

VOYAGER

Space Flight Operations Schedule (SFOS)

Issue Date: December 23, 2015

For the Period: 12/24/15 to 01/18/16 (15-358 – 16-018)

DSN OPSCHIEF (1) 230-102

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

OTHER

* KMassey@jgld.gdscc.nasa.gov
 * Belinda.Arroyo@jpl.nasa.gov
 *DL-DSSN-MPSETA@dsn.nasa.gov

SCIENCE

CRS *bryant@mail630.gsfc.nasa.gov
 LECP *r.decker@jhuapl.edu
 UVS *holburg@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

FLIGHT TEAM (14) 600-100

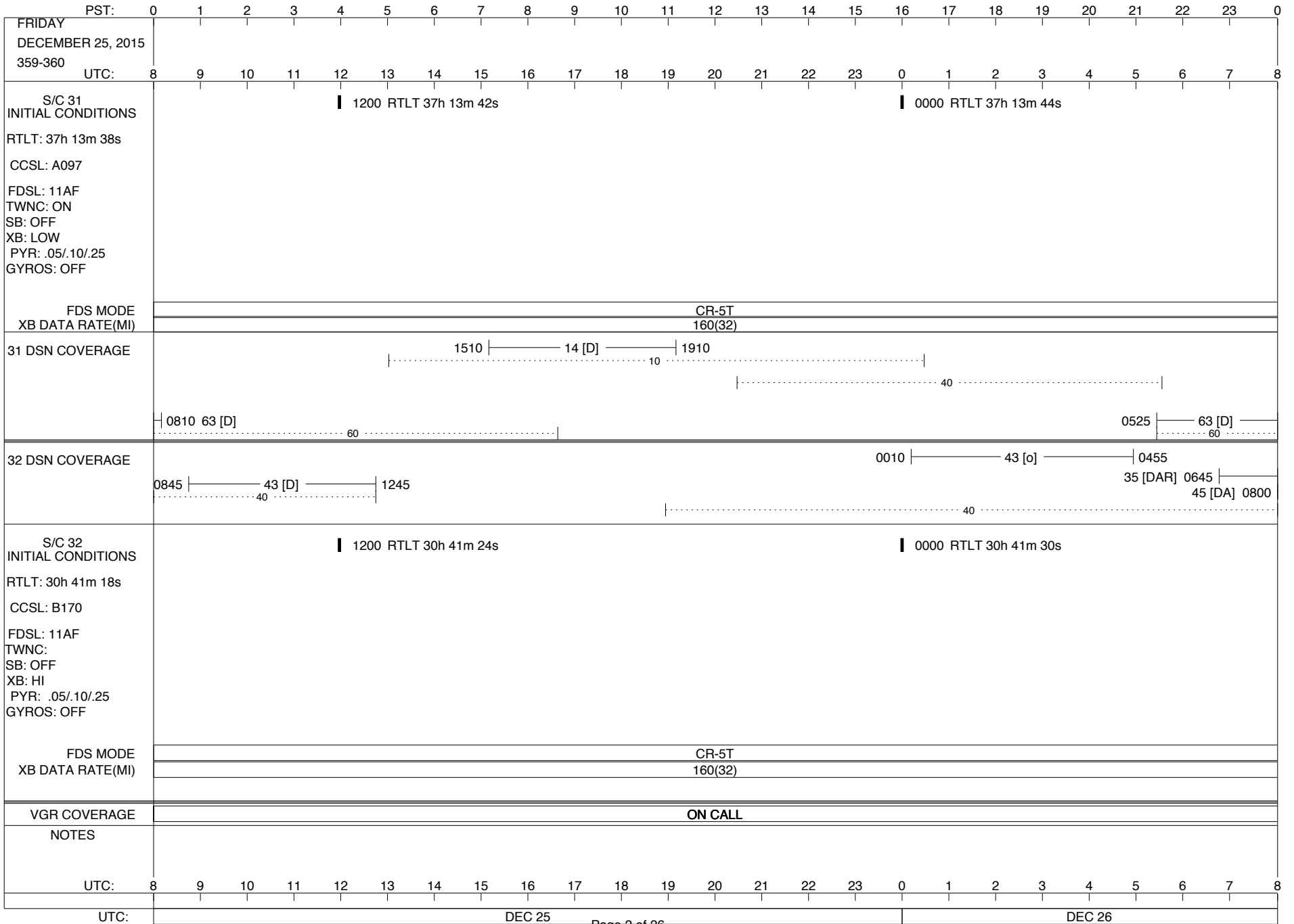
Dodd, S.
 Hall, J.
 Howard, S. (3)
 Ludwig, R. (2)
 Matsumoto, S.
 Medina
 Peralta, F.
 Weeks, T.
 Wong, R.
 Yang, L.
 Zottarelli, L.
 *odivers@san.rr.com

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

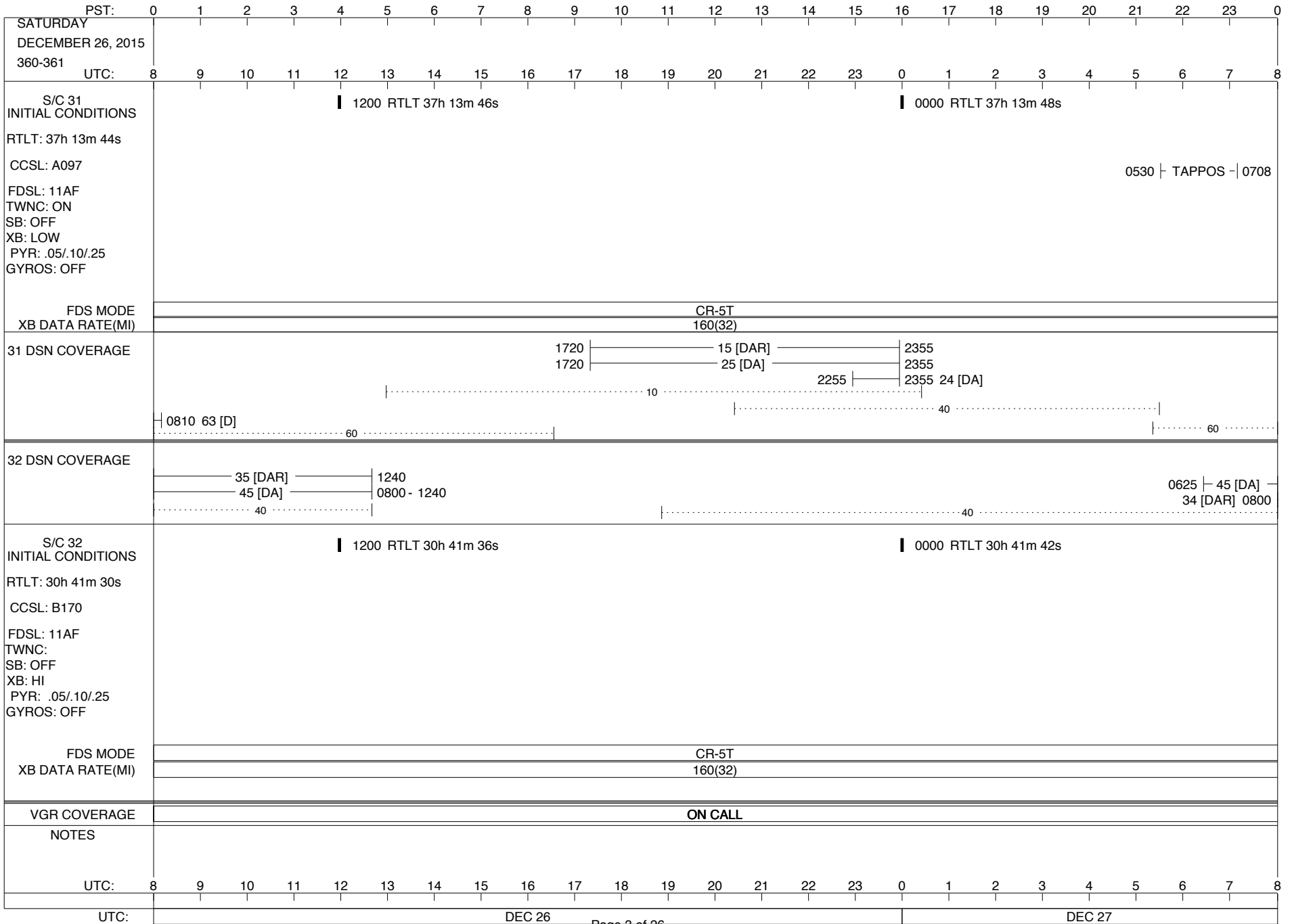
*Electronic Copy Only
 (16 – Dist/N: Paper Copies)
 09/08/10

