



17132 - The First Early FUV Observations of a Type IIP Supernova

Cycle: 30, Proposal Category: GO

(UV Initiative)

(Availability Mode: SUPPORTED)

INVESTIGATORS

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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	(5) AT2022ACKO	STIS/CCD STIS/FUV-MAMA STIS/NUV-MAMA	2	14-Dec-2022 10:00:17.0	yes

Visit	Targets used in Visit	Configurations used in Visit	Orbits Used	Last Orbit Planner Run	OP Current with Visit?
02	(5) AT2022ACKO	STIS/CCD STIS/FUV-MAMA STIS/NUV-MAMA	2	14-Dec-2022 10:00:18.0	yes
03	(5) AT2022ACKO	STIS/CCD STIS/FUV-MAMA STIS/NUV-MAMA	1	14-Dec-2022 10:00:19.0	yes
04	(5) AT2022ACKO	STIS/CCD STIS/FUV-MAMA STIS/NUV-MAMA	3	14-Dec-2022 10:00:20.0	yes
13	(5) AT2022ACKO	STIS/CCD STIS/NUV-MAMA	1	14-Dec-2022 10:00:20.0	yes
05	(4) SNII-17	STIS/CCD STIS/FUV-MAMA STIS/NUV-MAMA	2	14-Dec-2022 10:00:21.0	yes
06	(4) SNII-17	STIS/CCD STIS/FUV-MAMA STIS/NUV-MAMA	2	14-Dec-2022 10:00:22.0	yes
07	(4) SNII-17	STIS/CCD STIS/FUV-MAMA STIS/NUV-MAMA	1	14-Dec-2022 10:00:23.0	yes
08	(4) SNII-17	STIS/CCD STIS/FUV-MAMA STIS/NUV-MAMA	3	14-Dec-2022 10:00:24.0	yes
09	(2) SNII-OFFSET (3) REFERENCE-STAR	STIS/CCD STIS/FUV-MAMA STIS/NUV-MAMA	2	14-Dec-2022 10:00:24.0	yes
10	(2) SNII-OFFSET (3) REFERENCE-STAR	STIS/CCD STIS/FUV-MAMA STIS/NUV-MAMA	2	14-Dec-2022 10:00:25.0	yes

Visit	Targets used in Visit	Configurations used in Visit	Orbits Used	Last Orbit Planner Run	OP Current with Visit?
11	(2) SNII-OFFSET (3) REFERENCE-STAR	STIS/CCD STIS/FUV-MAMA STIS/NUV-MAMA	1	14-Dec-2022 10:00:26.0	yes
12	(2) SNII-OFFSET (3) REFERENCE-STAR	STIS/CCD STIS/FUV-MAMA STIS/NUV-MAMA	3	14-Dec-2022 10:00:27.0	yes

25 Total Orbits Used

ABSTRACT

Early, ultraviolet (UV) observations of hydrogen rich Type IIP/L core-collapse supernovae (CCSNe) are critical for understanding the connection between massive red supergiant (RSG) stars, their mass loss, and the subsequent SN explosion. During the RSG phase, a significant amount of mass loss occurs, and depending on the duration can surround the star with dense and extended circumstellar material (CSM). When the star eventually explodes as a CCSN, high energy photons from the shock breakout ionizes the CSM. These ionization features can be used to constrain the properties of the CSM, including metallicity density, and structure, mapping the evolution of the final years of life of the progenitor star. UV observations during the first two weeks after explosion are crucial for detecting these high ionization lines, and are the most sensitive to lower densities and weaker CSM interactions which may occur in lower mass RSG progenitors. The dearth of UV (particularly FUV) observations of Type IIP/L SNe at this phase has left many open-ended questions about the role CSM interaction plays in "normal" Type II SNe, and a disruptive ToO with HST in the UV is crucial to obtaining these important data on a very short timescale.

OBSERVING DESCRIPTION

This proposal will be triggered on a very young type II supernova to obtain UV spectroscopy as close to the trigger time as possible. We will work closely with our contact scientist to ensure the safety of the detectors and with our program coordinator to ensure schedulability.

Once triggered, the SN will be observed daily for 3 days and then once one week after the last observation.

Each visit will consist of a STIS FUV-MAMA G140L observation with the 52x0.2" slit and a STIS NUV-MAMA G230L observation with the 52x0.2" slit

I have created a complete set of visits for 3 scenarios:

The supernova is faint at first observation (r~17mag rising to 15mag for last visit)

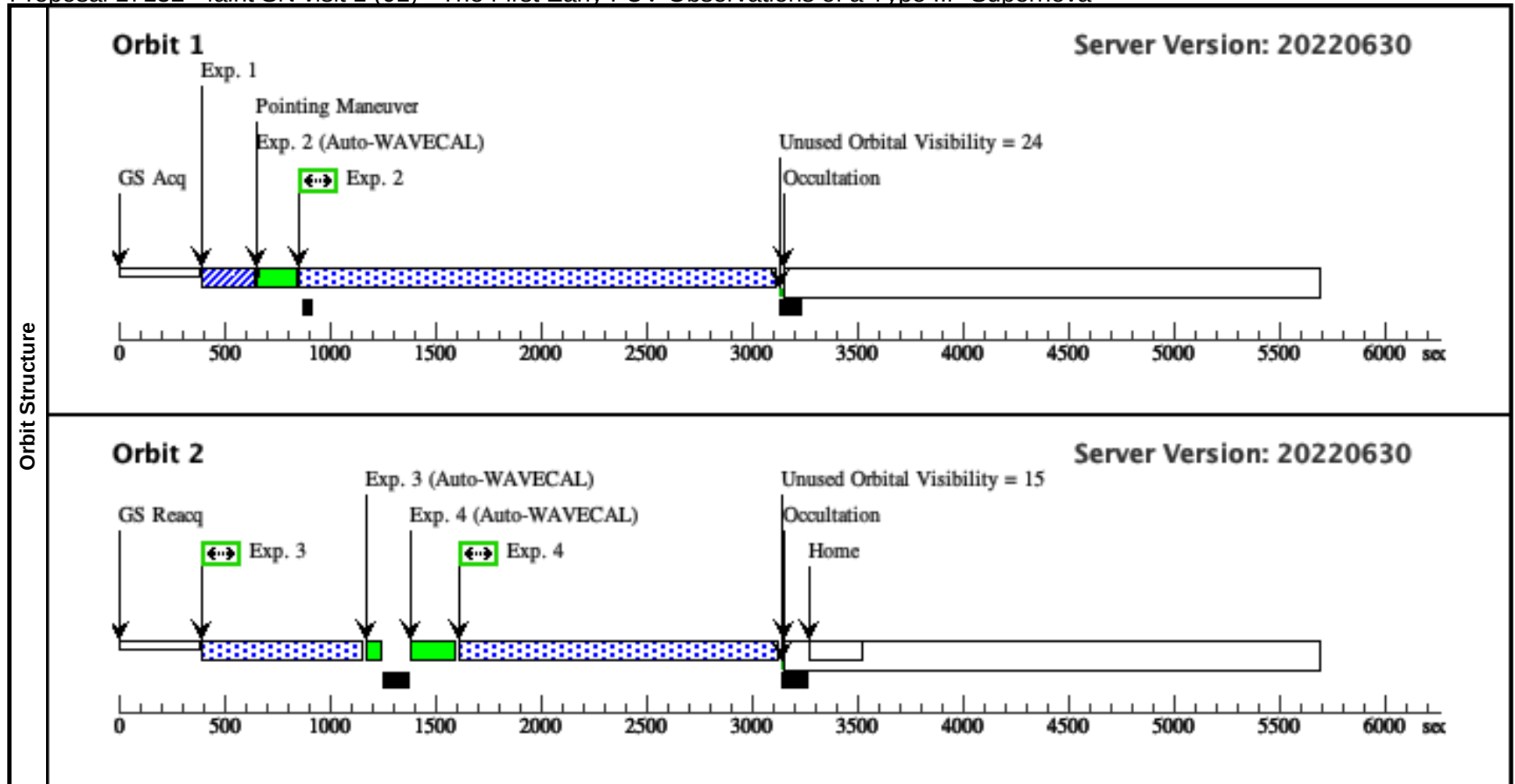
The supernova is bright at first observation (r~14mag rising to 12mag for last visit)

The supernova is on a bright background or has a nearby source and requires an offset for the TA (r~17mag rising to 15mag for last visit)

