

VOYAGER

Space Flight Operations Schedule (SFOS)

Issue Date: October 31, 2018

For the Period: 11/01/18 to 11/19/18 (18/305 – 18/323)

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.	

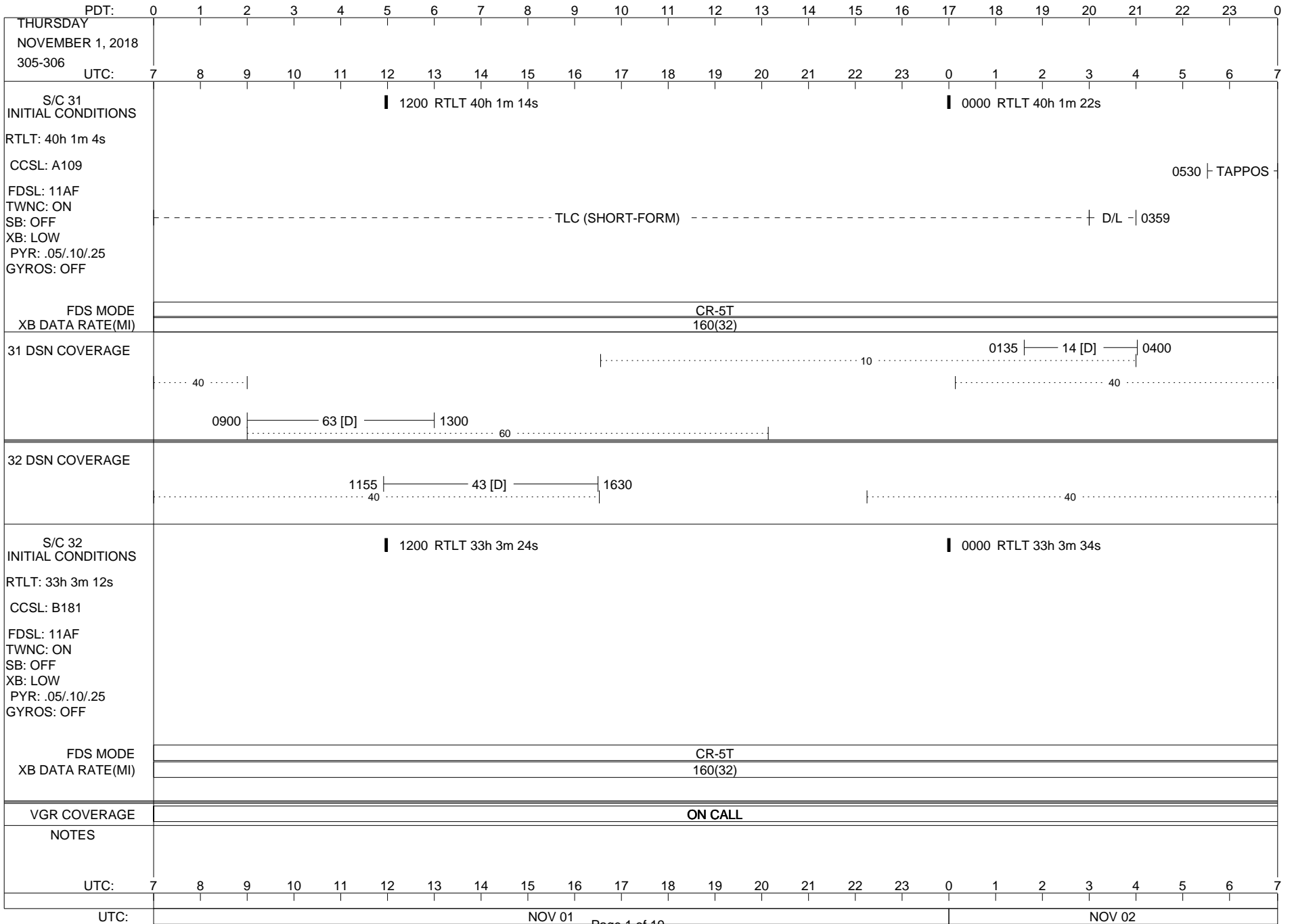
LEGEND:

- ∇ = 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

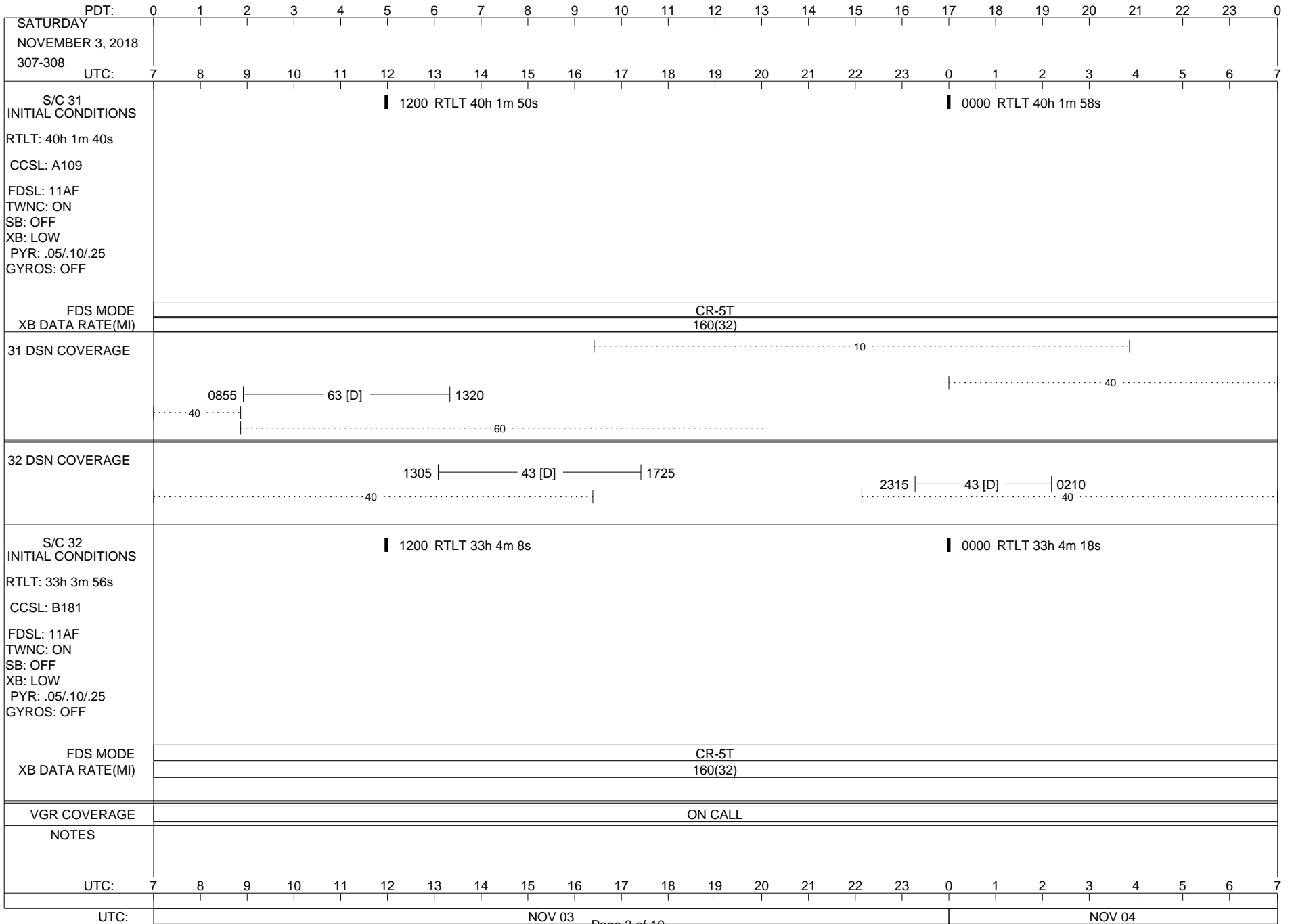
ISSUE DATE: 11/02/18 11:51



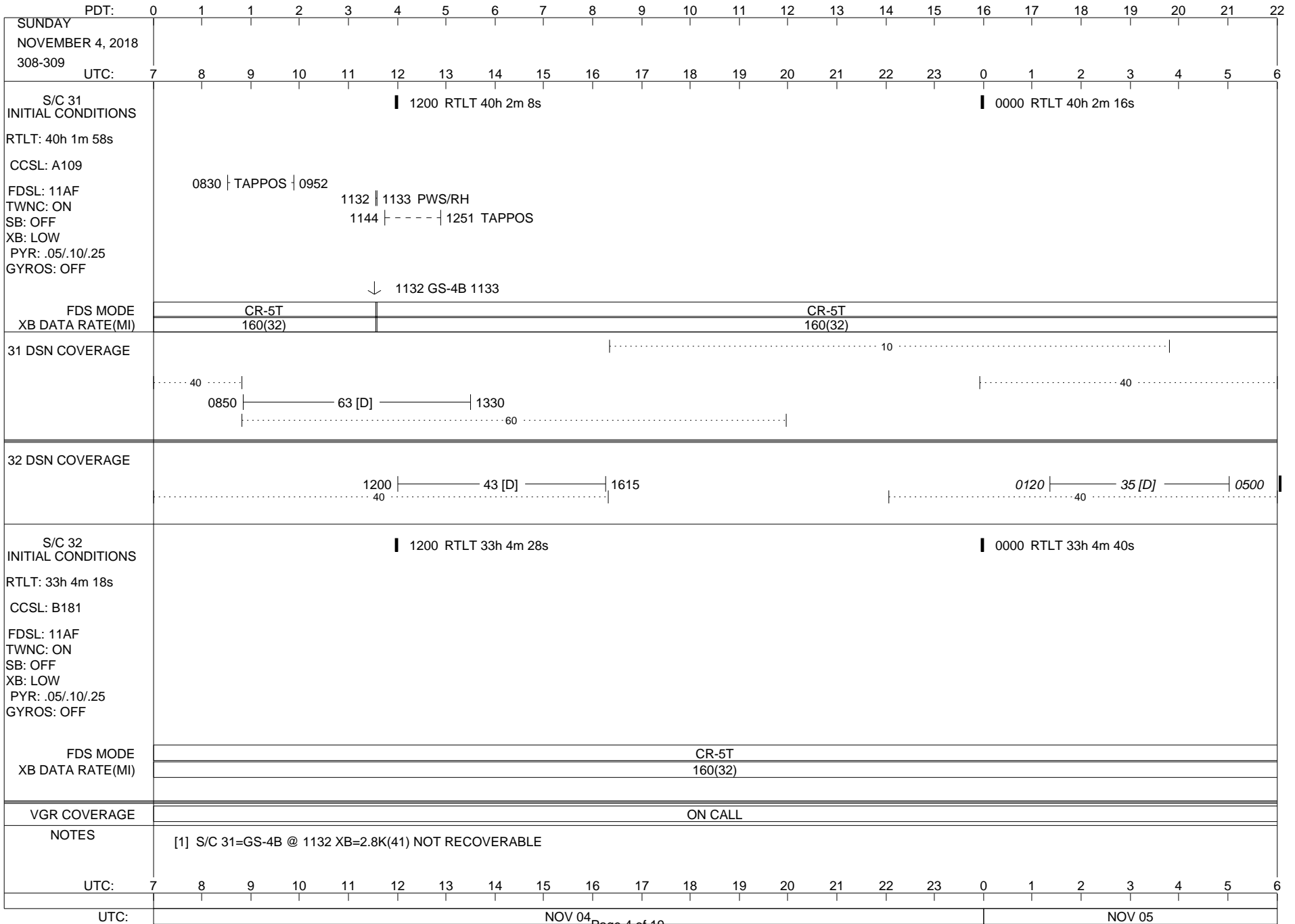
ISSUE DATE: 11/02/18 11:51

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
FRIDAY NOVEMBER 2, 2018 306-307																									
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 1m 22s CCSL: A109 FDSL: 11AF TWNC: ON SB: OFF XB: LOW PYR: .05/.10/.25 GYROS: OFF	1200 RTLT 40h 1m 32s												0000 RTLT 40h 1m 40s ↓ 2127 BAY 1 HTR OFF ↓ 2127 GYROS BC ON ↓ 2132 BAY 6 HTR ON ↓ 2152 WGY SID MRO ↓ 2158 AAI 2201 ----- 2313 MAGROL ↓ 2313 RAI ↓ 2319 GYROS OFF ↓ 2322 BAY 6 HTR OFF ↓ 2327 BAY 1 HTR ON ↓ 2332 WGY SID MRO ↓ 2131 EL-40 2131												
FDS MODE	CR-5T						CR-5T						CR-5T												
XB DATA RATE(MI)	160(32)						160(32)						160(32)												
31 DSN COVERAGE 40 ----- 60 -----												2100 ----- 14 [DA] ----- 0100 2100 ----- 24 [DAR] ----- 2340 2100 ----- 25 [DA] ----- 2340 2100 ----- 26 [DA] ----- 2340 10 ----- 40 -----												
32 DSN COVERAGE 40 1240 ----- 43 [B] ----- 1640 40																								
