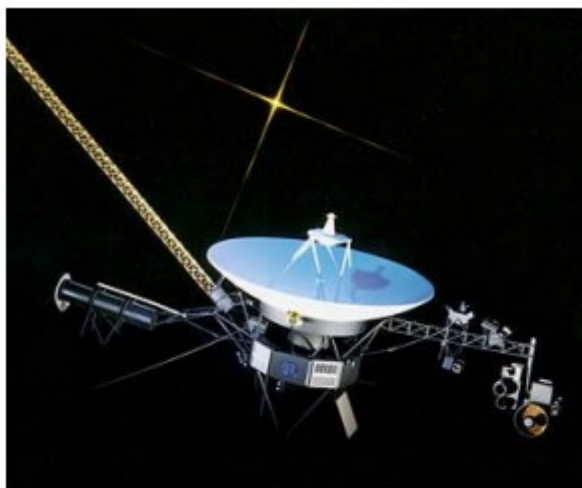


VOYAGER

Space Flight Operations Schedule (SFOS)

Issue Date: December 18, 2019

For the Period: 12/19/19 to 01/13/20 (19/353 – 20/013)



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: 12/30/19 13:04

PST: 0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 0						
THURSDAY DECEMBER 19, 2019 353-354						
UTC: 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 0 1 2 3 4 5 6 7 8						
S/C 31 INITIAL CONDITIONS RTLT: 41h 10m 38s CCSL: A113C FDSL: 11AF TWNC: ON SB: OFF XB: LOW PYR: .05/10/.25 GYROS: OFF	1200 RTLT 41h 10m 42s 0000 RTLT 41h 10m 44s 0252 - TAPPOS - 0444 0554 0555 PWS/RH 0606 - 0744 TAPPOS - 0554 GS-4B 0555 ↓					
	<table border="1"> <tr> <td>FDS MODE</td> <td>CR-5T</td> <td>CR-5T</td> </tr> <tr> <td>XB DATA RATE(MI)</td> <td>160(32)</td> <td>160(32)</td> </tr> </table>	FDS MODE	CR-5T	CR-5T	XB DATA RATE(MI)	160(32)
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 RTLT: 34h 10m 42s CCSL: B186 FDSL: 11AF TWNC: ON SB: OFF XB: LOW PYR: .05/10/.25 GYROS: OFF	1200 RTLT 34h 10m 48s 0000 RTLT 34h 10m 56s CR-5T 1021* ↓					
	<table border="1"> <tr> <td>FDS MODE</td> <td>EL-40</td> <td>CR-5T</td> </tr> <tr> <td>XB DATA RATE(MI)</td> <td>40(30)</td> <td>160(32)</td> </tr> </table>	FDS MODE	EL-40	CR-5T	XB DATA RATE(MI)	40(30)
FDS MODE	EL-40	CR-5T				
XB DATA RATE(MI)	40(30)	160(32)				
VGR COVERAGE	<table border="1"> <tr> <td>ON CALL</td> <td>VGR</td> <td>ON CALL</td> </tr> </table>	ON CALL	VGR	ON CALL		
ON CALL	VGR	ON CALL				
NOTES	[1] S/C 32=CR-5T @ 1021 XB=160(32)					
UTC: 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 0 1 2 3 4 5 6 7 8						
UTC: DEC 19 DEC 20						

ISSUE DATE: 12/30/19 13:04

PST:		0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	0			
FRIDAY																													
DECEMBER 20, 2019																													
354-355 UTC:		8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	0	1	2	3	4	5	6	7	8			
S/C 31 INITIAL CONDITIONS		1200 RTLT 41h 10m 48s												0000 RTLT 41h 10m 52s															
RTLTL: 41h 10m 44s																													
CCSL: A113C																													
FDSL: 11AF																													
TWNC: ON																													
SB: OFF																													
XB: LOW																													
PYR: .05/.10/.25																													
GYROS: OFF																													
FDS MODE														CR-5T															
XB DATA RATE(MI)														160(32)															
31 DSN COVERAGE		1325 ----- 14 [T] ----- 1925												----- 40 -----															
		----- 60 -----												----- 60 -----															
32 DSN COVERAGE		0900 ----- 43 [H1] ----- 1320												----- 40 -----															
S/C 32 INITIAL CONDITIONS		1200 RTLT 34h 11m 2s												0000 RTLT 34h 11m 10s															
RTLTL: 34h 10m 56s																													
CCSL: B186																													
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		VGR						ON CALL						VGR						ON CALL									
NOTES		[1] DSS-43 HP DRV OFF <= 11:57																											
UTC:		8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	0	1	2	3	4	5	6	7	8			
UTC:		DEC 20												DEC 21															

PST:	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	0
SATURDAY DECEMBER 21, 2019 355-356	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	0	1	2	3	4	5	6	7	8
S/C 31 INITIAL CONDITIONS RTLTL: 41h 10m 52s CCSL: A113C FDSL: 11AF TWNC: ON SB: OFF XB: LOW PYR: .05/.10/.25 GYROS: OFF	1200 RTLTL 41h 10m 54s												0000 RTLTL 41h 10m 58s												
	0552 - 0731 TAPPOS -																								
	----- TLC (SHORT-FORM) -----																								
FDS MODE XB DATA RATE(MI)	CR-5T 160(32)																								
31 DSN COVERAGE	1210 ----- 63 [D] ----- 1610 60												10 40 0605 ----- 63 [D] ----- 60												
32 DSN COVERAGE	43 [D] ----- 0830 - 1315 40												1905 ----- 43 [D] ----- 2235 40												
S/C 32 INITIAL CONDITIONS RTLTL: 34h 11m 10s CCSL: B186 FDSL: 11AF TWNC: ON SB: OFF XB: LOW PYR: .05/.10/.25 GYROS: OFF	1200 RTLTL 34h 11m 16s												0000 RTLTL 34h 11m 22s												
	EL-40 2005												1932 CCSB CLEANUP 2021 ----- 2137 CCSB FULMRO 2137 CCSB CR-5T 2145 CCSA CR-5T												
FDS MODE XB DATA RATE(MI)	CR-5T 160(32)												EL-40 40(30)						CR-5T 160(32)						
VGR COVERAGE	ON CALL												VGR						ON CALL						
NOTES	[1] S/C 32=EL-40 @ 2005 XB=160(32) [2] S/C 32=CR-5T @ 2137 XB=160(32)																								
UTC:	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	0	1	2	3	4	5	6	7	8
UTC:	DEC 21												DEC 22												

ISSUE DATE: 12/30/19 13:04

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

SUNDAY
DECEMBER 22, 2019
356-357

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

S/C 31
INITIAL CONDITIONS

1200 RTLT 41h 11m 2s

0000 RTLT 41h 11m 4s

RTLT: 41h 10m 58s

CCSL: A113C

0854 | 0856 PWS/RH

0906 | TAPPOS | 1030

FDSL: 11AF

TWNC: ON

SB: OFF

XB: LOW

PYR: .05/.10/.25

GYROS: OFF

TLC (SHORT-FORM)

D/L - | 1104

↓ 0854 GS-4B 0856

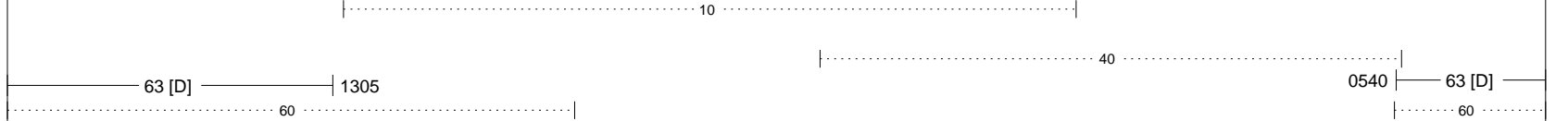
FDS MODE
XB DATA RATE(MI)

CR-5T

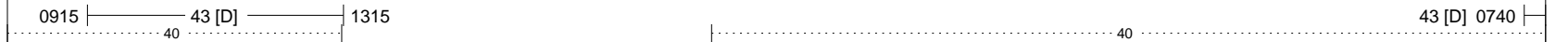
CR-5T

160(32)

31 DSN COVERAGE



32 DSN COVERAGE



S/C 32
INITIAL CONDITIONS

1200 RTLT 34h 11m 30s

0000 RTLT 34h 11m 36s

RTLT: 34h 11m 22s

CCSL: B186

FDSL: 11AF

TWNC: ON

SB: OFF

XB: LOW

PYR: .05/.10/.25

GYROS: OFF

FDS MODE
XB DATA RATE(MI)

CR-5T

160(32)

