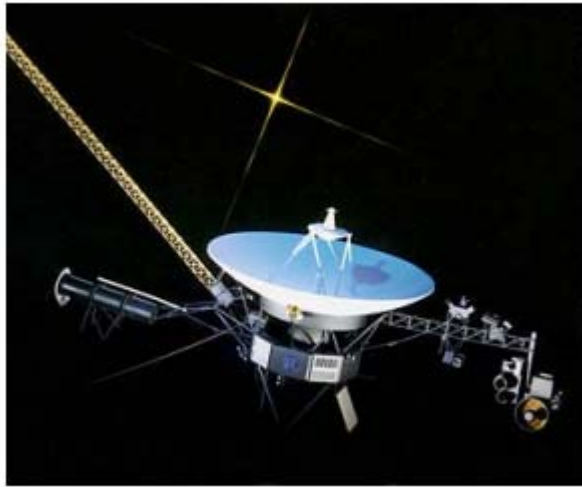


# VOYAGER

## Space Flight Operations Schedule (SFOS)

Issue Date: November 16, 2022

For the Period: 11/17/22 to 12/05/22 (22/321 – 22/339)



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

02/27/19

ISSUE DATE: 11/16/22 10:09

		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 17, 2022 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 RTLTL: 44h 2m 36s CCSL: BASELINE FDSL: 11AF TWNC: ON SB: OFF XB: LOW PYR: .05.100/.25 GYROS: OFF		1200 RTLTL 44h 2m 44s											0000 RTLTL 44h 2m 50s														
FDS MODE		CR-5T																									
XB DATA RATE(MI)		160(32)																									
31 DSN COVERAGE		-----40-----											-----60-----														
		-----40-----											-----40-----														
32 DSN COVERAGE		-----40-----											-----40-----														
		-----40-----											-----40-----														
S/C 32 INITIAL CONDITIONS RTLTL: 36h 39m 36s CCSL: BASELINE FDSL: 11AF TWNC: ON SB: OFF XB: LOW PYR: .05/.10/.25 GYROS: OFF		1200 RTLTL 36h 39m 46s											0000 RTLTL 36h 39m 56s														
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 17											NOV 18														

ISSUE DATE: 11/16/22 10:09

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 18, 2022  
322-323  
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 2m 50s  
CCSL: BASELINE  
FDSL: 11AF  
TWNC: ON  
SB: OFF  
XB: LOW  
PYR: .05/100/.25  
GYROS: OFF

1200 RTLT 44h 2m 58s  
0000 RTLT 44h 3m 6s

▼ 1425 CCS DIAG (10:28)

U/L 1450 | - | ----- TLC (SHORT-FORM) -----

FDS MODE  
XB DATA RATE(MI)

CR-5T  
160(32)

31 DSN COVERAGE

0750 43 [D]  
40  
0820 |----- 63 [T]-----| 1805  
60

32 DSN COVERAGE

0835 |----- 43 [D]-----| 1345  
40  
43 [D] 0630 |  
40

S/C 32  
INITIAL CONDITIONS  
RTLT: 36h 39m 56s  
CCSL: BASELINE  
FDSL: 11AF  
TWNC: ON  
SB: OFF  
XB: LOW  
PYR: .05/10/.25  
GYROS: OFF

1200 RTLT 36h 40m 6s  
0000 RTLT 36h 40m 16s

FDS MODE  
XB DATA RATE(MI)

CR-5T  
160(32)

