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***          RELEASE 18 - H
***          *****
***          *
***          *          JOB: B122289
***          *          PROBLEM: 0011
***          *          PROGRAMMER: KLUMPP.A
***          *          ROOM: DL7 220A  MS# 73
***          *          EXTENSION: 1105
***          *          HOME PHONE: 358-7659
***          *
***          *****

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// EXEC AGCSIM
XXR          EXEC PGM=MACFETCH,REGION=368K,PARM=AGCSIM          00010000
XXMACPAC DD DSN=SYS1.MACPAC,DISP=SHR                          00030000
XX          DD DSN=SYS1.MACEXT,DISP=SHR                        00040000
XXSYSPRINT DD SYSOUT=A                                         00050000
XXSYSUDUMP DD SYSOUT=A                                         00060000
XXDISKSYMB DD UNIT=2301,SPACE=(CYL,(1,1))                     00070000
XXSIMBINXX DD UNIT=2301,SPACE=(CYL,(1,1))                     00080000
XXSIMDISK DD VOLUME=SER=AGCB02,UNIT=2314,DISP=SHR            00090000
XXTAPEDIR1 DD DSN=SYS1.TAPDIR8,DISP=SHR                       00100000
XXTAPEDIR2 DD DSN=SYS1.TAPDIR9,DISP=SHR                       00110000
XXMARS01 DD UNIT=(TAPE9,,DEFER),LABEL=(,SL),DISP=(NEW,KEEP) 00120000
XXMARS02 DD UNIT=(TAPE9,,DEFER),LABEL=(,SL),DISP=(NEW,KEEP) 00130000
XXSIMDAT DD DSN=AGCSIM.ADATA,DISP=SHR                         00140000
XXSIMINPUT DD UNIT=SYSDA,SPACE=(TRK,(10,2))                   00150000
XXAGCSTAT DD DSN=AGCSIM.STATDATA,DISP=SHR                    00160000
//SYSIN DD *
//

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BEGIN STEP 1: REGION=368K MAXTIME= 60.000 PGM=MACFETCH

12/14/70 15:51:52

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IEF236I ALLOC. FOR B122289 R
IEF237I 347 ALLOCATED TO MACPAC
IEF237I 347 ALLOCATED TO
IEF237I 02F ALLOCATED TO SYSPRINT
IEF237I 03E ALLOCATED TO SYSUDUMP
IEF237I 1C0 ALLOCATED TO DISKSYMB
IEF237I 1C0 ALLOCATED TO SIMBINXX
IEF237I 451 ALLOCATED TO SIMDISK
IEF237I 341 ALLOCATED TO TAPEDIR1
IEF237I 347 ALLOCATED TO TAPEDIR2
IEF237I 0C2 ALLOCATED TO MARS01
IEF237I 0C4 ALLOCATED TO MARS02
IEF237I 234 ALLOCATED TO SIMDAT
IEF237I 236 ALLOCATED TO SIMINPUT
IEF237I 456 ALLOCATED TO AGCSTAT
IEF237I 081 ALLOCATED TO SYSIN
COMPLETION CODE - SYSTEM=000 USER=0052
IEF285I SYS1.MACPAC KEPT
IEF285I VOL SER NOS= SYSLIB.
IEF285I SYS1.MACEXT KEPT
IEF285I VOL SER NOS= SYSLIB.
IEF285I SYS70348.T093447.RV000.B122289.R0002665 DELETED
IEF285I VOL SER NOS=
IEF285I SYS70348.T093447.RV000.B122289.R0002667 DELETED
IEF285I VOL SER NOS= WRKDRM.
IEF285I SYS70348.T093447.RV000.B122289.R0002668 DELETED
IEF285I VOL SER NOS= WRKDRM.
IEF285I AGCPROG.LUMINARY.R178 KEPT
IEF285I VOL SER NOS= AGCB02.
IEF285I TAPDIR8 KEPT
IEF285I VOL SER NOS= STOR01.
IEF285I TAPDIR9 KEPT
IEF285I VOL SER NOS= SYSLIB.
IEF285I AGCSIM.ADATA KEPT
IEF285I VOL SER NOS= SYS002.
IEF285I SYS70348.T093447.RV000.B122289.R0002672 DELETED
IEF285I VOL SER NOS= SYSI01.
IEF285I AGCSIM.STATDATA KEPT
IEF285I VOL SER NOS= STOR03.
IEF285I SYS70348.T093447.RV000.B122289.R0002673 DELETED
IEF285I VOL SER NOS=
END STEP 1: B122289 R

