TABLE OF CONTENTS

1. INTRODUCTION
2. CHANGE LOG
3. LINKS TO RELEVANT INFORMATION IN THE ONLINE NSSDC INFORMATION SYSTEM
    a. URL to S/C “Remarks” field
    b. URL to S/C “Materials” field
    c. URL to Experiment “Remarks” field
    d. URL to Experiment “Materials” field
    e. URL to Data Set “Remarks” field
    f. URL to Data Set “Materials” field
    g. Items e and f for additional data sets from this experiment, if needed
    h. Items c thru g for additional experiments from this spacecraft, if needed
    i. Items a thru h for additional spacecraft, if needed
4. CATALOG MATERIALS.

1. Introduction:

The documentation for this data set was originally on paper kept in NSSDC's Data Set Catalogs (DSCs). The offline tape datasets have now been migrated from the original magnetic tape to magnetic disk (starting in mid-2004). Accordingly, statements in the format descriptions that address such tape relevant factors as blocking and but density are no longer applicable. The paper documentation in the Data Set Catalogs have been scanned and made into digital images of the pages, the collected into a single PDF file for each Data Set Catalog.

The inventory information in these DSCs is current as of July 1, 2004. But this inventory information is now no longer maintained in the DSCs, but is now managed in the inventory part of the NSSDC information system, and the user should go to that interface (JIN) if further information existing in the DSCs is now not needed for locating data files, but we did not go to the trouble of removing that inventory information.

2. CHANGE LOG

Version	Date	Person	Page	Description of Change
01				

3. LINKS TO RELEVANT INFORMATION IN THE ONLINE NSSDC INFORMATION SYSTEM:
[NOTE: ANY OF THE INFORMATION FIELDS MIGHT BE BLANK.]
[THE "MATERIALS FOR DISTRIBUTION" FIELD IS HERE CALLED JUST "MATERIALS"]

"Remarks" for spacecraft SCNAME1":
http://nssdc.gsfc.nasa.gov/database/MasterCatalog?sc=1977-102A--remark--

"Materials" for spacecraft SCNAME1":
http://nssdc.gsfc.nasa.gov/database/MasterCatalog?sc=1977-102A--mat--

"Remarks" for SCNAME1 experiment EXNAME1:
http://nssdc.gsfc.nasa.gov/database/MasterCatalog?sc=1977-102A&ex=09--remark--

"Materials" for SCNAME experiment EXNAME1:
http://nssdc.gsfc.nasa.gov/database/MasterCatalog?sc=1977-102&ex=09--mat--

"Remarks" for EXNAME1 data set DSNAME1:
http://nssdc.gsfc.nasa.gov/database/MasterCatalog?ds=SPHE-00677--remark--

"Materials" for EXNAME1 data set DSNAME1:
http://nssdc.gsfc.nasa.gov/database/MasterCatalog?ds=SPHE-00677--mat--

"Remarks" for EXNAME1 data set DSNAME2:
http://nssdc.gsfc.nasa,gov/database/MasterCatalog?ds=SPHE-00677--remark--

"Materials" for EXNAME1 data set DSNAME2:
http://nssdc.gsfc.nasa.gov/database/MasterCatalog?ds=SPHE-00677--mat--

"Remarks" for EXNAME1 data set DSNAME3:

"Materials" for EXNAME1 data set DSNAME3:

"Remarks" for SCNAME1 experiment EXNAME2:

"Materials" for SCNAME1 experiment EXNAME2:

"Remarks" for EXNAME2 data set DSNAME1:
"Materials" for EXNAME2 data set DSNAME1:

"Remarks" for EXNAME2 data set DSNAME2:
"Materials" for EXNAME2 data set DSNAME2:

“Remarks” for spacecraft SCNAME2”:
http://nssdc.gsfc.nasa.gov/database/MaterCatalog?sc=1978-079A--??--

“Materials” for spacecraft SCNAME2:
http://nssdc.gsfc.nasa.gov/database/MaterCatalog?sc=1978-079A--??--

“Remarks” for SCNAME2 experiment EXNAME1:
http://nssdc.gsfc.nasa.gov/database/MaterCatalog?sc=1978-079A&ex=03--??--

“Materials” for SCNAME2 experiment EXNAME1”
http://nssdc.gsfc.nasa.gov/database/MasterCatalog?sc=1978-079A&ex=03--??--

“Remarks” for EXNAME1 data set DSNAME1:
http://nssdc.gsfc.nasa.gov/database/MasterCatalog?ds=SPHE--00011--remark--

“Materials” for EXNAME1 data set DSNAME1:
http://nssdc.gsfc.nasa.gov/database/MasterCatalog?ds=SPHE--00011--remark--

“Remarks” for EXNAME1 data set DSNAME2:
http://nssdc.gsfc.nasa.gov/database/MasterCatalog?ds=SPHE-00014--remark--

“Materials” for EXNAME1 data set DSNAME2:
http://nssdc.gsfc.nasa.gov/database/MasterCatalog?ds=SPHE-00014--remark--

“Remarks” for EXNAME1 data set DSNAME3:

“Materials” for EXNAME1 data set DSNAME3:

“Remarks” for SCNAME2 experiment EXNAME2:

“Materials” for SCNAME2 experiment EXNAME2:

“Remarks” for EXNAME2 data set DSNAME1:

“Materials” for EXNAME2 data set DSNAME1:

“Remarks” for EXNAME2 data set DSNAME2:

“Materials” for EXNAME2 data set DSNAME2:

“Remarks” for data set DSNAME3:

“Materials” for EXNAME data set DSNAME3:

“Remarks” for SCNAME2 experiment EXNAME3:

“Materials” for SCNAME2 experiment EXNAME3:

“Remarks” for EXNAME3 data set DSNAME1:

“Materials” for EXNAME3 data set DSNAME1:

“Remarks” for EXNAME3 data set DSNAME2:

“Materials” for EXNAME3 data set DSNAME2:

=-=-= -
=-=-= -

ALTERNATE OPTION:

For SCNAME2:

“Remarks” for EXNAME1 data set DSNAME2:

http://nssdc.gsfc.nasa.gov/database/MasterCatalog?ds=SPHE-00014--remark--

“Materials” for EXNAME1 data set DSNAME2:

http://nssdc.gsfc.nasa.gov/database/MasterCatalog?ds=SPHE-00014--mat--

can be shown as

“Remarks” for EXNAME1 data set DSNAME2:

http://nssdc.gsfc.nasa.gov/database/MasterCatalog?ds=78-079A-03C--remark--

“Materials” for EXNAME1 data set DSNAME2:

http://nssdc.gsfc.nasa.gov/database/MasterCatalog?ds=78-079A-03C--mat--

=-=-= -
=-=-= -

4. CATALOG MATERIALS:

DATA SET CATALOG # 6

Explorer 12 Charged Particle

61-020A-03A 3 tapes

EXPLORER 12

PARTICLE COUNT RATE & EPHEMERIS

L-ORDERED ELECTRON COUNT RATE

61-020A-03A

61-020A-03C

THIS DATA SET HAS BEEN RESTORED. ORIGINALLY IT CONTAINED FOUR 7-TRACK, 556 BPI TAPES WRITTEN IN BCD. THERE IS ONE RESTORED TAPE WRITTEN IN EBCDIC. FILES 1-3 ARE DATA SET 61-020A-03A AND FILE 4 IS DATA SET 61-020A-03C. THE DR AND DS TAPES ARE 9-TRACK, 6250 BPI. THE ORIGINAL TAPES WERE CREATED ON A 7094 COMPUTER. THE DR AND DS TAPES ALONG WITH THE CORRESPONDING D NUMBERS AND THE TIME SPANS ARE AS FOLLOWS:

DR#	DS#	D#	FILES	TIME SPAN
DR01738	DS01738	D00042	1	08/01/61 - 10/01/61
		D00043	2	10/01/61 - 11/22/61
		D00044	3	11/22/61 - 12/06/61
		D05520	4	08/16/61 - 12/06/61

Data Set Catalog
EXPLORER 12
Charged Particle Experiment

This data set catalog for the data set is composed of the following:

1. Description of the data set.
2. Listing as described for each of 3 tapes
3. Sample BCD list of one tape
4. List of program used to produce 2.
5. DUN

The tapes in this data set are 556 BPI, BCD tapes with 342 characters per logical record, 5 logical records per block.

The tapes are

TAPE	PERIOD	SAMPLES
D-00042	8/16/61 - 10/1/61	36745
D-00043	10/1/61 - 11/22/61	36835
D-00044	11/22/61 - 12/6/61	5625

DATA USERS' NOTE

NSSDC 67-16

EXPLORER 12 (1961 UPSILON 1)

CHARGED PARTICLE EXPERIMENT

FEBRUARY 1967

NATIONAL SPACE SCIENCE DATA CENTER

NATIONAL AERONAUTICS AND SPACE ADMINISTRATION • GODDARD SPACE FLIGHT CENTER, GREENBELT, MD.

DATA USERS' NOTE
NSSDC 67-16

EXPLORER 12 (1961 UPSILON 1)
CHARGED PARTICLE EXPERIMENT

EXPERIMENTERS
B. J. O'Brien
L. A. Frank

FEBRUARY 1967

FOREWORD

This Data Users' Note is specifically designed to help potential data users decide if they can make use of the data obtained in the Explorer 12 (1961 Upsilon 1) charged particle experiment. Once a data user decides that he requires the data, it will serve as the unifying element - the key - in the actual use of the data available at the National Space Science Data Center (NSSDC). To achieve these goals, the Note briefly describes the experiment, including the instrumentation and measurements, the telemetry, and the operational experience. All available details are then provided on the actual reduction techniques and format of recorded data. For those desiring more details, a list of experimenters is provided to facilitate direct contact. As a further aid, detailed references (and bibliography) are also included. When available, NASA accession numbers* are given. The primary purpose of these references is to identify the sources containing complete information concerning the subject under discussion. Most of these references are physically available at NSSDC - those that are not are readily obtainable.

Inquiries concerning the availability of data should be directed to:

National Space Science Data Center
Goddard Space Flight Center
Greenbelt, Maryland 20771
Area Code 301 982-6695

*For example, N64-2243 is an accession number for an article reported in the *Scientific and Technical Aerospace Reports* (STAR), and A63-5921 refers to an entry in the *International Aerospace Abstracts* (IAA).

CONTENTS

	Page
BACKGROUND	1
EXPERIMENTERS	1
EXPERIMENT	
Instrumentation and Measurements	2
Telemetry	4
Operational Experience	4
DATA	
Reduction Techniques	4
Timespan of Data	5
Format of Available Data	6
REFERENCES	9
BIBLIOGRAPHY	11

LIST OF FIGURES

Figure		
1	Explorer 12 Experiments	1
2	Geometric Factors and Particle Energy Thresholds for the University of Iowa Detectors on Explorer 12	3
3	Longitudinal Difference Between Apogee and Earth-Sun Line	5

EXPLORER 12 (1961 UPSILON 1)
CHARGED PARTICLE EXPERIMENT

BACKGROUND

Investigators at the University of Iowa designed the charged particle experiment in Explorer 12 to measure the characteristics of particle radiation over the entire spacecraft orbit. The instrumentation for this experiment measured trapped radiation, solar particle radiation, and cosmic rays.

This experiment was one of six (see Figure 1) carried aboard Explorer 12 (1961 Upsilon 1). The satellite was launched at 0321 UT on August 16, 1961, and achieved an apogee of 77 300 km and a perigee of 300 km. The orbital period of Explorer 12 was 26.5 hr and the inclination was 33.0 deg. The sun angle with the spin axis, X, varied from 105 deg after launch to a maximum of 135 deg in mid-October. The spin rate increased from 27.8 to 30.5 rpm in the same period.[1,2]

FIGURE 1
EXPLORER 12 EXPERIMENTS

No.	Experiment	Investigator(s)	Affiliation
01	Proton Analyzer	M. Bader	Ames Research Center
02	Magnetometer	L. Cahill	University of New Hampshire
03	Charged Particle	B. J. O'Brien L. A. Frank	Rice University University of Iowa
04	Cosmic-Ray	F. B. McDonald	GSFC*
05	Ion-Electron Detector	L. R. Davis	GSFC*
06	Solar Cell	G. W. Longanecker	GSFC*

EXPERIMENTERS

B. J. O'Brien - Rice University**
L. A. Frank - University of Iowa ***

*Goddard Space Flight Center
**Address: Dept. of Space Science, Rice University, Houston, Texas
***Address: Dept. of Physics and Astronomy, University of Iowa, Iowa City, Iowa

EXPERIMENT

Instrumentation and Measurements

The characteristics of the University of Iowa detectors on board Explorer 12 are listed in Figure 2. These instruments included a shielded Anton type 302 Geiger-Mueller (GM) tube, a magnetic spectrometer utilizing three thin-windowed Anton type 213 GM tubes, and three cadmium sulfide crystals for measurements of the total energy flux of protons and electrons.[3,4]

The Anton type 302 GM tube was similar to the detectors flown by Iowa experimenters in Explorer 4, Pioneers 3 and 4, and Explorer 7, and by the Minnesota group in Pioneer 5 and Explorer 6. Of particular concern in the 302 GM detector is a laboratory calibration of the relative proportions of penetrating and nonpenetrating electrons. The 302 GM tube was located outside the main body of the satellite and was essentially an omnidirectional intensity detector. The detector was sensitive directly to electrons and protons and indirectly to bremsstrahlung from electrons of $E \gtrsim 30$ kev.[1,6]

Three crystals of cadmium sulfide were selected to provide, in part, an extended range of particle energies and absorbed energy flux over which the electrical conductivity was approximately proportional to the absorbed energy flux and independent of particle energy and type. The current resulting from the crystal conductivity was monitored by a neon bulb relaxation oscillator whose output frequency was a linear function of the crystal's conduction current.[2,7]

The cadmium sulfide total energy detector (CdSTE) consisted of a bare photoconductive single crystal of CdS mounted in a cylindrical lead shield situated behind a series of beam-collimating and light-baffling apertures. The unshielded aperture of 10^{-2} ster enabled the CdSTE to detect energy fluxes exceeding 1 erg $(cm^2 sec\ ster)^{-1}$. The lead shielding covered 12 ster of the detector and Mg covered a total of .66 ster.[2, 4, 7]

The cadmium sulfide detector with a broom magnet (CdSB) was identical to CdSTE except that a magnetic "broom" within the collimator prevented electrons of energy $E \lesssim 250$ kev and protons of $E \lesssim 400$ kev from striking the crystal.[2,7]

The third CdS crystal (CdSO) served as an optical monitor and was identical to CdSTE except for a 2-mm-thick transparent quartz window. The CdSO monitored the background response of the cadmium sulfide crystals to light and X rays. All three CdS crystals were sensitive to light from the Sun, Earth, and Moon. Whenever the output of CdSO exceeded its dark current, the data from CdSTE and CdSB were rejected.[2,4,7]

FIGURE 2

GEOMETRIC FACTORS AND PARTICLE ENERGY THRESHOLDS FOR THE UNIVERSITY OF IOWA DETECTORS ON EXPLORER 12

Detector	Symbol	Omnidirectional Measurements			Unidirectional Measurements***		
		Shielding	Penetrating Particles	Geometric Factor (cm^2)	Shielding	Penetrating Particles Detected	Geometric Factor (cm^2-ster)
302 GM Tube	302	265 $mg(cm)^{-2}$ Mg 400 $mg(cm)^{-2}$ Stainless Steel	Protons > 23 Mev Electrons ≥ 1.6 Mev	0.6*			
Electron Magnetic Spectrometer	SPL	3.5 $g(cm)^{-2}$ Pb	Protons > 70 Mev	0.2	1.2 $mg(cm)^{-2}$ Mica	Electrons 40 kev ≤ E_e ≤ 50 kev	10^{-5}
	SPH	1 $g(cm)^{-2}$ Mg	Electrons ≳ 20 Mev	0.2	1.2 $mg(cm)^{-2}$ Mica	Electrons 80 kev ≤ E_e ≤ 100 kev	10^{-5}
	SPB	860 $mg(cm)^{-2}$ Stainless Steel		0.2			
CdS Total Energy Flux Detector	CDSTE**	~1 $g(cm)^{-2}$ Mg	Protons ≳25 Mev Electrons ≳3 Mev	(0.66 ster)		Electrons 200 ev ≲ E_e ≲ 500 kev Protons 1 kev ≲ E_p ≲ 10 Mev (LIGHT)	3×10^{-4}
CdS Proton Energy Flux Detector	CDSB**	~2.6 $g(cm)^{-2}$ Pb	Protons ≳50 Mev Electrons ≳6 Mev	(12 ster)	(MAGNET)	Protons 1 kev ≲ E_p ≲ 10 Mev Electrons E_e ≳ 250 kev (LIGHT)	3×10^{-4}
CdS Light Monitor	CDSO**				550 $mg(cm)^{-2}$ Quartz	(LIGHT)	3×10^{-4}

*See reference 5.
**See reference 2.
***All unidirectional detectors were mounted so that the axes of their fields-of-view were perpendicular to the satellite spin axis.

The magnetic spectrometer was enclosed in a lead cylinder. A low-energy passband (SpL) detected electron energies between 40 and 50 kev which were magnetically focused into a mica window. For high-energy electron detection, a second GM tube (SpH) measured energy between 80 and 100 kev. The counting rates of these detectors were corrected for background penetrating radiation by deducting the count rate of an identical tube (SpB) with the same omnidirectional shielding but with no aperture.[2,7,8]

Telemetry

The telemetry format of Explorer 12 was set up to supply a new readout of counts once every 79 sec for each Iowa detector, although the actual time of monitoring was only about 30 sec. The output, in digital form, was accumulated over a 10.24-sec interval (approximately 5 rotations of the satellite). Each new readout is defined as a data point. Where continuous data permitted, a three-data-point average of the count rate was taken and was considered to cover a time interval of approximately 4 min.[2,3,7]

Operational Experience

Explorer 12 transmitted data from the charged particle experiment from the August 16, 1961, launch date to December 6 of the same year. Data were recorded throughout the active lifetime of the satellite. All instruments, with the exception of the SpB detector, functioned until the end of transmission on December 6. The SpB detector failed to transmit data after September 20, 1961. Figure 3 illustrates the longitudinal differences which occurred during the active lifetime of Explorer 12 in relation to the Earth-Sun line and the equatorial plane of the earth.[2,4]

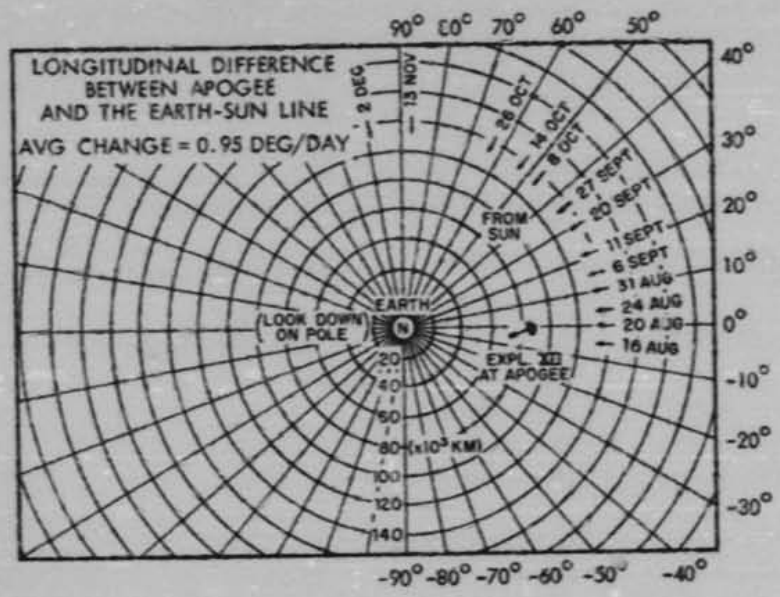
DATA

Reduction Techniques

The SpL, SpH, and SpB counters normally responded only to penetrating cosmic-ray particles. The counting rates of the three detectors at apogee were within 5% and were equal to ~ 0.4 cps. It was assumed that the three counters had almost the same geometric factors for penetrating particles. Inside the radiation zones, the actual SpB rates were subtracted from the raw SpL and SpH rates to allow for penetration.[2]

Data from the charged particle detectors were received in digitized form on magnetic tape at the Goddard Space Flight Center and were processed by University of Iowa investigators on an IBM 7070. The computer program found frame

FIGURE 3
LONGITUDINAL DIFFERENCE BETWEEN
APOGEE AND EARTH-SUN LINE



synchronization by searching for the Iowa sync words. The program also rejected noisy data by requiring perfect redundancy between redundantly telemetered detector count rates.[2]

A second program, designed to operate on the output of the first, provided for automatic plotting and more detailed data analysis. This second program: (1) computed the three-point average for count rates; (2) corrected detector count rates for dead time, scaling factors, and background; (3) computed magnetic coordinates for each data point; (4) provided data from each detector on a separate output for automatic graphing; and (5) merged and sorted data from all stations to provide a chronologically ordered output. Whereas some time and space resolutions were lost in the averaging process, the highly variable areas that were suspect were hand-plotted with every data point.[2,3]

The data were punched on IBM cards and separated into successive inbound and outbound passes. Count-rate data from each pass were plotted as a function of geocentric position.[2]

Timespan of Data

The timespan of the data available at NSSDC is from 1812 UT on August 16 to 1029 UT on December 6, 1961.[2]

Format of Available Data

The following computer format, which is a guide to the magnetic tapes stored at NSSDC, was supplied by L. A. Frank of the University of Iowa.[9]

EXPLORER 12 (UPSILON I) DATA FORMAT

Note: The data is packed at 556 bpi, in BCD mode, 5 records per block, with a logical record length of 342 characters.

Format: The convention used is that the first character is character number 1.

Record Positions	Description of Contents	
1,2*	Month	
3,4*	Day	
5	Year	
6,7*	Hour	
8,9*	Minute	
10-13	SUI Reel Number	
14-19*	Radial Distance	
20-24*	Geomagnetic Latitude (decimal point in 23)	
25-30*	L - McIlwain's parameter (decimal point in 27)	
31-35*	B - Magnitude of the earth's magnetic field based on the Jensen and Cain coefficients[3]	
36-41	Log (A) + 1	(A) = counting rate of the CdSO detector
42-47	Log (B) + 1	(B) = counting rate of 302 GM tube
48-53	Log (C) + 1	(C) = counting rate of the SpB detector's high-energy passband
54-59	Log (D) + 1	(D) = counting rate of SpL detector
60-65	Log (E) + 1	(E) = counting rate of the CdSTE detector
66-71	Log (F) + 1	(F) = counting rate of the CdSB detector
72-77	Log (G) + 1	(G) = counting rate of the SpH detector
78-83	Log (H) + 1	(H) = counting rate of SpB detector's low-energy passband
84	ID (see positions 121-264)	
85-90	X	
91-96	Y	
97-99	θ	
100-107*	Longitude (decimal point in 104)	

*These items have leading zeros suppressed.

Record Positions	Description of Contents
108-114*	Latitude (decimal point in 111)
115-120	Zero
121-156	First 6 words of S-3 data**
	ID = 1 (detectors A and E)
157-192	First 6 words of S-3 data**
	ID = 2 (detectors B and F)
193-228	First 6 words of S-3 data**
	ID = 3 (detectors C and G)
229-264	First 6 words of S-3 data**
	ID = 4 (detectors D and H)
265-267	Zeros
268-270	Daycount
271-276	100 (hour count)
277-282	Orbit Numbers
283-288	PHSUN - Sun angle (decimal point in 287)
289-294	RASUN - Right ascension of sun (decimal in 293)
295-300	DECSUN - Declination of sun (decimal in 299)
301-306	RASAT - Right ascension of ~~sun~~ satellite (decimal in 305)
307-312	DECSAT - Declination of satellite (decimal in 311)
313-318	THETSE - Solar ecliptic latitude (decimal in 317)
319-324	PHISE - Solar ecliptic longitude (decimal in 323)
325-330	THETSM - Solar magnetic latitude (decimal in 329)
331-336	PHISM - Solar magnetic longitude (decimal in 335)
337-342	SESA - Sun, Earth, satellite angle (decimal in 341)

The first six words of S-3 data are:

1-6	SUI tape number
7-9	Analog tape number
10-11	Station number
12	Year
13-14	Month
15-16	Day
17-18	Hour
19-20	Minute
21-22	Second
23	Q - Data quality flag
24	N1 - Noise for data readout (detectors A-D)

*These items have leading zeros suppressed.
**See breakdown that follows at the end of this listing.

25	N2 - Noise for detector redundant readout (detectors A-D)
26-27	RED - Redundant bit
28-29	C - Confidence level
30	ID
31	Blank
32	N3 - Noise for detector readout (detectors E-H)
33	N4 - Noise for detector redundant readout (detectors E-H)
34-36	Blank

The above data are also available in graphic form in the University of Iowa publication NsG-233-62, by Frank et al.[3]

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3. Frank, L. A., R. C. Bohlin, and R. J. DeCoster, "Graphic Summary of the Responses of Iowa Charged Particle Detectors on Explorer 12," University of Iowa, Apr. 1966. NsG-233-62.

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5. Frank, L. A., J. A. Van Allen, and H. K. Hills, "A Study of Charged Particles in the Earth's Outer Radiation Zone with Explorer 14," J. Geophys. Res., 69, 2171-2191, Jun. 1, 1964.

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Frank, L. A., J. A. Van Allen, and H. K. Hills, "A Study of Charged Particles in the Earth's Outer Radiation Zone with Explorer 14," J. Geophys. Res., 69, 2171-2191, Jun. 1, 1964.

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DD-42

FILE 0001 REC 0001 CH 1710

0001	0 0 1 6 1 0	3 5 3 0 0 1	2 0 1 0 5 4	2 0 2 3 3 6
0049	0 1 7 3 2 0	0 2 0 3 3 0	0 2 1 1 3 0	0 3 0 1 3 0
0097	0 7 3 0 0 1	5 3 2 1 4 0	2 5 3 3 0 6	0 0 0 0 0 0
0145	0 0 0 1 1 1	0 0 0 0 0 0	0 0 0 0 1 2	0 0 1 1 1 1
0193	0 0 0 0 1 2	0 0 1 1 1 1	0 0 1 6 0 3	5 3 2 0 1 0
0241	0 0 1 6 0 3	5 3 4 0 1 0	0 0 0 1 1 4	0 0 0 0 0 0
0289	0 1 4 4 3 1	0 0 1 3 3 1	0 0 3 1 3 2	0 0 2 5 3 3
0337	0 1 0 1 3 1	0 0 1 6 1 0	3 5 5 0 0 1	2 0 1 1 1 1
0385	0 3 0 0 0 0	0 1 3 1 7 0	0 2 0 6 0 0	0 2 1 7 1 0
0433	0 0 1 1 3 1	0 7 7 0 0 1	0 3 1 1 7 0	2 6 3 7 0 3
0481	5 4 0 7 1 2	1 1 0 1 1 1	0 0 0 0 0 0	0 0 0 0 1 2
0529	0 0 0 0 0 0	0 0 0 0 1 2	0 0 1 1 1 1	0 0 1 6 0 3
0577	0 0 1 1 1 1	0 0 1 6 0 3	5 5 0 6 1 0	0 0 0 1 1 4
0625	0 1 4 2 3 6	0 1 4 4 3 1	0 0 1 3 3 1	0 0 4 3 3 5
0673	0 2 5 1 3 1	0 1 0 6 3 3	0 0 1 6 1 0	3 5 6 0 0 1
0721	0 3 0 7 3 0	0 0 0 0 0 0	0 1 2 3 0 0	0 1 1 1 5 0
0769	0 1 7 1 7 0	0 0 0 7 0 0	0 7 1 0 0 2	0 3 7 6 3 0
0817	0 0 1 6 0 3	5 5 2 5 1 0	0 0 0 1 1 1	0 0 0 0 0 0
0865	1 1 0 1 1 2	0 0 0 0 0 0	0 0 0 0 1 2	0 0 1 1 1 1
0913	0 0 0 0 1 2	0 0 1 1 1 1	0 0 1 6 0 3	5 6 2 3 1 0
0961	0 0 0 0 0 1	0 1 4 2 3 6	0 1 4 4 3 1	0 0 1 3 3 1
1009	0 0 2 6 3 0	0 2 5 3 3 6	0 1 0 4 3 6	0 0 1 6 1 0
1057	0 5 1 1 1 0	0 3 0 4 2 0	0 0 0 0 0 0	0 0 6 0 2 0
1105	0 0 1 0 3 1	0 1 0 3 0 1	0 0 0 4 3 1	0 0 1 0 0 2
1153	0 0 1 1 1 1	0 0 1 6 0 3	5 6 4 3 1 0	0 0 0 1 1 1
1201	5 7 0 2 1 1	0 1 0 1 1 2	0 0 0 0 0 0	0 0 0 0 1 2
1249	0 0 0 0 0 0	0 0 0 0 1 2	0 0 1 1 1 1	0 0 1 6 0 3
1297	0 0 0 3 1 4	0 0 0 0 0 1	0 1 4 2 3 6	0 1 4 4 3 1
1345	0 2 5 1 3 0	0 0 2 7 3 0	0 2 5 5 3 3	0 1 0 3 3 0
1393	0 2 3 7 5 4	0 5 2 6 5 0	0 3 0 5 7 0	0 3 3 4 3 0
1441	0 2 1 4 6 0	0 0 1 5 4 1	0 1 1 0 0 3	0 0 7 7 6 1
1489	0 0 0 0 1 2	0 0 1 1 1 1	0 0 1 6 0 3	5 0 0 1 1 0
1537	0 0 1 6 0 3	5 0 2 0 1 0	0 0 0 1 1 2	0 0 0 0 0 0
1585	2 0 0 1 1 3	0 0 0 0 0 0	0 0 0 0 1 2	0 0 1 1 1 1
1633	0 0 0 2 2 0	0 0 0 3 1 0	0 0 0 0 0 1	0 1 4 2 3 6
1681	0 0 4 5 3 7	0 2 5 5 3 5	0 0 2 0 3 0	0 2 5 0 3 5

FILE 0001 REC 0002 CH 1710

0001	0 0 1 6 1 0	4 0 0 0 0 1	2 0 1 2 5 6	1 0 3 0 3 0
0049	0 1 2 3 0 0	0 0 0 0 0 0	0 1 2 7 0 0	0 1 1 3 4 0
0097	0 0 7 0 0 2	7 3 0 0 1 0	2 1 3 4 3 0	0 0 0 0 0 0
0145	0 0 0 1 1 1	0 0 0 0 0 0	0 0 0 0 1 2	0 0 1 1 1 1
0193	0 0 0 0 1 2	0 0 1 1 1 1	0 0 1 6 0 3	5 1 5 7 1 0
0241	0 0 0 0 0 0	0 0 0 0 0 0	0 0 0 0 0 0	0 0 0 0 0 0
0289	0 1 4 4 3 1	0 0 1 3 3 1	0 0 5 2 3 0	0 0 2 1 3 4
0337	0 0 1 0 3 6	0 0 1 6 1 0	4 0 1 0 0 1	2 0 1 2 0 5
0385	0 0 0 0 0 0	0 1 5 7 1 0	0 2 1 7 0 0	0 0 0 0 0 0
0433	0 0 7 1 5 2	0 0 0 0 0 2	0 3 4 1 2 0	2 1 3 0 3 1
0481	0 0 0 0 0 0	0 0 0 0 0 0	0 0 0 0 0 0	0 0 0 0 0 0
0529	0 0 0 0 0 0	0 0 0 0 1 2	0 0 2 1 1 1	0 3 1 6 0 4
0577	0 0 2 1 1 1	0 0 1 6 0 4	0 1 3 5 1 0	0 0 0 1 1 4
0625	0 1 4 2 3 6	0 1 4 4 3 1	0 0 1 3 3 1	0 0 5 4 3 5
0673	0 2 6 1 3 5	0 0 1 7 3 3	0 0 1 6 1 0	4 0 3 0 0 1
0721	0 1 2 0 4 0	0 4 1 0 7 0	0 1 7 1 2 0	0 2 2 6 0 0
0769	1 0 0 4 3 6	0 0 6 5 7 7	0 1 1 0 0 3	1 3 1 3 1 0
0817	0 0 1 6 0 4	0 1 5 4 1 0	0 0 0 1 1 1	0 0 0 0 0 0
0865	1 0 0 1 1 2	0 0 0 0 0 0	0 0 0 0 1 2	0 0 2 1 1 1
0913	0 0 0 0 1 2	0 0 2 1 1 1	0 0 1 6 0 4	0 2 5 3 1 0
0961	0 0 0 0 0 1	0 1 4 2 3 6	0 1 4 4 3 1	0 0 1 3 3 1
1009	0 0 3 1 3 6	0 2 6 4 3 3	0 0 1 4 3 0	0 0 1 6 1 0
1057	0 3 1 0 7 0	0 1 2 5 5 0	0 4 1 1 0 0	0 1 0 6 3 0
1105	0 0 0 0 0 1	1 0 0 0 0 1	0 0 6 3 0 5	0 1 3 0 0 3

