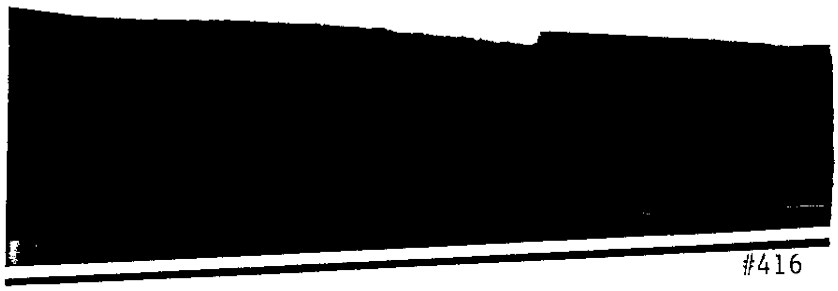

#416

VIKING ORBITER 1
EDR OCCULATION DATA
75-075A-04B

Table of Contents

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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 This inventory information is now no longer maintained in the DSCs, but is now managed in the inventory part of the NSSDC information system.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

VIKING 1 ORBITER

EDR OCCULTATION DATA

75-075A-04B ASGA-00007

THIS DATA SET HAS BEEN RESTORED. ORIGINALLY THERE WERE SEVEN 7-TRACK, 800 BPI TAPES WRITTEN IN BCD. THERE IS ONE RESTORED TAPE WRITTEN IN ASCII. THE DR AND DS TAPES ARE 9-TRACK, 6250 BPI. THE ORIGINAL TAPES WERE CREATED ON AN IBM 360 COMPUTER. THE DR AND DS NUMBER ALONG WITH THE CORRESPONDING D NUMBERS AND THE TIME SPANS ARE AS FOLLOWS:

DR#	DS#	D#	FILES	TIME SPAN
DR01053	DS01053	D30926	1-12	10/06/76 - 10/08/76
		D30927	13-24	10/09/76 - 10/11/76
		D30928	25-34	10/12/76 - 10/14/76
		D30929	35-47	10/15/76 - 10/21/76
		D30930	48-61	10/22/76 - 10/28/76
		D30931	62-71	10/29/76 - 10/31/76
		D30932	72-75	11/01/76 - 11/01/76

REQ. AGENT	RAND NO.	ACQ. AGENT
CAW	RC8899	RWV

VIKING ORBITER 1

EDR OCCULATION DATA

75-075A-04B

1 9-Tr 6250 # of Files ASCII format ~~multifiled~~ Modcomp classic

This data set catalog consists of 7 'D' and 'C' tapes created on the 360 computer. The tapes are 7 track, 800 BPI, BCD, EVEN parity, and are multi-filed. The 'D' and 'C' numbers along with the time spans are listed below.

D#	C#	FILES	TIME SPAN
D-30926	C-19723	12	10/06/76 - 10/08/76
D-30927	C-19724	12	10/09/76 - 10/11/76
D-30928	C-19725	10	10/12/76 - 10/14/76
D-30929	C-19726	13	10/15/76 - 10/21/76
D-30930	C-19727	14	10/22/76 - 10/28/76
D-30931	C-19728	10	10/29/76 - 10/31/76
D-30932	C-19729	4	11/01/76

VIK 1-7

W1465P

JET PROPULSION LABORATORY

INTEROFFICE MEMORANDUM

315.1-133

25 May 1977

TO: G. Fjeldbo

FROM: D. Sweetnam

SUBJECT: Viking Prime Mission Occultation EDR Tapes

This memo describes the content and formats of the Viking Prime Mission Occultation EDR Tapes.

The EDR Tapes were written on the GPCF Univac 1108 with the following characteristics:

7 Tracks
800 B.P.I. Density
Even Parity
BCD (Translator ON)

The data is divided into logical records of 12 words (72 characters) which are blocked into physical records of 336 words (2016 characters).

Each file is separated by a hardware end-of-file mark with two marks after the last file on the tape.

There are two types of files on these tapes - radio data files and trajectory files.

