14664 - Phase-Resolved Emission Spectroscopy of the Transiting Brown Dwarf KELT-1b Using WFC3

Cycle: 24, Proposal Category: GO

(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) KELT-1	WFC3/IR	10	07-Sep-2016 17:55:33.0	yes
02	(1) KELT-1	WFC3/IR	10	07-Sep-2016 17:57:09.0	yes
05	(1) KELT-1	WFC3/IR	10	07-Sep-2016 17:58:42.0	yes
06	(1) KELT-1	WFC3/IR	10	07-Sep-2016 18:00:16.0	yes

40 Total Orbits Used

ABSTRACT

We propose to use 40 HST orbits to observe a spectroscopically-resolved orbital phase curve of the transiting brown dwarf KELT-1b from 1.15um to 1.65um using WFC3. KELT-1b is a 27MJ object on a short 1.217 day (29.2 hour) orbit around a bright (H=9.534) F5V star. This system is unique, in

that it contains the only known highly irradiated brown dwarf on which it is possible to perform high precision atmospheric measurements. It thus gives us a chance to globally observe an irradiated atmosphere, when we know how that atmosphere should look in the absence of external irradiation. We intend to determine how irradiation affects the cloud properties and composition of KELT-1b's atmosphere, by comparing directly to observations of field brown dwarfs with a similar mass and age. We will also investigate the role surface gravity plays in setting the circulation and structure of hot Jupiter atmospheres, by comparing KELT-1b's high-gravity atmosphere to existing datasets for WASP-43b and WASP-103b. Finally, these observations will allow us to perform one of the first direct tests of brown dwarf surface gravity indicators. These observations will complement existing Spitzer observations of KELT-1b's phase curve at 3.6um and 4.5um, and an H-band eclipse spectrum that our group has already obtained from the ground.

OBSERVING DESCRIPTION

We will perform time-series spectroscopy using HST to measure a phase curve of KELT-1b. The observations will occur over four visits of 10 consecutive orbits each. We will use the WFC3 IR channel with the G141 grism to measure the planet-to-star flux ratio from 1.1 to 1.7 um during a complete orbit of the planet. The observations will be very similar to phase curve observations for WASP-43b for HST GO-13467.

The 10 orbits in each visit must be scheduled to avoid crossing the SAA.

I've labeled the visits according to what phases of the planetary orbit they cover. For example, "After transit to after eclipse" covers phases from just after a transit occurs to just after an eclipse completes.

The ephemeris we used in the phase 2 file is based on a transit measured during Spitzer observations from October 2015, which we used to determine a Tc closer to the current date and to refine the orbital period. The major difference from the discovery ephemeris is the orbital period is about 2 seconds shorter (updated period is 1.217494 days), which leads to transit predictions about 40 minutes earlier than the discovery ephemeris predicts.

The observations will be performed with the 256 x 256 subarray using SPARS10, NSAMP=15 (total time per exposure of 103 s) and the spatial scan mode with roundtrip scans to maximize the duty cycle (expected to be 80\%). We will use a scan rate of 0.097"/s, which will give peak counts of roughly 27K e-/pixel and a scan height of about 75 pixels. The peak counts is what is desired there, and sets the scan rate. We considered using SPARS5, but determined that we would end up losing too much on overhead compared to SPARS10. Following standard procedure, we will use an extra orbit at the beginning of each visit to allow the telescope and detector to settle. We will take a direct image with the F126N filter at the

beginning of each orbit for wavelength calibration.

The phase constraints for each visit were chosen to ensure sufficient baseline before and after the transit and eclipse, and are not symmetric in orbital phase about the eclipses or transits (i.e., we're not starting around phase 0.25 or 0.75) in an attempt to have different parts of the orbital phase curve sampled with different detector systematics.

These phase contraints supersede the observing plan described in the proposal: they'll enforce the interleaving described in the proposal, but should allow easier scheduling than requiring the visits to be observed 36 HST orbits after one another.

If possible, we would like to have the two eclipse visits observed first ("After transit to after eclipse" and "Before eclipse to before transit").

We have not specified any orient ranges for the visits, just because the times these observations are possible is already pretty limited. In planning these observations, we have decided that the schedulabilty of the observations should outrank orientation and visibility constraints, so we've set the schedulabilty to 100, but once the observations are scheduled, if it is possible we would like to request the following:

There is a faint companion star 0.6 arcsec away from the target at a PA of 157.4 deg. If it's possible, we would like to orient the spacecraft so the the spatial scan is along this PA angle (towards or away, doesn't matter). I believe that along the PA angle would be orients of 292.17 or 112.17. An orient of 112.17 is only possible during the late Nov. 2016 visibility window. If the observations are scheduled during this date range, we'd prefer that orientation be used.

The actual orientation contraints are wider than this, to aid in scheduling. As it is, they should make it so that the companion star doesn't align closely with the target star along the dispersion direction. This is to allow the spectra of the target and the companion star to be separated.

Also, some of the data ranges allow for one more round-trip spatial scan exposure during an indivdual orbit. If these observations get scheduled for those longer visibility orbits, we'd appreciate if another scan could be added. Those dates are: Nov. 2016 and Dec. 2017.

That being said, the scientific goals of these observations will be possible without the orientation constraints or the extra scan, so it is not necessary to try and schedule specifically for any of these dates.

Visit

Proposal 14664, After transit to after eclipse (01), implementation Wed Sep 07 22:00:22 GMT 2016

Diagnostic Status: Warning

Scientific Instruments: WFC3/IR

Special Requirements: SCHED 100%; ORIENT 67D TO 157 D; ORIENT 247D TO 337 D; Period 1.217494 D AND ZERO-PHASE HJD2457306.97537

Diagnostics

(After transit to after eclipse (01)) Warning (Orbit Planner): LONG SU LIKELY TO INTERSECT THE SAA

Fixed Targets

#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(1)	KELT-1	RA: 00 01 26.9222 (.3621758d)	Proper Motion RA: 3.70 mas/yr	V=10.63+/-0.06	Reference Frame: SIMBAD
		Dec: +39 23 1.67 (39.38380d)	Proper Motion Dec: -14.10 mas/yr	J=9.682,	
		Equinox: J2000	Epoch of Position: 2000	H=9.534	

Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.
Extended=NO

Exposures

#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
1	Image	(1) KELT-1	WFC3/IR, MULTIACCUM, GRISM256	F126N	NSAMP=2; SAMP-SEQ=RAPID	PHASE 0.012 TO 0.022	Sequence 1-2 Non-Int in After transit to after eclipse (01)	0.55563 Secs (0.556 Secs) *[==>]*	***[1]***
2	Scan	(1) KELT-1	WFC3/IR, MULTIACCUM, GRISM256	G141	NSAMP=15; SAMP-SEQ=SPARS10	SPATIAL SCAN 0.097,90.0 Degrees,Round trip	Sequence 1-2 Non-Int in After transit to after eclipse (01)	103.128633 Secs X 9 (1856.315 Secs) *[==>(Copy 1, Forward)]* *[==>(Copy 1, Reverse)]* *[==>(Copy 2, Forward)]* *[==>(Copy 2, Reverse)]* *[==>(Copy 3, Forward)]* *[==>(Copy 3, Reverse)]* *[==>(Copy 4, Forward)]* *[==>(Copy 4, Reverse)]* *[==>(Copy 5, Forward)]* *[==>(Copy 5, Reverse)]* *[==>(Copy 6, Forward)]* *[==>(Copy 6, Reverse)]* *[==>(Copy 7, Forward)]* *[==>(Copy 7, Reverse)]* *[==>(Copy 8, Forward)]* *[==>(Copy 8, Reverse)]* *[==>(Copy 9, Forward)]* *[==>(Copy 9, Reverse)]*	***[1]***
3	Image	(1) KELT-1	WFC3/IR, MULTIACCUM, GRISM256	F126N	NSAMP=2; SAMP-SEQ=RAPID		Sequence 3-5 Non-Int in After transit to after eclipse (01)	0.55563 Secs (0.556 Secs) *[==>]*	***[2]***

	4	Scan	(1) KELT-1	WFC3/IR, MULTIACCUM, GRISM256	G141	NSAMP=15; SAMP-SEQ=SPARS10	SPATIAL SCAN 0.097,90.0 Degrees,Round trip	Sequence 3-5 Non-Int in After transit to after eclipse (01)	103.128633 Secs X 9 (1856.315 Secs) *[==>(Copy 1, Forward)]* *[==>(Copy 1, Reverse)]* *[==>(Copy 2, Forward)]* *[==>(Copy 2, Reverse)]* *[==>(Copy 3, Forward)]* *[==>(Copy 3, Reverse)]* *[==>(Copy 4, Forward)]* *[==>(Copy 4, Reverse)]* *[==>(Copy 5, Forward)]* *[==>(Copy 5, Reverse)]* *[==>(Copy 6, Forward)]* *[==>(Copy 6, Reverse)]* *[==>(Copy 7, Forward)]* *[==>(Copy 7, Reverse)]* *[==>(Copy 8, Forward)]* *[==>(Copy 8, Reverse)]* *[==>(Copy 9, Forward)]* *[==>(Copy 9, Reverse)]*	***[2]***
	5	Scan once	(1) KELT-1	WFC3/IR, MULTIACCUM, GRISM256	G141	NSAMP=15; SAMP-SEQ=SPARS10	SPATIAL SCAN 0.097,90.0 Degrees,Forward	Sequence 3-5 Non-Int in After transit to after eclipse (01)	103.128633 Secs (103.129 Secs) *[==>]*	***[2]***
	6	Image	(1) KELT-1	WFC3/IR, MULTIACCUM, GRISM256	F126N	NSAMP=2; SAMP-SEQ=RAPID		Sequence 6-8 Non-Int in After transit to after eclipse (01)	0.55563 Secs (0.556 Secs) *[==>]*	***[3]***
	7	Scan	(1) KELT-1	WFC3/IR, MULTIACCUM, GRISM256	G141	NSAMP=15; SAMP-SEQ=SPARS10	SPATIAL SCAN 0.097,90.0 Degrees,Round trip	Sequence 6-8 Non-Int in After transit to after eclipse (01)	103.128633 Secs X 9 (1856.315 Secs) *[==>(Copy 1, Forward)]* *[==>(Copy 1, Reverse)]* *[==>(Copy 2, Forward)]* *[==>(Copy 2, Reverse)]* *[==>(Copy 3, Forward)]* *[==>(Copy 3, Reverse)]* *[==>(Copy 4, Forward)]* *[==>(Copy 4, Reverse)]* *[==>(Copy 5, Forward)]* *[==>(Copy 5, Reverse)]* *[==>(Copy 6, Forward)]* *[==>(Copy 6, Reverse)]* *[==>(Copy 7, Forward)]* *[==>(Copy 7, Reverse)]* *[==>(Copy 8, Forward)]* *[==>(Copy 8, Reverse)]* *[==>(Copy 9, Forward)]* *[==>(Copy 9, Reverse)]*	***[3]***

8	Scan once	(1) KELT-1	WFC3/IR, MULTIACCUM, GRISM256	G141	NSAMP=15; SAMP-SEQ=SPARS10	SPATIAL SCAN 0.097,90.0 Degrees,Forward	Sequence 6-8 Non-Int in After transit to after eclipse (01)	103.128633 Secs (103.129 Secs) *[==>]*	 ***[3]***
9	Image	(1) KELT-1	WFC3/IR, MULTIACCUM, GRISM256	F126N	NSAMP=2; SAMP-SEQ=RAPID		Sequence 9-11 Non-Int in After transit to after eclipse (01)	0.55563 Secs (0.556 Secs) *[==>]*	 ***[4]***
10	Scan	(1) KELT-1	WFC3/IR, MULTIACCUM, GRISM256	G141	NSAMP=15; SAMP-SEQ=SPARS10	SPATIAL SCAN 0.097,90.0 Degrees,Round trip	Sequence 9-11 Non-Int in After transit to after eclipse (01)	103.128633 Secs X 9 (1856.315 Secs) *[==>(Copy 1, Forward)]* *[==>(Copy 1, Reverse)]* *[==>(Copy 2, Forward)]* *[==>(Copy 2, Reverse)]* *[==>(Copy 3, Forward)]* *[==>(Copy 3, Reverse)]* *[==>(Copy 4, Forward)]* *[==>(Copy 4, Reverse)]* *[==>(Copy 5, Forward)]* *[==>(Copy 5, Reverse)]* *[==>(Copy 6, Forward)]* *[==>(Copy 6, Reverse)]* *[==>(Copy 7, Forward)]* *[==>(Copy 7, Reverse)]* *[==>(Copy 8, Forward)]* *[==>(Copy 8, Reverse)]* *[==>(Copy 9, Forward)]* *[==>(Copy 9, Reverse)]*	 ***[4]***
11	Scan once	(1) KELT-1	WFC3/IR, MULTIACCUM, GRISM256	G141	NSAMP=15; SAMP-SEQ=SPARS10	SPATIAL SCAN 0.097,90.0 Degrees,Forward	Sequence 9-11 Non-Int in After transit to after eclipse (01)	103.128633 Secs (103.129 Secs) *[==>]*	 ***[4]***
12	Image	(1) KELT-1	WFC3/IR, MULTIACCUM, GRISM256	F126N	NSAMP=2; SAMP-SEQ=RAPID		Sequence 12-14 Non-Int in After transit to after eclipse (01)	0.55563 Secs (0.556 Secs) *[==>]*	 ***[5]***

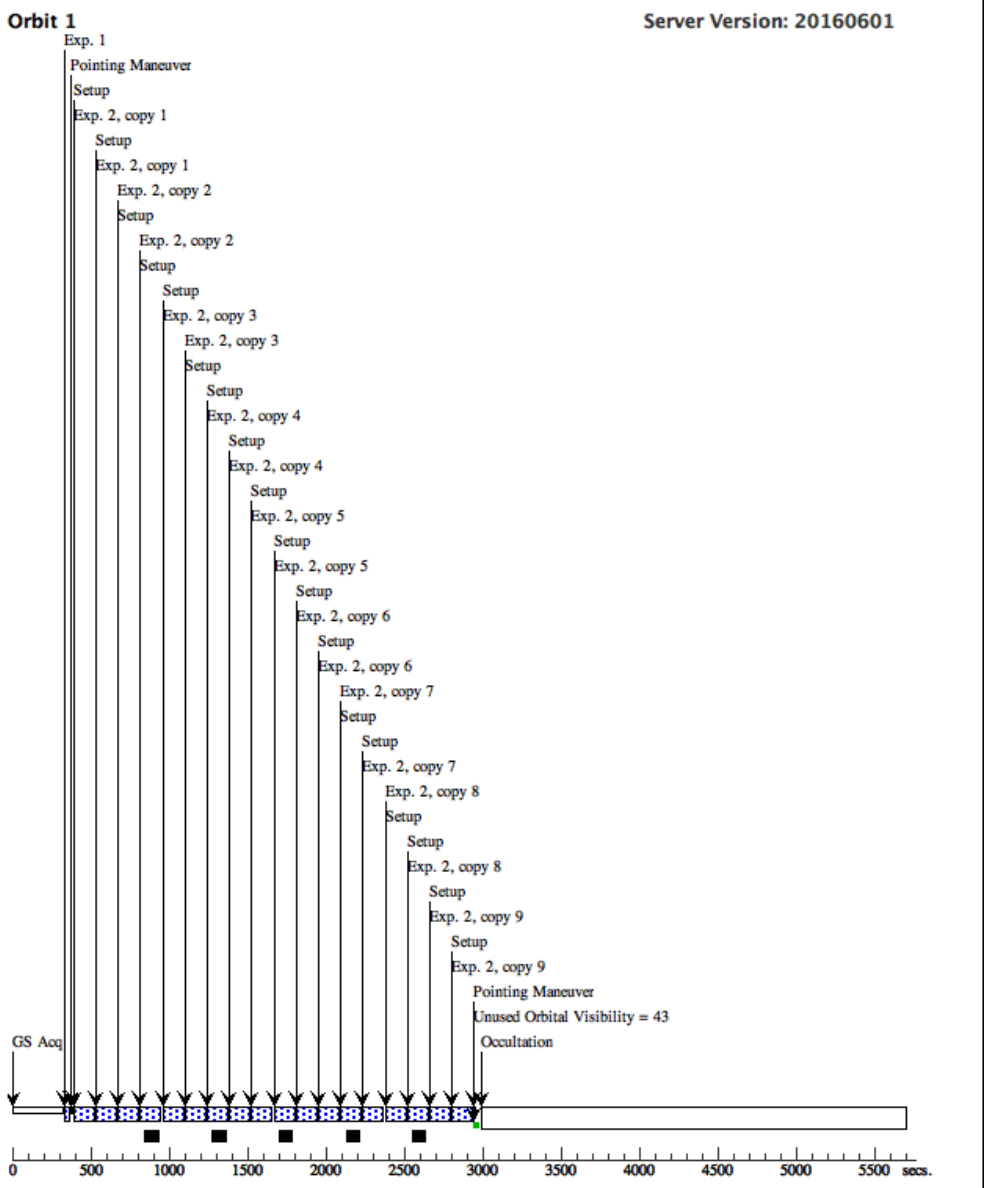
13	Scan	(1) KELT-1	WFC3/IR, MULTIACCUM, GRISM256	G141	NSAMP=15; SAMP-SEQ=SPARS10	SPATIAL SCAN 0.0 97,90.0 Degrees,Round trip	Sequence 12-14 Non-Int in After transit to after eclipse (01)	103.128633 Secs X 9 (1856.315 Secs)	
								[==>(Copy 1, Forward)] *[==>(Copy 1, Reverse)]* *[==>(Copy 2, Forward)]* *[==>(Copy 2, Reverse)]* *[==>(Copy 3, Forward)]* *[==>(Copy 3, Reverse)]* *[==>(Copy 4, Forward)]* *[==>(Copy 4, Reverse)]* *[==>(Copy 5, Forward)]* *[==>(Copy 5, Reverse)]* *[==>(Copy 6, Forward)]* *[==>(Copy 6, Reverse)]* *[==>(Copy 7, Forward)]* *[==>(Copy 7, Reverse)]* *[==>(Copy 8, Forward)]* *[==>(Copy 8, Reverse)]* *[==>(Copy 9, Forward)]* *[==>(Copy 9, Reverse)]*	***[5]***
14	Scan once	(1) KELT-1	WFC3/IR, MULTIACCUM, GRISM256	G141	NSAMP=15; SAMP-SEQ=SPARS10	SPATIAL SCAN 0.0 97,90.0 Degrees,Forward	Sequence 12-14 Non-Int in After transit to after eclipse (01)	103.128633 Secs (103.129 Secs)	
								[==>]	***[5]***
15	Image	(1) KELT-1	WFC3/IR, MULTIACCUM, GRISM256	F126N	NSAMP=2; SAMP-SEQ=RAPID		Sequence 15-17 Non-Int in After transit to after eclipse (01)	0.55563 Secs (0.556 Secs)	
								[==>]	***[6]***
16	Scan	(1) KELT-1	WFC3/IR, MULTIACCUM, GRISM256	G141	NSAMP=15; SAMP-SEQ=SPARS10	SPATIAL SCAN 0.0 97,90.0 Degrees,Round trip	Sequence 15-17 Non-Int in After transit to after eclipse (01)	103.128633 Secs X 9 (1856.315 Secs)	
								[==>(Copy 1, Forward)] *[==>(Copy 1, Reverse)]* *[==>(Copy 2, Forward)]* *[==>(Copy 2, Reverse)]* *[==>(Copy 3, Forward)]* *[==>(Copy 3, Reverse)]* *[==>(Copy 4, Forward)]* *[==>(Copy 4, Reverse)]* *[==>(Copy 5, Forward)]* *[==>(Copy 5, Reverse)]* *[==>(Copy 6, Forward)]* *[==>(Copy 6, Reverse)]* *[==>(Copy 7, Forward)]* *[==>(Copy 7, Reverse)]* *[==>(Copy 8, Forward)]* *[==>(Copy 8, Reverse)]* *[==>(Copy 9, Forward)]* *[==>(Copy 9, Reverse)]*	***[6]***

17	Scan once	(1) KELT-1	WFC3/IR, MULTIACCUM, GRISM256	G141	NSAMP=15; SAMP-SEQ=SPARS10	SPATIAL SCAN 0.0 97,90.0 Degrees,Forward	Sequence 15-17 Non-Int in After transit to after eclipse (01)	103.128633 Secs (103.129 Secs) *[==>]*	***[6]***
18	Image	(1) KELT-1	WFC3/IR, MULTIACCUM, GRISM256	F126N	NSAMP=2; SAMP-SEQ=RAPID		Sequence 18-20 Non-Int in After transit to after eclipse (01)	0.55563 Secs (0.556 Secs) *[==>]*	***[7]***
19	Scan	(1) KELT-1	WFC3/IR, MULTIACCUM, GRISM256	G141	NSAMP=15; SAMP-SEQ=SPARS10	SPATIAL SCAN 0.0 97,90.0 Degrees,Round trip	Sequence 18-20 Non-Int in After transit to after eclipse (01)	103.128633 Secs X 9 (1856.315 Secs) *[==>(Copy 1, Forward)]* *[==>(Copy 1, Reverse)]* *[==>(Copy 2, Forward)]* *[==>(Copy 2, Reverse)]* *[==>(Copy 3, Forward)]* *[==>(Copy 3, Reverse)]* *[==>(Copy 4, Forward)]* *[==>(Copy 4, Reverse)]* *[==>(Copy 5, Forward)]* *[==>(Copy 5, Reverse)]* *[==>(Copy 6, Forward)]* *[==>(Copy 6, Reverse)]* *[==>(Copy 7, Forward)]* *[==>(Copy 7, Reverse)]* *[==>(Copy 8, Forward)]* *[==>(Copy 8, Reverse)]* *[==>(Copy 9, Forward)]* *[==>(Copy 9, Reverse)]*	***[7]***
20	Scan once	(1) KELT-1	WFC3/IR, MULTIACCUM, GRISM256	G141	NSAMP=15; SAMP-SEQ=SPARS10	SPATIAL SCAN 0.0 97,90.0 Degrees,Forward	Sequence 18-20 Non-Int in After transit to after eclipse (01)	103.128633 Secs (103.129 Secs) *[==>]*	***[7]***
21	Image	(1) KELT-1	WFC3/IR, MULTIACCUM, GRISM256	F126N	NSAMP=2; SAMP-SEQ=RAPID		Sequence 21-23 Non-Int in After transit to after eclipse (01)	0.55563 Secs (0.556 Secs) *[==>]*	***[8]***

22	Scan	(1) KELT-1	WFC3/IR, MULTIACCUM, GRISM256	G141	NSAMP=15; SAMP-SEQ=SPARS10	SPATIAL SCAN 0.0 97,90.0 Degrees,Round trip	Sequence 21-23 Non-Int in After transit to after eclipse (01)	103.128633 Secs X 9 (1856.315 Secs)	
								[==>(Copy 1, Forward)] *[==>(Copy 1, Reverse)]* *[==>(Copy 2, Forward)]* *[==>(Copy 2, Reverse)]* *[==>(Copy 3, Forward)]* *[==>(Copy 3, Reverse)]* *[==>(Copy 4, Forward)]* *[==>(Copy 4, Reverse)]* *[==>(Copy 5, Forward)]* *[==>(Copy 5, Reverse)]* *[==>(Copy 6, Forward)]* *[==>(Copy 6, Reverse)]* *[==>(Copy 7, Forward)]* *[==>(Copy 7, Reverse)]* *[==>(Copy 8, Forward)]* *[==>(Copy 8, Reverse)]* *[==>(Copy 9, Forward)]* *[==>(Copy 9, Reverse)]*	***[8]***
23	Scan once	(1) KELT-1	WFC3/IR, MULTIACCUM, GRISM256	G141	NSAMP=15; SAMP-SEQ=SPARS10	SPATIAL SCAN 0.0 97,90.0 Degrees,Forward	Sequence 21-23 Non-Int in After transit to after eclipse (01)	103.128633 Secs (103.129 Secs)	
								[==>]	***[8]***
24	Image	(1) KELT-1	WFC3/IR, MULTIACCUM, GRISM256	F126N	NSAMP=2; SAMP-SEQ=RAPID		Sequence 24-26 Non-Int in After transit to after eclipse (01)	0.55563 Secs (0.556 Secs)	
								[==>]	***[9]***
25	Scan	(1) KELT-1	WFC3/IR, MULTIACCUM, GRISM256	G141	NSAMP=15; SAMP-SEQ=SPARS10	SPATIAL SCAN 0.0 97,90.0 Degrees,Round trip	Sequence 24-26 Non-Int in After transit to after eclipse (01)	103.128633 Secs X 9 (1856.315 Secs)	
								[==>(Copy 1, Forward)] *[==>(Copy 1, Reverse)]* *[==>(Copy 2, Forward)]* *[==>(Copy 2, Reverse)]* *[==>(Copy 3, Forward)]* *[==>(Copy 3, Reverse)]* *[==>(Copy 4, Forward)]* *[==>(Copy 4, Reverse)]* *[==>(Copy 5, Forward)]* *[==>(Copy 5, Reverse)]* *[==>(Copy 6, Forward)]* *[==>(Copy 6, Reverse)]* *[==>(Copy 7, Forward)]* *[==>(Copy 7, Reverse)]* *[==>(Copy 8, Forward)]* *[==>(Copy 8, Reverse)]* *[==>(Copy 9, Forward)]* *[==>(Copy 9, Reverse)]*	***[9]***