VGR COVERAGE

ON CALL

NOTES

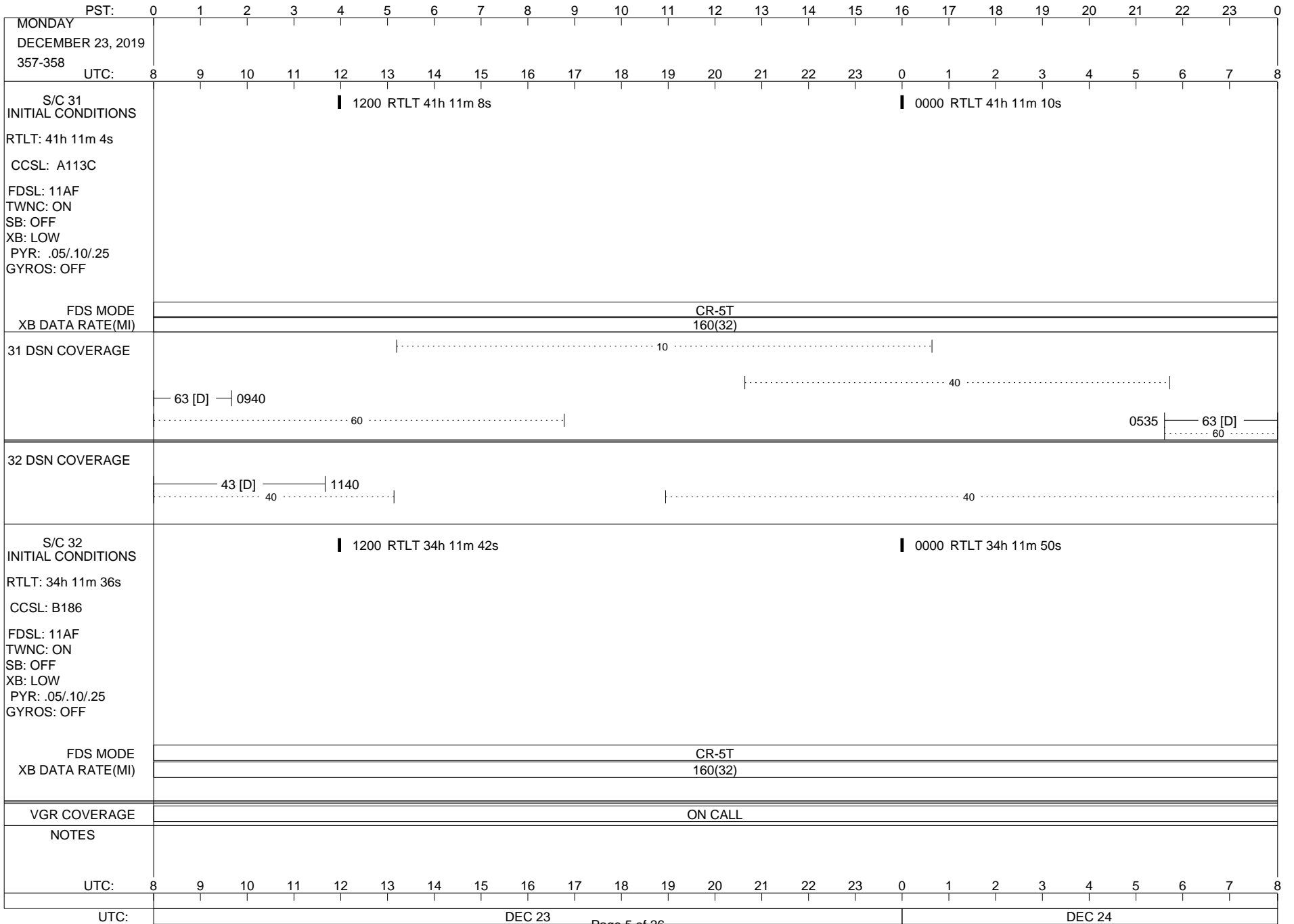
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UTC:

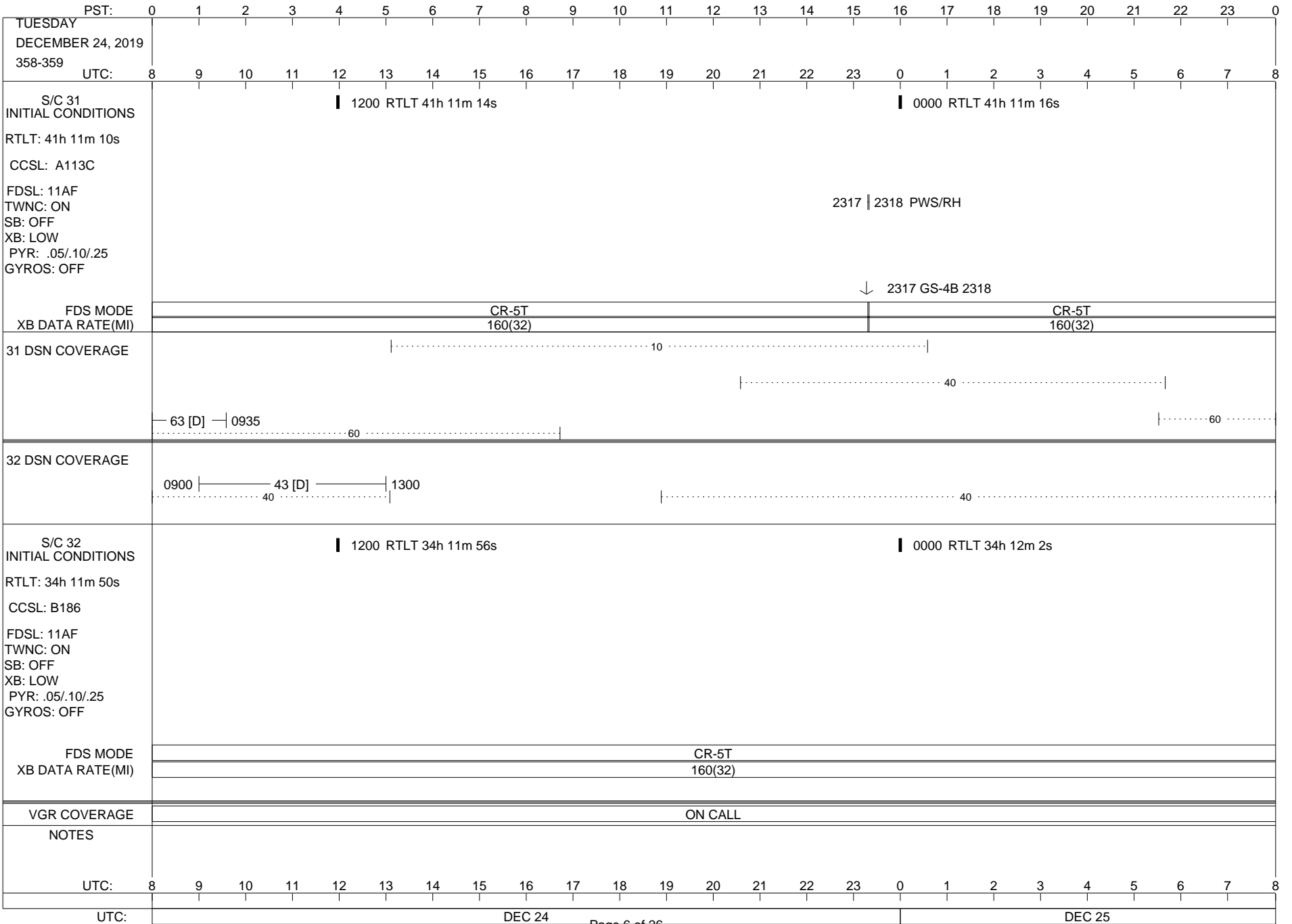
DEC 22

DEC 23

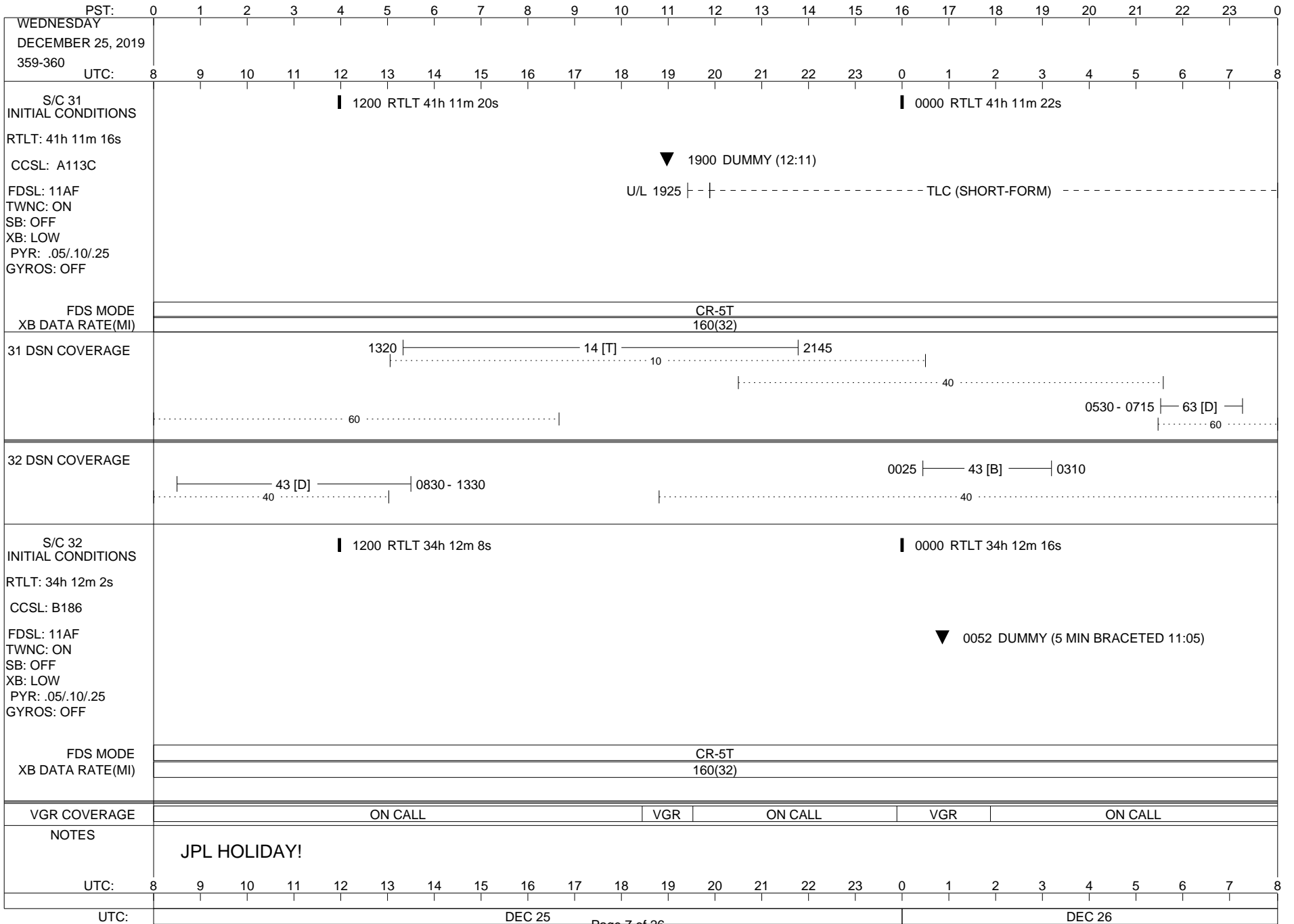
ISSUE DATE: 12/30/19 13:04



ISSUE DATE: 12/30/19 13:04



ISSUE DATE: 12/30/19 13:04

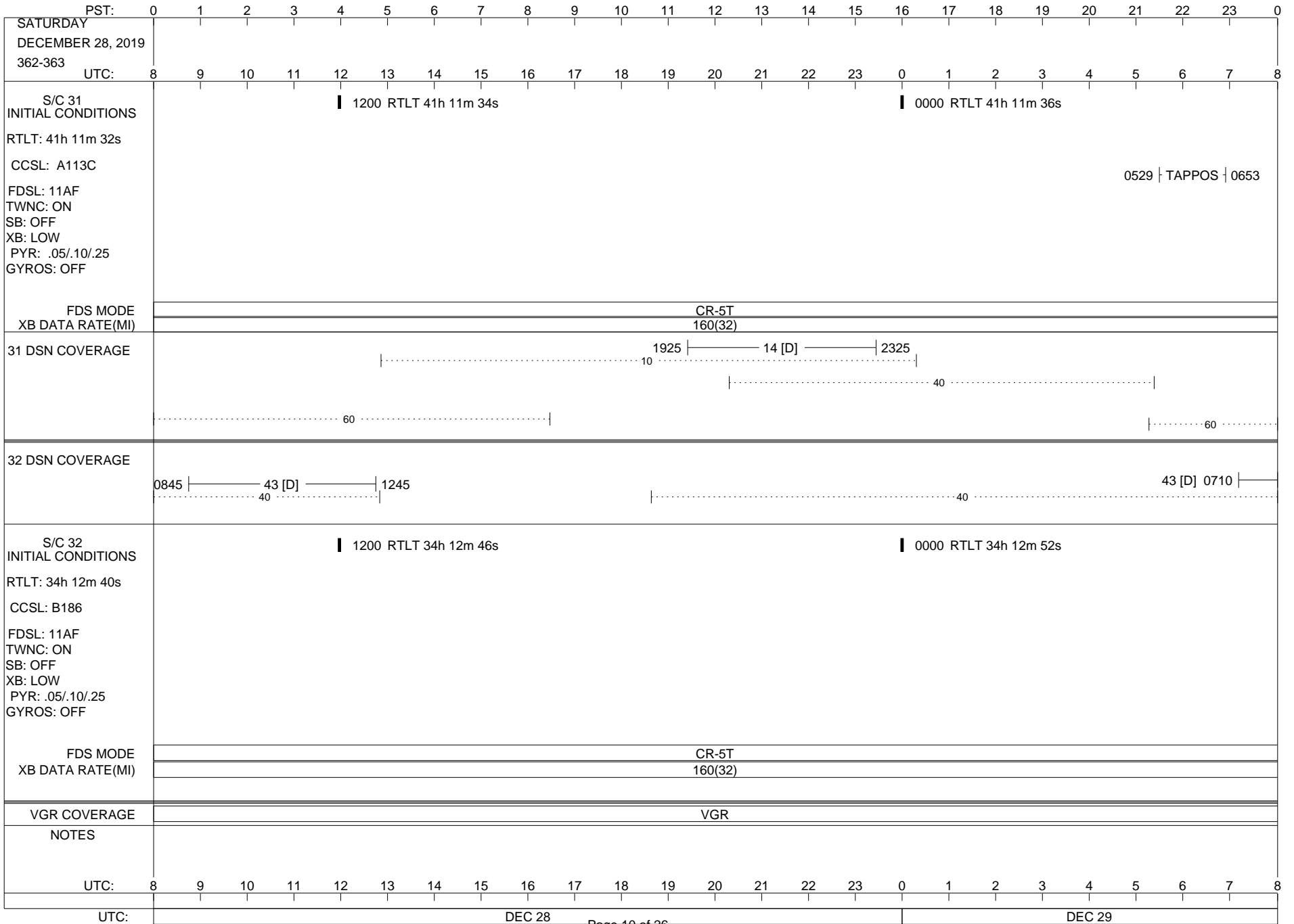


ISSUE DATE: 12/30/19 13:04

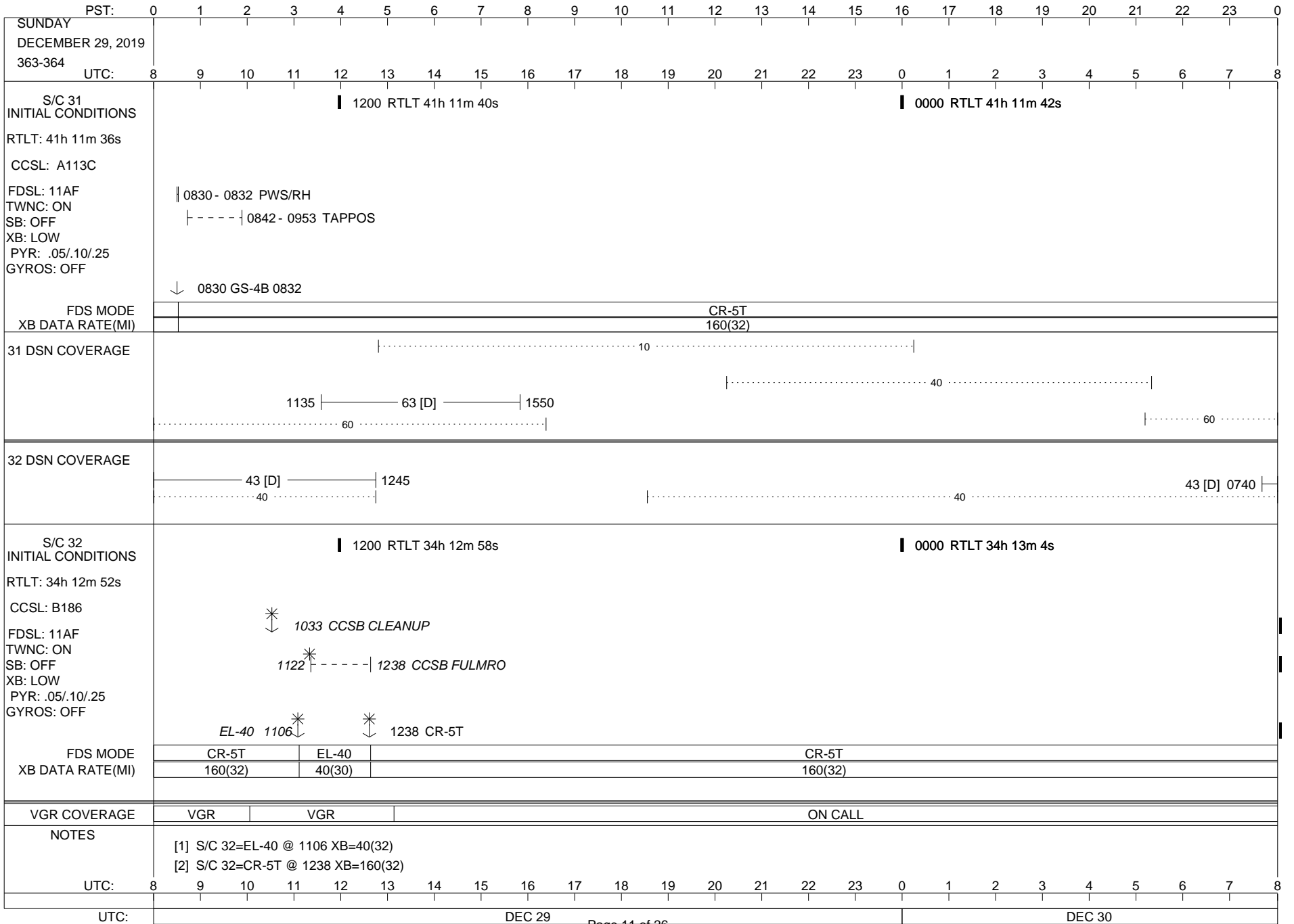
PST:	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	0
THURSDAY DECEMBER 26, 2019 360-361																									
UTC:	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	0	1	2	3	4	5	6	7	8
S/C 31 INITIAL CONDITIONS RTLT: 41h 11m 22s CCSL: A113C FDSL: 11AF TWNC: ON SB: OFF XB: LOW PYR: .05/.10/.25 GYROS: OFF	█ 1200 RTLT 41h 11m 24s												█ 0000 RTLT 41h 11m 28s												
----- TLC (SHORT-FORM) -----												0229 TAPPOS 0407 0530 0532 PWS/RH 0542 TAPPOS 0707 0530 GS-4B 0532 ↓													
FDS MODE	CR-5T												CR-5T												
XB DATA RATE(MI)	160(32)												160(32)												
31 DSN COVERAGE	----- 10 -----												2140 ----- 43 [D] ----- 0330 ----- 40 -----												
	----- 60 -----												----- 60 -----												
32 DSN COVERAGE	----- 43 [D] ----- 0830 - 1255 ----- 40 -----												----- 40 -----												
S/C 32 INITIAL CONDITIONS RTLT: 34h 12m 16s CCSL: B186 FDSL: 11AF TWNC: ON SB: OFF XB: LOW PYR: .05/.10/.25 GYROS: OFF	█ 1200 RTLT 34h 12m 22s												█ 0000 RTLT 34h 12m 28s												
FDS MODE	CR-5T												CR-5T												
XB DATA RATE(MI)	160(32)												160(32)												
VGR COVERAGE	ON CALL																								
NOTES	JPL HOLIDAY!																								
UTC:	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	0	1	2	3	4	5	6	7	8
UTC:	DEC 26												DEC 27												

