



11573 - Investigating Post-Equinox Atmospheric Changes on Uranus

Cycle: 17, 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) URANUS	WFC3/IR WFC3/UVIS	1	25-Mar-2010 21:01:13.0	yes
02	(1) URANUS	WFC3/UVIS	1	25-Mar-2010 21:01:25.0	yes
04	(1) URANUS	WFC3/IR WFC3/UVIS	1	25-Mar-2010 21:01:36.0	yes
05	(1) URANUS	WFC3/UVIS	1	25-Mar-2010 21:01:43.0	yes
06	(1) URANUS	WFC3/IR WFC3/UVIS	1	25-Mar-2010 21:01:55.0	yes
16	(1) URANUS	WFC3/IR WFC3/UVIS	1	25-Mar-2010 21:02:08.0	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>
19	(1) URANUS	WFC3/IR WFC3/UVIS	1	25-Mar-2010 21:02:22.0	yes
20	(1) URANUS	WFC3/UVIS	1	25-Mar-2010 21:02:29.0	yes
21	(1) URANUS	WFC3/IR WFC3/UVIS	1	25-Mar-2010 21:02:38.0	yes
22	(1) URANUS	WFC3/UVIS	1	25-Mar-2010 21:02:45.0	yes
23	(1) URANUS	WFC3/UVIS	1	25-Mar-2010 21:02:49.0	yes
24	(1) URANUS	WFC3/UVIS	1	25-Mar-2010 21:02:54.0	yes

12 Total Orbits Used

ABSTRACT

Uranus is now past its 7 December 2007 equinox. The large seasonal phase shift expected from its long radiative time constant implies that it should now be in the process of reversing its hemispheric asymmetries in cloud band structure and zonal circulation. Many changes already observed -- the development of the first visible-wavelength dark spot, discovered in Cycle 15, the fading of the south polar cap, and the development of a new northern bright band while the southern band fades -- may all be indicative of the expected reversal. We propose a detailed characterization of Uranus' current seasonal response with a 9-orbit program consisting of 3 orbits of WFC3 imaging of cloud bands and dark spots, and 6 orbits of high signal-to-noise imaging using the F845M filter, capable of tracking bright discrete cloud features. Filters between 0.467 and 1.7 microns will provide vertical sensing depths scanning through the pressure range where the putative methane and deeper H₂S clouds might plausibly exist and provide strong constraints on their contributions and parent gas mixing ratios. These observations have unique combinations of spectral range and resolution with needed temporal sampling and spatial resolution not available from groundbased observations.

OBSERVING DESCRIPTION

The F547M, F658N, and F763M filters are very similar to the ACS filters that revealed the dark spot we discovered in Cycle 15, which displayed maximum contrast at 658 nm. The F467M filter is one that provided the highest contrast for dark spots on Neptune. The F763M and F845M will provide high contrast for bright features. After redesign of the observing program (which initially used NICMOS for high-contrast imaging of bright features), this burden falls to the F845M filter. Though feature contrast is reduced in the F845M (compared to the F160W) bandpass, high signal-to-noise ratios and coadding of de-rotated images will make up for the loss of contrast. Additionally, the F845M filter is superior to filters used previously for feature tracking on ACS and WFPC2, due to its sampling the methane window near 830 nm with less Rayleigh scattering than in the F775W filter, and higher throughput allowing exposures one quarter the duration needed for F850LP exposures (35s vs 140s). The FQ889N, FQ906N, FQ924N, and FQ937N filters will probe a range of atmospheric depths that will be comparable to those of the ramp filter observations we obtained with ACS in Cycle 15 (ranging from < 1 bar to > 10 bars in a clear atmosphere), and mainly used for constraining models of vertical structure of cloud bands. The WFC3/IR F160W filter is also aimed at improving our models for the vertical structure of cloud bands. Unfortunately the pixel scale of the WFC3/IR array (0.13 arcsecond/pixel) precludes its use as the primary camera for feature tracking.

The 9-orbit observing program is designed to obtain (1) complete longitudinal coverage for the F845M and F658N filters at 60 N for detection of new bright cloud features (which were discovered in 2007) and high-latitude dark features, and (2) nearly complete repeated coverage to obtain accurate zonal cloud motions. Orbits 1, 4, 6, and 19 (orbits relative to first (which is Orbit 1)) provide the base longitude coverage for the high-contrast F845M imaging program. Two additional orbits (16 and 21) provide important temporal coverage that, with other images, allows dynamical measurements of latitudinal and longitudinal motions over the 15-30 hour time domain that is inaccessible from the ground.

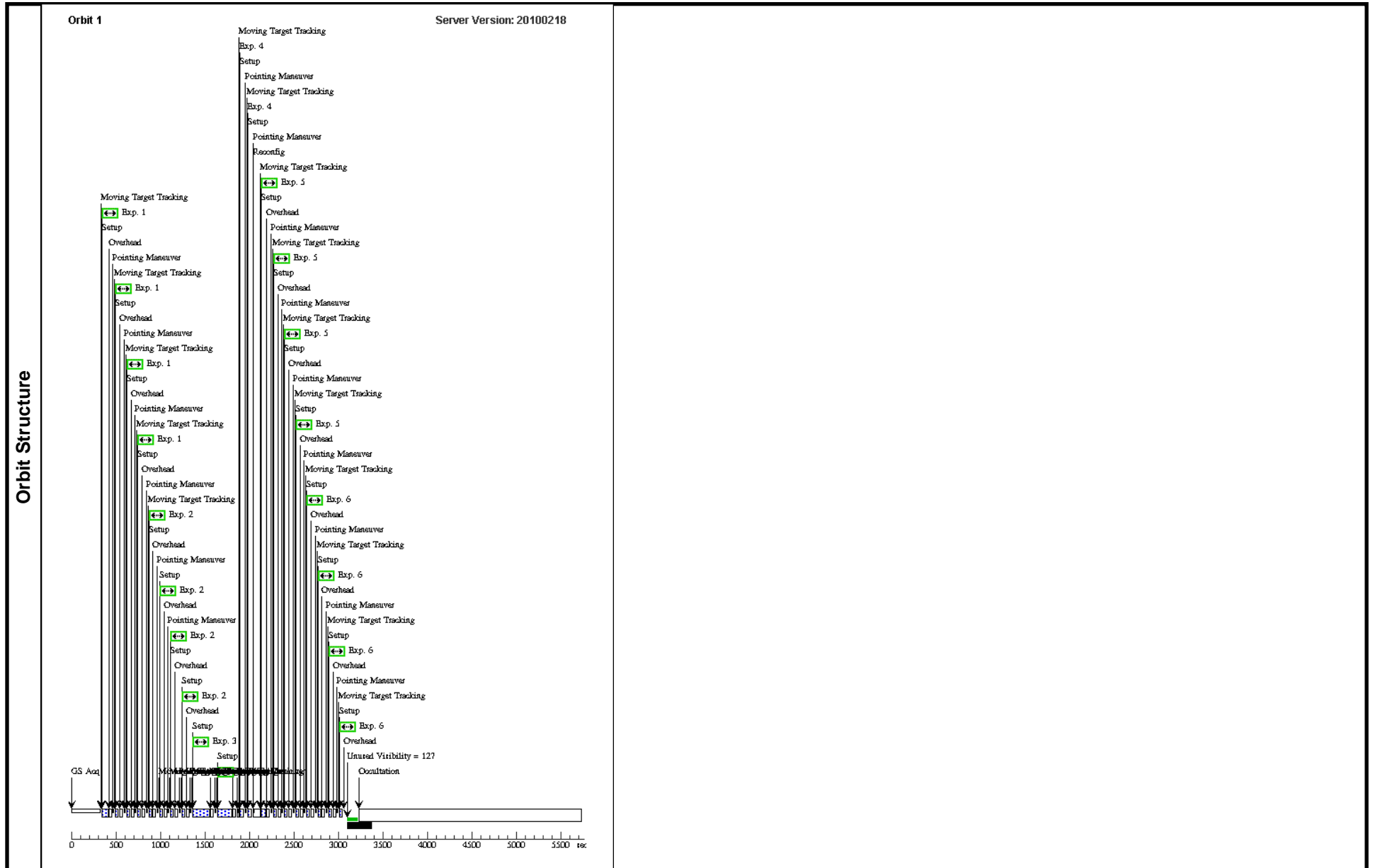
The remaining WFC3 sampling provides complete longitudinal coverage for key filters at 30 N, where previously discovered dark spots have been seen. This can be done with only three orbits (2, 5, and 20), because of more favorable viewing. Lower latitudes provide even better coverage. The large sampling gap (between orbits 6 and 16) is needed to avoid SAA interference. The coverage varies with latitude because of view angle differences and differences in planetary rotation rates. Dynamical information on longer time scales will be obtained from analysis combining any 2009 groundbased observations that are acquired, and from SNAP images acquired. Our coverage objectives for these WFC3 images are designed to obtain center-to-limb information for deciphering the vertical structure of latitude bands, as well as providing the coverage needed for detection of dark spots.

Visit	Proposal 11573, Visit 01, completed						
	Diagnostic Status: No Diagnostics						
	Scientific Instruments: WFC3/IR, WFC3/UVIS						
	Special Requirements: AFTER 12-MAY-2009:00:00:00						
Patterns	#	Primary Pattern			Secondary Pattern	Exposures	
	(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=false			(1), (2), (5), (6)	
	(2)	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			(3)	
	(3)	Pattern Type=WFC3-IR-DITHER-LINE Purpose=DITHER Number Of Points=2 Point Spacing=0.636 Line Spacing=	Coordinate Frame=POS-TARG Pattern Orientation=41.788 Angle Between Sides= Center Pattern=false			(4)	
Solar System Targets	#	Name	Level 1	Level 2	Level 3	Window	Ephem Center
	(1)	URANUS	STD=URANUS				NOT TRANSIT OF ARIEL ACROSS EARTH URANUS FROM EARTH, NOT TRANSIT OF UMBRIEL ACROSS URANUS FROM EARTH, NOT TRANSIT OF TITANIA ACROSS URANUS FROM EARTH, NOT TRANSIT OF OBERON ACROSS URANUS FROM EARTH, NOT TRANSIT OF MIRANDA ACROSS URANUS FROM EARTH

Proposal 11573 - Visit 01 - Investigating Post-Equinox Atmospheric Changes on Uranus