The contents of each logical record on a trajectory file, followed by a corresponding Fortran format statement are:

Header Records

Number of Data Points	Spacecraft ID	Orbital Rev	Entry (1) Exit (2)

Format (4I10)

0.	Ephemeris-Universal Time (sec)	1-way Light-time (sec)

Format (3D24.16)

X,Y,Z Mars to Sun

Format (3D24.16)

Data Records
Data Point 1

Ephemeris Time
Seconds Past 1950. and YR DOY HR MIN SEC

Format (D26.14,4x,4F7.1,F14.8)

X,Y,Z Mars to Spacecraft

Format (3D24.16)

$\dot{X},\dot{Y},\dot{Z}$ Mars to Spacecraft

Format (3D24.16)

X,Y,Z Mars to Earth

Format (3D24.16)

$\dot{X},\dot{Y},\dot{Z}$ Mars to Earth

Format (3D24.16)

•
•
•

To number of
data points

All vectors are in the Mars centered, space fixed, Earth mean orbit of 1950 coordinate system.

The contents of each logical record on a radio data file, followed by a corresponding Fortran format statement are:

Header Records

Number of Data Points	Spacecraft ID	Orbital Rev	Entry (1) Exit (2)

Format (4I10)

Transmitting Station	Receiving Station	Tracking Mode 1-way 2-way 3-way	Frequency Bands 1-S-only 2-X-only 3-both

Format (4I10)

Uplink frequency(RF)HZ Downlink frequency(RF)HZ

Format (2D26.18)

Data Records Data Point 1	Year	Day of Year	Seconds Past Midnight	S-band Doppler HZ	X-band Doppler HZ

Format (I2,I5,F10.4,2D26.18)

⋮

To number
of data points

All of the occultation data for the Viking Prime Mission has been stored, as outlined above, on 7 Viking tape library tapes. They are:

PE0011
PE0012
PE0013
PE0014
PE0015
PE0016
PE0017

The content of each of these tapes is on the remaining pages.

Distribution:

Advanced Radiometric Systems Group
W. G. Melbourne
D. Curkendall
G. C. Broome
W. F. Cuddihy
R. Cohen
J. P. Brenkle
G. L. Tyler
T. A. Komarek
G. Cowdery
R. A. Schmitz
C. W. Snyder
T. S. Bilbo
G. A. Soffen
W. H. Michael, Jr.
B. Seidel
C. T. Stelzreid
J. Nash
T. M. Taylor
E. Batka
D. W. Johnston
T. Howe
G. Winn
J. Mehta
D. L. Brunn
M. S. Johnson
D. G. Hanks
L. R. Wiewel
D. J. Mudgway
ASO/VPO (3)

PE0011

251 trajectory points written to EDR tape file 1 for rev 107
793 radio data points written to EDR tape file 2 for rev 107
233 trajectory points written to EDR tape file 3 for rev 107
982 radio data points written to EDR tape file 4 for rev 107
383 trajectory points written to EDR tape file 5 for rev 108
1248 radio data points written to EDR tape file 6 for rev 108
305 trajectory points written to EDR tape file 7 for rev 108
1050 radio data points written to EDR tape file 8 for rev 108
117 trajectory points written to EDR tape file 9 for rev 109
346 radio data points written to EDR tape file 10 for rev 109
252 trajectory points written to EDR tape file 11 for rev 109
795 radio data points written to EDR tape file 12 for rev 109

99 trajectory points written to EDR tape file 1 for rev 110
281 radio data points written to EDR tape file 2 for rev 110
243 trajectory points written to EDR tape file 3 for rev 110
783 radio data points written to EDR tape file 4 for rev 110
189 trajectory points written to EDR tape file 5 for rev 111
562 radio data points written to EDR tape file 6 for rev 111
294 trajectory points written to EDR tape file 7 for rev 111
922 radio data points written to EDR tape file 8 for rev 111
123 trajectory points written to EDR tape file 9 for rev 112
375 radio data points written to EDR tape file 10 for rev 112
380 trajectory points written to EDR tape file 11 for rev 112
1236 radio data points written to EDR tape file 12 for rev 112