PST:	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	0
FRIDAY DECEMBER 27, 2019 361-362	UTC: 8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	0	1	2	3	4	5	6	7	8
S/C 31 INITIAL CONDITIONS RTLT: 41h 11m 28s CCSL: A113C FDSL: 11AF TWNC: ON SB: OFF XB: LOW PYR: .05/.10/.25 GYROS: OFF	1200 RTLT 41h 11m 30s												0000 RTLT 41h 11m 32s												
FDS MODE XB DATA RATE(MI)	CR-5T 160(32)																								
31 DSN COVERAGE	1135 ----- 63 [D] ----- 1635												40 ----- 40 -----												
32 DSN COVERAGE	0845 ----- 43 [D] ----- 1255												0005 ----- 43 [H] ----- 0310												
S/C 32 INITIAL CONDITIONS RTLT: 34h 12m 28s CCSL: B186 FDSL: 11AF TWNC: ON SB: OFF XB: LOW PYR: .05/.10/.25 GYROS: OFF	1200 RTLT 34h 12m 34s												0000 RTLT 34h 12m 40s												
FDS MODE XB DATA RATE(MI)	CR-5T 160(32)												▼ 0019 CCSB CLEANUP (10:32) ▼ 0053 EL-40 CCSB FULMRO (11:05)												
VGR COVERAGE	ON CALL												VGR						VGR						
NOTES																									
UTC: 8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	0	1	2	3	4	5	6	7	8	
UTC:	DEC 27												Page 9 of 26						DEC 28						

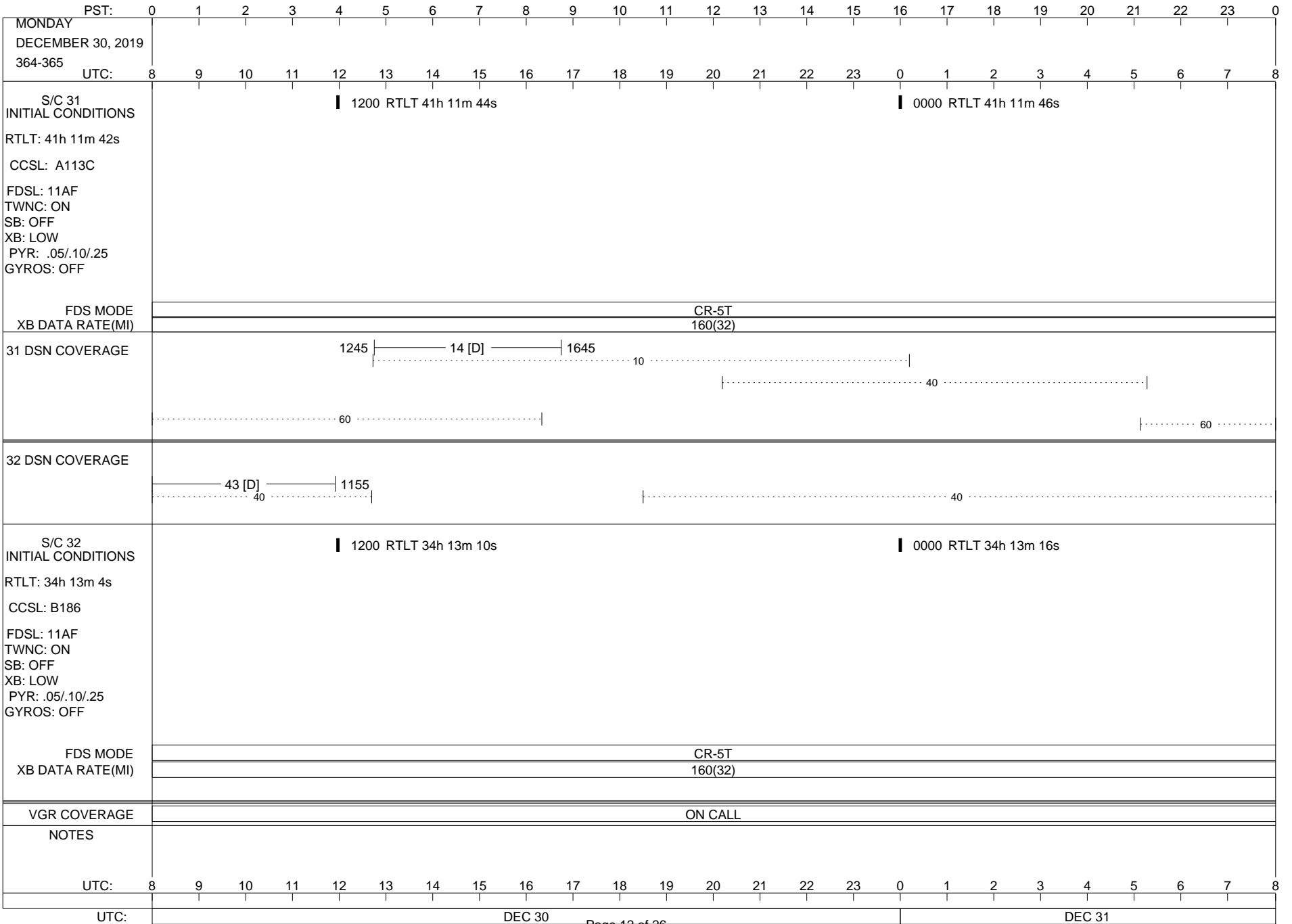
ISSUE DATE: 12/30/19 13:04



ISSUE DATE: 12/30/19 13:04



ISSUE DATE: 12/30/19 13:04



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

TUESDAY
DECEMBER 31, 2019
365-001

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

S/C 31
INITIAL CONDITIONS
RTLTL: 41h 11m 46s
CCSL: A113C
FDSL: 11AF
TWNC: ON
SB: OFF
XB: LOW
PYR: .05/.10/.25
GYROS: OFF

1200 RTLTL 41h 11m 48s

0000 RTLTL 41h 11m 50s

1210 DUMMY (05:22)

U/L 1235 | - |

TLC (SHORT-FORM)

2254 | 2254 PWS/RH

2306 | ----- DTR MAINT -----

0430
0434 | - - TAPPOS - - - |

0708

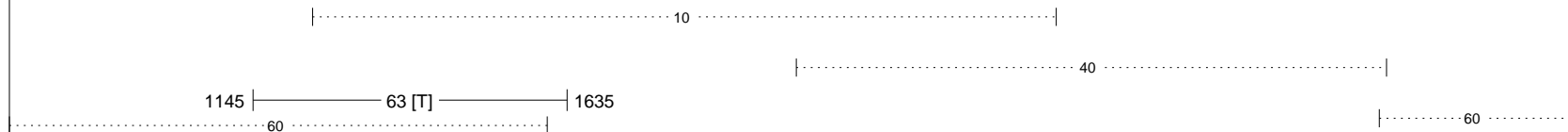
↓ 2254 GS-4B 2254

FDS MODE
XB DATA RATE(MI)

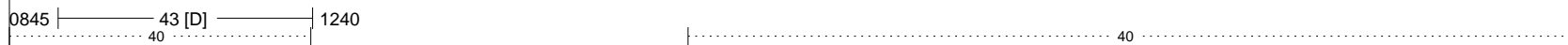
CR-5T
160(32)

CR-5T
160(32)

31 DSN COVERAGE



32 DSN COVERAGE



S/C 32
INITIAL CONDITIONS

RTLTL: 34h 13m 16s
CCSL: B186
FDSL: 11AF
TWNC: ON
SB: OFF
XB: LOW
PYR: .05/.10/.25
GYROS: OFF

1200 RTLTL 34h 13m 20s

0000 RTLTL 34h 13m 26s

FDS MODE
XB DATA RATE(MI)

CR-5T
160(32)

