18108 - Beyond hydrogen and helium: an exhaustive survey of escaping metals in ultra-hot Jupiters around bright, hot stars

Cycle: 33, Proposal Category: GO

(UV Initiative)

(Availability Mode: SUPPORTED)

INVESTIGATORS

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VISITS

Visit	*Targets used in Visit*	*Configurations used in Visit*	*Orbits Used*	*Last Orbit Planner Run*	*OP Current with Visit?*
01	(1) WASP-189 WAVE	STIS/CCD STIS/FUV-MAMA	5	26-Feb-2026 11:00:20.0	yes
02	(1) WASP-189 WAVE	STIS/CCD STIS/FUV-MAMA	5	26-Feb-2026 11:00:25.0	yes
03	(1) WASP-189 WAVE	STIS/CCD STIS/NUV-MAMA	5	26-Feb-2026 11:00:30.0	yes
53	(1) WASP-189 WAVE	STIS/CCD STIS/NUV-MAMA	5	26-Feb-2026 11:00:36.0	yes
04	(1) WASP-189 WAVE	STIS/CCD STIS/NUV-MAMA	5	26-Feb-2026 11:00:41.0	yes
05	(7) MASCARA-4 WAVE	STIS/CCD STIS/FUV-MAMA	5	26-Feb-2026 11:00:44.0	yes
06	(7) MASCARA-4 WAVE	STIS/CCD STIS/FUV-MAMA	5	26-Feb-2026 11:00:45.0	yes
07	(7) MASCARA-4 WAVE	STIS/CCD STIS/NUV-MAMA	5	26-Feb-2026 11:00:49.0	yes
08	(7) MASCARA-4 WAVE	STIS/CCD STIS/NUV-MAMA	5	26-Feb-2026 11:00:54.0	yes
09	(3) KELT-17 WAVE	STIS/CCD STIS/FUV-MAMA	5	26-Feb-2026 11:00:56.0	yes
10	(3) KELT-17 WAVE	STIS/CCD STIS/FUV-MAMA	5	26-Feb-2026 11:00:57.0	yes
11	(3) KELT-17 WAVE	STIS/CCD STIS/NUV-MAMA	5	26-Feb-2026 11:01:00.0	yes
12	(3) KELT-17 WAVE	STIS/CCD STIS/NUV-MAMA	5	26-Feb-2026 11:01:05.0	yes

Visit	*Targets used in Visit*	*Configurations used in Visit*	*Orbits Used*	*Last Orbit Planner Run*	*OP Current with Visit?*
13	(2) KELT-9 WAVE	STIS/CCD STIS/FUV-MAMA	5	26-Feb-2026 11:01:10.0	yes
14	(2) KELT-9 WAVE	STIS/CCD STIS/FUV-MAMA	5	26-Feb-2026 11:01:15.0	yes
15	(5) KELT-20 WAVE	STIS/CCD STIS/NUV-MAMA	5	26-Feb-2026 11:01:20.0	yes
16	(5) KELT-20 WAVE	STIS/CCD STIS/NUV-MAMA	5	26-Feb-2026 11:01:25.0	yes

85 Total Orbits Used

ABSTRACT

Two decades ago, HST UV observations spearheaded the discovery of atmospheric escape from exoplanets, and it is now widely accepted that this process explains exoplanet population demographic features, the chemical composition of atmospheres in Solar System bodies, and resolves the curious lack of atmospheres in worlds orbiting M dwarfs. A wave of theoretical efforts to understand escape in hot exoplanets ensued, with the caveat that many efforts have assumed that atmospheres are composed of pure H+He. With the knowledge that this assumption limits our understanding of atmospheric escape, we hit a breaking point in our theoretical efforts: how do we best incorporate metals in our models? Our blindspot to the effects of metallicity has a downstream effect that limits our capacity to assess if smaller planets are able to retain their volatile-rich atmospheres, as they tend to be more metal-rich than larger exoplanets.

While hot Jupiters orbiting A-type stars are under no threat of losing significant fractions of their mass, they are the best targets to study atmospheric escape because they have the strongest and most detectable signals of exospheric metals in transmission spectroscopy. These signatures can only be observed by HST in the ultraviolet. The new observations we propose to observe will complement archival data from previous programs and yield an comprehensive survey that will measure the abundances of metals in their outflows and assess how efficiently these planets are evaporating. Our study exhausts the sample of known ultra-hot Jupiters orbiting bright A-type stars, the most extreme planets known to us.

OBSERVING DESCRIPTION

In this program, we aim to obtain exoplanet transit time-series observations of five ultrahot Jupiters orbiting bright, A-type stellar hosts. These hosts have strong continuum flux in the UV, allowing for precise measurements of atmospheric absorption during exoplanet transits. In fact, some of them

are actually too bright to be observed with first-order spectroscopy or TIME-TAG mode. We describe each case below. We decided to use the widest slit available and supported for this program to minimize slit losses. For first-order spectra, we shall utilize 52x2", which has the most stable spectrophotometric precision; for echelle observations, there are not many options and we shall use the usual 0.2x0.2" to avoid order overlap.

WASP-189b and MASCARA-4b: FUV observations with G140L using the TIME-TAG mode produce heavy data loads, which will require special handling. NUV observations are too bright for TIME-TAG mode, even with E230H, and we choose ACCUM mode instead. We choose an exposure time > 120 s to allow for parallized memory buffer dumps and minimize overheads.

KELT-17b: FUV and NUV observations with G140L and E230M, respectively, can be executed in TIME-TAG mode, but produce heavy data, which will require special handling.

KELT-9b: FUV observations with G140L exceed global count rate limit of 30k cts/s, so we decided to use the echelle mode E140M. Observations are too bright for TIME-TAG mode and we choose ACCUM mode instead. We choose an exposure time > 120 s to allow for parallized memory buffer dumps and minimize overheads.

KELT-20b: NUV observations are too bright for TIME-TAG mode, even with E230H, and we choose ACCUM mode instead. We choose an exposure time > 120 s to allow for parallized memory buffer dumps and minimize overheads.

Observability:
- WASP-189: January-June
- MASCARA-4: All year round
- KELT-17: October-February
- KELT-9: All year round
- KELT-20: March-September

Visit

Proposal 18108, WASP-189b/FUV/Transit 1 (01), completed Thu Feb 26 16:01:26 GMT 2026

Diagnostic Status: No Diagnostics

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

Special Requirements: SCHED 100%; ORIENT 132D TO 279 D; ORIENT 312D TO 99 D; Period 2.7240330 D AND ZERO-PHASE HJD2458926.5416960

Comments: Ephemeris from Lendl+2020. Transit midpoint uncertainty by January 2026 is << 1 minute.

In the FUV, the current strategy is to use G140L. But we can also consider going for E140M; ETC results for comparison are here: STIS.sp.2023891 (G140L results are in STIS.sp.2022820).

Fixed Targets

#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(1)	WASP-189	RA: 15 02 44.8679 (225.6869496d) Dec: -03 01 52.99 (-3.03139d) Equinox: J2000	Proper Motion RA: -50.473 mas/yr Proper Motion Dec: -23.754999938319088 mas/yr Parallax: 0.0100997" Epoch of Position: 2000	V=6.618	Reference Frame: ICRS

Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.

SIMBAD listed proper motion for this target. When retrieving targets with PM from SIMBAD, APT requests the coordinates be calculated with an epoch of the year 2000. Do not modify this epoch. Always review coordinates using the Target Confirmation tool, which graphically displays the PM.
Category=EXT-STAR
Description=[A4-A9 V-IV, EXTRA-SOLAR PLANETARY SYSTEM]
Extended=NO

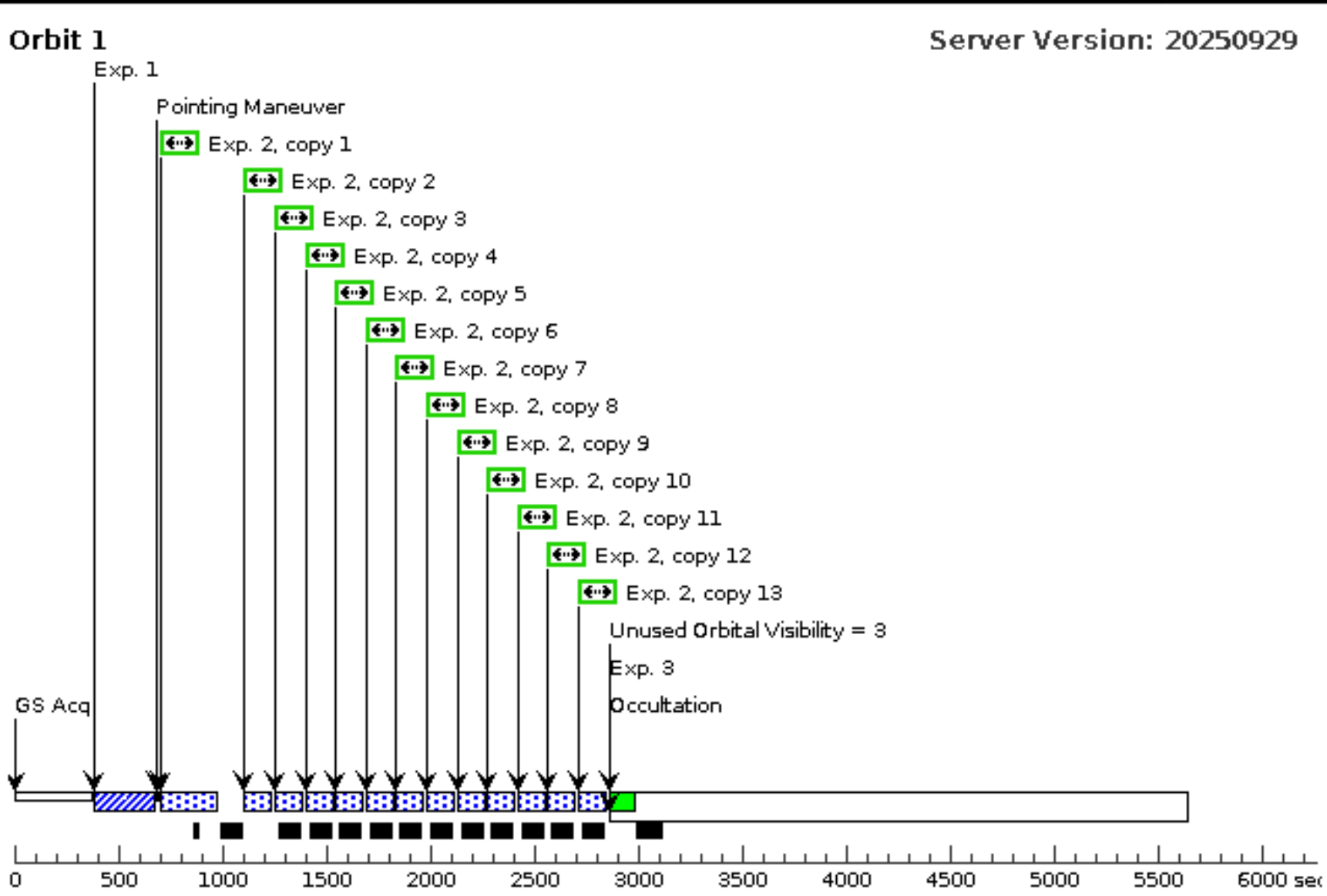
Exposures

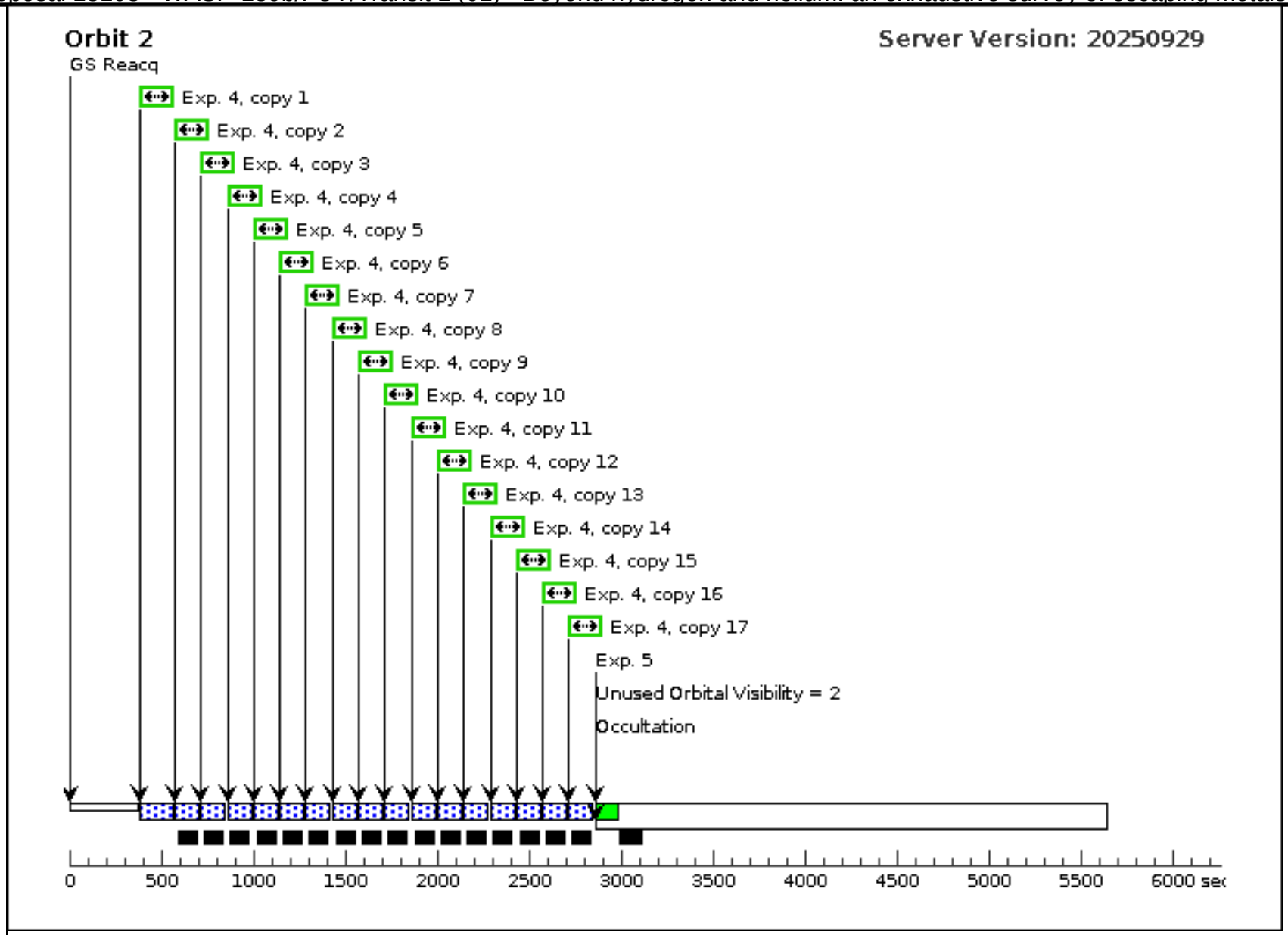
#	Label (ETC Run)	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
1	ACQ (STIS.ta.2022800)	(1) WASP-189	STIS/CCD, ACQ, F25ND3	MIRROR	ACQTYPE=POINT	PHASE 0.92224151 95900099 TO 0.9375 3746742422		0.1 Secs (0.1 Secs) *[==>]*	***[1]***
2	SCI (STIS.sp.2022820)	(1) WASP-189	STIS/FUV-MAMA, ACCUM, 52X2	G140L 1425 A	WAVECAL=NO			120 Secs X 13 (1612 Secs) *[==>124.0 Secs (Copy 1)]* *[==>124.0 Secs (Copy 2)]* *[==>124.0 Secs (Copy 3)]* *[==>124.0 Secs (Copy 4)]* *[==>124.0 Secs (Copy 5)]* *[==>124.0 Secs (Copy 6)]* *[==>124.0 Secs (Copy 7)]* *[==>124.0 Secs (Copy 8)]* *[==>124.0 Secs (Copy 9)]* *[==>124.0 Secs (Copy 10)]* *[==>124.0 Secs (Copy 11)]* *[==>124.0 Secs (Copy 12)]* *[==>124.0 Secs (Copy 13)]*	***[1]***
	Comments: ETC sim for 52x2" aperture: STIS.sp.2022820 (SNR~61 at 1425A) *ETC sim for 52x0.5" aperture: STIS.sp.2022821 (SNR~57 at 1425 A)*								
3	GO-WAVE CAL	WAVE	STIS/FUV-MAMA, ACCUM, 52X0.2	G140L 1425 A				*[==>]*	***[1]***
4	SCI (STIS.sp.2022820)	(1) WASP-189	STIS/FUV-MAMA, ACCUM, 52X2	G140L 1425 A	WAVECAL=NO			120 Secs X 17 (2057 Secs) *[==>121.0 Secs (Copy 1)]* *[==>121.0 Secs (Copy 2)]* *[==>121.0 Secs (Copy 3)]* *[==>121.0 Secs (Copy 4)]* *[==>121.0 Secs (Copy 5)]* *[==>121.0 Secs (Copy 6)]* *[==>121.0 Secs (Copy 7)]* *[==>121.0 Secs (Copy 8)]* *[==>121.0 Secs (Copy 9)]* *[==>121.0 Secs (Copy 10)]* *[==>121.0 Secs (Copy 11)]* *[==>121.0 Secs (Copy 12)]* *[==>121.0 Secs (Copy 13)]* *[==>121.0 Secs (Copy 14)]* *[==>121.0 Secs (Copy 15)]* *[==>121.0 Secs (Copy 16)]* *[==>121.0 Secs (Copy 17)]*	***[2]***
	Comments: ETC sim for 52x2" aperture: STIS.sp.2022820 (SNR~61 at 1425A) *ETC sim for 52x0.5" aperture: STIS.sp.2022821 (SNR~57 at 1425 A)*								
5	GO-WAVE CAL	WAVE	STIS/FUV-MAMA, ACCUM, 52X0.2	G140L 1425 A				*[==>]*	***[2]***

6	SCI (STIS.sp.2022820)	(1) WASP-189	STIS/FUV-MAMA, ACCUM, 52X2	G140L 1425 A	WAVECAL=NO	120 Secs X 17 (2057 Secs) *[==>121.0 Secs (Copy 1)]* *[==>121.0 Secs (Copy 2)]* *[==>121.0 Secs (Copy 3)]* *[==>121.0 Secs (Copy 4)]* *[==>121.0 Secs (Copy 5)]* *[==>121.0 Secs (Copy 6)]* *[==>121.0 Secs (Copy 7)]* *[==>121.0 Secs (Copy 8)]* *[==>121.0 Secs (Copy 9)]* *[==>121.0 Secs (Copy 10)]* *[==>121.0 Secs (Copy 11)]* *[==>121.0 Secs (Copy 12)]* *[==>121.0 Secs (Copy 13)]* *[==>121.0 Secs (Copy 14)]* *[==>121.0 Secs (Copy 15)]* *[==>121.0 Secs (Copy 16)]* *[==>121.0 Secs (Copy 17)]*	***[3]***
Comments: ETC sim for 52x2" aperture: STIS.sp.2022820 (SNR~61 at 1425A) *ETC sim for 52x0.5" aperture: STIS.sp.2022821 (SNR~57 at 1425 A)*								
7	GO-WAVE CAL	WAVE	STIS/FUV-MAMA, ACCUM, 52X0.2	G140L 1425 A		*[==>]*	***[3]***
8	SCI (STIS.sp.2022820)	(1) WASP-189	STIS/FUV-MAMA, ACCUM, 52X2	G140L 1425 A	WAVECAL=NO	120 Secs X 17 (2057 Secs) *[==>121.0 Secs (Copy 1)]* *[==>121.0 Secs (Copy 2)]* *[==>121.0 Secs (Copy 3)]* *[==>121.0 Secs (Copy 4)]* *[==>121.0 Secs (Copy 5)]* *[==>121.0 Secs (Copy 6)]* *[==>121.0 Secs (Copy 7)]* *[==>121.0 Secs (Copy 8)]* *[==>121.0 Secs (Copy 9)]* *[==>121.0 Secs (Copy 10)]* *[==>121.0 Secs (Copy 11)]* *[==>121.0 Secs (Copy 12)]* *[==>121.0 Secs (Copy 13)]* *[==>121.0 Secs (Copy 14)]* *[==>121.0 Secs (Copy 15)]* *[==>121.0 Secs (Copy 16)]* *[==>121.0 Secs (Copy 17)]*	***[4]***
Comments: ETC sim for 52x2" aperture: STIS.sp.2022820 (SNR~61 at 1425A) *ETC sim for 52x0.5" aperture: STIS.sp.2022821 (SNR~57 at 1425 A)*								
9	GO-WAVE CAL	WAVE	STIS/FUV-MAMA, ACCUM, 52X0.2	G140L 1425 A		*[==>]*	***[4]***

	10	SCI (STIS.sp.2022820)	(1) WASP-189	STIS/FUV-MAMA, ACCUM, 52X2	G140L 1425 A	WAVECAL=NO	120 Secs X 17 (2057 Secs) *[==>121.0 Secs (Copy 1)]* *[==>121.0 Secs (Copy 2)]* *[==>121.0 Secs (Copy 3)]* *[==>121.0 Secs (Copy 4)]* *[==>121.0 Secs (Copy 5)]* *[==>121.0 Secs (Copy 6)]* *[==>121.0 Secs (Copy 7)]* *[==>121.0 Secs (Copy 8)]* *[==>121.0 Secs (Copy 9)]* *[==>121.0 Secs (Copy 10)]* *[==>121.0 Secs (Copy 11)]* *[==>121.0 Secs (Copy 12)]* *[==>121.0 Secs (Copy 13)]* *[==>121.0 Secs (Copy 14)]* *[==>121.0 Secs (Copy 15)]* *[==>121.0 Secs (Copy 16)]* *[==>121.0 Secs (Copy 17)]*	***[5]***
	Comments: ETC sim for 52x2'' aperture: STIS.sp.2022820 (SNR~61 at 1425A) *ETC sim for 52x0.5'' aperture: STIS.sp.2022821 (SNR~57 at 1425 A)*							
	11	GO-WAVE CAL	WAVE	STIS/FUV-MAMA, ACCUM, 52X0.2	G140L 1425 A		*[==>]*	***[5]***

Orbit Structure

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Exp. 4, copy 16
Exp. 4, copy 17
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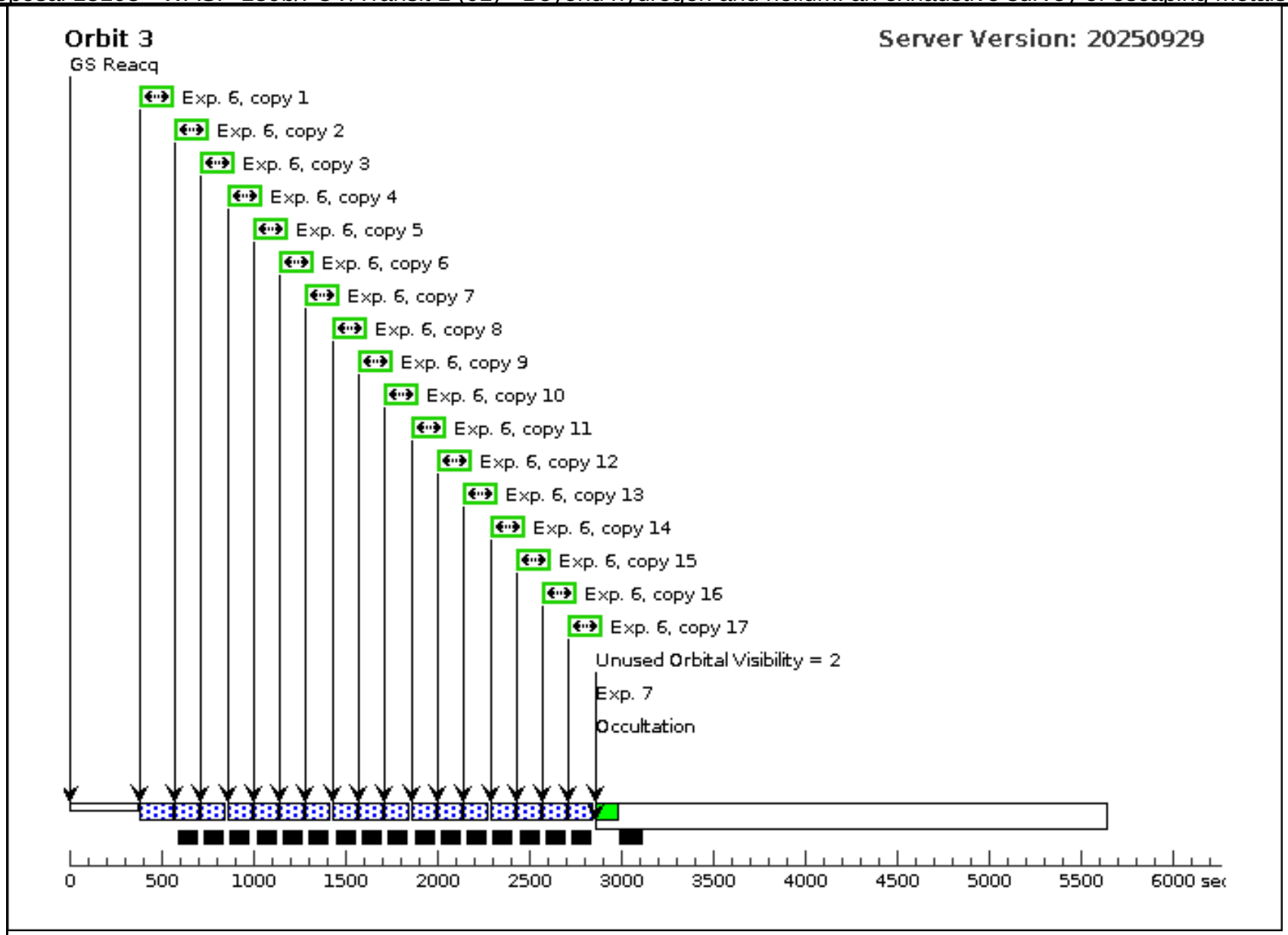
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Exp. 6, copy 10
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Exp. 6, copy 12
Exp. 6, copy 13
Exp. 6, copy 14
Exp. 6, copy 15
Exp. 6, copy 16
Exp. 6, copy 17
Unused Orbital Visibility = 2
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Occultation
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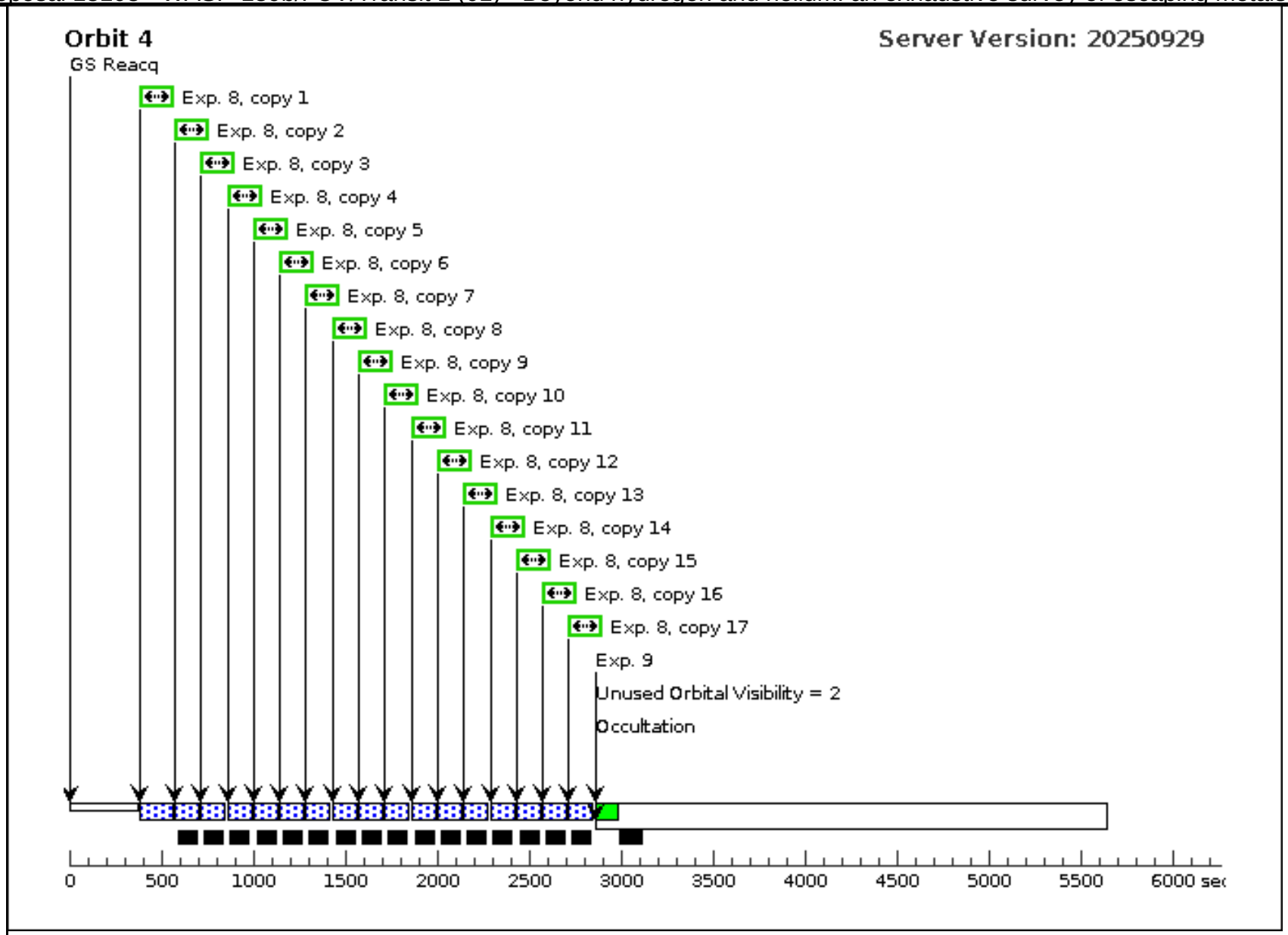
6000 sec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Exp. 8, copy 12
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Exp. 8, copy 14
Exp. 8, copy 15
Exp. 8, copy 16
Exp. 8, copy 17
Exp. 9
Unused Orbital Visibility = 2
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5500
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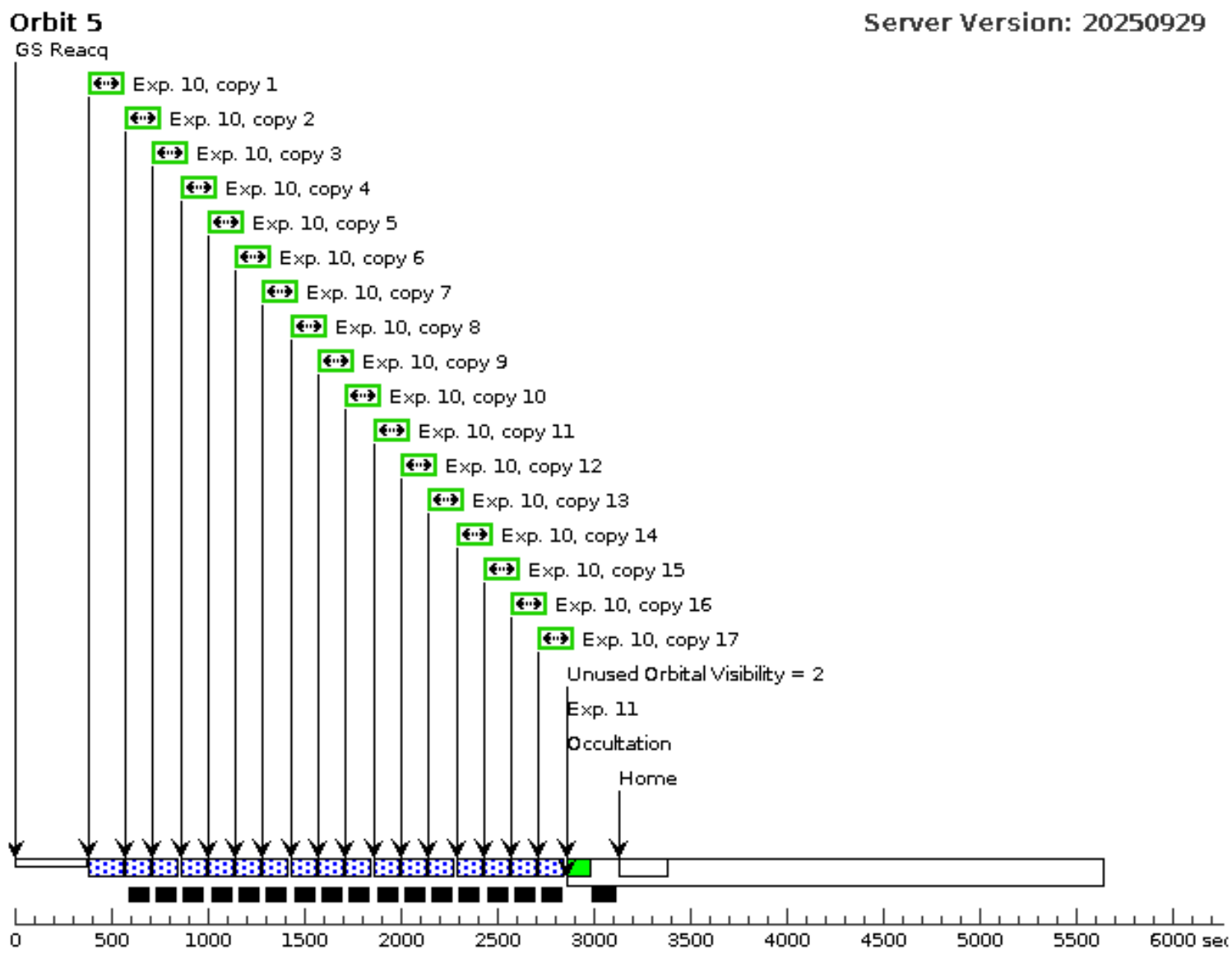
Orbit 5
Server Version: 20250929
GS Reacq
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Exp. 10, copy 3
Exp. 10, copy 4
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Exp. 10, copy 11
Exp. 10, copy 12
Exp. 10, copy 13
Exp. 10, copy 14
Exp. 10, copy 15
Exp. 10, copy 16
Exp. 10, copy 17
Unused Orbital Visibility = 2
Exp. 11
Occultation
Home
0
500
1000
1500
2000
2500
3000
3500
4000
4500
5000
5500
6000 sec

Visit

Proposal 18108, WASP-189b/FUV/Transit 2 (02), scheduling Thu Feb 26 16:01:27 GMT 2026

Diagnostic Status: No Diagnostics

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

Special Requirements: SCHED 100%; ORIENT 132D TO 279 D; ORIENT 312D TO 99 D; Period 2.7240330 D AND ZERO-PHASE HJD2458926.5416960

Comments: Ephemeris from Lendl+2020. Transit midpoint uncertainty by January 2026 is << 1 minute.

Fixed Targets

#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(1)	WASP-189	RA: 15 02 44.8679 (225.6869496d) Dec: -03 01 52.99 (-3.03139d) Equinox: J2000	Proper Motion RA: -50.473 mas/yr Proper Motion Dec: -23.754999938319088 mas/yr Parallax: 0.0100997" Epoch of Position: 2000	V=6.618	Reference Frame: ICRS

Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.

SIMBAD listed proper motion for this target. When retrieving targets with PM from SIMBAD, APT requests the coordinates be calculated with an epoch of the year 2000. Do not modify this epoch. Always review coordinates using the Target Confirmation tool, which graphically displays the PM.
Category=EXT-STAR
Description=[A4-A9 V-IV, EXTRA-SOLAR PLANETARY SYSTEM]
Extended=NO

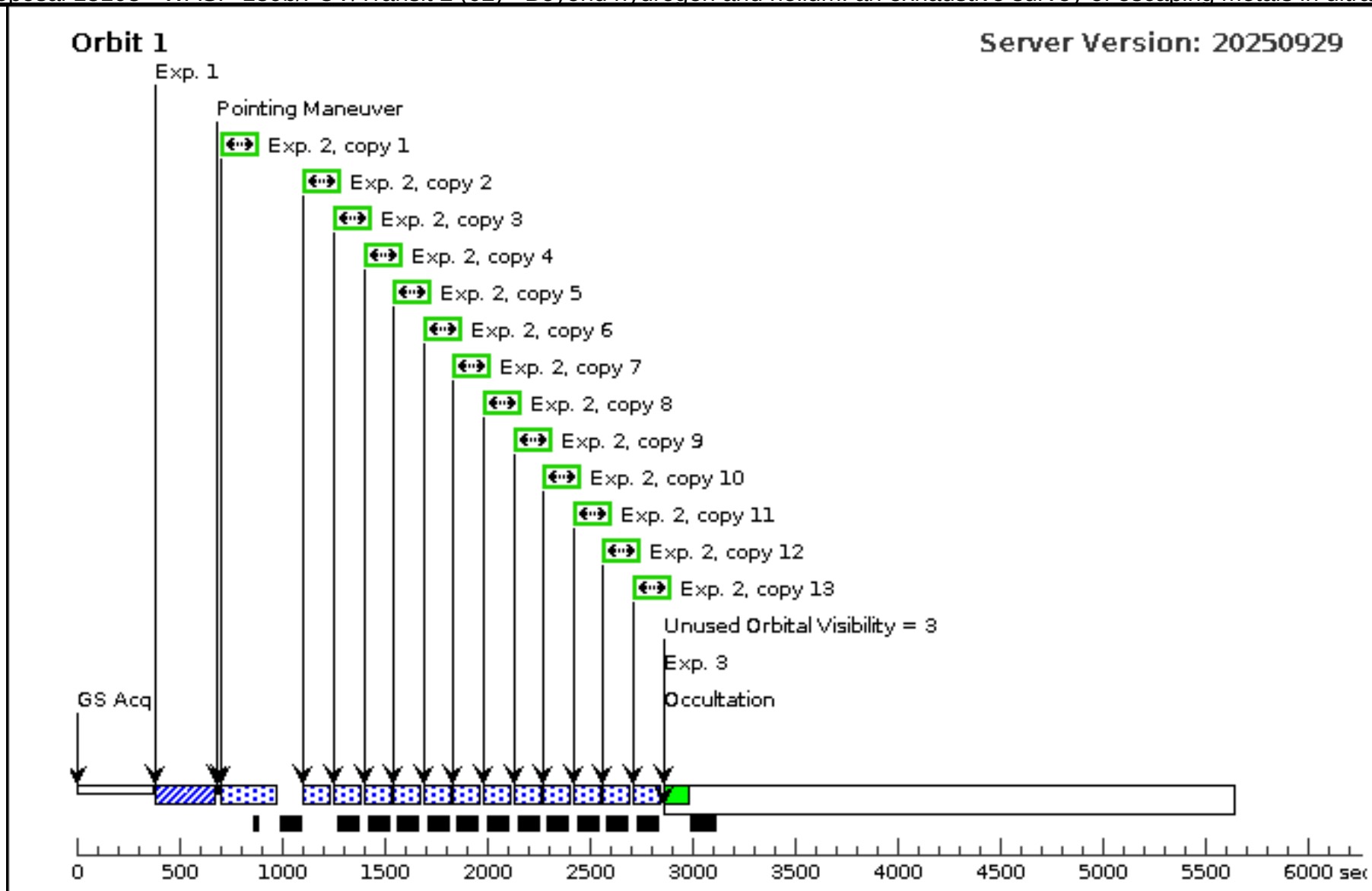
Exposures

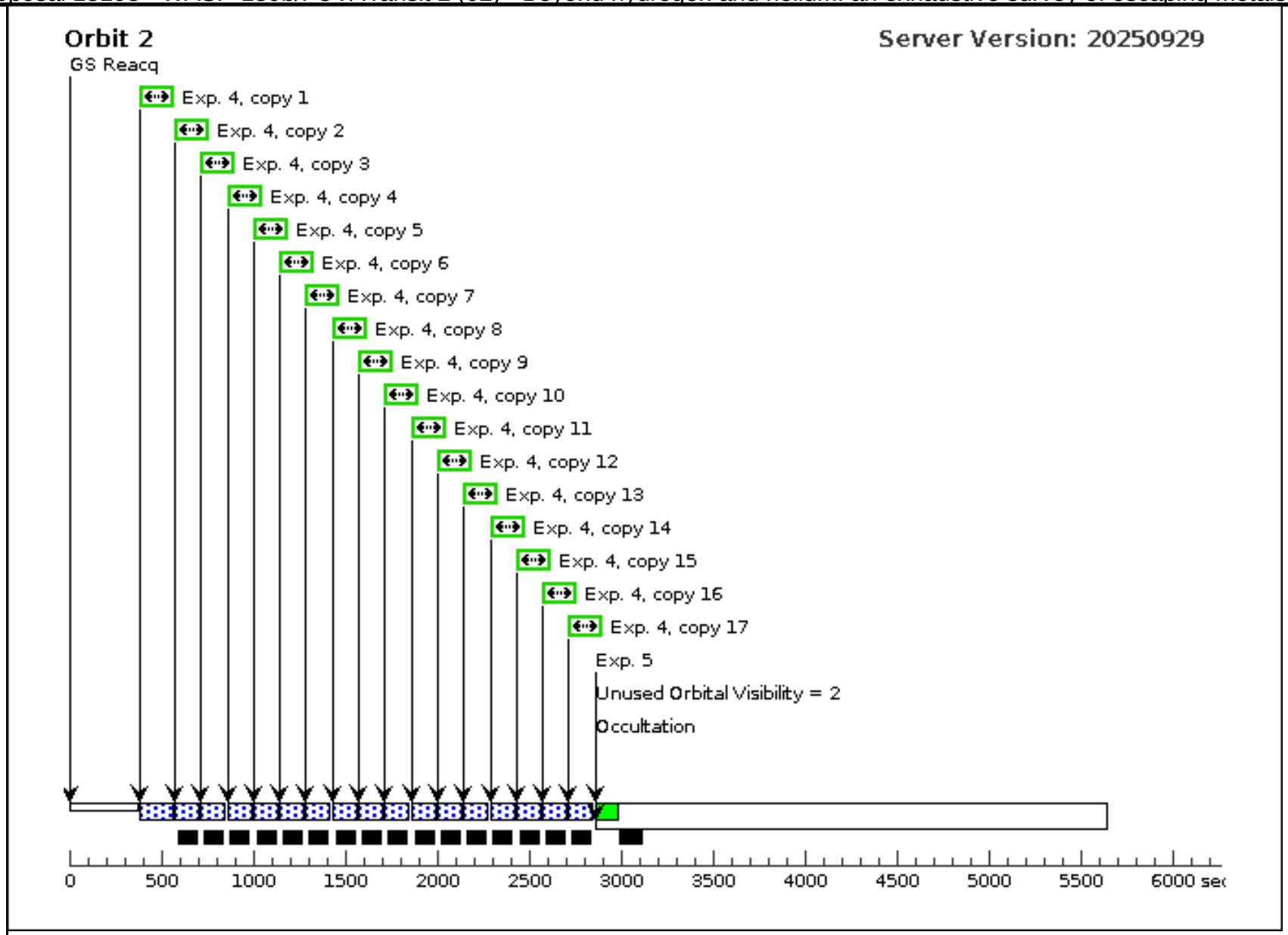
#	Label (ETC Run)	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
1	ACQ (STIS.ta.2022800)	(1) WASP-189	STIS/CCD, ACQ, F25ND3	MIRROR	ACQTYPE=POINT	PHASE 0.93753746 74242198 TO 0.9528 334152584299		0.1 Secs (0.1 Secs) *[==>]*	***[1]***
2	SCI (STIS.sp.2022820)	(1) WASP-189	STIS/FUV-MAMA, ACCUM, 52X2	G140L 1425 A	WAVECAL=NO			120 Secs X 13 (1612 Secs) *[==>124.0 Secs (Copy 1)]* *[==>124.0 Secs (Copy 2)]* *[==>124.0 Secs (Copy 3)]* *[==>124.0 Secs (Copy 4)]* *[==>124.0 Secs (Copy 5)]* *[==>124.0 Secs (Copy 6)]* *[==>124.0 Secs (Copy 7)]* *[==>124.0 Secs (Copy 8)]* *[==>124.0 Secs (Copy 9)]* *[==>124.0 Secs (Copy 10)]* *[==>124.0 Secs (Copy 11)]* *[==>124.0 Secs (Copy 12)]* *[==>124.0 Secs (Copy 13)]*	***[1]***
	Comments: ETC sim for 52x2" aperture: STIS.sp.2022820 (SNR~61 at 1425A) *ETC sim for 52x0.5" aperture: STIS.sp.2022821 (SNR~57 at 1425 A)*								
3	GO-WAVE CAL	WAVE	STIS/FUV-MAMA, ACCUM, 52X0.2	G140L 1425 A				*[==>]*	***[1]***
4	SCI (STIS.sp.2022820)	(1) WASP-189	STIS/FUV-MAMA, ACCUM, 52X2	G140L 1425 A	WAVECAL=NO			120 Secs X 17 (2057 Secs) *[==>121.0 Secs (Copy 1)]* *[==>121.0 Secs (Copy 2)]* *[==>121.0 Secs (Copy 3)]* *[==>121.0 Secs (Copy 4)]* *[==>121.0 Secs (Copy 5)]* *[==>121.0 Secs (Copy 6)]* *[==>121.0 Secs (Copy 7)]* *[==>121.0 Secs (Copy 8)]* *[==>121.0 Secs (Copy 9)]* *[==>121.0 Secs (Copy 10)]* *[==>121.0 Secs (Copy 11)]* *[==>121.0 Secs (Copy 12)]* *[==>121.0 Secs (Copy 13)]* *[==>121.0 Secs (Copy 14)]* *[==>121.0 Secs (Copy 15)]* *[==>121.0 Secs (Copy 16)]* *[==>121.0 Secs (Copy 17)]*	***[2]***
	Comments: ETC sim for 52x2" aperture: STIS.sp.2022820 (SNR~61 at 1425A) *ETC sim for 52x0.5" aperture: STIS.sp.2022821 (SNR~57 at 1425 A)*								
5	GO-WAVE CAL	WAVE	STIS/FUV-MAMA, ACCUM, 52X0.2	G140L 1425 A				*[==>]*	***[2]***

6	SCI (STIS.sp.2022820)	(1) WASP-189	STIS/FUV-MAMA, ACCUM, 52X2	G140L 1425 A	WAVECAL=NO	120 Secs X 17 (2057 Secs) *[==>121.0 Secs (Copy 1)]* *[==>121.0 Secs (Copy 2)]* *[==>121.0 Secs (Copy 3)]* *[==>121.0 Secs (Copy 4)]* *[==>121.0 Secs (Copy 5)]* *[==>121.0 Secs (Copy 6)]* *[==>121.0 Secs (Copy 7)]* *[==>121.0 Secs (Copy 8)]* *[==>121.0 Secs (Copy 9)]* *[==>121.0 Secs (Copy 10)]* *[==>121.0 Secs (Copy 11)]* *[==>121.0 Secs (Copy 12)]* *[==>121.0 Secs (Copy 13)]* *[==>121.0 Secs (Copy 14)]* *[==>121.0 Secs (Copy 15)]* *[==>121.0 Secs (Copy 16)]* *[==>121.0 Secs (Copy 17)]*	***[3]***
Comments: ETC sim for 52x2" aperture: STIS.sp.2022820 (SNR~61 at 1425A) *ETC sim for 52x0.5" aperture: STIS.sp.2022821 (SNR~57 at 1425 A)*								
7	GO-WAVE CAL	WAVE	STIS/FUV-MAMA, ACCUM, 52X0.2	G140L 1425 A		*[==>]*	***[3]***
8	SCI (STIS.sp.2022820)	(1) WASP-189	STIS/FUV-MAMA, ACCUM, 52X2	G140L 1425 A	WAVECAL=NO	120 Secs X 17 (2057 Secs) *[==>121.0 Secs (Copy 1)]* *[==>121.0 Secs (Copy 2)]* *[==>121.0 Secs (Copy 3)]* *[==>121.0 Secs (Copy 4)]* *[==>121.0 Secs (Copy 5)]* *[==>121.0 Secs (Copy 6)]* *[==>121.0 Secs (Copy 7)]* *[==>121.0 Secs (Copy 8)]* *[==>121.0 Secs (Copy 9)]* *[==>121.0 Secs (Copy 10)]* *[==>121.0 Secs (Copy 11)]* *[==>121.0 Secs (Copy 12)]* *[==>121.0 Secs (Copy 13)]* *[==>121.0 Secs (Copy 14)]* *[==>121.0 Secs (Copy 15)]* *[==>121.0 Secs (Copy 16)]* *[==>121.0 Secs (Copy 17)]*	***[4]***
Comments: ETC sim for 52x2" aperture: STIS.sp.2022820 (SNR~61 at 1425A) *ETC sim for 52x0.5" aperture: STIS.sp.2022821 (SNR~57 at 1425 A)*								
9	GO-WAVE CAL	WAVE	STIS/FUV-MAMA, ACCUM, 52X0.2	G140L 1425 A		*[==>]*	***[4]***

	10	SCI (STIS.sp.2022820)	(1) WASP-189	STIS/FUV-MAMA, ACCUM, 52X2	G140L 1425 A	WAVECAL=NO	120 Secs X 17 (2057 Secs) *[==>121.0 Secs (Copy 1)]* *[==>121.0 Secs (Copy 2)]* *[==>121.0 Secs (Copy 3)]* *[==>121.0 Secs (Copy 4)]* *[==>121.0 Secs (Copy 5)]* *[==>121.0 Secs (Copy 6)]* *[==>121.0 Secs (Copy 7)]* *[==>121.0 Secs (Copy 8)]* *[==>121.0 Secs (Copy 9)]* *[==>121.0 Secs (Copy 10)]* *[==>121.0 Secs (Copy 11)]* *[==>121.0 Secs (Copy 12)]* *[==>121.0 Secs (Copy 13)]* *[==>121.0 Secs (Copy 14)]* *[==>121.0 Secs (Copy 15)]* *[==>121.0 Secs (Copy 16)]* *[==>121.0 Secs (Copy 17)]*	***[5]***
	Comments: ETC sim for 52x2'' aperture: STIS.sp.2022820 (SNR~61 at 1425A) *ETC sim for 52x0.5'' aperture: STIS.sp.2022821 (SNR~57 at 1425 A)*							
	11	GO-WAVE CAL	WAVE	STIS/FUV-MAMA, ACCUM, 52X0.2	G140L 1425 A		*[==>]*	***[5]***