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STEP TIME = 0.034 MIN, STEP I/O COUNT = 510

12/14/70 15:52:15

END JOB: B122289 0011 KLUMPP.A PRTY = 03 12/14/70 15:52:16

JOB ACCOUNTING TOTALS: CPU TIME USED = 0.034 MIN LINES PRINTED = 404
I/O COUNT = 510 CARDS PUNCHED = 0
CARDS READ = 194

TOTAL CHARGE = 0.264 *MACHINE UNITS*

ADJUSTED ACCOUNT BUDGET: MACHINE UNITS USED: PRIO>0 = 124.327 PRIO0 = 21.117
MACHINE UNITS LEFT: PRIO3 = 108.415 PRIO2 = 44.516

ACCUMULATED CHARGE THIS MONTH = 145.444 *MACHINE UNITS*

A G C SIMULATION
COMMUNICATOR H03
SIMULATOR C02

COMPUTER: AGC

PROGRAM TITLE: LUMINARY

REVISN 178

AUTHOR: NASA 2021112-151

SPECIAL REQUESTS

CARD	LOCATION	OP	ADDRESS 1	ADDRESS 2	ID	REQ CLAS
	SLAP1	START			022460	1
	SLAP1 +1	STOP			022461	0256 3

LUMINARY AGC 178 NASA 2021112-151 NEW SIMULATION MARSROT NONE / / LAST SNAP NONE 2

P TRAJECTORY 7012120 POST-DOI DATA
R LANDING SITE DEPENDENT DATA

R AGC MNEMONIC AGC VALUE GSOP MNEMONIC GSOP VALUE (MKS)

R INITIAL TIME

R	TEPHEM	1D + 6	T	(EPOCH	+1.85627999 E+ 7	001706	00006	0257	2
R	TEPHEM +1	2D + 245667264	0	SECS U.T.)		001707	35222	12700	0258 2
R	TIME2	2D + 39104688	T		+3.91046880 E+ 5	000024	04522	30260	0259 2
R	TETLEM	2D + 39104688	T		+3.91046880 E+ 5	001642	04522	30260	0260 2
R	TETCSM	2D + 39104688	T		+3.91046880 E+ 5	001570	04522	30260	0261 2

R INITIAL CONDITIONS

R	MASS	2D +1.54077163 E+ 4B-16	M		+1.54077163 E+ 4	001243	07413	35566	0262 2
R	RCVLEM	2D -1.27553366 E+ 6B-27	-		-1.27553366 E+ 6	001660	77544	51344	0263 2
R	RCVLEM +2	2D +1.19317498 E+ 6B-27	R		+1.19317498 E+ 6	001662	00221	24656	0264 2
R	RCVLEM +4	2D +1.56367062 E+ 5B-27	LCON		+1.56367062 E+ 5	001664	00023	02636	0265 2
R	RRECTLEM	2D -1.27553366 E+ 6B-27	-		-1.27553366 E+ 6	001626	77544	51344	0266 2
R	RRECTLEM +2	2D +1.19317498 E+ 6B-27	R		+1.19317498 E+ 6	001630	00221	24656	0267 2
R	RRECTLEM +4	2D +1.56367062 E+ 5B-27	LO		+1.56367062 E+ 5	001632	00023	02636	0268 2
R	VCVLEM	2D +1.09875516 E+ 1B-05	-		+1.09875516 E+ 3	001666	12771	24027	0269 2
R	VCVLEM +2	2D +1.06107936 E+ 1B-05	V		+1.06107936 E+ 3	001670	12470	27174	0270 2
R	VCVLEM +4	2D +7.30720070 E+ 0B-05	LCON		+7.30720070 E+ 2	001672	07235	11132	0271 2
R	VRECTLEM	2D +1.09875516 E+ 1B-05	-		+1.09875516 E+ 3	001634	12771	24027	0272 2
R	VRECTLEM +2	2D +1.06107936 E+ 1B-05	V		+1.06107936 E+ 3	001636	12470	27174	0273 2
R	VRECTLEM +4	2D +7.30720070 E+ 0B-05	LO		+7.30720070 E+ 2	001640	07235	11132	0274 2
R	RCVCSM	2D -1.67002840 E+ 6B-27	-		-1.67002840 E+ 6	001606	77464	44346	0275 2
R	RCVCSM +2	2D +7.87612969 E+ 5B-27	R		+7.87612969 E+ 5	001610	00140	04472	0276 2
R	RCVCSM +4	2D -1.16183933 E+ 5B-27	CCON		-1.16183933 E+ 5	001612	77761	72117	0277 2
R	RRECTCSM	2D -1.67002840 E+ 6B-27	-		-1.67002840 E+ 6	001554	77464	44346	0278 2
R	RRECTCSM +2	2D +7.87612969 E+ 5B-27	R		+7.87612969 E+ 5	001556	00140	04472	0279 2
R	RRECTCSM +4	2D -1.16183933 E+ 5B-27	CO		-1.16183933 E+ 5	001560	77761	72117	0280 2
R	VCVCSM	2D +5.87526815 E+ 0B-05	-		+5.87526815 E+ 2	001614	05700	04311	0281 2
R	VCVCSM +2	2D +1.33980689 E+ 1B-05	V		+1.33980689 E+ 3	001616	15313	31754	0282 2
R	VCVCSM +4	2D +7.10659454 E+ 0B-05	CCON		+7.10659454 E+ 2	001620	07066	22344	0283 2
R	VRECTCSM	2D +5.87526815 E+ 0B-05	-		+5.87526815 E+ 2	001562	05700	04311	0284 2
R	VRECTCSM +2	2D +1.33980689 E+ 1B-05	V		+1.33980689 E+ 3	001564	15313	31754	0285 2
R	VRECTCSM +4	2D +7.10659454 E+ 0B-05	CO		+7.10659454 E+ 2	001566	07066	22344	0286 2

