



13664 - Origin and Composition of the Ultra-Red Kuiper Belt Objects

Cycle: 22, 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>
01	(1) 1999HG12	WFC3/IR WFC3/UVIS	1	20-Jan-2015 15:26:20.0	yes
02	(2) 118378	WFC3/IR WFC3/UVIS	1	20-Jan-2015 15:26:22.0	yes
03	(3) 2000QN251	WFC3/IR WFC3/UVIS	1	20-Jan-2015 15:26:24.0	yes
04	(4) 2002VV130	WFC3/IR WFC3/UVIS	1	20-Jan-2015 15:26:26.0	yes
05	(5) 2004VE131	WFC3/IR WFC3/UVIS	1	20-Jan-2015 15:26:28.0	yes
06	(6) 2005SE278	WFC3/IR WFC3/UVIS	1	20-Jan-2015 15:26:30.0	yes

<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>
07	(7) 2005SF278	WFC3/IR WFC3/UVIS	1	20-Jan-2015 15:26:32.0	yes
08	(8) 119070	WFC3/IR WFC3/UVIS	1	20-Jan-2015 15:26:34.0	yes

8 Total Orbits Used

ABSTRACT

The low inclination classical Kuiper belt has been found to contain many objects with a unique ultra-red color. These ultra-red objects are not found in any stable reservoir interior to Neptune. The ultra-red objects in the classical Kuiper belt, through HST observations, show a very high binary fraction. A recent color survey from the Magellan telescopes have identified Kuiper Belt objects in the 5:3 and 7:4 mean motion resonances with Neptune to have a large fraction of ultra-red objects. We propose to use HST to determine if these ultra-red resonant objects have a similar binary fraction as the low inclination classical Kuiper belt objects. This would suggest that the two populations originated together and allow us to constrain the migration of the giant planets and evolution of the Kuiper belt. In addition, we will determine if water ice is present on the ultra-red objects to help constrain the composition of this mysterious material.

OBSERVING DESCRIPTION

We will obtain a pair of images in the F606W filter to go as deep as possible to detect binary companions and then use the F127m (green), F139m (red) and F153m (blue) to test for the presence of water ice on these objects. The F139m - F127m will be used to establish the slope of the continuum near the water ice absorption, while F153m will measure the absorption depth itself.

This project imposes no orientation constraints and uses ordinary blind target acquisition. Target motion rates are very slow, at most a few arcsec per hour, so tracking under FGS control is feasible, regardless of the gyroscopic mode in use.

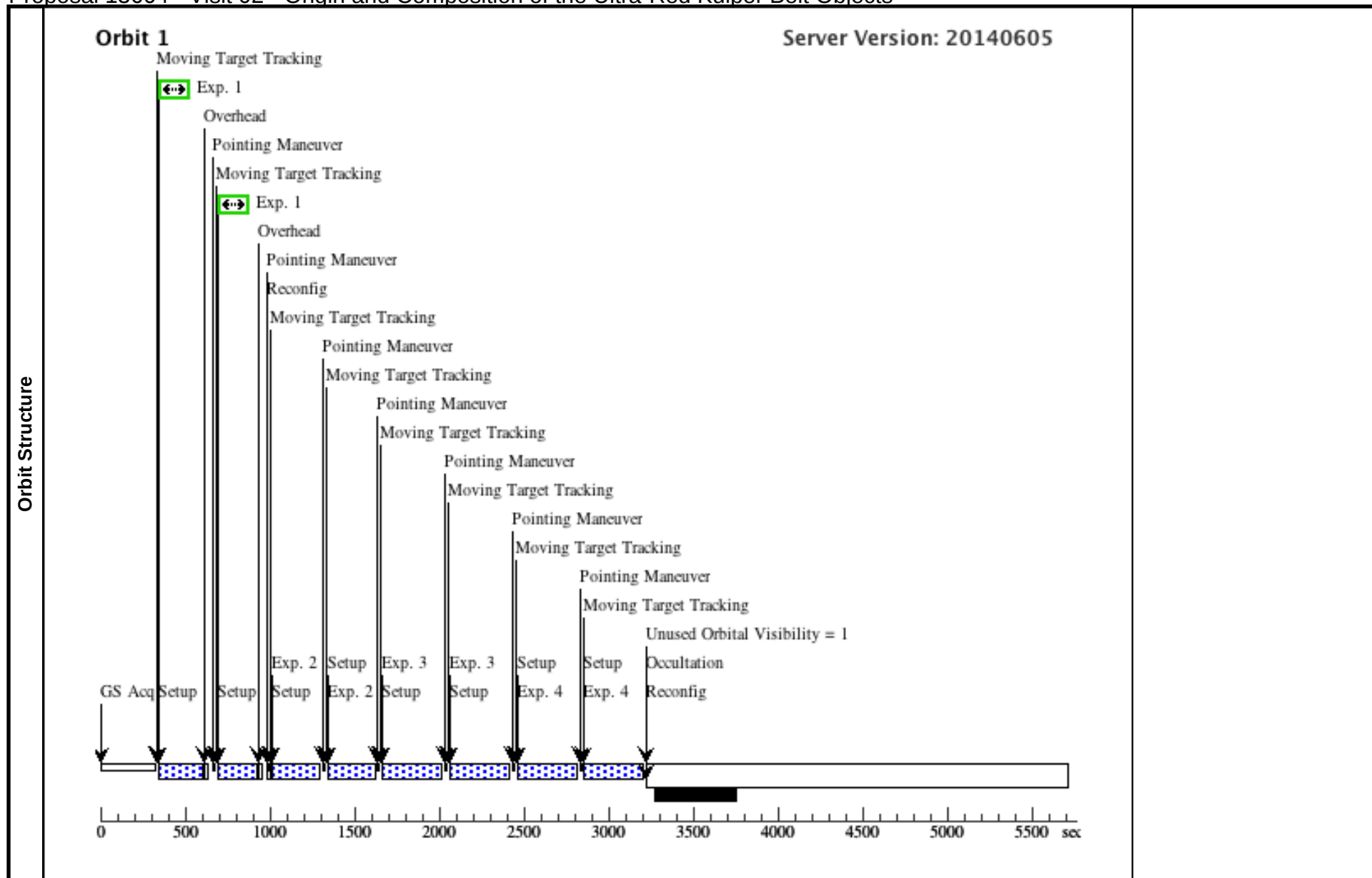
Proposal 13664 - Visit 01 - Origin and Composition of the Ultra-Red Kuiper Belt Objects

