#290

IMP-I

HOURLY AVG ION PLASMA PARAM

71-019A-11B

IMP-I

HOUR AVG ION PLASMA PARAM. TAPE

71-019A-11B

THIS DATA SET HAS BEEN RESTORED. ORIGINALLY IT CONTAINED TWO 7-TRACK, 800 BPI TAPES WRITTEN IN BINARY. THERE IS ONE RESTORED TAPE. THE DR TAPE IS A 3480 CARTRIDGE AND THE DS TAPE IS 9-TRACK, 6250 BPI. THE ORIGINAL TAPES WERE CREATED ON A CDC 6600 COMPUTER AND WERE RESTORED ON AN IBM 9021 COMPUTER. THE DR AND DS NUMBER ALONG WITH THE CORRESPONDING D NUMBER AND TIME SPAN ARE AS FOLLOWS:

DR#	DS#	D#	FILES	TIME SPAN
DR004087	DS004087	D017524	1-7	03/18/71 - 07/26/72 (a)
		D022959	8-10	01/02/73 - 07/27/73

a) D017524 - 1 ERROR, RECORD 1, FILE 3

REQ. AGENT	RAND NO.	ACQ. AGENT
VJP WTJ	RC2826 RC5252	DJH

IMP-I

HOURLY AVG. ION PLASMA PARAM.

71-019A-11B

This data set consists of 2 IMP-I Hourly Averaged Ion Plasma Parameter Data tapes. The tapes are 800 BPI, Binary, 7 track and was created on a CDC 6600 computer. Each logical record consists of 6 floating point 60 bit words.

D#	C#	FILES	TIME SPAN
D-17524	C-13899	7	3/18/71 - 7/26/72
D-22959	C-17457	3	1/02/73 - 7/27/73

IMP-I

HOURLY AVG ION PLASMA PARAMETER

71-019A-11B

FORMAT

FIELD	IDENTIFICATION	FORMAT
1	Date (YRMNDY)	F10.1
2	Hour	F10.1
3	Proton Density	F10.3
4	Solar Wind Speed	F10.3
5	Avg Proton Temperature	F10.3
6	Number of Points	F10.1

The data are written in CDC floating point format.

UNIVERSITY OF CALIFORNIA
LOS ALAMOS SCIENTIFIC LABORATORY
(CONTRACT W-7405-ENG-36)
P. O. Box 1663
Los Alamos, New Mexico 87544

RE 01315

IN REPLY REFER TO: P-4U:74-776

12/17/74

December 12, 1974

DEC 17 1974

Dr. James Vette, Code 601
National Space Science Data Center
NASA Goddard Space Flight Center
Greenbelt, MD 20771

Dear Jim:

Under separate cover we are sending solar wind data for the first two seasons of IMP 6. It is in the form of one-hour averages of the solar wind speed, proton density and average proton temperature because that is the form that is presently in the cleanest shape. We are proceeding with preparing the full data set to send to NSSDC and hope to have it available soon. If any problems arise with reading the tape, you can have your people call Earl Tech at (505) 667-5559.

I hope this data set will be of value to your users. It has taken longer than I would have chosen to get it out, but as you know, we have a rather limited staff so that we must allocate our time carefully.

Best regards,

Sam

S. J. Bame

SJB:ns

cc: File
ISD-5 (2)

AN EQUAL OPPORTUNITY EMPLOYER

```
      PROGRAM LIST(INPUT,OUTPUT,TAPE2)
C                    THIS PROGRAM LISTS A SWAVE TAPE
C
      DIMENSION Y(510)
      IEOF = 0
      IFILE = 1
105   PRINT 900,IFILE
      PRINT 902
10    BUFFER IN(2,1)(Y(1),Y(510))
11    IF(UNIT,2) 11,20,100,20
20    NWR = LENGTH(2)
      IEOF = 0
      DO 30 I = 1,NWR,6
30    PRINT 901,Y(I),Y(I+1),Y(I+2),Y(I+3),Y(I+4),Y(I+5)
      GO TO 10
100   IFILE = IFILE + 1
      IEOF = IEOF + 1
      IF(IEOF .EQ.2) STOP
      GO TO 105
900   FORMAT(*1 FILE*I5)
901   FORMAT(1X,2F10.1,3E10.3,F10.1)
902   FORMAT(*     DATE      HOUR      DENSITY  VELOCITY  TEMPERATURE
     *NPTS*)
      END
```

