

**U.S. Department of Commerce  
National Technical Information Service**



**N79-20972**

# **THE IRAS RADIATION ENVIRONMENT**

**NATIONAL AERONAUTICS AND SPACE ADMINISTRATION  
WASHINGTON, DC**

**DEC 78**

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X-601-79-7

TM-80275

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(NASA-TM-80275) THE IRAS RADIATION  
ENVIRONMENT (NASA) 354 p HC A16/MF A01  
CSCL 03B

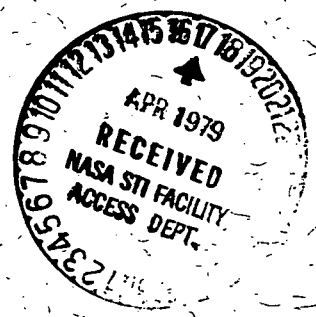
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DECEMBER 1978

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National Space Science Data Center

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## Introduction

At the request of the IRAS Project Office and with support from JPL and NASA Headquarters, a comprehensive study was conducted to determine and define the radiation environment of the IRAS mission. Initially limited in its objective, the scope of the study was later expanded to include recently implemented special data processing and analysis methods that produced novel types of results and display products.

The material in this report is structured and organized in a fashion parallel to that of a similar report on the radiation environment of the Space Telescope (X-601-78-30, October 1978). Also, the pattern established and the style adopted in the ST report is being closely followed in the present writing. It is hoped that this arrangement may facilitate the complimentary use of the two documents, thereby providing the largest amount of environment information and radiation data to the greatest number of users and covering the widest possible range of application areas.

The new analysis-features introduced in this report pertain to:

1. Positional Fluxes as a function of time and energy for the most severe pass through the South Atlantic Anomaly (SAA).
2. Total positional doses as a function of time and shield thickness for the most severe pass through the SAA.
3. Special comparison mapping fluxes, for ratios of positional intensities to orbit integrated averages, in terms of several energies.
4. Statistical exposure-time history of trajectory as a function of energy, indicating, in percent of total mission duration, the time intervals over which the instantaneous fluxes would exceed the orbit integrated averages.

Because the attainment of nominal orbit is not always achieved during launch, the study effort was extended beyond the targeted flight path to higher and lower altitudes, in order to provide some information in case the final trajectory should be different from the planned nominal. This additional effort involves orbital flux integrations only and not special processing and analysis.

Extensive calculations were performed and a large data base was generated, processed, and analyzed. The results of this work are presented in a transparent way to facilitate their use:

As guidelines for laboratory radiation studies of optical, electronic, and detector components;

As a source of information for the investigators on the environment (average and instantaneous) in which their instruments must operate; and

As the boundary conditions for calculating the radiation environment interior to the spacecraft.



Following the precedent established with ST, the external (surface incident) charged particle radiation, predicted for the IRAS satellite was determined in two ways: (a) by orbital flux integration for three selected mission altitudes and (b) by geographical instantaneous flux-mapping for the nominal flight-path altitude. The latest standard models of the environment were used in the calculations.

Magnetic field definitions for three nominal circular trajectories and for the geographic mapping positions were obtained from a current field model.

Spatial and temporal variations or conditions affecting the static environment models were considered and accounted for, wherever possible.

Finally, limited shielding and dose evaluations were performed for a simple geometry.

Results, given in graphical and tabular form, are analyzed, explained, and discussed. Conclusions are presented and commented on.

## 2. SPECIFICATION OF ORBITS

The analysis was based on three nominal circular orbits with altitudes of 600, 900, and 1200 kilometers, and all with inclination of about 99 degrees.

## 3. GENERATION OF TRAJECTORIES

A flight path ephemeris was generated for each selected orbit with the GEODYN-BLCONV System<sup>1</sup> for trajectories of 24-hour duration defined at 2-minute intervals. The length of simulated orbit time and the integration stepsize were especially selected so as to provide sufficient point density to insure an adequate sampling of the ambient radiation environment when flying the trajectories through the models. The trajectories were subsequently converted from geodetic polar to magnetic B-L coordinates with McIlwain's INVAR program of 1965<sup>2</sup> and the field routine ALLMAG,<sup>3</sup> which now utilizes the BARRACLOUGH 1975 field model.<sup>4</sup> The field computations were extrapolated to the tentative mission epoch of 1980.0 with linear time terms representing secular variations of the field.

## 4. FLIGHT PATH EXPOSURE TO TRAPPING DOMAINS

The specified nominal flight-path configuration ( $i=99^\circ$ ,  $h=900$  km) displays a significant characteristic of polar orbits in magnetic L-space: they

traverse the entire terrestrial radiation belt twice during each revolution, moving back and forth through regions of low L values (the inner zone:  $1.0 < L < 2.8$ ), regions of high L values (the outer zone:  $2.8 < L < 12$ ), and regions outside the trapping domain (external). Occasionally, some revolutions will also enter regions of space where no particle trapping can occur because of atmospheric cut-off conditions; that is, trajectory segments may have a combination of magnetic B and L values that place them outside the atmospheric cut-off limits of the models.

These excursions and the "external" visitations afford the satellite an amount of flux-free time, which may be of substantial duration.

## 5. GEOGRAPHIC FLUX-MAPPING

### A. Range and Altitude

The geographic mapping activity was limited to the h=900 kilometer altitude. It extended in geodetic latitude ( $\lambda$ ) from 81°N to 86°S, covering all longitudes ( $\phi$ ) from 180°W to 180°E. Grid points were generated at increments of  $\Delta\lambda = 1^\circ$  and  $\Delta\phi = 3^\circ$ .

### B. Magnetic Parameters and Flux Calculations

The magnetic B-L parameters corresponding to the grid positions were obtained with the same set of programs as in the trajectory conversion (INVAR, ALLMAG, BARRACLOUGH), and for the same epoch (1980.0).

Instantaneous integral, omnidirectional electron and proton fluxes at the grid points were obtained for several energy thresholds ( $E_e > .04, .25, .50, 1.0, 2., 3., 4., 5., 6., \text{ MeV}; E_p > .04, .50, 1., 5., 15., 30., 50., 100., 300. \text{ MeV}$ ).

## 6. GEOGRAPHIC COMPARISON MAPPING: FLUX RATIOS

### A. Range and Altitude

Same as in preceding section with same density of grid points.

### B. Magnetic Parameters and Flux Calculations

Same as in preceding section. However, ratios of instantaneous integral, omnidirectional electron and proton fluxes to orbit integrated averages at the grid points, were obtained for some different energy thresholds ( $E_e > .5, 1, 2, 3, 4, 5, 6; E_p > 5, 10, 30, 50, 100, 200, 500$ ).

## 7. TRAPPED PARTICLE ENVIRONMENT MODELS

The fluxes in this study were obtained from current NSSDC models: the solar maximum AE6 for the inner zone electrons<sup>5</sup>, the new interim model AEI7 for the outer zone electrons<sup>6</sup>, and the solar maximum version of the new AP8 model<sup>7</sup> for energetic trapped protons. It should be noted that the interim AEI7 does not reflect solar cycle variations in its present state. However, this model was issued in two versions, the AEI7-HI and the AEI7-LO, in order to account for differences in the data sets used in their construction. Both versions were used in this effort. All models describe an average static environment at a given epoch.

## 8. GEOMAGNETIC SHIELDING AND SOLAR FLARE PROTONS

Low altitude polar orbits experience a significant amount of geomagnetic shielding from cosmic rays of solar or galactic origin in the energy range  $E > 10$  MeV. Therefore, it may be assumed that the IRAS spacecraft will only intermittently be exposed to the unattenuated interplanetary solar flare proton intensities of all energies above 10 MeV. To a first approximation, the fluxes may also be considered omnidirectional and isotropic, probably to within 10-15%.

Usually, geomagnetic shielding effects on geocentric missions are being evaluated with simple rigidity considerations because of substantial diurnal variations in the cutoff latitude associated with geomagnetic tail effects (2-4 degrees) and storm-induced changes ( $> 4$  degrees). The simple analysis used here assumed that energetic solar protons of all energies above 10 MeV have free access to all magnetospheric regions external to a dipole shell of  $L=5$  earth radii, which is equivalent to a cut-off latitude of about 63 degrees.

Predictions of solar flare proton fluxes at 1 AU are obtained as a function of mission duration  $\tau$  and confidence level  $Q^*$  on the basis of a probabilistic analysis<sup>8</sup> using a modified type of Poisson statistics by a computerized model SOLPRO<sup>9</sup> that includes the distinction between "ordinary" (OR) and "anomalously large" (AL) events and the probability of occurrence of the latter. Both AL- and OR- event fluences are non-linear functions of  $Q$  and  $\tau$ .

\*  $Q$  denotes the degree of confidence one wishes to assign to the results, namely that for the specified mission duration the calculated fluences are the smallest values which will not be exceeded by actually encountered intensities.

For these predictions, only high quality comprehensive satellite measurements (not ground observations) are being used, covering almost the entire 20th solar cycle. There have been indications that descriptions of the solar flare environment in interplanetary space (at 1 AU), derived from interpretations and extrapolations of ground based measurements, have not been very accurate.

It should be noted that the statistics cannot predict when an AL event will occur; only the probability that one will occur in a given length of time. And it must be remembered that a single AL event will impart its total fluence within two to four days.

This implies that for unmanned satellites with mission durations of  $\tau \geq 1$  year, OR-event fluences are not significant because probabilistic theory predicts the possible occurrence of at least one AL event, even for the lowest allowable confidence level (Q=80%).

#### 9. ORBITAL FLUX INTEGRATIONS

Orbital flux integrations were performed with the UNIFLUX<sup>10</sup> and the SOFIP<sup>11</sup> systems. UNIFLUX provided L-band distributions and exposure times with B-L bin breakdown, while SOFIP provided the dose and shield data.

#### 10. FLUX DATA: TYPE, QUALITY, AND VARIATIONS

The trapped particle flux data available from the models represent omnidirectional, integral intensities that one would expect to obtain as average values over periods in excess of six months. But over most regions of magnetospheric space ( $L \approx 2$  earth radii), short term excursions can vary from these values by factors of  $10^2$  to  $10^3$ , depending on the particle energies and on the type and intensity of the causative event. These variations do affect the IRAS mission because its trajectory enters regions of space where L is greater than 2 earth radii. Also, trapped particle populations experience changes due to: (a) local time (LT) dependence, and (b) solar cycle dependence. Both are of consequence to IRAS. The former is significant for spacecraft that sample regions of  $L > 5$  earth radii, which are visited by IRAS. To compensate for these variations, the model provides LT-averaged values, which should yield an adequate approximation for missions of long duration ( $\tau \geq 1$  year). The latter has been taken into account by selecting the appropriate (solar max) models.

Solar cycle variations have opposite effects on each particle species:

	<u>Solar Min</u>	<u>Solar Max</u>
Electrons	low	high
Protons	high	low

The solar cycle changes, as derived from a comparison of the corresponding models, are functions of energy  $E$  and magnetic parameter  $L$ . For the inner zone electrons, they may range from a factor of 1 to a factor of 5.

Protons are only affected in the vicinity of the atmospheric cutoff regions. No changes of consequence have been observed in the heart of the proton trapping domain. Proton changes have about the same range as those of the electrons.

Should the IRAS mission duration extend past the maximum phase into the minimum phase of solar activity, new evaluations would have to be performed.

It is necessary to emphasize that the calculations, although based on the best data available for the past epochs, can only serve as approximations for the future.

It also should be noted that a basic uncertainty factor of 2 is attached to the flux values of the AP8 model, while the AE6 is characterized by an average uncertainty factor of 5. No uncertainty factor has yet been defined for the interim AEI7.

## 11. WORST AND BEST CASE CALCULATIONS

So as to provide worst and best case estimates, orbital flux integrations were performed at the three investigated altitude levels for the conditions and with the models indicated below:

Worst: with all uncertainty factors applied and using AEI7-HI

Best: no uncertainty factors applied and using AEI7-LO

Caution: the data given in special processing and analysis products (as for example mappings, comparisons, positional flux plots, etc.) are neither worst nor best case values. For these type of products, routinely no uncertainty factors are applied and the AEI7-HI is normally used.

## 12. DOSE AND SHIELDING EVALUATION

Best and worst case doses were calculated from the total orbit integrated, surface incident, omnidirectional, integral fluences by existing shielding codes,<sup>12</sup> as functions of various aluminum shield thicknesses.

A simple procedure was followed, not involving solid angle sectoring or three-dimensional geometry considerations. Instead, a simple two-dimensional geometry with a cosine law for the incident spectra was considered.

Bremsstrahlung calculations were performed with the same codes.

### 13. RESULTS: PRESENTATION DESCRIPTION

This section describes the form and format in which the results, derived from the Orbital Flux Integration (OFI) process, are presented for practical use. Except where otherwise specified, all particle data in this report relate to integral, omnidirectional fluxes or fluences.

#### A. Tabular Presentations

The outcome of all calculations is summarized in Tables 1 to 36. The tables are arranged in six sets, where every set pertains to one specific type of data. The first two sets have two similar members for every trajectory considered in the study: one for trapped protons and one for electrons, in that order. The last four sets contain only one member for each trajectory. A more detailed description of the tables is provided elsewhere.

Note: sets I, II, III, and IV are double sets composed of best and worst case versions.

##### I. L-band Tabulations: Tables 1-6 (Best), 7-12 (Worst)

Tabulation of total orbit-integrated fluence distributions by L-bands for selected energy thresholds, in units of particles per square centimeter, normalized to 5 MeV and .5 MeV for protons and electrons, respectively.

The tables contain 36 L-bands of equal size covering the range from  $L=1.0$  to  $L > 8.0$  earth radii in constant increments of .2 earth radii.

##### II. Spectral Profiles: Tables 13-15 (Best), 16-18 (Worst)

Tabulation of average orbit-integrated spectral distributions. Composite spectra are given in units of: fluxes per square centimeter per second, fluxes per square centimeter per day, and total fluences per specified mission duration (1 year). For the electrons, the latter are also given in terms of inner and outer zone contributions. Functionally derived differential fluxes are listed in the last columns for both species of particles.

Total orbit-integrated spectra in percent, for energy intervals  $\Delta E$  corresponding to the energy levels of the L-band tables, are also given in terms of average instantaneous and daily intensities.

An exposure index (for the normalization energies used in the L-band tables) is listed for nine successive intensity ranges varying by one order of magnitude, in terms of processed exposure duration (in hours) and total number of particles accumulated while in that intensity range for the indicated number of hours.

### III. Peaks and Totals Per Orbit: Tables 19-21 (Best), 22-24 (Worst)

These tables contain the absolute instantaneous peak fluxes and the total fluences accumulated during each successive revolution, as obtained from the nominal trajectories for the investigated flight duration (24 hours of mission time).

Specifically, there are nine columns on these tables. Column 1 is an orbit counting device, based on:

- a) the orbit period when the trajectory is circular and lies in the equatorial plane;
- b) the physical perigee in all elliptical flight-path cases; and,
- c) the equatorial crossing for circular inclined trajectories.

Column 2 gives the peak flux. Columns 3, 4, and 5 indicate the spacecraft position in geocentric coordinates at which the predicted peak flux was encountered. Columns 6, 7, and 8 determine respectively the relative orbit time and the magnetic B-L coordinates for this event. For the purpose of orbital radiation studies, all simulated trajectories start at  $t_0$ =hours. Finally, the last column indicates the total predicted flux to be encountered during that particular orbit. It is advisable to disregard the last line on this table because many times that orbit (#15) is incomplete and the fluxes or positions shown do not correspond to true peaks.

### IV. Time-Accounting and Exposure-Analysis: Tables 25-27

The "EXPOSURE-ANALYSIS" summary indicates what percent of its total lifetime the satellite spends in "flux-free" regions of space, what percent of its total lifetime it spends in high intensity proton and electron domains, and while so exposed, what percent of its total flux it accumulates.

In the context of this study, the term "flux-free" applies to all regions of space where trapped particle fluxes are less than one proton or electron per square centimeter per second, having energies  $E > 5$  MeV, and  $E > .5$  MeV, respectively. By definition, this includes all regions external to the Van Allen radiation belts.

The concept of "trapped particle fluxes" is meant to include stably trapped, pseudo trapped, and transient fluxes, as long as they are part of or contained in the environment models used and, in the case of transients or pseudos, their sources are considered powerful enough to supply them continuously in substantial numbers.

Similarly, as "high intensity" are defined those regions of space where the instantaneous, integral, omnidirectional, trapped-particle flux is greater than  $10^3$  protons with energies  $E > 5$  MeV, and greater than  $10^5$  electrons with energies  $E > 5$  MeV.

The values given in these tables are statistical averages, obtained over extended intervals of mission time. However, they may vary significantly

from one orbit to the next, when individual revolutions are considered.