Each of these scenarios has the same exposure time per observation

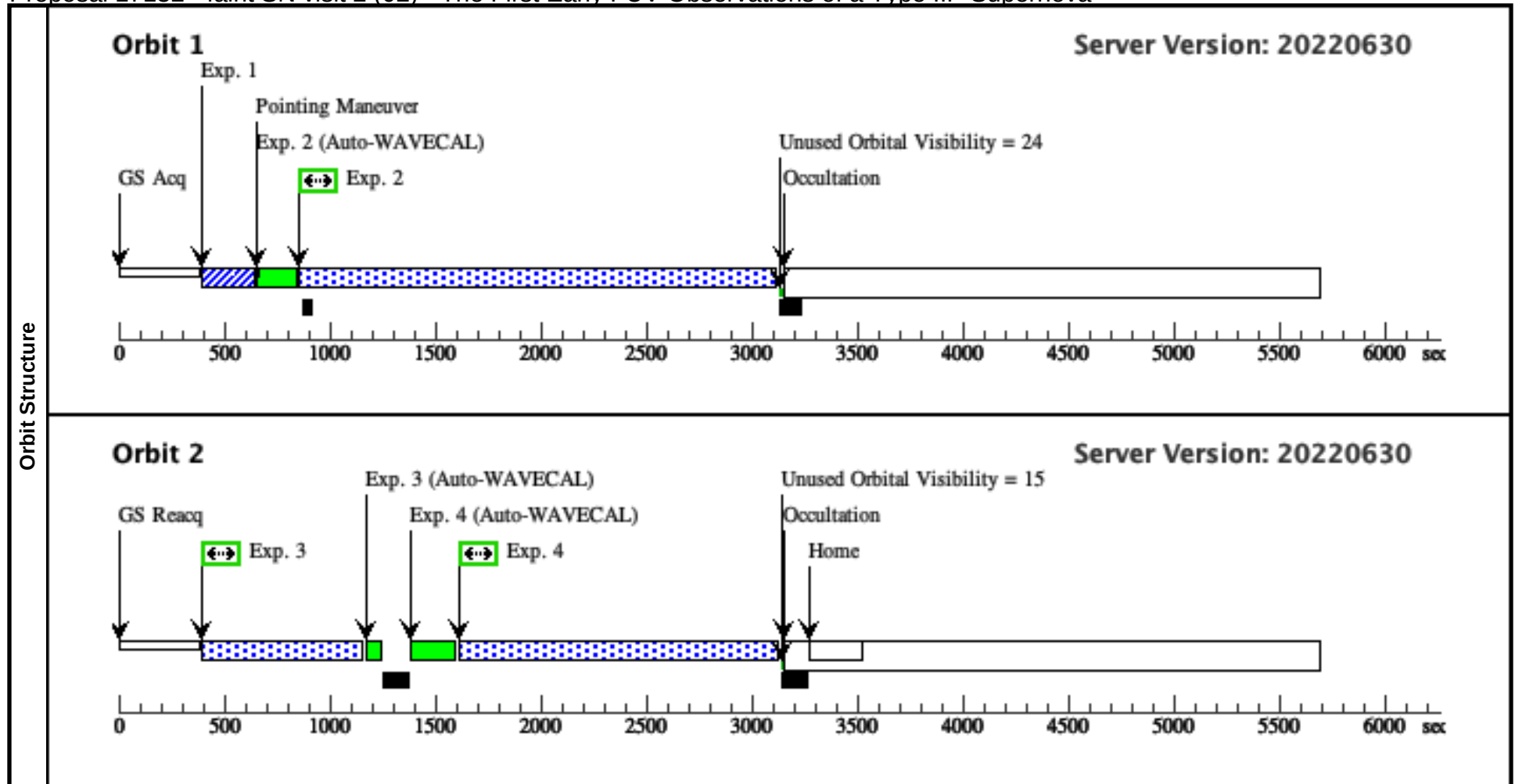
Proposal 17132 - faint SN visit 1 (01) - The First Early FUV Observations of a Type IIP Supernova

Visit	Proposal 17132, faint SN visit 1 (01), completed								Wed Dec 14 15:00:28 GMT 2022	
	Diagnostic Status: No Diagnostics									
	Scientific Instruments: STIS/NUV-MAMA, STIS/CCD, STIS/FUV-MAMA									
	Special Requirements: ON HOLD ; TOO RESPONSE TIME 2.0D									
	Comments: First epoch should be executed as soon as possible after trigger For SN with initial brightness around r=17 mag									
	On Hold Comments: Waiting for a suitable supernova to explode. I understand this response time is likely a lower limit on what STScI is capable of but the sooner the better for this program									
Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections		Fluxes		Miscellaneous		
	(5)	AT2022ACKO	RA: 03 19 38.9700 (49.9123750d) Dec: -19 23 42.87 (-19.39524d) Equinox: J2000			V=16.5		Reference Frame: ICRS		
	Comments: DLT40 discovery. ATLAS non-detections < 24 hours prior to discovery									
	Category=EXT-STAR Description=[SUPERNOVA TYPE II]									
Exposures	#	Label (ETC Run)	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
	1	TA (STIS.ta.181 4737)	(5) AT2022ACKO	STIS/CCD, ACQ, F28X50LP	MIRROR				5 Secs (5 Secs) [=>]	[1]
	2	FUV (STIS.sp.18 35523)	(5) AT2022ACKO	STIS/FUV-MAMA, ACCUM, 52X0.2	G140L 1425 A				2250 Secs (2250 Secs) [=>]	[1]
	3	FUV (STIS.sp.18 35523)	(5) AT2022ACKO	STIS/FUV-MAMA, ACCUM, 52X0.2	G140L 1425 A				750 Secs (750 Secs) [=>]	[2]
	4	NUV (STIS.sp.18 35533)	(5) AT2022ACKO	STIS/NUV-MAMA, ACCUM, 52X0.2	G230L 2376 A				1500 Secs (1500 Secs) [=>]	[2]



Proposal 17132 - faint SN visit 2 (02) - The First Early FUV Observations of a Type IIP Supernova

Visit	Proposal 17132, faint SN visit 2 (02), failed										Wed Dec 14 15:00:28 GMT 2022	
	Diagnostic Status: No Diagnostics											
	Scientific Instruments: STIS/NUV-MAMA, STIS/CCD, STIS/FUV-MAMA											
	Special Requirements: ON HOLD ; TOO RESPONSE TIME 2.0D											
	Comments: Second epoch should be executed 24 hours after first visit For SN with initial brightness around r=17 mag If possible execute at same orientation as visit 1											
	On Hold Comments: Waiting for a suitable supernova to explode. I understand this response time is likely a lower limit on what STScI is capable of but the sooner the better for this program Will be triggered at same time as visit 1											
Fixed Targets	#	Name	Target Coordinates			Targ. Coord. Corrections		Fluxes		Miscellaneous		
	(5)	AT2022ACKO	RA: 03 19 38.9700 (49.9123750d) Dec: -19 23 42.87 (-19.39524d) Equinox: J2000					V=16.5		Reference Frame: ICRS		
	Comments: DLT40 discovery. ATLAS non-detections < 24 hours prior to discovery Category=EXT-STAR Description=[SUPERNOVA TYPE II]											
Exposures	#	Label (ETC Run)	Target	Config,Mode,Aperture		Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]		Orbit
	1	TA (STIS.ta.181 4737)	(5) AT2022ACKO	STIS/CCD, ACQ, F28X50LP		MIRROR				5 Secs (5 Secs)		
										[==>]		[1]
	2	FUV (STIS.sp.18 35524)	(5) AT2022ACKO	STIS/FUV-MAMA, ACCUM, 52X0.2		G140L 1425 A				2250 Secs (2250 Secs)		
										[==>]		[1]
	3	FUV (STIS.sp.18 35524)	(5) AT2022ACKO	STIS/FUV-MAMA, ACCUM, 52X0.2		G140L 1425 A				750 Secs (750 Secs)		
										[==>]		[2]
4	NUV (STIS.sp.18 35535)	(5) AT2022ACKO	STIS/NUV-MAMA, ACCUM, 52X0.2		G230L 2376 A				1500 Secs (1500 Secs)			
									[==>]		[2]	



Proposal 17132 - faint SN visit 3 (03) - The First Early FUV Observations of a Type IIP Supernova