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S/C 31 INITIAL CONDITIONS RTLTL: 37h 13m 32s CCSL: A097 FDSL: 11AF TWNC: ON SB: OFF XB: LOW PYR: .05/10/25 GYROS: OFF	1200 RTLTL 37h 13m 36s												0000 RTLTL 37h 13m 38s												
FDS MODE	CR-5T												CR-5T												
XB DATA RATE(MI)	160(32)												160(32)												
31 DSN COVERAGE	<p>1305 ----- 14 [D] ----- 1705</p> <p>..... 10 </p> <p>..... 40 </p> <p> ----- 0815 63 [D] ----- </p> <p>..... 60 </p> <p>..... 0610 ----- 63 [D] ----- </p> <p>..... 60</p>																								
32 DSN COVERAGE	<p>0850 ----- 43 [D] ----- 1250</p> <p>..... 40 </p> <p>..... 40</p>																								
S/C 32 INITIAL CONDITIONS RTLTL: 30h 41m 4s CCSL: B170 FDSL: 11AF TWNC: SB: OFF XB: HI PYR: .05/10/25 GYROS: OFF	1200 RTLTL 30h 41m 10s												0000 RTLTL 30h 41m 18s												
FDS MODE	CR-5T												CR-5T												
XB DATA RATE(MI)	160(32)												160(32)												
VGR COVERAGE	ON CALL																								
NOTES	[1] S/C 31=GS-4B @ 0531 XB=2.8K(41) NOT RECOVERABLE JPL HOLIDAY!																								
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ISSUE DATE: 12/23/15 10:19



