

VOYAGER

Space Flight Operations Schedule (SFOS)

Issue Date: November 4, 2009

For the Period: 11/05/09 to 11/23/09 (09-309 – 09-327)

DSN OPSCHIEF (1) 230-102

SCIENCE

FLIGHT TEAM (15) 600-100

DSOT (1) 230-102

- *Zsarina.Bulchand@jpl.nasa.gov
- *gdyke@airmail.ftops.jpl.nasa.gov
- *John.M.Grant@jpl.nasa.gov
- *dmcclena@airmail.ftops.jpl.nasa.gov
- *pquach@airmail.ftops.jpl.nasa.gov
- *mrobles@airmail.ftops.jpl.nasa.gov
- *rwilliam@airmail.ftops.jpl.nasa.gov

- CRS *bryant@mail630.gsfc.nasa.gov
- LECP *r.decker@jhupl.edu
- UVS *holberg@argus.lpl.arizona.edu
- MAG *u2mha@lepvox.gsfc.nasa.gov
- PLS *vgr@space.mit.edu
- PWS *wsk@space.physics.uiowa.edu
- *Leonard.F.Burlaga@nasa.gov
- *Donald-Gurnett@uiowa.edu

- Hall, J.
- Howard, S. (3)
- Ludwig, R. (2)
- Massey, Ed
- Matsumoto, S.
- Medina, E.
- Peralta, F.
- Poynter, R.
- Weeks, T.
- Wong, R.
- Yang, L
- Zottarelli, L.

*odivers1@san.rr.com

OTHER

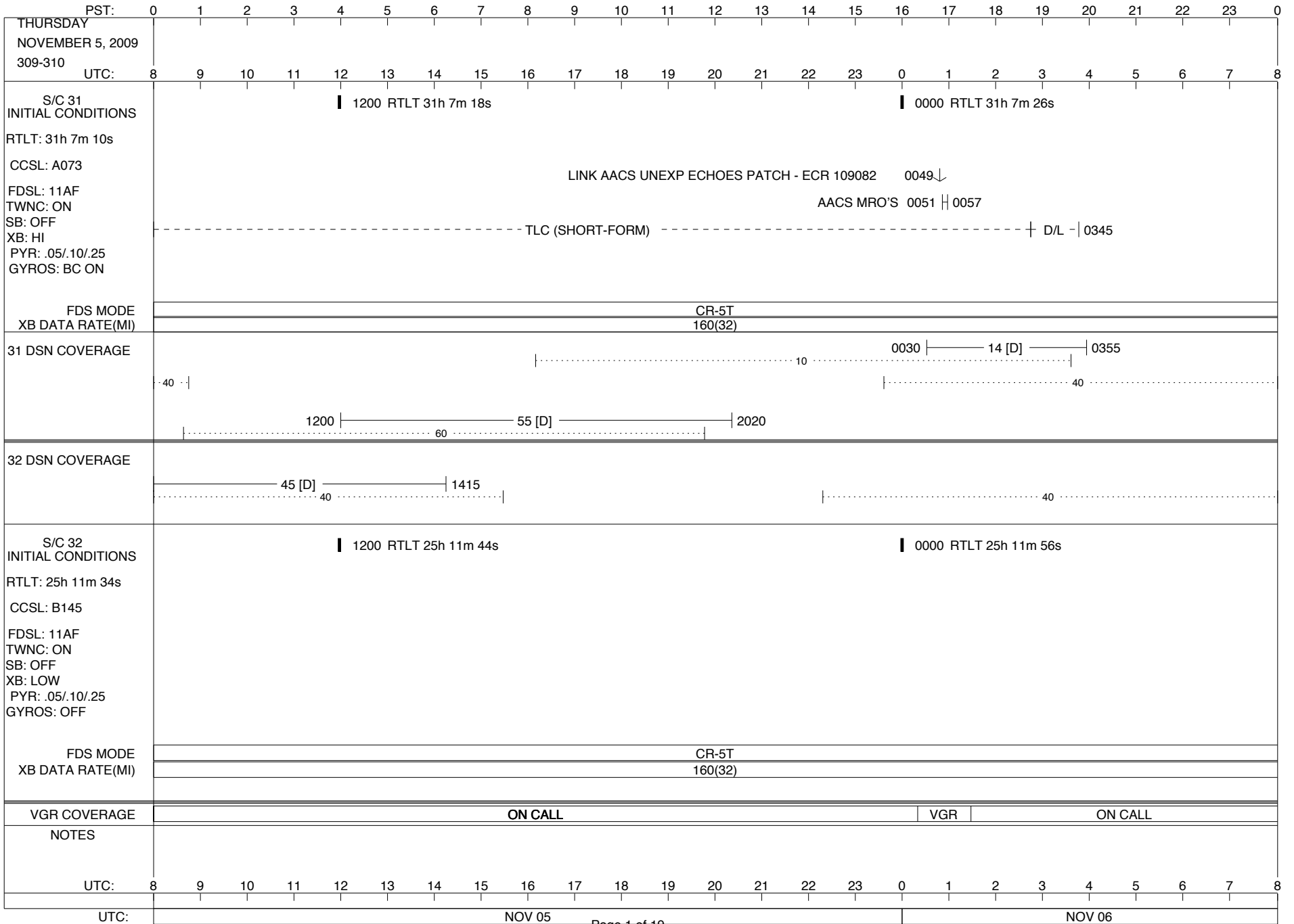
- * KMassey@jgld.gdscc.nasa.gov
- * Belinda.Arroyo@jpl.nasa.gov
- * DSN-MPSETA@jjpl.jpl.nasa.gov

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 = 7-Point BLF
- D = Downlink only pass
- H = High Power Transmitter
- R = Array Reference Antenna
- T = TLC Uplink
- U = Uplink only pass
- [o] = Ramp-through

