

Data Set Catalog #141

Explorer 34 , Pifted RATE PACK TAPES
67-051A-03F 11 tapes

Explorer 34 , PIFTED PHA EVENT SUMMARY TAPES
67-051A-03G 17 tapes

Table of Contents

1. Introduction
2. Errata/Change Log
3. LINKS TO RELEVANT INFORMATION IN THE ONLINE NSSDC
INFORMATION SYSTEM
4. Catalog Materials
 - a. Associated Documents
 - b. Core Catalog Materials

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 This inventory information is now no longer maintained in the DSCs, but is now managed in the inventory part of the NSSDC information system.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

IMP-F

DATASET - 03A IN IBM 7094 FORMAT

67-051A-03F

This data set has been restored. There were originally eleven 7-track, 800 BPI tapes written in Binary. There are two restored tapes. The DR tapes are 3480 cartridges and the DS tapes are 9-track, 6250 BPI. The tapes were created on an IBM 7094 computer. The DR and DS numbers along with the corresponding D numbers and the time span are as follows:

DR#	DS#	D#	FILES	TIME SPAN
-----	-----	-----	-----	-----
DR03771	DS03771	D-06732	1 - 15	05/24/67 - 07/26/67
		D-06733	16 - 30	07/26/67 - 09/30/67
		D-06734	31 - 45	09/30/67 - 12/04/67
		D-06735	46 - 60	12/04/67 - 02/07/68
		D-06736	61 - 75	02/07/68 - 04/05/68
		D-06737	76 - 90	04/05/68 - 06/16/68
		D-06738	91 -105	06/16/68 - 08/20/68
		D-06739	106 -120	08/20/68 - 10/24/68
		D-06740	121 -135	10/24/68 - 12/28/68
DR03772	DS03772	D-06741	1 - 15	12/28/68 - 03/03/69
		D-06742	16 - 29	03/03/69 - 05/02/69

SUMMARY SHEET

IMP - F
DATASET - 03A IN IBM 7094 FORMAT
67-051A-03F

DR#	DS#	D#	FILES	TIME SPAN
-----	-----	-----	-----	-----
DR03771	DS03771	D-06732	1 - 15	05/24/67 - 07/26/67
		D-06733	16 - 30	07/26/67 - 09/30/67
		D-06734	31 - 45	09/30/67 - 12/04/67
		D-06735	46 - 60	12/04/67 - 02/07/68
		D-06736	61 - 75	02/07/68 - 04/05/68
		D-06737	76 - 90	04/05/68 - 06/16/68
		D-06738	91 - 105	06/16/68 - 08/20/68
		D-06739	106 - 120	08/20/68 - 10/24/68
		D-06740	121 - 135	10/24/68 - 12/28/68

○ TOTAL NUMBER FILES : 135, TOTAL NUMBER RECORDS : 22676, TOTAL
NUMBER BYTES : 111M, LARGEST BLOCKSIZE : 4896, LARGEST RECORD
SIZE : 178.

DR03772	DS03772	D-06741	1 - 15	12/28/68 - 03/03/69
		D-06742	16 - 29	03/03/69 - 05/02/69

○ TOTAL NUMBER FILES : 29, TOTAL NUMBER RECORDS : 4699, TOTAL
NUMBER BYTES: 23M, LARGEST BLOCKSIZE : 4896, LARGEST RECORD
SIZE : 170.

○ FIXED

○ REMARKS : GOOD COPY

IMP-F

C. R. PROTON (R VS DE/DX)

67-051A-03G

This data set has been restored. There were originally 17 7-track, 800 BPI tapes written in Binary. There are two restored tapes. The DR tapes are 3480 cartridges and the DS tapes are 9-track, 6250 BPI. Tapes were created on an IBM 7094 computer. The DR and DS numbers along with corresponding D numbers and the time spans are as follows:

DR#	DS#	DD#	FILES	TIME SPAN
-----	-----	-----	-----	-----
DR03556	DS03556	DD 06743	1-10	05/24/67 07/06/67
		DD 06744	11-20	07/06/67 08/18/67
		DD 06745	21-30	08/18/67 09/30/67
		DD 06746	31-40	09/30/67 11/13/67
		DD 06747	41-50	11/13/67 12/26/67
		DD 06748	51-55	12/26/67 02/07/68
		DD 06749	56-60	02/07/68 03/21/68
		DD 06750	61-70	03/21/68 05/04/68
		DD 06751	71-80	05/04/68 06/16/68
DR03557	DS03557	DD 06752	1-10	06/16/68 07/29/68
		DD 06753	11-20	07/29/68 09/11/68
		DD 06754	21-30	09/11/68 10/24/68
		DD 06755	31-40	10/24/68 12/06/68
		DD 06756	41-50	12/06/68 01/18/69
		DD 06757	51-60	01/18/69 03/03/69
		DD 06758	61-70	03/03/69 04/16/69
		DD 06759	71-74	04/16/69 05/02/69

67-051A-03G	DD 06744	1	0	07/06/67	-	08/18/67
67-051A-03G	DD 06749	2	0	02/07/68	-	03/21/68
67-051A-03G	DD 06751	3	0	05/04/68	-	06/16/68
67-051A-03G	DD 06752	4	0	06/16/68	-	07/29/68
67-051A-03G	DD 06754	5	0	09/11/68	-	10/24/68
67-051A-03G	DD 06755	6	0	10/24/68	-	12/06/68
67-051A-03G	DD 06756	7	0	12/06/68	-	01/18/69
67-051A-03G	DD 06746	8	0	09/30/67	-	11/13/67
67-051A-03G	DD 06753	9	0	07/29/68	-	09/11/68
67-051A-03G	DD 06750	10	0	03/21/68	-	05/04/68
67-051A-03G	DD 06745	11	0	08/18/67	-	09/30/67
67-051A-03G	DD 06747	12	0	11/13/67	-	12/26/67
67-051A-03G	DD 06748	13	0	12/26/67	-	02/07/68
67-051A-03G	DD 06758	14	0	03/03/69	-	04/16/69
67-051A-03G	DD 06743	15	0	05/24/67	-	07/06/67
67-051A-03G	DD 06757	16	0	01/18/69	-	03/03/69
67-051A-03G	DD 06759	17	0	04/16/69	-	05/02/69

80 Files
DR-03556

74 Files
DR-03557

141 MF

IMPF.TXT

Impo - F
CIR. Protons (R VS DE/OX)
67-051A-036

DR/DS ~~0356~~, DD 06743-51 DC-None
Qtr, 6250, Bin, 80 Files Var, TL BIKs Lg BIK TOTAL Bytes Lg Bytes
26944, 2700, 72748894, 96100
05/24/67-06/16/68 Remarks: All Good

DR/DS 03557, DD 06752-S9 DC-None
Qtr, 6250, Bin, 74 Files, Var, TL BIKs Lg BIK TL Bytes Lg Bytes
24496, 2700, 66139237, 95300
06/16/68 - 05/02/69 Remarks: Rev'n/o - tape# 06753, File#1 - Blk 129
Tape# 06754, File#1 Blk# 255, tape# 06755 File#1 Blk 8 and File#2 Blk 120.

67-051A-03F

EXPLORER 34, RATE PACKED TAPES

<u>D#</u>	<u>FILES</u>	<u>START</u>	<u>STOP</u>
D-06732	15	5/24/67	7/26/67
D-06733	15	7/26/67	9/30/67
D-06734	15	9/30/67	12/04/67
D-06735	15	12/04/67	2/07/68
D-06736	15	2/07/68	4/05/68
D-06737	15	4/05/68	6/16/68
D-06738	15	6/16/68	8/20/68
D-06739	15	8/20/68	10/24/68
D-06740	15	10/24/68	12/28/68
D-06741	15	12/28/68	3/03/69
D-06742	14	3/03/69	5/02/69

* This data set was created from data set 67-051A-03A by PIFTing
XDC 930 tapes to IBM 7094.

