



## 10508 - Orbits, Masses, and Densities of Three Transneptunian Binaries

Cycle: 14, 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) 2003QY90	ACS/HRC	1	05-Dec-2006 21:01:15.0	yes
02	(1) 2003QY90	ACS/HRC	1	05-Dec-2006 21:01:25.0	yes
03	(1) 2003QY90	ACS/HRC	1	05-Dec-2006 21:01:33.0	yes
04	(4) 2003QY90B	ACS/HRC	1	05-Dec-2006 21:01:43.0	yes
05	(2) 2002CR46	ACS/HRC	1	05-Dec-2006 21:01:51.0	yes
06	(2) 2002CR46	ACS/HRC	1	05-Dec-2006 21:01:58.0	yes
07	(5) 2002CR46B	ACS/HRC	1	05-Dec-2006 21:02:05.0	yes
08	(5) 2002CR46B	ACS/HRC	1	05-Dec-2006 21:02:12.0	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>
09	(3) 2003FX128	ACS/HRC	1	05-Dec-2006 21:02:22.0	yes
10	(3) 2003FX128	ACS/HRC	1	05-Dec-2006 21:02:29.0	yes
11	(3) 2003FX128	ACS/HRC	1	05-Dec-2006 21:02:36.0	yes
12	(3) 2003FX128	ACS/HRC	1	05-Dec-2006 21:02:43.0	yes
18	(5) 2002CR46B	ACS/HRC	1	05-Dec-2006 21:02:50.0	yes

13 Total Orbits Used

### **ABSTRACT**

The subset of transneptunian objects (TNOs) having natural satellites offers unique opportunities for physical studies of these distant relics from the outer parts of the protoplanetary nebula. HST/ACS is ideally suited to determining orbits of TNO satellites, resulting in the system masses. In conjunction with thermal emission observations by Spitzer, which provides sizes, we can determine the densities of TNOs. Densities offer a powerful window into their bulk compositions and interior structures.

### **OBSERVING DESCRIPTION**

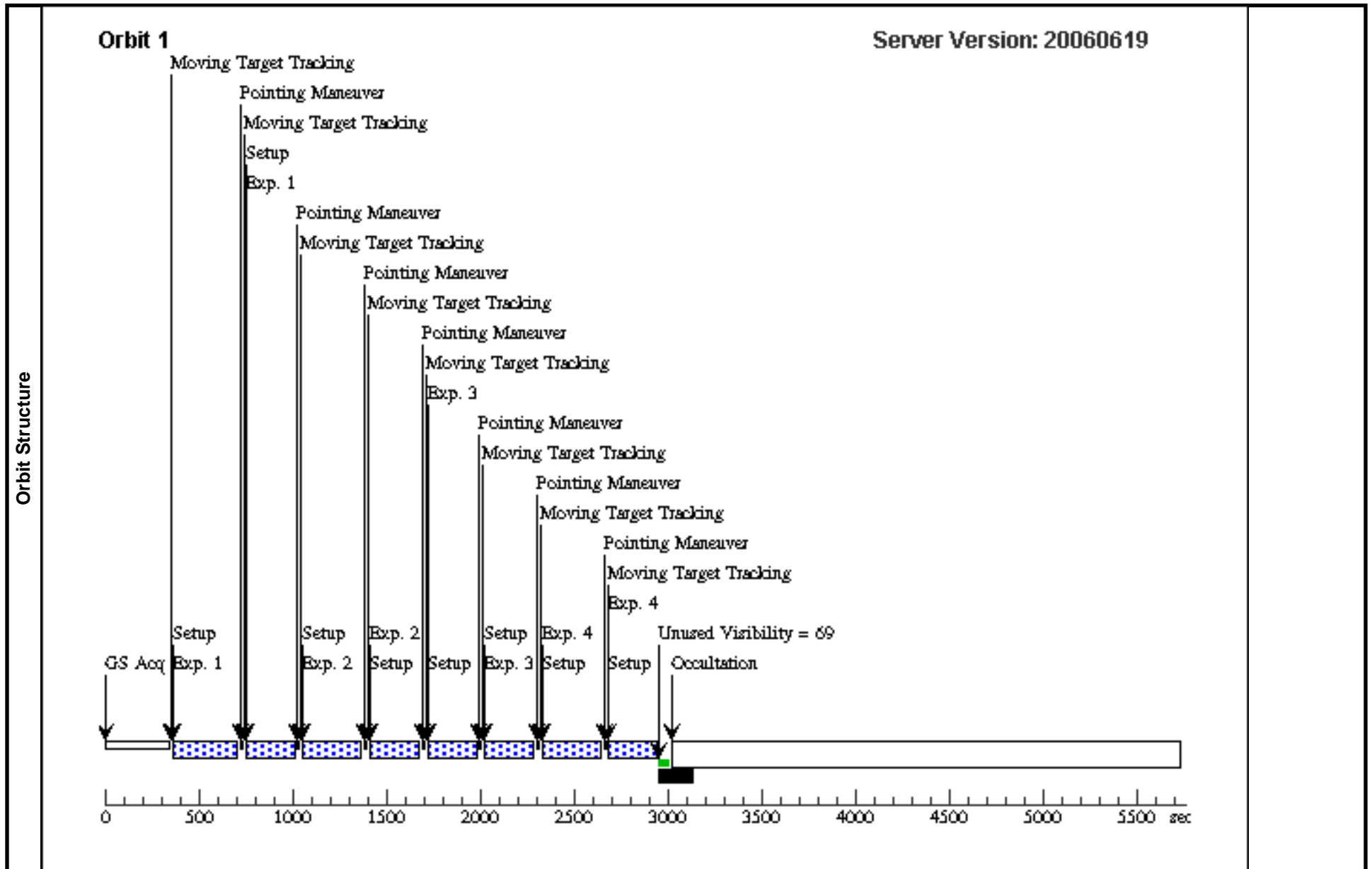
Two visits to the 1st target are scheduled as early as possible in Cycle 14, in order to leave time for a follow-up observation to be scheduled during the remainder of the 2005 apparition (which ends in early September). Note: if we've constrained the first two visits so tightly that they're not schedulable, please contact us. We could relax the timing constraints somewhat without wrecking the experiment.

The other 2 targets will get scheduled pending confirmation of their binary status, most likely with the 1st two visits being activated together, followed by the remaining two visits being scheduled after analysis of data from the 1st 2 visits.

Proposal 10508 - Visit 01 - Orbits, Masses, and Densities of Three Transneptunian Binaries

Wed Dec 06 02:02:52 GMT 2006

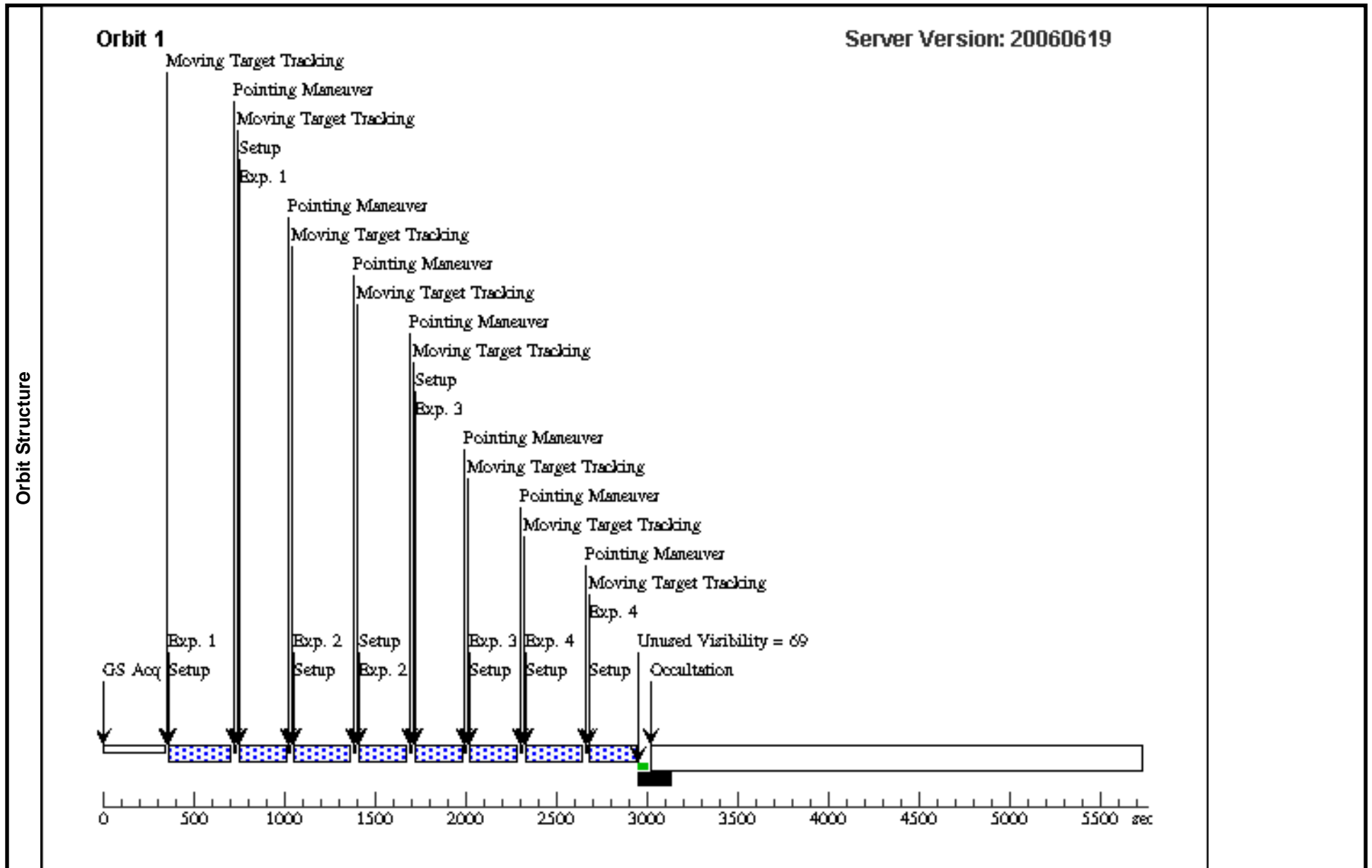
<b>Visit</b>	<b>Proposal 10508, Visit 01, completed</b> <b>Diagnostic Status: No Diagnostics</b> Scientific Instruments: ACS/HRC Special Requirements: SCHED 100%; BEFORE 07-AUG-2005:00:00:00									
	<b>Patterns</b>	#	<b>Primary Pattern</b>				<b>Secondary Pattern</b>			
(1)		Pattern Type=ACS-HRC-DITHER-LINE Purpose=DITHER Number Of Points=2 Point Spacing=0.198 Line Spacing=	Coordinate Frame=POS-TARG Pattern Orientation=44.3 Angle Between Sides= Center Pattern=true							(1), (3)
(2)	Pattern Type=ACS-HRC-DITHER-LINE Purpose=DITHER Number Of Points=2 Point Spacing=0.198 Line Spacing=	Coordinate Frame=POS-TARG Pattern Orientation=134.3 Angle Between Sides= Center Pattern=true							(2), (4)	
<b>Solar System Targets</b>	#	<b>Name</b>	<b>Level 1</b>	<b>Level 2</b>	<b>Level 3</b>	<b>Window</b>				
	(1)	2003QY90	TYPE=ASTEROID,A=42.79558262,E=0.0 5101959,I=3.77183,O=104.22046,W=35.81 372,M=180.91633,EQUINOX=J2000,EPO CH=24-AUG-2000:00:00:00			A_VEL 2003QY90 FROM EARTH GT 0.00005				
<b>Exposures</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/[Actual Dur.]</b>	<b>Orbit</b>
	1	(1) 2003QY90	ACS/HRC, ACCUM, HRC	F606W	CR-SPLIT=NO			Pattern 1-1 (1)	223.0 Secs [=>(Pattern 1)] [=>(Pattern 2)]	[1]
	2	(1) 2003QY90	ACS/HRC, ACCUM, HRC	F814W	CR-SPLIT=NO			Pattern 2-2 (2)	223.0 Secs [=>(Pattern 1)] [=>(Pattern 2)]	[1]
	3	(1) 2003QY90	ACS/HRC, ACCUM, HRC	F814W	CR-SPLIT=NO			Pattern 3-3 (1)	223.0 Secs [=>(Pattern 1)] [=>(Pattern 2)]	[1]
4	(1) 2003QY90	ACS/HRC, ACCUM, HRC	F606W	CR-SPLIT=NO			Pattern 4-4 (2)	223.0 Secs [=>(Pattern 1)] [=>(Pattern 2)]	[1]	



