

VOYAGER

Space Flight Operations Schedule (SFOS)

Issue Date: January 16, 2019

For the Period: 01/17/19 to 02/04/19 (19/017 – 19/035)

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

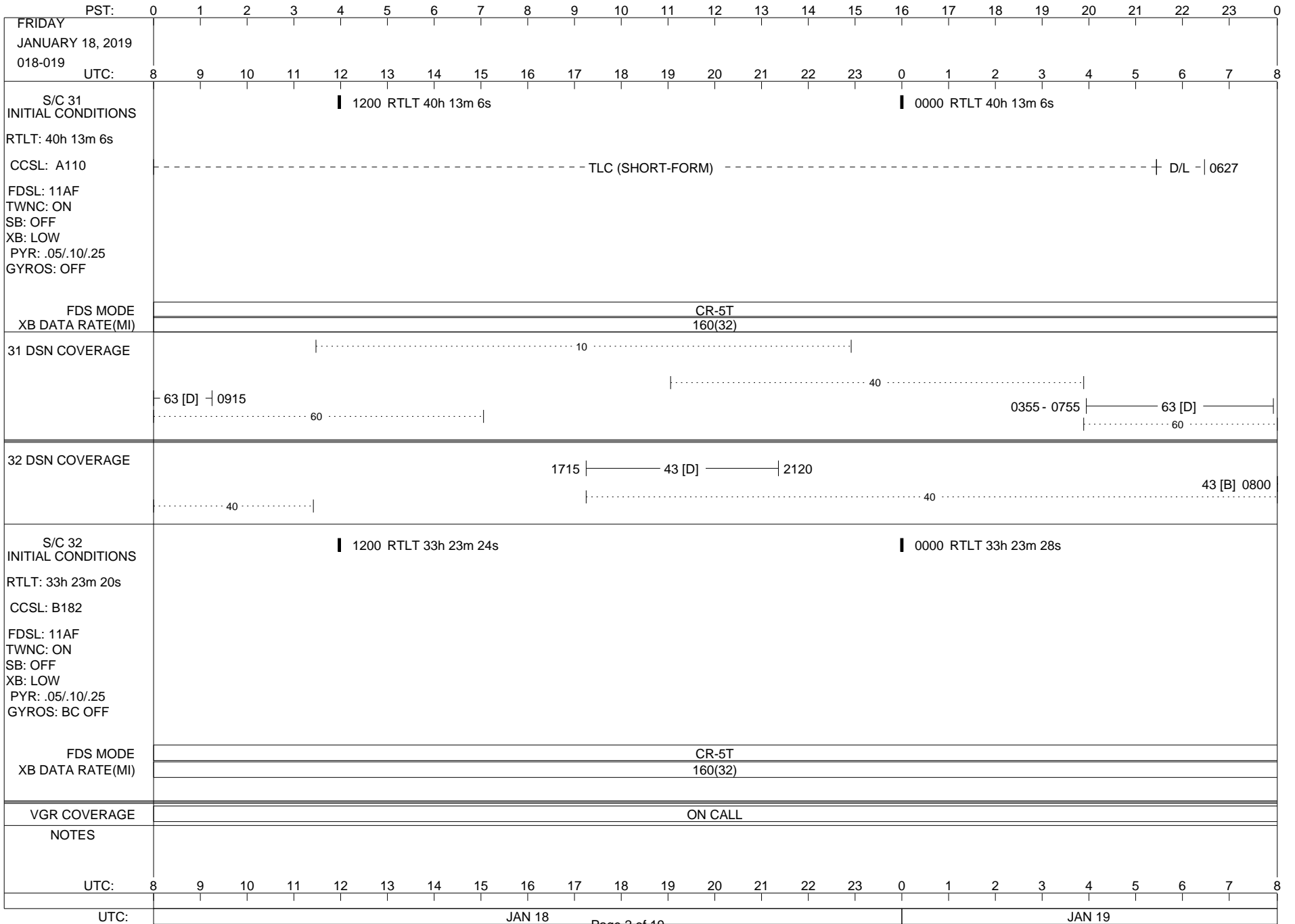
Posted at http://voyager.jpl.nasa.gov/mission/soesfos/tracking_schedule.html

02/27/17

ISSUE DATE: 01/23/19 09:44

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S/C 31 INITIAL CONDITIONS RTLTL: 40h 13m 6s CCSL: A110 FDSL: 11AF TWNC: ON SB: OFF XB: LOW PYR: .05/.10/.25 GYROS: OFF	1200 RTLTL 40h 13m 6s												0000 RTLTL 40h 13m 6s												
	1220 DUMMY (04:33)												TLC (SHORT-FORM)												
	U/L 1245 -												1328 - 1400 SHUNT POWER TEST												
													0111 0113 TAPPOS						0413 0415 PWS/RH 0425 0437 TAPPOS						
																			↓ 0413 GS-4B 0415						
FDS MODE	CR-5T												CR-5T												
XB DATA RATE(MI)	160(32)												160(32)												
31 DSN COVERAGE	1150 ----- 14 [T] ----- 1625												0355 ----- 63 [D] -----												
	60 -----												40 -----												
32 DSN COVERAGE	40 ----- 1128												1850 ----- 34 [DAR] ----- 2220 1850 ----- 36 [DA] ----- 2220												
	40 -----												40 -----												
S/C 32 INITIAL CONDITIONS RTLTL: 33h 23m 14s CCSL: B182 FDSL: 11AF TWNC: ON SB: OFF XB: LOW PYR: .05/.10/.25 GYROS: BC OFF	1200 RTLTL 33h 23m 16s												0000 RTLTL 33h 23m 20s												
FDS MODE	CR-5T												CR-5T												
XB DATA RATE(MI)	160(32)												160(32)												
VGR COVERAGE	ON CALL						VGR						ON CALL												
NOTES	[1] S/C 31=GS-4B @ 0413 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 17												JAN 18												

