

#285

ISIS 1

ELECTRON AND PROTON DATA

69-009A-04A

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 This inventory information is now no longer maintained in the DSCs, but is now managed in the inventory part of the NSSDC information system.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

ISIS 1

ELECTRON AND PROTON DATA

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SPMS-00578

THIS DATA SET HAS BEEN RESTORED. ORIGINALLY THERE WERE 35 9-TRACK, 800 BPI TAPES WRITTEN IN BINARY. THERE ARE FOUR RESTORED TAPES. THE ORIGINAL TAPES WERE CREATED ON AN IBM 360 COMPUTER. THE DR AND DS TAPES ARE 9-TRACK, 6250 BPI. THE DR AND DS NUMBERS ALONG WITH THE CORRESPONDING D NUMBERS AND THE TIME SPANS ARE AS FOLLOWS:

DR#	DS#	D#	FILES	TIME SPAN
DR02540	DS02540	D16936	1-52	02/02/69 - 02/06/69
		D16937	53-111	02/07/69 - 02/10/69
		D16938	112-172	02/15/69 - 03/12/69
		D16939	173-200	02/26/69 - 03/08/69
		D16940	201-264	04/06/69 - 04/08/69
		D16941	265-324	04/08/69 - 04/10/69
		D16942	325-384	04/14/69 - 04/16/69
		D16943	385-444	04/11/69 - 04/14/69
		D16944	445-502	04/16/69 - 04/18/69
		D16945	503-551	04/19/69 - 04/24/69
DR02541	DS02541	D18793	1-43	04/26/69 - 04/29/69
		D18794	44-101	05/09/69 - 05/13/69
		D18795	102-165	05/13/69 - 05/16/69
		D18796	166-223	05/17/69 - 05/19/69
		D18797	224-285	05/20/69 - 05/22/69
		D18798	286-350	05/23/69 - 05/26/69
		D18799	351-409	05/28/69 - 05/31/69
		D18800	410-466	06/01/69 - 06/04/69
		D18801	467-529	06/05/69 - 06/09/69
		D18802	530-591	06/10/69 - 06/14/69
DR02542	DS02542	D18803	1-59	06/15/69 - 06/19/69
		D18804	60-115	06/20/69 - 06/27/69
		D18805	116-175	06/29/69 - 07/06/69
		D18806	176-238	07/07/69 - 07/12/69
		D18807	239-292	07/12/69 - 07/15/69
		D18808	293-345	07/16/69 - 07/19/69
		D18809	346-398	07/26/69 - 08/03/69
		D18810	399-456	08/05/69 - 08/19/69
		D18811	457-518	08/21/69 - 09/11/69
		D18812	519-583	09/19/69 - 10/22/69

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DR#	DS#	D#	FILES	TIME SPAN
DR02543	DS02543	D28801	1-58	10/31/69 - 11/04/69
		D28802	59-121	11/05/69 - 11/13/69
		D28803	122-179	11/14/69 - 11/21/69
		D28804	180-208	11/22/69 - 12/10/69
		D28805	209-266	12/23/69 - 12/29/69

REQ. AGENT
VJP
CAW

RAND NO.
RC2276
RC3522

ACQ. AGENT
EGS

ISIS 1

ELECTRON AND PROTON DATA

69-009A-04A

This data set catalog consists of 35 ISIS 1 Electron and Proton data on Magnetic tape. The tapes are Multi-filed, nine track, 800 BPI, in IBM/360 Binary format.