The "TIME-ACCOUNT" breakdown shows what percent of its total time the satellite spends in the "inner zone" ( $1.0 \leq L < 2.8$ ) and in the "outer zone" ( $2.8 \leq L \leq 11.0$ ) electron trapping domains, and also the percent of time spent in regions external to the latter ( $L > 11.0$ ).

It should be noted that the confinement of the outer zone within the boundary of the  $L=11.0$  earth radii volume is arbitrary and has no physical meaning. It is intended only as a simplification to facilitate the calculations. The region considered "external" in this study ( $L > 11.0$ ) is still partially a domain of the outer zone, at least as far out as  $L=12.0$  earth radii, according to the current environment models.

A last item on this table: the inner zone time is further subdivided into two parts: the percentage of time spend outside ( $L < 1.1$ ) and inside ( $1.1 \leq L < 2.8$ ) the trapping domain.

#### V. Solar Proton Fluences and Exposure Factor: Tables 28-30

For the specified mission duration  $\tau$  (printed in the sub-title), and dipole cut-off shell ( $L=5$  earth radii, shown in the header), this table lists the solar proton fluence-spectra (in units of particles per square centimeter) at five discrete confidence levels  $Q$  (given at the top of each column).

The exposure factors (in percent of total mission duration) obtained from the geomagnetic shielding analysis are also listed for four dipole cut-off shell values (in earth radii).

#### VI. Total Dose and Components: Tables 31-33 (Best), 34-36 (Worst)

These tables list doses in units of  $\text{rads}_{\text{Al}}$  as a function of aluminum shield thickness, given in three ways: range  $\underline{z}$  in grams per square centimeter, depth  $\underline{t}$  in millimeters, and depth  $\underline{t}$  in mils.

Electron, bremsstrahlung, and proton contributions to the overall sum-total dose are given separately. Electron and proton doses are further broken down into their respective constituents; namely, inner zone and outer zone for the former, trapped and solar flare for the latter.

The specific mission duration for which the doses have been calculated is indicated in the table headline.

Caution: the AL-event solar flare protons are not contributed gradually over the investigated mission duration ( $\tau = 1$  year) but are imparted in toto in a relatively short burst, that is, within approximately 2-4 days per AL event.



## B. Graphical Presentation

Some of the tabulated data are also plotted in Figures 1 to 36, and 43 to 60 with additional Figures 37 to 42 containing plots of flight path data. As with the tables, the computer plots are arranged in six sets, where again each set pertains to one specific type of data. The first three sets have two similar members for each trajectory investigated: one for each particle species. The last three sets contain only one member for every trajectory. However, late in the study, the original single members of the dose-plot set (#VI) were replaced with three graphs each (for respective depth ranges) in order to provide greater resolution at thin shields. The plots are also described and explained in reference 7.

Note: Sets I, II, III, and IV are double sets composed of best and worst case versions.

Finally, Figures 61 to 67 are special graphs relating to flux-free time, to times for which positional fluxes are greater than average fluxes, to trajectory flux profiles through the SAA, and to trajectory dose profiles through the SAA.

### I. Time and Flux Histograms: Figures 1-6 (Best), 7-12 (Worst)

These plots show two curves superimposed on the same graph, namely one each for the variables "time" and "flux". Both are given on a semi-log scale as functions of the parameter L (earth radii), within the range  $1 < L < 10$ , and for constant L-bands of .1 earth radius width. The plots depict:

- a) by a plain curve, the characteristic trajectory intensities as obtained from the orbital integration process in terms of averaged integral particle fluxes above a given energy.
- b) by a contour marked with symbols, the percent total lifetime (%T) spent in each L interval.

The logarithmic ordinate relates to the time-flux variables. The printed numbers are powers of 10 and pertain to the fluxes; the scale values for the time curves are given in the upper part of the ordinate label: from  $10^{-3}$  to  $10^2$  percent of T, the type of particles, their integral energy, and the units, are all given in the lower part of the label. The label on the top of the graph identifies the trajectory.

### II. Spectral Profiles: Figures 13-18 (Best), 19-24 (Worst)

A graphical presentation of the final composite spectral distribution, obtained from the orbital integration process. The plots are semi-log graphs, where the abscissa is a linear energy scale for integral particle energies E, in MeV, and the ordinate is a logarithmic scale for the fluxes, given in daily averages for energies greater than E; the printed scale values are powers of 10.

### III. Peaks Per Orbit: Figures 25-30 (Best), 31-36 (Worst)

Here the absolute peak intensities, encountered per period (1 period = 1 revolution = 1 orbit), are plotted for the duration of the flight-time processed in the analysis. The logarithmic ordinate, with scale values in powers of 10, relates to instantaneous particle fluxes of the environment at the indicated energy thresholds, while the abscissa is a linear orbit enumeration.

### IV. Trajectory World Map Projections: Figures 37-39

These graphs depict the surface trace of the geocentrically projected sub-satellite positions. The trajectories are plotted for several revolutions on a global map produced by a Miller Cylindrical Projection method. The contours of the continents have been omitted for clarity. The positions of equatorial crossing, of physical perigee, or of period commencement are indicated by numbers identifying the orbits shown in the graphs. For all trajectories, the distance between successive sequential numbers is a measure of the orbit precession.

### V. Flight Path Tracing in B-L Space: Figures 40-42

Plots showing trajectory traces in B-L space on a semi-log scale. Several orbits are depicted, each identified by its sequential number. The magnetic equator is entered on all plots. The logarithmic ordinate relates to the field strength B in gauss; the printed values are exponents of 10. L is given in earth radii on the linear abscissa.

### VI. Dose-Depth Curves: Figures 43-51 (Best), 52-60 (Worst)

Plots of final depth-dose values for the indicated mission duration. Normally, these plots show composite curves for bremsstrahlung, combined electrons (inner and outer zone), combined protons (trapped and solar flare), and sumtotal of all contributions. In the present case, the respective contours consist of inner and outer zone electrons separately and of trapped and solar flare protons, separately, of composite bremsstrahlung, and the sum-total.

For ease of use and in order to provide a greater resolution at the more sensitive range of depths, namely the thinner shields, three plots have been generated per processed altitude level (h=600, 900, 1200 km), for shield-ranges and subdivisions increasing by one order of magnitude.

The logarithmic ordinate, with scale values in powers of 10, relates to aluminum dose in units of rads. The linear abscissa is the shield thickness, given in three different units: range  $z$  in grams per square centimeter, depth  $t$  in millimeters, depth  $t$  in mils.

### VII. Flux-Free Time and Electron Trapping Zone Exposure: Figure 61

Graph indicating the "Total Flux-Free Time in Percent of Mission Duration" for electrons and protons, and the "Percent of Mission Duration in Electron

Trapping Zones", both as a function of altitude.

#### VIII. Duration of Exposure-Severity: Figures 62-63

These graphs show, separately for electrons and protons, in percent of total mission duration vs energy, the intervals of time for which the positional instantaneous fluxes were greater than the orbit-integrated average instantaneous fluxes, by a factor of  $m$ . Curves for several values of integer multiples of  $m$  are plotted.

#### IX. Positional Flux Plot: Figures 64-65

Plots of positional instantaneous electron and proton fluxes versus time, for the most severe satellite pass through the SAA. Curves are given for several electron and proton threshold energies. The logarithmic ordinate relates to fluxes in units of particles per square centimeter per second while the linear abscissa indicates relative time in minutes.

The electron display was extended beyond the actual SAA pass, so as to provide coverage over one complete revolution ( $\sim 103$  min), in order to show the high latitude protrusions of the environment, the so-called "horns". The salient features are identified as to source, and approximate polar and equatorial regions are so labeled.

#### X. Positional Dose Plot: Figure 66

An arrangement similar to that of IX above, only here the curves relate to total dose (composite of all electron, trapped proton, and bremsstrahlung contributions), in units of rads-aluminum, given for different shield thicknesses of  $z$ , in grams per square centimeter

#### C. Geographic Mapping

Maps of instantaneous, positional, integral fluxes, or of positional to average flux ratios, are tables containing 168 latitude rows, covering the entire planned latitude range ( $81^\circ \text{ N} > \theta > 86^\circ \text{ S}$ ) in increments of  $\Delta\theta = 1^\circ$ , and 15 longitude columns, corresponding to a longitude-range-per-table of  $45^\circ$  in increments of  $\Delta\phi = 3^\circ$ . Full azimuthal coverage is thereby achieved with eight two-page tables, comprising one set.

For each selected energy threshold of each particle species (nine electrons and nine protons for Spatial Flux Maps, seven electrons and seven protons for Global Comparison Maps) one such set of eight tables was generated at the 900 km altitude level. Thus, a total of 32 two-page sets of mapping tables was produced.

Every set initially contained its eight member-tables. However, for reasons of bulk reduction and printing economy, empty members were deleted from this report.

### I. Spatial Flux Maps: Tables M1-M123

The data in these tables represent instantaneous, integral, omnidirectional, trapped particle fluxes, as yielded by the respective environment models for the indicated positions, in units of particles per square centimeter per second. The number "one" (1) was used to denote positions where no fluxes are predicted.

### II. Global Comparison Maps: M124-M213

For the particular energies indicated, these tables outline the regions of space at the 900 kilometer altitude level, where the positional instantaneous fluxes are greater than the orbit integrated (or total) average instantaneous fluxes. It should be remembered that for the electrons the "total" averages are composite values, containing contributions from the inner and the outer zone visitations. It is not practical to compute "partial" averages, separately for the inner and the outer zones, neither would a comparison by zones be meaningful.

The dimensionless, truncated, integer part  $\underline{n}$  of the ratios:

$$F_I/F_A = n.xxx$$

is printed in the tables according to the formula:

$$n \leq F_I/F_A < n + 1$$

where  $F_I$  is the positional instantaneous flux and  $F_A$  is the average instantaneous flux, both in units of particles per square centimeter per second.

The symbol "0" (zero) serves a dual purpose in this mapping: it is used for places where no instantaneous fluxes occur, as well as for fractional ratios of value less than one.

## 14. RESULTS: ANALYSIS AND DISCUSSION

In this section, some of the presented tabular or graphical study-results are discussed, with occasional comments as to their use, limits, and applications.

### A. Spectral Profiles

Characteristic features of the near earth radiation environment are strong altitude and inclination dependencies. Here the presented external (surface incident) average daily intensities display only the former, which in the investigated altitude regime are most pronounced for the protons. However, as only one inclination was considered in this study, the data do not reflect the important effect of the latter. It should be noted that at high inclination values ( $30^\circ < i < 90^\circ$ ) small changes in either

direction up or down, will not produce significant changes in flux levels and spectral distributions. The greatest inclination dependent variations occur in the range  $0^\circ \lesssim i \lesssim 30^\circ$ .

I. Protons: The protons exhibit relatively hard, almost uniform spectra. Average orbit-integrated intensities rise significantly with altitude. Over the energy range from  $E > 30$  MeV to  $E > 500$  MeV, the particle distribution per altitude for the "best" case prediction could well be expressed in an exponential form:

$$F = F_0 \exp \left( \frac{50-E}{E_0} \right)$$

where  $F$  is the integral flux in units of particles per square centimeter per day, and  $E$  is the energy in MeV.  $F_0$  and  $E_0$  (in the same units as  $F$  and  $E$ ) are given below for the three altitudes:

Altitude	$F_0$	$E_0$
600	$2.585 \times 10^6$	99.21
900	$1.224 \times 10^7$	105.88
1200	$3.509 \times 10^7$	105.61

This representation is clearly favored by the data: it holds over the indicated energy range with a maximum deviation of less than 5%. The evaluation was performed for the best-case values. In order to obtain the worst-case counter parts, just multiply  $F_0$  by a factor of x2.

II. Electrons: The electrons show complex variable spectra. Average, orbit-integrated, composite (inner zone and outer zone) intensities rise non-uniformly with altitude, particularly at energies above 3.75 MeV with differences reaching up to several orders of magnitude at  $E > 6$  MeV. Spectra extend to higher energies as height increases.

These composite electron distributions cannot be represented by either exponential or power law forms. The inner zone spectra fall rapidly off to zero flux in the energy range from 4 to 5 MeV and they are therefore more benign than their harder outer-zone counterparts, which extend to energies of about 7 MeV.

#### B. Peaks Per Orbit

The absolute peaks per revolution have been obtained for standard processing energies:  $E > 5$  MeV for protons and  $E > .5$  MeV for electrons. Other energy selections produce different peak curves in an inverse relationship: lower energies yield higher and more expanded contours, and vice versa.

Peak contours of inclined circular trajectories display amplitude variations and/or discontinuities (flux-free time) that follow periodic patterns based on the daily cycle of revolutions. For fixed energies, amplitudes and discontinuities are function of: (a) inclination  $i$ , and (b) altitude  $h$ .

Variations in either  $i$  or  $h$  may produce significant changes in the amplitude of the peak curves and in the duration of the discontinuities: up to several orders of magnitude for the former, and completely eliminating the latter.

For the investigated trajectories at the given, fixed, inclination ( $i=99^\circ$ ), the following observations can be made for the "best-case" data:

- a) protons: the about three (3) flux-free orbits per day, afforded the 600 kilometer altitude level, completely disappear at 900 km and above. The maxima of the peak contours rise gradually by about one order of magnitude from 600 to 1200 km. The minima (or troughs) rise rapidly over the same altitude range, by about three orders of magnitude. The two extrema are always several orders of magnitude apart;
- b) electrons: for these particles, the peak contours display only small and gradual changes: a slight rise in all contour features per altitude level. In antithesis to the proton peaks, the electron extrema lie close together: they are at most a factor of 5 apart. Also, the electron peaks start in the fifth order of magnitude range, even for the lowest altitude of 600 km.

Peak contours for the "worst-case" data are very similar in patterns and shape for both species of particles, except for the 1200 km electrons. These latter appear substantially different because of the greater contributions from the outer zone model AE17-HI and/or the lesser in extent but higher in intensity contributions from the inner zone model AE6, whose data has been multiplied by an average uncertainty factor of 5.

### C. Flux-Free Time

Some comments on this topic have been provided in the previous section and in section 13/IV. Here a more detailed discussion will be given.

Flux-free time (FFT) intervals are an important feature of certain orbital configurations. They may occur over short orbit segments (partial FFT per period) or over the entire length of a revolution (total FFT per period). In terms of geomagnetic geometry, the FFT's establish the duration for which the trajectory lies outside the trapping domain of the corresponding particle species, evaluated at the given energies. Or conversely, they are a measure of the degree to which the trajectory is exposed to the charged particle trapping domains.

As indicated in the preceding section (14/B), one manifestation of extended FFT occurrence is the sharp drop-off of the proton peak contours (Figures 25, 31) to the zero-flux levels. In the case of that particular trajectory, this happens for several orbits in the investigated study-duration of 24 hours. That is, for the entire length of the respective revolutions, no Van Allen belt radiation at all is to be encountered by the satellite, according to model predictions.

The number of consecutive flux-free orbits of circular trajectories is primarily a function of altitude and inclination and to a lesser degree

a function of particle energy. Of the investigated IRAS flight paths, and for the selected energies (electrons:  $E > .5$  MeV, protons:  $E > 5$  MeV), only the 600 kilometer altitude level yields about 3 completely flux-free revolutions per day, and for protons only. The total FFT, however, which includes contributions from partially exposed revolutions (see "Exposure Analysis," Tables #25, 26, and 27; also Figure 61) in percent of total mission duration can be summarized as follows:

<u>Altitude</u> (km)	<u>Protons</u> ( $E > 5$ MeV)	<u>Electrons</u> ( $E > .5$ MeV)
600	91%	63%
900	83%	54%
1200	68%	34%

Higher energies will yield longer FFT's because the more energetic particles occupy a smaller volume of space. As to "worst" and "best" cases, there is no substantial difference in the corresponding FFT.

#### D. Dose and Shielding

The calculated doses display features characteristic of the near earth radiation environment: at medium-to-high shield thicknesses, small contributions from relatively benign and low intensity electron spectra combined with major contributions from comparatively hard and intense proton spectra; at thin shield thicknesses the electrons predominate.

The proton doses prevail for all shield thicknesses greater than about 100-150 mils of aluminum; this is in the range of about 2 to 3 times the average satellite skin thicknesses (most common range: about 30-70 mils).

Significant is the fact that the proton dose is only a weak function of shield thickness, as it shows very little attenuation over the evaluated depth range. Thus, in order to get an appreciable reduction in the dose, say by one order of magnitude, a 20-fold increase in shield thickness over an average satellite skin is necessary. The same is true for the bremsstrahlung dose. However, in comparison to the proton contributions, the bremsstrahlung dose is so small (about 1-2 orders of magnitude lower) that it may be disregarded.

