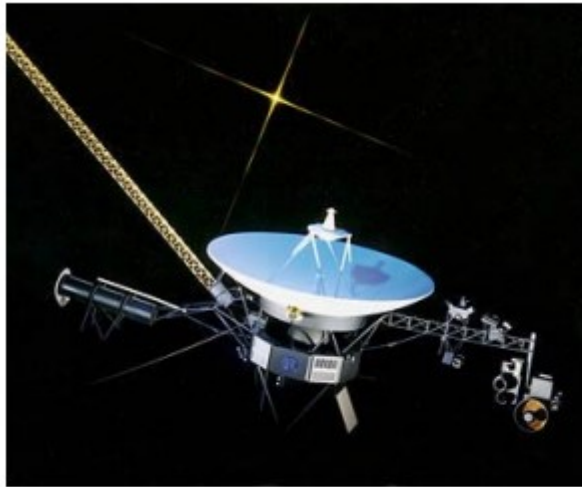


# VOYAGER

## Space Flight Operations Schedule (SFOS)

Issue Date: July 17, 2019

For the Period: 07/18/19 to 08/05/19 (19/199 – 19/217)



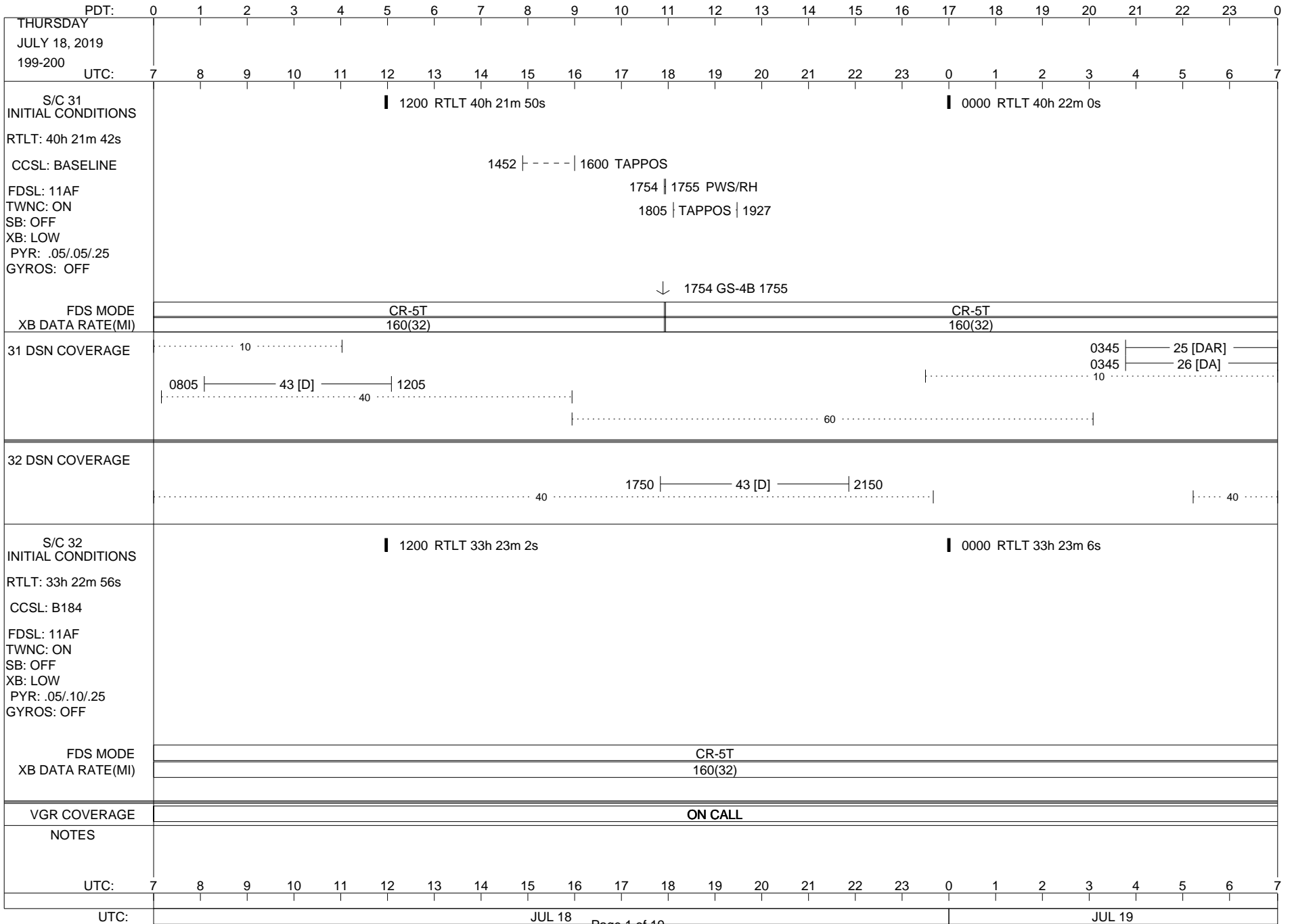
Posted at <https://voyager.jpl.nasa.gov/mission/status/>

