

VOYAGER

Space Flight Operations Schedule (SFOS)

Issue Date: November 28, 2018

For the Period: 11/29/18 to 12/17/18 (18/333 – 18/351)

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.	

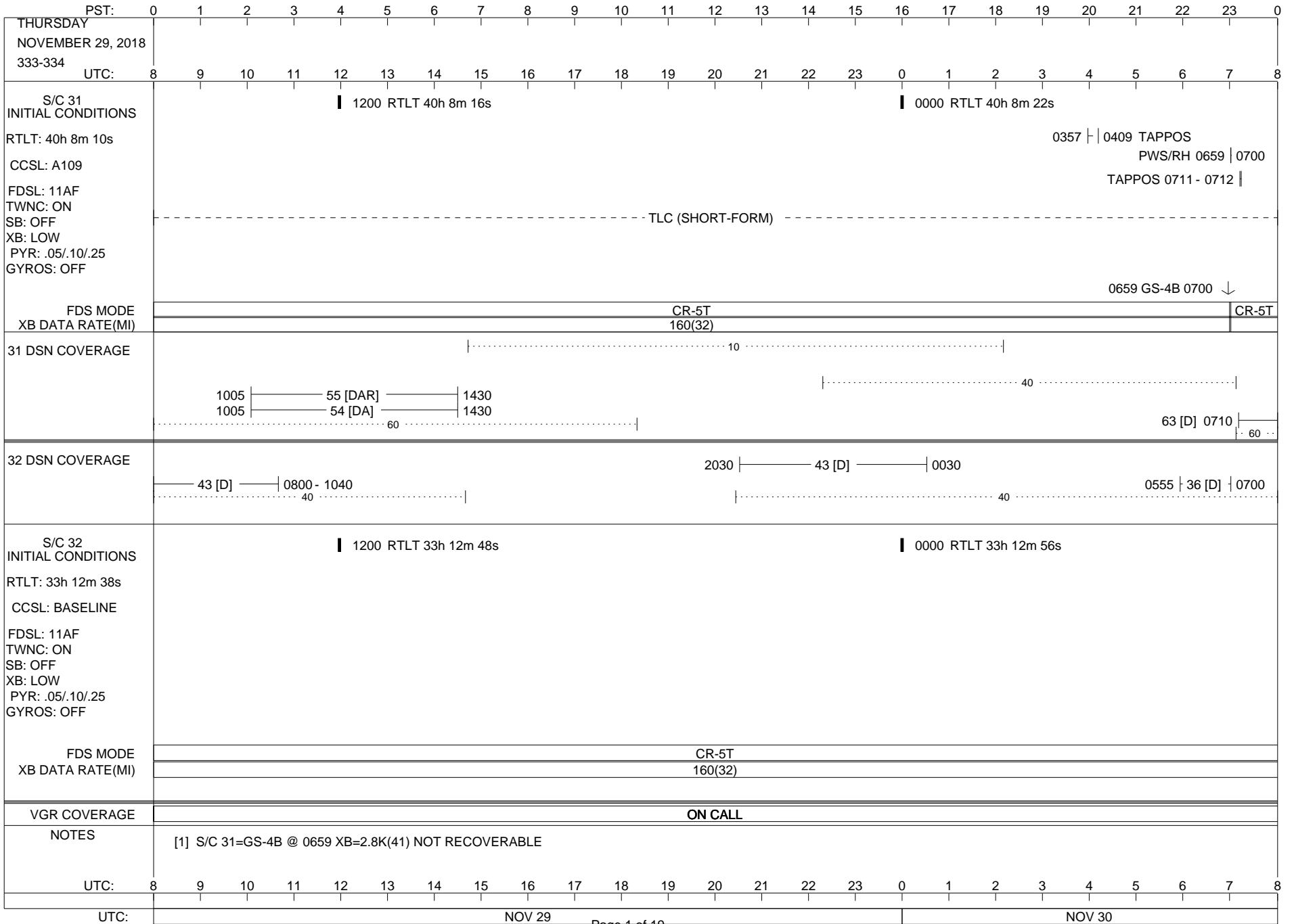
LEGEND:

