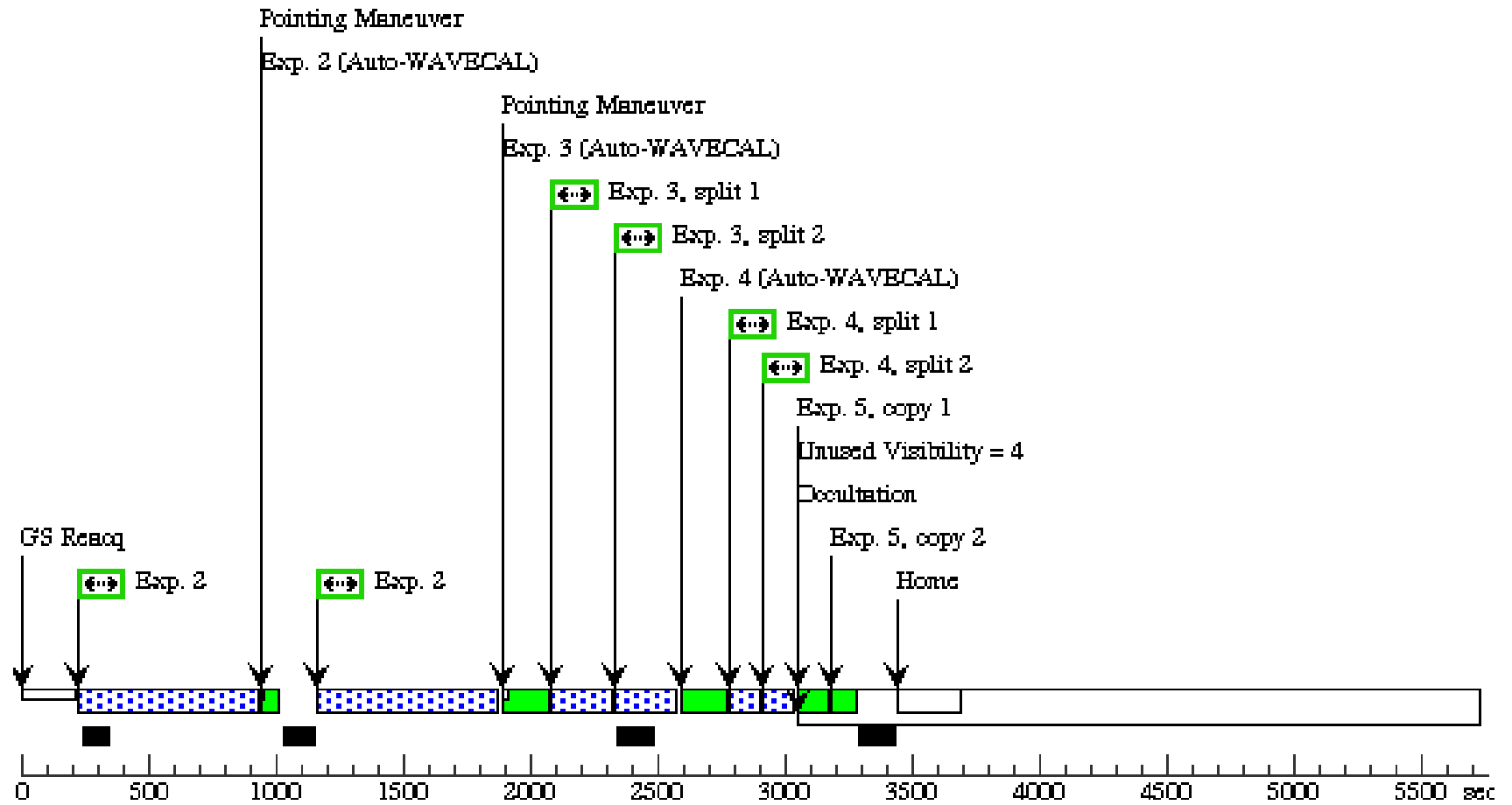
Orbit 3

Server Version: 20120712



Orbit 4

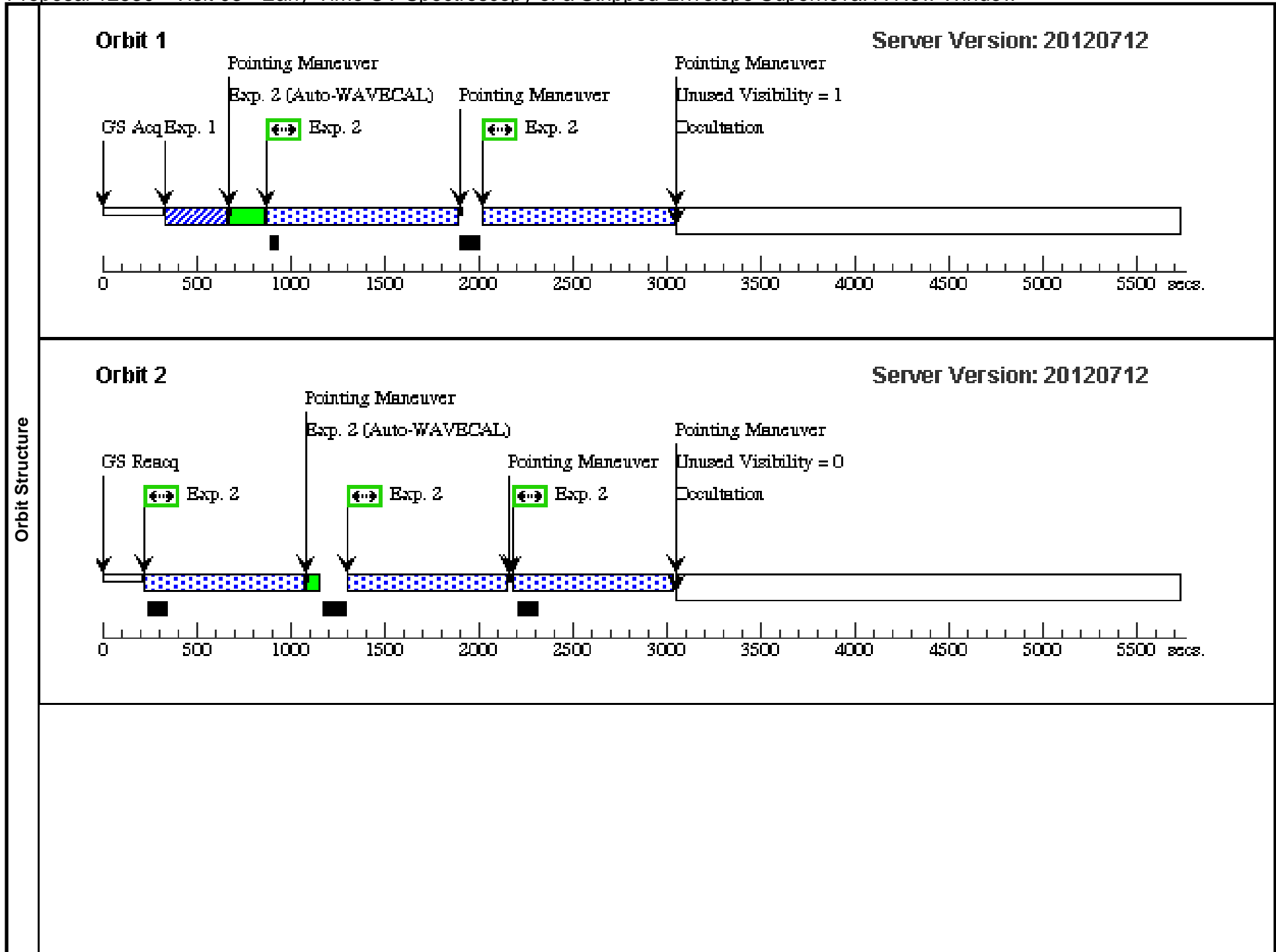
Server Version: 20120712



Proposal 12530 - Visit 03 - Early-Time UV Spectroscopy of a Stripped-Envelope Supernova: A New Window