Proposal 10508 - Visit 02 - Orbits, Masses, and Densities of Three Transneptunian Binaries

Wed Dec 06 02:02:53 GMT 2006

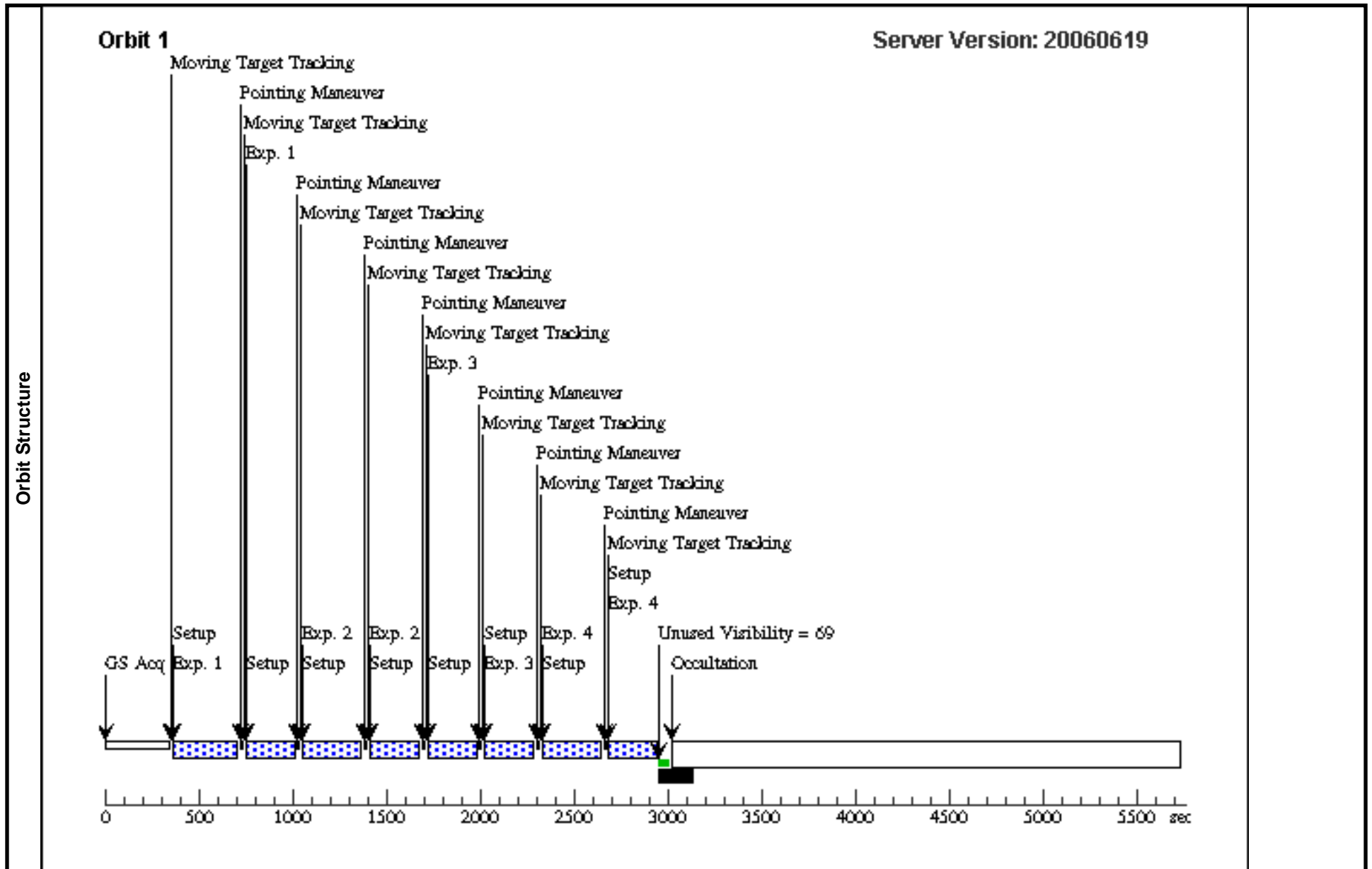
<b>Visit</b>	<b>Proposal 10508, Visit 02, completed</b> <b>Diagnostic Status: No Diagnostics</b> Scientific Instruments: ACS/HRC Special Requirements: SCHED 100%; AFTER 01 BY 20 D TO 40 D									
	<b>Patterns</b>	<b>#</b>	<b>Primary Pattern</b>				<b>Secondary Pattern</b>			
(1)		Pattern Type=ACS-HRC-DITHER-LINE Purpose=DITHER Number Of Points=2 Point Spacing=0.198 Line Spacing=	Coordinate Frame=POS-TARG Pattern Orientation=44.3 Angle Between Sides= Center Pattern=true							(1), (3)
(2)	Pattern Type=ACS-HRC-DITHER-LINE Purpose=DITHER Number Of Points=2 Point Spacing=0.198 Line Spacing=	Coordinate Frame=POS-TARG Pattern Orientation=134.3 Angle Between Sides= Center Pattern=true							(2), (4)	
<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>				
	(1)	2003QY90	TYPE=ASTEROID,A=42.79558262,E=0.0 5101959,I=3.77183,O=104.22046,W=35.81 372,M=180.91633,EQUINOX=J2000,EPO CH=24-AUG-2000:00:00:00			A_VEL 2003QY90 FROM EARTH GT 0.00005				
<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/[Actual Dur.]</b>	<b>Orbit</b>
	1	(1) 2003QY90	ACS/HRC, ACCUM, HRC	F606W	CR-SPLIT=NO			Pattern 1-1 (1)	223.0 Secs [=>(Pattern 1)] [=>(Pattern 2)]	[1]
	2	(1) 2003QY90	ACS/HRC, ACCUM, HRC	F814W	CR-SPLIT=NO			Pattern 2-2 (2)	223.0 Secs [=>(Pattern 1)] [=>(Pattern 2)]	[1]
	3	(1) 2003QY90	ACS/HRC, ACCUM, HRC	F814W	CR-SPLIT=NO			Pattern 3-3 (1)	223.0 Secs [=>(Pattern 1)] [=>(Pattern 2)]	[1]
	4	(1) 2003QY90	ACS/HRC, ACCUM, HRC	F606W	CR-SPLIT=NO			Pattern 4-4 (2)	223.0 Secs [=>(Pattern 1)] [=>(Pattern 2)]	[1]



Proposal 10508 - Visit 03 - Orbits, Masses, and Densities of Three Transneptunian Binaries