<u>D#</u>	<u>C#</u>	<u>FILES</u>	<u>TIME SPAN</u>
D-16936	C-13144	52	2/02/69 - 2/06/69
D-16937	C-13145	59	2/07/69 - 2/10/69
D-16938	C-13146	61	2/15/69 - 3/12/69
D-16939	C-13147	28	2/26/69 - 3/08/69
D-16940	C-13148	60 ⁶⁴	4/06/69 - 4/08/69
D-16941	C-13149	60	4/08/69 - 4/10/69
D-16942	C-13150	60	4/14/69 - 4/16/69
D-16943	C-13151	60	4/11/69 - 4/14/69
D-16944	C-13152	58	4/16/69 - 4/18/69
D-16945/	C-13153✓	49	✓4/19/69 - 4/24/69
D-18793	C-15078	43✓	4/26/69 - 4/29/69
D-18794	C-15079	58	5/09/69 - 5/13/69
D-18795	C-15080	64	5/13/69 - 5/16/69
D-18796	C-15081	58	5/17/69 - 5/19/69
D-18797	C-15082	62	5/20/69 - 5/22/69
D-18798	C-15083	65	5/23/69 - 5/26/69
D-18799	C-15084	59	5/28/69 - 5/31/69
D-18800	C-15085	57	6/01/69 - 6/04/69
D-18801	C-15086	63	6/05/69 - 6/09/69
D-18802	C-15087	62✓	6/10/69 - 6/14/69

<u>D#</u>	<u>C#</u>	<u>FILES</u>	<u>TIME SPAN</u>
D-18803	C-15088	59	6/15/59 - 6/19/69
D-18804	C-15089	56	6/20/69 - 6/27/69
D-18805	C-15090	60	6/29/69 - 7/06/69
D-18806	C-15091	63	7/07/69 - 7/12/69
D-18807	C-15092	54	7/12/69 - 7/15/69
D-18808	C-15093	53	7/16/69 - 7/19/69
D-18809	C-15094	53	7/26/69 - 8/03/69
D-18810	C-15095	58	8/05/69 - 8/19/69
D-18811	C-15096	62	8/21/69 - 9/11/69
D-18812	C-15097	65	9/19/69 - 10/22/69
D-28801	C-18674	58	10/31/69 - 11/04/69
D-28802	C-18675	63	11/05/69 - 11/13/69
D-28803	C-18676	58	11/14/69 - 11/21/69
D-28804	C-18677	29	11/22/69 - 12/10/69
D-28805	C-18678	58	12/23/69 - 12/29/69



National Research Council
Canada

Conseil national de recherches
Canada

Division of Physics

Division de physique

File Référence

March 11, 1975

Dr. E.G. Stassinopoulos,
Fields and Particles Branch,
Code 601,
National Space Science Data Centre,
NASA Goddard Space Flight-Centre,
Greenbelt, Maryland 20770,
U.S.A.

Dear Dr. Stassinopoulos:

We have sent, under separate cover, twenty
ISIS-1 data tapes, labelled "EXP4011A" to "EXP4030A".
Lists of the contents of these tapes are enclosed.

A detailed list of the variables included
in each one minute record of each pass is attached.
If you have any further questions or problems about
the data, please do not hesitate to let me know.

With best wishes

Yours sincerely,

Margaret D. Wilson.

Encl.

Ottawa, Canada
K1A 0R6
Telex 053-4322

Rec'd 17. III. 75

ISIS-1 OUTPUT TAPE (NEW VERSION)

Each one minute record contains 11626 bytes and is written (unformatted) as follows:-

Section 1: Pass identification 8 words integer*4

WORD

1	Pass number
2	Year
3	Day
4	Hour
5	Minute
6	Second
7	Number of first frame in minute
8	Number of good magnetometer points in minute

Section 2: Once/minute housekeeping data 6 words real*4

WORD

1	Spin period (seconds)
2	Temperature at start of minute
3	Local solar time at start of minute
4	Local magnetic time at start of minute
5	Magnetic declination at start of pass
6	Angle between spin axis and field at start of minute

Section 3: Once/6-second orbit data 80 words real*4

WORDS

1-10	10 values of geographic latitude
11-20	10 values of geographic longitude
21-30	10 values of geographic altitude
31-40	10 values of geomagnetic latitude
41-50	10 values of geomagnetic longitude
51-60	10 values of invariant latitude
61-70	10 values of L
71-80	10 values of B