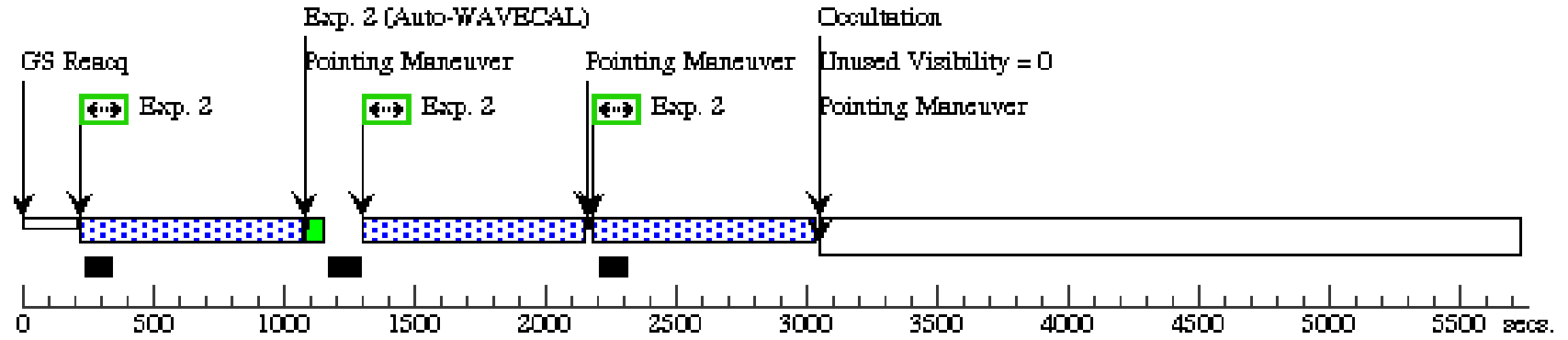
Wed Aug 01 01:23:12 GMT 2012

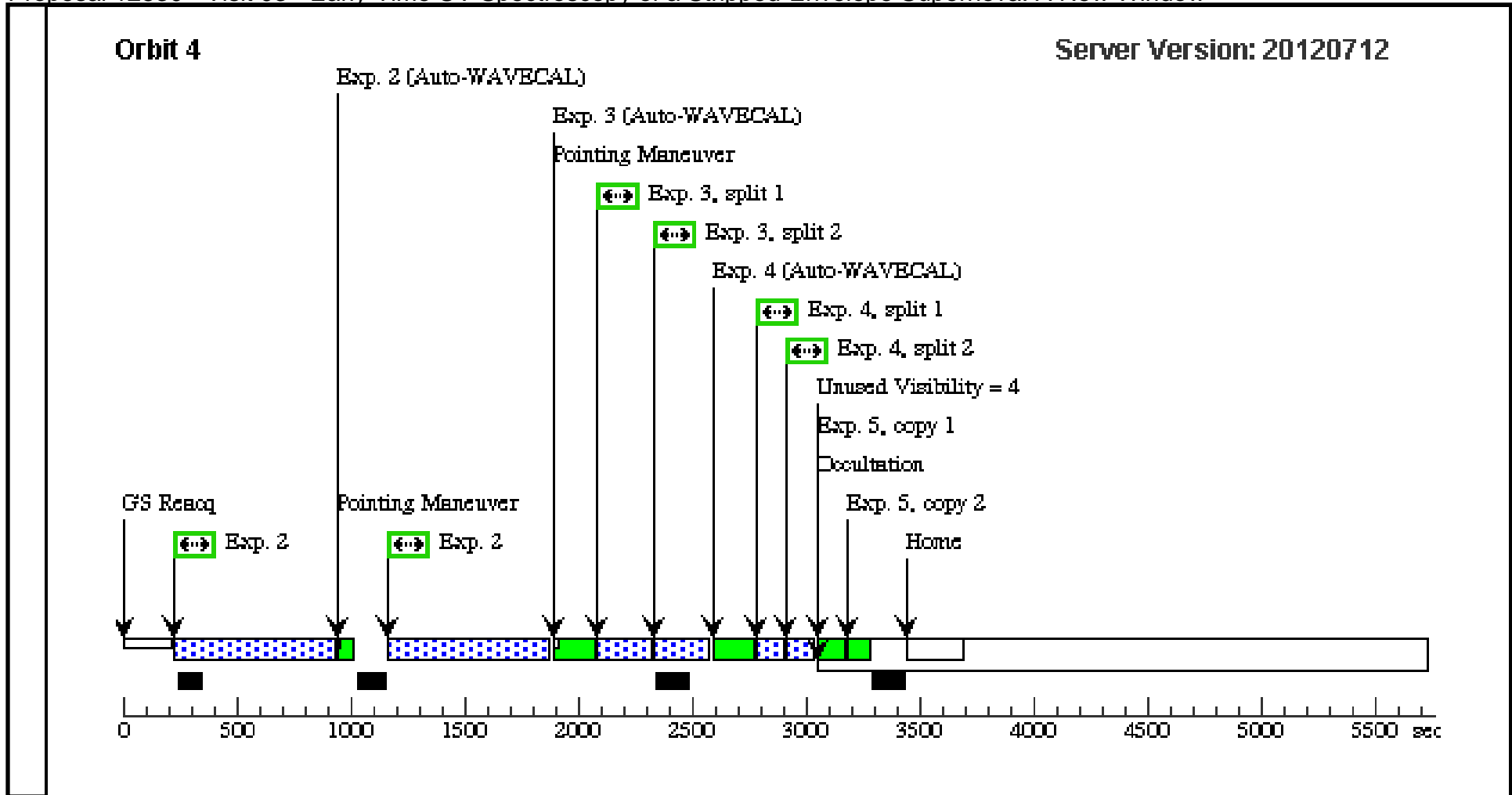
Visit	Proposal 12530, Visit 03, withdrawn Diagnostic Status: No Diagnostics Scientific Instruments: STIS/CCD, STIS/NUV-MAMA Special Requirements: AFTER 02 BY 3 D TO 5 D; ON HOLD ; VISIBILITY INTERVAL 50.9 M <i>On Hold Comments: Target of Opportunity</i>									
	Patterns	#	Primary Pattern			Secondary Pattern			Exposures	
		(1)	Pattern Type=STIS-ALONG-SLIT	Coordinate Frame=POS-TARG						
		Purpose=DITHER	Pattern Orientation=90.0							
		Number Of Points=10	Angle Between Sides=							
		Point Spacing=1.1	Center Pattern=false							
		Line Spacing=								
Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous				
	(2)	PTF12GZK	RA: 22 12 41.5300 (333.1730417d) Dec: +00 30 43.10 (.51197d) Equinox: J2000		V=16+/-0.2	Reference Frame: ICRS				
Exposures	#	Label (ETC Run)	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit
	1	Target Acquisition	(2) PTF12GZK	STIS/CCD, ACQ, F28X50LP	MIRROR				25 Secs	
									[==>]	[1]
	2	SpectroscopyNUV (STIS.sp.179874)	(2) PTF12GZK	STIS/NUV-MAMA, ACCUM, 52X0.2	G230L 2376 A			Pattern 1, Exps 2-2 in Visit 03 (1)	816 Secs	
									[==>1005.0 Secs (Pattern 1)]	[1]
									[==>1005.0 Secs (Pattern 2)]	
									[==>837.0 Secs (Pattern 3)]	
									[==>837.0 Secs (Pattern 4)]	[2]
									[==>837.0 Secs (Pattern 5)]	
									[==>837.0 Secs (Pattern 6)]	
								[==>837.0 Secs (Pattern 7)]	[3]	
								[==>837.0 Secs (Pattern 8)]		
								[==>698.0 Secs (Pattern 9)]	[4]	
								[==>698.0 Secs (Pattern 10)]		
3	SpectroscopyG430L	(2) PTF12GZK	STIS/CCD, ACCUM, 52X0.2E1	G430L 4300 A				100 Secs		
								[==>203.0 Secs (Split 1)]	[4]	
								[==>203.0 Secs (Split 2)]		
4	SpectroscopyG750L	(2) PTF12GZK	STIS/CCD, ACCUM, 52X0.2E1	G750L 7751 A				50 Secs		
								[==>85.0 Secs (Split 1)]	[4]	
								[==>85.0 Secs (Split 2)]		
5	G750LFringsFlats	CCDFLAT	STIS/CCD, ACCUM, 52X0.1	G750L 7751 A				[==>(Copy 1)]	[4]	
								[==>(Copy 2)]		