D-17524

```
EOF-PARITY-ERROR TAPE CHECK RUN BEGINS.

AN END-OF-FILE HAS BEEN ENCOUNTERED ON PHYSICAL RECORD NO.   12  OF FILE NO.   1

AN END-OF-FILE HAS BEEN ENCOUNTERED ON PHYSICAL RECORD NO.   13  OF FILE NO.   2

AN END-OF-FILE HAS BEEN ENCOUNTERED ON PHYSICAL RECORD NO.    5  OF FILE NO.   3

AN END-OF-FILE HAS BEEN ENCOUNTERED ON PHYSICAL RECORD NO.   13  OF FILE NO.   4

AN END-OF-FILE HAS BEEN ENCOUNTERED ON PHYSICAL RECORD NO.   13  OF FILE NO.   5

AN END-OF-FILE HAS BEEN ENCOUNTERED ON PHYSICAL RECORD NO.   13  OF FILE NO.   6

AN END-OF-FILE HAS BEEN ENCOUNTERED ON PHYSICAL RECORD NO.    3  OF FILE NO.   7

AN END-OF-FILE HAS BEEN ENCOUNTERED ON PHYSICAL RECORD NO.    1  OF FILE NO.   8

AN END-OF-FILE HAS BEEN ENCOUNTERED ON PHYSICAL RECORD NO.    1  OF FILE NO.   9

AN END-OF-FILE HAS BEEN ENCOUNTERED ON PHYSICAL RECORD NO.    1  OF FILE NO.  10

INPUT TAPE HAS     38.87 FEET OF DATA

EOF-PARITY-ERROR TAPE CHECK RUN HAS ENDED.
```