**LEGEND:**

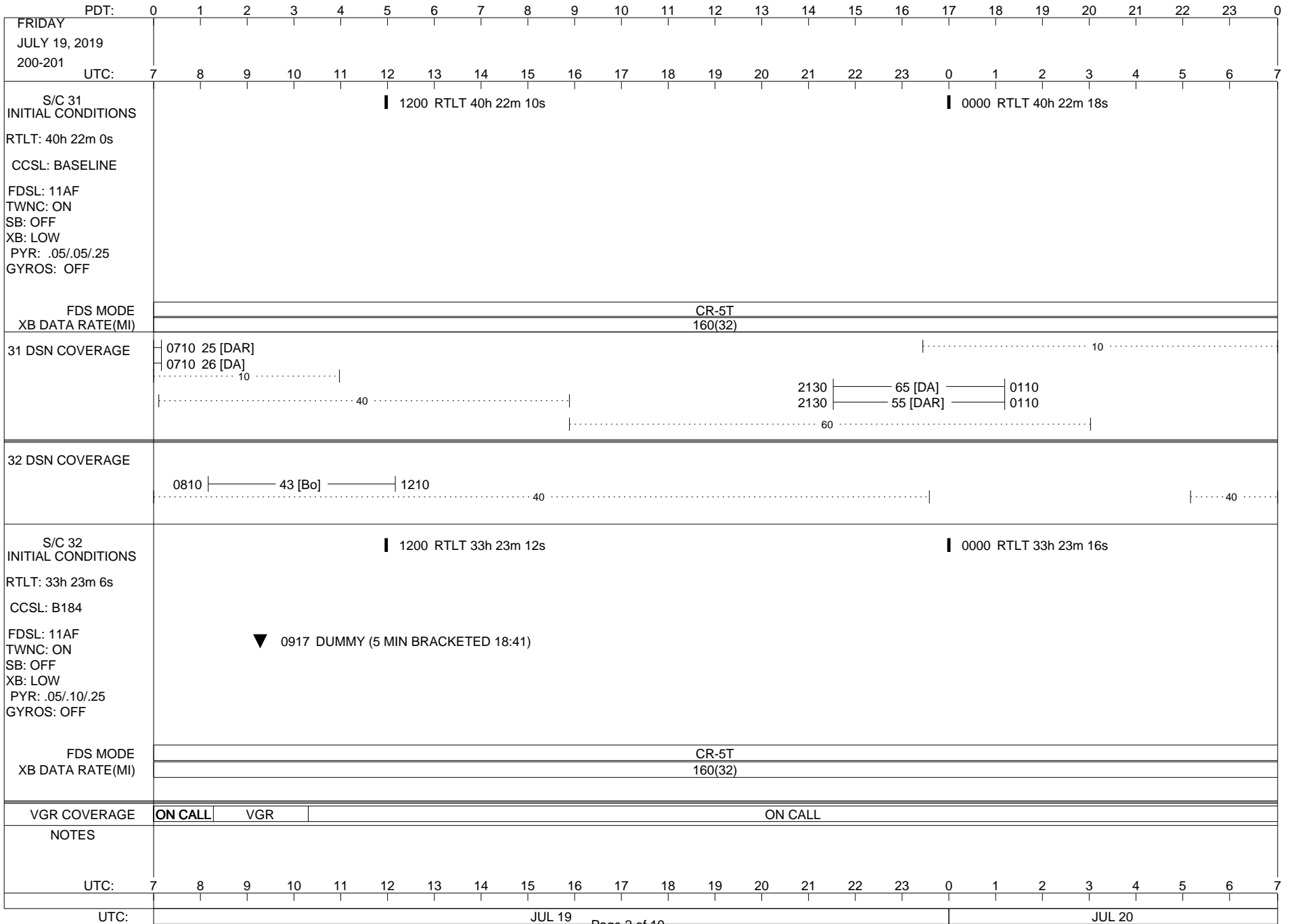
- ∇ = R/T Command (Last chance or Contingency)
- ▼ = R/T Command (Scheduled)
- \* = Result of R/T Command
- n = (where n = 1,2,3 ..) Special Note, see bottom of page
- A = Arrayed station
- B = BLF
- D = Downlink only pass
- H = High Power Transmitter
- R = Array Reference Antenna
- T = TLC Uplink
-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