Orbit Structure

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Exp. 4, copy 16
Exp. 4, copy 17
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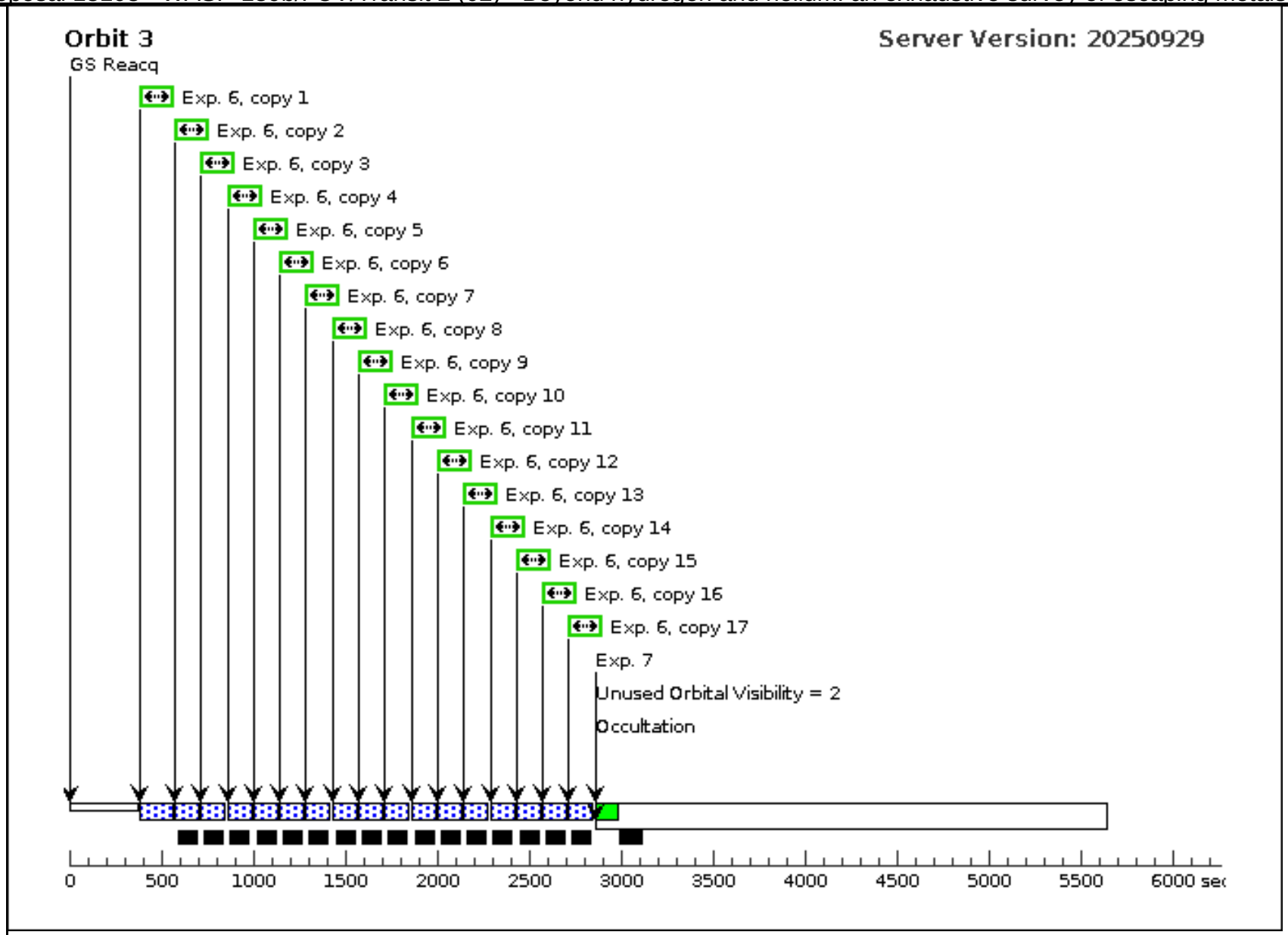
5500
6000 sec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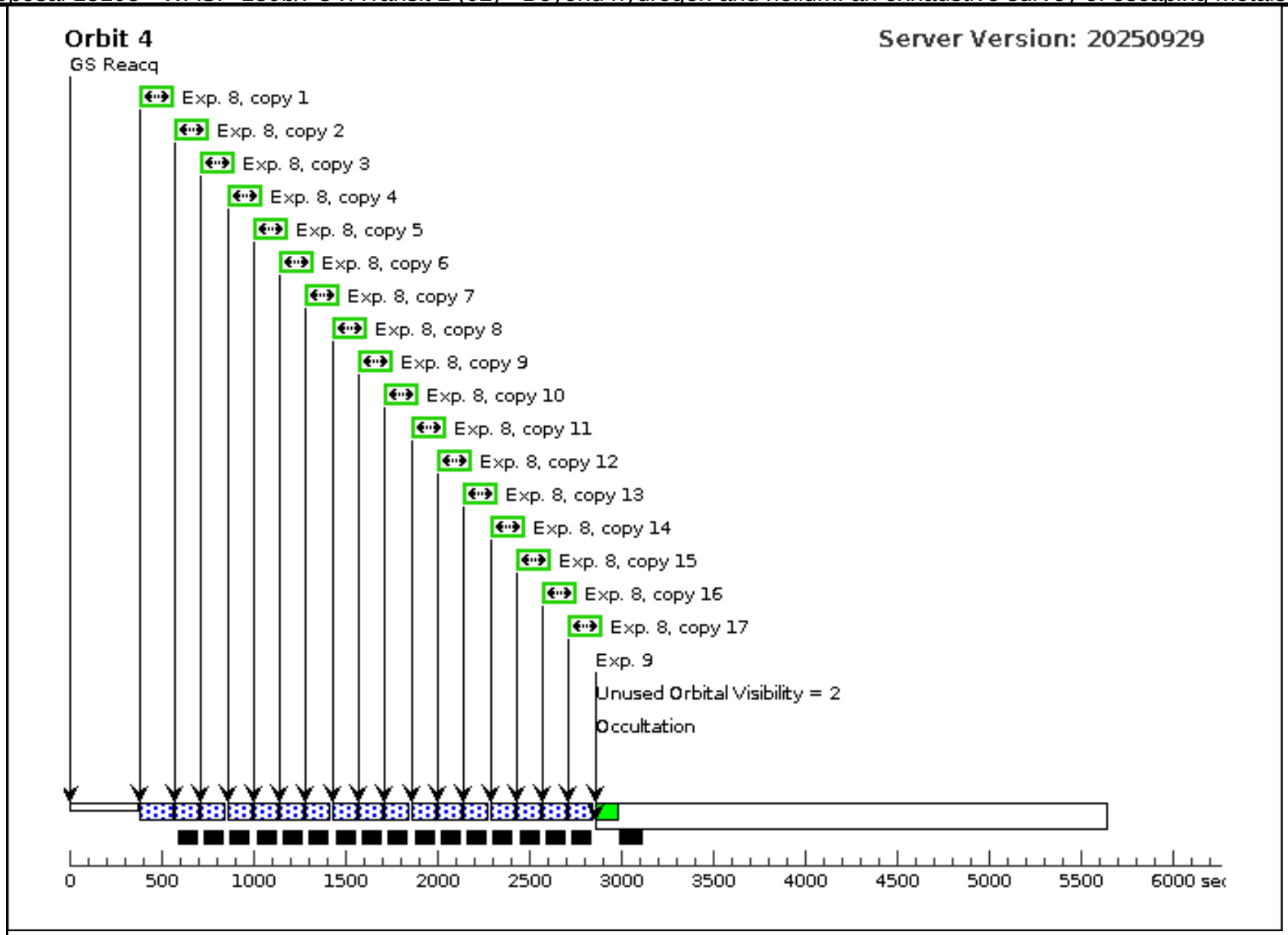
Exp. 6, copy 11
Exp. 6, copy 12
Exp. 6, copy 13
Exp. 6, copy 14
Exp. 6, copy 15
Exp. 6, copy 16
Exp. 6, copy 17
Exp. 7
Unused Orbital Visibility = 2
Occultation
0
500
1000
1500
2000
2500
3000
3500
4000
4500
5000
5500
6000 sec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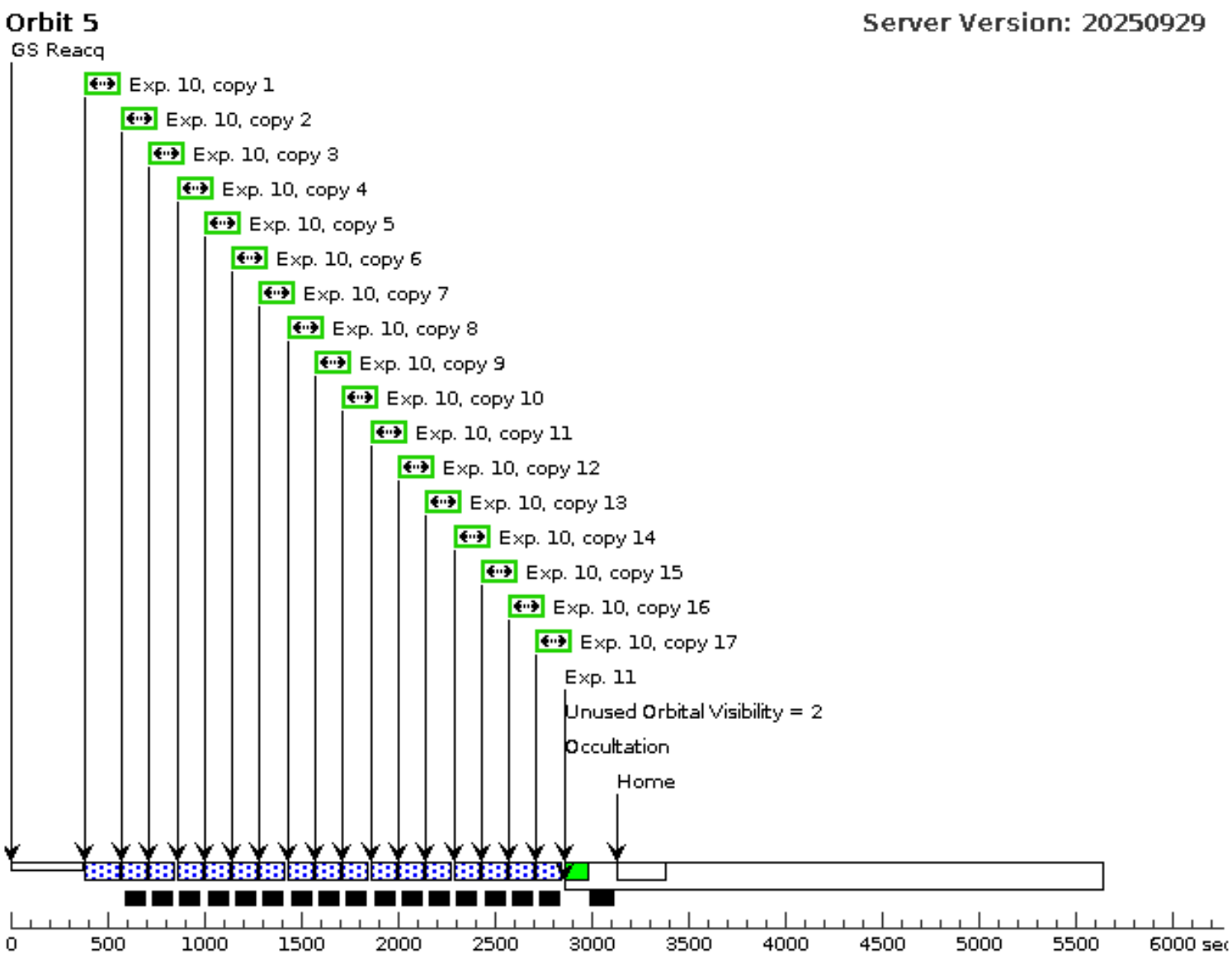
Exp. 8, copy 11
Exp. 8, copy 12
Exp. 8, copy 13
Exp. 8, copy 14
Exp. 8, copy 15
Exp. 8, copy 16
Exp. 8, copy 17
Exp. 9
Unused Orbital Visibility = 2
Occultation
0
500
1000
1500
2000
2500
3000
3500
4000
4500
5000
5500
6000 sec


Orbit 5
Server Version: 20250929
GS Reacq
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Exp. 10, copy 11
Exp. 10, copy 12
Exp. 10, copy 13
Exp. 10, copy 14
Exp. 10, copy 15
Exp. 10, copy 16
Exp. 10, copy 17
Exp. 11
Unused Orbital Visibility = 2
Occultation
Home
0
500
1000
1500
2000
2500
3000
3500
4000
4500
5000
5500
6000 sec

Visit

Proposal 18108, WASP-189b/NUV/Transit 1 (03), failed Thu Feb 26 16:01:27 GMT 2026

Diagnostic Status: No Diagnostics

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

Special Requirements: SCHED 100%; Period 2.7240330 D AND ZERO-PHASE HJD2458926.5416960

Comments: Ephemeris from Lendl+2020. Transit midpoint uncertainty by January 2026 is << 1 minute.

Fixed Targets

#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(1)	WASP-189	RA: 15 02 44.8679 (225.6869496d) Dec: -03 01 52.99 (-3.03139d) Equinox: J2000	Proper Motion RA: -50.473 mas/yr Proper Motion Dec: -23.754999938319088 mas/yr Parallax: 0.0100997" Epoch of Position: 2000	V=6.618	Reference Frame: ICRS

Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.

SIMBAD listed proper motion for this target. When retrieving targets with PM from SIMBAD, APT requests the coordinates be calculated with an epoch of the year 2000. Do not modify this epoch. Always review coordinates using the Target Confirmation tool, which graphically displays the PM.
Category=EXT-STAR
Description=[A4-A9 V-IV, EXTRA-SOLAR PLANETARY SYSTEM]
Extended=NO

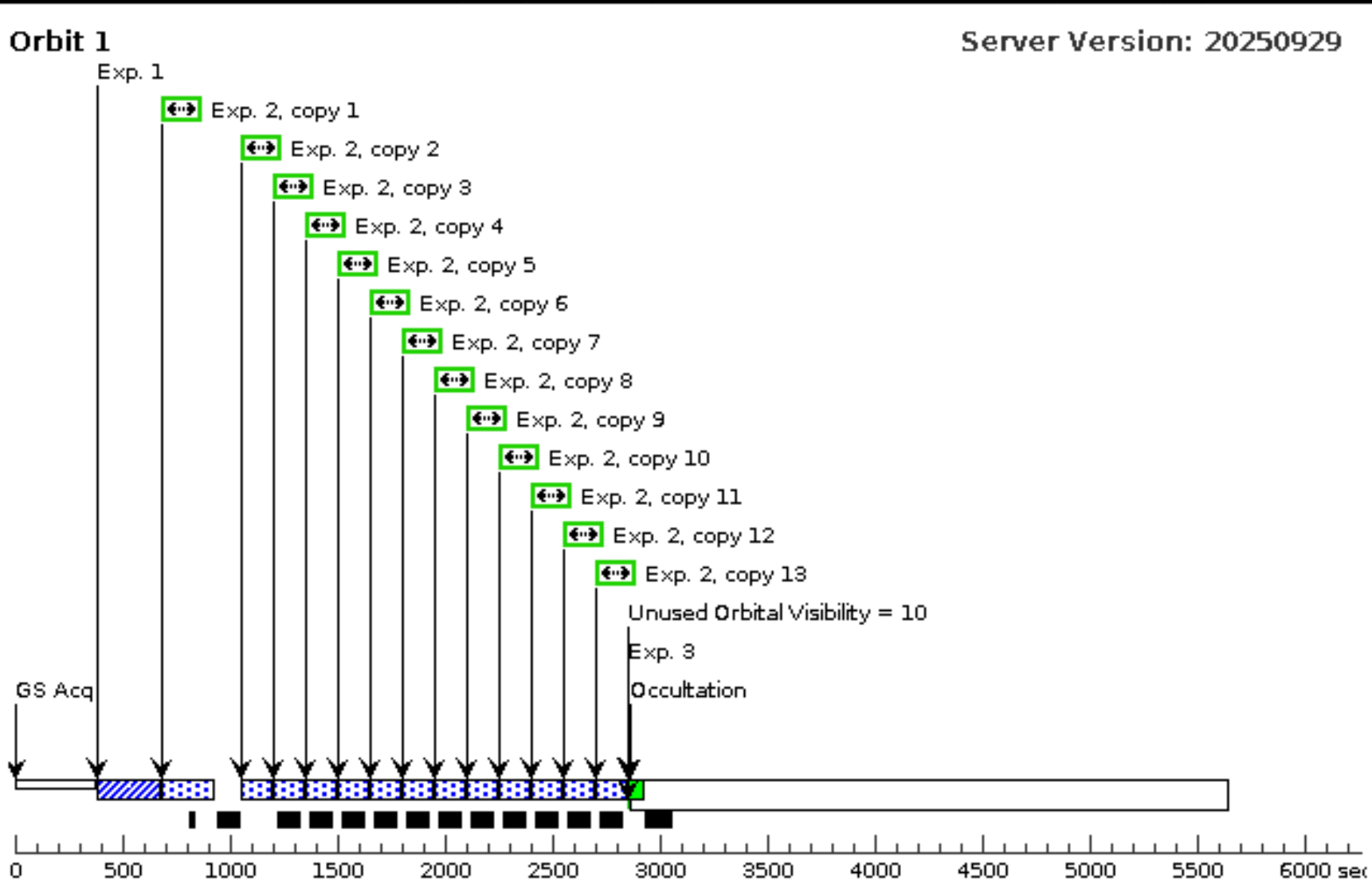
Exposures

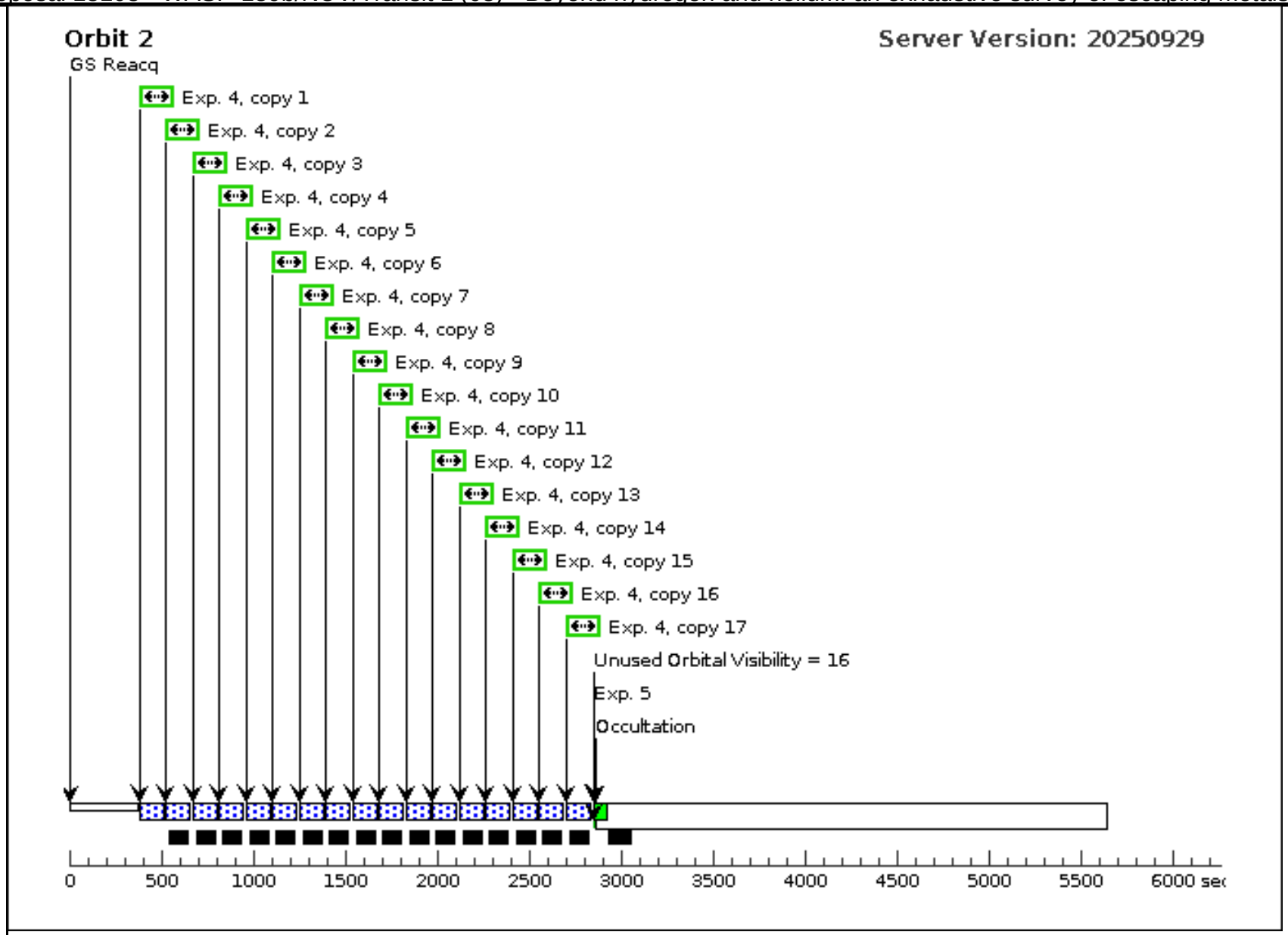
#	Label (ETC Run)	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
1	ACQ (STIS.ta.2022800)	(1) WASP-189	STIS/CCD, ACQ, F25ND3	MIRROR	ACQTYPE=POINT	PHASE 0.92224151 95900099 TO 0.9375 3746742422		0.1 Secs (0.1 Secs) *[==>]*	*[1]*
2	SCI (STIS.sp.2023445)	(1) WASP-189	STIS/NUV-MAMA, ACCUM, 0.2X0.2	E230M 2707 A	WAVECAL=NO			120 Secs X 13 (1638 Secs) *[==>126.0 Secs (Copy 1)]* *[==>126.0 Secs (Copy 2)]* *[==>126.0 Secs (Copy 3)]* *[==>126.0 Secs (Copy 4)]* *[==>126.0 Secs (Copy 5)]* *[==>126.0 Secs (Copy 6)]* *[==>126.0 Secs (Copy 7)]* *[==>126.0 Secs (Copy 8)]* *[==>126.0 Secs (Copy 9)]* *[==>126.0 Secs (Copy 10)]* *[==>126.0 Secs (Copy 11)]* *[==>126.0 Secs (Copy 12)]* *[==>126.0 Secs (Copy 13)]*	*[1]*
	Comments: Star is too bright for TIME-TAG mode, even when using E230H. We decide to go with E230M to increase the wavelength range of the observation and set mode to ACCUM. We shall use a minimum exposure time of 120 s to allow for parallel buffer dumps, which maximizes the time on object. The count rate in the brightest pixel is only 3.85 cts/s, so one exposure of 120 s yields 462 cts, which is well below the MAMA saturation limit of 65,536 counts per pixel.								
3	GO-WAVE CAL	WAVE	STIS/NUV-MAMA, ACCUM, 0.2X0.2	E230M 2707 A				*[==>]*	*[1]*
4	SCI (STIS.sp.2023445)	(1) WASP-189	STIS/NUV-MAMA, ACCUM, 0.2X0.2	E230M 2707 A	WAVECAL=NO			120 Secs X 17 (2057 Secs) *[==>121.0 Secs (Copy 1)]* *[==>121.0 Secs (Copy 2)]* *[==>121.0 Secs (Copy 3)]* *[==>121.0 Secs (Copy 4)]* *[==>121.0 Secs (Copy 5)]* *[==>121.0 Secs (Copy 6)]* *[==>121.0 Secs (Copy 7)]* *[==>121.0 Secs (Copy 8)]* *[==>121.0 Secs (Copy 9)]* *[==>121.0 Secs (Copy 10)]* *[==>121.0 Secs (Copy 11)]* *[==>121.0 Secs (Copy 12)]* *[==>121.0 Secs (Copy 13)]* *[==>121.0 Secs (Copy 14)]* *[==>121.0 Secs (Copy 15)]* *[==>121.0 Secs (Copy 16)]* *[==>121.0 Secs (Copy 17)]*	*[2]*
	Comments: Star is too bright for TIME-TAG mode, even when using E230H. We decide to go with E230M to increase the wavelength range of the observation and set mode to ACCUM. We shall use a minimum exposure time of 120 s to allow for parallel buffer dumps, which maximizes the time on object. The count rate in the brightest pixel is only 3.85 cts/s, so one exposure of 120 s yields 462 cts, which is well below the MAMA saturation limit of 65,536 counts per pixel.								
5	GO-WAVE CAL	WAVE	STIS/NUV-MAMA, ACCUM, 0.2X0.2	E230M 2707 A				*[==>]*	*[2]*

6	SCI (STIS.sp.2023445)	(1) WASP-189	STIS/NUV-MAMA, ACCUM, 0.2X0.2	E230M 2707 A	WAVECAL=NO	120 Secs X 17 (2057 Secs)		
						[==>121.0 Secs (Copy 1)] *[==>121.0 Secs (Copy 2)]* *[==>121.0 Secs (Copy 3)]* *[==>121.0 Secs (Copy 4)]* *[==>121.0 Secs (Copy 5)]* *[==>121.0 Secs (Copy 6)]* *[==>121.0 Secs (Copy 7)]* *[==>121.0 Secs (Copy 8)]* *[==>121.0 Secs (Copy 9)]* *[==>121.0 Secs (Copy 10)]* *[==>121.0 Secs (Copy 11)]* *[==>121.0 Secs (Copy 12)]* *[==>121.0 Secs (Copy 13)]* *[==>121.0 Secs (Copy 14)]* *[==>121.0 Secs (Copy 15)]* *[==>121.0 Secs (Copy 16)]* *[==>121.0 Secs (Copy 17)]*	***[3]***
Comments: Star is too bright for TIME-TAG mode, even when using E230H. We decide to go with E230M to increase the wavelength range of the observation and set mode to ACCUM. We shall use a minimum exposure time of 120 s to allow for parallel buffer dumps, which maximizes the time on object. The count rate in the brightest pixel is only 3.85 cts/s, so one exposure of 120 s yields 462 cts, which is well below the MAMA saturation limit of 65,536 counts per pixel.								
7	GO-WAVE CAL	WAVE	STIS/NUV-MAMA, ACCUM, 0.2X0.2	E230M 2707 A		*[==>]*		***[3]***
8	SCI (STIS.sp.2023445)	(1) WASP-189	STIS/NUV-MAMA, ACCUM, 0.2X0.2	E230M 2707 A	WAVECAL=NO	120 Secs X 17 (2057 Secs)		
						[==>121.0 Secs (Copy 1)] *[==>121.0 Secs (Copy 2)]* *[==>121.0 Secs (Copy 3)]* *[==>121.0 Secs (Copy 4)]* *[==>121.0 Secs (Copy 5)]* *[==>121.0 Secs (Copy 6)]* *[==>121.0 Secs (Copy 7)]* *[==>121.0 Secs (Copy 8)]* *[==>121.0 Secs (Copy 9)]* *[==>121.0 Secs (Copy 10)]* *[==>121.0 Secs (Copy 11)]* *[==>121.0 Secs (Copy 12)]* *[==>121.0 Secs (Copy 13)]* *[==>121.0 Secs (Copy 14)]* *[==>121.0 Secs (Copy 15)]* *[==>121.0 Secs (Copy 16)]* *[==>121.0 Secs (Copy 17)]*	***[4]***
Comments: Star is too bright for TIME-TAG mode, even when using E230H. We decide to go with E230M to increase the wavelength range of the observation and set mode to ACCUM. We shall use a minimum exposure time of 120 s to allow for parallel buffer dumps, which maximizes the time on object. The count rate in the brightest pixel is only 3.85 cts/s, so one exposure of 120 s yields 462 cts, which is well below the MAMA saturation limit of 65,536 counts per pixel.								
9	GO-WAVE CAL	WAVE	STIS/NUV-MAMA, ACCUM, 0.2X0.2	E230M 2707 A		*[==>]*		***[4]***

	10	SCI (STIS.sp.2023445)	(1) WASP-189	STIS/NUV-MAMA, ACCUM, 0.2X0.2	E230M 2707 A	WAVECAL=NO	120 Secs X 17 (2057 Secs) *[==>121.0 Secs (Copy 1)]* *[==>121.0 Secs (Copy 2)]* *[==>121.0 Secs (Copy 3)]* *[==>121.0 Secs (Copy 4)]* *[==>121.0 Secs (Copy 5)]* *[==>121.0 Secs (Copy 6)]* *[==>121.0 Secs (Copy 7)]* *[==>121.0 Secs (Copy 8)]* *[==>121.0 Secs (Copy 9)]* *[==>121.0 Secs (Copy 10)]* *[==>121.0 Secs (Copy 11)]* *[==>121.0 Secs (Copy 12)]* *[==>121.0 Secs (Copy 13)]* *[==>121.0 Secs (Copy 14)]* *[==>121.0 Secs (Copy 15)]* *[==>121.0 Secs (Copy 16)]* *[==>121.0 Secs (Copy 17)]*	***[5]***
	Comments: Star is too bright for TIME-TAG mode, even when using E230H. We decide to go with E230M to increase the wavelength range of the observation and set mode to ACCUM. We shall use a minimum exposure time of 120 s to allow for parallel buffer dumps, which maximizes the time on object. The count rate in the brightest pixel is only 3.85 cts/s, so one exposure of 120 s yields 462 cts, which is well below the MAMA saturation limit of 65,536 counts per pixel.							
	11	GO-WAVE CAL	WAVE	STIS/NUV-MAMA, ACCUM, 0.2X0.2	E230M 2707 A		*[==>]*	***[5]***

Orbit Structure

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Exp. 4, copy 12
Exp. 4, copy 13
Exp. 4, copy 14
Exp. 4, copy 15
Exp. 4, copy 16
Exp. 4, copy 17
Unused Orbital Visibility = 16
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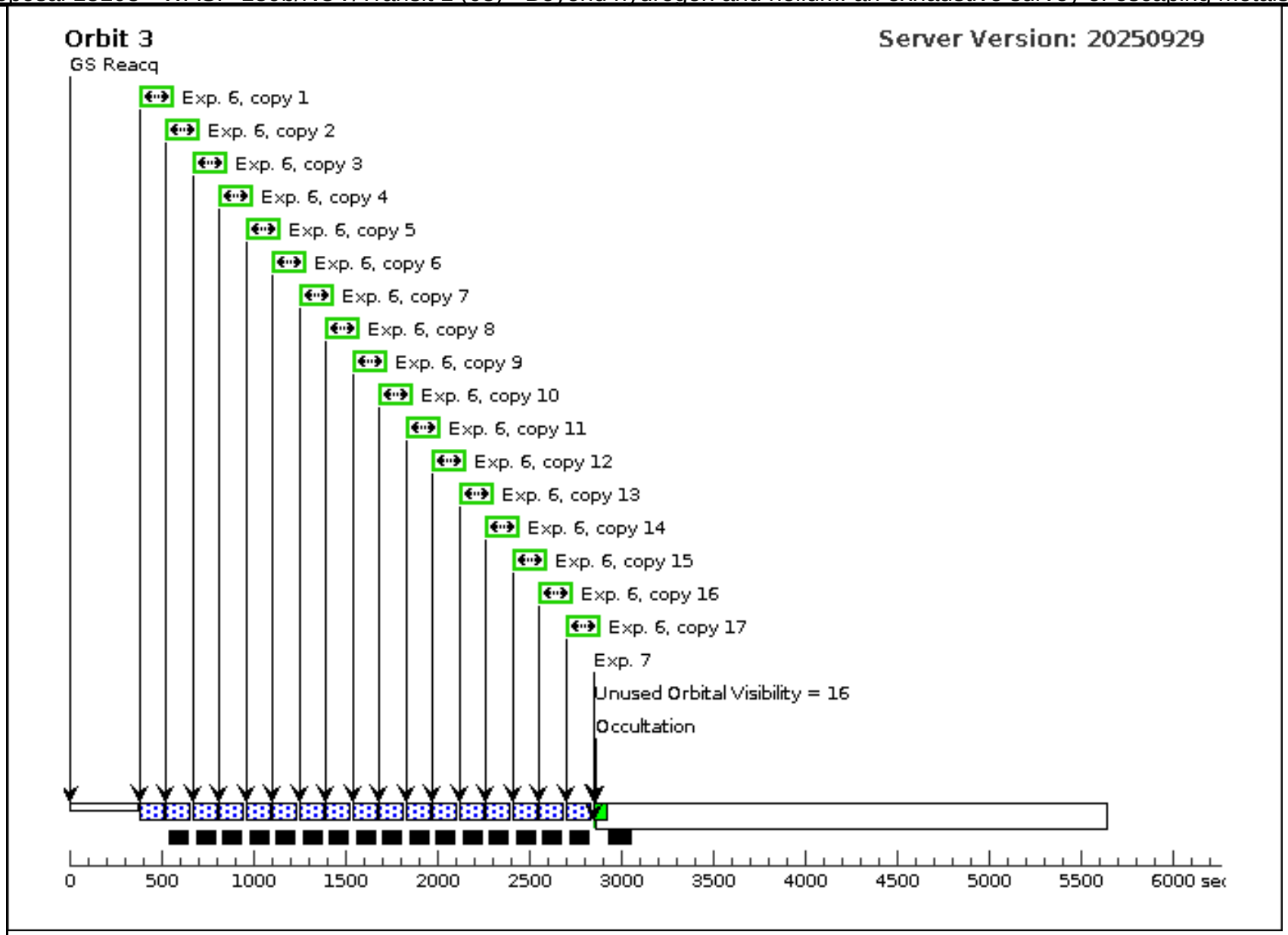
6000 sec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Exp. 6, copy 11
Exp. 6, copy 12
Exp. 6, copy 13
Exp. 6, copy 14
Exp. 6, copy 15
Exp. 6, copy 16
Exp. 6, copy 17
Exp. 7
Unused Orbital Visibility = 16
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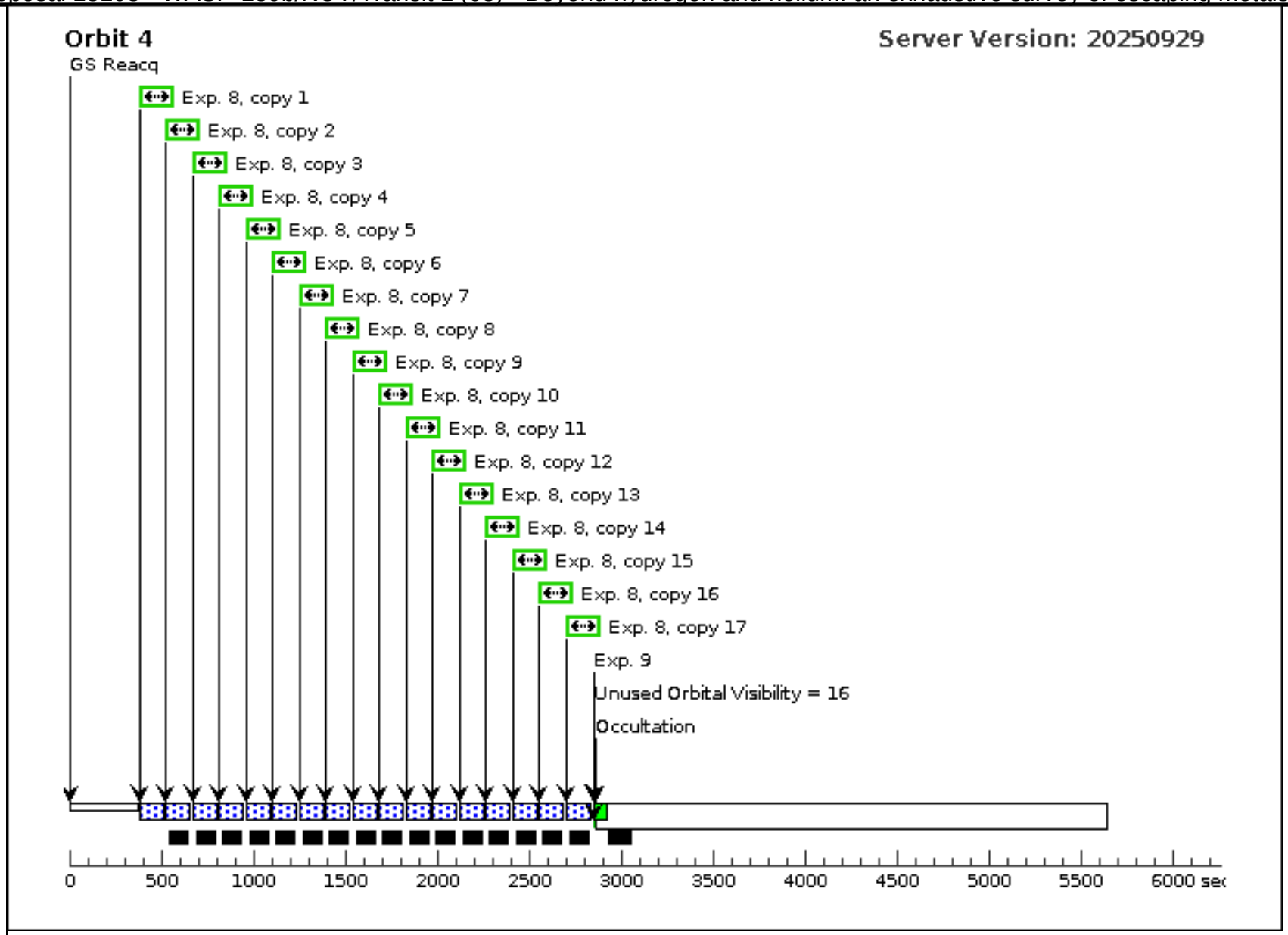
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Exp. 8, copy 11
Exp. 8, copy 12
Exp. 8, copy 13
Exp. 8, copy 14
Exp. 8, copy 15
Exp. 8, copy 16
Exp. 8, copy 17
Exp. 9
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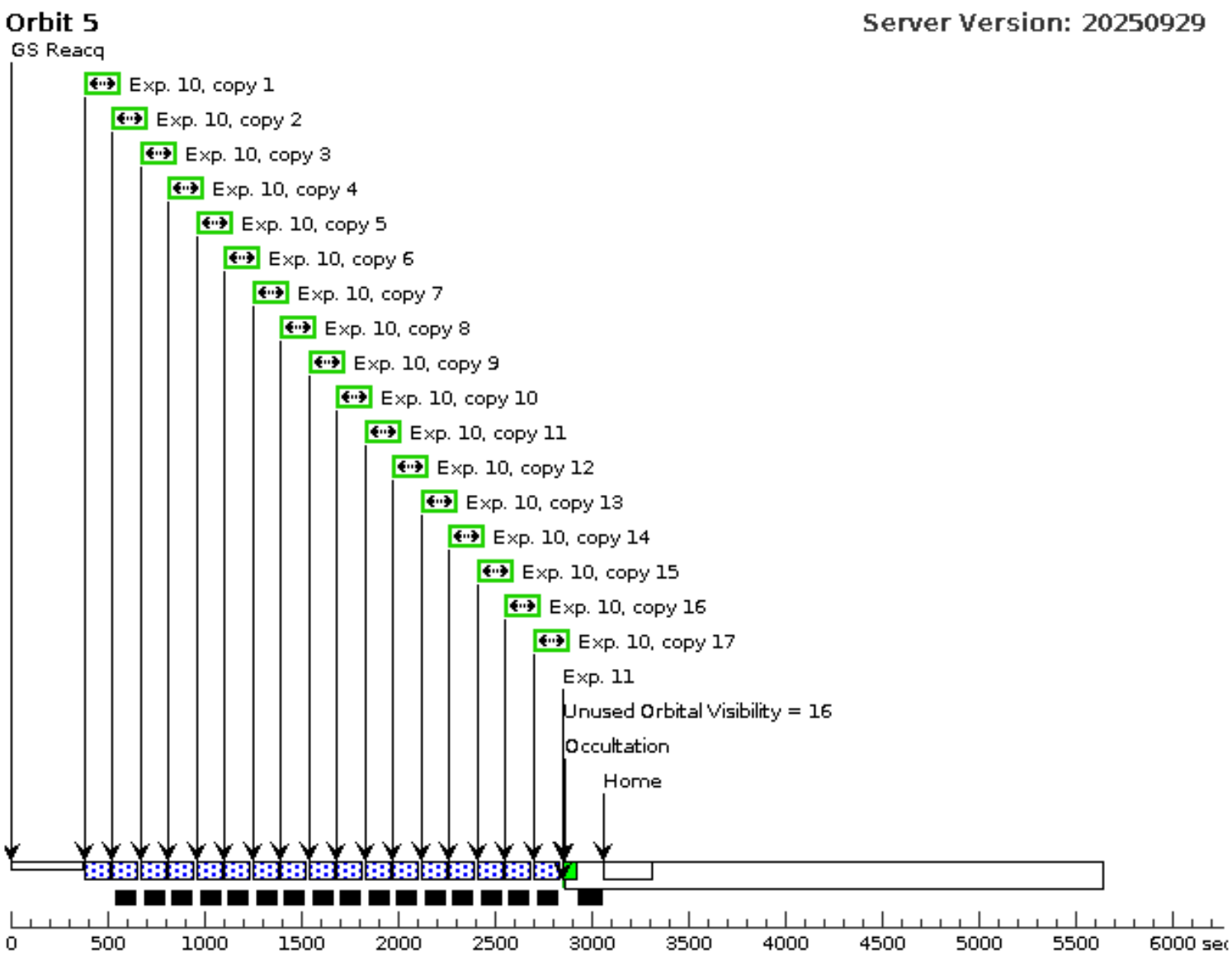
6000 sec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Exp. 10, copy 17
Exp. 11
Unused Orbital Visibility = 16
Occultation
Home
0
500
1000
1500
2000
2500
3000
3500
4000
4500
5000
5500
6000 sec

Visit

Proposal 18108, WASP-189b/NUV/Transit 1-REPEAT (53), implementation Thu Feb 26 16:01:27 GMT 2026

Diagnostic Status: Warning

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

Special Requirements: SCHED 100%; Period 2.7240330 D AND ZERO-PHASE HJD2458926.5416960

Comments: Ephemeris from Lendl+2020. Transit midpoint uncertainty by January 2026 is << 1 minute.

Diagnostics

(WASP-189b/NUV/Transit 1-REPEAT (53)) Warning (Orbit Planner): ORBITAL VISIBILITY OVERRUN

Fixed Targets

#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(1)	WASP-189	RA: 15 02 44.8679 (225.6869496d) Dec: -03 01 52.99 (-3.03139d) Equinox: J2000	Proper Motion RA: -50.473 mas/yr Proper Motion Dec: -23.754999938319088 mas/yr Parallax: 0.0100997" Epoch of Position: 2000	V=6.618	Reference Frame: ICRS

Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.

SIMBAD listed proper motion for this target. When retrieving targets with PM from SIMBAD, APT requests the coordinates be calculated with an epoch of the year 2000. Do not modify this epoch. Always review coordinates using the Target Confirmation tool, which graphically displays the PM.
Category=EXT-STAR
Description=[A4-A9 V-IV, EXTRA-SOLAR PLANETARY SYSTEM]
Extended=NO

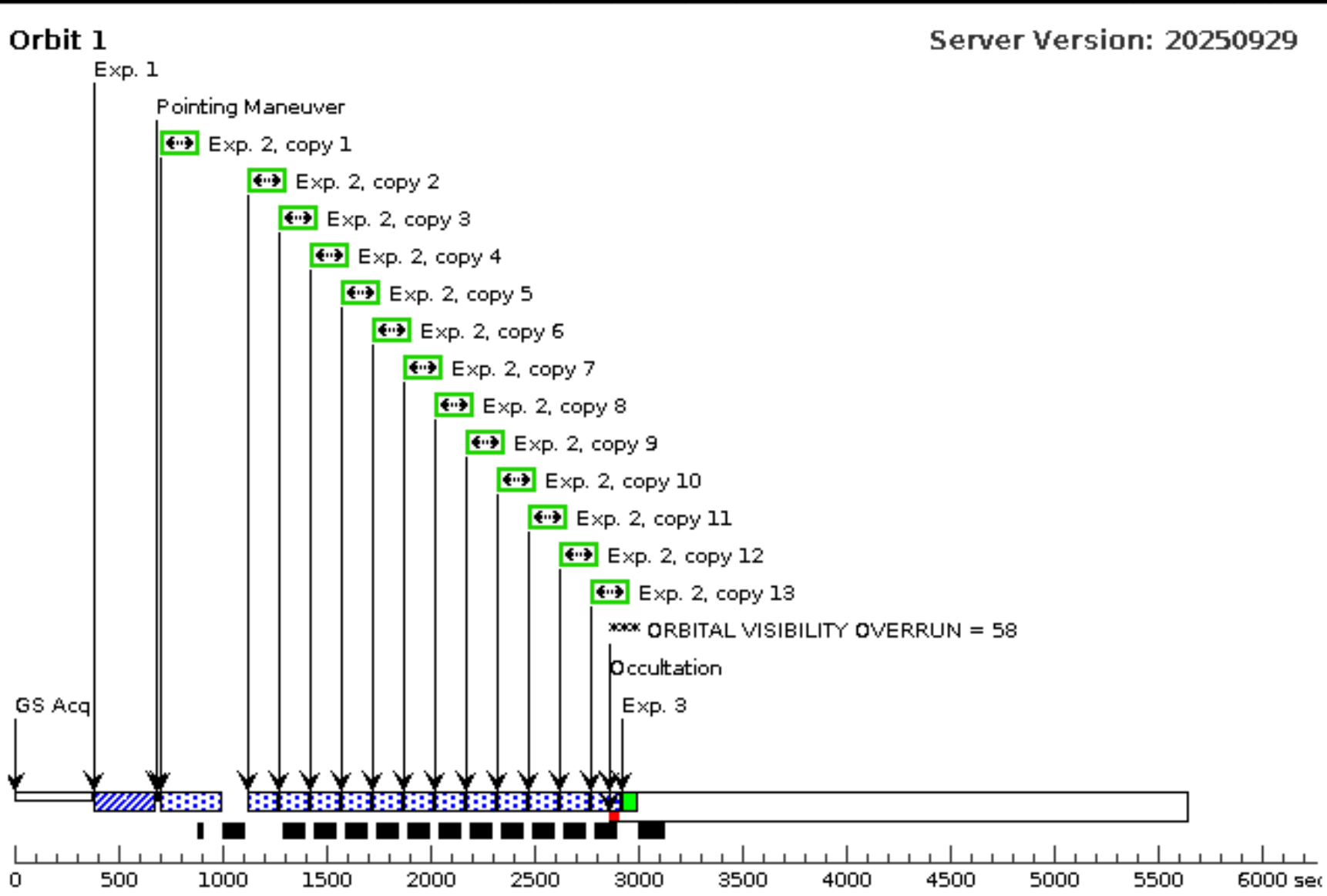
Exposures

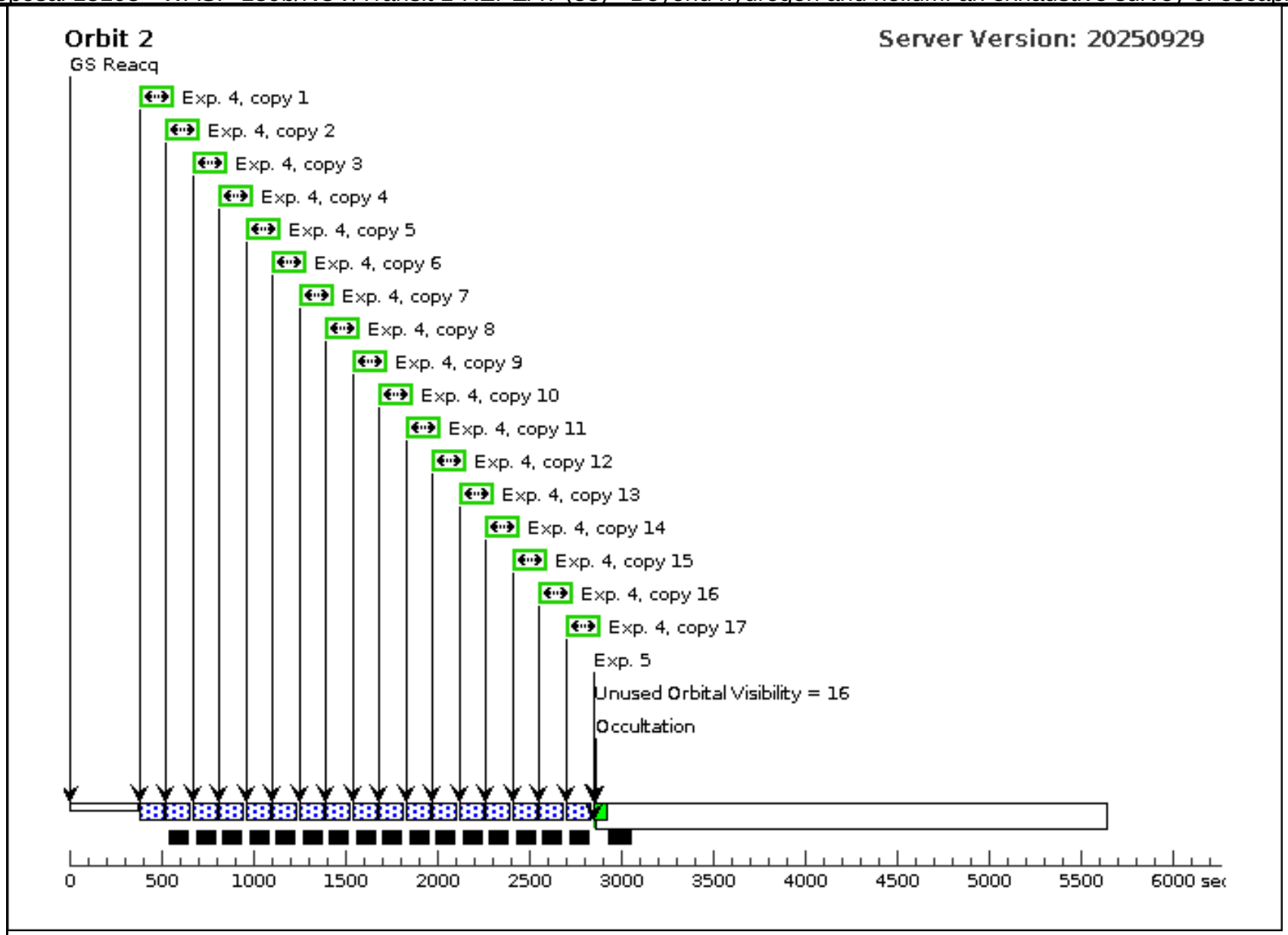
#	Label (ETC Run)	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
1	ACQ (STIS.ta.2022800)	(1) WASP-189	STIS/CCD, ACQ, F25ND3	MIRROR	ACQTYPE=POINT	PHASE 0.92224151 95900099 TO 0.9375 3746742422		0.1 Secs (0.1 Secs) *[==>]*	*[1]*
2	SCI (STIS.sp.2023445)	(1) WASP-189	STIS/NUV-MAMA, ACCUM, 6X0.2	E230M 2707 A	WAVECAL=NO			120 Secs X 13 (1638 Secs) *[==>126.0 Secs (Copy 1)]* *[==>126.0 Secs (Copy 2)]* *[==>126.0 Secs (Copy 3)]* *[==>126.0 Secs (Copy 4)]* *[==>126.0 Secs (Copy 5)]* *[==>126.0 Secs (Copy 6)]* *[==>126.0 Secs (Copy 7)]* *[==>126.0 Secs (Copy 8)]* *[==>126.0 Secs (Copy 9)]* *[==>126.0 Secs (Copy 10)]* *[==>126.0 Secs (Copy 11)]* *[==>126.0 Secs (Copy 12)]* *[==>126.0 Secs (Copy 13)]*	*[1]*
	Comments: Star is too bright for TIME-TAG mode, even when using E230H. We decide to go with E230M to increase the wavelength range of the observation and set mode to ACCUM. We shall use a minimum exposure time of 120 s to allow for parallel buffer dumps, which maximizes the time on object. The count rate in the brightest pixel is only 3.85 cts/s, so one exposure of 120 s yields 462 cts, which is well below the MAMA saturation limit of 65,536 counts per pixel.								
3	GO-WAVE CAL	WAVE	STIS/NUV-MAMA, ACCUM, 6X0.2	E230M 2707 A				*[==>]*	*[1]*
4	SCI (STIS.sp.2023445)	(1) WASP-189	STIS/NUV-MAMA, ACCUM, 6X0.2	E230M 2707 A	WAVECAL=NO			120 Secs X 17 (2057 Secs) *[==>121.0 Secs (Copy 1)]* *[==>121.0 Secs (Copy 2)]* *[==>121.0 Secs (Copy 3)]* *[==>121.0 Secs (Copy 4)]* *[==>121.0 Secs (Copy 5)]* *[==>121.0 Secs (Copy 6)]* *[==>121.0 Secs (Copy 7)]* *[==>121.0 Secs (Copy 8)]* *[==>121.0 Secs (Copy 9)]* *[==>121.0 Secs (Copy 10)]* *[==>121.0 Secs (Copy 11)]* *[==>121.0 Secs (Copy 12)]* *[==>121.0 Secs (Copy 13)]* *[==>121.0 Secs (Copy 14)]* *[==>121.0 Secs (Copy 15)]* *[==>121.0 Secs (Copy 16)]* *[==>121.0 Secs (Copy 17)]*	*[2]*
	Comments: Star is too bright for TIME-TAG mode, even when using E230H. We decide to go with E230M to increase the wavelength range of the observation and set mode to ACCUM. We shall use a minimum exposure time of 120 s to allow for parallel buffer dumps, which maximizes the time on object. The count rate in the brightest pixel is only 3.85 cts/s, so one exposure of 120 s yields 462 cts, which is well below the MAMA saturation limit of 65,536 counts per pixel.								
5	GO-WAVE CAL	WAVE	STIS/NUV-MAMA, ACCUM, 6X0.2	E230M 2707 A				*[==>]*	*[2]*