Orbit 3

Server Version: 20120712

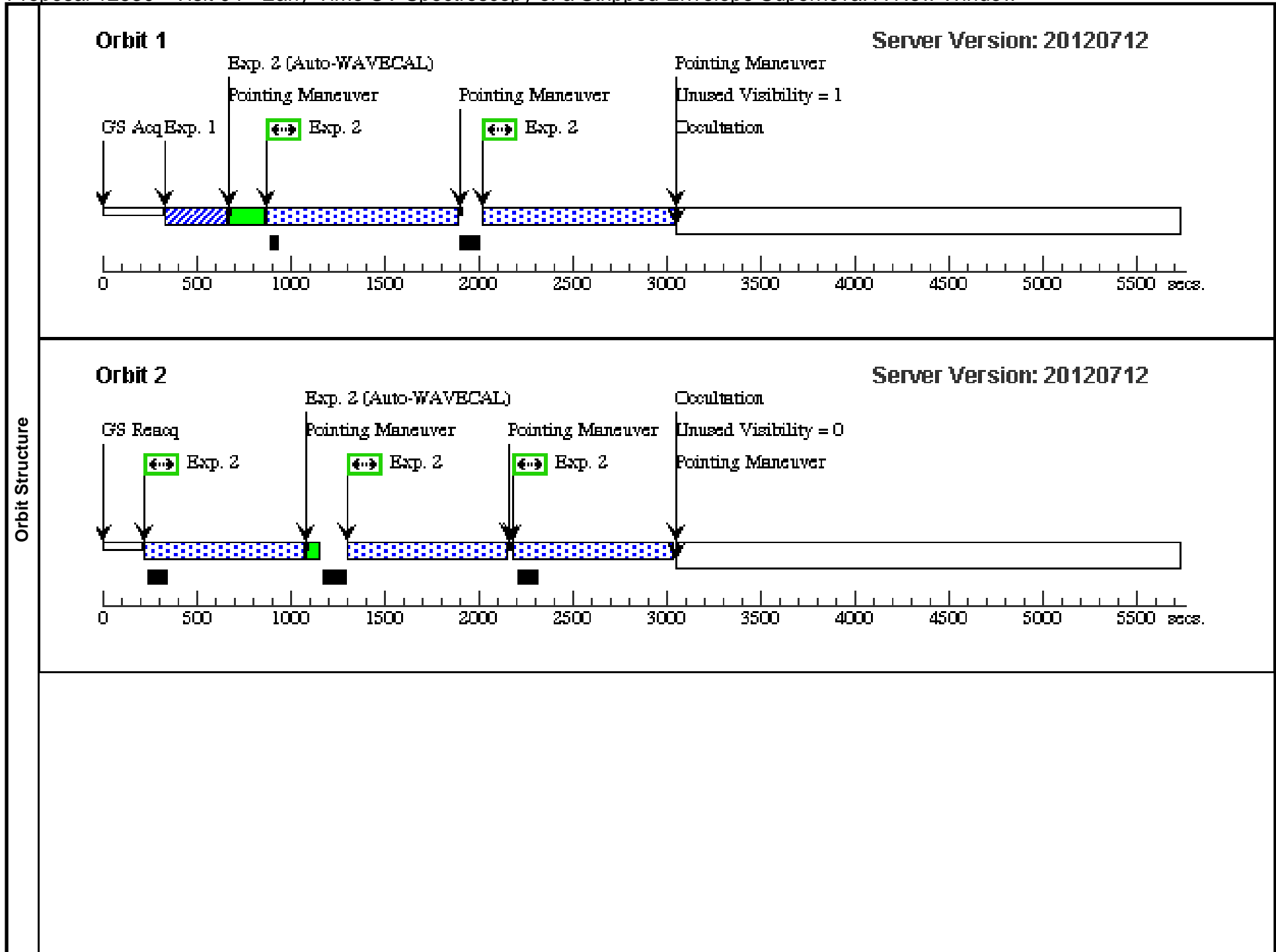


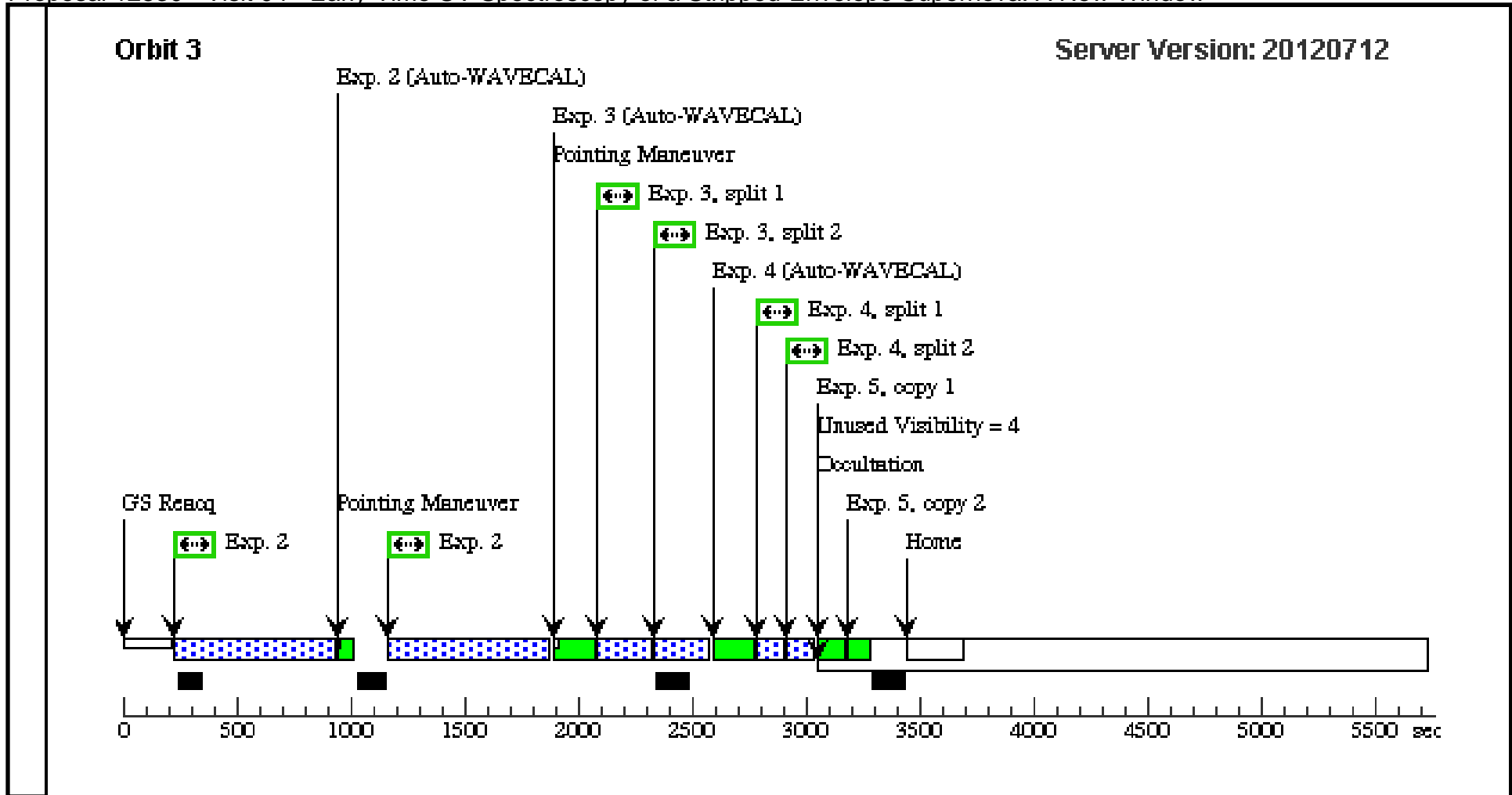


Proposal 12530 - Visit 04 - Early-Time UV Spectroscopy of a Stripped-Envelope Supernova: A New Window

