



16880 - Disruption or deflection? Transient secondary dark features in Neptune's atmosphere

Cycle: 29, Proposal Category: GO
(Availability Mode: AVAILABLE)

INVESTIGATORS

<i>Name</i>	<i>Institution</i>	<i>E-Mail</i>
Michael H. Wong (PI) (Contact)	University of California - Berkeley	mikewong@astro.berkeley.edu
Dr. Amy Simon (CoI)	NASA Goddard Space Flight Center	amy.simon@nasa.gov
Prof. Agustin Sanchez-Lavega (CoI) (ESA Member)	Universidad del Pais Vasco	agustin.sanchez@ehu.es
Dr. Raul Morales-Juberias (CoI)	New Mexico Institute of Mining and Technology	rmjuberias@gmail.com
Dr. Lawrence A. Sromovsky (CoI)	University of Wisconsin - Madison	larry.sromovsky@ssec.wisc.edu
Mr. Patrick M. Fry (CoI)	University of Wisconsin - Madison	pat.fry@ssec.wisc.edu
Prof. Imke de Pater (CoI)	University of California - Berkeley	imke@berkeley.edu
Dr. Ricardo Hueso (CoI) (ESA Member)	Universidad del Pais Vasco	ricardo.hueso@ehu.es

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	11-May-2022 23:00:14.0	yes
02	(1) NEPTUNE	WFC3/UVIS	1	11-May-2022 23:00:17.0	yes
03	(1) NEPTUNE	WFC3/UVIS	1	11-May-2022 23:00:19.0	yes
04	(1) NEPTUNE	WFC3/UVIS	1	11-May-2022 23:00:21.0	yes
05	(1) NEPTUNE	WFC3/UVIS	1	11-May-2022 23:00:24.0	yes
06	(1) NEPTUNE	WFC3/UVIS	1	11-May-2022 23:00:26.0	yes
07	(1) NEPTUNE	WFC3/UVIS	1	11-May-2022 23:00:28.0	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	11-May-2022 23:00:30.0	yes
09	(1) NEPTUNE	WFC3/UVIS	1	11-May-2022 23:00:32.0	yes
10	(1) NEPTUNE	WFC3/UVIS	1	11-May-2022 23:00:35.0	yes

10 Total Orbits Used

ABSTRACT

HST observations taken less than a month before the Mid-Cycle deadline show that a secondary dark feature has appeared on Neptune, closer to the equator than the main dark vortex known as NDS-2018. We propose deep imaging in the F467M filter that is ideal for detecting dark features, which cannot be seen at infrared wavelengths; only HST has the short wavelength spatial resolution capable of observing these spots. New observations are needed to constrain the evolution of NDS-2018 and the recently-discovered secondary dark feature, given the limited information currently available on these storms. Results from the proposed study would constrain future modeling efforts and lay groundwork for potential Neptune spacecraft missions in the coming decades.

Infrared JWST observations of Neptune in 2022 will be blind to NDS-2018 and any secondary dark features, but the JWST observations are intended to characterize any localized compositional or thermal anomalies associated with storms or other discrete features. The proposed HST observations would enhance the interpretation of JWST data by showing whether NDS-2018 is still present at the time of the JWST observations, and whether any secondary dark features (either localized or global-scale) are present.

We seek to explore five key questions: What is the dynamical nature of secondary dark features? How do secondary dark features influence the north-south migration of the dark vortex? What does vortex migration tell us about the background atmosphere? Are Jupiter/Saturn vortices different from Neptune's dark spots? What global-scale effects are produced by dark vortices?

OBSERVING DESCRIPTION

Two global maps of Neptune: one in Dec 2021-Jan 2022, one in June 2022-July 2022. If possible, we will attempt to schedule the second epoch to coincide with JWST Neptune observations.

Each global map is a sequence of 5 HST orbits, each 2 orbits after the last (so, skipping one HST orbit in between). This gives global coverage, with

Proposal 16880 (STScI Edit Number: 4, Created: Wednesday, May 11, 2022 at 10:00:35 PM Eastern Standard Time) - Overview

all longitudes within +/-40 deg of the central meridian, for a feature at < 20 deg N latitude.

Each visit/orbit uses 3-point and 4-point patterns to dither Neptune, with 11 exposures in F467M (best contrast for dark spots), and 11 exposures in other filters. Filters F547M and F390M also show the dark spot, while F845M shows companion cloud features.

We use the C512C subarray to prevent buffer dumps. This corner subarray is close to the amplifier, reducing CTE losses (although these are small because light from the PSF wings basically flashes the detector for us).

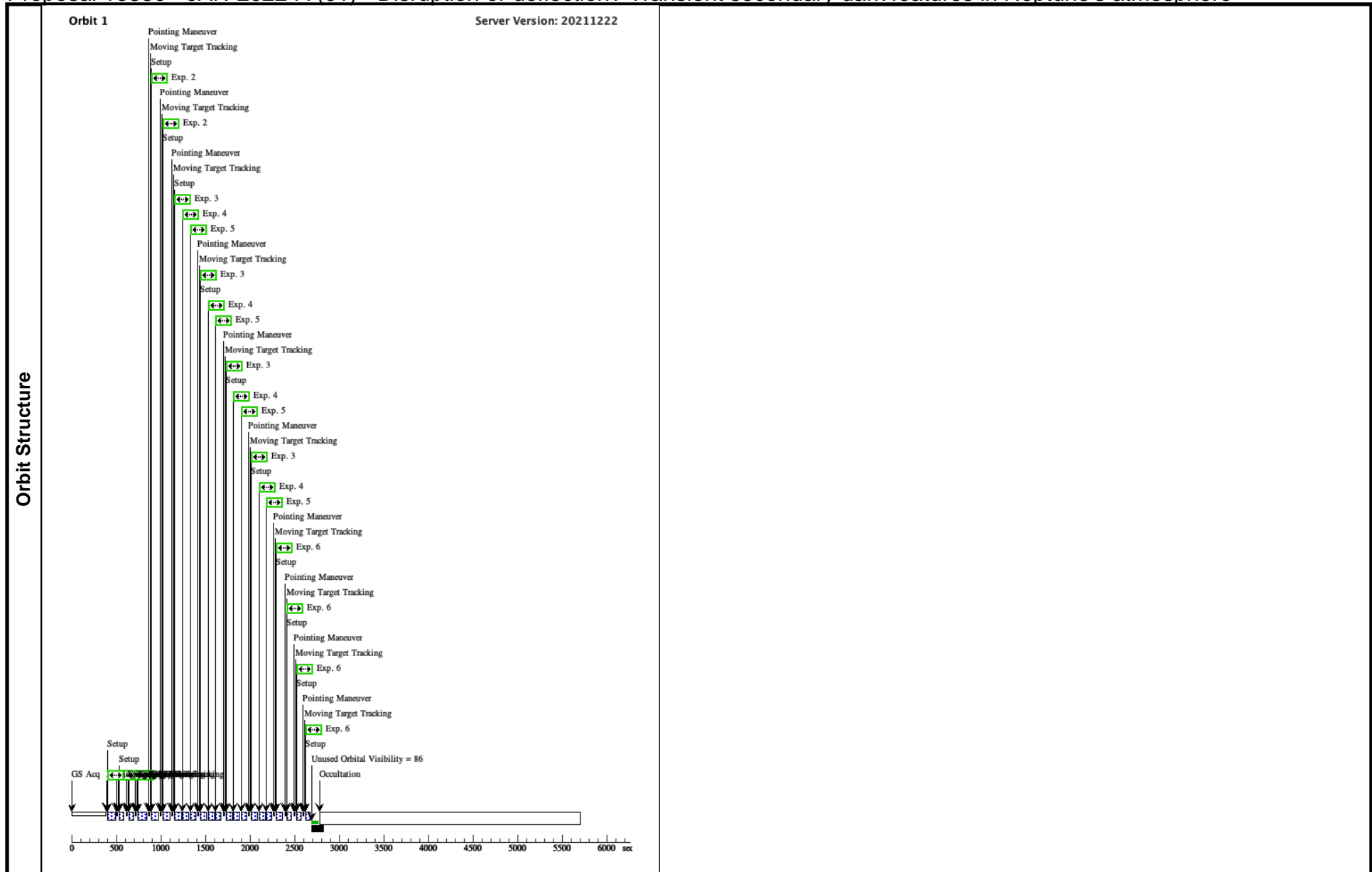
Proposal 16880 - JAN-2022-A (01) - Disruption or deflection? Transient secondary dark features in Neptune's atmosphere