VGR COVERAGE

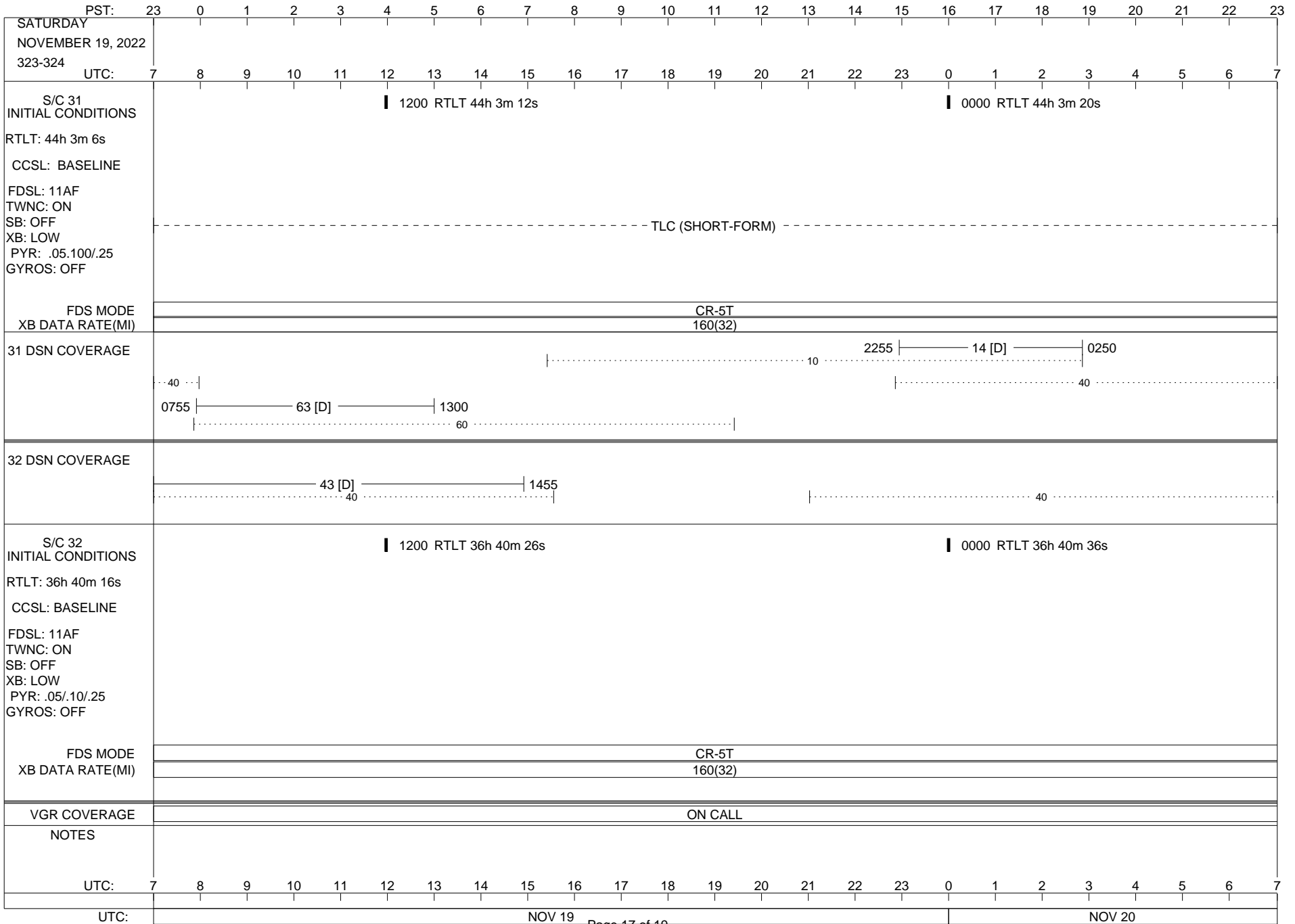
ON CALL VGR ON CALL

NOTES

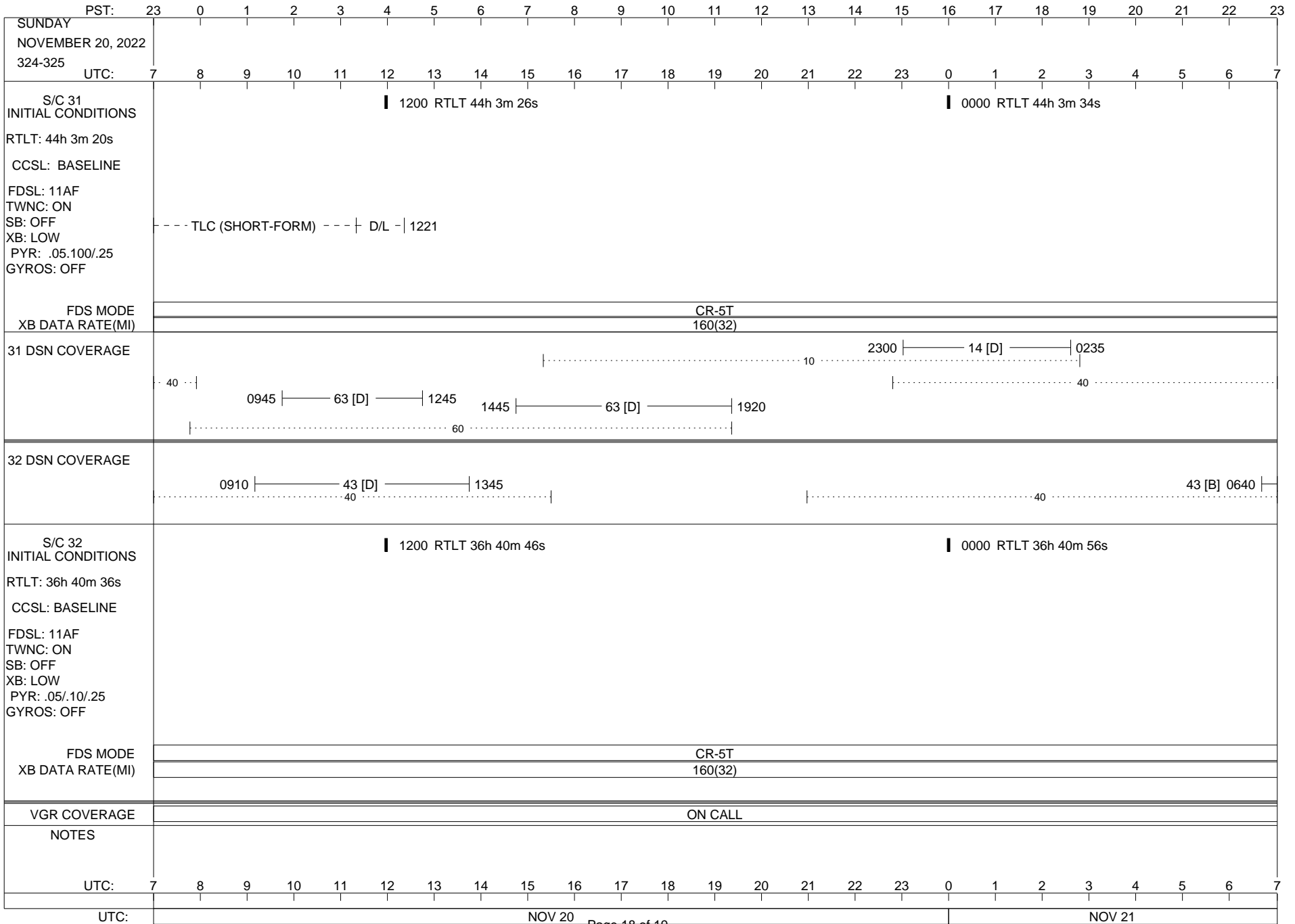
UTC: 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 0 1 2 3 4 5 6 7