ISSUE DATE: 12/23/15 10:19

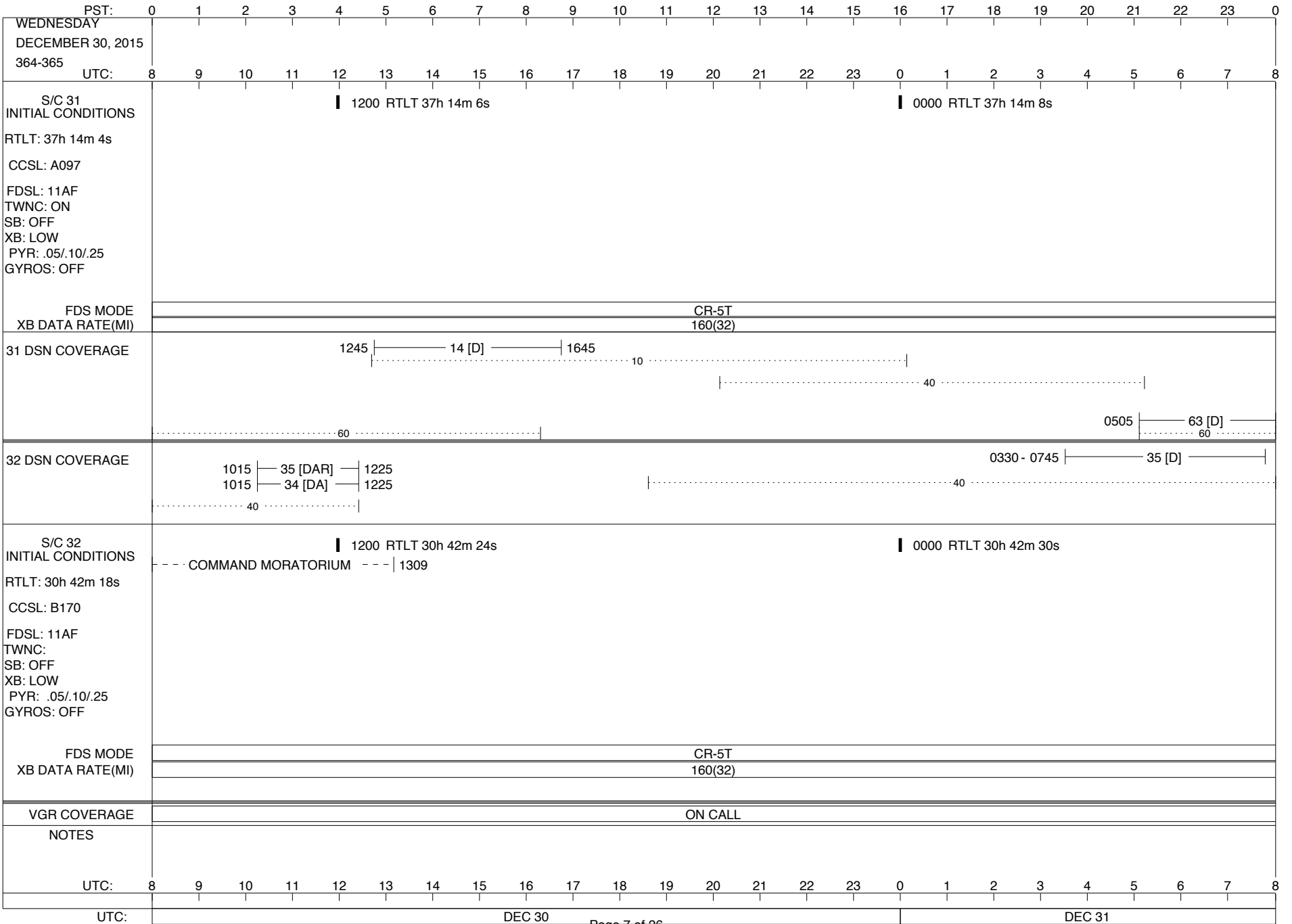


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SUNDAY DECEMBER 27, 2015 361-362																										
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S/C 31 INITIAL CONDITIONS RTLTL: 37h 13m 48s CCSL: A097 FDSL: 11AF TWNC: ON SB: OFF XB: LOW PYR: .05/10/25 GYROS: OFF	█ 1200 RTLTL 37h 13m 52s												█ 0000 RTLTL 37h 13m 54s													
FDS MODE													CR-5T													
XB DATA RATE(MI)													160(32)													
31 DSN COVERAGE	1310 ----- 14 [T] ----- 1655												10 ----- 40 ----- 0540 ----- 63 [D] ----- 60													
32 DSN COVERAGE	45 [DA] ----- 1050 34 [DAR] ----- 0800 - 1050 40 -----												1850 ----- 43 [D] ----- 2340 40 ----- 43 [D] 0730 -----													
S/C 32 INITIAL CONDITIONS RTLTL: 30h 41m 42s CCSL: B170 FDSL: 11AF TWNC: SB: OFF XB: HI PYR: .05/10/25 GYROS: OFF	█ 1200 RTLTL 30h 41m 48s												█ 0000 RTLTL 30h 41m 54s													
FDS MODE													CR-5T													
XB DATA RATE(MI)													160(32)													
VGR COVERAGE													ON CALL													
NOTES	[1] S/C 31=GS-4B @ 0831 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	
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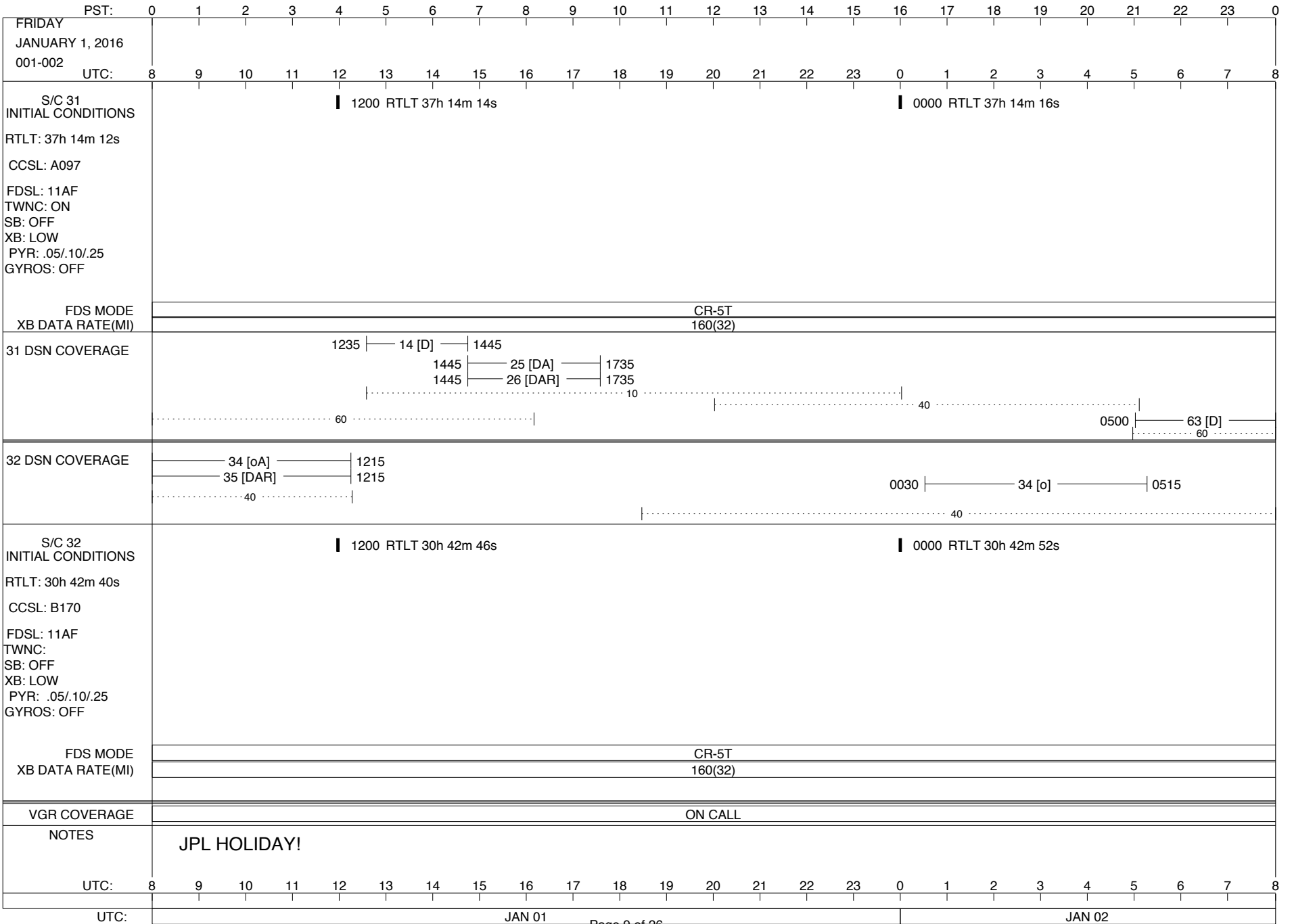
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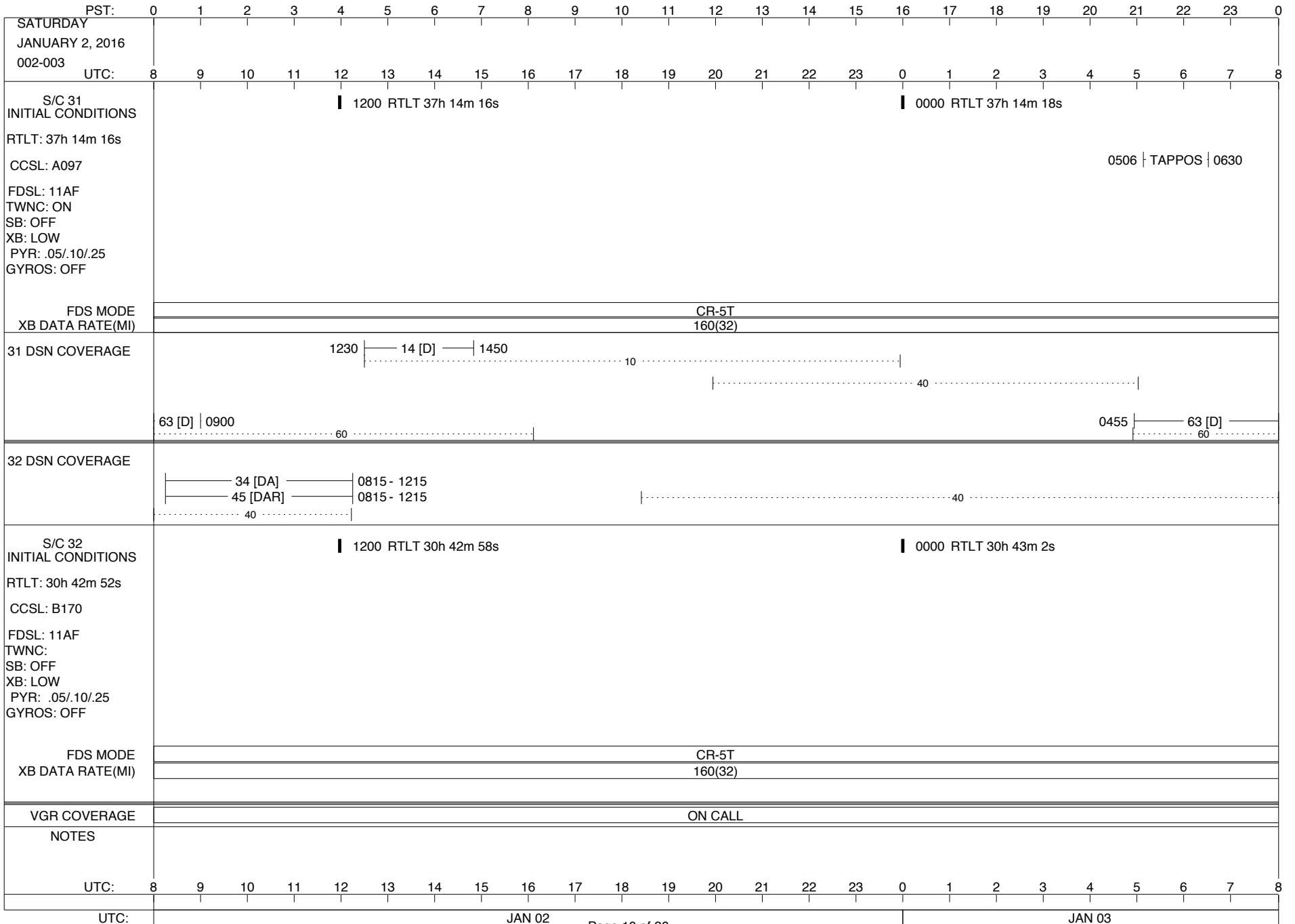