6	SCI (STIS.sp.2023445)	(1) WASP-189	STIS/NUV-MAMA, ACCUM, 6X0.2	E230M 2707 A	WAVECAL=NO	120 Secs X 17 (2057 Secs) *[==>121.0 Secs (Copy 1)]* *[==>121.0 Secs (Copy 2)]* *[==>121.0 Secs (Copy 3)]* *[==>121.0 Secs (Copy 4)]* *[==>121.0 Secs (Copy 5)]* *[==>121.0 Secs (Copy 6)]* *[==>121.0 Secs (Copy 7)]* *[==>121.0 Secs (Copy 8)]* *[==>121.0 Secs (Copy 9)]* *[==>121.0 Secs (Copy 10)]* *[==>121.0 Secs (Copy 11)]* *[==>121.0 Secs (Copy 12)]* *[==>121.0 Secs (Copy 13)]* *[==>121.0 Secs (Copy 14)]* *[==>121.0 Secs (Copy 15)]* *[==>121.0 Secs (Copy 16)]* *[==>121.0 Secs (Copy 17)]*	***[3]***
Comments: Star is too bright for TIME-TAG mode, even when using E230H. We decide to go with E230M to increase the wavelength range of the observation and set mode to ACCUM. We shall use a minimum exposure time of 120 s to allow for parallel buffer dumps, which maximizes the time on object. The count rate in the brightest pixel is only 3.85 cts/s, so one exposure of 120 s yields 462 cts, which is well below the MAMA saturation limit of 65,536 counts per pixel.								
7	GO-WAVE CAL	WAVE	STIS/NUV-MAMA, ACCUM, 6X0.2	E230M 2707 A		*[==>]*	***[3]***
8	SCI (STIS.sp.2023445)	(1) WASP-189	STIS/NUV-MAMA, ACCUM, 6X0.2	E230M 2707 A	WAVECAL=NO	120 Secs X 17 (2057 Secs) *[==>121.0 Secs (Copy 1)]* *[==>121.0 Secs (Copy 2)]* *[==>121.0 Secs (Copy 3)]* *[==>121.0 Secs (Copy 4)]* *[==>121.0 Secs (Copy 5)]* *[==>121.0 Secs (Copy 6)]* *[==>121.0 Secs (Copy 7)]* *[==>121.0 Secs (Copy 8)]* *[==>121.0 Secs (Copy 9)]* *[==>121.0 Secs (Copy 10)]* *[==>121.0 Secs (Copy 11)]* *[==>121.0 Secs (Copy 12)]* *[==>121.0 Secs (Copy 13)]* *[==>121.0 Secs (Copy 14)]* *[==>121.0 Secs (Copy 15)]* *[==>121.0 Secs (Copy 16)]* *[==>121.0 Secs (Copy 17)]*	***[4]***
Comments: Star is too bright for TIME-TAG mode, even when using E230H. We decide to go with E230M to increase the wavelength range of the observation and set mode to ACCUM. We shall use a minimum exposure time of 120 s to allow for parallel buffer dumps, which maximizes the time on object. The count rate in the brightest pixel is only 3.85 cts/s, so one exposure of 120 s yields 462 cts, which is well below the MAMA saturation limit of 65,536 counts per pixel.								
9	GO-WAVE CAL	WAVE	STIS/NUV-MAMA, ACCUM, 6X0.2	E230M 2707 A		*[==>]*	***[4]***

	10	SCI (STIS.sp.2023445)	(1) WASP-189	STIS/NUV-MAMA, ACCUM, 6X0.2	E230M 2707 A	WAVECAL=NO	120 Secs X 17 (2057 Secs)	
							[==>121.0 Secs (Copy 1)] *[==>121.0 Secs (Copy 2)]* *[==>121.0 Secs (Copy 3)]* *[==>121.0 Secs (Copy 4)]* *[==>121.0 Secs (Copy 5)]* *[==>121.0 Secs (Copy 6)]* *[==>121.0 Secs (Copy 7)]* *[==>121.0 Secs (Copy 8)]* *[==>121.0 Secs (Copy 9)]* *[==>121.0 Secs (Copy 10)]* *[==>121.0 Secs (Copy 11)]* *[==>121.0 Secs (Copy 12)]* *[==>121.0 Secs (Copy 13)]* *[==>121.0 Secs (Copy 14)]* *[==>121.0 Secs (Copy 15)]* *[==>121.0 Secs (Copy 16)]* *[==>121.0 Secs (Copy 17)]*	***[5]***
	Comments: Star is too bright for TIME-TAG mode, even when using E230H. We decide to go with E230M to increase the wavelength range of the observation and set mode to ACCUM. We shall use a minimum exposure time of 120 s to allow for parallel buffer dumps, which maximizes the time on object. The count rate in the brightest pixel is only 3.85 cts/s, so one exposure of 120 s yields 462 cts, which is well below the MAMA saturation limit of 65,536 counts per pixel.							
	11	GO-WAVE CAL	WAVE	STIS/NUV-MAMA, ACCUM, 6X0.2	E230M 2707 A		*[==>]*	***[5]***

Orbit Structure

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Exp. 4, copy 12
Exp. 4, copy 13
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Exp. 4, copy 16
Exp. 4, copy 17
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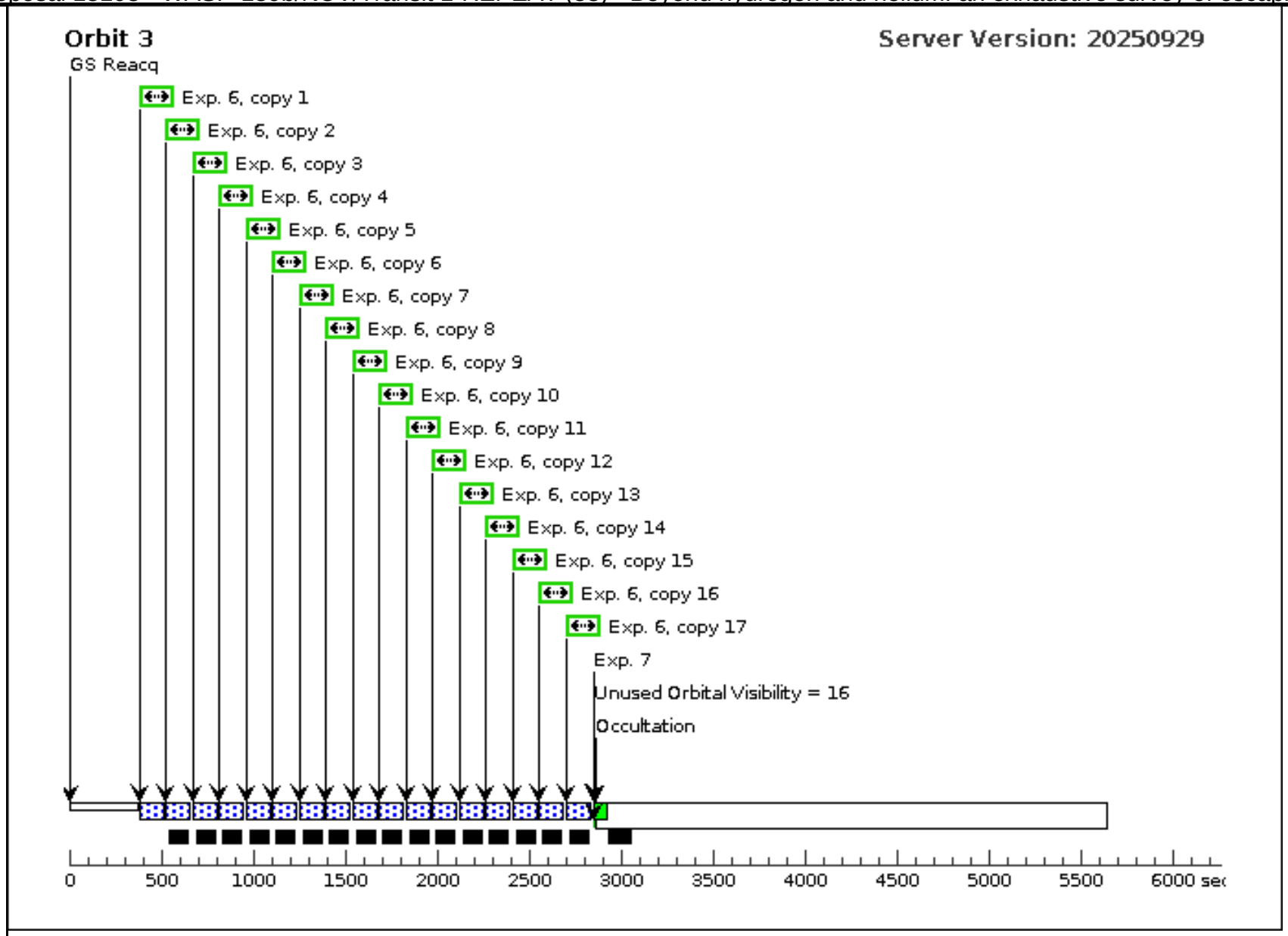
5000
5500
6000 sec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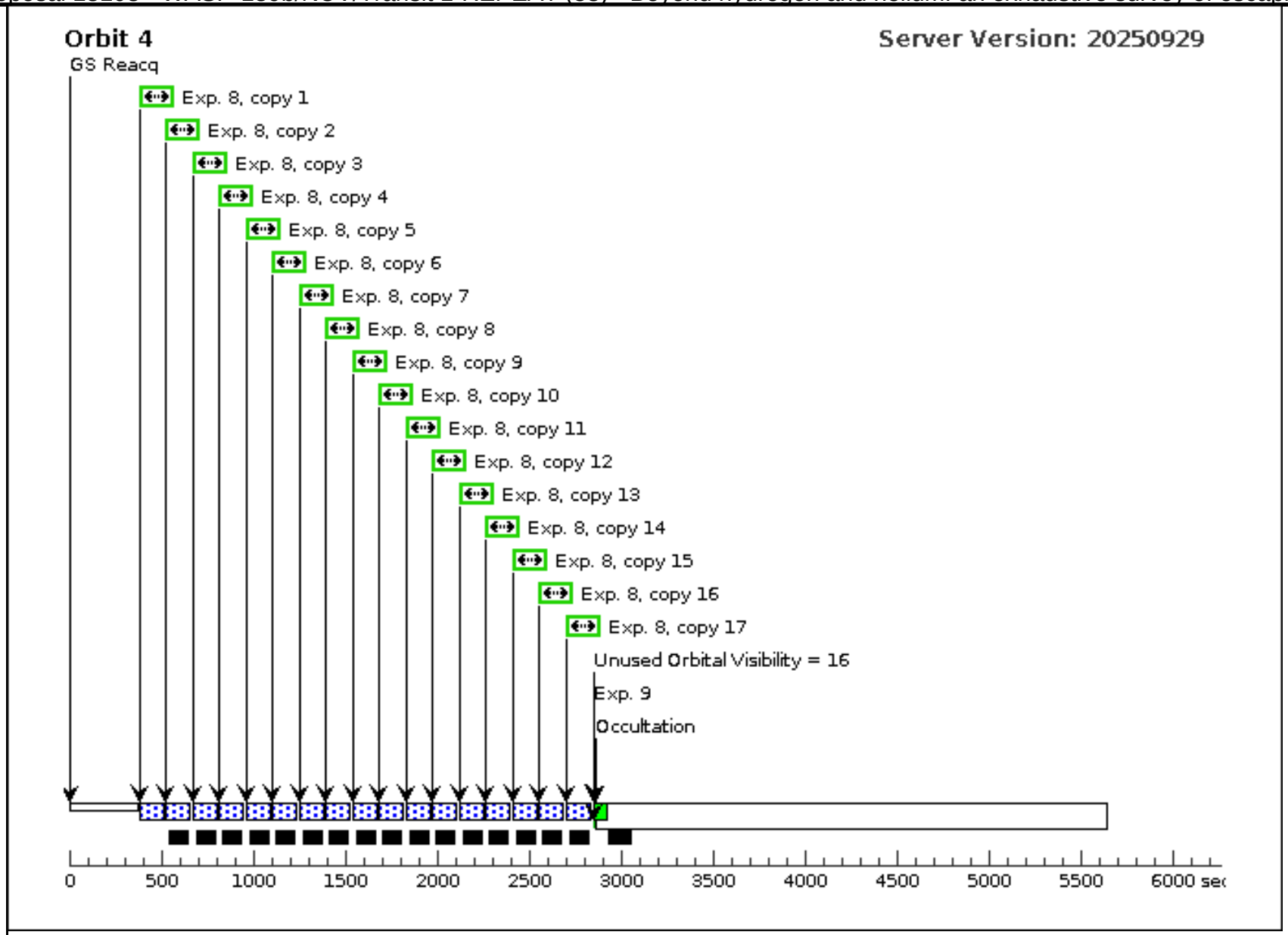
Exp. 6, copy 11
Exp. 6, copy 12
Exp. 6, copy 13
Exp. 6, copy 14
Exp. 6, copy 15
Exp. 6, copy 16
Exp. 6, copy 17
Exp. 7
Unused Orbital Visibility = 16
Occultation
0
500
1000
1500
2000
2500
3000
3500
4000
4500
5000
5500
6000 sec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Exp. 8, copy 11
Exp. 8, copy 12
Exp. 8, copy 13
Exp. 8, copy 14
Exp. 8, copy 15
Exp. 8, copy 16
Exp. 8, copy 17
Unused Orbital Visibility = 16
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Occultation
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1500
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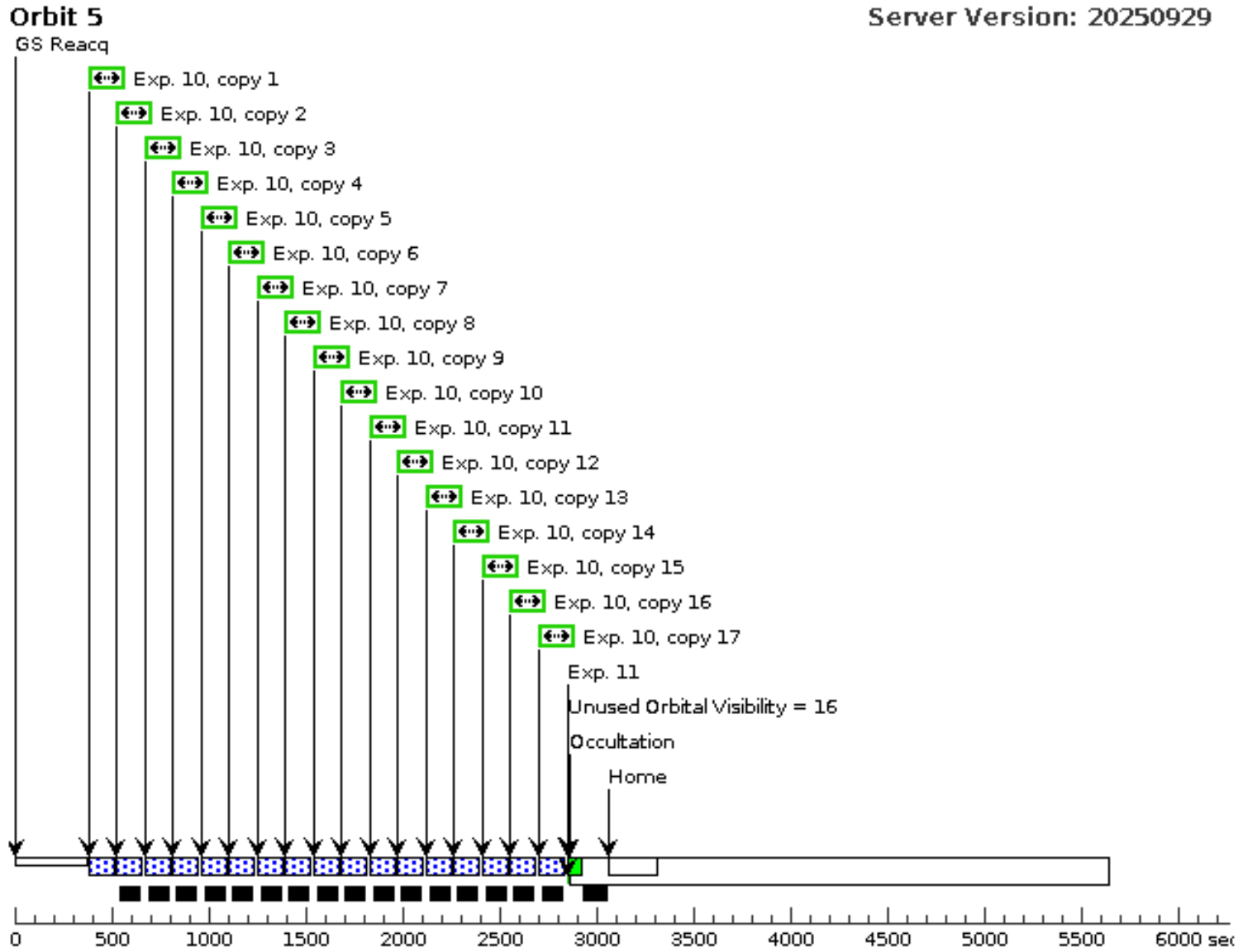
2500
3000
3500
4000
4500
5000
5500
6000 sec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GS Reacq
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Exp. 10, copy 3
Exp. 10, copy 4
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Exp. 10, copy 10
Exp. 10, copy 11
Exp. 10, copy 12
Exp. 10, copy 13
Exp. 10, copy 14
Exp. 10, copy 15
Exp. 10, copy 16
Exp. 10, copy 17
Exp. 11
Unused Orbital Visibility = 16
Occultation
Home
0
500
1000
1500
2000
2500
3000
3500
4000
4500
5000
5500
6000 sec

Visit

Proposal 18108, WASP-189b/NUV/Transit 2 (04), implementation Thu Feb 26 16:01:27 GMT 2026

Diagnostic Status: Warning

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

Special Requirements: SCHED 100%; Period 2.7240330 D AND ZERO-PHASE HJD2458926.5416960

Comments: Ephemeris from Lendl+2020. Transit midpoint uncertainty by January 2026 is << 1 minute.

Diagnostics

(WASP-189b/NUV/Transit 2 (04)) Warning (Orbit Planner): ORBITAL VISIBILITY OVERRUN

Fixed Targets

#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(1)	WASP-189	RA: 15 02 44.8679 (225.6869496d) Dec: -03 01 52.99 (-3.03139d) Equinox: J2000	Proper Motion RA: -50.473 mas/yr Proper Motion Dec: -23.754999938319088 mas/yr Parallax: 0.0100997" Epoch of Position: 2000	V=6.618	Reference Frame: ICRS

Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.

SIMBAD listed proper motion for this target. When retrieving targets with PM from SIMBAD, APT requests the coordinates be calculated with an epoch of the year 2000. Do not modify this epoch. Always review coordinates using the Target Confirmation tool, which graphically displays the PM.
Category=EXT-STAR
Description=[A4-A9 V-IV, EXTRA-SOLAR PLANETARY SYSTEM]
Extended=NO

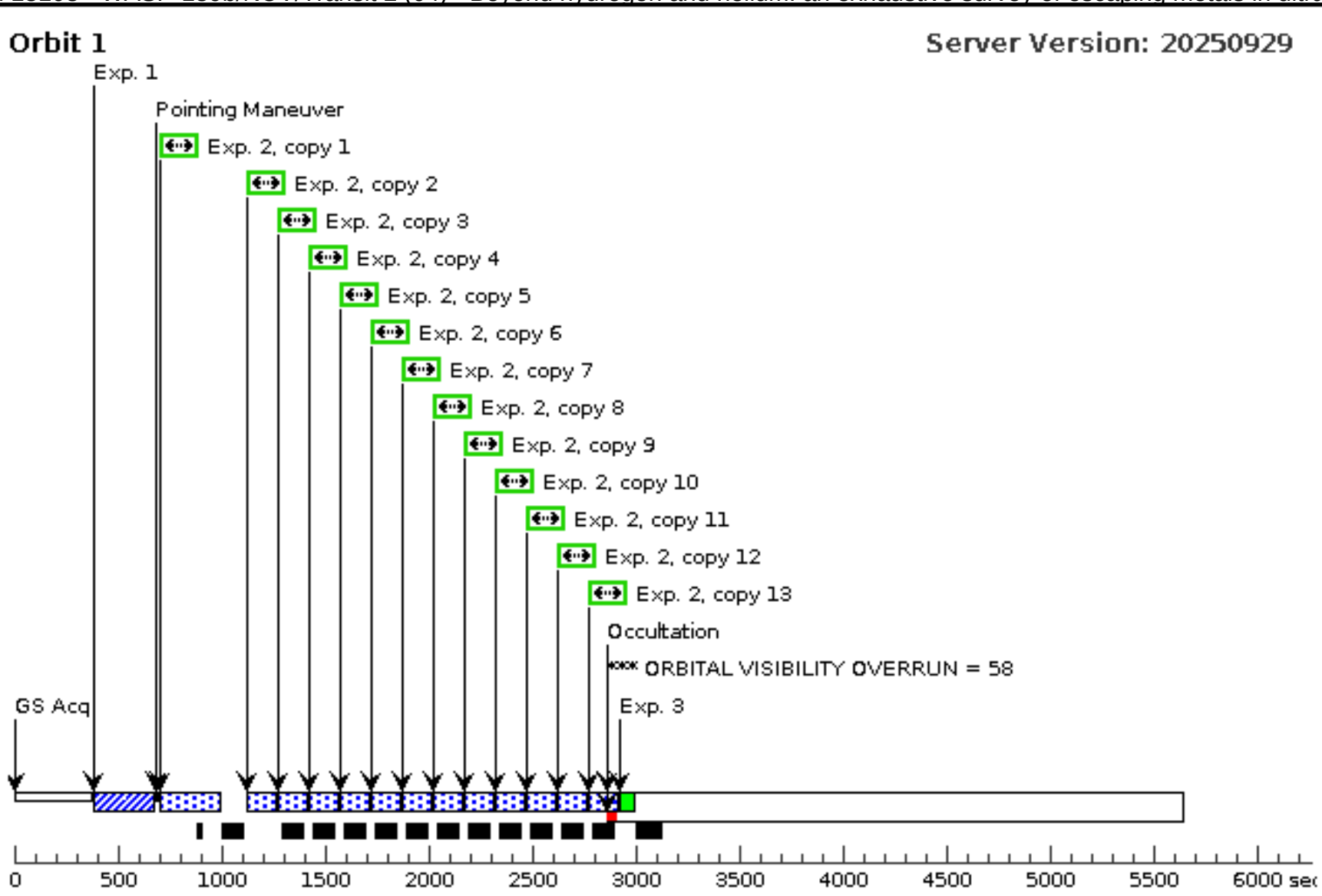
Exposures

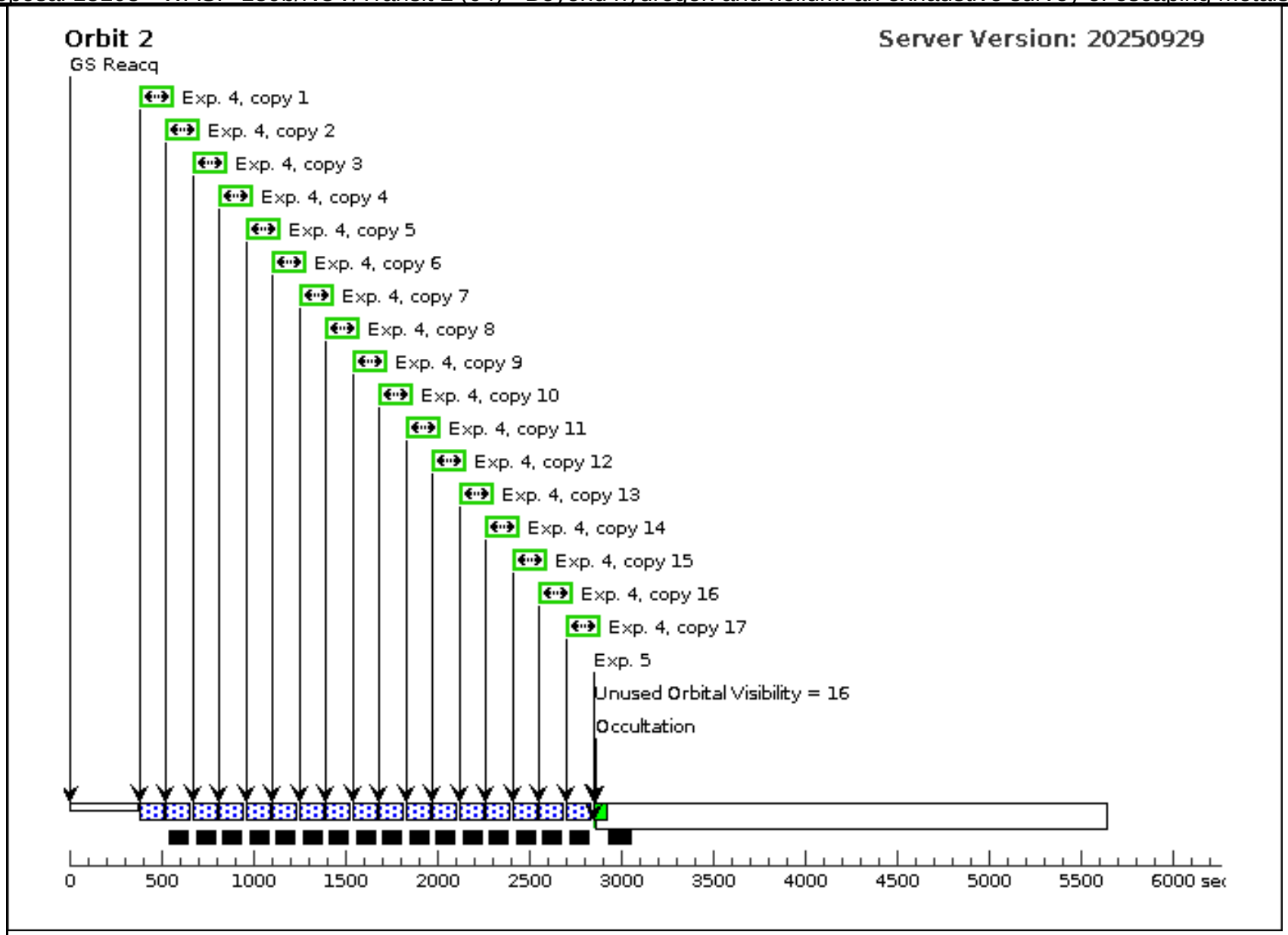
#	Label (ETC Run)	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
1	ACQ (STIS.ta.2022800)	(1) WASP-189	STIS/CCD, ACQ, F25ND3	MIRROR	ACQTYPE=POINT	PHASE 0.93753746 74242198 TO 0.9528334152584299		0.1 Secs (0.1 Secs) *[==>]*	***[1]***
2	SCI (STIS.sp.2023445)	(1) WASP-189	STIS/NUV-MAMA, ACCUM, 6X0.2	E230M 2707 A	WAVECAL=NO			120 Secs X 13 (1638 Secs) *[==>126.0 Secs (Copy 1)]* *[==>126.0 Secs (Copy 2)]* *[==>126.0 Secs (Copy 3)]* *[==>126.0 Secs (Copy 4)]* *[==>126.0 Secs (Copy 5)]* *[==>126.0 Secs (Copy 6)]* *[==>126.0 Secs (Copy 7)]* *[==>126.0 Secs (Copy 8)]* *[==>126.0 Secs (Copy 9)]* *[==>126.0 Secs (Copy 10)]* *[==>126.0 Secs (Copy 11)]* *[==>126.0 Secs (Copy 12)]* *[==>126.0 Secs (Copy 13)]*	***[1]***
Comments: Star is too bright for TIME-TAG mode, even when using E230H. We decide to go with E230M to increase the wavelength range of the observation and set mode to ACCUM. We shall use a minimum exposure time of 120 s to allow for parallel buffer dumps, which maximizes the time on object. The count rate in the brightest pixel is only 3.85 cts/s, so one exposure of 120 s yields 462 cts, which is well below the MAMA saturation limit of 65,536 counts per pixel.									
3	GO-WAVE CAL	WAVE	STIS/NUV-MAMA, ACCUM, 6X0.2	E230M 2707 A				*[==>]*	***[1]***
4	SCI (STIS.sp.2023445)	(1) WASP-189	STIS/NUV-MAMA, ACCUM, 6X0.2	E230M 2707 A	WAVECAL=NO			120 Secs X 17 (2057 Secs) *[==>121.0 Secs (Copy 1)]* *[==>121.0 Secs (Copy 2)]* *[==>121.0 Secs (Copy 3)]* *[==>121.0 Secs (Copy 4)]* *[==>121.0 Secs (Copy 5)]* *[==>121.0 Secs (Copy 6)]* *[==>121.0 Secs (Copy 7)]* *[==>121.0 Secs (Copy 8)]* *[==>121.0 Secs (Copy 9)]* *[==>121.0 Secs (Copy 10)]* *[==>121.0 Secs (Copy 11)]* *[==>121.0 Secs (Copy 12)]* *[==>121.0 Secs (Copy 13)]* *[==>121.0 Secs (Copy 14)]* *[==>121.0 Secs (Copy 15)]* *[==>121.0 Secs (Copy 16)]* *[==>121.0 Secs (Copy 17)]*	***[2]***
Comments: Star is too bright for TIME-TAG mode, even when using E230H. We decide to go with E230M to increase the wavelength range of the observation and set mode to ACCUM. We shall use a minimum exposure time of 120 s to allow for parallel buffer dumps, which maximizes the time on object. The count rate in the brightest pixel is only 3.85 cts/s, so one exposure of 120 s yields 462 cts, which is well below the MAMA saturation limit of 65,536 counts per pixel.									
5	GO-WAVE CAL	WAVE	STIS/NUV-MAMA, ACCUM, 6X0.2	E230M 2707 A				*[==>]*	***[2]***

6	SCI (STIS.sp.2023445)	(1) WASP-189	STIS/NUV-MAMA, ACCUM, 6X0.2	E230M 2707 A	WAVECAL=NO	120 Secs X 17 (2057 Secs) *[==>121.0 Secs (Copy 1)]* *[==>121.0 Secs (Copy 2)]* *[==>121.0 Secs (Copy 3)]* *[==>121.0 Secs (Copy 4)]* *[==>121.0 Secs (Copy 5)]* *[==>121.0 Secs (Copy 6)]* *[==>121.0 Secs (Copy 7)]* *[==>121.0 Secs (Copy 8)]* *[==>121.0 Secs (Copy 9)]* *[==>121.0 Secs (Copy 10)]* *[==>121.0 Secs (Copy 11)]* *[==>121.0 Secs (Copy 12)]* *[==>121.0 Secs (Copy 13)]* *[==>121.0 Secs (Copy 14)]* *[==>121.0 Secs (Copy 15)]* *[==>121.0 Secs (Copy 16)]* *[==>121.0 Secs (Copy 17)]*	***[3]***
Comments: Star is too bright for TIME-TAG mode, even when using E230H. We decide to go with E230M to increase the wavelength range of the observation and set mode to ACCUM. We shall use a minimum exposure time of 120 s to allow for parallel buffer dumps, which maximizes the time on object. The count rate in the brightest pixel is only 3.85 cts/s, so one exposure of 120 s yields 462 cts, which is well below the MAMA saturation limit of 65,536 counts per pixel.								
7	GO-WAVE CAL	WAVE	STIS/NUV-MAMA, ACCUM, 6X0.2	E230M 2707 A		*[==>]*	***[3]***
8	SCI (STIS.sp.2023445)	(1) WASP-189	STIS/NUV-MAMA, ACCUM, 6X0.2	E230M 2707 A	WAVECAL=NO	120 Secs X 17 (2057 Secs) *[==>121.0 Secs (Copy 1)]* *[==>121.0 Secs (Copy 2)]* *[==>121.0 Secs (Copy 3)]* *[==>121.0 Secs (Copy 4)]* *[==>121.0 Secs (Copy 5)]* *[==>121.0 Secs (Copy 6)]* *[==>121.0 Secs (Copy 7)]* *[==>121.0 Secs (Copy 8)]* *[==>121.0 Secs (Copy 9)]* *[==>121.0 Secs (Copy 10)]* *[==>121.0 Secs (Copy 11)]* *[==>121.0 Secs (Copy 12)]* *[==>121.0 Secs (Copy 13)]* *[==>121.0 Secs (Copy 14)]* *[==>121.0 Secs (Copy 15)]* *[==>121.0 Secs (Copy 16)]* *[==>121.0 Secs (Copy 17)]*	***[4]***
Comments: Star is too bright for TIME-TAG mode, even when using E230H. We decide to go with E230M to increase the wavelength range of the observation and set mode to ACCUM. We shall use a minimum exposure time of 120 s to allow for parallel buffer dumps, which maximizes the time on object. The count rate in the brightest pixel is only 3.85 cts/s, so one exposure of 120 s yields 462 cts, which is well below the MAMA saturation limit of 65,536 counts per pixel.								
9	GO-WAVE CAL	WAVE	STIS/NUV-MAMA, ACCUM, 6X0.2	E230M 2707 A		*[==>]*	***[4]***

	10	SCI (STIS.sp.2023445)	(1) WASP-189	STIS/NUV-MAMA, ACCUM, 6X0.2	E230M 2707 A	WAVECAL=NO	120 Secs X 17 (2057 Secs)	
							[==>121.0 Secs (Copy 1)] *[==>121.0 Secs (Copy 2)]* *[==>121.0 Secs (Copy 3)]* *[==>121.0 Secs (Copy 4)]* *[==>121.0 Secs (Copy 5)]* *[==>121.0 Secs (Copy 6)]* *[==>121.0 Secs (Copy 7)]* *[==>121.0 Secs (Copy 8)]* *[==>121.0 Secs (Copy 9)]* *[==>121.0 Secs (Copy 10)]* *[==>121.0 Secs (Copy 11)]* *[==>121.0 Secs (Copy 12)]* *[==>121.0 Secs (Copy 13)]* *[==>121.0 Secs (Copy 14)]* *[==>121.0 Secs (Copy 15)]* *[==>121.0 Secs (Copy 16)]* *[==>121.0 Secs (Copy 17)]*	***[5]***
	Comments: Star is too bright for TIME-TAG mode, even when using E230H. We decide to go with E230M to increase the wavelength range of the observation and set mode to ACCUM. We shall use a minimum exposure time of 120 s to allow for parallel buffer dumps, which maximizes the time on object. The count rate in the brightest pixel is only 3.85 cts/s, so one exposure of 120 s yields 462 cts, which is well below the MAMA saturation limit of 65,536 counts per pixel.							
	11	GO-WAVE CAL	WAVE	STIS/NUV-MAMA, ACCUM, 6X0.2	E230M 2707 A		*[==>]*	***[5]***

Orbit Structure

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Exp. 4, copy 11
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Exp. 4, copy 14
Exp. 4, copy 15
Exp. 4, copy 16
Exp. 4, copy 17
Exp. 5
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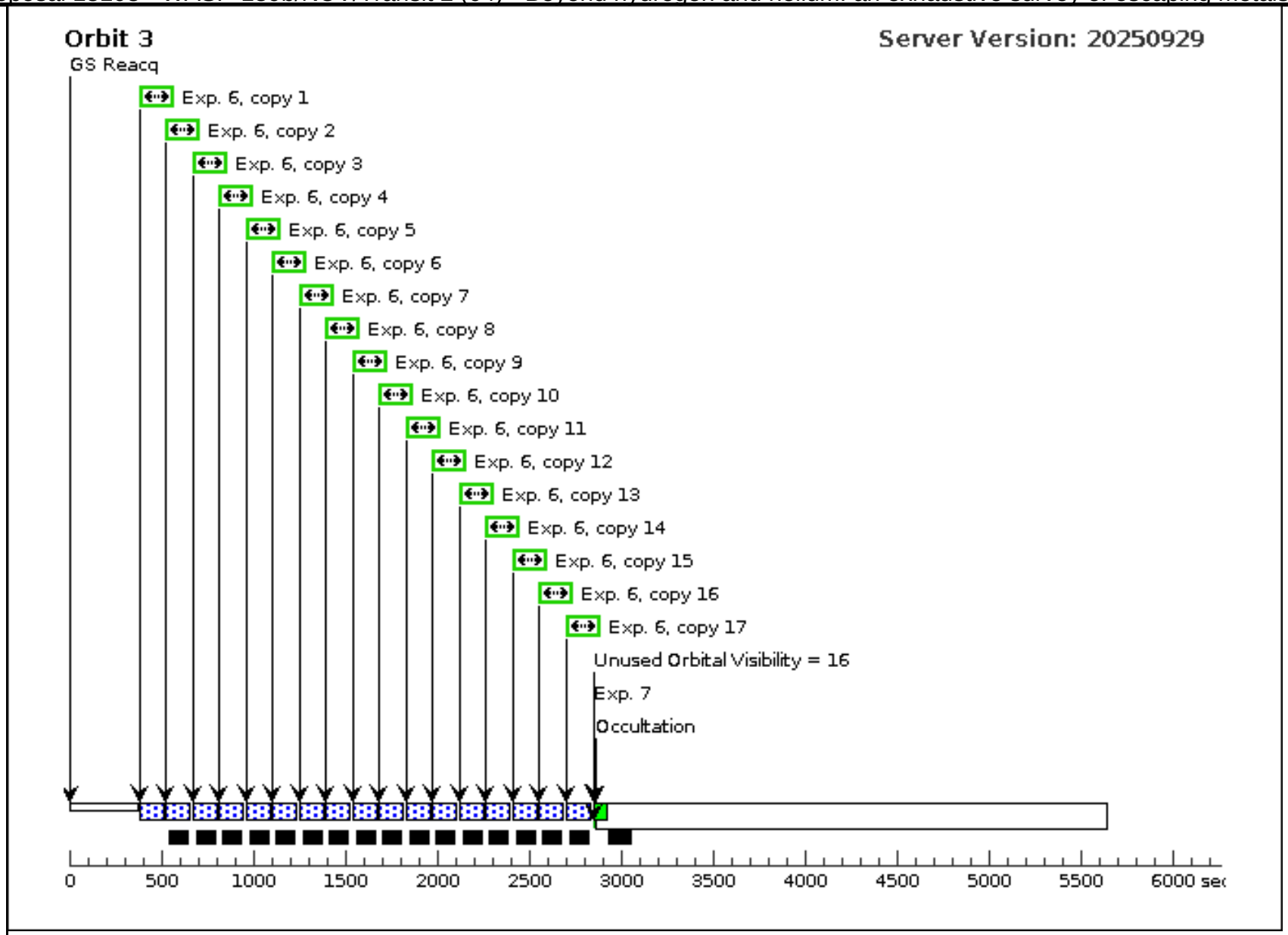
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Exp. 6, copy 12
Exp. 6, copy 13
Exp. 6, copy 14
Exp. 6, copy 15
Exp. 6, copy 16
Exp. 6, copy 17
Unused Orbital Visibility = 16
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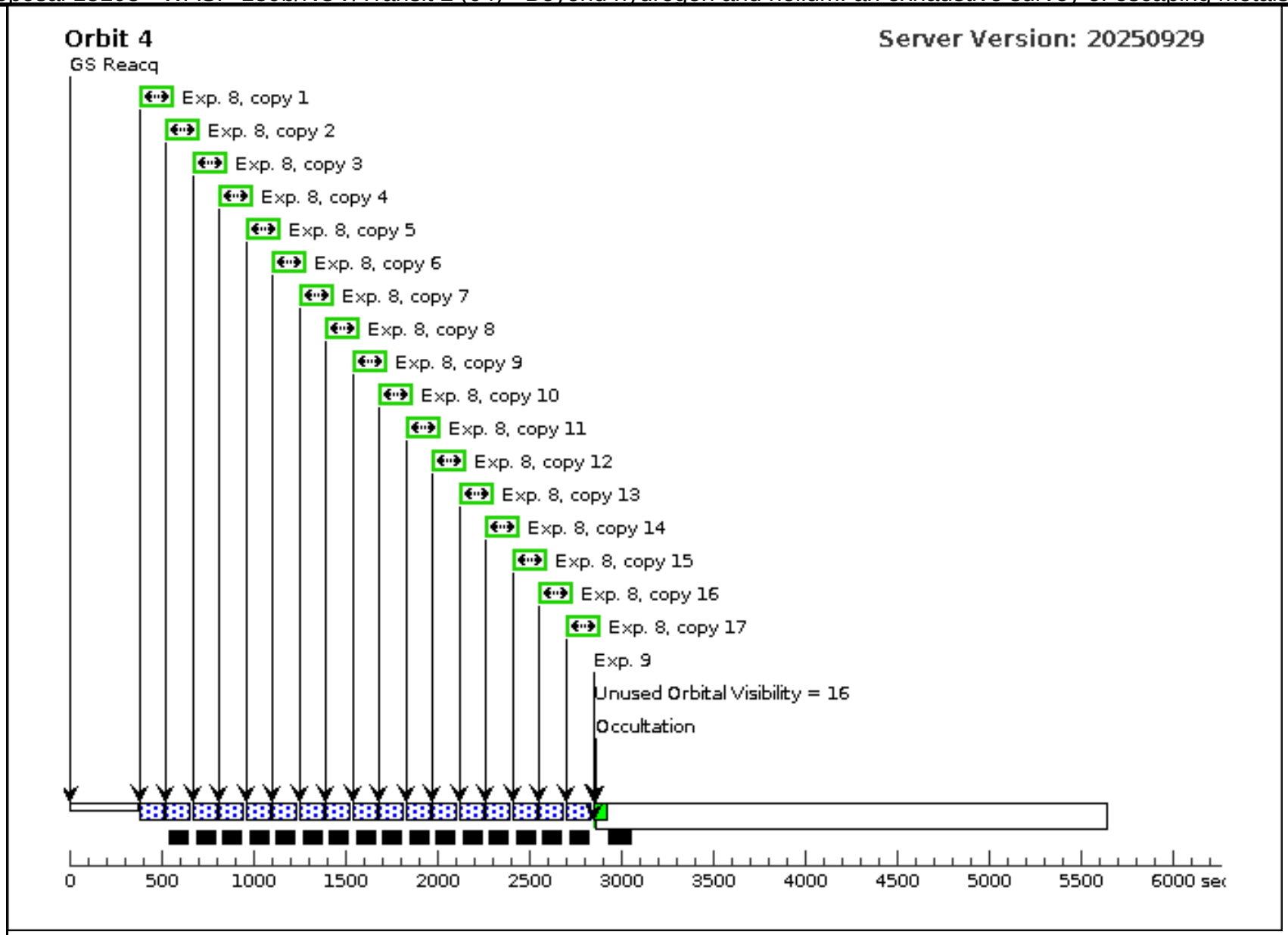
6000 sec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Exp. 8, copy 12
Exp. 8, copy 13
Exp. 8, copy 14
Exp. 8, copy 15
Exp. 8, copy 16
Exp. 8, copy 17
Exp. 9
Unused Orbital Visibility = 16
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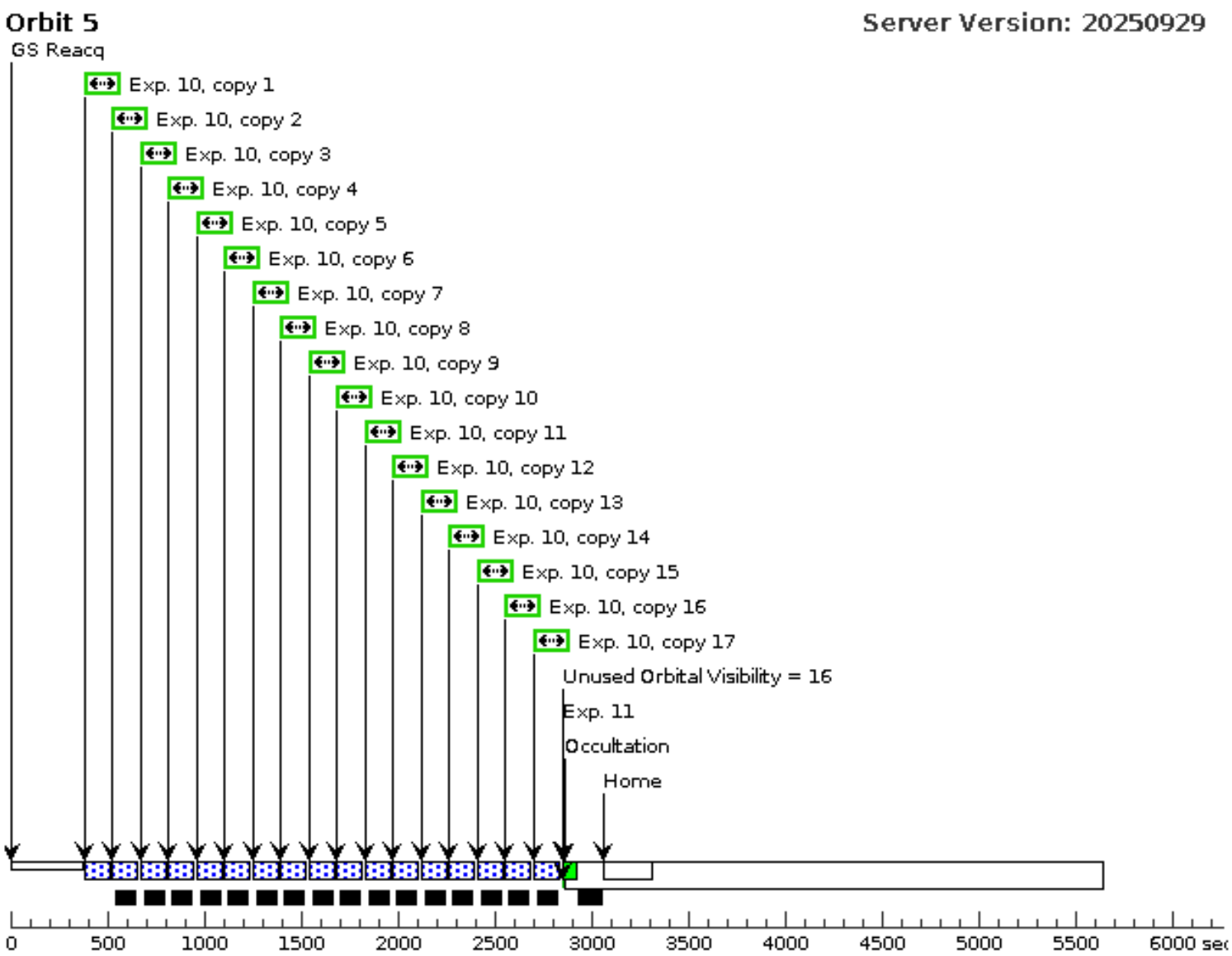
6000 sec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Exp. 10, copy 12
Exp. 10, copy 13
Exp. 10, copy 14
Exp. 10, copy 15
Exp. 10, copy 16
Exp. 10, copy 17
Unused Orbital Visibility = 16
Exp. 11
Occultation
Home
0
500
1000
1500
2000
2500
3000
3500
4000
4500
5000
5500
6000 sec

Visit

Proposal 18108, MASCARA-4b/FUV/Transit 1 (05), implementation Thu Feb 26 16:01:27 GMT 2026

Diagnostic Status: Warning

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

Special Requirements: SCHED 100%; Period 2.8240932 D AND ZERO-PHASE HJD2459321.97544

Comments: Ephemeris from Kokori+2023. XXX IMPORTANT XXX: Transit midpoint uncertainty by January 2026 is ~5 minutes and increases to ~6 minutes in 2027.

Diagnostics

(MASCARA-4b/FUV/Transit 1 (05)) Warning (Orbit Planner): STIS TIME-TAG EXPOSURE GENERATES HEAVY DATA VOLUME

Fixed Targets

#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(7)	MASCARA-4	RA: 09 50 19.2009 (147.5800038d) Dec: -66 06 49.90 (-66.11386d) Equinox: J2000	Proper Motion RA: 5.91 mas/yr Proper Motion Dec: -15.044000042507832 mas/yr Parallax: 0.0059437" Epoch of Position: 2000	V=8.19	Reference Frame: ICRS

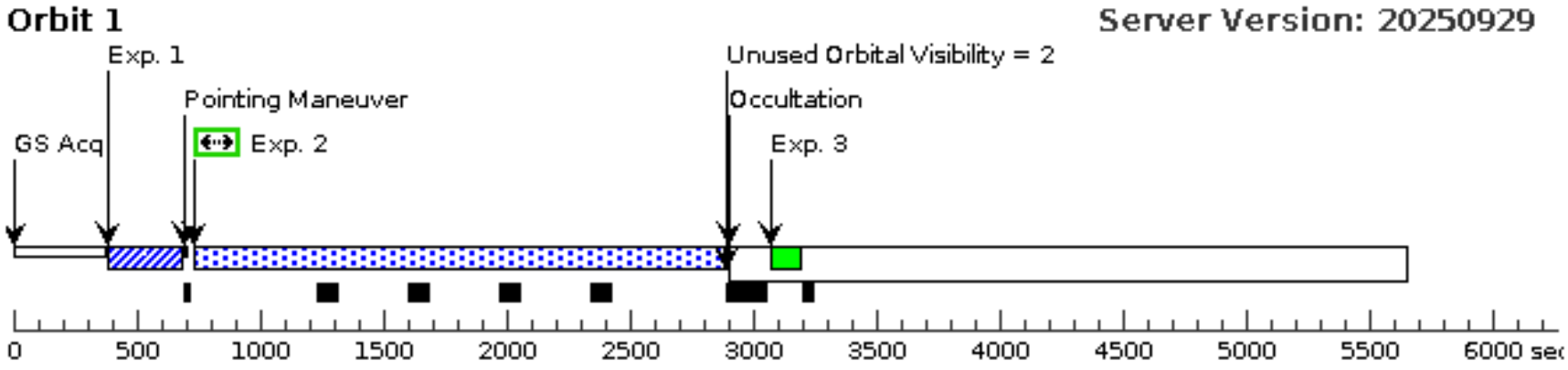
Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.