	26	Scan once	(1) KELT-1	WFC3/IR, MULTIACCUM, GRISM256	G141	NSAMP=15; SAMP-SEQ=SPARS10	SPATIAL SCAN 0.0 97,90.0 Degrees,Forward	Sequence 24-26 Non-Int in After transit to after eclipse (01)	103.128633 Secs (103.129 Secs) *[==>]*	 ***[9]***
	27	Image	(1) KELT-1	WFC3/IR, MULTIACCUM, GRISM256	F126N	NSAMP=2; SAMP-SEQ=RAPID		Sequence 27-29 Non-Int in After transit to after eclipse (01)	0.55563 Secs (0.556 Secs) *[==>]*	 ***[10]***
	28	Scan	(1) KELT-1	WFC3/IR, MULTIACCUM, GRISM256	G141	NSAMP=15; SAMP-SEQ=SPARS10	SPATIAL SCAN 0.0 97,90.0 Degrees,Round trip	Sequence 27-29 Non-Int in After transit to after eclipse (01)	103.128633 Secs X 9 (1856.315 Secs) *[==>(Copy 1, Forward)]* *[==>(Copy 1, Reverse)]* *[==>(Copy 2, Forward)]* *[==>(Copy 2, Reverse)]* *[==>(Copy 3, Forward)]* *[==>(Copy 3, Reverse)]* *[==>(Copy 4, Forward)]* *[==>(Copy 4, Reverse)]* *[==>(Copy 5, Forward)]* *[==>(Copy 5, Reverse)]* *[==>(Copy 6, Forward)]* *[==>(Copy 6, Reverse)]* *[==>(Copy 7, Forward)]* *[==>(Copy 7, Reverse)]* *[==>(Copy 8, Forward)]* *[==>(Copy 8, Reverse)]* *[==>(Copy 9, Forward)]* *[==>(Copy 9, Reverse)]*	 ***[10]***
	29	Scan once	(1) KELT-1	WFC3/IR, MULTIACCUM, GRISM256	G141	NSAMP=15; SAMP-SEQ=SPARS10	SPATIAL SCAN 0.0 97,90.0 Degrees,Forward	Sequence 27-29 Non-Int in After transit to after eclipse (01)	103.128633 Secs (103.129 Secs) *[==>]*	 ***[10]***

Orbit Structure




Orbit 2
Server Version: 20160601
GS Reacq
Exp. 3
Pointing Maneuver
Setup
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Setup
Exp. 4, copy 1
Setup
Exp. 4, copy 2
Setup
Exp. 4, copy 2
Setup
Exp. 4, copy 3
Exp. 4, copy 3
Setup
Exp. 4, copy 4
Setup
Setup
Exp. 4, copy 4
Setup
Exp. 4, copy 5
Exp. 4, copy 5
Setup
Setup
Exp. 4, copy 6
Exp. 4, copy 6
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Exp. 4, copy 7
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Exp. 4, copy 7
Setup
Setup
Exp. 4, copy 8
Exp. 4, copy 8
Setup
Exp. 4, copy 9
Setup
Setup
Exp. 4, copy 9
Setup
Exp. 5
Unused Orbital Visibility = 12
Pointing Maneuver
Occultation
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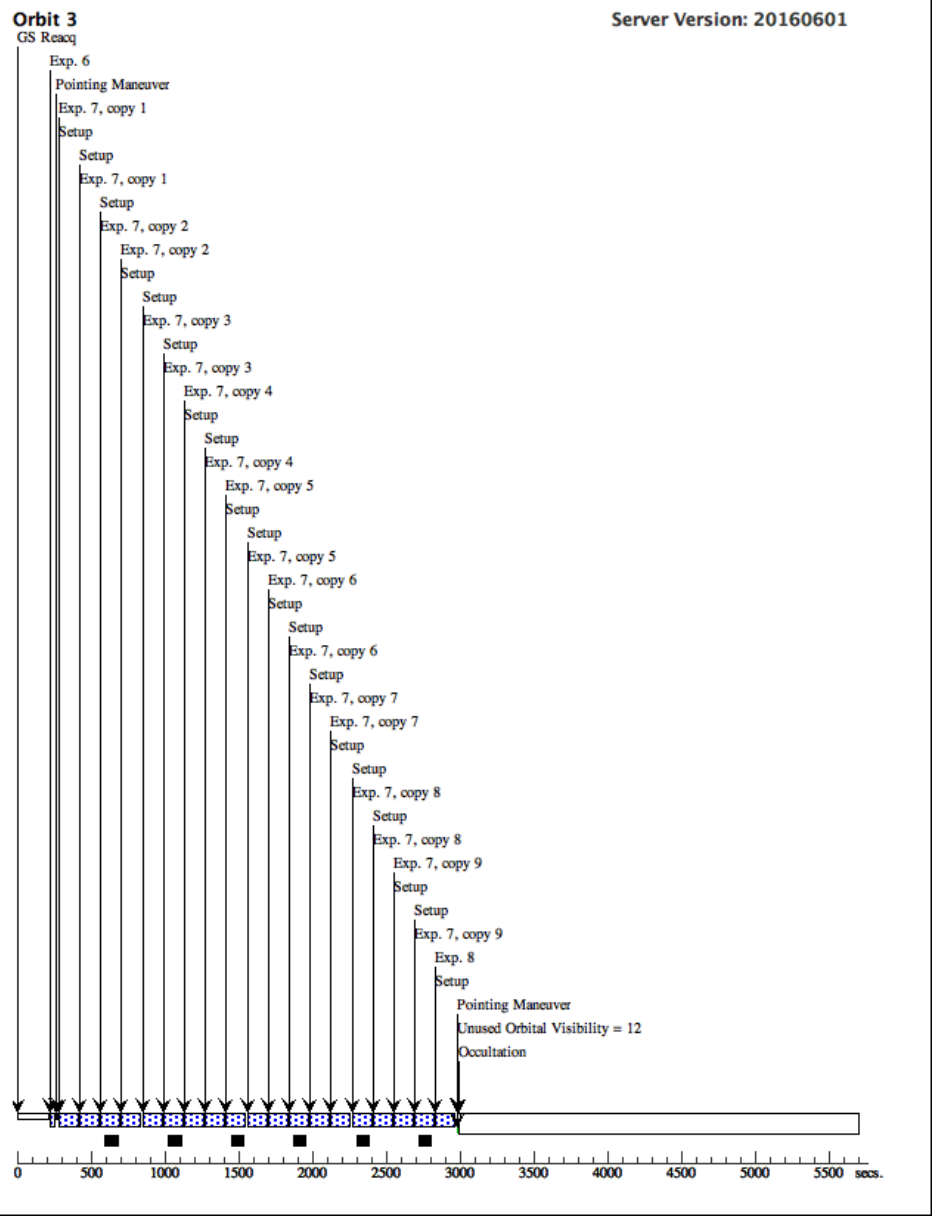
1500
2000
2500
3000
3500
4000
4500
5000
5500
secs.


Orbit 3
Server Version: 20160601
GS Reacq
Exp. 6
Pointing Maneuver
Exp. 7, copy 1
Setup
Setup
Exp. 7, copy 1
Setup
Exp. 7, copy 2
Exp. 7, copy 2
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Exp. 7, copy 3
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Exp. 7, copy 7
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Setup
Exp. 7, copy 8
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Exp. 7, copy 8
Exp. 7, copy 9
Setup
Setup
Exp. 7, copy 9
Exp. 8
Setup
Pointing Maneuver
Unused Orbital Visibility = 12
Occultation
0
500
1000
1500
2000
2500
3000
3500
4000
4500
5000
5500
secs.


Orbit 4
Server Version: 20160601
GS Reacq
Exp. 9
Pointing Maneuver
Exp. 10, copy 1
Setup
Exp. 10, copy 1
Setup
Setup
Exp. 10, copy 2
Setup
Exp. 10, copy 2
Exp. 10, copy 3
Setup
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Exp. 10, copy 8
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Setup
Exp. 10, copy 9
Setup
Exp. 10, copy 9
Setup
Exp. 11
Setup
Unused Orbital Visibility = 12
Pointing Maneuver
Occultation
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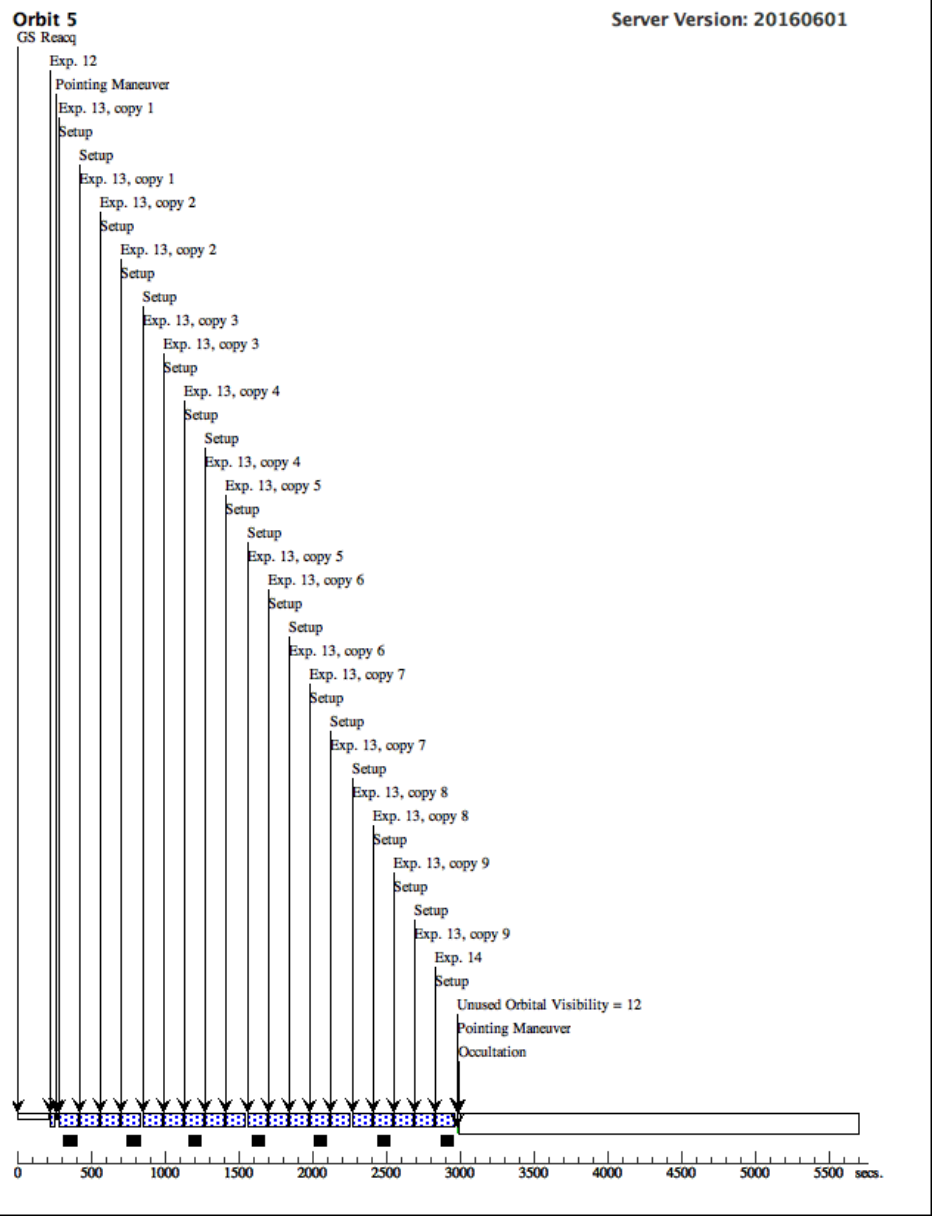
1000
1500
2000
2500
3000
3500
4000
4500
5000
5500
secs.


Orbit 5
Server Version: 20160601
GS Reacq
Exp. 12
Pointing Maneuver
Exp. 13, copy 1
Setup
Setup
Exp. 13, copy 1
Exp. 13, copy 2
Setup
Exp. 13, copy 2
Setup
Setup
Exp. 13, copy 3
Exp. 13, copy 3
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Exp. 13, copy 4
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Exp. 13, copy 4
Exp. 13, copy 5
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Exp. 13, copy 5
Exp. 13, copy 6
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Exp. 13, copy 6
Exp. 13, copy 7
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Exp. 13, copy 7
Setup
Exp. 13, copy 8
Exp. 13, copy 8
Setup
Exp. 13, copy 9
Setup
Setup
Exp. 13, copy 9
Exp. 14
Setup
Unused Orbital Visibility = 12
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Occultation
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3500
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5000
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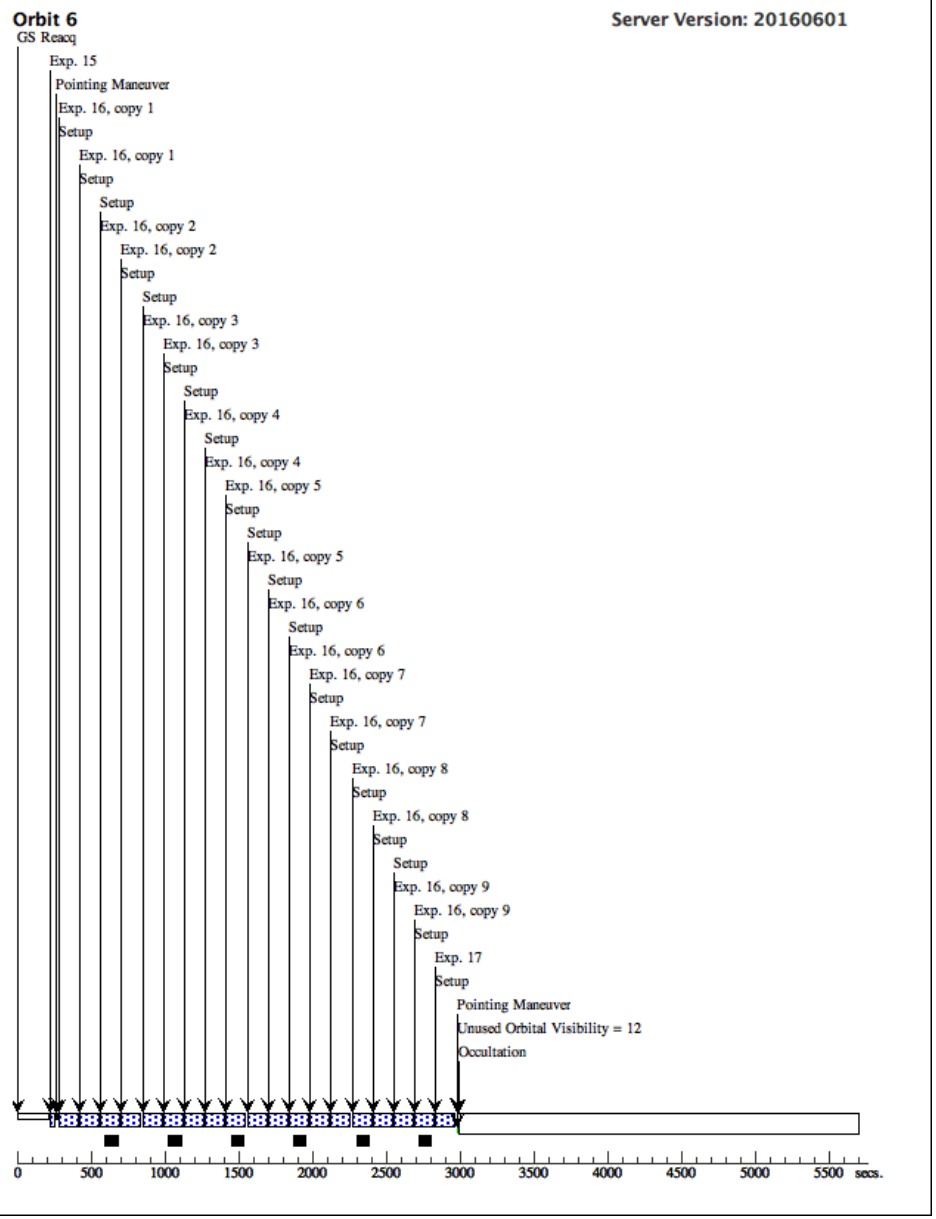
secs.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Server Version: 20160601
GS Reacq
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Setup
Exp. 16, copy 3
Exp. 16, copy 3
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Exp. 16, copy 4
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Exp. 16, copy 5
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Exp. 16, copy 7
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Exp. 16, copy 7
Setup
Exp. 16, copy 8
Setup
Exp. 16, copy 8
Setup
Setup
Exp. 16, copy 9
Exp. 16, copy 9
Setup
Exp. 17
Setup
Pointing Maneuver
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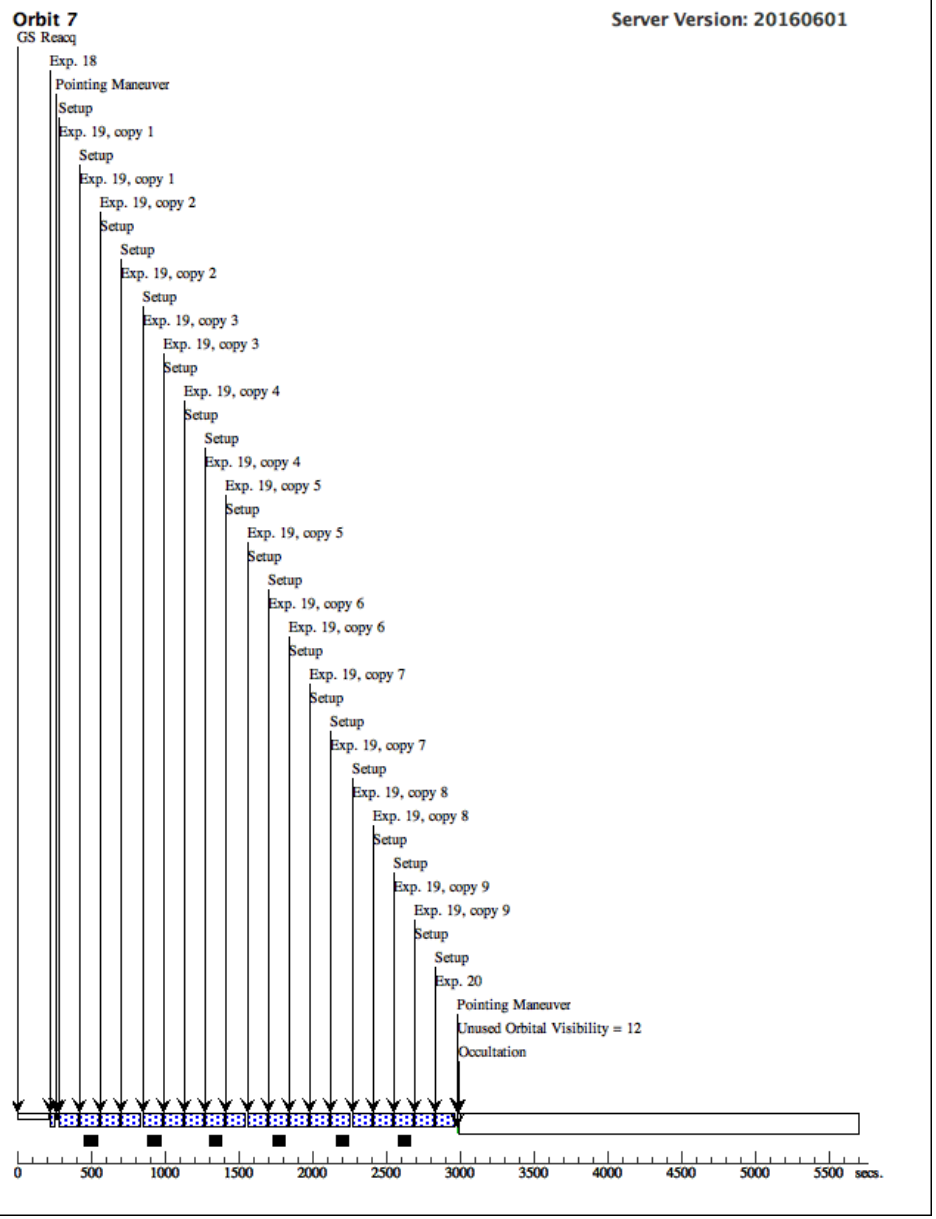
Orbit 7
Server Version: 20160601
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Exp. 18
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Exp. 19, copy 2
Setup
Setup
Exp. 19, copy 2
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Exp. 19, copy 3
Exp. 19, copy 3
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Exp. 19, copy 4
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Exp. 19, copy 4
Exp. 19, copy 5
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Exp. 19, copy 5
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Exp. 19, copy 6
Exp. 19, copy 6
Setup
Exp. 19, copy 7
Setup
Setup
Exp. 19, copy 7
Setup
Exp. 19, copy 8
Exp. 19, copy 8
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Exp. 19, copy 9
Exp. 19, copy 9
Setup
Setup
Exp. 20
Pointing Maneuver
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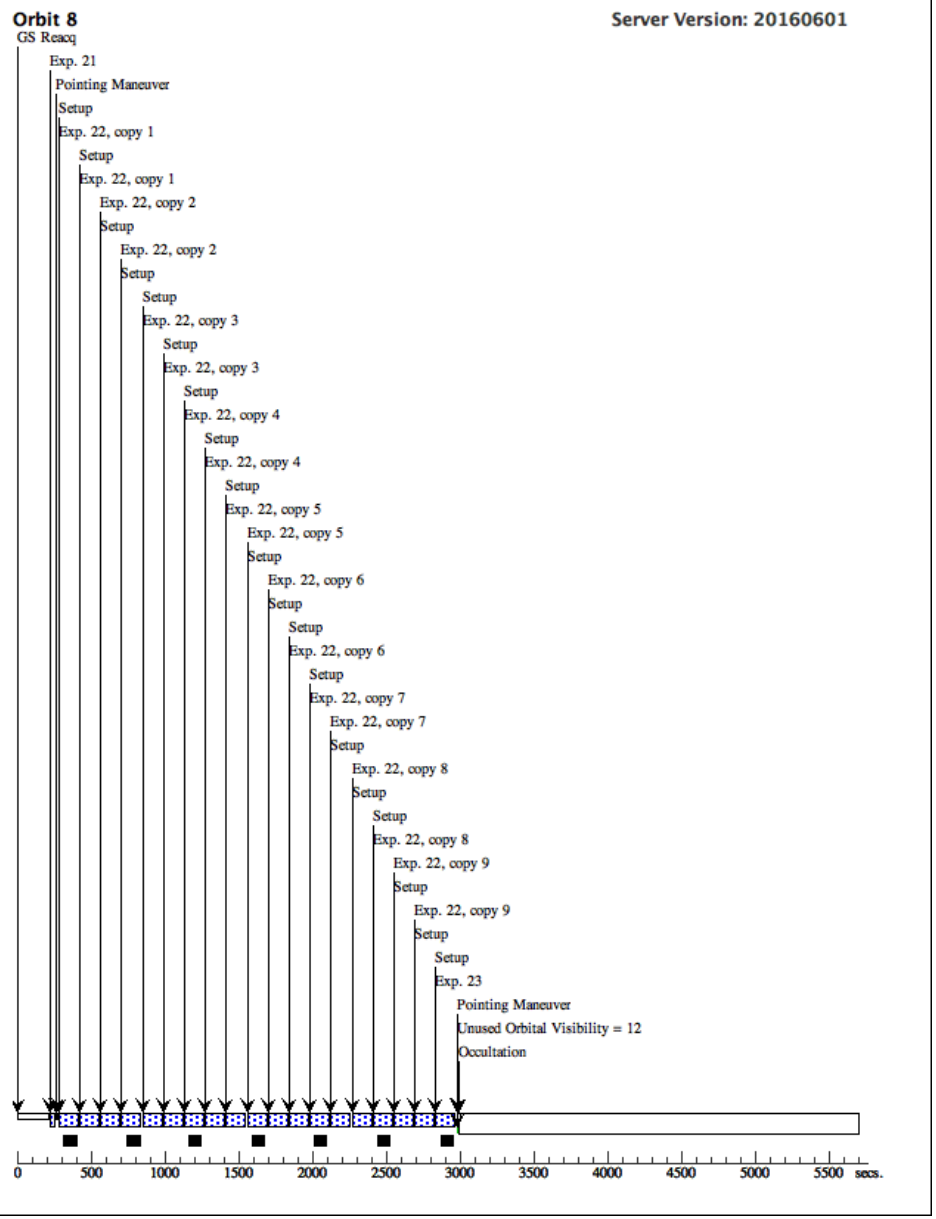
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Server Version: 20160601
GS Reacq
Exp. 21
Pointing Maneuver
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Exp. 22, copy 2
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Exp. 22, copy 3
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Exp. 22, copy 3
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Exp. 22, copy 4
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Exp. 22, copy 7
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Exp. 22, copy 8
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Setup
Exp. 22, copy 8
Exp. 22, copy 9
Setup
Exp. 22, copy 9
Setup
Setup
Exp. 23
Pointing Maneuver
Unused Orbital Visibility = 12
Occultation
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500
1000
1500
2000
2500
3000
3500
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secs.