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UTC: 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 0 1 2 3 4 5 6 7 8		S/C 31 INITIAL CONDITIONS RTLT: 37h 13m 58s CCSL: A097 FDSL: 11AF TWNC: ON SB: OFF XB: LOW PYR: .05/.10/.25 GYROS: OFF												1200 RTLT 37h 14m 0s												0000 RTLT 37h 14m 4s											
FDS MODE XB DATA RATE(MI)		CR-5T 160(32)												2255 GS-4B 2256												CR-5T 160(32)											
31 DSN COVERAGE		<p>Timeline for 31 DSN COVERAGE:</p> <ul style="list-style-type: none"> 2010 - 2340: 15 [DAR], 25 [DA] 2240 - 2340: 24 [DA] 0510 - 0745: 63 [D] 60 (dotted line) 40 (dotted line) 60 (dotted line) 																																			
32 DSN COVERAGE		<p>Timeline for 32 DSN COVERAGE:</p> <ul style="list-style-type: none"> 1055 - 1230: 43 [D] 1855 - 2335: 43 [D] 0345 - 0745: 35 [D] 40 (dotted line) 40 (dotted line) 																																			
S/C 32 INITIAL CONDITIONS RTLT: 30h 42m 6s CCSL: B170 FDSL: 11AF TWNC: SB: OFF XB: HI PYR: .05/.10/.25 GYROS: OFF		1200 RTLT 30h 42m 12s												0000 RTLT 30h 42m 18s																							
FDS MODE XB DATA RATE(MI)		COMMAND MORATORIUM																																			
		<p>Timeline for 32 DSN COVERAGE (continued):</p> <ul style="list-style-type: none"> 1947 X/B LOW POWER 1951 BAY 1 HTR ON 																																			
VGR COVERAGE		ON CALL												VGR												ON CALL											
NOTES		[1] S/C 31=GS-4B @ 2255 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		DEC 29												DEC 30																							

