

DATA SET CATALOG \*106

ATS-2  
PARTICLE COUNT RATES

67-031A-05A      31 tapes

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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 This inventory information is now no longer maintained in the DSCs, but is now managed in the inventory part of the NSSDC information system.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 2

REDUCED ELCT + PROT CNT RATES, TAPES

67-031A-05A

THIS DATA SET HAS BEEN RESTORED. THERE WERE ORIGINALLY 31 7-TRACK, 800 BPI TAPES, WRITTEN IN BINARY. THERE ARE FIVE RESTORED TAPES. THE DR TAPES ARE 3480 CARTRIDGES AND THE DS TAPES ARE 9-TRACK, 6250 BPI. THE TAPES WERE CREATED ON AN IBM 360 COMPUTER. THE DR AND DS NUMBERS ALONG WITH THE CORRESPONDING D NUMBERS AND TIME SPANS ARE AS FOLLOWS:

DR#	DS#	DD#	FILES	TIME SPAN
DR03692	DS03692	D02696	1	04/07/67 - 04/09/67
		D04824	2	04/09/67 - 04/21/67
		D04825	3	04/21/67 - 04/28/67
		D04826	4	05/05/67 - 05/13/67
		D04827	5	05/13/67 - 05/20/67
		D04828	6	05/20/67 - 05/23/67
DR03767	DS03767	D04829	1	05/23/67 - 05/26/67
		D04830	2	05/29/67 - 06/01/67
		D04831	3	06/01/67 - 06/03/67
		D04832	4	06/03/67 - 06/14/67
		D04833	5	06/14/67 - 06/19/67
		D04834	6	06/19/67 - 06/23/67
DR03875	DS03875	D04835	1	06/23/67 - 06/24/67
		D04836	2	06/24/67 - 06/25/67
		D04837	3	06/25/67 - 06/29/67
		D04838	4	07/01/67 - 07/08/67
DR03876	DS03876	D04839	1	07/12/67 - 07/19/67
		D04840	2	07/22/67 - 07/24/67
		D04841	3	07/28/67 - 07/30/67
		D04842	4	08/04/67 - 08/07/67
		D04843	5	08/07/67 - 08/13/67
		D04844	6	08/13/67 - 08/28/67
		D04845	7	08/28/67 - 08/31/67
		D04846	8	09/01/67 - 09/05/67
DR03916	DS03916	D04847	1	09/05/67 - 09/12/67
		D04848	2	09/12/67 - 09/17/67
		D04849	3	09/17/67 - 09/17/67
		D04850	4	09/24/67 - 09/24/67
		D04851	5	10/01/67 - 10/07/67
		D04852	6	10/08/67 - 10/15/67
		D04853	7	10/15/67 - 10/23/67

## 67-031A-05A

This data set consists of 31, 800 BPI, 7-track, binary tapes made on CDC/3600.

<u>D#</u>	<u>C#</u>	<u>Start</u>	<u>Stop</u>
D-02696	C-01827	4/7/67	4/8/67
D-04824	C-02379	4/9/67	4/21/67
D-04825	C-02380	4/21/67	4/28/67
D-04826	C-02381	5/5/67	5/13/67
D-04827	C-02382	5/13/67	5/20/67
D-04828	C-02383	5/20/67	5/23/67
D-04829	C-02384	5/24/67	5/26/67
D-04830	C-02385	5/29/67	6/1/67
D-04831	C-02386	6/1/67	6/3/67
D-04832	C-02387	6/3/67	6/14/67
D-04833	C-02388	6/14/67	6/19/67
D-04834	C-02389	6/19/67	6/23/67
D-04835	C-02390	6/23/67	6/24/67
D-04836	C-02391	6/24/67	6/25/67
D-04837	C-02392	6/25/67	6/29/67
D-04838	C-02393	7/1/67	7/8/67
D-04839	C-02394	7/12/67	7/22/67
D-04840	C-02395	7/22/67	7/24/67

