



16053 - Tracking short time variability on Jupiter

Cycle: 27, Proposal Category: GO

(Availability Mode: AVAILABLE)

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) JUPITER	WFC3/UVIS	1	19-Jun-2020 14:00:56.0	yes
02	(1) JUPITER	WFC3/UVIS	1	19-Jun-2020 14:00:56.0	yes
03	(1) JUPITER	WFC3/UVIS	1	19-Jun-2020 14:00:57.0	yes
04	(1) JUPITER	WFC3/UVIS	1	19-Jun-2020 14:00:58.0	yes
05	(1) JUPITER	WFC3/UVIS	1	19-Jun-2020 14:00:59.0	yes
06	(1) JUPITER	WFC3/UVIS	1	19-Jun-2020 14:01:00.0	yes
07	(1) JUPITER	WFC3/UVIS	1	19-Jun-2020 14:01:00.0	yes
08	(1) JUPITER	WFC3/UVIS	1	19-Jun-2020 14:01:01.0	yes
09	(1) JUPITER	WFC3/UVIS	1	19-Jun-2020 14:01:02.0	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>
10	(1) JUPITER	WFC3/UVIS	1	19-Jun-2020 14:01:03.0	yes
11	(1) JUPITER	WFC3/UVIS	1	19-Jun-2020 14:01:03.0	yes
12	(1) JUPITER	WFC3/UVIS	1	19-Jun-2020 14:01:04.0	yes

12 Total Orbits Used

ABSTRACT

Juno's arrival at Jupiter has spurred a coordinated multi-wavelength study of the planet, with observations tied to Juno's 53-day orbit. The Juno and Very Large Array observations revealed a turbulent sub-cloud structure that was constantly changing, as seen in high-resolution radio maps of brightness temperature. By comparing past observations taken less than a month apart, we have detected perturbations spanning the whole planet, implying changes to the global circulation patterns on time scales as short as three weeks. We have yet to understand what causes such large variations on such short time scales. We consider resolving these perturbations is key to understanding how disturbances can propagate so quickly across the planet. We, therefore, propose to observe Jupiter twice in the span of less than a week in order to investigate the shortest timescale variability ever seen below Jupiter's cloud deck ($8 < P < 0.5$ bars). The resulting longitude-resolved radio maps will simultaneously allow us to: derive the zonal wind profile below the cloud deck, construct the power spectrum of the turbulent cloud layers, and study the short timescale variability of storm systems such as the Great Red Spot.

OBSERVING DESCRIPTION

Observations are very tightly constrained to coincide with 4 VLA tracks, 5.5 hours each:

	CML range	good lon. Range
VLA 2020-07-22 4-9:30 UT	046.08- 245.61	006 - 286
VLA 2020-07-23 4-9:30 UT	196.73- 036.26	157 - 076
VLA 2020-07-24 4-9:30 UT	347.38- 186.91	307 - 227
VLA 2020-07-25 4-9:30 UT	138.03- 337.55	098 - 018

plus Juno perijove 28:

PJ Lon Eq-X Lon

PJ28 2020-07-25 06:15:14 252.75 265.75

This means only 5-9 exposures per HST orbit.

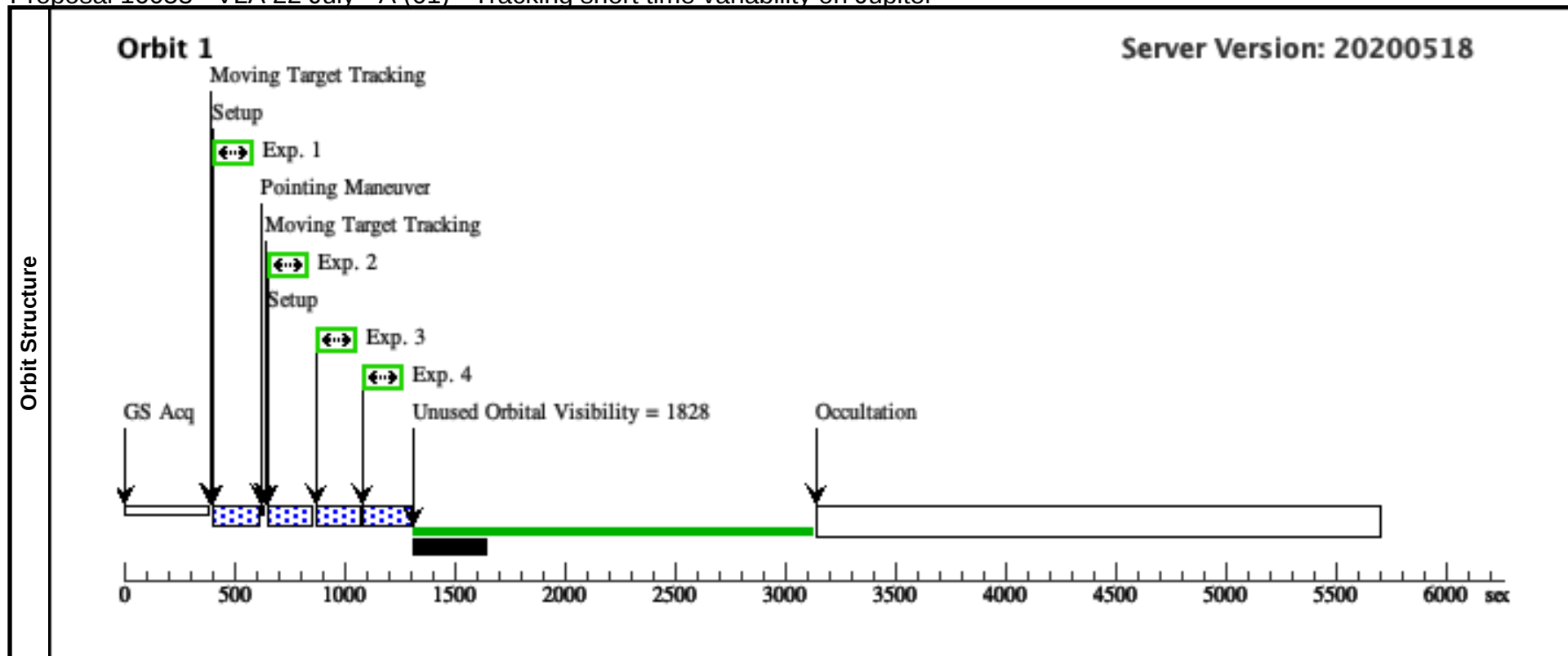
We use POS-TARG to keep Jupiter close to UVIS center, avoiding GS ReAcquisition (Wong et al. 2020, Table 2, DOI 10.3847/1538-4365/ab775f).

2K2 Subs used to minimize buffer dumps.

Between HST visits A and B of each epoch, there is a skipped HST orbit for Gyro Bias activities.

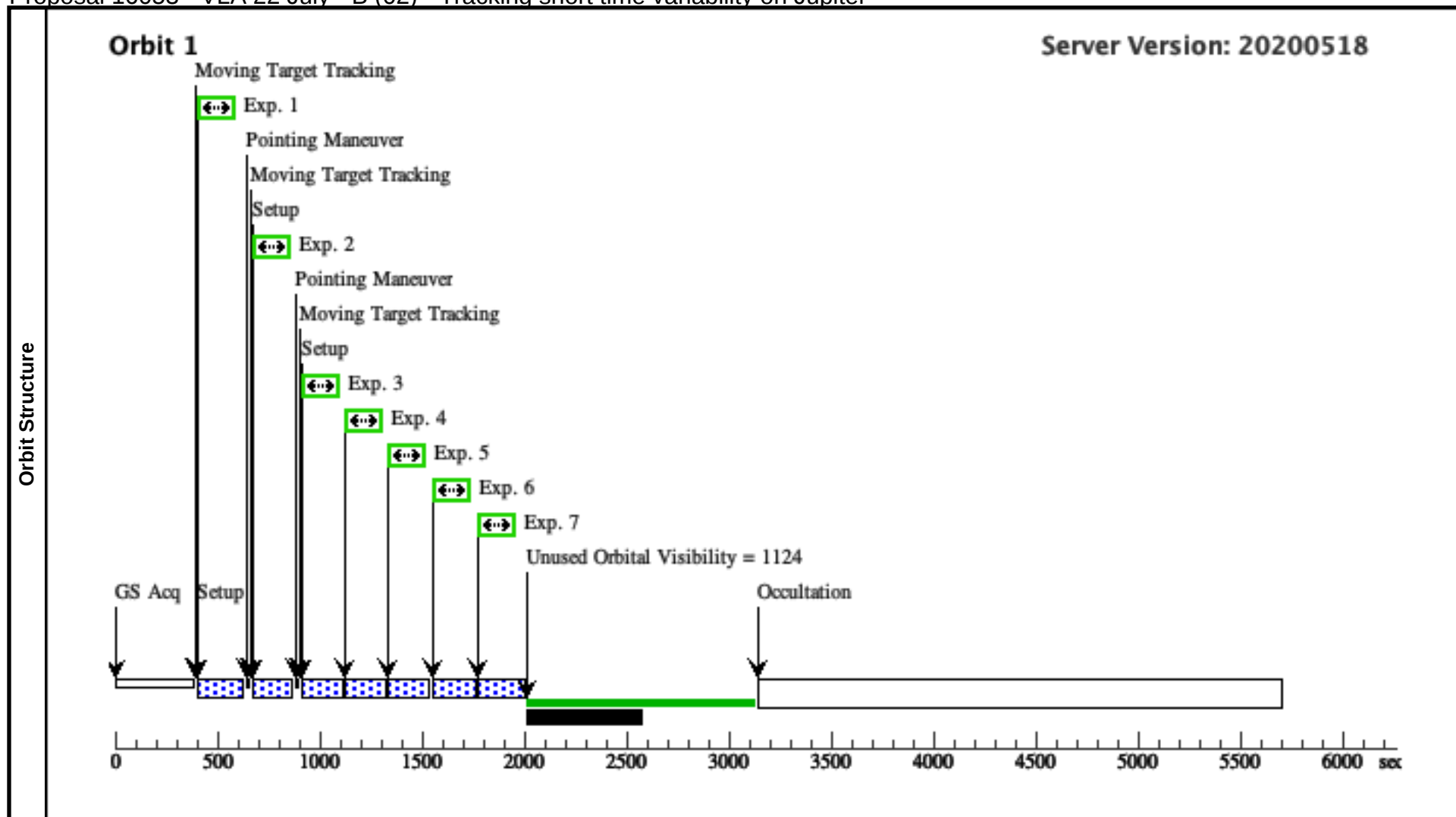
Proposal 16053 - VLA 22 July - A (01) - Tracking short time variability on Jupiter