*Electronic Copy Only
(17 – Dist/N: Paper Copies)
04/02/09

ISSUE DATE: 11/09/09 10:44

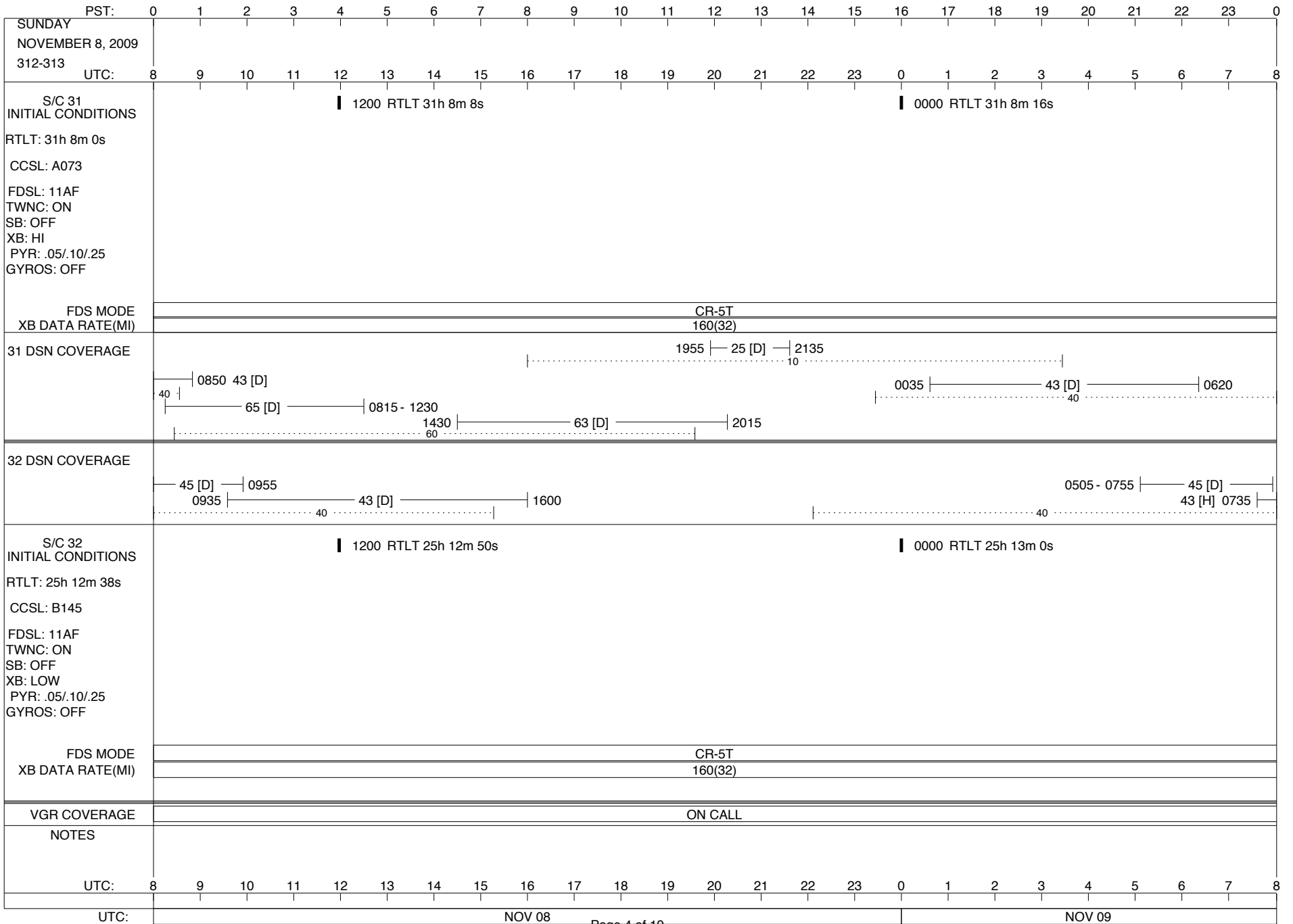


ISSUE DATE: 11/09/09 10:44

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 NOVEMBER 6, 2009 310-311	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: 31h 7m 26s CCSL: A073 FDSL: 11AF TWNC: ON SB: OFF XB: HI PYR: .05/.10/.25 GYROS: BC ON	1200 RTLT 31h 7m 36s												0000 RTLT 31h 7m 44s												
FDS MODE XB DATA RATE(MI)													CR-5T 160(32)												
31 DSN COVERAGE	40 . 55 [D] 0835 - 1445 60												2015 10 14 [D] 0345 40												
	1430 63 [D] 2025																								
32 DSN COVERAGE	0850 45 [D] 1435 40												0140 45 [D] 40												
S/C 32 INITIAL CONDITIONS RTLT: 25h 11m 56s CCSL: B145 FDSL: 11AF TWNC: ON SB: OFF XB: LOW PYR: .05/.10/.25 GYROS: OFF	1200 RTLT 25h 12m 6s												0000 RTLT 25h 12m 18s												
FDS MODE XB DATA RATE(MI)													CR-5T 160(32)												
VGR COVERAGE	ON CALL												VGR						ON CALL						
NOTES	[1] S/C 31 D/L AGC & SNR VARIATIONS EXPECTED DURING MAGROL (1947-0143)																								
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:	NOV 06												Page 2 of 19						NOV 07						

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 NOVEMBER 7, 2009 311-312	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: 31h 7m 44s CCSL: A073 FDSL: 11AF TWNC: ON SB: OFF XB: HI PYR: .05/10/25 GYROS: OFF	1200 RTLT 31h 7m 52s												0000 RTLT 31h 8m 0s												
0816- 0817 PWS/RH 1023 - TAPPOS - 1214 ↓ 0816 GS-4B 0817																									
FDS MODE XB DATA RATE(MI)													CR-5T 160(32)												
31 DSN COVERAGE	<p>40 ----- 63 [D] ----- 0810 - 1110 ----- 1620 ----- 65 [D] ----- 2010</p> <p>2010 ----- 14 [D] ----- 0015 ----- 0100 ----- 24 [D] ----- 0340 ----- 0520 ----- 43 [D] ----- </p> <p>10 ----- 40 ----- </p>																								
32 DSN COVERAGE	<p>45 [D] ----- 0940 ----- 0935 ----- 43 [o] ----- 1415 ----- 0035 ----- 45 [D] ----- </p> <p>40 ----- 40 ----- </p>																								
S/C 32 INITIAL CONDITIONS RTLT: 25h 12m 18s CCSL: B145 FDSL: 11AF TWNC: ON SB: OFF XB: LOW PYR: .05/10/25 GYROS: OFF	1200 RTLT 25h 12m 28s												0000 RTLT 25h 12m 38s												
FDS MODE XB DATA RATE(MI)													CR-5T 160(32)												
VGR COVERAGE	ON CALL																								
NOTES	[1] S/C 31=GS-4B @ 0816 XB=2.8K(41) NOT RECOVERABLE																								
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:	NOV 07												NOV 08												

