15312 - Ultraviolet Spectroscopic Monitoring of a Tidal Disruption Eventd

Cycle: 25, Proposal Category: GO

(UV Initiative)

(Availability Mode: SUPPORTED)

INVESTIGATORS

Name	*Institution*	*E-Mail*
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VISITS

Visit	*Targets used in Visit*	*Configurations used in Visit*	*Orbits Used*	*Last Orbit Planner Run*	*OP Current with Visit?*
01	(2) ASASSN18JD	STIS/CCD STIS/FUV-MAMA STIS/NUV-MAMA	1	14-May-2018 19:03:20.0	yes
02	(2) ASASSN18JD	STIS/CCD STIS/FUV-MAMA STIS/NUV-MAMA	2	14-May-2018 19:03:22.0	yes
03	(2) ASASSN18JD	STIS/CCD STIS/FUV-MAMA STIS/NUV-MAMA	2	14-May-2018 19:03:24.0	yes

Visit	*Targets used in Visit*	*Configurations used in Visit*	*Orbits Used*	*Last Orbit Planner Run*	*OP Current with Visit?*
04	(2) ASASSN18JD	STIS/CCD STIS/FUV-MAMA STIS/NUV-MAMA	3	14-May-2018 19:03:27.0	yes
05	(2) ASASSN18JD	STIS/CCD STIS/FUV-MAMA STIS/NUV-MAMA	4	14-May-2018 19:03:30.0	yes
06	(2) ASASSN18JD	STIS/CCD STIS/FUV-MAMA STIS/NUV-MAMA	5	14-May-2018 19:03:35.0	yes
07	(2) ASASSN18JD	STIS/CCD STIS/FUV-MAMA STIS/NUV-MAMA	5	14-May-2018 19:03:40.0	yes

22 Total Orbits Used

ABSTRACT

Tidal disruption events (TDE), where supermassive black holes destroy stars to produce accretion flares, are of great current observational and theoretical interest. Here we propose a seven epoch STIS UV spectroscopic "movie" of a UV bright TDE spread over the first ~90 days after a rapid TOO trigger. The roughly 15 day cadence is comparable to the expected and observed time scales for kinematic changes in the optical and UV emission and absorption lines. We will measure the evolution of UV absorption and emission lines from elements (e.g., C, N, Si) and ionization states/potentials not seen in optical spectra of TDEs, which should help to illuminate their dynamical evolution. In some cases, the debris from the stellar cores should have significantly enhanced [N/C] abundances due to the CNO cycle, so UV spectra can provide a means of differentiating debris from

the core and the envelope of the disrupted star. Optically-selected TDEs are energetically dominated by their UV emission, making it the wavelength range most needed to understand these fascinating transients.

OBSERVING DESCRIPTION

The goal is to obtain a sequence of 7 STIS FUV-MAMA/G140L and NUV-MAMA/G230L UV spectra of a tidal disruption event, obtaining roughly one spectrum every 15 days for 90 days.

Orbits are set for 1, 2, 2, 3, 4, 5 and 5 orbits for the first through seventh observations. The exact final sequence may need adjusting to match the evolution of the target.

First observation is a disruptive, rapid (but not ultra-rapid) 2-5 day TOO, followed by observations chained by 13-17 days. The second observation counts as a disruptive TOO, and the remainder are non-disruptive.

We have set the acquisiton image for a point source with the standard F28X50LP filter and a 10 second exposure time -- this is appropriate for the early phases where any ASAS-SN bright ASAS-SN TDE should have V~16-17 mag -- should yield a SNR=79 according to the STIS acquistion ETC -- this should still be OK if the TDE is as bright as V~15, and hold for at least the first 1/2 of the visits. The exposure times may need to be adjusted for the later 1/2 of the visits and may need a switch to a diffuse source as the TDE fades relative to its host.

We have used an along slit dither to clean up hot pixels, with a step of 16 pixels to be larger than the recommended 0.35 arcsec -- we expect features fairly broad in velocity so we have not used dithers perpendicular to the slit. A minimum of two exposures are then taken at each dither position. The source should be well above sky, so the 0.2x50 slit should be fine

for both the FUV and NUV observations.

Visit

Proposal 15312, Visit 01, implementation Mon May 14 23:03:42 GMT 2018

Diagnostic Status: No Diagnostics

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

Special Requirements: SCHED 100%; BETWEEN 01-MAY-2018:00:00:00 AND 20-MAY-2018:00:00:00; ON HOLD ; TOO RESPONSE TIME 2.0D

Comments: Disruptive ToO trigger of 2-5 days turnaround.

On Hold Comments: requires discovery of a sufficiently bright ASAS-SN Tidal Disruption Event

Patterns

#	Primary Pattern		Secondary Pattern	Exposures
(1)	Pattern Type=STIS-ALONG-SLIT	Coordinate Frame=POS-TARG		(2), (3)
	Purpose=DITHER	Pattern Orientation=90.0		
	Number Of Points=2	Angle Between Sides=		
	Point Spacing=0.3829	Center Pattern=false		
	Line Spacing=			

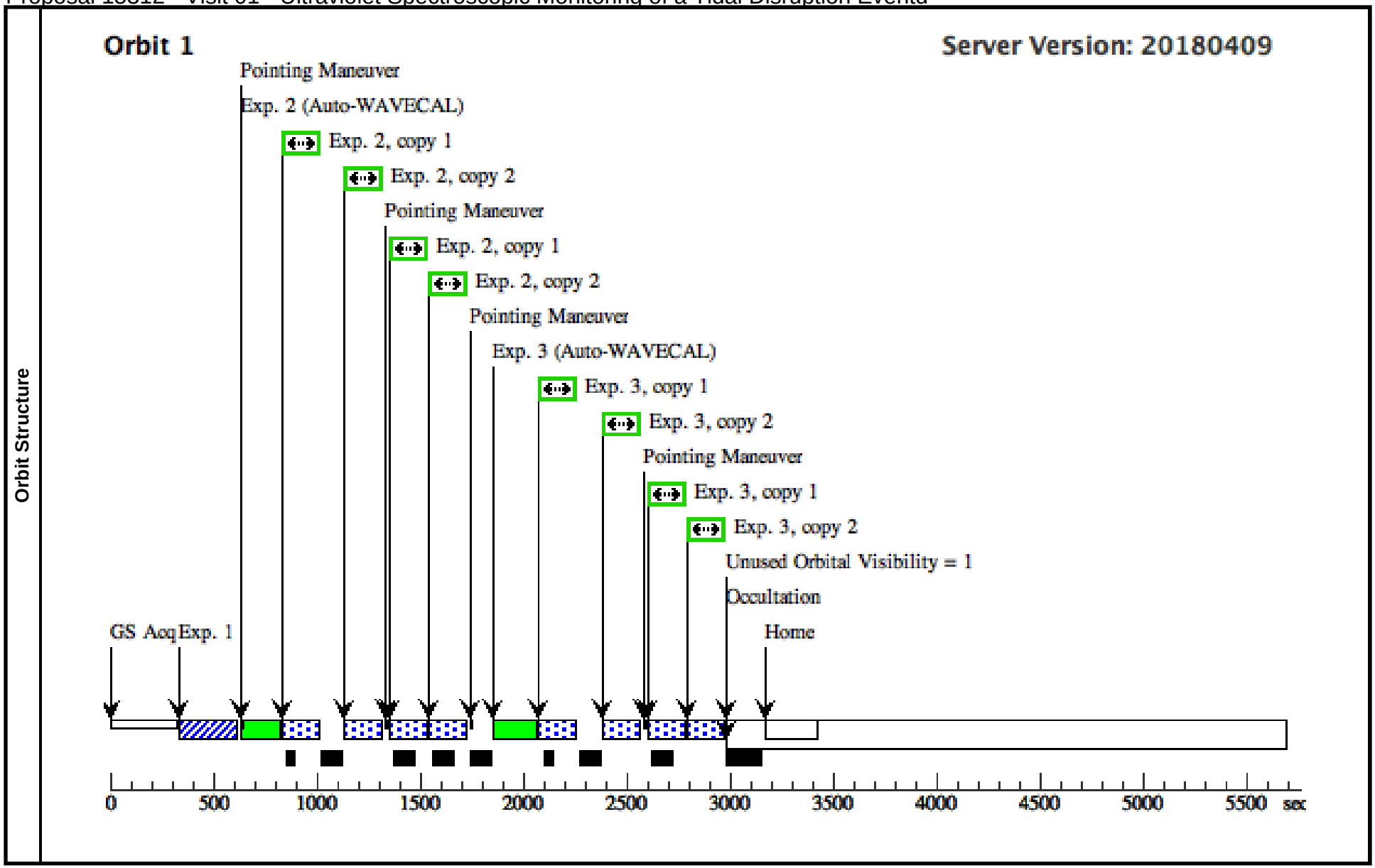
Fixed Targets

#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(2)	ASASSN18JD	RA: 22 43 42.8760 (340.9286500d) Dec: -16 59 8.51 (-16.98570d) Equinox: J2000		V=16	Reference Frame: ICRS

Comments:
Category=GALAXY
Description=[ACCRETION DISK, QUASAR]
Extended=YES

Exposures

#	Label (ETC Run)	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
1		(2) ASASSN18JD	STIS/CCD, ACQ, 50CCD	MIRROR				10 Secs (10 Secs)	
								[==>]	***[1]***
2	(STIS.sp.826569)	(2) ASASSN18JD	STIS/FUV-MAMA, ACCUM, 52X0.2	G140L 1425 A			Pattern 1, Exps 2-2 in Visit 01 (1)	100 Secs X 2 (676 Secs)	
								[==>169.0 Secs (Pattern 1, Copy 1)] *[==>169.0 Secs (Pattern 1, Copy 2)]* *[==>169.0 Secs (Pattern 2, Copy 1)]* *[==>169.0 Secs (Pattern 2, Copy 2)]*	***[1]***
3	(STIS.sp.826568)	(2) ASASSN18JD	STIS/NUV-MAMA, ACCUM, 52X0.2	G230L 2376 A			Pattern 1, Exps 3-3 in Visit 01 (1)	100 Secs X 2 (676 Secs)	
								[==>169.0 Secs (Pattern 1, Copy 1)] *[==>169.0 Secs (Pattern 1, Copy 2)]* *[==>169.0 Secs (Pattern 2, Copy 1)]* *[==>169.0 Secs (Pattern 2, Copy 2)]*	***[1]***


Orbit Structure
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Exp. 2, copy 1
Exp. 2, copy 2
Pointing Maneuver
Exp. 3 (Auto-WAVECAL)
Exp. 3, copy 1
Exp. 3, copy 2
Pointing Maneuver
Exp. 3, copy 1
Exp. 3, copy 2
Unused Orbital Visibility = 1
Occultation
Home
GS Acq
Exp. 1
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1000
1500
2000
2500
3000
3500
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4500
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sec

Visit

Proposal 15312, Visit 02, implementation Mon May 14 23:03:42 GMT 2018

Diagnostic Status: No Diagnostics

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

Special Requirements: SCHED 100%; AFTER 01 BY 13 D TO 17 D; ON HOLD

On Hold Comments: requires discovery of a sufficiently bright ASAS-SN Tidal Disruption Event

Patterns

#	Primary Pattern		Secondary Pattern	Exposures
(2)	Pattern Type=STIS-ALONG-SLIT	Coordinate Frame=POS-TARG		(2), (3)
	Purpose=DITHER	Pattern Orientation=90.0		
	Number Of Points=3	Angle Between Sides=		
	Point Spacing=0.3829	Center Pattern=false		
	Line Spacing=			

Fixed Targets

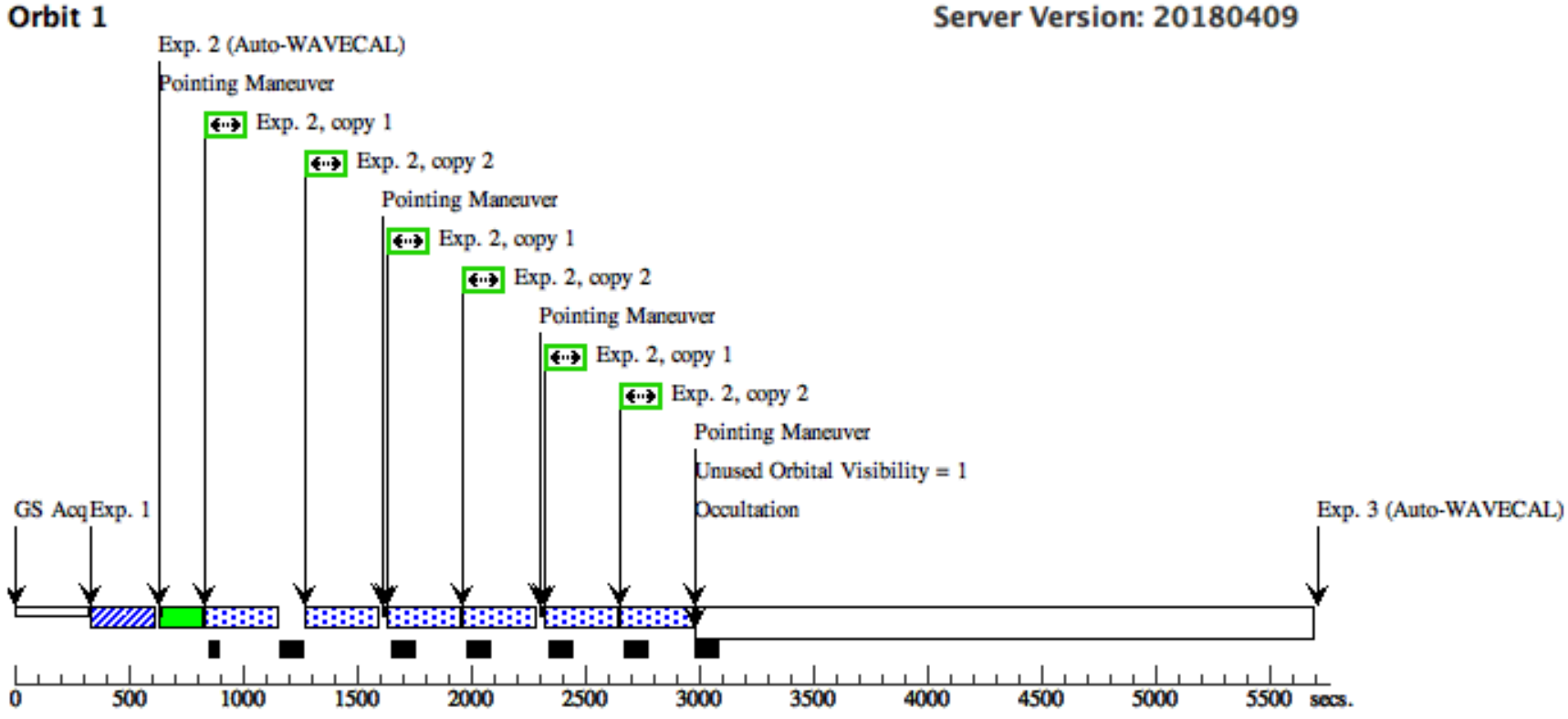
#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(2)	ASASSN18JD	RA: 22 43 42.8760 (340.9286500d) Dec: -16 59 8.51 (-16.98570d) Equinox: J2000		V=16	Reference Frame: ICRS