UTC: NOV 18 NOV 19

ISSUE DATE: 11/16/22 10:09



ISSUE DATE: 11/16/22 10:09



ISSUE DATE: 11/16/22 10:09

		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 21, 2022																													
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 44h 3m 40s											0000 RTLT 44h 3m 48s																
RTLTL: 44h 3m 34s																													
CCSL: BASELINE																													
FDSL: 11AF																													
TWNC: ON																													
SB: OFF																													
XB: LOW																													
PYR: .05/100/.25																													
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 36h 41m 6s											0000 RTLT 36h 41m 14s																
RTLTL: 36h 40m 56s																													
CCSL: BASELINE																													
FDSL: 11AF																													
TWNC: ON																													
SB: OFF																													
XB: LOW																													
PYR: .05/10/.25																													
GYROS: OFF																													
FDS MODE																CR-5T													
XB DATA RATE(MI)																160(32)													
VGR COVERAGE		ON CALL							VGR							ON CALL													
NOTES		<p style="text-align: center;">▼ 0932 DUMMY (5 MIN BRACKETED 22:14)</p>																											
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: 11/16/22 10:09

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 22, 2022  
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: 44h 3m 48s  
CCSL: BASELINE  
FDSL: 11AF  
TWNC: ON  
SB: OFF  
XB: LOW  
PYR: .05.100/.25  
GYROS: OFF

1200 RTLTL 44h 3m 54s | 0000 RTLTL 44h 4m 2s

0044 | 0045 PWS/RH

↓ 0044 GS-4B 0045

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  
RTLTL: 36h 41m 14s  
CCSL: BASELINE  
FDSL: 11AF  
TWNC: ON  
SB: OFF  
XB: LOW  
PYR: .05/.10/.25  
GYROS: OFF

1200 RTLTL 36h 41m 24s | 0000 RTLTL 36h 41m 34s

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 22 Page 20 of 19 NOV 23

ISSUE DATE: 11/16/22 10:09

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 23, 2022  
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: 44h 4m 2s  
CCSL: BASELINE  
FDSL: 11AF  
TWNC: ON  
SB: OFF  
XB: LOW  
PYR: .05.100/.25  
GYROS: OFF

1200 RTLT 44h 4m 8s 0000 RTLT 44h 4m 14s

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

31 DSN COVERAGE



32 DSN COVERAGE



S/C 32  
INITIAL CONDITIONS  
RTLTL: 36h 41m 34s  
CCSL: BASELINE  
FDSL: 11AF  
TWNC: ON  
SB: OFF  
XB: LOW  
PYR: .05/.10/.25  
GYROS: OFF

1200 RTLT 36h 41m 44s 0000 RTLT 36h 41m 52s

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

VGR COVERAGE ON CALL

NOTES

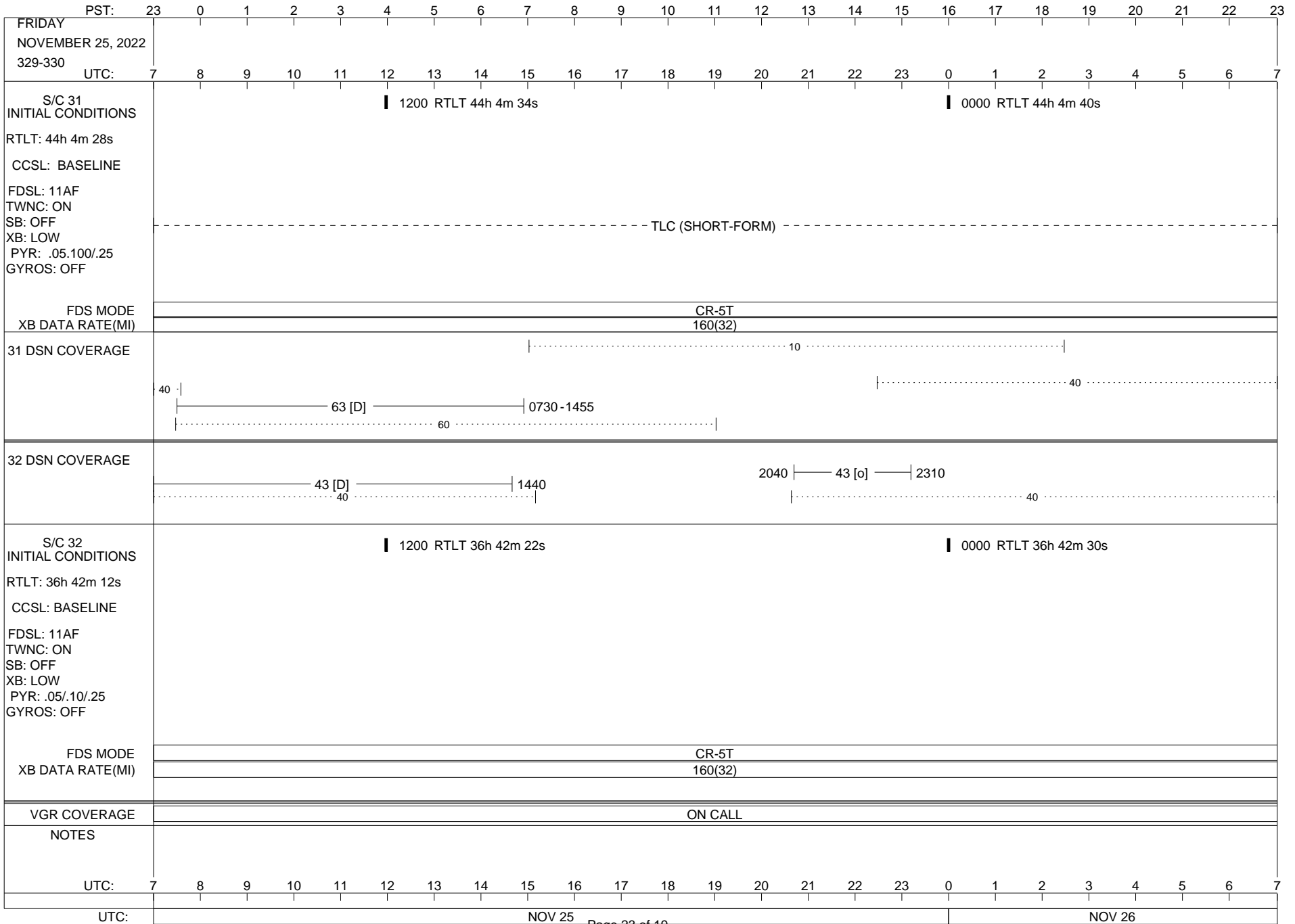
UTC: 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 0 1 2 3 4 5 6 7