Wed Dec 14 15:00:28 GMT 2022

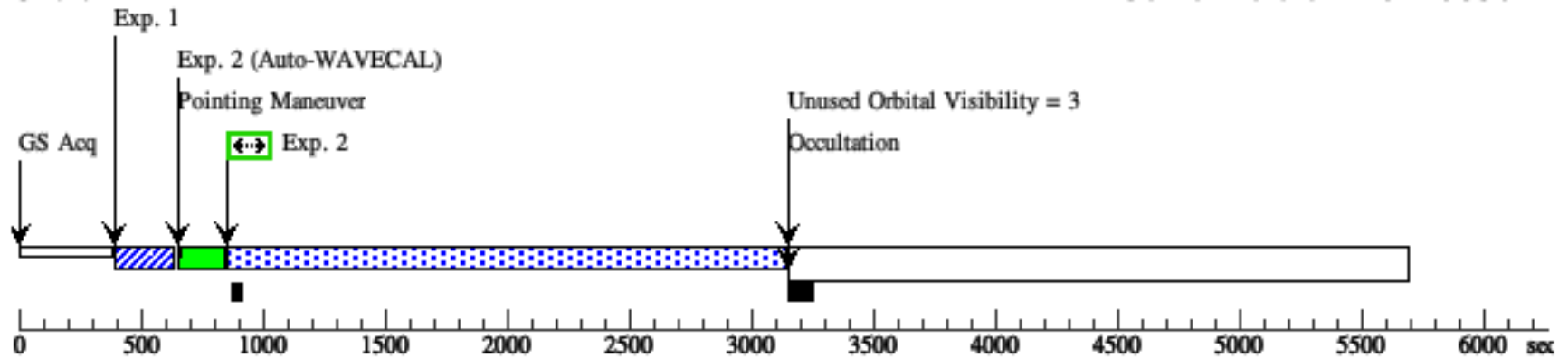
Visit	Proposal 17132, faint SN visit 3 (03), completed									
	Diagnostic Status: No Diagnostics									
	Scientific Instruments: STIS/NUV-MAMA, STIS/CCD, STIS/FUV-MAMA									
	Special Requirements: ON HOLD ; TOO RESPONSE TIME 2.0D									
	Comments: Third epoch should be executed 24 hours after second visit and 48 hours after first visit For SN with initial brightness around $r=17$ mag If possible execute at same orientation as visit 1 On Hold Comments: Waiting for a suitable supernova to explode. I understand this response time is likely a lower limit on what STScI is capable of but the sooner the better for this program Will be triggered at same time as visit 1									
Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous				
	(5)	AT2022ACKO	RA: 03 19 38.9700 (49.9123750d) Dec: -19 23 42.87 (-19.39524d) Equinox: J2000		V=16.5	Reference Frame: ICRS				
Comments: DLT40 discovery. ATLAS non-detections < 24 hours prior to discovery Category=EXT-STAR Description=[SUPERNOVA TYPE II]										
Exposures	#	Label (ETC Run)	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
	1	TA (STIS.ta.181 4738)	(5) AT2022ACKO	STIS/CCD, ACQ, F28X50LP	MIRROR				4 Secs (4 Secs) [==>]	[1]
	2	FUV (STIS.sp.18 35526)	(5) AT2022ACKO	STIS/FUV-MAMA, ACCUM, 52X0.2	G140L 1425 A				1465 Secs (1465 Secs) [==>]	[1]
	3	NUV (STIS.sp.18 35536)	(5) AT2022ACKO	STIS/NUV-MAMA, ACCUM, 52X0.2	G230L 2376 A				440 Secs (440 Secs) [==>]	[1]
	Comments: BOP Warning for irregularly-variable source. This isn't irregularly variable so shouldn't be an issue									
Orbit Structure	Orbit 1 Server Version: 20220630									

Proposal 17132 - faint SN visit 4 (04) - The First Early FUV Observations of a Type IIP Supernova

Visit	Proposal 17132, faint SN visit 4 (04), scheduled								Wed Dec 14 15:00:28 GMT 2022	
	Diagnostic Status: No Diagnostics									
	Scientific Instruments: STIS/NUV-MAMA, STIS/CCD, STIS/FUV-MAMA									
	Special Requirements: ON HOLD ; TOO RESPONSE TIME 2.0D									
	Comments: fourth epoch should be executed 7 days after third visit For SN with initial brightness around r=17 mag If possible execute at same orientation as visit 1									
	On Hold Comments: Waiting for a suitable supernova to explode. I understand this response time is likely a lower limit on what STScI is capable of but the sooner the better for this program Will be triggered at same time as visit 1									
Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous				
	(5)	AT2022ACKO	RA: 03 19 38.9700 (49.9123750d) Dec: -19 23 42.87 (-19.39524d) Equinox: J2000		V=16.5	Reference Frame: ICRS				
	Comments: DLT40 discovery. ATLAS non-detections < 24 hours prior to discovery Category=EXT-STAR Description=[SUPERNOVA TYPE II]									
Exposures	#	Label (ETC Run)	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
	1	TA (STIS.ta.181 4515)	(5) AT2022ACKO	STIS/CCD, ACQ, F28X50LP	MIRROR				4 Secs (4 Secs)	
									[==>]	[1]
	2	FUV (STIS.sp.18 35528)	(5) AT2022ACKO	STIS/FUV-MAMA, ACCUM, 52X0.2	G140L 1425 A				2275 Secs (2275 Secs)	
									[==>]	[1]
	3	FUV (STIS.sp.18 35528)	(5) AT2022ACKO	STIS/FUV-MAMA, ACCUM, 52X0.2	G140L 1425 A				2720 Secs (2736 Secs)	
									[==>2736.0 Secs]	[2]
	4	FUV (STIS.sp.18 35528)	(5) AT2022ACKO	STIS/FUV-MAMA, ACCUM, 52X0.2	G140L 1425 A				1586 Secs (1593 Secs)	
									[==>1593.0 Secs]	[3]
	5	NUV (STIS.sp.18 35539)	(5) AT2022ACKO	STIS/NUV-MAMA, ACCUM, 52X0.2	G230L 2376 A				750 Secs (757 Secs)	
								[==>757.0 Secs]	[3]	

