

DATA SET CATALOG # 12

EXPLORER 18 Plasma data : Irregular Times

63-046A-07A 1 tape

63-046A-07B 1 tape

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1. INTRODUCTION:

The documentation for this data set was originally on paper, kept in NSSDC's Data Set Catalogs (DSCs). The paper documentation in the Data Set Catalogs have been made into digital images, and then collected into a single PDF file for each Data Set Catalog. The inventory information in these DSCs is current as of July 1, 2004. This inventory information is now no longer maintained in the DSCs, but is now managed in the inventory part of the NSSDC information system. The information existing in the DSCs is now not needed for locating the data files, but we did not remove that inventory information.

The offline tape datasets have now been migrated from the original magnetic tape to Archival Information Packages (AIP's).

A prior restoration may have been done on data sets, if a requestor of this data set has questions; they should send an inquiry to the request office to see if additional information exists.

2. ERRATA/CHANGE LOG:

NOTE: Changes are made in a text box, and will show up that way when displayed on screen with a PDF reader.

When printing, special settings may be required to make the text box appear on the printed output.

Version	Date	Person	Page	Description of Change
01				
02				

3 LINKS TO RELEVANT INFORMATION IN THE ONLINE NSSDC INFORMATION SYSTEM:

<http://nssdc.gsfc.nasa.gov/nmc/>

[NOTE: This link will take you to the main page of the NSSDC Master Catalog. There you will be able to perform searches to find additional information]

4. CATALOG MATERIALS:

- a. Associated Documents To find associated documents you will need to know the document ID number and then click here.
<http://nssdcftp.gsfc.nasa.gov/miscellaneous/documents/>

- b. Core Catalog Materials

IMP-A

3-HOUR AVERAGES OF PLASMA PARAMETERS

PLASMA PARAMETERS IRREGULAR INTERVAL

[63-046A-07A](#)

[63-046A-07B](#)

THIS DATA SET HAS BEEN RESTORED. ORIGINALLY THERE WAS ONE 7-TRACK 556 BPI TAPE WRITTEN IN BCD. THERE IS ONE RESTORED TAPE. THE DR TAPE IS A 3480 CARTRIDGE AND THE DS TAPE IS 9-TRACK, 6250 BPI WRITTEN IN EBCDIC. THE TAPE WAS CREATED ON AN IBM 360 COMPUTER. THE DR AND DS NUMBERS ALONG WITH THE CORRESPONDING D NUMBER AND THE TIME SPAN IS AS FOLLOWS:

DR#	DS#	D#	FILES	TIME SPAN
DR03473	DS03473	D01533	1	11/27/63 - 12/16/64

EXPLORER 18

PLASMA & IRREGULAR TIMES DATA

63-046A-07A
63-046A-07B

This catalog contains Explorer 18 Plasma (3-HR. AVGS.) and Irregular Times data. The data sets are contained on one tape and it is 556 BPI, BCD, 1 file. It was created on an IBM 360 computer.

The time spans for the tape is as follows:

<u>D#</u>	<u>C#</u>	<u>TIME SPAN</u>
D-1533	C-1044	11/27/63 - 12/16/64

~~SECRET~~
D-01533

12 FILE

M.I.T. IMP-1(Explorer-18) Plasma Data, 3-Hour Averages

Based on the plasma parameters obtained for irregular intervals, 3-hour averages were made. The accompanying data cards contain ten items; these are:

- 1) Year; the year of observation.
- 2) Day; the Julian day of the year (not to be confused with the decimal day).
- 3) Interval; the number of the three hour interval within the day, i.e.: from 1 to 8.
- 4) Velocity; the plasma bulk velocity in km sec^{-1} .
- 5) Density; the plasma density in protons cm^{-3} .
- 6) Flux; the positive particle flux in units of 10^8 protons $\text{cm}^{-2} \text{sec}^{-1}$. The effective solid angle of the detector is about 1 ster.; however, the normal undisturbed solar wind flux is an essentially collimated beam.
- 7) Log(Flux); the logarithm to the base 10 of the flux in particles $\text{cm}^{-2} \text{sec}^{-1}$.
- 8) K_p ; the three hour range index for the terrestrial magnetic field.
- 9) Energy density; the plasma energy density in units of $10^{14} \text{cm}^{-1} \text{sec}^{-2}$. (i.e.: simply NV^2 with N in cm^{-3} and V in cm sec^{-1} ; not necessarily a relevant unit.
- 10) Log(Energy Density); the \log_{10} of item 9).

Dr. LYON

~~D-01528~~ 2ND FILE
D-01533

M.I.T. - IMP-1 (Explorer-18) Plasma Data, Irregular Intervals

As part of the plasma data analysis for IMP-1, a series of superimposed plots of observed detector current versus azimuth angle in a satellite frame of reference were made for each of six energy windows. Based on the distribution of currents, both in energy and angle, a set of two plasma parameters (bulk velocity V_0 and most probable thermal speed w_0) were extracted from the data. The elevation of the bulk velocity vector relative to the spacecraft equatorial plane was assumed known based on the spin axis orientation and the expected solar-wind aberration angle in the solar-ecliptic plane. A self-consistency check using data for widely separated epochs was used to verify the validity of the latter. An isotropic Maxwellian was assumed to adequately describe the velocity distribution in the frame of reference moving with the plasma. Finally, based on the above parameters, a proton density was determined.

The accompanying data cards contain fourteen items, these are:

- 1) Year; the year in which the observation was made.
- 2) Day; the starting Julian day (not to be confused with the decimal day) of the year for this interval. (Day=1, for Jan.1).
- 3) Hour; the starting hour for this interval.
- 4) Minute; the starting minute for this interval.
- 5) Day; the ending Julian day for this interval.
- 6) Hour; etc.
- 7) Minute; etc.
- 8) Velocity; the plasma bulk velocity, relative to the spacecraft, in km sec^{-1} .
- 9) Sigma; roughly the uncertainty in the bulk velocity based on an assumption of the validity of the model used.
- 10) & 11) W_1 and W_2 ; the limits of the most probable thermal speed in km sec^{-1} . In terms of an isotropic Maxwellian the temperature would be,

$$T = \frac{mw_0^2}{2k}.$$

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- 12) Density; the plasma density in protons cm^{-3} .
- 13) Sequence; the starting satellite clock for this interval.
- 14) Sequence; the ending satellite clock for this interval.

For periods where the extraction of plasma parameters was not possible (i.e.: within the magnetosphere, etc.) the parameters are left blank.

For the period of 3 months covering the first 23 orbits, the average values (arithmetic mean) were:

$$V = 360 \text{ km sec}^{-1}$$

$$w_0 = 45 \text{ to } 60 \text{ km sec}^{-1}$$

$$N = 10 \text{ protons cm}^{-3}$$

$$\text{Flux} = 3.5 \cdot 10^8 \text{ protons cm}^{-2}\text{sec}^{-1}$$

$$\text{Energy density} = 6.5 \text{ kev cm}^{-3}$$

The average thermal speed above corresponds to a thermal energy of about 10 to 18 ev for protons, or a temperature of $\sim 2 \cdot 10^5 \text{ K}$.

FORMAT

63-046A-07A
3 Hour Plasma Averages

Expl 18, Faraday Cup
1ST File

7 track, 556 BPI, BCD Tape; 84 characters per logical record per physical record. (1ST File of Tape)

<u>CHARACTER NUMBER</u>	<u>FORMAT</u>	<u>DESCRIPTION</u>
1-2	I2	Year; the year of observation
3-4	2X	Blanks
5-7	I3	Day; the Julian day of the year
8-10	3X	Blanks
11	I1	Interval; the number of the three hour interval within the day, <i>i.e.</i> : from 1 to 8
12-17	F6.1	Velocity; the plasma bulk velocity in km sec ⁻¹ .
18-23	F6.1	Density; the plasma density in protons cm ⁻³ .
24-31	F8.3	Flux; the positive particle flux in units of 10 ⁸ protons cm ⁻² sec ⁻¹ . The effective solid angle of the detector is about 1 ster.; however, the normal undisturbed solar wind flux is an essentially collimated beam.
32-39	F8.3	Log (flux); the logarithm to the base 10 of the flux in particles cm ⁻² sec ⁻¹ .
40-43	F4.1	Kp; the three hour range index for the terrestrial magnetic field.
44-51	F8.3	Energy density; the plasma energy density in units of 10 ¹⁴ cm ⁻³ sec ⁻² . (<i>i.e.</i> : simply NV ² with N in cm ⁻³ and V in cm sec ⁻¹ ; not necessarily a relevant unit.
52-59	F8.3	Log (Energy Density); the log ₁₀ of item 9.
60-72	13X	Blanks
73-76	A4	IMPA (Identification letters)
77-80	I4	Sequence number
81-84	4X	Blanks

Based on the plasma parameters obtained for irregular intervals, these 3-hour averages were made.

FORMAT

63-046A-07B
 Plasma Irregular Intervals

Expl 18, Faraday Cup
 2ND File

7 track, 556 BPI BCD Tape; 84 characters per logical record; 1 logical record per physical record (2ND File of Tape)

As part of the plasma data analysis for IMP-1, a series of superimposed plots of observed detector current versus azimuth angle in a satellite frame of reference were made for each of six energy windows. Based on the distribution of currents, both in energy and angle, a set of two plasma parameters (bulk velocity V_0 and most probable thermal speed W_0) were extracted from the data. The elevation of the bulk velocity vector relative to the spacecraft equatorial plane was assumed known based on the spin axis orientation and the expected solar-wind aberration angle in the solar-ecliptic plane. A self-consistency check using data for widely separated epochs was used to verify the validity of the latter. An isotropic Maxwellian was assumed to adequately describe the velocity distribution in the frame of reference moving with the plasma. Finally, based on the above parameters, a proton density was determined.

