



## 15144 - Deep Search for Satellites Around the Lucy Mission Targets

Cycle: 25, Proposal Category: GO

(Availability Mode: SUPPORTED)

### INVESTIGATORS

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### VISITS

<i>Visit</i>	<i>Targets used in Visit</i>	<i>Configurations used in Visit</i>	<i>Orbits Used</i>	<i>Last Orbit Planner Run</i>	<i>OP Current with Visit?</i>
11	(1) PATROCLUS	WFC3/UVIS	1	21-Aug-2018 15:00:12.0	yes
12	(1) PATROCLUS	WFC3/UVIS	1	21-Aug-2018 15:00:13.0	yes
21	(2) EURYBATES	WFC3/UVIS	1	21-Aug-2018 15:00:15.0	yes
22	(2) EURYBATES	WFC3/UVIS	1	21-Aug-2018 15:00:16.0	yes
31	(3) ORUS	WFC3/UVIS	1	21-Aug-2018 15:00:17.0	yes
32	(3) ORUS	WFC3/UVIS	1	21-Aug-2018 15:00:18.0	yes
41	(4) LEUCUS	WFC3/UVIS	1	21-Aug-2018 15:00:19.0	yes
42	(4) LEUCUS	WFC3/UVIS	1	21-Aug-2018 15:00:19.0	yes
51	(5) POLYMELE	WFC3/UVIS	1	21-Aug-2018 15:00:21.0	yes
52	(5) POLYMELE	WFC3/UVIS	1	21-Aug-2018 15:00:22.0	yes

10 Total Orbits Used

## **ABSTRACT**

By performing the first deep search for Trojan satellites with HST we will obtain unique constraints on satellite-forming processes in this population. We have selected the targets from NASA's Lucy mission because they represent a taxonomically and physically diverse set of targets that allow intercomparisons from a small survey. Also, by searching now to identify any orbiting material around the Lucy targets, it will be possible impact hardware decisions and plan for maximum scientific return from the mission. This search also is a necessary step to assure mission safety as the Lucy spacecraft will fly within 1000 km of the targets, well within the region where stable orbits can exist.

## **OBSERVING DESCRIPTION**

Two visits for each of five targets. Timing for the first of each two visit pair is constrained to be within 10% of minimum opposition distance to maximize angular scale.

The time from the first visit to the second is chosen to allow enough time for any small objects to move.

In the case of the PM binary, the first visit is chosen to be near minimum separation/mutual events that minimize scattered light.

The second visit to the PM binary should be at the same orbital phase a half integer number of orbital periods later ( $P=102.783$  hr).

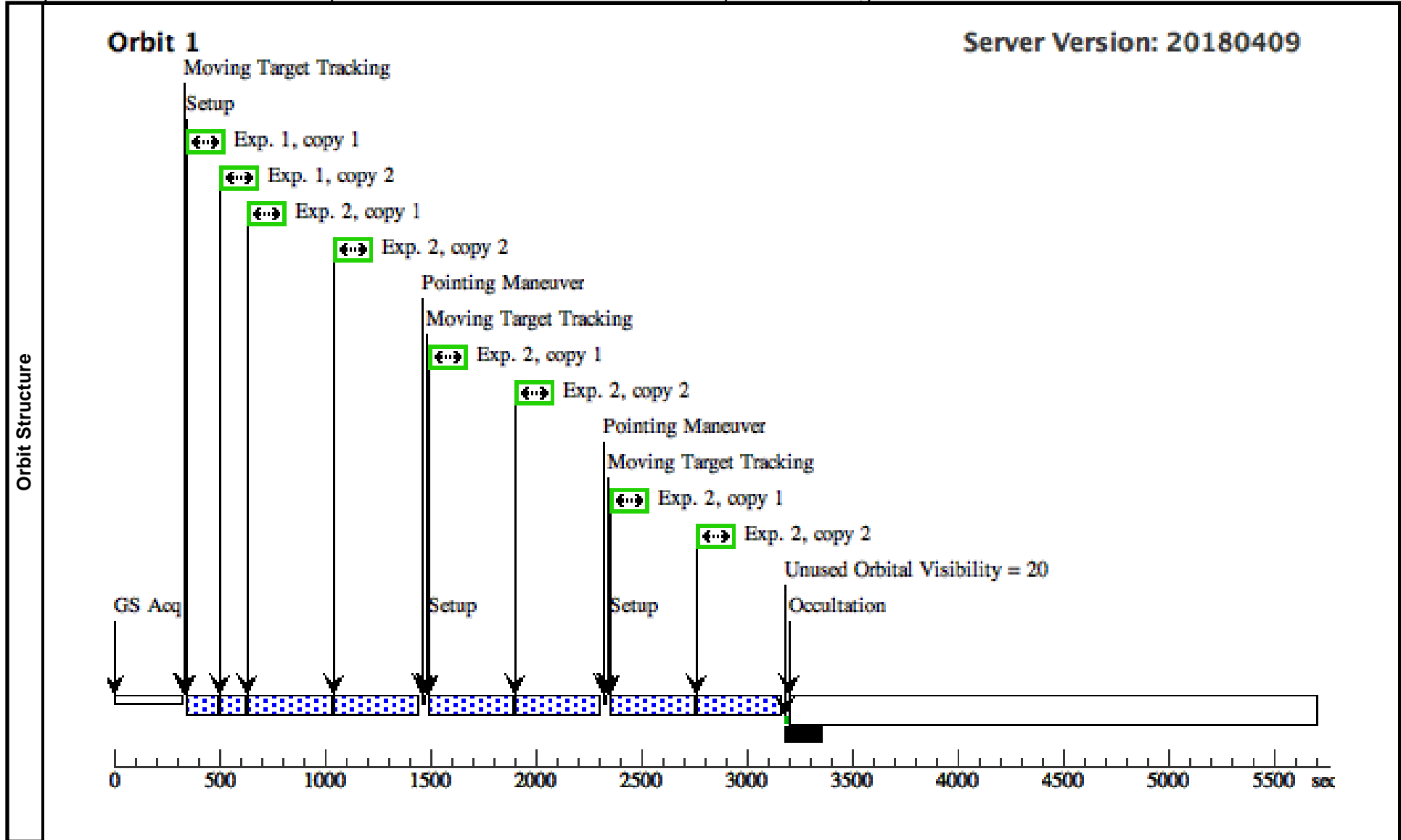
The two visits to the Patroclus/Menoetius binary should be separated by one (or more) full periods. We will choose times near minimum elongation as described in the visit and email.

Long exposure times can be shortened as needed to schedule (by ~10 sec, if more is needed, please ask).