Visit	Proposal 13664, Visit 01, implementation										Tue Jan 20 20:26:35 GMT 2015			
	Diagnostic Status: No Diagnostics													
	Scientific Instruments: WFC3/IR, WFC3/UVIS													
	Special Requirements: (none)													
Patterns	#	Primary Pattern					Secondary Pattern					Exposures		
	(1)	Pattern Type=WFC3-UVIS-DITHER-LINE Purpose=DITHER Number Of Points=2 Point Spacing=0.145 Line Spacing=			Coordinate Frame=POS-TARG Pattern Orientation=46.84 Angle Between Sides= Center Pattern=false								(1)	
	(2)	Pattern Type=WFC3-IR-DITHER-LINE Purpose=DITHER Number Of Points=2 Point Spacing=0.636 Line Spacing=			Coordinate Frame=POS-TARG Pattern Orientation=41.788 Angle Between Sides= Center Pattern=false								(2), (3), (4)	
Solar System Targets	#	Name	Level 1	Level 2	Level 3	Window	Ephem Center							
	(1)	1999HG12	TYPE=ASTEROID,A=43.30373391,E=0.15549156,I=1.02130,O=30.57469,W=270.68885,M=280.67188,EQUINOX=J2000,EPOCH=12-APR-1999:00:00:00,EpochTimeScale=UTC									EARTH		
Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]		Orbit			
	1		(1) 1999HG12	WFC3/UVIS, ACCUM, UVIS2-C512C-SUB	F606W	CR-SPLIT=NO	POS TARG -0.1582 00,0.0289867	Pattern 1, Exps 1-1 in Visit 01 (1)	233 Secs (466 Secs)					
									[==>(Pattern 1)]		[1]			
									[==>(Pattern 2)]					
	2		(1) 1999HG12	WFC3/IR, MULTIACCUM, IRSUB512	F127M	NSAMP=12;	SAMP-SEQ=SPAR S25		Pattern 2, Exps 2-2 in Visit 01 (2)	252.986788 Secs (505.974 Secs)				
										[==>(Pattern 1)]		[1]		
										[==>(Pattern 2)]				
	3		(1) 1999HG12	WFC3/IR, MULTIACCUM, IRSUB512	F139M	NSAMP=15;	SAMP-SEQ=SPAR S25		Pattern 2, Exps 3-3 in Visit 01 (2)	321.750541 Secs (643.501 Secs)				
									[==>(Pattern 1)]		[1]			
									[==>(Pattern 2)]					
4		(1) 1999HG12	WFC3/IR, MULTIACCUM, IRSUB512	F153M	NSAMP=15;	SAMP-SEQ=SPAR S25		Pattern 2, Exps 4-4 in Visit 01 (2)	321.750541 Secs (643.501 Secs)					
									[==>(Pattern 1)]		[1]			
									[==>(Pattern 2)]					



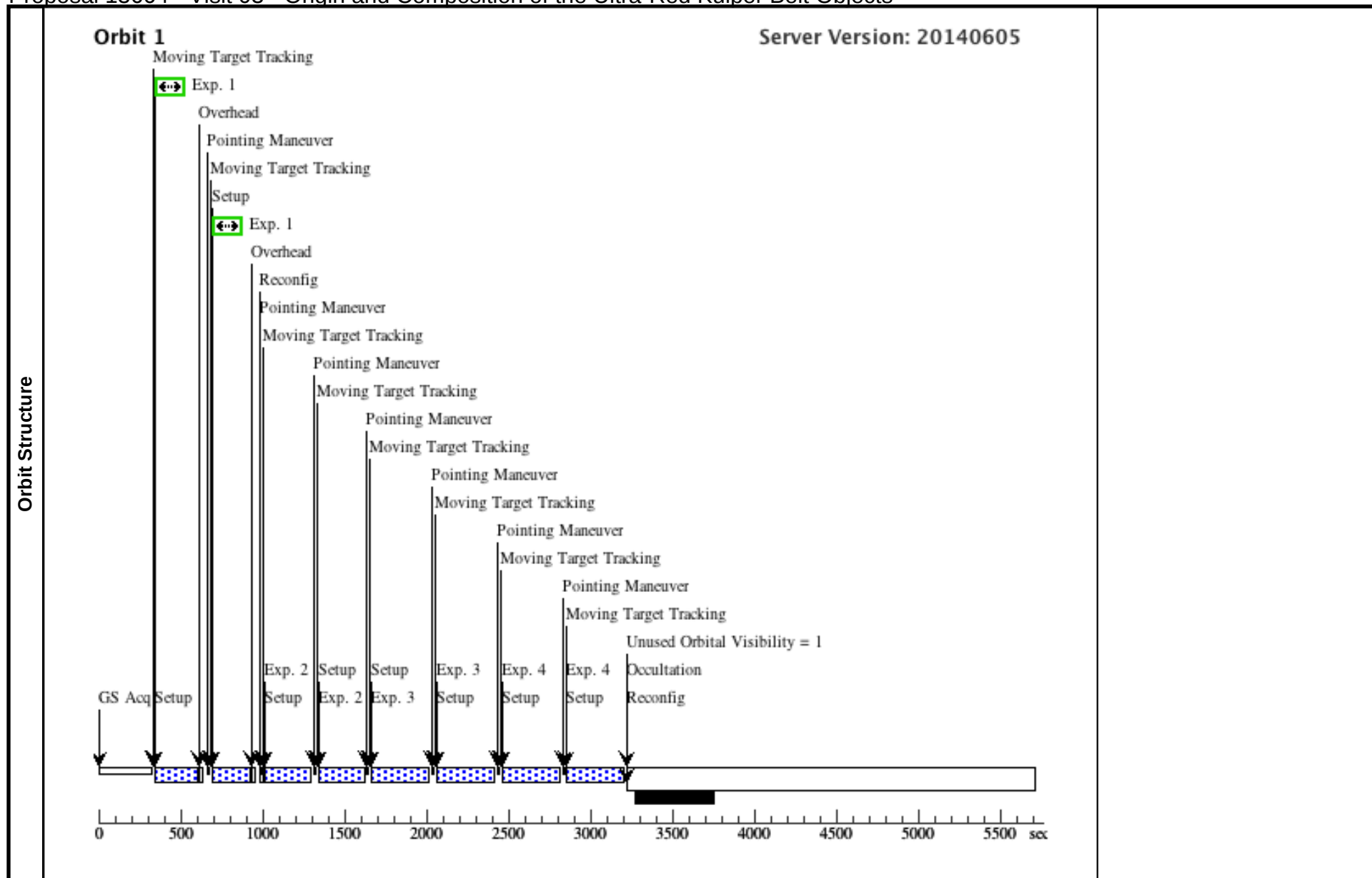
Proposal 13664 - Visit 02 - Origin and Composition of the Ultra-Red Kuiper Belt Objects