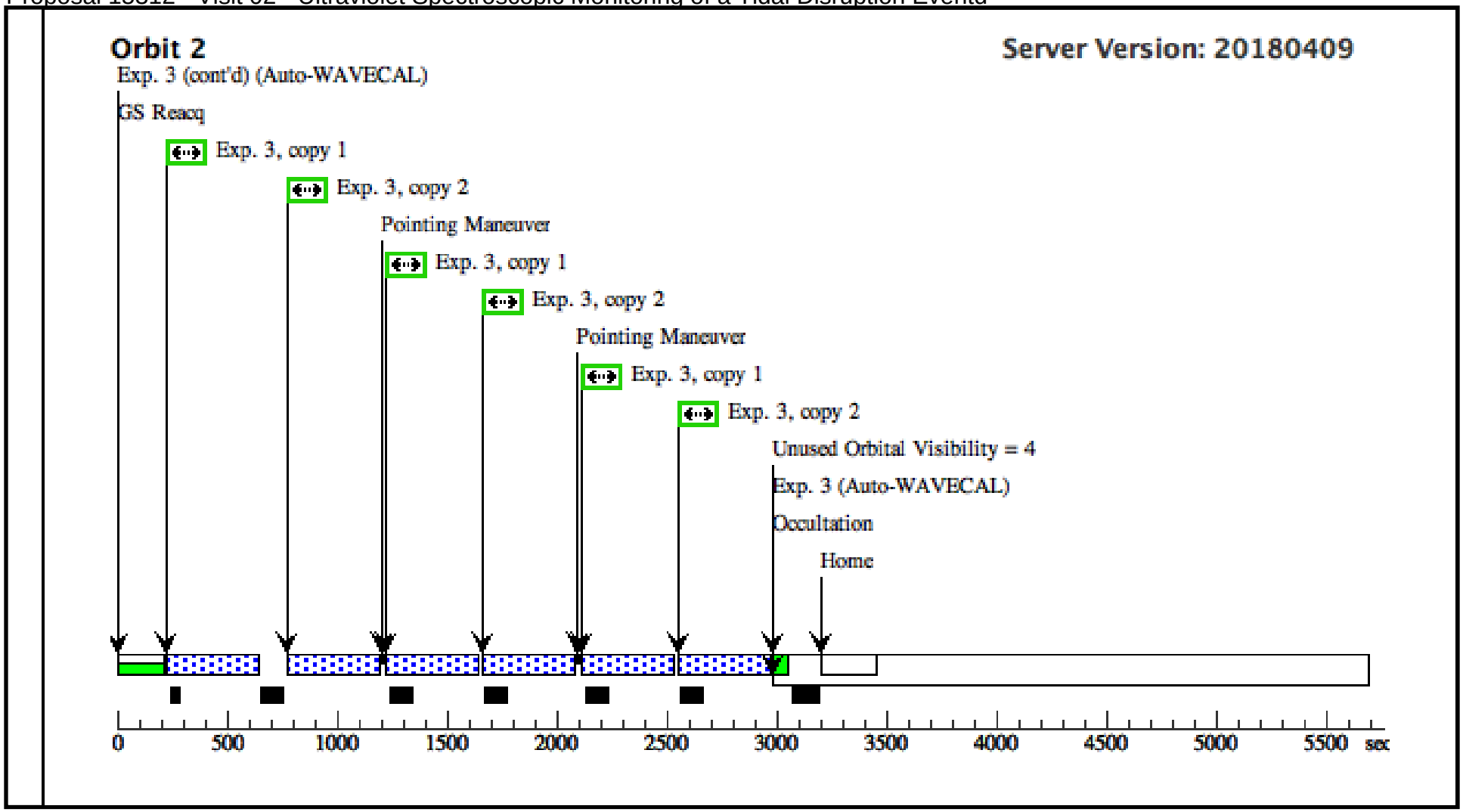
Comments:
Category=GALAXY
Description=[ACCRETION DISK, QUASAR]
Extended=YES

Exposures

#	Label (ETC Run)	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
1		(2) ASASSN18JD	STIS/CCD, ACQ, 50CCD	MIRROR				10 Secs (10 Secs)	
								[==>]	***[1]***
2	(STIS.sp.826569)	(2) ASASSN18JD	STIS/NUV-MAMA, ACCUM, 52X0.2	G230L 2376 A			Pattern 2, Exps 2-2 in Visit 02 (2)	300 Secs X 2 (1854 Secs)	
								[==>309.0 Secs (Pattern 1, Copy 1)] *[==>309.0 Secs (Pattern 1, Copy 2)]* *[==>309.0 Secs (Pattern 2, Copy 1)]* *[==>309.0 Secs (Pattern 2, Copy 2)]* *[==>309.0 Secs (Pattern 3, Copy 1)]* *[==>309.0 Secs (Pattern 3, Copy 2)]*	***[1]***
3	(STIS.sp.826568)	(2) ASASSN18JD	STIS/FUV-MAMA, ACCUM, 52X0.2	G140L 1425 A			Pattern 2, Exps 3-3 in Visit 02 (2)	300 Secs X 2 (2460 Secs)	
								[==>410.0 Secs (Pattern 1, Copy 1)] *[==>410.0 Secs (Pattern 1, Copy 2)]* *[==>410.0 Secs (Pattern 2, Copy 1)]* *[==>410.0 Secs (Pattern 2, Copy 2)]* *[==>410.0 Secs (Pattern 3, Copy 1)]* *[==>410.0 Secs (Pattern 3, Copy 2)]*	***[2]***

Orbit Structure

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Exp. 3, copy 2
Pointing Maneuver
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Pointing Maneuver
Exp. 3, copy 1
Exp. 3, copy 2
Unused Orbital Visibility = 4
Exp. 3 (Auto-WAVECAL)
Occultation
Home
0
500
1000
1500
2000
2500
3000
3500
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Visit

Proposal 15312, Visit 03, implementation Mon May 14 23:03:42 GMT 2018

Diagnostic Status: No Diagnostics

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

Special Requirements: SCHED 100%; AFTER 02 BY 13 D TO 30 D; ON HOLD

On Hold Comments: requires discovery of a sufficiently bright ASAS-SN Tidal Disruption Event

Patterns

#	Primary Pattern		Secondary Pattern	Exposures
(2)	Pattern Type=STIS-ALONG-SLIT	Coordinate Frame=POS-TARG		(2), (3)
	Purpose=DITHER	Pattern Orientation=90.0		
	Number Of Points=3	Angle Between Sides=		
	Point Spacing=0.3829	Center Pattern=false		
	Line Spacing=			

Fixed Targets

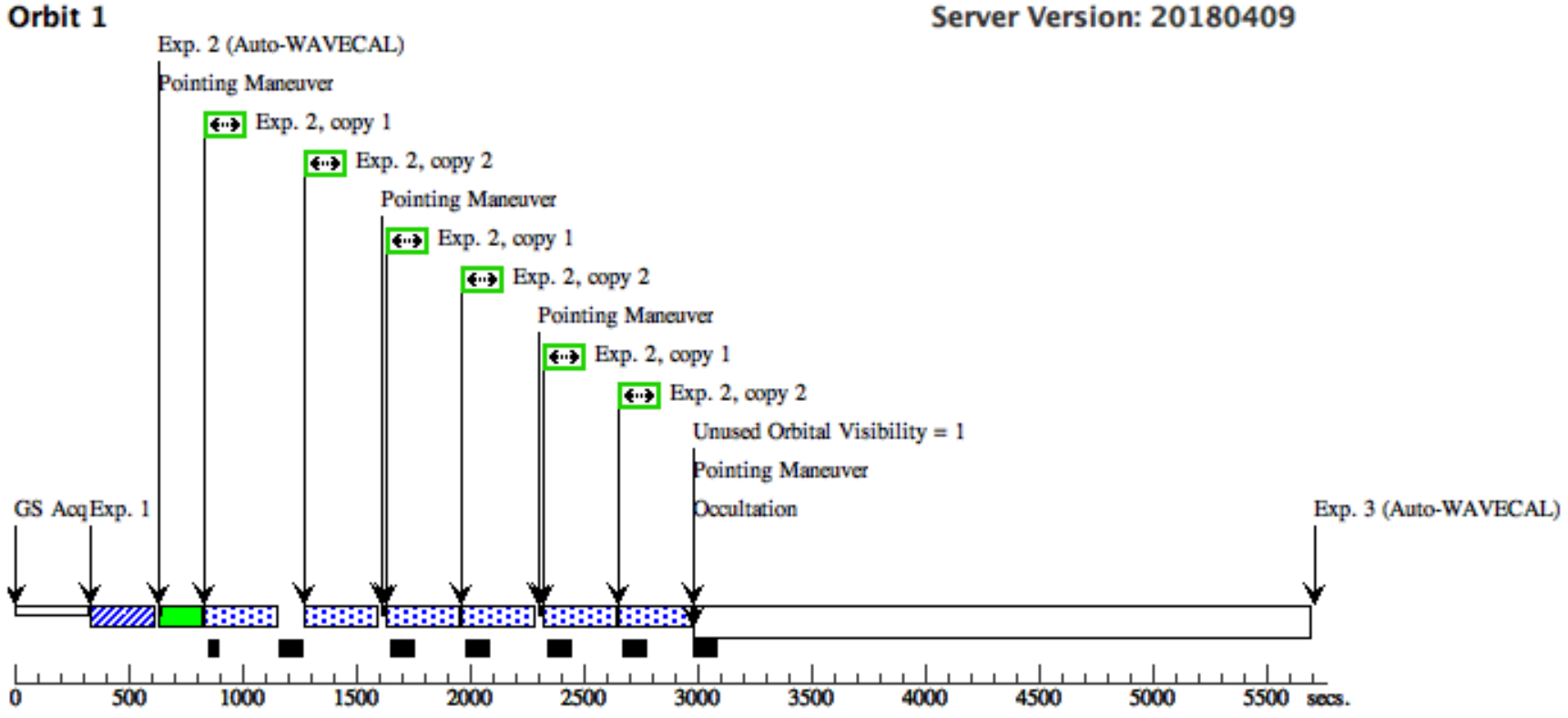
#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(2)	ASASSN18JD	RA: 22 43 42.8760 (340.9286500d) Dec: -16 59 8.51 (-16.98570d) Equinox: J2000		V=16	Reference Frame: ICRS

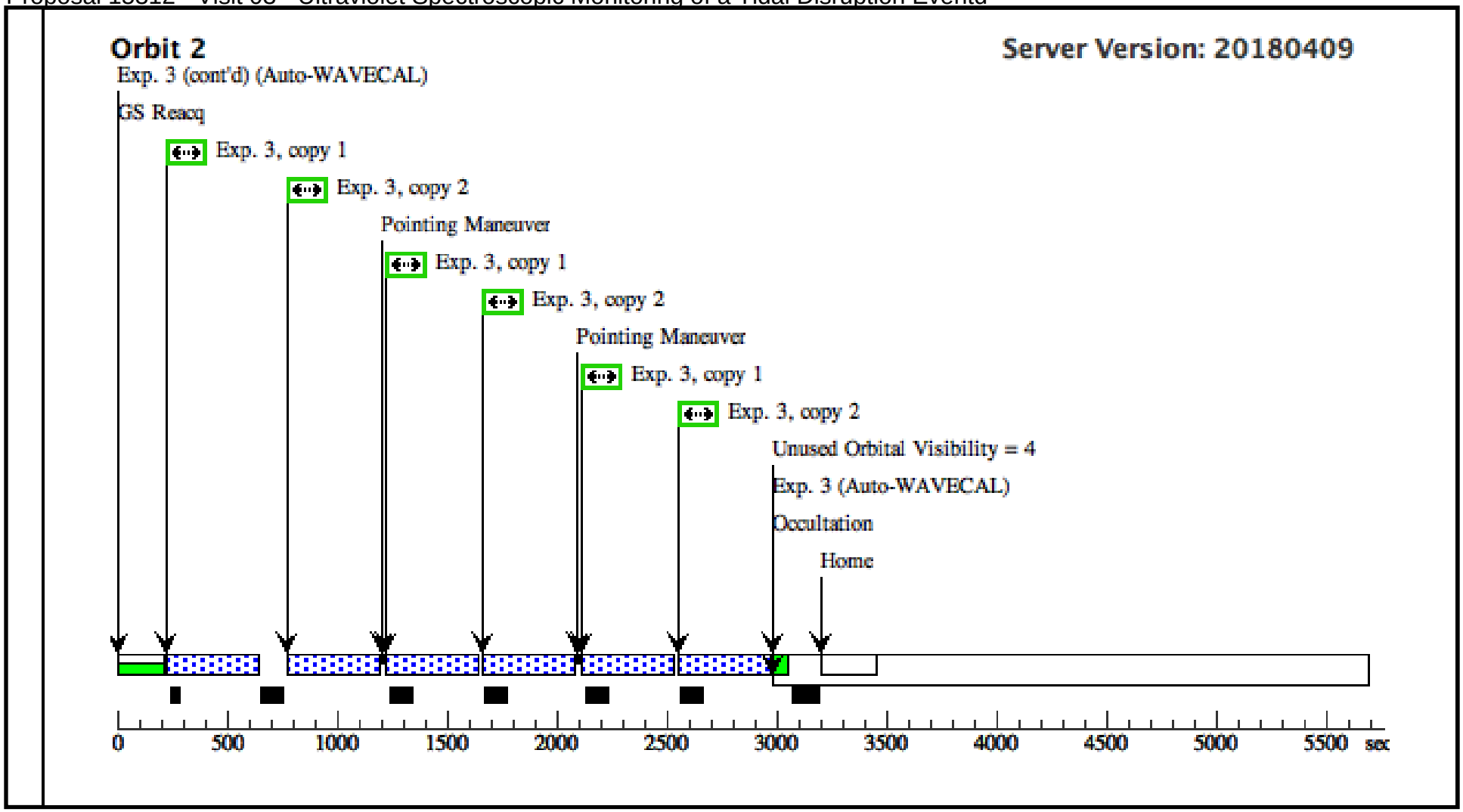
Comments:
Category=GALAXY
Description=[ACCRETION DISK, QUASAR]
Extended=YES

