17410 - Reducing Type Ia Supernova Distance Biases by Separating Reddening and Intrinsic Color

Cycle: 31, Proposal Category: GO

(UV Initiative)

(Availability Mode: SUPPORTED)

INVESTIGATORS

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Name	*Institution*
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Dr. Armin Rest (CoI)	Space Telescope Science Institute
Dr. Adam Riess (CoI)	The Johns Hopkins University
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Dr. Benjamin Rose (CoI)	Baylor University
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Dr. Stephen Thorp (CoI) (ESA Member)	University of Cambridge, Kavli Institute for Cosmology
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VISITS

Visit	*Targets used in Visit*	*Configurations used in Visit*	*Orbits Used*	*Last Orbit Planner Run*	*OP Current with Visit?*
21	(121) SN2023BU	WFC3/IR WFC3/UVIS	1	30-Jul-2026 16:00:29.0	yes
28	(128) SN2023KE	WFC3/IR WFC3/UVIS	1	30-Jul-2026 16:00:30.0	yes
B8	(128) SN2023KE	WFC3/UVIS	1	30-Jul-2026 16:00:30.0	yes
33	(133) SN2023DAY	WFC3/IR WFC3/UVIS	1	30-Jul-2026 16:00:31.0	yes
C3	(133) SN2023DAY	WFC3/UVIS	1	30-Jul-2026 16:00:32.0	yes
H3	(133) SN2023DAY	WFC3/UVIS	1	30-Jul-2026 16:00:32.0	yes
97	(197) SN2022ZUT	WFC3/IR WFC3/UVIS	2	30-Jul-2026 16:00:33.0	yes
30	(130) SN2023ALF	WFC3/IR WFC3/UVIS	1	30-Jul-2026 16:00:34.0	yes
45	(145) SN2023GRN	WFC3/IR WFC3/UVIS	1	30-Jul-2026 16:00:35.0	yes
D5	(145) SN2023GRN	WFC3/UVIS	1	30-Jul-2026 16:00:36.0	yes
60	(160) SN2023KMJ	WFC3/IR WFC3/UVIS	1	30-Jul-2026 16:00:36.0	yes

Visit	*Targets used in Visit*	*Configurations used in Visit*	*Orbits Used*	*Last Orbit Planner Run*	*OP Current with Visit?*
05	(105) SN2022UTO	WFC3/IR WFC3/UVIS	1	30-Jul-2026 16:00:37.0	yes
79	(179) SN2023SNN	WFC3/IR WFC3/UVIS	1	30-Jul-2026 16:00:38.0	yes
G9	(179) SN2023SNN	WFC3/UVIS	1	30-Jul-2026 16:00:38.0	yes
L9	(179) SN2023SNN	WFC3/UVIS	1	30-Jul-2026 16:00:39.0	yes
84	(184) SN2023VPD	WFC3/IR WFC3/UVIS	1	30-Jul-2026 16:00:39.0	yes
A4	(204) SN2023WUK	WFC3/IR WFC3/UVIS	2	30-Jul-2026 16:00:40.0	yes
24	(124) SN2022AEBW	WFC3/IR WFC3/UVIS	1	30-Jul-2026 16:00:41.0	yes
25	(125) SN2022AEFD	WFC3/IR WFC3/UVIS	1	30-Jul-2026 16:00:42.0	yes
B5	(125) SN2022AEFD	WFC3/UVIS	1	30-Jul-2026 16:00:43.0	yes
04	(104) SN2022ZSN	WFC3/IR WFC3/UVIS	1	30-Jul-2026 16:00:44.0	yes
46	(146) SN2023GUY	WFC3/IR WFC3/UVIS	1	30-Jul-2026 16:00:44.0	yes
16	(116) SN2022ADCF	WFC3/IR WFC3/UVIS	1	30-Jul-2026 16:00:45.0	yes
64	(164) SN2023JVT	WFC3/IR WFC3/UVIS	1	30-Jul-2026 16:00:46.0	yes
F4	(164) SN2023JVT	WFC3/IR WFC3/UVIS	1	30-Jul-2026 16:00:47.0	yes
72	(172) SN2023ONO	WFC3/IR WFC3/UVIS	1	30-Jul-2026 16:00:48.0	yes

Visit	*Targets used in Visit*	*Configurations used in Visit*	*Orbits Used*	*Last Orbit Planner Run*	*OP Current with Visit?*
A2	(202) SN2024GY	WFC3/IR WFC3/UVIS	2	30-Jul-2026 16:00:49.0	yes
F2	(202) SN2024GY	WFC3/IR WFC3/UVIS	1	30-Jul-2026 16:00:51.0	yes
17	(117) SN2022ABVT	WFC3/IR WFC3/UVIS	1	30-Jul-2026 16:00:52.0	yes
55	(155) SN2023HZY	WFC3/IR WFC3/UVIS	1	30-Jul-2026 16:00:53.0	yes
62	(162) SN2023LHY	WFC3/IR WFC3/UVIS	1	30-Jul-2026 16:00:54.0	yes
56	(156) SN2023IKS	WFC3/IR WFC3/UVIS	1	30-Jul-2026 16:00:55.0	yes
85	(185) SN2023VER	WFC3/IR WFC3/UVIS	1	30-Jul-2026 16:00:56.0	yes
H5	(185) SN2023VER	WFC3/UVIS	1	30-Jul-2026 16:00:57.0	yes
65	(165) SN2023MBZ	WFC3/IR WFC3/UVIS	1	30-Jul-2026 16:00:58.0	yes
F5	(165) SN2023MBZ	WFC3/UVIS	1	30-Jul-2026 16:00:59.0	yes
K5	(165) SN2023MBZ	WFC3/UVIS	1	30-Jul-2026 16:00:59.0	yes
68	(168) SN2023MVL	WFC3/IR WFC3/UVIS	1	30-Jul-2026 16:01:00.0	yes
44	(144) SN2023HRW	WFC3/IR WFC3/UVIS	1	30-Jul-2026 16:01:01.0	yes
53	(153) SN2023HUY	WFC3/IR WFC3/UVIS	1	30-Jul-2026 16:01:03.0	yes

43 Total Orbits Used

ABSTRACT

Accurate distance measurements and unbiased cosmological constraints from Type Ia supernovae (SNe Ia) rely on proper correction for host-galaxy dust reddening that may attenuate the observed SN brightness. A correction is made by comparing observed and intrinsic color, and using a reddening law to determine extinction. This procedure is nontrivial since a SN's intrinsic color correlates with its luminosity in a manner nearly indistinguishable from the effects of dust reddening at optical wavelengths.

The current standard for measuring SN distances treats both fainter-redder relations as a single SN color law. This simplification introduces a bias that depends on the relative contribution of each component. If dust properties change with galactic environment or redshift, equation-of-state parameter measurements may be biased by up to ~6%. This issue is currently SN cosmology's largest systematic uncertainty and if not addressed will prevent future cosmology experiments from meeting their goals.

The path to breaking the degeneracy between SN color and dust reddening is to extend observations to the UV and NIR, where the dust and intrinsic color, respectively, dominate the observed color. We propose to image 100 SNe across 2 UV, 1 optical, and 4 NIR bands in a single orbit each at a phase in a SN's evolution where the observed color scatter is small and is late enough to use non-disruptive ToOs. Simulations indicate this sample will be sufficient to constrain the environmental dependence of the dust law and reduce the size of dust/color-related systematic uncertainties to be subdominant even for future cosmological analyses with the Nancy G. Roman Space Telescope.

OBSERVING DESCRIPTION

There are 100 separate non-disruptive ToOs to be executred in Cycle 30. Of these, 95 are single-orbit visits. 5 targets will be two orbits. We alo have 30 Cycle 31 orbits to obtain template observations of the 5 two-orbit targets and 20 of the single-orbit targets.

Visit

Proposal 17410, SN2023BU (21), completed Thu Jul 30 20:01:04 GMT 2026

Diagnostic Status: Informational

Scientific Instruments: WFC3/IR, WFC3/UVIS

Special Requirements: SCHED 70%; ORIENT 316.1D TO 321.1 D; ORIENT 226.1D TO 231.1 D; ORIENT 136.1D TO 141.1 D; ORIENT 46.1D TO 51.1 D; AFTER 19-JAN-2024; ON HOLD ; TOO MAX RESPONSE TIME 30.0D

On Hold Comments: We would like this template observations to be scheduled at least 1 year after peak brightness of the SN. See timing requirements above.

Diagnostics

(SN2023BU (21)) Informational (Form): Target of Opportunity Minimum Response time is a required field.

Patterns

#	Primary Pattern		Secondary Pattern	Exposures
(1)	Pattern Type=LINE Purpose=DITHER Number Of Points=2 Point Spacing=0.636 Line Spacing=	Coordinate Frame=POS-TARG Pattern Orientation=41.788 Angle Between Sides= Center Pattern=false		(1-4)
(3)	Pattern Type=WFC3-UVIS-DITHER-LINE Purpose=DITHER Number Of Points=2 Point Spacing=0.145 Line Spacing=	Coordinate Frame=POS-TARG Pattern Orientation=46.84 Angle Between Sides= Center Pattern=false		(6-7)

Fixed Targets

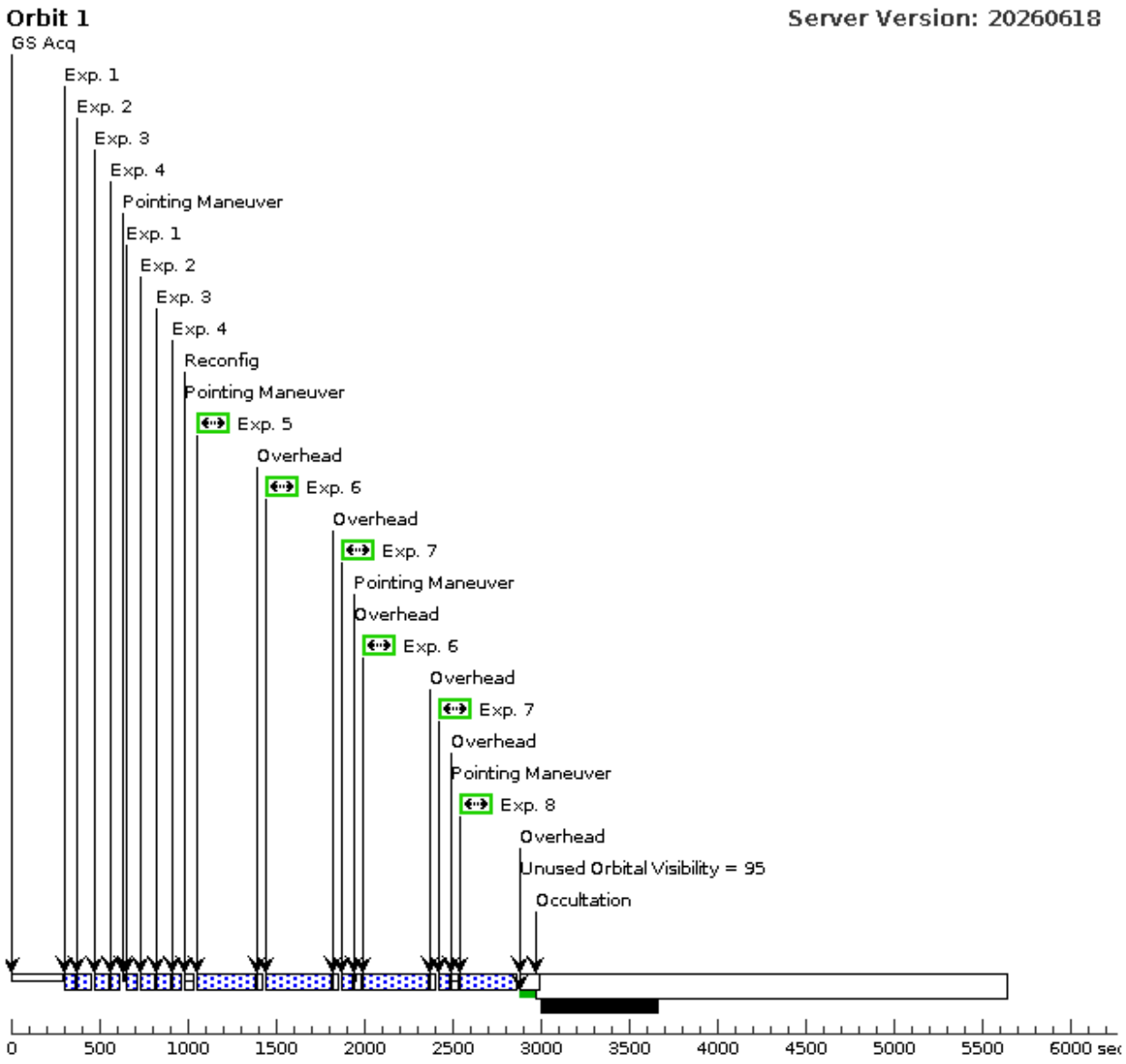
#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(121)	SN2023BU	RA: 11 53 11.2800 (178.2970000d) Dec: -17 50 33.86 (-17.84274d) Equinox: J2000		V=18.1+/-0.1	Reference Frame: ICRS

Comments: Past-maximum Type Ia supernova. Will fade significantly by time of observation.
Category=EXT-STAR
Description=[SUPERNOVA TYPE IA]
Extended=NO

Exposures

#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
1		(121) SN2023BU	WFC3/IR, MULTIACCUM, IRSUB512	F125W	NSAMP=6; SAMP-SEQ=STEP25		Pattern 1, Exps 1-4 in SN2023BU (21) (1)	36.754642 Secs (73.509 Secs) *[==>(Pattern 1)]* *[==>(Pattern 2)]*	 ***[1]***
2		(121) SN2023BU	WFC3/IR, MULTIACCUM, IRSUB512	F140W	NSAMP=7; SAMP-SEQ=STEP25		Pattern 1, Exps 1-4 in SN2023BU (21) (1)	59.675893 Secs (119.352 Secs) *[==>(Pattern 1)]* *[==>(Pattern 2)]*	 ***[1]***
3		(121) SN2023BU	WFC3/IR, MULTIACCUM, IRSUB512	F160W	NSAMP=7; SAMP-SEQ=STEP25		Pattern 1, Exps 1-4 in SN2023BU (21) (1)	59.675893 Secs (119.352 Secs) *[==>(Pattern 1)]* *[==>(Pattern 2)]*	 ***[1]***
4		(121) SN2023BU	WFC3/IR, MULTIACCUM, IRSUB512	F105W	NSAMP=6; SAMP-SEQ=STEP25		Pattern 1, Exps 1-4 in SN2023BU (21) (1)	36.754642 Secs (73.509 Secs) *[==>(Pattern 1)]* *[==>(Pattern 2)]*	 ***[1]***
5		(121) SN2023BU	WFC3/UVIS, ACCUM, UVIS2-C512C-SUB	F336W	FLASH=20			298 Secs (298 Secs) *[==>]*	 ***[1]***
6		(121) SN2023BU	WFC3/UVIS, ACCUM, UVIS2-C512C-SUB	F300X	FLASH=20		Pattern 3, Exps 6-7 in SN2023BU (21) (3)	351 Secs (702 Secs) *[==>(Pattern 1)]* *[==>(Pattern 2)]*	 ***[1]***
7		(121) SN2023BU	WFC3/UVIS, ACCUM, UVIS2-C512C-SUB	F555W	FLASH=20		Pattern 3, Exps 6-7 in SN2023BU (21) (3)	30 Secs (60 Secs) *[==>(Pattern 1)]* *[==>(Pattern 2)]*	 ***[1]***
8		(121) SN2023BU	WFC3/UVIS, ACCUM, UVIS2-FIX	F336W	FLASH=20	POS TARG 0.099,0.106		299 Secs (299 Secs) *[==>]*	 ***[1]***

Orbit Structure



Visit

Proposal 17410, SN2023KE (28), failed Thu Jul 30 20:01:04 GMT 2026

Diagnostic Status: Informational

Scientific Instruments: WFC3/IR, WFC3/UVIS

Special Requirements: SCHED 70%; ORIENT 254.6D TO 254.6 D; ORIENT 344.6D TO 344.6 D; ORIENT 164.6D TO 164.6 D; ORIENT 74.6D TO 74.6 D; AFTER 17-JAN-2024; ON HOLD ; TOO MAX RESPONSE TIME 30.0D

On Hold Comments: We would like this template observations to be scheduled at least 1 year after peak brightness of the SN. See timing requirements above.

Diagnostics

(SN2023KE (28)) Informational (Form): Target of Opportunity Minimum Response time is a required field.

Patterns

#	Primary Pattern		Secondary Pattern	Exposures
(1)	Pattern Type=LINE Purpose=DITHER Number Of Points=2 Point Spacing=0.636 Line Spacing=	Coordinate Frame=POS-TARG Pattern Orientation=41.788 Angle Between Sides= Center Pattern=false		(1-4)
(3)	Pattern Type=WFC3-UVIS-DITHER-LINE Purpose=DITHER Number Of Points=2 Point Spacing=0.145 Line Spacing=	Coordinate Frame=POS-TARG Pattern Orientation=46.84 Angle Between Sides= Center Pattern=false		(6-7)

Fixed Targets

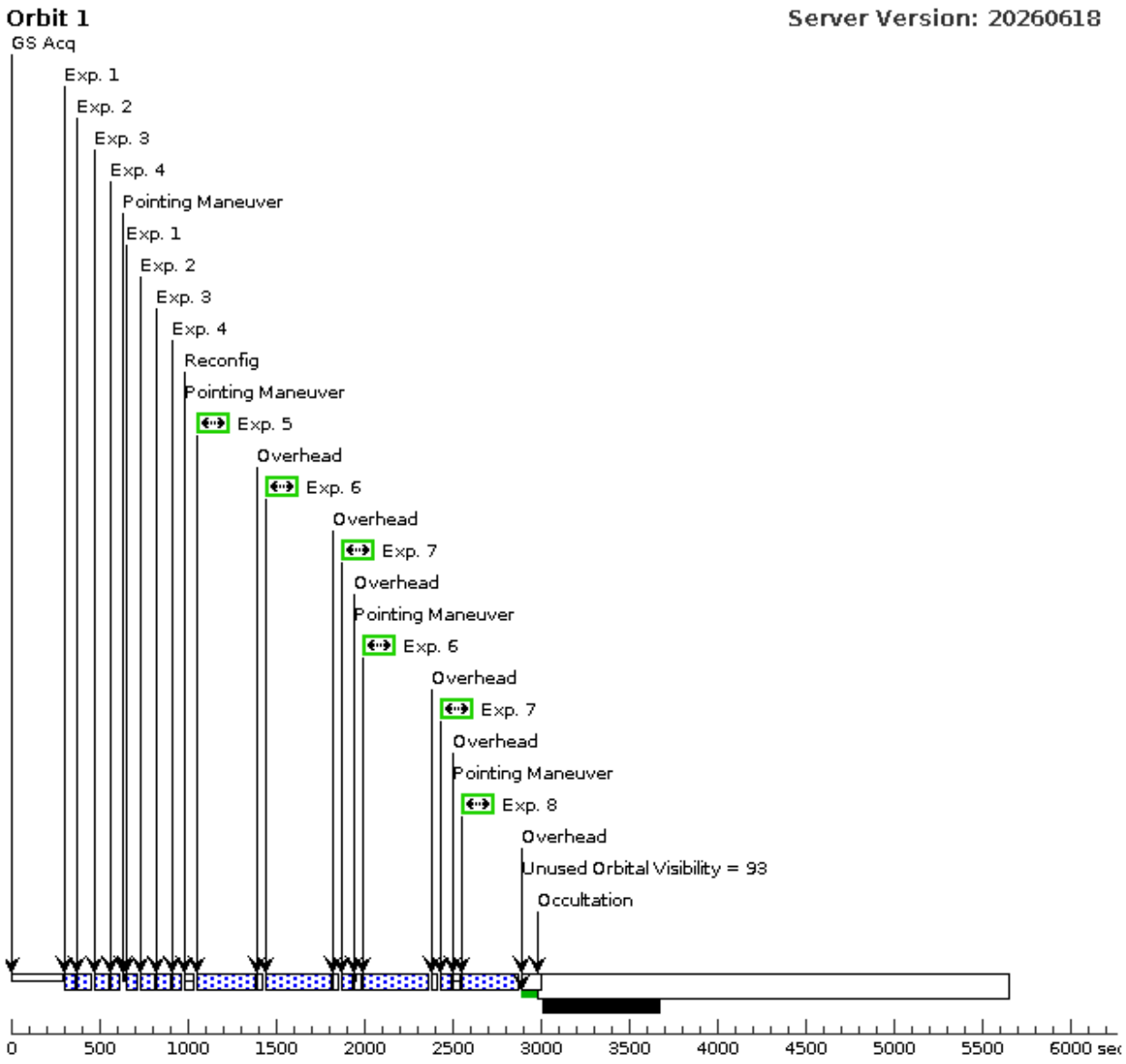
#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(128)	SN2023KE	RA: 12 58 18.2300 (194.5759583d) Dec: +29 07 43.44 (29.12873d) Equinox: J2000		V=16.8+/-0.1	Reference Frame: ICRS

Comments: Post-maximum Type Ia supernova. Will fade significantly by time of observation.
Category=EXT-STAR
Description=[SUPERNOVA TYPE IA]
Extended=NO

Exposures

#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
1		(128) SN2023KE	WFC3/IR, MULTIACCUM, IRSUB512	F125W	NSAMP=6; SAMP-SEQ=STEP25		Pattern 1, Exps 1-4 in SN2023KE (28) (1)	36.754642 Secs (73.509 Secs) *[==>(Pattern 1)]* *[==>(Pattern 2)]*	***[1]***
2		(128) SN2023KE	WFC3/IR, MULTIACCUM, IRSUB512	F140W	NSAMP=7; SAMP-SEQ=STEP25		Pattern 1, Exps 1-4 in SN2023KE (28) (1)	59.675893 Secs (119.352 Secs) *[==>(Pattern 1)]* *[==>(Pattern 2)]*	***[1]***
3		(128) SN2023KE	WFC3/IR, MULTIACCUM, IRSUB512	F160W	NSAMP=7; SAMP-SEQ=STEP25		Pattern 1, Exps 1-4 in SN2023KE (28) (1)	59.675893 Secs (119.352 Secs) *[==>(Pattern 1)]* *[==>(Pattern 2)]*	***[1]***
4		(128) SN2023KE	WFC3/IR, MULTIACCUM, IRSUB512	F105W	NSAMP=6; SAMP-SEQ=STEP25		Pattern 1, Exps 1-4 in SN2023KE (28) (1)	36.754642 Secs (73.509 Secs) *[==>(Pattern 1)]* *[==>(Pattern 2)]*	***[1]***
5		(128) SN2023KE	WFC3/UVIS, ACCUM, UVIS2-C512C-SUB	F336W	FLASH=20			303 Secs (303 Secs) *[==>]*	***[1]***
6		(128) SN2023KE	WFC3/UVIS, ACCUM, UVIS2-C512C-SUB	F300X	FLASH=20		Pattern 3, Exps 6-7 in SN2023KE (28) (3)	351 Secs (702 Secs) *[==>(Pattern 1)]* *[==>(Pattern 2)]*	***[1]***
7		(128) SN2023KE	WFC3/UVIS, ACCUM, UVIS2-C512C-SUB	F555W	FLASH=20		Pattern 3, Exps 6-7 in SN2023KE (28) (3)	30 Secs (60 Secs) *[==>(Pattern 1)]* *[==>(Pattern 2)]*	***[1]***
8		(128) SN2023KE	WFC3/UVIS, ACCUM, UVIS2-FIX	F336W	FLASH=20	POS TARG 0.099,0.106		303 Secs (303 Secs) *[==>]*	***[1]***

Orbit Structure



Visit

Proposal 17410, SN2023KE (B8), completed Thu Jul 30 20:01:04 GMT 2026

Diagnostic Status: Informational

Scientific Instruments: WFC3/UVIS

Special Requirements: SCHED 100%; ORIENT 254.6D TO 254.6 D; ORIENT 344.6D TO 344.6 D; ORIENT 164.6D TO 164.6 D; ORIENT 74.6D TO 74.6 D; AFTER 17-JAN-2024; ON HOLD ; TOO MAX RESPONSE TIME 30.0D

Comments: Duplicate of failed visit 28

On Hold Comments: We would like this template observations to be scheduled at least 1 year after peak brightness of the SN. See timing requirements above.

Diagnostics

(SN2023KE (B8)) Informational (Form): Target of Opportunity Minimum Response time is a required field.

Fixed Targets

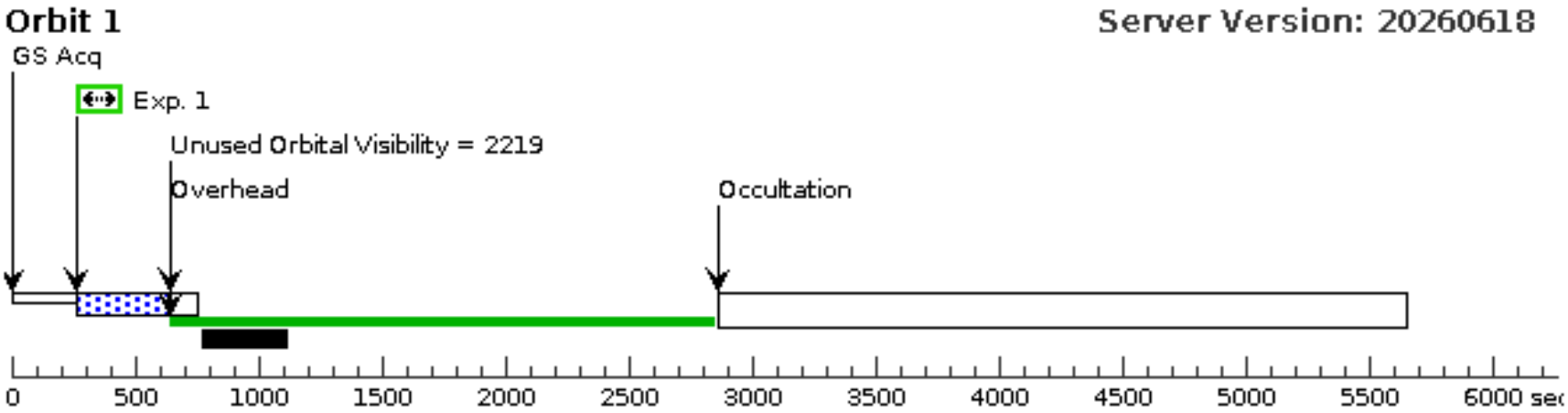
#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(128)	SN2023KE	RA: 12 58 18.2300 (194.5759583d) Dec: +29 07 43.44 (29.12873d) Equinox: J2000		V=16.8+/-0.1	Reference Frame: ICRS

Comments: Post-maximum Type Ia supernova. Will fade significantly by time of observation.
Category=EXT-STAR
Description=[SUPERNOVA TYPE IA]
Extended=NO

Exposures

#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
1		(128) SN2023KE	WFC3/UVIS, ACCUM, UVIS2-FIX	F336W	FLASH=20	POS TARG 0.099,0.106		336 Secs (336 Secs) *[==>]*	*[1]*

Orbit Structure



Visit

Proposal 17410, SN2023DAY (33), failed Thu Jul 30 20:01:04 GMT 2026

Diagnostic Status: Informational

Scientific Instruments: WFC3/IR, WFC3/UVIS

Special Requirements: SCHED 70%; ORIENT 135.9D TO 135.9 D; ORIENT 45.9D TO 45.9 D; ORIENT 225.9D TO 225.9 D; ORIENT 315.9D TO 315.9 D; AFTER 26-MAR-2024; ON HOLD ; TOO MAX RESPONSE TIME 30.0D

On Hold Comments: We would like this template observations to be scheduled at least 1 year after peak brightness of the SN. See timing requirements above.

Diagnostics

(SN2023DAY (33)) Informational (Form): Target of Opportunity Minimum Response time is a required field.

Patterns

#	Primary Pattern		Secondary Pattern	Exposures
(1)	Pattern Type=LINE Purpose=DITHER Number Of Points=2 Point Spacing=0.636 Line Spacing=	Coordinate Frame=POS-TARG Pattern Orientation=41.788 Angle Between Sides= Center Pattern=false		(1-4)
(3)	Pattern Type=WFC3-UVIS-DITHER-LINE Purpose=DITHER Number Of Points=2 Point Spacing=0.145 Line Spacing=	Coordinate Frame=POS-TARG Pattern Orientation=46.84 Angle Between Sides= Center Pattern=false		(6-7)

Fixed Targets

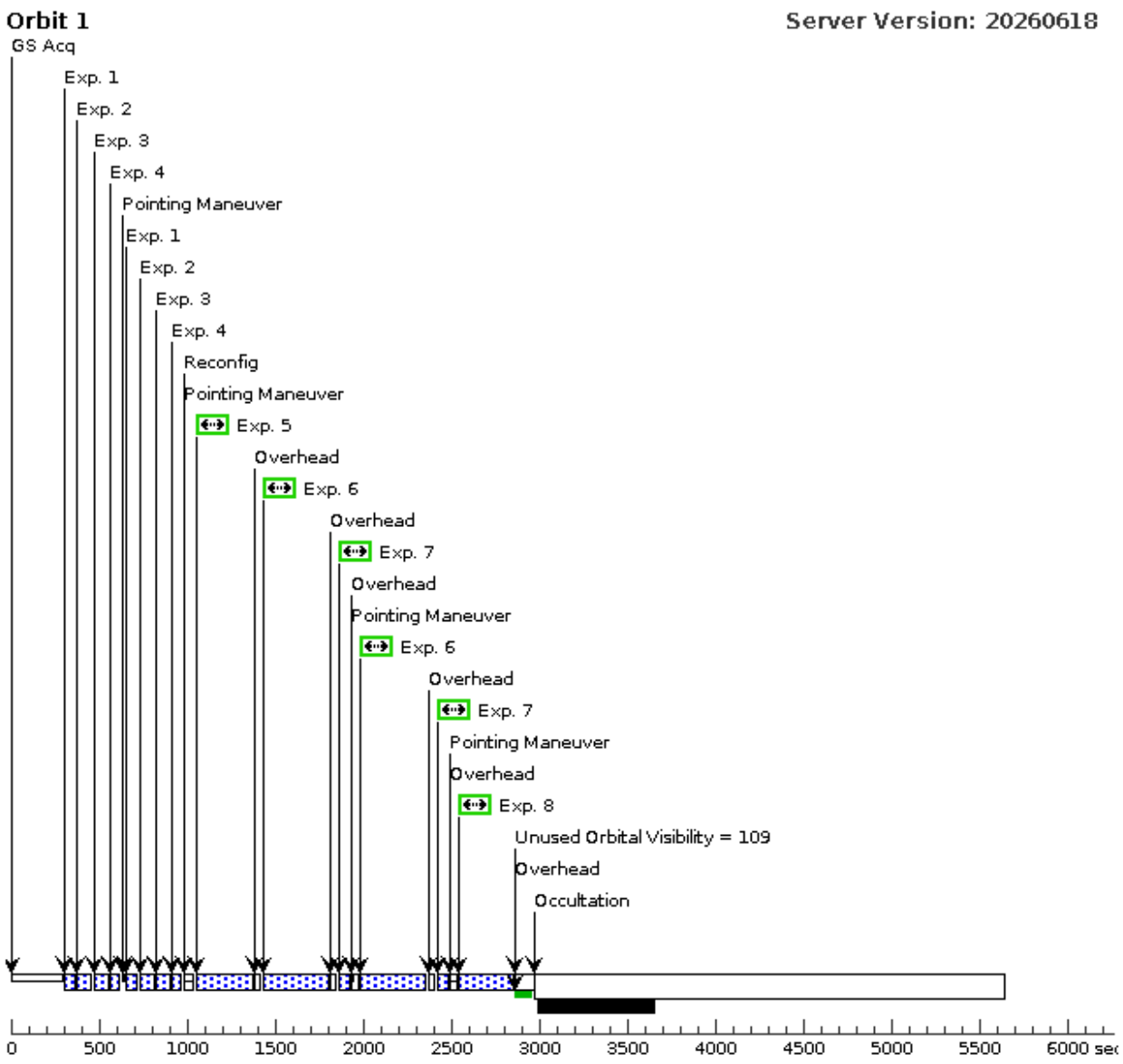
#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(133)	SN2023DAY	RA: 14 13 36.6300 (213.4026250d) Dec: -05 43 49.44 (-5.73040d) Equinox: J2000		V=17.3+/-0.1	Reference Frame: ICRS

Comments: Post-maximum Type Ia supernova. Will fade significantly by time of observation.
Category=EXT-STAR
Description=[SUPERNOVA TYPE IA]
Extended=NO

Exposures

#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
1		(133) SN2023DAY	WFC3/IR, MULTIACCUM, IRSUB512	F125W	NSAMP=6; SAMP-SEQ=STEP25		Pattern 1, Exps 1-4 in SN2023DAY (33) (1)	36.754642 Secs (73.509 Secs) *[==>(Pattern 1)]* *[==>(Pattern 2)]*	***[1]***
2		(133) SN2023DAY	WFC3/IR, MULTIACCUM, IRSUB512	F140W	NSAMP=7; SAMP-SEQ=STEP25		Pattern 1, Exps 1-4 in SN2023DAY (33) (1)	59.675893 Secs (119.352 Secs) *[==>(Pattern 1)]* *[==>(Pattern 2)]*	***[1]***
3		(133) SN2023DAY	WFC3/IR, MULTIACCUM, IRSUB512	F160W	NSAMP=7; SAMP-SEQ=STEP25		Pattern 1, Exps 1-4 in SN2023DAY (33) (1)	59.675893 Secs (119.352 Secs) *[==>(Pattern 1)]* *[==>(Pattern 2)]*	***[1]***
4		(133) SN2023DAY	WFC3/IR, MULTIACCUM, IRSUB512	F105W	NSAMP=6; SAMP-SEQ=STEP25		Pattern 1, Exps 1-4 in SN2023DAY (33) (1)	36.754642 Secs (73.509 Secs) *[==>(Pattern 1)]* *[==>(Pattern 2)]*	***[1]***
5		(133) SN2023DAY	WFC3/UVIS, ACCUM, UVIS2-C512C-SUB	F336W	FLASH=20			292 Secs (292 Secs) *[==>]*	***[1]***
6		(133) SN2023DAY	WFC3/UVIS, ACCUM, UVIS2-C512C-SUB	F300X	FLASH=20		Pattern 3, Exps 6-7 in SN2023DAY (33) (3)	351 Secs (702 Secs) *[==>(Pattern 1)]* *[==>(Pattern 2)]*	***[1]***
7		(133) SN2023DAY	WFC3/UVIS, ACCUM, UVIS2-C512C-SUB	F555W	FLASH=20		Pattern 3, Exps 6-7 in SN2023DAY (33) (3)	30 Secs (60 Secs) *[==>(Pattern 1)]* *[==>(Pattern 2)]*	***[1]***
8		(133) SN2023DAY	WFC3/UVIS, ACCUM, UVIS2-FIX	F336W	FLASH=20	POS TARG 0.099,0.106		292 Secs (292 Secs) *[==>]*	***[1]***

Orbit Structure



Visit

Proposal 17410, SN2023DAY (C3), failed Thu Jul 30 20:01:04 GMT 2026

Diagnostic Status: Informational

Scientific Instruments: WFC3/UVIS

Special Requirements: SCHED 70%; ORIENT 135.9D TO 135.9 D; ORIENT 45.9D TO 45.9 D; ORIENT 225.9D TO 225.9 D; ORIENT 315.9D TO 315.9 D; AFTER 26-MAR-2024; ON HOLD ; TOO MAX RESPONSE TIME 30.0D

On Hold Comments: We would like this template observations to be scheduled at least 1 year after peak brightness of the SN. See timing requirements above.

Diagnostics

(SN2023DAY (C3)) Informational (Form): Target of Opportunity Minimum Response time is a required field.