Visit	Proposal 13664, Visit 02, implementation Tue Jan 20 20:26:36 GMT 2015									
	Diagnostic Status: No Diagnostics Scientific Instruments: WFC3/IR, WFC3/UVIS Special Requirements: (none)									
Patterns	#	Primary Pattern				Secondary Pattern				Exposures
	(1)	Pattern Type=WFC3-UVIS-DITHER-LINE Coordinate Frame=POS-TARG Pattern Orientation=46.84 Purpose=DITHER Angle Between Sides= Number Of Points=2 Center Pattern=false Point Spacing=0.145 Line Spacing=								(1)
	(2)	Pattern Type=WFC3-IR-DITHER-LINE Coordinate Frame=POS-TARG Pattern Orientation=41.788 Purpose=DITHER Angle Between Sides= Number Of Points=2 Center Pattern=false Point Spacing=0.636 Line Spacing=								(2), (3), (4)
Solar System Targets	#	Name	Level 1	Level 2	Level 3	Window	Ephem Center			
	(2)	118378	TYPE=ASTEROID,A=43.48349114,E= 0.11203711,I=5.05613,O=87.86886,W= 191.56363,M=298.23447,EQUINOX= J2000,EPOCH=18-APR-1999:00:00:00,EpochTimeScale=UTC							EARTH
Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
	1		(2) 118378	WFC3/UVIS, ACCUM, UVIS2-C512C-SUB	F606W	CR-SPLIT=NO	POS TARG -0.1582 00,0.0289867	Pattern 1, Exps 1-1 i n Visit 02 (1)	233 Secs (466 Secs) [=>(Pattern 1)] [=>(Pattern 2)]	[1]
	2		(2) 118378	WFC3/IR, MULTIACCUM, IRSUB512	F127M	NSAMP=12; SAMP-SEQ=SPAR S25		Pattern 2, Exps 2-2 i n Visit 02 (2)	252.986788 Secs (505.974 Secs) [=>(Pattern 1)] [=>(Pattern 2)]	[1]
	3		(2) 118378	WFC3/IR, MULTIACCUM, IRSUB512	F139M	NSAMP=15; SAMP-SEQ=SPAR S25		Pattern 2, Exps 3-3 i n Visit 02 (2)	321.750541 Secs (643.501 Secs) [=>(Pattern 1)] [=>(Pattern 2)]	[1]
	4		(2) 118378	WFC3/IR, MULTIACCUM, IRSUB512	F153M	NSAMP=15; SAMP-SEQ=SPAR S25		Pattern 2, Exps 4-4 i n Visit 02 (2)	321.750541 Secs (643.501 Secs) [=>(Pattern 1)] [=>(Pattern 2)]	[1]



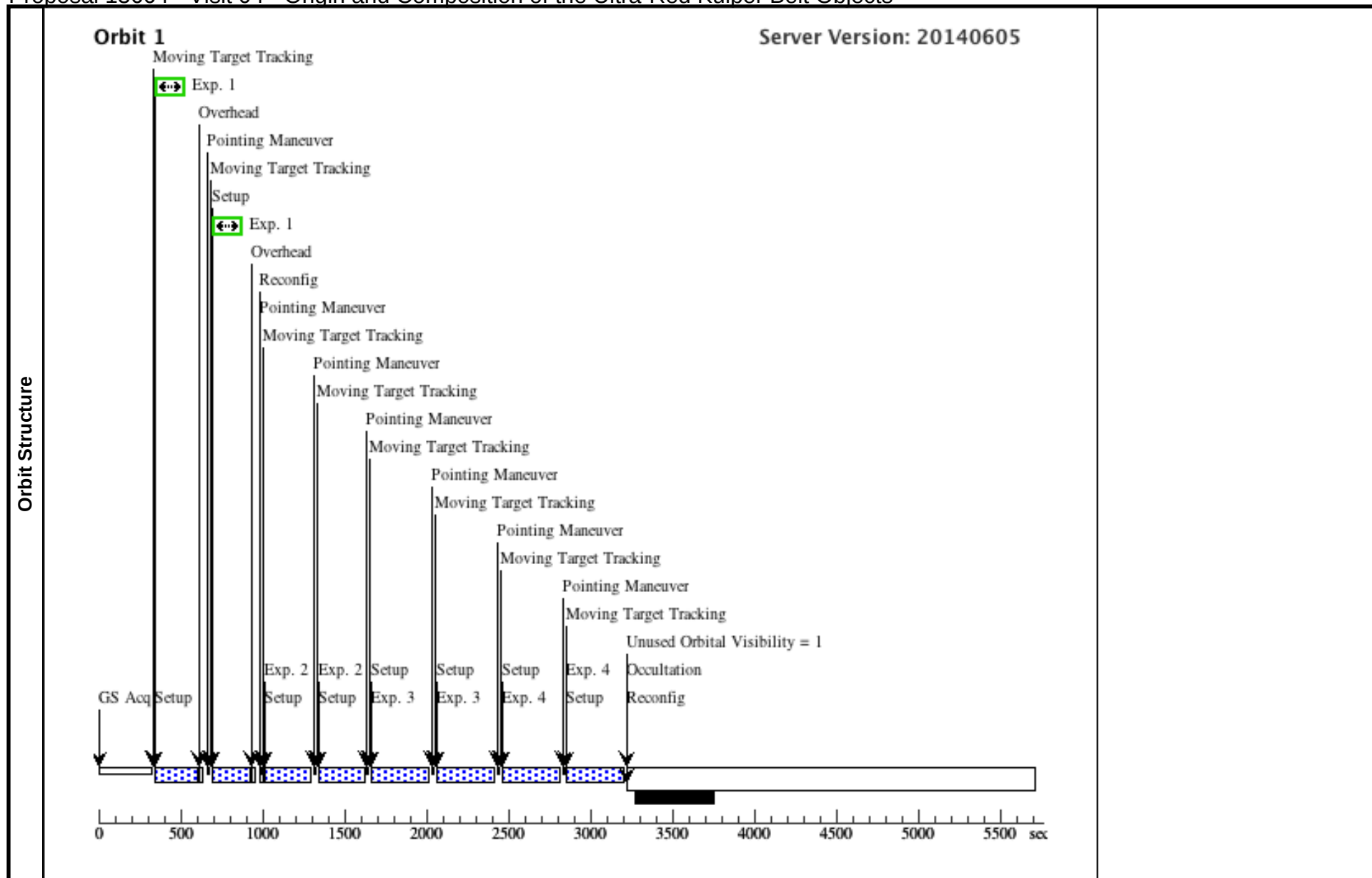
Proposal 13664 - Visit 03 - Origin and Composition of the Ultra-Red Kuiper Belt Objects