	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit
Exposures	1	F845M	(1) URANUS	WFC3/UVIS, ACCUM, UVIS1-C512B-SUB	F845M	CR-SPLIT=NO		Sequence 1-6 Non-Int Pattern 1, Exps 1-1 (1)	35 Secs [==>(Pattern 1)] [==>(Pattern 2)] [==>(Pattern 3)] [==>(Pattern 4)]	[1]
	2	F845M	(1) URANUS	WFC3/UVIS, ACCUM, UVIS1-C512B-SUB	F845M	CR-SPLIT=NO		Sequence 1-6 Non-Int Pattern 1, Exps 2-2 (1)	35 Secs [==>(Pattern 1)] [==>(Pattern 2)] [==>(Pattern 3)] [==>(Pattern 4)]	[1]
	3		(1) URANUS	WFC3/UVIS, ACCUM, UVIS1-C512B-SUB	F658N	CR-SPLIT=NO		Sequence 1-6 Non-Int Pattern 2, Exps 3-3 (2)	160 Secs [==>(Pattern 1)] [==>(Pattern 2)]	[1]
	4	F160W	(1) URANUS	WFC3/IR, MULTIACCUM, IRSUB512	F160W	SAMP-SEQ=RAPID ; NSAMP=15		Sequence 1-6 Non-Int Pattern 3, Exps 4-4 (3)	[==>(Pattern 1)] [==>(Pattern 2)]	[1]
	5	F845M	(1) URANUS	WFC3/UVIS, ACCUM, UVIS1-C512B-SUB	F845M	CR-SPLIT=NO		Sequence 1-6 Non-Int Pattern 1, Exps 5-5 (1)	35 Secs [==>(Pattern 1)] [==>(Pattern 2)] [==>(Pattern 3)] [==>(Pattern 4)]	[1]
	6	F845M	(1) URANUS	WFC3/UVIS, ACCUM, UVIS1-C512B-SUB	F845M	CR-SPLIT=NO		Sequence 1-6 Non-Int Pattern 1, Exps 6-6 (1)	35 Secs [==>(Pattern 1)] [==>(Pattern 2)] [==>(Pattern 3)] [==>(Pattern 4)]	[1]

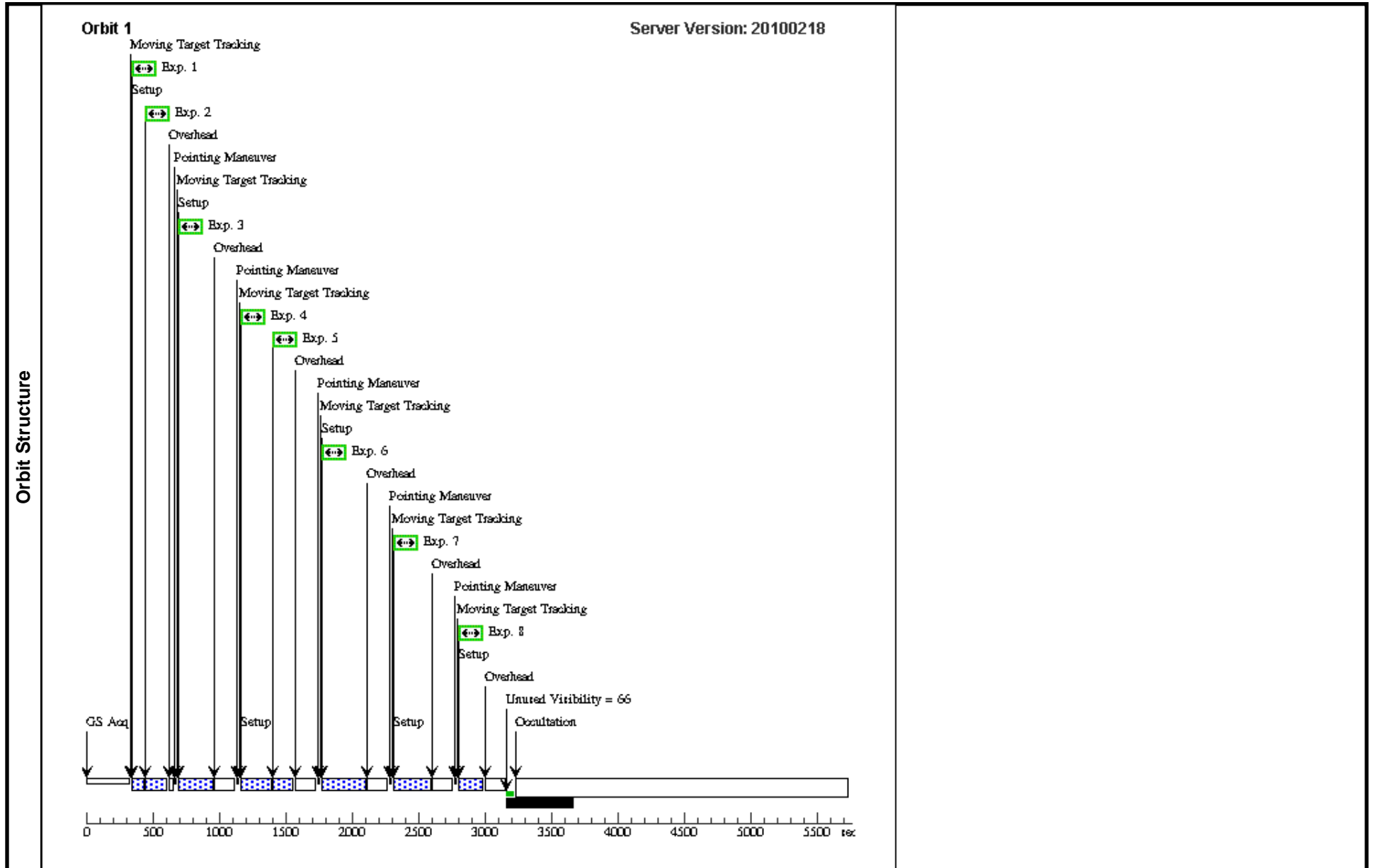
Proposal 11573 - Visit 01 - Investigating Post-Equinox Atmospheric Changes on Uranus



Proposal 11573 - Visit 01 - Investigating Post-Equinox Atmospheric Changes on Uranus

Fri Mar 26 01:02:59 GMT 2010

Visit	Proposal 11573, Visit 02, failed Diagnostic Status: Warning Scientific Instruments: WFC3/UVIS Special Requirements: AFTER 01 BY 0.8 Orbits TO 1.2 Orbits									
	Diagnosics (FQ906N_280s (02.007)) Warning (Form): POS TARG & PATTERN should be used carefully with ACS/WFPC2 ramp or WFC3 quad filters as central wavelengths & transmission efficiencies vary within the apertures.									
Solar System Targets	#	Name	Level 1	Level 2	Level 3	Window	Ephem Center			
	(1)	URANUS	STD=URANUS			NOT TRANSIT OF ARIEL ACROSS URANUS FROM EARTH, NOT TRANSIT OF UMBRIEL ACROSS URANUS FROM EARTH, NOT TRANSIT OF TITANIA ACROSS URANUS FROM EARTH, NOT TRANSIT OF OBERON ACROSS URANUS FROM EARTH, NOT TRANSIT OF MIRANDA ACROSS URANUS FROM EARTH	EARTH			
Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit
	1	F467M_15.5s	(1) URANUS	WFC3/UVIS, ACCUM, UVIS1-C512B-SUB	F467M	CR-SPLIT=NO		Sequence 1-8 Non-Int	15.5 Secs [==>]	[1]
	2	F658N_140s	(1) URANUS	WFC3/UVIS, ACCUM, UVIS1-C512B-SUB	F658N	CR-SPLIT=NO		Sequence 1-8 Non-Int	140 Secs [==>]	[1]
	3	FQ727N_240s	(1) URANUS	WFC3/UVIS, ACCUM, UVIS-QUAD-SUB	FQ727N	CR-SPLIT=NO		Sequence 1-8 Non-Int	240 Secs [==>]	[1]
	4	FQ750N_60s	(1) URANUS	WFC3/UVIS, ACCUM, UVIS-QUAD-SUB	FQ750N	CR-SPLIT=NO		Sequence 1-8 Non-Int	60 Secs [==>]	[1]
	5	FQ937N_140s	(1) URANUS	WFC3/UVIS, ACCUM, UVIS-QUAD-SUB	FQ937N	CR-SPLIT=NO		Sequence 1-8 Non-Int	140 Secs [==>]	[1]
	6	FQ889N_330s	(1) URANUS	WFC3/UVIS, ACCUM, UVIS-QUAD-SUB	FQ889N	CR-SPLIT=NO		Sequence 1-8 Non-Int	330 Secs [==>]	[1]
	7	FQ906N_280s	(1) URANUS	WFC3/UVIS, ACCUM, UVIS-QUAD-SUB	FQ906N	CR-SPLIT=NO	POS TARG +25,+25	Sequence 1-8 Non-Int	280 Secs [==>]	[1]
	8	FQ924N_180s	(1) URANUS	WFC3/UVIS, ACCUM, UVIS-QUAD-SUB	FQ924N	CR-SPLIT=NO		Sequence 1-8 Non-Int	180 Secs [==>]	[1]



Proposal 11573 - Visit 02 - Investigating Post-Equinox Atmospheric Changes on Uranus

Visit	Proposal 11573, Visit 04, completed						Fri Mar 26 01:03:00 GMT 2010
	Diagnostic Status: No Diagnostics						
	Scientific Instruments: WFC3/IR, WFC3/UVIS						
	Special Requirements: AFTER 01 BY 2.8 Orbits TO 3.2 Orbits						
Patterns	#	Primary Pattern		Secondary Pattern		Exposures	
	(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=false			(1), (2), (5), (6)	
	(2)	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			(3)	
(3)	Pattern Type=WFC3-IR-DITHER-LINE Purpose=DITHER Number Of Points=2 Point Spacing=0.636 Line Spacing=	Coordinate Frame=POS-TARG Pattern Orientation=41.788 Angle Between Sides= Center Pattern=false			(4)		
Solar System Targets	#	Name	Level 1	Level 2	Level 3	Window	Ephem Center
	(1)	URANUS	STD=URANUS			NOT TRANSIT OF ARIEL ACROSS URANUS FROM EARTH, NOT TRANSIT OF UMBRIEL ACROSS URANUS FROM EARTH, NOT TRANSIT OF TITANIA ACROSS URANUS FROM EARTH, NOT TRANSIT OF OBERON ACROSS URANUS FROM EARTH, NOT TRANSIT OF MIRANDA ACROSS URANUS FROM EARTH	EARTH

Proposal 11573 - Visit 04 - Investigating Post-Equinox Atmospheric Changes on Uranus

