16238 - Measuring the Effect of Progenitor Metallicity on Type Ia Supernova Distance Estimates

Cycle: 28, Proposal Category: GO

(UV Initiative)

(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	(9) AT2020UXZ CCDFLAT	STIS/CCD STIS/NUV-MAMA	1	21-Nov-2022 16:01:14.0	yes

Visit	*Targets used in Visit*	*Configurations used in Visit*	*Orbits Used*	*Last Orbit Planner Run*	*OP Current with Visit?*
02	(10) AT2020YVU CCDFLAT	STIS/CCD STIS/NUV-MAMA	1	21-Nov-2022 16:01:16.0	yes
03	(11) AT2021J CCDFLAT	STIS/CCD STIS/NUV-MAMA	1	21-Nov-2022 16:01:17.0	yes
04	(13) SN2021HIZ CCDFLAT	STIS/CCD STIS/NUV-MAMA	1	21-Nov-2022 16:01:18.0	yes
05	(12) AT2021DOV CCDFLAT	STIS/CCD STIS/NUV-MAMA	2	21-Nov-2022 16:01:19.0	yes
06	(14) AT2021JAD CCDFLAT	STIS/CCD STIS/NUV-MAMA	2	21-Nov-2022 16:01:20.0	yes
07	(19) 2022MOX CCDFLAT	STIS/CCD STIS/NUV-MAMA	2	21-Nov-2022 16:01:22.0	yes
Z7	(20) 2022AAIQ CCDFLAT	STIS/CCD STIS/NUV-MAMA	2	21-Nov-2022 16:01:23.0	yes
08	(17) AT2021ZFW CCDFLAT	STIS/CCD STIS/NUV-MAMA	2	21-Nov-2022 16:01:24.0	yes
Z8	(17) AT2021ZFW CCDFLAT	STIS/CCD STIS/NUV-MAMA	2	21-Nov-2022 16:01:26.0	yes

16 Total Orbits Used

ABSTRACT

Despite using Type Ia supernovae (SN Ia) to precisely measure cosmological parameters, we still do not know basic facts about the progenitor systems and explosions. Theory suggests that SN Ia progenitor metallicity is correlated with its peak luminosity, but not how quickly it fades, which we use to calibrate the luminosity and measure distances. This effect should lead to an increased Hubble scatter, reducing the precision with which we measure distances. If the mean progenitor metallicity changes with redshift or population, cosmological measurements such as the dark energy equation-of-state parameter and the Hubble constant could be biased. Models also indicate that changing progenitor metallicity will have little effect on the appearance of optical/NIR SN data, but significantly alter UV spectra. These data can only be obtained with HST.

Previous HST observations of 2 "twin" SN (having nearly identical optical spectra and light-curve shapes) with different UV spectra and peak optical luminosities indicate progenitor metallicity differences consistent with models. To determine the overall impact of progenitor metallicity on cosmological measurements, we must increase the sample.

The community now discovers (and announces) ~20 SN Ia each year >2 weeks before peak. With the increased discovery rate of young SN, we can double the sample of SN Ia with UV spectra near peak in a single Cycle. UV observations are critical to the understanding of SN Ia explosions and progenitors and constraining fundamental parameters such as the Hubble constant. This is our best opportunity to further our understanding of SN Ia while directly improving the utility of SN Ia for cosmology.

OBSERVING DESCRIPTION

There are 8 separate TOO targets, each will obtain a single spectrum. 4 targets will be bright enough for a single orbit, while half will require 2 orbits.

Fast turn around is key, and we will work closely to speed this process up. Some tweaking to the visits will be required for each trigger.

Visit

Proposal 16238, Visit 01, completed Mon Nov 21 21:01:27 GMT 2022

Diagnostic Status: No Diagnostics

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

Special Requirements: SCHED 100%

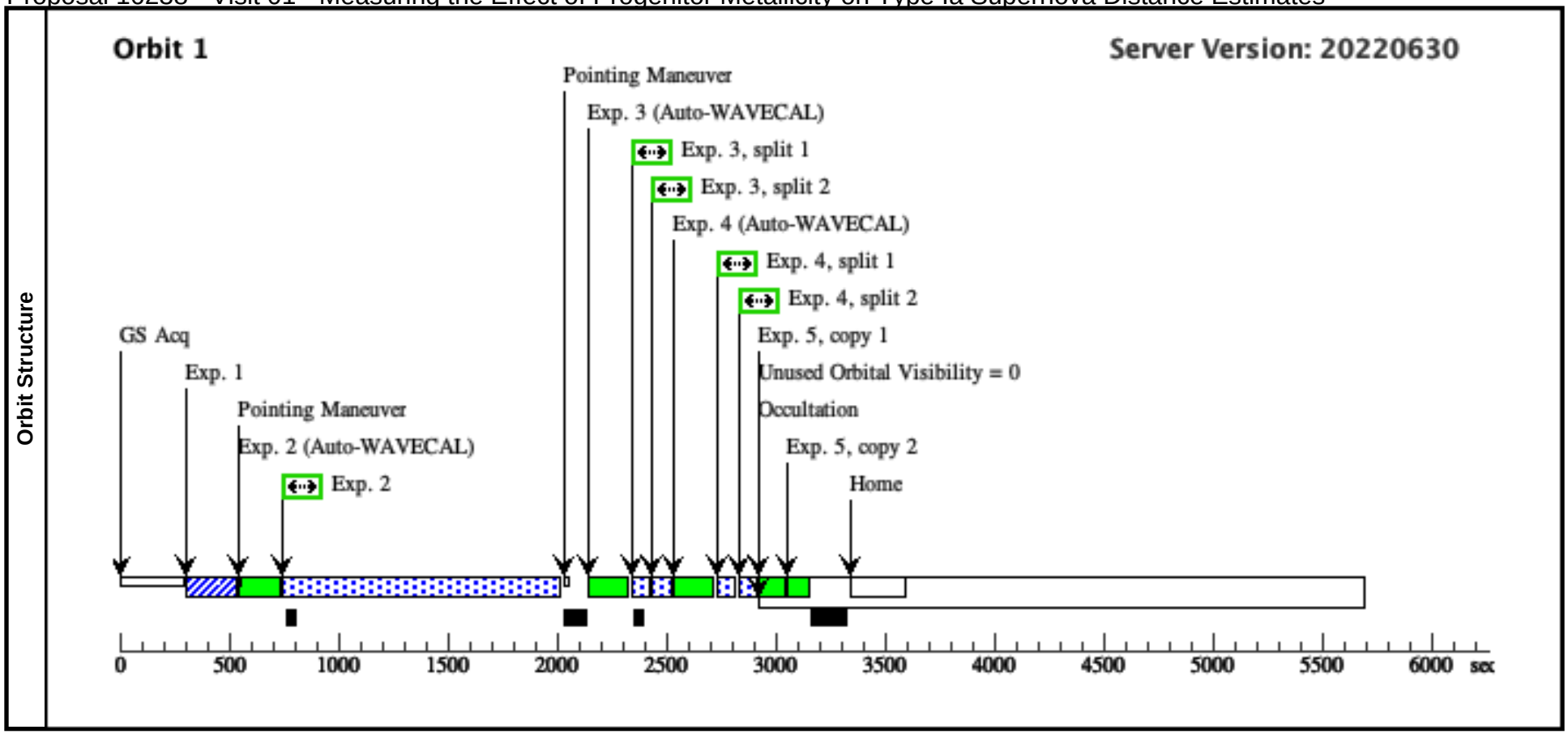
Fixed Targets

#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(9)	AT2020UXZ	RA: 01 24 6.8850 (21.0286875d) Dec: +12 55 17.33 (12.92148d) Equinox: J2000	Epoch of Position: 2000	V=16.5	Reference Frame: ICRS

Comments: Rising SN.
Category=EXT-STAR
Description=[SUPERNOVA TYPE IA]
Extended=NO

Exposures

#	Label (ETC Run)	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
1		(9) AT2020UXZ	STIS/CCD, ACQ, F28X50LP	MIRROR		GS ACQ SCENARIO SINGLE		1 Secs (1 Secs) *[==>]*	*[1]*
2	(STIS.sp.186473)	(9) AT2020UXZ	STIS/NUV-MAMA, ACCUM, 52X0.2	G230L 2376 A				1400 Secs (1257 Secs) *[==>1257.0 Secs]*	*[1]*
3		(9) AT2020UXZ	STIS/CCD, ACCUM, 52X0.2E1	G430L 4300 A	CR-SPLIT=2			50 Secs (100 Secs) *[==>50.0 Secs (Split 1)]* *[==>50.0 Secs (Split 2)]*	*[1]*
4		(9) AT2020UXZ	STIS/CCD, ACCUM, 52X0.2E1	G750L 7751 A	CR-SPLIT=2			50 Secs (100 Secs) *[==>50.0 Secs (Split 1)]* *[==>50.0 Secs (Split 2)]*	*[1]*
5		CCDFLAT	STIS/CCD, ACCUM, 52X0.1	G750L 7751 A				*[==>(Copy 1)]* *[==>(Copy 2)]*	*[1]*


Orbit Structure
Orbit 1
Server Version: 20220630
Pointing Maneuver
Exp. 3 (Auto-WAVECAL)
Exp. 3, split 1
Exp. 3, split 2
Exp. 4 (Auto-WAVECAL)
Exp. 4, split 1
Exp. 4, split 2
Exp. 5, copy 1
Unused Orbital Visibility = 0
Occultation
Exp. 5, copy 2
Home
GS Acq
Exp. 1
Pointing Maneuver
Exp. 2 (Auto-WAVECAL)
Exp. 2
0
500
1000
1500
2000
2500
3000
3500
4000
4500
5000
5500
6000
sec