189 trajectory points written to EDR tape file 1 for rev 113
583 radio data points written to EDR tape file 2 for rev 113
219 trajectory points written to EDR tape file 3 for rev 113
691 radio data points written to EDR tape file 4 for rev 113
189 trajectory points written to EDR tape file 5 for rev 114
592 radio data points written to EDR tape file 6 for rev 115
186 trajectory points written to EDR tape file 7 for rev 115
577 radio data points written to EDR tape file 8 for rev 115
291 trajectory points written to EDR tape file 9 for rev 115
852 radio data points written to EDR tape file 10 for rev 115

189 trajectory points written to EDR tape file 1 for rev 116
586 radio data points written to EDR tape file 2 for rev 116
537 radio data points written to EDR tape file 3 for rev 116
249 trajectory points written to EDR tape file 4 for rev 117
773 radio data points written to EDR tape file 5 for rev 117
192 trajectory points written to EDR tape file 6 for rev 118
600 radio data points written to EDR tape file 7 for rev 118
590 radio data points written to EDR tape file 8 for rev 119
216 trajectory points written to EDR tape file 9 for rev 119
296 radio data points written to EDR tape file 10 for rev 120
96 trajectory points written to EDR tape file 11 for rev 120
600 radio data points written to EDR tape file 12 for rev 122
189 trajectory points written to EDR tape file 13 for rev 122

235 radio data points written to EDR tape file 1 for rev 123
81 trajectory points written to EDR tape file 2 for rev 123
511 radio data points written to EDR tape file 3 for rev 124
174 trajectory points written to EDR tape file 4 for rev 124
900 radio data points written to EDR tape file 5 for rev 125
306 trajectory points written to EDR tape file 6 for rev 125
601 radio data points written to EDR tape file 7 for rev 126
200 trajectory points written to EDR tape file 8 for rev 126
865 trajectory points written to EDR tape file 9 for rev 128
261 trajectory points written to EDR tape file 10 for rev 128
733 radio data points written to EDR tape file 11 for rev 129
291 trajectory points written to EDR tape file 12 for rev 129
989 radio data points written to EDR tape file 13 for rev 129
270 trajectory points written to EDR tape file 14 for rev 129

846 radio data points written to EDR tape file 1 for rev 130
252 trajectory points written to EDR tape file 2 for rev 130
640 radio data points written to EDR tape file 3 for rev 131
216 trajectory points written to EDR tape file 4 for rev 131
1016 radio data points written to EDR tape file 5 for rev 131
264 trajectory points written to EDR tape file 6 for rev 131
699 radio data points written to EDR tape file 7 for rev 132
222 trajectory points written to EDR tape file 8 for rev 132
850 radio data points written to EDR tape file 9 for rev 132
234 trajectory points written to EDR tape file 10 for rev 132