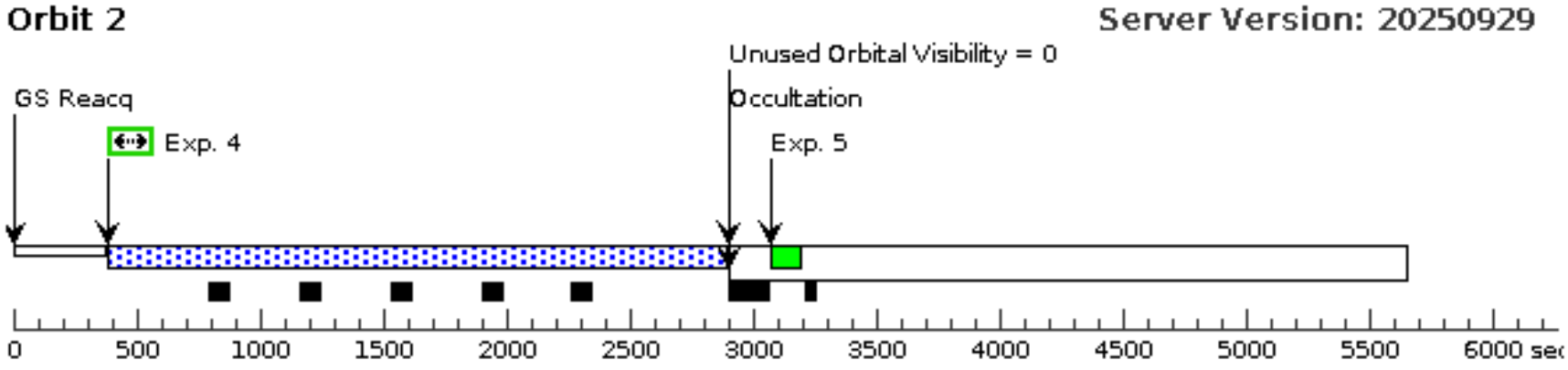
SIMBAD listed proper motion for this target. When retrieving targets with PM from SIMBAD, APT requests the coordinates be calculated with an epoch of the year 2000. Do not modify this epoch. Always review coordinates using the Target Confirmation tool, which graphically displays the PM.
Category=EXT-STAR
Description=[A0-A3 V-IV, EXTRA-SOLAR PLANETARY SYSTEM]
Extended=NO

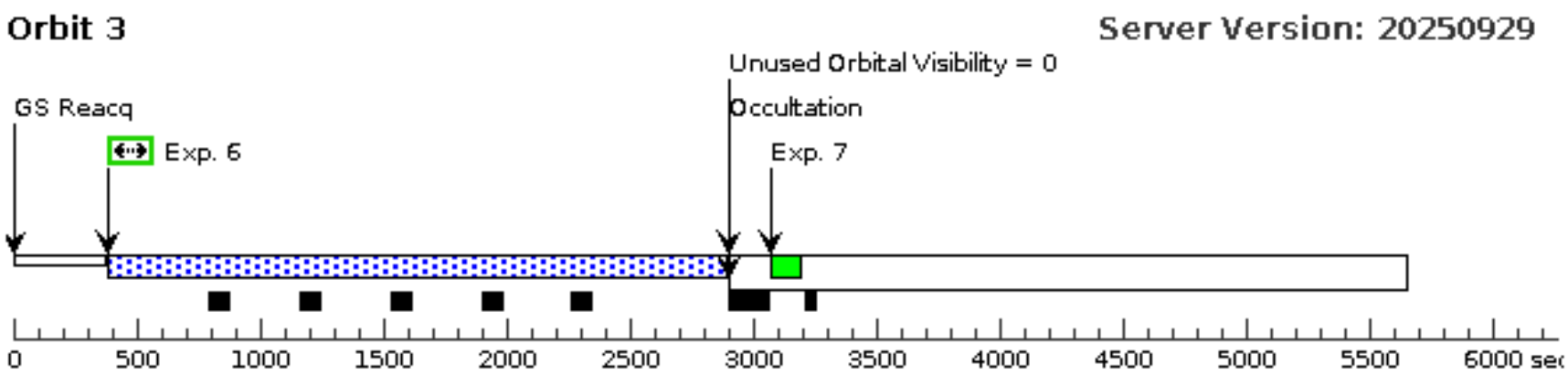
Exposures

#	Label (ETC Run)	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
1	ACQ (STIS.ta.2023786)	(7) MASCARA-4	STIS/CCD, ACQ, F25ND3	MIRROR		PHASE 0.92094807 63595196 TO 0.9357020747993255		1 Secs (1 Secs)	
								[==>]	***[1]***
2	SCI (STIS.sp.2244243)	(7) MASCARA-4	STIS/FUV-MAMA, TIME-TAG, 52X2	G140L 1425 A	BUFFER-TIME=368; WAVECAL=NO			2000 Secs (2000 Secs)	
								[==>]	***[1]***
3	GO-WAVE CAL	WAVE	STIS/FUV-MAMA, ACCUM, 52X0.2	G140L 1425 A				*[==>]*	***[1]***
4	SCI (STIS.sp.2244243)	(7) MASCARA-4	STIS/FUV-MAMA, TIME-TAG, 52X2	G140L 1425 A	BUFFER-TIME=368; WAVECAL=NO			3000 Secs (2444 Secs)	
								[==>2444.0 Secs]	***[2]***
5	GO-WAVE CAL	WAVE	STIS/FUV-MAMA, ACCUM, 52X0.2	G140L 1425 A				*[==>]*	***[2]***
6	SCI (STIS.sp.2244243)	(7) MASCARA-4	STIS/FUV-MAMA, TIME-TAG, 52X2	G140L 1425 A	BUFFER-TIME=368; WAVECAL=NO			3000 Secs (2444 Secs)	
								[==>2444.0 Secs]	***[3]***
7	GO-WAVE CAL	WAVE	STIS/FUV-MAMA, ACCUM, 52X0.2	G140L 1425 A				*[==>]*	***[3]***
8	SCI (STIS.sp.2244243)	(7) MASCARA-4	STIS/FUV-MAMA, TIME-TAG, 52X2	G140L 1425 A	BUFFER-TIME=368; WAVECAL=NO			3000 Secs (2444 Secs)	
								[==>2444.0 Secs]	***[4]***
9	GO-WAVE CAL	WAVE	STIS/FUV-MAMA, ACCUM, 52X0.2	G140L 1425 A				*[==>]*	***[4]***
10	SCI (STIS.sp.2244243)	(7) MASCARA-4	STIS/FUV-MAMA, TIME-TAG, 52X2	G140L 1425 A	BUFFER-TIME=368; WAVECAL=NO			3000 Secs (2444 Secs)	
								[==>2444.0 Secs]	***[5]***
11	GO-WAVE CAL	WAVE	STIS/FUV-MAMA, ACCUM, 52X0.2	G140L 1425 A				*[==>]*	***[5]***

Orbit Structure



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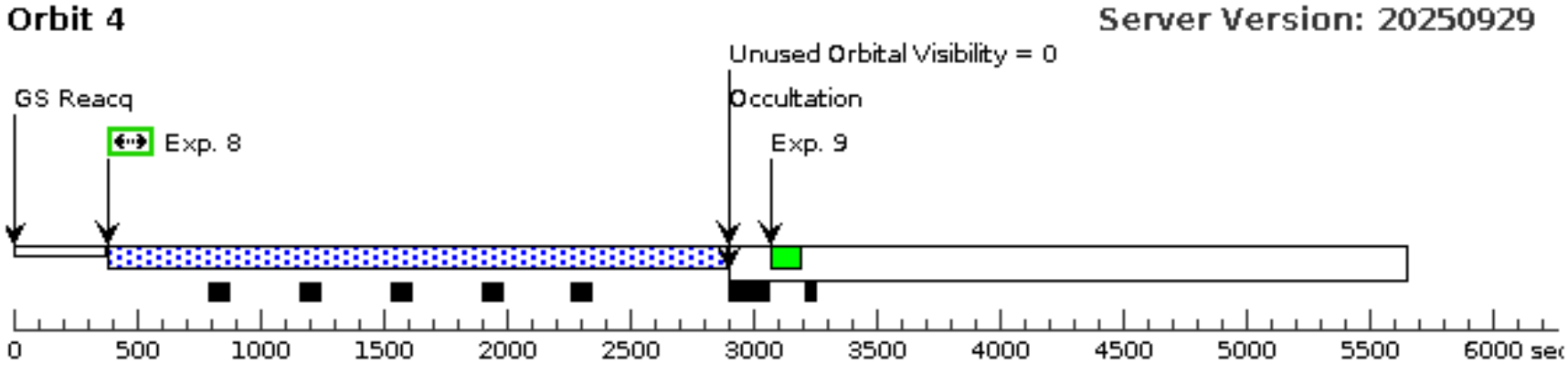
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Occultation
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Exp. 9
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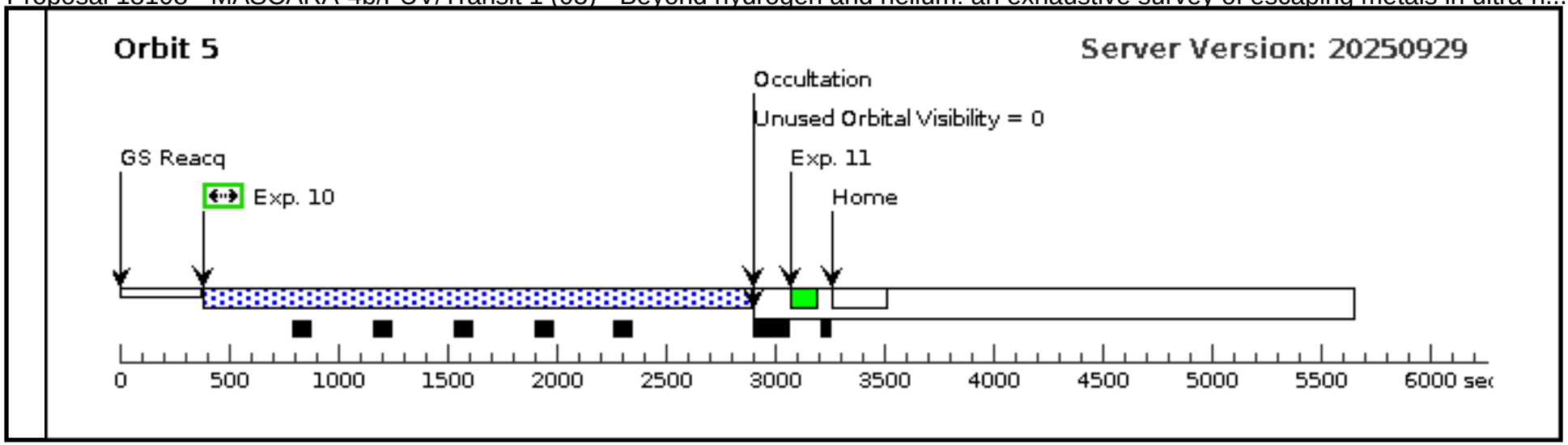
4500
5000
5500
6000 sec


Orbit 5
Server Version: 20250929
Occultation
Unused Orbital Visibility = 0
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Exp. 10
Exp. 11
Home
0
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1000
1500
2000
2500
3000
3500
4000
4500
5000
5500
6000 sec

Visit

Proposal 18108, MASCARA-4b/FUV/Transit 2 (06), implementation Thu Feb 26 16:01:27 GMT 2026

Diagnostic Status: Warning

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

Special Requirements: SCHED 100%; Period 2.8240932 D AND ZERO-PHASE HJD2459321.97544

Comments: Ephemeris from Kokori+2023. XXX IMPORTANT XXX: Transit midpoint uncertainty by January 2026 is ~5 minutes and increases to ~6 minutes in 2027.

Diagnostics

(MASCARA-4b/FUV/Transit 2 (06)) Warning (Orbit Planner): STIS TIME-TAG EXPOSURE GENERATES HEAVY DATA VOLUME

Fixed Targets

#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(7)	MASCARA-4	RA: 09 50 19.2009 (147.5800038d) Dec: -66 06 49.90 (-66.11386d) Equinox: J2000	Proper Motion RA: 5.91 mas/yr Proper Motion Dec: -15.044000042507832 mas/yr Parallax: 0.0059437" Epoch of Position: 2000	V=8.19	Reference Frame: ICRS

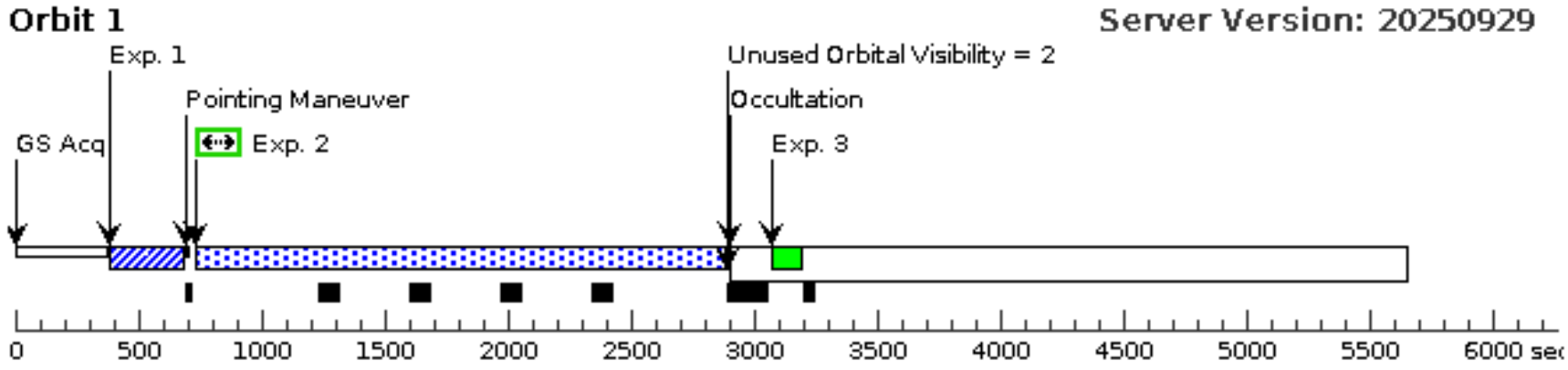
Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.

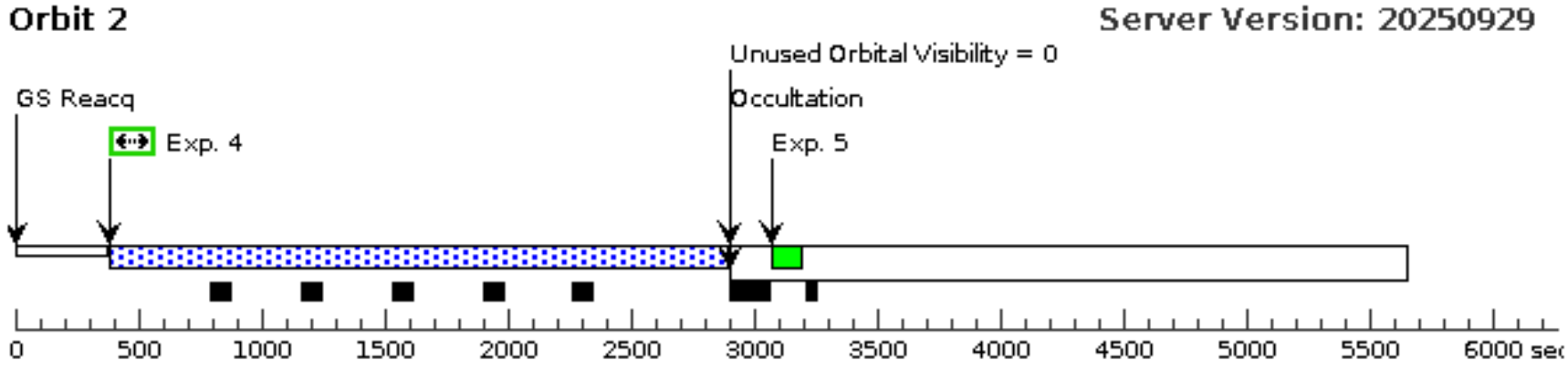
SIMBAD listed proper motion for this target. When retrieving targets with PM from SIMBAD, APT requests the coordinates be calculated with an epoch of the year 2000. Do not modify this epoch. Always review coordinates using the Target Confirmation tool, which graphically displays the PM.
Category=EXT-STAR
Description=[A0-A3 V-IV, EXTRA-SOLAR PLANETARY SYSTEM]
Extended=NO

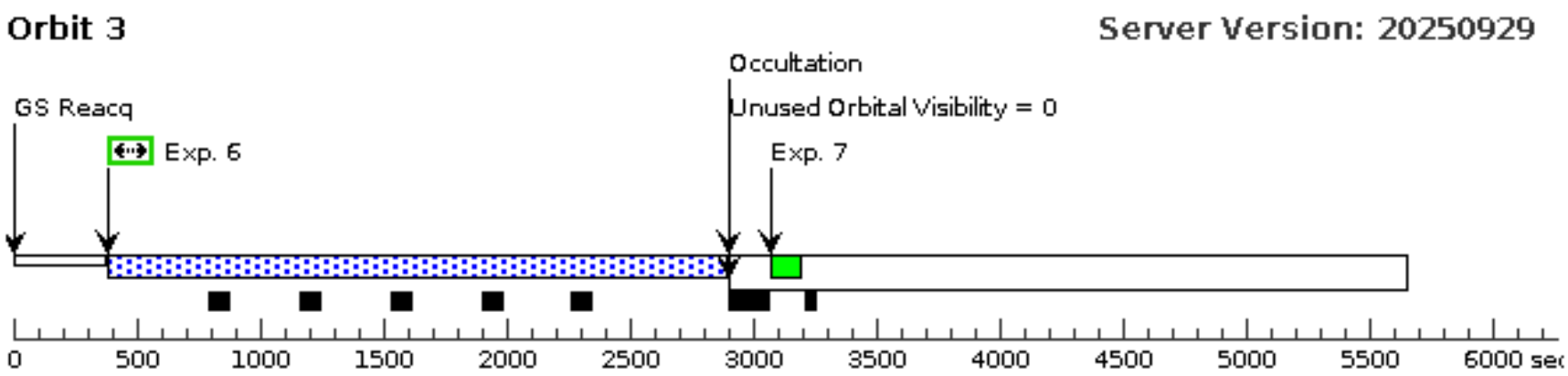
Exposures

#	Label (ETC Run)	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
1	ACQ (STIS.ta.2023786)	(7) MASCARA-4	STIS/CCD, ACQ, F25ND3	MIRROR		PHASE 0.94275127 51113644 TO 0.9575052735511703		1 Secs (1 Secs) *[==>]*	***[1]***
2	SCI (STIS.sp.2244243)	(7) MASCARA-4	STIS/FUV-MAMA, TIME-TAG, 52X2	G140L 1425 A	WAVECAL=NO; BUFFER-TIME=368			2000 Secs (2000 Secs) *[==>]*	***[1]***
3	GO-WAVE CAL	WAVE	STIS/FUV-MAMA, ACCUM, 52X0.2	G140L 1425 A				*[==>]*	***[1]***
4	SCI (STIS.sp.2244243)	(7) MASCARA-4	STIS/FUV-MAMA, TIME-TAG, 52X2	G140L 1425 A	BUFFER-TIME=368; WAVECAL=NO			3000 Secs (2444 Secs) *[==>2444.0 Secs]*	***[2]***
5	GO-WAVE CAL	WAVE	STIS/FUV-MAMA, ACCUM, 52X0.2	G140L 1425 A				*[==>]*	***[2]***
6	SCI (STIS.sp.2244243)	(7) MASCARA-4	STIS/FUV-MAMA, TIME-TAG, 52X2	G140L 1425 A	BUFFER-TIME=368; WAVECAL=NO			3000 Secs (2444 Secs) *[==>2444.0 Secs]*	***[3]***
7	GO-WAVE CAL	WAVE	STIS/FUV-MAMA, ACCUM, 52X0.2	G140L 1425 A				*[==>]*	***[3]***
8	SCI (STIS.sp.2244243)	(7) MASCARA-4	STIS/FUV-MAMA, TIME-TAG, 52X2	G140L 1425 A	BUFFER-TIME=368; WAVECAL=NO			3000 Secs (2444 Secs) *[==>2444.0 Secs]*	***[4]***
9	GO-WAVE CAL	WAVE	STIS/FUV-MAMA, ACCUM, 52X0.2	G140L 1425 A				*[==>]*	***[4]***
10	SCI (STIS.sp.2244243)	(7) MASCARA-4	STIS/FUV-MAMA, TIME-TAG, 52X2	G140L 1425 A	BUFFER-TIME=368; WAVECAL=NO			3000 Secs (2444 Secs) *[==>2444.0 Secs]*	***[5]***
11	GO-WAVE CAL	WAVE	STIS/FUV-MAMA, ACCUM, 52X0.2	G140L 1425 A				*[==>]*	***[5]***

Orbit Structure



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GS Reacq
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Exp. 7
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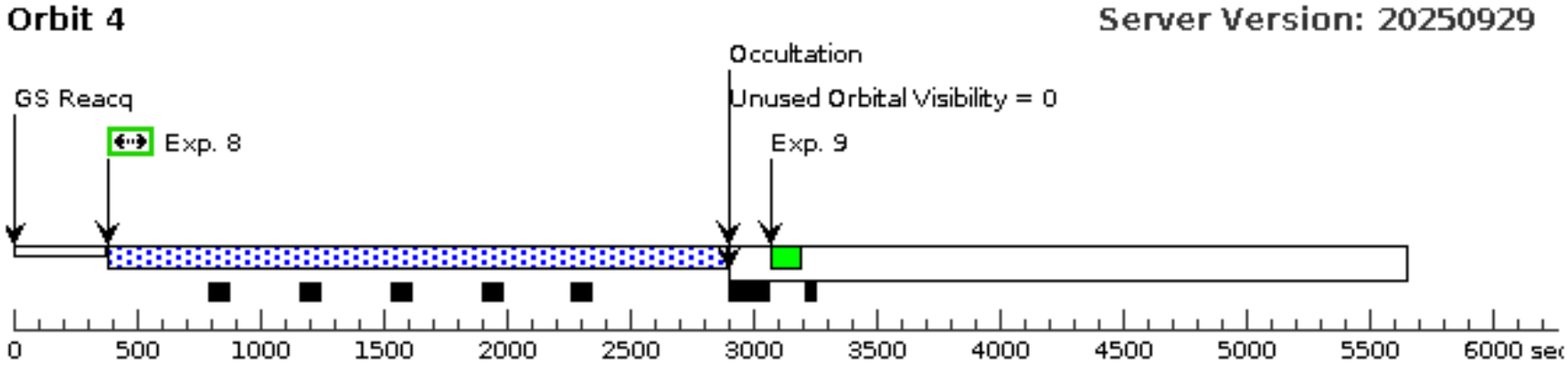
6000 sec


Orbit 4
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Occultation
GS Reacq
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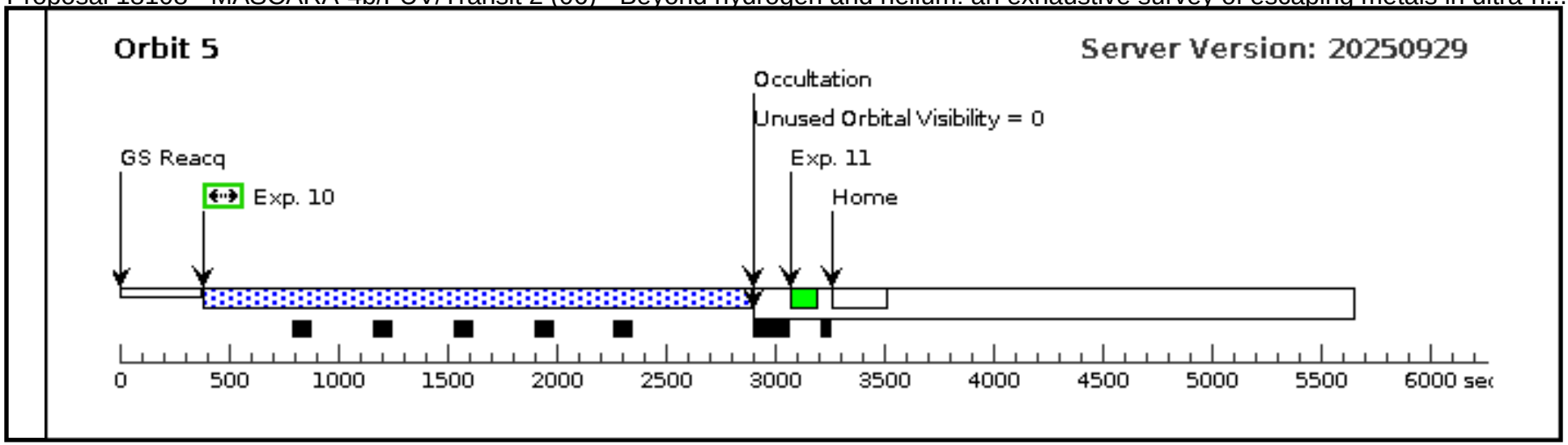
6000 sec


Orbit 5
Server Version: 20250929
Occultation
Unused Orbital Visibility = 0
GS Reacq
Exp. 10
Exp. 11
Home
0
500
1000
1500
2000
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3000
3500
4000
4500
5000
5500
6000 sec

Visit

Proposal 18108, MASCARA-4b/NUV/Transit 1 (07), completed Thu Feb 26 16:01:27 GMT 2026

Diagnostic Status: No Diagnostics

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

Special Requirements: SCHED 100%; Period 2.8240759 D AND ZERO-PHASE HJD2459321.97544

Comments: Ephemeris from Kokori+2023. XXX IMPORTANT XXX: Transit midpoint uncertainty by January 2026 is ~5 minutes and increases to ~6 minutes in 2027.

Fixed Targets

#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(7)	MASCARA-4	RA: 09 50 19.2009 (147.5800038d) Dec: -66 06 49.90 (-66.11386d) Equinox: J2000	Proper Motion RA: 5.91 mas/yr Proper Motion Dec: -15.044000042507832 mas/yr Parallax: 0.0059437" Epoch of Position: 2000	V=8.19	Reference Frame: ICRS

Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.

SIMBAD listed proper motion for this target. When retrieving targets with PM from SIMBAD, APT requests the coordinates be calculated with an epoch of the year 2000. Do not modify this epoch. Always review coordinates using the Target Confirmation tool, which graphically displays the PM.
Category=EXT-STAR
Description=[A0-A3 V-IV, EXTRA-SOLAR PLANETARY SYSTEM]
Extended=NO

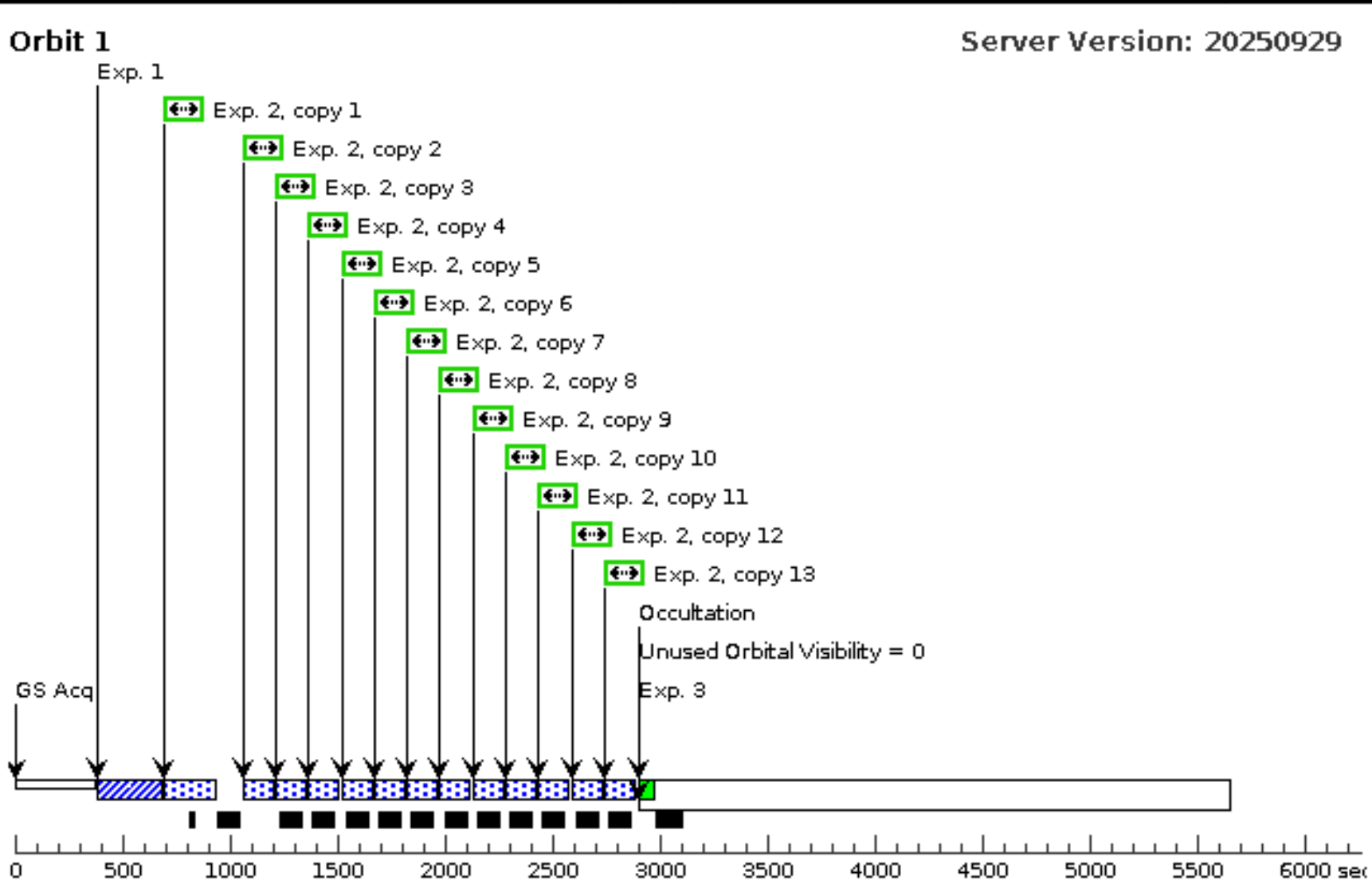
Exposures

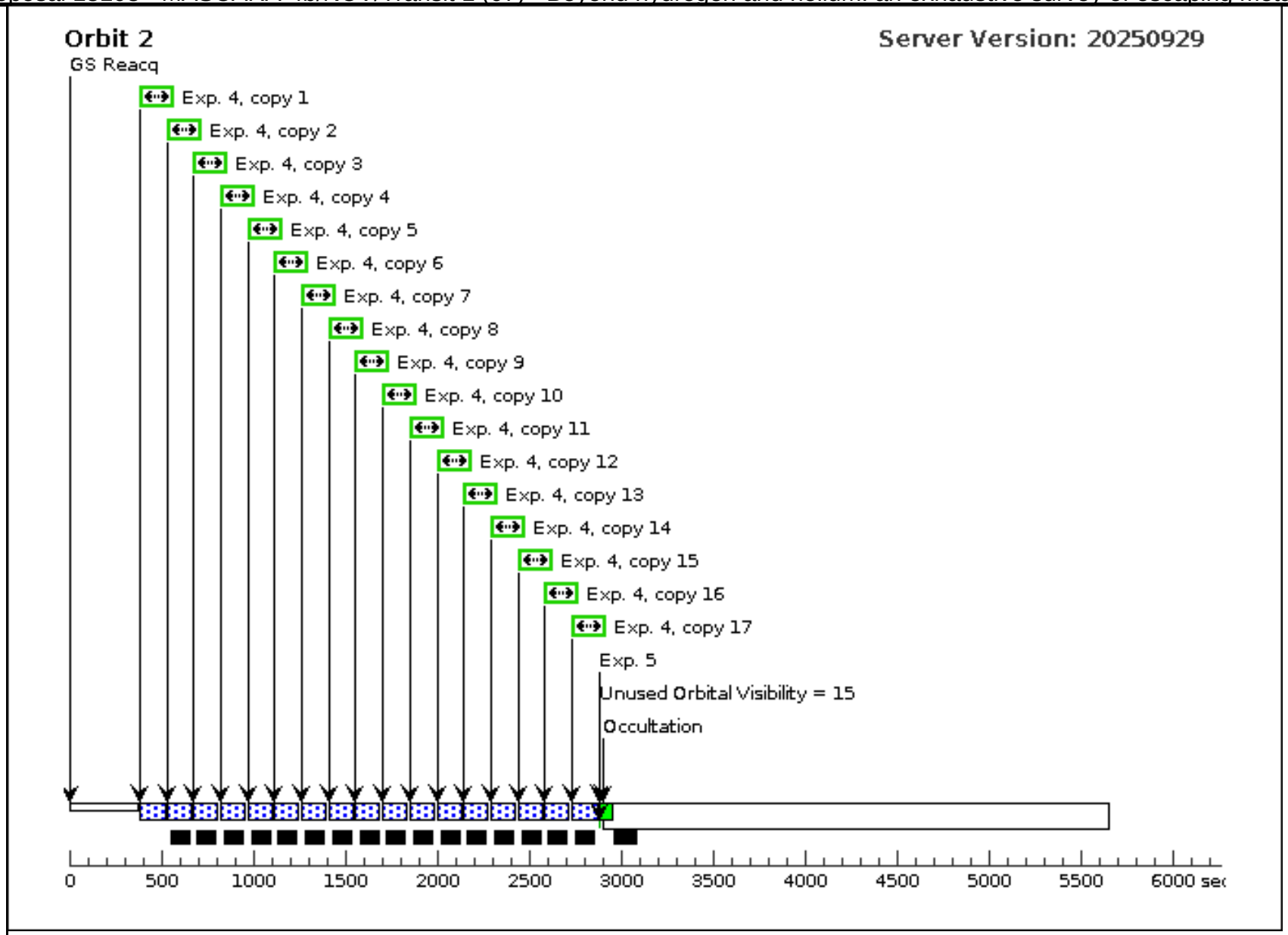
#	Label (ETC Run)	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
1	ACQ (STIS.ta.2023786)	(7) MASCARA-4	STIS/CCD, ACQ, F25ND3	MIRROR		PHASE 0.92094807 63595196 TO 0.9357020747993255		1 Secs (1 Secs)	
								[==>]	***[1]***
2	SCI (STIS.sp.2023797)	(7) MASCARA-4	STIS/NUV-MAMA, ACCUM, 0.2X0.2	E230M 2707 A	WAVECAL=NO			120 Secs X 13 (1677 Secs)	
								[==>129.0 Secs (Copy 1)]	
								[==>129.0 Secs (Copy 2)]	
								[==>129.0 Secs (Copy 3)]	
								[==>129.0 Secs (Copy 4)]	
								[==>129.0 Secs (Copy 5)]	
								[==>129.0 Secs (Copy 6)]	
								[==>129.0 Secs (Copy 7)]	***[1]***
								[==>129.0 Secs (Copy 8)]	
								[==>129.0 Secs (Copy 9)]	
								[==>129.0 Secs (Copy 10)]	
								[==>129.0 Secs (Copy 11)]	
								[==>129.0 Secs (Copy 12)]	
								[==>129.0 Secs (Copy 13)]	
3	GO-WAVE CAL	WAVE	STIS/NUV-MAMA, ACCUM, 0.2X0.2	E230M 2707 A				*[==>]*	***[1]***
4	SCI (STIS.sp.2023797)	(7) MASCARA-4	STIS/NUV-MAMA, ACCUM, 0.2X0.2	E230M 2707 A	WAVECAL=NO			120 Secs X 17 (2091 Secs)	
								[==>123.0 Secs (Copy 1)]	
								[==>123.0 Secs (Copy 2)]	
								[==>123.0 Secs (Copy 3)]	
								[==>123.0 Secs (Copy 4)]	
								[==>123.0 Secs (Copy 5)]	
								[==>123.0 Secs (Copy 6)]	
								[==>123.0 Secs (Copy 7)]	
								[==>123.0 Secs (Copy 8)]	
								[==>123.0 Secs (Copy 9)]	***[2]***
								[==>123.0 Secs (Copy 10)]	
								[==>123.0 Secs (Copy 11)]	
								[==>123.0 Secs (Copy 12)]	
								[==>123.0 Secs (Copy 13)]	
								[==>123.0 Secs (Copy 14)]	
								[==>123.0 Secs (Copy 15)]	
								[==>123.0 Secs (Copy 16)]	
								[==>123.0 Secs (Copy 17)]	
5	GO-WAVE CAL	WAVE	STIS/NUV-MAMA, ACCUM, 0.2X0.2	E230M 2707 A				*[==>]*	***[2]***

	6	SCI (STIS.sp.2023797)	(7) MASCARA-4	STIS/NUV-MAMA, ACCUM, 0.2X0.2	E230M 2707 A	WAVECAL=NO	120 Secs X 17 (2091 Secs) *[==>123.0 Secs (Copy 1)]* *[==>123.0 Secs (Copy 2)]* *[==>123.0 Secs (Copy 3)]* *[==>123.0 Secs (Copy 4)]* *[==>123.0 Secs (Copy 5)]* *[==>123.0 Secs (Copy 6)]* *[==>123.0 Secs (Copy 7)]* *[==>123.0 Secs (Copy 8)]* *[==>123.0 Secs (Copy 9)]* *[==>123.0 Secs (Copy 10)]* *[==>123.0 Secs (Copy 11)]* *[==>123.0 Secs (Copy 12)]* *[==>123.0 Secs (Copy 13)]* *[==>123.0 Secs (Copy 14)]* *[==>123.0 Secs (Copy 15)]* *[==>123.0 Secs (Copy 16)]* *[==>123.0 Secs (Copy 17)]*	***[3]***
	7	GO-WAVE CAL	WAVE	STIS/NUV-MAMA, ACCUM, 0.2X0.2	E230M 2707 A		*[==>]*	***[3]***
	8	SCI (STIS.sp.2023797)	(7) MASCARA-4	STIS/NUV-MAMA, ACCUM, 0.2X0.2	E230M 2707 A	WAVECAL=NO	120 Secs X 17 (2091 Secs) *[==>123.0 Secs (Copy 1)]* *[==>123.0 Secs (Copy 2)]* *[==>123.0 Secs (Copy 3)]* *[==>123.0 Secs (Copy 4)]* *[==>123.0 Secs (Copy 5)]* *[==>123.0 Secs (Copy 6)]* *[==>123.0 Secs (Copy 7)]* *[==>123.0 Secs (Copy 8)]* *[==>123.0 Secs (Copy 9)]* *[==>123.0 Secs (Copy 10)]* *[==>123.0 Secs (Copy 11)]* *[==>123.0 Secs (Copy 12)]* *[==>123.0 Secs (Copy 13)]* *[==>123.0 Secs (Copy 14)]* *[==>123.0 Secs (Copy 15)]* *[==>123.0 Secs (Copy 16)]* *[==>123.0 Secs (Copy 17)]*	***[4]***
	9	GO-WAVE CAL	WAVE	STIS/NUV-MAMA, ACCUM, 0.2X0.2	E230M 2707 A		*[==>]*	***[4]***

	10	SCI (STIS.sp.2023797)	(7) MASCARA-4	STIS/NUV-MAMA, ACCUM, 0.2X0.2	E230M 2707 A	WAVECAL=NO	120 Secs X 17 (2091 Secs) *[==>123.0 Secs (Copy 1)]* *[==>123.0 Secs (Copy 2)]* *[==>123.0 Secs (Copy 3)]* *[==>123.0 Secs (Copy 4)]* *[==>123.0 Secs (Copy 5)]* *[==>123.0 Secs (Copy 6)]* *[==>123.0 Secs (Copy 7)]* *[==>123.0 Secs (Copy 8)]* *[==>123.0 Secs (Copy 9)]* *[==>123.0 Secs (Copy 10)]* *[==>123.0 Secs (Copy 11)]* *[==>123.0 Secs (Copy 12)]* *[==>123.0 Secs (Copy 13)]* *[==>123.0 Secs (Copy 14)]* *[==>123.0 Secs (Copy 15)]* *[==>123.0 Secs (Copy 16)]* *[==>123.0 Secs (Copy 17)]*	***[5]***
	11	GO-WAVE CAL	WAVE	STIS/NUV-MAMA, ACCUM, 0.2X0.2	E230M 2707 A		*[==>]*	***[5]***

Orbit Structure

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Exp. 4, copy 12
Exp. 4, copy 13
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Exp. 4, copy 16
Exp. 4, copy 17
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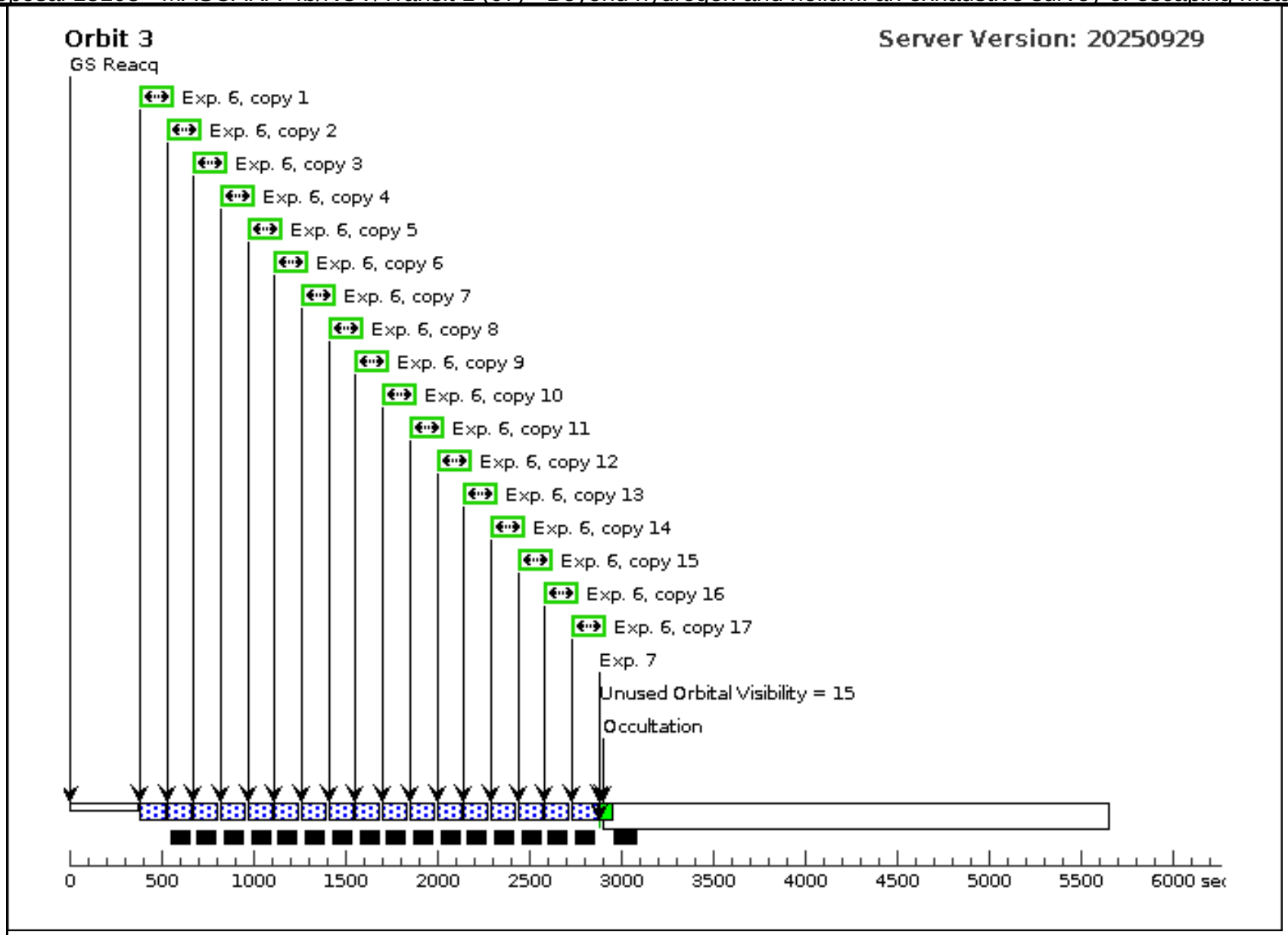
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Exp. 6, copy 4
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Exp. 6, copy 11
Exp. 6, copy 12
Exp. 6, copy 13
Exp. 6, copy 14
Exp. 6, copy 15
Exp. 6, copy 16
Exp. 6, copy 17
Exp. 7
Unused Orbital Visibility = 15
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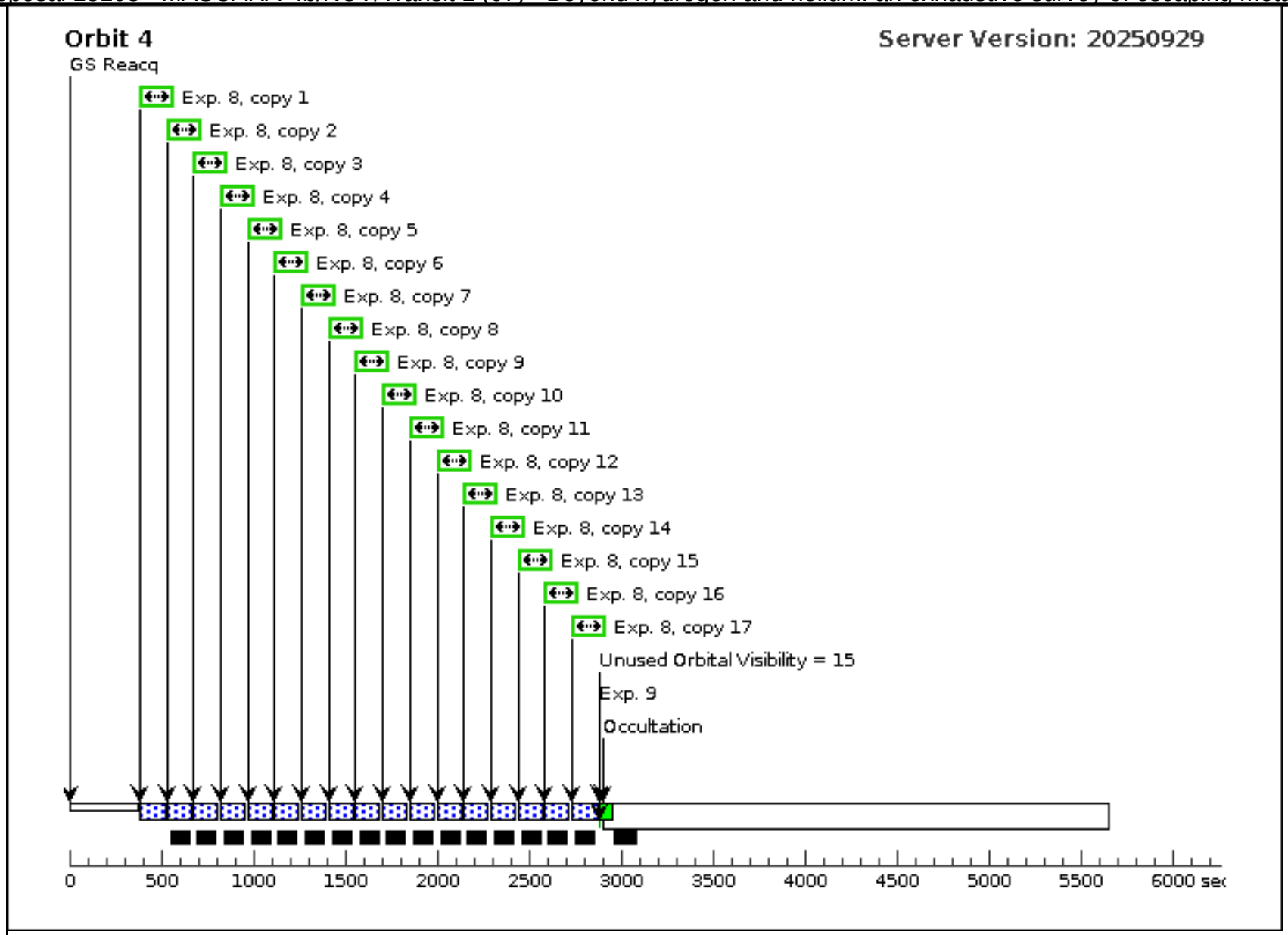
6000 sec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Exp. 8, copy 12
Exp. 8, copy 13
Exp. 8, copy 14
Exp. 8, copy 15
Exp. 8, copy 16
Exp. 8, copy 17
Unused Orbital Visibility = 15
Exp. 9
Occultation
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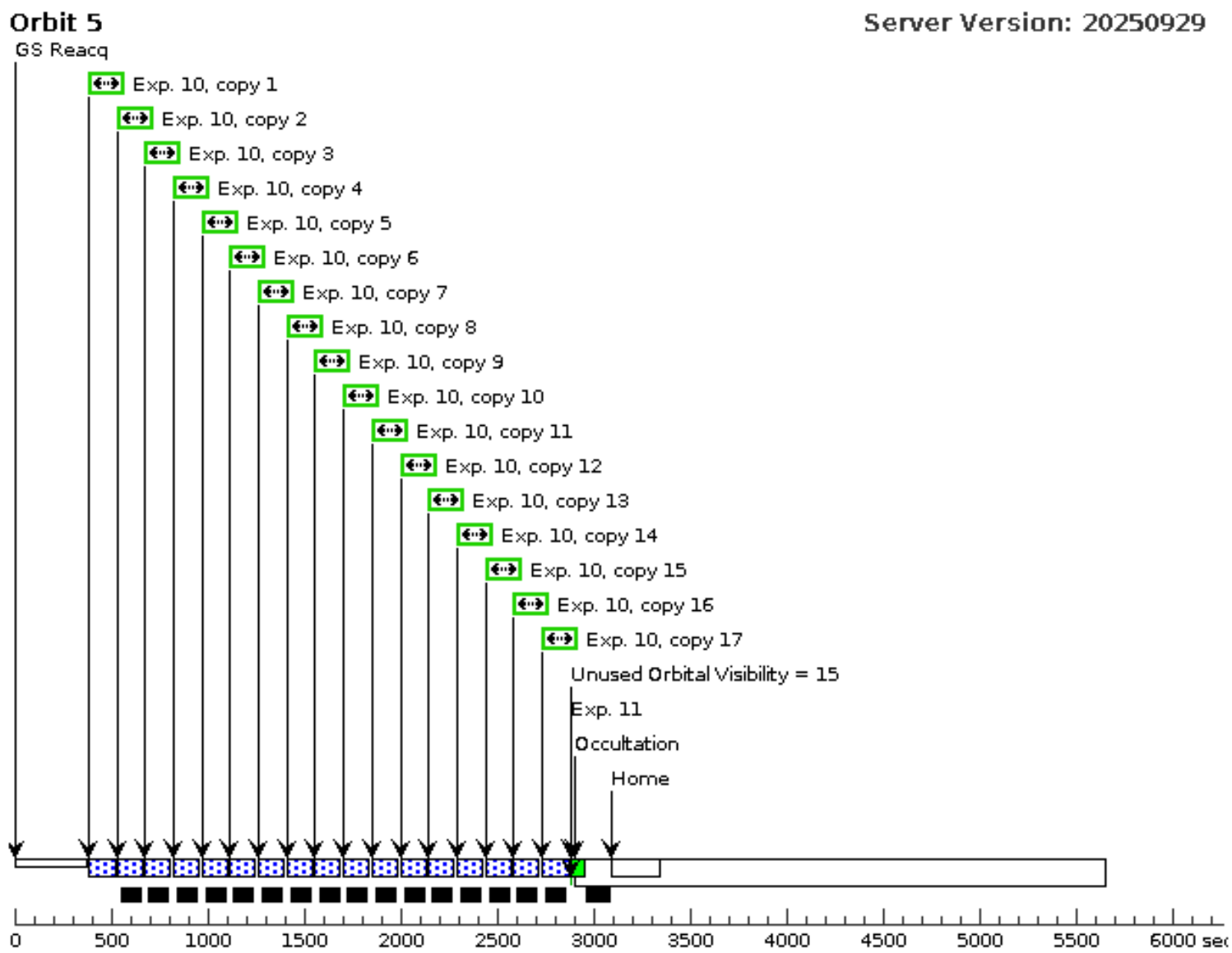
6000 sec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Exp. 11
Occultation
Home
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1000
1500
2000
2500
3000
3500
4000
4500
5000
5500
6000 sec

Visit

Proposal 18108, MASCARA-4b/NUV/Transit 2 (08), implementation Thu Feb 26 16:01:27 GMT 2026

Diagnostic Status: Warning

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

Special Requirements: SCHED 100%; Period 2.8240932 D AND ZERO-PHASE HJD2459321.97544

Comments: Ephemeris from Kokori+2023. XXX IMPORTANT XXX: Transit midpoint uncertainty by January 2026 is ~5 minutes and increases to ~6 minutes in 2027.

Diagnostics

(MASCARA-4b/NUV/Transit 2 (08)) Warning (Orbit Planner): ORBITAL VISIBILITY OVERRUN

Fixed Targets

#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(7)	MASCARA-4	RA: 09 50 19.2009 (147.5800038d) Dec: -66 06 49.90 (-66.11386d) Equinox: J2000	Proper Motion RA: 5.91 mas/yr Proper Motion Dec: -15.044000042507832 mas/yr Parallax: 0.0059437" Epoch of Position: 2000	V=8.19	Reference Frame: ICRS

Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.