- ▽ = 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

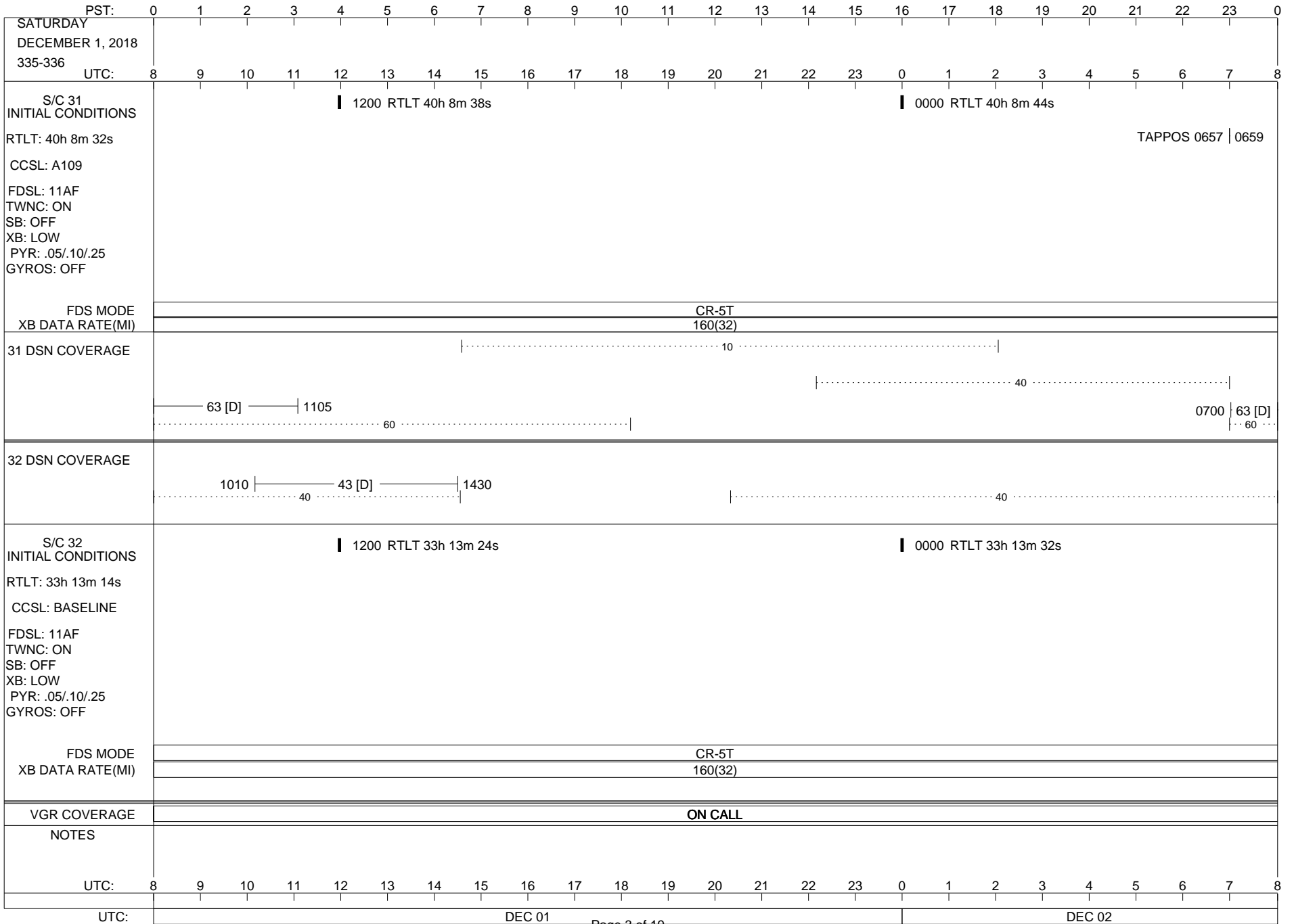
ISSUE DATE: 11/15/18 13:55



ISSUE DATE: 11/15/18 13:55

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 30, 2018 334-335																										
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	RTL	40h	8m	28s							█	0000	RTL	40h	8m	32s				
RTLT: 40h 8m 22s																										
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																										