19	20				24	25					30	31					35										
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2	0	1	1	1	1	4	0	2	5	3	0	0	2	3	3	7	6	0	6	6	7	0	0	0	0	0	0	0	0
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0	0	1	6	0	3	5	7	4	1	1	0	0	0	0	1	1	4	0	0	0	0	0	0	0	0	0	2	2	0
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0	0	2	1	3	4	0	0	4	6	3	6	0	2	5	7	3	3	0	0	2	1	3	5	0	2	6	0	3	0
2	0	1	2	0	5	1	0	3	0	3	7	0	2	3	1	4	4	0	4	6	1	1	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	2	1	1	0	0	0	1	0	0	0	1	0	1	1	7	1	4
2	1	3	0	3	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	1	6	0	4	0	1	1	5	1	0	0	0	0	1	1	3	0	0	0	0	0	0	0	0	0	0	1	2
0	0	0	1	1	4	0	2	0	0	0	0	0	0	0	2	2	0	0	0	0	4	0	1	0	0	0	0	0	1
0	0	5	4	3	5	0	0	2	1	3	0	0	0	4	7	3	5	0	2	5	1	3	1	0	0	3	0	3	3
4	0	3	0	0	1	2	0	1	3	4	3	0	0	3	1	3	1	0	3	3	1	3	4	0	4	2	0	0	0
0	2	2	6	0	0	0	1	3	4	2	0	0	1	1	7	3	0	0	2	2	1	2	0	0	1	1	1	1	1
1	3	1	3	1	0	3	0	3	5	0	1	0	0	0	0	0	0	0	0	0	0	1	2	0	0	2	1	1	1
0	0	0	0	0	0	0	0	0	0	1	2	0	0	2	1	1	1	0	0	1	6	0	4	0	2	1	4	1	0
0	0	2	1	1	1	0	0	1	6	0	4	0	2	3	3	1	0	0	0	0	1	1	3	0	0	0	0	0	0
0	2	5	3	1	0	0	0	0	1	1	4	0	0	0	0	0	0	0	0	0	2	2	0	0	0	0	4	0	4
0	0	1	3	3	1	0	0	5	7	3	6	0	0	3	0	3	5	0	0	4	1	3	0	0	2	6	2	3	6
0	0	1	6	1	0	4	0	4	0	0	1	2	0	1	3	7	1	0	0	3	2	3	4	0	3	3	2	2	1
0	1	0	6	3	0	0	2	2	3	2	0	0	1	0	0	0	0	0	1	1	1	5	0	0	2	1	7	0	0
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FILE 0001 REC 0002 CH 1710

1153	0 0 2 1 1 1	0 0 1 6 0 4	0 3 1 2 1 0	0 0 0 1 1 1
1201	0 3 3 1 1 0	0 0 0 1 1 2	0 0 2 0 0 0	0 0 0 0 1 2
1249	0 0 0 0 0 0	0 0 0 0 1 2	0 0 2 1 1 1	0 0 1 6 0 4
1297	0 0 0 4 0 6	0 0 0 0 0 1	0 1 4 2 3 6	0 1 4 4 3 1
1345	0 2 6 4 3 3	0 0 3 2 3 2	0 2 6 5 3 7	0 0 1 3 3 6
1393	0 3 3 3 2 4	0 3 7 0 1 0	0 1 2 3 0 0	0 4 0 4 4 0
1441	0 2 1 3 6 0	0 1 7 1 6 1	1 0 1 1 6 6	0 0 6 0 4 2
1489	0 0 0 0 1 2	0 0 2 1 1 1	0 0 1 6 0 4	0 4 3 0 1 0
1537	0 0 1 6 0 4	0 4 4 1 1 0	0 0 0 1 1 2	0 0 0 0 0 0
1585	0 0 0 1 1 3	0 0 0 0 0 0	0 0 0 0 1 2	0 0 2 1 1 1
1633	0 0 0 2 2 0	0 0 0 4 0 0	0 0 0 0 0 1	0 1 4 2 3 6
1681	0 0 5 0 3 3	0 2 6 6 3 0	0 0 3 2 3 7	0 2 6 7 3 0

FILE 0001 REC 0003 CH 1710

0001	0 0 1 6 1 0	4 0 0 0 0 1	2 0 1 4 0 6	4 0 3 4 3 2
0049	0 1 6 0 1 0	0 2 1 3 1 0	0 1 3 1 7 0	0 0 0 0 0 0
0097	0 1 0 0 0 3	6 3 0 0 1 0	3 1 3 7 0 1	0 0 0 0 0 0
0145	0 0 0 1 1 1	0 0 0 0 0 0	0 0 0 0 1 2	0 0 2 1 1 1
0193	0 0 0 0 1 2	0 0 2 1 1 1	0 0 1 6 0 4	0 7 4 5 1 0
0241	0 0 1 6 0 4	0 0 0 4 1 0	0 0 0 1 1 4	0 0 0 0 0 0
0289	0 1 4 4 3 1	0 0 1 3 3 1	0 0 6 4 3 5	0 0 3 1 3 7
0337	0 0 0 1 3 3	0 0 1 6 1 0	4 1 0 0 0 1	2 0 1 5 4 3
0385	0 4 5 6 6 0	0 1 0 6 1 0	0 2 1 3 3 0	0 1 2 7 0 0
0433	0 0 4 0 6 4	1 0 1 0 0 3	0 3 7 4 0 0	3 2 3 0 3 0
0481	0 1 4 1 1 0	0 0 0 1 1 1	0 0 0 0 0 0	0 0 0 0 1 2
0529	0 0 0 0 0 0	0 0 0 0 1 2	0 0 3 1 1 1	0 0 1 6 0 4
0577	0 0 3 1 1 1	0 0 1 6 0 4	1 0 4 0 1 0	0 0 0 1 1 4
0625	0 1 4 2 3 6	0 1 4 5 3 0	0 0 1 3 3 1	0 0 6 7 3 0
0673	0 2 7 3 3 0	0 0 0 7 3 5	0 0 1 6 1 0	4 1 2 0 0 1
0721	0 1 3 2 2 0	0 4 5 0 6 0	0 1 0 1 2 0	0 1 1 0 6 0
0769	1 0 3 7 3 0	0 0 4 4 5 0	1 0 3 0 0 4	0 3 5 3 7 0
0817	0 0 1 6 0 4	1 0 5 1 1 0	0 0 0 1 1 1	0 0 0 0 0 0
0865	0 0 0 1 1 2	0 0 0 0 0 0	0 0 0 0 1 2	0 0 3 1 1 1
0913	0 0 0 0 1 2	0 0 3 1 1 1	0 0 1 6 0 4	1 1 5 0 1 0
0961	0 0 0 0 0 1	0 1 4 2 3 6	0 1 4 5 3 0	0 0 1 3 3 1
1009	0 0 3 5 3 7	0 2 7 5 3 2	0 0 0 5 3 7	0 0 1 6 1 0
1057	0 2 5 4 7 0	0 1 3 0 1 0	0 4 4 1 5 0	0 1 0 0 0 0
1105	0 1 0 0 6 1	1 0 4 1 0 3	0 0 4 2 5 3	1 0 4 0 0 4
1153	0 0 3 1 1 1	0 0 1 6 0 4	1 2 1 7 1 0	0 0 0 1 1 1
1201	1 2 3 7 1 0	1 0 0 1 1 2	0 0 0 0 0 0	0 0 0 0 1 2
1249	0 0 0 0 0 0	0 0 0 0 1 2	0 0 3 1 1 1	0 0 1 6 0 4
1297	0 0 0 4 2 1	0 0 0 0 0 1	0 1 4 2 3 6	0 1 4 5 3 0
1345	0 2 7 0 3 6	0 0 3 6 3 0	0 2 7 6 3 2	0 0 0 4 3 1
1393	0 4 3 1 4 7	0 2 4 3 3 0	0 1 2 7 0 0	0 4 3 1 2 0
1441	0 2 1 0 3 0	0 1 0 1 1 1	1 0 4 4 6 0	0 0 4 0 6 4
1489	0 0 0 0 1 2	0 0 3 1 1 1	0 0 1 6 0 4	1 3 3 5 1 0
1537	0 0 1 6 0 4	1 3 5 4 1 0	0 0 0 1 1 2	0 0 0 0 0 0
1585	0 0 0 1 1 3	0 0 0 0 0 0	0 0 0 0 1 2	0 0 3 1 1
1633	0 0 0 2 2 0	0 0 0 4 2 3	0 0 0 0 0 1	0 1 4 2 3
1681	0 0 5 4 3 2	0 2 0 0 3 0	0 0 3 6 3 3	0 2 7 7 3

FILE 0001 REC 0004 CH 1710

0001	0 0 1 6 1 0	4 1 6 0 0 1	2 0 1 7 1 0	1 0 3 6 3
0049	0 1 6 5 3 0	0 2 0 1 2 0	0 1 1 7 6 0	0 1 1 1 1
0097	1 0 7 0 0 4	3 3 6 1 0 0	3 2 3 6 7 1	0 0 0 0 0
0145	0 0 0 1 1 1	0 0 0 0 0 0	0 0 0 0 1 2	0 0 3 1 1
0193	0 0 0 0 1 2	0 0 3 1 1 1	0 0 1 6 0 4	1 5 3 2 1
0241	0 0 1 6 0 4	1 5 5 1 1 0	0 0 0 1 1 4	0 0 0 0 0
0289	0 1 4 5 3 0	0 0 1 3 3 1	0 0 7 3 3 4	0 0 3 2 3
0337	0 0 0 2 3 6	0 0 1 6 1 0	4 1 7 0 0 1	2 0 1 7 3
0385	0 4 0 1 3 0	0 1 3 1 7 0	0 2 0 7 5 0	0 1 1 4 6
0433	0 0 3 5 3 6	1 0 0 0 0 4	4 3 4 1 0 0	3 2 3 7 3
0481	1 6 1 1 1 0	1 0 0 1 1 1	0 0 0 0 0 0	0 0 0 0 1

000111	010000	000012	002111	001604
000012	002111	001604	035110	000113
001604	041010	001114	010000	000220
014431	001331	005131	003037	004137
001336	001610	405001	201400	603231
040440	017160	022400	014310	020040
006042	014003	335470	313063	000000
043010	000111	000000	000012	002111
000000	000012	002111	001604	050110
002111	001604	052010	000114	000000
014236	014431	001331	006035	003130
026730	001235			

403432	033605	032410	012550	000000
000000	020640	010121	102261	005310
000000	000012	002111	001604	070600
002111	001604	072512	011112	000000
074510	000113	000000	000012	002111
000000	000220	000413	000001	014236
003137	005131	027031	003432	027037
201543	103431	033701	021360	013010
012700	011510	022120	010751	103004
323030	000000	000012	003111	001604
000012	003111	001604	100110	000112
001604	102010	200113	000000	000012
000114	000000	000220	000416	000001
006730	003230	005230	027431	003530
412001	201511	303535	033170	026610
011060	012700	011540	021500	010451
035370	323301	000000	000012	003111
000000	000012	003111	001604	111110
003111	001604	113000	000113	000000
115010	000114	000000	000220	000411
001331	006133	003233	005335	027731
001610	413001	201627	203530	043051
010000	020600	012300	011340	021230
104004	133770	323412	000000	000012
000111	000000	000012	003111	001604
000012	003111	001604	125612	000113
001604	131610	000114	001000	000220
014530	001331	007034	003234	005331
000431	001610	414001	201655	003630
043120	010000	011770	012040	011540
004064	105004	231030	323501	000000
133510	000111	000000	000012	003111
000000	000012	003111	001604	141411
003111	001604	143310	000114	000000
014236	014530	001331	007134	003235
027732	000431			

103635	043321	022250	012700	041160
011110	021410	017161	105112	003706
000000	000012	003111	001604	145310
003111	001604	151210	000112	000000
153210	000113	000000	000012	003111
000000	000220	000426	000001	014236
003236	005437	020230	003630	027132
201737	503637	043407	021300	012550
011460	011440	020000	014771	105553
323736	000000	000012	003111	001604
000012	003111	001604	163010	000112

FILE 0001 REC 0004 CH 1710

0529	0 0 0 0 0 0	0 0 0 0 1 2	0 0 3 1 1 1	0 0 1 6 0 4	
0577	0 0 3 1 1 1	0 0 1 6 0 4	1 7 0 1 1 0	0 0 0 1 1 4	
0625	0 1 4 2 3 6	0 1 4 5 3 0	0 0 1 3 3 1	0 0 7 4 3 4	
0673	0 2 0 0 3 1	0 0 0 1 3 0	0 0 1 6 1 0	4 1 0 0 0 1	
0721	0 1 2 3 0 0	0 3 1 6 0 0	0 1 4 1 1 0	0 1 1 6 3 0	
0769	1 0 5 1 1 1	0 0 3 3 7 2	1 0 1 0 0 4	5 3 0 1 3 0	
0817	0 0 1 6 0 4	1 7 2 1 1 0	0 0 0 1 1 1	0 0 0 0 0 0	
0865	0 0 0 1 1 2	0 0 0 0 0 0	0 0 0 0 1 2	0 0 3 1 1 1	
0913	0 0 0 0 1 2	0 0 3 1 1 1	0 0 1 6 0 4	1 0 2 7 1 0	
0961	0 0 0 0 0 1	0 1 4 2 3 6	0 1 4 5 3 0	0 0 1 3 3 1	
1009	0 0 3 7 3 3	0 2 0 1 3 1	0 0 0 1 3 1	0 0 1 6 1 0	
1057	0 1 1 5 6 0	0 1 2 5 5 0	0 3 0 6 1 0	0 1 4 7 7 0	
1105	0 1 4 4 7 1	1 0 6 2 6 0	0 0 3 2 1 3	1 1 0 0 0 4	
1153	0 0 3 1 1 1	0 0 1 6 0 4	1 0 4 7 1 0	0 0 0 1 1 1	
1201	1 1 0 6 1 0	0 0 0 1 1 2	0 0 0 0 0 0	0 0 0 0 1 2	
1249	0 0 0 0 0 0	0 0 0 0 1 2	0 0 3 1 1 1	0 0 1 6 0 4	
1297	0 0 0 4 3 1	0 0 0 0 0 1	0 1 4 2 3 6	0 1 4 5 3 0	
1345	0 2 0 6 3 0	0 0 3 7 3 5	0 2 0 2 3 0	0 0 0 0 3 5	
1393	0 4 3 7 3 1	0 1 0 0 2 0	0 1 2 5 5 0	0 3 7 6 2 0	
1441	0 1 7 1 1 0	0 1 1 4 6 1	1 0 6 1 7 7	0 0 2 1 1 3	
1489	0 0 0 0 1 2	0 0 3 1 1 1	0 0 1 6 0 4	2 0 0 5 1 0	
1537	0 0 1 6 0 4	2 0 2 4 1 0	0 0 0 1 1 2	0 0 0 0 0 0	
1585	0 0 0 1 1 3	0 0 0 0 0 0	0 0 0 0 1 2	0 0 3 1 1 1	
1633	0 0 0 2 2 0	0 0 0 4 3 4	0 0 0 0 0 1	0 1 4 2 3 6	
1681	0 0 5 5 3 6	0 2 0 1 3 3	0 0 3 7 3 1	0 2 0 3 3 7	

FILE 0001 REC 0005 CH 1710

0001	0 0 1 6 1 0	4 2 2 0 0 1	2 0 1 0 7 2	3 0 3 7 3 5	
0049	0 1 3 4 2 0	0 1 1 7 3 0	0 1 1 4 0 0	0 1 1 1 1 0	
0097	1 1 3 0 0 4	7 3 5 6 5 0	3 2 3 1 4 2	0 0 0 0 0 0	
0145	0 0 0 1 1 1	0 0 0 0 0 0	0 0 0 0 1 2	0 0 3 1 1 1	
0193	0 0 0 0 1 2	0 0 3 1 1 1	0 0 1 6 0 4	2 2 0 1 1 0	
0241	0 0 1 6 0 4	2 2 2 1 0 0	0 0 0 1 1 4	0 0 0 0 0 0	
0289	0 1 4 5 3 0	0 0 1 3 3 1	0 0 7 0 3 0	0 0 3 2 3 1	
0337	0 0 7 0 3 5	0 0 1 6 1 0	4 2 3 0 0 1	2 0 1 0 1 0	
0385	0 3 5 6 1 0	0 1 1 1 3 0	0 1 1 6 3 0	0 1 1 7 6 0	
0433	0 0 2 6 3 2	1 1 3 0 0 4	0 3 1 2 4 0	3 2 3 1 6 2	
0481	2 2 4 0 1 0	0 0 0 1 1 1	0 0 0 0 0 0	0 0 0 0 1 2	
0529	0 0 0 0 0 0	0 0 0 0 1 2	0 0 3 1 1 1	0 0 1 6 0 4	
0577	0 0 3 1 1 1	0 0 1 6 0 4	2 3 3 1 0 0	0 0 0 1 1 4	
0625	0 1 4 2 3 6	0 1 4 5 3 0	0 0 1 3 3 1	0 0 7 1 3 6	
0673	0 2 0 5 3 3	0 0 7 7 3 1	0 0 1 6 1 0	4 2 6 0 0 1	
0721	0 1 2 3 0 0	0 3 3 1 0 0	0 1 0 7 1 0	0 2 1 1 3 0	
0769	1 0 0 7 1 5	0 0 2 2 4 7	1 1 6 0 0 4	1 3 6 7 1 0	
0817	0 0 1 6 0 4	2 3 5 0 1 0	0 0 0 1 1 1	0 0 0 0 0 0	
0865	0 0 0 1 1 2	0 0 0 0 0 0	0 0 0 0 1 2	0 0 4 1 1 1	
0913	0 0 0 0 1 2	0 0 4 1 1 1	0 0 1 6 0 4	2 6 1 5 1 0	
0961	0 0 0 0 0 1	0 1 4 2 3 6	0 1 4 5 3 0	0 0 1 3 3 1	
1009	0 0 3 0 3 6	0 2 0 7 3 7	0 0 7 6 3 2	0 0 1 6 1 0	
1057	0 1 4 2 0 0	0 1 2 3 0 0	0 3 3 1 0 0	0 1 0 7 1 0	
1105	0 0 0 4 5 1	1 0 1 0 5 7	0 0 2 1 2 6	1 1 6 0 0 5	
1153	0 0 4 1 1 1	0 0 1 6 0 4	2 6 3 4 1 0	0 0 0 1 1 1	
1201	2 6 5 4 0 0	0 0 0 1 1 2	0 0 0 0 0 0	0 0 0 0 1 2	
1249	0 0 0 0 0 0	0 0 0 0 1 2	0 0 4 1 1 1	0 0 1 6 0 4	
1297	0 0 0 4 4 4	0 0 0 0 0 1	0 1 4 2 3 6	0 1 4 5 3 0	
1345	0 2 1 6 3 2	0 0 3 0 3 7	0 2 0 0 3 4	0 0 7 5 3 7	
1393	0 5 3 3 5 5	0 1 3 2 0 0	0 1 2 3 0 0	0 1 0 0 0 0	
1441	0 0 0 0 0 0	0 0 0 4 5 1	1 0 1 7 3 4	0 0 1 0 1 0	
1489	0 0 0 0 1 2	0 0 4 1 1 1	0 0 1 6 0 4	2 7 5 2 0 0	
1537	0 0 1 6 0 4	2 0 1 2 1 2	0 0 0 1 1 2	0 0 0 0 0 0	
1585	0 0 1 1 1 3	0 0 0 0 0 0	0 0 0 0 1 2	0 0 4 1 1 1	
1633	0 0 0 2 2 0	0 0 0 4 4 0	0 0 0 0 0 1	0 1 4 2 3 6	

01604	16501 0	000113	000000	000012
00114	000000	000220	000420	000001
07434	003237	005431	020432	003731
10001	201764	703631	043411	020410
11630	011460	011930	011150	016231
30130	323713	000000	000012	003111
00000	000012	003111	001604	174010
03111	001604	100010	000113	000000
02710	000114	000000	000220	000421
01331	007533	003237	005531	020535
01610	411001	201711	103731	043575
14770	011210	011460	011210	010060
10004	537410	323041	000000	000012
00111	000000	000012	003111	001604
00012	003111	001604	112610	000113
01604	114510	000114	000000	000220
14530	001331	007632	003230	005533
00035	001610	421001	201045	603734
37620	013170	020000	011460	010000
02113	112004	631040	323115	000000
00610	000111	000000	000012	003111
00000	000012	003111	001604	204310
03111	001604	210310	000114	000000
14236	014530	001331	007030	003231
20337	007132			

03735	043011	017310	012550	036620
11110	010630	012551	107320	002770
00000	000012	003111	001604	212210
03111	001604	214210	000112	000000
20110	000113	000000	000012	003111
00000	000220	004336	000001	014236
03231	005537	021035	003030	020435
01010	103736	043011	016630	012550
11760	010060	017110	012301	107670
23162	000000	000012	003111	001604
00012	003111	001604	226000	000112
01604	231100	000113	000000	000012
00114	000000	000220	000430	000001
07136	003231	005530	021137	003032
26001	201177	703030	053131	014020
21130	011460	010120	017240	006101
36710	323113	000000	000012	003111
00000	000012	004111	001604	253610
04111	001604	255510	000113	000000
61510	000114	000000	000220	000443
01331	000131	003231	005630	021531
01610	427001	202003	703031	053206
10710	021130	012040	011240	017550
16005	031460	323114	000000	000012
00111	000000	000012	004111	001604
00012	004111	001604	271300	000113
01604	273310	000114	000000	000220
14530	001331	000236	003231	005631
07537	001610	421001	202055	303032
10000	011460	020530	012040	010060
61010	110005	130430	323104	000000
75200	000111	000000	000012	004111
00000	000012	004111	001604	203110
04111	001604	205110	000114	000000
14236	014530	001331	000430	003231

FILE 0001 REC 0005 CH 1710

1681	0 0 5 6 3 2	0 2 1 0 3 3	0 0 3 0 3 1	0 2 0 1 3 0

FILE 0001 REC 0006 CH 1710

0001	0 0 1 6 1 0	4 3 0 0 0 1	2 0 2 0 0 0	1 0 3 0 3 3
0049	0 1 1 1 3 0	0 1 1 2 4 0	0 1 2 0 4 0	0 1 1 1 3 0
0097	1 1 0 0 0 5	1 3 4 6 5 0	3 2 3 1 7 3	0 0 0 0 0 0
0145	0 0 0 1 1 1	0 0 0 0 0 0	0 0 0 0 1 2	0 0 4 1 1 1
0193	0 0 0 0 1 2	0 0 4 1 1 1	0 0 1 6 0 4	2 1 4 1 1 0
0241	0 0 1 6 0 4	3 0 0 1 0 0	0 0 0 1 1 4	0 0 0 0 0 0
0289	0 1 4 5 3 0	0 0 1 3 3 1	0 0 0 4 3 7	0 0 3 2 3 1
0337	0 0 7 4 3 1	0 0 1 6 1 0	4 3 1 0 0 1	2 0 2 1 0 6
0385	0 3 0 7 4 0	0 0 0 4 5 0	0 2 2 4 3 0	0 1 3 0 1 0
0433	0 0 1 6 0 5	1 1 1 0 0 5	1 3 0 7 1 0	3 2 3 1 6 0
0481	3 0 2 0 1 0	0 0 0 1 1 1	0 0 0 0 0 0	0 0 0 0 1 2
0529	0 0 0 0 0 0	0 0 0 0 1 2	0 0 4 1 1 1	0 0 1 6 0 4
0577	0 0 4 1 1 1	0 0 1 6 0 4	3 1 2 6 1 0	0 0 0 1 1 4
0625	0 1 4 2 3 6	0 1 4 5 3 0	0 0 1 3 3 1	0 0 0 5 3 4
0673	0 2 1 1 3 2	0 0 7 3 3 6	0 0 1 6 1 0	4 3 2 0 0 1
0721	0 1 2 0 4 0	0 3 0 0 1 0	0 1 0 0 0 0	0 2 2 0 5 0
0769	1 1 0 7 3 5	0 0 1 5 0 3	1 2 0 0 0 5	2 3 2 6 1 0
0817	0 0 1 6 0 4	3 1 4 6 1 0	0 0 0 1 1 1	0 0 0 0 0 0
0865	0 0 0 1 1 2	0 0 0 0 0 0	0 0 0 0 1 2	0 0 4 1 1 1
0913	0 0 0 0 1 2	0 0 4 1 1 1	0 0 1 6 0 4	3 2 4 4 1 0
0961	0 0 0 0 0 1	0 1 4 2 3 6	0 1 4 5 3 0	0 0 1 3 3 1
1009	0 0 3 1 3 2	0 2 1 1 3 0	0 0 7 3 3 2	0 0 1 6 1 0
1057	0 1 0 0 1 0	0 1 2 0 4 0	0 3 1 4 2 0	0 0 6 0 2 0
1105	0 0 1 0 3 1	1 1 1 7 1 6	0 0 1 2 1 1	1 2 2 0 0 5
1153	0 0 5 1 1 1	0 0 1 6 0 4	3 4 2 2 0 0	0 0 0 1 1 1
1201	3 4 4 1 0 0	0 0 0 1 1 2	0 0 0 0 0 0	0 0 0 0 1 2
1249	0 0 0 0 0 0	0 0 0 0 1 2	0 0 5 1 1 1	0 0 1 6 0 4
1297	0 0 0 4 5 0	0 0 0 0 0 1	0 1 4 2 3 6	0 1 4 5 3 0
1345	0 3 0 4 3 1	0 0 3 1 3 4	0 2 1 3 3 7	0 0 7 1 3 0
1393	0 5 3 0 4 3	0 1 0 4 7 0	0 1 2 3 0 0	0 3 1 2 3 0
1441	0 2 6 6 6 0	0 1 0 0 0 1	1 1 2 0 3 1	0 0 1 2 1 0
1489	0 0 0 0 1 2	0 0 5 1 1 1	0 0 1 6 0 4	3 5 4 0 1 0
1537	0 0 1 6 0 4	3 5 5 1 0 0	0 0 0 1 1 2	0 0 0 0 0 0
1585	0 0 0 1 1 3	0 0 0 0 0 0	0 0 0 0 1 2	0 0 5 1 1 1
1633	0 0 0 2 2 0	0 0 0 4 5 1	0 0 0 0 0 1	0 1 4 2 3 6
1681	0 0 5 6 3 2	0 3 0 5 3 0	0 0 3 1 3 5	0 2 1 4 3 3

FILE 0001 REC 0007 CH 1710

0001	0 0 1 6 1 0	4 3 0 0 0 1	2 0 2 2 0 0	1 0 3 0 3 6
0049	0 0 6 1 0 0	0 2 5 1 1 0	0 1 5 1 0 0	0 1 1 1 1 0
0097	1 2 3 0 0 5	4 3 2 1 1 0	3 2 3 7 1 2	0 0 0 0 0 0
0145	0 0 0 1 1 1	0 0 0 0 0 0	0 0 0 0 1 2	0 0 5 1 1 1
0193	0 0 0 0 1 2	0 0 5 1 1 1	0 0 1 6 0 4	3 7 3 7 0 0
0241	0 0 1 6 0 4	3 7 5 6 0 0	0 0 0 1 1 4	0 0 0 0 0 0
0289	0 1 4 5 3 0	0 0 1 3 3 1	0 0 0 1 3 5	0 0 3 2 3 7
0337	0 0 7 0 3 5	0 0 1 6 1 0	4 4 3 0 0 1	2 0 2 4 0 1
0385	0 2 1 7 1 0	0 1 0 0 0 0	0 2 6 6 5 0	0 1 5 0 5 0
0433	0 0 0 6 6 4	1 2 6 0 0 5	5 3 6 5 6 0	3 2 3 6 1 6
0481	4 2 1 0 1 0	0 0 0 1 1 1	0 0 0 0 0 0	0 0 0 0 1 2
0529	0 0 0 0 0 0	0 0 0 0 1 2	0 0 5 1 1 1	0 0 1 6 0 4
0577	0 0 5 1 1 1	0 0 1 6 0 4	4 3 0 0 0 0	0 0 0 1 1 4
0625	0 1 4 2 3 6	0 1 4 5 3 0	0 0 1 3 3 1	0 0 1 2 3 2
0673	0 2 1 0 3 2	0 0 6 0 3 6	0 0 1 6 1 0	4 4 4 0 0 1
0721	0 1 2 7 0 0	0 2 0 0 3 0	0 0 4 7 7 0	0 2 6 2 0 0
0769	1 1 4 5 5 3	0 0 0 5 1 6	1 2 6 0 0 5	5 3 0 1 5 0
0817	0 0 1 6 0 4	4 3 2 0 1 0	0 0 0 1 1 1	0 0 0 0 0 0
0865	0 0 0 1 1 2	0 0 0 0 0 0	0 0 0 0 1 2	0 0 5 1 1 1
0913	0 0 0 0 1 2	0 0 5 1 1 1	0 0 1 6 0 4	4 4 2 6 0 0
0961	0 0 0 0 0 1	0 1 4 2 3 6	0 1 4 5 3 0	0 0 1 3 3 1
1009	0 0 3 1 3 0	0 2 1 0 3 7	0 0 6 0 3 2	0 0 1 6 1 0

