



17330 - Deep Imaging of Dimorphos's Dust Tail

Cycle: 30, Proposal Category: GO/DD

(Availability Mode: SUPPORTED)

INVESTIGATORS

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Dr. Steven Chesley (CoI)	Jet Propulsion Laboratory
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Dr. Yun Zhang (CoI)	University of Michigan
Tony L. Farnham (CoI)	University of Maryland
Dr. Gonzalo Tancredi (CoI)	Universidad de La Republica Facultad de Ciencias
Dr. Fernando Moreno Danvila (CoI) (ESA Member)	Instituto de Astrofisica de Andalucia (IAA)
Dr. Bin Yang (CoI) (Contact)	Planetary Science Institute

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) DIDYMOS	WFC3/UVIS	1	13-Feb-2024 10:01:37.0	yes
02	(1) DIDYMOS	WFC3/UVIS	1	13-Feb-2024 10:01:38.0	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>
03	(1) DIDYMOS	WFC3/UVIS	1	13-Feb-2024 10:01:38.0	yes
04	(1) DIDYMOS	WFC3/UVIS	1	13-Feb-2024 10:01:39.0	yes
05	(1) DIDYMOS	WFC3/UVIS	1	13-Feb-2024 10:01:39.0	yes
06	(1) DIDYMOS	WFC3/UVIS	1	13-Feb-2024 10:01:40.0	yes
07	(1) DIDYMOS	WFC3/UVIS	1	13-Feb-2024 10:01:40.0	yes
08	(1) DIDYMOS	WFC3/UVIS	1	13-Feb-2024 10:01:41.0	yes
09	(1) DIDYMOS	WFC3/UVIS	1	13-Feb-2024 10:01:41.0	yes
10	(1) DIDYMOS	WFC3/UVIS	1	13-Feb-2024 10:01:42.0	yes

10 Total Orbits Used

ABSTRACT

We request 10 DD orbits to perform deep imaging of the tail of Dimorphos created by the DART impact in early July before the Didymos system moves into the solar avoidance zone and remains unobservable for ~7 months. The proposed program continues the previous HST programs GO-16674 and GO-17292 to study the formation and evolution of the dust tail formed from the impact ejecta. The proposed observations will allow us to study the evolution of the brightness profile of the tail and the diffuse dust feature to the south of the main tail noticed in February image. Preliminary evidence suggests that the diffuse cloud contains particles lifted by the re-impact of large DART ejecta particles. In the context of the data collected by other post-impact HST programs to observe Didymos, we will constrain the size, size distribution, total mass, and dust dynamics of the ejecta in the binary system, and will explore the mechanisms of delayed dust emission from the binary system. As the first active asteroid with precisely known impact conditions and much better determined physical properties than any other active asteroids, these studies will form the foundation for us to improve our understanding of past and future active asteroid observations, and therefore have broad implications for active asteroid research. The high spatial resolution and sensitivity of HST/WFC3/UVIS are essential for the proposed observations. These observations could not be proposed during the regular Cycle 30 proposal period because we could not have predicted the brightness of the tail before impact. The tail continues to evolve and fade and so the proposed observations cannot wait until Cycle 31.

OBSERVING DESCRIPTION

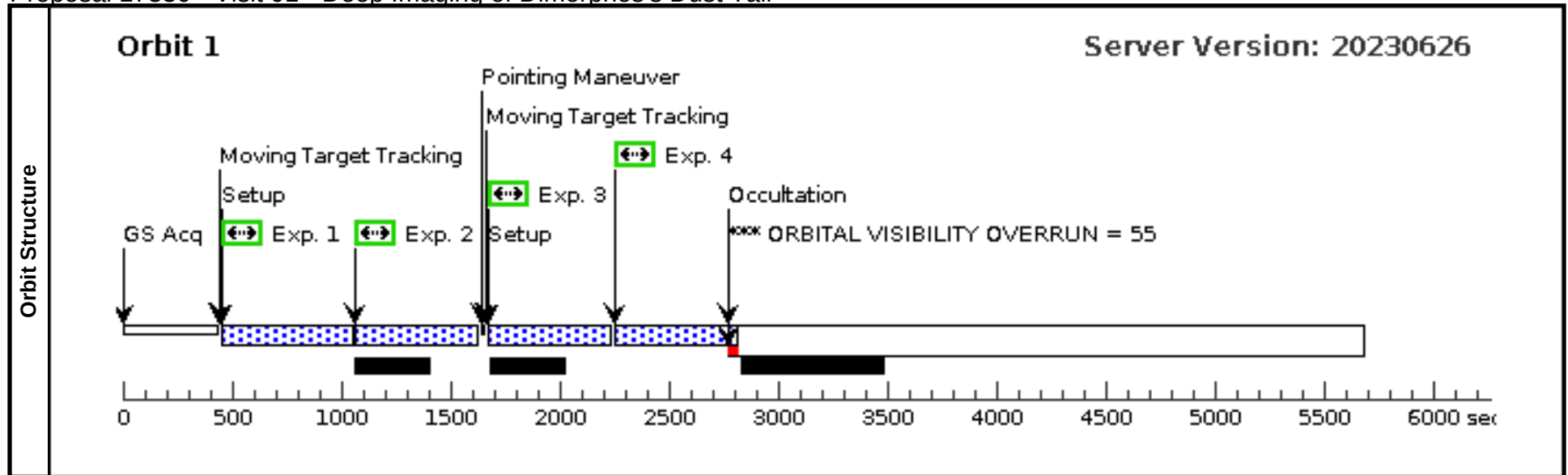
Proposal 17330 (STScI Edit Number: 2, Created: Tuesday, February 13, 2024 at 10:01:42 AM Eastern Standard Time) - Overview

We plan to observe the tail of Dimorphos in the week between June 30, 2023 and July 6, 2023, right before the Didymos system moves to within the solar avoidance zone. If it's difficult to schedule within this week, we can extend the window to two weeks without affecting the science objectives. The ten orbits do not need to be consecutive, but should be placed as close to each other as possible, e.g., to allow all orbits to be executed within 2 days, to facilitate the stack of all images.

