



17275 - The closure of two climate cycles in Jupiter's atmosphere during the Juno era

Cycle: 30, Proposal Category: GO
(Availability Mode: AVAILABLE)

INVESTIGATORS

<i>Name</i>	<i>Institution</i>
Michael H. Wong (PI) (Contact)	University of California - Berkeley
Dr. Glenn S. Orton (CoI)	Jet Propulsion Laboratory
Dr. Shawn Brueshaber (CoI)	Michigan Technological University
Dr. Amy Simon (CoI)	NASA Goddard Space Flight Center

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>
02	(2) JUPITER-PJ48-22-JAN-2023	WFC3/UVIS	1	08-Aug-2024 10:00:19.0	yes
03	(3) JUPITER-STORMS-JAN-2023	WFC3/UVIS	1	08-Aug-2024 10:00:20.0	yes
04	(4) JUPITER-PJ53-31-JUL-2023	WFC3/UVIS	1	08-Aug-2024 10:00:21.0	yes
01	(1) JUPITER-PJ54A-07-SEP-2023	WFC3/UVIS	1	08-Aug-2024 10:00:22.0	yes
06	(6) JUPITER-PJ54B-07-SEP-2023	WFC3/UVIS	1	08-Aug-2024 10:00:23.0	yes
05	(5) JUPITER-PJ54C+STORMS	WFC3/UVIS	1	08-Aug-2024 10:00:24.0	yes
07	(7) JUPITER-PJ55-15-OCT-2023	WFC3/UVIS	1	08-Aug-2024 10:00:25.0	yes
08	(8) JUPITER-PJ65-20-SEP-2024	WFC3/UVIS	1	08-Aug-2024 10:00:26.0	yes

8 Total Orbits Used

ABSTRACT

Two climate cycles on Jupiter---one in the North Equatorial Belt (NEB) and one in the Equatorial Zone (EZ)---have been underway for one and four years, respectively. Conditions in the NEB and EZ now show sudden indications of resolving back to their normal states, urgently requiring new data to characterize the evolution of these climate cycles.

In the NEB, the cycle involves a transition from typical globally-distributed convective storms to convective storms erupting only at a specific active longitude. Now, the activity seems to be reverting to a wider longitude range, and characterizing the evolution of this climate cycle may solve questions of how convective styles on Jupiter are related to the volatile abundance in the atmosphere. In the EZ, a dramatic darkening/reddening in 2018 also shows sudden signs of weakening back to the typical white state. Intensified observations as the climate cycle closes are needed to coordinate with Juno observations to provide the first evidence that cloud/haze properties are tied to compositional changes in the deeper sub-cloud region. HST imaging at UV wavelengths provide spectral constraints, in addition to the physical constraints, on the evolution of haze properties by completing temporal sampling of the climate cycle.

These HST data will provide broad benefit beyond the proposed study of climate cycles in the EZ and the NEB, by providing visible/UV context imaging for Juno atmospheric microwave scans. As the spacecraft track precesses onto the night side of the planet during Cycle 30, Juno will lose the ability to provide its own visible-wavelength context imaging with JunoCam.

OBSERVING DESCRIPTION

Image full disk of Jupiter in a series of filters. Each visit is a single orbit. Visits are either:

- * carefully timed (and with CML constraints) to image the sub-spacecraft track of Juno during one of its perijove passes, or
- * loosely timed (but with CML constrained) to image a special "active longitude" that is significant to a climate transition in Jupiter's North Equatorial Belt in late 2022.

Visits are:

2 --- Jan 22 2023 --- Juno PJ 48

3 --- Jan 2023 --- NEB active longitude
(solar conjunction)

4 --- July 31 2023 --- Juno PJ 53

1,5,6 --- Sep 7 2023 --- Juno PJ 54 + NEB active longitude

7 --- Oct 15 2023 --- Juno PJ 55 + NEB active longitude in single orbit

8 --- Nov 22 2023 --- Juno PJ 56

A set of 3 orbits near PJ 54 will provide coverage of most longitudes on Jupiter. This includes one orbit focused on the stealth superstorm longitude, plus two orbits to cover an expanded range of longitudes for Juno.

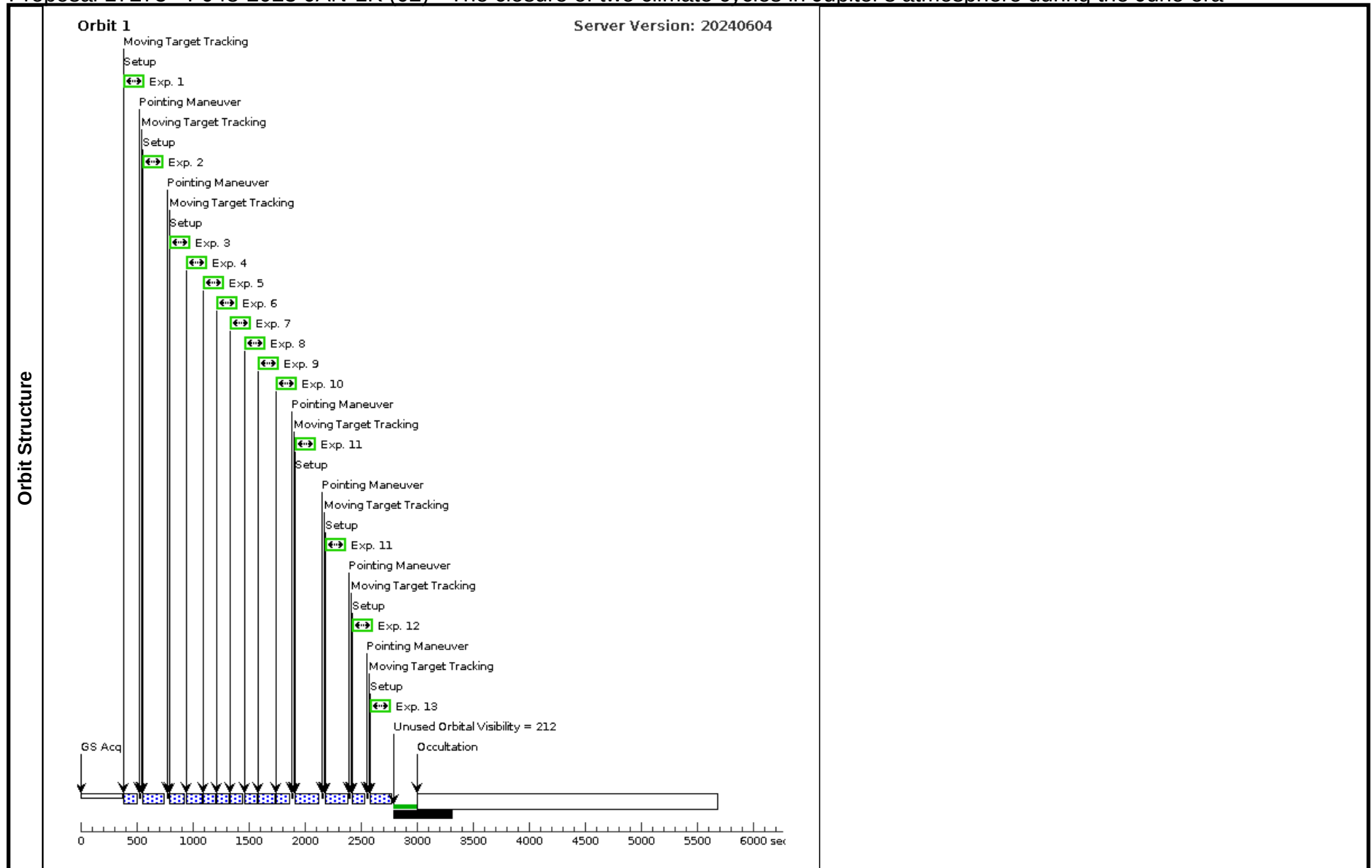
For 2K subarrays (including Quad-sub), POS TARGS are used to shift Jupiter closer to UVIS center, to enable the same guide stars to be used for the whole orbit. The POS TARGs for the Quad-sub are smaller because of filter edge effects. The offsets are as described in Wong et al. 2020 (ApJS).

Proposal 17275 - PJ48-2023-JAN-1K (02) - The closure of two climate cycles in Jupiter's atmosphere during the Juno era

Visit	Proposal 17275, PJ48-2023-JAN-1K (02), completed			Thu Aug 08 14:00:26 GMT 2024			
	Diagnostic Status: Warning						
	Scientific Instruments: WFC3/UVIS Special Requirements: BETWEEN 21-JAN-2023:06:27:00 AND 23-JAN-2023:06:27:00; VISIBILITY INTERVAL NO GYRO BIAS UPDATE ON MOVING TARGET Comments: Juno PJ 48 at Earth is 2023-01-22 06:27 (Lon 199.9 W) Closest time with CML = 200 is 2023-Jan-22 08:30 Visit timing constraint is +/-24 hours (about +/- 2 Jupiter rotations) from PJ time. Can be expanded if necessary for scheduling.						
Diagnostics	(F631N (02.001)) Warning (Form): FLASH level may be too low for this exposure or a short subexposure. See extended explanation in the diagnostic browser						
	(FQ727N_quadD (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.						
	(F275W (02.003)) Warning (Form): FLASH level may be too low for this exposure or a short subexposure. See extended explanation in the diagnostic browser						
	(F225W (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						
	(F658N (02.006)) Warning (Form): FLASH level may be too low for this exposure or a short subexposure. See extended explanation in the diagnostic browser						
	(F343N (02.007)) Warning (Form): FLASH level may be too low for this exposure or a short subexposure. See extended explanation in the diagnostic browser						
	(F395N (02.008)) Warning (Form): FLASH level may be too low for this exposure or a short subexposure. See extended explanation in the diagnostic browser						
	(F225W (02.009)) Warning (Form): FLASH level may be too low for this exposure or a short subexposure. See extended explanation in the diagnostic browser						
	(F275W (02.010)) Warning (Form): FLASH level may be too low for this exposure or a short subexposure. See extended explanation in the diagnostic browser						
	(FQ889N_quadA (02.011)) Warning (Form): FLASH level may be too low for this exposure or a short subexposure. See extended explanation in the diagnostic browser						
	(FQ889N_quadA (02.011)) 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 (02.012)) Warning (Form): FLASH level may be too low for this exposure or a short subexposure. See extended explanation in the diagnostic browser						
	(FQ727N_quadD (02.013)) Warning (Form): FLASH level may be too low for this exposure or a short subexposure. See extended explanation in the diagnostic browser						
(FQ727N_quadD (02.013)) 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.							
(PJ48-2023-JAN-1K (02)) Informational (Form): The Visit Planner and Spike may produce different schedulability results.							
Patterns	#	Primary Pattern		Secondary Pattern	Exposures		
	(1)	Pattern Type=WFC3-UVIS-DITHER-LINE Purpose=DITHER Number Of Points=2 Point Spacing=0.87 Line Spacing=		Coordinate Frame=POS-TARG Pattern Orientation=46.84 Angle Between Sides= Center Pattern=false	(11)		
Solar System Targets	#	Name	Level 1	Level 2	Level 3	Window	Ephem Center
	(2)	JUPITER-PJ48-22-JAN-2023	STD=JUPITER			CML OF JUPITER FROM EARTH BETWEEN 175 240	EARTH
	Comments: Can be expanded to CML betw 160,240 if necessary for scheduling Description=Jupiter Extended=YES						