Wed Aug 01 01:23:16 GMT 2012

Visit	Proposal 12530, Visit 04, withdrawn Diagnostic Status: No Diagnostics Scientific Instruments: STIS/CCD, STIS/NUV-MAMA Special Requirements: AFTER 03 BY 3 D TO 5 D; ON HOLD ; VISIBILITY INTERVAL 50.9 M <i>On Hold Comments: Target of Opportunity</i>									
	Patterns	#	Primary Pattern			Secondary Pattern			Exposures	
		(3)	Pattern Type=STIS-ALONG-SLIT	Coordinate Frame=POS-TARG						(2)
		Purpose=DITHER	Pattern Orientation=90.0							
		Number Of Points=7	Angle Between Sides=							
		Point Spacing=1.14	Center Pattern=false							
		Line Spacing=								
Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous				
	(2)	PTF12GZK	RA: 22 12 41.5300 (333.1730417d) Dec: +00 30 43.10 (.51197d) Equinox: J2000		V=16+/-0.2	Reference Frame: ICRS				
Exposures	#	Label (ETC Run)	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit
	1	TargetAcquisition	(2) PTF12GZK	STIS/CCD, ACQ, F28X50LP	MIRROR				25 Secs	
									[==>]	[1]
	2	SpectroscopyNUV (STIS.sp.179864)	(2) PTF12GZK	STIS/NUV-MAMA, ACCUM, 52X0.2	G230L 2376 A			Pattern 3, Exps 2-2 in Visit 04 (3)	800 Secs	
									[==>1005.0 Secs (Pattern 1)]	[1]
									[==>1005.0 Secs (Pattern 2)]	
									[==>837.0 Secs (Pattern 3)]	[2]
									[==>837.0 Secs (Pattern 4)]	
								[==>837.0 Secs (Pattern 5)]	[3]	
								[==>698.0 Secs (Pattern 6)]		
								[==>698.0 Secs (Pattern 7)]		
3	SpectroscopyG430L	(2) PTF12GZK	STIS/CCD, ACCUM, 52X0.2E1	G430L 4300 A				100 Secs		
								[==>203.0 Secs (Split 1)]	[3]	
								[==>203.0 Secs (Split 2)]		
4	SpectroscopyG750L	(2) PTF12GZK	STIS/CCD, ACCUM, 52X0.2E1	G750L 7751 A				50 Secs		
								[==>85.0 Secs (Split 1)]	[3]	
								[==>85.0 Secs (Split 2)]		
5	G750LFringeFlats	CCDFLAT	STIS/CCD, ACCUM, 52X0.1	G750L 7751 A				[==>(Copy 1)]	[3]	
								[==>(Copy 2)]		

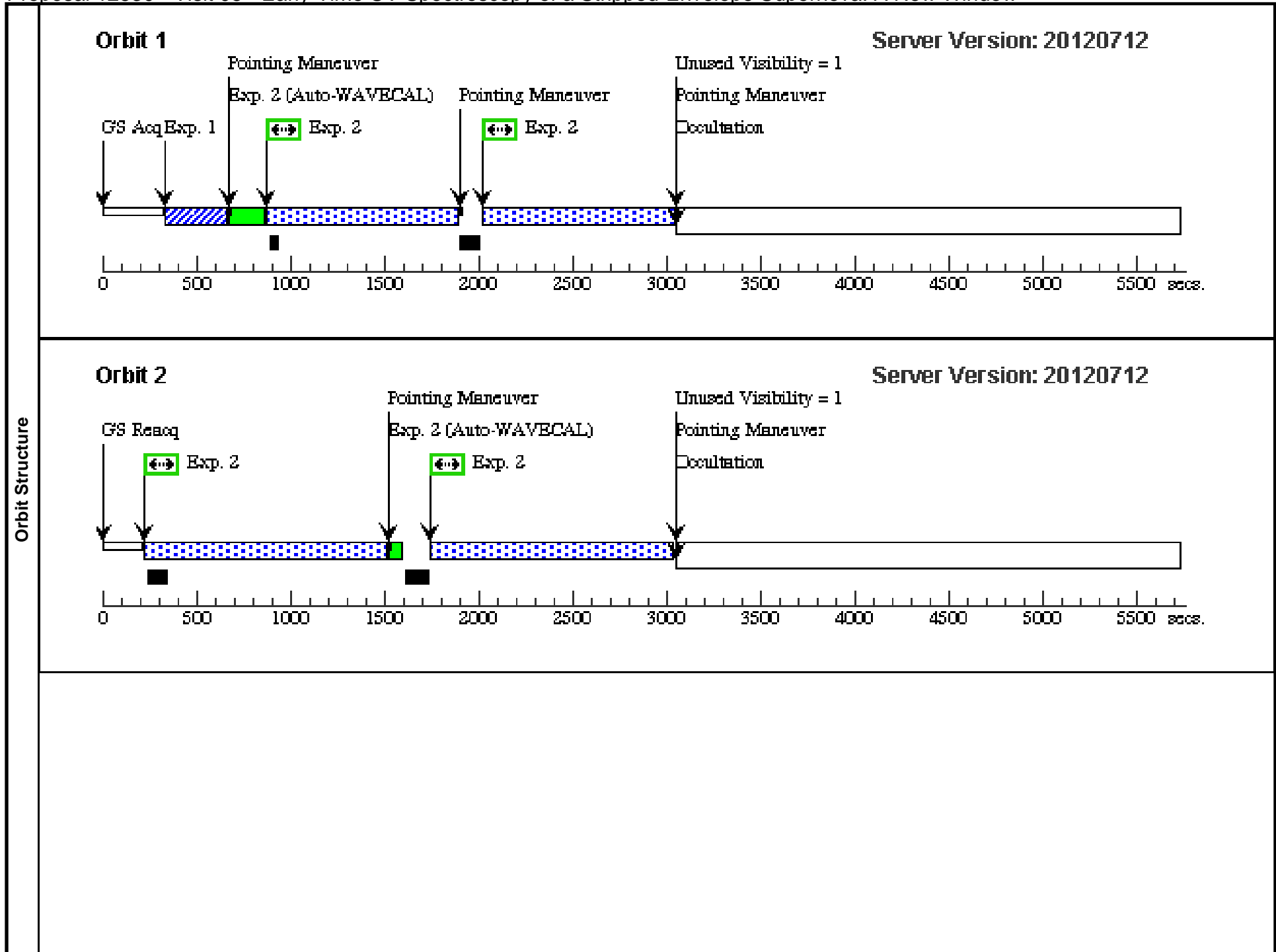




Proposal 12530 - Visit 05 - Early-Time UV Spectroscopy of a Stripped-Envelope Supernova: A New Window