ISSUE DATE: 11/15/18 13:55



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 DECEMBER 2, 2018 336-337	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 8m 44s CCSL: A109 FDSL: 11AF TWNC: ON SB: OFF XB: LOW PYR: .05/.10/.25 GYROS: OFF	1200 RTLT 40h 8m 50s												0000 RTLT 40h 8m 56s												
	0959 1000 PWS/RH																								
	1011 1026 TAPPOS																								
	↓ 0959 GS-4B 1001																								
FDS MODE	CR-5T												CR-5T												
XB DATA RATE(MI)	160(32)												160(32)												
31 DSN COVERAGE	1435 ----- 14 [D] ----- 2100												10 ----- 40 ----- 0655 63 [D] ----- 60												
	63 [D] ----- 1220																								
32 DSN COVERAGE	43 [D] ----- 0810 - 1355												40 ----- 40												
S/C 32 INITIAL CONDITIONS RTLT: 33h 13m 32s CCSL: BASELINE FDSL: 11AF TWNC: ON SB: OFF XB: LOW PYR: .05/.10/.25 GYROS: OFF	1200 RTLT 33h 13m 40s												0000 RTLT 33h 13m 50s												
FDS MODE													CR-5T												
XB DATA RATE(MI)													160(32)												
VGR COVERAGE	ON CALL												VGR												
NOTES	[1] S/C 31=GS-4B @ 0959 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:	DEC 02												DEC 03												

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 DECEMBER 3, 2018 337-338	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 8m 56s CCSL: A109 FDSL: 11AF TWNC: ON SB: OFF XB: LOW PYR: .05/.10/.25 GYROS: OFF	1200 RTLT 40h 9m 0s												0000 RTLT 40h 9m 6s												
FDS MODE XB DATA RATE(MI)													CR-5T 160(32)												
31 DSN COVERAGE	1430 14 [D] 1645												10 40 0650 63 [D] 60												
	63 [D] 0945												60 40												
32 DSN COVERAGE	1115 43 [D] 1420												40 40												
S/C 32 INITIAL CONDITIONS RTLT: 33h 13m 50s CCSL: BASELINE FDSL: 11AF TWNC: ON SB: OFF XB: LOW PYR: .05/.10/.25 GYROS: OFF	1200 RTLT 33h 13m 58s												0000 RTLT 33h 14m 8s												
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:	DEC 03												DEC 04												

ISSUE DATE: 11/15/18 13:55

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																													
DECEMBER 4, 2018																													
338-339																													
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 9m 12s												█ 0000 RTLT 40h 9m 16s															
RTLTL: 40h 9m 6s																													
CCSL: A109																													
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		<p>1445 14 [D] 1655</p> <p>63 [D] 1005</p> <p>1000 40 2000</p> <p>60 2400</p>																											
32 DSN COVERAGE		<p>1030 43 [H2] 1415</p> <p>2010 43 [D] 2340</p> <p>40 2400</p>																											
S/C 32 INITIAL CONDITIONS		█ 1200 RTLT 33h 14m 16s												█ 0000 RTLT 33h 14m 24s															
RTLTL: 33h 14m 8s																													
CCSL: BASELINE		<p>▼ 1045 EL-40 (19:59)</p> <p>▼ 1101 CCSL B182 (20:15)</p> <p>▼ 1143 CCSTIM F/C (20:57)</p> <p>▼ 1211 CR-5T (21:25)</p>																											
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)													
VGR COVERAGE		ON CALL								VGR								ON CALL											
NOTES		<p>[1] S/C 31=GS-4B @ 0022 XB=2.8K(41) NOT RECOVERABLE</p> <p>[2] VGR2 DSS-43 HP TRX OFF < 13:00</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:		DEC 04														DEC 05													

ISSUE DATE: 11/15/18 13:55

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			
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			
WEDNESDAY DECEMBER 5, 2018 339-340																												
S/C 31 INITIAL CONDITIONS RTLT: 40h 9m 16s CCSL: A109 FDSL: 11AF TWNC: ON SB: OFF XB: LOW PYR: .05/.10/.25 GYROS: OFF	1200 RTLT 40h 9m 22s												0000 RTLT 40h 9m 28s															
													▼ 1630 DUMMY (08:39)															
													1638 ---- MAGCAL ---- 1940															
													1638 ---- PESCAL ---- 1958															
													U/L 1700 - ----- TLC (SHORT-FORM) -----															
FDS MODE													CR-5T															
XB DATA RATE(MI)													160(32)															
31 DSN COVERAGE	1540 ----- 14 [T] ----- 2015												10 ----- 40 ----- 63 [D] 0800															
	60 -----												60 -----															
32 DSN COVERAGE	1100 ----- 43 [D] ----- 1415												1955 ----- 43 [D] ----- 2340															
	40 -----												40 -----															
S/C 32 INITIAL CONDITIONS RTLT: 33h 14m 24s CCSL: BASELINE FDSL: 11AF TWNC: ON SB: OFF XB: LOW PYR: .05/.10/.25 GYROS: OFF	1200 RTLT 33h 14m 32s												0000 RTLT 33h 14m 42s															
													* 2033 2037 B182 CHKSUM															
													* 2058 2105 CCSTIM COARSE															
													2115 2118 FINE															
													EL-40 2000 ↓ ↓ 2126 CR-5T															
FDS MODE	CR-5T												EL-40				CR-5T											
XB DATA RATE(MI)	160(32)												40(30)				160(32)											
VGR COVERAGE	ON CALL							VGR			ON CALL			VGR			ON CALL											
NOTES	[1] S/C 32=EL-40 @ 2000 XB=40(30) [2] S/C 32=CR-5T @ 2126 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:	DEC 05														DEC 06													

