



## 16454 - The Extended Death Throes of a Dark Vortex on Neptune

Cycle: 28, 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) NEPTUNE	WFC3/UVIS	1	10-Nov-2020 10:01:30.0	yes
02	(1) NEPTUNE	WFC3/UVIS	1	10-Nov-2020 10:01:33.0	yes
03	(1) NEPTUNE	WFC3/UVIS	1	10-Nov-2020 10:01:36.0	yes
04	(1) NEPTUNE	WFC3/UVIS	1	10-Nov-2020 10:01:39.0	yes
05	(1) NEPTUNE	WFC3/UVIS	1	10-Nov-2020 10:01:42.0	yes
06	(1) NEPTUNE	WFC3/UVIS	1	10-Nov-2020 10:01:45.0	yes
07	(1) NEPTUNE	WFC3/UVIS	1	10-Nov-2020 10:01:48.0	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>
08	(1) NEPTUNE	WFC3/UVIS	1	10-Nov-2020 10:01:50.0	yes
09	(1) NEPTUNE	WFC3/UVIS	1	10-Nov-2020 10:01:53.0	yes
10	(1) NEPTUNE	WFC3/UVIS	1	10-Nov-2020 10:01:56.0	yes

10 Total Orbits Used

## **ABSTRACT**

A dark vortex (called NDS-2018) has been discovered on Neptune, and tracked over three years. This very dark feature has a higher contrast than any other previous vortex (including the Great Dark Spot seen by Voyager). After its first sighting in 2018, it has also lacked obvious "companion clouds" that are common to most other dark spots. But most critically, 2019 data showed that the vortex was drifting equatorward. This was the first instance when a dark vortex tracked by HST actually followed the patterns of equatorward drift seen in numerical models.

Models predict that vortices disrupt after crossing a critical latitude of ~15 deg from the equator. But 2020 HST data showed that instead of drifting and subsequently disrupting, NDS-2018 had arrested its motion just short of the predicted critical latitude. We propose imaging observations prior to Jan 2021 (solar avoidance) to investigate vortex evolution and potential global-scale changes in Neptune's atmosphere.

We will search for oscillations in position and shape (as seen by Voyager for previous vortices), and measure drift in both latitude and longitude. Drift rates and oscillations are key parameters used by numerical models to constrain atmospheric properties such as the thermal structure, methane abundance, and deep winds---all of which remain open questions slated for eventual investigation by atmospheric entry probes in the coming decades. We will also follow up on a small transient dark spot in January 2020 data that may represent a stage of the disruption process, characterize a dramatic drop in northern CH<sub>4</sub>-cloud activity, and track south polar features unrelated to the vortex.

## **OBSERVING DESCRIPTION**

We image Neptune in a set of 5 filters. Exposures are dithered and spread over each full orbit (for additional rotational dithering), to smooth out pixel-to-pixel noise on WFC3/UVIS. The goal is to achieve 14 frames of F467M (most sensitive to the dark vortex) per orbit, and exposures in other filters may be cut or have reduced exposure times if visibility window duration is restricted.

A single Neptune rotation is covered by 5 orbits (visits 1-5), each separated from each other by one orbit to span the 16 hour rotation period.

A second Neptune rotation is similarly covered by visits 6-10. The two rotations should be observed within 4 days of each other.

Proposal 16454 - ROT1-A (01) - The Extended Death Throes of a Dark Vortex on Neptune

Tue Nov 10 15:01:57 GMT 2020

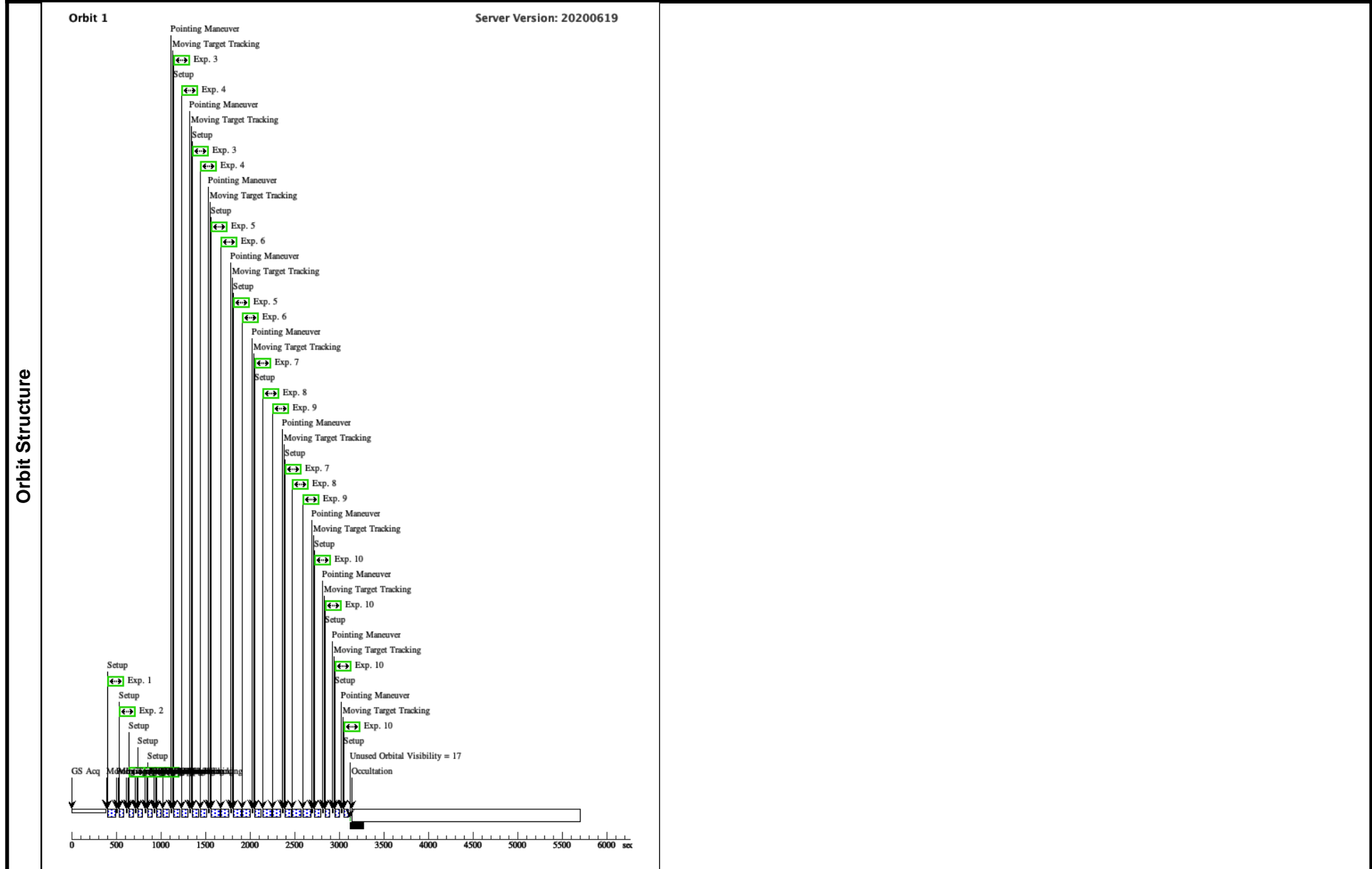
<b>Visit</b>	<b>Proposal 16454, ROT1-A (01), implementation</b> <b>Diagnostic Status: Warning</b> Scientific Instruments: WFC3/UVIS Special Requirements: (none)						
	<b>Diagnosics</b> (F467M (01.001)) Warning (Form): FLASH level may be too low for this exposure or a short subexposure. See extended explanation in the diagnostic browser (F467M (01.002)) Warning (Form): FLASH level may be too low for this exposure or a short subexposure. See extended explanation in the diagnostic browser (F467M (01.003)) Warning (Form): FLASH level may be too low for this exposure or a short subexposure. See extended explanation in the diagnostic browser (F547M (01.004)) Warning (Form): FLASH level may be too low for this exposure or a short subexposure. See extended explanation in the diagnostic browser (F845M (01.005)) Warning (Form): FLASH level may be too low for this exposure or a short subexposure. See extended explanation in the diagnostic browser (F390M (01.006)) Warning (Form): FLASH level may be too low for this exposure or a short subexposure. See extended explanation in the diagnostic browser (F467M (01.007)) Warning (Form): FLASH level may be too low for this exposure or a short subexposure. See extended explanation in the diagnostic browser (F845M (01.008)) Warning (Form): FLASH level may be too low for this exposure or a short subexposure. See extended explanation in the diagnostic browser (F390M (01.009)) Warning (Form): FLASH level may be too low for this exposure or a short subexposure. See extended explanation in the diagnostic browser (F467M (01.010)) Warning (Form): FLASH level may be too low for this exposure or a short subexposure. See extended explanation in the diagnostic browser						
<b>Patterns</b>	<b>#</b>	<b>Primary Pattern</b>	<b>Secondary Pattern</b>	<b>Exposures</b>			
	(1)	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=true	(2), (10)			
	(2)	Pattern Type=WFC3-UVIS-DITHER-LINE-3PT Purpose=DITHER Number Of Points=3 Point Spacing=0.135 Line Spacing=	Coordinate Frame=POS-TARG Pattern Orientation=46.84 Angle Between Sides= Center Pattern=true	(3-4)			
	(3)	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=true	(5-6), (7-9)			
<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)	NEPTUNE	STD=NEPTUNE				NOT ECL P PARTIAL OF NEPTUNE EARTH BY TRITON FROM EARTH
Comments: Description=Neptune Extended=YES							

Proposal 16454 - ROT1-A (01) - The Extended Death Throes of a Dark Vortex on Neptune

Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
	1	F467M	(1) NEPTUNE	WFC3/UVIS, ACCUM, UVIS2-C512C-SUB	F467M			Sequence 1-10 Non-Int in ROT1-A (01)	15 Secs (15 Secs) [==>]	[1]
	2	F467M	(1) NEPTUNE	WFC3/UVIS, ACCUM, UVIS2-C512C-SUB	F467M			Sequence 1-10 Non-Int in ROT1-A (01) Pattern 1, Exps 2-2 in Sequence 1-10 Non-Int in ROT1-A (01) (1)	15 Secs (60 Secs) [==>(Pattern 1)] [==>(Pattern 2)] [==>(Pattern 3)] [==>(Pattern 4)]	[1]
	3	F467M	(1) NEPTUNE	WFC3/UVIS, ACCUM, UVIS2-C512C-SUB	F467M			Sequence 1-10 Non-Int in ROT1-A (01) Pattern 2, Exps 3-4 in Sequence 1-10 Non-Int in ROT1-A (01) (2)	15 Secs (45 Secs) [==>(Pattern 1)] [==>(Pattern 2)] [==>(Pattern 3)]	[1]
	4	F547M	(1) NEPTUNE	WFC3/UVIS, ACCUM, UVIS2-C512C-SUB	F547M			Sequence 1-10 Non-Int in ROT1-A (01) Pattern 2, Exps 3-4 in Sequence 1-10 Non-Int in ROT1-A (01) (2)	6 Secs (18 Secs) [==>(Pattern 1)] [==>(Pattern 2)] [==>(Pattern 3)]	[1]
	5	F845M	(1) NEPTUNE	WFC3/UVIS, ACCUM, UVIS2-C512C-SUB	F845M			Sequence 1-10 Non-Int in ROT1-A (01) Pattern 3, Exps 5-6 in Sequence 1-10 Non-Int in ROT1-A (01) (3)	40 Secs (80 Secs) [==>(Pattern 1)] [==>(Pattern 2)]	[1]
	6	F390M	(1) NEPTUNE	WFC3/UVIS, ACCUM, UVIS2-C512C-SUB	F390M			Sequence 1-10 Non-Int in ROT1-A (01) Pattern 3, Exps 5-6 in Sequence 1-10 Non-Int in ROT1-A (01) (3)	15 Secs (30 Secs) [==>(Pattern 1)] [==>(Pattern 2)]	[1]
	7	F467M	(1) NEPTUNE	WFC3/UVIS, ACCUM, UVIS2-C512C-SUB	F467M			Sequence 1-10 Non-Int in ROT1-A (01) Pattern 3, Exps 7-9 in Sequence 1-10 Non-Int in ROT1-A (01) (3)	15 Secs (30 Secs) [==>(Pattern 1)] [==>(Pattern 2)]	[1]
	8	F845M	(1) NEPTUNE	WFC3/UVIS, ACCUM, UVIS2-C512C-SUB	F845M			Sequence 1-10 Non-Int in ROT1-A (01) Pattern 3, Exps 7-9 in Sequence 1-10 Non-Int in ROT1-A (01) (3)	40 Secs (80 Secs) [==>(Pattern 1)] [==>(Pattern 2)]	[1]
	9	F390M	(1) NEPTUNE	WFC3/UVIS, ACCUM, UVIS2-C512C-SUB	F390M			Sequence 1-10 Non-Int in ROT1-A (01) Pattern 3, Exps 7-9 in Sequence 1-10 Non-Int in ROT1-A (01) (3)	15 Secs (30 Secs) [==>(Pattern 1)] [==>(Pattern 2)]	[1]