02/27/19

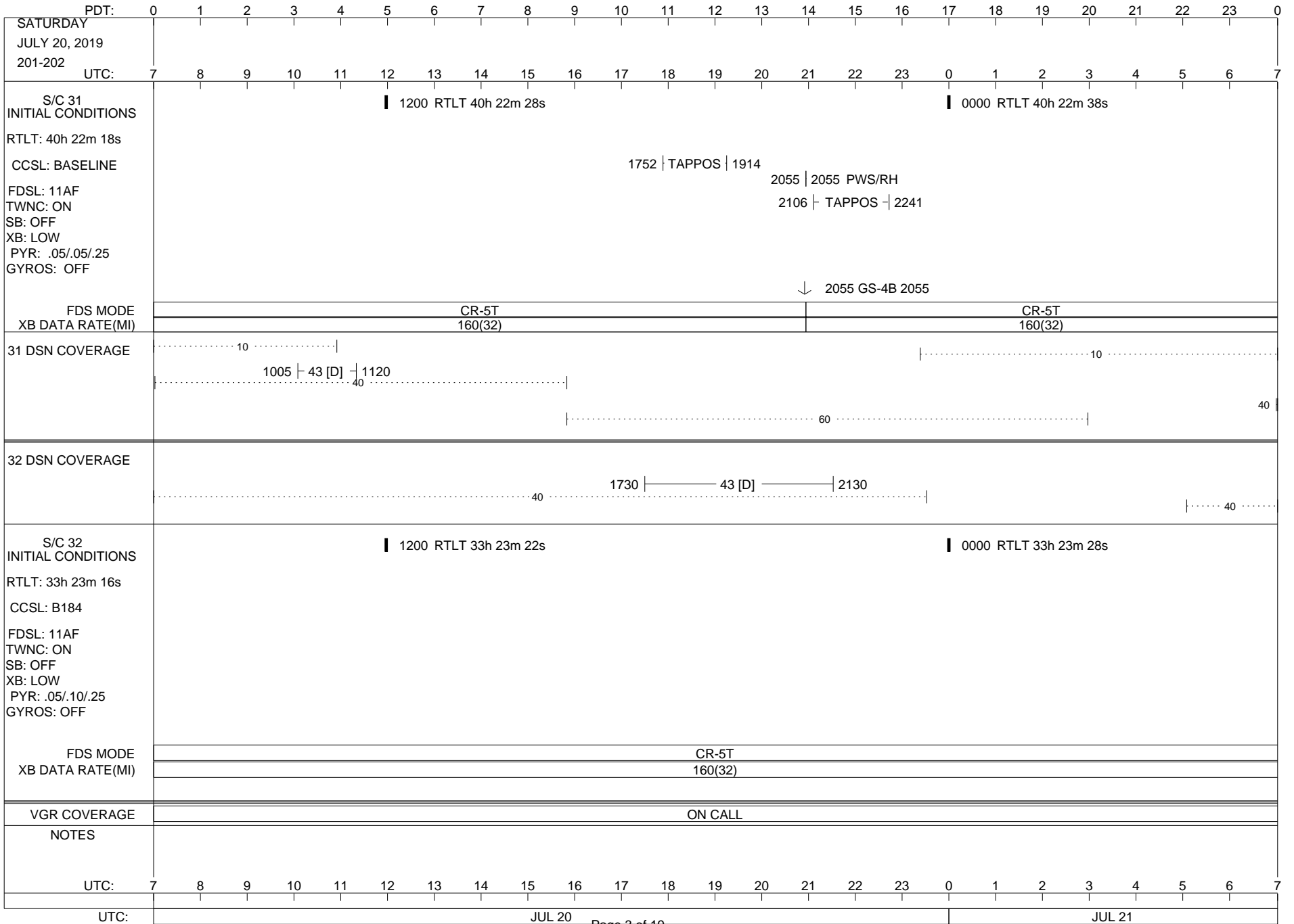
ISSUE DATE: 07/17/19 09:47



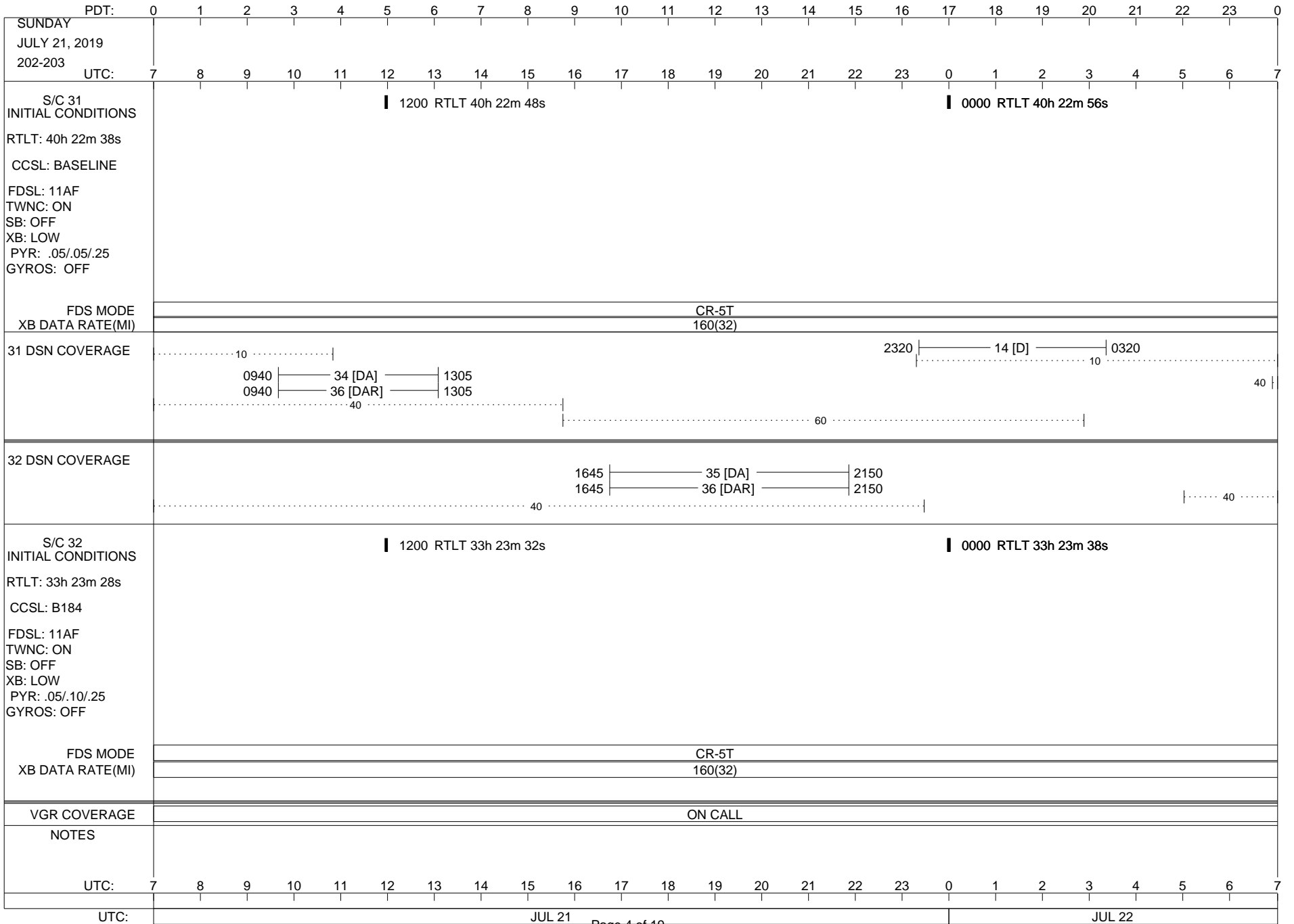
ISSUE DATE: 07/17/19 09:47



ISSUE DATE: 07/17/19 09:47



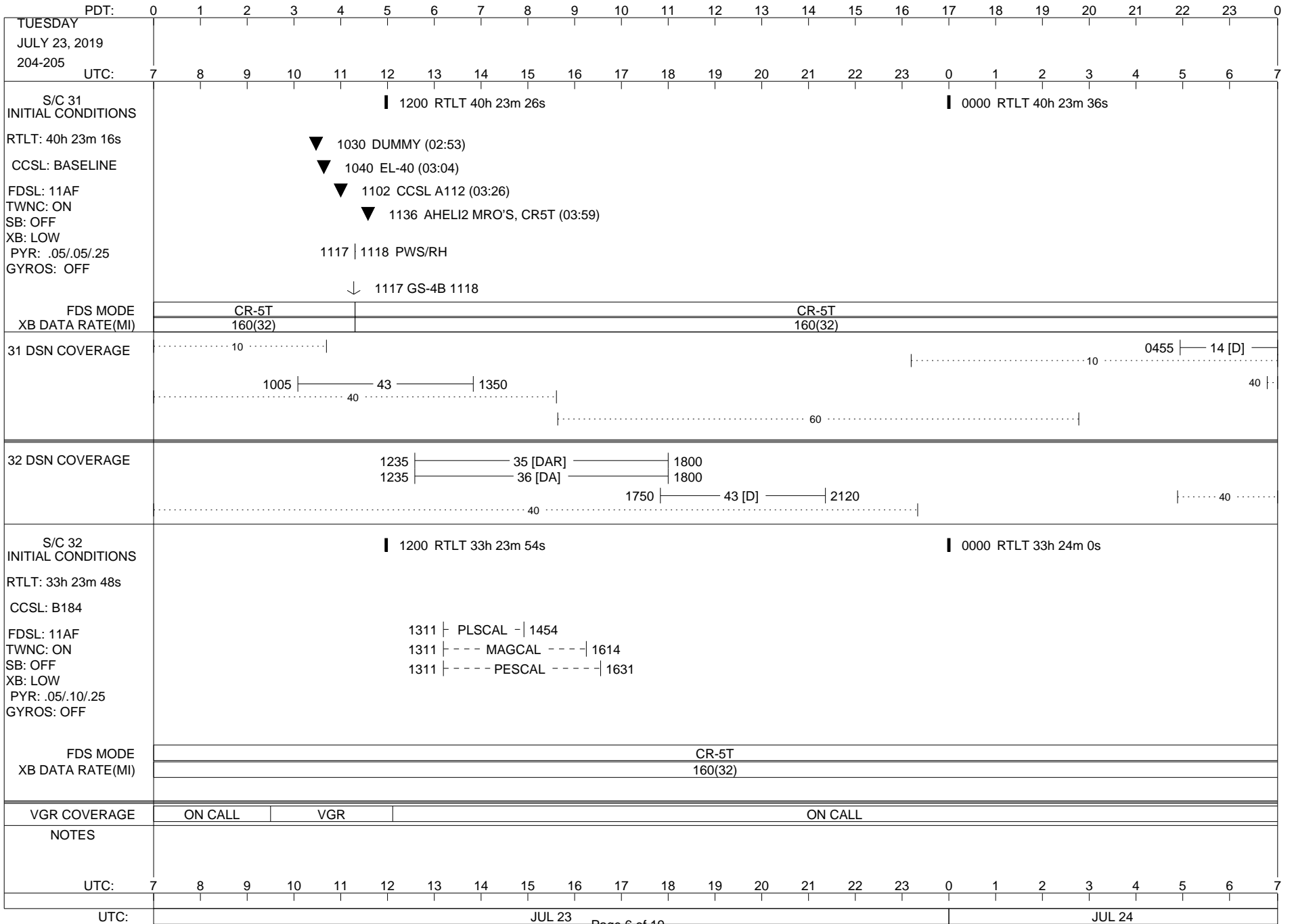
ISSUE DATE: 07/17/19 09:47



ISSUE DATE: 07/17/19 09:47

PDT:	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	
MONDAY JULY 22, 2019 203-204																										
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: 40h 22m 56s CCSL: BASELINE FDSL: 11AF TWNC: ON SB: OFF XB: LOW PYR: .05/.05/.25 GYROS: OFF	1200 RTLT 40h 23m 6s												0000 RTLT 40h 23m 16s													
FDS MODE													CR-5T													
XB DATA RATE(MI)													160(32)													
31 DSN COVERAGE	..... 10 .....										..... 10 .....															
	..... 40 .....										..... 40 .....															
	..... 60 .....										..... 60 .....															
	..... 40 .....										..... 40 .....															
32 DSN COVERAGE	----- 43 [o] -----  0730 - 1200										..... 40 .....															
	..... 40 .....										..... 40 .....															
S/C 32 INITIAL CONDITIONS RTLT: 33h 23m 38s CCSL: B184 FDSL: 11AF TWNC: ON SB: OFF XB: LOW PYR: .05/.10/.25 GYROS: OFF	1200 RTLT 33h 23m 44s												0000 RTLT 33h 23m 48s													
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:	JUL 22													JUL 23												