0 2 0 1 3 0	0 0 7 4 3 6			
1 0 3 0 3 3	0 5 3 4 2 7	0 1 2 0 2 0	0 1 2 0 4 0	0 3 1 1 4 0
0 1 1 1 3 0	0 1 7 0 5 0	0 0 4 7 7 1	1 1 0 0 7 0	0 0 1 7 0 1
0 0 0 0 0 0	0 0 0 0 1 2	0 0 4 1 1 1	0 0 1 6 0 4	2 1 1 0 1 0
0 0 4 1 1 1	0 0 1 6 0 4	2 1 3 0 0 0	0 0 0 1 1 2	0 0 0 0 0 0
2 1 4 1 1 0	0 0 0 1 1 3	0 0 0 0 0 0	0 0 0 0 1 2	0 0 4 1 1 1
0 0 0 0 0 0	0 0 0 2 2 0	0 0 0 4 5 0	0 0 0 0 0 1	0 1 4 2 3 6
0 0 3 2 3 1	0 0 5 6 3 2	0 2 1 1 3 4	0 0 3 1 3 0	0 2 1 0 3 5
2 0 2 1 0 6	3 0 3 0 3 4	0 5 3 4 1 1	0 1 2 3 0 0	0 1 2 3 0 0
0 1 3 0 1 0	0 1 0 0 6 0	0 2 0 5 3 0	0 1 0 0 0 1	1 1 0 4 0 3
3 2 3 1 6 0	0 0 0 0 0 0	0 0 0 0 1 2	0 0 4 1 1 1	0 0 1 6 0 4
0 0 0 0 1 2	0 0 4 1 1 1	0 0 1 6 0 4	3 0 4 7 0 0	0 0 0 1 1 2
0 0 1 6 0 4	3 1 0 7 0 0	0 0 0 1 1 3	0 0 0 0 0 0	0 0 0 0 1 2
0 0 0 1 1 4	0 0 0 0 0 0	0 0 0 2 2 0	0 0 0 4 5 1	0 0 0 0 0 1
0 0 0 5 3 4	0 0 3 2 3 1	0 0 5 6 3 2	0 3 0 0 3 3	0 0 3 1 3 1
4 3 2 0 0 1	2 0 2 1 3 1	7 0 3 0 3 4	0 5 3 5 7 0	0 1 1 1 6 0
0 2 2 0 5 0	0 1 3 6 1 0	0 1 1 1 3 0	0 2 2 1 6 0	0 0 1 5 4 1
2 3 2 6 1 0	3 2 3 1 4 3	0 0 0 0 0 0	0 0 0 0 1 2	0 0 4 1 1 1
0 0 0 0 0 0	0 0 0 0 1 2	0 0 4 1 1 1	0 0 1 6 0 4	3 2 0 5 0 0
0 0 4 1 1 1	0 0 1 6 0 4	3 2 2 5 0 0	0 0 0 1 1 3	0 0 0 0 0 0
3 2 4 4 1 0	0 0 0 1 1 4	0 0 0 0 0 0	0 0 0 2 2 0	0 0 0 4 5 3
0 0 1 3 3 1	0 0 0 6 3 0	0 0 3 2 3 1	0 0 5 6 3 3	0 3 0 1 3 3
0 0 1 6 1 0	4 3 5 0 0 1	2 0 2 2 0 6	0 0 3 0 3 6	0 5 3 7 7 6
0 0 6 0 2 0	0 2 4 5 0 0	0 1 4 3 1 0	0 1 1 1 1 0	0 2 5 1 4 0
1 2 2 0 0 5	3 3 3 4 1 0	3 2 3 0 7 7	0 0 0 0 0 0	0 0 0 0 1 2
0 0 0 1 1 1	0 0 0 0 0 0	0 0 0 0 1 2	0 0 5 1 1 1	0 0 1 6 0 4
0 0 0 0 1 2	0 0 5 1 1 1	0 0 1 6 0 4	3 5 0 1 0 0	0 0 0 1 1 3
0 0 1 6 0 4	3 5 2 0 0 0	0 0 0 1 1 4	0 0 0 0 0 0	0 0 0 2 2 0
0 1 4 5 3 0	0 0 1 3 3 1	0 0 0 7 3 0	0 0 3 2 3 0	0 0 5 6 3 2
0 0 7 1 3 0	0 0 1 6 1 0	4 3 6 0 0 1	2 0 2 2 3 1	6 0 3 0 3 6
0 3 1 2 3 0	0 0 1 0 3 0	0 2 5 5 3 0	0 1 4 6 2 0	0 1 0 1 2 0
0 0 1 2 1 0	1 2 2 0 0 5	3 3 6 7 3 0	3 2 3 0 5 1	0 0 0 0 0 0
3 5 4 0 1 0	0 0 0 1 1 1	0 0 0 0 0 0	0 0 0 0 1 2	0 0 5 1 1 1
0 0 0 0 0 0	0 0 0 0 1 2	0 0 5 1 1 1	0 0 1 6 0 4	3 6 1 1 1 0
0 0 5 1 1 1	0 0 1 6 0 4	3 6 3 0 1 0	0 0 0 1 1 4	0 2 0 0 0 0
0 1 4 2 3 6	0 1 4 5 3 0	0 0 1 3 3 1	0 0 0 0 3 4	0 0 3 2 3 0
0 2 1 4 3 3	0 0 7 1 3 4			
1 0 3 0 3 6	0 5 3 1 7 5	0 0 1 0 2 0	0 1 2 0 4 0	0 3 0 5 6 0
0 1 1 1 1 0	0 2 7 2 4 0	0 1 0 0 0 1	1 1 2 6 0 0	0 0 1 0 4 0
0 0 0 0 0 0	0 0 0 0 1 2	0 0 5 1 1 1	0 0 1 6 0 4	3 6 5 0 1 0
0 0 5 1 1 1	0 0 1 6 0 4	3 7 1 7 0 0	0 0 0 1 1 2	0 0 0 0 0 0
3 7 3 7 0 0	0 0 0 1 1 3	0 0 0 0 0 0	0 0 0 0 1 2	0 0 5 1 1 1
0 0 0 0 0 0	0 0 0 2 2 0	0 0 0 4 6 3	0 0 0 0 0 1	0 1 4 2 3 6
0 0 3 2 3 7	0 0 5 6 3 2	0 3 0 6 3 7	0 0 3 1 3 6	0 2 1 5 3 5
2 0 2 4 0 1	7 0 3 0 3 7	0 6 3 2 0 1	0 0 0 4 4 0	0 1 2 3 0 0
0 1 5 0 5 0	0 1 1 1 1 0	0 2 6 5 5 0	0 0 0 4 5 1	1 1 4 2 4 6
3 2 3 6 1 6	0 0 0 0 0 0	0 0 0 0 1 2	0 0 5 1 1 1	0 0 1 6 0 4
0 0 0 0 1 2	0 0 5 1 1 1	0 0 1 6 0 4	4 2 2 1 0 0	0 0 0 1 1 2
0 0 1 6 0 4	4 2 4 1 0 2	0 0 0 1 1 3	0 0 0 0 0 0	0 0 0 0 1 2
0 0 0 1 1 4	0 0 0 0 0 0	0 0 0 2 2 0	0 0 0 4 7 1	0 0 0 0 0 1
0 0 1 2 3 2	0 0 3 2 3 6	0 0 5 6 3 0	0 3 1 0 3 6	0 0 3 1 3 7
4 4 4 0 0 1	2 0 2 4 2 5	5 0 3 0 3 7	0 6 3 3 4 1	0 0 0 1 1 0
0 2 6 2 0 0	0 1 5 0 5 0	0 1 0 0 6 0	0 2 6 2 0 0	0 0 1 5 4 1
5 3 0 1 5 0	3 2 3 5 7 7	0 0 0 0 0 0	0 0 0 0 1 2	0 0 5 1 1 1
0 0 0 0 0 0	0 0 0 0 1 2	0 0 5 1 1 1	0 0 1 6 0 4	4 3 4 7 0 0
0 0 5 1 1 1	0 0 1 6 0 4	4 4 0 7 0 0	0 0 0 1 1 3	0 0 0 0 0 0
4 4 2 6 0 0	0 0 0 1 1 4	0 0 0 0 0 0	0 0 0 2 2 0	0 0 0 4 7 3
0 0 1 3 3 1	0 0 1 2 3 6	0 0 3 2 3 5	0 0 5 5 3 1	0 3 1 1 3 3
0 0 1 6 1 0	4 4 5 0 0 1	2 0 2 4 4 1	2 0 3 0 3 7	0 6 3 4 0 1

FILE 0001 REC 0007 CH 1710

1057	007160	012040	020600	006100
1105	000451	114050	000530	127005
1153	005111	001604	444610	000111
1201	450500	000112	010000	000012
1249	000000	000012	005111	001604
1297	000475	000001	014236	014530
1345	031231	003130	021132	006731
1393	063526	007530	012300	020220
1441	025220	005021	115464	000404
1489	000012	005111	001604	460410
1537	001604	462400	000112	000000
1585	000113	000000	000012	005111
1633	000220	000470	000001	014236
1681	005530	031334	003130	030032

FILE 0001 REC 0008 CH 1710

0001	001610	440001	202511	603037
0049	000450	026000	014770	011110
0097	120005	637550	323410	000000
0145	000111	000000	000012	005111
0193	000012	005111	001604	400100
0241	001604	402100	000114	000000
0289	014530	001331	001435	003234
0337	006631	001610	441001	202542
0385	027750	003010	000000	014110
0433	000207	121005	631400	323367
0481	404010	000111	000000	000012
0529	000000	000012	005111	001604
0577	000000	000000	000000	000000
0625	014236	014530	001331	001530
0673	030132	006635	001610	451001
0721	012040	027730	004770	026300
0769	116652	000177	130005	733000
0817	001604	415000	001111	000000
0865	000112	000000	000012	006111
0913	000012	006111	001604	505710
0961	000001	014236	014530	001331
1009	003130	030231	006531	001610
1057	006410	012040	026170	003010
1105	007701	117236	000075	130005
1153	006111	001604	523400	000111
1201	525400	000112	000000	000012
1249	000000	000012	006111	001604
1297	000400	000001	014236	014530
1345	031733	003131	030231	006533
1393	063167	006010	012300	000000
1441	024200	006101	117012	071171
1489	000012	006111	001604	533510
1537	001604	541200	010112	000000
1585	000113	000000	000012	006111
1633	000220	000411	000001	014235
1681	005532	031034	003130	030330

FILE 0001 REC 0009 CH 1710

0001	001610	456001	202702	203036
0049	010410	026740	014310	011240
0097	132005	030740	323043	000000
0145	000111	000000	000012	006111
0193	000012	006111	001604	554110
0241	001604	560110	000114	000000
0289	014530	001331	001730	003230
0337	006434	001610	457001	202724
0385	000000	006100	026040	014140

006100	026160	014110	010000	025550
127005	531240	323537	000000	000012
000111	000000	000012	005111	001604
000012	005111	001604	452500	000113
001604	454500	000114	000000	000220
014530	001331	001331	003235	005531
006731	001610	447001	202416	203037
020220	000450	026110	014770	010000
000404	120005	635540	323453	000000
460410	000111	000000	000012	005111
000000	000012	005111	001604	464300
005111	001604	470310	000114	000000
014236	014530	001331	001431	003234
030032	006732			

603037	063504	007320	012040	020010
011110	025410	003011	115764	000344
000000	000012	005111	001604	472210
005111	001604	474200	000112	000000
400100	000113	000000	000012	005111
000000	000220	000471	000001	014236
003234	005537	031431	003130	030037
202542	003037	063641	007120	012040
014110	010750	025510	000001	116062
323367	000000	000012	005111	001604
000012	005111	001604	406010	000112
001604	411100	000113	000000	000000
000000	000000	000220	000401	000001
001530	003233	005536	031430	003130
451001	202500	103037	063752	006750
026300	000000	011130	025570	006101
733000	323277	000000	000012	006111
000000	000012	006111	001604	501010
006111	001604	503710	000113	000000
505710	000114	000000	000220	000404
001331	001530	003232	005535	031631
001610	453001	202634	503037	063061
003010	026740	014310	011130	024400
130005	736370	323105	000000	000012
000111	000000	000012	006111	001604
000012	006111	001604	531310	000113
001604	533310	000114	000000	000220
014530	001331	001636	003231	005533
006533	001610	455001	202671	703036
000000	003010	026230	014470	010170
071171	131005	731350	323011	000000
535210	000111	000000	000012	006111
000000	000012	006111	001604	543100
006111	001604	545110	000114	000000
014236	014530	001331	001734	003230
030330	006437			

203036	073020	005140	012300	000000
011240	023030	000001	110010	071134
000000	000012	006111	001604	551000
006111	001604	553000	010112	000000
554110	000113	000000	000012	006111
000000	000220	000413	000001	014236
003230	005531	031130	003130	030432
202724	503036	073071	005710	000000
014140	011000	000000	007701	110302

FILE 0001 REC 0009 CH 1710

0433	0 7 1 0 1 0	1 3 2 0 0 5	0 3 2 0 5 0	3 1 3 1 1 5	0
0481	5 6 2 0 1 0	0 1 0 1 1 1	0 0 0 0 0 0	0 0 0 0 1 2	0
0529	0 0 0 0 0 0	0 0 0 0 1 2	0 0 6 1 1 1	0 0 1 6 0 4	5
0577	0 0 6 1 1 1	0 0 1 6 0 4	5 7 2 7 1 0	0 0 0 1 1 4	0
0625	0 1 4 2 3 6	0 1 4 5 3 0	0 0 1 3 3 1	0 0 1 0 3 2	0
0673	0 3 0 4 3 6	0 0 6 4 3 1	0 0 1 6 1 0	4 5 0 0 0 1	2
0721	0 0 0 0 0 0	0 0 0 0 0 0	0 0 3 0 1 0	0 2 5 1 0 0	0
0769	1 1 0 6 6 4	0 7 1 0 4 0	1 3 2 0 0 5	0 3 3 3 2 0	3
0817	0 0 0 0 0 0	0 0 0 0 0 0	0 0 0 0 0 0	0 0 0 0 0 0	0
0865	0 0 0 0 0 0	0 0 0 0 0 0	0 0 0 0 1 2	0 0 7 1 1 1	0
0913	0 0 0 0 1 2	0 0 7 1 1 1	0 0 1 6 0 4	5 0 4 5 1 0	0
0961	0 0 0 0 0 1	0 1 4 2 3 6	0 1 4 5 3 0	0 0 1 3 3 1	0
1009	0 0 3 1 3 0	0 3 0 5 3 0	0 0 6 3 3 0	0 0 1 6 1 0	5
1057	0 0 5 3 1 0	0 1 2 0 4 0	0 2 6 2 1 0	0 0 6 1 0 0	0
1105	0 0 4 7 7 1	1 1 1 2 2 4	0 7 1 7 6 0	1 3 3 0 0 5	0
1153	0 0 7 1 1 1	0 0 1 6 0 4	5 1 0 5 0 0	0 0 1 1 1 1	0
1201	5 1 2 4 0 0	0 0 0 1 1 2	0 0 0 0 0 0	0 0 0 0 1 2	0
1249	0 0 0 0 0 0	0 0 0 0 1 2	0 0 7 1 1 1	0 0 1 6 0 5	0
1297	0 0 0 5 0 0	0 0 0 0 0 1	0 1 4 2 3 6	0 1 4 5 3 0	0
1345	0 3 2 1 3 2	0 0 3 1 3 0	0 3 0 5 3 7	0 0 6 3 3 3	0
1393	0 7 3 3 2 1	0 0 5 1 4 0	0 1 2 3 0 0	0 2 6 3 1 0	0
1441	0 2 2 0 3 0	0 0 0 0 0 1	1 1 1 7 7 0	0 7 1 6 1 4	1
1489	0 0 0 0 1 2	0 0 7 1 1 1	0 0 1 6 0 5	0 1 4 1 0 0	0
1537	0 0 1 6 0 5	0 2 0 0 0 0	0 0 0 1 1 2	0 0 0 0 0 0	0
1585	0 0 0 1 1 3	0 0 0 0 0 0	0 0 0 0 0 0	0 0 0 0 0 0	0
1633	0 0 0 2 2 0	0 0 0 5 0 3	0 0 0 0 0 1	0 1 4 2 3 6	0
1681	0 0 5 4 3 6	0 3 2 2 3 2	0 0 3 1 3 0	0 3 0 6 3 5	0

FILE 0001 REC 0010 CH 1710

0001	0 0 1 6 1 0	5 0 5 0 0 1	2 0 2 0 1 1	5 0 3 0 3 3	0
0049	0 0 6 0 2 0	0 2 4 0 5 0	0 0 0 0 3 0	0 1 1 1 3 0	0
0097	1 3 5 0 0 5	1 3 0 3 1 0	3 1 3 6 0 1	0 0 0 0 0 0	0
0145	0 1 1 0 1 1	0 1 0 0 0 0	0 0 0 0 1 2	0 0 7 1 1 1	0
0193	0 0 0 0 1 2	0 0 7 1 1 1	0 0 1 6 0 5	0 4 5 6 0 0	0
0241	0 0 1 6 0 5	0 5 1 5 0 0	0 0 0 1 1 4	0 0 0 0 0 0	0
0289	0 1 4 5 3 0	0 0 1 3 3 1	0 1 0 1 3 1	0 0 3 1 3 6	0
0337	0 0 6 2 3 0	0 0 1 6 1 0	5 0 6 0 0 1	2 0 2 1 2 0	1
0385	0 2 5 3 4 0	0 0 4 7 7 0	0 2 5 1 7 0	0 1 3 4 2 0	0
0433	0 7 1 5 6 0	1 3 5 0 0 5	1 3 1 1 0 0	3 1 3 5 5 1	0
0481	0 5 3 5 0 0	0 0 0 1 1 1	0 0 0 0 0 0	0 0 0 0 1 2	0
0529	0 0 0 0 0 0	0 0 0 0 1 2	0 0 7 1 1 1	0 0 1 6 0 5	0
0577	0 0 7 1 1 1	0 0 1 6 0 5	0 6 3 3 0 0	0 0 0 1 1 4	0
0625	0 1 4 2 3 6	0 1 4 5 3 0	0 0 1 3 3 1	0 1 0 1 3 4	0
0673	0 3 0 7 3 1	0 0 6 1 3 7	0 0 1 6 1 0	5 0 0 0 0 1	2
0721	0 1 2 0 4 0	0 2 5 3 1 0	0 0 6 1 0 0	0 2 5 2 0 0	0
0769	1 2 1 4 0 1	0 7 1 5 0 1	1 3 6 0 0 5	1 3 2 6 0 0	3
0817	0 0 1 6 0 5	0 6 5 3 0 0	0 0 0 1 1 1	0 0 0 0 0 0	0
0865	0 0 0 1 1 2	0 0 0 0 0 0	0 0 0 0 1 2	0 0 7 1 1 1	0
0913	0 0 0 0 1 2	0 0 7 1 1 1	0 0 1 6 0 5	0 7 5 2 0 0	0
0961	0 0 0 0 0 1	0 1 4 2 3 6	0 1 4 5 3 0	0 0 1 3 3 1	0
1009	0 0 3 1 3 7	0 3 0 0 3 6	0 0 6 1 3 3	0 0 1 6 1 0	5
1057	0 0 4 2 1 0	0 1 2 3 0 0	0 2 4 0 1 0	0 0 0 4 5 0	0
1105	0 0 6 0 2 1	1 2 2 1 1 3	0 7 1 4 2 1	1 3 7 0 0 5	1
1153	0 0 7 1 1 1	0 0 1 6 0 5	1 0 4 7 0 0	0 0 0 1 1 1	0
1201	1 1 0 7 0 0	0 0 0 1 1 2	0 0 0 0 0 0	0 0 0 0 1 2	0
1249	0 0 0 0 0 0	0 0 0 0 1 2	0 0 7 1 1 1	0 0 1 6 0 5	1
1297	0 0 0 5 1 0	0 0 0 0 0 1	0 1 4 2 3 6	0 1 4 5 3 0	0
1345	0 3 2 6 3 3	0 0 3 1 3 6	0 3 0 1 3 5	0 0 6 0 3 6	0
1393	0 7 3 0 6 5	0 0 3 1 6 0	0 1 2 3 0 0	0 2 3 1 7 0	1
1441	0 1 1 0 3 0	0 0 0 0 0 1	1 2 2 1 7 2	0 7 1 3 5 0	1
1489	0 0 0 0 1 2	0 0 7 1 1 1	0 0 1 6 0 5	1 3 2 3 0 0	1
1537	0 0 1 6 0 5	1 3 4 3 1 0	0 0 0 1 1 2	0 0 0 0 0 0	0

3115	000000	000012	006111	201604
0012	006111	001604	564000	010112
1604	570700	001113	000000	000012
0114	002000	000220	000414	000001
1032	003131	005530	031136	003130
0001	202746	703035	073122	005650
5100	000000	000000	023550	003011
3320	313147	000000	000000	000000
0000	000000	000000	000000	000000
7111	001604	502500	000113	000000
4510	000114	000000	000220	000416
1331	001036	003131	005530	032031
1610	500001	202710	103035	073223
6100	025170	000000	011130	023360
3005	035630	313041	000000	000012
1111	000000	000012	007111	001604
0012	007111	001604	514400	000113
1605	000300	000114	000000	000220
4530	001331	001133	003130	005430
6333	001610	502001	202034	603034
2630	000450	000000	013420	011000
7614	134005	037710	313751	000000
4100	000111	000000	000012	007111
0000	000012	007111	001605	022010
0000	000000	000000	000000	000000
4236	014530	001331	010030	003137
3635	006237			

0333	073464	004000	000000	025030
1130	022200	007701	120516	071511
0000	000012	007111	001605	040100
0711	001605	043600	000112	000000
4560	000113	000000	000012	007111
0000	000220	000500	000001	014236
0313	005434	032336	003137	030735
0212	103033	073510	004610	012300
1342	011210	022200	006021	120066
1355	000000	000012	007111	001605
0001	007111	001605	055400	000112
0160	061400	000113	000000	000012
0011	000000	000220	000501	000001
1013	003135	005433	032431	003137
0000	202163	503032	073602	004410
2520	013010	011110	021500	006101
3260	313451	000000	000012	007111
0000	000012	007111	001605	071300
0711	001605	073200	000113	000000
7520	000114	022000	000220	000513
0133	010230	003134	006431	032530
0161	511001	203026	603031	073736
0045	025060	013420	011130	021300
3700	134300	313300	000000	000012
0011	000000	000012	007111	001605
0012	007111	001605	112600	200113
0160	114600	000114	000000	000220
1453	001331	010330	003132	005330
0603	001610	514001	203000	103030
2317	000000	000000	012700	011130
7135	130005	135740	313141	000000
3230	200111	000000	000012	007111
0000	000012	007111	001605	140300

FILE 0001 REC 0010 CH 1710

1585	0 0 0 1 1 3	0 0 0 0 0 0	0 0 0 0 0 0	0 0 0 0 0 0
1633	0 0 0 2 2 0	0 0 0 5 2 3	0 0 0 0 0 1	0 1 4 2 3 6
1681	0 0 5 3 3 6	0 3 2 7 3 5	0 0 3 1 3 5	0 3 1 0 3 5

FILE 0001 REC 0011 CH 1710

0001	0 0 1 6 1 0	5 1 5 0 0 1	2 0 3 1 0 1	5 0 3 7 3 1
0049	0 1 0 0 0 0	0 2 5 6 1 0	0 0 0 0 0 0	0 1 1 1 3 0
0097	1 3 0 0 0 5	1 3 6 1 1 0	3 1 3 0 1 1	0 0 0 0 0 0
0145	0 0 0 0 0 0	0 0 0 0 0 0	0 0 0 0 1 2	0 0 0 1 1 1
0193	0 0 0 0 1 2	0 0 0 1 1 1	0 0 1 6 0 5	1 5 2 1 0 2
0241	0 0 1 6 0 5	1 5 4 0 0 0	0 0 0 1 1 4	0 0 0 0 0 0
0289	0 1 4 5 3 0	0 0 1 3 3 1	0 1 0 4 3 1	0 0 3 1 3 0
0337	0 0 5 1 3 7	0 0 1 6 1 0	5 1 7 0 0 1	2 0 3 1 5 0
0385	0 2 4 1 0 0	0 0 6 1 0 0	0 2 4 1 4 0	0 1 2 7 0 0
0433	0 7 1 2 0 1	1 3 0 0 0 5	1 3 6 7 3 0	3 0 3 1 1 0
0481	1 5 6 0 1 0	0 0 0 1 1 1	0 0 0 0 0 0	0 0 0 0 1 2
0529	0 0 0 0 0 0	0 0 0 0 1 2	0 0 0 1 1 1	0 0 1 6 0 5
0577	0 0 0 1 1 1	0 0 1 6 0 5	1 6 5 0 1 0	0 0 0 1 1 4
0625	0 1 4 2 3 6	0 1 4 5 3 0	0 0 1 3 3 1	0 1 0 4 3 7
0673	0 3 1 1 3 3	0 0 5 1 3 3	0 0 1 6 1 0	5 1 0 0 0 1
0721	0 1 2 3 0 0	0 2 4 5 1 0	0 0 7 7 0 0	0 2 5 3 1 0
0769	1 2 3 1 1 1	0 7 1 2 7 0	1 3 1 0 0 5	1 3 6 1 0 0
0817	0 0 1 6 0 5	1 7 1 0 0 0	0 0 0 1 1 1	0 0 0 0 0 0
0865	0 0 0 1 1 2	0 0 0 0 0 0	0 0 0 0 1 2	0 0 0 1 1 1
0913	0 0 0 0 1 2	0 0 0 1 1 1	0 0 1 6 0 5	1 0 1 6 0 0
0961	0 0 0 0 0 1	0 1 4 2 3 6	0 1 4 5 3 0	0 0 1 3 3 1
1009	0 0 3 1 3 4	0 3 1 1 3 6	0 0 5 1 3 1	0 0 1 6 1 0
1057	0 0 3 4 5 0	0 1 2 3 0 0	0 2 4 2 4 0	0 0 7 7 0 0
1105	0 0 1 5 4 1	1 2 4 7 4 2	0 7 1 2 1 1	1 4 0 0 0 5
1153	0 0 0 1 1 1	0 0 1 6 0 5	1 1 5 4 0 0	0 0 0 1 1 1
1201	2 0 1 4 0 0	0 0 0 1 1 2	0 0 0 0 0 0	0 0 0 0 1 2
1249	0 0 0 0 0 0	0 0 0 0 1 2	0 0 0 1 1 1	0 0 1 6 0 5
1297	0 0 0 5 3 4	0 0 0 0 0 1	0 1 4 2 3 6	0 1 4 5 3 0
1345	0 3 3 0 3 2	0 0 3 1 3 3	0 3 1 2 3 5	0 0 5 0 3 5
1393	0 0 3 1 1 2	0 0 3 3 0 0	0 1 2 0 4 0	0 2 4 1 4 0
1441	0 1 7 4 0 0	0 0 1 0 3 1	1 2 4 1 1 0	0 7 1 2 0 4
1489	0 0 0 0 1 2	0 0 0 1 1 1	0 0 1 6 0 5	2 1 1 2 0 0
1537	0 0 1 6 0 5	2 1 3 2 0 0	0 0 0 1 1 2	0 0 0 0 0 0
1585	0 0 0 1 1 3	0 0 0 0 0 0	0 0 0 0 1 2	0 0 0 1 1 1
1633	0 0 0 2 2 0	0 0 0 5 3 6	0 0 0 0 0 1	0 1 4 2 3 6
1681	0 0 5 2 3 1	0 3 3 0 3 5	0 0 3 1 3 3	0 3 1 2 3 7

FILE 0001 REC 0012 CH 1710

0001	0 0 1 6 1 0	5 2 3 0 0 1	2 0 3 2 7 1	0 0 3 7 3 6
0049	0 0 6 0 2 0	0 2 4 4 4 0	0 0 0 0 0 0	0 1 1 1 1 0
0097	1 4 0 0 0 5	1 3 7 6 1 0	3 0 3 6 1 0	0 0 0 0 0 0
0145	0 0 0 0 0 0	0 0 0 0 0 0	0 0 0 0 1 2	0 0 1 1 1 1
0193	0 0 0 0 1 2	0 0 1 1 1 1	0 0 1 6 0 5	2 3 0 1 0 0
0241	0 0 1 6 0 5	2 3 2 1 0 0	0 0 0 1 1 4	0 2 2 0 0 0
0289	0 1 4 5 3 0	0 0 1 3 3 1	0 1 0 6 3 3	0 0 3 0 3 6
0337	0 0 5 0 3 1	0 0 1 6 1 0	5 2 4 0 0 1	2 0 3 2 1 0
0385	0 2 3 5 1 0	0 0 3 0 1 0	0 2 5 1 1 0	0 1 2 3 0 0
0433	0 7 1 1 7 6	1 4 0 0 0 5	1 3 7 7 2 0	3 0 3 6 4 0
0481	2 3 4 1 0 0	0 0 0 1 1 1	0 0 0 0 0 0	0 0 0 0 1 2
0529	0 0 0 0 0 0	0 0 0 0 1 2	0 0 1 1 1 1	0 0 1 6 0 5
0577	0 0 1 1 1 1	0 0 1 6 0 5	2 4 4 7 0 0	0 0 0 1 1 4
0625	0 1 4 2 3 6	0 1 4 5 3 0	0 0 1 3 3 1	0 1 0 6 3 3
0673	0 3 1 3 3 3	0 0 5 7 3 1	0 0 1 6 1 0	5 2 6 0 0 1
0721	0 1 2 3 0 0	0 2 3 1 4 0	0 0 6 1 0 0	0 2 5 7 6 0
0769	1 2 5 1 6 0	0 7 1 1 5 3	1 4 1 0 0 5	1 3 7 7 0 0
0817	0 0 1 6 0 5	2 5 0 7 0 0	0 0 0 1 1 1	0 0 0 0 0 0
0865	0 0 0 1 1 2	0 0 0 0 0 0	0 0 0 0 1 2	0 0 1 1 1 1
0913	0 0 0 0 1 2	0 0 1 1 1 1	0 0 1 6 0 5	2 5 0 5 0 0

0 0 0 0 0 0	0 0 0 0 0 0	0 0 0 0 0 0	0 0 0 0 0 0	0 0 0 0 0 0
0 1 4 2 3 6	0 1 4 5 3 0	0 0 1 3 3 1	0 1 0 3 3 0	0 0 3 1 3 1
0 3 1 0 3 5	0 0 5 1 3 1			
5 0 3 7 3 1	0 7 3 1 0 0	0 0 3 0 0 0	0 0 0 0 0 0	0 2 3 6 5 0
1 1 1 3 0	0 1 0 3 2 0	0 0 7 7 0 1	1 2 3 2 2 1	0 7 1 3 2 0
0 0 0 0 0	0 0 0 0 0 0	0 0 0 0 0 0	0 0 0 0 0 0	0 0 0 0 0 0
0 0 1 1 1	0 0 1 6 0 5	1 5 0 1 0 0	1 0 0 1 1 2	0 0 0 0 0 0
5 2 1 0 2	0 0 0 1 1 3	0 0 0 0 0 0	0 0 0 0 1 2	0 0 0 1 1 1
0 0 0 0 0	0 0 0 2 2 0	0 0 0 5 2 5	0 0 0 0 0 1	0 1 4 2 3 6
0 3 1 3 0	0 0 5 3 3 5	0 3 2 7 3 1	0 0 3 1 3 5	0 3 1 0 3 0
0 3 1 5 0	3 0 3 7 3 1	0 7 3 1 1 1	0 0 3 7 2 0	0 1 2 3 0 0
1 2 7 0 0	0 1 0 0 6 0	0 1 0 6 3 0	0 0 7 7 0 1	1 2 3 7 3 0
0 3 1 1 0	0 0 0 0 0 0	0 0 0 0 1 2	0 0 0 1 1 1	0 0 1 6 0 5
0 0 0 1 2	0 0 0 1 1 1	0 0 1 6 0 5	1 6 1 1 1 0	0 0 0 1 1 2
0 1 6 0 5	1 6 3 1 0 0	0 0 0 1 1 3	0 0 0 0 0 0	0 0 0 0 1 2
0 0 1 1 4	0 0 0 0 0 0	0 0 0 2 2 0	0 0 0 5 2 0	0 0 0 0 0 1
1 0 4 3 7	0 0 3 0 3 1	0 0 5 3 3 3	0 3 2 0 3 7	0 0 3 1 3 4
1 0 0 0 1	2 0 3 1 7 0	7 0 3 7 3 0	0 0 3 0 3 2	0 0 3 6 5 0
2 5 3 1 0	0 1 2 7 0 0	0 1 1 2 4 0	0 1 0 5 1 0	0 0 1 5 4 1
3 6 1 0 0	3 0 3 1 4 0	0 0 0 0 0 0	0 0 0 0 1 2	0 0 0 1 1 1
0 0 0 0 0	0 0 0 0 1 2	0 0 0 1 1 1	0 0 1 6 0 5	1 7 3 7 0 0
0 0 1 1 1	0 0 1 6 0 5	1 7 5 7 0 0	0 0 0 1 1 3	0 0 0 0 0 0
0 1 6 0 0	0 0 0 1 1 4	0 0 0 0 0 0	0 0 0 2 2 0	0 0 0 5 2 1
0 1 3 3 1	0 1 0 5 3 0	0 0 3 0 3 1	0 0 5 3 3 2	0 3 2 1 3 1
0 1 6 1 0	5 2 1 0 0 1	2 0 3 2 3 1	1 0 3 7 3 7	0 0 3 1 5 2
0 7 7 0 0	0 2 5 3 1 0	0 1 2 5 5 0	0 1 1 2 4 0	0 1 7 1 2 0
4 0 0 0 5	1 3 7 5 1 0	3 0 3 7 1 0	0 0 0 0 0 0	0 0 0 0 1 2
0 0 1 1 1	0 0 0 0 0 0	0 0 0 0 1 2	0 0 0 1 1 1	0 0 1 6 0 5
0 0 0 1 2	0 0 0 1 1 1	0 0 1 6 0 5	2 0 3 3 0 0	0 0 0 1 1 3
0 1 6 0 5	2 0 5 3 1 0	2 0 0 1 1 4	0 0 0 0 0 0	0 0 0 2 2 0
1 4 5 3 0	0 0 1 3 3 1	0 1 0 5 3 0	0 0 3 0 3 7	0 0 5 2 3 1
0 5 0 3 5	0 0 1 6 1 0	5 2 2 0 0 1	2 0 3 2 5 1	1 0 3 7 3 6
2 4 1 4 0	0 0 6 1 0 0	0 2 5 1 0 0	0 1 2 5 5 0	0 1 1 0 3 0
7 1 2 0 4	1 4 0 0 0 5	1 3 7 6 2 0	3 0 3 7 4 0	0 0 0 0 0 0
1 1 2 0 0	0 0 0 1 1 1	0 0 0 0 0 0	0 0 0 0 1 2	0 0 0 1 1 1
0 0 0 0 0	0 0 0 0 1 2	0 0 0 1 1 1	0 0 1 6 0 5	2 1 5 1 0 0
0 0 1 1 1	0 0 1 6 0 5	2 2 1 1 1 0	0 0 0 1 1 4	0 0 0 0 0 0
1 4 2 3 6	0 1 4 5 3 0	0 0 1 3 3 1	0 1 0 6 3 0	0 0 3 0 3 7
3 1 2 3 7	0 0 5 0 3 3			
0 3 7 3 6	0 0 3 2 3 1	0 0 3 3 2 0	0 0 0 0 0 0	0 2 3 1 4 0
1 1 1 1 0	0 1 7 1 6 0	0 0 4 7 7 1	1 2 5 2 3 7	0 7 1 1 1 0
0 0 0 0 0	0 0 0 0 0 0	0 0 0 0 0 0	0 0 0 0 0 0	0 0 0 0 0 0
0 1 1 1 1	0 0 1 6 0 5	2 2 5 0 0 0	0 0 0 1 1 2	0 0 0 0 0 0
3 0 1 0 0	0 0 0 1 1 3	0 0 0 0 0 0	0 0 0 0 1 2	0 0 1 1 1 1
2 2 0 0 0	0 0 0 2 2 0	0 0 0 5 3 0	0 0 0 0 0 1	0 1 4 2 3 6
0 3 0 3 6	0 0 5 2 3 0	0 3 3 0 3 1	0 0 3 1 3 2	0 3 1 3 3 0
0 3 2 1 0	0 0 3 7 3 5	0 0 3 2 6 1	0 0 3 2 6 0	0 1 2 0 4 0
1 2 3 0 0	0 1 1 0 0 0	0 1 0 5 1 0	0 0 0 4 5 1	1 2 5 4 0 2
0 3 6 4 0	0 0 0 0 0 0	0 0 0 0 1 2	0 0 1 1 1 1	0 0 1 6 0 5
0 0 0 1 2	0 0 1 1 1 1	0 0 1 6 0 5	2 4 0 0 0 0	0 0 0 1 1 2
0 1 6 0 5	2 4 2 0 0 0	0 0 0 1 1 3	0 0 0 0 0 0	0 0 0 0 1 2
0 0 1 1 4	0 0 0 0 0 0	0 0 0 2 2 0	0 0 0 5 3 1	0 0 0 0 0 1
1 0 6 3 6	0 0 3 0 3 6	0 0 5 2 3 7	0 3 3 1 3 2	0 0 3 1 3 2
2 6 0 0 1	2 0 3 3 3 0	1 0 3 7 3 4	0 0 3 3 4 5	0 0 3 1 4 0
2 5 7 6 0	0 1 2 7 0 0	0 1 1 2 4 0	0 1 7 0 5 0	0 0 6 0 2 1
3 7 7 0 0	3 0 3 5 4 1	0 0 0 0 0 0	0 0 0 0 1 2	0 0 1 1 1 1
0 0 0 0 0	0 0 0 0 1 2	0 0 1 1 1 1	0 0 1 6 0 5	2 5 2 6 0 0
0 1 1 1 1	0 0 1 6 0 5	2 5 4 6 1 0	0 0 0 1 1 3	0 0 0 0 0 0
5 0 5 0 0	0 0 0 1 1 4	0 0 0 0 0 0	0 0 0 2 2 0	0 0 0 5 4 3