Visit	Proposal 13664, Visit 03, completed										Tue Jan 20 20:26:36 GMT 2015		
	Diagnostic Status: No Diagnostics												
	Scientific Instruments: WFC3/IR, WFC3/UVIS												
	Special Requirements: (none)												
Patterns	#	Primary Pattern					Secondary Pattern					Exposures	
	(1)	Pattern Type=WFC3-UVIS-DITHER-LINE Coordinate Frame=POS-TARG Pattern Orientation=46.84 Purpose=DITHER Angle Between Sides= Number Of Points=2 Center Pattern=false Point Spacing=0.145 Line Spacing=										(1)	
	(2)	Pattern Type=WFC3-IR-DITHER-LINE Coordinate Frame=POS-TARG Pattern Orientation=41.788 Purpose=DITHER Angle Between Sides= Number Of Points=2 Center Pattern=false Point Spacing=0.636 Line Spacing=										(2), (3), (4)	
Solar System Targets	#	Name	Level 1	Level 2	Level 3	Window	Ephem Center						
	(3)	2000QN251	TYPE=ASTEROID,A=42.42264732,E=0.12880400,I=0.34369,O=42.53819,W=318.4711,M=355.23175,EQUINOX=J2000,EPOCH=24-AUG-2000:00:00:00,EpochTimeScale=UTC									EARTH	
Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]		Orbit		
	1		(3) 2000QN251	WFC3/UVIS, ACCUM, UVIS2-C512C-SUB	F606W	CR-SPLIT=NO	POS TARG -0.1582 00,0.0289867	Pattern 1, Exps 1-1 i n Visit 03 (1)	233 Secs (466 Secs)				
									[==>(Pattern 1)]		[1]		
									[==>(Pattern 2)]				
	2		(3) 2000QN251	WFC3/IR, MULTIACCUM, IRSUB512	F127M	NSAMP=12;	SAMP-SEQ=SPAR S25		Pattern 2, Exps 2-2 i n Visit 03 (2)	252.986788 Secs (505.974 Secs)			
										[==>(Pattern 1)]		[1]	
										[==>(Pattern 2)]			
	3		(3) 2000QN251	WFC3/IR, MULTIACCUM, IRSUB512	F139M	NSAMP=15;	SAMP-SEQ=SPAR S25		Pattern 2, Exps 3-3 i n Visit 03 (2)	321.750541 Secs (643.501 Secs)			
									[==>(Pattern 1)]		[1]		
									[==>(Pattern 2)]				
4		(3) 2000QN251	WFC3/IR, MULTIACCUM, IRSUB512	F153M	NSAMP=15;	SAMP-SEQ=SPAR S25		Pattern 2, Exps 4-4 i n Visit 03 (2)	321.750541 Secs (643.501 Secs)				
									[==>(Pattern 1)]		[1]		
									[==>(Pattern 2)]				