FILE 0001 REC 0001 CH 8400 71 0515

D-17524

3/18/71-7/26/72

0001	174353265340	000000001723	400000000000	000017214146	627003624407	173065134037	230747051737	674247555473
0049	700617237000	000000000000	174353265340	000000001723	440000000000	000017215610	340774770613	173065663733
0097	532067051740	452443736107	105717244200	000000000000	174353265340	000000001723	500000000000	000017215853
0145	412753576751	173065540272	261363321740	430707473775	627617244000	000000000000	174353265340	000000001723
0193	540000000000	000017215764	157275741506	173064614655	626316001740	420742525364	204417246000	000000000000
0241	174353265340	000000001723	600000000000	000017216102	334753136161	173066775761	537425271737	620105004165
0289	570117247400	000000000000	174353265340	000000001723	640000000000	000017215755	566640316640	173066202516
0337	312267621737	602137326726	532517244600	000000000000	174353265340	000000001723	700000000000	000017216077
0385	064125377231	173065604361	315230741737	566211131226	656317254100	000000000000	174353265340	000000001723
0433	740000000000	000017216515	746412327007	173063635641	044727021737	642273130336	503517247600	000000000000
0481	174353265340	000000001724	400000000000	000017216344	266343712322	173063461144	705251021737	610761270511
0529	633217247200	000000000000	174353265340	000000001724	420000000000	000017216255	464307231104	173063554634
0577	166320211737	643167100066	502517247400	000000000000	174353265340	000000001724	440000000000	000017216267
0625	331330611032	173063616414	410531051737	627643117320	050717254100	000000000000	174353265340	000000001724
0673	460000000000	000017216377	741171446310	173064440736	333308151737	571326361630	761017254000	000000000000
0721	174353265340	000000001724	500000000000	000017216423	001074077447	173064255655	576743061737	622545401551
0769	662317246200	000000000000	174353265340	000000001724	520000000000	000017216256	246400461710	173064202161
0817	417720671737	634352118311	220717247400	000000000000	174353265340	000000001724	540000000000	000017217030
0865	051605365346	173061643671	611643761737	603634020076	763617247400	000000000000	174353265340	000000001724
0913	560000000000	000017216733	074276235235	173063111753	440626401737	727521437037	250517246600	000000000000
0961	174353265340	000000001724	600000000000	000017216771	751265010560	173063565403	264577101737	674108357751
1009	306117246400	000000000000	174353265360	000000001720	400000000000	000017217073	305701100576	173062602751
1057	042653711737	676243271200	206317247200	000000000000	174353265360	000000001721	400000000000	000017217672
1105	257544675644	173061630413	327476411737	667240164567	270517246400	000000000000	174353265360	000000001721
1153	600000000000	000017217347	563473107424	173062427156	245650161737	723233217642	604117237400	000000000000
1201	174353265360	000000001722	400000000000	000017216677	201550374262	173063417762	435604621737	634154523643
1249	620017235400	000000000000	174353265360	000000001722	500000000000	000017224041	652506736437	173062546734
1297	415544431737	656265404535	511217246600	000000000000	174353265360	000000001722	600000000000	000017217772
1345	531625212763	173061435727	070566771737	666135715271	173117244000	000000000000	174353265360	000000001722
1393	700000000000	000017217633	570341210115	173062474114	377167151737	774525131403	411517247400	000000000000
1441	174353265360	000000001723	400000000000	000017224056	736025456723	173061473542	562502421737	706252651125
1489	740417247000	000000000000	174353265360	000000001723	440000000000	000017224016	226661551045	173061443664
1537	210170011737	756751521722	113017242209	000000000000	174353265360	000000001723	500000000000	000017224213
1585	545373521524	173061674110	032734701737	777166106514	507317247600	000000000000	174353265360	000000001723
1633	540000000000	000017224254	154475723301	173062304342	705356271740	413646442524	553017247200	000000000000
1681	174353265360	000000001723	600000000000	000017226075	174625023165	173063334302	660163311740	534877376773
1729	427117245200	000000000000	174353265360	000000001723	640000000000	000017235456	607752540262	173070527713
1777	252721711741	527334212302	273217247200	000000000000	174353265360	000000001723	700000000000	000017235506
1825	107144527734	173071002275	700106071741	511133541053	205217245200	000000000000	174353265360	000000001723
1873	740000000000	000017234765	401541377035	173070154641	644675151741	442054115350	756017244400	000000000000
1921	174353265360	000000001724	400000000000	000017234174	122057371466	173065257672	425371351741	407230304674
1969	601117245600	000000000000	174353265360	000000001724	420000000000	000017227460	115746742154	173064401764
2017	314355161740	774072554746	043317247200	000000000000	174353265360	000000001724	440000000000	000017234065
2065	526505501165	173063156732	312717421740	704165152575	024417254000	000000000000	174353265360	000000001724
2113	460000000000	000017227427	015640577630	173062750514	420563581740	601602324446	426017247000	000000000000
2161	174353265360	000000001724	500000000000	000017227261	353420740370	173061455045	654677121740	544216234536
2209	346017247400	000000000000	174353265360	000000001724	520000000000	000017227465	733230460635	173057164706
2257	746551041740	520641550067	360417247000	000000000000	174353265360	000000001724	540000000000	000017227445
2305	665127676410	173057777140	305202541740	474140601750	713217247600	000000000000	174353265360	000000001724
2353	560000000000	000017226275	652214757231	173057334766	032313121740	477311337751	131617254000	000000000000
2401	174353265360	000000001724	600000000000	000017225463	440664361622	173087160725	431431531740	502477700801
2449	454017247200	000000000000	174353265400	000000001720	400000000000	000017225327	011624574763	173056273072
2497	556754431740	465551260143	402117246400	000000000000	174353265400	000000001721	400000000000	000017224113
2545	524356531716	173057734700	656041411737	752067226453	471417247000	000000000000	174353265400	000000001721
2593	600000000000	000017216553	212005222631	173062250306	674744641737	505257402467	572117246200	000000000000
2641	174353265400	000000001722	400000000000	000017216555	175757575214	173062261542	431331211737	506454655224
2689	631317237400	000000000000	174353265400	000000001722	500000000000	000017215346	634275323171	173062364027
2737	041760041737	506514304217	330017226000	000000000000	174353265400	000000001722	600000000000	000017214022
2785	370172500000	173065216338	543420861737	570742207441	503517227000	000000000000	174353265400	000000001722
2833	700000000000	000017207632	302535506070	173064665510	303207461737	671656255660	374617246400	000000000000
2881	174353265400	000000001723	400000000000	000017225045	465345533121	173067024100	144742361737	542303736521
2929	230017235000	000000000000	174353265400	000000001723	440000000000	000017225712	305323037721	173067114476