Thu May 12 03:00:36 GMT 2022

Visit	Proposal 16880, JAN-2022-A (01), completed Diagnostic Status: Warning Scientific Instruments: WFC3/UVIS Special Requirements: BEFORE 16-JAN-2022:00:00:00						
	Diagnosics (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 (F845M (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 (F390M (01.005)) Warning (Form): FLASH level may be too low for this exposure or a short subexposure. See extended explanation in the diagnostic browser (F467M (01.006)) Warning (Form): FLASH level may be too low for this exposure or a short subexposure. See extended explanation in the diagnostic browser						
Patterns	#	Primary Pattern		Secondary Pattern		Exposures	
	(3)	Pattern Type=WFC3-UVIS-DITHER-LINE-3PT Purpose=DITHER Number Of Points=3 Point Spacing=1.143 Line Spacing=	Coordinate Frame=POS-TARG Pattern Orientation=46.84 Angle Between Sides= Center Pattern=false			(1), (2)	
	(4)	Pattern Type=WFC3-UVIS-DITHER-BOX Purpose=DITHER Number Of Points=4 Point Spacing=1.173 Line Spacing=1.107	Coordinate Frame=POS-TARG Pattern Orientation=23.884 Angle Between Sides=81.785 Center Pattern=false			(3-5), (6)	
Solar System Targets	#	Name	Level 1	Level 2	Level 3	Window	Ephem Center
	(1)	NEPTUNE	STD=NEPTUNE				NOT ECL P PARTIAL OF NEPTUNE EARTH BY TRITON FROM EARTH
Comments: Description=Neptune Extended=YES							

Proposal 16880 - JAN-2022-A (01) - Disruption or deflection? Transient secondary dark features in Neptune's atmosphere

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 1-6 Non-Int in JAN-2022-A (01) [==>(Pattern 1)] Pattern 3, Exps 1-1 in Sequence 1-6 Non-Int in JAN-2022-A (01) (3) [==>(Pattern 2)] [==>(Pattern 3)]	15 Secs (45 Secs)	[1]
	2	F845M	(1) NEPTUNE	WFC3/UVIS, ACCUM, UVIS2-C512C-SUB	F845M				Sequence 1-6 Non-Int in JAN-2022-A (01) [==>(Pattern 1)] Pattern 3, Exps 2-2 in Sequence 1-6 Non-Int in JAN-2022-A (01) (3) [==>(Pattern 2)] [==>(Pattern 3)]	40 Secs (120 Secs)	[1]
	3	F467M	(1) NEPTUNE	WFC3/UVIS, ACCUM, UVIS2-C512C-SUB	F467M				Sequence 1-6 Non-Int in JAN-2022-A (01) [==>(Pattern 1)] Pattern 4, Exps 3-5 in Sequence 1-6 Non-Int in JAN-2022-A (01) (4) [==>(Pattern 2)] [==>(Pattern 3)] [==>(Pattern 4)]	15 Secs (60 Secs)	[1]
	4	F547M	(1) NEPTUNE	WFC3/UVIS, ACCUM, UVIS2-C512C-SUB	F547M				Sequence 1-6 Non-Int in JAN-2022-A (01) [==>(Pattern 1)] Pattern 4, Exps 3-5 in Sequence 1-6 Non-Int in JAN-2022-A (01) (4) [==>(Pattern 2)] [==>(Pattern 3)] [==>(Pattern 4)]	6 Secs (24 Secs)	[1]
	5	F390M	(1) NEPTUNE	WFC3/UVIS, ACCUM, UVIS2-C512C-SUB	F390M				Sequence 1-6 Non-Int in JAN-2022-A (01) [==>(Pattern 1)] Pattern 4, Exps 3-5 in Sequence 1-6 Non-Int in JAN-2022-A (01) (4) [==>(Pattern 2)] [==>(Pattern 3)] [==>(Pattern 4)]	15 Secs (60 Secs)	[1]
	6	F467M	(1) NEPTUNE	WFC3/UVIS, ACCUM, UVIS2-C512C-SUB	F467M				Sequence 1-6 Non-Int in JAN-2022-A (01) [==>(Pattern 1)] Pattern 4, Exps 6-6 in Sequence 1-6 Non-Int in JAN-2022-A (01) (4) [==>(Pattern 2)] [==>(Pattern 3)] [==>(Pattern 4)]	15 Secs (60 Secs)	[1]



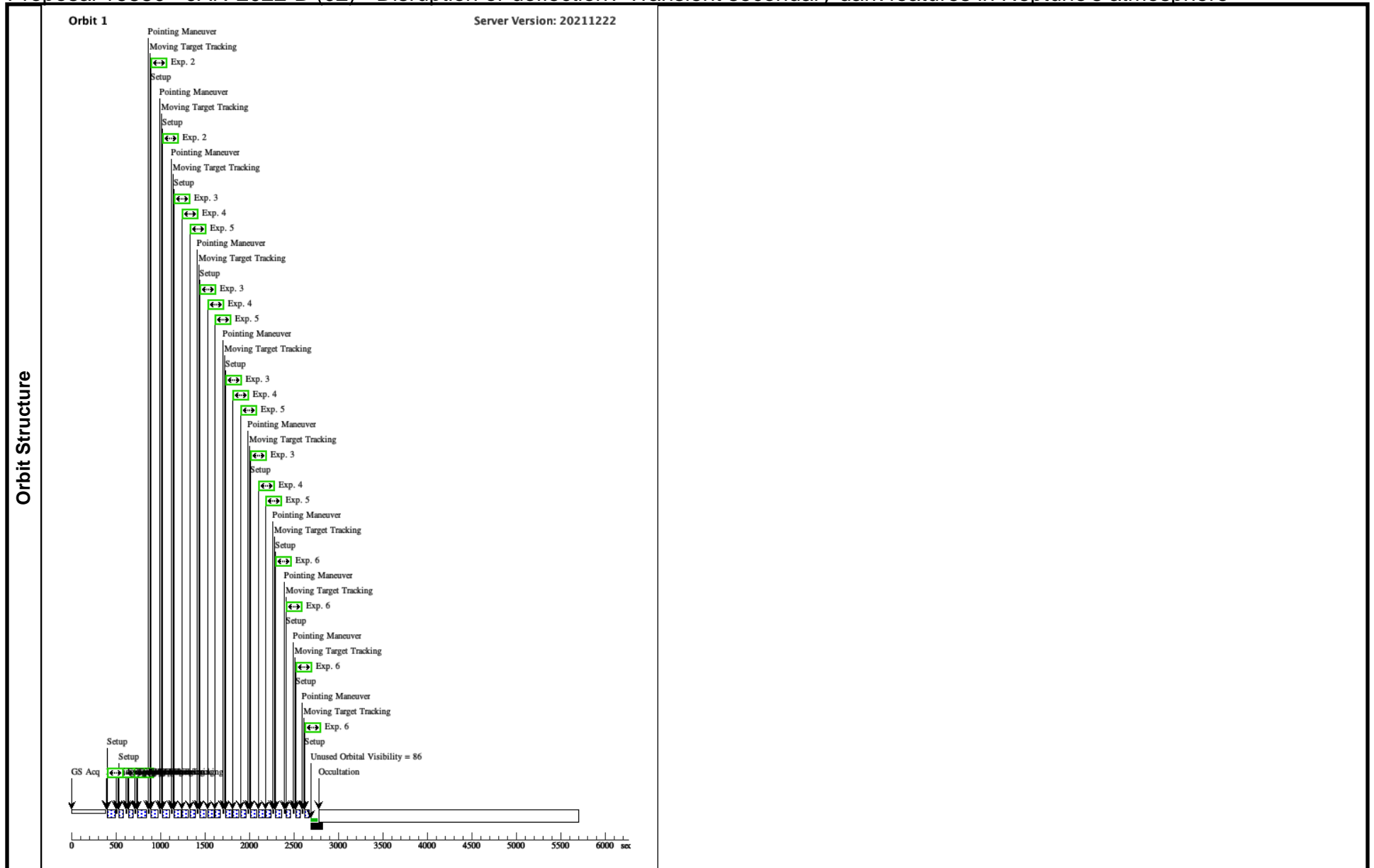
Proposal 16880 - JAN-2022-B (02) - Disruption or deflection? Transient secondary dark features in Neptune's atmosphere