All orbits will have the same structure. In each orbit, we will use F350LP filter to take four exposures of 450s each, using the full-frame aperture UVIS2-FIX. The large geocentric distance of 2.5 au of the target allows for the long exposure time without trailing due to parallax. The use of full-frame aperture will allow us to capture the tail as much as possible. In fact, 2k-by-2k subframe will cause more overhead time. The long exposures will hide the buffer dump behind the exposures. The tail of Dimorphos is expected to extend at a position angle about 295 deg during our observing window. The roll angle range of HST during our observing window is 105 - 115 deg, allowing the tail to extend along the diagonal direction of the full-frame CCD field of view. There is no need to impose orientation requirements. We will offset the target in the opposition direction of the tail by 40" to allow for more space for the tail. We will also use a two point dither pattern in each orbit with (1", -2") offset in x and y directions to avoid bad pixels/columns and the chip gap.

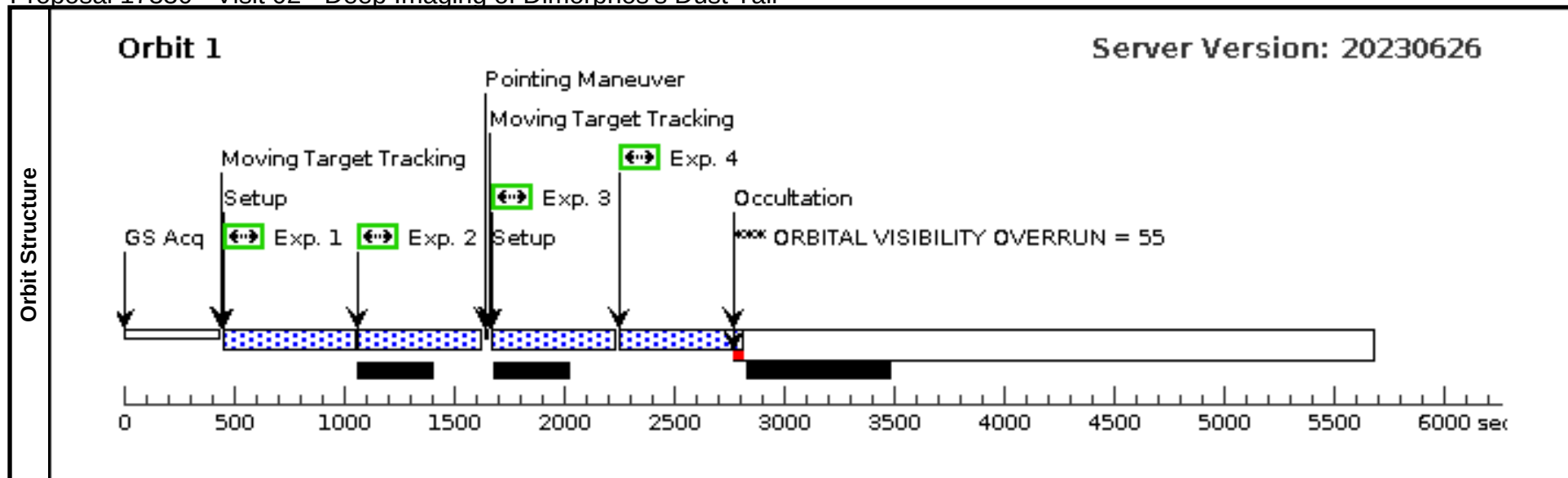
Proposal 17330 - Visit 01 - Deep Imaging of Dimorphos's Dust Tail

Visit	Proposal 17330, Visit 01, completed										Tue Feb 13 15:01:42 GMT 2024	
	Diagnostic Status: Warning											
	Scientific Instruments: WFC3/UVIS											
	Special Requirements: BETWEEN 26-JUN-2023:00:00:00 AND 07-JUL-2023:00:00:00											
Diagnostics	(Visit 01) Warning (Orbit Planner): ORBITAL VISIBILITY OVERRUN											
	(Visit 01) Informational (Form): The Visit Planner and Spike may produce different schedulability results.											
Solar System Targets	#	Name	Level 1	Level 2	Level 3	Window	Ephem Center					
	(1)	DIDYMOS	TYPE=ASTEROID,A=1.64251436375 7057,E=0.3832947329867846,I=3.414 168800300961 ,O=72.99221760945375,W=319.55599 20731379,M=38.72558818260499,EQ UINOX=J2000,EPOCH=12-JAN- 2023:12:00:00,EpochTimeScale=TDB, R0=1. ,A1=0.,A2=-1.042309691002E- 14,A3=0. ,ALN=1.,NM=2.,NN=0.,NK=0.,AMR AT=0.							EARTH		
	Comments: Description=Binary asteroid (65803) Didymos Extended=YES											
Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]		Orbit	
	1		(1) DIDYMOS	WFC3/UVIS, ACCUM, UVIS2-FIX	F350LP		POS TARG -40,0	Sequence 1-4 Non-In t in Visit 01	450 Secs (450 Secs)			
									[==>]		[1]	
	2		(1) DIDYMOS	WFC3/UVIS, ACCUM, UVIS2-FIX	F350LP		POS TARG -40,0	Sequence 1-4 Non-In t in Visit 01	450 Secs (450 Secs)			
									[==>]		[1]	
	3		(1) DIDYMOS	WFC3/UVIS, ACCUM, UVIS2-FIX	F350LP		POS TARG -41,-2	Sequence 1-4 Non-In t in Visit 01	450 Secs (450 Secs)			
									[==>]		[1]	
4		(1) DIDYMOS	WFC3/UVIS, ACCUM, UVIS2-FIX	F350LP		POS TARG -41,-2	Sequence 1-4 Non-In t in Visit 01	450 Secs (450 Secs)				
								[==>]		[1]		