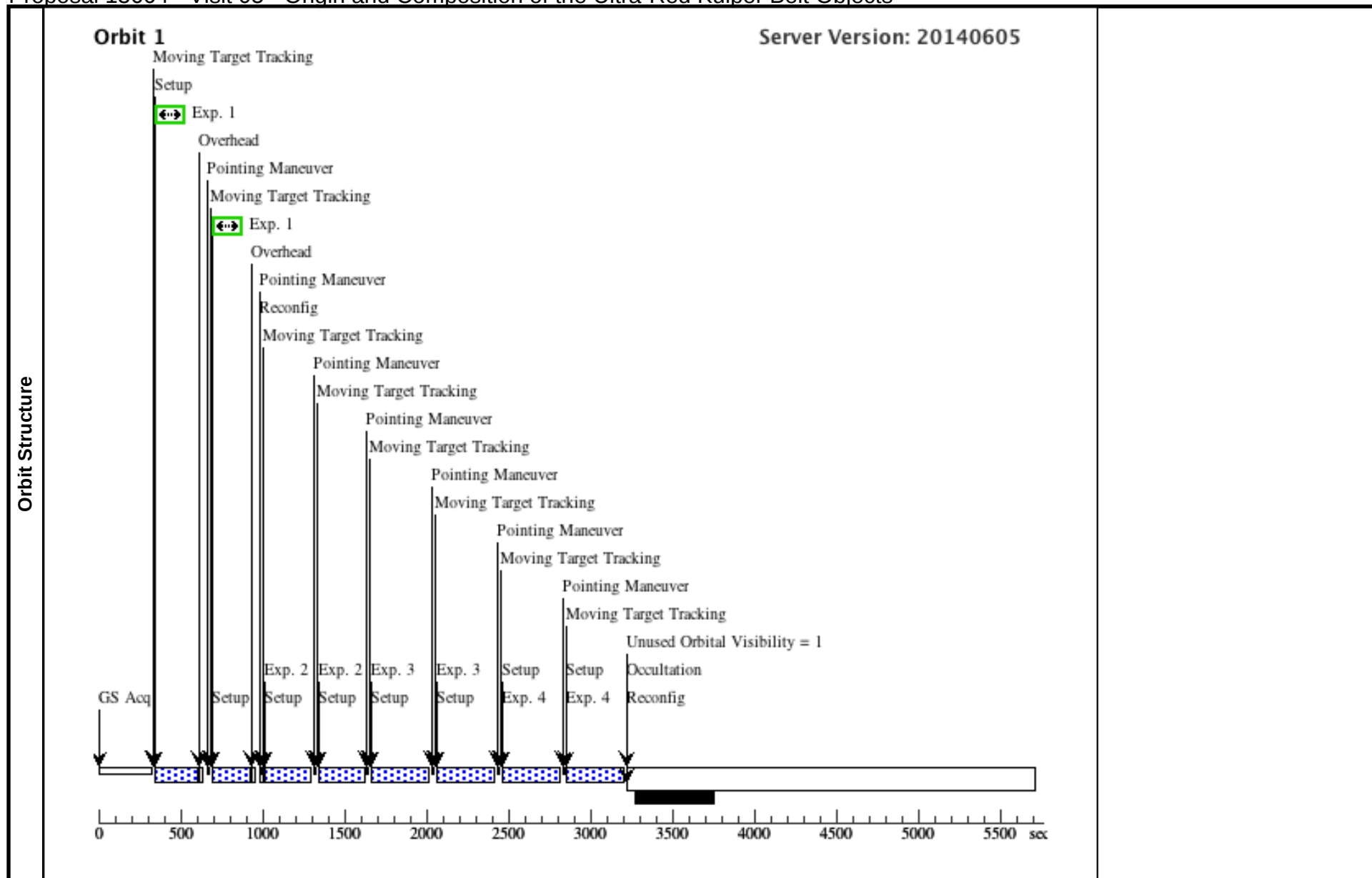
Proposal 13664 - Visit 04 - Origin and Composition of the Ultra-Red Kuiper Belt Objects

Visit	Proposal 13664, Visit 04, completed										Tue Jan 20 20:26:36 GMT 2015			
	Diagnostic Status: No Diagnostics													
	Scientific Instruments: WFC3/IR, WFC3/UVIS													
	Special Requirements: (none)													
Patterns	#	Primary Pattern					Secondary Pattern					Exposures		
	(1)	Pattern Type=WFC3-UVIS-DITHER-LINE Purpose=DITHER Number Of Points=2 Point Spacing=0.145 Line Spacing=			Coordinate Frame=POS-TARG Pattern Orientation=46.84 Angle Between Sides= Center Pattern=false								(1)	
	(2)	Pattern Type=WFC3-IR-DITHER-LINE Purpose=DITHER Number Of Points=2 Point Spacing=0.636 Line Spacing=			Coordinate Frame=POS-TARG Pattern Orientation=41.788 Angle Between Sides= Center Pattern=false								(2), (3), (4)	
Solar System Targets	#	Name	Level 1	Level 2	Level 3	Window	Ephem Center							
	(4)	2002VV130	TYPE=ASTEROID,A=42.38685246,E=0.17118095,I=2.38270,O=171.48564,W=259.95289,M=323.17659,EQUINOX=J2000,EPOCH=02-NOV-2002:00:00:00,EpochTimeScale=UTC										EARTH	
Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]		Orbit			
	1		(4) 2002VV130	WFC3/UVIS, ACCUM, UVIS2-C512C-SUB	F606W	CR-SPLIT=NO	POS TARG -0.1582 00,0.0289867	Pattern 1, Exps 1-1 i n Visit 04 (1)	233 Secs (466 Secs)					
									[==>(Pattern 1)]		[1]			
									[==>(Pattern 2)]					
	2		(4) 2002VV130	WFC3/IR, MULTIACCUM, IRSUB512	F127M	NSAMP=12;	SAMP-SEQ=SPAR S25		Pattern 2, Exps 2-2 i n Visit 04 (2)	252.986788 Secs (505.974 Secs)				
										[==>(Pattern 1)]		[1]		
										[==>(Pattern 2)]				
3		(4) 2002VV130	WFC3/IR, MULTIACCUM, IRSUB512	F139M	NSAMP=15;	SAMP-SEQ=SPAR S25		Pattern 2, Exps 3-3 i n Visit 04 (2)	321.750541 Secs (643.501 Secs)					
									[==>(Pattern 1)]		[1]			
									[==>(Pattern 2)]					
4		(4) 2002VV130	WFC3/IR, MULTIACCUM, IRSUB512	F153M	NSAMP=15;	SAMP-SEQ=SPAR S25		Pattern 2, Exps 4-4 i n Visit 04 (2)	321.750541 Secs (643.501 Secs)					
									[==>(Pattern 1)]		[1]			
									[==>(Pattern 2)]					