#### I. Decay and Degradation

The total annual doses obtained for each of the three investigated trajectories are comfortably low. In terms of electronics decay or materials degradation, the doses to be experienced at the 900 km altitude level inside the satellite, that is, behind a skin of about 4.5 mils of equivalent aluminum, are not severe even for the most sensitive components or equipment: about 5000 rads per year for the "best"-case evaluation and about 8000 rads per year for the "worst".

## II. Contamination and Interference

The above statements do not imply that the direct or indirect effects of the radiation environment may not be a nuisance in terms of instrument interference or measurement contamination. If such is the case, some remedies may be available. In this context see also reference 10 (IUE study report).

## III. Possible Improvements

In the event that the magnitude of total dose or degree of radiation penetration behind the skin of the satellite is of importance to the IRAS mission, four possibilities exist to reduce the radiation effects on instrument and components:

- a) build or design an instrument less sensitive to radiation and construct the on-board and/or on-ground data processing software to remove or suppress radiation-induced noise
- b) change the orbit by any combination of the elements eccentricity, altitude, and inclination so as to achieve a more benign environment
- c) change the mission epoch: solar max for reduced proton intensities, solar min for reduced electron intensities
- d) provide increased shielding either by geometry or by weight or by a combination of both;

by geometry: perform a 3-D analysis (solid angle sectoring) and rearrange other equipment on board the satellite in order to provide maximum protection to sensitive part over greatest possible fraction of solid angle.

by weight: place additional shields around sensitive part as needed.

Clearly, options (a), (b), and (d) are viable for IRAS.

## E. Instantaneous Exposure Severity

The evaluation of the nominal IRAS flight-path ( $h=900$  km) is given in Figures 62 and 63, for protons and electrons respectively. The graphs are self explanatory. Of interest may be the fact that the instantaneous electron exposures exceed the orbit-integrated average values for much longer relative durations than is the case with the protons.

## F. Spatially Mapped Fluxes

The listed instantaneous positional intensities are in units of particles per square centimeter per second. The data are printed unaltered, as they are obtained from the models.

An inspection of these tables reveals an unusual feature which is most pronounced at the lower altitudes and for the more energetic particles; namely, regions of higher intensities that appear to the north of the South Atlantic Anomaly. At 900 kilometers these secondary electron peaks are less pronounced and are merged with the main body of the data, that



is, they are connected as is the case with the proton maps. These peak regions seem to be promontories or protrusions and resemble high energy "streamers". Whether they are artifices of the modelling process or whether they represent real "physical" features of the environment has not been determined. An interesting feature of the low energy proton maps ( $E > .04, .5, > 1$  MeV) are the well known from the electrons high latitude "horns". These appear to follow the same pattern as for the electrons, indicating a kind of "outer zone" structure for these particles.

#### G. Positional Fluxes Through SAA

Protons: if low energy fluxes had been plotted, the corresponding high latitude "horns", discussed in the previous section (14/F), would have appeared on Figure 64.

Electrons: in Figure 66 note absence of the  $E > 5$  MeV contour in the SAA: data derives from the inner zone, which does not contain particles in the energy range 5-7 MeV. In contrast, these energetic electrons are abundantly present in the outer zone, whose contribution is shown in the "horns".

#### H. Positional Doses Through SAA

The high dose values in the SAA for the thick shields ( $z=5\text{gm/cm}^2$ ) are primarily due to the substantial trapped proton contributions. The doses at the thinner shields, in the SAA and the "horns", are mostly due to electrons.

#### I. Related Projects

Some of the radiation induced concerns and problems pertaining to the IRAS mission, are also shared by other projects, not unlike the IRAS in many respects of experiment hardware (with many similar operational requirements and instrument sensitivities), as for example:

- the International Ultraviolet Explorer (IUE),
- the Space Telescope (ST),
- the High Energy Astronomy Observatory (HEAO), and
- the Solar Maximum Mission (SMM).

They all have related concerns about instrument performance (interference from radiation environment: contamination from primary and secondary radiation effects) and they have parallel equipment hardware considerations.

It should be noted, that IUE has a singularly different trajectory. Its orbit is eccentric (perigee  $\sim 25000$  km, apogee  $\sim 46000$  km), inclined ( $i = 29^\circ$ ), and synchronous (period = 24 hours).

For all of the above listed projects, radiation studies have either been performed already or are now in progress. Specifically:

I. IUE: Study concluded, report issued.<sup>13</sup> Evaluation included (a) analysis of the space radiation environment and its effects on instruments and cameras, (b) determination of radiation-induced background current in the spectrograph cameras,<sup>14</sup> (c) performance of irradiated optical and electronic components used in astronomical satellites,<sup>15</sup> and (d) semiconductor device degradation.<sup>16</sup> Also considered were experimentally established data for ultraviolet transmittance of optical materials.<sup>14, 15, 17</sup>

II. ST: Study concluded, report published.<sup>18</sup>

III. HEAO: Initial study performed, report issued.<sup>19</sup> Evaluation included orbital flux integrations and geographic flux mapping only. Part of the data (trapped protons) obsolete. Work in progress on comprehensive, updated analysis.

IV. SMM: Study in progress, report to be issued in early 1979.

## References

1. Stassinopoulos, E. G., K. A. Maale, and J. J. Hebert, "Trajectory Computations with the NSSDC Version of GEODYN and BLCONV Programs", NSSDC 73-15, National Space Science Data Center, Greenbelt, Maryland, December 1973.
2. Hassit, A., and C. C. McIlwain, "Computer Programs for the Computation of B and L (May 1966)", Data User's Note NSSDC 67-27, National Space Science Data Center, Greenbelt, Maryland, March 1967.
3. Stassinopoulos, E. G., and G. D. Mead, "ALLMAG, GDALMG, LINTRA: Computer Programs for Geomagnetic Field and Field-Line Calculations", NSSDC 72-12, National Space Science Data Center, Greenbelt, Maryland, February 1972.
4. Barraclough, D. R., T. M. Harwood, B. R. Leaton and S. R. C. Malin, "A Model of the Geomagnetic Field at Epoch 1975", Geophys. T. Roy. Ask. Soc. 43, 645-659, 1975.
5. Teague, M. J., K. W. Chan, and J. I. Vette, "AE6: A Model Environment for Trapped Electrons for Solar Maximum", NSSDC/WDC-A-R&S 76-04, National Space Science Data Center, Greenbelt, Maryland, March 1976.
6. Hills, H. K., Chan, K. W., Teague, M. J., and J. I. Vette, to be published, 1979.
7. Sawyer, D. M., and J. I. Vette, "AP8 Trapped Proton Environment for Solar Maximum and Solar Minimum", NSSDC 76-06, National Space Data Center, Greenbelt, Maryland, December 1976.
8. King, J. H., "Solar Proton Fluences for 1977-1983 Space Missions", J. Spacecraft and Rockets, 11: 401-408, 1974.
9. Stassinopoulos, E. G., "SOLPRO: A Computer Code to Calculate Probabilistic Energetic Solar Proton Fluences", NSSDC 75-11, National Space Science Data Center, Greenbelt, Maryland, April 1975.
10. Stassinopoulos, E. G., and C. Z. Gregory, "UNIFLUX: A Unified Orbital Flux Integration and Analysis System", to be published in 1979.
11. Stassinopoulos, E. G., J. J. Hebert, and E. L. Butler, "SOFIP: A Short Orbital Flux Integration Program", NASA-GSFC Report X-601-77-114, May 1977.
12. Watts, J. W., and M. O. Burrell, "Electron and Bremsstrahlung Penetration and Dose Calculation", NASA TN D-6385, June 1971.

References Continued

13. Stassinopoulos, E. G., and J. I. Vette, "Evaluation of the IUE Radiation Environment", NASA-GSFC Report X-601-78-6, January 1978.
14. Coleman, C. I., University College London, England, Report to Distribution: "In-Orbit Radiation-Induced Background in the IUE Spectrograph Cameras", August 16, 1977.
15. Becher, Jacob, C. S. Reft, R. L. Keruell, "Radiation Studies of Optical and Electronic Components Used in Astronomical Satellite Studies", Old Dominion University Research Foundation, Technical Report PGSTR-PH77-55, May 1977.
16. Stassinopoulos, E. G., V. Danchenko, R. A. Cliff, M. Sing, G. J. Brucker, R. S. Ohanian, "Prediction and Measurement Results of Radiation Damage to CMOS Devices on Board Spacecraft", IEEE Transactions on Nuclear Science, Vol. NS-24, No. 6, December 1977.
17. Heath, D. F., and P. A. Sacher, "Effects of a Simulated High-Energy Space Environment on the Ultraviolet Transmittance of Optical Materials Between 1050 Å and 3000 Å", Applied Optics, Vol. 5, No. 6, June 1966.
18. Stassinopoulos, E. G., "The ST Environment: Expected Charged Particle Radiation Levels", NASA-GSFC Report X-601-78-30, October 1978.
19. Stassinopoulos, E. G., "Expected Radiation Exposure of HEAO Missions", NASA-GSFC Report X-601-76-233, October 1976.

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 \*\* ORBITAL FLUX STUDY WITH COMPOSITE PARTICLE ENVIRONMENTS: VETTES AP8, AE6, AE17 FOR SOLAR MAXIMUM \*\*\* UNIFLUX OF 1970 \*\*  
 \*\* UNCERTAINTY FACTORS (UF) APPLIED FOR THIS RUN ARE: FOR PROTONS (AP8) - UF= 1.0; FOR INNER ZONE ELECTRONS (AE6) - UF= 1.0 \*\*  
 \*\* MAGNETIC COORDINATES B AND L COMPUTED BY INVAFA OF 1972 WITH ALLMAG, MODEL S: BARRACLOUGH ET. AL. 168-TERM 1975 \* TIME= 1980.0 \*\*  
 \*\* VEHICLE : IRAS 600 KM \*\* INCLINATION= 80DEG \*\* PERIGEE= 600KM \*\* APOGEE= 600KM \*\* B7L CURET TAPE: TL5362 \*\* PERIOD= 1.011 \*\*  
 \*\*\*\*\*  
 \*\* SPECTRAL DISTRIBUTION : NORMALIZED BY FLUX OF ENERGY GREATER THAN 5.000MEV \*\*  
 \*\*\*\*\*

ENERGY LEVELS >(MEV)	L - BANDS (MAGNETIC SHELL PARAMETER IN EARTH RADII) L - BANDS											
	*1.0-1.2*	*1.2-1.4*	*1.4-1.6*	*1.6-1.8*	*1.8-2.0*	*2.0-2.2*	*2.2-2.4*	*2.4-2.6*	*2.6-2.8*	*2.8-3.0*	*3.0-3.2*	*3.2-3.4*
.1000	1.07E 00	1.09E 00	1.14E 00	1.40E 00	2.78E 00	1.13E 01	2.53E 01	1.55E 02	7.59E 02	3.64E 03	6.00E 02	8.73E 04
2.000	1.02E 00	1.03E 00	1.07E 00	1.22E 00	1.76E 00	2.88E 00	3.63E 00	6.34E 00	1.15E 01	1.77E 01	3.30E 00	5.30E 01
5.000	1.00E 00	1.00E 00	1.00E 00	1.00E 00	1.00E 00	1.00E 00	1.00E 00	1.00E 00	1.00E 00	1.00E 00	0.0	1.00E 00
8.000	9.79E-01	9.63E-01	9.32E-01	8.44E-01	6.49E-01	4.28E-01	3.81E-01	2.55E-01	2.00E-01	1.49E-01	0.0	0.0
10.00	9.66E-01	9.38E-01	8.91E-01	7.60E-01	5.07E-01	2.61E-01	2.23E-01	1.61E-01	5.03E-02	5.75E-02	0.0	0.0
25.00	8.94E-01	8.25E-01	7.24E-01	5.18E-01	2.02E-01	3.77E-02	2.54E-02	1.22E-02	0.0	0.0	0.0	0.0
50.00	7.77E-01	6.82E-01	5.64E-01	3.55E-01	8.42E-02	6.50E-03	3.31E-03	0.0	0.0	0.0	0.0	0.0
100.0	5.61E-01	4.64E-01	3.23E-01	1.50E-01	1.77E-02	4.02E-04	0.0	0.0	0.0	0.0	0.0	0.0
500.0	1.83E-02	1.04E-02	2.37E-03	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NORM FLUX	3.92E 05	1.80E 05	1.26E 05	8.06E 05	6.09E 05	3.63E 05	2.26E 05	6.20E 04	2.68E 04	8.27E 03	0.0	6.62E 03

ENERGY LEVELS >(MEV)	L - BANDS (MAGNETIC SHELL PARAMETER IN EARTH RADII) L - BANDS											
	*3.4-3.6*	*3.6-3.8*	*3.8-4.0*	*4.0-4.2*	*4.2-4.4*	*4.4-4.6*	*4.6-4.8*	*4.8-5.0*	*5.0-5.2*	*5.2-5.4*	*5.4-5.6*	*5.6-5.8*
.1000	2.32E 05	0.0	3.68E 03	9.13E 04	3.41E 02	1.69E 04	2.70E 04	6.76E 03	7.81E 04	2.30E 03	1.72E 02	3.51E 01
2.000	1.14E 02	0.0	5.09E 00	1.26E 01	0.0	1.01E 00	0.0	0.0	0.0	0.0	0.0	0.0
5.000	1.00E 00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
8.000	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
10.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
25.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
50.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
100.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
500.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NORM FLUX	4.67E 02	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

ENERGY LEVELS >(MEV)	L - BANDS (MAGNETIC SHELL PARAMETER IN EARTH RADII) L - BANDS											
	*5.8-6.0*	*6.0-6.2*	*6.2-6.4*	*6.4-6.6*	*6.6-6.8*	*6.8-7.0*	*7.0-7.2*	*7.2-7.4*	*7.4-7.6*	*7.6-7.8*	*7.8-8.0*	*8.0-8.2*
.1000	7.04E 02	1.03E 02	1.21E 02	6.20E 00	1.92E 02	4.93E 00	0.0	0.0	0.0	0.0	0.0	0.0
2.000	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5.000	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
8.000	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
10.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
25.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
50.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
100.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
500.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NORM FLUX	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

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 OF POOR QUALITY

Table 1

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 \*\* ORBITAL FLUX STUDY WITH COMPOSITE PARTICLE ENVIRONMENTS: VETTES AP8; AE6, AE17 FOR SOLAR MAXIMUM \*\*\* UNIFLUX OF 1979 \*\*  
 \*\* UNCERTAINTY FACTORS (UF) APPLIED FOR THIS RUN ARE: FOR PROTONS (AP8) - UF= 1.0; FOR INNER ZONE ELECTRONS (AE6) - UF= 1.0 \*\*  
 \*\* MAGNETIC COORDINATES B AND L COMPUTED BY JAVARA OF 1973 WITH ALLMAG, MODEL 6; BARRACLOUGH ET. AL. 168-TERM 1975 \* TIME= 1000.0 \*\*  
 \*\* VEHICLE : IRAS 600 KM \*\* INCLINATION= 80CEG \*\* PERIGEE= 600KM \*\* APOGEE= 600KM \*\* B/L ORBIT TAPE: TC5362 \*\* PERIOD= 1611 \*\*  
 \*\*\*\*\*  
 \*\* SPECTRAL DISTRIBUTION : NORMALIZED BY FLUX OF ENERGY GREATER THAN .5000MEV \*\*  
 \*\*\*\*\*

ENERGY LEVELS >(MEV)	L BANDS (MAGNETIC SHELL PARAMETER IN EARTH RADII) L BANDS											
	*1.0-1.2*	*1.2-1.4*	*1.4-1.6*	*1.6-1.8*	*1.8-2.0*	*2.0-2.2*	*2.2-2.4*	*2.4-2.6*	*2.6-2.8*	*2.8-3.0*	*3.0-3.2*	*3.2-3.4*
.1000	2.18E 01	3.62E C1	4.43E 01	5.87E 01	7.21E 01	1.50E 02	1.89E 02	5.19E 01	1.23E 01	6.77E 00	6.06E 00	5.90E 00
.5000	1.00E 00	1.00E 00	1.00E 00	1.00E 00	1.00E 00	1.00E 00	1.00E 00	1.00E 00	1.00E 00	1.00E 00	1.00E 00	1.00E 00
1.000	1.09E-01	1.35E-C1	1.58E-01	6.51E-02	1.54E-02	1.03E-02	1.08E-02	2.40E-02	6.36E-02	3.38E-01	3.77E-01	4.55E-01
1.500	3.85E-C2	4.65E-C2	6.42E-02	2.35E-02	3.89E-C3	1.57E-03	1.55E-03	4.44E-03	2.69E-02	1.77E-01	1.93E-01	2.33E-01
2.000	2.17E-02	2.05E-C2	2.95E-02	9.26E-03	8.75E-04	3.51E-04	2.63E-04	8.13E-04	5.17E-03	5.25E-02	9.83E-02	1.20E-01
3.000	4.59E-C3	1.57E-C3	2.00E-C3	4.71E-04	3.13E-C5	0.0	0.0	0.0	0.0	3.35E-02	3.88E-02	4.66E-02
4.000	0.0	1.30E-C5	1.29E-C5	2.20E-06	0.0	0.0	0.0	0.0	0.0	9.51E-03	8.52E-03	9.05E-03
5.000	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.51E-04	3.74E-04	4.82E-04
6.000	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NORMFLUX=	1.34E 06	5.57E 07	8.53E 07	6.78E 07	3.57E 07	4.67E 06	2.75E 06	6.62E 05	3.50E 05	3.36E 06	2.97E 07	1.07E 08