	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit
Exposures	1	F845M	(1) URANUS	WFC3/UVIS, ACCUM, UVIS1-C512B-SUB	F845M	CR-SPLIT=NO		Sequence 1-6 Non-Int Pattern 1, Exps 1-1 (1)	35 Secs [==>(Pattern 1)] [==>(Pattern 2)] [==>(Pattern 3)] [==>(Pattern 4)]	[1]
	2	F845M	(1) URANUS	WFC3/UVIS, ACCUM, UVIS1-C512B-SUB	F845M	CR-SPLIT=NO		Sequence 1-6 Non-Int Pattern 1, Exps 2-2 (1)	35 Secs [==>(Pattern 1)] [==>(Pattern 2)] [==>(Pattern 3)] [==>(Pattern 4)]	[1]
	3		(1) URANUS	WFC3/UVIS, ACCUM, UVIS1-C512B-SUB	F658N	CR-SPLIT=NO		Sequence 1-6 Non-Int Pattern 2, Exps 3-3 (2)	160 Secs [==>(Pattern 1)] [==>(Pattern 2)]	[1]
	4	F160W	(1) URANUS	WFC3/IR, MULTIACCUM, IRSUB512	F160W	SAMP-SEQ=RAPID ; NSAMP=15		Sequence 1-6 Non-Int Pattern 3, Exps 4-4 (3)	[==>(Pattern 1)] [==>(Pattern 2)]	[1]
	5	F845M	(1) URANUS	WFC3/UVIS, ACCUM, UVIS1-C512B-SUB	F845M	CR-SPLIT=NO		Sequence 1-6 Non-Int Pattern 1, Exps 5-5 (1)	35 Secs [==>(Pattern 1)] [==>(Pattern 2)] [==>(Pattern 3)] [==>(Pattern 4)]	[1]
	6	F845M	(1) URANUS	WFC3/UVIS, ACCUM, UVIS1-C512B-SUB	F845M	CR-SPLIT=NO		Sequence 1-6 Non-Int Pattern 1, Exps 6-6 (1)	35 Secs [==>(Pattern 1)] [==>(Pattern 2)] [==>(Pattern 3)] [==>(Pattern 4)]	[1]

Proposal 11573 - Visit 04 - Investigating Post-Equinox Atmospheric Changes on Uranus

Fri Mar 26 01:03:01 GMT 2010

Visit	Proposal 11573, Visit 05, failed Diagnostic Status: Warning Scientific Instruments: WFC3/UVIS Special Requirements: AFTER 01 BY 3.8 Orbits TO 4.2 Orbits									
	Diagnosics (FQ906N_300s (05.007)) Warning (Form): POS TARG & PATTERN should be used carefully with ACS/WFPC2 ramp or WFC3 quad filters as central wavelengths & transmission efficiencies vary within the apertures.									
Solar System Targets	#	Name	Level 1	Level 2	Level 3	Window	Ephem Center			
	(1)	URANUS	STD=URANUS			NOT TRANSIT OF ARIEL ACROSS URANUS FROM EARTH, NOT TRANSIT OF UMBRIEL ACROSS URANUS FROM EARTH, NOT TRANSIT OF TITANIA ACROSS URANUS FROM EARTH, NOT TRANSIT OF OBERON ACROSS URANUS FROM EARTH, NOT TRANSIT OF MIRANDA ACROSS URANUS FROM EARTH	EARTH			
Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit
	1	FQ619N_14 4s	(1) URANUS	WFC3/UVIS, ACCUM, UVIS-QUAD-SUB	FQ619N	CR-SPLIT=NO		Sequence 1-9 Non-Int	144 Secs [==>]	[1]
	2	F547M_6s	(1) URANUS	WFC3/UVIS, ACCUM, UVIS1-C512B-SUB	F547M	CR-SPLIT=NO		Sequence 1-9 Non-Int	6 Secs [==>]	[1]
	3	F658N_160s	(1) URANUS	WFC3/UVIS, ACCUM, UVIS1-C512B-SUB	F658N	CR-SPLIT=NO		Sequence 1-9 Non-Int	160 Secs [==>]	[1]
	4	F763M_26s	(1) URANUS	WFC3/UVIS, ACCUM, UVIS1-C512B-SUB	F763M	CR-SPLIT=NO		Sequence 1-9 Non-Int	26 Secs [==>]	[1]
	5	F845M_35s	(1) URANUS	WFC3/UVIS, ACCUM, UVIS1-C512B-SUB	F845M	CR-SPLIT=NO		Sequence 1-9 Non-Int	35 Secs [==>]	[1]
	6	FQ924N_18 0s	(1) URANUS	WFC3/UVIS, ACCUM, UVIS-QUAD-SUB	FQ924N	CR-SPLIT=NO		Sequence 1-9 Non-Int	180 Secs [==>]	[1]
	7	FQ906N_30 0s	(1) URANUS	WFC3/UVIS, ACCUM, UVIS-QUAD-SUB	FQ906N	CR-SPLIT=NO	POS TARG +25,+25	Sequence 1-9 Non-Int	300 Secs [==>]	[1]
	8	FQ889N_36 0s	(1) URANUS	WFC3/UVIS, ACCUM, UVIS-QUAD-SUB	FQ889N	CR-SPLIT=NO		Sequence 1-9 Non-Int	360 Secs [==>]	[1]
	9	FQ937N_14 0s	(1) URANUS	WFC3/UVIS, ACCUM, UVIS-QUAD-SUB	FQ937N	CR-SPLIT=NO		Sequence 1-9 Non-Int	140 Secs [==>]	[1]

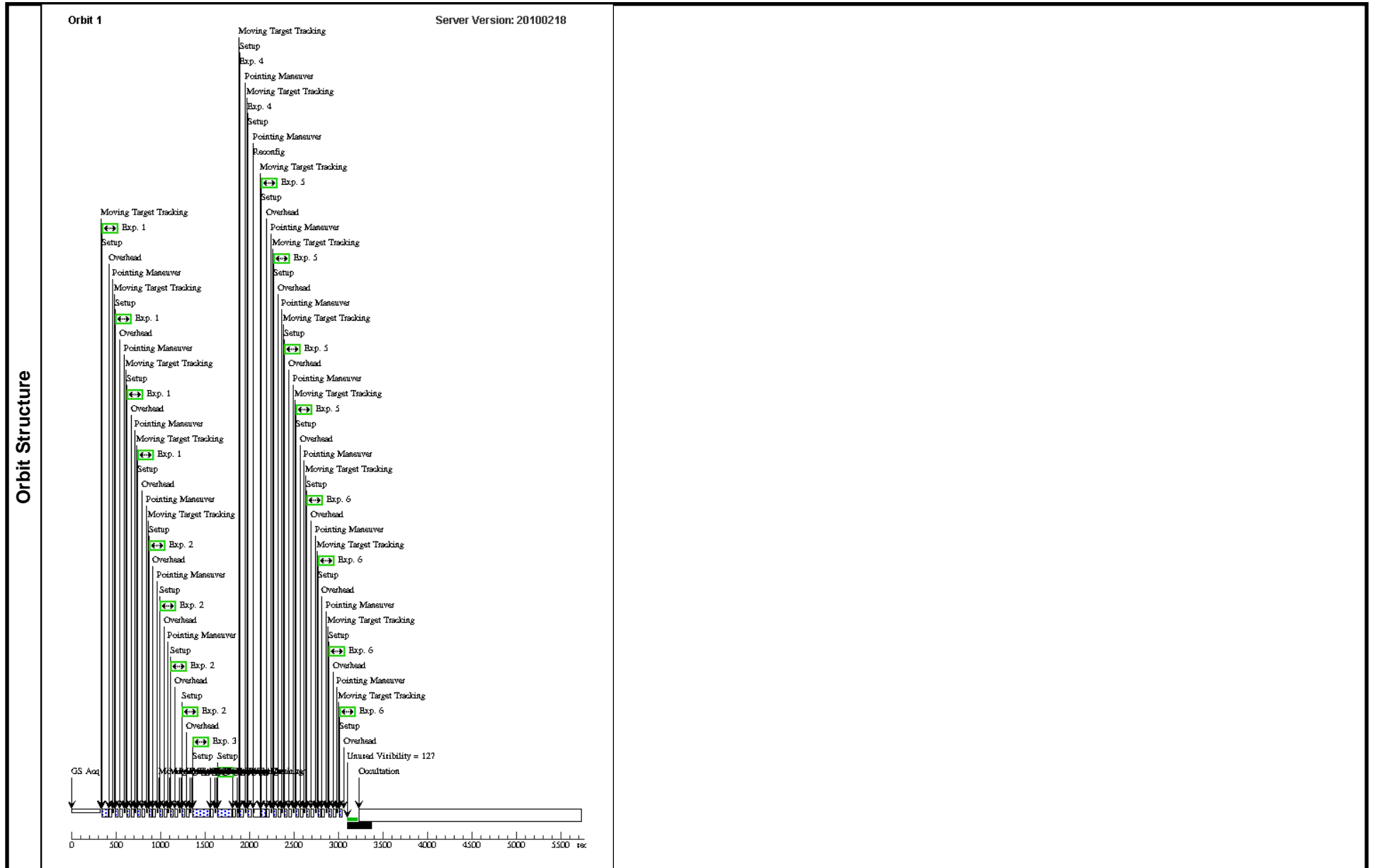
Proposal 11573 - Visit 05 - Investigating Post-Equinox Atmospheric Changes on Uranus

Visit	Proposal 11573, Visit 06, completed Fri Mar 26 01:03:02 GMT 2010 Diagnostic Status: No Diagnostics Scientific Instruments: WFC3/IR, WFC3/UVIS Special Requirements: AFTER 01 BY 4.8 Orbits TO 5.2 Orbits						
	Patterns	#	Primary Pattern		Secondary Pattern		Exposures
		(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=false			(1), (2), (5), (6)
		(2)	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			(3)
(3)	Pattern Type=WFC3-IR-DITHER-LINE Purpose=DITHER Number Of Points=2 Point Spacing=0.636 Line Spacing=	Coordinate Frame=POS-TARG Pattern Orientation=41.788 Angle Between Sides= Center Pattern=false			(4)		
Solar System Targets	#	Name	Level 1	Level 2	Level 3	Window	Ephem Center
	(1)	URANUS	STD=URANUS			NOT TRANSIT OF ARIEL ACROSS URANUS FROM EARTH, NOT TRANSIT OF UMBRIEL ACROSS URANUS FROM EARTH, NOT TRANSIT OF TITANIA ACROSS URANUS FROM EARTH, NOT TRANSIT OF OBERON ACROSS URANUS FROM EARTH, NOT TRANSIT OF MIRANDA ACROSS URANUS FROM EARTH	EARTH

Proposal 11573 - Visit 06 - Investigating Post-Equinox Atmospheric Changes on Uranus

