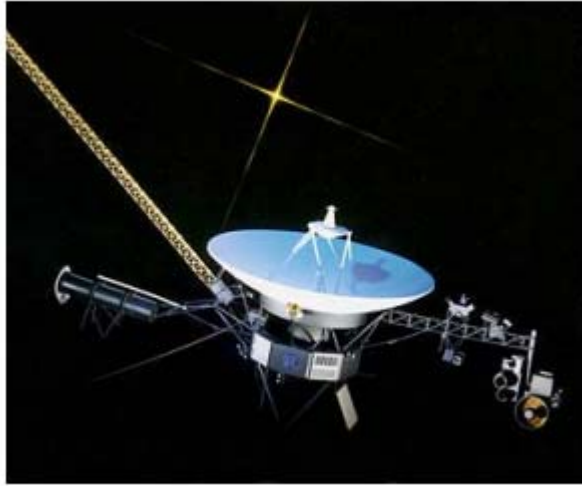


# VOYAGER

## Space Flight Operations Schedule (SFOS)

Issue Date: November 8, 2023

For the Period: 11/09/23 to 11/27/23 (23/313 – 23/331)



Posted at <https://voyager.jpl.nasa.gov/mission/status/>

**LEGEND:**

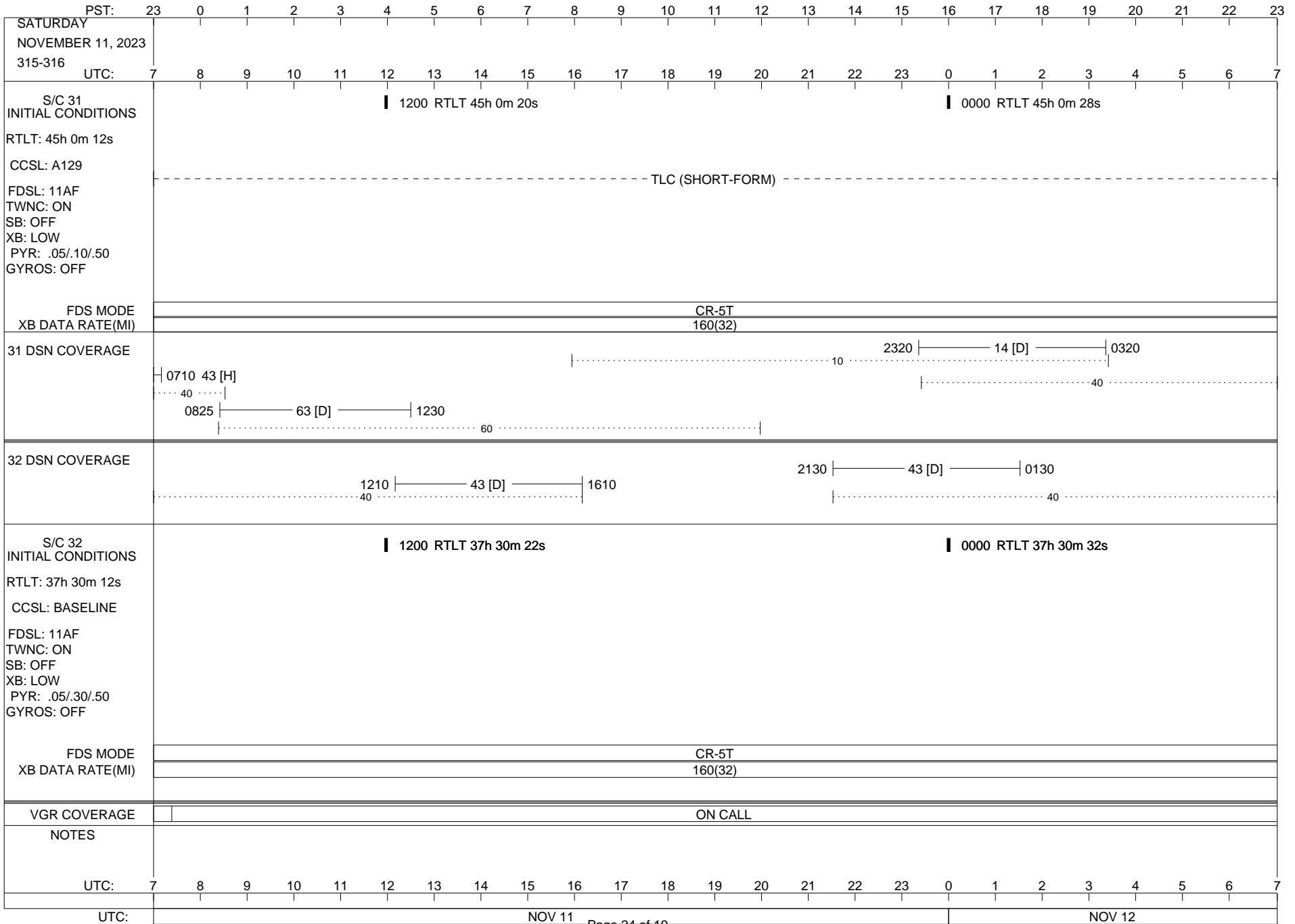
- ▽ = R/T Command (Last chance or Contingency)
- ▼ = R/T Command (Scheduled)
- \* = Result of R/T Command
- n = (where n = 1,2,3 ..) Special Note, see bottom of page
- A = Arrayed station
- B = BLF
- D = Downlink only pass
- H = High Power Transmitter
- R = Array Reference Antenna
- T = TLC Uplink
- U = Uplink only pass
- [o] = Ramp-through

