#326

PIONEER 10

DOPPLER TRACKING DATA

72-012A-09A

#326

PIONEER 10

DOPPLER TRACKING/SOLAR OPPOSITION

72-012A-09B

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 This inventory information is now no longer maintained in the DSCs, but is now managed in the inventory part of the NSSDC information system.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

PIONEER 10

DOPPLER TRACKING DATA ON MAG TAPE

72-012A-09A PSCM-00019

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 an IBM ~~360~~ 1108 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
DR005630	DS005630	D022352	1	10/05/73 - 12/28/73 (a)

(a) D022352: Read errors occurred in records 27, 1982, 1986, 1990, 1991, 1994 of file 1.

REQ. AGENT	RAND NO.	ACQ. AGENT
CMP	RC4715	CDW

PIONEER 10

DOPPLER TRACKING DATA

72-012A-09A

This data set consists of 1 tape written in binary, and odd parity. The tape is 7 track with a density of 800 BPI and was created on a UNIVAC 1108 computer. There is one file of data on the tape.

D#	C#	TIME SPAN
D-22352	C-17288	10/05/73 - 12/28/73

DATA TAPE FORMAT

APPENDIX A

OD FILE LOGICAL RECORD FORMATS

OD files are existed in two formats; type-66 format and LGFIO format. The OD file generated by the ODE is in type-66 format. It has to be converted to LGFIO format by the CONVRTDRIVE before the ODP can use it. The following sections describe both formats of OD files in detail (word, type, contents and description).

A.1 OD FILE IN TYPE-66 FORMAT

1) FILE IDENTIFICATION GROUP

1.1) Header Record

1	I	11	Size (in integer words) of each logical record in 1.2.
2	I	4	Identifies content of 1.2 records as Fieldata.
3	I	1	Indicates group does not end with a trailer record.
4	I	101	File id. group indicator.
5	I	0	Not used.

1.2) One Record which Identifies the File

1	I	10	The number of integral words in the record.
2-4	Fieldata		"SPACECRAFT ID = nn" where nn is the spacecraft number input by the user in the OD statement.
5-9	Fieldata		"Y, M, D, H, M = yy, mm, dd, hh, mm, 1108" for identifying the time and system the file was written.
10-11	Fieldata		"ODE = vv.v" for identifying the version of ODE that created the file.

2) FINGERPRINTS GROUP (May not be present)

2.1) Header Record

1	I	8	Size (in integer words) of each

			logical record in 2.2.
2	I	4	Identifies content of 2.2 records as Fieldata.
3	I	0	Indicates group ends with a trailer
4	I	102	Fingerprint group indicator.
5	I	0	Not used.

2.2) One or More Records of Fieldata Fingerprints

1	I	7 The number of integral words in the record.
2	Fieldata	Unique run-id (left justified).
3	Fieldata	Date when file was written - MMDDYY.
4	Fieldata	Time when file was written - HHMMSS.
5	Fieldata	Name of program wrote this file (right justified).
6	Fieldata	Version of the above program (left justified).
7	Fieldata	Date when above program was mapped - MMDDYY.
8	Fieldata	Time when above program was mapped - HHMMSS.

2.3) Group Trailer

1	I	1
2	Fieldata	'000000' (Six Fieldata zeros)

3) USER LABEL GROUP

3.1) Header Record

1	I	15	Size (in integer words) of each logical record in 3.2.
2	I	4	Identifies content of 3.2 records as Fieldata.
3	I	0	Indicates group ends with a trailer.
4	I	103	Label group indicator.
5	I	0	Not used.

3.2) One or More Records of Fieldata Descriptive Text

These include the text generated by the ODE and input to the ODE by the user via the LABEL parameter in the OD-FILE statement. The text generated by the ODE describes when the file was created or updated. The text input by the user is any comments the user would have concerning the circumstances under which the file was created.