Thu May 12 03:00:36 GMT 2022

Visit	Proposal 16880, JAN-2022-B (02), completed Diagnostic Status: Warning Scientific Instruments: WFC3/UVIS Special Requirements: AFTER 01 BY 1.9 Orbits TO 2.1 Orbits						
	Diagnosics (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 (F845M (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 (F390M (02.005)) Warning (Form): FLASH level may be too low for this exposure or a short subexposure. See extended explanation in the diagnostic browser (F467M (02.006)) Warning (Form): FLASH level may be too low for this exposure or a short subexposure. See extended explanation in the diagnostic browser						
Patterns	#	Primary Pattern		Secondary Pattern	Exposures		
	(3)	Pattern Type=WFC3-UVIS-DITHER-LINE-3PT Purpose=DITHER Number Of Points=3 Point Spacing=1.143 Line Spacing=	Coordinate Frame=POS-TARG Pattern Orientation=46.84 Angle Between Sides= Center Pattern=false		(1), (2)		
	(4)	Pattern Type=WFC3-UVIS-DITHER-BOX Purpose=DITHER Number Of Points=4 Point Spacing=1.173 Line Spacing=1.107	Coordinate Frame=POS-TARG Pattern Orientation=23.884 Angle Between Sides=81.785 Center Pattern=false		(3-5), (6)		
Solar System Targets	#	Name	Level 1	Level 2	Level 3	Window	Ephem Center
	(1)	NEPTUNE	STD=NEPTUNE				NOT ECL P PARTIAL OF NEPTUNE EARTH BY TRITON FROM EARTH
Comments: Description=Neptune Extended=YES							

Proposal 16880 - JAN-2022-B (02) - Disruption or deflection? Transient secondary dark features in Neptune's atmosphere

#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
Exposures	1	F467M	(1) NEPTUNE	WFC3/UVIS, ACCUM, UVIS2-C512C-SUB	F467M		Sequence 1-6 Non-Int in JAN-2022-B (02) Pattern 3, Exps 1-1 in Sequence 1-6 Non-Int in JAN-2022-B (02) (3)	15 Secs (45 Secs) [==>(Pattern 1)] [==>(Pattern 2)] [==>(Pattern 3)]	[1]
	2	F845M	(1) NEPTUNE	WFC3/UVIS, ACCUM, UVIS2-C512C-SUB	F845M		Sequence 1-6 Non-Int in JAN-2022-B (02) Pattern 3, Exps 2-2 in Sequence 1-6 Non-Int in JAN-2022-B (02) (3)	40 Secs (120 Secs) [==>(Pattern 1)] [==>(Pattern 2)] [==>(Pattern 3)]	[1]
	3	F467M	(1) NEPTUNE	WFC3/UVIS, ACCUM, UVIS2-C512C-SUB	F467M		Sequence 1-6 Non-Int in JAN-2022-B (02) Pattern 4, Exps 3-5 in Sequence 1-6 Non-Int in JAN-2022-B (02) (4)	15 Secs (60 Secs) [==>(Pattern 1)] [==>(Pattern 2)] [==>(Pattern 3)] [==>(Pattern 4)]	[1]
	4	F547M	(1) NEPTUNE	WFC3/UVIS, ACCUM, UVIS2-C512C-SUB	F547M		Sequence 1-6 Non-Int in JAN-2022-B (02) Pattern 4, Exps 3-5 in Sequence 1-6 Non-Int in JAN-2022-B (02) (4)	6 Secs (24 Secs) [==>(Pattern 1)] [==>(Pattern 2)] [==>(Pattern 3)] [==>(Pattern 4)]	[1]
	5	F390M	(1) NEPTUNE	WFC3/UVIS, ACCUM, UVIS2-C512C-SUB	F390M		Sequence 1-6 Non-Int in JAN-2022-B (02) Pattern 4, Exps 3-5 in Sequence 1-6 Non-Int in JAN-2022-B (02) (4)	15 Secs (60 Secs) [==>(Pattern 1)] [==>(Pattern 2)] [==>(Pattern 3)] [==>(Pattern 4)]	[1]
	6	F467M	(1) NEPTUNE	WFC3/UVIS, ACCUM, UVIS2-C512C-SUB	F467M		Sequence 1-6 Non-Int in JAN-2022-B (02) Pattern 4, Exps 6-6 in Sequence 1-6 Non-Int in JAN-2022-B (02) (4)	15 Secs (60 Secs) [==>(Pattern 1)] [==>(Pattern 2)] [==>(Pattern 3)] [==>(Pattern 4)]	[1]



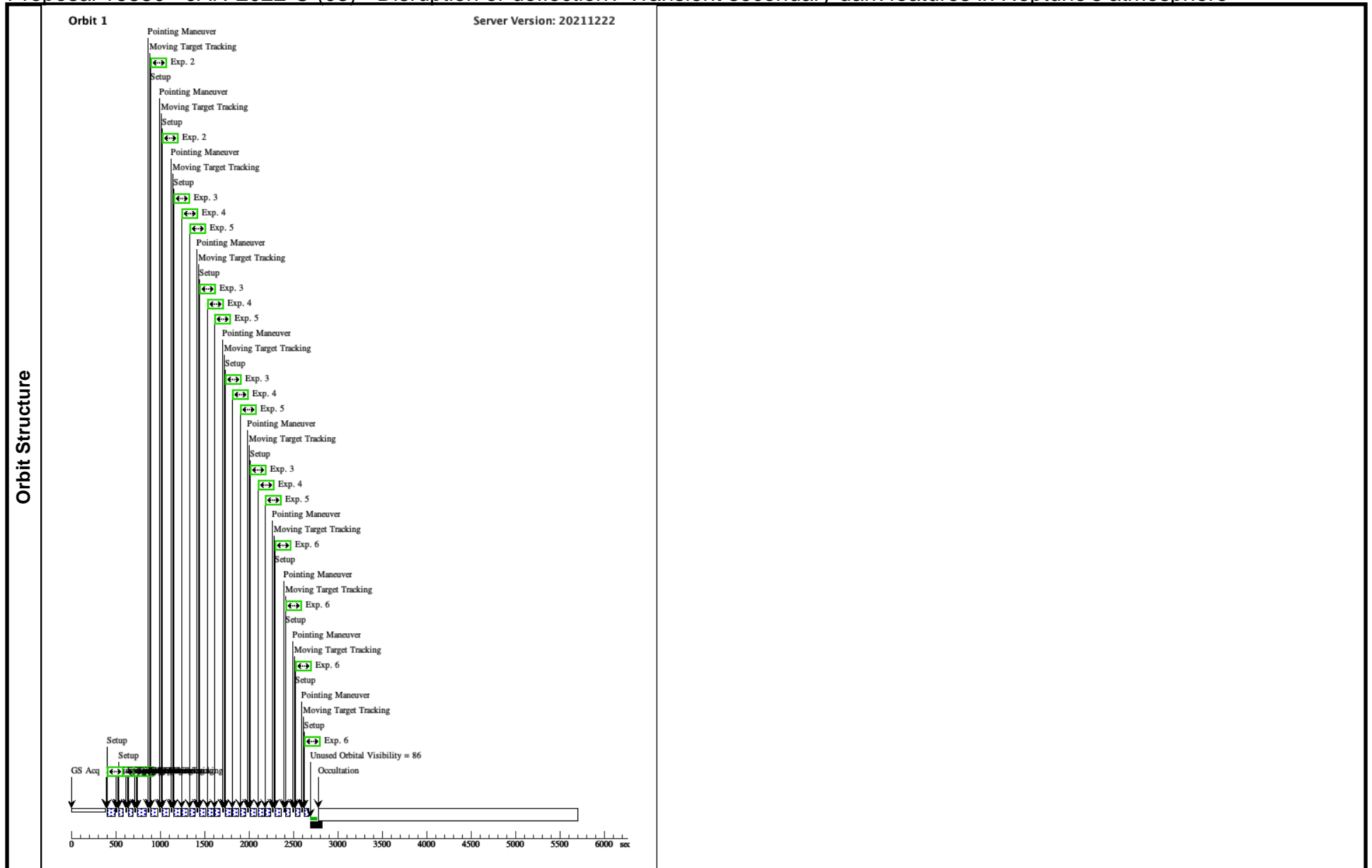
Proposal 16880 - JAN-2022-C (03) - Disruption or deflection? Transient secondary dark features in Neptune's atmosphere