Patterns

#	Primary Pattern		Secondary Pattern	Exposures
(3)	Pattern Type=WFC3-UVIS-DITHER-LINE Purpose=DITHER Number Of Points=2 Point Spacing=0.145 Line Spacing=	Coordinate Frame=POS-TARG Pattern Orientation=46.84 Angle Between Sides= Center Pattern=false		(2-3)

Fixed Targets

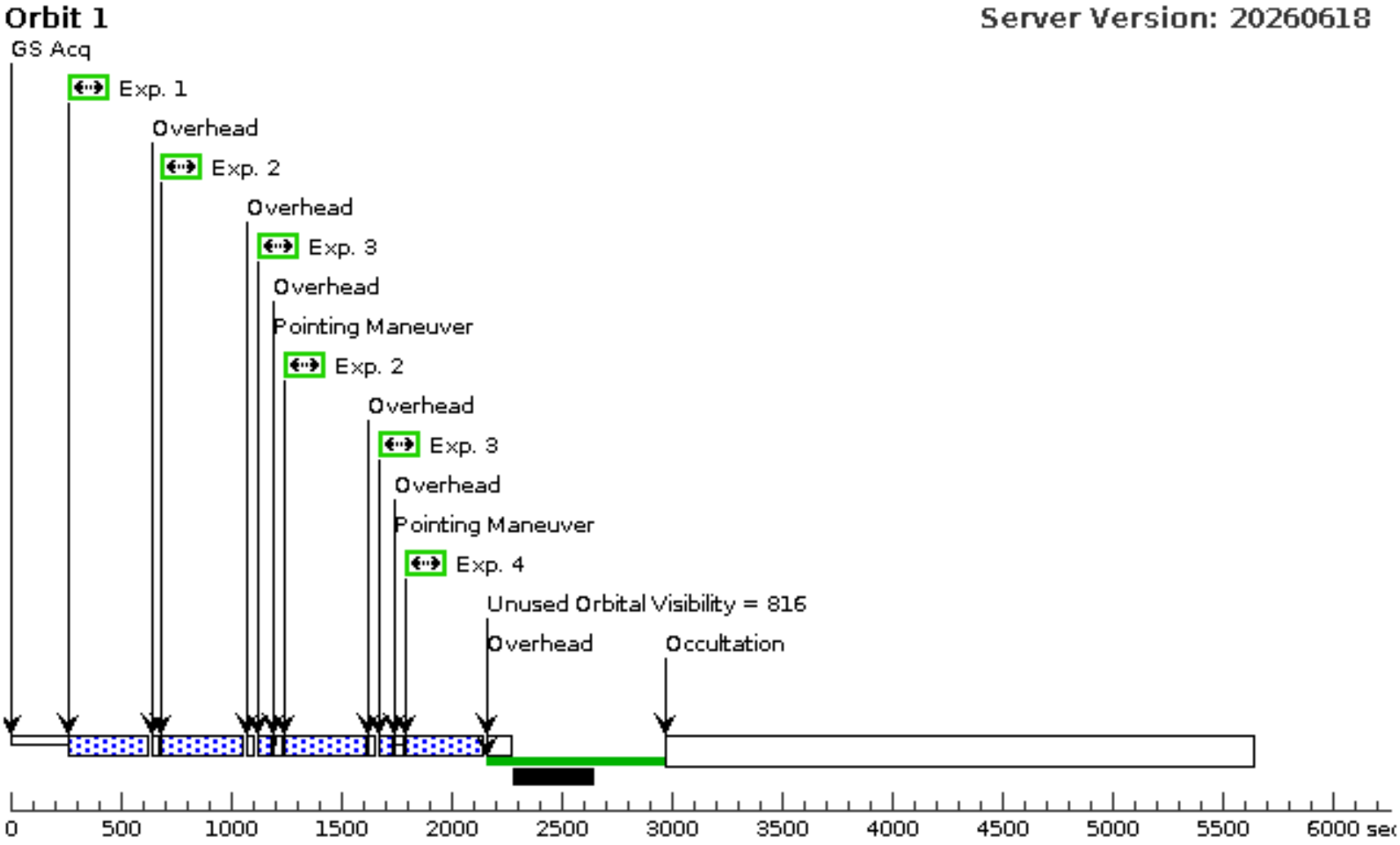
#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(133)	SN2023DAY	RA: 14 13 36.6300 (213.4026250d) Dec: -05 43 49.44 (-5.73040d) Equinox: J2000		V=17.3+/-0.1	Reference Frame: ICRS

Comments: Post-maximum Type Ia supernova. Will fade significantly by time of observation.
Category=EXT-STAR
Description=[SUPERNOVA TYPE IA]
Extended=NO

Exposures

#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
1		(133) SN2023DAY	WFC3/UVIS, ACCUM, UVIS2-C512C-SUB	F336W	FLASH=20			331 Secs (331 Secs) *[==>]*	 ***[1]***
2		(133) SN2023DAY	WFC3/UVIS, ACCUM, UVIS2-C512C-SUB	F300X	FLASH=20		Pattern 3, Exps 2-3 in SN2023DAY (C3) (3)	351 Secs (702 Secs) *[==>(Pattern 1)]* *[==>(Pattern 2)]*	 ***[1]***
3		(133) SN2023DAY	WFC3/UVIS, ACCUM, UVIS2-C512C-SUB	F555W	FLASH=20		Pattern 3, Exps 2-3 in SN2023DAY (C3) (3)	30 Secs (60 Secs) *[==>(Pattern 1)]* *[==>(Pattern 2)]*	 ***[1]***
4		(133) SN2023DAY	WFC3/UVIS, ACCUM, UVIS2-FIX	F336W	FLASH=20	POS TARG 0.099,0.106		331 Secs (331 Secs) *[==>]*	 ***[1]***

Orbit Structure



Visit

Proposal 17410, SN2023DAY (H3), implementation Thu Jul 30 20:01:04 GMT 2026

Diagnostic Status: No Diagnostics

Scientific Instruments: WFC3/UVIS

Special Requirements: SCHED 70%; ORIENT 135.9D TO 135.9 D; ORIENT 45.9D TO 45.9 D; ORIENT 225.9D TO 225.9 D; ORIENT 315.9D TO 315.9 D; TOO MIN RESPONSE TIME 30.0D; TOO MAX RESPONSE TIME 300.0D

Comments: Duplicate of failed visit C3

Patterns

#	Primary Pattern		Secondary Pattern	Exposures
(3)	Pattern Type=WFC3-UVIS-DITHER-LINE Purpose=DITHER Number Of Points=2 Point Spacing=0.145 Line Spacing=	Coordinate Frame=POS-TARG Pattern Orientation=46.84 Angle Between Sides= Center Pattern=false		(2-3)

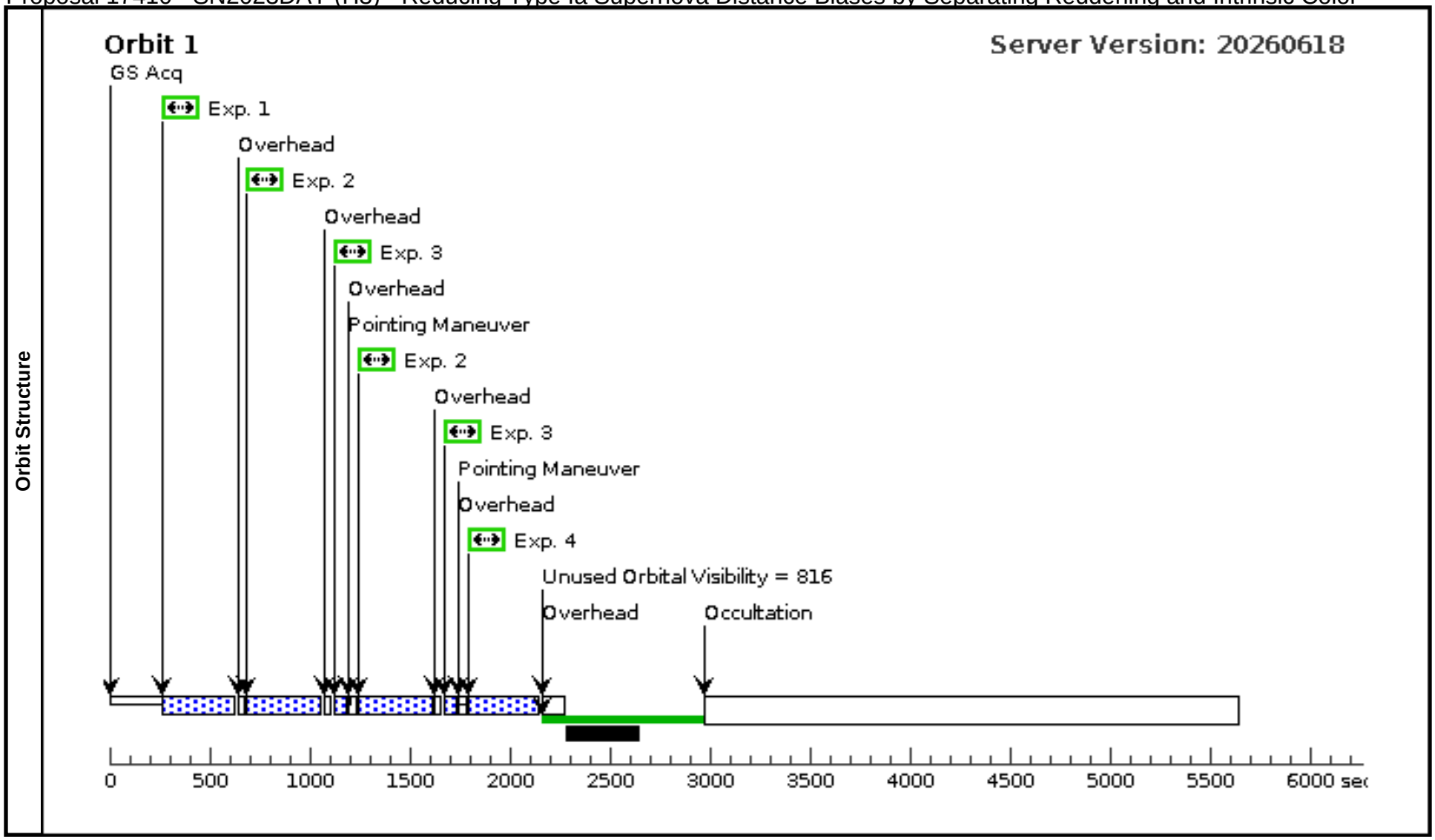
Fixed Targets

#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(133)	SN2023DAY	RA: 14 13 36.6300 (213.4026250d) Dec: -05 43 49.44 (-5.73040d) Equinox: J2000		V=17.3+/-0.1	Reference Frame: ICRS

Comments: Post-maximum Type Ia supernova. Will fade significantly by time of observation.
Category=EXT-STAR
Description=[SUPERNOVA TYPE IA]
Extended=NO

Exposures

#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
1		(133) SN2023DAY	WFC3/UVIS, ACCUM, UVIS2-C512C-SUB	F336W	FLASH=20			331 Secs (331 Secs) *[==>]*	***[1]***
2		(133) SN2023DAY	WFC3/UVIS, ACCUM, UVIS2-C512C-SUB	F300X	FLASH=20		Pattern 3, Exps 2-3 in SN2023DAY (H3) (3)	351 Secs (702 Secs) *[==>(Pattern 1)]* *[==>(Pattern 2)]*	***[1]***
3		(133) SN2023DAY	WFC3/UVIS, ACCUM, UVIS2-C512C-SUB	F555W	FLASH=20		Pattern 3, Exps 2-3 in SN2023DAY (H3) (3)	30 Secs (60 Secs) *[==>(Pattern 1)]* *[==>(Pattern 2)]*	***[1]***
4		(133) SN2023DAY	WFC3/UVIS, ACCUM, UVIS2-FIX	F336W	FLASH=20	POS TARG 0.099,0.106		331 Secs (331 Secs) *[==>]*	***[1]***


Orbit Structure
Orbit 1
Server Version: 20260618
GS Acq
Exp. 1
Overhead
Exp. 2
Overhead
Exp. 3
Overhead
Pointing Maneuver
Exp. 2
Overhead
Exp. 3
Pointing Maneuver
Overhead
Exp. 4
Unused Orbital Visibility = 816
Overhead
Occultation
0
500
1000
1500
2000
2500
3000
3500
4000
4500
5000
5500
6000 sec

Visit

Proposal 17410, SN2022ZUT (97), completed Thu Jul 30 20:01:04 GMT 2026

Diagnostic Status: Informational

Scientific Instruments: WFC3/IR, WFC3/UVIS

Special Requirements: SCHED 70%; ORIENT 287.5D TO 292.5 D; ORIENT 197.5D TO 202.5 D; ORIENT 107.5D TO 112.5 D; ORIENT 17.5D TO 22.5 D; AFTER 11-NOV-2023; ON HOLD ; TOO MAX RESPONSE TIME 30.0D

On Hold Comments: We would like this template observation to be scheduled at least 1 year after peak brightness of the SN. See timing requirements above.

Diagnostics

(SN2022ZUT (97)) Informational (Form): Target of Opportunity Minimum Response time is a required field.

Patterns

#	Primary Pattern		Secondary Pattern	Exposures
(1)	Pattern Type=LINE	Coordinate Frame=POS-TARG		(1-2), (7-8)
	Purpose=DITHER	Pattern Orientation=41.788		
	Number Of Points=2	Angle Between Sides=		
	Point Spacing=0.636	Center Pattern=false		
	Line Spacing=			

Fixed Targets

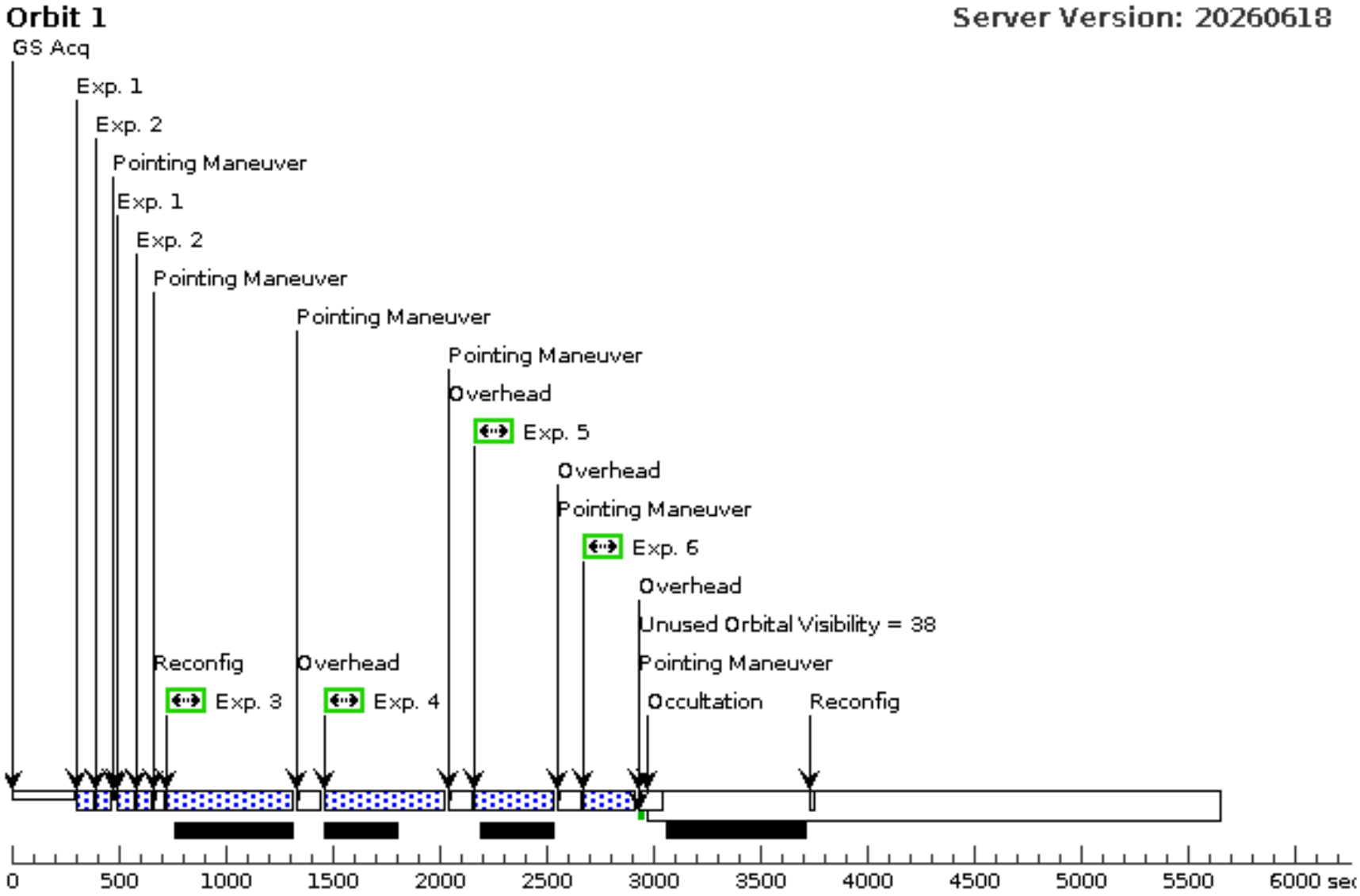
#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(197)	SN2022ZUT	RA: 11 40 58.8300 (175.2451250d)		V=13.0+/-0.1	Reference Frame: ICRS
		Dec: +11 28 10.88 (11.46969d)			
		Equinox: J2000			

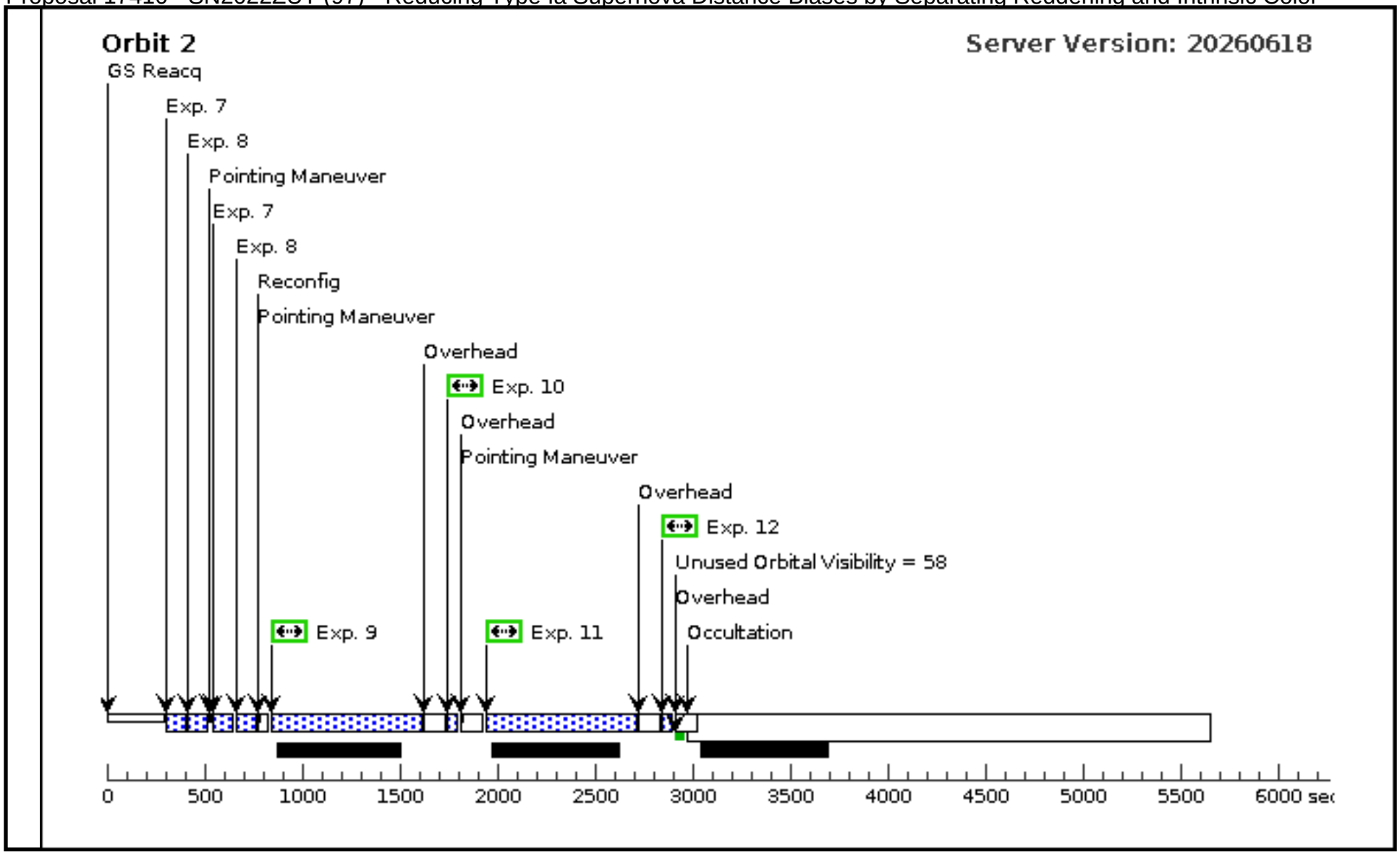
Comments: Rising nearby (D ~ 15 Mpc) Type Ia supernova. Will fade significantly by time of observation.
Category=EXT-STAR
Description=[SUPERNOVA TYPE IA]
Extended=NO

Exposures

#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
1		(197) SN2022ZUT	WFC3/IR, MULTIACCUM, IR-UVIS	F125W	NSAMP=6; SAMP-SEQ=STEP25		Pattern 1, Exps 1-2 in SN2022ZUT (97) (1)	49.230226 Secs (98.46 Secs) *[==>(Pattern 1)]* *[==>(Pattern 2)]*	***[1]***
2		(197) SN2022ZUT	WFC3/IR, MULTIACCUM, IR-UVIS	F105W	NSAMP=6; SAMP-SEQ=STEP25		Pattern 1, Exps 1-2 in SN2022ZUT (97) (1)	49.230226 Secs (98.46 Secs) *[==>(Pattern 1)]* *[==>(Pattern 2)]*	***[1]***
3		(197) SN2022ZUT	WFC3/UVIS, ACCUM, UVIS	F300X	FLASH=19	POS TARG 0.000,0.000		565 Secs (565 Secs) *[==>]*	***[1]***
4		(197) SN2022ZUT	WFC3/UVIS, ACCUM, UVIS	F300X	FLASH=19	POS TARG 0.099,0.106		565 Secs (565 Secs) *[==>]*	***[1]***
5		(197) SN2022ZUT	WFC3/UVIS, ACCUM, UVIS	F336W	FLASH=20	POS TARG 0.000,0.000		348 Secs (348 Secs) *[==>]*	***[1]***
6		(197) SN2022ZUT	WFC3/UVIS, ACCUM, UVIS	F336W	FLASH=20	POS TARG 0.099,0.106		245 Secs (245 Secs) *[==>]*	***[1]***
7		(197) SN2022ZUT	WFC3/IR, MULTIACCUM, IR-UVIS	F160W	NSAMP=7; SAMP-SEQ=STEP25		Pattern 1, Exps 7-8 in SN2022ZUT (97) (1)	74.230741 Secs (148.461 Secs) *[==>(Pattern 1)]* *[==>(Pattern 2)]*	***[2]***
8		(197) SN2022ZUT	WFC3/IR, MULTIACCUM, IR-UVIS	F140W	NSAMP=7; SAMP-SEQ=STEP25		Pattern 1, Exps 7-8 in SN2022ZUT (97) (1)	74.230741 Secs (148.461 Secs) *[==>(Pattern 1)]* *[==>(Pattern 2)]*	***[2]***
9		(197) SN2022ZUT	WFC3/UVIS, ACCUM, UVIS	F275W	FLASH=18	POS TARG 0.000,0.000		745 Secs (745 Secs) *[==>]*	***[2]***
10		(197) SN2022ZUT	WFC3/UVIS, ACCUM, UVIS	F555W	FLASH=19	POS TARG 0.000,0.000		30 Secs (30 Secs) *[==>]*	***[2]***
11		(197) SN2022ZUT	WFC3/UVIS, ACCUM, UVIS	F275W	FLASH=18	POS TARG 0.099,0.106		745 Secs (745 Secs) *[==>]*	***[2]***
12		(197) SN2022ZUT	WFC3/UVIS, ACCUM, UVIS	F555W	FLASH=19	POS TARG 0.099,0.106		30 Secs (30 Secs) *[==>]*	***[2]***

Orbit Structure




Orbit 2
Server Version: 20260618
GS Reacq
Exp. 7
Exp. 8
Pointing Maneuver
Exp. 7
Exp. 8
Reconfig
Pointing Maneuver
Overhead
Exp. 10
Overhead
Pointing Maneuver
Overhead
Exp. 12
Unused Orbital Visibility = 58
Overhead
Occultation
Exp. 9
Exp. 11
0
500
1000
1500
2000
2500
3000
3500
4000
4500
5000
5500
6000 sec

Visit

Proposal 17410, SN2023ALF (30), completed Thu Jul 30 20:01:04 GMT 2026

Diagnostic Status: Informational

Scientific Instruments: WFC3/IR, WFC3/UVIS

Special Requirements: SCHED 70%; ORIENT 290.6D TO 295.6 D; ORIENT 200.6D TO 205.6 D; ORIENT 110.6D TO 115.6 D; ORIENT 20.6D TO 25.6 D; AFTER 05-FEB-2024; ON HOLD ; TOO MAX RESPONSE TIME 30.0D

On Hold Comments: We would like this template observation to be scheduled at least 1 year after peak brightness of the SN. See timing requirements above.

Diagnostics

(SN2023ALF (30)) Informational (Form): Target of Opportunity Minimum Response time is a required field.

Patterns

#	Primary Pattern		Secondary Pattern	Exposures
(1)	Pattern Type=LINE Purpose=DITHER Number Of Points=2 Point Spacing=0.636 Line Spacing=	Coordinate Frame=POS-TARG Pattern Orientation=41.788 Angle Between Sides= Center Pattern=false		(1-4)
(3)	Pattern Type=WFC3-UVIS-DITHER-LINE Purpose=DITHER Number Of Points=2 Point Spacing=0.145 Line Spacing=	Coordinate Frame=POS-TARG Pattern Orientation=46.84 Angle Between Sides= Center Pattern=false		(6-7)

Fixed Targets

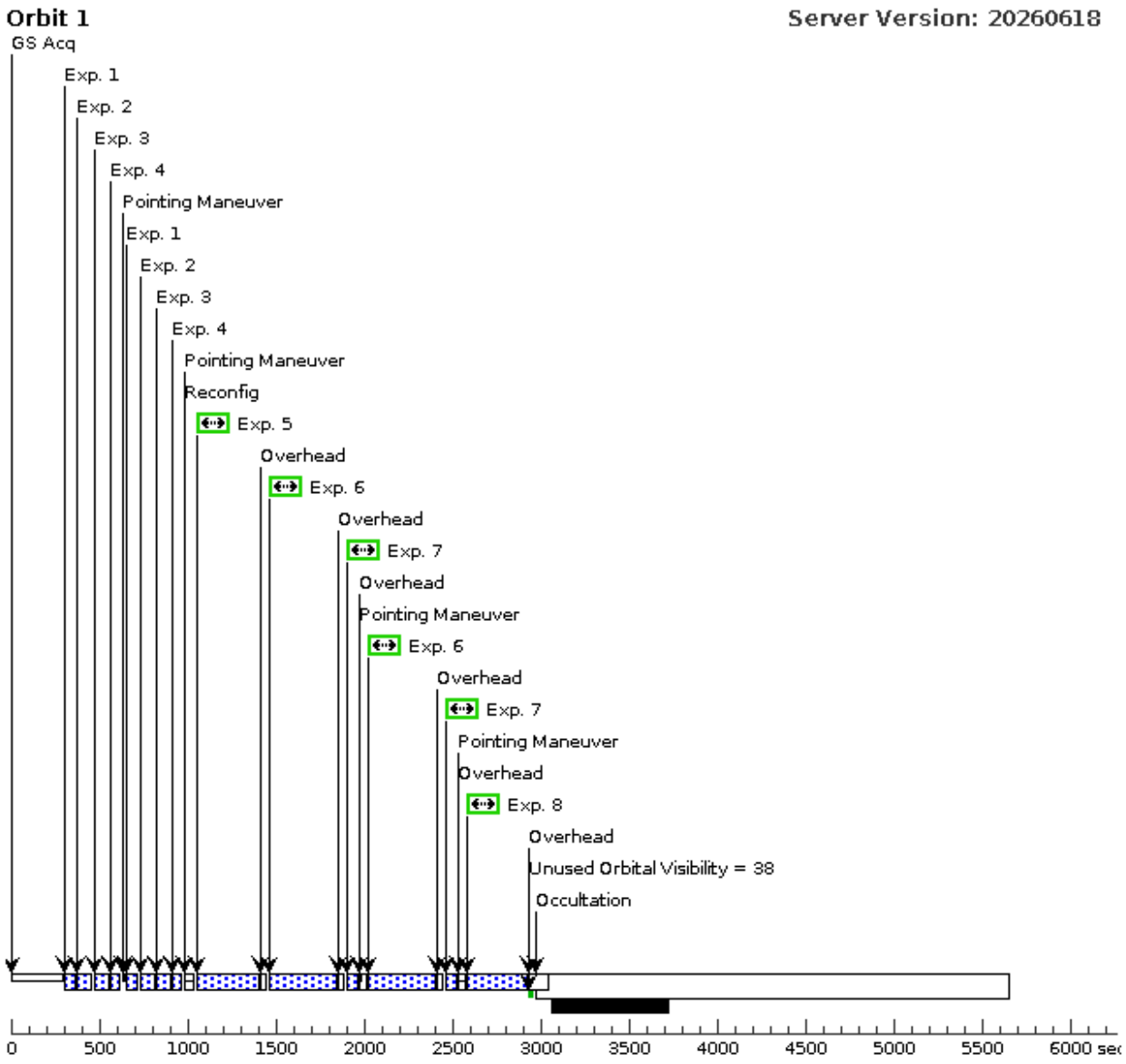
#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(130)	SN2023ALF	RA: 13 49 51.2000 (207.4633333d) Dec: -13 12 14.18 (-13.20394d) Equinox: J2000		V=18.8+/-0.1	Reference Frame: ICRS

Comments: Post-maximum Type Ia supernova. Will fade significantly by time of observation.
Category=EXT-STAR
Description=[SUPERNOVA TYPE IA]
Extended=NO

Exposures

#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
1		(130) SN2023ALF	WFC3/IR, MULTIACCUM, IRSUB512	F125W	NSAMP=6; SAMP-SEQ=STEP25		Pattern 1, Exps 1-4 in SN2023ALF (30) (1)	36.754642 Secs (73.509 Secs) *[==>(Pattern 1)]* *[==>(Pattern 2)]*	***[1]***
2		(130) SN2023ALF	WFC3/IR, MULTIACCUM, IRSUB512	F140W	NSAMP=7; SAMP-SEQ=STEP25		Pattern 1, Exps 1-4 in SN2023ALF (30) (1)	59.675893 Secs (119.352 Secs) *[==>(Pattern 1)]* *[==>(Pattern 2)]*	***[1]***
3		(130) SN2023ALF	WFC3/IR, MULTIACCUM, IRSUB512	F160W	NSAMP=7; SAMP-SEQ=STEP25		Pattern 1, Exps 1-4 in SN2023ALF (30) (1)	59.675893 Secs (119.352 Secs) *[==>(Pattern 1)]* *[==>(Pattern 2)]*	***[1]***
4		(130) SN2023ALF	WFC3/IR, MULTIACCUM, IRSUB512	F105W	NSAMP=6; SAMP-SEQ=STEP25		Pattern 1, Exps 1-4 in SN2023ALF (30) (1)	36.754642 Secs (73.509 Secs) *[==>(Pattern 1)]* *[==>(Pattern 2)]*	***[1]***
5		(130) SN2023ALF	WFC3/UVIS, ACCUM, UVIS2-C512C-SUB	F336W	FLASH=20			317 Secs (317 Secs) *[==>]*	***[1]***
6		(130) SN2023ALF	WFC3/UVIS, ACCUM, UVIS2-C512C-SUB	F300X	FLASH=20		Pattern 3, Exps 6-7 in SN2023ALF (30) (3)	360 Secs (720 Secs) *[==>(Pattern 1)]* *[==>(Pattern 2)]*	***[1]***
7		(130) SN2023ALF	WFC3/UVIS, ACCUM, UVIS2-C512C-SUB	F555W	FLASH=20		Pattern 3, Exps 6-7 in SN2023ALF (30) (3)	30 Secs (60 Secs) *[==>(Pattern 1)]* *[==>(Pattern 2)]*	***[1]***
8		(130) SN2023ALF	WFC3/UVIS, ACCUM, UVIS2-FIX	F336W	FLASH=20	POS TARG 0.099,0.106		317 Secs (317 Secs) *[==>]*	***[1]***

Orbit Structure



Visit

Proposal 17410, SN2023GRN (45), failed Thu Jul 30 20:01:04 GMT 2026

Diagnostic Status: Informational

Scientific Instruments: WFC3/IR, WFC3/UVIS

Special Requirements: SCHED 70%; ORIENT 115.2D TO 120.2 D; ORIENT 25.2D TO 30.2 D; ORIENT 205.2D TO 210.2 D; ORIENT 295.2D TO 300.2 D; AFTER 11-MAY-2024; ON HOLD ; TOO MAX RESPONSE TIME 30.0D

On Hold Comments: We would like this template observation to be scheduled at least 1 year after peak brightness of the SN. See timing requirements above.

Diagnostics

(SN2023GRN (45)) Informational (Form): Target of Opportunity Minimum Response time is a required field.

Patterns

#	Primary Pattern		Secondary Pattern	Exposures
(1)	Pattern Type=LINE Purpose=DITHER Number Of Points=2 Point Spacing=0.636 Line Spacing=	Coordinate Frame=POS-TARG Pattern Orientation=41.788 Angle Between Sides= Center Pattern=false		(1-4)
(3)	Pattern Type=WFC3-UVIS-DITHER-LINE Purpose=DITHER Number Of Points=2 Point Spacing=0.145 Line Spacing=	Coordinate Frame=POS-TARG Pattern Orientation=46.84 Angle Between Sides= Center Pattern=false		(6-7)

Fixed Targets

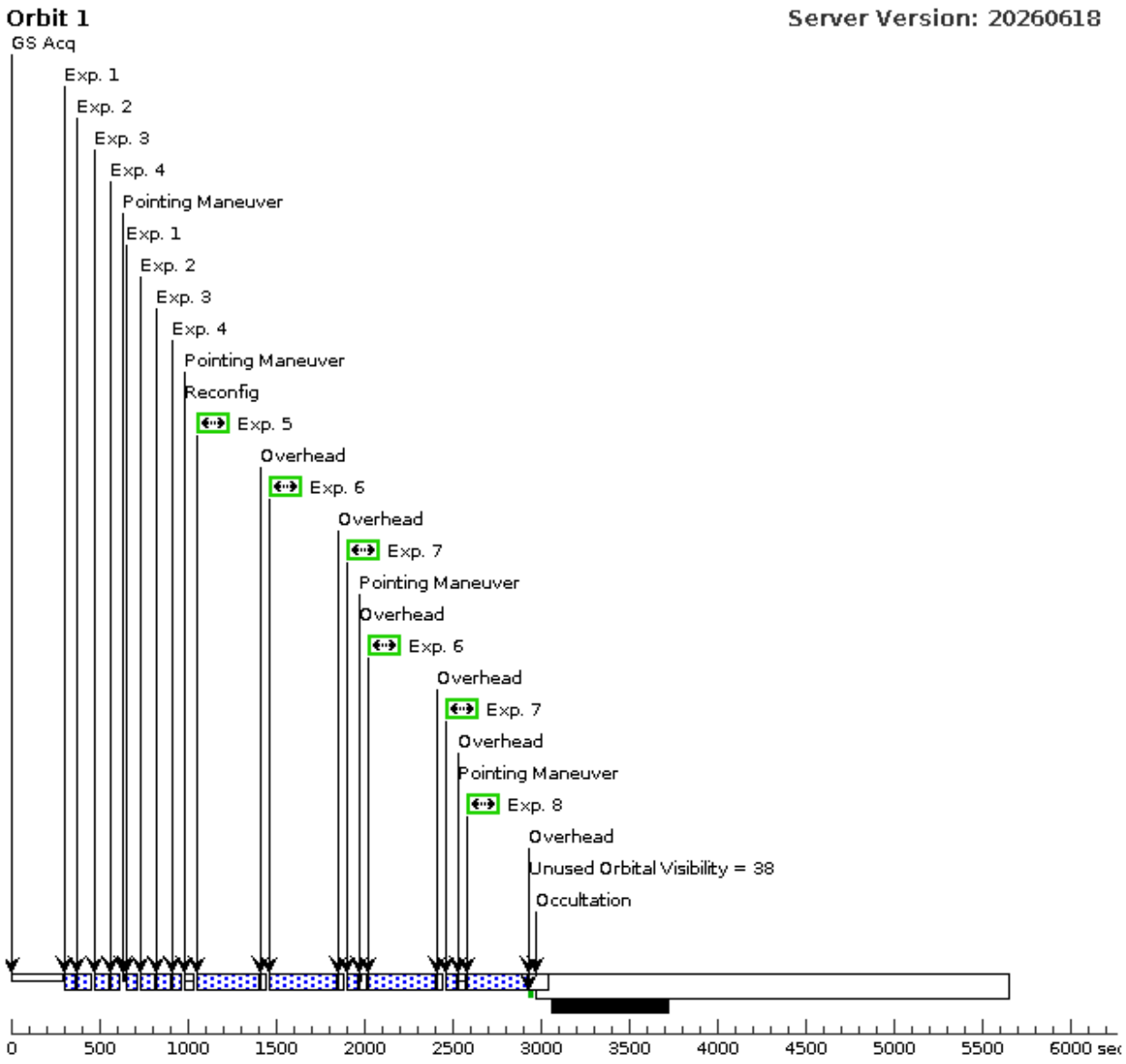
#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(145)	SN2023GRN	RA: 10 07 32.1700 (151.8840417d) Dec: -12 57 37.97 (-12.96055d) Equinox: J2000		V=17.7+/-0.1	Reference Frame: ICRS

Comments: Post-maximum Type Ia supernova. Will fade significantly by time of observation.
Category=EXT-STAR
Description=[SUPERNOVA TYPE IA]
Extended=NO

Exposures

#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
1		(145) SN2023GRN	WFC3/IR, MULTIACCUM, IRSUB512	F125W	NSAMP=6; SAMP-SEQ=STEP25		Pattern 1, Exps 1-4 in SN2023GRN (45) (1)	36.754642 Secs (73.509 Secs) *[==>(Pattern 1)]* *[==>(Pattern 2)]*	***[1]***
2		(145) SN2023GRN	WFC3/IR, MULTIACCUM, IRSUB512	F140W	NSAMP=7; SAMP-SEQ=STEP25		Pattern 1, Exps 1-4 in SN2023GRN (45) (1)	59.675893 Secs (119.352 Secs) *[==>(Pattern 1)]* *[==>(Pattern 2)]*	***[1]***
3		(145) SN2023GRN	WFC3/IR, MULTIACCUM, IRSUB512	F160W	NSAMP=7; SAMP-SEQ=STEP25		Pattern 1, Exps 1-4 in SN2023GRN (45) (1)	59.675893 Secs (119.352 Secs) *[==>(Pattern 1)]* *[==>(Pattern 2)]*	***[1]***
4		(145) SN2023GRN	WFC3/IR, MULTIACCUM, IRSUB512	F105W	NSAMP=6; SAMP-SEQ=STEP25		Pattern 1, Exps 1-4 in SN2023GRN (45) (1)	36.754642 Secs (73.509 Secs) *[==>(Pattern 1)]* *[==>(Pattern 2)]*	***[1]***
5		(145) SN2023GRN	WFC3/UVIS, ACCUM, UVIS2-C512C-SUB	F336W	FLASH=20			317 Secs (317 Secs) *[==>]*	***[1]***
6		(145) SN2023GRN	WFC3/UVIS, ACCUM, UVIS2-C512C-SUB	F300X	FLASH=20		Pattern 3, Exps 6-7 in SN2023GRN (45) (3)	360 Secs (720 Secs) *[==>(Pattern 1)]* *[==>(Pattern 2)]*	***[1]***
7		(145) SN2023GRN	WFC3/UVIS, ACCUM, UVIS2-C512C-SUB	F555W	FLASH=20		Pattern 3, Exps 6-7 in SN2023GRN (45) (3)	30 Secs (60 Secs) *[==>(Pattern 1)]* *[==>(Pattern 2)]*	***[1]***
8		(145) SN2023GRN	WFC3/UVIS, ACCUM, UVIS2-FIX	F336W	FLASH=20	POS TARG 0.099,0.106		317 Secs (317 Secs) *[==>]*	***[1]***

Orbit Structure



Visit

Proposal 17410, SN2023GRN (D5), completed Thu Jul 30 20:01:04 GMT 2026

Diagnostic Status: Informational

Scientific Instruments: WFC3/UVIS

Special Requirements: SCHED 100%; ORIENT 115.2D TO 120.2 D; ORIENT 25.2D TO 30.2 D; ORIENT 205.2D TO 210.2 D; ORIENT 295.2D TO 300.2 D; AFTER 11-MAY-2024; ON HOLD ; TOO MAX RESPONSE TIME 30.0D

Comments: Duplicate of failed visit 45

On Hold Comments: We would like this template observation to be scheduled at least 1 year after peak brightness of the SN. See timing requirements above.