Proposal 15144 - Visit 11 - Deep Search for Satellites Around the Lucy Mission Targets

Tue Aug 21 19:00:23 GMT 2018

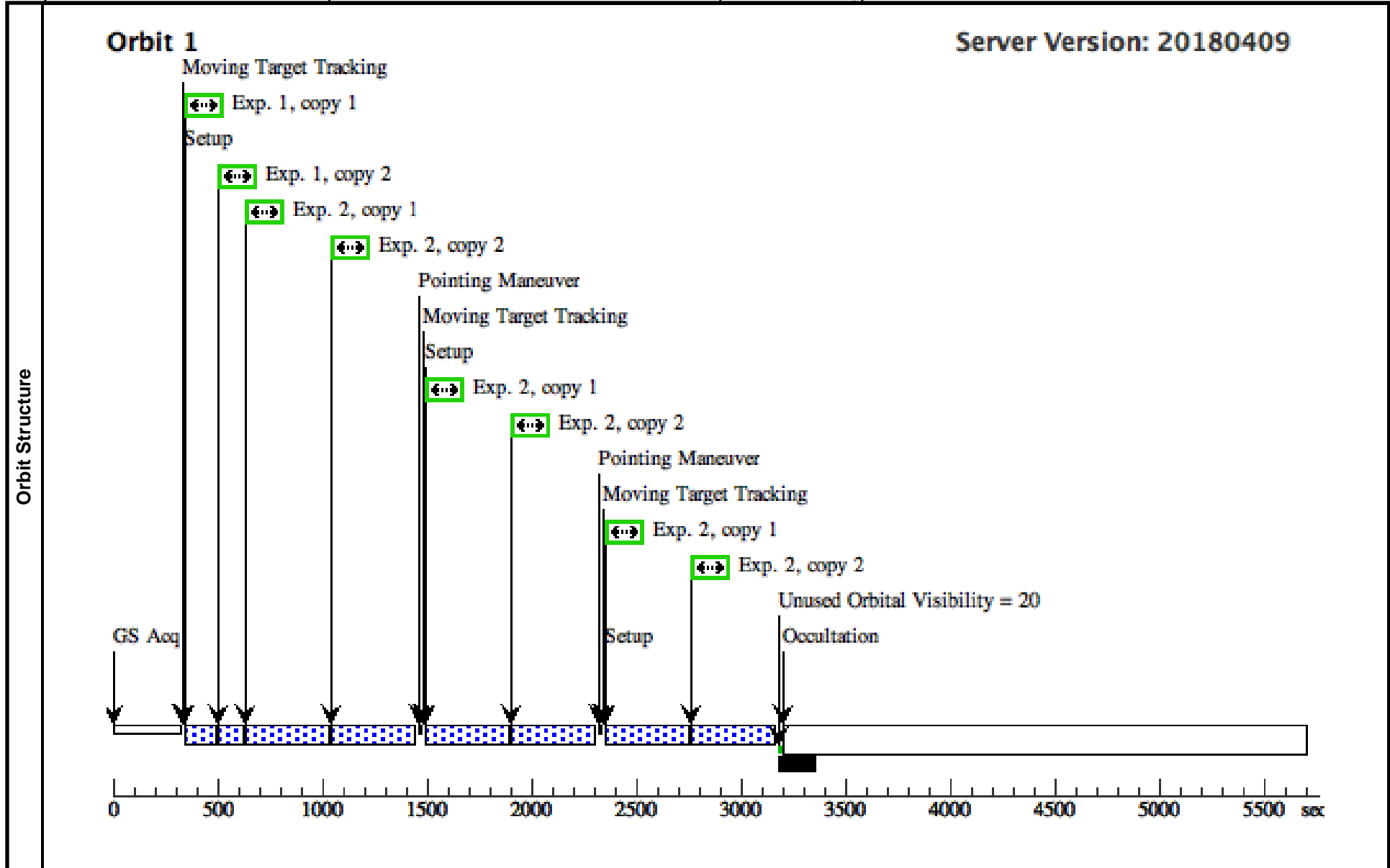
<b>Visit</b>	<b>Proposal 15144, Visit 11, completed</b> <b>Diagnostic Status: No Diagnostics</b> Scientific Instruments: WFC3/UVIS Special Requirements: (none) <i>Comments: This first visit should schedule at one of the following times:</i> 2018-01-04 22:23 UT - 2018-01-05 04:14 UT 2018-01-07 01:48 UT - 2018-01-07 07:38 UT 2018-01-09 05:12 UT - 2018-01-09 11:02 UT 2018-01-11 08:37 UT - 2018-01-11 14:27 UT 2018-01-13 12:03 UT - 2018-01-13 17:51 UT (see email file for additional windows)									
	<b>Patterns</b>	# (1)	<b>Primary Pattern</b> Pattern Type=WFC3-UVIS-DITHER-LINE Purpose=DITHER Number Of Points=3 Point Spacing=0.290 Line Spacing=	Coordinate Frame=POS-TARG Pattern Orientation=46.84 Angle Between Sides= Center Pattern=false	<b>Secondary Pattern</b>	<b>Exposures</b> (2)				
<b>Solar System Targets</b>	#	Name	Level 1	Level 2	Level 3	Window	Ephem Center			
	(1)	PATROCLUS	TYPE=ASTEROID,A=5.21849969455 3197,E=0.1399500456355474,I=22.05 269861079197,O=44.36596299545594 ,W=307.8595259822105,M=325.1954 514012491,EQUINOX=J2000,EPOCH =08-JUN- 2011:00:00:00,EpochTimeScale=TDB			RANGE PATROCLUS EARTH LT 5.5	EARTH			
	<i>Comments: Description=617 Patroclus/Menoetius Extended=NO</i>									
<b>Exposures</b>	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
	1	(1) PATROCLUS		WFC3/UVIS, ACCUM, UVIS2-M1K1C-SUB	F555W	FLASH=11	GS ACQ SCENARI O BASE1B3	Sequence 1-2 Non-Int in Visit 11	30 Secs X 2 (60 Secs) [=>(Copy 1)] [=>(Copy 2)]	[1]
	2	(1) PATROCLUS		WFC3/UVIS, ACCUM, UVIS2-M1K1C-SUB	F555W	FLASH=5		Sequence 1-2 Non-Int in Visit 11 Pattern 1, Exps 2-2 in Sequence 1-2 Non-Int in Visit 11 (1)	320 Secs X 2 (1920 Secs) [=>(Pattern 1, Copy 1)] [=>(Pattern 1, Copy 2)] [=>(Pattern 2, Copy 1)] [=>(Pattern 2, Copy 2)] [=>(Pattern 3, Copy 1)] [=>(Pattern 3, Copy 2)]	[1]



Proposal 15144 - Visit 12 - Deep Search for Satellites Around the Lucy Mission Targets