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ISSUE DATE: 12/23/15 10:19

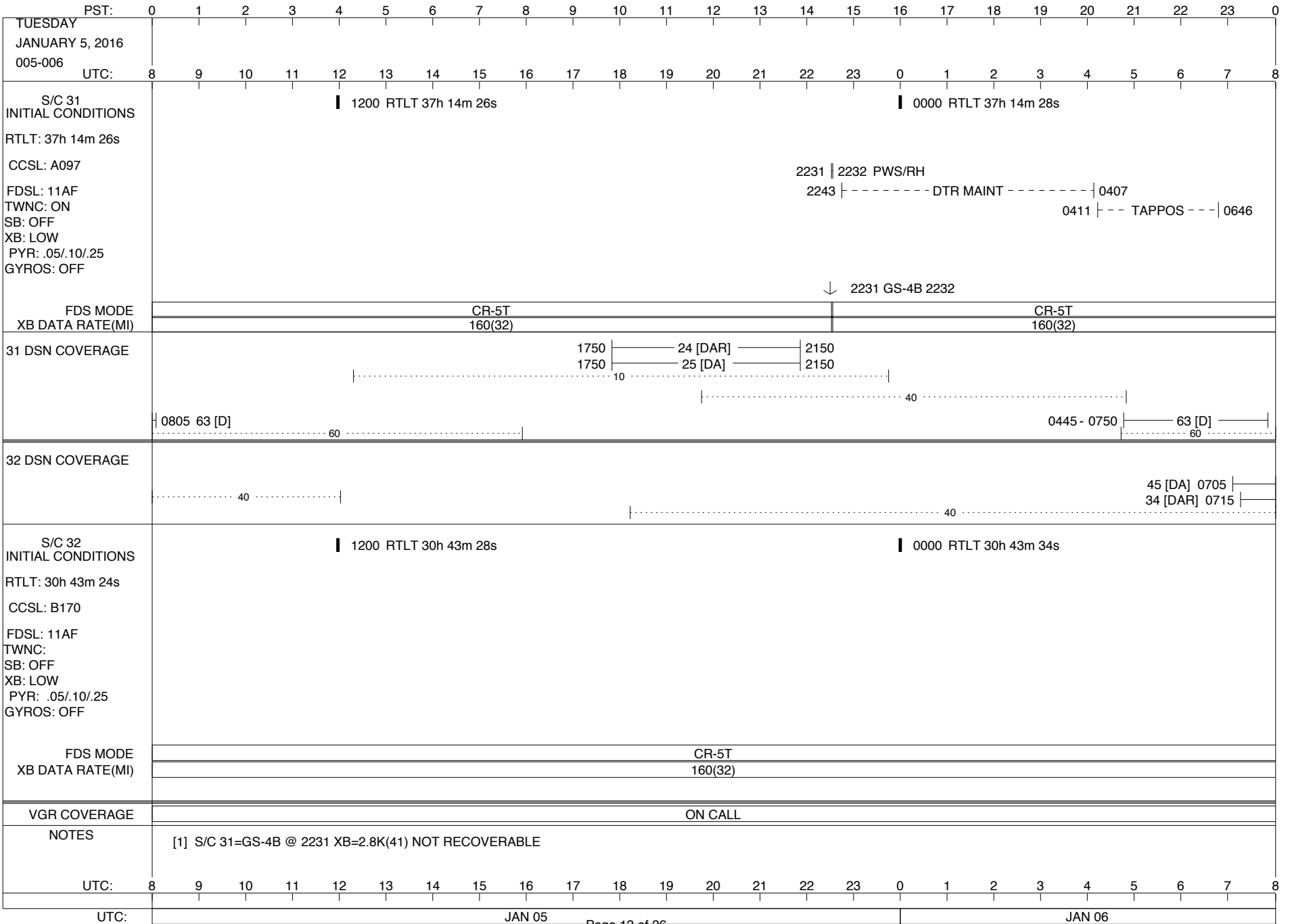




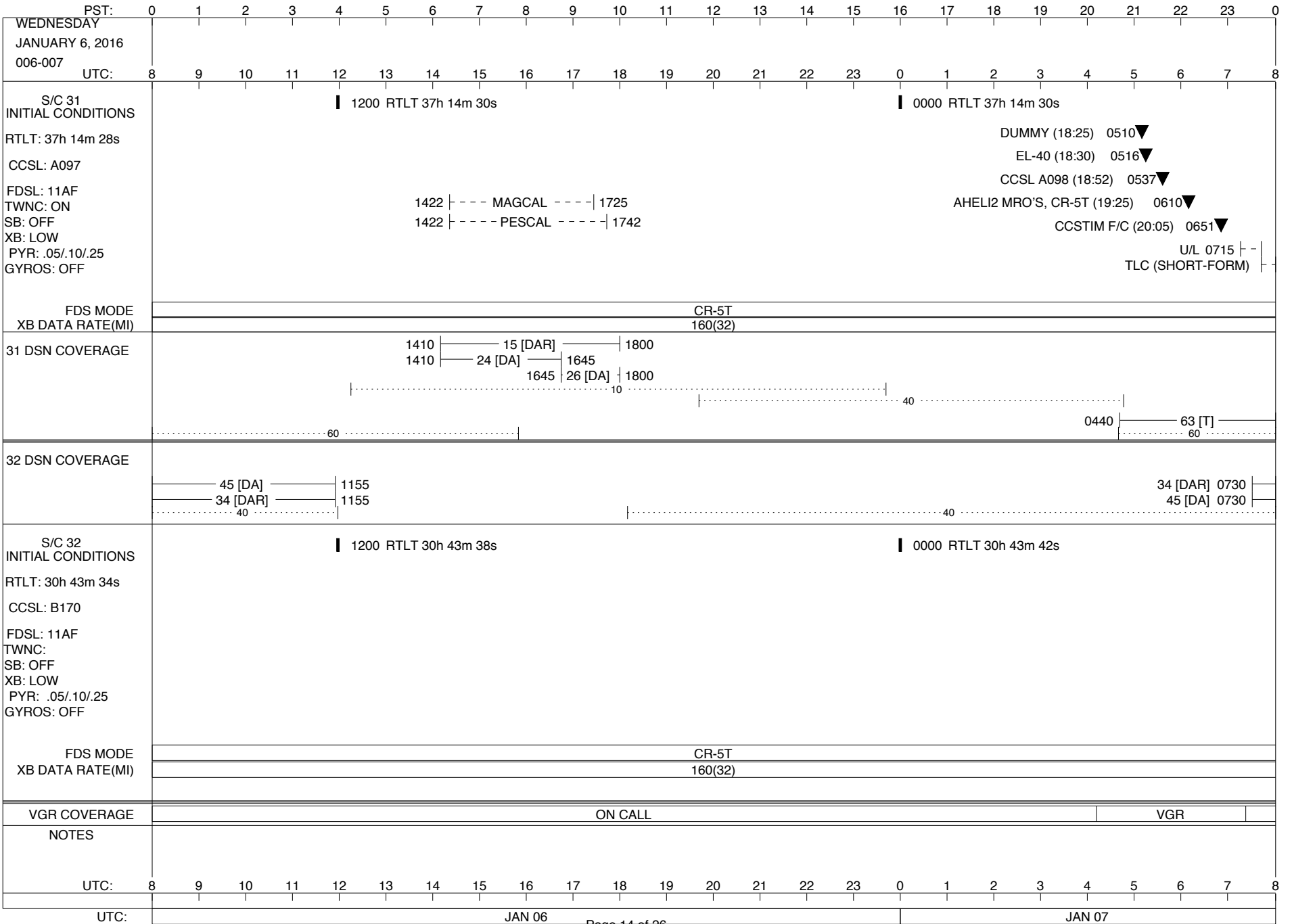
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SUNDAY JANUARY 3, 2016 003-004	UTC: 8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	0	1	2	3	4	5	6	7	8
S/C 31 INITIAL CONDITIONS RTLTL: 37h 14m 18s CCSL: A097 FDSL: 11AF TWNC: ON SB: OFF XB: LOW PYR: .05/.10/.25 GYROS: OFF	1200 RTLTL 37h 14m 20s												0000 RTLTL 37h 14m 22s												
0808 - 0809 PWS/RH 0820 - 0930 TAPPOS 0808 GS-4B 0809																									
FDS MODE XB DATA RATE(MI)													CR-5T 160(32)												
31 DSN COVERAGE	<p>1230 ----- 14 [D] ----- 1630</p> <p>..... ----- 10 ----- </p> <p>..... ----- 40 ----- </p> <p> ----- 0855 63 [D] ----- </p> <p>..... ----- 60 ----- </p> <p>..... ----- 0450 ----- 63 [D] </p> <p>..... ----- 60 ----- </p>																								
32 DSN COVERAGE	<p>..... ----- 43 [D] ----- 0810 - 1210</p> <p>..... ----- 40 ----- </p> <p>..... ----- 0035 - 0725 ----- 35 [D] </p> <p>..... ----- 40 ----- </p>																								
S/C 32 INITIAL CONDITIONS RTLTL: 30h 43m 2s CCSL: B170 FDSL: 11AF TWNC: SB: OFF XB: LOW PYR: .05/.10/.25 GYROS: OFF	1200 RTLTL 30h 43m 8s												0000 RTLTL 30h 43m 12s												
FDS MODE XB DATA RATE(MI)													CR-5T 160(32)												
VGR COVERAGE	ON CALL																								
NOTES	[1] S/C 31=GS-4B @ 0808 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:	JAN 03												JAN 04												

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S/C 31 INITIAL CONDITIONS RTLT: 37h 14m 22s CCSL: A097 FDSL: 11AF TWNC: ON SB: OFF XB: LOW PYR: .05/10/25 GYROS: OFF	1200 RTLT 37h 14m 24s												0000 RTLT 37h 14m 26s												
FDS MODE XB DATA RATE(MI)	CR-5T 160(32)																								
31 DSN COVERAGE	----- 10 -----												----- 40 -----												
	63 [D] 0900 ----- 60 -----												0445 ----- 63 [D] ----- 60 -----												
32 DSN COVERAGE	0855 ----- 35 [DAR] ----- 1205				0855 ----- 45 [DA] ----- 1205				2315 ----- 35 [D] ----- 0115				0320 - 0725 ----- 45 [D] -----												
S/C 32 INITIAL CONDITIONS RTLT: 30h 43m 12s CCSL: B170 FDSL: 11AF TWNC: SB: OFF XB: LOW PYR: .05/10/25 GYROS: OFF	1200 RTLT 30h 43m 18s												0000 RTLT 30h 43m 24s												
FDS MODE XB DATA RATE(MI)	CR-5T 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
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ISSUE DATE: 12/23/15 10:19