ISSUE DATE: 11/09/09 10:44

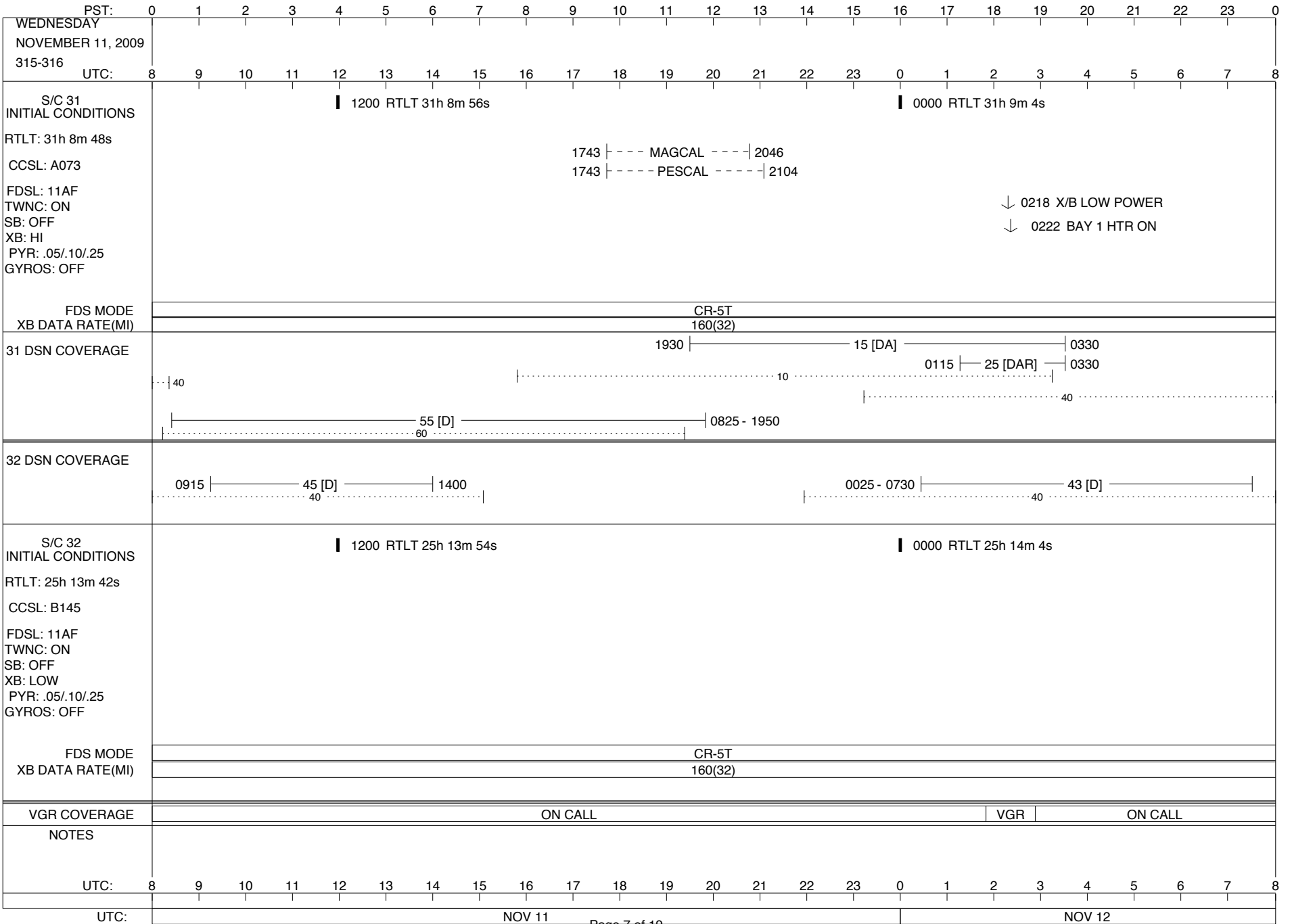


ISSUE DATE: 11/09/09 10:44

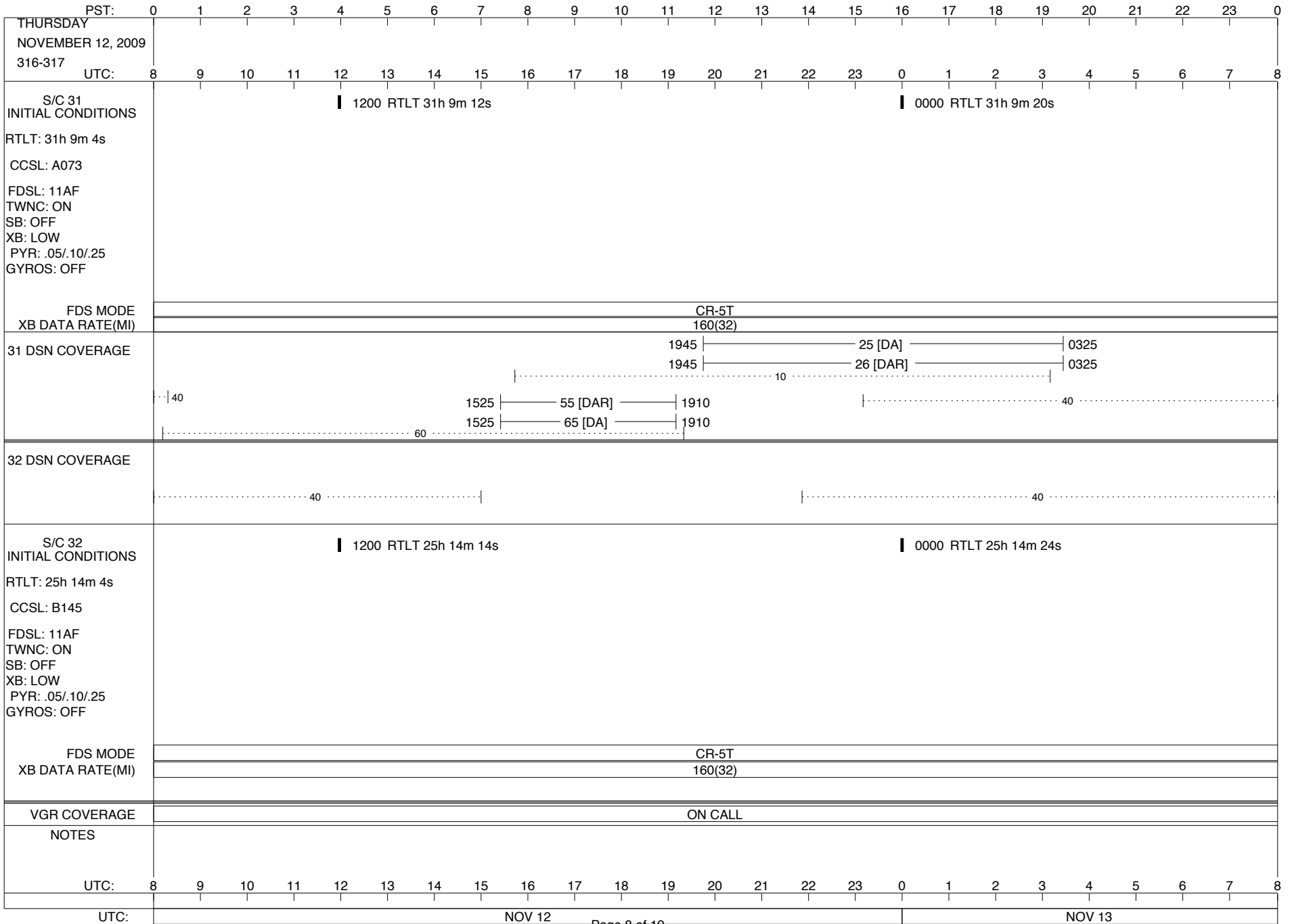
PST:	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	0
MONDAY NOVEMBER 9, 2009 313-314	UTC: 8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	0	1	2	3	4	5	6	7	8
S/C 31 INITIAL CONDITIONS RTLTL: 31h 8m 16s CCSL: A073 FDSL: 11AF TWNC: ON SB: OFF XB: HI PYR: .05/10/25 GYROS: OFF	1200 RTLTL 31h 8m 24s												0000 RTLTL 31h 8m 32s												
FDS MODE XB DATA RATE(MI)	CR-5T 160(32)												CR-5T 160(32)												
31 DSN COVERAGE	1540 ----- 15 [D] ----- 2345 ----- 10 ----- 0045 ----- 14 ----- 0340 40 ----- 40 0845 ----- 63 [T] ----- 1010 ----- 60 -----																								
32 DSN COVERAGE	43 [H] ----- 1410 ----- 40 -----																								
S/C 32 INITIAL CONDITIONS RTLTL: 25h 13m 0s CCSL: B145 FDSL: 11AF TWNC: ON SB: OFF XB: LOW PYR: .05/10/25 GYROS: OFF	1200 RTLTL 25h 13m 10s												0000 RTLTL 25h 13m 22s												
FDS MODE XB DATA RATE(MI)	CR-5T 160(32)												CR-5T 160(32)												
VGR COVERAGE	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	
UTC:	NOV 09												NOV 10												