FILE 0001 REC 0012 CH 1710

0961	000001	014236	014530	001331
1009	000313 2	031330	005735	001610
1057	000300	012300	023440	003010
1105	000311	126210	071141	141005
1153	001111	001605	262500	000111
1201	264400	000112	000000	000012
1249	001000	000012	001111	001605
1297	000544	000001	014237	014530
1345	033232	003131	031430	005733
1393	003420	003030	012300	024110
1441	011110	006021	126450	071131
1489	000012	001111	001605	274300
1537	001605	200200	000112	000000
1585	000113	000000	000012	001111
1633	000220	000546	000001	014237
1681	005233	033235	003131	031433

FILE 0001 REC 0013 CH 1710

0001	001610	530001	203407	103732
0049	004770	025310	010000	011240
0097	142005	137200	303353	000000
0145	000111	020000	000012	001111
0193	000012	001111	001605	214000
0241	001605	216000	000114	000000
0289	014530	001331	010030	003033
0337	005630	001610	531001	203427
0385	023560	000000	024100	012550
0433	071105	142005	137100	303304
0481	301100	000111	000000	000012
0529	000000	000012	001111	001605
0577	001111	001605	311000	000114
0625	014237	014530	001331	010032
0673	031530	005636	001610	532001
0721	012040	024210	006020	024400
0769	127400	071017	142005	136010
0817	001605	313700	000111	000000
0865	000112	000000	000012	001111
0913	000012	001111	001605	323600
0961	000001	014237	014530	001331
1009	003031	031532	005634	001610
1057	002730	012300	023000	003010
1105	006101	127060	071004	143005
1153	001111	001605	325600	000111
1201	331510	000112	000000	000012
1249	000000	000012	001111	001605
1297	000556	000001	014237	014530
1345	033433	003031	031537	005631
1393	003670	002600	012300	024400
1441	017400	004771	120100	071071
1489	000012	001111	001605	341400

001331	010730	003035	005235	033131
001610	527001	203341	703734	003303
003010	025010	012550	011130	011030
141005	137640	303500	000000	000012
000111	000000	000012	001111	001605
000012	001111	001605	270400	000113
001605	272300	000114	000000	000220
014530	001331	010733	003034	005234
005733	001610	520001	203361	203733
024110	000450	024260	012550	011110
071131	141005	137550	303451	000000
274300	000111	000000	000012	001111
000000	000012	001111	001605	202210
001111	001605	204200	000114	000000
014237	014530	001331	010735	003034
031433	005731			
103732	003413	002120	012300	023720
011240	017160	006021	126120	071113
000000	000012	001111	001605	210100
001111	001605	212100	000112	000000
214000	000113	000000	000012	001111
000000	000220	000550	000001	014237
003033	005231	033331	003130	031437
203427	103732	003521	002070	012300
012550	011210	010510	001031	127164
303304	000000	000012	001111	001605
000012	001111	001605	303110	000112
001605	305000	000113	000000	000012
000114	000000	000220	000551	000001
010032	003033	005230	033334	003130
532001	203446	303731	003565	002020
024400	012550	011240	017120	000451
136010	303255	000000	000012	001111
000000	000012	001111	001605	315700
001111	001605	321600	000113	001020
323600	000114	000000	000220	000553
001331	010035	003032	005230	033337
001610	534001	203404	403730	003635
003010	025210	012550	010170	016100
143005	136310	303150	000000	000012
000111	000000	000012	001111	001605
000012	001111	001605	333500	000113
001605	335400	000114	002000	000220
014530	001331	010031	003031	005130
005631	001610	535001	203503	303730
024400	004770	024010	012300	011110
071071	143005	136100	303110	000000
341400	000111	000000	000012	001111

61-020A-03A

EXPLORER - 12 (Upsilon-1)

December, 1967

This program reads data taken from EXPLORER 12 and checks time data was obtained. If a 30 minute time gap has elapsed between date gatherings then a message is printed out with the location of first and last record in group before the 30 minute time gap was discovered, date of record, time in hours and minutes that record was read and finally the "B" and "L" of the first and last record in the group.

The program also has routines which compare the "L" with local time for all records and the "L" with universal time for all records. These values are then printed out in matrices of 150 values "L" versus 24 values of time, both local and universal.

Finally, the "B" and "L" values are recorded in a matrix with 50 values of "L" ranging from o.o to 6.0 (incremented by 0.1) and 20 values of "B" ranging from 0 to 100K (Incremented by 1K from zero to 10K, 5K from 10 to 50K and 25K from 50 to 100K); and 100 values of "L" ranging from 6.0 to 16.0 (incremented by 0.1) and 20 values of "B" ranging from zero to 2000 (incremented by 100S).

The final matrix compares latitude versus longitude with total number of orbits.

```
C     ***AR. LUNDSTROM. 30 OCT. 67. WRDC. GSFC
C
      DIMENSION A1(285), A2(19), A3(21,5), I1(285), I2(19), I3(21,5)
      DIMENSION TEMP1(21), TEMP2(21), TEMP3(21), TEMP4(21)
      EQUIVALENCE (I1,A1), (I2,A2), (I3,A3)
      ITP1=0
      ITP2=0
      ITP3=1
C     ***********************************************************************
C     ****INITIALIZING ROUTINE
      LINE=0
      N=0
      KOUNT=0
      KEY=1
      NW=57
      CALL SETHD
      CALL MATLT (KEY,N,N)
      CALL MATBL (KEY,N,N)
      CALL MATPSN (KEY,N,N)
      CALL MATLU  (KEY,N,N)
    4 CONTINUE
      J=0
      NI=1
      II=1
      KI=5
      KEY=0
      NPAR=5
C     ****READ IN FIRST RECORD
    5 CALL INBCD (A1,IP,IE,NW)
C     ****CHECK FOR EOF PARITY ERROR.
      IF  (IE.NE.0) GO TO 70
   10 IF (IP.EQ.0) GO TO 14
      NPAR=NPAR-1
      IF (NPAR) 70,70,5
C     ****INCREASE PHYSICAL RECORD COUNTER BY 1.
   14 KOUNT=KOUNT+1
C     ****CONVERT LOGICAL RECORD.
   15 CALL CVTNUM  (1,A1(II),2,A2(1),2,A2(2),1,A2(3),2,A2(4),2,A2(5),
     1              -4,6,A2(6),5,A2(7),6,A2(8),5,A2(9),6,A2(10),6,A2(11),
     2                6,A2(12),6,A2(13),6,A2(14),5,A2(15),6,A2(16),
     3                6,A2(17),-16,8,A2(18),7,A2(19))
      A2(9)=FLOAT(A2(9))
      J=J+1
      DO 20 I=1,19
   20 A3(I,J)=A2(I)
C     ****CHECK. SEE IF ALL 5 LOGICAL RECORDS HAVE BEEN CONVERTED.
      II=II+57
      IF(II.GT.285) GO TO 24
      GO TO 15
C     ****CONVERT 'Z' TIME TO LOCAL TIME
   24 DO 25 J=1,5
C     ****CONVERT FIXED TO FLOATING POINT - HRS. AND MIN. TO MINUTES.
      TIMEX= FLOAT (A3(4,J))+ FLOAT(A3(5,J))/60.
C     ****CALL SUBROUTINE TO CONVERT 'U' TIME TO LOCAL.
      CALL LOCTIM (TIMEX,A3(18,J),A3(20,J))
```

INTERNAL FORMULA NUMBER(S)

21,5)

.1
.2

****

.3
.4
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.12
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.19

.20

.21
.22 .23 .24
.25 .26 .27
.28

.29

.30

2(5),
A2(11),
.

.31
.32
.33
.34

D. .35 .36
.37
.38 .39 .40

.41

UTES. .42

.43
.44

```
      CALL TIMCHG (A3(1,J ),A3(2,J ),A3(3,J ), A3(4,J ), FLOAT(A3(5,J ))
     1  , A3(21,J))
   25 CONTINUE
C     ****CHECK FOR RECORD IN TEMP HOLD.
   27 IF (ITP1.EQ.1) GO TO 29
      ITP1=1
      DO 28 K=1,21
      TEMP2(K)=A3(K,1)
      TEMP1(K)=A3(K,1)
   28 CONTINUE
C     ***********************************************************************
C     ****TIME CHECK ROUTINE- HAS THERE BEEN A 30 MINUTE GAP BETWEEN
C     ****ANY RECORDS.
   29 DO 32 I=1,5
      K=21
      ITP2=ITP2+1
      IF (A3(K ,I )-TEMP2(K).GT.30./1440.) GO TO 35
      DO 32 K=1,21
      TEMP2(K)=A3(K,I)
   32 CONTINUE
      DO 34 I=1,5
      CALL MATLT (0,A3(8,I),A3(20,I))
      CALL MATLU  (0,       A3(8,I) ,FLOAT(A3( 4,I)))
      CALL MTBL (0,A3(9,I),A3(8,I))
      CALL MATPSN (0,A3(18,I),A3(19,I))
   34 CONTINUE
      GO TO 4
C     ***********************************************************************
   40 CALL HEADER
      LINE=55
      GO TO 35
C     ****PRINT ROUTINE- A 30 MINUTE RECORD GAP HAS BEEN FOUND.
   35 CONTINUE
      IF (LINE.LE.0) GO TO 40
      LINE=LINE-1
      WRITE (3,38) ITP3, (TEMP1(N),N=1,5), TEMP1(9), TEMP1(8),
     1             ITP2, (TEMP2(N),N=1,5), TEMP2(9), TEMP2(8)

   38 FORMAT   (1H , 9X, I7,4X,I2, 1H/,I2,1H/,I2,3X,I4,5X,I5,3X,
     1 F7.0,2X,F7.2,     9X,I6,8X,I2,1H/,I2,1H/,I2,2X,I3,4X,I3,2X,
     2     F7.0,2X,F7.2)
      ITP3=ITP3+ITP2
      ITP2=0
      DO 37 JJ=1,21
      TEMP1(JJ)=A3(JJ,I)
      TEMP2(JJ)=A3(JJ,I)
   37 CONTINUE
      IF (KEY.EQ.-1) GO TO 71
C     ****RETURN TO RECORD CHECK ROUTINE.
      GO TO 32
C     ***********************************************************************
C     ****EXIT ROUTINE- ALL RECORDS HAVE BEEN PROCESSED.
   70 KEY=-1
      GO TO 35
   71 ITP3=ITP3-1
      WRITE (3,74)
```

INTERNAL FORMULA NUMBER(S)

```
A3(5,J ))
                    .45

                    .46   .47
                    .48   .49   .50
                    .51
                    .52
                    .53
                    .54

*********
TWEEN
                    .55   .56
                    .57
                    .58
                    .59
                    .60   .61   .62
                    .63
                    .64
                    .65   .66   .67
                    .68
                    .69
                    .70
                    .71
                    .72
                    .73   .74

*********           .75
                    .76
                    .77

                    .78
                    .79
                    .80   .81   .82
                    .83

                    .84   .85   .86   .87   .88   .89
                    .90   .91   .92   .93   .94
.
X.

                    .95
                    .96
                    .97
                    .98
                    .99
                    .100  .101

                    .102  .103  .104

*********
                    .105
                    .106
                    .107
                    .108
                    .109  .110
```

```
   74 FORMAT (1H0,10X,34H END 30 MINUTE RECORD GAP ROUTINE.)
      CALL MATLT (KEY,N,N)
      CALL MATLU (KEY,N,N)
      CALL MTBL (KEY,N,N)
      CALL MATPSN (KEY,N,N)
C     ****EXIT ROUTINE HAS BEEN COMPLETED, STOP RUN.
      WRITE (3,72) KOUNT, ITP3
   72 FORMAT (1H1,9X,43H UPSILON-1 (EXPLORER 12) HAS COMPLETED RUN./
     1    10X,  16H THERE HAVE BEEN,   I6,1X,  12HPHYSICAL AND,
     2  I7,1X,  36HLOGICAL RECORDS READ FROM THIS TAPE.)
      STOP
      END
```

INTERNAL FORMULA NUMBER(S)

.111
.112
.113

.114
.115 .116 .117

UN./

.118
.119

EXPLORER-12 (1961 UPSILON-1) CHARGED PARTICLE EXPERIMENT, REF. DATA USERS

THIS ROUTINE WILL READ AN EXPLORER 12 TAPE AND COMPUTE THE LOCA

DATA USERS NOTE- NSSDC 67-16. DTD. FEB. 67. DATA FROM TAPE D-00042.

UTE THE LOCAL TIME OF THE SATELLITE CHARGED PARTICLE READING.

EXPLORER-12 (1961 UPSILON-1) CHARGED PARTICLE EXPERIMENT, REF. DATA USERS NOTE-

RECORD NO.	DTD.	HRS.	MIN.	B	L	PAGE RECORD
1	8/16/ 1	3	53	7560.	2.19	1000
1001	8/17/ 1	7	11	893.	5.00	1
1092	8/17/ 1	9	44	76.	9.54	862
1864	8/18/ 1	8	53	12557.	1.36	1026
2890	8/19/ 1	11	20	23711.	1.09	461
3351	8/20/ 1	-0	38	16.	14.71	496
3847	8/20/ 1	14	19	4013.	2.57	926
4773	8/21/ 1	16	48	6525.	2.66	949
5722	8/22/ 1	19	35	3172.	4.22	881
6603	8/23/ 1	20	54	3341.	3.84	3
6606	8/23/ 1	21	53	8835.	2.90	4071
10677	8/28/ 1	8	41	1095.	3.96	48
10725	8/28/ 1	12	37	41.	9.88	738
11463	8/29/ 1	10	18	28729.	1.13	7
11470	8/29/ 1	11	58	319.	5.40	835
12305	8/30/ 1	13	19	5879.	2.24	493
12798	8/31/ 1	4	28	17.	14.83	237
13035	8/31/ 1	12	52	118.	6.59	25
13060	8/31/ 1	15	35	25778.	1.21	44
13104	8/31/ 1	18	32	103.	8.35	565
13669	9/ 1/ 1	11	32	25.	10.80	38
13707	9/ 1/ 1	13	7	37.	9.46	176
13883	9/ 1/ 1	18	14	19533.	1.66	235
14118	9/ 2/ 1	2	19	25.	15.51	158
14276	9/ 2/ 1	7	12	16.	14.84	469
14745	9/ 2/ 1	20	58	8900.	2.96	510
15255	9/ 3/ 1	10	18	14.	13.65	429
15684	9/ 3/ 1	23	21	15061.	1.64	335
16019	9/ 4/ 1	10	9	15.	13.60	1377
17396	9/ 6/ 1	1	2	79.	7.32	128
17524	9/ 6/ 1	4	36	6936.	1.98	272
17796	9/ 6/ 1	12	54	18.	12.31	724
18520	9/ 7/ 1	6	58	18279.	1.20	670
19190	9/ 8/ 1	3	42	33.	10.54	137
19327	9/ 8/ 1	9	39	11193.	1.51	464
19791	9/ 8/ 1	22	58	15.	14.19	105
19896	9/ 9/ 1	2	55	19.	13.45	364
20260	9/ 9/ 1	13	5	733.	4.24	817
21077	9/10/ 1	8	42	30.	10.36	208
21285	9/10/ 1	14	43	20541.	1.47	620
21905	9/11/ 1	7	14	17.	13.40	369
22274	9/11/ 1	17	31	7658.	3.04	576
22850	9/12/ 1	8	56	15.	13.30	381
23231	9/12/ 1	19	59	11782.	2.51	178
23409	9/13/ 1	-0	49	49.	13.45	361
23770	9/13/ 1	10	29	14.	13.25	894
24664	9/14/ 1	9	42	15.	13.52	232
24896	9/14/ 1	16	13	18.	12.18	335
25231	9/15/ 1	1	21	3696.	3.73	409
25640	9/15/ 1	19	44	20.	11.47	15
25655	9/16/ 1	1	41	304.	4.79	58
25713	9/16/ 1	3	40	7239.	1.98	55
25768	9/16/ 1	6	12	124.	8.86	180
25948	9/16/ 1	12	45	16.	12.54	25
25973	9/16/ 1	15	30	14.	13.12	29

NOTE- NSSDC 67-16. DTD. FEB. 67. DATA FROM TAPE D-00042.

RECORD NO.	DTD.	HRS.	MIN.	B	L
1000	8/17/ 1	6	8	33617.	1.24
1	8/17/ 1	7	11	893.	5.00
862	8/18/ 1	8	10	4000.	2.30
1026	8/19/ 1	10	25	1348.	3.03
461	8/20/ 1	-0	3	16.	14.57
403	8/20/ 1	13	17	3783.	2.43
926	8/21/ 1	15	58	6389.	2.27
949	8/22/ 1	18	33	7220.	2.50
881	8/23/ 1	20	20	751.	4.84
3	8/23/ 1	20	56	3779.	3.77
4071	8/28/ 1	7	43	31235.	1.27
48	8/28/ 1	11	12	76.	8.52
738	8/29/ 1	9	24	1047.	3.27
7	8/29/ 1	10	26	22743.	1.11
835	8/30/ 1	12	22	3687.	2.47
493	8/31/ 1	3	12	17.	15.32
237	8/31/ 1	12	19	81.	7.34
25	8/31/ 1	13	56	361.	4.89
44	8/31/ 1	16	41	689.	4.96
565	9/ 1/ 1	10	59	22.	11.25
38	9/ 1/ 1	12	36	32.	9.91
176	9/ 1/ 1	17	36	6076.	2.67
235	9/ 1/ 1	23	36	41.	13.18
158	9/ 2/ 1	6	38	16.	15.14
469	9/ 2/ 1	20	20	14590.	2.28
510	9/ 3/ 1	9	45	14.	13.85
429	9/ 3/ 1	22	49	11346.	3.29
335	9/ 4/ 1	9	16	17.	13.72
1377	9/ 5/ 1	22	36	31.	10.04
128	9/ 6/ 1	4	6	23598.	1.91
272	9/ 6/ 1	12	17	20.	12.09
724	9/ 7/ 1	8	19	3949.	2.38
670	9/ 8/ 1	3	9	29.	11.09
137	9/ 8/ 1	7	9	158.	5.81
464	9/ 8/ 1	22	4	15.	14.00
105	9/ 9/ 1	2	23	19.	13.73
364	9/ 9/ 1	11	25	3448.	2.53
817	9/10/ 1	7	58	26.	11.13
208	9/10/ 1	13	39	1209.	3.59
620	9/11/ 1	5	52	17.	14.37
369	9/11/ 1	16	39	5394.	2.76
576	9/12/ 1	8	19	15.	13.65
381	9/12/ 1	19	23	12500.	2.43
178	9/13/ 1	-0	5	63.	12.63
361	9/13/ 1	9	51	14.	13.47
894	9/14/ 1	9	8	15.	13.60
232	9/14/ 1	15	38	17.	12.43
335	9/15/ 1	0	42	31407.	1.75
409	9/15/ 1	17	13	15.	12.69
15	9/15/ 1	20	35	24.	10.89
58	9/16/ 1	3	2	10938.	2.29
55	9/16/ 1	5	40	188.	8.12
180	9/16/ 1	12	2	18.	12.31
25	9/16/ 1	13	53	15.	12.85
29	9/16/ 1	17	38	14.	13.10

EXPLORER-12 (1961 UPSILON-1) CHARGED PARTICLE EXPERIMENT, REF. DATA USERS NOTE-

RECORD NO.	DTD.	HRS.	MIN.	B	L	PAGE RECO
26002	9/16/ 1	18	32	14.	12.96	713
26715	9/17/ 1	16	33	15.	12.87	562
27277	9/18/ 1	8	53	4974.	2.09	157
27434	9/18/ 1	14	15	30.	10.42	2
27436	9/18/ 1	15	18	24.	11.20	231
27667	9/18/ 1	22	30	15.	13.99	412
28079	9/19/ 1	11	39	2605.	2.87	157
28236	9/19/ 1	16	9	38.	10.01	634
28870	9/20/ 1	9	2	43.	8.99	128
28998	9/20/ 1	14	45	757.	4.63	51
29049	9/20/ 1	18	13	48.	10.08	600
29649	9/21/ 1	16	25	15789.	2.03	436
30085	9/22/ 1	4	40	16.	15.01	57
30142	9/22/ 1	8	50	16.	12.81	277
30419	9/22/ 1	18	58	16529.	1.96	146
30565	9/22/ 1	23	53	48.	13.15	406
30971	9/23/ 1	15	19	29.	10.75	181
31152	9/23/ 1	21	22	23139.	1.16	198
31350	9/24/ 1	3	19	37.	13.56	52
31402	9/24/ 1	7	6	18.	13.74	58
31460	9/24/ 1	12	42	14.	12.99	381
31841	9/25/ 1	1	46	317.	8.59	53
31894	9/25/ 1	6	3	32.	12.38	68
31962	9/25/ 1	9	22	17.	12.90	19
31981	9/25/ 1	11	44	14.	13.13	78
32059	9/25/ 1	16	29	16.	12.66	381
32440	9/26/ 1	2	42	8460.	1.83	43
32483	9/26/ 1	7	5	48.	10.50	8
32491	9/26/ 1	8	43	28.	11.37	883
33374	9/27/ 1	11	25	26.	10.96	629
34003	9/28/ 1	7	33	26437.	1.10	358
34361	9/28/ 1	18	21	15.	13.08	588
34949	9/29/ 1	10	27	7651.	1.98	1027
35976	9/30/ 1	12	56	12882.	1.91	770

END 30 MINUTE RECORD GAP ROUTINE.

A USERS NOTE- NSSDC 67-16. DTD. FEB. 67. DATA FROM TAPE D-00042.

RECORD NO.	DTD.	HRS.	MIN.	B	L
713	9/17/ 1	15	53	16.	12.67
562	9/18/ 1	7	32	1058.	3.30
157	9/18/ 1	12	49	47.	9.13
2	9/18/ 1	14	18	30.	10.46
231	9/18/ 1	21	56	15.	13.93
412	9/19/ 1	10	21	2185.	2.85
157	9/19/ 1	15	22	49.	9.19
634	9/20/ 1	8	32	36.	9.53
128	9/20/ 1	13	0	2954.	2.83
51	9/20/ 1	17	41	59.	9.42
600	9/21/ 1	15	6	891.	4.50
436	9/22/ 1	3	55	17.	15.27
57	9/22/ 1	8	15	16.	13.14
277	9/22/ 1	18	0	2260.	4.30
146	9/22/ 1	23	10	62.	12.33
406	9/23/ 1	14	44	25.	11.14
181	9/23/ 1	20	12	900.	4.74
198	9/24/ 1	2	26	49.	13.13
52	9/24/ 1	6	35	19.	13.81
58	9/24/ 1	11	45	14.	13.13
381	9/25/ 1	0	49	1344.	5.86
53	9/25/ 1	4	52	47.	11.93
68	9/25/ 1	8	12	20.	12.77
19	9/25/ 1	10	51	15.	13.05
76	9/25/ 1	15	20	15.	12.98
381	9/26/ 1	2	3	8360.	2.46
43	9/26/ 1	5	59	80.	9.65
8	9/26/ 1	7	29	41.	10.74
883	9/27/ 1	10	44	30.	10.51
529	9/28/ 1	6	54	2561.	2.67
358	9/28/ 1	17	24	16.	12.74
588	9/29/ 1	9	26	2324.	2.82
1027	9/30/ 1	12	11	4777.	2.48
770	10/ 1/ 1	11	7	52.	8.69

EXPLORER-12 (1961 UPSILON-1) CHARGED PARTICLE EXPERIMENT, REF. DATA USERS NOTE-
MATRIX OF VALUES OF L AND LOCAL TIME FO

TIME L RANGE	1	2	3	4	5	6	7	8	9	10	11	12	13	14
1.0-1.1	1	1	0	0	0	0	0	0	0	0	0	0	0	0
1.1-1.2	2	0	0	0	0	0	0	0	0	0	0	0	0	0
1.2-1.3	7	2	0	0	0	0	0	0	0	0	0	0	0	0
1.3-1.4	2	4	1	0	0	0	0	0	0	0	0	0	0	0
1.4-1.5	5	5	0	0	0	0	0	0	0	0	0	0	0	0
1.5-1.6	2	3	6	0	0	0	0	0	0	0	0	0	0	0
1.6-1.7	3	8	5	1	0	0	0	0	0	0	0	0	0	0
1.7-1.8	0	5	4	0	1	0	0	0	0	0	0	0	0	0
1.8-1.9	1	2	3	2	1	0	0	0	0	0	0	0	0	0
1.9-2.0	1	5	4	1	2	0	0	0	0	0	0	0	0	0
2.0-2.1	0	7	2	4	2	0	0	0	0	0	0	0	0	0
2.1-2.2	0	1	6	5	3	1	0	0	0	0	0	0	0	0
2.2-2.3	0	4	6	5	1	2	0	0	0	0	0	0	0	0
2.3-2.4	0	3	3	6	1	3	0	0	0	0	0	0	0	0
2.4-2.5	0	2	6	7	6	1	0	0	0	0	0	0	0	0
2.5-2.6	0	0	4	6	5	4	0	0	0	0	0	0	0	0
2.6-2.7	0	1	3	10	7	5	0	0	0	0	0	0	0	3
2.7-2.8	0	0	6	5	8	4	0	0	0	0	0	0	0	5
2.8-2.9	0	0	3	6	9	4	2	0	0	0	0	0	0	13
2.9-3.0	0	0	3	9	7	6	1	0	0	0	0	0	0	9
3.0-3.1	0	0	1	5	10	4	4	0	0	0	0	0	0	15
3.1-3.2	0	0	2	5	7	8	2	0	0	0	0	0	4	1[illegible]
3.2-3.3	0	0	2	0	14	6	4	0	0	0	0	0	7	1[illegible]
3.3-3.4	0	0	0	6	10	8	3	0	0	0	0	0	6	1[illegible]
3.4-3.5	0	0	1	3	12	4	3	0	0	0	0	0	9	1[illegible]
3.5-3.6	0	0	1	4	7	8	1	1	0	0	0	0	8	2[illegible]
3.6-3.7	0	0	1	4	7	7	3	2	0	0	0	0	9	2[illegible]
3.7-3.8	0	0	0	1	11	11	1	0	0	0	0	0	20	1[illegible]
3.8-3.9	0	0	0	3	4	10	1	3	0	0	0	0	13	1[illegible]
3.9-4.0	0	0	0	5	8	8	10	2	0	0	0	0	21	1[illegible]
4.0-4.1	0	0	0	2	14	9	9	2	0	0	0	0	27	2[illegible]
4.1-4.2	0	0	0	2	7	13	8	3	0	0	0	0	24	2[illegible]
4.2-4.3	0	0	0	2	7	14	12	6	0	0	0	4	23	2[illegible]
4.3-4.4	0	0	0	2	9	16	7	4	0	0	0	6	19	2[illegible]
4.4-4.5	0	0	0	0	5	16	13	8	0	0	0	6	22	3[illegible]
4.5-4.6	0	0	0	0	7	21	11	11	0	0	0	9	20	2[illegible]
4.6-4.7	0	0	0	1	2	11	18	11	0	0	0	11	18	2[illegible]
4.7-4.8	0	0	0	1	3	16	14	8	2	0	0	11	26	3[illegible]
4.8-4.9	0	0	0	1	3	14	17	12	0	0	0	10	27	3[illegible]
4.9-5.0	0	0	0	0	2	15	17	4	4	0	0	9	30	2[illegible]
5.0-5.1	0	0	0	0	1	10	21	11	4	0	0	16	32	2[illegible]
5.1-5.2	0	0	0	0	4	12	11	9	3	0	0	15	32	2[illegible]
5.2-5.3	0	0	0	0	2	15	15	10	3	0	0	16	36	3[illegible]
5.3-5.4	0	0	0	0	2	9	13	13	6	0	0	17	34	3[illegible]
5.4-5.5	0	0	0	0	3	11	18	16	3	0	0	21	34	3[illegible]
5.5-5.6	0	0	0	0	3	14	17	11	6	0	0	18	28	3[illegible]
5.6-5.7	0	0	0	0	1	4	17	14	10	0	0	25	26	4[illegible]
5.7-5.8	0	0	0	0	2	6	24	12	12	0	0	21	29	4[illegible]
5.8-5.9	0	0	0	0	3	5	20	14	12	0	0	28	32	3[illegible]
5.9-6.0	0	0	0	0	1	5	23	16	14	0	0	27	31	3[illegible]