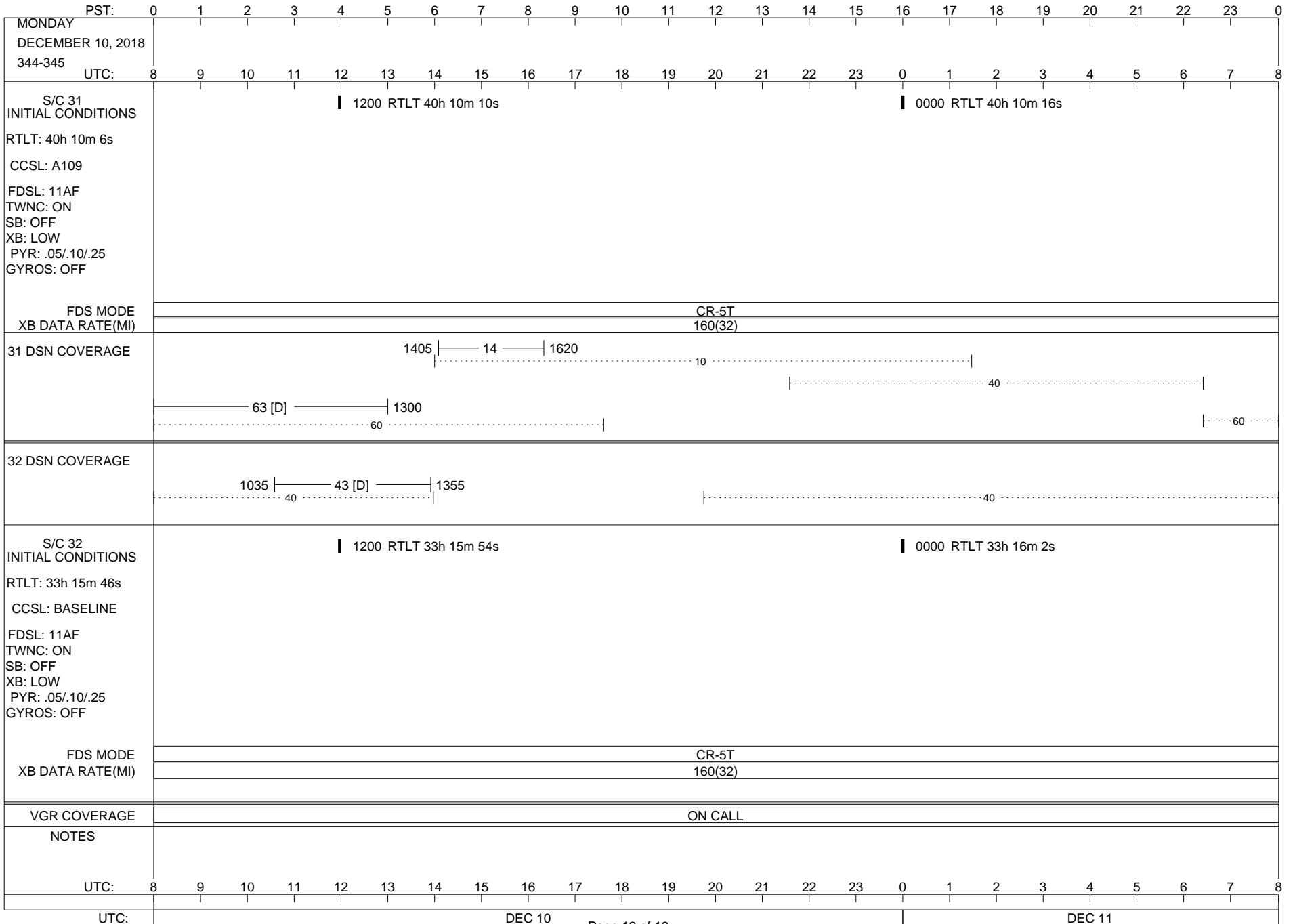
ISSUE DATE: 11/15/18 13:55

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THURSDAY DECEMBER 6, 2018 340-341																									
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 9m 28s CCSL: A109 FDSL: 11AF TWNC: ON SB: OFF XB: LOW PYR: .05/.10/.25 GYROS: OFF	1200 RTLTL 40h 9m 32s												0000 RTLTL 40h 9m 38s												
	0334 - 0403 TAPPOS PWS/RH 0635 0637 TAPPOS 0647 - 0730 - -																								
	----- TLC (SHORT-FORM) -----																								
	0635 GS-4B 0637 ↓																								
FDS MODE	CR-5T												CR-5T												
XB DATA RATE(MI)	160(32)												160(32)												
31 DSN COVERAGE 10																								
	63 [D] 0800 - 1005 40												0640 63 [D]												
	1005 55 [DAR] 1145											 60												
	1005 65 [DA] 1145											 60												
32 DSN COVERAGE 40																								
	1015 43 [D] 1415											 40												
S/C 32 INITIAL CONDITIONS RTLTL: 33h 14m 42s CCSL: BASELINE FDSL: 11AF TWNC: ON SB: OFF XB: LOW PYR: .05/.10/.25 GYROS: OFF	1200 RTLTL 33h 14m 50s												0000 RTLTL 33h 14m 58s												
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 @ 0635 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:	DEC 06												DEC 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 DECEMBER 8, 2018 342-343	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 9m 48s CCSL: A109 FDSL: 11AF TWNC: ON SB: OFF XB: LOW PYR: .05/.10/.25 GYROS: OFF	1200 RTLTL 40h 9m 52s												0000 RTLTL 40h 9m 56s												
FDS MODE XB DATA RATE(MI)													CR-5T 160(32)												