Visit	Proposal 16053, VLA 22 July - A (01), implementation										Fri Jun 19 18:01:05 GMT 2020	
	Diagnostic Status: Warning											
	Scientific Instruments: WFC3/UVIS											
	Special Requirements: BETWEEN 22-JUL-2020:04:30:00 AND 22-JUL-2020:05:30:00											
	Comments: PC: Cut FQ889N if visit does not schedule in the desired window.											
Diagnostics	(FQ727N_quadD (01.001)) Warning (Form): FLASH level may be too low for this exposure or a short subexposure. See extended explanation in the diagnostic browser											
	(FQ727N_quadD (01.001)) Warning (Form): POS TARG & PATTERN should be used carefully with WFC3 quad filters to avoid placing the target on the vignetted part of the field of view or moving it to another quadrant.											
	(F631N (01.002)) Warning (Form): FLASH level may be too low for this exposure or a short subexposure. See extended explanation in the diagnostic browser											
	(F395N (01.003)) Warning (Form): FLASH level may be too low for this exposure or a short subexposure. See extended explanation in the diagnostic browser											
	(F275W (01.004)) Warning (Form): FLASH level may be too low for this exposure or a short subexposure. See extended explanation in the diagnostic browser											
Solar System Targets	#	Name	Level 1	Level 2	Level 3	Window	Ephem Center					
	(1)	JUPITER	STD=JUPITER									EARTH
	Comments: Description=Jupiter Extended=YES											
Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]		Orbit	
	1	FQ727N_quadD	(1) JUPITER	WFC3/UVIS, ACCUM, UVIS-QUAD-SUB	FQ727N	CR-SPLIT=NO	POS TARG -6.7,+6.9		8 Secs (8 Secs)			
									[==>]		[1]	
	2	F631N	(1) JUPITER	WFC3/UVIS, ACCUM, UVIS2-2K2D-SUB	F631N	CR-SPLIT=NO; BLADE=A	POS TARG -15,+15		4 Secs (4 Secs)			
									[==>]		[1]	
	3	F395N	(1) JUPITER	WFC3/UVIS, ACCUM, UVIS2-2K2D-SUB	F395N	CR-SPLIT=NO	POS TARG -15,+15		9 Secs (9 Secs)			
									[==>]		[1]	
4	F275W	(1) JUPITER	WFC3/UVIS, ACCUM, UVIS2-2K2D-SUB	F275W	CR-SPLIT=NO	POS TARG -15,+15		20 Secs (20 Secs)				
								[==>]		[1]		



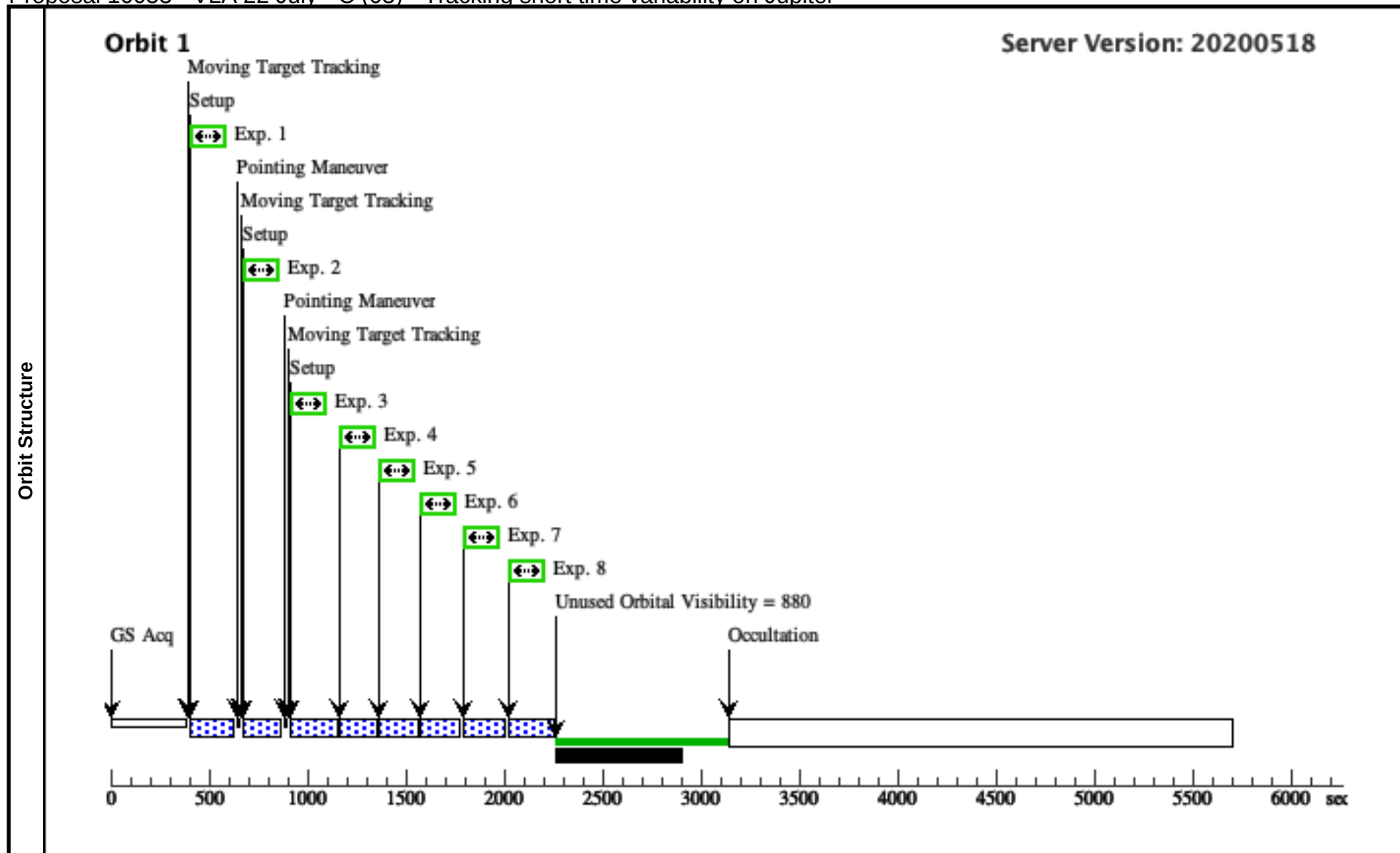
Proposal 16053 - VLA 22 July - B (02) - Tracking short time variability on Jupiter

Visit	Proposal 16053, VLA 22 July - B (02), implementation							Fri Jun 19 18:01:05 GMT 2020		
	Diagnostic Status: Warning									
	Scientific Instruments: WFC3/UVIS									
	Special Requirements: BETWEEN 22-JUL-2020:08:00:00 AND 22-JUL-2020:08:30:00									
Comments: PC: No cuts should be needed.										
Diagnostics	(FQ889N_quadA (02.001)) Warning (Form): FLASH level may be too low for this exposure or a short subexposure. See extended explanation in the diagnostic browser									
	(FQ889N_quadA (02.001)) Warning (Form): POS TARG & PATTERN should be used carefully with WFC3 quad filters to avoid placing the target on the vignetted part of the field of view or moving it to another quadrant.									
	(FQ727N_quadD (02.002)) Warning (Form): FLASH level may be too low for this exposure or a short subexposure. See extended explanation in the diagnostic browser									
	(FQ727N_quadD (02.002)) Warning (Form): POS TARG & PATTERN should be used carefully with WFC3 quad filters to avoid placing the target on the vignetted part of the field of view or moving it to another quadrant.									
	(F631N (02.003)) Warning (Form): FLASH level may be too low for this exposure or a short subexposure. See extended explanation in the diagnostic browser									
	(F395N (02.004)) Warning (Form): FLASH level may be too low for this exposure or a short subexposure. See extended explanation in the diagnostic browser									
	(F502N (02.005)) Warning (Form): FLASH level may be too low for this exposure or a short subexposure. See extended explanation in the diagnostic browser									
	(F275W (02.006)) Warning (Form): FLASH level may be too low for this exposure or a short subexposure. See extended explanation in the diagnostic browser									
(F225W (02.007)) Warning (Form): FLASH level may be too low for this exposure or a short subexposure. See extended explanation in the diagnostic browser										
Solar System Targets	#	Name	Level 1	Level 2	Level 3	Window	Ephem Center			
	(1)	JUPITER	STD=JUPITER						EARTH	
Comments: Description=Jupiter										
Extended=YES										
Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
	1	FQ889N_quadA	(1) JUPITER	WFC3/UVIS, ACCUM, UVIS-QUAD-SUB	FQ889N		POS TARG +1.7,-2.2; GS ACQ SCENARIO BASE1BE		20 Secs (20 Secs) [==>]	[1]
	2	FQ727N_quadD	(1) JUPITER	WFC3/UVIS, ACCUM, UVIS-QUAD-SUB	FQ727N	CR-SPLIT=NO	POS TARG -6.7,+6.9		8 Secs (8 Secs) [==>]	[1]
	3	F631N	(1) JUPITER	WFC3/UVIS, ACCUM, UVIS2-2K2D-SUB	F631N	CR-SPLIT=NO; BLADE=A	POS TARG -15,+15		4 Secs (4 Secs) [==>]	[1]
	4	F395N	(1) JUPITER	WFC3/UVIS, ACCUM, UVIS2-2K2D-SUB	F395N	CR-SPLIT=NO	POS TARG -15,+15		9 Secs (9 Secs) [==>]	[1]
	5	F502N	(1) JUPITER	WFC3/UVIS, ACCUM, UVIS2-2K2D-SUB	F502N	CR-SPLIT=NO; BLADE=A	POS TARG -15,+15		4 Secs (4 Secs) [==>]	[1]
	6	F275W	(1) JUPITER	WFC3/UVIS, ACCUM, UVIS2-2K2D-SUB	F275W	CR-SPLIT=NO	POS TARG -15,+15		20 Secs (20 Secs) [==>]	[1]
	7	F225W	(1) JUPITER	WFC3/UVIS, ACCUM, UVIS2-2K2D-SUB	F225W	CR-SPLIT=NO	POS TARG -15,+15		40 Secs (40 Secs) [==>]	[1]