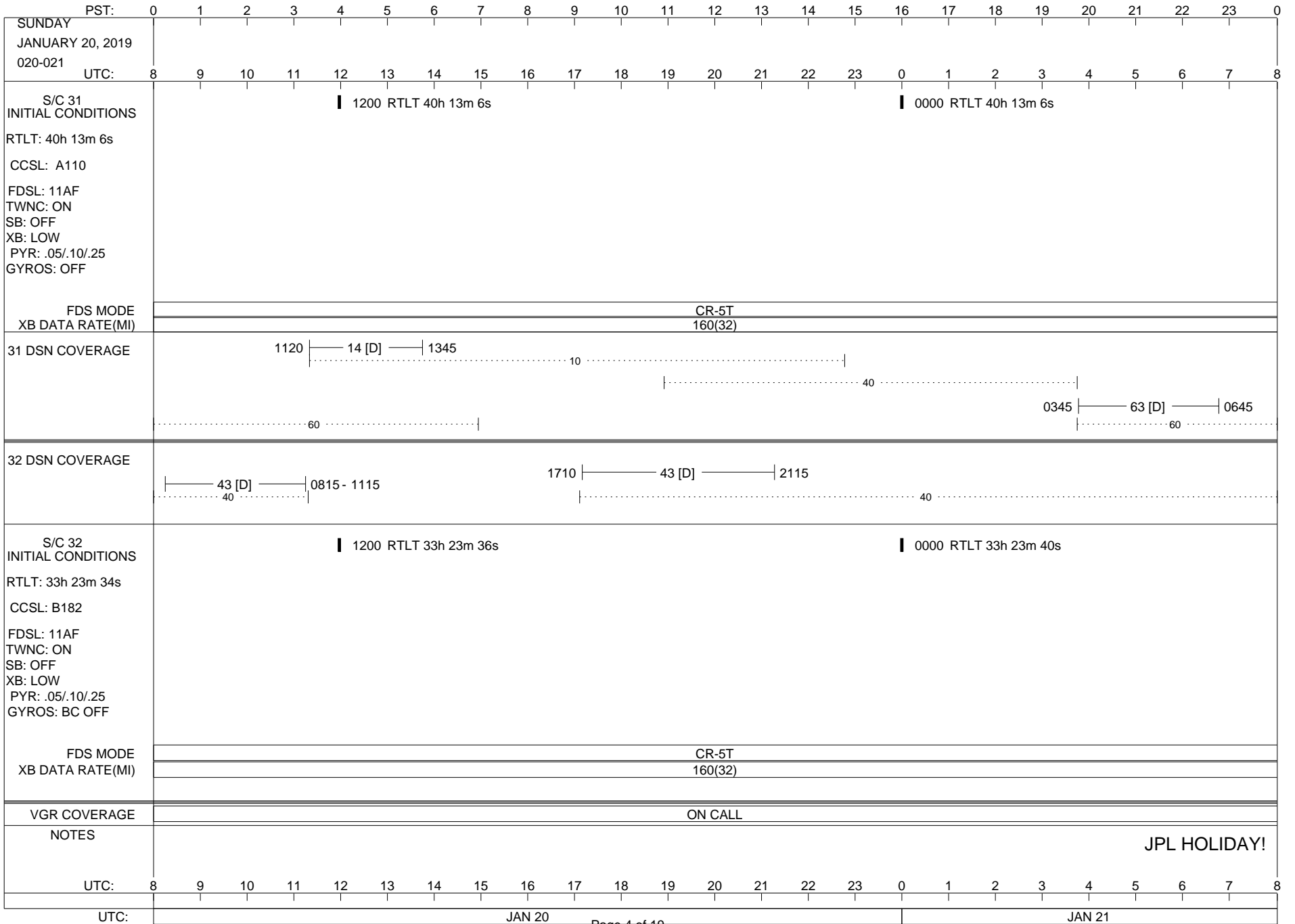
ISSUE DATE: 01/23/19 09:44



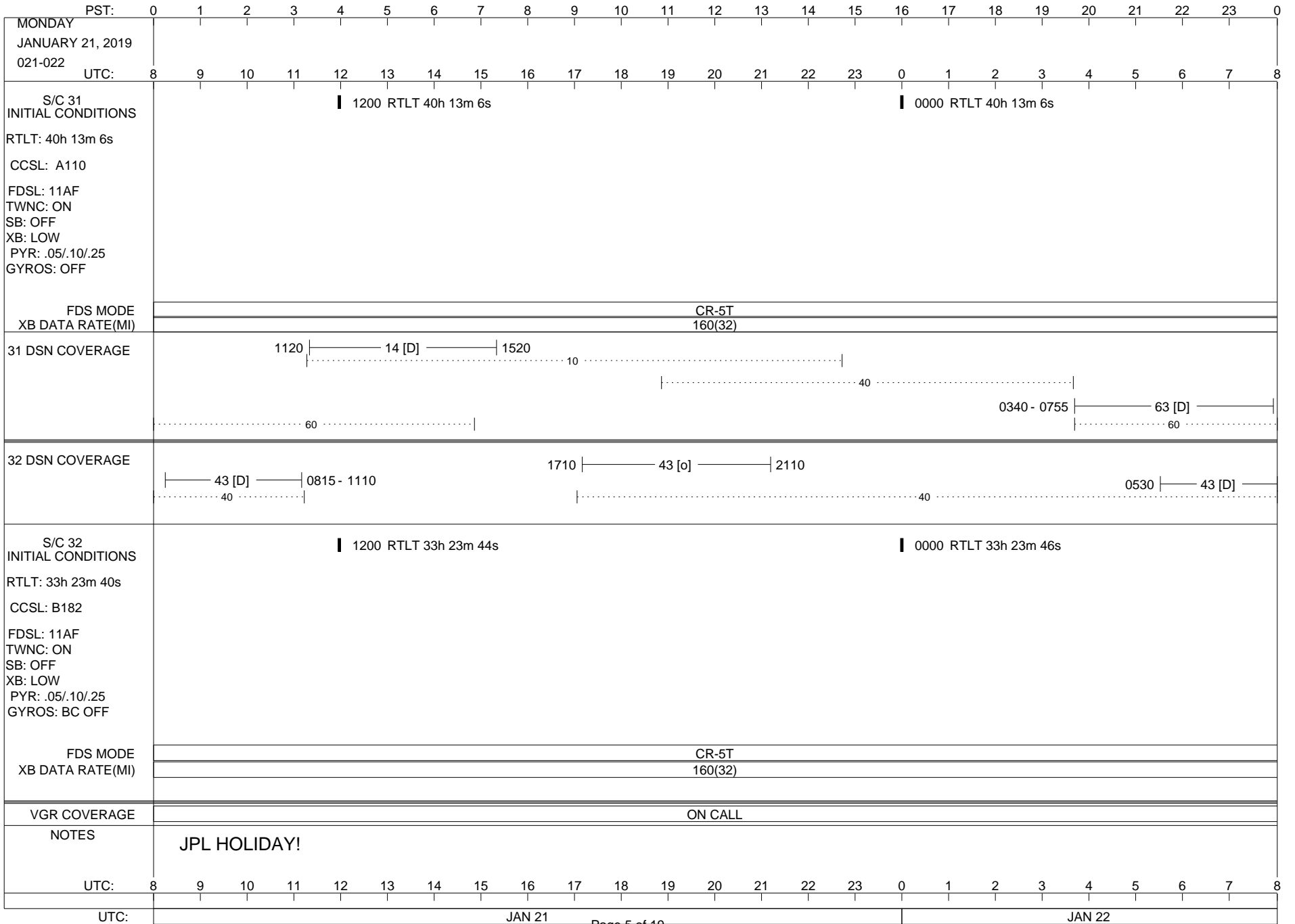
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S/C 31 INITIAL CONDITIONS RTL: 40h 13m 6s CCSL: A110 FDSL: 11AF TWNC: ON SB: OFF XB: LOW PYR: .05/.10/.25 GYROS: OFF	1200 RTLT 40h 13m 6s												0000 RTLT 40h 13m 6s												
FDS MODE	CR-5T																								
XB DATA RATE(MI)	160(32)																								
31 DSN COVERAGE	1220 14 [D] 1425												0350 - 0750 63 [D]												
32 DSN COVERAGE	43 [B] 0800 - 1115												1715 43 [D] 2115												
S/C 32 INITIAL CONDITIONS RTL: 33h 23m 28s CCSL: B182 FDSL: 11AF TWNC: ON SB: OFF XB: LOW PYR: .05/.10/.25 GYROS: BC OFF	1200 RTLT 33h 23m 30s												0000 RTLT 33h 23m 34s												
FDS MODE	CR-5T																								
XB DATA RATE(MI)	160(32)																								
VGR COVERAGE	VGR												ON CALL												
NOTES	[1] S/C 31=GS-4B @ 0713 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 19												JAN 20												

ISSUE DATE: 01/23/19 09:44



ISSUE DATE: 01/23/19 09:44



ISSUE DATE: 01/23/19 09:44

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																													
JANUARY 22, 2019																													
022-023																													
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 40h 13m 6s														0000 RTLT 40h 13m 6s													
RTLT: 40h 13m 6s																													
CCSL: A110																													
FDSL: 11AF																													
TWNC: ON																													
SB: OFF																													
XB: LOW																													
PYR: .05/.10/.25																													
GYROS: OFF																													
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		1200 RTLT 33h 23m 50s														0000 RTLT 33h 23m 52s													
RTLT: 33h 23m 46s																													
CCSL: B182																													
FDSL: 11AF																													
TWNC: ON																													
SB: OFF																													
XB: LOW																													
PYR: .05/.10/.25																													
GYROS: BC OFF																													
FDS MODE		CR-5T														CR-5T													
XB DATA RATE(MI)		160(32)														160(32)													
VGR COVERAGE		ON CALL														VGR				ON CALL									
NOTES		[1] S/C 31=GS-4B @ 2136 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 22														JAN 23													

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 23, 2019

023-024 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: 40h 13m 6s
CCSL: A110
FDSL: 11AF
TWNC: ON
SB: OFF
XB: LOW
PYR: .05/.10/.25
GYROS: OFF

1200 RTLT 40h 13m 6s 0000 RTLT 40h 13m 4s

U/L 1210 | - | --- TLC (SHORT-FORM)