31 DSN COVERAGE	1410 ----- 14 [D] ----- 1655 ----- 10 ----- ----- 63 [D] ----- 1035 ----- 60 -----												----- 40 ----- ----- 0635 ----- 63 [D] ----- ----- 60 -----												
32 DSN COVERAGE	0930 ----- 43 [o1] ----- 1400 ----- 40 -----												----- 40 -----												
S/C 32 INITIAL CONDITIONS RTLTL: 33h 15m 14s CCSL: BASELINE FDSL: 11AF TWNC: ON SB: OFF XB: LOW PYR: .05/.10/.25 GYROS: OFF	1200 RTLTL 33h 15m 22s												0000 RTLTL 33h 15m 30s												
FDS MODE XB DATA RATE(MI)													CR-5T 160(32)												
VGR COVERAGE													ON CALL												
NOTES	[1] B182 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
UTC:	DEC 08												DEC 09												

ISSUE DATE: 11/15/18 13:55

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 DECEMBER 9, 2018 343-344	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 9m 56s CCSL: A109 FDSL: 11AF TWNC: ON SB: OFF XB: LOW PYR: .05/.10/.25 GYROS: OFF	1200 RTLTL 40h 10m 2s												0000 RTLTL 40h 10m 6s												
FDS MODE XB DATA RATE(MI)	CR-5T 160(32)												CR-5T 160(32)												
31 DSN COVERAGE	1405 ----- 14 [D] ----- 1805 ----- 10 ----- 40 63 [D] ----- 0920 ----- 60 ----- 0630 ----- 63 [D] ----- 60																								
32 DSN COVERAGE	1050 ----- 43 [D] ----- 1230 ----- 40 ----- 40												1950 ----- 43 [D] ----- 2350 ----- 40 ----- 40												
S/C 32 INITIAL CONDITIONS RTLTL: 33h 15m 30s CCSL: BASELINE FDSL: 11AF TWNC: ON SB: OFF XB: LOW PYR: .05/.10/.25 GYROS: OFF	1200 RTLTL 33h 15m 38s												0000 RTLTL 33h 15m 46s												
FDS MODE XB DATA RATE(MI)													CR-5T 160(32)												
VGR COVERAGE													ON CALL												
NOTES	[1] S/C 31=GS-4B @ 0936 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:	DEC 09												DEC 10												