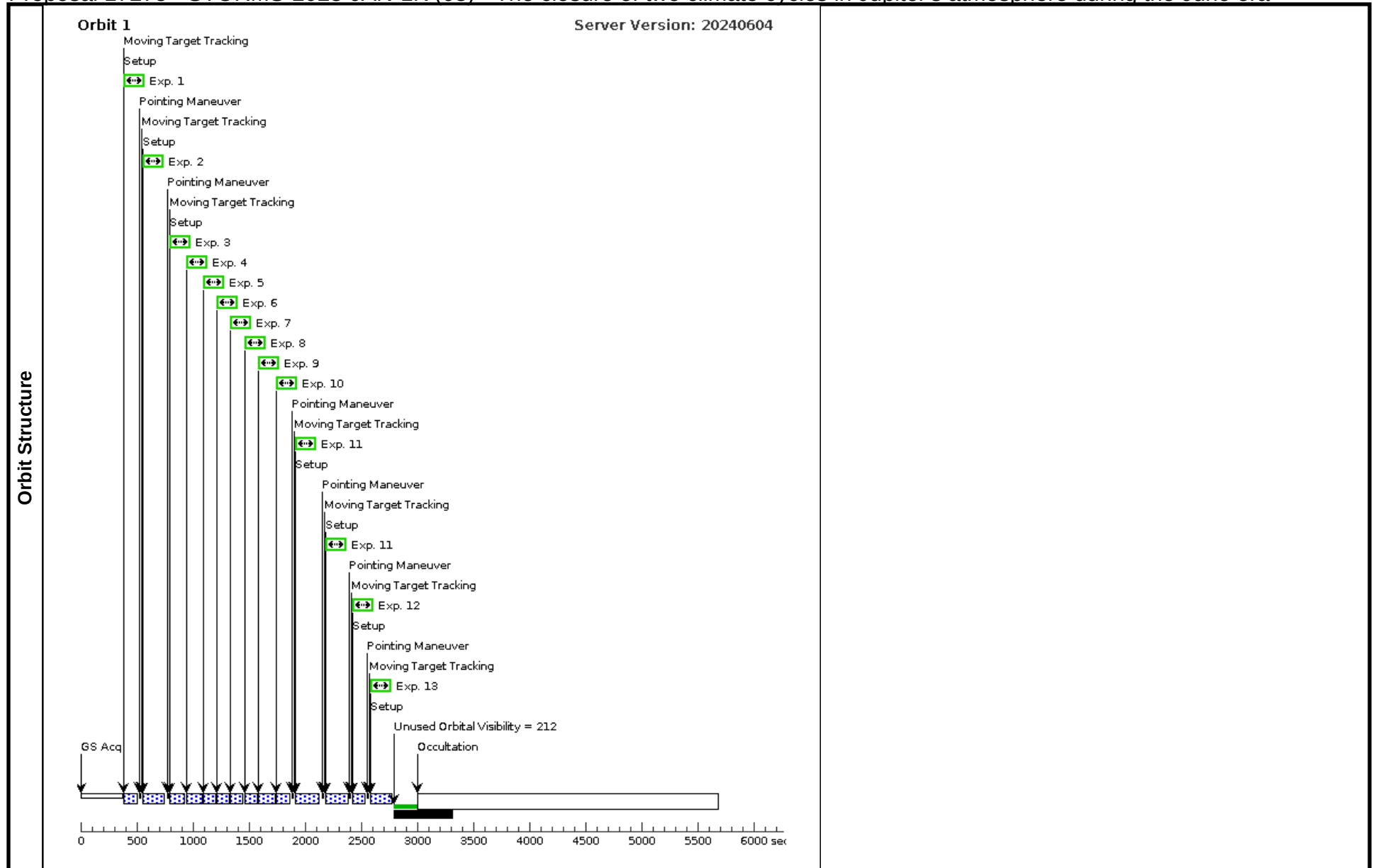
Proposal 17275 - PJ48-2023-JAN-1K (02) - The closure of two climate cycles in Jupiter's atmosphere during the Juno era

Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
	1	F631N	(2) JUPITER-PJ48-2 2-JAN-2023	WFC3/UVIS, ACCUM, UVIS2-M1K1C-SUB	F631N	CR-SPLIT=NO; BLADE=A	POS TARG 0,0		4 Secs (4 Secs) [==>]	[1]
	Comments: Request BLADE=A for this exposure only									
	2	FQ727N_qu adD	(2) JUPITER-PJ48-2 2-JAN-2023	WFC3/UVIS, ACCUM, UVIS-QUAD-SUB	FQ727N	CR-SPLIT=NO	POS TARG -11,+12		8 Secs (8 Secs) [==>]	[1]
	3	F275W	(2) JUPITER-PJ48-2 2-JAN-2023	WFC3/UVIS, ACCUM, UVIS2-M1K1C-SUB	F275W	CR-SPLIT=NO	POS TARG 0,0		20 Secs (20 Secs) [==>]	[1]
	4	F225W	(2) JUPITER-PJ48-2 2-JAN-2023	WFC3/UVIS, ACCUM, UVIS2-M1K1C-SUB	F225W	CR-SPLIT=NO	POS TARG 0,0		40 Secs (40 Secs) [==>]	[1]
	5	F502N	(2) JUPITER-PJ48-2 2-JAN-2023	WFC3/UVIS, ACCUM, UVIS2-M1K1C-SUB	F502N	CR-SPLIT=NO	POS TARG 0,0		4 Secs (4 Secs) [==>]	[1]
	6	F658N	(2) JUPITER-PJ48-2 2-JAN-2023	WFC3/UVIS, ACCUM, UVIS2-M1K1C-SUB	F658N	CR-SPLIT=NO	POS TARG 0,0		8 Secs (8 Secs) [==>]	[1]
	7	F343N	(2) JUPITER-PJ48-2 2-JAN-2023	WFC3/UVIS, ACCUM, UVIS2-M1K1C-SUB	F343N	CR-SPLIT=NO	POS TARG 0,0		6 Secs (6 Secs) [==>]	[1]
	8	F395N	(2) JUPITER-PJ48-2 2-JAN-2023	WFC3/UVIS, ACCUM, UVIS2-M1K1C-SUB	F395N	CR-SPLIT=NO	POS TARG 0,0		9 Secs (9 Secs) [==>]	[1]
	9	F225W	(2) JUPITER-PJ48-2 2-JAN-2023	WFC3/UVIS, ACCUM, UVIS2-M1K1C-SUB	F225W	CR-SPLIT=NO	POS TARG 0,0		40 Secs (40 Secs) [==>]	[1]
	10	F275W	(2) JUPITER-PJ48-2 2-JAN-2023	WFC3/UVIS, ACCUM, UVIS2-M1K1C-SUB	F275W	CR-SPLIT=NO	POS TARG 0,0		20 Secs (20 Secs) [==>]	[1]
	11	FQ889N_qu adA	(2) JUPITER-PJ48-2 2-JAN-2023	WFC3/UVIS, ACCUM, UVIS-QUAD-SUB	FQ889N	CR-SPLIT=NO	POS TARG +6,-7	Pattern 1, Exps 11-1 1 in PJ48-2023-JAN- 1K (02) (1)	30 Secs (60 Secs) [==>(Pattern 1)] [==>(Pattern 2)]	[1]
	12	F631N	(2) JUPITER-PJ48-2 2-JAN-2023	WFC3/UVIS, ACCUM, UVIS2-M1K1C-SUB	F631N	CR-SPLIT=NO; BLADE=A	POS TARG 0,0		4 Secs (4 Secs) [==>]	[1]
	Comments: Request BLADE=A for this exposure only									
	13	FQ727N_qu adD	(2) JUPITER-PJ48-2 2-JAN-2023	WFC3/UVIS, ACCUM, UVIS-QUAD-SUB	FQ727N	CR-SPLIT=NO	POS TARG -11,+12		8 Secs (8 Secs) [==>]	[1]



Proposal 17275 - STORMS-2023-JAN-1K (03) - The closure of two climate cycles in Jupiter's atmosphere during the Juno era

Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
	1	F631N	(3) JUPITER-STOR MS-JAN-2023	WFC3/UVIS, ACCUM, UVIS2-M1K1C-SUB	F631N	CR-SPLIT=NO; BLADE=A	POS TARG 0,0		4 Secs (4 Secs) [==>]	[1]
	Comments: Request BLADE=A for this exposure only									
	2	FQ727N_qu adD	(3) JUPITER-STOR MS-JAN-2023	WFC3/UVIS, ACCUM, UVIS-QUAD-SUB	FQ727N	CR-SPLIT=NO	POS TARG -11,+12		8 Secs (8 Secs) [==>]	[1]
	3	F275W	(3) JUPITER-STOR MS-JAN-2023	WFC3/UVIS, ACCUM, UVIS2-M1K1C-SUB	F275W	CR-SPLIT=NO	POS TARG 0,0		20 Secs (20 Secs) [==>]	[1]
	4	F225W	(3) JUPITER-STOR MS-JAN-2023	WFC3/UVIS, ACCUM, UVIS2-M1K1C-SUB	F225W	CR-SPLIT=NO	POS TARG 0,0		40 Secs (40 Secs) [==>]	[1]
	5	F502N	(3) JUPITER-STOR MS-JAN-2023	WFC3/UVIS, ACCUM, UVIS2-M1K1C-SUB	F502N	CR-SPLIT=NO	POS TARG 0,0		4 Secs (4 Secs) [==>]	[1]
	6	F658N	(3) JUPITER-STOR MS-JAN-2023	WFC3/UVIS, ACCUM, UVIS2-M1K1C-SUB	F658N	CR-SPLIT=NO	POS TARG 0,0		8 Secs (8 Secs) [==>]	[1]
	7	F343N	(3) JUPITER-STOR MS-JAN-2023	WFC3/UVIS, ACCUM, UVIS2-M1K1C-SUB	F343N	CR-SPLIT=NO	POS TARG 0,0		6 Secs (6 Secs) [==>]	[1]
	8	F395N	(3) JUPITER-STOR MS-JAN-2023	WFC3/UVIS, ACCUM, UVIS2-M1K1C-SUB	F395N	CR-SPLIT=NO	POS TARG 0,0		9 Secs (9 Secs) [==>]	[1]
	9	F225W	(3) JUPITER-STOR MS-JAN-2023	WFC3/UVIS, ACCUM, UVIS2-M1K1C-SUB	F225W	CR-SPLIT=NO	POS TARG 0,0		40 Secs (40 Secs) [==>]	[1]
	10	F275W	(3) JUPITER-STOR MS-JAN-2023	WFC3/UVIS, ACCUM, UVIS2-M1K1C-SUB	F275W	CR-SPLIT=NO	POS TARG 0,0		20 Secs (20 Secs) [==>]	[1]
	11	FQ889N_qu adA	(3) JUPITER-STOR MS-JAN-2023	WFC3/UVIS, ACCUM, UVIS-QUAD-SUB	FQ889N	CR-SPLIT=NO	POS TARG +6,-7	Pattern 1, Exps 11-1 1 in STORMS-2023- JAN-1K (03) (1)	30 Secs (60 Secs) [==>(Pattern 1)] [==>(Pattern 2)]	[1]
	12	F631N	(3) JUPITER-STOR MS-JAN-2023	WFC3/UVIS, ACCUM, UVIS2-M1K1C-SUB	F631N	CR-SPLIT=NO; BLADE=A	POS TARG 0,0		4 Secs (4 Secs) [==>]	[1]
	Comments: Request BLADE=A for this exposure only									
	13	FQ727N_qu adD	(3) JUPITER-STOR MS-JAN-2023	WFC3/UVIS, ACCUM, UVIS-QUAD-SUB	FQ727N	CR-SPLIT=NO	POS TARG -11,+12		8 Secs (8 Secs) [==>]	[1]