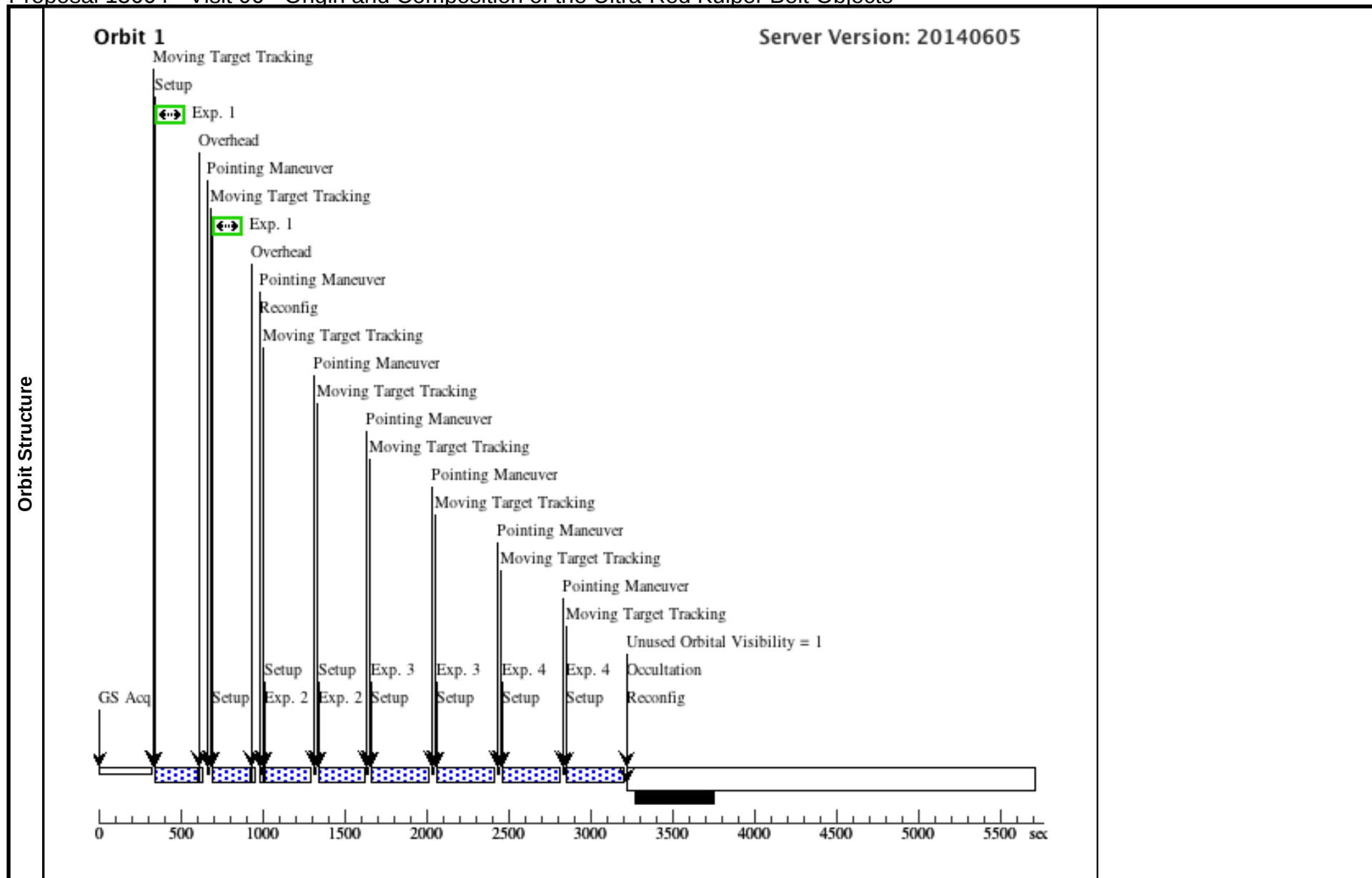
Proposal 13664 - Visit 05 - Origin and Composition of the Ultra-Red Kuiper Belt Objects

Visit	Proposal 13664, Visit 05, scheduled										Tue Jan 20 20:26:36 GMT 2015			
	Diagnostic Status: No Diagnostics													
	Scientific Instruments: WFC3/IR, WFC3/UVIS													
	Special Requirements: (none)													
Patterns	#	Primary Pattern					Secondary Pattern					Exposures		
	(1)	Pattern Type=WFC3-UVIS-DITHER-LINE Purpose=DITHER Number Of Points=2 Point Spacing=0.145 Line Spacing=			Coordinate Frame=POS-TARG Pattern Orientation=46.84 Angle Between Sides= Center Pattern=false								(1)	
	(2)	Pattern Type=WFC3-IR-DITHER-LINE Purpose=DITHER Number Of Points=2 Point Spacing=0.636 Line Spacing=			Coordinate Frame=POS-TARG Pattern Orientation=41.788 Angle Between Sides= Center Pattern=false								(2), (3), (4)	
Solar System Targets	#	Name	Level 1	Level 2	Level 3	Window	Ephem Center							
	(5)	2004VE131	TYPE=ASTEROID,A=42.21970666,E=0.25912016,I=5.20405,O=219.19485,W=272.83331,M=298.48105,EQUINOX=J2000,EPOCH=01-NOV-2004:00:00:00,EpochTimeScale=UTC									EARTH		
Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]		Orbit			
	1		(5) 2004VE131	WFC3/UVIS, ACCUM, UVIS2-C512C-SUB	F606W	CR-SPLIT=NO	POS TARG -0.1582 00,0.0289867	Pattern 1, Exps 1-1 i n Visit 05 (1)	233 Secs (466 Secs)					
									[==>(Pattern 1)]		[1]			
									[==>(Pattern 2)]					
	2		(5) 2004VE131	WFC3/IR, MULTIACCUM, IRSUB512	F127M	NSAMP=12;	SAMP-SEQ=SPAR S25		Pattern 2, Exps 2-2 i n Visit 05 (2)	252.986788 Secs (505.974 Secs)				
										[==>(Pattern 1)]		[1]		
										[==>(Pattern 2)]				
	3		(5) 2004VE131	WFC3/IR, MULTIACCUM, IRSUB512	F139M	NSAMP=15;	SAMP-SEQ=SPAR S25		Pattern 2, Exps 3-3 i n Visit 05 (2)	321.750541 Secs (643.501 Secs)				
									[==>(Pattern 1)]		[1]			
									[==>(Pattern 2)]					
4		(5) 2004VE131	WFC3/IR, MULTIACCUM, IRSUB512	F153M	NSAMP=15;	SAMP-SEQ=SPAR S25		Pattern 2, Exps 4-4 i n Visit 05 (2)	321.750541 Secs (643.501 Secs)					
									[==>(Pattern 1)]		[1]			
									[==>(Pattern 2)]					