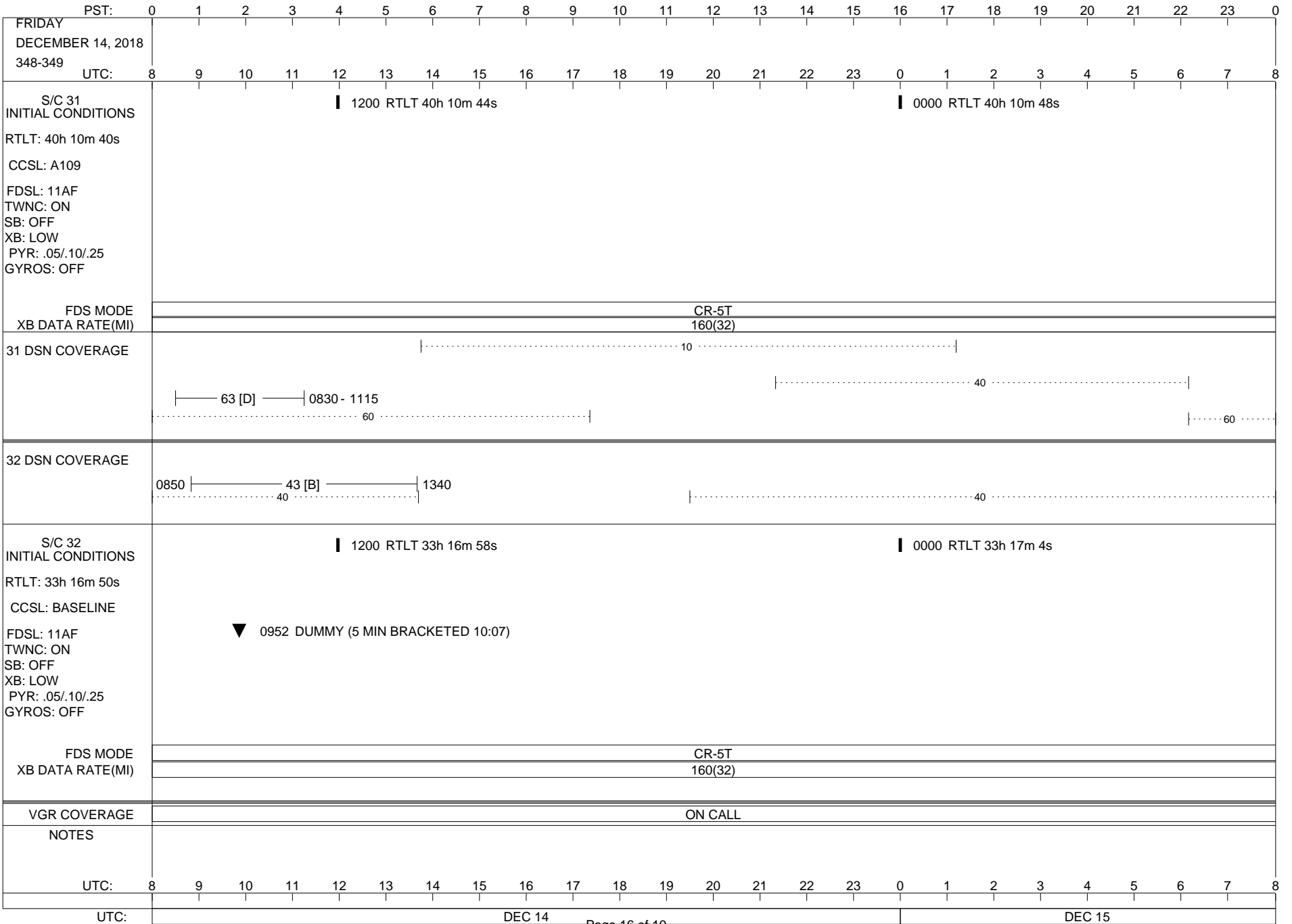
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TUESDAY DECEMBER 11, 2018 345-346	UTC: 8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	0	1	2	3	4	5	6	7	8
S/C 31 INITIAL CONDITIONS RTLTL: 40h 10m 16s CCSL: A109 FDSL: 11AF TWNC: ON SB: OFF XB: LOW PYR: .05/.10/.25 GYROS: OFF	1200 RTLTL 40h 10m 20s												0000 RTLTL 40h 10m 24s												
FDS MODE XB DATA RATE(MI)	CR-5T 160(32)												CR-5T 160(32)												
31 DSN COVERAGE	1140 ----- 63 [D] ----- 1705												2359 0000 PWS/RH												
	60												40												
	0620 ----- 63 [D] -----												60												
32 DSN COVERAGE	1045 ----- 43 [D] ----- 1350												2359 GS-4B 0000												
	40												40												
S/C 32 INITIAL CONDITIONS RTLTL: 33h 16m 2s CCSL: BASELINE FDSL: 11AF TWNC: ON SB: OFF XB: LOW PYR: .05/.10/.25 GYROS: OFF	1200 RTLTL 33h 16m 10s												0000 RTLTL 33h 16m 18s												
FDS MODE XB DATA RATE(MI)	CR-5T 160(32)												0146 PLSCAL - 0328 0146 --- MAGCAL --- 0448 0146 --- PESCAL --- 0506												
VGR COVERAGE	ON CALL																								
NOTES	[1] S/C 31=GS-4B @ 2359 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:	DEC 11												DEC 12												