	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit
Exposures	1	F845M	(1) URANUS	WFC3/UVIS, ACCUM, UVIS1-C512B-SUB	F845M	CR-SPLIT=NO		Sequence 1-6 Non-Int Pattern 1, Exps 1-1 (1)	35 Secs [==>(Pattern 1)] [==>(Pattern 2)] [==>(Pattern 3)] [==>(Pattern 4)]	[1]
	2	F845M	(1) URANUS	WFC3/UVIS, ACCUM, UVIS1-C512B-SUB	F845M	CR-SPLIT=NO		Sequence 1-6 Non-Int Pattern 1, Exps 2-2 (1)	35 Secs [==>(Pattern 1)] [==>(Pattern 2)] [==>(Pattern 3)] [==>(Pattern 4)]	[1]
	3		(1) URANUS	WFC3/UVIS, ACCUM, UVIS1-C512B-SUB	F658N	CR-SPLIT=NO		Sequence 1-6 Non-Int Pattern 2, Exps 3-3 (2)	160 Secs [==>(Pattern 1)] [==>(Pattern 2)]	[1]
	4	F160W	(1) URANUS	WFC3/IR, MULTIACCUM, IRSUB512	F160W	SAMP-SEQ=RAPID ; NSAMP=15		Sequence 1-6 Non-Int Pattern 3, Exps 4-4 (3)	[==>(Pattern 1)] [==>(Pattern 2)]	[1]
	5	F845M	(1) URANUS	WFC3/UVIS, ACCUM, UVIS1-C512B-SUB	F845M	CR-SPLIT=NO		Sequence 1-6 Non-Int Pattern 1, Exps 5-5 (1)	35 Secs [==>(Pattern 1)] [==>(Pattern 2)] [==>(Pattern 3)] [==>(Pattern 4)]	[1]
	6	F845M	(1) URANUS	WFC3/UVIS, ACCUM, UVIS1-C512B-SUB	F845M	CR-SPLIT=NO		Sequence 1-6 Non-Int Pattern 1, Exps 6-6 (1)	35 Secs [==>(Pattern 1)] [==>(Pattern 2)] [==>(Pattern 3)] [==>(Pattern 4)]	[1]

Proposal 11573 - Visit 06 - Investigating Post-Equinox Atmospheric Changes on Uranus



Proposal 11573 - Visit 06 - Investigating Post-Equinox Atmospheric Changes on Uranus

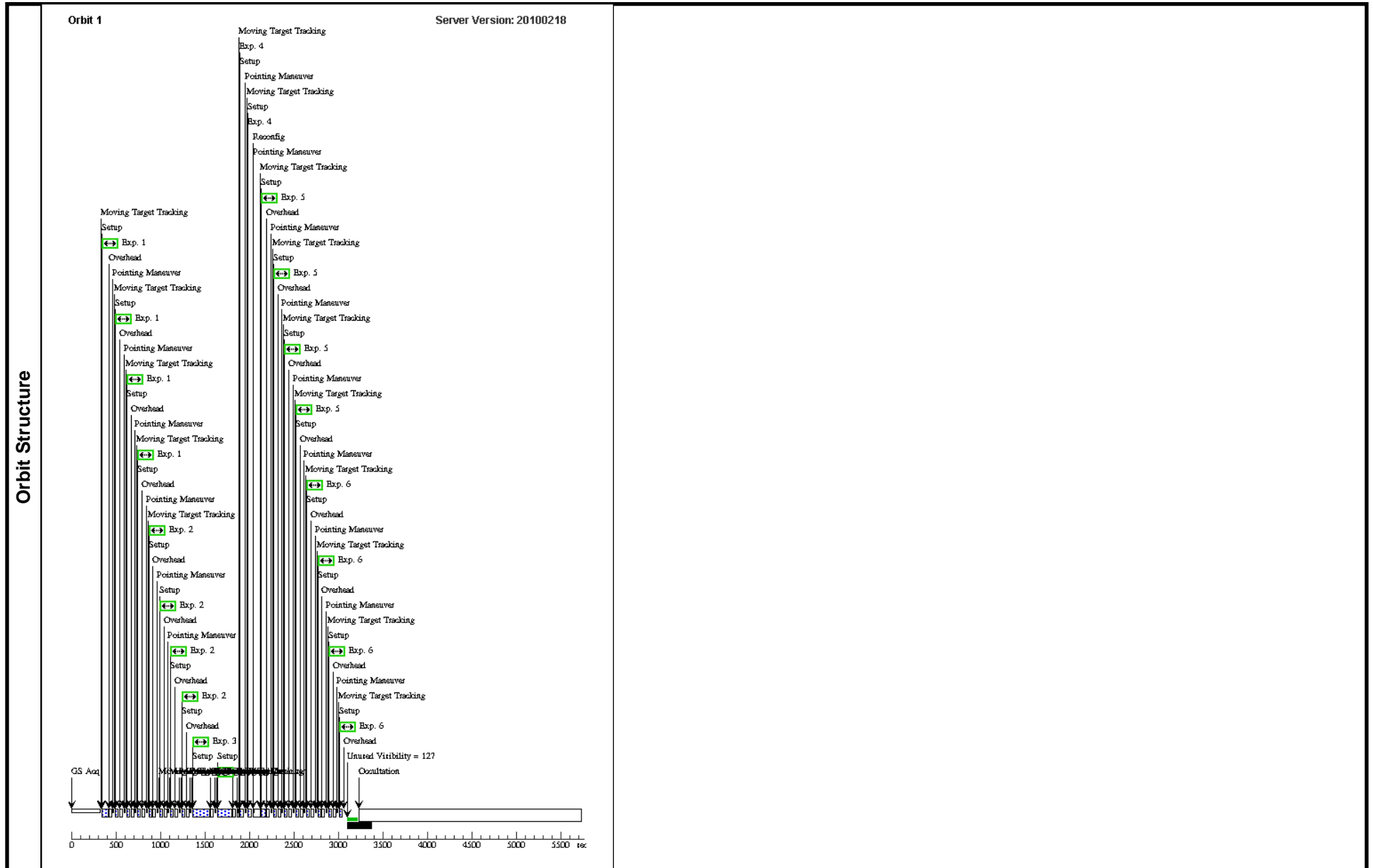
Fri Mar 26 01:03:03 GMT 2010

Visit	Proposal 11573, Visit 16, completed Diagnostic Status: No Diagnostics Scientific Instruments: WFC3/IR, WFC3/UVIS Special Requirements: AFTER 01 BY 14.8 Orbits TO 15.2 Orbits						
	Patterns	#	Primary Pattern		Secondary Pattern	Exposures	
		(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=false		(1), (2), (5), (6)	
		(2)	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		(3)	
(3)	Pattern Type=WFC3-IR-DITHER-LINE Purpose=DITHER Number Of Points=2 Point Spacing=0.636 Line Spacing=	Coordinate Frame=POS-TARG Pattern Orientation=41.788 Angle Between Sides= Center Pattern=false		(4)			
Solar System Targets	#	Name	Level 1	Level 2	Level 3	Window	Ephem Center
	(1)	URANUS	STD=URANUS				NOT TRANSIT OF ARIEL ACROSS EARTH URANUS FROM EARTH, NOT TRANSIT OF UMBRIEL ACROSS URANUS FROM EARTH, NOT TRANSIT OF TITANIA ACROSS URANUS FROM EARTH, NOT TRANSIT OF OBERON ACROSS URANUS FROM EARTH, NOT TRANSIT OF MIRANDA ACROSS URANUS FROM EARTH

Proposal 11573 - Visit 16 - Investigating Post-Equinox Atmospheric Changes on Uranus

	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit
Exposures	1	F845M	(1) URANUS	WFC3/UVIS, ACCUM, UVIS1-C512B-SUB	F845M	CR-SPLIT=NO		Sequence 1-6 Non-Int Pattern 1, Exps 1-1 (1)	35 Secs [==>(Pattern 1)] [==>(Pattern 2)] [==>(Pattern 3)] [==>(Pattern 4)]	[1]
	2	F845M	(1) URANUS	WFC3/UVIS, ACCUM, UVIS1-C512B-SUB	F845M	CR-SPLIT=NO		Sequence 1-6 Non-Int Pattern 1, Exps 2-2 (1)	35 Secs [==>(Pattern 1)] [==>(Pattern 2)] [==>(Pattern 3)] [==>(Pattern 4)]	[1]
	3		(1) URANUS	WFC3/UVIS, ACCUM, UVIS1-C512B-SUB	F658N	CR-SPLIT=NO		Sequence 1-6 Non-Int Pattern 2, Exps 3-3 (2)	160 Secs [==>(Pattern 1)] [==>(Pattern 2)]	[1]
	4	F160W	(1) URANUS	WFC3/IR, MULTIACCUM, IRSUB512	F160W	SAMP-SEQ=RAPID ; NSAMP=15		Sequence 1-6 Non-Int Pattern 3, Exps 4-4 (3)	[==>(Pattern 1)] [==>(Pattern 2)]	[1]
	5	F845M	(1) URANUS	WFC3/UVIS, ACCUM, UVIS1-C512B-SUB	F845M	CR-SPLIT=NO		Sequence 1-6 Non-Int Pattern 1, Exps 5-5 (1)	35 Secs [==>(Pattern 1)] [==>(Pattern 2)] [==>(Pattern 3)] [==>(Pattern 4)]	[1]
	6	F845M	(1) URANUS	WFC3/UVIS, ACCUM, UVIS1-C512B-SUB	F845M	CR-SPLIT=NO		Sequence 1-6 Non-Int Pattern 1, Exps 6-6 (1)	35 Secs [==>(Pattern 1)] [==>(Pattern 2)] [==>(Pattern 3)] [==>(Pattern 4)]	[1]

Proposal 11573 - Visit 16 - Investigating Post-Equinox Atmospheric Changes on Uranus