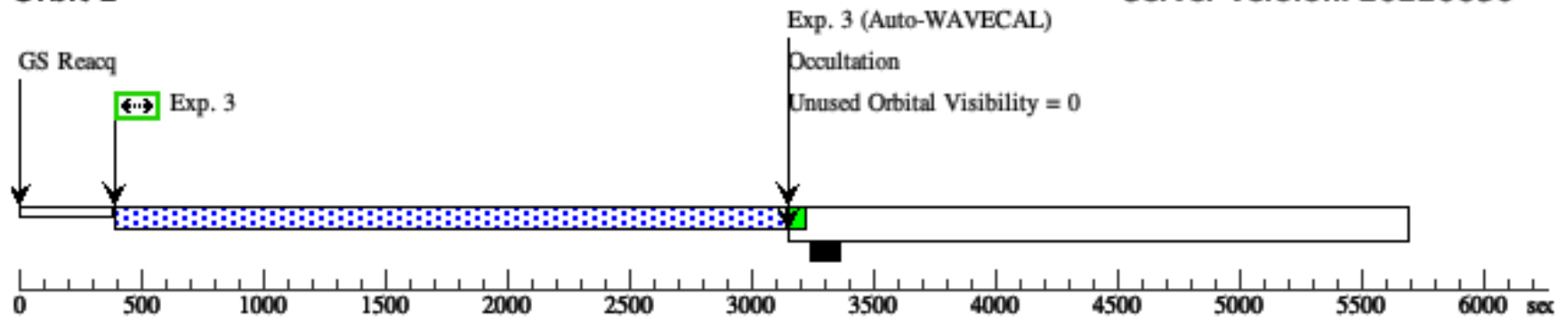
Orbit 1

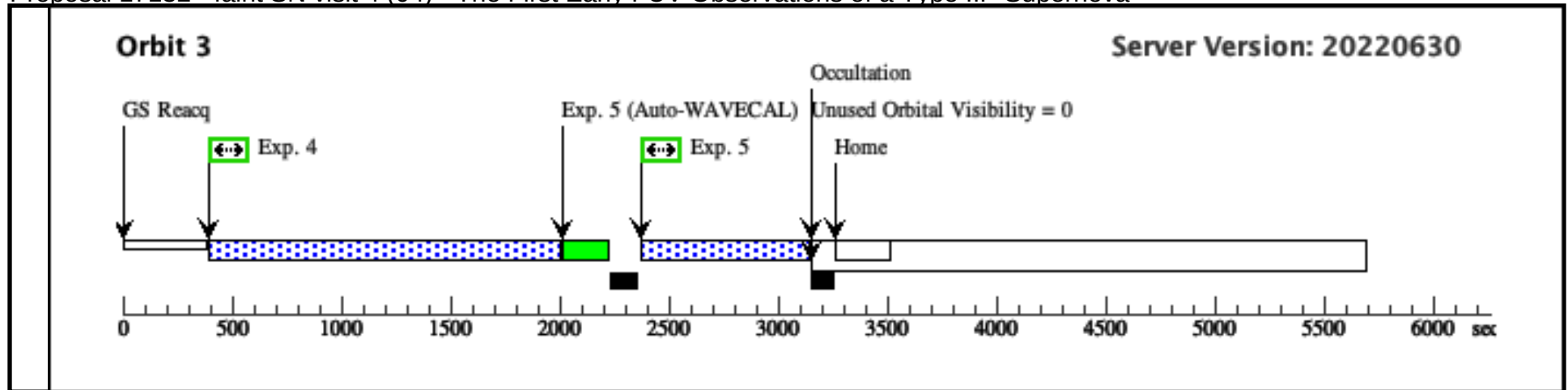
Server Version: 20220630



Orbit 2

Server Version: 20220630





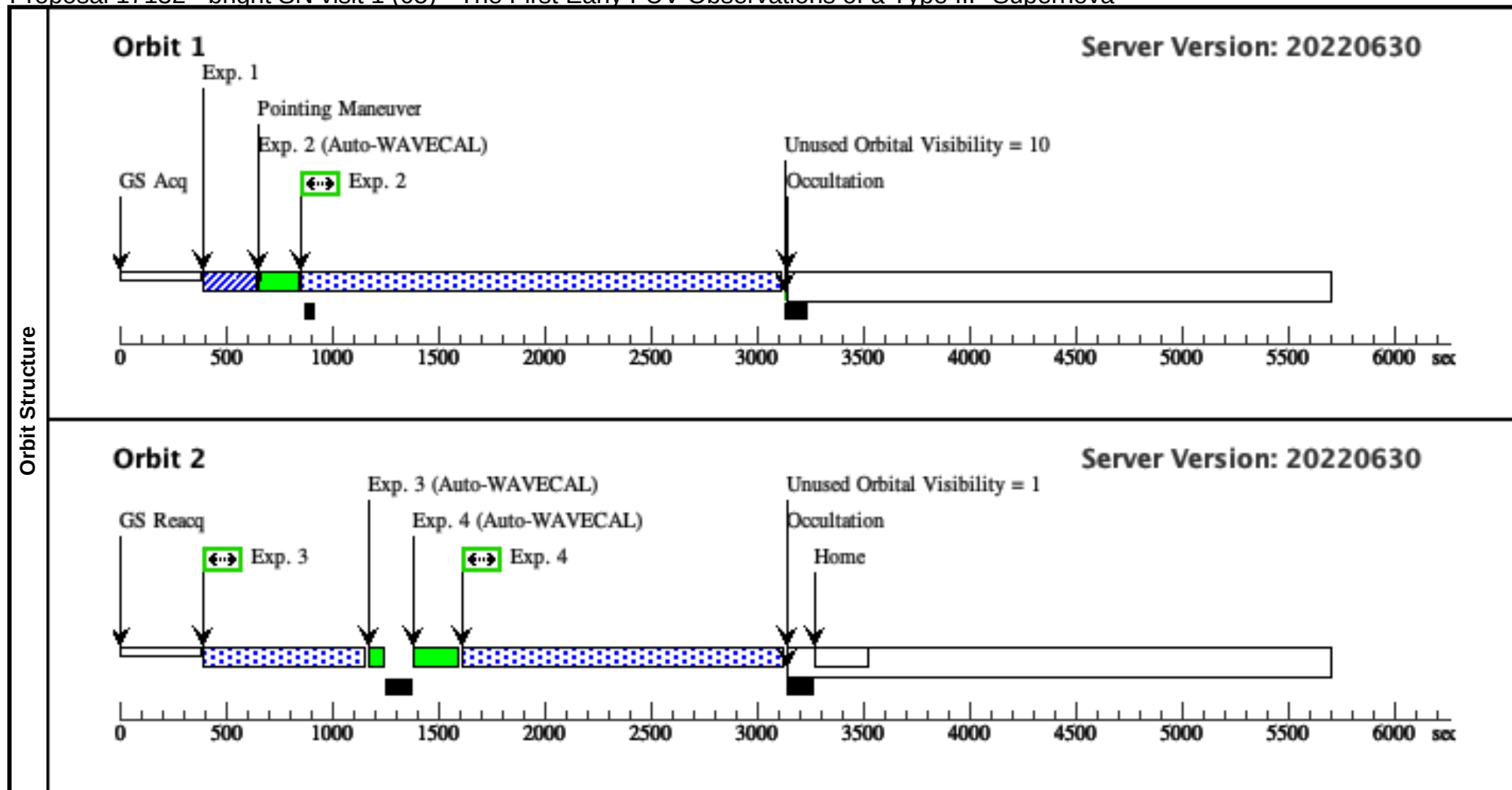
Proposal 17132 - faint SN visit 5 (13) - The First Early FUV Observations of a Type IIP Supernova

Wed Dec 14 15:00:28 GMT 2022

Visit	Proposal 17132, faint SN visit 5 (13)									
	Diagnostic Status: No Diagnostics									
	Scientific Instruments: STIS/NUV-MAMA, STIS/CCD									
	Special Requirements: ON HOLD ; TOO RESPONSE TIME 2.0D									
	Comments: visit 5 should be scheduled as soon as possible, regardless of when visit 4 executes On Hold Comments: Waiting for a suitable supernova to explode. I understand this response time is likely a lower limit on what STScI is capable of but the sooner the better for this program Will be triggered at same time as visit 1									
Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections			Fluxes		Miscellaneous	
	(5)	AT2022ACKO	RA: 03 19 38.9700 (49.9123750d) Dec: -19 23 42.87 (-19.39524d) Equinox: J2000				V=16.5		Reference Frame: ICRS	
Comments: DLT40 discovery. ATLAS non-detections < 24 hours prior to discovery Category=EXT-STAR Description=[SUPERNOVA TYPE II]										
Exposures	#	Label (ETC Run)	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
	1	TA (STIS.ta.181 4515)	(5) AT2022ACKO	STIS/CCD, ACQ, F28X50LP	MIRROR				4 Secs (4 Secs)	
									[==>]	[1]
	2	NUV (STIS.sp.18 35539)	(5) AT2022ACKO	STIS/NUV-MAMA, ACCUM, 52X0.2	G230L 2376 A				2278 Secs (2278 Secs)	
									[==>]	[1]
Orbit Structure	Orbit 1 Server Version: 20220630									

Proposal 17132 - bright SN visit 1 (05) - The First Early FUV Observations of a Type IIP Supernova

Visit	Proposal 17132, bright SN visit 1 (05), implementation								Wed Dec 14 15:00:28 GMT 2022	
	Diagnostic Status: No Diagnostics									
	Scientific Instruments: STIS/NUV-MAMA, STIS/CCD, STIS/FUV-MAMA									
	Special Requirements: ON HOLD ; TOO RESPONSE TIME 2.0D									
	Comments: First epoch should be executed as soon as possible after trigger For supernova with initial mag around r=14mag									
	On Hold Comments: Waiting for a suitable supernova to explode. I understand this response time is likely a lower limit on what STScI is capable of but the sooner the better for this program									
Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous				
	(4)	SNII-17	RA: 00 00 0.0000 (.0000000d) Dec: +00 00 0.00 (.00000d) Equinox: J2000		V=17.0	Reference Frame: ICRS				
	Comments: Category=EXT-STAR Description=[SUPERNOVA TYPE II] Extended=NO									
Exposures	#	Label (ETC Run)	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
	1	TA (STIS.ta.181 4740)	(4) SNII-17	STIS/CCD, ACQ, F28X50LP	MIRROR				5 Secs (5 Secs) [==>]	 [1]
	2	FUV (STIS.sp.18 14756)	(4) SNII-17	STIS/FUV-MAMA, ACCUM, 52X0.2	G140L 1425 A				2250 Secs (2250 Secs) [==>]	 [1]
	3	FUV (STIS.sp.18 14756)	(4) SNII-17	STIS/FUV-MAMA, ACCUM, 52X0.2	G140L 1425 A				750 Secs (750 Secs) [==>]	 [2]
	4	NUV (STIS.sp.18 14783)	(4) SNII-17	STIS/NUV-MAMA, ACCUM, 52X0.2	G230L 2376 A				1500 Secs (1500 Secs) [==>]	 [2]

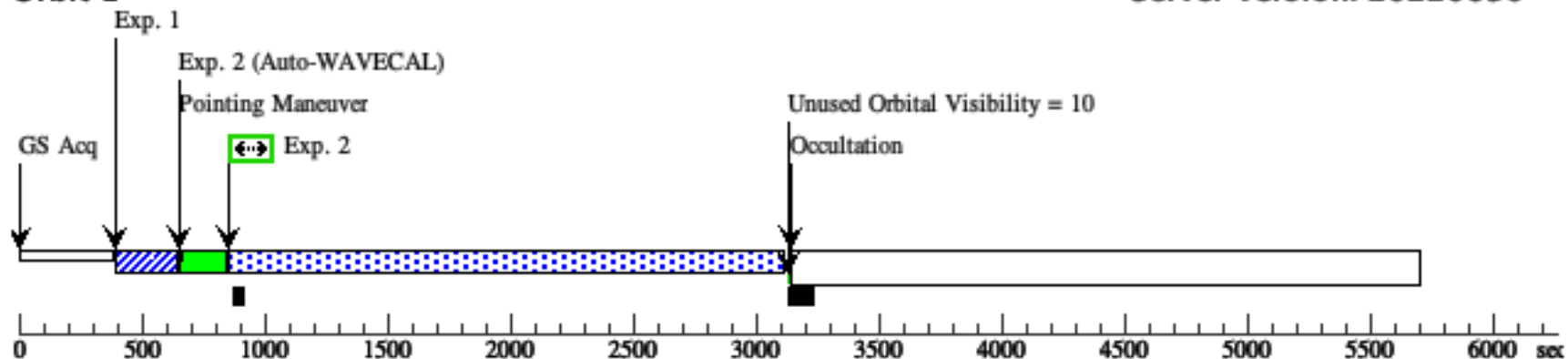


Proposal 17132 - bright SN visit 2 (06) - The First Early FUV Observations of a Type IIP Supernova