Tue Aug 21 19:00:24 GMT 2018

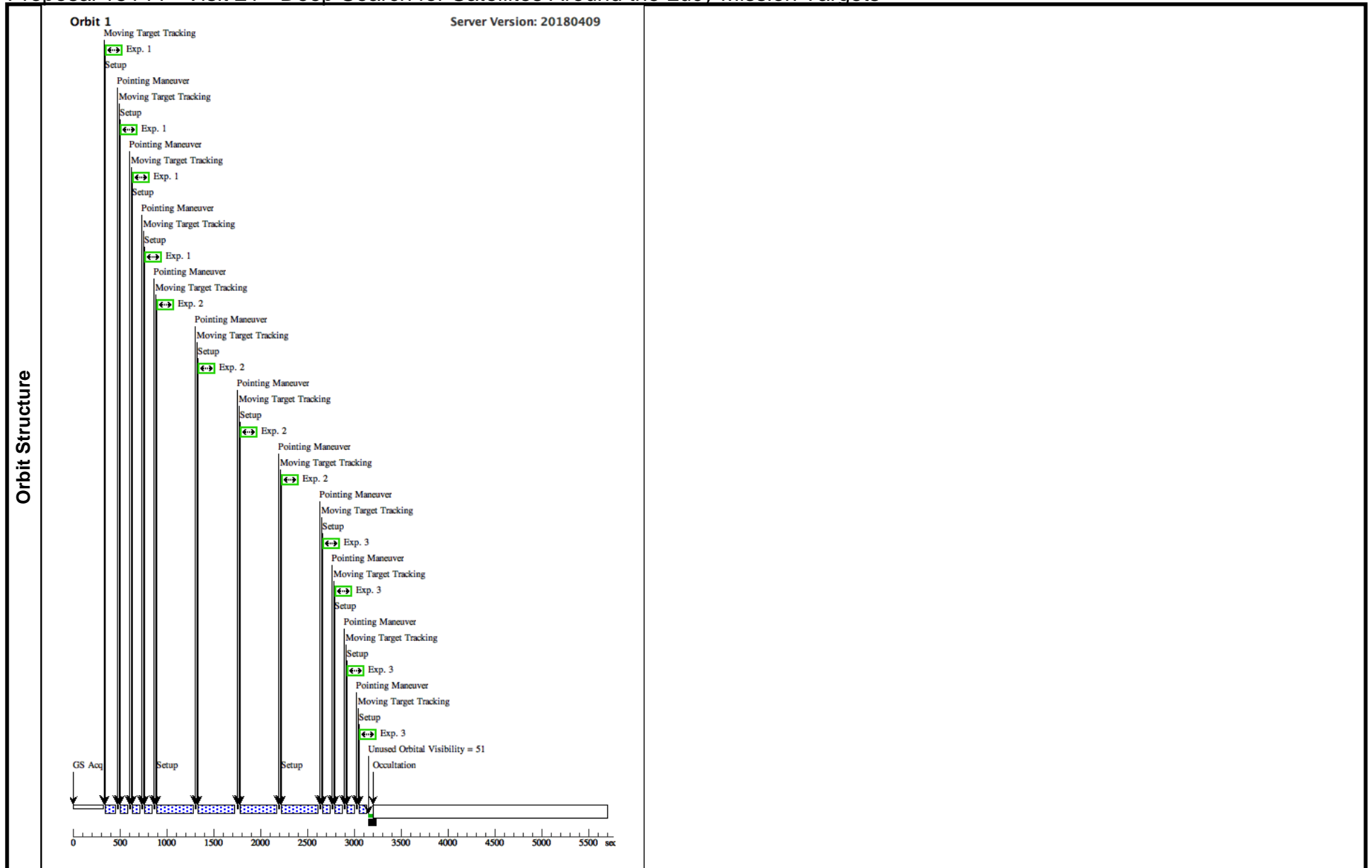
<b>Visit</b>	<b>Proposal 15144, Visit 12, completed</b> <b>Diagnostic Status: No Diagnostics</b> Scientific Instruments: WFC3/UVIS Special Requirements: SAME ORIENT AS 11 <i>Comments: After visit 11 by <math>n/2 * 102.783</math> hr periods where <math>n</math> is as small as is practical. This returns the system to the same relative positions (every half orbit).</i>									
	<b>Patterns</b>	<b>#</b>	<b>Primary Pattern</b>			<b>Secondary Pattern</b>		<b>Exposures</b>		
(1)		Pattern Type=WFC3-UVIS-DITHER- LINE Purpose=DITHER Number Of Points=3 Point Spacing=0.290 Line Spacing=			Coordinate Frame=POS-TARG Pattern Orientation=46.84 Angle Between Sides= Center Pattern=false		(2)			
<b>Solar System Targets</b>	<b>#</b>	<b>Name</b>	<b>Level 1</b>	<b>Level 2</b>	<b>Level 3</b>	<b>Window</b>	<b>Ephem Center</b>			
	(1)	PATROCLUS	TYPE=ASTEROID,A=5.21849969455 3197,E=0.1399500456355474,I=22.05 269861079197,O=44.36596299545594 ,W=307.8595259822105,M=325.1954 514012491,EQUINOX=J2000,EPOCH =08-JUN- 2011:00:00:00,EpochTimeScale=TDB			RANGE PATROCLUS EARTH LT 5.5	EARTH			
<i>Comments: Description=617 Patroclus/Menoetius</i>										
<i>Extended=NO</i>										
<b>Exposures</b>	<b>#</b>	<b>Label</b>	<b>Target</b>	<b>Config,Mode,Aperture</b>	<b>Spectral Els.</b>	<b>Opt. Params.</b>	<b>Special Reqs.</b>	<b>Groups</b>	<b>Exp. Time (Total)/[Actual Dur.]</b>	<b>Orbit</b>
	1	(1) PATROCLUS		WFC3/UVIS, ACCUM, UVIS2-M1K1C-SUB	F555W	FLASH=11	GS ACQ SCENARI O BASE1B3	Sequence 1-2 Non-Int in Visit 12	30 Secs X 2 (60 Secs) [==>(Copy 1)] [==>(Copy 2)]	[1]
	2	(1) PATROCLUS		WFC3/UVIS, ACCUM, UVIS2-M1K1C-SUB	F555W	FLASH=5		Sequence 1-2 Non-Int in Visit 12 Pattern 1, Exps 2-2 i n Sequence 1-2 Non- Int in Visit 12 (1)	320 Secs X 2 (1920 Secs) [==>(Pattern 1, Copy 1)] [==>(Pattern 1, Copy 2)] [==>(Pattern 2, Copy 1)] [==>(Pattern 2, Copy 2)] [==>(Pattern 3, Copy 1)] [==>(Pattern 3, Copy 2)]	[1]



Proposal 15144 - Visit 21 - Deep Search for Satellites Around the Lucy Mission Targets