Exposures

#	Label (ETC Run)	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
1		(2) ASASSN18JD	STIS/CCD, ACQ, 50CCD	MIRROR				10 Secs (10 Secs)	
								[==>]	***[1]***
2	(STIS.sp.826569)	(2) ASASSN18JD	STIS/NUV-MAMA, ACCUM, 52X0.2	G230L 2376 A			Pattern 2, Exps 2-2 in Visit 03 (2)	300 Secs X 2 (1854 Secs)	
								[==>309.0 Secs (Pattern 1, Copy 1)] *[==>309.0 Secs (Pattern 1, Copy 2)]* *[==>309.0 Secs (Pattern 2, Copy 1)]* *[==>309.0 Secs (Pattern 2, Copy 2)]* *[==>309.0 Secs (Pattern 3, Copy 1)]* *[==>309.0 Secs (Pattern 3, Copy 2)]*	***[1]***
3	(STIS.sp.826568)	(2) ASASSN18JD	STIS/FUV-MAMA, ACCUM, 52X0.2	G140L 1425 A			Pattern 2, Exps 3-3 in Visit 03 (2)	300 Secs X 2 (2460 Secs)	
								[==>410.0 Secs (Pattern 1, Copy 1)] *[==>410.0 Secs (Pattern 1, Copy 2)]* *[==>410.0 Secs (Pattern 2, Copy 1)]* *[==>410.0 Secs (Pattern 2, Copy 2)]* *[==>410.0 Secs (Pattern 3, Copy 1)]* *[==>410.0 Secs (Pattern 3, Copy 2)]*	***[2]***

Orbit Structure

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Exp. 3, copy 2
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Exp. 3, copy 1
Exp. 3, copy 2
Pointing Maneuver
Exp. 3, copy 1
Exp. 3, copy 2
Unused Orbital Visibility = 4
Exp. 3 (Auto-WAVECAL)
Occultation
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Visit

Proposal 15312, Visit 04, implementation Mon May 14 23:03:42 GMT 2018

Diagnostic Status: No Diagnostics

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

Special Requirements: SCHED 100%; AFTER 03 BY 13 D TO 17 D; ON HOLD

On Hold Comments: requires discovery of a sufficiently bright ASAS-SN Tidal Disruption Event

Patterns

#	Primary Pattern		Secondary Pattern	Exposures
(2)	Pattern Type=STIS-ALONG-SLIT	Coordinate Frame=POS-TARG		(2), (3)
	Purpose=DITHER	Pattern Orientation=90.0		
	Number Of Points=3	Angle Between Sides=		
	Point Spacing=0.3829	Center Pattern=false		
	Line Spacing=			

Fixed Targets

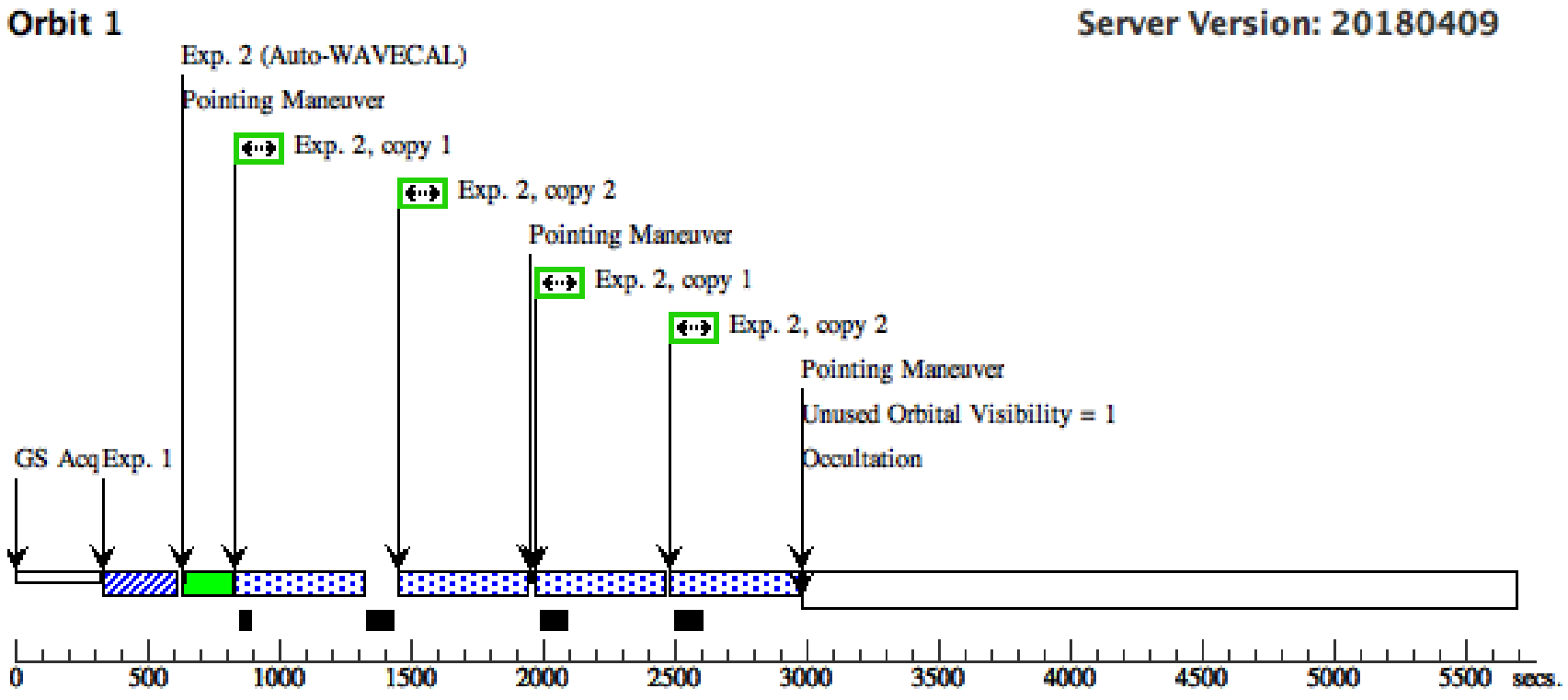
#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(2)	ASASSN18JD	RA: 22 43 42.8760 (340.9286500d) Dec: -16 59 8.51 (-16.98570d) Equinox: J2000		V=16	Reference Frame: ICRS

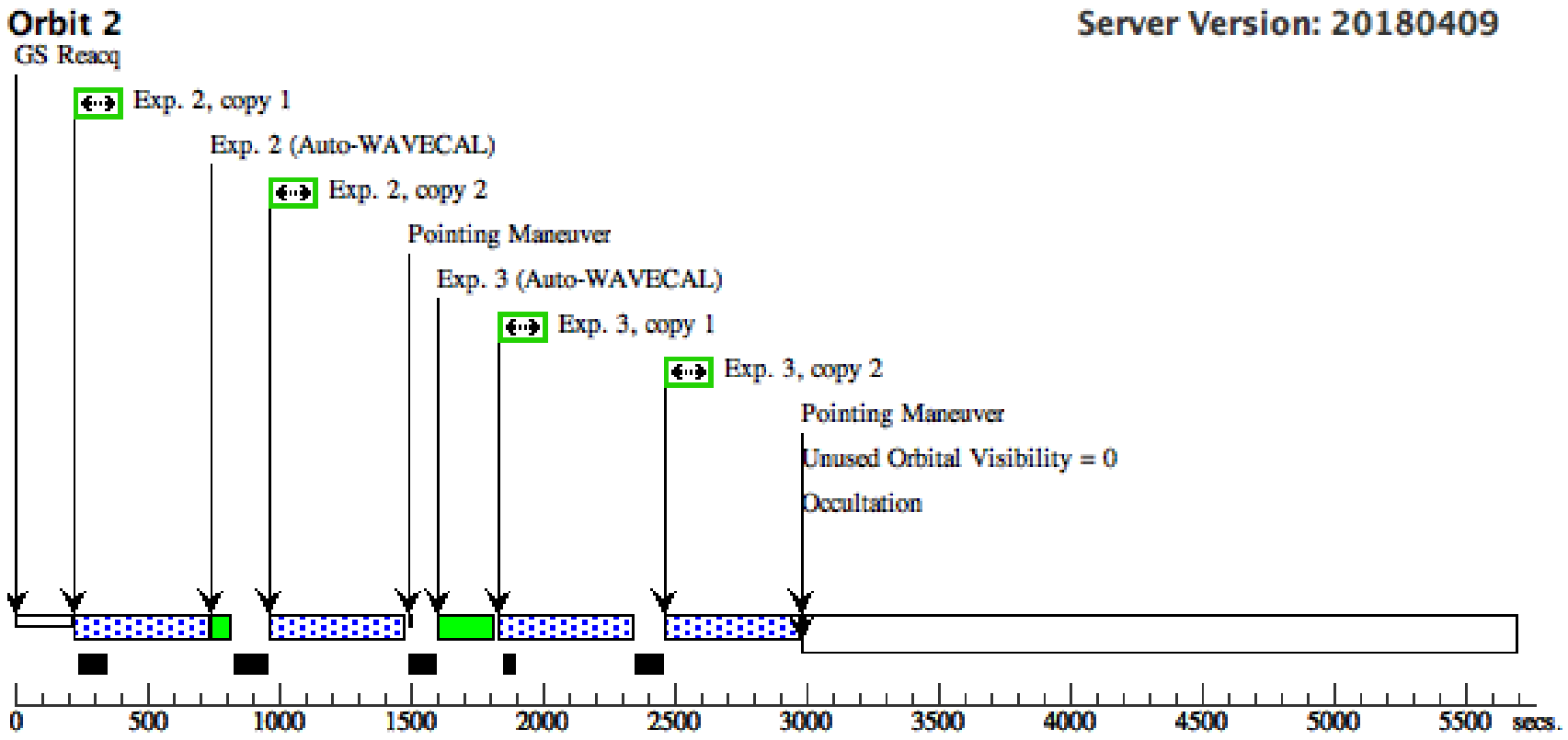
Comments:
Category=GALAXY
Description=[ACCRETION DISK, QUASAR]
Extended=YES

Exposures

#	Label (ETC Run)	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
1		(2) ASASSN18JD	STIS/CCD, ACQ, 50CCD	MIRROR				10 Secs (10 Secs)	
								[==>]	***[1]***
2	(STIS.sp.826569)	(2) ASASSN18JD	STIS/NUV-MAMA, ACCUM, 52X0.2	G230L 2376 A			Pattern 2, Exps 2-2 in Visit 04 (2)	500 Secs X 2 (2920 Secs)	
								[==>481.0 Secs (Pattern 1, Copy 1)] *[==>481.0 Secs (Pattern 1, Copy 2)]* *[==>481.0 Secs (Pattern 2, Copy 1)]* *[==>481.0 Secs (Pattern 2, Copy 2)]*	***[1]***
								[==>498.0 Secs (Pattern 3, Copy 1)] *[==>498.0 Secs (Pattern 3, Copy 2)]*	***[2]***
3	(STIS.sp.826568)	(2) ASASSN18JD	STIS/FUV-MAMA, ACCUM, 52X0.2	G140L 1425 A			Pattern 2, Exps 3-3 in Visit 04 (2)	500 Secs X 2 (3420 Secs)	
								[==>498.0 Secs (Pattern 1, Copy 1)] *[==>498.0 Secs (Pattern 1, Copy 2)]*	***[2]***
								[==>606.0 Secs (Pattern 2, Copy 1)] *[==>606.0 Secs (Pattern 2, Copy 2)]* *[==>606.0 Secs (Pattern 3, Copy 1)]* *[==>606.0 Secs (Pattern 3, Copy 2)]*	***[3]***