Orbit 9
Server Version: 20160601
GS Reacq
Exp. 24
Pointing Maneuver
Exp. 25, copy 1
Setup
Exp. 25, copy 1
Setup
Setup
Exp. 25, copy 2
Setup
Exp. 25, copy 2
Setup
Exp. 25, copy 3
Exp. 25, copy 3
Setup
Setup
Exp. 25, copy 4
Exp. 25, copy 4
Setup
Exp. 25, copy 5
Setup
Setup
Exp. 25, copy 5
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Exp. 25, copy 6
Setup
Exp. 25, copy 6
Setup
Exp. 25, copy 7
Setup
Exp. 25, copy 7
Setup
Exp. 25, copy 8
Setup
Exp. 25, copy 8
Setup
Exp. 25, copy 9
Exp. 25, copy 9
Setup
Exp. 26
Setup
Pointing Maneuver
Unused Orbital Visibility = 12
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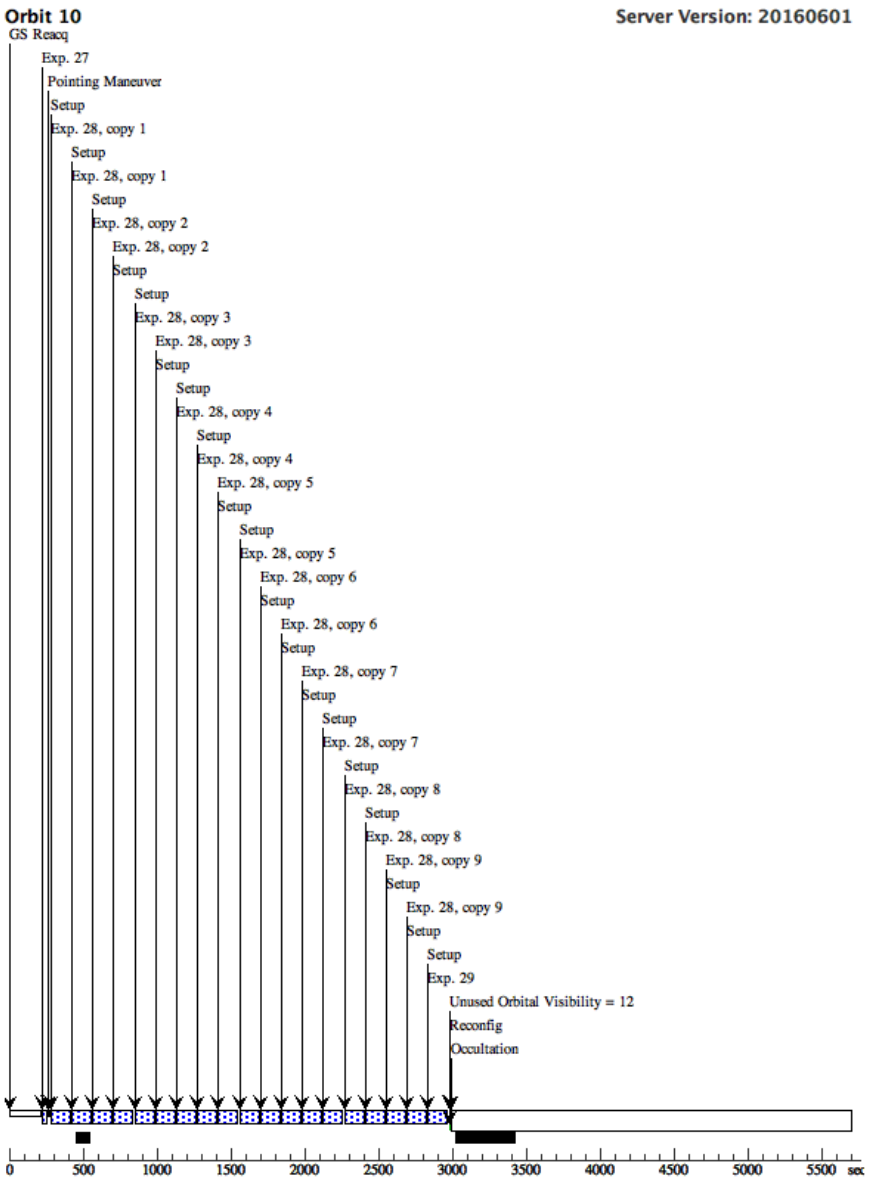
secs.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Server Version: 20160601
GS Reacq
Exp. 27
Pointing Maneuver
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Exp. 28, copy 1
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Exp. 28, copy 1
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Exp. 28, copy 2
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Exp. 28, copy 3
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Exp. 28, copy 4
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Exp. 28, copy 5
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Exp. 28, copy 5
Exp. 28, copy 6
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Exp. 28, copy 6
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Exp. 28, copy 7
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Exp. 28, copy 7
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Exp. 28, copy 8
Setup
Exp. 28, copy 8
Exp. 28, copy 9
Setup
Exp. 28, copy 9
Setup
Setup
Exp. 29
Unused Orbital Visibility = 12
Reconfig
Occultation
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5500
sec

Visit

Proposal 14664, Before eclipse to before transit (02), implementation Wed Sep 07 22:00:23 GMT 2016

Diagnostic Status: Warning

Scientific Instruments: WFC3/IR

Special Requirements: SCHED 100%; ORIENT 67D TO 157 D; ORIENT 247D TO 337 D; Period 1.217494 D AND ZERO-PHASE HJD2457306.97537

Diagnostics

(Before eclipse to before transit (02)) Warning (Orbit Planner): LONG SU LIKELY TO INTERSECT THE SAA

Fixed Targets

#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(1)	KELT-1	RA: 00 01 26.9222 (.3621758d)	Proper Motion RA: 3.70 mas/yr	V=10.63+/-0.06	Reference Frame: SIMBAD
		Dec: +39 23 1.67 (39.38380d)	Proper Motion Dec: -14.10 mas/yr	J=9.682,	
		Equinox: J2000	Epoch of Position: 2000	H=9.534	

Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.
Extended=NO

Exposures

#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
1	Image	(1) KELT-1	WFC3/IR, MULTIACCUM, GRISM256	F126N	NSAMP=2; SAMP-SEQ=RAPID	PHASE 0.345 TO 0.355	Sequence 1-2 Non-Int in Before eclipse to before transit (02)	0.55563 Secs (0.556 Secs) *[==>]*	***[1]***
2	Scan	(1) KELT-1	WFC3/IR, MULTIACCUM, GRISM256	G141	NSAMP=15; SAMP-SEQ=SPARS10	SPATIAL SCAN 0.097,90.0 Degrees,Round trip	Sequence 1-2 Non-Int in Before eclipse to before transit (02)	103.128633 Secs X 9 (1856.315 Secs) *[==>(Copy 1, Forward)]* *[==>(Copy 1, Reverse)]* *[==>(Copy 2, Forward)]* *[==>(Copy 2, Reverse)]* *[==>(Copy 3, Forward)]* *[==>(Copy 3, Reverse)]* *[==>(Copy 4, Forward)]* *[==>(Copy 4, Reverse)]* *[==>(Copy 5, Forward)]* *[==>(Copy 5, Reverse)]* *[==>(Copy 6, Forward)]* *[==>(Copy 6, Reverse)]* *[==>(Copy 7, Forward)]* *[==>(Copy 7, Reverse)]* *[==>(Copy 8, Forward)]* *[==>(Copy 8, Reverse)]* *[==>(Copy 9, Forward)]* *[==>(Copy 9, Reverse)]*	***[1]***
3	Image	(1) KELT-1	WFC3/IR, MULTIACCUM, GRISM256	F126N	NSAMP=2; SAMP-SEQ=RAPID		Sequence 3-5 Non-Int in Before eclipse to before transit (02)	0.55563 Secs (0.556 Secs) *[==>]*	***[2]***

	4	Scan	(1) KELT-1	WFC3/IR, MULTIACCUM, GRISM256	G141	NSAMP=15; SAMP-SEQ=SPARS10	SPATIAL SCAN 0.0 97,90.0 Degrees,Round trip	Sequence 3-5 Non-Int in Before eclipse to before transit (02)	103.128633 Secs X 9 (1856.315 Secs) *[==>(Copy 1, Forward)]* *[==>(Copy 1, Reverse)]* *[==>(Copy 2, Forward)]* *[==>(Copy 2, Reverse)]* *[==>(Copy 3, Forward)]* *[==>(Copy 3, Reverse)]* *[==>(Copy 4, Forward)]* *[==>(Copy 4, Reverse)]* *[==>(Copy 5, Forward)]* *[==>(Copy 5, Reverse)]* *[==>(Copy 6, Forward)]* *[==>(Copy 6, Reverse)]* *[==>(Copy 7, Forward)]* *[==>(Copy 7, Reverse)]* *[==>(Copy 8, Forward)]* *[==>(Copy 8, Reverse)]* *[==>(Copy 9, Forward)]* *[==>(Copy 9, Reverse)]*	***[2]***
	5	Scan once	(1) KELT-1	WFC3/IR, MULTIACCUM, GRISM256	G141	NSAMP=15; SAMP-SEQ=SPARS10	SPATIAL SCAN 0.0 97,90.0 Degrees,Forward	Sequence 3-5 Non-Int in Before eclipse to before transit (02)	103.128633 Secs (103.129 Secs) *[==>]*	***[2]***
	6	Image	(1) KELT-1	WFC3/IR, MULTIACCUM, GRISM256	F126N	NSAMP=2; SAMP-SEQ=RAPID		Sequence 6-8 Non-Int in Before eclipse to before transit (02)	0.55563 Secs (0.556 Secs) *[==>]*	***[3]***
	7	Scan	(1) KELT-1	WFC3/IR, MULTIACCUM, GRISM256	G141	NSAMP=15; SAMP-SEQ=SPARS10	SPATIAL SCAN 0.0 97,90.0 Degrees,Round trip	Sequence 6-8 Non-Int in Before eclipse to before transit (02)	103.128633 Secs X 9 (1856.315 Secs) *[==>(Copy 1, Forward)]* *[==>(Copy 1, Reverse)]* *[==>(Copy 2, Forward)]* *[==>(Copy 2, Reverse)]* *[==>(Copy 3, Forward)]* *[==>(Copy 3, Reverse)]* *[==>(Copy 4, Forward)]* *[==>(Copy 4, Reverse)]* *[==>(Copy 5, Forward)]* *[==>(Copy 5, Reverse)]* *[==>(Copy 6, Forward)]* *[==>(Copy 6, Reverse)]* *[==>(Copy 7, Forward)]* *[==>(Copy 7, Reverse)]* *[==>(Copy 8, Forward)]* *[==>(Copy 8, Reverse)]* *[==>(Copy 9, Forward)]* *[==>(Copy 9, Reverse)]*	***[3]***

8	Scan once	(1) KELT-1	WFC3/IR, MULTIACCUM, GRISM256	G141	NSAMP=15; SAMP-SEQ=SPARS10	SPATIAL SCAN 0.097,90.0 Degrees,Forward	Sequence 6-8 Non-Int in Before eclipse to before transit (02)	103.128633 Secs (103.129 Secs) *[==>]*	 ***[3]***
9	Image	(1) KELT-1	WFC3/IR, MULTIACCUM, GRISM256	F126N	NSAMP=2; SAMP-SEQ=RAPID		Sequence 9-11 Non-Int in Before eclipse to before transit (02)	0.55563 Secs (0.556 Secs) *[==>]*	 ***[4]***
10	Scan	(1) KELT-1	WFC3/IR, MULTIACCUM, GRISM256	G141	NSAMP=15; SAMP-SEQ=SPARS10	SPATIAL SCAN 0.097,90.0 Degrees,Round trip	Sequence 9-11 Non-Int in Before eclipse to before transit (02)	103.128633 Secs X 9 (1856.315 Secs) *[==>(Copy 1, Forward)]* *[==>(Copy 1, Reverse)]* *[==>(Copy 2, Forward)]* *[==>(Copy 2, Reverse)]* *[==>(Copy 3, Forward)]* *[==>(Copy 3, Reverse)]* *[==>(Copy 4, Forward)]* *[==>(Copy 4, Reverse)]* *[==>(Copy 5, Forward)]* *[==>(Copy 5, Reverse)]* *[==>(Copy 6, Forward)]* *[==>(Copy 6, Reverse)]* *[==>(Copy 7, Forward)]* *[==>(Copy 7, Reverse)]* *[==>(Copy 8, Forward)]* *[==>(Copy 8, Reverse)]* *[==>(Copy 9, Forward)]* *[==>(Copy 9, Reverse)]*	 ***[4]***
11	Scan once	(1) KELT-1	WFC3/IR, MULTIACCUM, GRISM256	G141	NSAMP=15; SAMP-SEQ=SPARS10	SPATIAL SCAN 0.097,90.0 Degrees,Forward	Sequence 9-11 Non-Int in Before eclipse to before transit (02)	103.128633 Secs (103.129 Secs) *[==>]*	 ***[4]***
12	Image	(1) KELT-1	WFC3/IR, MULTIACCUM, GRISM256	F126N	NSAMP=2; SAMP-SEQ=RAPID		Sequence 12-14 Non-Int in Before eclipse to before transit (02)	0.55563 Secs (0.556 Secs) *[==>]*	 ***[5]***

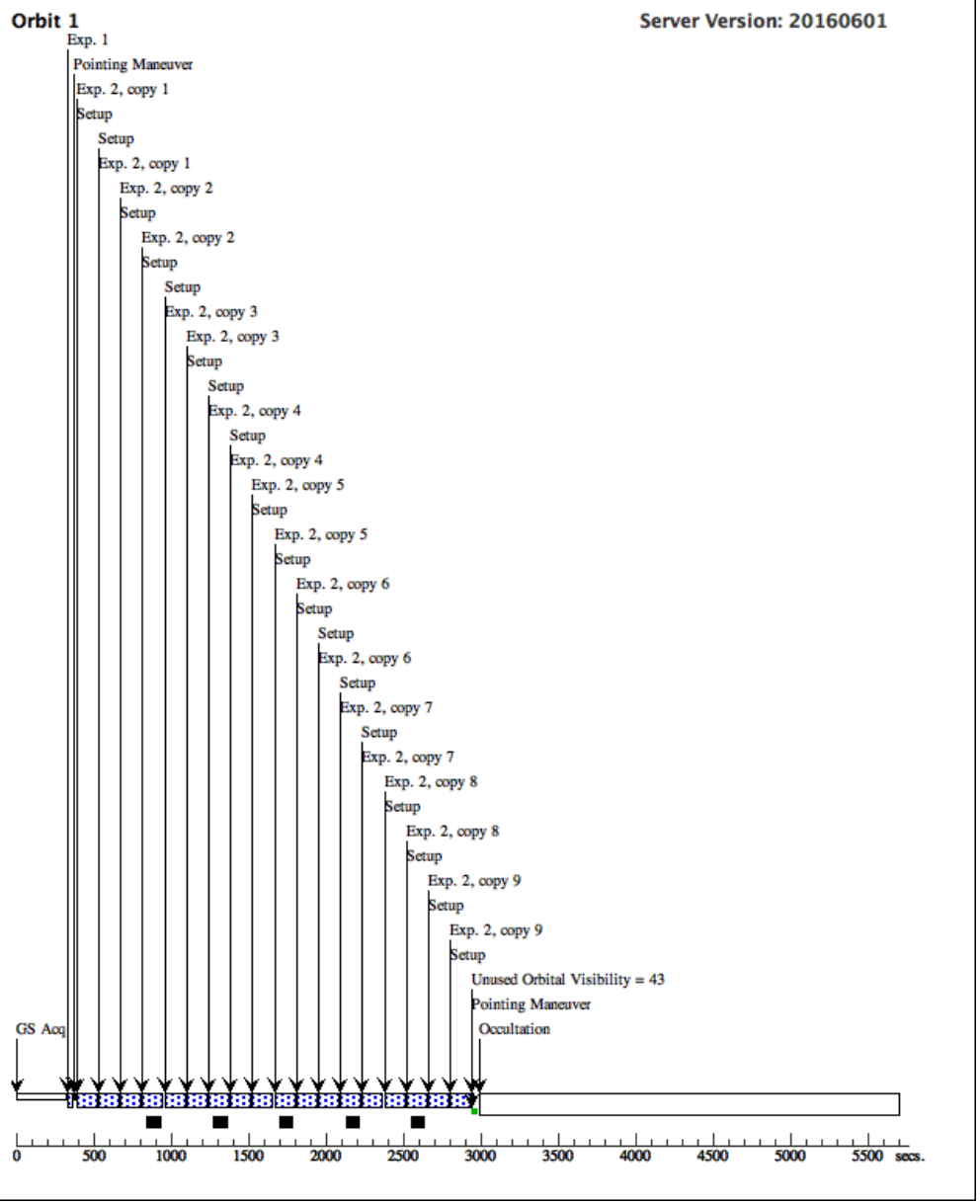
13	Scan	(1) KELT-1	WFC3/IR, MULTIACCUM, GRISM256	G141	NSAMP=15; SAMP-SEQ=SPARS10	SPATIAL SCAN 0.0 97,90.0 Degrees,Round trip	Sequence 12-14 Non-Int in Before eclipse to before transit (02)	103.128633 Secs X 9 (1856.315 Secs) *[==>(Copy 1, Forward)]* *[==>(Copy 1, Reverse)]* *[==>(Copy 2, Forward)]* *[==>(Copy 2, Reverse)]* *[==>(Copy 3, Forward)]* *[==>(Copy 3, Reverse)]* *[==>(Copy 4, Forward)]* *[==>(Copy 4, Reverse)]* *[==>(Copy 5, Forward)]* *[==>(Copy 5, Reverse)]* *[==>(Copy 6, Forward)]* *[==>(Copy 6, Reverse)]* *[==>(Copy 7, Forward)]* *[==>(Copy 7, Reverse)]* *[==>(Copy 8, Forward)]* *[==>(Copy 8, Reverse)]* *[==>(Copy 9, Forward)]* *[==>(Copy 9, Reverse)]*	***[5]***
14	Scan once	(1) KELT-1	WFC3/IR, MULTIACCUM, GRISM256	G141	NSAMP=15; SAMP-SEQ=SPARS10	SPATIAL SCAN 0.0 97,90.0 Degrees,Forward	Sequence 12-14 Non-Int in Before eclipse to before transit (02)	103.128633 Secs (103.129 Secs) *[==>]*	***[5]***
15	Image	(1) KELT-1	WFC3/IR, MULTIACCUM, GRISM256	F126N	NSAMP=2; SAMP-SEQ=RAPID		Sequence 15-17 Non-Int in Before eclipse to before transit (02)	0.55563 Secs (0.556 Secs) *[==>]*	***[6]***
16	Scan	(1) KELT-1	WFC3/IR, MULTIACCUM, GRISM256	G141	NSAMP=15; SAMP-SEQ=SPARS10	SPATIAL SCAN 0.0 97,90.0 Degrees,Round trip	Sequence 15-17 Non-Int in Before eclipse to before transit (02)	103.128633 Secs X 9 (1856.315 Secs) *[==>(Copy 1, Forward)]* *[==>(Copy 1, Reverse)]* *[==>(Copy 2, Forward)]* *[==>(Copy 2, Reverse)]* *[==>(Copy 3, Forward)]* *[==>(Copy 3, Reverse)]* *[==>(Copy 4, Forward)]* *[==>(Copy 4, Reverse)]* *[==>(Copy 5, Forward)]* *[==>(Copy 5, Reverse)]* *[==>(Copy 6, Forward)]* *[==>(Copy 6, Reverse)]* *[==>(Copy 7, Forward)]* *[==>(Copy 7, Reverse)]* *[==>(Copy 8, Forward)]* *[==>(Copy 8, Reverse)]* *[==>(Copy 9, Forward)]* *[==>(Copy 9, Reverse)]*	***[6]***

17	Scan once	(1) KELT-1	WFC3/IR, MULTIACCUM, GRISM256	G141	NSAMP=15; SAMP-SEQ=SPARS10	SPATIAL SCAN 0.0 97,90.0 Degrees,Forward	Sequence 15-17 Non-Int in Before eclipse to before transit (02)	103.128633 Secs (103.129 Secs) *[==>]*	 ***[6]***
18	Image	(1) KELT-1	WFC3/IR, MULTIACCUM, GRISM256	F126N	NSAMP=2; SAMP-SEQ=RAPID		Sequence 18-20 Non-Int in Before eclipse to before transit (02)	0.55563 Secs (0.556 Secs) *[==>]*	 ***[7]***
19	Scan	(1) KELT-1	WFC3/IR, MULTIACCUM, GRISM256	G141	NSAMP=15; SAMP-SEQ=SPARS10	SPATIAL SCAN 0.0 97,90.0 Degrees,Round trip	Sequence 18-20 Non-Int in Before eclipse to before transit (02)	103.128633 Secs X 9 (1856.315 Secs) *[==>(Copy 1, Forward)]* *[==>(Copy 1, Reverse)]* *[==>(Copy 2, Forward)]* *[==>(Copy 2, Reverse)]* *[==>(Copy 3, Forward)]* *[==>(Copy 3, Reverse)]* *[==>(Copy 4, Forward)]* *[==>(Copy 4, Reverse)]* *[==>(Copy 5, Forward)]* *[==>(Copy 5, Reverse)]* *[==>(Copy 6, Forward)]* *[==>(Copy 6, Reverse)]* *[==>(Copy 7, Forward)]* *[==>(Copy 7, Reverse)]* *[==>(Copy 8, Forward)]* *[==>(Copy 8, Reverse)]* *[==>(Copy 9, Forward)]* *[==>(Copy 9, Reverse)]*	 ***[7]***
20	Scan once	(1) KELT-1	WFC3/IR, MULTIACCUM, GRISM256	G141	NSAMP=15; SAMP-SEQ=SPARS10	SPATIAL SCAN 0.0 97,90.0 Degrees,Forward	Sequence 18-20 Non-Int in Before eclipse to before transit (02)	103.128633 Secs (103.129 Secs) *[==>]*	 ***[7]***
21	Image	(1) KELT-1	WFC3/IR, MULTIACCUM, GRISM256	F126N	NSAMP=2; SAMP-SEQ=RAPID		Sequence 21-23 Non-Int in Before eclipse to before transit (02)	0.55563 Secs (0.556 Secs) *[==>]*	 ***[8]***

	22	Scan	(1) KELT-1	WFC3/IR, MULTIACCUM, GRISM256	G141	NSAMP=15; SAMP-SEQ=SPARS10	SPATIAL SCAN 0.0 97,90.0 Degrees,Round trip	Sequence 21-23 Non-Int in Before eclipse to before transit (02)	103.128633 Secs X 9 (1856.315 Secs) *[==>(Copy 1, Forward)]* *[==>(Copy 1, Reverse)]* *[==>(Copy 2, Forward)]* *[==>(Copy 2, Reverse)]* *[==>(Copy 3, Forward)]* *[==>(Copy 3, Reverse)]* *[==>(Copy 4, Forward)]* *[==>(Copy 4, Reverse)]* *[==>(Copy 5, Forward)]* *[==>(Copy 5, Reverse)]* *[==>(Copy 6, Forward)]* *[==>(Copy 6, Reverse)]* *[==>(Copy 7, Forward)]* *[==>(Copy 7, Reverse)]* *[==>(Copy 8, Forward)]* *[==>(Copy 8, Reverse)]* *[==>(Copy 9, Forward)]* *[==>(Copy 9, Reverse)]*	***[8]***
	23	Scan once	(1) KELT-1	WFC3/IR, MULTIACCUM, GRISM256	G141	NSAMP=15; SAMP-SEQ=SPARS10	SPATIAL SCAN 0.0 97,90.0 Degrees,Forward	Sequence 21-23 Non-Int in Before eclipse to before transit (02)	103.128633 Secs (103.129 Secs) *[==>]*	***[8]***
	24	Image	(1) KELT-1	WFC3/IR, MULTIACCUM, GRISM256	F126N	NSAMP=2; SAMP-SEQ=RAPID		Sequence 24-26 Non-Int in Before eclipse to before transit (02)	0.55563 Secs (0.556 Secs) *[==>]*	***[9]***
	25	Scan	(1) KELT-1	WFC3/IR, MULTIACCUM, GRISM256	G141	NSAMP=15; SAMP-SEQ=SPARS10	SPATIAL SCAN 0.0 97,90.0 Degrees,Round trip	Sequence 24-26 Non-Int in Before eclipse to before transit (02)	103.128633 Secs X 9 (1856.315 Secs) *[==>(Copy 1, Forward)]* *[==>(Copy 1, Reverse)]* *[==>(Copy 2, Forward)]* *[==>(Copy 2, Reverse)]* *[==>(Copy 3, Forward)]* *[==>(Copy 3, Reverse)]* *[==>(Copy 4, Forward)]* *[==>(Copy 4, Reverse)]* *[==>(Copy 5, Forward)]* *[==>(Copy 5, Reverse)]* *[==>(Copy 6, Forward)]* *[==>(Copy 6, Reverse)]* *[==>(Copy 7, Forward)]* *[==>(Copy 7, Reverse)]* *[==>(Copy 8, Forward)]* *[==>(Copy 8, Reverse)]* *[==>(Copy 9, Forward)]* *[==>(Copy 9, Reverse)]*	***[9]***