SIMBAD listed proper motion for this target. When retrieving targets with PM from SIMBAD, APT requests the coordinates be calculated with an epoch of the year 2000. Do not modify this epoch. Always review coordinates using the Target Confirmation tool, which graphically displays the PM.
Category=EXT-STAR
Description=[A0-A3 V-IV, EXTRA-SOLAR PLANETARY SYSTEM]
Extended=NO

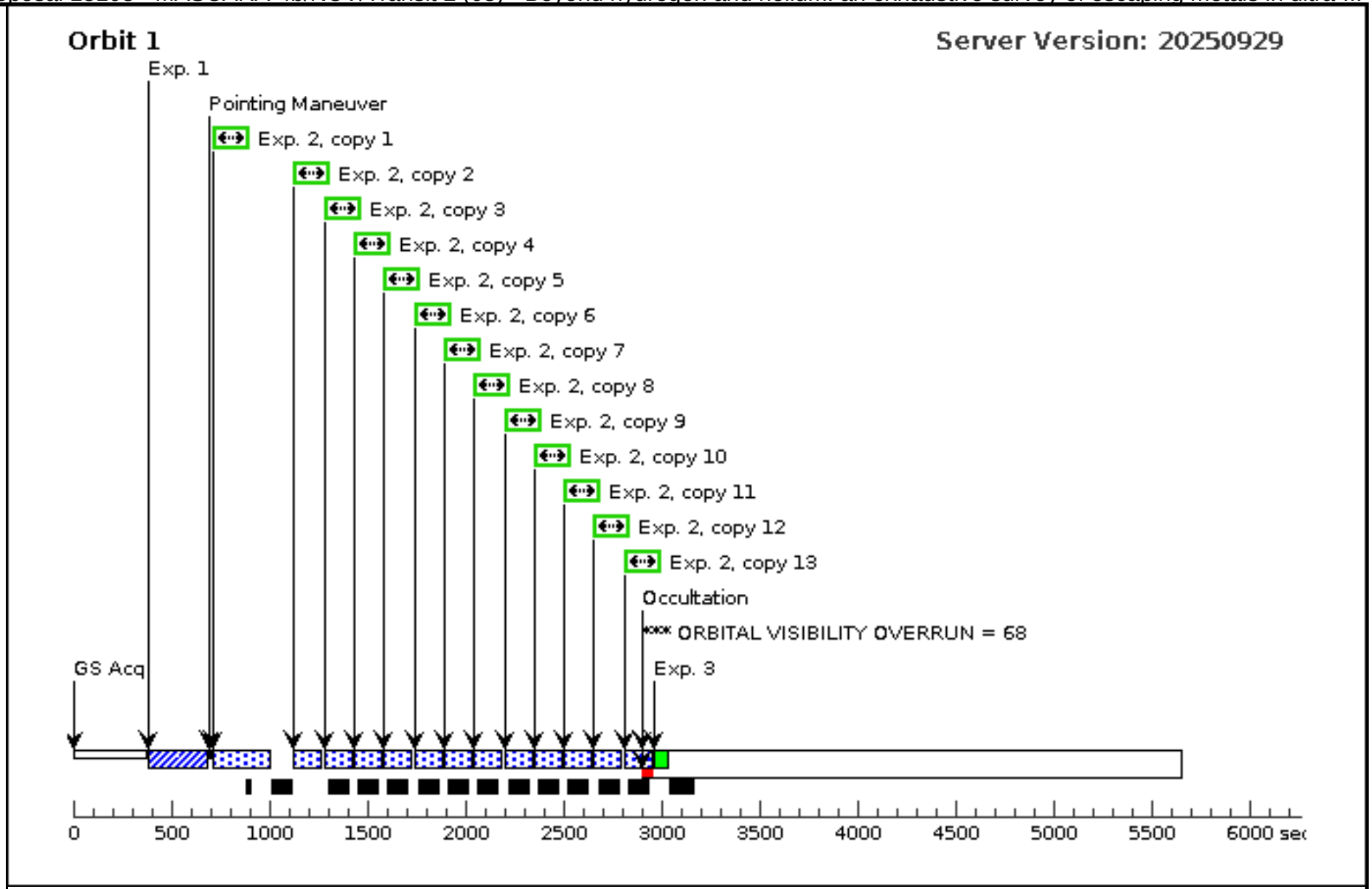
Exposures

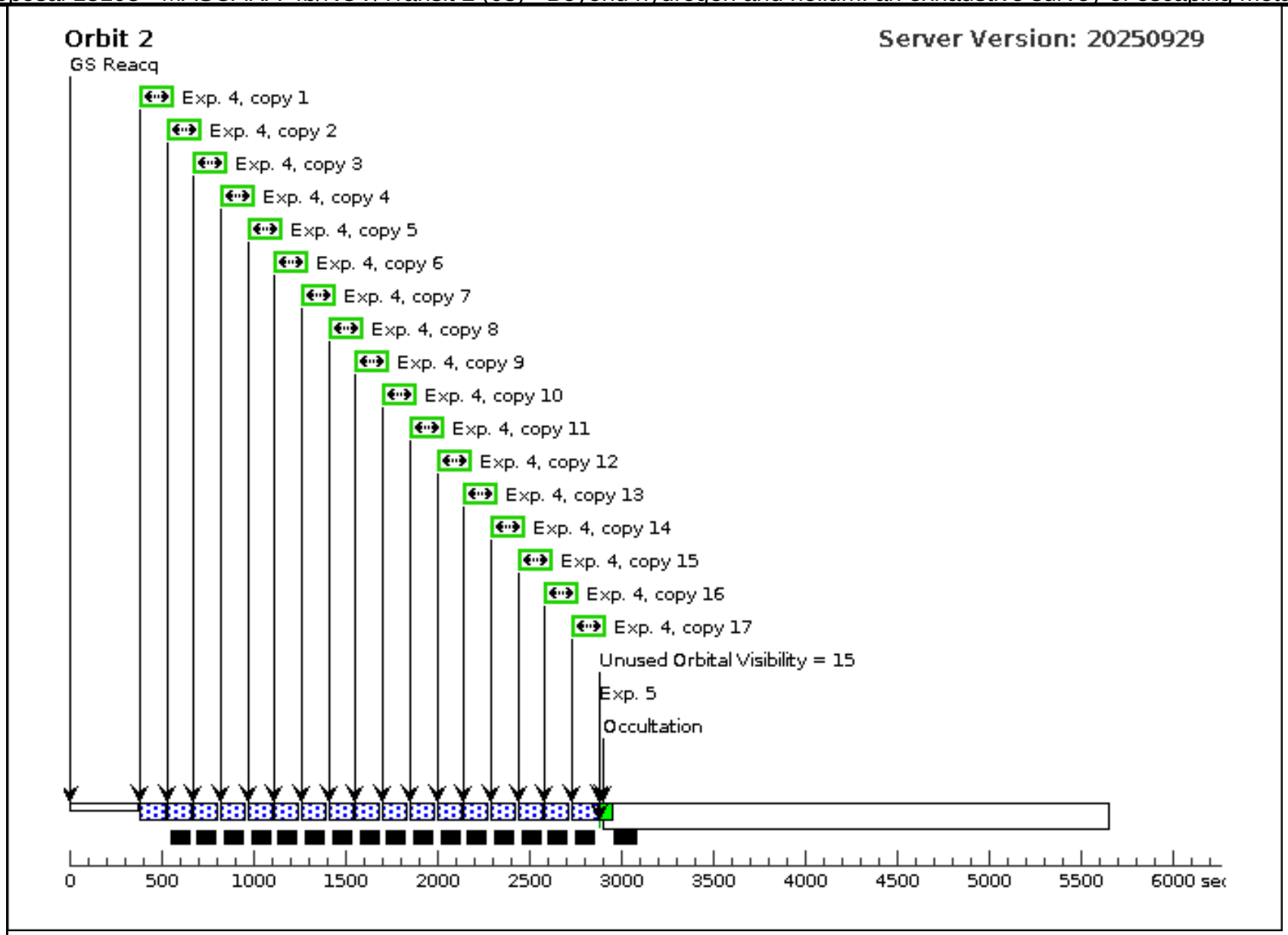
#	Label (ETC Run)	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
1	ACQ (STIS.ta.2023786)	(7) MASCARA-4	STIS/CCD, ACQ, F25ND3	MIRROR		PHASE 0.94275127 51113644 TO 0.9575 052735511703		1 Secs (1 Secs) *[==>]*	*[1]*
2	SCI (STIS.sp.2023797)	(7) MASCARA-4	STIS/NUV-MAMA, ACCUM, 6X0.2	E230M 2707 A	WAVECAL=NO			120 Secs X 13 (1677 Secs) *[==>129.0 Secs (Copy 1)]* *[==>129.0 Secs (Copy 2)]* *[==>129.0 Secs (Copy 3)]* *[==>129.0 Secs (Copy 4)]* *[==>129.0 Secs (Copy 5)]* *[==>129.0 Secs (Copy 6)]* *[==>129.0 Secs (Copy 7)]* *[==>129.0 Secs (Copy 8)]* *[==>129.0 Secs (Copy 9)]* *[==>129.0 Secs (Copy 10)]* *[==>129.0 Secs (Copy 11)]* *[==>129.0 Secs (Copy 12)]* *[==>129.0 Secs (Copy 13)]*	*[1]*
3	GO-WAVE CAL	WAVE	STIS/NUV-MAMA, ACCUM, 6X0.2	E230M 2707 A				*[==>]*	*[1]*
4	SCI (STIS.sp.2023797)	(7) MASCARA-4	STIS/NUV-MAMA, ACCUM, 6X0.2	E230M 2707 A	WAVECAL=NO			120 Secs X 17 (2091 Secs) *[==>123.0 Secs (Copy 1)]* *[==>123.0 Secs (Copy 2)]* *[==>123.0 Secs (Copy 3)]* *[==>123.0 Secs (Copy 4)]* *[==>123.0 Secs (Copy 5)]* *[==>123.0 Secs (Copy 6)]* *[==>123.0 Secs (Copy 7)]* *[==>123.0 Secs (Copy 8)]* *[==>123.0 Secs (Copy 9)]* *[==>123.0 Secs (Copy 10)]* *[==>123.0 Secs (Copy 11)]* *[==>123.0 Secs (Copy 12)]* *[==>123.0 Secs (Copy 13)]* *[==>123.0 Secs (Copy 14)]* *[==>123.0 Secs (Copy 15)]* *[==>123.0 Secs (Copy 16)]* *[==>123.0 Secs (Copy 17)]*	*[2]*
5	GO-WAVE CAL	WAVE	STIS/NUV-MAMA, ACCUM, 6X0.2	E230M 2707 A				*[==>]*	*[2]*

	6	SCI (STIS.sp.2023797)	(7) MASCARA-4	STIS/NUV-MAMA, ACCUM, 6X0.2	E230M 2707 A	WAVECAL=NO	120 Secs X 17 (2091 Secs) *[==>123.0 Secs (Copy 1)]* *[==>123.0 Secs (Copy 2)]* *[==>123.0 Secs (Copy 3)]* *[==>123.0 Secs (Copy 4)]* *[==>123.0 Secs (Copy 5)]* *[==>123.0 Secs (Copy 6)]* *[==>123.0 Secs (Copy 7)]* *[==>123.0 Secs (Copy 8)]* *[==>123.0 Secs (Copy 9)]* *[==>123.0 Secs (Copy 10)]* *[==>123.0 Secs (Copy 11)]* *[==>123.0 Secs (Copy 12)]* *[==>123.0 Secs (Copy 13)]* *[==>123.0 Secs (Copy 14)]* *[==>123.0 Secs (Copy 15)]* *[==>123.0 Secs (Copy 16)]* *[==>123.0 Secs (Copy 17)]*	***[3]***
	7	GO-WAVE CAL	WAVE	STIS/NUV-MAMA, ACCUM, 6X0.2	E230M 2707 A		*[==>]*	***[3]***
	8	SCI (STIS.sp.2023797)	(7) MASCARA-4	STIS/NUV-MAMA, ACCUM, 6X0.2	E230M 2707 A	WAVECAL=NO	120 Secs X 17 (2091 Secs) *[==>123.0 Secs (Copy 1)]* *[==>123.0 Secs (Copy 2)]* *[==>123.0 Secs (Copy 3)]* *[==>123.0 Secs (Copy 4)]* *[==>123.0 Secs (Copy 5)]* *[==>123.0 Secs (Copy 6)]* *[==>123.0 Secs (Copy 7)]* *[==>123.0 Secs (Copy 8)]* *[==>123.0 Secs (Copy 9)]* *[==>123.0 Secs (Copy 10)]* *[==>123.0 Secs (Copy 11)]* *[==>123.0 Secs (Copy 12)]* *[==>123.0 Secs (Copy 13)]* *[==>123.0 Secs (Copy 14)]* *[==>123.0 Secs (Copy 15)]* *[==>123.0 Secs (Copy 16)]* *[==>123.0 Secs (Copy 17)]*	***[4]***
	9	GO-WAVE CAL	WAVE	STIS/NUV-MAMA, ACCUM, 6X0.2	E230M 2707 A		*[==>]*	***[4]***

	10	SCI (STIS.sp.2023797)	(7) MASCARA-4	STIS/NUV-MAMA, ACCUM, 6X0.2	E230M 2707 A	WAVECAL=NO	120 Secs X 17 (2091 Secs) *[==>123.0 Secs (Copy 1)]* *[==>123.0 Secs (Copy 2)]* *[==>123.0 Secs (Copy 3)]* *[==>123.0 Secs (Copy 4)]* *[==>123.0 Secs (Copy 5)]* *[==>123.0 Secs (Copy 6)]* *[==>123.0 Secs (Copy 7)]* *[==>123.0 Secs (Copy 8)]* *[==>123.0 Secs (Copy 9)]* *[==>123.0 Secs (Copy 10)]* *[==>123.0 Secs (Copy 11)]* *[==>123.0 Secs (Copy 12)]* *[==>123.0 Secs (Copy 13)]* *[==>123.0 Secs (Copy 14)]* *[==>123.0 Secs (Copy 15)]* *[==>123.0 Secs (Copy 16)]* *[==>123.0 Secs (Copy 17)]*	***[5]***
	11	GO-WAVE CAL	WAVE	STIS/NUV-MAMA, ACCUM, 6X0.2	E230M 2707 A		*[==>]*	***[5]***

Orbit Structure

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Exp. 4, copy 11
Exp. 4, copy 12
Exp. 4, copy 13
Exp. 4, copy 14
Exp. 4, copy 15
Exp. 4, copy 16
Exp. 4, copy 17
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3500
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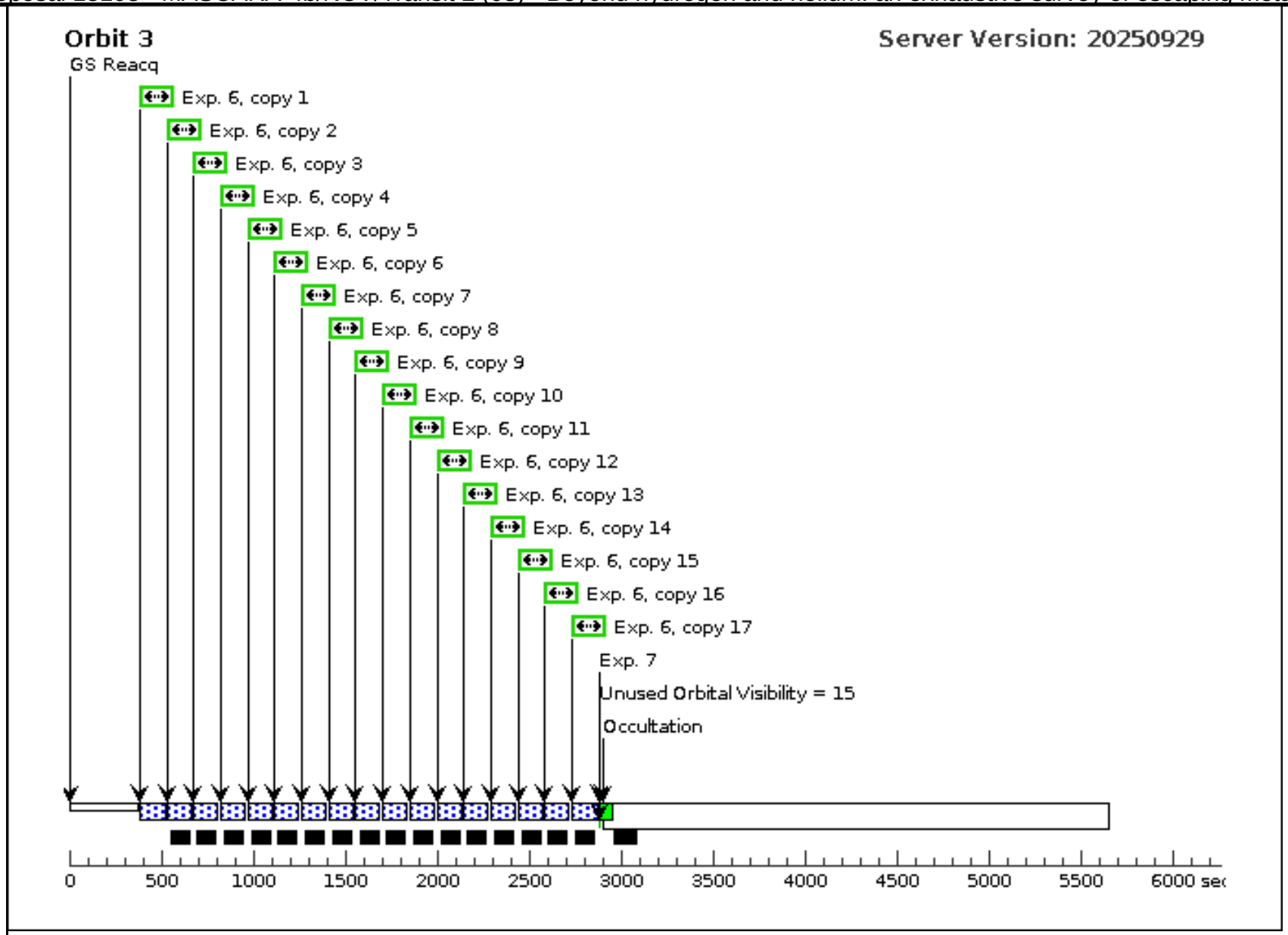
4500
5000
5500
6000 sec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Exp. 6, copy 3
Exp. 6, copy 4
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Exp. 6, copy 8
Exp. 6, copy 9
Exp. 6, copy 10
Exp. 6, copy 11
Exp. 6, copy 12
Exp. 6, copy 13
Exp. 6, copy 14
Exp. 6, copy 15
Exp. 6, copy 16
Exp. 6, copy 17
Exp. 7
Unused Orbital Visibility = 15
Occultation
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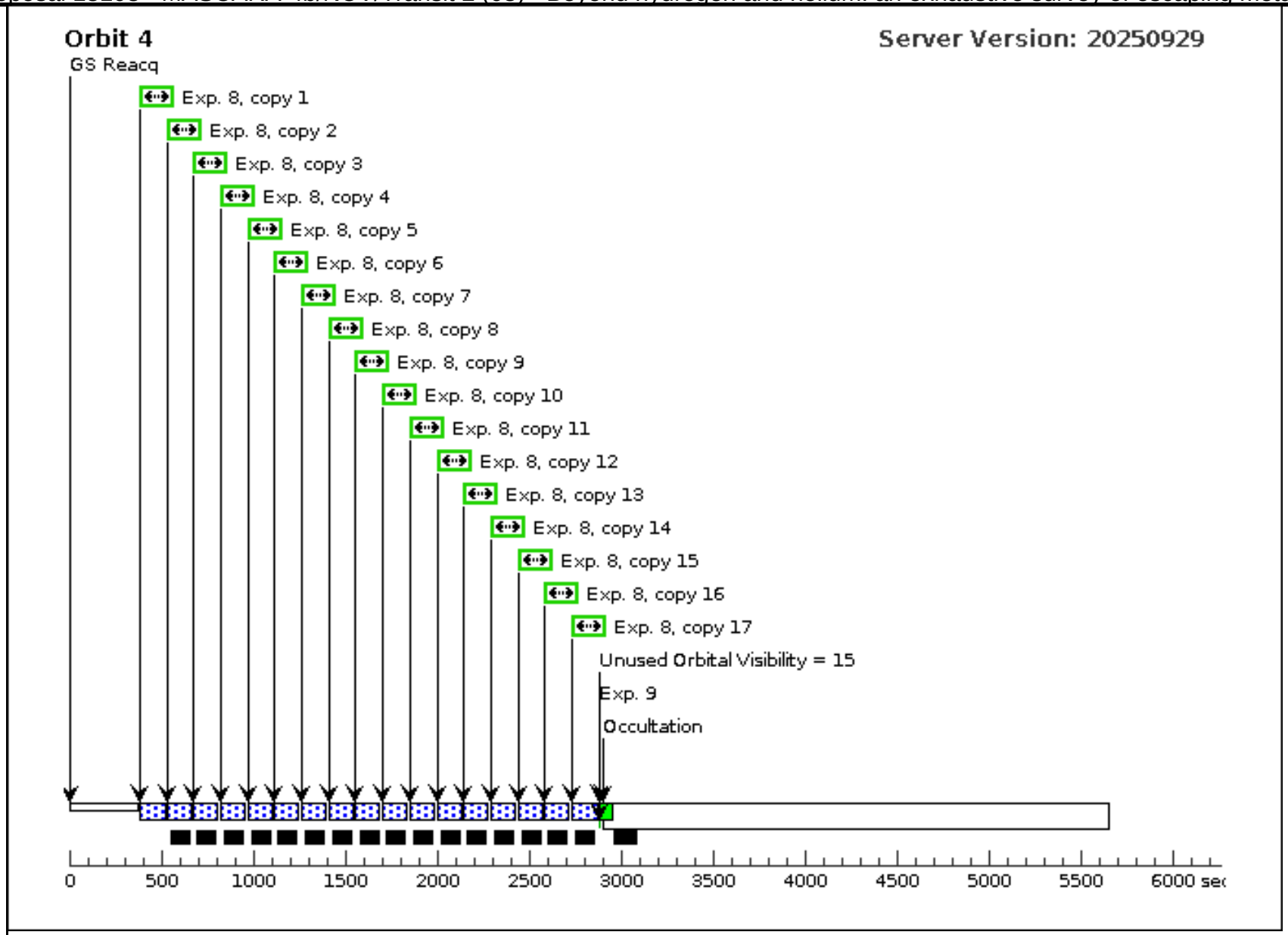
1500
2000
2500
3000
3500
4000
4500
5000
5500
6000 sec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Exp. 8, copy 2
Exp. 8, copy 3
Exp. 8, copy 4
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Exp. 8, copy 8
Exp. 8, copy 9
Exp. 8, copy 10
Exp. 8, copy 11
Exp. 8, copy 12
Exp. 8, copy 13
Exp. 8, copy 14
Exp. 8, copy 15
Exp. 8, copy 16
Exp. 8, copy 17
Unused Orbital Visibility = 15
Exp. 9
Occultation
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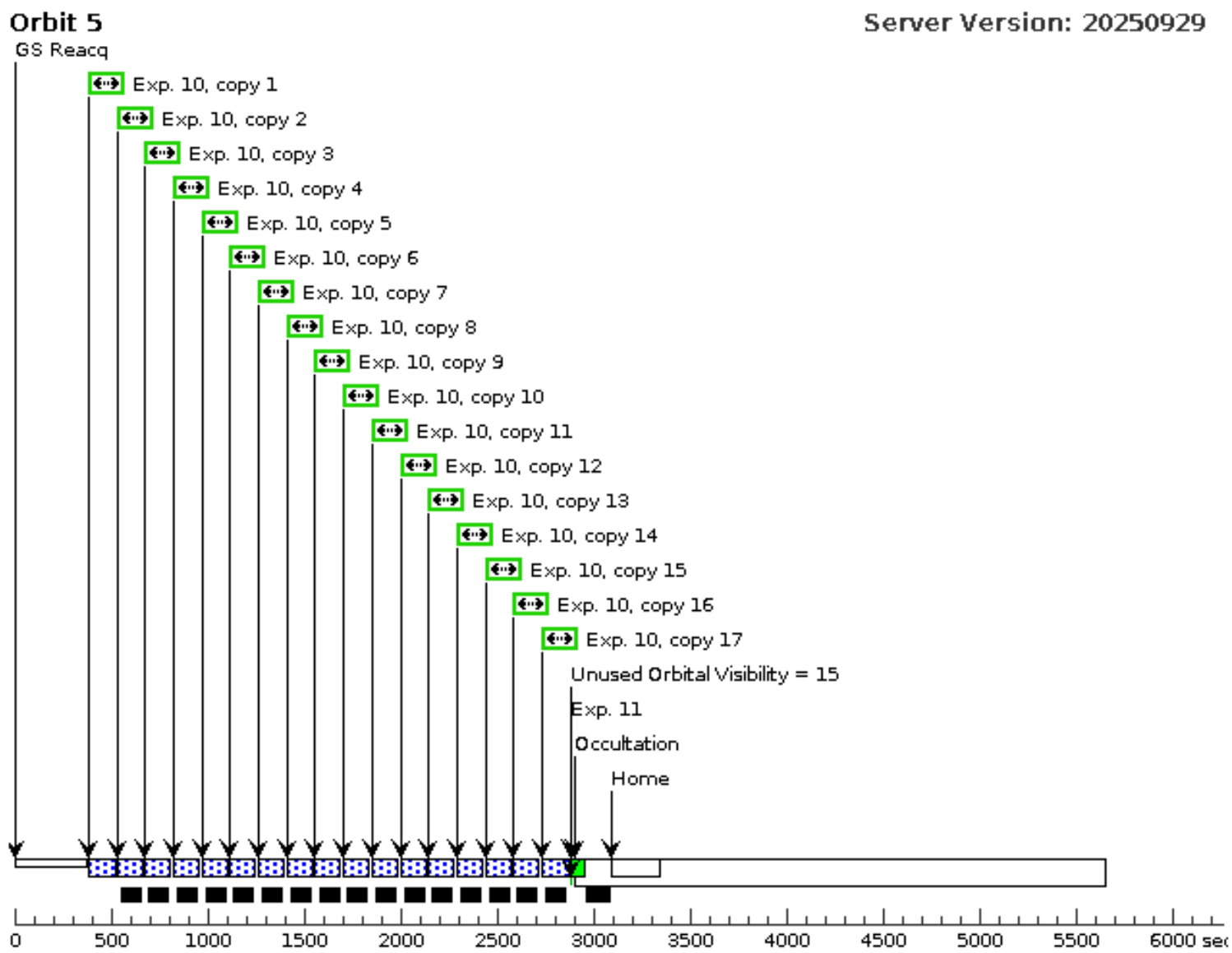
500
1000
1500
2000
2500
3000
3500
4000
4500
5000
5500
6000 sec


Orbit 5
Server Version: 20250929
GS Reacq
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Exp. 10, copy 3
Exp. 10, copy 4
Exp. 10, copy 5
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Exp. 10, copy 10
Exp. 10, copy 11
Exp. 10, copy 12
Exp. 10, copy 13
Exp. 10, copy 14
Exp. 10, copy 15
Exp. 10, copy 16
Exp. 10, copy 17
Unused Orbital Visibility = 15
Exp. 11
Occultation
Home
0
500
1000
1500
2000
2500
3000
3500
4000
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5000
5500
6000 sec

Visit

Proposal 18108, KELT-17b/FUV/Transit 1 (09), implementation Thu Feb 26 16:01:28 GMT 2026

Diagnostic Status: No Diagnostics

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

Special Requirements: SCHED 100%; Period 3.08017985 D AND ZERO-PHASE HJD2459440.791304

Comments: Ephemeris from Kokori+2023. Transit midpoint uncertainty by January 2026 is ~30 seconds.

Fixed Targets

#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(3)	KELT-17	RA: 08 22 28.2047 (125.6175196d) Dec: +13 44 7.14 (13.73532d) Equinox: J2000	Proper Motion RA: -25.381 mas/yr Proper Motion Dec: -1.9549999251466943 mas/yr Parallax: 0.0043907" Epoch of Position: 2000	V=9.23	Reference Frame: ICRS

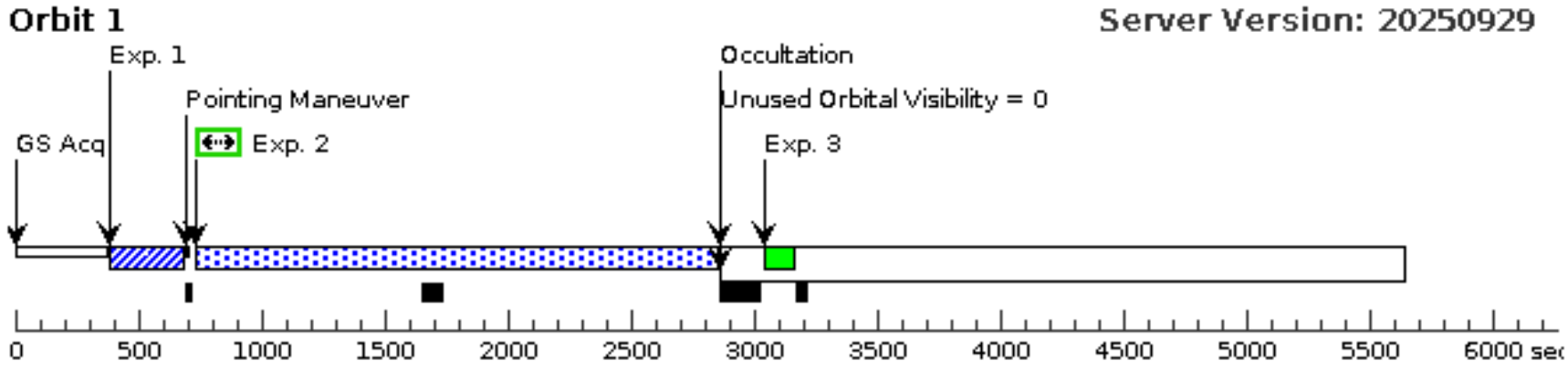
Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.

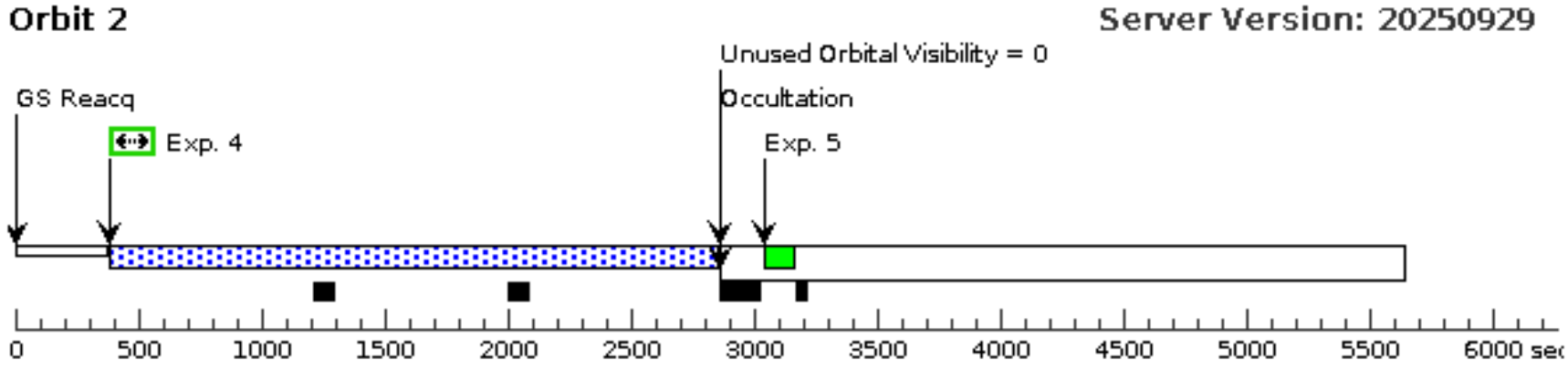
SIMBAD listed proper motion for this target. When retrieving targets with PM from SIMBAD, APT requests the coordinates be calculated with an epoch of the year 2000. Do not modify this epoch. Always review coordinates using the Target Confirmation tool, which graphically displays the PM.
Category=EXT-STAR
Description=[A4-A9 V-IV, EXTRA-SOLAR PLANETARY SYSTEM]
Extended=NO

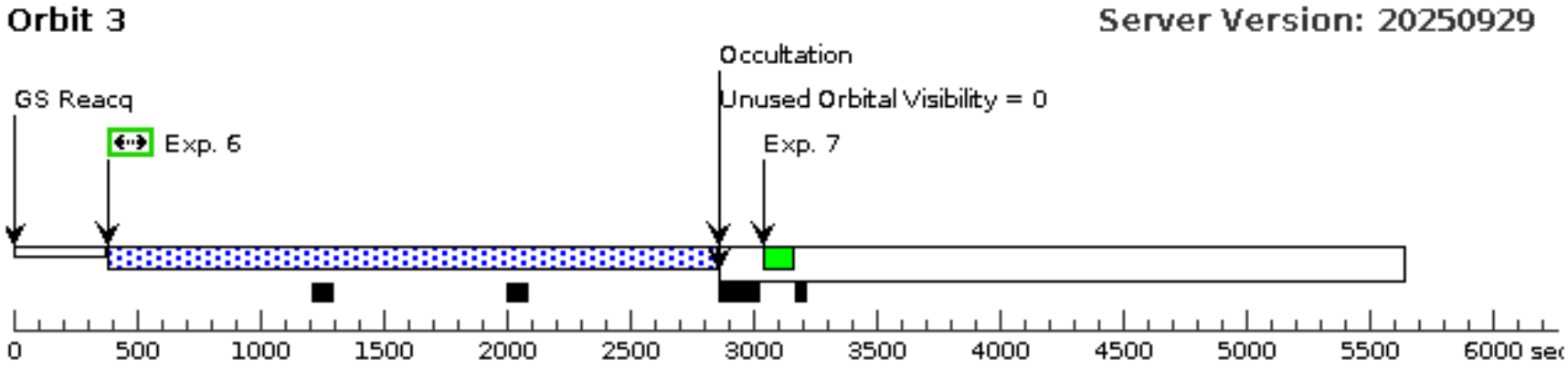
Exposures

#	Label (ETC Run)	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
1	ACQ (STIS.ta.2023812)	(3) KELT-17	STIS/CCD, ACQ, F25ND3	MIRROR		PHASE 0.93186145 62891574 TO 0.9453 8880491676		1 Secs (1 Secs) *[==>]*	 ***[1]***
2	SCI (STIS.sp.2244244)	(3) KELT-17	STIS/FUV-MAMA, TIME-TAG, 52X2	G140L 1425 A	BUFFER-TIME=790; WAVECAL=NO			2000 Secs (1969 Secs) *[==>1969.0 Secs]*	 ***[1]***
3	GO-WAVE CAL	WAVE	STIS/FUV-MAMA, ACCUM, 52X0.2	G140L 1425 A				*[==>]*	***[1]***
4	SCI (STIS.sp.2244244)	(3) KELT-17	STIS/FUV-MAMA, TIME-TAG, 52X2	G140L 1425 A	BUFFER-TIME=790; WAVECAL=NO			3000 Secs (2411 Secs) *[==>2411.0 Secs]*	 ***[2]***
5	GO-WAVE CAL	WAVE	STIS/FUV-MAMA, ACCUM, 52X0.2	G140L 1425 A				*[==>]*	***[2]***
6	SCI (STIS.sp.2244244)	(3) KELT-17	STIS/FUV-MAMA, TIME-TAG, 52X2	G140L 1425 A	BUFFER-TIME=790; WAVECAL=NO			3000 Secs (2411 Secs) *[==>2411.0 Secs]*	 ***[3]***
7	GO-WAVE CAL	WAVE	STIS/FUV-MAMA, ACCUM, 52X0.2	G140L 1425 A				*[==>]*	***[3]***
8	SCI (STIS.sp.2244244)	(3) KELT-17	STIS/FUV-MAMA, TIME-TAG, 52X2	G140L 1425 A	BUFFER-TIME=790; WAVECAL=NO			3000 Secs (2411 Secs) *[==>2411.0 Secs]*	 ***[4]***
9	GO-WAVE CAL	WAVE	STIS/FUV-MAMA, ACCUM, 52X0.2	G140L 1425 A				*[==>]*	***[4]***
10	SCI (STIS.sp.2244244)	(3) KELT-17	STIS/FUV-MAMA, TIME-TAG, 52X2	G140L 1425 A	BUFFER-TIME=790; WAVECAL=NO			3000 Secs (2411 Secs) *[==>2411.0 Secs]*	 ***[5]***
11	GO-WAVE CAL	WAVE	STIS/FUV-MAMA, ACCUM, 52X0.2	G140L 1425 A				*[==>]*	***[5]***

Orbit Structure



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Occultation
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1000
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4500
5000
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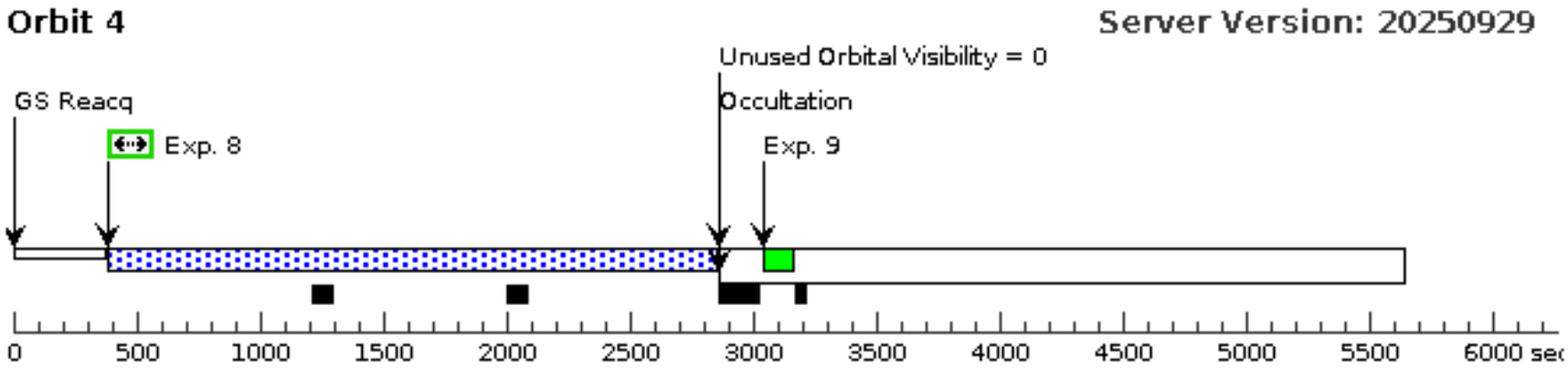
6000 sec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Server Version: 20250929
Unused Orbital Visibility = 0
Occultation
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Exp. 9
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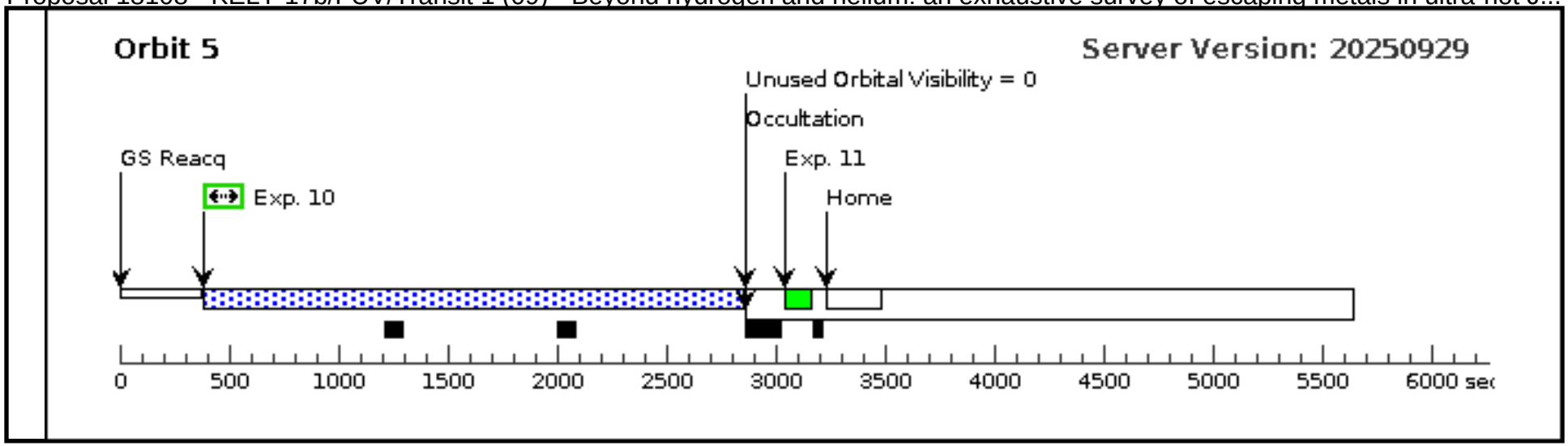

Orbit 5
Server Version: 20250929
Unused Orbital Visibility = 0
Occultation
GS Reacq
Exp. 10
Exp. 11
Home
0
500
1000
1500
2000
2500
3000
3500
4000
4500
5000
5500
6000 sec

Visit

Proposal 18108, KELT-17b/FUV/Transit 2 (10), implementation Thu Feb 26 16:01:28 GMT 2026

Diagnostic Status: No Diagnostics

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

Special Requirements: SCHED 100%; Period 3.08017985 D AND ZERO-PHASE HJD2459440.791304

Comments: Ephemeris from Kokori+2023. Transit midpoint uncertainty by January 2026 is ~30 seconds.

Fixed Targets

#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(3)	KELT-17	RA: 08 22 28.2047 (125.6175196d) Dec: +13 44 7.14 (13.73532d) Equinox: J2000	Proper Motion RA: -25.381 mas/yr Proper Motion Dec: -1.9549999251466943 mas/yr Parallax: 0.0043907" Epoch of Position: 2000	V=9.23	Reference Frame: ICRS

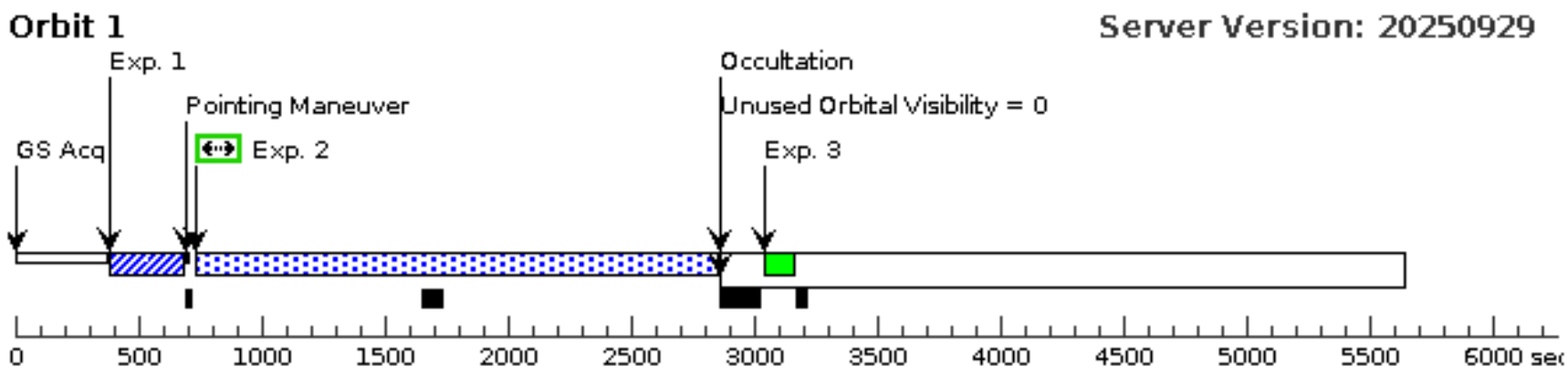
Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.

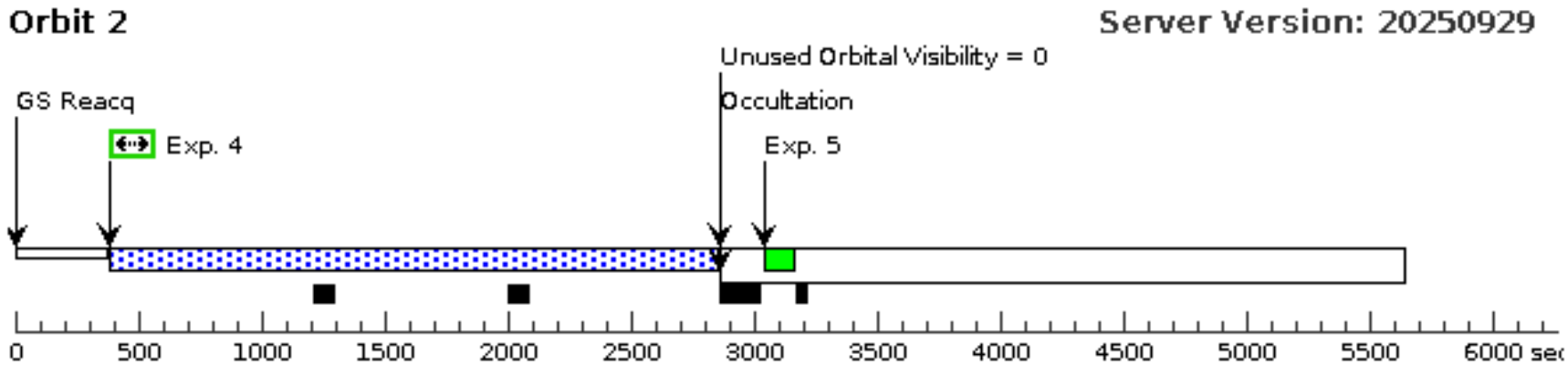
SIMBAD listed proper motion for this target. When retrieving targets with PM from SIMBAD, APT requests the coordinates be calculated with an epoch of the year 2000. Do not modify this epoch. Always review coordinates using the Target Confirmation tool, which graphically displays the PM.
Category=EXT-STAR
Description=[A4-A9 V-IV, EXTRA-SOLAR PLANETARY SYSTEM]
Extended=NO

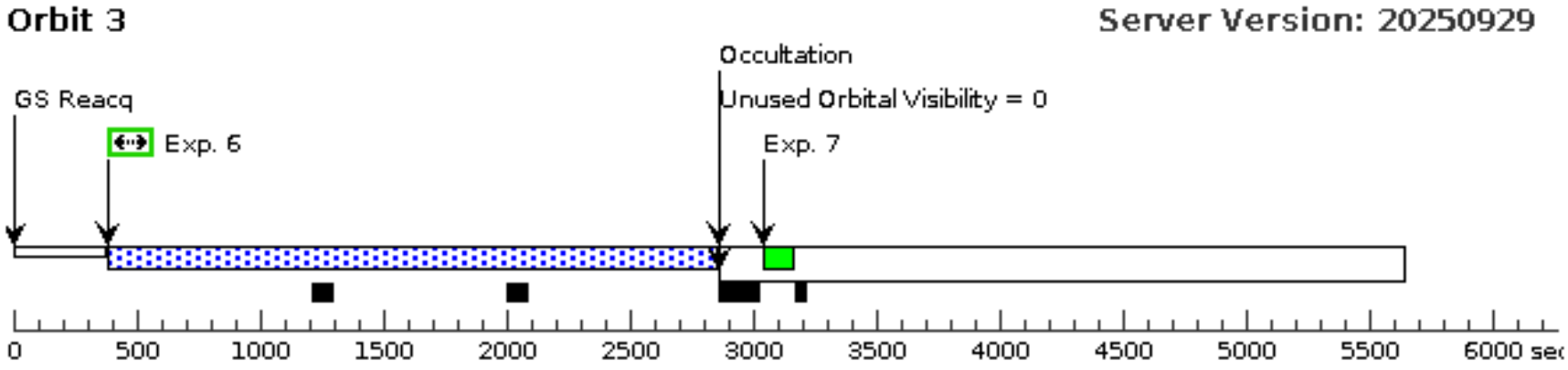
Exposures

#	Label (ETC Run)	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
1	ACQ (STIS.ta.2023812)	(3) KELT-17	STIS/CCD, ACQ, F25ND3	MIRROR		PHASE 0.94768332 79448492 TO 0.9612106765724518		1 Secs (1 Secs) *[==>]*	*[1]*
2	SCI (STIS.sp.2244244)	(3) KELT-17	STIS/FUV-MAMA, TIME-TAG, 52X2	G140L 1425 A	BUFFER-TIME=790; WAVECAL=NO			1700 Secs (1969 Secs) *[==>1969.0 Secs]*	*[1]*
3	GO-WAVE CAL	WAVE	STIS/FUV-MAMA, ACCUM, 52X0.2	G140L 1425 A				*[==>]*	*[1]*
4	SCI (STIS.sp.2244244)	(3) KELT-17	STIS/FUV-MAMA, TIME-TAG, 52X2	G140L 1425 A	BUFFER-TIME=790; WAVECAL=NO			3000 Secs (2411 Secs) *[==>2411.0 Secs]*	*[2]*
5	GO-WAVE CAL	WAVE	STIS/FUV-MAMA, ACCUM, 52X0.2	G140L 1425 A				*[==>]*	*[2]*
6	SCI (STIS.sp.2244244)	(3) KELT-17	STIS/FUV-MAMA, TIME-TAG, 52X2	G140L 1425 A	BUFFER-TIME=790; WAVECAL=NO			3000 Secs (2411 Secs) *[==>2411.0 Secs]*	*[3]*
7	GO-WAVE CAL	WAVE	STIS/FUV-MAMA, ACCUM, 52X0.2	G140L 1425 A				*[==>]*	*[3]*
8	SCI (STIS.sp.2244244)	(3) KELT-17	STIS/FUV-MAMA, TIME-TAG, 52X2	G140L 1425 A	BUFFER-TIME=790; WAVECAL=NO			3000 Secs (2411 Secs) *[==>2411.0 Secs]*	*[4]*
9	GO-WAVE CAL	WAVE	STIS/FUV-MAMA, ACCUM, 52X0.2	G140L 1425 A				*[==>]*	*[4]*
10	SCI (STIS.sp.2244244)	(3) KELT-17	STIS/FUV-MAMA, TIME-TAG, 52X2	G140L 1425 A	BUFFER-TIME=790; WAVECAL=NO			3000 Secs (2411 Secs) *[==>2411.0 Secs]*	*[5]*
11	GO-WAVE CAL	WAVE	STIS/FUV-MAMA, ACCUM, 52X0.2	G140L 1425 A				*[==>]*	*[5]*

Orbit Structure



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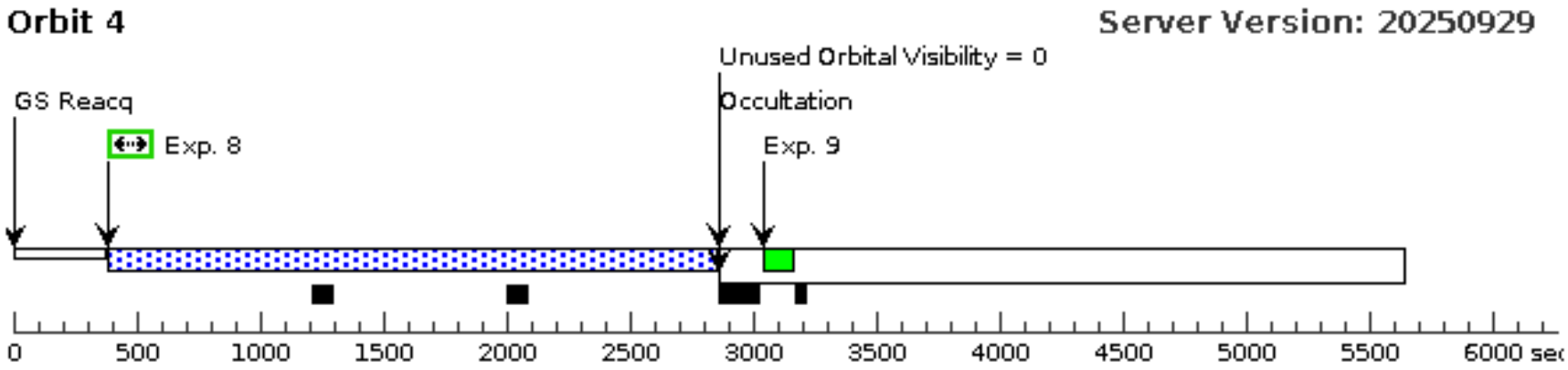
6000 sec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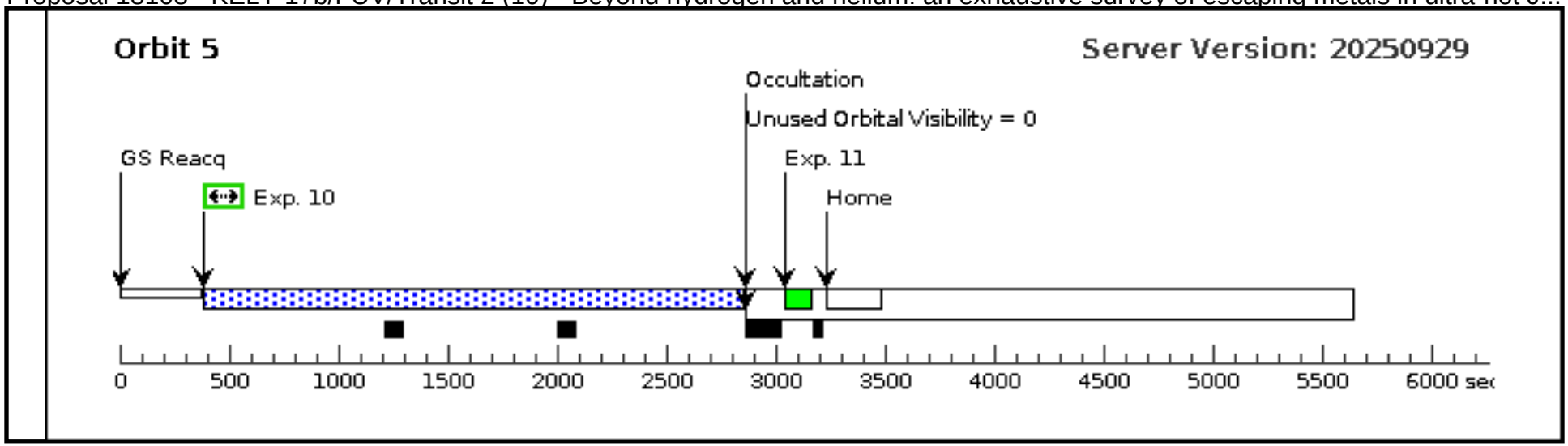
4500
5000
5500
6000 sec


Orbit 5
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Occultation
Unused Orbital Visibility = 0
GS Reacq
Exp. 10
Exp. 11
Home
0
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1000
1500
2000
2500
3000
3500
4000
4500
5000
5500
6000 sec

Visit

Proposal 18108, KELT-17b/NUV/Transit 1 (11), implementation Thu Feb 26 16:01:28 GMT 2026

Diagnostic Status: Warning

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

Special Requirements: SCHED 100%; Period 3.08017985 D AND ZERO-PHASE HJD2459440.791304

Comments: Ephemeris from Kokori+2023. Transit midpoint uncertainty by January 2026 is ~30 seconds.

Diagnostics

(KELT-17b/NUV/Transit 1 (11)) Warning (Orbit Planner): ORBITAL VISIBILITY OVERRUN

Fixed Targets

#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(3)	KELT-17	RA: 08 22 28.2047 (125.6175196d) Dec: +13 44 7.14 (13.73532d) Equinox: J2000	Proper Motion RA: -25.381 mas/yr Proper Motion Dec: -1.9549999251466943 mas/yr Parallax: 0.0043907" Epoch of Position: 2000	V=9.23	Reference Frame: ICRS

Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.