FDS MODE
XB DATA RATE(MI)

CR-5T
160(32)

31 DSN COVERAGE

1125 | 14 [T] | 1410
..... 10 40
0825 55 [DAR] 0335 - 0715 63 [D]
0825 65 [DA] 65 [DAR] 0705
..... 60 55 [DA] 0705
..... 60

32 DSN COVERAGE

1655 | 43 [D] | 2050
..... 40 40

S/C 32
INITIAL CONDITIONS
RTLT: 33h 23m 52s
CCSL: B182
FDSL: 11AF
TWNC: ON
SB: OFF
XB: LOW
PYR: .05/.10/.25
GYROS: BC OFF

1200 RTLT 33h 23m 56s 0000 RTLT 33h 23m 58s

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

ISSUE DATE: 01/23/19 09:44

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 JANUARY 24, 2019 024-025	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: 40h 13m 4s CCSL: A110 FDSL: 11AF TWNC: ON SB: OFF XB: LOW PYR: .05/.10/.25 GYROS: OFF	1200 RTLTL 40h 13m 4s												0000 RTLTL 40h 13m 4s															
FDS MODE XB DATA RATE(MI)	CR-5T 160(32)												CR-5T 160(32)															
31 DSN COVERAGE	1120 ----- 14 ----- 1545 ----- 10 ----- 40 ----- 60												0335 - 0735 ----- 63 [D] ----- 60															
32 DSN COVERAGE	1655 ----- 43 [D] ----- 2055 ----- 40 ----- 40																											
S/C 32 INITIAL CONDITIONS RTLTL: 33h 23m 58s CCSL: B182 FDSL: 11AF TWNC: ON SB: OFF XB: LOW PYR: .05/.10/.25 GYROS: BC OFF	1200 RTLTL 33h 24m 0s												0000 RTLTL 33h 24m 4s															
FDS MODE XB DATA RATE(MI)	CR-5T 160(32)																											
VGR COVERAGE	ON CALL				VGR				ON CALL																			
NOTES	[1] S/C 31=GS-4B @ 0349 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 24														JAN 25													

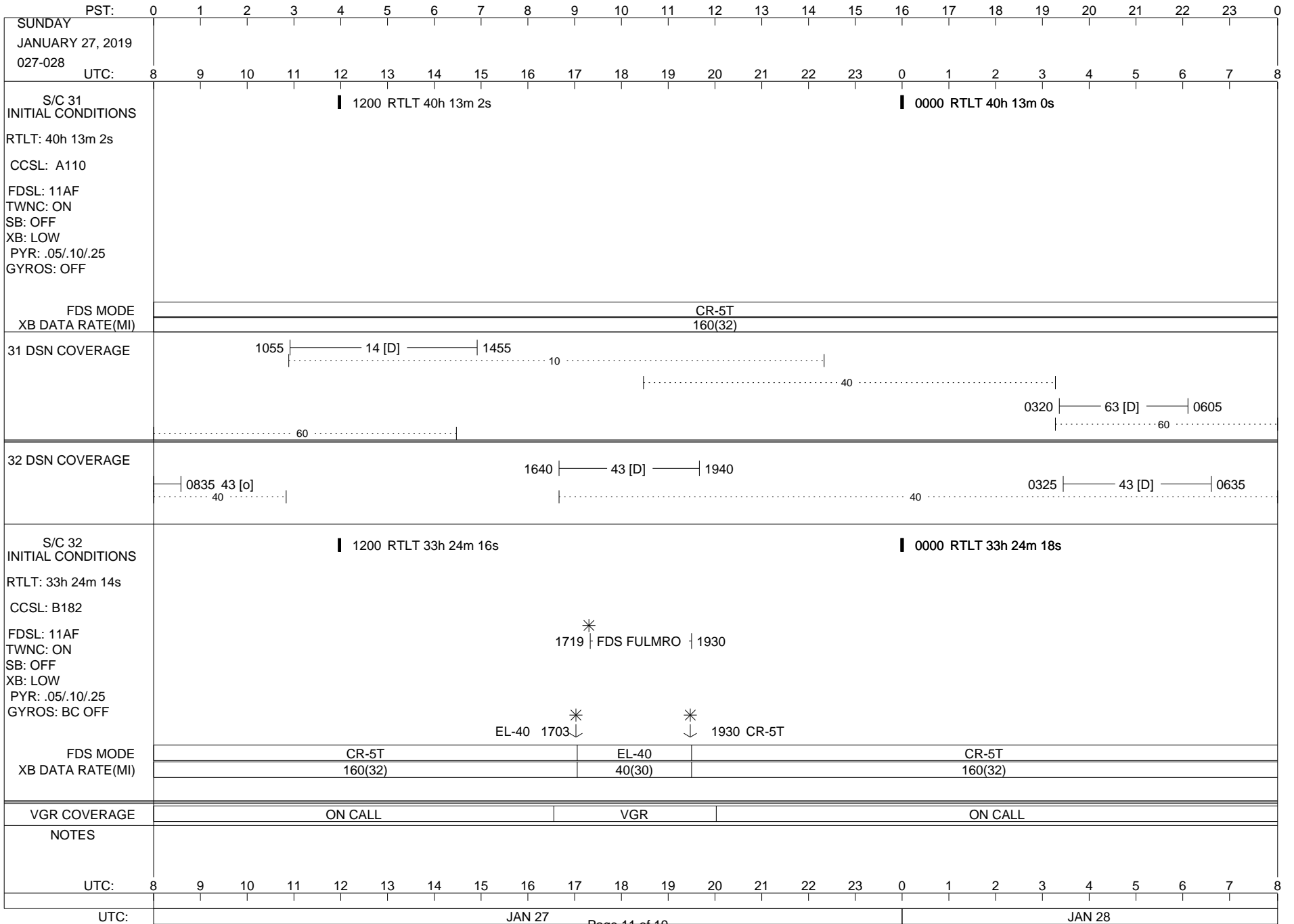
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FRIDAY JANUARY 25, 2019 025-026																									
UTC:	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	0	1	2	3	4	5	6	7	8
S/C 31 INITIAL CONDITIONS RTLT: 40h 13m 4s CCSL: A110 FDSL: 11AF TWNC: ON SB: OFF XB: LOW PYR: .05/.10/.25 GYROS: OFF	█ 1200 RTLT 40h 13m 4s												█ 0000 RTLT 40h 13m 4s												
FDS MODE	CR-5T												40(30)				160(32)								
XB DATA RATE(MI)	160(32)												EL-40				CR-5T								
31 DSN COVERAGE	250 14 [D] 1350												0325 63 [D] 0625 0615 - 0750 55 [DAR] 0615 - 0750 65 [DA]												
32 DSN COVERAGE	40												1650 43 [Bo] 2050 43 [H] 0720												
S/C 32 INITIAL CONDITIONS RTLT: 33h 24m 4s CCSL: B182 FDSL: 11AF TWNC: ON SB: OFF XB: LOW PYR: .05/.10/.25 GYROS: BC OFF	█ 1200 RTLT 33h 24m 6s												█ 0000 RTLT 33h 24m 8s												
FDS MODE	CR-5T																								
XB DATA RATE(MI)	160(32)																								
VGR COVERAGE	ON CALL												VGR				ON CALL				VGR				
NOTES	[1] S/C 31=EL-40 @ 0433 XB=40(30) [2] S/C 31=CR-5T @ 0606 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:	JAN 25																JAN 26								