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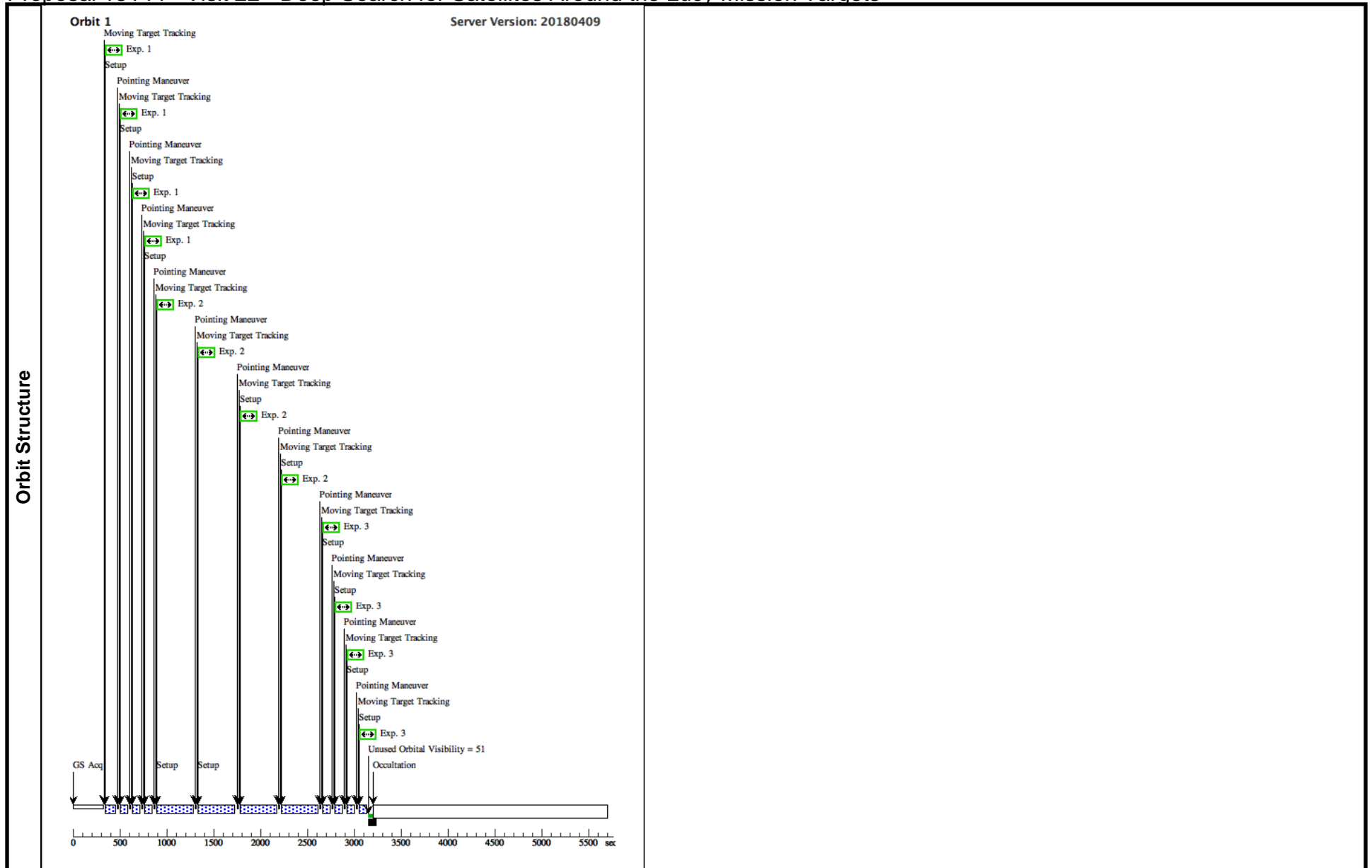
Visit	<b>Proposal 15144, Visit 21, implementation</b> <b>Diagnostic Status: No Diagnostics</b> Scientific Instruments: WFC3/UVIS Special Requirements: (none)									
	Patterns	#	Primary Pattern	Secondary Pattern	Exposures					
	(2)	Pattern Type=WFC3-UVIS-DITHER-BOX Purpose=DITHER Number Of Points=4 Point Spacing=0.173 Line Spacing=0.112	Coordinate Frame=POS-TARG Pattern Orientation=23.884 Angle Between Sides=81.785 Center Pattern=false		(1), (2), (3)					
Solar System Targets	#	Name	Level 1	Level 2	Level 3	Window	Ephem Center			
	(2)	EURYBATES	TYPE=ASTEROID,A=5.17511511350 6851,E=0.0909488607811488,I=8.071 6342051452,O=43.54663408449642, W=26.97429921064895,M=52.178910 51251581,EQUINOX=J2000,EPOCH =17-FEB- 2012:00:00:00,EpochTimeScale=TDB			RANGE EURYBATES EARTH LT 4.8	EARTH			
	<i>Comments: Description=Trojan Asteroid Extended=NO</i>									
Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
	1	(2) EURYBATES		WFC3/UVIS, ACCUM, UVIS2-M512C-SUB	F555W	FLASH=12		Sequence 1-3 Non-Int in Visit 21 Pattern 2, Exps 1-1 in Sequence 1-3 Non-Int in Visit 21 (2)	30 Secs (120 Secs) [=>(Pattern 1)] [=>(Pattern 2)] [=>(Pattern 3)] [=>(Pattern 4)]	[1]
	2	(2) EURYBATES		WFC3/UVIS, ACCUM, UVIS2-M512C-SUB	F555W	FLASH=5		Sequence 1-3 Non-Int in Visit 21 Pattern 2, Exps 2-2 in Sequence 1-3 Non-Int in Visit 21 (2)	350 Secs (1400 Secs) [=>(Pattern 1)] [=>(Pattern 2)] [=>(Pattern 3)] [=>(Pattern 4)]	[1]
	3	(2) EURYBATES		WFC3/UVIS, ACCUM, UVIS2-M512C-SUB	F555W	FLASH=12	POS TARG 0.172,0.148	Sequence 1-3 Non-Int in Visit 21 Pattern 2, Exps 3-3 in Sequence 1-3 Non-Int in Visit 21 (2)	30 Secs (120 Secs) [=>(Pattern 1)] [=>(Pattern 2)] [=>(Pattern 3)] [=>(Pattern 4)]	[1]



Proposal 15144 - Visit 22 - Deep Search for Satellites Around the Lucy Mission Targets

