

#490

ATS-5 & 6

GEOSYN PLASMA ENVIRON. PICT ATLAS

69-069A-11C

74-039A-05B

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1. INTRODUCTION:

The documentation for this data set was originally on paper, kept in NSSDC's Data Set Catalogs (DSCs). The paper documentation in the Data Set Catalogs have been made into digital images, and then collected into a single PDF file for each Data Set Catalog. The inventory information in these DSCs is current as of July 1, 2004. This inventory information is now no longer maintained in the DSCs, but is now managed in the inventory part of the NSSDC information system. The information existing in the DSCs is now not needed for locating the data files, but we did not remove that inventory information.

The offline tape datasets have now been migrated from the original magnetic tape to Archival Information Packages (AIP's).

A prior restoration may have been done on data sets, if a requestor of this data set has questions; they should send an inquiry to the request office to see if additional information exists.

2. ERRATA/CHANGE LOG:

NOTE: Changes are made in a text box, and will show up that way when displayed on screen with a PDF reader.

When printing, special settings may be required to make the text box appear on the printed output.

Version	Date	Person	Page	Description of Change
01				
02				

3 LINKS TO RELEVANT INFORMATION IN THE ONLINE NSSDC
INFORMATION SYSTEM:

<http://nssdc.gsfc.nasa.gov/nmc/>

[NOTE: This link will take you to the main page of the NSSDC Master Catalog. There you will be able to perform searches to find additional information]

4. CATALOG MATERIALS:

- a. Associated Documents To find associated documents you will need to know the document ID number and then click here.
<http://nssdcftp.gsfc.nasa.gov/miscellaneous/documents/>

- b. Core Catalog Materials

ATS 5

GEOSYN PLASMA ENVIRON. PICT ATLAS

69-069A-11C SPMS-00320

This data set has been restored. There was originally one 7-track, 800 BPI tape 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 tape was created on a 6600 computer and the restored tape was created on an IBM 9021 computer. The DR and DS numbers along with the corresponding D number are as follows:

DR#	DS#	D#	FILES	TIME SPAN
-----	-----	-----	-----	-----
DR004607	DS004607	D042429	1 - 50	11/08/69 - 11/24/70

o Read error occurred in record 14 of file 3.

GEOSYN PLASMA ENVIRON. PICT ATLAS

74-039A-05B SPMS-00453

This data set has been restored. There was originally one 7-track, 800 BPI tape 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 tape was created on a 6600 computer and the restored tape was created on an IBM 9021 computer. The DR and DS numbers along with the corresponding D number are as follows:

DR#	DS#	D#	FILES	TIME SPAN
-----	-----	-----	-----	-----
DR005293	DS005293	D042430	1 - 46	07/05/74 - 02/17/76

REQ. AGENT

DEW

RD. NO.

V0079

ACQ. AGENT

HKH

ATS-5 & 6

GEO SYN PLASMA ENVIRON. PICT. ATLAS

69-069A-11C

74-039A-05B

These data sets consists of 1 tape each. The tapes are 800 BPI, 7 track, Bin and are multifiled. The tapes were created on a CDC 6600 computer.

ATS-5

D#

C#

FILES

TIME SPAN

D-42429

C-21450

50

11/8/69-11/24/70

ATS-6

D-42430

C-21451

46

7/5/74-2/17/76

Appendix D

ATS Data Tape Formats

Two tapes containing 10-min averages of the four moments of the distribution function for ATS-5 and ATS-6 are available in the format described in Table D1.

For ATS-5, the detector numbers correspond to

- Detector 1 = perpendicular electrons,
- Detector 2 = perpendicular ions,
- Detector 3 = parallel electrons,
- Detector 4 = parallel ions.

For ATS-6, the detector numbers are

- Detector 1 = North-South electrons,
- Detector 2 = North-South ions.

The tapes are available from AFGL/SUA (R. McInerney) or (preferably) the National Space Science Data Center, NASA Goddard, Greenbelt, MD 20771 (Attn: J. Vette).

Table D1. ATS Data Tape Formats

Data is stored in CDC 60-bit format.

Standard data set contains data collected during a 10-min interval.

Standard records contain 1 hr of data, that is, six sets.

Total record size is 512 words.

Standard file contains data for one day.

These are labeled, 800 B.P.I., NOS/BE standard, 7-track tapes

Record structure, based on CDC words contains two identification words before the data sets.

Type of word: C, coded; F, floating; I, integer.

WORD	TYPE	DESCRIPTION
1	I	number of words in data set (usually 85)
2	I	presently unused, set to 0

There are six data sets for 1 hr of data or 510 words, based on CDC words.

WORD	TYPE	DESCRIPTION	DETECTOR	ORIGIN OF DATA
1	C	"ATS 5" or "ATS 6"		ATS-5 & ATS-6
2	F	YEAR		" "
3	F	MONTH		" "
4	F	DAY		" "
5	F	HOUR		" "
6	F	AVERAGE MINUTE		" "
7	F	DAY OF YEAR		" "
8	F	NUMBER DENSITY (N/cm ³)	1	" "
9	F	NUMBER OF VALUES		" "
10	F	NUMBER FLUX (N/cm ² /sec/sr)	1	" "
11	F	NUMBER OF VALUES		" "
12	F	ENERGY DENSITY (eV/cm ³)	1	" "
13	F	NUMBER OF VALUES		" "
14	F	ENERGY FLUX (eV/cm ² /sec/sr)	1	" "
15	F	NUMBER OF VALUES		" "
16	F	NUMBER DENSITY (N/cm ³)	2	" "
17	F	NUMBER OF VALUES		" "
18	F	NUMBER FLUX (N/cm ² /sec/sr)	2	" "
19	F	NUMBER OF VALUES		" "
20	F	ENERGY DENSITY (eV/cm ³)	2	" "
21	F	NUMBER OF VALUES		" "
22	F	ENERGY FLUX (eV/cm ² /sec/sr)	2	" "
23	F	NUMBER OF VALUES		" "
24	F	NUMBER DENSITY (N/cm ³)	3	ATS 5
25	F	NUMBER OF VALUES		" "
26	F	NUMBER FLUX (N/cm ² /sec/sr)	3	" "
27	F	NUMBER OF VALUES		" "
28	F	ENERGY DENSITY (eV/cm ³)	3	" "
29	F	NUMBER OF VALUES		" "
30	F	ENERGY FLUX (eV/cm ² /sec/sr)	3	" "
31	F	NUMBER OF VALUES		" "
32	F	NUMBER DENSITY (N/cm ³)	4	" "
33	F	NUMBER OF VALUES		" "
34	F	NUMBER FLUX (N/cm ² /sec/sr)	4	" "
35	F	NUMBER OF VALUES		" "
36	F	ENERGY DENSITY (eV/cm ³)	4	" "
37	F	NUMBER OF VALUES		" "
38	F	ENERGY FLUX (eV/cm ² /sec/sr)	4	" "
39	F	NUMBER OF VALUES		" "

Table D1. ATS Data Tape Format (Cont)