SIMBAD listed proper motion for this target. When retrieving targets with PM from SIMBAD, APT requests the coordinates be calculated with an epoch of the year 2000. Do not modify this epoch. Always review coordinates using the Target Confirmation tool, which graphically displays the PM.
Category=EXT-STAR
Description=[A4-A9 V-IV, EXTRA-SOLAR PLANETARY SYSTEM]
Extended=NO

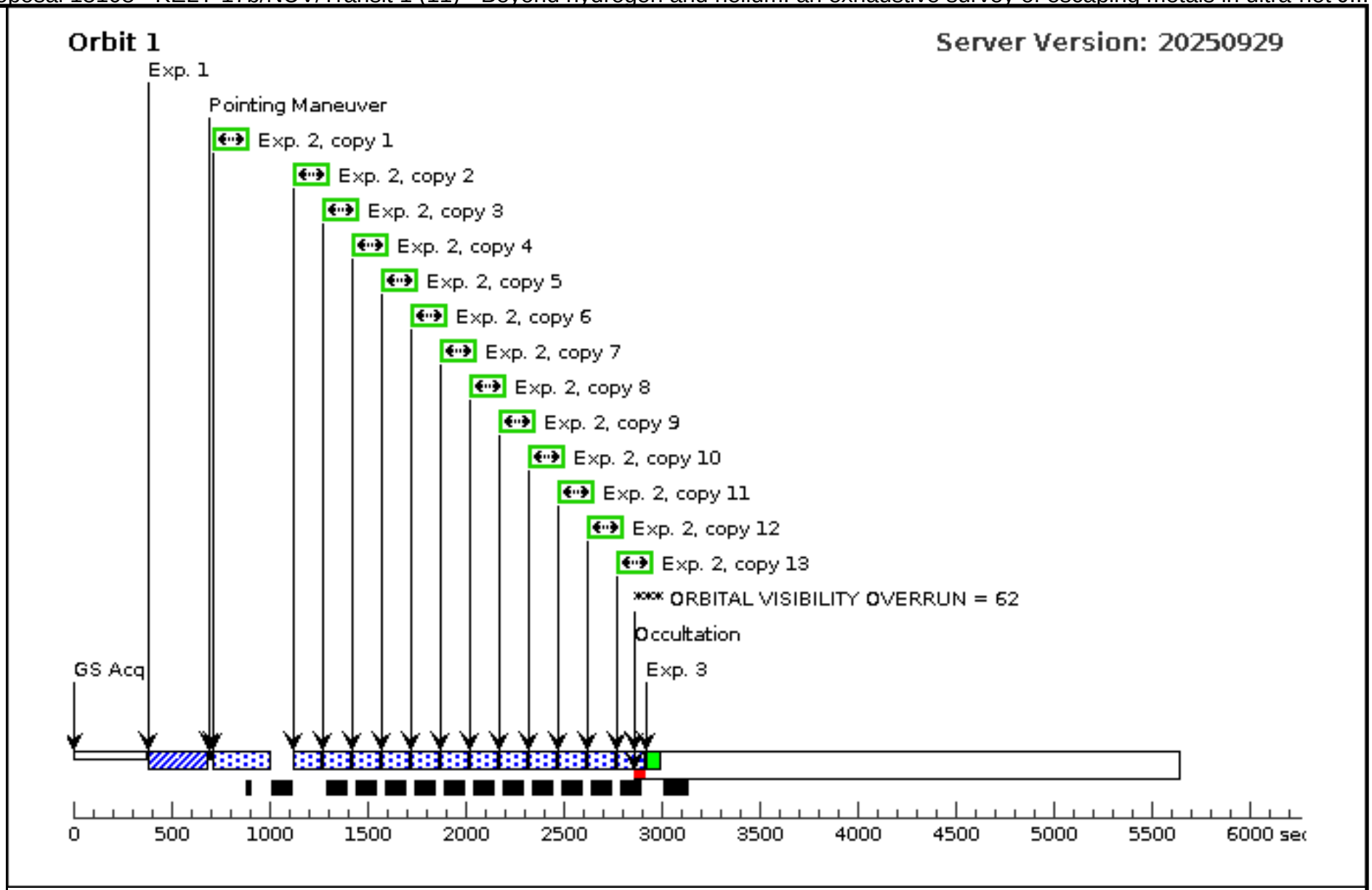
Exposures

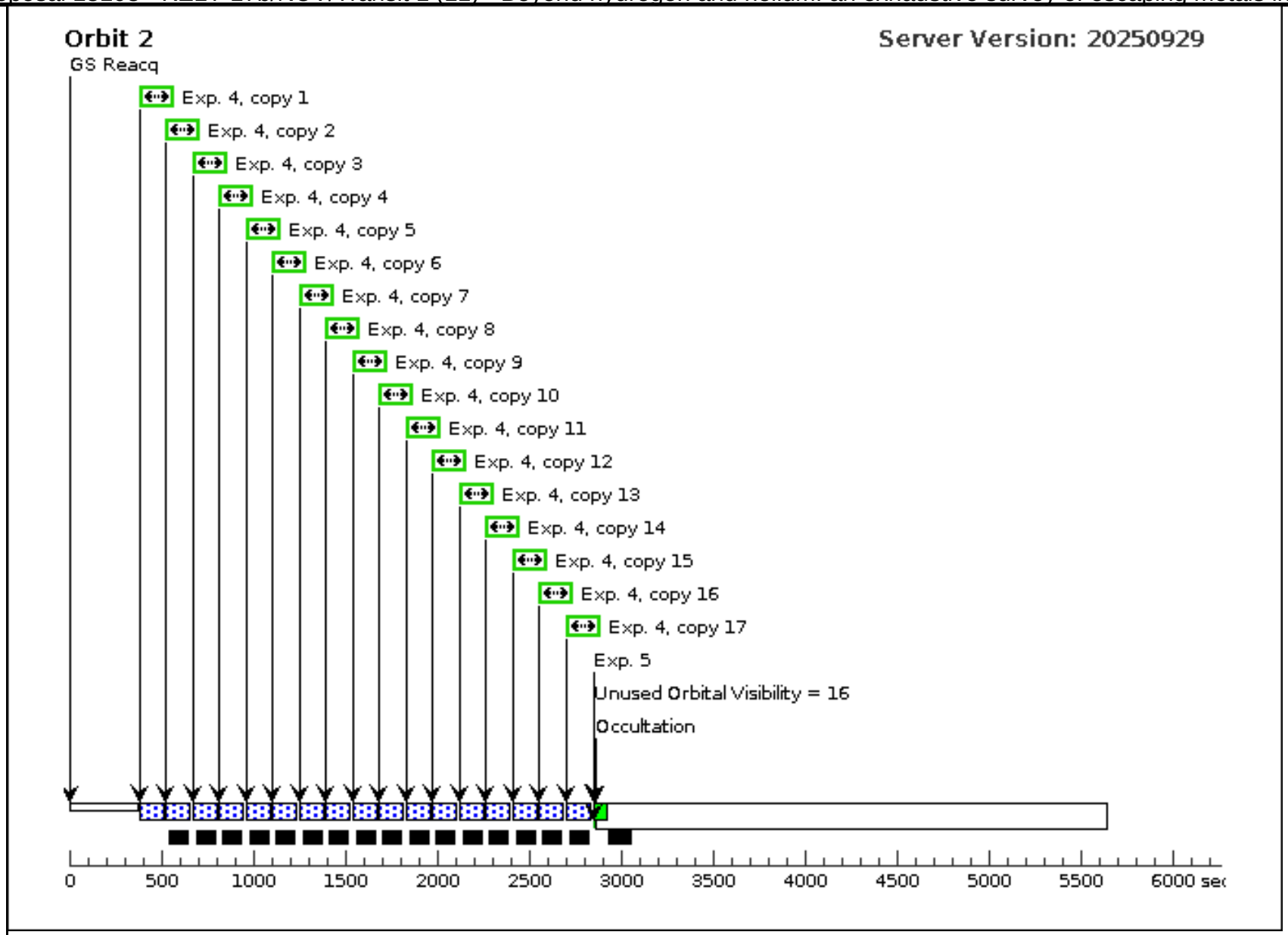
#	Label (ETC Run)	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
1	ACQ (STIS.ta.2023812)	(3) KELT-17	STIS/CCD, ACQ, F25ND3	MIRROR		PHASE 0.93186145 62891574 TO 0.9453 8880491676		1 Secs (1 Secs) *[==>]*	*[1]*
2	SCI (STIS.sp.2023824)	(3) KELT-17	STIS/NUV-MAMA, ACCUM, 6X0.2	E230M 2707 A	WAVECAL=NO			120 Secs X 13 (1638 Secs) *[==>126.0 Secs (Copy 1)]* *[==>126.0 Secs (Copy 2)]* *[==>126.0 Secs (Copy 3)]* *[==>126.0 Secs (Copy 4)]* *[==>126.0 Secs (Copy 5)]* *[==>126.0 Secs (Copy 6)]* *[==>126.0 Secs (Copy 7)]* *[==>126.0 Secs (Copy 8)]* *[==>126.0 Secs (Copy 9)]* *[==>126.0 Secs (Copy 10)]* *[==>126.0 Secs (Copy 11)]* *[==>126.0 Secs (Copy 12)]* *[==>126.0 Secs (Copy 13)]*	*[1]*
3	GO-WAVE CAL	WAVE	STIS/NUV-MAMA, ACCUM, 6X0.2	E230M 2707 A				*[==>]*	*[1]*
4	SCI (STIS.sp.2023824)	(3) KELT-17	STIS/NUV-MAMA, ACCUM, 6X0.2	E230M 2707 A	WAVECAL=NO			120 Secs X 17 (2057 Secs) *[==>121.0 Secs (Copy 1)]* *[==>121.0 Secs (Copy 2)]* *[==>121.0 Secs (Copy 3)]* *[==>121.0 Secs (Copy 4)]* *[==>121.0 Secs (Copy 5)]* *[==>121.0 Secs (Copy 6)]* *[==>121.0 Secs (Copy 7)]* *[==>121.0 Secs (Copy 8)]* *[==>121.0 Secs (Copy 9)]* *[==>121.0 Secs (Copy 10)]* *[==>121.0 Secs (Copy 11)]* *[==>121.0 Secs (Copy 12)]* *[==>121.0 Secs (Copy 13)]* *[==>121.0 Secs (Copy 14)]* *[==>121.0 Secs (Copy 15)]* *[==>121.0 Secs (Copy 16)]* *[==>121.0 Secs (Copy 17)]*	*[2]*
5	GO-WAVE CAL	WAVE	STIS/NUV-MAMA, ACCUM, 6X0.2	E230M 2707 A				*[==>]*	*[2]*

	6	SCI (STIS.sp.2023824)	(3) KELT-17	STIS/NUV-MAMA, ACCUM, 6X0.2	E230M 2707 A	WAVECAL=NO	120 Secs X 17 (2057 Secs) *[==>121.0 Secs (Copy 1)]* *[==>121.0 Secs (Copy 2)]* *[==>121.0 Secs (Copy 3)]* *[==>121.0 Secs (Copy 4)]* *[==>121.0 Secs (Copy 5)]* *[==>121.0 Secs (Copy 6)]* *[==>121.0 Secs (Copy 7)]* *[==>121.0 Secs (Copy 8)]* *[==>121.0 Secs (Copy 9)]* *[==>121.0 Secs (Copy 10)]* *[==>121.0 Secs (Copy 11)]* *[==>121.0 Secs (Copy 12)]* *[==>121.0 Secs (Copy 13)]* *[==>121.0 Secs (Copy 14)]* *[==>121.0 Secs (Copy 15)]* *[==>121.0 Secs (Copy 16)]* *[==>121.0 Secs (Copy 17)]*	***[3]***
	7	GO-WAVE CAL	WAVE	STIS/NUV-MAMA, ACCUM, 6X0.2	E230M 2707 A		*[==>]*	***[3]***
	8	SCI (STIS.sp.2023824)	(3) KELT-17	STIS/NUV-MAMA, ACCUM, 6X0.2	E230M 2707 A	WAVECAL=NO	120 Secs X 17 (2057 Secs) *[==>121.0 Secs (Copy 1)]* *[==>121.0 Secs (Copy 2)]* *[==>121.0 Secs (Copy 3)]* *[==>121.0 Secs (Copy 4)]* *[==>121.0 Secs (Copy 5)]* *[==>121.0 Secs (Copy 6)]* *[==>121.0 Secs (Copy 7)]* *[==>121.0 Secs (Copy 8)]* *[==>121.0 Secs (Copy 9)]* *[==>121.0 Secs (Copy 10)]* *[==>121.0 Secs (Copy 11)]* *[==>121.0 Secs (Copy 12)]* *[==>121.0 Secs (Copy 13)]* *[==>121.0 Secs (Copy 14)]* *[==>121.0 Secs (Copy 15)]* *[==>121.0 Secs (Copy 16)]* *[==>121.0 Secs (Copy 17)]*	***[4]***
	9	GO-WAVE CAL	WAVE	STIS/NUV-MAMA, ACCUM, 6X0.2	E230M 2707 A		*[==>]*	***[4]***

	10	SCI (STIS.sp.2023824)	(3) KELT-17	STIS/NUV-MAMA, ACCUM, 6X0.2	E230M 2707 A	WAVECAL=NO	120 Secs X 17 (2057 Secs) *[==>121.0 Secs (Copy 1)]* *[==>121.0 Secs (Copy 2)]* *[==>121.0 Secs (Copy 3)]* *[==>121.0 Secs (Copy 4)]* *[==>121.0 Secs (Copy 5)]* *[==>121.0 Secs (Copy 6)]* *[==>121.0 Secs (Copy 7)]* *[==>121.0 Secs (Copy 8)]* *[==>121.0 Secs (Copy 9)]* *[==>121.0 Secs (Copy 10)]* *[==>121.0 Secs (Copy 11)]* *[==>121.0 Secs (Copy 12)]* *[==>121.0 Secs (Copy 13)]* *[==>121.0 Secs (Copy 14)]* *[==>121.0 Secs (Copy 15)]* *[==>121.0 Secs (Copy 16)]* *[==>121.0 Secs (Copy 17)]*	***[5]***
	11	GO-WAVE CAL	WAVE	STIS/NUV-MAMA, ACCUM, 6X0.2	E230M 2707 A		*[==>]*	***[5]***

Orbit Structure

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Exp. 4, copy 14
Exp. 4, copy 15
Exp. 4, copy 16
Exp. 4, copy 17
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3000
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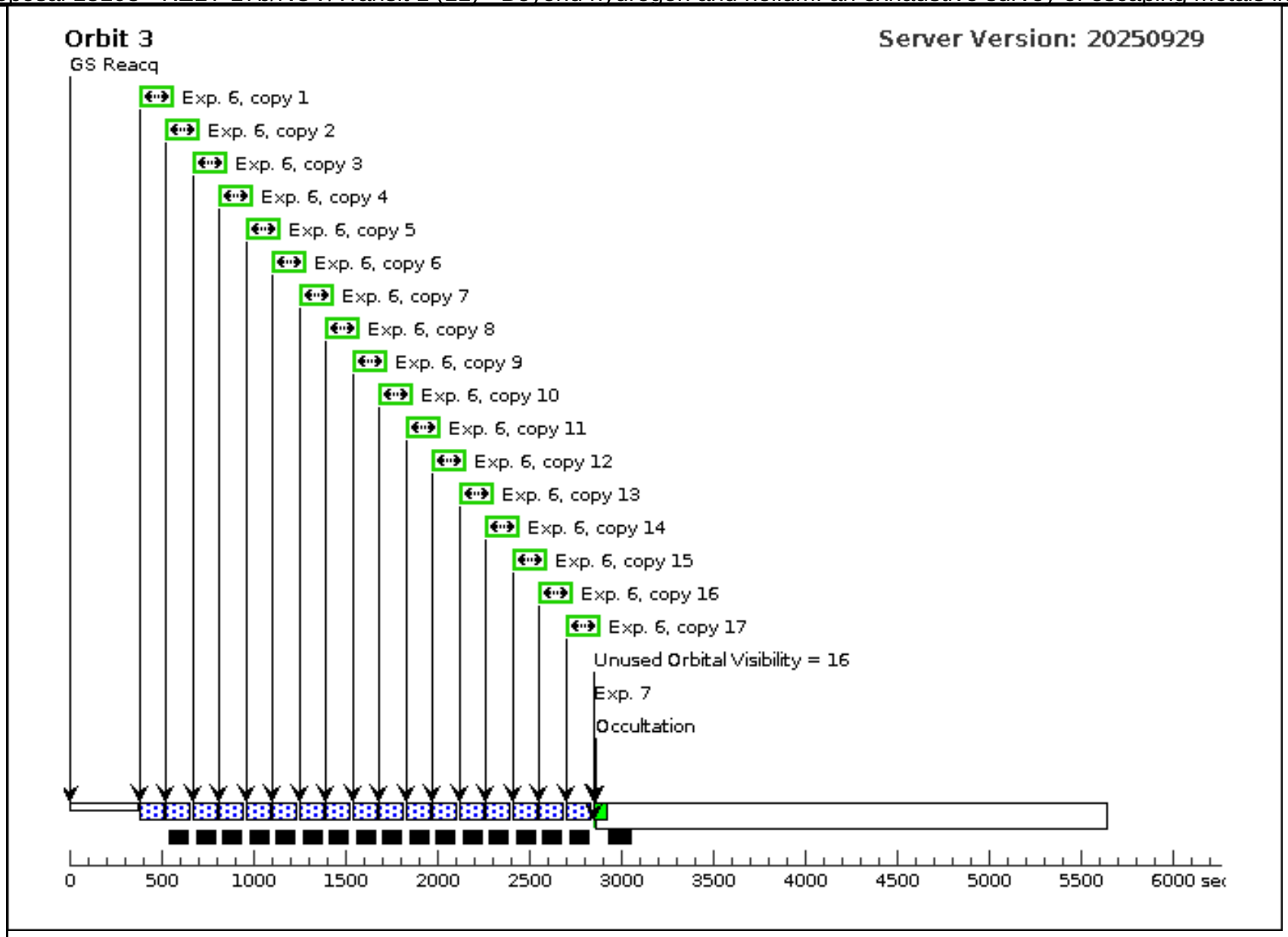
6000 sec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Exp. 6, copy 12
Exp. 6, copy 13
Exp. 6, copy 14
Exp. 6, copy 15
Exp. 6, copy 16
Exp. 6, copy 17
Unused Orbital Visibility = 16
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Occultation
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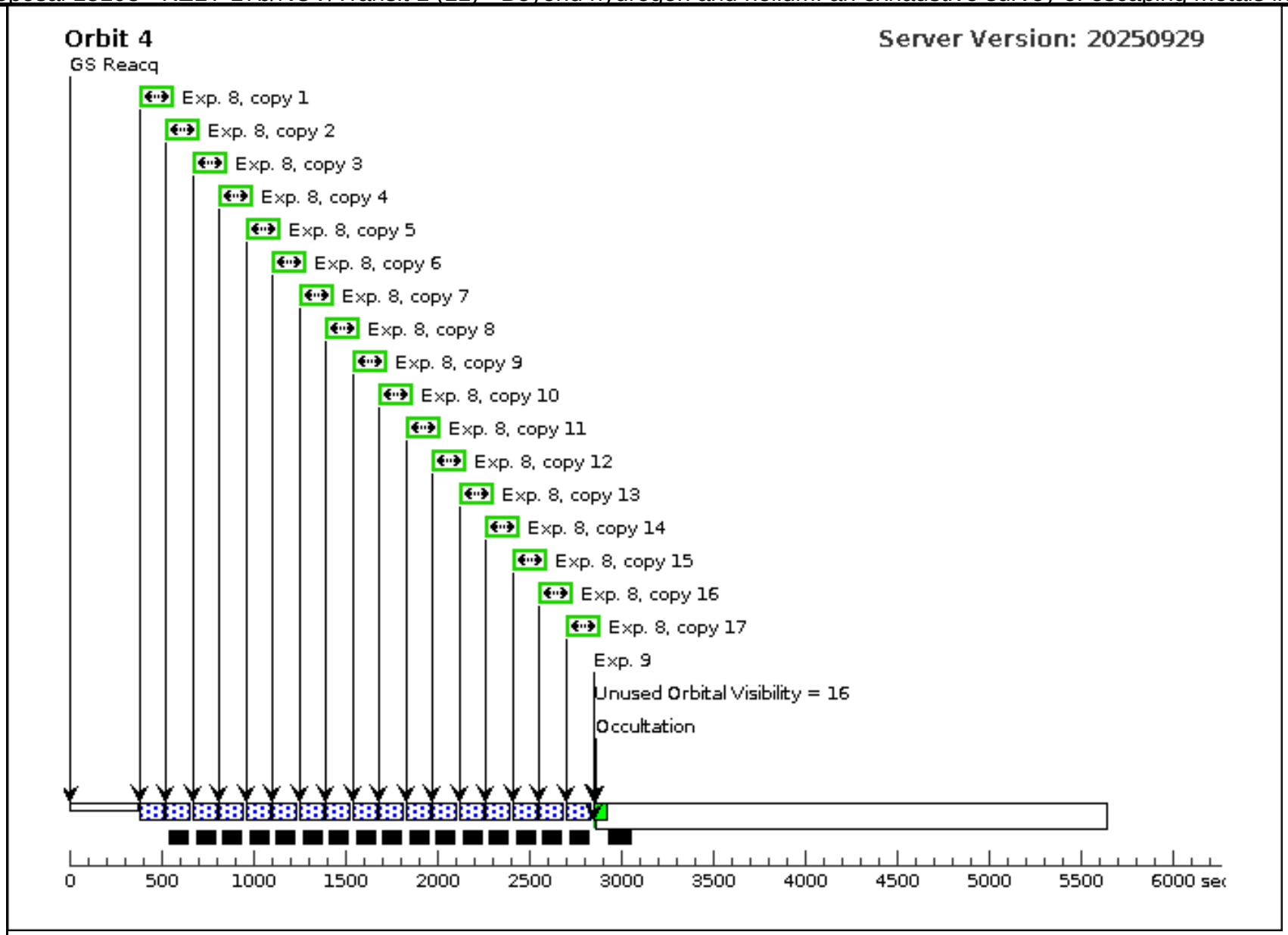
1000
1500
2000
2500
3000
3500
4000
4500
5000
5500
6000 sec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Exp. 8, copy 12
Exp. 8, copy 13
Exp. 8, copy 14
Exp. 8, copy 15
Exp. 8, copy 16
Exp. 8, copy 17
Exp. 9
Unused Orbital Visibility = 16
Occultation
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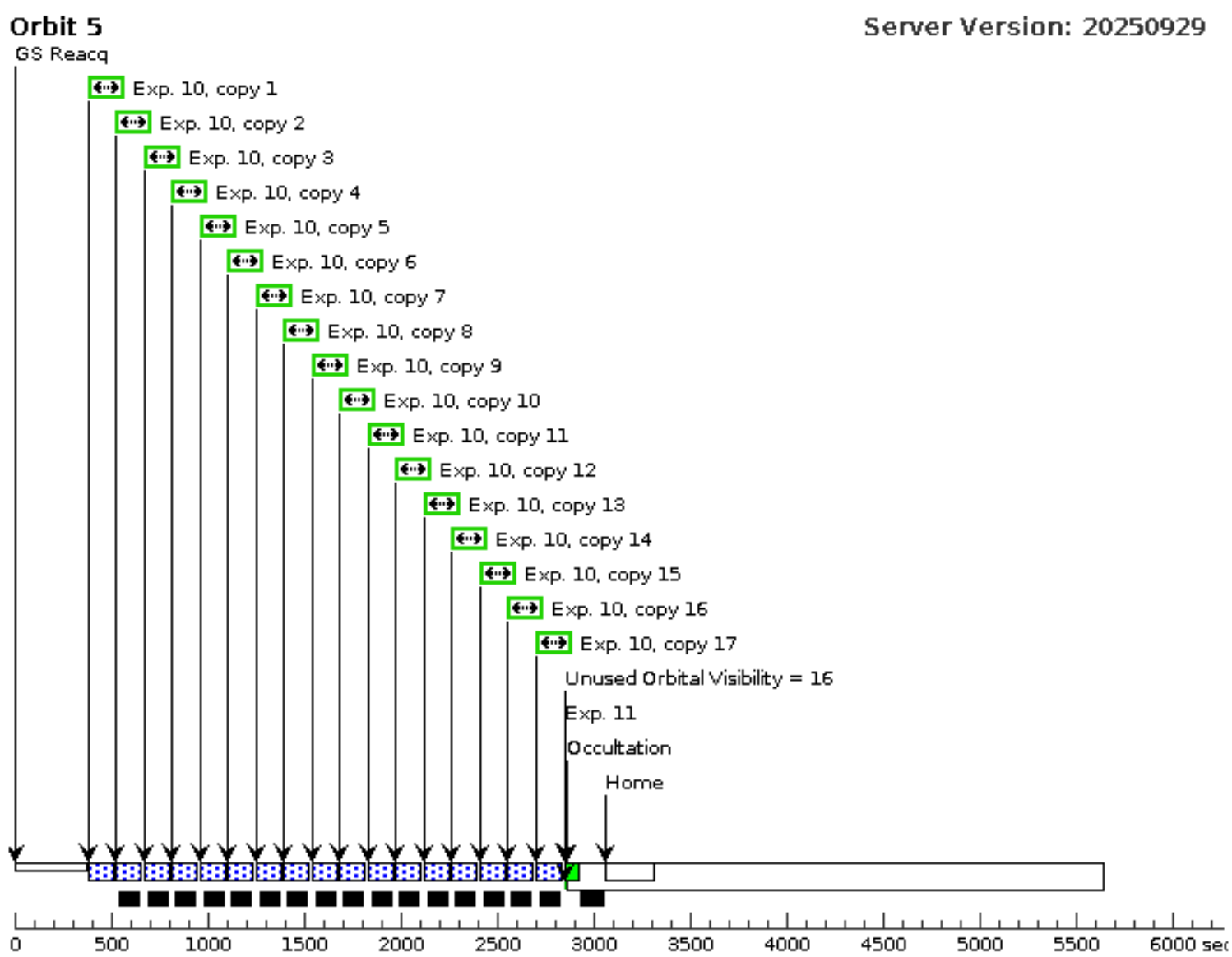
500
1000
1500
2000
2500
3000
3500
4000
4500
5000
5500
6000 sec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Exp. 10, copy 12
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Exp. 10, copy 14
Exp. 10, copy 15
Exp. 10, copy 16
Exp. 10, copy 17
Unused Orbital Visibility = 16
Exp. 11
Occultation
Home
0
500
1000
1500
2000
2500
3000
3500
4000
4500
5000
5500
6000 sec

Visit

Proposal 18108, KELT-17b/NUV/Transit 2 (12), implementation Thu Feb 26 16:01:28 GMT 2026

Diagnostic Status: Warning

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

Special Requirements: SCHED 100%; Period 3.08017985 D AND ZERO-PHASE HJD2459440.791304

Comments: Ephemeris from Kokori+2023. Transit midpoint uncertainty by January 2026 is ~30 seconds.

Diagnostics

(KELT-17b/NUV/Transit 2 (12)) Warning (Orbit Planner): ORBITAL VISIBILITY OVERRUN

Fixed Targets

#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(3)	KELT-17	RA: 08 22 28.2047 (125.6175196d) Dec: +13 44 7.14 (13.73532d) Equinox: J2000	Proper Motion RA: -25.381 mas/yr Proper Motion Dec: -1.9549999251466943 mas/yr Parallax: 0.0043907" Epoch of Position: 2000	V=9.23	Reference Frame: ICRS

Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.

SIMBAD listed proper motion for this target. When retrieving targets with PM from SIMBAD, APT requests the coordinates be calculated with an epoch of the year 2000. Do not modify this epoch. Always review coordinates using the Target Confirmation tool, which graphically displays the PM.
Category=EXT-STAR
Description=[A4-A9 V-IV, EXTRA-SOLAR PLANETARY SYSTEM]
Extended=NO

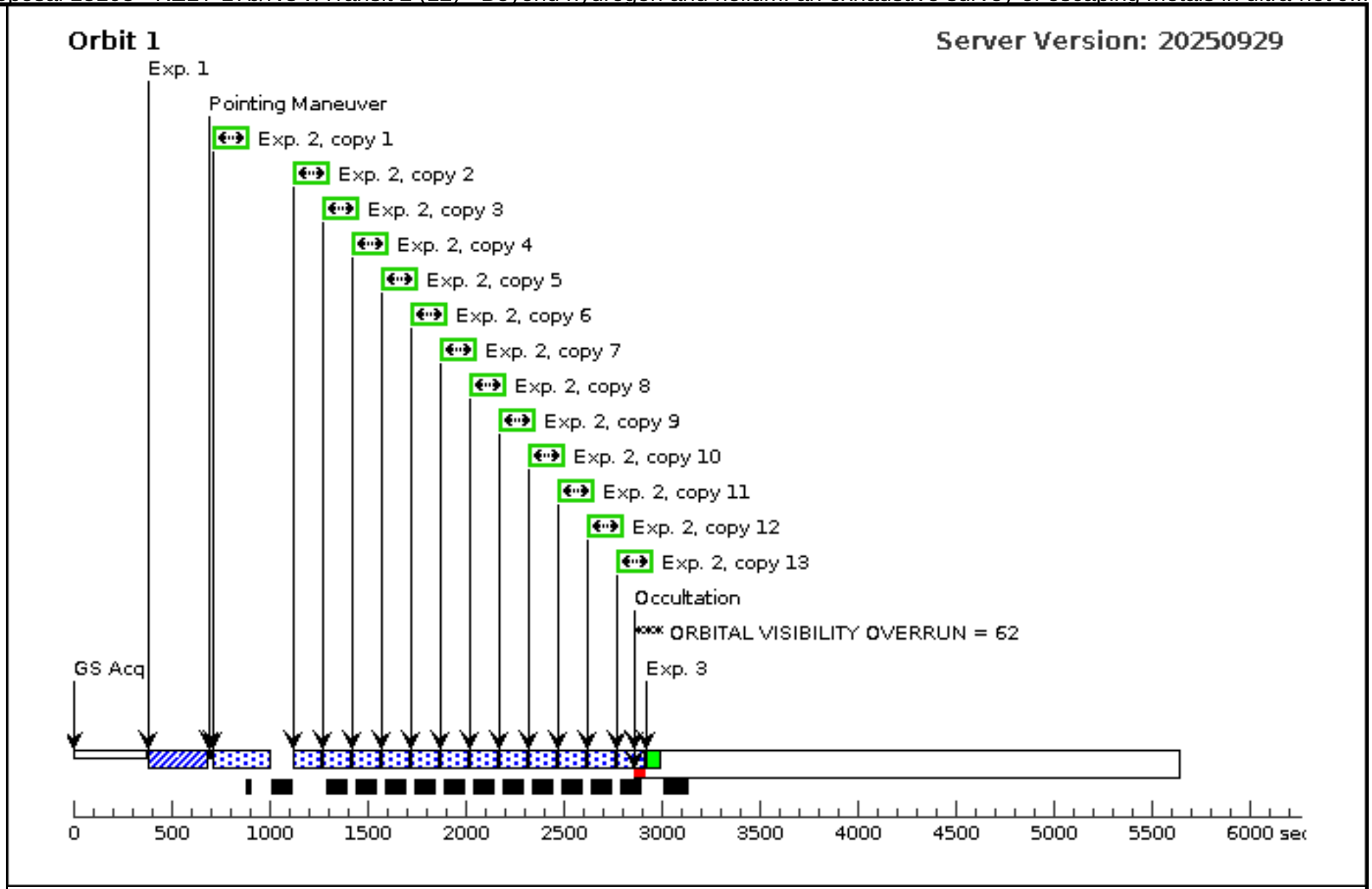
Exposures

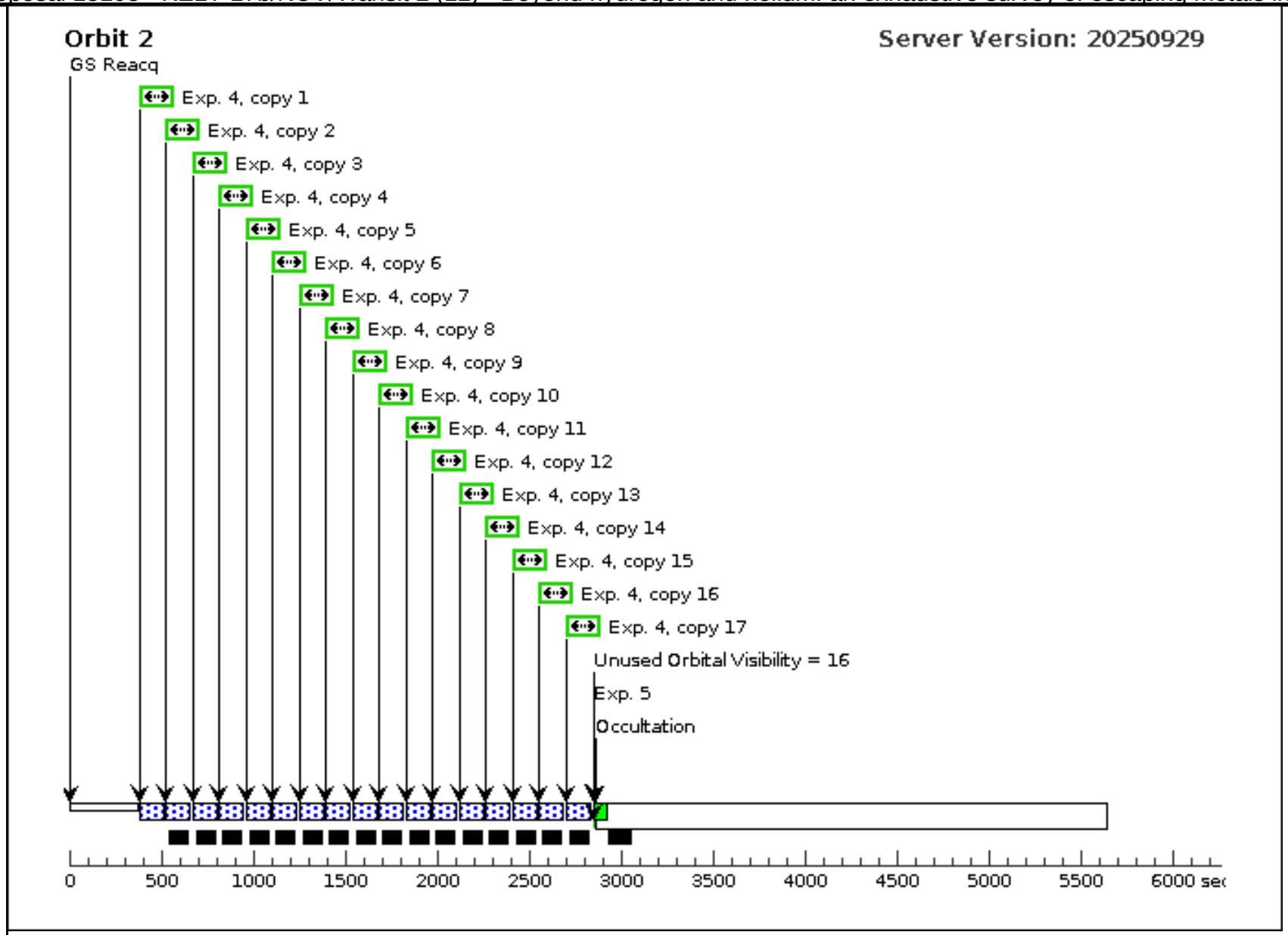
#	Label (ETC Run)	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
1	ACQ (STIS.ta.2023812)	(3) KELT-17	STIS/CCD, ACQ, F25ND3	MIRROR		PHASE 0.94768332 79448492 TO 0.9612 106765724518		1 Secs (1 Secs) *[==>]*	***[1]***
2	SCI/ACCUM (STIS.sp.2023824)	(3) KELT-17	STIS/NUV-MAMA, ACCUM, 6X0.2	E230M 2707 A	WAVECAL=NO			120 Secs X 13 (1638 Secs) *[==>126.0 Secs (Copy 1)]* *[==>126.0 Secs (Copy 2)]* *[==>126.0 Secs (Copy 3)]* *[==>126.0 Secs (Copy 4)]* *[==>126.0 Secs (Copy 5)]* *[==>126.0 Secs (Copy 6)]* *[==>126.0 Secs (Copy 7)]* *[==>126.0 Secs (Copy 8)]* *[==>126.0 Secs (Copy 9)]* *[==>126.0 Secs (Copy 10)]* *[==>126.0 Secs (Copy 11)]* *[==>126.0 Secs (Copy 12)]* *[==>126.0 Secs (Copy 13)]*	***[1]***
3	GO-WAVE CAL	WAVE	STIS/NUV-MAMA, ACCUM, 6X0.2	E230M 2707 A				*[==>]*	***[1]***
4	SCI/ACCUM (STIS.sp.2023824)	(3) KELT-17	STIS/NUV-MAMA, ACCUM, 6X0.2	E230M 2707 A	WAVECAL=NO			120 Secs X 17 (2057 Secs) *[==>121.0 Secs (Copy 1)]* *[==>121.0 Secs (Copy 2)]* *[==>121.0 Secs (Copy 3)]* *[==>121.0 Secs (Copy 4)]* *[==>121.0 Secs (Copy 5)]* *[==>121.0 Secs (Copy 6)]* *[==>121.0 Secs (Copy 7)]* *[==>121.0 Secs (Copy 8)]* *[==>121.0 Secs (Copy 9)]* *[==>121.0 Secs (Copy 10)]* *[==>121.0 Secs (Copy 11)]* *[==>121.0 Secs (Copy 12)]* *[==>121.0 Secs (Copy 13)]* *[==>121.0 Secs (Copy 14)]* *[==>121.0 Secs (Copy 15)]* *[==>121.0 Secs (Copy 16)]* *[==>121.0 Secs (Copy 17)]*	***[2]***
5	GO-WAVE CAL	WAVE	STIS/NUV-MAMA, ACCUM, 6X0.2	E230M 2707 A				*[==>]*	***[2]***

	6	SCI/ACCUM (STIS.sp.2023824)	(3) KELT-17	STIS/NUV-MAMA, ACCUM, 6X0.2	E230M 2707 A	WAVECAL=NO	120 Secs X 17 (2057 Secs) *[==>121.0 Secs (Copy 1)]* *[==>121.0 Secs (Copy 2)]* *[==>121.0 Secs (Copy 3)]* *[==>121.0 Secs (Copy 4)]* *[==>121.0 Secs (Copy 5)]* *[==>121.0 Secs (Copy 6)]* *[==>121.0 Secs (Copy 7)]* *[==>121.0 Secs (Copy 8)]* *[==>121.0 Secs (Copy 9)]* *[==>121.0 Secs (Copy 10)]* *[==>121.0 Secs (Copy 11)]* *[==>121.0 Secs (Copy 12)]* *[==>121.0 Secs (Copy 13)]* *[==>121.0 Secs (Copy 14)]* *[==>121.0 Secs (Copy 15)]* *[==>121.0 Secs (Copy 16)]* *[==>121.0 Secs (Copy 17)]*	***[3]***
	7	GO-WAVE CAL	WAVE	STIS/NUV-MAMA, ACCUM, 6X0.2	E230M 2707 A		*[==>]*	***[3]***
	8	SCI/ACCUM (STIS.sp.2023824)	(3) KELT-17	STIS/NUV-MAMA, ACCUM, 6X0.2	E230M 2707 A	WAVECAL=NO	120 Secs X 17 (2057 Secs) *[==>121.0 Secs (Copy 1)]* *[==>121.0 Secs (Copy 2)]* *[==>121.0 Secs (Copy 3)]* *[==>121.0 Secs (Copy 4)]* *[==>121.0 Secs (Copy 5)]* *[==>121.0 Secs (Copy 6)]* *[==>121.0 Secs (Copy 7)]* *[==>121.0 Secs (Copy 8)]* *[==>121.0 Secs (Copy 9)]* *[==>121.0 Secs (Copy 10)]* *[==>121.0 Secs (Copy 11)]* *[==>121.0 Secs (Copy 12)]* *[==>121.0 Secs (Copy 13)]* *[==>121.0 Secs (Copy 14)]* *[==>121.0 Secs (Copy 15)]* *[==>121.0 Secs (Copy 16)]* *[==>121.0 Secs (Copy 17)]*	***[4]***
	9	GO-WAVE CAL	WAVE	STIS/NUV-MAMA, ACCUM, 6X0.2	E230M 2707 A		*[==>]*	***[4]***

	10	SCI/ACCUM (STIS.sp.2023824)	(3) KELT-17	STIS/NUV-MAMA, ACCUM, 6X0.2	E230M 2707 A	WAVECAL=NO	120 Secs X 17 (2057 Secs) *[==>121.0 Secs (Copy 1)]* *[==>121.0 Secs (Copy 2)]* *[==>121.0 Secs (Copy 3)]* *[==>121.0 Secs (Copy 4)]* *[==>121.0 Secs (Copy 5)]* *[==>121.0 Secs (Copy 6)]* *[==>121.0 Secs (Copy 7)]* *[==>121.0 Secs (Copy 8)]* *[==>121.0 Secs (Copy 9)]* *[==>121.0 Secs (Copy 10)]* *[==>121.0 Secs (Copy 11)]* *[==>121.0 Secs (Copy 12)]* *[==>121.0 Secs (Copy 13)]* *[==>121.0 Secs (Copy 14)]* *[==>121.0 Secs (Copy 15)]* *[==>121.0 Secs (Copy 16)]* *[==>121.0 Secs (Copy 17)]*	***[5]***
	11	GO-WAVE CAL	WAVE	STIS/NUV-MAMA, ACCUM, 6X0.2	E230M 2707 A		*[==>]*	***[5]***

Orbit Structure

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Exp. 4, copy 13
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Exp. 4, copy 16
Exp. 4, copy 17
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5000
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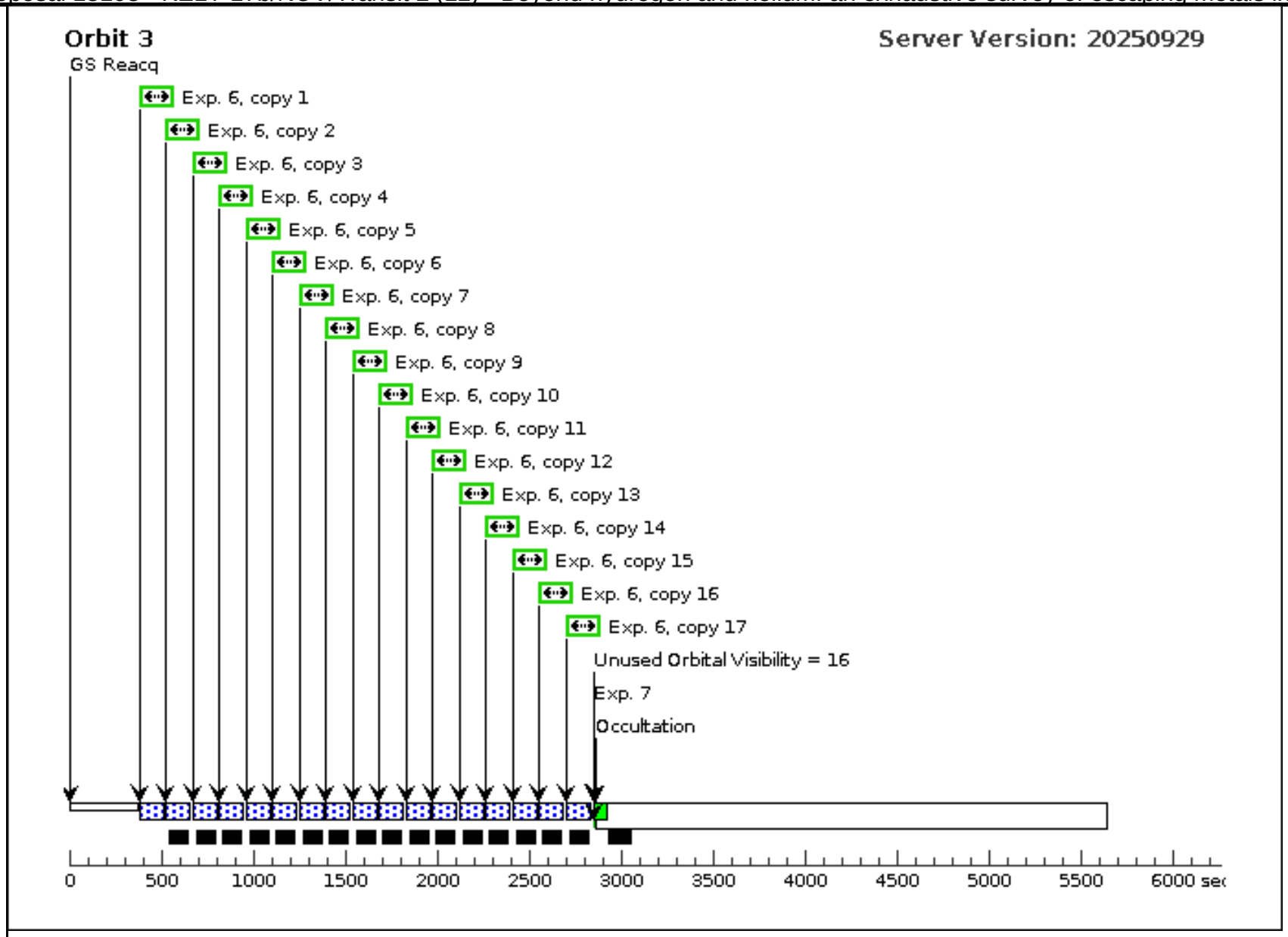
6000 sec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Exp. 6, copy 11
Exp. 6, copy 12
Exp. 6, copy 13
Exp. 6, copy 14
Exp. 6, copy 15
Exp. 6, copy 16
Exp. 6, copy 17
Unused Orbital Visibility = 16
Exp. 7
Occultation
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1000
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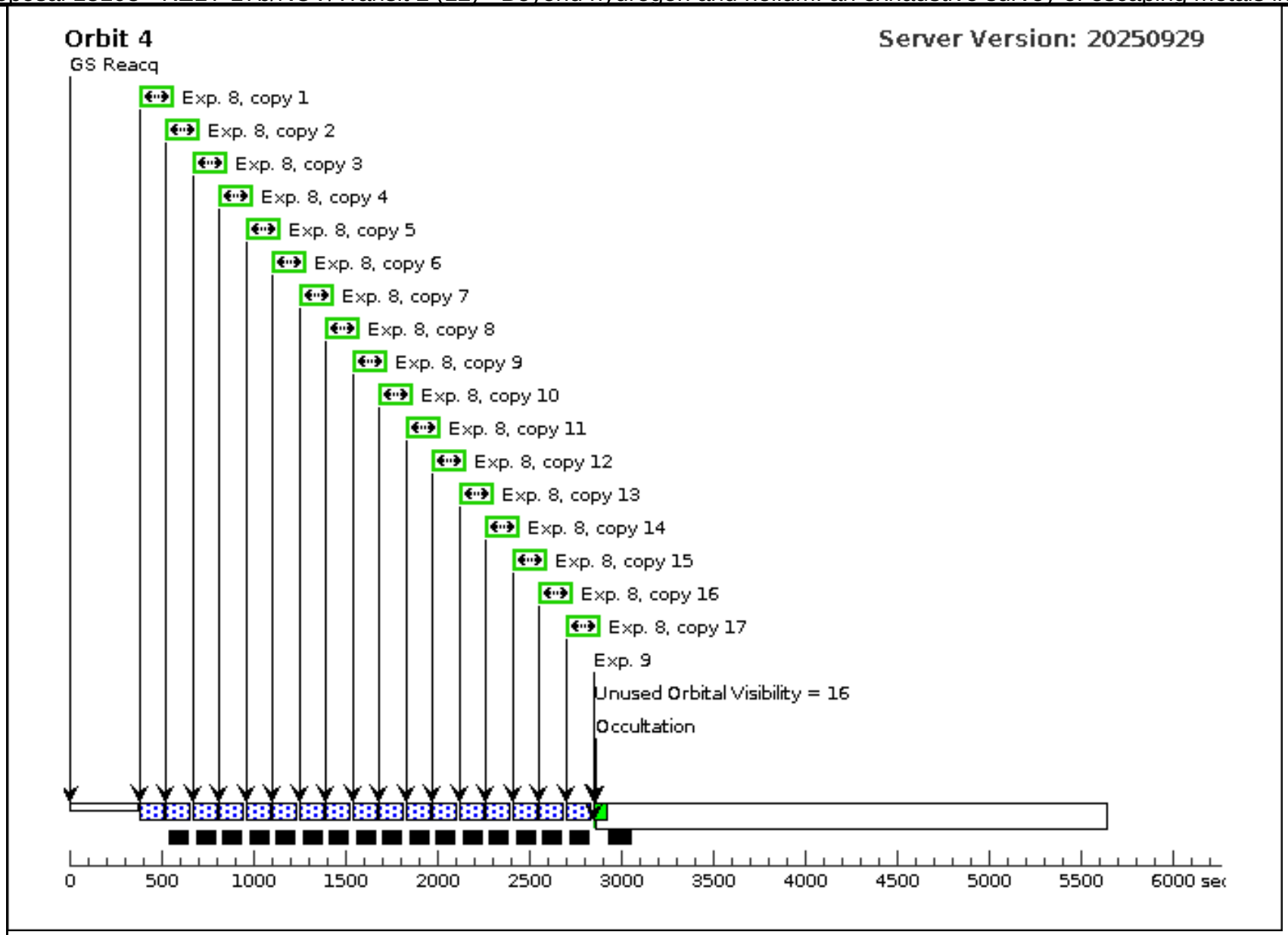
6000 sec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Exp. 8, copy 12
Exp. 8, copy 13
Exp. 8, copy 14
Exp. 8, copy 15
Exp. 8, copy 16
Exp. 8, copy 17
Exp. 9
Unused Orbital Visibility = 16
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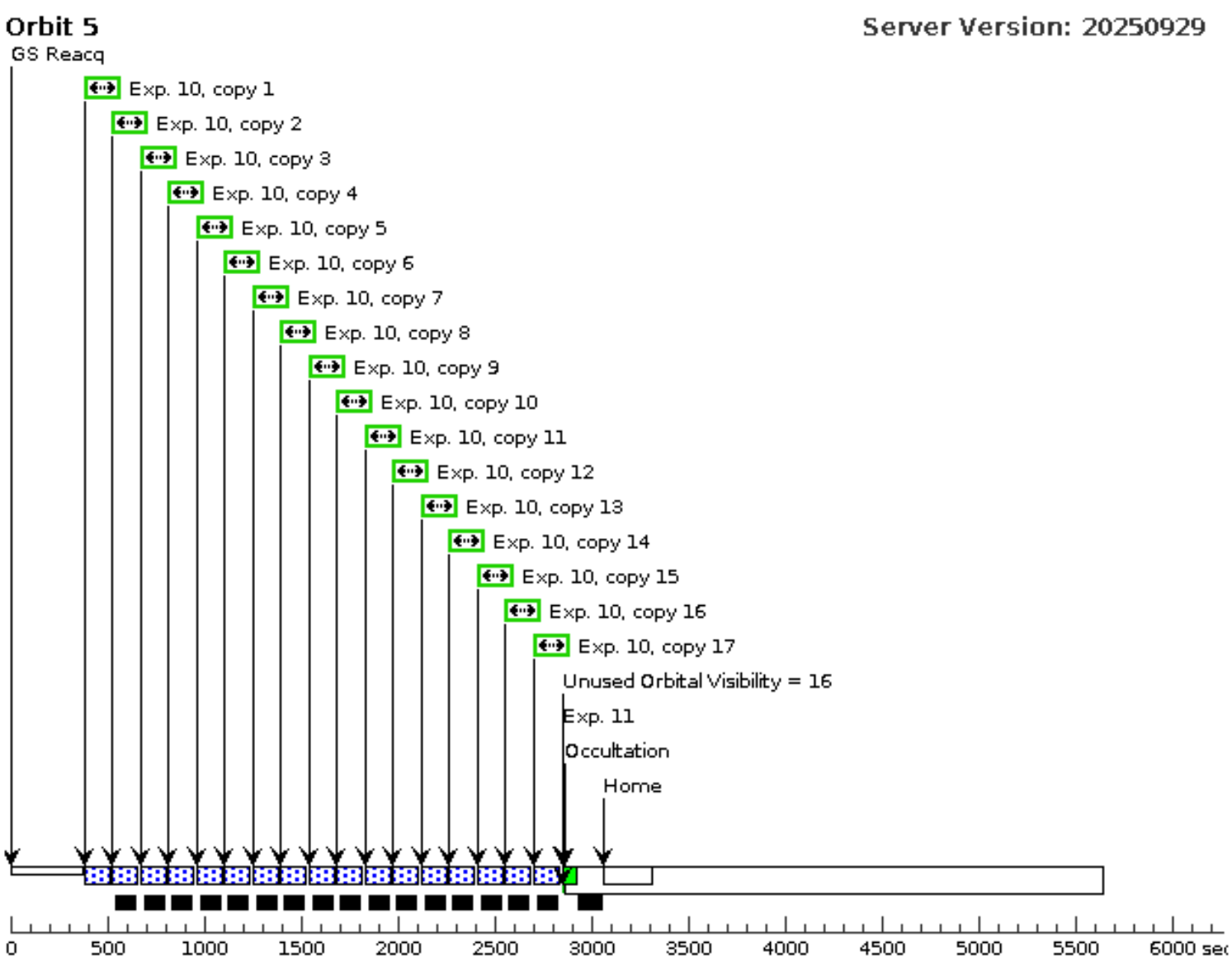
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Exp. 10, copy 12
Exp. 10, copy 13
Exp. 10, copy 14
Exp. 10, copy 15
Exp. 10, copy 16
Exp. 10, copy 17
Unused Orbital Visibility = 16
Exp. 11
Occultation
Home
0
500
1000
1500
2000
2500
3000
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4000
4500
5000
5500
6000 sec

Visit

Proposal 18108, KELT-9b/FUV/Transit 1 (13), implementation Thu Feb 26 16:01:28 GMT 2026

Diagnostic Status: No Diagnostics

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

Special Requirements: SCHED 100%; Period 1.48111874 D AND ZERO-PHASE HJD2458955.970923

Comments: Ephemeris from Kokori+2023. Transit midpoint uncertainty by January 2026 is 0.36 minutes.

Fixed Targets

#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(2)	KELT-9	RA: 20 31 26.3534 (307.8598058d)	Proper Motion RA: 16.717 mas/yr	V=7.56	Reference Frame: ICRS
		Dec: +39 56 19.77 (39.93882d)	Proper Motion Dec: 20.961 mas/yr		
		Equinox: J2000	Parallax: 0.0048258"		
			Epoch of Position: 2000		

Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.