Diagnostics

(SN2023GRN (D5)) Informational (Form): Target of Opportunity Minimum Response time is a required field.

Fixed Targets

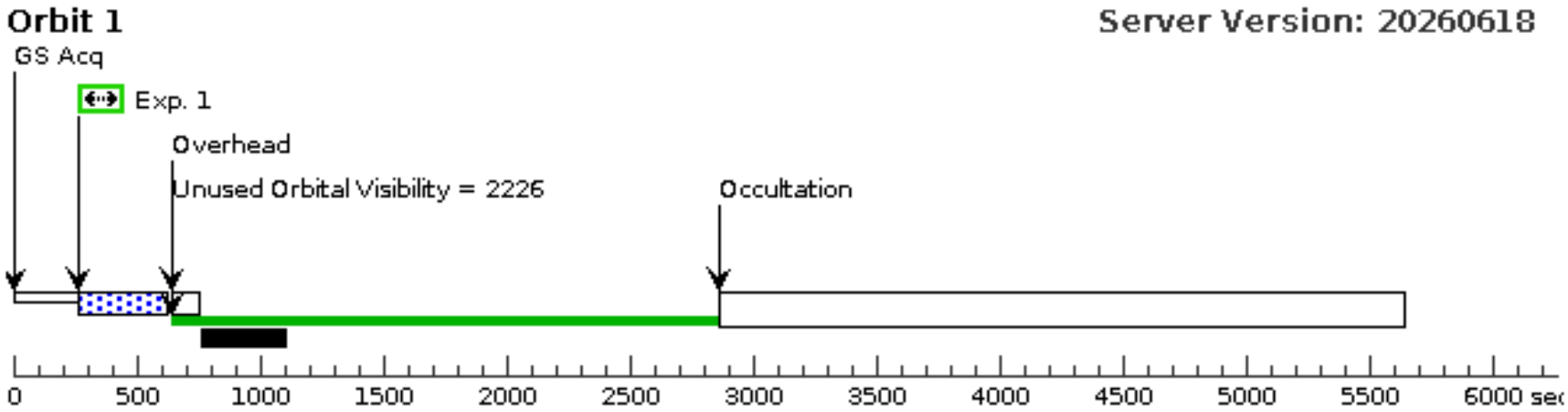
#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(145)	SN2023GRN	RA: 10 07 32.1700 (151.8840417d) Dec: -12 57 37.97 (-12.96055d) Equinox: J2000		V=17.7+/-0.1	Reference Frame: ICRS

Comments: Post-maximum Type Ia supernova. Will fade significantly by time of observation.
Category=EXT-STAR
Description=[SUPERNOVA TYPE IA]
Extended=NO

Exposures

#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
1		(145) SN2023GRN	WFC3/UVIS, ACCUM, UVIS2-FIX	F336W	FLASH=20	POS TARG 0.099,0.106		332 Secs (332 Secs) *[==>]*	*[1]*

Orbit Structure



Visit

Proposal 17410, SN2023KMJ (60), completed Thu Jul 30 20:01:04 GMT 2026

Diagnostic Status: Informational

Scientific Instruments: WFC3/IR, WFC3/UVIS

Special Requirements: SCHED 70%; ORIENT 104.1D TO 109.1 D; ORIENT 14.1D TO 19.1 D; ORIENT 194.1D TO 199.1 D; ORIENT 284.1D TO 289.1 D; AFTER 24-JUN-2024; ON HOLD ; TOO MAX RESPONSE TIME 30.0D

On Hold Comments: We would like this template observation to be scheduled at least 1 year after peak brightness of the SN. See timing requirements above.

Diagnostics

(SN2023KMJ (60)) Informational (Form): Target of Opportunity Minimum Response time is a required field.

Patterns

#	Primary Pattern		Secondary Pattern	Exposures
(1)	Pattern Type=LINE Purpose=DITHER Number Of Points=2 Point Spacing=0.636 Line Spacing=	Coordinate Frame=POS-TARG Pattern Orientation=41.788 Angle Between Sides= Center Pattern=false		(1-4)
(3)	Pattern Type=WFC3-UVIS-DITHER-LINE Purpose=DITHER Number Of Points=2 Point Spacing=0.145 Line Spacing=	Coordinate Frame=POS-TARG Pattern Orientation=46.84 Angle Between Sides= Center Pattern=false		(6-7)

Fixed Targets

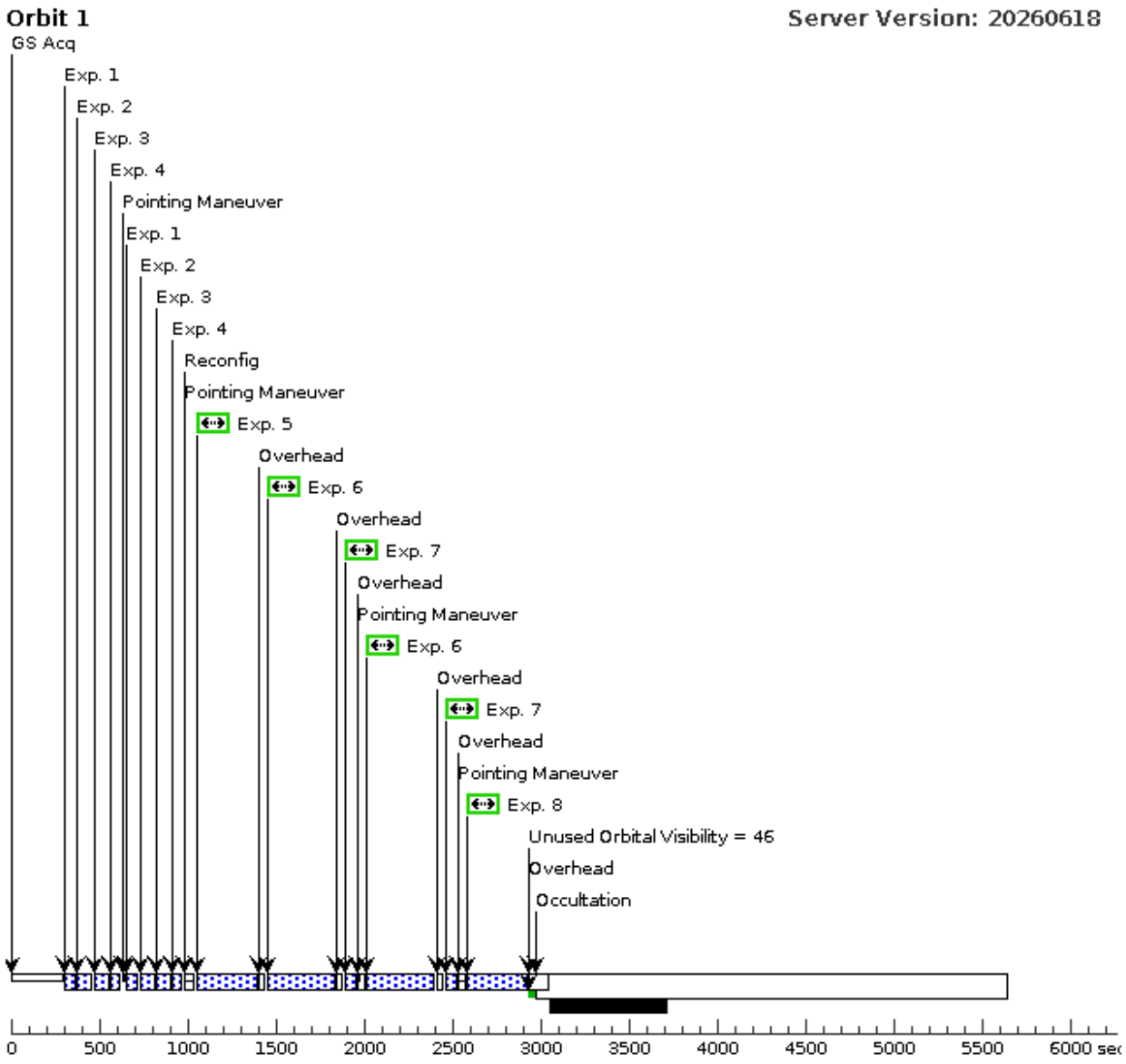
#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(160)	SN2023KMJ	RA: 15 00 27.6400 (225.1151667d) Dec: +06 27 16.40 (6.45456d) Equinox: J2000		V=16.8+/-0.1	Reference Frame: ICRS

Comments: Pre-maximum Type Ia supernova. Will fade significantly by time of observation.
Category=EXT-STAR
Description=[SUPERNOVA TYPE IA]
Extended=NO

Exposures

#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
1		(160) SN2023KMJ	WFC3/IR, MULTIACCUM, IRSUB512	F125W	NSAMP=6; SAMP-SEQ=STEP25		Pattern 1, Exps 1-4 in SN2023KMJ (60) (1)	36.754642 Secs (73.509 Secs) *[==>(Pattern 1)]* *[==>(Pattern 2)]*	 ***[1]***
2		(160) SN2023KMJ	WFC3/IR, MULTIACCUM, IRSUB512	F140W	NSAMP=7; SAMP-SEQ=STEP25		Pattern 1, Exps 1-4 in SN2023KMJ (60) (1)	59.675893 Secs (119.352 Secs) *[==>(Pattern 1)]* *[==>(Pattern 2)]*	 ***[1]***
3		(160) SN2023KMJ	WFC3/IR, MULTIACCUM, IRSUB512	F160W	NSAMP=7; SAMP-SEQ=STEP25		Pattern 1, Exps 1-4 in SN2023KMJ (60) (1)	59.675893 Secs (119.352 Secs) *[==>(Pattern 1)]* *[==>(Pattern 2)]*	 ***[1]***
4		(160) SN2023KMJ	WFC3/IR, MULTIACCUM, IRSUB512	F105W	NSAMP=6; SAMP-SEQ=STEP25		Pattern 1, Exps 1-4 in SN2023KMJ (60) (1)	36.754642 Secs (73.509 Secs) *[==>(Pattern 1)]* *[==>(Pattern 2)]*	 ***[1]***
5		(160) SN2023KMJ	WFC3/UVIS, ACCUM, UVIS2-C512C-SUB	F336W	FLASH=20			314 Secs (314 Secs) *[==>]*	 ***[1]***
6		(160) SN2023KMJ	WFC3/UVIS, ACCUM, UVIS2-C512C-SUB	F300X	FLASH=20		Pattern 3, Exps 6-7 in SN2023KMJ (60) (3)	360 Secs (720 Secs) *[==>(Pattern 1)]* *[==>(Pattern 2)]*	 ***[1]***
7		(160) SN2023KMJ	WFC3/UVIS, ACCUM, UVIS2-C512C-SUB	F555W	FLASH=20		Pattern 3, Exps 6-7 in SN2023KMJ (60) (3)	30 Secs (60 Secs) *[==>(Pattern 1)]* *[==>(Pattern 2)]*	 ***[1]***
8		(160) SN2023KMJ	WFC3/UVIS, ACCUM, UVIS2-FIX	F336W	FLASH=20	POS TARG 0.099,0.106		315 Secs (315 Secs) *[==>]*	 ***[1]***

Orbit Structure



Visit

Proposal 17410, SN2022UTO (05), completed Thu Jul 30 20:01:04 GMT 2026

Diagnostic Status: Informational

Scientific Instruments: WFC3/IR, WFC3/UVIS

Special Requirements: SCHED 70%; ORIENT 237D TO 242 D; ORIENT 147D TO 152 D; ORIENT 57D TO 92 D; ORIENT 327D TO 332 D; AFTER 28-SEP-2023; ON HOLD ; TOO MAX RESPONSE TIME 30.0D

On Hold Comments: We would like this template observation to be scheduled at least 1 year after peak brightness of the SN. See timing requirements above.

Diagnostics

(SN2022UTO (05)) Informational (Form): Target of Opportunity Minimum Response time is a required field.

Patterns

#	Primary Pattern		Secondary Pattern	Exposures
(1)	Pattern Type=LINE Purpose=DITHER Number Of Points=2 Point Spacing=0.636 Line Spacing=	Coordinate Frame=POS-TARG Pattern Orientation=41.788 Angle Between Sides= Center Pattern=false		(1-4)
(3)	Pattern Type=WFC3-UVIS-DITHER-LINE Purpose=DITHER Number Of Points=2 Point Spacing=0.145 Line Spacing=	Coordinate Frame=POS-TARG Pattern Orientation=46.84 Angle Between Sides= Center Pattern=false		(6-7)

Fixed Targets

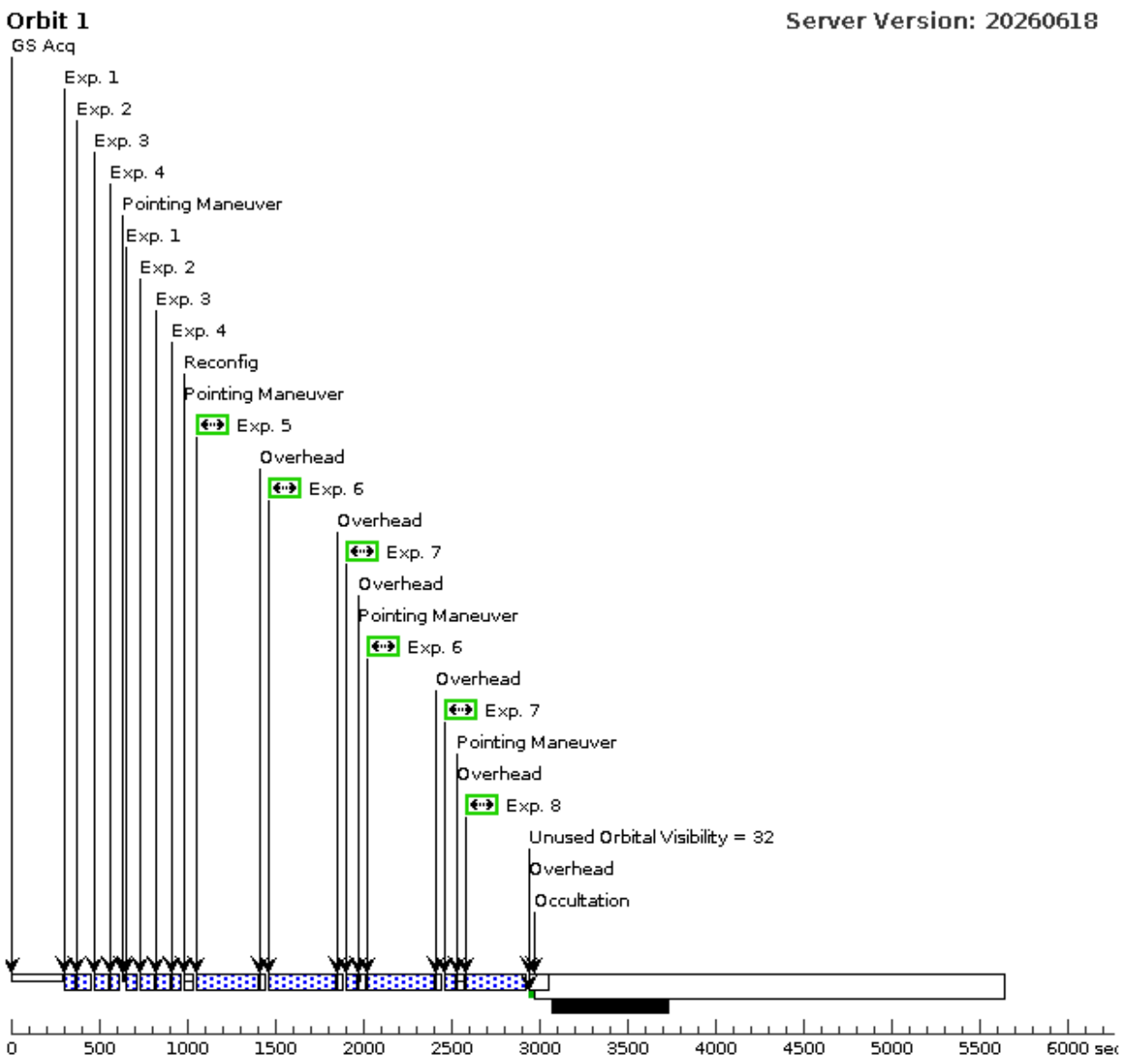
#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(105)	SN2022UTO	RA: 02 42 59.3800 (40.7474167d) Dec: +17 12 38.08 (17.21058d) Equinox: J2000		V=19.0+/-0.1	Reference Frame: ICRS

Comments: Reddened near-maximum Type Ia supernova. Will fade significantly by time of observation.
Category=EXT-STAR
Description=[SUPERNOVA TYPE IA]
Extended=NO

Exposures

#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
1		(105) SN2022UTO	WFC3/IR, MULTIACCUM, IRSUB512	F125W	NSAMP=6; SAMP-SEQ=STEP25		Pattern 1, Exps 1-4 in SN2022UTO (05) (1)	36.754642 Secs (73.509 Secs) *[==>(Pattern 1)]* *[==>(Pattern 2)]*	 ***[1]***
2		(105) SN2022UTO	WFC3/IR, MULTIACCUM, IRSUB512	F140W	NSAMP=7; SAMP-SEQ=STEP25		Pattern 1, Exps 1-4 in SN2022UTO (05) (1)	59.675893 Secs (119.352 Secs) *[==>(Pattern 1)]* *[==>(Pattern 2)]*	 ***[1]***
3		(105) SN2022UTO	WFC3/IR, MULTIACCUM, IRSUB512	F160W	NSAMP=7; SAMP-SEQ=STEP25		Pattern 1, Exps 1-4 in SN2022UTO (05) (1)	59.675893 Secs (119.352 Secs) *[==>(Pattern 1)]* *[==>(Pattern 2)]*	 ***[1]***
4		(105) SN2022UTO	WFC3/IR, MULTIACCUM, IRSUB512	F105W	NSAMP=6; SAMP-SEQ=STEP25		Pattern 1, Exps 1-4 in SN2022UTO (05) (1)	36.754642 Secs (73.509 Secs) *[==>(Pattern 1)]* *[==>(Pattern 2)]*	 ***[1]***
5		(105) SN2022UTO	WFC3/UVIS, ACCUM, UVIS2-C512C-SUB	F336W	FLASH=20			321 Secs (321 Secs) *[==>]*	 ***[1]***
6		(105) SN2022UTO	WFC3/UVIS, ACCUM, UVIS2-C512C-SUB	F300X	FLASH=20		Pattern 3, Exps 6-7 in SN2022UTO (05) (3)	360 Secs (720 Secs) *[==>(Pattern 1)]* *[==>(Pattern 2)]*	 ***[1]***
7		(105) SN2022UTO	WFC3/UVIS, ACCUM, UVIS2-C512C-SUB	F555W	FLASH=20		Pattern 3, Exps 6-7 in SN2022UTO (05) (3)	30 Secs (60 Secs) *[==>(Pattern 1)]* *[==>(Pattern 2)]*	 ***[1]***
8		(105) SN2022UTO	WFC3/UVIS, ACCUM, UVIS2-FIX	F336W	FLASH=20	POS TARG 0.099,0.106		321 Secs (321 Secs) *[==>]*	 ***[1]***

Orbit Structure



Visit

Proposal 17410, SN2023SNN (79), failed Thu Jul 30 20:01:04 GMT 2026

Diagnostic Status: Informational

Scientific Instruments: WFC3/IR, WFC3/UVIS

Special Requirements: SCHED 70%; ORIENT 65.1D TO 70.1 D; ORIENT 155.1D TO 160.1 D; ORIENT 245.1D TO 250.1 D; ORIENT 335.1D TO 340.1 D; AFTER 21-SEP-2024; ON HOLD ; TOO MAX RESPONSE TIME 30.0D

On Hold Comments: We would like this template observation to be scheduled at least 1 year after peak brightness of the SN. See timing requirements above.

Diagnostics

(SN2023SNN (79)) Informational (Form): Target of Opportunity Minimum Response time is a required field.

Patterns

#	Primary Pattern		Secondary Pattern	Exposures
(1)	Pattern Type=LINE Purpose=DITHER Number Of Points=2 Point Spacing=0.636 Line Spacing=	Coordinate Frame=POS-TARG Pattern Orientation=41.788 Angle Between Sides= Center Pattern=false		(1-4)
(3)	Pattern Type=WFC3-UVIS-DITHER-LINE Purpose=DITHER Number Of Points=2 Point Spacing=0.145 Line Spacing=	Coordinate Frame=POS-TARG Pattern Orientation=46.84 Angle Between Sides= Center Pattern=false		(6-7)

Fixed Targets

#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(179)	SN2023SNN	RA: 22 08 3.6400 (332.0151667d) Dec: -16 32 28.01 (-16.54111d) Equinox: J2000		V=17.0+/-0.1	Reference Frame: ICRS

Comments: Post-maximum Type Ia supernova. Will fade significantly by time of observation.
Category=EXT-STAR
Description=[SUPERNOVA TYPE IA]
Extended=NO

Exposures

#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
1		(179) SN2023SNN	WFC3/IR, MULTIACCUM, IRSUB512	F125W	NSAMP=6; SAMP-SEQ=STEP25		Pattern 1, Exps 1-4 in SN2023SNN (79) (1)	36.754642 Secs (73.509 Secs) *[==>(Pattern 1)]* *[==>(Pattern 2)]*	 ***[1]***
2		(179) SN2023SNN	WFC3/IR, MULTIACCUM, IRSUB512	F140W	NSAMP=7; SAMP-SEQ=STEP25		Pattern 1, Exps 1-4 in SN2023SNN (79) (1)	59.675893 Secs (119.352 Secs) *[==>(Pattern 1)]* *[==>(Pattern 2)]*	 ***[1]***
3		(179) SN2023SNN	WFC3/IR, MULTIACCUM, IRSUB512	F160W	NSAMP=7; SAMP-SEQ=STEP25		Pattern 1, Exps 1-4 in SN2023SNN (79) (1)	59.675893 Secs (119.352 Secs) *[==>(Pattern 1)]* *[==>(Pattern 2)]*	 ***[1]***
4		(179) SN2023SNN	WFC3/IR, MULTIACCUM, IRSUB512	F105W	NSAMP=6; SAMP-SEQ=STEP25		Pattern 1, Exps 1-4 in SN2023SNN (79) (1)	36.754642 Secs (73.509 Secs) *[==>(Pattern 1)]* *[==>(Pattern 2)]*	 ***[1]***
5		(179) SN2023SNN	WFC3/UVIS, ACCUM, UVIS2-C512C-SUB	F336W	FLASH=20			321 Secs (321 Secs) *[==>]*	 ***[1]***
6		(179) SN2023SNN	WFC3/UVIS, ACCUM, UVIS2-C512C-SUB	F300X	FLASH=20		Pattern 3, Exps 6-7 in SN2023SNN (79) (3)	360 Secs (720 Secs) *[==>(Pattern 1)]* *[==>(Pattern 2)]*	 ***[1]***
7		(179) SN2023SNN	WFC3/UVIS, ACCUM, UVIS2-C512C-SUB	F555W	FLASH=20		Pattern 3, Exps 6-7 in SN2023SNN (79) (3)	30 Secs (60 Secs) *[==>(Pattern 1)]* *[==>(Pattern 2)]*	 ***[1]***
8		(179) SN2023SNN	WFC3/UVIS, ACCUM, UVIS2-FIX	F336W	FLASH=20	POS TARG 0.099,0.106		321 Secs (321 Secs) *[==>]*	 ***[1]***

Orbit Structure

Visit

Proposal 17410, SN2023SNN (G9), failed Thu Jul 30 20:01:05 GMT 2026

Diagnostic Status: Informational

Scientific Instruments: WFC3/UVIS

Special Requirements: SCHED 70%; ORIENT 65.1D TO 70.1 D; ORIENT 155.1D TO 160.1 D; ORIENT 245.1D TO 250.1 D; ORIENT 335.1D TO 340.1 D; AFTER 21-SEP-2024; ON HOLD ; TOO MAX RESPONSE TIME 30.0D

On Hold Comments: We would like this template observation to be scheduled at least 1 year after peak brightness of the SN. See timing requirements above.

Diagnostics

(SN2023SNN (G9)) Informational (Form): Target of Opportunity Minimum Response time is a required field.

Patterns

#	Primary Pattern		Secondary Pattern	Exposures
(3)	Pattern Type=WFC3-UVIS-DITHER-LINE Purpose=DITHER Number Of Points=2 Point Spacing=0.145 Line Spacing=	Coordinate Frame=POS-TARG Pattern Orientation=46.84 Angle Between Sides= Center Pattern=false		(1-2)

Fixed Targets

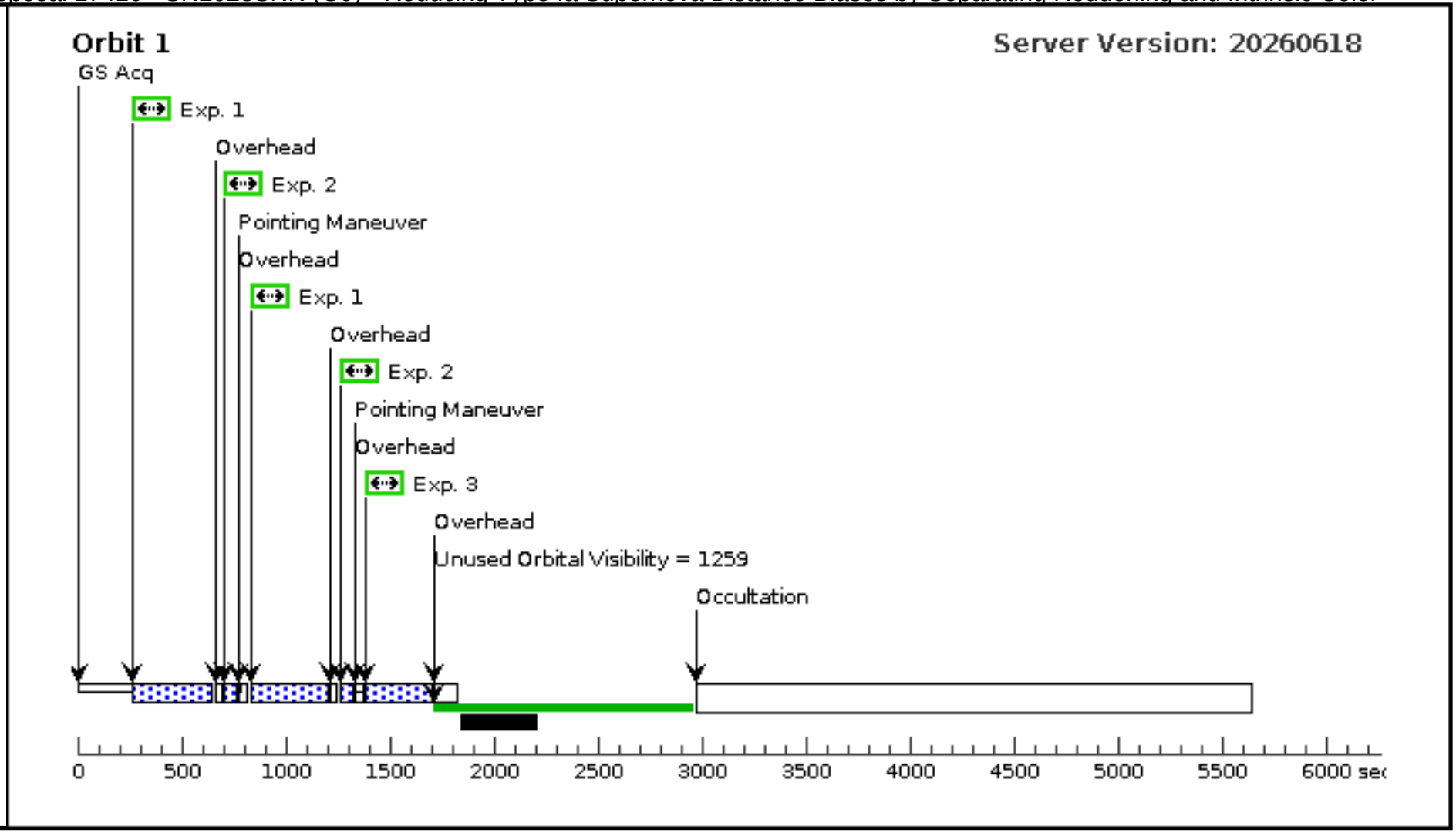
#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(179)	SN2023SNN	RA: 22 08 3.6400 (332.0151667d) Dec: -16 32 28.01 (-16.54111d) Equinox: J2000		V=17.0+/-0.1	Reference Frame: ICRS

Comments: Post-maximum Type Ia supernova. Will fade significantly by time of observation.
Category=EXT-STAR
Description=[SUPERNOVA TYPE IA]
Extended=NO

Exposures

#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
1		(179) SN2023SNN	WFC3/UVIS, ACCUM, UVIS2-C512C-SUB	F300X	FLASH=20		Pattern 3, Exps 1-2 in SN2023SNN (G9) (3)	351 Secs (702 Secs) *[==>(Pattern 1)]* *[==>(Pattern 2)]*	***[1]***
2		(179) SN2023SNN	WFC3/UVIS, ACCUM, UVIS2-C512C-SUB	F555W	FLASH=20		Pattern 3, Exps 1-2 in SN2023SNN (G9) (3)	30 Secs (60 Secs) *[==>(Pattern 1)]* *[==>(Pattern 2)]*	***[1]***
3		(179) SN2023SNN	WFC3/UVIS, ACCUM, UVIS2-FIX	F336W	FLASH=20	POS TARG 0.099,0.106		299 Secs (299 Secs) *[==>]*	***[1]***

Orbit Structure



Visit

Proposal 17410, SN2023SNN (L9) Thu Jul 30 20:01:05 GMT 2026

Diagnostic Status: No Diagnostics

Scientific Instruments: WFC3/UVIS

Special Requirements: SCHED 70%; ORIENT 65.1D TO 70.1 D; ORIENT 155.1D TO 160.1 D; ORIENT 245.1D TO 250.1 D; ORIENT 335.1D TO 340.1 D; AFTER 21-SEP-2024; TOO MIN RESPONSE TIME 30.0D; TOO MAX RESPONSE TIME 300.0D

Fixed Targets

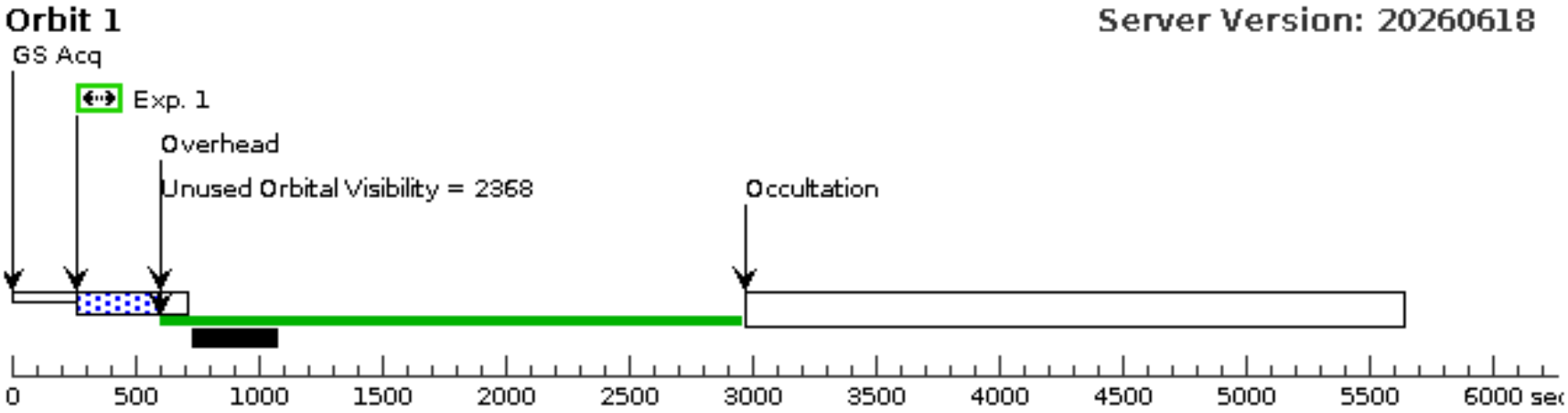
#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(179)	SN2023SNN	RA: 22 08 3.6400 (332.0151667d) Dec: -16 32 28.01 (-16.54111d) Equinox: J2000		V=17.0+/-0.1	Reference Frame: ICRS

Comments: Post-maximum Type Ia supernova. Will fade significantly by time of observation.
Category=EXT-STAR
Description=[SUPERNOVA TYPE IA]
Extended=NO

Exposures

#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
1		(179) SN2023SNN	WFC3/UVIS, ACCUM, UVIS2-FIX	F336W	FLASH=20	POS TARG 0.099,0.106		299 Secs (299 Secs) *[==>]*	*[1]*

Orbit Structure



Visit

Proposal 17410, SN2023VPD (84), completed Thu Jul 30 20:01:05 GMT 2026

Diagnostic Status: Informational

Scientific Instruments: WFC3/IR, WFC3/UVIS

Special Requirements: SCHED 70%; ORIENT 54D TO 59 D; ORIENT 144D TO 149 D; ORIENT 234D TO 239 D; ORIENT 324D TO 329 D; AFTER 04-NOV-2024; ON HOLD ; TOO MAX RESPONSE TIME 30.0D

On Hold Comments: We would like this template observation to be scheduled at least 1 year after peak brightness of the SN. See timing requirements above.

Diagnostics

(SN2023VPD (84)) Informational (Form): Target of Opportunity Minimum Response time is a required field.