Proposal 16454 - ROT1-A (01) - The Extended Death Throes of a Dark Vortex on Neptune

10	F467M	(1) NEPTUNE	WFC3/UVIS, ACCUM, UVIS2-C512C-SUB	F467M	Sequence 1-10 Non-Int in ROT1-A (01)	15 Secs (60 Secs)	
					Pattern 1, Exps 10-10 in Sequence 1-10 Non-Int in ROT1-A (01) (1)	[=>(Pattern 1)] [=>(Pattern 2)] [=>(Pattern 3)] [=>(Pattern 4)]	[1]



Proposal 16454 - ROT1-B (02) - The Extended Death Throes of a Dark Vortex on Neptune

Tue Nov 10 15:01:57 GMT 2020

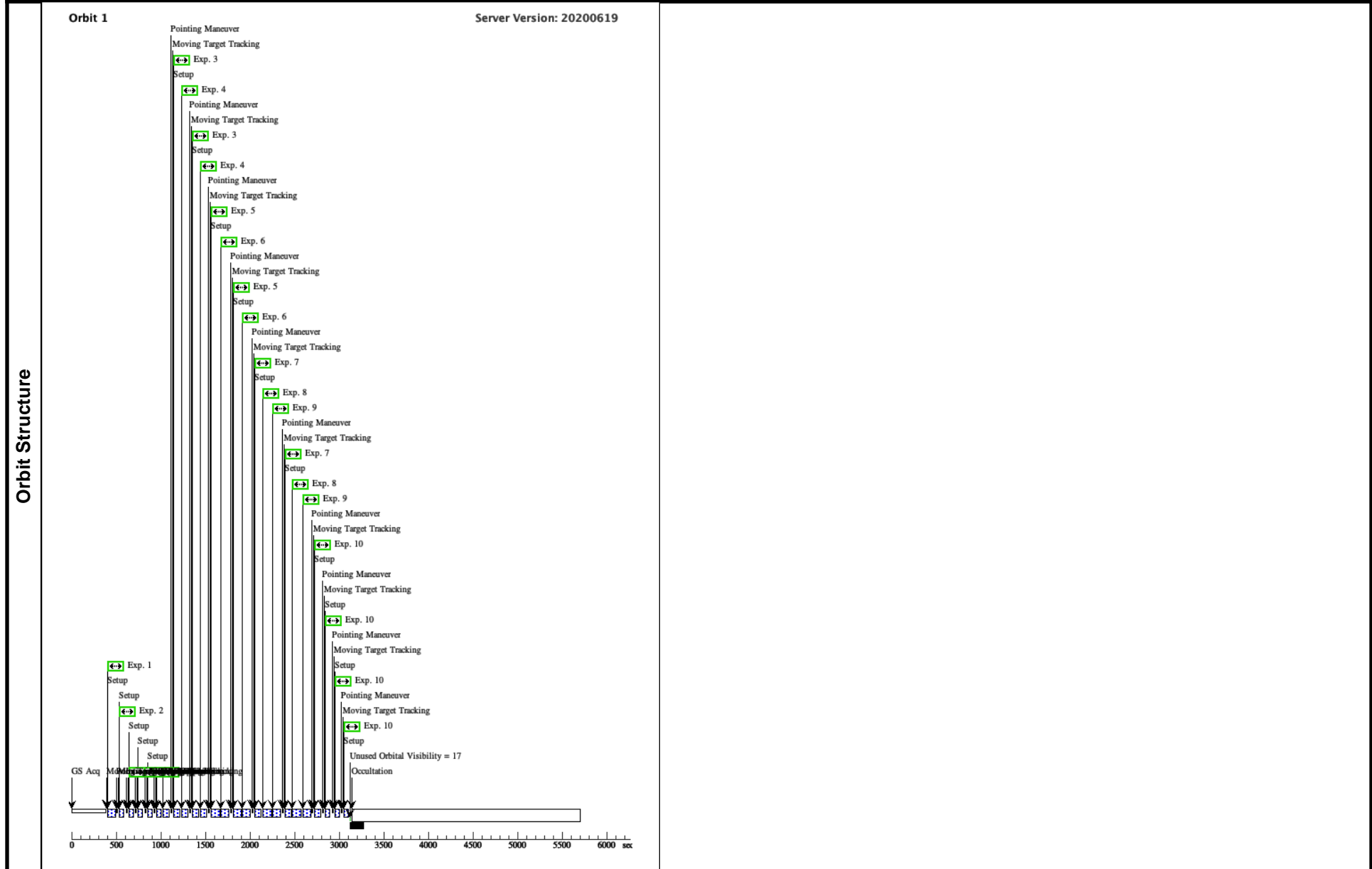
<b>Visit</b>	<b>Proposal 16454, ROT1-B (02), implementation</b> <b>Diagnostic Status: Warning</b> Scientific Instruments: WFC3/UVIS Special Requirements: AFTER 01 BY 1.9 Orbits TO 2.1 Orbits						
	<b>Diagnosics</b> (F467M (02.001)) Warning (Form): FLASH level may be too low for this exposure or a short subexposure. See extended explanation in the diagnostic browser (F467M (02.002)) Warning (Form): FLASH level may be too low for this exposure or a short subexposure. See extended explanation in the diagnostic browser (F467M (02.003)) Warning (Form): FLASH level may be too low for this exposure or a short subexposure. See extended explanation in the diagnostic browser (F547M (02.004)) Warning (Form): FLASH level may be too low for this exposure or a short subexposure. See extended explanation in the diagnostic browser (F845M (02.005)) Warning (Form): FLASH level may be too low for this exposure or a short subexposure. See extended explanation in the diagnostic browser (F390M (02.006)) Warning (Form): FLASH level may be too low for this exposure or a short subexposure. See extended explanation in the diagnostic browser (F467M (02.007)) Warning (Form): FLASH level may be too low for this exposure or a short subexposure. See extended explanation in the diagnostic browser (F845M (02.008)) Warning (Form): FLASH level may be too low for this exposure or a short subexposure. See extended explanation in the diagnostic browser (F390M (02.009)) Warning (Form): FLASH level may be too low for this exposure or a short subexposure. See extended explanation in the diagnostic browser (F467M (02.010)) Warning (Form): FLASH level may be too low for this exposure or a short subexposure. See extended explanation in the diagnostic browser						
<b>Patterns</b>	<b>#</b>	<b>Primary Pattern</b>	<b>Secondary Pattern</b>	<b>Exposures</b>			
	(1)	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=true	(2), (10)			
	(2)	Pattern Type=WFC3-UVIS-DITHER-LINE-3PT Purpose=DITHER Number Of Points=3 Point Spacing=0.135 Line Spacing=	Coordinate Frame=POS-TARG Pattern Orientation=46.84 Angle Between Sides= Center Pattern=true	(3-4)			
	(3)	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=true	(5-6), (7-9)			
<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)	NEPTUNE	STD=NEPTUNE				NOT ECL P PARTIAL OF NEPTUNE EARTH BY TRITON FROM EARTH
Comments: Description=Neptune Extended=YES							

Proposal 16454 - ROT1-B (02) - The Extended Death Throes of a Dark Vortex on Neptune

Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
	1	F467M	(1) NEPTUNE	WFC3/UVIS, ACCUM, UVIS2-C512C-SUB	F467M			Sequence 1-10 Non-Int in ROT1-B (02)	15 Secs (15 Secs) [==>]	[1]
	2	F467M	(1) NEPTUNE	WFC3/UVIS, ACCUM, UVIS2-C512C-SUB	F467M			Sequence 1-10 Non-Int in ROT1-B (02) Pattern 1, Exps 2-2 in Sequence 1-10 Non-Int in ROT1-B (02) (1)	15 Secs (60 Secs) [==>(Pattern 1)] [==>(Pattern 2)] [==>(Pattern 3)] [==>(Pattern 4)]	[1]
	3	F467M	(1) NEPTUNE	WFC3/UVIS, ACCUM, UVIS2-C512C-SUB	F467M			Sequence 1-10 Non-Int in ROT1-B (02) Pattern 2, Exps 3-4 in Sequence 1-10 Non-Int in ROT1-B (02) (2)	15 Secs (45 Secs) [==>(Pattern 1)] [==>(Pattern 2)] [==>(Pattern 3)]	[1]
	4	F547M	(1) NEPTUNE	WFC3/UVIS, ACCUM, UVIS2-C512C-SUB	F547M			Sequence 1-10 Non-Int in ROT1-B (02) Pattern 2, Exps 3-4 in Sequence 1-10 Non-Int in ROT1-B (02) (2)	6 Secs (18 Secs) [==>(Pattern 1)] [==>(Pattern 2)] [==>(Pattern 3)]	[1]
	5	F845M	(1) NEPTUNE	WFC3/UVIS, ACCUM, UVIS2-C512C-SUB	F845M			Sequence 1-10 Non-Int in ROT1-B (02) Pattern 3, Exps 5-6 in Sequence 1-10 Non-Int in ROT1-B (02) (3)	40 Secs (80 Secs) [==>(Pattern 1)] [==>(Pattern 2)]	[1]
	6	F390M	(1) NEPTUNE	WFC3/UVIS, ACCUM, UVIS2-C512C-SUB	F390M			Sequence 1-10 Non-Int in ROT1-B (02) Pattern 3, Exps 5-6 in Sequence 1-10 Non-Int in ROT1-B (02) (3)	15 Secs (30 Secs) [==>(Pattern 1)] [==>(Pattern 2)]	[1]
	7	F467M	(1) NEPTUNE	WFC3/UVIS, ACCUM, UVIS2-C512C-SUB	F467M			Sequence 1-10 Non-Int in ROT1-B (02) Pattern 3, Exps 7-9 in Sequence 1-10 Non-Int in ROT1-B (02) (3)	15 Secs (30 Secs) [==>(Pattern 1)] [==>(Pattern 2)]	[1]
	8	F845M	(1) NEPTUNE	WFC3/UVIS, ACCUM, UVIS2-C512C-SUB	F845M			Sequence 1-10 Non-Int in ROT1-B (02) Pattern 3, Exps 7-9 in Sequence 1-10 Non-Int in ROT1-B (02) (3)	40 Secs (80 Secs) [==>(Pattern 1)] [==>(Pattern 2)]	[1]
	9	F390M	(1) NEPTUNE	WFC3/UVIS, ACCUM, UVIS2-C512C-SUB	F390M			Sequence 1-10 Non-Int in ROT1-B (02) Pattern 3, Exps 7-9 in Sequence 1-10 Non-Int in ROT1-B (02) (3)	15 Secs (30 Secs) [==>(Pattern 1)] [==>(Pattern 2)]	[1]

Proposal 16454 - ROT1-B (02) - The Extended Death Throes of a Dark Vortex on Neptune

10	F467M	(1) NEPTUNE	WFC3/UVIS, ACCUM, UVIS2-C512C-SUB	F467M	Sequence 1-10 Non-Int in ROT1-B (02)	15 Secs (60 Secs)	
					Pattern 1, Exps 10-10 in Sequence 1-10 Non-Int in ROT1-B (02) (1)	[=>(Pattern 1)] [=>(Pattern 2)] [=>(Pattern 3)] [=>(Pattern 4)]	[1]



Proposal 16454 - ROT1-C (03) - The Extended Death Throes of a Dark Vortex on Neptune