UTC: NOV 23 Page 21 of 19 NOV 24

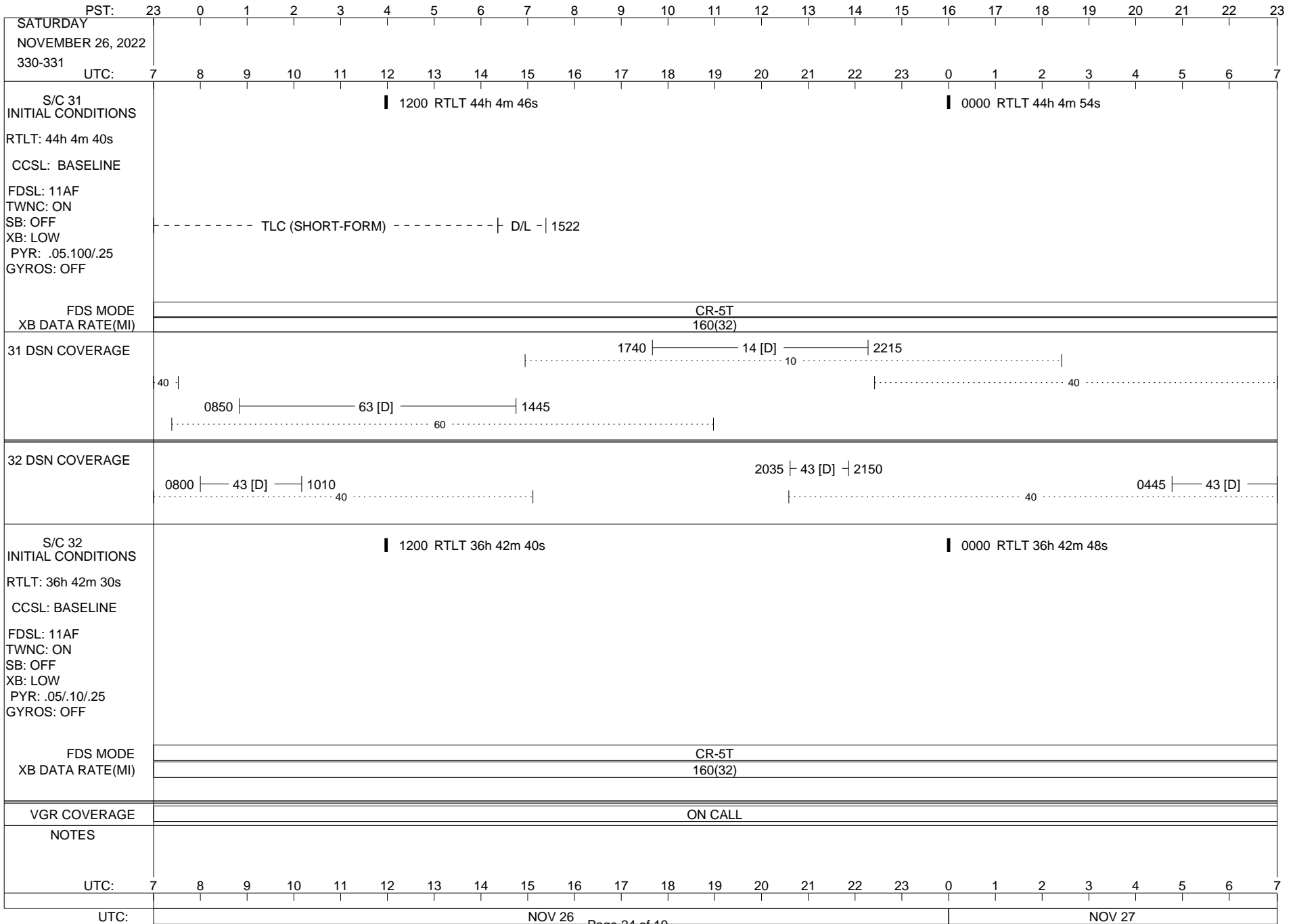


ISSUE DATE: 11/16/22 10:09

		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 24, 2022 328-329		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: 44h 4m 14s CCSL: BASELINE FDSL: 11AF TWNC: ON SB: OFF XB: LOW PYR: .05/100/.25 GYROS: OFF				1200 RTLT 44h 4m 22s											0000 RTLT 44h 4m 28s																			
FDS MODE XB DATA RATE(MI)		CR-5T 160(32)																																
31 DSN COVERAGE				1610  ----- 14 [T] -----  2010											0020  ----- 14 [D] -----  0230																			
		40  ----- 0740 43 [D] -----		----- 10 -----											----- 40 -----																			
				----- 60 -----																														
32 DSN COVERAGE				0825  ----- 43 [D] -----  1340											2040  ----- 43 [D] -----  2240																			
		40  ----- 0825 -----		----- 40 -----											----- 40 -----																			
				----- 43 [D] -----  0610																														
S/C 32 INITIAL CONDITIONS RTLTL: 36h 41m 52s CCSL: BASELINE FDSL: 11AF TWNC: ON SB: OFF XB: LOW PYR: .05/10/.25 GYROS: OFF				1200 RTLT 36h 42m 2s											0000 RTLT 36h 42m 12s																			
FDS MODE XB DATA RATE(MI)		CR-5T 160(32)																																
VGR COVERAGE		ON CALL											VGR											ON CALL										
NOTES		JPL HOLIDAY!																																
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 24														NOV 25																		