Thu May 12 03:00:36 GMT 2022

Visit	Proposal 16880, JAN-2022-C (03), completed Diagnostic Status: Warning Scientific Instruments: WFC3/UVIS Special Requirements: AFTER 02 BY 1.9 Orbits TO 2.1 Orbits						
	Diagnosics (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 (F845M (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 (F390M (03.005)) Warning (Form): FLASH level may be too low for this exposure or a short subexposure. See extended explanation in the diagnostic browser (F467M (03.006)) Warning (Form): FLASH level may be too low for this exposure or a short subexposure. See extended explanation in the diagnostic browser						
Patterns	#	Primary Pattern		Secondary Pattern		Exposures	
	(3)	Pattern Type=WFC3-UVIS-DITHER-LINE-3PT Purpose=DITHER Number Of Points=3 Point Spacing=1.143 Line Spacing=	Coordinate Frame=POS-TARG Pattern Orientation=46.84 Angle Between Sides= Center Pattern=false			(1), (2)	
	(4)	Pattern Type=WFC3-UVIS-DITHER-BOX Purpose=DITHER Number Of Points=4 Point Spacing=1.173 Line Spacing=1.107	Coordinate Frame=POS-TARG Pattern Orientation=23.884 Angle Between Sides=81.785 Center Pattern=false			(3-5), (6)	
Solar System Targets	#	Name	Level 1	Level 2	Level 3	Window	Ephem Center
	(1)	NEPTUNE	STD=NEPTUNE				NOT ECL P PARTIAL OF NEPTUNE EARTH BY TRITON FROM EARTH
Comments: Description=Neptune Extended=YES							

Proposal 16880 - JAN-2022-C (03) - Disruption or deflection? Transient secondary dark features in Neptune's atmosphere

#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
Exposures	1	F467M	(1) NEPTUNE	WFC3/UVIS, ACCUM, UVIS2-C512C-SUB	F467M		Sequence 1-6 Non-Int in JAN-2022-C (03) Pattern 3, Exps 1-1 in Sequence 1-6 Non-Int in JAN-2022-C (03) (3)	15 Secs (45 Secs) [==>(Pattern 1)] [==>(Pattern 2)] [==>(Pattern 3)]	[1]
	2	F845M	(1) NEPTUNE	WFC3/UVIS, ACCUM, UVIS2-C512C-SUB	F845M		Sequence 1-6 Non-Int in JAN-2022-C (03) Pattern 3, Exps 2-2 in Sequence 1-6 Non-Int in JAN-2022-C (03) (3)	40 Secs (120 Secs) [==>(Pattern 1)] [==>(Pattern 2)] [==>(Pattern 3)]	[1]
	3	F467M	(1) NEPTUNE	WFC3/UVIS, ACCUM, UVIS2-C512C-SUB	F467M		Sequence 1-6 Non-Int in JAN-2022-C (03) Pattern 4, Exps 3-5 in Sequence 1-6 Non-Int in JAN-2022-C (03) (4)	15 Secs (60 Secs) [==>(Pattern 1)] [==>(Pattern 2)] [==>(Pattern 3)] [==>(Pattern 4)]	[1]
	4	F547M	(1) NEPTUNE	WFC3/UVIS, ACCUM, UVIS2-C512C-SUB	F547M		Sequence 1-6 Non-Int in JAN-2022-C (03) Pattern 4, Exps 3-5 in Sequence 1-6 Non-Int in JAN-2022-C (03) (4)	6 Secs (24 Secs) [==>(Pattern 1)] [==>(Pattern 2)] [==>(Pattern 3)] [==>(Pattern 4)]	[1]
	5	F390M	(1) NEPTUNE	WFC3/UVIS, ACCUM, UVIS2-C512C-SUB	F390M		Sequence 1-6 Non-Int in JAN-2022-C (03) Pattern 4, Exps 3-5 in Sequence 1-6 Non-Int in JAN-2022-C (03) (4)	15 Secs (60 Secs) [==>(Pattern 1)] [==>(Pattern 2)] [==>(Pattern 3)] [==>(Pattern 4)]	[1]
	6	F467M	(1) NEPTUNE	WFC3/UVIS, ACCUM, UVIS2-C512C-SUB	F467M		Sequence 1-6 Non-Int in JAN-2022-C (03) Pattern 4, Exps 6-6 in Sequence 1-6 Non-Int in JAN-2022-C (03) (4)	15 Secs (60 Secs) [==>(Pattern 1)] [==>(Pattern 2)] [==>(Pattern 3)] [==>(Pattern 4)]	[1]



Proposal 16880 - JAN-2022-D (04) - Disruption or deflection? Transient secondary dark features in Neptune's atmosphere

Thu May 12 03:00:36 GMT 2022

Visit	Proposal 16880, JAN-2022-D (04), completed Diagnostic Status: Warning Scientific Instruments: WFC3/UVIS Special Requirements: AFTER 03 BY 1.9 Orbits TO 2.1 Orbits						
	Diagnosics (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 (F845M (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 (F390M (04.005)) Warning (Form): FLASH level may be too low for this exposure or a short subexposure. See extended explanation in the diagnostic browser (F467M (04.006)) Warning (Form): FLASH level may be too low for this exposure or a short subexposure. See extended explanation in the diagnostic browser						
Patterns	#	Primary Pattern		Secondary Pattern		Exposures	
	(3)	Pattern Type=WFC3-UVIS-DITHER-LINE-3PT Purpose=DITHER Number Of Points=3 Point Spacing=1.143 Line Spacing=	Coordinate Frame=POS-TARG Pattern Orientation=46.84 Angle Between Sides= Center Pattern=false			(1), (2)	
	(4)	Pattern Type=WFC3-UVIS-DITHER-BOX Purpose=DITHER Number Of Points=4 Point Spacing=1.173 Line Spacing=1.107	Coordinate Frame=POS-TARG Pattern Orientation=23.884 Angle Between Sides=81.785 Center Pattern=false			(3-5), (6)	
Solar System Targets	#	Name	Level 1	Level 2	Level 3	Window	Ephem Center
	(1)	NEPTUNE	STD=NEPTUNE				NOT ECL P PARTIAL OF NEPTUNE EARTH BY TRITON FROM EARTH
Comments: Description=Neptune Extended=YES							

Proposal 16880 - JAN-2022-D (04) - Disruption or deflection? Transient secondary dark features in Neptune's atmosphere

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 1-6 Non-Int in JAN-2022-D (04) [==>(Pattern 1)] Pattern 3, Exps 1-1 in Sequence 1-6 Non-Int in JAN-2022-D (04) (3) [==>(Pattern 2)] [==>(Pattern 3)]	15 Secs (45 Secs)	[1]
	2	F845M	(1) NEPTUNE	WFC3/UVIS, ACCUM, UVIS2-C512C-SUB	F845M				Sequence 1-6 Non-Int in JAN-2022-D (04) [==>(Pattern 1)] Pattern 3, Exps 2-2 in Sequence 1-6 Non-Int in JAN-2022-D (04) (3) [==>(Pattern 2)] [==>(Pattern 3)]	40 Secs (120 Secs)	[1]
	3	F467M	(1) NEPTUNE	WFC3/UVIS, ACCUM, UVIS2-C512C-SUB	F467M				Sequence 1-6 Non-Int in JAN-2022-D (04) [==>(Pattern 1)] Pattern 4, Exps 3-5 in Sequence 1-6 Non-Int in JAN-2022-D (04) (4) [==>(Pattern 2)] [==>(Pattern 3)] [==>(Pattern 4)]	15 Secs (60 Secs)	[1]
	4	F547M	(1) NEPTUNE	WFC3/UVIS, ACCUM, UVIS2-C512C-SUB	F547M				Sequence 1-6 Non-Int in JAN-2022-D (04) [==>(Pattern 1)] Pattern 4, Exps 3-5 in Sequence 1-6 Non-Int in JAN-2022-D (04) (4) [==>(Pattern 2)] [==>(Pattern 3)] [==>(Pattern 4)]	6 Secs (24 Secs)	[1]
	5	F390M	(1) NEPTUNE	WFC3/UVIS, ACCUM, UVIS2-C512C-SUB	F390M				Sequence 1-6 Non-Int in JAN-2022-D (04) [==>(Pattern 1)] Pattern 4, Exps 3-5 in Sequence 1-6 Non-Int in JAN-2022-D (04) (4) [==>(Pattern 2)] [==>(Pattern 3)] [==>(Pattern 4)]	15 Secs (60 Secs)	[1]
	6	F467M	(1) NEPTUNE	WFC3/UVIS, ACCUM, UVIS2-C512C-SUB	F467M				Sequence 1-6 Non-Int in JAN-2022-D (04) [==>(Pattern 1)] Pattern 4, Exps 6-6 in Sequence 1-6 Non-Int in JAN-2022-D (04) (4) [==>(Pattern 2)] [==>(Pattern 3)] [==>(Pattern 4)]	15 Secs (60 Secs)	[1]

Proposal 16880 - JAN-2022-E (05) - Disruption or deflection? Transient secondary dark features in Neptune's atmosphere