Tue Nov 10 15:01:57 GMT 2020

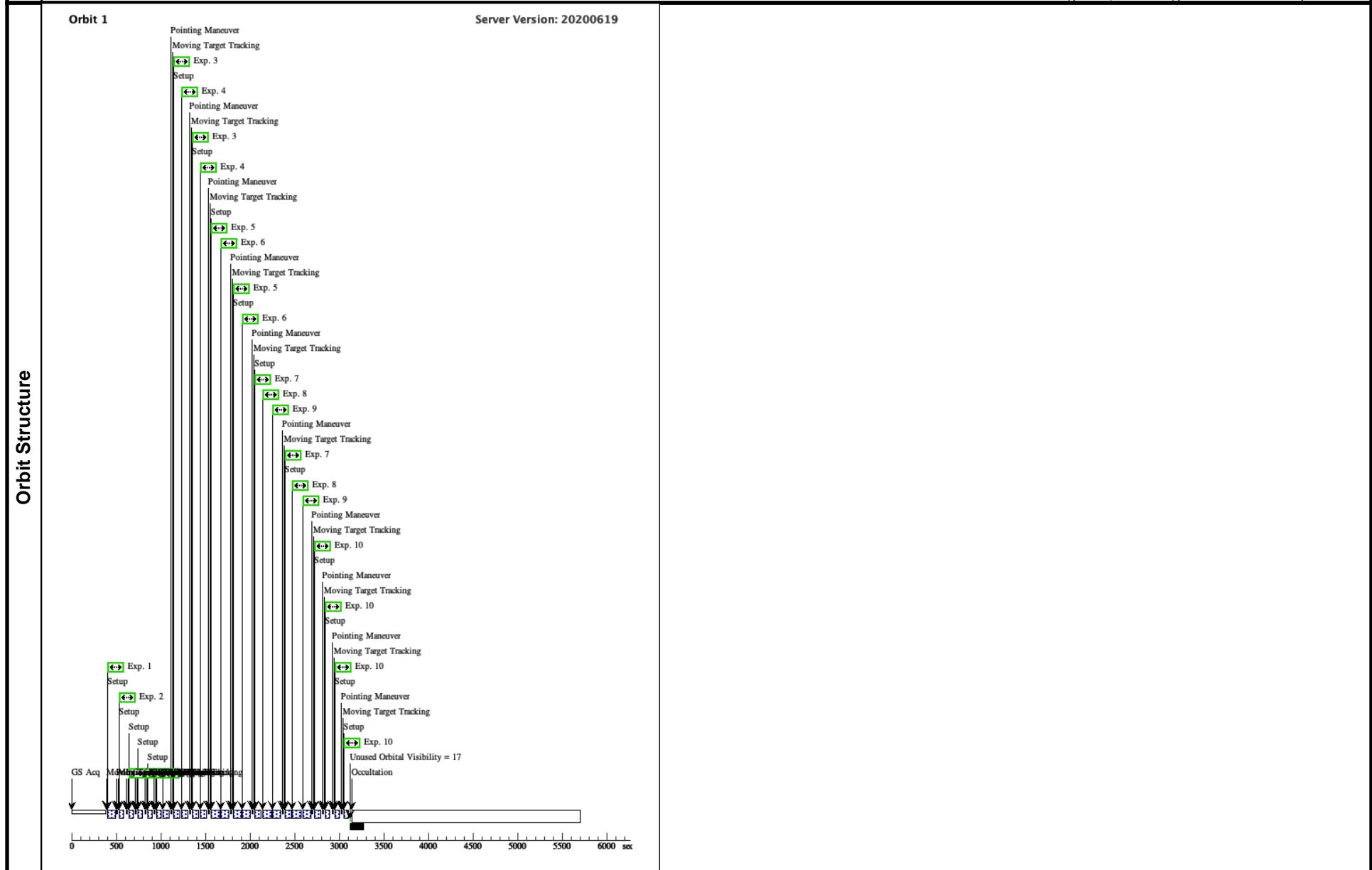
<b>Visit</b>	<b>Proposal 16454, ROT1-C (03), implementation</b> <b>Diagnostic Status: Warning</b> Scientific Instruments: WFC3/UVIS Special Requirements: AFTER 02 BY 1.9 Orbits TO 2.1 Orbits						
	<b>Diagnosics</b> (F467M (03.001)) Warning (Form): FLASH level may be too low for this exposure or a short subexposure. See extended explanation in the diagnostic browser (F467M (03.002)) Warning (Form): FLASH level may be too low for this exposure or a short subexposure. See extended explanation in the diagnostic browser (F467M (03.003)) Warning (Form): FLASH level may be too low for this exposure or a short subexposure. See extended explanation in the diagnostic browser (F547M (03.004)) Warning (Form): FLASH level may be too low for this exposure or a short subexposure. See extended explanation in the diagnostic browser (F845M (03.005)) Warning (Form): FLASH level may be too low for this exposure or a short subexposure. See extended explanation in the diagnostic browser (F390M (03.006)) Warning (Form): FLASH level may be too low for this exposure or a short subexposure. See extended explanation in the diagnostic browser (F467M (03.007)) Warning (Form): FLASH level may be too low for this exposure or a short subexposure. See extended explanation in the diagnostic browser (F845M (03.008)) Warning (Form): FLASH level may be too low for this exposure or a short subexposure. See extended explanation in the diagnostic browser (F390M (03.009)) Warning (Form): FLASH level may be too low for this exposure or a short subexposure. See extended explanation in the diagnostic browser (F467M (03.010)) Warning (Form): FLASH level may be too low for this exposure or a short subexposure. See extended explanation in the diagnostic browser						
<b>Patterns</b>	<b>#</b>	<b>Primary Pattern</b>		<b>Secondary Pattern</b>		<b>Exposures</b>	
	(1)	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=true			(2), (10)	
	(2)	Pattern Type=WFC3-UVIS-DITHER-LINE-3PT Purpose=DITHER Number Of Points=3 Point Spacing=0.135 Line Spacing=	Coordinate Frame=POS-TARG Pattern Orientation=46.84 Angle Between Sides= Center Pattern=true			(3-4)	
	(3)	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=true			(5-6), (7-9)	
<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)	NEPTUNE	STD=NEPTUNE				NOT ECL P PARTIAL OF NEPTUNE EARTH BY TRITON FROM EARTH  <i>Comments: Description=Neptune                  Extended=YES</i>

Proposal 16454 - ROT1-C (03) - The Extended Death Throes of a Dark Vortex on Neptune

Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
	1	F467M	(1) NEPTUNE	WFC3/UVIS, ACCUM, UVIS2-C512C-SUB	F467M			Sequence 1-10 Non-Int in ROT1-C (03)	15 Secs (15 Secs) [==>]	[1]
	2	F467M	(1) NEPTUNE	WFC3/UVIS, ACCUM, UVIS2-C512C-SUB	F467M			Sequence 1-10 Non-Int in ROT1-C (03) Pattern 1, Exps 2-2 in Sequence 1-10 Non-Int in ROT1-C (03) (1)	15 Secs (60 Secs) [==>(Pattern 1)] [==>(Pattern 2)] [==>(Pattern 3)] [==>(Pattern 4)]	[1]
	3	F467M	(1) NEPTUNE	WFC3/UVIS, ACCUM, UVIS2-C512C-SUB	F467M			Sequence 1-10 Non-Int in ROT1-C (03) Pattern 2, Exps 3-4 in Sequence 1-10 Non-Int in ROT1-C (03) (2)	15 Secs (45 Secs) [==>(Pattern 1)] [==>(Pattern 2)] [==>(Pattern 3)]	[1]
	4	F547M	(1) NEPTUNE	WFC3/UVIS, ACCUM, UVIS2-C512C-SUB	F547M			Sequence 1-10 Non-Int in ROT1-C (03) Pattern 2, Exps 3-4 in Sequence 1-10 Non-Int in ROT1-C (03) (2)	6 Secs (18 Secs) [==>(Pattern 1)] [==>(Pattern 2)] [==>(Pattern 3)]	[1]
	5	F845M	(1) NEPTUNE	WFC3/UVIS, ACCUM, UVIS2-C512C-SUB	F845M			Sequence 1-10 Non-Int in ROT1-C (03) Pattern 3, Exps 5-6 in Sequence 1-10 Non-Int in ROT1-C (03) (3)	40 Secs (80 Secs) [==>(Pattern 1)] [==>(Pattern 2)]	[1]
	6	F390M	(1) NEPTUNE	WFC3/UVIS, ACCUM, UVIS2-C512C-SUB	F390M			Sequence 1-10 Non-Int in ROT1-C (03) Pattern 3, Exps 5-6 in Sequence 1-10 Non-Int in ROT1-C (03) (3)	15 Secs (30 Secs) [==>(Pattern 1)] [==>(Pattern 2)]	[1]
	7	F467M	(1) NEPTUNE	WFC3/UVIS, ACCUM, UVIS2-C512C-SUB	F467M			Sequence 1-10 Non-Int in ROT1-C (03) Pattern 3, Exps 7-9 in Sequence 1-10 Non-Int in ROT1-C (03) (3)	15 Secs (30 Secs) [==>(Pattern 1)] [==>(Pattern 2)]	[1]
	8	F845M	(1) NEPTUNE	WFC3/UVIS, ACCUM, UVIS2-C512C-SUB	F845M			Sequence 1-10 Non-Int in ROT1-C (03) Pattern 3, Exps 7-9 in Sequence 1-10 Non-Int in ROT1-C (03) (3)	40 Secs (80 Secs) [==>(Pattern 1)] [==>(Pattern 2)]	[1]
	9	F390M	(1) NEPTUNE	WFC3/UVIS, ACCUM, UVIS2-C512C-SUB	F390M			Sequence 1-10 Non-Int in ROT1-C (03) Pattern 3, Exps 7-9 in Sequence 1-10 Non-Int in ROT1-C (03) (3)	15 Secs (30 Secs) [==>(Pattern 1)] [==>(Pattern 2)]	[1]

Proposal 16454 - ROT1-C (03) - The Extended Death Throes of a Dark Vortex on Neptune

10	F467M	(1) NEPTUNE	WFC3/UVIS, ACCUM, UVIS2-C512C-SUB	F467M	Sequence 1-10 Non-Int in ROT1-C (03)	15 Secs (60 Secs)	
					Pattern 1, Exps 10-10 in Sequence 1-10 Non-Int in ROT1-C (03) (1)	[=>(Pattern 1)] [=>(Pattern 2)] [=>(Pattern 3)] [=>(Pattern 4)]	[1]



Proposal 16454 - ROT1-D (04) - The Extended Death Throes of a Dark Vortex on Neptune

Tue Nov 10 15:01:58 GMT 2020

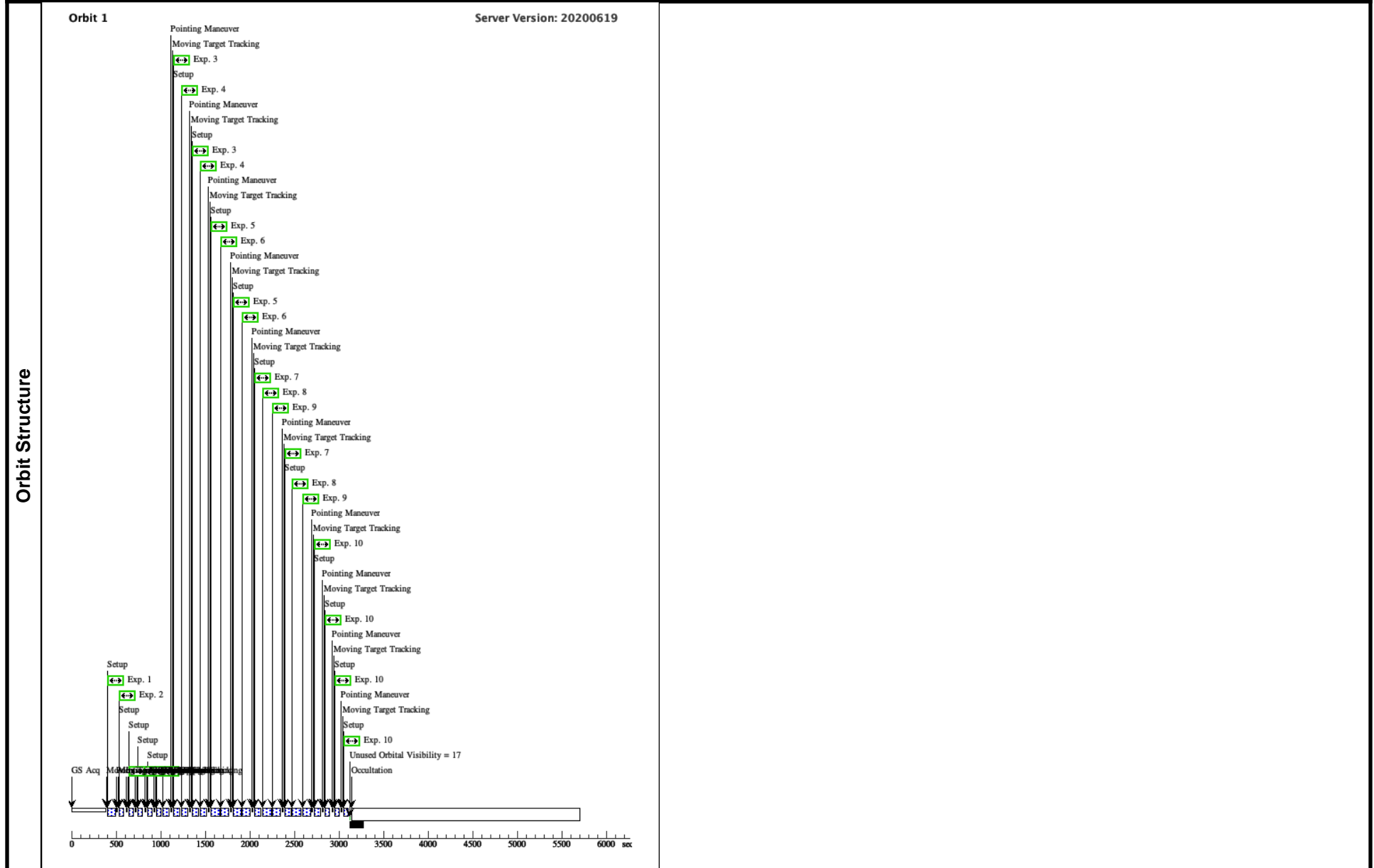
<b>Visit</b>	<b>Proposal 16454, ROT1-D (04), implementation</b> <b>Diagnostic Status: Warning</b> Scientific Instruments: WFC3/UVIS Special Requirements: AFTER 03 BY 1.9 Orbits TO 2.1 Orbits						
	<b>Diagnosics</b> (F467M (04.001)) Warning (Form): FLASH level may be too low for this exposure or a short subexposure. See extended explanation in the diagnostic browser (F467M (04.002)) Warning (Form): FLASH level may be too low for this exposure or a short subexposure. See extended explanation in the diagnostic browser (F467M (04.003)) Warning (Form): FLASH level may be too low for this exposure or a short subexposure. See extended explanation in the diagnostic browser (F547M (04.004)) Warning (Form): FLASH level may be too low for this exposure or a short subexposure. See extended explanation in the diagnostic browser (F845M (04.005)) Warning (Form): FLASH level may be too low for this exposure or a short subexposure. See extended explanation in the diagnostic browser (F390M (04.006)) Warning (Form): FLASH level may be too low for this exposure or a short subexposure. See extended explanation in the diagnostic browser (F467M (04.007)) Warning (Form): FLASH level may be too low for this exposure or a short subexposure. See extended explanation in the diagnostic browser (F845M (04.008)) Warning (Form): FLASH level may be too low for this exposure or a short subexposure. See extended explanation in the diagnostic browser (F390M (04.009)) Warning (Form): FLASH level may be too low for this exposure or a short subexposure. See extended explanation in the diagnostic browser (F467M (04.010)) Warning (Form): FLASH level may be too low for this exposure or a short subexposure. See extended explanation in the diagnostic browser						
<b>Patterns</b>	<b>#</b>	<b>Primary Pattern</b>		<b>Secondary Pattern</b>		<b>Exposures</b>	
	(1)	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=true			(2), (10)	
	(2)	Pattern Type=WFC3-UVIS-DITHER-LINE-3PT Purpose=DITHER Number Of Points=3 Point Spacing=0.135 Line Spacing=	Coordinate Frame=POS-TARG Pattern Orientation=46.84 Angle Between Sides= Center Pattern=true			(3-4)	
	(3)	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=true			(5-6), (7-9)	
<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)	NEPTUNE	STD=NEPTUNE				NOT ECL P PARTIAL OF NEPTUNE EARTH BY TRITON FROM EARTH  <i>Comments: Description=Neptune                  Extended=YES</i>

