

VOYAGER

Space Flight Operations Schedule (SFOS)

Issue Date: October 24, 2018

For the Period: 10/25/18 to 11/12/18 (18/298 – 18/316)

DSN OPSCHIEF	230-102	SCIENCE	FLIGHT TEAM	600-100
DSOT	230-102	CRS bryant@mail630.gsfc.nasa.gov LECP r.decker@jhuapl.edu MAG u2mha@lepvax.gsfc.nasa.gov PLS vgr@space.mit.edu PWS wsk@space.physics.uiowa.edu Leonard.F.Burlaga@nasa.gov Donald-Gurnett@uiowa.edu	Dodd, S. Hall, J. Howard, S. Ko, A. Ledeboer, W. Ludwig, R. Matsumoto, S. Medina, E. Peralta, F. Weeks, T. Yang, L.	

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

Posted at http://voyager.jpl.nasa.gov/mission/soesfos/tracking_schedule.html

02/27/17

ISSUE DATE: 10/29/18 05:54

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

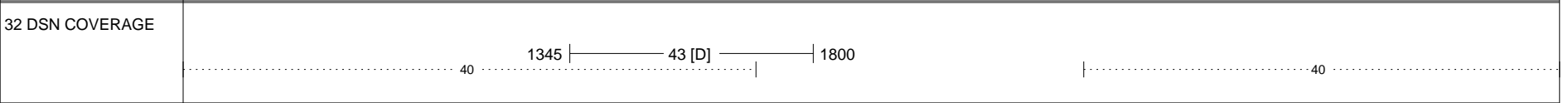
THURSDAY
OCTOBER 25, 2018
298-299

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: 39h 58m 52s
CCSL: A109
FDSL: 11AF
TWNC: ON
SB: OFF
XB: LOW
PYR: .05/.10/.25
GYROS: OFF

1200 RTLT 39h 59m 2s
0000 RTLT 39h 59m 12s
TAPPOS 0553 |-----
1750 |---| 1844 TAPPOS
TLC (SHORT-FORM)
0020 RE-ENA BL PLAYBACKS
0023 | 0024 2 SID MRO'S
0123 | 0124 REDUNDANT MRO'S

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



S/C 32
INITIAL CONDITIONS
RTLT: 33h 0m 38s
CCSL: B181
FDSL: 11AF
TWNC: ON
SB: OFF
XB: LOW
PYR: .05/.10/.25
GYROS: OFF

1200 RTLT 33h 0m 50s
0000 RTLT 33h 1m 2s

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: OCT 25 Page 1 of 19 OCT 26