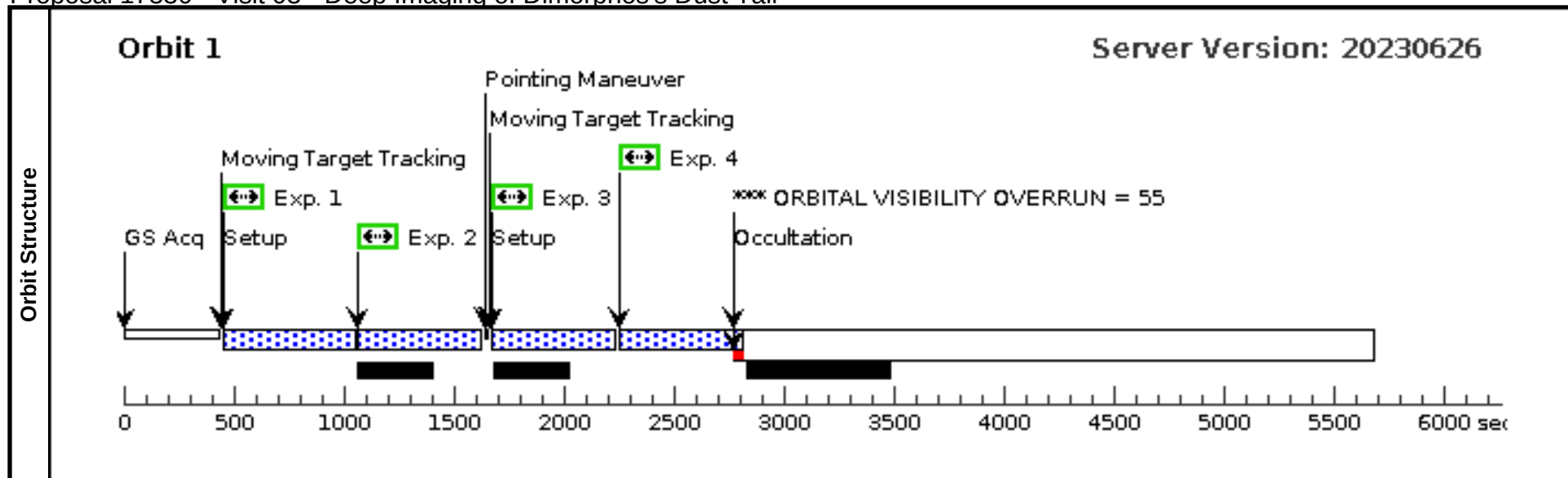
Proposal 17330 - Visit 02 - Deep Imaging of Dimorphos's Dust Tail

Visit	Proposal 17330, Visit 02, completed Tue Feb 13 15:01:42 GMT 2024									
	Diagnostic Status: Warning Scientific Instruments: WFC3/UVIS Special Requirements: BETWEEN 26-JUN-2023:00:00:00 AND 07-JUL-2023:00:00:00									
Diagnostics	(Visit 02) Warning (Orbit Planner): ORBITAL VISIBILITY OVERRUN (Visit 02) Informational (Form): The Visit Planner and Spike may produce different schedulability results.									
Solar System Targets	#	Name	Level 1	Level 2	Level 3	Window	Ephem Center			
	(1)	DIDYMOS	TYPE=ASTEROID,A=1.64251436375 7057,E=0.3832947329867846,I=3.414 168800300961 ,O=72.99221760945375,W=319.55599 20731379,M=38.72558818260499,EQ UINOX=J2000,EPOCH=12-JAN- 2023:12:00:00,EpochTimeScale=TDB, R0=1. ,A1=0.,A2=-1.042309691002E- 14,A3=0. ,ALN=1.,NM=2.,NN=0.,NK=0.,AMR AT=0. Comments: Description=Binary asteroid (65803) Didymos Extended=YES				EARTH			
Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
	1	(1) DIDYMOS	WFC3/UVIS, ACCUM, UVIS2-FIX	F350LP		POS TARG -40,0	Sequence 1-4 Non-Int in Visit 02	450 Secs (450 Secs)	[==>]	[1]
	2	(1) DIDYMOS	WFC3/UVIS, ACCUM, UVIS2-FIX	F350LP		POS TARG -40,0	Sequence 1-4 Non-Int in Visit 02	450 Secs (450 Secs)	[==>]	[1]
	3	(1) DIDYMOS	WFC3/UVIS, ACCUM, UVIS2-FIX	F350LP		POS TARG -41,-2	Sequence 1-4 Non-Int in Visit 02	450 Secs (450 Secs)	[==>]	[1]
	4	(1) DIDYMOS	WFC3/UVIS, ACCUM, UVIS2-FIX	F350LP		POS TARG -41,-2	Sequence 1-4 Non-Int in Visit 02	450 Secs (450 Secs)	[==>]	[1]



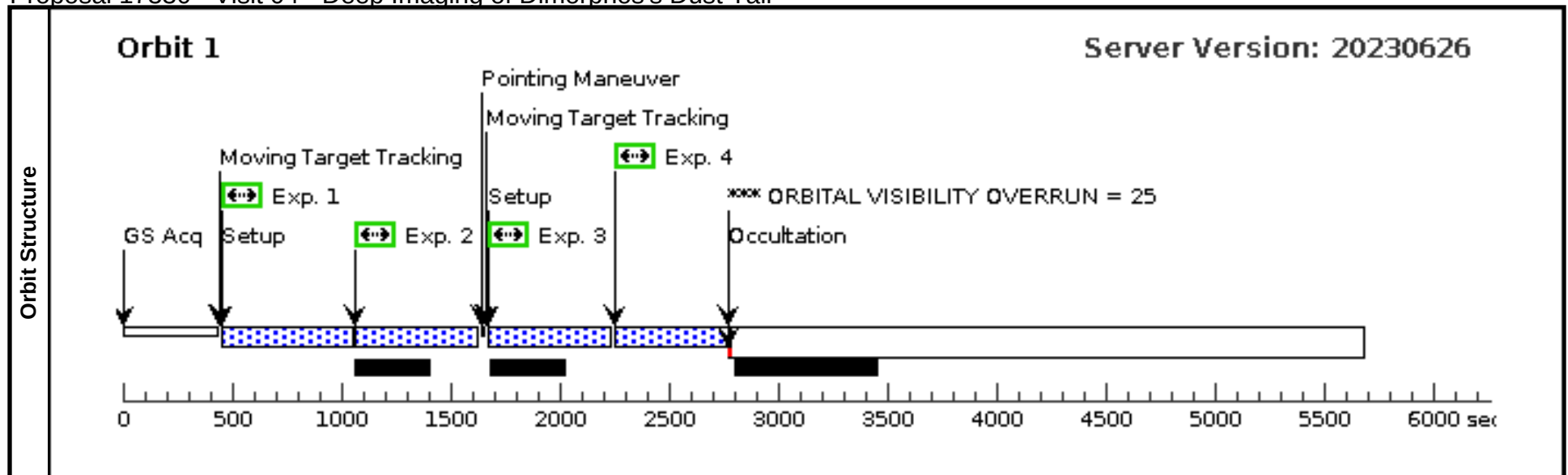
Proposal 17330 - Visit 03 - Deep Imaging of Dimorphos's Dust Tail