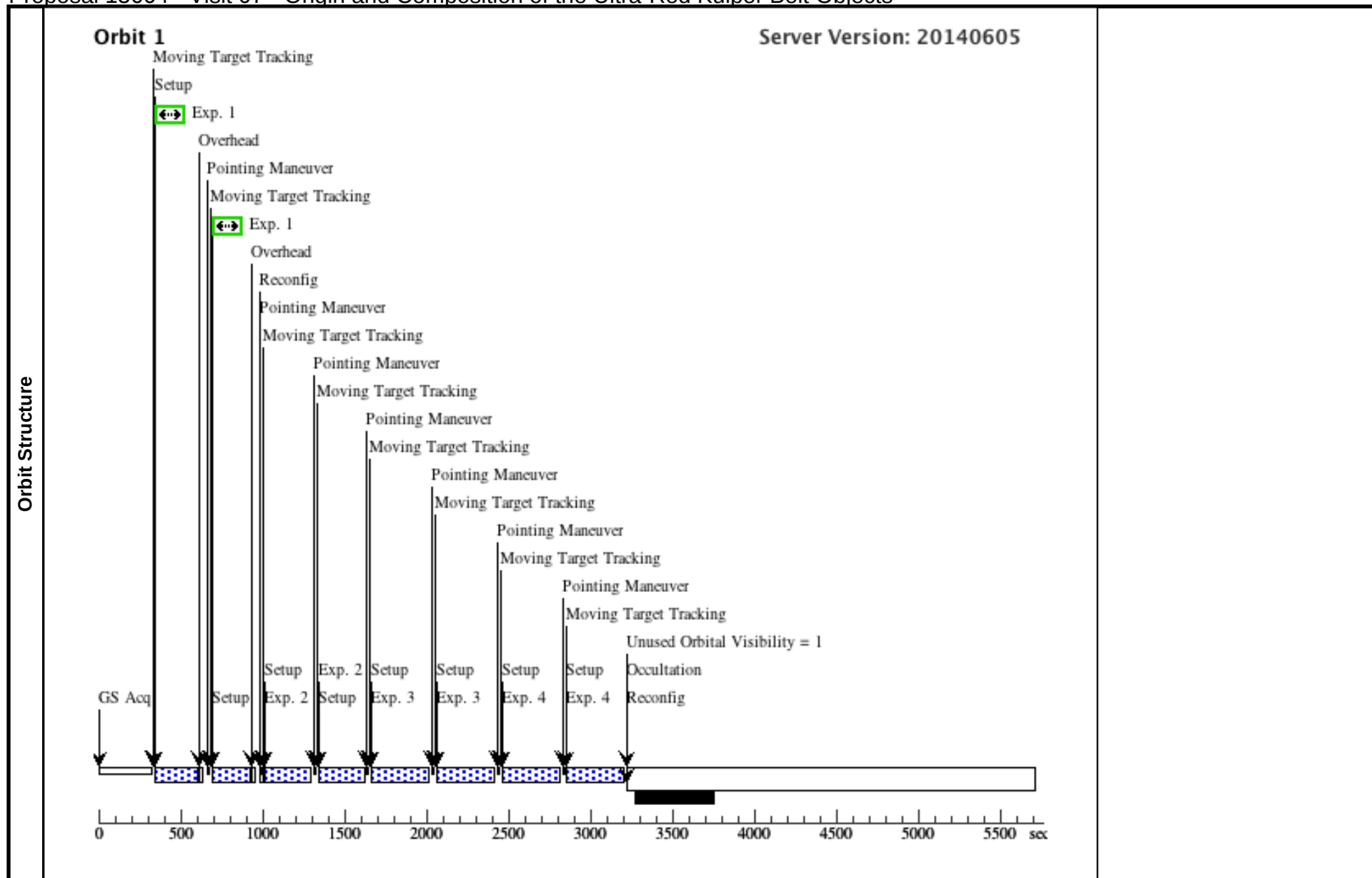
Proposal 13664 - Visit 06 - Origin and Composition of the Ultra-Red Kuiper Belt Objects

Visit	Proposal 13664, Visit 06, completed Tue Jan 20 20:26:36 GMT 2015									
	Diagnostic Status: No Diagnostics Scientific Instruments: WFC3/IR, WFC3/UVIS Special Requirements: (none)									
Patterns	#	Primary Pattern				Secondary Pattern				Exposures
	(1)	Pattern Type=WFC3-UVIS-DITHER-LINE Coordinate Frame=POS-TARG Pattern Orientation=46.84 Purpose=DITHER Angle Between Sides= Number Of Points=2 Center Pattern=false Point Spacing=0.145 Line Spacing=								(1)
	(2)	Pattern Type=WFC3-IR-DITHER-LINE Coordinate Frame=POS-TARG Pattern Orientation=41.788 Purpose=DITHER Angle Between Sides= Number Of Points=2 Center Pattern=false Point Spacing=0.636 Line Spacing=								(2), (3), (4)
Solar System Targets	#	Name	Level 1	Level 2	Level 3	Window	Ephem Center			
	(6)	2005SE278	TYPE=ASTEROID,A=42.12845363,E= 0.10649919,I=6.89272,O=95.16929,W= 269.83024,M=7.92387,EQUINOX=J 2000,EPOCH=17-SEP- 2005:00:00:00,EpochTimeScale=UTC							EARTH
Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
	1		(6) 2005SE278	WFC3/UVIS, ACCUM, UVIS2-C512C-SUB	F606W	CR-SPLIT=NO	POS TARG -0.1582 00,0.0289867	Pattern 1, Exps 1-1 i n Visit 06 (1)	233 Secs (466 Secs) [==>(Pattern 1)] [==>(Pattern 2)]	[1]
	2		(6) 2005SE278	WFC3/IR, MULTIACCUM, IRSUB512	F127M	NSAMP=12; SAMP-SEQ=SPAR S25		Pattern 2, Exps 2-2 i n Visit 06 (2)	252.986788 Secs (505.974 Secs) [==>(Pattern 1)] [==>(Pattern 2)]	[1]
	3		(6) 2005SE278	WFC3/IR, MULTIACCUM, IRSUB512	F139M	NSAMP=15; SAMP-SEQ=SPAR S25		Pattern 2, Exps 3-3 i n Visit 06 (2)	321.750541 Secs (643.501 Secs) [==>(Pattern 1)] [==>(Pattern 2)]	[1]
	4		(6) 2005SE278	WFC3/IR, MULTIACCUM, IRSUB512	F153M	NSAMP=15; SAMP-SEQ=SPAR S25		Pattern 2, Exps 4-4 i n Visit 06 (2)	321.750541 Secs (643.501 Secs) [==>(Pattern 1)] [==>(Pattern 2)]	[1]