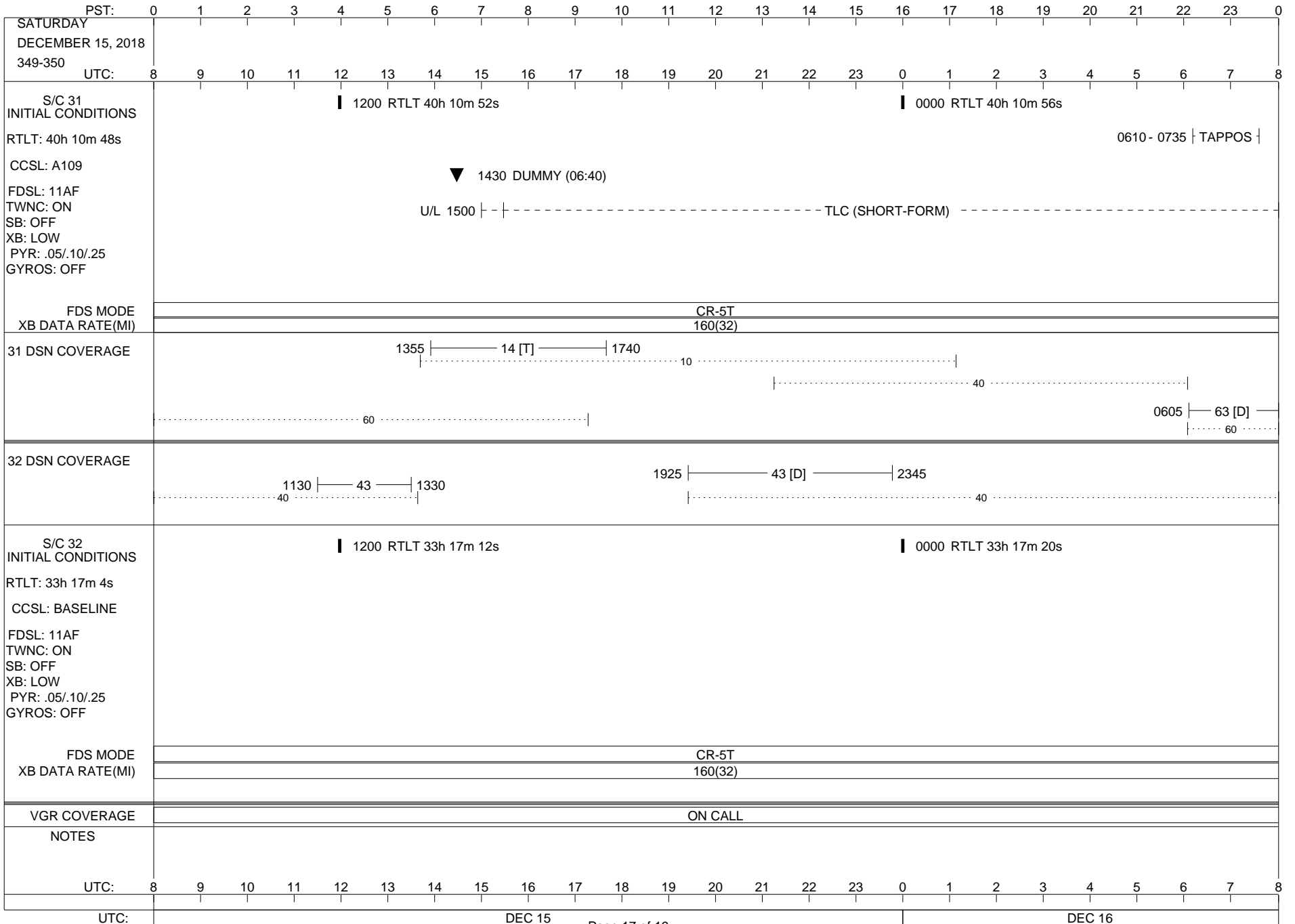
PST:	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	0	
WEDNESDAY DECEMBER 12, 2018 346-347	UTC:	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	0	1	2	3	4	5	6	7	8
S/C 31 INITIAL CONDITIONS RTLT: 40h 10m 24s CCSL: A109 FDSL: 11AF TWNC: ON SB: OFF XB: LOW PYR: .05/.10/.25 GYROS: OFF						1200																				
FDS MODE XB DATA RATE(MI)																										
31 DSN COVERAGE								1400				14 [D]														
32 DSN COVERAGE																										
S/C 32 INITIAL CONDITIONS RTLT: 33h 16m 18s CCSL: BASELINE FDSL: 11AF TWNC: ON SB: OFF XB: LOW PYR: .05/.10/.25 GYROS: OFF																										
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:	DEC 12													DEC 13												