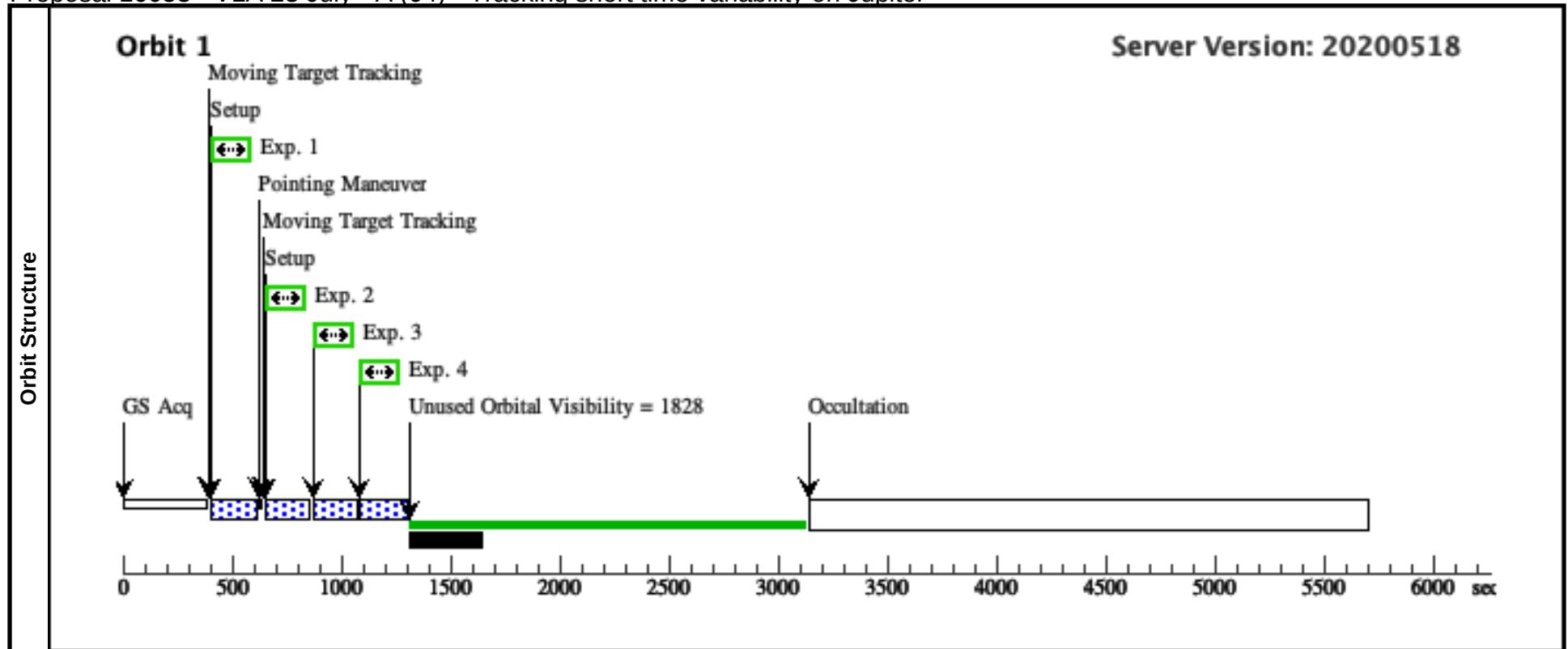
Proposal 16053 - VLA 22 July - C (03) - Tracking short time variability on Jupiter

Visit	Proposal 16053, VLA 22 July - C (03), implementation										Fri Jun 19 18:01:05 GMT 2020
	Diagnostic Status: Warning										
	Scientific Instruments: WFC3/UVIS										
	Special Requirements: BETWEEN 22-JUL-2020:09:30:00 AND 22-JUL-2020:10:15:00										
Comments: PC: No cuts should be needed.											
Diagnostics	(FQ889N_quadA (03.001)) Warning (Form): FLASH level may be too low for this exposure or a short subexposure. See extended explanation in the diagnostic browser										
	(FQ889N_quadA (03.001)) Warning (Form): POS TARG & PATTERN should be used carefully with WFC3 quad filters to avoid placing the target on the vignetted part of the field of view or moving it to another quadrant.										
	(FQ727N_quadD (03.002)) Warning (Form): FLASH level may be too low for this exposure or a short subexposure. See extended explanation in the diagnostic browser										
	(FQ727N_quadD (03.002)) Warning (Form): POS TARG & PATTERN should be used carefully with WFC3 quad filters to avoid placing the target on the vignetted part of the field of view or moving it to another quadrant.										
	(F225W (03.003)) Warning (Form): FLASH level may be too low for this exposure or a short subexposure. See extended explanation in the diagnostic browser										
	(F631N (03.004)) Warning (Form): FLASH level may be too low for this exposure or a short subexposure. See extended explanation in the diagnostic browser										
	(F395N (03.005)) Warning (Form): FLASH level may be too low for this exposure or a short subexposure. See extended explanation in the diagnostic browser										
	(F502N (03.006)) Warning (Form): FLASH level may be too low for this exposure or a short subexposure. See extended explanation in the diagnostic browser										
	(F275W (03.007)) Warning (Form): FLASH level may be too low for this exposure or a short subexposure. See extended explanation in the diagnostic browser										
(F225W (03.008)) Warning (Form): FLASH level may be too low for this exposure or a short subexposure. See extended explanation in the diagnostic browser											
Solar System Targets	#	Name	Level 1	Level 2	Level 3	Window	Ephem Center				
	(1)	JUPITER	STD=JUPITER				EARTH				
Comments: Description=Jupiter											
Extended=YES											
Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]		Orbit
	1	FQ889N_quadA	(1) JUPITER	WFC3/UVIS, ACCUM, UVIS-QUAD-SUB	FQ889N		POS TARG +1.7,-2.2; GS ACQ SCENARIO BASE1BE		20 Secs (20 Secs)		
									[==>]		[1]
	2	FQ727N_quadD	(1) JUPITER	WFC3/UVIS, ACCUM, UVIS-QUAD-SUB	FQ727N	CR-SPLIT=NO	POS TARG -6.7,+6.9		8 Secs (8 Secs)		
									[==>]		[1]
	3	F225W	(1) JUPITER	WFC3/UVIS, ACCUM, UVIS2-2K2D-SUB	F225W	CR-SPLIT=NO	POS TARG -15,+15		40 Secs (40 Secs)		
									[==>]		[1]
	4	F631N	(1) JUPITER	WFC3/UVIS, ACCUM, UVIS2-2K2D-SUB	F631N	CR-SPLIT=NO; BLADE=A	POS TARG -15,+15		4 Secs (4 Secs)		
									[==>]		[1]
	5	F395N	(1) JUPITER	WFC3/UVIS, ACCUM, UVIS2-2K2D-SUB	F395N	CR-SPLIT=NO	POS TARG -15,+15		9 Secs (9 Secs)		
								[==>]		[1]	
6	F502N	(1) JUPITER	WFC3/UVIS, ACCUM, UVIS2-2K2D-SUB	F502N	CR-SPLIT=NO; BLADE=A	POS TARG -15,+15		4 Secs (4 Secs)			
								[==>]		[1]	
7	F275W	(1) JUPITER	WFC3/UVIS, ACCUM, UVIS2-2K2D-SUB	F275W	CR-SPLIT=NO	POS TARG -15,+15		20 Secs (20 Secs)			
								[==>]		[1]	
8	F225W	(1) JUPITER	WFC3/UVIS, ACCUM, UVIS2-2K2D-SUB	F225W	CR-SPLIT=NO	POS TARG -15,+15		40 Secs (40 Secs)			
								[==>]		[1]	



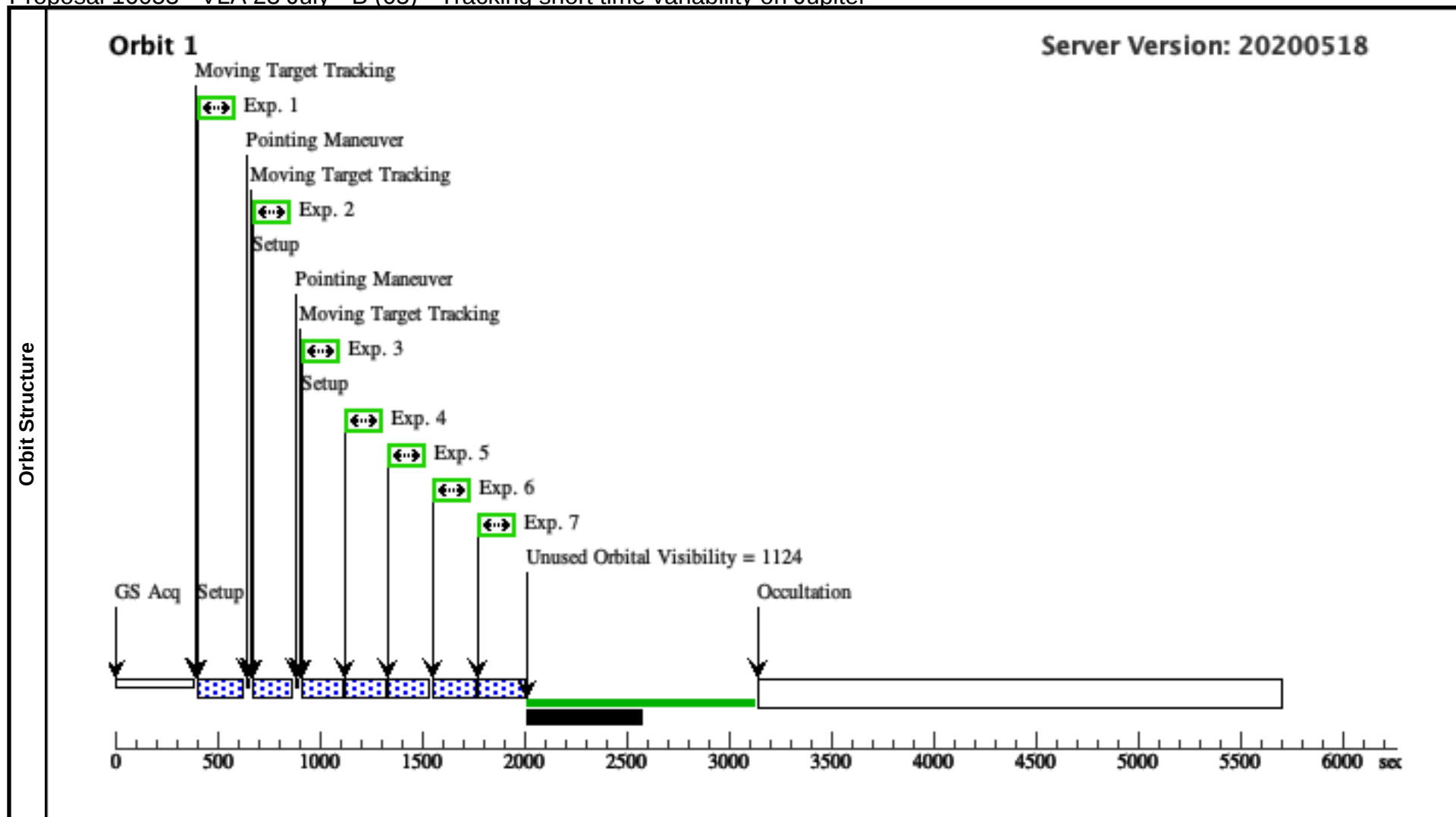
Proposal 16053 - VLA 23 July - A (04) - Tracking short time variability on Jupiter