TABLE 18
RAPT LOGICAL RECORD SPECIFICATION

ITEM NUMBER	ITEM NAME	LOCATION WITHIN LOGICAL RECORD		COMMENTS
		WORD	BITS	
1.	7094 PADDING	1	0-11	Zeros
2.	CALIBRATE/NORMAL FLAG	1	12	Value = 0, In Calibrate Mode 1, Normal Mode
3.	END OF ORBIT FLAG	1	13	Value = 1, Normally 0, At End Of Orbit Where All Remaining Logical Records In The Last Physical Record Are Filled With Zeros.
4.	PSEUDO SEQUENCE COUNT	1	14-35	See Section 2.4
5.	7094 PADDING	2	0-11	Zeros
6.	ACCUMULATOR 7C FRAME 2	2	12-23	See Tables 9 and 10
7.	ACCUMULATOR 7C FRAME 6	2	24-35	
8.	7094 PADDING	3	0-11	Zeros
9.	ACCUMULATOR 7C FRAME 10	3	12-23	See Tables 9 and 10.
10.	ACCUMULATOR 7C FRAME 14	3	24-35	
11.	7094 PADDING	4	0-11	Zeros
12.	PRESALE FLAG FRAME 2	4	12-13	Value = 0, Not In Prescale Mode 1, D1D2D3D6 Is Prescaled 2, D1D2D6 Is Prescaled 3, Both D1D2D6 And D1D2D3D6 Are Prescaled.
13.	PRESALE FLAG FRAME 6	4	14-15	
14.	PRESALE FLAG FRAME 10	4	16-17	
15.	PRESALE FLAG FRAME 14	4	18-19	

* IBM 7094, Binary, 36 bits per word
102 log/phys, 816 words/phys, 8 words per logical record

TABLE 18
 RAPT LOGICAL RECORD SPECIFICATION

ITEM NUMBER	ITEM NAME	LOCATION WITHIN LOGICAL RECORD		COMMENTS
		WORD	BITS	
16.	DATA QUALITY FLAG FRAME 2	4	20	Flag Value = 0, All Data Items Have Good Quality. 1, One Or More Items Had Fair Quality; Or One Item Had Poor Quality, So, All Data Items Are Filled, With Ones
17.	DATA QUALITY FLAG FRAME 6	4	21	
18.	DATA QUALITY FLAG FRAME 10	4	22	
19.	DATA QUALITY FLAG FRAME 14	4	23	
20.	GEOCENTRIC DISTANCE OF SATELLITE	4	24-32	In Tenths Of Earth Radii.
21.	OVERLAP ELIMINA- TION FLAG	4	33-35	A Value Of '5' Indicates The Elimination Of Overlap.
22.	7094 PADDING	5	0-11	Zeros
23.	PHA DUPLICATE EVENT FLAG FRAME 14	5	12	Value = 0, There Is A Record Of This Frame On The PHAEST. 1, There Is Not A Record Of This Frame On The PHAEST, Because There Were No Events Collected During This Frame.
24.	FRAME 10	5	13	
25.	FRAME 6	5	14	
26.	FRAME 2	5	15	
27.	ACCUMULATOR 7A FRAME 2	5	16-25	See Tables 9 and 10.
28.	ACCUMULATOR 7A FRAME 6	5	26-35	
29.	7094 PADDING	6	0-11	Zeros
30.	ACCUMULATOR 7A FRAME 10	6	12-21	See Tables 9 and 10.
31.	ACCUMULATOR 7A FRAME 14	6	26-35	
32.	7094 PADDING	7	0-11	Zeros

TABLE 18
 RAPT LOGICAL RECORD SPECIFICATION

ITEM NUMBER	ITEM NAME	LOCATION WITHIN LOGICAL RECORD		COMMENTS
		WORD	BITS	
33.	ACCUMULATOR 7B FRAME 2	7	12-21	See Tables 9 and 10.
34.	ACCUMULATOR 7B FRAME 6	7	26-35	
35	7094 PADDING	8	0-11	Zeros
36.	ACCUMULATOR 7B FRAME 10	8	12-21	See Tables 9 and 10.
37.	ACCUMULATOR 7B FRAME 14	8	26-35	
38.	SUN TIME	6,7,8	22-25	In Milli-Seconds. Word 6 Contains Most Significant Part, And Word 8 Contains The Least Significant Part.