Visit

Proposal 16238, Visit 02, completed Mon Nov 21 21:01:27 GMT 2022

Diagnostic Status: No Diagnostics

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

Special Requirements: SCHED 100%; ON HOLD

On Hold Comments: ToO

Fixed Targets

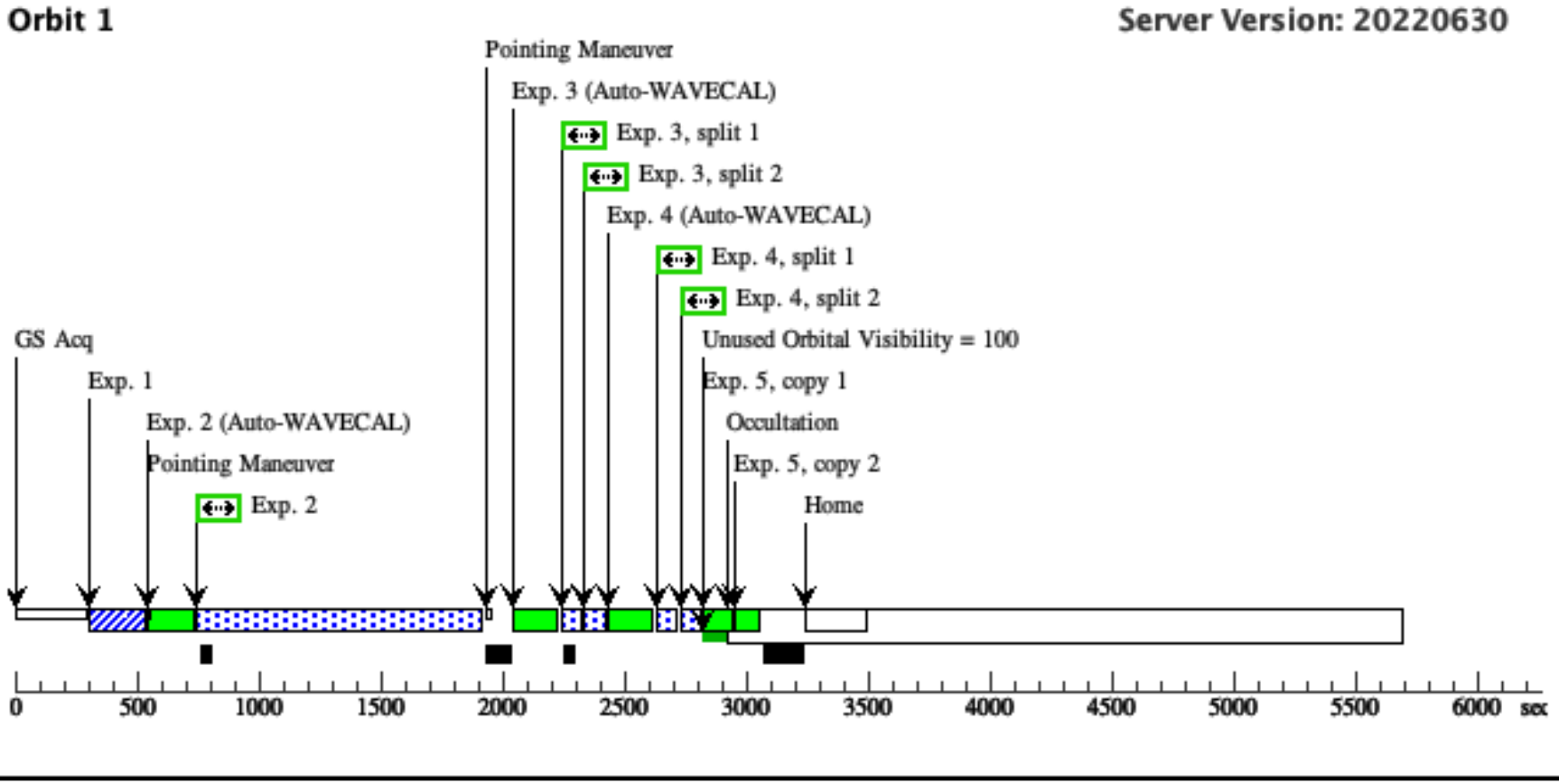
#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(10)	AT2020YVU	RA: 23 00 59.8400 (345.2493333d) Dec: +40 54 38.27 (40.91063d) Equinox: J2000	Epoch of Position: 2000	V=16.5	Reference Frame: ICRS

Comments: Rising SN Ia.
Category=EXT-STAR
Description=[SUPERNOVA TYPE IA]
Extended=NO

Exposures

#	Label (ETC Run)	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
1		(10) AT2020YVU	STIS/CCD, ACQ, F28X50LP	MIRROR		GS ACQ SCENARIO SINGLE		1 Secs (1 Secs) *[==>]*	***[1]***
2	(STIS.sp.186473)	(10) AT2020YVU	STIS/NUV-MAMA, ACCUM, 52X0.2	G230L 2376 A				1400 Secs (1159 Secs) *[==>1159.0 Secs]*	***[1]***
3		(10) AT2020YVU	STIS/CCD, ACCUM, 52X0.2E1	G430L 4300 A	CR-SPLIT=2			50 Secs (100 Secs) *[==>50.0 Secs (Split 1)]* *[==>50.0 Secs (Split 2)]*	***[1]***
4		(10) AT2020YVU	STIS/CCD, ACCUM, 52X0.2E1	G750L 7751 A	CR-SPLIT=2			50 Secs (100 Secs) *[==>50.0 Secs (Split 1)]* *[==>50.0 Secs (Split 2)]*	***[1]***
5		CCDFLAT	STIS/CCD, ACCUM, 52X0.1	G750L 7751 A				*[==>(Copy 1)]* *[==>(Copy 2)]*	***[1]***

Orbit Structure



Visit

Proposal 16238, Visit 03, completed Mon Nov 21 21:01:27 GMT 2022

Diagnostic Status: No Diagnostics

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

Special Requirements: SCHED 100%

Fixed Targets

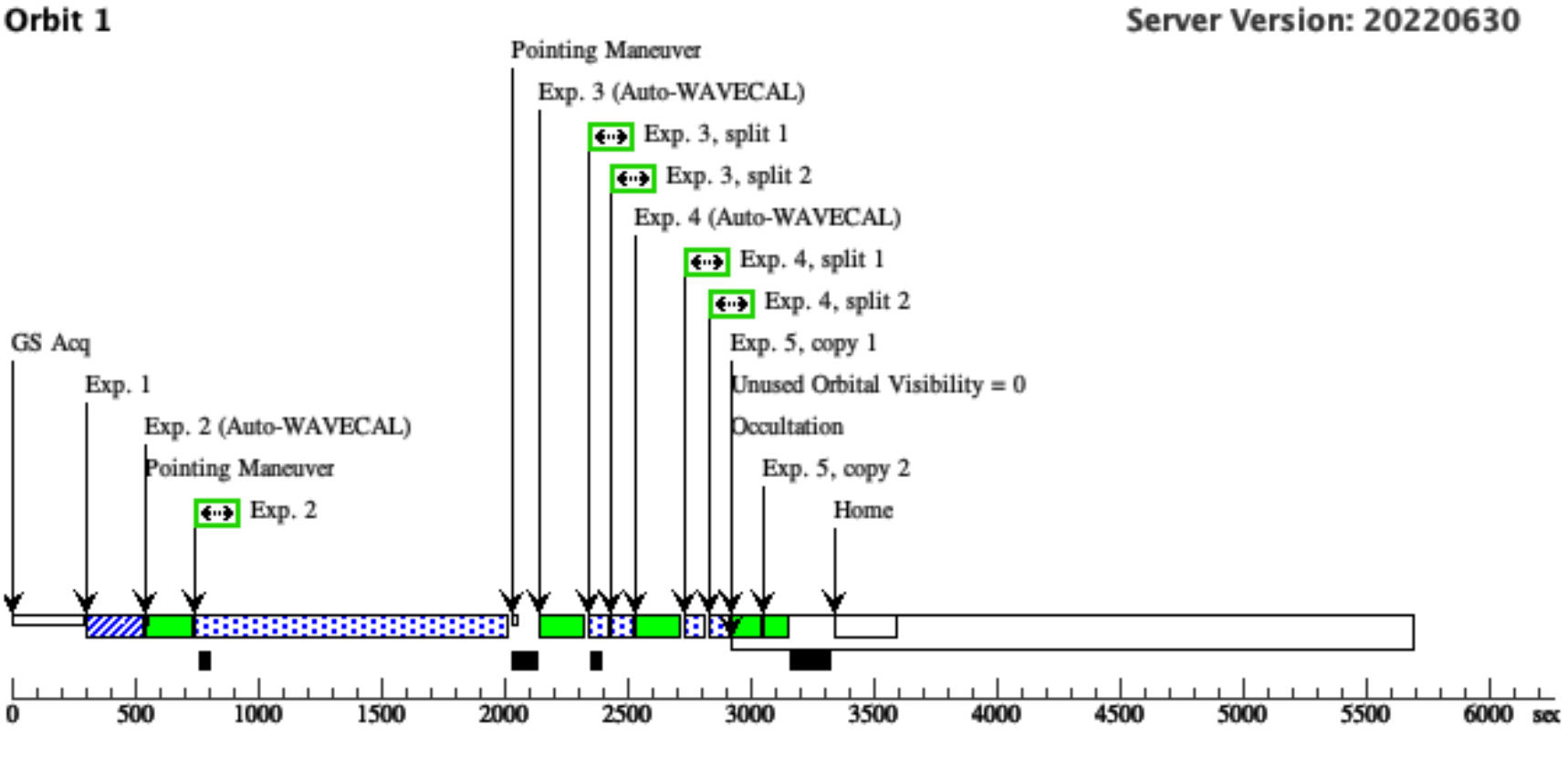
#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(11)	AT2021J	RA: 12 26 27.0300 (186.6126250d) Dec: +31 13 20.59 (31.22239d) Equinox: J2000	Epoch of Position: 2000	V=16.1	Reference Frame: ICRS

Comments: Rising SN Ia.
Category=EXT-STAR
Description=[SUPERNOVA TYPE IA]
Extended=NO