ISSUE DATE: 01/23/19 09:44

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SATURDAY JANUARY 26, 2019 026-027	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: 40h 13m 4s CCSL: A110 FDSL: 11AF TWNC: ON SB: OFF XB: LOW PYR: .05/.10/.25 GYROS: OFF	1200 RTLTL 40h 13m 2s												0000 RTLTL 40h 13m 2s												
FDS MODE	160(32)												CR-5T												
XB DATA RATE(MI)	CR-5T												160(32)												
31 DSN COVERAGE	1100 ----- 14 [D] ----- 1500 ----- 10 ----- ----- 40 -----												0320 ----- 63 [D] ----- 0620 ----- 60 -----												
32 DSN COVERAGE	43 [H] ----- 1050 ----- 40 -----												0245 ----- 43 [o] ----- ----- 40 -----												
S/C 32 INITIAL CONDITIONS RTLTL: 33h 24m 8s CCSL: B182 FDSL: 11AF TWNC: ON SB: OFF XB: LOW PYR: .05/.10/.25 GYROS: BC OFF	1200 RTLTL 33h 24m 10s												0000 RTLTL 33h 24m 14s												
FDS MODE	CR-5T												CR-5T												
XB DATA RATE(MI)	160(32)												160(32)												
VGR COVERAGE	ON CALL												ON CALL												
NOTES	[1] S/C 31=GS-4B @ 0649 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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ISSUE DATE: 01/23/19 09:44