1	I	14	The number of integral words in the record.
2-15	Fieldata	84	Fieldata characters text.

3.3) Group Trailer

1	I	1	
2	Fieldata	'000000'	(Six Fieldata zeros)

4) RAMPED TRANSMITTER GROUPS (May not be present)

4.1) Header Record

1	I	129	Maximum size (in integer words) of each logical record in 4.2
2	I	2	Identifies data records as double precision
3	I	0	Indicates group ends with a trailer record
4	I	2030	Key 1
5	I	DSN Station Number or 0	Key 2

4.2) A Series of Data Records

Each data record shall consist of an integer NWORDS plus up to 16 packed transmitter messages. Each transmitter message will contain four double precision words as follows:

D.P. Word	
1	T_O, Beginning time of ramp in seconds past 0^h 1 January 1950.
2	T_F, End time of ramp in seconds past 0^h 1 January 1950.

D.P. Word	
3	DCO transmitter frequency in Hz at T_o ($\cong$45 MC) [$f_{VCO} = (f_{DCO} + 20\ MHZ)/3$]
4	DCO frequency rate to be applied between T_o and T_F, Hz/sec.

4. 3) Group Trailer

1	I	1
2, 3	DPFP	0. 0D + 0

5) ORBIT DATA SUMMARY GROUP

5. 1) Header Record

1	I	9	Size (in integer words) of each logical record in 5. 2.
2	I	2	Identifies content of 5. 2 records as DPFP.
3	I	0	Indicates group ends with a trailer.
4	I	105	Orbit data summary group indicator.
5	I	0	Not used.

5. 2) A Record for Each Data-Type that Exists for Each Station/Band

1	I	4	Number of DPFP words in the record
2, 3	DPFP	1. 0000000bc00eeffD+16	

where

b = radio band indicator (See Orbit Data Group)

c = tracking network indicator (See Orbit Data Group)

ee = receiving station number

ff = data-type indicator (See Orbit Data Group)

4, 5	DPFP	Number of points	
6, 7	DPFP	Time of earliest point	Seconds after January 1, 1950 0:0:0.0
8, 9	DPFP	Time of latest point	

5. 3) Group Trailer

1	I	1
2, 3	DPFP	0.0D+0

6) ORBIT DATA IDENTIFIER GROUP

6. 1) Header Record

1	I	6	Size (in integer words) of each logical record in 6. 2.
2	I	4	Identifies content of 6. 2 records as Fieldata.
3	I	1	Indicates group does not end with a trailer record.
4	I	107	Orbit data identifier group indicato
5	I	0	Not used.

6. 2) One Record which Identifies the Various Fields and Their Positions within the Orbit Data Record .

1	I	5	Number of integral words in the record.
2	Fieldata	TIMTAGIDWORDOBSVBLFREQCYPASSID	

7) ORBIT DATA GROUP

7.1) Header Record

1	I	241	Size (in integer words) of largest logical record in 7.2.
2	I	2	Identifies content of 7.2 records as DPFP.
3	I	0	Indicates group ends with a trailer
4	I	109	Orbit data group indicator
5	I	0	Not used

7.2) A Series of Records (possibly void):

1	I	M	The number of double precision words of data in the record. M=120 except possibly for the last record in which M=R*5 where R is the number of logical records within the record.
2 to 2M+1	DPFP		M/5 logical records

A logical record is as defined below

Orbit Data Logical Record

Words	Mode	Contents
1,2	DPFP	Time of observation; seconds after January 1, 1950 0:0:0.0
3,4	DPFP	1.aaaaaaabcddeeffD+16

where

aaaaaaa = doppler compression time in hundredths of seconds for doppler data

= 0 for DRVID

= ranging components for range data

= 0 for angle data

b = radio band indicator. 1 = S, 2 = X, 3 = L, 4 = LS

c = tracking network indicator. 1 = DSN, 2 = MSFN, 3 = ETR

dd = transmitting station number

ee = receiving station number

ff = data-type indicator

- 11 = one-way doppler (F1)
- 12 = two-way doppler (F2)
- 13 = three-way doppler (F3)
- 14 = three-way coherent doppler (F3C)
- 24 = DRVID using TAU ranging (DTAU)
- 25 = DRVID using MU ranging (DMU)
- 26 = DRVID using PLOP ranging (DPLOP)
- 27 = DRVID using PLOP2 ranging (DPLOP2)
- 28 = DRVID using MU2 ranging (DMU2)
- 31 = ETR range (ETR)
- 32 = MARK 1 range (MARK1)
- 33 = MARK1A range (MARK1A)
- 34 = TAU range (TAU)
- 35 = MU range (MU)
- 36 = planetary operational discrete spectrum (PLOP)
- 37 = planetary operational continuous spectrum (PLOP2)
- 38 = planetary R&D (MU2)
- 51 = azimuth (AZ)
- 52 = elevation (EL)
- 53 = hour angle (HA)
- 54 = declination (DEC)
- 55 = X30 (X30)