ISSUE DATE: 10/29/18 05:54

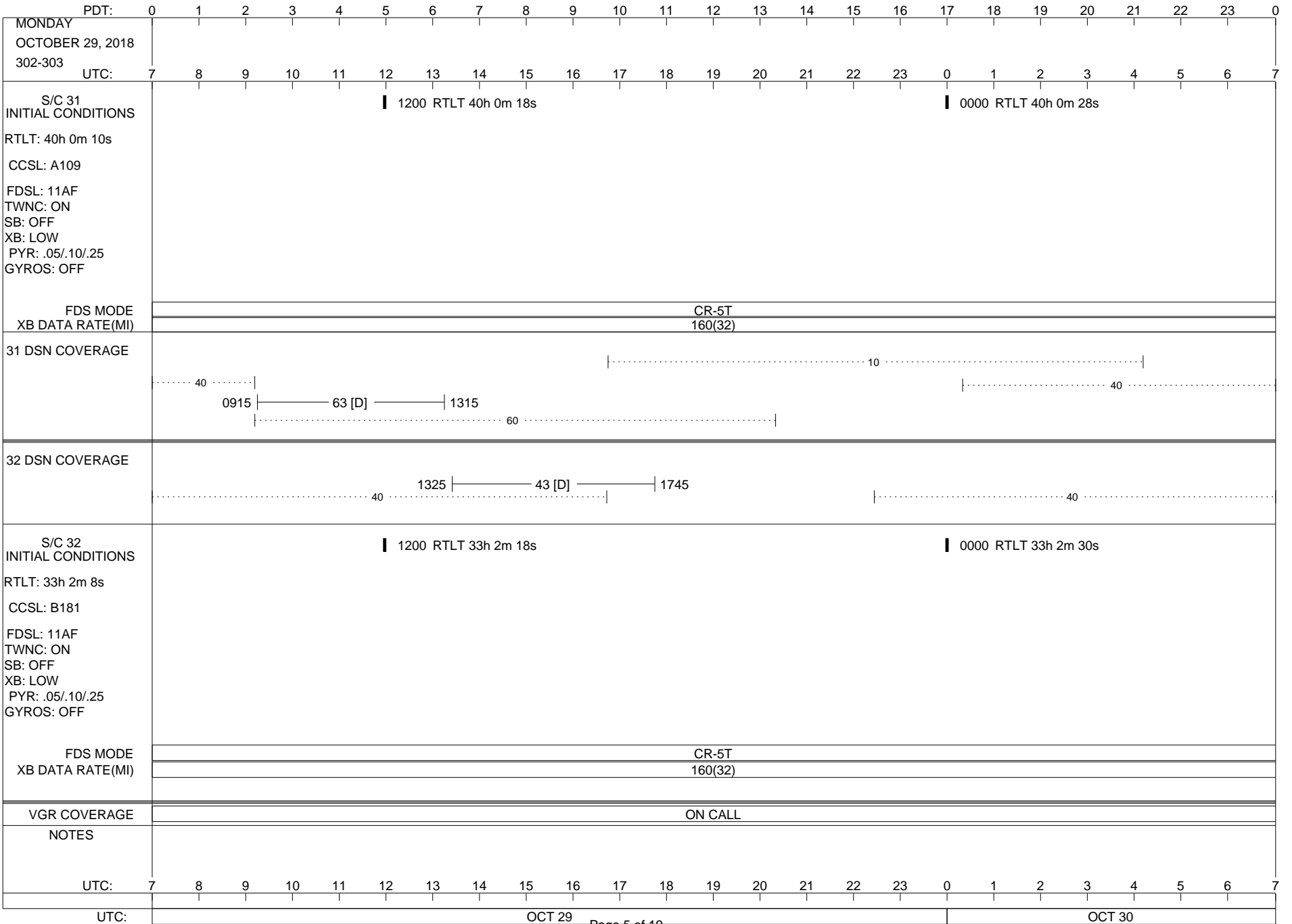
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FRIDAY OCTOBER 26, 2018 299-300					
UTC: 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 0 1 2 3 4 5 6 7					
S/C 31 INITIAL CONDITIONS RTLT: 39h 59m 12s CCSL: A109 FDSL: 11AF TWNC: ON SB: OFF XB: LOW PYR: .05/.10/.25 GYROS: OFF	<p>1200 RTLT 39h 59m 22s</p> <p>0810 TAPPOS 0854 0856 PWS/RH 0906 - TAPPOS - 1109</p> <p>TLC (SHORT-FORM) ----- D/L - 2027</p> <p>1936 1942 CCSTIMB FINE 1946 - - - 2040 TAPPOS</p> <p>0000 RTLT 39h 59m 32s</p> <p>↓ 0854 GS-4B 0856</p>				
FDS MODE XB DATA RATE(MI)	<table border="1"> <tr> <td>CR-5T</td> <td>CR-5T</td> </tr> <tr> <td>160(32)</td> <td>160(32)</td> </tr> </table>	CR-5T	CR-5T	160(32)	160(32)
CR-5T	CR-5T				
160(32)	160(32)				
31 DSN COVERAGE	<p>1825 14 [D] 2055</p> <p>40 40</p> <p>60 60</p>				
32 DSN COVERAGE	<p>1210 43 [o] 1755</p> <p>40 40</p>				
S/C 32 INITIAL CONDITIONS RTLT: 33h 1m 2s CCSL: B181 FDSL: 11AF TWNC: ON SB: OFF XB: LOW PYR: .05/.10/.25 GYROS: OFF	<p>1200 RTLT 33h 1m 12s</p> <p>0000 RTLT 33h 1m 24s</p>				
FDS MODE XB DATA RATE(MI)	<table border="1"> <tr> <td>CR-5T</td> </tr> <tr> <td>160(32)</td> </tr> </table>	CR-5T	160(32)		
CR-5T					
160(32)					
VGR COVERAGE	ON CALL				
NOTES	[1] S/C 31=GS-4B @ 0854 XB=2.8K(41) NOT RECOVERABLE				
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: OCT 26 OCT 27					

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	1	2	3	4	5	6	7
SATURDAY OCTOBER 27, 2018 300-301																																
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: 39h 59m 32s CCSL: A109 FDSL: 11AF TWNC: ON SB: OFF XB: LOW PYR: .05/.10/.25 GYROS: OFF	1200 RTLT 39h 59m 40s												0000 RTLT 39h 59m 50s																			
													↓ 1902 BAY 1 HTR OFF ↓ 1906 X/B HI POWER ↓ 1914 YAW=.05 1924 ----- PLAYBACK ----- 0200 ↓ 0210 YAW=.10 ↓ 0214 X/B LOW POWER ↓ 0218 BAY 1 HTR ON 0459 - TAPPOS - -																			
FDS MODE XB DATA RATE(MI)	CR-5T 160(32)												PB-14 1.4K(39)												CR-5T 160(32)							
31 DSN COVERAGE	<p>Timeline for S/C 31 DSN COVERAGE:</p> <ul style="list-style-type: none"> 1850 ----- 14 [DA] ----- 0300 1850 ----- 24 [DA] ----- 0200 1850 ----- 25 [DA] ----- 0200 1850 ----- 26 [DA] ----- 0200 0200 ----- 10 ----- 0200 (Playback) 0200 ----- 40 ----- 0200 (Playback) 																															
32 DSN COVERAGE	<p>Timeline for S/C 32 DSN COVERAGE:</p> <ul style="list-style-type: none"> 1240 ----- 43 [D] ----- 1755 2215 ----- 43 [D] ----- 0215 																															
S/C 32 INITIAL CONDITIONS RTLTL: 33h 1m 24s CCSL: B181 FDSL: 11AF TWNC: ON SB: OFF XB: LOW PYR: .05/.10/.25 GYROS: OFF	1200 RTLT 33h 1m 34s												0000 RTLT 33h 1m 46s																			
FDS MODE XB DATA RATE(MI)	CR-5T 160(32)																															
VGR COVERAGE	ON CALL												VGR												ON CALL							
NOTES	[1] S/C 31=PB-14 @ 1924 XB=1.4K(39) [2] S/C 31=CR-5T @ 0200 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:	OCT 27																					OCT 28										