Patterns

#	Primary Pattern		Secondary Pattern	Exposures
(1)	Pattern Type=LINE Purpose=DITHER Number Of Points=2 Point Spacing=0.636 Line Spacing=	Coordinate Frame=POS-TARG Pattern Orientation=41.788 Angle Between Sides= Center Pattern=false		(1-4)
(3)	Pattern Type=WFC3-UVIS-DITHER-LINE Purpose=DITHER Number Of Points=2 Point Spacing=0.145 Line Spacing=	Coordinate Frame=POS-TARG Pattern Orientation=46.84 Angle Between Sides= Center Pattern=false		(6-7)

Fixed Targets

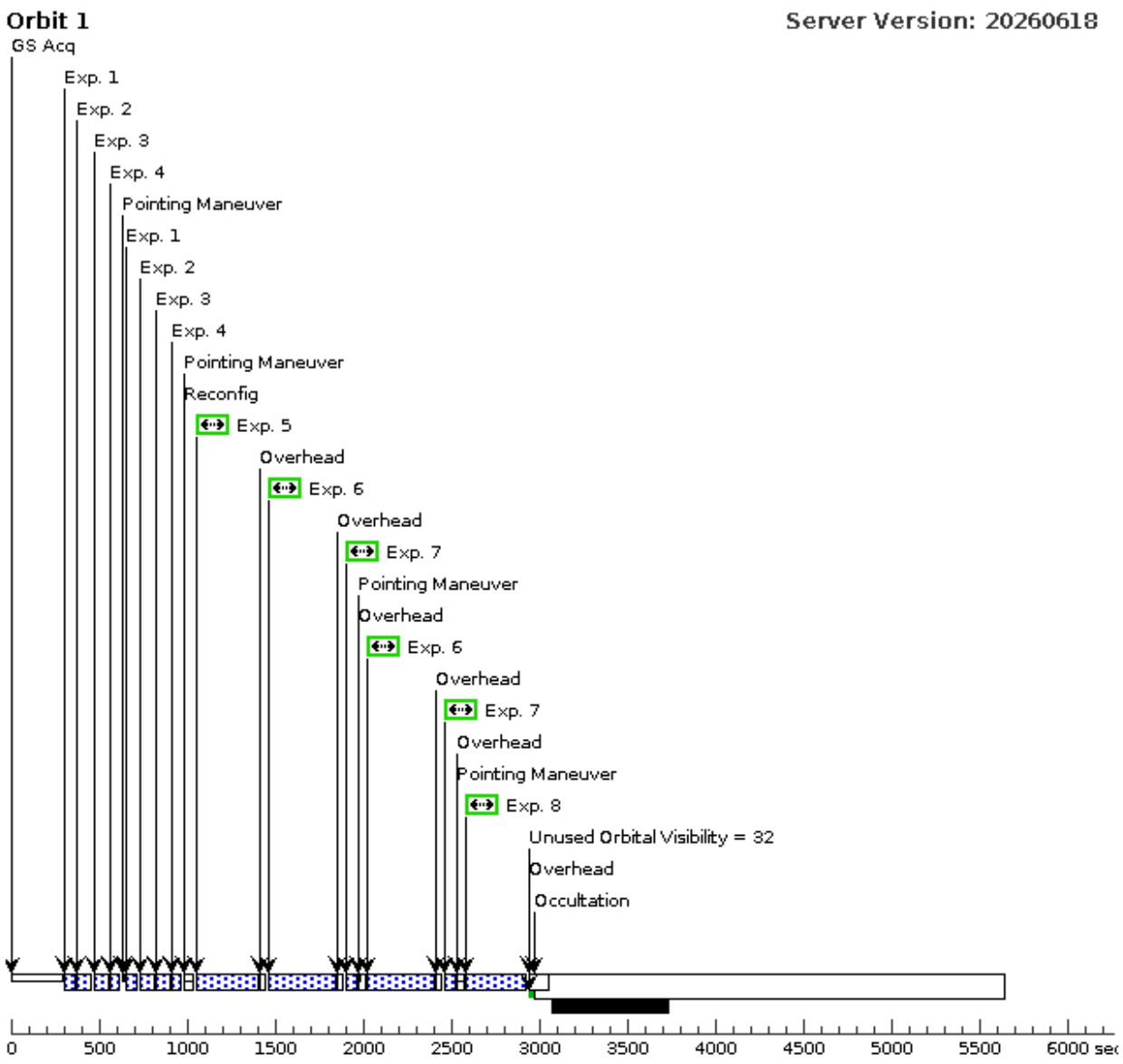
#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(184)	SN2023VPD	RA: 22 40 12.9100 (340.0537917d) Dec: +19 30 24.54 (19.50682d) Equinox: J2000		V=17.0+/-0.1	Reference Frame: ICRS

Comments: Post-maximum Type Ia supernova. Will fade significantly by time of observation.
Category=EXT-STAR
Description=[SUPERNOVA TYPE IA]
Extended=NO

Exposures

#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
1		(184) SN2023VPD	WFC3/IR, MULTIACCUM, IRSUB512	F125W	NSAMP=6; SAMP-SEQ=STEP25		Pattern 1, Exps 1-4 in SN2023VPD (84) (1)	36.754642 Secs (73.509 Secs) *[==>(Pattern 1)]* *[==>(Pattern 2)]*	***[1]***
2		(184) SN2023VPD	WFC3/IR, MULTIACCUM, IRSUB512	F140W	NSAMP=7; SAMP-SEQ=STEP25		Pattern 1, Exps 1-4 in SN2023VPD (84) (1)	59.675893 Secs (119.352 Secs) *[==>(Pattern 1)]* *[==>(Pattern 2)]*	***[1]***
3		(184) SN2023VPD	WFC3/IR, MULTIACCUM, IRSUB512	F160W	NSAMP=7; SAMP-SEQ=STEP25		Pattern 1, Exps 1-4 in SN2023VPD (84) (1)	59.675893 Secs (119.352 Secs) *[==>(Pattern 1)]* *[==>(Pattern 2)]*	***[1]***
4		(184) SN2023VPD	WFC3/IR, MULTIACCUM, IRSUB512	F105W	NSAMP=6; SAMP-SEQ=STEP25		Pattern 1, Exps 1-4 in SN2023VPD (84) (1)	36.754642 Secs (73.509 Secs) *[==>(Pattern 1)]* *[==>(Pattern 2)]*	***[1]***
5		(184) SN2023VPD	WFC3/UVIS, ACCUM, UVIS2-C512C-SUB	F336W	FLASH=20			321 Secs (321 Secs) *[==>]*	***[1]***
6		(184) SN2023VPD	WFC3/UVIS, ACCUM, UVIS2-C512C-SUB	F300X	FLASH=20		Pattern 3, Exps 6-7 in SN2023VPD (84) (3)	360 Secs (720 Secs) *[==>(Pattern 1)]* *[==>(Pattern 2)]*	***[1]***
7		(184) SN2023VPD	WFC3/UVIS, ACCUM, UVIS2-C512C-SUB	F555W	FLASH=20		Pattern 3, Exps 6-7 in SN2023VPD (84) (3)	30 Secs (60 Secs) *[==>(Pattern 1)]* *[==>(Pattern 2)]*	***[1]***
8		(184) SN2023VPD	WFC3/UVIS, ACCUM, UVIS2-FIX	F336W	FLASH=20	POS TARG 0.099,0.106		321 Secs (321 Secs) *[==>]*	***[1]***

Orbit Structure



Visit

Proposal 17410, SN2023WUK (A4), completed Thu Jul 30 20:01:05 GMT 2026

Diagnostic Status: Informational

Scientific Instruments: WFC3/IR, WFC3/UVIS

Special Requirements: SCHED 70%; ORIENT 57.4D TO 62.4 D; ORIENT 147.4D TO 152.4 D; ORIENT 237.4D TO 242.4 D; ORIENT 327.4D TO 332.4 D; AFTER 20-NOV-2024; ON HOLD ; TOO MAX RESPONSE TIME 30.0D

On Hold Comments: We would like this template observation to be scheduled at least 1 year after peak brightness of the SN. See timing requirements above.

Diagnostics

(SN2023WUK (A4)) Informational (Form): Target of Opportunity Minimum Response time is a required field.

Patterns

#	Primary Pattern		Secondary Pattern	Exposures
(1)	Pattern Type=LINE	Coordinate Frame=POS-TARG		(1-2), (7-8)
	Purpose=DITHER	Pattern Orientation=41.788		
	Number Of Points=2	Angle Between Sides=		
	Point Spacing=0.636	Center Pattern=false		
	Line Spacing=			

Fixed Targets

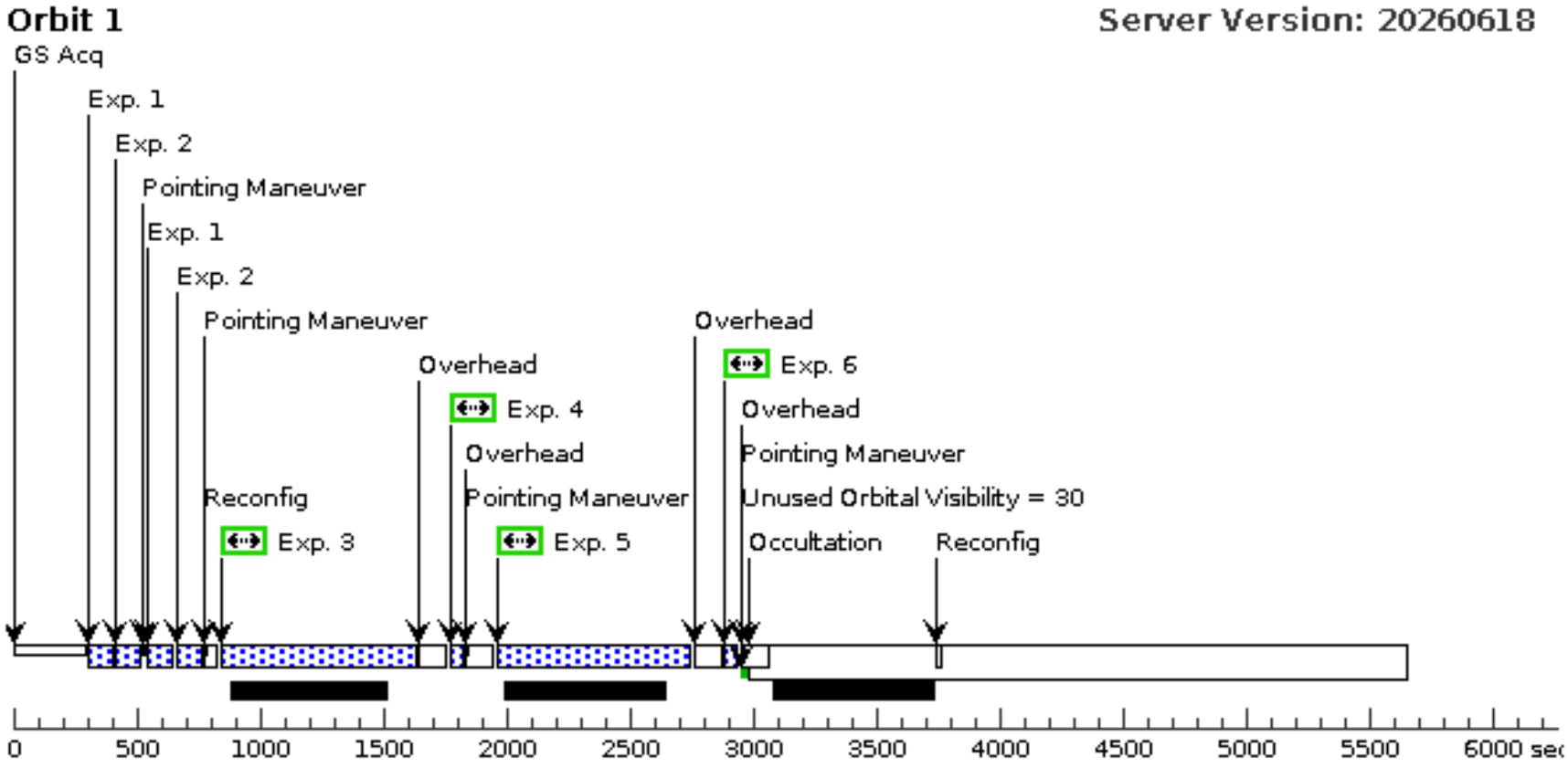
#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(204)	SN2023WUK	RA: 22 19 30.3900 (334.8766250d)		V=16.7+/-0.1	Reference Frame: ICRS
		Dec: +29 23 17.58 (29.38822d)			
		Equinox: J2000			

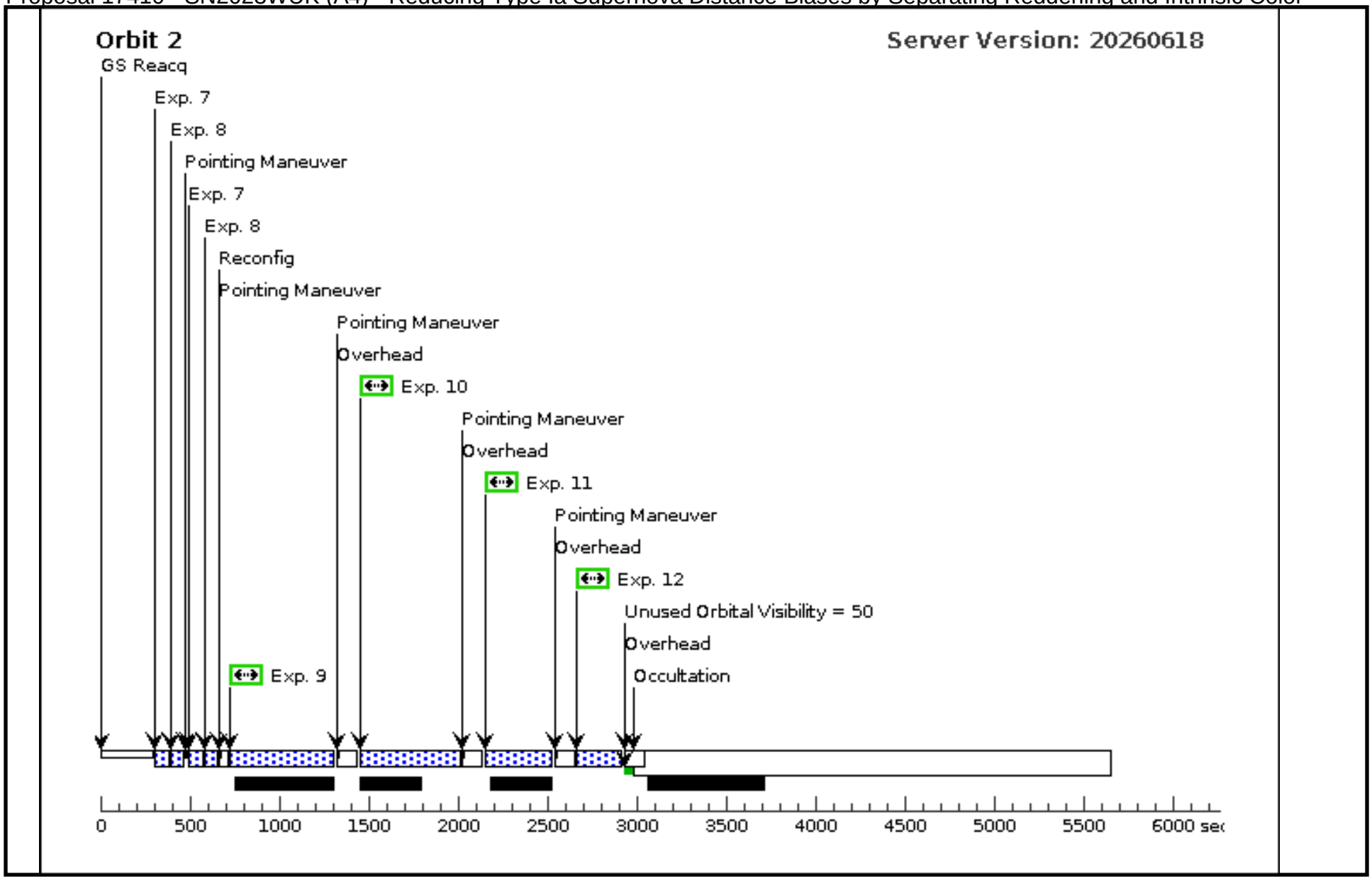
Comments: Past peak nearby (D ~ 30 Mpc) Type Ia supernova. Will fade significantly by time of observation.
Category=EXT-STAR
Description=[SUPERNOVA TYPE IA]
Extended=NO

Exposures

#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
1		(204) SN2023WUK	WFC3/IR, MULTIACCUM, IR-UVIS	F160W	NSAMP=7; SAMP-SEQ=STEP25		Pattern 1, Exps 1-2 in SN2023WUK (A4) (1)	74.230741 Secs (148.461 Secs) *[==>(Pattern 1)]* *[==>(Pattern 2)]*	***[1]***
2		(204) SN2023WUK	WFC3/IR, MULTIACCUM, IR-UVIS	F140W	NSAMP=7; SAMP-SEQ=STEP25		Pattern 1, Exps 1-2 in SN2023WUK (A4) (1)	74.230741 Secs (148.461 Secs) *[==>(Pattern 1)]* *[==>(Pattern 2)]*	***[1]***
3		(204) SN2023WUK	WFC3/UVIS, ACCUM, UVIS	F275W	FLASH=18	POS TARG 0.000,0.000		759 Secs (759 Secs) *[==>]*	***[1]***
4		(204) SN2023WUK	WFC3/UVIS, ACCUM, UVIS	F555W	FLASH=19	POS TARG 0.000,0.000		30 Secs (30 Secs) *[==>]*	***[1]***
5		(204) SN2023WUK	WFC3/UVIS, ACCUM, UVIS	F275W	FLASH=18	POS TARG 0.099,0.106		759 Secs (759 Secs) *[==>]*	***[1]***
6		(204) SN2023WUK	WFC3/UVIS, ACCUM, UVIS	F555W	FLASH=19	POS TARG 0.099,0.106		30 Secs (30 Secs) *[==>]*	***[1]***
7		(204) SN2023WUK	WFC3/IR, MULTIACCUM, IR-UVIS	F125W	NSAMP=6; SAMP-SEQ=STEP25		Pattern 1, Exps 7-8 in SN2023WUK (A4) (1)	49.230226 Secs (98.46 Secs) *[==>(Pattern 1)]* *[==>(Pattern 2)]*	***[2]***
8		(204) SN2023WUK	WFC3/IR, MULTIACCUM, IR-UVIS	F105W	NSAMP=6; SAMP-SEQ=STEP25		Pattern 1, Exps 7-8 in SN2023WUK (A4) (1)	49.230226 Secs (98.46 Secs) *[==>(Pattern 1)]* *[==>(Pattern 2)]*	***[2]***
9		(204) SN2023WUK	WFC3/UVIS, ACCUM, UVIS	F300X	FLASH=19	POS TARG 0.000,0.000		565 Secs (565 Secs) *[==>]*	***[2]***
10		(204) SN2023WUK	WFC3/UVIS, ACCUM, UVIS	F300X	FLASH=19	POS TARG 0.099,0.106		565 Secs (565 Secs) *[==>]*	***[2]***
11		(204) SN2023WUK	WFC3/UVIS, ACCUM, UVIS	F336W	FLASH=20	POS TARG 0.000,0.000		348 Secs (348 Secs) *[==>]*	***[2]***
12		(204) SN2023WUK	WFC3/UVIS, ACCUM, UVIS	F336W	FLASH=20	POS TARG 0.099,0.106		254 Secs (254 Secs) *[==>]*	***[2]***

Orbit Structure




Orbit 2
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GS Reacq
Exp. 7
Exp. 8
Pointing Maneuver
Exp. 7
Exp. 8
Reconfig
Pointing Maneuver
Pointing Maneuver
Overhead
Exp. 10
Pointing Maneuver
Overhead
Exp. 11
Pointing Maneuver
Overhead
Exp. 12
Unused Orbital Visibility = 50
Overhead
Occultation
Exp. 9
0
500
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1500
2000
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3000
3500
4000
4500
5000
5500
6000 sec

Visit

Proposal 17410, SN2022AEBW (24), completed Thu Jul 30 20:01:05 GMT 2026

Diagnostic Status: Informational

Scientific Instruments: WFC3/IR, WFC3/UVIS

Special Requirements: SCHED 70%; ORIENT 79.9D TO 84.9 D; ORIENT 169.9D TO 174.9 D; ORIENT 259.9D TO 267.4 D; ORIENT 349.9D TO 354.9 D; AFTER 01-JAN-2024; ON HOLD ; TOO MAX RESPONSE TIME 30.0D

On Hold Comments: We would like this template observation to be scheduled at least 1 year after peak brightness of the SN. See timing requirements above.

Diagnostics

(SN2022AEBW (24)) Informational (Form): Target of Opportunity Minimum Response time is a required field.

Patterns

#	Primary Pattern		Secondary Pattern	Exposures
(1)	Pattern Type=LINE Purpose=DITHER Number Of Points=2 Point Spacing=0.636 Line Spacing=	Coordinate Frame=POS-TARG Pattern Orientation=41.788 Angle Between Sides= Center Pattern=false		(1-4)
(3)	Pattern Type=WFC3-UVIS-DITHER-LINE Purpose=DITHER Number Of Points=2 Point Spacing=0.145 Line Spacing=	Coordinate Frame=POS-TARG Pattern Orientation=46.84 Angle Between Sides= Center Pattern=false		(6-7)

Fixed Targets

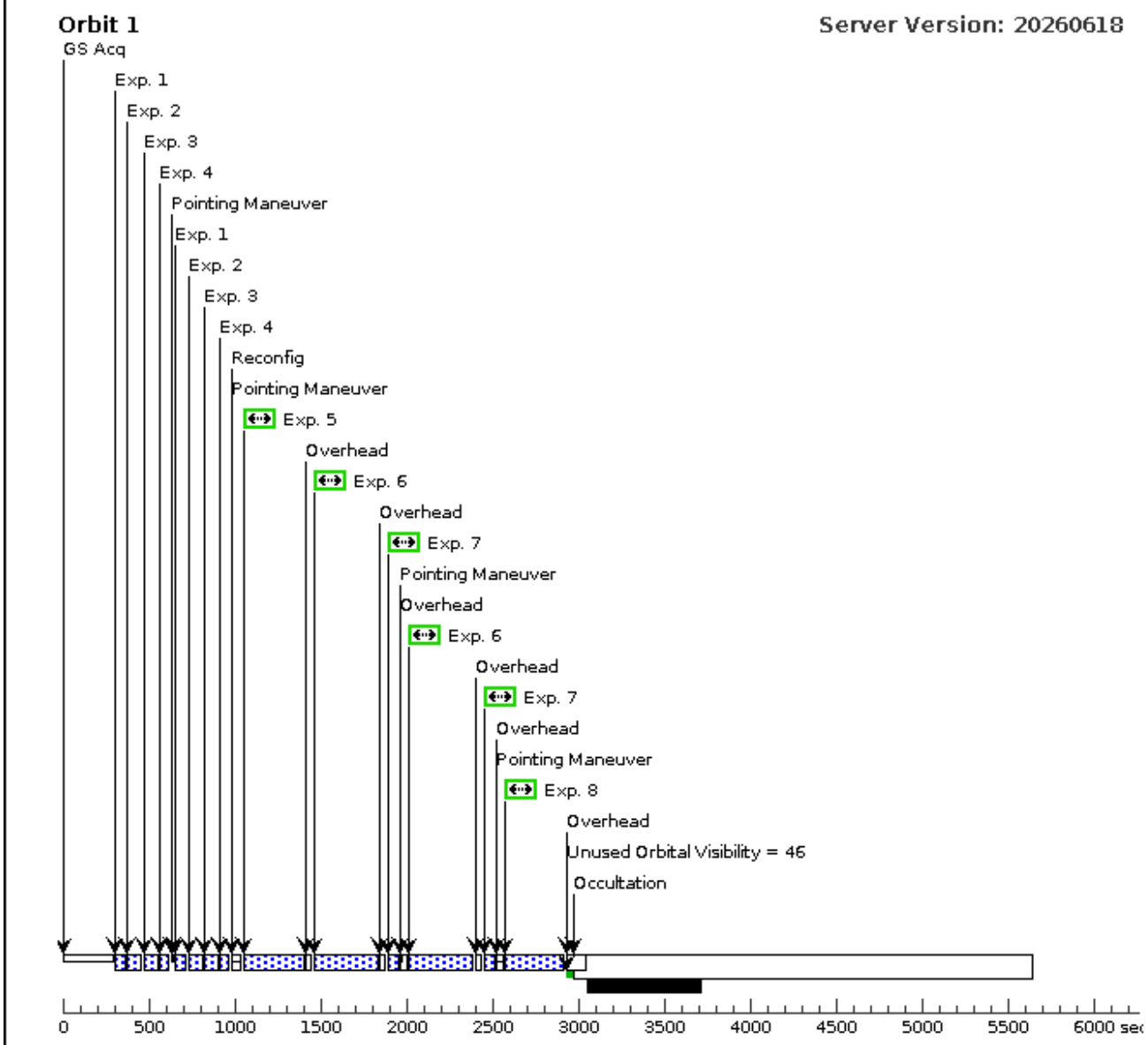
#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(124)	SN2022AEBW	RA: 08 38 46.7000 (129.6945833d) Dec: +05 16 47.20 (5.27978d) Equinox: J2000		V=18.6+/-0.1	Reference Frame: ICRS

Comments: Past-maximum Type Ia supernova. Will fade significantly by time of observation.
Category=EXT-STAR
Description=[SUPERNOVA TYPE IA]
Extended=NO

Exposures

#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
1		(124) SN2022AEBW	WFC3/IR, MULTIACCUM, IRSUB512	F125W	NSAMP=6; SAMP-SEQ=STEP25		Pattern 1, Exps 1-4 in SN2022AEBW (24) (1)	36.754642 Secs (73.509 Secs) *[==>(Pattern 1)]* *[==>(Pattern 2)]*	***[1]***
2		(124) SN2022AEBW	WFC3/IR, MULTIACCUM, IRSUB512	F140W	NSAMP=7; SAMP-SEQ=STEP25		Pattern 1, Exps 1-4 in SN2022AEBW (24) (1)	59.675893 Secs (119.352 Secs) *[==>(Pattern 1)]* *[==>(Pattern 2)]*	***[1]***
3		(124) SN2022AEBW	WFC3/IR, MULTIACCUM, IRSUB512	F160W	NSAMP=7; SAMP-SEQ=STEP25		Pattern 1, Exps 1-4 in SN2022AEBW (24) (1)	59.675893 Secs (119.352 Secs) *[==>(Pattern 1)]* *[==>(Pattern 2)]*	***[1]***
4		(124) SN2022AEBW	WFC3/IR, MULTIACCUM, IRSUB512	F105W	NSAMP=6; SAMP-SEQ=STEP25		Pattern 1, Exps 1-4 in SN2022AEBW (24) (1)	36.754642 Secs (73.509 Secs) *[==>(Pattern 1)]* *[==>(Pattern 2)]*	***[1]***
5		(124) SN2022AEBW	WFC3/UVIS, ACCUM, UVIS2-C512C-SUB	F336W	FLASH=20			323 Secs (323 Secs) *[==>]*	***[1]***
6		(124) SN2022AEBW	WFC3/UVIS, ACCUM, UVIS2-C512C-SUB	F300X	FLASH=20		Pattern 3, Exps 6-7 in SN2022AEBW (24) (3)	351 Secs (702 Secs) *[==>(Pattern 1)]* *[==>(Pattern 2)]*	***[1]***
7		(124) SN2022AEBW	WFC3/UVIS, ACCUM, UVIS2-C512C-SUB	F555W	FLASH=20		Pattern 3, Exps 6-7 in SN2022AEBW (24) (3)	30 Secs (60 Secs) *[==>(Pattern 1)]* *[==>(Pattern 2)]*	***[1]***
8		(124) SN2022AEBW	WFC3/UVIS, ACCUM, UVIS2-FIX	F336W	FLASH=20	POS TARG 0.099,0.106		324 Secs (324 Secs) *[==>]*	***[1]***

Orbit Structure



Visit

Proposal 17410, SN2022AEFD (25), failed Thu Jul 30 20:01:05 GMT 2026

Diagnostic Status: Informational

Scientific Instruments: WFC3/IR, WFC3/UVIS

Special Requirements: SCHED 70%; ORIENT 46.4D TO 51.4 D; ORIENT 136.4D TO 141.4 D; ORIENT 226.4D TO 231.4 D; ORIENT 316.4D TO 321.4 D; AFTER 07-JAN-2024; ON HOLD ; TOO MAX RESPONSE TIME 30.0D

On Hold Comments: We would like this template observation to be scheduled at least 1 year after peak brightness of the SN. See timing requirements above.

Diagnostics

(SN2022AEFD (25)) Informational (Form): Target of Opportunity Minimum Response time is a required field.

Patterns

#	Primary Pattern		Secondary Pattern	Exposures
(1)	Pattern Type=LINE Purpose=DITHER Number Of Points=2 Point Spacing=0.636 Line Spacing=	Coordinate Frame=POS-TARG Pattern Orientation=41.788 Angle Between Sides= Center Pattern=false		(1-4)
(3)	Pattern Type=WFC3-UVIS-DITHER-LINE Purpose=DITHER Number Of Points=2 Point Spacing=0.145 Line Spacing=	Coordinate Frame=POS-TARG Pattern Orientation=46.84 Angle Between Sides= Center Pattern=false		(6-7)

Fixed Targets

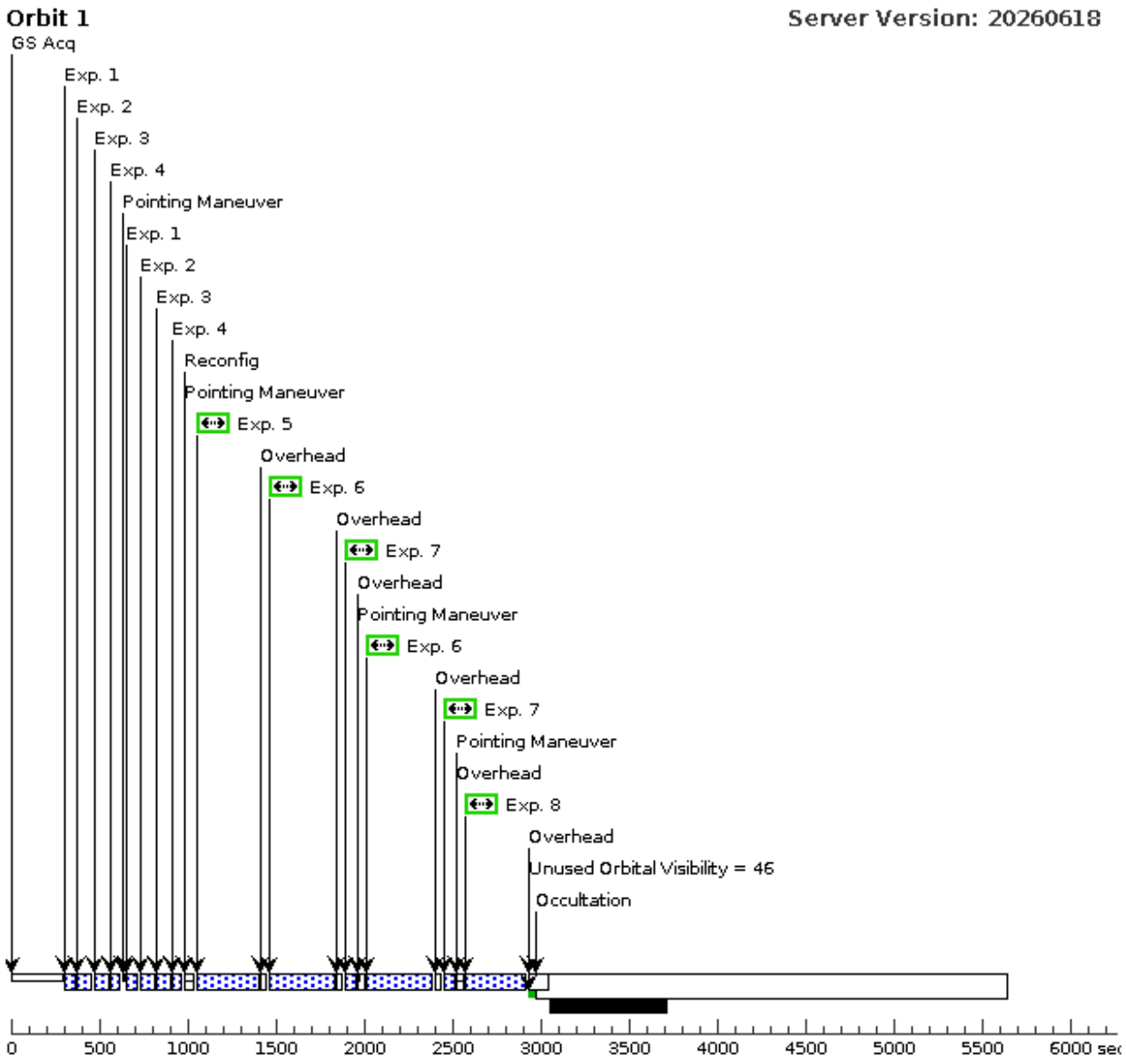
#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(125)	SN2022AEFD	RA: 08 16 56.4100 (124.2350417d) Dec: -07 15 25.18 (-7.25699d) Equinox: J2000		V=18.6+/-0.1	Reference Frame: ICRS

Comments: Post-maximum Type Ia supernova. Will fade significantly by time of observation.
Category=EXT-STAR
Description=[SUPERNOVA TYPE IA]
Extended=NO

Exposures

#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
1		(125) SN2022AEFD	WFC3/IR, MULTIACCUM, IRSUB512	F125W	NSAMP=6; SAMP-SEQ=STEP25		Pattern 1, Exps 1-4 in SN2022AEFD (25) (1)	36.754642 Secs (73.509 Secs) *[==>(Pattern 1)]* *[==>(Pattern 2)]*	***[1]***
2		(125) SN2022AEFD	WFC3/IR, MULTIACCUM, IRSUB512	F140W	NSAMP=7; SAMP-SEQ=STEP25		Pattern 1, Exps 1-4 in SN2022AEFD (25) (1)	59.675893 Secs (119.352 Secs) *[==>(Pattern 1)]* *[==>(Pattern 2)]*	***[1]***
3		(125) SN2022AEFD	WFC3/IR, MULTIACCUM, IRSUB512	F160W	NSAMP=7; SAMP-SEQ=STEP25		Pattern 1, Exps 1-4 in SN2022AEFD (25) (1)	59.675893 Secs (119.352 Secs) *[==>(Pattern 1)]* *[==>(Pattern 2)]*	***[1]***
4		(125) SN2022AEFD	WFC3/IR, MULTIACCUM, IRSUB512	F105W	NSAMP=6; SAMP-SEQ=STEP25		Pattern 1, Exps 1-4 in SN2022AEFD (25) (1)	36.754642 Secs (73.509 Secs) *[==>(Pattern 1)]* *[==>(Pattern 2)]*	***[1]***
5		(125) SN2022AEFD	WFC3/UVIS, ACCUM, UVIS2-C512C-SUB	F336W	FLASH=20			323 Secs (323 Secs) *[==>]*	***[1]***
6		(125) SN2022AEFD	WFC3/UVIS, ACCUM, UVIS2-C512C-SUB	F300X	FLASH=20		Pattern 3, Exps 6-7 in SN2022AEFD (25) (3)	351 Secs (702 Secs) *[==>(Pattern 1)]* *[==>(Pattern 2)]*	***[1]***
7		(125) SN2022AEFD	WFC3/UVIS, ACCUM, UVIS2-C512C-SUB	F555W	FLASH=20		Pattern 3, Exps 6-7 in SN2022AEFD (25) (3)	30 Secs (60 Secs) *[==>(Pattern 1)]* *[==>(Pattern 2)]*	***[1]***
8		(125) SN2022AEFD	WFC3/UVIS, ACCUM, UVIS2-FIX	F336W	FLASH=20	POS TARG 0.099,0.106		324 Secs (324 Secs) *[==>]*	***[1]***

Orbit Structure



Visit

Proposal 17410, SN2022AEFD-repeat (B5), completed Thu Jul 30 20:01:05 GMT 2026

Diagnostic Status: Informational

Scientific Instruments: WFC3/UVIS

Special Requirements: SCHED 70%; ORIENT 46.4D TO 51.4 D; ORIENT 136.4D TO 141.4 D; ORIENT 226.4D TO 231.4 D; ORIENT 316.4D TO 321.4 D; AFTER 07-JAN-2024; ON HOLD ; TOO MAX RESPONSE TIME 30.0D

Comments: Repeating vist 25 as approved by HOPR.

On Hold Comments: We would like this template observation to be scheduled at least 1 year after peak brightness of the SN. See timing requirements above.

Diagnostics

(SN2022AEFD-repeat (B5)) Informational (Form): Target of Opportunity Minimum Response time is a required field.