Thu May 12 03:00:36 GMT 2022

Visit	Proposal 16880, JAN-2022-E (05), completed Diagnostic Status: Warning Scientific Instruments: WFC3/UVIS Special Requirements: AFTER 04 BY 1.9 Orbits TO 2.1 Orbits						
	Diagnosics (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 (F845M (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 (F390M (05.005)) Warning (Form): FLASH level may be too low for this exposure or a short subexposure. See extended explanation in the diagnostic browser (F467M (05.006)) Warning (Form): FLASH level may be too low for this exposure or a short subexposure. See extended explanation in the diagnostic browser						
Patterns	#	Primary Pattern		Secondary Pattern		Exposures	
	(3)	Pattern Type=WFC3-UVIS-DITHER-LINE-3PT Purpose=DITHER Number Of Points=3 Point Spacing=1.143 Line Spacing=	Coordinate Frame=POS-TARG Pattern Orientation=46.84 Angle Between Sides= Center Pattern=false			(1), (2)	
	(4)	Pattern Type=WFC3-UVIS-DITHER-BOX Purpose=DITHER Number Of Points=4 Point Spacing=1.173 Line Spacing=1.107	Coordinate Frame=POS-TARG Pattern Orientation=23.884 Angle Between Sides=81.785 Center Pattern=false			(3-5), (6)	
Solar System Targets	#	Name	Level 1	Level 2	Level 3	Window	Ephem Center
	(1)	NEPTUNE	STD=NEPTUNE				NOT ECL P PARTIAL OF NEPTUNE EARTH BY TRITON FROM EARTH
Comments: Description=Neptune Extended=YES							

Proposal 16880 - JAN-2022-E (05) - Disruption or deflection? Transient secondary dark features in Neptune's atmosphere

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 1-6 Non-Int in JAN-2022-E (05) Pattern 3, Exps 1-1 in Sequence 1-6 Non-Int in JAN-2022-E (05) (3)	15 Secs (45 Secs) [==>(Pattern 1)] [==>(Pattern 2)] [==>(Pattern 3)]	[1]
	2	F845M	(1) NEPTUNE	WFC3/UVIS, ACCUM, UVIS2-C512C-SUB	F845M			Sequence 1-6 Non-Int in JAN-2022-E (05) Pattern 3, Exps 2-2 in Sequence 1-6 Non-Int in JAN-2022-E (05) (3)	40 Secs (120 Secs) [==>(Pattern 1)] [==>(Pattern 2)] [==>(Pattern 3)]	[1]
	3	F467M	(1) NEPTUNE	WFC3/UVIS, ACCUM, UVIS2-C512C-SUB	F467M			Sequence 1-6 Non-Int in JAN-2022-E (05) Pattern 4, Exps 3-5 in Sequence 1-6 Non-Int in JAN-2022-E (05) (4)	15 Secs (60 Secs) [==>(Pattern 1)] [==>(Pattern 2)] [==>(Pattern 3)] [==>(Pattern 4)]	[1]
	4	F547M	(1) NEPTUNE	WFC3/UVIS, ACCUM, UVIS2-C512C-SUB	F547M			Sequence 1-6 Non-Int in JAN-2022-E (05) Pattern 4, Exps 3-5 in Sequence 1-6 Non-Int in JAN-2022-E (05) (4)	6 Secs (24 Secs) [==>(Pattern 1)] [==>(Pattern 2)] [==>(Pattern 3)] [==>(Pattern 4)]	[1]
	5	F390M	(1) NEPTUNE	WFC3/UVIS, ACCUM, UVIS2-C512C-SUB	F390M			Sequence 1-6 Non-Int in JAN-2022-E (05) Pattern 4, Exps 3-5 in Sequence 1-6 Non-Int in JAN-2022-E (05) (4)	15 Secs (60 Secs) [==>(Pattern 1)] [==>(Pattern 2)] [==>(Pattern 3)] [==>(Pattern 4)]	[1]
	6	F467M	(1) NEPTUNE	WFC3/UVIS, ACCUM, UVIS2-C512C-SUB	F467M			Sequence 1-6 Non-Int in JAN-2022-E (05) Pattern 4, Exps 6-6 in Sequence 1-6 Non-Int in JAN-2022-E (05) (4)	15 Secs (60 Secs) [==>(Pattern 1)] [==>(Pattern 2)] [==>(Pattern 3)] [==>(Pattern 4)]	[1]

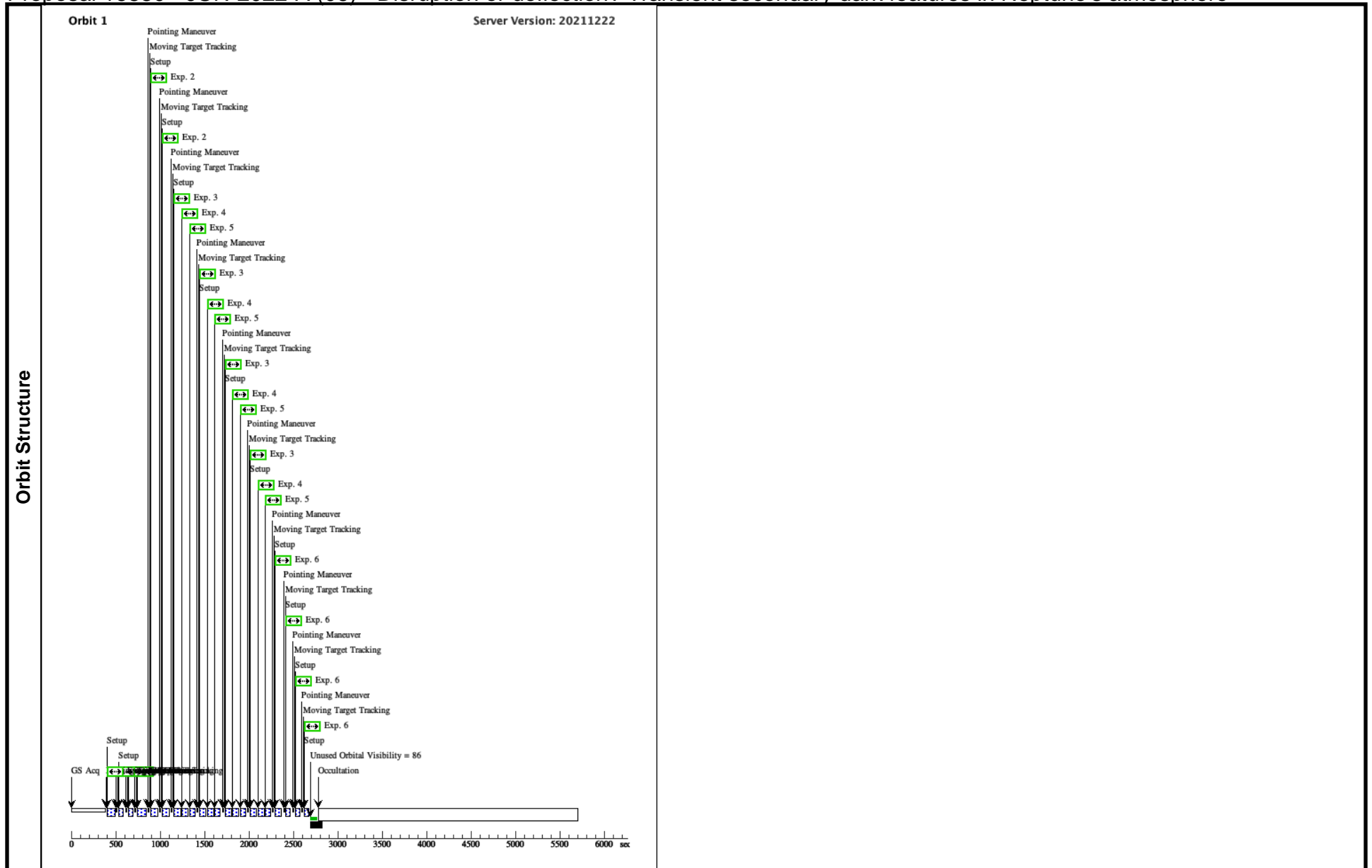
Proposal 16880 - JUN-2022-A (06) - Disruption or deflection? Transient secondary dark features in Neptune's atmosphere