S/C 32 INITIAL CONDITIONS RTLT: 33h 3m 34s CCSL: B181 FDSL: 11AF TWNC: ON SB: OFF XB: LOW PYR: .05/.10/.25 GYROS: OFF	1200 RTLT 33h 3m 46s												0000 RTLT 33h 3m 56s ▼ 1422 DUMMY (5 MIN BRACKETED 23:26)												
FDS MODE													CR-5T												
XB DATA RATE(MI)													160(32)												
VGR COVERAGE	ON CALL						VGR						ON CALL												
NOTES	[1] S/C 31=GS-4B @ 0832 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:	NOV 02												NOV 03												

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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	40											2155 ----- 14 [D] ----- 0155 ----- 10 ----- ----- 40 ----- 60														
32 DSN COVERAGE	40											1215 ----- 43 [D] ----- 1615 ----- 40 ----- 0425 - 0625 --- 43 [D1] --- 40														
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	[1] S/C 32 DSS-43 & 49 PARALLEL EVALUATION 1																									
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											

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		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							
RTLTL: 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							
RTLTL: 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
 [2] S/C 32 DSS-43 & 49 PARALLEL PARKES EVALUATION 2

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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
RTLTL: 40h 2m 50s
CCSL: A109
FDSL: 11AF
TWNC: ON
SB: OFF
XB: LOW
PYR: .05/.10/.25
GYROS: OFF

1200 RTLT 40h 2m 58s 0000 RTLT 40h 3m 8s

1810 |---- MAGCAL ----| 2113
1810 |---- PESCAL ----| 2130

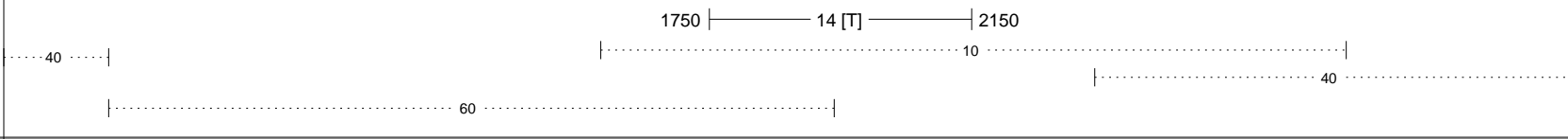
▼ 1825 DUMMY (10:28)

U/L 1850 | - - - - - 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 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

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 07 Page 7 of 19 NOV 08

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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
1200 RTLT 40h 3m 16s
0000 RTLT 40h 3m 24s
RTLTL: 40h 3m 8s
CCSL: A109
FDSL: 11AF
TWNC: ON
SB: OFF
XB: LOW
PYR: .05/.10/.25
GYROS: OFF
TLC (SHORT-FORM)