Patterns

#	Primary Pattern		Secondary Pattern	Exposures
(3)	Pattern Type=WFC3-UVIS-DITHER-LINE Purpose=DITHER Number Of Points=2 Point Spacing=0.145 Line Spacing=	Coordinate Frame=POS-TARG Pattern Orientation=46.84 Angle Between Sides= Center Pattern=false		(2-3)

Fixed Targets

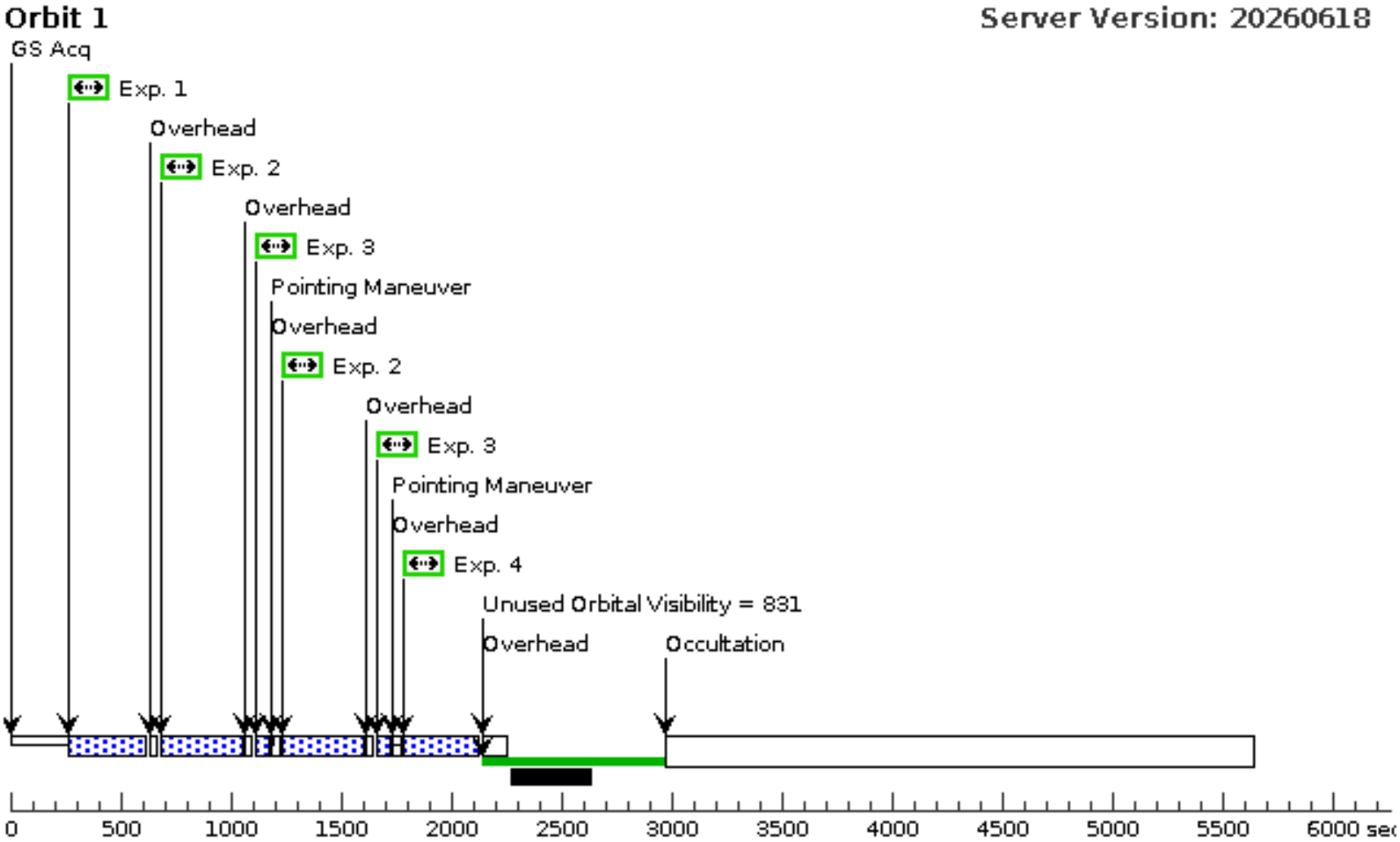
#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(125)	SN2022AEFD	RA: 08 16 56.4100 (124.2350417d) Dec: -07 15 25.18 (-7.25699d) Equinox: J2000		V=18.6+/-0.1	Reference Frame: ICRS

Comments: Post-maximum Type Ia supernova. Will fade significantly by time of observation.
Category=EXT-STAR
Description=[SUPERNOVA TYPE IA]
Extended=NO

Exposures

#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
1		(125) SN2022AEFD	WFC3/UVIS, ACCUM, UVIS2-C512C-SUB	F336W	FLASH=20			323 Secs (323 Secs)	
								[==>]	***[1]***
2		(125) SN2022AEFD	WFC3/UVIS, ACCUM, UVIS2-C512C-SUB	F300X	FLASH=20		Pattern 3, Exps 2-3 in SN2022AEFD-repeat (B5) (3)	351 Secs (702 Secs)	
								[==>(Pattern 1)] *[==>(Pattern 2)]*	***[1]***
3		(125) SN2022AEFD	WFC3/UVIS, ACCUM, UVIS2-C512C-SUB	F555W	FLASH=20		Pattern 3, Exps 2-3 in SN2022AEFD-repeat (B5) (3)	30 Secs (60 Secs)	
								[==>(Pattern 1)] *[==>(Pattern 2)]*	***[1]***
4		(125) SN2022AEFD	WFC3/UVIS, ACCUM, UVIS2-FIX	F336W	FLASH=20	POS TARG 0.099,0.106		324 Secs (324 Secs)	
								[==>]	***[1]***

Orbit Structure



Visit

Proposal 17410, SN2022ZSN (04), completed Thu Jul 30 20:01:05 GMT 2026

Diagnostic Status: Informational

Scientific Instruments: WFC3/IR, WFC3/UVIS

Special Requirements: SCHED 70%; ORIENT 241.7D TO 246.7 D; ORIENT 331.7D TO 336.7 D; ORIENT 151.7D TO 156.7 D; ORIENT 61.7D TO 66.7 D; AFTER 19-NOV-2023; ON HOLD ; TOO MAX RESPONSE TIME 30.0D

On Hold Comments: We would like this template observation to be scheduled at least 1 year after peak brightness of the SN. See timing requirements above.

Diagnostics

(SN2022ZSN (04)) Informational (Form): Target of Opportunity Minimum Response time is a required field.

Patterns

#	Primary Pattern		Secondary Pattern	Exposures
(1)	Pattern Type=LINE Purpose=DITHER Number Of Points=2 Point Spacing=0.636 Line Spacing=	Coordinate Frame=POS-TARG Pattern Orientation=41.788 Angle Between Sides= Center Pattern=false		(1-4)
(3)	Pattern Type=WFC3-UVIS-DITHER-LINE Purpose=DITHER Number Of Points=2 Point Spacing=0.145 Line Spacing=	Coordinate Frame=POS-TARG Pattern Orientation=46.84 Angle Between Sides= Center Pattern=false		(6-7)

Fixed Targets

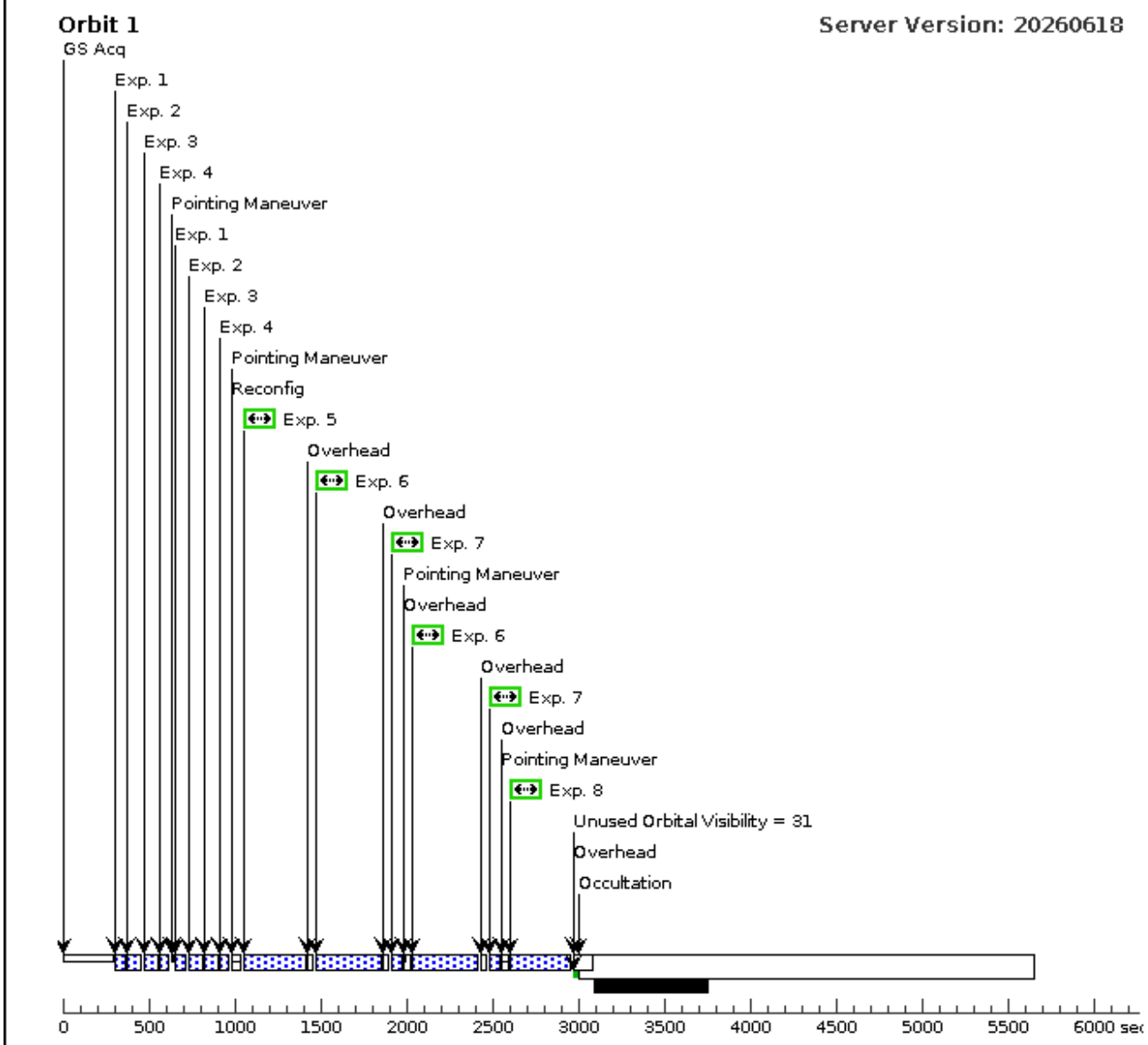
#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(104)	SN2022ZSN	RA: 08 38 52.6800 (129.7195000d) Dec: +43 29 42.48 (43.49513d) Equinox: J2000		V=17.1+/-0.1	Reference Frame: ICRS

Comments: At peak Type Ia supernova. Will fade significantly by time of observation.
Category=EXT-STAR
Description=[SUPERNOVA TYPE IA]
Extended=NO

Exposures

#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
1		(104) SN2022ZSN	WFC3/IR, MULTIACCUM, IRSUB512	F125W	NSAMP=6; SAMP-SEQ=STEP25		Pattern 1, Exps 1-4 in SN2022ZSN (04) (1)	36.754642 Secs (73.509 Secs) *[==>(Pattern 1)]* *[==>(Pattern 2)]*	***[1]***
2		(104) SN2022ZSN	WFC3/IR, MULTIACCUM, IRSUB512	F140W	NSAMP=7; SAMP-SEQ=STEP25		Pattern 1, Exps 1-4 in SN2022ZSN (04) (1)	59.675893 Secs (119.352 Secs) *[==>(Pattern 1)]* *[==>(Pattern 2)]*	***[1]***
3		(104) SN2022ZSN	WFC3/IR, MULTIACCUM, IRSUB512	F160W	NSAMP=7; SAMP-SEQ=STEP25		Pattern 1, Exps 1-4 in SN2022ZSN (04) (1)	59.675893 Secs (119.352 Secs) *[==>(Pattern 1)]* *[==>(Pattern 2)]*	***[1]***
4		(104) SN2022ZSN	WFC3/IR, MULTIACCUM, IRSUB512	F105W	NSAMP=6; SAMP-SEQ=STEP25		Pattern 1, Exps 1-4 in SN2022ZSN (04) (1)	36.754642 Secs (73.509 Secs) *[==>(Pattern 1)]* *[==>(Pattern 2)]*	***[1]***
5		(104) SN2022ZSN	WFC3/UVIS, ACCUM, UVIS2-C512C-SUB	F336W	FLASH=20			334 Secs (334 Secs) *[==>]*	***[1]***
6		(104) SN2022ZSN	WFC3/UVIS, ACCUM, UVIS2-C512C-SUB	F300X	FLASH=20		Pattern 3, Exps 6-7 in SN2022ZSN (04) (3)	360 Secs (720 Secs) *[==>(Pattern 1)]* *[==>(Pattern 2)]*	***[1]***
7		(104) SN2022ZSN	WFC3/UVIS, ACCUM, UVIS2-C512C-SUB	F555W	FLASH=20		Pattern 3, Exps 6-7 in SN2022ZSN (04) (3)	30 Secs (60 Secs) *[==>(Pattern 1)]* *[==>(Pattern 2)]*	***[1]***
8		(104) SN2022ZSN	WFC3/UVIS, ACCUM, UVIS2-FIX	F336W	FLASH=20	POS TARG 0.099,0.106		334 Secs (334 Secs) *[==>]*	***[1]***

Orbit Structure



Visit

Proposal 17410, SN2023GUY (46), completed Thu Jul 30 20:01:05 GMT 2026

Diagnostic Status: Informational

Scientific Instruments: WFC3/IR, WFC3/UVIS

Special Requirements: SCHED 70%; ORIENT 24.4D TO 29.4 D; ORIENT 114.4D TO 119.4 D; ORIENT 204.4D TO 209.4 D; ORIENT 294.4D TO 299.4 D; AFTER 14-MAY-2024; ON HOLD ; TOO MAX RESPONSE TIME 30.0D

On Hold Comments: We would like this template observation to be scheduled at least 1 year after peak brightness of the SN. See timing requirements above.

Diagnostics

(SN2023GUY (46)) Informational (Form): Target of Opportunity Minimum Response time is a required field.

Patterns

#	Primary Pattern		Secondary Pattern	Exposures
(1)	Pattern Type=LINE Purpose=DITHER Number Of Points=2 Point Spacing=0.636 Line Spacing=	Coordinate Frame=POS-TARG Pattern Orientation=41.788 Angle Between Sides= Center Pattern=false		(1-4)
(3)	Pattern Type=WFC3-UVIS-DITHER-LINE Purpose=DITHER Number Of Points=2 Point Spacing=0.145 Line Spacing=	Coordinate Frame=POS-TARG Pattern Orientation=46.84 Angle Between Sides= Center Pattern=false		(6-7)

Fixed Targets

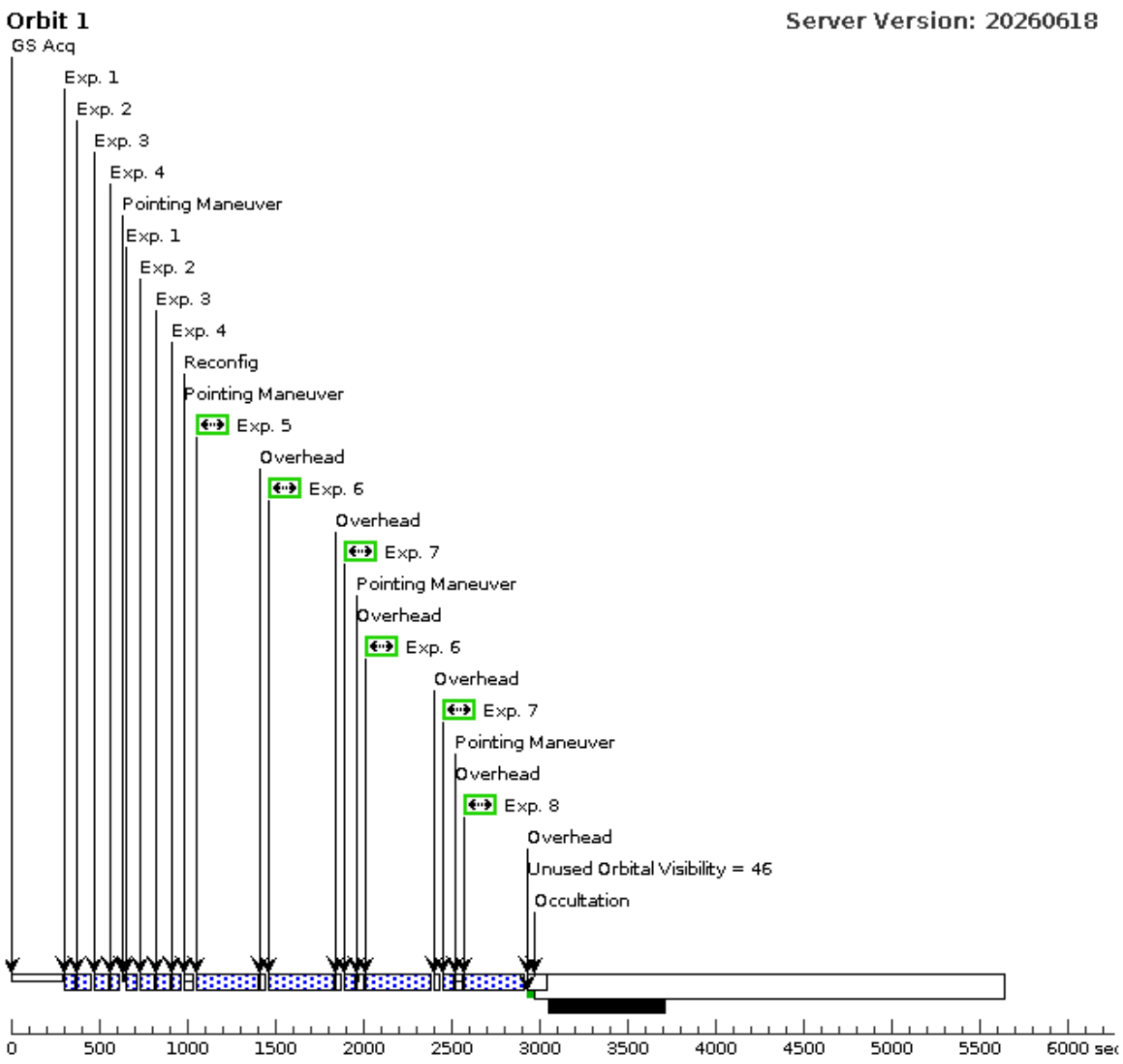
#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(146)	SN2023GUY	RA: 12 55 55.4100 (193.9808750d) Dec: +07 55 50.39 (7.93066d) Equinox: J2000		V=17.2+/-0.1	Reference Frame: ICRS

Comments: Post-maximum Type Ia supernova. Will fade significantly by time of observation.
Category=EXT-STAR
Description=[SUPERNOVA TYPE IA]
Extended=NO

Exposures

#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
1		(146) SN2023GUY	WFC3/IR, MULTIACCUM, IRSUB512	F125W	NSAMP=6; SAMP-SEQ=STEP25		Pattern 1, Exps 1-4 in SN2023GUY (46) (1)	36.754642 Secs (73.509 Secs) *[==>(Pattern 1)]* *[==>(Pattern 2)]*	 ***[1]***
2		(146) SN2023GUY	WFC3/IR, MULTIACCUM, IRSUB512	F140W	NSAMP=7; SAMP-SEQ=STEP25		Pattern 1, Exps 1-4 in SN2023GUY (46) (1)	59.675893 Secs (119.352 Secs) *[==>(Pattern 1)]* *[==>(Pattern 2)]*	 ***[1]***
3		(146) SN2023GUY	WFC3/IR, MULTIACCUM, IRSUB512	F160W	NSAMP=7; SAMP-SEQ=STEP25		Pattern 1, Exps 1-4 in SN2023GUY (46) (1)	59.675893 Secs (119.352 Secs) *[==>(Pattern 1)]* *[==>(Pattern 2)]*	 ***[1]***
4		(146) SN2023GUY	WFC3/IR, MULTIACCUM, IRSUB512	F105W	NSAMP=6; SAMP-SEQ=STEP25		Pattern 1, Exps 1-4 in SN2023GUY (46) (1)	36.754642 Secs (73.509 Secs) *[==>(Pattern 1)]* *[==>(Pattern 2)]*	 ***[1]***
5		(146) SN2023GUY	WFC3/UVIS, ACCUM, UVIS2-C512C-SUB	F336W	FLASH=20			323 Secs (323 Secs) *[==>]*	 ***[1]***
6		(146) SN2023GUY	WFC3/UVIS, ACCUM, UVIS2-C512C-SUB	F300X	FLASH=20		Pattern 3, Exps 6-7 in SN2023GUY (46) (3)	351 Secs (702 Secs) *[==>(Pattern 1)]* *[==>(Pattern 2)]*	 ***[1]***
7		(146) SN2023GUY	WFC3/UVIS, ACCUM, UVIS2-C512C-SUB	F555W	FLASH=20		Pattern 3, Exps 6-7 in SN2023GUY (46) (3)	30 Secs (60 Secs) *[==>(Pattern 1)]* *[==>(Pattern 2)]*	 ***[1]***
8		(146) SN2023GUY	WFC3/UVIS, ACCUM, UVIS2-FIX	F336W	FLASH=20	POS TARG 0.099,0.106		324 Secs (324 Secs) *[==>]*	 ***[1]***

Orbit Structure



Visit

Proposal 17410, SN2022ADCF (16), completed Thu Jul 30 20:01:05 GMT 2026

Diagnostic Status: Informational

Scientific Instruments: WFC3/IR, WFC3/UVIS

Special Requirements: SCHED 70%; ORIENT 289.5D TO 294.5 D; ORIENT 199.5D TO 204.5 D; ORIENT 109.5D TO 114.5 D; ORIENT 19.5D TO 24.5 D; AFTER 27-DEC-2023; ON HOLD ; TOO MAX RESPONSE TIME 30.0D

On Hold Comments: We would like this template observation to be scheduled at least 1 year after peak brightness of the SN. See timing requirements above.

Diagnostics

(SN2022ADCF (16)) Informational (Form): Target of Opportunity Minimum Response time is a required field.

Patterns

#	Primary Pattern		Secondary Pattern	Exposures
(1)	Pattern Type=LINE Purpose=DITHER Number Of Points=2 Point Spacing=0.636 Line Spacing=	Coordinate Frame=POS-TARG Pattern Orientation=41.788 Angle Between Sides= Center Pattern=false		(1-4)
(3)	Pattern Type=WFC3-UVIS-DITHER-LINE Purpose=DITHER Number Of Points=2 Point Spacing=0.145 Line Spacing=	Coordinate Frame=POS-TARG Pattern Orientation=46.84 Angle Between Sides= Center Pattern=false		(6-7)

Fixed Targets

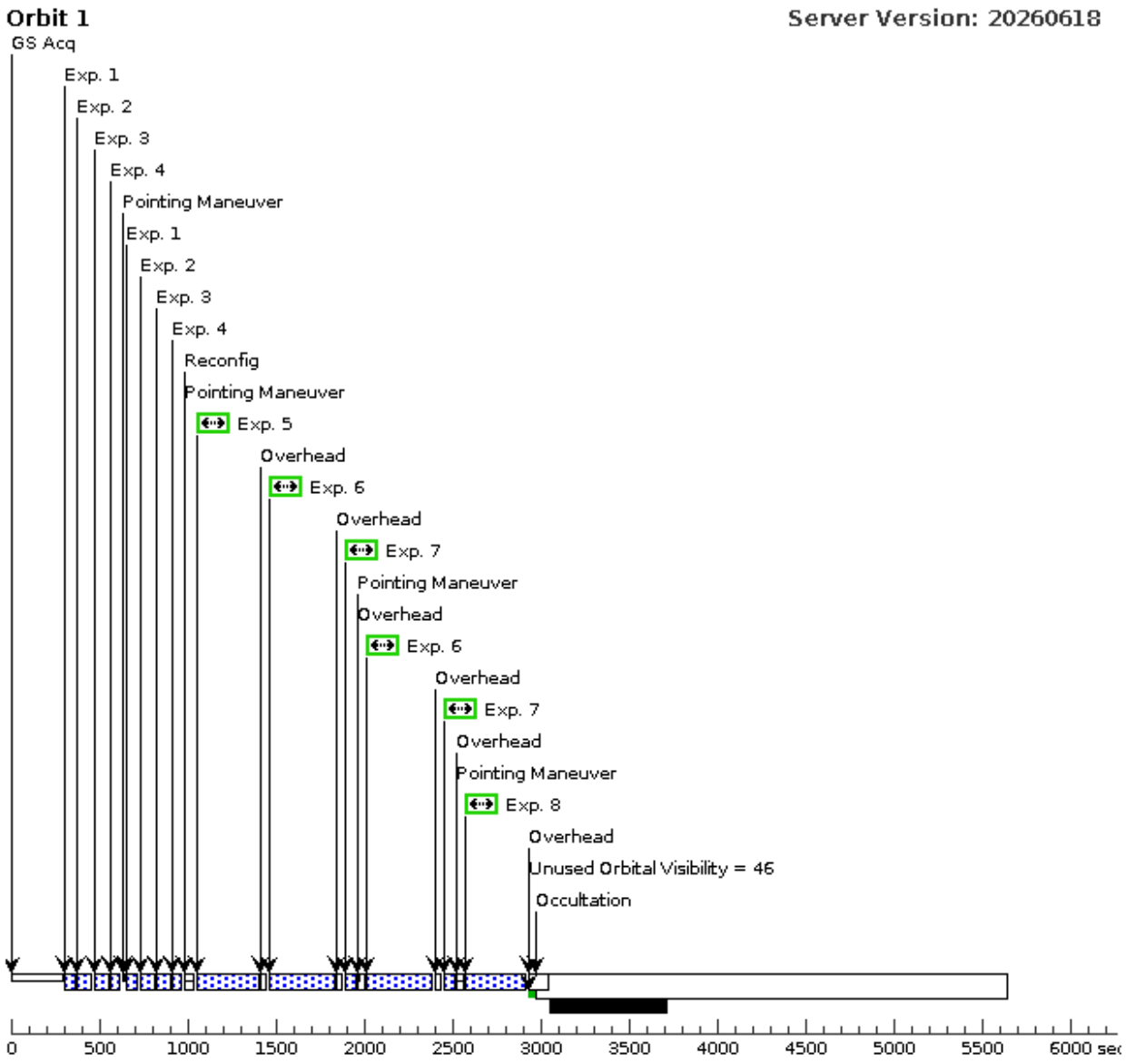
#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(116)	SN2022ADCF	RA: 10 24 52.2900 (156.2178750d) Dec: +09 35 36.70 (9.59353d) Equinox: J2000		V=16.7+/-0.1	Reference Frame: ICRS

Comments: Pre-maximum Type Ia supernova. Will fade significantly by time of observation.
Category=EXT-STAR
Description=[SUPERNOVA TYPE IA]
Extended=NO

Exposures

#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
1		(116) SN2022ADCF	WFC3/IR, MULTIACCUM, IRSUB512	F125W	NSAMP=6; SAMP-SEQ=STEP25		Pattern 1, Exps 1-4 in SN2022ADCF (16) (1)	36.754642 Secs (73.509 Secs) *[==>(Pattern 1)]* *[==>(Pattern 2)]*	***[1]***
2		(116) SN2022ADCF	WFC3/IR, MULTIACCUM, IRSUB512	F140W	NSAMP=7; SAMP-SEQ=STEP25		Pattern 1, Exps 1-4 in SN2022ADCF (16) (1)	59.675893 Secs (119.352 Secs) *[==>(Pattern 1)]* *[==>(Pattern 2)]*	***[1]***
3		(116) SN2022ADCF	WFC3/IR, MULTIACCUM, IRSUB512	F160W	NSAMP=7; SAMP-SEQ=STEP25		Pattern 1, Exps 1-4 in SN2022ADCF (16) (1)	59.675893 Secs (119.352 Secs) *[==>(Pattern 1)]* *[==>(Pattern 2)]*	***[1]***
4		(116) SN2022ADCF	WFC3/IR, MULTIACCUM, IRSUB512	F105W	NSAMP=6; SAMP-SEQ=STEP25		Pattern 1, Exps 1-4 in SN2022ADCF (16) (1)	36.754642 Secs (73.509 Secs) *[==>(Pattern 1)]* *[==>(Pattern 2)]*	***[1]***
5		(116) SN2022ADCF	WFC3/UVIS, ACCUM, UVIS2-C512C-SUB	F336W	FLASH=20			323 Secs (323 Secs) *[==>]*	***[1]***
6		(116) SN2022ADCF	WFC3/UVIS, ACCUM, UVIS2-C512C-SUB	F300X	FLASH=20		Pattern 3, Exps 6-7 in SN2022ADCF (16) (3)	351 Secs (702 Secs) *[==>(Pattern 1)]* *[==>(Pattern 2)]*	***[1]***
7		(116) SN2022ADCF	WFC3/UVIS, ACCUM, UVIS2-C512C-SUB	F555W	FLASH=20		Pattern 3, Exps 6-7 in SN2022ADCF (16) (3)	30 Secs (60 Secs) *[==>(Pattern 1)]* *[==>(Pattern 2)]*	***[1]***
8		(116) SN2022ADCF	WFC3/UVIS, ACCUM, UVIS2-FIX	F336W	FLASH=20	POS TARG 0.099,0.106		324 Secs (324 Secs) *[==>]*	***[1]***

Orbit Structure



Visit

Proposal 17410, SN2023JVT (64), failed Thu Jul 30 20:01:05 GMT 2026

Diagnostic Status: Informational

Scientific Instruments: WFC3/IR, WFC3/UVIS

Special Requirements: SCHED 70%; ORIENT 21.8D TO 26.8 D; ORIENT 111.8D TO 116.8 D; ORIENT 201.8D TO 206.8 D; ORIENT 291.8D TO 296.8 D; AFTER 19-JUN-2024; ON HOLD ; TOO MAX RESPONSE TIME 30.0D

On Hold Comments: We would like this template observation to be scheduled at least 1 year after peak brightness of the SN. See timing requirements above.

Diagnostics

(SN2023JVT (64)) Informational (Form): Target of Opportunity Minimum Response time is a required field.

Patterns

#	Primary Pattern		Secondary Pattern	Exposures
(1)	Pattern Type=LINE Purpose=DITHER Number Of Points=2 Point Spacing=0.636 Line Spacing=	Coordinate Frame=POS-TARG Pattern Orientation=41.788 Angle Between Sides= Center Pattern=false		(1-4)
(3)	Pattern Type=WFC3-UVIS-DITHER-LINE Purpose=DITHER Number Of Points=2 Point Spacing=0.145 Line Spacing=	Coordinate Frame=POS-TARG Pattern Orientation=46.84 Angle Between Sides= Center Pattern=false		(6-7)

Fixed Targets

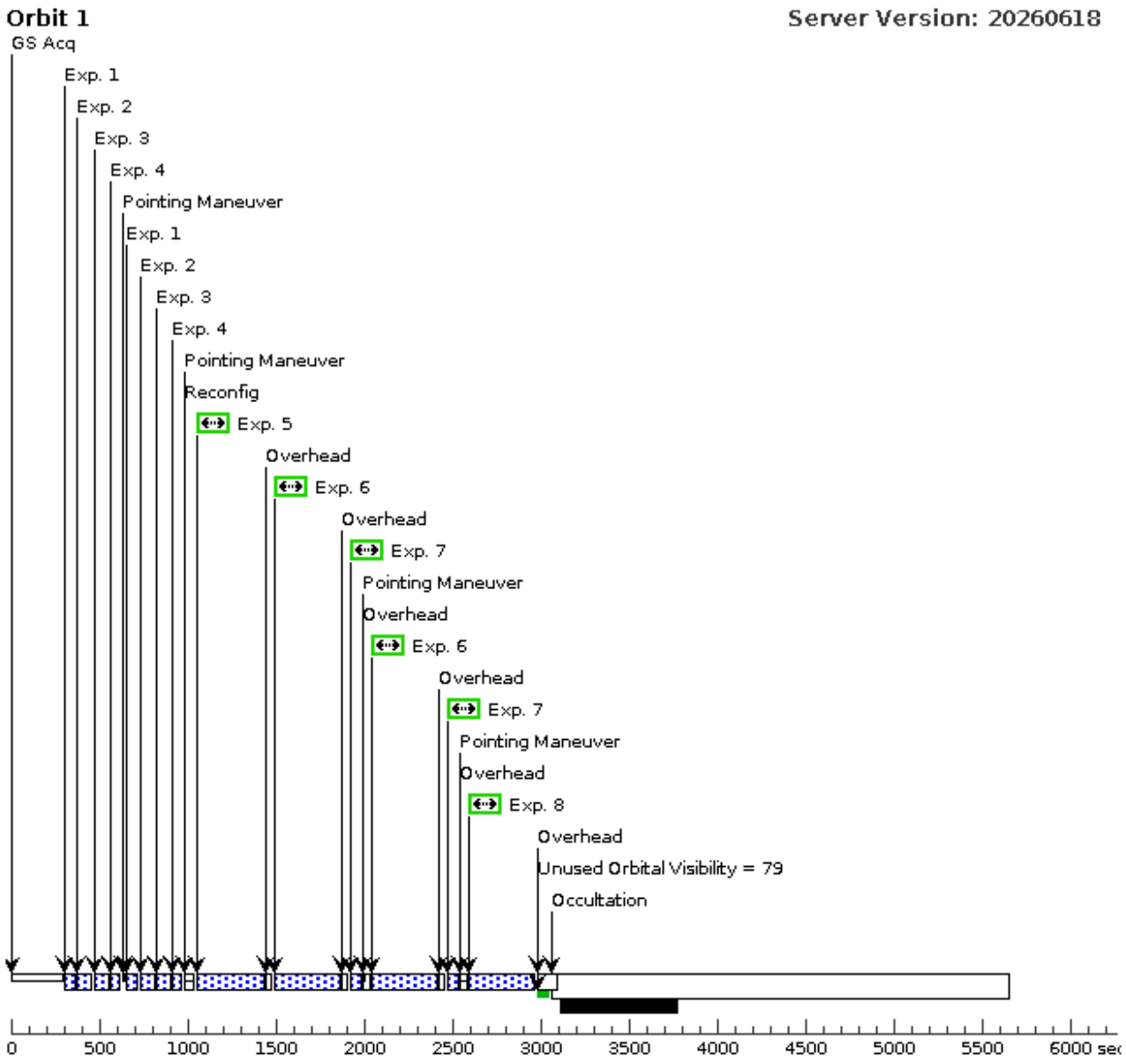
#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(164)	SN2023JVT	RA: 15 22 32.7600 (230.6365000d) Dec: +64 51 42.35 (64.86176d) Equinox: J2000		V=17.5+/-0.1	Reference Frame: ICRS

Comments: Post-maximum Type Ia supernova. Will fade significantly by time of observation.
Category=EXT-STAR
Description=[SUPERNOVA TYPE IA]
Extended=NO

Exposures

#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
1		(164) SN2023JVT	WFC3/IR, MULTIACCUM, IRSUB512	F125W	NSAMP=6; SAMP-SEQ=STEP25		Pattern 1, Exps 1-4 in SN2023JVT (64) (1)	36.754642 Secs (73.509 Secs) *[==>(Pattern 1)]* *[==>(Pattern 2)]*	 ***[1]***
2		(164) SN2023JVT	WFC3/IR, MULTIACCUM, IRSUB512	F140W	NSAMP=7; SAMP-SEQ=STEP25		Pattern 1, Exps 1-4 in SN2023JVT (64) (1)	59.675893 Secs (119.352 Secs) *[==>(Pattern 1)]* *[==>(Pattern 2)]*	 ***[1]***
3		(164) SN2023JVT	WFC3/IR, MULTIACCUM, IRSUB512	F160W	NSAMP=7; SAMP-SEQ=STEP25		Pattern 1, Exps 1-4 in SN2023JVT (64) (1)	59.675893 Secs (119.352 Secs) *[==>(Pattern 1)]* *[==>(Pattern 2)]*	 ***[1]***
4		(164) SN2023JVT	WFC3/IR, MULTIACCUM, IRSUB512	F105W	NSAMP=6; SAMP-SEQ=STEP25		Pattern 1, Exps 1-4 in SN2023JVT (64) (1)	36.754642 Secs (73.509 Secs) *[==>(Pattern 1)]* *[==>(Pattern 2)]*	 ***[1]***
5		(164) SN2023JVT	WFC3/UVIS, ACCUM, UVIS2-C512C-SUB	F336W	FLASH=20			350 Secs (350 Secs) *[==>]*	 ***[1]***
6		(164) SN2023JVT	WFC3/UVIS, ACCUM, UVIS2-C512C-SUB	F300X	FLASH=20		Pattern 3, Exps 6-7 in SN2023JVT (64) (3)	351 Secs (702 Secs) *[==>(Pattern 1)]* *[==>(Pattern 2)]*	 ***[1]***
7		(164) SN2023JVT	WFC3/UVIS, ACCUM, UVIS2-C512C-SUB	F555W	FLASH=20		Pattern 3, Exps 6-7 in SN2023JVT (64) (3)	30 Secs (60 Secs) *[==>(Pattern 1)]* *[==>(Pattern 2)]*	 ***[1]***
8		(164) SN2023JVT	WFC3/UVIS, ACCUM, UVIS2-FIX	F336W	FLASH=20	POS TARG 0.099,0.106		351 Secs (351 Secs) *[==>]*	 ***[1]***