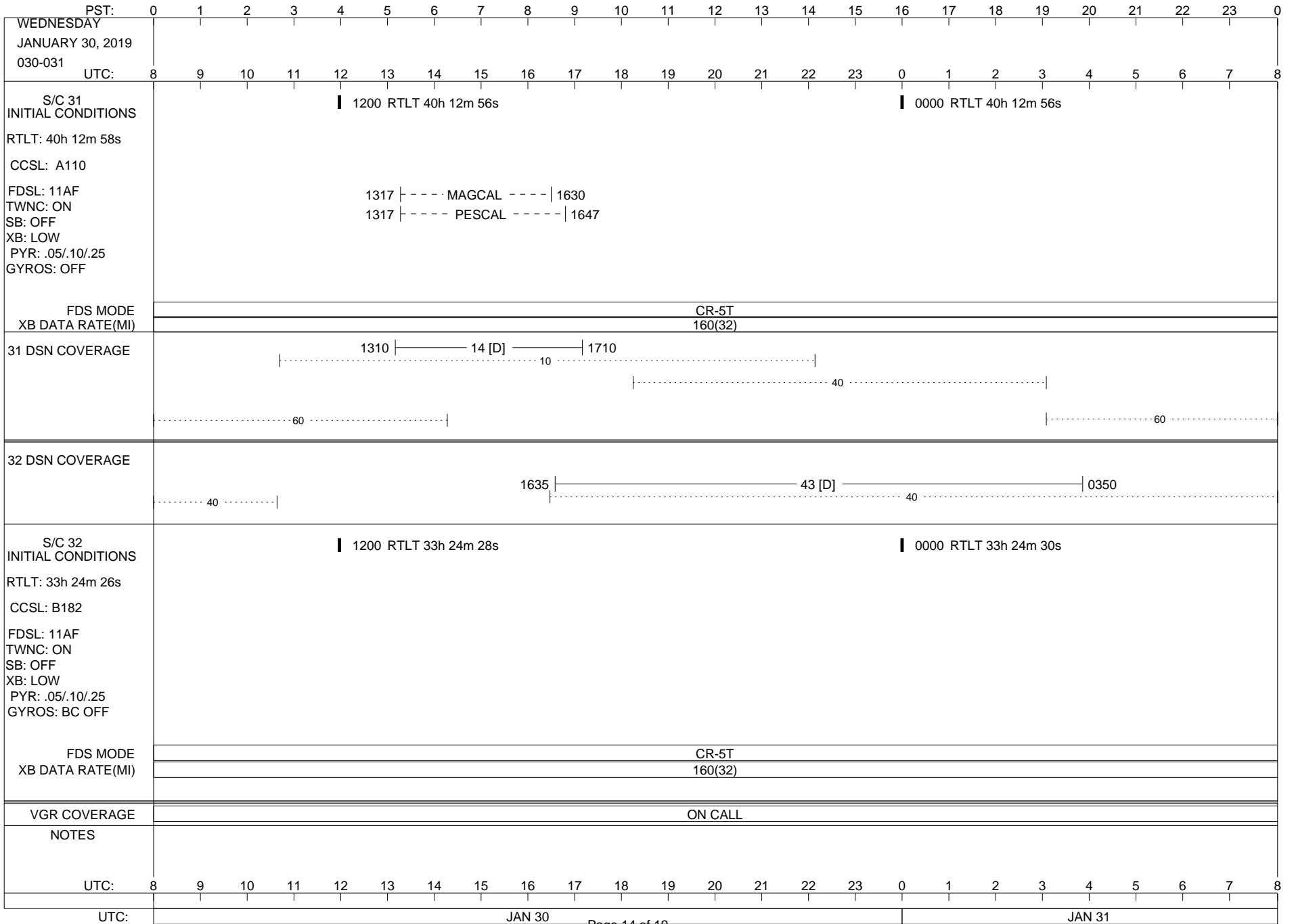
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MONDAY JANUARY 28, 2019 028-029	
UTC: 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 0 1 2 3 4 5 6 7 8	
S/C 31 INITIAL CONDITIONS RTLT: 40h 13m 0s CCSL: A110 FDSL: 11AF TWNC: ON SB: OFF XB: LOW PYR: .05/.10/.25 GYROS: OFF	<p>1200 RTLT 40h 13m 0s</p> <p>0000 RTLT 40h 13m 0s</p> <p>▼ 1131 FDS FULMRO (03:44)</p>
FDS MODE XB DATA RATE(MI)	CR-5T 160(32)
31 DSN COVERAGE	<p>1105 ----- 14 ----- 1450</p> <p>..... ----- 10 ----- 40 ----- 0315 63 [D] 0445</p> <p>..... ----- 60 ----- 60</p>
32 DSN COVERAGE	<p>0930 43 [o] 1045</p> <p>1640 ----- 43 [D] ----- 2040</p> <p>..... ----- 40 ----- 40 ----- 43 [D] 0535 ----- 0625</p>
S/C 32 INITIAL CONDITIONS RTLT: 33h 24m 18s CCSL: B182 FDSL: 11AF TWNC: ON SB: OFF XB: LOW PYR: .05/.10/.25 GYROS: BC OFF	<p>1200 RTLT 33h 24m 20s</p> <p>0000 RTLT 33h 24m 22s</p>
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: JAN 28 Page 12 of 19 JAN 29	

ISSUE DATE: 01/23/19 09:44

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TUESDAY																													
JANUARY 29, 2019																													
029-030																													
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 40h 12m 58s														0000 RTLT 40h 12m 58s													
RTLT: 40h 13m 0s																													
CCSL: A110																													
FDSL: 11AF																2112 2113 PWS/RH							0401 * FDS FULMRO 0613						
TWNC: ON																													
SB: OFF																													
XB: LOW																													
PYR: .05/.10/.25																													
GYROS: OFF																													
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		1200 RTLT 33h 24m 24s														0000 RTLT 33h 24m 26s													
RTLT: 33h 24m 22s																													
CCSL: B182																													
FDSL: 11AF																													
TWNC: ON																													
SB: OFF																													
XB: LOW																													
PYR: .05/.10/.25																													
GYROS: BC OFF																													
FDS MODE																CR-5T													
XB DATA RATE(MI)																160(32)													
VGR COVERAGE		ON CALL														VGR ON CALL													
NOTES		<p>[1] S/C 31=GS-4B @ 2112 XB=2.8K(41) NOT RECOVERABLE</p> <p>[2] S/C 31=EL-40 @ 0345 XB=40(30)</p> <p>[3] S/C 31=CR-5T @ 0613 XB=160(32)</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:		JAN 29														JAN 30													