Tue Aug 21 19:00:24 GMT 2018

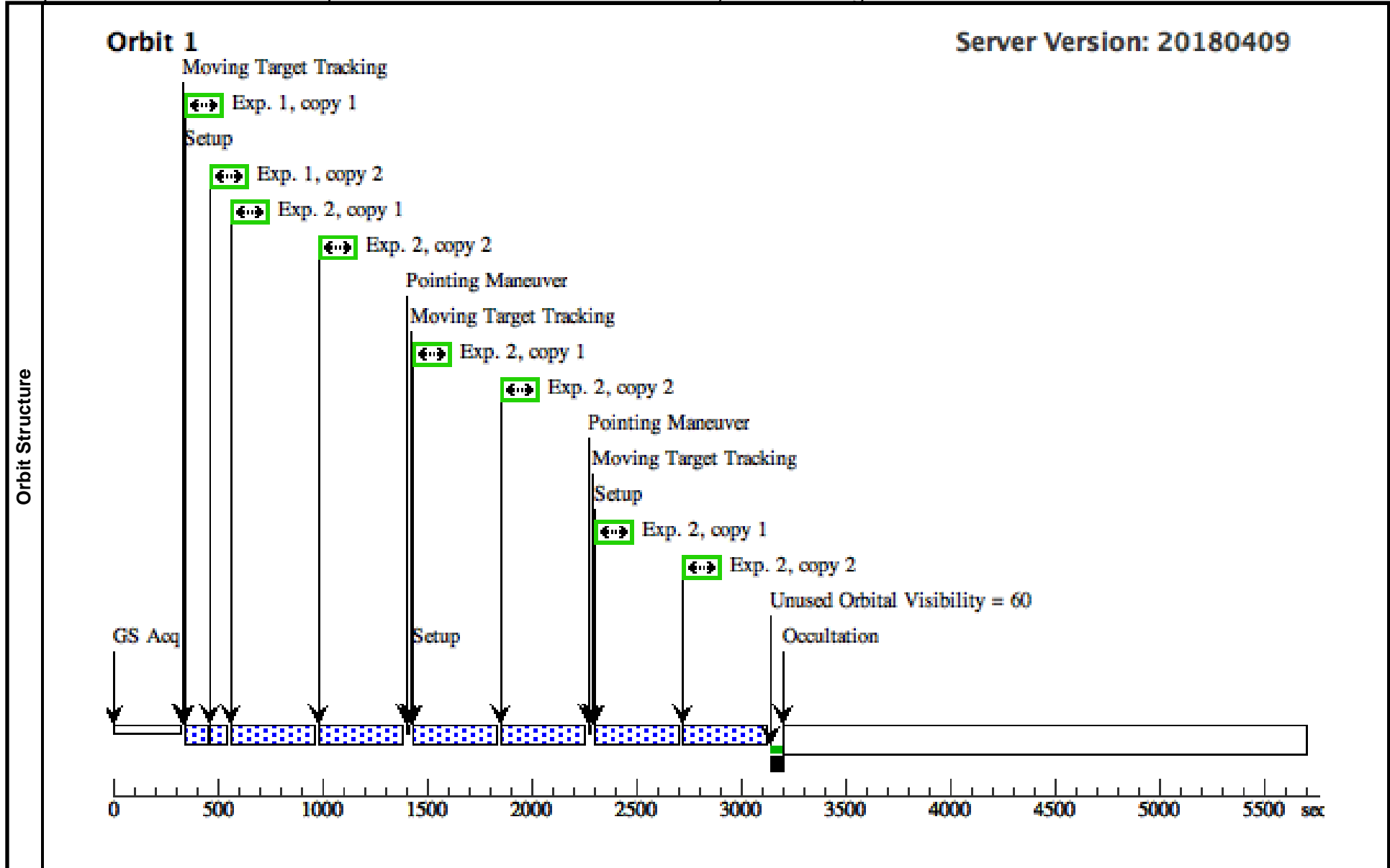
<b>Visit</b>	<b>Proposal 15144, Visit 22, implementation</b> <b>Diagnostic Status: No Diagnostics</b> Scientific Instruments: WFC3/UVIS Special Requirements: SAME ORIENT AS 21; AFTER 21 BY 24 H TO 96 H Comments: After visit 21 by 24 to 96 hours									
<b>Patterns</b>	<b>#</b>	<b>Primary Pattern</b>		<b>Secondary Pattern</b>		<b>Exposures</b>				
	(2)	Pattern Type=WFC3-UVIS-DITHER-BOX Purpose=DITHER Number Of Points=4 Point Spacing=0.173 Line Spacing=0.112		Coordinate Frame=POS-TARG Pattern Orientation=23.884 Angle Between Sides=81.785 Center Pattern=false		(1), (2), (3)				
<b>Solar System Targets</b>	<b>#</b>	<b>Name</b>	<b>Level 1</b>	<b>Level 2</b>	<b>Level 3</b>	<b>Window</b>	<b>Ephem Center</b>			
	(2)	EURYBATES	TYPE=ASTEROID,A=5.17511511350 6851,E=0.0909488607811488,I=8.071 6342051452,O=43.54663408449642, W=26.97429921064895,M=52.178910 51251581,EQUINOX=J2000,EPOCH =17-FEB- 2012:00:00:00,EpochTimeScale=TDB			RANGE EURYBATES EARTH LT 4.8	EARTH			
Comments: Description=Trojan Asteroid Extended=NO										
<b>Exposures</b>	<b>#</b>	<b>Label</b>	<b>Target</b>	<b>Config,Mode,Aperture</b>	<b>Spectral Els.</b>	<b>Opt. Params.</b>	<b>Special Reqs.</b>	<b>Groups</b>	<b>Exp. Time (Total)/[Actual Dur.]</b>	<b>Orbit</b>
	1	(2) EURYBATES		WFC3/UVIS, ACCUM, UVIS2-M512C-SUB	F555W	FLASH=12		Sequence 1-3 Non-Int in Visit 22	30 Secs (120 Secs)	
								Pattern 2, Exps 1-1 in Sequence 1-3 Non-Int in Visit 22 (2)	[=>(Pattern 1)] [=>(Pattern 2)] [=>(Pattern 3)] [=>(Pattern 4)]	[1]
	2	(2) EURYBATES		WFC3/UVIS, ACCUM, UVIS2-M512C-SUB	F555W	FLASH=5		Sequence 1-3 Non-Int in Visit 22	350 Secs (1400 Secs)	
							Pattern 2, Exps 2-2 in Sequence 1-3 Non-Int in Visit 22 (2)	[=>(Pattern 1)] [=>(Pattern 2)] [=>(Pattern 3)] [=>(Pattern 4)]	[1]	
3	(2) EURYBATES		WFC3/UVIS, ACCUM, UVIS2-M512C-SUB	F555W	FLASH=12	POS TARG 0.172,0.148		Sequence 1-3 Non-Int in Visit 22	30 Secs (120 Secs)	
							Pattern 2, Exps 3-3 in Sequence 1-3 Non-Int in Visit 22 (2)	[=>(Pattern 1)] [=>(Pattern 2)] [=>(Pattern 3)] [=>(Pattern 4)]	[1]	



Proposal 15144 - Visit 31 - Deep Search for Satellites Around the Lucy Mission Targets

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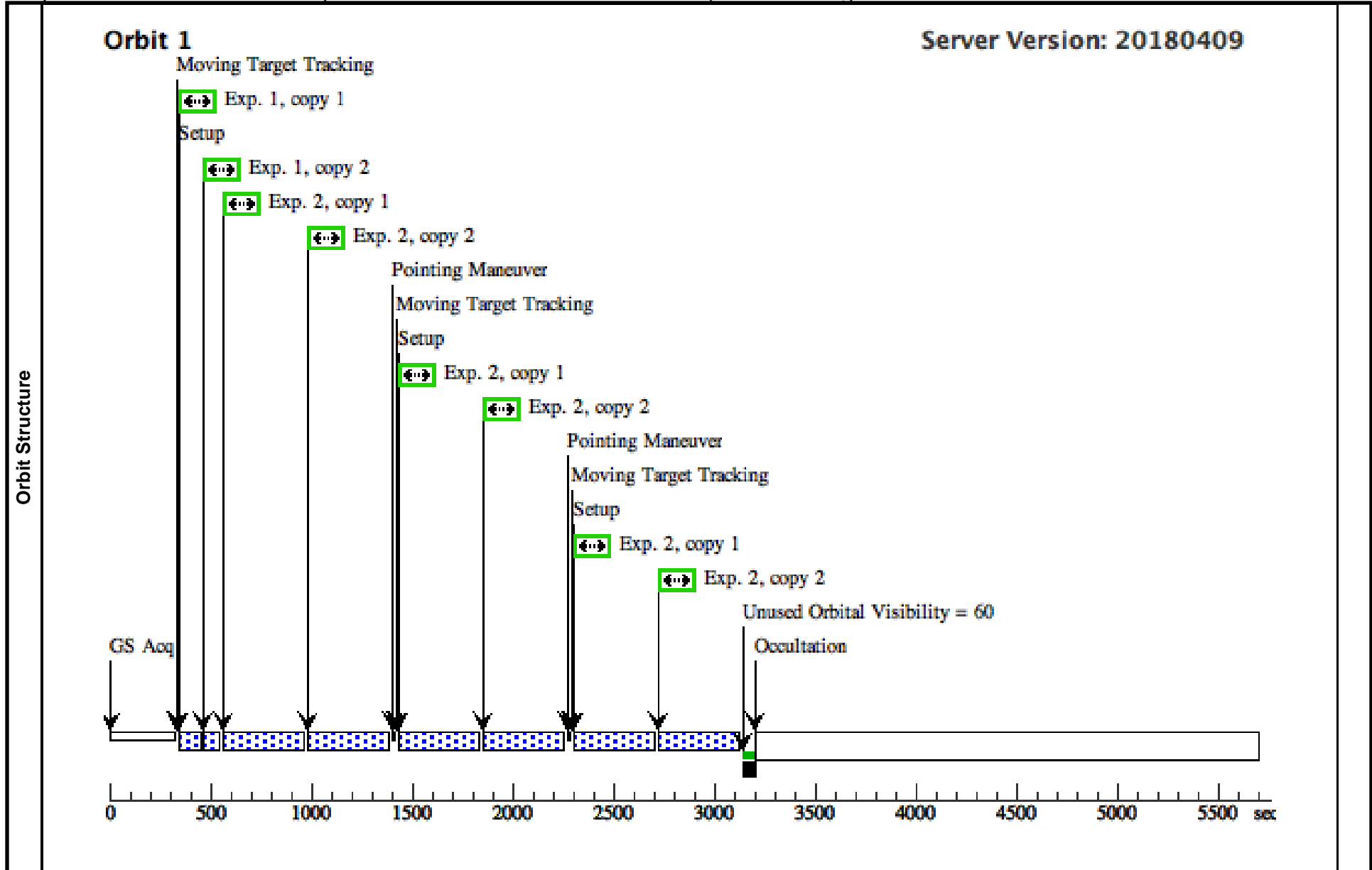
Visit	<b>Proposal 15144, Visit 31, completed</b> <b>Diagnostic Status: No Diagnostics</b> Scientific Instruments: WFC3/UVIS Special Requirements: (none)									
	Patterns	#	Primary Pattern	Secondary Pattern	Exposures					
		(1)	Pattern Type=WFC3-UVIS-DITHER-LINE Purpose=DITHER Number Of Points=3 Point Spacing=0.290 Line Spacing=	Coordinate Frame=POS-TARG Pattern Orientation=46.84 Angle Between Sides= Center Pattern=false		(2)				
Solar System Targets	#	Name	Level 1	Level 2	Level 3	Window	Ephem Center			
	(3)	ORUS	TYPE=ASTEROID,A=5.13644628693 4752,E=0.03797045685102873,I=8.46 4167968557787,O=258.589998874120 1,W=182.450371734245,M=21.30651 185899933,EQUINOX=J2000,EPOCH =29-MAY- 2012:00:00:00,EpochTimeScale=TDB  <i>Comments: Description=Trojan Asteroid                      Extended=NO</i>			RANGE ORUS EARTH LT 4.7	EARTH			
Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
	1		(3) ORUS	WFC3/UVIS, ACCUM, UVIS2-M512C-SUB	F555W	FLASH=11		Sequence 1-2 Non-Int in Visit 31	30 Secs X 2 (60 Secs) [=>(Copy 1)] [=>(Copy 2)]	[1]
2		(3) ORUS	WFC3/UVIS, ACCUM, UVIS2-M512C-SUB	F555W	FLASH=5		Sequence 1-2 Non-Int in Visit 31 Pattern 1, Exps 2-2 in Sequence 1-2 Non-Int in Visit 31 (1)	360 Secs X 2 (2160 Secs) [=>(Pattern 1, Copy 1)] [=>(Pattern 1, Copy 2)] [=>(Pattern 2, Copy 1)] [=>(Pattern 2, Copy 2)] [=>(Pattern 3, Copy 1)] [=>(Pattern 3, Copy 2)]	[1]	