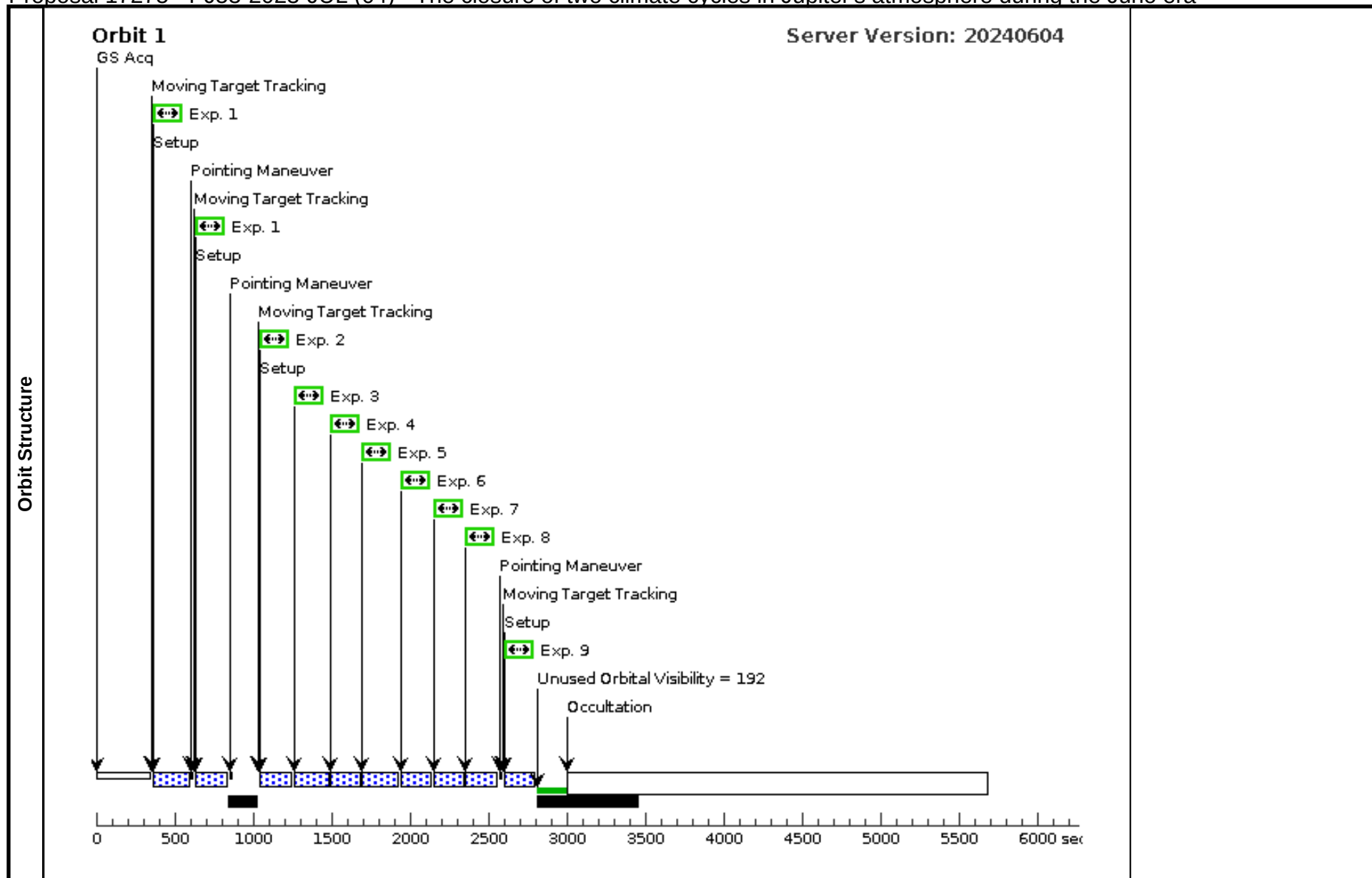


Proposal 17275 - PJ53-2023-JUL (04) - The closure of two climate cycles in Jupiter's atmosphere during the Juno era

Visit	Proposal 17275, PJ53-2023-JUL (04), completed			Thu Aug 08 14:00:27 GMT 2024			
	Diagnostic Status: Warning						
	Scientific Instruments: WFC3/UVIS						
	Special Requirements: BETWEEN 30-JUL-2023:09:46:00 AND 01-AUG-2023:09:46:00; VISIBILITY INTERVAL NO GYRO BIAS UPDATE ON MOVING TARGET						
Diagnostics	Comments: Juno PJ 53 at Earth is 2023-07-31 09:46 (Lon 121.9 W)						
	Closest time with CML = 122 is 2023-Jul-31 12:50						
	Visit timing constraint is +/-24 hours (about +/- 2 Jupiter rotations) from PJ time. Can be expanded if necessary for scheduling.						
	(PJ53-2023-JUL (04)) Warning (Orbit Planner): GS ACQ SCENARIO REQUESTED INCONSISTENT WITH VISIT GYRO MODE						
	(FQ889N_quadA (04.001)) Warning (Form): FLASH level may be too low for this exposure or a short subexposure. See extended explanation in the diagnostic browser						
	(FQ889N_quadA (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.						
	(FQ889N_quadA (04.001) special requirements) Warning (Form): The specified GS Acq Scenario is not in the current list of valid scenarios.						
	(F658N (04.002)) Warning (Form): FLASH level may be too low for this exposure or a short subexposure. See extended explanation in the diagnostic browser						
	(F275W (04.003)) Warning (Form): FLASH level may be too low for this exposure or a short subexposure. See extended explanation in the diagnostic browser						
	(F343N (04.004)) Warning (Form): FLASH level may be too low for this exposure or a short subexposure. See extended explanation in the diagnostic browser						
Patterns	(F225W (04.005)) Warning (Form): FLASH level may be too low for this exposure or a short subexposure. See extended explanation in the diagnostic browser						
	(F502N (04.006)) Warning (Form): FLASH level may be too low for this exposure or a short subexposure. See extended explanation in the diagnostic browser						
	(F395N (04.007)) Warning (Form): FLASH level may be too low for this exposure or a short subexposure. See extended explanation in the diagnostic browser						
	(F631N (04.008)) Warning (Form): FLASH level may be too low for this exposure or a short subexposure. See extended explanation in the diagnostic browser						
	(FQ727N_quadD (04.009)) Warning (Form): FLASH level may be too low for this exposure or a short subexposure. See extended explanation in the diagnostic browser						
	(FQ727N_quadD (04.009)) 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.						
	(PJ53-2023-JUL (04)) Informational (Form): The Visit Planner and Spike may produce different schedulability results.						
Solar System Targets	#	Name	Level 1	Level 2	Level 3	Window	Ephem Center
	(4)	JUPITER-PJ53-31-JUL-2023	STD=JUPITER			CML OF JUPITER FROM EARTH BETWEEN 99 162	EARTH
	Comments: Can be expanded to CML betw 82,162 if necessary for scheduling						
	Description=Jupiter						
	Extended=YES						

Proposal 17275 - PJ53-2023-JUL (04) - The closure of two climate cycles in Jupiter's atmosphere during the Juno era

Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
	1	FQ889N_quadA	(4) JUPITER-PJ53-3 1-JUL-2023	WFC3/UVIS, ACCUM, UVIS-QUAD-SUB	FQ889N	CR-SPLIT=NO	POS TARG +5,-6; GS ACQ SCENARIO ONEB1BE	Sequence 1-9 Non-Int in PJ53-2023-JUL (04) Pattern 1, Exps 1-1 in Sequence 1-9 Non-Int in PJ53-2023-JUL (04) (1)	30 Secs (60 Secs) [==>(Pattern 1)] [==>(Pattern 2)]	[1]
	2	F658N	(4) JUPITER-PJ53-3 1-JUL-2023	WFC3/UVIS, ACCUM, UVIS2-2K2D-SUB	F658N	CR-SPLIT=NO	POS TARG -28,+30	Sequence 1-9 Non-Int in PJ53-2023-JUL (04)	8 Secs (8 Secs) [==>]	[1]
	3	F275W	(4) JUPITER-PJ53-3 1-JUL-2023	WFC3/UVIS, ACCUM, UVIS2-2K2D-SUB	F275W	CR-SPLIT=NO	POS TARG -28,+30	Sequence 1-9 Non-Int in PJ53-2023-JUL (04)	20 Secs (20 Secs) [==>]	[1]
	4	F343N	(4) JUPITER-PJ53-3 1-JUL-2023	WFC3/UVIS, ACCUM, UVIS2-2K2D-SUB	F343N	CR-SPLIT=NO; BLADE=A	POS TARG -28,+30	Sequence 1-9 Non-Int in PJ53-2023-JUL (04)	6 Secs (6 Secs) [==>]	[1]
	5	F225W	(4) JUPITER-PJ53-3 1-JUL-2023	WFC3/UVIS, ACCUM, UVIS2-2K2D-SUB	F225W	CR-SPLIT=NO	POS TARG -28,+30	Sequence 1-9 Non-Int in PJ53-2023-JUL (04)	40 Secs (40 Secs) [==>]	[1]
	6	F502N	(4) JUPITER-PJ53-3 1-JUL-2023	WFC3/UVIS, ACCUM, UVIS2-2K2D-SUB	F502N	CR-SPLIT=NO	POS TARG -28,+30	Sequence 1-9 Non-Int in PJ53-2023-JUL (04)	4 Secs (4 Secs) [==>]	[1]
	7	F395N	(4) JUPITER-PJ53-3 1-JUL-2023	WFC3/UVIS, ACCUM, UVIS2-2K2D-SUB	F395N	CR-SPLIT=NO	POS TARG -28,+30	Sequence 1-9 Non-Int in PJ53-2023-JUL (04)	9 Secs (9 Secs) [==>]	[1]
	8	F631N	(4) JUPITER-PJ53-3 1-JUL-2023	WFC3/UVIS, ACCUM, UVIS2-2K2D-SUB	F631N	CR-SPLIT=NO	POS TARG -28,+30	Sequence 1-9 Non-Int in PJ53-2023-JUL (04)	4 Secs (4 Secs) [==>]	[1]
	Comments: Request BLADE=A for this exposure only									
	9	FQ727N_quadD	(4) JUPITER-PJ53-3 1-JUL-2023	WFC3/UVIS, ACCUM, UVIS-QUAD-SUB	FQ727N	CR-SPLIT=NO	POS TARG -10,+11	Sequence 1-9 Non-Int in PJ53-2023-JUL (04)	8 Secs (8 Secs) [==>]	[1]

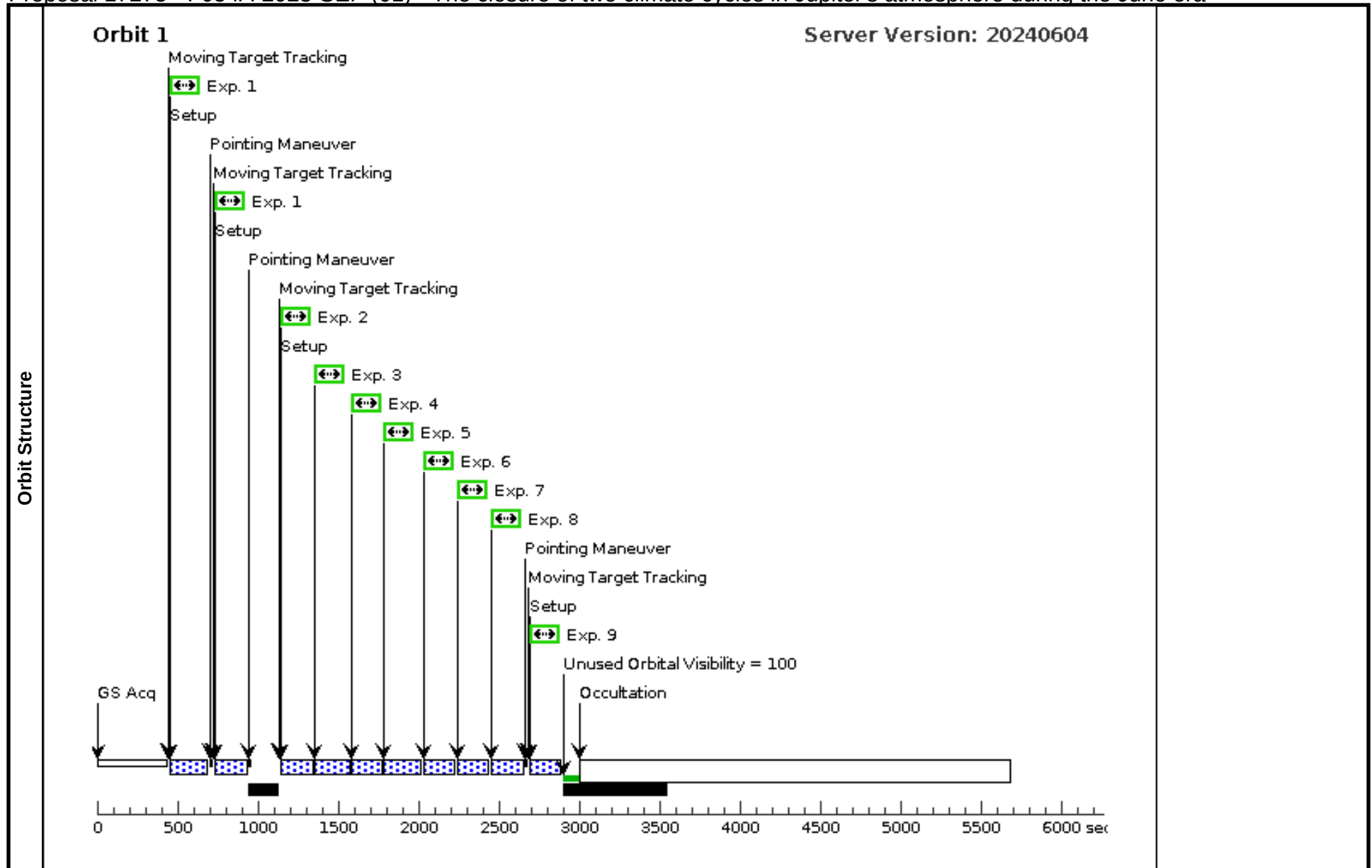


Proposal 17275 - PJ54A-2023-SEP (01) - The closure of two climate cycles in Jupiter's atmosphere during the Juno era

Visit	Proposal 17275, PJ54A-2023-SEP (01), completed			Thu Aug 08 14:00:27 GMT 2024			
	Diagnostic Status: Warning						
	Scientific Instruments: WFC3/UVIS						
	Special Requirements: BETWEEN 02-SEP-2023:15:40:00 AND 12-SEP-2023:15:40:00; VISIBILITY INTERVAL NO GYRO BIAS UPDATE ON MOVING TARGET						
	Comments: Juno PJ 54 at Earth is 2023-09-07 12:34 (Lon 186 W) Closest time with CML = 186 is 2023-Sep-07 15:40 This visit covers longitudes to the east of the perijove longitude. Visit timing constraint is +/-24 hours (about +/- 2 Jupiter rotations) from PJ time. Can be expanded if necessary for scheduling.						
Diagnostics	(PJ54A-2023-SEP (01)) Warning (Orbit Planner): GS ACQ SCENARIO REQUESTED INCONSISTENT WITH VISIT GYRO MODE						
	(FQ889N_quadA (01.001)) Warning (Form): FLASH level may be too low for this exposure or a short subexposure. See extended explanation in the diagnostic browser						
	(FQ889N_quadA (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.						
	(FQ889N_quadA (01.001) special requirements) Warning (Form): The specified GS Acq Scenario is not in the current list of valid scenarios.						
	(F658N (01.002)) Warning (Form): FLASH level may be too low for this exposure or a short subexposure. See extended explanation in the diagnostic browser						
	(F275W (01.003)) Warning (Form): FLASH level may be too low for this exposure or a short subexposure. See extended explanation in the diagnostic browser						
	(F343N (01.004)) Warning (Form): FLASH level may be too low for this exposure or a short subexposure. See extended explanation in the diagnostic browser						
	(F225W (01.005)) Warning (Form): FLASH level may be too low for this exposure or a short subexposure. See extended explanation in the diagnostic browser						
	(F502N (01.006)) Warning (Form): FLASH level may be too low for this exposure or a short subexposure. See extended explanation in the diagnostic browser						
	(F395N (01.007)) Warning (Form): FLASH level may be too low for this exposure or a short subexposure. See extended explanation in the diagnostic browser						
	(F631N (01.008)) Warning (Form): FLASH level may be too low for this exposure or a short subexposure. See extended explanation in the diagnostic browser						
	(FQ727N_quadD (01.009)) Warning (Form): FLASH level may be too low for this exposure or a short subexposure. See extended explanation in the diagnostic browser						
Patterns	(FQ727N_quadD (01.009)) 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.						
	(PJ54A-2023-SEP (01)) Informational (Form): The Visit Planner and Spike may produce different schedulability results.						
Patterns	#	Primary Pattern		Secondary Pattern	Exposures		
	(1)	Pattern Type=WFC3-UVIS-DITHER- LINE Purpose=DITHER Number Of Points=2 Point Spacing=0.87 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)	JUPITER-PJ54A-07- SEP-2023	STD=JUPITER			CML OF JUPITER FROM EARTH BETWEEN 35 97	EARTH
Comments: If necessary, CML observing window can be shifted to increase scheduling opportunities, but the interval should remain 97-37 = 62 deg after shifting. Any shift may also require CML windows for visits 5 and 6 to be shifted (contact PI to confirm). Description=Jupiter Extended=YES							

Proposal 17275 - PJ54A-2023-SEP (01) - The closure of two climate cycles in Jupiter's atmosphere during the Juno era

Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
	1	FQ889N_quadA	(1) JUPITER-PJ54A-07-SEP-2023	WFC3/UVIS, ACCUM, UVIS-QUAD-SUB	FQ889N	CR-SPLIT=NO	POS TARG +7.3,-8.2; GS ACQ SCENARIO BASE1BR	Sequence 1-9 Non-Int in PJ54A-2023-SEP (01) Pattern 1, Exps 1-1 in Sequence 1-9 Non-Int in PJ54A-2023-SEP (01) (1)	30 Secs (60 Secs) [==>(Pattern 1)] [==>(Pattern 2)]	[1]
	2	F658N	(1) JUPITER-PJ54A-07-SEP-2023	WFC3/UVIS, ACCUM, UVIS2-2K2D-SUB	F658N	CR-SPLIT=NO	POS TARG -21.4,+27.5	Sequence 1-9 Non-Int in PJ54A-2023-SEP (01)	8 Secs (8 Secs) [==>]	[1]
	3	F275W	(1) JUPITER-PJ54A-07-SEP-2023	WFC3/UVIS, ACCUM, UVIS2-2K2D-SUB	F275W	CR-SPLIT=NO	POS TARG -21.4,+27.5	Sequence 1-9 Non-Int in PJ54A-2023-SEP (01)	20 Secs (20 Secs) [==>]	[1]
	4	F343N	(1) JUPITER-PJ54A-07-SEP-2023	WFC3/UVIS, ACCUM, UVIS2-2K2D-SUB	F343N	CR-SPLIT=NO; BLADE=A	POS TARG -21.4,+27.5	Sequence 1-9 Non-Int in PJ54A-2023-SEP (01)	6 Secs (6 Secs) [==>]	[1]
	5	F225W	(1) JUPITER-PJ54A-07-SEP-2023	WFC3/UVIS, ACCUM, UVIS2-2K2D-SUB	F225W	CR-SPLIT=NO	POS TARG -21.4,+27.5	Sequence 1-9 Non-Int in PJ54A-2023-SEP (01)	40 Secs (40 Secs) [==>]	[1]
	6	F502N	(1) JUPITER-PJ54A-07-SEP-2023	WFC3/UVIS, ACCUM, UVIS2-2K2D-SUB	F502N	CR-SPLIT=NO	POS TARG -21.4,+27.5	Sequence 1-9 Non-Int in PJ54A-2023-SEP (01)	4 Secs (4 Secs) [==>]	[1]
	7	F395N	(1) JUPITER-PJ54A-07-SEP-2023	WFC3/UVIS, ACCUM, UVIS2-2K2D-SUB	F395N	CR-SPLIT=NO	POS TARG -21.4,+27.5	Sequence 1-9 Non-Int in PJ54A-2023-SEP (01)	9 Secs (9 Secs) [==>]	[1]
	8	F631N	(1) JUPITER-PJ54A-07-SEP-2023	WFC3/UVIS, ACCUM, UVIS2-2K2D-SUB	F631N	CR-SPLIT=NO	POS TARG -21.4,+27.5	Sequence 1-9 Non-Int in PJ54A-2023-SEP (01)	4 Secs (4 Secs) [==>]	[1]
	Comments: Request BLADE=A for this exposure only									
	9	FQ727N_quadD	(1) JUPITER-PJ54A-07-SEP-2023	WFC3/UVIS, ACCUM, UVIS-QUAD-SUB	FQ727N	CR-SPLIT=NO	POS TARG -11.1,+12.7	Sequence 1-9 Non-Int in PJ54A-2023-SEP (01)	8 Secs (8 Secs) [==>]	[1]

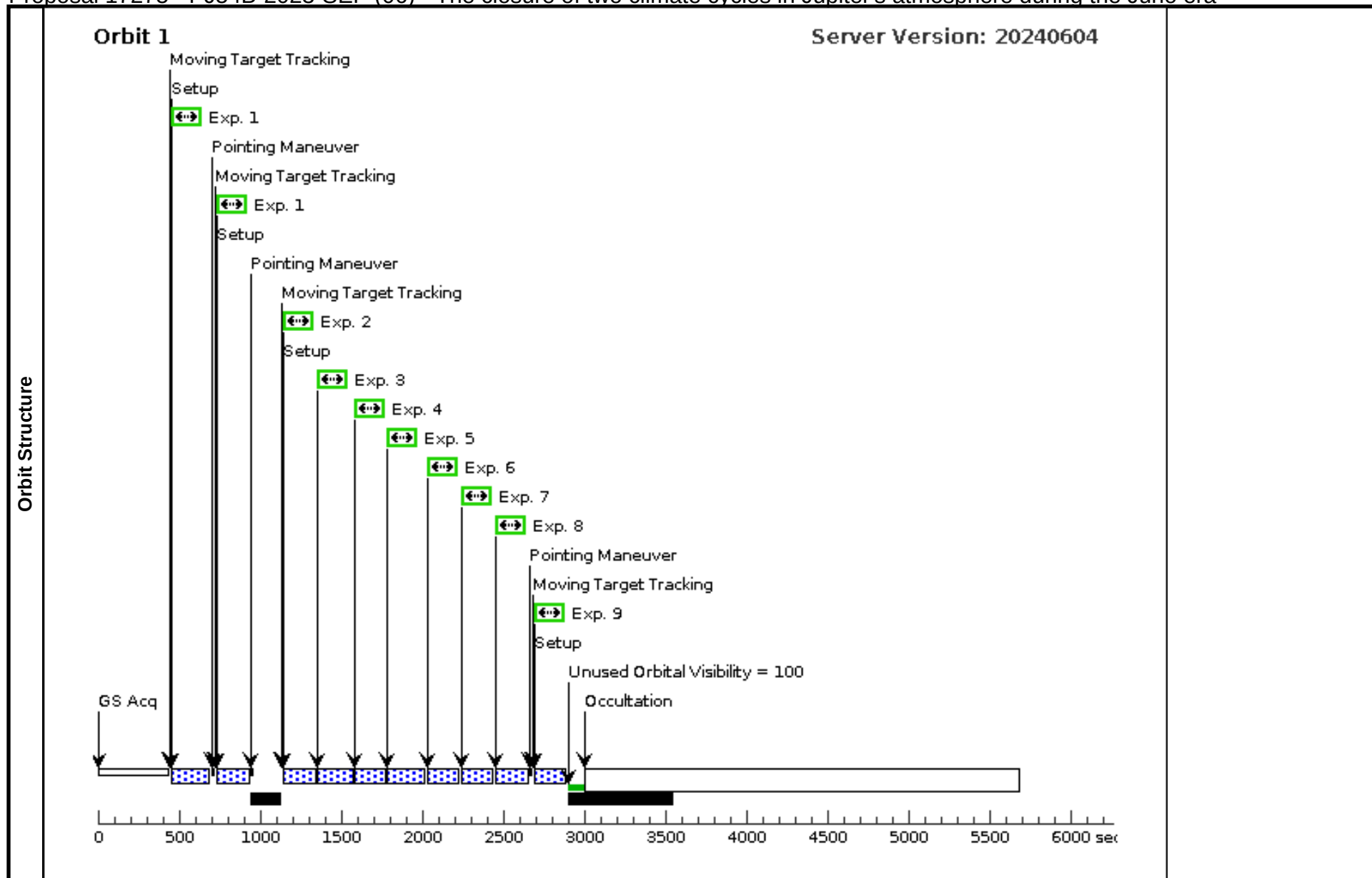


Proposal 17275 - PJ54B-2023-SEP (06) - The closure of two climate cycles in Jupiter's atmosphere during the Juno era

Proposal 17275, PJ54B-2023-SEP (06), completed				Thu Aug 08 14:00:27 GMT 2024			
Visit	Diagnostic Status: Warning						
	Scientific Instruments: WFC3/UVIS Special Requirements: BETWEEN 02-SEP-2023:15:40:00 AND 12-SEP-2023:15:40:00; VISIBILITY INTERVAL NO GYRO BIAS UPDATE ON MOVING TARGET Comments: Juno PJ 54 at Earth is 2023-09-07 12:34 (Lon 186 W) Closest time with CML = 186 is 2023-Sep-07 15:40 Visit timing constraint is +/-24 hours (about +/- 2 Jupiter rotations) from PJ time. Can be expanded if necessary for scheduling.						
Diagnostics	(PJ54B-2023-SEP (06)) Warning (Orbit Planner): GS ACQ SCENARIO REQUESTED INCONSISTENT WITH VISIT GYRO MODE						
	(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.						
	(FQ889N_quadA (06.001) special requirements) Warning (Form): The specified GS Acq Scenario is not in the current list of valid scenarios.						
	(F658N (06.002)) Warning (Form): FLASH level may be too low for this exposure or a short subexposure. See extended explanation in the diagnostic browser						
	(F275W (06.003)) Warning (Form): FLASH level may be too low for this exposure or a short subexposure. See extended explanation in the diagnostic browser						
	(F343N (06.004)) Warning (Form): FLASH level may be too low for this exposure or a short subexposure. See extended explanation in the diagnostic browser						
	(F225W (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						
	(F395N (06.007)) Warning (Form): FLASH level may be too low for this exposure or a short subexposure. See extended explanation in the diagnostic browser						
Patterns	(F631N (06.008)) Warning (Form): FLASH level may be too low for this exposure or a short subexposure. See extended explanation in the diagnostic browser						
	(FQ727N_quadD (06.009)) Warning (Form): FLASH level may be too low for this exposure or a short subexposure. See extended explanation in the diagnostic browser						
	(FQ727N_quadD (06.009)) 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.						
	(PJ54B-2023-SEP (06)) Informational (Form): The Visit Planner and Spike may produce different schedulability results.						
Patterns	#	Primary Pattern		Secondary Pattern	Exposures		
	(1)	Pattern Type=WFC3-UVIS-DITHER-LINE Purpose=DITHER Number Of Points=2 Point Spacing=0.87 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
	(6)	JUPITER-PJ54B-07-SEP-2023	STD=JUPITER			CML OF JUPITER FROM EARTH BETWEEN 164 226	EARTH
Comments: If necessary, CML observing window can be shifted to increase scheduling opportunities, but the interval should remain 226-164 = 62 deg after shifting. Any shift may also require CML windows for visits 1 and 5 to be shifted (contact PI to confirm). Description=Jupiter Extended=YES							

Proposal 17275 - PJ54B-2023-SEP (06) - The closure of two climate cycles in Jupiter's atmosphere during the Juno era

Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
	1	FQ889N_quadA	(6) JUPITER-PJ54B-07-SEP-2023	WFC3/UVIS, ACCUM, UVIS-QUAD-SUB	FQ889N	CR-SPLIT=NO	POS TARG +7.3,-8.2; GS ACQ SCENARIO BASE1BR	Sequence 1-9 Non-Int in PJ54B-2023-SEP (06) Pattern 1, Exps 1-1 in Sequence 1-9 Non-Int in PJ54B-2023-SEP (06) (1)	30 Secs (60 Secs) [==>(Pattern 1)] [==>(Pattern 2)]	[1]
	2	F658N	(6) JUPITER-PJ54B-07-SEP-2023	WFC3/UVIS, ACCUM, UVIS2-2K2D-SUB	F658N	CR-SPLIT=NO	POS TARG -21.4,+27.5	Sequence 1-9 Non-Int in PJ54B-2023-SEP (06)	8 Secs (8 Secs) [==>]	[1]
	3	F275W	(6) JUPITER-PJ54B-07-SEP-2023	WFC3/UVIS, ACCUM, UVIS2-2K2D-SUB	F275W	CR-SPLIT=NO	POS TARG -21.4,+27.5	Sequence 1-9 Non-Int in PJ54B-2023-SEP (06)	20 Secs (20 Secs) [==>]	[1]
	4	F343N	(6) JUPITER-PJ54B-07-SEP-2023	WFC3/UVIS, ACCUM, UVIS2-2K2D-SUB	F343N	CR-SPLIT=NO; BLADE=A	POS TARG -21.4,+27.5	Sequence 1-9 Non-Int in PJ54B-2023-SEP (06)	6 Secs (6 Secs) [==>]	[1]
	5	F225W	(6) JUPITER-PJ54B-07-SEP-2023	WFC3/UVIS, ACCUM, UVIS2-2K2D-SUB	F225W	CR-SPLIT=NO	POS TARG -21.4,+27.5	Sequence 1-9 Non-Int in PJ54B-2023-SEP (06)	40 Secs (40 Secs) [==>]	[1]
	6	F502N	(6) JUPITER-PJ54B-07-SEP-2023	WFC3/UVIS, ACCUM, UVIS2-2K2D-SUB	F502N	CR-SPLIT=NO	POS TARG -21.4,+27.5	Sequence 1-9 Non-Int in PJ54B-2023-SEP (06)	4 Secs (4 Secs) [==>]	[1]
	7	F395N	(6) JUPITER-PJ54B-07-SEP-2023	WFC3/UVIS, ACCUM, UVIS2-2K2D-SUB	F395N	CR-SPLIT=NO	POS TARG -21.4,+27.5	Sequence 1-9 Non-Int in PJ54B-2023-SEP (06)	9 Secs (9 Secs) [==>]	[1]
	8	F631N	(6) JUPITER-PJ54B-07-SEP-2023	WFC3/UVIS, ACCUM, UVIS2-2K2D-SUB	F631N	CR-SPLIT=NO	POS TARG -21.4,+27.5	Sequence 1-9 Non-Int in PJ54B-2023-SEP (06)	4 Secs (4 Secs) [==>]	[1]
	Comments: Request BLADE=A for this exposure only									
	9	FQ727N_quadD	(6) JUPITER-PJ54B-07-SEP-2023	WFC3/UVIS, ACCUM, UVIS-QUAD-SUB	FQ727N	CR-SPLIT=NO	POS TARG -11.1,+12.7	Sequence 1-9 Non-Int in PJ54B-2023-SEP (06)	8 Secs (8 Secs) [==>]	[1]