ISSUE DATE: 07/17/19 09:47

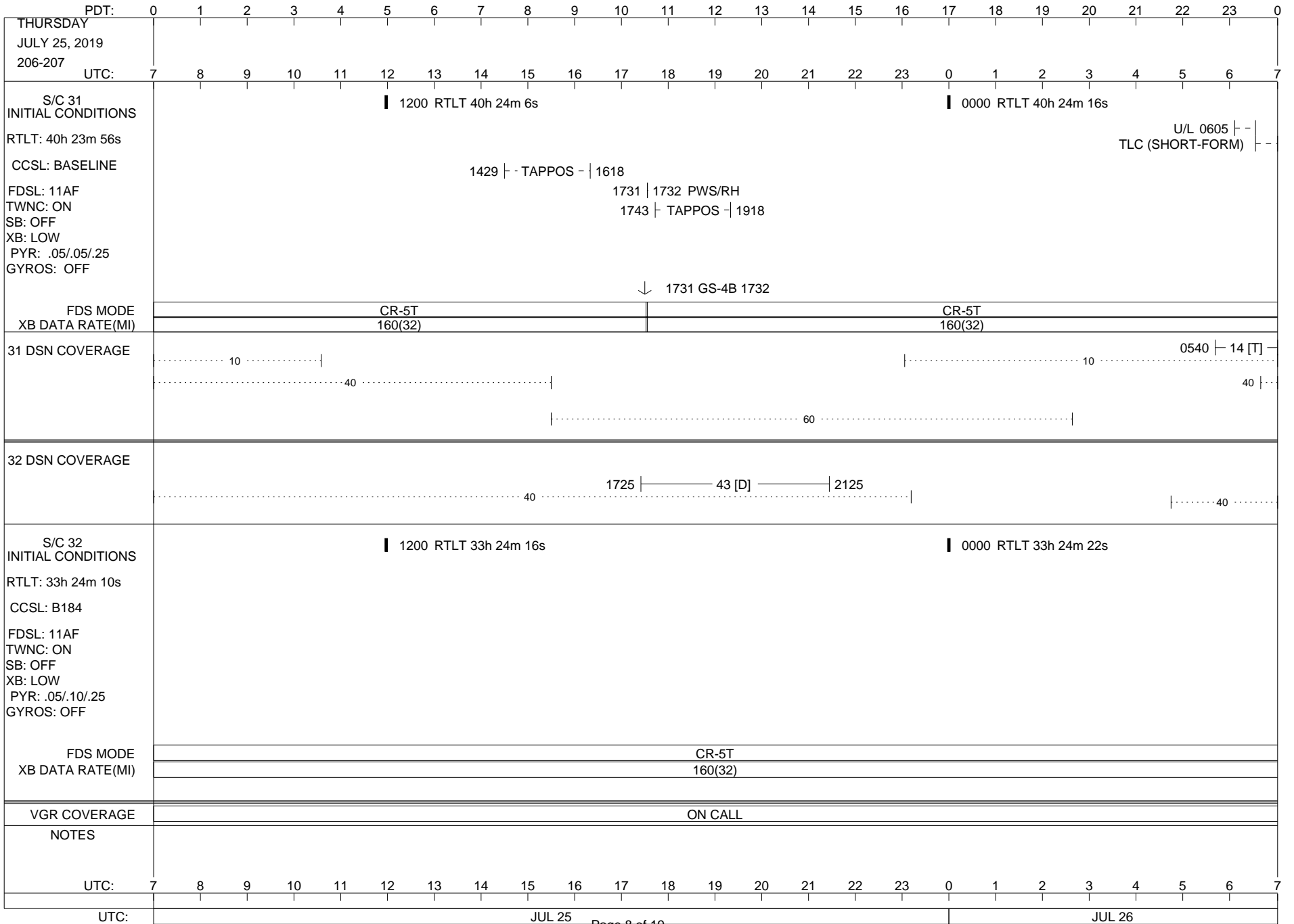


ISSUE DATE: 07/17/19 09:47

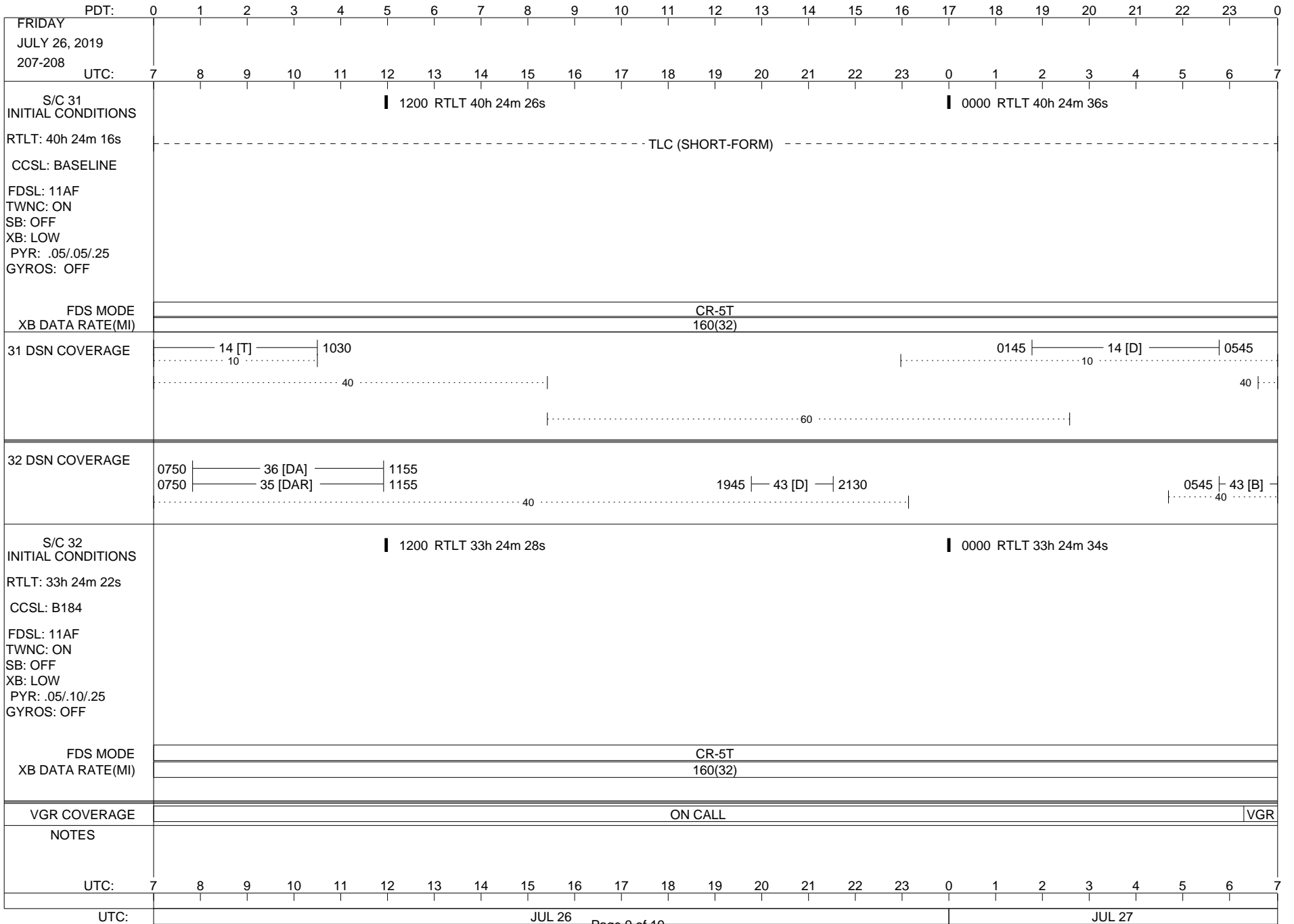
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WEDNESDAY JULY 24, 2019 205-206																									
UTC:	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	0	1	2	3	4	5	6	7
S/C 31 INITIAL CONDITIONS RTLT: 40h 23m 36s CCSL: BASELINE FDSL: 11AF TWNC: ON SB: OFF XB: LOW PYR: .05/.05/.25 GYROS: OFF	1200 RTLT 40h 23m 46s												0000 RTLT 40h 23m 56s												
FDS MODE	CR-5T												EL-40												
XB DATA RATE(MI)	160(32)												40(30)												
31 DSN COVERAGE	14 [D]   0955 .....  .....40.....												0010   14 [D]   0410  .....  .....60.....												
32 DSN COVERAGE	.....40.....1740   43 [D]   2140												.....40.....												
S/C 32 INITIAL CONDITIONS RTLT: 33h 24m 0s CCSL: B184 FDSL: 11AF TWNC: ON SB: OFF XB: LOW PYR: .05/.10/.25 GYROS: OFF	1200 RTLT 33h 24m 6s												0000 RTLT 33h 24m 10s												
FDS MODE	CR-5T																								
XB DATA RATE(MI)	160(32)																								
VGR COVERAGE	ON CALL												VGR ON CALL												
NOTES	[1] S/C 31=EL-40 XB=40(30) @ 0305 [2] SC 31=CR-5T XB=160(32) @ 0405																								
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:	JUL 24												JUL 25												



ISSUE DATE: 07/17/19 09:47



ISSUE DATE: 07/17/19 09:47



ISSUE DATE: 07/17/19 09:47

PDT:	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 JULY 27, 2019 208-209																									
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 40h 24m 46s												0000 RTLT 40h 24m 56s												
RTLT: 40h 24m 36s	----- TLC (SHORT-FORM) -----   D/L -   2357																								
CSSL: BASELINE													BEGIN SEQUENCED A112 0520 ↓												
FDSL: 11AF													1729   TAPPOS   1905												
TWNC: ON													2032   2033 PWS/RH												
SB: OFF													2043   TAPPOS   2205												
XB: LOW													↓ 2031 GS-4B 2033												
PYR: .05/.05/.25																									
GYROS: OFF																									
FDS MODE	CR-5T												CR-5T												
XB DATA RATE(MI)	160(32)												160(32)												
31 DSN COVERAGE	..... 10 .....												..... 10 ..... 14 [D] 0620												
	..... 40 .....												..... 40												
													2230   65 [DAR]   0035												
													2230   54 [DA]   0035												
													..... 60 .....												
32 DSN COVERAGE	----- 43 [B] -----   1000												..... 40 .....												
	..... 40 .....												..... 40 .....												
S/C 32 INITIAL CONDITIONS	1200 RTLT 33h 24m 40s												0000 RTLT 33h 24m 46s												
RTLT: 33h 24m 34s																									
CSSL: B184																									
FDSL: 11AF	▼ 0717 DUMMY (5 MIN BRACKETED 16:42)																								
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
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:	JUL 27												JUL 28												