Wed Dec 06 02:02:54 GMT 2006

<b>Visit</b>	<b>Proposal 10508, Visit 03, completed</b> <b>Diagnostic Status: No Diagnostics</b> Scientific Instruments: ACS/HRC Special Requirements: SCHED 100%; BETWEEN 29-AUG-2005:00:00:00 AND 27-SEP-2005:00:00:00									
	<b>Patterns</b>	<b>#</b>	<b>Primary Pattern</b>				<b>Secondary Pattern</b>			
(1)		Pattern Type=ACS-HRC-DITHER-LINE Purpose=DITHER Number Of Points=2 Point Spacing=0.198 Line Spacing=	Coordinate Frame=POS-TARG Pattern Orientation=44.3 Angle Between Sides= Center Pattern=true							(1), (3)
(2)	Pattern Type=ACS-HRC-DITHER-LINE Purpose=DITHER Number Of Points=2 Point Spacing=0.198 Line Spacing=	Coordinate Frame=POS-TARG Pattern Orientation=134.3 Angle Between Sides= Center Pattern=true							(2), (4)	
<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>				
	(1)	2003QY90	TYPE=ASTEROID,A=42.79558262,E=0.0 5101959,I=3.77183,O=104.22046,W=35.81 372,M=180.91633,EQUINOX=J2000,EPO CH=24-AUG-2000:00:00:00			A_VEL 2003QY90 FROM EARTH GT 0.00005				
<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/[Actual Dur.]</b>	<b>Orbit</b>
	1	(1) 2003QY90	ACS/HRC, ACCUM, HRC	F606W	CR-SPLIT=NO			Pattern 1-1 (1)	223.0 Secs [=>(Pattern 1)] [=>(Pattern 2)]	[1]
	2	(1) 2003QY90	ACS/HRC, ACCUM, HRC	F814W	CR-SPLIT=NO			Pattern 2-2 (2)	223.0 Secs [=>(Pattern 1)] [=>(Pattern 2)]	[1]
	3	(1) 2003QY90	ACS/HRC, ACCUM, HRC	F814W	CR-SPLIT=NO			Pattern 3-3 (1)	223.0 Secs [=>(Pattern 1)] [=>(Pattern 2)]	[1]
	4	(1) 2003QY90	ACS/HRC, ACCUM, HRC	F606W	CR-SPLIT=NO			Pattern 4-4 (2)	223.0 Secs [=>(Pattern 1)] [=>(Pattern 2)]	[1]



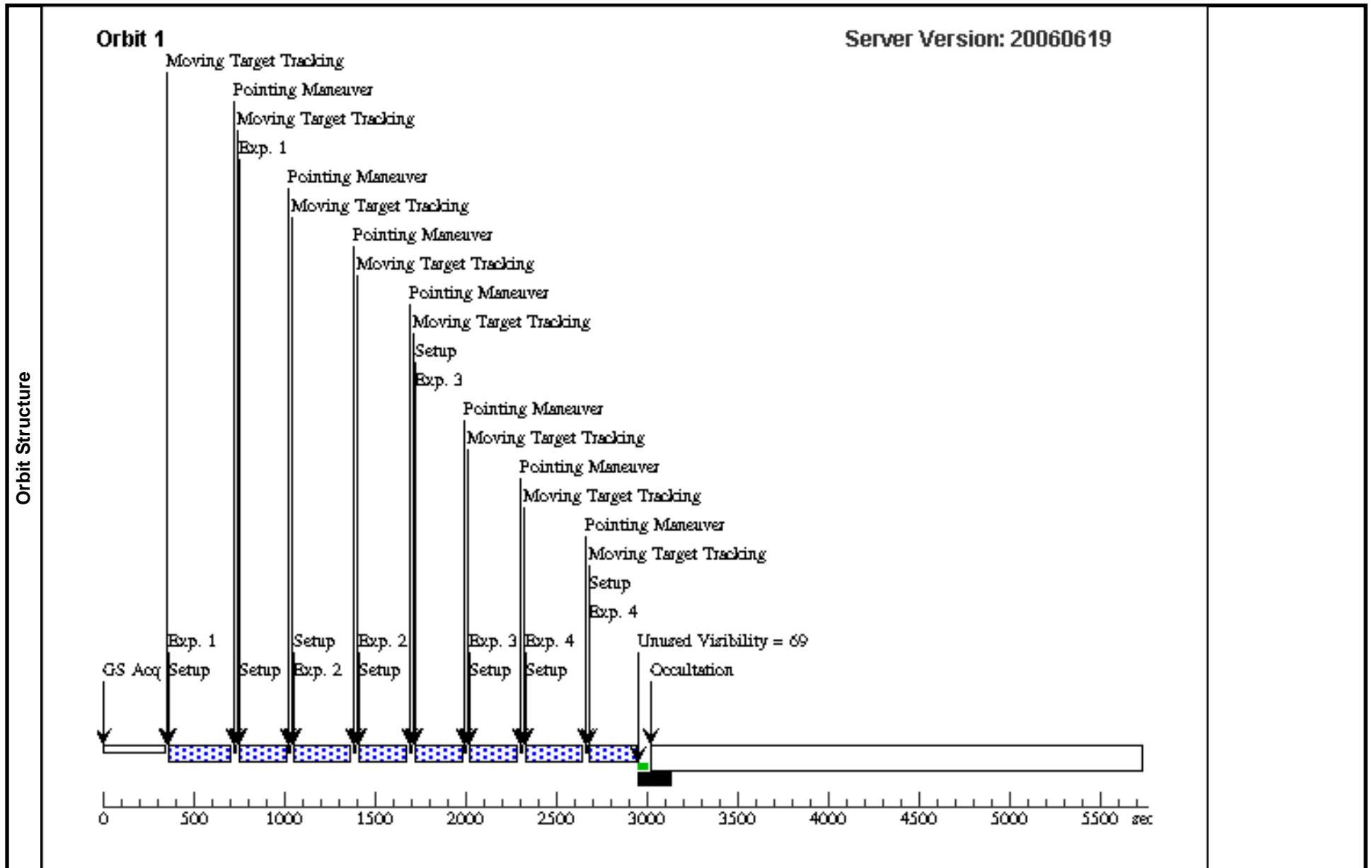
Proposal 10508 - Visit 04 - Orbits, Masses, and Densities of Three Transneptunian Binaries

Wed Dec 06 02:02:55 GMT 2006

<b>Visit</b>	<b>Proposal 10508, Visit 04, completed</b> <b>Diagnostic Status: No Diagnostics</b> Scientific Instruments: ACS/HRC Special Requirements: SCHED 100%; BETWEEN 18-AUG-2006:00:00:00 AND 30-SEP-2006:23:59:59; ON HOLD Comments: <i>To be triggered by investigators</i> On Hold Comments: <i>Pending computation of optimal follow-up timing</i>									
	<b>Patterns</b>	<b>#</b>	<b>Primary Pattern</b>			<b>Secondary Pattern</b>			<b>Exposures</b>	
(1)		Pattern Type=ACS-HRC-DITHER-LINE Purpose=DITHER Number Of Points=2 Point Spacing=0.198 Line Spacing=	Coordinate Frame=POS-TARG Pattern Orientation=44.3 Angle Between Sides= Center Pattern=true					(1), (3)		
(2)	Pattern Type=ACS-HRC-DITHER-LINE Purpose=DITHER Number Of Points=2 Point Spacing=0.198 Line Spacing=	Coordinate Frame=POS-TARG Pattern Orientation=134.3 Angle Between Sides= Center Pattern=true					(2), (4)			
<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>				
	(4)	2003QY90B	TYPE=ASTEROID,A=42.79250247,E=0.0 5106278,I=3.77164,O=104.21811,W=36.09 316,M=180.60991,EQUINOX=J2000,EPO CH=24-AUG-2000:00:00:00							
<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/[Actual Dur.]</b>	<b>Orbit</b>
	1	(4) 2003QY90B	ACS/HRC, ACCUM, HRC	F606W	CR-SPLIT=NO			Pattern 1-1 (1)	223.0 Secs [=>(Pattern 1)] [=>(Pattern 2)]	[1]
	2	(4) 2003QY90B	ACS/HRC, ACCUM, HRC	F814W	CR-SPLIT=NO			Pattern 2-2 (2)	223.0 Secs [=>(Pattern 1)] [=>(Pattern 2)]	[1]
	3	(4) 2003QY90B	ACS/HRC, ACCUM, HRC	F814W	CR-SPLIT=NO			Pattern 3-3 (1)	223.0 Secs [=>(Pattern 1)] [=>(Pattern 2)]	[1]

Proposal 10508 - Visit 04 - Orbits, Masses, and Densities of Three Transneptunian Binaries

Exposures (continued)	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit
	4	(4) 2003QY90B	ACS/HRC, ACCUM, HRC	F606W	CR-SPLIT=NO	Pattern 4-4 (2)	223.0 Secs	[=>(Pattern 1)] [=>(Pattern 2)]	[1]	