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 NOVEMBER 10, 2009 314-315	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: 31h 8m 32s CCSL: A073 FDSL: 11AF TWNC: ON SB: OFF XB: HI PYR: .05/10/25 GYROS: OFF	1200 RTLTL 31h 8m 40s												0000 RTLTL 31h 8m 48s															
FDS MODE	CR-5T												CR-5T															
XB DATA RATE(MI)	160(32)												160(32)															
31 DSN COVERAGE	0030 ----- 15 [D] ----- 0330												0330 ----- 40 -----															
	40 ----- 1530 ----- 65 [D] ----- 1950												60 ----- 40 -----															
32 DSN COVERAGE	1000 ----- 45 [D] ----- 1405												40 ----- 40 -----															
S/C 32 INITIAL CONDITIONS RTLTL: 25h 13m 22s CCSL: B145 FDSL: 11AF TWNC: ON SB: OFF XB: LOW PYR: .05/10/25 GYROS: OFF	1200 RTLTL 25h 13m 32s												0000 RTLTL 25h 13m 42s															
FDS MODE	CR-5T				EL-40				CR-5T				CR-5T															
XB DATA RATE(MI)	160(32)				40(30)				160(32)				160(32)															
VGR COVERAGE	ON CALL				VGR				ON CALL				ON CALL															
NOTES	[1] S/C 31=GS-4B @ 0152 XB=2.8K(41) NOT RECOVERABLE [2] S/C 32=EL-40 @ 1156 XB=40(30) [3] S/C 32=CR-5T @ 1256 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:	NOV 10														NOV 11													