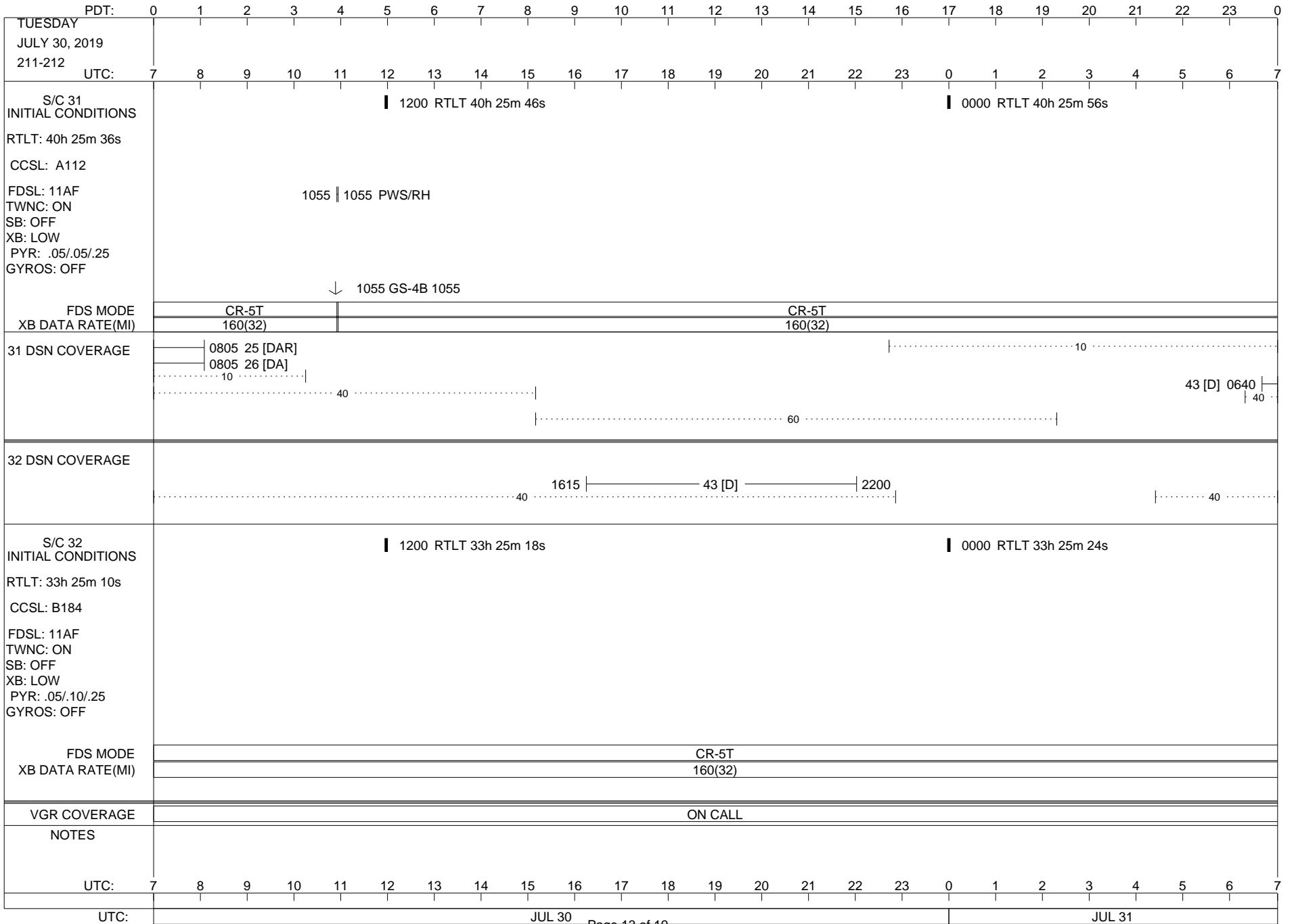
ISSUE DATE: 07/17/19 09:47

PDT:	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	
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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: 40h 24m 56s CCSL: A112 FDSL: 11AF TWNC: ON SB: OFF XB: LOW PYR: .05/.05/.25 GYROS: OFF	1200 RTLT 40h 25m 6s												0000 RTLT 40h 25m 16s													
	↓ 0734 SS HTR A OFF												BAY 1 HTR OFF 0247 ↓													
	↓ 0735 SS HTR B ON												AC GYROS ON 0247 ↓													
													CONDITIONING 0247  ----  0347													
													GYROS OFF 0347 ↓													
													BAY 1 HTR ON 0356 ↓													
													↓ 0250 EL-40 0252													
FDS MODE	CR-5T												CR-5T													
XB DATA RATE(MI)	160(32)												160(32)													
31 DSN COVERAGE	14 [D]  -----  1020												0145  -----  14 [D]  -----  0545													
	-----10-----												-----10-----													
	-----40-----												-----40-----													
	-----60-----												-----60-----													
32 DSN COVERAGE	-----40-----												1630  -----  43 [D]  -----  2225													
	-----40-----												-----40-----													
43 [o] 0645													-----40-----													
S/C 32 INITIAL CONDITIONS RTLT: 33h 24m 46s CCSL: B184 FDSL: 11AF TWNC: ON SB: OFF XB: LOW PYR: .05/.10/.25 GYROS: OFF	1200 RTLT 33h 24m 52s												0000 RTLT 33h 24m 58s													
FDS MODE	CR-5T												CR-5T													
XB DATA RATE(MI)	160(32)												160(32)													
VGR COVERAGE	VGR	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:	JUL 28													JUL 29												