ERS NOTE- NSSDC 67-16, DTD. FEB. 67, DATA FROM TAPE D-00042.
TIME FOR THIS TAPE

13	14	15	16	17	18	19	20	21	22	23	24
0	0	0	0	0	0	0	0	0	3	1	2
0	0	0	0	0	0	0	0	0	0	3	1
0	0	0	0	0	0	0	0	0	1	0	6
0	0	0	0	0	0	0	0	0	1	0	2
0	0	0	0	0	0	0	0	2	0	0	1
0	0	0	0	0	0	3	1	0	0	0	0
0	0	0	0	0	0	4	0	0	0	0	0
0	0	0	0	0	3	1	0	1	2	0	0
0	0	0	0	0	4	1	2	1	1	0	0
0	0	0	0	6	3	2	4	2	1	0	0
0	0	0	1	4	0	6	1	1	0	0	0
0	0	0	3	1	6	2	1	2	0	0	0
0	0	1	2	5	6	1	2	1	0	0	0
0	0	3	4	8	2	1	1	0	0	0	0
0	0	5	12	11	2	2	2	0	0	0	0
0	0	9	16	7	4	6	0	0	0	0	0
0	3	10	9	7	13	0	1	0	0	0	0
0	5	12	13	10	6	0	1	0	0	0	0
0	13	14	12	16	2	0	0	0	0	0	0
0	9	9	18	6	0	1	0	0	0	0	0
0	15	11	26	1	1	2	0	0	0	0	0
4	10	19	16	2	2	0	0	0	0	0	0
7	11	20	11	3	4	0	0	0	0	0	0
6	19	19	9	9	1	0	0	0	0	0	0
9	19	18	14	9	0	0	0	0	0	0	0
8	20	19	16	3	0	0	0	0	0	0	0
9	22	17	15	0	0	0	0	0	0	0	0
20	17	32	13	1	0	0	0	0	0	0	0
13	16	30	9	0	0	0	0	0	0	0	0
21	16	33	5	0	0	0	0	0	0	0	0
27	20	26	3	0	0	0	0	0	0	0	0
24	26	23	1	0	0	0	0	0	0	0	0
23	23	25	0	0	0	0	0	0	0	0	0
19	28	23	0	0	0	0	0	0	0	0	0
22	32	22	0	0	0	0	0	0	0	0	0
20	29	18	0	0	0	0	0	0	0	0	0
18	29	10	0	0	0	0	0	0	0	0	0
26	30	14	0	0	0	0	0	0	0	0	0
27	31	17	0	0	0	0	0	0	0	0	0
30	20	16	0	0	0	0	0	0	0	0	0
32	26	13	0	0	0	0	0	0	0	0	0
32	26	12	0	0	0	0	0	0	0	0	0
36	30	9	0	0	0	0	0	0	0	0	0
34	31	8	0	0	0	0	0	0	0	0	0
34	37	6	0	0	0	0	0	0	0	0	0
28	34	0	0	0	0	0	0	0	0	0	0
26	40	0	0	0	0	0	0	0	0	0	0
29	40	0	0	0	0	0	0	0	0	0	0
32	34	0	0	0	0	0	0	0	0	0	0
31	33	0	0	0	0	0	0	0	0	0	0

EXPLORER-12 (1961 UPSILON-1) CHARGED PARTICLE EXPERIMENT, REF. DATA USERS NOTE
MATRIX OF VALUES OF L AND LOCAL TIME FO

TIME / L RANGE	1	2	3	4	5	6	7	8	9	10	11	12	13	14
6.0-6.1	0	0	0	0	0	5	22	10	16	0	0	29	31	33
6.1-6.2	0	0	0	0	2	3	25	13	15	0	0	29	32	35
6.2-6.3	0	0	0	0	1	2	15	19	15	0	0	31	33	29
6.3-6.4	0	0	0	0	0	7	25	21	11	0	2	33	42	23
6.4-6.5	0	0	0	0	0	1	26	21	12	2	4	22	35	21
6.5-6.6	0	0	0	0	0	8	19	24	15	1	5	28	39	23
6.6-6.7	0	0	0	0	0	1	21	28	12	4	8	32	48	23
6.7-6.8	0	0	0	0	0	5	15	34	12	8	12	29	46	24
6.8-6.9	0	0	0	0	0	4	14	27	12	8	13	29	45	24
6.9-7.0	0	0	0	0	0	2	21	25	14	8	10	28	45	22
7.0-7.1	0	0	0	0	0	4	20	26	17	8	14	33	41	20
7.1-7.2	0	0	0	0	0	1	12	25	18	5	15	32	43	20
7.2-7.3	0	0	0	0	0	2	16	25	16	5	13	37	38	21
7.3-7.4	0	0	0	0	0	1	17	23	23	4	11	33	34	22
7.4-7.5	0	0	0	0	0	2	20	24	18	8	13	40	38	21
7.5-7.6	0	0	0	0	0	1	20	26	22	12	16	46	33	22
7.6-7.7	0	0	0	0	0	2	16	31	19	11	20	43	37	22
7.7-7.8	0	0	0	0	0	2	13	31	25	9	19	46	34	25
7.8-7.9	0	0	0	0	0	1	13	35	21	11	21	46	29	20
7.9-8.0	0	0	0	0	0	1	11	30	31	11	16	47	39	14
8.0-8.1	0	0	0	0	0	0	9	33	29	18	18	48	44	13
8.1-8.2	0	0	0	0	0	0	9	35	30	13	20	45	45	13
8.2-8.3	0	0	0	0	0	0	11	38	26	19	19	45	42	11
8.3-8.4	0	0	0	0	0	0	7	40	29	18	16	47	49	9
8.4-8.5	0	0	0	0	0	0	9	37	31	23	26	43	47	6
8.5-8.6	0	0	0	0	0	0	7	33	31	19	25	47	37	8
8.6-8.7	0	0	0	0	0	0	7	28	31	20	31	45	39	8
8.7-8.8	0	0	0	0	0	0	7	33	39	20	28	41	42	11
8.8-8.9	0	0	0	0	0	0	4	39	33	24	34	37	48	7
8.9-9.0	0	0	0	0	0	0	5	32	38	23	42	41	46	5
9.0-9.1	0	0	0	0	0	0	4	31	38	29	40	49	41	7
9.1-9.2	0	0	0	0	0	0	3	32	44	28	42	44	37	5
9.2-9.3	0	0	0	0	0	0	2	34	30	24	49	38	47	0
9.3-9.4	0	0	0	0	0	0	4	28	28	21	48	42	49	0
9.4-9.5	0	0	0	0	0	0	1	30	26	29	53	43	44	0
9.5-9.6	0	0	0	0	0	0	5	30	34	27	60	41	45	0
9.6-9.7	0	0	0	0	0	0	3	26	38	27	67	44	48	0
9.7-9.8	0	0	0	0	0	0	1	23	43	27	63	41	45	0
9.8-9.9	0	0	0	0	0	0	2	28	45	25	69	53	51	0
9.9-0.0	0	0	0	0	0	0	2	27	41	40	74	51	49	0
10.0-0.1	0	0	0	0	0	0	3	30	45	32	64	46	50	0
10.1-0.2	0	0	0	0	0	0	0	32	42	38	76	53	53	0
10.2-0.3	0	0	0	0	0	0	0	36	38	46	77	55	52	0
10.3-0.4	0	0	0	0	0	0	0	36	44	49	74	53	55	0
10.4-0.5	0	0	0	0	0	0	0	31	33	58	79	56	49	0
10.5-0.6	0	0	0	0	0	0	0	32	32	53	70	65	55	0
10.6-0.7	0	0	0	0	0	0	0	24	34	63	77	52	52	0
10.7-0.8	0	0	0	0	0	0	0	20	38	75	87	57	48	0
10.8-0.9	0	0	0	0	0	0	0	20	36	78	76	59	42	0
10.9-1.0	0	0	0	0	0	0	0	25	39	76	85	59	38	0

USERS NOTE- NSSDC 67-16. DTD. FEB. 67. DATA FROM TAPE D-00042.
AL TIME FOR THIS TAPE

13	14	15	16	17	18	19	20	21	22	23	24
31	33	0	0	0	0	0	0	0	0	0	0
32	35	0	0	0	0	0	0	0	0	0	0
33	29	0	0	0	0	0	0	0	0	0	0
42	23	0	0	0	0	0	0	0	0	0	0
35	21	0	0	0	0	0	0	0	0	0	0
39	23	0	0	0	0	0	0	0	0	0	0
48	23	0	0	0	0	0	0	0	0	0	0
46	24	0	0	0	0	0	0	0	0	0	0
45	24	0	0	0	0	0	0	0	0	0	0
45	22	0	0	0	0	0	0	0	0	0	0
41	20	0	0	0	0	0	0	0	0	0	0
43	20	0	0	0	0	0	0	0	0	0	0
38	21	0	0	0	0	0	0	0	0	0	0
34	22	0	0	0	0	0	0	0	0	0	0
38	21	0	0	0	0	0	0	0	0	0	0
33	22	0	0	0	0	0	0	0	0	0	0
37	22	0	0	0	0	0	0	0	0	0	0
34	25	0	0	0	0	0	0	0	0	0	0
29	20	0	0	0	0	0	0	0	0	0	0
39	14	0	0	0	0	0	0	0	0	0	0
44	13	0	0	0	0	0	0	0	0	0	0
45	13	0	0	0	0	0	0	0	0	0	0
42	11	0	0	0	0	0	0	0	0	0	0
49	9	0	0	0	0	0	0	0	0	0	0
47	6	0	0	0	0	0	0	0	0	0	0
37	8	0	0	0	0	0	0	0	0	0	0
39	8	0	0	0	0	0	0	0	0	0	0
42	11	0	0	0	0	0	0	0	0	0	0
48	7	0	0	0	0	0	0	0	0	0	0
46	5	0	0	0	0	0	0	0	0	0	0
41	7	0	0	0	0	0	0	0	0	0	0
37	5	0	0	0	0	0	0	0	0	0	0
47	0	0	0	0	0	0	0	0	0	0	0
49	0	0	0	0	0	0	0	0	0	0	0
44	0	0	0	0	0	0	0	0	0	0	0
45	0	0	0	0	0	0	0	0	0	0	0
48	0	0	0	0	0	0	0	0	0	0	0
45	0	0	0	0	0	0	0	0	0	0	0
51	0	0	0	0	0	0	0	0	0	0	0
49	0	0	0	0	0	0	0	0	0	0	0
50	0	0	0	0	0	0	0	0	0	0	0
53	0	0	0	0	0	0	0	0	0	0	0
52	0	0	0	0	0	0	0	0	0	0	0
55	0	0	0	0	0	0	0	0	0	0	0
49	0	0	0	0	0	0	0	0	0	0	0
55	0	0	0	0	0	0	0	0	0	0	0
52	0	0	0	0	0	0	0	0	0	0	0
48	0	0	0	0	0	0	0	0	0	0	0
42	0	0	0	0	0	0	0	0	0	0	0
38	0	0	0	0	0	0	0	0	0	0	0

EXPLORER-12 (1961 UPSILON-1) CHARGED PARTICLE EXPERIMENT. REF. DATA USERS NOTE
MATRIX OF VALUES OF L AND LOCAL TIME FO

TIME L RANGE	1	2	3	4	5	6	7	8	9	10	11	12	13	14
11.0-1.1	0	0	0	0	0	0	0	22	49	95	78	56	36	0
11.1-1.2	0	0	0	0	0	0	0	15	49	80	97	63	39	0
11.2-1.3	0	0	0	0	0	0	0	16	62	78	92	74	44	0
11.3-1.4	0	0	0	0	0	0	0	13	77	76	109	68	42	0
11.4-1.5	0	0	0	0	0	0	0	7	86	74	119	75	47	0
11.5-1.6	0	0	0	0	0	0	0	14	74	84	125	90	33	0
11.6-1.7	0	0	0	0	0	0	0	12	67	93	116	88	32	0
11.7-1.8	0	0	0	0	0	0	0	10	79	92	109	97	27	0
11.8-1.9	0	0	0	0	0	0	0	13	60	108	120	106	28	0
11.9-2.0	0	0	0	0	0	0	0	10	66	112	120	103	28	0
12.0-2.1	0	0	0	0	0	0	0	8	65	114	119	96	31	0
12.1-2.2	0	0	0	0	0	0	0	9	69	121	136	102	34	0
12.2-2.3	0	0	0	0	0	0	0	7	62	144	147	98	37	0
12.3-2.4	0	0	0	0	0	0	0	5	75	145	150	108	31	0
12.4-2.5	0	0	0	0	0	0	0	5	78	150	175	119	37	0
12.5-2.6	0	0	0	0	0	0	0	5	76	162	183	130	30	0
12.6-2.7	0	0	0	0	0	0	0	4	69	181	211	114	33	0
12.7-2.8	0	0	0	0	0	0	0	5	78	172	221	133	41	0
12.8-2.9	0	0	0	0	0	0	0	7	67	179	243	151	44	0
12.9-3.0	0	0	0	0	0	0	0	5	74	186	317	169	38	0
13.0-3.1	0	0	0	0	0	0	0	0	94	208	328	235	16	0
13.1-3.2	0	0	0	0	0	0	0	0	76	423	492	315	16	0
13.2-3.3	0	0	0	0	0	0	0	0	53	230	230	340	15	0
13.3-3.4	0	0	0	0	0	0	0	0	50	160	168	103	15	0
13.4-3.5	0	0	0	0	0	0	0	0	57	148	162	105	16	0
13.5-3.6	0	0	0	0	0	0	0	0	62	107	155	114	17	0
13.6-3.7	0	0	0	0	0	0	0	0	81	102	121	116	13	0
13.7-3.8	0	0	0	0	0	0	0	0	53	189	132	124	6	0
13.8-3.9	0	0	0	0	0	0	0	0	64	197	115	92	6	0
13.9-4.0	0	0	0	0	0	0	0	0	38	195	157	57	5	0
14.0-4.1	0	0	0	0	0	0	0	0	31	106	77	57	6	0
14.1-4.2	0	0	0	0	0	0	0	0	26	79	86	63	0	0
14.2-4.3	0	0	0	0	0	0	0	0	40	90	98	68	0	0
14.3-4.4	0	0	0	0	0	0	0	0	48	87	83	71	0	0
14.4-4.5	0	0	0	0	0	0	0	0	38	105	85	79	0	0
14.5-4.6	0	0	0	0	0	0	0	0	61	138	85	88	0	1
14.6-4.7	0	0	0	0	0	0	0	0	30	105	74	37	0	0
14.7-4.8	0	0	0	0	0	0	0	0	37	126	93	75	0	1
14.8-4.9	0	0	0	0	0	0	0	0	62	133	94	76	0	0
14.9-5.0	0	0	0	0	0	0	0	0	92	86	105	28	0	1
15.0-5.1	0	0	0	0	0	0	0	0	53	131	136	29	0	0
15.1-5.2	0	0	0	0	0	0	0	0	59	71	145	22	0	1
15.2-5.3	0	0	0	0	0	0	0	0	14	84	101	26	0	0
15.3-5.4	0	0	0	0	0	0	0	0	17	119	119	29	0	1
15.4-5.5	0	0	0	0	0	0	0	0	6	92	88	22	0	0
15.5-5.6	0	0	0	0	0	0	0	0	0	56	67	43	0	1
15.6-5.7	0	0	0	0	0	0	0	0	0	111	68	45	0	1
15.7-5.8	0	0	0	0	0	0	0	0	0	0	75	49	0	1
15.8-5.9	0	0	0	0	0	0	0	0	0	0	116	19	0	1
15.9-6.0	0	0	0	0	0	0	0	0	0	0	126	122	0	1

SERS NOTE- NSSDC 67-16, DTD. FEB. 67. DATA FROM TAPE D-00042.
. TIME FOR THIS TAPE

13	14	15	16	17	18	19	20	21	22	23	24
36	0	0	0	0	0	0	0	0	0	0	0
39	0	0	0	0	0	0	0	0	0	0	0
44	0	0	0	0	0	0	0	0	0	0	0
42	0	0	0	0	0	0	0	0	0	0	0
47	0	0	0	0	0	0	0	0	0	0	0
33	0	0	0	0	0	0	0	0	0	0	0
32	0	0	0	0	0	0	0	0	0	0	0
27	0	0	0	0	0	0	0	0	0	0	0
28	0	0	0	0	0	0	0	0	0	0	0
28	0	0	0	0	0	0	0	0	0	0	0
31	0	0	0	0	0	0	0	0	0	0	0
34	0	0	0	0	0	0	0	0	0	0	0
37	0	0	0	0	0	0	0	0	0	0	0
31	0	0	0	0	0	0	0	0	0	0	0
37	0	0	0	0	0	0	0	0	0	0	0
30	0	0	0	0	0	0	0	0	0	0	0
33	0	0	0	0	0	0	0	0	0	0	0
41	0	0	0	0	0	0	0	0	0	0	0
44	0	0	0	0	0	0	0	0	0	0	0
38	0	0	0	0	0	0	0	0	0	0	0
16	0	0	0	0	0	0	0	0	0	0	0
16	0	0	0	0	0	0	0	0	0	0	0
15	0	0	0	0	0	0	0	0	0	0	0
15	0	0	0	0	0	0	0	0	0	0	0
16	0	0	0	0	0	0	0	0	0	0	0
17	0	0	0	0	0	0	0	0	0	0	0
13	0	0	0	0	0	0	0	0	0	0	0
6	0	0	0	0	0	0	0	0	0	0	0
6	0	0	0	0	0	0	0	0	0	0	0
5	0	0	0	0	0	0	0	0	0	0	0
6	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0

EXPLORER-12 (1961 UPSILON-1) CHARGED PARTICLE EXPERIMENT, REF. DATA USERS NOTE-
MATRIX OF VALUES OF L AND UNIVERSAL TIME

TIME / L RANGE	1	2	3	4	5	6	7	8	9	10	11	12	13	14
1.0-1.1	0	0	0	0	0	0	3	0	0	4	1	0	0	0
1.1-1.2	0	0	0	0	0	2	0	0	0	3	0	0	0	0
1.2-1.3	0	0	0	0	7	4	1	0	0	0	0	0	0	0
1.3-1.4	0	0	0	0	1	2	3	1	0	0	0	0	0	0
1.4-1.5	0	0	0	0	2	1	4	0	0	0	0	0	0	1
1.5-1.6	0	1	0	2	3	2	1	0	2	0	0	0	0	1
1.6-1.7	2	2	0	1	4	1	2	0	1	0	1	0	0	0
1.7-1.8	2	1	0	2	1	0	3	0	2	0	1	0	0	2
1.8-1.9	0	2	0	1	4	0	4	0	1	0	1	0	0	1
1.9-2.0	1	1	1	7	5	0	5	0	1	1	1	1	0	0
2.0-2.1	1	1	0	6	3	0	4	1	3	1	1	1	0	0
2.1-2.2	1	1	2	5	4	0	4	1	1	1	2	0	0	2
2.2-2.3	1	2	4	3	4	1	1	2	2	2	1	0	2	1
2.3-2.4	0	3	5	4	5	2	3	3	1	1	2	0	1	0
2.4-2.5	1	5	7	5	4	2	2	5	3	2	0	2	5	2
2.5-2.6	4	8	3	5	7	2	3	3	4	1	3	3	2	2
2.6-2.7	4	7	5	4	3	4	1	3	3	2	4	3	7	3
2.7-2.8	7	6	6	5	6	3	6	1	2	3	1	2	3	1
2.8-2.9	7	6	3	7	4	5	5	1	6	5	4	3	6	1
2.9-3.0	4	3	3	4	5	7	4	2	2	4	3	2	5	1
3.0-3.1	7	5	2	5	5	5	2	1	3	6	7	1	4	2
3.1-3.2	8	2	3	6	9	5	2	0	4	5	4	3	5	1
3.2-3.3	6	3	3	8	5	4	3	2	5	2	6	5	0	1
3.3-3.4	5	3	0	8	6	5	5	1	5	2	6	5	4	2
3.4-3.5	2	4	4	6	5	5	5	2	6	4	8	5	1	1
3.5-3.6	2	2	3	3	5	6	6	1	5	9	4	4	3	1
3.6-3.7	5	3	4	3	2	5	3	2	4	4	7	5	2	2
3.7-3.8	7	3	5	9	3	5	7	1	7	1	9	4	4	0
3.8-3.9	4	1	7	6	2	5	4	2	6	5	3	6	1	2
3.9-4.0	4	2	8	5	3	5	4	3	10	2	5	5	6	1
4.0-4.1	6	3	7	8	4	5	4	5	9	3	6	6	5	1
4.1-4.2	2	5	6	8	4	4	6	5	8	2	6	7	3	1
4.2-4.3	6	5	2	5	1	6	5	7	9	3	5	6	6	4
4.3-4.4	8	2	4	6	4	6	3	8	6	3	6	11	5	1
4.4-4.5	7	3	6	8	2	9	4	6	8	2	6	6	6	4
4.5-4.6	6	4	6	5	5	8	2	7	7	4	7	7	6	3
4.6-4.7	5	3	5	5	3	9	3	9	8	3	4	8	4	3
4.7-4.8	2	3	5	6	7	6	1	6	6	3	6	10	6	7
4.8-4.9	2	2	3	8	5	13	0	10	11	1	4	5	7	6
4.9-5.0	1	5	4	5	5	8	1	5	6	4	4	7	5	4
5.0-5.1	0	3	7	7	6	4	3	6	12	5	9	7	4	9
5.1-5.2	0	3	6	10	6	6	0	8	6	9	9	4	5	6
5.2-5.3	0	3	8	7	4	5	2	7	7	8	9	6	4	6
5.3-5.4	0	7	6	7	6	4	0	4	10	12	6	2	3	7
5.4-5.5	2	3	6	8	7	6	1	7	9	10	10	7	5	7
5.5-5.6	1	3	3	7	6	5	1	8	6	6	8	7	3	9
5.6-5.7	0	5	6	3	5	8	2	7	8	11	8	7	5	7
5.7-5.8	1	6	9	6	5	5	5	4	6	8	7	9	7	8
5.8-5.9	0	6	6	3	4	5	8	7	5	9	7	10	6	5
5.9-6.0	5	4	7	4	6	5	6	3	3	8	6	10	10	9

USERS NOTE- NSSDC 67-16, DTD. FEB. 67, DATA FROM TAPE D-00042.
VERSAL TIME FOR THIS TAPE

13	14	15	16	17	18	19	20	21	22	23	24
0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	1	0	0	0
0	0	1	0	0	0	0	0	1	1	0	1
0	0	1	0	0	0	0	0	1	0	0	1
0	1	2	0	0	0	0	0	1	1	0	1
0	1	1	0	0	0	0	0	0	1	0	1
0	0	0	0	0	1	0	0	1	1	1	3
0	2	1	0	0	0	0	0	0	1	0	1
0	1	1	0	0	1	0	0	0	0	0	2
0	0	1	0	0	2	0	0	0	2	1	1
0	0	1	1	0	0	0	0	1	1	0	2
0	2	1	0	0	1	0	0	1	1	2	1
2	1	2	1	0	1	1	1	1	0	1	2
1	0	2	1	0	0	1	0	0	0	0	1
5	2	3	1	0	1	2	1	0	1	1	1
2	2	2	1	0	2	2	1	0	2	1	0
7	3	3	1	1	3	0	0	1	2	2	3
3	1	3	3	1	0	2	2	1	0	3	3
6	1	4	2	2	3	1	1	1	0	1	3
5	1	3	2	0	2	1	2	1	1	4	4
4	2	4	3	3	1	1	2	2	0	5	4
5	1	2	3	2	2	0	0	3	0	5	3
0	1	4	4	2	1	3	1	2	1	7	4
4	2	3	4	1	3	1	2	2	3	9	5
1	1	4	2	2	3	0	2	4	4	8	5
3	1	3	4	2	2	3	3	4	4	6	3
2	2	4	3	3	1	2	2	5	5	9	2
4	0	3	4	4	4	1	3	5	7	7	4
1	2	2	4	1	3	3	3	5	6	5	3
6	1	2	6	6	2	6	1	5	7	6	4
5	1	5	3	3	4	5	1	4	5	7	3
3	1	1	5	5	5	2	1	4	7	5	5
6	4	4	5	7	2	5	0	5	10	5	3
5	1	3	6	6	5	3	1	5	7	3	2
6	4	4	5	7	4	4	1	5	8	4	5
6	3	5	10	8	4	4	1	4	7	2	4
4	3	8	4	7	3	1	0	6	4	4	2
6	7	5	3	12	5	2	3	7	7	3	4
7	6	6	4	8	3	4	8	6	7	4	5
5	4	7	3	8	5	1	10	4	7	3	5
4	9	6	1	9	6	3	8	2	9	3	5
5	6	7	3	7	4	4	6	2	4	4	5
4	6	9	2	8	6	5	7	2	9	6	6
3	7	8	4	9	4	9	5	2	10	2	6
5	7	5	2	8	4	11	4	3	12	4	8
3	9	2	4	9	4	10	5	7	6	6	5
5	7	5	4	7	4	9	6	6	7	4	3
7	8	5	5	8	8	6	5	7	6	5	5
6	5	6	6	10	8	8	6	8	7	3	5
10	9	4	5	11	5	8	5	6	8	4	8

EXPLORER-12 (1961 UPSILON-1) CHARGED PARTICLE EXPERIMENT, REF, DATA USERS NOTE-
MATRIX OF VALUES OF L AND UNIVERSAL TIME

TIME / L RANGE	1	2	3	4	5	6	7	8	9	10	11	12	13	14
6.0-6.1	4	5	6	1	5	8	9	4	7	6	3	8	8	10
6.1-6.2	2	6	4	5	6	10	8	7	7	8	5	7	7	9
6.2-6.3	2	7	9	3	7	6	7	8	5	8	5	9	7	9
6.3-6.4	6	7	7	7	7	8	9	5	6	11	4	8	6	9
6.4-6.5	4	4	7	9	4	7	4	6	6	9	3	8	8	7
6.5-6.6	4	3	8	7	6	7	6	6	5	9	6	7	10	6
6.6-6.7	5	8	5	9	9	6	8	7	6	10	6	5	10	8
6.7-6.8	4	8	9	10	7	3	7	8	10	10	8	7	11	8
6.8-6.9	3	10	9	7	8	4	6	9	8	16	5	4	11	6
6.9-7.0	6	7	10	7	9	6	5	8	11	14	6	5	9	7
7.0-7.1	6	5	4	8	6	6	11	11	8	6	10	8	7	6
7.1-7.2	7	7	8	8	6	7	9	6	8	10	10	7	5	8
7.2-7.3	7	9	4	7	8	9	4	9	0	8	8	7	8	6
7.3-7.4	10	8	6	6	4	8	8	6	3	7	6	6	14	6
7.4-7.5	6	7	4	8	7	4	10	7	8	9	9	7	12	7
7.5-7.6	6	9	5	7	9	9	13	4	7	12	9	5	11	17
7.6-7.7	9	9	3	10	9	9	10	4	9	9	11	7	13	12
7.7-7.8	7	8	5	10	10	8	7	4	9	10	13	10	11	10
7.8-7.9	9	7	8	10	7	10	9	8	4	11	9	7	7	11
7.9-8.0	6	9	6	7	8	6	5	3	9	12	8	11	11	12
8.0-8.1	7	9	7	8	9	6	8	9	9	13	12	8	10	10
8.1-8.2	5	10	10	13	7	10	8	7	4	8	13	10	11	9
8.2-8.3	9	10	5	8	5	9	6	11	6	5	13	11	10	12
8.3-8.4	9	7	6	9	6	6	8	12	9	6	9	11	14	10
8.4-8.5	10	6	9	8	5	9	10	10	10	6	8	14	14	14
8.5-8.6	11	7	9	9	7	8	7	9	7	7	5	9	12	14
8.6-8.7	10	6	8	7	8	6	9	11	4	6	4	8	11	12
8.7-8.8	10	5	9	7	8	8	12	15	4	8	11	15	7	10
8.8-8.9	10	5	8	8	11	7	8	14	7	11	13	10	5	12
8.9-9.0	8	5	10	7	9	6	9	14	7	13	10	11	9	17
9.0-9.1	9	6	8	11	9	11	7	13	9	11	8	12	7	14
9.1-9.2	13	10	10	8	10	7	13	6	10	12	10	12	4	12
9.2-9.3	10	7	11	6	10	5	11	6	10	11	7	14	5	18
9.3-9.4	12	8	9	9	12	3	10	5	9	6	8	14	8	19
9.4-9.5	11	9	8	6	8	6	8	7	7	6	8	10	9	22
9.5-9.6	11	14	8	3	10	6	10	10	11	4	14	9	9	19
9.6-9.7	8	11	9	4	10	12	14	11	8	7	11	7	15	10
9.7-9.8	7	10	7	8	8	9	9	10	17	11	13	4	12	4
9.8-9.9	6	11	8	10	10	10	8	9	12	14	13	7	17	6
9.9-0.0	6	10	10	11	11	12	9	9	13	23	9	12	16	8
10.0-0.1	5	12	11	8	10	9	7	15	9	19	10	7	10	11
10.1-0.2	7	12	12	10	9	13	13	10	14	16	11	5	17	6
10.2-0.3	8	14	10	8	11	10	9	14	12	15	7	9	20	10
10.3-0.4	11	13	11	11	11	7	7	12	17	19	11	14	9	13
10.4-0.5	11	10	10	10	12	12	8	9	14	13	10	14	13	13
10.5-0.6	11	10	7	10	12	9	13	15	9	19	14	14	17	12
10.6-0.7	14	10	1	12	11	10	7	13	12	14	14	12	13	11
10.7-0.8	12	10	2	9	13	11	11	12	12	11	16	15	14	10
10.8-0.9	14	14	9	12	11	12	13	6	13	16	5	15	15	12
10.9-1.0	16	10	8	10	12	8	14	11	15	13	10	9	13	16

TA USERS NOTE- NSSDC 67-16, DTD. FEB. 67, DATA FROM TAPE D-00042.
UNIVERSAL TIME FOR THIS TAPE

12	13	14	15	16	17	18	19	20	21	22	23	24
8	8	10	9	8	7	3	8	4	10	3	4	6
7	7	9	7	10	6	5	4	4	10	5	7	5
9	7	9	10	8	5	3	0	8	5	4	7	3
8	6	9	11	8	6	6	6	9	5	4	7	2
8	8	7	9	9	5	6	4	8	6	4	4	3
7	10	6	7	11	5	6	11	7	7	6	10	2
5	10	8	8	12	6	8	13	5	8	4	10	1
7	11	8	8	12	3	10	9	6	8	10	8	1
4	11	6	7	10	4	11	6	7	9	9	5	2
5	9	7	8	11	3	14	7	6	8	2	6	0
8	7	6	9	11	4	16	5	9	10	7	8	2
7	5	8	7	10	4	11	7	8	8	4	7	0
7	8	6	8	12	7	9	7	9	11	8	8	0
6	14	6	8	9	6	11	8	12	5	5	4	2
7	12	7	13	8	6	12	7	10	10	7	6	0
5	11	17	10	9	3	11	7	15	3	6	9	2
7	13	12	14	6	6	10	5	12	7	13	3	1
10	11	10	16	7	6	10	10	13	5	12	4	1
7	7	11	11	11	5	9	9	13	5	11	4	2
11	11	12	10	10	6	14	7	11	9	15	4	1
8	10	10	13	8	10	11	10	9	8	13	3	2
10	11	9	13	8	10	10	9	10	11	10	3	1
11	10	12	14	12	11	9	5	15	8	12	3	2
11	14	10	12	12	14	7	8	16	5	11	3	5
14	14	14	12	11	11	6	12	13	4	13	2	5
9	12	14	9	14	8	8	10	12	8	8	4	5
8	11	12	14	7	15	7	12	11	8	11	5	9
15	7	10	11	7	9	7	14	10	10	9	6	9
10	5	12	15	9	12	9	18	5	7	6	4	12
11	9	17	11	11	12	13	12	3	13	6	4	12
12	7	14	11	14	13	13	14	8	14	5	4	8
12	4	12	13	9	15	6	15	8	20	2	4	6
14	5	18	7	11	16	3	14	11	16	3	4	8
14	8	19	7	17	8	3	11	7	16	3	5	11
10	9	22	12	16	9	5	16	11	15	4	3	10
9	9	19	12	13	8	10	13	9	17	6	7	9
7	15	10	13	15	9	12	15	7	16	4	12	13
4	12	4	13	19	9	11	12	10	15	3	11	11
7	17	6	13	19	14	19	10	15	9	5	17	11
12	16	8	14	16	12	20	8	12	9	5	19	10
7	10	11	10	21	14	15	9	17	6	9	14	12
5	17	6	13	21	12	14	16	23	5	7	13	15
9	20	10	22	16	10	21	18	17	6	10	15	12
14	9	13	24	12	9	23	12	18	5	13	13	16
14	13	13	21	14	14	21	6	18	6	17	16	14
14	17	12	17	12	13	15	14	18	9	12	12	13
12	13	11	13	9	27	11	15	12	14	16	15	16
15	14	10	15	22	27	15	20	13	13	20	11	11
15	15	12	10	14	19	10	17	14	15	20	13	12
9	13	16	13	16	21	18	20	7	16	20	13	13