ISSUE DATE: 11/09/09 10:44



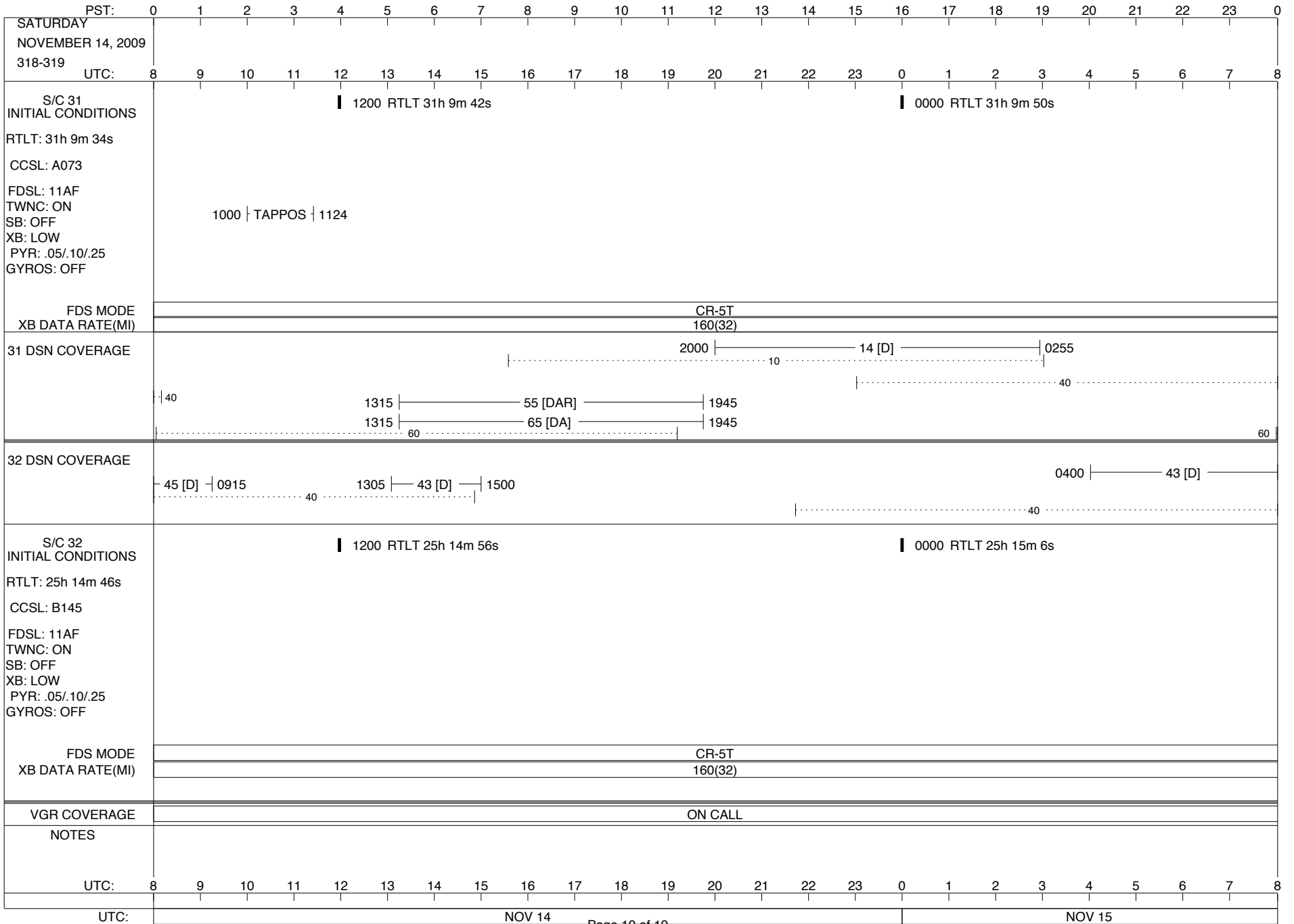
ISSUE DATE: 11/09/09 10:44



ISSUE DATE: 11/09/09 10:44

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 NOVEMBER 13, 2009 317-318																										
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 31h 9m 28s												0000 RTLT 31h 9m 34s													
RTLT: 31h 9m 20s																										
CCSL: A073																										
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	<div style="display: flex; justify-content: space-between;"> <div style="width: 45%;"> <p>0030 24 [DAR] 0320</p> <p>0030 25 [DA] 0320</p> <p>1805 54 [DAR] 1945</p> <p>1805 65 [DA] 1945</p> </div> <div style="width: 10%; text-align: center;">10</div> <div style="width: 45%;"> <p>0320 40</p> <p>0320 40</p> </div> </div>																									
32 DSN COVERAGE	<div style="display: flex; justify-content: space-between;"> <div style="width: 45%;"> <p>0935 45 [D] 1405</p> </div> <div style="width: 10%; text-align: center;">40</div> <div style="width: 45%;"> <p>0350 45 [D] </p> </div> </div>																									
S/C 32 INITIAL CONDITIONS	1200 RTLT 25h 14m 36s												0000 RTLT 25h 14m 46s													
RTLT: 25h 14m 24s																										
CCSL: B145																										
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																									
NOTES	<p>[1] S/C 31=GS-4B @ 0753 XB=2.8K(41) NOT RECOVERABLE</p> <p>PIE DAY!</p>																									
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:	NOV 13												NOV 14													