Visit	Proposal 16053, VLA 23 July - A (04), implementation										Fri Jun 19 18:01:05 GMT 2020
	Diagnostic Status: Warning										
	Scientific Instruments: WFC3/UVIS										
	Special Requirements: BETWEEN 23-JUL-2020:04:30:00 AND 23-JUL-2020:05:15:00										
	Comments: PC: Cut FQ889N if visit does not schedule in the desired window.										
Diagnostics	(FQ727N_quadD (04.001)) Warning (Form): FLASH level may be too low for this exposure or a short subexposure. See extended explanation in the diagnostic browser										
	(FQ727N_quadD (04.001)) Warning (Form): POS TARG & PATTERN should be used carefully with WFC3 quad filters to avoid placing the target on the vignetted part of the field of view or moving it to another quadrant.										
	(F631N (04.002)) Warning (Form): FLASH level may be too low for this exposure or a short subexposure. See extended explanation in the diagnostic browser										
	(F395N (04.003)) Warning (Form): FLASH level may be too low for this exposure or a short subexposure. See extended explanation in the diagnostic browser										
	(F275W (04.004)) Warning (Form): FLASH level may be too low for this exposure or a short subexposure. See extended explanation in the diagnostic browser										
Solar System Targets	#	Name	Level 1	Level 2	Level 3	Window	Ephem Center				
	(1)	JUPITER	STD=JUPITER								EARTH
	Comments: Description=Jupiter Extended=YES										
Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit	
	1	FQ727N_quadD	(1) JUPITER	WFC3/UVIS, ACCUM, UVIS-QUAD-SUB	FQ727N	CR-SPLIT=NO	POS TARG -6.7,+6.9		8 Secs (8 Secs)		
									[==>]	[1]	
	2	F631N	(1) JUPITER	WFC3/UVIS, ACCUM, UVIS2-2K2D-SUB	F631N	CR-SPLIT=NO; BLADE=A	POS TARG -15,+15		4 Secs (4 Secs)		
									[==>]	[1]	
	3	F395N	(1) JUPITER	WFC3/UVIS, ACCUM, UVIS2-2K2D-SUB	F395N	CR-SPLIT=NO	POS TARG -15,+15		9 Secs (9 Secs)		
									[==>]	[1]	
4	F275W	(1) JUPITER	WFC3/UVIS, ACCUM, UVIS2-2K2D-SUB	F275W	CR-SPLIT=NO	POS TARG -15,+15		20 Secs (20 Secs)			
								[==>]	[1]		



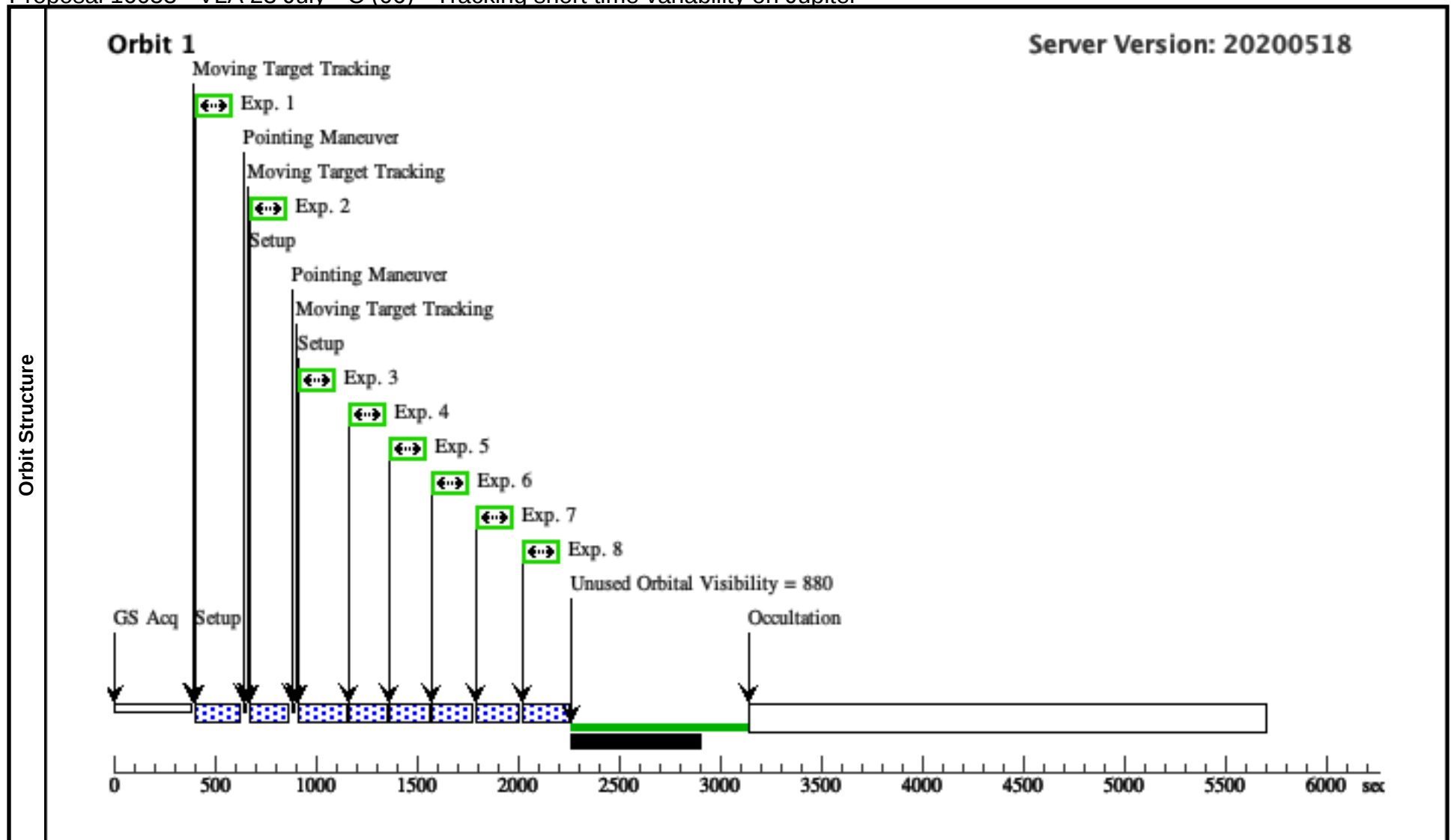
Proposal 16053 - VLA 23 July - B (05) - Tracking short time variability on Jupiter

Visit	Proposal 16053, VLA 23 July - B (05), implementation							Fri Jun 19 18:01:05 GMT 2020		
	Diagnostic Status: Warning									
	Scientific Instruments: WFC3/UVIS									
	Special Requirements: BETWEEN 23-JUL-2020:07:30:00 AND 23-JUL-2020:08:30:00									
Comments: PC: No cuts should be needed.										
Diagnostics	(FQ889N_quadA (05.001)) Warning (Form): FLASH level may be too low for this exposure or a short subexposure. See extended explanation in the diagnostic browser									
	(FQ889N_quadA (05.001)) Warning (Form): POS TARG & PATTERN should be used carefully with WFC3 quad filters to avoid placing the target on the vignetted part of the field of view or moving it to another quadrant.									
	(FQ727N_quadD (05.002)) Warning (Form): FLASH level may be too low for this exposure or a short subexposure. See extended explanation in the diagnostic browser									
	(FQ727N_quadD (05.002)) Warning (Form): POS TARG & PATTERN should be used carefully with WFC3 quad filters to avoid placing the target on the vignetted part of the field of view or moving it to another quadrant.									
	(F631N (05.003)) Warning (Form): FLASH level may be too low for this exposure or a short subexposure. See extended explanation in the diagnostic browser									
	(F395N (05.004)) Warning (Form): FLASH level may be too low for this exposure or a short subexposure. See extended explanation in the diagnostic browser									
	(F502N (05.005)) Warning (Form): FLASH level may be too low for this exposure or a short subexposure. See extended explanation in the diagnostic browser									
	(F275W (05.006)) Warning (Form): FLASH level may be too low for this exposure or a short subexposure. See extended explanation in the diagnostic browser									
(F225W (05.007)) Warning (Form): FLASH level may be too low for this exposure or a short subexposure. See extended explanation in the diagnostic browser										
Solar System Targets	#	Name	Level 1	Level 2	Level 3	Window	Ephem Center			
	(1)	JUPITER	STD=JUPITER	EARTH						
Comments: Description=Jupiter										
Extended=YES										
Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
	1	FQ889N_quadA	(1) JUPITER	WFC3/UVIS, ACCUM, UVIS-QUAD-SUB	FQ889N		POS TARG +1.7,-2.2; GS ACQ SCENARIO BASE1BE		20 Secs (20 Secs) [==>]	[1]
	2	FQ727N_quadD	(1) JUPITER	WFC3/UVIS, ACCUM, UVIS-QUAD-SUB	FQ727N	CR-SPLIT=NO	POS TARG -6.7,+6.9		8 Secs (8 Secs) [==>]	[1]
	3	F631N	(1) JUPITER	WFC3/UVIS, ACCUM, UVIS2-2K2D-SUB	F631N	CR-SPLIT=NO; BLADE=A	POS TARG -15,+15		4 Secs (4 Secs) [==>]	[1]
	4	F395N	(1) JUPITER	WFC3/UVIS, ACCUM, UVIS2-2K2D-SUB	F395N	CR-SPLIT=NO	POS TARG -15,+15		9 Secs (9 Secs) [==>]	[1]
	5	F502N	(1) JUPITER	WFC3/UVIS, ACCUM, UVIS2-2K2D-SUB	F502N	CR-SPLIT=NO; BLADE=A	POS TARG -15,+15		4 Secs (4 Secs) [==>]	[1]
	6	F275W	(1) JUPITER	WFC3/UVIS, ACCUM, UVIS2-2K2D-SUB	F275W	CR-SPLIT=NO	POS TARG -15,+15		20 Secs (20 Secs) [==>]	[1]
	7	F225W	(1) JUPITER	WFC3/UVIS, ACCUM, UVIS2-2K2D-SUB	F225W	CR-SPLIT=NO	POS TARG -15,+15		40 Secs (40 Secs) [==>]	[1]