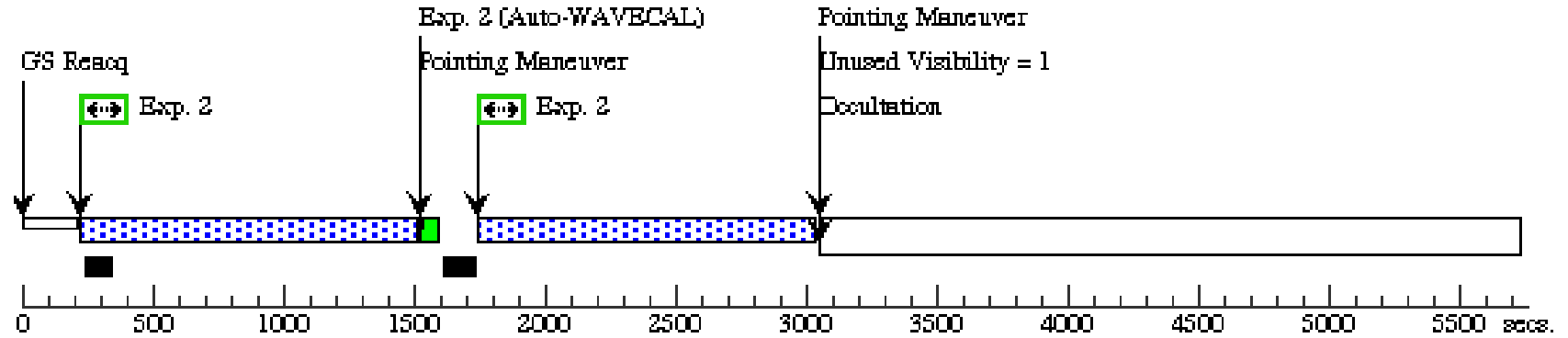
Wed Aug 01 01:23:18 GMT 2012

Visit	Proposal 12530, Visit 05, implementation Diagnostic Status: No Diagnostics Scientific Instruments: STIS/CCD, STIS/NUV-MAMA Special Requirements: BEFORE 09-AUG-2012; ON HOLD ; VISIBILITY INTERVAL 50.9 M <i>On Hold Comments: Target of Opportunity</i>									
	Patterns	#	Primary Pattern			Secondary Pattern			Exposures	
		(4)	Pattern Type=STIS-ALONG-SLIT	Coordinate Frame=POS-TARG						(2)
		Purpose=DITHER	Pattern Orientation=90.0							
		Number Of Points=10	Angle Between Sides=							
		Point Spacing=0.5	Center Pattern=true							
		Line Spacing=								
Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous				
	(2)	PTF12GZK	RA: 22 12 41.5300 (333.1730417d) Dec: +00 30 43.10 (.51197d) Equinox: J2000		V=16+/-0.2	Reference Frame: ICRS				
Exposures	#	Label (ETC Run)	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit
	1	TargetAcquisition	(2) PTF12GZK	STIS/CCD, ACQ, F28X50LP	MIRROR				25 Secs	
									[==>]	[1]
	2	SpectroscopyNUV (STIS.sp.179872)	(2) PTF12GZK	STIS/NUV-MAMA, ACCUM, 52X0.2	G230L 2376 A			Pattern 4, Exps 2-2 in Visit 05 (4)	816 Secs	
									[==>1005.0 Secs (Pattern 1)]	[1]
									[==>1005.0 Secs (Pattern 2)]	
									[==>1279.0 Secs (Pattern 3)]	[2]
									[==>1279.0 Secs (Pattern 4)]	
									[==>1279.0 Secs (Pattern 5)]	[3]
									[==>1279.0 Secs (Pattern 6)]	
									[==>1279.0 Secs (Pattern 7)]	[4]
									[==>1279.0 Secs (Pattern 8)]	
									[==>797 Secs (Pattern 9)]	[5]
									[==>797 Secs (Pattern 10)]	
	3	SpectroscopyG430L	(2) PTF12GZK	STIS/CCD, ACCUM, 52X0.2E1	G430L 4300 A				100 Secs	
								[==>193.0 Secs (Split 1)]	[5]	
								[==>193.0 Secs (Split 2)]		
4	SpectroscopyG750L	(2) PTF12GZK	STIS/CCD, ACCUM, 52X0.2E1	G750L 7751 A				50 Secs		
								[==>54.0 Secs (Split 1)]	[5]	
								[==>54.0 Secs (Split 2)]		
5	G750LFringsFlats	CCDFLAT	STIS/CCD, ACCUM, 52X0.1	G750L 7751 A				[==>(Copy 1)]	[5]	
								[==>(Copy 2)]		