EXPLORER-12 (1961 UPSILON-1) CHARGED PARTICLE EXPERIMENT, REF. DATA USERS NOTE-
MATRIX OF VALUES OF L AND UNIVERSAL TIME

TIME / L RANGE	1	2	3	4	5	6	7	8	9	10	11	12	13	14
11.0-1.1	16	15	8	8	9	14	9	11	19	13	14	17	11	12
11.1-1.2	11	15	10	6	15	15	10	9	12	13	14	24	8	17
11.2-1.3	11	14	9	7	15	14	12	11	14	16	18	17	13	17
11.3-1.4	11	10	11	4	13	12	15	9	21	11	15	23	16	27
11.4-1.5	14	9	7	10	14	13	19	10	22	15	17	22	16	32
11.5-1.6	16	7	14	10	13	16	18	6	16	16	21	25	16	29
11.6-1.7	17	8	13	12	14	12	18	11	8	13	20	25	25	16
11.7-1.8	16	12	7	5	15	17	17	12	15	16	21	14	21	16
11.8-1.9	15	14	11	12	11	16	18	13	7	22	15	16	21	16
11.9-2.0	11	15	12	11	13	15	16	17	8	21	25	10	29	23
12.0-2.1	13	12	15	10	8	18	11	20	9	15	18	16	36	14
12.1-2.2	12	12	12	11	10	15	16	20	20	20	24	14	30	17
12.2-2.3	11	15	10	15	4	15	17	24	16	18	20	18	32	26
12.3-2.4	10	16	18	11	9	29	13	22	18	13	13	16	29	35
12.4-2.5	16	16	20	10	9	22	14	27	24	20	18	21	21	41
12.5-2.6	21	14	15	14	10	31	12	25	22	27	20	27	21	38
12.6-2.7	17	15	10	17	9	17	24	18	25	30	30	22	25	39
12.7-2.8	14	22	16	11	10	15	18	28	31	41	46	24	31	27
12.8-2.9	21	17	17	15	3	13	5	7	21	43	48	37	31	38
12.9-3.0	23	21	21	11	15	7	6	4	15	41	57	54	63	17
13.0-3.1	25	22	25	9	14	1	5	1	13	23	56	51	79	56
13.1-3.2	19	18	24	20	17	5	5	6	15	15	29	75	141	149
13.2-3.3	14	11	19	24	11	8	11	10	23	19	37	28	25	48
13.3-3.4	12	15	19	16	25	7	7	5	17	29	33	42	25	0
13.4-3.5	17	11	15	17	24	10	3	12	32	48	41	30	0	0
13.5-3.6	25	7	13	20	16	6	6	20	30	41	44	0	0	0
13.6-3.7	37	8	18	21	25	5	20	40	20	35	17	0	0	0
13.7-3.8	12	17	16	32	17	11	12	35	34	27	6	0	0	0
13.8-3.9	9	21	15	31	58	54	50	43	25	11	0	0	0	0
13.9-4.0	21	17	16	14	11	91	75	44	15	11	0	0	0	0
14.0-4.1	20	19	12	15	9	9	19	17	20	11	0	0	0	0
14.1-4.2	37	20	10	20	9	12	14	25	17	3	0	0	0	0
14.2-4.3	27	27	13	18	8	15	22	14	20	0	0	0	0	0
14.3-4.4	35	28	20	8	9	17	24	19	18	0	0	0	0	0
14.4-4.5	34	26	34	1	14	27	21	16	10	0	0	0	0	0
14.5-4.6	29	25	34	8	22	29	15	17	1	0	0	0	0	0
14.6-4.7	16	24	36	10	18	32	13	19	0	0	0	0	0	0
14.7-4.8	35	55	27	16	22	24	18	20	0	0	0	0	0	0
14.8-4.9	53	66	35	15	26	15	10	16	0	0	0	0	0	0
14.9-5.0	7	32	92	25	29	15	23	6	0	0	0	0	0	0
15.0-5.1	29	30	54	65	19	24	25	0	0	0	0	0	0	0
15.1-5.2	72	3	13	53	42	19	20	0	0	0	0	0	0	0
15.2-5.3	38	24	5	45	28	39	8	0	0	0	0	0	0	0
15.3-5.4	115	30	19	16	48	31	6	0	0	0	0	0	0	0
15.4-5.5	52	83	29	22	15	6	1	0	0	0	0	0	0	0
15.5-5.6	49	33	20	35	12	17	0	0	0	0	0	0	0	0
15.6-5.7	32	81	62	17	19	13	0	0	0	0	0	0	0	0
15.7-5.8	9	31	35	18	22	9	0	0	0	0	0	0	0	0
15.8-5.9	0	26	45	45	7	12	0	0	0	0	0	0	0	0
15.9-6.0	0	33	78	87	50	0	0	0	0	0	0	0	0	0

ENT, REF. DATA USERS NOTE- NSSDC 67-16, DTD. FEB. 67, DATA FROM TAPE D-00042.
ES OF L AND UNIVERSAL TIME FOR THIS TAPE

10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
13	14	17	11	12	20	16	14	16	26	7	14	22	10	15
13	14	24	8	17	12	11	20	18	26	7	17	17	15	21
16	18	17	13	17	18	12	28	15	30	7	20	20	16	12
11	15	23	16	27	19	23	22	17	26	19	14	18	13	16
15	17	22	16	32	25	19	16	23	25	16	22	19	11	12
16	21	25	16	29	28	16	13	27	14	23	23	23	11	19
13	20	25	25	16	21	24	17	32	10	15	30	18	10	19
16	21	14	21	16	21	33	27	28	12	23	23	13	11	19
22	15	16	21	16	26	24	24	32	19	29	31	16	12	15
21	25	10	29	23	35	20	25	28	26	20	23	16	12	8
15	18	16	36	14	38	23	29	20	24	25	19	18	8	14
20	24	14	30	17	20	38	36	12	26	37	15	17	18	19
18	20	18	32	26	21	25	44	14	39	33	20	19	20	19
13	13	16	29	35	17	26	36	28	41	34	22	13	23	20
20	18	21	21	41	21	34	31	34	43	31	29	26	13	23
27	20	27	21	38	21	35	32	32	49	31	30	25	28	6
30	30	22	25	39	37	31	27	52	45	32	26	28	30	6
41	46	24	31	27	44	26	26	58	44	41	26	10	30	11
43	48	37	31	38	53	36	40	64	40	44	35	30	20	13
41	57	54	63	17	49	56	59	67	71	22	23	48	4	15
23	56	51	79	56	62	79	89	64	59	63	26	42	9	8
15	29	75	141	149	104	124	168	113	112	49	65	21	20	8
19	37	28	25	48	78	51	22	94	126	103	43	13	26	24
29	33	42	25	0	0	0	0	0	72	70	24	37	8	33
48	41	30	0	0	0	0	0	0	26	103	42	22	8	27
41	44	0	0	0	0	0	0	0	8	53	81	21	48	17
35	17	0	0	0	0	0	0	0	0	49	55	54	22	7
27	6	0	0	0	0	0	0	0	0	20	98	84	27	56
11	0	0	0	0	0	0	0	0	0	7	48	26	47	29
11	0	0	0	0	0	0	0	0	0	0	46	43	33	15
11	0	0	0	0	0	0	0	0	0	0	25	59	40	2
3	0	0	0	0	0	0	0	0	0	0	20	36	27	4
0	0	0	0	0	0	0	0	0	0	0	10	40	63	19
0	0	0	0	0	0	0	0	0	0	0	0	49	52	10
0	0	0	0	0	0	0	0	0	0	0	0	44	57	23
0	0	0	0	0	0	0	0	0	0	0	0	24	90	78
0	0	0	0	0	0	0	0	0	0	0	0	10	48	20
0	0	0	0	0	0	0	0	0	0	0	0	0	67	47
0	0	0	0	0	0	0	0	0	0	0	0	0	47	82
0	0	0	0	0	0	0	0	0	0	0	0	0	21	61
0	0	0	0	0	0	0	0	0	0	0	0	0	6	97
0	0	0	0	0	0	0	0	0	0	0	0	0	0	75
0	0	0	0	0	0	0	0	0	0	0	0	0	0	38
0	0	0	0	0	0	0	0	0	0	0	0	0	0	17
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

EXPLORER-12 (1961 UPSILON-1) CHARGED PARTICLE EXPERIMENT, REF. DATA USERS NOTE-
MATRIX OF VALUES OF B AND L FOR THI
B GIVEN IN GAMMA = 10 TO THE MINUS

B RANGE 0 -1K	-2K	-3K	-4K	-5K	-6K	-7K	-8K	-9K	-10K	-15K	-20
L RANGE											
1.0-1.1	0	0	0	0	0	0	0	0	0	0	0
1.1-1.2	0	0	0	0	0	0	0	0	0	0	0
1.2-1.3	0	0	0	0	0	0	0	0	0	0	0
1.3-1.4	0	0	0	0	0	0	0	0	0	0	0
1.4-1.5	0	0	0	0	0	0	0	0	0	0	0
1.5-1.6	0	0	0	0	0	0	0	0	2	2	0
1.6-1.7	0	0	0	0	0	0	0	1	2	3	0
1.7-1.8	0	0	0	0	0	0	0	4	1	0	0
1.8-1.9	0	0	0	0	0	0	3	1	1	0	0
1.9-2.0	0	0	0	0	0	3	2	2	1	3	0
2.0-2.1	0	0	0	0	2	5	1	3	2	0	0
2.1-2.2	0	0	0	0	7	0	3	4	0	1	0
2.2-2.3	0	0	0	1	6	8	2	1	2	5	0
2.3-2.4	0	0	0	9	9	4	3	2	3	0	0
2.4-2.5	0	0	1	20	11	4	4	4	2	1	0
2.5-2.6	0	0	12	20	6	4	3	3	0	1	0
2.6-2.7	0	0	22	15	4	5	7	1	3	3	0
2.7-2.8	0	4	27	9	4	8	2	1	2	2	0
2.8-2.9	0	13	35	6	7	7	2	2	2	0	0
2.9-3.0	0	24	16	6	6	2	1	4	4	2	0
3.0-3.1	0	36	15	6	8	3	0	3	5	1	0
3.1-3.2	0	44	10	10	3	1	3	4	0	0	0
3.2-3.3	1	47	4	13	5	0	4	2	1	1	0
3.3-3.4	12	42	11	8	0	5	5	4	0	1	0
3.4-3.5	32	31	11	1	4	3	6	2	1	1	0
3.5-3.6	33	26	12	2	2	7	3	1	2	0	0
3.6-3.7	31	28	10	5	5	3	4	1	0	0	0
3.7-3.8	50	32	8	3	11	3	0	0	0	0	0
3.8-3.9	49	22	3	10	3	2	0	0	0	0	0
3.9-4.0	60	30	6	8	0	4	0	0	0	0	0
4.0-4.1	72	21	7	6	4	2	0	0	0	0	0
4.1-4.2	72	19	7	4	5	0	0	0	0	0	0
4.2-4.3	79	22	7	3	5	0	0	0	0	0	0
4.3-4.4	85	13	12	0	4	0	0	0	0	0	0
4.4-4.5	92	17	11	3	1	0	0	0	0	0	0
4.5-4.6	98	14	9	5	0	0	0	0	0	0	0
4.6-4.7	97	7	4	3	0	0	0	0	0	0	0
4.7-4.8	102	15	3	5	0	0	0	0	0	0	0
4.8-4.9	114	11	2	5	0	0	0	0	0	0	0
4.9-5.0	102	10	4	1	0	0	0	0	0	0	0
5.0-5.1	122	8	4	0	0	0	0	0	0	0	0
5.1-5.2	111	8	5	0	0	0	0	0	0	0	0
5.2-5.3	122	6	8	0	0	0	0	0	0	0	0
5.3-5.4	120	9	4	0	0	0	0	0	0	0	0
5.4-5.5	133	10	6	0	0	0	0	0	0	0	0
5.5-5.6	115	6	10	0	0	0	0	0	0	0	0
5.6-5.7	130	4	3	0	0	0	0	0	0	0	0
5.7-5.8	134	12	0	0	0	0	0	0	0	0	0
5.8-5.9	138	10	0	0	0	0	0	0	0	0	0
5.9-6.0	138	12	0	0	0	0	0	0	0	0	0

EF. DATA USERS NOTE- NSSDC 67-16. DTD. FEB. 67. DATA FROM TAPE D-00042.
S OF B AND L FOR THIS TAPE
A = 10 TO THE MINUS 5 GAUSS

-9K	-10K	-15K	-20K	-25K	-30K	-35K	-40K	-45K	-50K	-75K	-100K
0	0	0	0	0	0	2	6	0	0	0	0
0	0	0	0	0	2	2	2	0	0	0	0
0	0	0	0	0	6	4	3	3	0	0	0
0	0	0	0	6	2	1	0	1	0	0	0
0	0	0	0	5	3	3	2	0	0	0	0
2	2	0	0	3	4	4	0	0	0	0	0
2	3	0	0	7	6	2	0	0	0	0	0
1	0	0	0	3	6	0	0	2	1	0	0
1	0	0	0	7	2	1	1	1	1	0	0
1	3	0	0	9	5	3	1	2	0	0	0
2	0	0	0	9	4	0	1	1	0	0	0
0	1	0	0	12	0	1	2	1	0	0	0
2	5	0	0	8	0	0	3	0	0	0	0
3	0	0	0	3	0	0	2	0	0	0	0
2	1	0	0	5	0	4	0	0	0	0	0
0	1	0	0	6	4	2	0	0	0	0	0
3	3	0	0	3	5	1	0	0	0	0	0
2	2	0	0	7	4	0	0	0	0	0	0
2	0	0	0	5	2	0	0	0	0	0	0
4	2	0	0	3	1	0	0	0	0	0	0
5	1	0	0	2	1	0	0	0	0	0	0
0	0	0	0	2	0	0	0	0	0	0	0
1	1	0	0	4	0	0	0	0	0	0	0
0	1	0	0	2	0	0	0	0	0	0	0
1	1	0	0	0	0	0	0	0	0	0	0
2	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0

EXPLORER-12 (1961 UPSILON-1) CHARGED PARTICLE EXPERIMENT, REF. DATA USERS NOT
MATRIX OF VALUES OF B AND L FOR T
B GIVEN IN GAMMA = 10 TO THE MINU

B RANGE / L RANGE	0 -100	-200	-300	-400	-500	-600	-700	-800	-900	-1000	-1100 -
6.0-6.1	0	68	54	9	0	4	2	0	0	0	2
6.1-6.2	0	4	42	6	1	9	3	0	0	0	1
6.2-6.3	0	96	32	0	3	3	2	0	1	3	0
6.3-6.4	0	112	22	0	8	5	1	0	2	4	1
6.4-6.5	0	98	22	1	10	2	1	1	2	2	0
6.5-6.6	0	114	18	2	9	3	0	3	1	2	2
6.6-6.7	0	134	18	6	8	1	0	1	3	1	2
6.7-6.8	4	147	8	5	5	0	1	3	2	2	2
6.8-6.9	45	103	3	8	1	0	2	4	2	3	2
6.9-7.0	65	78	6	12	0	0	4	5	2	1	2
7.0-7.1	68	84	2	10	2	2	4	1	4	3	3
7.1-7.2	74	75	6	7	0	2	4	2	0	2	0
7.2-7.3	74	72	5	6	0	4	2	4	2	4	0
7.3-7.4	78	60	10	5	0	7	1	1	6	0	0
7.4-7.5	102	57	9	0	1	6	4	2	3	0	0
7.5-7.6	124	41	14	2	4	5	2	6	0	0	0
7.6-7.7	139	30	13	0	7	6	2	4	0	0	0
7.7-7.8	152	21	13	0	10	1	5	2	0	0	0
7.8-7.9	141	24	13	3	6	4	6	0	0	0	0
7.9-8.0	152	19	8	4	9	2	6	0	0	0	0
8.0-8.1	171	20	5	4	5	3	4	0	0	0	0
8.1-8.2	165	19	4	12	4	6	0	0	0	0	0
8.2-8.3	172	14	2	12	4	7	0	0	0	0	0
8.3-8.4	176	19	0	12	3	5	0	0	0	0	0
8.4-8.5	183	16	4	10	8	1	0	0	0	0	0
8.5-8.6	168	18	5	11	5	0	0	0	0	0	0
8.6-8.7	173	13	11	4	8	0	0	0	0	0	0
8.7-8.8	177	17	15	6	6	0	0	0	0	0	0
8.8-8.9	187	16	13	6	4	0	0	0	0	0	0
8.9-9.0	197	12	14	9	0	0	0	0	0	0	0
9.0-9.1	202	17	11	9	0	0	0	0	0	0	0
9.1-9.2	192	14	20	9	0	0	0	0	0	0	0
9.2-9.3	188	14	15	7	0	0	0	0	0	0	0
9.3-9.4	188	11	16	5	0	0	0	0	0	0	0
9.4-9.5	197	16	10	3	0	0	0	0	0	0	0
9.5-9.6	207	22	11	2	0	0	0	0	0	0	0
9.6-9.7	216	24	13	0	0	0	0	0	0	0	0
9.7-9.8	216	15	12	0	0	0	0	0	0	0	0
9.8-9.9	242	21	10	0	0	0	0	0	0	0	0
9.9-0.0	248	26	10	0	0	0	0	0	0	0	0
10.0-0.1	236	24	10	0	0	0	0	0	0	0	0
10.1-0.2	261	25	7	0	0	0	0	0	0	0	0
10.2-0.3	272	29	3	0	0	0	0	0	0	0	0
10.3-0.4	276	33	2	0	0	0	0	0	0	0	0
10.4-0.5	270	35	1	0	0	0	0	0	0	0	0
10.5-0.6	277	30	0	0	0	0	0	0	0	0	0
10.6-0.7	270	32	0	0	0	0	0	0	0	0	0
10.7-0.8	305	20	0	0	0	0	0	0	0	0	0
10.8-0.9	292	19	0	0	0	0	0	0	0	0	0
10.9-1.0	306	16	0	0	0	0	0	0	0	0	0

'A USERS NOTE- NSSDC 67-16, DTD. FEB. 67, DATA FROM TAPE D-00042,
AND L FOR THIS TAPE
TO THE MINUS 5 GAUSS

000	-1100	-1200	-1300	-1400	-1500	-1600	-1700	-1800	-1900	-2000
0	2	1	0	1	3	0	2	0	0	0
0	1	0	1	1	1	2	3	0	0	0
3	0	0	1	1	1	2	0	0	0	0
4	1	2	3	1	2	1	0	0	0	0
2	0	1	2	2	0	0	0	0	0	0
2	2	1	5	2	0	0	0	0	0	0
1	2	1	2	0	0	0	0	0	0	0
2	2	4	2	0	0	0	0	0	0	0
3	2	3	0	0	0	0	0	0	0	0
1	2	0	0	0	0	0	0	0	0	0
3	3	0	0	0	0	0	0	0	0	0
2	0	0	0	0	0	0	0	0	0	0
4	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0

EXPLORER-12 (1961 UPSILON-1) CHARGED PARTICLE EXPERIMENT, REF. DATA USERS NOTE- NS
MATRIX OF VALUES OF B AND L FOR THIS T
B GIVEN IN GAMMA = 10 TO THE MINUS 5 G

B RANGE 0	-100	-200	-300	-400	-500	-600	-700	-800	-900	-1000	-1100	-1200
L RANGE												
11.0-1.1	315	21	0	0	0	0	0	0	0	0	0	0
11.1-1.2	320	23	0	0	0	0	0	0	0	0	0	0
11.2-1.3	345	18	0	0	0	0	0	0	0	0	0	0
11.3-1.4	370	15	0	0	0	0	0	0	0	0	0	0
11.4-1.5	391	17	0	0	0	0	0	0	0	0	0	0
11.5-1.6	405	15	0	0	0	0	0	0	0	0	0	0
11.6-1.7	395	13	0	0	0	0	0	0	0	0	0	0
11.7-1.8	406	8	0	0	0	0	0	0	0	0	0	0
11.8-1.9	428	7	0	0	0	0	0	0	0	0	0	0
11.9-2.0	435	4	0	0	0	0	0	0	0	0	0	0
12.0-2.1	433	0	0	0	0	0	0	0	0	0	0	0
12.1-2.2	471	0	0	0	0	0	0	0	0	0	0	0
12.2-2.3	495	0	0	0	0	0	0	0	0	0	0	0
12.3-2.4	512	0	0	0	0	0	0	0	0	0	0	0
12.4-2.5	564	0	0	0	0	0	0	0	0	0	0	0
12.5-2.6	586	0	0	0	0	0	0	0	0	0	0	0
12.6-2.7	612	0	0	0	0	0	0	0	0	0	0	0
12.7-2.8	650	0	0	0	0	0	0	0	0	0	0	0
12.8-2.9	691	0	0	0	0	0	0	0	0	0	0	0
12.9-3.0	769	0	0	0	0	0	0	0	0	0	0	0
13.0-3.1	881	0	0	0	0	0	0	0	0	0	0	0
13.1-3.2	1322	0	0	0	0	0	0	0	0	0	0	0
13.2-3.3	868	0	0	0	0	0	0	0	0	0	0	0
13.3-3.4	496	0	0	0	0	0	0	0	0	0	0	0
13.4-3.5	488	0	0	0	0	0	0	0	0	0	0	0
13.5-3.6	455	0	0	0	0	0	0	0	0	0	0	0
13.6-3.7	433	0	0	0	0	0	0	0	0	0	0	0
13.7-3.8	504	0	0	0	0	0	0	0	0	0	0	0
13.8-3.9	474	0	0	0	0	0	0	0	0	0	0	0
13.9-4.0	452	0	0	0	0	0	0	0	0	0	0	0
14.0-4.1	277	0	0	0	0	0	0	0	0	0	0	0
14.1-4.2	254	0	0	0	0	0	0	0	0	0	0	0
14.2-4.3	295	0	0	0	0	0	0	0	0	0	0	0
14.3-4.4	289	0	0	0	0	0	0	0	0	0	0	0
14.4-4.5	307	0	0	0	0	0	0	0	0	0	0	0
14.5-4.6	372	0	0	0	0	0	0	0	0	0	0	0
14.6-4.7	246	0	0	0	0	0	0	0	0	0	0	0
14.7-4.8	331	0	0	0	0	0	0	0	0	0	0	0
14.8-4.9	365	0	0	0	0	0	0	0	0	0	0	0
14.9-5.0	311	0	0	0	0	0	0	0	0	0	0	0
15.0-5.1	349	0	0	0	0	0	0	0	0	0	0	0
15.1-5.2	297	0	0	0	0	0	0	0	0	0	0	0
15.2-5.3	225	0	0	0	0	0	0	0	0	0	0	0
15.3-5.4	284	0	0	0	0	0	0	0	0	0	0	0
15.4-5.5	208	0	0	0	0	0	0	0	0	0	0	0
15.5-5.6	166	0	0	0	0	0	0	0	0	0	0	0
15.6-5.7	224	0	0	0	0	0	0	0	0	0	0	0
15.7-5.8	124	0	0	0	0	0	0	0	0	0	0	0
15.8-5.9	135	0	0	0	0	0	0	0	0	0	0	0
15.9-6.0	248	0	0	0	0	0	0	0	0	0	0	0

DATA USERS NOTE- NSSDC 67-16. DTD. FEB. 67. DATA FROM TAPE D-00042.
B AND L FOR THIS TAPE
10 TO THE MINUS 5 GAUSS

-1000	-1100	-1200	-1300	-1400	-1500	-1600	-1700	-1800	-1900	-2000
0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0

EXPLORER-12 (1961 UPSILON-1) CHARGED PARTICLE EXPERIMENT. REF. DATA USERS NOTE-

NUMBER OF SAMPLES PER POSITION ON THIS T

LONG (E) LAT	0	10	20	30	40	50	60	70	80	90	100	110
90	0	0	0	0	0	0	0	0	0	0	0	0
80	0	0	0	0	0	0	0	0	0	0	0	0
70	0	0	0	0	0	0	0	0	0	0	0	0
60	0	0	0	0	0	0	0	0	0	0	0	0
50	0	0	0	0	0	0	0	0	0	0	0	0
40	14	35	78	48	8	69	68	38	23	81	102	37
30	157	186	208	191	125	220	280	231	148	247	289	228
20	243	323	311	294	258	309	345	322	345	322	386	358
10	241	191	225	223	216	223	247	225	227	208	217	218
0	101	83	70	135	121	65	103	139	127	75	88	158
-10	63	19	0	26	101	30	0	54	79	31	0	47
-20	11	0	13	35	19	1	18	49	12	1	15	37
-30	0	3	5	4	7	10	5	4	10	18	14	9
-40	0	0	0	0	0	0	0	0	0	0	0	0
-50	0	0	0	0	0	0	0	0	0	0	0	0
-60	0	0	0	0	0	0	0	0	0	0	0	0
-70	0	0	0	0	0	0	0	0	0	0	0	0
-80	0	0	0	0	0	0	0	0	0	0	0	0
-90	0	0	0	0	0	0	0	0	0	0	0	0

LONG (W) LAT	-180	-170	-160	-150	-140	-130	-120	-110	-100	-90	-80	-70
90	0	0	0	0	0	0	0	0	0	0	0	0
80	0	0	0	0	0	0	0	0	0	0	0	0
70	0	0	0	0	0	0	0	0	0	0	0	0
60	0	0	0	0	0	0	0	0	0	0	0	0
50	0	0	0	0	0	0	0	0	0	0	0	0
40	94	43	22	54	94	38	26	70	104	44	22	29
30	236	204	118	186	228	150	117	205	245	191	104	108
20	365	362	402	408	368	346	329	323	363	360	310	292
10	328	325	340	323	350	345	286	356	346	353	322	265
0	48	94	154	119	138	161	167	113	137	167	168	90
-10	1	57	82	53	0	85	104	43	0	89	49	32
-20	23	55	20	6	27	53	25	0	12	17	4	0
-30	8	7	8	10	2	0	0	0	0	0	0	0
-40	0	0	0	0	0	0	0	0	0	0	0	0
-50	0	0	0	0	0	0	0	0	0	0	0	0
-60	0	0	0	0	0	0	0	0	0	0	0	0
-70	0	0	0	0	0	0	0	0	0	0	0	0
-80	0	0	0	0	0	0	0	0	0	0	0	0
-90	0	0	0	0	0	0	0	0	0	0	0	0

USERS NOTE- NSSDC 67-16, DTD. FEB. 67, DATA FROM TAPE D-00042.

ON ON THIS TAPE

100	110	120	130	140	150	160	170	180
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
102	37	29	56	60	46	19	51	94
289	228	163	205	191	157	130	173	236
386	358	445	371	390	398	400	399	365
217	218	246	256	286	287	274	275	328
88	158	130	76	118	158	118	42	48
0	47	100	23	0	69	84	25	1
15	37	15	3	34	49	19	3	23
14	9	13	20	5	7	19	18	8
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0

-80	-70	-60	-50	-40	-30	-20	-10	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
22	29	86	77	20	35	71	21	14
104	108	204	197	122	145	207	155	157
310	292	256	278	278	281	241	219	243
322	265	244	237	195	219	234	185	241
168	90	113	133	124	81	124	152	101
49	32	0	88	76	30	0	101	63
4	0	17	32	17	4	25	30	11
0	0	0	0	1	3	2	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0

UPSILON-1 (EXPLORER 12) HAS COMPLETED RUN.
THERE HAVE BEEN 7349 PHYSICAL AND 36745 LOGICAL RECORDS READ FROM THIS TAPE.

EXPLORER-12 (1961 UPSILON-1) CHARGED PARTICLE EXPERIMENT. REF. DATA USERS NOTE- NSS

THIS ROUTINE WILL READ AN EXPLORER 12 TAPE AND COMPUTE THE LOCAL TIME OF

TA USERS NOTE- NSSDC 67-16, DTD. FEB. 67. DATA FROM TAPE D-00004.

THE LOCAL TIME OF THE SATELLITE CHARGED PARTICLE READING.

EXPLORER-12 (1961 UPSILON-1) CHARGED PARTICLE EXPERIMENT. REF. DATA USERS NO

RECORD NO.	DTD.	HRS.	MIN.	B	L	P R
1	11/22/ 1	13	58	406.	6.55	
61	11/22/ 1	15	53	13212.	2.47	
178	11/22/ 1	21	32	37.	12.66	
193	11/22/ 1	23	32	24.	13.50	
203	11/23/ 1	1	33	18.	13.62	
215	11/23/ 1	3	31	15.	13.41	
225	11/23/ 1	5	11	14.	13.18	
243	11/23/ 1	7	32	15.	12.90	
257	11/23/ 1	9	32	19.	12.52	
277	11/23/ 1	11	31	27.	11.67	
294	11/23/ 1	13	37	50.	9.95	
309	11/23/ 1	14	36	77.	8.82	1
470	11/24/ 1	-0	1	36.	12.15	
490	11/24/ 1	2	4	22.	12.71	
493	11/24/ 1	4	1	16.	12.91	
510	11/24/ 1	6	2	14.	13.07	
525	11/24/ 1	8	1	14.	13.22	
538	11/24/ 1	10	4	15.	13.16	
550	11/24/ 1	12	39	21.	12.30	1
686	11/24/ 1	21	34	1674.	5.03	
694	11/24/ 1	22	33	332.	7.54	
721	11/25/ 1	-0	50	63.	10.21	1
880	11/25/ 1	8	9	14.	13.01	
881	11/25/ 1	9	6	14.	13.21	
883	11/25/ 1	9	46	14.	13.30	1
993	11/25/ 1	16	33	25.	10.93	
1001	11/25/ 1	18	32	42.	9.13	
1004	11/25/ 1	19	10	54.	8.43	1
1128	11/25/ 1	23	47	3736.	2.95	
1142	11/26/ 1	0	41	511.	5.81	
1223	11/26/ 1	5	0	31.	10.46	
1241	11/26/ 1	7	1	20.	11.62	
1253	11/26/ 1	11	1	14.	13.11	
1269	11/26/ 1	13	10	14.	13.17	
1275	11/26/ 1	15	1	15.	12.79	
1284	11/26/ 1	17	3	18.	12.02	
1286	11/26/ 1	19	1	24.	10.86	
1304	11/26/ 1	21	10	43.	8.96	
1317	11/26/ 1	22	9	65.	7.83	2
1568	11/27/ 1	7	32	30.	10.16	
1585	11/27/ 1	9	31	20.	11.53	
1601	11/27/ 1	11	32	16.	12.46	
1615	11/27/ 1	13	31	14.	12.96	
1634	11/27/ 1	15	49	14.	13.05	
1636	11/27/ 1	17	32	15.	12.83	
1646	11/27/ 1	19	31	18.	12.21	
1667	11/27/ 1	21	34	25.	10.99	
1681	11/28/ 1	-0	37	61.	7.97	1
1782	11/28/ 1	4	14	18184.	1.37	
1870	11/28/ 1	6	51	136.	6.52	
1911	11/28/ 1	10	1	31.	10.05	
1931	11/28/ 1	12	2	21.	11.49	
1950	11/28/ 1	18	1	15.	13.38	
1965	11/28/ 1	20	2	16.	13.22	
1985	11/28/ 1	22	3	19.	12.45	
2001	11/29/ 1	0	2	24.	11.10	
2004	11/29/ 1	3	11	61.	8.03	1
2115	11/29/ 1	7	21	6684.	2.26	1
2215	11/29/ 1	10	36	66.	8.10	