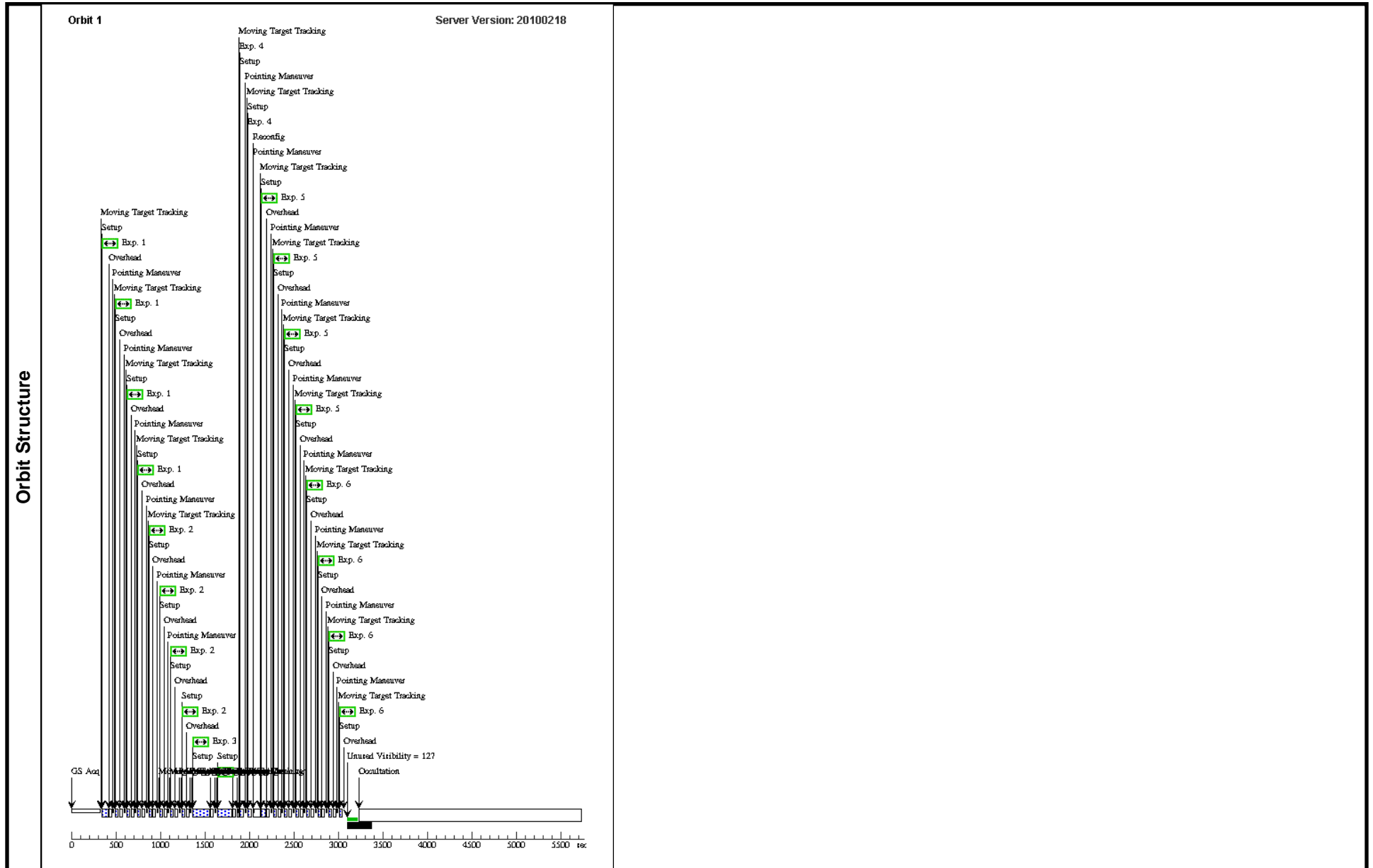
Proposal 11573 - Visit 16 - Investigating Post-Equinox Atmospheric Changes on Uranus

Visit	Proposal 11573, Visit 19, completed						Fri Mar 26 01:03:03 GMT 2010
	Diagnostic Status: No Diagnostics						
	Scientific Instruments: WFC3/IR, WFC3/UVIS						
	Special Requirements: AFTER 01 BY 17.8 Orbits TO 18.2 Orbits						
Patterns	#	Primary Pattern		Secondary Pattern		Exposures	
	(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=false			(1), (2), (5), (6)	
	(2)	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			(3)	
(3)	Pattern Type=WFC3-IR-DITHER-LINE Purpose=DITHER Number Of Points=2 Point Spacing=0.636 Line Spacing=	Coordinate Frame=POS-TARG Pattern Orientation=41.788 Angle Between Sides= Center Pattern=false			(4)		
Solar System Targets	#	Name	Level 1	Level 2	Level 3	Window	Ephem Center
	(1)	URANUS	STD=URANUS			NOT TRANSIT OF ARIEL ACROSS URANUS FROM EARTH, NOT TRANSIT OF UMBRIEL ACROSS URANUS FROM EARTH, NOT TRANSIT OF TITANIA ACROSS URANUS FROM EARTH, NOT TRANSIT OF OBERON ACROSS URANUS FROM EARTH, NOT TRANSIT OF MIRANDA ACROSS URANUS FROM EARTH	EARTH

Proposal 11573 - Visit 19 - Investigating Post-Equinox Atmospheric Changes on Uranus

Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit
	1	F845M	(1) URANUS	WFC3/UVIS, ACCUM, UVIS1-C512B-SUB	F845M	CR-SPLIT=NO		Sequence 1-6 Non-Int Pattern 1, Exps 1-1 (1)	35 Secs [==>(Pattern 1)] [==>(Pattern 2)] [==>(Pattern 3)] [==>(Pattern 4)]	[1]
	2	F845M	(1) URANUS	WFC3/UVIS, ACCUM, UVIS1-C512B-SUB	F845M	CR-SPLIT=NO		Sequence 1-6 Non-Int Pattern 1, Exps 2-2 (1)	35 Secs [==>(Pattern 1)] [==>(Pattern 2)] [==>(Pattern 3)] [==>(Pattern 4)]	[1]
	3		(1) URANUS	WFC3/UVIS, ACCUM, UVIS1-C512B-SUB	F658N	CR-SPLIT=NO		Sequence 1-6 Non-Int Pattern 2, Exps 3-3 (2)	160 Secs [==>(Pattern 1)] [==>(Pattern 2)]	[1]
	4	F160W	(1) URANUS	WFC3/IR, MULTIACCUM, IRSUB512	F160W	SAMP-SEQ=RAPID ; NSAMP=15		Sequence 1-6 Non-Int Pattern 3, Exps 4-4 (3)	[==>(Pattern 1)] [==>(Pattern 2)]	[1]
	5	F845M	(1) URANUS	WFC3/UVIS, ACCUM, UVIS1-C512B-SUB	F845M	CR-SPLIT=NO		Sequence 1-6 Non-Int Pattern 1, Exps 5-5 (1)	35 Secs [==>(Pattern 1)] [==>(Pattern 2)] [==>(Pattern 3)] [==>(Pattern 4)]	[1]
	6	F845M	(1) URANUS	WFC3/UVIS, ACCUM, UVIS1-C512B-SUB	F845M	CR-SPLIT=NO		Sequence 1-6 Non-Int Pattern 1, Exps 6-6 (1)	35 Secs [==>(Pattern 1)] [==>(Pattern 2)] [==>(Pattern 3)] [==>(Pattern 4)]	[1]

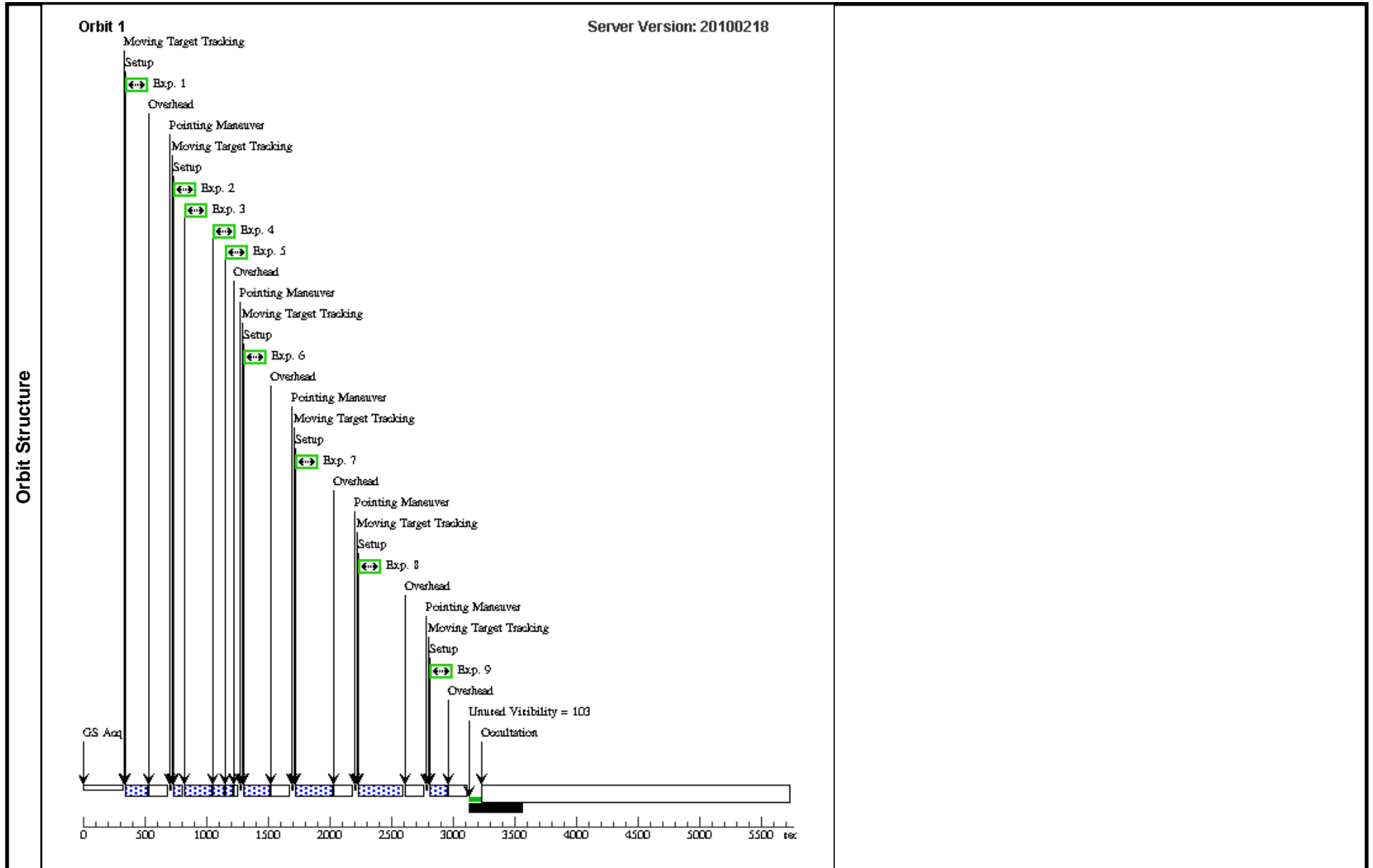
Proposal 11573 - Visit 19 - Investigating Post-Equinox Atmospheric Changes on Uranus



Proposal 11573 - Visit 19 - Investigating Post-Equinox Atmospheric Changes on Uranus