ISSUE DATE: 11/08/23 08:04

PST:	23	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	
THURSDAY NOVEMBER 9, 2023 313-314																										
UTC:	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	0	1	2	3	4	5	6	7	
S/C 31 INITIAL CONDITIONS RTLT: 44h 59m 38s CCSL: A129 FDSL: 11AF TWNC: ON SB: OFF XB: LOW PYR: .05/10/50 GYROS: OFF	1200 RTLT 44h 59m 48s											0000 RTLT 44h 59m 56s														
	↓ 1015 BAY 1 HTR OFF ↓ 1019 X/B HI POWER ↓ 1027 YAW=.05											↓ 1723 YAW=.10 ↓ 1726 X/B LOW POWER ↓ 1730 BAY 1 HTR ON														
	1037  ----- PLAYBACK -----  1713																									
	PB-14 1037↓											↓ 1713 CR-5T														
FDS MODE	CR-5T											CR-5T														
XB DATA RATE(MI)	160(32)											160(32)														
31 DSN COVERAGE	0955  ----- 53 [DA] -----  1755											0955  ----- 54 [DA] -----  1755														
	0955  ----- 55 [DAR] -----  1755											0955  ----- 65 [DA] -----  1755														
	0955  ----- 63 [DA] -----  2005																									
32 DSN COVERAGE	1220  ----- 43 [D] -----  1620																									
S/C 32 INITIAL CONDITIONS RTLT: 37h 29m 30s CCSL: BASELINE FDSL: 11AF TWNC: ON SB: OFF XB: LOW PYR: .05/30/50 GYROS: OFF	1200 RTLT 37h 29m 40s											0000 RTLT 37h 29m 50s														
FDS MODE												CR-5T														
XB DATA RATE(MI)												160(32)														
VGR COVERAGE	ON CALL											ON CALL														
NOTES																										
UTC:	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	0	1	2	3	4	5	6	7	
UTC:	NOV 09											NOV 10														

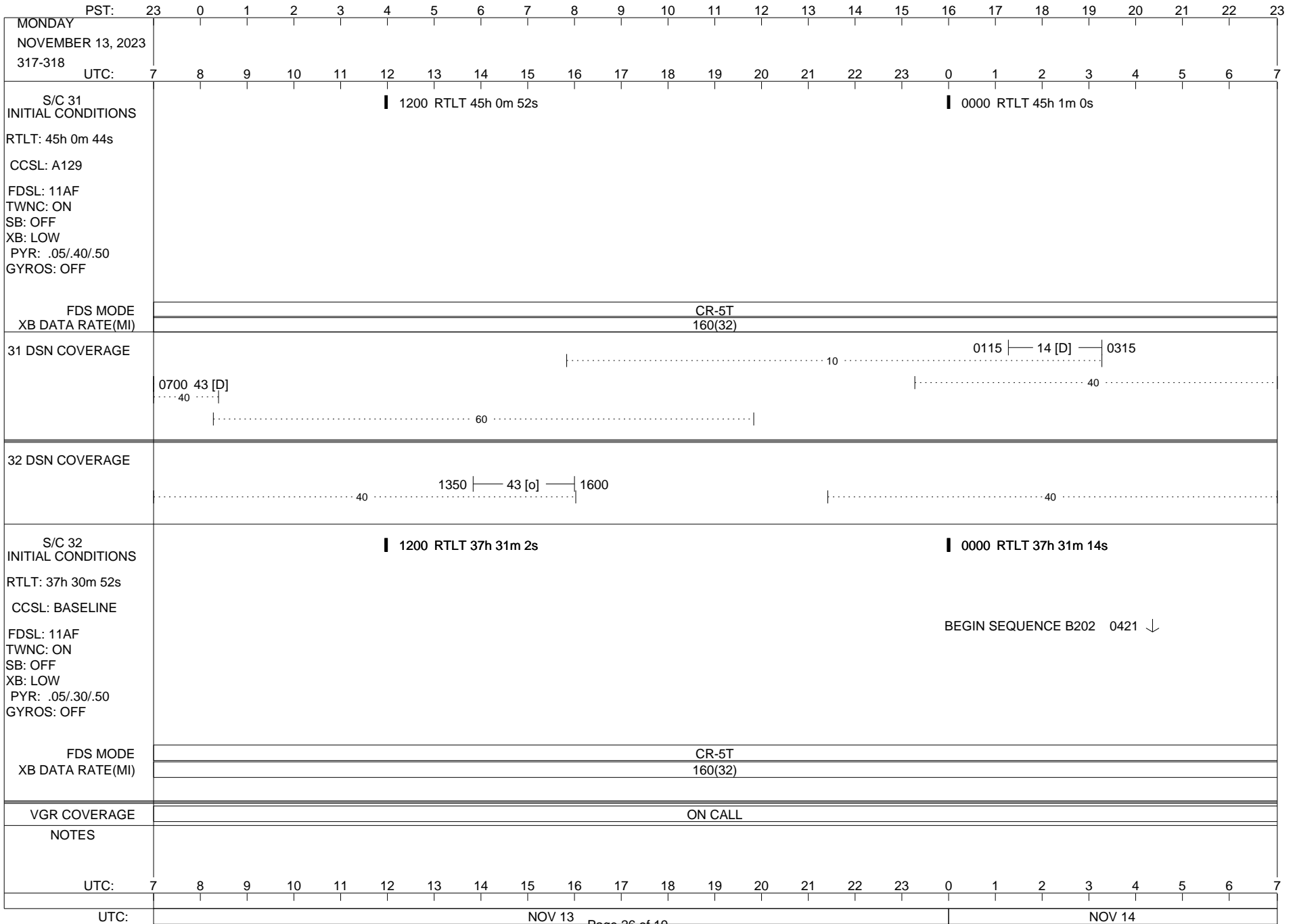
PST:		23	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23		
FRIDAY																												
NOVEMBER 10, 2023																												
314-315																												
UTC:		7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	0	1	2	3	4	5	6	7		
S/C 31 INITIAL CONDITIONS		1200 RTLT 45h 0m 4s												0000 RTLT 45h 0m 12s														
RTLT: 44h 59m 56s		0853   TAPPOS -   1041																										
CCSL: A129		U/L 1120   -   TLC (SHORT-FORM)																										
FDSL: 11AF		YAW 0.4 DEG DEADBAND (03:08) 0608 ▼																										
TWNC: ON		PRE-NDATA AACS FULMRO (03:20) 0620 ▼																										
SB: OFF																												
XB: LOW																												
PYR: .05/10/50																												
GYROS: OFF																												
FDS MODE														CR-5T														
XB DATA RATE(MI)														160(32)														
31 DSN COVERAGE																												
32 DSN COVERAGE																												
S/C 32 INITIAL CONDITIONS		1200 RTLT 37h 30m 2s												0000 RTLT 37h 30m 12s														
RTLT: 37h 29m 50s		<ul style="list-style-type: none"> <li>▼ 2335 EL-40 (13:05)</li> <li>▼ 2357 CCSL B202 (13:27)</li> <li>▼ 0038 CCSTIM F/C (14:08)</li> <li>▼ 0106 CR-5T (14:36)</li> </ul>																										
CCSL: BASELINE																												
FDSL: 11AF																												
TWNC: ON																												
SB: OFF																												
XB: LOW																												
PYR: .05/30/50																												
GYROS: OFF																												
FDS MODE														CR-5T														
XB DATA RATE(MI)														160(32)														
VGR COVERAGE		ON CALL												VGR						ON CALL						VGR		
NOTES		[1] DSS-43 HPTXR DRV ON >= 23:05																										
UTC:		7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	0	1	2	3	4	5	6	7		
UTC:		NOV 10																		NOV 11								