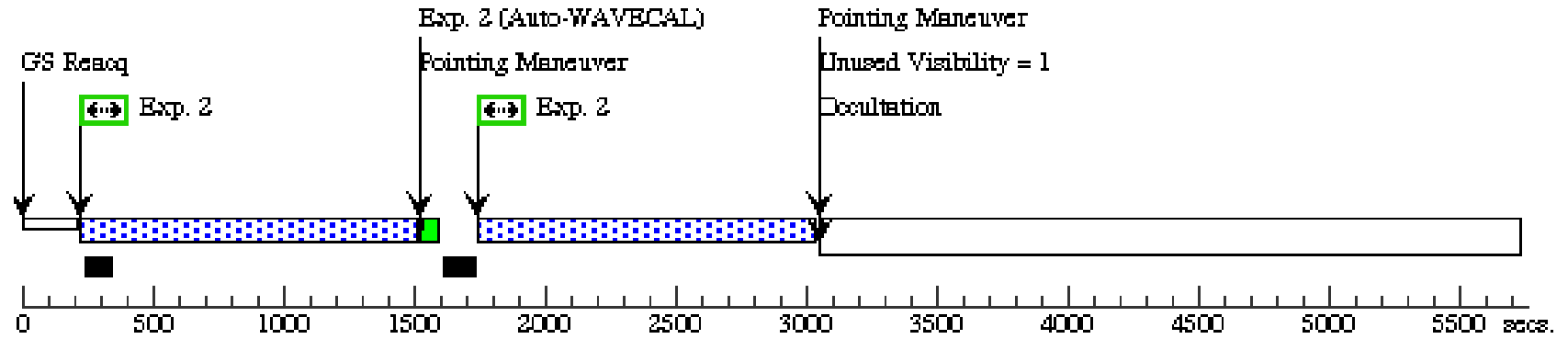
Orbit 3

Server Version: 20120712



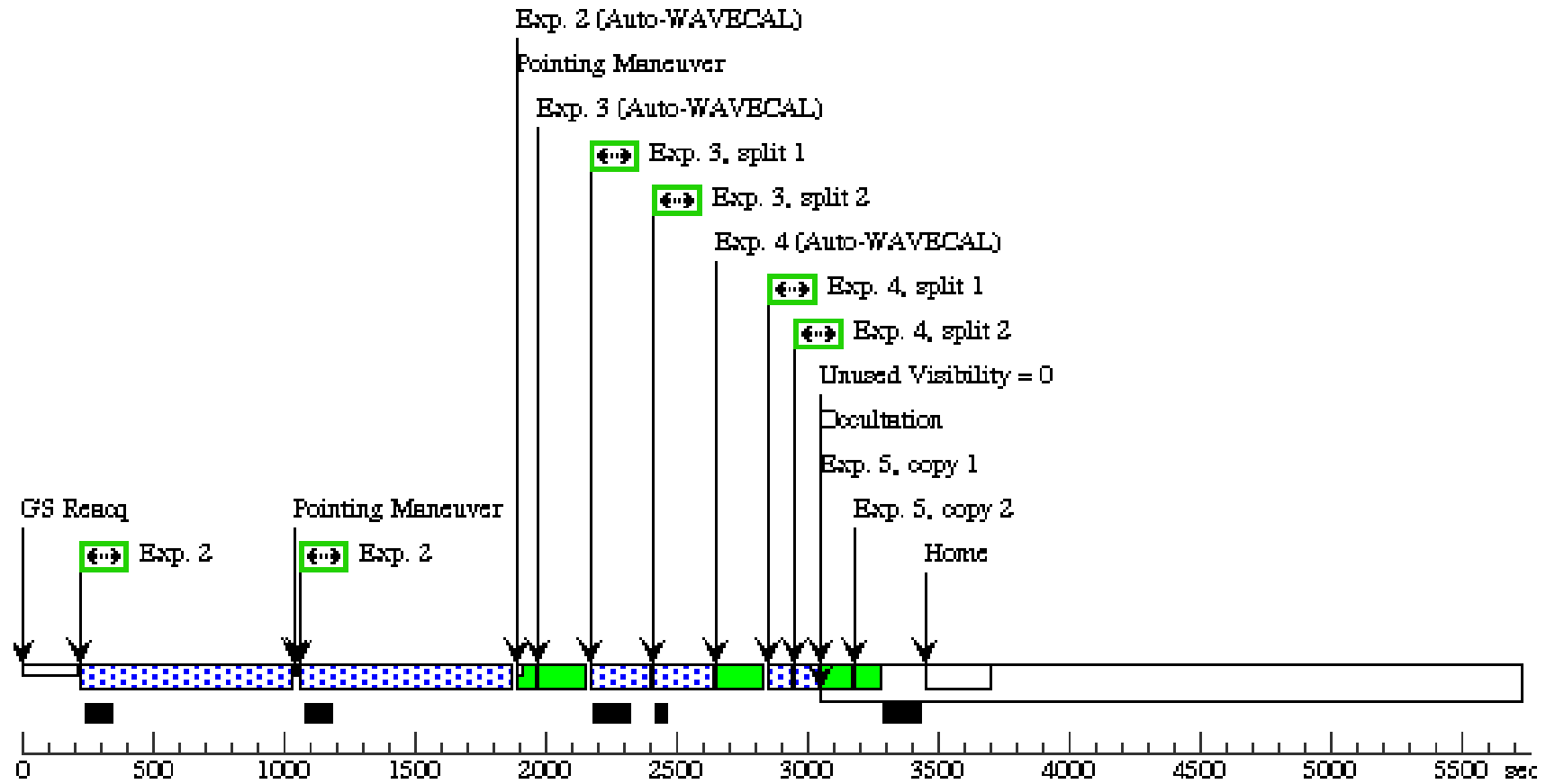
Orbit 4

Server Version: 20120712



Orbit 5

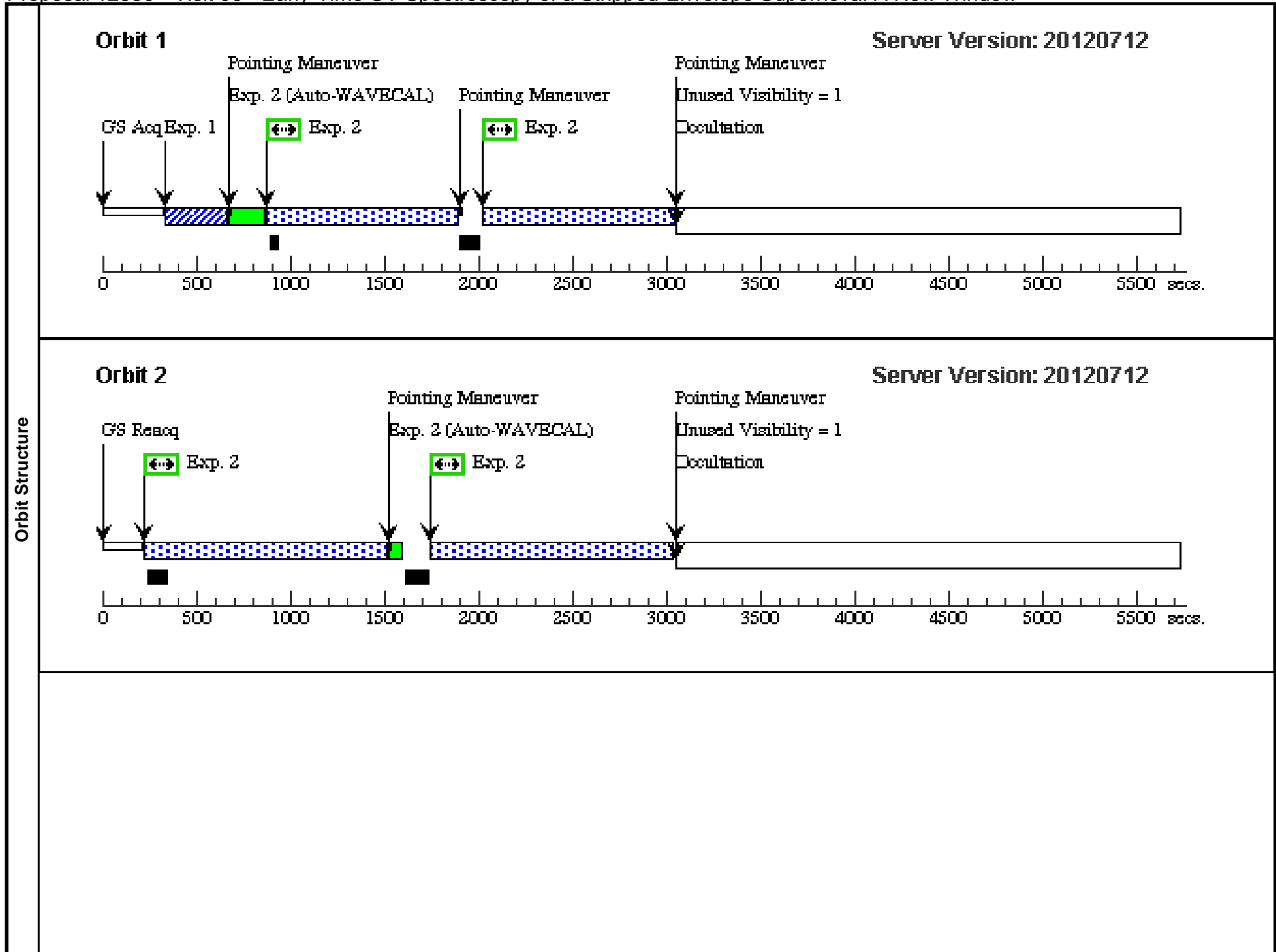
Server Version: 20120712



Proposal 12530 - Visit 06 - Early-Time UV Spectroscopy of a Stripped-Envelope Supernova: A New Window

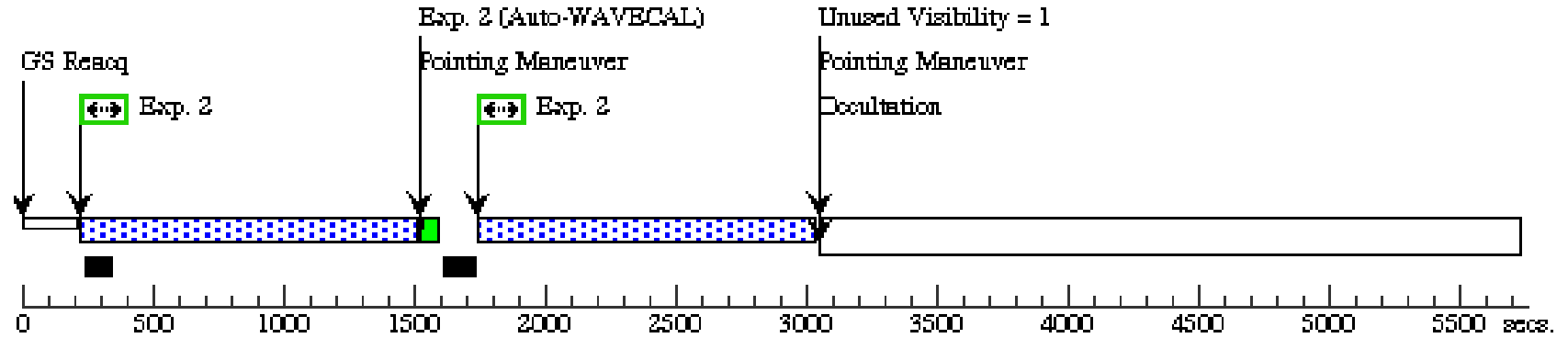
Wed Aug 01 01:23:22 GMT 2012

Visit	Proposal 12530, Visit 06, implementation Diagnostic Status: No Diagnostics Scientific Instruments: STIS/CCD, STIS/NUV-MAMA Special Requirements: AFTER 05 BY 3 D TO 5 D; ON HOLD ; VISIBILITY INTERVAL 50.9 M On Hold Comments: Target of Opportunity									
	Patterns	#	Primary Pattern	Secondary Pattern	Exposures					
		(4)	Pattern Type=STIS-ALONG-SLIT Purpose=DITHER Number Of Points=10 Point Spacing=0.5 Line Spacing=	Coordinate Frame=POS-TARG Pattern Orientation=90.0 Angle Between Sides= Center Pattern=true	(2)					
Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous				
	(2)	PTF12GZK	RA: 22 12 41.5300 (333.1730417d) Dec: +00 30 43.10 (.51197d) Equinox: J2000		V=16+/-0.2	Reference Frame: ICRS				
Exposures	#	Label (ETC Run)	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit
	1	TargetAcquisition	(2) PTF12GZK	STIS/CCD, ACQ, F28X50LP	MIRROR				25 Secs	
									[==>]	[1]
	2	SpectroscopyNUV (STIS.sp.179872)	(2) PTF12GZK	STIS/NUV-MAMA, ACCUM, 52X0.2	G230L 2376 A			Pattern 4, Exps 2-2 in Visit 06 (4)	816 Secs	
									[==>1005.0 Secs (Pattern 1)]	[1]
									[==>1005.0 Secs (Pattern 2)]	
									[==>1279.0 Secs (Pattern 3)]	[2]
									[==>1279.0 Secs (Pattern 4)]	
									[==>1279.0 Secs (Pattern 5)]	[3]
									[==>1279.0 Secs (Pattern 6)]	[4]
								[==>1279.0 Secs (Pattern 7)]		
								[==>1279.0 Secs (Pattern 8)]	[5]	
								[==>797.0 Secs (Pattern 9)]		
								[==>797.0 Secs (Pattern 10)]		
3	SpectroscopyG430L	(2) PTF12GZK	STIS/CCD, ACCUM, 52X0.2E1	G430L 4300 A				100 Secs		
								[==>201.0 Secs (Split 1)]	[5]	
								[==>201.0 Secs (Split 2)]		
4	SpectroscopyG750L	(2) PTF12GZK	STIS/CCD, ACCUM, 52X0.2E1	G750L 7751 A				50 Secs		
								[==>46.0 Secs (Split 1)]	[5]	
								[==>46.0 Secs (Split 2)]		
5	G750LFringsFlats	CCDFLAT	STIS/CCD, ACCUM, 52X0.1	G750L 7751 A				[==>(Copy 1)]	[5]	
								[==>(Copy 2)]		