56 = Y30 (Y30)

57 = X85 (X85)

58 = Y85 (Y85)

5,6 DPFP One of the following

i) doppler observable

ii) DRVID observable

iii) range observable

iv) angle observable

7,8 DPFP Reference frequency for doppler, DRVID and range data, 0 for angle data, where reference frequency is defined as the frequency of the

i) Transponder if doppler ground mode is one-way

ii) Transmitter if doppler ground mode is two-way, three-way, or three-way coherent. Reference frequency is taken at light corrected time of data point.

9,10 DPFP 1.aaaabccD+16

where

aaaa = Pass identification

b = Split pass identification

cc = Spacecraft identification

The logical data records are ordered in increasing order of time/net/station/data type/band.

7.3) Group Trailer

1	I	1
2,3	DPFD	0.0D+0

8) CONTROL STATEMENT GROUP

8.1) Header Record

1	I	15	Size (in integer words) of each logical record in 8.2.

2	I	4	Identifies content of 8.2 records as Fieldata.
3	I	0	Indicates group ends with a trailer
4	I	111	ODE control statement group indicator
5	I	0	Not used

8.2) Fieldata Card/Line Images of All the ODE Control Statements

1	I	14	The number of integral words in a record
2-15	Fieldata	84	Fieldata character text.

8.3) Group Trailer

1	I	1
2	Fieldata '000000' (Six Fieldata zeros)	

9) FILE CLOSE GROUP

9.1) Header Record

1	I	1
2	I	5
3	I	0
4	I	0
5	I	0

9.2) End of File Mark

The entire OD file is written and read with non-formatted (binary) read and write FORTRAN V statements. The data within each record are ordered and typed as specified above; the various file groups are also ordered as shown in paragraphs (1) through (8).

72-012A-09A

JET PROPULSION LABORATORY *California Institute of Technology • 4800 Oak Grove Drive, Pasadena, California 91103*

CPB-104

August 14, 1975

Mr. Leo Davis
National Space Science Data Center
Code 601.1
Goddard Space Flight Center
Greenbelt, Maryland, 20771

Dear Mr. Davis:

This is to notify you that I have mailed a magnetic tape containing Pioneer 10 Doppler tracking data to you at the National Space Science Data Center (NSSDC). These data, which cover the period 15 October - 28 December 1973 were taken near Jupiter and used by the Pioneer 10 celestial mechanics experimenters, Dr. J. D. Anderson of JPL and myself. The tape you will receive (tape D564) was written at JPL on a Univac 1108 computer in the standard 7 track, 800 BPI Fortran mode with 32 bit word length. Please send a replacement tape to me at the address given above.

The following explanatory materials are enclosed:

1. A description of the data tape format. Note that the ramped transmitter groups, although present, are not used for Pioneer 10.

2. One copy of TR 32-1527 defining the S-band, two-way observable found on the data tape. See pages 19-22, 46-50, 72-75.

3. A photocopy of a Pioneer 10 journal article giving the results of the Pioneer 10 Celestial Mechanics Experiment.

4. A list of Deep Space Net Tracking station locations.

5. Trajectory coordinates sufficient to start a least squares adjustment.

6. A listing of the beginning records of tape D564.

The Pioneer 10 spacecraft was perturbed by orientation manuevers at the following times (UTC)

11	November 73	16^h
15	November 73	21^h
26	November 73	12^h
6	December 73	22^h
13	December 73	16^h
21	December 73	6^h

The velocity perturbations were almost entirely along the earth line with a magnitude of about 1 mm/sec. The tracking data provided is S-band, two-way Doppler data. Each data record contains both the observed Doppler (F) and the transmitter frequency (f_q) as defined in item (2).

We plan to publish some of the trajectory and data characteristics for Pioneers 10 and 11 in a final Pioneer 10 and 11 paper in early 1976, at which time the Pioneer 11 tracking data will be transmitted to NSSDC. Please instruct any potential users of the data to contact me if any questions arise concerning its use. Information concerning the Pioneer 10 solar radiation pressure can be obtained upon request to me; the memos describing this effect were too lengthy and complicated to include in this mailing.