ISSUE DATE: 11/08/23 08:04

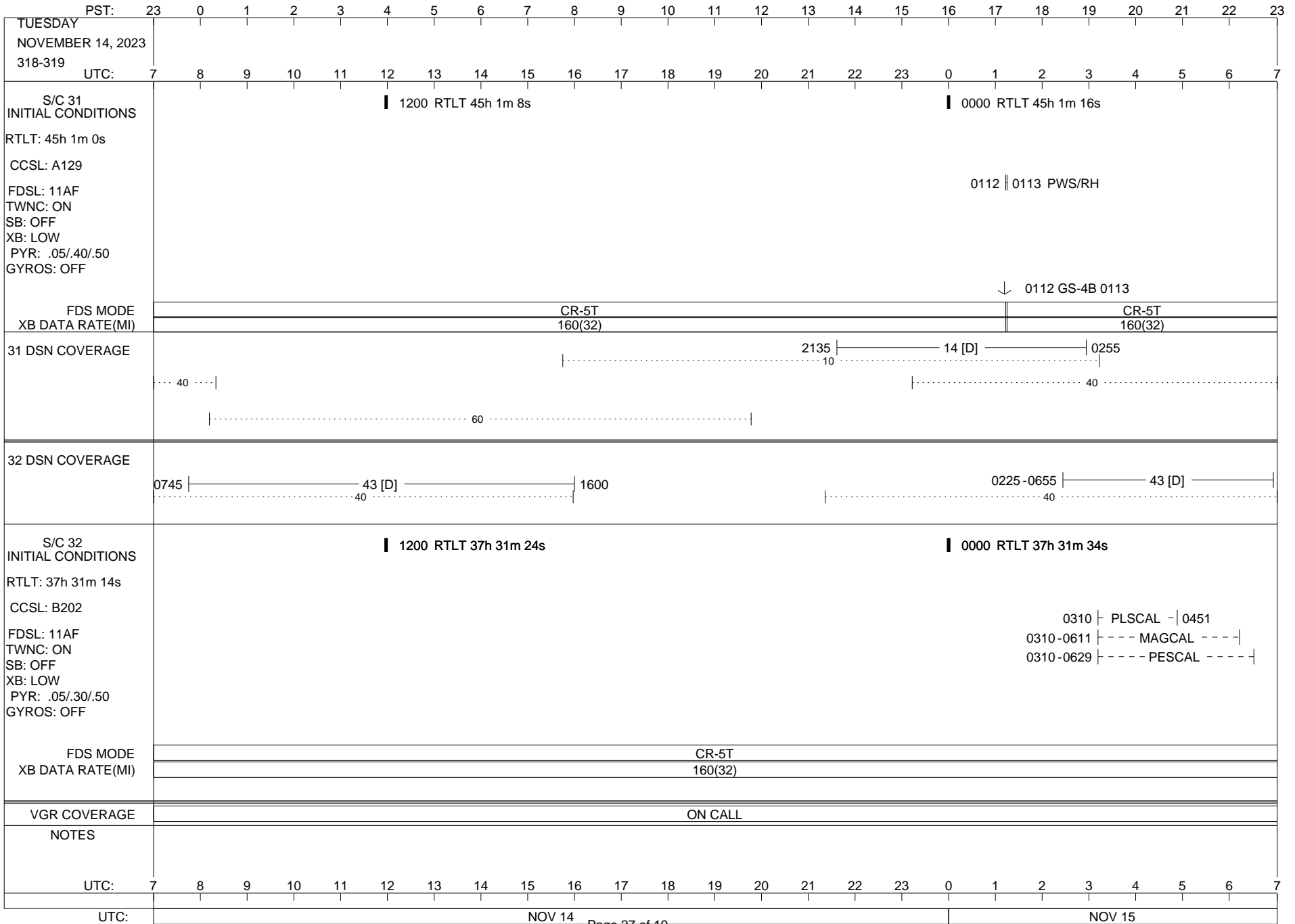


PST:	23	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
SUNDAY NOVEMBER 12, 2023 316-317	UTC: 7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	0	1	2	3	4	5	6	7
S/C 31 INITIAL CONDITIONS RTLTL: 45h 0m 28s CCSL: A129 FDSL: 11AF TWNC: ON SB: OFF XB: LOW PYR: .05/10/50 GYROS: OFF	1200 RTLT 45h 0m 36s												0000 RTLT 45h 0m 44s												
FDS MODE	CR-5T												EL-40												
XB DATA RATE(MI)	160(32)												40(30)												
31 DSN COVERAGE	0820  -----  63 [D]  -----  1430												0300-0700  -----  43 [D]  -----												
32 DSN COVERAGE	1120  -----  43 [D]  -----  1605												40												
S/C 32 INITIAL CONDITIONS RTLTL: 37h 30m 32s CCSL: BASELINE FDSL: 11AF TWNC: ON SB: OFF XB: LOW PYR: .05/30/50 GYROS: OFF	1200 RTLT 37h 30m 42s												0000 RTLT 37h 30m 52s												
FDS MODE	CR-5T						EL-40						CR-5T												
XB DATA RATE(MI)	160(32)						40(30)						160(32)												
VGR COVERAGE	ON CALL						VGR						ON CALL						VGR						
NOTES	[1] SC 32=EL-40 @ 1306 XB=40(30) [2] SC 32=CR-5T @ 1437 XB=160(32)												[3] SC 31=EL-40 @ 0321 XB=40(30) [4] SC 31=CR-5T @ 0538 XB=160(32)												
UTC:	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	0	1	2	3	4	5	6	7
UTC:	NOV 12												NOV 13												

ISSUE DATE: 11/08/23 08:04



ISSUE DATE: 11/08/23 08:04



ISSUE DATE: 11/08/23 08:04

PST:	23	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
WEDNESDAY NOVEMBER 15, 2023 319-320																									
UTC:	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	0	1	2	3	4	5	6	7
S/C 31 INITIAL CONDITIONS RTLT: 45h 1m 16s CCSL: A129 FDSL: 11AF TWNC: ON SB: OFF XB: LOW PYR: .05/.40/.50 GYROS: OFF						1200 RTLT 45h 1m 22s																			
FDS MODE XB DATA RATE(MI)																									
31 DSN COVERAGE																									
32 DSN COVERAGE																									
S/C 32 INITIAL CONDITIONS RTLT: 37h 31m 34s CCSL: B202 FDSL: 11AF TWNC: ON SB: OFF XB: LOW PYR: .05/.30/.50 GYROS: OFF						1200 RTLT 37h 31m 44s																			