Fri Mar 26 01:03:04 GMT 2010

Visit	Proposal 11573, Visit 20, failed Diagnostic Status: Warning Scientific Instruments: WFC3/UVIS Special Requirements: AFTER 01 BY 18.8 Orbits TO 19.2 Orbits									
	Diagnosics (FQ906N_30s (20.007)) Warning (Form): POS TARG & PATTERN should be used carefully with ACS/WFPC2 ramp or WFC3 quad filters as central wavelengths & transmission efficiencies vary within the apertures.									
Solar System Targets	#	Name	Level 1	Level 2	Level 3	Window	Ephem Center			
	(1)	URANUS	STD=URANUS			NOT TRANSIT OF ARIEL ACROSS URANUS FROM EARTH, NOT TRANSIT OF UMBRIEL ACROSS URANUS FROM EARTH, NOT TRANSIT OF TITANIA ACROSS URANUS FROM EARTH, NOT TRANSIT OF OBERON ACROSS URANUS FROM EARTH, NOT TRANSIT OF MIRANDA ACROSS URANUS FROM EARTH	EARTH			
Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit
	1	FQ619N_14 4s	(1) URANUS	WFC3/UVIS, ACCUM, UVIS-QUAD-SUB	FQ619N	CR-SPLIT=NO		Sequence 1-9 Non-Int	144 Secs [==>]	[1]
	2	F547M_6s	(1) URANUS	WFC3/UVIS, ACCUM, UVIS1-C512B-SUB	F547M	CR-SPLIT=NO		Sequence 1-9 Non-Int	6 Secs [==>]	[1]
	3	F658N_160s	(1) URANUS	WFC3/UVIS, ACCUM, UVIS1-C512B-SUB	F658N	CR-SPLIT=NO		Sequence 1-9 Non-Int	160 Secs [==>]	[1]
	4	F763M_26s	(1) URANUS	WFC3/UVIS, ACCUM, UVIS1-C512B-SUB	F763M	CR-SPLIT=NO		Sequence 1-9 Non-Int	26 Secs [==>]	[1]
	5	F845M_35s	(1) URANUS	WFC3/UVIS, ACCUM, UVIS1-C512B-SUB	F845M	CR-SPLIT=NO		Sequence 1-9 Non-Int	35 Secs [==>]	[1]
	6	FQ924N_18 0s	(1) URANUS	WFC3/UVIS, ACCUM, UVIS-QUAD-SUB	FQ924N	CR-SPLIT=NO		Sequence 1-9 Non-Int	180 Secs [==>]	[1]
	7	FQ906N_30 0s	(1) URANUS	WFC3/UVIS, ACCUM, UVIS-QUAD-SUB	FQ906N	CR-SPLIT=NO	POS TARG +25,+25	Sequence 1-9 Non-Int	300 Secs [==>]	[1]
	8	FQ889N_36 0s	(1) URANUS	WFC3/UVIS, ACCUM, UVIS-QUAD-SUB	FQ889N	CR-SPLIT=NO		Sequence 1-9 Non-Int	360 Secs [==>]	[1]
	9	FQ937N_14 0s	(1) URANUS	WFC3/UVIS, ACCUM, UVIS-QUAD-SUB	FQ937N	CR-SPLIT=NO		Sequence 1-9 Non-Int	140 Secs [==>]	[1]



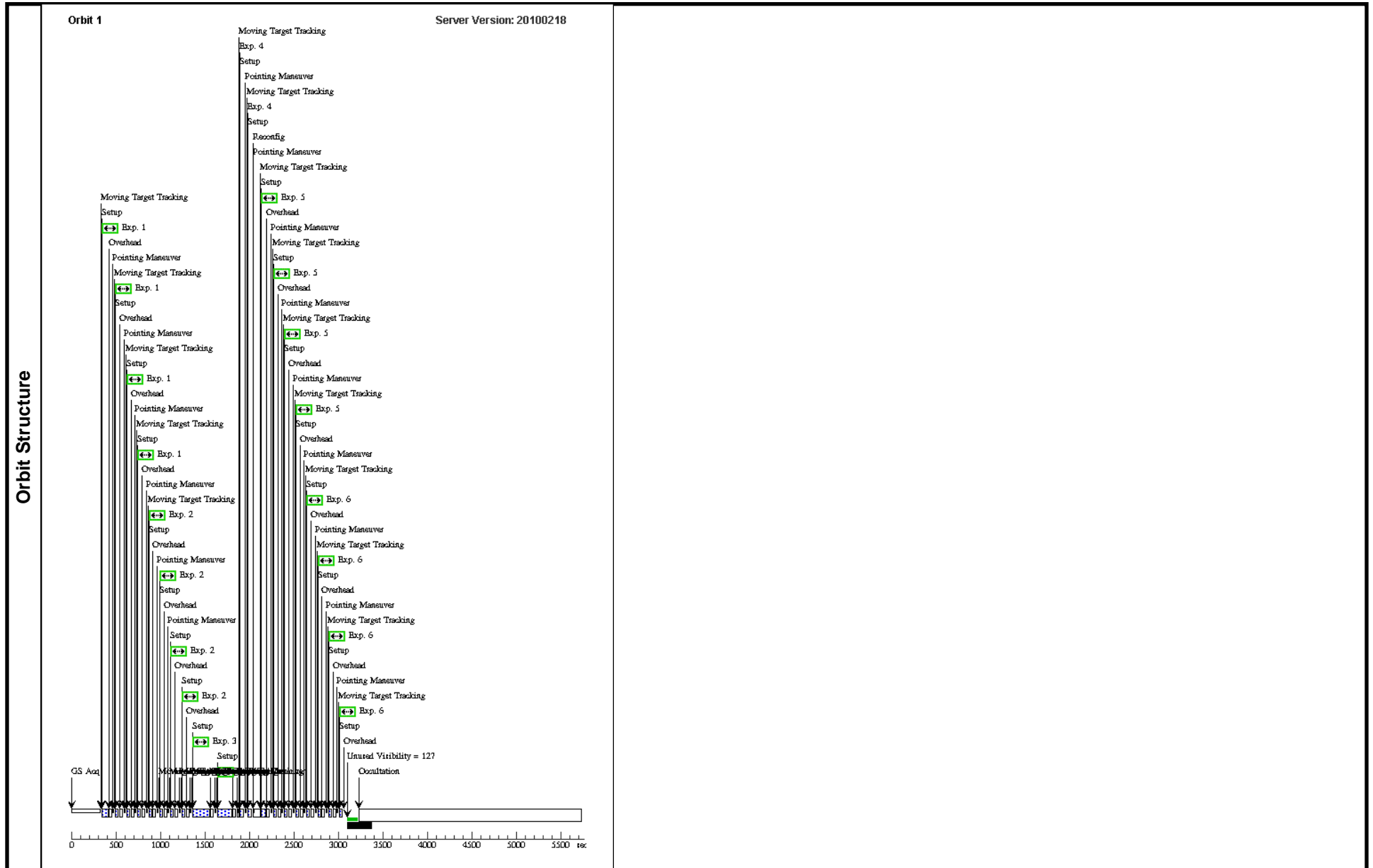
Proposal 11573 - Visit 20 - Investigating Post-Equinox Atmospheric Changes on Uranus

Visit	Proposal 11573, Visit 21, completed						Fri Mar 26 01:03:05 GMT 2010
	Diagnostic Status: No Diagnostics						
	Scientific Instruments: WFC3/IR, WFC3/UVIS						
	Special Requirements: AFTER 01 BY 19.8 Orbits TO 20.2 Orbits						
Patterns	#	Primary Pattern		Secondary Pattern		Exposures	
	(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=false			(1), (2), (5), (6)	
	(2)	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			(3)	
(3)	Pattern Type=WFC3-IR-DITHER-LINE Purpose=DITHER Number Of Points=2 Point Spacing=0.636 Line Spacing=	Coordinate Frame=POS-TARG Pattern Orientation=41.788 Angle Between Sides= Center Pattern=false			(4)		
Solar System Targets	#	Name	Level 1	Level 2	Level 3	Window	Ephem Center
	(1)	URANUS	STD=URANUS			NOT TRANSIT OF ARIEL ACROSS URANUS FROM EARTH, NOT TRANSIT OF UMBRIEL ACROSS URANUS FROM EARTH, NOT TRANSIT OF TITANIA ACROSS URANUS FROM EARTH, NOT TRANSIT OF OBERON ACROSS URANUS FROM EARTH, NOT TRANSIT OF MIRANDA ACROSS URANUS FROM EARTH	EARTH

Proposal 11573 - Visit 21 - Investigating Post-Equinox Atmospheric Changes on Uranus

Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit
	1	F845M	(1) URANUS	WFC3/UVIS, ACCUM, UVIS1-C512B-SUB	F845M	CR-SPLIT=NO		Sequence 1-6 Non-Int Pattern 1, Exps 1-1 (1)	35 Secs [==>(Pattern 1)] [==>(Pattern 2)] [==>(Pattern 3)] [==>(Pattern 4)]	[1]
	2	F845M	(1) URANUS	WFC3/UVIS, ACCUM, UVIS1-C512B-SUB	F845M	CR-SPLIT=NO		Sequence 1-6 Non-Int Pattern 1, Exps 2-2 (1)	35 Secs [==>(Pattern 1)] [==>(Pattern 2)] [==>(Pattern 3)] [==>(Pattern 4)]	[1]
	3		(1) URANUS	WFC3/UVIS, ACCUM, UVIS1-C512B-SUB	F658N	CR-SPLIT=NO		Sequence 1-6 Non-Int Pattern 2, Exps 3-3 (2)	160 Secs [==>(Pattern 1)] [==>(Pattern 2)]	[1]
	4	F160W	(1) URANUS	WFC3/IR, MULTIACCUM, IRSUB512	F160W	SAMP-SEQ=RAPID ; NSAMP=15		Sequence 1-6 Non-Int Pattern 3, Exps 4-4 (3)	[==>(Pattern 1)] [==>(Pattern 2)]	[1]
	5	F845M	(1) URANUS	WFC3/UVIS, ACCUM, UVIS1-C512B-SUB	F845M	CR-SPLIT=NO		Sequence 1-6 Non-Int Pattern 1, Exps 5-5 (1)	35 Secs [==>(Pattern 1)] [==>(Pattern 2)] [==>(Pattern 3)] [==>(Pattern 4)]	[1]
	6	F845M	(1) URANUS	WFC3/UVIS, ACCUM, UVIS1-C512B-SUB	F845M	CR-SPLIT=NO		Sequence 1-6 Non-Int Pattern 1, Exps 6-6 (1)	35 Secs [==>(Pattern 1)] [==>(Pattern 2)] [==>(Pattern 3)] [==>(Pattern 4)]	[1]

Proposal 11573 - Visit 21 - Investigating Post-Equinox Atmospheric Changes on Uranus