SIMBAD listed proper motion for this target. When retrieving targets with PM from SIMBAD, APT requests the coordinates be calculated with an epoch of the year 2000. Do not modify this epoch. Always review coordinates using the Target Confirmation tool, which graphically displays the PM.
Category=EXT-STAR
Description=[A0-A3 V-IV, EXTRA-SOLAR PLANETARY SYSTEM]
Extended=NO

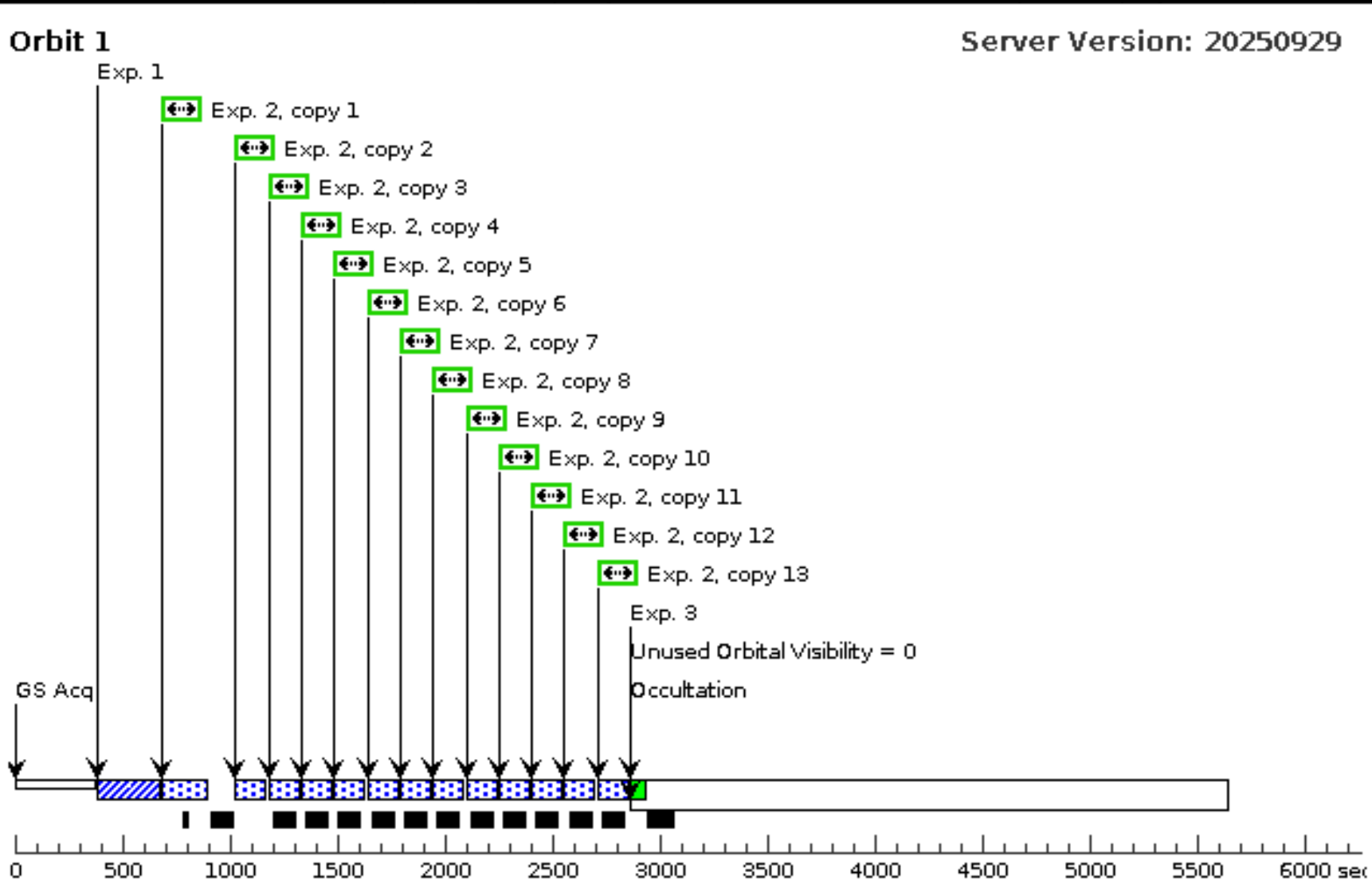
Exposures

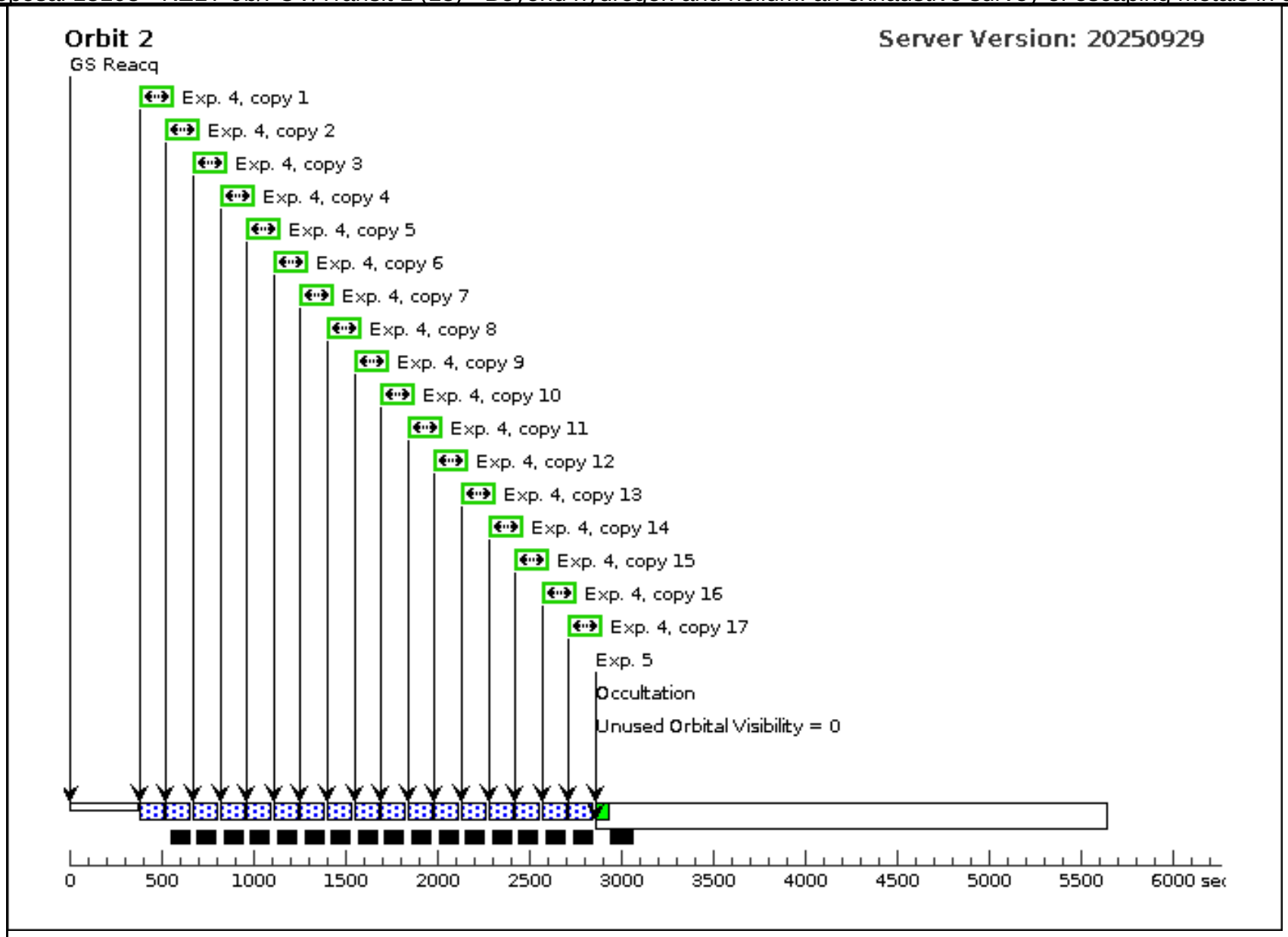
#	Label (ETC Run)	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
1	ACQ (STIS.ta.2023853)	(2) KELT-9	STIS/CCD, ACQ, F25ND3	MIRROR		PHASE 0.85487286 34040308 TO 0.8830 046611012968		0.5 Secs (0.5 Secs) *[==>]*	*[1]*
2	SCI (STIS.sp.2023873)	(2) KELT-9	STIS/FUV-MAMA, ACCUM, 0.2X0.2	E140M 1425 A	WAVECAL=NO			120 Secs X 13 (1677 Secs) *[==>129.0 Secs (Copy 1)]* *[==>129.0 Secs (Copy 2)]* *[==>129.0 Secs (Copy 3)]* *[==>129.0 Secs (Copy 4)]* *[==>129.0 Secs (Copy 5)]* *[==>129.0 Secs (Copy 6)]* *[==>129.0 Secs (Copy 7)]* *[==>129.0 Secs (Copy 8)]* *[==>129.0 Secs (Copy 9)]* *[==>129.0 Secs (Copy 10)]* *[==>129.0 Secs (Copy 11)]* *[==>129.0 Secs (Copy 12)]* *[==>129.0 Secs (Copy 13)]*	*[1]*
3	GO-WAVE CAL	WAVE	STIS/FUV-MAMA, ACCUM, 0.2X0.2	E140M 1425 A				*[==>]*	*[1]*
4	SCI (STIS.sp.2023873)	(2) KELT-9	STIS/FUV-MAMA, ACCUM, 0.2X0.2	E140M 1425 A	WAVECAL=NO			120 Secs X 17 (2074 Secs) *[==>122.0 Secs (Copy 1)]* *[==>122.0 Secs (Copy 2)]* *[==>122.0 Secs (Copy 3)]* *[==>122.0 Secs (Copy 4)]* *[==>122.0 Secs (Copy 5)]* *[==>122.0 Secs (Copy 6)]* *[==>122.0 Secs (Copy 7)]* *[==>122.0 Secs (Copy 8)]* *[==>122.0 Secs (Copy 9)]* *[==>122.0 Secs (Copy 10)]* *[==>122.0 Secs (Copy 11)]* *[==>122.0 Secs (Copy 12)]* *[==>122.0 Secs (Copy 13)]* *[==>122.0 Secs (Copy 14)]* *[==>122.0 Secs (Copy 15)]* *[==>122.0 Secs (Copy 16)]* *[==>122.0 Secs (Copy 17)]*	*[2]*
5	GO-WAVE CAL	WAVE	STIS/FUV-MAMA, ACCUM, 0.2X0.2	E140M 1425 A				*[==>]*	*[2]*

	6	SCI (STIS.sp.2023873)	(2) KELT-9	STIS/FUV-MAMA, ACCUM, 0.2X0.2	E140M 1425 A	WAVECAL=NO	120 Secs X 17 (2074 Secs) *[==>122.0 Secs (Copy 1)]* *[==>122.0 Secs (Copy 2)]* *[==>122.0 Secs (Copy 3)]* *[==>122.0 Secs (Copy 4)]* *[==>122.0 Secs (Copy 5)]* *[==>122.0 Secs (Copy 6)]* *[==>122.0 Secs (Copy 7)]* *[==>122.0 Secs (Copy 8)]* *[==>122.0 Secs (Copy 9)]* *[==>122.0 Secs (Copy 10)]* *[==>122.0 Secs (Copy 11)]* *[==>122.0 Secs (Copy 12)]* *[==>122.0 Secs (Copy 13)]* *[==>122.0 Secs (Copy 14)]* *[==>122.0 Secs (Copy 15)]* *[==>122.0 Secs (Copy 16)]* *[==>122.0 Secs (Copy 17)]*	***[3]***
	7	GO-WAVE CAL	WAVE	STIS/FUV-MAMA, ACCUM, 0.2X0.2	E140M 1425 A		*[==>]*	***[3]***
	8	SCI (STIS.sp.2023873)	(2) KELT-9	STIS/FUV-MAMA, ACCUM, 0.2X0.2	E140M 1425 A	WAVECAL=NO	120 Secs X 17 (2074 Secs) *[==>122.0 Secs (Copy 1)]* *[==>122.0 Secs (Copy 2)]* *[==>122.0 Secs (Copy 3)]* *[==>122.0 Secs (Copy 4)]* *[==>122.0 Secs (Copy 5)]* *[==>122.0 Secs (Copy 6)]* *[==>122.0 Secs (Copy 7)]* *[==>122.0 Secs (Copy 8)]* *[==>122.0 Secs (Copy 9)]* *[==>122.0 Secs (Copy 10)]* *[==>122.0 Secs (Copy 11)]* *[==>122.0 Secs (Copy 12)]* *[==>122.0 Secs (Copy 13)]* *[==>122.0 Secs (Copy 14)]* *[==>122.0 Secs (Copy 15)]* *[==>122.0 Secs (Copy 16)]* *[==>122.0 Secs (Copy 17)]*	***[4]***
	9	GO-WAVE CAL	WAVE	STIS/FUV-MAMA, ACCUM, 0.2X0.2	E140M 1425 A		*[==>]*	***[4]***

	10	SCI (STIS.sp.2023873)	(2) KELT-9	STIS/FUV-MAMA, ACCUM, 0.2X0.2	E140M 1425 A	WAVECAL=NO	120 Secs X 17 (2074 Secs) *[==>122.0 Secs (Copy 1)]* *[==>122.0 Secs (Copy 2)]* *[==>122.0 Secs (Copy 3)]* *[==>122.0 Secs (Copy 4)]* *[==>122.0 Secs (Copy 5)]* *[==>122.0 Secs (Copy 6)]* *[==>122.0 Secs (Copy 7)]* *[==>122.0 Secs (Copy 8)]* *[==>122.0 Secs (Copy 9)]* *[==>122.0 Secs (Copy 10)]* *[==>122.0 Secs (Copy 11)]* *[==>122.0 Secs (Copy 12)]* *[==>122.0 Secs (Copy 13)]* *[==>122.0 Secs (Copy 14)]* *[==>122.0 Secs (Copy 15)]* *[==>122.0 Secs (Copy 16)]* *[==>122.0 Secs (Copy 17)]*	***[5]***
	11	GO-WAVE CAL	WAVE	STIS/FUV-MAMA, ACCUM, 0.2X0.2	E140M 1425 A		*[==>]*	***[5]***

Orbit Structure

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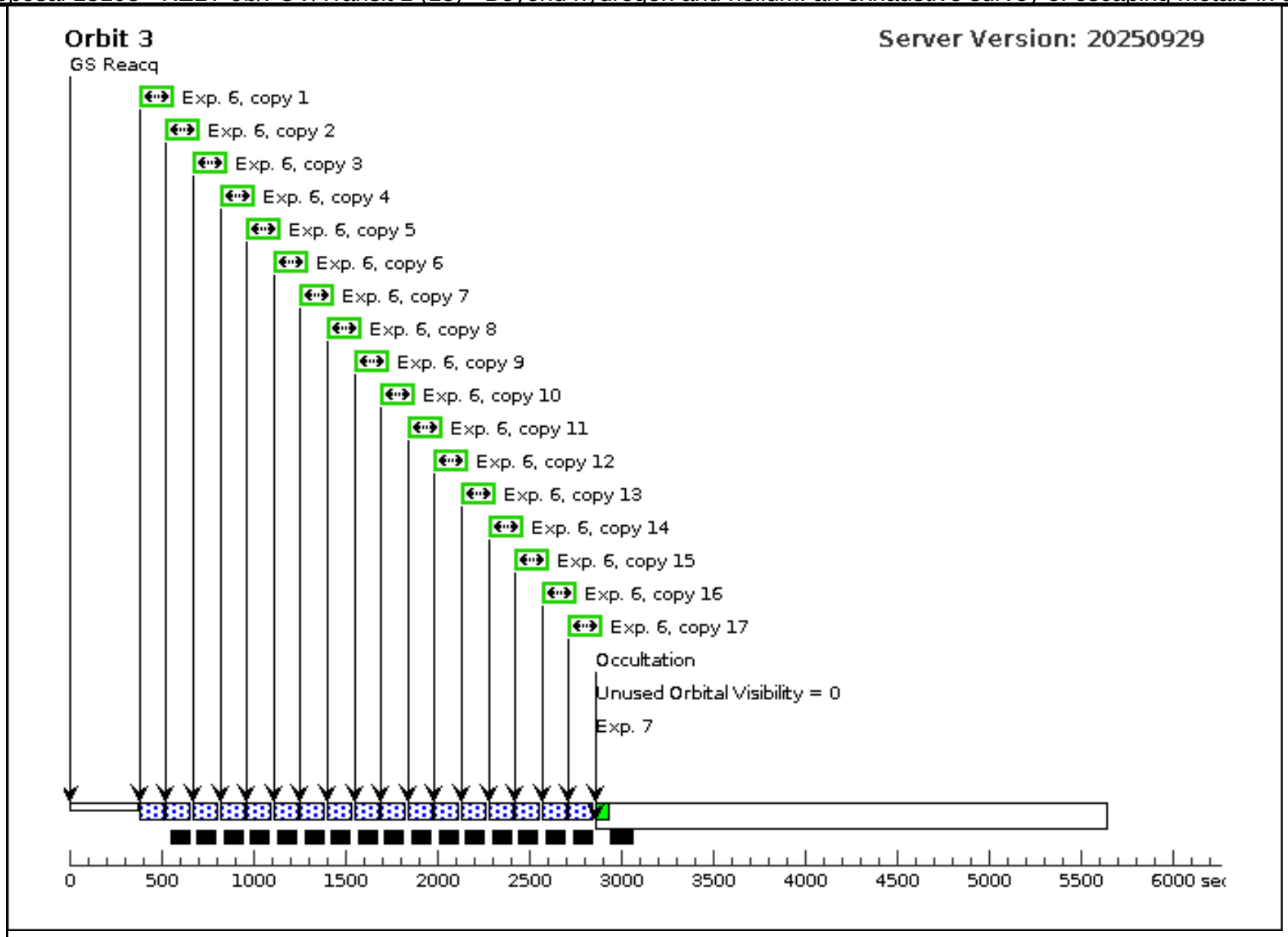
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Exp. 6, copy 13
Exp. 6, copy 14
Exp. 6, copy 15
Exp. 6, copy 16
Exp. 6, copy 17
Occultation
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1500
2000
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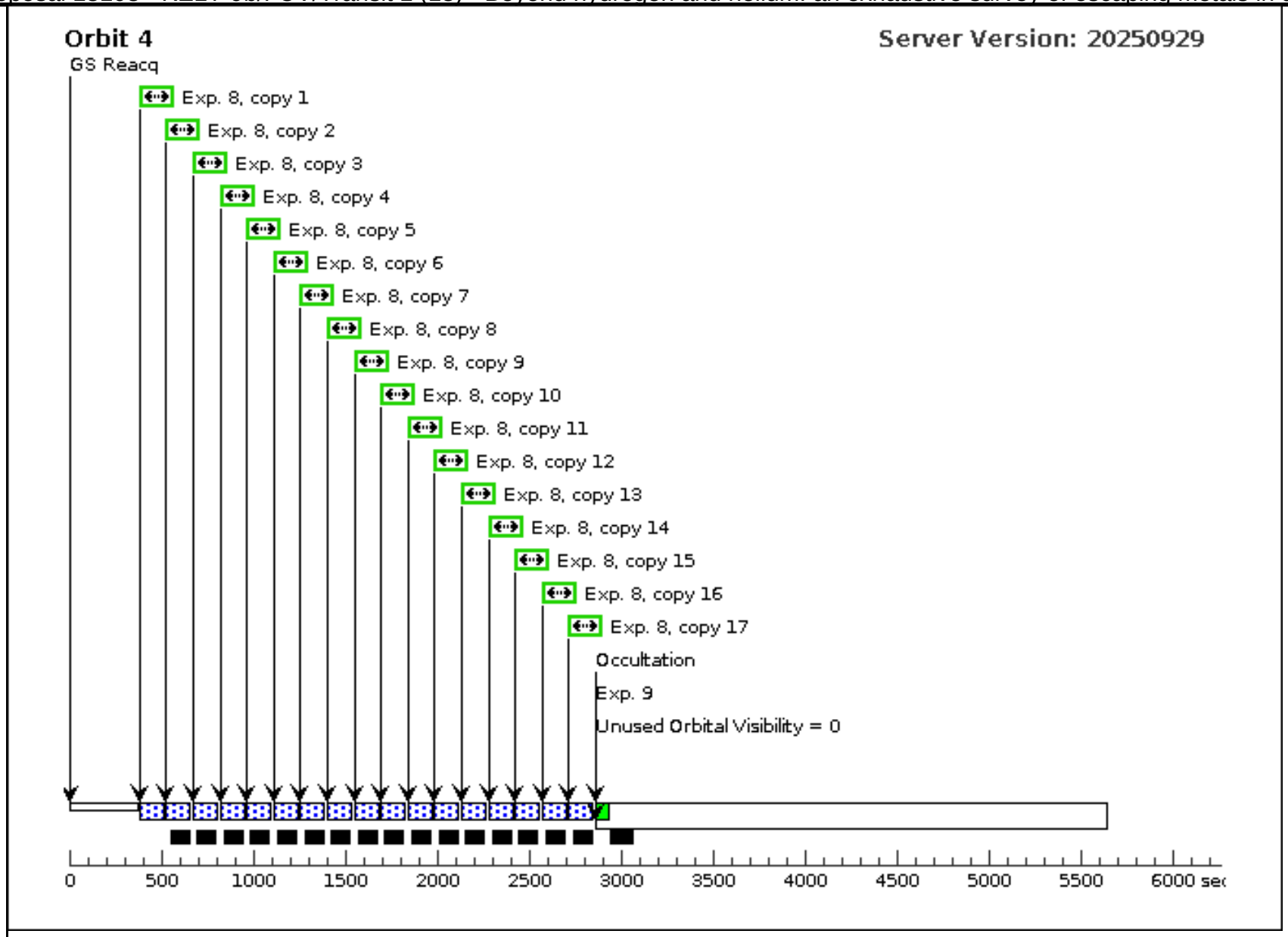
3000
3500
4000
4500
5000
5500
6000 sec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Exp. 8, copy 13
Exp. 8, copy 14
Exp. 8, copy 15
Exp. 8, copy 16
Exp. 8, copy 17
Occultation
Exp. 9
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3000
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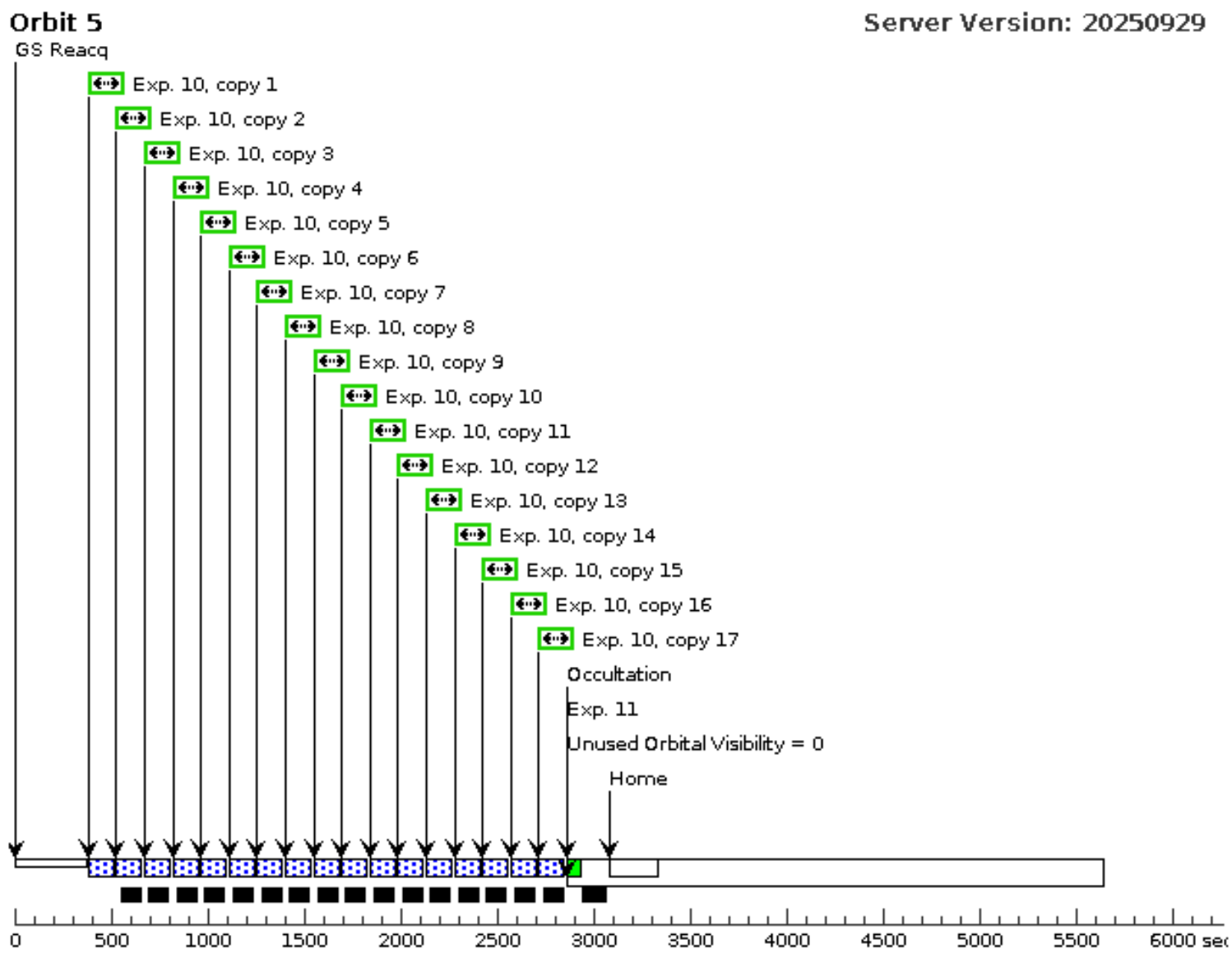
5000
5500
6000 sec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Exp. 10, copy 11
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Exp. 10, copy 13
Exp. 10, copy 14
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Exp. 10, copy 17
Occultation
Exp. 11
Unused Orbital Visibility = 0
Home
0
500
1000
1500
2000
2500
3000
3500
4000
4500
5000
5500
6000 sec

Visit

Proposal 18108, KELT-9b/FUV/Transit 2 (14), implementation Thu Feb 26 16:01:28 GMT 2026

Diagnostic Status: No Diagnostics

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

Special Requirements: SCHED 100%; Period 1.48111874 D AND ZERO-PHASE HJD2458955.970923

Comments: Ephemeris from Kokori+2023. Transit midpoint uncertainty by January 2026 is 0.36 minutes.

Fixed Targets

#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(2)	KELT-9	RA: 20 31 26.3534 (307.8598058d)	Proper Motion RA: 16.717 mas/yr	V=7.56	Reference Frame: ICRS
		Dec: +39 56 19.77 (39.93882d)	Proper Motion Dec: 20.961 mas/yr		
		Equinox: J2000	Parallax: 0.0048258"		
			Epoch of Position: 2000		

Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.

SIMBAD listed proper motion for this target. When retrieving targets with PM from SIMBAD, APT requests the coordinates be calculated with an epoch of the year 2000. Do not modify this epoch. Always review coordinates using the Target Confirmation tool, which graphically displays the PM.
Category=EXT-STAR
Description=[A0-A3 V-IV, EXTRA-SOLAR PLANETARY SYSTEM]
Extended=NO

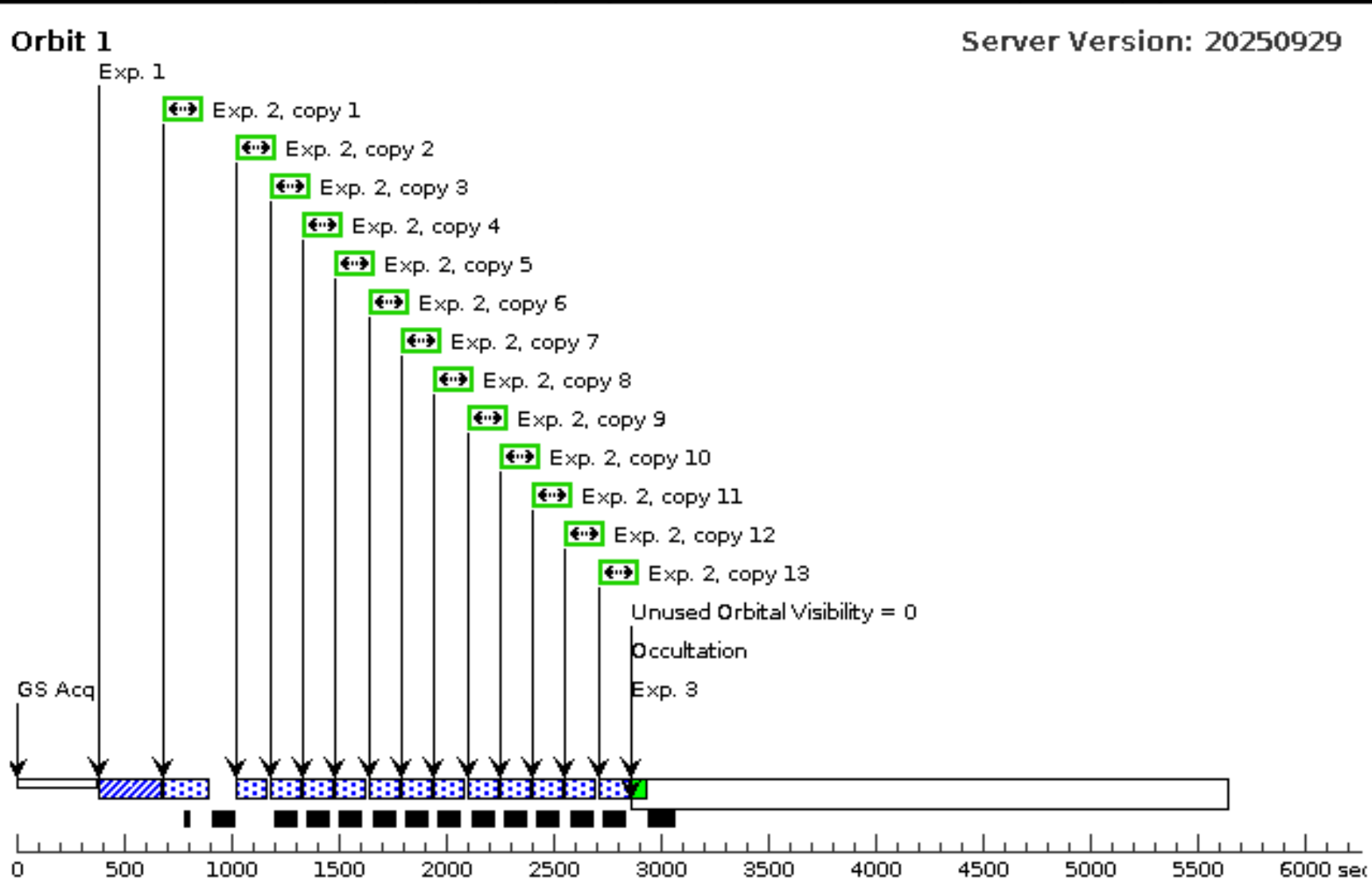
Exposures

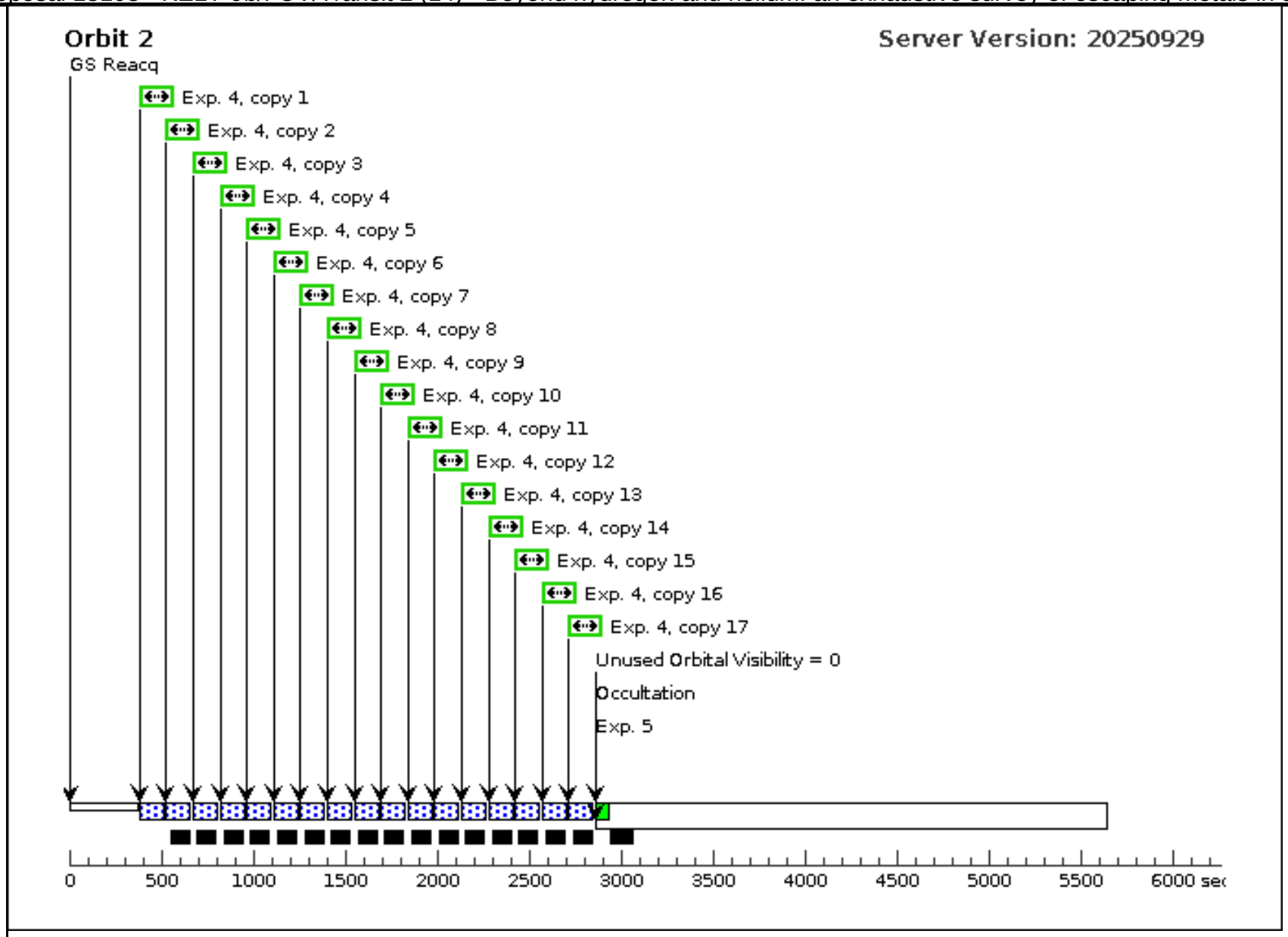
#	Label (ETC Run)	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
1	ACQ (STIS.ta.2023853)	(2) KELT-9	STIS/CCD, ACQ, F25ND3	MIRROR		PHASE 0.87690581 28283473 TO 0.9050376105256134		0.5 Secs (0.5 Secs) *[==>]*	*[1]*
2	SCI (STIS.sp.2023873)	(2) KELT-9	STIS/FUV-MAMA, ACCUM, 0.2X0.2	E140M 1425 A	WAVECAL=NO			120 Secs X 13 (1677 Secs) *[==>129.0 Secs (Copy 1)]* *[==>129.0 Secs (Copy 2)]* *[==>129.0 Secs (Copy 3)]* *[==>129.0 Secs (Copy 4)]* *[==>129.0 Secs (Copy 5)]* *[==>129.0 Secs (Copy 6)]* *[==>129.0 Secs (Copy 7)]* *[==>129.0 Secs (Copy 8)]* *[==>129.0 Secs (Copy 9)]* *[==>129.0 Secs (Copy 10)]* *[==>129.0 Secs (Copy 11)]* *[==>129.0 Secs (Copy 12)]* *[==>129.0 Secs (Copy 13)]*	*[1]*
3	GO-WAVE CAL	WAVE	STIS/FUV-MAMA, ACCUM, 0.2X0.2	E140M 1425 A				*[==>]*	*[1]*
4	SCI (STIS.sp.2023873)	(2) KELT-9	STIS/FUV-MAMA, ACCUM, 0.2X0.2	E140M 1425 A	WAVECAL=NO			120 Secs X 17 (2074 Secs) *[==>122.0 Secs (Copy 1)]* *[==>122.0 Secs (Copy 2)]* *[==>122.0 Secs (Copy 3)]* *[==>122.0 Secs (Copy 4)]* *[==>122.0 Secs (Copy 5)]* *[==>122.0 Secs (Copy 6)]* *[==>122.0 Secs (Copy 7)]* *[==>122.0 Secs (Copy 8)]* *[==>122.0 Secs (Copy 9)]* *[==>122.0 Secs (Copy 10)]* *[==>122.0 Secs (Copy 11)]* *[==>122.0 Secs (Copy 12)]* *[==>122.0 Secs (Copy 13)]* *[==>122.0 Secs (Copy 14)]* *[==>122.0 Secs (Copy 15)]* *[==>122.0 Secs (Copy 16)]* *[==>122.0 Secs (Copy 17)]*	*[2]*
5	GO-WAVE CAL	WAVE	STIS/FUV-MAMA, ACCUM, 0.2X0.2	E140M 1425 A				*[==>]*	*[2]*

	6	SCI (STIS.sp.2023873)	(2) KELT-9	STIS/FUV-MAMA, ACCUM, 0.2X0.2	E140M 1425 A	WAVECAL=NO	120 Secs X 17 (2074 Secs) *[==>122.0 Secs (Copy 1)]* *[==>122.0 Secs (Copy 2)]* *[==>122.0 Secs (Copy 3)]* *[==>122.0 Secs (Copy 4)]* *[==>122.0 Secs (Copy 5)]* *[==>122.0 Secs (Copy 6)]* *[==>122.0 Secs (Copy 7)]* *[==>122.0 Secs (Copy 8)]* *[==>122.0 Secs (Copy 9)]* *[==>122.0 Secs (Copy 10)]* *[==>122.0 Secs (Copy 11)]* *[==>122.0 Secs (Copy 12)]* *[==>122.0 Secs (Copy 13)]* *[==>122.0 Secs (Copy 14)]* *[==>122.0 Secs (Copy 15)]* *[==>122.0 Secs (Copy 16)]* *[==>122.0 Secs (Copy 17)]*	***[3]***
	7	GO-WAVE CAL	WAVE	STIS/FUV-MAMA, ACCUM, 0.2X0.2	E140M 1425 A		*[==>]*	***[3]***
	8	SCI (STIS.sp.2023873)	(2) KELT-9	STIS/FUV-MAMA, ACCUM, 0.2X0.2	E140M 1425 A	WAVECAL=NO	120 Secs X 17 (2074 Secs) *[==>122.0 Secs (Copy 1)]* *[==>122.0 Secs (Copy 2)]* *[==>122.0 Secs (Copy 3)]* *[==>122.0 Secs (Copy 4)]* *[==>122.0 Secs (Copy 5)]* *[==>122.0 Secs (Copy 6)]* *[==>122.0 Secs (Copy 7)]* *[==>122.0 Secs (Copy 8)]* *[==>122.0 Secs (Copy 9)]* *[==>122.0 Secs (Copy 10)]* *[==>122.0 Secs (Copy 11)]* *[==>122.0 Secs (Copy 12)]* *[==>122.0 Secs (Copy 13)]* *[==>122.0 Secs (Copy 14)]* *[==>122.0 Secs (Copy 15)]* *[==>122.0 Secs (Copy 16)]* *[==>122.0 Secs (Copy 17)]*	***[4]***
	9	GO-WAVE CAL	WAVE	STIS/FUV-MAMA, ACCUM, 0.2X0.2	E140M 1425 A		*[==>]*	***[4]***

	10	SCI (STIS.sp.2023873)	(2) KELT-9	STIS/FUV-MAMA, ACCUM, 0.2X0.2	E140M 1425 A	WAVECAL=NO	120 Secs X 17 (2074 Secs) *[==>122.0 Secs (Copy 1)]* *[==>122.0 Secs (Copy 2)]* *[==>122.0 Secs (Copy 3)]* *[==>122.0 Secs (Copy 4)]* *[==>122.0 Secs (Copy 5)]* *[==>122.0 Secs (Copy 6)]* *[==>122.0 Secs (Copy 7)]* *[==>122.0 Secs (Copy 8)]* *[==>122.0 Secs (Copy 9)]* *[==>122.0 Secs (Copy 10)]* *[==>122.0 Secs (Copy 11)]* *[==>122.0 Secs (Copy 12)]* *[==>122.0 Secs (Copy 13)]* *[==>122.0 Secs (Copy 14)]* *[==>122.0 Secs (Copy 15)]* *[==>122.0 Secs (Copy 16)]* *[==>122.0 Secs (Copy 17)]*	***[5]***
	11	GO-WAVE CAL	WAVE	STIS/FUV-MAMA, ACCUM, 0.2X0.2	E140M 1425 A		*[==>]*	***[5]***

Orbit Structure

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Exp. 4, copy 17
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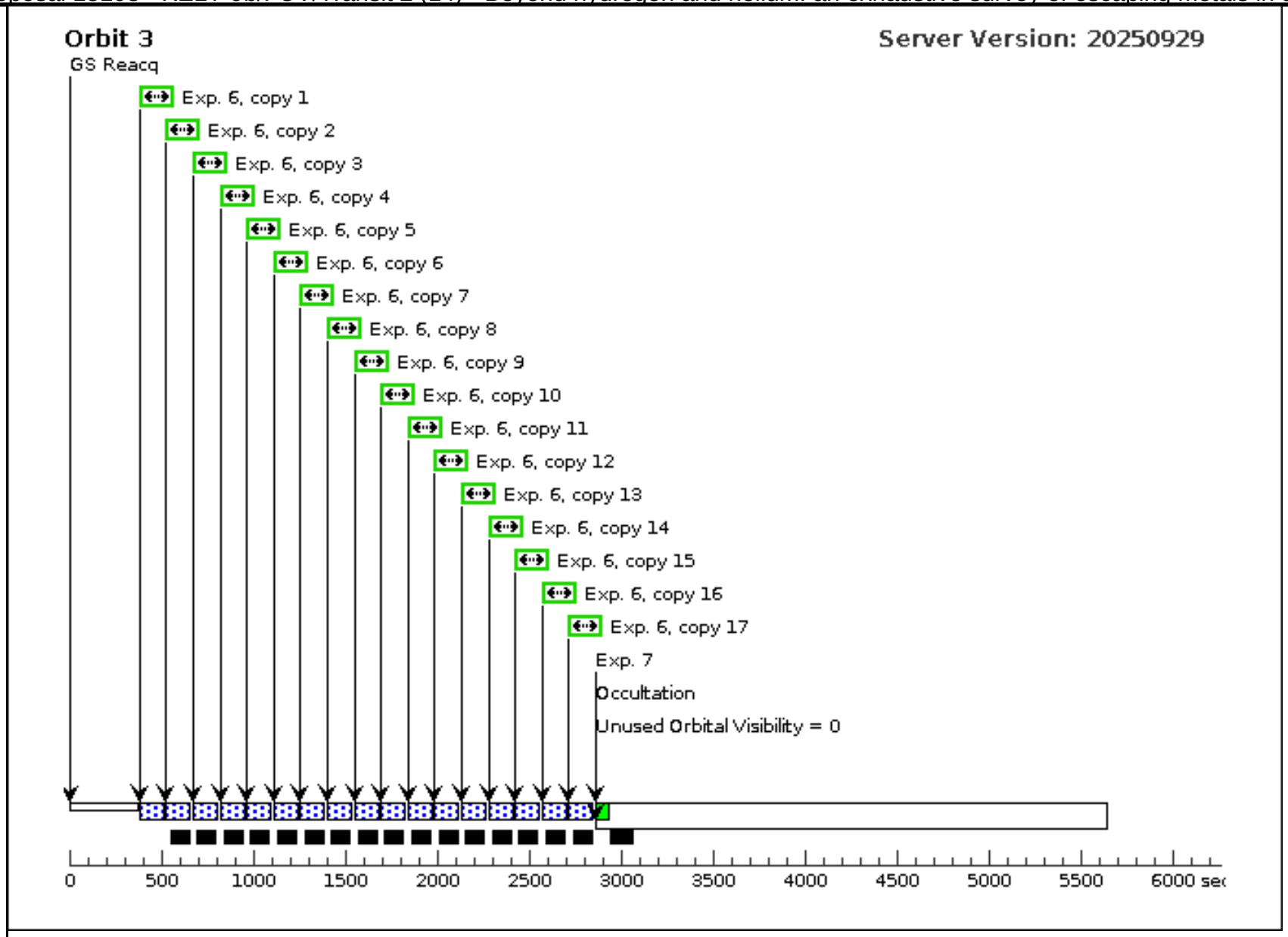
5000
5500
6000 sec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Exp. 6, copy 13
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Exp. 6, copy 15
Exp. 6, copy 16
Exp. 6, copy 17
Exp. 7
Occultation
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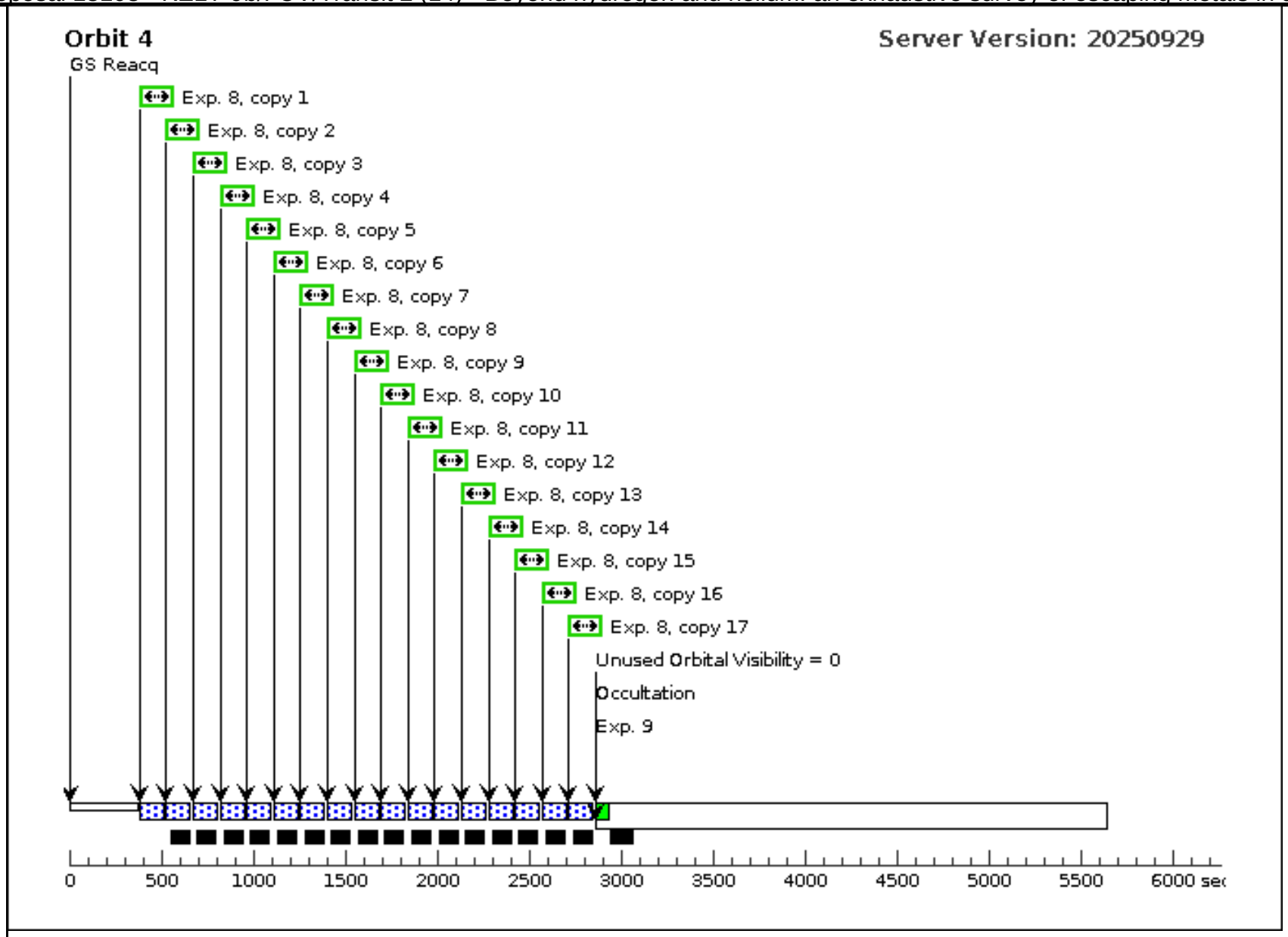
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Exp. 8, copy 16
Exp. 8, copy 17
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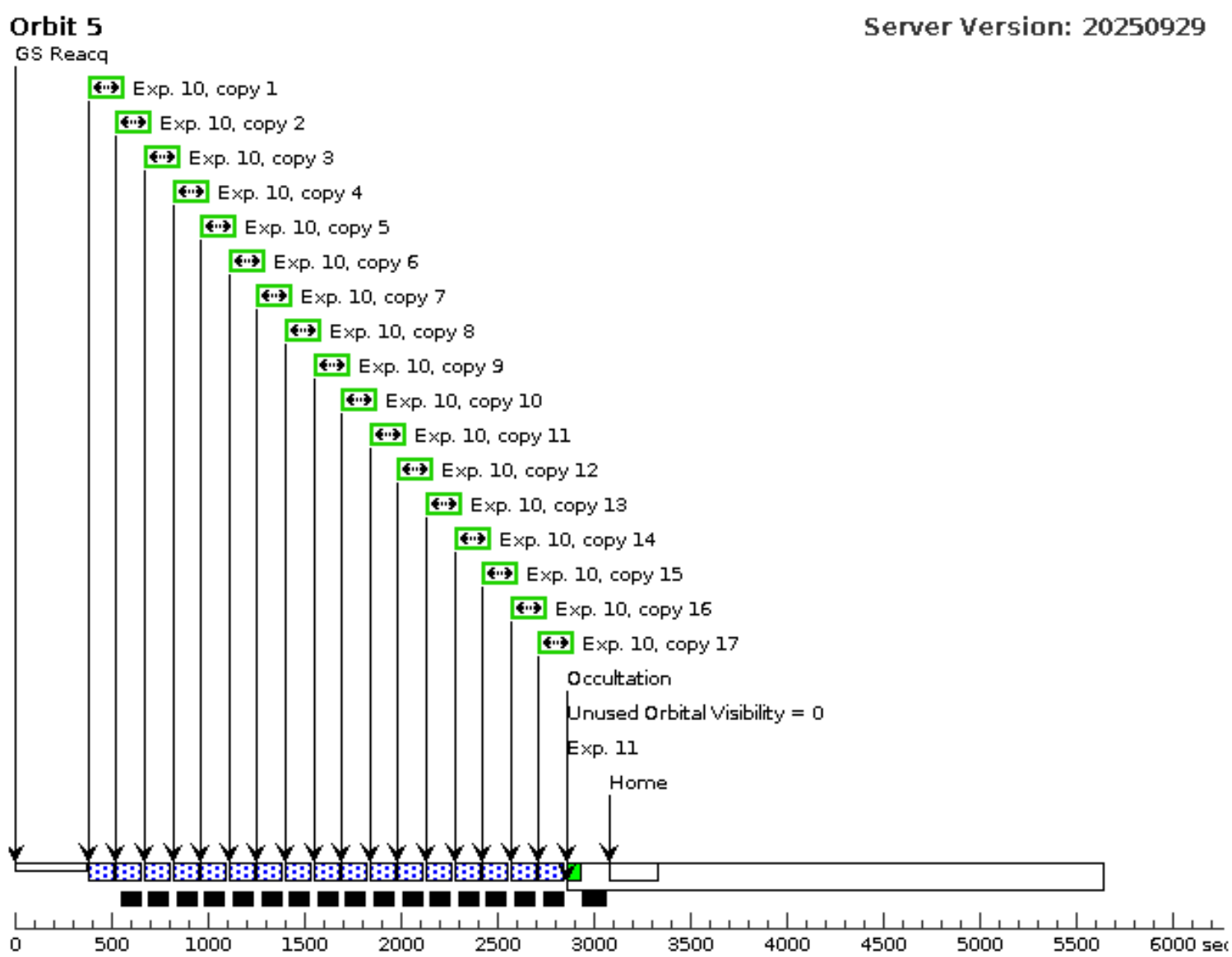
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Unused Orbital Visibility = 0
Exp. 11
Home
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5500
6000 sec

Visit

Proposal 18108, KELT-20b/NUV/Transit 1 (15), implementation Thu Feb 26 16:01:28 GMT 2026

Diagnostic Status: Warning

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

Special Requirements: SCHED 100%; Period 3.47410042 D AND ZERO-PHASE HJD2459288.807775

Comments: Ephemeris from Kokori+2023. Transit midpoint uncertainty by January 2026 is 0.19 minutes.