ISSUE DATE: 11/15/18 13:55

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 DECEMBER 13, 2018 347-348																									
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 10m 32s CCSL: A109 FDSL: 11AF TWNC: ON SB: OFF XB: LOW PYR: .05/.10/.25 GYROS: OFF	1200 RTLT 40h 10m 36s												0000 RTLT 40h 10m 40s												
FDS MODE	CR-5T												CR-5T												
XB DATA RATE(MI)	160(32)												160(32)												
31 DSN COVERAGE	1350 ----- 14 [D] ----- 1745												10 ----- 40												
 ----- 60 ----- 60												
32 DSN COVERAGE	1035 ----- 43 [D] ----- 1345												40 ----- 40												
S/C 32 INITIAL CONDITIONS RTLT: 33h 16m 34s CCSL: BASELINE FDSL: 11AF TWNC: ON SB: OFF XB: LOW PYR: .05/.10/.25 GYROS: OFF	1200 RTLT 33h 16m 42s												0000 RTLT 33h 16m 50s												
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 @ 0612 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:	DEC 13												DEC 14												

ISSUE DATE: 11/15/18 13:55





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 DECEMBER 16, 2018 350-351	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 10m 56s CCSL: A109 FDSL: 11AF TWNC: ON SB: OFF XB: LOW PYR: .05/.10/.25 GYROS: OFF	1200 RTLTL 40h 11m 0s												0000 RTLTL 40h 11m 4s												
0912 0914 PWS/RH 0924 TAPPOS - 1102	----- TLC (SHORT-FORM) -----																								
FDS MODE XB DATA RATE(MI)	CR-5T 160(32)											CR-5T 160(32)													
31 DSN COVERAGE	<p>1426 - 1458 SHUNT POWER TEST</p> <p>↓ 0912 GS-4B 0914</p> <p>1340 ----- 14 [D] ----- 1600</p> <p>63 [D] ----- 1005</p> <p>0600 ----- 63 [D] ----- </p>																								
32 DSN COVERAGE	<p>1025 ----- 43 [D] ----- 1330</p> <p>1925 ----- 43 [D] ----- 2345</p>																								
S/C 32 INITIAL CONDITIONS RTLTL: 33h 17m 20s CCSL: BASELINE FDSL: 11AF TWNC: ON SB: OFF XB: LOW PYR: .05/.10/.25 GYROS: OFF	1200 RTLTL 33h 17m 26s												0000 RTLTL 33h 17m 34s												
FDS MODE XB DATA RATE(MI)	CR-5T 160(32)											CR-5T 160(32)													
VGR COVERAGE	ON CALL																								
NOTES	[1] S/C 31=GS-4B @ 0912 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:	DEC 16												DEC 17												

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 DECEMBER 17, 2018 351-352	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 11m 4s CCSL: A109 FDSL: 11AF TWNC: ON SB: OFF XB: LOW PYR: .05/.10/.25 GYROS: OFF D/L 0839	<div style="text-align: center;"> <p>1200 RTLT 40h 11m 8s</p> </div>																										
FDS MODE XB DATA RATE(MI)														CR-5T 160(32)													
31 DSN COVERAGE	<div style="text-align: center;"> <p>63 [D] 1055</p> <p>.....60.....</p> </div>																										
32 DSN COVERAGE	<div style="text-align: center;"> <p>1020 43 [D] 1325</p> <p>.....40.....</p> </div>																										
S/C 32 INITIAL CONDITIONS RTLT: 33h 17m 34s CCSL: BASELINE FDSL: 11AF TWNC: ON SB: OFF XB: LOW PYR: .05/.10/.25 GYROS: OFF	<div style="text-align: center;"> <p>1200 RTLT 33h 17m 42s</p> </div>																										
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		
UTC:	DEC 17													DEC 18													