Visit	Proposal 17330, Visit 03, completed										Tue Feb 13 15:01:42 GMT 2024		
	Diagnostic Status: Warning												
	Scientific Instruments: WFC3/UVIS												
	Special Requirements: BETWEEN 26-JUN-2023:00:00:00 AND 07-JUL-2023:00:00:00												
Diagnostics	(Visit 03) Warning (Orbit Planner): ORBITAL VISIBILITY OVERRUN												
	(Visit 03) Informational (Form): The Visit Planner and Spike may produce different schedulability results.												
Solar System Targets	#	Name	Level 1	Level 2	Level 3	Window	Ephem Center						
	(1)	DIDYMOS	TYPE=ASTEROID,A=1.64251436375 7057,E=0.3832947329867846,I=3.414 168800300961 ,O=72.99221760945375,W=319.55599 20731379,M=38.72558818260499,EQ UINOX=J2000,EPOCH=12-JAN- 2023:12:00:00,EpochTimeScale=TDB, R0=1. ,A1=0.,A2=-1.042309691002E- 14,A3=0. ,ALN=1.,NM=2.,NN=0.,NK=0.,AMR AT=0.									EARTH	
	Comments: Description=Binary asteroid (65803) Didymos Extended=YES												
Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]		Orbit		
	1		(1) DIDYMOS	WFC3/UVIS, ACCUM, UVIS2-FIX	F350LP		POS TARG -40,0	Sequence 1-4 Non-In t in Visit 03	450 Secs (450 Secs)				
									[==>]		[1]		
	2		(1) DIDYMOS	WFC3/UVIS, ACCUM, UVIS2-FIX	F350LP		POS TARG -40,0	Sequence 1-4 Non-In t in Visit 03	450 Secs (450 Secs)				
									[==>]		[1]		
	3		(1) DIDYMOS	WFC3/UVIS, ACCUM, UVIS2-FIX	F350LP		POS TARG -41,-2	Sequence 1-4 Non-In t in Visit 03	450 Secs (450 Secs)				
									[==>]		[1]		
4		(1) DIDYMOS	WFC3/UVIS, ACCUM, UVIS2-FIX	F350LP		POS TARG -41,-2	Sequence 1-4 Non-In t in Visit 03	450 Secs (450 Secs)					
									[==>]		[1]		



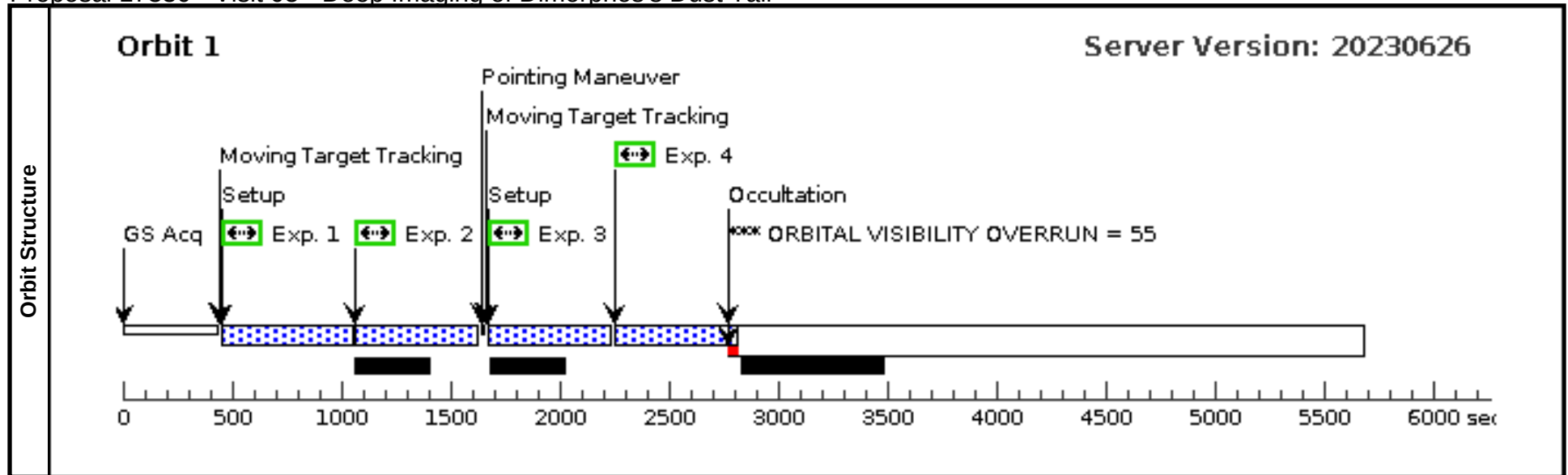
Proposal 17330 - Visit 04 - Deep Imaging of Dimorphos's Dust Tail