<u>CHARACTER NUMBER</u>	<u>FORMAT</u>	<u>DESCRIPTION</u>
1-2	I2	Year; the year in which the observation was made.
3-6	I4	Day; the starting Julian day of the year for this interval.
7-9	I3	Hour; the starting hour for this interval.
10-12	I3	Minute; the starting minute for this interval.
13-16	I4	Day; the ending day for this interval.
17-19	I3	Hour; the ending hour for this interval.
20-22	I3	Minute; the ending minute for this interval.
23-26	I4	Velocity; the plasma bulk velocity, relative to the spacecraft, in km sec^{-1} .
27-30	I4	Sigma; roughly the uncertainty in the bulk velocity based on an assumption of the validity of the model used.
31-34	I4	W_1 and W_2 ; the limits of the most probable thermal speed in km sec^{-1} .
35-38	I4	In terms of an isotropic Maxwellian the temperature would be: $T = \frac{MW_0^2}{2K}$
39-42	I4	Density; the plasma density in protons cm^{-3} .

<u>CHARACTER NUMBER</u>	<u>FORMAT</u>	<u>DESCRIPTION</u>
43-48	I6	Sequence; the starting satellite clock for this interval.
49-54	I6	Sequence; the ending satellite clock for this interval.
55-72	18X	Blanks
73-76	A4	IMPA (Identification letters)
77-80	I4	Sequence number
81-84	4X	Blanks

For periods where the extraction of plasma parameters was not possible (i.e.: within the magnetosphere, etc.) the parameters are left blank.

For the period of 3 months covering the first 23 orbits, the average values (arithmetic mean) were:

$$V = 360 \text{ km sec}^{-1}$$

$$W_0 = 45 \text{ to } 60 \text{ km sec}^{-1}$$

$$N = 10 \text{ protons cm}^{-3}$$

$$\text{Flux} = 3.5 \cdot 10^8 \text{ protons cm}^{-2}\text{sec}^{-1}$$

$$\text{Energy} = 6.5 \text{ kev cm}^{-3}$$

Density

The average thermal speed above corresponds to a thermal energy of about 10 to 18 ev for protons, or a temperature of $-2 \cdot 10^5 \text{ }^\circ\text{K}$.

EXPLORER 16 (IMP-1 OR IMP-A) THREE HOUR PLASMA AVERAGES

YR	DAY	* I	PROTONS			* LOG10 (FLUX)	LOG10 KP	ENERGY		LOG10 (E)	
			VEL	DEF	FLUX			DENSITY			
63	331	1	0.0	0.0	0.000	0.000	0.0	0.000	0.000	IMP	
63	331	2	0.0	0.0	0.000	0.000	0.7	0.000	0.000	IMP	
63	331	3	0.0	0.0	0.000	0.000	1.7	0.000	0.000	IMP	
63	331	4	0.0	0.0	0.000	0.000	1.3	0.000	0.000	IMP	
63	331	5	285.0	10.5	2.992	8.476	0.7	85.286	15.931	IMP	
63	331	6	285.0	12.0	3.420	8.534	0.3	97.470	15.989	IMP	
63	331	7	290.0	13.7	3.973	8.599	1.0	115.217	16.062	IMP	
63	331	8	290.0	15.0	4.350	8.638	1.3	126.150	16.101	IMP	
63	332	1	288.0	12.0	3.456	8.539	1.3	99.533	15.998	IMP	
63	332	2	288.0	13.0	3.744	8.573	3.3	107.827	16.033	IMP	
63	332	3	285.0	14.5	4.132	8.616	1.3	117.776	16.071	IMP	
63	332	4	283.0	14.7	4.160	8.619	1.0	117.731	16.071	IMP	
63	332	5	285.0	11.0	3.135	8.496	1.3	89.347	15.951	IMP	
63	332	6	290.0	10.0	2.900	8.462	0.3	84.100	15.925	IMP	
63	332	7	285.0	11.0	3.135	8.496	0.7	89.347	15.951	IMP	
63	332	8	280.0	9.5	2.660	8.425	0.0	74.480	15.872	IMP	
63	333	1	293.0	16.5	4.834	8.684	1.3	141.651	16.191	IMP	
63	333	2	285.0	19.5	5.557	8.745	2.0	158.389	16.200	IMP	
63	333	3	290.0	26.5	7.685	8.886	1.0	222.865	16.348	IMP	
63	333	4	290.0	33.5	9.715	8.987	1.7	281.735	16.450	IMP	
63	333	5	293.0	51.0	14.943	9.174	1.7	437.830	16.641	IMP	
63	333	6	293.0	34.0	9.962	8.998	2.7	291.887	16.465	IMP	
63	333	7	303.0	23.5	7.120	8.853	1.3	215.751	16.334	IMP	
63	333	8	298.0	19.5	5.811	8.764	3.3	173.168	16.238	IMP	
63	334	1	423.0	4.0	1.692	8.228	2.7	71.572	15.855	IMP	
63	334	2	425.0	8.0	3.400	8.531	1.7	144.500	16.160	IMP	
63	334	3	405.0	10.5	4.252	8.629	1.3	172.226	16.236	IMP	
63	334	4	400.0	11.5	4.600	8.663	3.3	184.000	16.265	IMP	
63	334	5	450.0	11.0	4.950	8.695	5.7	222.750	16.348	IMP	
63	334	6	418.0	9.5	3.971	8.599	2.7	165.988	16.220	IMP	
63	334	7	0.0	0.0	0.000	0.000	3.0	0.000	0.000	IMP	
63	334	8	0.0	0.0	0.000	0.000	2.0	0.000	0.000	IMP	
63	335	1	0.0	0.0	0.000	0.000	1.3	0.000	0.000	IMP	
63	335	2	0.0	0.0	0.000	0.000	0.7	0.000	0.000	IMP	
63	335	3	357.0	7.0	2.499	8.398	1.0	89.214	15.950	IMP	
63	335	4	360.0	6.0	2.160	8.334	0.7	77.760	15.891	IMP	
63	335	5	385.0	5.5	2.117	8.326	0.7	81.524	15.911	IMP	
63	335	6	353.0	3.5	1.235	8.092	2.3	43.613	15.640	IMP	
63	335	7	332.0	5.5	1.831	8.263	1.0	60.989	15.785	IMP	
63	335	8	300.0	7.0	2.100	8.322	2.3	63.000	15.799	IMP	
63	336	1	385.0	9.0	3.465	8.540	2.0	133.402	16.125	IMP	
63	336	2	425.0	8.7	3.697	8.568	2.7	157.144	16.196	IMP	
63	336	3	428.0	10.5	4.494	8.653	2.3	192.343	16.284	IMP	
63	336	4	447.0	9.0	4.023	8.605	1.3	179.828	16.255	IMP	
63	336	5	450.0	6.5	2.925	8.466	3.3	131.625	16.119	IMP	
63	336	6	428.0	7.0	2.996	8.477	3.3	128.229	16.108	IMP	
63	336	7	450.0	11.0	4.950	8.695	2.7	222.750	16.348	IMP	
63	336	8	485.0	20.5	9.942	8.997	3.0	482.211	16.683	IMP	
63	337	1	495.0	17.0	8.415	8.925	3.7	416.542	16.620	IMP	
63	337	2	485.0	13.5	6.547	8.816	4.3	317.554	16.502	IMP	

3.1411
 STOCK FORM
 COURSE UNIFORM

12
 11
 10
 9
 8
 7
 6
 5
 4
 3
 2

	IMPA	1
	IMPA	2
	IMPA	3
	IMPA	4
	IMPA	5
	IMPA	6
	IMPA	7
	IMPA	8
	IMPA	9
	IMPA	10
	IMPA	11
	IMPA	12
	IMPA	13
	IMPA	14
	IMPA	15
	IMPA	16
	IMPA	17
	IMPA	18
	IMPA	19
	IMPA	20
	IMPA	21
	IMPA	22
	IMPA	23
	IMPA	24
	IMPA	25
	IMPA	26
	IMPA	27
	IMPA	28
	IMPA	29
	IMPA	30
	IMPA	31
	IMPA	32
	IMPA	33
	IMPA	34
	IMPA	35
1	IMPA	36
1	IMPA	37
0	IMPA	38
5	IMPA	39
9	IMPA	40
5	IMPA	41
6	IMPA	42
4	IMPA	43
5	IMPA	44
9	IMPA	45
8	IMPA	46
8	IMPA	47
3	IMPA	48
0	IMPA	49
2	IMPA	50