Thu May 12 03:00:36 GMT 2022

Visit	Proposal 16880, JUN-2022-A (06), scheduling Diagnostic Status: Warning Scientific Instruments: WFC3/UVIS Special Requirements: BEFORE 15-JUL-2022:00:00:00						
	Diagnosics (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 (F845M (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 (F390M (06.005)) Warning (Form): FLASH level may be too low for this exposure or a short subexposure. See extended explanation in the diagnostic browser (F467M (06.006)) Warning (Form): FLASH level may be too low for this exposure or a short subexposure. See extended explanation in the diagnostic browser						
Patterns	#	Primary Pattern		Secondary Pattern		Exposures	
	(3)	Pattern Type=WFC3-UVIS-DITHER-LINE-3PT Purpose=DITHER Number Of Points=3 Point Spacing=1.143 Line Spacing=	Coordinate Frame=POS-TARG Pattern Orientation=46.84 Angle Between Sides= Center Pattern=false			(1), (2)	
	(4)	Pattern Type=WFC3-UVIS-DITHER-BOX Purpose=DITHER Number Of Points=4 Point Spacing=1.173 Line Spacing=1.107	Coordinate Frame=POS-TARG Pattern Orientation=23.884 Angle Between Sides=81.785 Center Pattern=false			(3-5), (6)	
Solar System Targets	#	Name	Level 1	Level 2	Level 3	Window	Ephem Center
	(1)	NEPTUNE	STD=NEPTUNE				NOT ECL P PARTIAL OF NEPTUNE EARTH BY TRITON FROM EARTH
Comments: Description=Neptune Extended=YES							

Proposal 16880 - JUN-2022-A (06) - Disruption or deflection? Transient secondary dark features in Neptune's atmosphere

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 1-6 Non-Int in JUN-2022-A (06)	15 Secs (45 Secs)	
									[==>(Pattern 1)]		[1]
								Pattern 3, Exps 1-1 in Sequence 1-6 Non-Int in JUN-2022-A (06) (3)	[==>(Pattern 2)]		
									[==>(Pattern 3)]		
	2	F845M	(1) NEPTUNE	WFC3/UVIS, ACCUM, UVIS2-C512C-SUB	F845M				Sequence 1-6 Non-Int in JUN-2022-A (06)	40 Secs (120 Secs)	
									[==>(Pattern 1)]		[1]
							Pattern 3, Exps 2-2 in Sequence 1-6 Non-Int in JUN-2022-A (06) (3)	[==>(Pattern 2)]			
								[==>(Pattern 3)]			
3	F467M	(1) NEPTUNE	WFC3/UVIS, ACCUM, UVIS2-C512C-SUB	F467M				Sequence 1-6 Non-Int in JUN-2022-A (06)	15 Secs (60 Secs)		
								[==>(Pattern 1)]		[1]	
							Pattern 4, Exps 3-5 in Sequence 1-6 Non-Int in JUN-2022-A (06) (4)	[==>(Pattern 2)]			
								[==>(Pattern 3)]			
								[==>(Pattern 4)]			
4	F547M	(1) NEPTUNE	WFC3/UVIS, ACCUM, UVIS2-C512C-SUB	F547M				Sequence 1-6 Non-Int in JUN-2022-A (06)	6 Secs (24 Secs)		
								[==>(Pattern 1)]		[1]	
							Pattern 4, Exps 3-5 in Sequence 1-6 Non-Int in JUN-2022-A (06) (4)	[==>(Pattern 2)]			
								[==>(Pattern 3)]			
								[==>(Pattern 4)]			
5	F390M	(1) NEPTUNE	WFC3/UVIS, ACCUM, UVIS2-C512C-SUB	F390M				Sequence 1-6 Non-Int in JUN-2022-A (06)	15 Secs (60 Secs)		
								[==>(Pattern 1)]		[1]	
							Pattern 4, Exps 3-5 in Sequence 1-6 Non-Int in JUN-2022-A (06) (4)	[==>(Pattern 2)]			
								[==>(Pattern 3)]			
								[==>(Pattern 4)]			
6	F467M	(1) NEPTUNE	WFC3/UVIS, ACCUM, UVIS2-C512C-SUB	F467M				Sequence 1-6 Non-Int in JUN-2022-A (06)	15 Secs (60 Secs)		
								[==>(Pattern 1)]		[1]	
							Pattern 4, Exps 6-6 in Sequence 1-6 Non-Int in JUN-2022-A (06) (4)	[==>(Pattern 2)]			
								[==>(Pattern 3)]			
								[==>(Pattern 4)]			



Proposal 16880 - JUN-2022-B (07) - Disruption or deflection? Transient secondary dark features in Neptune's atmosphere

Thu May 12 03:00:36 GMT 2022

Visit	Proposal 16880, JUN-2022-B (07), scheduling Diagnostic Status: Warning Scientific Instruments: WFC3/UVIS Special Requirements: AFTER 06 BY 1.9 Orbits TO 2.1 Orbits						
	Diagnosics (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 (F845M (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 (F390M (07.005)) Warning (Form): FLASH level may be too low for this exposure or a short subexposure. See extended explanation in the diagnostic browser (F467M (07.006)) Warning (Form): FLASH level may be too low for this exposure or a short subexposure. See extended explanation in the diagnostic browser						
Patterns	#	Primary Pattern		Secondary Pattern		Exposures	
	(3)	Pattern Type=WFC3-UVIS-DITHER-LINE-3PT Purpose=DITHER Number Of Points=3 Point Spacing=1.143 Line Spacing=	Coordinate Frame=POS-TARG Pattern Orientation=46.84 Angle Between Sides= Center Pattern=false			(1), (2)	
	(4)	Pattern Type=WFC3-UVIS-DITHER-BOX Purpose=DITHER Number Of Points=4 Point Spacing=1.173 Line Spacing=1.107	Coordinate Frame=POS-TARG Pattern Orientation=23.884 Angle Between Sides=81.785 Center Pattern=false			(3-5), (6)	
Solar System Targets	#	Name	Level 1	Level 2	Level 3	Window	Ephem Center
	(1)	NEPTUNE	STD=NEPTUNE				NOT ECL P PARTIAL OF NEPTUNE EARTH BY TRITON FROM EARTH
Comments: Description=Neptune Extended=YES							

Proposal 16880 - JUN-2022-B (07) - Disruption or deflection? Transient secondary dark features in Neptune's atmosphere

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 1-6 Non-Int in JUN-2022-B (07) [==>(Pattern 1)] Pattern 3, Exps 1-1 in Sequence 1-6 Non-Int in JUN-2022-B (07) (3) [==>(Pattern 2)] [==>(Pattern 3)]	15 Secs (45 Secs)	[1]
	2	F845M	(1) NEPTUNE	WFC3/UVIS, ACCUM, UVIS2-C512C-SUB	F845M				Sequence 1-6 Non-Int in JUN-2022-B (07) [==>(Pattern 1)] Pattern 3, Exps 2-2 in Sequence 1-6 Non-Int in JUN-2022-B (07) (3) [==>(Pattern 2)] [==>(Pattern 3)]	40 Secs (120 Secs)	[1]
	3	F467M	(1) NEPTUNE	WFC3/UVIS, ACCUM, UVIS2-C512C-SUB	F467M				Sequence 1-6 Non-Int in JUN-2022-B (07) [==>(Pattern 1)] Pattern 4, Exps 3-5 in Sequence 1-6 Non-Int in JUN-2022-B (07) (4) [==>(Pattern 2)] [==>(Pattern 3)] [==>(Pattern 4)]	15 Secs (60 Secs)	[1]
	4	F547M	(1) NEPTUNE	WFC3/UVIS, ACCUM, UVIS2-C512C-SUB	F547M				Sequence 1-6 Non-Int in JUN-2022-B (07) [==>(Pattern 1)] Pattern 4, Exps 3-5 in Sequence 1-6 Non-Int in JUN-2022-B (07) (4) [==>(Pattern 2)] [==>(Pattern 3)] [==>(Pattern 4)]	6 Secs (24 Secs)	[1]
	5	F390M	(1) NEPTUNE	WFC3/UVIS, ACCUM, UVIS2-C512C-SUB	F390M				Sequence 1-6 Non-Int in JUN-2022-B (07) [==>(Pattern 1)] Pattern 4, Exps 3-5 in Sequence 1-6 Non-Int in JUN-2022-B (07) (4) [==>(Pattern 2)] [==>(Pattern 3)] [==>(Pattern 4)]	15 Secs (60 Secs)	[1]
	6	F467M	(1) NEPTUNE	WFC3/UVIS, ACCUM, UVIS2-C512C-SUB	F467M				Sequence 1-6 Non-Int in JUN-2022-B (07) [==>(Pattern 1)] Pattern 4, Exps 6-6 in Sequence 1-6 Non-Int in JUN-2022-B (07) (4) [==>(Pattern 2)] [==>(Pattern 3)] [==>(Pattern 4)]	15 Secs (60 Secs)	[1]

Proposal 16880 - JUN-2022-C (08) - Disruption or deflection? Transient secondary dark features in Neptune's atmosphere