FDS MODE XB DATA RATE(MI)																									
VGR COVERAGE																									
NOTES																									
UTC:	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	0	1	2	3	4	5	6	7
UTC:																									



ISSUE DATE: 11/08/23 08:04

PST:	23	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	
THURSDAY NOVEMBER 16, 2023 320-321																										
UTC:	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	0	1	2	3	4	5	6	7	
S/C 31 INITIAL CONDITIONS RTLTL: 45h 1m 30s CCSL: A129 FDSL: 11AF TWNC: ON SB: OFF XB: LOW PYR: .05/.40/.50 GYROS: OFF						1200																				
FDS MODE												CR-5T														
XB DATA RATE(MI)												160(32)														
31 DSN COVERAGE																										
32 DSN COVERAGE																										
S/C 32 INITIAL CONDITIONS RTLTL: 37h 31m 54s CCSL: B202 FDSL: 11AF TWNC: ON SB: OFF XB: LOW PYR: .05/.30/.50 GYROS: OFF						1200																				
FDS MODE												CR-5T														
XB DATA RATE(MI)												160(32)														
VGR COVERAGE												ON CALL														
NOTES																										
UTC:	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	0	1	2	3	4	5	6	7	
UTC:	NOV 16													NOV 17												

ISSUE DATE: 11/08/23 08:04

PST: 23 0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23

FRIDAY  
NOVEMBER 17, 2023  
321-322  
UTC: 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 0 1 2 3 4 5 6 7

S/C 31  
INITIAL CONDITIONS  
RTLT: 45h 1m 46s  
CCSL: A129  
FDSL: 11AF  
TWNC: ON  
SB: OFF  
XB: LOW  
PYR: .05/.40/.50  
GYROS: OFF  
1200 RTLT 45h 1m 54s  
0000 RTLT 45h 2m 0s  
NDATA #1 - DELINK UEPC (22:15) 0113▼  
AACS FULMRO (22:55) 0153▼  
U/L 0350 | - |  
TLC (SHORT-FORM) | - - - - -

FDS MODE  
XB DATA RATE(MI)  
CR-5T  
160(32)



S/C 32  
INITIAL CONDITIONS  
RTLT: 37h 32m 14s  
CCSL: B202  
FDSL: 11AF  
TWNC: ON  
SB: OFF  
XB: LOW  
PYR: .05/.30/.50  
GYROS: OFF  
1200 RTLT 37h 32m 24s  
0000 RTLT 37h 32m 34s

FDS MODE  
XB DATA RATE(MI)  
CR-5T  
160(32)