VGR COVERAGE

ON CALL

VGR

ON CALL

NOTES

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

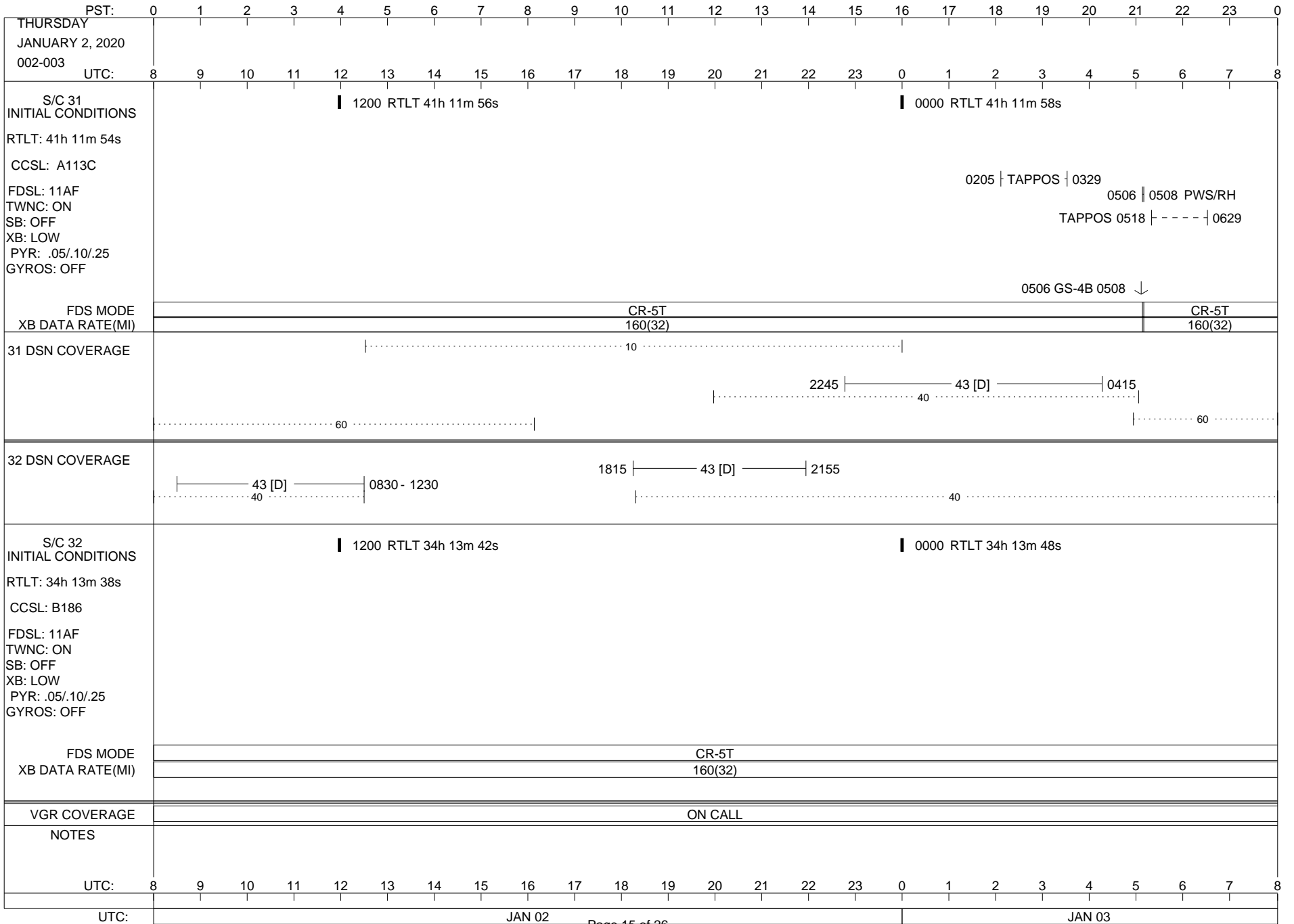
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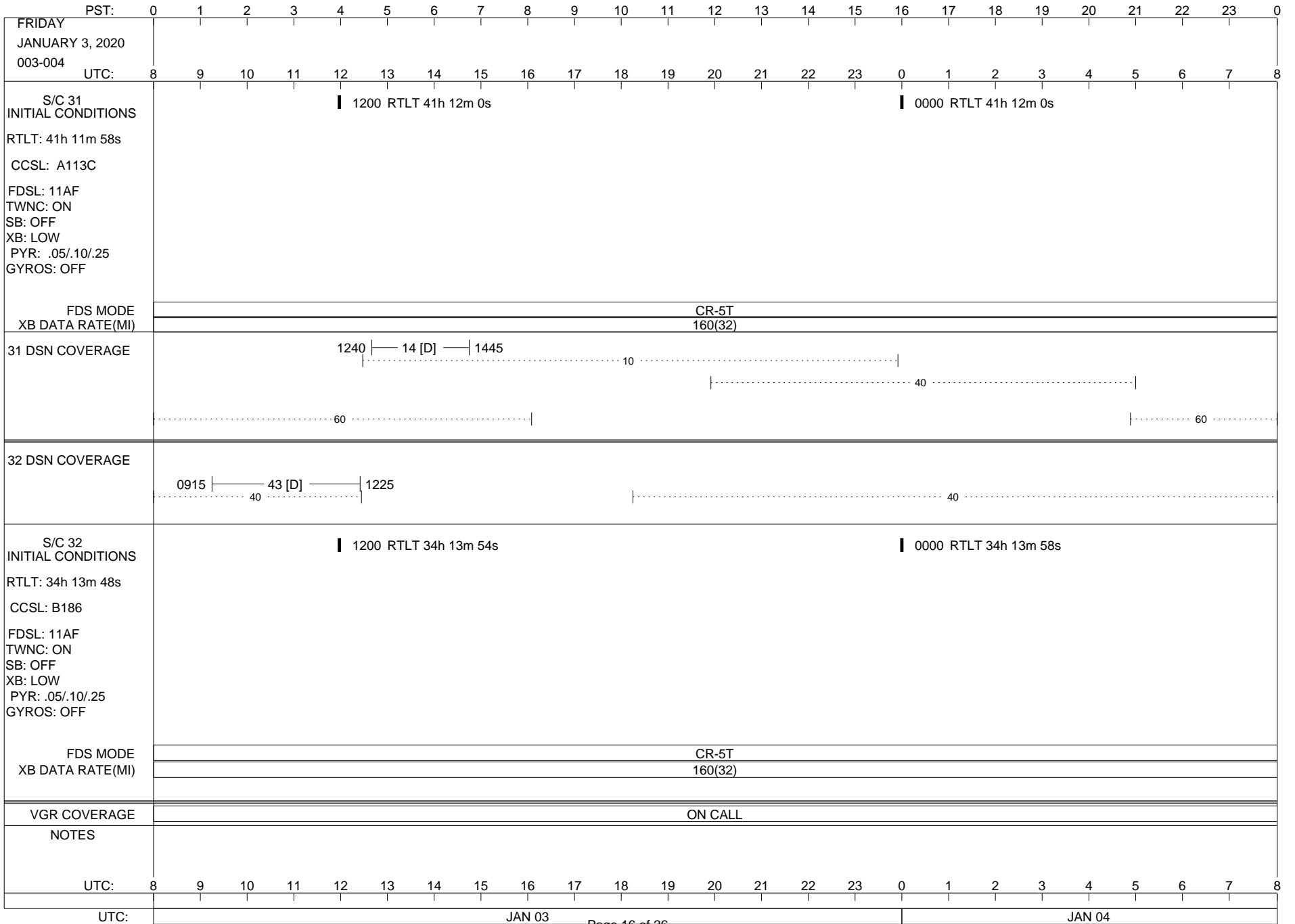
DEC 31

JAN 01

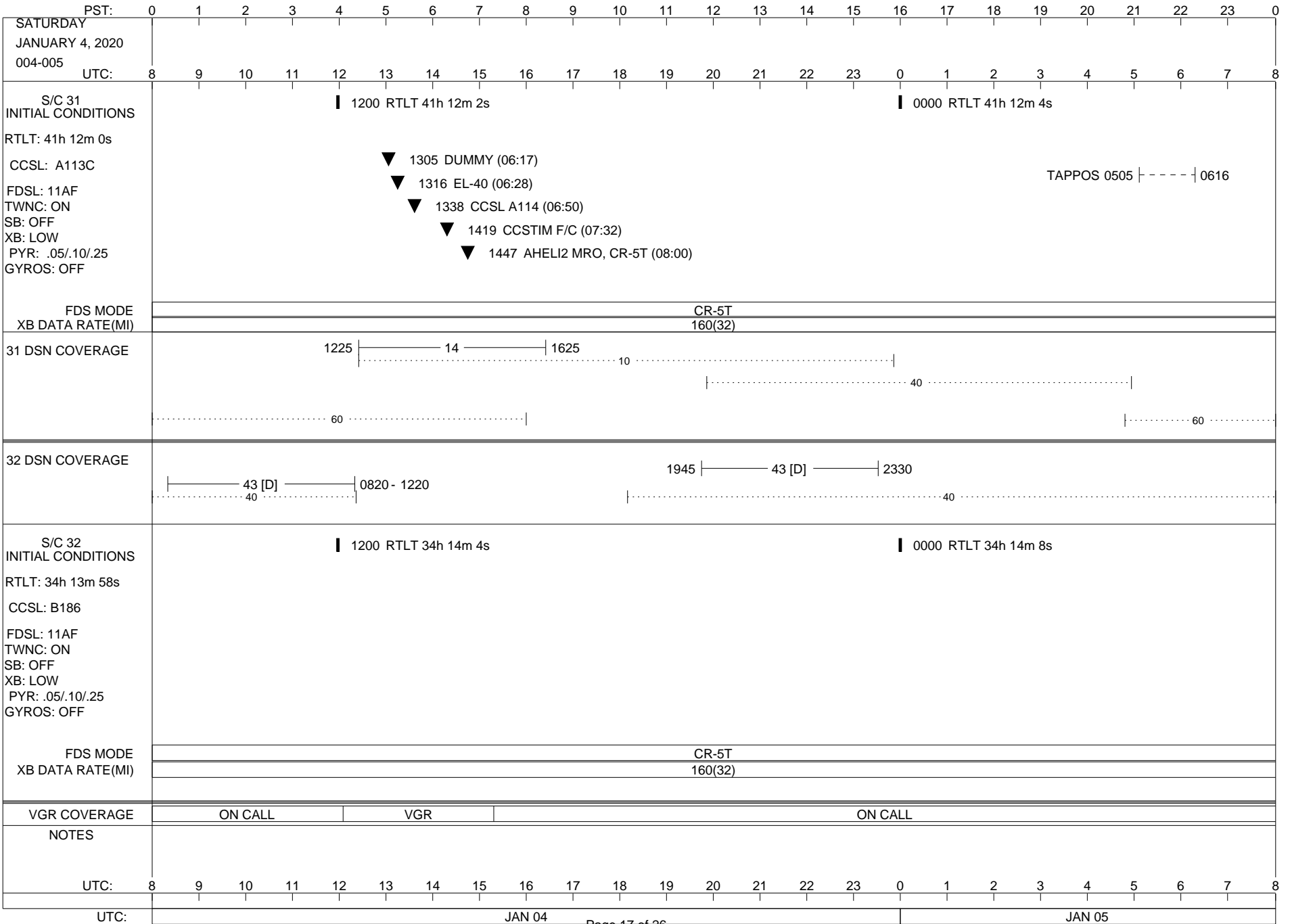
ISSUE DATE: 12/30/19 13:04

PST: 0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 0	
WEDNESDAY JANUARY 1, 2020 001-002	
UTC: 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 0 1 2 3 4 5 6 7 8	
S/C 31 INITIAL CONDITIONS RTL: 41h 11m 50s CCSL: A113C FDSL: 11AF TWNC: ON SB: OFF XB: LOW PYR: .05/10/25 GYROS: OFF	<p>1200 RTLT 41h 11m 52s</p> <p>0000 RTLT 41h 11m 54s</p> <p>----- TLC (SHORT-FORM) -----</p> <p>- 0715 D/L - </p> <p>1445 --- MAGCAL --- 1747</p> <p>1445 --- PESCAL --- 1805</p>
FDS MODE XB DATA RATE(MI)	CR-5T 160(32)
31 DSN COVERAGE	<p>1235 ----- 14 [D] ----- 1815</p> <p>----- 60 -----</p> <p>----- 40 -----</p> <p>0500 - 0715 ----- 63 [D] ----- </p> <p>----- 60 -----</p>
32 DSN COVERAGE	<p>43 [Bo] ----- 0810 - 1230 ----- </p> <p>----- 40 -----</p> <p>----- 40 -----</p>
S/C 32 INITIAL CONDITIONS RTL: 34h 13m 26s CCSL: B186 FDSL: 11AF TWNC: ON SB: OFF XB: LOW PYR: .05/10/25 GYROS: OFF	<p>1200 RTLT 34h 13m 32s</p> <p>0000 RTLT 34h 13m 38s</p> <p>▼ 0852 DUMMY (5 MIN BRACKETED 19:06)</p>
FDS MODE XB DATA RATE(MI)	CR-5T 160(32)
VGR COVERAGE	VGR ON CALL
NOTES	JPL HOLIDAY!
UTC: 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 0 1 2 3 4 5 6 7 8	
UTC: JAN 01 Page 14 of 26 JAN 02	