WORD	TYPE	DESCRIPTION	ORIGIN OF DATA
40	F	TEMPERATURE CORRECTION COEFF.	ATS 6
41	F	ANGLE N-S DETECTOR	"
42	F	PITCH ANGLE	"
43	F	ENERGY STEP OF PHOTOELECTRON CUTOFF	"
44	F	ELECTRON CUTOFF ENERGY	"
45	F	SPACECRAFT POTENTIAL	"
46	F	COLATITUDE (Degrees)	ATS 5
47	F	LONGITUDE (Degrees)	"
48	F	RADIUS (Re)	"
49	F	$\perp$ MAGNETIC FIELD COMPONENT ($B_{\perp}$ in γ)	"
50	F	MAGNETIC FIELD IN Z DIRECTION (B_z in γ)	"
51	F	TOTAL MAGNETIC FIELD (B in γ)	"
52	F	INCLINATION OF SATELLITE TO B	"
53	F	AE AVERAGE	AE Tape
54	F	AE MAXIMUM	"
55	F	KP VALUES — (CODED 3/1)	Data Cards
56	F	RADIUS (Km)	Ephemeris Tape
57	F	LATITUDE (Deg.)	Ephemeris Tape
58	F	LONGITUDE (Deg.)	Ephemeris Tape
59-85	F	FILL	

The initial fill value, deleted data, and erroneous data are indicated by -999999.

Fill data are -1.0×10^6 , depending on round-off.

CDC 60 bit floating point word

First 2 words are control words. The third word is the satellite description. To find the year, month, day, take the first 12 bits and subtract 1717 from it, to convert to decimal that tells you how many bits to move the decimal point from left to right. Break down the next 12 bits by counting right the number of decimal places. Then going right to left every three bits draw a line. Then convert that to octal, convert to decimal to get the year. Repeat for day and month.

Year

EX:

$$1732_8$$

$$\underline{1717_8}$$

$$13_8 = 11_{10}$$

$$7554 = 111101101100$$

$$\left[\begin{array}{c} 11 \\ 3 \end{array} \right] \left[\begin{array}{c} 110 \\ 6 \end{array} \right] \left[\begin{array}{c} 110 \\ 6 \end{array} \right] 110.0 \\ 68 = 1974_{10}$$

DEPARTMENT OF THE AIR FORCE
AIR FORCE GEOPHYSICS LABORATORY (AFSC)
HANSCOM AIR FORCE BASE, MASSACHUSETTS 01731



REPLY TO
ATTN OF: PHI/3127

30 May 1980

SUBJECT: ATS-5/ATS-6 Data

TO: National Space Science Data Center
Code 601
Goddard Space Flight Center
Greenbelt, Maryland 20771

ATTN: J. Vette

Dear Jim

Here is the ATS-5/ATS-6 data I promised you. I have gone over this with Sherman DeForest many times and he approved sending it to you. I suggest, however, that you get final approval from Carl McIlwain for safety's sake. We paid for it, but it was his data. I'm leaving for JPL today.

Sincerely


HANK GARRETT
Physicist
Space Physics Division

Atch
a/s

*Reid 6/10/80
HKH
2 tapes
ATS 517
ATS 617*

666	888888888	XX	XX	A	7
666	888888888	XX	XX	A	7
66	88	88	XX XX	A	7
66	88	88	XX XX	A	7
66	888888889		XX	A	7
66	888888888		XX	A	7
66666666	88	88	XXXX	A	7
66666666	88	88	XXXX	A	7
66	66	88	88 XX XX	A	7
66	66	88	88 XX XX	A	7
666666	888888888	XX	XX	A	7
666666	888888888	XX	XX	A	7

8888888888	XX	XX	A	7
8888888888	XX	XX	A	7
88	88	XX XX	A	7
88	88	XX XX	A	7
8888888888	XX		A	7
8888888888	XX		A	7
88	88	XXXX	A	7
88	88	XXXX	A	7
88	88	XX XX	A	7
88	88	XX XX	A	7
8888888888	XX	XX	A	7
8888888888	XX	XX	A	7

186 48
7/5/74 - 2/17/76

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 100 101 102 103 104 105 106 107 108 109 110 111 112 113 114 115 116 117 118 119 120 121 122 123 124 125 126 127 128 129 130 131 132 133 134 135 136 137 138 139 140 141 142 143 144 145 146 147 148 149 150 151 152 153 154 155 156 157 158 159 160 161 162 163 164 165 166 167 168 169 170 171 172 173 174 175 176 177 178 179 180 181 182 183 184 185 186 187 188 189 190 191 192 193 194 195 196 197 198 199 200 201 202 203 204 205 206 207 208 209 210 211 212 213 214 215 216 217 218 219 220 221 222 223 224 225 226 227 228 229 230 231 232 233 234 235 236 237 238 239 240 241 242 243 244 245 246 247 248 249 250 251 252 253 254 255 256 257 258 259 260 261 262 263 264 265 266 267 268 269 270 271 272 273 274 275 276 277 278 279 280 281 282 283 284 285 286 287 288 289 290 291 292 293 294 295 296 297 298 299 300 301 302 303 304 305 306 307 308 309 310 311 312 313 314 315 316 317 318 319 320 321 322 323 324 325 326 327 328 329 330 331 332 333 334 335 336 337 338 339 340 341 342 343 344 345 346 347 348 349 350 351 352 353 354 355 356 357 358 359 360 361 362 363 364 365 366 367 368 369 370 371 372 373 374 375 376 377 378 379 380 381 382 383 384 385 386 387 388 389 390 391 392 393 394 395 396 397 398 399 400 401 402 403 404 405 406 407 408 409 410 411 412 413 414 415 416 417 418 419 420 421 422 423 424 425 426 427 428 429 430 431 432 433 434 435 436 437 438 439 440 441 442 443 444 445 446 447 448 449 450 451 452 453 454 455 456 457 458 459 460 461 462 463 464 465 466 467 468 469 470 471 472 473 474 475 476 477 478 479 480 481 482 483 484 485 486 487 488 489 490 491 492 493 494 495 496 497 498 499 500 501 502 503 504 505 506 507 508 509 510 511 512 513 514 515 516 517 518 519 520 521 522 523 524 525 526 527 528 529 530 531 532 533 534 535 536 537 538 539 540 541 542 543 544 545 546 547 548 549 550 551 552 553 554 555 556 557 558 559 560 561 562 563 564 565 566 567 568 569 570 571 572 573 574 575 576 577 578 579 580 581 582 583 584 585 586 587 588 589 590 591 592 593 594 595 596 597 598 599 600 601 602 603 604 605 606 607 608 609 610 611 612 613 614 615 616 617 618 619 620 621 622 623 624 625 626 627 628 629 630 631 632 633 634 635 636 637 638 639 640 641 642 643 644 645 646 647 648 649 650 651 652 653 654 655 656 657 658 659 660 661 662 663 664 665 666 667 668 669 670 671 672 673 674 675 676 677 678 679 680 681 682 683 684 685 686 687 688 689 690 691 692 693 694 695 696 697 698 699 700 701 702 703 704 705 706 707 708 709 710 711 712 713 714 715 716 717 718 719 720 721 722 723 724 725 726 727 728 729 730 731 732 733 734 735 736 737 738 739 740 741 742 743 744 745 746 747 748 749 750 751 752 753 754 755 756 757 758 759 760 761 762 763 764 765 766 767 768 769 770 771 772 773 774 775 776 777 778 779 780 781 782 783 784 785 786 787 788 789 790 791 792 793 794 795 796 797 798 799 800 801 802 803 804 805 806 807 808 809 810 811 812 813 814 815 816 817 818 819 820 821 822 823 824 825 826 827 828 829 830 831 832 833 834 835 836 837 838 839 840 841 842 843 844 845 846 847 848 849 850 851 852 853 854 855 856 857 858 859 860 861 862 863 864 865 866 867 868 869 870 871 872 873 874 875 876 877 878 879 880 881 882 883 884 885 886 887 888 889 890 891 892 893 894 895 896 897 898 899 900 901 902 903 904 905 906 907 908 909 910 911 912 913 914 915 916 917 918 919 920 921 922 923 924 925 926 927 928 929 930 931 932 933 934 935 936 937 938 939 940 941 942 943 944 945 946 947 948 949 950 951 952 953 954 955 956 957 958 959 960 961 962 963 964 965 966 967 968 969 970 971 972 973 974 975 976 977 978 979 980 981 982 983 984 985 986 987 988 989 990 991 992 993 994 995 996 997 998 999 1000 1001 1002 1003 1004 1005 1006 1007 1008 1009 1010 1011 1012 1013 1014 1015 1016 1017 1018 1019 1020 1021 1022 1023 1024 1025 1026 1027 1028 1029 1030 1031 1032 1033 1034 1035 1036 1037 1038 1039 104