598 radio data points written to EDR tape file 1 for rev 133

216 trajectory points written to EDR tape file 2 for rev 133

916 radio data points written to EDR tape file 3 for rev 133

279 trajectory points written to EDR tape file 4 for rev 133

Ø Viking, B

Viking 1 Orbiter

75-075A-04B

OR/DS 01053

10-6-76 → 11-1-76

FILE	1	HAS	44	RECS,	<MINREC	SIZE=	2016>	<MAXREC	SIZE= 2016>
FILE	2	HAS	31	RECS,	<MINREC	SIZE=	72>	<MAXREC	SIZE= 2016>
FILE	3	HAS	41	RECS,	<MINREC	SIZE=	2016>	<MAXREC	SIZE= 2016>
FILE	4	HAS	38	RECS,	<MINREC	SIZE=	72>	<MAXREC	SIZE= 2016>
FILE	5	HAS	68	RECS,	<MINREC	SIZE=	2016>	<MAXREC	SIZE= 2016>
FILE	6	HAS	47	RECS,	<MINREC	SIZE=	72>	<MAXREC	SIZE= 2016>
FILE	7	HAS	54	RECS,	<MINREC	SIZE=	2016>	<MAXREC	SIZE= 2016>
FILE	8	HAS	40	RECS,	<MINREC	SIZE=	72>	<MAXREC	SIZE= 2016>
FILE	9	HAS	21	RECS,	<MINREC	SIZE=	2016>	<MAXREC	SIZE= 2016>
FILE	10	HAS	15	RECS,	<MINREC	SIZE=	72>	<MAXREC	SIZE= 2016>
FILE	11	HAS	45	RECS,	<MINREC	SIZE=	2016>	<MAXREC	SIZE= 2016>
FILE	12	HAS	31	RECS,	<MINREC	SIZE=	72>	<MAXREC	SIZE= 2016>
FILE	13	HAS	17	RECS,	<MINREC	SIZE=	2016>	<MAXREC	SIZE= 2016>
FILE	14	HAS	13	RECS,	<MINREC	SIZE=	72>	<MAXREC	SIZE= 2016>
FILE	15	HAS	43	RECS,	<MINREC	SIZE=	2016>	<MAXREC	SIZE= 2016>
FILE	16	HAS	30	RECS,	<MINREC	SIZE=	72>	<MAXREC	SIZE= 2016>
FILE	17	HAS	33	RECS,	<MINREC	SIZE=	2016>	<MAXREC	SIZE= 2016>
FILE	18	HAS	23	RECS,	<MINREC	SIZE=	72>	<MAXREC	SIZE= 2016>
FILE	19	HAS	52	RECS,	<MINREC	SIZE=	2016>	<MAXREC	SIZE= 2016>
FILE	20	HAS	35	RECS,	<MINREC	SIZE=	72>	<MAXREC	SIZE= 2016>
FILE	21	HAS	22	RECS,	<MINREC	SIZE=	2016>	<MAXREC	SIZE= 2016>
FILE	22	HAS	16	RECS,	<MINREC	SIZE=	72>	<MAXREC	SIZE= 2016>
FILE	23	HAS	67	RECS,	<MINREC	SIZE=	2016>	<MAXREC	SIZE= 2016>
FILE	24	HAS	47	RECS,	<MINREC	SIZE=	72>	<MAXREC	SIZE= 2016>
FILE	25	HAS	33	RECS,	<MINREC	SIZE=	2016>	<MAXREC	SIZE= 2016>
FILE	26	HAS	23	RECS,	<MINREC	SIZE=	72>	<MAXREC	SIZE= 2016>
FILE	27	HAS	39	RECS,	<MINREC	SIZE=	2016>	<MAXREC	SIZE= 2016>
FILE	28	HAS	27	RECS,	<MINREC	SIZE=	72>	<MAXREC	SIZE= 2016>
FILE	29	HAS	33	RECS,	<MINREC	SIZE=	2016>	<MAXREC	SIZE= 2016>
FILE	30	HAS	24	RECS,	<MINREC	SIZE=	72>	<MAXREC	SIZE= 2016>
FILE	31	HAS	33	RECS,	<MINREC	SIZE=	2016>	<MAXREC	SIZE= 2016>
FILE	32	HAS	23	RECS,	<MINREC	SIZE=	72>	<MAXREC	SIZE= 2016>
FILE	33	HAS	52	RECS,	<MINREC	SIZE=	2016>	<MAXREC	SIZE= 2016>
FILE	34	HAS	33	RECS,	<MINREC	SIZE=	72>	<MAXREC	SIZE= 2016>
FILE	35	HAS	33	RECS,	<MINREC	SIZE=	2016>	<MAXREC	SIZE= 2016>
FILE	36	HAS	23	RECS,	<MINREC	SIZE=	72>	<MAXREC	SIZE= 2016>
FILE	37	HAS	22	RECS,	<MINREC	SIZE=	72>	<MAXREC	SIZE= 2016>
FILE	38	HAS	44	RECS,	<MINREC	SIZE=	2016>	<MAXREC	SIZE= 2016>
FILE	39	HAS	30	RECS,	<MINREC	SIZE=	72>	<MAXREC	SIZE= 2016>