FILE 0007 REC 0001 CH 5100

2977	503071461737	523726453553	370417245200	000000000000	174353772100	000000001724	560000000000	000017237062
3025	724676563536	173045546052	124620621737	511553215651	364517235400	000000000000	174353772100	000000001724
3073	600000000000	000017236635	213006737653	173044661677	610346231737	422116702400	642717245000	000000000000
3121	174353772120	000000001720	400000000000	000017237545	462430260623	173045120374	300603721737	415426531155
3169	507017247000	000000000000	174353772120	000000001721	400000000000	000017244121	245307011016	173046630432
3217	074754561736	640476657156	441017247000	000000000000	174353772120	000000001721	600000000000	000017237106
3265	075147477761	173047072435	153036561737	402111460510	504217247200	000000000000	174353772120	000000001722
3313	400000000000	000017235014	660667400233	173046745747	634646321737	611451116620	143017246400	000000000000
3361	174353772120	000000001722	500000000000	000017235071	453757564254	173046527240	117213551737	721060720253
3409	245617247000	000000000000	174353772120	000000001722	600000000000	000017235220	607264146312	173047622145
3457	656356631740	425265646231	566517247000	000000000000	174353772120	000000001722	700000000000	000017234314
3505	762636300444	173050420303	220131661740	411204744604	545717246600	000000000000	174353772120	000000001723
3553	400000000000	000017234245	250553127571	173050365472	436307221740	430537746526	440417236000	000000000000
3601	174353772120	000000001723	440000000000	000017234204	740433724246	173050115774	764011601740	401022703200
3649	157317246400	000000000000	174353772120	000000001723	500000000000	000017236353	076476354115	173050450122
3697	606327441737	524224735455	111017247000	000000000000	174353772120	000000001723	540000000000	000017236370
3745	152675136671	173051523064	143757071737	521771326371	210617247200	000000000000	174353772120	000000001723
3793	600000000000	000017236162	065122205132	173051275121	770510121737	646660406721	263217246600	000000000000
3841	174353772120	000000001723	640000000000	000017236452	342042032371	173052763552	335760201737	741707610200
3889	661417247000	000000000000	174353772120	000000001723	700000000000	000017236603	714270160434	173053050553
3937	707347401740	431730530557	423317247000	000000000000	174353772120	000000001723	740000000000	000017237313
3985	733225650764	173053324310	776421427740	435731015747	772017246200	000000000000	174353772120	000000001724
4033	400000000000	000017237512	304314744515	173053424524	572666311740	420066470521	514417244600	000000000000
4081	174353772120	000000001724	420000000000	000017236225	140367621136	173053504436	154714461740	543521176072
4129	412117247200	000000000000	174353772120	000000001724	440000000000	000017235141	435566325341	173053171110
4177	575551241740	671715552314	315117246400	000000000000	174353772120	000000001724	460000000000	000017235277
4225	733747701656	173053727215	267704531740	646334247552	332417246600	000000000000	174353772120	000000001724
4273	500000000000	000017235260	571736301053	173054422313	403742761740	762551243332	230417247000	000000000000
4321	174353772120	000000001724	520000000000	000017234727	477221616426	173055277331	650345761740	720301210662
4369	140217246600	000000000000	174353772120	000000001724	540000000000	000017234515	520704650331	173056250520
4417	702301671740	722071070006	641317246400	000000000000	174353772120	000000001724	560000000000	000017234524
4465	203101274675	173056061174	727747411740	746616465333	225517216000	000000000000	174353772220	000000001724
4513	440000000000	000017224640	724015246375	173051266146	072600431737	401275327610	053417236000	000000000000
4561	174353772220	000000001724	460000000000	000017225026	073001154156	173051444503	403000741737	403306654507
4609	342517247000	000000000000	174353772220	000000001724	500000000000	000017224777	561107303522	173051444116
4657	141717541737	420733227637	706017247000	000000000000	174353772220	000000001724	520000000000	000017225060
4705	053002534513	173050708761	354072561737	423407640253	407317246400	000000000000	174353772220	000000001724
4753	540000000000	000017224646	236245424544	173047516745	633720341737	516743407074	431217247000	000000000000
4801	174353772220	000000001724	560000000000	000017225055	440716620530	173046755721	032015561737	636311351616
4849	412617244600	000000000000	174353772220	000000001724	600000000000	000017225026	774413770133	173046477736
4897	471647721737	756470676424	602117245000	000000000000	174353772240	000000001720	400000000000	000017225676
4945	432140064025	173050502522	046020141737	533217507124	322117246000	000000000000	174353772240	000000001721
4993	400000000000	000017225210	646265557324	173047515041	067243431737	574077620261	760517246200	000000000000
5041	174353772240	000000001721	600000000000	000017226351	405735413345	173047447460	150520361737	507775633525
5089	026557234000	000000000000						