Visit	Proposal 17132, bright SN visit 2 (06), implementation								Wed Dec 14 15:00:28 GMT 2022	
	Diagnostic Status: No Diagnostics									
	Scientific Instruments: STIS/NUV-MAMA, STIS/CCD, STIS/FUV-MAMA									
	Special Requirements: ON HOLD ; TOO RESPONSE TIME 2.0D									
	Comments: Second epoch should be executed 24 hours after first visit									
	For SN with initial brightness around r=14 mag									
	If possible execute at same orientation as visit 1									
Fixed Targets	On Hold Comments: Waiting for a suitable supernova to explode.									
	I understand this response time is likely a lower limit on what STScI is capable of but the sooner the better for this program									
	Will be triggered at same time as visit 1									
	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous				
	(4)	SNII-17	RA: 00 00 0.0000 (.0000000d)		V=17.0	Reference Frame: ICRS				
			Dec: +00 00 0.00 (.00000d)							
			Equinox: J2000							
Comments:										
Category=EXT-STAR										
Description=[SUPERNOVA TYPE II]										
Extended=NO										
Exposures	#	Label (ETC Run)	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
	1	TA (STIS.ta.181 4740)	(4) SNII-17	STIS/CCD, ACQ, F28X50LP	MIRROR				5 Secs (5 Secs)	
									[==>]	[1]
	2	FUV (STIS.sp.18 14756)	(4) SNII-17	STIS/FUV-MAMA, ACCUM, 52X0.2	G140L 1425 A				2250 Secs (2250 Secs)	
									[==>]	[1]
	3	FUV (STIS.sp.18 14756)	(4) SNII-17	STIS/FUV-MAMA, ACCUM, 52X0.2	G140L 1425 A				750 Secs (750 Secs)	
									[==>]	[2]
4	NUV (STIS.sp.18 14783)	(4) SNII-17	STIS/NUV-MAMA, ACCUM, 52X0.2	G230L 2376 A				1500 Secs (1500 Secs)		
								[==>]	[2]	

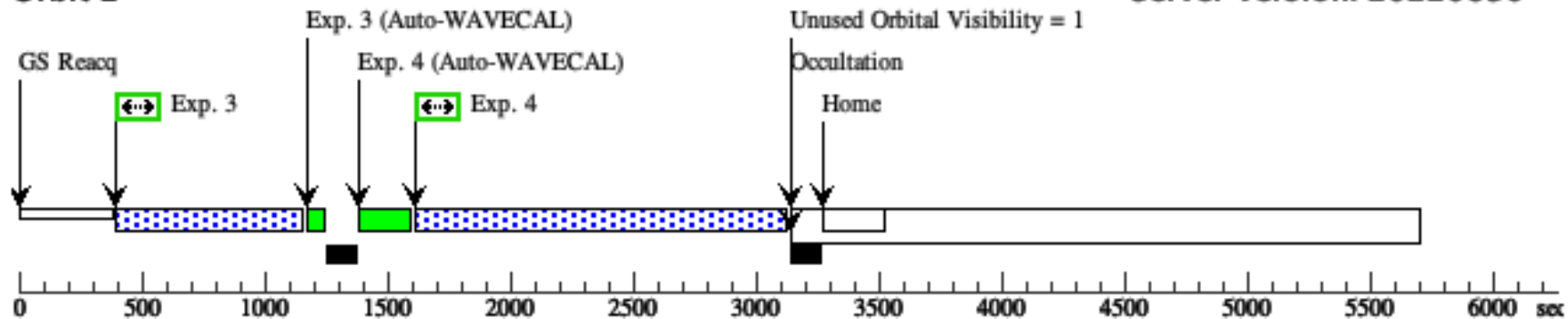
Orbit 1

Server Version: 20220630



Orbit 2

Server Version: 20220630



Proposal 17132 - bright SN visit 3 (07) - The First Early FUV Observations of a Type IIP Supernova

Wed Dec 14 15:00:28 GMT 2022

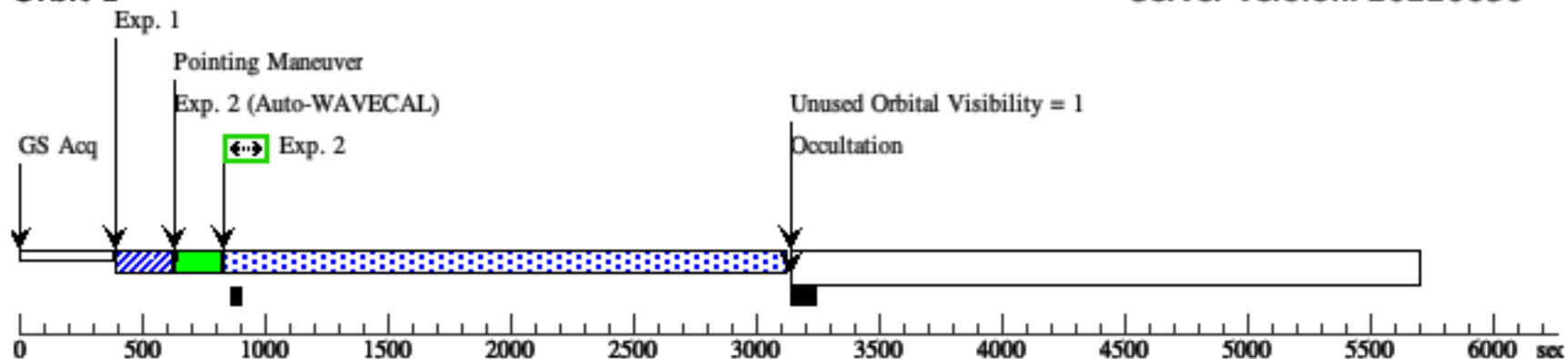
Visit	Proposal 17132, bright SN visit 3 (07), implementation									
	Diagnostic Status: No Diagnostics									
	Scientific Instruments: STIS/NUV-MAMA, STIS/CCD, STIS/FUV-MAMA									
	Special Requirements: ON HOLD ; TOO RESPONSE TIME 2.0D									
	Comments: Third epoch should be executed 24 hours after second visit and 48 hours after first visit For SN with initial brightness around $r=14$ mag If possible execute at same orientation as visit 1 On Hold Comments: Waiting for a suitable supernova to explode. I understand this response time is likely a lower limit on what STScI is capable of but the sooner the better for this program Will be triggered at same time as visit 1									
Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections			Fluxes	Miscellaneous		
	(4)	SNII-17	RA: 00 00 0.0000 (.0000000d) Dec: +00 00 0.00 (.00000d) Equinox: J2000				V=17.0	Reference Frame: ICRS		
Exposures	Comments: Category=EXT-STAR Description=[SUPERNOVA TYPE II] Extended=NO									
	#	Label (ETC Run)	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
	1	TA (STIS.ta.181 4741)	(4) SNII-17	STIS/CCD, ACQ, F28X50LP	MIRROR				2 Secs (2 Secs) [==>]	[1]
	2	FUV (STIS.sp.18 14757)	(4) SNII-17	STIS/FUV-MAMA, ACCUM, 52X0.2	G140L 1425 A				1465 Secs (1465 Secs) [==>]	[1]
	3	NUV (STIS.sp.18 14781)	(4) SNII-17	STIS/NUV-MAMA, ACCUM, 52X0.2	G230L 2376 A				440 Secs (440 Secs) [==>]	[1]
Orbit Structure	Orbit 1 Server Version: 20220630									

Proposal 17132 - bright SN visit 4 (08) - The First Early FUV Observations of a Type IIP Supernova