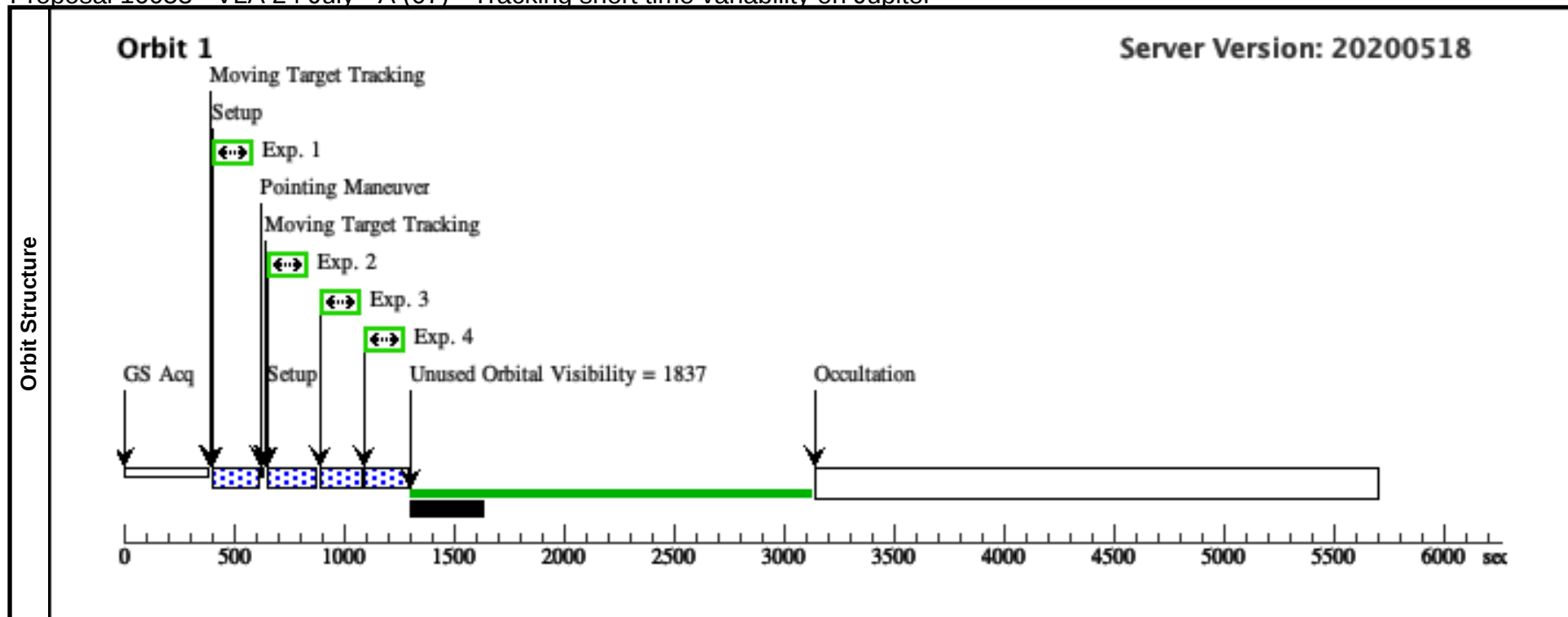
Proposal 16053 - VLA 23 July - C (06) - Tracking short time variability on Jupiter

Visit	Proposal 16053, VLA 23 July - C (06), implementation										Fri Jun 19 18:01:05 GMT 2020
	Diagnostic Status: Warning										
	Scientific Instruments: WFC3/UVIS										
	Special Requirements: BETWEEN 23-JUL-2020:09:15:00 AND 23-JUL-2020:10:00:00										
Comments: PC: No cuts should be needed.											
Diagnostics	(FQ889N_quadA (06.001)) Warning (Form): FLASH level may be too low for this exposure or a short subexposure. See extended explanation in the diagnostic browser										
	(FQ889N_quadA (06.001)) Warning (Form): POS TARG & PATTERN should be used carefully with WFC3 quad filters to avoid placing the target on the vignetted part of the field of view or moving it to another quadrant.										
	(FQ727N_quadD (06.002)) Warning (Form): FLASH level may be too low for this exposure or a short subexposure. See extended explanation in the diagnostic browser										
	(FQ727N_quadD (06.002)) Warning (Form): POS TARG & PATTERN should be used carefully with WFC3 quad filters to avoid placing the target on the vignetted part of the field of view or moving it to another quadrant.										
	(F225W (06.003)) Warning (Form): FLASH level may be too low for this exposure or a short subexposure. See extended explanation in the diagnostic browser										
	(F631N (06.004)) Warning (Form): FLASH level may be too low for this exposure or a short subexposure. See extended explanation in the diagnostic browser										
	(F395N (06.005)) Warning (Form): FLASH level may be too low for this exposure or a short subexposure. See extended explanation in the diagnostic browser										
	(F502N (06.006)) Warning (Form): FLASH level may be too low for this exposure or a short subexposure. See extended explanation in the diagnostic browser										
	(F275W (06.007)) Warning (Form): FLASH level may be too low for this exposure or a short subexposure. See extended explanation in the diagnostic browser										
(F225W (06.008)) Warning (Form): FLASH level may be too low for this exposure or a short subexposure. See extended explanation in the diagnostic browser											
Solar System Targets	#	Name	Level 1	Level 2	Level 3	Window	Ephem Center				
	(1)	JUPITER	STD=JUPITER				EARTH				
Comments: Description=Jupiter											
Extended=YES											
Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]		Orbit
	1	FQ889N_quadA	(1) JUPITER	WFC3/UVIS, ACCUM, UVIS-QUAD-SUB	FQ889N		POS TARG +1.7,-2.2; GS ACQ SCENARIO BASE1BE		20 Secs (20 Secs) [==>]		[1]
	2	FQ727N_quadD	(1) JUPITER	WFC3/UVIS, ACCUM, UVIS-QUAD-SUB	FQ727N	CR-SPLIT=NO	POS TARG -6.7,+6.9		8 Secs (8 Secs) [==>]		[1]
	3	F225W	(1) JUPITER	WFC3/UVIS, ACCUM, UVIS2-2K2D-SUB	F225W	CR-SPLIT=NO	POS TARG -15,+15		40 Secs (40 Secs) [==>]		[1]
	4	F631N	(1) JUPITER	WFC3/UVIS, ACCUM, UVIS2-2K2D-SUB	F631N	CR-SPLIT=NO; BLADE=A	POS TARG -15,+15		4 Secs (4 Secs) [==>]		[1]
	5	F395N	(1) JUPITER	WFC3/UVIS, ACCUM, UVIS2-2K2D-SUB	F395N	CR-SPLIT=NO	POS TARG -15,+15		9 Secs (9 Secs) [==>]		[1]
	6	F502N	(1) JUPITER	WFC3/UVIS, ACCUM, UVIS2-2K2D-SUB	F502N	CR-SPLIT=NO; BLADE=A	POS TARG -15,+15		4 Secs (4 Secs) [==>]		[1]
	7	F275W	(1) JUPITER	WFC3/UVIS, ACCUM, UVIS2-2K2D-SUB	F275W	CR-SPLIT=NO	POS TARG -15,+15		20 Secs (20 Secs) [==>]		[1]
	8	F225W	(1) JUPITER	WFC3/UVIS, ACCUM, UVIS2-2K2D-SUB	F225W	CR-SPLIT=NO	POS TARG -15,+15		40 Secs (40 Secs) [==>]		[1]



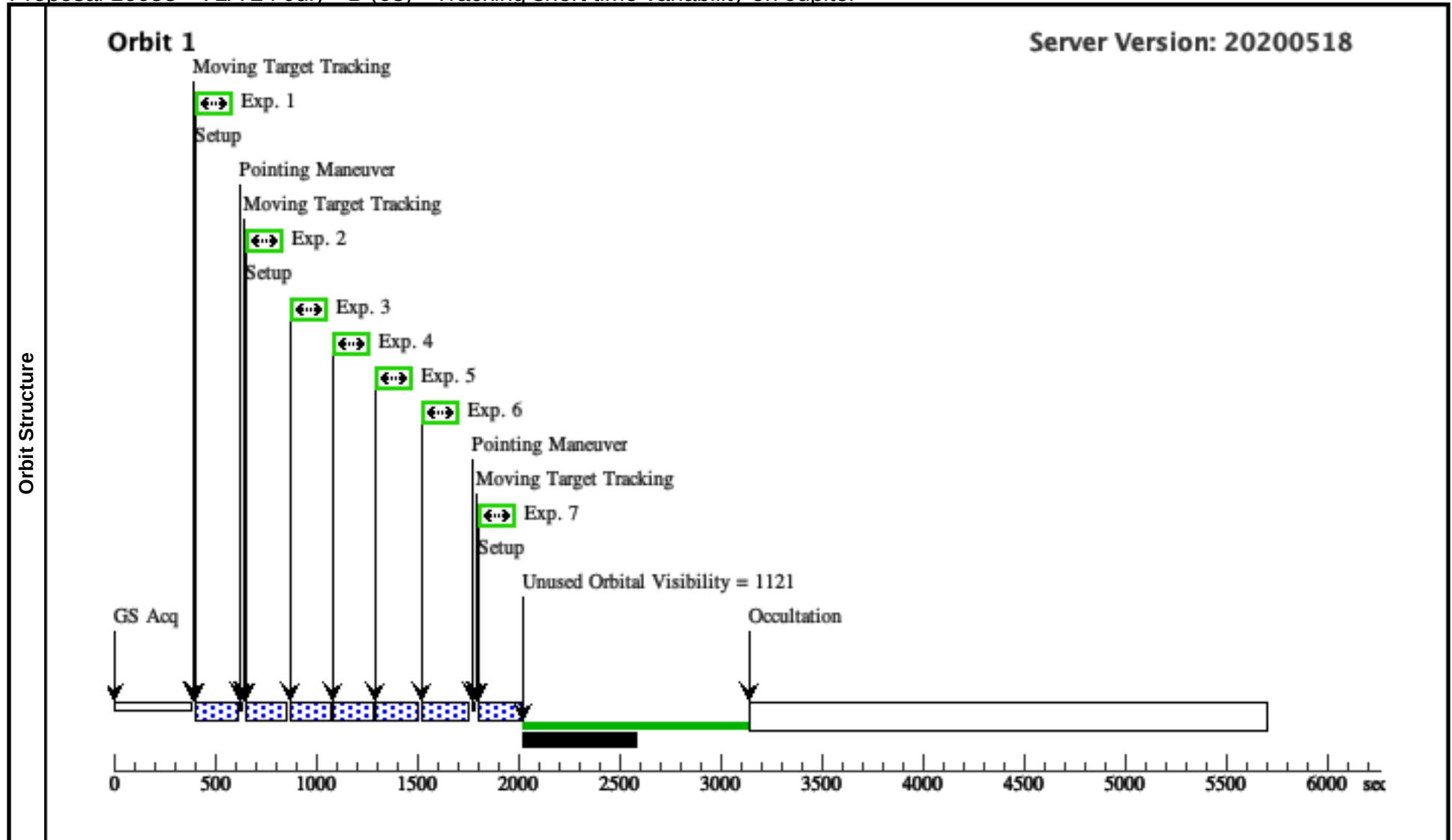
Proposal 16053 - VLA 24 July - A (07) - Tracking short time variability on Jupiter