SYMBOLIC REFERENCE MAP (R=2)

VARIABLES	SN	TYPE	RELOCATION
6357	B	REAL	ARRAY
6347	IBAD	INTEGER	
6350	IECF	INTEGER	
6352	IHR	INTEGER	
6346	IREC	INTEGER	
6355	J	INTEGER	ARRAY
6353	K	INTEGER	
6354	L	INTEGER	
6351	M	INTEGER	

FILE NAMES MODE

0 INPUT
2054 OUTPUT
4130 TAPE1

FMT
BUF

WRITES
READS

9
12

20
MOTION

23
6

29

32

EXTERNALS UNIT

TYPE
REAL

ARGS
1

REFERENCES
13

STATEMENT LABELS

DEF LINE

REFERENCES

6275	10	FMT	10	9	
6225	20		11	15	18
0	40	INACTIVE	14	13	
6234	50		16	13	
6237	60		19	13	
6311	80	FMT	21	20	
6317	90	FMT	24	23	
0	100		25	22	
6254	170		27	19	
6257	180		29	26	
6327	190	FMT	30	29	
0	200		31	7	
6264	220		32	28	
6337	230	FMT	33	32	

LOOPS LABEL INDEX

FROM-TO

LENGTH

PROPERTIES

EXT REFS
EXT REFS

EXITS NOT INNER

6222	200	* M	7 31	428	
6243	100	* K	22 25	118	

STATISTICS

PROGRAM LENGTH

13468

742

BUFFER LENGTH

60118

3081

600008 CM USED

FMA OF THE LOAD 111
LWA#1 OF THE LOAD 14700

TRANSFER ADDRESS -- ATDUMP 6325

PROGRAM ENTRY POINTS -- ATDUMP 6325

PROGRAM AND BLOCK ASSIGNMENTS.

BLOCK	ADDRESS	LENGTH	FILE	DATE	PROCSSR	VER	LEVEL	HARDWARE	COMMENTS
ATDUMP	111	7357	LGO	05/27/80	FTN		4.7 476	666X I	PROGRAM OPT=1
SYSALO=	7470	1	SL-FORTRAN	12/04/78	COMPASS	3.6	485		LINK BETWEEN SYS=AID AND INITIALIZATION CODE.
/STP. END/	7471	1							
/FCL.C./	7472	26							
/Q8.I0./	7520	101							
Q2NTRY=	7621	0	SL-FORTRAN	12/04/78	COMPASS	3.6	485		FCL INITIALIZATION ROUTINE.
BUFIN=	7621	44	SL-FORTRAN	12/04/78	COMPASS	3.6	485		BUFFERED INPUT PROCESSOR.
FBCMSK=	7665	41	SL-FORTRAN	12/04/78	COMPASS	3.6	485		INITIALIZE CONSTANTS.
FMTAP=	7726	357	SL-FORTRAN	12/04/78	COMPASS	3.6	485		CRACK APLIST AND FORMAT FOR KODER/KRAKER.
FDRUTL=	10305	46	SL-FORTRAN	12/04/78	COMPASS	3.6	485		FCL MISC. UTILITIES.
GETFIT=	10353	57	SL-FORTRAN	12/04/78	COMPASS	3.6	485		LOCATE AN FIT GIVEN A FILE NAME.
KWDER=	10432	451	SL-FORTRAN	12/04/78	COMPASS	3.6	485		OUTPUT FORMAT INTERPRETER.
OUTC=	11103	150	SL-FORTRAN	12/04/78	COMPASS	3.6	485		FORMATTED WRITE FORTRAN RECORD.
BUFTO=	11253	100	SL-FORTRAN	12/04/78	COMPASS	3.6	485		COMMON SET-UP ROUTINE FOR BUFIN=BUFOUT=
/FCL-ENT/	11353	40							
COMTO=	11413	33	SL-FORTRAN	12/04/78	COMPASS	3.6	485		COMMON CODED I/O ROUTINES AND CONSTANTS.
FCL=FOL	11446	40	SL-FORTRAN	12/04/78	COMPASS	3.6	485		FCL CAPSULE LOADING
FRIFST=	11506	3	SL-FORTRAN	12/04/78	COMPASS	3.6	485		CONVERGED DATA STORAGE
FLTOOT=	11511	311	SL-FORTRAN	12/04/78	COMPASS	3.6	485		COMMON FLOATING OUTPUT CODE
FORSYS=	12022	301	SL-FORTRAN	12/04/78	COMPASS	3.6	485		FORTRAN OBJECT LIBRARY UTILITIES.
OUTCOM=	12323	154	SL-FORTRAN	12/04/78	COMPASS	3.6	485		COMMON OUTPUT CODE
REWIND=	12477	33	SL-FORTRAN	12/04/78	COMPASS	3.6	485		POSITION FILE AT BEGINNING-OF-INFORMATION.
UNIT	12532	60	SL-FORTRAN	12/04/78	COMPASS	3.6	485		STATUS OF BUFFER I/O FILE.
CTLSRM	12612	433	SL-SYSLIB	09/21/79	COMPASS	3.5	476		CRM CONTROLLING ROUTINE.
CTLSWR	13245	32	SL-SYSLIB	09/21/79	COMPASS	3.5	476		CRM CONTROLLER - ME0X, REWIND
ERRSRM	13277	25	SL-SYSLIB	09/21/79	COMPASS	3.5	476		CRM ERROR PROCESSOR ENTRY.
CPWRM	13324	60	SL-SYSLIB	09/21/79	COMPASS	3.5	476		CRM SO SBF GET/PUT ROUTINE
LISTSRM	13404	67	SL-SYSLIB	09/21/79	COMPASS	3.5	476		CRM - ALLOCATE SPACE FOR LIST OF FILES
CMF.ALF	13473	160	SL-SYSLIB	11/15/79	COMPASS	3.6	498		CMH V1.1 - ALLOCATE FIXED.
CMF.CSF	13653	6	SL-SYSLIB	11/15/79	COMPASS	3.6	498		CMH V1.1 - CHANGE SPECS FIXED.
CMH.TFA	13661	14	SL-SYSLIB	11/15/79	COMPASS	3.6	498		CMH V1.1 - FIXED FREE ALGORITHM.
CMF.FRF	13675	36	SL-SYSLIB	11/15/79	COMPASS	3.6	498		CMH V1.1 - FREE FIXED.
CMH.MEM	13733	7	SL-SYSLIB	11/15/79	COMPASS	3.6	498		
CMH.R	13742	205	SL-SYSLIB	11/15/79	COMPASS	3.6	498		CMH V1.1 - RESIDENT SUBROUTINES.
CMF.SLF	14147	22	SL-SYSLIB	11/15/79	COMPASS	3.6	498		CMH V1.1 - SHRINK AT LWA FIXED.
CPU.SYS	14171	40	SL-SYSLIB	11/15/79	COMPASS	3.5	476		PROCESS SYSTEM REQUEST.
/FOL.COM/	14231	14							
FOL.RES	14245	211	SL-SYSLIB	12/10/79	COMPASS	3.6	498		FAST DYNAMIC LOADER RESIDENT.
FOL.MMI	14456	222	SL-SYSLIB	12/10/79	COMPASS	3.6	498		FOL MEMORY MANAGER INTERFACE.