67-051A-03C

EXPLORER 34, PHA EVENT SUMMARY TAPES

<u>D#</u>	<u>FILES</u>	<u>START</u>	<u>STOP</u>
D-06743	10	5/24/67	7/06/67
D-06744	10	7/06/67	8/18/67
D-06745	10	8/18/67	9/30/67
D-06746	10	9/30/67	11/13/67
D-06747	10	11/13/67	12/26/67
D-06748	10	12/26/67	2/07/68
D-06749	10	2/07/68	3/21/68
D-06750	10	3/21/68	5/04/68
D-06751	10	5/04/68	6/16/68
D-06752	10	6/16/68	7/29/68
D-06753	10	7/29/68	9/11/68
D-06754	10	9/11/68	10/24/68
D-06755	10	10/24/68	12/06/68
D-06756	10	12/06/68	1/18/69
D-06757	10	1/18/69	3/03/69
D-06758	10	3/03/69	4/16/69
D-06759	4	4/16/69	5/02/69

* This data set was created from data set 67-051A-03C by PIFTing

XDC 930 tapes to IBM 7094.

TABLE 20

PHAEST LOGICAL RECORD SPECIFICATION

ITEM NUMBER	ITEM NAME	LOCATION WITHIN LOCATION RECORD		COMMENTS
		WORD	BITS	
1.	7094 PADDING	1	0-11	Zeros
2.	PSC	1	12-35	See Section 2.4
3.	7094 PADDING	2	0-11	Zeros
4.	PHA ACCUMULATOR 1	2	12-19	See Tables 9 & 10
5.	PHA ACCUMULATOR 2	2	20-27	
6.	PHA ACCUMULATOR 3	2	28-35	
7.	7094 PADDING	3	0-11	Zeros
8.	RANGE ID	3	12-14	See Section 2.
9.	ANGULAR SECTOR	3	15-17	
10.	FRAME NUMBER	3	18-19	Instead of 2, 6, 10 And 14 We Have Respectively 0, 1, 2, 3.
11.	DATA QUALITY FLAG	3	20	Value = 0, All Data Qualities Are Good 1, At Least One Data Quality Was Fair But None Were Lower Than Fair.
12.	ORBIT NUMBER	3	21-27	Least Significant Part Of Orbit Number (For Orbits 1 through 127)
13.	ORBIT NUMBER	3	28	Most Significant Bit (For Orbits 128 through 255)
14.	PHA ACCUMULATOR 2	3	29	The Most Significant Bit Of Item 3. (This Bit Was Added To Accommodate The 512 Channel D2 PHA Analyzer On IMP-5)
15.	END OF ORBIT FLAG	3	30-35	Value = 1, During Orbit 0, At End Of Orbit (The Remaining Logical Records In The Last Physical Record Are Filled With Zeros)

* IEM 7094, Binary, 36 bits per word
200 log/phys, 600 words/phys, 3 words per logical record

Formula Used to Determine Day and
Year for Explorer 34.

A data card that was read in by the program(s) contain the start day of the orbit (144) for the year 1967.

In the program when the PSC* is calculated the following check was used.

1. When the PSC* is 0 to 221 the calculation was:
PSC* + 144 which had the day count of 144
to 365 for the year 1967.
2. When the PSC* is 222 to 587 the calculation was:
PSC* + 144 - 365 which had the day count of 1
to 366 for the year 1968.
3. When the PSC* is 588 and greater the calculation was:
PSC* + 144 - 731 which had the day count of 1
and up to the final day on the input tapes for
the year 1968.

*PSC = PSEUDO SEQUENCE COUNT

SEQUENCE COUNT FORMULA

Use Sequence Count in data format to obtain data and time of measurement (start time of first orbit corresponds to sequence count 44, 651, L.E., Day 144 (May 24, 1967) at 14:26.1 UT). Each sequence was 20.45439 Sec. Long. experimenter says time span of data is 5/3/69.

Total number of intervals on sequence count minus intervals at launch on sequence count equals intervals since launch on sequence count.

Intervals since launch on sequence count times 20.45439 Sec/intervals equals sec. from launch.

Sec. from launch divided by NO. OF SEC. in a day equals days from launch.

EXAMPLE

2238356	Sequence Count
- 44651	Sequence Count at launch (base)
2193705	Sequence Interval since launch
2193705	Sequence interval since launch
x 20.45439	Sec. long per interval
44870897.61495	Sec From launch
44870897.61495	86400 sec. in day = 519.33909 Days since launch