Proposal 16454 - ROT1-D (04) - The Extended Death Throes of a Dark Vortex on Neptune

Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
	1	F467M	(1) NEPTUNE	WFC3/UVIS, ACCUM, UVIS2-C512C-SUB	F467M			Sequence 1-10 Non-Int in ROT1-D (04)	15 Secs (15 Secs) [==>]	[1]
	2	F467M	(1) NEPTUNE	WFC3/UVIS, ACCUM, UVIS2-C512C-SUB	F467M			Sequence 1-10 Non-Int in ROT1-D (04) Pattern 1, Exps 2-2 in Sequence 1-10 Non-Int in ROT1-D (04) (1)	15 Secs (60 Secs) [==>(Pattern 1)] [==>(Pattern 2)] [==>(Pattern 3)] [==>(Pattern 4)]	[1]
	3	F467M	(1) NEPTUNE	WFC3/UVIS, ACCUM, UVIS2-C512C-SUB	F467M			Sequence 1-10 Non-Int in ROT1-D (04) Pattern 2, Exps 3-4 in Sequence 1-10 Non-Int in ROT1-D (04) (2)	15 Secs (45 Secs) [==>(Pattern 1)] [==>(Pattern 2)] [==>(Pattern 3)]	[1]
	4	F547M	(1) NEPTUNE	WFC3/UVIS, ACCUM, UVIS2-C512C-SUB	F547M			Sequence 1-10 Non-Int in ROT1-D (04) Pattern 2, Exps 3-4 in Sequence 1-10 Non-Int in ROT1-D (04) (2)	6 Secs (18 Secs) [==>(Pattern 1)] [==>(Pattern 2)] [==>(Pattern 3)]	[1]
	5	F845M	(1) NEPTUNE	WFC3/UVIS, ACCUM, UVIS2-C512C-SUB	F845M			Sequence 1-10 Non-Int in ROT1-D (04) Pattern 3, Exps 5-6 in Sequence 1-10 Non-Int in ROT1-D (04) (3)	40 Secs (80 Secs) [==>(Pattern 1)] [==>(Pattern 2)]	[1]
	6	F390M	(1) NEPTUNE	WFC3/UVIS, ACCUM, UVIS2-C512C-SUB	F390M			Sequence 1-10 Non-Int in ROT1-D (04) Pattern 3, Exps 5-6 in Sequence 1-10 Non-Int in ROT1-D (04) (3)	15 Secs (30 Secs) [==>(Pattern 1)] [==>(Pattern 2)]	[1]
	7	F467M	(1) NEPTUNE	WFC3/UVIS, ACCUM, UVIS2-C512C-SUB	F467M			Sequence 1-10 Non-Int in ROT1-D (04) Pattern 3, Exps 7-9 in Sequence 1-10 Non-Int in ROT1-D (04) (3)	15 Secs (30 Secs) [==>(Pattern 1)] [==>(Pattern 2)]	[1]
	8	F845M	(1) NEPTUNE	WFC3/UVIS, ACCUM, UVIS2-C512C-SUB	F845M			Sequence 1-10 Non-Int in ROT1-D (04) Pattern 3, Exps 7-9 in Sequence 1-10 Non-Int in ROT1-D (04) (3)	40 Secs (80 Secs) [==>(Pattern 1)] [==>(Pattern 2)]	[1]
	9	F390M	(1) NEPTUNE	WFC3/UVIS, ACCUM, UVIS2-C512C-SUB	F390M			Sequence 1-10 Non-Int in ROT1-D (04) Pattern 3, Exps 7-9 in Sequence 1-10 Non-Int in ROT1-D (04) (3)	15 Secs (30 Secs) [==>(Pattern 1)] [==>(Pattern 2)]	[1]

Proposal 16454 - ROT1-D (04) - The Extended Death Throes of a Dark Vortex on Neptune

10	F467M	(1) NEPTUNE	WFC3/UVIS, ACCUM, UVIS2-C512C-SUB	F467M	Sequence 1-10 Non-Int in ROT1-D (04)	15 Secs (60 Secs)	
					Pattern 1, Exps 10-10 in Sequence 1-10 Non-Int in ROT1-D (04) (1)	[=>(Pattern 1)] [=>(Pattern 2)] [=>(Pattern 3)] [=>(Pattern 4)]	[1]



Proposal 16454 - ROT1-E (05) - The Extended Death Throes of a Dark Vortex on Neptune

Tue Nov 10 15:01:58 GMT 2020

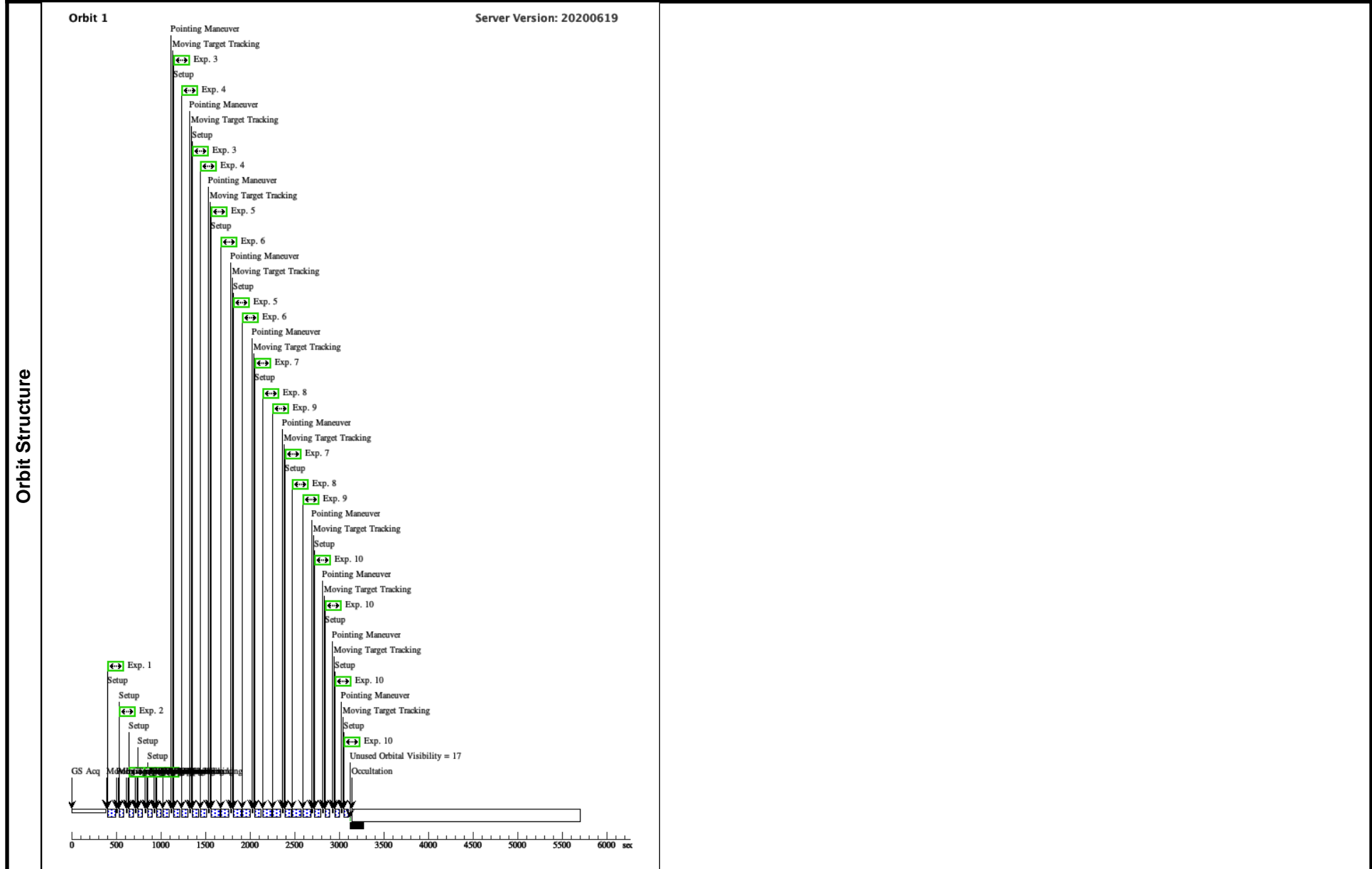
<b>Visit</b>	<b>Proposal 16454, ROT1-E (05), implementation</b> <b>Diagnostic Status: Warning</b> Scientific Instruments: WFC3/UVIS Special Requirements: AFTER 04 BY 1.9 Orbits TO 2.1 Orbits						
	<b>Diagnosics</b> (F467M (05.001)) Warning (Form): FLASH level may be too low for this exposure or a short subexposure. See extended explanation in the diagnostic browser (F467M (05.002)) Warning (Form): FLASH level may be too low for this exposure or a short subexposure. See extended explanation in the diagnostic browser (F467M (05.003)) Warning (Form): FLASH level may be too low for this exposure or a short subexposure. See extended explanation in the diagnostic browser (F547M (05.004)) Warning (Form): FLASH level may be too low for this exposure or a short subexposure. See extended explanation in the diagnostic browser (F845M (05.005)) Warning (Form): FLASH level may be too low for this exposure or a short subexposure. See extended explanation in the diagnostic browser (F390M (05.006)) Warning (Form): FLASH level may be too low for this exposure or a short subexposure. See extended explanation in the diagnostic browser (F467M (05.007)) Warning (Form): FLASH level may be too low for this exposure or a short subexposure. See extended explanation in the diagnostic browser (F845M (05.008)) Warning (Form): FLASH level may be too low for this exposure or a short subexposure. See extended explanation in the diagnostic browser (F390M (05.009)) Warning (Form): FLASH level may be too low for this exposure or a short subexposure. See extended explanation in the diagnostic browser (F467M (05.010)) Warning (Form): FLASH level may be too low for this exposure or a short subexposure. See extended explanation in the diagnostic browser						
<b>Patterns</b>	<b>#</b>	<b>Primary Pattern</b>	<b>Secondary Pattern</b>	<b>Exposures</b>			
	(1)	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=true	(2), (10)			
	(2)	Pattern Type=WFC3-UVIS-DITHER-LINE-3PT Purpose=DITHER Number Of Points=3 Point Spacing=0.135 Line Spacing=	Coordinate Frame=POS-TARG Pattern Orientation=46.84 Angle Between Sides= Center Pattern=true	(3-4)			
	(3)	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=true	(5-6), (7-9)			
<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)	NEPTUNE	STD=NEPTUNE				NOT ECL P PARTIAL OF NEPTUNE EARTH BY TRITON FROM EARTH
Comments: Description=Neptune Extended=YES							

Proposal 16454 - ROT1-E (05) - The Extended Death Throes of a Dark Vortex on Neptune

Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
	1	F467M	(1) NEPTUNE	WFC3/UVIS, ACCUM, UVIS2-C512C-SUB	F467M			Sequence 1-10 Non-Int in ROT1-E (05)	15 Secs (15 Secs) [==>]	[1]
	2	F467M	(1) NEPTUNE	WFC3/UVIS, ACCUM, UVIS2-C512C-SUB	F467M			Sequence 1-10 Non-Int in ROT1-E (05) Pattern 1, Exps 2-2 in Sequence 1-10 Non-Int in ROT1-E (05) (1)	15 Secs (60 Secs) [==>(Pattern 1)] [==>(Pattern 2)] [==>(Pattern 3)] [==>(Pattern 4)]	[1]
	3	F467M	(1) NEPTUNE	WFC3/UVIS, ACCUM, UVIS2-C512C-SUB	F467M			Sequence 1-10 Non-Int in ROT1-E (05) Pattern 2, Exps 3-4 in Sequence 1-10 Non-Int in ROT1-E (05) (2)	15 Secs (45 Secs) [==>(Pattern 1)] [==>(Pattern 2)] [==>(Pattern 3)]	[1]
	4	F547M	(1) NEPTUNE	WFC3/UVIS, ACCUM, UVIS2-C512C-SUB	F547M			Sequence 1-10 Non-Int in ROT1-E (05) Pattern 2, Exps 3-4 in Sequence 1-10 Non-Int in ROT1-E (05) (2)	6 Secs (18 Secs) [==>(Pattern 1)] [==>(Pattern 2)] [==>(Pattern 3)]	[1]
	5	F845M	(1) NEPTUNE	WFC3/UVIS, ACCUM, UVIS2-C512C-SUB	F845M			Sequence 1-10 Non-Int in ROT1-E (05) Pattern 3, Exps 5-6 in Sequence 1-10 Non-Int in ROT1-E (05) (3)	40 Secs (80 Secs) [==>(Pattern 1)] [==>(Pattern 2)]	[1]
	6	F390M	(1) NEPTUNE	WFC3/UVIS, ACCUM, UVIS2-C512C-SUB	F390M			Sequence 1-10 Non-Int in ROT1-E (05) Pattern 3, Exps 5-6 in Sequence 1-10 Non-Int in ROT1-E (05) (3)	15 Secs (30 Secs) [==>(Pattern 1)] [==>(Pattern 2)]	[1]
	7	F467M	(1) NEPTUNE	WFC3/UVIS, ACCUM, UVIS2-C512C-SUB	F467M			Sequence 1-10 Non-Int in ROT1-E (05) Pattern 3, Exps 7-9 in Sequence 1-10 Non-Int in ROT1-E (05) (3)	15 Secs (30 Secs) [==>(Pattern 1)] [==>(Pattern 2)]	[1]
	8	F845M	(1) NEPTUNE	WFC3/UVIS, ACCUM, UVIS2-C512C-SUB	F845M			Sequence 1-10 Non-Int in ROT1-E (05) Pattern 3, Exps 7-9 in Sequence 1-10 Non-Int in ROT1-E (05) (3)	40 Secs (80 Secs) [==>(Pattern 1)] [==>(Pattern 2)]	[1]
	9	F390M	(1) NEPTUNE	WFC3/UVIS, ACCUM, UVIS2-C512C-SUB	F390M			Sequence 1-10 Non-Int in ROT1-E (05) Pattern 3, Exps 7-9 in Sequence 1-10 Non-Int in ROT1-E (05) (3)	15 Secs (30 Secs) [==>(Pattern 1)] [==>(Pattern 2)]	[1]

Proposal 16454 - ROT1-E (05) - The Extended Death Throes of a Dark Vortex on Neptune

10	F467M	(1) NEPTUNE	WFC3/UVIS, ACCUM, UVIS2-C512C-SUB	F467M	Sequence 1-10 Non-Int in ROT1-E (05)	15 Secs (60 Secs)	
					Pattern 1, Exps 10-10 in Sequence 1-10 Non-Int in ROT1-E (05) (1)	[=>(Pattern 1)] [=>(Pattern 2)] [=>(Pattern 3)] [=>(Pattern 4)]	[1]



Proposal 16454 - ROT2-A (06) - The Extended Death Throes of a Dark Vortex on Neptune

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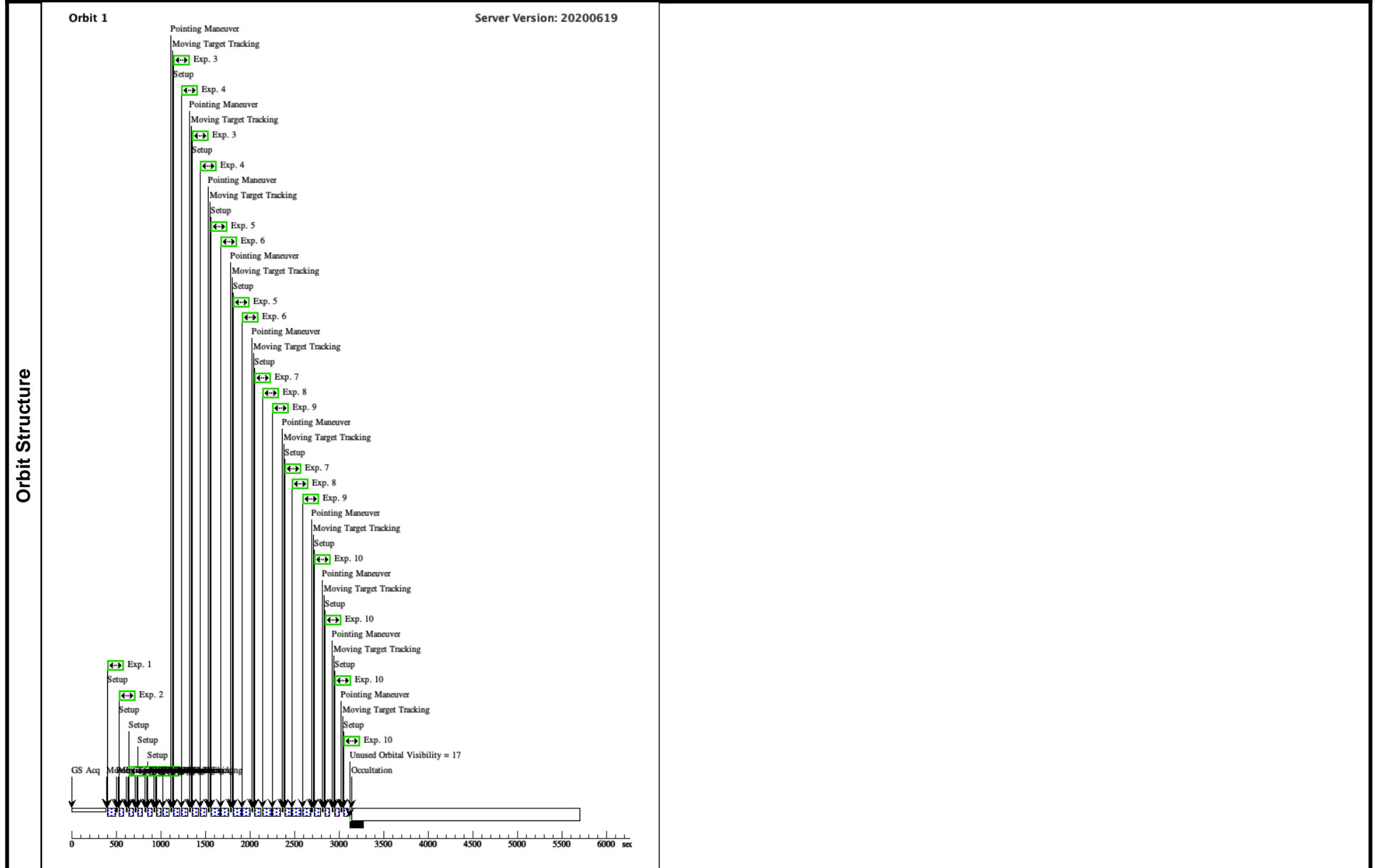
<b>Visit</b>	<b>Proposal 16454, ROT2-A (06), implementation</b> <b>Diagnostic Status: Warning</b> Scientific Instruments: WFC3/UVIS Special Requirements: AFTER 05 BY 0.5 D TO 4 D						
	<b>Diagnosics</b> (F467M (06.001)) Warning (Form): FLASH level may be too low for this exposure or a short subexposure. See extended explanation in the diagnostic browser (F467M (06.002)) Warning (Form): FLASH level may be too low for this exposure or a short subexposure. See extended explanation in the diagnostic browser (F467M (06.003)) Warning (Form): FLASH level may be too low for this exposure or a short subexposure. See extended explanation in the diagnostic browser (F547M (06.004)) Warning (Form): FLASH level may be too low for this exposure or a short subexposure. See extended explanation in the diagnostic browser (F845M (06.005)) Warning (Form): FLASH level may be too low for this exposure or a short subexposure. See extended explanation in the diagnostic browser (F390M (06.006)) Warning (Form): FLASH level may be too low for this exposure or a short subexposure. See extended explanation in the diagnostic browser (F467M (06.007)) Warning (Form): FLASH level may be too low for this exposure or a short subexposure. See extended explanation in the diagnostic browser (F845M (06.008)) Warning (Form): FLASH level may be too low for this exposure or a short subexposure. See extended explanation in the diagnostic browser (F390M (06.009)) Warning (Form): FLASH level may be too low for this exposure or a short subexposure. See extended explanation in the diagnostic browser (F467M (06.010)) Warning (Form): FLASH level may be too low for this exposure or a short subexposure. See extended explanation in the diagnostic browser						
<b>Patterns</b>	<b>#</b>	<b>Primary Pattern</b>	<b>Secondary Pattern</b>	<b>Exposures</b>			
	(1)	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=true	(2), (10)			
	(2)	Pattern Type=WFC3-UVIS-DITHER-LINE-3PT Purpose=DITHER Number Of Points=3 Point Spacing=0.135 Line Spacing=	Coordinate Frame=POS-TARG Pattern Orientation=46.84 Angle Between Sides= Center Pattern=true	(3-4)			
	(3)	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=true	(5-6), (7-9)			
<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)	NEPTUNE	STD=NEPTUNE				NOT ECL P PARTIAL OF NEPTUNE EARTH BY TRITON FROM EARTH
Comments: Description=Neptune Extended=YES							

Proposal 16454 - ROT2-A (06) - The Extended Death Throes of a Dark Vortex on Neptune

Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
	1	F467M	(1) NEPTUNE	WFC3/UVIS, ACCUM, UVIS2-C512C-SUB	F467M			Sequence 1-10 Non-Int in ROT2-A (06)	15 Secs (15 Secs) [==>]	[1]
	2	F467M	(1) NEPTUNE	WFC3/UVIS, ACCUM, UVIS2-C512C-SUB	F467M			Sequence 1-10 Non-Int in ROT2-A (06) Pattern 1, Exps 2-2 in Sequence 1-10 Non-Int in ROT2-A (06) (1)	15 Secs (60 Secs) [==>(Pattern 1)] [==>(Pattern 2)] [==>(Pattern 3)] [==>(Pattern 4)]	[1]
	3	F467M	(1) NEPTUNE	WFC3/UVIS, ACCUM, UVIS2-C512C-SUB	F467M			Sequence 1-10 Non-Int in ROT2-A (06) Pattern 2, Exps 3-4 in Sequence 1-10 Non-Int in ROT2-A (06) (2)	15 Secs (45 Secs) [==>(Pattern 1)] [==>(Pattern 2)] [==>(Pattern 3)]	[1]
	4	F547M	(1) NEPTUNE	WFC3/UVIS, ACCUM, UVIS2-C512C-SUB	F547M			Sequence 1-10 Non-Int in ROT2-A (06) Pattern 2, Exps 3-4 in Sequence 1-10 Non-Int in ROT2-A (06) (2)	6 Secs (18 Secs) [==>(Pattern 1)] [==>(Pattern 2)] [==>(Pattern 3)]	[1]
	5	F845M	(1) NEPTUNE	WFC3/UVIS, ACCUM, UVIS2-C512C-SUB	F845M			Sequence 1-10 Non-Int in ROT2-A (06) Pattern 3, Exps 5-6 in Sequence 1-10 Non-Int in ROT2-A (06) (3)	40 Secs (80 Secs) [==>(Pattern 1)] [==>(Pattern 2)]	[1]
	6	F390M	(1) NEPTUNE	WFC3/UVIS, ACCUM, UVIS2-C512C-SUB	F390M			Sequence 1-10 Non-Int in ROT2-A (06) Pattern 3, Exps 5-6 in Sequence 1-10 Non-Int in ROT2-A (06) (3)	15 Secs (30 Secs) [==>(Pattern 1)] [==>(Pattern 2)]	[1]
	7	F467M	(1) NEPTUNE	WFC3/UVIS, ACCUM, UVIS2-C512C-SUB	F467M			Sequence 1-10 Non-Int in ROT2-A (06) Pattern 3, Exps 7-9 in Sequence 1-10 Non-Int in ROT2-A (06) (3)	15 Secs (30 Secs) [==>(Pattern 1)] [==>(Pattern 2)]	[1]
	8	F845M	(1) NEPTUNE	WFC3/UVIS, ACCUM, UVIS2-C512C-SUB	F845M			Sequence 1-10 Non-Int in ROT2-A (06) Pattern 3, Exps 7-9 in Sequence 1-10 Non-Int in ROT2-A (06) (3)	40 Secs (80 Secs) [==>(Pattern 1)] [==>(Pattern 2)]	[1]
	9	F390M	(1) NEPTUNE	WFC3/UVIS, ACCUM, UVIS2-C512C-SUB	F390M			Sequence 1-10 Non-Int in ROT2-A (06) Pattern 3, Exps 7-9 in Sequence 1-10 Non-Int in ROT2-A (06) (3)	15 Secs (30 Secs) [==>(Pattern 1)] [==>(Pattern 2)]	[1]