ENERGY LEVELS >(MEV)	L BANDS (MAGNETIC SHELL PARAMETER IN EARTH RADII) L BANDS											
	*3.4-3.6*	*3.6-3.8*	*3.8-4.0*	*4.0-4.2*	*4.2-4.4*	*4.4-4.6*	*4.6-4.8*	*4.8-5.0*	*5.0-5.2*	*5.2-5.4*	*5.4-5.6*	*5.6-5.8*
.1000	6.34E 00	6.00E 00	4.64E 00	3.87E 00	3.51E 00	3.31E 00	3.43E 00	3.67E 00	3.60E 00	3.64E 00	3.92E 00	3.64E 00
.5000	1.00E 00	1.00E 00	1.00E 00	1.00E 00	1.00E 00	1.00E 00	1.00E 00	1.00E 00	1.00E 00	1.00E 00	1.00E 00	1.00E 00
1.000	4.88E-C1	5.27E-C1	5.21E-01	4.96E-01	4.90E-01	4.79E-01	4.64E-01	4.44E-01	4.07E-01	3.61E-01	3.14E-01	2.92E-01
1.500	2.46E-01	2.50E-C1	2.29E-01	2.05E-01	1.90E-01	1.75E-01	1.68E-01	1.55E-C1	1.44E-01	1.26E-01	1.06E-01	9.40E-02
2.000	1.24E-01	1.19E-01	1.00E-01	8.43E-02	7.36E-02	6.38E-02	6.09E-02	5.76E-02	5.12E-02	4.40E-02	3.60E-02	3.03E-02
3.000	4.83E-02	4.67E-C2	3.80E-02	3.04E-02	2.36E-02	1.80E-02	1.54E-02	1.22E-02	9.73E-03	7.46E-03	5.24E-03	3.65E-03
4.000	8.81E-03	8.13E-C3	6.48E-03	5.20E-03	4.44E-03	3.63E-03	3.36E-03	3.01E-03	2.62E-03	2.24E-03	1.73E-03	1.21E-03
5.000	4.77E-C4	4.61E-C4	3.82E-04	3.14E-04	2.81E-04	2.28E-04	2.11E-04	1.87E-04	1.57E-04	1.30E-04	9.39E-05	6.32E-05
6.000	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NORMFLUX=	1.51E 08	1.22E 08	1.92E 08	1.11E 08	7.55E 07	2.20E 08	1.61E 08	8.55E 07	5.74E 07	3.50E 07	4.67E 07	3.52E 07

ENERGY LEVELS >(MEV)	L BANDS (MAGNETIC SHELL PARAMETER IN EARTH RADII) L BANDS											
	*5.8-6.0*	*6.0-6.2*	*6.2-6.4*	*6.4-6.6*	*6.6-6.8*	*6.8-7.0*	*7.0-7.2*	*7.2-7.4*	*7.4-7.6*	*7.6-7.8*	*7.8-8.0*	*8.0-OVR*
.1000	3.95E 00	4.42E 00	5.06E 00	6.45E 00	7.12E 00	7.55E 00	9.26E 00	1.25E 01	1.65E 01	2.05E 01	3.33E 01	6.44E 01
.5000	1.00E 00	1.00E 00	1.00E 00	1.00E 00	1.00E 00	1.00E 00	1.00E 00	1.00E 00	1.00E 00	1.00E 00	1.00E 00	1.00E 00
1.000	2.81E-C1	2.59E-C1	2.41E-01	2.16E-01	1.96E-01	1.83E-01	1.60E-01	1.44E-01	1.33E-01	1.17E-01	8.93E-02	6.27E-02
1.500	8.82E-02	7.52E-C2	6.49E-02	5.18E-02	4.45E-02	3.99E-02	3.25E-02	2.66E-02	2.36E-02	2.06E-02	1.60E-02	8.74E-03
2.000	2.77E-02	2.19E-02	1.75E-02	1.24E-02	1.01E-02	8.72E-03	6.60E-03	4.54E-03	4.17E-03	3.60E-03	2.87E-03	1.44E-03
3.000	3.05E-C3	2.10E-C3	1.52E-03	9.72E-04	6.52E-04	4.76E-04	2.68E-04	1.05E-C4	0.0	0.0	0.0	0.0
4.000	1.02E-C3	6.81E-C4	4.75E-04	2.94E-04	1.66E-C4	9.26E-C5	0.0	0.0	0.0	0.0	0.0	0.0
5.000	5.30E-C5	2.24E-C5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
6.000	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NORMFLUX=	4.82E 07	2.50E 07	1.15E 07	4.21E 06	2.13E 07	7.01E 06	5.79E 06	2.75E 06	6.54E 05	4.27E 05	8.99E 05	7.79E 05

Table 2

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 \*\* ORBITAL FLUX STUDY WITH COMPOSITE PARTICLE ENVIRONMENTS: VETTES AP8; AE6, AE17 FOR SOLAR MAXIMUM \*\*\* UNIFLUX OF 1975 \*\*  
 \*\* UNCERTAINTY FACTORS (UF) APPLIED FOR THIS RUN ARE: FOR PROTONS (AP8) - UF= 1.0; FOR INNER ZONE ELECTRONS (AE6) - UF= 1.0 \*\*  
 \*\* MAGNETIC COORDINATES B AND L COMPUTED BY INVARA OF 1972 WITH ALL MAG. MODEL 23; BARRACLOUGH ET AL. 168-TERM 1975 \* TIME= 1980.0 \*\*  
 \*\* VEHICLE : IRAS 900 KM \*\* INCLINATION= 99DEG \*\* PERIGEE= 900KM \*\* APOGEE= 900KM \*\* B/L ORBIT TAPE: YD5376 \*\* PERIOD= 1.716 \*\*  
 \*\*\*\*\*  
 \*\*\*\*\* PROTONS \*\*\*\*\*  
 \*\* SPECTRAL DISTRIBUTION : NORMALIZED BY FLUX OF ENERGY GREATER THAN 5.000MEV \*\*  
 \*\*\*\*\*

ENERGY LEVELS (MEV)	L - BANDS (MAGNETIC SHELL PARAMETER IN EARTH RADI)											L - BANDS		
	*1.0-1.2*	*1.2-1.4*	*1.4-1.6*	*1.6-1.8*	*1.8-2.0*	*2.0-2.2*	*2.2-2.4*	*2.4-2.6*	*2.6-2.8*	*2.8-3.0*	*3.0-3.2*	*3.2-3.4*		
1.000	1.76E 03	1.10E 00	1.19E 00	1.62E 00	3.54E 00	9.18E 00	2.86E 01	1.07E 02	6.14E 02	3.03E 03	1.76E 04	7.57E 04		
2.000	1.22E 00	1.04E 00	1.11E 00	1.37E 00	2.11E 00	3.02E 00	4.20E 00	6.79E 00	1.24E 01	1.66E 01	3.06E 01	4.58E 01		
5.000	1.00E 00	1.00E 00	1.00E 00	1.00E 00	1.00E 00	1.00E 00	1.00E 00	1.00E 00	1.00E 00	1.00E 00	1.00E 00	1.00E 00		
8.000	9.80E-01	9.53E-01	8.92E-01	7.25E-01	5.55E-01	4.28E-01	3.40E-01	2.78E-01	1.88E-01	1.49E-01	5.11E-02	0.0		
10.00	9.66E-01	9.22E-01	8.25E-01	5.85E-01	3.94E-01	2.66E-01	1.87E-01	1.46E-01	8.24E-02	5.86E-02	1.77E-02	0.0		
25.00	8.86E-01	7.55E-01	6.04E-01	2.88E-01	1.26E-01	4.36E-02	1.88E-02	1.07E-02	0.0	0.0	0.0	0.0		
50.00	7.86E-01	6.01E-01	4.66E-01	1.77E-01	6.08E-02	9.02E-03	3.45E-03	1.06E-03	0.0	0.0	0.0	0.0		
100.0	5.55E-01	3.99E-01	2.52E-01	6.77E-02	1.16E-02	1.81E-03	1.91E-04	0.0	0.0	0.0	0.0	0.0		
500.0	2.01E-02	1.12E-02	2.42E-03	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
NORMFLUX=	1.80E 06	2.46E 07	1.55E 07	5.58E 06	4.66E 06	2.43E 06	2.40E 06	7.74E 05	1.36E 05	7.46E 04	2.01E 04	6.09E 03		
ENERGY LEVELS (MEV)	L - BANDS (MAGNETIC SHELL PARAMETER IN EARTH RADI)											L - BANDS		
	*3.4-3.6*	*3.6-3.8*	*3.8-4.0*	*4.0-4.2*	*4.2-4.4*	*4.4-4.6*	*4.6-4.8*	*4.8-5.0*	*5.0-5.2*	*5.2-5.4*	*5.4-5.6*	*5.6-5.8*		
1.000	3.19E 05	1.23E 06	7.75E 05	5.85E 05	4.60E 05	1.49E 05	3.87E 05	3.31E 05	2.81E 05	9.77E 04	1.03E 05	8.74E 04		
2.000	1.32E 02	3.65E 02	1.50E 02	5.30E 01	1.26E 01	3.17E 00	0.0	0.0	0.0	0.0	0.0	0.0		
5.000	1.00E 00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
8.000	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
1.000	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
25.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
50.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
100.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
500.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
NORMFLUX=	8.90E 02	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
ENERGY LEVELS (MEV)	L - BANDS (MAGNETIC SHELL PARAMETER IN EARTH RADI)											L - BANDS		
	*5.8-6.0*	*6.0-6.2*	*6.2-6.4*	*6.4-6.6*	*6.6-6.8*	*6.8-7.0*	*7.0-7.2*	*7.2-7.4*	*7.4-7.6*	*7.6-7.8*	*7.8-8.0*	*8.0-DVR*		
1.000	1.48E 04	7.69E 03	6.19E 02	3.10E 03	5.94E 02	6.23E 01	3.19E 00	0.0	0.0	0.0	0.0	0.0		
2.000	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
5.000	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
8.000	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
10.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
25.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
50.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
100.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
500.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
NORMFLUX=	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		

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Table 3

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 \*\* ORBITAL FLUX STUDY WITH COMPOSITE PARTICLE ENVIRONMENTS: VETTES AP8; AE6, AE17 FOR SOLAR MAXIMUM \*\*\* UNIFLUX OF 1979 \*\*  
 \*\* UNCERTAINTY FACTORS (UF) APPLIED FOR THIS RUN ARE: FOR PROTONS (AP8) - UF= 1.0; FOR INNER ZONE ELECTRONS (AE6) - UF= 1.0 \*\*  
 \*\* MAGNETIC COORDINATES B AND L COMPUTED BY INVARA OF 1972 WITH ALLMAG MODEL 2; BARRACLOUGH ET. AL. 168-TERM 1975 - A TIME= 1980.0 \*\*  
 \*\* VEHICLE : IRAS 900 KM \*\* INCLINATION= 99DEG \*\* PERIGEE= 900KM \*\* APOGEE= 900KM \*\* B/L ORBIT TAPE: TD537c \*\* PERIOD= 1.716 \*\*  
 \*\*\*\*\*  
 \*\* SPECTRAL DISTRIBUTION : NORMALIZED BY FLUX OF ENERGY GREATER THAN .5000MEV \*\*  
 \*\*\*\*\*

ENERGY LEVELS >(MEV)	L BANDS (MAGNETIC SHELL PARAMETER IN EARTH RADII) L BANDS											
	*1.0-1.2*	*1.2-1.4*	*1.4-1.6*	*1.6-1.8*	*1.8-2.0*	*2.0-2.2*	*2.2-2.4*	*2.4-2.6*	*2.6-2.9*	*2.8-3.0*	*3.0-3.2*	*3.2-3.4*
.100	2.09E 01	3.56E 01	4.18E 01	5.79E 01	7.11E 01	1.19E 02	1.77E 02	9.65E 01	1.31E 01	6.91E 00	5.84E 00	5.77E 00
.500	1.77E 00	1.14E 00	1.02E 00	1.02E 00	1.02E 00	1.00E 00	1.00E 00	1.00E 00	1.00E 00	1.00E 00	1.00E 00	1.00E 00
1.000	1.04E-01	1.14E-01	1.55E-01	5.02E-02	1.62E-02	9.98E-03	1.08E-02	2.02E-02	5.77E-02	3.35E-01	3.90E-01	4.87E-01
1.500	3.55E-02	3.75E-02	6.13E-02	1.75E-02	4.24E-03	1.58E-03	1.53E-03	3.71E-03	1.82E-02	1.74E-01	1.99E-01	2.29E-01
2.000	1.01E-03	1.66E-02	2.74E-02	6.30E-03	9.89E-04	3.64E-04	2.76E-04	6.92E-04	4.66E-03	9.03E-01	1.01E-01	1.17E-01
3.000	3.53E-03	1.89E-03	1.89E-03	3.05E-04	4.21E-05	0.0	0.0	0.0	0.0	3.58E-02	4.02E-02	4.60E-02
4.000	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	9.20E-05	8.57E-03	8.94E-03
5.000	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.64E-04	3.90E-04	4.51E-04
6.000	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NORMFLUX=	6.53E 06	9.28E 08	9.36E 08	3.01E 08	1.51E 08	2.91E 07	1.38E 07	4.99E 06	1.13E 06	1.60E 07	1.24E 08	3.14E 08

ENERGY LEVELS >(MEV)	L BANDS (MAGNETIC SHELL PARAMETER IN EARTH RADII) L BANDS											
	*3.4-3.6*	*3.6-3.8*	*3.8-4.0*	*4.0-4.2*	*4.2-4.4*	*4.4-4.6*	*4.6-4.8*	*4.8-5.0*	*5.0-5.2*	*5.2-5.4*	*5.4-5.6*	*5.6-5.8*
.100	6.35E 00	5.85E 00	4.64E 00	3.88E 00	3.50E 00	3.33E 00	3.47E 00	3.68E 00	3.80E 00	3.86E 00	3.92E 00	3.94E 00
.500	1.16E 00	1.22E 00	1.27E 00	1.00E 00	1.00E 00	1.00E 00	1.00E 00	1.00E 00	1.00E 00	1.00E 00	1.00E 00	1.00E 00
1.000	4.90E-01	5.32E-01	5.21E-01	4.97E-01	4.88E-01	4.82E-01	4.60E-01	4.40E-01	4.06E-01	3.53E-01	3.18E-01	2.99E-01
1.500	2.46E-01	2.53E-01	2.28E-01	2.05E-01	1.87E-01	1.77E-01	1.66E-01	1.58E-01	1.44E-01	1.22E-01	1.08E-01	9.82E-02
2.000	1.24E-01	1.18E-01	1.00E-01	8.47E-02	7.18E-02	6.54E-02	6.01E-02	5.69E-02	5.11E-02	4.24E-02	3.47E-02	3.22E-02
3.000	4.84E-02	4.58E-02	3.80E-02	3.06E-02	2.26E-02	1.90E-02	1.48E-02	1.21E-02	9.69E-03	7.01E-03	5.45E-03	4.18E-03
4.000	8.78E-03	7.97E-03	6.87E-03	5.23E-03	4.25E-03	3.76E-03	3.29E-03	2.98E-03	2.61E-03	2.13E-03	1.78E-03	1.39E-03
5.000	4.77E-04	4.52E-04	3.80E-04	3.15E-04	2.65E-04	2.35E-04	2.05E-04	1.84E-04	1.56E-04	1.21E-04	9.73E-05	7.30E-05
6.000	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NORMFLUX=	3.66E 08	3.17E 08	5.70E 08	3.74E 08	5.12E 08	2.74E 08	5.23E 08	2.19E 08	1.53E 08	1.58E 08	1.24E 08	1.48E 08