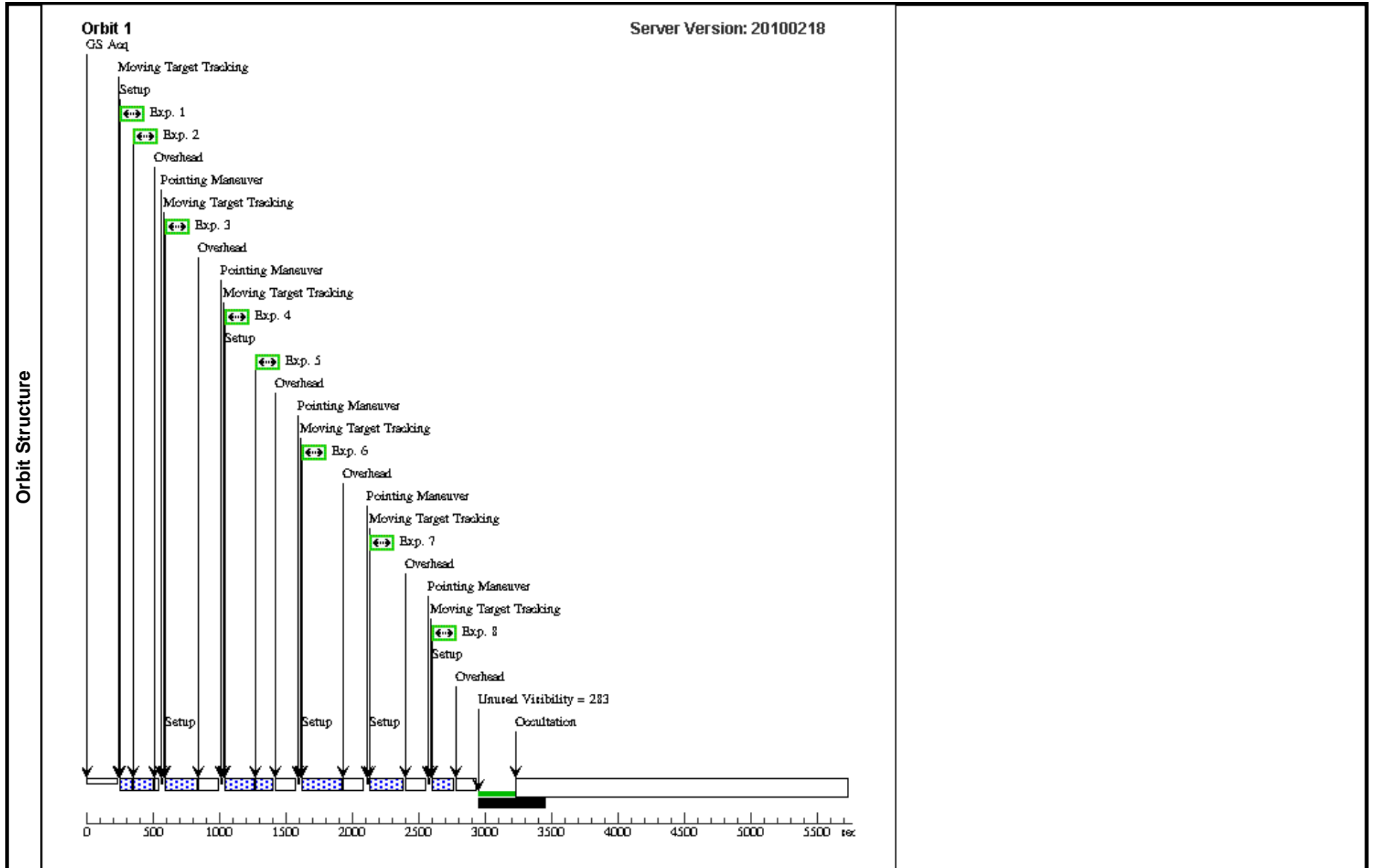
Proposal 11573 - Visit 21 - Investigating Post-Equinox Atmospheric Changes on Uranus

Visit	Proposal 11573, Visit 22, implementation Fri Mar 26 01:03:05 GMT 2010						
	Diagnostic Status: Warning Scientific Instruments: WFC3/UVIS Special Requirements: (none)						
Diagnostics	(FQ906N_280s (22.007)) Warning (Form): POS TARG & PATTERN should be used carefully with ACS/WFPC2 ramp or WFC3 quad filters as central wavelengths & transmission efficiencies vary within the apertures.						
Solar System Targets	#	Name	Level 1	Level 2	Level 3	Window	Ephem Center
	(1)	URANUS	STD=URANUS			NOT TRANSIT OF ARIEL ACROSS URANUS FROM EARTH, NOT TRANSIT OF UMBRIEL ACROSS URANUS FROM EARTH, NOT TRANSIT OF TITANIA ACROSS URANUS FROM EARTH, NOT TRANSIT OF OBERON ACROSS URANUS FROM EARTH, NOT TRANSIT OF MIRANDA ACROSS URANUS FROM EARTH	EARTH

Proposal 11573 - Visit 22 - Investigating Post-Equinox Atmospheric Changes on Uranus

#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit
1	F467M_15.5s	(1) URANUS	WFC3/UVIS, ACCUM, UVIS1-C512B-SUB	F467M	CR-SPLIT=NO	GS ACQ SCENARIO SINGLE	Sequence 1-8 Non-Int	14.1 Secs [==>]	[1]
<i>Comments: Exposure cut from 15.5s to 14.1 so visit could schedule.</i>									
2	F658N_140s	(1) URANUS	WFC3/UVIS, ACCUM, UVIS1-C512B-SUB	F658N	CR-SPLIT=NO		Sequence 1-8 Non-Int	127 Secs [==>]	[1]
<i>Comments: Exposure cut from 140s to 127 so the visit could schedule.</i>									
3	FQ727N_240s	(1) URANUS	WFC3/UVIS, ACCUM, UVIS-QUAD-SUB	FQ727N	CR-SPLIT=NO		Sequence 1-8 Non-Int	218 Secs [==>]	[1]
<i>Comments: Exposure cut from 240s to 218 so the visit could schedule.</i>									
4	FQ750N_60s	(1) URANUS	WFC3/UVIS, ACCUM, UVIS-QUAD-SUB	FQ750N	CR-SPLIT=NO		Sequence 1-8 Non-Int	55 Secs [==>]	[1]
<i>Comments: Exposure cut from 60s to 55s so the visit could schedule.</i>									
5	FQ937N_140s	(1) URANUS	WFC3/UVIS, ACCUM, UVIS-QUAD-SUB	FQ937N	CR-SPLIT=NO		Sequence 1-8 Non-Int	127 Secs [==>]	[1]
<i>Comments: Exposure cut from 140s to 127s so the visit could schedule.</i>									
6	FQ889N_330s	(1) URANUS	WFC3/UVIS, ACCUM, UVIS-QUAD-SUB	FQ889N	CR-SPLIT=NO		Sequence 1-8 Non-Int	300 Secs [==>]	[1]
<i>Comments: Exposure cut from 330s to 300s so the visit could schedule.</i>									
7	FQ906N_280s	(1) URANUS	WFC3/UVIS, ACCUM, UVIS-QUAD-SUB	FQ906N	CR-SPLIT=NO	POS TARG +25,+25	Sequence 1-8 Non-Int	255 Secs [==>]	[1]
<i>Comments: Exposure cut from 280s to 255s so the visit could schedule.</i>									
8	FQ924N_180s	(1) URANUS	WFC3/UVIS, ACCUM, UVIS-QUAD-SUB	FQ924N	CR-SPLIT=NO		Sequence 1-8 Non-Int	164 Secs [==>]	[1]
<i>Comments: Exposure cut from 180s to 164s so the visit could schedule.</i>									

Exposures



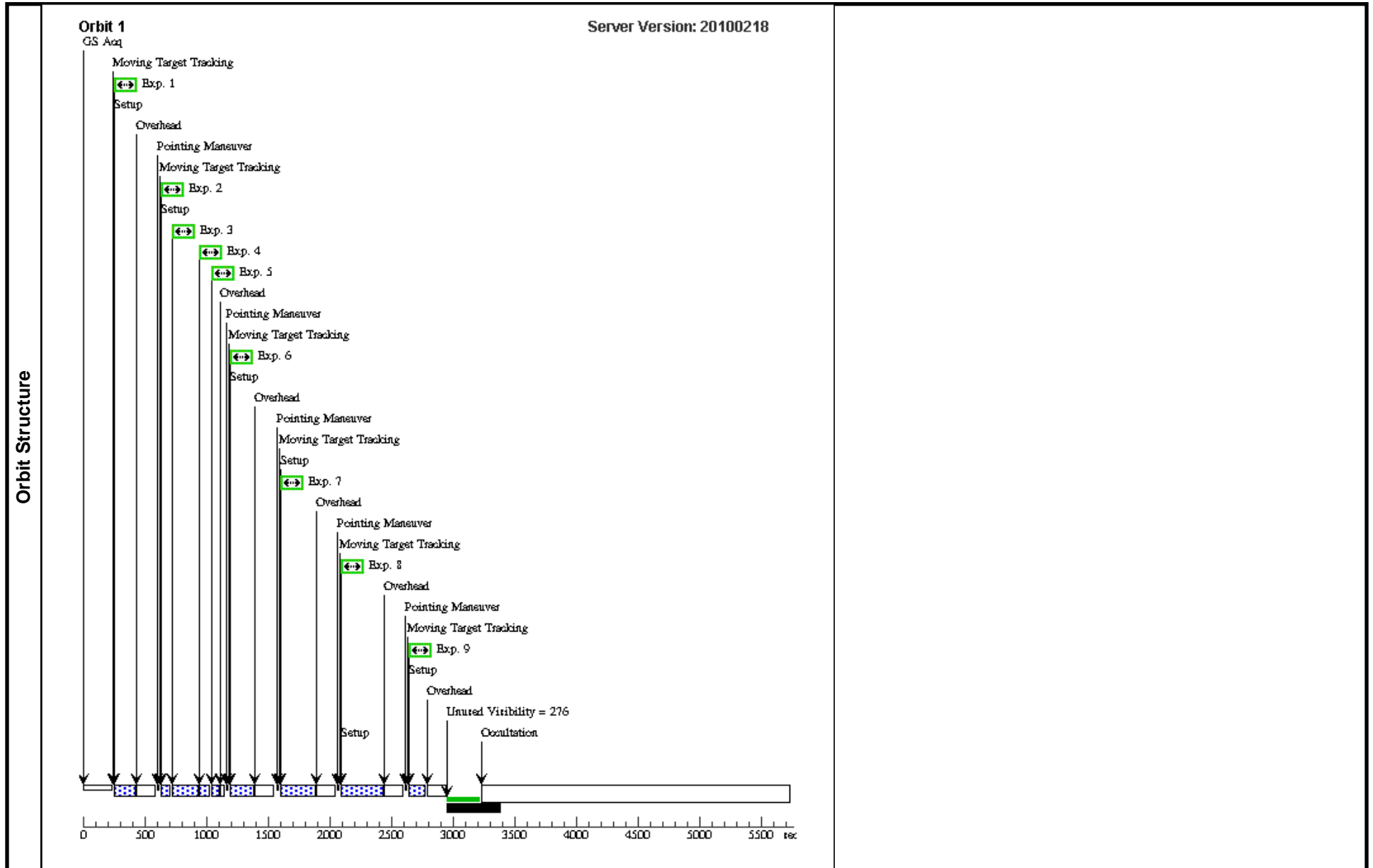
Proposal 11573 - Visit 22 - Investigating Post-Equinox Atmospheric Changes on Uranus