.351 CP SECONDS

312008 CM STORAGE USED

2 TABLE MOVES

ATS 6 1974.0 7.0 5.0 23.0 5.0 186.0

.1882E+01	.4000E+01	.2786E+09	.6000E+01	.2439E+04	.6000E+01	.8050E+12	.6000E+01
.2221E+01	.6000E+01	.2725E+08	.6000E+01	.4642E+05	.6000E+01	.1114E+13	.6000E+01
-.1000E+07	-.1000E+07	-.1000E+07	-.1000E+07	-.1000E+07	-.1000E+07	-.1000E+07	-.1000E+07
-.1000E+07	-.1000E+07	-.1000E+07	-.1000E+07	-.1000E+07	-.1000E+07	-.1000E+07	-.1000E+07
.4984E+02	.1042E+03	.2100E+02	.7000E+01	.1587E+02	0.	-.1000E+07	-.1000E+07
-.1000E+07	-.1000E+07	-.1000E+07	-.1000E+07	-.1000E+07	-.1000E+07	-.1000E+07	-.1900E+02
.4216E+05	-.1666E+01	.2650E+03	-.1000E+07	-.1000E+07			

ATS 6 1974.0 7.0 5.0 23.0 15.0 186.0

.2721E+01	.5000E+01	.3512E+09	.5000E+01	.4909E+04	.6000E+01	.1443E+13	.6000E+01
.2440E+01	.5000E+01	.2927E+08	.5000E+01	.4826E+05	.5000E+01	.1246E+13	.6000E+01
-.1000E+07	-.1000E+07	-.1000E+07	-.1000E+07	-.1000E+07	-.1000E+07	-.1000E+07	-.1000E+07
-.1000E+07	-.1000E+07	-.1000E+07	-.1000E+07	-.1000E+07	-.1000E+07	-.1000E+07	-.1000E+07
.4610E+02	.3721E+02	.5100E+02	.7000E+01	.1582E+02	0.	-.1000E+07	-.1000E+07
-.1000E+07	-.1000E+07	-.1000E+07	-.1000E+07	-.1000E+07	-.1000E+07	-.1000E+07	-.1900E+02
.4216E+05	-.1665E+01	.2650E+03	-.1000E+07	-.1000E+07			

ATS 6 1974.0 7.0 5.0 23.0 25.0 186.0

.2662E+01	.5000E+01	.3778E+09	.7000E+01	.4243E+04	.8000E+01	.1169E+13	.8000E+01
.2129E+01	.8000E+01	.2297E+08	.8000E+01	.3704E+05	.8000E+01	.8691E+12	.8000E+01
-.1000E+07	-.1000E+07	-.1000E+07	-.1000E+07	-.1000E+07	-.1000E+07	-.1000E+07	-.1000E+07
-.1000E+07	-.1000E+07	-.1000E+07	-.1000E+07	-.1000E+07	-.1000E+07	-.1000E+07	-.1000E+07
.4268E+02	.9480E+02	.3680E+02	.7000E+01	.1579E+02	0.	-.1000E+07	-.1000E+07
-.1000E+07	-.1000E+07	-.1000E+07	-.1000E+07	-.1000E+07	-.1000E+07	-.1000E+07	-.1900E+02
.4216E+05	-.1661E+01	.2650E+03	-.1000E+07	-.1000E+07			

ATS 6 1974.0 7.0 5.0 23.0 35.0 186.0

.2790E+01	.5000E+01	.4071E+09	.7000E+01	.3741E+04	.7000E+01	.1282E+13	.7000E+01
.2329E+01	.7000E+01	.2283E+08	.7000E+01	.3561E+05	.7000E+01	.8148E+12	.7000E+01
-.1000E+07	-.1000E+07	-.1000E+07	-.1000E+07	-.1000E+07	-.1000E+07	-.1000E+07	-.1000E+07
-.1000E+07	-.1000E+07	-.1000E+07	-.1000E+07	-.1000E+07	-.1000E+07	-.1000E+07	-.1000E+07
.3985E+02	.9245E+02	.2680E+02	.7000E+01	.1575E+02	0.	-.1000E+07	-.1000E+07
-.1000E+07	-.1000E+07	-.1000E+07	-.1000E+07	-.1000E+07	-.1000E+07	-.1000E+07	-.1900E+02
.4216E+05	-.1654E+01	.2650E+03	-.1000E+07	-.1000E+07			

ATS 6 1974.0 7.0 5.0 23.0 45.0 186.0

.3187E+01	.8000E+01	.4316E+09	.1000E+02	.4596E+04	.1000E+02	.1885E+13	.1000E+02
.2328E+01	.1000E+02	.1859E+08	.1000E+02	.2799E+05	.1000E+02	.6250E+12	.1000E+02
-.1000E+07	-.1000E+07	-.1000E+07	-.1000E+07	-.1000E+07	-.1000E+07	-.1000E+07	-.1000E+07
-.1000E+07	-.1000E+07	-.1000E+07	-.1000E+07	-.1000E+07	-.1000E+07	-.1000E+07	-.1000E+07
.3637E+02	.8806E+02	.3200E+02	.7000E+01	.1571E+02	0.	-.1000E+07	-.1000E+07
-.1000E+07	-.1000E+07	-.1000E+07	-.1000E+07	-.1000E+07	-.1000E+07	-.1000E+07	-.1900E+02
.4216E+05	-.1644E+01	.2650E+03	-.1000E+07	-.1000E+07			