T. REF. DATA USERS NOTE- NSSDC 67-16, DTD. FEB. 67. DATA FROM TAPE D-00044.

L	RECORD NO.	DTD.	HRS.	MIN.	B	L
6.55	60	11/22/ 1	15	20	12460.	2.24
2.47	117	11/22/ 1	19	28	78.	10.75
12.66	15	11/22/ 1	22	4	32.	12.98
13.50	10	11/23/ 1	-0	1	22.	13.58
13.62	12	11/23/ 1	2	2	17.	13.58
13.41	10	11/23/ 1	4	0	14.	13.34
13.18	18	11/23/ 1	6	3	14.	13.07
12.90	14	11/23/ 1	8	4	16.	12.82
12.52	20	11/23/ 1	10	15	21.	12.28
11.67	17	11/23/ 1	12	2	30.	11.33
9.95	15	11/23/ 1	14	2	59.	9.50
8.82	161	11/23/ 1	21	36	96.	10.39
12.15	20	11/24/ 1	-0	39	30.	12.38
12.71	3	11/24/ 1	2	9	22.	12.72
12.91	17	11/24/ 1	4	29	16.	12.95
13.07	15	11/24/ 1	6	30	14.	13.11
13.22	13	11/24/ 1	8	32	14.	13.24
13.16	12	11/24/ 1	10	25	16.	13.10
12.30	136	11/24/ 1	20	1	2478.	3.63
5.03	8	11/24/ 1	22	3	654.	6.49
7.54	27	11/25/ 1	-0	6	93.	9.58
10.21	159	11/25/ 1	7	37	15.	12.88
13.01	1	11/25/ 1	8	9	14.	13.01
13.21	2	11/25/ 1	9	10	14.	13.22
13.30	110	11/25/ 1	14	38	19.	12.20
10.93	6	11/25/ 1	16	59	27.	10.58
9.13	3	11/25/ 1	18	35	43.	9.08
8.43	124	11/25/ 1	23	16	25385.	1.24
2.95	14	11/26/ 1	0	10	1335.	4.44
5.81	81	11/26/ 1	3	1	68.	8.99
10.46	18	11/26/ 1	5	32	27.	10.79
11.62	12	11/26/ 1	7	27	19.	11.84
13.11	16	11/26/ 1	11	31	14.	13.17
13.17	6	11/26/ 1	13	33	14.	13.12
12.79	9	11/26/ 1	15	30	16.	12.64
12.02	2	11/26/ 1	17	12	18.	11.94
10.86	18	11/26/ 1	19	28	27.	10.52
8.96	13	11/26/ 1	21	29	48.	8.62
7.83	251	11/27/ 1	5	29	66.	8.29
10.16	17	11/27/ 1	7	59	27.	10.51
11.53	16	11/27/ 1	9	59	19.	11.80
12.48	14	11/27/ 1	11	52	16.	12.59
12.96	19	11/27/ 1	13	57	14.	13.01
13.05	2	11/27/ 1	15	58	14.	13.04
12.83	10	11/27/ 1	17	58	16.	12.74
12.21	21	11/27/ 1	19	59	19.	11.99
10.99	14	11/27/ 1	22	-0	27.	10.65
7.97	101	11/28/ 1	3	14	698.	3.93
1.37	88	11/28/ 1	6	18	228.	5.65
6.52	41	11/28/ 1	7	55	68.	7.93
10.05	20	11/28/ 1	10	31	27.	10.46
11.49	19	11/28/ 1	12	32	19.	11.78
13.38	15	11/28/ 1	18	30	15.	13.39
13.22	20	11/28/ 1	20	32	16.	13.08
12.45	16	11/28/ 1	22	29	19.	12.20
11.10	3	11/29/ 1	-0	29	26.	10.73
8.03	111	11/29/ 1	6	9	1598.	3.33
2.26	100	11/29/ 1	9	43	110.	6.54
8.10	17	11/29/ 1	10	59	54.	8.55

2232	11/29/ 1	12	32	32.	10.12	20	11
2252	11/29/ 1	14	33	22.	11.70	15	11
2267	11/29/ 1	16	31	13.	12.86	10	11
2277	11/29/ 1	18	33	16.	13.66	18	11
2295	11/29/ 1	22	32	16.	13.45	15	11
2310	11/30/ 1	-0	32	18.	12.44	18	11
2328	11/30/ 1	4	54	43.	9.11	7	11
2335	11/30/ 1	5	46	63.	8.27	120	11
2455	11/30/ 1	10	43	701.	4.61	39	11
2494	11/30/ 1	15	2	36.	10.58	17	11
2511	11/30/ 1	17	1	24.	12.34	18	11
2529	11/30/ 1	19	0	19.	13.59	16	11
2545	11/30/ 1	21	9	16.	14.17	6	11
2551	11/30/ 1	23	1	15.	13.99	22	11
2573	12/ 1/ 1	1	2	15.	13.26	325	12
2898	12/ 1/ 1	12	13	24948.	1.45	374	12
3272	12/ 1/ 1	23	31	16.	14.05	225	12
3497	12/ 2/ 1	9	48	44.	10.36	36	12
3533	12/ 2/ 1	13	14	557.	6.33	43	12
3576	12/ 2/ 1	15	12	4721.	4.40	67	12
3643	12/ 2/ 1	17	40	123.	9.39	195	12
3838	12/ 2/ 1	23	46	20.	13.58	18	12
3856	12/ 3/ 1	2	55	14.	13.35	35	12
3891	12/ 3/ 1	5	5	14.	13.07	70	12
3961	12/ 3/ 1	9	6	20.	12.41	17	12
3978	12/ 3/ 1	11	31	34.	11.15	15	12
3993	12/ 3/ 1	13	37	78.	9.05	103	12
4096	12/ 3/ 1	17	55	2750.	5.09	314	12
4410	12/ 4/ 1	6	38	14.	13.19	454	12
4864	12/ 5/ 1	0	30	49.	10.63	174	12
5038	12/ 5/ 1	7	22	14.	13.06	519	12
5557	12/ 6/ 1	1	55	74.	8.86	6	12
5563	12/ 6/ 1	4	40	26.	10.84	2	12
5565	12/ 6/ 1	6	1	20.	11.59	14	12
5579	12/ 6/ 1	8	1	16.	12.53	23	12
5602	12/ 6/ 1	10	1	14.	13.14	25	12

10.12	20	11/29/ 1	12	59	29.	10.51
11.70	15	11/29/ 1	14	59	20.	11.99
12.86	10	11/29/ 1	16	55	17.	13.06
13.66	18	11/29/ 1	18	59	16.	13.76
13.45	15	11/29/ 1	22	59	16.	13.26
12.44	18	11/30/ 1	-0	59	19.	12.15
9.11	7	11/30/ 1	5	3	45.	8.97
8.27	120	11/30/ 1	9	3	4973.	2.58
4.61	39	11/30/ 1	13	18	66.	8.63
10.58	17	11/30/ 1	15	28	32.	11.01
12.34	18	11/30/ 1	17	27	22.	12.66
13.59	16	11/30/ 1	19	29	18.	13.79
14.17	6	11/30/ 1	21	28	16.	14.18
13.99	22	11/30/ 1	23	42	15.	13.79
13.26	325	12/ 1/ 1	11	37	5142.	2.93
1.45	374	12/ 1/ 1	21	52	19.	14.04
14.05	225	12/ 2/ 1	9	5	35.	10.83
10.36	36	12/ 2/ 1	11	30	102.	8.79
6.33	43	12/ 2/ 1	14	19	9550.	2.69
4.40	67	12/ 2/ 1	16	48	246.	8.05
9.39	195	12/ 2/ 1	23	12	21.	13.52
13.58	18	12/ 3/ 1	1	42	16.	13.50
13.35	35	12/ 3/ 1	4	34	14.	13.13
13.07	70	12/ 3/ 1	7	48	17.	12.72
12.41	17	12/ 3/ 1	9	50	23.	12.14
11.15	15	12/ 3/ 1	12	3	41.	10.71
9.05	103	12/ 3/ 1	17	21	17299.	1.53
5.09	314	12/ 4/ 1	6	7	14.	13.15
13.19	454	12/ 4/ 1	23	40	71.	10.03
10.63	174	12/ 5/ 1	6	9	15.	12.73
13.06	519	12/ 6/ 1	1	25	101.	8.36
8.86	6	12/ 6/ 1	2	5	63.	9.02
10.84	2	12/ 6/ 1	4	49	25.	10.93
11.59	14	12/ 6/ 1	6	29	19.	11.83
12.53	23	12/ 6/ 1	8	29	15.	12.71
13.14	25	12/ 6/ 1	10	26	14.	13.21

EXPLORER-12 (1961 UPSILON-1) CHARGED PARTICLE EXPERIMENT. REF. DATA USERS
MATRIX OF VALUES OF L AND LOCAL TIM

TIME / L RANGE	1	2	3	4	5	6	7	8	9	10	11	12	13
1.0-1.1	0	0	0	0	0	0	0	0	0	0	0	0	0
1.1-1.2	0	0	0	0	0	0	0	0	0	0	0	0	0
1.2-1.3	0	0	0	0	0	0	0	0	0	0	0	0	0
1.3-1.4	0	0	0	0	0	0	0	0	0	0	0	0	0
1.4-1.5	0	0	0	0	0	0	0	0	0	0	0	0	0
1.5-1.6	0	0	0	0	0	0	0	0	0	0	0	0	0
1.6-1.7	0	0	0	0	0	0	0	0	0	0	0	0	0
1.7-1.8	0	0	0	0	0	0	0	0	0	0	0	0	0
1.8-1.9	0	0	0	0	0	0	0	0	0	0	0	0	0
1.9-2.0	0	0	0	0	0	0	0	0	0	0	0	0	0
2.0-2.1	0	0	0	0	0	0	0	0	0	0	0	0	0
2.1-2.2	0	0	0	0	0	0	0	0	0	0	0	0	2
2.2-2.3	0	0	0	0	0	0	0	0	0	0	0	0	2
2.3-2.4	0	0	0	0	0	0	0	0	0	0	0	1	1
2.4-2.5	0	0	0	0	0	0	0	0	0	0	0	0	1
2.5-2.6	0	0	0	0	0	0	0	0	0	0	2	3	0
2.6-2.7	0	0	0	0	0	0	0	0	0	0	2	1	3
2.7-2.8	0	0	0	0	0	0	0	0	0	0	3	1	2
2.8-2.9	0	0	0	0	0	0	0	0	0	0	5	1	3
2.9-3.0	0	0	0	0	0	0	0	0	0	2	2	0	0
3.0-3.1	2	0	0	0	0	0	0	0	0	2	4	1	2
3.1-3.2	4	0	0	0	0	0	0	0	0	4	2	1	0
3.2-3.3	4	0	0	0	0	0	0	0	0	6	1	3	0
3.3-3.4	6	0	0	0	0	0	0	0	0	7	3	1	0
3.4-3.5	4	0	0	0	0	0	0	0	1	6	2	3	1
3.5-3.6	6	0	0	0	0	0	0	0	1	7	3	1	0
3.6-3.7	7	0	0	0	0	0	0	0	5	7	3	1	0
3.7-3.8	1	1	0	0	0	0	0	0	5	5	1	1	0
3.8-3.9	2	4	0	0	0	0	0	0	9	7	1	3	0
3.9-4.0	3	4	0	0	0	0	0	0	8	7	1	2	0
4.0-4.1	0	6	0	0	0	0	0	0	13	3	2	3	0
4.1-4.2	2	7	0	0	0	0	0	0	14	3	3	1	0
4.2-4.3	2	4	0	0	0	0	0	0	14	2	4	0	0
4.3-4.4	3	8	0	0	0	0	0	1	15	1	7	0	0
4.4-4.5	4	5	0	0	0	0	0	0	15	4	5	0	0
4.5-4.6	0	7	0	0	0	0	0	1	13	9	1	0	0
4.6-4.7	3	8	0	0	0	0	0	1	19	5	1	0	0
4.7-4.8	5	7	0	0	0	0	0	2	13	8	2	0	0
4.8-4.9	4	7	0	0	0	0	0	6	9	4	2	0	0
4.9-5.0	6	3	4	0	0	0	0	13	12	5	0	0	0
5.0-5.1	4	1	4	0	0	0	0	11	12	7	0	0	0
5.1-5.2	5	2	4	0	0	0	0	15	10	2	0	0	0
5.2-5.3	6	3	5	0	0	0	0	13	9	4	0	0	0
5.3-5.4	4	5	5	0	0	0	0	15	7	3	0	0	0
5.4-5.5	5	3	5	0	0	0	0	19	7	2	0	0	0
5.5-5.6	4	4	7	0	0	0	0	17	8	2	0	0	0
5.6-5.7	4	5	5	0	0	0	0	19	5	3	0	0	0
5.7-5.8	4	5	3	0	0	0	0	21	5	0	0	0	0
5.8-5.9	4	8	8	0	0	0	0	19	6	0	0	0	0
5.9-6.0	5	7	10	0	0	0	2	17	5	0	0	0	0

ERIMENT. REF. DATA USERS NOTE- NSSDC 67-16. DTD. FEB. 67. DATA FROM TAPE D-00044.
VALUES OF L AND LOCAL TIME FOR THIS TAPE

9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0
0	0	0	0	0	0	0	1	2	2	1	0	0	0	0	0
0	0	0	0	0	0	0	3	1	1	0	0	0	0	0	0
0	0	0	0	0	0	2	1	3	0	1	0	0	0	0	0
0	0	0	0	0	0	1	3	0	0	0	1	2	0	0	0
0	0	0	0	0	0	0	2	0	0	0	1	0	0	0	0
0	0	0	0	0	1	1	0	0	0	0	1	0	3	0	0
0	0	0	0	0	1	3	0	0	0	0	1	1	3	0	0
0	0	0	0	0	1	2	0	0	0	0	1	0	0	0	0
0	0	0	0	0	3	2	0	0	0	0	0	2	3	0	0
0	0	0	0	0	1	0	0	0	0	0	0	1	1	2	0
0	0	0	0	2	2	1	0	0	0	0	0	0	1	2	0
0	0	0	0	2	3	0	0	0	0	0	0	2	1	4	0
0	0	0	1	1	1	0	0	0	0	0	0	1	1	5	0
0	0	0	0	1	1	0	0	0	0	0	0	1	2	1	2
0	0	2	3	0	1	0	0	0	0	0	0	0	1	2	3
0	0	2	1	3	0	0	0	0	0	0	0	0	1	1	3
0	0	3	1	2	1	0	0	0	0	0	0	0	0	2	5
0	0	5	1	3	0	0	0	0	0	0	0	0	1	1	3
0	2	2	0	0	1	0	0	0	0	0	0	0	1	2	5
0	2	4	1	2	0	0	0	0	0	0	0	0	0	3	2
0	4	2	1	0	0	0	0	0	0	0	0	0	1	1	1
0	6	1	3	0	0	0	0	0	0	0	0	0	0	2	1
0	7	3	1	0	0	0	0	0	0	0	0	0	0	0	1
1	6	2	3	1	0	0	0	0	0	0	0	0	0	2	1
1	7	3	1	0	0	0	0	0	0	0	0	0	0	2	1
5	7	3	1	0	0	0	0	0	0	0	0	0	0	2	0
5	5	1	1	0	0	0	0	0	0	0	0	0	0	1	1
9	7	1	3	0	0	0	0	0	0	0	0	0	0	0	3
8	7	1	2	0	0	0	0	0	0	0	0	0	0	0	4
13	3	2	3	0	0	0	0	0	0	0	0	0	0	0	5
14	3	3	1	0	0	0	0	0	0	0	0	0	0	0	2
14	2	4	0	0	0	0	0	0	0	0	0	0	0	0	5
15	1	7	0	0	0	0	0	0	0	0	0	0	0	0	3
15	4	5	0	0	0	0	0	0	0	0	0	0	0	0	5
13	9	1	0	0	0	0	0	0	0	0	0	0	0	0	1
19	5	1	0	0	0	0	0	0	0	0	0	0	0	0	2
13	8	2	0	0	0	0	0	0	0	0	0	0	0	0	2
9	4	2	0	0	0	0	0	0	0	0	0	0	0	0	0
12	5	0	0	0	0	0	0	0	0	0	0	0	0	0	1
12	7	0	0	0	0	0	0	0	0	0	0	0	0	0	2
10	2	0	0	0	0	0	0	0	0	0	0	0	0	0	1
9	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

EXPLORER-12 (1961 UPSILON-1) CHARGED PARTICLE EXPERIMENT, REF. DATA USERS N

MATRIX OF VALUES OF L AND LOCAL TIME

TIME L RANGE	1	2	3	4	5	6	7	8	9	10	11	12	13
6.0-6.1	2	10	7	0	0	0	1	23	7	0	0	0	0
6.1-6.2	0	12	11	0	0	0	1	20	6	0	0	0	0
6.2-6.3	0	7	12	0	0	0	0	17	4	0	0	0	0
6.3-6.4	0	8	13	0	0	0	2	17	4	0	0	0	0
6.4-6.5	0	8	12	0	0	0	0	22	2	0	0	0	0
6.5-6.6	0	10	15	0	0	0	5	20	2	0	0	0	0
6.6-6.7	0	8	15	0	0	0	1	23	0	0	0	0	0
6.7-6.8	0	7	16	0	0	0	3	18	0	0	0	0	0
6.8-6.9	0	9	14	3	0	0	3	19	0	0	0	0	0
6.9-7.0	0	3	12	7	0	0	5	19	0	0	0	0	0
7.0-7.1	0	6	6	6	0	0	10	13	0	0	0	0	0
7.1-7.2	0	6	9	5	0	0	6	13	0	0	0	0	0
7.2-7.3	0	4	12	5	0	0	12	15	0	0	0	0	0
7.3-7.4	0	4	11	4	0	0	14	11	0	0	0	0	0
7.4-7.5	0	2	16	8	0	0	13	10	0	0	0	0	0
7.5-7.6	0	3	14	8	0	0	13	11	0	0	0	0	0
7.6-7.7	0	3	15	11	0	0	19	6	0	0	0	0	0
7.7-7.8	0	1	10	8	0	0	16	3	0	0	0	0	0
7.8-7.9	0	1	12	9	0	0	19	1	0	0	0	0	0
7.9-8.0	0	1	15	5	0	0	13	2	0	0	0	0	0
8.0-8.1	0	0	18	6	0	0	19	4	0	0	0	0	0
8.1-8.2	0	0	8	8	0	0	16	4	0	0	0	0	0
8.2-8.3	0	0	8	10	0	0	15	5	0	0	0	0	0
8.3-8.4	0	0	7	10	0	0	12	3	0	0	0	0	0
8.4-8.5	0	0	9	15	0	0	12	2	0	0	0	0	0
8.5-8.6	0	0	3	12	0	0	11	0	0	0	0	0	0
8.6-8.7	0	0	7	12	0	0	13	1	0	0	0	0	0
8.7-8.8	0	0	5	11	0	0	17	3	0	0	0	0	0
8.8-8.9	0	0	6	11	0	0	19	1	0	0	0	0	0
8.9-9.0	0	0	6	10	0	0	23	0	0	0	0	0	0
9.0-9.1	0	0	4	6	0	0	20	0	0	0	0	0	0
9.1-9.2	0	0	3	6	0	3	14	0	0	0	0	0	0
9.2-9.3	0	0	4	8	0	1	9	0	0	0	0	0	0
9.3-9.4	0	0	6	6	0	1	7	0	0	0	0	0	0
9.4-9.5	0	0	5	7	0	2	9	0	0	0	0	0	0
9.5-9.6	0	0	7	8	0	0	9	0	0	0	0	0	0
9.6-9.7	0	0	7	9	0	1	10	0	0	0	0	0	0
9.7-9.8	0	0	3	8	0	0	14	0	0	0	0	0	0
9.8-9.9	0	0	4	9	0	1	15	0	0	0	0	0	0
9.9-0.0	0	0	4	12	0	3	13	0	0	0	0	0	0
10.0-0.1	0	0	2	14	3	5	2	0	0	0	0	0	0
10.1-0.2	0	0	4	14	5	5	8	0	0	0	0	0	0
10.2-0.3	0	0	1	22	12	6	11	0	0	0	0	0	0
10.3-0.4	0	0	0	23	7	5	5	0	0	0	0	0	0
10.4-0.5	0	0	0	19	15	5	2	0	0	0	0	0	0
10.5-0.6	0	0	0	14	7	10	8	0	0	0	0	0	0
10.6-0.7	0	0	0	16	7	11	11	0	0	0	0	0	0
10.7-0.8	0	0	0	18	10	11	17	0	0	0	0	0	0
10.8-0.9	0	0	0	24	4	16	12	0	0	0	0	0	0
10.9-1.0	0	0	0	20	7	29	7	0	0	0	0	0	0

A USERS NOTE- NSSDC 67-16, DTD. FEB. 67. DATA FROM TAPE D-00044.
OCAL TIME FOR THIS TAPE

12	13	14	15	16	17	18	19	20	21	22	23	24
0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0

EXPLORER-12 (1961 UPSILON-1) CHARGED PARTICLE EXPERIMENT. REF. DATA USERS
MATRIX OF VALUES OF L AND LOCAL TIME

TIME / L RANGE	1	2	3	4	5	6	7	8	9	10	11	12	13
11.0-1.1	0	0	0	16	8	22	0	0	0	0	0	0	0
11.1-1.2	0	0	0	19	8	24	1	0	0	0	0	0	0
11.2-1.3	0	0	0	17	6	24	4	0	0	0	0	0	0
11.3-1.4	0	0	0	17	10	19	4	0	0	0	0	0	0
11.4-1.5	0	0	0	23	7	17	8	0	0	0	0	0	0
11.5-1.6	0	0	0	24	12	20	5	0	0	0	0	0	0
11.6-1.7	0	0	0	29	25	11	5	0	0	0	0	0	0
11.7-1.8	0	0	0	26	31	17	1	0	0	0	0	0	0
11.8-1.9	0	0	0	29	15	14	3	0	0	0	0	0	0
11.9-2.0	0	0	0	19	9	25	1	0	0	0	0	0	0
12.0-2.1	0	0	0	17	11	39	2	0	0	0	0	0	0
12.1-2.2	0	0	0	16	21	36	2	0	0	0	0	0	0
12.2-2.3	0	0	0	18	26	37	2	0	0	0	0	0	0
12.3-2.4	0	0	0	23	32	42	7	0	0	0	0	0	0
12.4-2.5	0	0	0	17	21	32	10	0	0	0	0	0	0
12.5-2.6	0	0	0	10	50	29	3	0	0	0	0	0	0
12.6-2.7	0	0	0	1	53	35	0	0	0	0	0	0	0
12.7-2.8	0	0	0	5	39	54	0	0	0	0	0	0	0
12.8-2.9	0	0	0	7	38	73	0	0	0	0	0	0	0
12.9-3.0	0	0	0	7	46	79	0	0	0	0	0	0	0
13.0-3.1	0	0	0	9	44	91	0	0	0	0	0	0	0
13.1-3.2	0	0	0	0	70	108	0	0	0	0	0	0	0
13.2-3.3	0	0	0	0	134	75	0	0	0	0	0	0	0
13.3-3.4	0	0	0	0	118	61	0	0	0	0	0	0	0
13.4-3.5	0	0	0	0	48	11	0	0	0	0	0	0	0
13.5-3.6	0	0	0	0	50	6	0	0	0	0	0	0	0
13.6-3.7	0	0	0	0	34	6	0	0	0	0	0	0	0
13.7-3.8	0	0	0	0	40	2	0	0	0	0	0	0	0
13.8-3.9	0	0	0	0	15	8	0	0	0	0	0	0	0
13.9-4.0	0	0	0	0	22	12	0	0	0	0	0	0	0
14.0-4.1	0	0	0	0	22	0	0	0	0	0	0	0	0
14.1-4.2	0	0	0	0	6	0	0	0	0	0	0	0	0
14.2-4.3	0	0	0	0	0	0	0	0	0	0	0	0	0
14.3-4.4	0	0	0	0	0	0	0	0	0	0	0	0	0
14.4-4.5	0	0	0	0	0	0	0	0	0	0	0	0	0
14.5-4.6	0	0	0	0	0	0	0	0	0	0	0	0	0
14.6-4.7	0	0	0	0	0	0	0	0	0	0	0	0	0
14.7-4.8	0	0	0	0	0	0	0	0	0	0	0	0	0
14.8-4.9	0	0	0	0	0	0	0	0	0	0	0	0	0
14.9-5.0	0	0	0	0	0	0	0	0	0	0	0	0	0
15.0-5.1	0	0	0	0	0	0	0	0	0	0	0	0	0
15.1-5.2	0	0	0	0	0	0	0	0	0	0	0	0	0
15.2-5.3	0	0	0	0	0	0	0	0	0	0	0	0	0
15.3-5.4	0	0	0	0	0	0	0	0	0	0	0	0	0
15.4-5.5	0	0	0	0	0	0	0	0	0	0	0	0	0
15.5-5.6	0	0	0	0	0	0	0	0	0	0	0	0	0
15.6-5.7	0	0	0	0	0	0	0	0	0	0	0	0	0
15.7-5.8	0	0	0	0	0	0	0	0	0	0	0	0	0
15.8-5.9	0	0	0	0	0	0	0	0	0	0	0	0	0
15.9-6.0	0	0	0	0	0	0	0	0	0	0	0	0	0

ATA USERS NOTE- NSSDC 67-16, DTD. FEB. 67. DATA FROM TAPE D-00044.
LOCAL TIME FOR THIS TAPE

12	13	14	15	16	17	18	19	20	21	22	23	24
0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0

EXPLORER-12 (1961 UPSILON-1) CHARGED PARTICLE EXPERIMENT, REF. DATA USERS NO

MATRIX OF VALUES OF L AND UNIVERSAL T

TIME L RANGE	1	2	3	4	5	6	7	8	9	10	11	12	13
1.0-1.1	0	0	0	1	0	0	0	0	0	0	0	0	0
1.1-1.2	0	0	0	6	0	0	0	0	0	0	0	0	0
1.2-1.3	2	0	0	2	0	0	0	0	0	0	0	0	0
1.3-1.4	0	0	0	2	0	0	0	0	0	0	0	0	0
1.4-1.5	2	2	0	0	0	0	0	0	0	0	0	1	0
1.5-1.6	0	0	0	0	0	0	0	0	0	0	0	0	0
1.6-1.7	1	2	0	1	0	0	0	0	0	0	0	1	0
1.7-1.8	1	1	0	2	0	0	0	0	0	0	0	1	0
1.8-1.9	1	0	0	0	0	0	0	0	0	0	0	1	0
1.9-2.0	0	1	0	2	0	0	0	0	0	0	0	0	0
2.0-2.1	0	1	0	1	0	0	0	0	0	0	0	0	0
2.1-2.2	1	0	0	2	0	0	0	0	0	0	0	0	0
2.2-2.3	0	1	0	2	0	0	1	0	0	0	0	1	0
2.3-2.4	1	2	0	1	0	0	2	0	0	0	0	1	0
2.4-2.5	0	0	0	2	0	0	1	0	0	0	0	1	0
2.5-2.6	1	2	0	1	0	0	2	0	1	0	0	0	0
2.6-2.7	0	1	0	1	0	0	1	0	1	0	0	0	0
2.7-2.8	2	1	0	1	0	0	3	0	0	0	0	0	0
2.8-2.9	2	0	0	0	2	0	1	2	0	0	0	1	0
2.9-3.0	2	0	0	0	2	0	2	1	0	0	1	1	0
3.0-3.1	2	0	0	0	2	0	1	1	0	0	1	0	0
3.1-3.2	2	0	0	0	1	0	3	1	0	0	1	1	0
3.2-3.3	0	1	0	0	2	0	1	2	0	0	1	0	0
3.3-3.4	0	1	0	0	2	2	3	1	0	0	1	0	0
3.4-3.5	0	1	0	0	2	1	1	1	0	0	1	0	0
3.5-3.6	0	2	0	0	1	2	2	2	0	0	1	0	0
3.6-3.7	0	2	0	0	2	2	2	1	0	0	1	0	0
3.7-3.8	0	1	0	0	3	0	0	1	0	0	0	0	0
3.8-3.9	0	2	0	0	6	0	1	2	0	0	1	1	0
3.9-4.0	0	2	2	0	2	0	1	3	0	0	2	1	0
4.0-4.1	0	1	1	0	5	0	0	4	0	0	1	2	0
4.1-4.2	0	2	3	0	5	0	0	4	0	0	1	0	0
4.2-4.3	0	2	3	0	2	0	0	4	0	0	2	2	0
4.3-4.4	0	2	2	0	5	0	0	4	0	0	1	0	0
4.4-4.5	0	3	0	0	5	0	0	5	0	0	2	1	0
4.5-4.6	0	2	2	0	4	0	0	4	0	0	1	0	0
4.6-4.7	0	4	1	0	5	0	0	4	0	1	2	1	0
4.7-4.8	0	1	3	0	5	0	0	4	0	0	1	1	2
4.8-4.9	0	2	2	0	4	0	0	5	0	0	3	0	2
4.9-5.0	0	3	2	0	5	0	0	4	0	0	1	0	3
5.0-5.1	0	3	1	0	5	0	0	5	0	0	2	0	2
5.1-5.2	0	3	0	0	2	2	0	4	0	2	0	0	3
5.2-5.3	0	2	0	0	4	3	0	4	0	2	0	0	3
5.3-5.4	0	3	0	0	2	3	2	2	0	2	1	0	5
5.4-5.5	0	2	0	0	3	2	3	2	0	2	1	0	2
5.5-5.6	0	2	0	1	2	3	3	3	0	2	1	0	5
5.6-5.7	0	4	0	2	0	2	2	2	0	2	1	0	6
5.7-5.8	0	3	0	3	0	0	3	2	0	0	1	0	3
5.8-5.9	0	3	2	2	0	0	2	1	2	1	1	0	4
5.9-6.0	0	2	3	4	0	0	2	0	3	2	1	0	4

ATA USERS NOTE- NSSDC 67-16, DTD. FEB. 67, DATA FROM TAPE D-00044.
UNIVERSAL TIME FOR THIS TAPE

12	13	14	15	16	17	18	19	20	21	22	23	24
0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	1	0
0	0	0	0	0	0	1	0	0	0	2	2	0
1	0	0	0	0	0	0	1	0	0	1	0	0
0	0	0	0	0	1	0	1	0	0	0	1	0
1	0	0	0	0	0	0	0	0	0	1	0	0
1	0	0	0	0	0	1	1	0	0	1	1	0
1	0	0	0	0	0	0	1	0	0	0	1	0
0	0	0	0	0	1	1	0	0	0	3	2	0
0	0	0	0	0	1	1	0	0	0	1	0	0
0	0	0	0	0	1	1	0	0	0	1	2	0
1	0	0	1	0	1	0	1	1	0	3	0	0
1	0	0	0	0	0	0	1	0	0	2	0	0
1	0	0	1	0	0	0	1	0	0	2	0	0
0	0	0	1	0	0	1	0	0	0	3	0	0
0	0	1	1	0	0	1	1	0	2	1	0	0
0	0	0	0	1	1	1	1	0	0	3	0	0
1	0	1	2	1	0	0	1	0	0	1	0	0
1	0	0	0	0	1	1	0	0	0	1	1	0
0	0	1	2	1	0	0	0	0	0	4	1	0
1	0	0	0	0	0	1	1	0	0	2	1	0
0	0	1	1	0	0	1	2	0	0	2	1	2
0	0	1	0	0	0	0	2	0	1	3	0	1
0	0	1	1	1	1	1	1	1	1	2	0	3
0	0	0	0	2	0	0	2	1	0	2	2	2
0	0	1	1	1	0	0	4	2	2	1	1	2
0	0	1	1	0	0	0	3	1	0	1	1	3
1	0	1	1	3	0	1	4	0	1	3	0	2
1	0	0	0	2	2	2	1	0	1	2	2	4
2	0	1	1	2	2	5	2	0	2	1	1	1
0	0	1	1	1	1	2	2	0	1	2	1	5
2	0	1	1	2	1	3	0	1	2	1	2	2
0	0	1	2	3	3	2	2	1	4	0	1	5
1	0	1	2	3	3	1	3	2	2	0	2	3
0	0	3	0	4	3	1	2	1	3	0	0	2
1	0	1	1	2	3	4	2	2	3	0	1	2
1	2	2	2	5	3	0	1	2	2	0	2	3
0	2	2	0	4	2	1	1	0	1	0	1	2
0	3	1	1	3	3	4	2	2	4	0	2	4
0	2	3	1	4	4	2	3	1	2	0	1	2
0	3	1	2	3	1	3	2	4	1	0	5	1
0	3	3	2	7	0	1	1	3	2	0	3	0
0	5	3	1	2	0	4	2	3	0	0	4	0
0	2	2	3	3	0	4	0	4	4	0	4	0
0	5	2	3	3	0	4	0	3	2	0	3	0
0	6	3	2	2	2	3	1	2	2	0	3	0
0	3	2	3	3	3	2	0	4	3	0	3	0
0	4	2	4	3	3	2	2	3	1	0	5	2
0	4	1	4	4	1	0	1	5	3	0	3	3