Visit	Proposal 17132, bright SN visit 4 (08), implementation								Wed Dec 14 15:00:28 GMT 2022	
	Diagnostic Status: No Diagnostics									
	Scientific Instruments: STIS/NUV-MAMA, STIS/CCD, STIS/FUV-MAMA									
	Special Requirements: ON HOLD ; TOO RESPONSE TIME 2.0D									
	Comments: fourth epoch should be executed 7 days after third visit									
	For SN with initial brightness around r=14 mag									
	If possible execute at same orientation as visit 1									
Fixed Targets	On Hold Comments: Waiting for a suitable supernova to explode.									
	I understand this response time is likely a lower limit on what STScI is capable of but the sooner the better for this program									
	Will be triggered at same time as visit 1									
	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous				
	(4)	SNII-17	RA: 00 00 0.0000 (.0000000d) Dec: +00 00 0.00 (.00000d) Equinox: J2000		V=17.0	Reference Frame: ICRS				
Comments: Category=EXT-STAR Description=[SUPERNOVA TYPE II] Extended=NO										
Exposures	#	Label (ETC Run)	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
	1	TA (STIS.ta.181 4528)	(4) SNII-17	STIS/CCD, ACQ, F28X50LP	MIRROR				1 Secs (1 Secs) [==>]	[1]
	2	FUV (STIS.sp.18 14532)	(4) SNII-17	STIS/FUV-MAMA, ACCUM, 52X0.2	G140L 1425 A				2275 Secs (2275 Secs) [==>]	[1]
	3	FUV (STIS.sp.18 14532)	(4) SNII-17	STIS/FUV-MAMA, ACCUM, 52X0.2	G140L 1425 A				2720 Secs (2720 Secs) [==>]	[2]
	4	FUV (STIS.sp.18 14532)	(4) SNII-17	STIS/FUV-MAMA, ACCUM, 52X0.2	G140L 1425 A				1586 Secs (1586 Secs) [==>]	[3]
	5	NUV (STIS.sp.18 14530)	(4) SNII-17	STIS/NUV-MAMA, ACCUM, 52X0.2	G230L 2376 A				750 Secs (750 Secs) [==>]	[3]

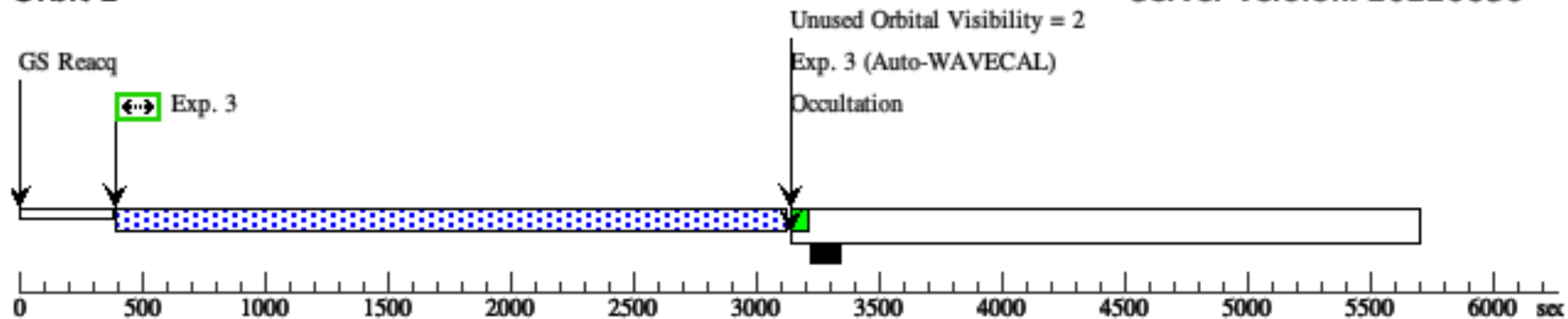
Orbit 1

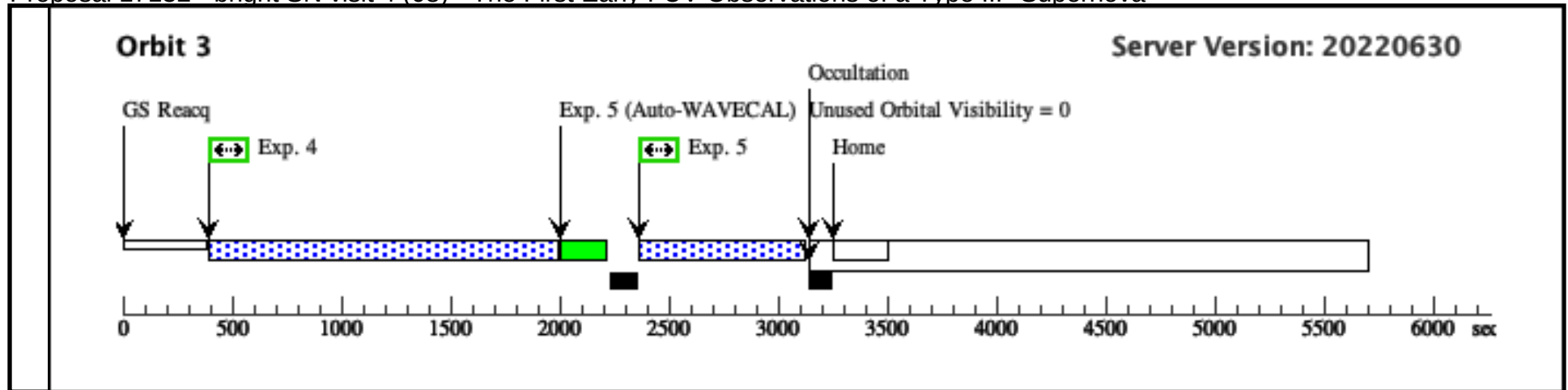
Server Version: 20220630



Orbit 2

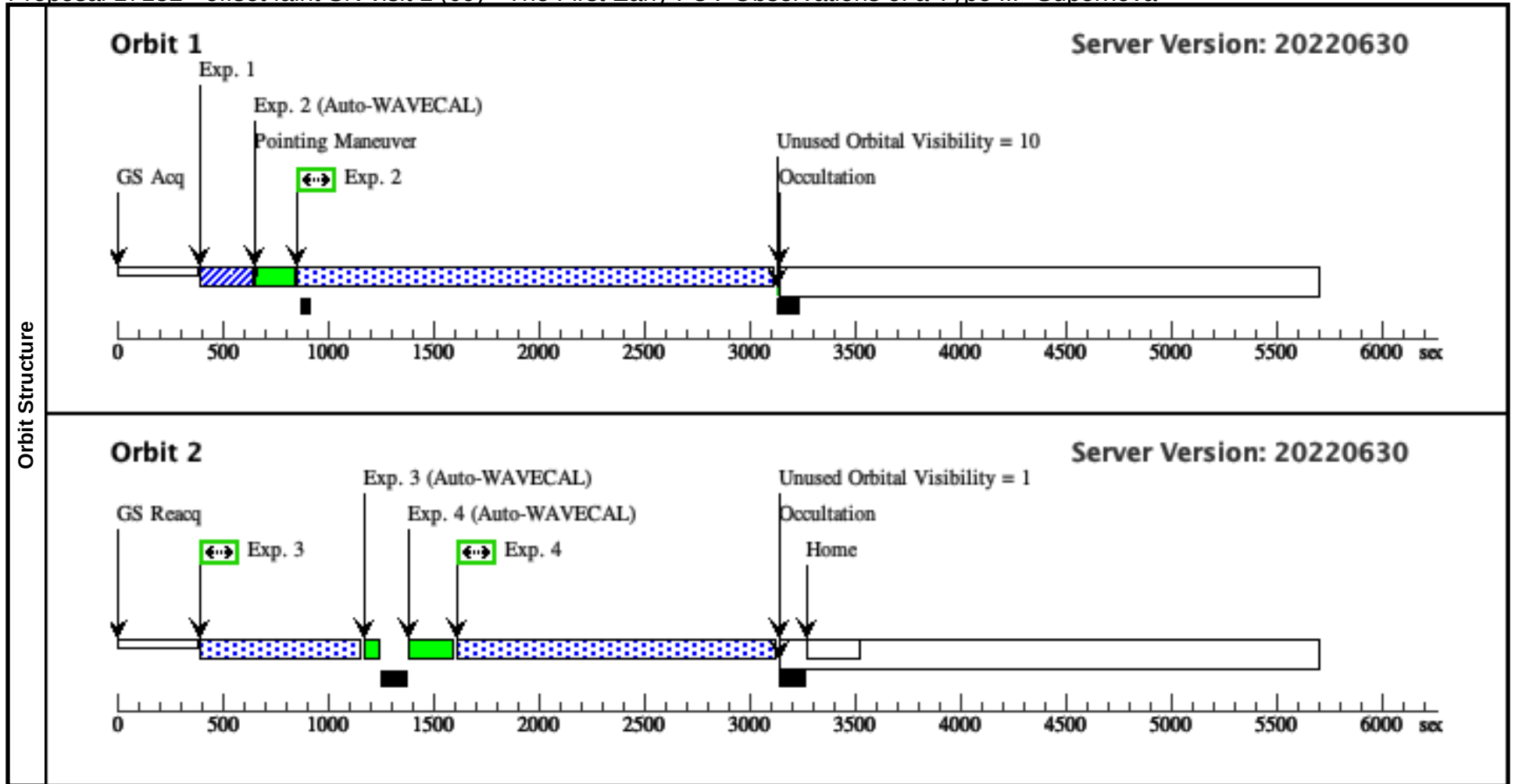
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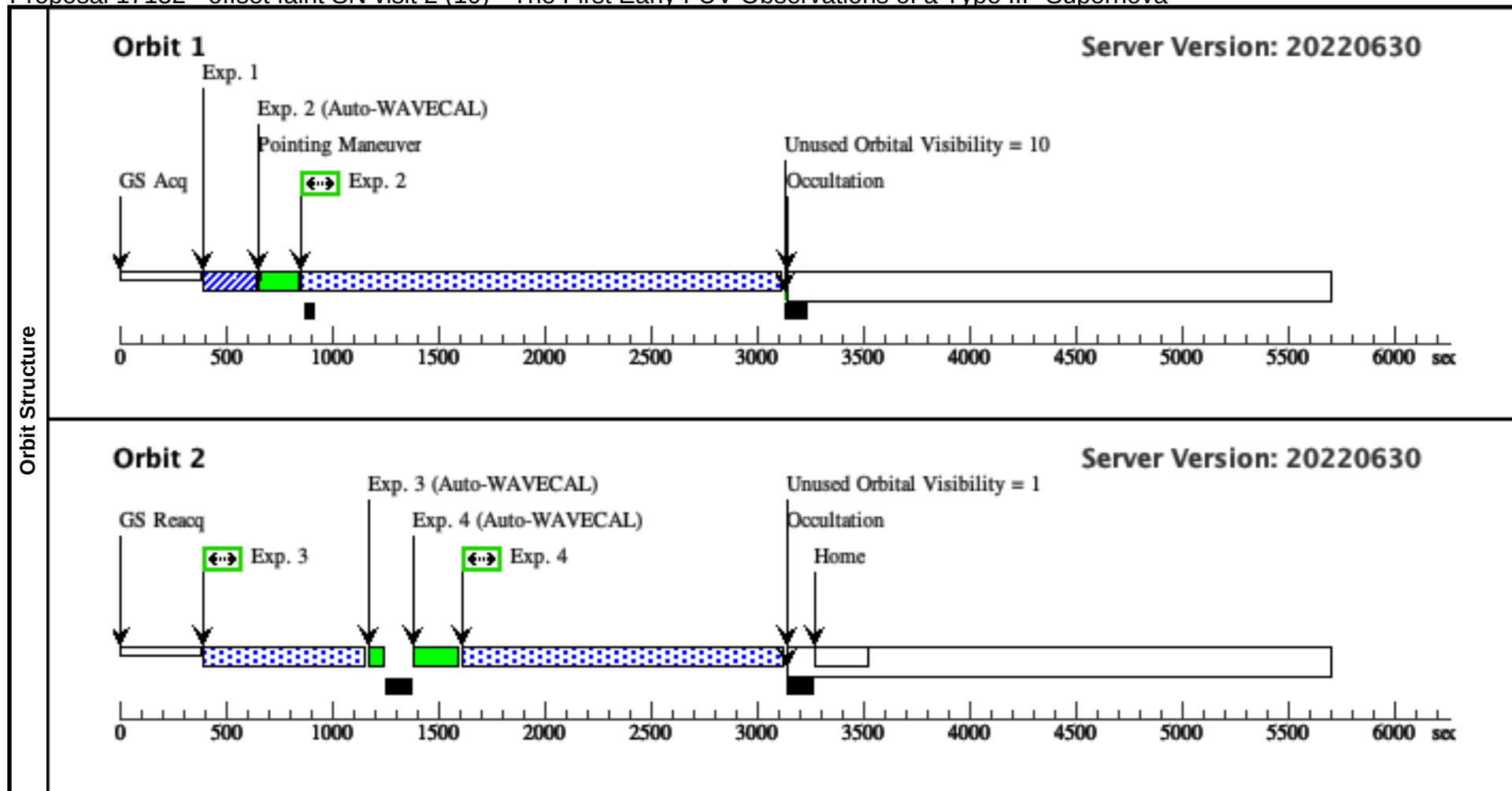
Proposal 17132 - offset faint SN visit 1 (09) - The First Early FUV Observations of a Type IIP Supernova