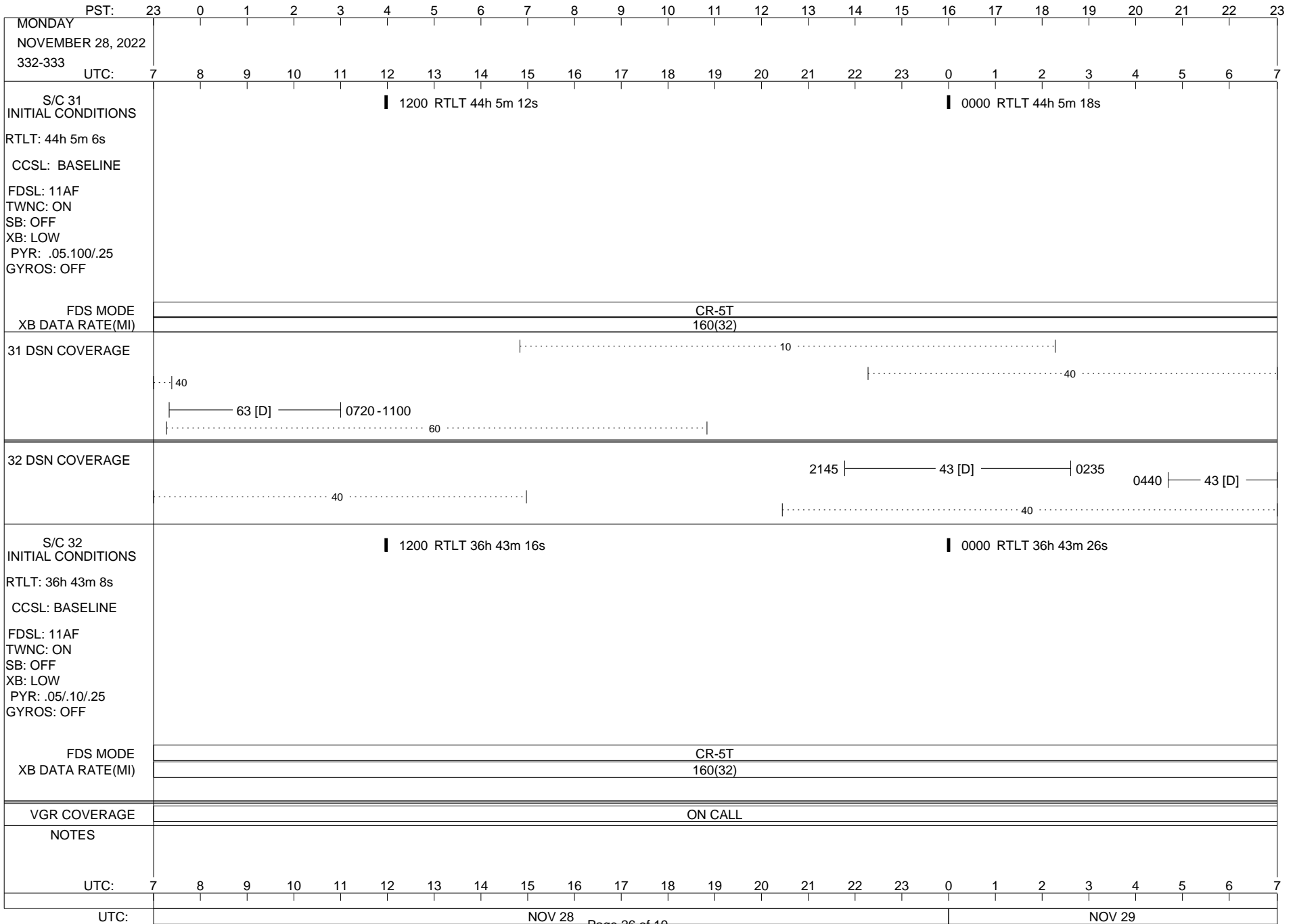
ISSUE DATE: 11/16/22 10:09



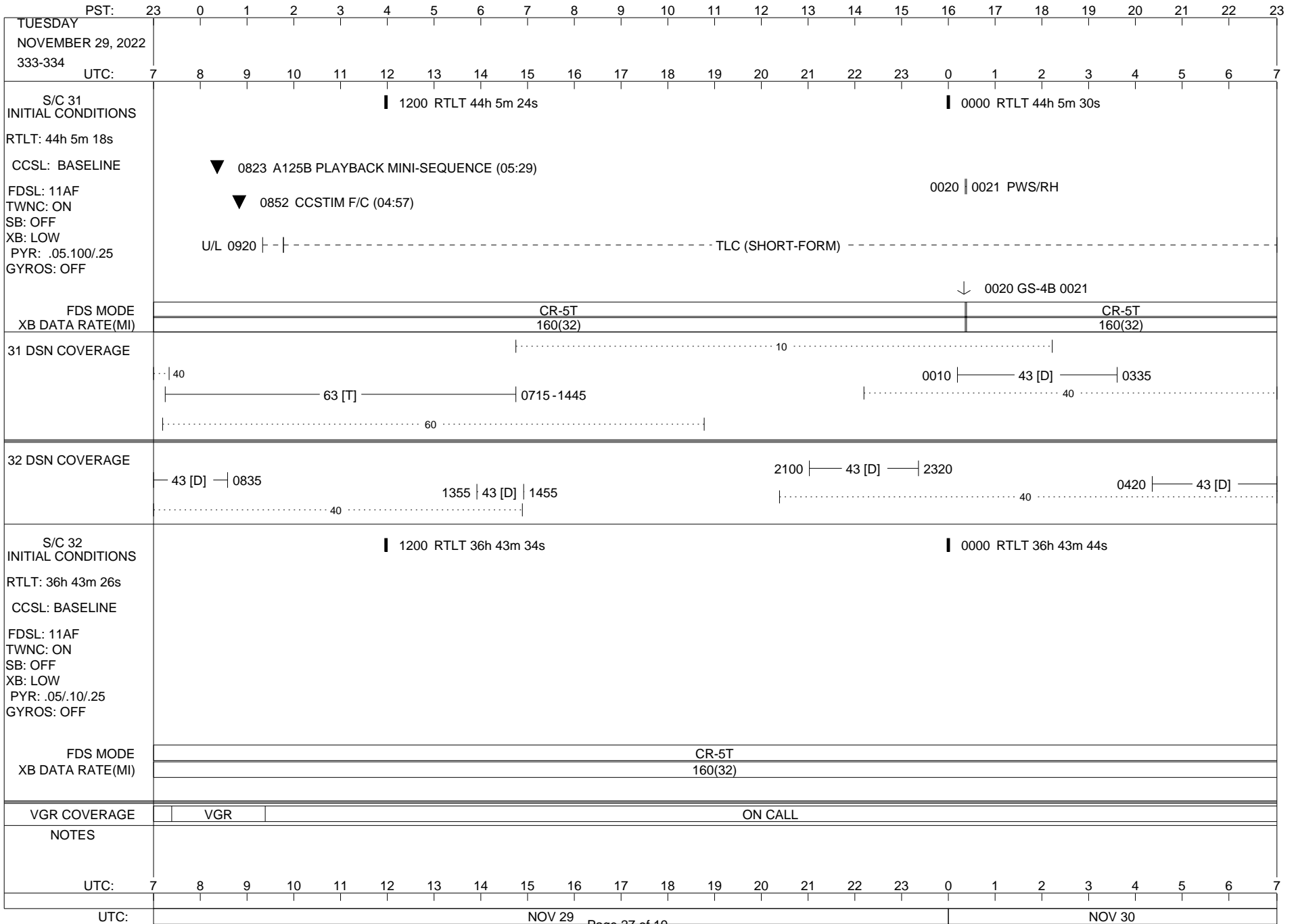
ISSUE DATE: 11/16/22 10:09

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 27, 2022 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 RTLT: 44h 4m 54s CCSL: BASELINE FDSL: 11AF TWNC: ON SB: OFF XB: LOW PYR: .05/100/.25 GYROS: OFF		1200 RTLT 44h 5m 0s												0000 RTLT 44h 5m 6s												
FDS MODE XB DATA RATE(MI)														CR-5T 160(32)												
31 DSN COVERAGE		<p>40   ..... 1655  ----- 14 [D] -----  2015 ..... 40</p> <p>..... 63 [D] -----  0720-1700 ..... 60</p>																								
32 DSN COVERAGE		<p>..... 43 [D] -----  0950 ..... 40</p> <p>..... 2055  ----- 43 [B] -----  0220 ..... 40</p>																								
S/C 32 INITIAL CONDITIONS RTLT: 36h 42m 48s CCSL: BASELINE FDSL: 11AF TWNC: ON SB: OFF XB: LOW PYR: .05/10/.25 GYROS: OFF		1200 RTLT 36h 42m 58s												0000 RTLT 36h 43m 8s												