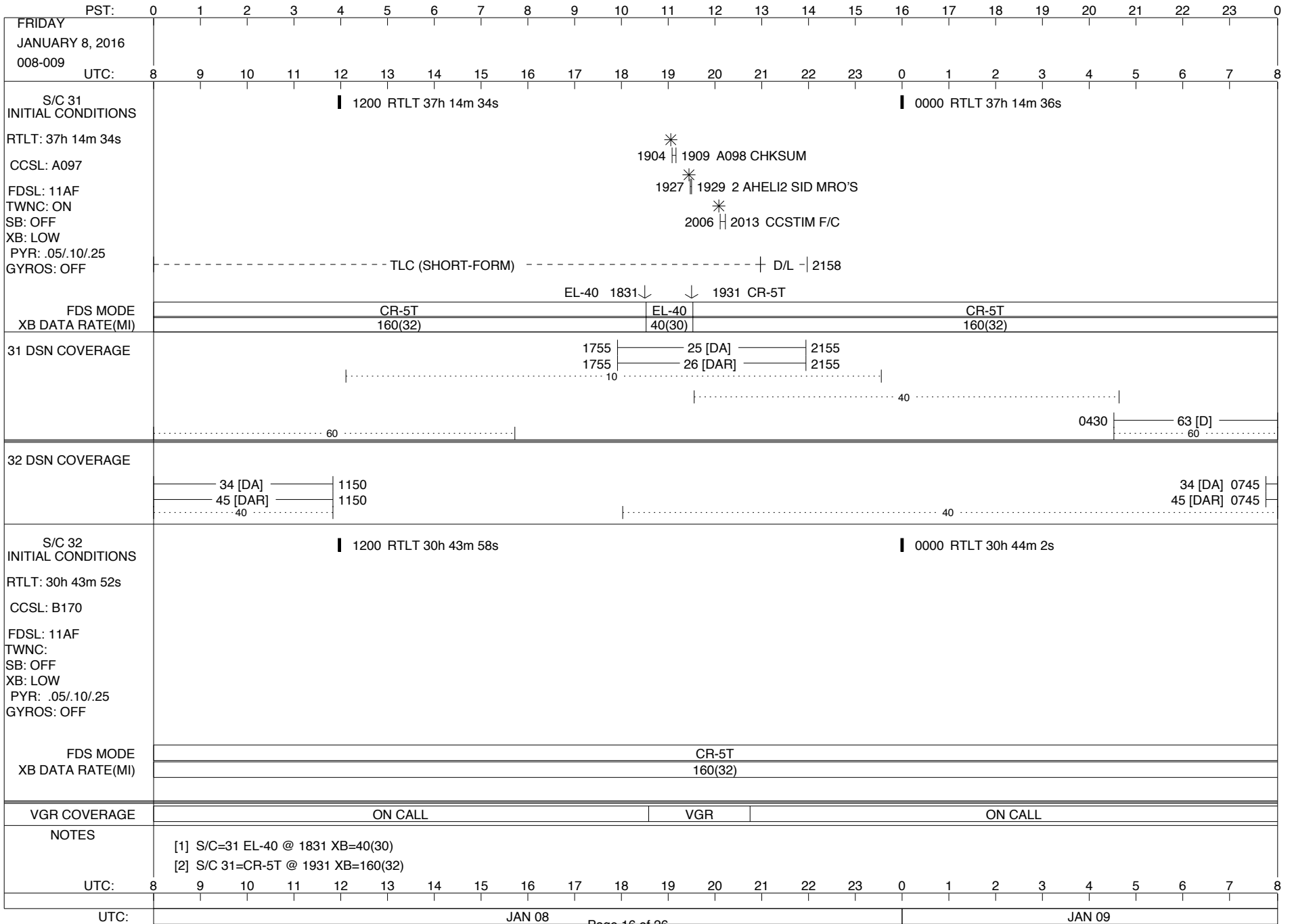


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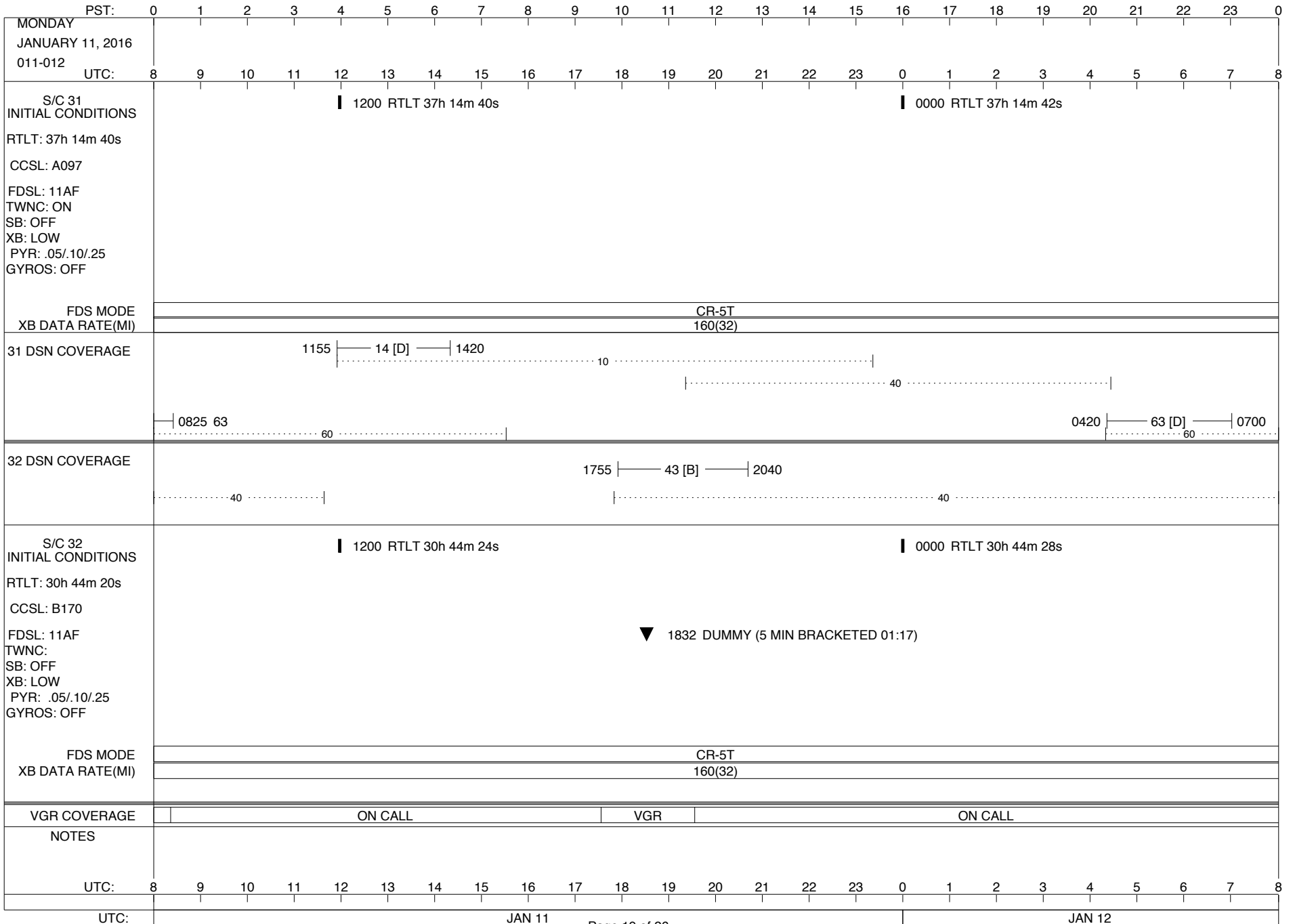
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S/C 31 INITIAL CONDITIONS RTLTL: 37h 14m 30s CCSL: A097 FDSL: 11AF TWNC: ON SB: OFF XB: LOW PYR: .05/.10/.25 GYROS: OFF	1200 RTLTL 37h 14m 32s												0000 RTLTL 37h 14m 34s												
	0142 TAPPOS 0307 0444 0445 PWS/RH TAPPOS 0456 - - - - 0606																								
	----- TLC (SHORT-FORM) -----																								
	↓ 0444 GS-4B 0445																								
FDS MODE	CR-5T												CR-5T												
XB DATA RATE(MI)	160(32)												160(32)												
31 DSN COVERAGE	<div style="display: flex; justify-content: space-between;"> <div>1210 ----- 14 [D] ----- 1545</div> <div>..... 10</div> <div>..... 40</div> </div> <div style="display: flex; justify-content: space-between; margin-top: 10px;"> <div>0830 63 [T] 60</div> <div>0435 - 0720 ----- 63 [D] ----- 60</div> </div>																								
32 DSN COVERAGE	<div style="display: flex; justify-content: space-between;"> <div>34 [DAR] ----- 1130</div> <div>45 [DA] ----- 1130</div> <div>..... 40</div> </div> <div style="display: flex; justify-content: space-between; margin-top: 10px;"> <div>..... 40</div> <div>34 [DA] 0735 -----</div> <div>45 [DAR] 0735 -----</div> </div>																								
S/C 32 INITIAL CONDITIONS RTLTL: 30h 43m 42s CCSL: B170 FDSL: 11AF TWNC: SB: OFF XB: LOW PYR: .05/.10/.25 GYROS: OFF	1200 RTLTL 30h 43m 48s												0000 RTLTL 30h 43m 52s												
FDS MODE	CR-5T												CR-5T												
XB DATA RATE(MI)	160(32)												160(32)												
VGR COVERAGE	ON CALL																								
NOTES	[1] S/C 31=GS-4B @ 0444 XB=2.8K(41) NOT RECOVERABLE																								
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UTC:	JAN 07												JAN 08												