Proposal 15144 - Visit 32 - Deep Search for Satellites Around the Lucy Mission Targets

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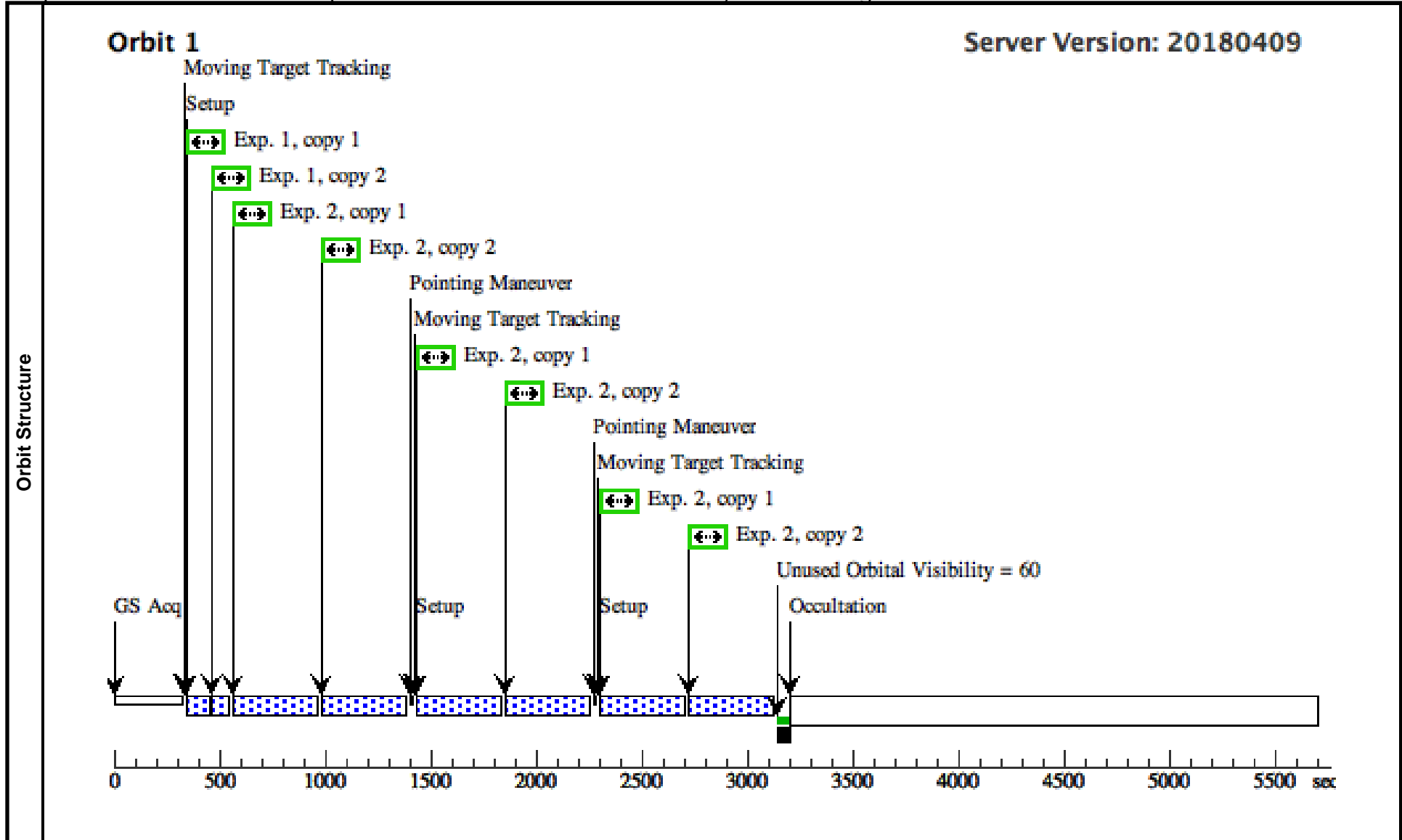
<b>Visit</b>	<b>Proposal 15144, Visit 32, completed</b> <b>Diagnostic Status: No Diagnostics</b> Scientific Instruments: WFC3/UVIS Special Requirements: SAME ORIENT AS 31; AFTER 31 BY 24 H TO 96 H Comments: After visit 31 by 24 to 96 hours									
<b>Patterns</b>	<b>#</b>	<b>Primary Pattern</b>			<b>Secondary Pattern</b>		<b>Exposures</b>			
	(1)	Pattern Type=WFC3-UVIS-DITHER- LINE Purpose=DITHER Number Of Points=3 Point Spacing=0.290 Line Spacing= Coordinate Frame=POS-TARG Pattern Orientation=46.84 Angle Between Sides= Center Pattern=false					(2)			
<b>Solar System Targets</b>	<b>#</b>	<b>Name</b>	<b>Level 1</b>	<b>Level 2</b>	<b>Level 3</b>	<b>Window</b>	<b>Ephem Center</b>			
	(3)	ORUS	TYPE=ASTEROID,A=5.13644628693 4752,E=0.03797045685102873,I=8.46 4167968557787,O=258.589998874120 1,W=182.450371734245,M=21.30651 185899933,EQUINOX=J2000,EPOCH =29-MAY- 2012:00:00:00,EpochTimeScale=TDB			RANGE ORUS EARTH LT 4.7	EARTH			
Comments: Description=Trojan Asteroid Extended=NO										
<b>Exposures</b>	<b>#</b>	<b>Label</b>	<b>Target</b>	<b>Config,Mode,Aperture</b>	<b>Spectral Els.</b>	<b>Opt. Params.</b>	<b>Special Reqs.</b>	<b>Groups</b>	<b>Exp. Time (Total)/[Actual Dur.]</b>	<b>Orbit</b>
	1	(3) ORUS		WFC3/UVIS, ACCUM, UVIS2-M512C-SUB	F555W	FLASH=11		Sequence 1-2 Non-Int in Visit 32	30 Secs X 2 (60 Secs) [=>(Copy 1)] [=>(Copy 2)]	[1]
	2	(3) ORUS		WFC3/UVIS, ACCUM, UVIS2-M512C-SUB	F555W	FLASH=5		Sequence 1-2 Non-Int in Visit 32 Pattern 1, Exps 2-2 in Sequence 1-2 Non-Int in Visit 32 (1)	360 Secs X 2 (2160 Secs) [=>(Pattern 1, Copy 1)] [=>(Pattern 1, Copy 2)] [=>(Pattern 2, Copy 1)] [=>(Pattern 2, Copy 2)] [=>(Pattern 3, Copy 1)] [=>(Pattern 3, Copy 2)]	[1]