	26	Scan once	(1) KELT-1	WFC3/IR, MULTIACCUM, GRISM256	G141	NSAMP=15; SAMP-SEQ=SPARS10	SPATIAL SCAN 0.097,90.0 Degrees,Forward	Sequence 24-26 Non-Int in Before eclipse to before transit (02)	103.128633 Secs (103.129 Secs) *[==>]*	 ***[9]***
	27	Image	(1) KELT-1	WFC3/IR, MULTIACCUM, GRISM256	F126N	NSAMP=2; SAMP-SEQ=RAPID		Sequence 27-29 Non-Int in Before eclipse to before transit (02)	0.55563 Secs (0.556 Secs) *[==>]*	 ***[10]***
	28	Scan	(1) KELT-1	WFC3/IR, MULTIACCUM, GRISM256	G141	NSAMP=15; SAMP-SEQ=SPARS10	SPATIAL SCAN 0.097,90.0 Degrees,Round trip	Sequence 27-29 Non-Int in Before eclipse to before transit (02)	103.128633 Secs X 9 (1856.315 Secs) *[==>(Copy 1, Forward)]* *[==>(Copy 1, Reverse)]* *[==>(Copy 2, Forward)]* *[==>(Copy 2, Reverse)]* *[==>(Copy 3, Forward)]* *[==>(Copy 3, Reverse)]* *[==>(Copy 4, Forward)]* *[==>(Copy 4, Reverse)]* *[==>(Copy 5, Forward)]* *[==>(Copy 5, Reverse)]* *[==>(Copy 6, Forward)]* *[==>(Copy 6, Reverse)]* *[==>(Copy 7, Forward)]* *[==>(Copy 7, Reverse)]* *[==>(Copy 8, Forward)]* *[==>(Copy 8, Reverse)]* *[==>(Copy 9, Forward)]* *[==>(Copy 9, Reverse)]*	 ***[10]***
	29	Scan once	(1) KELT-1	WFC3/IR, MULTIACCUM, GRISM256	G141	NSAMP=15; SAMP-SEQ=SPARS10	SPATIAL SCAN 0.097,90.0 Degrees,Forward	Sequence 27-29 Non-Int in Before eclipse to before transit (02)	103.128633 Secs (103.129 Secs) *[==>]*	 ***[10]***

Orbit Structure

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Exp. 4, copy 6
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Exp. 5
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Unused Orbital Visibility = 12
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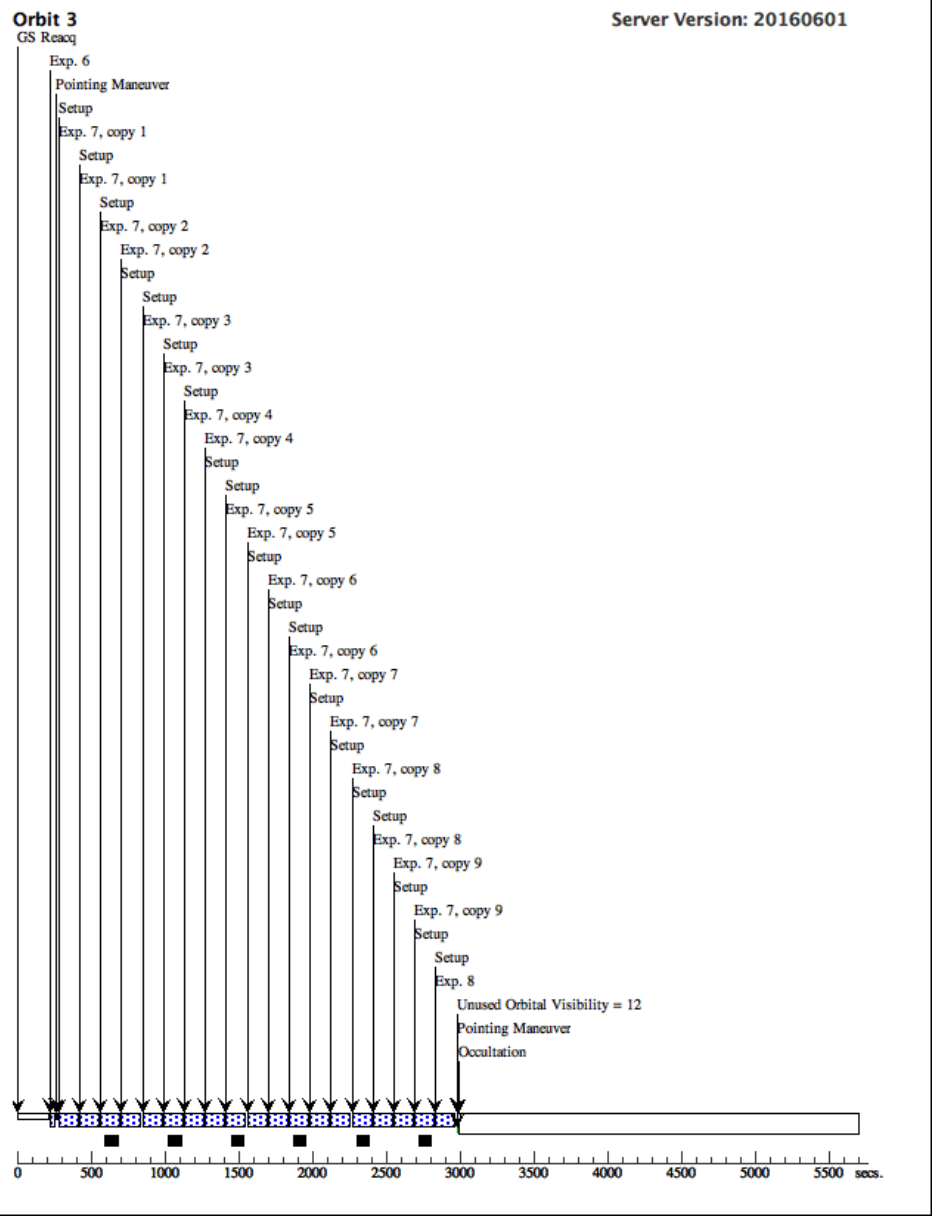
Orbit 3
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Exp. 7, copy 9
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Exp. 7, copy 9
Setup
Setup
Exp. 8
Unused Orbital Visibility = 12
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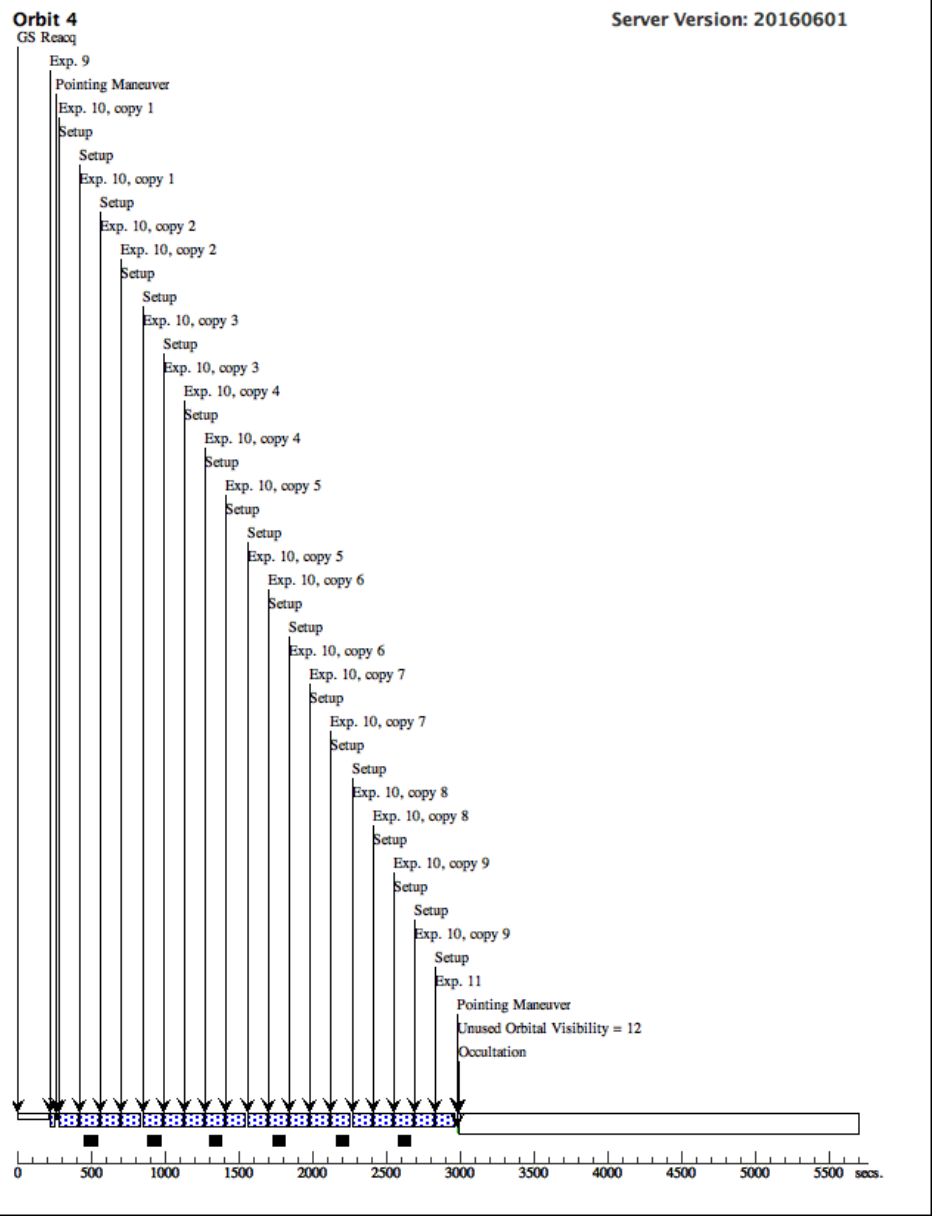
Orbit 4
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GS Reacq
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Exp. 10, copy 2
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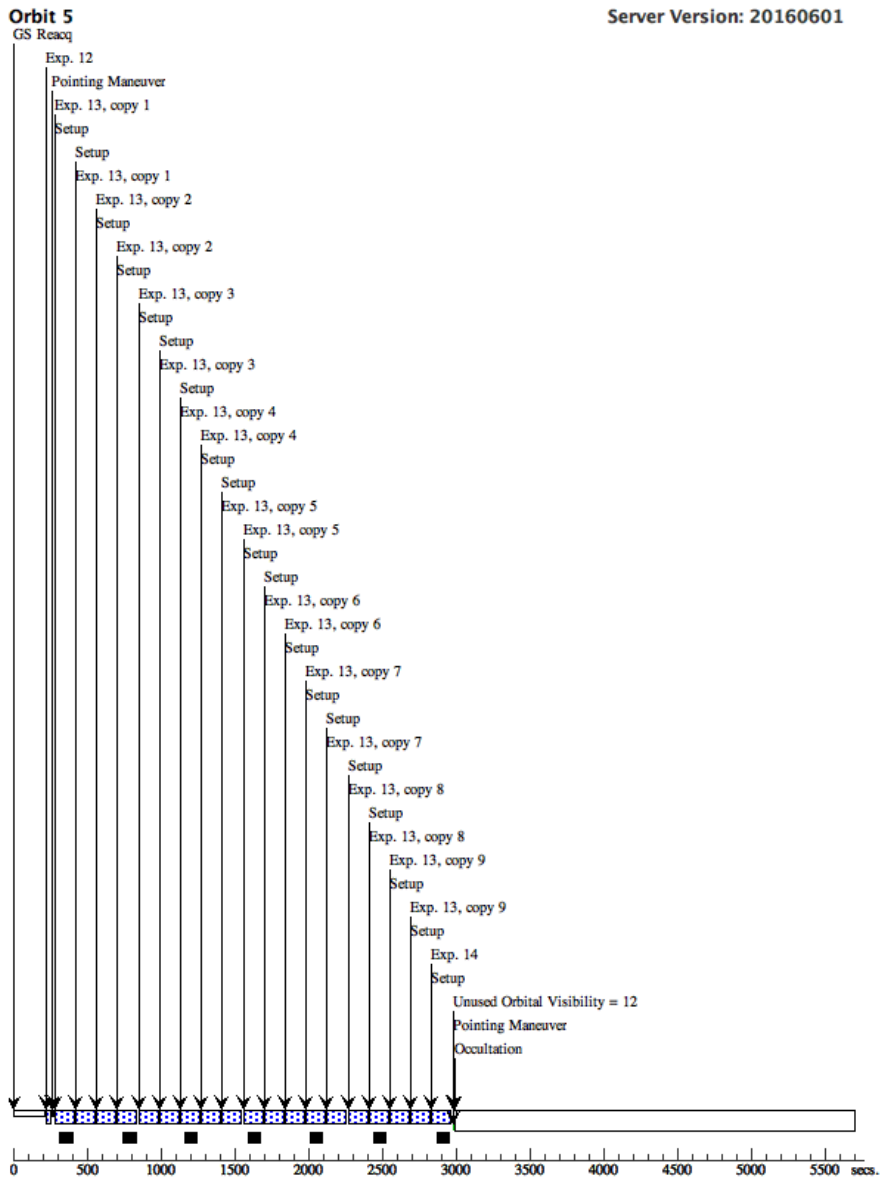
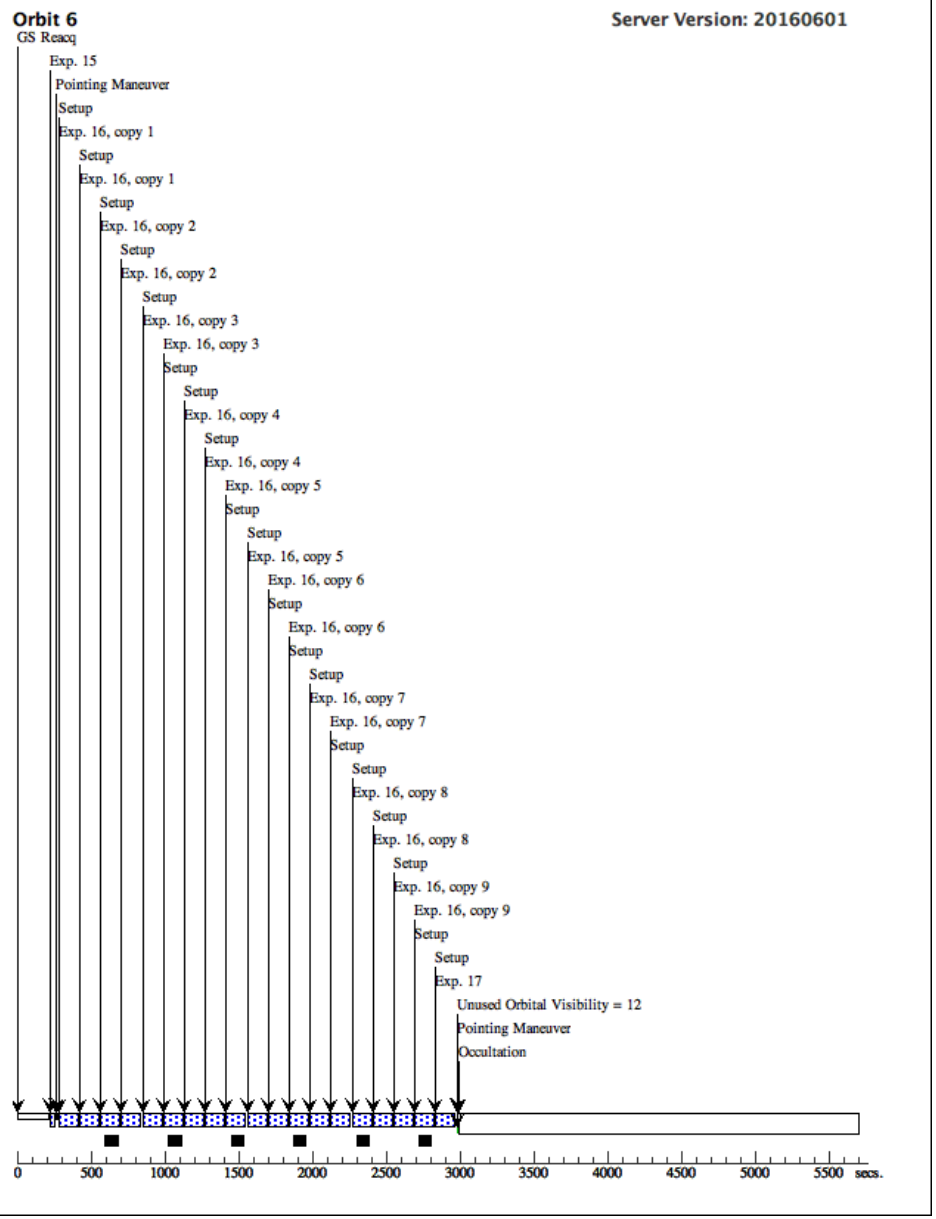
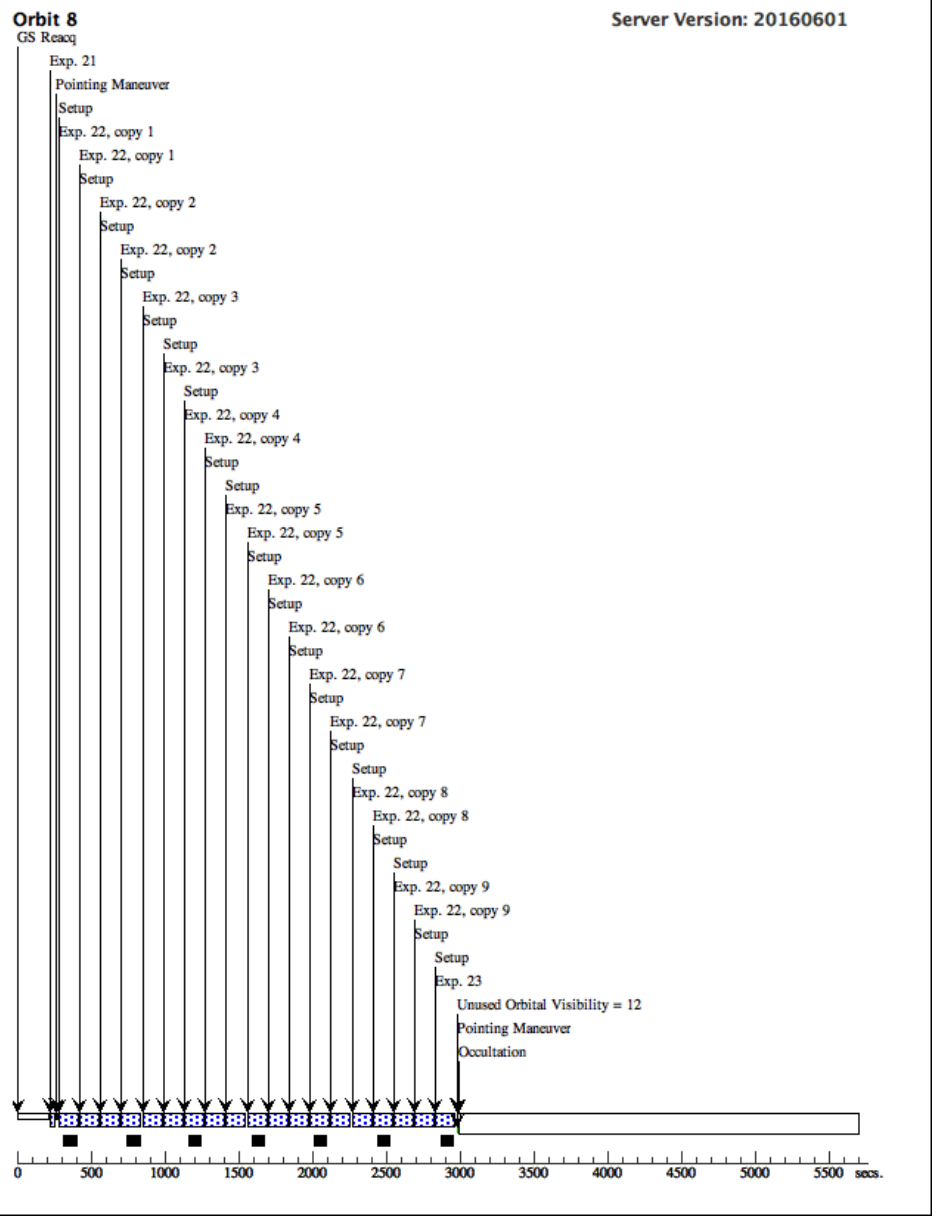
Exp. 10, copy 4
Setup
Exp. 10, copy 5
Setup
Setup
Exp. 10, copy 5
Exp. 10, copy 6
Setup
Setup
Exp. 10, copy 6
Exp. 10, copy 7
Setup
Exp. 10, copy 7
Setup
Setup
Exp. 10, copy 8
Exp. 10, copy 8
Setup
Exp. 10, copy 9
Setup
Setup
Exp. 10, copy 9
Setup
Exp. 11
Pointing Maneuver
Unused Orbital Visibility = 12
Occultation
0
500
1000
1500
2000
2500
3000
3500
4000
4500
5000
5500
secs.

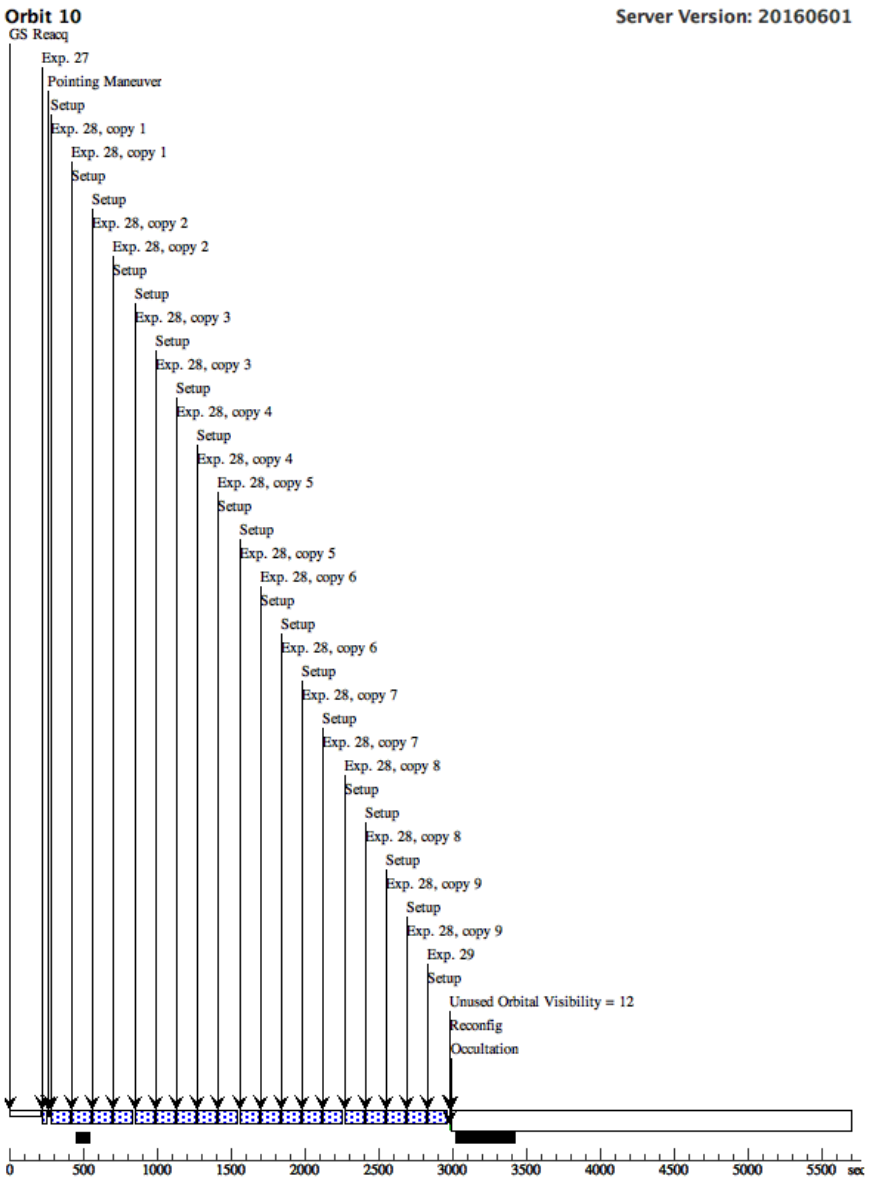

Orbit 5
Server Version: 20160601
GS Reacq
Exp. 12
Pointing Maneuver
Exp. 13, copy 1
Setup
Setup
Exp. 13, copy 1
Exp. 13, copy 2
Setup
Exp. 13, copy 2
Setup
Exp. 13, copy 3
Setup
Setup
Exp. 13, copy 3
Setup
Exp. 13, copy 4
Exp. 13, copy 4
Setup
Setup
Exp. 13, copy 5
Exp. 13, copy 5
Setup
Setup
Exp. 13, copy 6
Exp. 13, copy 6
Setup
Exp. 13, copy 7
Setup
Setup
Exp. 13, copy 7
Setup
Exp. 13, copy 8
Setup
Exp. 13, copy 8
Exp. 13, copy 9
Setup
Exp. 13, copy 9
Setup
Exp. 14
Setup
Unused Orbital Visibility = 12
Pointing Maneuver
Occultation
0
500
1000
1500
2000
2500
3000
3500
4000
4500
5000
5500
secs.


Orbit 6
Server Version: 20160601
GS Reacq
Exp. 15
Pointing Maneuver
Setup
Exp. 16, copy 1
Setup
Exp. 16, copy 1
Setup
Exp. 16, copy 2
Setup
Exp. 16, copy 2
Setup
Exp. 16, copy 3
Exp. 16, copy 3
Setup
Setup
Exp. 16, copy 4
Setup
Exp. 16, copy 4
Exp. 16, copy 5
Setup
Setup
Exp. 16, copy 5
Exp. 16, copy 6
Setup
Exp. 16, copy 6
Setup
Setup
Exp. 16, copy 7
Exp. 16, copy 7
Setup
Setup
Exp. 16, copy 8
Setup
Exp. 16, copy 8
Setup
Exp. 16, copy 9
Exp. 16, copy 9
Setup
Setup
Exp. 17
Unused Orbital Visibility = 12
Pointing Maneuver
Occultation
0
500
1000
1500
2000
2500
3000
3500
4000
4500
5000
5500
secs.