Orbit Structure

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Exp. 3 (Auto-WAVECAL)
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Exp. 3, copy 2
Pointing Maneuver
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Occultation
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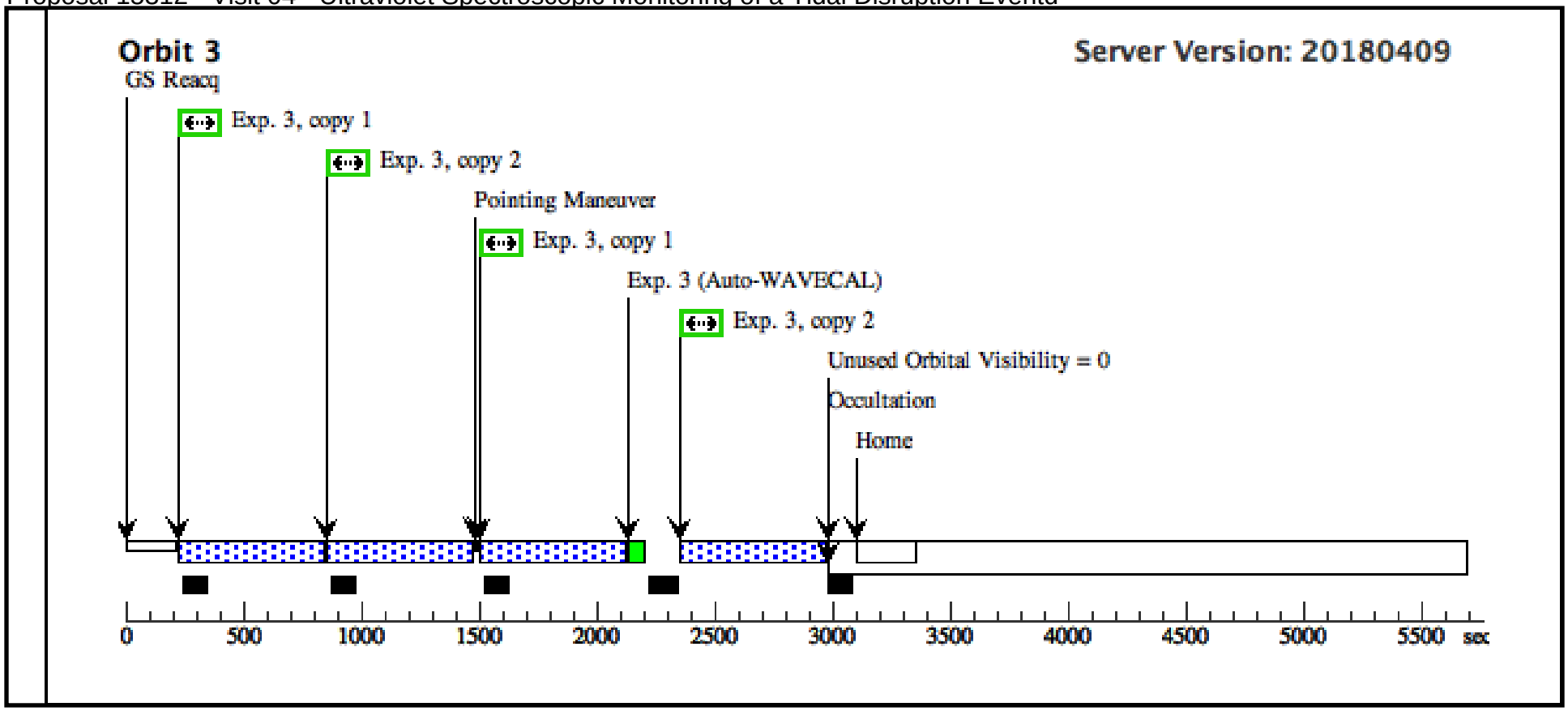
secs.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Server Version: 20180409
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Exp. 3, copy 1
Exp. 3, copy 2
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Exp. 3, copy 1
Exp. 3 (Auto-WAVECAL)
Exp. 3, copy 2
Unused Orbital Visibility = 0
Occultation
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Visit

Proposal 15312, Visit 05, implementation Mon May 14 23:03:43 GMT 2018

Diagnostic Status: No Diagnostics

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

Special Requirements: SCHED 100%; AFTER 04 BY 13 D TO 17 D; ON HOLD

On Hold Comments: requires discovery of a sufficiently bright ASAS-SN Tidal Disruption Event

Patterns

#	Primary Pattern		Secondary Pattern	Exposures
(3)	Pattern Type=STIS-ALONG-SLIT	Coordinate Frame=POS-TARG		(2), (3)
	Purpose=DITHER	Pattern Orientation=90.0		
	Number Of Points=5	Angle Between Sides=		
	Point Spacing=0.3829	Center Pattern=false		
	Line Spacing=			

Fixed Targets

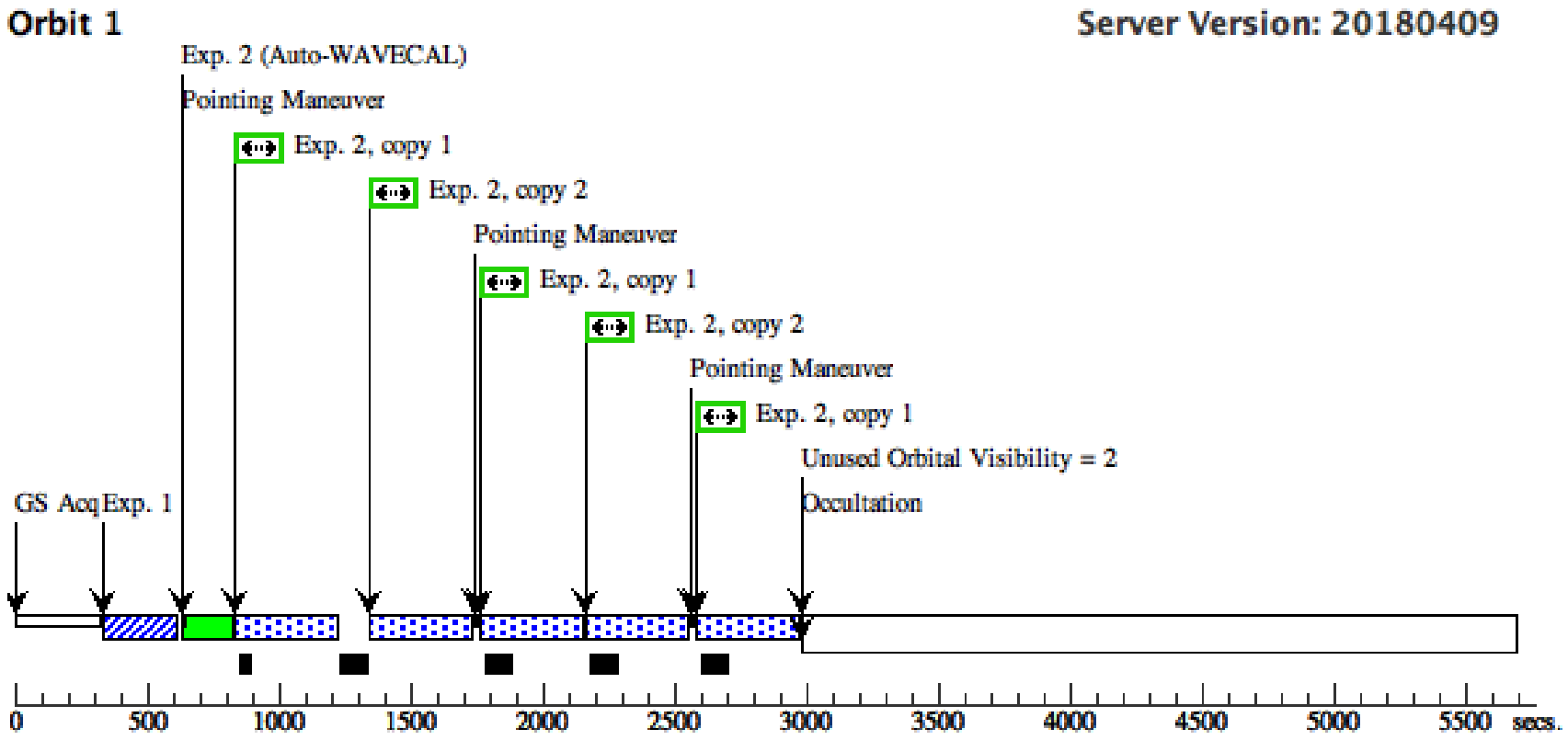
#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(2)	ASASSN18JD	RA: 22 43 42.8760 (340.9286500d)		V=16	Reference Frame: ICRS
		Dec: -16 59 8.51 (-16.98570d)			
		Equinox: J2000			

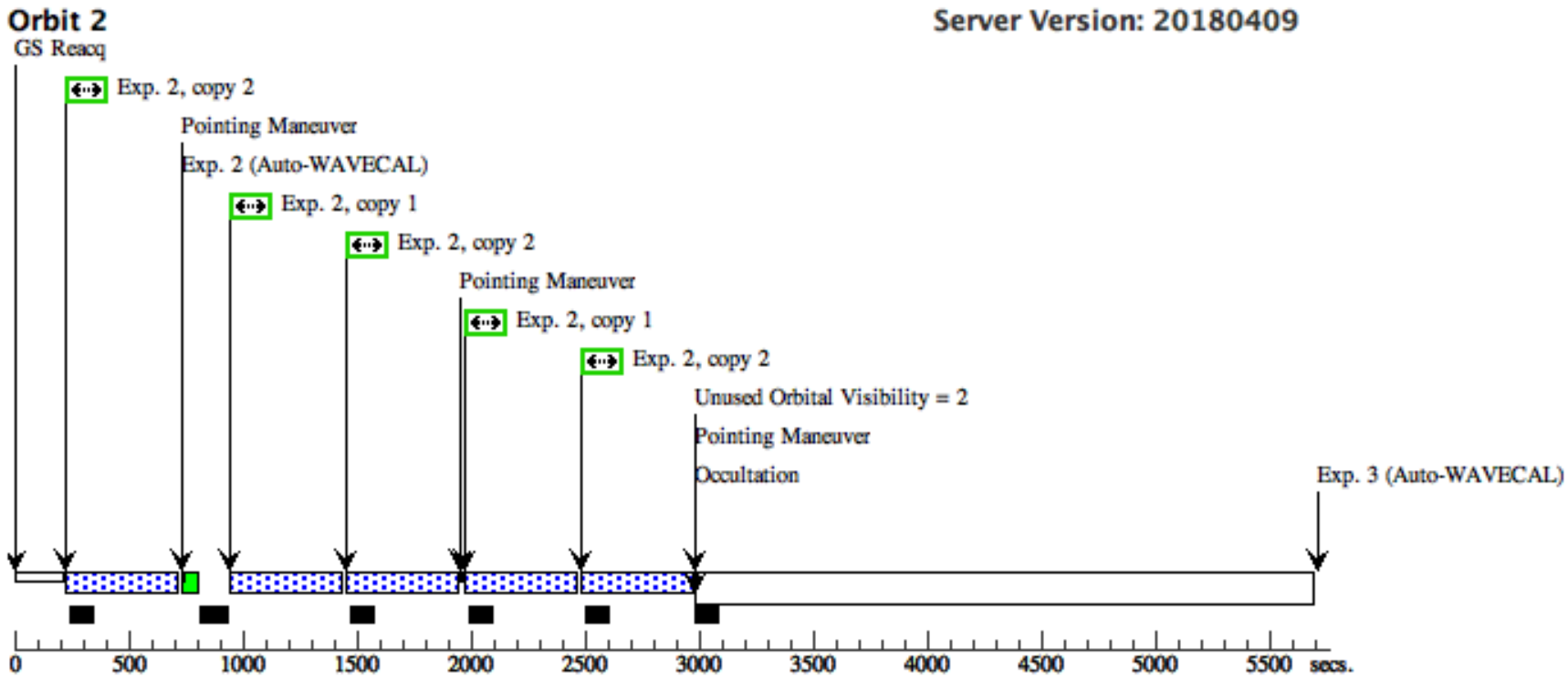
Comments:
Category=GALAXY
Description=[ACCRETION DISK, QUASAR]
Extended=YES

Exposures

#	Label (ETC Run)	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
1		(2) ASASSN18JD	STIS/CCD, ACQ, 50CCD	MIRROR				10 Secs (10 Secs)	
								[==>]	***[1]***
2	(STIS.sp.826569)	(2) ASASSN18JD	STIS/NUV-MAMA, ACCUM, 52X0.2	G230L 2376 A			Pattern 3, Exps 2-2 in Visit 05 (3)	400 Secs X 2 (4275 Secs)	
								[==>375.0 Secs (Pattern 1, Copy 1)] *[==>375.0 Secs (Pattern 1, Copy 2)]* *[==>375.0 Secs (Pattern 2, Copy 1)]* *[==>375.0 Secs (Pattern 2, Copy 2)]* *[==>375.0 Secs (Pattern 3, Copy 1)]*	***[1]***
								[==>480.0 Secs (Pattern 3, Copy 2)] *[==>480.0 Secs (Pattern 4, Copy 1)]* *[==>480.0 Secs (Pattern 4, Copy 2)]* *[==>480.0 Secs (Pattern 5, Copy 1)]* *[==>480.0 Secs (Pattern 5, Copy 2)]*	***[2]***
3	(STIS.sp.826568)	(2) ASASSN18JD	STIS/FUV-MAMA, ACCUM, 52X0.2	G140L 1425 A			Pattern 3, Exps 3-3 in Visit 05 (3)	500 Secs X 2 (5080 Secs)	
								[==>497.0 Secs (Pattern 1, Copy 1)] *[==>497.0 Secs (Pattern 1, Copy 2)]* *[==>497.0 Secs (Pattern 2, Copy 1)]* *[==>497.0 Secs (Pattern 2, Copy 2)]* *[==>497.0 Secs (Pattern 3, Copy 1)]*	***[3]***
								[==>519.0 Secs (Pattern 3, Copy 2)] *[==>519.0 Secs (Pattern 4, Copy 1)]* *[==>519.0 Secs (Pattern 4, Copy 2)]* *[==>519.0 Secs (Pattern 5, Copy 1)]* *[==>519.0 Secs (Pattern 5, Copy 2)]*	***[4]***