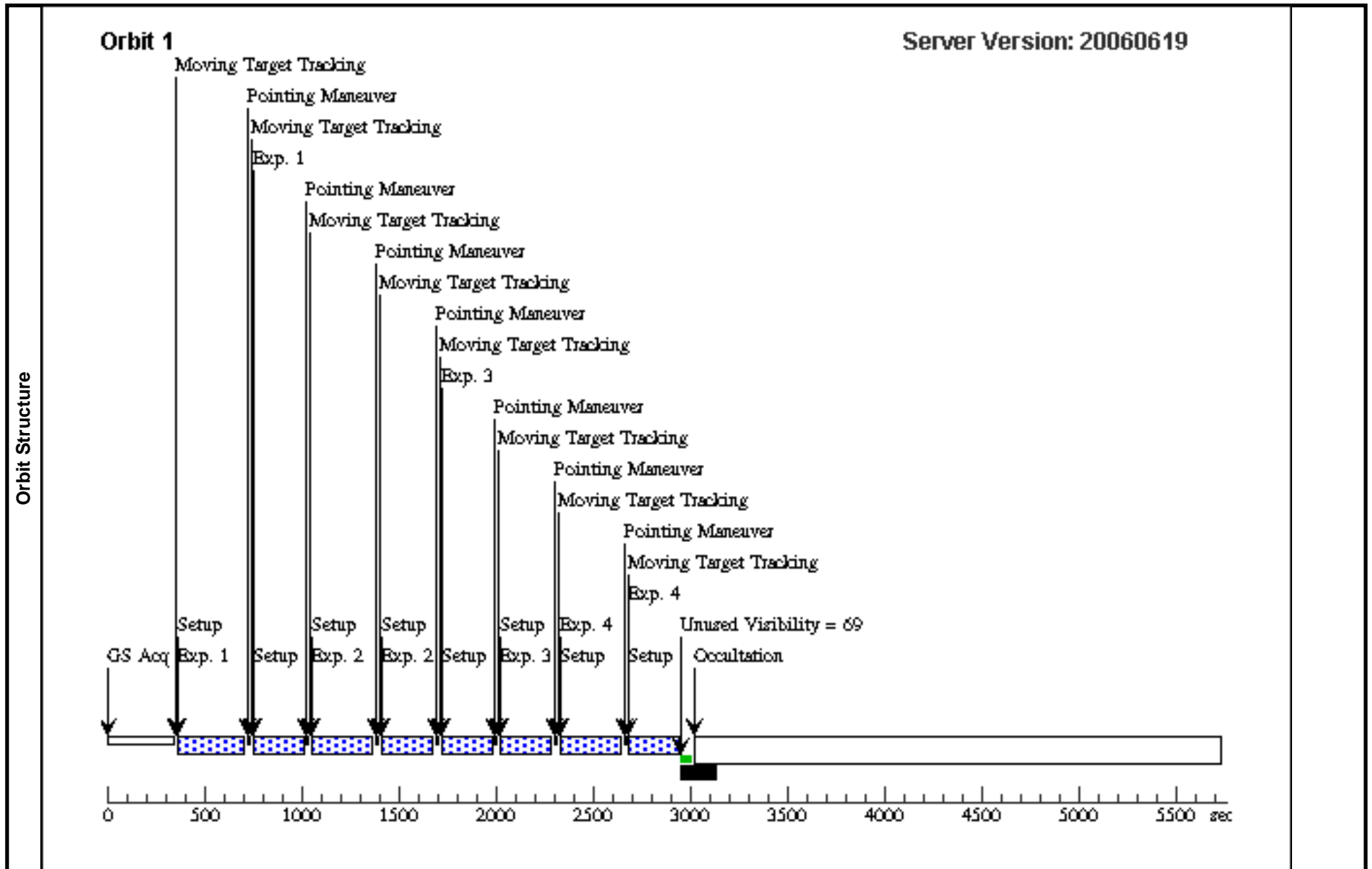
Proposal 10508 - Visit 05 - Orbits, Masses, and Densities of Three Transneptunian Binaries

Wed Dec 06 02:02:56 GMT 2006

<b>Visit</b>	<b>Proposal 10508, Visit 05, completed</b> <b>Diagnostic Status: No Diagnostics</b> Scientific Instruments: ACS/HRC Special Requirements: SCHED 100%; BEFORE 15-FEB-2006:12:00:00 Comments: Goal is to schedule this visit plus visit 6, both during the current visibility window, but separated by as much time as possible (at least 6 days).									
	<b>Patterns</b>	<b>#</b>	<b>Primary Pattern</b>				<b>Secondary Pattern</b>			<b>Exposures</b>
(1)		Pattern Type=ACS-HRC-DITHER-LINE Purpose=DITHER Number Of Points=2 Point Spacing=0.198 Line Spacing=	Coordinate Frame=POS-TARG Pattern Orientation=44.3 Angle Between Sides= Center Pattern=true				(1), (3)			
(2)	Pattern Type=ACS-HRC-DITHER-LINE Purpose=DITHER Number Of Points=2 Point Spacing=0.198 Line Spacing=	Coordinate Frame=POS-TARG Pattern Orientation=134.3 Angle Between Sides= Center Pattern=true				(2), (4)				
<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>				
	(2)	2002CR46	TYPE=ASTEROID,A=38.112041389,E=0.5401516,I=2.4286678,O=351.9872969,W=159.0246487,M=0.113753,EQUINOX=J2000,EPOCH=14-JUN-2006:00:00:00							
<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/[Actual Dur.]</b>	<b>Orbit</b>
	1	(2) 2002CR46	ACS/HRC, ACCUM, HRC	F606W	CR-SPLIT=NO		Pattern 1-1 (1)	223.0 Secs [=>(Pattern 1)] [=>(Pattern 2)]	[1]	
	2	(2) 2002CR46	ACS/HRC, ACCUM, HRC	F814W	CR-SPLIT=NO		Pattern 2-2 (2)	223.0 Secs [=>(Pattern 1)] [=>(Pattern 2)]	[1]	
	3	(2) 2002CR46	ACS/HRC, ACCUM, HRC	F814W	CR-SPLIT=NO		Pattern 3-3 (1)	223.0 Secs [=>(Pattern 1)] [=>(Pattern 2)]	[1]	

Proposal 10508 - Visit 05 - Orbits, Masses, and Densities of Three Transneptunian Binaries

Exposures (continued)	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit
	4	(2) 2002CR46	ACS/HRC, ACCUM, HRC	F606W	CR-SPLIT=NO	Pattern 4-4 (2)	223.0 Secs	[=>(Pattern 1)] [=>(Pattern 2)]	[1]	



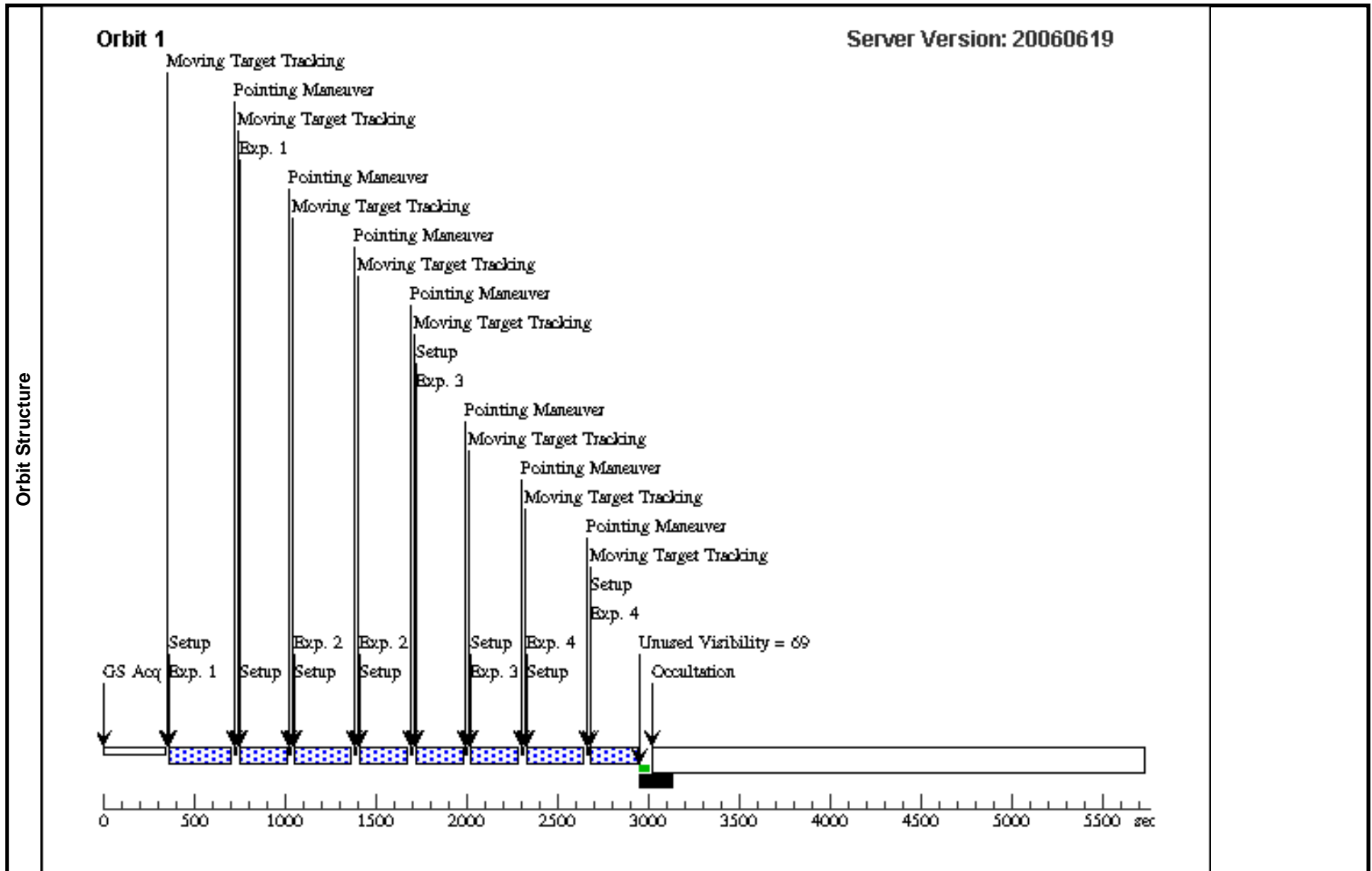
Proposal 10508 - Visit 06 - Orbits, Masses, and Densities of Three Transneptunian Binaries

Wed Dec 06 02:02:56 GMT 2006

<b>Visit</b>	<b>Proposal 10508, Visit 06, completed</b> <b>Diagnostic Status: No Diagnostics</b> Scientific Instruments: ACS/HRC Special Requirements: SCHED 100%; AFTER 05 BY 4 D TO 30 D <i>Comments: Goal is to follow visit 5 by as long of a time span as possible within the constraints of 2-gyro scheduling during the current visibility window.</i>									
	<b>Patterns</b>	<b>#</b>	<b>Primary Pattern</b>				<b>Secondary Pattern</b>			<b>Exposures</b>
(1)		Pattern Type=ACS-HRC-DITHER-LINE Purpose=DITHER Number Of Points=2 Point Spacing=0.198 Line Spacing=	Coordinate Frame=POS-TARG Pattern Orientation=44.3 Angle Between Sides= Center Pattern=true						(1), (3)	
(2)	Pattern Type=ACS-HRC-DITHER-LINE Purpose=DITHER Number Of Points=2 Point Spacing=0.198 Line Spacing=	Coordinate Frame=POS-TARG Pattern Orientation=134.3 Angle Between Sides= Center Pattern=true						(2), (4)		
<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>				
	(2)	2002CR46	TYPE=ASTEROID,A=38.112041389,E=0.5401516,I=2.4286678,O=351.9872969,W=159.0246487,M=0.113753,EQUINOX=J2000,EPOCH=14-JUN-2006:00:00:00							
<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/[Actual Dur.]</b>	<b>Orbit</b>
	1	(2) 2002CR46	ACS/HRC, ACCUM, HRC	F606W	CR-SPLIT=NO			Pattern 1-1 (1)	223.0 Secs	
									[==>(Pattern 1)]	[1]
									[==>(Pattern 2)]	
	2	(2) 2002CR46	ACS/HRC, ACCUM, HRC	F814W	CR-SPLIT=NO			Pattern 2-2 (2)	223.0 Secs	
									[==>(Pattern 1)]	[1]
								[==>(Pattern 2)]		
3	(2) 2002CR46	ACS/HRC, ACCUM, HRC	F814W	CR-SPLIT=NO			Pattern 3-3 (1)	223.0 Secs		
								[==>(Pattern 1)]	[1]	
								[==>(Pattern 2)]		