Proposal 16454 - ROT2-A (06) - The Extended Death Throes of a Dark Vortex on Neptune

10	F467M	(1) NEPTUNE	WFC3/UVIS, ACCUM, UVIS2-C512C-SUB	F467M	Sequence 1-10 Non-Int in ROT2-A (06)	15 Secs (60 Secs)	
					Pattern 1, Exps 10-1 0 in Sequence 1-10 Non-Int in ROT2-A (06) (1)	[=>(Pattern 1)] [=>(Pattern 2)] [=>(Pattern 3)] [=>(Pattern 4)]	[1]



Proposal 16454 - ROT2-B (07) - The Extended Death Throes of a Dark Vortex on Neptune

Tue Nov 10 15:01:58 GMT 2020

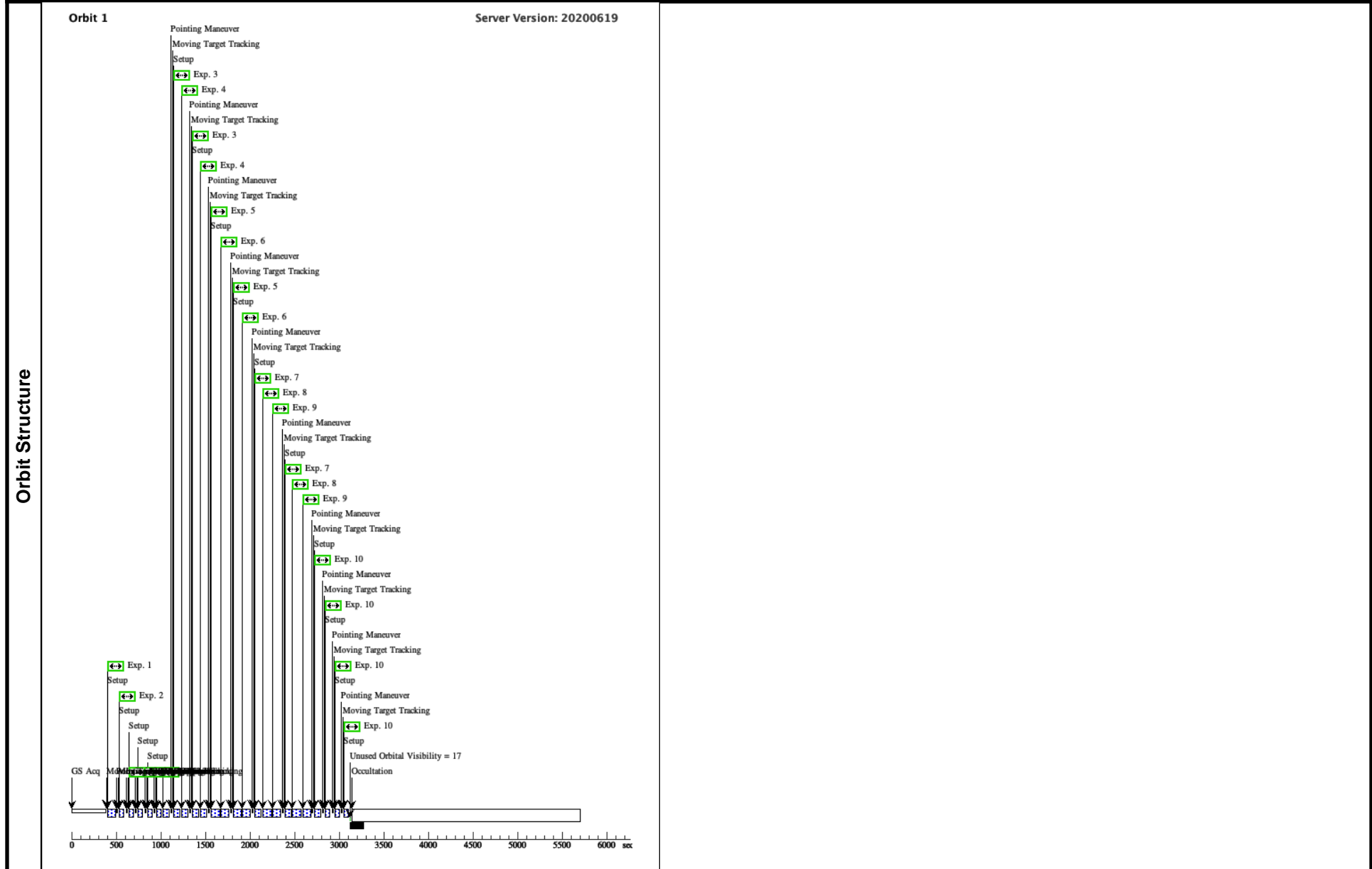
<b>Visit</b>	<b>Proposal 16454, ROT2-B (07), implementation</b> <b>Diagnostic Status: Warning</b> Scientific Instruments: WFC3/UVIS Special Requirements: AFTER 06 BY 1.9 Orbits TO 2.1 Orbits					
	(F467M (07.001)) Warning (Form): FLASH level may be too low for this exposure or a short subexposure. See extended explanation in the diagnostic browser (F467M (07.002)) Warning (Form): FLASH level may be too low for this exposure or a short subexposure. See extended explanation in the diagnostic browser (F467M (07.003)) Warning (Form): FLASH level may be too low for this exposure or a short subexposure. See extended explanation in the diagnostic browser (F547M (07.004)) Warning (Form): FLASH level may be too low for this exposure or a short subexposure. See extended explanation in the diagnostic browser (F845M (07.005)) Warning (Form): FLASH level may be too low for this exposure or a short subexposure. See extended explanation in the diagnostic browser (F390M (07.006)) Warning (Form): FLASH level may be too low for this exposure or a short subexposure. See extended explanation in the diagnostic browser (F467M (07.007)) Warning (Form): FLASH level may be too low for this exposure or a short subexposure. See extended explanation in the diagnostic browser (F845M (07.008)) Warning (Form): FLASH level may be too low for this exposure or a short subexposure. See extended explanation in the diagnostic browser (F390M (07.009)) Warning (Form): FLASH level may be too low for this exposure or a short subexposure. See extended explanation in the diagnostic browser (F467M (07.010)) Warning (Form): FLASH level may be too low for this exposure or a short subexposure. See extended explanation in the diagnostic browser					
<b>Diagnostics</b>						
	<b>Patterns</b>	<b>#</b>	<b>Primary Pattern</b>	<b>Secondary Pattern</b>	<b>Exposures</b>	
		(1)	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=true	(2), (10)	
		(2)	Pattern Type=WFC3-UVIS-DITHER-LINE-3PT Purpose=DITHER Number Of Points=3 Point Spacing=0.135 Line Spacing=	Coordinate Frame=POS-TARG Pattern Orientation=46.84 Angle Between Sides= Center Pattern=true	(3-4)	
(3)	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=true	(5-6), (7-9)			
<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)	NEPTUNE	STD=NEPTUNE			NOT ECL P PARTIAL OF NEPTUNE EARTH BY TRITON FROM EARTH
Comments: Description=Neptune Extended=YES						

Proposal 16454 - ROT2-B (07) - The Extended Death Throes of a Dark Vortex on Neptune

Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
	1	F467M	(1) NEPTUNE	WFC3/UVIS, ACCUM, UVIS2-C512C-SUB	F467M			Sequence 1-10 Non-Int in ROT2-B (07)	15 Secs (15 Secs) [==>]	[1]
	2	F467M	(1) NEPTUNE	WFC3/UVIS, ACCUM, UVIS2-C512C-SUB	F467M			Sequence 1-10 Non-Int in ROT2-B (07) Pattern 1, Exps 2-2 in Sequence 1-10 Non-Int in ROT2-B (07) (1)	15 Secs (60 Secs) [==>(Pattern 1)] [==>(Pattern 2)] [==>(Pattern 3)] [==>(Pattern 4)]	[1]
	3	F467M	(1) NEPTUNE	WFC3/UVIS, ACCUM, UVIS2-C512C-SUB	F467M			Sequence 1-10 Non-Int in ROT2-B (07) Pattern 2, Exps 3-4 in Sequence 1-10 Non-Int in ROT2-B (07) (2)	15 Secs (45 Secs) [==>(Pattern 1)] [==>(Pattern 2)] [==>(Pattern 3)]	[1]
	4	F547M	(1) NEPTUNE	WFC3/UVIS, ACCUM, UVIS2-C512C-SUB	F547M			Sequence 1-10 Non-Int in ROT2-B (07) Pattern 2, Exps 3-4 in Sequence 1-10 Non-Int in ROT2-B (07) (2)	6 Secs (18 Secs) [==>(Pattern 1)] [==>(Pattern 2)] [==>(Pattern 3)]	[1]
	5	F845M	(1) NEPTUNE	WFC3/UVIS, ACCUM, UVIS2-C512C-SUB	F845M			Sequence 1-10 Non-Int in ROT2-B (07) Pattern 3, Exps 5-6 in Sequence 1-10 Non-Int in ROT2-B (07) (3)	40 Secs (80 Secs) [==>(Pattern 1)] [==>(Pattern 2)]	[1]
	6	F390M	(1) NEPTUNE	WFC3/UVIS, ACCUM, UVIS2-C512C-SUB	F390M			Sequence 1-10 Non-Int in ROT2-B (07) Pattern 3, Exps 5-6 in Sequence 1-10 Non-Int in ROT2-B (07) (3)	15 Secs (30 Secs) [==>(Pattern 1)] [==>(Pattern 2)]	[1]
	7	F467M	(1) NEPTUNE	WFC3/UVIS, ACCUM, UVIS2-C512C-SUB	F467M			Sequence 1-10 Non-Int in ROT2-B (07) Pattern 3, Exps 7-9 in Sequence 1-10 Non-Int in ROT2-B (07) (3)	15 Secs (30 Secs) [==>(Pattern 1)] [==>(Pattern 2)]	[1]
	8	F845M	(1) NEPTUNE	WFC3/UVIS, ACCUM, UVIS2-C512C-SUB	F845M			Sequence 1-10 Non-Int in ROT2-B (07) Pattern 3, Exps 7-9 in Sequence 1-10 Non-Int in ROT2-B (07) (3)	40 Secs (80 Secs) [==>(Pattern 1)] [==>(Pattern 2)]	[1]
	9	F390M	(1) NEPTUNE	WFC3/UVIS, ACCUM, UVIS2-C512C-SUB	F390M			Sequence 1-10 Non-Int in ROT2-B (07) Pattern 3, Exps 7-9 in Sequence 1-10 Non-Int in ROT2-B (07) (3)	15 Secs (30 Secs) [==>(Pattern 1)] [==>(Pattern 2)]	[1]

Proposal 16454 - ROT2-B (07) - The Extended Death Throes of a Dark Vortex on Neptune

10	F467M	(1) NEPTUNE	WFC3/UVIS, ACCUM, UVIS2-C512C-SUB	F467M	Sequence 1-10 Non-Int in ROT2-B (07) Pattern 1, Exps 10-10 in Sequence 1-10 Non-Int in ROT2-B (07) (1)	15 Secs (60 Secs) [=>(Pattern 1)] [=>(Pattern 2)] [=>(Pattern 3)] [=>(Pattern 4)]	[1]
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Proposal 16454 - ROT2-C (08) - The Extended Death Throes of a Dark Vortex on Neptune