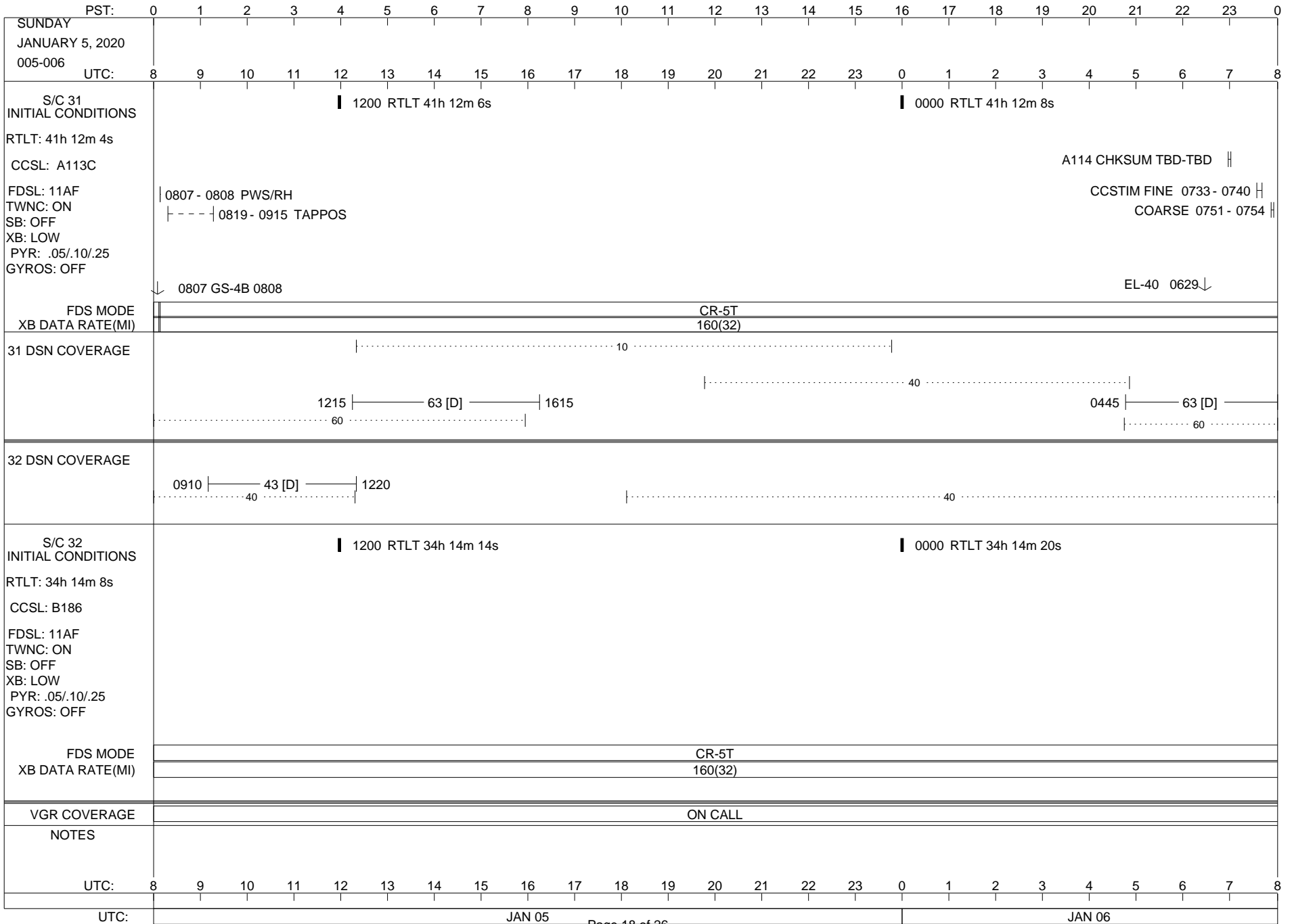




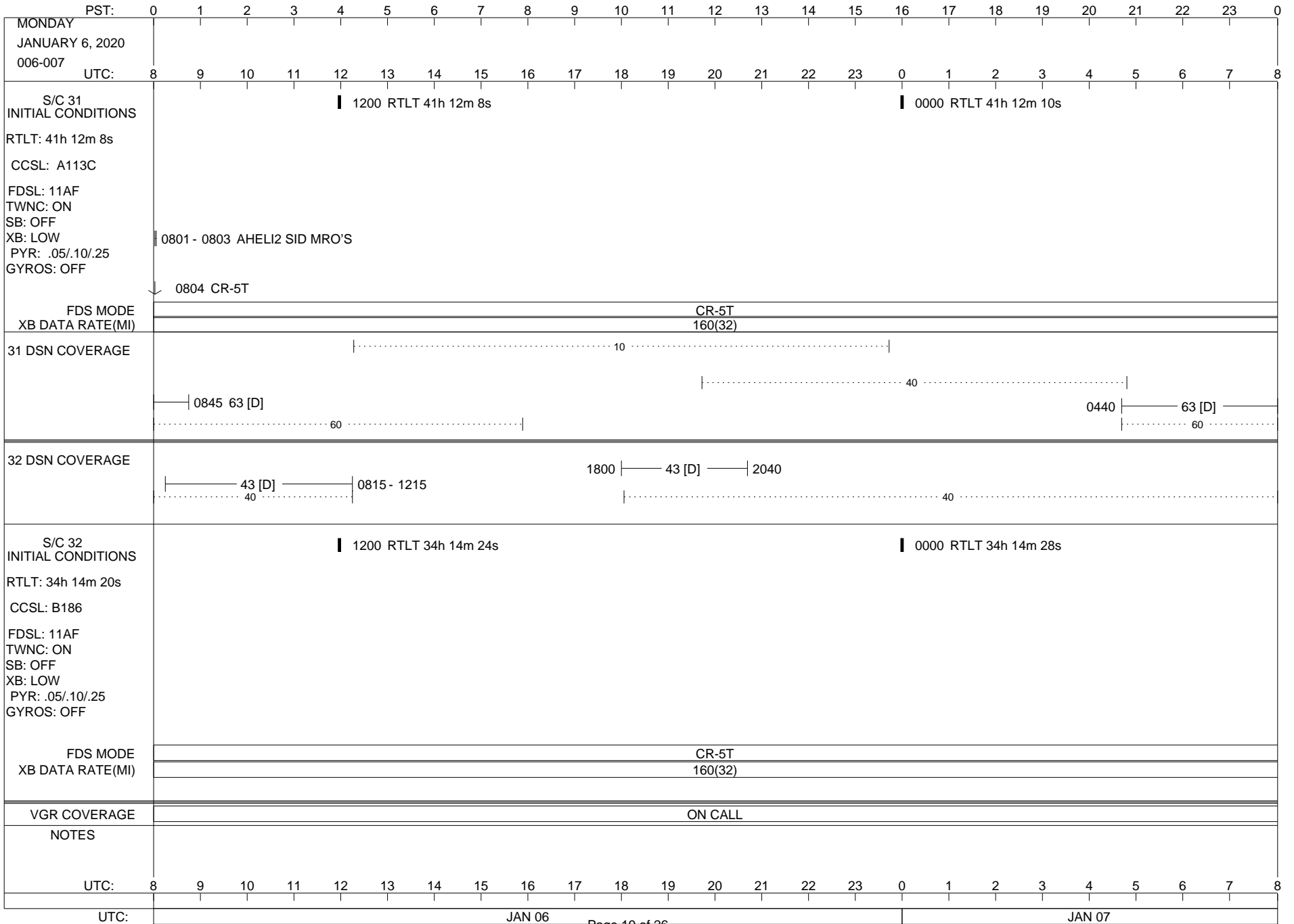
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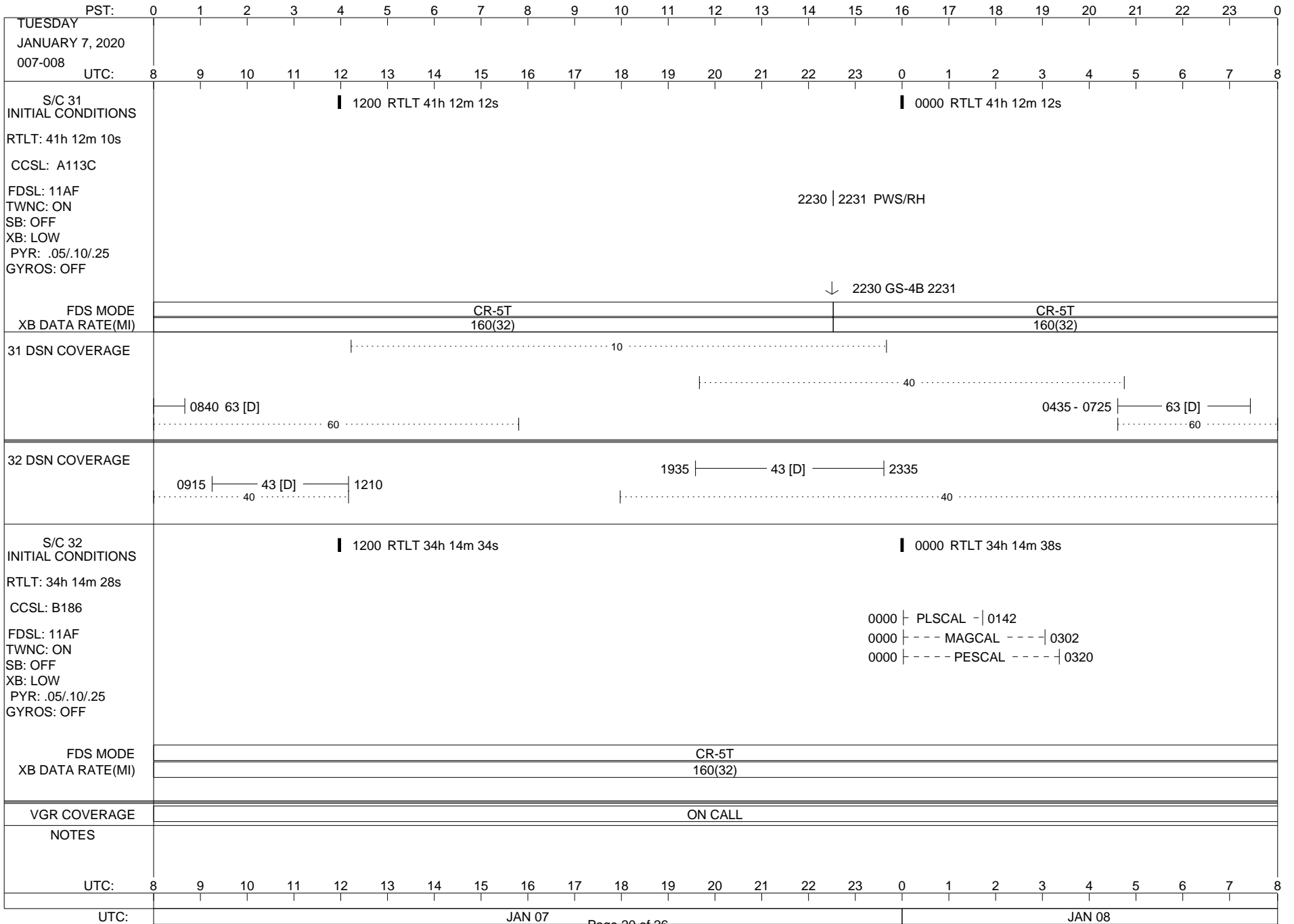