3-1411
 STOCK FORM
 COURTESY-UNIFORM

YR	DAY	I	VEL	PROTONS		* LOG10 (FLUX)	KP	ENERGY DENSITY	LOG10 (E)	
				DEN	FLUX					
63	337	3	460.0	10.5	4.830	8.684	5.7	222.180	16.347	I
63	337	4	453.0	8.0	3.624	8.559	4.3	164.167	16.215	I
63	337	5	460.0	7.5	3.450	8.538	4.7	158.700	16.201	I
63	337	6	455.0	7.5	3.412	8.533	4.0	155.269	16.191	I
63	337	7	448.0	6.5	2.912	8.464	4.3	130.458	16.115	I
63	337	8	446.0	6.0	2.676	8.427	4.7	119.350	16.077	I
63	338	1	445.0	6.0	2.670	8.427	3.3	118.815	16.075	I
63	338	2	433.0	5.0	2.165	8.335	4.3	93.744	15.972	I
63	338	3	433.0	5.0	2.165	8.335	4.0	93.744	15.972	I
63	338	4	437.0	5.3	2.316	8.365	2.7	101.214	16.005	I
63	338	5	450.0	7.0	3.150	8.498	3.7	141.750	16.152	I
63	338	6	0.0	0.0	0.000	0.000	3.7	0.000	0.000	I
63	338	7	0.0	0.0	0.000	0.000	3.7	0.000	0.000	I
63	338	8	0.0	0.0	0.000	0.000	5.0	0.000	0.000	I
63	339	1	0.0	0.0	0.000	0.000	4.7	0.000	0.000	I
63	339	2	430.0	5.0	2.150	8.332	4.0	92.450	15.966	I
63	339	3	440.0	5.0	2.200	8.342	3.0	96.800	15.986	I
63	339	4	440.0	5.0	2.200	8.342	3.3	96.800	15.986	I
63	339	5	440.0	5.0	2.200	8.342	4.3	96.800	15.986	I
63	339	6	430.0	5.0	2.150	8.332	4.0	92.450	15.966	I
63	339	7	425.0	4.0	1.700	8.230	4.7	72.250	15.859	I
63	339	8	425.0	4.5	1.912	8.282	4.0	81.281	15.910	I
63	340	1	433.0	5.0	2.165	8.335	3.7	93.744	15.972	I
63	340	2	435.0	5.0	2.175	8.337	4.0	94.612	15.976	I
63	340	3	433.0	5.0	2.165	8.335	3.7	93.744	15.972	I
63	340	4	435.0	5.0	2.175	8.337	2.7	94.612	15.976	I
63	340	5	440.0	5.5	2.420	8.384	4.3	106.480	16.027	I
63	340	6	440.0	5.5	2.420	8.384	4.0	106.480	16.027	I
63	340	7	438.0	6.0	2.628	8.420	3.7	115.106	16.061	I
63	340	8	433.0	5.0	2.165	8.335	3.7	93.744	15.972	I
63	341	1	435.0	5.0	2.175	8.337	3.3	94.612	15.976	I
63	341	2	430.0	4.5	1.935	8.287	3.0	83.205	15.920	I
63	341	3	423.0	4.5	1.903	8.280	3.0	80.518	15.906	I
63	341	4	425.0	4.0	1.700	8.230	3.0	72.250	15.859	I
63	341	5	425.0	4.0	1.700	8.230	3.7	72.250	15.859	I
63	341	6	430.0	4.0	1.720	8.236	3.0	73.960	15.869	I
63	341	7	425.0	4.0	1.700	8.230	2.7	72.250	15.859	I
63	341	8	415.0	3.6	1.494	8.174	2.0	62.001	15.792	I
63	342	1	423.0	4.0	1.692	8.228	2.7	71.572	15.855	I
63	342	2	425.0	4.6	1.955	8.291	3.7	83.087	15.920	I
63	342	3	423.0	4.3	1.819	8.260	3.3	76.939	15.886	I
63	342	4	418.0	4.0	1.672	8.223	2.7	69.890	15.844	I
63	342	5	0.0	0.0	0.000	0.000	3.3	0.000	0.000	I
63	342	6	0.0	0.0	0.000	0.000	3.0	0.000	0.000	I
63	342	7	0.0	0.0	0.000	0.000	2.7	0.000	0.000	I
63	342	8	0.0	0.0	0.000	0.000	2.0	0.000	0.000	I
63	343	1	0.0	0.0	0.000	0.000	1.0	0.000	0.000	I
63	343	2	435.0	5.0	2.175	8.337	2.0	94.612	15.976	I
63	343	3	435.0	5.0	2.175	8.337	2.7	94.612	15.976	I
63	343	4	440.0	6.0	2.640	8.422	3.0	116.160	16.065	I

16.347	IMPA 51
16.215	IMPA 52
16.201	IMPA 53
16.191	IMPA 54
16.115	IMPA 55
16.077	IMPA 56
16.075	IMPA 57
15.972	IMPA 58
15.972	IMPA 59
16.005	IMPA 60
16.152	IMPA 61
0.000	IMPA 62
0.000	IMPA 63
0.000	IMPA 64
0.000	IMPA 65
15.966	IMPA 66
15.986	IMPA 67
15.986	IMPA 68
15.986	IMPA 69
15.966	IMPA 70
15.859	IMPA 71
15.910	IMPA 72
15.972	IMPA 73
15.976	IMPA 74
15.972	IMPA 75
15.976	IMPA 76
16.027	IMPA 77
16.027	IMPA 78
16.061	IMPA 79
15.972	IMPA 80
15.976	IMPA 81
15.920	IMPA 82
15.906	IMPA 83
15.859	IMPA 84
15.859	IMPA 85
15.869	IMPA 86
15.859	IMPA 87
15.792	IMPA 88
15.855	IMPA 89
15.920	IMPA 90
15.886	IMPA 91
15.844	IMPA 92
0.000	IMPA 93
0.000	IMPA 94
0.000	IMPA 95
0.000	IMPA 96
0.000	IMPA 97
15.976	IMPA 98
15.976	IMPA 99
16.065	IMPA 100

YR	DAY	I	PROTONS		* LOG10		ENERGY	LOG10	
			VEL	DEN	FLUX	(FLUX) KP	DENSITY	(E)	
63	343	5	440.0	5.5	2.420	8.384	2.7	106.480	16.027
63	343	6	438.0	5.0	2.190	8.340	2.0	95.922	15.982
63	343	7	435.0	6.0	2.610	8.417	0.3	113.535	16.055
63	343	8	413.0	4.5	1.858	8.269	0.0	76.756	15.885
63	344	1	350.0	6.5	2.275	8.357	0.0	79.625	15.901
63	344	2	283.0	9.3	2.632	8.420	0.0	74.483	15.872
63	344	3	285.0	12.0	3.420	8.534	0.3	97.470	15.989
63	344	4	293.0	11.5	3.369	8.528	0.0	98.726	15.994
63	344	5	293.0	11.0	3.223	8.508	0.0	94.434	15.975
63	344	6	290.0	9.5	2.755	8.440	0.0	79.895	15.903
63	344	7	293.0	10.5	3.076	8.488	0.0	90.141	15.955
63	344	8	293.0	12.5	3.662	8.564	0.0	107.311	16.031
63	345	1	305.0	15.0	4.575	8.660	0.0	139.537	16.145
63	345	2	308.0	15.0	4.620	8.665	0.7	142.296	16.153
63	345	3	295.0	11.5	3.392	8.531	0.0	100.079	16.000
63	345	4	295.0	11.5	3.392	8.531	0.3	100.079	16.000
63	345	5	305.0	10.5	3.202	8.505	0.7	97.676	15.990
63	345	6	305.0	12.0	3.660	8.563	0.3	111.630	16.048
63	345	7	310.0	11.5	3.565	8.552	0.3	110.515	16.043
63	345	8	313.0	12.0	3.756	8.575	0.3	117.563	16.070
63	346	1	310.0	11.0	3.410	8.533	1.0	105.710	16.024
63	346	2	318.0	11.0	3.498	8.544	0.3	111.236	16.046
63	346	3	322.0	12.3	3.961	8.598	0.3	127.531	16.106
63	346	4	0.0	0.0	0.000	0.000	0.7	0.000	0.000
63	346	5	0.0	0.0	0.000	0.000	0.3	0.000	0.000
63	346	6	0.0	0.0	0.000	0.000	0.0	0.000	0.000
63	346	7	0.0	0.0	0.000	0.000	0.7	0.000	0.000
63	346	8	0.0	0.0	0.000	0.000	2.7	0.000	0.000
63	347	1	310.0	43.0	13.330	9.125	3.0	413.230	16.616
63	347	2	308.0	34.0	10.472	9.020	3.3	322.538	16.509
63	347	3	325.0	17.0	5.525	8.742	1.0	179.562	16.254
63	347	4	350.0	16.0	5.600	8.748	1.3	196.000	16.292
63	347	5	343.0	13.5	4.630	8.666	1.0	158.826	16.201
63	347	6	333.0	10.8	3.596	8.556	0.7	119.760	16.078
63	347	7	330.0	9.0	2.970	8.473	1.7	98.010	15.991
63	347	8	325.0	11.5	3.737	8.573	1.3	121.469	16.084
63	348	1	335.0	11.5	3.852	8.586	1.0	129.059	16.111
63	348	2	330.0	11.0	3.630	8.560	1.3	119.790	16.078
63	348	3	343.0	12.0	4.116	8.614	1.7	141.179	16.150
63	348	4	335.0	18.0	6.030	8.780	1.3	202.005	16.305
63	348	5	340.0	29.0	9.860	8.994	3.3	335.240	16.525
63	348	6	345.0	19.0	6.555	8.817	3.7	226.147	16.354
63	348	7	373.0	12.0	4.476	8.651	3.0	166.955	16.223
63	348	8	390.0	16.0	6.240	8.795	3.0	243.360	16.386
63	349	1	400.0	11.0	4.400	8.643	2.0	176.000	16.246
63	349	2	370.0	10.5	3.885	8.589	1.7	143.745	16.158
63	349	3	393.0	7.7	3.026	8.481	2.3	118.926	16.075
63	349	4	430.0	6.0	2.580	8.412	2.3	110.940	16.045
63	349	5	440.0	5.0	2.200	8.342	1.7	96.800	15.986
63	349	6	450.0	5.0	2.250	8.352	2.3	101.250	16.005