FILE	40	HAS	54	RECS,	<MINREC	SIZE=	2016>	<MAXREC	SIZE= 2016>
FILE	41	HAS	24	RECS,	<MINREC	SIZE=	72>	<MAXREC	SIZE= 2016>
FILE	42	HAS	24	RECS,	<MINREC	SIZE=	72>	<MAXREC	SIZE= 2016>
FILE	43	HAS	38	RECS,	<MINREC	SIZE=	2016>	<MAXREC	SIZE= 2016>
FILE	44	HAS	13	RECS,	<MINREC	SIZE=	72>	<MAXREC	SIZE= 2016>
FILE	45	HAS	17	RECS,	<MINREC	SIZE=	2016>	<MAXREC	SIZE= 2016>
FILE	46	HAS	24	RECS,	<MINREC	SIZE=	72>	<MAXREC	SIZE= 2016>
FILE	47	HAS	33	RECS,	<MINREC	SIZE=	2016>	<MAXREC	SIZE= 2016>
FILE	48	HAS	11	RECS,	<MINREC	SIZE=	72>	<MAXREC	SIZE= 2016>
FILE	49	HAS	14	RECS,	<MINREC	SIZE=	2016>	<MAXREC	SIZE= 2016>
FILE	50	HAS	21	RECS,	<MINREC	SIZE=	72>	<MAXREC	SIZE= 2016>
FILE	51	HAS	31	RECS,	<MINREC	SIZE=	2016>	<MAXREC	SIZE= 2016>
FILE	52	HAS	55	RECS,	<MINREC	SIZE=	72>	<MAXREC	SIZE= 2016>
FILE	53	HAS	54	RECS,	<MINREC	SIZE=	2016>	<MAXREC	SIZE= 2016>
FILE	54	HAS	24	RECS,	<MINREC	SIZE=	72>	<MAXREC	SIZE= 2016>
FILE	55	HAS	35	RECS,	<MINREC	SIZE=	2016>	<MAXREC	SIZE= 2016>
FILE	56	HAS	33	RECS,	<MINREC	SIZE=	72>	<MAXREC	SIZE= 2016>
FILE	57	HAS	46	RECS,	<MINREC	SIZE=	2016>	<MAXREC	SIZE= 2016>
FILE	58	HAS	29	RECS,	<MINREC	SIZE=	72>	<MAXREC	SIZE= 2016>
FILE	59	HAS	52	RECS,	<MINREC	SIZE=	2016>	<MAXREC	SIZE= 2016>
FILE	60	HAS	38	RECS,	<MINREC	SIZE=	72>	<MAXREC	SIZE= 2016>

```
 FILE     61 HAS        48 RECS, <MINREC SIZE=     2016> <MAXREC SIZE=     2016>
 FILE     62 HAS        53 RECS, <MINREC SIZE=       72> <MAXREC SIZE=     2016>
 FILE     63 HAS        44 RECS, <MINREC SIZE=     2016> <MAXREC SIZE=     2016>
 FILE     64 HAS        25 RECS, <MINREC SIZE=       72> <MAXREC SIZE=     2016>
 FILE     65 HAS        38 RECS, <MINREC SIZE=     2016> <MAXREC SIZE=     2016>
 FILE     66 HAS        39 RECS, <MINREC SIZE=       72> <MAXREC SIZE=     2016>
 FILE     67 HAS        47 RECS, <MINREC SIZE=     2016> <MAXREC SIZE=     2016>
 FILE     68 HAS        27 RECS, <MINREC SIZE=       72> <MAXREC SIZE=     2016>
 FILE     69 HAS        59 RECS, <MINREC SIZE=     2016> <MAXREC SIZE=     2016>
 FILE     70 HAS        33 RECS, <MINREC SIZE=       72> <MAXREC SIZE=     2016>
 FILE     71 HAS        41 RECS, <MINREC SIZE=     2016> <MAXREC SIZE=     2016>
 FILE     72 HAS        24 RECS, <MINREC SIZE=       72> <MAXREC SIZE=     2016>
 FILE     73 HAS        38 RECS, <MINREC SIZE=     2016> <MAXREC SIZE=     2016>
 FILE     74 HAS        35 RECS, <MINREC SIZE=       72> <MAXREC SIZE=     2016>
 FILE     75 HAS        49 RECS, <MINREC SIZE=     2016> <MAXREC SIZE=     2016>
LOGICAL END-OF-TAPE DETECTED.
 END OF FORMATTED DIRECTORY OPERATION...

 TOTAL OF 2535 RECORDS IN 75 FILE(S).
 SMALLEST RECORD LENGTH IS 72 BYTES.
 LARGEST RECORD LENGTH IS 2016 BYTES.
```