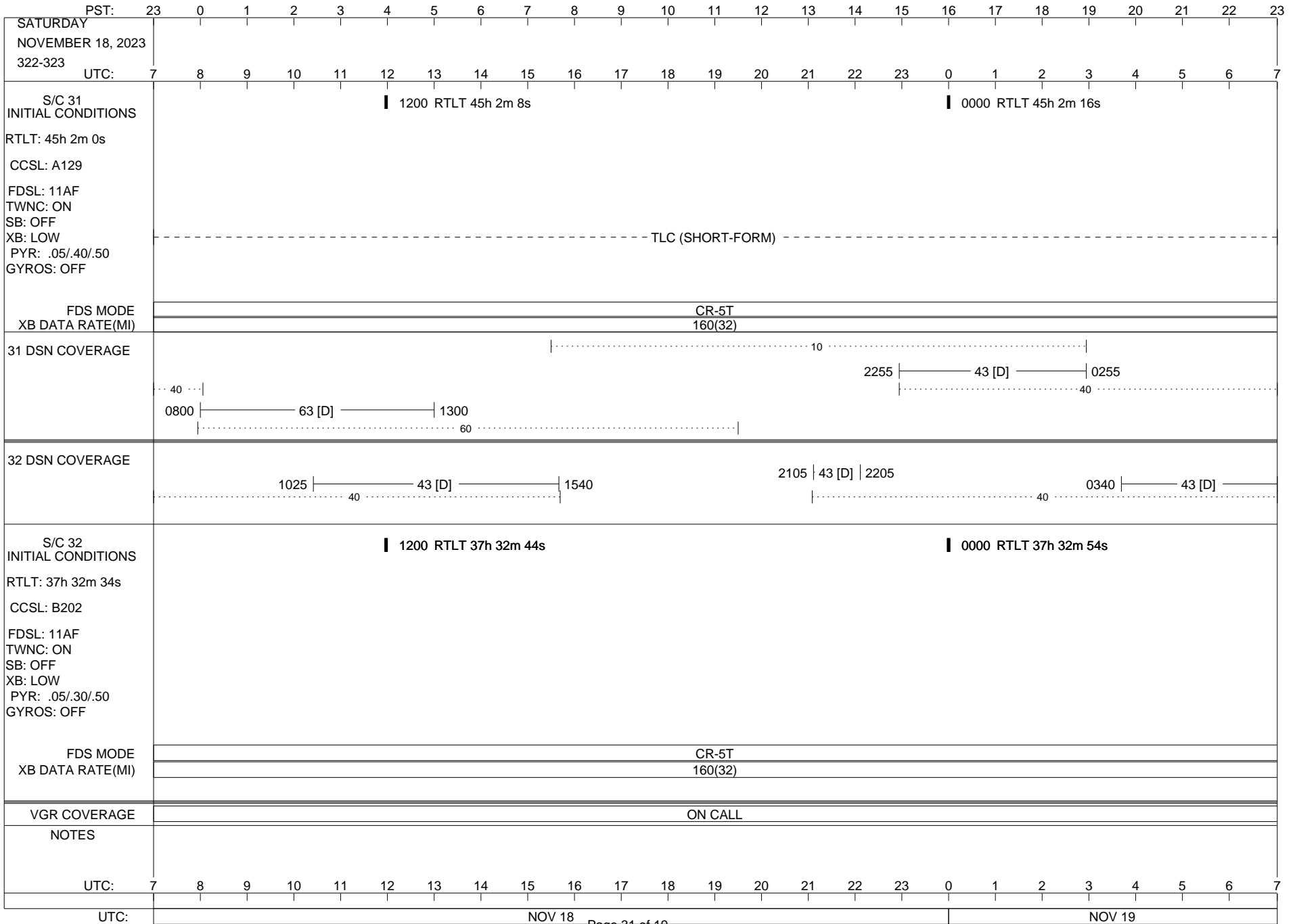
VGR COVERAGE  
ON CALL

NOTES

UTC: 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 0 1 2 3 4 5 6 7

UTC: NOV 17 NOV 18

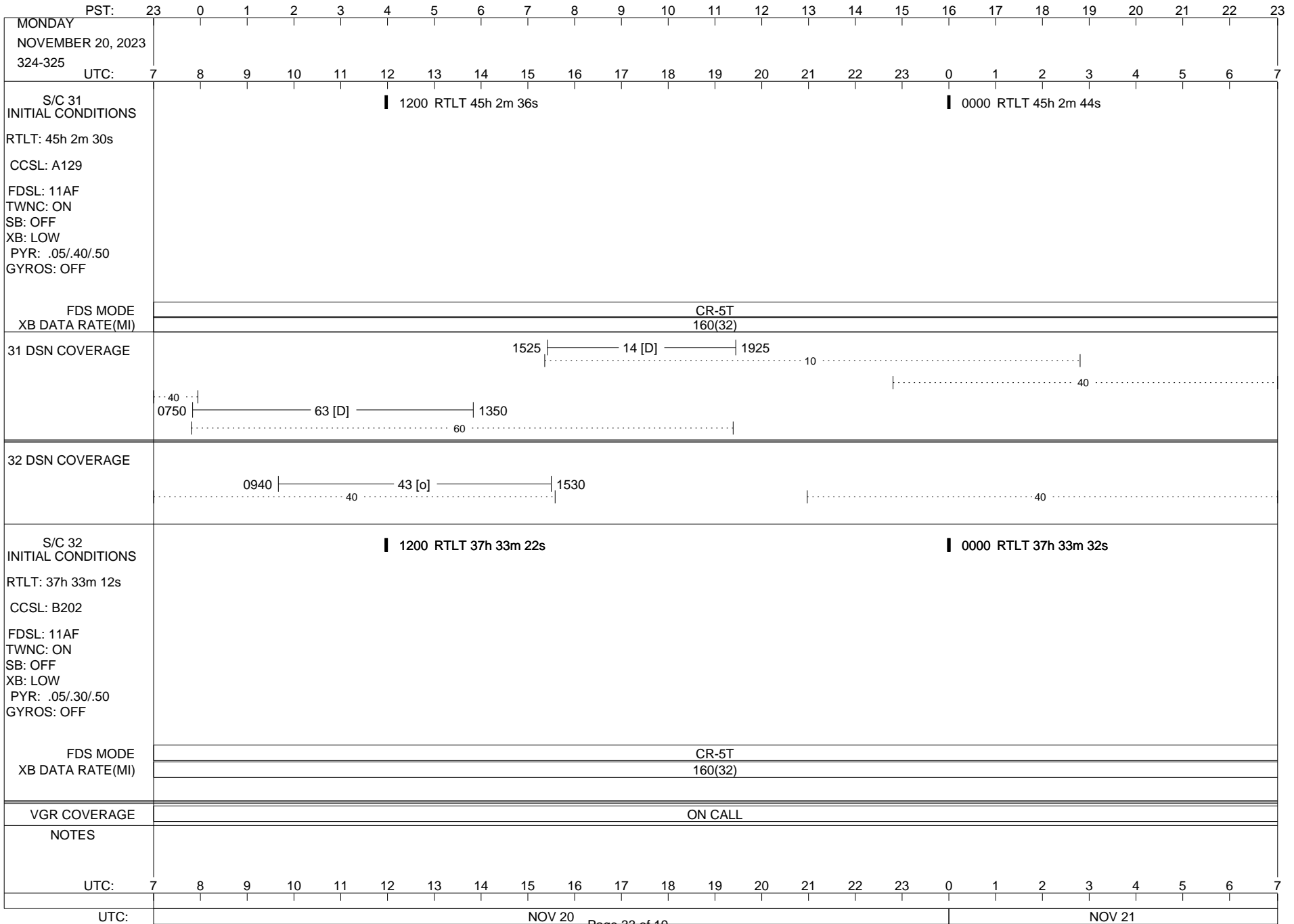
ISSUE DATE: 11/08/23 08:04



ISSUE DATE: 11/08/23 08:04

PST:		23	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	
UTC:		7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	0	1	2	3	4	5	6	7	
SUNDAY NOVEMBER 19, 2023 323-324																											
S/C 31 INITIAL CONDITIONS		1200 RTLT 45h 2m 22s													0000 RTLT 45h 2m 30s												
RTLT: 45h 2m 16s																											
CCSL: A129															* ↓ 2216 NDATA #1 - DELINK UEPC												
FDSL: 11AF															2312  -----  0055 AACs FULMRO												
TWNC: ON																											
SB: OFF																											
XB: LOW															----- TLC (SHORT-FORM) -----   D/L -  0220												
PYR: .05/.40/.50																											
GYROS: OFF																											
FDS MODE		CR-5T													EL-40 2256 ↓												
XB DATA RATE(MI)		160(32)													↓ 0055 CR-5T												
31 DSN COVERAGE		1525  --- 14 [D] ---  1720													EL-40 40(30)												
		----- 1930  ----- 14 [D] -----  0250													CR-5T 160(32)												
		----- 0755  ----- 63 [D] -----  1135													----- 10 -----												
		----- 60 -----													----- 40 -----												
32 DSN COVERAGE		----- 43 [D] -----  1030													----- 40 -----												
S/C 32 INITIAL CONDITIONS		1200 RTLT 37h 33m 2s													0000 RTLT 37h 33m 12s												
RTLT: 37h 32m 54s																											
CCSL: B202																											
FDSL: 11AF																											
TWNC: ON																											
SB: OFF																											
XB: LOW																											
PYR: .05/.30/.50																											
GYROS: OFF																											
FDS MODE															CR-5T												
XB DATA RATE(MI)															160(32)												
VGR COVERAGE		ON CALL													VGR												
NOTES															ON CALL												
UTC:		7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	0	1	2	3	4	5	6	7	
UTC:		NOV 19													NOV 20												

ISSUE DATE: 11/08/23 08:04



ISSUE DATE: 11/08/23 08:04

		PST:	23	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