Exposures

#	Label (ETC Run)	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
1		(11) AT2021J	STIS/CCD, ACQ, F28X50LP	MIRROR		GS ACQ SCENARIO SINGLE		1 Secs (1 Secs) *[==>]*	*[1]*
2	(STIS.sp.186473)	(11) AT2021J	STIS/NUV-MAMA, ACCUM, 52X0.2	G230L 2376 A				1400 Secs (1257 Secs) *[==>1257.0 Secs]*	*[1]*
3		(11) AT2021J	STIS/CCD, ACCUM, 52X0.2E1	G430L 4300 A	CR-SPLIT=2			50 Secs (100 Secs) *[==>50.0 Secs (Split 1)]* *[==>50.0 Secs (Split 2)]*	*[1]*
4		(11) AT2021J	STIS/CCD, ACCUM, 52X0.2E1	G750L 7751 A	CR-SPLIT=2			50 Secs (100 Secs) *[==>50.0 Secs (Split 1)]* *[==>50.0 Secs (Split 2)]*	*[1]*
5		CCDFLAT	STIS/CCD, ACCUM, 52X0.1	G750L 7751 A				*[==>(Copy 1)]* *[==>(Copy 2)]*	*[1]*

Orbit Structure



Visit

Proposal 16238, Visit 04, completed Mon Nov 21 21:01:27 GMT 2022

Diagnostic Status: No Diagnostics

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

Special Requirements: SCHED 100%; ORIENT 49.3D TO 177 D; ORIENT 227D TO 356 D; ON HOLD

On Hold Comments: ToO

Fixed Targets

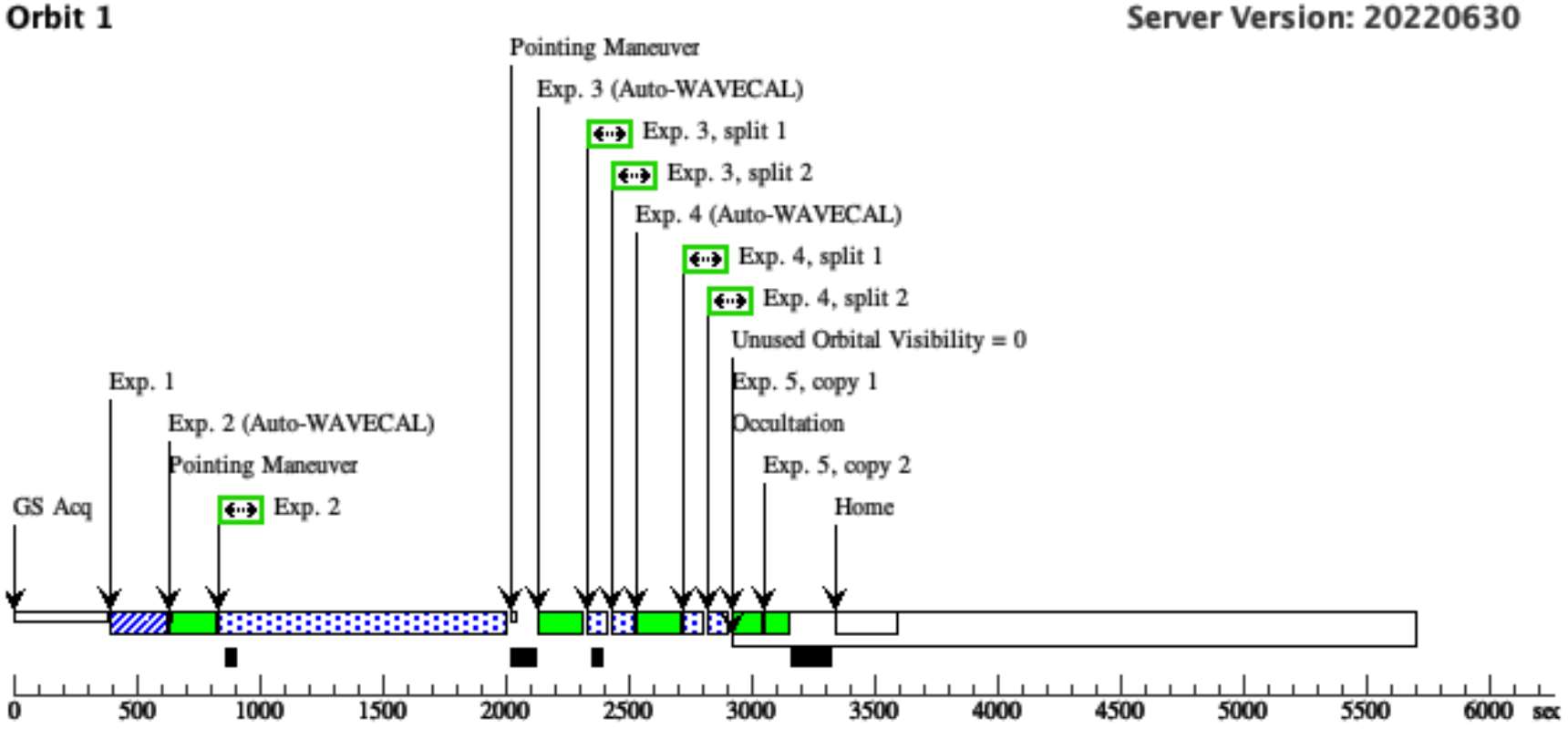
#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(13)	SN2021HIZ	RA: 12 25 41.6800 (186.4236667d) Dec: +07 13 42.22 (7.22839d) Equinox: J2000		V=12.5	Reference Frame: ICRS

Comments: Rising SN Ia currently 15.9 mag
Category=EXT-STAR
Description=[SUPERNOVA TYPE IA]
Extended=NO

Exposures

#	Label (ETC Run)	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
1		(13) SN2021HIZ	STIS/CCD, ACQ, F28X50LP	MIRROR		GS ACQ SCENARIO BASE1BNE		1 Secs (1 Secs) *[==>]*	 ***[1]***
2	(STIS.sp.186473)	(13) SN2021HIZ	STIS/NUV-MAMA, ACCUM, 52X0.2	G230L 2376 A				1160 Secs (1160 Secs) *[==>1160.0 Secs]*	 ***[1]***
3		(13) SN2021HIZ	STIS/CCD, ACCUM, 52X0.2E1	G430L 4300 A	CR-SPLIT=2			100 Secs (100 Secs) *[==>50.0 Secs (Split 1)]* *[==>50.0 Secs (Split 2)]*	 ***[1]***
4		(13) SN2021HIZ	STIS/CCD, ACCUM, 52X0.2E1	G750L 7751 A	CR-SPLIT=2			100 Secs (100 Secs) *[==>50.0 Secs (Split 1)]* *[==>50.0 Secs (Split 2)]*	 ***[1]***
5		CCDFLAT	STIS/CCD, ACCUM, 52X0.1	G750L 7751 A				*[==>(Copy 1)]* *[==>(Copy 2)]*	***[1]***

Orbit Structure



Visit

Proposal 16238, Visit 05, completed Mon Nov 21 21:01:27 GMT 2022

Diagnostic Status: No Diagnostics

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

Special Requirements: SCHED 100%; ON HOLD ; TOO RESPONSE TIME 21.0D

On Hold Comments: ToO

Fixed Targets

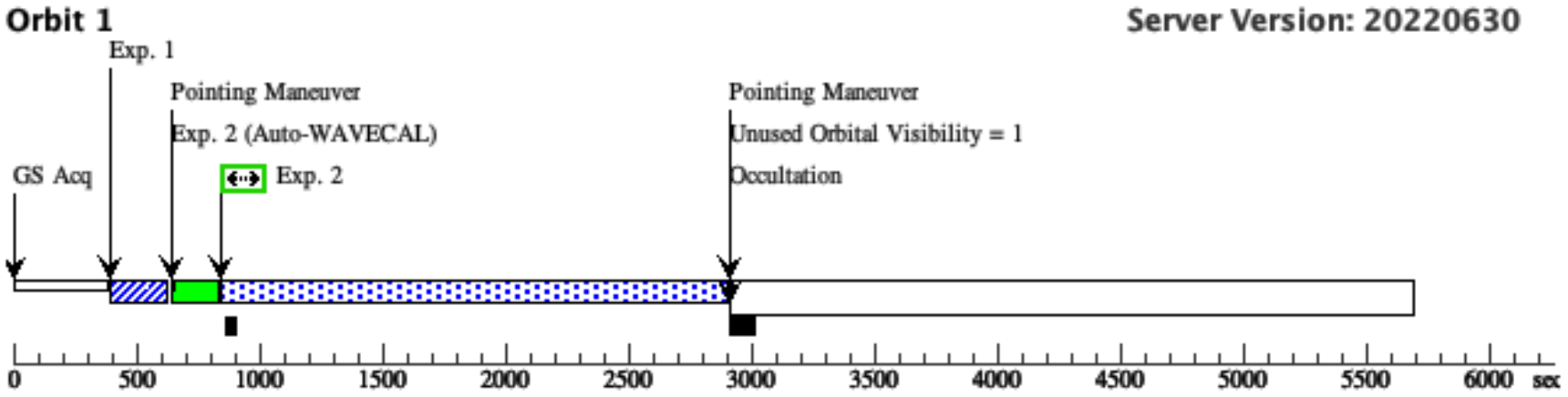
#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(12)	AT2021DOV	RA: 08 56 18.7070 (134.0779458d) Dec: -00 26 31.71 (-.44214d) Equinox: J2000		V=17	Reference Frame: ICRS