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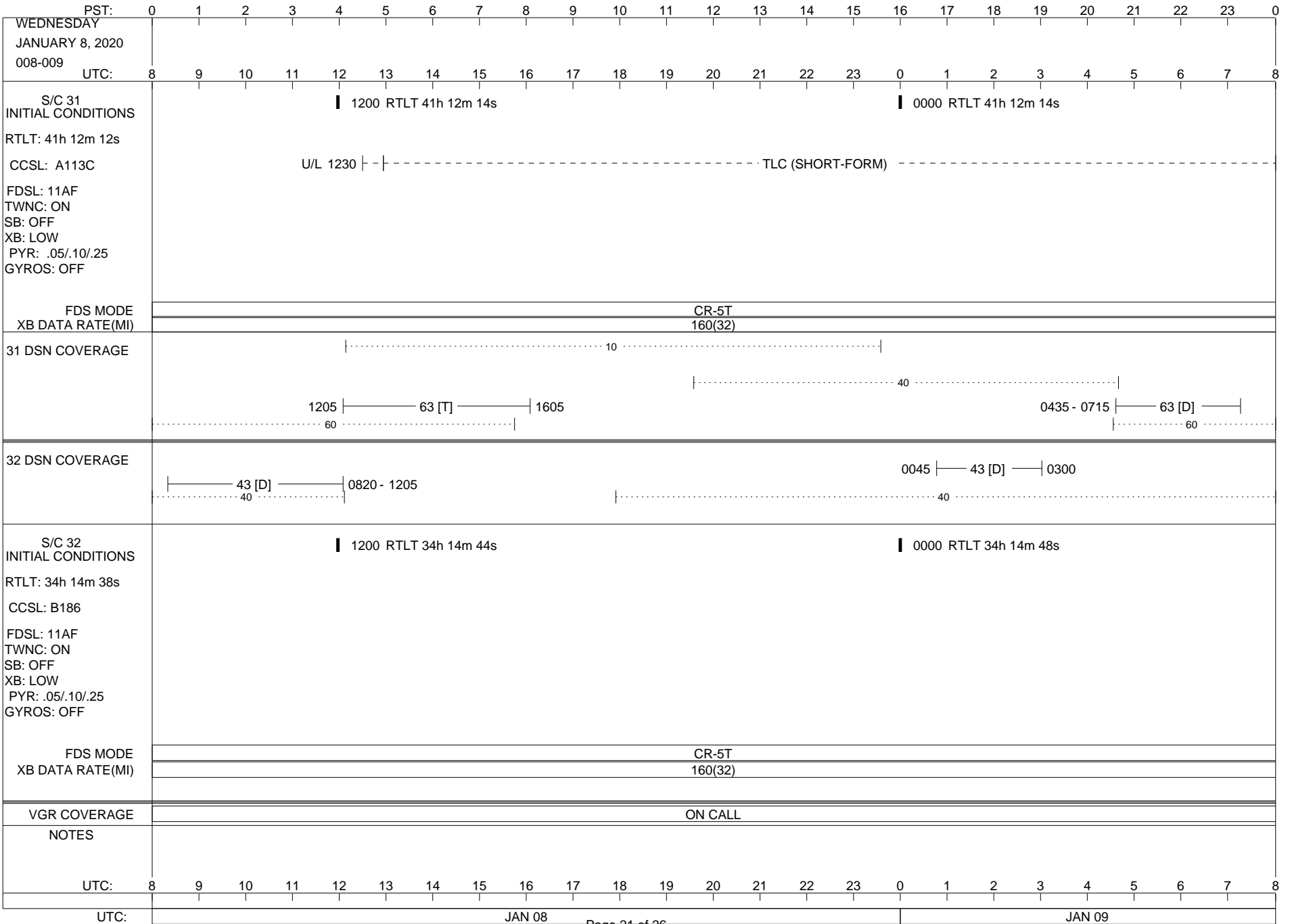


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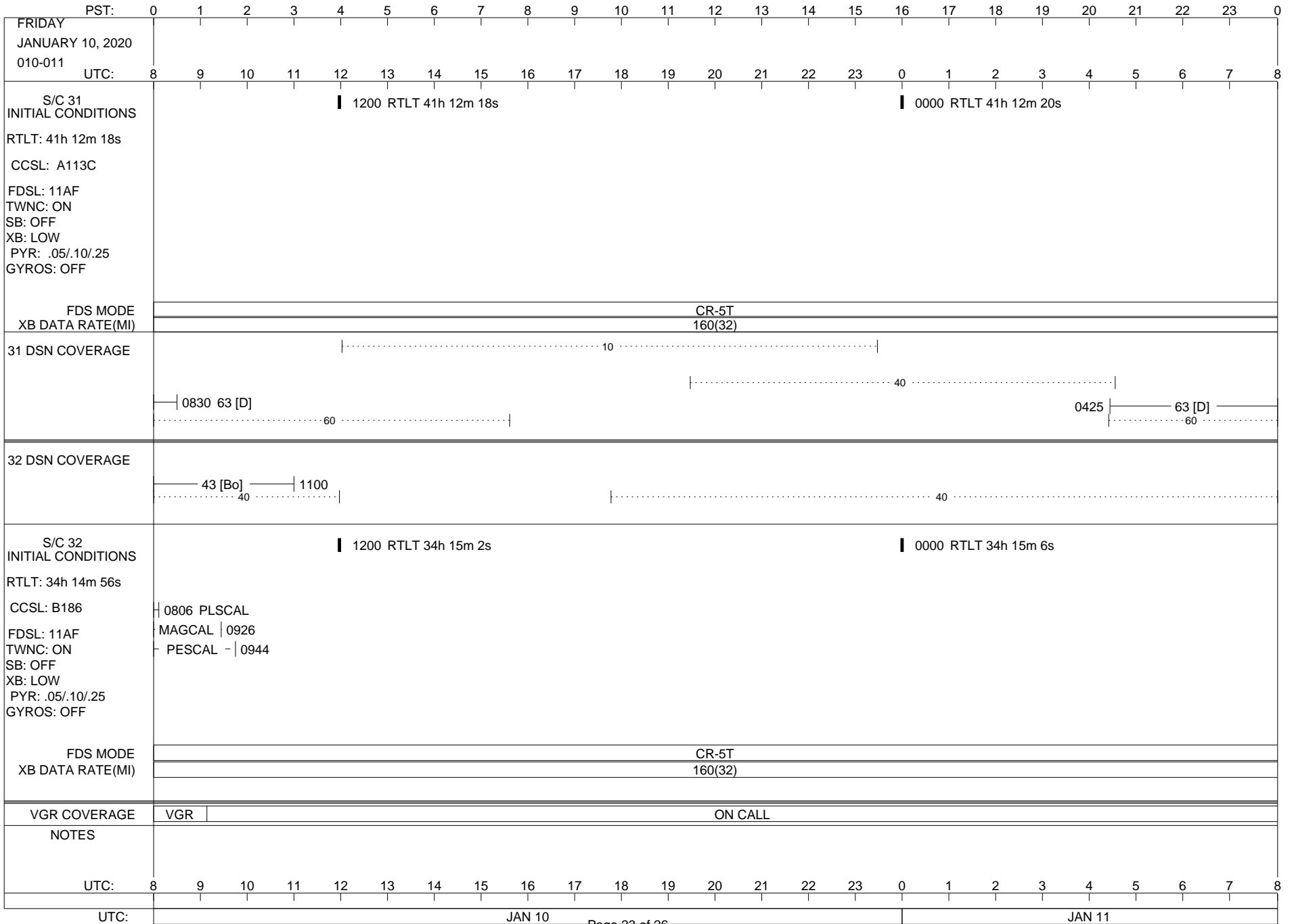