7TR, 800, BCD
12 FILES

VIKING ORBITER 1
EDR OCCULTATION DATA
75-075A-04A

D-30926
[C-19723]
10/06/76 - 10/08/76

```
$JOB  16:05:50
$ASS IN MS6
$NOP ******* LIST OF X-372
$EXEC ;IST BS

$EXEC LIST BS

INPUT PARAMETERS ARE:  BC FL 1 1 1 12

 TAPE NO.   1  SAT, IO  FILE NO.   1
 RECORD   1             LENGTH   2016
       251          27          107           1                                  .0000000000000000
.471843799995258 5+002   .125859613889879 4+004   .188019074415152 5+009   .143100374774703 1+009  -.15
6160803518307 0+007       .844560820000 00+009        76.0  280.0      .0   13.0   40.00000000  -.14581
45312649582+005  -.811625275148599 2+004   .411853381936608 1+004  -.947588657009227 1+000  -.12922698
99743995+001  -.564793405974751 6+000   .334011084127348 8+009   .175471284720145 4+009  -.15648502864
26006+007  -.225535057963494 4+002   .461912592156497 8+002   .743646119841118 2+000       .8445608300
0000+009        76.0  280.0      .0   13.0   50.00000000  -.145909228669710 3+005  -.812917202844482+
004   .411288415076548 6+004  -.946359761909301 1+000  -.129158556502808 6+001  -.565140105910085 0+000
   .334010858591908 1+009   .175471746632601 0+009  -.156484284996391 8+007  -.225535823519911 2+002
.461912319112746 8+002   .743646298123511 2+000       .844560840000 00+009        76.0  280.0      .0
14.0      .00000000  -.146003803282030 6+005  -.814208446424673 0+004   .410723102140495 8+004  -.94513
28075251574+000  -.129090166836499 9+001  -.565485558721096 0+000   .334010633055701 8+009   .17547220
85447836+009  -.156483541350004 5+007  -.225536589075990 8+002   .461912046067698 4+002   .74364647640
46786+000       .844560850000 00+009        76.0  280.0      .0   14.0   10.00000000  -.14609825529573
63+005  -.815499006327238 4+004   .410157444373298 5+004  -.943907788770340 2+000  -.129021820978092 0+
001  -.565829768955186 8+000   .334010407518729 9+009   .175472670456693 2+009  -.156482797703439 0+007
  -.225537354631733 3+002   .461911773021352 6+002   .743646654684620 2+000       .844560860000 00+009
     76.0  280.0      .0   14.0   20.00000000  -.146192584904136 7+005  -.816788882990268 4+004   .40
9591443015268 6+004  -.942684700576072 3+000  -.128953518929730 0+001  -.566172741138898 4+000   .33401
01819809925+009   .175473132368329 7+009  -.156482054056695 1+007  -.225538120187138 7+002   .46191149
99737092+002   .743646832963336 2+000

 TAPE NO.   1             FILE NO.   1
 RECORD   44              LENGTH   2016
  -.170972560206831 6+005  -.119679712347572 7+005   .216106032654556 6+004  -.628679315078486 8+000  -
.109236153348535 7+001  -.630472200074855 4+000   .333937970587945 9+009   .175620930061162 9+009  -.15
62440779490063+007  -.225783080598804 4+002   .461824058091680 8+002   .743703819146258 5+000       .8
4456407000000+009       76.0  280.0      1.0      7.0   50.00000000  -.171035368510941 1+005  -.11978892
07576013+005   .215475510439299 5+004  -.627886920637122 1+000  -.109180672451448 1+001  -.63057215625
55470+000   .333937744804482 6+009   .175621391885084 3+009  -.156243334245098 2+007  -.22578384604595
80+002   .461823784627567 2+002   .743703997031016 3+000       .844564080000 00+009        76.0  280.0
   1.0      8.0      .00000000  -.171098117621632 9+005   .214844888490206 6+004
  -.627095446411317 8+000  -.109125225842628 7+001  -.630671667953045 3+000   .333937519020253 8+009
.175621853708732 2+009  -.156242590541012 3+007  -.225784611492774 1+002   .461823511162156 2+002   .74
37041749145452+000       .844564090000 00+009        76.0  280.0      1.0      8.0   10.00000000  -.17116