Orbit Structure



Visit

Proposal 17410, SN2023JVT (F4), implementation Thu Jul 30 20:01:05 GMT 2026

Diagnostic Status: No Diagnostics

Scientific Instruments: WFC3/IR, WFC3/UVIS

Special Requirements: SCHED 70%; ORIENT 21.8D TO 26.8 D; ORIENT 111.8D TO 116.8 D; ORIENT 201.8D TO 206.8 D; ORIENT 291.8D TO 296.8 D; TOO MIN RESPONSE TIME 30.0D; TOO MAX RESPONSE TIME 300.0D

Comments: Duplicate of visit 64 which failed

Patterns

#	Primary Pattern		Secondary Pattern	Exposures
(1)	Pattern Type=LINE Purpose=DITHER Number Of Points=2 Point Spacing=0.636 Line Spacing=	Coordinate Frame=POS-TARG Pattern Orientation=41.788 Angle Between Sides= Center Pattern=false		(1-4)
(3)	Pattern Type=WFC3-UVIS-DITHER-LINE Purpose=DITHER Number Of Points=2 Point Spacing=0.145 Line Spacing=	Coordinate Frame=POS-TARG Pattern Orientation=46.84 Angle Between Sides= Center Pattern=false		(6-7)

Fixed Targets

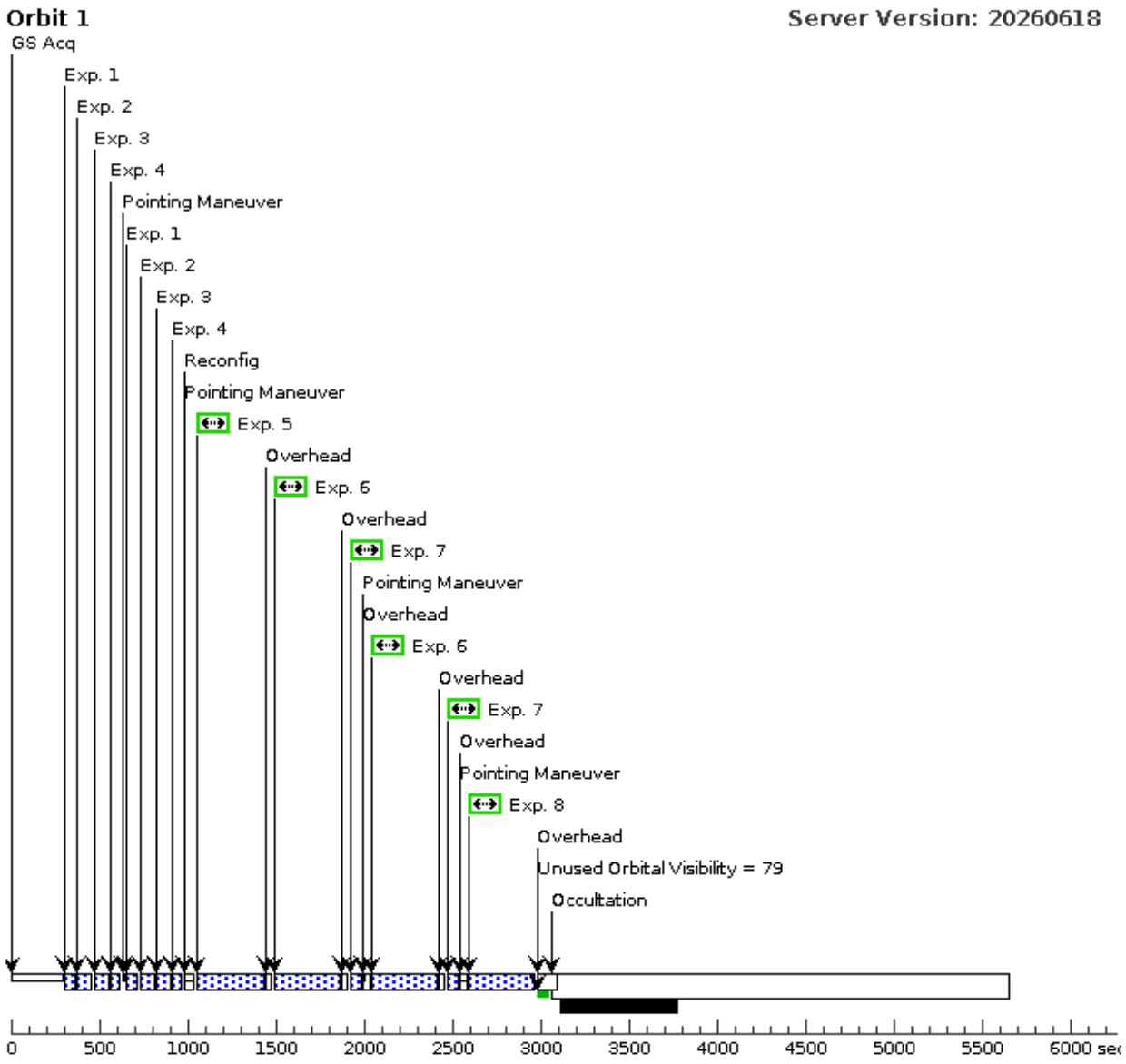
#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(164)	SN2023JVT	RA: 15 22 32.7600 (230.6365000d) Dec: +64 51 42.35 (64.86176d) Equinox: J2000		V=17.5+/-0.1	Reference Frame: ICRS

Comments: Post-maximum Type Ia supernova. Will fade significantly by time of observation.
Category=EXT-STAR
Description=[SUPERNOVA TYPE IA]
Extended=NO

Exposures

#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
1		(164) SN2023JVT	WFC3/IR, MULTIACCUM, IRSUB512	F125W	NSAMP=6; SAMP-SEQ=STEP25		Pattern 1, Exps 1-4 in SN2023JVT (F4) (1)	36.754642 Secs (73.509 Secs) *[==>(Pattern 1)]* *[==>(Pattern 2)]*	***[1]***
2		(164) SN2023JVT	WFC3/IR, MULTIACCUM, IRSUB512	F140W	NSAMP=7; SAMP-SEQ=STEP25		Pattern 1, Exps 1-4 in SN2023JVT (F4) (1)	59.675893 Secs (119.352 Secs) *[==>(Pattern 1)]* *[==>(Pattern 2)]*	***[1]***
3		(164) SN2023JVT	WFC3/IR, MULTIACCUM, IRSUB512	F160W	NSAMP=7; SAMP-SEQ=STEP25		Pattern 1, Exps 1-4 in SN2023JVT (F4) (1)	59.675893 Secs (119.352 Secs) *[==>(Pattern 1)]* *[==>(Pattern 2)]*	***[1]***
4		(164) SN2023JVT	WFC3/IR, MULTIACCUM, IRSUB512	F105W	NSAMP=6; SAMP-SEQ=STEP25		Pattern 1, Exps 1-4 in SN2023JVT (F4) (1)	36.754642 Secs (73.509 Secs) *[==>(Pattern 1)]* *[==>(Pattern 2)]*	***[1]***
5		(164) SN2023JVT	WFC3/UVIS, ACCUM, UVIS2-C512C-SUB	F336W	FLASH=20			350 Secs (350 Secs) *[==>]*	***[1]***
6		(164) SN2023JVT	WFC3/UVIS, ACCUM, UVIS2-C512C-SUB	F300X	FLASH=20		Pattern 3, Exps 6-7 in SN2023JVT (F4) (3)	351 Secs (702 Secs) *[==>(Pattern 1)]* *[==>(Pattern 2)]*	***[1]***
7		(164) SN2023JVT	WFC3/UVIS, ACCUM, UVIS2-C512C-SUB	F555W	FLASH=20		Pattern 3, Exps 6-7 in SN2023JVT (F4) (3)	30 Secs (60 Secs) *[==>(Pattern 1)]* *[==>(Pattern 2)]*	***[1]***
8		(164) SN2023JVT	WFC3/UVIS, ACCUM, UVIS2-FIX	F336W	FLASH=20	POS TARG 0.099,0.106		351 Secs (351 Secs) *[==>]*	***[1]***

Orbit Structure



Visit

Proposal 17410, SN2023ONO (72), implementation Thu Jul 30 20:01:05 GMT 2026

Diagnostic Status: No Diagnostics

Scientific Instruments: WFC3/IR, WFC3/UVIS

Special Requirements: SCHED 70%; ORIENT 14.7D TO 19.7 D; ORIENT 104.7D TO 109.7 D; ORIENT 194.7D TO 199.7 D; ORIENT 284.7D TO 289.7 D; AFTER 17-AUG-2024

Patterns

#	Primary Pattern		Secondary Pattern	Exposures
(1)	Pattern Type=LINE Purpose=DITHER Number Of Points=2 Point Spacing=0.636 Line Spacing=	Coordinate Frame=POS-TARG Pattern Orientation=41.788 Angle Between Sides= Center Pattern=false		(1-4)
(3)	Pattern Type=WFC3-UVIS-DITHER-LINE Purpose=DITHER Number Of Points=2 Point Spacing=0.145 Line Spacing=	Coordinate Frame=POS-TARG Pattern Orientation=46.84 Angle Between Sides= Center Pattern=false		(6-7)

Fixed Targets

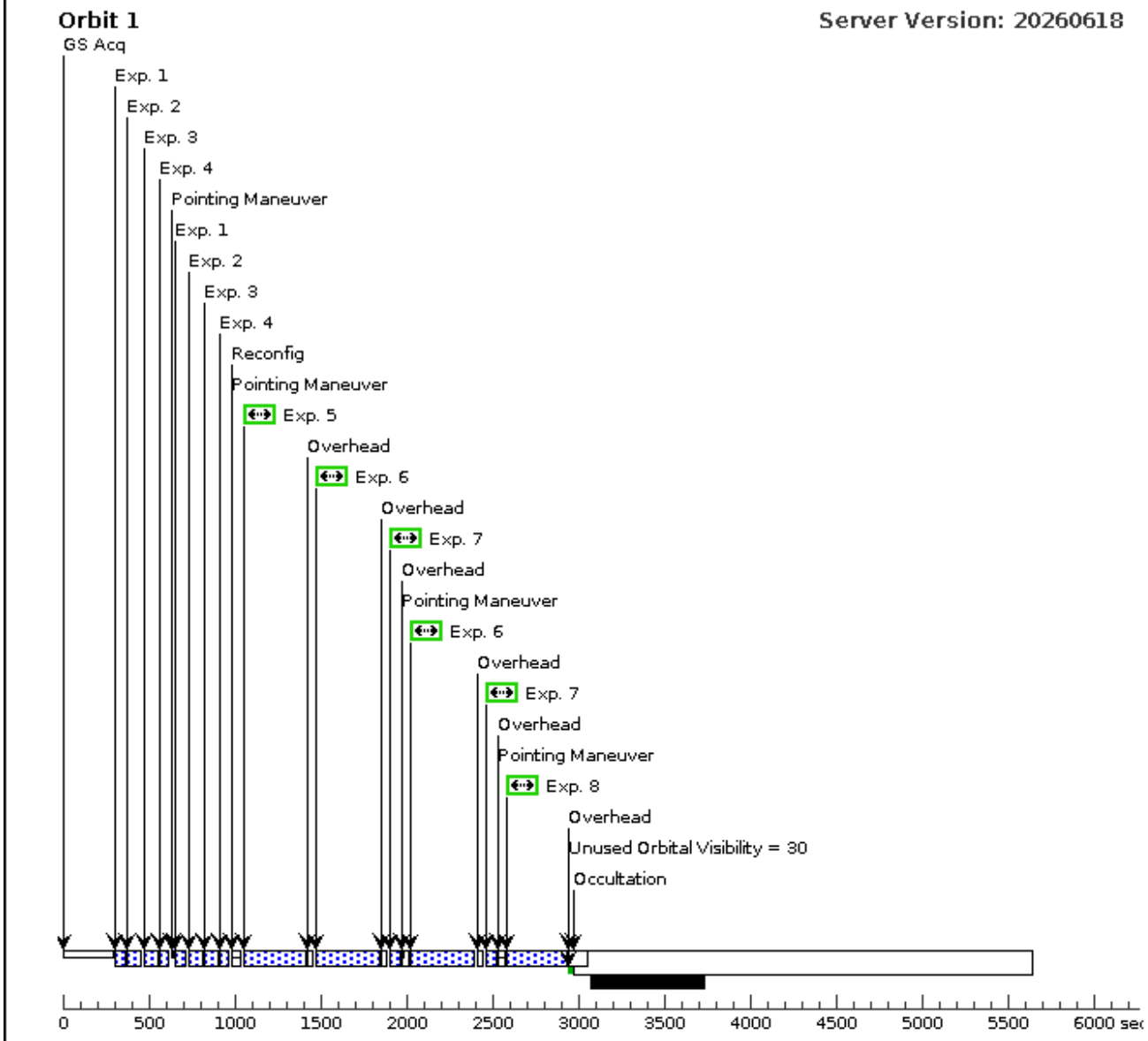
#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(172)	SN2023ONO	RA: 02 54 25.8300 (43.6076250d) Dec: -22 30 9.66 (-22.50268d) Equinox: J2000		V=16.7+/-0.1	Reference Frame: ICRS

Comments: Post-maximum Type Ia supernova. Will fade significantly by time of observation.
Category=EXT-STAR
Description=[SUPERNOVA TYPE IA]
Extended=NO

Exposures

#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
1		(172) SN2023ONO	WFC3/IR, MULTIACCUM, IRSUB512	F125W	NSAMP=6; SAMP-SEQ=STEP25		Pattern 1, Exps 1-4 in SN2023ONO (72) (1)	36.754642 Secs (73.509 Secs) *[==>(Pattern 1)]* *[==>(Pattern 2)]*	***[1]***
2		(172) SN2023ONO	WFC3/IR, MULTIACCUM, IRSUB512	F140W	NSAMP=7; SAMP-SEQ=STEP25		Pattern 1, Exps 1-4 in SN2023ONO (72) (1)	59.675893 Secs (119.352 Secs) *[==>(Pattern 1)]* *[==>(Pattern 2)]*	***[1]***
3		(172) SN2023ONO	WFC3/IR, MULTIACCUM, IRSUB512	F160W	NSAMP=7; SAMP-SEQ=STEP25		Pattern 1, Exps 1-4 in SN2023ONO (72) (1)	59.675893 Secs (119.352 Secs) *[==>(Pattern 1)]* *[==>(Pattern 2)]*	***[1]***
4		(172) SN2023ONO	WFC3/IR, MULTIACCUM, IRSUB512	F105W	NSAMP=6; SAMP-SEQ=STEP25		Pattern 1, Exps 1-4 in SN2023ONO (72) (1)	36.754642 Secs (73.509 Secs) *[==>(Pattern 1)]* *[==>(Pattern 2)]*	***[1]***
5		(172) SN2023ONO	WFC3/UVIS, ACCUM, UVIS2-C512C-SUB	F336W	FLASH=20			332 Secs (332 Secs) *[==>]*	***[1]***
6		(172) SN2023ONO	WFC3/UVIS, ACCUM, UVIS2-C512C-SUB	F300X	FLASH=20		Pattern 3, Exps 6-7 in SN2023ONO (72) (3)	351 Secs (702 Secs) *[==>(Pattern 1)]* *[==>(Pattern 2)]*	***[1]***
7		(172) SN2023ONO	WFC3/UVIS, ACCUM, UVIS2-C512C-SUB	F555W	FLASH=20		Pattern 3, Exps 6-7 in SN2023ONO (72) (3)	30 Secs (60 Secs) *[==>(Pattern 1)]* *[==>(Pattern 2)]*	***[1]***
8		(172) SN2023ONO	WFC3/UVIS, ACCUM, UVIS2-FIX	F336W	FLASH=20	POS TARG 0.099,0.106		333 Secs (333 Secs) *[==>]*	***[1]***

Orbit Structure



Visit

Proposal 17410, SN2024GY (A2), failed Thu Jul 30 20:01:05 GMT 2026

Diagnostic Status: Informational

Scientific Instruments: WFC3/IR, WFC3/UVIS

Special Requirements: SCHED 70%; ORIENT 355D TO 360 D; ORIENT 265D TO 270 D; ORIENT 175D TO 180 D; ORIENT 85D TO 90 D; AFTER 22-JAN-2025; ON HOLD ; TOO MAX RESPONSE TIME 30.0D

On Hold Comments: We would like this template observation to be scheduled at least 1 year after peak brightness of the SN. See timing requirements above.

Diagnostics

(SN2024GY (A2)) Informational (Form): Target of Opportunity Minimum Response time is a required field.

Patterns

#	Primary Pattern		Secondary Pattern	Exposures
(1)	Pattern Type=LINE	Coordinate Frame=POS-TARG		(1-2), (7-8)
	Purpose=DITHER	Pattern Orientation=41.788		
	Number Of Points=2	Angle Between Sides=		
	Point Spacing=0.636	Center Pattern=false		
	Line Spacing=			

Fixed Targets

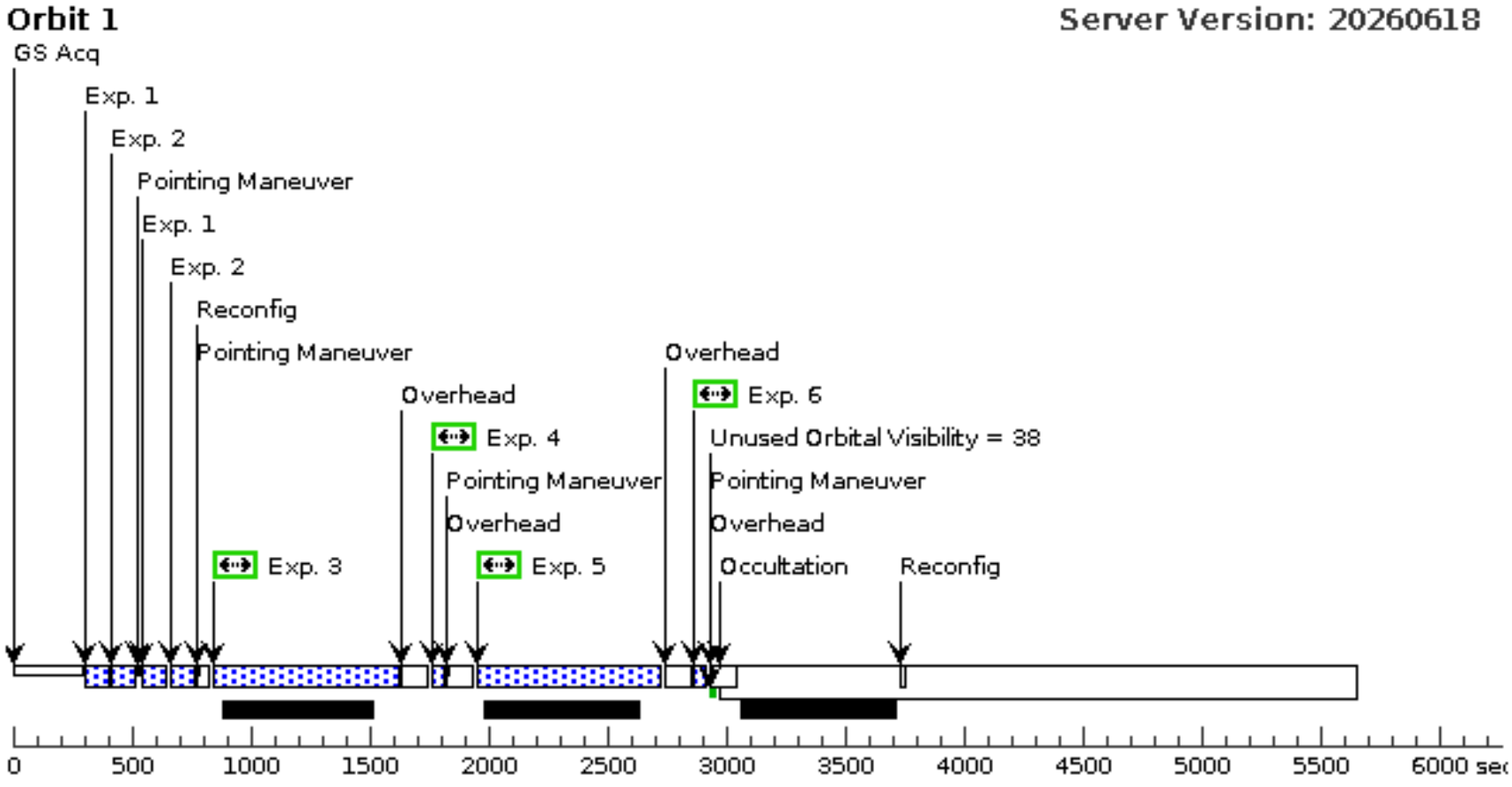
#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(202)	SN2024GY	RA: 12 15 51.2900 (183.9637083d)		V=14.7+/-0.1	Reference Frame: ICRS
		Dec: +13 06 56.12 (13.11559d)			
		Equinox: J2000			

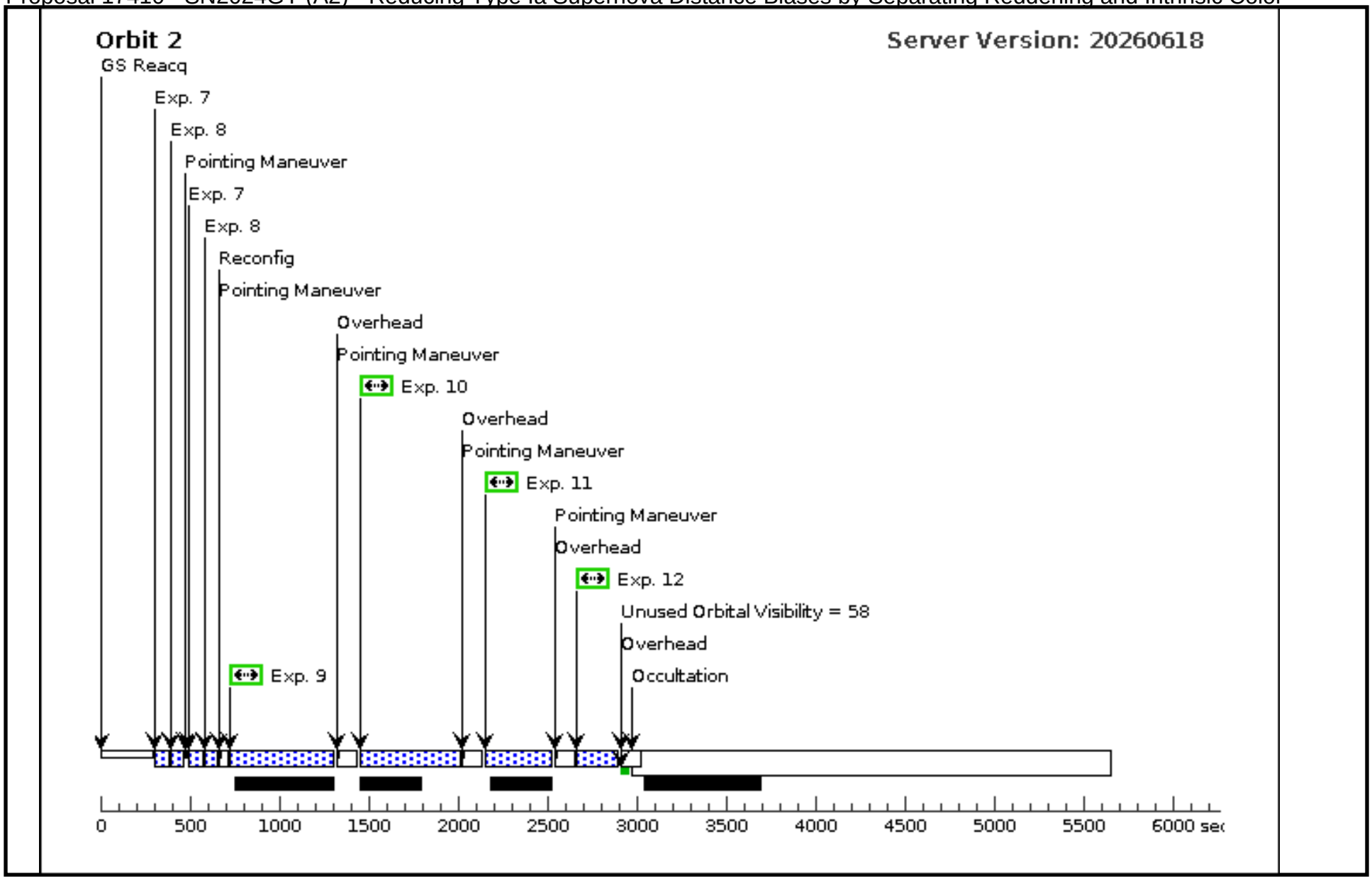
Comments: Pre-maximum Type Ia supernova. Will fade significantly by time of observation.
Category=EXT-STAR
Description=[SUPERNOVA TYPE IA]
Extended=NO

Exposures

#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
1		(202) SN2024GY	WFC3/IR, MULTIACCUM, IR-UVIS	F160W	NSAMP=7; SAMP-SEQ=STEP25		Pattern 1, Exps 1-2 in SN2024GY (A2) (1)	74.230741 Secs (148.461 Secs) *[==>(Pattern 1)]* *[==>(Pattern 2)]*	***[1]***
2		(202) SN2024GY	WFC3/IR, MULTIACCUM, IR-UVIS	F140W	NSAMP=7; SAMP-SEQ=STEP25		Pattern 1, Exps 1-2 in SN2024GY (A2) (1)	74.230741 Secs (148.461 Secs) *[==>(Pattern 1)]* *[==>(Pattern 2)]*	***[1]***
3		(202) SN2024GY	WFC3/UVIS, ACCUM, UVIS	F275W	FLASH=18	POS TARG 0.000,0.000		750 Secs (750 Secs) *[==>]*	***[1]***
4		(202) SN2024GY	WFC3/UVIS, ACCUM, UVIS	F555W	FLASH=19	POS TARG 0.000,0.000		30 Secs (30 Secs) *[==>]*	***[1]***
5		(202) SN2024GY	WFC3/UVIS, ACCUM, UVIS	F275W	FLASH=18	POS TARG 0.099,0.106		751 Secs (751 Secs) *[==>]*	***[1]***
6		(202) SN2024GY	WFC3/UVIS, ACCUM, UVIS	F555W	FLASH=19	POS TARG 0.099,0.106		30 Secs (30 Secs) *[==>]*	***[1]***
7		(202) SN2024GY	WFC3/IR, MULTIACCUM, IR-UVIS	F125W	NSAMP=6; SAMP-SEQ=STEP25		Pattern 1, Exps 7-8 in SN2024GY (A2) (1)	49.230226 Secs (98.46 Secs) *[==>(Pattern 1)]* *[==>(Pattern 2)]*	***[2]***
8		(202) SN2024GY	WFC3/IR, MULTIACCUM, IR-UVIS	F105W	NSAMP=6; SAMP-SEQ=STEP25		Pattern 1, Exps 7-8 in SN2024GY (A2) (1)	49.230226 Secs (98.46 Secs) *[==>(Pattern 1)]* *[==>(Pattern 2)]*	***[2]***
9		(202) SN2024GY	WFC3/UVIS, ACCUM, UVIS	F300X	FLASH=19	POS TARG 0.000,0.000		565 Secs (565 Secs) *[==>]*	***[2]***
10		(202) SN2024GY	WFC3/UVIS, ACCUM, UVIS	F300X	FLASH=19	POS TARG 0.099,0.106		565 Secs (565 Secs) *[==>]*	***[2]***
11		(202) SN2024GY	WFC3/UVIS, ACCUM, UVIS	F336W	FLASH=20	POS TARG 0.000,0.000		350 Secs (350 Secs) *[==>]*	***[2]***
12		(202) SN2024GY	WFC3/UVIS, ACCUM, UVIS	F336W	FLASH=20	POS TARG 0.099,0.106		235 Secs (235 Secs) *[==>]*	***[2]***

Orbit Structure




Orbit 2
Server Version: 20260618
GS Reacq
Exp. 7
Exp. 8
Pointing Maneuver
Exp. 7
Exp. 8
Reconfig
Pointing Maneuver
Overhead
Pointing Maneuver
Exp. 10
Overhead
Pointing Maneuver
Exp. 11
Pointing Maneuver
Overhead
Exp. 12
Unused Orbital Visibility = 58
Overhead
Occultation
Exp. 9
0
500
1000
1500
2000
2500
3000
3500
4000
4500
5000
5500
6000 sec

Visit

Proposal 17410, SN2024GY (F2), completed Thu Jul 30 20:01:05 GMT 2026

Diagnostic Status: Informational

Scientific Instruments: WFC3/IR, WFC3/UVIS

Special Requirements: SCHED 70%; ORIENT 355D TO 360 D; ORIENT 265D TO 270 D; ORIENT 175D TO 180 D; ORIENT 85D TO 90 D; AFTER 22-JAN-2025; ON HOLD ; TOO MAX RESPONSE TIME 30.0D

Comments: Duplicate of failed visit A2

On Hold Comments: We would like this template observation to be scheduled at least 1 year after peak brightness of the SN. See timing requirements above.

Diagnostics

(SN2024GY (F2)) Informational (Form): Target of Opportunity Minimum Response time is a required field.

Patterns

#	Primary Pattern		Secondary Pattern	Exposures
(1)	Pattern Type=LINE	Coordinate Frame=POS-TARG		(1-2)
	Purpose=DITHER	Pattern Orientation=41.788		
	Number Of Points=2	Angle Between Sides=		
	Point Spacing=0.636	Center Pattern=false		
	Line Spacing=			

Fixed Targets

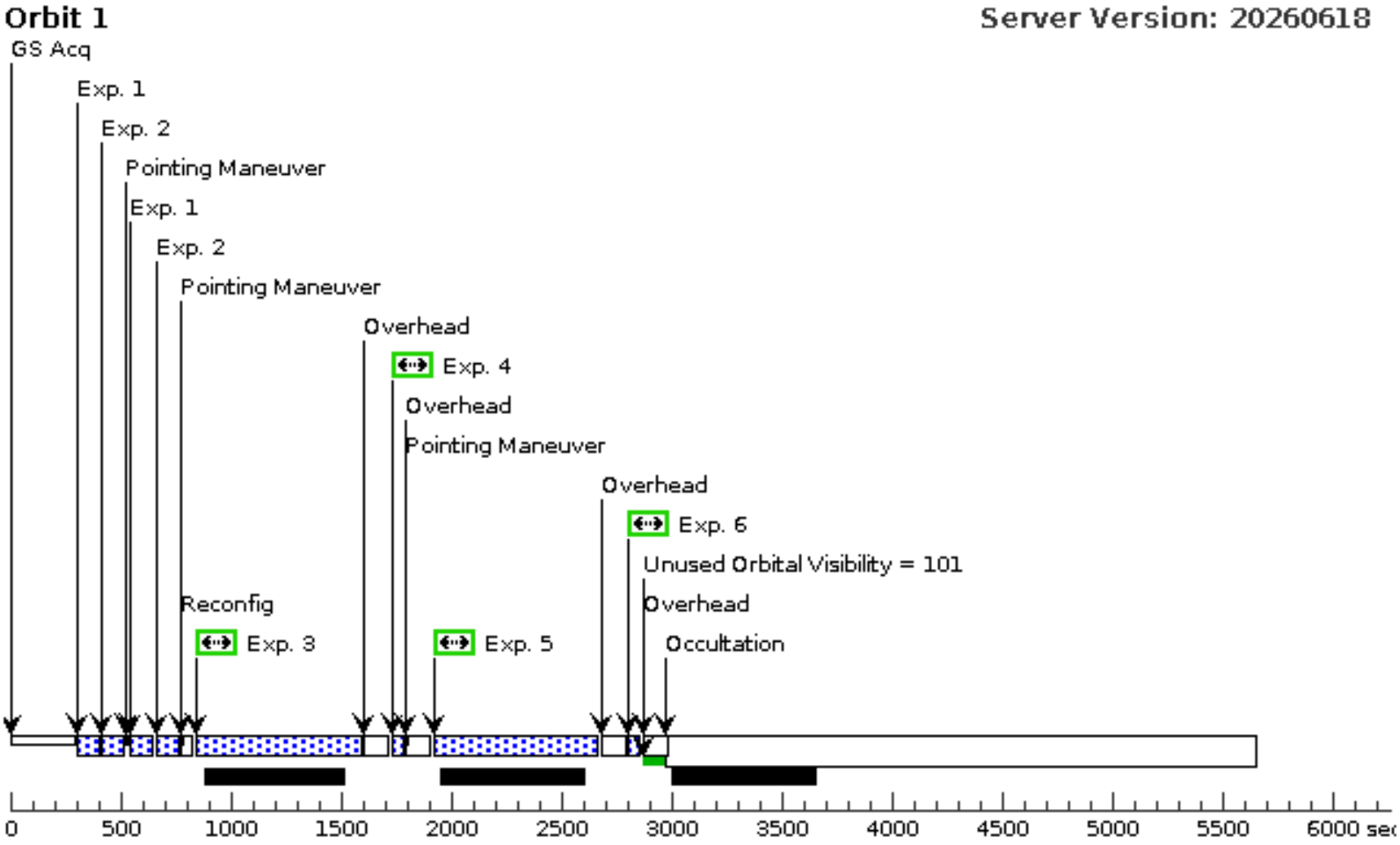
#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(202)	SN2024GY	RA: 12 15 51.2900 (183.9637083d) Dec: +13 06 56.12 (13.11559d) Equinox: J2000		V=14.7+/-0.1	Reference Frame: ICRS

Comments: Pre-maximum Type Ia supernova. Will fade significantly by time of observation.
Category=EXT-STAR
Description=[SUPERNOVA TYPE IA]
Extended=NO

Exposures

#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
1		(202) SN2024GY	WFC3/IR, MULTIACCUM, IR-UVIS	F160W	NSAMP=7; SAMP-SEQ=STEP25		Pattern 1, Exps 1-2 in SN2024GY (F2) (1)	74.230741 Secs (148.461 Secs) *[==>(Pattern 1)]* *[==>(Pattern 2)]*	 ***[1]***
2		(202) SN2024GY	WFC3/IR, MULTIACCUM, IR-UVIS	F140W	NSAMP=7; SAMP-SEQ=STEP25		Pattern 1, Exps 1-2 in SN2024GY (F2) (1)	74.230741 Secs (148.461 Secs) *[==>(Pattern 1)]* *[==>(Pattern 2)]*	 ***[1]***
3		(202) SN2024GY	WFC3/UVIS, ACCUM, UVIS	F275W	FLASH=18	POS TARG 0.000,0.000		719 Secs (719 Secs) *[==>]*	 ***[1]***
4		(202) SN2024GY	WFC3/UVIS, ACCUM, UVIS	F555W	FLASH=19	POS TARG 0.000,0.000		30 Secs (30 Secs) *[==>]*	 ***[1]***
5		(202) SN2024GY	WFC3/UVIS, ACCUM, UVIS	F275W	FLASH=18	POS TARG 0.099,0.106		719 Secs (719 Secs) *[==>]*	 ***[1]***
6		(202) SN2024GY	WFC3/UVIS, ACCUM, UVIS	F555W	FLASH=19	POS TARG 0.099,0.106		30 Secs (30 Secs) *[==>]*	 ***[1]***

Orbit Structure



Visit

Proposal 17410, SN2022ABVT (17), implementation Thu Jul 30 20:01:05 GMT 2026

Diagnostic Status: No Diagnostics

Scientific Instruments: WFC3/IR, WFC3/UVIS

Special Requirements: SCHED 70%; ORIENT 73.7D TO 78.7 D; ORIENT 163.7D TO 168.7 D; ORIENT 253.7D TO 258.7 D; ORIENT 343.7D TO 348.7 D; AFTER 09-DEC-2023; TOO MIN RESPONSE TIME 30.0D; TOO MAX RESPONSE TIME 300.0D

Patterns

#	Primary Pattern		Secondary Pattern	Exposures
(1)	Pattern Type=LINE Purpose=DITHER Number Of Points=2 Point Spacing=0.636 Line Spacing=	Coordinate Frame=POS-TARG Pattern Orientation=41.788 Angle Between Sides= Center Pattern=false		(1-4)
(3)	Pattern Type=WFC3-UVIS-DITHER-LINE Purpose=DITHER Number Of Points=2 Point Spacing=0.145 Line Spacing=	Coordinate Frame=POS-TARG Pattern Orientation=46.84 Angle Between Sides= Center Pattern=false		(6-7)

Fixed Targets

#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(117)	SN2022ABVT	RA: 01 30 43.4400 (22.6810000d) Dec: -31 30 51.92 (-31.51442d) Equinox: J2000		V=17.0+/-0.1	Reference Frame: ICRS

Comments: Past-maximum Type Ia supernova. Will fade significantly by time of observation.
Category=EXT-STAR
Description=[SUPERNOVA TYPE IA]
Extended=NO

Exposures

#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
1		(117) SN2022ABVT	WFC3/IR, MULTIACCUM, IRSUB512	F125W	NSAMP=6; SAMP-SEQ=STEP25		Pattern 1, Exps 1-4 in SN2022ABVT (17) (1)	36.754642 Secs (73.509 Secs) *[==>(Pattern 1)]* *[==>(Pattern 2)]*	***[1]***
2		(117) SN2022ABVT	WFC3/IR, MULTIACCUM, IRSUB512	F140W	NSAMP=7; SAMP-SEQ=STEP25		Pattern 1, Exps 1-4 in SN2022ABVT (17) (1)	59.675893 Secs (119.352 Secs) *[==>(Pattern 1)]* *[==>(Pattern 2)]*	***[1]***
3		(117) SN2022ABVT	WFC3/IR, MULTIACCUM, IRSUB512	F160W	NSAMP=7; SAMP-SEQ=STEP25		Pattern 1, Exps 1-4 in SN2022ABVT (17) (1)	59.675893 Secs (119.352 Secs) *[==>(Pattern 1)]* *[==>(Pattern 2)]*	***[1]***
4		(117) SN2022ABVT	WFC3/IR, MULTIACCUM, IRSUB512	F105W	NSAMP=6; SAMP-SEQ=STEP25		Pattern 1, Exps 1-4 in SN2022ABVT (17) (1)	36.754642 Secs (73.509 Secs) *[==>(Pattern 1)]* *[==>(Pattern 2)]*	***[1]***
5		(117) SN2022ABVT	WFC3/UVIS, ACCUM, UVIS2-C512C-SUB	F336W	FLASH=20			335 Secs (335 Secs) *[==>]*	***[1]***
6		(117) SN2022ABVT	WFC3/UVIS, ACCUM, UVIS2-C512C-SUB	F300X	FLASH=20		Pattern 3, Exps 6-7 in SN2022ABVT (17) (3)	351 Secs (702 Secs) *[==>(Pattern 1)]* *[==>(Pattern 2)]*	***[1]***
7		(117) SN2022ABVT	WFC3/UVIS, ACCUM, UVIS2-C512C-SUB	F555W	FLASH=20		Pattern 3, Exps 6-7 in SN2022ABVT (17) (3)	30 Secs (60 Secs) *[==>(Pattern 1)]* *[==>(Pattern 2)]*	***[1]***
8		(117) SN2022ABVT	WFC3/UVIS, ACCUM, UVIS2-FIX	F336W	FLASH=20	POS TARG 0.099,0.106		336 Secs (336 Secs) *[==>]*	***[1]***

Orbit Structure

Visit

Proposal 17410, SN2023HZY (55), completed Thu Jul 30 20:01:05 GMT 2026

Diagnostic Status: Informational

Scientific Instruments: WFC3/IR, WFC3/UVIS

Special Requirements: SCHED 70%; ORIENT 22.4D TO 27.4 D; ORIENT 112.4D TO 117.4 D; ORIENT 202.4D TO 207.4 D; ORIENT 292.4D TO 297.4 D; ON HOLD ; TOO MAX RESPONSE TIME 30.0D

On Hold Comments: We would like this template observation to be scheduled at least 1 year after peak brightness of the SN. See timing requirements above.