ENERGY LEVELS >(MEV)	L BANDS (MAGNETIC SHELL PARAMETER IN EARTH RADII) L BANDS											
	*5.8-6.0*	*6.0-6.2*	*6.2-6.4*	*6.4-6.6*	*6.6-6.8*	*6.8-7.0*	*7.0-7.2*	*7.2-7.4*	*7.4-7.6*	*7.6-7.8*	*7.8-8.0*	*8.0-OVR*
.100	3.96E 00	4.35E 00	5.20E 00	6.10E 00	6.98E 00	7.77E 00	9.24E 00	1.28E 01	1.71E 01	2.34E 01	3.28E 01	6.99E 01
.500	1.00E 00	1.00E 00	1.00E 00	1.00E 00	1.00E 00	1.00E 00	1.00E 00	1.00E 00	1.00E 00	1.00E 00	1.00E 00	1.00E 00
1.000	2.79E-01	2.61E-01	2.39E-01	2.22E-01	2.01E-01	1.77E-01	1.67E-01	1.45E-01	1.32E-01	1.10E-01	9.06E-02	5.75E-02
1.500	8.73E-02	7.65E-02	5.36E-02	5.45E-02	4.61E-02	3.81E-02	3.25E-02	2.71E-02	2.34E-02	1.94E-02	1.61E-02	7.68E-03
2.000	2.73E-02	2.66E-02	1.69E-02	1.34E-02	1.06E-02	9.30E-03	6.69E-03	5.06E-03	4.16E-03	3.42E-03	2.88E-03	1.10E-03
3.000	2.97E-03	2.19E-03	1.45E-03	1.06E-03	7.19E-04	4.28E-04	2.71E-04	1.18E-04	3.07E-05	0.0	0.0	0.0
4.000	9.95E-04	7.15E-04	4.51E-04	3.21E-04	1.93E-04	9.01E-05	3.34E-05	0.0	0.0	0.0	0.0	0.0
5.000	5.15E-05	3.00E-05	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
6.000	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NORMFLUX=	1.19E 08	5.24E 07	3.01E 07	4.88E 07	3.65E 07	1.66E 07	1.71E 07	1.29E 07	4.04E 06	3.92E 06	2.16E 06	1.70E 06

Table 4



\*\*\*\*\*  
 \*\* ORBITAL FLUX STUDY WITH COMPOSITE PARTICLE ENVIRONMENTS: VETTES AP8; AE6, AE17 FOR SOLAR MAXIMUM \*\*\* UNIFLUX OF 1979 \*\*  
 \*\* UNCERTAINTY FACTORS (UF) APPLIED FOR THIS RUN ARE: FOR PROTONS (AP8) - UF= 1.0; FOR INNER ZONE ELECTRONS (AE6) - UF= 1.0 \*\*  
 \*\* MAGNETIC COORDINATES B AND L COMPUTED BY INVAF4 OF 1972 WITH ALLMAG, MODEL 5: BARRACLOUGH ET. AL. 168-TERM 1975 \* TIME= 1980.0 \*\*  
 \*\* VEHICLE - 1 TRAS 1200 KM \*\* INCLINATION = 88DFC \*\* PERIGEE = 1200KM \*\* APUGEE = 1200KM \*\* B/L ORBIT TAPE: TCG403 \*\* PERIOD = 1.024 \*\*  
 \*\*\*\*\*  
 \*\*\*\*\* PROTONS \*\*\*\*\*  
 \*\* SPECTRAL DISTRIBUTION : NORMALIZED BY FLUX OF ENERGY GREATER THAN 5.000MEV \*\*  
 \*\*\*\*\*

ENERGY LEVELS >(MEV)	L - BANDS (MAGNETIC SHELL PARAMETER IN EARTH RADII)													
	1.0	1.2	1.4	1.6	1.8	2.0	2.2	2.4	2.6	2.8	3.0	3.2	3.4	3.6
1.000	1.07E 00	1.11E 00	1.23E 00	1.63E 00	3.39E 00	8.81E 00	3.29E 01	1.51E 02	6.30E 02	2.74E 03	2.01E 04	8.42E 04		
2.000	1.02E 00	1.05E 00	1.13E 00	1.39E 00	2.07E 00	3.19E 00	4.65E 00	7.74E 00	1.25E 01	1.71E 01	3.34E 01	5.17E 01		
5.000	1.00E 00	1.00E 00	1.00E 00	1.00E 00	1.00E 00	1.00E 00	1.00E 00	1.00E 00	1.00E 00	1.00E 00	1.00E 00	1.00E 00		
8.000	9.80E-01	9.40E-01	8.72E-01	6.95E-01	5.36E-01	4.07E-01	3.21E-01	2.57E-01	1.88E-01	1.45E-01	6.88E-02	0.0		
10.00	9.68E-01	9.00E-01	7.95E-01	5.39E-01	3.65E-01	2.44E-01	1.72E-01	1.30E-01	8.17E-02	5.87E-02	1.98E-02	0.0		
25.00	8.90E-01	6.52E-01	5.40E-01	2.41E-01	1.83E-01	1.04E-01	1.69E-02	9.04E-03	1.57E-03	0.0	0.0	0.0		
50.00	7.82E-01	5.39E-01	3.96E-01	1.49E-01	4.06E-02	5.52E-03	2.36E-03	6.65E-04	0.0	0.0	0.0	0.0		
100.0	5.67E-01	3.50E-01	2.23E-01	6.15E-02	1.00E-02	1.90E-03	2.08E-04	0.0	0.0	0.0	0.0	0.0		
500.0	1.87E-02	5.55E-03	2.59E-03	7.63E-05	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
NORMFLUX=	1.35E 06	4.27E 07	2.22E 07	9.76E 06	6.02E 06	4.13E 06	3.36E 06	6.22E 05	2.48E 05	8.05E 04	2.54E 04	4.71E 03		

ENERGY LEVELS >(MEV)	L - BANDS (MAGNETIC SHELL PARAMETER IN EARTH RADII)													
	3.4	3.6	3.8	4.0	4.2	4.4	4.6	4.8	5.0	5.2	5.4	5.6	5.8	6.0
1.000	5.02E 05	5.63E 05	1.40E 06	1.25E 06	6.81E 05	3.04E 05	9.74E 03	5.05E 02	5.07E 03	3.07E 02	1.78E 03	3.63E 04		
2.000	1.62E 02	2.78E 02	1.66E 02	6.52E 01	1.71E 01	4.36E 00	2.22E 00	0.0	0.0	0.0	0.0	0.0		
5.000	1.00E 00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
8.000	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
10.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
25.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
50.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
100.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
500.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
NORMFLUX=	1.72E 03	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		

ENERGY LEVELS >(MEV)	L - BANDS (MAGNETIC SHELL PARAMETER IN EARTH RADII)													
	6.8	6.9	6.9	6.9	6.9	6.9	6.9	6.9	6.9	6.9	6.9	6.9	6.9	6.9
1.000	8.42E 04	8.33E 02	2.17E 04	1.32E 04	1.27E 03	2.80E 02	1.91E 01	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2.000	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5.000	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
8.000	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
10.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
25.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
50.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
100.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
500.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NORMFLUX=	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

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Table 5

\*\*\*\*\*  
 \*\* ORBITAL FLUX STUDY WITH COMPOSITE PARTICLE ENVIRONMENTS: VETTES AP8; AE6, AE17 FOR SOLAR MAXIMUM \*\*\* UNIFLUX OF 1979 \*\*  
 \*\* UNCERTAINTY FACTORS (UF) APPLIED FOR THIS RUN ARE: FOR PROTONS (AP8) - UF= 1.0; FOR INNER ZONE ELECTRONS (AE6) - UF= 1.0 \*\*  
 \*\* MAGNETIC COORDINATES B AND L COMPUTED BY INVAFA OF 1972 WITH ALLMAG, MODEL S: BARRACLOUGH ET. AL. 168-TERM 1975 \* TIME= 1980.0 \*\*  
 \*\* VEHICLE: IRAS 1200 KM \*\* INCLINATION= 80DEG \*\* PERIGEE= 1200KM \*\* APOGEE= 1200KM \*\* B/L GREET TAPE: TC5403 \*\* PERIOD= 1.824 \*\*  
 \*\*\*\*\*  
 \*\*\*\*\* ELECTRONS LO \*\*\*\*\*  
 \*\*\*\*\* SPECTRAL DISTRIBUTION : NORMALIZED BY FLUX OF ENERGY GREATER THAN 5000MEV \*\*\*\*\*  
 \*\*\*\*\*

ENERGY LEVELS >(MEV)	L - BANDS (MAGNETIC SHELL PARAMETER IN EARTH RADII) L - BANDS											
	#1.0-1.2*	#1.2-1.4*	#1.4-1.6*	#1.6-1.8*	#1.8-2.0*	#2.0-2.2*	#2.2-2.4*	#2.4-2.6*	#2.6-2.8*	#2.8-3.0*	#3.0-3.2*	#3.2-3.4*
1000	1.92E-01	3.58E-01	7.76E-01	5.42E-01	6.43E-01	1.66E-02	1.67E-02	6.42E-01	1.31E-01	6.66E-00	5.81E-00	5.82E-00
5000	1.00E-00	1.00E-00	1.00E-00	1.00E-00	1.00E-00	1.00E-00	1.00E-00	1.00E-00	1.00E-00	1.00E-00	1.00E-00	1.00E-00
1000	1.12E-01	1.02E-01	1.65E-01	5.68E-02	1.68E-02	9.95E-03	1.07E-02	2.35E-02	5.75E-02	3.33E-01	3.92E-01	4.50E-01
1500	3.89E-02	3.22E-02	6.46E-02	2.02E-02	4.43E-03	1.61E-03	1.49E-03	4.66E-02	1.41E-02	1.73E-01	1.99E-01	2.36E-01
2000	2.11E-02	1.41E-02	2.89E-02	7.61E-03	1.02E-03	3.69E-04	2.76E-04	8.14E-04	4.47E-03	9.03E-02	1.01E-01	1.18E-01
3000	3.74E-03	1.54E-03	2.04E-03	3.74E-04	4.54E-05	0.0	0.0	0.0	1.50E-04	3.61E-02	4.03E-02	4.61E-02
4000	0.0	1.52E-05	1.48E-05	4.75E-06	0.0	0.0	0.0	0.0	0.0	9.45E-03	8.58E-03	8.98E-03
5000	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.02E-04	3.91E-04	4.53E-04
6000	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NORMFLUX=	4.13E-06	1.84E-09	1.47E-09	4.09E-08	1.60E-08	4.25E-07	1.68E-07	3.58E-06	1.67E-06	1.10E-07	9.19E-07	2.14E-08

ENERGY LEVELS >(MEV)	L - BANDS (MAGNETIC SHELL PARAMETER IN EARTH RADII) L - BANDS											
	#3.4-3.6*	#3.6-3.8*	#3.8-4.0*	#4.0-4.2*	#4.2-4.4*	#4.4-4.6*	#4.6-4.8*	#4.8-5.0*	#5.0-5.2*	#5.2-5.4*	#5.4-5.6*	#5.6-5.8*
1000	6.36E-00	6.02E-00	4.66E-00	3.02E-00	3.55E-00	3.32E-00	3.46E-00	3.67E-00	3.60E-00	3.66E-00	3.92E-00	3.94E-00
5000	1.00E-00	1.00E-00	1.00E-00	1.00E-00	1.00E-00	1.00E-00	1.00E-00	1.00E-00	1.00E-00	1.00E-00	1.00E-00	1.00E-00
1000	4.91E-01	5.26E-01	5.22E-01	4.55E-01	4.89E-01	4.79E-01	4.62E-01	4.40E-01	4.06E-01	3.56E-01	3.16E-01	3.01E-01
1500	2.46E-01	2.50E-01	2.29E-01	2.02E-01	1.89E-01	1.75E-01	1.67E-01	1.55E-01	1.45E-01	1.23E-01	1.07E-01	9.91E-02
2000	1.24E-01	1.19E-01	1.01E-01	8.27E-02	7.34E-02	6.39E-02	6.04E-02	5.68E-02	5.14E-02	4.25E-02	3.63E-02	3.26E-02
3000	4.84E-02	4.07E-02	3.81E-02	2.93E-02	2.36E-02	1.81E-02	1.51E-02	1.22E-02	9.78E-03	7.16E-03	5.33E-03	4.30E-03
4000	8.76E-03	8.12E-03	6.49E-03	5.07E-03	4.38E-03	3.64E-03	3.31E-03	2.58E-03	2.42E-03	2.15E-03	1.75E-03	1.43E-03
5000	4.76E-04	4.57E-04	3.82E-04	3.08E-04	2.70E-04	2.27E-04	2.06E-04	1.84E-04	1.58E-04	1.22E-04	9.52E-05	7.55E-05
6000	0.0	0.0	5.20E-07	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NORMFLUX=	2.60E-08	2.48E-08	2.45E-08	3.49E-08	2.14E-08	2.75E-08	2.77E-08	1.36E-08	2.47E-08	8.13E-07	7.49E-07	5.72E-07

ENERGY LEVELS >(MEV)	L - BANDS (MAGNETIC SHELL PARAMETER IN EARTH RADII) L - BANDS											
	#5.8-6.0*	#6.0-6.2*	#6.2-6.4*	#6.4-6.6*	#6.6-6.8*	#6.8-7.0*	#7.0-7.2*	#7.2-7.4*	#7.4-7.6*	#7.6-7.8*	#7.8-8.0*	#8.0-OVR*
1000	3.96E-00	4.49E-00	5.31E-00	6.23E-00	7.17E-00	7.72E-00	9.29E-00	1.22E-01	1.74E-01	2.66E-01	3.30E-01	6.64E-01
5000	1.00E-00	1.00E-00	1.00E-00	1.00E-00	1.00E-00	1.00E-00	1.00E-00	1.00E-00	1.00E-00	1.00E-00	1.00E-00	1.00E-00
1000	2.79E-01	2.57E-01	2.37E-01	2.19E-01	1.95E-01	1.78E-01	1.60E-01	1.47E-01	1.30E-01	1.05E-01	9.03E-02	5.90E-02
1500	8.72E-02	7.40E-02	6.27E-02	5.35E-02	4.40E-02	3.85E-02	3.25E-02	2.79E-02	2.22E-02	1.65E-02	1.62E-02	7.92E-03
2000	2.73E-02	2.13E-02	1.66E-02	1.30E-02	9.93E-03	8.33E-03	6.60E-03	5.30E-03	4.12E-03	3.28E-03	2.90E-03	1.19E-03
3000	2.97E-03	2.04E-03	1.43E-03	1.02E-03	6.33E-04	4.43E-04	2.74E-04	1.67E-04	4.69E-05	0.0	0.0	0.0
4000	9.94E-04	6.62E-04	4.46E-04	3.10E-04	1.61E-04	9.52E-05	3.70E-05	0.0	0.0	0.0	0.0	0.0
5000	5.14E-05	2.86E-05	5.98E-06	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
6000	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NORMFLUX=	7.57E-07	8.93E-06	5.91E-07	4.67E-07	1.82E-07	1.14E-07	1.03E-07	3.39E-06	3.17E-06	2.23E-06	1.45E-06	1.60E-06

Table 6

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 \*\* ORBITAL FLUX STUDY WITH COMPOSITE PARTICLE ENVIRONMENTS: VETTES AP6; AE6, AE17 FOR SOLAR MAXIMUM \*\*\* UNIFLUX OF 1979 \*\*  
 \*\* UNCERTAINTY FACTORS (UF) APPLIED FOR THIS RUN ARE: FOR PROTONS (AP6) - UF= 2.0; FOR INNER ZONE ELECTRONS (AE6) - UF= 5.0 \*\*  
 \*\* MAGNETIC COORDINATES B AND L COMPUTED BY INVARA OF 1972 WITH ALLMAG, MODEL 5; BARRACLOUGH ET. AL. 168-TERM 1975 \* TIME= 1980.0 \*\*  
 \*\* VEHICLE - IRAS 600 KM \*\* INCLINATION= 80DEG \*\* PERIGEE= 600KM \*\* APOGEE= 600KM \*\* B/L ORBIT TAPE: TD5362 \*\* PERIOD= 1.611 \*\*  
 \*\*\*\*\*  
 \*\*\*\*\* PROTONS \*\*\*\*\*  
 \*\*\*\*\* SPECTRAL DISTRIBUTION: NORMALIZED BY FLUX OF ENERGY GREATER THAN 5.000MEV \*\*\*\*\*  
 \*\*\*\*\*