FDS MODE XB DATA RATE(MI)														CR-5T 160(32)												
VGR COVERAGE		ON CALL												VGR			ON CALL									
NOTES		DUMMY (5 MIN BRACKETED 14:16) 0132▼																								
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												

ISSUE DATE: 11/16/22 10:09



ISSUE DATE: 11/16/22 10:09



ISSUE DATE: 11/16/22 10:09

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 30, 2022  
334-335  
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: 44h 5m 30s  
CCSL: BASELINE  
FDSL: 11AF  
TWNC: ON  
SB: OFF  
XB: LOW  
PYR: .05/100/.25  
GYROS: OFF

1200 RTLT 44h 5m 36s 0000 RTLT 44h 5m 42s

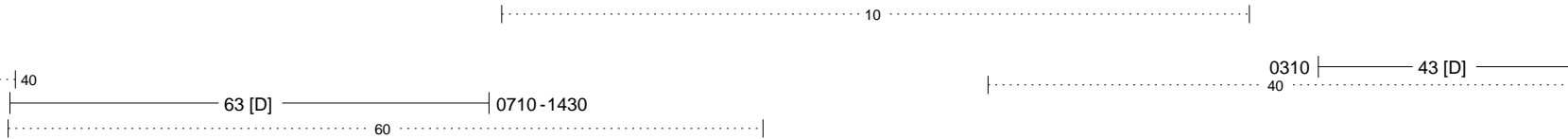
A125BB CHKSUM 0442 | 0501  
CCSTIM  
0458 | 0505 FINE  
COARSE 0526 | 0529  
-0653 | D/L -|

TLC (SHORT-FORM)

FDS MODE  
XB DATA RATE(MI)

CR-5T  
160(32)