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

31 DSN COVERAGE
40|
1600 | 63 [D] | 1700
60|
40|

32 DSN COVERAGE
1135 |----- 43 [D] -----| 1600
40| 40

S/C 32
INITIAL CONDITIONS
1200 RTLT 33h 5m 54s
0000 RTLT 33h 6m 4s
RTLTL: 33h 5m 44s
CCSL: B181
FDSL: 11AF
TWNC: ON
SB: OFF
XB: LOW
PYR: .05/.10/.25
GYROS: OFF

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

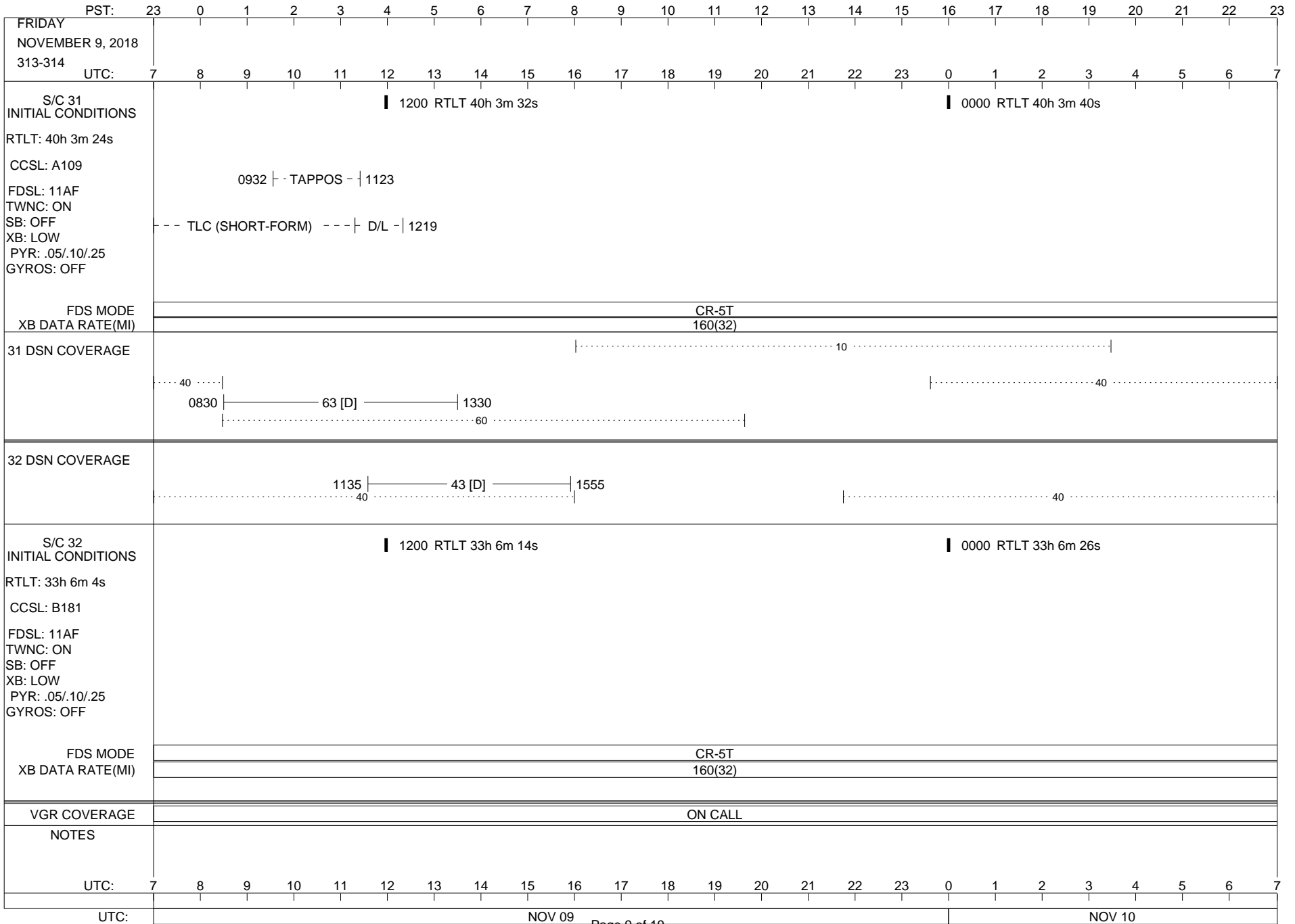
VGR COVERAGE ON CALL

NOTES

UTC: 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 08 Page 8 of 19 NOV 09