TUESDAY																											
NOVEMBER 21, 2023																											
325-326																											
UTC:		7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	0	1	2	3	4	5	6	7	
S/C 31 INITIAL CONDITIONS		1200 RTLT 45h 2m 50s											0000 RTLT 45h 2m 58s														
RTLT: 45h 2m 44s																											
CCSL: A129																											
FDSL: 11AF																											
TWNC: ON																											
SB: OFF																											
XB: LOW																											
PYR: .05/.40/.50																											
GYROS: OFF																											
FDS MODE		CR-5T											CR-5T														
XB DATA RATE(MI)		160(32)											160(32)														
31 DSN COVERAGE																											
32 DSN COVERAGE																											
S/C 32 INITIAL CONDITIONS		1200 RTLT 37h 33m 42s											0000 RTLT 37h 33m 52s														
RTLT: 37h 33m 32s																											
CCSL: B202																											
FDSL: 11AF																											
TWNC: ON																											
SB: OFF																											
XB: LOW																											
PYR: .05/.30/.50																											
GYROS: OFF																											
FDS MODE		CR-5T											CR-5T														
XB DATA RATE(MI)		160(32)											160(32)														
VGR COVERAGE		ON CALL											VGR					ON CALL									
NOTES		[1] DSS-43 HPTXR ON >= 22:21																									
UTC:		7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	0	1	2	3	4	5	6	7	
UTC:		NOV 21											NOV 22														

ISSUE DATE: 11/08/23 08:04

PST: 23 0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23

WEDNESDAY  
NOVEMBER 22, 2023  
326-327  
UTC: 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 0 1 2 3 4 5 6 7

S/C 31  
INITIAL CONDITIONS  
RTLTL: 45h 2m 58s  
CCSL: A129  
FDSL: 11AF  
TWNC: ON  
SB: OFF  
XB: LOW  
PYR: .05/.40/.50  
GYROS: OFF

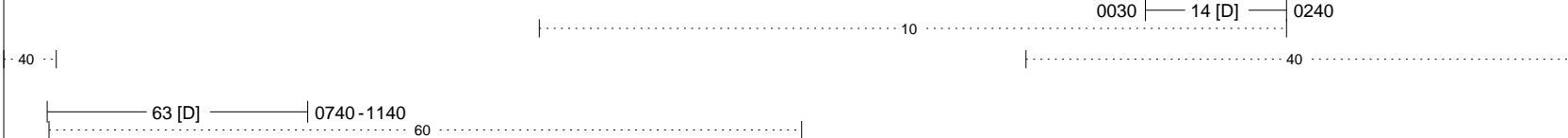
1200 RTLT 45h 3m 4s

0000 RTLT 45h 3m 12s

FDS MODE  
XB DATA RATE(MI)

CR-5T  
160(32)

31 DSN COVERAGE



32 DSN COVERAGE



S/C 32  
INITIAL CONDITIONS  
RTLTL: 37h 33m 52s  
CCSL: B202  
FDSL: 11AF  
TWNC: ON  
SB: OFF  
XB: LOW  
PYR: .05/.30/.50  
GYROS: OFF

1200 RTLT 37h 34m 2s

0000 RTLT 37h 34m 10s

FDS MODE  
XB DATA RATE(MI)

CR-5T  
160(32)