Thu May 12 03:00:36 GMT 2022

Visit	Proposal 16880, JUN-2022-C (08), scheduling Diagnostic Status: Warning Scientific Instruments: WFC3/UVIS Special Requirements: AFTER 07 BY 1.9 Orbits TO 2.1 Orbits						
	Diagnosics (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 (F845M (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 (F390M (08.005)) Warning (Form): FLASH level may be too low for this exposure or a short subexposure. See extended explanation in the diagnostic browser (F467M (08.006)) Warning (Form): FLASH level may be too low for this exposure or a short subexposure. See extended explanation in the diagnostic browser						
Patterns	#	Primary Pattern		Secondary Pattern		Exposures	
	(3)	Pattern Type=WFC3-UVIS-DITHER-LINE-3PT Purpose=DITHER Number Of Points=3 Point Spacing=1.143 Line Spacing=	Coordinate Frame=POS-TARG Pattern Orientation=46.84 Angle Between Sides= Center Pattern=false			(1), (2)	
	(4)	Pattern Type=WFC3-UVIS-DITHER-BOX Purpose=DITHER Number Of Points=4 Point Spacing=1.173 Line Spacing=1.107	Coordinate Frame=POS-TARG Pattern Orientation=23.884 Angle Between Sides=81.785 Center Pattern=false			(3-5), (6)	
Solar System Targets	#	Name	Level 1	Level 2	Level 3	Window	Ephem Center
	(1)	NEPTUNE	STD=NEPTUNE				NOT ECL P PARTIAL OF NEPTUNE EARTH BY TRITON FROM EARTH
Comments: Description=Neptune Extended=YES							

Proposal 16880 - JUN-2022-C (08) - Disruption or deflection? Transient secondary dark features in Neptune's atmosphere

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 1-6 Non-Int in JUN-2022-C (08)	15 Secs (45 Secs)	
								Pattern 3, Exps 1-1 in Sequence 1-6 Non-Int in JUN-2022-C (08) (3)	[==>(Pattern 1)] [==>(Pattern 2)] [==>(Pattern 3)]	[1]
	2	F845M	(1) NEPTUNE	WFC3/UVIS, ACCUM, UVIS2-C512C-SUB	F845M			Sequence 1-6 Non-Int in JUN-2022-C (08)	40 Secs (120 Secs)	
								Pattern 3, Exps 2-2 in Sequence 1-6 Non-Int in JUN-2022-C (08) (3)	[==>(Pattern 1)] [==>(Pattern 2)] [==>(Pattern 3)]	[1]
	3	F467M	(1) NEPTUNE	WFC3/UVIS, ACCUM, UVIS2-C512C-SUB	F467M			Sequence 1-6 Non-Int in JUN-2022-C (08)	15 Secs (60 Secs)	
								Pattern 4, Exps 3-5 in Sequence 1-6 Non-Int in JUN-2022-C (08) (4)	[==>(Pattern 1)] [==>(Pattern 2)] [==>(Pattern 3)] [==>(Pattern 4)]	[1]
4	F547M	(1) NEPTUNE	WFC3/UVIS, ACCUM, UVIS2-C512C-SUB	F547M			Sequence 1-6 Non-Int in JUN-2022-C (08)	6 Secs (24 Secs)		
							Pattern 4, Exps 3-5 in Sequence 1-6 Non-Int in JUN-2022-C (08) (4)	[==>(Pattern 1)] [==>(Pattern 2)] [==>(Pattern 3)] [==>(Pattern 4)]	[1]	
5	F390M	(1) NEPTUNE	WFC3/UVIS, ACCUM, UVIS2-C512C-SUB	F390M			Sequence 1-6 Non-Int in JUN-2022-C (08)	15 Secs (60 Secs)		
							Pattern 4, Exps 3-5 in Sequence 1-6 Non-Int in JUN-2022-C (08) (4)	[==>(Pattern 1)] [==>(Pattern 2)] [==>(Pattern 3)] [==>(Pattern 4)]	[1]	
6	F467M	(1) NEPTUNE	WFC3/UVIS, ACCUM, UVIS2-C512C-SUB	F467M			Sequence 1-6 Non-Int in JUN-2022-C (08)	15 Secs (60 Secs)		
							Pattern 4, Exps 6-6 in Sequence 1-6 Non-Int in JUN-2022-C (08) (4)	[==>(Pattern 1)] [==>(Pattern 2)] [==>(Pattern 3)] [==>(Pattern 4)]	[1]	

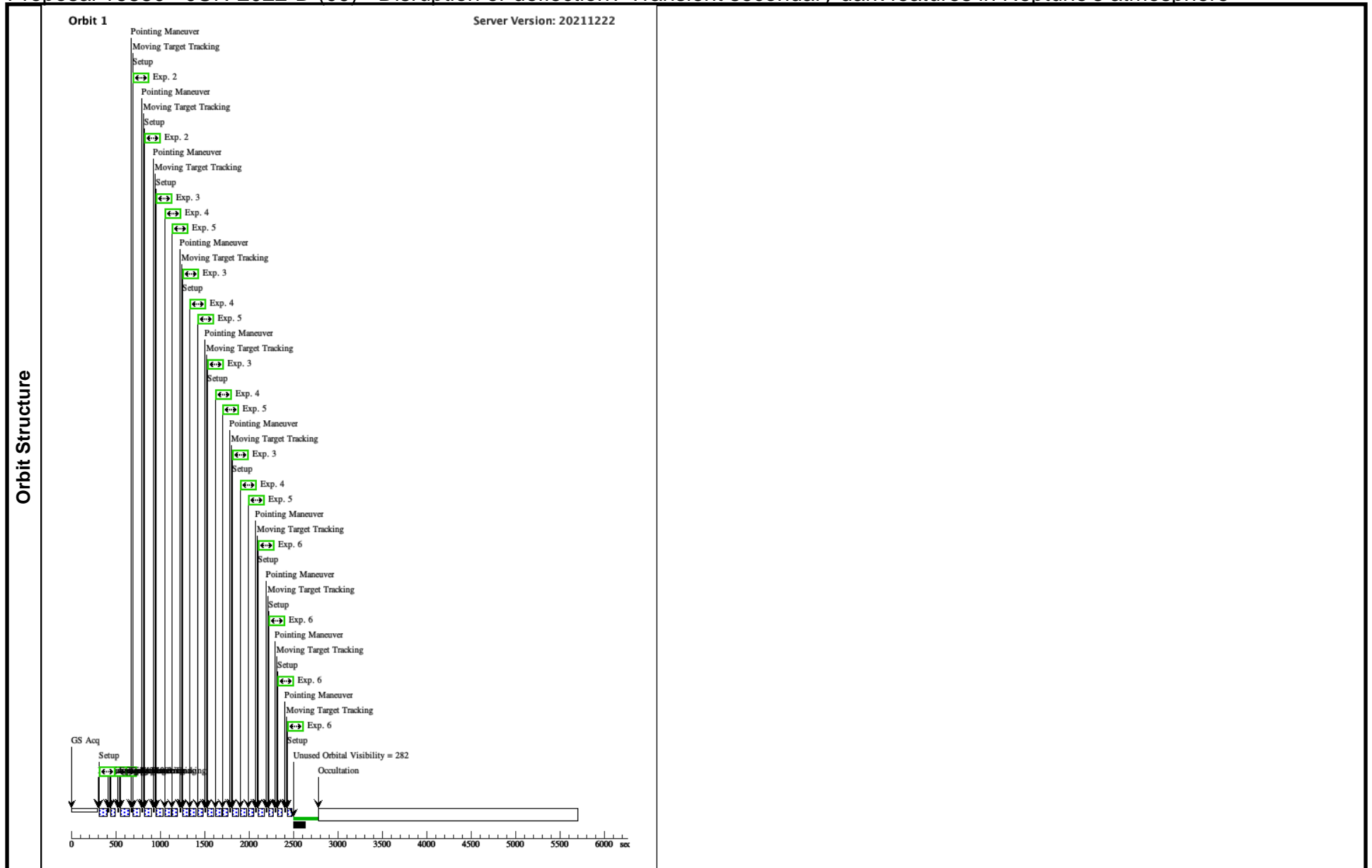
Proposal 16880 - JUN-2022-D (09) - Disruption or deflection? Transient secondary dark features in Neptune's atmosphere