ATS 6 1974.0 7.0 5.0 23.0 55.0 186.0

.4375E+01	.7000E+01	.6976E+09	.8000E+01	.9243E+04	.8000E+01	.3578E+13	.8000E+01
.1665E+01	.6000E+01	.1800E+08	.8000E+01	.2302E+05	.8000E+01	.4471E+12	.8000E+01
-.1000E+07	-.1000E+07	-.1000E+07	-.1000E+07	-.1000E+07	-.1000E+07	-.1000E+07	-.1000E+07
-.1000E+07	-.1000E+07	-.1000E+07	-.1000E+07	-.1000E+07	-.1000E+07	-.1000E+07	-.1000E+07
.3381E+02	.6860E+02	.4400E+02	.7000E+01	.1568E+02	0.	-.1000E+07	-.1000E+07
-.1000E+07	-.1000E+07	-.1000E+07	-.1000E+07	-.1000E+07	-.1000E+07	-.1000E+07	-.1900E+02
.4216E+05	-.1631E+01	.2650E+03	-.1000E+07	-.1000E+07			

ATS 6 1974.0 7.0 6.0 23.0 5.0 187.0
 .2562E+00 .1000E+02 .5463E+08 .1000E+02 .1448E+04 .1000E+02 .1090E+13 .1000E+02
 .1677E+01 .1000E+02 .8947E+07 .1000E+02 .1445E+05 .1000E+02 .3318E+12 .1000E+02
 -.1000E+07 -.1000E+07 -.1000E+07 -.1000E+07 -.1000E+07 -.1000E+07 -.1000E+07 -.1000E+07
 -.1000E+07 -.1000E+07 -.1000E+07 -.1000E+07 -.1000E+07 -.1000E+07 -.1000E+07 -.1000E+07
 .5044E+02 .9217E+02 .4400E+02 .8000E+01 .2113E+02 0. -.1000E+07 -.1000E+07
 -.1000E+07 -.1000E+07 -.1000E+07 -.1000E+07 -.1000E+07 -.1000E+07 -.1000E+07 -.1000E+07
 .4216E+05 -.1663E+01 .2651E+03 -.1000E+07 -.1000E+07

ATS 6 1974.0 7.0 6.0 23.0 15.0 187.0
 .2314E+00 .9000E+01 .5819E+08 .9000E+01 .1574E+04 .9000E+01 .1184E+13 .9000E+01
 .1170E+01 .9000E+01 .9223E+07 .9000E+01 .1492E+05 .9000E+01 .3418E+12 .9000E+01
 -.1000E+07 -.1000E+07 -.1000E+07 -.1000E+07 -.1000E+07 -.1000E+07 -.1000E+07 -.1000E+07
 -.1000E+07 -.1000E+07 -.1000E+07 -.1000E+07 -.1000E+07 -.1000E+07 -.1000E+07 -.1000E+07
 .4635E+02 .6656E+02 .6580E+02 .8000E+01 .2108E+02 0. -.1000E+07 -.1000E+07
 -.1000E+07 -.1000E+07 -.1000E+07 -.1000E+07 -.1000E+07 -.1000E+07 -.1000E+07 -.1000E+07
 .4216E+05 -.1661E+01 .2651E+03 -.1000E+07 -.1000E+07

ATS 6 1974.0 7.0 6.0 23.0 25.0 187.0
 .2705E+00 .9000E+01 .5905E+08 .9000E+01 .1546E+04 .9000E+01 .1148E+13 .9000E+01
 .1317E+01 .9000E+01 .9276E+07 .9000E+01 .1479E+05 .9000E+01 .3378E+12 .9000E+01
 -.1000E+07 -.1000E+07 -.1000E+07 -.1000E+07 -.1000E+07 -.1000E+07 -.1000E+07 -.1000E+07
 -.1000E+07 -.1000E+07 -.1000E+07 -.1000E+07 -.1000E+07 -.1000E+07 -.1000E+07 -.1000E+07
 .4288E+02 .8363E+02 .5480E+02 .8000E+01 .2104E+02 0. -.1000E+07 -.1000E+07
 -.1000E+07 -.1000E+07 -.1000E+07 -.1000E+07 -.1000E+07 -.1000E+07 -.1000E+07 -.1000E+07
 .4216E+05 -.1656E+01 .2651E+03 -.1000E+07 -.1000E+07

ATS 6 1974.0 7.0 6.0 23.0 35.0 187.0
 .2996E+00 .1000E+02 .5764E+08 .1000E+02 .1472E+04 .1000E+02 .1086E+13 .1000E+02
 .1611E+01 .1000E+02 .8867E+07 .1000E+02 .1374E+05 .1000E+02 .3113E+12 .1000E+02
 -.1000E+07 -.1000E+07 -.1000E+07 -.1000E+07 -.1000E+07 -.1000E+07 -.1000E+07 -.1000E+07
 -.1000E+07 -.1000E+07 -.1000E+07 -.1000E+07 -.1000E+07 -.1000E+07 -.1000E+07 -.1000E+07
 .3953E+02 .9119E+02 .4400E+02 .8000E+01 .2108E+02 0. -.1000E+07 -.1000E+07
 -.1000E+07 -.1000E+07 -.1000E+07 -.1000E+07 -.1000E+07 -.1000E+07 -.1000E+07 -.1000E+07
 .4216E+05 -.1647E+01 .2651E+03 -.1000E+07 -.1000E+07

ATS 6 1974.0 7.0 6.0 23.0 45.0 187.0
 .3034E+00 .9000E+01 .5868E+08 .9000E+01 .1468E+04 .9000E+01 .1068E+13 .9000E+01
 .1403E+01 .9000E+01 .8393E+07 .9000E+01 .1326E+05 .9000E+01 .3012E+12 .9000E+01
 -.1000E+07 -.1000E+07 -.1000E+07 -.1000E+07 -.1000E+07 -.1000E+07 -.1000E+07 -.1000E+07
 -.1000E+07 -.1000E+07 -.1000E+07 -.1000E+07 -.1000E+07 -.1000E+07 -.1000E+07 -.1000E+07
 .3643E+02 .8896E+02 .4200E+02 .8000E+01 .2097E+02 0. -.1000E+07 -.1000E+07
 -.1000E+07 -.1000E+07 -.1000E+07 -.1000E+07 -.1000E+07 -.1000E+07 -.1000E+07 -.1000E+07
 .4216E+05 -.1636E+01 .2651E+03 -.1000E+07 -.1000E+07