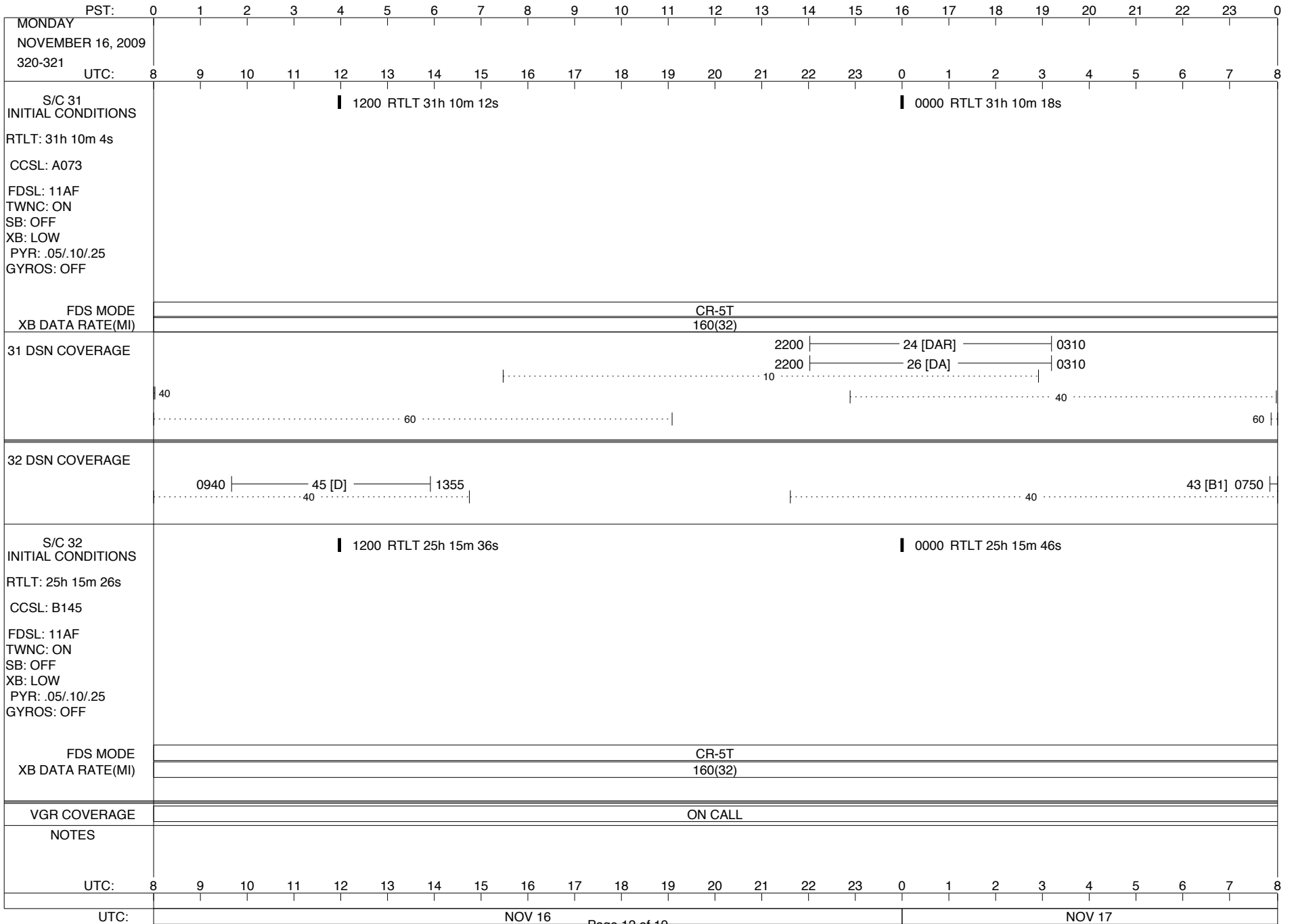
ISSUE DATE: 11/09/09 10:44



ISSUE DATE: 11/09/09 10:44

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 NOVEMBER 15, 2009 319-320																												
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 31h 9m 56s												0000 RTLT 31h 10m 4s															
RTLT: 31h 9m 50s																												
CCSL: A073																												
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	<p>Timeline for 31 DSN COVERAGE:</p> <ul style="list-style-type: none"> 0015 - 24 [DAR] - 0215 0015 - 26 [DA] - 0215 1500 - 55 [DAR] - 1940 1500 - 65 [DA] - 1940 																											
32 DSN COVERAGE	<p>Timeline for 32 DSN COVERAGE:</p> <ul style="list-style-type: none"> 0810 43 [D] 0930 - 45 [D] - 1115 																											
S/C 32 INITIAL CONDITIONS	1200 RTLT 25h 15m 16s												0000 RTLT 25h 15m 26s															
RTLT: 25h 15m 6s																												
CCSL: B145																												
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																											
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:	NOV 15														NOV 16													

ISSUE DATE: 11/09/09 10:44



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
NOVEMBER 17, 2009
321-322 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: 31h 10m 18s
CCSL: A073
FDSL: 11AF
TWNC: ON
SB: OFF
XB: LOW
PYR: .05/.10/.25
GYROS: OFF
1200 RTLT 31h 10m 26s
0000 RTLT 31h 10m 34s
0129 | 0130 PWS/RH
↓ 0129 GS-4B 0130

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

31 DSN COVERAGE
1515 |----- 14 [D] -----| 2145
|----- 10 -----|
|----- 40 -----|
|----- 60 -----|
60 |

32 DSN COVERAGE
43 [B1] |----- 1350
|----- 40 -----|
0200 |----- 34 [D] -----| 0535
|----- 40 -----| 0530 |----- 43 [D] -----|

S/C 32
INITIAL CONDITIONS
RTLT: 25h 15m 46s
CCSL: B145
FDSL: 11AF
TWNC: ON
SB: OFF
XB: LOW
PYR: .05/.10/.25
GYROS: OFF
1200 RTLT 25h 15m 58s
0000 RTLT 25h 16m 8s
▼ 1327 DUMMY (5 MIN BRACKETED 14:43)
0236 | PLSCAL - | 0419
0236 | --- MAGCAL --- | 0539
0236 | --- PESCAL --- | 0556

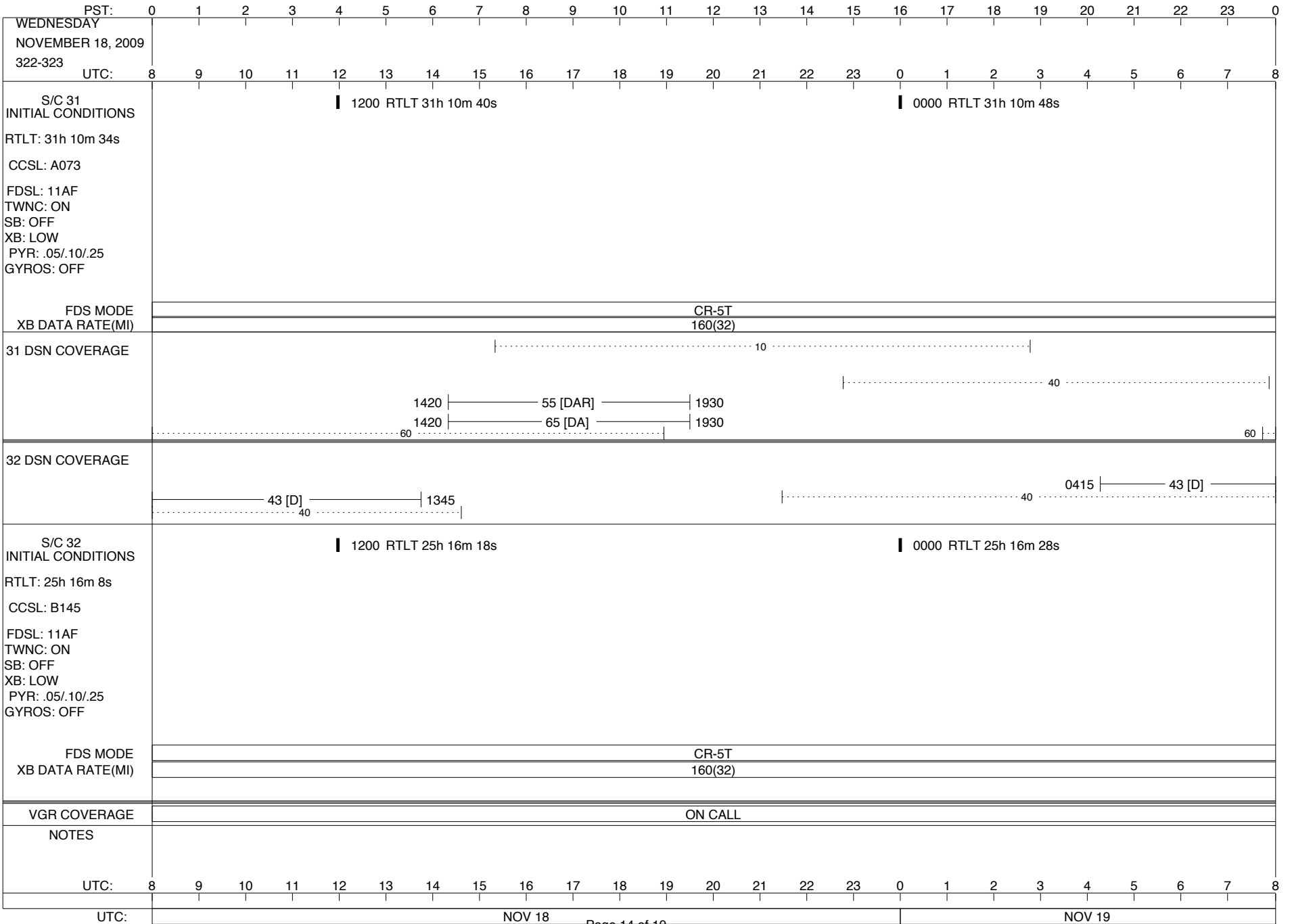
FDS MODE CR-5T
XB DATA RATE(MI) 160(32)