ISSUE DATE: 10/29/18 05:54

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
SUNDAY OCTOBER 28, 2018 301-302																									
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: 39h 59m 50s CCSL: A109 FDSL: 11AF TWNC: ON SB: OFF XB: LOW PYR: .05/.10/.25 GYROS: OFF	█ 1200 RTLT 40h 0m 0s												█ 0000 RTLT 40h 0m 10s												
	0853 - TAPPOS - 1056												1155 1156 PWS/RH												
													1206 - TAPPOS - 1356												
	0715 TAPPOS																								
	↓ 1155 GS-4B 1156																								
FDS MODE	CR-5T												CR-5T												
XB DATA RATE(MI)	160(32)												160(32)												
31 DSN COVERAGE	1630 ----- 14 [D] ----- 2110												----- 10 -----												
	----- 40 -----												----- 40 -----												
32 DSN COVERAGE	----- 40 -----												1350 ----- 43 [D] ----- 1750												
	----- 40 -----												----- 40 -----												
S/C 32 INITIAL CONDITIONS RTLT: 33h 1m 46s CCSL: B181 FDSL: 11AF TWNC: ON SB: OFF XB: LOW PYR: .05/.10/.25 GYROS: OFF	█ 1200 RTLT 33h 1m 56s												█ 0000 RTLT 33h 2m 8s												
FDS MODE													CR-5T												
XB DATA RATE(MI)													160(32)												
VGR COVERAGE													ON CALL												
NOTES	[1] S/C 31=GS-4B @ 1155 XB=2.8K(41) NOT RECOVERABLE																								
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:	OCT 28												OCT 29												

ISSUE DATE: 10/29/18 05:54



ISSUE DATE: 10/29/18 05:54

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

TUESDAY
OCTOBER 30, 2018
303-304
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 0m 28s
CCSL: A109
FDSL: 11AF
TWNC: ON
SB: OFF
XB: LOW
PYR: .05/.10/.25
GYROS: OFF

1200 RTLTL 40h 0m 38s 0000 RTLTL 40h 0m 46s

0218 | 0219 PWS/RH

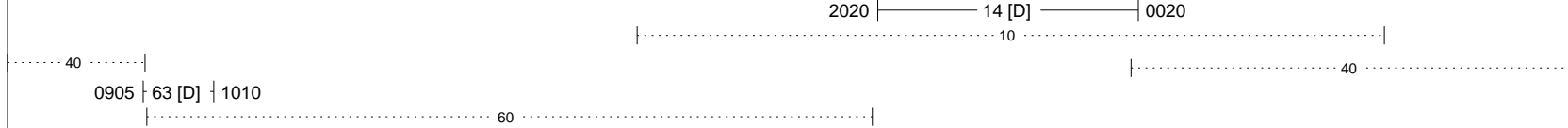
↓ 0218 GS-4B 0219

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: 33h 2m 30s
CCSL: B181
FDSL: 11AF
TWNC: ON
SB: OFF
XB: LOW
PYR: .05/.10/.25
GYROS: OFF

1200 RTLTL 33h 2m 40s 0000 RTLTL 33h 2m 52s

FDS MODE
XB DATA RATE(MI)

CR-5T
160(32)