P	TRAJECTORY 7012120 POST-DOI DATA							
R	LANDING SITE DEPENDENT DATA CONTINUED							
R	AGC MNEMONIC	AGC VALUE	GSOP MNEMONIC	GSOP VALUE (MKS)				
R	LANDING SITE DATA							
R	TLAND	2D + 39201259	TLAND	+3.92012589 E+ 5	002026	04530	24753	0287 2
R	RLS	2D +1.65322750 E+ 6B-27 -		+1.65322750 E+ 6	002020	00311	31727	0288 2
R	RLS +2	2D -5.20128000 E+ 5B-27 R		-5.20128000 E+ 5	002022	77700	60177	0289 2
R	RLS +4	2D -1.11264500 E+ 5B-27 LS		-1.11264500 E+ 5	002024	77762	55276	0290 2
R	LUNAR LIBRATION							
R	504LM	2D -.000355157	-	-3.55157286 E- 4	002012	77772	45626	0291 2
R	504LM +2	2D -.000317843	L	-3.17843853 E- 4	002014	77772	71267	0292 2
R	504LM +4	2D +.000386667	LIBRATION	+3.86667691 E- 4	002016	00006	12563	0293 2
R	GEOMETRY OF INERTIAL REFERENCE AND PLATFORM COORDINATES							
R	REFSMMAT	2D -.144113816	-	-2.88227632 E- 1	001731	73306	72665	0294 2
R	REFSMMAT +2	2D +.454584409	REFSMMAT	+9.09168818 E- 1	001733	16427	35115	0295 2
R	REFSMMAT +4	2D +.150280481	0	+3.00560962 E- 1	001735	04636	06201	0296 2
R	REFSMMAT +6	2D -.118826090	-	-2.37652181 E- 1	001737	74145	44717	0297 2
R	WARNINGREFSMMAT +10	2D -.185989759	REFSMMAT	-3.71979518 E- 1	001741	72030	67631	0298 2
R	WARNINGREFSMMAT +12	2D +.448651501	3	+8.97303002 E- 1	001743	16266	26462	0299 2
R	WARNINGREFSMMAT +14	2D +.463801216	-	+9.27602432 E- 1	001745	16656	35323	0300 2
R	WARNINGREFSMMAT +16	2D +.093599275	REFSMMAT	+1.87198551 E- 1	001747	02775	20764	0301 2
R	WARNINGREFSMMAT +20	2D +.161640364	6	+3.23280729 E- 1	001751	05130	12065	0302 2
R			XEULER (OUT)	-1.53286190 E+ 2				
R			YEULER (IN)	-1.33800003 E+ 2				
R			ZEULER (MID)	+6.53907398 E+ 1				