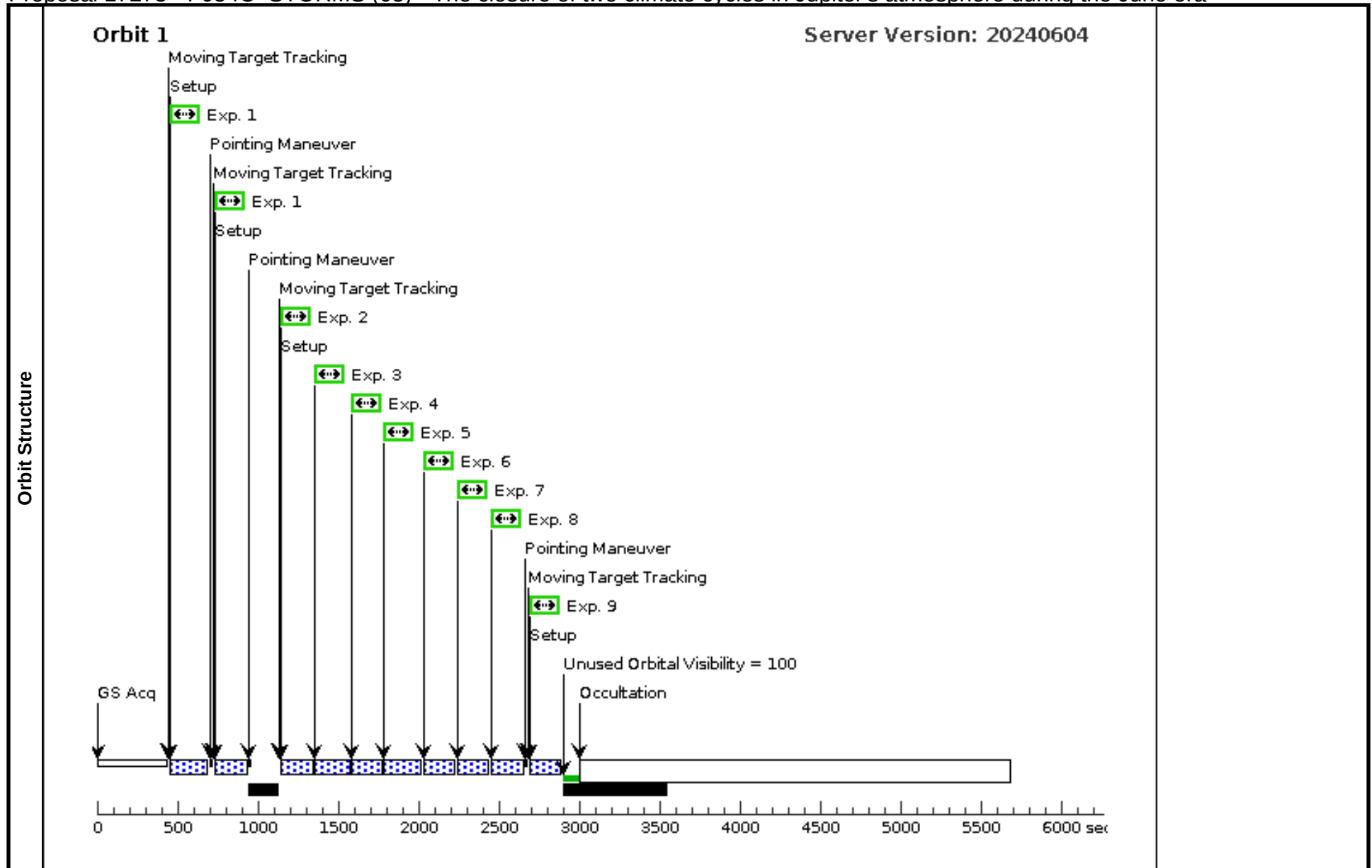


Proposal 17275 - PJ54C+STORMS (05) - The closure of two climate cycles in Jupiter's atmosphere during the Juno era

Visit	Proposal 17275, PJ54C+STORMS (05), completed			Thu Aug 08 14:00:27 GMT 2024			
	Diagnostic Status: Warning						
	Scientific Instruments: WFC3/UVIS						
	Special Requirements: BETWEEN 02-SEP-2023:15:40:00 AND 12-SEP-2023:15:40:00; VISIBILITY INTERVAL NO GYRO BIAS UPDATE ON MOVING TARGET						
	Comments: Juno PJ 54 at Earth is 2023-09-07 12:34 (Lon 186 W) Closest time with CML = 186 is 2023-Sep-07 15:40 This visit covers longitudes to the west of the perijove longitude, including the stealth superstorm longitude. Visit timing constraint is +/-24 hours (about +/- 2 Jupiter rotations) from PJ time. Can be expanded if necessary for scheduling.						
Diagnostics	(PJ54C+STORMS (05)) Warning (Orbit Planner): GS ACQ SCENARIO REQUESTED INCONSISTENT WITH VISIT GYRO MODE						
	(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.						
	(FQ889N_quadA (05.001) special requirements) Warning (Form): The specified GS Acq Scenario is not in the current list of valid scenarios.						
	(F658N (05.002)) Warning (Form): FLASH level may be too low for this exposure or a short subexposure. See extended explanation in the diagnostic browser						
	(F275W (05.003)) Warning (Form): FLASH level may be too low for this exposure or a short subexposure. See extended explanation in the diagnostic browser						
	(F343N (05.004)) Warning (Form): FLASH level may be too low for this exposure or a short subexposure. See extended explanation in the diagnostic browser						
	(F225W (05.005)) Warning (Form): FLASH level may be too low for this exposure or a short subexposure. See extended explanation in the diagnostic browser						
	(F502N (05.006)) Warning (Form): FLASH level may be too low for this exposure or a short subexposure. See extended explanation in the diagnostic browser						
	(F395N (05.007)) Warning (Form): FLASH level may be too low for this exposure or a short subexposure. See extended explanation in the diagnostic browser						
	(F631N (05.008)) Warning (Form): FLASH level may be too low for this exposure or a short subexposure. See extended explanation in the diagnostic browser						
	(FQ727N_quadD (05.009)) Warning (Form): FLASH level may be too low for this exposure or a short subexposure. See extended explanation in the diagnostic browser						
(FQ727N_quadD (05.009)) 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.							
(PJ54C+STORMS (05)) Informational (Form): The Visit Planner and Spike may produce different schedulability results.							
Patterns	#	Primary Pattern		Secondary Pattern	Exposures		
	(1)	Pattern Type=WFC3-UVIS-DITHER- LINE Purpose=DITHER Number Of Points=2 Point Spacing=0.87 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
	(5)	JUPITER- PJ54C+STORMS	STD=JUPITER			CML OF JUPITER FROM EARTH BETWEEN 290 352	EARTH
	Comments: If necessary, CML observing window can be shifted to increase scheduling opportunities, but the interval should remain 352-290 = 62 deg after shifting. Any shift may also require CML windows for visits 1 and 6 to be shifted (contact PI to confirm). Description=Jupiter Extended=YES						

Proposal 17275 - PJ54C+STORMS (05) - The closure of two climate cycles in Jupiter's atmosphere during the Juno era

Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
	1	FQ889N_quadA	(5) JUPITER-PJ54C+STORMS	WFC3/UVIS, ACCUM, UVIS-QUAD-SUB	FQ889N	CR-SPLIT=NO	POS TARG +7.3,-8.2; GS ACQ SCENARIO BASE1BR	Sequence 1-9 Non-Int in PJ54C+STORMS (05) Pattern 1, Exps 1-1 in Sequence 1-9 Non-Int in PJ54C+STORMS (05) (1)	30 Secs (60 Secs) [==>(Pattern 1)] [==>(Pattern 2)]	[1]
	2	F658N	(5) JUPITER-PJ54C+STORMS	WFC3/UVIS, ACCUM, UVIS2-2K2D-SUB	F658N	CR-SPLIT=NO	POS TARG -21.4,+27.5	Sequence 1-9 Non-Int in PJ54C+STORMS (05)	8 Secs (8 Secs) [==>]	[1]
	3	F275W	(5) JUPITER-PJ54C+STORMS	WFC3/UVIS, ACCUM, UVIS2-2K2D-SUB	F275W	CR-SPLIT=NO	POS TARG -21.4,+27.5	Sequence 1-9 Non-Int in PJ54C+STORMS (05)	20 Secs (20 Secs) [==>]	[1]
	4	F343N	(5) JUPITER-PJ54C+STORMS	WFC3/UVIS, ACCUM, UVIS2-2K2D-SUB	F343N	CR-SPLIT=NO; BLADE=A	POS TARG -21.4,+27.5	Sequence 1-9 Non-Int in PJ54C+STORMS (05)	6 Secs (6 Secs) [==>]	[1]
	5	F225W	(5) JUPITER-PJ54C+STORMS	WFC3/UVIS, ACCUM, UVIS2-2K2D-SUB	F225W	CR-SPLIT=NO	POS TARG -21.4,+27.5	Sequence 1-9 Non-Int in PJ54C+STORMS (05)	40 Secs (40 Secs) [==>]	[1]
	6	F502N	(5) JUPITER-PJ54C+STORMS	WFC3/UVIS, ACCUM, UVIS2-2K2D-SUB	F502N	CR-SPLIT=NO	POS TARG -21.4,+27.5	Sequence 1-9 Non-Int in PJ54C+STORMS (05)	4 Secs (4 Secs) [==>]	[1]
	7	F395N	(5) JUPITER-PJ54C+STORMS	WFC3/UVIS, ACCUM, UVIS2-2K2D-SUB	F395N	CR-SPLIT=NO	POS TARG -21.4,+27.5	Sequence 1-9 Non-Int in PJ54C+STORMS (05)	9 Secs (9 Secs) [==>]	[1]
	8	F631N	(5) JUPITER-PJ54C+STORMS	WFC3/UVIS, ACCUM, UVIS2-2K2D-SUB	F631N	CR-SPLIT=NO	POS TARG -21.4,+27.5	Sequence 1-9 Non-Int in PJ54C+STORMS (05)	4 Secs (4 Secs) [==>]	[1]
	Comments: Request BLADE=A for this exposure only									
	9	FQ727N_quadD	(5) JUPITER-PJ54C+STORMS	WFC3/UVIS, ACCUM, UVIS-QUAD-SUB	FQ727N	CR-SPLIT=NO	POS TARG -11.1,+12.7	Sequence 1-9 Non-Int in PJ54C+STORMS (05)	8 Secs (8 Secs) [==>]	[1]