ATS 6 1974.0 7.0 6.0 23.0 55.0 187.0
 .3510E+00 .8000E+01 .6015E+08 .8000E+01 .1457E+04 .8000E+01 .1043E+13 .8000E+01
 .9404E+00 .8000E+01 .8267E+07 .8000E+01 .1308E+05 .8000E+01 .2961E+12 .8000E+01
 -.1000E+07 -.1000E+07 -.1000E+07 -.1000E+07 -.1000E+07 -.1000E+07 -.1000E+07 -.1000E+07
 -.1000E+07 -.1000E+07 -.1000E+07 -.1000E+07 -.1000E+07 -.1000E+07 -.1000E+07 -.1000E+07
 .3381E+02 .9890E+02 .4000E+02 .8000E+01 .2094E+02 0. -.1000E+07 -.1000E+07
 -.1000E+07 -.1000E+07 -.1000E+07 -.1000E+07 -.1000E+07 -.1000E+07 -.1000E+07 -.1000E+07
 .4216E+05 -.1621E+01 .2651E+03 -.1000E+07 -.1000E+07

11/8/69 - 11/24/70

Line	Code	Statement	Address
1		PROGRAM ATDUMP (INPUT, OUTPUT, TAPE1)	000100
		DIMENSION B(85,6)	000110
		DIMENSION J(512)	000120
		EQUIVALENCE (B(1,1),J(3))	000130
5		IREF=I8AD=IEOF=0	000140
		REWIND 1	000150
		DO 200 M=1,400	000160
		IHR=0	000170
		PRINT 10	000180
10	10	FORMAT(1H1)	000190
	20	CONTINUE	000200
		BUFFER IN(1,1) (J(1),J(512))	000210
		IF(UNIT(1)) 50,60,40	000220
	40	I8AD=I8AD+1	000230
		GO TO 20	000240
	50	IREF=IREF+1	000250
		IHR=IHR+1	000260
		GO TO 20	000270
	60	IF(IHR.EQ.0) GO TO 170	000280
		PRINT 80, J(1),J(2),IREF	000290
	80	FORMAT(3I6/)	000300
		DO 100 K=1,6	000310
		PRINT 90, (B(L,K), L=1,6)	000320
	90	FORMAT(1X,A6,6F7.1/ 6(8E11.4/),5E11.4 /)	000330
25	100	CONTINUE	000340
		GO TO 180	000350
	170	IEOF=IEOF+1	000360
		IF(IEOF.GT.2) GO TO 220	000370
	180	PRINT 190, M	000380
	190	FORMAT(*- FILE *I5)	000390
	200	CONTINUE	000400
	220	PRINT 230, IREF,I8AD	000410
	230	FORMAT(*- RECORDS READ = *I5* UNREADABLE = *I4)	000420
		STOP 1111	000430
35		END	000440

SYMBOLIC REFERENCE MAP (P=2)

ENTRY	POINTS	DEF	LINE	REFERENCES
6214	ATDUMP		1	

VARIABLES	SN	TYPE	RELOCATION
6357 B		REAL	ARRAY
6347 IBA0		INTEGER	
6350 IBCF		INTEGER	
6352 IWR		INTEGER	
6346 IRET		INTEGER	
6355 J		INTEGER	ARRAY
6353 K		INTEGER	
6354 L		INTEGER	
6351 M		INTEGER	

REFS	2	4	23			
REFS	14	32	DEFINED	5	14	
REFS	27	28	DEFINED	5	27	
REFS	17	19	DEFINED	8	17	
REFS	16	20	32	DEFINED	5	16
REFS	3	4	2*20	DEFINED	2*12	
REFS	23	DEFINED	23			
REFS	23	DEFINED	23			
REFS	29	DEFINED	7			

FILE NAMES MODE

FILE NAMES	MODE	WRITES	9	20	23	29	32
0 INPUT							
2054 OUTPUT	FMT						
4130 TAPE1	BUF	READS	12	MOTION	6		

EXTERNALS	UNIT	TYPE	REAL	ARGS	1	REFERENCES	13

STATEMENT LABELS	DEF LINE	REFERENCES
6275 10 FMT	10	9
6225 20	11	15
0 40 INACTIVE	14	13
6234 50	16	13
6237 60	19	13
6311 80 FMT	21	20
6317 90 FMT	24	23
0 100	25	22
6254 170	27	19
6257 180	29	26
6327 190 FMT	30	29
0 200	31	7
6264 220	32	28
6337 230 FMT	33	32

LOOPS	LABEL	INDEX	FROM-TO	LENGTH	PROPERTIES
6222	200	* M	7 31	428	EXT REFS. EXITS. NOT INNER
6243	100	* K	22 25	118	EXT REFS

STATISTICS

PROGRAM LENGTH	13468	742
BUFFER LENGTH	60118	3081
600000 CM USED		

FMA OF THE LOAD 111
LWA+1 OF THE LOAD 14700

TRANSFER ADDRESS -- ATDUMP 6325

PROGRAM ENTRY POINTS -- ATDUMP 6325

PROGRAM AND BLOCK ASSIGNMENTS.