ISSUE DATE: 07/17/19 09:47

PDT:	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
MONDAY JULY 29, 2019 210-211	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: 40h 25m 16s CCSL: A112 FDSL: 11AF TWNC: ON SB: OFF XB: LOW PYR: .05/.05/.25 GYROS: OFF	1200 RTLT 40h 25m 26s												0000 RTLT 40h 25m 36s												
FDS MODE XB DATA RATE(MI)	CR-5T 160(32)																								
31 DSN COVERAGE	..... 10 .....												..... 10 .....												
	..... 40 .....												..... 40 .....												
	..... 60 .....												..... 60 .....												
32 DSN COVERAGE	..... 43 [o] .....  1045												..... 1935   43 [D]   2140 .....												
	..... 40 .....												..... 40 .....												
S/C 32 INITIAL CONDITIONS RTLTL: 33h 24m 58s CCSL: B184 FDSL: 11AF TWNC: ON SB: OFF XB: LOW PYR: .05/.10/.25 GYROS: OFF	1200 RTLT 33h 25m 4s												0000 RTLT 33h 25m 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:	JUL 29												JUL 30												

ISSUE DATE: 07/17/19 09:47



ISSUE DATE: 07/17/19 09:47

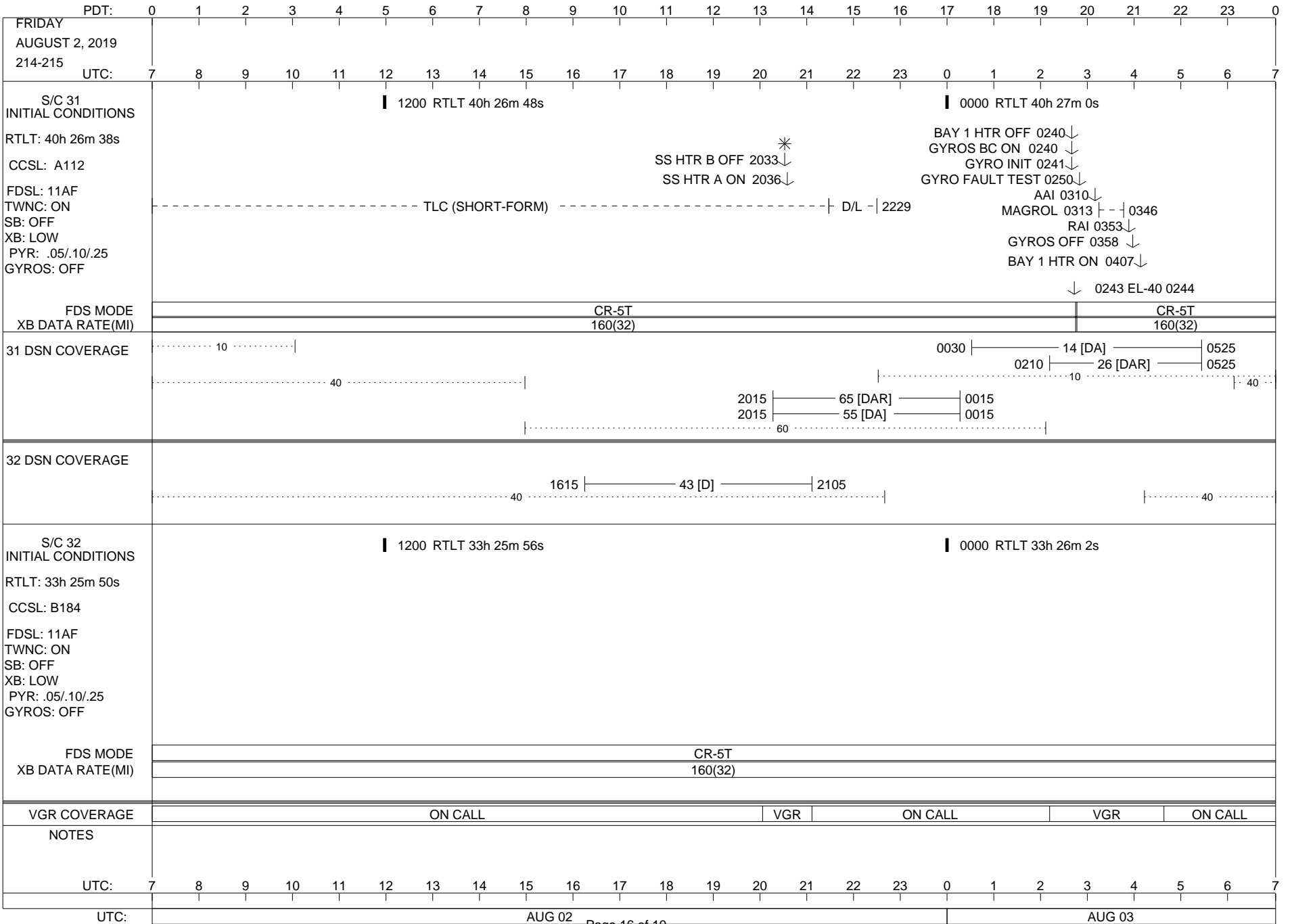
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WEDNESDAY JULY 31, 2019 212-213																										
UTC:	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	0	1	2	3	4	5	6	7	
S/C 31 INITIAL CONDITIONS RTLT: 40h 25m 56s CCSL: A112 FDSL: 11AF TWNC: ON SB: OFF XB: LOW PYR: .05/.05/.25 GYROS: OFF						1200																				
FDS MODE XB DATA RATE(MI)																										
31 DSN COVERAGE																										
32 DSN COVERAGE																										
S/C 32 INITIAL CONDITIONS RTLT: 33h 25m 24s CCSL: B184 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:																										

ISSUE DATE: 07/17/19 09:47

PDT:	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 AUGUST 1, 2019 213-214																												
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: 40h 26m 18s CCSL: A112 FDSL: 11AF TWNC: ON SB: OFF XB: LOW PYR: .05/.10/.25 GYROS: OFF	1200 RTLT 40h 26m 28s												0000 RTLT 40h 26m 38s															
----- TLC (SHORT-FORM) -----																												
1406   TAPPOS   1542														1709   1709 PWS/RH														
														1720   TAPPOS   1841														
														↓ 1708 GS-4B 1709														
FDS MODE	CR-5T												CR-5T															
XB DATA RATE(MI)	160(32)												160(32)															
31 DSN COVERAGE	0700 14 .....														..... 10 .....													
	..... 10 .....														..... 40 .....													
	..... 40 .....														..... 60 .....													
															2135   55 [DA]   0020													
															2135   54 [DAR]   0020													
32 DSN COVERAGE	0835   34 [oA]   1400														1400													
	0835   35 [DAR]   1400														1715   43 [D]   1955													
	..... 40 .....														..... 40 .....													
S/C 32 INITIAL CONDITIONS RTLTL: 33h 25m 36s CCSL: B184 FDSL: 11AF TWNC: ON SB: OFF XB: LOW PYR: .05/.10/.25 GYROS: OFF	1200 RTLT 33h 25m 42s												0000 RTLT 33h 25m 50s															
FDS MODE	CR-5T												CR-5T															
XB DATA RATE(MI)	160(32)												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:	AUG 01														AUG 02													