Visit	Proposal 17132, offset faint SN visit 1 (09), implementation								Wed Dec 14 15:00:28 GMT 2022	
	Diagnostic Status: No Diagnostics									
	Scientific Instruments: STIS/NUV-MAMA, STIS/CCD, STIS/FUV-MAMA									
	Special Requirements: ON HOLD ; TOO RESPONSE TIME 2.0D									
	Comments: First epoch should be executed as soon as possible after trigger For SN with initial brightness around r=17 mag that requires acquisition on an offset star either due to high background or a nearby bright source									
	On Hold Comments: Waiting for a suitable supernova to explode. I understand this response time is likely a lower limit on what STScI is capable of but the sooner the better for this program									
Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections			Fluxes	Miscellaneous		
	(2)	SNII-OFFSET	Offset from REFERENCE-STAR RA Offset: 0.2 Secs Dec Offset: 0.2 Arcsec				V=19.0	Offset Position (SNII-OFFSET)		
	Comments: Category=EXT-STAR Description=[SUPERNOVA TYPE II] Extended=NO									
	(3)	REFERENCE-STAR	RA: 00 00 0.0000 (.0000000d) Dec: +00 00 0.00 (.00000d) Equinox: J2000				V=19.0	Reference Frame: ICRS		
Comments: Category=EXT-STAR Description=[SUPERNOVA TYPE II] Extended=NO										
Exposures	#	Label (ETC Run)	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
	1	TA (STIS.ta.181 4737)	(3) REFERENCE-S TAR	STIS/CCD, ACQ, F28X50LP	MIRROR				5 Secs (5 Secs) [==>]	[1]
	2	FUV (STIS.sp.18 14747)	(2) SNII-OFFSET	STIS/FUV-MAMA, ACCUM, 52X0.2	G140L 1425 A				2250 Secs (2250 Secs) [==>]	[1]
	3	FUV (STIS.sp.18 14747)	(2) SNII-OFFSET	STIS/FUV-MAMA, ACCUM, 52X0.2	G140L 1425 A				750 Secs (750 Secs) [==>]	[2]
	4	NUV (STIS.sp.18 14767)	(2) SNII-OFFSET	STIS/NUV-MAMA, ACCUM, 52X0.2	G230L 2376 A				1500 Secs (1500 Secs) [==>]	[2]



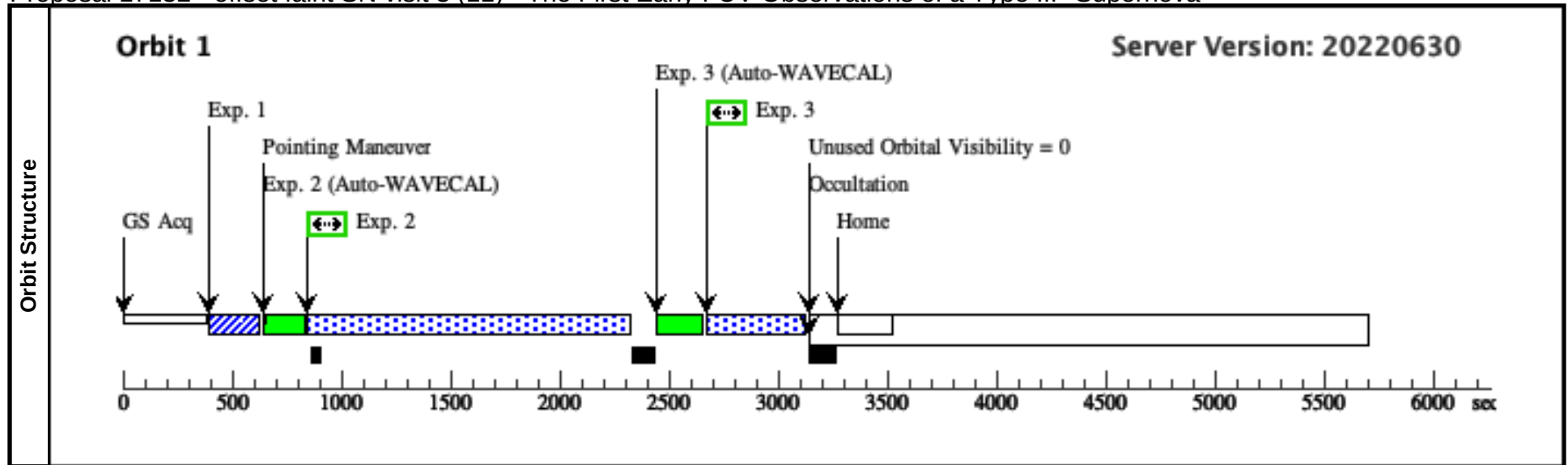
Proposal 17132 - offset faint SN visit 2 (10) - The First Early FUV Observations of a Type IIP Supernova