P	TRAJECTORY 7012120 POST-DOI DATA							
R	TRAJECTORY DESIGN DEPENDENT DATA							
R	AGC MNEMONIC	AGC VALUE	GSOP MNEMONIC	GSOP VALUE (MKS)				
R	DOI BURN PARAMETERS							
R			TIG	+3.90128944 E+ 5				
R			DOI					
R			-	+0.00000000 E+ 0				
R			DELV (FPS)	+0.00000000 E+ 0				
R			DOI	+0.00000000 E+ 0				
R	IGNITION PARAMETERS							
R	VIGN	2D +1.69107719 E+ 1B-10	VIGG	+1.69107719 E+ 3	002456	00416	22241	0303 2
R	RIGNX	2D -4.20980309 E+ 4B-24	RIGXG	-4.20980309 E+ 4	002460	77726	74337	0304 2
R	RIGNZ	2D -4.45242789 E+ 5B-24	RIGZG	-4.45242789 E+ 5	002462	77115	46122	0305 2
R	KIGNX/B4	2D -.026187499	KX	+4.18999999 E- 1	002464	77122	76152	0306 2
R	KIGNY/B8	2D -.194586876	KY	+2.96916010 E- 6	002466	71613	74336	0307 2
R	KIGNV/B4	2D -.179290771	KV	+4.70000000 E+ 2	002470	72206	57777	0308 2
R	BRAKING PHASE							
R	TCGIBRAK	1D +1.11111111 E+13B-17	TCGIBRAK	+1.11111111 E+11				0309
3	FIELD BAD							
R	TCGFBRK	1D -1.11111111 E+13B-17	TCGFBRK	-1.11111111 E+11				0310
3	FIELD BAD							
R	TENDBRAK	1D +6.20000000 E+ 3B-17	TENDBRAK	+6.20000000 E+ 1	003423	01407		0311 2
R	GAINBRAK	2D +9.99999998 E- 1B+00	GAINBRAK	+9.99999998 E- 1	002446	37777	37777	0312 2
R	RBRFG	2D -5.40631379 E+ 2B-24 -		-5.40631379 E+ 2		77777	57065	0313
1	FIELD BAD							
R	RBRFG +2	2D +0.00000000 E+ 0B-24 R		+0.00000000 E+ 0		00000	00000	0314
1	FIELD BAD							
R	RBRFG +4	2D -4.41595059 E+ 3B-24	OFG	-4.41595059 E+ 3		77773	66000	0315
1	FIELD BAD							
R	VBRFG	2D -5.12388480 E- 1B-10 -		-5.12388480 E+ 1		77767	71517	0316
1	FIELD BAD							
R	VBRFG +2	2D +0.00000000 E+ 0B-10 V		+0.00000000 E+ 0		00000	00000	0317
1	FIELD BAD							
R	VBRFG +4	2D -2.36568590 E- 1B-10	OFG	-2.36568590 E+ 1		77774	46700	0318
1	FIELD BAD							
R	ABRFG	2D -1.97277539 E- 5B+04 -		-1.97277539 E- 1		77772	72405	0319
1	FIELD BAD							
R	ABRFG +2	2D +0.00000000 E+ 0B+04 A		+0.00000000 E+ 0		00000	00000	0320
1	FIELD BAD							
R	ABRFG +4	2D -2.56470360 E- 4B+04	OFG	-2.56470360 E+ 0		77674	70443	0321
1	FIELD BAD							
R	VBRFG*	2D -5.32279327 E- 1B-10	1B78 VOFZG	-5.32279327 E+ 1	002432	77767	57361	0322 2
1	FIELD BAD							
R	ABRFG*	2D -1.53882216 E- 3B+04	6 AOFZG	-1.53882216 E+ 1	002436	77154	63330	0323 2