Sincerely yours,

George W. Null

George W. Null
Member of Technical Staff
Tracking & Orbit Determination
(213) 354-2052

GWN/bmr

Enclosure

```
FILE 0001 REC 0001 CH 0168                                                
```

```
FILE 0001 REC 0013 CH 0168
0097 065405022650 000017010001 000000000000 000000000000 000000000000 000000000000 000000000000 000000000000
0145 000000000000 000000000000 000000000000 000000000000

FILE 0001 REC 0014 CH 0168
0001 000017010001 000000000016 051725516156 664044646356 646356605663 615661566156 050505050505 050505050505
0049 050505050505 050505050505 050505050505 050505050505 050505050505 050505050505 050505050505 050505050505
0097 250515607100 000017010001 000000000000 000000000000 000000000000 000000000000 000000000000 000000000000
0145 000000000000 000000000000 000000000000 000000000000

FILE 0001 REC 0015 CH 0168
0001 000017010001 000000000016 050651615667 404472110631 067256050505 050505050505 050505050505 050505050505
0049 050505050505 050505050505 050505050505 050505050505 050505050505 050505050505 050505050505 050505050505
0097 443611676233 000017010001 000000000000 000000000000 000000000000 000000000000 000000000000 000000000000
0145 000000000000 000000000000 000000000000 000000000000

FILE 0001 REC 0016 CH 0168
0001 000017010001 000000000016 051631162251 615667404461 716763616160 606266566061 646365606060 606056050505
0049 050505050505 050505050505 050505050505 050505050505 050505050505 050505050505 050505050505 050505050505
0097 576507557052 000017010001 000000000000 000000000000 000000000000 000000000000 000000000000 000000000000
0145 000000000000 000000000000 000000000000 000000000000

FILE 0001 REC 0017 CH 0168
0001 000017010001 000000000016 052551635667 404475706060 616466617062 651171560505 050505050505 050505050505
0049 050505050505 050505050505 050505050505 050505050505 050505050505 050505050505 050505050505 050505050505
0097 775412772040 000017010001 000000000000 000000000000 000000000000 000000000000 000000000000 000000000000
0145 000000000000 000000000000 000000000000 000000000000

FILE 0001 REC 0018 CH 0168
0001 000017010001 000000000016 051725516156 674044616456 616486606663 615661566156 050505050505 050505050505
0049 050505050505 050505050505 050505050505 050505050505 050505050505 050505050505 050505050505 050505050505
0097 230615557200 000017010001 000000000000 000000000000 000000000000 000000000000 000000000000 000000000000
0145 000000000000 000000000000 000000000000 000000000000

FILE 0001 REC 0019 CH 0168
0001 000017010001 000000000016 050651615670 404472110631 067256050505 050505050505 050505050505 050505050505
0049 050505050505 050505050505 050505050505 050505050505 050505050505 050505050505 050505050505 050505050505
0097 443611676234 000017010001 000000000000 000000000000 000000000000 000000000000 000000000000 000000000000
0145 000000000000 000000000000 000000000000 000000000000

FILE 0001 REC 0020 CH 0168
0001 000017010001 000000000016 051631162251 615670404461 716763616260 606161566065 647062626060 606056050505
0049 050505050505 050505050505 050505050505 050505050505 050505050505 050505050505 050505050505 050505050505
0097 577100577156 000017010001 000000000000 000000000000 000000000000 000000000000 000000000000 000000000000
0145 000000000000 000000000000 000000000000 000000000000

FILE 0001 REC 0021 CH 0168
0001 000017010001 000000000016 052551635670 404475706067 666460717165 117156050505 050505050505 050505050505
0049 050505050505 050505050505 050505050505 050505050505 050505050505 050505050505 050505050505 050505050505