Section 4: 225 values/minute electron counter and pitch angle data 1350 words real*4

WORDS

1-225	225 values of counter G1 (>42 kev axial)
226-450	225 values of counter G2 (>23 kev axial)
451-675	225 values of counter G3 (>36 kev radial)
676-900	225 values of counter G6 (>20 kev radial)
901-1125	225 values of counter S3 (log energy > 10 kev)
1126-1350	225 values of pitch angle of G6 (degrees)

Section 5: 225 values/minute electron and proton counter
data 2925 words integer*2

WORDS

1-225	225 values of counter S50 (50 kev, alternate values)
226-450	225 values of counter S80 (80 kev, alternate values)
451-675	225 values of counter G4L (80 kev, alternate values)
676-900	225 values of counter G4H (110 kev, alternate values)
901-1125	225 values of counter G5L (>140 kev, radial)
1126-1350	225 values of counter G5H (>200 kev, radial)
1351-1575	225 values of counter D1 (protons > 0.15 mev)
1576-1800	225 values of counter D2 (protons $0.6 < E_p < 3.8$ mev)
1801-2025	225 values of counter D3 (protons $3.4 < E_p < 12$ mev)
2026-2250	225 values of counter D4H (protons $12.2 < E_p < 30$ mev)
2251-2475	225 values of counter D4L (protons $12.5 < E_p < 20$ mev)
2476-2700	225 values of counter DB2 (protons >45 mev)
2701-2925	225 values of counter DB1 (protons $45 < E_p < 55$ mev)

Division of Physics

File Reference
August 13, 1974

Dr. E.G. Stassinopoulos
Fields and Particles Branch
Code 601
National Space Science Data Centre
NASA. Goddard Space Flight Centre
Greenbelt, Maryland 20770
U.S.A.

Dear Dr. Stassinopoulos:

We are sending, under separate cover, the first ten ISIS-1 data tapes, labelled "EXP4001A" to "EXP4010A". A list of the contents of these tapes is enclosed.

The tapes are 9-track, 800 BPI and were written unformatted, with "RECFM=V" and maximum block size 11700 characters. The first 8 characters of each record specify the block and record lengths. Each record contains one minute's data and, as you requested, these consist of:

- a) Pass identification 8 words (Integer ~~x-4~~)
- b) Once/minute housekeeping data 6 words (Real ~~x-4~~)
- c) Once/6-second orbit data 80 words (Real ~~x-4~~)
- d) 225 values/minute counter and pitch angle data
1350 words (Real ~~x-4~~)
- e) 225 values/minute counter data 2925 words
(integer ~~x-2~~)

An end-of-file mark follows the last record of each pass.

In any record where data are missing or incomplete (e.g. at the end of a pass) the orbit data values are set to zero, the "real ~~x-4~~" counter data are set to $-1.0E-14$ and the "integer ~~x-2~~" counter data to -32768 . Errors in the data in section b (the local magnetic time at the start of the minute and the magnetic declination at the start of the pass) and in section c (the L and B values) which occurred in early passes and were noted on the original descriptions, have been corrected.

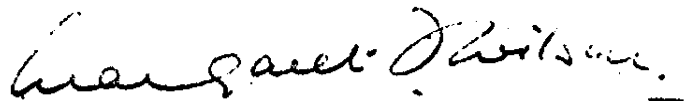
I trust that these tapes will meet with your requirements. Should there be any problems, please do not hesitate to let me know. We are in the process of preparing the remainder of the ISIS-1 data for you but will await your comments on this first batch of tapes before sending any more.