Proposal 10508 - Visit 06 - Orbits, Masses, and Densities of Three Transneptunian Binaries

Exposures (continued)	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit
	4	(2) 2002CR46	ACS/HRC, ACCUM, HRC	F606W	CR-SPLIT=NO	Pattern 4-4 (2)	223.0 Secs	[=>(Pattern 1)] [=>(Pattern 2)]	[1]	



Proposal 10508 - Visit 07 - Orbits, Masses, and Densities of Three Transneptunian Binaries

Wed Dec 06 02:02:57 GMT 2006

<b>Visit</b>	<b>Proposal 10508, Visit 07, completed</b> <b>Diagnostic Status: No Diagnostics</b> Scientific Instruments: ACS/HRC Special Requirements: SCHED 100%; BEFORE 08-NOV-2006:00:00:00; ON HOLD Comments: <i>To be triggered by investigators</i> On Hold Comments: <i>Pending target confirmation</i>										
	<b>Patterns</b>	#	<b>Primary Pattern</b>			<b>Secondary Pattern</b>			<b>Exposures</b>		
(1)		Pattern Type=ACS-HRC-DITHER-LINE Purpose=DITHER Number Of Points=2 Point Spacing=0.198 Line Spacing=	Coordinate Frame=POS-TARG Pattern Orientation=44.3 Angle Between Sides= Center Pattern=true					(1), (3)			
(2)	Pattern Type=ACS-HRC-DITHER-LINE Purpose=DITHER Number Of Points=2 Point Spacing=0.198 Line Spacing=	Coordinate Frame=POS-TARG Pattern Orientation=134.3 Angle Between Sides= Center Pattern=true					(2), (4)				
<b>Solar System Targets</b>	#	<b>Name</b>	<b>Level 1</b>	<b>Level 2</b>	<b>Level 3</b>	<b>Window</b>					
	(5)	2002CR46B	TYPE=ASTEROID,A=38.112152452,E=0.54015273,I=2.42868,O=351.9869701,W=159.0249012,M=0.11377,EQUINOX=J2000,EPOCH=14-JUN-2006:00:00:00								
<b>Exposures</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/[Actual Dur.]</b>		<b>Orbit</b>
	1	(5) 2002CR46B	ACS/HRC, ACCUM, HRC	F606W	CR-SPLIT=NO			Pattern 1-1 (1)	223.0 Secs		
									[==>(Pattern 1)]		[1]
									[==>(Pattern 2)]		
	2	(5) 2002CR46B	ACS/HRC, ACCUM, HRC	F814W	CR-SPLIT=NO			Pattern 2-2 (2)	223.0 Secs		
									[==>(Pattern 1)]		[1]
								[==>(Pattern 2)]			
3	(5) 2002CR46B	ACS/HRC, ACCUM, HRC	F814W	CR-SPLIT=NO			Pattern 3-3 (1)	223.0 Secs			
								[==>(Pattern 1)]		[1]	
								[==>(Pattern 2)]			

Proposal 10508 - Visit 07 - Orbits, Masses, and Densities of Three Transneptunian Binaries

Exposures (continued)	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit
	4		(5) 2002CR46B	ACS/HRC, ACCUM, HRC	F606W	CR-SPLIT=NO		Pattern 4-4 (2)	223.0 Secs [=>(Pattern 1)] [=>(Pattern 2)]	[1]



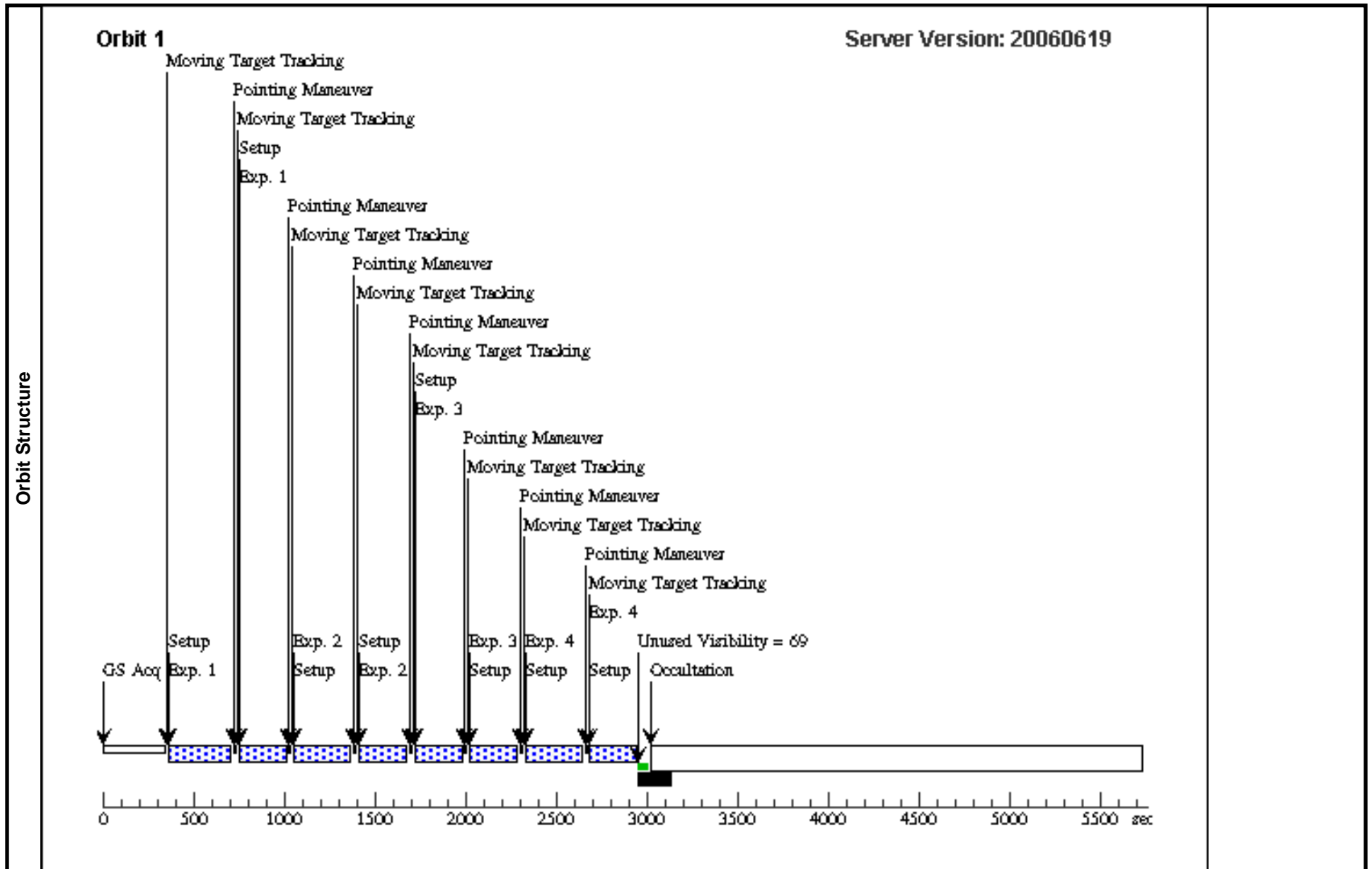
Proposal 10508 - Visit 08 - Orbits, Masses, and Densities of Three Transneptunian Binaries

Wed Dec 06 02:02:58 GMT 2006

<b>Visit</b>	<b>Proposal 10508, Visit 08, failed</b> <b>Diagnostic Status: No Diagnostics</b> Scientific Instruments: ACS/HRC Special Requirements: SCHED 100%; BETWEEN 02-DEC-2006:10:00:00 AND 04-DEC-2006:02:00:00; ON HOLD Comments: <i>To be triggered by investigators</i> On Hold Comments: <i>Pending target confirmation</i>									
	<b>Patterns</b>	<b>#</b>	<b>Primary Pattern</b>			<b>Secondary Pattern</b>			<b>Exposures</b>	
(1)		Pattern Type=ACS-HRC-DITHER-LINE Purpose=DITHER Number Of Points=2 Point Spacing=0.198 Line Spacing=	Coordinate Frame=POS-TARG Pattern Orientation=44.3 Angle Between Sides= Center Pattern=true					(1), (3)		
(2)	Pattern Type=ACS-HRC-DITHER-LINE Purpose=DITHER Number Of Points=2 Point Spacing=0.198 Line Spacing=	Coordinate Frame=POS-TARG Pattern Orientation=134.3 Angle Between Sides= Center Pattern=true					(2), (4)			
<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>				
	(5)	2002CR46B	TYPE=ASTEROID,A=38.112152452,E=0.54015273,I=2.42868,O=351.9869701,W=159.0249012,M=0.11377,EQUINOX=J2000,EPOCH=14-JUN-2006:00:00:00							
<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/[Actual Dur.]</b>	<b>Orbit</b>
	1	(5) 2002CR46B	ACS/HRC, ACCUM, HRC	F606W	CR-SPLIT=NO			Pattern 1-1 (1)	223.0 Secs [=>(Pattern 1)] [=>(Pattern 2)]	[1]
	2	(5) 2002CR46B	ACS/HRC, ACCUM, HRC	F814W	CR-SPLIT=NO			Pattern 2-2 (2)	223.0 Secs [=>(Pattern 1)] [=>(Pattern 2)]	[1]
	3	(5) 2002CR46B	ACS/HRC, ACCUM, HRC	F814W	CR-SPLIT=NO			Pattern 3-3 (1)	223.0 Secs [=>(Pattern 1)] [=>(Pattern 2)]	[1]