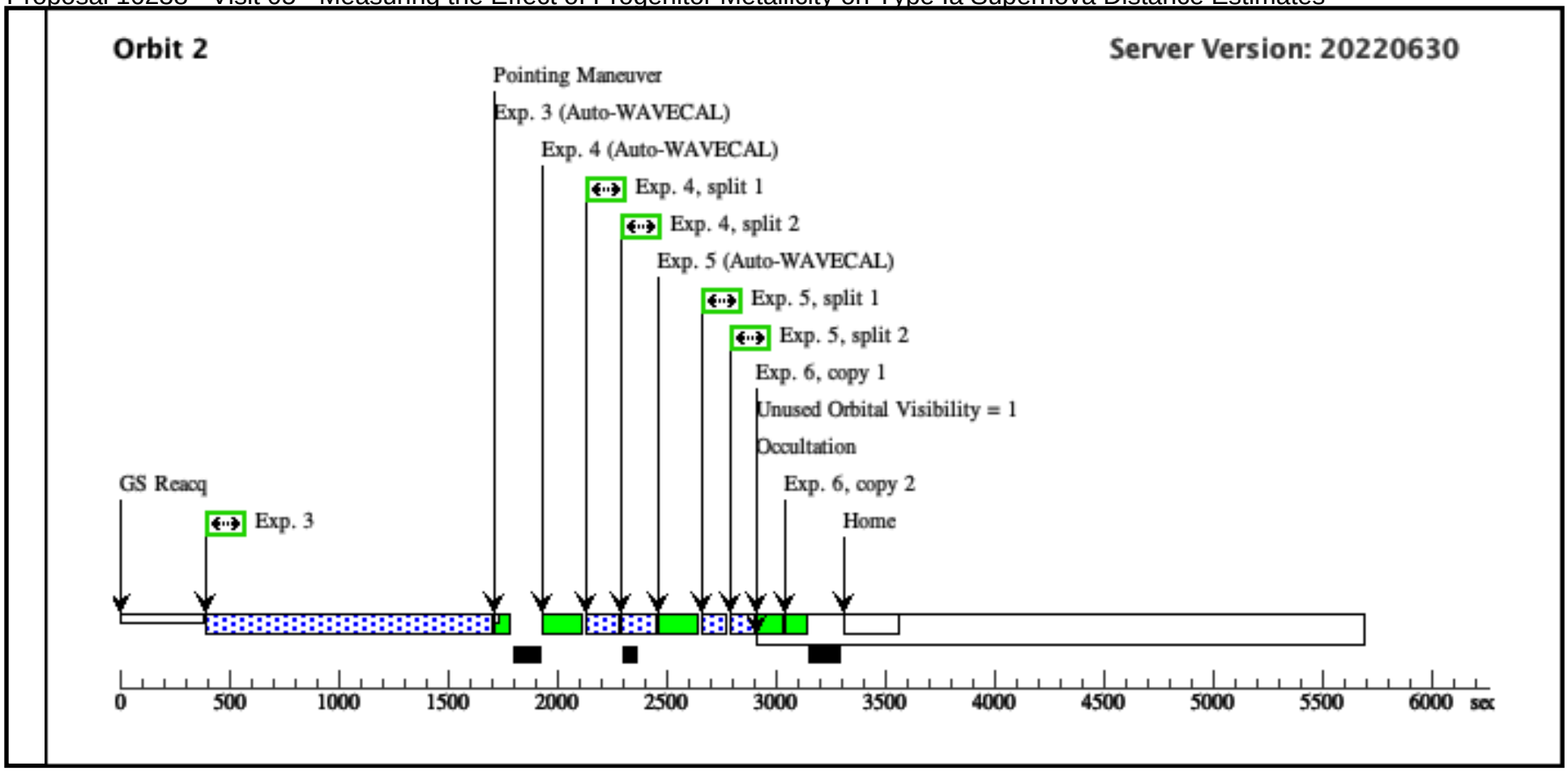
Comments: Currently r = 17.8 and rising very quickly. Should reach r ~ 14 mag at peak. This will be slightly fainter than previous targets (thus a 2-orbit allocation).
Category=EXT-STAR
Description=[SUPERNOVA TYPE IA]

Exposures

#	Label (ETC Run)	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
1		(12) AT2021DOV	STIS/CCD, ACQ, F28X50LP	MIRROR		GS ACQ SCENARIO BASE1BE		2 Secs (2 Secs) *[==>]*	 ***[1]***
Comments:).1 for 14th mag star yields a s/n ~50 *Time to saturation is 15 seconds.*									
2	(STIS.sp.186468)	(12) AT2021DOV	STIS/NUV-MAMA, ACCUM, 52X0.2	G230L 2376 A		POS TARG 0.0,0.5		2200 Secs (2047 Secs) *[==>2047.0 Secs]*	 ***[1]***
3	(STIS.sp.186471)	(12) AT2021DOV	STIS/NUV-MAMA, ACCUM, 52X0.2	G230L 2376 A		POS TARG 0.0,0.0		1350 Secs (1297 Secs) *[==>1297.0 Secs]*	 ***[2]***
4		(12) AT2021DOV	STIS/CCD, ACCUM, 52X0.2E1	G430L 4300 A	CR-SPLIT=2			200 Secs (240 Secs) *[==>120.0 Secs (Split 1)]* *[==>120.0 Secs (Split 2)]*	 ***[2]***
5		(12) AT2021DOV	STIS/CCD, ACCUM, 52X0.2E1	G750L 7751 A	CR-SPLIT=2			200 Secs (160 Secs) *[==>80.0 Secs (Split 1)]* *[==>80.0 Secs (Split 2)]*	 ***[2]***
6		CCDFLAT	STIS/CCD, ACCUM, 52X0.1	G750L 7751 A				*[==>(Copy 1)]* *[==>(Copy 2)]*	***[2]***

Orbit Structure




Orbit 2
Server Version: 20220630
Pointing Maneuver
Exp. 3 (Auto-WAVECAL)
Exp. 4 (Auto-WAVECAL)
Exp. 4, split 1
Exp. 4, split 2
Exp. 5 (Auto-WAVECAL)
Exp. 5, split 1
Exp. 5, split 2
Exp. 6, copy 1
Unused Orbital Visibility = 1
Occultation
Exp. 6, copy 2
Home
GS Reacq
Exp. 3
0
500
1000
1500
2000
2500
3000
3500
4000
4500
5000
5500
6000
sec

Visit

Proposal 16238, Visit 06, completed Mon Nov 21 21:01:27 GMT 2022

Diagnostic Status: No Diagnostics

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

Special Requirements: SCHED 100%; ON HOLD ; TOO RESPONSE TIME 21.0D

On Hold Comments: ToO

Fixed Targets

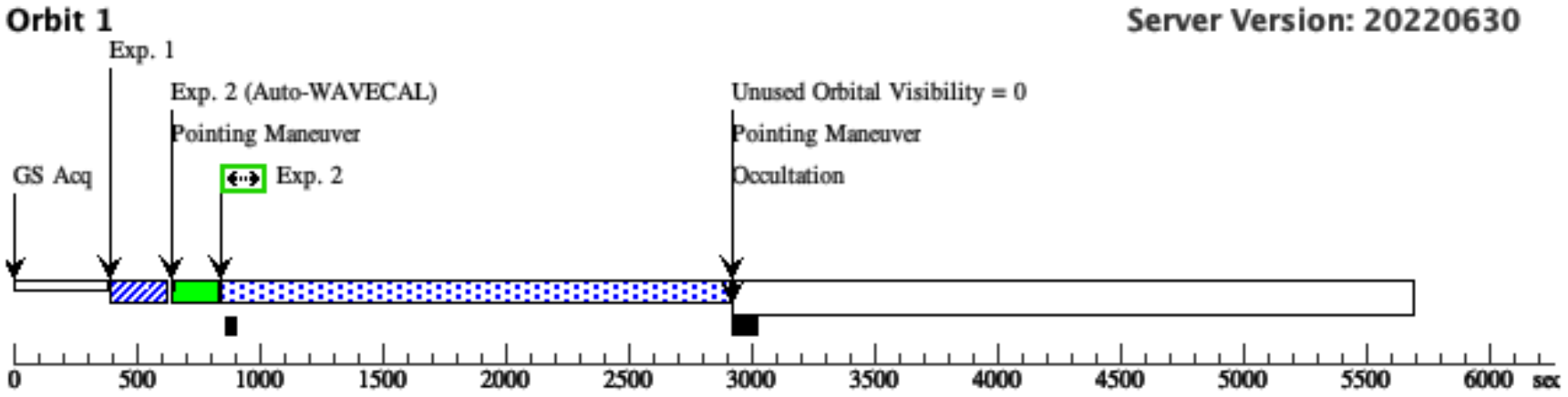
#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(14)	AT2021JAD	RA: 05 33 22.1800 (83.3424167d) Dec: -21 57 6.55 (-21.95182d) Equinox: J2000		V=12.5	Reference Frame: ICRS