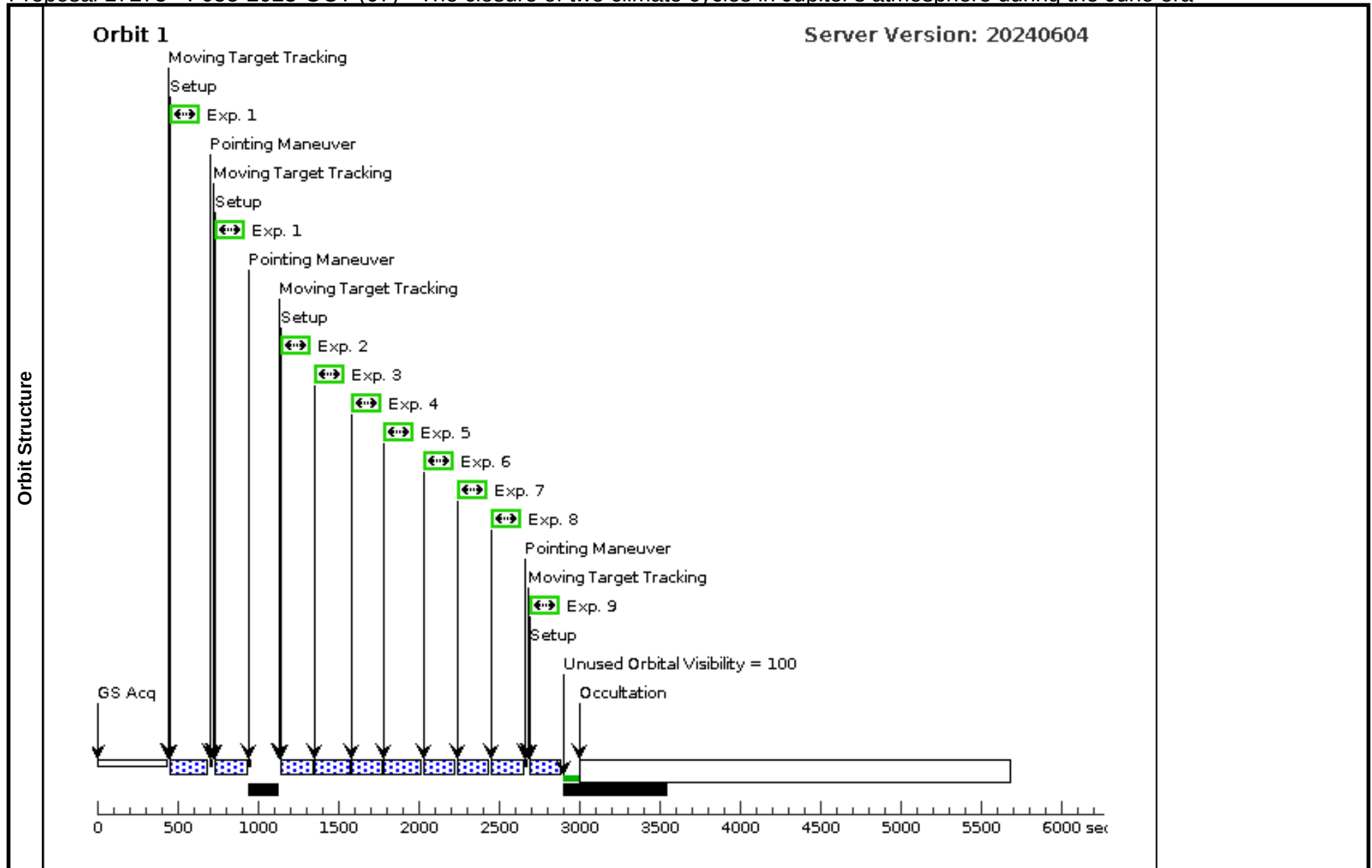


Proposal 17275 - PJ55-2023-OCT (07) - The closure of two climate cycles in Jupiter's atmosphere during the Juno era

Visit	Proposal 17275, PJ55-2023-OCT (07), completed			Thu Aug 08 14:00:27 GMT 2024			
	Diagnostic Status: Warning						
	Scientific Instruments: WFC3/UVIS						
	Special Requirements: BETWEEN 13-OCT-2023:12:30:00 AND 13-OCT-2023:13:30:00; VISIBILITY INTERVAL NO GYRO BIAS UPDATE ON MOVING TARGET						
Diagnostics	Comments: Juno PJ 55 at Earth is 2023-10-15 11:26 (Lon 106.7 W)						
	Storm lon is 124, average of the two is 115, with closest time at 2023-Oct-15 14:41						
	Visit timing constraint is +/-24 hours (about +/- 2 Jupiter rotations) from PJ time. Can be expanded if necessary for scheduling.						
	(PJ55-2023-OCT (07)) Warning (Orbit Planner): GS ACQ SCENARIO REQUESTED INCONSISTENT WITH VISIT GYRO MODE						
	(FQ889N_quadA (07.001)) Warning (Form): FLASH level may be too low for this exposure or a short subexposure. See extended explanation in the diagnostic browser						
	(FQ889N_quadA (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.						
	(FQ889N_quadA (07.001) special requirements) Warning (Form): The specified GS Acq Scenario is not in the current list of valid scenarios.						
	(F658N (07.002)) Warning (Form): FLASH level may be too low for this exposure or a short subexposure. See extended explanation in the diagnostic browser						
	(F275W (07.003)) Warning (Form): FLASH level may be too low for this exposure or a short subexposure. See extended explanation in the diagnostic browser						
	(F343N (07.004)) Warning (Form): FLASH level may be too low for this exposure or a short subexposure. See extended explanation in the diagnostic browser						
Patterns	(F225W (07.005)) Warning (Form): FLASH level may be too low for this exposure or a short subexposure. See extended explanation in the diagnostic browser						
	(F502N (07.006)) Warning (Form): FLASH level may be too low for this exposure or a short subexposure. See extended explanation in the diagnostic browser						
	(F395N (07.007)) Warning (Form): FLASH level may be too low for this exposure or a short subexposure. See extended explanation in the diagnostic browser						
	(F631N (07.008)) Warning (Form): FLASH level may be too low for this exposure or a short subexposure. See extended explanation in the diagnostic browser						
	(FQ727N_quadD (07.009)) Warning (Form): FLASH level may be too low for this exposure or a short subexposure. See extended explanation in the diagnostic browser						
	(FQ727N_quadD (07.009)) 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.						
	(PJ55-2023-OCT (07)) Informational (Form): The Visit Planner and Spike may produce different schedulability results.						
	#	Primary Pattern		Secondary Pattern	Exposures		
	(1)	Pattern Type=WFC3-UVIS-DITHER-LINE	Coordinate Frame=POS-TARG		(1)		
		Purpose=DITHER	Pattern Orientation=46.84				
	Number Of Points=2	Angle Between Sides=					
	Point Spacing=0.87	Center Pattern=false					
	Line Spacing=						
Solar System Targets	#	Name	Level 1	Level 2	Level 3	Window	Ephem Center
	(7)	JUPITER-PJ55-15-OCT-2023	STD=JUPITER			CML OF JUPITER FROM EARTH BETWEEN 75 155	EARTH
	Comments: 106.69 PJ 55 actual PJ lon						
	115.30 average						
	123.92 PJ 55 storm lon						
	See phase I: target +/- 40 deg from 115 W, midway between storm and PJ longitudes.						
	Description=Jupiter						
	Extended=YES						

Proposal 17275 - PJ55-2023-OCT (07) - The closure of two climate cycles in Jupiter's atmosphere during the Juno era

Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
	1	FQ889N_quadA	(7) JUPITER-PJ55-1 5-OCT-2023	WFC3/UVIS, ACCUM, UVIS-QUAD-SUB	FQ889N	CR-SPLIT=NO	POS TARG +7.3,-8.2; GS ACQ SCENARIO BASE1BR	Sequence 1-9 Non-Int in PJ55-2023-OCT (07) Pattern 1, Exps 1-1 in Sequence 1-9 Non-Int in PJ55-2023-OCT (07) (1)	30 Secs (60 Secs) [==>(Pattern 1)] [==>(Pattern 2)]	[1]
	2	F658N	(7) JUPITER-PJ55-1 5-OCT-2023	WFC3/UVIS, ACCUM, UVIS2-2K2D-SUB	F658N	CR-SPLIT=NO	POS TARG -21.4,+27.5	Sequence 1-9 Non-Int in PJ55-2023-OCT (07)	8 Secs (8 Secs) [==>]	[1]
	3	F275W	(7) JUPITER-PJ55-1 5-OCT-2023	WFC3/UVIS, ACCUM, UVIS2-2K2D-SUB	F275W	CR-SPLIT=NO	POS TARG -21.4,+27.5	Sequence 1-9 Non-Int in PJ55-2023-OCT (07)	20 Secs (20 Secs) [==>]	[1]
	4	F343N	(7) JUPITER-PJ55-1 5-OCT-2023	WFC3/UVIS, ACCUM, UVIS2-2K2D-SUB	F343N	CR-SPLIT=NO; BLADE=A	POS TARG -21.4,+27.5	Sequence 1-9 Non-Int in PJ55-2023-OCT (07)	6 Secs (6 Secs) [==>]	[1]
	5	F225W	(7) JUPITER-PJ55-1 5-OCT-2023	WFC3/UVIS, ACCUM, UVIS2-2K2D-SUB	F225W	CR-SPLIT=NO	POS TARG -21.4,+27.5	Sequence 1-9 Non-Int in PJ55-2023-OCT (07)	40 Secs (40 Secs) [==>]	[1]
	6	F502N	(7) JUPITER-PJ55-1 5-OCT-2023	WFC3/UVIS, ACCUM, UVIS2-2K2D-SUB	F502N	CR-SPLIT=NO	POS TARG -21.4,+27.5	Sequence 1-9 Non-Int in PJ55-2023-OCT (07)	4 Secs (4 Secs) [==>]	[1]
	7	F395N	(7) JUPITER-PJ55-1 5-OCT-2023	WFC3/UVIS, ACCUM, UVIS2-2K2D-SUB	F395N	CR-SPLIT=NO	POS TARG -21.4,+27.5	Sequence 1-9 Non-Int in PJ55-2023-OCT (07)	9 Secs (9 Secs) [==>]	[1]
	8	F631N	(7) JUPITER-PJ55-1 5-OCT-2023	WFC3/UVIS, ACCUM, UVIS2-2K2D-SUB	F631N	CR-SPLIT=NO	POS TARG -21.4,+27.5	Sequence 1-9 Non-Int in PJ55-2023-OCT (07)	4 Secs (4 Secs) [==>]	[1]
	Comments: Request BLADE=A for this exposure only									
	9	FQ727N_quadD	(7) JUPITER-PJ55-1 5-OCT-2023	WFC3/UVIS, ACCUM, UVIS-QUAD-SUB	FQ727N	CR-SPLIT=NO	POS TARG -11.1,+12.7	Sequence 1-9 Non-Int in PJ55-2023-OCT (07)	8 Secs (8 Secs) [==>]	[1]



Proposal 17275 - PJ65-2024-SEP (08) - The closure of two climate cycles in Jupiter's atmosphere during the Juno era

Visit	Proposal 17275, PJ65-2024-SEP (08), implementation			Thu Aug 08 14:00:27 GMT 2024			
	Diagnostic Status: Warning Scientific Instruments: WFC3/UVIS Special Requirements: BETWEEN 19-SEP-2024:05:50:00 AND 21-SEP-2024:07:00:00; VISIBILITY INTERVAL NO GYRO BIAS UPDATE ON MOVING TARGET Comments: Juno PJ 65 at Earth is 2024-09-20 03:09 (PJ Lon 8.3 W, EQX Lon 34 W, Occultation Lons 325, 341 W) Closest time with CML in range of 325 W to 8 W is 2024-09-20 5:50-7:00 Visit timing constraint is +/-24 hours (about +/- 2 Jupiter rotations) from PJ time. Can be expanded if necessary for scheduling.						
Diagnostics	(F631N (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 (08.002)) Warning (Form): FLASH level may be too low for this exposure or a short subexposure. See extended explanation in the diagnostic browser						
	(FQ727N_quadD (08.002)) 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.						
	(F275W (08.003)) Warning (Form): FLASH level may be too low for this exposure or a short subexposure. See extended explanation in the diagnostic browser						
	(F225W (08.004)) Warning (Form): FLASH level may be too low for this exposure or a short subexposure. See extended explanation in the diagnostic browser						
	(F502N (08.005)) Warning (Form): FLASH level may be too low for this exposure or a short subexposure. See extended explanation in the diagnostic browser						
	(F658N (08.006)) Warning (Form): FLASH level may be too low for this exposure or a short subexposure. See extended explanation in the diagnostic browser						
	(F343N (08.007)) Warning (Form): FLASH level may be too low for this exposure or a short subexposure. See extended explanation in the diagnostic browser						
	(F395N (08.008)) Warning (Form): FLASH level may be too low for this exposure or a short subexposure. See extended explanation in the diagnostic browser						
	(F225W (08.009)) Warning (Form): FLASH level may be too low for this exposure or a short subexposure. See extended explanation in the diagnostic browser						
	(F275W (08.010)) Warning (Form): FLASH level may be too low for this exposure or a short subexposure. See extended explanation in the diagnostic browser						
	(FQ889N_quadA (08.011)) Warning (Form): FLASH level may be too low for this exposure or a short subexposure. See extended explanation in the diagnostic browser						
Patterns	(FQ889N_quadA (08.011)) 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 (08.012)) Warning (Form): FLASH level may be too low for this exposure or a short subexposure. See extended explanation in the diagnostic browser						
	(FQ727N_quadD (08.012)) 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 (08.013)) Warning (Form): FLASH level may be too low for this exposure or a short subexposure. See extended explanation in the diagnostic browser						
(PJ65-2024-SEP (08)) Informational (Form): The Visit Planner and Spike may produce different schedulability results.							
Patterns	#	Primary Pattern		Secondary Pattern	Exposures		
	(1)	Pattern Type=WFC3-UVIS-DITHER-LINE Purpose=DITHER Number Of Points=2 Point Spacing=0.87 Line Spacing= Coordinate Frame=POS-TARG Pattern Orientation=46.84 Angle Between Sides= Center Pattern=false			(11)		
Solar System Targets	#	Name	Level 1	Level 2	Level 3	Window	Ephem Center
	(8)	JUPITER-PJ65-20-SEP-2024	STD=JUPITER			CML OF JUPITER FROM EARTH BETWEEN 285 408	EARTH
	Comments: Can be expanded to CML betw 285,434 if necessary for scheduling. (Lonigitude values greater than 360 used to correctly express a continuous longitude range using only 2 numbers) Description=Jupiter Extended=YES						

Proposal 17275 - PJ65-2024-SEP (08) - The closure of two climate cycles in Jupiter's atmosphere during the Juno era

Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
	1	F631N	(8) JUPITER-PJ65-2 0-SEP-2024	WFC3/UVIS, ACCUM, UVIS2-M1K1C-SUB	F631N	CR-SPLIT=NO; BLADE=A	POS TARG 0,0	Sequence 1-13 Non-Int in PJ65-2024-SEP (08)	4 Secs (4 Secs) [==>]	[1]
	Comments: Request BLADE=A for this exposure only									
	2	FQ727N_qu adD	(8) JUPITER-PJ65-2 0-SEP-2024	WFC3/UVIS, ACCUM, UVIS-QUAD-SUB	FQ727N	CR-SPLIT=NO	POS TARG -9.7,+10 .5	Sequence 1-13 Non-Int in PJ65-2024-SEP (08)	8 Secs (8 Secs) [==>]	[1]
	3	F275W	(8) JUPITER-PJ65-2 0-SEP-2024	WFC3/UVIS, ACCUM, UVIS2-M1K1C-SUB	F275W	CR-SPLIT=NO	POS TARG 0,0	Sequence 1-13 Non-Int in PJ65-2024-SEP (08)	20 Secs (20 Secs) [==>]	[1]
	4	F225W	(8) JUPITER-PJ65-2 0-SEP-2024	WFC3/UVIS, ACCUM, UVIS2-M1K1C-SUB	F225W	CR-SPLIT=NO	POS TARG 0,0	Sequence 1-13 Non-Int in PJ65-2024-SEP (08)	40 Secs (40 Secs) [==>]	[1]
	5	F502N	(8) JUPITER-PJ65-2 0-SEP-2024	WFC3/UVIS, ACCUM, UVIS2-M1K1C-SUB	F502N	CR-SPLIT=NO	POS TARG 0,0	Sequence 1-13 Non-Int in PJ65-2024-SEP (08)	4 Secs (4 Secs) [==>]	[1]
	6	F658N	(8) JUPITER-PJ65-2 0-SEP-2024	WFC3/UVIS, ACCUM, UVIS2-M1K1C-SUB	F658N	CR-SPLIT=NO	POS TARG 0,0	Sequence 1-13 Non-Int in PJ65-2024-SEP (08)	8 Secs (8 Secs) [==>]	[1]
	7	F343N	(8) JUPITER-PJ65-2 0-SEP-2024	WFC3/UVIS, ACCUM, UVIS2-M1K1C-SUB	F343N	CR-SPLIT=NO	POS TARG 0,0	Sequence 1-13 Non-Int in PJ65-2024-SEP (08)	6 Secs (6 Secs) [==>]	[1]
	8	F395N	(8) JUPITER-PJ65-2 0-SEP-2024	WFC3/UVIS, ACCUM, UVIS2-M1K1C-SUB	F395N	CR-SPLIT=NO	POS TARG 0,0	Sequence 1-13 Non-Int in PJ65-2024-SEP (08)	9 Secs (9 Secs) [==>]	[1]
	9	F225W	(8) JUPITER-PJ65-2 0-SEP-2024	WFC3/UVIS, ACCUM, UVIS2-M1K1C-SUB	F225W	CR-SPLIT=NO	POS TARG 0,0	Sequence 1-13 Non-Int in PJ65-2024-SEP (08)	40 Secs (40 Secs) [==>]	[1]
	10	F275W	(8) JUPITER-PJ65-2 0-SEP-2024	WFC3/UVIS, ACCUM, UVIS2-M1K1C-SUB	F275W	CR-SPLIT=NO	POS TARG 0,0	Sequence 1-13 Non-Int in PJ65-2024-SEP (08)	20 Secs (20 Secs) [==>]	[1]
	11	FQ889N_qu adA	(8) JUPITER-PJ65-2 0-SEP-2024	WFC3/UVIS, ACCUM, UVIS-QUAD-SUB	FQ889N	CR-SPLIT=NO	POS TARG +4.7,-5. 7	Sequence 1-13 Non-Int in PJ65-2024-SEP (08) Pattern 1, Exps 11-1 1 in Sequence 1-13 Non-Int in PJ65-202 4-SEP (08) (1)	30 Secs (60 Secs) [==>(Pattern 1)] [==>(Pattern 2)]	[1]
	12	FQ727N_qu adD	(8) JUPITER-PJ65-2 0-SEP-2024	WFC3/UVIS, ACCUM, UVIS-QUAD-SUB	FQ727N	CR-SPLIT=NO	POS TARG -9.7,+10 .5	Sequence 1-13 Non-Int in PJ65-2024-SEP (08)	8 Secs (8 Secs) [==>]	[1]
	13	F631N	(8) JUPITER-PJ65-2 0-SEP-2024	WFC3/UVIS, ACCUM, UVIS2-M1K1C-SUB	F631N	CR-SPLIT=NO; BLADE=A	POS TARG 0,0	Sequence 1-13 Non-Int in PJ65-2024-SEP (08)	4 Secs (4 Secs) [==>]	[1]
	Comments: Request BLADE=A for this exposure only									