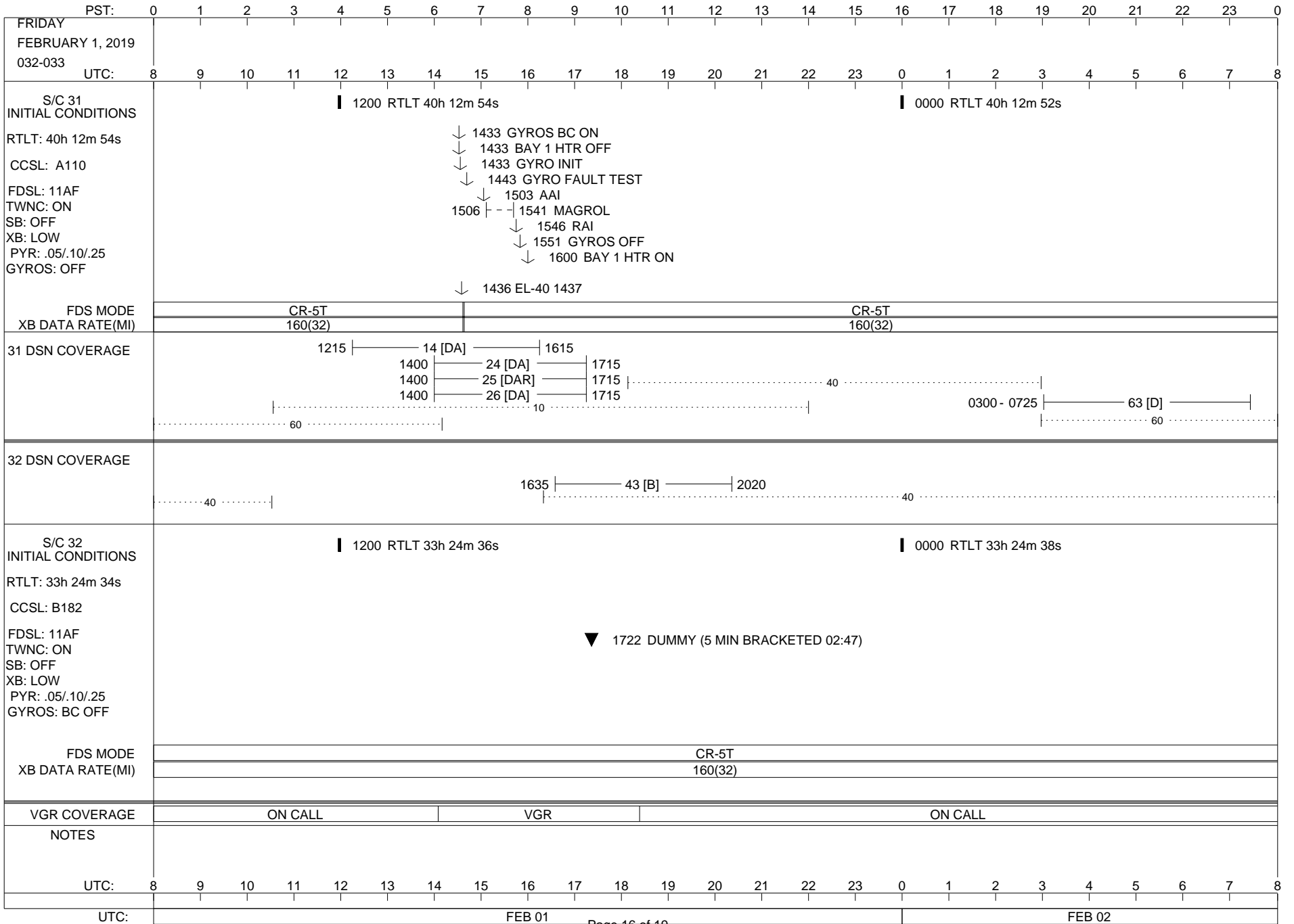
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ISSUE DATE: 01/23/19 09:44

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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			
THURSDAY JANUARY 31, 2019 031-032																													
S/C 31 INITIAL CONDITIONS RTLT: 40h 12m 56s CCSL: A110 FDSL: 11AF TWNC: ON SB: OFF XB: LOW PYR: .05/10/25 GYROS: OFF		1200 RTLT 40h 12m 56s 1241 BAY 1 HTR OFF 1241 GYROS AC ON 1241 --- 1341 GYRO COND 1341 GYROS OFF 1350 BAY 1 HTR ON 1515 --- 1547 SSB ASCAL 1548 ROLL=.25														0000 RTLT 40h 12m 54s 0023 --- 0050 TAPPOS 0326 0327 PWS/RH 0337 0349 TAPPOS													
FDS MODE XB DATA RATE(MI)		CR-5T 160(32)				CR-5T 160(32)				EL-40 40(30)				CR-5T 160(32)				CR-5T 160(32)								CR-5T 160(32)			
31 DSN COVERAGE		1040 ----- 14 [D] ----- 1545 ----- ----- ----- ----- ----- ----- ----- ----- ----- ----- ----- ----- ----- -----														----- ----- ----- ----- ----- ----- ----- ----- ----- ----- ----- ----- ----- -----													
32 DSN COVERAGE		----- ----- ----- ----- ----- ----- ----- ----- ----- ----- ----- ----- ----- -----														1755 ----- 35 [DA] ----- 2145 1755 ----- 36 [DAR] ----- 2145 ----- ----- ----- ----- ----- ----- ----- ----- ----- ----- ----- ----- ----- -----													
S/C 32 INITIAL CONDITIONS RTLT: 33h 24m 30s CCSL: B182 FDSL: 11AF TWNC: ON SB: OFF XB: LOW PYR: .05/10/25 GYROS: BC OFF		1200 RTLT 33h 24m 32s														0000 RTLT 33h 24m 34s													
FDS MODE XB DATA RATE(MI)		CR-5T 160(32)																											
VGR COVERAGE		ON CALL							VGR							ON CALL													
NOTES		[1] S/C 31=EL-40 @ 1455 XB=40(30) [2] S/C 31=GS-4B @ 0325 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 31														FEB 01													