ENERGY LEVELS >(MEV)	L - BANDS (MAGNETIC SHELL PARAMETER IN EARTH RADII) L - BANDS											
	*1.0-1.2*	*1.2-1.4*	*1.4-1.6*	*1.6-1.8*	*1.8-2.0*	*2.0-2.2*	*2.2-2.4*	*2.4-2.6*	*2.6-2.8*	*2.8-3.0*	*3.0-3.2*	*3.2-3.4*
1.000	1.07E 00	1.09E 00	1.14E 00	1.40E 00	2.78E 00	1.13E 01	2.53E 01	1.55E 02	7.59E 02	3.64E 03	1.20E 03	8.73E 04
2.000	1.02E 00	1.03E 00	1.07E 00	1.22E 00	1.76E 00	2.88E 00	3.63E 00	6.36E 00	1.15E 01	1.77E 01	6.61E 00	5.30E 01
5.000	1.00E 00	1.00E 00	1.00E 00	1.00E 00	1.00E 00	1.00E 00	1.00E 00	1.00E 00	1.00E 00	1.00E 00	0.0	1.00E 00
8.000	9.79E-01	9.67E-01	9.32E-01	8.49E-01	6.49E-01	4.28E-01	3.81E-01	2.95E-01	2.00E-01	1.42E-01	0.0	0.0
10.00	9.66E-01	9.38E-01	8.91E-01	7.60E-01	5.07E-01	2.61E-01	2.23E-01	1.61E-01	9.03E-02	5.75E-02	0.0	0.0
25.00	8.94E-01	8.25E-01	7.24E-01	5.18E-01	2.02E-01	3.77E-02	2.54E-02	1.52E-02	0.0	0.0	0.0	0.0
50.00	7.77E-01	6.82E-01	5.64E-01	3.55E-01	8.42E-02	6.59E-03	3.31E-03	0.0	0.0	0.0	0.0	0.0
100.0	5.61E-01	4.64E-01	3.23E-01	1.50E-01	1.77E-02	4.02E-04	0.0	0.0	0.0	0.0	0.0	0.0
500.0	1.83E-02	1.04E-02	2.37E-03	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NORMFLUX=	7.83E 05	3.60E 06	2.52E 06	1.61E 06	1.18E 06	7.06E 05	4.51E 05	1.04E 05	5.36E 04	1.65E 04	0.0	1.32E 03

ENERGY LEVELS >(MEV)	L - BANDS (MAGNETIC SHELL PARAMETER IN EARTH RADII) L - BANDS											
	*3.4-3.6*	*3.6-3.8*	*3.8-4.0*	*4.0-4.2*	*4.2-4.4*	*4.4-4.6*	*4.6-4.8*	*4.8-5.0*	*5.0-5.2*	*5.2-5.4*	*5.4-5.6*	*5.6-5.8*
1.000	2.32E 05	0.0	7.35E 03	1.83E 05	6.82E 02	3.39E 04	5.41E 04	1.35E 04	1.56E 05	4.59E 03	3.45E 02	7.01E 01
2.000	1.14E 02	0.0	1.02E 01	2.53E 01	0.0	2.01E 00	0.0	0.0	0.0	0.0	0.0	0.0
5.000	1.00E 00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
8.000	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
10.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
25.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
50.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
100.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
500.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NORMFLUX=	9.34E 02	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

ENERGY LEVELS >(MEV)	L - BANDS (MAGNETIC SHELL PARAMETER IN EARTH RADII) L - BANDS											
	*6.0-6.0*	*6.0-6.2*	*6.2-6.4*	*6.4-6.6*	*6.6-6.8*	*6.8-7.0*	*7.0-7.2*	*7.2-7.4*	*7.4-7.6*	*7.6-7.8*	*7.8-8.0*	*8.0-OVR*
1.000	1.41E 03	2.06E 02	2.41E 02	1.24E 01	3.85E 02	9.87E 00	0.0	0.0	0.0	0.0	0.0	0.0
2.000	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5.000	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
8.000	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
10.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
25.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
50.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
100.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
500.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NORMFLUX=	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

ORIGINAL PAGE IS OF POOR QUALITY

Table 7

\*\*\*\*\*  
 \*\* ORBITAL FLUX STUDY WITH COMPOSITE PARTICLE ENVIRONMENTS: VETTES AP8; AE6; AE17 FOR SOLAR MAXIMUM \*\*\* UNIFLUX OF 1979 \*\*  
 \*\* UNCERTAINTY FACTORS (UF) APPLIED FOR THIS RUN ARE: FOR PROTONS (AP8) - UF= 2.0; FOR INNER ZONE ELECTRONS (AE6) - UF= 5.0 \*\*  
 \*\* MAGNETIC COORDINATES AND C COMPUTED BY INVARIANT WITH ALLMAG MODEL S: BARRACLOUGH ET. AL. 168-TERM 1975 \*\* TIME=1980.00 \*\*  
 \*\* VEHICLE : IRAS 600 KM \*\* INCLINATION= 80DEG \*\* PERIGEE= 600KM \*\* APOGEE= 600KM \*\* B/L ORBIT TAPE: TD5362 \*\* PERIOD= 1.611 \*\*  
 \*\*\*\*\*  
 \*\*\*\*\* ELECTRONS HI \*\*\*\*\*  
 \*\* SPECTRAL DISTRIBUTION : NORMALIZED BY FLUX OF ENERGY GREATER THAN .5000MEV \*\*  
 \*\*\*\*\*

ENERGY LEVELS >(MEV)	L - BANDS (MAGNETIC SHELL PARAMETER IN EARTH RADIUS)											
	*1.0-1.2*	*1.2-1.4*	*1.4-1.6*	*1.6-1.8*	*1.8-2.0*	*2.0-2.2*	*2.2-2.4*	*2.4-2.6*	*2.6-2.8*	*2.8-3.0*	*3.0-3.2*	*3.2-3.4*
.1000	2.18E 01	3.62E 01	4.43E 01	5.87E 01	7.21E 01	1.50E 02	1.89E 02	5.19E 01	1.23E 01	6.77E 00	6.06E 00	5.90E 00
.5000	1.00E 00	1.00E 00	1.00E 00	1.00E 00	1.00E 00	1.00E 00	1.00E 00	1.00E 00	1.00E 00	1.00E 00	1.00E 00	1.00E 00
1.000	1.09E-01	1.35E-01	1.58E-01	6.51E-02	1.54E-02	1.03E-02	1.08E-02	2.40E-02	6.36E-02	3.38E-01	3.77E-01	4.55E-01
1.500	3.89E-02	4.65E-02	6.42E-02	2.35E-02	3.89E-03	1.57E-03	1.55E-03	4.64E-03	2.09E-02	1.77E-01	1.96E-01	2.55E-01
2.000	2.17E-02	2.05E-02	2.95E-02	9.26E-03	8.75E-04	3.51E-04	2.83E-04	8.13E-04	5.17E-03	9.29E-02	1.02E-01	1.44E-01
3.000	4.59E-03	1.97E-03	2.00E-03	4.71E-04	3.13E-05	0.0	0.0	0.0	0.0	4.08E-02	4.36E-02	5.99E-02
4.000	0.0	1.30E-05	1.29E-05	2.20E-06	0.0	0.0	0.0	0.0	0.0	1.24E-02	1.30E-02	1.94E-02
5.000	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.01E-03	3.24E-03	5.52E-03
6.000	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.10E-04	3.33E-04	5.81E-04
NORMFLUX=	6.69E 06	2.78E 06	4.26E 06	3.39E 08	1.78E 08	2.33E 07	1.37E 07	3.31E 06	1.95E 06	3.36E 06	2.97E 07	1.07E 08
ENERGY LEVELS >(MEV)	L - BANDS (MAGNETIC SHELL PARAMETER IN EARTH RADIUS)											
	*3.4-3.6*	*3.6-3.8*	*3.8-4.0*	*4.0-4.2*	*4.2-4.4*	*4.4-4.6*	*4.6-4.8*	*4.8-5.0*	*5.0-5.2*	*5.2-5.4*	*5.4-5.6*	*5.6-5.8*
.1000	6.34E 00	6.00E 00	4.64E 00	3.87E 00	3.51E 00	3.31E 00	3.43E 00	3.67E 00	3.80E 00	3.84E 00	3.92E 00	3.94E 00
.5000	1.00E 00	1.00E 00	1.00E 00	1.00E 00	1.00E 00	1.00E 00	1.00E 00	1.00E 00	1.00E 00	1.00E 00	1.00E 00	1.00E 00
1.000	4.88E-01	5.27E-01	5.21E-01	4.56E-01	4.90E-01	4.79E-01	4.64E-01	4.41E-01	4.07E-01	3.61E-01	3.14E-01	2.92E-01
1.500	1.98E-01	2.68E-01	3.60E-01	1.71E-01	1.94E-01	1.72E-01	1.62E-01	1.88E-01	1.88E-01	1.78E-01	1.87E-01	2.03E-01
2.000	6.54E-02	7.63E-02	7.35E-02	6.36E-02	4.89E-02	3.70E-02	3.05E-02	2.28E-02	1.72E-02	1.21E-02	7.78E-03	4.89E-03
3.000	2.42E-02	3.09E-02	3.72E-02	3.42E-02	2.37E-02	1.62E-02	1.27E-02	6.95E-03	6.56E-03	4.66E-03	2.88E-03	1.82E-03
4.000	7.00E-03	8.73E-03	9.01E-03	7.34E-03	5.19E-03	3.58E-03	2.93E-03	2.19E-03	1.61E-03	1.11E-03	6.88E-04	4.06E-04
5.000	6.98E-04	7.70E-04	7.10E-04	5.81E-04	4.61E-04	3.25E-04	2.70E-04	2.07E-04	1.54E-04	1.09E-04	6.82E-05	4.10E-05
6.000	6.98E-04	7.70E-04	7.10E-04	5.81E-04	4.61E-04	3.25E-04	2.70E-04	2.07E-04	1.54E-04	1.09E-04	6.82E-05	4.10E-05
NORMFLUX=	1.51E 02	1.22E 02	1.92E 02	1.11E 02	7.95E 07	2.20E 08	1.61E 08	8.59E 07	9.74E 07	3.50E 07	4.67E 07	3.62E 07
ENERGY LEVELS >(MEV)	L - BANDS (MAGNETIC SHELL PARAMETER IN EARTH RADIUS)											
	*5.8-6.0*	*6.0-6.2*	*6.2-6.4*	*6.4-6.6*	*6.6-6.8*	*6.8-7.0*	*7.0-7.2*	*7.2-7.4*	*7.4-7.6*	*7.6-7.8*	*7.8-8.0*	*8.0-OVR*
.1000	3.95E 00	4.42E 00	5.00E 00	6.45E 00	7.12E 00	7.55E 00	9.26E 00	1.29E 01	1.69E 01	2.09E 01	3.33E 01	6.44E 01
.5000	1.00E 00	1.00E 00	1.00E 00	1.00E 00	1.00E 00	1.00E 00	1.00E 00	1.00E 00	1.00E 00	1.00E 00	1.00E 00	1.00E 00
1.000	2.81E-01	2.99E-01	2.41E-01	2.16E-01	1.98E-01	1.85E-01	1.60E-01	1.34E-01	1.17E-01	1.09E-01	9.48E-02	6.74E-02
1.500	8.91E-02	7.52E-02	6.45E-02	5.18E-02	4.47E-02	4.02E-02	3.25E-02	2.58E-02	2.21E-02	1.98E-02	1.65E-02	9.15E-03
2.000	2.83E-02	2.19E-02	1.75E-02	1.24E-02	1.01E-02	8.72E-03	6.60E-03	4.94E-03	4.17E-03	3.60E-03	2.87E-03	1.44E-03
3.000	3.89E-03	2.48E-03	1.68E-03	1.77E-04	6.32E-04	4.75E-04	2.68E-04	1.05E-04	0.0	0.0	0.0	0.0
4.000	1.43E-03	8.57E-04	5.42E-04	2.56E-04	1.86E-04	9.14E-05	0.0	0.0	0.0	0.0	0.0	0.0
5.000	1.18E-04	1.80E-04	1.08E-04	3.47E-05	9.51E-06	0.0	0.0	0.0	0.0	0.0	0.0	0.0
6.000	3.33E-05	5.45E-06	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NORMFLUX=	4.82E 07	2.50E 07	1.15E 07	4.21E 06	2.13E 07	7.01E 06	5.79E 06	2.75E 06	6.54E 05	4.27E 05	8.99E 05	7.79E 05

Table 8

\*\*\*\*\*  
 \*\* ORBITAL FLUX STUDY WITH COMPOSITE PARTICLE ENVIRONMENTS: VETTES AP8; AE6, AE7 FOR SOLAR MAXIMUM \*\*\* UNIFLUX OF 1979 \*\*  
 \*\* UNCERTAINTY FACTORS (UF) APPLIED FOR THIS RUN ARE: FOR PROTONS (AP8) - UF= 2.0; FOR INNER ZONE ELECTRONS (AE6) - UF= 5.0 \*\*  
 \*\* MAGNETIC COORDINATES B AND L COMPUTED BY INVASA OF 1972 WITH ALL MAG. MODEL 2: BARRACLOUGH ET. AL. 1988-TERM 1975. \*\* TIME= 1980.0 \*\*  
 \*\* VEHICLE : IRAS 900 KM \*\* INCLINATION= 95DEG \*\* PERIGEE= 900KM \*\* APOGEE= 900KM \*\* B/L ORBIT TAPE: T05376 \*\* PERIOD= 1.716 \*\*  
 \*\*\*\*\*  
 \*\* SPECTRAL DISTRIBUTION : NORMALIZED BY FLUX OF ENERGY GREATER THAN 5.000MEV \*\*  
 \*\*\*\*\*

ENERGY LEVELS >(MEV)	L BANDS (MAGNETIC SHELL PARAMETER IN EARTH RADIUS) I-BANDS											
	*1.0-1.2*	*1.2-1.4*	*1.4-1.6*	*1.5-1.8*	*1.8-2.0*	*2.0-2.2*	*2.2-2.4*	*2.4-2.6*	*2.6-2.8*	*2.8-3.0*	*3.0-3.2*	*3.2-3.4*
.1000	1.06E 00	1.10E 00	1.19E 00	1.62E 00	3.59E 00	9.18E 00	2.86E 01	1.07E 02	6.14E 02	3.03E 03	1.76E 04	7.57E 04
2.000	1.02E 00	1.04E 00	1.11E 00	1.37E 00	2.11E 00	3.03E 00	4.28E 00	6.79E 00	1.24E 01	1.66E 01	3.06E 01	4.58E 01
5.000	1.00E 00	1.00E 00	1.00E 00	1.00E 00	1.00E 00	1.00E 00	1.00E 00	1.00E 00	1.00E 00	1.00E 00	1.00E 00	1.00E 00
8.000	7.80E-01	7.54E-01	8.92E-01	7.25E-01	5.55E-01	4.28E-01	3.40E-01	2.78E-01	1.88E-01	1.49E-01	5.11E-02	0.00
10.00	7.86E-01	7.22E-01	8.25E-01	5.85E-01	3.94E-01	2.66E-01	1.87E-01	1.46E-01	8.24E-02	5.86E-02	1.77E-02	0.00
25.00	3.86E-01	7.55E-01	6.04E-01	2.88E-01	1.26E-01	4.36E-02	1.88E-02	1.07E-02	0.00	0.00	0.00	0.00
50.00	7.66E-01	6.01E-01	4.55E-01	1.77E-01	5.04E-02	9.92E-03	2.64E-03	1.06E-03	0.00	0.00	0.00	0.00
100.0	5.35E-01	3.99E-01	2.52E-01	6.77E-02	1.16E-02	1.81E-03	1.91E-04	0.00	0.00	0.00	0.00	0.00
500.0	2.01E-02	1.12E-02	2.42E-03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
NORMFLUX=	3.60E 00	4.92E 07	3.10E 07	1.12E 07	9.32E 06	4.87E 06	4.81E 06	1.55E 06	2.71E 05	1.49E 05	4.03E 04	1.22E 04

ENERGY LEVELS >(MEV)	L BANDS (MAGNETIC SHELL PARAMETER IN EARTH RADIUS) I-BANDS											
	*3.4-3.6*	*3.6-3.8*	*3.8-4.0*	*4.0-4.2*	*4.2-4.4*	*4.4-4.6*	*4.6-4.8*	*4.8-5.0*	*5.0-5.2*	*5.2-5.4*	*5.4-5.6*	*5.6-5.8*
.1000	3.19E 05	2.46E 06	1.55E 06	1.17E 05	9.21E 05	2.98E 05	7.75E 05	6.62E 05	5.61E 05	1.95E 05	2.07E 05	1.75E 05
2.000	1.34E 02	7.31E 02	3.00E 02	1.06E 02	2.53E 01	6.34E 00	0.00	0.00	0.00	0.00	0.00	0.00
5.000	1.00E 00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8.000	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
25.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
50.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
100.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
500.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
NORMFLUX=	1.79E 03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