VGR COVERAGE ON CALL VGR ON CALL

NOTES
[1] S/C 31=GS-4B @ 0129 XB=2.8K(41) NOT RECOVERABLE
[2] B146 BACKUP U/L TRACK

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

ISSUE DATE: 11/09/09 10:44



ISSUE DATE: 11/09/09 10:44

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
NOVEMBER 19, 2009
323-324
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: 31h 10m 48s
CCSL: A073
FDSL: 11AF
TWNC: ON
SB: OFF
XB: LOW
PYR: .05/10/25
GYROS: OFF

1200 RTLT 31h 10m 54s

0000 RTLT 31h 11m 0s

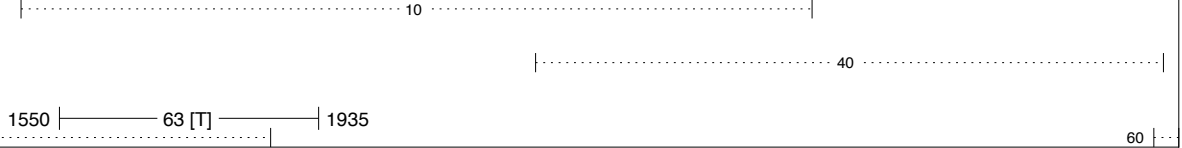
▼ 1700 DUMMY (00:11)

U/L 1815 | - | - - - - - TLC (SHORT-FORM) - - - - -

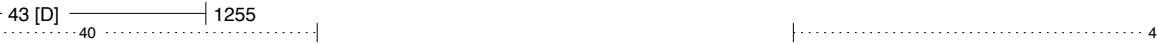
FDS MODE
XB DATA RATE(MI)

CR-5T
160(32)

31 DSN COVERAGE



32 DSN COVERAGE



S/C 32
INITIAL CONDITIONS
RTLT: 25h 16m 28s
CCSL: B145
FDSL: 11AF
TWNC: ON
SB: OFF
XB: LOW
PYR: .05/10/25
GYROS: OFF

1200 RTLT 25h 16m 38s

0000 RTLT 25h 16m 48s

FDS MODE
XB DATA RATE(MI)

CR-5T
160(32)

VGR COVERAGE

ON CALL VGR ON CALL

NOTES

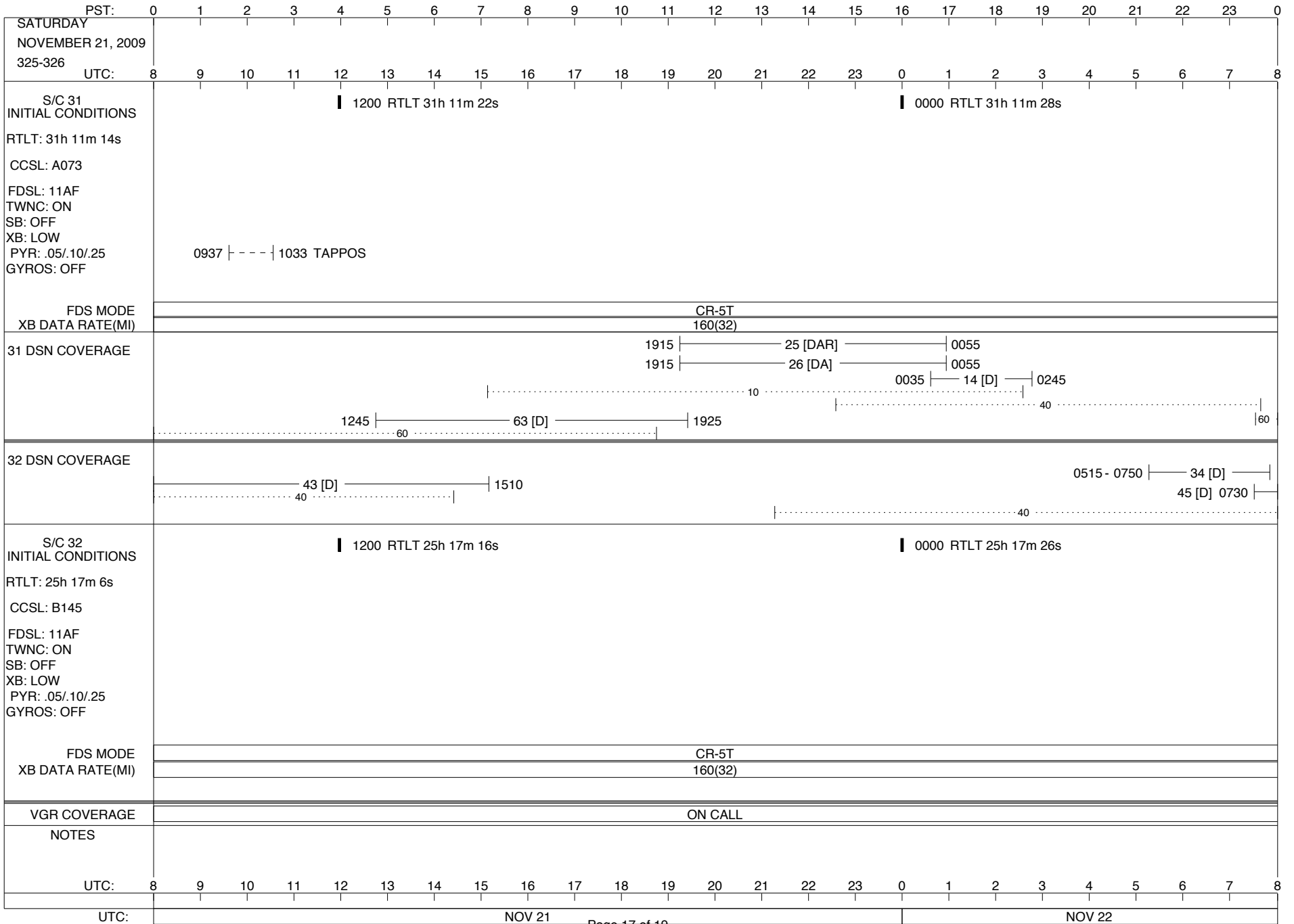
UTC: 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 0 1 2 3 4 5 6 7 8