VGR COVERAGE

ON CALL

NOTES

[1] S/C 31=GS-4B @ 0218 XB=2.8K(41) NOT RECOVERABLE

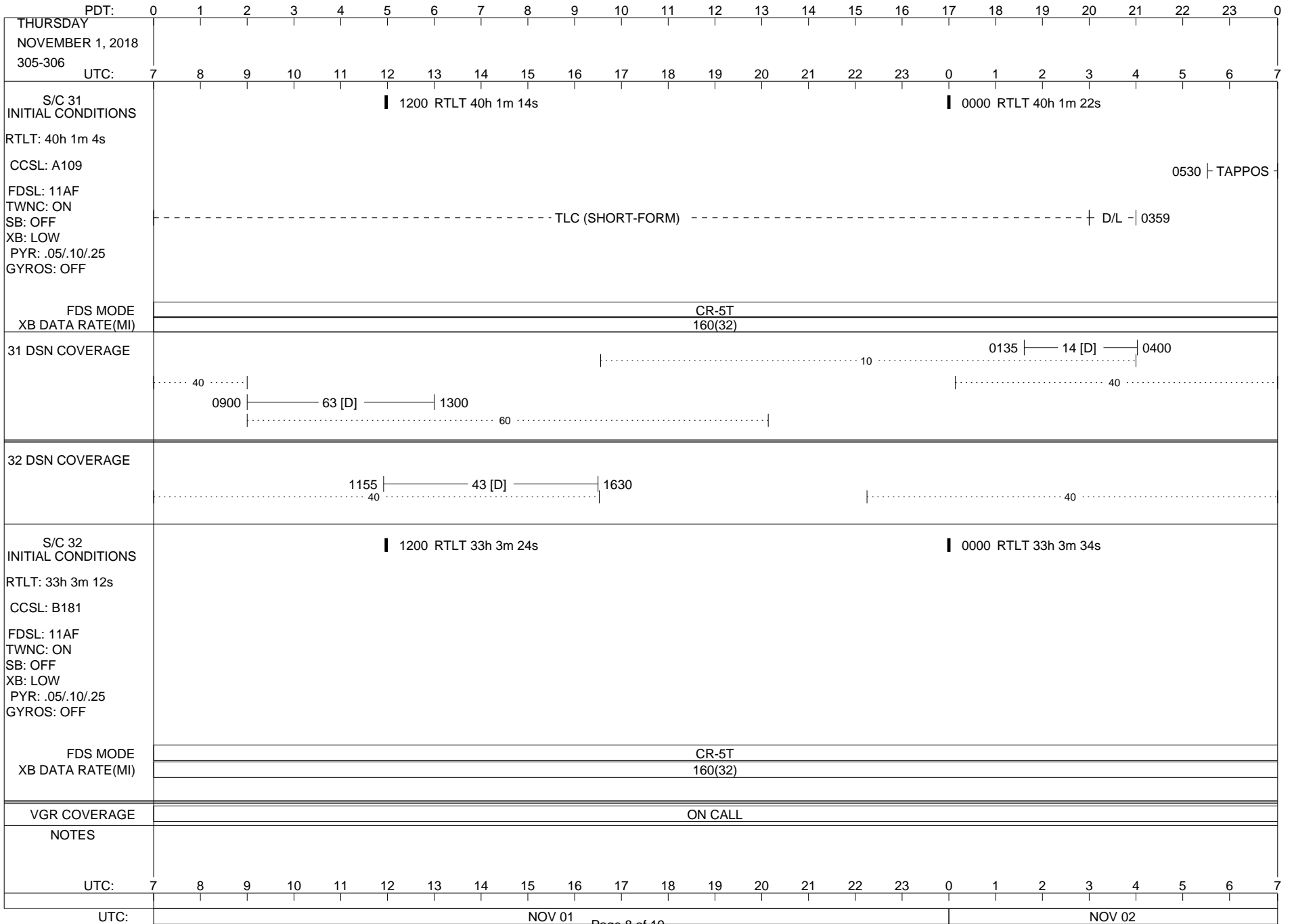
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UTC: OCT 30 Page 6 of 19 OCT 31