ENERGY LEVELS >(MEV)	L BANDS (MAGNETIC SHELL PARAMETER IN EARTH RADIUS) I-BANDS											
	*5.8-6.0*	*6.0-6.2*	*6.2-6.4*	*6.4-6.6*	*6.6-6.8*	*6.8-7.0*	*7.0-7.2*	*7.2-7.4*	*7.4-7.6*	*7.6-7.8*	*7.8-8.0*	*8.0-OVR*
.1000	2.97E 04	1.54E 04	1.24E 03	6.19E 03	1.19E 03	1.25E 02	6.38E 00	0.00	0.00	0.00	0.00	0.00
2.000	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5.000	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8.000	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
25.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
50.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
100.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
500.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
NORMFLUX=	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Table 9

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 \*\* ORBITAL FLUX STUDY WITH COMPOSITE PARTICLE ENVIRONMENTS: VETTES APR: AEG, AE17 FOR SOLAR MAXIMUM \*\*\* UNIFLUX OF 1979 \*\*  
 \*\* UNCERTAINTY FACTORS (UF) APPLIED FOR THIS RUN ARE: F32 PROTONS (AP8) - UF= 2.0; FOR INNER ZONE ELECTRONS (AE6) - UF= 5.0 \*\*  
 \*\* MAGNETIC COORDINATES B AND L COMPUTED BY INVARA OF 1972 WITH ALLMAG, MODEL 2; BARRACLOUGH ET. AL. 168-TERM 1975 \* TIME= 1980.0 \*\*  
 \*\* VEHICLE : IRAS 900 KM \*\* INCLINATION= 99DEG \*\* PERIGEE= 900KM \*\* APOGEE= 900KM \*\* B/L ORBIT TAPE: TD5376 \*\* PERIOD= 1.716 \*\*  
 \*\*\*\*\*  
 \*\*\*\*\* ELECTRONS HI \*\*\*\*\*  
 \*\* SPECTRAL DISTRIBUTION : NORMALIZED BY FLUX OF ENERGY GREATER THAN .5000MEV \*\*  
 \*\*\*\*\*

ENERGY LEVELS >(MEV)	L - BANDS (MAGNETIC SHELL PARAMETER IN EARTH RADII)											
	*1.0-1.2*	*1.2-1.4*	*1.4-1.6*	*1.6-1.8*	*1.8-2.0*	*2.0-2.2*	*2.2-2.4*	*2.4-2.6*	*2.6-2.8*	*2.8-3.0*	*3.0-3.2*	*3.2-3.4*
.1000	2.09E 01	3.55E 01	4.18E 01	5.79E 01	7.11E 01	1.19E 02	1.77E 02	9.65E 01	1.31E 01	6.91E 00	5.84E 00	5.77E 00
.5000	1.00E 00	1.00E 00	1.00E 00	1.00E 00	1.00E 00	1.00E 00	1.00E 00	1.00E 00	1.00E 00	1.00E 00	1.00E 00	1.00E 00
1.000	1.04E-01	1.14E-01	1.55E-01	5.02E-02	1.62E-02	9.94E-03	1.08E-02	2.02E-02	5.77E-02	3.35E-01	3.90E-01	4.47E-01
1.500	3.55E-02	3.75E-02	6.13E-02	1.75E-02	4.24E-03	1.58E-03	1.53E-03	3.71E-03	1.82E-02	1.74E-01	2.04E-01	2.48E-01
2.000	1.91E-02	1.65E-02	2.76E-02	6.30E-03	9.89E-04	3.64E-04	2.76E-04	6.92E-04	4.68E-03	9.03E-02	1.06E-01	1.38E-01
3.000	3.33E-03	1.88E-03	1.89E-03	5.09E-04	4.21E-05	0.0	0.0	0.0	0.0	3.92E-02	4.53E-02	5.75E-02
4.000	0.0	1.65E-05	1.38E-05	2.88E-06	0.0	0.0	0.0	0.0	0.0	1.16E-02	1.37E-02	1.85E-02
5.000	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.75E-03	3.50E-03	5.19E-03
6.000	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.68E-04	3.76E-04	5.48E-04
NORMFLUX=	3.26E 07	4.64E 04	4.68E 00	1.61E 00	7.57E 08	1.46E 08	6.88E 07	2.49E 07	5.63E 06	1.60E 07	1.24E 08	3.14E 08
ENERGY LEVELS >(MEV)	L - BANDS (MAGNETIC SHELL PARAMETER IN EARTH RADII)											
	*3.4-3.6*	*3.6-3.8*	*3.8-4.0*	*4.0-4.2*	*4.2-4.4*	*4.4-4.6*	*4.6-4.8*	*4.8-5.0*	*5.0-5.2*	*5.2-5.4*	*5.4-5.6*	*5.6-5.8*
.1000	6.35E 00	5.85E 00	4.64E 00	3.88E 00	3.50E 00	3.33E 00	3.47E 00	3.68E 00	3.80E 00	3.86E 00	3.92E 00	3.94E 00
.5000	1.00E 00	1.00E 00	1.00E 00	1.00E 00	1.00E 00	1.00E 00	1.00E 00	1.00E 00	1.00E 00	1.00E 00	1.00E 00	1.00E 00
1.000	4.90E-01	5.32E-01	5.21E-01	4.97E-01	4.88E-01	4.82E-01	4.60E-01	4.40E-01	4.06E-01	3.53E-01	3.18E-01	2.99E-01
1.500	2.90E-01	3.30E-01	3.23E-01	2.92E-01	2.57E-01	2.38E-01	2.08E-01	1.85E-01	1.62E-01	1.33E-01	1.15E-01	1.02E-01
2.000	1.71E-01	2.04E-01	2.00E-01	1.72E-01	1.35E-01	1.17E-01	9.81E-02	7.80E-02	6.47E-02	5.01E-02	4.12E-02	3.46E-02
3.000	6.99E-02	7.07E-02	7.37E-02	6.92E-02	4.71E-02	3.93E-02	2.92E-02	2.24E-02	1.71E-02	1.13E-02	8.19E-03	5.83E-03
4.000	2.45E-02	3.19E-02	3.72E-02	3.46E-02	2.25E-02	1.76E-02	1.21E-02	8.84E-03	6.54E-03	4.32E-03	3.14E-03	2.19E-03
5.000	7.07E-03	3.97E-03	9.00E-03	7.43E-03	4.89E-03	3.85E-03	2.80E-03	2.16E-03	1.61E-03	1.02E-03	7.27E-04	4.96E-04
6.000	7.02E-04	7.69E-04	7.08E-04	5.86E-04	4.21E-04	3.46E-04	2.58E-04	2.03E-04	1.53E-04	9.93E-05	7.19E-05	4.96E-05
NORMFLUX=	3.66E 08	3.17E 08	5.70E 08	3.74E 08	5.12E 08	2.04E 08	5.23E 08	2.19E 08	1.53E 08	1.58E 08	1.24E 08	1.48E 08
ENERGY LEVELS >(MEV)	L - BANDS (MAGNETIC SHELL PARAMETER IN EARTH RADII)											
	*5.8-6.0*	*6.0-6.2*	*6.2-6.4*	*6.4-6.6*	*6.6-6.8*	*6.8-7.0*	*7.0-7.2*	*7.2-7.4*	*7.4-7.6*	*7.6-7.8*	*7.8-8.0*	*8.0-8.2*
.1000	3.96E 00	4.35E 00	5.20E 00	6.10E 00	6.49E 00	7.77E 00	9.24E 00	1.28E 01	1.71E 01	2.34E 01	3.28E 01	6.99E 01
.5000	1.00E 00	1.00E 00	1.00E 00	1.00E 00	1.00E 00	1.00E 00	1.00E 00	1.00E 00	1.00E 00	1.00E 00	1.00E 00	1.00E 00
1.000	2.79E-01	2.61E-01	2.39E-01	2.22E-01	2.02E-01	1.80E-01	1.60E-01	1.35E-01	1.18E-01	1.06E-01	9.55E-02	6.14E-02
1.500	9.80E-02	7.66E-02	6.36E-02	6.46E-02	4.62E-02	3.84E-02	2.55E-02	2.42E-02	2.23E-02	1.90E-02	1.66E-02	8.00E-03
2.000	2.78E-02	2.25E-02	1.89E-02	1.34E-02	1.06E-02	8.20E-03	6.59E-03	5.06E-03	4.15E-03	3.42E-03	2.88E-03	1.19E-03
3.000	3.78E-03	2.60E-03	1.59E-03	1.09E-03	7.19E-04	4.28E-04	2.71E-04	1.18E-04	3.07E-05	0.0	0.0	0.0
4.000	1.39E-03	7.11E-04	5.10E-04	3.31E-04	1.93E-04	8.98E-05	3.27E-05	0.0	0.0	0.0	0.0	0.0
5.000	3.09E-04	1.95E-04	9.51E-05	6.45E-05	2.13E-05	0.0	0.0	0.0	0.0	0.0	0.0	0.0
6.000	3.24E-05	1.26E-05	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NORMFLUX=	1.19E 08	6.24E 07	3.01E 07	4.86E 07	3.65E 07	1.66E 07	1.71E 07	1.29E 07	4.04E 06	3.92E 06	2.16E 06	1.70E 06

ORIGINAL PAGE IS OF POOR QUALITY

Table 10

\*\*\*\*\*  
 \*\* ORBITAL FLUX STUDY WITH COMPOSITE PARTICLE ENVIRONMENTS: VETTES AP8; AE6, AE17 FOR SOLAR MAXIMUM \*\*\* UNIFLUX OF 1979 \*\*  
 \*\* UNCERTAINTY FACTORS (UF) APPLIED FOR THIS RUN ARE: FOR PROTONS (AP8) - UF= 2.0; FOR INNER-ZONE ELECTRONS (AE6) - UF= 5.0 \*\*  
 \*\* MAGNETIC COORDINATES B AND L COMPUTED BY INVARA OF 1972 WITH ALLMAG, MODEL 5; BARRACLOUGH ET. AL. 168-TERM 1975 \* TIME= 1980.0 \*\*  
 \*\* VEHICLE: IRAS 1200 KM \*\* INCLINATION= 80DEG \*\* PERIGEE= 1200KM \*\* APOGEE= 1200KM \*\* B/L ORBIT TAPE: TD5403 \*\* PERIOD= 1.824 \*\*  
 \*\*\*\*\*  
 \*\*\*\*\*  
 \*\* SPECTRAL DISTRIBUTION: NORMALIZED BY FLUX OF ENERGY GREATER THAN 5.000MEV \*\*  
 \*\*\*\*\*

ENERGY LEVELS >(MEV)	L - BANDS (MAGNETIC SHELL PARAMETER IN EARTH RADI-I) L - BANDS											
	*1.0-1.2*	*1.2-1.4*	*1.4-1.6*	*1.6-1.8*	*1.8-2.0*	*2.0-2.2*	*2.2-2.4*	*2.4-2.6*	*2.6-2.8*	*2.8-3.0*	*3.0-3.2*	*3.2-3.4*
.1000	1.07E 00	1.11E 00	1.23E 00	1.63E 00	3.39E 01	8.81E 00	3.29E 01	1.51E 02	6.30E 02	2.74E 03	2.01E 04	8.42E 04
2.000	1.02E 00	1.09E 00	1.13E 00	1.39E 00	2.07E 00	3.19E 00	4.65E 00	7.74E 00	1.25E 01	1.71E 01	3.34E 01	5.17E 01
5.000	1.00E 00	1.00E 00	1.00E 00	1.00E 00	1.00E 00	1.00E 00	1.00E 00	1.00E 00	1.00E 00	1.00E 00	1.00E 00	1.00E 00
8.000	9.80E-01	9.40E-01	8.72E-01	6.69E-01	5.36E-01	4.07E-01	3.21E-01	2.57E-01	1.88E-01	1.49E-01	6.88E-02	0.0
10.00	9.68E-01	9.00E-01	7.95E-01	5.39E-01	3.65E-01	2.44E-01	1.72E-01	1.30E-01	8.17E-02	5.87E-02	1.98E-02	0.0
25.00	7.88E-01	6.50E-01	5.40E-01	2.41E-01	1.03E-01	4.04E-02	1.63E-02	2.04E-03	1.57E-03	0.0	0.0	0.0
50.00	7.82E-01	5.30E-01	3.66E-01	1.40E-01	4.86E-02	6.58E-03	2.38E-03	2.89E-04	0.0	0.0	0.0	0.0
100.0	5.67E-01	3.50E-01	2.23E-01	6.15E-02	1.00E-02	1.90E-03	2.08E-04	0.0	0.0	0.0	0.0	0.0
500.0	1.87E-02	9.55E-03	2.59E-03	7.63E-05	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NORMFLUX=	2.77E 06	8.53E 07	4.65E 07	1.55E 07	1.20E 07	8.26E 06	6.72E 06	1.25E 06	4.96E 05	1.62E 05	5.07E 04	9.41E 03
ENERGY LEVELS >(MEV)	L - BANDS (MAGNETIC SHELL PARAMETER IN EARTH RADI-I) L - BANDS											
	*2.4-3.6*	*3.6-3.8*	*3.8-4.0*	*4.0-4.2*	*4.2-4.4*	*4.4-4.6*	*4.6-4.8*	*4.8-5.0*	*5.0-5.2*	*5.2-5.4*	*5.4-5.6*	*5.6-5.8*
.1000	5.03E 05	1.11E 06	2.79E 06	2.50E 06	1.32E 05	6.09E 05	1.95E 06	1.02E 06	1.93E 06	6.13E 05	3.56E 05	7.26E 04
2.000	1.62E 02	5.55E 02	3.33E 02	1.30E 02	3.42E 01	8.72E 00	4.44E 00	0.0	0.0	0.0	0.0	0.0
5.000	1.00E 00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
8.000	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
10.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
25.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
50.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
100.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
500.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NORMFLUX=	3.44E 03	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
ENERGY LEVELS >(MEV)	L - BANDS (MAGNETIC SHELL PARAMETER IN EARTH RADI-I) L - BANDS											
	*5.8-6.0*	*6.0-6.2*	*6.2-6.4*	*6.4-6.6*	*6.6-6.8*	*6.8-7.0*	*7.0-7.2*	*7.2-7.4*	*7.4-7.6*	*7.6-7.8*	*7.8-8.0*	*8.0-DVR*
.1000	1.68E 05	1.67E 03	4.33E 04	2.64E 04	2.55E 03	5.60E 02	3.83E 01	0.0	0.0	0.0	0.0	0.0
2.000	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5.000	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
8.000	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
10.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
25.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
50.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
100.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
500.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NORMFLUX=	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Table 11

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 \*\* ORBITAL FLUX STUDY WITH COMPOSITE PARTICLE ENVIRONMENTS: VETTES AP8; AEG, AE17 FOR SOLAR MAXIMUM \*\*\* UNIFLUX OF 1979 \*\*  
 \*\* UNCERTAINTY FACTORS (UF) APPLIED FOR THIS RUN ARE: FOR PROTONS (AP8) - UF= 2.0; FOR INNER ZONE ELECTRONS (AEG) - UF= 5.0 \*\*  
 \*\* MAGNETIC COORDINATES B AND L COMPUTED BY INVARA OF 1972 WITH ALLMAG, MODEL 5; BARRACLOUGH ET. AL. 168-TERM 1975 \* TIME= 1980.0 \*\*  
 \*\* VEHICLE : 18AS 1200 KM \*\* INCLINATION= 80DEG \*\* PERIGEE= 1200KM \*\* APOGEE= 1200KM \*\* B/L ORBIT TAPE: TD403 \*\* PERIOD= 1.824 \*\*  
 \*\*\*\*\*  
 \*\*\*\*\* ELECTRONS MI \*\*\*\*\*  
 \*\* SPECTRAL DISTRIBUTION : NORMALIZED BY FLUX OF ENERGY GREATER THAN .500MEV \*\*  
 \*\*\*\*\*

ENERGY LEVELS >(MEV)	L - BANDS (MAGNETIC SHELL PARAMETER IN EARTH RADIUS)											
	#1.0-1.2*	#1.2-1.4*	#1.4-1.6*	#1.6-1.8*	#1.8-2.0*	#2.0-2.2*	#2.2-2.4*	#2.4-2.6*	#2.6-2.8*	#2.8-3.0*	#3.0-3.2*	#3.2-3.4*
.1000	1.92E-01	3.58E-01	3.76E-01	6.43E-01	6.43E-01	1.06E-02	1.67E-02	6.62E-01	1.31E-01	6.06E-00	5.81E-00	5.82E-00
.5000	1.00E-00	1.00E-00	1.00E-00	1.00E-00	1.00E-00	1.00E-00	1.00E-00	1.00E-00	1.00E-00	1.00E-00	1.00E-00	1.00E-00
1.000	1.12E-01	1.02E-01	1.65E-01	5.68E-02	1.68E-02	9.95E-03	1.07E-02	2.35E-02	6.75E-02	3.35E-01	3.92E-01	6.50E-01
1.500	3.89E-02	3.22E-02	6.46E-02	2.62E-02	4.43E-03	1.51E-03	1.49E-03	4.66E-03	1.81E-02	1.73E-01	2.04E-01	2.51E-01
2.000	2.11E-02	1.41E-02	2.82E-02	7.61E-03	1.02E-03	3.59E-04	2.76E-04	6.54E-04	4.67E-03	9.03E-02	1.07E-01	1.40E-01
3.000	3.74E-03	1.54E-03	2.04E-03	3.74E-04	4.54E-05	0.0	0.0	0.0	1.50E-04	3.93E-02	4.55E-02	5.83E-02
4.000	0.0	1.52E-05	1.48E-05	4.75E-06	0.0	0.0	0.0	0.0	0.0	1.18E-02	1.37E-02	1.88E-02
5.000	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.82E-03	3.52E-03	5.30E-03
6.000	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.82E-04	3.78E-04	5.58E-04
NORMFLUX=	2.07E 07	9.19E 05	7.34E 09	2.64E 09	7.98E 08	2.12E 08	8.41E 07	1.79E 07	8.33E 06	1.10E 07	9.19E 07	2.14E 08