Proposal 15144 - Visit 41 - Deep Search for Satellites Around the Lucy Mission Targets

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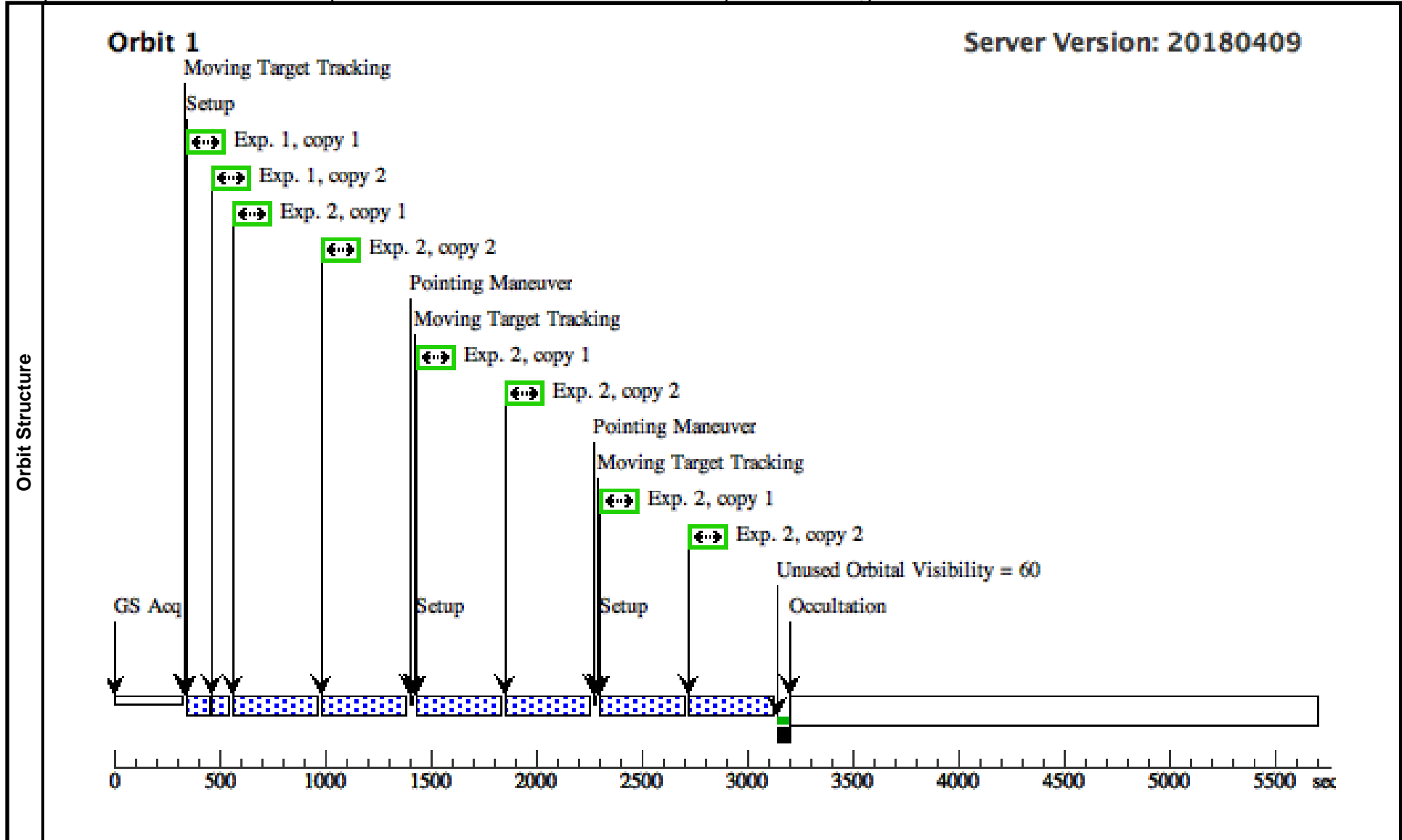
Visit	<b>Proposal 15144, Visit 41, scheduled</b> <b>Diagnostic Status: No Diagnostics</b> Scientific Instruments: WFC3/UVIS Special Requirements: (none)									
	Patterns	#	Primary Pattern	Secondary Pattern	Exposures					
		(1)	Pattern Type=WFC3-UVIS-DITHER-LINE Purpose=DITHER Number Of Points=3 Point Spacing=0.290 Line Spacing=	Coordinate Frame=POS-TARG Pattern Orientation=46.84 Angle Between Sides= Center Pattern=false		(2)				
Solar System Targets	#	Name	Level 1	Level 2	Level 3	Window	Ephem Center			
	(4)	LEUCUS	TYPE=ASTEROID,A=5.26676963951 9152,E=0.06613217986623902,I=11.5 6549052270034,O=251.086937199050 1,W=160.0963195215948,M=66.3112 00245168,EQUINOX=J2000,EPOCH =29-SEP- 2011:00:00:00,EpochTimeScale=TDB  <i>Comments: Description=Trojan Asteroid                      Extended=NO</i>			RANGE LEUCUS EARTH LT 4.75	EARTH			
Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
	1		(4) LEUCUS	WFC3/UVIS, ACCUM, UVIS2-M512C-SUB	F555W	FLASH=11		Sequence 1-2 Non-Int in Visit 41	30 Secs X 2 (60 Secs) [=>(Copy 1)] [=>(Copy 2)]	[1]
2		(4) LEUCUS	WFC3/UVIS, ACCUM, UVIS2-M512C-SUB	F555W	FLASH=5		Sequence 1-2 Non-Int in Visit 41 Pattern 1, Exps 2-2 in Sequence 1-2 Non-Int in Visit 41 (1)	360 Secs X 2 (2160 Secs) [=>(Pattern 1, Copy 1)] [=>(Pattern 1, Copy 2)] [=>(Pattern 2, Copy 1)] [=>(Pattern 2, Copy 2)] [=>(Pattern 3, Copy 1)] [=>(Pattern 3, Copy 2)]	[1]	



Proposal 15144 - Visit 42 - Deep Search for Satellites Around the Lucy Mission Targets