Visit	Proposal 17330, Visit 04, completed Tue Feb 13 15:01:42 GMT 2024									
	Diagnostic Status: Warning Scientific Instruments: WFC3/UVIS Special Requirements: BETWEEN 26-JUN-2023:00:00:00 AND 07-JUL-2023:00:00:00									
Diagnostics	(Visit 04) Warning (Orbit Planner): ORBITAL VISIBILITY OVERRUN (Visit 04) Informational (Form): The Visit Planner and Spike may produce different schedulability results.									
Solar System Targets	#	Name	Level 1	Level 2	Level 3	Window	Ephem Center			
	(1)	DIDYMOS	TYPE=ASTEROID,A=1.64251436375 7057,E=0.3832947329867846,I=3.414 168800300961 ,O=72.99221760945375,W=319.55599 20731379,M=38.72558818260499,EQ UINOX=J2000,EPOCH=12-JAN- 2023:12:00:00,EpochTimeScale=TDB, R0=1. ,A1=0.,A2=-1.042309691002E- 14,A3=0. ,ALN=1.,NM=2.,NN=0.,NK=0.,AMR AT=0. Comments: Description=Binary asteroid (65803) Didymos Extended=YES				EARTH			
Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
	1	(1) DIDYMOS	WFC3/UVIS, ACCUM, UVIS2-FIX	F350LP		POS TARG -40,0	Sequence 1-4 Non-Int in Visit 04	450 Secs (450 Secs)	[==>]	[1]
	2	(1) DIDYMOS	WFC3/UVIS, ACCUM, UVIS2-FIX	F350LP		POS TARG -40,0	Sequence 1-4 Non-Int in Visit 04	450 Secs (450 Secs)	[==>]	[1]
	3	(1) DIDYMOS	WFC3/UVIS, ACCUM, UVIS2-FIX	F350LP		POS TARG -41,-2	Sequence 1-4 Non-Int in Visit 04	450 Secs (450 Secs)	[==>]	[1]
	4	(1) DIDYMOS	WFC3/UVIS, ACCUM, UVIS2-FIX	F350LP		POS TARG -41,-2	Sequence 1-4 Non-Int in Visit 04	420 Secs (420 Secs)	[==>]	[1]



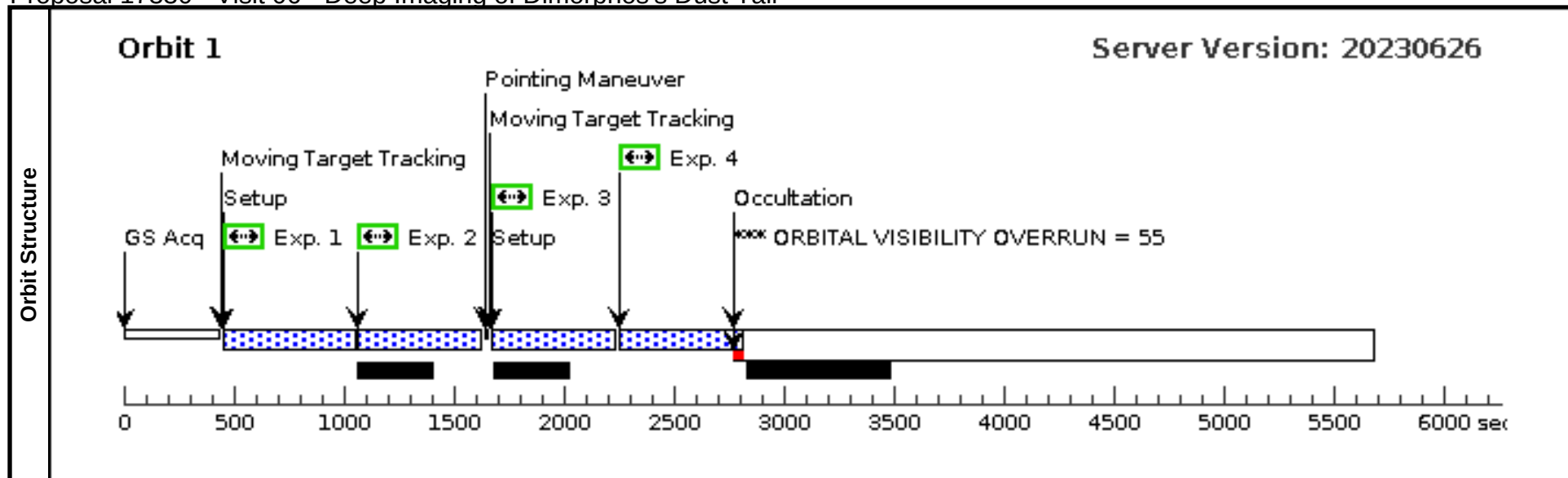
Proposal 17330 - Visit 05 - Deep Imaging of Dimorphos's Dust Tail

Visit	Proposal 17330, Visit 05, completed Tue Feb 13 15:01:42 GMT 2024									
	Diagnostic Status: Warning Scientific Instruments: WFC3/UVIS Special Requirements: BETWEEN 26-JUN-2023:00:00:00 AND 07-JUL-2023:00:00:00									
Diagnostics	(Visit 05) Warning (Orbit Planner): ORBITAL VISIBILITY OVERRUN (Visit 05) Informational (Form): The Visit Planner and Spike may produce different schedulability results.									
Solar System Targets	#	Name	Level 1	Level 2	Level 3	Window	Ephem Center			
	(1)	DIDYMOS	TYPE=ASTEROID,A=1.64251436375 7057,E=0.3832947329867846,I=3.414 168800300961 ,O=72.99221760945375,W=319.55599 20731379,M=38.72558818260499,EQ UINOX=J2000,EPOCH=12-JAN- 2023:12:00:00,EpochTimeScale=TDB, R0=1. ,A1=0.,A2=-1.042309691002E- 14,A3=0. ,ALN=1.,NM=2.,NN=0.,NK=0.,AMR AT=0. Comments: Description=Binary asteroid (65803) Didymos Extended=YES				EARTH			
Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
	1	(1) DIDYMOS	WFC3/UVIS, ACCUM, UVIS2-FIX	F350LP		POS TARG -40,0	Sequence 1-4 Non-Int in Visit 05	450 Secs (450 Secs)	[==>]	[1]
	2	(1) DIDYMOS	WFC3/UVIS, ACCUM, UVIS2-FIX	F350LP		POS TARG -40,0	Sequence 1-4 Non-Int in Visit 05	450 Secs (450 Secs)	[==>]	[1]
	3	(1) DIDYMOS	WFC3/UVIS, ACCUM, UVIS2-FIX	F350LP		POS TARG -41,-2	Sequence 1-4 Non-Int in Visit 05	450 Secs (450 Secs)	[==>]	[1]
	4	(1) DIDYMOS	WFC3/UVIS, ACCUM, UVIS2-FIX	F350LP		POS TARG -41,-2	Sequence 1-4 Non-Int in Visit 05	450 Secs (450 Secs)	[==>]	[1]