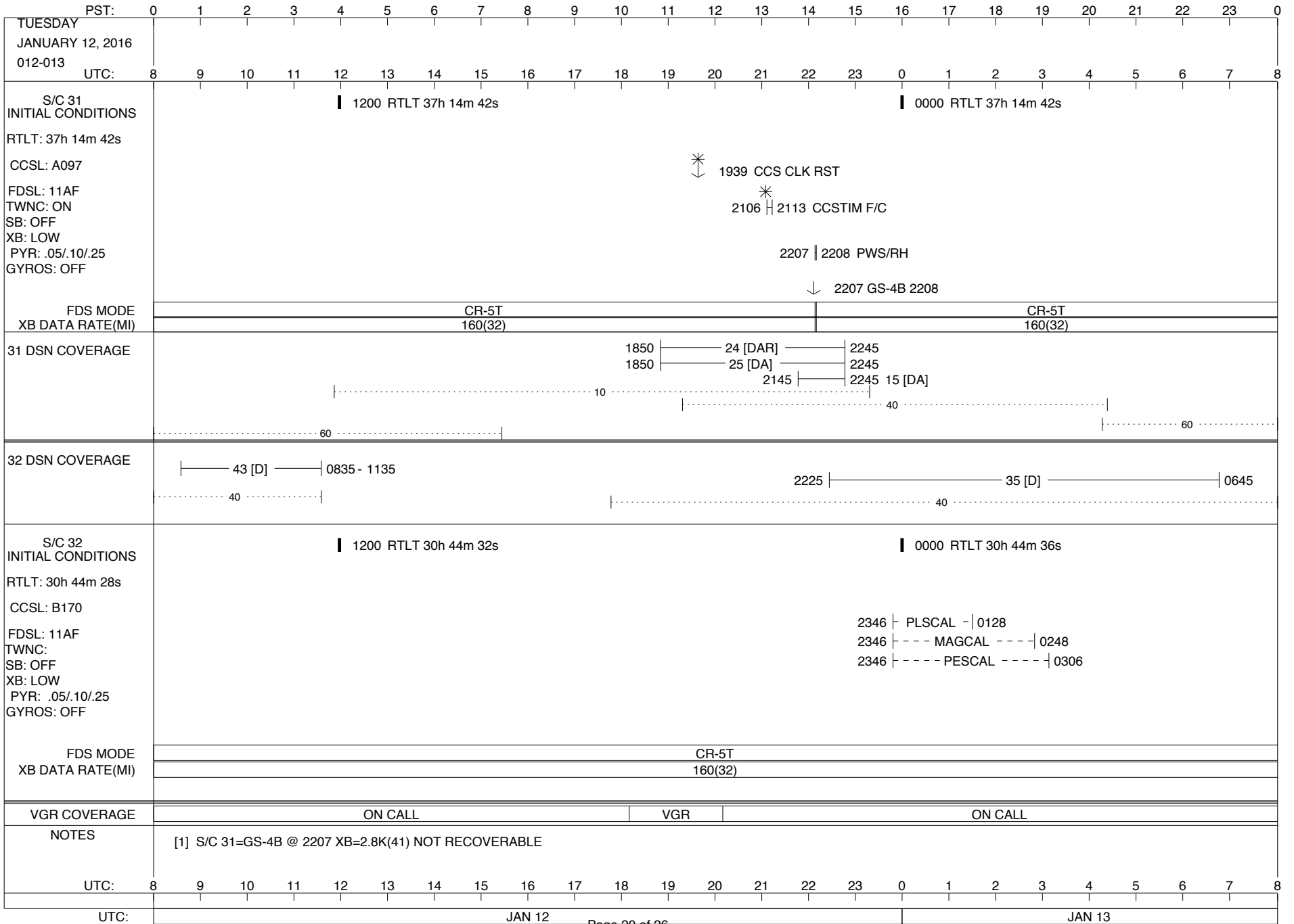


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S/C 31 INITIAL CONDITIONS RTLTL: 37h 14m 36s CCSL: A097 FDSL: 11AF TWNC: ON SB: OFF XB: LOW PYR: .05/10/25 GYROS: OFF	█ 1200 RTLTL 37h 14m 36s												█ 0000 RTLTL 37h 14m 38s												
FDS MODE XB DATA RATE(MI)	CR-5T 160(32)																								
31 DSN COVERAGE	1205 ----- 14 [D] ----- 1430												10 ----- 40 -----												
	0830 63 [D] ----- 60 -----												0430 ----- 63 [D] ----- 0710 60												
32 DSN COVERAGE	34 [DA] ----- 1145												35 [DA] 0740												
	45 [DAR] ----- 1145												34 [DAR] 0740												
	40 ----- 40 -----																								
S/C 32 INITIAL CONDITIONS RTLTL: 30h 44m 2s CCSL: B170 FDSL: 11AF TWNC: SB: OFF XB: LOW PYR: .05/10/25 GYROS: OFF	█ 1200 RTLTL 30h 44m 6s												█ 0000 RTLTL 30h 44m 10s												
FDS MODE XB DATA RATE(MI)	CR-5T 160(32)																								
VGR COVERAGE	ON CALL																								
NOTES	[1] S/C 31=GS-4B @ 0744 XB=2.8K(41) NOT RECOVERABLE																								
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ISSUE DATE: 12/23/15 10:19