FILE 0007 REC 0002 CH 1620

0001	174353772420	000000001724	460000000000	000017226102	025456016100	173050276066	122041041737	411712137450
0049	666217225000	000000000000	174353772420	000000001724	500000000000	000017226350	600413213435	173050254717
0097	653550311736	737547125605	252217237400	000000000000	174353772420	000000001724	520000000000	000017226460
0145	741334706256	173047773370	542553221737	403501261043	557217247000	000000000000	174353772420	000000001724
0193	540000000000	000017226571	404450015172	173047561110	305435321736	743737437755	116617246600	000000000000
0241	174353772420	000000001724	560000000000	000017226713	560334613460	173047350412	746212541736	725032445355
0289	570517247000	000000000000	174353772420	000000001724	600000000000	000017225743	704756337422	173046513007
0337	643106751737	410662425026	302217246600	000000000000	174353772440	000000001720	400000000000	000017225477
0385	475244421415	173046451442	763006731736	752621705630	073617246400	000000000000	174353772440	000000001721
0433	400000000000	000017234030	471061222430	173046034173	707706331736	654376053306	263517247000	000000000000
0481	174353772440	000000001721	600000000000	000017226571	477462771173	173045317320	462067731736	736552025411
0529	706317246400	000000000000	174353772440	000000001722	400000000000	000017226355	006315622257	173045054253
0577	646144471736	652651425403	636317246200	000000000000	174353772440	000000001722	500000000000	000017226427
0625	644050116063	173044732076	272262561736	527272303555	640417247000	000000000000	174353772440	000000001722
0673	600000000000	000017227020	506366627204	173044642614	717026661736	611206750342	344717246600	000000000000
0721	174353772440	000000001722	700000000000	000017227603	761111414233	173044532223	320207611736	500771334151

FILE 0007 REC 0002 CH 1620

0769	510317247200	000000000000	174353772440	000000001723	400000000000	000017234115	235673222222	173044240046
0817	663242701736	614027757072	312417246600	000000000000	174353772440	000000001723	440000000000	000017227102
0865	512577141414	173043651537	655462441736	622333176417	374417246400	000000000000	174353772440	000000001723
0913	500000000000	000017234074	035132712766	173043557345	566030131736	616066511107	064617234400	000000000000
0961	174353772520	000000001724	540000000000	000017225344	307536371312	173143402211	462234461741	441245145044
1009	076317234400	000000000000	174353772520	000000001724	560000000000	000017225640	466535471062	173143542630
1057	437642461740	737337620663	065517245400	000000000000	174353772520	000000001724	600000000000	000017226613
1105	102560047636	173142174014	364503421741	532236130325	244317234000	000000000000	174353772540	000000001720
1153	400000000000	000017226234	205367642661	173141442255	456120701741	540671177736	306717246600	000000000000
1201	174353772540	000000001721	400000000000	000017227144	110053061346	173141267713	363563661741	526151443045
1249	425217246200	000000000000	174353772540	000000001721	600000000000	000017226661	323242637153	173141061247
1297	111230511741	427072430631	305217247000	000000000000	174353772540	000000001722	400000000000	000017226514
1345	014630664057	173142141725	423627711741	455061224366	621617247200	000000000000	174353772540	000000001722
1393	500000000000	000017226477	314755500334	173142133146	441736001741	563730716733	426417246400	000000000000
1441	174353772540	000000001722	600000000000	000017225676	220755224767	173142052161	675012441741	451263323621
1489	777117247200	000000000000	174353772540	000000001722	700000000000	000017225351	002406510436	173143062064
1537	050732021741	543242750521	407317246400	000000000000	174353772540	000000001723	400000000000	000017226430
1585	751135156341	173142042351	511603761741	732054041707	354617235000	000000000000		