Tue Aug 21 19:00:24 GMT 2018

<b>Visit</b>	<b>Proposal 15144, Visit 42, scheduled</b> <b>Diagnostic Status: No Diagnostics</b> Scientific Instruments: WFC3/UVIS Special Requirements: SAME ORIENT AS 41; AFTER 41 BY 24 H TO 96 H Comments: After visit 41 by 24 to 96 hours									
	<b>Patterns</b>		<b>#</b>	<b>Primary Pattern</b>	<b>Secondary Pattern</b>			<b>Exposures</b>		
	(1)	Pattern Type=WFC3-UVIS-DITHER- LINE Purpose=DITHER Number Of Points=3 Point Spacing=0.290 Line Spacing=	Coordinate Frame=POS-TARG Pattern Orientation=46.84 Angle Between Sides= Center Pattern=false				(2)			
<b>Solar System Targets</b>	<b>#</b>	<b>Name</b>	<b>Level 1</b>	<b>Level 2</b>	<b>Level 3</b>	<b>Window</b>	<b>Ephem Center</b>			
	(4)	LEUCUS	TYPE=ASTEROID,A=5.26676963951 9152,E=0.06613217986623902,I=11.5 6549052270034,O=251.086937199050 1,W=160.0963195215948,M=66.3112 00245168,EQUINOX=J2000,EPOCH =29-SEP- 2011:00:00:00,EpochTimeScale=TDB			RANGE LEUCUS EARTH LT 4.75	EARTH			
	Comments: Description=Trojan Asteroid Extended=NO									
<b>Exposures</b>	<b>#</b>	<b>Label</b>	<b>Target</b>	<b>Config,Mode,Aperture</b>	<b>Spectral Els.</b>	<b>Opt. Params.</b>	<b>Special Reqs.</b>	<b>Groups</b>	<b>Exp. Time (Total)/[Actual Dur.]</b>	<b>Orbit</b>
	1	(4) LEUCUS		WFC3/UVIS, ACCUM, UVIS2-M512C-SUB	F555W	FLASH=11		Sequence 1-2 Non-Int in Visit 42	30 Secs X 2 (60 Secs)	
									[==>(Copy 1)] [==>(Copy 2)]	[1]
2	(4) LEUCUS		WFC3/UVIS, ACCUM, UVIS2-M512C-SUB	F555W	FLASH=5			Sequence 1-2 Non-Int in Visit 42 Pattern 1, Exps 2-2 in Sequence 1-2 Non-Int in Visit 42 (1)	360 Secs X 2 (2160 Secs)	
								[==>(Pattern 1, Copy 1)] [==>(Pattern 1, Copy 2)] [==>(Pattern 2, Copy 1)] [==>(Pattern 2, Copy 2)] [==>(Pattern 3, Copy 1)] [==>(Pattern 3, Copy 2)]	[1]	



Proposal 15144 - Visit 51 - Deep Search for Satellites Around the Lucy Mission Targets

Tue Aug 21 19:00:24 GMT 2018

Visit	<b>Proposal 15144, Visit 51, implementation</b> <b>Diagnostic Status: No Diagnostics</b> Scientific Instruments: WFC3/UVIS Special Requirements: BETWEEN 2018.255:09:00:00 AND 2018.255:14:30:00; BETWEEN 2018.256:10:15:00 AND 2018.256:16:00:00; BETWEEN 2018.257:10:00:00 AND 2018.257:14:10:00; BETWEEN 2018.258:11:30:00 AND 2018.258:14:00:00									
	Patterns	#	Primary Pattern	Secondary Pattern	Exposures					
	(2)	Pattern Type=WFC3-UVIS-DITHER-BOX Purpose=DITHER Number Of Points=4 Point Spacing=0.173 Line Spacing=0.112	Coordinate Frame=POS-TARG Pattern Orientation=23.884 Angle Between Sides=81.785 Center Pattern=false		(1), (2), (3)					
Solar System Targets	#	Name	Level 1	Level 2	Level 3	Window	Ephem Center			
	(5)	POLYMELE	TYPE=ASTEROID,A=5.14994445529 5234,E=0.09683882313991052,I=13.0 0701555282984,O=50.3157980121937 5,W=4.341803495948901,M=67.4705 9336952179,EQUINOX=J2000,EPOC H=01-MAR- 2012:00:00:00,EpochTimeScale=TDB			RANGE POLYMELE EARTH LT 4.7	EARTH			
	<i>Comments: Description=Trojan Asteroid                      Extended=NO</i>									
Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
	1		(5) POLYMELE	WFC3/UVIS, ACCUM, UVIS2-M512C-SUB	F555W	FLASH=12		Sequence 1-3 Non-Int in Visit 51 Pattern 2, Exps 1-1 in Sequence 1-3 Non-Int in Visit 51 (2)	30 Secs (120 Secs) [=>(Pattern 1)] [=>(Pattern 2)] [=>(Pattern 3)] [=>(Pattern 4)]	[1]
	2		(5) POLYMELE	WFC3/UVIS, ACCUM, UVIS2-M512C-SUB	F555W	FLASH=5		Sequence 1-3 Non-Int in Visit 51 Pattern 2, Exps 2-2 in Sequence 1-3 Non-Int in Visit 51 (2)	350 Secs (1400 Secs) [=>(Pattern 1)] [=>(Pattern 2)] [=>(Pattern 3)] [=>(Pattern 4)]	[1]
	3		(5) POLYMELE	WFC3/UVIS, ACCUM, UVIS2-M512C-SUB	F555W	FLASH=12	POS TARG 0.172,0.148	Sequence 1-3 Non-Int in Visit 51 Pattern 2, Exps 3-3 in Sequence 1-3 Non-Int in Visit 51 (2)	30 Secs (120 Secs) [=>(Pattern 1)] [=>(Pattern 2)] [=>(Pattern 3)] [=>(Pattern 4)]	[1]



Proposal 15144 - Visit 52 - Deep Search for Satellites Around the Lucy Mission Targets

Tue Aug 21 19:00:24 GMT 2018

<b>Visit</b>	<b>Proposal 15144, Visit 52, implementation</b> <b>Diagnostic Status: No Diagnostics</b> Scientific Instruments: WFC3/UVIS Special Requirements: SAME ORIENT AS 51; AFTER 51 BY 24 H TO 96 H; BETWEEN 2018.256:10:10:00 AND 2018.256:16:00:00; BETWEEN 2018.257:10:00:00 AND 2018.257:14:10:00; BETWEEN 2018.258:11:30:00 AND 2018.258:14:00:00; BETWEEN 2018.261:09:30:00 AND 2018.261:13:35:00 <i>Comments: After visit 51 by 24 to 96 hours</i>																																													
	<b>Patterns</b>		<table border="1"> <thead> <tr> <th>#</th> <th>Primary Pattern</th> <th>Secondary Pattern</th> <th>Exposures</th> </tr> </thead> <tbody> <tr> <td>(2)</td> <td>                     Pattern Type=WFC3-UVIS-DITHER-BOX                      Purpose=DITHER                      Number Of Points=4                      Point Spacing=0.173                      Line Spacing=0.112                 </td> <td>                     Coordinate Frame=POS-TARG                      Pattern Orientation=23.884                      Angle Between Sides=81.785                      Center Pattern=false                 </td> <td>(1), (2), (3)</td> </tr> </tbody> </table>	#	Primary Pattern	Secondary Pattern	Exposures	(2)	Pattern Type=WFC3-UVIS-DITHER-BOX Purpose=DITHER Number Of Points=4 Point Spacing=0.173 Line Spacing=0.112	Coordinate Frame=POS-TARG Pattern Orientation=23.884 Angle Between Sides=81.785 Center Pattern=false	(1), (2), (3)																																			
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