Visit	Proposal 16053, VLA 24 July - A (07), implementation										Fri Jun 19 18:01:05 GMT 2020	
	Diagnostic Status: Warning											
	Scientific Instruments: WFC3/UVIS											
	Special Requirements: BETWEEN 24-JUL-2020:04:20:00 AND 24-JUL-2020:05:20:00											
	Comments: PC: Cut FQ889N if visit does not schedule in the desired window.											
Diagnostics	(FQ727N_quadD (07.001)) Warning (Form): FLASH level may be too low for this exposure or a short subexposure. See extended explanation in the diagnostic browser											
	(FQ727N_quadD (07.001)) Warning (Form): POS TARG & PATTERN should be used carefully with WFC3 quad filters to avoid placing the target on the vignetted part of the field of view or moving it to another quadrant.											
	(F275W (07.002)) Warning (Form): FLASH level may be too low for this exposure or a short subexposure. See extended explanation in the diagnostic browser											
	(F631N (07.003)) Warning (Form): FLASH level may be too low for this exposure or a short subexposure. See extended explanation in the diagnostic browser											
	(F395N (07.004)) Warning (Form): FLASH level may be too low for this exposure or a short subexposure. See extended explanation in the diagnostic browser											
Solar System Targets	#	Name	Level 1	Level 2	Level 3	Window	Ephem Center					
	(1)	JUPITER	STD=JUPITER									EARTH
	Comments: Description=Jupiter Extended=YES											
Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]		Orbit	
	1	FQ727N_qu adD	(1) JUPITER	WFC3/UVIS, ACCUM, UVIS-QUAD-SUB	FQ727N	CR-SPLIT=NO	POS TARG -6.7,+6. 9		8 Secs (8 Secs)			
									[==>]		[1]	
	2	F275W	(1) JUPITER	WFC3/UVIS, ACCUM, UVIS2-2K2D-SUB	F275W	CR-SPLIT=NO	POS TARG -15,+15		20 Secs (20 Secs)			
									[==>]		[1]	
	3	F631N	(1) JUPITER	WFC3/UVIS, ACCUM, UVIS2-2K2D-SUB	F631N	CR-SPLIT=NO; BLADE=A	POS TARG -15,+15		4 Secs (4 Secs)			
									[==>]		[1]	
4	F395N	(1) JUPITER	WFC3/UVIS, ACCUM, UVIS2-2K2D-SUB	F395N	CR-SPLIT=NO	POS TARG -15,+15		9 Secs (9 Secs)				
								[==>]		[1]		



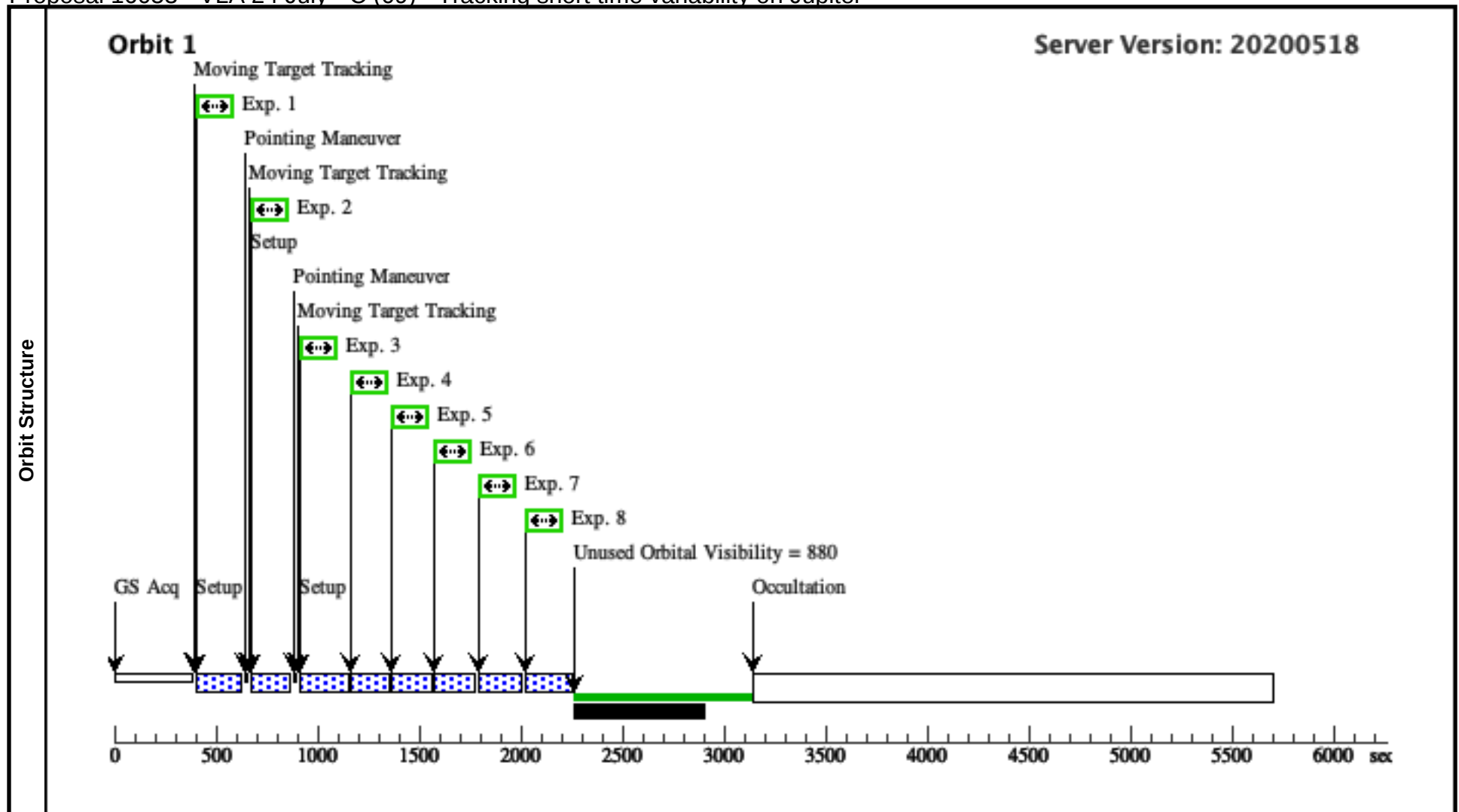
Proposal 16053 - VLA 24 July - B (08) - Tracking short time variability on Jupiter

Visit	Proposal 16053, VLA 24 July - B (08), implementation										Fri Jun 19 18:01:05 GMT 2020
	Diagnostic Status: Warning										
	Scientific Instruments: WFC3/UVIS										
	Special Requirements: BETWEEN 24-JUL-2020:07:30:00 AND 24-JUL-2020:08:30:00										
Comments: PC: No cuts should be needed.											
Diagnostics	(FQ727N_quadD (08.001)) Warning (Form): FLASH level may be too low for this exposure or a short subexposure. See extended explanation in the diagnostic browser										
	(FQ727N_quadD (08.001)) Warning (Form): POS TARG & PATTERN should be used carefully with WFC3 quad filters to avoid placing the target on the vignetted part of the field of view or moving it to another quadrant.										
	(F631N (08.002)) Warning (Form): FLASH level may be too low for this exposure or a short subexposure. See extended explanation in the diagnostic browser										
	(F395N (08.003)) Warning (Form): FLASH level may be too low for this exposure or a short subexposure. See extended explanation in the diagnostic browser										
	(F502N (08.004)) Warning (Form): FLASH level may be too low for this exposure or a short subexposure. See extended explanation in the diagnostic browser										
	(F275W (08.005)) Warning (Form): FLASH level may be too low for this exposure or a short subexposure. See extended explanation in the diagnostic browser										
	(F225W (08.006)) Warning (Form): FLASH level may be too low for this exposure or a short subexposure. See extended explanation in the diagnostic browser										
	(FQ889N_quadA (08.007)) Warning (Form): FLASH level may be too low for this exposure or a short subexposure. See extended explanation in the diagnostic browser										
(FQ889N_quadA (08.007)) Warning (Form): POS TARG & PATTERN should be used carefully with WFC3 quad filters to avoid placing the target on the vignetted part of the field of view or moving it to another quadrant.											
Solar System Targets	#	Name	Level 1	Level 2	Level 3	Window	Ephem Center				
	(1)	JUPITER	STD=JUPITER								EARTH
Comments: Description=Jupiter											
Extended=YES											
Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]		Orbit
	1	FQ727N_quadD	(1) JUPITER	WFC3/UVIS, ACCUM, UVIS-QUAD-SUB	FQ727N	CR-SPLIT=NO	POS TARG -6.7,+6.9		8 Secs (8 Secs)		
									[==>]		[1]
	2	F631N	(1) JUPITER	WFC3/UVIS, ACCUM, UVIS2-2K2D-SUB	F631N	CR-SPLIT=NO; BLADE=A	POS TARG -15,+15		4 Secs (4 Secs)		
									[==>]		[1]
	3	F395N	(1) JUPITER	WFC3/UVIS, ACCUM, UVIS2-2K2D-SUB	F395N	CR-SPLIT=NO	POS TARG -15,+15		9 Secs (9 Secs)		
									[==>]		[1]
	4	F502N	(1) JUPITER	WFC3/UVIS, ACCUM, UVIS2-2K2D-SUB	F502N	CR-SPLIT=NO; BLADE=A	POS TARG -15,+15		4 Secs (4 Secs)		
									[==>]		[1]
	5	F275W	(1) JUPITER	WFC3/UVIS, ACCUM, UVIS2-2K2D-SUB	F275W	CR-SPLIT=NO	POS TARG -15,+15		20 Secs (20 Secs)		
								[==>]		[1]	
6	F225W	(1) JUPITER	WFC3/UVIS, ACCUM, UVIS2-2K2D-SUB	F225W	CR-SPLIT=NO	POS TARG -15,+15		40 Secs (40 Secs)			
								[==>]		[1]	
7	FQ889N_quadA	(1) JUPITER	WFC3/UVIS, ACCUM, UVIS-QUAD-SUB	FQ889N		POS TARG +1.7,-2.2; GS ACQ SCENARIO BASE1BE		20 Secs (20 Secs)			
								[==>]		[1]	