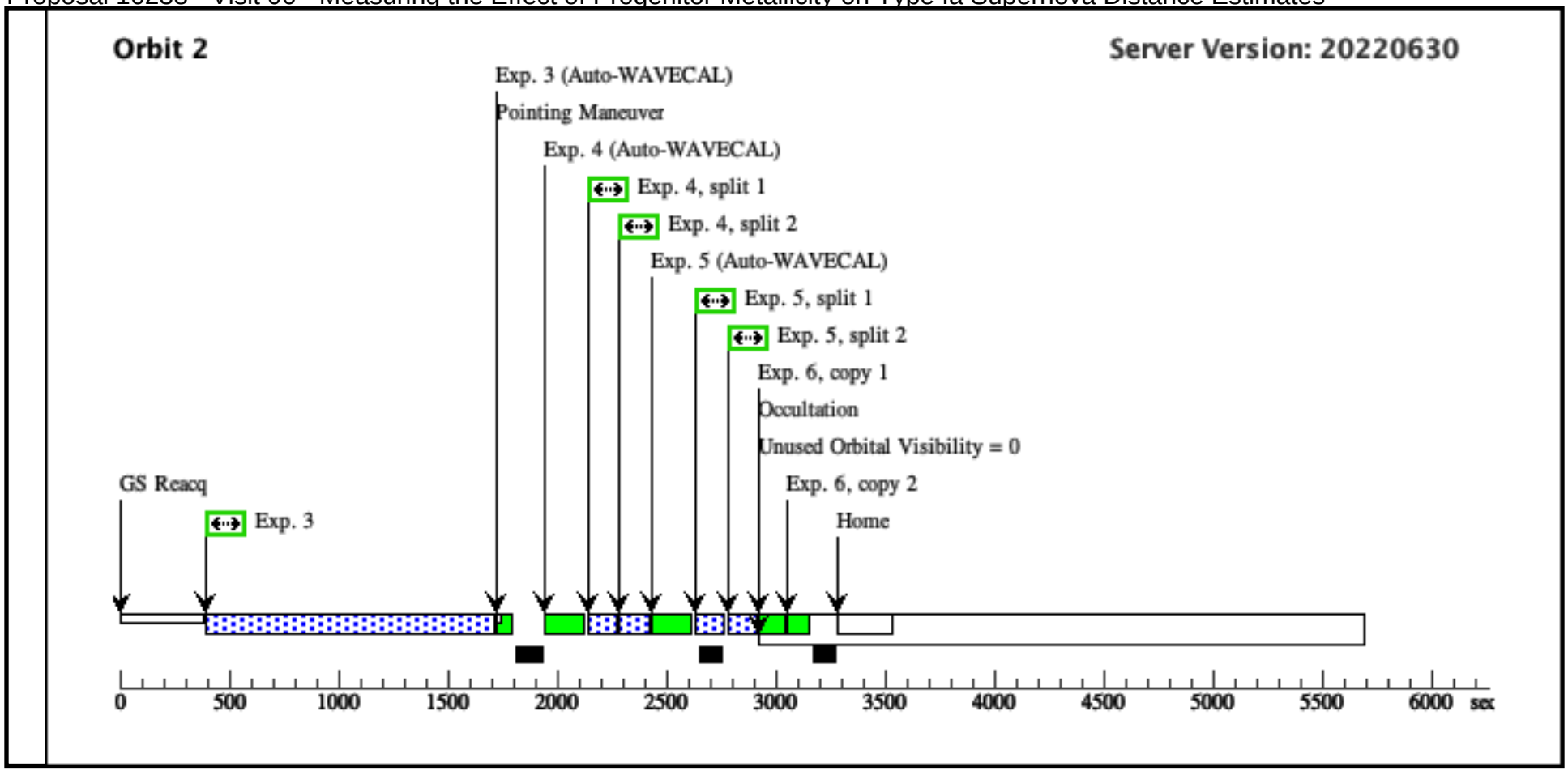
Comments: Rising SN Ia currently 15.9 mag
Category=EXT-STAR
Description=[SUPERNOVA TYPE IA]
Extended=NO

Exposures

#	Label (ETC Run)	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
1		(14) AT2021JAD	STIS/CCD, ACQ, F28X50LP	MIRROR		GS ACQ SCENARIO BASE1BNE		2 Secs (2 Secs) *[==>]*	 ***[1]***
Comments:).1 for 14th mag star yields a s/n ~50 *Time to saturation is 15 seconds.*									
2	(STIS.sp.186468)	(14) AT2021JAD	STIS/NUV-MAMA, ACCUM, 52X0.2	G230L 2376 A		POS TARG 0.0,0.5		2059 Secs (2059 Secs) *[==>2059 Secs]*	 ***[1]***
3	(STIS.sp.186471)	(14) AT2021JAD	STIS/NUV-MAMA, ACCUM, 52X0.2	G230L 2376 A		POS TARG 0.0,0.0		1309 Secs (1309 Secs) *[==>1309 Secs]*	 ***[2]***
4		(14) AT2021JAD	STIS/CCD, ACCUM, 52X0.2E1	G430L 4300 A	CR-SPLIT=2			200 Secs (200 Secs) *[==>100.0 Secs (Split 1)]* *[==>100.0 Secs (Split 2)]*	 ***[2]***
5		(14) AT2021JAD	STIS/CCD, ACCUM, 52X0.2E1	G750L 7751 A	CR-SPLIT=2			200 Secs (200 Secs) *[==>100.0 Secs (Split 1)]* *[==>100.0 Secs (Split 2)]*	 ***[2]***
6		CCDFLAT	STIS/CCD, ACCUM, 52X0.1	G750L 7751 A				*[==>(Copy 1)]* *[==>(Copy 2)]*	***[2]***

Orbit Structure




Orbit 2
Server Version: 20220630
Exp. 3 (Auto-WAVECAL)
Pointing Maneuver
Exp. 4 (Auto-WAVECAL)
Exp. 4, split 1
Exp. 4, split 2
Exp. 5 (Auto-WAVECAL)
Exp. 5, split 1
Exp. 5, split 2
Exp. 6, copy 1
Occultation
Unused Orbital Visibility = 0
Exp. 6, copy 2
Home
GS Reacq
Exp. 3
0
500
1000
1500
2000
2500
3000
3500
4000
4500
5000
5500
6000
sec

Visit

Proposal 16238, Visit 07, failed Mon Nov 21 21:01:27 GMT 2022

Diagnostic Status: No Diagnostics

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

Special Requirements: SCHED 100%; ON HOLD ; TOO RESPONSE TIME 21.0D

On Hold Comments: ToO

Fixed Targets

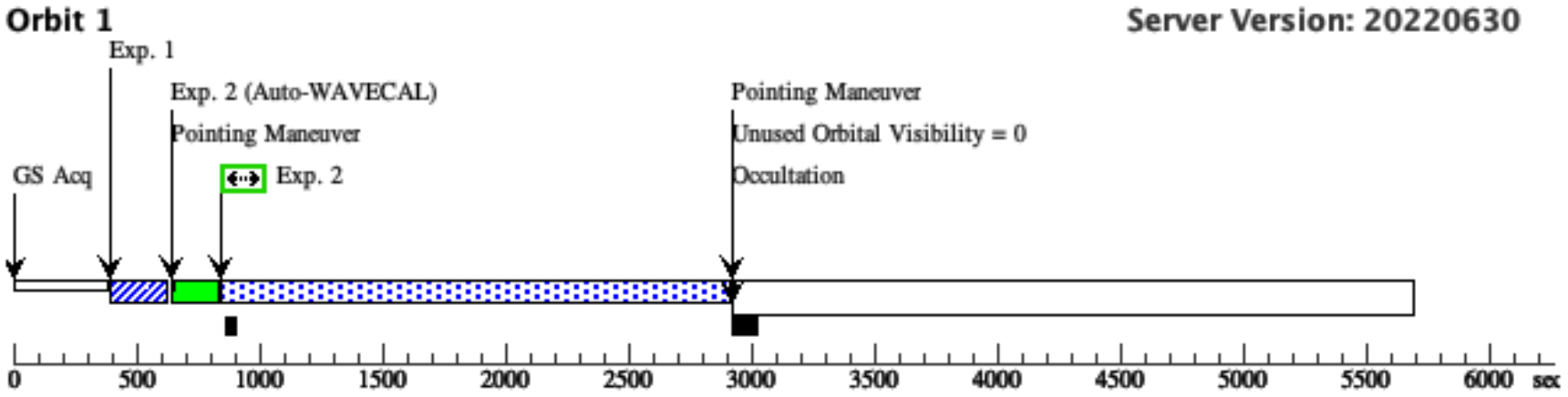
#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(19)	2022MOX	RA: 13 34 44.8500 (203.6868750d) Dec: +33 53 23.10 (33.88975d) Equinox: J2000		V=15.8	Reference Frame: ICRS

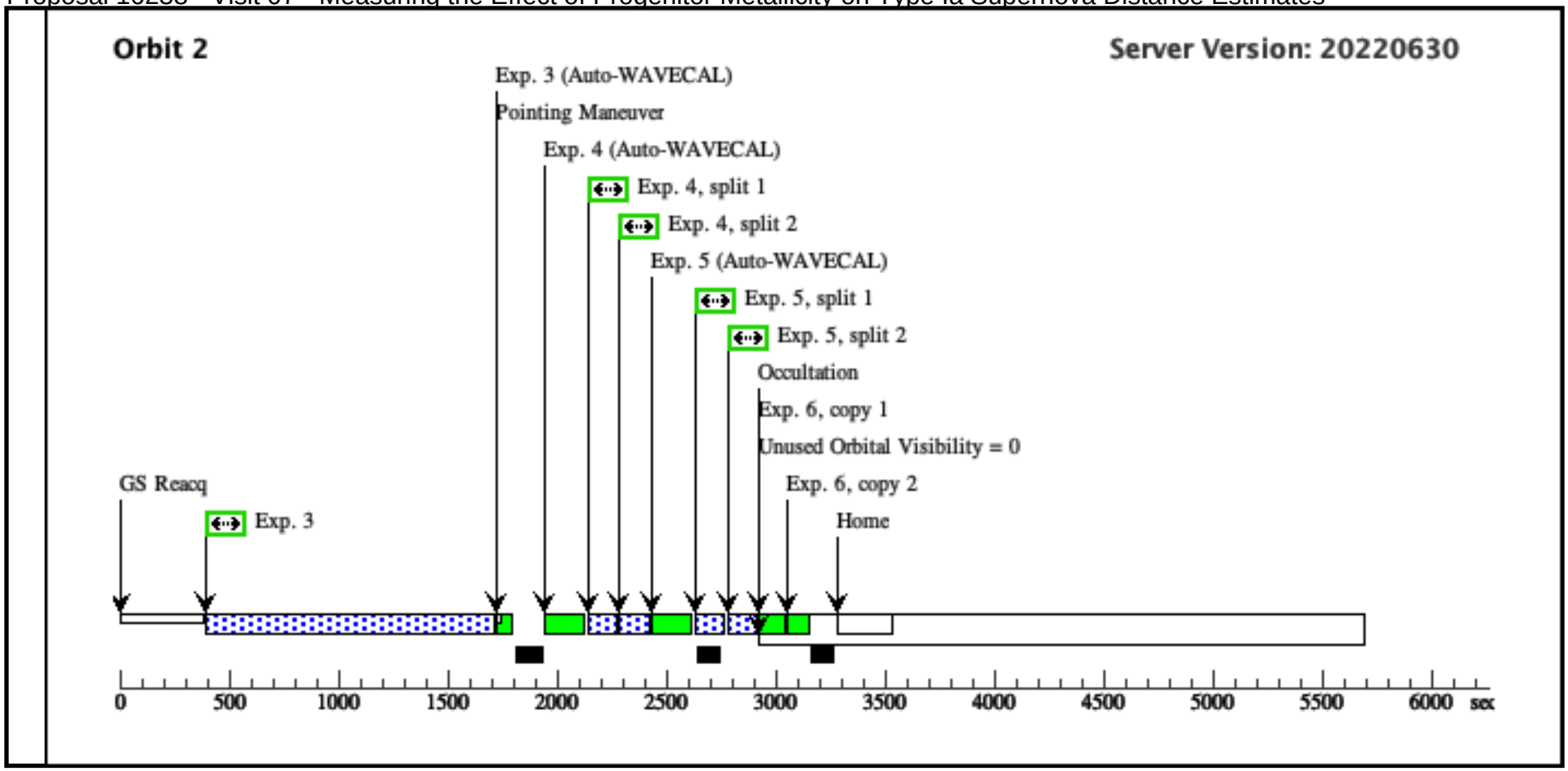
Comments: Rising SN Ia currently 18.0 mag
Category=EXT-STAR
Description=[SUPERNOVA TYPE IA]