720726

D-17524

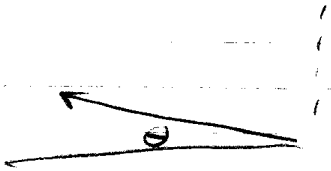
DATE	HOUR	DENSITY	VELOCITY	TEMPERATURE	NPTS
710318.0	8.0	2.100E+00	4.254E+02	5.687E+04	14.0
710318.0	9.0	2.883E+00	4.308E+02	7.643E+04	17.0
710318.0	10.0	2.918E+00	4.295E+02	7.191E+04	16.0
710318.0	11.0	2.988E+00	4.222E+02	6.987E+04	24.0
710318.0	12.0	3.065E+00	4.400E+02	5.122E+04	30.0
710318.0	13.0	2.982E+00	4.340E+02	4.943E+04	19.0
710318.0	14.0	3.062E+00	4.301E+02	4.791E+04	33.0
710318.0	15.0	3.326E+00	4.145E+02	5.355E+04	31.0
710318.0	16.0	3.223E+00	4.128E+02	5.030E+04	29.0
710318.0	17.0	3.170E+00	4.137E+02	5.366E+04	30.0
710318.0	18.0	3.179E+00	4.142E+02	5.220E+04	33.0
710318.0	19.0	3.250E+00	4.205E+02	4.831E+04	8.0
710318.0	20.0	3.269E+00	4.187E+02	5.155E+04	25.0
710318.0	21.0	3.170E+00	4.180E+02	5.279E+04	30.0
710318.0	22.0	3.524E+00	3.986E+02	4.964E+04	30.0
710318.0	23.0	3.464E+00	4.092E+02	6.037E+04	27.0
710318.0	24.0	3.494E+00	4.138E+02	5.685E+04	26.0
710319.0	1.0	3.558E+00	4.060E+02	5.713E+04	29.0
710319.0	2.0	3.932E+00	3.984E+02	5.623E+04	23.0
710319.0	3.0	3.726E+00	4.044E+02	5.981E+04	15.0
710319.0	4.0	3.437E+00	4.122E+02	5.276E+04	11.0
710319.0	5.0	4.066E+00	4.056E+02	5.509E+04	27.0
710319.0	6.0	3.995E+00	3.965E+02	5.609E+04	16.0
710319.0	7.0	3.902E+00	4.049E+02	6.511E+04	30.0
710319.0	8.0	4.092E+00	3.969E+02	5.815E+04	28.0
710319.0	9.0	4.028E+00	3.966E+02	6.335E+04	25.0
710319.0	10.0	4.273E+00	3.989E+02	6.544E+04	31.0
710319.0	11.0	4.336E+00	4.031E+02	6.856E+04	29.0
710319.0	12.0	6.120E+00	4.114E+02	8.931E+04	21.0
710319.0	13.0	1.118E+01	4.534E+02	1.758E+05	29.0
710319.0	14.0	1.127E+01	4.560E+02	1.685E+05	21.0
710319.0	15.0	9.959E+00	4.497E+02	1.485E+05	18.0
710319.0	16.0	8.485E+00	4.267E+02	1.348E+05	23.0
710319.0	17.0	7.594E+00	4.200E+02	1.301E+05	29.0
710319.0	18.0	8.210E+00	4.097E+02	1.158E+05	32.0
710319.0	19.0	7.545E+00	4.076E+02	9.875E+04	28.0
710319.0	20.0	7.347E+00	3.967E+02	9.121E+04	30.0
710319.0	21.0	7.605E+00	3.778E+02	8.619E+04	28.0
710319.0	22.0	7.574E+00	3.840E+02	8.094E+04	31.0
710319.0	23.0	6.371E+00	3.795E+02	8.176E+04	32.0
710319.0	24.0	5.601E+00	3.778E+02	8.259E+04	29.0
710320.0	1.0	5.420E+00	3.709E+02	7.928E+04	26.0
710320.0	2.0	4.148E+00	3.835E+02	6.273E+04	28.0
710320.0	3.0	3.355E+00	4.026E+02	4.164E+04	25.0
710320.0	4.0	3.357E+00	4.028E+02	4.180E+04	15.0
710320.0	5.0	2.725E+00	4.038E+02	4.181E+04	6.0
710320.0	6.0	2.018E+00	4.102E+02	4.825E+04	7.0
710320.0	7.0	1.950E+00	4.228E+02	5.656E+04	26.0
710320.0	8.0	5.073E+00	4.403E+02	4.536E+04	10.0
710320.0	9.0	5.895E+00	4.412E+02	5.534E+04	26.0
710320.0	10.0	5.470E+00	4.377E+02	5.081E+04	29.0
710320.0	11.0	5.396E+00	4.505E+02	5.185E+04	24.0
710320.0	12.0	4.756E+00	4.456E+02	5.134E+04	29.0
710320.0	13.0	4.909E+00	4.463E+02	4.600E+04	27.0
710320.0	14.0	4.145E+00	4.375E+02	5.037E+04	5.0
710320.0	15.0	3.324E+00	4.315E+02	4.422E+04	24.0
710320.0	16.0	4.354E+00	4.312E+02	4.576E+04	30.0
710320.0	17.0	4.100E+00	4.204E+02	3.352E+04	30.0
710320.0	18.0	4.115E+00	4.126E+02	2.159E+04	31.0
710320.0	19.0	3.920E+00	4.115E+02	3.412E+04	25.0