Diagnostics

(SN2023HZY (55)) Informational (Form): Target of Opportunity Minimum Response time is a required field.

Patterns

#	Primary Pattern		Secondary Pattern	Exposures
(1)	Pattern Type=LINE Purpose=DITHER Number Of Points=2 Point Spacing=0.636 Line Spacing=	Coordinate Frame=POS-TARG Pattern Orientation=41.788 Angle Between Sides= Center Pattern=false		(1-4)
(3)	Pattern Type=WFC3-UVIS-DITHER-LINE Purpose=DITHER Number Of Points=2 Point Spacing=0.145 Line Spacing=	Coordinate Frame=POS-TARG Pattern Orientation=46.84 Angle Between Sides= Center Pattern=false		(6-7)

Fixed Targets

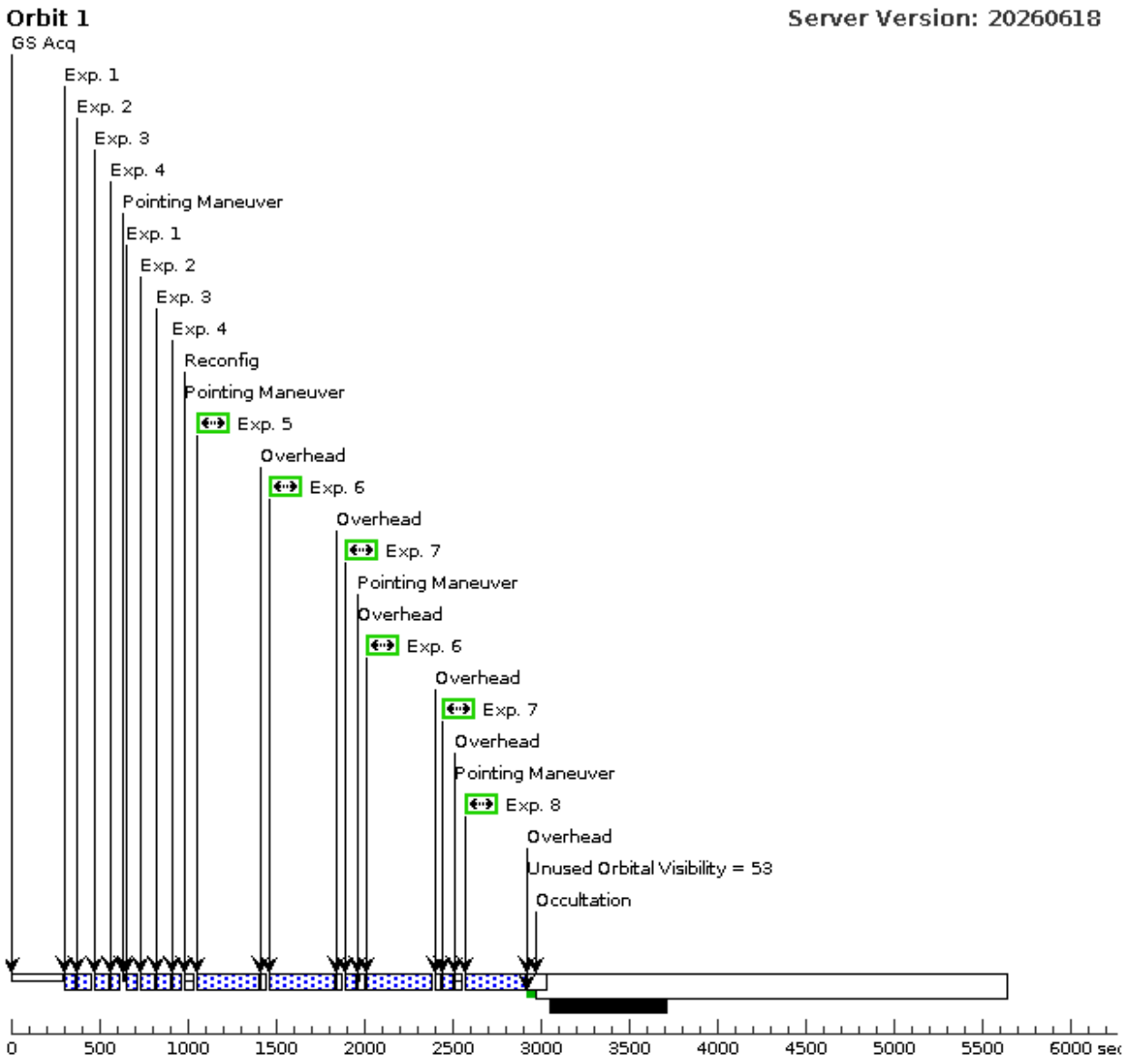
#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(155)	SN2023HZY	RA: 13 51 6.4900 (207.7770417d) Dec: +00 27 50.93 (.46415d) Equinox: J2000		V=17.7+/-0.1	Reference Frame: ICRS

Comments: Pre-maximum Type Ia supernova. Will fade significantly by time of observation.
Category=EXT-STAR
Description=[SUPERNOVA TYPE IA]
Extended=NO

Exposures

#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
1		(155) SN2023HZY	WFC3/IR, MULTIACCUM, IRSUB512	F125W	NSAMP=6; SAMP-SEQ=STEP25		Pattern 1, Exps 1-4 in SN2023HZY (55) (1)	36.754642 Secs (73.509 Secs) *[==>(Pattern 1)]* *[==>(Pattern 2)]*	 ***[1]***
2		(155) SN2023HZY	WFC3/IR, MULTIACCUM, IRSUB512	F140W	NSAMP=7; SAMP-SEQ=STEP25		Pattern 1, Exps 1-4 in SN2023HZY (55) (1)	59.675893 Secs (119.352 Secs) *[==>(Pattern 1)]* *[==>(Pattern 2)]*	 ***[1]***
3		(155) SN2023HZY	WFC3/IR, MULTIACCUM, IRSUB512	F160W	NSAMP=7; SAMP-SEQ=STEP25		Pattern 1, Exps 1-4 in SN2023HZY (55) (1)	59.675893 Secs (119.352 Secs) *[==>(Pattern 1)]* *[==>(Pattern 2)]*	 ***[1]***
4		(155) SN2023HZY	WFC3/IR, MULTIACCUM, IRSUB512	F105W	NSAMP=6; SAMP-SEQ=STEP25		Pattern 1, Exps 1-4 in SN2023HZY (55) (1)	36.754642 Secs (73.509 Secs) *[==>(Pattern 1)]* *[==>(Pattern 2)]*	 ***[1]***
5		(155) SN2023HZY	WFC3/UVIS, ACCUM, UVIS2-C512C-SUB	F336W	FLASH=20			321 Secs (321 Secs) *[==>]*	 ***[1]***
6		(155) SN2023HZY	WFC3/UVIS, ACCUM, UVIS2-C512C-SUB	F300X	FLASH=20		Pattern 3, Exps 6-7 in SN2023HZY (55) (3)	351 Secs (702 Secs) *[==>(Pattern 1)]* *[==>(Pattern 2)]*	 ***[1]***
7		(155) SN2023HZY	WFC3/UVIS, ACCUM, UVIS2-C512C-SUB	F555W	FLASH=20		Pattern 3, Exps 6-7 in SN2023HZY (55) (3)	30 Secs (60 Secs) *[==>(Pattern 1)]* *[==>(Pattern 2)]*	 ***[1]***
8		(155) SN2023HZY	WFC3/UVIS, ACCUM, UVIS2-FIX	F336W	FLASH=20	POS TARG 0.099,0.106		321 Secs (321 Secs) *[==>]*	 ***[1]***

Orbit Structure



Visit

Proposal 17410, SN2023LHY (62), completed Thu Jul 30 20:01:05 GMT 2026

Diagnostic Status: Informational

Scientific Instruments: WFC3/IR, WFC3/UVIS

Special Requirements: SCHED 70%; ORIENT 16.3D TO 21.3 D; ORIENT 106.3D TO 111.3 D; ORIENT 196.3D TO 201.3 D; ORIENT 286.3D TO 291.3 D; AFTER 03-JUL-2024; ON HOLD ; TOO MAX RESPONSE TIME 30.0D

On Hold Comments: We would like this template observation to be scheduled at least 1 year after peak brightness of the SN. See timing requirements above.

Diagnostics

(SN2023LHY (62)) Informational (Form): Target of Opportunity Minimum Response time is a required field.

Patterns

#	Primary Pattern		Secondary Pattern	Exposures
(1)	Pattern Type=LINE Purpose=DITHER Number Of Points=2 Point Spacing=0.636 Line Spacing=	Coordinate Frame=POS-TARG Pattern Orientation=41.788 Angle Between Sides= Center Pattern=false		(1-4)
(3)	Pattern Type=WFC3-UVIS-DITHER-LINE Purpose=DITHER Number Of Points=2 Point Spacing=0.145 Line Spacing=	Coordinate Frame=POS-TARG Pattern Orientation=46.84 Angle Between Sides= Center Pattern=false		(6-7)

Fixed Targets

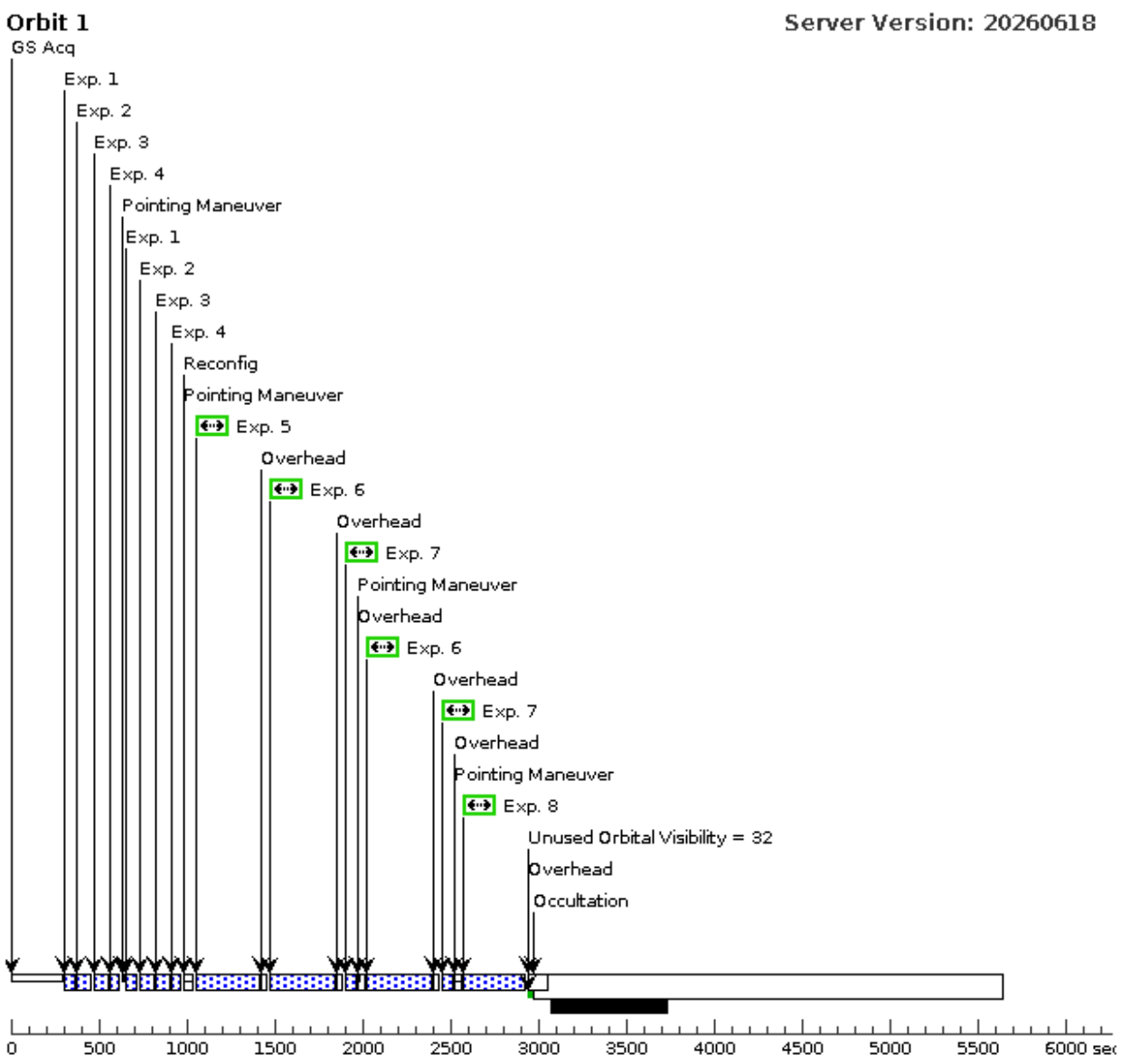
#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(162)	SN2023LHY	RA: 16 09 50.3100 (242.4596250d) Dec: +15 35 54.91 (15.59859d) Equinox: J2000		V=17.5+/-0.1	Reference Frame: ICRS

Comments: Post-maximum Type Ia supernova. Will fade significantly by time of observation.
Category=EXT-STAR
Description=[SUPERNOVA TYPE IA]
Extended=NO

Exposures

#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
1		(162) SN2023LHY	WFC3/IR, MULTIACCUM, IRSUB512	F125W	NSAMP=6; SAMP-SEQ=STEP25		Pattern 1, Exps 1-4 in SN2023LHY (62) (1)	36.754642 Secs (73.509 Secs) *[==>(Pattern 1)]* *[==>(Pattern 2)]*	 ***[1]***
2		(162) SN2023LHY	WFC3/IR, MULTIACCUM, IRSUB512	F140W	NSAMP=7; SAMP-SEQ=STEP25		Pattern 1, Exps 1-4 in SN2023LHY (62) (1)	59.675893 Secs (119.352 Secs) *[==>(Pattern 1)]* *[==>(Pattern 2)]*	 ***[1]***
3		(162) SN2023LHY	WFC3/IR, MULTIACCUM, IRSUB512	F160W	NSAMP=7; SAMP-SEQ=STEP25		Pattern 1, Exps 1-4 in SN2023LHY (62) (1)	59.675893 Secs (119.352 Secs) *[==>(Pattern 1)]* *[==>(Pattern 2)]*	 ***[1]***
4		(162) SN2023LHY	WFC3/IR, MULTIACCUM, IRSUB512	F105W	NSAMP=6; SAMP-SEQ=STEP25		Pattern 1, Exps 1-4 in SN2023LHY (62) (1)	36.754642 Secs (73.509 Secs) *[==>(Pattern 1)]* *[==>(Pattern 2)]*	 ***[1]***
5		(162) SN2023LHY	WFC3/UVIS, ACCUM, UVIS2-C512C-SUB	F336W	FLASH=20			330 Secs (330 Secs) *[==>]*	 ***[1]***
6		(162) SN2023LHY	WFC3/UVIS, ACCUM, UVIS2-C512C-SUB	F300X	FLASH=20		Pattern 3, Exps 6-7 in SN2023LHY (62) (3)	351 Secs (702 Secs) *[==>(Pattern 1)]* *[==>(Pattern 2)]*	 ***[1]***
7		(162) SN2023LHY	WFC3/UVIS, ACCUM, UVIS2-C512C-SUB	F555W	FLASH=20		Pattern 3, Exps 6-7 in SN2023LHY (62) (3)	30 Secs (60 Secs) *[==>(Pattern 1)]* *[==>(Pattern 2)]*	 ***[1]***
8		(162) SN2023LHY	WFC3/UVIS, ACCUM, UVIS2-FIX	F336W	FLASH=20	POS TARG 0.099,0.106		330 Secs (330 Secs) *[==>]*	 ***[1]***

Orbit Structure



Visit

Proposal 17410, SN2023IKS (56), completed Thu Jul 30 20:01:05 GMT 2026

Diagnostic Status: Informational

Scientific Instruments: WFC3/IR, WFC3/UVIS

Special Requirements: SCHED 70%; ORIENT 60.1D TO 65.1 D; ORIENT 150.1D TO 155.1 D; ORIENT 240.1D TO 245.1 D; ORIENT 330.1D TO 335.1 D; AFTER 26-MAY-2024; ON HOLD ; TOO MAX RESPONSE TIME 30.0D

On Hold Comments: We would like this template observation to be scheduled at least 1 year after peak brightness of the SN. See timing requirements above.

Diagnostics

(SN2023IKS (56)) Informational (Form): Target of Opportunity Minimum Response time is a required field.

Patterns

#	Primary Pattern		Secondary Pattern	Exposures
(1)	Pattern Type=LINE Purpose=DITHER Number Of Points=2 Point Spacing=0.636 Line Spacing=	Coordinate Frame=POS-TARG Pattern Orientation=41.788 Angle Between Sides= Center Pattern=false		(1-4)
(3)	Pattern Type=WFC3-UVIS-DITHER-LINE Purpose=DITHER Number Of Points=2 Point Spacing=0.145 Line Spacing=	Coordinate Frame=POS-TARG Pattern Orientation=46.84 Angle Between Sides= Center Pattern=false		(6-7)

Fixed Targets

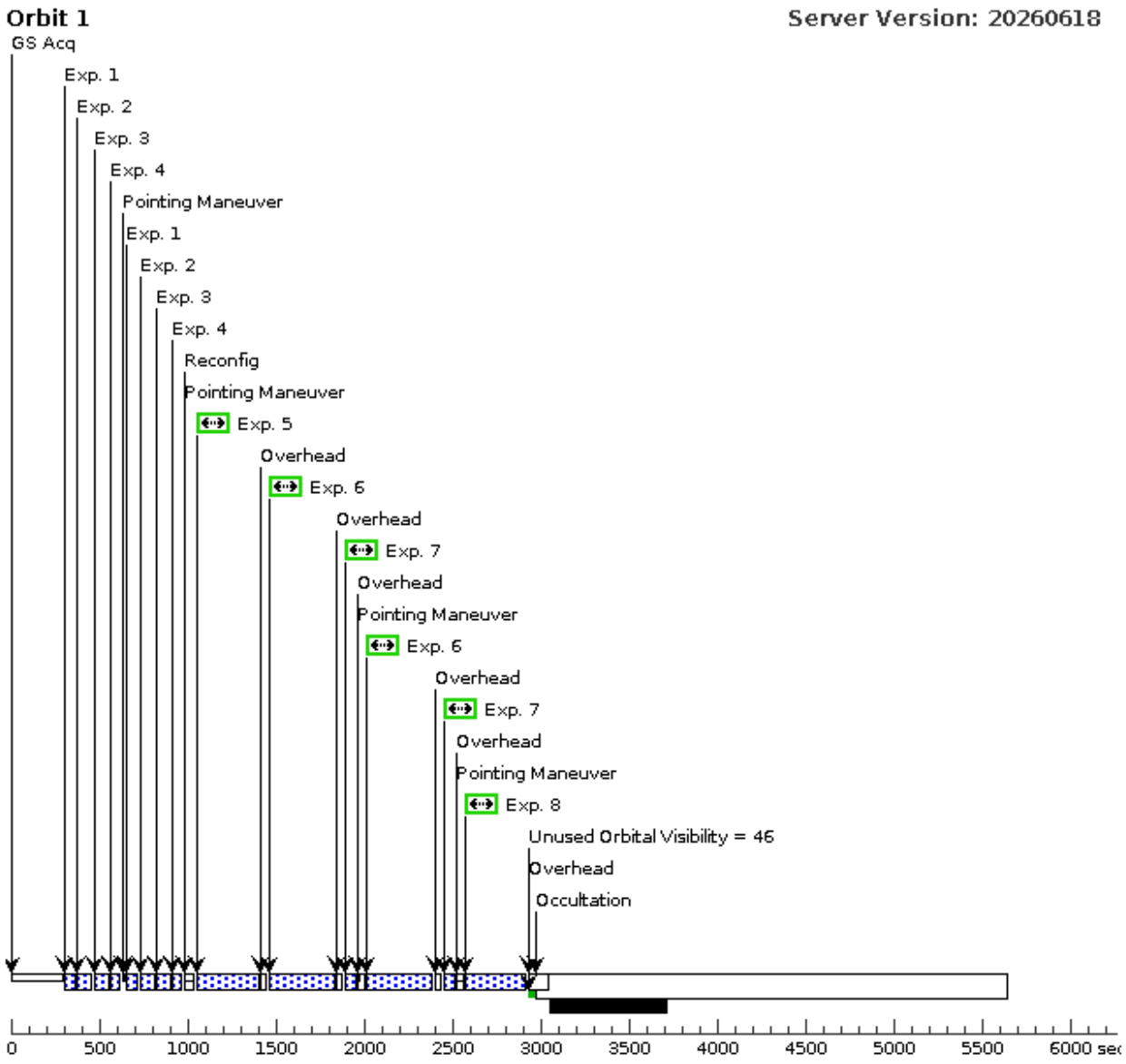
#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(156)	SN2023IKS	RA: 17 35 12.7500 (263.8031250d) Dec: +06 46 28.50 (6.77458d) Equinox: J2000		V=17.4+/-0.1	Reference Frame: ICRS

Comments: Pre-maximum Type Ia supernova. Will fade significantly by time of observation.
Category=EXT-STAR
Description=[SUPERNOVA TYPE IA]
Extended=NO

Exposures

#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
1		(156) SN2023IKS	WFC3/IR, MULTIACCUM, IRSUB512	F125W	NSAMP=6; SAMP-SEQ=STEP25		Pattern 1, Exps 1-4 in SN2023IKS (56) (1)	36.754642 Secs (73.509 Secs) *[==>(Pattern 1)]* *[==>(Pattern 2)]*	***[1]***
2		(156) SN2023IKS	WFC3/IR, MULTIACCUM, IRSUB512	F140W	NSAMP=7; SAMP-SEQ=STEP25		Pattern 1, Exps 1-4 in SN2023IKS (56) (1)	59.675893 Secs (119.352 Secs) *[==>(Pattern 1)]* *[==>(Pattern 2)]*	***[1]***
3		(156) SN2023IKS	WFC3/IR, MULTIACCUM, IRSUB512	F160W	NSAMP=7; SAMP-SEQ=STEP25		Pattern 1, Exps 1-4 in SN2023IKS (56) (1)	59.675893 Secs (119.352 Secs) *[==>(Pattern 1)]* *[==>(Pattern 2)]*	***[1]***
4		(156) SN2023IKS	WFC3/IR, MULTIACCUM, IRSUB512	F105W	NSAMP=6; SAMP-SEQ=STEP25		Pattern 1, Exps 1-4 in SN2023IKS (56) (1)	36.754642 Secs (73.509 Secs) *[==>(Pattern 1)]* *[==>(Pattern 2)]*	***[1]***
5		(156) SN2023IKS	WFC3/UVIS, ACCUM, UVIS2-C512C-SUB	F336W	FLASH=20			323 Secs (323 Secs) *[==>]*	***[1]***
6		(156) SN2023IKS	WFC3/UVIS, ACCUM, UVIS2-C512C-SUB	F300X	FLASH=20		Pattern 3, Exps 6-7 in SN2023IKS (56) (3)	351 Secs (702 Secs) *[==>(Pattern 1)]* *[==>(Pattern 2)]*	***[1]***
7		(156) SN2023IKS	WFC3/UVIS, ACCUM, UVIS2-C512C-SUB	F555W	FLASH=20		Pattern 3, Exps 6-7 in SN2023IKS (56) (3)	30 Secs (60 Secs) *[==>(Pattern 1)]* *[==>(Pattern 2)]*	***[1]***
8		(156) SN2023IKS	WFC3/UVIS, ACCUM, UVIS2-FIX	F336W	FLASH=20	POS TARG 0.099,0.106		324 Secs (324 Secs) *[==>]*	***[1]***

Orbit Structure



Visit

Proposal 17410, SN2023VER (85), failed Thu Jul 30 20:01:05 GMT 2026

Diagnostic Status: Informational

Scientific Instruments: WFC3/IR, WFC3/UVIS

Special Requirements: SCHED 70%; ORIENT 25.9D TO 30.9 D; ORIENT 115.9D TO 120.9 D; ORIENT 205.9D TO 210.9 D; ORIENT 295.9D TO 300.9 D; AFTER 07-NOV-2024; ON HOLD ; TOO MAX RESPONSE TIME 30.0D

On Hold Comments: We would like this template observation to be scheduled at least 1 year after peak brightness of the SN. See timing requirements above.

Diagnostics

(SN2023VER (85)) Informational (Form): Target of Opportunity Minimum Response time is a required field.

Patterns

#	Primary Pattern		Secondary Pattern	Exposures
(1)	Pattern Type=LINE Purpose=DITHER Number Of Points=2 Point Spacing=0.636 Line Spacing=	Coordinate Frame=POS-TARG Pattern Orientation=41.788 Angle Between Sides= Center Pattern=false		(1-4)
(3)	Pattern Type=WFC3-UVIS-DITHER-LINE Purpose=DITHER Number Of Points=2 Point Spacing=0.145 Line Spacing=	Coordinate Frame=POS-TARG Pattern Orientation=46.84 Angle Between Sides= Center Pattern=false		(6-7)

Fixed Targets

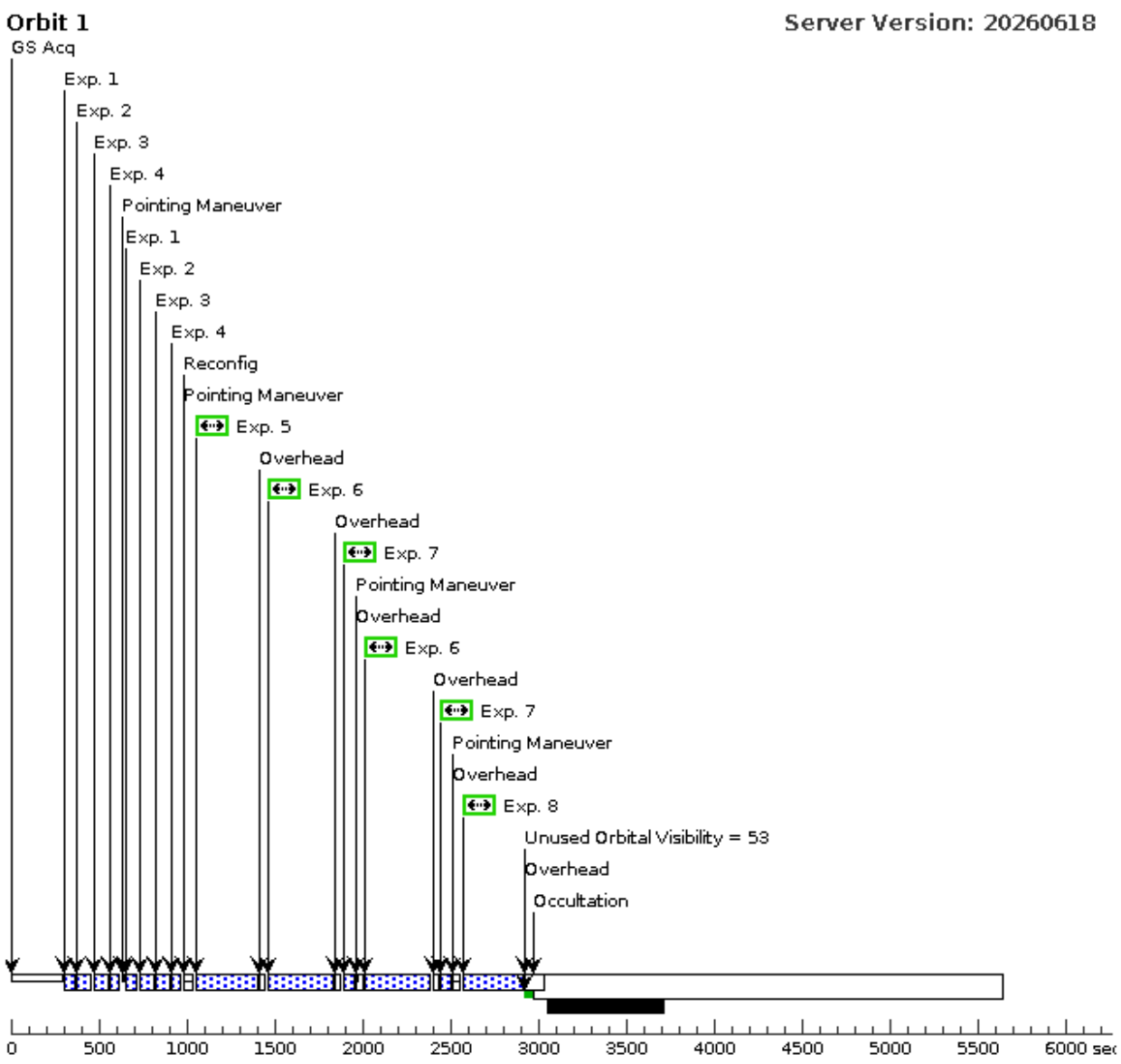
#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(185)	SN2023VER	RA: 03 51 40.2700 (57.9177917d) Dec: -00 30 38.95 (-.51082d) Equinox: J2000		V=17.5+/-0.1	Reference Frame: ICRS

Comments: Pre-maximum Type Ia supernova. Will fade significantly by time of observation.
Category=EXT-STAR
Description=[SUPERNOVA TYPE IA]
Extended=NO

Exposures

#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
1		(185) SN2023VER	WFC3/IR, MULTIACCUM, IRSUB512	F125W	NSAMP=6; SAMP-SEQ=STEP25		Pattern 1, Exps 1-4 in SN2023VER (85) (1)	36.754642 Secs (73.509 Secs) *[==>(Pattern 1)]* *[==>(Pattern 2)]*	 ***[1]***
2		(185) SN2023VER	WFC3/IR, MULTIACCUM, IRSUB512	F140W	NSAMP=7; SAMP-SEQ=STEP25		Pattern 1, Exps 1-4 in SN2023VER (85) (1)	59.675893 Secs (119.352 Secs) *[==>(Pattern 1)]* *[==>(Pattern 2)]*	 ***[1]***
3		(185) SN2023VER	WFC3/IR, MULTIACCUM, IRSUB512	F160W	NSAMP=7; SAMP-SEQ=STEP25		Pattern 1, Exps 1-4 in SN2023VER (85) (1)	59.675893 Secs (119.352 Secs) *[==>(Pattern 1)]* *[==>(Pattern 2)]*	 ***[1]***
4		(185) SN2023VER	WFC3/IR, MULTIACCUM, IRSUB512	F105W	NSAMP=6; SAMP-SEQ=STEP25		Pattern 1, Exps 1-4 in SN2023VER (85) (1)	36.754642 Secs (73.509 Secs) *[==>(Pattern 1)]* *[==>(Pattern 2)]*	 ***[1]***
5		(185) SN2023VER	WFC3/UVIS, ACCUM, UVIS2-C512C-SUB	F336W	FLASH=20			321 Secs (321 Secs) *[==>]*	 ***[1]***
6		(185) SN2023VER	WFC3/UVIS, ACCUM, UVIS2-C512C-SUB	F300X	FLASH=20		Pattern 3, Exps 6-7 in SN2023VER (85) (3)	351 Secs (702 Secs) *[==>(Pattern 1)]* *[==>(Pattern 2)]*	 ***[1]***
7		(185) SN2023VER	WFC3/UVIS, ACCUM, UVIS2-C512C-SUB	F555W	FLASH=20		Pattern 3, Exps 6-7 in SN2023VER (85) (3)	30 Secs (60 Secs) *[==>(Pattern 1)]* *[==>(Pattern 2)]*	 ***[1]***
8		(185) SN2023VER	WFC3/UVIS, ACCUM, UVIS2-FIX	F336W	FLASH=20	POS TARG 0.099,0.106		321 Secs (321 Secs) *[==>]*	 ***[1]***

Orbit Structure



Visit

Proposal 17410, SN2023VER-Repeat (H5), implementation Thu Jul 30 20:01:05 GMT 2026

Diagnostic Status: No Diagnostics

Scientific Instruments: WFC3/UVIS

Special Requirements: SCHED 70%; ORIENT 25.9D TO 30.9 D; ORIENT 115.9D TO 120.9 D; ORIENT 205.9D TO 210.9 D; ORIENT 295.9D TO 300.9 D; AFTER 07-NOV-2024; TOO MIN RESPONSE TIME 30.0D; TOO MAX RESPONSE TIME 300.0D

Fixed Targets

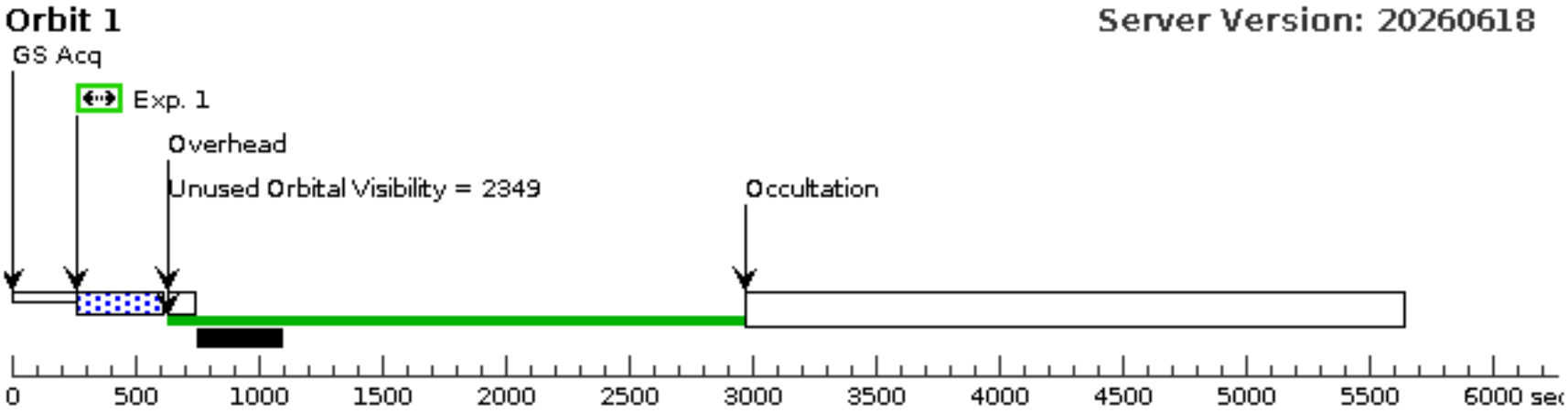
#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(185)	SN2023VER	RA: 03 51 40.2700 (57.9177917d) Dec: -00 30 38.95 (-.51082d) Equinox: J2000		V=17.5+/-0.1	Reference Frame: ICRS

Comments: Pre-maximum Type Ia supernova. Will fade significantly by time of observation.
Category=EXT-STAR
Description=[SUPERNOVA TYPE IA]
Extended=NO

Exposures

#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
1		(185) SN2023VER	WFC3/UVIS, ACCUM, UVIS2-FIX	F336W	FLASH=20	POS TARG 0.099,0.106		321 Secs (321 Secs) *[==>]*	 ***[1]***

Orbit Structure



Visit

Proposal 17410, SN2023MBZ (65), failed Thu Jul 30 20:01:05 GMT 2026

Diagnostic Status: Informational

Scientific Instruments: WFC3/IR, WFC3/UVIS

Special Requirements: SCHED 70%; ORIENT 4.5D TO 9.5 D; ORIENT 94.5D TO 99.5 D; ORIENT 184.5D TO 189.5 D; ORIENT 274.5D TO 279.5 D; AFTER 13-JUL-2024; ON HOLD ; TOO MAX RESPONSE TIME 30.0D

On Hold Comments: We would like this template observation to be scheduled at least 1 year after peak brightness of the SN. See timing requirements above.