In answer to your queries about Alouette II data, the direction of the interplanetary field was obtained from a report entitled "Interplanetary Sector Structure in the rising portion of the sunspot cycle" by John W. Wilcox and David S. Colburn, published in February 1969 by the Space Sciences Laboratory, University of California, Berkeley, report number Series 9, Issue 68. These field directions were included in the boundary tape data because they were required for one particular study which we did some time ago. The time resolution of the counting rates for Alouette II was one second.

I hope you had a pleasant holiday.

With best wishes,

Yours sincerely,



Margaret D. Wilson

D-16936

CONTENTS OF ISIS-1 REDUCED TAPE NO. EXP4001A

PAGE 1
NATIONAL RESEARCH COUNCIL OF CANADA
TAPE COPIED ON JUN. 12 1974

FILE	PASS	YEAR	DAY	START TIME		STOP TIME		INVARIANT LATITUDE		NO. OF RECORDS
				HH	MM	SS	HH	MM	SS	
1	31	69	33	0	43	5	0	58	47	19
2	31	69	33	0	57	12	1	6	0	10
3	32	69	33	3	0	29	3	13	53	15
4	32	69	33	3	13	11	3	20	11	8
5	35	69	33	9	33	11	9	42	11	10
6	37	69	33	13	25	22	13	37	52	14
7	37	69	33	14	43	25	14	55	1	13
8	39	69	33	17	46	32	17	56	32	11
9	41	69	33	23	20	12	23	39	12	20
10	54	69	35	2	5	15	2	23	56	20
11	57	69	35	8	20	46	8	40	16	20
12	58	69	35	10	31	12	10	47	42	18
13	59	69	35	12	32	34	12	54	34	23
14	60	69	35	14	37	49	14	53	49	17
15	60	69	35	16	1	14	16	9	44	10
16	61	69	35	16	47	16	17	2	10	16
17	62	69	35	18	58	35	19	26	11	29
18	43	69	34	2	33	15	2	52	15	20
19	44	69	34	4	42	22	4	55	22	14
20	46	69	34	8	47	48	9	5	48	19
21	47	69	34	11	45	28	11	50	28	6
22	49	69	34	15	4	44	15	22	44	19
23	50	69	34	17	14	52	17	29	52	16
24	51	69	34	19	36	13	19	52	32	18
25	51	69	34	21	12	25	21	39	25	28
26	52	69	34	21	37	9	21	52	9	16
27	52	69	34	21	52	27	21	54	27	3
28	53	69	34	23	52	5	0	4	5	13
29	65	69	36	1	38	10	1	49	10	12
30	65	69	36	1	48	50	1	57	50	10
31	66	69	36	3	59	12	4	5	12	7
32	67	69	36	5	59	24	6	8	24	10
33	67	69	36	6	6	31	6	13	19	8
34	71	69	36	14	11	2	14	27	2	17
35	73	69	36	18	30	53	18	48	53	19
36	73	69	36	18	48	14	18	59	14	12
37	74	69	36	21	59	15	22	16	15	18
38	66	69	36	4	4	1	4	10	1	7
39	67	69	36	6	6	31	6	15	37	10
40	76	69	37	1	10	23	1	26	23	17
41	76	69	37	2	30	11	2	56	11	27
42	77	69	37	3	34	12	4	6	12	24
43	78	69	37	5	29	17	5	36	17	8
44	79	69	37	7	41	5	7	49	5	9
45	79	69	37	8	43	5	9	37	5	48
46	81	69	37	11	33	8	11	49	8	17
47	81	69	37	12	25	23	12	38	23	14
48	82	69	37	15	26	6	16	8	6	43
49	84	69	37	18	7	14	18	22	14	16
50	84	69	37	19	49	14	20	39	14	51

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FILE	PASS	YEAR	DAY	START TIME			STOP TIME			INVARIANT LATITUDE		NO. OF RECORDS
				HH	MM	SS	HH	MM	SS	START	STOP	
51	85	69	37	21	58	20	22	14	20	39.4	36.3	17
52	86	69	37	23	38	4	23	54	4	82.7	57.7	17

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