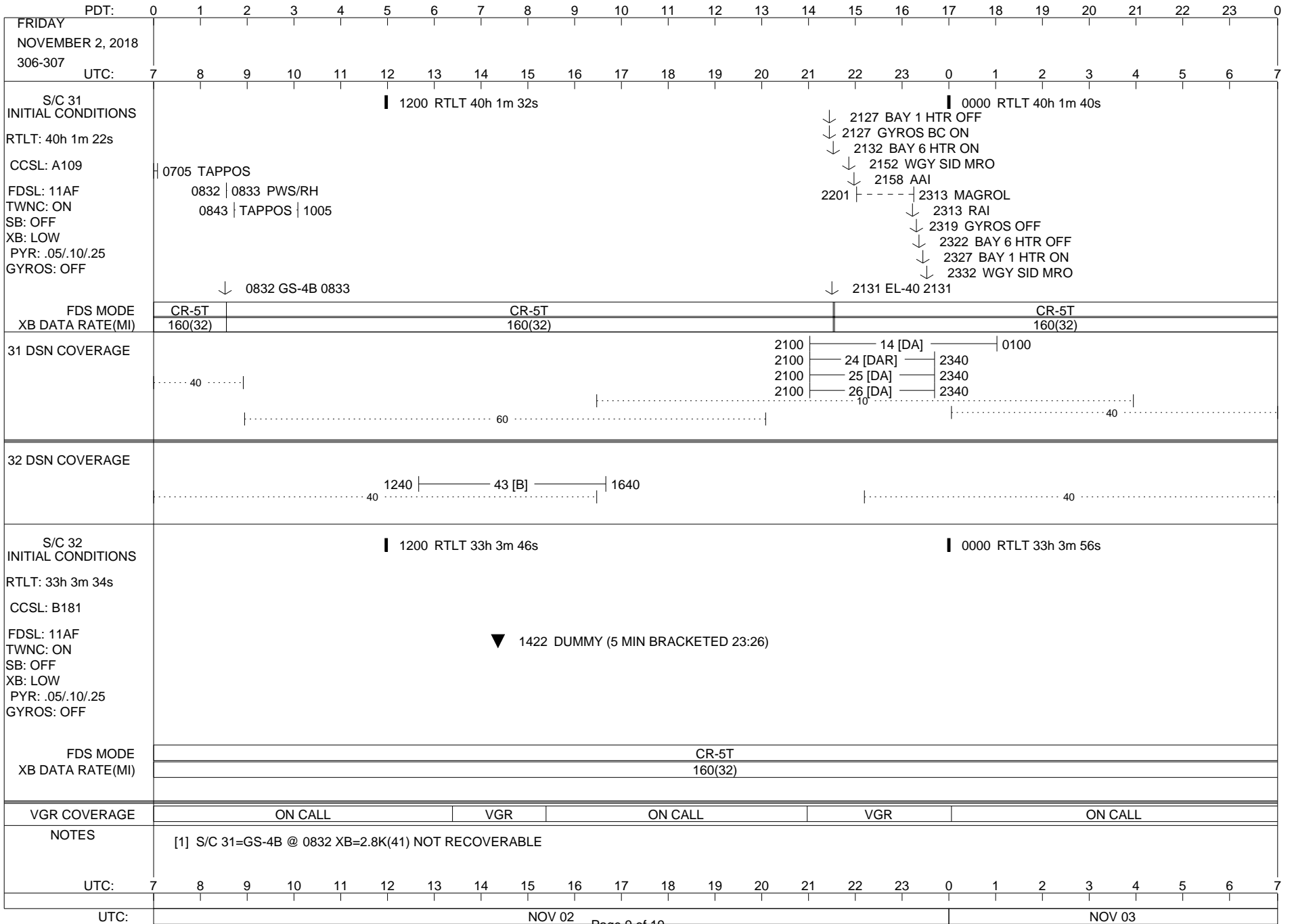
ISSUE DATE: 10/29/18 05:54

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																							
WEDNESDAY																							
OCTOBER 31, 2018																							
304-305 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 0m 46s CCSL: A109 FDSL: 11AF TWNC: ON SB: OFF XB: LOW PYR: .05/10/.25 GYROS: OFF FDS MODE XB DATA RATE(MI)																							
1200 RTLT 40h 0m 56s 0000 RTLT 40h 1m 4s ▼ 1000 DUMMY (02:01) U/L 1030 - ----- TLC (SHORT-FORM) -----																							
CR-5T 160(32)																							
31 DSN COVERAGE 40..... 40..... 0920 ----- 63 [T] ----- 1345 -----60-----																							
32 DSN COVERAGE 1235 ----- 43 [D] ----- 163540..... 40.....																							
S/C 32 INITIAL CONDITIONS RTLT: 33h 2m 52s CCSL: B181 FDSL: 11AF TWNC: ON SB: OFF XB: LOW PYR: .05/10/.25 GYROS: OFF FDS MODE XB DATA RATE(MI)																							
1200 RTLT 33h 3m 2s 0000 RTLT 33h 3m 12s																							
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: OCT 31 NOV 01																							