Orbit Structure

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Exp. 2 (Auto-WAVECAL)
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Exp. 2, copy 2
Pointing Maneuver
Exp. 2, copy 1
Exp. 2, copy 2
Unused Orbital Visibility = 2
Pointing Maneuver
Occultation
Exp. 3 (Auto-WAVECAL)
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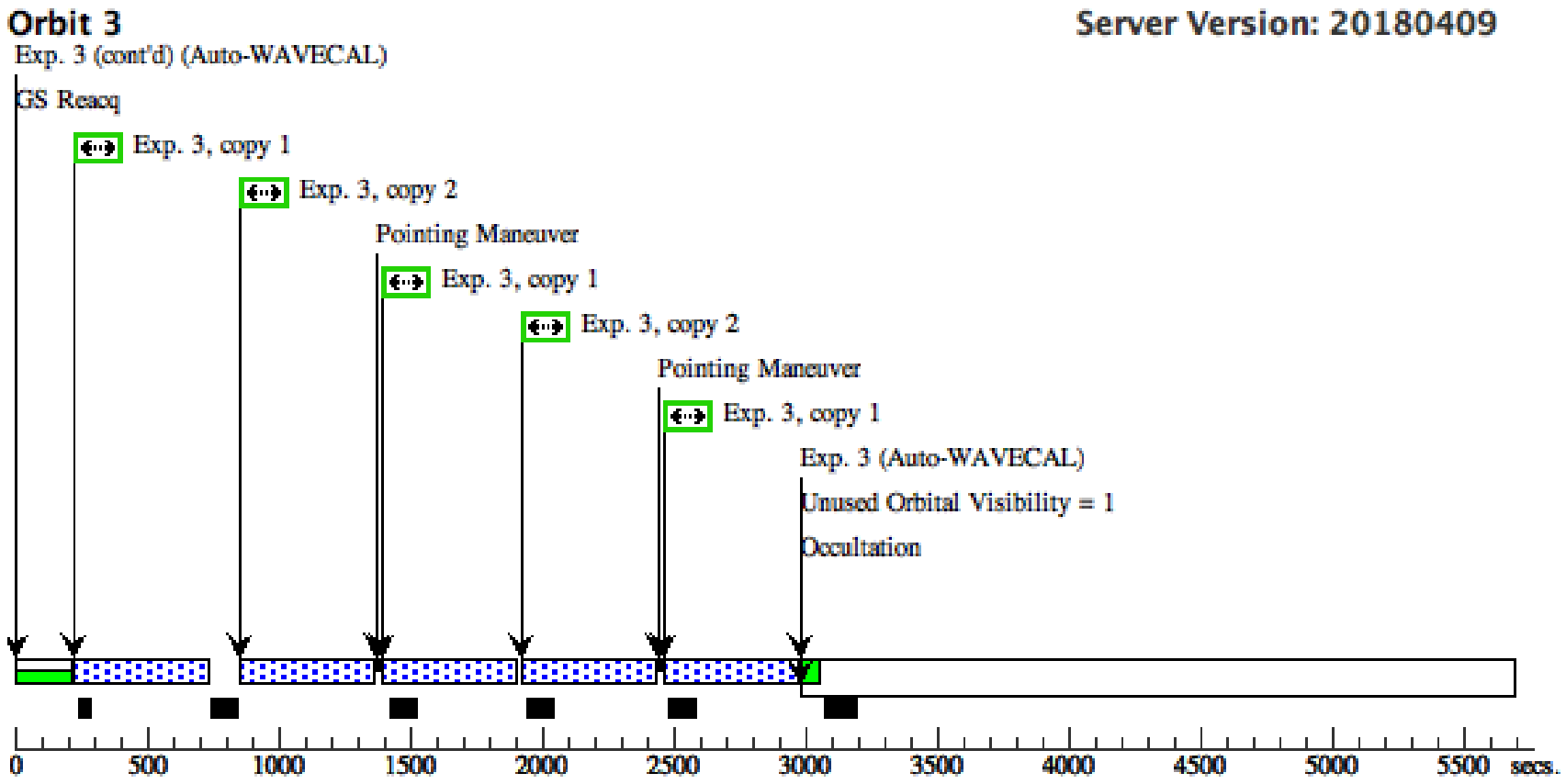
secs.


Orbit 3
Server Version: 20180409
Exp. 3 (cont'd) (Auto-WAVECAL)
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Exp. 3, copy 2
Pointing Maneuver
Exp. 3, copy 1
Exp. 3, copy 2
Pointing Maneuver
Exp. 3, copy 1
Exp. 3 (Auto-WAVECAL)
Unused Orbital Visibility = 1
Occultation
0
500
1000
1500
2000
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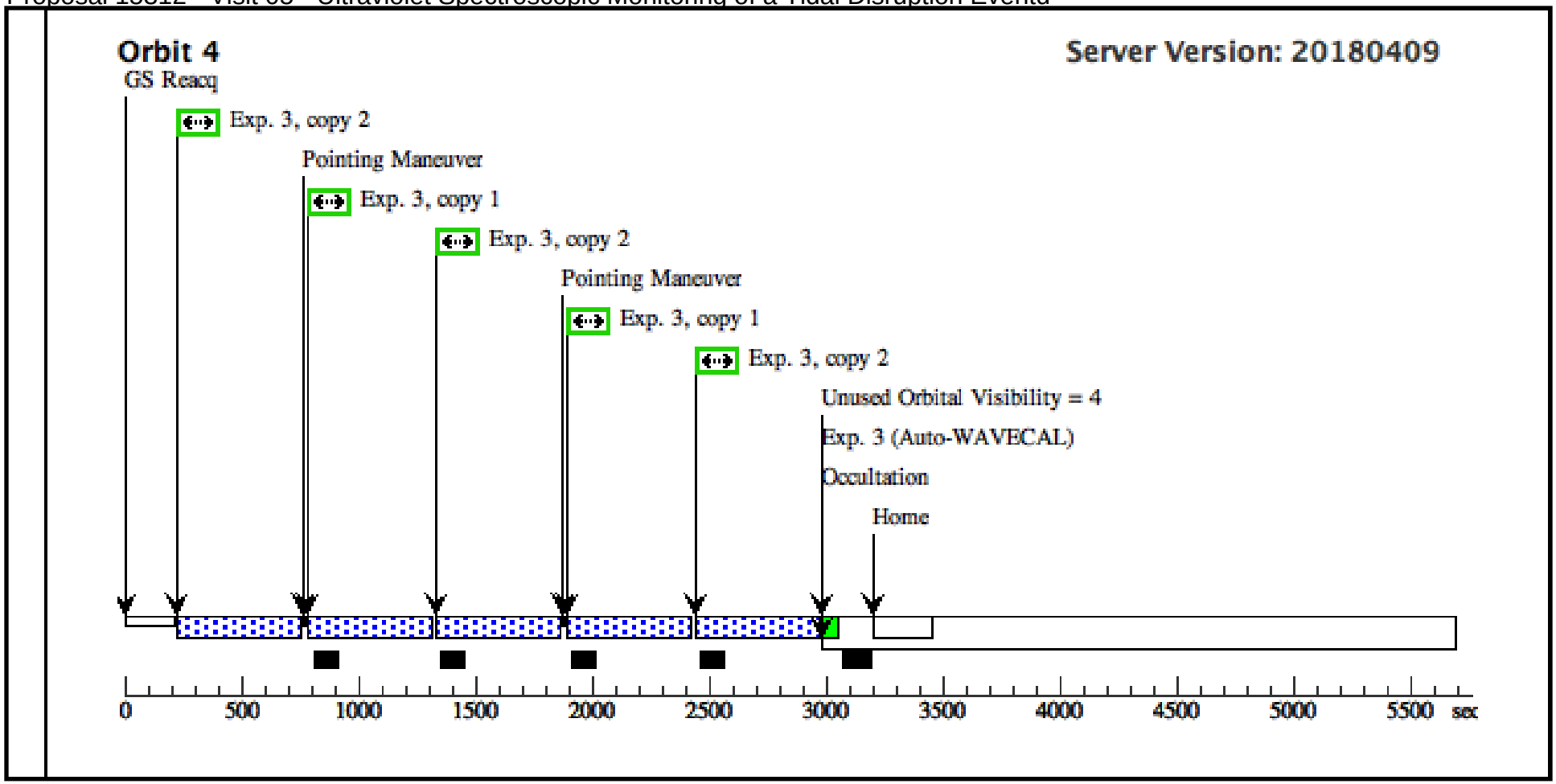
3500
4000
4500
5000
5500
secs.


Orbit 4
Server Version: 20180409
GS Reacq
Exp. 3, copy 2
Pointing Maneuver
Exp. 3, copy 1
Exp. 3, copy 2
Pointing Maneuver
Exp. 3, copy 1
Exp. 3, copy 2
Unused Orbital Visibility = 4
Exp. 3 (Auto-WAVECAL)
Occultation
Home
0
500
1000
1500
2000
2500
3000
3500
4000
4500
5000
5500
sec

Visit

Proposal 15312, Visit 06, implementation Mon May 14 23:03:43 GMT 2018

Diagnostic Status: No Diagnostics

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

Special Requirements: SCHED 100%; AFTER 05 BY 13 D TO 17 D; ON HOLD

On Hold Comments: requires discovery of a sufficiently bright ASAS-SN Tidal Disruption Event

Patterns

#	Primary Pattern		Secondary Pattern	Exposures
(1)	Pattern Type=STIS-ALONG-SLIT	Coordinate Frame=POS-TARG		(3), (5)
	Purpose=DITHER	Pattern Orientation=90.0		
	Number Of Points=2	Angle Between Sides=		
	Point Spacing=0.3829	Center Pattern=false		
	Line Spacing=			
(3)	Pattern Type=STIS-ALONG-SLIT	Coordinate Frame=POS-TARG		(2), (4)
	Purpose=DITHER	Pattern Orientation=90.0		
	Number Of Points=5	Angle Between Sides=		
	Point Spacing=0.3829	Center Pattern=false		
	Line Spacing=			

Fixed Targets

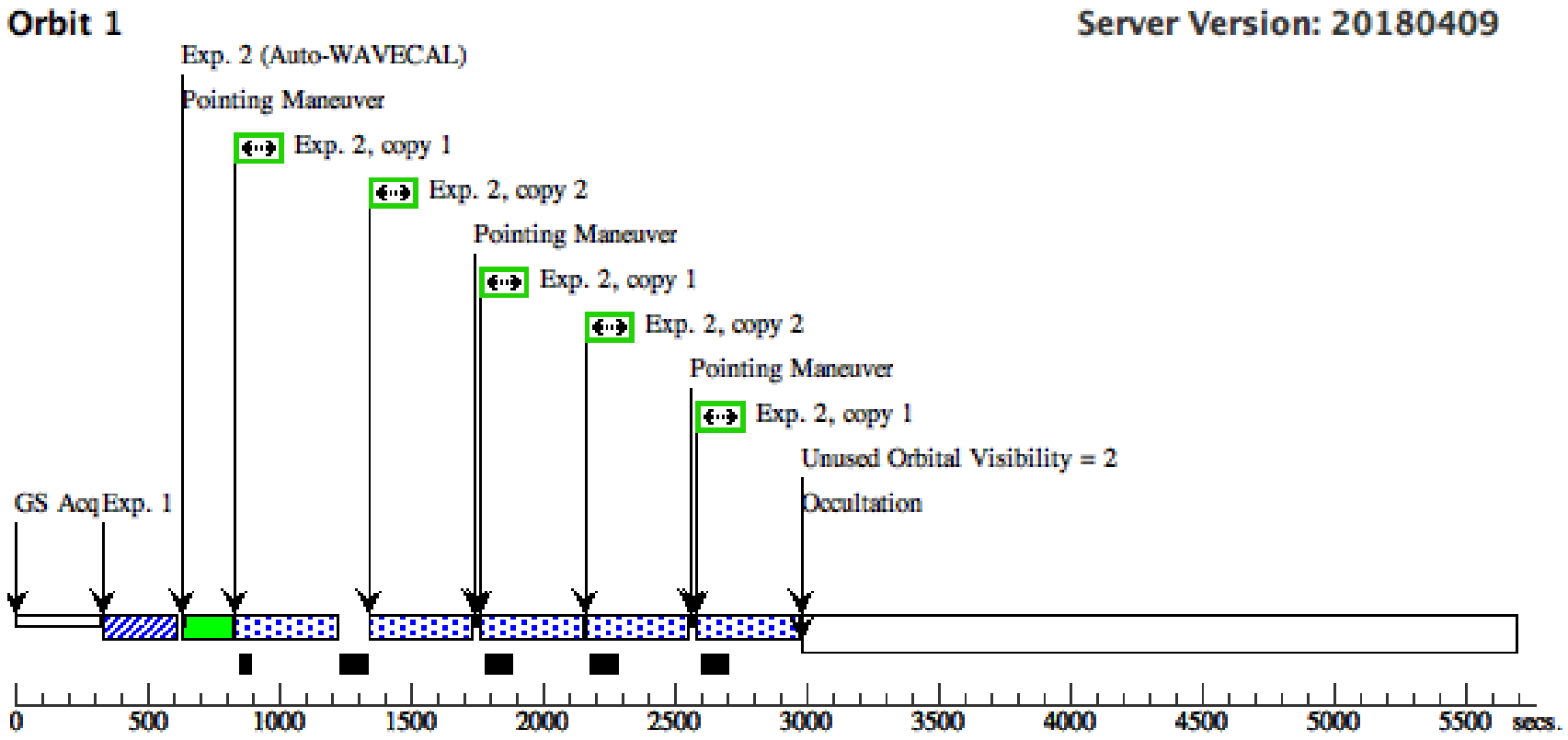
#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(2)	ASASSN18JD	RA: 22 43 42.8760 (340.9286500d)		V=16	Reference Frame: ICRS
		Dec: -16 59 8.51 (-16.98570d)			
		Equinox: J2000			