Orbit 7
Server Version: 20160601
GS Reacq
Exp. 18
Pointing Maneuver
Exp. 19, copy 1
Setup
Exp. 19, copy 1
Setup
Exp. 19, copy 2
Setup
Setup
Exp. 19, copy 2
Setup
Exp. 19, copy 3
Exp. 19, copy 3
Setup
Exp. 19, copy 4
Setup
Setup
Exp. 19, copy 4
Exp. 19, copy 5
Setup
Exp. 19, copy 5
Setup
Setup
Exp. 19, copy 6
Setup
Exp. 19, copy 6
Exp. 19, copy 7
Setup
Exp. 19, copy 7
Setup
Setup
Exp. 19, copy 8
Setup
Exp. 19, copy 8
Exp. 19, copy 9
Setup
Exp. 19, copy 9
Setup
Setup
Exp. 20
Unused Orbital Visibility = 12
Pointing Maneuver
Occultation
0
500
1000
1500
2000
2500
3000
3500
4000
4500
5000
5500
secs.


Orbit 8
Server Version: 20160601
GS Reacq
Exp. 21
Pointing Maneuver
Setup
Exp. 22, copy 1
Exp. 22, copy 1
Setup
Exp. 22, copy 2
Setup
Exp. 22, copy 2
Setup
Exp. 22, copy 3
Setup
Setup
Exp. 22, copy 3
Setup
Exp. 22, copy 4
Exp. 22, copy 4
Setup
Setup
Exp. 22, copy 5
Exp. 22, copy 5
Setup
Exp. 22, copy 6
Setup
Exp. 22, copy 6
Setup
Exp. 22, copy 7
Setup
Exp. 22, copy 7
Setup
Setup
Exp. 22, copy 8
Exp. 22, copy 8
Setup
Setup
Exp. 22, copy 9
Exp. 22, copy 9
Setup
Setup
Exp. 23
Unused Orbital Visibility = 12
Pointing Maneuver
Occultation
0
500
1000
1500
2000
2500
3000
3500
4000
4500
5000
5500
secs.


Orbit 9
Server Version: 20160601
GS Reacq
Exp. 24
Pointing Maneuver
Exp. 25, copy 1
Setup
Setup
Exp. 25, copy 1
Setup
Exp. 25, copy 2
Setup
Exp. 25, copy 2
Exp. 25, copy 3
Setup
Exp. 25, copy 3
Setup
Setup
Exp. 25, copy 4
Exp. 25, copy 4
Setup
Setup
Exp. 25, copy 5
Setup
Exp. 25, copy 5
Setup
Exp. 25, copy 6
Setup
Exp. 25, copy 6
Setup
Exp. 25, copy 7
Exp. 25, copy 7
Setup
Exp. 25, copy 8
Setup
Exp. 25, copy 8
Setup
Setup
Exp. 25, copy 9
Setup
Exp. 25, copy 9
Setup
Exp. 26
Pointing Maneuver
Unused Orbital Visibility = 12
Occultation
0
500
1000
1500
2000
2500
3000
3500
4000
4500
5000
5500
secs.


Orbit 10
Server Version: 20160601
GS Reacq
Exp. 27
Pointing Maneuver
Setup
Exp. 28, copy 1
Exp. 28, copy 1
Setup
Setup
Exp. 28, copy 2
Exp. 28, copy 2
Setup
Setup
Exp. 28, copy 3
Setup
Exp. 28, copy 3
Setup
Exp. 28, copy 4
Setup
Exp. 28, copy 4
Exp. 28, copy 5
Setup
Setup
Exp. 28, copy 5
Exp. 28, copy 6
Setup
Setup
Exp. 28, copy 6
Setup
Exp. 28, copy 7
Setup
Exp. 28, copy 7
Exp. 28, copy 8
Setup
Setup
Exp. 28, copy 8
Setup
Exp. 28, copy 9
Setup
Exp. 28, copy 9
Exp. 29
Setup
Unused Orbital Visibility = 12
Reconfig
Occultation
0
500
1000
1500
2000
2500
3000
3500
4000
4500
5000
5500
sec

Visit

Proposal 14664, After eclipse to after transit (05), implementation Wed Sep 07 22:00:24 GMT 2016

Diagnostic Status: Warning

Scientific Instruments: WFC3/IR

Special Requirements: SCHED 100%; ORIENT 67D TO 157 D; ORIENT 247D TO 337 D; Period 1.217494 D AND ZERO-PHASE HJD2457306.97537

Diagnostics

(After eclipse to after transit (05)) Warning (Orbit Planner): LONG SU LIKELY TO INTERSECT THE SAA

Fixed Targets

#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(1)	KELT-1	RA: 00 01 26.9222 (.3621758d)	Proper Motion RA: 3.70 mas/yr	V=10.63+/-0.06	Reference Frame: SIMBAD
		Dec: +39 23 1.67 (39.38380d)	Proper Motion Dec: -14.10 mas/yr	J=9.682,	
		Equinox: J2000	Epoch of Position: 2000	H=9.534	

Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.
Extended=NO

Exposures

#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
1	Image	(1) KELT-1	WFC3/IR, MULTIACCUM, GRISM256	F126N	NSAMP=2; SAMP-SEQ=RAPID	PHASE 0.495 TO 0.505	Sequence 1-2 Non-Int in After eclipse to after transit (05)	0.55563 Secs (0.556 Secs) *[==>]*	***[1]***
2	Scan	(1) KELT-1	WFC3/IR, MULTIACCUM, GRISM256	G141	NSAMP=15; SAMP-SEQ=SPARS10	SPATIAL SCAN 0.097,90.0 Degrees,Round trip	Sequence 1-2 Non-Int in After eclipse to after transit (05)	103.128633 Secs X 9 (1856.315 Secs) *[==>(Copy 1, Forward)]* *[==>(Copy 1, Reverse)]* *[==>(Copy 2, Forward)]* *[==>(Copy 2, Reverse)]* *[==>(Copy 3, Forward)]* *[==>(Copy 3, Reverse)]* *[==>(Copy 4, Forward)]* *[==>(Copy 4, Reverse)]* *[==>(Copy 5, Forward)]* *[==>(Copy 5, Reverse)]* *[==>(Copy 6, Forward)]* *[==>(Copy 6, Reverse)]* *[==>(Copy 7, Forward)]* *[==>(Copy 7, Reverse)]* *[==>(Copy 8, Forward)]* *[==>(Copy 8, Reverse)]* *[==>(Copy 9, Forward)]* *[==>(Copy 9, Reverse)]*	***[1]***
3	Image	(1) KELT-1	WFC3/IR, MULTIACCUM, GRISM256	F126N	NSAMP=2; SAMP-SEQ=RAPID		Sequence 3-5 Non-Int in After eclipse to after transit (05)	0.55563 Secs (0.556 Secs) *[==>]*	***[2]***

	4	Scan	(1) KELT-1	WFC3/IR, MULTIACCUM, GRISM256	G141	NSAMP=15; SAMP-SEQ=SPARS10	SPATIAL SCAN 0.097,90.0 Degrees,Round trip	Sequence 3-5 Non-Int in After eclipse to after transit (05)	103.128633 Secs X 9 (1856.315 Secs) *[==>(Copy 1, Forward)]* *[==>(Copy 1, Reverse)]* *[==>(Copy 2, Forward)]* *[==>(Copy 2, Reverse)]* *[==>(Copy 3, Forward)]* *[==>(Copy 3, Reverse)]* *[==>(Copy 4, Forward)]* *[==>(Copy 4, Reverse)]* *[==>(Copy 5, Forward)]* *[==>(Copy 5, Reverse)]* *[==>(Copy 6, Forward)]* *[==>(Copy 6, Reverse)]* *[==>(Copy 7, Forward)]* *[==>(Copy 7, Reverse)]* *[==>(Copy 8, Forward)]* *[==>(Copy 8, Reverse)]* *[==>(Copy 9, Forward)]* *[==>(Copy 9, Reverse)]*	***[2]***
	5	Scan once	(1) KELT-1	WFC3/IR, MULTIACCUM, GRISM256	G141	NSAMP=15; SAMP-SEQ=SPARS10	SPATIAL SCAN 0.097,90.0 Degrees,Forward	Sequence 3-5 Non-Int in After eclipse to after transit (05)	103.128633 Secs (103.129 Secs) *[==>]*	***[2]***
	6	Image	(1) KELT-1	WFC3/IR, MULTIACCUM, GRISM256	F126N	NSAMP=2; SAMP-SEQ=RAPID		Sequence 6-8 Non-Int in After eclipse to after transit (05)	0.55563 Secs (0.556 Secs) *[==>]*	***[3]***
	7	Scan	(1) KELT-1	WFC3/IR, MULTIACCUM, GRISM256	G141	NSAMP=15; SAMP-SEQ=SPARS10	SPATIAL SCAN 0.097,90.0 Degrees,Round trip	Sequence 6-8 Non-Int in After eclipse to after transit (05)	103.128633 Secs X 9 (1856.315 Secs) *[==>(Copy 1, Forward)]* *[==>(Copy 1, Reverse)]* *[==>(Copy 2, Forward)]* *[==>(Copy 2, Reverse)]* *[==>(Copy 3, Forward)]* *[==>(Copy 3, Reverse)]* *[==>(Copy 4, Forward)]* *[==>(Copy 4, Reverse)]* *[==>(Copy 5, Forward)]* *[==>(Copy 5, Reverse)]* *[==>(Copy 6, Forward)]* *[==>(Copy 6, Reverse)]* *[==>(Copy 7, Forward)]* *[==>(Copy 7, Reverse)]* *[==>(Copy 8, Forward)]* *[==>(Copy 8, Reverse)]* *[==>(Copy 9, Forward)]* *[==>(Copy 9, Reverse)]*	***[3]***

8	Scan once	(1) KELT-1	WFC3/IR, MULTIACCUM, GRISM256	G141	NSAMP=15; SAMP-SEQ=SPARS10	SPATIAL SCAN 0.097,90.0 Degrees,Forward	Sequence 6-8 Non-Int in After eclipse to after transit (05)	103.128633 Secs (103.129 Secs) *[==>]*	 ***[3]***
9	Image	(1) KELT-1	WFC3/IR, MULTIACCUM, GRISM256	F126N	NSAMP=2; SAMP-SEQ=RAPID		Sequence 9-11 Non-Int in After eclipse to after transit (05)	0.55563 Secs (0.556 Secs) *[==>]*	 ***[4]***
10	Scan	(1) KELT-1	WFC3/IR, MULTIACCUM, GRISM256	G141	NSAMP=15; SAMP-SEQ=SPARS10	SPATIAL SCAN 0.097,90.0 Degrees,Round trip	Sequence 9-11 Non-Int in After eclipse to after transit (05)	103.128633 Secs X 9 (1856.315 Secs) *[==>(Copy 1, Forward)]* *[==>(Copy 1, Reverse)]* *[==>(Copy 2, Forward)]* *[==>(Copy 2, Reverse)]* *[==>(Copy 3, Forward)]* *[==>(Copy 3, Reverse)]* *[==>(Copy 4, Forward)]* *[==>(Copy 4, Reverse)]* *[==>(Copy 5, Forward)]* *[==>(Copy 5, Reverse)]* *[==>(Copy 6, Forward)]* *[==>(Copy 6, Reverse)]* *[==>(Copy 7, Forward)]* *[==>(Copy 7, Reverse)]* *[==>(Copy 8, Forward)]* *[==>(Copy 8, Reverse)]* *[==>(Copy 9, Forward)]* *[==>(Copy 9, Reverse)]*	 ***[4]***
11	Scan once	(1) KELT-1	WFC3/IR, MULTIACCUM, GRISM256	G141	NSAMP=15; SAMP-SEQ=SPARS10	SPATIAL SCAN 0.097,90.0 Degrees,Forward	Sequence 9-11 Non-Int in After eclipse to after transit (05)	103.128633 Secs (103.129 Secs) *[==>]*	 ***[4]***
12	Image	(1) KELT-1	WFC3/IR, MULTIACCUM, GRISM256	F126N	NSAMP=2; SAMP-SEQ=RAPID		Sequence 12-14 Non-Int in After eclipse to after transit (05)	0.55563 Secs (0.556 Secs) *[==>]*	 ***[5]***

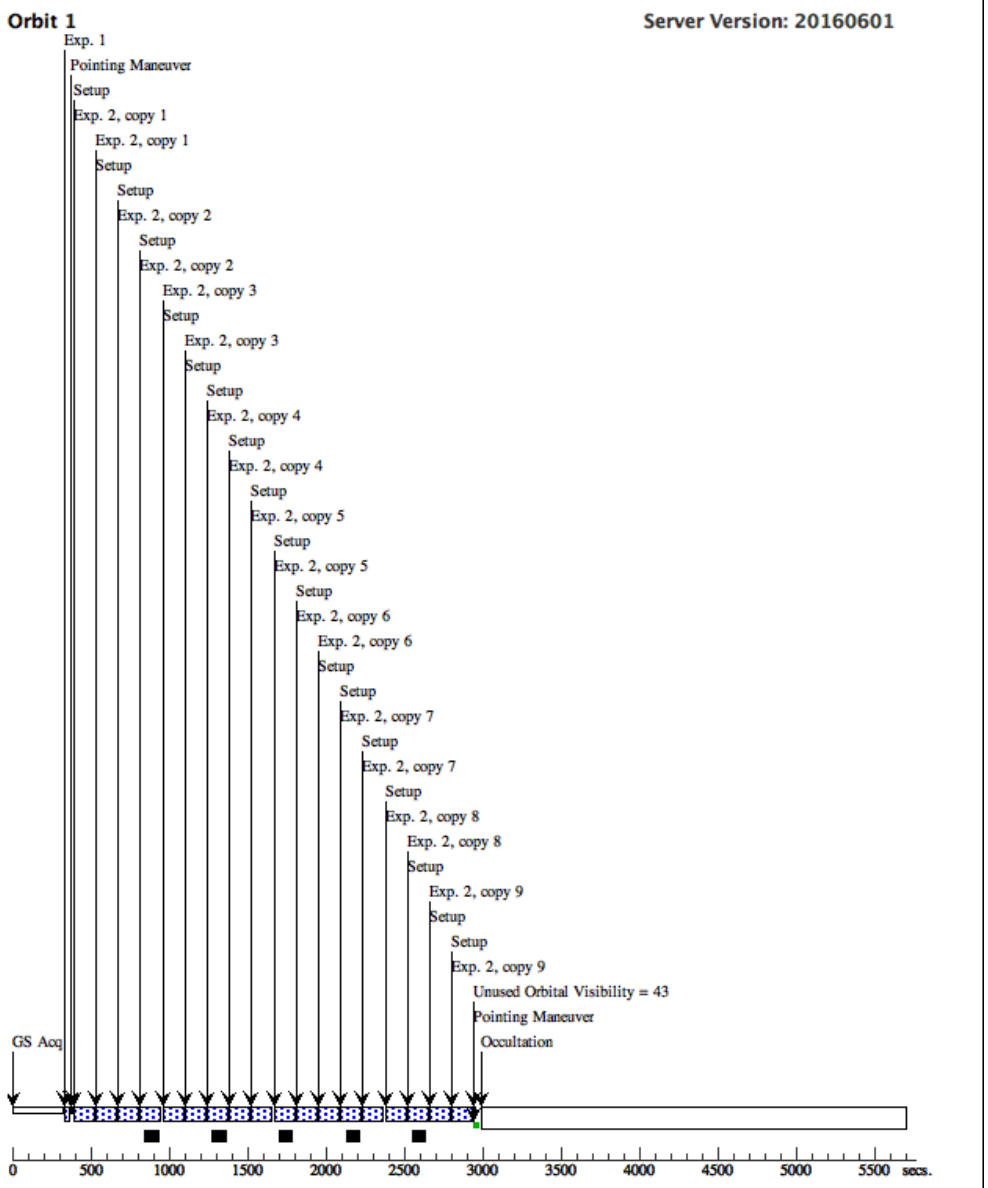
13	Scan	(1) KELT-1	WFC3/IR, MULTIACCUM, GRISM256	G141	NSAMP=15; SAMP-SEQ=SPARS10	SPATIAL SCAN 0.0 97,90.0 Degrees,Round trip	Sequence 12-14 Non-Int in After eclipse to after transit (05)	103.128633 Secs X 9 (1856.315 Secs)	
								[==>(Copy 1, Forward)] *[==>(Copy 1, Reverse)]* *[==>(Copy 2, Forward)]* *[==>(Copy 2, Reverse)]* *[==>(Copy 3, Forward)]* *[==>(Copy 3, Reverse)]* *[==>(Copy 4, Forward)]* *[==>(Copy 4, Reverse)]* *[==>(Copy 5, Forward)]* *[==>(Copy 5, Reverse)]* *[==>(Copy 6, Forward)]* *[==>(Copy 6, Reverse)]* *[==>(Copy 7, Forward)]* *[==>(Copy 7, Reverse)]* *[==>(Copy 8, Forward)]* *[==>(Copy 8, Reverse)]* *[==>(Copy 9, Forward)]* *[==>(Copy 9, Reverse)]*	***[5]***
14	Scan once	(1) KELT-1	WFC3/IR, MULTIACCUM, GRISM256	G141	NSAMP=15; SAMP-SEQ=SPARS10	SPATIAL SCAN 0.0 97,90.0 Degrees,Forward	Sequence 12-14 Non-Int in After eclipse to after transit (05)	103.128633 Secs (103.129 Secs)	
								[==>]	***[5]***
15	Image	(1) KELT-1	WFC3/IR, MULTIACCUM, GRISM256	F126N	NSAMP=2; SAMP-SEQ=RAPID		Sequence 15-17 Non-Int in After eclipse to after transit (05)	0.55563 Secs (0.556 Secs)	
								[==>]	***[6]***
16	Scan	(1) KELT-1	WFC3/IR, MULTIACCUM, GRISM256	G141	NSAMP=15; SAMP-SEQ=SPARS10	SPATIAL SCAN 0.0 97,90.0 Degrees,Round trip	Sequence 15-17 Non-Int in After eclipse to after transit (05)	103.128633 Secs X 9 (1856.315 Secs)	
								[==>(Copy 1, Forward)] *[==>(Copy 1, Reverse)]* *[==>(Copy 2, Forward)]* *[==>(Copy 2, Reverse)]* *[==>(Copy 3, Forward)]* *[==>(Copy 3, Reverse)]* *[==>(Copy 4, Forward)]* *[==>(Copy 4, Reverse)]* *[==>(Copy 5, Forward)]* *[==>(Copy 5, Reverse)]* *[==>(Copy 6, Forward)]* *[==>(Copy 6, Reverse)]* *[==>(Copy 7, Forward)]* *[==>(Copy 7, Reverse)]* *[==>(Copy 8, Forward)]* *[==>(Copy 8, Reverse)]* *[==>(Copy 9, Forward)]* *[==>(Copy 9, Reverse)]*	***[6]***

17	Scan once	(1) KELT-1	WFC3/IR, MULTIACCUM, GRISM256	G141	NSAMP=15; SAMP-SEQ=SPARS10	SPATIAL SCAN 0.097,90.0 Degrees,Forward	Sequence 15-17 Non-Int in After eclipse to after transit (05)	103.128633 Secs (103.129 Secs) *[==>]*	 ***[6]***
18	Image	(1) KELT-1	WFC3/IR, MULTIACCUM, GRISM256	F126N	NSAMP=2; SAMP-SEQ=RAPID		Sequence 18-20 Non-Int in After eclipse to after transit (05)	0.55563 Secs (0.556 Secs) *[==>]*	 ***[7]***
19	Scan	(1) KELT-1	WFC3/IR, MULTIACCUM, GRISM256	G141	NSAMP=15; SAMP-SEQ=SPARS10	SPATIAL SCAN 0.097,90.0 Degrees,Round trip	Sequence 18-20 Non-Int in After eclipse to after transit (05)	103.128633 Secs X 9 (1856.315 Secs) *[==>(Copy 1, Forward)]* *[==>(Copy 1, Reverse)]* *[==>(Copy 2, Forward)]* *[==>(Copy 2, Reverse)]* *[==>(Copy 3, Forward)]* *[==>(Copy 3, Reverse)]* *[==>(Copy 4, Forward)]* *[==>(Copy 4, Reverse)]* *[==>(Copy 5, Forward)]* *[==>(Copy 5, Reverse)]* *[==>(Copy 6, Forward)]* *[==>(Copy 6, Reverse)]* *[==>(Copy 7, Forward)]* *[==>(Copy 7, Reverse)]* *[==>(Copy 8, Forward)]* *[==>(Copy 8, Reverse)]* *[==>(Copy 9, Forward)]* *[==>(Copy 9, Reverse)]*	 ***[7]***
20	Scan once	(1) KELT-1	WFC3/IR, MULTIACCUM, GRISM256	G141	NSAMP=15; SAMP-SEQ=SPARS10	SPATIAL SCAN 0.097,90.0 Degrees,Forward	Sequence 18-20 Non-Int in After eclipse to after transit (05)	103.128633 Secs (103.129 Secs) *[==>]*	 ***[7]***
21	Image	(1) KELT-1	WFC3/IR, MULTIACCUM, GRISM256	F126N	NSAMP=2; SAMP-SEQ=RAPID		Sequence 21-23 Non-Int in After eclipse to after transit (05)	0.55563 Secs (0.556 Secs) *[==>]*	 ***[8]***

	22	Scan	(1) KELT-1	WFC3/IR, MULTIACCUM, GRISM256	G141	NSAMP=15; SAMP-SEQ=SPARS10	SPATIAL SCAN 0.0 97,90.0 Degrees,Round trip	Sequence 21-23 Non-Int in After eclipse to after transit (05)	103.128633 Secs X 9 (1856.315 Secs)	
									[==>(Copy 1, Forward)] *[==>(Copy 1, Reverse)]* *[==>(Copy 2, Forward)]* *[==>(Copy 2, Reverse)]* *[==>(Copy 3, Forward)]* *[==>(Copy 3, Reverse)]* *[==>(Copy 4, Forward)]* *[==>(Copy 4, Reverse)]* *[==>(Copy 5, Forward)]* *[==>(Copy 5, Reverse)]* *[==>(Copy 6, Forward)]* *[==>(Copy 6, Reverse)]* *[==>(Copy 7, Forward)]* *[==>(Copy 7, Reverse)]* *[==>(Copy 8, Forward)]* *[==>(Copy 8, Reverse)]* *[==>(Copy 9, Forward)]* *[==>(Copy 9, Reverse)]*	***[8]***
	23	Scan once	(1) KELT-1	WFC3/IR, MULTIACCUM, GRISM256	G141	NSAMP=15; SAMP-SEQ=SPARS10	SPATIAL SCAN 0.0 97,90.0 Degrees,Forward	Sequence 21-23 Non-Int in After eclipse to after transit (05)	103.128633 Secs (103.129 Secs)	
									[==>]	***[8]***
	24	Image	(1) KELT-1	WFC3/IR, MULTIACCUM, GRISM256	F126N	NSAMP=2; SAMP-SEQ=RAPID		Sequence 24-26 Non-Int in After eclipse to after transit (05)	0.55563 Secs (0.556 Secs)	
									[==>]	***[9]***
	25	Scan	(1) KELT-1	WFC3/IR, MULTIACCUM, GRISM256	G141	NSAMP=15; SAMP-SEQ=SPARS10	SPATIAL SCAN 0.0 97,90.0 Degrees,Round trip	Sequence 24-26 Non-Int in After eclipse to after transit (05)	103.128633 Secs X 9 (1856.315 Secs)	
									[==>(Copy 1, Forward)] *[==>(Copy 1, Reverse)]* *[==>(Copy 2, Forward)]* *[==>(Copy 2, Reverse)]* *[==>(Copy 3, Forward)]* *[==>(Copy 3, Reverse)]* *[==>(Copy 4, Forward)]* *[==>(Copy 4, Reverse)]* *[==>(Copy 5, Forward)]* *[==>(Copy 5, Reverse)]* *[==>(Copy 6, Forward)]* *[==>(Copy 6, Reverse)]* *[==>(Copy 7, Forward)]* *[==>(Copy 7, Reverse)]* *[==>(Copy 8, Forward)]* *[==>(Copy 8, Reverse)]* *[==>(Copy 9, Forward)]* *[==>(Copy 9, Reverse)]*	***[9]***

	26	Scan once	(1) KELT-1	WFC3/IR, MULTIACCUM, GRISM256	G141	NSAMP=15; SAMP-SEQ=SPARS10	SPATIAL SCAN 0.0 97,90.0 Degrees,Forward	Sequence 24-26 Non-Int in After eclipse to after transit (05)	103.128633 Secs (103.129 Secs) *[==>]*	 ***[9]***
	27	Image	(1) KELT-1	WFC3/IR, MULTIACCUM, GRISM256	F126N	NSAMP=2; SAMP-SEQ=RAPID		Sequence 27-29 Non-Int in After eclipse to after transit (05)	0.55563 Secs (0.556 Secs) *[==>]*	 ***[10]***
	28	Scan	(1) KELT-1	WFC3/IR, MULTIACCUM, GRISM256	G141	NSAMP=15; SAMP-SEQ=SPARS10	SPATIAL SCAN 0.0 97,90.0 Degrees,Round trip	Sequence 27-29 Non-Int in After eclipse to after transit (05)	103.128633 Secs X 9 (1856.315 Secs) *[==>(Copy 1, Forward)]* *[==>(Copy 1, Reverse)]* *[==>(Copy 2, Forward)]* *[==>(Copy 2, Reverse)]* *[==>(Copy 3, Forward)]* *[==>(Copy 3, Reverse)]* *[==>(Copy 4, Forward)]* *[==>(Copy 4, Reverse)]* *[==>(Copy 5, Forward)]* *[==>(Copy 5, Reverse)]* *[==>(Copy 6, Forward)]* *[==>(Copy 6, Reverse)]* *[==>(Copy 7, Forward)]* *[==>(Copy 7, Reverse)]* *[==>(Copy 8, Forward)]* *[==>(Copy 8, Reverse)]* *[==>(Copy 9, Forward)]* *[==>(Copy 9, Reverse)]*	 ***[10]***
	29	Scan once	(1) KELT-1	WFC3/IR, MULTIACCUM, GRISM256	G141	NSAMP=15; SAMP-SEQ=SPARS10	SPATIAL SCAN 0.0 97,90.0 Degrees,Forward	Sequence 27-29 Non-Int in After eclipse to after transit (05)	103.128633 Secs (103.129 Secs) *[==>]*	 ***[10]***

Orbit Structure




Orbit 2
Server Version: 20160601
GS Reacq
Exp. 3
Pointing Maneuver
Setup
Exp. 4, copy 1
Exp. 4, copy 1
Setup
Setup
Exp. 4, copy 2
Setup
Exp. 4, copy 2
Exp. 4, copy 3
Setup
Exp. 4, copy 3
Setup
Exp. 4, copy 4
Setup
Setup
Exp. 4, copy 4
Exp. 4, copy 5
Setup
Exp. 4, copy 5
Setup
Exp. 4, copy 6
Setup
Exp. 4, copy 6
Setup
Exp. 4, copy 7
Setup
Setup
Exp. 4, copy 7
Exp. 4, copy 8
Setup
Setup
Exp. 4, copy 8
Exp. 4, copy 9
Setup
Setup
Exp. 4, copy 9
Exp. 5
Setup
Pointing Maneuver
Unused Orbital Visibility = 12
Occultation
0
500
1000
1500
2000
2500
3000
3500
4000
4500
5000
5500
secs.