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ISSUE DATE: 11/02/18 11:51

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
RTLT: 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
0859 | TAPPOS - | 1039

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

31 DSN COVERAGE
0820 |----- 63 [D] -----| 1335
40 |----- 60 -----|
10
40

32 DSN COVERAGE
1115 |----- 43 [D] -----| 1550
40 |----- 40 -----|
0015 |----- 43 [D] -----| 0330
40

S/C 32
INITIAL CONDITIONS
RTLT: 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
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 11 NOV 12

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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 RTLTL: 40h 4m 12s CCSL: A109 FDSL: 11AF TWNC: ON SB: OFF XB: LOW PYR: .05/.10/.25 GYROS: OFF	1200 RTLT 40h 4m 20s											0000 RTLT 40h 4m 28s														
FDS MODE XB DATA RATE(MI)												CR-5T 160(32)														
31 DSN COVERAGE	1540 ----- 14 [D] ----- 1955											10 ----- 40														
32 DSN COVERAGE	1140 ----- 43 [D] ----- 1545											40 ----- 40														
S/C 32 INITIAL CONDITIONS RTLTL: 33h 7m 6s CCSL: B181 FDSL: 11AF TWNC: ON SB: OFF XB: LOW PYR: .05/.10/.25 GYROS: OFF	1200 RTLT 33h 7m 18s											0000 RTLT 33h 7m 28s														
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												

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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 13, 2018 317-318	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 4m 28s CCSL: A109 FDSL: 11AF TWNC: ON SB: OFF XB: LOW PYR: .05/.10/.25 GYROS: OFF	1200 RTLT 40h 4m 36s												0000 RTLT 40h 4m 44s												
FDS MODE	CR-5T												CR-5T												
XB DATA RATE(MI)	160(32)												160(32)												
31 DSN COVERAGE	0815 ----- 63 [D] ----- 1145 40 40												
32 DSN COVERAGE	0830 ----- 43 [D] ----- 1140 40 40												
S/C 32 INITIAL CONDITIONS RTLTL: 33h 7m 28s CCSL: B181 FDSL: 11AF TWNC: ON SB: OFF XB: LOW PYR: .05/.10/.25 GYROS: OFF	1200 RTLT 33h 7m 38s												0000 RTLT 33h 7m 48s												
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 @ 0132 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:	NOV 13												NOV 14												

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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 15, 2018
319-320
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 5m 0s
CCSL: A109
FDSL: 11AF
TWNC: ON
SB: OFF
XB: LOW
PYR: .05/.10/.25
GYROS: OFF
1200 RTLT 40h 5m 6s
0000 RTLT 40h 5m 14s
0444 - 0619 | TAPPOS |
----- TLC (SHORT-FORM) -----

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

31 DSN COVERAGE
40
1430 | 63 [D1] | 1805
60

32 DSN COVERAGE
43 [H] | 0900
40 40

S/C 32
INITIAL CONDITIONS
RTLT: 33h 8m 8s
CCSL: B181
FDSL: 11AF
TWNC: ON
SB: OFF
XB: LOW
PYR: .05/.10/.25
GYROS: OFF
1200 RTLT 33h 8m 18s
0000 RTLT 33h 8m 28s