VGR COVERAGE

ON CALL

NOTES

UTC: 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 0 1 2 3 4 5 6 7

UTC: NOV 22 Page 35 of 19 NOV 23

ISSUE DATE: 11/08/23 08:04

PST:	23	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	
THURSDAY NOVEMBER 23, 2023 327-328																										
UTC:	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	0	1	2	3	4	5	6	7	
S/C 31 INITIAL CONDITIONS RTLTL: 45h 3m 12s CCSL: A129 FDSL: 11AF TWNC: ON SB: OFF XB: LOW PYR: .05/.40/.50 GYROS: OFF						1200 RTLT 45h 3m 18s																				
FDS MODE XB DATA RATE(MI)																										
31 DSN COVERAGE								1510																		
32 DSN COVERAGE																										
S/C 32 INITIAL CONDITIONS RTLTL: 37h 34m 10s CCSL: B202 FDSL: 11AF TWNC: ON SB: OFF XB: LOW PYR: .05/.30/.50 GYROS: OFF						1200 RTLT 37h 34m 20s																				
FDS MODE XB DATA RATE(MI)																										
VGR COVERAGE																										
NOTES																										
UTC:	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	0	1	2	3	4	5	6	7	
UTC:																										

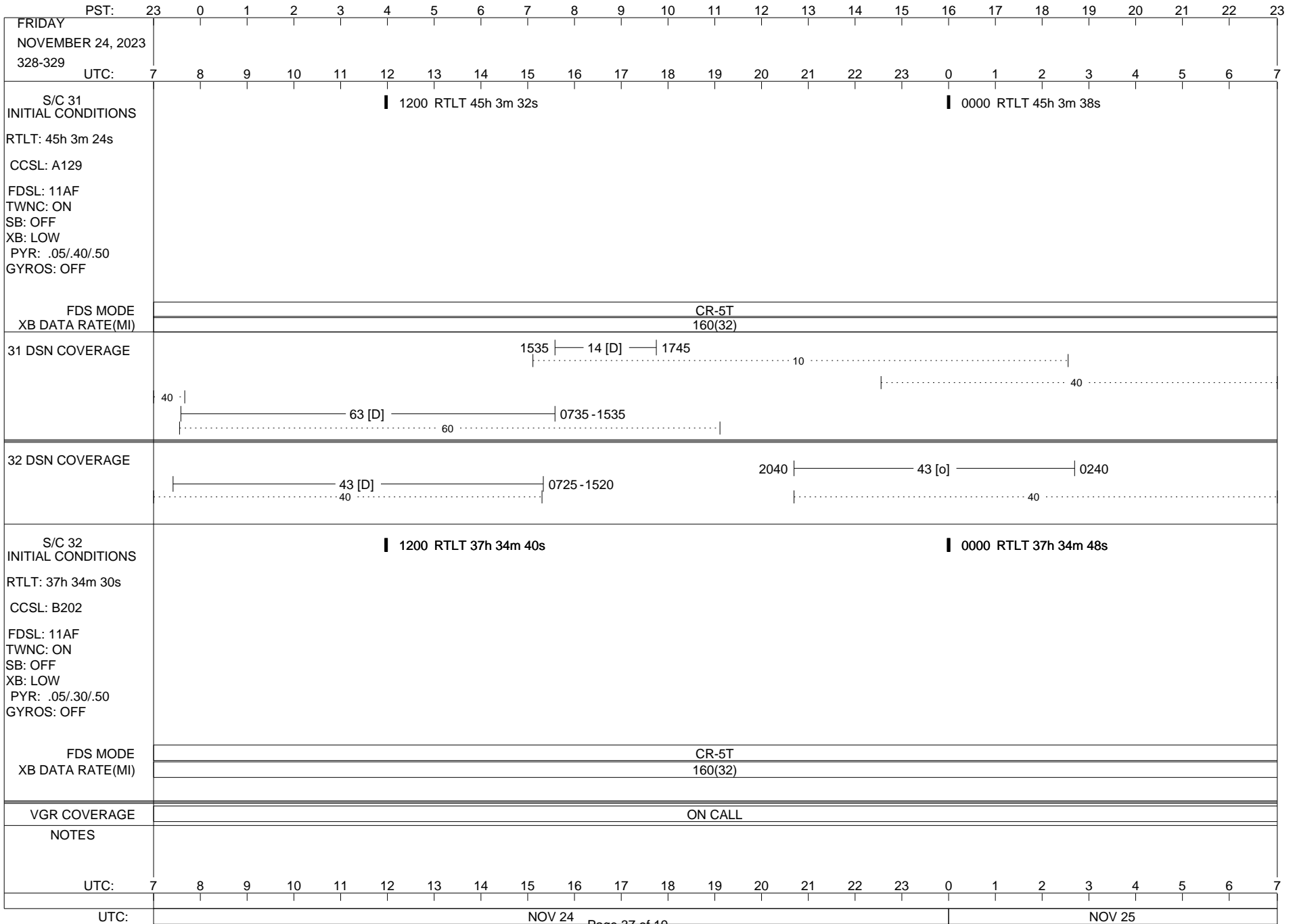
JPL HOLIDAY!