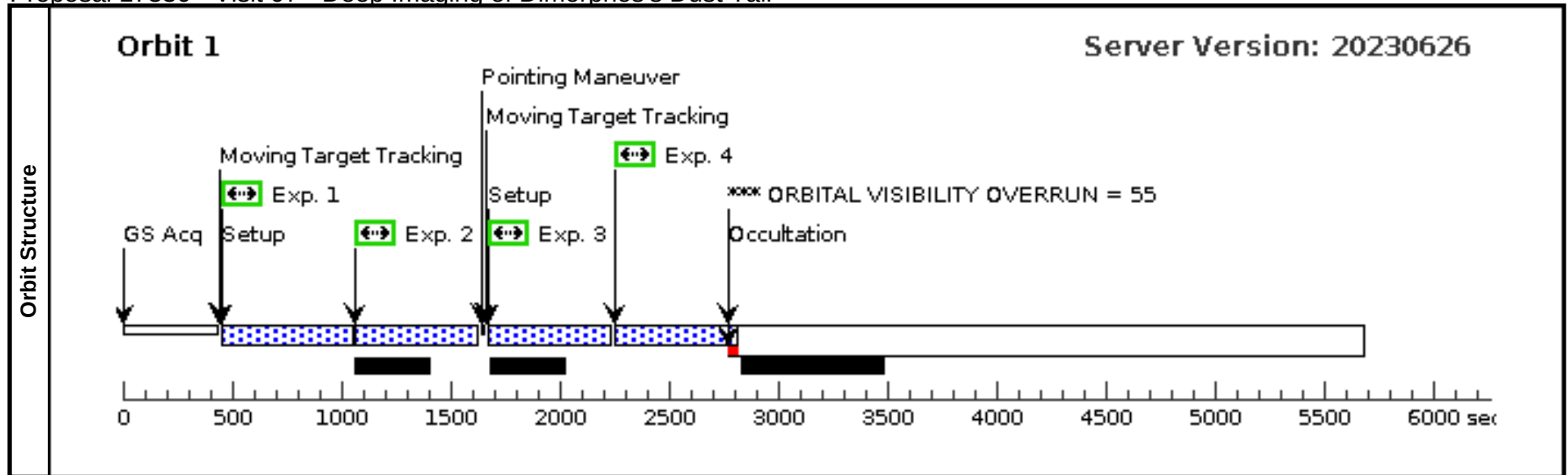
Proposal 17330 - Visit 06 - Deep Imaging of Dimorphos's Dust Tail

Visit	Proposal 17330, Visit 06, completed										Tue Feb 13 15:01:43 GMT 2024	
	Diagnostic Status: Warning											
	Scientific Instruments: WFC3/UVIS											
	Special Requirements: BETWEEN 26-JUN-2023:00:00:00 AND 07-JUL-2023:00:00:00											
Diagnostics	(Visit 06) Warning (Orbit Planner): ORBITAL VISIBILITY OVERRUN											
	(Visit 06) Informational (Form): The Visit Planner and Spike may produce different schedulability results.											
Solar System Targets	#	Name	Level 1	Level 2	Level 3	Window	Ephem Center					
	(1)	DIDYMOS	TYPE=ASTEROID,A=1.64251436375 7057,E=0.3832947329867846,I=3.414 168800300961 ,O=72.99221760945375,W=319.55599 20731379,M=38.72558818260499,EQ UINOX=J2000,EPOCH=12-JAN- 2023:12:00:00,EpochTimeScale=TDB, R0=1. ,A1=0.,A2=-1.042309691002E- 14,A3=0. ,ALN=1.,NM=2.,NN=0.,NK=0.,AMR AT=0.				EARTH					
	Comments: Description=Binary asteroid (65803) Didymos Extended=YES											
Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]		Orbit	
	1	(1) DIDYMOS	WFC3/UVIS, ACCUM, UVIS2-FIX	F350LP			POS TARG -40,0	Sequence 1-4 Non-Int in Visit 06	450 Secs (450 Secs)			
									[==>]		[1]	
	2	(1) DIDYMOS	WFC3/UVIS, ACCUM, UVIS2-FIX	F350LP			POS TARG -40,0	Sequence 1-4 Non-Int in Visit 06	450 Secs (450 Secs)			
									[==>]		[1]	
	3	(1) DIDYMOS	WFC3/UVIS, ACCUM, UVIS2-FIX	F350LP			POS TARG -41,-2	Sequence 1-4 Non-Int in Visit 06	450 Secs (450 Secs)			
									[==>]		[1]	
4	(1) DIDYMOS	WFC3/UVIS, ACCUM, UVIS2-FIX	F350LP			POS TARG -41,-2	Sequence 1-4 Non-Int in Visit 06	450 Secs (450 Secs)				
								[==>]		[1]		



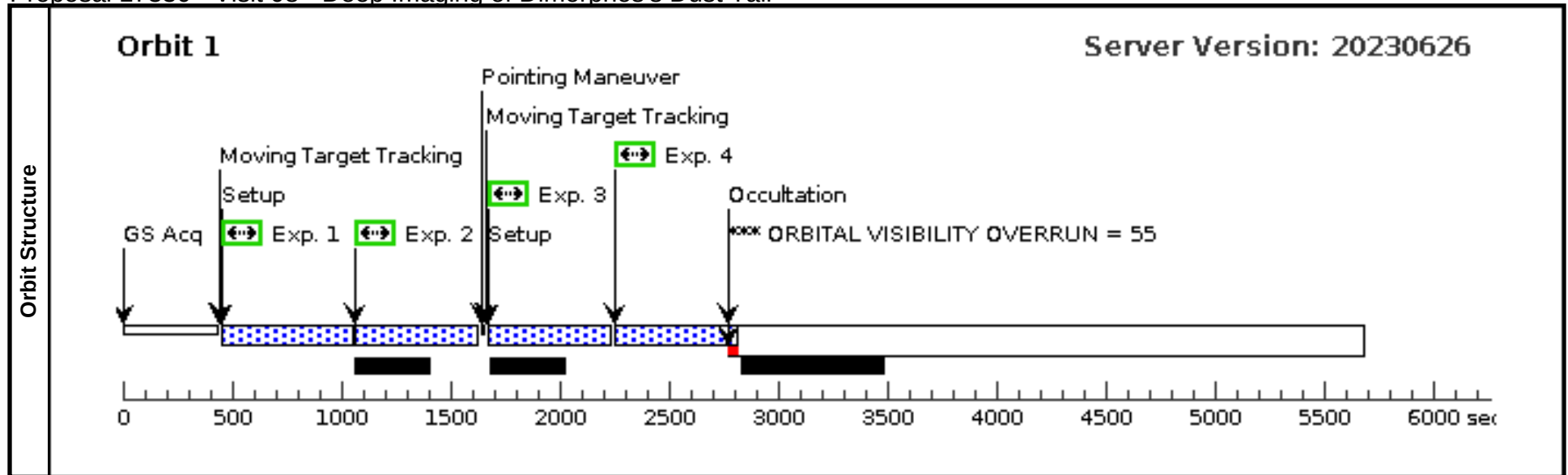
Proposal 17330 - Visit 07 - Deep Imaging of Dimorphos's Dust Tail