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

VGR COVERAGE ON CALL

NOTES
[1] A109B BACKUP U/L TRACK

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 15 NOV 16

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 16, 2018																												
320-321																												
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 5m 22s													0000 RTLT 40h 5m 30s													
RTLTL: 40h 5m 14s		0747 0747 PWS/RH		0757 TAPPOS 0919																								
CCSL: A109		0927 0931 A109B CHKSUM																										
FDSL: 11AF		1000 1007 CCSTIM FINE																										
TWNC: ON		1018 1021 COARSE																										
SB: OFF		1030 1031 2 AHEL12 SID MRO'S																										
XB: LOW		--- TLC (SHORT-FORM) --- D/L 1218																										
PYR: .05/.10/.25		↓ 0746 GS-4B 0747																										
GYROS: OFF		EL-40 0856 ↓		1033 CR-5T																								
FDS MODE		CR-5T		EL-40		CR-5T																						
XB DATA RATE(MI)		160(32)		40(30)		160(32)																						
31 DSN COVERAGE		1535 14 [D] 1725																										
		40 40																										
		0805 63 [D] 1205																										
		60																										
32 DSN COVERAGE		1130 43 [D] 1530																										
		40																										
		2120 43 [D] 0200																										
		40																										
S/C 32 INITIAL CONDITIONS		1200 RTLT 33h 8m 38s													0000 RTLT 33h 8m 48s													
RTLTL: 33h 8m 28s																												
CCSL: B181																												
FDSL: 11AF		* ↓ 1425 PMPCAL IN CMD BUFFER																										
TWNC: ON		* 2152 PLSCAL - 2334																										
SB: OFF		2152 --- MAGCAL --- 0054																										
XB: LOW		2152 --- PESCAL --- 0112																										
PYR: .05/.10/.25																												
GYROS: OFF																												
FDS MODE		CR-5T																										
XB DATA RATE(MI)		160(32)																										
VGR COVERAGE		ON CALL											VGR					ON CALL										
NOTES		[1] S/C 31=GS-4B @ 0746 XB=2.8K(41) NOT RECOVERABLE																										
		[2] S/C 31=EL-40 @ 0856 XB=40(30)																										
		[3] S/C 31=CR-5T XB=160(32) @ 1033																										
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 16													NOV 17													

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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	
SATURDAY NOVEMBER 17, 2018 321-322	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 5m 30s CCSL: A109 FDSL: 11AF TWNC: ON SB: OFF XB: LOW PYR: .05/.10/.25 GYROS: OFF	1200 RTLT 40h 5m 36s												0000 RTLT 40h 5m 44s													
FDS MODE XB DATA RATE(MI)													CR-5T 160(32)													
31 DSN COVERAGE	-----												-----													
0755 ----- 1315	63 [D]												60													
32 DSN COVERAGE	-----												-----													
S/C 32 INITIAL CONDITIONS RTLTL: 33h 8m 48s CCSL: B181 FDSL: 11AF TWNC: ON SB: OFF XB: LOW PYR: .05/.10/.25 GYROS: OFF	1200 RTLT 33h 8m 58s												0000 RTLT 33h 9m 8s													
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 17													NOV 18												

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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 18, 2018 322-323																										
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 5m 50s											0000 RTLT 40h 5m 58s														
RTLTL: 40h 5m 44s																										
CCSL: A109	0744 TAPPOS 0905																									
FDSL: 11AF	1045 1047 PWS/RH																									
TWNC: ON	1057 - - - - 1205 TAPPOS																									
SB: OFF																										
XB: LOW																										
PYR: .05/.10/.25																										
GYROS: OFF																										
	↓ 1045 GS-4B 1047																									
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 9m 18s											0000 RTLT 33h 9m 28s														
RTLTL: 33h 9m 8s																										
CCSL: B181																										
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	[1] S/C 31=GS-4B @ 1045 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:	NOV 18											NOV 19														

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		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 19, 2018																											
323-324		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 6m 6s																									
RTLT: 40h 5m 58s																											
CCSL: A109																											
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		1525 14 [D] 1625																									
		40																									
		0750 63 [D] 1025																									
		60																									
32 DSN COVERAGE		1050 43 [D] 1520																									
		40																									
S/C 32 INITIAL CONDITIONS		1200 RTLT 33h 9m 38s																									
RTLT: 33h 9m 28s																											
CCSL: B181																											
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:		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 19													NOV 20												