EXPLORER-12 (1961 UPSILON-1) CHARGED PARTICLE EXPERIMENT. REF. DATA USERS NOTE-
MATRIX OF VALUES OF L AND UNIVERSAL TIME

TIME L RANGE	1	2	3	4	5	6	7	8	9	10	11	12	13	14
6.0-6.1	0	3	1	2	0	0	3	0	2	2	2	0	7	3
6.1-6.2	2	0	3	2	0	0	3	0	3	2	3	0	4	3
6.2-6.3	2	0	3	2	0	0	2	0	3	2	1	0	3	2
6.3-6.4	2	0	3	1	0	0	1	0	3	3	2	0	5	3
6.4-6.5	3	0	0	6	0	0	3	0	3	2	1	0	3	2
6.5-6.6	6	0	0	5	0	3	3	0	3	2	1	0	4	0
6.6-6.7	5	0	0	5	0	4	4	0	2	3	1	0	0	1
6.7-6.8	6	0	0	6	0	0	5	0	1	2	1	0	0	3
6.8-6.9	6	0	0	5	0	1	4	0	3	3	1	2	0	1
6.9-7.0	3	0	0	8	0	4	4	0	3	2	0	0	0	2
7.0-7.1	1	0	3	3	0	2	3	0	3	0	0	1	0	1
7.1-7.2	2	0	2	3	0	0	2	0	2	0	0	1	0	5
7.2-7.3	3	0	1	2	0	2	3	0	4	0	0	1	0	6
7.3-7.4	6	0	3	3	0	1	1	0	3	0	0	1	0	3
7.4-7.5	7	0	2	4	0	2	4	0	4	0	0	0	0	4
7.5-7.6	3	0	4	3	0	1	3	0	3	0	0	0	0	2
7.6-7.7	3	0	3	4	0	3	3	0	2	0	0	1	0	6
7.7-7.8	2	0	1	2	1	2	2	0	3	0	0	1	0	2
7.8-7.9	3	0	3	0	3	4	2	0	4	0	0	1	0	3
7.9-8.0	3	2	2	0	2	2	1	0	1	0	0	0	0	1
8.0-8.1	4	2	1	0	4	2	0	0	3	1	0	2	0	5
8.1-8.2	2	0	0	0	5	0	0	0	4	4	0	2	0	1
8.2-8.3	0	0	0	0	8	0	0	3	0	3	0	0	1	2
8.3-8.4	1	3	0	0	0	0	0	4	0	4	0	0	1	5
8.4-8.5	0	4	0	0	0	0	0	4	0	4	0	0	1	4
8.5-8.6	0	4	0	0	0	0	0	5	0	1	0	0	1	1
8.6-8.7	0	5	0	0	0	0	0	4	0	0	0	0	1	1
8.7-8.8	0	5	0	0	0	0	0	6	0	0	1	0	1	3
8.8-8.9	2	5	0	0	0	0	0	4	0	0	1	0	2	1
8.9-9.0	1	4	2	0	2	0	0	4	0	0	4	0	3	0
9.0-9.1	0	2	0	4	0	0	0	3	0	0	1	0	2	0
9.1-9.2	0	0	0	1	0	0	2	3	0	0	2	0	0	0
9.2-9.3	0	0	0	0	0	0	4	0	0	0	4	0	0	0
9.3-9.4	0	0	0	0	0	0	4	0	0	2	1	0	0	0
9.4-9.5	0	0	0	0	0	0	5	0	0	2	0	0	0	1
9.5-9.6	0	0	0	0	0	0	2	0	0	2	0	0	3	1
9.6-9.7	0	0	0	0	0	0	3	0	0	3	0	0	2	0
9.7-9.8	0	0	0	0	0	0	3	0	0	4	0	0	2	2
9.8-9.9	0	0	0	0	0	0	4	0	0	1	0	0	3	4
9.9-0.0	0	0	0	0	0	5	1	0	0	0	0	0	3	2
10.0-0.1	0	0	0	0	0	1	0	0	0	4	0	0	0	3
10.1-0.2	0	0	0	0	0	3	1	0	0	7	0	5	0	3
10.2-0.3	0	0	0	0	0	6	6	0	2	7	0	3	0	3
10.3-0.4	0	0	0	0	0	3	4	0	1	3	0	5	0	2
10.4-0.5	5	0	0	0	2	3	5	0	0	4	0	6	0	3
10.5-0.6	5	0	0	0	5	5	1	0	0	0	0	1	0	3
10.6-0.7	5	0	0	0	9	0	0	0	0	0	0	0	0	3
10.7-0.8	3	0	0	0	12	0	0	0	0	0	1	2	3	3
10.8-0.9	4	0	0	1	5	0	0	1	4	0	3	0	3	2
10.9-1.0	9	3	0	1	7	0	0	7	0	0	4	0	5	0

DATA USERS NOTE- NSSDC 67-16, DTD. FEB. 67. DATA FROM TAPE D-00044.
D UNIVERSAL TIME FOR THIS TAPE

12	13	14	15	16	17	18	19	20	21	22	23	24
0	7	3	5	2	3	3	1	4	1	0	4	2
0	4	3	4	4	4	0	1	5	0	0	5	2
0	3	2	2	2	2	0	1	3	1	0	6	3
0	5	3	4	3	2	0	3	2	1	0	3	3
0	3	2	6	3	2	2	0	2	0	1	2	3
0	4	0	5	3	3	3	3	1	1	0	3	3
0	0	1	3	5	0	5	1	2	1	0	3	2
0	0	3	1	4	1	3	3	2	0	3	0	3
2	0	1	1	4	2	4	2	2	2	3	0	2
0	0	2	3	1	6	3	2	0	0	2	0	3
1	0	1	3	2	6	3	3	1	1	2	0	3
1	0	5	2	3	5	2	3	2	1	2	0	2
1	0	6	0	5	5	2	6	2	0	3	0	3
1	0	3	2	2	3	3	2	3	1	4	0	3
0	0	4	2	5	5	1	5	0	1	0	0	3
0	0	2	3	5	3	2	5	0	3	3	0	6
1	0	6	2	5	3	5	4	0	1	4	0	5
1	0	2	1	4	2	2	2	0	1	3	0	7
1	0	3	1	4	2	3	1	0	1	2	0	5
0	0	1	1	5	3	1	6	0	1	3	0	2
2	0	5	1	5	5	2	7	0	2	1	0	0
2	0	1	1	3	6	4	4	0	0	0	0	0
0	1	2	3	2	6	1	6	2	0	1	0	0
0	1	5	2	0	4	2	5	1	0	0	0	0
0	1	4	4	3	3	2	3	1	0	4	1	0
0	1	1	3	2	3	2	3	0	0	0	1	0
0	1	1	7	1	1	2	4	2	3	1	1	0
0	1	3	4	1	0	5	3	1	4	1	1	0
0	2	1	7	3	2	1	3	1	3	1	1	0
0	3	0	6	1	3	0	2	1	3	2	1	0
0	2	0	8	1	3	2	3	0	0	0	1	0
0	0	0	5	3	3	1	3	2	0	0	1	0
0	0	0	3	1	1	0	3	2	0	1	3	0
0	0	0	4	0	2	0	4	0	0	1	2	0
0	0	1	2	1	4	0	2	2	0	0	3	1
0	3	1	5	0	1	1	0	3	0	0	3	3
0	2	0	3	2	5	3	0	4	0	0	2	0
0	2	2	3	3	1	3	0	3	1	0	0	0
0	3	4	3	4	1	2	0	4	3	0	0	0
0	3	2	2	6	0	5	0	4	4	0	0	0
0	0	3	0	6	0	6	0	2	3	0	1	0
5	0	3	2	6	0	2	2	4	1	0	0	0
3	0	3	2	7	0	4	3	5	3	0	0	1
5	0	2	1	7	0	4	3	4	3	0	0	0
6	0	3	0	4	0	4	3	2	0	0	0	0
1	0	3	2	8	0	3	6	0	0	0	0	0
0	0	3	3	10	0	3	9	0	1	1	0	1
2	3	3	6	7	0	4	7	0	3	0	0	5
0	3	2	8	3	3	4	3	0	5	0	0	7
0	5	0	9	1	4	2	0	0	10	0	0	1

EXPLORER-12 (1961 UPSILON-1) CHARGED PARTICLE EXPERIMENT, REF. DATA USE
MATRIX OF VALUES OF L AND UNIVER

TIME L RANGE	1	2	3	4	5	6	7	8	9	10	11	12
11.0-1.1	4	8	0	0	7	0	0	9	0	0	2	0
11.1-1.2	8	8	0	1	6	0	0	9	0	0	3	0
11.2-1.3	7	6	0	7	0	0	0	9	0	0	0	0
11.3-1.4	9	10	0	7	0	0	0	6	0	0	2	2
11.4-1.5	0	12	6	6	0	0	2	0	0	0	4	1
11.5-1.6	0	11	2	5	0	1	4	0	4	0	4	6
11.6-1.7	0	11	10	2	0	7	5	0	5	0	5	9
11.7-1.8	0	2	14	2	0	3	10	0	7	0	0	7
11.8-1.9	0	0	15	9	0	7	2	0	0	0	0	1
11.9-2.0	0	0	14	3	0	5	0	0	0	0	0	3
12.0-2.1	0	0	16	4	0	5	0	0	0	0	0	5
12.1-2.2	0	0	3	8	12	2	0	0	5	0	0	5
12.2-2.3	0	0	2	8	13	0	0	0	4	1	0	3
12.3-2.4	0	1	0	12	17	0	0	0	8	4	4	1
12.4-2.5	0	0	0	3	19	1	0	0	12	0	11	0
12.5-2.6	0	4	0	11	11	8	0	9	3	0	20	0
12.6-2.7	1	3	0	6	10	13	0	12	0	0	8	3
12.7-2.8	18	7	0	6	0	4	15	2	0	4	4	6
12.8-2.9	8	20	3	0	0	11	20	3	0	6	0	10
12.9-3.0	4	0	25	22	6	18	0	0	0	3	0	16
13.0-3.1	6	0	6	16	28	14	7	1	7	10	1	19
13.1-3.2	3	2	1	6	20	9	17	1	22	29	25	8
13.2-3.3	3	10	16	1	0	4	32	71	8	8	33	1
13.3-3.4	0	13	17	1	0	0	0	18	28	48	10	0
13.4-3.5	5	4	1	0	0	0	0	0	15	2	0	0
13.5-3.6	23	1	0	0	0	0	0	0	0	0	0	0
13.6-3.7	15	0	0	0	0	0	0	0	0	0	0	0
13.7-3.8	6	0	0	0	0	0	0	0	0	0	0	0
13.8-3.9	0	0	0	0	0	0	0	0	0	0	0	0
13.9-4.0	0	0	0	0	0	0	0	0	0	0	0	0
14.0-4.1	0	0	0	0	0	0	0	0	0	0	0	0
14.1-4.2	0	0	0	0	0	0	0	0	0	0	0	0
14.2-4.3	0	0	0	0	0	0	0	0	0	0	0	0
14.3-4.4	0	0	0	0	0	0	0	0	0	0	0	0
14.4-4.5	0	0	0	0	0	0	0	0	0	0	0	0
14.5-4.6	0	0	0	0	0	0	0	0	0	0	0	0
14.6-4.7	0	0	0	0	0	0	0	0	0	0	0	0
14.7-4.8	0	0	0	0	0	0	0	0	0	0	0	0
14.8-4.9	0	0	0	0	0	0	0	0	0	0	0	0
14.9-5.0	0	0	0	0	0	0	0	0	0	0	0	0
15.0-5.1	0	0	0	0	0	0	0	0	0	0	0	0
15.1-5.2	0	0	0	0	0	0	0	0	0	0	0	0
15.2-5.3	0	0	0	0	0	0	0	0	0	0	0	0
15.3-5.4	0	0	0	0	0	0	0	0	0	0	0	0
15.4-5.5	0	0	0	0	0	0	0	0	0	0	0	0
15.5-5.6	0	0	0	0	0	0	0	0	0	0	0	0
15.6-5.7	0	0	0	0	0	0	0	0	0	0	0	0
15.7-5.8	0	0	0	0	0	0	0	0	0	0	0	0
15.8-5.9	0	0	0	0	0	0	0	0	0	0	0	0
15.9-6.0	0	0	0	0	0	0	0	0	0	0	0	0

EF. DATA USERS NOTE- NSSDC 67-16. DTD. FEB. 67. DATA FROM TAPE D-00044.
L AND UNIVERSAL TIME FOR THIS TAPE

11	12	13	14	15	16	17	18	19	20	21	22	23	24
2	0	3	0	2	0	3	2	1	0	5	0	0	0
3	0	3	1	1	0	5	0	4	0	2	0	0	1
0	0	4	4	4	0	5	0	5	0	0	0	0	0
2	2	4	0	2	0	3	0	4	0	1	0	0	0
4	1	8	1	4	0	4	0	4	0	3	0	0	0
4	6	7	5	0	0	3	0	4	0	0	5	0	0
5	9	0	5	0	0	3	0	3	0	0	5	0	0
0	7	1	12	0	0	4	0	6	0	0	7	0	0
0	1	3	8	0	0	5	0	5	0	0	6	0	0
0	3	1	11	0	0	1	5	3	0	0	8	0	0
0	5	2	7	0	0	1	5	8	4	0	4	4	0
0	5	4	1	0	0	0	4	9	4	0	1	8	9
0	3	7	5	0	0	0	5	2	5	0	5	8	15
4	1	8	5	0	0	4	5	0	6	0	6	12	11
11	0	1	4	0	0	5	3	0	7	0	4	3	7
20	0	4	2	0	0	5	6	0	3	0	0	0	6
8	3	13	0	2	0	4	6	0	1	3	0	0	4
4	6	5	0	7	0	6	3	2	2	7	0	0	0
0	10	12	0	0	3	4	0	7	0	11	0	0	0
0	16	17	0	0	4	0	0	6	0	8	3	0	0
1	19	6	0	2	3	0	0	6	2	10	0	0	0
25	8	6	0	0	0	0	0	7	14	8	0	0	0
33	1	0	0	0	0	0	0	7	4	1	10	0	0
10	0	0	0	0	0	0	15	8	1	0	20	0	0
0	0	0	0	0	0	0	0	0	7	0	23	2	0
0	0	0	0	0	0	0	0	1	10	0	0	13	8
0	0	0	0	0	0	0	7	9	9	0	0	0	0
0	0	0	0	0	0	0	11	6	10	0	0	2	7
0	0	0	0	0	0	0	0	0	1	6	0	8	8
0	0	0	0	0	0	0	0	0	0	17	0	15	2
0	0	0	0	0	0	0	0	0	0	10	0	12	0
0	0	0	0	0	0	0	0	0	0	6	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0

EXPLORER-12 (1961 UPSILON-1) CHARGED PARTICLE EXPERIMENT, REF. DATA USERS N
MATRIX OF VALUES OF B AND L FOR
B GIVEN IN GAMMA = 10 TO THE MI

B RANGE 0 -1K	-2K	-3K	-4K	-5K	-6K	-7K	-8K	-9K	-10K	-15K
L RANGE										
1.0-1.1	0	0	0	0	0	0	0	0	0	0
1.1-1.2	0	0	0	0	0	0	0	0	0	0
1.2-1.3	0	0	0	0	0	0	0	0	0	0
1.3-1.4	0	0	0	0	0	0	0	0	0	0
1.4-1.5	0	0	0	0	0	0	0	0	0	0
1.5-1.6	0	0	0	0	0	0	0	0	0	0
1.6-1.7	0	0	0	0	0	0	0	0	2	1
1.7-1.8	0	0	0	0	0	0	0	1	1	1
1.8-1.9	0	0	0	0	0	0	0	0	0	0
1.9-2.0	0	0	0	0	0	0	2	2	0	0
2.0-2.1	0	0	0	0	0	1	1	1	0	0
2.1-2.2	0	0	0	0	0	2	0	1	0	0
2.2-2.3	0	0	0	0	3	0	2	0	1	0
2.3-2.4	0	0	0	2	1	3	1	0	0	1
2.4-2.5	0	0	0	2	0	2	0	0	1	0
2.5-2.6	0	0	1	3	3	0	3	0	0	0
2.6-2.7	0	0	1	1	3	1	1	0	0	2
2.7-2.8	0	0	3	4	3	0	0	0	1	0
2.8-2.9	0	0	5	3	0	0	0	0	1	1
2.9-3.0	0	0	6	2	1	1	0	1	0	0
3.0-3.1	0	3	4	4	1	0	0	1	1	0
3.1-3.2	0	4	5	1	1	0	0	1	0	2
3.2-3.3	0	7	3	1	1	0	0	4	1	0
3.3-3.4	0	12	2	1	0	1	2	0	0	0
3.4-3.5	0	11	1	1	2	0	3	0	0	0
3.5-3.6	1	12	2	3	1	0	0	1	0	1
3.6-3.7	2	12	4	3	1	1	1	1	0	0
3.7-3.8	4	6	3	1	0	2	0	0	0	0
3.8-3.9	12	7	3	0	1	3	1	2	0	0
3.9-4.0	11	10	3	0	1	1	3	0	0	0
4.0-4.1	12	10	1	2	3	4	0	0	0	0
4.1-4.2	19	7	1	0	4	1	0	0	0	0
4.2-4.3	16	6	3	1	4	1	0	0	0	0
4.3-4.4	22	6	2	4	4	0	0	0	0	0
4.4-4.5	20	5	6	5	2	0	0	0	0	0
4.5-4.6	21	1	4	5	1	0	0	0	0	0
4.6-4.7	26	7	4	2	0	0	0	0	0	0
4.7-4.8	21	7	7	4	0	0	0	0	0	0
4.8-4.9	18	11	2	1	0	0	0	0	0	0
4.9-5.0	29	11	3	1	0	0	0	0	0	0
5.0-5.1	26	10	4	1	0	0	0	0	0	0
5.1-5.2	30	7	2	0	0	0	0	0	0	0
5.2-5.3	28	9	3	0	0	0	0	0	0	0
5.3-5.4	30	6	3	0	0	0	0	0	0	0
5.4-5.5	32	8	1	0	0	0	0	0	0	0
5.5-5.6	31	10	1	0	0	0	0	0	0	0
5.6-5.7	34	7	0	0	0	0	0	0	0	0
5.7-5.8	32	6	0	0	0	0	0	0	0	0
5.8-5.9	37	8	0	0	0	0	0	0	0	0
5.9-6.0	40	6	0	0	0	0	0	0	0	0

TA USERS NOTE-- NSSDC 67-16, DTD. FEB. 67. DATA FROM TAPE D-00044.
AND L FOR THIS TAPE
TO THE MINUS 5 GAUSS

10K	-15K	-20K	-25K	-30K	-35K	-40K	-45K	-50K	-75K	-100K
0	0	0	0	0	1	0	0	0	0	0
0	0	0	0	0	6	0	0	0	0	0
0	0	0	0	1	3	1	0	0	0	0
0	0	0	0	3	0	4	0	0	0	0
0	0	0	2	1	3	1	0	0	0	0
0	0	0	0	1	2	0	0	0	0	0
1	0	0	0	1	2	0	0	0	0	0
1	0	0	2	0	4	0	0	0	0	0
0	0	0	1	1	2	0	0	0	0	0
0	0	0	1	5	0	0	0	0	0	0
0	0	0	1	1	0	0	0	0	0	0
0	0	0	4	1	0	0	0	0	0	0
0	0	0	3	2	1	0	0	0	0	0
1	0	0	0	2	0	0	0	0	0	0
0	0	0	2	1	0	0	0	0	0	0
0	0	0	2	0	0	0	0	0	0	0
2	0	0	1	1	0	0	0	0	0	0
0	0	0	3	0	0	0	0	0	0	0
1	0	0	4	0	0	0	0	0	0	0
0	0	0	2	0	0	0	0	0	0	0
0	0	0	2	0	0	0	0	0	0	0
2	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0
0	0	0	2	0	0	0	0	0	0	0
1	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0

EXPLORER-12 (1961 UPSILON-1) CHARGED PARTICLE EXPERIMENT. REF. DATA USERS NOTE-
MATRIX OF VALUES OF B AND L FOR THI
B GIVEN IN GAMMA = 10 TO THE MINUS

B RANGE 0 / L RANGE	-100	-200	-300	-400	-500	-600	-700	-800	-900	-1000	-1100	-12
6.0-6.1	0	13	11	1	12	0	4	2	2	0	1	
6.1-6.2	0	13	13	5	7	3	2	0	2	1	1	
6.2-6.3	0	16	6	9	1	2	1	1	0	2	1	
6.3-6.4	0	20	1	12	2	3	0	1	2	1	1	
6.4-6.5	0	23	1	12	2	0	1	3	2	0	0	
6.5-6.6	0	28	5	10	2	0	2	1	1	1	2	
6.6-6.7	0	27	12	1	0	1	2	2	1	1	0	
6.7-6.8	0	26	12	0	0	1	3	0	2	0	0	
6.8-6.9	7	23	9	0	0	5	1	2	1	0	0	
6.9-7.0	7	22	11	0	1	2	1	2	0	0	0	
7.0-7.1	10	15	9	0	3	1	2	1	0	0	0	
7.1-7.2	11	11	8	0	4	1	4	0	0	0	0	
7.2-7.3	15	21	3	1	3	1	4	0	0	0	0	
7.3-7.4	15	22	0	1	2	4	0	0	0	0	0	
7.4-7.5	18	23	0	3	3	2	0	0	0	0	0	
7.5-7.6	23	15	0	8	2	1	0	0	0	0	0	
7.6-7.7	27	16	0	6	5	0	0	0	0	0	0	
7.7-7.8	21	11	3	1	2	0	0	0	0	0	0	
7.8-7.9	20	14	4	3	1	0	0	0	0	0	0	
7.9-8.0	15	8	7	6	0	0	0	0	0	0	0	
8.0-8.1	21	15	7	4	0	0	0	0	0	0	0	
8.1-8.2	24	7	3	2	0	0	0	0	0	0	0	
8.2-8.3	25	4	6	3	0	0	0	0	0	0	0	
8.3-8.4	20	6	6	0	0	0	0	0	0	0	0	
8.4-8.5	21	11	6	0	0	0	0	0	0	0	0	
8.5-8.6	17	3	6	0	0	0	0	0	0	0	0	
8.6-8.7	20	6	7	0	0	0	0	0	0	0	0	
8.7-8.8	26	6	4	0	0	0	0	0	0	0	0	
8.8-8.9	30	3	4	0	0	0	0	0	0	0	0	
8.9-9.0	33	5	1	0	0	0	0	0	0	0	0	
9.0-9.1	26	4	0	0	0	0	0	0	0	0	0	
9.1-9.2	20	6	0	0	0	0	0	0	0	0	0	
9.2-9.3	13	9	0	0	0	0	0	0	0	0	0	
9.3-9.4	12	8	0	0	0	0	0	0	0	0	0	
9.4-9.5	14	9	0	0	0	0	0	0	0	0	0	
9.5-9.6	19	5	0	0	0	0	0	0	0	0	0	
9.6-9.7	16	11	0	0	0	0	0	0	0	0	0	
9.7-9.8	17	8	0	0	0	0	0	0	0	0	0	
9.8-9.9	19	10	0	0	0	0	0	0	0	0	0	
9.9-0.0	22	10	0	0	0	0	0	0	0	0	0	
10.0-0.1	19	7	0	0	0	0	0	0	0	0	0	
10.1-0.2	31	5	0	0	0	0	0	0	0	0	0	
10.2-0.3	49	3	0	0	0	0	0	0	0	0	0	
10.3-0.4	40	0	0	0	0	0	0	0	0	0	0	
10.4-0.5	41	0	0	0	0	0	0	0	0	0	0	
10.5-0.6	39	0	0	0	0	0	0	0	0	0	0	
10.6-0.7	45	0	0	0	0	0	0	0	0	0	0	
10.7-0.8	56	0	0	0	0	0	0	0	0	0	0	
10.8-0.9	56	0	0	0	0	0	0	0	0	0	0	
10.9-1.0	63	0	0	0	0	0	0	0	0	0	0	

ATA USERS NOTE- NSSDC 67-16, DTD. FEB. 67, DATA FROM TAPE D-00044.
B AND L FOR THIS TAPE
) TO THE MINUS 5 GAUSS

-1000	-1100	-1200	-1300	-1400	-1500	-1600	-1700	-1800	-1900	-2000
0	1	1	1	0	2	0	0	0	0	0
1	1	3	0	0	0	0	0	0	0	0
2	1	0	1	0	0	0	0	0	0	0
1	1	1	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0
1	2	0	0	0	0	0	0	0	0	0
1	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0

EXPLORER-12 (1961 UPSILON-1) CHARGED PARTICLE EXPERIMENT, REF. DATA USERS NOTE-
MATRIX OF VALUES OF B AND L FOR TH
B GIVEN IN GAMMA = 10 TO THE MINUS

B RANGE / L RANGE	0 -100	-200	-300	-400	-500	-600	-700	-800	-900	-1000	-1100	-1
11.0-1.1	46	0	0	0	0	0	0	0	0	0	0	
11.1-1.2	52	0	0	0	0	0	0		0	0	0	
11.2-1.3	51	0	0	0	0	0	0	0	0	0	0	
11.3-1.4	50	0	0	0	0	0	0	0	0	0	0	
11.4-1.5	55	0	0	0	0	0	0	0	0	0	0	
11.5-1.6	61	0	0	0	0	0	0	0	0	0	0	
11.6-1.7	70	0	0	0	0	0	0	0	0	0	0	
11.7-1.8	75	0	0	0	0	0	0	0	0	0	0	
11.8-1.9	61	0	0	0	0	0	0	0	0	0	0	
11.9-2.0	54	0	0	0	0	0	0	0	0	0	0	
12.0-2.1	69	0	0	0	0	0	0	0	0	0	0	
12.1-2.2	75	0	0	0	0	0	0	0	0	0	0	
12.2-2.3	83	0	0	0	0	0	0	0	0	0	0	
12.3-2.4	104	0	0	0	0	0	0	0	0	0	0	
12.4-2.5	80	0	0	0	0	0	0	0	0	0	0	
12.5-2.6	92	0	0	0	0	0	0	0	0	0	0	
12.6-2.7	89	0	0	0	0	0	0	0	0	0	0	
12.7-2.8	98	0	0	0	0	0	0	0	0	0	0	
12.8-2.9	118	0	0	0	0	0	0	0	0	0	0	
12.9-3.0	132	0	0	0	0	0	0	0	0	0	0	
13.0-3.1	144	0	0	0	0	0	0	0	0	0	0	
13.1-3.2	178	0	0	0	0	0	0	0	0	0	0	
13.2-3.3	209	0	0	0	0	0	0	0	0	0	0	
13.3-3.4	179	0	0	0	0	0	0	0	0	0	0	
13.4-3.5	59	0	0	0	0	0	0	0	0	0	0	
13.5-3.6	56	0	0	0	0	0	0	0	0	0	0	
13.6-3.7	40	0	0	0	0	0	0	0	0	0	0	
13.7-3.8	42	0	0	0	0	0	0	0	0	0	0	
13.8-3.9	23	0	0	0	0	0	0	0	0	0	0	
13.9-4.0	34	0	0	0	0	0	0	0	0	0	0	
14.0-4.1	22	0	0	0	0	0	0	0	0	0	0	
14.1-4.2	6	0	0	0	0	0	0	0	0	0	0	
14.2-4.3	0	0	0	0	0	0	0	0	0	0	0	
14.3-4.4	0	0	0	0	0	0	0	0	0	0	0	
14.4-4.5	0	0	0	0	0	0	0	0	0	0	0	
14.5-4.6	0	0	0	0	0	0	0	0	0	0	0	
14.6-4.7	0	0	0	0	0	0	0	0	0	0	0	
14.7-4.8	0	0	0	0	0	0	0	0	0	0	0	
14.8-4.9	0	0	0	0	0	0	0	0	0	0	0	
14.9-5.0	0	0	0	0	0	0	0	0	0	0	0	
15.0-5.1	0	0	0	0	0	0	0	0	0	0	0	
15.1-5.2	0	0	0	0	0	0	0	0	0	0	0	
15.2-5.3	0	0	0	0	0	0	0	0	0	0	0	
15.3-5.4	0	0	0	0	0	0	0	0	0	0	0	
15.4-5.5	0	0	0	0	0	0	0	0	0	0	0	
15.5-5.6	0	0	0	0	0	0	0	0	0	0	0	
15.6-5.7	0	0	0	0	0	0	0	0	0	0	0	
15.7-5.8	0	0	0	0	0	0	0	0	0	0	0	
15.8-5.9	0	0	0	0	0	0	0	0	0	0	0	
15.9-6.0	0	0	0	0	0	0	0	0	0	0	0	

RIMENT, REF. DATA USERS NOTE- NSSDC 67-16, DTD. FEB. 67, DATA FROM TAPE D-00044.
OF VALUES OF B AND L FOR THIS TAPE
N IN GAMMA = 10 TO THE MINUS 5 GAUSS

0	-800	-900	-1000	-1100	-1200	-1300	-1400	-1500	-1600	-1700	-1800	-1900	-2000
0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0

EXPLORER-12 (1961 UPSILON-1) CHARGED PARTICLE EXPERIMENT, REF. DATA USERS NOTE-

NUMBER OF SAMPLES PER POSITION ON THIS TA

LONG (E) / LAT	0	10	20	30	40	50	60	70	80	90	100	110
90	0	0	0	0	0	0	0	0	0	0	0	0
80	0	0	0	0	0	0	0	0	0	0	0	0
70	0	0	0	0	0	0	0	0	0	0	0	0
60	0	0	0	0	0	0	0	0	0	0	0	0
50	0	0	0	0	0	0	0	0	0	0	0	0
40	8	5	15	10	3	4	17	11	7	5	16	11
30	0	0	74	3	0	2	71	3	2	23	41	3
20	20	35	5	19	11	17	0	5	12	20	0	25
10	57	68	75	42	57	60	85	54	54	75	56	30
0	38	38	22	30	30	28	18	19	43	33	37	54
-10	31	0	17	45	29	0	16	13	0	1	5	38
-20	28	0	0	18	24	3	0	27	41	2	0	32
-30	0	5	7	6	6	9	18	6	4	7	16	5
-40	0	0	0	0	0	0	0	0	0	0	0	0
-50	0	0	0	0	0	0	0	0	0	0	0	0
-60	0	0	0	0	0	0	0	0	0	0	0	0
-70	0	0	0	0	0	0	0	0	0	0	0	0
-80	0	0	0	0	0	0	0	0	0	0	0	0
-90	0	0	0	0	0	0	0	0	0	0	0	0

LONG (W) / LAT	-180	-170	-160	-150	-140	-130	-120	-110	-100	-90	-80	-70
90	0	0	0	0	0	0	0	0	0	0	0	0
80	0	0	0	0	0	0	0	0	0	0	0	0
70	0	0	0	0	0	0	0	0	0	0	0	0
60	0	0	0	0	0	0	0	0	0	0	0	0
50	0	0	0	0	0	0	0	0	0	0	0	0
40	12	3	4	0	31	20	11	5	14	8	4	3
30	42	0	0	33	70	17	1	55	80	8	0	25
20	12	61	39	34	47	83	62	30	54	44	55	38
10	20	12	10	12	35	0	5	28	26	18	18	12
0	11	13	10	17	13	12	8	10	0	3	8	10
-10	20	55	39	0	0	30	47	0	0	36	42	0
-20	1	19	41	0	0	10	30	0	0	0	23	0
-30	6	2	1	1	5	3	0	0	0	0	0	0
-40	0	0	0	0	0	0	0	0	0	0	0	0
-50	0	0	0	0	0	0	0	0	0	0	0	0
-60	0	0	0	0	0	0	0	0	0	0	0	0
-70	0	0	0	0	0	0	0	0	0	0	0	0
-80	0	0	0	0	0	0	0	0	0	0	0	0
-90	0	0	0	0	0	0	0	0	0	0	0	0

TA USERS NOTE- NSSDC 67-16, DTD. FEB. 67, DATA FROM TAPE D-00044.

ION ON THIS TAPE

90	100	110	120	130	140	150	160	170	180
0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0
5	16	11	6	5	2	0	0	0	12
3	41	3	0	16	17	0	0	39	42
0	0	25	11	20	3	12	5	17	12
5	56	30	14	19	8	2	3	0	20
3	37	54	64	67	40	23	22	19	11
1	5	38	41	0	24	66	45	0	20
2	0	32	38	3	2	22	44	1	1
7	16	5	3	3	10	4	5	3	6
0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0

0	-80	-70	-60	-50	-40	-30	-20	-10	0
0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0
8	4	3	26	7	4	0	17	14	8
8	0	25	34	4	3	57	74	6	0
4	55	38	36	11	65	65	51	55	20
8	18	12	48	50	28	49	47	51	57
3	8	10	0	3	8	27	33	40	38
6	42	0	0	36	34	0	2	32	31
0	23	0	0	12	29	0	0	16	28
0	0	0	0	0	0	3	7	1	0
0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0

UPSILON-1 (EXPLORER 12) HAS COMPLETED RUN.
THERE HAVE BEEN 1125 PHYSICAL AND 5625 LOGICAL RECORDS READ FROM THIS TAPE.

UPSILON-1 (EXPLORER 12) HAS COMPLETED RUN.
THERE HAVE BEEN 1125 PHYSICAL AND 5625 LOGICAL RECORDS READ FROM THIS TAPE.