31 DSN COVERAGE



32 DSN COVERAGE



S/C 32  
INITIAL CONDITIONS  
RTLTL: 36h 43m 44s  
CCSL: BASELINE  
FDSL: 11AF  
TWNC: ON  
SB: OFF  
XB: LOW  
PYR: .05/10/.25  
GYROS: OFF

1200 RTLT 36h 43m 52s 0000 RTLT 36h 44m 2s

FDS MODE  
XB DATA RATE(MI)

CR-5T  
160(32)

VGR COVERAGE

ON CALL

VGR

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 30 Page 28 of 19 DEC 01

ISSUE DATE: 11/16/22 10:09

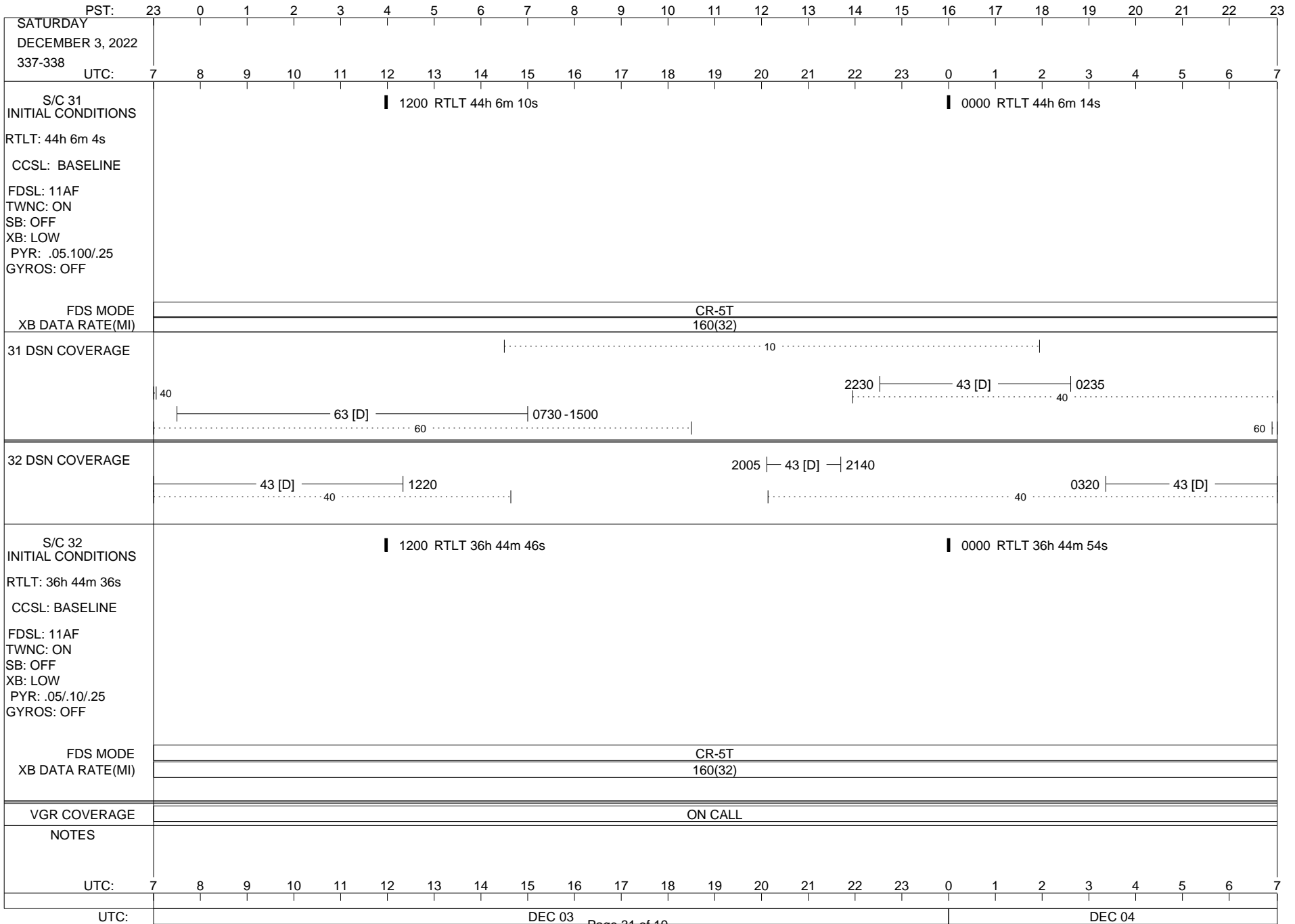
PST:	23	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	
THURSDAY DECEMBER 1, 2022 335-336	UTC: 7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	0	1	2	3	4	5	6	7	
S/C 31 INITIAL CONDITIONS RTLTL: 44h 5m 42s CCSL: BASELINE FDSL: 11AF TWNC: ON SB: OFF XB: LOW PYR: .05.100/.25 GYROS: OFF	1200 RTLTL 44h 5m 48s											0000 RTLTL 44h 5m 52s														
FDS MODE XB DATA RATE(MI)												CR-5T 160(32)														
31 DSN COVERAGE	0710 43 [D]   40											2240   43 [D1]   0435   40														
32 DSN COVERAGE	0810   43 [o]   1130   40											2020   43 [D]   2150   40														
S/C 32 INITIAL CONDITIONS RTLTL: 36h 44m 2s CCSL: BASELINE FDSL: 11AF TWNC: ON SB: OFF XB: LOW PYR: .05/.10/.25 GYROS: OFF	1200 RTLTL 36h 44m 10s											0000 RTLTL 36h 44m 18s														
FDS MODE XB DATA RATE(MI)												CR-5T 160(32)														
VGR COVERAGE												ON CALL														
NOTES	[1] A125B BACKUP U/L TRACK																									
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:	DEC 01											DEC 02														