Visit	Proposal 17330, Visit 07, completed Tue Feb 13 15:01:43 GMT 2024									
	Diagnostic Status: Warning Scientific Instruments: WFC3/UVIS Special Requirements: BETWEEN 26-JUN-2023:00:00:00 AND 07-JUL-2023:00:00:00									
Diagnostics	(Visit 07) Warning (Orbit Planner): ORBITAL VISIBILITY OVERRUN (Visit 07) Informational (Form): The Visit Planner and Spike may produce different schedulability results.									
Solar System Targets	#	Name	Level 1	Level 2	Level 3	Window	Ephem Center			
	(1)	DIDYMOS	TYPE=ASTEROID,A=1.64251436375 7057,E=0.3832947329867846,I=3.414 168800300961 ,O=72.99221760945375,W=319.55599 20731379,M=38.72558818260499,EQ UINOX=J2000,EPOCH=12-JAN- 2023:12:00:00,EpochTimeScale=TDB, R0=1. ,A1=0.,A2=-1.042309691002E- 14,A3=0. ,ALN=1.,NM=2.,NN=0.,NK=0.,AMR AT=0. Comments: Description=Binary asteroid (65803) Didymos Extended=YES				EARTH			
Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
	1	(1) DIDYMOS	WFC3/UVIS, ACCUM, UVIS2-FIX	F350LP		POS TARG -40,0	Sequence 1-4 Non-Int in Visit 07	450 Secs (450 Secs)	[==>]	[1]
	2	(1) DIDYMOS	WFC3/UVIS, ACCUM, UVIS2-FIX	F350LP		POS TARG -40,0	Sequence 1-4 Non-Int in Visit 07	450 Secs (450 Secs)	[==>]	[1]
	3	(1) DIDYMOS	WFC3/UVIS, ACCUM, UVIS2-FIX	F350LP		POS TARG -41,-2	Sequence 1-4 Non-Int in Visit 07	450 Secs (450 Secs)	[==>]	[1]
	4	(1) DIDYMOS	WFC3/UVIS, ACCUM, UVIS2-FIX	F350LP		POS TARG -41,-2	Sequence 1-4 Non-Int in Visit 07	450 Secs (450 Secs)	[==>]	[1]



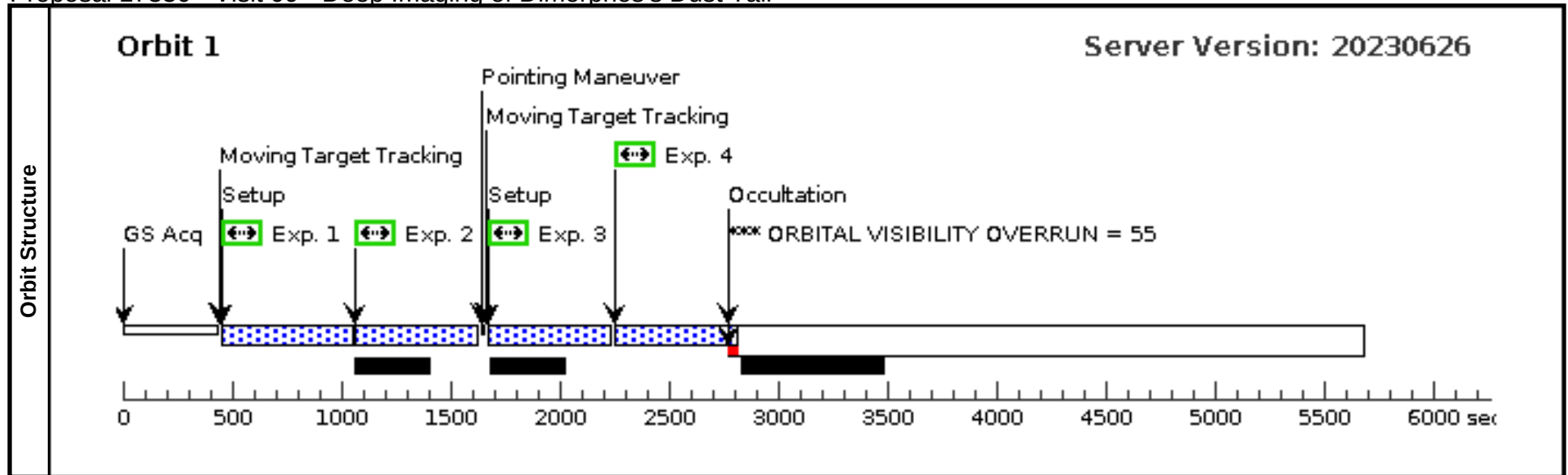
Proposal 17330 - Visit 08 - Deep Imaging of Dimorphos's Dust Tail