Diagnostics

(KELT-20b/NUV/Transit 1 (15)) Warning (Orbit Planner): ORBITAL VISIBILITY OVERRUN

Fixed Targets

#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(5)	KELT-20	RA: 19 38 38.7352 (294.6613967d) Dec: +31 13 9.22 (31.21923d) Equinox: J2000	Proper Motion RA: 3.151 mas/yr Proper Motion Dec: -6.264999910854385 mas/yr Parallax: 0.0073000999999999995" Epoch of Position: 2000	V=7.58	Reference Frame: ICRS

Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.

SIMBAD listed proper motion for this target. When retrieving targets with PM from SIMBAD, APT requests the coordinates be calculated with an epoch of the year 2000. Do not modify this epoch. Always review coordinates using the Target Confirmation tool, which graphically displays the PM.
Category=EXT-STAR
Description=[A0-A3 V-IV, EXTRA-SOLAR PLANETARY SYSTEM]
Extended=NO

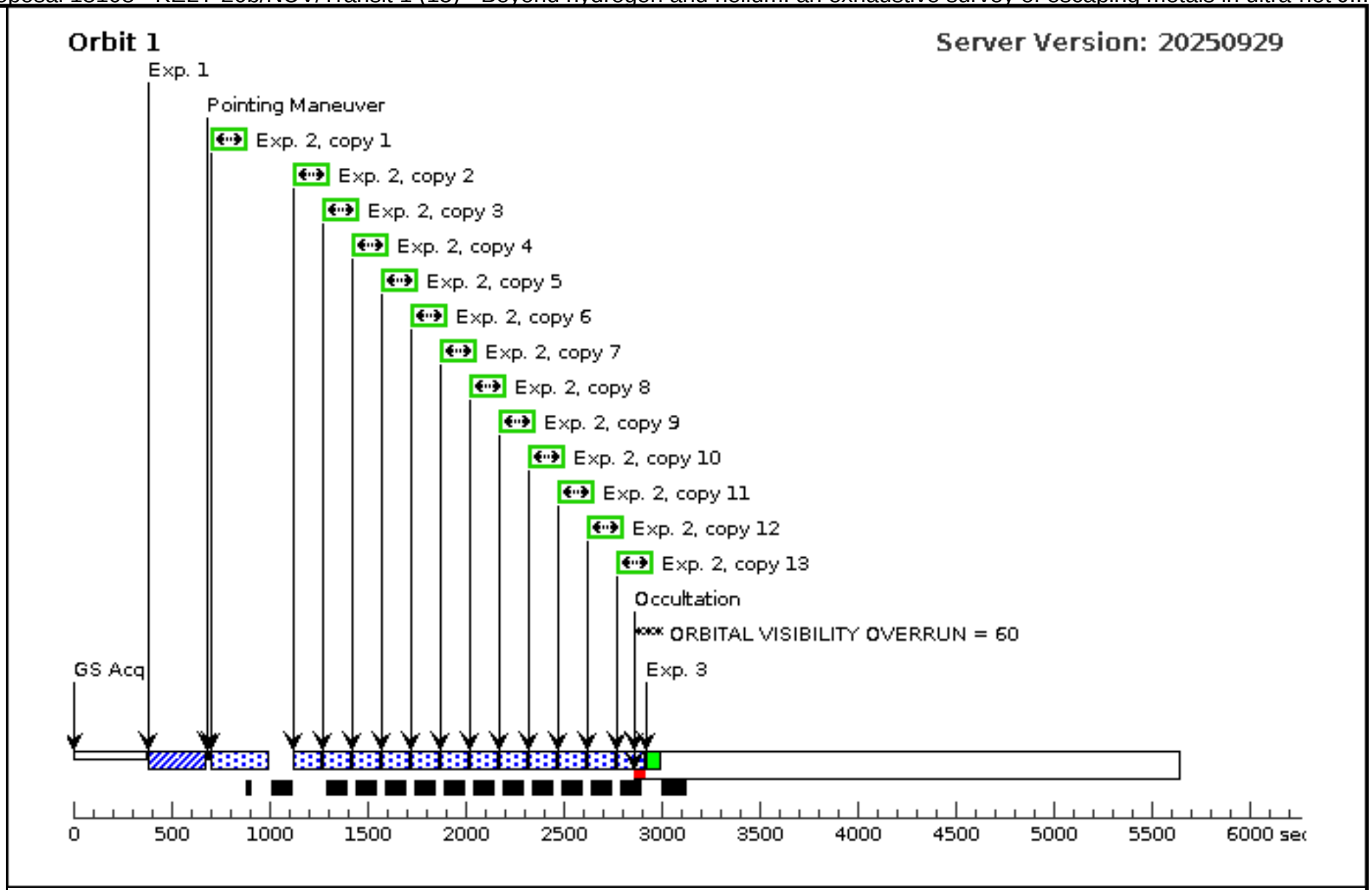
Exposures

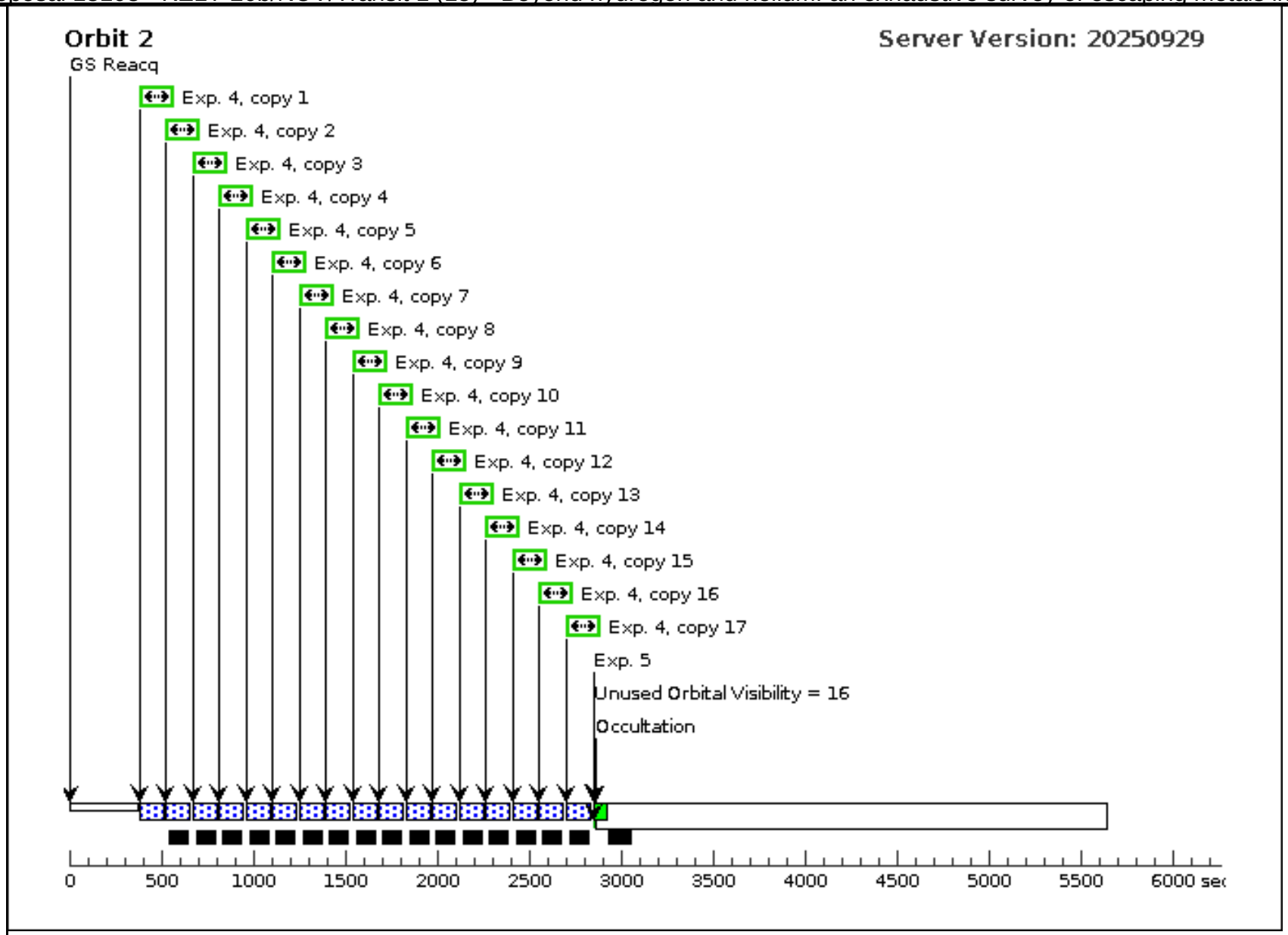
#	Label (ETC Run)	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
1	ACQ (STIS.ta.2023880)	(5) KELT-20	STIS/CCD, ACQ, F25ND3	MIRROR		PHASE 0.94042836 21731062 TO 0.9524 218467366041		0.5 Secs (0.5 Secs) *[==>]*	*[1]*
2	SCI (STIS.sp.2023881)	(5) KELT-20	STIS/NUV-MAMA, ACCUM, 6X0.2	E230M 2707 A	WAVECAL=NO			120 Secs X 13 (1638 Secs) *[==>126.0 Secs (Copy 1)]* *[==>126.0 Secs (Copy 2)]* *[==>126.0 Secs (Copy 3)]* *[==>126.0 Secs (Copy 4)]* *[==>126.0 Secs (Copy 5)]* *[==>126.0 Secs (Copy 6)]* *[==>126.0 Secs (Copy 7)]* *[==>126.0 Secs (Copy 8)]* *[==>126.0 Secs (Copy 9)]* *[==>126.0 Secs (Copy 10)]* *[==>126.0 Secs (Copy 11)]* *[==>126.0 Secs (Copy 12)]* *[==>126.0 Secs (Copy 13)]*	*[1]*
3	GO-WAVE CAL	WAVE	STIS/NUV-MAMA, ACCUM, 6X0.2	E230M 2707 A				*[==>]*	*[1]*
4	SCI (STIS.sp.2023881)	(5) KELT-20	STIS/NUV-MAMA, ACCUM, 6X0.2	E230M 2707 A	WAVECAL=NO			120 Secs X 17 (2057 Secs) *[==>121.0 Secs (Copy 1)]* *[==>121.0 Secs (Copy 2)]* *[==>121.0 Secs (Copy 3)]* *[==>121.0 Secs (Copy 4)]* *[==>121.0 Secs (Copy 5)]* *[==>121.0 Secs (Copy 6)]* *[==>121.0 Secs (Copy 7)]* *[==>121.0 Secs (Copy 8)]* *[==>121.0 Secs (Copy 9)]* *[==>121.0 Secs (Copy 10)]* *[==>121.0 Secs (Copy 11)]* *[==>121.0 Secs (Copy 12)]* *[==>121.0 Secs (Copy 13)]* *[==>121.0 Secs (Copy 14)]* *[==>121.0 Secs (Copy 15)]* *[==>121.0 Secs (Copy 16)]* *[==>121.0 Secs (Copy 17)]*	*[2]*
5	GO-WAVE CAL	WAVE	STIS/NUV-MAMA, ACCUM, 6X0.2	E230M 2707 A				*[==>]*	*[2]*

	6	SCI (STIS.sp.2023881)	(5) KELT-20	STIS/NUV-MAMA, ACCUM, 6X0.2	E230M 2707 A	WAVECAL=NO	120 Secs X 17 (2057 Secs) *[==>121.0 Secs (Copy 1)]* *[==>121.0 Secs (Copy 2)]* *[==>121.0 Secs (Copy 3)]* *[==>121.0 Secs (Copy 4)]* *[==>121.0 Secs (Copy 5)]* *[==>121.0 Secs (Copy 6)]* *[==>121.0 Secs (Copy 7)]* *[==>121.0 Secs (Copy 8)]* *[==>121.0 Secs (Copy 9)]* *[==>121.0 Secs (Copy 10)]* *[==>121.0 Secs (Copy 11)]* *[==>121.0 Secs (Copy 12)]* *[==>121.0 Secs (Copy 13)]* *[==>121.0 Secs (Copy 14)]* *[==>121.0 Secs (Copy 15)]* *[==>121.0 Secs (Copy 16)]* *[==>121.0 Secs (Copy 17)]*	***[3]***
	7	GO-WAVE CAL	WAVE	STIS/NUV-MAMA, ACCUM, 6X0.2	E230M 2707 A		*[==>]*	***[3]***
	8	SCI (STIS.sp.2023881)	(5) KELT-20	STIS/NUV-MAMA, ACCUM, 6X0.2	E230M 2707 A	WAVECAL=NO	120 Secs X 17 (2057 Secs) *[==>121.0 Secs (Copy 1)]* *[==>121.0 Secs (Copy 2)]* *[==>121.0 Secs (Copy 3)]* *[==>121.0 Secs (Copy 4)]* *[==>121.0 Secs (Copy 5)]* *[==>121.0 Secs (Copy 6)]* *[==>121.0 Secs (Copy 7)]* *[==>121.0 Secs (Copy 8)]* *[==>121.0 Secs (Copy 9)]* *[==>121.0 Secs (Copy 10)]* *[==>121.0 Secs (Copy 11)]* *[==>121.0 Secs (Copy 12)]* *[==>121.0 Secs (Copy 13)]* *[==>121.0 Secs (Copy 14)]* *[==>121.0 Secs (Copy 15)]* *[==>121.0 Secs (Copy 16)]* *[==>121.0 Secs (Copy 17)]*	***[4]***
	9	GO-WAVE CAL	WAVE	STIS/NUV-MAMA, ACCUM, 6X0.2	E230M 2707 A		*[==>]*	***[4]***

	10	SCI (STIS.sp.2023881)	(5) KELT-20	STIS/NUV-MAMA, ACCUM, 6X0.2	E230M 2707 A	WAVECAL=NO	120 Secs X 17 (2057 Secs) *[==>121.0 Secs (Copy 1)]* *[==>121.0 Secs (Copy 2)]* *[==>121.0 Secs (Copy 3)]* *[==>121.0 Secs (Copy 4)]* *[==>121.0 Secs (Copy 5)]* *[==>121.0 Secs (Copy 6)]* *[==>121.0 Secs (Copy 7)]* *[==>121.0 Secs (Copy 8)]* *[==>121.0 Secs (Copy 9)]* *[==>121.0 Secs (Copy 10)]* *[==>121.0 Secs (Copy 11)]* *[==>121.0 Secs (Copy 12)]* *[==>121.0 Secs (Copy 13)]* *[==>121.0 Secs (Copy 14)]* *[==>121.0 Secs (Copy 15)]* *[==>121.0 Secs (Copy 16)]* *[==>121.0 Secs (Copy 17)]*	***[5]***
	11	GO-WAVE CAL	WAVE	STIS/NUV-MAMA, ACCUM, 6X0.2	E230M 2707 A		*[==>]*	***[5]***

Orbit Structure

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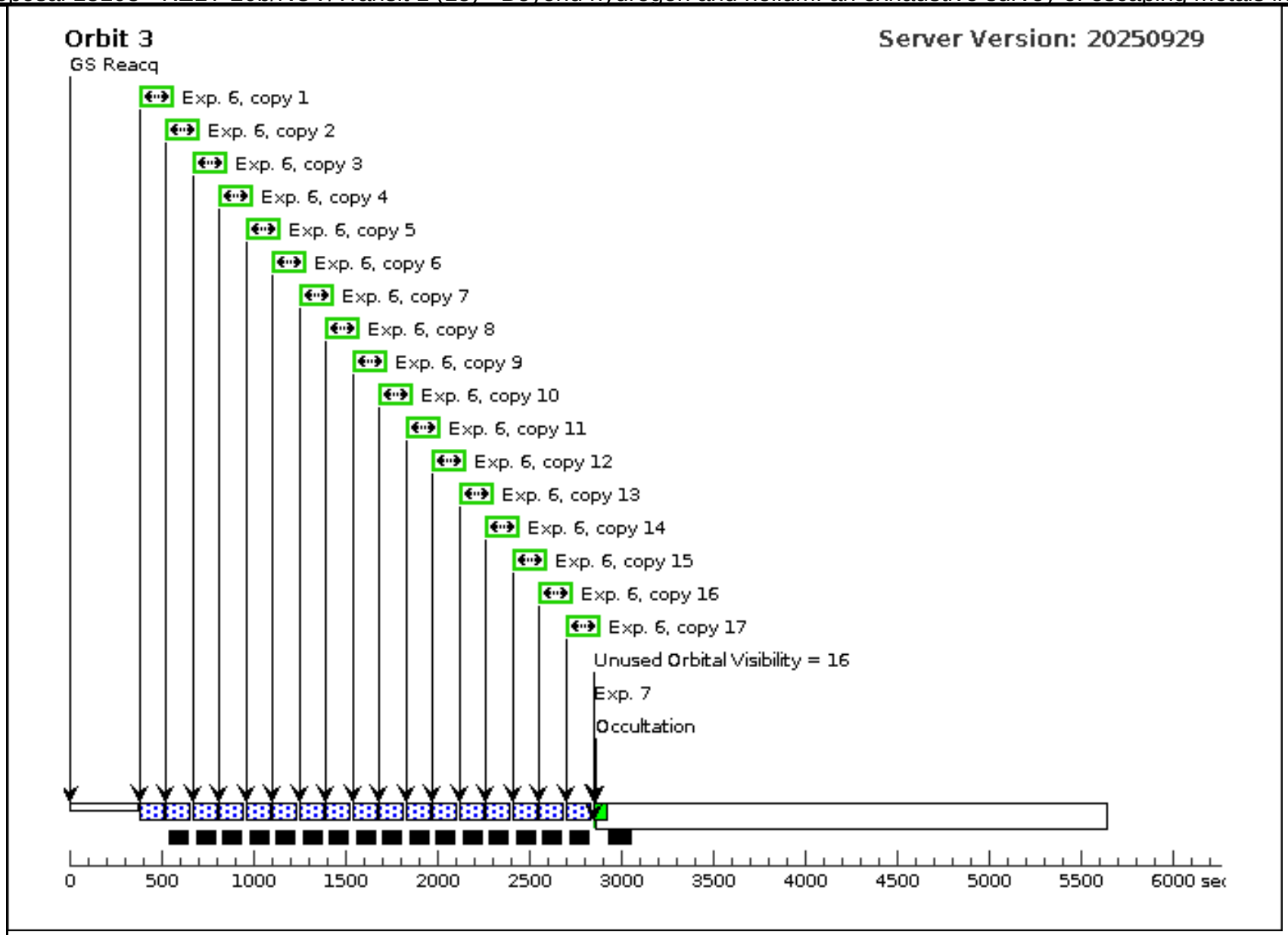
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2000
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3000
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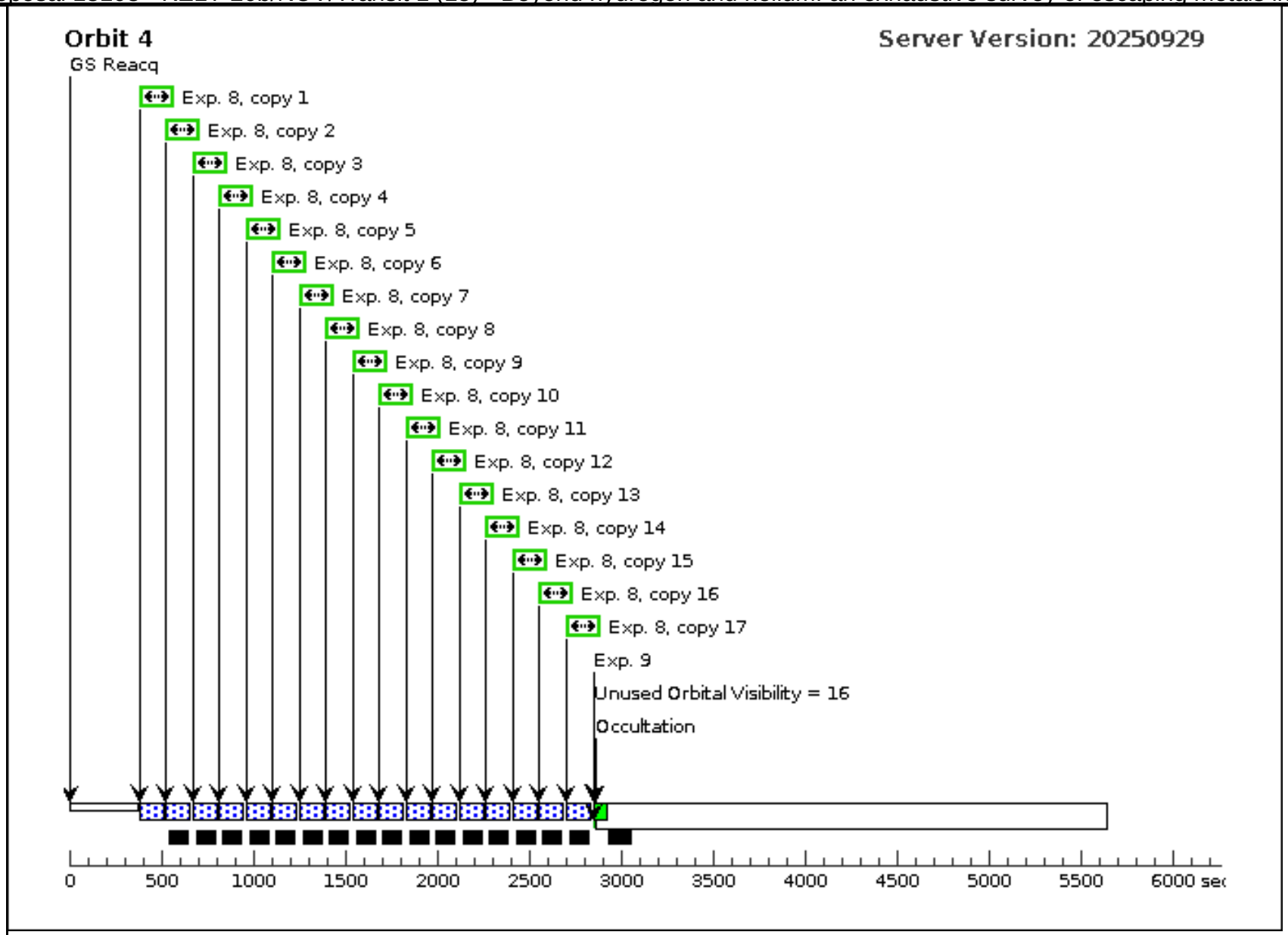
5000
5500
6000 sec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Exp. 8, copy 17
Exp. 9
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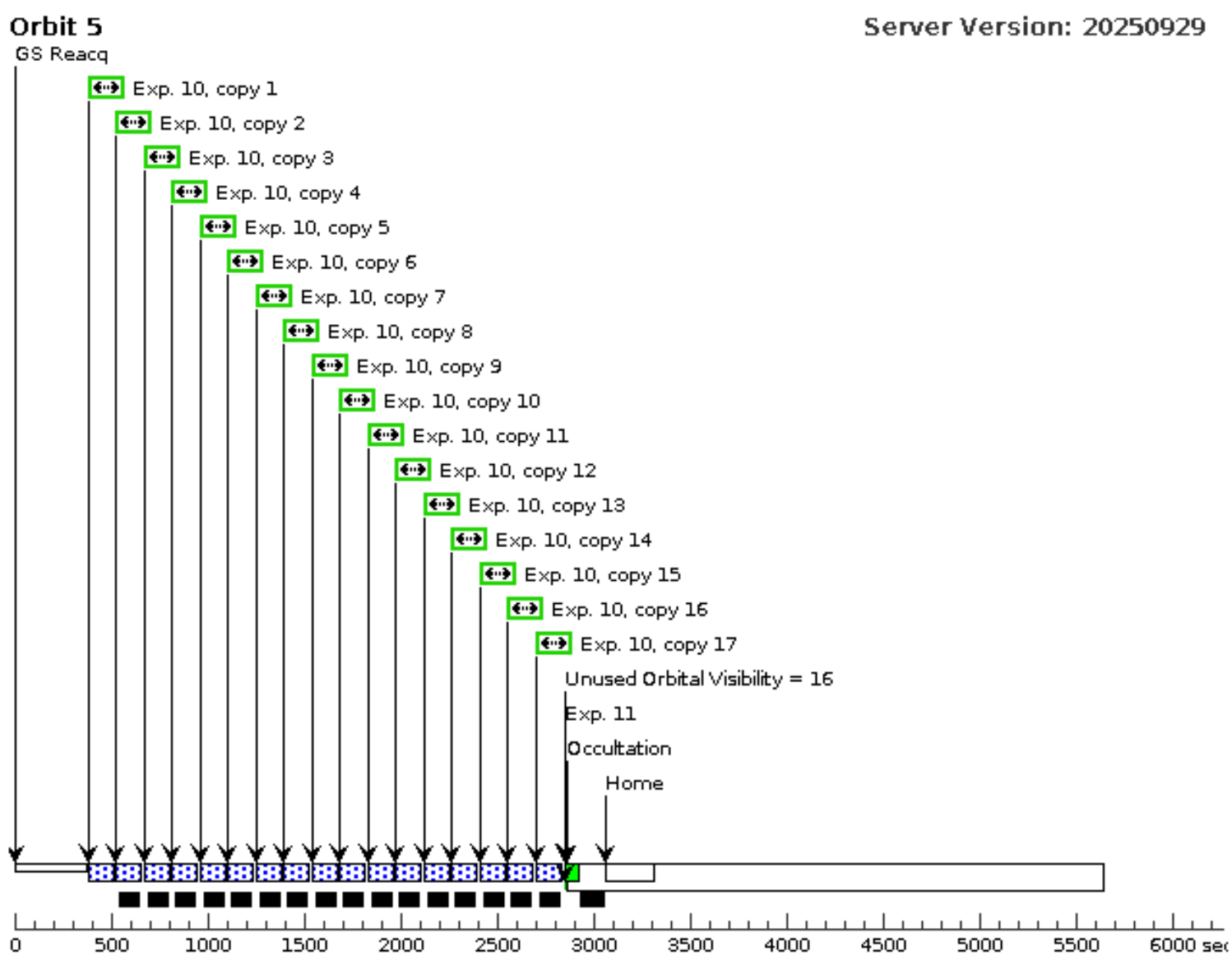
6000 sec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Exp. 10, copy 16
Exp. 10, copy 17
Unused Orbital Visibility = 16
Exp. 11
Occultation
Home
0
500
1000
1500
2000
2500
3000
3500
4000
4500
5000
5500
6000 sec

Visit

Proposal 18108, KELT-20b/NUV/Transit 2 (16), implementation Thu Feb 26 16:01:28 GMT 2026

Diagnostic Status: Warning

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

Special Requirements: SCHED 100%; Period 3.47410042 D AND ZERO-PHASE HJD2459288.807775

Comments: Ephemeris from Kokori+2023. Transit midpoint uncertainty by January 2026 is 0.19 minutes.

Diagnostics

(KELT-20b/NUV/Transit 2 (16)) Warning (Orbit Planner): ORBITAL VISIBILITY OVERRUN

Fixed Targets

#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(5)	KELT-20	RA: 19 38 38.7352 (294.6613967d) Dec: +31 13 9.22 (31.21923d) Equinox: J2000	Proper Motion RA: 3.151 mas/yr Proper Motion Dec: -6.264999910854385 mas/yr Parallax: 0.0073000999999999995" Epoch of Position: 2000	V=7.58	Reference Frame: ICRS

Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.

SIMBAD listed proper motion for this target. When retrieving targets with PM from SIMBAD, APT requests the coordinates be calculated with an epoch of the year 2000. Do not modify this epoch. Always review coordinates using the Target Confirmation tool, which graphically displays the PM.
Category=EXT-STAR
Description=[A0-A3 V-IV, EXTRA-SOLAR PLANETARY SYSTEM]
Extended=NO

Exposures

#	Label (ETC Run)	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
1	ACQ (STIS.ta.2023880)	(5) KELT-20	STIS/CCD, ACQ, F25ND3	MIRROR		PHASE 0.95122249 82802543 TO 0.9632159828437521		0.5 Secs (0.5 Secs) *[==>]*	***[1]***
2	SCI (STIS.sp.2023881)	(5) KELT-20	STIS/NUV-MAMA, ACCUM, 6X0.2	E230M 2707 A	WAVECAL=NO			120 Secs X 13 (1638 Secs) *[==>126.0 Secs (Copy 1)]* *[==>126.0 Secs (Copy 2)]* *[==>126.0 Secs (Copy 3)]* *[==>126.0 Secs (Copy 4)]* *[==>126.0 Secs (Copy 5)]* *[==>126.0 Secs (Copy 6)]* *[==>126.0 Secs (Copy 7)]* *[==>126.0 Secs (Copy 8)]* *[==>126.0 Secs (Copy 9)]* *[==>126.0 Secs (Copy 10)]* *[==>126.0 Secs (Copy 11)]* *[==>126.0 Secs (Copy 12)]* *[==>126.0 Secs (Copy 13)]*	***[1]***
3	GO-WAVE CAL	WAVE	STIS/NUV-MAMA, ACCUM, 6X0.2	E230M 2707 A				*[==>]*	***[1]***
4	SCI (STIS.sp.2023881)	(5) KELT-20	STIS/NUV-MAMA, ACCUM, 6X0.2	E230M 2707 A	WAVECAL=NO			120 Secs X 17 (2057 Secs) *[==>121.0 Secs (Copy 1)]* *[==>121.0 Secs (Copy 2)]* *[==>121.0 Secs (Copy 3)]* *[==>121.0 Secs (Copy 4)]* *[==>121.0 Secs (Copy 5)]* *[==>121.0 Secs (Copy 6)]* *[==>121.0 Secs (Copy 7)]* *[==>121.0 Secs (Copy 8)]* *[==>121.0 Secs (Copy 9)]* *[==>121.0 Secs (Copy 10)]* *[==>121.0 Secs (Copy 11)]* *[==>121.0 Secs (Copy 12)]* *[==>121.0 Secs (Copy 13)]* *[==>121.0 Secs (Copy 14)]* *[==>121.0 Secs (Copy 15)]* *[==>121.0 Secs (Copy 16)]* *[==>121.0 Secs (Copy 17)]*	***[2]***
5	GO-WAVE CAL	WAVE	STIS/NUV-MAMA, ACCUM, 6X0.2	E230M 2707 A				*[==>]*	***[2]***

	6	SCI (STIS.sp.2023881)	(5) KELT-20	STIS/NUV-MAMA, ACCUM, 6X0.2	E230M 2707 A	WAVECAL=NO	120 Secs X 17 (2057 Secs) *[==>121.0 Secs (Copy 1)]* *[==>121.0 Secs (Copy 2)]* *[==>121.0 Secs (Copy 3)]* *[==>121.0 Secs (Copy 4)]* *[==>121.0 Secs (Copy 5)]* *[==>121.0 Secs (Copy 6)]* *[==>121.0 Secs (Copy 7)]* *[==>121.0 Secs (Copy 8)]* *[==>121.0 Secs (Copy 9)]* *[==>121.0 Secs (Copy 10)]* *[==>121.0 Secs (Copy 11)]* *[==>121.0 Secs (Copy 12)]* *[==>121.0 Secs (Copy 13)]* *[==>121.0 Secs (Copy 14)]* *[==>121.0 Secs (Copy 15)]* *[==>121.0 Secs (Copy 16)]* *[==>121.0 Secs (Copy 17)]*	***[3]***
	7	GO-WAVE CAL	WAVE	STIS/NUV-MAMA, ACCUM, 6X0.2	E230M 2707 A		*[==>]*	***[3]***
	8	SCI (STIS.sp.2023881)	(5) KELT-20	STIS/NUV-MAMA, ACCUM, 6X0.2	E230M 2707 A	WAVECAL=NO	120 Secs X 17 (2057 Secs) *[==>121.0 Secs (Copy 1)]* *[==>121.0 Secs (Copy 2)]* *[==>121.0 Secs (Copy 3)]* *[==>121.0 Secs (Copy 4)]* *[==>121.0 Secs (Copy 5)]* *[==>121.0 Secs (Copy 6)]* *[==>121.0 Secs (Copy 7)]* *[==>121.0 Secs (Copy 8)]* *[==>121.0 Secs (Copy 9)]* *[==>121.0 Secs (Copy 10)]* *[==>121.0 Secs (Copy 11)]* *[==>121.0 Secs (Copy 12)]* *[==>121.0 Secs (Copy 13)]* *[==>121.0 Secs (Copy 14)]* *[==>121.0 Secs (Copy 15)]* *[==>121.0 Secs (Copy 16)]* *[==>121.0 Secs (Copy 17)]*	***[4]***
	9	GO-WAVE CAL	WAVE	STIS/NUV-MAMA, ACCUM, 6X0.2	E230M 2707 A		*[==>]*	***[4]***

	10	SCI (STIS.sp.2023881)	(5) KELT-20	STIS/NUV-MAMA, ACCUM, 6X0.2	E230M 2707 A	WAVECAL=NO	120 Secs X 17 (2057 Secs) *[==>121.0 Secs (Copy 1)]* *[==>121.0 Secs (Copy 2)]* *[==>121.0 Secs (Copy 3)]* *[==>121.0 Secs (Copy 4)]* *[==>121.0 Secs (Copy 5)]* *[==>121.0 Secs (Copy 6)]* *[==>121.0 Secs (Copy 7)]* *[==>121.0 Secs (Copy 8)]* *[==>121.0 Secs (Copy 9)]* *[==>121.0 Secs (Copy 10)]* *[==>121.0 Secs (Copy 11)]* *[==>121.0 Secs (Copy 12)]* *[==>121.0 Secs (Copy 13)]* *[==>121.0 Secs (Copy 14)]* *[==>121.0 Secs (Copy 15)]* *[==>121.0 Secs (Copy 16)]* *[==>121.0 Secs (Copy 17)]*	***[5]***
	11	GO-WAVE CAL	WAVE	STIS/NUV-MAMA, ACCUM, 6X0.2	E230M 2707 A		*[==>]*	***[5]***

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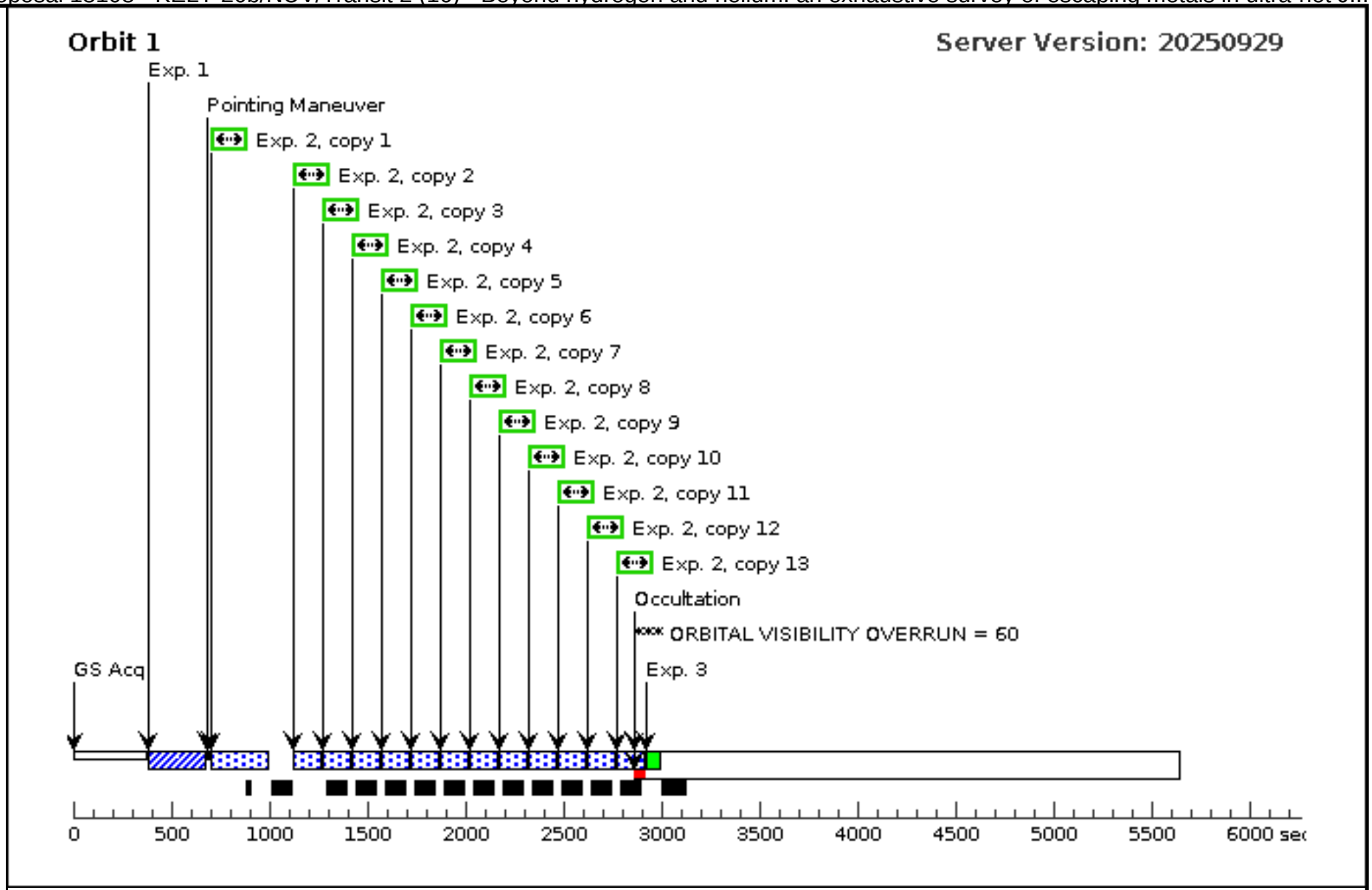

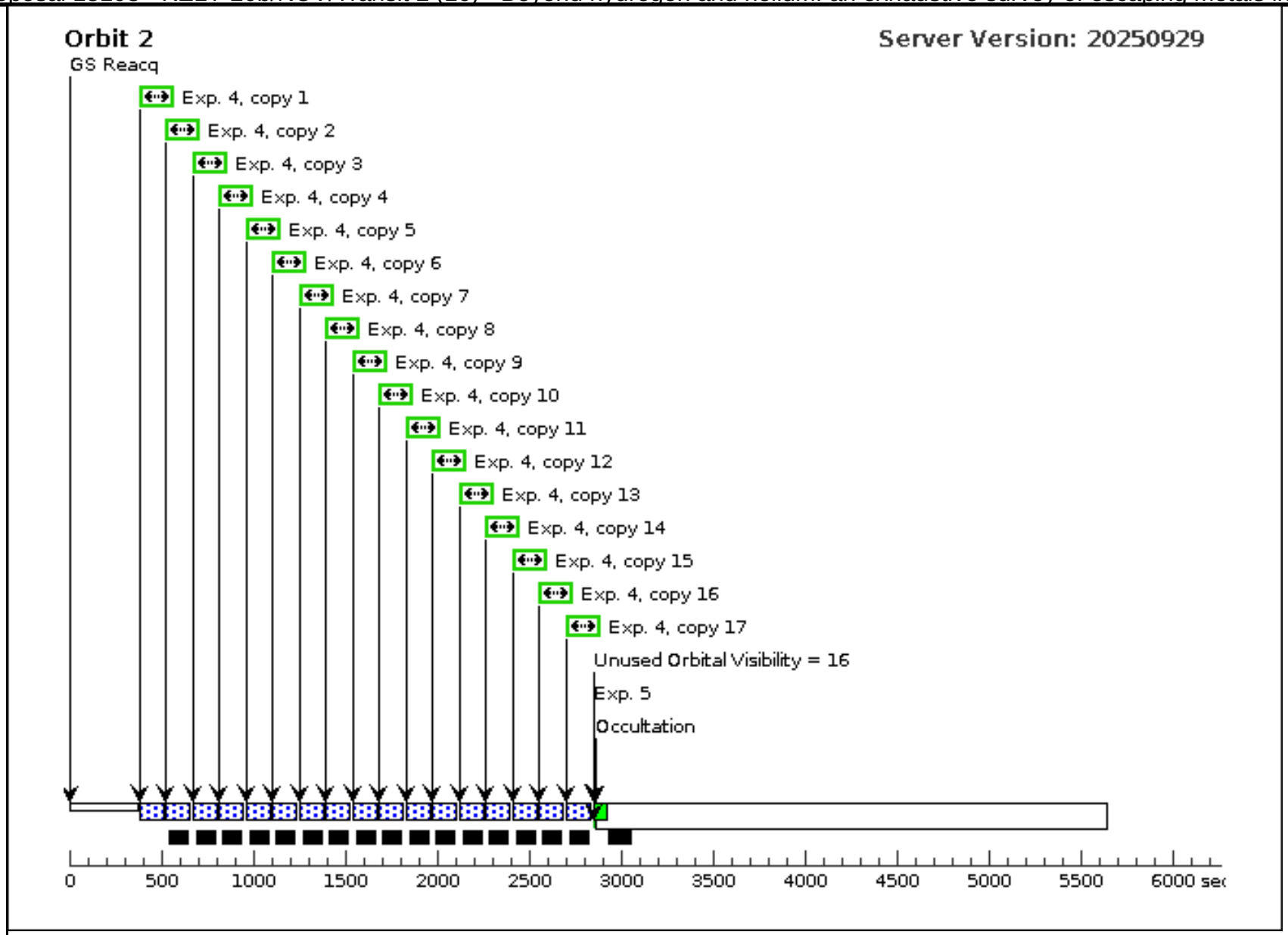
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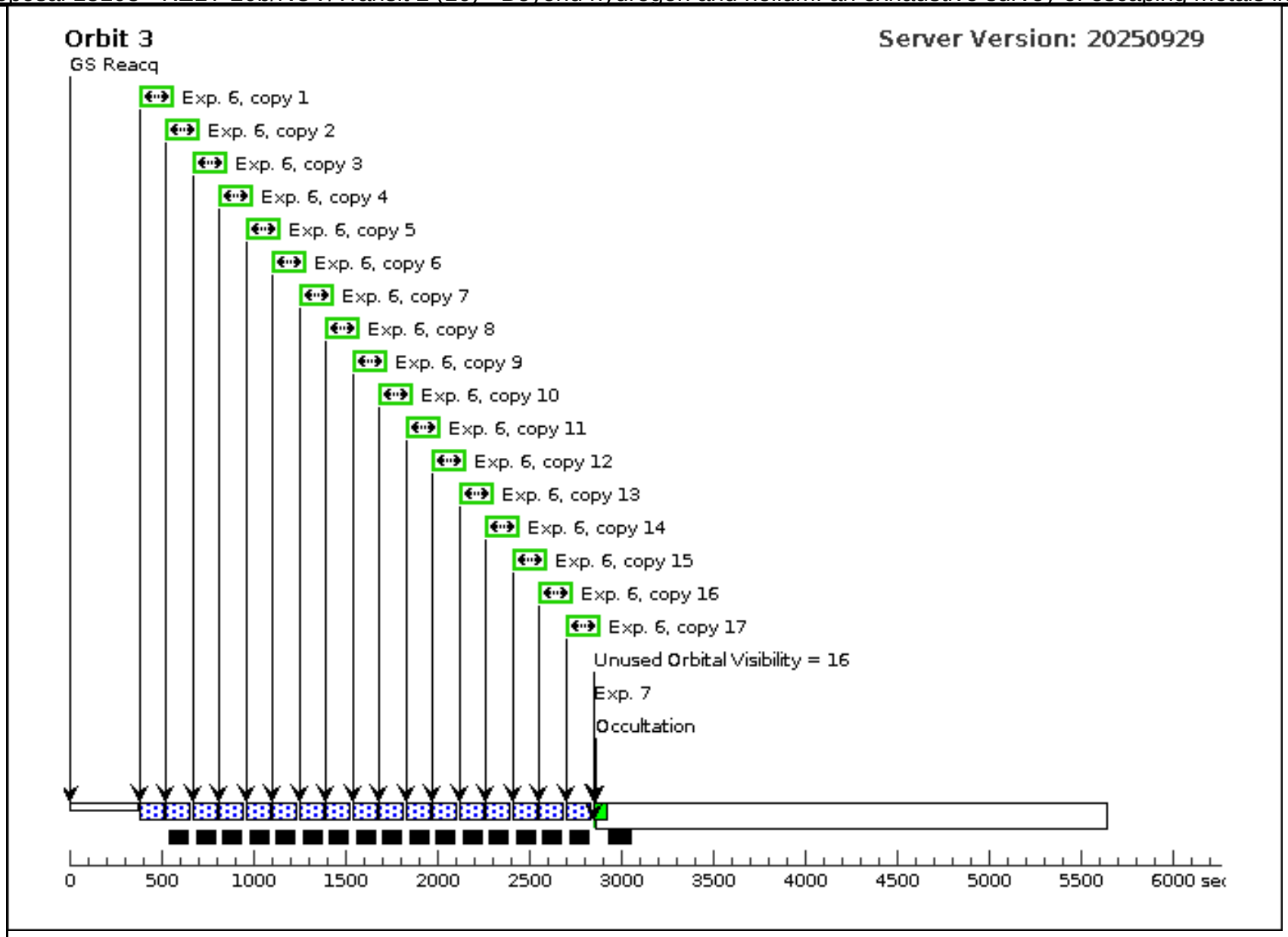
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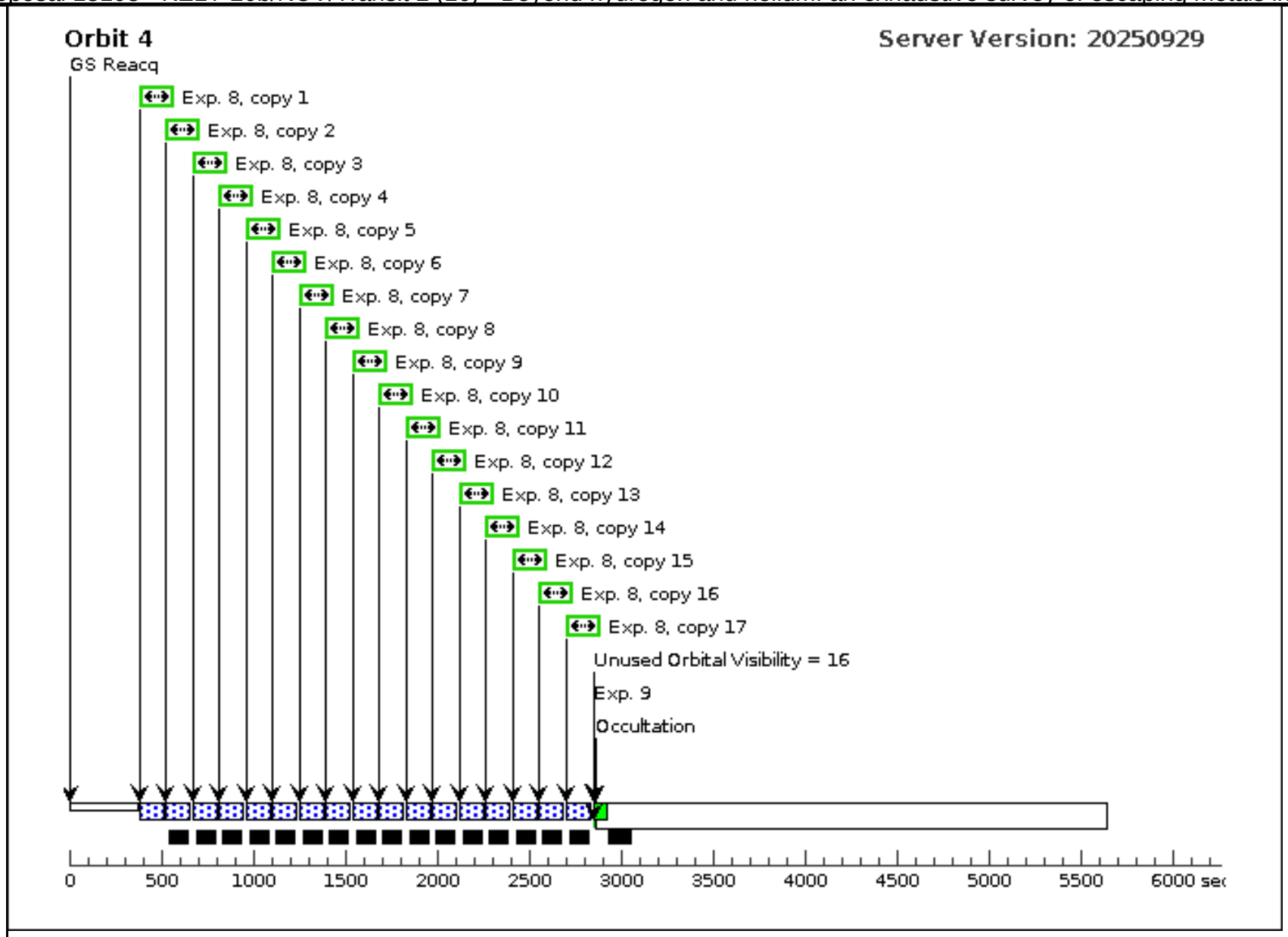
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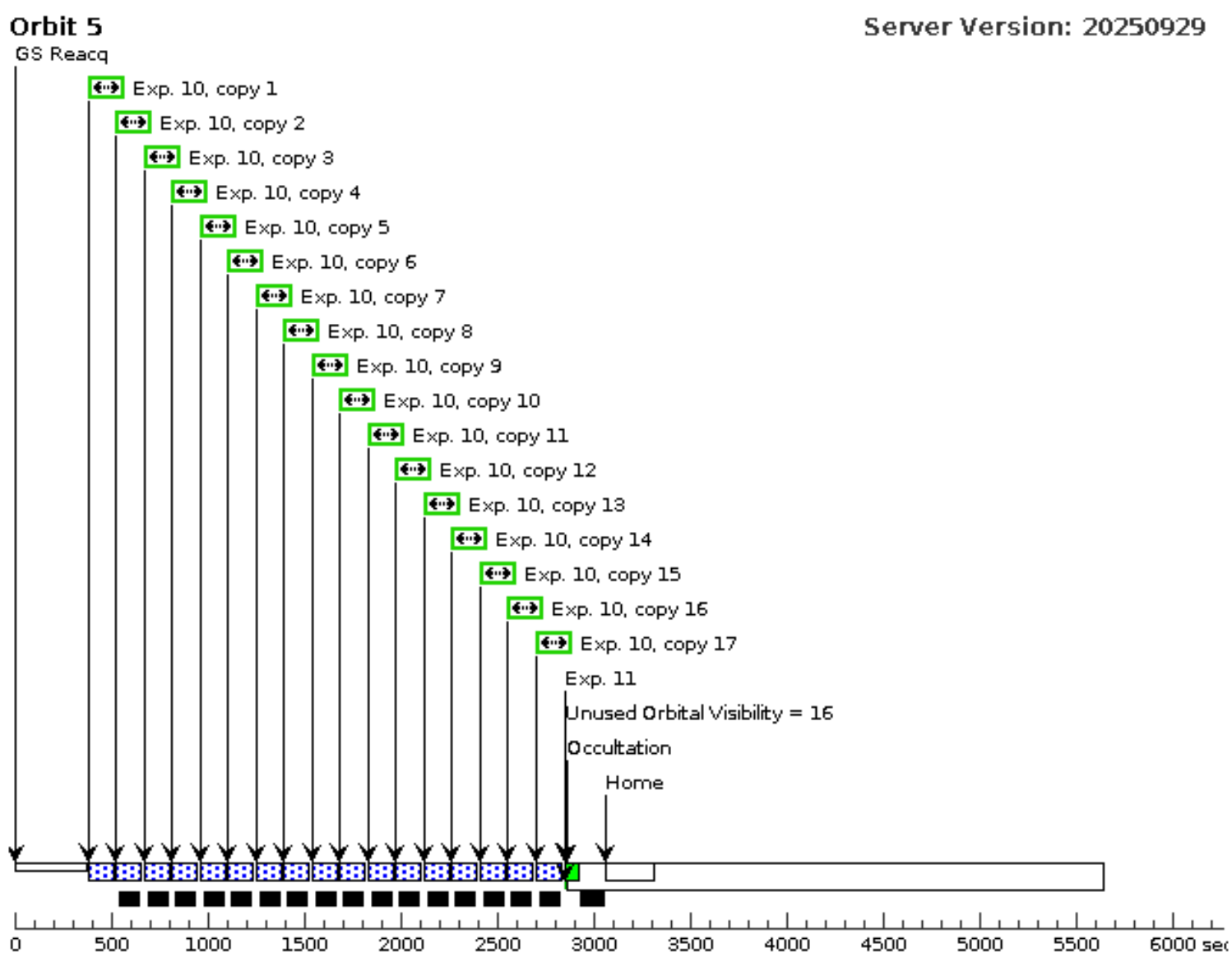
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