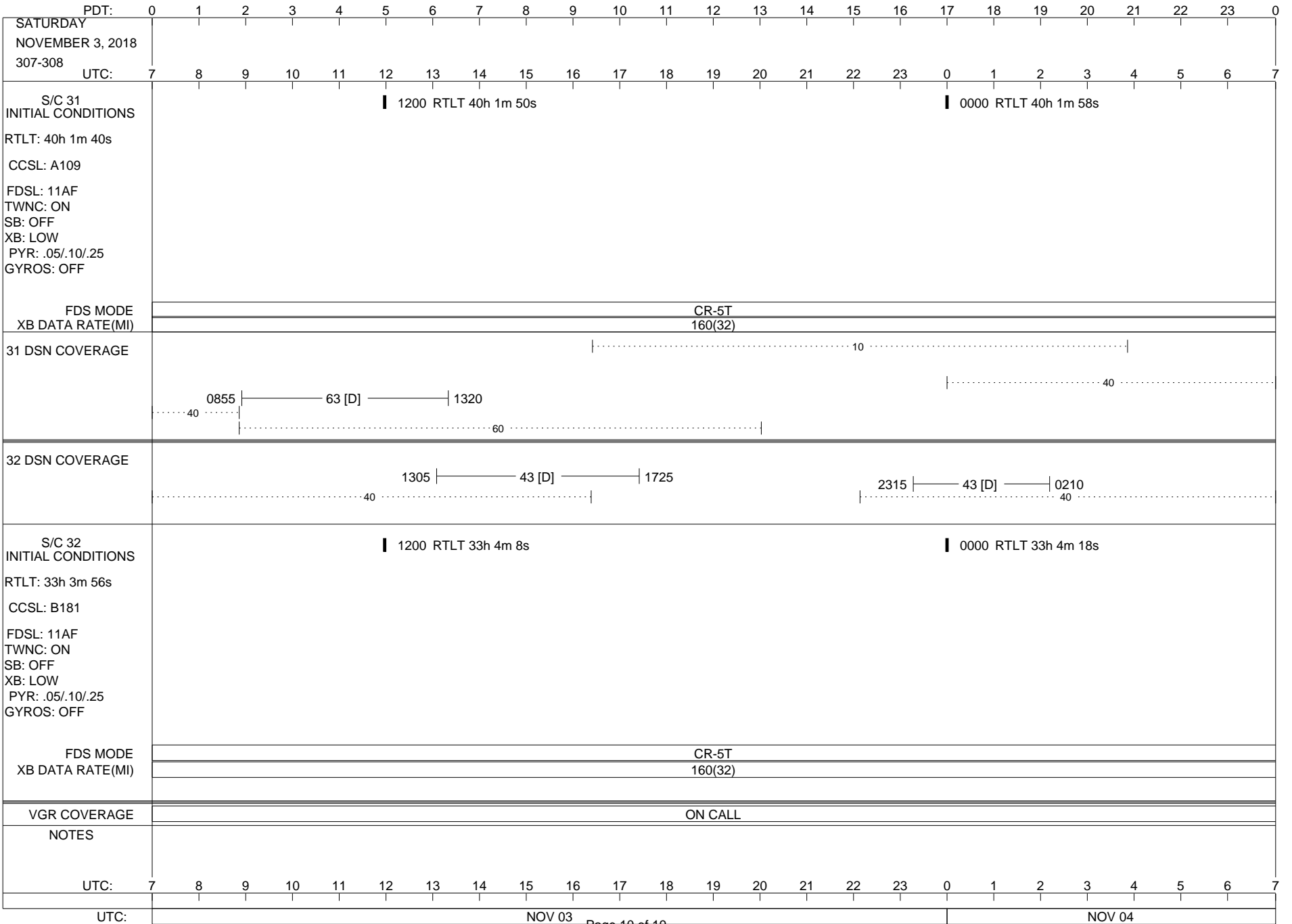
ISSUE DATE: 10/29/18 05:54



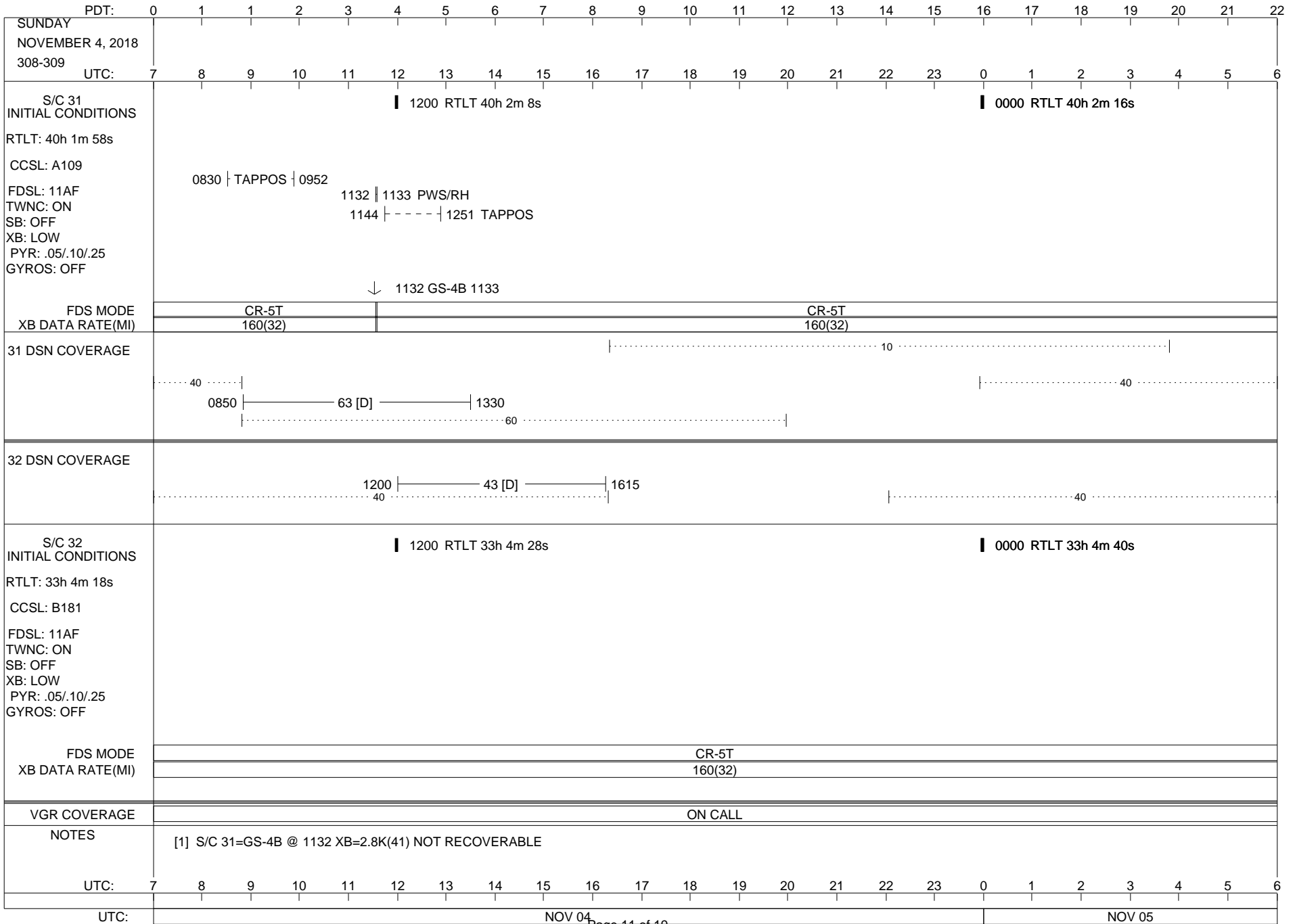
ISSUE DATE: 10/29/18 05:54



ISSUE DATE: 10/29/18 05:54



ISSUE DATE: 10/29/18 05:54



ISSUE DATE: 10/29/18 05:54

PST: 22 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 5, 2018
309-310
UTC: 6 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 2m 16s
CCSL: A109
FDSL: 11AF
TWNC: ON
SB: OFF
XB: LOW
PYR: .05/10/.25
GYROS: OFF

1200 RTLT 40h 2m 24s

0000 RTLT 40h 2m 34s

FDS MODE
XB DATA RATE(MI)

CR-5T
160(32)

31 DSN COVERAGE



32 DSN COVERAGE



S/C 32
INITIAL CONDITIONS
RTLT: 33h 4m 40s
CCSL: B181
FDSL: 11AF
TWNC: ON
SB: OFF
XB: LOW
PYR: .05/10/.25
GYROS: OFF

1200 RTLT 33h 4m 50s

0000 RTLT 33h 5m 0s

FDS MODE
XB DATA RATE(MI)