07876308353+005  -.120007171220693 3+005   .214214167251142 1+004  -.626304890542925 1+000  -.10906981
34540928+001  -.630770736044576+000   .333937292352596+009   .175622315532106 6+009  -.15624184683
67484+007  -.225785376939252 9+002   .461823237695447 9+002   .743704352796845 2+000       .8445641000
0000+009        76.0  280.0      1.0      8.0   20.00000000  -.171223378630291 6+005  -.120116213342197 3+
005   .213583347164735 4+004  -.625515251178919 8+000  -.109014435247873 8+001  -.630869362842534 6+000
   .333937067449499 9+009   .175622773552076+009  -.156241103132306 7+007  -.225786142385394 4+002
.461822964227442 2+002   .743704530677916 3+000       .844564110000 00+009        76.0  280.0      1.0
  8.0   30.00000000  -.171285890711559 6+005  -.120225200102570 5+005   .212952428672385 3+004  -.62472
65264713846+000  -.108959091186023 1+001  -.630967548495688 6+000   .333936841662974 8+009   .17562323
91780351+009  -.156240359427687 1+007

***** JOB DONE.
DATA IGNORED
$EXEC LIST BS

INPUT PARAMETERS ARE:  BC FL 1=1=12
```

```
$JOB  16:27:37                                          FILE 4 12
$ASS IN MS6
$NOP ******* LIST OF FLIE 12 OF X-372
$EXEC LIST BS

INPUT PARAMETERS ARE:  BC FL 1 1 12

 TAPE NO.   1              FILE NO.   12
 RECORD   1                LENGTH   72
       795         27          109          2

 TAPE NO.   1              FILE NO.   12
 RECORD   31               LENGTH   2016
76  282  12261.5000   .3713538051751442 23+004   .1361619869021543 67+005 76  282  12262.5000   .3713
2071426184847 7+004   .1361500869123109 98+005 76  282  12263.5000   .3712865892616100 59+004   .13613
7936903036516+005 76  282  12264.5000   .3712496689287014 28+004   .1361227744249471 83+005 76  282
12265.5000   .3712158506062813 08+004   .1361124493894943 41+005 76  282  12266.5000   .3711679756489
58233+004   .1360940119073757 34+005 76  282  12267.5000   .3711341575709171 57+004   .1360818744222 2
9211+005 76  282  12268.5000   .3710920665171928 68+004   .1360676118938097 17+005 76  282  12269.500
0   .3710507028666324 89+004   .1360522119269737 41+005 76  282  12270.5000   .3710145097938366 21+004
   .1360367118958601 17+005 76  282  12271.5000   .3709693165150471 01+004   .1360235619191297 70+005
76  282  12272.5000   .3709372597304172 81+004   .1360076118771204 16+005 76  282  12273.5000   .3708
9693033965304 3+004   .1359958118889698 20+005 76  282  12274.5000   .3708589756396599 11+004   .13598
1986945069711+005 76  282  12275.5000   .3708217484441585 84+004   .1359687368462452 10+005 76  282
12276.5000   .3707899981764145 18+004   .1359559120468267 61+005 76  282  12277.5000   .3707534987119
02646+004   .1359431242714294 60+005 76  282  12278.5000   .3707168844905681 88+004   .1359284995202 1
9247+005 76  282  12279.5000   .3706752145675010 96+004   .1359137869397768 19+005 76  282  12280.500
0   .3706310553637333 19+004   .1359001992950805 83+005 76  282  12281.5000   .3706044752744026 46+004
   .1358875995633968 52+005 76  282  12282.5000   .3705631118205375 95+004   .1358726742331155 94+005
76  282  12283.5000   .3705320893255062 38+004   .1358617619750866 11+005 76  282  12284.5000   .3704
8865784080699 1+004   .1358447994146713 42+005 76  282  12285.5000   .3704465665963478 37+004   .13583
1536998546999+005 76  282  12286.5000   .3704134758618660 25+004   .1358178368286260 77+005 76  282
12287.5000   .3703713845518417 63+004   .1358023994899639 30+005 76  282  12288.5000   .3703382938292
80881+004   .1357903117380508 59+005

***** JOB DONE.

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$REW LO
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