510928

720721.0	21.0	6.596E+00	3.199E+02	3.323E+04	28.0
720721.0	22.0	6.737E+00	3.178E+02	3.097E+04	27.0
720721.0	23.0	6.898E+00	3.156E+02	3.002E+04	28.0
720721.0	24.0	5.945E+00	3.092E+02	3.390E+04	27.0
720722.0	1.0	5.624E+00	3.086E+02	3.141E+04	26.0
720722.0	2.0	8.096E+00	3.044E+02	2.742E+04	28.0
720722.0	3.0	6.738E+00	2.992E+02	3.064E+04	26.0
720722.0	4.0	6.463E+00	2.967E+02	2.732E+04	25.0
720722.0	5.0	6.547E+00	2.954E+02	2.198E+04	28.0
720722.0	6.0	7.032E+00	2.945E+02	2.517E+04	27.0
720722.0	7.0	7.758E+00	2.934E+02	2.054E+04	29.0
720722.0	8.0	8.302E+00	2.905E+02	2.535E+04	27.0
720722.0	9.0	7.130E+00	2.867E+02	2.576E+04	26.0
720722.0	10.0	8.235E+00	2.857E+02	2.548E+04	9.0
720725.0	22.0	5.446E+00	5.681E+02	1.481E+05	9.0
720725.0	23.0	5.814E+00	5.711E+02	1.227E+05	22.0
720725.0	24.0	6.772E+00	5.479E+02	1.773E+05	8.0
720726.0	1.0	6.305E+00	5.371E+02	1.807E+05	27.0
720726.0	2.0	7.196E+00	5.337E+02	1.752E+05	25.0
720726.0	3.0	6.847E+00	5.295E+02	1.429E+05	28.0
720726.0	4.0	6.648E+00	5.471E+02	1.542E+05	29.0
720726.0	5.0	6.624E+00	5.469E+02	1.904E+05	26.0
720726.0	6.0	5.872E+00	5.453E+02	1.522E+05	29.0
720726.0	7.0	5.455E+00	5.616E+02	1.819E+05	26.0
720726.0	8.0	6.549E+00	5.451E+02	2.427E+05	10.0