Proposal 10508 - Visit 08 - Orbits, Masses, and Densities of Three Transneptunian Binaries

Exposures (continued)	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit
	4		(5) 2002CR46B	ACS/HRC, ACCUM, HRC	F606W	CR-SPLIT=NO		Pattern 4-4 (2)	223.0 Secs [=>(Pattern 1)] [=>(Pattern 2)]	[1]



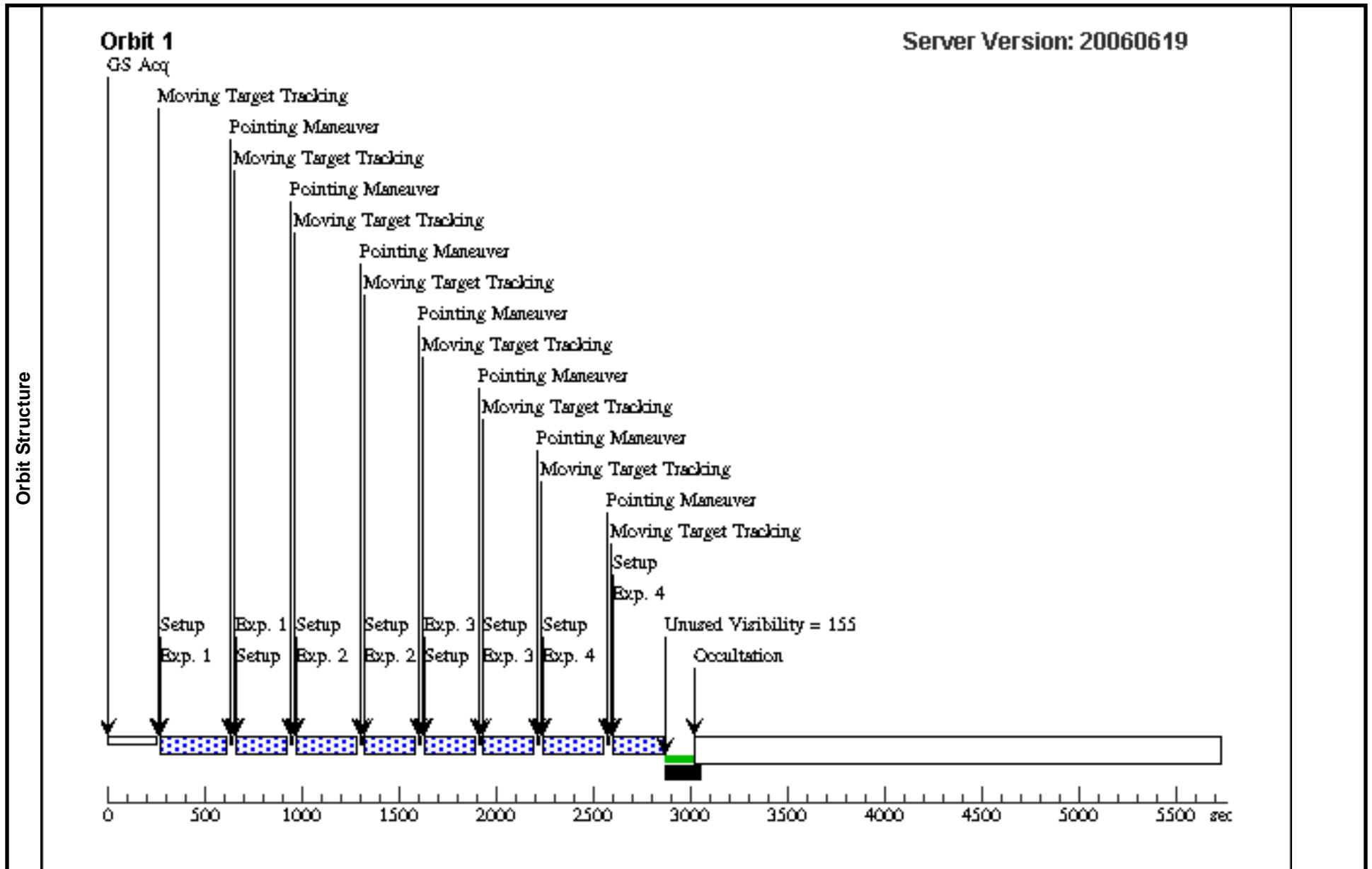
Proposal 10508 - Visit 09 - Orbits, Masses, and Densities of Three Transneptunian Binaries

Wed Dec 06 02:02:59 GMT 2006

<b>Visit</b>	<b>Proposal 10508, Visit 09, completed</b> <b>Diagnostic Status: No Diagnostics</b> Scientific Instruments: ACS/HRC Special Requirements: SCHED 100%; ORIENT 176.0D TO 177.0 D; BEFORE 08-MAY-2006:00:00:00; ON HOLD Comments: <i>To be triggered by investigators</i> On Hold Comments: <i>Pending target confirmation</i>									
	<b>Patterns</b>	<b>#</b>	<b>Primary Pattern</b>			<b>Secondary Pattern</b>				<b>Exposures</b>
(1)		Pattern Type=ACS-HRC-DITHER-LINE Purpose=DITHER Number Of Points=2 Point Spacing=0.198 Line Spacing=	Coordinate Frame=POS-TARG Pattern Orientation=44.3 Angle Between Sides= Center Pattern=true					(1), (3)		
(2)	Pattern Type=ACS-HRC-DITHER-LINE Purpose=DITHER Number Of Points=2 Point Spacing=0.198 Line Spacing=	Coordinate Frame=POS-TARG Pattern Orientation=134.3 Angle Between Sides= Center Pattern=true					(2), (4)			
<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>				
	(3)	2003FX128	TYPE=ASTEROID,A=102.87588697,E=0.82633281,I=22.2725924,O=171.9358773,W=320.0908497,M=5.8075731,EQUINOX=J2000,EPOCH=14-JUN-2006:00:00:00							
<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/[Actual Dur.]</b>	<b>Orbit</b>
	1	(3) 2003FX128	ACS/HRC, ACCUM, HRC	F606W	CR-SPLIT=NO	GS ACQ SCENARI O ONEBIT	Pattern 1-1 (1)	223.0 Secs		
								[=>(Pattern 1)]	[1]	
								[=>(Pattern 2)]		
	2	(3) 2003FX128	ACS/HRC, ACCUM, HRC	F814W	CR-SPLIT=NO		Pattern 2-2 (2)	223.0 Secs		
								[=>(Pattern 1)]	[1]	
							[=>(Pattern 2)]			
3	(3) 2003FX128	ACS/HRC, ACCUM, HRC	F814W	CR-SPLIT=NO		Pattern 3-3 (1)	223.0 Secs			
							[=>(Pattern 1)]	[1]		
							[=>(Pattern 2)]			

Proposal 10508 - Visit 09 - Orbits, Masses, and Densities of Three Transneptunian Binaries

Exposures (continued)	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit
	4		(3) 2003FX128	ACS/HRC, ACCUM, HRC	F606W	CR-SPLIT=NO		Pattern 4-4 (2)	223.0 Secs [=>(Pattern 1)] [=>(Pattern 2)]	[1]



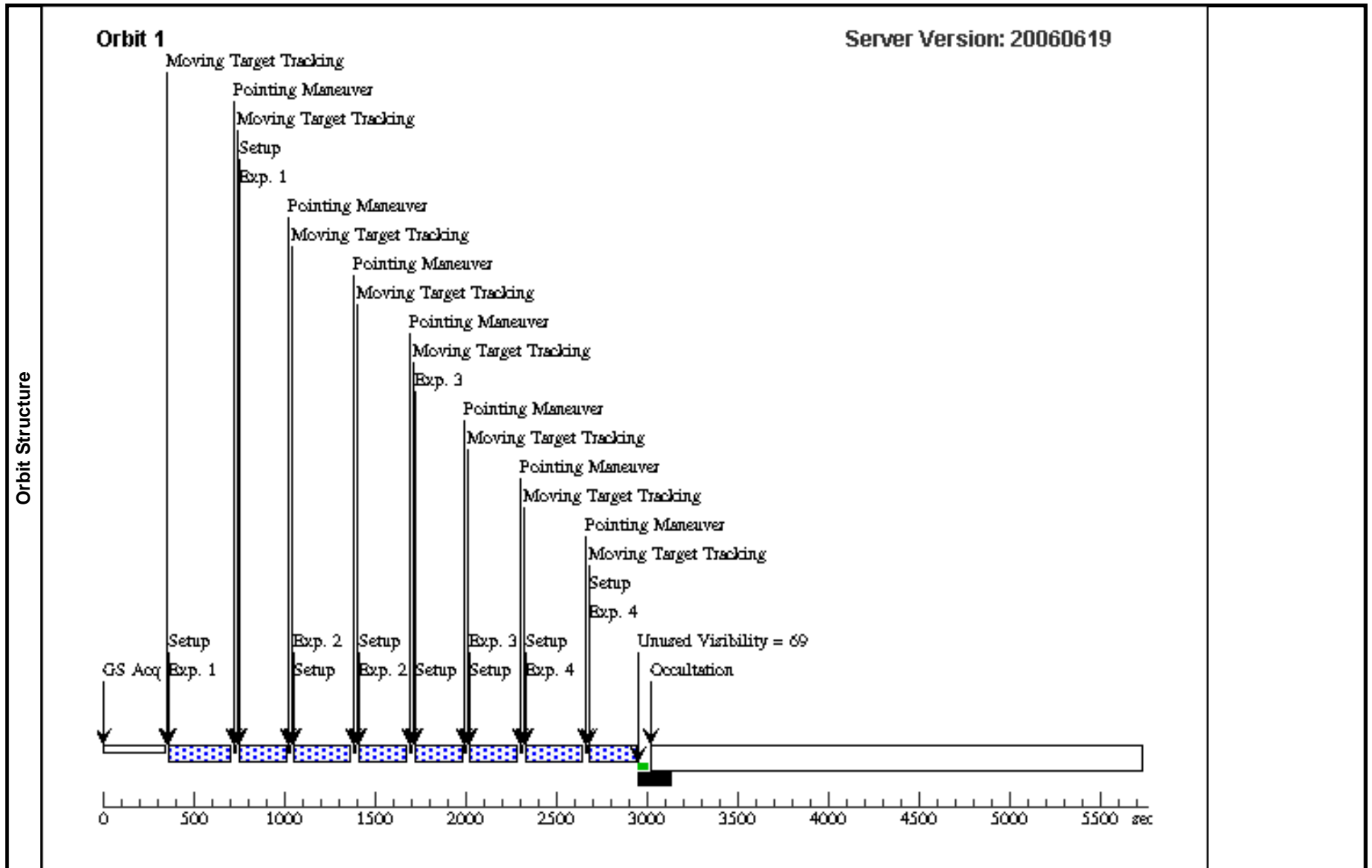
Proposal 10508 - Visit 10 - Orbits, Masses, and Densities of Three Transneptunian Binaries