Visit	Proposal 17330, Visit 08, completed Tue Feb 13 15:01:43 GMT 2024									
	Diagnostic Status: Warning Scientific Instruments: WFC3/UVIS Special Requirements: BETWEEN 26-JUN-2023:00:00:00 AND 07-JUL-2023:00:00:00									
Diagnostics	(Visit 08) Warning (Orbit Planner): ORBITAL VISIBILITY OVERRUN (Visit 08) Informational (Form): The Visit Planner and Spike may produce different schedulability results.									
Solar System Targets	#	Name	Level 1	Level 2	Level 3	Window	Ephem Center			
	(1)	DIDYMOS	TYPE=ASTEROID,A=1.64251436375 7057,E=0.3832947329867846,I=3.414 168800300961 ,O=72.99221760945375,W=319.55599 20731379,M=38.72558818260499,EQ UINOX=J2000,EPOCH=12-JAN- 2023:12:00:00,EpochTimeScale=TDB, R0=1. ,A1=0.,A2=-1.042309691002E- 14,A3=0. ,ALN=1.,NM=2.,NN=0.,NK=0.,AMR AT=0. Comments: Description=Binary asteroid (65803) Didymos Extended=YES							
Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
	1	(1) DIDYMOS	WFC3/UVIS, ACCUM, UVIS2-FIX	F350LP			POS TARG -40,0	Sequence 1-4 Non-Int in Visit 08	450 Secs (450 Secs) [==>]	[1]
	2	(1) DIDYMOS	WFC3/UVIS, ACCUM, UVIS2-FIX	F350LP			POS TARG -40,0	Sequence 1-4 Non-Int in Visit 08	450 Secs (450 Secs) [==>]	[1]
	3	(1) DIDYMOS	WFC3/UVIS, ACCUM, UVIS2-FIX	F350LP			POS TARG -41,-2	Sequence 1-4 Non-Int in Visit 08	450 Secs (450 Secs) [==>]	[1]
	4	(1) DIDYMOS	WFC3/UVIS, ACCUM, UVIS2-FIX	F350LP			POS TARG -41,-2	Sequence 1-4 Non-Int in Visit 08	450 Secs (450 Secs) [==>]	[1]



Proposal 17330 - Visit 09 - Deep Imaging of Dimorphos's Dust Tail

Visit	Proposal 17330, Visit 09, completed										Tue Feb 13 15:01:43 GMT 2024	
	Diagnostic Status: Warning											
	Scientific Instruments: WFC3/UVIS											
	Special Requirements: BETWEEN 26-JUN-2023:00:00:00 AND 07-JUL-2023:00:00:00											
Diagnostics	(Visit 09) Warning (Orbit Planner): ORBITAL VISIBILITY OVERRUN											
	(Visit 09) Informational (Form): The Visit Planner and Spike may produce different schedulability results.											
Solar System Targets	#	Name	Level 1	Level 2	Level 3	Window	Ephem Center					
	(1)	DIDYMOS	TYPE=ASTEROID,A=1.64251436375 7057,E=0.3832947329867846,I=3.414 168800300961 ,O=72.99221760945375,W=319.55599 20731379,M=38.72558818260499,EQ UINOX=J2000,EPOCH=12-JAN- 2023:12:00:00,EpochTimeScale=TDB, R0=1. ,A1=0.,A2=-1.042309691002E- 14,A3=0. ,ALN=1.,NM=2.,NN=0.,NK=0.,AMR AT=0.							EARTH		
	Comments: Description=Binary asteroid (65803) Didymos Extended=YES											
Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]		Orbit	
	1		(1) DIDYMOS	WFC3/UVIS, ACCUM, UVIS2-FIX	F350LP		POS TARG -40,0	Sequence 1-4 Non-Int in Visit 09	450 Secs (450 Secs)			
									[==>]		[1]	
	2		(1) DIDYMOS	WFC3/UVIS, ACCUM, UVIS2-FIX	F350LP		POS TARG -40,0	Sequence 1-4 Non-Int in Visit 09	450 Secs (450 Secs)			
									[==>]		[1]	
	3		(1) DIDYMOS	WFC3/UVIS, ACCUM, UVIS2-FIX	F350LP		POS TARG -41,-2	Sequence 1-4 Non-Int in Visit 09	450 Secs (450 Secs)			
									[==>]		[1]	
4		(1) DIDYMOS	WFC3/UVIS, ACCUM, UVIS2-FIX	F350LP		POS TARG -41,-2	Sequence 1-4 Non-Int in Visit 09	450 Secs (450 Secs)				
								[==>]		[1]		



Proposal 17330 - Visit 10 - Deep Imaging of Dimorphos's Dust Tail

Visit	Proposal 17330, Visit 10, completed Tue Feb 13 15:01:43 GMT 2024									
	Diagnostic Status: Warning Scientific Instruments: WFC3/UVIS Special Requirements: BETWEEN 26-JUN-2023:00:00:00 AND 07-JUL-2023:00:00:00									
Diagnostics	(Visit 10) Warning (Orbit Planner): ORBITAL VISIBILITY OVERRUN (Visit 10) Informational (Form): The Visit Planner and Spike may produce different schedulability results.									
Solar System Targets	#	Name	Level 1	Level 2	Level 3	Window	Ephem Center			
	(1)	DIDYMOS	TYPE=ASTEROID,A=1.64251436375 7057,E=0.3832947329867846,I=3.414 168800300961 ,O=72.99221760945375,W=319.55599 20731379,M=38.72558818260499,EQ UINOX=J2000,EPOCH=12-JAN- 2023:12:00:00,EpochTimeScale=TDB, R0=1. ,A1=0.,A2=-1.042309691002E- 14,A3=0. ,ALN=1.,NM=2.,NN=0.,NK=0.,AMR AT=0. Comments: Description=Binary asteroid (65803) Didymos Extended=YES				EARTH			
Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
	1	(1) DIDYMOS	WFC3/UVIS, ACCUM, UVIS2-FIX	F350LP		POS TARG -40,0	Sequence 1-4 Non-Int in Visit 10	450 Secs (450 Secs)	[==>]	[1]
	2	(1) DIDYMOS	WFC3/UVIS, ACCUM, UVIS2-FIX	F350LP		POS TARG -40,0	Sequence 1-4 Non-Int in Visit 10	450 Secs (450 Secs)	[==>]	[1]
	3	(1) DIDYMOS	WFC3/UVIS, ACCUM, UVIS2-FIX	F350LP		POS TARG -41,-2	Sequence 1-4 Non-Int in Visit 10	450 Secs (450 Secs)	[==>]	[1]
	4	(1) DIDYMOS	WFC3/UVIS, ACCUM, UVIS2-FIX	F350LP		POS TARG -41,-2	Sequence 1-4 Non-Int in Visit 10	450 Secs (450 Secs)	[==>]	[1]