Tue Nov 10 15:01:58 GMT 2020

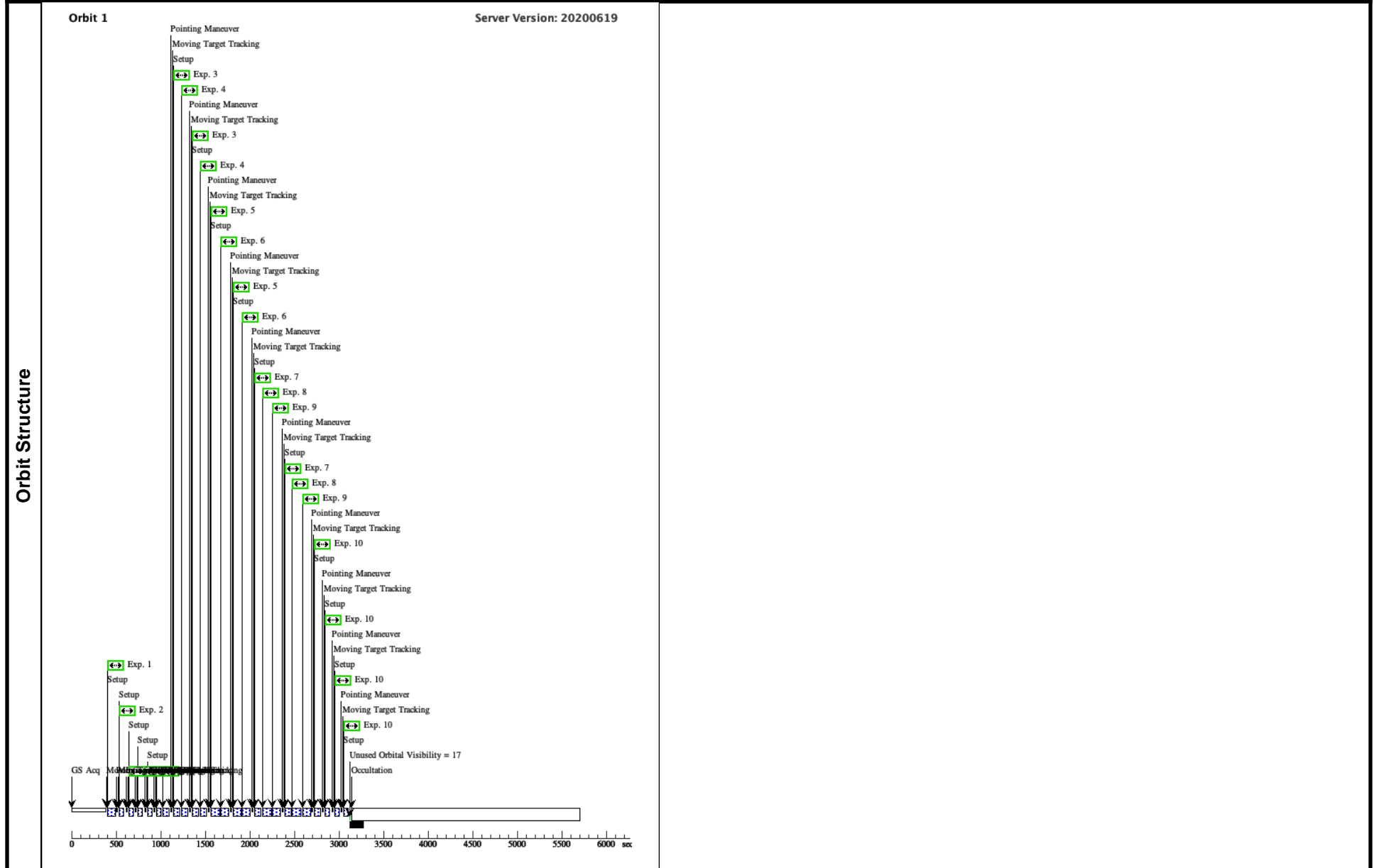
<b>Visit</b>	<b>Proposal 16454, ROT2-C (08), implementation</b> <b>Diagnostic Status: Warning</b> Scientific Instruments: WFC3/UVIS Special Requirements: AFTER 07 BY 1.9 Orbits TO 2.1 Orbits						
	(F467M (08.001)) Warning (Form): FLASH level may be too low for this exposure or a short subexposure. See extended explanation in the diagnostic browser (F467M (08.002)) Warning (Form): FLASH level may be too low for this exposure or a short subexposure. See extended explanation in the diagnostic browser (F467M (08.003)) Warning (Form): FLASH level may be too low for this exposure or a short subexposure. See extended explanation in the diagnostic browser (F547M (08.004)) Warning (Form): FLASH level may be too low for this exposure or a short subexposure. See extended explanation in the diagnostic browser (F845M (08.005)) Warning (Form): FLASH level may be too low for this exposure or a short subexposure. See extended explanation in the diagnostic browser (F390M (08.006)) Warning (Form): FLASH level may be too low for this exposure or a short subexposure. See extended explanation in the diagnostic browser (F467M (08.007)) Warning (Form): FLASH level may be too low for this exposure or a short subexposure. See extended explanation in the diagnostic browser (F845M (08.008)) Warning (Form): FLASH level may be too low for this exposure or a short subexposure. See extended explanation in the diagnostic browser (F390M (08.009)) Warning (Form): FLASH level may be too low for this exposure or a short subexposure. See extended explanation in the diagnostic browser (F467M (08.010)) Warning (Form): FLASH level may be too low for this exposure or a short subexposure. See extended explanation in the diagnostic browser						
<b>Diagnostics</b>							
<b>Patterns</b>	<b>#</b>	<b>Primary Pattern</b>	<b>Secondary Pattern</b>	<b>Exposures</b>			
	(1)	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=true		(2), (10)		
	(2)	Pattern Type=WFC3-UVIS-DITHER-LINE-3PT Purpose=DITHER Number Of Points=3 Point Spacing=0.135 Line Spacing=	Coordinate Frame=POS-TARG Pattern Orientation=46.84 Angle Between Sides= Center Pattern=true		(3-4)		
	(3)	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=true		(5-6), (7-9)		
<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)	NEPTUNE	STD=NEPTUNE				NOT ECL P PARTIAL OF NEPTUNE EARTH BY TRITON FROM EARTH
Comments: Description=Neptune Extended=YES							

Proposal 16454 - ROT2-C (08) - The Extended Death Throes of a Dark Vortex on Neptune

Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
	1	F467M	(1) NEPTUNE	WFC3/UVIS, ACCUM, UVIS2-C512C-SUB	F467M			Sequence 1-10 Non-Int in ROT2-C (08)	15 Secs (15 Secs) [==>]	[1]
	2	F467M	(1) NEPTUNE	WFC3/UVIS, ACCUM, UVIS2-C512C-SUB	F467M			Sequence 1-10 Non-Int in ROT2-C (08) Pattern 1, Exps 2-2 in Sequence 1-10 Non-Int in ROT2-C (08) (1)	15 Secs (60 Secs) [==>(Pattern 1)] [==>(Pattern 2)] [==>(Pattern 3)] [==>(Pattern 4)]	[1]
	3	F467M	(1) NEPTUNE	WFC3/UVIS, ACCUM, UVIS2-C512C-SUB	F467M			Sequence 1-10 Non-Int in ROT2-C (08) Pattern 2, Exps 3-4 in Sequence 1-10 Non-Int in ROT2-C (08) (2)	15 Secs (45 Secs) [==>(Pattern 1)] [==>(Pattern 2)] [==>(Pattern 3)]	[1]
	4	F547M	(1) NEPTUNE	WFC3/UVIS, ACCUM, UVIS2-C512C-SUB	F547M			Sequence 1-10 Non-Int in ROT2-C (08) Pattern 2, Exps 3-4 in Sequence 1-10 Non-Int in ROT2-C (08) (2)	6 Secs (18 Secs) [==>(Pattern 1)] [==>(Pattern 2)] [==>(Pattern 3)]	[1]
	5	F845M	(1) NEPTUNE	WFC3/UVIS, ACCUM, UVIS2-C512C-SUB	F845M			Sequence 1-10 Non-Int in ROT2-C (08) Pattern 3, Exps 5-6 in Sequence 1-10 Non-Int in ROT2-C (08) (3)	40 Secs (80 Secs) [==>(Pattern 1)] [==>(Pattern 2)]	[1]
	6	F390M	(1) NEPTUNE	WFC3/UVIS, ACCUM, UVIS2-C512C-SUB	F390M			Sequence 1-10 Non-Int in ROT2-C (08) Pattern 3, Exps 5-6 in Sequence 1-10 Non-Int in ROT2-C (08) (3)	15 Secs (30 Secs) [==>(Pattern 1)] [==>(Pattern 2)]	[1]
	7	F467M	(1) NEPTUNE	WFC3/UVIS, ACCUM, UVIS2-C512C-SUB	F467M			Sequence 1-10 Non-Int in ROT2-C (08) Pattern 3, Exps 7-9 in Sequence 1-10 Non-Int in ROT2-C (08) (3)	15 Secs (30 Secs) [==>(Pattern 1)] [==>(Pattern 2)]	[1]
	8	F845M	(1) NEPTUNE	WFC3/UVIS, ACCUM, UVIS2-C512C-SUB	F845M			Sequence 1-10 Non-Int in ROT2-C (08) Pattern 3, Exps 7-9 in Sequence 1-10 Non-Int in ROT2-C (08) (3)	40 Secs (80 Secs) [==>(Pattern 1)] [==>(Pattern 2)]	[1]
	9	F390M	(1) NEPTUNE	WFC3/UVIS, ACCUM, UVIS2-C512C-SUB	F390M			Sequence 1-10 Non-Int in ROT2-C (08) Pattern 3, Exps 7-9 in Sequence 1-10 Non-Int in ROT2-C (08) (3)	15 Secs (30 Secs) [==>(Pattern 1)] [==>(Pattern 2)]	[1]

Proposal 16454 - ROT2-C (08) - The Extended Death Throes of a Dark Vortex on Neptune

10	F467M	(1) NEPTUNE	WFC3/UVIS, ACCUM, UVIS2-C512C-SUB	F467M	Sequence 1-10 Non-Int in ROT2-C (08) Pattern 1, Exps 10-10 in Sequence 1-10 Non-Int in ROT2-C (08) (1)	15 Secs (60 Secs) [=>(Pattern 1)] [=>(Pattern 2)] [=>(Pattern 3)] [=>(Pattern 4)]	[1]
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Proposal 16454 - ROT2-D (09) - The Extended Death Throes of a Dark Vortex on Neptune

Tue Nov 10 15:01:58 GMT 2020

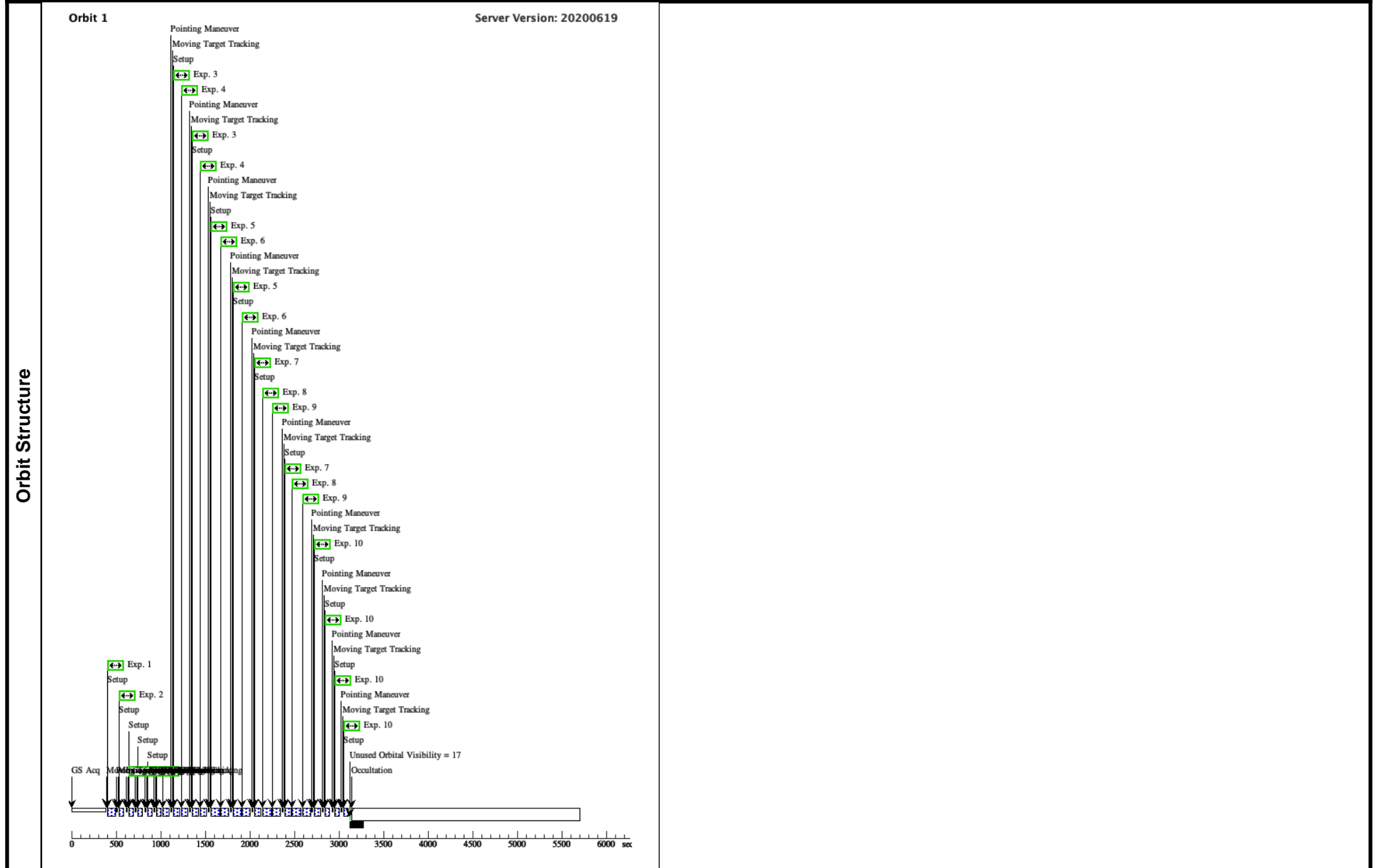
<b>Visit</b>	<b>Proposal 16454, ROT2-D (09), implementation</b> <b>Diagnostic Status: Warning</b> Scientific Instruments: WFC3/UVIS Special Requirements: AFTER 08 BY 1.9 Orbits TO 2.1 Orbits					
	(F467M (09.001)) Warning (Form): FLASH level may be too low for this exposure or a short subexposure. See extended explanation in the diagnostic browser (F467M (09.002)) Warning (Form): FLASH level may be too low for this exposure or a short subexposure. See extended explanation in the diagnostic browser (F467M (09.003)) Warning (Form): FLASH level may be too low for this exposure or a short subexposure. See extended explanation in the diagnostic browser (F547M (09.004)) Warning (Form): FLASH level may be too low for this exposure or a short subexposure. See extended explanation in the diagnostic browser (F845M (09.005)) Warning (Form): FLASH level may be too low for this exposure or a short subexposure. See extended explanation in the diagnostic browser (F390M (09.006)) Warning (Form): FLASH level may be too low for this exposure or a short subexposure. See extended explanation in the diagnostic browser (F467M (09.007)) Warning (Form): FLASH level may be too low for this exposure or a short subexposure. See extended explanation in the diagnostic browser (F845M (09.008)) Warning (Form): FLASH level may be too low for this exposure or a short subexposure. See extended explanation in the diagnostic browser (F390M (09.009)) Warning (Form): FLASH level may be too low for this exposure or a short subexposure. See extended explanation in the diagnostic browser (F467M (09.010)) Warning (Form): FLASH level may be too low for this exposure or a short subexposure. See extended explanation in the diagnostic browser					
<b>Diagnostics</b>						
	<b>Patterns</b>	<b>#</b>	<b>Primary Pattern</b>	<b>Secondary Pattern</b>	<b>Exposures</b>	
		(1)	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=true	(2), (10)	
		(2)	Pattern Type=WFC3-UVIS-DITHER-LINE-3PT Purpose=DITHER Number Of Points=3 Point Spacing=0.135 Line Spacing=	Coordinate Frame=POS-TARG Pattern Orientation=46.84 Angle Between Sides= Center Pattern=true	(3-4)	
(3)	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=true	(5-6), (7-9)			
<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)	NEPTUNE	STD=NEPTUNE			NOT ECL P PARTIAL OF NEPTUNE EARTH BY TRITON FROM EARTH
Comments: Description=Neptune Extended=YES						