Wed Dec 06 02:03:00 GMT 2006

<b>Visit</b>	<b>Proposal 10508, Visit 10, completed</b> <b>Diagnostic Status: No Diagnostics</b> Scientific Instruments: ACS/HRC Special Requirements: SCHED 100%; ORIENT 160.0D TO 170.0 D; AFTER 09 BY 2 D TO 5 D; ON HOLD Comments: <i>To be triggered by investigators</i> On Hold Comments: <i>Pending target confirmation</i>										
	<b>Patterns</b>	<b>#</b>	<b>Primary Pattern</b>			<b>Secondary Pattern</b>			<b>Exposures</b>		
(1)		Pattern Type=ACS-HRC-DITHER-LINE Purpose=DITHER Number Of Points=2 Point Spacing=0.198 Line Spacing=	Coordinate Frame=POS-TARG Pattern Orientation=44.3 Angle Between Sides= Center Pattern=true						(1), (3)		
(2)	Pattern Type=ACS-HRC-DITHER-LINE Purpose=DITHER Number Of Points=2 Point Spacing=0.198 Line Spacing=	Coordinate Frame=POS-TARG Pattern Orientation=134.3 Angle Between Sides= Center Pattern=true						(2), (4)			
<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>					
	(3)	2003FX128	TYPE=ASTEROID,A=102.87588697,E=0.82633281,I=22.2725924,O=171.9358773,W=320.0908497,M=5.8075731,EQUINOX=J2000,EPOCH=14-JUN-2006:00:00:00								
<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/[Actual Dur.]</b>		<b>Orbit</b>
	1	(3) 2003FX128	ACS/HRC, ACCUM, HRC	F606W	CR-SPLIT=NO			Pattern 1-1 (1)	223.0 Secs		
									[=>(Pattern 1)]		[1]
									[=>(Pattern 2)]		
	2	(3) 2003FX128	ACS/HRC, ACCUM, HRC	F814W	CR-SPLIT=NO			Pattern 2-2 (2)	223.0 Secs		
									[=>(Pattern 1)]		[1]
								[=>(Pattern 2)]			
3	(3) 2003FX128	ACS/HRC, ACCUM, HRC	F814W	CR-SPLIT=NO			Pattern 3-3 (1)	223.0 Secs			
								[=>(Pattern 1)]		[1]	
								[=>(Pattern 2)]			

Proposal 10508 - Visit 10 - Orbits, Masses, and Densities of Three Transneptunian Binaries

Exposures (continued)	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit
	4		(3) 2003FX128	ACS/HRC, ACCUM, HRC	F606W	CR-SPLIT=NO		Pattern 4-4 (2)	223.0 Secs [=>(Pattern 1)] [=>(Pattern 2)]	[1]



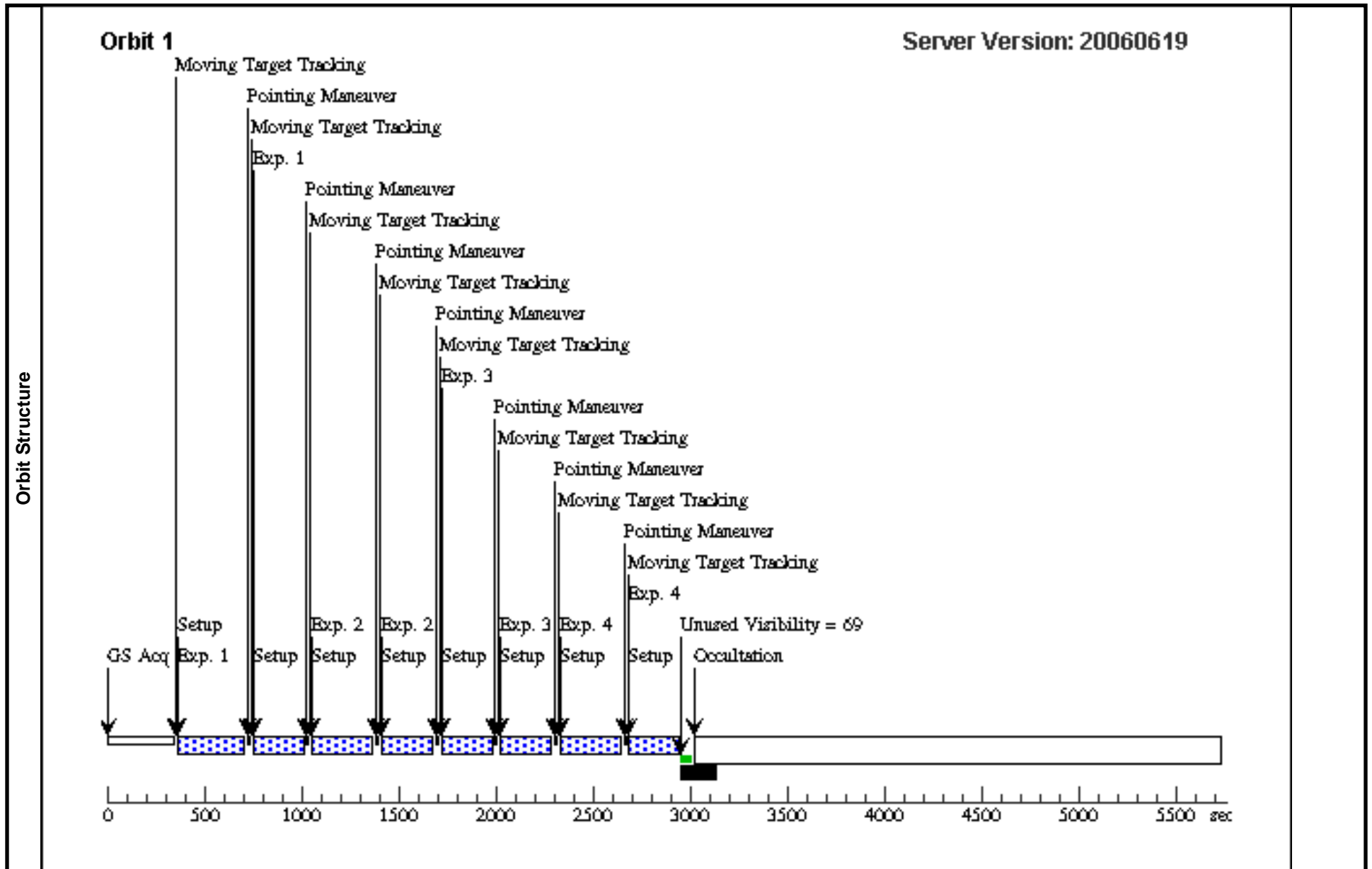
Proposal 10508 - Visit 11 - Orbits, Masses, and Densities of Three Transneptunian Binaries

Wed Dec 06 02:03:00 GMT 2006

<b>Visit</b>	<b>Proposal 10508, Visit 11, completed</b> <b>Diagnostic Status: No Diagnostics</b> Scientific Instruments: ACS/HRC Special Requirements: SCHED 100%; ON HOLD Comments: <i>To be triggered by investigators</i> On Hold Comments: <i>Pending target confirmation</i>										
	<b>Patterns</b>	<b>#</b>	<b>Primary Pattern</b>			<b>Secondary Pattern</b>			<b>Exposures</b>		
(1)		Pattern Type=ACS-HRC-DITHER-LINE Purpose=DITHER Number Of Points=2 Point Spacing=0.198 Line Spacing=	Coordinate Frame=POS-TARG Pattern Orientation=44.3 Angle Between Sides= Center Pattern=true						(1), (3)		
(2)	Pattern Type=ACS-HRC-DITHER-LINE Purpose=DITHER Number Of Points=2 Point Spacing=0.198 Line Spacing=	Coordinate Frame=POS-TARG Pattern Orientation=134.3 Angle Between Sides= Center Pattern=true						(2), (4)			
<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>					
	(3)	2003FX128	TYPE=ASTEROID,A=102.87588697,E=0.82633281,I=22.2725924,O=171.9358773,W=320.0908497,M=5.8075731,EQUINOX=J2000,EPOCH=14-JUN-2006:00:00:00								
<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/[Actual Dur.]</b>		<b>Orbit</b>
	1	(3) 2003FX128	ACS/HRC, ACCUM, HRC	F606W	CR-SPLIT=NO			Pattern 1-1 (1)	223.0 Secs		
									[=>(Pattern 1)]		[1]
									[=>(Pattern 2)]		
	2	(3) 2003FX128	ACS/HRC, ACCUM, HRC	F814W	CR-SPLIT=NO			Pattern 2-2 (2)	223.0 Secs		
									[=>(Pattern 1)]		[1]
								[=>(Pattern 2)]			
3	(3) 2003FX128	ACS/HRC, ACCUM, HRC	F814W	CR-SPLIT=NO			Pattern 3-3 (1)	223.0 Secs			
								[=>(Pattern 1)]		[1]	
								[=>(Pattern 2)]			