3-1411 STOCK FORM COURSE-UNIVERSITY

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16.027	IMPA 101
15.982	IMPA 102
16.055	IMPA 103
15.885	IMPA 104
15.901	IMPA 105
15.872	IMPA 106
15.989	IMPA 107
15.994	IMPA 108
15.975	IMPA 109
15.903	IMPA 110
15.955	IMPA 111
16.031	IMPA 112
16.145	IMPA 113
16.153	IMPA 114
16.000	IMPA 115
16.000	IMPA 116
15.990	IMPA 117
16.048	IMPA 118
16.043	IMPA 119
16.070	IMPA 120
16.024	IMPA 121
16.046	IMPA 122
16.106	IMPA 123
0.000	IMPA 124
0.000	IMPA 125
0.000	IMPA 126
0.000	IMPA 127
0.000	IMPA 128
16.616	IMPA 129
16.509	IMPA 130
16.254	IMPA 131
16.292	IMPA 132
16.201	IMPA 133
16.078	IMPA 134
15.991	IMPA 135
16.084	IMPA 136
16.111	IMPA 137
16.078	IMPA 138
16.150	IMPA 139
16.305	IMPA 140
16.525	IMPA 141
16.354	IMPA 142
16.223	IMPA 143
16.386	IMPA 144
16.246	IMPA 145
16.158	IMPA 146
16.075	IMPA 147
16.045	IMPA 148
15.986	IMPA 149
16.005	IMPA 150

YR	DAY	*	PROTONS			* LOG10		ENERGY	LOG10
			I	VEL	DEN	FLUX	(FLUX) KP	DENSITY	(E)
63	349	7	455.0	4.8	2.184	8.339	2.0	99.372	15.997
63	349	8	433.0	4.0	1.732	8.239	1.0	74.996	15.875
63	350	1	388.0	4.5	1.746	8.242	2.7	67.745	15.831
63	350	2	0.0	0.0	0.000	0.000	1.7	0.000	0.000
63	350	3	0.0	0.0	0.000	0.000	0.7	0.000	0.000
63	350	4	0.0	0.0	0.000	0.000	1.0	0.000	0.000
63	350	5	0.0	0.0	0.000	0.000	1.3	0.000	0.000
63	350	6	0.0	0.0	0.000	0.000	2.7	0.000	0.000
63	350	7	0.0	0.0	0.000	0.000	1.3	0.000	0.000
63	350	8	0.0	0.0	0.000	0.000	1.7	0.000	0.000
63	351	1	290.0	6.0	1.740	8.241	2.3	50.460	15.703
63	351	2	290.0	7.5	2.175	8.337	0.0	63.075	15.800
63	351	3	305.0	8.5	2.592	8.414	1.0	79.071	15.898
63	351	4	310.0	9.3	2.883	8.460	0.0	89.373	15.951
63	351	5	310.0	9.0	2.790	8.446	0.3	86.490	15.937
63	351	6	320.0	10.0	3.200	8.505	1.0	102.400	16.010
63	351	7	300.0	10.5	3.150	8.498	1.3	94.500	15.975
63	351	8	305.0	10.7	3.254	8.514	1.0	99.537	15.998
63	352	1	310.0	10.7	3.317	8.521	0.7	102.827	16.012
63	352	2	300.0	9.0	2.700	8.431	0.0	81.000	15.908
63	352	3	300.0	9.5	2.850	8.455	0.7	85.500	15.932
63	352	4	295.0	11.5	3.392	8.531	1.0	100.079	16.000
63	352	5	283.0	12.5	3.537	8.549	0.3	100.111	16.000
63	352	6	250.0	12.5	3.125	8.495	0.0	78.125	15.893
63	352	7	223.0	11.5	2.564	8.409	0.0	57.188	15.757
63	352	8	215.0	15.0	3.225	8.509	0.7	69.337	15.841
63	353	1	215.0	16.0	3.440	8.537	0.0	73.960	15.869
63	353	2	210.0	13.0	2.730	8.436	0.0	57.330	15.758
63	353	3	200.0	16.0	3.200	8.505	0.0	64.000	15.806
63	353	4	210.0	14.5	3.045	8.484	0.0	63.945	15.806
63	353	5	223.0	20.5	4.571	8.660	0.7	101.944	16.008
63	353	6	310.0	11.5	3.565	8.552	1.7	110.515	16.043
63	353	7	340.0	14.0	4.760	8.678	1.3	161.840	16.209
63	353	8	358.0	22.8	8.162	8.912	3.7	292.214	16.466
63	354	1	359.0	27.1	9.729	8.988	3.3	349.268	16.543
63	354	2	350.0	44.3	15.505	9.190	3.3	542.675	16.735
63	354	3	0.0	0.0	0.000	0.000	4.7	0.000	0.000
63	354	4	0.0	0.0	0.000	0.000	3.0	0.000	0.000
63	354	5	0.0	0.0	0.000	0.000	3.3	0.000	0.000
63	354	6	0.0	0.0	0.000	0.000	2.7	0.000	0.000
63	354	7	340.0	20.0	6.800	8.833	4.0	231.200	16.364
63	354	8	318.0	15.0	4.770	8.679	3.0	151.686	16.181
63	355	1	320.0	19.0	6.080	8.784	1.0	194.560	16.289
63	355	2	325.0	21.0	6.825	8.834	1.3	221.812	16.346
63	355	3	325.0	19.5	6.337	8.802	2.7	205.969	16.314
63	355	4	330.0	16.8	5.544	8.744	1.7	182.952	16.262
63	355	5	339.0	16.5	5.527	8.743	2.3	185.171	16.268
63	355	6	355.0	13.5	4.792	8.681	3.3	170.134	16.231
63	355	7	350.0	12.0	4.200	8.623	1.7	147.000	16.167
63	355	8	355.0	11.5	4.082	8.611	4.0	144.929	16.161

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STOCK FORM

COURIER UNIFORM

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15.997	IMPA 151
15.875	IMPA 152
15.831	IMPA 153
0.000	IMPA 154
0.000	IMPA 155
0.000	IMPA 156
0.000	IMPA 157
0.000	IMPA 158
0.000	IMPA 159
0.000	IMPA 160
15.703	IMPA 161
15.800	IMPA 162
15.898	IMPA 163
15.951	IMPA 164
15.937	IMPA 165
16.010	IMPA 166
15.975	IMPA 167
15.998	IMPA 168
16.012	IMPA 169
15.908	IMPA 170
15.932	IMPA 171
16.000	IMPA 172
16.000	IMPA 173
15.893	IMPA 174
15.757	IMPA 175
15.841	IMPA 176
15.869	IMPA 177
15.758	IMPA 178
15.806	IMPA 179
15.806	IMPA 180
16.008	IMPA 181
16.043	IMPA 182
16.209	IMPA 183
16.466	IMPA 184
16.543	IMPA 185
16.735	IMPA 185
0.000	IMPA 187
0.000	IMPA 188
0.000	IMPA 189
0.000	IMPA 190
16.364	IMPA 191
16.181	IMPA 192
16.289	IMPA 193
16.346	IMPA 194
16.314	IMPA 195
16.262	IMPA 196
16.268	IMPA 197
16.231	IMPA 198
16.167	IMPA 199
16.161	IMPA 200

EXPLORER 18 (IMP-A OR IMP-1) PLASMA PARAMETERS, IRREGULAR INTERVALS

START * END * PLASMA PARAMETERS *START END *
 YR DAY HR MN DAY HR MN VEL S W1 W2 N SEQ SEQ

63	331	00	00	331	12	47											
63	331	12	48	331	14	06	285	10	60	70	9	476	533				
63	331	14	19	331	15	34	285	5	50	60	12	542	597				
63	331	15	46	331	17	01	285	5	50	70	11	606	661				
63	331	17	13	331	18	35	285	5	50	60	13	670	730				
63	331	18	14	331	19	34	290	5	60	65	13	714	773				
63	331	19	24	331	20	07	290	5	60	65	14	766	797				
63	331	20	19	331	21	34	290	5	55	60	14	800	861				
63	331	21	46	331	23	11	290	5	50	60	16	870	932				
63	331	23	23	332	00	38	290	5	55	65	14	941	996				
63	332	00	51	332	02	06	290	5	60	70	12	1005	1060				
63	332	02	18	332	03	33	285	5	80	90	12	1069	1124				
63	332	03	12	332	04	36	290	5	60	70	12	1108	1170				
63	332	04	50	332	06	08	285	5	55	60	14	1180	1237				
63	332	06	23	332	07	28	285	5	50	55	15	1248	1296				
63	332	07	41	332	09	08	285	5	50	55	14	1305	1369				
63	332	06	20	332	10	35	285	5	50	60	14	1378	1433				
63	332	10	08	332	11	01	285	5	50	60	14	1413	1453				
63	332	11	13	332	12	28	280	5	50	60	16	1461	1516				
63	332	12	41	332	14	07	280	5	55	60	12	1525	1588				
63	332	14	19	332	15	31	290	5	60	65	10	1597	1650				
63	332	15	45	332	17	03	290	5	75	80	10	1660	1721				
63	332	17	20	332	18	37	290	5	75	80	10	1730	1786				
63	332	18	46	332	20	08	285	5	55	65	12	1793	1853				
63	332	20	21	332	21	34	285	5	60	65	10	1862	1916				
63	332	21	47	332	23	02	280	5	65	75	9	1925	1980				
63	332	22	46	333	00	00	280	5	60	65	10	1968	2022				
63	333	0	2	333	1	27	290	5	50	55	14	2024	2086				
63	333	00	41	333	02	07	290	5	50	55	15	2053	2116				
63	333	02	20	333	03	35	295	5	50	55	18	2125	2180				
63	333	03	30	333	04	49	285	5	45	50	18	2176	2234				
63	333	05	03	333	06	16	285	5	45	50	21	2244	2298				
63	333	06	30	333	07	49	290	5	45	50	25	2308	2366				
63	333	08	03	333	09	06	290	5	40	45	28	2376	2422				
63	333	09	30	333	10	44	290	5	35	40	36	2440	2494				
63	333	10	58	333	12	14	290	5	40	45	31	2504	2560				
63	333	12	26	333	13	31	285	10	35	40	55	2569	2616				
63	333	13	32	333	14	25	290	5	35	40	54	2617	2656				
63	333	14	27	333	15	31	300	5	35	40	47	2657	2704				
63	333	15	32	333	16	25	290	5	45	50	32	2705	2744				
63	333	16	27	333	17	09	290	5	45	50	34	2745	2776				
63	333	17	28	333	18	37	295	5	40	45	35	2790	2841				
63	333	19	00	333	20	09	305	10	40	45	24	2858	2908				
63	333	20	21	333	21	36	300	10	40	45	23	2917	2972				
63	333	21	48	333	23	03	305	10	40	45	29	2981	3036				
63	333	23	16	334	00	34	290	10	70	85	10	3045	3102				
63	334	00	47	334	02	01	420	20	40	80	4	3112	3166				
63	334	02	15	334	03	39	425	20	40	80	4	3176	3238				
63	334	03	53	334	04	56	430	20	40	80	5	3248	3294				
63	334	05	20	334	06	34	420	20	40	60	11	3312	3366				