Thu May 12 03:00:37 GMT 2022

Visit	Proposal 16880, JUN-2022-D (09), implementation Diagnostic Status: Warning Scientific Instruments: WFC3/UVIS Special Requirements: AFTER 08 BY 1.9 Orbits TO 2.1 Orbits						
	Diagnostics	(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 (F845M (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 (F390M (09.005)) Warning (Form): FLASH level may be too low for this exposure or a short subexposure. See extended explanation in the diagnostic browser (F467M (09.006)) Warning (Form): FLASH level may be too low for this exposure or a short subexposure. See extended explanation in the diagnostic browser					
Patterns		#	Primary Pattern	Secondary Pattern	Exposures		
		(3)	Pattern Type=WFC3-UVIS-DITHER-LINE-3PT Purpose=DITHER Number Of Points=3 Point Spacing=1.143 Line Spacing=	Coordinate Frame=POS-TARG Pattern Orientation=46.84 Angle Between Sides= Center Pattern=false	(2)		
		(4)	Pattern Type=WFC3-UVIS-DITHER-BOX Purpose=DITHER Number Of Points=4 Point Spacing=1.173 Line Spacing=1.107	Coordinate Frame=POS-TARG Pattern Orientation=23.884 Angle Between Sides=81.785 Center Pattern=false	(3-5), (6)		
(6)		Pattern Type=WFC3-UVIS-DITHER-LINE Purpose=DITHER Number Of Points=2 Point Spacing=0.145 Line Spacing=	Coordinate Frame=POS-TARG Pattern Orientation=46.84 Angle Between Sides= Center Pattern=false	(1)			
Solar System Targets	#	Name	Level 1	Level 2	Level 3	Window	Ephem Center
	(1)	NEPTUNE	STD=NEPTUNE			NOT ECL P PARTIAL OF NEPTUNE EARTH BY TRITON FROM EARTH	
Comments: Description=Neptune Extended=YES							

Proposal 16880 - JUN-2022-D (09) - Disruption or deflection? Transient secondary dark features in Neptune's atmosphere

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		SAA CONTOUR 02; GS ACQ SCENARIO ONEB1BE	Sequence 1-6 Non-Int in JUN-2022-D (09) Pattern 6, Exps 1-1 in Sequence 1-6 Non-Int in JUN-2022-D (09) (6)	15 Secs (30 Secs) [==>(Pattern 1)] [==>(Pattern 2)]	[1]
	2	F845M	(1) NEPTUNE	WFC3/UVIS, ACCUM, UVIS2-C512C-SUB	F845M			Sequence 1-6 Non-Int in JUN-2022-D (09) Pattern 3, Exps 2-2 in Sequence 1-6 Non-Int in JUN-2022-D (09) (3)	40 Secs (120 Secs) [==>(Pattern 1)] [==>(Pattern 2)] [==>(Pattern 3)]	[1]
	3	F467M	(1) NEPTUNE	WFC3/UVIS, ACCUM, UVIS2-C512C-SUB	F467M			Sequence 1-6 Non-Int in JUN-2022-D (09) Pattern 4, Exps 3-5 in Sequence 1-6 Non-Int in JUN-2022-D (09) (4)	15 Secs (60 Secs) [==>(Pattern 1)] [==>(Pattern 2)] [==>(Pattern 3)] [==>(Pattern 4)]	[1]
	4	F547M	(1) NEPTUNE	WFC3/UVIS, ACCUM, UVIS2-C512C-SUB	F547M			Sequence 1-6 Non-Int in JUN-2022-D (09) Pattern 4, Exps 3-5 in Sequence 1-6 Non-Int in JUN-2022-D (09) (4)	6 Secs (24 Secs) [==>(Pattern 1)] [==>(Pattern 2)] [==>(Pattern 3)] [==>(Pattern 4)]	[1]
	5	F390M	(1) NEPTUNE	WFC3/UVIS, ACCUM, UVIS2-C512C-SUB	F390M			Sequence 1-6 Non-Int in JUN-2022-D (09) Pattern 4, Exps 3-5 in Sequence 1-6 Non-Int in JUN-2022-D (09) (4)	15 Secs (60 Secs) [==>(Pattern 1)] [==>(Pattern 2)] [==>(Pattern 3)] [==>(Pattern 4)]	[1]
	6	F467M	(1) NEPTUNE	WFC3/UVIS, ACCUM, UVIS2-C512C-SUB	F467M			Sequence 1-6 Non-Int in JUN-2022-D (09) Pattern 4, Exps 6-6 in Sequence 1-6 Non-Int in JUN-2022-D (09) (4)	15 Secs (60 Secs) [==>(Pattern 1)] [==>(Pattern 2)] [==>(Pattern 3)] [==>(Pattern 4)]	[1]



Proposal 16880 - JUN-2022-E (10) - Disruption or deflection? Transient secondary dark features in Neptune's atmosphere

Thu May 12 03:00:37 GMT 2022

Visit	Proposal 16880, JUN-2022-E (10), scheduling Diagnostic Status: Warning Scientific Instruments: WFC3/UVIS Special Requirements: AFTER 09 BY 1.9 Orbits TO 2.1 Orbits						
	Diagnosics (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 (F845M (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 (F390M (10.005)) Warning (Form): FLASH level may be too low for this exposure or a short subexposure. See extended explanation in the diagnostic browser (F467M (10.006)) Warning (Form): FLASH level may be too low for this exposure or a short subexposure. See extended explanation in the diagnostic browser						
Patterns	#	Primary Pattern		Secondary Pattern		Exposures	
	(3)	Pattern Type=WFC3-UVIS-DITHER-LINE-3PT Purpose=DITHER Number Of Points=3 Point Spacing=1.143 Line Spacing=	Coordinate Frame=POS-TARG Pattern Orientation=46.84 Angle Between Sides= Center Pattern=false			(1), (2)	
	(4)	Pattern Type=WFC3-UVIS-DITHER-BOX Purpose=DITHER Number Of Points=4 Point Spacing=1.173 Line Spacing=1.107	Coordinate Frame=POS-TARG Pattern Orientation=23.884 Angle Between Sides=81.785 Center Pattern=false			(3-5), (6)	
Solar System Targets	#	Name	Level 1	Level 2	Level 3	Window	Ephem Center
	(1)	NEPTUNE	STD=NEPTUNE				NOT ECL P PARTIAL OF NEPTUNE EARTH BY TRITON FROM EARTH
Comments: Description=Neptune Extended=YES							

Proposal 16880 - JUN-2022-E (10) - Disruption or deflection? Transient secondary dark features in Neptune's atmosphere

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 1-6 Non-Int in JUN-2022-E (10)	15 Secs (45 Secs)	
								Pattern 3, Exps 1-1 in Sequence 1-6 Non-Int in JUN-2022-E (10) (3)	[==>(Pattern 1)] [==>(Pattern 2)] [==>(Pattern 3)]	[1]
	2	F845M	(1) NEPTUNE	WFC3/UVIS, ACCUM, UVIS2-C512C-SUB	F845M			Sequence 1-6 Non-Int in JUN-2022-E (10)	40 Secs (120 Secs)	
								Pattern 3, Exps 2-2 in Sequence 1-6 Non-Int in JUN-2022-E (10) (3)	[==>(Pattern 1)] [==>(Pattern 2)] [==>(Pattern 3)]	[1]
	3	F467M	(1) NEPTUNE	WFC3/UVIS, ACCUM, UVIS2-C512C-SUB	F467M			Sequence 1-6 Non-Int in JUN-2022-E (10)	15 Secs (60 Secs)	
								Pattern 4, Exps 3-5 in Sequence 1-6 Non-Int in JUN-2022-E (10) (4)	[==>(Pattern 1)] [==>(Pattern 2)] [==>(Pattern 3)] [==>(Pattern 4)]	[1]
4	F547M	(1) NEPTUNE	WFC3/UVIS, ACCUM, UVIS2-C512C-SUB	F547M			Sequence 1-6 Non-Int in JUN-2022-E (10)	6 Secs (24 Secs)		
							Pattern 4, Exps 3-5 in Sequence 1-6 Non-Int in JUN-2022-E (10) (4)	[==>(Pattern 1)] [==>(Pattern 2)] [==>(Pattern 3)] [==>(Pattern 4)]	[1]	
5	F390M	(1) NEPTUNE	WFC3/UVIS, ACCUM, UVIS2-C512C-SUB	F390M			Sequence 1-6 Non-Int in JUN-2022-E (10)	15 Secs (60 Secs)		
							Pattern 4, Exps 3-5 in Sequence 1-6 Non-Int in JUN-2022-E (10) (4)	[==>(Pattern 1)] [==>(Pattern 2)] [==>(Pattern 3)] [==>(Pattern 4)]	[1]	
6	F467M	(1) NEPTUNE	WFC3/UVIS, ACCUM, UVIS2-C512C-SUB	F467M			Sequence 1-6 Non-Int in JUN-2022-E (10)	15 Secs (60 Secs)		
							Pattern 4, Exps 6-6 in Sequence 1-6 Non-Int in JUN-2022-E (10) (4)	[==>(Pattern 1)] [==>(Pattern 2)] [==>(Pattern 3)] [==>(Pattern 4)]	[1]	