CR-5T
160(32)

VGR COVERAGE

ON CALL

NOTES

UTC: 6 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 05

NOV 06

ISSUE DATE: 10/29/18 05:54

		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 6, 2018																											
310-311		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													0000						
RTLT: 40h 2m 34s																											
CCSL: A109																											
FDSL: 11AF																											
TWNC: ON																											
SB: OFF																											
XB: LOW																											
PYR: .05/.10/.25																											
GYROS: OFF																											
FDS MODE																											
XB DATA RATE(MI)																											
31 DSN COVERAGE																											
32 DSN COVERAGE																											
S/C 32 INITIAL CONDITIONS								1200													0000						
RTLT: 33h 5m 0s																											
CCSL: B181																											
FDSL: 11AF																											
TWNC: ON																											
SB: OFF																											
XB: LOW																											
PYR: .05/.10/.25																											
GYROS: OFF																											
FDS MODE																											
XB DATA RATE(MI)																											
VGR COVERAGE																											
NOTES																											
UTC:																											
UTC:																											

[1] S/C 31=GS-4B @ 0155 XB=2.8K(41) NOT RECOVERABLE

NOV 06

NOV 07

ISSUE DATE: 10/29/18 05:54

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 7, 2018 311-312																										
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 2m 50s CCSL: A109 FDSL: 11AF TWNC: ON SB: OFF XB: LOW PYR: .05/10/25 GYROS: OFF						█ 1200 RTLT 40h 2m 58s							▼ 1725 DUMMY (09:26)					█ 0000 RTLT 40h 3m 8s								
FDS MODE XB DATA RATE(MI)														CR-5T 160(32)												
31 DSN COVERAGE													1750 ----- 2150													
32 DSN COVERAGE																										
S/C 32 INITIAL CONDITIONS RTLT: 33h 5m 22s CCSL: B181 FDSL: 11AF TWNC: ON SB: OFF XB: LOW PYR: .05/10/25 GYROS: OFF						█ 1200 RTLT 33h 5m 32s													█ 0000 RTLT 33h 5m 44s							
FDS MODE XB DATA RATE(MI)														CR-5T 160(32)												
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: 10/29/18 05:54

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 8, 2018
312-313

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 3m 8s
CCSL: A109
FDSL: 11AF
TWNC: ON
SB: OFF
XB: LOW
PYR: .05/.10/.25
GYROS: OFF

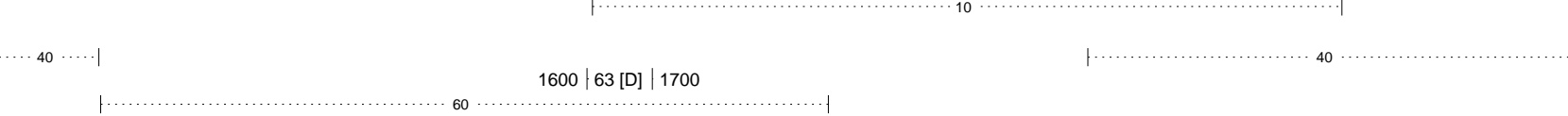
1200 RTLT 40h 3m 16s 0000 RTLT 40h 3m 24s

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: 33h 5m 44s
CCSL: B181
FDSL: 11AF
TWNC: ON
SB: OFF
XB: LOW
PYR: .05/.10/.25
GYROS: OFF

1200 RTLT 33h 5m 54s 0000 RTLT 33h 6m 4s

FDS MODE
XB DATA RATE(MI)

CR-5T
160(32)