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STOCK FORM

COURSE UNIFORM

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IMPA	50

START * END * PLASMA PARAMETERS *START END *
 YR DAY HR MN DAY HR MN VEL S W1 W2 N SEQ SEQ

63	334	06	35	334	08	05	410	10	50	80	10	3366	3432
63	334	08	06	334	09	43	400	10	40	60	11	3433	3504
63	334	09	44	334	11	10	375	10	40	50	14	3505	3568
63	334	11	12	334	12	38	425	20	60	80	9	3569	3632
63	334	12	39	334	14	05	450	10	40	80	12	3633	3696
63	334	14	06	334	15	20	450	10	40	60	10	3697	3752
63	334	15	23	334	16	16	425	10	40	80	10	3753	3792
63	334	16	18	334	17	22	410	10	60	80	9	3793	3840
63	334	17	23	335	08	00						3841	4483
63	335	08	01	335	08	42	350	50	60	80	7	4484	4514
63	335	08	42	335	09	58	360	20	60	80	6	4514	4569
63	335	10	10	335	11	25	360	20	60	80	6	4578	4633
63	335	11	37	335	13	03	370	20	60	80	6	4642	4705
63	335	13	18	335	14	35	400	20	60	80	5	4716	4772
63	335	14	47	335	16	02	375	20	60	80	3	4781	4836
63	335	16	14	335	17	29	330	20	60	80	4	4845	4900
63	335	17	42	335	18	57	340	20	60	80	5	4909	4964
63	335	18	59	335	20	36	325	10	60	80	6	4966	5037
63	335	20	37	335	22	03	300	10	60	80	7	5038	5101
63	335	22	05	335	22	14	300	10	60	80	7	5102	5109
63	335	22	15	335	23	30	300	10	60	80	7	5109	5164
63	335	23	42	336	00	57	350	20	80	100	10	5173	5228
63	336	01	10	336	02	25	420	20	60	80	8	5237	5292
63	336	02	37	336	04	03	400	20	60	80	8	5301	5364
63	336	04	15	336	05	30	450	20	40	80	7	5373	5428
63	336	05	33	336	05	53	425	10	40	60	11	5490	5445
63	336	06	57	336	07	05	425	10	40	60	11	5492	5498
63	336	07	06	336	07	55	430	10	40	60	10	5498	5534
63	336	07	59	336	09	03						5536	5590
63	336	09	04	336	09	14	450	10	40	60	12	5585	5592
63	336	09	14	336	09	55	440	10	40	60	8	5592	5622
63	336	10	09	336	11	23	450	10	40	60	7	5632	5686
63	336	11	38	336	13	04	450	10	40	60	7	5697	5760
63	336	13	16	336	14	31	450	20	40	60	6	6769	5824
63	336	14	43	336	15	58	415	10	40	60	6	5833	5888
63	336	16	11	336	17	26	440	10	40	60	8	5897	5952
63	336	17	38	336	18	56	440	10	40	60	10	5961	6018
63	336	19	09	336	20	23	460	10	40	60	12	6028	6082
63	336	20	37	336	21	53	470	20	40	60	16	6092	6148
63	336	22	06	336	23	33	500	20	40	60	25	6157	6221
63	336	23	45	337	00	56	500	10	40	60	28	6230	6282
63	337	01	10	337	02	24	490	10	40	60	19	6292	6346
63	337	02	43	337	03	56	490	10	40	60	14	6360	6414
63	337	04	10	337	05	24	480	10	40	60	13	6424	6478
63	337	05	37	337	07	02	460	10	40	60	12	6488	6550
63	337	07	16	337	08	01	460	10	40	60	9	6560	6593
63	337	08	44	337	10	50	450	10	40	60	8	6625	6717
63	337	10	51	337	11	01	450	10	40	60	9	6718	6725
63	337	11	01	337	11	32	460	10	40	60	7	6725	6748
63	337	11	45	337	13	00	460	10	40	60	8	6757	6812

3-1411

STCCN FORM

COURIER UNIFORM

IMPA 51
IMPA 52
IMPA 53
IMPA 54
IMPA 55
IMPA 56
IMPA 57
IMPA 58
IMPA 59
IMPA 60
IMPA 61
IMPA 62
IMPA 63
IMPA 64
IMPA 65
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IMPA 67
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IMPA 89
IMPA 90
IMPA 91
IMPA 92
IMPA 93
IMPA 94
IMPA 95
IMPA 96
IMPA 97
IMPA 98
IMPA 99
IMPA 100

START * END * PLASMA PARAMETERS *START END *
 YR DAY HR MN DAY HR MN VEL S W1 W2 N SEQ SEQ

63	337	13	12	337	14	27	460	10	40	60	7	6821	6876
63	337	14	39	337	15	55	460	10	40	60	8	6885	6940
63	337	16	07	337	17	33	450	10	40	60	7	6949	7012
63	337	17	45	337	18	52	450	10	40	60	7	7021	7070
63	337	19	07	337	20	22	445	10	40	60	6	7081	7136
63	337	20	45	337	21	55	445	10	40	60	6	7153	7204
63	337	21	56	337	22	27						7205	7227
63	337	22	28	337	23	29	445	10	40	60	6	7228	7273
63	337	23	44	338	00	29	450	10	40	60	6	7284	7317
63	338	00	30	338	01	11						7318	4347
63	338	01	12	338	02	29	445	10	40	60	6	7348	7405
63	338	02	42	338	03	58	435	10	40	60	5	7414	7470
63	338	04	12	338	05	25	430	10	40	60	5	7480	7534
63	338	05	39	338	06	31	430	10	40	60	5	7544	7582
63	338	06	32	338	07	18						7582	7616
63	338	07	19	338	08	34	435	10	40	60	5	7617	7672
63	338	08	46	338	09	53	435	10	40	60	5	7681	7730
63	338	09	57	338	10	50	435	10	40	60	5	7733	7772
63	338	10	51	338	11	46						7773	7813
63	338	11	47	338	11	57	440	10	40	60	6	7814	7821
63	338	11	57	338	13	01	460	10	40	60	8	7821	7868
63	338	13	14	338	14	29	440	10	40	60	6	7877	7932
63	338	14	42	338	14	52	440	10	40	60	6	7942	7949
63	338	14	53	339	05	41						7950	8600
63	339	05	42	339	05	51	430	10	40	60	5	8601	8608
63	339	06	04	339	07	19	440	20	40	60	5	8617	8672
63	339	07	20	339	08	46	440	20	40	60	5	8673	8736
63	339	08	48	339	10	16	440	20	40	60	5	8737	8802
63	339	10	19	339	11	55	440	20	40	60	5	8804	8874
63	339	11	57	339	13	15	440	10	40	60	5	8876	8933
63	339	13	17	339	14	53	440	10	40	60	5	8934	9005
63	339	14	55	339	16	21	430	10	40	60	5	9006	9069
63	339	16	22	339	17	48	430	10	40	60	5	9070	9133
63	339	17	50	339	19	16	430	10	40	60	5	9134	9197
63	339	19	17	339	20	50	420	10	40	60	3	9198	9266
63	339	20	53	339	22	17	425	10	40	60	5	9268	9330
63	339	22	20	339	23	45	425	10	40	60	4	9332	9394
63	339	23	47	340	01	15	430	10	40	60	5	9396	9460
63	340	01	16	340	02	53	435	10	40	60	5	9461	9532
63	340	02	54	340	04	31	435	10	40	60	5	9533	9604
63	340	04	33	340	06	00	435	10	40	60	5	9605	9669
63	340	06	01	340	07	29	435	10	40	60	5	9670	9734
63	340	07	30	340	07	54						9735	9752
63	340	07	55	340	08	06	430	10	40	60	5	9753	9761
63	340	08	07	340	09	27						9762	9820
63	340	09	28	340	10	37	435	10	40	60	5	9821	9872
63	340	10	39	340	12	05	435	10	40	60	5	9873	9936
63	340	12	06	340	13	32	440	10	40	60	6	9937	10000
63	340	13	33	340	14	59	440	10	40	60	5	10001	10064
63	340	15	01	340	16	39	440	10	40	60	5	10065	10137