Visit	Proposal 11573, Visit 23, implementation Fri Mar 26 01:03:06 GMT 2010 Diagnostic Status: Warning Scientific Instruments: WFC3/UVIS Special Requirements: AFTER 22 BY 2.8 Orbits TO 3.2 Orbits																			
	Diagnostics	(FQ906N_300s (23.007)) Warning (Form): POS TARG & PATTERN should be used carefully with ACS/WFPC2 ramp or WFC3 quad filters as central wavelengths & transmission efficiencies vary within the apertures.																		
Solar System Targets		<table border="1"> <thead> <tr> <th>#</th> <th>Name</th> <th>Level 1</th> <th>Level 2</th> <th>Level 3</th> <th>Window</th> <th>Ephem Center</th> </tr> </thead> <tbody> <tr> <td>(1)</td> <td>URANUS</td> <td>STD=URANUS</td> <td></td> <td></td> <td>NOT TRANSIT OF ARIEL ACROSS URANUS FROM EARTH, NOT TRANSIT OF UMBRIEL ACROSS URANUS FROM EARTH, NOT TRANSIT OF TITANIA ACROSS URANUS FROM EARTH, NOT TRANSIT OF OBERON ACROSS URANUS FROM EARTH, NOT TRANSIT OF MIRANDA ACROSS URANUS FROM EARTH</td> <td>EARTH</td> </tr> </tbody> </table>						#	Name	Level 1	Level 2	Level 3	Window	Ephem Center	(1)	URANUS	STD=URANUS			NOT TRANSIT OF ARIEL ACROSS URANUS FROM EARTH, NOT TRANSIT OF UMBRIEL ACROSS URANUS FROM EARTH, NOT TRANSIT OF TITANIA ACROSS URANUS FROM EARTH, NOT TRANSIT OF OBERON ACROSS URANUS FROM EARTH, NOT TRANSIT OF MIRANDA ACROSS URANUS FROM EARTH
	#	Name	Level 1	Level 2	Level 3	Window	Ephem Center													
(1)	URANUS	STD=URANUS			NOT TRANSIT OF ARIEL ACROSS URANUS FROM EARTH, NOT TRANSIT OF UMBRIEL ACROSS URANUS FROM EARTH, NOT TRANSIT OF TITANIA ACROSS URANUS FROM EARTH, NOT TRANSIT OF OBERON ACROSS URANUS FROM EARTH, NOT TRANSIT OF MIRANDA ACROSS URANUS FROM EARTH	EARTH														

Proposal 11573 - Visit 23 - Investigating Post-Equinox Atmospheric Changes on Uranus

#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit
1	FQ619N_14 4s	(1) URANUS	WFC3/UVIS, ACCUM, UVIS-QUAD-SUB	FQ619N	CR-SPLIT=NO	GS ACQ SCENARI O SINGLE	Sequence 1-9 Non-In t	135 Secs [==>]	[1]
<i>Comments: Exposure cut from 144s to 135s so the visit could schedule.</i>									
2	F547M_6s	(1) URANUS	WFC3/UVIS, ACCUM, UVIS1-C512B-SUB	F547M	CR-SPLIT=NO		Sequence 1-9 Non-In t	5.6 Secs [==>]	[1]
<i>Comments: Exposure cut from 6s to 5.6 so the visit could schedule.</i>									
3	F658N_160s	(1) URANUS	WFC3/UVIS, ACCUM, UVIS1-C512B-SUB	F658N	CR-SPLIT=NO		Sequence 1-9 Non-In t	150 Secs [==>]	[1]
<i>Comments: Exposure cut from 160s to 150s so the visit could schedule.</i>									
4	F763M_26s	(1) URANUS	WFC3/UVIS, ACCUM, UVIS1-C512B-SUB	F763M	CR-SPLIT=NO		Sequence 1-9 Non-In t	24.4 Secs [==>]	[1]
<i>Comments: Exposure cut from 26s to 24.4 so the visit could schedule.</i>									
5	F845M_35s	(1) URANUS	WFC3/UVIS, ACCUM, UVIS1-C512B-SUB	F845M	CR-SPLIT=NO		Sequence 1-9 Non-In t	32.9 Secs [==>]	[1]
<i>Comments: Exposure cut from 35s to 32.9s so the visit could schedule.</i>									
6	FQ924N_18 0s	(1) URANUS	WFC3/UVIS, ACCUM, UVIS-QUAD-SUB	FQ924N	CR-SPLIT=NO		Sequence 1-9 Non-In t	169 Secs [==>]	[1]
<i>Comments: Exposure cut from 180s to 169s so the visit could schedule.</i>									
7	FQ906N_30 0s	(1) URANUS	WFC3/UVIS, ACCUM, UVIS-QUAD-SUB	FQ906N	CR-SPLIT=NO	POS TARG +25,+25	Sequence 1-9 Non-In t	282 Secs [==>]	[1]
<i>Comments: Exposure cut from 300s to 282s so the visit could schedule.</i>									
8	FQ889N_36 0s	(1) URANUS	WFC3/UVIS, ACCUM, UVIS-QUAD-SUB	FQ889N	CR-SPLIT=NO		Sequence 1-9 Non-In t	338 Secs [==>]	[1]
<i>Comments: Exposure cut from 360s to 338s so the visit could schedule.</i>									
9	FQ937N_14 0s	(1) URANUS	WFC3/UVIS, ACCUM, UVIS-QUAD-SUB	FQ937N	CR-SPLIT=NO		Sequence 1-9 Non-In t	132 Secs [==>]	[1]
<i>Comments: Exposure cut from 140s to 132s so the visit could schedule.</i>									

Exposures



Proposal 11573 - Visit 23 - Investigating Post-Equinox Atmospheric Changes on Uranus

Visit	Proposal 11573, Visit 24, implementation Fri Mar 26 01:03:07 GMT 2010						
	Diagnostic Status: Warning Scientific Instruments: WFC3/UVIS Special Requirements: AFTER 22 BY 17.8 Orbits TO 18.2 Orbits						
Diagnostics	(FQ906N_300s (24.007)) Warning (Form): POS TARG & PATTERN should be used carefully with ACS/WFPC2 ramp or WFC3 quad filters as central wavelengths & transmission efficiencies vary within the apertures.						
Solar System Targets	#	Name	Level 1	Level 2	Level 3	Window	Ephem Center
	(1)	URANUS	STD=URANUS			NOT TRANSIT OF ARIEL ACROSS URANUS FROM EARTH, NOT TRANSIT OF UMBRIEL ACROSS URANUS FROM EARTH, NOT TRANSIT OF TITANIA ACROSS URANUS FROM EARTH, NOT TRANSIT OF OBERON ACROSS URANUS FROM EARTH, NOT TRANSIT OF MIRANDA ACROSS URANUS FROM EARTH	EARTH

Proposal 11573 - Visit 24 - Investigating Post-Equinox Atmospheric Changes on Uranus

#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit
1	FQ619N_14 4s	(1) URANUS	WFC3/UVIS, ACCUM, UVIS-QUAD-SUB	FQ619N	CR-SPLIT=NO	GS ACQ SCENARI O SINGLE	Sequence 1-9 Non-In t	135 Secs [==>]	[1]
<i>Comments: Exposure cut from 144s to 135s so the visit could schedule.</i>									
2	F547M_6s	(1) URANUS	WFC3/UVIS, ACCUM, UVIS1-C512B-SUB	F547M	CR-SPLIT=NO		Sequence 1-9 Non-In t	5.6 Secs [==>]	[1]
<i>Comments: Exposure cut from 6s to 5.6 so the visit could schedule.</i>									
3	F658N_160s	(1) URANUS	WFC3/UVIS, ACCUM, UVIS1-C512B-SUB	F658N	CR-SPLIT=NO		Sequence 1-9 Non-In t	150 Secs [==>]	[1]
<i>Comments: Exposure cut from 160s to 150s so the visit could schedule.</i>									
4	F763M_26s	(1) URANUS	WFC3/UVIS, ACCUM, UVIS1-C512B-SUB	F763M	CR-SPLIT=NO		Sequence 1-9 Non-In t	24.4 Secs [==>]	[1]
<i>Comments: Exposure cut from 26s to 24.4 so the visit could schedule.</i>									
5	F845M_35s	(1) URANUS	WFC3/UVIS, ACCUM, UVIS1-C512B-SUB	F845M	CR-SPLIT=NO		Sequence 1-9 Non-In t	32.9 Secs [==>]	[1]
<i>Comments: Exposure cut from 35s to 32.9s so the visit could schedule.</i>									
6	FQ924N_18 0s	(1) URANUS	WFC3/UVIS, ACCUM, UVIS-QUAD-SUB	FQ924N	CR-SPLIT=NO		Sequence 1-9 Non-In t	169 Secs [==>]	[1]
<i>Comments: Exposure cut from 180s to 169s so the visit could schedule.</i>									
7	FQ906N_30 0s	(1) URANUS	WFC3/UVIS, ACCUM, UVIS-QUAD-SUB	FQ906N	CR-SPLIT=NO	POS TARG +25,+25	Sequence 1-9 Non-In t	282 Secs [==>]	[1]
<i>Comments: Exposure cut from 300s to 282s so the visit could schedule.</i>									
8	FQ889N_36 0s	(1) URANUS	WFC3/UVIS, ACCUM, UVIS-QUAD-SUB	FQ889N	CR-SPLIT=NO		Sequence 1-9 Non-In t	338 Secs [==>]	[1]
<i>Comments: Exposure cut from 360s to 338s so the visit could schedule.</i>									
9	FQ937N_14 0s	(1) URANUS	WFC3/UVIS, ACCUM, UVIS-QUAD-SUB	FQ937N	CR-SPLIT=NO		Sequence 1-9 Non-In t	132 Secs [==>]	[1]
<i>Comments: Exposure cut from 140s to 132s so the visit could schedule.</i>									

Exposures