VGR COVERAGE

ON CALL

NOTES

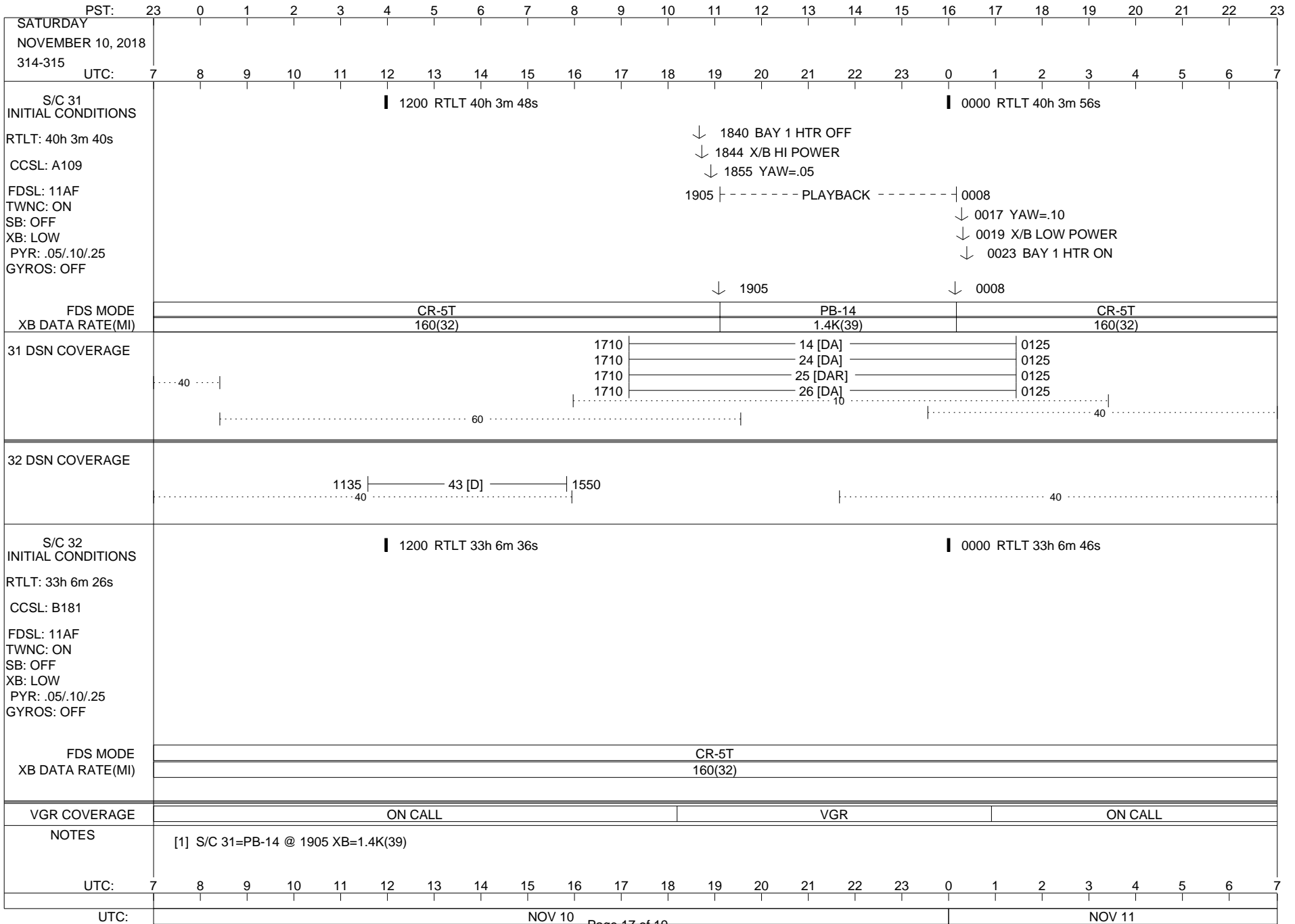
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UTC: NOV 08 Page 15 of 19 NOV 09

ISSUE DATE: 10/29/18 05:54

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 9, 2018 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 RTLTL: 40h 3m 24s CCSL: A109 FDSL: 11AF TWNC: ON SB: OFF XB: LOW PYR: .05/10/.25 GYROS: OFF	1200 RTLT 40h 3m 32s												0000 RTLT 40h 3m 40s													
TLC (SHORT-FORM) - D/L - 1119 0932 - - TAPPOS - 1123																										
FDS MODE XB DATA RATE(MI)													CR-5T 160(32)													
31 DSN COVERAGE																										
32 DSN COVERAGE																										
S/C 32 INITIAL CONDITIONS RTLTL: 33h 6m 4s CCSL: B181 FDSL: 11AF TWNC: ON SB: OFF XB: LOW PYR: .05/10/.25 GYROS: OFF	1200 RTLT 33h 6m 14s												0000 RTLT 33h 6m 26s													
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 09												NOV 10													

ISSUE DATE: 10/29/18 05:54



ISSUE DATE: 10/29/18 05:54

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 11, 2018 315-316																										
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 3m 56s CCSL: A109 FDSL: 11AF TWNC: ON SB: OFF XB: LOW PYR: .05/.10/.25 GYROS: OFF	1200 RTLT 40h 4m 4s												0000 RTLT 40h 4m 12s													
FDS MODE													CR-5T													
XB DATA RATE(MI)													160(32)													
31 DSN COVERAGE	0820 ----- 63 [D] ----- 1335												----- 40 -----													
	40 ----- 60 -----																									
32 DSN COVERAGE	1115 ----- 43 [D] ----- 1550												----- 40 -----													
	40 ----- 40 -----																									
S/C 32 INITIAL CONDITIONS RTLTL: 33h 6m 46s CCSL: B181 FDSL: 11AF TWNC: ON SB: OFF XB: LOW PYR: .05/.10/.25 GYROS: OFF	1200 RTLT 33h 6m 56s												0000 RTLT 33h 7m 6s													
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 11																		NOV 12							

ISSUE DATE: 10/29/18 05:54

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 12, 2018 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 RTLT: 40h 4m 12s CCSL: A109 FDSL: 11AF TWNC: ON SB: OFF XB: LOW PYR: .05/.10/.25 GYROS: OFF	<p>█ 1200 RTLT 40h 4m 20s</p> <p>↓ 1720 AHELI12 ENA 1723 1725 2 SID MRO'S</p>																								
FDS MODE XB DATA RATE(MI)	CR-5T 160(32)																								
31 DSN COVERAGE	<p>1540 ----- 14 [D] ----- 1955</p> <p>... 40 ... </p> <p> -----60----- </p>																								
32 DSN COVERAGE	<p>1140 ----- 43 [D] ----- 1545</p> <p>.....40..... </p>																								
S/C 32 INITIAL CONDITIONS RTLT: 33h 7m 6s CCSL: B181 FDSL: 11AF TWNC: ON SB: OFF XB: LOW PYR: .05/.10/.25 GYROS: OFF	<p>█ 1200 RTLT 33h 7m 18s</p>																								
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 12																NOV 13								