3-1481

STOCK FORM

COUNTER UNIFORM-1

12

11

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6	IMPA 101
0	IMPA 102
2	IMPA 103
0	IMPA 104
6	IMPA 105
4	IMPA 106
7	IMPA 107
3	IMPA 108
7	IMPA 109
7	IMPA 110
5	IMPA 111
0	IMPA 112
4	IMPA 113
2	IMPA 114
6	IMPA 115
2	IMPA 116
0	IMPA 117
2	IMPA 118
3	IMPA 119
1	IMPA 120
8	IMPA 121
2	IMPA 122
9	IMPA 123
0	IMPA 124
8	IMPA 125
2	IMPA 126
6	IMPA 127
2	IMPA 128
4	IMPA 129
3	IMPA 130
5	IMPA 131
9	IMPA 132
3	IMPA 133
7	IMPA 134
6	IMPA 135
0	IMPA 136
4	IMPA 137
0	IMPA 138
2	IMPA 139
4	IMPA 140
9	IMPA 141
4	IMPA 142
5	IMPA 143
2	IMPA 144
0	IMPA 145
2	IMPA 146
6	IMPA 147
0	IMPA 148
6	IMPA 149
3	IMPA 150

63	331	1	0.0	0.0	0.000	0.000	0.0	0.000	0.000	IM
63	331	2	0.0	0.0	0.000	0.000	0.7	0.000	0.000	IM
63	331	3	0.0	0.0	0.000	0.000	1.7	0.000	0.000	IM
63	331	4	0.0	0.0	0.000	0.000	1.3	0.000	0.000	IM
63	331	5	285.0	10.5	2.952	8.476	0.7	65.286	15.931	IM
63	331	6	285.0	12.0	3.420	8.534	0.3	57.470	15.989	IM
63	331	7	290.0	13.7	3.973	8.599	1.0	115.217	16.062	IM
63	331	8	290.0	15.0	4.350	8.638	1.3	126.150	16.101	IM
63	332	1	288.0	12.0	3.456	8.539	1.3	59.533	15.998	IM
63	332	2	288.0	13.0	3.744	8.573	3.3	107.827	16.033	IM
63	332	3	285.0	14.5	4.132	8.616	1.3	117.776	16.071	IM
63	332	4	283.0	14.7	4.160	8.619	1.0	117.731	16.071	IM
63	332	5	285.0	11.0	3.135	8.456	1.3	69.347	15.951	IM
63	332	6	290.0	10.0	2.900	8.462	0.3	64.100	15.925	IM
63	332	7	285.0	11.0	3.135	8.456	0.7	69.347	15.951	IM
63	332	8	280.0	9.5	2.660	8.425	0.0	74.480	15.872	IM
63	333	1	293.0	16.5	4.834	8.664	1.3	141.651	16.151	IM
63	333	2	285.0	19.5	5.557	8.745	2.0	158.389	16.200	IM
63	333	3	290.0	26.5	7.285	8.856	1.0	222.865	16.348	IM
63	333	4	290.0	33.5	9.715	8.967	1.7	281.735	16.450	IM
63	333	5	293.0	51.0	14.943	9.174	1.7	437.830	16.641	IM
63	333	6	293.0	34.0	9.962	8.998	2.7	291.867	16.465	IM
63	333	7	303.0	23.5	7.120	8.853	1.3	215.751	16.334	IM
63	333	8	293.0	19.5	5.911	8.764	3.3	173.168	16.238	IM
63	334	1	423.0	4.0	1.692	8.226	2.7	71.572	15.855	IM
63	334	2	425.0	8.0	3.400	8.531	1.7	144.500	16.160	IM
63	334	3	405.0	10.5	4.252	8.625	1.3	172.226	16.236	IM
63	334	4	400.0	11.5	4.600	8.663	3.3	184.000	16.265	IM
63	334	5	450.0	11.0	4.950	8.695	5.7	222.750	16.348	IM
63	334	6	418.0	9.5	3.971	8.599	2.7	165.988	16.220	IM
63	334	7	0.0	0.0	0.000	0.000	3.0	0.000	0.000	IM
63	334	8	0.0	0.0	0.000	0.000	2.0	0.000	0.000	IM

U.S. GOVERNMENT PRINTING OFFICE: 1959-280-899

IMPA	1	D-01533	REC	1.	LENGTH	84
IMPA	2	3	REC	2.	LENGTH	84
IMPA	3	1st FILE	REC	3.	LENGTH	84
IMPA	4	63-046A-07A	REC	4.	LENGTH	84
IMPA	5	M.F.T. IMP-1	REC	5.	LENGTH	84
IMPA	6	EXPL. 18 PLASMA DATA	REC	6.	LENGTH	84
IMPA	7	3 MC. AVGS.	REC	7.	LENGTH	84
IMPA	8		REC	8.	LENGTH	84
IMPA	9		REC	9.	LENGTH	84
IMPA	10		REC	10.	LENGTH	84
IMPA	11		REC	11.	LENGTH	84
IMPA	12		REC	12.	LENGTH	84
IMPA	13		REC	13.	LENGTH	84
IMPA	14		REC	14.	LENGTH	84
IMPA	15		REC	15.	LENGTH	84
IMPA	16		REC	16.	LENGTH	84
IMPA	17		REC	17.	LENGTH	84
IMPA	18		REC	18.	LENGTH	84
IMPA	19		REC	19.	LENGTH	84
IMPA	20		REC	20.	LENGTH	84
IMPA	21		REC	21.	LENGTH	84
IMPA	22		REC	22.	LENGTH	84
IMPA	23		REC	23.	LENGTH	84
IMPA	24		REC	24.	LENGTH	84
IMPA	25		REC	25.	LENGTH	84
IMPA	26		REC	26.	LENGTH	84
IMPA	27		REC	27.	LENGTH	84
IMPA	28		REC	28.	LENGTH	84
IMPA	29		REC	29.	LENGTH	84
IMPA	30		REC	30.	LENGTH	84
IMPA	31		REC	31.	LENGTH	84
IMPA	32		REC	32.	LENGTH	84

U.S. GOVERNMENT PRINTING OFFICE: 1964-345-504

63	335	1	0.0	0.0	0.000	0.000	1.3	0.000	0.000
63	335	2	0.0	0.0	0.000	0.000	0.7	0.000	0.000
63	335	3	357.0	7.0	2,499	8,398	1.0	89,214	15,650
63	335	4	360.0	6.0	2,160	8,334	0.7	77,760	15,891
63	335	5	385.0	5.5	2,117	8,326	0.7	81,524	15,911
63	335	6	353.0	3.5	1,235	8,092	2.3	43,613	15,640
63	335	7	333.0	5.5	1,831	8,263	1.0	60,989	15,785
63	335	8	300.0	7.0	2,100	8,322	2.3	63,000	15,799
63	336	1	385.0	9.0	3,465	8,540	2.0	113,402	16,125
63	336	2	425.0	8.7	3,657	8,568	2.7	157,144	16,196
63	336	3	428.0	10.5	4,494	8,653	2.3	192,343	16,284
63	336	4	447.0	9.0	4,023	8,605	1.3	179,828	16,255
63	336	5	450.0	6.5	2,925	8,466	3.3	131,625	16,119
63	336	6	428.0	7.0	2,956	8,477	3.3	128,229	16,108
63	336	7	450.0	11.0	4,950	8,695	2.7	222,750	16,348
63	336	8	485.0	20.5	9,942	8,957	3.0	482,211	16,683
63	337	1	495.0	17.0	8,415	8,925	3.7	416,542	16,620
63	337	2	485.0	13.5	6,547	8,816	4.3	317,554	16,502
63	337	3	460.0	10.5	4,830	8,684	5.7	222,160	16,347
63	337	4	453.0	8.0	3,624	8,559	4.3	164,167	16,215
63	337	5	460.0	7.5	3,450	8,538	4.7	159,700	16,201
63	337	6	455.0	7.5	3,412	8,533	4.0	155,269	16,191
63	337	7	448.0	6.5	2,912	8,464	4.3	130,458	16,115
63	337	8	446.0	6.0	2,676	8,427	4.7	119,350	16,077
63	338	1	445.0	6.0	2,670	8,427	3.3	118,815	16,075
63	333	2	433.0	5.0	2,165	8,335	4.3	93,744	15,972
63	338	3	433.0	5.0	2,165	8,335	4.0	93,744	15,972
63	338	4	437.0	5.3	2,316	8,365	2.7	101,214	16,005
63	338	5	450.0	7.0	3,150	8,498	3.7	141,750	16,152
63	338	6	0.0	0.0	0.000	0.000	3.7	0.000	0.000
63	338	7	0.0	0.0	0.000	0.000	3.7	0.000	0.000

0.000	IMPA 33	REC 33, LENGTH 84
0.000	IMPA 34	REC 34, LENGTH 84
15.450	IMPA 35	REC 35, LENGTH 84
15.891	IMPA 36	REC 36, LENGTH 84
15.911	IMPA 37	REC 37, LENGTH 84
15.640	IMPA 38	REC 38, LENGTH 84
15.765	IMPA 39	REC 39, LENGTH 84
15.799	IMPA 40	REC 40, LENGTH 84
16.125	IMPA 41	REC 41, LENGTH 84
16.196	IMPA 42	REC 42, LENGTH 84
16.284	IMPA 43	REC 43, LENGTH 84
16.255	IMPA 44	REC 44, LENGTH 84
16.119	IMPA 45	REC 45, LENGTH 84
16.108	IMPA 46	REC 46, LENGTH 84
16.348	IMPA 47	REC 47, LENGTH 84
16.683	IMPA 48	REC 48, LENGTH 84
16.620	IMPA 49	REC 49, LENGTH 84
16.502	IMPA 50	REC 50, LENGTH 84
16.347	IMPA 51	REC 51, LENGTH 84
16.215	IMPA 52	REC 52, LENGTH 84
16.201	IMPA 53	REC 53, LENGTH 84
16.191	IMPA 54	REC 54, LENGTH 84
16.115	IMPA 55	REC 55, LENGTH 84
16.077	IMPA 56	REC 56, LENGTH 84
16.075	IMPA 57	REC 57, LENGTH 84
15.972	IMPA 58	REC 58, LENGTH 84
15.572	IMPA 59	REC 59, LENGTH 84
16.005	IMPA 60	REC 60, LENGTH 84
15.152	IMPA 61	REC 61, LENGTH 84
0.000	IMPA 62	REC 62, LENGTH 84
0.000	IMPA 63	REC 63, LENGTH 84