0097 313371362153 000017010001 000000000000 000000000000 000000000000 000000000000 000000000000 000000000000
0145 000000000000 000000000000 000000000000 000000000000

FILE 0001 REC 0022 CH 0168
0001 000017010001 000000000016 051725516156 704044646356 646356605663 615661566156 050505050505 050505050505
0049 050505050505 050505050505 050505050505 050505050505 050505050505 050505050505 050505050505 050505050505
0097 270515607100 000017010001 000000000000 000000000000 000000000000 000000000000 000000000000 000000000000
0145 000000000000 000000000000 000000000000 000000000000

FILE 0001 REC 0023 CH 0168
0001 000017010001 000000000016 050651615661 604044617167 636162606061 615660616060 606060606060 560561716763
0049 616260606162 566061606060 606060606056 721132222572 560505050505 050505050505 050505050505 050505050505
0097 026026516040 000017010001 000000000000 000000000000 000000000000 000000000000 000000000000 000000000000
0145 000000000000 000000000000 000000000000 000000000000

FILE 0001 REC 0024 CH 0168
0001 000017010001 000000000016 054705050505 050505050505 050505050505 050505050505 050505050505 050505050505
0049 050505050505 050505050505 050505050505 050505050505 050505050505 050505050505 050505050505 050505050505
0097 075107070725 000017010001 000000000000 000000000000 000000000000 000000000000 000000000000 000000000000
0145 000000000000 000000000000 000000000000 000000000000

FILE 0001 REC 0025 CH 0168
0001 000017010001 000000000016 122311122311 050505050505 050505050505 050505050505 050505050505 050505050505
0049 050505050505 050505050505 050505050505 050505050505 050505050505 050505050505 050505050505 050505050505
0097 142513142531 000017010001 000000000000 000000000000 000000000000 000000000000 000000000000 000000000000
0145 000000000000 000000000000 000000000000 000000000000
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PIONEER 10

DOPPLER TRACKING/SOLAR OPPOSITION

72-012A-09B PSCM-00006

This data set has been restored. There was originally one 9-track, 6250 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 tape was created on an IBM 1100 computer. The DR and DS numbers along with the corresponding D number and the time span is as follows:

DR#	DS#	DD#	FILES	TIME SPAN
DR03734	DS03734	D54507	11	11/13/81 - 12/09/81

REQ. AGENT	REQ. NO.	ACQ. NO.
DEW	V0169	WSC

PIONEER 10

DOPPLER TRACKING / SOLAR OPPOSITION

72-012A-09B

THIS DATA SET CATALOG CONSISTS OF ONE TAPE. THE TAPE WAS CREATED ON A UNIVAC 1100/81 COMPUTER. THE TAPE IS 6250 BPI, 9 TRACK WITH 11 FILES OF DATA. THE D AND C NUMBERS ARE AS FOLLOWS:

D#	C#	TIME SPAN
D-54507	C-22914	11/13/81-12/09/81

JET PROPULSION LABORATORY *California Institute of Technology • 4800 Oak Grove Drive, Pasadena, California 91103*

28 September 1982

Mr. Ralph Post
National Space Science Data Center
Code 601.1
NASA - Goddard Space Flight Center
Greenbelt, MD 20771

Dear Mr. Post:

This letter is to notify you that I have mailed a magnetic tape containing Pioneer 10 Doppler tracking data to you at the National Space Science Data Center (NSSDC). These data, which cover the period 13 November - 9 December 1981, were taken during solar opposition for the Pioneer 10 Celestial Mechanics Experiment (Dr. J. D. Anderson, JPL, principal investigator). They represent the data record for a gravitational radiation search during the 1981 opportunity. The tape you will receive (tape A2403) was written at JPL on a UNIVAC 1100/81 computer in the standard 9 track, 6250 BPI mode. Please send a replacement tape to me at the address given above.