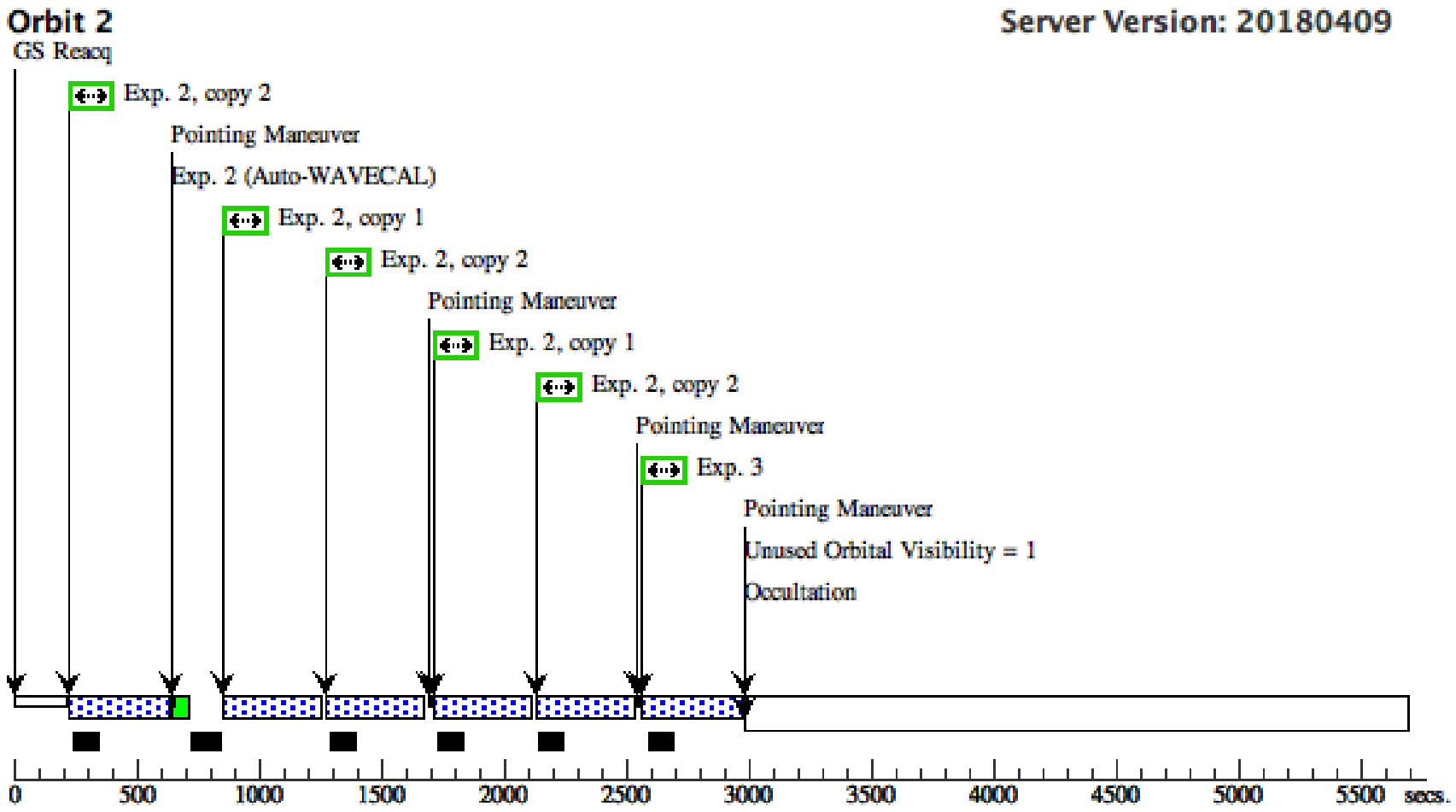
Comments:
Category=GALAXY
Description=[ACCRETION DISK, QUASAR]
Extended=YES

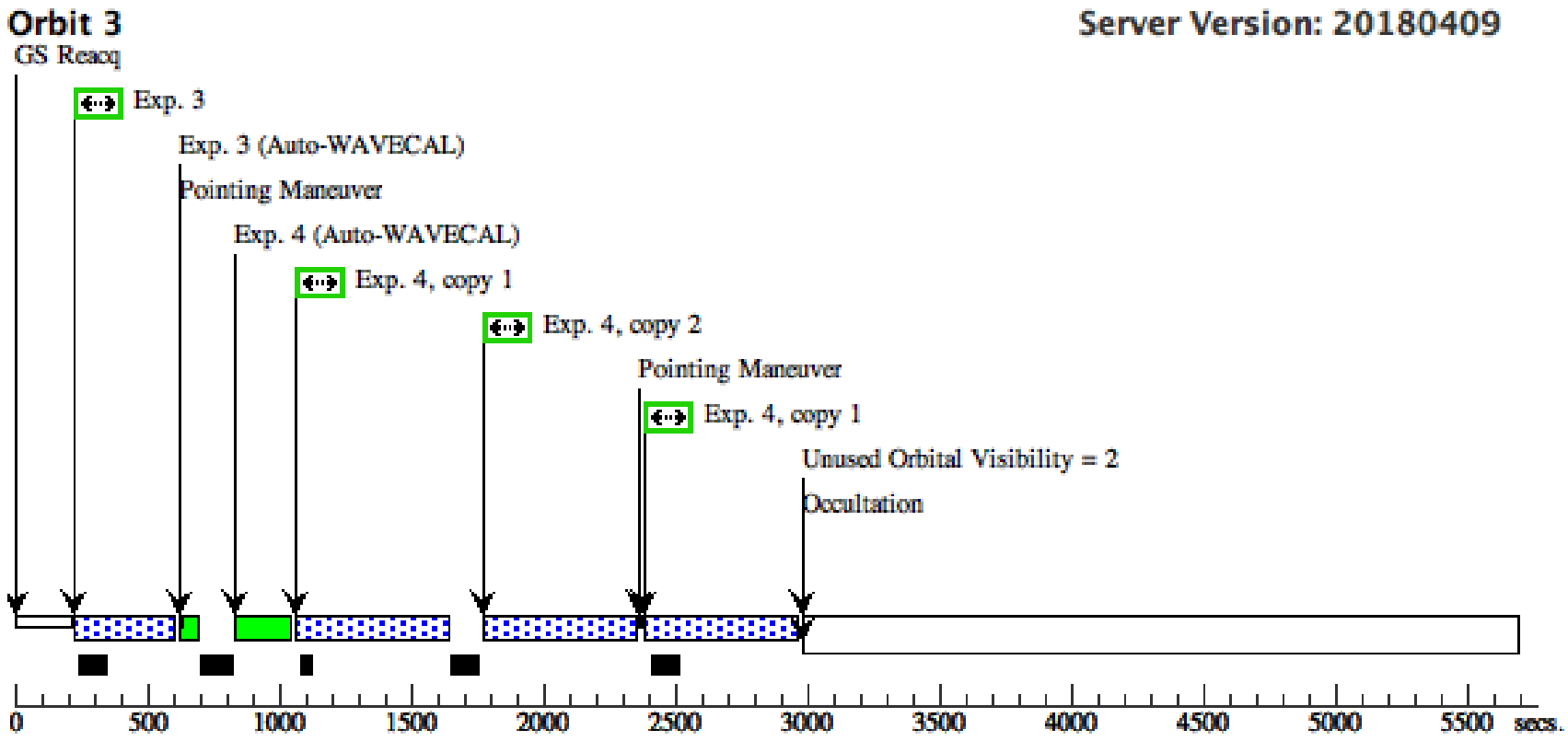
Exposures

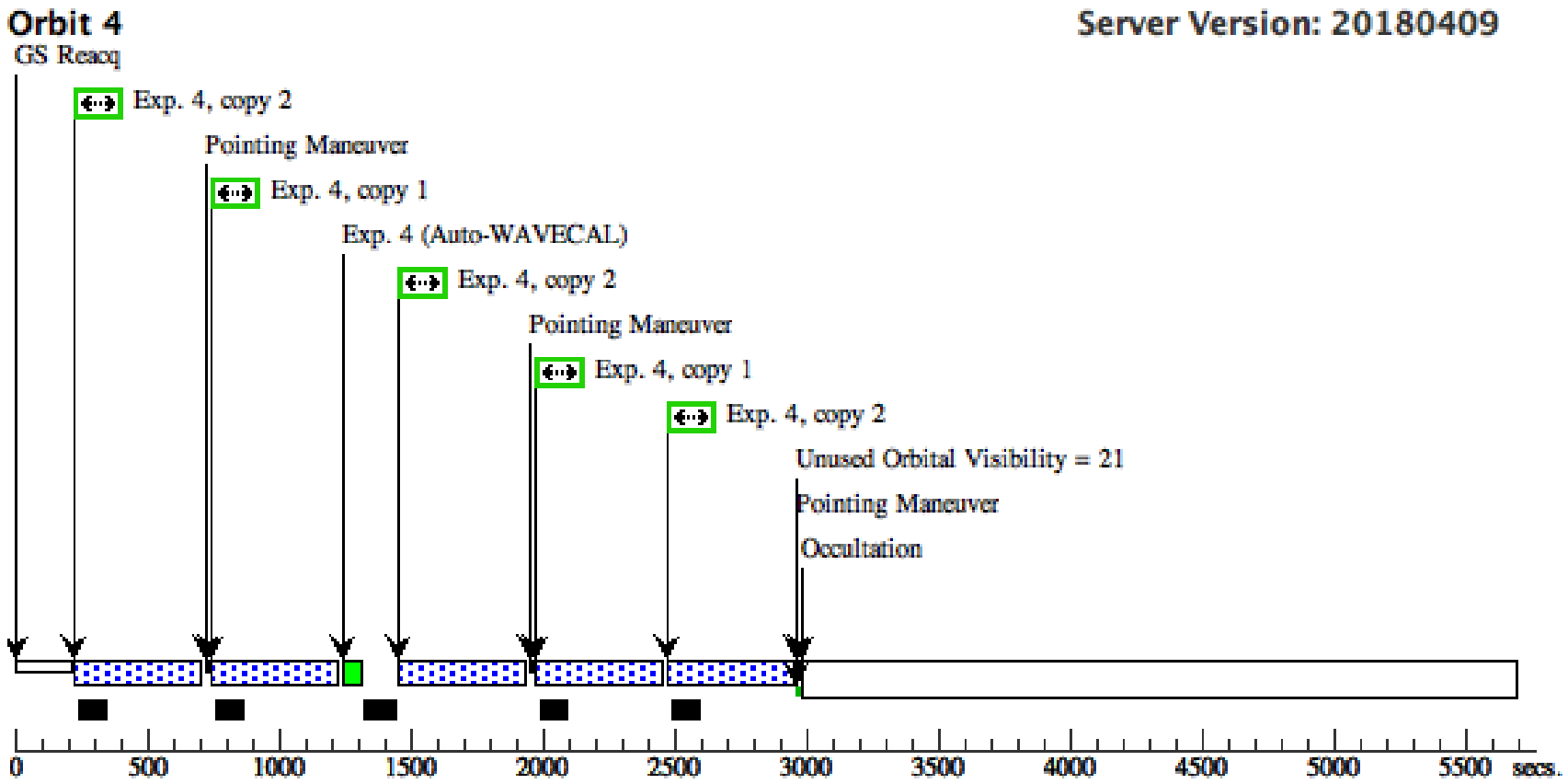
#	Label (ETC Run)	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
1		(2) ASASSN18JD	STIS/CCD, ACQ, 50CCD	MIRROR				10 Secs (10 Secs)	
								[==>]	***[1]***
2	(STIS.sp.826569)	(2) ASASSN18JD	STIS/NUV-MAMA, ACCUM, 52X0.2	G230L 2376 A			Pattern 3, Exps 2-2 in Visit 06 (3)	400 Secs X 2 (3835 Secs)	
								[==>375.0 Secs (Pattern 1, Copy 1)] *[==>375.0 Secs (Pattern 1, Copy 2)]* *[==>375.0 Secs (Pattern 2, Copy 1)]* *[==>375.0 Secs (Pattern 2, Copy 2)]* *[==>375.0 Secs (Pattern 3, Copy 1)]*	***[1]***
								[==>392.0 Secs (Pattern 3, Copy 2)] *[==>392.0 Secs (Pattern 4, Copy 1)]* *[==>392.0 Secs (Pattern 4, Copy 2)]* *[==>392.0 Secs (Pattern 5, Copy 1)]* *[==>392.0 Secs (Pattern 5, Copy 2)]*	***[2]***
3	(STIS.sp.826569)	(2) ASASSN18JD	STIS/NUV-MAMA, ACCUM, 52X0.2	G230L 2376 A			Pattern 1, Exps 3-3 in Visit 06 (1)	400 Secs (762 Secs)	
								[==>392.0 Secs (Pattern 1)]	***[2]***
								[==>370.0 Secs (Pattern 2)]	***[3]***
4	(STIS.sp.826568)	(2) ASASSN18JD	STIS/FUV-MAMA, ACCUM, 52X0.2	G140L 1425 A			Pattern 3, Exps 4-4 in Visit 06 (3)	500 Secs X 2 (5360 Secs)	
								[==>571.0 Secs (Pattern 1, Copy 1)] *[==>571.0 Secs (Pattern 1, Copy 2)]* *[==>571.0 Secs (Pattern 2, Copy 1)]*	***[3]***
								[==>471.0 Secs (Pattern 2, Copy 2)] *[==>471.0 Secs (Pattern 3, Copy 1)]* *[==>471.0 Secs (Pattern 3, Copy 2)]* *[==>471.0 Secs (Pattern 4, Copy 1)]* *[==>471.0 Secs (Pattern 4, Copy 2)]*	***[4]***
								[==>646.0 Secs (Pattern 5, Copy 1)] *[==>646.0 Secs (Pattern 5, Copy 2)]*	***[5]***
5	(STIS.sp.826568)	(2) ASASSN18JD	STIS/FUV-MAMA, ACCUM, 52X0.2	G140L 1425 A			Pattern 1, Exps 5-5 in Visit 06 (1)	500 Secs (1131 Secs)	
								[==>646.0 Secs (Pattern 1)] *[==>485.0 Secs (Pattern 2)]*	***[5]***