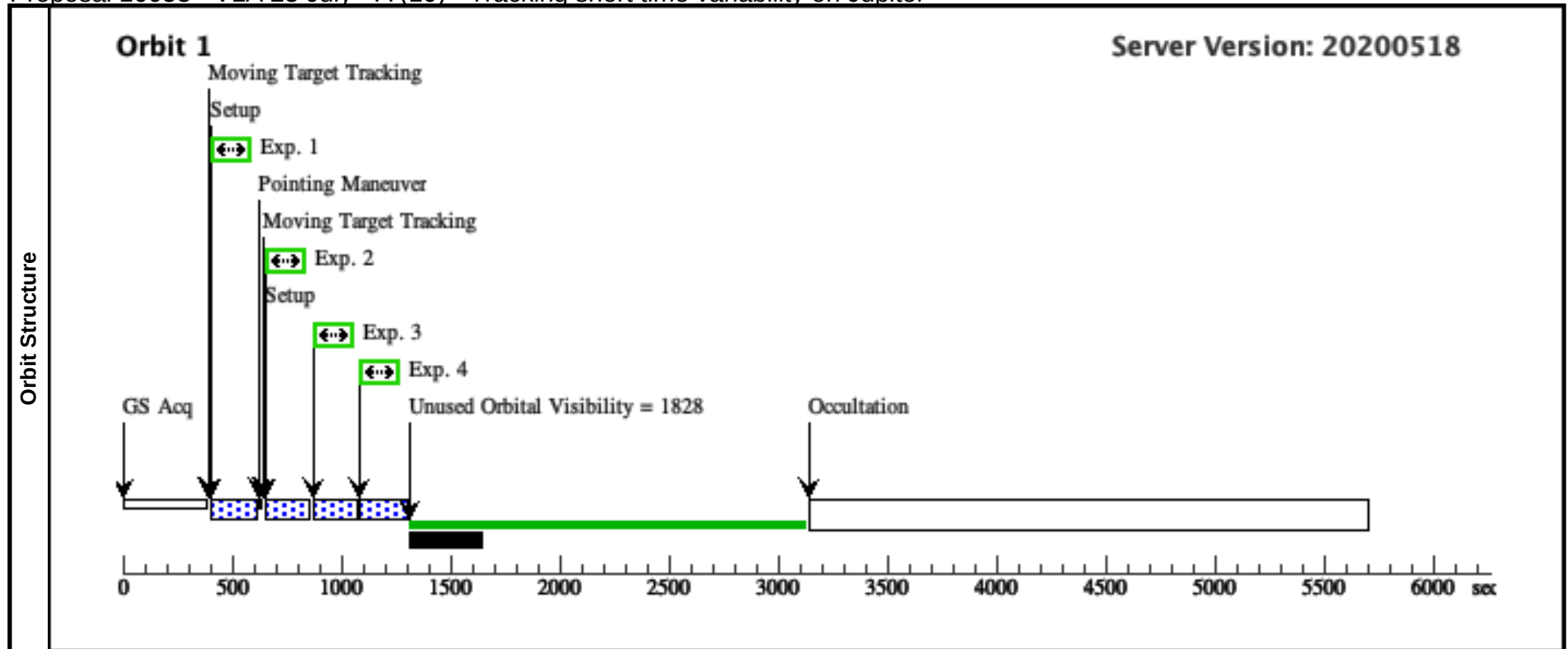
Proposal 16053 - VLA 24 July - C (09) - Tracking short time variability on Jupiter

Visit	Proposal 16053, VLA 24 July - C (09), implementation										Fri Jun 19 18:01:05 GMT 2020	
	Diagnostic Status: Warning											
	Scientific Instruments: WFC3/UVIS											
	Special Requirements: BETWEEN 24-JUL-2020:09:00:00 AND 24-JUL-2020:10:00:00											
	Comments: PC: No cuts should be needed.											
Diagnostics	(FQ889N_quadA (09.001)) Warning (Form): FLASH level may be too low for this exposure or a short subexposure. See extended explanation in the diagnostic browser											
	(FQ889N_quadA (09.001)) Warning (Form): POS TARG & PATTERN should be used carefully with WFC3 quad filters to avoid placing the target on the vignetted part of the field of view or moving it to another quadrant.											
	(FQ727N_quadD (09.002)) Warning (Form): FLASH level may be too low for this exposure or a short subexposure. See extended explanation in the diagnostic browser											
	(FQ727N_quadD (09.002)) Warning (Form): POS TARG & PATTERN should be used carefully with WFC3 quad filters to avoid placing the target on the vignetted part of the field of view or moving it to another quadrant.											
	(F225W (09.003)) Warning (Form): FLASH level may be too low for this exposure or a short subexposure. See extended explanation in the diagnostic browser											
	(F631N (09.004)) Warning (Form): FLASH level may be too low for this exposure or a short subexposure. See extended explanation in the diagnostic browser											
	(F395N (09.005)) Warning (Form): FLASH level may be too low for this exposure or a short subexposure. See extended explanation in the diagnostic browser											
	(F502N (09.006)) Warning (Form): FLASH level may be too low for this exposure or a short subexposure. See extended explanation in the diagnostic browser											
	(F275W (09.007)) Warning (Form): FLASH level may be too low for this exposure or a short subexposure. See extended explanation in the diagnostic browser											
(F225W (09.008)) Warning (Form): FLASH level may be too low for this exposure or a short subexposure. See extended explanation in the diagnostic browser												
Solar System Targets	#	Name	Level 1	Level 2	Level 3	Window	Ephem Center					
	(1)	JUPITER	STD=JUPITER							EARTH		
Comments: Description=Jupiter												
Extended=YES												
Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]		Orbit	
	1	FQ889N_quadA	(1) JUPITER	WFC3/UVIS, ACCUM, UVIS-QUAD-SUB	FQ889N		POS TARG +1.7,-2.2; GS ACQ SCENARIO BASE1BE		20 Secs (20 Secs)			
									[==>]		[1]	
	2	FQ727N_quadD	(1) JUPITER	WFC3/UVIS, ACCUM, UVIS-QUAD-SUB	FQ727N	CR-SPLIT=NO	POS TARG -6.7,+6.9		8 Secs (8 Secs)			
									[==>]		[1]	
	3	F225W	(1) JUPITER	WFC3/UVIS, ACCUM, UVIS2-2K2D-SUB	F225W	CR-SPLIT=NO	POS TARG -15,+15		40 Secs (40 Secs)			
									[==>]		[1]	
	4	F631N	(1) JUPITER	WFC3/UVIS, ACCUM, UVIS2-2K2D-SUB	F631N	CR-SPLIT=NO; BLADE=A	POS TARG -15,+15		4 Secs (4 Secs)			
									[==>]		[1]	
	5	F395N	(1) JUPITER	WFC3/UVIS, ACCUM, UVIS2-2K2D-SUB	F395N	CR-SPLIT=NO	POS TARG -15,+15		9 Secs (9 Secs)			
								[==>]		[1]		
6	F502N	(1) JUPITER	WFC3/UVIS, ACCUM, UVIS2-2K2D-SUB	F502N	CR-SPLIT=NO; BLADE=A	POS TARG -15,+15		4 Secs (4 Secs)				
								[==>]		[1]		
7	F275W	(1) JUPITER	WFC3/UVIS, ACCUM, UVIS2-2K2D-SUB	F275W	CR-SPLIT=NO	POS TARG -15,+15		20 Secs (20 Secs)				
								[==>]		[1]		
8	F225W	(1) JUPITER	WFC3/UVIS, ACCUM, UVIS2-2K2D-SUB	F225W	CR-SPLIT=NO	POS TARG -15,+15		40 Secs (40 Secs)				
								[==>]		[1]		



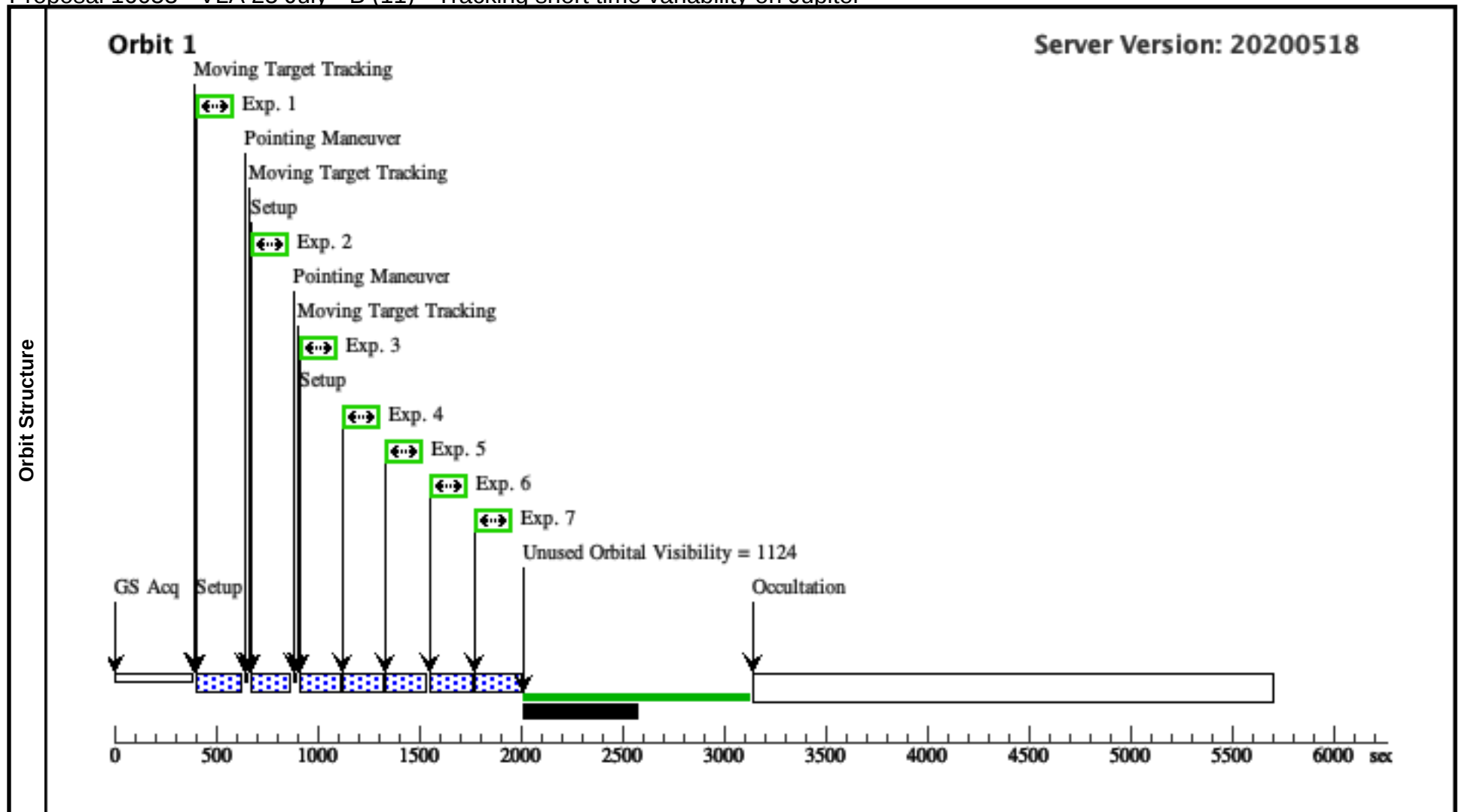
Proposal 16053 - VLA 25 July - A (10) - Tracking short time variability on Jupiter