JBRFG* 2D +2.01345879 E- 8B+18 8 JOFZG +2.01345879 E- 2 002442 00126 17216 0324 2
 R JOFZG +2.51682349 E- 3

P TRAJECTORY 7012120 POST-DOI DATA
 R TRAJECTORY DESIGN DEPENDENT DATA CONTINUED

R AGC MNEMONIC AGC VALUE GSOP MNEMONIC GSOP VALUE (MKS)
 R APPROACH PHASE

R					003425	75632	0325	2
	DELTFAP	1D -9.00000000 E+ 3B-17	TGOAUG	+9.00000000 E+ 1			0326	
	TCGIAPPR	1D +1.11111111 E+13B-17	TCGIAPPR	+1.11111111 E+11				
3	FIELD BAD						0327	
	TCGFAPPR	1D -1.11111111 E+13B-17	TCGFAPPR	-1.11111111 E+11				
3	FIELD BAD				003424	00226	0328	2
	TENDAPPR	1D +1.20000000 E+ 3B-17	TENDAPPR	+1.20000000 E+ 1				
R	GAINAPPR	2D +0.00000000 E+ 0B+00	GAINAPPR	+0.00000000 E+ 0	002450	00000	00000	0329 2
R	RAPFG	2D +2.89313420 E+ 1B-24 -		+2.89313420 E+ 1		00000	00717	0330
1	FIELD BAD					00000	00000	0331
	RAPFG +2	2D +0.00000000 E+ 0B-24 R		+0.00000000 E+ 0				
1	FIELD BAD					77777	77662	0332
	RAPFG +4	2D -4.79169980 E+ 0B-24 1FG		-4.79169980 E+ 0				
1	FIELD BAD							
R	VAPFG	2D +6.35075180 E- 3B-10 -		+6.35075180 E- 1		00000	03201	0333
1	FIELD BAD					00000	00000	0334
	VAPFG +2	2D +0.00000000 E+ 0B-10 V		+0.00000000 E+ 0				
1	FIELD BAD					00000	01227	0335
	VAPFG +4	2D +2.53081169 E- 3B-10 1FG		+2.53081169 E- 1				
1	FIELD BAD							
R	AAPFG	2D +1.64678870 E- 5B+04 -		+1.64678870 E- 1		00004	12111	0336
1	FIELD BAD					00000	00000	0337
	AAPFG +2	2D +0.00000000 E+ 0B+04 A		+0.00000000 E+ 0				
1	FIELD BAD					77776	43634	0338
	AAPFG +4	2D -7.17569300 E- 6B+04 1FG		-7.17569300 E- 2				
1	FIELD BAD							
R	VAPFG*	2D +5.69432632 E- 3B-10 1878	V1FZG	+5.69432632 E- 1	002434	00000	02725	0339 2
	AAPFG*	2D -4.30541580 E- 5B+04 6	A1FZG	-4.30541580 E- 1	002440	77764	66653	0340 2
	JAPFG*	2D +1.09953360 E- 7B+18 8	J1FZG	+1.09953360 E- 1	002444	00730	07700	0341 2
			J1FZG	+1.37441700 E- 2				

R VERTICAL DESCENT PHASE

R	TAUVERT	2D +8.00000000 E+ 2B-14	TAU (G)	+8.00000000 E+ 0		01440	00000	0342
1	FIELD BAD					77777	73242	0343
R	V2FG	2D -9.14399999 E- 3B-10 -		-9.14399999 E- 1		00000	00000	0344
1	FIELD BAD					00000	00000	0345
	V2FG +2	2D +0.00000000 E+ 0B-10 V		+0.00000000 E+ 0				
1	FIELD BAD							
	V2FG +4	2D +0.00000000 E+ 0B-10 2FG		+0.00000000 E+ 0				
1	FIELD BAD							

LUMINARY AGC

178 NASA 2021112-151 NEW SIMULATION

MARSROT

NONE /

/

LAST SNAP NONE

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P TRAJECTORY 7012120 POST-DOI DATA
R ERASABLE MEMORY CONSTANTS FOR GUIDANCE AND CONTROL

R AGC MNEMONIC AGC VALUE GSOP MNEMONIC GSOP VALUE (MKS)

R GUIDANCE CONSTANTS

R LEADTIME 1D -2.19999999 E+ 2B-17 LEADTIME +2.19999999 E+ 0 003426 77744 0346 2

R ENGINE CONSTANTS

R LOWCRIT 1D + 2124 FLO +2.66226063 E+ 4 002472 04114 0347 2
HIGHCRIT 1D + 2347 FHI +2.94249859 E+ 4 002473 04453 0348 2

R END OF DESCENT AGC ERASABLES
R B122289 LOADER ERRORS. SIMULATOR TERMINATING JOB