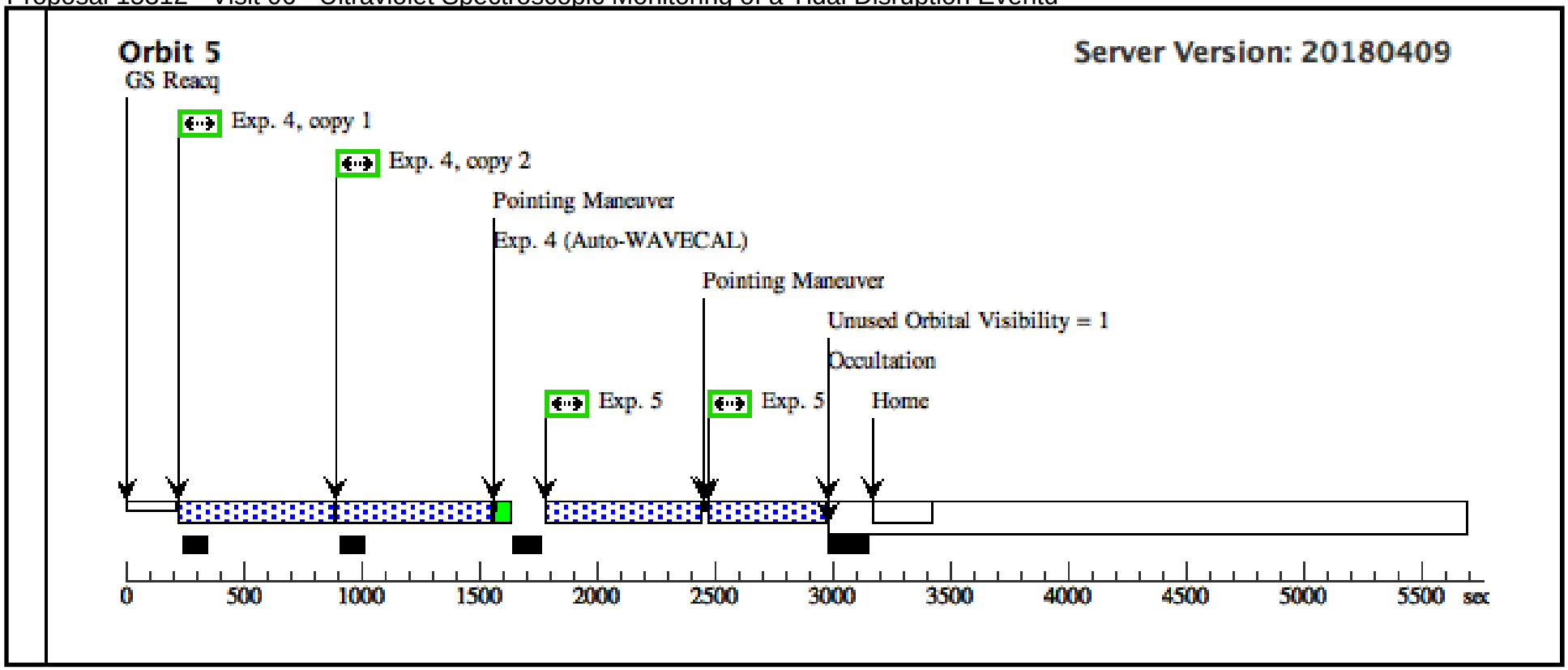
Orbit Structure




Orbit 2
Server Version: 20180409
GS Reacq
Exp. 2, copy 2
Pointing Maneuver
Exp. 2 (Auto-WAVECAL)
Exp. 2, copy 1
Exp. 2, copy 2
Pointing Maneuver
Exp. 2, copy 1
Exp. 2, copy 2
Pointing Maneuver
Exp. 3
Pointing Maneuver
Unused Orbital Visibility = 1
Occultation
0
500
1000
1500
2000
2500
3000
3500
4000
4500
5000
5500
secs.


Orbit 3
Server Version: 20180409
GS Reacq
Exp. 3
Exp. 3 (Auto-WAVECAL)
Pointing Maneuver
Exp. 4 (Auto-WAVECAL)
Exp. 4, copy 1
Exp. 4, copy 2
Pointing Maneuver
Exp. 4, copy 1
Unused Orbital Visibility = 2
Occultation
0
500
1000
1500
2000
2500
3000
3500
4000
4500
5000
5500
secs.


Orbit 4
Server Version: 20180409
GS Reacq
Exp. 4, copy 2
Pointing Maneuver
Exp. 4, copy 1
Exp. 4 (Auto-WAVECAL)
Exp. 4, copy 2
Pointing Maneuver
Exp. 4, copy 1
Exp. 4, copy 2
Unused Orbital Visibility = 21
Pointing Maneuver
Occultation
0
500
1000
1500
2000
2500
3000
3500
4000
4500
5000
5500
secs.


Orbit 5
Server Version: 20180409
GS Reacq
Exp. 4, copy 1
Exp. 4, copy 2
Pointing Maneuver
Exp. 4 (Auto-WAVECAL)
Pointing Maneuver
Unused Orbital Visibility = 1
Occultation
Exp. 5
Exp. 5
Home
0
500
1000
1500
2000
2500
3000
3500
4000
4500
5000
5500
sec

Visit

Proposal 15312, Visit 07, implementation Mon May 14 23:03:43 GMT 2018

Diagnostic Status: No Diagnostics

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

Special Requirements: SCHED 100%; AFTER 06 BY 13 D TO 17 D; ON HOLD

On Hold Comments: requires discovery of a sufficiently bright ASAS-SN Tidal Disruption Event

Patterns

#	Primary Pattern		Secondary Pattern	Exposures
(1)	Pattern Type=STIS-ALONG-SLIT	Coordinate Frame=POS-TARG		(3), (5)
	Purpose=DITHER	Pattern Orientation=90.0		
	Number Of Points=2	Angle Between Sides=		
	Point Spacing=0.3829	Center Pattern=false		
	Line Spacing=			
(3)	Pattern Type=STIS-ALONG-SLIT	Coordinate Frame=POS-TARG		(2), (4)
	Purpose=DITHER	Pattern Orientation=90.0		
	Number Of Points=5	Angle Between Sides=		
	Point Spacing=0.3829	Center Pattern=false		
	Line Spacing=			

Fixed Targets

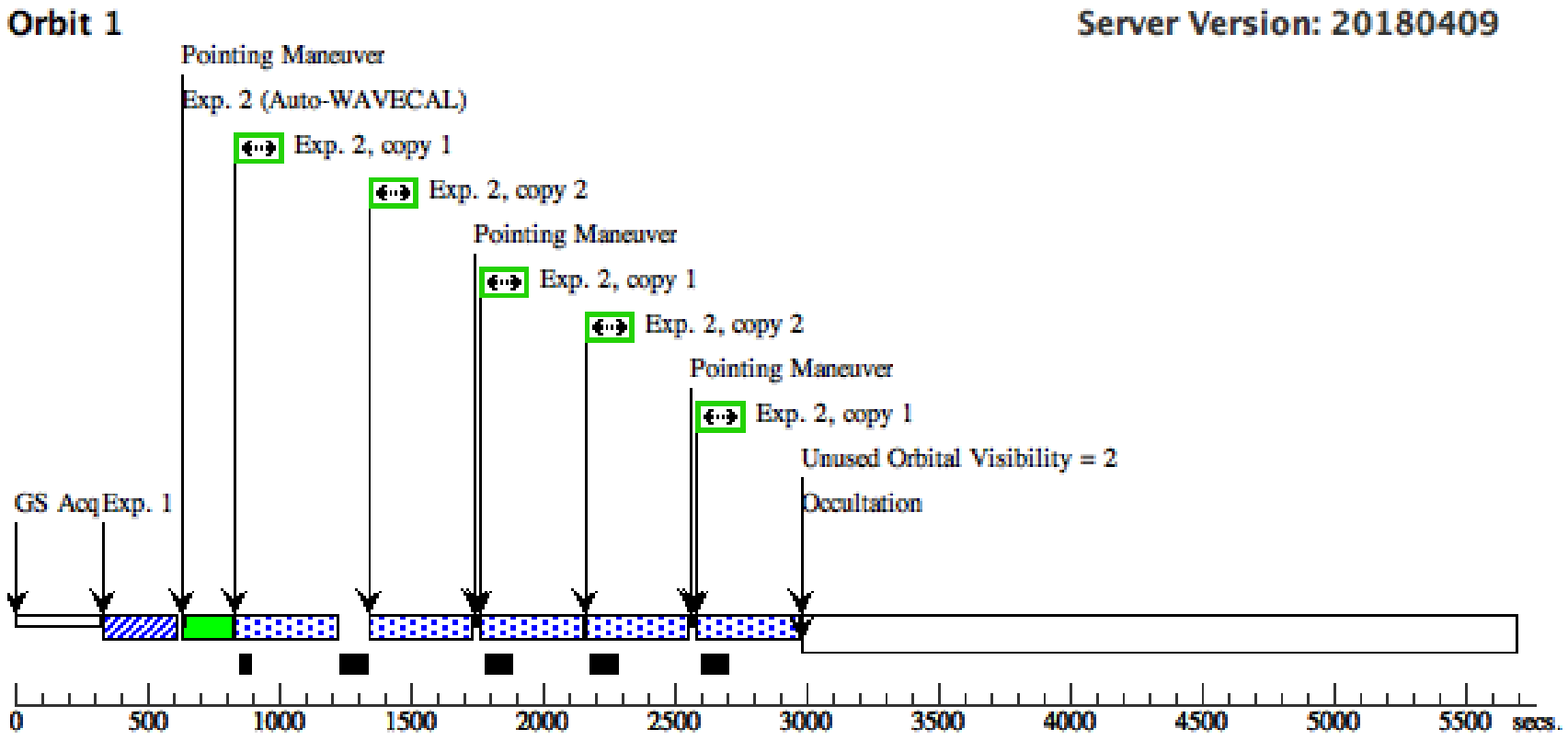
#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(2)	ASASSN18JD	RA: 22 43 42.8760 (340.9286500d)		V=16	Reference Frame: ICRS
		Dec: -16 59 8.51 (-16.98570d)			
		Equinox: J2000			

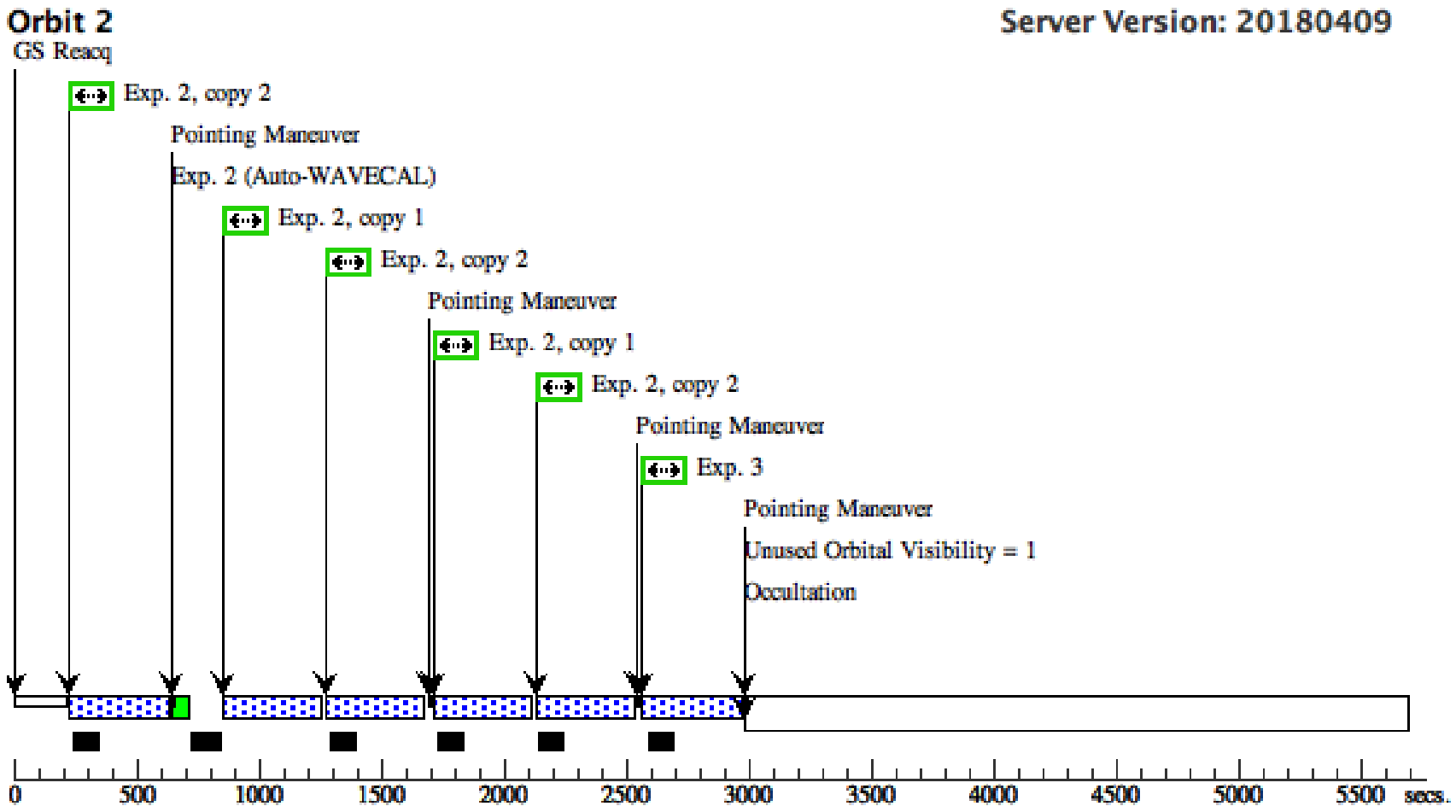
Comments:
Category=GALAXY
Description=[ACCRETION DISK, QUASAR]
Extended=YES