Proposal 16454 - ROT2-D (09) - The Extended Death Throes of a Dark Vortex on Neptune

Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
	1	F467M	(1) NEPTUNE	WFC3/UVIS, ACCUM, UVIS2-C512C-SUB	F467M			Sequence 1-10 Non-Int in ROT2-D (09)	15 Secs (15 Secs) [==>]	[1]
	2	F467M	(1) NEPTUNE	WFC3/UVIS, ACCUM, UVIS2-C512C-SUB	F467M			Sequence 1-10 Non-Int in ROT2-D (09) Pattern 1, Exps 2-2 in Sequence 1-10 Non-Int in ROT2-D (09) (1)	15 Secs (60 Secs) [==>(Pattern 1)] [==>(Pattern 2)] [==>(Pattern 3)] [==>(Pattern 4)]	[1]
	3	F467M	(1) NEPTUNE	WFC3/UVIS, ACCUM, UVIS2-C512C-SUB	F467M			Sequence 1-10 Non-Int in ROT2-D (09) Pattern 2, Exps 3-4 in Sequence 1-10 Non-Int in ROT2-D (09) (2)	15 Secs (45 Secs) [==>(Pattern 1)] [==>(Pattern 2)] [==>(Pattern 3)]	[1]
	4	F547M	(1) NEPTUNE	WFC3/UVIS, ACCUM, UVIS2-C512C-SUB	F547M			Sequence 1-10 Non-Int in ROT2-D (09) Pattern 2, Exps 3-4 in Sequence 1-10 Non-Int in ROT2-D (09) (2)	6 Secs (18 Secs) [==>(Pattern 1)] [==>(Pattern 2)] [==>(Pattern 3)]	[1]
	5	F845M	(1) NEPTUNE	WFC3/UVIS, ACCUM, UVIS2-C512C-SUB	F845M			Sequence 1-10 Non-Int in ROT2-D (09) Pattern 3, Exps 5-6 in Sequence 1-10 Non-Int in ROT2-D (09) (3)	40 Secs (80 Secs) [==>(Pattern 1)] [==>(Pattern 2)]	[1]
	6	F390M	(1) NEPTUNE	WFC3/UVIS, ACCUM, UVIS2-C512C-SUB	F390M			Sequence 1-10 Non-Int in ROT2-D (09) Pattern 3, Exps 5-6 in Sequence 1-10 Non-Int in ROT2-D (09) (3)	15 Secs (30 Secs) [==>(Pattern 1)] [==>(Pattern 2)]	[1]
	7	F467M	(1) NEPTUNE	WFC3/UVIS, ACCUM, UVIS2-C512C-SUB	F467M			Sequence 1-10 Non-Int in ROT2-D (09) Pattern 3, Exps 7-9 in Sequence 1-10 Non-Int in ROT2-D (09) (3)	15 Secs (30 Secs) [==>(Pattern 1)] [==>(Pattern 2)]	[1]
	8	F845M	(1) NEPTUNE	WFC3/UVIS, ACCUM, UVIS2-C512C-SUB	F845M			Sequence 1-10 Non-Int in ROT2-D (09) Pattern 3, Exps 7-9 in Sequence 1-10 Non-Int in ROT2-D (09) (3)	40 Secs (80 Secs) [==>(Pattern 1)] [==>(Pattern 2)]	[1]
	9	F390M	(1) NEPTUNE	WFC3/UVIS, ACCUM, UVIS2-C512C-SUB	F390M			Sequence 1-10 Non-Int in ROT2-D (09) Pattern 3, Exps 7-9 in Sequence 1-10 Non-Int in ROT2-D (09) (3)	15 Secs (30 Secs) [==>(Pattern 1)] [==>(Pattern 2)]	[1]

Proposal 16454 - ROT2-D (09) - The Extended Death Throes of a Dark Vortex on Neptune

10	F467M	(1) NEPTUNE	WFC3/UVIS, ACCUM, UVIS2-C512C-SUB	F467M	Sequence 1-10 Non-Int in ROT2-D (09) Pattern 1, Exps 10-10 in Sequence 1-10 Non-Int in ROT2-D (09) (1)	15 Secs (60 Secs) [=>(Pattern 1)] [=>(Pattern 2)] [=>(Pattern 3)] [=>(Pattern 4)]	[1]
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Proposal 16454 - ROT2-E (10) - The Extended Death Throes of a Dark Vortex on Neptune

Tue Nov 10 15:01:58 GMT 2020

<b>Visit</b>	<b>Proposal 16454, ROT2-E (10), implementation</b> <b>Diagnostic Status: Warning</b> Scientific Instruments: WFC3/UVIS Special Requirements: AFTER 09 BY 1.9 Orbits TO 2.1 Orbits; BEFORE 14-JAN-2021:00:00:00						
	<b>Diagnosics</b> (F467M (10.001)) Warning (Form): FLASH level may be too low for this exposure or a short subexposure. See extended explanation in the diagnostic browser (F467M (10.002)) Warning (Form): FLASH level may be too low for this exposure or a short subexposure. See extended explanation in the diagnostic browser (F467M (10.003)) Warning (Form): FLASH level may be too low for this exposure or a short subexposure. See extended explanation in the diagnostic browser (F547M (10.004)) Warning (Form): FLASH level may be too low for this exposure or a short subexposure. See extended explanation in the diagnostic browser (F845M (10.005)) Warning (Form): FLASH level may be too low for this exposure or a short subexposure. See extended explanation in the diagnostic browser (F390M (10.006)) Warning (Form): FLASH level may be too low for this exposure or a short subexposure. See extended explanation in the diagnostic browser (F467M (10.007)) Warning (Form): FLASH level may be too low for this exposure or a short subexposure. See extended explanation in the diagnostic browser (F845M (10.008)) Warning (Form): FLASH level may be too low for this exposure or a short subexposure. See extended explanation in the diagnostic browser (F390M (10.009)) Warning (Form): FLASH level may be too low for this exposure or a short subexposure. See extended explanation in the diagnostic browser (F467M (10.010)) Warning (Form): FLASH level may be too low for this exposure or a short subexposure. See extended explanation in the diagnostic browser						
<b>Patterns</b>	<b>#</b>	<b>Primary Pattern</b>		<b>Secondary Pattern</b>		<b>Exposures</b>	
	(1)	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=true			(2), (10)	
	(2)	Pattern Type=WFC3-UVIS-DITHER-LINE-3PT Purpose=DITHER Number Of Points=3 Point Spacing=0.135 Line Spacing=	Coordinate Frame=POS-TARG Pattern Orientation=46.84 Angle Between Sides= Center Pattern=true			(3-4)	
	(3)	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=true			(5-6), (7-9)	
<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)	NEPTUNE	STD=NEPTUNE				NOT ECL P PARTIAL OF NEPTUNE EARTH BY TRITON FROM EARTH
Comments: Description=Neptune Extended=YES							

Proposal 16454 - ROT2-E (10) - The Extended Death Throes of a Dark Vortex on Neptune

Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
	1	F467M	(1) NEPTUNE	WFC3/UVIS, ACCUM, UVIS2-C512C-SUB	F467M			Sequence 1-10 Non-Int in ROT2-E (10)	15 Secs (15 Secs) [==>]	[1]
	2	F467M	(1) NEPTUNE	WFC3/UVIS, ACCUM, UVIS2-C512C-SUB	F467M			Sequence 1-10 Non-Int in ROT2-E (10) Pattern 1, Exps 2-2 in Sequence 1-10 Non-Int in ROT2-E (10) (1)	15 Secs (60 Secs) [==>(Pattern 1)] [==>(Pattern 2)] [==>(Pattern 3)] [==>(Pattern 4)]	[1]
	3	F467M	(1) NEPTUNE	WFC3/UVIS, ACCUM, UVIS2-C512C-SUB	F467M			Sequence 1-10 Non-Int in ROT2-E (10) Pattern 2, Exps 3-4 in Sequence 1-10 Non-Int in ROT2-E (10) (2)	15 Secs (45 Secs) [==>(Pattern 1)] [==>(Pattern 2)] [==>(Pattern 3)]	[1]
	4	F547M	(1) NEPTUNE	WFC3/UVIS, ACCUM, UVIS2-C512C-SUB	F547M			Sequence 1-10 Non-Int in ROT2-E (10) Pattern 2, Exps 3-4 in Sequence 1-10 Non-Int in ROT2-E (10) (2)	6 Secs (18 Secs) [==>(Pattern 1)] [==>(Pattern 2)] [==>(Pattern 3)]	[1]
	5	F845M	(1) NEPTUNE	WFC3/UVIS, ACCUM, UVIS2-C512C-SUB	F845M			Sequence 1-10 Non-Int in ROT2-E (10) Pattern 3, Exps 5-6 in Sequence 1-10 Non-Int in ROT2-E (10) (3)	40 Secs (80 Secs) [==>(Pattern 1)] [==>(Pattern 2)]	[1]
	6	F390M	(1) NEPTUNE	WFC3/UVIS, ACCUM, UVIS2-C512C-SUB	F390M			Sequence 1-10 Non-Int in ROT2-E (10) Pattern 3, Exps 5-6 in Sequence 1-10 Non-Int in ROT2-E (10) (3)	15 Secs (30 Secs) [==>(Pattern 1)] [==>(Pattern 2)]	[1]
	7	F467M	(1) NEPTUNE	WFC3/UVIS, ACCUM, UVIS2-C512C-SUB	F467M			Sequence 1-10 Non-Int in ROT2-E (10) Pattern 3, Exps 7-9 in Sequence 1-10 Non-Int in ROT2-E (10) (3)	15 Secs (30 Secs) [==>(Pattern 1)] [==>(Pattern 2)]	[1]
	8	F845M	(1) NEPTUNE	WFC3/UVIS, ACCUM, UVIS2-C512C-SUB	F845M			Sequence 1-10 Non-Int in ROT2-E (10) Pattern 3, Exps 7-9 in Sequence 1-10 Non-Int in ROT2-E (10) (3)	40 Secs (80 Secs) [==>(Pattern 1)] [==>(Pattern 2)]	[1]
	9	F390M	(1) NEPTUNE	WFC3/UVIS, ACCUM, UVIS2-C512C-SUB	F390M			Sequence 1-10 Non-Int in ROT2-E (10) Pattern 3, Exps 7-9 in Sequence 1-10 Non-Int in ROT2-E (10) (3)	15 Secs (30 Secs) [==>(Pattern 1)] [==>(Pattern 2)]	[1]

Proposal 16454 - ROT2-E (10) - The Extended Death Throes of a Dark Vortex on Neptune

10	F467M	(1) NEPTUNE	WFC3/UVIS, ACCUM, UVIS2-C512C-SUB	F467M	Sequence 1-10 Non-Int in ROT2-E (10)	15 Secs (60 Secs)	
					Pattern 1, Exps 10-10 in Sequence 1-10 Non-Int in ROT2-E (10) (1)	[=>(Pattern 1)] [=>(Pattern 2)] [=>(Pattern 3)] [=>(Pattern 4)]	[1]