Exposures

#	Label (ETC Run)	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
1		(19) 2022MOX	STIS/CCD, ACQ, F28X50LP	MIRROR		GS ACQ SCENARIO BASE1BNE		2 Secs (2 Secs) *[==>]*	 ***[1]***
Comments:).1 for 14th mag star yields a s/n ~50 *Time to saturation is 15 seconds.*									
2	(STIS.sp.186468)	(19) 2022MOX	STIS/NUV-MAMA, ACCUM, 52X0.2	G230L 2376 A		POS TARG 0.0,0.5		2057 Secs (2057 Secs) *[==>2057 Secs]*	 ***[1]***
3	(STIS.sp.186471)	(19) 2022MOX	STIS/NUV-MAMA, ACCUM, 52X0.2	G230L 2376 A		POS TARG 0.0,0.0		1307 Secs (1307 Secs) *[==>1307 Secs]*	 ***[2]***
4		(19) 2022MOX	STIS/CCD, ACCUM, 52X0.2E1	G430L 4300 A	CR-SPLIT=2			100 Secs (200 Secs) *[==>100 Secs (Split 1)]* *[==>100 Secs (Split 2)]*	 ***[2]***
5		(19) 2022MOX	STIS/CCD, ACCUM, 52X0.2E1	G750L 7751 A	CR-SPLIT=2			100 Secs (200 Secs) *[==>100.0 Secs (Split 1)]* *[==>100.0 Secs (Split 2)]*	 ***[2]***
6		CCDFLAT	STIS/CCD, ACCUM, 52X0.1	G750L 7751 A				*[==>(Copy 1)]* *[==>(Copy 2)]*	***[2]***

Orbit Structure




Orbit 2
Server Version: 20220630
Exp. 3 (Auto-WAVECAL)
Pointing Maneuver
Exp. 4 (Auto-WAVECAL)
Exp. 4, split 1
Exp. 4, split 2
Exp. 5 (Auto-WAVECAL)
Exp. 5, split 1
Exp. 5, split 2
Occultation
Exp. 6, copy 1
Unused Orbital Visibility = 0
Exp. 6, copy 2
Home
GS Reacq
Exp. 3
0
500
1000
1500
2000
2500
3000
3500
4000
4500
5000
5500
6000
sec

Visit

Proposal 16238, 07_HOPR (Z7), implementation Mon Nov 21 21:01:27 GMT 2022

Diagnostic Status: No Diagnostics

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

Special Requirements: SCHED 100%; ON HOLD ; TOO RESPONSE TIME 21.0D

On Hold Comments: ToO

Fixed Targets

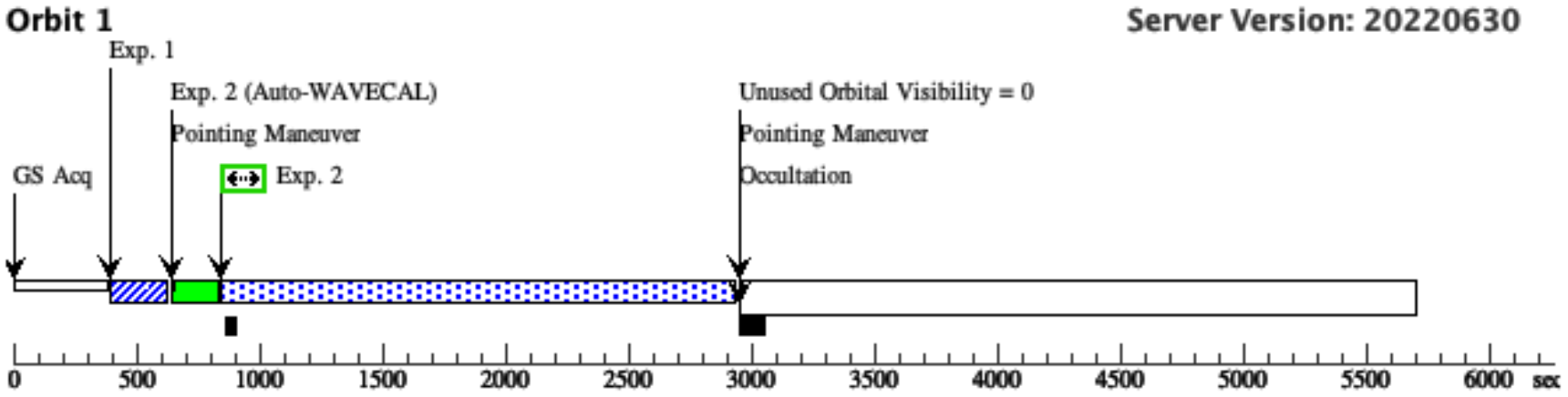
#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(20)	2022AAIQ	RA: 14 26 32.0200 (216.6334167d) Dec: +56 35 3.28 (56.58424d) Equinox: J2000		V=13	Reference Frame: ICRS

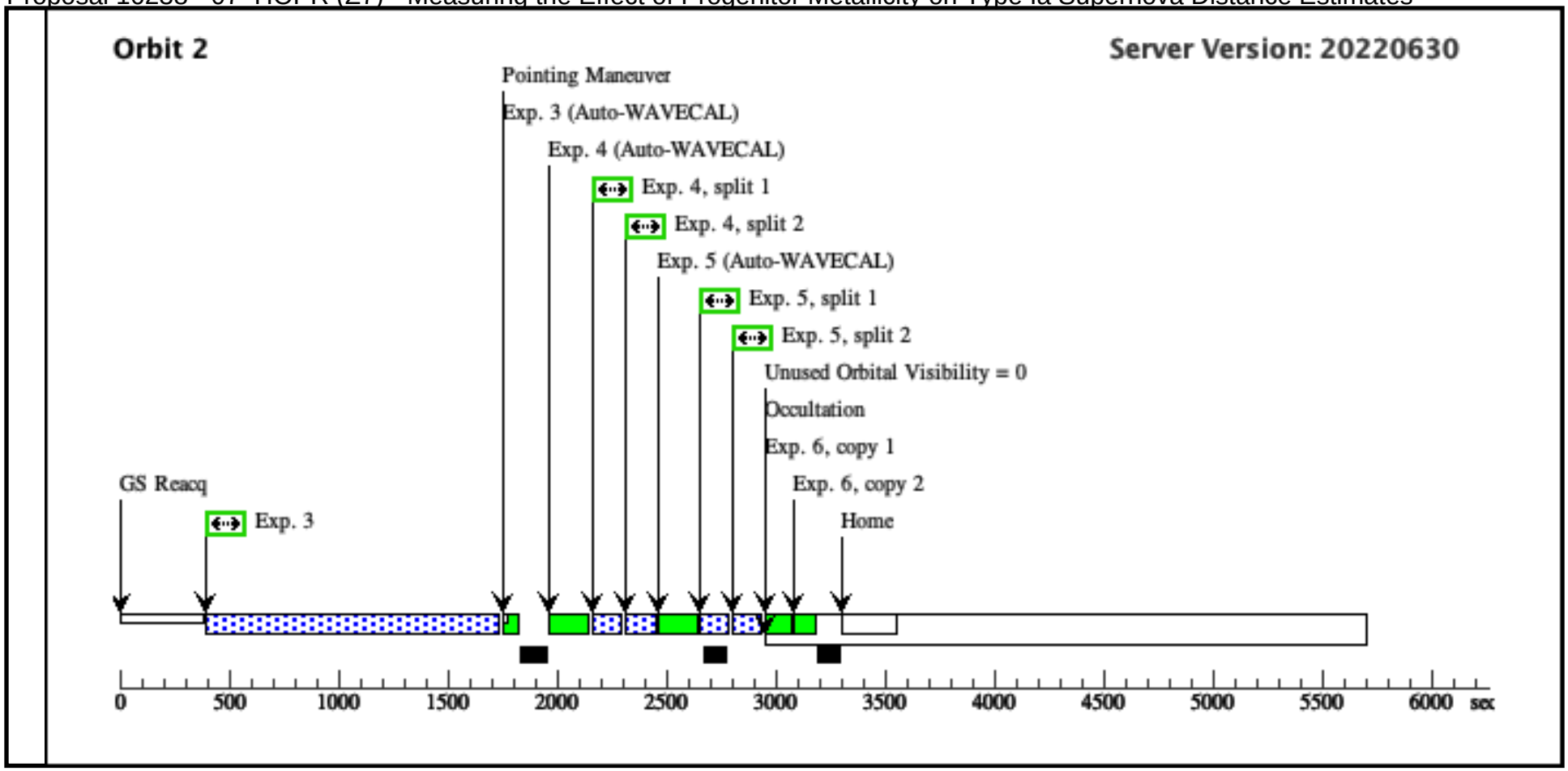
Comments: Rising SN Ia currently 16.0 mag
Category=EXT-STAR
Description=[SUPERNOVA TYPE IA]