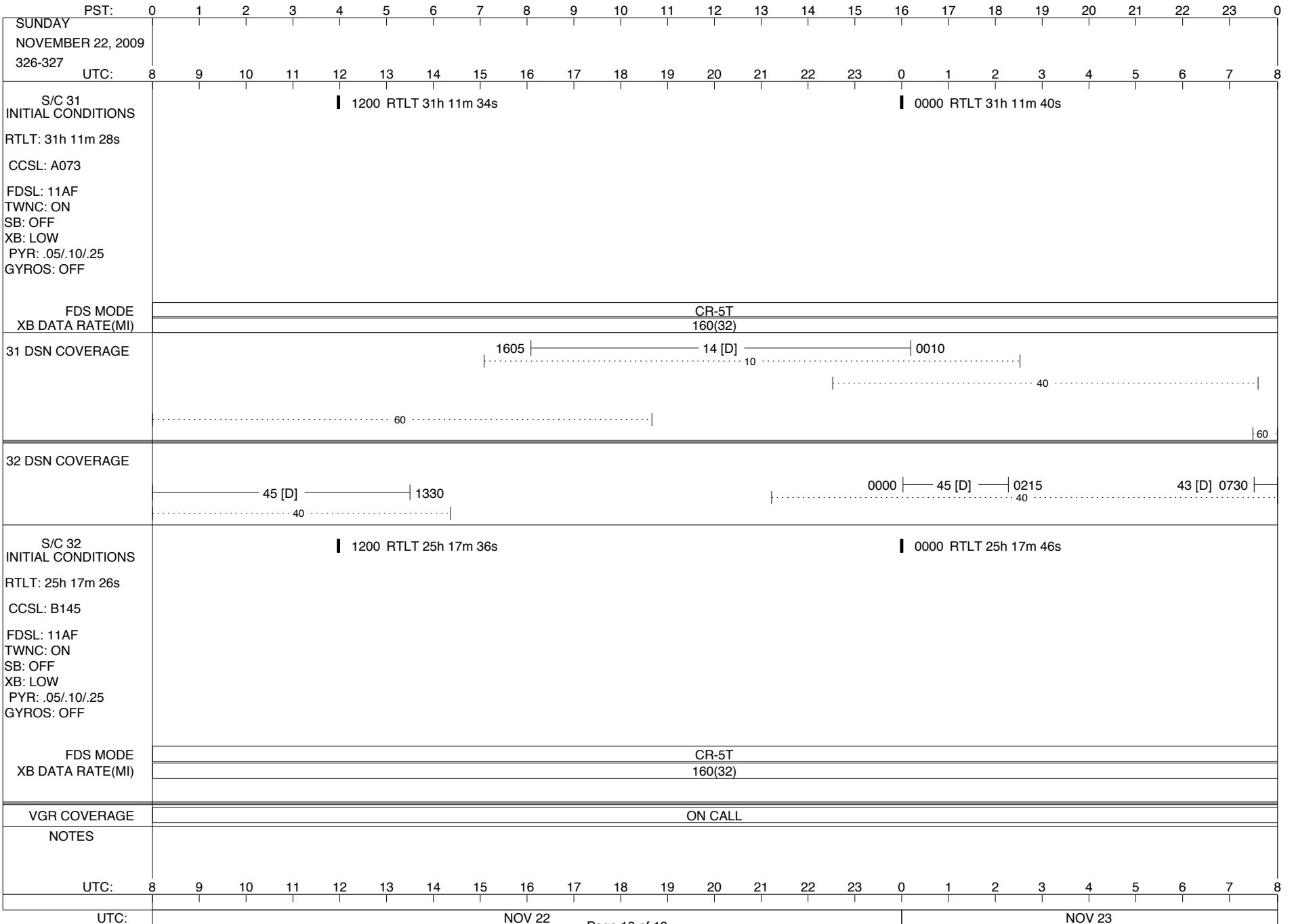
UTC: NOV 19 Page 15 of 19 NOV 20

ISSUE DATE: 11/09/09 10:44

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 NOVEMBER 20, 2009 324-325																									
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: 31h 11m 0s CCSL: A073 FDSL: 11AF TWNC: ON SB: OFF XB: LOW PYR: .05/10/25 GYROS: OFF	1200 RTLTL 31h 11m 8s												0000 RTLTL 31h 11m 14s												
FDS MODE XB DATA RATE(MI)	CR-5T 160(32)																								
31 DSN COVERAGE	1345 ----- 63 [D] ----- 1930 60												2330 ----- 14 [D] ----- 0255 40												
32 DSN COVERAGE	1030 ----- 43 [D] ----- 1445 40												0635 ----- 43 [D] ----- 40												
S/C 32 INITIAL CONDITIONS RTLTL: 25h 16m 48s CCSL: B145 FDSL: 11AF TWNC: ON SB: OFF XB: LOW PYR: .05/10/25 GYROS: OFF	1200 RTLTL 25h 16m 56s												0000 RTLTL 25h 17m 6s												
FDS MODE XB DATA RATE(MI)	CR-5T 160(32)																								
VGR COVERAGE	ON CALL																								
NOTES	[1] S/C 31=GS-4B @ 0730 XB=2.8K(41) NOT RECOVERABLE																								
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:	NOV 20												NOV 21												

ISSUE DATE: 11/09/09 10:44





ISSUE DATE: 11/09/09 10:44

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
MONDAY NOVEMBER 23, 2009 327-328																									
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: 31h 11m 40s CCSL: A073 FDSL: 11AF TWNC: ON SB: OFF XB: LOW PYR: .05/10/25 GYROS: OFF	<div style="text-align: center;"> <p>1200 RTLT 31h 11m 48s</p> </div>																								
FDS MODE													CR-5T												
XB DATA RATE(MI)													160(32)												
31 DSN COVERAGE	<div style="text-align: center;"> <p>1530 ----- 63 [D] ----- 1920 60</p> </div>																								
32 DSN COVERAGE	<div style="text-align: center;"> <p>1340 ----- 43 [D] ----- 1355 40</p> </div>																								
S/C 32 INITIAL CONDITIONS RTLT: 25h 17m 46s CCSL: B145 FDSL: 11AF TWNC: ON SB: OFF XB: LOW PYR: .05/10/25 GYROS: OFF	<div style="text-align: center;"> <p>1200 RTLT 25h 17m 56s</p> </div>																								
FDS MODE													CR-5T												
XB DATA RATE(MI)													160(32)												
VGR COVERAGE	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
UTC:	NOV 23												NOV 24												