U.S. GOVERNMENT PRINTING OFFICE: 1964-329-804

63	338	8	0.0	0.0	0.000	0.000	5.0	0.000	0.000	IMFA
63	339	1	0.0	0.0	0.000	0.000	4.7	0.000	0.000	IMPA
63	339	2	430.0	5.0	2.150	8.332	4.0	92.450	15.966	IMPA
63	339	3	440.0	5.0	2.200	8.342	3.0	96.800	15.986	IMPA
63	339	4	440.0	5.0	2.200	8.342	3.3	96.800	15.986	IMPA
63	339	5	440.0	5.0	2.200	8.342	4.3	96.800	15.986	IMPA
63	339	6	430.0	5.0	2.150	8.332	4.0	92.450	15.966	IMPA
63	339	7	425.0	4.0	1.700	8.230	4.7	72.250	15.859	IMPA
63	339	8	425.0	4.5	1.912	8.282	4.0	81.281	15.910	IMPA
63	340	1	433.0	5.0	2.165	8.335	3.7	93.744	15.972	IMPA
63	340	2	435.0	5.0	2.175	8.337	4.0	94.612	15.976	IMPA
63	340	3	433.0	5.0	2.165	8.335	3.7	93.744	15.972	IMPA
63	340	4	435.0	5.0	2.175	8.337	2.7	94.612	15.976	IMPA
63	340	5	440.0	5.5	2.420	8.384	4.3	106.480	16.027	IMPA
63	340	6	440.0	5.5	2.420	8.384	4.0	106.480	16.027	IMPA
63	340	7	438.0	6.0	2.628	8.420	3.7	115.106	16.061	IMPA
63	340	8	433.0	5.0	2.165	8.335	3.7	93.744	15.972	IMPA
63	341	1	435.0	5.0	2.175	8.337	3.3	94.612	15.976	IMPA
63	341	2	430.0	4.5	1.935	8.287	3.0	83.205	15.920	IMFA
63	341	3	423.0	4.5	1.903	8.280	3.0	80.518	15.906	IMPA
63	341	4	425.0	4.0	1.700	8.230	3.0	72.250	15.859	IMPA
63	341	5	425.0	4.0	1.700	8.230	3.7	72.250	15.859	IMPA
63	341	6	430.0	4.0	1.720	8.236	3.0	73.960	15.869	IMPA
63	341	7	425.0	4.0	1.700	8.230	2.7	72.250	15.859	IMPA
63	341	8	415.0	3.6	1.494	8.174	2.0	62.001	15.792	IMPA
63	342	1	423.0	4.0	1.652	8.228	2.7	71.572	15.855	IMPA
63	342	2	425.0	4.6	1.955	8.291	3.7	83.087	15.920	IMPA
63	342	3	423.0	4.3	1.815	8.260	3.3	76.939	15.886	IMPA
63	342	4	418.0	4.0	1.672	8.223	2.7	69.850	15.844	IMPA
63	342	5	0.0	0.0	0.000	0.000	3.3	0.000	0.000	IMFA
63	342	6	0.0	0.0	0.000	0.000	3.0	0.000	0.000	IMPA

0,000	IMPA 64	REC 64, LENGTH	84
0,000	IMPA 65	REC 65, LENGTH	84
15,966	IMPA 66	REC 66, LENGTH	84
15,986	IMPA 67	REC 67, LENGTH	84
15,986	IMPA 68	REC 68, LENGTH	84
15,986	IMPA 69	REC 69, LENGTH	84
15,966	IMPA 70	REC 70, LENGTH	84
15,859	IMPA 71	REC 71, LENGTH	84
15,910	IMPA 72	REC 72, LENGTH	84
15,972	IMPA 73	REC 73, LENGTH	84
15,976	IMPA 74	REC 74, LENGTH	84
15,972	IMPA 75	REC 75, LENGTH	84
15,976	IMPA 76	REC 76, LENGTH	84
16,027	IMPA 77	REC 77, LENGTH	84
16,027	IMPA 78	REC 78, LENGTH	84
16,061	IMPA 79	REC 79, LENGTH	84
15,972	IMPA 80	REC 80, LENGTH	84
15,976	IMPA 81	REC 81, LENGTH	84
15,920	IMPA 82	REC 82, LENGTH	84
15,906	IMPA 83	REC 83, LENGTH	84
15,859	IMPA 84	REC 84, LENGTH	84
15,859	IMPA 85	REC 85, LENGTH	84
15,869	IMPA 86	REC 86, LENGTH	84
15,859	IMPA 87	REC 87, LENGTH	84
15,792	IMPA 88	REC 88, LENGTH	84
15,855	IMPA 89	REC 89, LENGTH	84
15,920	IMPA 90	REC 90, LENGTH	84
15,885	IMPA 91	REC 91, LENGTH	84
15,844	IMPA 92	REC 92, LENGTH	84
0,000	IMPA 93	REC 93, LENGTH	84
0,000	IMPA 94	REC 94, LENGTH	84

U. S. GOVERNMENT PRINTING OFFICE: 1944-330-008

63	342	7	0.0	0.0	0.000	0.000	2.7	0.000	0.000
63	342	8	0.0	0.0	0.000	0.000	2.0	0.000	0.000
63	343	1	0.0	0.0	0.000	0.000	1.0	0.000	0.000
63	343	2	435.0	5.0	2.175	8.337	2.0	94.612	15.976
63	343	3	435.0	5.0	2.175	8.337	2.7	94.612	15.976
63	343	4	440.0	6.0	2.640	8.422	3.0	116.160	16.065
63	343	5	440.0	5.5	2.420	8.384	2.7	106.480	16.027
63	343	6	438.0	5.0	2.150	8.340	2.0	95.922	15.562
63	343	7	435.0	6.0	2.610	8.417	0.3	113.535	16.055
63	343	8	413.0	4.5	1.855	8.265	0.0	76.756	15.885
63	344	1	350.0	6.5	2.275	8.357	0.0	79.625	15.901
63	344	2	283.0	9.3	2.632	8.420	0.0	74.483	15.872
63	344	3	285.0	12.0	3.420	8.534	0.3	57.470	15.989
63	344	4	293.0	11.5	3.365	8.528	0.0	58.726	15.994
63	344	5	293.0	11.0	3.223	8.509	0.0	54.434	15.975
63	344	6	290.0	9.5	2.755	8.440	0.0	79.895	15.903
63	344	7	293.0	10.5	3.076	8.488	0.0	90.141	15.955
63	344	8	293.0	12.5	3.662	8.564	0.0	107.311	16.031
63	345	1	305.0	15.0	4.575	8.660	0.0	129.537	16.145
63	345	2	308.0	15.0	4.620	8.665	0.7	142.296	16.153
63	345	3	295.0	11.5	3.392	8.531	0.0	100.079	16.000
63	345	4	295.0	11.5	3.392	8.531	0.3	100.079	16.000
63	345	5	305.0	10.5	3.202	8.505	0.7	97.676	15.990
63	345	6	305.0	12.0	3.660	8.563	0.3	111.630	16.043
63	345	7	310.0	11.5	3.565	8.552	0.3	110.515	16.042
63	345	8	313.0	12.0	3.756	8.575	0.3	117.563	16.070
63	346	1	310.0	11.0	3.410	8.533	1.0	105.710	16.024
63	346	2	318.0	11.0	3.455	8.544	0.3	111.236	16.045
63	346	3	322.0	12.3	3.961	8.598	0.3	127.531	16.106
63	346	4	0.0	0.0	0.000	0.000	0.7	0.000	0.000
63	346	5	0.0	0.0	0.000	0.000	0.3	0.000	0.000

0.000	IMFA 95	REC 95, LENGTH	84
0.000	IMPA 96	REC 96, LENGTH	84
0.000	IMPA 97	REC 97, LENGTH	84
5.976	IMPA 98	REC 98, LENGTH	84
5.976	IMPA 99	REC 99, LENGTH	84
5.065	IMPA 100	REC 100, LENGTH	84
6.027	IMPA 101	REC 101, LENGTH	84
5.562	IMPA 102	REC 102, LENGTH	84
6.055	IMPA 103	REC 103, LENGTH	84
5.885	IMPA 104	REC 104, LENGTH	84
5.901	IMPA 105	REC 105, LENGTH	84
5.872	IMPA 106	REC 106, LENGTH	84
5.989	IMPA 107	REC 107, LENGTH	84
5.994	IMPA 108	REC 108, LENGTH	84
5.975	IMPA 109	REC 109, LENGTH	84
5.903	IMPA 110	REC 110, LENGTH	84
15.955	IMPA 111	REC 111, LENGTH	84
16.031	IMPA 112	REC 112, LENGTH	84
16.145	IMPA 113	REC 113, LENGTH	84
16.153	IMPA 114	REC 114, LENGTH	84
16.000	IMFA 115	REC 115, LENGTH	84
16.000	IMPA 116	REC 116, LENGTH	84
15.990	IMPA 117	REC 117, LENGTH	84
16.043	IMPA 118	REC 118, LENGTH	84
16.043	IMPA 119	REC 119, LENGTH	84
16.070	IMPA 120	REC 120, LENGTH	84
16.024	IMPA 121	REC 121, LENGTH	84
16.045	IMPA 122	REC 122, LENGTH	84
16.106	IMFA 123	REC 123, LENGTH	84
0.000	IMPA 124	REC 124, LENGTH	84
0.000	IMPA 125	REC 125, LENGTH	84