Proposal 10508 - Visit 11 - Orbits, Masses, and Densities of Three Transneptunian Binaries

Exposures (continued)	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit
	4		(3) 2003FX128	ACS/HRC, ACCUM, HRC	F606W	CR-SPLIT=NO		Pattern 4-4 (2)	223.0 Secs [=>(Pattern 1)] [=>(Pattern 2)]	[1]



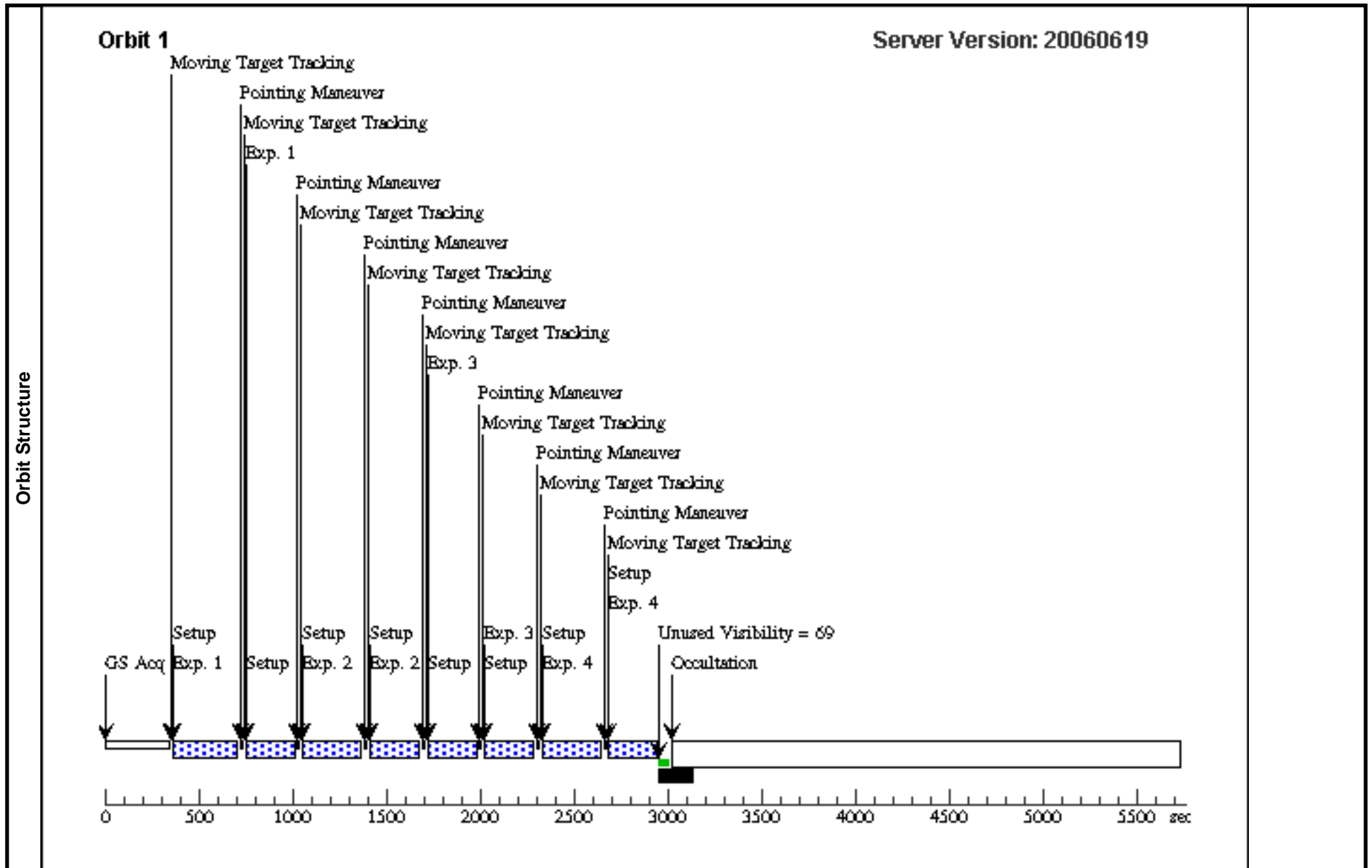
Proposal 10508 - Visit 12 - Orbits, Masses, and Densities of Three Transneptunian Binaries

Wed Dec 06 02:03:01 GMT 2006

<b>Visit</b>	<b>Proposal 10508, Visit 12, completed</b> <b>Diagnostic Status: No Diagnostics</b> Scientific Instruments: ACS/HRC Special Requirements: SCHED 100%; ON HOLD Comments: <i>To be triggered by investigators</i> On Hold Comments: <i>Pending target confirmation</i>									
	<b>Patterns</b>	<b>#</b>	<b>Primary Pattern</b>			<b>Secondary Pattern</b>			<b>Exposures</b>	
(1)		Pattern Type=ACS-HRC-DITHER-LINE Purpose=DITHER Number Of Points=2 Point Spacing=0.198 Line Spacing=	Coordinate Frame=POS-TARG Pattern Orientation=44.3 Angle Between Sides= Center Pattern=true					(1), (3)		
(2)	Pattern Type=ACS-HRC-DITHER-LINE Purpose=DITHER Number Of Points=2 Point Spacing=0.198 Line Spacing=	Coordinate Frame=POS-TARG Pattern Orientation=134.3 Angle Between Sides= Center Pattern=true					(2), (4)			
<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>				
	(3)	2003FX128	TYPE=ASTEROID,A=102.87588697,E=0.82633281,I=22.2725924,O=171.9358773,W=320.0908497,M=5.8075731,EQUINOX=J2000,EPOCH=14-JUN-2006:00:00:00							
<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/[Actual Dur.]</b>	<b>Orbit</b>
	1	(3) 2003FX128	ACS/HRC, ACCUM, HRC	F606W	CR-SPLIT=NO			Pattern 1-1 (1)	223.0 Secs [=>(Pattern 1)] [=>(Pattern 2)]	[1]
	2	(3) 2003FX128	ACS/HRC, ACCUM, HRC	F814W	CR-SPLIT=NO			Pattern 2-2 (2)	223.0 Secs [=>(Pattern 1)] [=>(Pattern 2)]	[1]
	3	(3) 2003FX128	ACS/HRC, ACCUM, HRC	F814W	CR-SPLIT=NO			Pattern 3-3 (1)	223.0 Secs [=>(Pattern 1)] [=>(Pattern 2)]	[1]

Proposal 10508 - Visit 12 - Orbits, Masses, and Densities of Three Transneptunian Binaries

Exposures (continued)	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit
	4		(3) 2003FX128	ACS/HRC, ACCUM, HRC	F606W	CR-SPLIT=NO		Pattern 4-4 (2)	223.0 Secs [=>(Pattern 1)] [=>(Pattern 2)]	[1]



Proposal 10508 - Visit 18 - Orbits, Masses, and Densities of Three Transneptunian Binaries

Wed Dec 06 02:03:01 GMT 2006

Visit	<b>Proposal 10508, Visit 18</b> <b>Diagnostic Status: No Diagnostics</b> Scientific Instruments: ACS/HRC Special Requirements: SCHED 100%; BETWEEN 22-DEC-2006:00:00:00 AND 24-DEC-2006:00:00:00 Comments: Repeat of failed visit 08.									
	Patterns	#	Primary Pattern			Secondary Pattern			Exposures	
		(1)	Pattern Type=ACS-HRC-DITHER-LINE Purpose=DITHER Number Of Points=2 Point Spacing=0.198 Line Spacing=	Coordinate Frame=POS-TARG Pattern Orientation=44.3 Angle Between Sides= Center Pattern=true						
	(2)	Pattern Type=ACS-HRC-DITHER-LINE Purpose=DITHER Number Of Points=2 Point Spacing=0.198 Line Spacing=	Coordinate Frame=POS-TARG Pattern Orientation=134.3 Angle Between Sides= Center Pattern=true							(2), (4)
Solar System Targets	#	Name	Level 1	Level 2	Level 3	Window				
	(5)	2002CR46B	TYPE=ASTEROID,A=38.112152452,E=0.54015273,I=2.42868,O=351.9869701,W=159.0249012,M=0.11377,EQUINOX=J2000,EPOCH=14-JUN-2006:00:00:00							
Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit
	1		(5) 2002CR46B	ACS/HRC, ACCUM, HRC	F606W	CR-SPLIT=NO		Pattern 1-1 (1)	223.0 Secs [=>(Pattern 1)] [=>(Pattern 2)]	[1]
	2		(5) 2002CR46B	ACS/HRC, ACCUM, HRC	F814W	CR-SPLIT=NO		Pattern 2-2 (2)	223.0 Secs [=>(Pattern 1)] [=>(Pattern 2)]	[1]
	3		(5) 2002CR46B	ACS/HRC, ACCUM, HRC	F814W	CR-SPLIT=NO		Pattern 3-3 (1)	223.0 Secs [=>(Pattern 1)] [=>(Pattern 2)]	[1]

Proposal 10508 - Visit 18 - Orbits, Masses, and Densities of Three Transneptunian Binaries

Exposures (continued)	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit
	4		(5) 2002CR46B	ACS/HRC, ACCUM, HRC	F606W	CR-SPLIT=NO		Pattern 4-4 (2)	223.0 Secs [=>(Pattern 1)] [=>(Pattern 2)]	[1]