BLOCK	ADDRESS	LENGTH	FILE	DATE	PROCSSR	VER	LEVEL	HARDWARE	COMMENTS
ATDUMP	111	7357	LGO	05/28/80	FTN	4.7	476	666X I	PROGRAM OPT=1
SYSAID=	7470	1	SL-FORTRAN	12/04/78	COMPASS	3.6	485		LINK BETWEEN SYS=AID AND INITIALIZATION CODE.
/STP.END/	7471	1							
/FCL.C./	7472	26							
/88.I.O./	7520	1*1							
Q2NTRY=	7621	0	SL-FORTRAN	12/04/78	COMPASS	3.6	485		FCL INITIALIZATION ROUTINE.
BUFIN=	7621	44	SL-FORTRAN	12/04/78	COMPASS	3.6	485		3UFFERED INPUT PROCESSOR.
FECHSK=	7665	41	SL-FORTRAN	12/04/78	COMPASS	3.6	485		INITIALIZE CONSTANTS.
FMTAP=	7726	357	SL-FORTRAN	12/04/78	COMPASS	3.6	485		CRACK APLIST AND FORMAT FOR KODER/KRAKER.
FORUTL=	10305	46	SL-FORTRAN	12/04/78	COMPASS	3.6	485		FCL MISC. UTILITIES.
GETFIT=	10353	57	SL-FORTRAN	12/04/78	COMPASS	3.6	485		LOCATE AN FIT GIVEN A FILE NAME.
KODER=	10432	451	SL-FORTRAN	12/04/78	COMPASS	3.6	485		OUTPUT FORMAT INTERPRETER.
OUTC=	11103	150	SL-FORTRAN	12/04/78	COMPASS	3.6	485		FORMATTED WRITE FORTRAN RECORD
BUFIN=	11253	100	SL-FORTRAN	12/04/78	COMPASS	3.6	485		COMMON SET-UP ROUTINE FOR BUFIN=BUFINOUT=
/FCL=ENT/	11353	40							
COMTO=	11413	33	SL-FORTRAN	12/04/78	COMPASS	3.6	485		COMMON CODED I/O ROUTINES AND CONSTANTS.
FCL=FCL	11446	40	SL-FORTRAN	12/04/78	COMPASS	3.6	485		FCL CAPSULE LOADING
FBIFST=	11506	3	SL-FORTRAN	12/04/78	COMPASS	3.6	485		CONVERTED DATA STORAGE
FLTOYT=	11511	311	SL-FORTRAN	12/04/78	COMPASS	3.6	485		COMMON FLOATING OUTPUT CODE
FORSYS=	12022	3*1	SL-FORTRAN	12/04/78	COMPASS	3.6	485		FORTRAN OBJECT LIBRARY UTILITIES.
OUTCOM=	12323	154	SL-FORTRAN	12/04/78	COMPASS	3.6	485		COMMON OUTPUT CODE
REWIND=	12477	33	SL-FORTRAN	12/04/78	COMPASS	3.6	485		POSITION FILE AT BEGINNING-OF- INFORMATION.
UNIT	12532	60	SL-FORTRAN	12/04/78	COMPASS	3.6	485		STATUS OF BUFFER I/O FILE.
CTLRM	12612	433	SL-SYSLIB	09/21/79	COMPASS	3.5	476		CRM CONTROLLING ROUTINE.
CTLRM	13245	32	SL-SYSLIB	09/21/79	COMPASS	3.5	476		CRM CONTROLLER - WEOX, REWIND
ERRSRM	13277	25	SL-SYSLIB	09/21/79	COMPASS	3.5	476		CRM ERROR PROCESSOR ENTRY.
GPWRM	13324	60	SL-SYSLIB	09/21/79	COMPASS	3.5	476		CRM SQ SBF GET/PUT ROUTINE
LISTERM	13404	67	SL-SYSLIB	09/21/79	COMPASS	3.5	476		CRM - ALLOCATE SPACE FOR LIST OF FILES
CMF.ALF	13473	168	SL-SYSLIB	11/15/79	COMPASS	3.6	498		CMH V1.1 - ALLOCATE FIXED.
CMF.DST	13653	6	SL-SYSLIB	11/15/79	COMPASS	3.6	498		CMH V1.1 - CHANGE SPECS FIXED.
CMH.TFA	13661	14	SL-SYSLIB	11/15/79	COMPASS	3.6	498		CMH V1.1 - FIXED FREE ALGORITHM.
CMF.FRF	13675	36	SL-SYSLIB	11/15/79	COMPASS	3.6	498		CMH V1.1 - FREE FIXED.
CMH.MEM	13733	7	SL-SYSLIB	11/15/79	COMPASS	3.6	498		
CMH.R	13742	205	SL-SYSLIB	11/15/79	COMPASS	3.6	498		CMH V1.1 - RESIDENT SUBROUTINES.
CMF.SLF	14147	22	SL-SYSLIB	11/15/79	COMPASS	3.6	498		CMH V1.1 - SHRINK AT LWA FIXED.
CRU.SVS	14171	40	SL-SYSLIB	11/15/79	COMPASS	3.5	476		PROCESS SYSTEM REQUEST.
/FCL.COM/	14231	14							
FCL.RES	14245	211	SL-SYSLIB	12/10/79	COMPASS	3.6	498		FAST DYNAMIC LOADER RESIDENT.
FCL.NMI	14456	222	SL-SYSLIB	12/10/79	COMPASS	3.6	498		FCL MEMORY MANAGER INTERFACE.

.319 CP SECONDS

312009 CM STORAGE USED

2 TABLE MOVES

ATS 5 1969.0 11.0 8.0 23.0 5.0 312.0

.1641E+00	.7000E+01	.2197E+08	.7000E+01	.4315E+03	.7000E+01	.3129E+12	.7000E+01
.1665E+01	.7000E+01	.1531E+08	.7000E+01	.1775E+05	.7000E+01	.2935E+12	.7000E+01
.6871E-01	.7000E+01	.1356E+08	.7000E+01	.3706E+03	.7000E+01	.2977E+12	.7000E+01
.1499E+01	.7000E+01	.1178E+08	.7000E+01	.1281E+05	.7000E+01	.2079E+12	.7000E+01
-.1000E+07	-.1000E+07	-.1000E+07	-.1000E+07	-.1000E+07	-.1000E+07	.8925E+02	.2550E+03
.6611E+01	.4590E+02	.9840E+02	.1088E+03	.2487E+02	.3758E+03	.4450E+03	.1100E+02
.4216E+05	.7193E+00	.2550E+03	-.1000E+07	-.1000E+07			

ATS 5 1969.0 11.0 8.0 23.0 15.0 312.0

.1859E+00	.7000E+01	.2358E+08	.7000E+01	.4428E+03	.7000E+01	.3189E+12	.7000E+01
.1800E+01	.7000E+01	.1684E+08	.7000E+01	.2021E+05	.7000E+01	.3460E+12	.7000E+01
.7686E-01	.7000E+01	.1342E+08	.7000E+01	.3436E+03	.7000E+01	.2714E+12	.7000E+01
.1577E+01	.7000E+01	.1220E+08	.7000E+01	.1331E+05	.7000E+01	.2170E+12	.7000E+01
-.1000E+07	-.1000E+07	-.1000E+07	-.1000E+07	-.1000E+07	-.1000E+07	.8915E+02	.2550E+03
.6611E+01	.4884E+02	.9851E+02	.1100E+03	.2633E+02	.3888E+03	.4040E+03	.1100E+02
.4216E+05	.2221E+00	.2550E+03	-.1000E+07	-.1000E+07			

ATS 5 1969.0 11.0 8.0 23.0 25.0 312.0

.3048E+00	.8000E+01	.2990E+08	.8000E+01	.4533E+03	.8000E+01	.3127E+12	.8000E+01
.2842E+01	.8000E+01	.1894E+08	.8000E+01	.2313E+05	.8000E+01	.4029E+12	.8000E+01
.1548E+00	.8000E+01	.1706E+08	.8000E+01	.3408E+03	.8000E+01	.2589E+12	.8000E+01
.1719E+01	.8000E+01	.1234E+08	.8000E+01	.1327E+05	.8000E+01	.2166E+12	.8000E+01
-.1000E+07	-.1000E+07	-.1000E+07	-.1000E+07	-.1000E+07	-.1000E+07	.8905E+02	.2550E+03
.6612E+01	.4624E+02	.9549E+02	.1061E+03	.2584E+02	.4848E+03	.5330E+03	.1100E+02
.4217E+05	.9233E+00	.2550E+03	-.1000E+07	-.1000E+07			

ATS 5 1969.0 11.0 8.0 23.0 35.0 312.0

.3146E+00	.7000E+01	.2822E+08	.7000E+01	.3652E+03	.7000E+01	.2339E+12	.7000E+01
.1779E+01	.7000E+01	.1580E+08	.7000E+01	.1928E+05	.7000E+01	.3431E+12	.7000E+01
.2270E+00	.7000E+01	.2115E+08	.7000E+01	.3374E+03	.7000E+01	.2414E+12	.7000E+01
.1541E+01	.7000E+01	.1221E+08	.7000E+01	.1388E+05	.7000E+01	.2363E+12	.7000E+01
-.1000E+07	-.1000E+07	-.1000E+07	-.1000E+07	-.1000E+07	-.1000E+07	.8895E+02	.2550E+03
.6612E+01	.5349E+02	.8643E+02	.1017E+03	.3167E+02	.6215E+03	.6430E+03	.1100E+02
.4217E+05	.1023E+01	.2550E+03	-.1000E+07	-.1000E+07			