Exposures

#	Label (ETC Run)	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
1		(20) 2022AAIQ	STIS/CCD, ACQ, F28X50LP	MIRROR		GS ACQ SCENARIO BASE1BNE		2 Secs (2 Secs) *[==>]*	***[1]***
Comments:).1 for 14th mag star yields a s/n ~50 *Time to saturation is 15 seconds.*									
2	(STIS.sp.186468)	(20) 2022AAIQ	STIS/NUV-MAMA, ACCUM, 52X0.2	G230L 2376 A		POS TARG 0.0,0.5		2080 Secs (2080 Secs) *[==>2080 Secs]*	***[1]***
3	(STIS.sp.186471)	(20) 2022AAIQ	STIS/NUV-MAMA, ACCUM, 52X0.2	G230L 2376 A		POS TARG 0.0,0.0		1330 Secs (1330 Secs) *[==>1330 Secs]*	***[2]***
4		(20) 2022AAIQ	STIS/CCD, ACCUM, 52X0.2E1	G430L 4300 A	CR-SPLIT=2			100 Secs (200 Secs) *[==>100 Secs (Split 1)]* *[==>100 Secs (Split 2)]*	***[2]***
5		(20) 2022AAIQ	STIS/CCD, ACCUM, 52X0.2E1	G750L 7751 A	CR-SPLIT=2			100 Secs (200 Secs) *[==>100.0 Secs (Split 1)]* *[==>100.0 Secs (Split 2)]*	***[2]***
6		CCDFLAT	STIS/CCD, ACCUM, 52X0.1	G750L 7751 A				*[==>(Copy 1)]* *[==>(Copy 2)]*	***[2]***

Orbit Structure




Orbit 2
Server Version: 20220630
Pointing Maneuver
Exp. 3 (Auto-WAVECAL)
Exp. 4 (Auto-WAVECAL)
Exp. 4, split 1
Exp. 4, split 2
Exp. 5 (Auto-WAVECAL)
Exp. 5, split 1
Exp. 5, split 2
Unused Orbital Visibility = 0
Occultation
Exp. 6, copy 1
Exp. 6, copy 2
Home
GS Reacq
Exp. 3
0
500
1000
1500
2000
2500
3000
3500
4000
4500
5000
5500
6000
sec

Visit

Proposal 16238, Visit 08, failed Mon Nov 21 21:01:27 GMT 2022

Diagnostic Status: No Diagnostics

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

Special Requirements: SCHED 100%; ON HOLD ; TOO RESPONSE TIME 21.0D

On Hold Comments: ToO

Fixed Targets

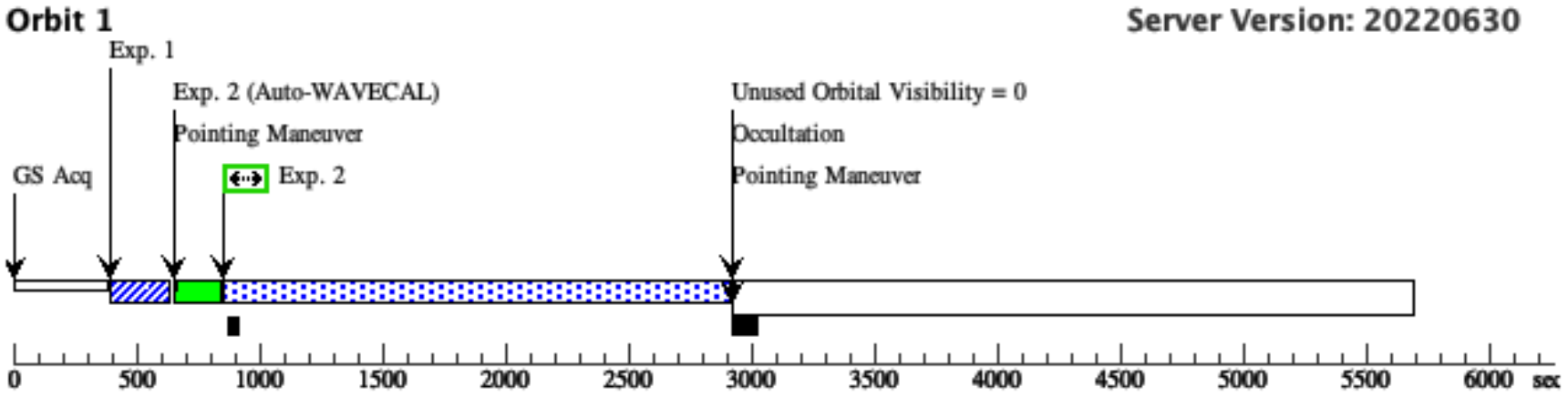
#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(17)	AT2021ZFW	RA: 21 31 37.6800 (322.9070000d) Dec: +11 49 58.61 (11.83295d) Equinox: J2000		V=16	Reference Frame: ICRS

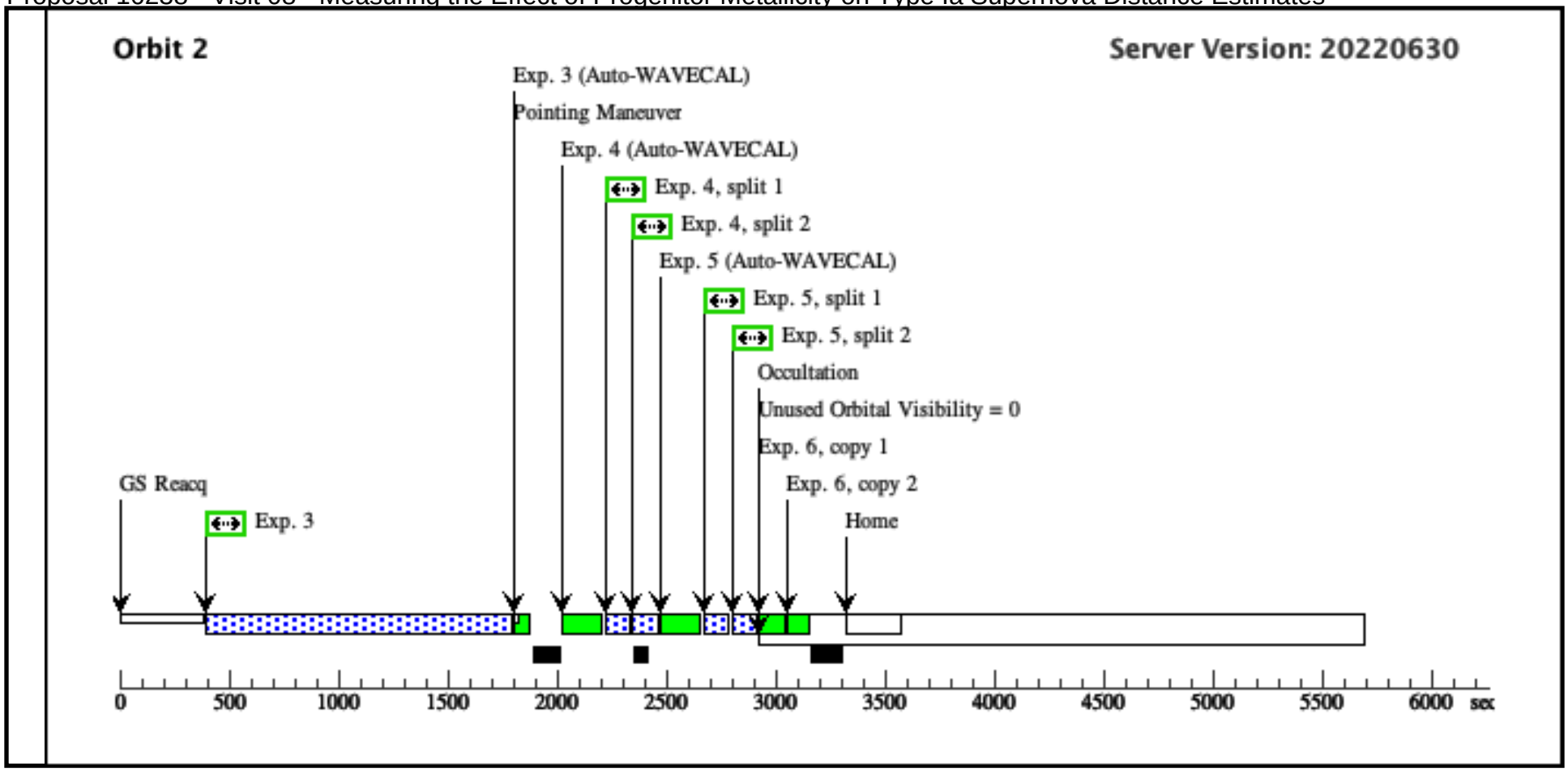
Comments: Rising SN Ia currently 17 mag
Category=EXT-STAR
Description=[SUPERNOVA TYPE IA]
Extended=NO

Exposures

#	Label (ETC Run)	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
1		(17) AT2021ZFW	STIS/CCD, ACQ, F28X50LP	MIRROR		GS ACQ SCENARIO BASE1BNE		4 Secs (4 Secs) *[==>]*	***[1]***
Comments:).1 for 14th mag star yields a s/n ~50 *Time to saturation is 15 seconds.*									
2	(STIS.sp.186468)	(17) AT2021ZFW	STIS/NUV-MAMA, ACCUM, 52X0.2	G230L 2376 A		POS TARG 0.0,0.5		2049 Secs (2049 Secs) *[==>]*	***[1]***
3	(STIS.sp.186471)	(17) AT2021ZFW	STIS/NUV-MAMA, ACCUM, 52X0.2	G230L 2376 A		POS TARG 0.0,0.0		1387 Secs (1387 Secs) *[==>]*	***[2]***
4		(17) AT2021ZFW	STIS/CCD, ACCUM, 52X0.2E1	G430L 4300 A	CR-SPLIT=2			160 Secs (160 Secs) *[==>(Split 1)]* *[==>(Split 2)]*	***[2]***
5		(17) AT2021ZFW	STIS/CCD, ACCUM, 52X0.2E1	G750L 7751 A	CR-SPLIT=2			160 Secs (160 Secs) *[==>(Split 1)]* *[==>(Split 2)]*	***[2]***
6		CCDFLAT	STIS/CCD, ACCUM, 52X0.1	G750L 7751 A				*[==>(Copy 1)]* *[==>(Copy 2)]*	***[2]***