Proposal 13664 - Visit 07 - Origin and Composition of the Ultra-Red Kuiper Belt Objects

Visit	Proposal 13664, Visit 07, completed										Tue Jan 20 20:26:36 GMT 2015		
	Diagnostic Status: No Diagnostics												
	Scientific Instruments: WFC3/IR, WFC3/UVIS												
	Special Requirements: (none)												
Patterns	#	Primary Pattern					Secondary Pattern					Exposures	
	(1)	Pattern Type=WFC3-UVIS-DITHER-LINE Coordinate Frame=POS-TARG Pattern Orientation=46.84 Purpose=DITHER Angle Between Sides= Number Of Points=2 Center Pattern=false Point Spacing=0.145 Line Spacing=										(1)	
	(2)	Pattern Type=WFC3-IR-DITHER-LINE Coordinate Frame=POS-TARG Pattern Orientation=41.788 Purpose=DITHER Angle Between Sides= Number Of Points=2 Center Pattern=false Point Spacing=0.636 Line Spacing=										(2), (3), (4)	
Solar System Targets	#	Name	Level 1	Level 2	Level 3	Window	Ephem Center						
	(7)	2005SF278	TYPE=ASTEROID,A=43.59296995,E=0.18606847,I=13.33724,O=101.66306,W=321.90023,M=335.94197,EQUINOX=J2000,EPOCH=02-OCT-2004:00:00:00,EpochTimeScale=UTC									EARTH	
Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]		Orbit		
	1		(7) 2005SF278	WFC3/UVIS, ACCUM, UVIS2-C512C-SUB	F606W	CR-SPLIT=NO	POS TARG -0.158200,0.0289867	Pattern 1, Exps 1-1 in Visit 07 (1)	233 Secs (466 Secs)				
									[==>(Pattern 1)]		[1]		
									[==>(Pattern 2)]				
	2		(7) 2005SF278	WFC3/IR, MULTIACCUM, IRSUB512	F127M	NSAMP=12; SAMP-SEQ=SPAR S25		Pattern 2, Exps 2-2 in Visit 07 (2)	252.986788 Secs (505.974 Secs)				
									[==>(Pattern 1)]		[1]		
									[==>(Pattern 2)]				
	3		(7) 2005SF278	WFC3/IR, MULTIACCUM, IRSUB512	F139M	NSAMP=15; SAMP-SEQ=SPAR S25		Pattern 2, Exps 3-3 in Visit 07 (2)	321.750541 Secs (643.501 Secs)				
								[==>(Pattern 1)]		[1]			
								[==>(Pattern 2)]					
4		(7) 2005SF278	WFC3/IR, MULTIACCUM, IRSUB512	F153M	NSAMP=15; SAMP-SEQ=SPAR S25		Pattern 2, Exps 4-4 in Visit 07 (2)	321.750541 Secs (643.501 Secs)					
								[==>(Pattern 1)]		[1]			
								[==>(Pattern 2)]					



Proposal 13664 - Visit 08 - Origin and Composition of the Ultra-Red Kuiper Belt Objects

Visit	Proposal 13664, Visit 08, implementation Tue Jan 20 20:26:37 GMT 2015									
	Diagnostic Status: No Diagnostics Scientific Instruments: WFC3/IR, WFC3/UVIS Special Requirements: (none)									
Patterns	#	Primary Pattern				Secondary Pattern				Exposures
	(1)	Pattern Type=WFC3-UVIS-DITHER-LINE Coordinate Frame=POS-TARG Pattern Orientation=46.84 Purpose=DITHER Angle Between Sides= Number Of Points=2 Center Pattern=false Point Spacing=0.145 Line Spacing=								(1)
	(2)	Pattern Type=WFC3-IR-DITHER-LINE Coordinate Frame=POS-TARG Pattern Orientation=41.788 Purpose=DITHER Angle Between Sides= Number Of Points=2 Center Pattern=false Point Spacing=0.636 Line Spacing=								(2), (3), (4)
Solar System Targets	#	Name	Level 1	Level 2	Level 3	Window	Ephem Center			
	(8)	119070	TYPE=ASTEROID,A=43.39438749,E=0.17015644,I=3.31728,O=22.02591,W=217.75803,M=359.72429,EQUINOX=J2000,EPOCH=23-MAY-2001:00:00:00,EpochTimeScale=UTC				EARTH			
Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
	1		(8) 119070	WFC3/UVIS, ACCUM, UVIS2-C512C-SUB	F606W	CR-SPLIT=NO	POS TARG -0.1582 00,0.0289867; GS ACQ SCENARIO BASE1B3	Pattern 1, Exps 1-1 in Visit 08 (1)	233 Secs (466 Secs) [==>(Pattern 1)] [==>(Pattern 2)]	[1]
	2		(8) 119070	WFC3/IR, MULTIACCUM, IRSUB512	F127M	NSAMP=12; SAMP-SEQ=SPARS25		Pattern 2, Exps 2-2 in Visit 08 (2)	252.986788 Secs (505.974 Secs) [==>(Pattern 1)] [==>(Pattern 2)]	[1]
	3		(8) 119070	WFC3/IR, MULTIACCUM, IRSUB512	F139M	NSAMP=15; SAMP-SEQ=SPARS25		Pattern 2, Exps 3-3 in Visit 08 (2)	321.750541 Secs (643.501 Secs) [==>(Pattern 1)] [==>(Pattern 2)]	[1]
	4		(8) 119070	WFC3/IR, MULTIACCUM, IRSUB512	F153M	NSAMP=15; SAMP-SEQ=SPARS25		Pattern 2, Exps 4-4 in Visit 08 (2)	321.750541 Secs (643.501 Secs) [==>(Pattern 1)] [==>(Pattern 2)]	[1]