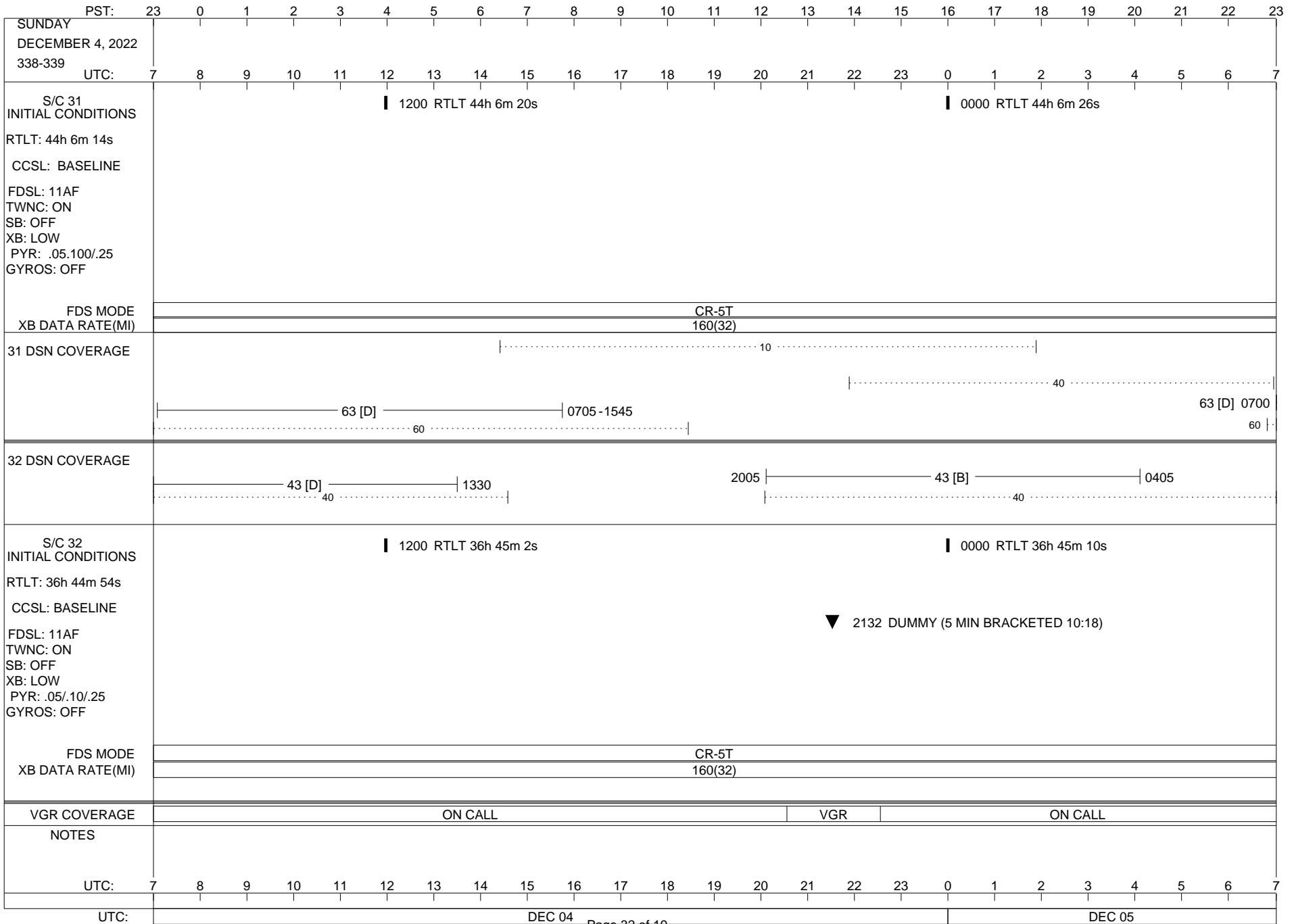
ISSUE DATE: 11/16/22 10:09

	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 DECEMBER 2, 2022 336-337	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 5m 52s CCSL: BASELINE FDSL: 11AF TWNC: ON SB: OFF XB: LOW PYR: .05.100/.25 GYROS: OFF							1200																				
FDS MODE XB DATA RATE(MI)																											
31 DSN COVERAGE																											
32 DSN COVERAGE																											
S/C 32 INITIAL CONDITIONS RTLT: 36h 44m 18s CCSL: BASELINE FDSL: 11AF TWNC: ON SB: OFF XB: LOW PYR: .05/.10/.25 GYROS: OFF							1200																				
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:	DEC 02											DEC 03														

ISSUE DATE: 11/16/22 10:09



ISSUE DATE: 11/16/22 10:09



ISSUE DATE: 11/16/22 10:09

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 DECEMBER 5, 2022 339-340	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: 44h 6m 26s CCSL: BASELINE FDSL: 11AF TWNC: ON SB: OFF XB: LOW PYR: .05.100/.25 GYROS: OFF	1200 RTLTL 44h 6m 30s											0000 RTLTL 44h 6m 36s														
FDS MODE XB DATA RATE(MI)												CR-5T 160(32)														
31 DSN COVERAGE	63 [D] 0700-1145											63 [D] 0650														
32 DSN COVERAGE	0755 43 [D] 1430											0530 43 [D]														
S/C 32 INITIAL CONDITIONS RTLTL: 36h 45m 10s CCSL: BASELINE FDSL: 11AF TWNC: ON SB: OFF XB: LOW PYR: .05/.10/.25 GYROS: OFF	1200 RTLTL 36h 45m 20s											0000 RTLTL 36h 45m 28s														
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:	DEC 05											DEC 06														