Orbit Structure




Orbit 2
Server Version: 20220630
Exp. 3 (Auto-WAVECAL)
Pointing Maneuver
Exp. 4 (Auto-WAVECAL)
Exp. 4, split 1
Exp. 4, split 2
Exp. 5 (Auto-WAVECAL)
Exp. 5, split 1
Exp. 5, split 2
Occultation
Unused Orbital Visibility = 0
Exp. 6, copy 1
Exp. 6, copy 2
Home
GS Reacq
Exp. 3
0
500
1000
1500
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3500
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5000
5500
6000
sec

Visit

Proposal 16238, 08_HOPR (Z8), implementation Mon Nov 21 21:01:27 GMT 2022

Diagnostic Status: No Diagnostics

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

Special Requirements: SCHED 100%; ON HOLD ; TOO RESPONSE TIME 21.0D

On Hold Comments: ToO

Fixed Targets

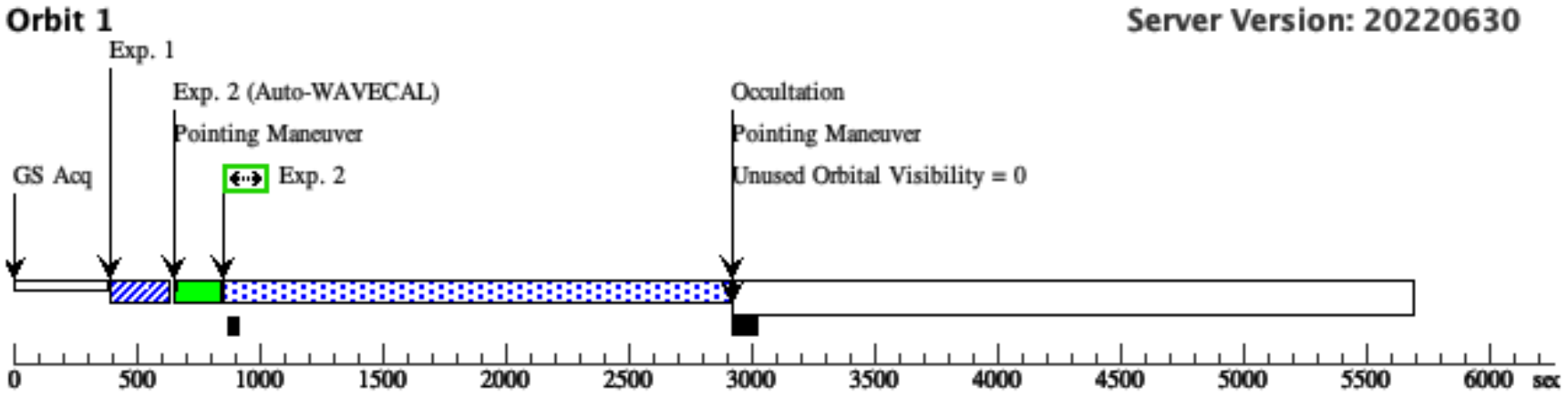
#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(17)	AT2021ZFW	RA: 21 31 37.6800 (322.9070000d) Dec: +11 49 58.61 (11.83295d) Equinox: J2000		V=16	Reference Frame: ICRS

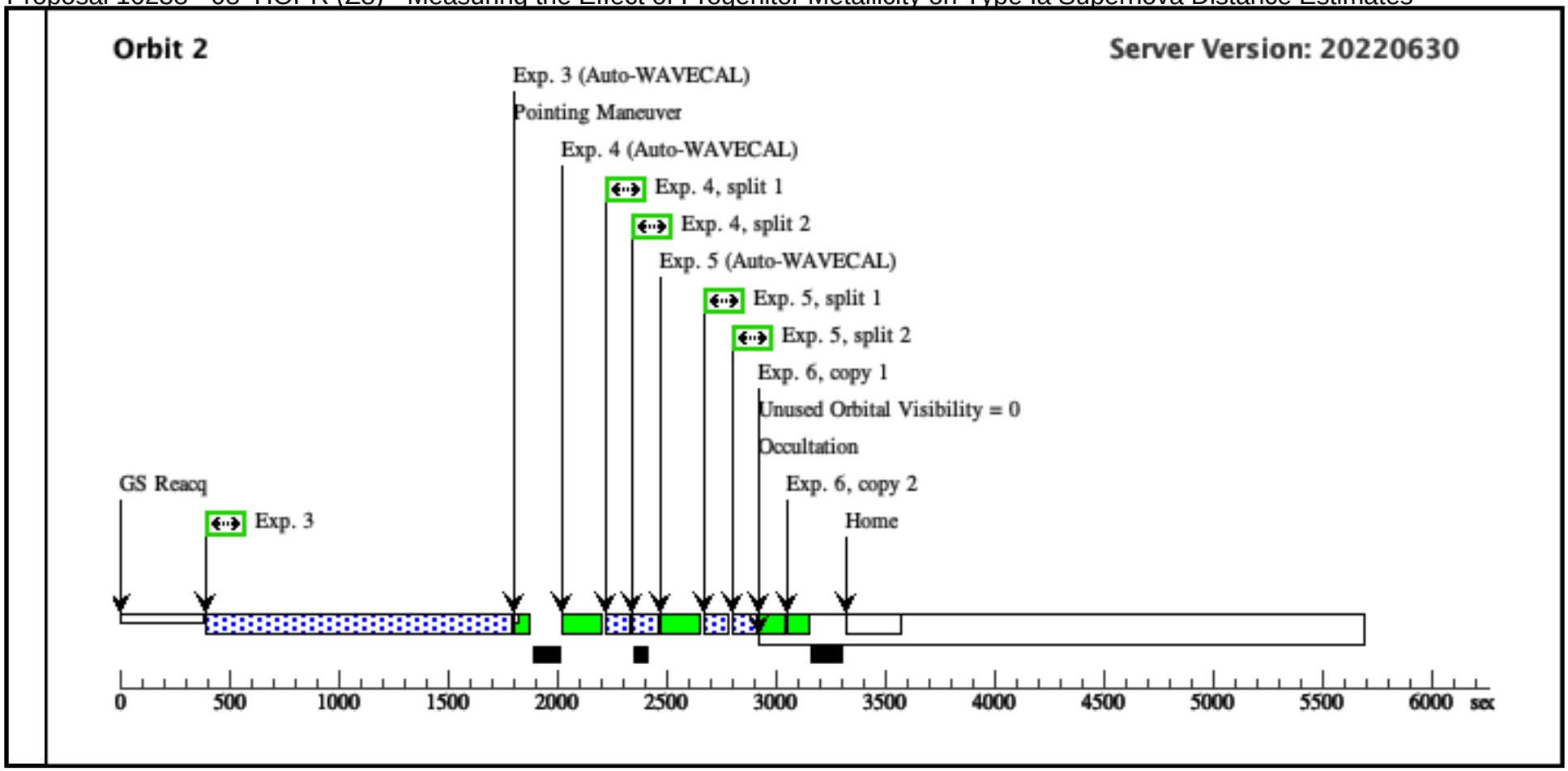
Comments: Rising SN Ia currently 17 mag
Category=EXT-STAR
Description=[SUPERNOVA TYPE IA]
Extended=NO

Exposures

#	Label (ETC Run)	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
1		(17) AT2021ZFW	STIS/CCD, ACQ, F28X50LP	MIRROR		GS ACQ SCENARIO BASE1BNE		4 Secs (4 Secs) *[==>]*	***[1]***
Comments:).1 for 14th mag star yields a s/n ~50 *Time to saturation is 15 seconds.*									
2	(STIS.sp.186468)	(17) AT2021ZFW	STIS/NUV-MAMA, ACCUM, 52X0.2	G230L 2376 A		POS TARG 0.0,0.5		2049 Secs (2049 Secs) *[==>]*	***[1]***
3	(STIS.sp.186471)	(17) AT2021ZFW	STIS/NUV-MAMA, ACCUM, 52X0.2	G230L 2376 A		POS TARG 0.0,0.0		1387 Secs (1387 Secs) *[==>]*	***[2]***
4		(17) AT2021ZFW	STIS/CCD, ACCUM, 52X0.2E1	G430L 4300 A	CR-SPLIT=2			160 Secs (160 Secs) *[==>(Split 1)]* *[==>(Split 2)]*	***[2]***
5		(17) AT2021ZFW	STIS/CCD, ACCUM, 52X0.2E1	G750L 7751 A	CR-SPLIT=2			160 Secs (160 Secs) *[==>(Split 1)]* *[==>(Split 2)]*	***[2]***
6		CCDFLAT	STIS/CCD, ACCUM, 52X0.1	G750L 7751 A				*[==>(Copy 1)]* *[==>(Copy 2)]*	***[2]***

Orbit Structure




Orbit 2
Server Version: 20220630
Exp. 3 (Auto-WAVECAL)
Pointing Maneuver
Exp. 4 (Auto-WAVECAL)
Exp. 4, split 1
Exp. 4, split 2
Exp. 5 (Auto-WAVECAL)
Exp. 5, split 1
Exp. 5, split 2
Exp. 6, copy 1
Unused Orbital Visibility = 0
Occultation
Exp. 6, copy 2
Home
GS Reacq
Exp. 3
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