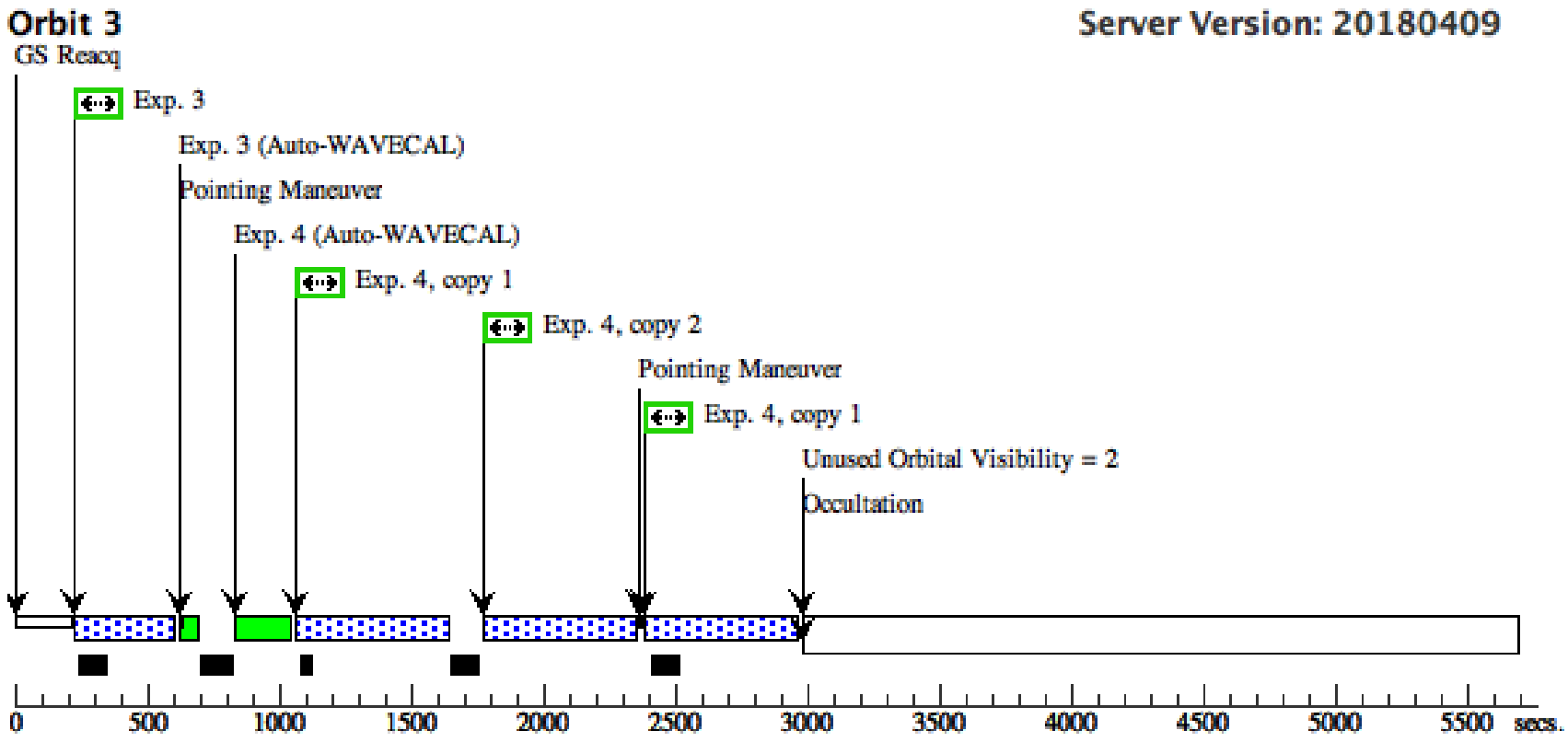
Exposures

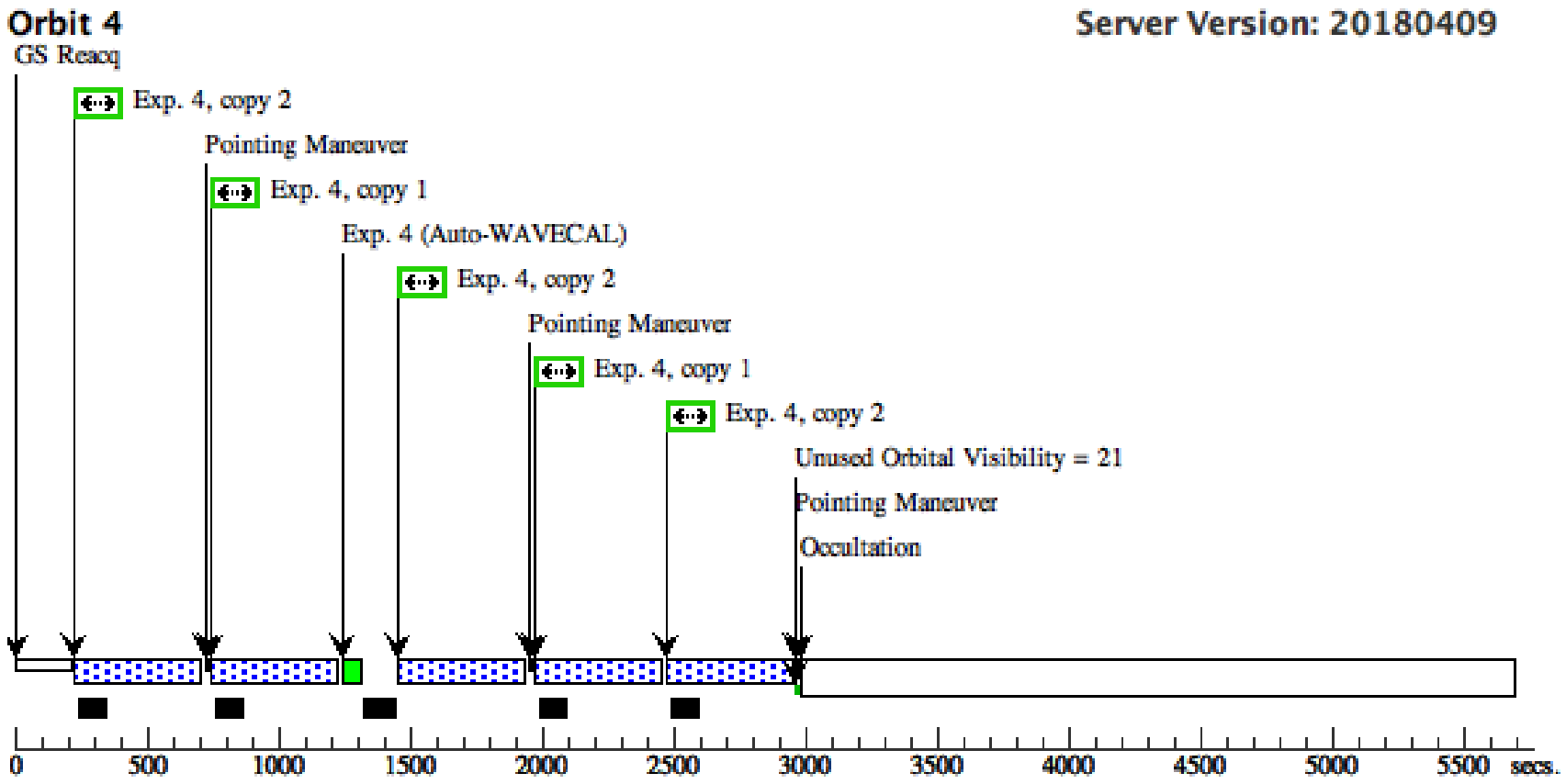
#	Label (ETC Run)	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
1		(2) ASASSN18JD	STIS/CCD, ACQ, 50CCD	MIRROR				10 Secs (10 Secs)	
								[==>]	***[1]***
2	(STIS.sp.826569)	(2) ASASSN18JD	STIS/NUV-MAMA, ACCUM, 52X0.2	G230L 2376 A			Pattern 3, Exps 2-2 in Visit 07 (3)	400 Secs X 2 (3835 Secs)	
								[==>375.0 Secs (Pattern 1, Copy 1)] *[==>375.0 Secs (Pattern 1, Copy 2)]* *[==>375.0 Secs (Pattern 2, Copy 1)]* *[==>375.0 Secs (Pattern 2, Copy 2)]* *[==>375.0 Secs (Pattern 3, Copy 1)]*	***[1]***
								[==>392.0 Secs (Pattern 3, Copy 2)] *[==>392.0 Secs (Pattern 4, Copy 1)]* *[==>392.0 Secs (Pattern 4, Copy 2)]* *[==>392.0 Secs (Pattern 5, Copy 1)]* *[==>392.0 Secs (Pattern 5, Copy 2)]*	***[2]***
3	(STIS.sp.826569)	(2) ASASSN18JD	STIS/NUV-MAMA, ACCUM, 52X0.2	G230L 2376 A			Pattern 1, Exps 3-3 in Visit 07 (1)	400 Secs (762 Secs)	
								[==>392.0 Secs (Pattern 1)]	***[2]***
								[==>370.0 Secs (Pattern 2)]	***[3]***
4	(STIS.sp.826568)	(2) ASASSN18JD	STIS/FUV-MAMA, ACCUM, 52X0.2	G140L 1425 A			Pattern 3, Exps 4-4 in Visit 07 (3)	500 Secs X 2 (5360 Secs)	
								[==>571.0 Secs (Pattern 1, Copy 1)] *[==>571.0 Secs (Pattern 1, Copy 2)]* *[==>571.0 Secs (Pattern 2, Copy 1)]*	***[3]***
								[==>471.0 Secs (Pattern 2, Copy 2)] *[==>471.0 Secs (Pattern 3, Copy 1)]* *[==>471.0 Secs (Pattern 3, Copy 2)]* *[==>471.0 Secs (Pattern 4, Copy 1)]* *[==>471.0 Secs (Pattern 4, Copy 2)]*	***[4]***
								[==>646.0 Secs (Pattern 5, Copy 1)] *[==>646.0 Secs (Pattern 5, Copy 2)]*	***[5]***
5	(STIS.sp.826568)	(2) ASASSN18JD	STIS/FUV-MAMA, ACCUM, 52X0.2	G140L 1425 A			Pattern 1, Exps 5-5 in Visit 07 (1)	500 Secs (1131 Secs)	
								[==>646.0 Secs (Pattern 1)] *[==>485.0 Secs (Pattern 2)]*	***[5]***

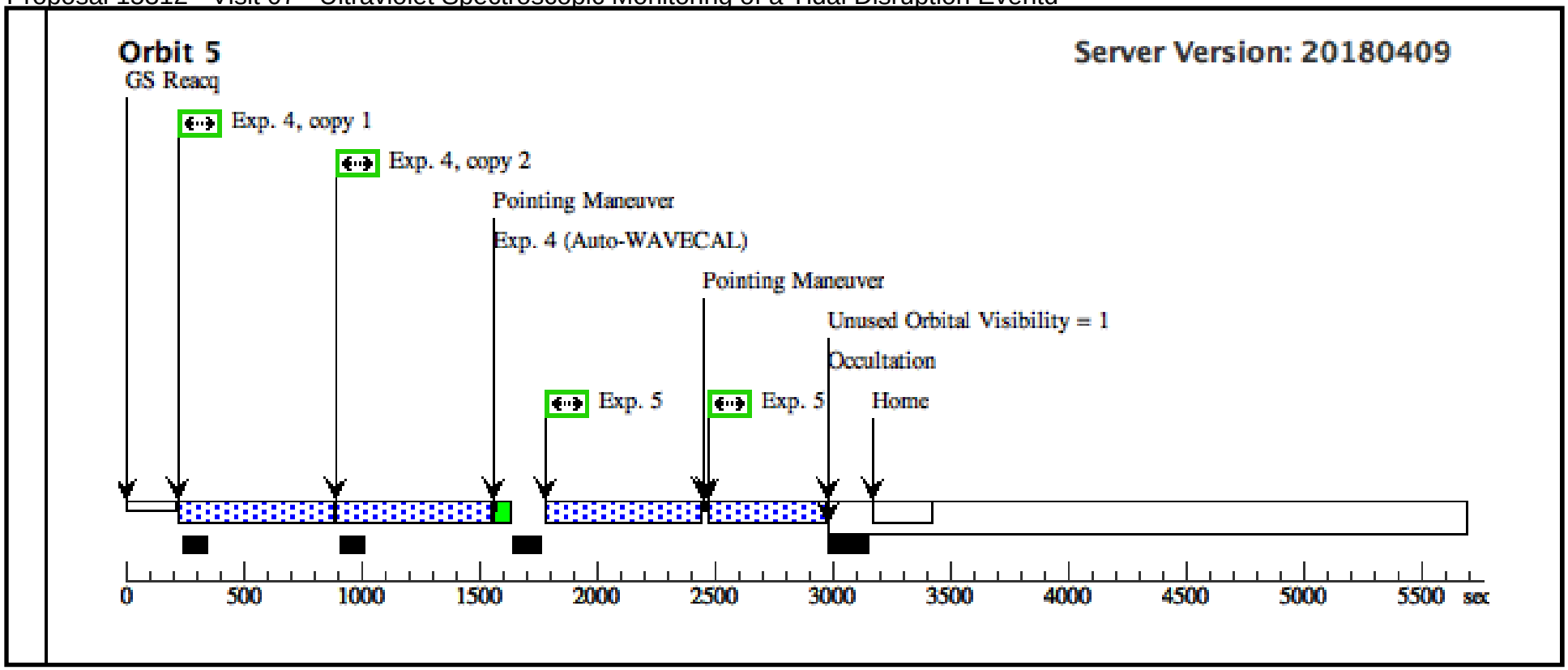
Orbit Structure




Orbit 2
Server Version: 20180409
GS Reacq
Exp. 2, copy 2
Pointing Maneuver
Exp. 2 (Auto-WAVECAL)
Exp. 2, copy 1
Exp. 2, copy 2
Pointing Maneuver
Exp. 2, copy 1
Exp. 2, copy 2
Pointing Maneuver
Exp. 3
Pointing Maneuver
Unused Orbital Visibility = 1
Occultation
0
500
1000
1500
2000
2500
3000
3500
4000
4500
5000
5500
secs.


Orbit 3
Server Version: 20180409
GS Reacq
Exp. 3
Exp. 3 (Auto-WAVECAL)
Pointing Maneuver
Exp. 4 (Auto-WAVECAL)
Exp. 4, copy 1
Exp. 4, copy 2
Pointing Maneuver
Exp. 4, copy 1
Unused Orbital Visibility = 2
Occultation
0
500
1000
1500
2000
2500
3000
3500
4000
4500
5000
5500
secs.


Orbit 4
Server Version: 20180409
GS Reacq
Exp. 4, copy 2
Pointing Maneuver
Exp. 4, copy 1
Exp. 4 (Auto-WAVECAL)
Exp. 4, copy 2
Pointing Maneuver
Exp. 4, copy 1
Exp. 4, copy 2
Unused Orbital Visibility = 21
Pointing Maneuver
Occultation
0
500
1000
1500
2000
2500
3000
3500
4000
4500
5000
5500
secs.


Orbit 5
Server Version: 20180409
GS Reacq
Exp. 4, copy 1
Exp. 4, copy 2
Pointing Maneuver
Exp. 4 (Auto-WAVECAL)
Pointing Maneuver
Unused Orbital Visibility = 1
Occultation
Exp. 5
Exp. 5
Home
0
500
1000
1500
2000
2500
3000
3500
4000
4500
5000
5500
sec