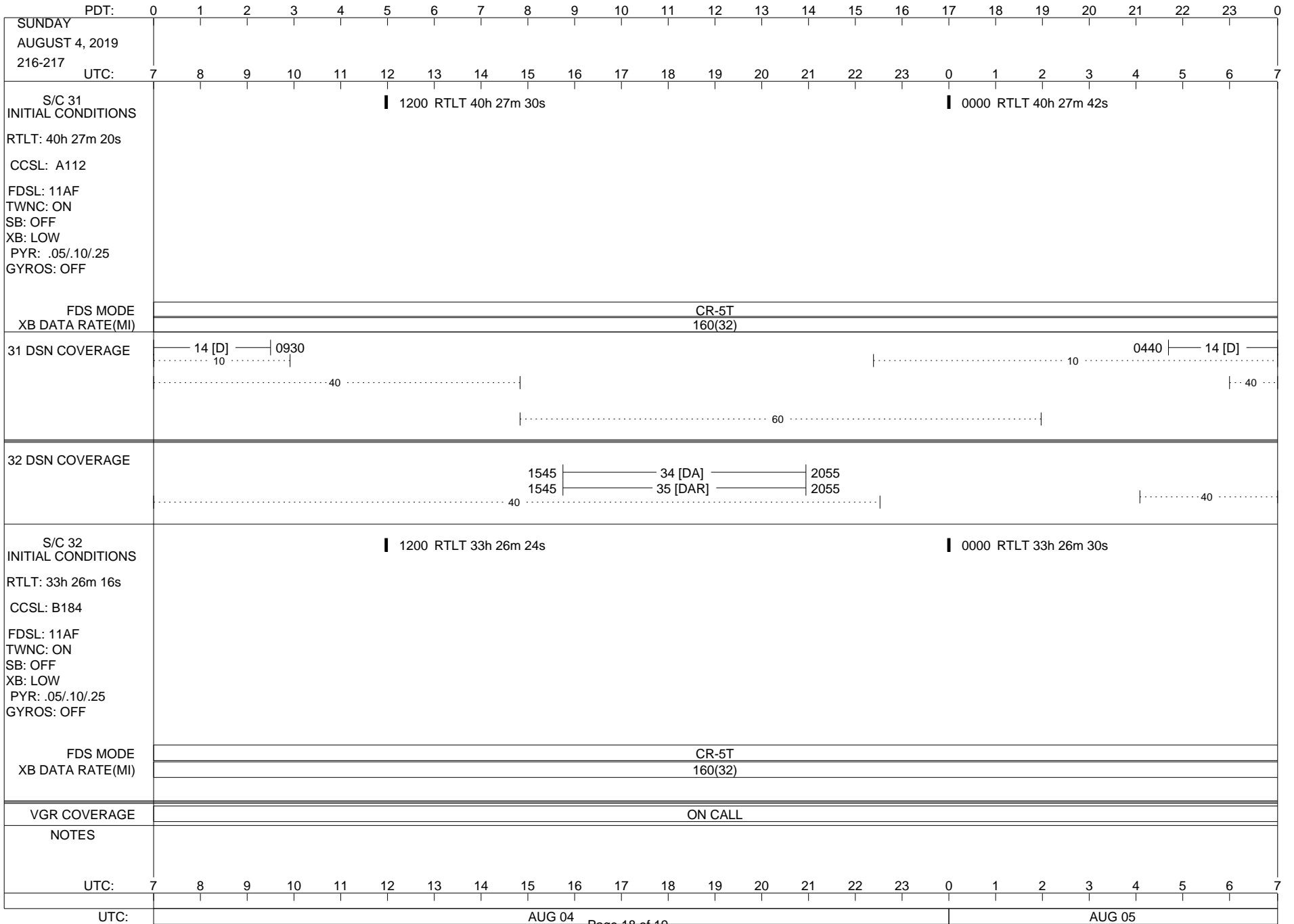


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PDT:	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	0
SATURDAY AUGUST 3, 2019 215-216	UTC: 7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	0	1	2	3	4	5	6	7
S/C 31 INITIAL CONDITIONS RTLTL: 40h 27m 0s CCSL: A112 FDSL: 11AF TWNC: ON SB: OFF XB: LOW PYR: .05/.10/.25 GYROS: OFF	1200 RTLT 40h 27m 10s												0000 RTLT 40h 27m 20s												
FDS MODE XB DATA RATE(MI)	CR-5T 160(32)												CR-5T 160(32)												
31 DSN COVERAGE	.....10..... .....40.....												.....60..... .....0425 -----14 [D]----- .....10..... .....40.....												
32 DSN COVERAGE	.....40..... .....1645 -----43 [D]----- .....2210												.....40.....												
S/C 32 INITIAL CONDITIONS RTLTL: 33h 26m 2s CCSL: B184 FDSL: 11AF TWNC: ON SB: OFF XB: LOW PYR: .05/.10/.25 GYROS: OFF	1200 RTLT 33h 26m 10s												0000 RTLT 33h 26m 16s												
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:	AUG 03												AUG 04												

ISSUE DATE: 07/17/19 09:47



ISSUE DATE: 07/17/19 09:47

PDT:	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		
MONDAY AUGUST 5, 2019 217-218																											
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: 40h 27m 42s CCSL: A112 FDSL: 11AF TWNC: ON SB: OFF XB: LOW PYR: .05/.10/.25 GYROS: OFF	<div style="text-align: center;"> <p>1200 RTLT 40h 27m 52s</p> </div>																										
FDS MODE														CR-5T													
XB DATA RATE(MI)														160(32)													
31 DSN COVERAGE																											
32 DSN COVERAGE																											
S/C 32 INITIAL CONDITIONS RTLT: 33h 26m 30s CCSL: B184 FDSL: 11AF TWNC: ON SB: OFF XB: LOW PYR: .05/.10/.25 GYROS: OFF	<div style="text-align: center;"> <p>1200 RTLT 33h 26m 38s</p> <p>▼ 0917 DUMMY (5 MIN BRACKETED 18:44)</p> </div>																										
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:	AUG 05													AUG 06													