Diagnostics

(SN2023MBZ (65)) Informational (Form): Target of Opportunity Minimum Response time is a required field.

Patterns

#	Primary Pattern		Secondary Pattern	Exposures
(1)	Pattern Type=LINE Purpose=DITHER Number Of Points=2 Point Spacing=0.636 Line Spacing=	Coordinate Frame=POS-TARG Pattern Orientation=41.788 Angle Between Sides= Center Pattern=false		(1-4)
(3)	Pattern Type=WFC3-UVIS-DITHER-LINE Purpose=DITHER Number Of Points=2 Point Spacing=0.145 Line Spacing=	Coordinate Frame=POS-TARG Pattern Orientation=46.84 Angle Between Sides= Center Pattern=false		(6-7)

Fixed Targets

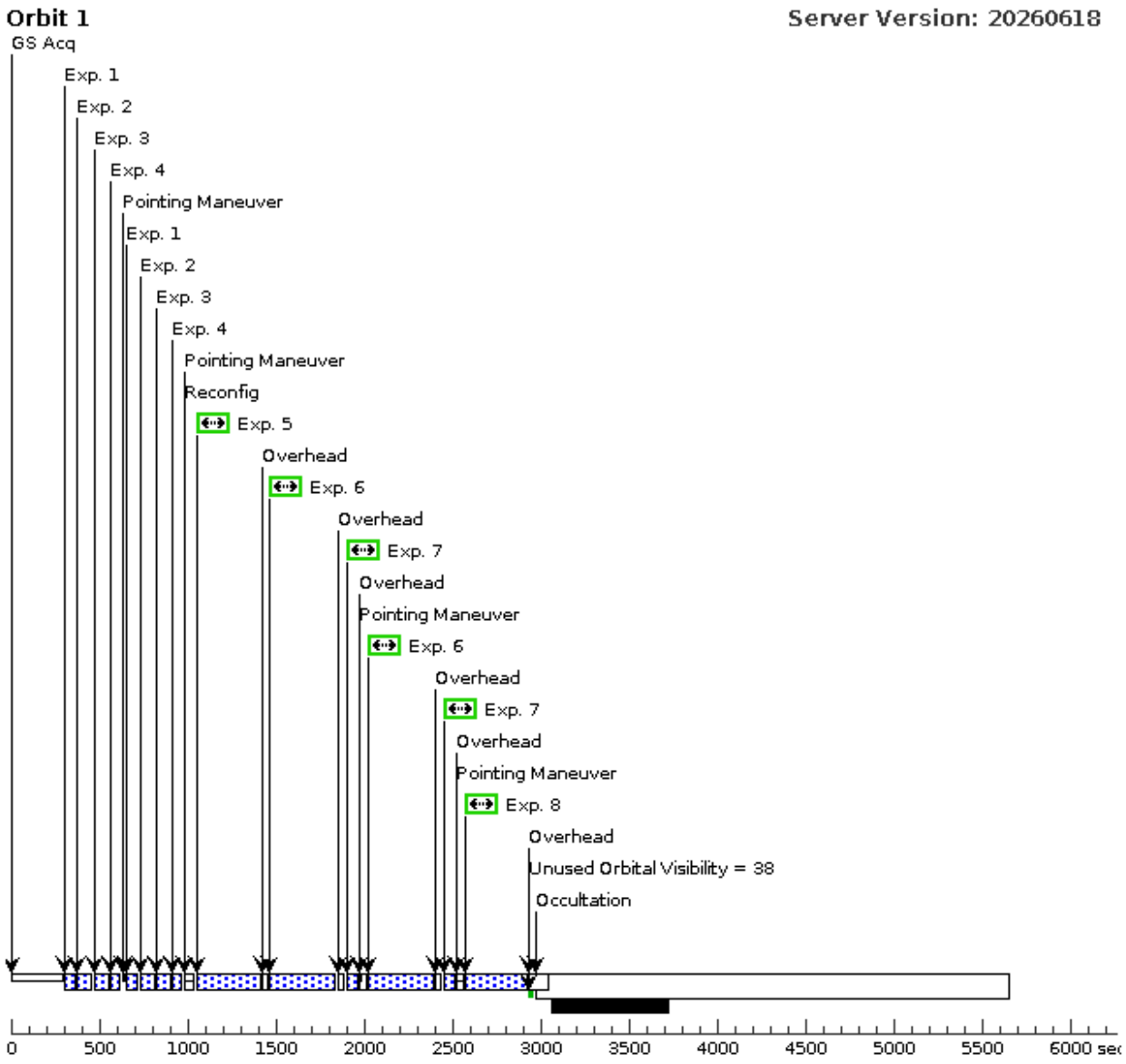
#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(165)	SN2023MBZ	RA: 15 00 31.5200 (225.1313333d) Dec: +11 31 48.82 (11.53023d) Equinox: J2000		V=18.0+/-0.1	Reference Frame: ICRS

Comments: Post-maximum Type Ia supernova. Will fade significantly by time of observation.
Category=EXT-STAR
Description=[SUPERNOVA TYPE IA]
Extended=NO

Exposures

#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
1		(165) SN2023MBZ	WFC3/IR, MULTIACCUM, IRSUB512	F125W	NSAMP=6; SAMP-SEQ=STEP25		Pattern 1, Exps 1-4 in SN2023MBZ (65) (1)	36.754642 Secs (73.509 Secs) *[==>(Pattern 1)]* *[==>(Pattern 2)]*	***[1]***
2		(165) SN2023MBZ	WFC3/IR, MULTIACCUM, IRSUB512	F140W	NSAMP=7; SAMP-SEQ=STEP25		Pattern 1, Exps 1-4 in SN2023MBZ (65) (1)	59.675893 Secs (119.352 Secs) *[==>(Pattern 1)]* *[==>(Pattern 2)]*	***[1]***
3		(165) SN2023MBZ	WFC3/IR, MULTIACCUM, IRSUB512	F160W	NSAMP=7; SAMP-SEQ=STEP25		Pattern 1, Exps 1-4 in SN2023MBZ (65) (1)	59.675893 Secs (119.352 Secs) *[==>(Pattern 1)]* *[==>(Pattern 2)]*	***[1]***
4		(165) SN2023MBZ	WFC3/IR, MULTIACCUM, IRSUB512	F105W	NSAMP=6; SAMP-SEQ=STEP25		Pattern 1, Exps 1-4 in SN2023MBZ (65) (1)	36.754642 Secs (73.509 Secs) *[==>(Pattern 1)]* *[==>(Pattern 2)]*	***[1]***
5		(165) SN2023MBZ	WFC3/UVIS, ACCUM, UVIS2-C512C-SUB	F336W	FLASH=20			326 Secs (326 Secs) *[==>]*	***[1]***
6		(165) SN2023MBZ	WFC3/UVIS, ACCUM, UVIS2-C512C-SUB	F300X	FLASH=20		Pattern 3, Exps 6-7 in SN2023MBZ (65) (3)	351 Secs (702 Secs) *[==>(Pattern 1)]* *[==>(Pattern 2)]*	***[1]***
7		(165) SN2023MBZ	WFC3/UVIS, ACCUM, UVIS2-C512C-SUB	F555W	FLASH=20		Pattern 3, Exps 6-7 in SN2023MBZ (65) (3)	30 Secs (60 Secs) *[==>(Pattern 1)]* *[==>(Pattern 2)]*	***[1]***
8		(165) SN2023MBZ	WFC3/UVIS, ACCUM, UVIS2-FIX	F336W	FLASH=20	POS TARG 0.099,0.106		326 Secs (326 Secs) *[==>]*	***[1]***

Orbit Structure



Visit

Proposal 17410, SN2023MBZ (F5), failed Thu Jul 30 20:01:05 GMT 2026

Diagnostic Status: Informational

Scientific Instruments: WFC3/UVIS

Special Requirements: SCHED 100%; ORIENT 4.5D TO 9.5 D; ORIENT 94.5D TO 99.5 D; ORIENT 184.5D TO 189.5 D; ORIENT 274.5D TO 279.5 D; AFTER 13-JUL-2024; ON HOLD ; TOO MAX RESPONSE TIME 30.0D

Comments: Duplicate of failed visit 65

On Hold Comments: We would like this template observation to be scheduled at least 1 year after peak brightness of the SN. See timing requirements above.

Diagnostics

(SN2023MBZ (F5)) Informational (Form): Target of Opportunity Minimum Response time is a required field.

Fixed Targets

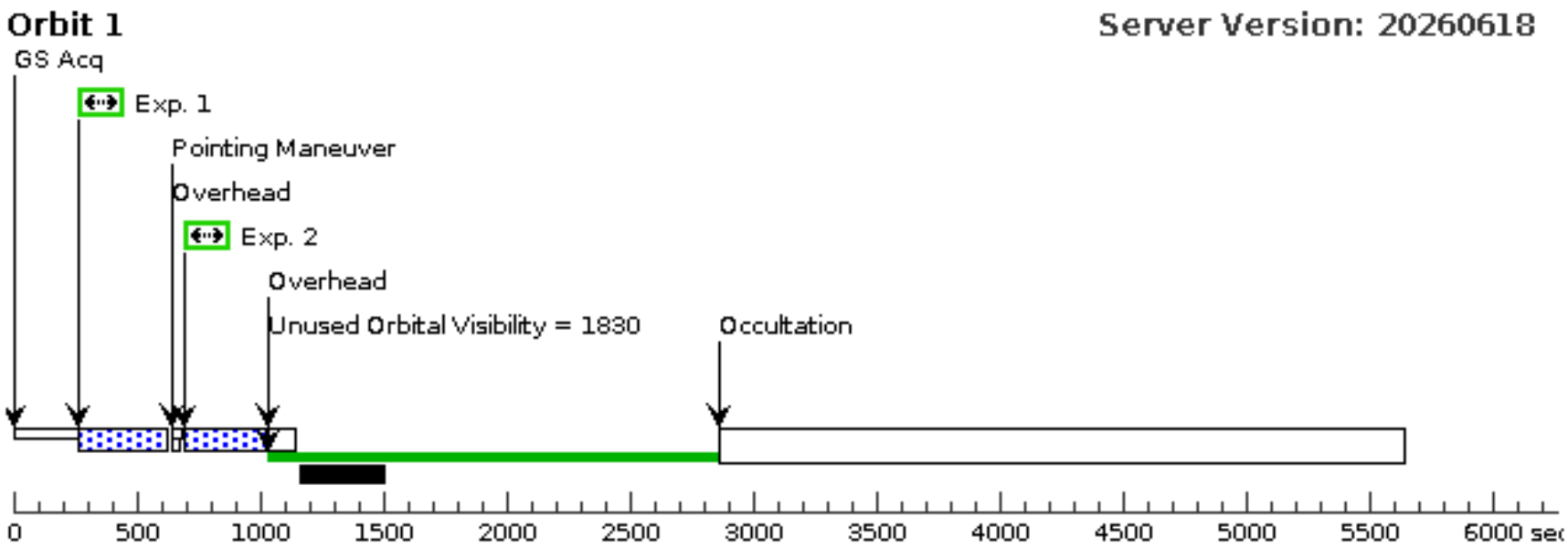
#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(165)	SN2023MBZ	RA: 15 00 31.5200 (225.1313333d) Dec: +11 31 48.82 (11.53023d) Equinox: J2000		V=18.0+/-0.1	Reference Frame: ICRS

Comments: Post-maximum Type Ia supernova. Will fade significantly by time of observation.
Category=EXT-STAR
Description=[SUPERNOVA TYPE IA]
Extended=NO

Exposures

#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
1		(165) SN2023MBZ	WFC3/UVIS, ACCUM, UVIS2-C512C-SUB	F336W	FLASH=20			332 Secs (332 Secs) *[==>]*	 ***[1]***
2		(165) SN2023MBZ	WFC3/UVIS, ACCUM, UVIS2-FIX	F336W	FLASH=20	POS TARG 0.099,0.106		332 Secs (332 Secs) *[==>]*	 ***[1]***

Orbit Structure



Visit

Proposal 17410, SN2023MBZ (K5), implementation Thu Jul 30 20:01:06 GMT 2026

Diagnostic Status: No Diagnostics

Scientific Instruments: WFC3/UVIS

Special Requirements: SCHED 100%; ORIENT 4.5D TO 9.5 D; ORIENT 94.5D TO 99.5 D; ORIENT 184.5D TO 189.5 D; ORIENT 274.5D TO 279.5 D; ON HOLD

Comments: Duplicate of failed visit F5

On Hold Comments: We would like this template observation to be scheduled at least 1 year after peak brightness of the SN. See timing requirements above.

Fixed Targets

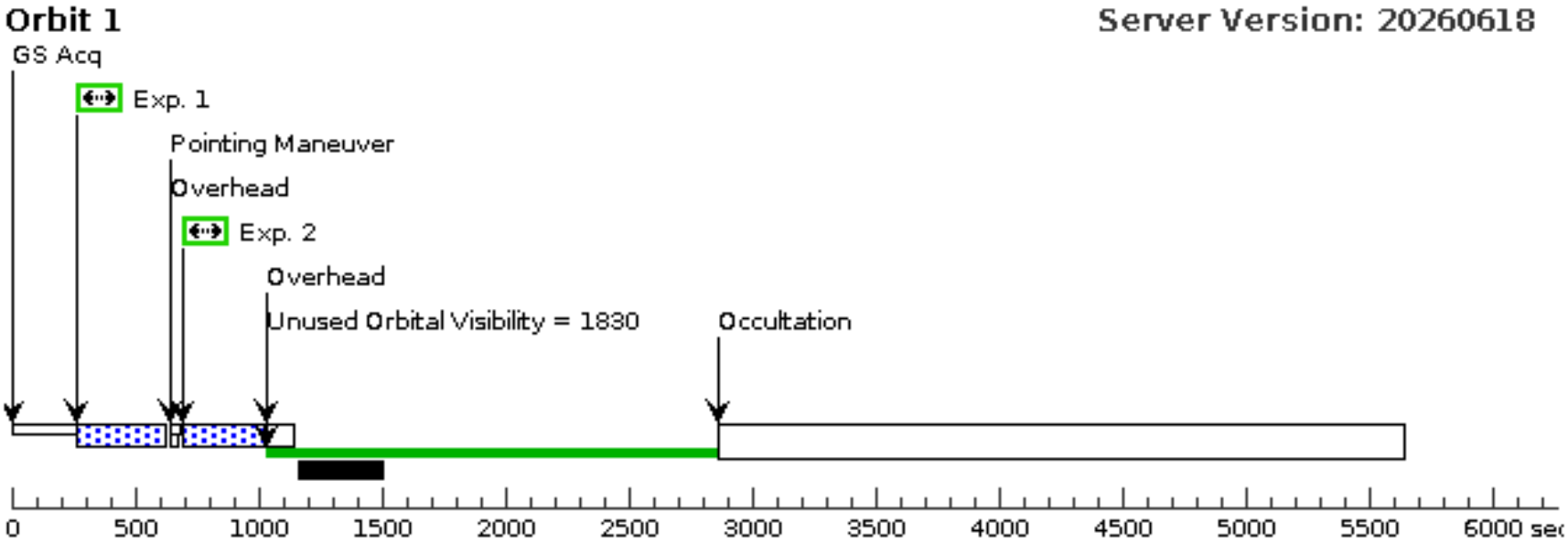
#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(165)	SN2023MBZ	RA: 15 00 31.5200 (225.1313333d) Dec: +11 31 48.82 (11.53023d) Equinox: J2000		V=18.0+/-0.1	Reference Frame: ICRS

Comments: Post-maximum Type Ia supernova. Will fade significantly by time of observation.
Category=EXT-STAR
Description=[SUPERNOVA TYPE IA]
Extended=NO

Exposures

#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
1		(165) SN2023MBZ	WFC3/UVIS, ACCUM, UVIS2-C512C-SUB	F336W	FLASH=20			332 Secs (332 Secs)	
								[==>]	***[1]***
2		(165) SN2023MBZ	WFC3/UVIS, ACCUM, UVIS2-FIX	F336W	FLASH=20	POS TARG 0.099,0.106		332 Secs (332 Secs)	
								[==>]	***[1]***

Orbit Structure



Visit

Proposal 17410, SN2023MVL (68), completed Thu Jul 30 20:01:06 GMT 2026

Diagnostic Status: Informational

Scientific Instruments: WFC3/IR, WFC3/UVIS

Special Requirements: SCHED 70%; ORIENT 77.8D TO 82.8 D; ORIENT 167.8D TO 172.8 D; ORIENT 257.8D TO 262.8 D; ORIENT 347.8D TO 352.8 D; AFTER 22-JUL-2024; ON HOLD ; TOO MAX RESPONSE TIME 30.0D

On Hold Comments: We would like this template observation to be scheduled at least 1 year after peak brightness of the SN. See timing requirements above.

Diagnostics

(SN2023MVL (68)) Informational (Form): Target of Opportunity Minimum Response time is a required field.

Patterns

#	Primary Pattern		Secondary Pattern	Exposures
(1)	Pattern Type=LINE Purpose=DITHER Number Of Points=2 Point Spacing=0.636 Line Spacing=	Coordinate Frame=POS-TARG Pattern Orientation=41.788 Angle Between Sides= Center Pattern=false		(1-4)
(3)	Pattern Type=WFC3-UVIS-DITHER-LINE Purpose=DITHER Number Of Points=2 Point Spacing=0.145 Line Spacing=	Coordinate Frame=POS-TARG Pattern Orientation=46.84 Angle Between Sides= Center Pattern=false		(6-7)

Fixed Targets

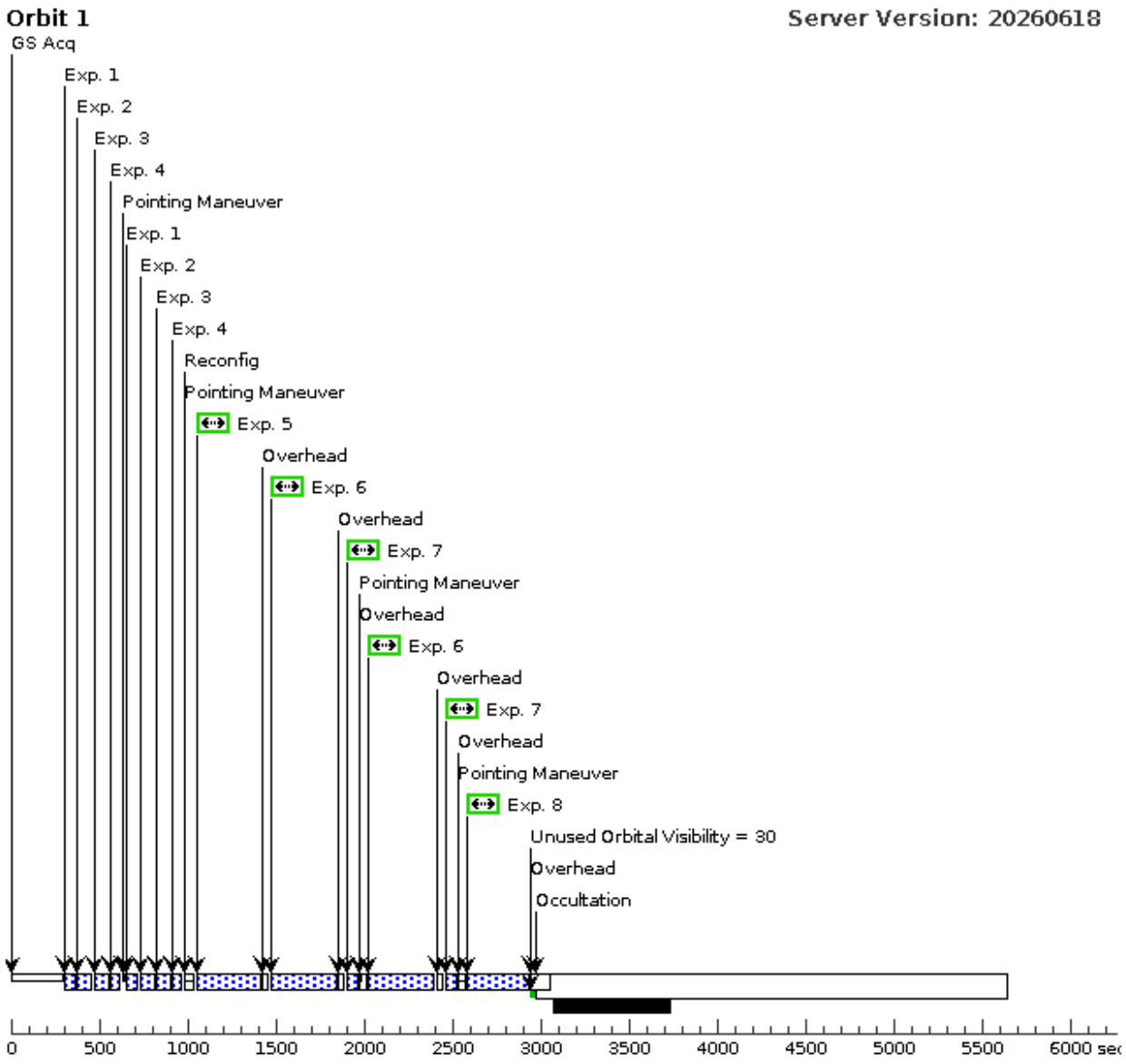
#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(168)	SN2023MVL	RA: 19 41 40.4800 (295.4186667d) Dec: -21 15 45.69 (-21.26269d) Equinox: J2000		V=18.5+/-0.1	Reference Frame: ICRS

Comments: Post-maximum Type Ia supernova. Will fade significantly by time of observation.
Category=EXT-STAR
Description=[SUPERNOVA TYPE IA]
Extended=NO

Exposures

#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
1		(168) SN2023MVL	WFC3/IR, MULTIACCUM, IRSUB512	F125W	NSAMP=6; SAMP-SEQ=STEP25		Pattern 1, Exps 1-4 in SN2023MVL (68) (1)	36.754642 Secs (73.509 Secs) *[==>(Pattern 1)]* *[==>(Pattern 2)]*	***[1]***
2		(168) SN2023MVL	WFC3/IR, MULTIACCUM, IRSUB512	F140W	NSAMP=7; SAMP-SEQ=STEP25		Pattern 1, Exps 1-4 in SN2023MVL (68) (1)	59.675893 Secs (119.352 Secs) *[==>(Pattern 1)]* *[==>(Pattern 2)]*	***[1]***
3		(168) SN2023MVL	WFC3/IR, MULTIACCUM, IRSUB512	F160W	NSAMP=7; SAMP-SEQ=STEP25		Pattern 1, Exps 1-4 in SN2023MVL (68) (1)	59.675893 Secs (119.352 Secs) *[==>(Pattern 1)]* *[==>(Pattern 2)]*	***[1]***
4		(168) SN2023MVL	WFC3/IR, MULTIACCUM, IRSUB512	F105W	NSAMP=6; SAMP-SEQ=STEP25		Pattern 1, Exps 1-4 in SN2023MVL (68) (1)	36.754642 Secs (73.509 Secs) *[==>(Pattern 1)]* *[==>(Pattern 2)]*	***[1]***
5		(168) SN2023MVL	WFC3/UVIS, ACCUM, UVIS2-C512C-SUB	F336W	FLASH=20			332 Secs (332 Secs) *[==>]*	***[1]***
6		(168) SN2023MVL	WFC3/UVIS, ACCUM, UVIS2-C512C-SUB	F300X	FLASH=20		Pattern 3, Exps 6-7 in SN2023MVL (68) (3)	351 Secs (702 Secs) *[==>(Pattern 1)]* *[==>(Pattern 2)]*	***[1]***
7		(168) SN2023MVL	WFC3/UVIS, ACCUM, UVIS2-C512C-SUB	F555W	FLASH=20		Pattern 3, Exps 6-7 in SN2023MVL (68) (3)	30 Secs (60 Secs) *[==>(Pattern 1)]* *[==>(Pattern 2)]*	***[1]***
8		(168) SN2023MVL	WFC3/UVIS, ACCUM, UVIS2-FIX	F336W	FLASH=20	POS TARG 0.099,0.106		333 Secs (333 Secs) *[==>]*	***[1]***

Orbit Structure



Visit

Proposal 17410, SN2023HRW (44), completed Thu Jul 30 20:01:06 GMT 2026

Diagnostic Status: Informational

Scientific Instruments: WFC3/IR, WFC3/UVIS

Special Requirements: SCHED 70%; ORIENT 37.9D TO 42.9 D; ORIENT 127.9D TO 132.9 D; ORIENT 217.9D TO 222.9 D; ORIENT 307.9D TO 312.9 D; AFTER 21-MAY-2024; ON HOLD ; TOO MAX RESPONSE TIME 30.0D

On Hold Comments: We would like this template observation to be scheduled at least 1 year after peak brightness of the SN. See timing requirements above.

Diagnostics

(SN2023HRW (44)) Informational (Form): Target of Opportunity Minimum Response time is a required field.

Patterns

#	Primary Pattern		Secondary Pattern	Exposures
(1)	Pattern Type=LINE Purpose=DITHER Number Of Points=2 Point Spacing=0.636 Line Spacing=	Coordinate Frame=POS-TARG Pattern Orientation=41.788 Angle Between Sides= Center Pattern=false		(1-4)
(3)	Pattern Type=WFC3-UVIS-DITHER-LINE Purpose=DITHER Number Of Points=2 Point Spacing=0.145 Line Spacing=	Coordinate Frame=POS-TARG Pattern Orientation=46.84 Angle Between Sides= Center Pattern=false		(6-7)

Fixed Targets

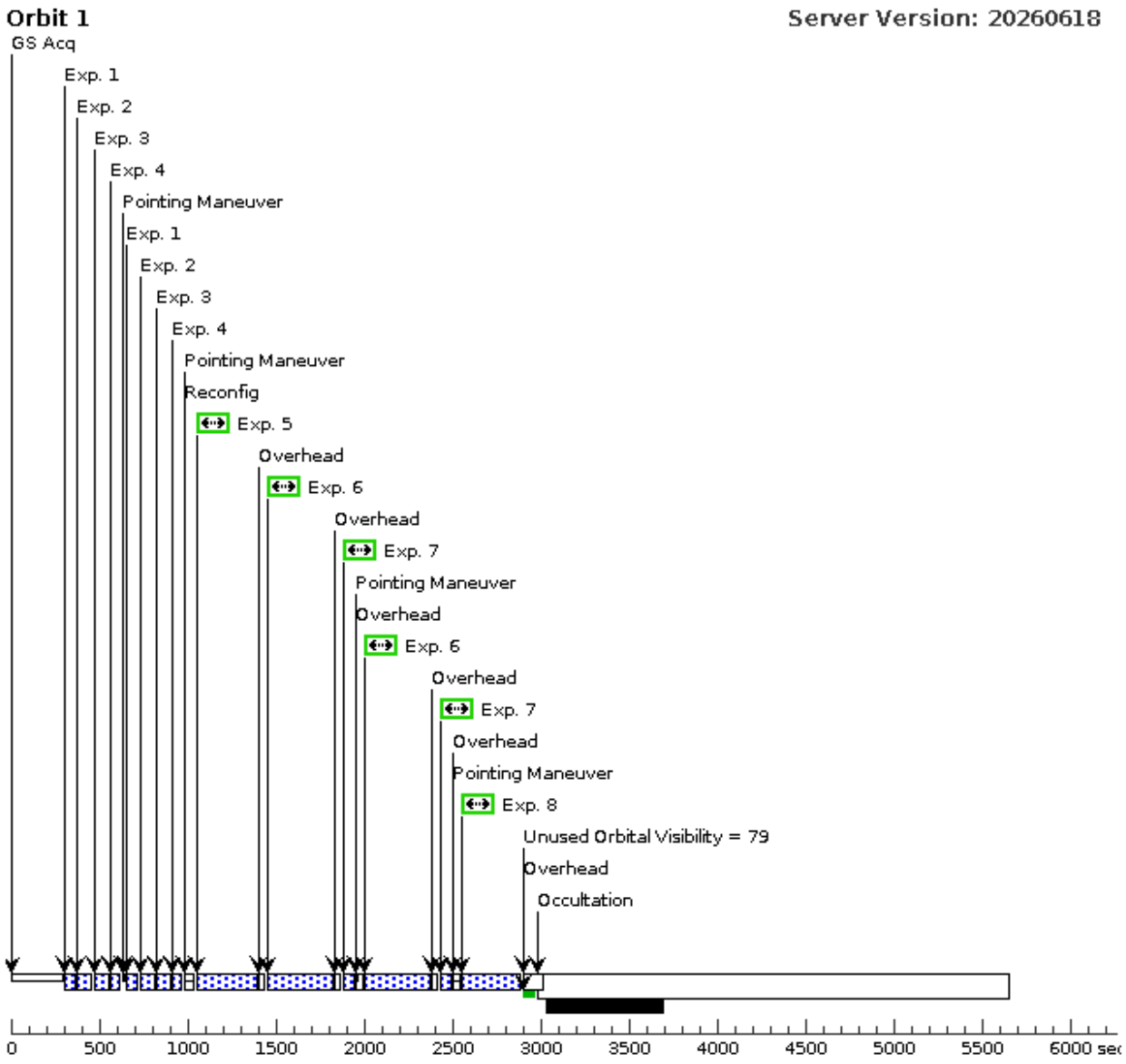
#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(144)	SN2023HRW	RA: 13 39 32.9300 (204.8872083d) Dec: +29 59 51.10 (29.99753d) Equinox: J2000		V=16.9+/-0.1	Reference Frame: ICRS

Comments: Pre-maximum Type Ia supernova. Will fade significantly by time of observation.
Category=EXT-STAR
Description=[SUPERNOVA TYPE IA]
Extended=NO

Exposures

#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
1		(144) SN2023HRW	WFC3/IR, MULTIACCUM, IRSUB512	F125W	NSAMP=6; SAMP-SEQ=STEP25		Pattern 1, Exps 1-4 in SN2023HRW (44) (1)	36.754642 Secs (73.509 Secs) *[==>(Pattern 1)]* *[==>(Pattern 2)]*	***[1]***
2		(144) SN2023HRW	WFC3/IR, MULTIACCUM, IRSUB512	F140W	NSAMP=7; SAMP-SEQ=STEP25		Pattern 1, Exps 1-4 in SN2023HRW (44) (1)	59.675893 Secs (119.352 Secs) *[==>(Pattern 1)]* *[==>(Pattern 2)]*	***[1]***
3		(144) SN2023HRW	WFC3/IR, MULTIACCUM, IRSUB512	F160W	NSAMP=7; SAMP-SEQ=STEP25		Pattern 1, Exps 1-4 in SN2023HRW (44) (1)	59.675893 Secs (119.352 Secs) *[==>(Pattern 1)]* *[==>(Pattern 2)]*	***[1]***
4		(144) SN2023HRW	WFC3/IR, MULTIACCUM, IRSUB512	F105W	NSAMP=6; SAMP-SEQ=STEP25		Pattern 1, Exps 1-4 in SN2023HRW (44) (1)	36.754642 Secs (73.509 Secs) *[==>(Pattern 1)]* *[==>(Pattern 2)]*	***[1]***
5		(144) SN2023HRW	WFC3/UVIS, ACCUM, UVIS2-C512C-SUB	F336W	FLASH=20			310 Secs (310 Secs) *[==>]*	***[1]***
6		(144) SN2023HRW	WFC3/UVIS, ACCUM, UVIS2-C512C-SUB	F300X	FLASH=20		Pattern 3, Exps 6-7 in SN2023HRW (44) (3)	351 Secs (702 Secs) *[==>(Pattern 1)]* *[==>(Pattern 2)]*	***[1]***
7		(144) SN2023HRW	WFC3/UVIS, ACCUM, UVIS2-C512C-SUB	F555W	FLASH=20		Pattern 3, Exps 6-7 in SN2023HRW (44) (3)	30 Secs (60 Secs) *[==>(Pattern 1)]* *[==>(Pattern 2)]*	***[1]***
8		(144) SN2023HRW	WFC3/UVIS, ACCUM, UVIS2-FIX	F336W	FLASH=20	POS TARG 0.099,0.106		310 Secs (310 Secs) *[==>]*	***[1]***

Orbit Structure



Visit

Proposal 17410, SN2023HUY (53), withdrawn Thu Jul 30 20:01:06 GMT 2026

Diagnostic Status: No Diagnostics

Scientific Instruments: WFC3/IR, WFC3/UVIS

Special Requirements: SCHED 70%; ORIENT 17.4D TO 22.4 D; ORIENT 107.4D TO 112.4 D; ORIENT 197.4D TO 202.4 D; ORIENT 287.4D TO 292.4 D; AFTER 22-MAY-2024; ON HOLD

On Hold Comments: We would like this template observation to be scheduled at least 1 year after peak brightness of the SN. See timing requirements above.

Patterns

#	Primary Pattern		Secondary Pattern	Exposures
(1)	Pattern Type=LINE Purpose=DITHER Number Of Points=2 Point Spacing=0.636 Line Spacing=	Coordinate Frame=POS-TARG Pattern Orientation=41.788 Angle Between Sides= Center Pattern=false		(1-4)
(3)	Pattern Type=WFC3-UVIS-DITHER-LINE Purpose=DITHER Number Of Points=2 Point Spacing=0.145 Line Spacing=	Coordinate Frame=POS-TARG Pattern Orientation=46.84 Angle Between Sides= Center Pattern=false		(6-7)

Fixed Targets

#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(153)	SN2023HUY	RA: 13 15 50.7900 (198.9616250d) Dec: -16 12 18.25 (-16.20507d) Equinox: J2000		V=16.5+/-0.1	Reference Frame: ICRS

Comments: Post-maximum Type Ia supernova. Will fade significantly by time of observation.
Category=EXT-STAR
Description=[SUPERNOVA TYPE IA]
Extended=NO

Exposures

#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
1		(153) SN2023HUY	WFC3/IR, MULTIACCUM, IRSUB512	F125W	NSAMP=6; SAMP-SEQ=STEP25		Pattern 1, Exps 1-4 in SN2023HUY (53) (1)	36.754642 Secs (73.509 Secs) *[==>(Pattern 1)]* *[==>(Pattern 2)]*	***[1]***
2		(153) SN2023HUY	WFC3/IR, MULTIACCUM, IRSUB512	F140W	NSAMP=7; SAMP-SEQ=STEP25		Pattern 1, Exps 1-4 in SN2023HUY (53) (1)	59.675893 Secs (119.352 Secs) *[==>(Pattern 1)]* *[==>(Pattern 2)]*	***[1]***
3		(153) SN2023HUY	WFC3/IR, MULTIACCUM, IRSUB512	F160W	NSAMP=7; SAMP-SEQ=STEP25		Pattern 1, Exps 1-4 in SN2023HUY (53) (1)	59.675893 Secs (119.352 Secs) *[==>(Pattern 1)]* *[==>(Pattern 2)]*	***[1]***
4		(153) SN2023HUY	WFC3/IR, MULTIACCUM, IRSUB512	F105W	NSAMP=6; SAMP-SEQ=STEP25		Pattern 1, Exps 1-4 in SN2023HUY (53) (1)	36.754642 Secs (73.509 Secs) *[==>(Pattern 1)]* *[==>(Pattern 2)]*	***[1]***
5		(153) SN2023HUY	WFC3/UVIS, ACCUM, UVIS2-C512C-SUB	F336W	FLASH=20			330 Secs (330 Secs) *[==>]*	***[1]***
6		(153) SN2023HUY	WFC3/UVIS, ACCUM, UVIS2-C512C-SUB	F300X	FLASH=20		Pattern 3, Exps 6-7 in SN2023HUY (53) (3)	351 Secs (702 Secs) *[==>(Pattern 1)]* *[==>(Pattern 2)]*	***[1]***
7		(153) SN2023HUY	WFC3/UVIS, ACCUM, UVIS2-C512C-SUB	F555W	FLASH=20		Pattern 3, Exps 6-7 in SN2023HUY (53) (3)	30 Secs (60 Secs) *[==>(Pattern 1)]* *[==>(Pattern 2)]*	***[1]***
8		(153) SN2023HUY	WFC3/UVIS, ACCUM, UVIS2-FIX	F336W	FLASH=20	POS TARG 0.099,0.106		330 Secs (330 Secs) *[==>]*	***[1]***

Orbit Structure