ATS 5 1969.0 11.0 8.0 23.0 45.0 312.0

.3774E+00	.7000E+01	.3163E+08	.7000E+01	.3336E+03	.7000E+01	.1945E+12	.7000E+01
.1445E+01	.7000E+01	.1422E+08	.7000E+01	.1753E+05	.7000E+01	.3123E+12	.7000E+01
.3214E+00	.7000E+01	.2576E+08	.7000E+01	.3141E+03	.7000E+01	.2040E+12	.7000E+01
.1324E+01	.7000E+01	.1171E+08	.7000E+01	.1360E+05	.7000E+01	.2317E+12	.7000E+01
-.1000E+07	-.1000E+07	-.1000E+07	-.1000E+07	-.1000E+07	-.1000E+07	.8885E+02	.2550E+03
.6612E+01	.5471E+02	.8440E+02	.1007E+03	.3287E+02	.6560E+03	.6660E+03	.1100E+02
.4217E+05	.1128E+01	.2550E+03	-.1000E+07	-.1000E+07			

ATS 5 1969.0 11.0 8.0 23.0 55.0 312.0

.3115E+00	.6000E+01	.2670E+08	.6000E+01	.2851E+03	.6000E+01	.1653E+12	.6000E+01
.1444E+01	.6000E+01	.1387E+08	.6000E+01	.1726E+05	.6000E+01	.3118E+12	.6000E+01
.2215E+00	.6000E+01	.1905E+08	.6000E+01	.2517E+03	.6000E+01	.1656E+12	.6000E+01
.1382E+01	.6000E+01	.1145E+08	.6000E+01	.1321E+05	.6000E+01	.2258E+12	.6000E+01
-.1000E+07	-.1000E+07	-.1000E+07	-.1000E+07	-.1000E+07	-.1000E+07	.8877E+02	.2550E+03
.6613E+01	.5093E+02	.8727E+02	.1011E+03	.3028E+02	.5130E+03	.5860E+03	.1100E+02
.4217E+05	.1215E+01	.2550E+03	-.1000E+07	-.1000E+07			

ATS 5 1969.0 11.0 9.0 23.0 5.0 313.0

.2979E+00	.7000E+01	.5782E+08	.7000E+01	.1231E+04	.7000E+01	.7954E+12	.7000E+01
.2435E+01	.7000E+01	.1676E+08	.7000E+01	.1993E+05	.7000E+01	.3407E+12	.7000E+01
.8350E+00	.7000E+01	.5214E+08	.7000E+01	.4944E+03	.7000E+01	.2695E+12	.7000E+01
.2636E+01	.7000E+01	.1383E+08	.7000E+01	.1339E+05	.7000E+01	.2139E+12	.7000E+01
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.6611E+01	.5239E+02	.1394E+03	.1490E+03	.2059E+02	.3775E+02	.5300E+02	.6000E+01
.4216E+05	.7612E+00	.2550E+03	-.1000E+07	-.1000E+07			

ATS 5 1969.0 11.0 9.0 23.0 15.0 313.0

.1884E+00	.7000E+01	.4638E+08	.7000E+01	.9914E+03	.7000E+01	.5955E+12	.7000E+01
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.2544E+00	.7000E+01	.4899E+08	.7000E+01	.4953E+03	.7000E+01	.2753E+12	.7000E+01
.2260E+01	.7000E+01	.1271E+08	.7000E+01	.1341E+05	.7000E+01	.2129E+12	.7000E+01
-.1000E+07	-.1000E+07	-.1000E+07	-.1000E+07	-.1000E+07	-.1000E+07	.8912E+02	.2550E+03
.6611E+01	.6010E+02	.1390E+03	.1514E+03	.2339E+02	.3950E+02	.5200E+02	.6000E+01
.4216E+05	.8632E+00	.2550E+03	-.1000E+07	-.1000E+07			

ATS 5 1969.0 11.0 9.0 23.0 25.0 313.0

.1843E+00	.8000E+01	.4479E+08	.8000E+01	.9463E+03	.8000E+01	.5635E+12	.8000E+01
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.2174E+01	.8000E+01	.1255E+08	.8000E+01	.1325E+05	.8000E+01	.2089E+12	.8000E+01
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.6612E+01	.5779E+02	.1361E+03	.1479E+03	.2298E+02	.5000E+02	.6300E+02	.6000E+01
.4217E+05	.9635E+00	.2550E+03	-.1000E+07	-.1000E+07			

ATS 5 1969.0 11.0 9.0 23.0 35.0 313.0

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.7419E+00	.7000E+01	.5069E+08	.7000E+01	.5404E+03	.7000E+01	.2966E+12	.7000E+01
.2524E+01	.7000E+01	.1400E+08	.7000E+01	.1472E+05	.7000E+01	.2323E+12	.7000E+01
-.1000E+07	-.1000E+07	-.1000E+07	-.1000E+07	-.1000E+07	-.1000E+07	.8891E+02	.2550E+03
.6612E+01	.5577E+02	.1354E+03	.1465E+03	.2236E+02	.4700E+02	.5100E+02	.6000E+01
.4217E+05	.1062E+01	.2550E+03	-.1000E+07	-.1000E+07			

ATS 5 1969.0 11.0 9.0 23.0 45.0 313.0

.2163E+00	.7000E+01	.4723E+08	.7000E+01	.9892E+03	.7000E+01	.6022E+12	.7000E+01
.2121E+01	.7000E+01	.1452E+08	.7000E+01	.1690E+05	.7000E+01	.2855E+12	.7000E+01
.7781E+00	.7000E+01	.5230E+08	.7000E+01	.5415E+03	.7000E+01	.2963E+12	.7000E+01
.2340E+01	.7000E+01	.1310E+08	.7000E+01	.1372E+05	.7000E+01	.2188E+12	.7000E+01
-.1000E+07	-.1000E+07	-.1000E+07	-.1000E+07	-.1000E+07	-.1000E+07	.8882E+02	.2550E+03
.6613E+01	.6010E+02	.1330E+03	.1459E+03	.2433E+02	.4200E+02	.5100E+02	.6000E+01
.4217E+05	.1158E+01	.2550E+03	-.1000E+07	-.1000E+07			

ATS 5 1969.0 11.0 9.0 23.0 55.0 313.0

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.1882E+01	.9000E+01	.1431E+08	.9000E+01	.1675E+05	.9000E+01	.2811E+12	.9000E+01
.8247E+00	.9000E+01	.5468E+08	.9000E+01	.5602E+03	.9000E+01	.3032E+12	.9000E+01
.2194E+01	.9000E+01	.1276E+08	.9000E+01	.1346E+05	.9000E+01	.2124E+12	.9000E+01
-.1000E+07	-.1000E+07	-.1000E+07	-.1000E+07	-.1000E+07	-.1000E+07	.8872E+02	.2550E+03
.6613E+01	.6010E+02	.1306E+03	.1438E+03	.2471E+02	.3625E+02	.3900E+02	.6000E+01
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ATS-5

11/8/69 - 11/24/70

B29775-000A

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[illegible]

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