511011

```
      PROGRAM IMPBLIST
C     THIS PROGRAM IS TO READ NESS'S IMP I TAPES AND PRODUCE PRINTOUTS
C
      DIMENSION BUFF(69,60),IBUFF(69,60),OUT(12,60),B(4141)
     1  , LH(60),LM(60),LMS(60)
      EQUIVALENCE (B(2),BUFF(1,1),IBUFF(1,1))
    1 WRITE(1,100)
  100 FORMAT('0   ENTER START TIME FOR NESS IMP I DATA AND INTERVAL '/
     1 ' TO BE OUTPUT IN MINUTES')
      WRITE(1,101)
  101 FORMAT('0YYDDDHHMMSSMIN')
      READ(1,102)IYEAR,IDAY,IHR,IMIN,ISEC,MINOUT
  102 FORMAT(I2,I3,3I2,I3)
      IF(IYEAR.LE.0)CALL EXIT
  103 FORMAT(1H0,5I5,'  MINUTES OUTPUT =',I4)
      WRITE(1,103)IYEAR,IDAY,IHR,IMIN,ISEC,MINOUT
      III=1
      ASSIGN 901 TO IEOF
      ASSIGN 900 TO IERR
      CALL REWD (5)
C     CALL AFILE (5,1)
   10 CALL READ(5,B,16564,LEG,IEOF,IERR)
      KUP=(LEG-1 )/69
      GO TO 11
  900 WRITE (1,104)
  104 FORMAT(' I/O ERROR')
      GO TO 10
  901 WRITE(1,902)
  902 FORMAT('0  EOF ENCOUNTERED ON UNIT 5')
      GO TO 10
   11 CONTINUE
      IF(IYEAR.EQ.IBUFF(2,1))GO TO 12
      WRITE(1,105)IBUFF(2,1)
  105 FORMAT('0 YEAR ON TAPE DIFFERS FROM REQUESTED YEAR,TAPE Y =',
     1 I4/)
      CALL REWD(5)
      GO TO 1
   12 CONTINUE
      DO 14 J=1,KUP
      INDEX=J
      IF(IBUFF(3,J)+1.LT.IDAY)GO TO 14
      IF(IBUFF(3,J)+1.GE.IDAY)GO TO 15
   14 CONTINUE
      GO TO 10
   15 CONTINUE
      IIS=ISEC+60*IMIN+3600*IHR+86400*IDAY
      IIE=IIS+MINOUT*60
      DO 2  J=INDEX, KUP
      IF(IBUFF(6,J).EQ.0)GO TO 20
      IF(IBUFF(5,J).NE.0)GO TO 20
      IF(IBUFF(3,J).GT.366)GO TO 20
      IF(IBUFF(4,J).GT.86400000)GO TO 20
      IT=86400*(IBUFF(3,J)+1)
      IT=IT+(IBUFF(4,J)-7680)/1000
      IF(IT.GT.IIE)GO TO 200
      IF(IT.GE.IIS)GO TO 16
      GO TO 2
   16 IT=IBUFF(4,J)-7680
      IHR=IT/3600000
      IX=IT-IHR*3600000
```

```
      IM=IY/60000
      IMS=IY-IM*60000
      LH(III)=IHR
      LM(III)=IM
      LMS(III)=IMS
      OUT(1,III)=FLOAT(IBUFF(6,J))*100.+FLOAT(IBUFF(7,J))      of YY . DDD
     1  +(FLOAT(IBUFF(3,J))+1.)/1000.
      OUT(2,III)=A360(BUFF(30,J))/6370.   Radius          BZ
      OUT(3,III)=A360(BUFF(27,J))         GSE x
      OUT(4,III)=A360(BUFF(28,J))         GSE y
      OUT(5,III)=A360(BUFF(29,J))         GSE z
      OUT(6,III)=A360(BUFF(25,J))         Gm Long
      OUT(7,III)=A360(BUFF(26,J))         Gm Lat
      OUT(8,III)=A360(BUFF(12,J))         B mag
      OUT(9,III)=A360(BUFF(61,J))         Sm θ
      OUT(10,III)=A360(BUFF(63,J))        Sm Φ
      OUT(11,III)=A360(BUFF(60,J))        GSE θ
      OUT(12,III)=A360(BUFF(62,J))        GSE Φ
      III=III+1
      IF(III.GT.60)GO TO 600
      GO TO 20
  600 IL=III-1
      III=1
      WRITE(3,601)
      WRITE(3,602)(LH(K),LM(K),LMS(K),(OUT(L,K),L=1,12),K=1,IL)
  601 FORMAT(1H1,11HHR MN MLSEC,10H OREYY.DDD   ,12H ~~SATBFRDIUS~~ ,
     1 10HSAT GSE X  ,10HSAT GSE Y  ,10HSAT GSE Z  ,11HS/C GM LONG  ,
     2 10H  GM LAT    ,10H B:  MAG    ,10H SM THETA  ,10H SM PHI    ,
     3 10HGSE THETA  ,10HGSE PHI    /)
  602 FORMAT(1H ,I2,I3,I6,F10.3,F10.5,3F10.1,7F10.3)
   20 CONTINUE
      GO TO 10
  800 IL=III-1
      WRITE(3,601)
      WRITE(3,602)(LH(K),LM(K),LMS(K),(OUT(L,K),L=1,12),K=1,IL)
 1000 WRITE(3,1001)
 1001 FORMAT('1  END OF RUN'//)
      END FILE 3
      CALL REWD(5)
      GO TO 1
 2000 CALL EXIT
      END
$NOTE/END   END     END     END     END     END     END   9:57:25
$ASS LO LO
```

OUT(2,III) = OUT(8,III) * sin (OUT(11,III) * .017453)