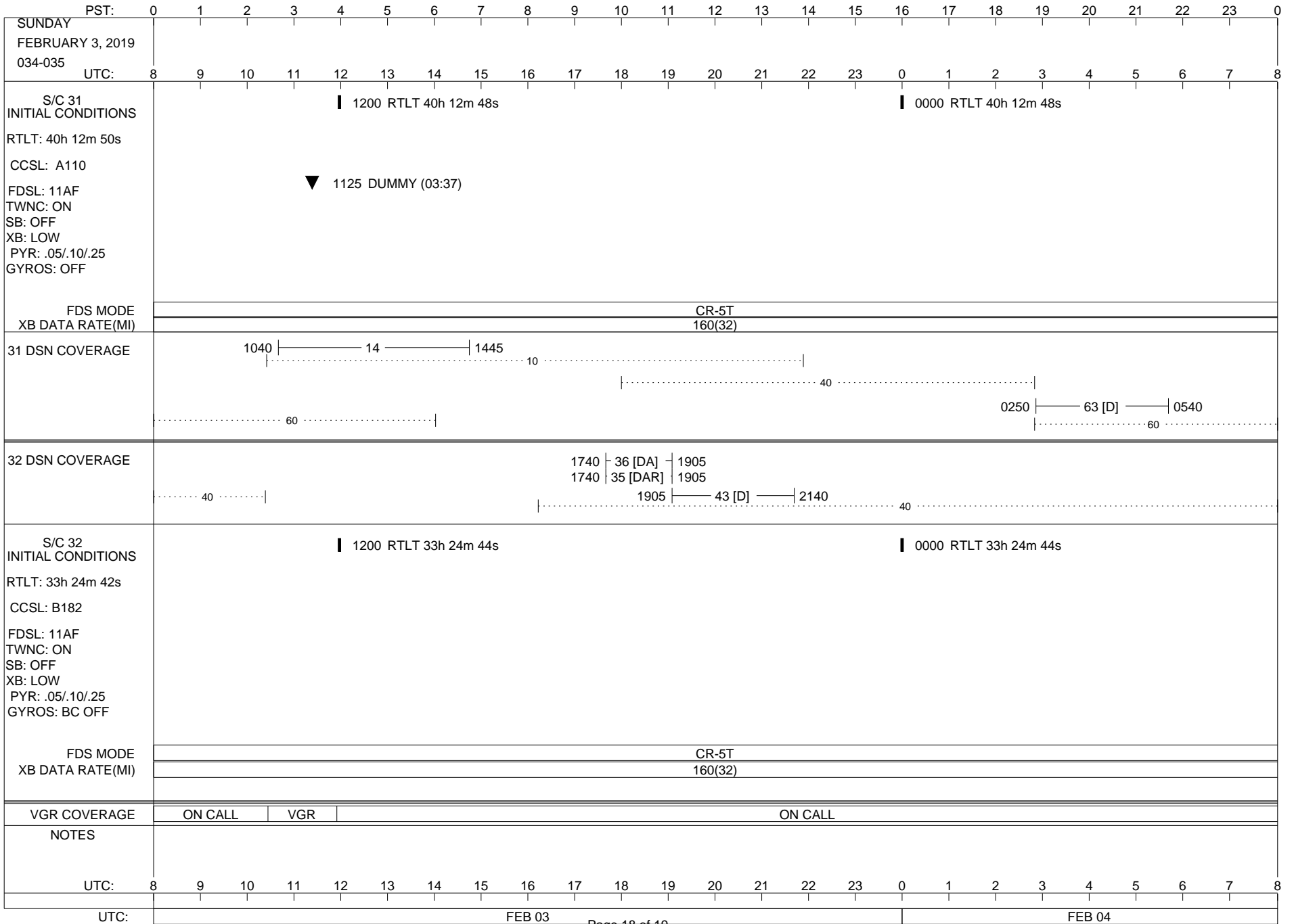
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ISSUE DATE: 01/23/19 09:44

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S/C 31 INITIAL CONDITIONS RTLTL: 40h 12m 52s CCSL: A110 FDSL: 11AF TWNC: ON SB: OFF XB: LOW PYR: .05/.10/.25 GYROS: OFF	1200 RTLTL 40h 12m 52s												0000 RTLTL 40h 12m 50s												
FDS MODE	CR-5T												CR-5T												
XB DATA RATE(MI)	160(32)												160(32)												
31 DSN COVERAGE	----- 10 -----												----- 40 -----												
	----- 60 -----												0320 ----- 63 [D] ----- 0540 ----- 60 -----												
32 DSN COVERAGE	----- 40 -----												1620 ----- 43 [D] ----- 2050 ----- 40 -----												
S/C 32 INITIAL CONDITIONS RTLTL: 33h 24m 38s CCSL: B182 FDSL: 11AF TWNC: ON SB: OFF XB: LOW PYR: .05/.10/.25 GYROS: BC OFF	1200 RTLTL 33h 24m 40s												0000 RTLTL 33h 24m 42s												
FDS MODE	CR-5T												CR-5T												
XB DATA RATE(MI)	160(32)												160(32)												
VGR COVERAGE	ON CALL												ON CALL												
NOTES	[1] S/C 31=GS-4B @ 0625 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:	FEB 02												FEB 03												

ISSUE DATE: 01/23/19 09:44



ISSUE DATE: 01/23/19 09:44