Orbit 3
Server Version: 20160601
GS Reacq
Exp. 6
Pointing Maneuver
Setup
Exp. 7, copy 1
Exp. 7, copy 1
Setup
Exp. 7, copy 2
Setup
Exp. 7, copy 2
Setup
Exp. 7, copy 3
Setup
Setup
Exp. 7, copy 3
Setup
Exp. 7, copy 4
Exp. 7, copy 4
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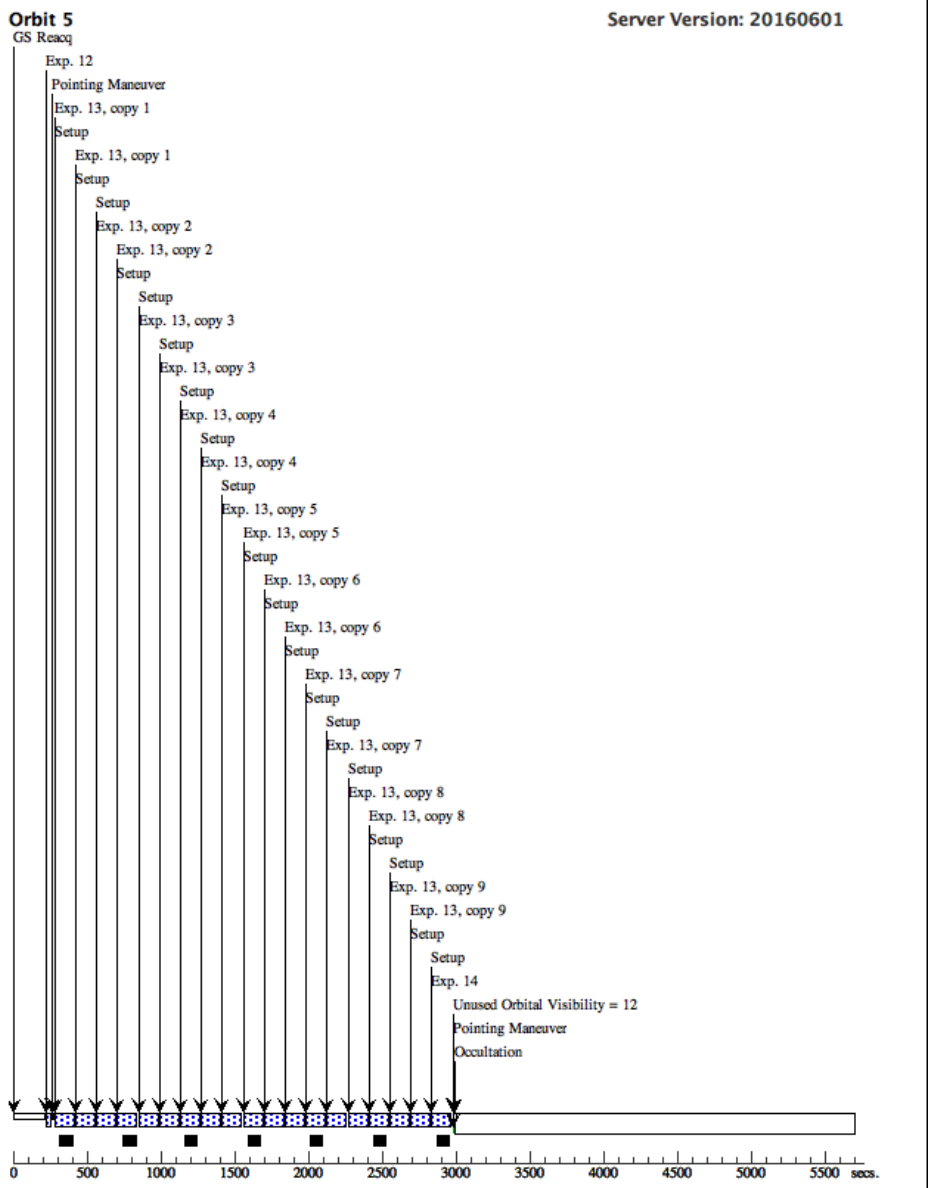
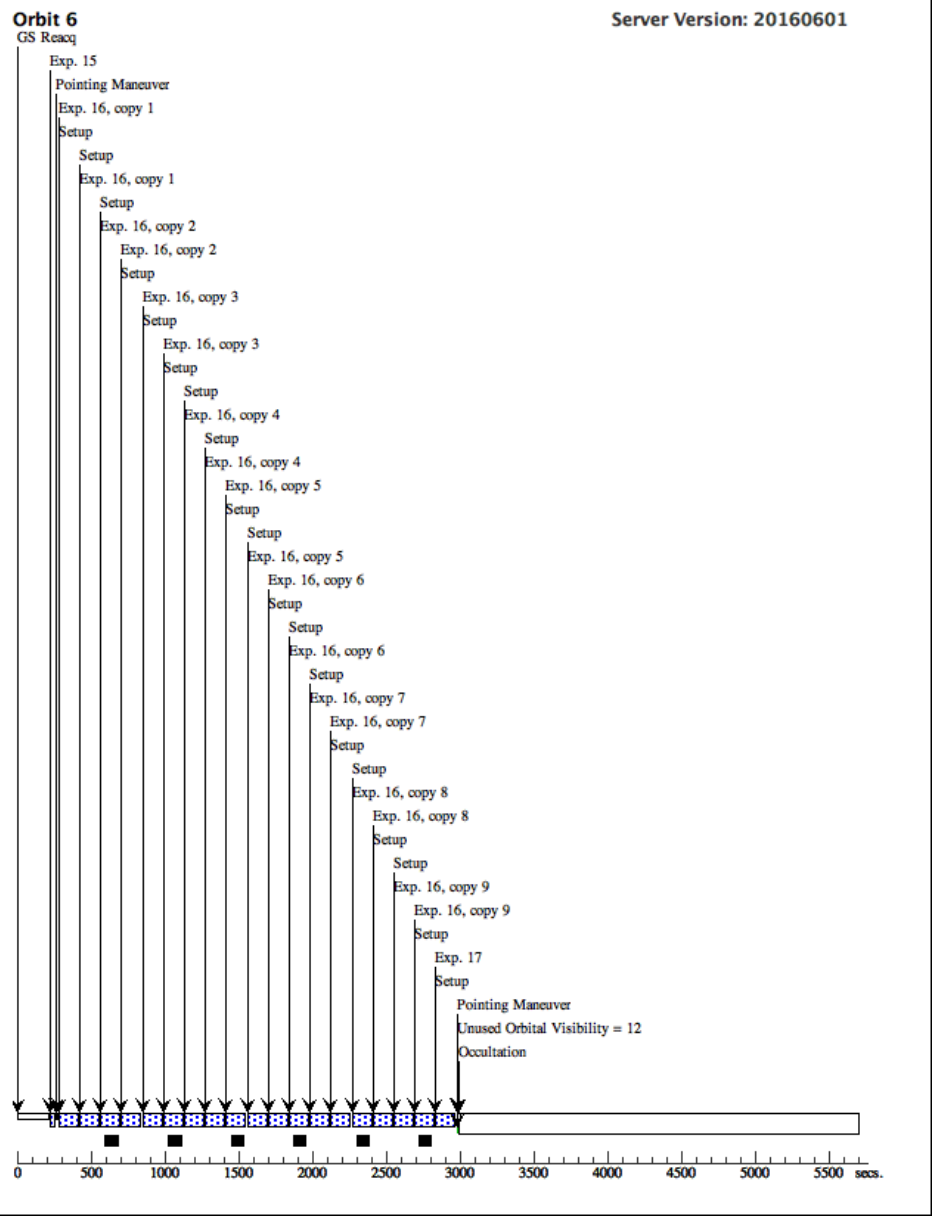
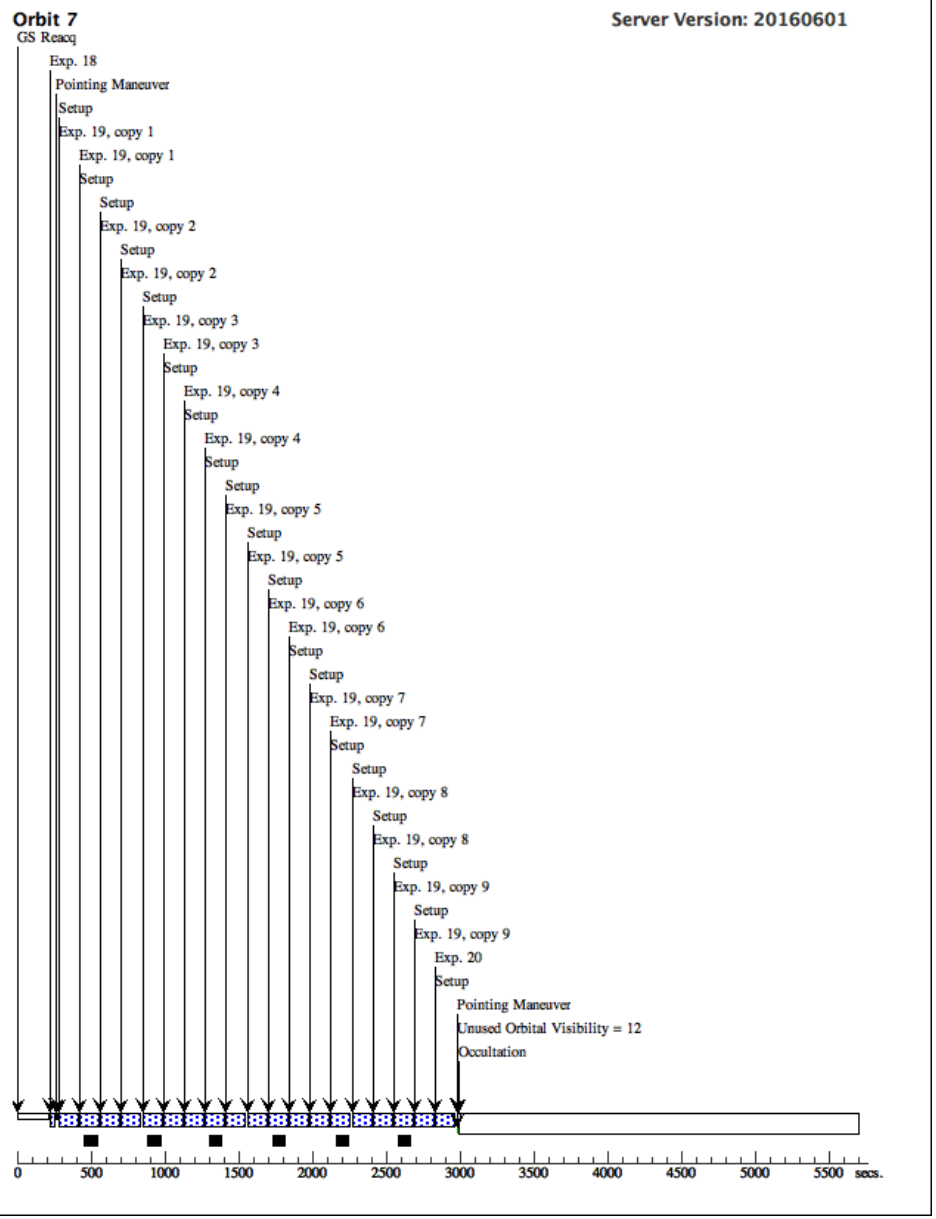
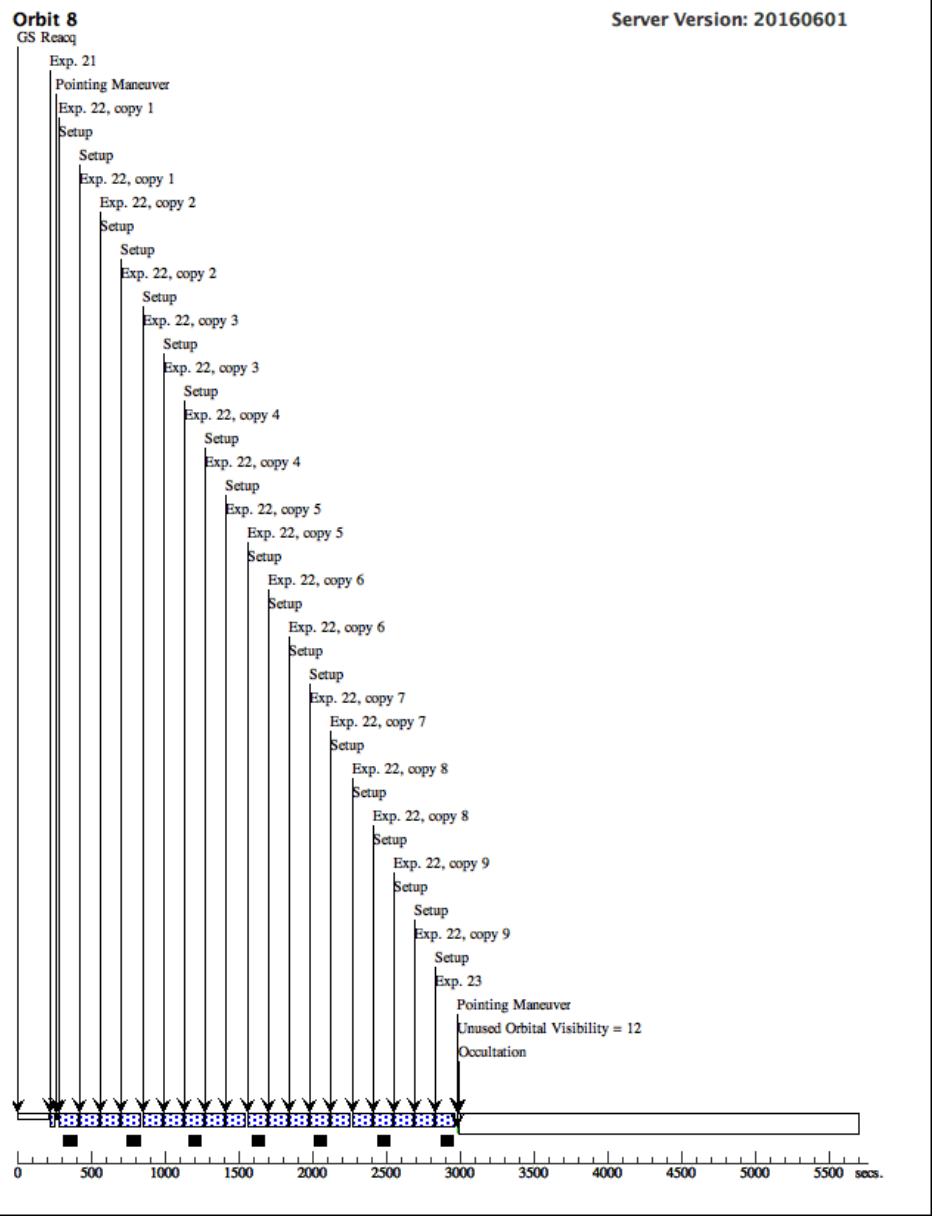
Exp. 7, copy 5
Setup
Setup
Exp. 7, copy 5
Setup
Exp. 7, copy 6
Exp. 7, copy 6
Setup
Setup
Exp. 7, copy 7
Exp. 7, copy 7
Setup
Exp. 7, copy 8
Setup
Exp. 7, copy 8
Setup
Exp. 7, copy 9
Setup
Setup
Exp. 7, copy 9
Setup
Exp. 8
Pointing Maneuver
Unused Orbital Visibility = 12
Occultation
0
500
1000
1500
2000
2500
3000
3500
4000
4500
5000
5500
secs.


Orbit 4
Server Version: 20160601
GS Reacq
Exp. 9
Pointing Maneuver
Exp. 10, copy 1
Setup
Setup
Exp. 10, copy 1
Exp. 10, copy 2
Setup
Exp. 10, copy 2
Setup
Setup
Exp. 10, copy 3
Exp. 10, copy 3
Setup
Exp. 10, copy 4
Setup
Setup
Exp. 10, copy 4
Setup
Exp. 10, copy 5
Setup
Exp. 10, copy 5
Setup
Exp. 10, copy 6
Setup
Exp. 10, copy 6
Exp. 10, copy 7
Setup
Setup
Exp. 10, copy 7
Setup
Exp. 10, copy 8
Exp. 10, copy 8
Setup
Exp. 10, copy 9
Setup
Setup
Exp. 10, copy 9
Exp. 11
Setup
Unused Orbital Visibility = 12
Pointing Maneuver
Occultation
0
500
1000
1500
2000
2500
3000
3500
4000
4500
5000
5500
secs.


Orbit 5
Server Version: 20160601
GS Reacq
Exp. 12
Pointing Maneuver
Exp. 13, copy 1
Setup
Exp. 13, copy 1
Setup
Setup
Exp. 13, copy 2
Exp. 13, copy 2
Setup
Setup
Exp. 13, copy 3
Setup
Exp. 13, copy 3
Setup
Exp. 13, copy 4
Setup
Exp. 13, copy 4
Setup
Exp. 13, copy 5
Exp. 13, copy 5
Setup
Exp. 13, copy 6
Setup
Exp. 13, copy 6
Setup
Exp. 13, copy 7
Setup
Setup
Exp. 13, copy 7
Setup
Exp. 13, copy 8
Exp. 13, copy 8
Setup
Setup
Exp. 13, copy 9
Exp. 13, copy 9
Setup
Setup
Exp. 14
Unused Orbital Visibility = 12
Pointing Maneuver
Occultation
0
500
1000
1500
2000
2500
3000
3500
4000
4500
5000
5500
secs.


Orbit 6
Server Version: 20160601
GS Reacq
Exp. 15
Pointing Maneuver
Exp. 16, copy 1
Setup
Setup
Exp. 16, copy 1
Setup
Exp. 16, copy 2
Exp. 16, copy 2
Setup
Exp. 16, copy 3
Setup
Exp. 16, copy 3
Setup
Setup
Exp. 16, copy 4
Setup
Exp. 16, copy 4
Exp. 16, copy 5
Setup
Setup
Exp. 16, copy 5
Exp. 16, copy 6
Setup
Setup
Exp. 16, copy 6
Setup
Exp. 16, copy 7
Exp. 16, copy 7
Setup
Setup
Exp. 16, copy 8
Exp. 16, copy 8
Setup
Setup
Exp. 16, copy 9
Exp. 16, copy 9
Setup
Exp. 17
Setup
Pointing Maneuver
Unused Orbital Visibility = 12
Occultation
0
500
1000
1500
2000
2500
3000
3500
4000
4500
5000
5500
secs.


Orbit 7
Server Version: 20160601
GS Reacq
Exp. 18
Pointing Maneuver
Setup
Exp. 19, copy 1
Exp. 19, copy 1
Setup
Setup
Exp. 19, copy 2
Setup
Exp. 19, copy 2
Setup
Exp. 19, copy 3
Exp. 19, copy 3
Setup
Exp. 19, copy 4
Setup
Exp. 19, copy 4
Setup
Setup
Exp. 19, copy 5
Setup
Exp. 19, copy 5
Setup
Exp. 19, copy 6
Exp. 19, copy 6
Setup
Setup
Exp. 19, copy 7
Exp. 19, copy 7
Setup
Setup
Exp. 19, copy 8
Setup
Exp. 19, copy 8
Setup
Exp. 19, copy 9
Setup
Exp. 19, copy 9
Exp. 20
Setup
Pointing Maneuver
Unused Orbital Visibility = 12
Occultation
0
500
1000
1500
2000
2500
3000
3500
4000
4500
5000
5500
secs.


Orbit 8
Server Version: 20160601
GS Reacq
Exp. 21
Pointing Maneuver
Exp. 22, copy 1
Setup
Setup
Exp. 22, copy 1
Exp. 22, copy 2
Setup
Setup
Exp. 22, copy 2
Setup
Exp. 22, copy 3
Setup
Exp. 22, copy 3
Setup
Exp. 22, copy 4
Setup
Exp. 22, copy 4
Setup
Exp. 22, copy 5
Exp. 22, copy 5
Setup
Exp. 22, copy 6
Setup
Exp. 22, copy 6
Setup
Setup
Exp. 22, copy 7
Exp. 22, copy 7
Setup
Exp. 22, copy 8
Setup
Exp. 22, copy 8
Setup
Exp. 22, copy 9
Setup
Setup
Exp. 22, copy 9
Setup
Exp. 23
Pointing Maneuver
Unused Orbital Visibility = 12
Occultation
0
500
1000
1500
2000
2500
3000
3500
4000
4500
5000
5500
secs.


Orbit 9
Server Version: 20160601
GS Reacq
Exp. 24
Pointing Maneuver
Exp. 25, copy 1
Setup
Exp. 25, copy 1
Setup
Setup
Exp. 25, copy 2
Setup
Exp. 25, copy 2
Exp. 25, copy 3
Setup
Exp. 25, copy 3
Setup
Setup
Exp. 25, copy 4
Exp. 25, copy 4
Setup
Exp. 25, copy 5
Setup
Exp. 25, copy 5
Setup
Setup
Exp. 25, copy 6
Setup
Exp. 25, copy 6
Exp. 25, copy 7
Setup
Exp. 25, copy 7
Setup
Exp. 25, copy 8
Setup
Setup
Exp. 25, copy 8
Setup
Exp. 25, copy 9
Exp. 25, copy 9
Setup
Setup
Exp. 26
Pointing Maneuver
Unused Orbital Visibility = 12
Occultation
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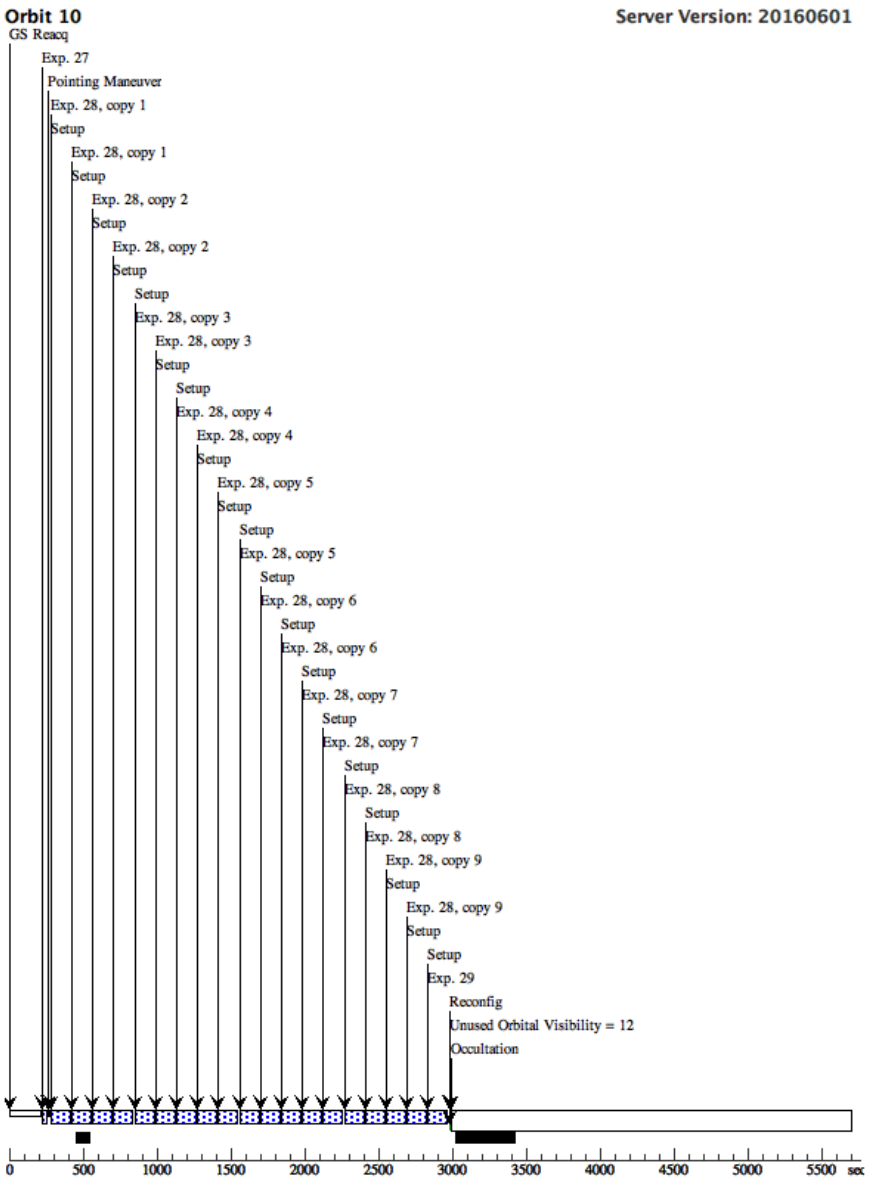
500
1000
1500
2000
2500
3000
3500
4000
4500
5000
5500
secs.