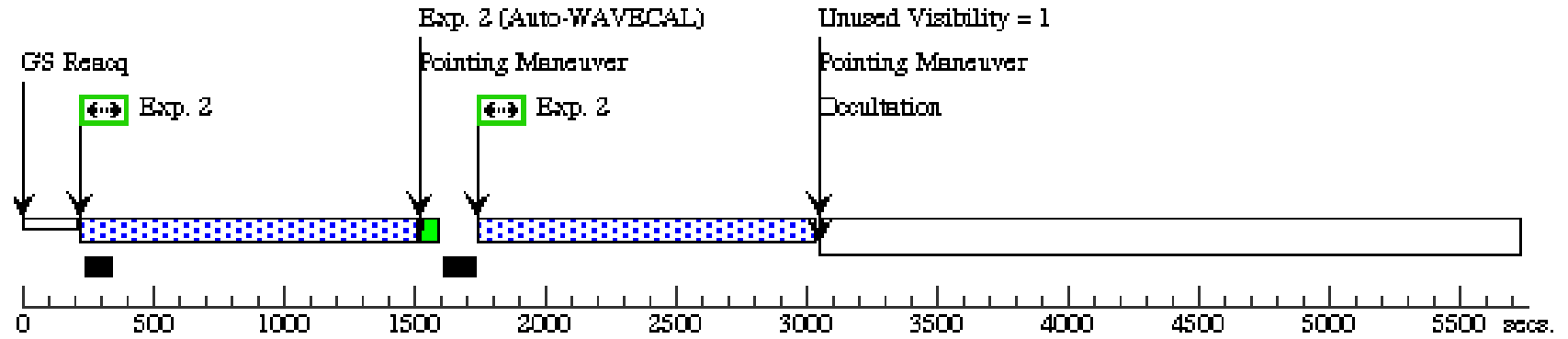
Orbit 3

Server Version: 20120712



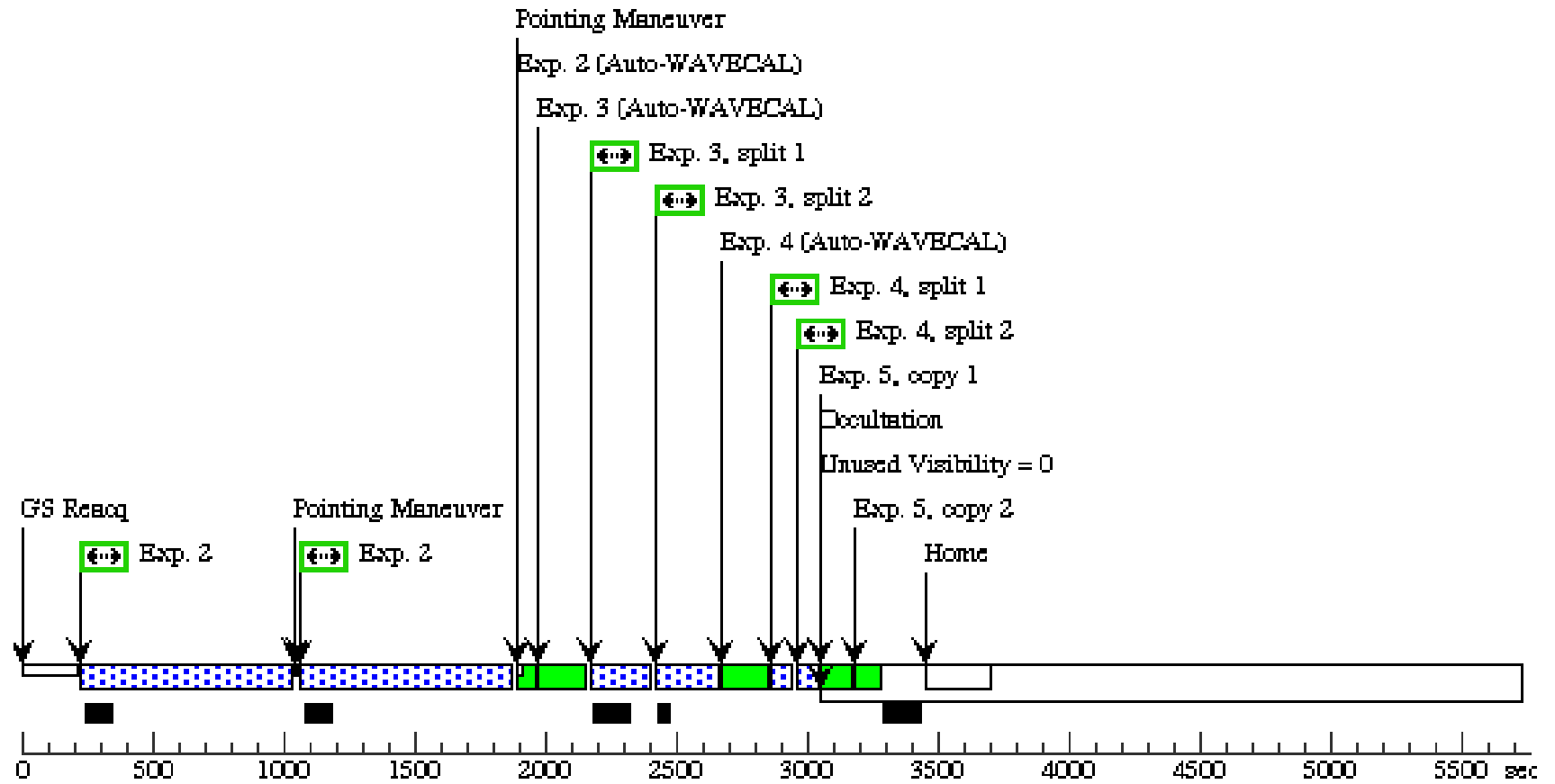
Orbit 4

Server Version: 20120712



Orbit 5

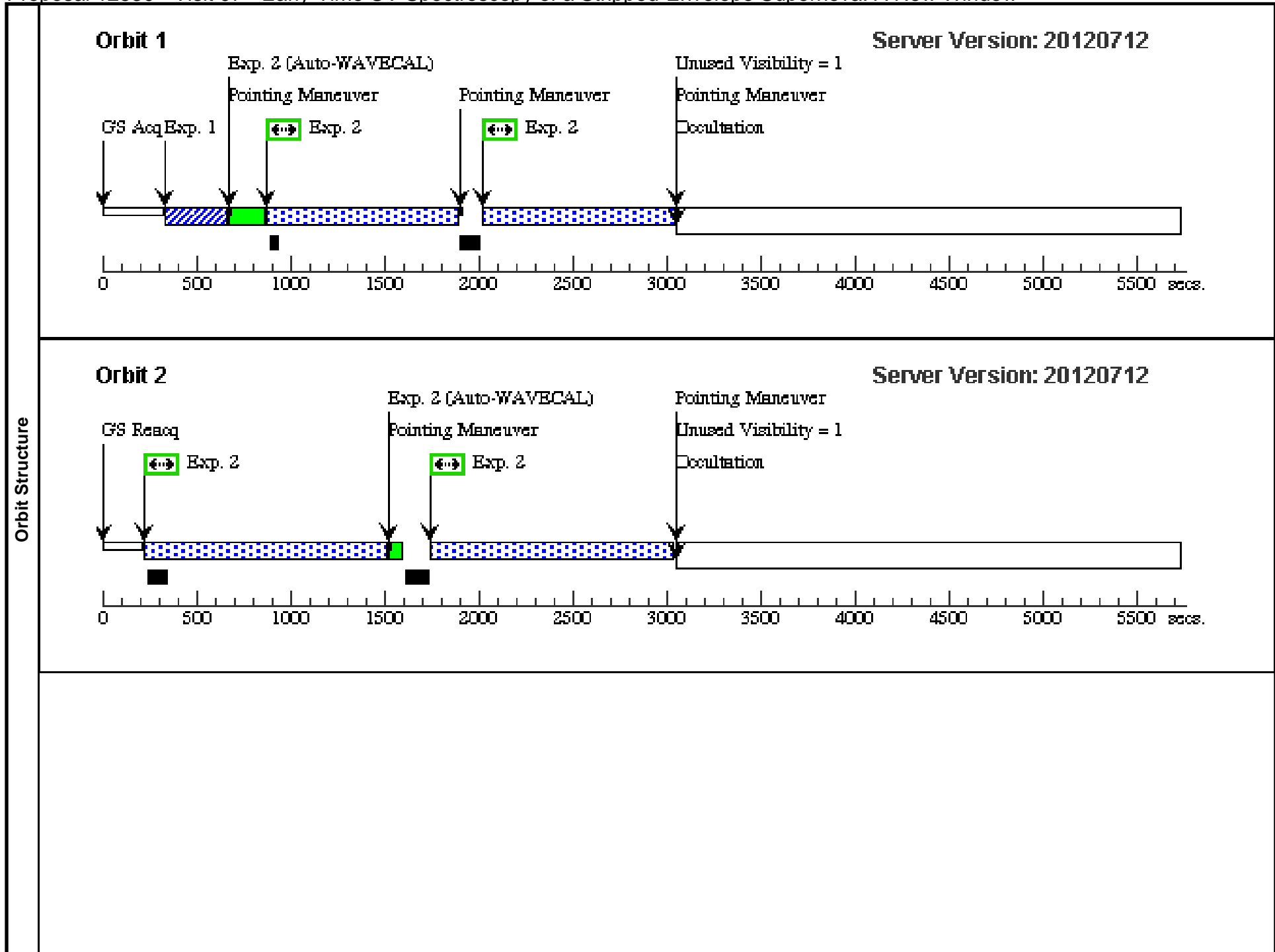
Server Version: 20120712



Proposal 12530 - Visit 07 - Early-Time UV Spectroscopy of a Stripped-Envelope Supernova: A New Window

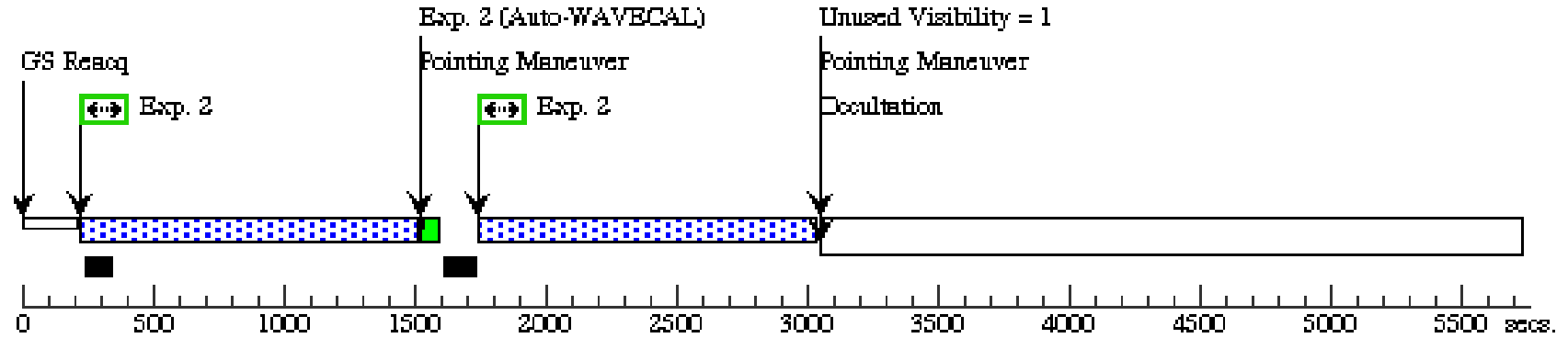
Wed Aug 01 01:23:26 GMT 2012

Visit	Proposal 12530, Visit 07, implementation Diagnostic Status: No Diagnostics Scientific Instruments: STIS/CCD, STIS/NUV-MAMA Special Requirements: AFTER 06 BY 3 D TO 5 D; ON HOLD ; VISIBILITY INTERVAL 50.9 M <i>On Hold Comments: Target of Opportunity</i>									
	Patterns	#	Primary Pattern			Secondary Pattern			Exposures	
		(4)	Pattern Type=STIS-ALONG-SLIT	Coordinate Frame=POS-TARG						(2)
		Purpose=DITHER	Pattern Orientation=90.0							
		Number Of Points=10	Angle Between Sides=							
		Point Spacing=0.5	Center Pattern=true							
		Line Spacing=								
Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous				
	(2)	PTF12GZK	RA: 22 12 41.5300 (333.1730417d) Dec: +00 30 43.10 (.51197d) Equinox: J2000		V=16+/-0.2	Reference Frame: ICRS				
Exposures	#	Label (ETC Run)	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit
	1	TargetAcquisition	(2) PTF12GZK	STIS/CCD, ACQ, F28X50LP	MIRROR				25 Secs	
									[==>]	[1]
	2	SpectroscopyNUV (STIS.sp.179872)	(2) PTF12GZK	STIS/NUV-MAMA, ACCUM, 52X0.2	G230L 2376 A			Pattern 4, Exps 2-2 in Visit 07 (4)	816 Secs	
									[==>1005.0 Secs (Pattern 1)]	[1]
									[==>1005.0 Secs (Pattern 2)]	
									[==>1279.0 Secs (Pattern 3)]	[2]
									[==>1279.0 Secs (Pattern 4)]	
									[==>1279.0 Secs (Pattern 5)]	[3]
									[==>1279.0 Secs (Pattern 6)]	[4]
								[==>1279.0 Secs (Pattern 7)]		
								[==>1279.0 Secs (Pattern 8)]		
								[==>797.0 Secs (Pattern 9)]	[5]	
								[==>797.0 Secs (Pattern 10)]		
3	SpectroscopyG430L	(2) PTF12GZK	STIS/CCD, ACCUM, 52X0.2E1	G430L 4300 A				100 Secs		
								[==>201.0 Secs (Split 1)]	[5]	
								[==>201.0 Secs (Split 2)]		
4	SpectroscopyG750L	(2) PTF12GZK	STIS/CCD, ACCUM, 52X0.2E1	G750L 7751 A				50 Secs		
								[==>46.0 Secs (Split 1)]	[5]	
								[==>46.0 Secs (Split 2)]		
5	G750LFringsFlats	CCDFLAT	STIS/CCD, ACCUM, 52X0.1	G750L 7751 A				[==>(Copy 1)]	[5]	
								[==>(Copy 2)]		



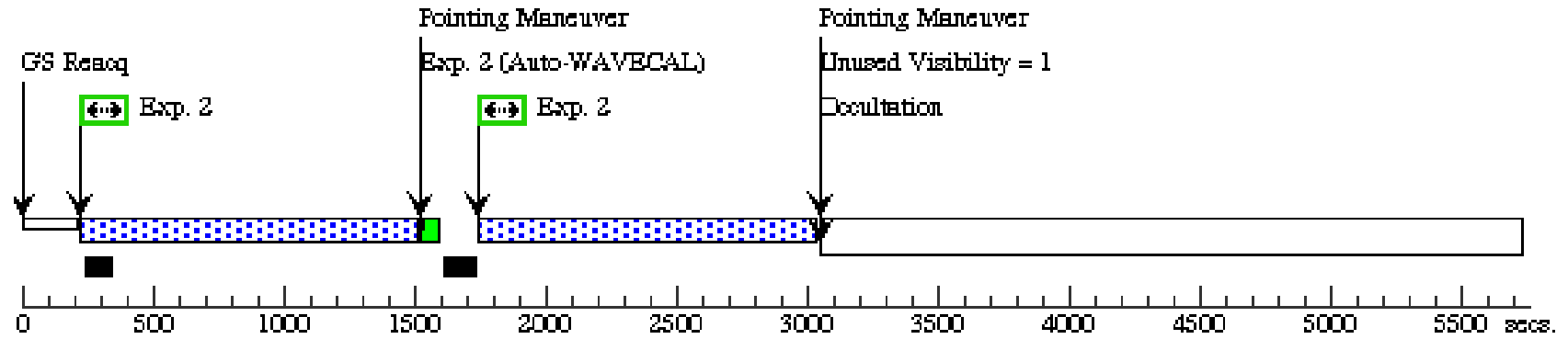
Orbit 3

Server Version: 20120712



Orbit 4

Server Version: 20120712



Orbit 5

Server Version: 20120712