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S/C 31 INITIAL CONDITIONS RTLTL: 37h 14m 38s CCSL: A097 FDSL: 11AF TWNC: ON SB: OFF XB: LOW PYR: .05/.10/.25 GYROS: OFF	1200 RTLTL 37h 14m 38s												0000 RTLTL 37h 14m 40s												
FDS MODE XB DATA RATE(MI)	CR-5T 160(32)												CR-5T 160(32)												
31 DSN COVERAGE	1200 ----- 14 [D] ----- 1600 ----- 10 ----- ----- 40 -----												0425 ----- 63 ----- ----- 60 -----												
32 DSN COVERAGE	35 [DA] ----- 1140 34 [DAR] ----- 1140 ----- 40 -----												0050 ----- 45 [D] ----- 0700 ----- 40 -----												
S/C 32 INITIAL CONDITIONS RTLTL: 30h 44m 10s CCSL: B170 FDSL: 11AF TWNC: SB: OFF XB: LOW PYR: .05/.10/.25 GYROS: OFF	1200 RTLTL 30h 44m 16s												0000 RTLTL 30h 44m 20s												
FDS MODE XB DATA RATE(MI)	CR-5T 160(32)												CR-5T 160(32)												
VGR COVERAGE	ON CALL																					VGR			
NOTES																									
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UTC:	JAN 10												JAN 11												





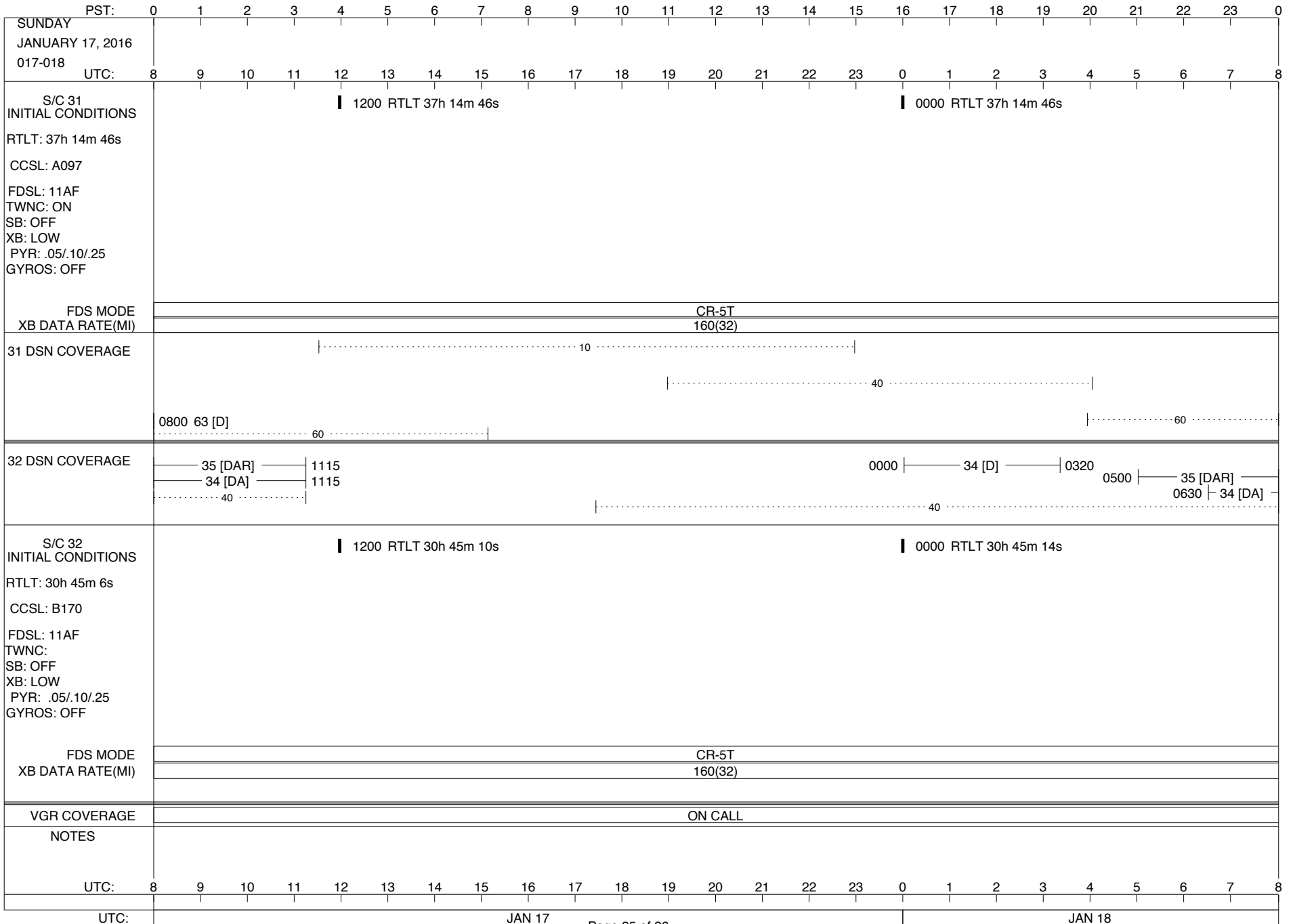
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S/C 31 INITIAL CONDITIONS RTLTL: 37h 14m 44s CCSL: A097 FDSL: 11AF TWNC: ON SB: OFF XB: LOW PYR: .05/.10/.25 GYROS: OFF						█ 1200												█ 0000								
FDS MODE																										
XB DATA RATE(MI)																										
31 DSN COVERAGE																										
32 DSN COVERAGE																										
S/C 32 INITIAL CONDITIONS RTLTL: 30h 44m 44s CCSL: B170 FDSL: 11AF TWNC: SB: OFF XB: LOW PYR: .05/.10/.25 GYROS: OFF						█ 1200												█ 0000								
FDS MODE																										
XB DATA RATE(MI)																										
VGR COVERAGE																										
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:																										

ISSUE DATE: 12/23/15 10:19

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FDS MODE XB DATA RATE(MI)	CR-5T 160(32)																								
31 DSN COVERAGE	1650 ----- 15 [DAR] ----- 2130 1650 ----- 25 [DA] ----- 2130 ----- 10 ----- 40 ----- 60												0400 - 0800 ----- 63 [D] ----- 60												
32 DSN COVERAGE	----- 40 ----- 40												0325 ----- 35 [DAR] 0620 ----- 34 [DA]												
S/C 32 INITIAL CONDITIONS RTLT: 30h 45m 0s CCSL: B170 FDSL: 11AF TWNC: SB: OFF XB: LOW PYR: .05/.10/.25 GYROS: OFF	1200 RTLT 30h 45m 4s												0000 RTLT 30h 45m 6s												
FDS MODE XB DATA RATE(MI)	CR-5T 160(32)																								
VGR COVERAGE	ON CALL																								
NOTES	[1] S/C 31=GS-4B @ 0720 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:	JAN 16												JAN 17												

ISSUE DATE: 12/23/15 10:19



ISSUE DATE: 12/23/15 10:19

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 JANUARY 18, 2016 018-019																											
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S/C 31 INITIAL CONDITIONS RTLT: 37h 14m 46s CCSL: A097 FDSL: 11AF TWNC: ON SB: OFF XB: LOW PYR: .05/.10/.25 GYROS: OFF	<div style="text-align: center;"> </div>																										
FDS MODE														CR-5T													
XB DATA RATE(MI)														160(32)													
31 DSN COVERAGE	<div style="text-align: center;"> </div>																										
32 DSN COVERAGE	<div style="text-align: center;"> </div>																										
S/C 32 INITIAL CONDITIONS RTLT: 30h 45m 14s CCSL: B170 FDSL: 11AF TWNC: SB: OFF XB: LOW PYR: .05/.10/.25 GYROS: OFF	<div style="text-align: center;"> </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:	JAN 18													Page 26 of 26											JAN 19		