<u>D#</u>	<u>C#</u>	<u>Start</u>	<u>Stop</u>
D-04841	C-02396	7/28/67	7/30/67
D-04842	C-02397	8/4/67	8/7/67
D-04843	C-02398	8/7/67	8/13/67
D-04844	C-02399	8/13/67	8/28/67
D-04845	C-02400	8/28/67	8/31/67
D-04846	C-02401	9/1/67	
D-04847	C-02402	9/5/67	9/12/67
D-04848	C-02403	9/12/67	
D-04849	C-02404	9/17/67	
D-04850	C-02405	9/24/67	9/27/67
D-04851	C-02406	10/1/67	10/7/67
D-04852	C-02407	10/8/67	10/15/67
D-04853	C-02408	10/15/67	10/23/67

## DESCRIPTION OF OUTPUTS

### Binary Tape

The binary compression tape is a high or hyperdensity tape containing one file of data written in odd parity. The physical record on the binary reduction tapes are 270 CDS3000 words, that are composed of 10 logical data records. The data records are composed of 27 integer words. The following table describes the contents of each word in the record format.

FORMAT COMPRESSION TAPE

Reduction Tape	Identification	Units
1	Sequence counter	Sequence
2	Time	Milliseconds since 0000 UT, 1 January 1963
3	SD1	Count per 1000 seconds
4	SD2	
5	SD3	
6	SD4	
7	B	Micro gauss
8	L	Micro earth radii
9	Local time	Milliseconds from 0 to 24 hours
10	Radial distance	Micro earth radii
11	Colatitude	Micro radian from north pole
12	Longitude	Micro radian east of Greenwich
13	SOT1	Hundredths of a degree K
14	SOT2	
15	SOT3	
16	SMTOT	Hundredths of a volt — packed 3 per word PPS PPS PPS on even and odd sequences
17	EME V and I	PPS on odd sequences (saved from last even sequence) PPS on even sequences

FORMAT COMPRESSION TAPE (continued)

Reduction Tape	Identification	Units
16	RA of B vector	Micro radian
18	Codeclination	
20	RA of sun	
21	Codeclination	
22	Angle in X, Y plane from X to sun component	
23	Angle in Z, Y plane from Z to sun component	
24	Codeclination of sun from detector	
25	RA of sun from Z	Error flag convention - <i>flagged</i> Satellite number, orbit number, station number, and tape number
26	Error flags	
27	Labels	

All quantities are positive integers except unusable data which are flagged with a minus sign. If PP6, PP7, or PP8 are bad the appropriate 12 bit byte in word 16 is set to 4000B. All words contain a single value except the following:

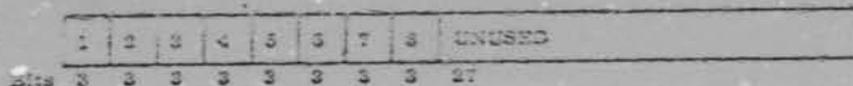
Word 16

	UNUSED	PP6	PP7	PP8
Bits	12	12	12	12

Word 26-27

	FSATNO	ORBIT	STATION	ANALOGNO
Bits	5	15	5	15

100-100-100



Data records are packed into the physical records in the order they are received from COROUT. At the end of a pass the unused portion of the last physical record would be filled with "-1's" before a file mark is written by the system. On restart the -1 fill and the end-of-file mark are eliminated. The -1 filled data records are used for the first records of the new pass.

#### BCD Tape

The BCD tape is written in high density so that it can be listed on the IBM1401. If the variable BCDTAPE1 contains a tape label the second BCD tape is assigned when the first one is filled. The following is a description of the values printed on the BCD listing:

##### Line 1

4//1967 - month and year of the time shown on data line 1  
 SATELLITE 67911 object number of spacecraft  
 ORBIT 102 orbit number  
 Compressed from reduction tapes containing time segment  
 Tapes M19 \_\_\_ M12 \_\_\_  
 BINTAPE 0113000 binary compression tape in use  
 RECORD 5502 logical record number corresponding to the last line  
 on the previous page

##### Line 2

111 DAY + F day number within the year  
 Data line 1-49 If the line is blank a data gap greater than 6000 milli-  
 seconds occurred between data records  
 DD day of reading within the month given in Line 1  
 HH hour within the day