Visit	Proposal 16053, VLA 25 July - A (10), implementation										Fri Jun 19 18:01:05 GMT 2020
	Diagnostic Status: Warning										
	Scientific Instruments: WFC3/UVIS										
	Special Requirements: BETWEEN 25-JUL-2020:04:00:00 AND 25-JUL-2020:05:00:00										
	Comments: PC: Cut FQ889N if visit does not schedule in the desired window.										
Diagnostics	(FQ727N_quadD (10.001)) Warning (Form): FLASH level may be too low for this exposure or a short subexposure. See extended explanation in the diagnostic browser										
	(FQ727N_quadD (10.001)) Warning (Form): POS TARG & PATTERN should be used carefully with WFC3 quad filters to avoid placing the target on the vignetted part of the field of view or moving it to another quadrant.										
	(F631N (10.002)) Warning (Form): FLASH level may be too low for this exposure or a short subexposure. See extended explanation in the diagnostic browser										
	(F395N (10.003)) Warning (Form): FLASH level may be too low for this exposure or a short subexposure. See extended explanation in the diagnostic browser										
	(F275W (10.004)) Warning (Form): FLASH level may be too low for this exposure or a short subexposure. See extended explanation in the diagnostic browser										
Solar System Targets	#	Name	Level 1	Level 2	Level 3	Window	Ephem Center				
	(1)	JUPITER	STD=JUPITER								EARTH
	Comments: Description=Jupiter Extended=YES										
Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit	
	1	FQ727N_quadD	(1) JUPITER	WFC3/UVIS, ACCUM, UVIS-QUAD-SUB	FQ727N	CR-SPLIT=NO	POS TARG -6.7,+6.9		8 Secs (8 Secs)		
									[==>]	[1]	
	2	F631N	(1) JUPITER	WFC3/UVIS, ACCUM, UVIS2-2K2D-SUB	F631N	CR-SPLIT=NO; BLADE=A	POS TARG -15,+15		4 Secs (4 Secs)		
									[==>]	[1]	
	3	F395N	(1) JUPITER	WFC3/UVIS, ACCUM, UVIS2-2K2D-SUB	F395N	CR-SPLIT=NO	POS TARG -15,+15		9 Secs (9 Secs)		
									[==>]	[1]	
4	F275W	(1) JUPITER	WFC3/UVIS, ACCUM, UVIS2-2K2D-SUB	F275W	CR-SPLIT=NO	POS TARG -15,+15		20 Secs (20 Secs)			
								[==>]	[1]		



Proposal 16053 - VLA 25 July - B (11) - Tracking short time variability on Jupiter

Visit	Proposal 16053, VLA 25 July - B (11), implementation										Fri Jun 19 18:01:06 GMT 2020
	Diagnostic Status: Warning										
	Scientific Instruments: WFC3/UVIS										
	Special Requirements: BETWEEN 25-JUL-2020:07:20:00 AND 25-JUL-2020:08:20:00										
Comments: PC: No cuts should be needed.											
Diagnostics	(FQ889N_quadA (11.001)) Warning (Form): FLASH level may be too low for this exposure or a short subexposure. See extended explanation in the diagnostic browser										
	(FQ889N_quadA (11.001)) Warning (Form): POS TARG & PATTERN should be used carefully with WFC3 quad filters to avoid placing the target on the vignetted part of the field of view or moving it to another quadrant.										
	(FQ727N_quadD (11.002)) Warning (Form): FLASH level may be too low for this exposure or a short subexposure. See extended explanation in the diagnostic browser										
	(FQ727N_quadD (11.002)) Warning (Form): POS TARG & PATTERN should be used carefully with WFC3 quad filters to avoid placing the target on the vignetted part of the field of view or moving it to another quadrant.										
	(F631N (11.003)) Warning (Form): FLASH level may be too low for this exposure or a short subexposure. See extended explanation in the diagnostic browser										
	(F395N (11.004)) Warning (Form): FLASH level may be too low for this exposure or a short subexposure. See extended explanation in the diagnostic browser										
	(F502N (11.005)) Warning (Form): FLASH level may be too low for this exposure or a short subexposure. See extended explanation in the diagnostic browser										
	(F275W (11.006)) Warning (Form): FLASH level may be too low for this exposure or a short subexposure. See extended explanation in the diagnostic browser										
(F225W (11.007)) Warning (Form): FLASH level may be too low for this exposure or a short subexposure. See extended explanation in the diagnostic browser											
Solar System Targets	#	Name	Level 1	Level 2	Level 3	Window	Ephem Center				
	(1)	JUPITER	STD=JUPITER	EARTH							
	Comments: Description=Jupiter Extended=YES										
Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit	
	1	FQ889N_quadA	(1) JUPITER	WFC3/UVIS, ACCUM, UVIS-QUAD-SUB	FQ889N		POS TARG +1.7,-2.2; GS ACQ SCENARIO BASE1BE		20 Secs (20 Secs) [==>]	[1]	
	2	FQ727N_quadD	(1) JUPITER	WFC3/UVIS, ACCUM, UVIS-QUAD-SUB	FQ727N	CR-SPLIT=NO	POS TARG -6.7,+6.9		8 Secs (8 Secs) [==>]	[1]	
	3	F631N	(1) JUPITER	WFC3/UVIS, ACCUM, UVIS2-2K2D-SUB	F631N	CR-SPLIT=NO; BLADE=A	POS TARG -15,+15		4 Secs (4 Secs) [==>]	[1]	
	4	F395N	(1) JUPITER	WFC3/UVIS, ACCUM, UVIS2-2K2D-SUB	F395N	CR-SPLIT=NO	POS TARG -15,+15		9 Secs (9 Secs) [==>]	[1]	
	5	F502N	(1) JUPITER	WFC3/UVIS, ACCUM, UVIS2-2K2D-SUB	F502N	CR-SPLIT=NO; BLADE=A	POS TARG -15,+15		4 Secs (4 Secs) [==>]	[1]	
	6	F275W	(1) JUPITER	WFC3/UVIS, ACCUM, UVIS2-2K2D-SUB	F275W	CR-SPLIT=NO	POS TARG -15,+15		20 Secs (20 Secs) [==>]	[1]	
	7	F225W	(1) JUPITER	WFC3/UVIS, ACCUM, UVIS2-2K2D-SUB	F225W	CR-SPLIT=NO	POS TARG -15,+15		40 Secs (40 Secs) [==>]	[1]	



Proposal 16053 - VLA 25 July - C (12) - Tracking short time variability on Jupiter

Visit	Proposal 16053, VLA 25 July - C (12), implementation										Fri Jun 19 18:01:06 GMT 2020	
	Diagnostic Status: Warning											
	Scientific Instruments: WFC3/UVIS											
	Special Requirements: BETWEEN 25-JUL-2020:09:00:00 AND 25-JUL-2020:10:00:00											
	Comments: PC: No cuts should be needed.											
Diagnostics	(FQ889N_quadA (12.001)) Warning (Form): FLASH level may be too low for this exposure or a short subexposure. See extended explanation in the diagnostic browser											
	(FQ889N_quadA (12.001)) Warning (Form): POS TARG & PATTERN should be used carefully with WFC3 quad filters to avoid placing the target on the vignetted part of the field of view or moving it to another quadrant.											
	(FQ727N_quadD (12.002)) Warning (Form): FLASH level may be too low for this exposure or a short subexposure. See extended explanation in the diagnostic browser											
	(FQ727N_quadD (12.002)) Warning (Form): POS TARG & PATTERN should be used carefully with WFC3 quad filters to avoid placing the target on the vignetted part of the field of view or moving it to another quadrant.											
	(F225W (12.003)) Warning (Form): FLASH level may be too low for this exposure or a short subexposure. See extended explanation in the diagnostic browser											
	(F631N (12.004)) Warning (Form): FLASH level may be too low for this exposure or a short subexposure. See extended explanation in the diagnostic browser											
	(F395N (12.005)) Warning (Form): FLASH level may be too low for this exposure or a short subexposure. See extended explanation in the diagnostic browser											
	(F502N (12.006)) Warning (Form): FLASH level may be too low for this exposure or a short subexposure. See extended explanation in the diagnostic browser											
	(F275W (12.007)) Warning (Form): FLASH level may be too low for this exposure or a short subexposure. See extended explanation in the diagnostic browser											
(F225W (12.008)) Warning (Form): FLASH level may be too low for this exposure or a short subexposure. See extended explanation in the diagnostic browser												
Solar System Targets	#	Name	Level 1	Level 2	Level 3	Window	Ephem Center					
	(1)	JUPITER	STD=JUPITER						EARTH			
Comments: Description=Jupiter Extended=YES												
Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]		Orbit	
	1	FQ889N_quadA	(1) JUPITER	WFC3/UVIS, ACCUM, UVIS-QUAD-SUB	FQ889N		POS TARG +1.7,-2.2; GS ACQ SCENARIO BASE1BE		20 Secs (20 Secs) [==>]		[1]	
	2	FQ727N_quadD	(1) JUPITER	WFC3/UVIS, ACCUM, UVIS-QUAD-SUB	FQ727N	CR-SPLIT=NO	POS TARG -6.7,+6.9		8 Secs (8 Secs) [==>]		[1]	
	3	F225W	(1) JUPITER	WFC3/UVIS, ACCUM, UVIS2-2K2D-SUB	F225W	CR-SPLIT=NO	POS TARG -15,+15		40 Secs (40 Secs) [==>]		[1]	
	4	F631N	(1) JUPITER	WFC3/UVIS, ACCUM, UVIS2-2K2D-SUB	F631N	CR-SPLIT=NO; BLADE=A	POS TARG -15,+15		4 Secs (4 Secs) [==>]		[1]	
	5	F395N	(1) JUPITER	WFC3/UVIS, ACCUM, UVIS2-2K2D-SUB	F395N	CR-SPLIT=NO	POS TARG -15,+15		9 Secs (9 Secs) [==>]		[1]	
	6	F502N	(1) JUPITER	WFC3/UVIS, ACCUM, UVIS2-2K2D-SUB	F502N	CR-SPLIT=NO; BLADE=A	POS TARG -15,+15		4 Secs (4 Secs) [==>]		[1]	
	7	F275W	(1) JUPITER	WFC3/UVIS, ACCUM, UVIS2-2K2D-SUB	F275W	CR-SPLIT=NO	POS TARG -15,+15		20 Secs (20 Secs) [==>]		[1]	
	8	F225W	(1) JUPITER	WFC3/UVIS, ACCUM, UVIS2-2K2D-SUB	F225W	CR-SPLIT=NO	POS TARG -15,+15		40 Secs (40 Secs) [==>]		[1]	