Visit	Proposal 17132, offset faint SN visit 2 (10), implementation								Wed Dec 14 15:00:28 GMT 2022	
	Diagnostic Status: No Diagnostics									
	Scientific Instruments: STIS/NUV-MAMA, STIS/CCD, STIS/FUV-MAMA									
	Special Requirements: ON HOLD ; TOO RESPONSE TIME 2.0D									
	Comments: Second epoch should be executed 24 hours after first visit									
	For SN with initial brightness around r=17 mag that requires acquisition on an offset star either due to high background or a nearby bright source									
	If possible execute at same orientation as visit 1									
Fixed Targets	On Hold Comments: Waiting for a suitable supernova to explode.									
	I understand this response time is likely a lower limit on what STScI is capable of but the sooner the better for this program									
	Will be triggered at same time as visit 1									
	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous				
	(2)	SNII-OFFSET	Offset from REFERENCE-STAR		V=19.0	Offset Position (SNII-OFFSET)				
	RA Offset: 0.2 Secs									
	Dec Offset: 0.2 Arcsec									
Exposures	Comments:									
	Category=EXT-STAR									
	Description=[SUPERNOVA TYPE II]									
	Extended=NO									
	(3)	REFERENCE-STAR	RA: 00 00 0.0000 (.0000000d)		V=19.0	Reference Frame: ICRS				
	Dec: +00 00 0.00 (.00000d)									
	Equinox: J2000									
Exposures	Comments:									
	Category=EXT-STAR									
	Description=[SUPERNOVA TYPE II]									
	Extended=NO									
	#	Label (ETC Run)	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
	1	TA (STIS.ta.181 4737)	(3) REFERENCE-S TAR	STIS/CCD, ACQ, F28X50LP	MIRROR				5 Secs (5 Secs)	
									[==>]	[1]
2	FUV (STIS.sp.18 14747)	(2) SNII-OFFSET	STIS/FUV-MAMA, ACCUM, 52X0.2	G140L 1425 A				2250 Secs (2250 Secs)		
								[==>]	[1]	
3	FUV (STIS.sp.18 14747)	(2) SNII-OFFSET	STIS/FUV-MAMA, ACCUM, 52X0.2	G140L 1425 A				750 Secs (750 Secs)		
								[==>]	[2]	
4	NUV (STIS.sp.18 14767)	(2) SNII-OFFSET	STIS/NUV-MAMA, ACCUM, 52X0.2	G230L 2376 A				1500 Secs (1500 Secs)		
								[==>]	[2]	



Proposal 17132 - offset faint SN visit 3 (11) - The First Early FUV Observations of a Type IIP Supernova

Visit	Proposal 17132, offset faint SN visit 3 (11), implementation								Wed Dec 14 15:00:28 GMT 2022	
	Diagnostic Status: No Diagnostics									
	Scientific Instruments: STIS/NUV-MAMA, STIS/CCD, STIS/FUV-MAMA									
	Special Requirements: ON HOLD ; TOO RESPONSE TIME 2.0D									
	Comments: Third epoch should be executed 24 hours after second visit and 48 hours after first visit For SN with initial brightness around r=17 mag that requires acquisition on an offset star either due to high background or a nearby bright source If possible execute at same orientation as visit 1									
	On Hold Comments: Waiting for a suitable supernova to explode. I understand this response time is likely a lower limit on what STScI is capable of but the sooner the better for this program Will be triggered at same time as visit 1									
Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections		Fluxes		Miscellaneous		
	(2)	SNII-OFFSET	Offset from REFERENCE-STAR RA Offset: 0.2 Secs Dec Offset: 0.2 Arcsec			V=19.0		Offset Position (SNII-OFFSET)		
	Comments: Category=EXT-STAR Description=[SUPERNOVA TYPE II] Extended=NO									
	(3)	REFERENCE-STAR	RA: 00 00 0.0000 (.0000000d) Dec: +00 00 0.00 (.00000d) Equinox: J2000			V=19.0		Reference Frame: ICRS		
Comments: Category=EXT-STAR Description=[SUPERNOVA TYPE II] Extended=NO										
Exposures	#	Label (ETC Run)	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
	1	TA (STIS.ta.181 4738)	(3) REFERENCE-S TAR	STIS/CCD, ACQ, F28X50LP	MIRROR				2 Secs (2 Secs) [==>]	[1]
	2	FUV (STIS.sp.18 14754)	(2) SNII-OFFSET	STIS/FUV-MAMA, ACCUM, 52X0.2	G140L 1425 A				1465 Secs (1465 Secs) [==>]	[1]
	3	NUV (STIS.sp.18 14769)	(2) SNII-OFFSET	STIS/NUV-MAMA, ACCUM, 52X0.2	G230L 2376 A				440 Secs (440 Secs) [==>]	[1]

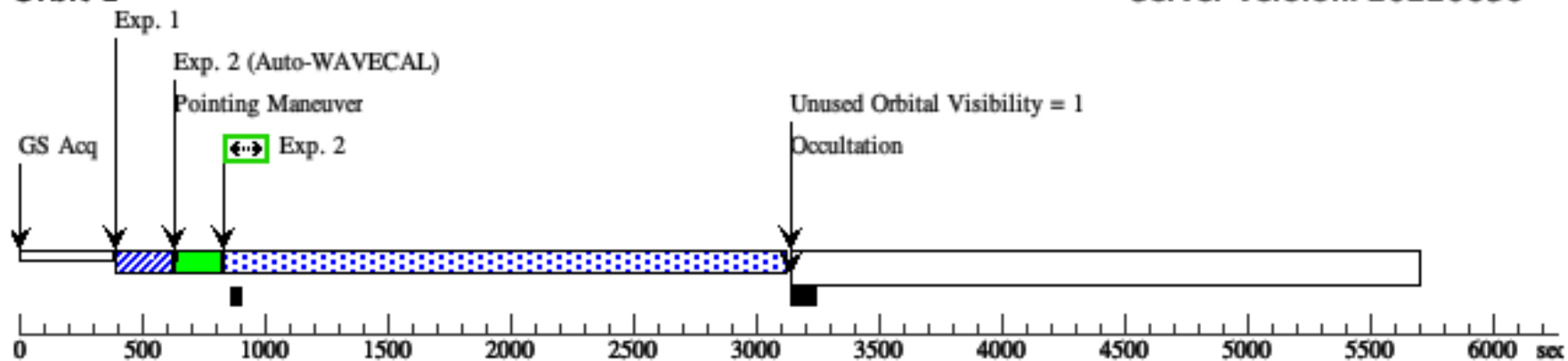


Proposal 17132 - offset faint SN visit 4 (12) - The First Early FUV Observations of a Type IIP Supernova

Visit	Proposal 17132, offset faint SN visit 4 (12), implementation								Wed Dec 14 15:00:28 GMT 2022	
	Diagnostic Status: No Diagnostics									
	Scientific Instruments: STIS/NUV-MAMA, STIS/CCD, STIS/FUV-MAMA									
	Special Requirements: ON HOLD ; TOO RESPONSE TIME 2.0D									
	Comments: fourth epoch should be executed 7 days after third visit For SN with initial brightness around r=17 mag that requires acquisition on an offset star either due to high background or a nearby bright source If possible execute at same orientation as visit 1									
	On Hold Comments: Waiting for a suitable supernova to explode. I understand this response time is likely a lower limit on what STScI is capable of but the sooner the better for this program Will be triggered at same time as visit 1									
Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections		Fluxes		Miscellaneous		
	(2)	SNII-OFFSET	Offset from REFERENCE-STAR RA Offset: 0.2 Secs Dec Offset: 0.2 Arcsec			V=19.0		Offset Position (SNII-OFFSET)		
	Comments: Category=EXT-STAR Description=[SUPERNOVA TYPE II] Extended=NO									
	(3)	REFERENCE-STAR	RA: 00 00 0.0000 (.0000000d) Dec: +00 00 0.00 (.00000d) Equinox: J2000			V=19.0		Reference Frame: ICRS		
Comments: Category=EXT-STAR Description=[SUPERNOVA TYPE II] Extended=NO										
Exposures	#	Label (ETC Run)	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
	1	TA (STIS.ta.181 4515)	(3) REFERENCE-S TAR	STIS/CCD, ACQ, F28X50LP	MIRROR				1 Secs (1 Secs) [==>]	[1]
	2	FUV (STIS.sp.18 14513)	(2) SNII-OFFSET	STIS/FUV-MAMA, ACCUM, 52X0.2	G140L 1425 A				2275 Secs (2275 Secs) [==>]	[1]
	3	FUV (STIS.sp.18 14513)	(2) SNII-OFFSET	STIS/FUV-MAMA, ACCUM, 52X0.2	G140L 1425 A				2720 Secs (2720 Secs) [==>]	[2]
	4	FUV (STIS.sp.18 14513)	(2) SNII-OFFSET	STIS/FUV-MAMA, ACCUM, 52X0.2	G140L 1425 A				1586 Secs (1586 Secs) [==>]	[3]
	5	NUV (STIS.sp.18 14434)	(2) SNII-OFFSET	STIS/NUV-MAMA, ACCUM, 52X0.2	G230L 2376 A				750 Secs (750 Secs) [==>]	[3]

Orbit 1

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Orbit 2

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