The tape A2403 has eleven (11) files of tracking data (see Table 1). These files were created by E. L. Lau of JPL by stripping the respective IDR tapes and writing directly onto the file using the subroutine PUTREC (see JPL publication 1843-1: LIB*CLIB$, Special Feature Subroutine Library). Each data point consists of five double precision words: time in seconds past January 1, 1950, 0^h; station number; tracking mode; Doppler cyclecount; and pseudo-residuals. These data are written in 36-sector blocks of 100 points each (500 double precision words and 4 null DP words at the end).

Please instruct any potential users of the data to contact me if any questions arise concerning its use.

Sincerely yours,

James M Rotenberry

James M. Rotenberry
Engineer III
Solar System Dynamics Group
(213) 354-3885

JMR:nc

cc: J. D. Anderson
E. L. Lau
C. Leidich (ARC, 5 copies)
W. L. Sjogren
J. Weber (U. of Maryland)

TABLE 1

FILE NAME	SIZE	TIME PERIOD SPANNED BY FILE (UTC)
49296*IK8223.	739 tracks	04:03 DOY 317 - 04:30 DOY 320
49296*IK8253.	790 tracks	23:30 DOY 319 - 20:50 DOY 321
49296*IK8282.	905 tracks	09:01 DOY 322 - 04:30 DOY 324
49296*IK8339.	1351 tracks	23:30 DOY 323 - 04:30 DOY 327
49296*IK8376.	958 tracks	23:30 DOY 326 - 04:30 DOY 329
49296*IK8412.	1028 tracks	23:30 DOY 328 - 04:30 DOY 331
49296*IK8447.	1538 tracks	23:30 DOY 330 - 04:30 DOY 334
49296*IL8009.	1005 tracks	23:30 DOY 333 - 02:40 DOY 336
49296*IL8034.	889 tracks	23:30 DOY 335 - 04:30 DOY 338
49296*IL8101.	1623 tracks	23:30 DOY 337 - 04:30 DOY 341
49296*IL8142.	641 tracks	23:30 DOY 340 - 04:30 DOY 343

Note: 04:03 DOY 317 = 4:03 a.m. GMT 13 November 1981.

= 1005624180. seconds past January 1, 1950, 0^h ET.

D54507
11/13/81 - 12/9/81

RECORD 1 OF FILE 1
LENGTH = 126 BYTES

21455E30	5D39CB9D	85145145	145390E3	2CB31451	45145D39	CB9D8514	51451453	73189CC5	14514514
50000000	01000000	00000000	00000060	00000000	06000000	00000000	00000000	0000265B	17840010
01258487	AED25848	72890000	0000001F	40000000	00000000	08880000	00000000	00000000	00000000
00000000									

RECORD 740 OF FILE 1
LENGTH = 8073 BYTES

00000B88	00000000	0041EEFD	25848000	0000404C	00000000	00000040	2C000000	00000000	420ABD61
FAC4EC00	00BFF643	FFFFFFFF	FFFF41EE	FD2584C0	00000040	4C000000	00000000	402C0000	00000000
00420ABE	7355E66C	0000CC00	9FFFFFFF	FFFFFF41	EEFD2584	80000000	406FC000	00000000	00402800
00000000	00004208	148EE518	6600008F	F678FFFF	FFFFFFFF	41EEFD25	84C00000	00406FC0	00000000
00004028	00000000	00000042	0D15D10D	4B680000	BFF62BFF	FFFFFFFF	FF41EEFD	25850000	0000406F
C0000000	00000040	28000000	00000000	420D16E3	3180D400	00EFF68F	FFFFFFFF	FFFF41EE	FD258500
00000040	4C000000	00000000	402C0000	00000000	00420ABF	84B10A5C	0000BFF5	AFFFFFFF	FFFFFF41
EEFD2585	40000000	404C0000	00000000	00402C00	00000000	0000420A	C0960C35	940000BF	F7C7FFFF
FFFFFFFF	41EEFD25	85800000	00404C00	00000000	0000402C	00000000	00000042	0AC1A767	61E40000
BFF337FF	FFFFFFFF	FF41EEFD	25854000	0000406F	C0000000	00000040	28000000	00000000	420D17F5
558A6C00	00BFF5B3	FFFFFFFF	FFFF41EE	FD258580	00000040	6FC00000	00000000	40280000	C0C00000
00420D19	0779F830	0000BFF7	CFFFFFFF	FFFFFF41	EEFD2585	C0000000	406FC000	00000000	00402800
00000000	00004200	1A199E3F	BC0000BF	F693FFFF	FFFFFFFF	41EEFD25	85C00000	00404C00	00000000
0000402C	00000000	00000042	0AC2B8C2	9A140000	C005DFFF	FFFFFFFF	FF41EEFD	25860000	00C0404C
00000000	00000040	2C000000	00000000	420AC3CA	1DD11C00	00BFF41F	FFFFFFFF	FFFF41EE	FD258640
00000040	4C000000	00000000	402C0000	00000000	00420AC4	DB790E1C	0000BFF4	EFFFFFFF	FFFFFF41
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