NOV 23

NOV 24



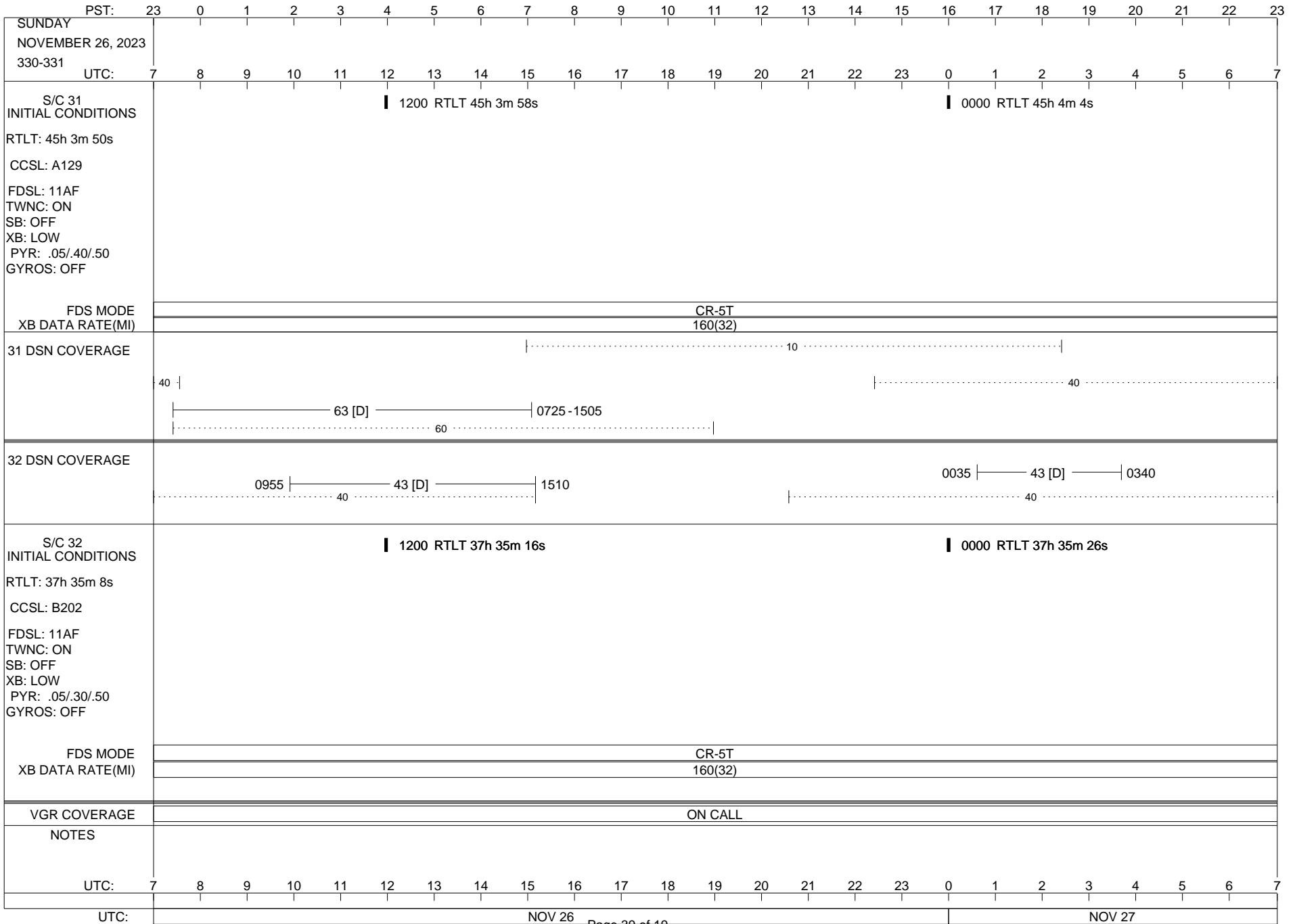
ISSUE DATE: 11/08/23 08:04



ISSUE DATE: 11/08/23 08:04

		PST:	23	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
SATURDAY NOVEMBER 25, 2023 329-330		UTC:	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	0	1	2	3	4	5	6	7
S/C 31 INITIAL CONDITIONS RTLT: 45h 3m 38s CCSL: A129 FDSL: 11AF TWNC: ON SB: OFF XB: LOW PYR: .05/.40/.50 GYROS: OFF		1200 RTLT 45h 3m 44s											0000 RTLT 45h 3m 50s														
FDS MODE		CR-5T											EL-40														
XB DATA RATE(MI)		160(32)											40(30)														
31 DSN COVERAGE		40  -----  63 [D]  -----  0730-1245  -----  60											2225  -----  14 [D]  -----  0225  -----  40														
32 DSN COVERAGE		1030  -----  43 [D]  -----  1430  -----  40											2035  -----  43 [D]  -----  0035  -----  40														
S/C 32 INITIAL CONDITIONS RTLT: 37h 34m 48s CCSL: B202 FDSL: 11AF TWNC: ON SB: OFF XB: LOW PYR: .05/.30/.50 GYROS: OFF		1200 RTLT 37h 34m 58s											0000 RTLT 37h 35m 8s														
FDS MODE		CR-5T											CR-5T														
XB DATA RATE(MI)		160(32)											160(32)														
VGR COVERAGE		ON CALL											VGR														
NOTES		[1] SC 31=EL-40 23:24 XB=40(30)											[2] SC 32=CR-5T @ 00:50 XB=160(32)														
UTC:		7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	0	1	2	3	4	5	6	7	
UTC:		NOV 25											NOV 26														

ISSUE DATE: 11/08/23 08:04



ISSUE DATE: 11/08/23 08:04

PST:	23	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23			
MONDAY NOVEMBER 27, 2023 331-332																												
UTC:	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	0	1	2	3	4	5	6	7			
S/C 31 INITIAL CONDITIONS	1200 RTLT 45h 4m 10s												0000 RTLT 45h 4m 16s															
RTLTL: 45h 4m 4s																												
CCSL: A129																												
FDSL: 11AF																												
TWNC: ON																												
SB: OFF																												
XB: LOW																												
PYR: .05/.40/.50																												
GYROS: OFF																												
FDS MODE													CR-5T															
XB DATA RATE(MI)													160(32)															
31 DSN COVERAGE																												
32 DSN COVERAGE																												
S/C 32 INITIAL CONDITIONS	1200 RTLT 37h 35m 34s												0000 RTLT 37h 35m 44s															
RTLTL: 37h 35m 26s																												
CCSL: B202																												
FDSL: 11AF																												
TWNC: ON																												
SB: OFF																												
XB: LOW																												
PYR: .05/.30/.50																												
GYROS: OFF																												
FDS MODE													CR-5T															
XB DATA RATE(MI)													160(32)															
VGR COVERAGE	ON CALL																											
NOTES																												
UTC:	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	0	1	2	3	4	5	6	7			
UTC:	NOV 27														NOV 28													