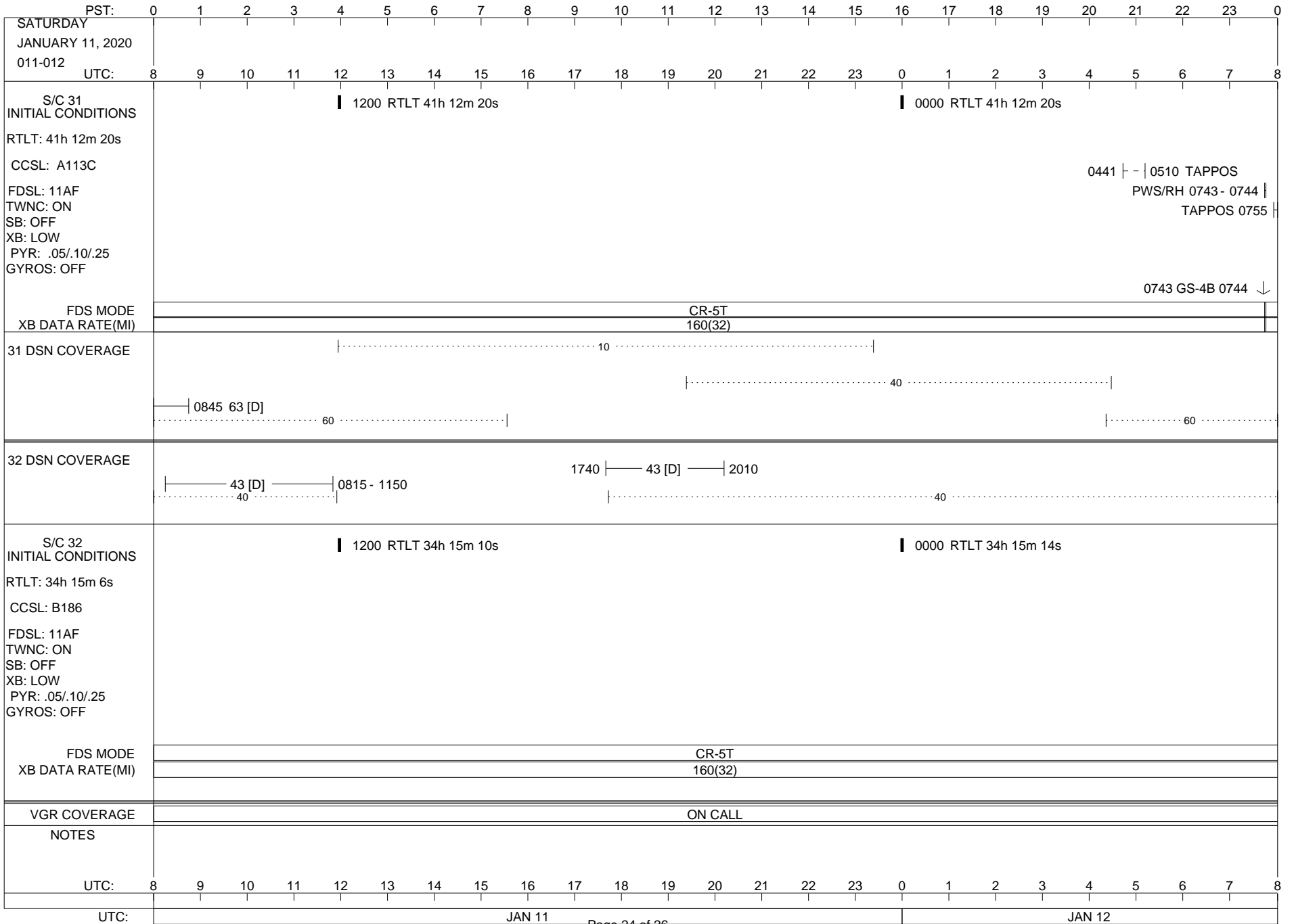


ISSUE DATE: 12/30/19 13:04

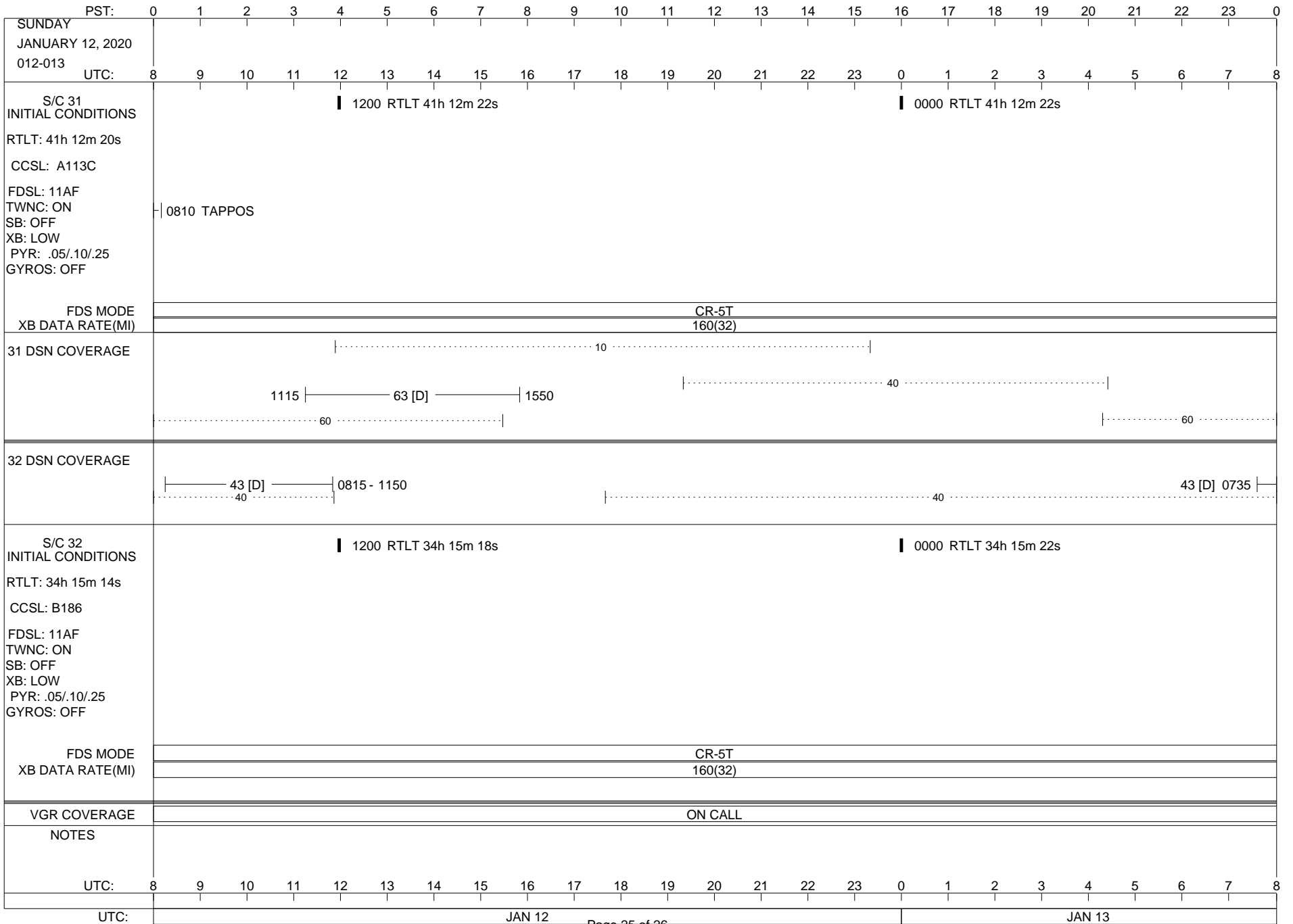


PST:	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	0
THURSDAY JANUARY 9, 2020 009-010	UTC: 8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	0	1	2	3	4	5	6	7	8
S/C 31 INITIAL CONDITIONS RTLTL: 41h 12m 14s CCSL: A113C FDSL: 11AF TWNC: ON SB: OFF XB: LOW PYR: .05/10/25 GYROS: OFF	1200 RTLTL 41h 12m 16s												0000 RTLTL 41h 12m 18s												
FDS MODE	CR-5T												CR-5T												
XB DATA RATE(MI)	160(32)												160(32)												
31 DSN COVERAGE10.....40.....												
60.....												0430 ----- 63 [D] -----60.....												
32 DSN COVERAGE40.....40.....												
												0545 ----- 43 [Bo] -----												
S/C 32 INITIAL CONDITIONS RTLTL: 34h 14m 48s CCSL: B186 FDSL: 11AF TWNC: ON SB: OFF XB: LOW PYR: .05/10/25 GYROS: OFF	1200 RTLTL 34h 14m 52s												0000 RTLTL 34h 14m 56s												
FDS MODE	CR-5T												CR-5T												
XB DATA RATE(MI)	160(32)												160(32)												
VGR COVERAGE	ON CALL																							VGR	
NOTES																									
UTC: 8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	0	1	2	3	4	5	6	7	8	
UTC:	JAN 09												JAN 10												





ISSUE DATE: 12/30/19 13:04



ISSUE DATE: 12/30/19 13:04