Orbit 10
Server Version: 20160601
GS Reacq
Exp. 27
Pointing Maneuver
Exp. 28, copy 1
Setup
Exp. 28, copy 1
Setup
Exp. 28, copy 2
Setup
Exp. 28, copy 2
Setup
Setup
Exp. 28, copy 3
Exp. 28, copy 3
Setup
Setup
Exp. 28, copy 4
Exp. 28, copy 4
Setup
Exp. 28, copy 5
Setup
Setup
Exp. 28, copy 5
Setup
Exp. 28, copy 6
Setup
Exp. 28, copy 6
Setup
Exp. 28, copy 7
Setup
Exp. 28, copy 7
Setup
Exp. 28, copy 8
Setup
Exp. 28, copy 8
Exp. 28, copy 9
Setup
Exp. 28, copy 9
Setup
Setup
Exp. 29
Reconfig
Unused Orbital Visibility = 12
Occultation
0
500
1000
1500
2000
2500
3000
3500
4000
4500
5000
5500
sec

Visit

Proposal 14664, Before transit to before eclipse (06), implementation Wed Sep 07 22:00:24 GMT 2016

Diagnostic Status: Warning

Scientific Instruments: WFC3/IR

Special Requirements: SCHED 100%; ORIENT 67D TO 157 D; ORIENT 247D TO 337 D; Period 1.217494 D AND ZERO-PHASE HJD2457306.97537

Diagnostics

(Before transit to before eclipse (06)) Warning (Orbit Planner): LONG SU LIKELY TO INTERSECT THE SAA

Fixed Targets

#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(1)	KELT-1	RA: 00 01 26.9222 (.3621758d)	Proper Motion RA: 3.70 mas/yr	V=10.63+/-0.06	Reference Frame: SIMBAD
		Dec: +39 23 1.67 (39.38380d)	Proper Motion Dec: -14.10 mas/yr	J=9.682,	
		Equinox: J2000	Epoch of Position: 2000	H=9.534	

Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.
Extended=NO

Exposures

#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
1	Image	(1) KELT-1	WFC3/IR, MULTIACCUM, GRISM256	F126N	NSAMP=2; SAMP-SEQ=RAPID	PHASE 0.86 TO 0.87	Sequence 1-2 Non-Int in Before transit to before eclipse (06)	0.55563 Secs (0.556 Secs) *[==>]*	***[1]***
2	Scan	(1) KELT-1	WFC3/IR, MULTIACCUM, GRISM256	G141	NSAMP=15; SAMP-SEQ=SPARS10	SPATIAL SCAN 0.097,90.0 Degrees,Round trip	Sequence 1-2 Non-Int in Before transit to before eclipse (06)	103.128633 Secs X 9 (1856.315 Secs) *[==>(Copy 1, Forward)]* *[==>(Copy 1, Reverse)]* *[==>(Copy 2, Forward)]* *[==>(Copy 2, Reverse)]* *[==>(Copy 3, Forward)]* *[==>(Copy 3, Reverse)]* *[==>(Copy 4, Forward)]* *[==>(Copy 4, Reverse)]* *[==>(Copy 5, Forward)]* *[==>(Copy 5, Reverse)]* *[==>(Copy 6, Forward)]* *[==>(Copy 6, Reverse)]* *[==>(Copy 7, Forward)]* *[==>(Copy 7, Reverse)]* *[==>(Copy 8, Forward)]* *[==>(Copy 8, Reverse)]* *[==>(Copy 9, Forward)]* *[==>(Copy 9, Reverse)]*	***[1]***
3	Image	(1) KELT-1	WFC3/IR, MULTIACCUM, GRISM256	F126N	NSAMP=2; SAMP-SEQ=RAPID		Sequence 3-5 Non-Int in Before transit to before eclipse (06)	0.55563 Secs (0.556 Secs) *[==>]*	***[2]***

	4	Scan	(1) KELT-1	WFC3/IR, MULTIACCUM, GRISM256	G141	NSAMP=15; SAMP-SEQ=SPARS10	SPATIAL SCAN 0.0 97,90.0 Degrees,Round trip	Sequence 3-5 Non-Int in Before transit to before eclipse (06)	103.128633 Secs X 9 (1856.315 Secs) *[==>(Copy 1, Forward)]* *[==>(Copy 1, Reverse)]* *[==>(Copy 2, Forward)]* *[==>(Copy 2, Reverse)]* *[==>(Copy 3, Forward)]* *[==>(Copy 3, Reverse)]* *[==>(Copy 4, Forward)]* *[==>(Copy 4, Reverse)]* *[==>(Copy 5, Forward)]* *[==>(Copy 5, Reverse)]* *[==>(Copy 6, Forward)]* *[==>(Copy 6, Reverse)]* *[==>(Copy 7, Forward)]* *[==>(Copy 7, Reverse)]* *[==>(Copy 8, Forward)]* *[==>(Copy 8, Reverse)]* *[==>(Copy 9, Forward)]* *[==>(Copy 9, Reverse)]*	***[2]***
	5	Scan once	(1) KELT-1	WFC3/IR, MULTIACCUM, GRISM256	G141	NSAMP=15; SAMP-SEQ=SPARS10	SPATIAL SCAN 0.0 97,90.0 Degrees,Forward	Sequence 3-5 Non-Int in Before transit to before eclipse (06)	103.128633 Secs (103.129 Secs) *[==>]*	***[2]***
	6	Image	(1) KELT-1	WFC3/IR, MULTIACCUM, GRISM256	F126N	NSAMP=2; SAMP-SEQ=RAPID		Sequence 6-8 Non-Int in Before transit to before eclipse (06)	0.55563 Secs (0.556 Secs) *[==>]*	***[3]***
	7	Scan	(1) KELT-1	WFC3/IR, MULTIACCUM, GRISM256	G141	NSAMP=15; SAMP-SEQ=SPARS10	SPATIAL SCAN 0.0 97,90.0 Degrees,Round trip	Sequence 6-8 Non-Int in Before transit to before eclipse (06)	103.128633 Secs X 9 (1856.315 Secs) *[==>(Copy 1, Forward)]* *[==>(Copy 1, Reverse)]* *[==>(Copy 2, Forward)]* *[==>(Copy 2, Reverse)]* *[==>(Copy 3, Forward)]* *[==>(Copy 3, Reverse)]* *[==>(Copy 4, Forward)]* *[==>(Copy 4, Reverse)]* *[==>(Copy 5, Forward)]* *[==>(Copy 5, Reverse)]* *[==>(Copy 6, Forward)]* *[==>(Copy 6, Reverse)]* *[==>(Copy 7, Forward)]* *[==>(Copy 7, Reverse)]* *[==>(Copy 8, Forward)]* *[==>(Copy 8, Reverse)]* *[==>(Copy 9, Forward)]* *[==>(Copy 9, Reverse)]*	***[3]***

8	Scan once	(1) KELT-1	WFC3/IR, MULTIACCUM, GRISM256	G141	NSAMP=15; SAMP-SEQ=SPARS10	SPATIAL SCAN 0.097,90.0 Degrees,Forward	Sequence 6-8 Non-Int in Before transit to before eclipse (06)	103.128633 Secs (103.129 Secs) *[==>]*	 ***[3]***
9	Image	(1) KELT-1	WFC3/IR, MULTIACCUM, GRISM256	F126N	NSAMP=2; SAMP-SEQ=RAPID		Sequence 9-11 Non-Int in Before transit to before eclipse (06)	0.55563 Secs (0.556 Secs) *[==>]*	 ***[4]***
10	Scan	(1) KELT-1	WFC3/IR, MULTIACCUM, GRISM256	G141	NSAMP=15; SAMP-SEQ=SPARS10	SPATIAL SCAN 0.097,90.0 Degrees,Round trip	Sequence 9-11 Non-Int in Before transit to before eclipse (06)	103.128633 Secs X 9 (1856.315 Secs) *[==>(Copy 1, Forward)]* *[==>(Copy 1, Reverse)]* *[==>(Copy 2, Forward)]* *[==>(Copy 2, Reverse)]* *[==>(Copy 3, Forward)]* *[==>(Copy 3, Reverse)]* *[==>(Copy 4, Forward)]* *[==>(Copy 4, Reverse)]* *[==>(Copy 5, Forward)]* *[==>(Copy 5, Reverse)]* *[==>(Copy 6, Forward)]* *[==>(Copy 6, Reverse)]* *[==>(Copy 7, Forward)]* *[==>(Copy 7, Reverse)]* *[==>(Copy 8, Forward)]* *[==>(Copy 8, Reverse)]* *[==>(Copy 9, Forward)]* *[==>(Copy 9, Reverse)]*	 ***[4]***
11	Scan once	(1) KELT-1	WFC3/IR, MULTIACCUM, GRISM256	G141	NSAMP=15; SAMP-SEQ=SPARS10	SPATIAL SCAN 0.097,90.0 Degrees,Forward	Sequence 9-11 Non-Int in Before transit to before eclipse (06)	103.128633 Secs (103.129 Secs) *[==>]*	 ***[4]***
12	Image	(1) KELT-1	WFC3/IR, MULTIACCUM, GRISM256	F126N	NSAMP=2; SAMP-SEQ=RAPID		Sequence 12-14 Non-Int in Before transit to before eclipse (06)	0.55563 Secs (0.556 Secs) *[==>]*	 ***[5]***

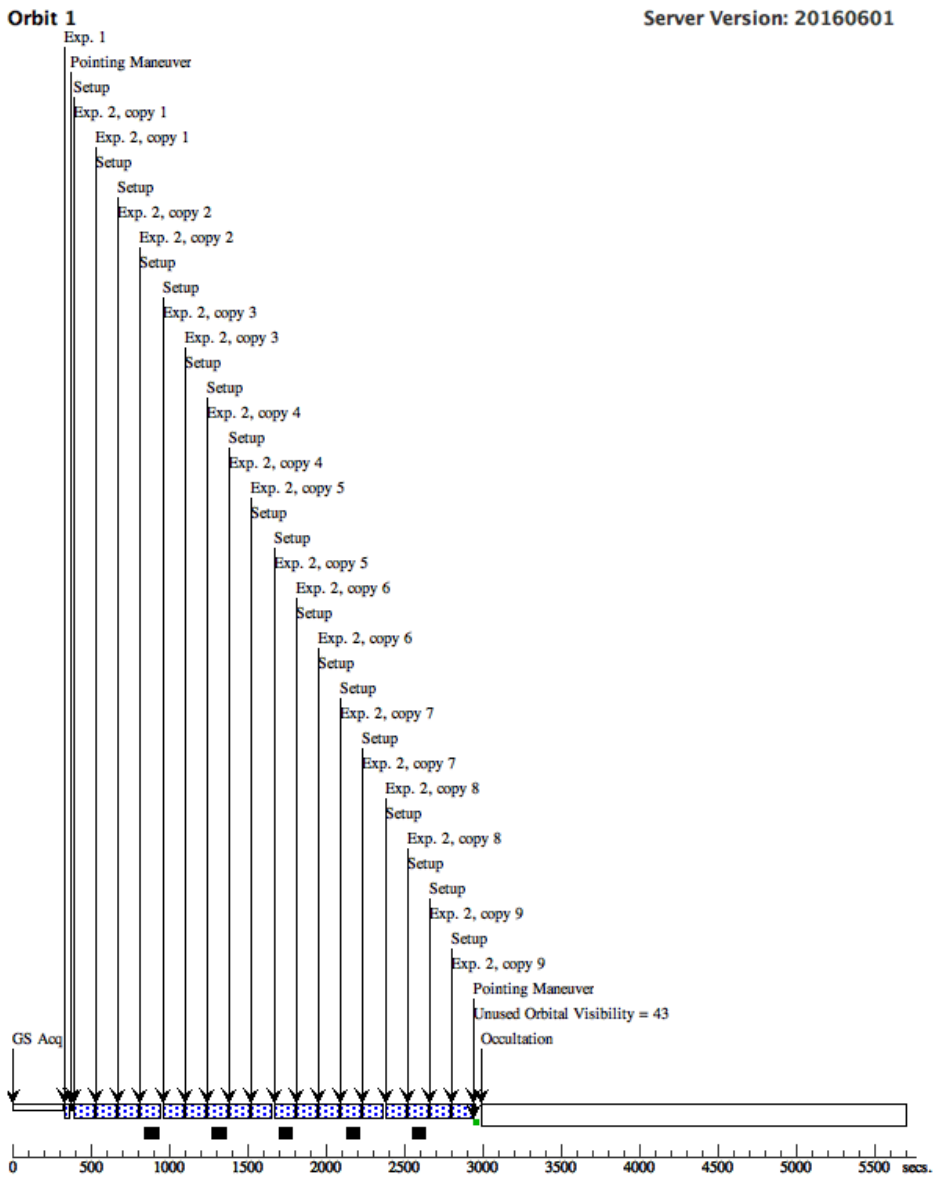
13	Scan	(1) KELT-1	WFC3/IR, MULTIACCUM, GRISM256	G141	NSAMP=15; SAMP-SEQ=SPARS10	SPATIAL SCAN 0.0 97,90.0 Degrees,Round trip	Sequence 12-14 Non-Int in Before transit to before eclipse (06)	103.128633 Secs X 9 (1856.315 Secs) *[==>(Copy 1, Forward)]* *[==>(Copy 1, Reverse)]* *[==>(Copy 2, Forward)]* *[==>(Copy 2, Reverse)]* *[==>(Copy 3, Forward)]* *[==>(Copy 3, Reverse)]* *[==>(Copy 4, Forward)]* *[==>(Copy 4, Reverse)]* *[==>(Copy 5, Forward)]* *[==>(Copy 5, Reverse)]* *[==>(Copy 6, Forward)]* *[==>(Copy 6, Reverse)]* *[==>(Copy 7, Forward)]* *[==>(Copy 7, Reverse)]* *[==>(Copy 8, Forward)]* *[==>(Copy 8, Reverse)]* *[==>(Copy 9, Forward)]* *[==>(Copy 9, Reverse)]*	***[5]***
14	Scan once	(1) KELT-1	WFC3/IR, MULTIACCUM, GRISM256	G141	NSAMP=15; SAMP-SEQ=SPARS10	SPATIAL SCAN 0.0 97,90.0 Degrees,Forward	Sequence 12-14 Non-Int in Before transit to before eclipse (06)	103.128633 Secs (103.129 Secs) *[==>]*	***[5]***
15	Image	(1) KELT-1	WFC3/IR, MULTIACCUM, GRISM256	F126N	NSAMP=2; SAMP-SEQ=RAPID		Sequence 15-17 Non-Int in Before transit to before eclipse (06)	0.55563 Secs (0.556 Secs) *[==>]*	***[6]***
16	Scan	(1) KELT-1	WFC3/IR, MULTIACCUM, GRISM256	G141	NSAMP=15; SAMP-SEQ=SPARS10	SPATIAL SCAN 0.0 97,90.0 Degrees,Round trip	Sequence 15-17 Non-Int in Before transit to before eclipse (06)	103.128633 Secs X 9 (1856.315 Secs) *[==>(Copy 1, Forward)]* *[==>(Copy 1, Reverse)]* *[==>(Copy 2, Forward)]* *[==>(Copy 2, Reverse)]* *[==>(Copy 3, Forward)]* *[==>(Copy 3, Reverse)]* *[==>(Copy 4, Forward)]* *[==>(Copy 4, Reverse)]* *[==>(Copy 5, Forward)]* *[==>(Copy 5, Reverse)]* *[==>(Copy 6, Forward)]* *[==>(Copy 6, Reverse)]* *[==>(Copy 7, Forward)]* *[==>(Copy 7, Reverse)]* *[==>(Copy 8, Forward)]* *[==>(Copy 8, Reverse)]* *[==>(Copy 9, Forward)]* *[==>(Copy 9, Reverse)]*	***[6]***

17	Scan once	(1) KELT-1	WFC3/IR, MULTIACCUM, GRISM256	G141	NSAMP=15; SAMP-SEQ=SPARS10	SPATIAL SCAN 0.0 97,90.0 Degrees,Forward	Sequence 15-17 Non-Int in Before transit to before eclipse (06)	103.128633 Secs (103.129 Secs) *[==>]*	 ***[6]***
18	Image	(1) KELT-1	WFC3/IR, MULTIACCUM, GRISM256	F126N	NSAMP=2; SAMP-SEQ=RAPID		Sequence 18-20 Non-Int in Before transit to before eclipse (06)	0.55563 Secs (0.556 Secs) *[==>]*	 ***[7]***
19	Scan	(1) KELT-1	WFC3/IR, MULTIACCUM, GRISM256	G141	NSAMP=15; SAMP-SEQ=SPARS10	SPATIAL SCAN 0.0 97,90.0 Degrees,Round trip	Sequence 18-20 Non-Int in Before transit to before eclipse (06)	103.128633 Secs X 9 (1856.315 Secs) *[==>(Copy 1, Forward)]* *[==>(Copy 1, Reverse)]* *[==>(Copy 2, Forward)]* *[==>(Copy 2, Reverse)]* *[==>(Copy 3, Forward)]* *[==>(Copy 3, Reverse)]* *[==>(Copy 4, Forward)]* *[==>(Copy 4, Reverse)]* *[==>(Copy 5, Forward)]* *[==>(Copy 5, Reverse)]* *[==>(Copy 6, Forward)]* *[==>(Copy 6, Reverse)]* *[==>(Copy 7, Forward)]* *[==>(Copy 7, Reverse)]* *[==>(Copy 8, Forward)]* *[==>(Copy 8, Reverse)]* *[==>(Copy 9, Forward)]* *[==>(Copy 9, Reverse)]*	 ***[7]***
20	Scan once	(1) KELT-1	WFC3/IR, MULTIACCUM, GRISM256	G141	NSAMP=15; SAMP-SEQ=SPARS10	SPATIAL SCAN 0.0 97,90.0 Degrees,Forward	Sequence 18-20 Non-Int in Before transit to before eclipse (06)	103.128633 Secs (103.129 Secs) *[==>]*	 ***[7]***
21	Image	(1) KELT-1	WFC3/IR, MULTIACCUM, GRISM256	F126N	NSAMP=2; SAMP-SEQ=RAPID		Sequence 21-23 Non-Int in Before transit to before eclipse (06)	0.55563 Secs (0.556 Secs) *[==>]*	 ***[8]***

22	Scan	(1) KELT-1	WFC3/IR, MULTIACCUM, GRISM256	G141	NSAMP=15; SAMP-SEQ=SPARS10	SPATIAL SCAN 0.0 97,90.0 Degrees,Round trip	Sequence 21-23 Non-Int in Before transit to before eclipse (06)	103.128633 Secs X 9 (1856.315 Secs) *[==>(Copy 1, Forward)]* *[==>(Copy 1, Reverse)]* *[==>(Copy 2, Forward)]* *[==>(Copy 2, Reverse)]* *[==>(Copy 3, Forward)]* *[==>(Copy 3, Reverse)]* *[==>(Copy 4, Forward)]* *[==>(Copy 4, Reverse)]* *[==>(Copy 5, Forward)]* *[==>(Copy 5, Reverse)]* *[==>(Copy 6, Forward)]* *[==>(Copy 6, Reverse)]* *[==>(Copy 7, Forward)]* *[==>(Copy 7, Reverse)]* *[==>(Copy 8, Forward)]* *[==>(Copy 8, Reverse)]* *[==>(Copy 9, Forward)]* *[==>(Copy 9, Reverse)]*	***[8]***
23	Scan once	(1) KELT-1	WFC3/IR, MULTIACCUM, GRISM256	G141	NSAMP=15; SAMP-SEQ=SPARS10	SPATIAL SCAN 0.0 97,90.0 Degrees,Forward	Sequence 21-23 Non-Int in Before transit to before eclipse (06)	103.128633 Secs (103.129 Secs) *[==>]*	***[8]***
24	Image	(1) KELT-1	WFC3/IR, MULTIACCUM, GRISM256	F126N	NSAMP=2; SAMP-SEQ=RAPID		Sequence 24-26 Non-Int in Before transit to before eclipse (06)	0.55563 Secs (0.556 Secs) *[==>]*	***[9]***
25	Scan	(1) KELT-1	WFC3/IR, MULTIACCUM, GRISM256	G141	NSAMP=15; SAMP-SEQ=SPARS10	SPATIAL SCAN 0.0 97,90.0 Degrees,Round trip	Sequence 24-26 Non-Int in Before transit to before eclipse (06)	103.128633 Secs X 9 (1856.315 Secs) *[==>(Copy 1, Forward)]* *[==>(Copy 1, Reverse)]* *[==>(Copy 2, Forward)]* *[==>(Copy 2, Reverse)]* *[==>(Copy 3, Forward)]* *[==>(Copy 3, Reverse)]* *[==>(Copy 4, Forward)]* *[==>(Copy 4, Reverse)]* *[==>(Copy 5, Forward)]* *[==>(Copy 5, Reverse)]* *[==>(Copy 6, Forward)]* *[==>(Copy 6, Reverse)]* *[==>(Copy 7, Forward)]* *[==>(Copy 7, Reverse)]* *[==>(Copy 8, Forward)]* *[==>(Copy 8, Reverse)]* *[==>(Copy 9, Forward)]* *[==>(Copy 9, Reverse)]*	***[9]***

	26	Scan once	(1) KELT-1	WFC3/IR, MULTIACCUM, GRISM256	G141	NSAMP=15; SAMP-SEQ=SPARS10	SPATIAL SCAN 0.097,90.0 Degrees,Forward	Sequence 24-26 Non-Int in Before transit to before eclipse (06)	103.128633 Secs (103.129 Secs) *[==>]*	 ***[9]***
	27	Image	(1) KELT-1	WFC3/IR, MULTIACCUM, GRISM256	F126N	NSAMP=2; SAMP-SEQ=RAPID		Sequence 27-29 Non-Int in Before transit to before eclipse (06)	0.55563 Secs (0.556 Secs) *[==>]*	 ***[10]***
	28	Scan	(1) KELT-1	WFC3/IR, MULTIACCUM, GRISM256	G141	NSAMP=15; SAMP-SEQ=SPARS10	SPATIAL SCAN 0.097,90.0 Degrees,Round trip	Sequence 27-29 Non-Int in Before transit to before eclipse (06)	103.128633 Secs X 9 (1856.315 Secs) *[==>(Copy 1, Forward)]* *[==>(Copy 1, Reverse)]* *[==>(Copy 2, Forward)]* *[==>(Copy 2, Reverse)]* *[==>(Copy 3, Forward)]* *[==>(Copy 3, Reverse)]* *[==>(Copy 4, Forward)]* *[==>(Copy 4, Reverse)]* *[==>(Copy 5, Forward)]* *[==>(Copy 5, Reverse)]* *[==>(Copy 6, Forward)]* *[==>(Copy 6, Reverse)]* *[==>(Copy 7, Forward)]* *[==>(Copy 7, Reverse)]* *[==>(Copy 8, Forward)]* *[==>(Copy 8, Reverse)]* *[==>(Copy 9, Forward)]* *[==>(Copy 9, Reverse)]*	 ***[10]***
	29	Scan once	(1) KELT-1	WFC3/IR, MULTIACCUM, GRISM256	G141	NSAMP=15; SAMP-SEQ=SPARS10	SPATIAL SCAN 0.097,90.0 Degrees,Forward	Sequence 27-29 Non-Int in Before transit to before eclipse (06)	103.128633 Secs (103.129 Secs) *[==>]*	 ***[10]***