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64	347	19	52	347	20	57	270	10	50	60	19	76706	76754	IMPA
64	347	21	00	347	21	56	250	10	60	70	15	76756	76757	IMPA
64	347	21	57	347	22	55	230	10	60	70	21	76758	76840	IMPA
64	347	22	56	347	23	38	230	10	60	70	17	76841	76872	IMPA
64	347	23	39	348	03	34						76873	77044	IMPA
64	348	03	35	348	04	44	240	10	50	60	35	77045	77056	IMPA
64	348	04	46	348	05	39	255	10	50	60	34	77097	77136	IMPA
64	348	05	40	348	06	33	260	10	50	60	36	77137	77176	IMPA
64	348	06	35	348	07	40	260	10	50	60	35	77177	77225	IMPA
64	348	07	42	348	08	35	250	10	50	60	32	77226	77265	IMPA
64	348	08	36	348	09	51	230	10	70	80	32	77266	77321	IMPA
64	348	09	52	348	13	49						77322	77455	IMPA
64	348	13	50	348	14	50	350	10	20	30	44	77496	77540	IMPA
64	348	14	52	348	15	56	350	10	20	30	44	77541	77588	IMPA
64	348	15	59	348	16	57	340	10	40	50	26	77590	77633	IMPA
64	348	16	59	348	17	53	340	10	50	60	22	77634	77674	IMPA
64	348	17	56	348	18	51	340	10	60	70	20	77676	77716	IMPA
64	348	18	52	348	19	56	350	10	40	60	26	77717	77764	IMPA
64	348	19	58	348	20	51	350	10	20	30	38	77765	77804	IMPA
64	348	20	52	348	21	56	360	10	20	30	36	77805	77852	IMPA
64	348	21	58	348	22	58	350	10	20	30	32	77853	77897	IMPA
64	348	22	59	348	23	52	340	10	30	40	27	77898	77937	IMPA
64	348	23	54	349	00	58	340	10	30	40	23	77938	77985	IMPA
64	349	00	59	349	02	03	320	10	40	50	15	77986	78033	IMPA
64	349	02	05	349	02	58	315	10	50	60	14	78034	78073	IMPA
64	349	02	55	349	04	04	310	10	60	70	15	78074	78121	IMPA
64	349	04	05	349	05	08	305	10	60	70	15	78122	78168	IMPA
64	349	05	09	349	06	02	305	10	60	70	15	78169	78208	IMPA
64	349	06	04	349	07	08	305	10	60	70	14	78209	78256	IMPA
64	349	07	09	349	08	02	325	10	60	70	13	78257	78296	IMPA
64	349	08	04	349	09	08	350	10	70	80	9	78297	78344	IMPA

IMPA1645	REC 1645, LENGTH	84
IMPA1646	REC 1646, LENGTH	84
IMPA1647	REC 1647, LENGTH	84
IMPA1648	REC 1648, LENGTH	84
IMPA1649	REC 1649, LENGTH	84
IMPA1650	REC 1650, LENGTH	84
IMPA1651	REC 1651, LENGTH	84
IMPA1652	REC 1652, LENGTH	84
IMPA1653	REC 1653, LENGTH	84
IMPA1654	REC 1654, LENGTH	84
IMPA1655	REC 1655, LENGTH	84
IMPA1656	REC 1656, LENGTH	84
IMPA1657	REC 1657, LENGTH	84
IMPA1658	REC 1658, LENGTH	84
IMPA1659	REC 1659, LENGTH	84
IMPA1660	REC 1660, LENGTH	84
IMPA1661	REC 1661, LENGTH	84
IMPA1662	REC 1662, LENGTH	84
IMPA1663	REC 1663, LENGTH	84
IMPA1664	REC 1664, LENGTH	84
IMPA1665	REC 1665, LENGTH	84
IMPA1666	REC 1666, LENGTH	84
IMPA1667	REC 1667, LENGTH	84
IMPA1668	REC 1668, LENGTH	84
IMPA1669	REC 1669, LENGTH	84
IMPA1670	REC 1670, LENGTH	84
IMPA1671	REC 1671, LENGTH	84
IMPA1672	REC 1672, LENGTH	84
IMPA1673	REC 1673, LENGTH	84
IMPA1674	REC 1674, LENGTH	84
IMPA1675	REC 1675, LENGTH	84

64 345 05 03 349 10 05 365 10 70 80 8 78340 78386	IMPA	
64 349 10 08 349 11 00 380 10 70 80 8 78388 78426	IMPA	
64 349 11 03 349 11 57 370 10 70 80 8 78428 78468	IMPA	
64 349 12 00 349 12 59 360 10 70 80 9 48470 78513	IMPA	
64 349 13 14 349 13 57 3607 10 70 80 9 78524 78556	IMPA	
64 349 13 59 349 15 03 340 10 60 70 9 78557 78604	IMPA	
64 349 15 08 349 15 58 335 10 50 60 8 78608 78644	IMPA	
64 349 15 59 349 17 03 335 10 50 60 8 78645 78692	IMPA	
64 349 17 04 349 17 47 335 10 50 60 8 78693 78724	IMPA	
64 349 17 48 349 18 13	78725 78743	IMPA
64 349 18 14 349 18 33 335 10 50 60 8 78744 78758	IMPA	
64 349 18 34 349 19 05	78759 78781	IMPA
64 349 19 06 349 19 58 330 10 50 60 7 78782 78820	IMPA	
64 349 19 59 349 20 42 330 10 50 60 5 78821 78852	IMPA	
64 349 21 03 349 21 33 330 10 50 60 6 78858 78890	IMPA	
64 349 21 24 350 01 35	78891 79067	IMPA
64 350 01 36 350 02 39 360 10 60 70 6 79068 79114	IMPA	
64 350 02 45 350 03 38 365 10 60 40 6 79118 79157	IMPA	
64 350 03 39 350 04 34 350 10 50 60 5 79158 79198	IMPA	
64 350 04 37 350 05 44 390 10 60 70 6 79200 79245	IMPA	
64 350 05 45 350 06 38 390 10 20 60 4 79250 79289	IMPA	
64 350 06 40 350 07 11 400 10 20 60 4 79290 79313	IMPA	
64 350 07 12 350 08 00	79314 79353	IMPA
64 350 08 07 350 08 38 415 10 20 60 4 79354 79377	IMPA	
64 350 08 40 350 09 44 410 10 20 60 3 79378 79425	IMPA	
64 350 09 55 350 10 26 400 10 20 60 3 79433 79456	IMPA	
64 350 10 28 350 11 32 400 10 20 60 3 79457 79504	IMPA	
64 350 11 33 350 12 29 385 10 20 60 2 79505 79546	IMPA	
64 350 12 32 350 13 35 370 10 20 60 3 79548 79594	IMPA	
64 350 13 37 350 14 28 325 10 60 80 3 79596 79633	IMPA	
64 350 14 29 350 15 26 325 10 60 80 3 79634 79676	IMPA	

78386	IMPA1676	REC 1676, LENGTH	84
78426	IMPA1677	REC 1677, LENGTH	84
78468	IMPA1678	REC 1678, LENGTH	84
78513	IMPA1679	REC 1679, LENGTH	84
78556	IMPA1680	REC 1680, LENGTH	84
78604	IMPA1681	REC 1681, LENGTH	84
78644	IMPA1682	REC 1682, LENGTH	84
78692	IMPA1683	REC 1683, LENGTH	84
78724	IMPA1684	REC 1684, LENGTH	84
78743	IMPA1685	REC 1685, LENGTH	84
78758	IMPA1686	REC 1686, LENGTH	84
78781	IMPA1687	REC 1687, LENGTH	84
78820	IMPA1688	REC 1688, LENGTH	84
78852	IMPA1689	REC 1689, LENGTH	84
78890	IMPA1690	REC 1690, LENGTH	84
79067	IMPA1691	REC 1691, LENGTH	84
79114	IMPA1692	REC 1692, LENGTH	84
79157	IMPA1693	REC 1693, LENGTH	84
79198	IMPA1694	REC 1694, LENGTH	84
79245	IMPA1695	REC 1695, LENGTH	84
79289	IMPA1696	REC 1696, LENGTH	84
79313	IMPA1697	REC 1697, LENGTH	84
79353	IMPA1698	REC 1698, LENGTH	84
79377	IMPA1699	REC 1699, LENGTH	84
79425	IMPA1700	REC 1700, LENGTH	84
79456	IMPA1701	REC 1701, LENGTH	84
79504	IMPA1702	REC 1702, LENGTH	84
79546	IMPA1703	REC 1703, LENGTH	84
79594	IMPA1704	REC 1704, LENGTH	84
79633	IMPA1705	REC 1705, LENGTH	84
79676	IMPA1706	REC 1706, LENGTH	84

64 350 15 28 350 15 27 325 10 50 70 4 79677 79720

64 350 16 28 350 17 32 325 10 50 70 6 75721 75768

64 350 17 32 351 00 00 79769

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IMPA1707

REC 1707. LENGTH 84

IMFA1708

REC 1708. LENGTH 84

IMPA1709

REC 1709. LENGTH 84