Orbit Structure




Orbit 2
Server Version: 20160601
GS Reacq
Exp. 3
Pointing Maneuver
Exp. 4, copy 1
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Exp. 4, copy 1
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Exp. 4, copy 2
Setup
Exp. 4, copy 2
Exp. 4, copy 3
Setup
Exp. 4, copy 3
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Exp. 4, copy 4
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Exp. 4, copy 9
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Exp. 4, copy 9
Setup
Exp. 5
Setup
Unused Orbital Visibility = 12
Pointing Maneuver
Occultation
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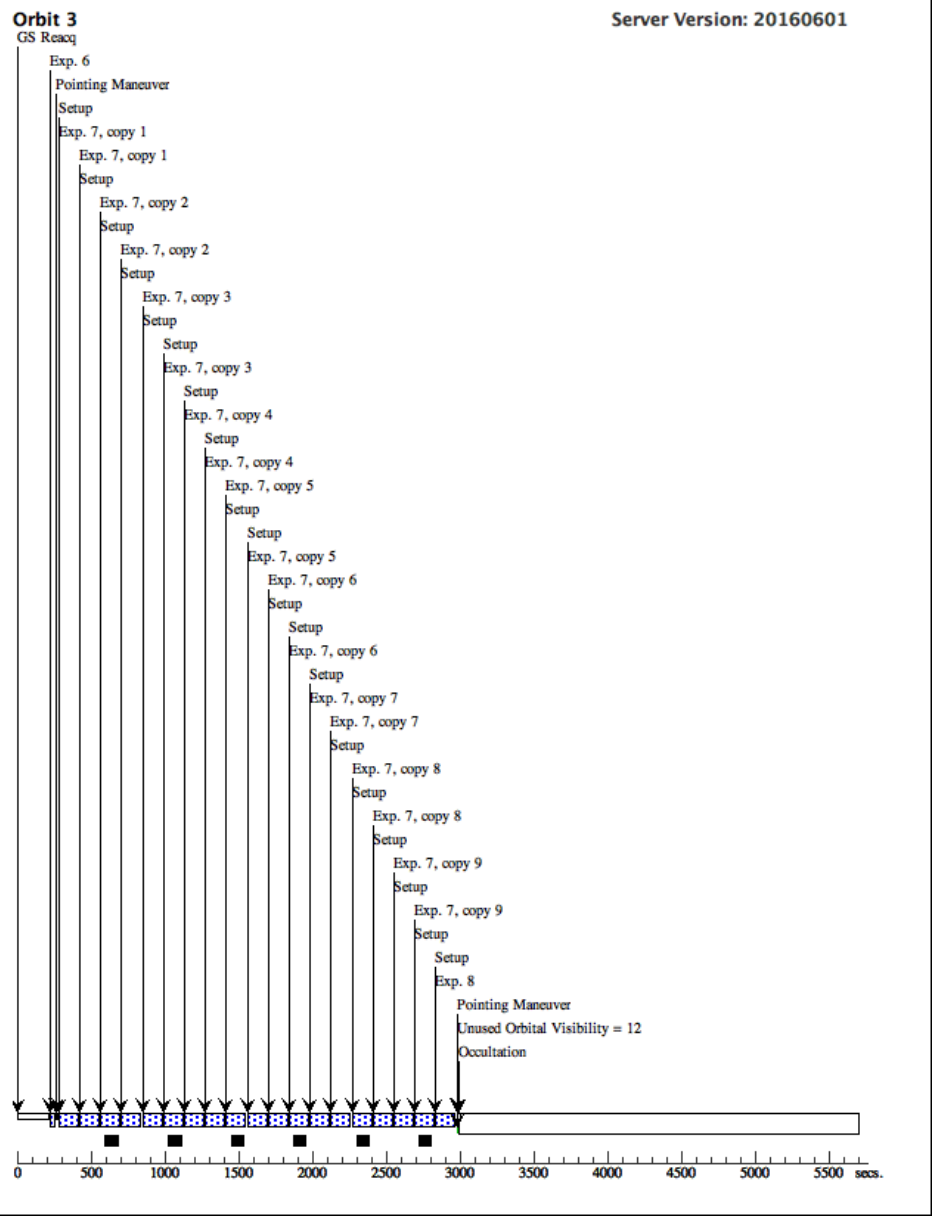
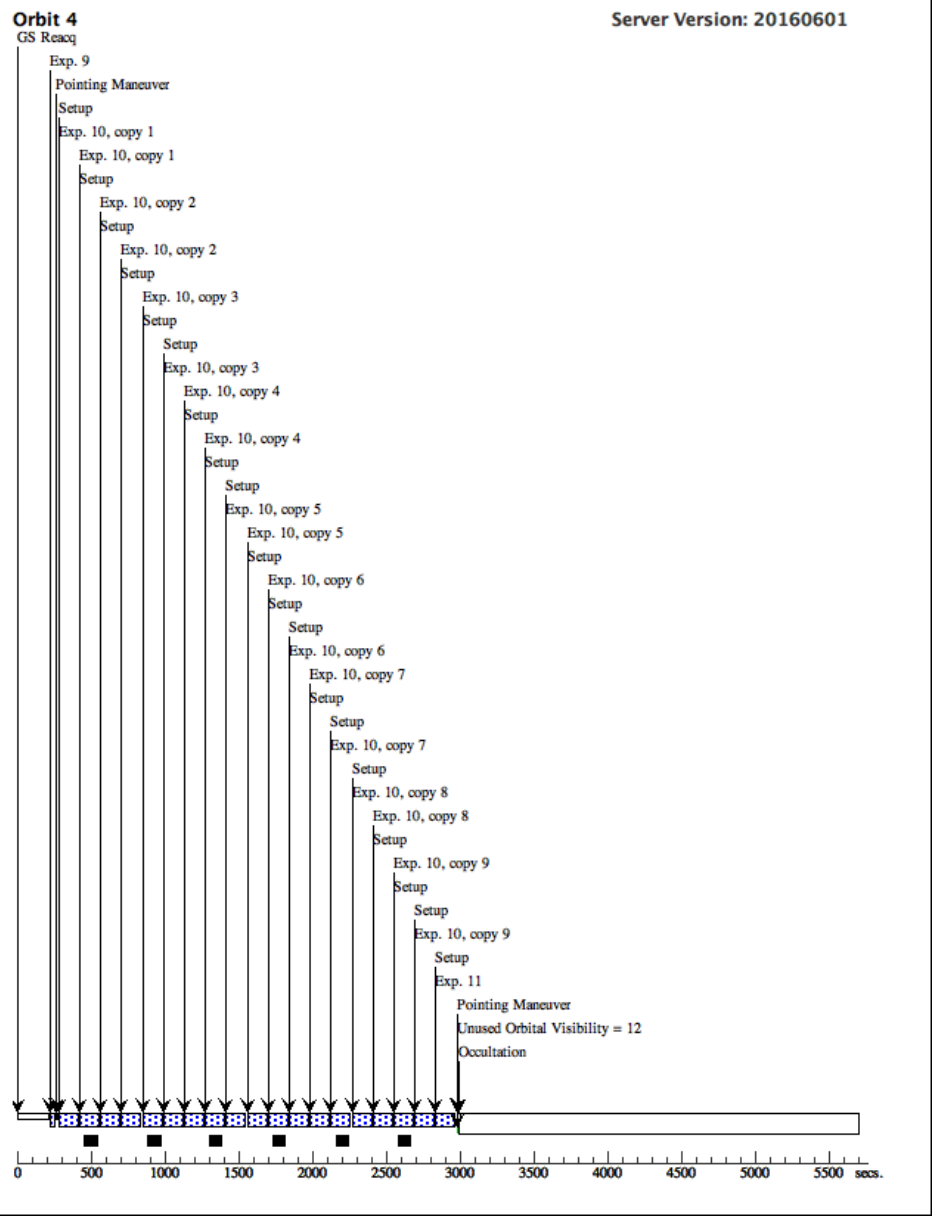
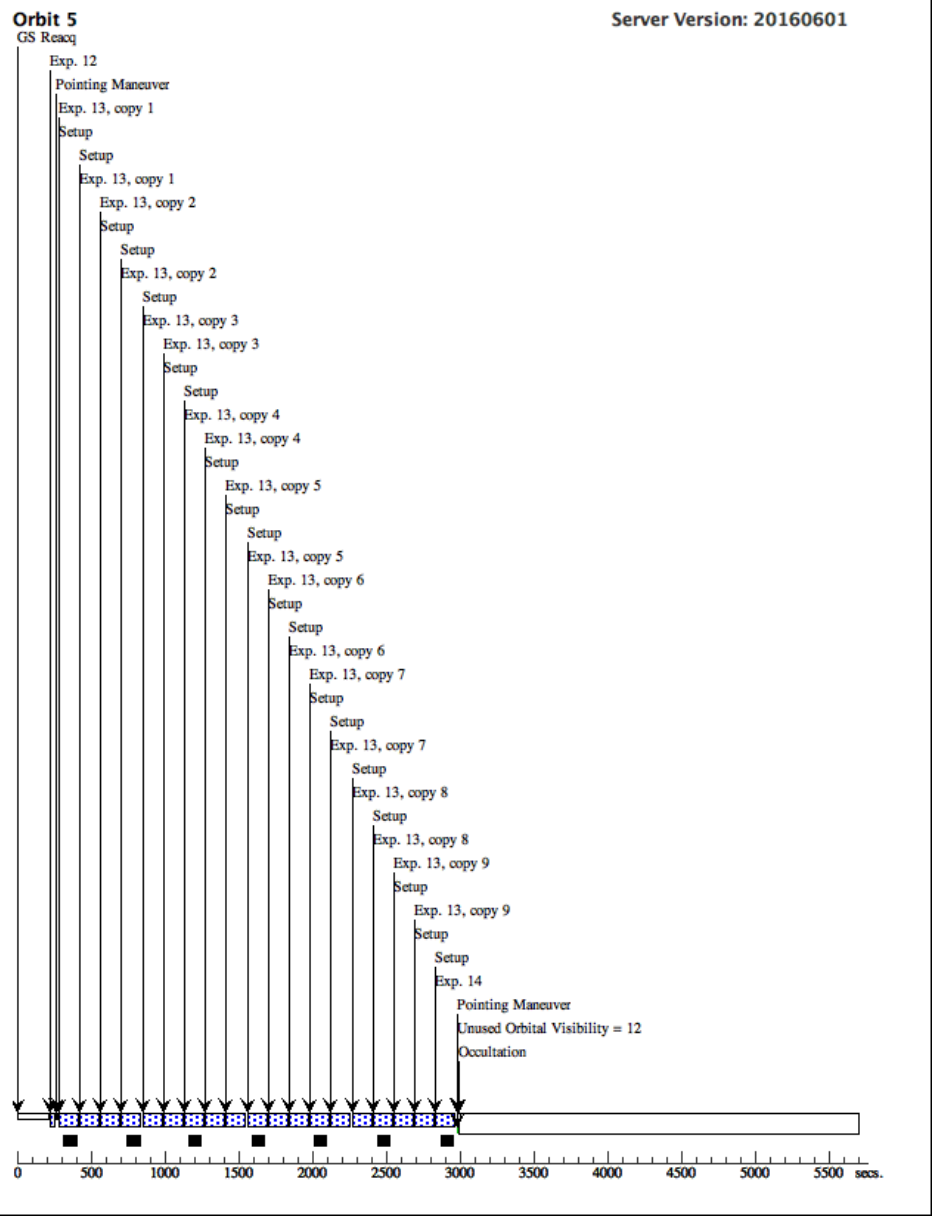
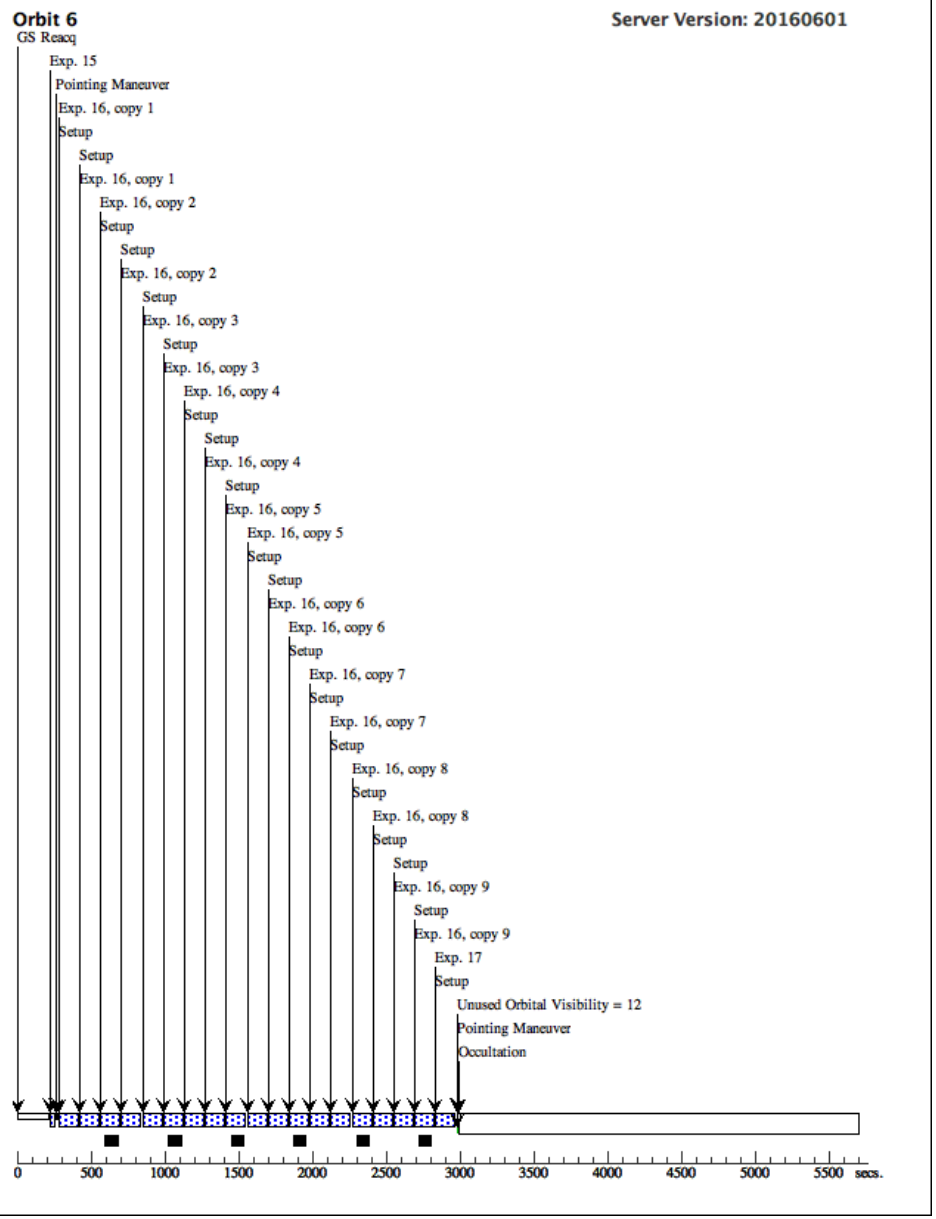
1500
2000
2500
3000
3500
4000
4500
5000
5500
secs.


Orbit 3
Server Version: 20160601
GS Reacq
Exp. 6
Pointing Maneuver
Setup
Exp. 7, copy 1
Exp. 7, copy 1
Setup
Exp. 7, copy 2
Setup
Exp. 7, copy 2
Setup
Exp. 7, copy 3
Setup
Setup
Exp. 7, copy 3
Setup
Exp. 7, copy 4
Setup
Exp. 7, copy 4
Exp. 7, copy 5
Setup
Setup
Exp. 7, copy 5
Exp. 7, copy 6
Setup
Setup
Exp. 7, copy 6
Setup
Exp. 7, copy 7
Exp. 7, copy 7
Setup
Exp. 7, copy 8
Setup
Exp. 7, copy 8
Setup
Exp. 7, copy 9
Setup
Exp. 7, copy 9
Setup
Setup
Exp. 8
Pointing Maneuver
Unused Orbital Visibility = 12
Occultation
0
500
1000
1500
2000
2500
3000
3500
4000
4500
5000
5500
secs.


Orbit 4
Server Version: 20160601
GS Reacq
Exp. 9
Pointing Maneuver
Setup
Exp. 10, copy 1
Exp. 10, copy 1
Setup
Exp. 10, copy 2
Setup
Exp. 10, copy 2
Setup
Exp. 10, copy 3
Setup
Setup
Exp. 10, copy 3
Exp. 10, copy 4
Setup
Exp. 10, copy 4
Setup
Setup
Exp. 10, copy 5
Exp. 10, copy 5
Setup
Exp. 10, copy 6
Setup
Setup
Exp. 10, copy 6
Exp. 10, copy 7
Setup
Setup
Exp. 10, copy 7
Setup
Exp. 10, copy 8
Exp. 10, copy 8
Setup
Exp. 10, copy 9
Setup
Setup
Exp. 10, copy 9
Setup
Exp. 11
Pointing Maneuver
Unused Orbital Visibility = 12
Occultation
0
500
1000
1500
2000
2500
3000
3500
4000
4500
5000
5500
secs.

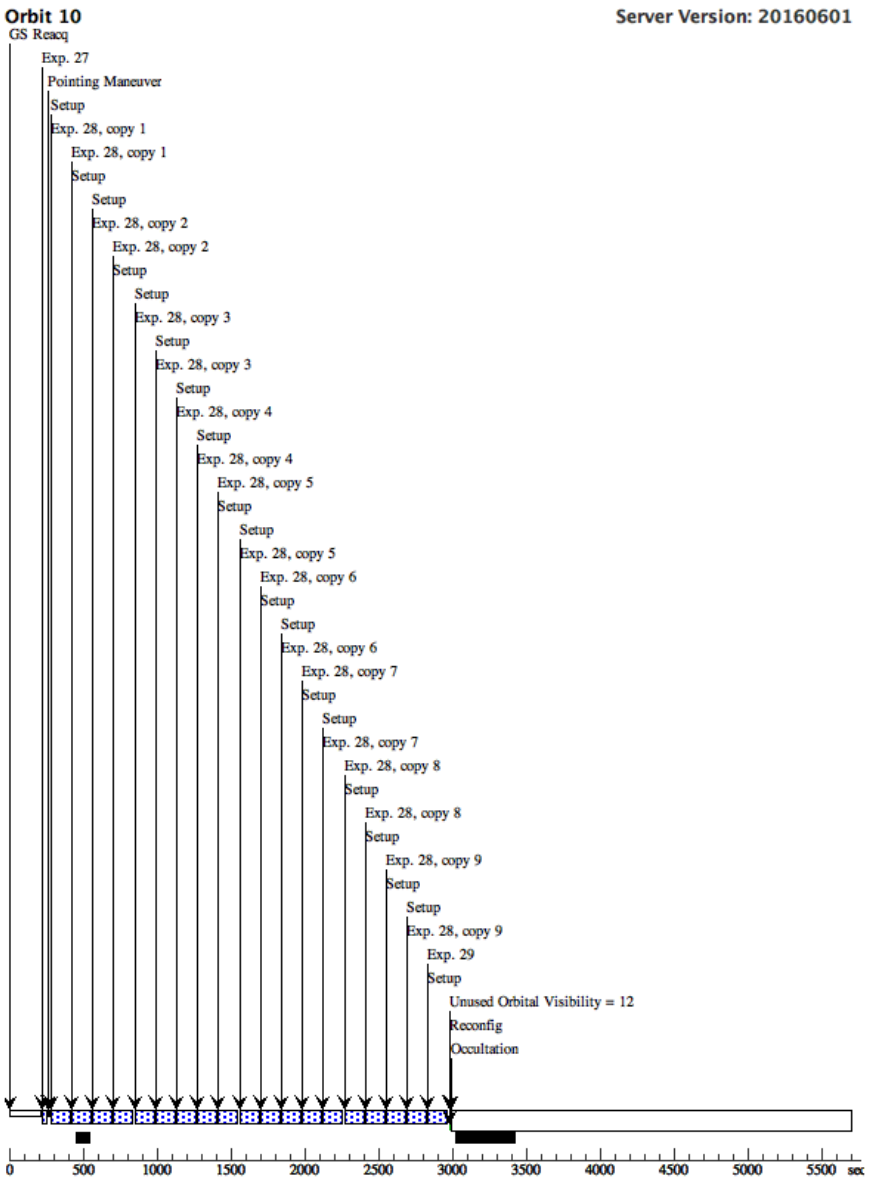

Orbit 5
Server Version: 20160601
GS Reacq
Exp. 12
Pointing Maneuver
Exp. 13, copy 1
Setup
Setup
Exp. 13, copy 1
Exp. 13, copy 2
Setup
Setup
Exp. 13, copy 2
Setup
Exp. 13, copy 3
Exp. 13, copy 3
Setup
Setup
Exp. 13, copy 4
Exp. 13, copy 4
Setup
Exp. 13, copy 5
Setup
Setup
Exp. 13, copy 5
Exp. 13, copy 6
Setup
Setup
Exp. 13, copy 6
Exp. 13, copy 7
Setup
Setup
Exp. 13, copy 7
Setup
Exp. 13, copy 8
Setup
Exp. 13, copy 8
Exp. 13, copy 9
Setup
Exp. 13, copy 9
Setup
Setup
Exp. 14
Pointing Maneuver
Unused Orbital Visibility = 12
Occultation
0
500
1000
1500
2000
2500
3000
3500
4000
4500
5000
5500
secs.


Orbit 6
Server Version: 20160601
GS Reacq
Exp. 15
Pointing Maneuver
Exp. 16, copy 1
Setup
Setup
Exp. 16, copy 1
Exp. 16, copy 2
Setup
Setup
Exp. 16, copy 2
Setup
Exp. 16, copy 3
Setup
Exp. 16, copy 3
Exp. 16, copy 4
Setup
Setup
Exp. 16, copy 4
Setup
Exp. 16, copy 5
Exp. 16, copy 5
Setup
Setup
Exp. 16, copy 6
Exp. 16, copy 6
Setup
Exp. 16, copy 7
Setup
Exp. 16, copy 7
Setup
Exp. 16, copy 8
Setup
Exp. 16, copy 8
Setup
Setup
Exp. 16, copy 9
Setup
Exp. 16, copy 9
Exp. 17
Setup
Unused Orbital Visibility = 12
Pointing Maneuver
Occultation
0
500
1000
1500
2000
2500
3000
3500
4000
4500
5000
5500
secs.


Orbit 7
Server Version: 20160601
GS Reacq
Exp. 18
Pointing Maneuver
Setup
Exp. 19, copy 1
Setup
Exp. 19, copy 1
Setup
Exp. 19, copy 2
Exp. 19, copy 2
Setup
Setup
Exp. 19, copy 3
Setup
Exp. 19, copy 3
Exp. 19, copy 4
Setup
Exp. 19, copy 4
Setup
Exp. 19, copy 5
Setup
Exp. 19, copy 5
Setup
Exp. 19, copy 6
Setup
Setup
Exp. 19, copy 6
Setup
Exp. 19, copy 7
Setup
Exp. 19, copy 7
Setup
Exp. 19, copy 8
Exp. 19, copy 8
Setup
Setup
Exp. 19, copy 9
Setup
Exp. 19, copy 9
Setup
Exp. 20
Unused Orbital Visibility = 12
Pointing Maneuver
Occultation
0
500
1000
1500
2000
2500
3000
3500
4000
4500
5000
5500
secs.


Orbit 8
Server Version: 20160601
GS Reacq
Exp. 21
Pointing Maneuver
Setup
Exp. 22, copy 1
Setup
Exp. 22, copy 1
Setup
Exp. 22, copy 2
Setup
Exp. 22, copy 2
Exp. 22, copy 3
Setup
Exp. 22, copy 3
Setup
Setup
Exp. 22, copy 4
Setup
Exp. 22, copy 4
Exp. 22, copy 5
Setup
Exp. 22, copy 5
Setup
Setup
Exp. 22, copy 6
Setup
Exp. 22, copy 6
Setup
Exp. 22, copy 7
Exp. 22, copy 7
Setup
Setup
Exp. 22, copy 8
Setup
Exp. 22, copy 8
Setup
Exp. 22, copy 9
Exp. 22, copy 9
Setup
Setup
Exp. 23
Pointing Maneuver
Unused Orbital Visibility = 12
Occultation
0
500
1000
1500
2000
2500
3000
3500
4000
4500
5000
5500
secs.


Orbit 9
Server Version: 20160601
GS Reacq
Exp. 24
Pointing Maneuver
Setup
Exp. 25, copy 1
Exp. 25, copy 1
Setup
Setup
Exp. 25, copy 2
Exp. 25, copy 2
Setup
Setup
Exp. 25, copy 3
Setup
Exp. 25, copy 3
Setup
Exp. 25, copy 4
Setup
Exp. 25, copy 4
Exp. 25, copy 5
Setup
Setup
Exp. 25, copy 5
Exp. 25, copy 6
Setup
Setup
Exp. 25, copy 6
Exp. 25, copy 7
Setup
Setup
Exp. 25, copy 7
Setup
Exp. 25, copy 8
Setup
Exp. 25, copy 8
Exp. 25, copy 9
Setup
Setup
Exp. 25, copy 9
Setup
Exp. 26
Pointing Maneuver
Unused Orbital Visibility = 12
Occultation
0
500
1000
1500
2000
2500
3000
3500
4000
4500
5000
5500
secs.


Orbit 10
Server Version: 20160601
GS Reacq
Exp. 27
Pointing Maneuver
Setup
Exp. 28, copy 1
Exp. 28, copy 1
Setup
Setup
Exp. 28, copy 2
Exp. 28, copy 2
Setup
Setup
Exp. 28, copy 3
Setup
Exp. 28, copy 3
Setup
Exp. 28, copy 4
Setup
Exp. 28, copy 4
Exp. 28, copy 5
Setup
Setup
Exp. 28, copy 5
Exp. 28, copy 6
Setup
Setup
Exp. 28, copy 6
Exp. 28, copy 7
Setup
Setup
Exp. 28, copy 7
Exp. 28, copy 8
Setup
Exp. 28, copy 8
Setup
Exp. 28, copy 9
Setup
Setup
Exp. 28, copy 9
Exp. 29
Setup
Unused Orbital Visibility = 12
Reconfig
Occultation
0
500
1000
1500
2000
2500
3000
3500
4000
4500
5000
5500
sec