ENERGY LEVELS >(MEV)	L - BANDS (MAGNETIC SHELL PARAMETER IN EARTH RADIUS)											
	#3.4-3.6*	#3.6-3.8*	#3.8-4.0*	#4.0-4.2*	#4.2-4.4*	#4.4-4.6*	#4.6-4.8*	#4.8-5.0*	#5.0-5.2*	#5.2-5.4*	#5.4-5.6*	#5.6-5.8*
.1000	6.36E-00	6.02E-00	4.66E-00	3.42E-00	3.55E-01	3.32E-00	3.45E-00	3.67E-00	3.80E-00	3.86E-00	3.92E-00	3.94E-00
.5000	1.00E-00	1.00E-00	1.00E-00	1.00E-00	1.00E-00	1.00E-00	1.00E-00	1.00E-00	1.00E-00	1.00E-00	1.00E-00	1.00E-00
1.000	4.91E-01	5.26E-01	5.22E-01	4.55E-01	4.89E-01	4.79E-01	4.62E-01	4.40E-01	4.08E-01	3.56E-01	3.16E-01	3.01E-01
1.500	2.91E-01	3.23E-01	3.24E-01	2.87E-01	2.61E-01	2.32E-01	2.10E-01	1.86E-01	1.63E-01	1.35E-01	1.13E-01	1.03E-01
2.000	1.72E-01	1.59E-01	2.00E-01	1.66E-01	1.40E-01	1.13E-01	9.59E-02	7.86E-02	6.52E-02	5.09E-02	4.06E-02	3.52E-02
3.000	7.02E-02	7.61E-02	7.38E-02	6.14E-02	4.31E-02	3.72E-02	3.00E-02	2.28E-02	1.73E-02	1.16E-02	7.97E-03	6.05E-03
4.000	2.47E-02	3.06E-02	3.71E-02	3.25E-02	2.39E-02	1.94E-02	1.25E-02	8.94E-03	6.62E-03	4.45E-03	3.05E-03	2.28E-03
5.000	7.12E-03	8.65E-03	9.01E-03	6.99E-03	5.18E-03	3.61E-03	2.87E-03	2.18E-03	1.63E-03	1.06E-03	7.06E-04	5.19E-04
6.000	7.04E-04	7.62E-04	7.09E-04	6.68E-04	4.39E-04	3.26E-04	2.64E-04	2.05E-04	1.55E-04	1.02E-04	7.00E-05	5.19E-05
NORMFLUX=	2.60E 08	2.48E 08	2.45E 08	3.49E 08	2.14E 08	2.75E 08	2.77E 08	1.38E 08	2.47E 08	8.13E 07	7.49E 07	5.72E 07

ENERGY LEVELS >(MEV)	L - BANDS (MAGNETIC SHELL PARAMETER IN EARTH RADIUS)											
	#5.8-6.0*	#6.0-6.2*	#6.2-6.4*	#6.4-6.6*	#6.6-6.8*	#6.8-7.0*	#7.0-7.2*	#7.2-7.4*	#7.4-7.6*	#7.6-7.8*	#7.8-8.0*	#8.0+OVR*
.1000	3.96E-00	4.49E-00	5.31E-00	6.23E-00	7.17E-00	7.72E-00	9.29E-00	1.22E-01	1.74E-01	2.55E-01	3.30E-01	6.54E-01
.5000	1.00E-00	1.00E-00	1.00E-00	1.00E-00	1.00E-00	1.00E-00	1.00E-00	1.00E-00	1.00E-00	1.00E-00	1.00E-00	1.00E-00
1.000	2.79E-01	2.57E-01	2.37E-01	2.19E-01	1.96E-01	1.81E-01	1.60E-01	1.39E-01	1.17E-01	1.03E-01	9.54E-02	6.31E-02
1.500	8.79E-02	7.40E-02	6.27E-02	5.35E-02	4.41E-02	3.89E-02	3.25E-02	2.71E-02	2.20E-02	1.84E-02	1.66E-02	8.04E-03
2.000	2.77E-02	2.13E-02	1.66E-02	1.33E-02	9.93E-03	8.33E-03	6.60E-03	5.30E-03	4.12E-03	3.28E-03	2.90E-03	1.19E-03
3.000	3.78E-03	2.39E-03	1.57E-03	1.05E-03	6.33E-04	4.43E-04	2.74E-04	1.63E-04	4.69E-05	0.0	0.0	0.0
4.000	1.39E-03	6.27E-04	5.04E-04	3.19E-04	1.61E-04	9.49E-05	3.65E-05	0.0	0.0	0.0	0.0	0.0
5.000	3.09E-04	1.76E-04	1.01E-04	6.24E-05	1.67E-05	0.0	0.0	0.0	0.0	0.0	0.0	0.0
6.000	3.22E-05	1.65E-05	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NORMFLUX=	7.57E 07	8.93E 06	5.91E 07	4.67E 07	1.82E 07	1.14E 07	1.03E 07	3.39E 06	3.17E 06	2.23E 06	1.45E 06	1.60E 06

Table 12



\*\*\*\*\*  
 \*\* ORBITAL FLUX STUDY WITH COMPOSITE PARTICLE ENVIRONMENT: VETTES APB; ACG; AE17 FOR SOLAR MAXIMUM \*\*\*\*\*  
 \*\* UNCERTAINTY FACTORS (UF) APPLIED FOR THIS RUN AS FOLLOWS (APB) - UF= 1.0; FOR INNER ZONE ELECTRONS (AE6) - UF= 1.0  
 \*\* MAGNETIC COORDINATES R AND L COMPUTED BY INVAFA OF 1972 WITH ALLMAG, MODEL 5; BARRACLOUGH ET AL. 168-TERM 1975 \* TIME= 1980.0 \*\*  
 \*\* VEHICLE : IRAS 600 KM \*\* INCLINATION= 80DEG \*\* PD= 33CM \*\* APOGEE= 33CM \*\* PERIHELION= 103CM \*\* RFL= 103CM \*\* ROR= 33CM  
 \*\*\*\*\*  
 \*\*\*\*\* PROTONS \*\*\*\*\*  
 \*\*\*\*\*

\*\*\*\*\* SPECTRUM IN PERCENT DELTA ENERGY \*\*\*\*\*

ENERGY RANGES	AVERAGED TOTAL FLUX #/CM**2/SEC	AVERAGED TOTAL FLUX #/CM**2/DAY	SPECTRUM PERCENT
1000-2000	3.014E C3	2.665E 08	55.577
2000-3000	3.278E C1	2.931E 06	0.647
3000-4000	1.043E 01	9.009E 05	0.204
4000-5000	4.172E 03	3.665E 05	0.382
5000-6000	1.101E C1	9.913E 05	0.218
6000-7000	8.364E 00	7.222E 05	0.165
7000-8000	1.145E C1	9.844E 05	0.226
8000-9000	1.814E 01	1.567E 06	0.358
9000-10000	3.339E C1	2.884E 04	6.067
TOTAL	3.111E 03	2.688E 08	61.488

\*\*\*\*\* EXPOSURE INDEX: ENERGY 35.000 MEV \*\*\*\*\*

INTENSITY RANGES #/CM**2/SEC	EXPOSURE (HOURS)	TOTAL # OF PARTICLES	% OF TOTAL
ZERO FLUX	11.767	0.0	
1e0-1e1	6.200	4.342E 03	
1e1-1e2	6.267	1.017E 04	
1e2-1e3	6.700	1.041E 06	
1e3-1e4	6.733	4.266E 06	
1e4-1e5	0.0	0.0	
1e5-1e6	0.0	0.0	
1e6-1e7	0.0	0.0	
1e7-OVER	0.0	0.0	
TOTAL	23.967	5.513E 06	

\*\*\*\*\* COMPOSITE ORBIT SPECTRUM \*\*\*\*\* TAU= 1.00 YEAR(S)

ENERGY LEVELS	AVERAGED INTRG. FLUX #/CM**2/SEC	AVERAGED INTRG. FLUX #/CM**2/DAY	AVERAGED INTRG. FLUX #/CM**2/TAU	AVERAGED DIFFER. FLUX #/CM**2/SEC/KEV
4000E-015-069E 03	4.373E 08	1.596E 11	2.574E 01	
7000E-015-087E 05	3.441E 08	3.245E 11	5.498E 01	
1000E-003-111E 03	4.488E 08	6.611E 10	2.642E 01	
5000E-03-300E 02	3.793E 07	1.384E 10	2.455E 00	
1000E-1-057E C2	1.446E 07	5.252E 09	1.605E 01	
2000E-7-066E 01	8.351E 06	2.048E 09	5.193E 02	
3000E-9-073E 01	6.975E 06	2.546E 09	1.014E 02	
4000E-7-074E 01	6.112E 06	2.611E 09	1.037E 02	
5000E-3-390E 00	3.451E 06	1.159E 09	1.768E 02	
6000E-5-853E 01	3.092E 06	1.859E 09	4.193E 03	
7000E-8-347E 01	4.233E 06	1.464E 09	1.233E 03	
8000E-4-830E 01	3.834E 06	1.400E 09	1.624E 03	
9000E-4-438E 01	3.834E 06	1.400E 09	5.167E 04	
1000E-4-078E 01	3.508E 06	1.280E 09	2.594E 04	
1500E-3-030E 01	3.300E 06	1.207E 09	4.708E 04	
2000E-3-623E 01	3.130E 06	1.014E 09	3.806E 04	
2500E-3-444E 01	2.980E 06	1.008E 09	3.250E 04	
3000E-3-073E 01	2.860E 06	1.037E 09	1.510E 04	
3500E-3-388E 01	2.700E 06	8.842E 08	3.387E 04	
4000E-2-992E 01	2.580E 06	6.437E 08	3.201E 04	
5000E-2-767E 01	2.330E 06	6.536E 08	2.771E 04	
6000E-2-527E 01	1.920E 06	1.627E 08	2.474E 04	
7000E-1-847E 01	1.500E 06	5.825E 08	1.915E 04	
8000E-1-659E 01	9.445E 05	2.460E 08	1.105E 04	
9000E-0-051E 00	5.781E 05	1.111E 08	1.030E 04	
1000E-0-956E 00	3.452E 05	1.260E 08	4.062E 05	
1500E-0-404E 00	2.080E 05	1.602E 07	1.484E 06	
2000E-0-184E 00	1.260E 05	1.111E 07	1.857E 05	
3000E-0-874E 01	7.607E 04	2.798E 07	1.237E 06	
4000E-0-328E 01	2.884E 04	1.053E 07	2.280E 06	

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 \*\* ORBITAL FLUX STUDY WITH COMPOSITE PARTICLE ENVIRONMENT: VETTES APB; ACG; AE17 FOR SOLAR MAXIMUM \*\*\*\*\*  
 \*\* UNCERTAINTY FACTORS (UF) APPLIED FOR THIS RUN ARE: 167 PROTONS (APB) - UF= 1.0; FOR INNER ZONE ELECTRONS (AE6) - UF= 1.0  
 \*\* MAGNETIC COORDINATES R AND L COMPUTED BY INVAFA OF 1972 WITH ALLMAG, MODEL 5; BARRACLOUGH ET AL. 168-TERM 1975 \* TIME= 1980.0 \*\*  
 \*\* VEHICLE : IRAS 600 KM \*\* INCLINATION= 80DEG \*\* PD= 33CM \*\* APOGEE= 33CM \*\* PERIHELION= 103CM \*\* RFL= 103CM \*\* ROR= 33CM  
 \*\*\*\*\*  
 \*\*\*\*\* ELECTRONS \*\*\*\*\*  
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\*\*\*\*\* SPECTRUM IN PERCENT DELTA ENERGY \*\*\*\*\*

ENERGY RANGES	AVERAGED TOTAL FLUX #/CM**2/SEC	AVERAGED TOTAL FLUX #/CM**2/DAY	SPECTRUM PERCENT
1000-2000	2.212E C5	1.912E 10	56.765
2000-3000	1.292E C4	1.114E 09	3.313
3000-4000	5.128E 03	4.468E 08	1.309
4000-5000	2.045E 03	1.767E 08	0.525
5000-6000	1.010E 03	8.726E 07	0.259
6000-7000	3.880E C3	3.257E 07	0.100
7000-8000	8.621E 01	7.444E 06	0.022
8000-9000	5.233E 03	4.513E 05	0.001
9000-OVER	0.0	0.0	0.0
TOTAL	2.429E C5	2.048E 10	62.264

\*\*\*\*\* EXPOSURE INDEX: ENERGY 35.000 MEV \*\*\*\*\*

INTENSITY RANGES #/CM**2/SEC	EXPOSURE (HOURS)	TOTAL # OF PARTICLES	% OF TOTAL
ZERO FLUX	15.000	0.0	
1e0-1e1	6.600	7.342E 03	
1e1-1e2	1.267	1.235E 06	
1e2-1e3	0.800	1.235E 06	
1e3-1e4	1.323	1.990E 07	
1e4-1e5	3.561	6.956E 08	
1e5-1e6	2.100	1.243E 09	
1e6-1e7	0.0	0.0	
1e7-OVER	0.0	0.0	
TOTAL	23.967	1.860E 09	

\*\*\*\*\* COMPOSITE ORBIT SPECTRUM \*\*\*\*\* TAU= 1.00 YR(S)

ENERGY LEVELS	AVERAGED INTRG. FLUX #/CM**2/SEC	AVERAGED INTRG. FLUX #/CM**2/DAY	AVERAGED INTRG. FLUX #/CM**2/TAU	AVERAGED INNER ZONE + OUTER ZONE	AVERAGED DIFFER. FLUX #/CM**2/SEC/KEV
4000E-012-099E 05	1.368E 10	1.225E 12	8.177E 12	4.218E 12	2.068E 03
7000E-011-057E 05	2.800E 10	4.607E 12	6.331E 12	3.341E 12	2.751E 03
1000E-002-429E 05	2.096E 10	7.655E 12	4.441E 12	2.678E 12	2.049E 03
2000E-1-099E 05	5.490E 09	3.466E 12	1.604E 12	1.666E 12	6.137E 02
3000E-1-452E 04	4.711E 09	1.719E 12	6.720E 11	1.040E 12	3.273E 02
4000E-1-272E 04	2.827E 09	1.403E 12	6.455E 11	7.880E 11	1.562E 02
5000E-1-155E 04	1.862E 09	6.757E 11	9.252E 10	5.868E 11	7.341E 01
6000E-1-741E 04	1.500E 09	5.492E 11	5.126E 10	4.579E 11	4.603E 01
7000E-1-438E 04	1.240E 09	4.271E 11	4.271E 10	2.688E 11	2.688E 01
8000E-1-203E 04	1.040E 09	3.754E 11	1.222E 10	3.606E 11	2.169E 01
9000E-1-019E 04	8.750E 08	3.210E 11	1.240E 10	3.076E 11	2.025E 01
1000E-0-830E 04	3.740E 08	3.740E 11	1.605E 10	1.605E 10	1.605E 01
1250E-0-238E 03	4.750E 08	1.737E 11	5.469E 09	1.678E 11	9.605E 00
1500E-0-138E 03	3.095E 08	1.115E 11	3.667E 09	1.679E 11	6.050E 00
1750E-0-228E 03	1.990E 08	7.219E 10	1.220E 09	3.976E 10	3.976E 00
2000E-0-149E 03	1.288E 08	4.766E 10	1.251E 09	4.541E 10	2.201E 00
2250E-0-111E 03	9.600E 07	3.526E 10	1.170E 09	3.819E 10	1.372E 00
2500E-0-643E 02	7.268E 07	2.660E 10	7.215E 08	2.588E 10	5.654E 01
2750E-0-431E 02	5.470E 07	1.876E 10	1.908E 10	1.703E 10	1.703E 01
3000E-0-300E 02	4.170E 07	1.314E 10	1.148E 10	1.603E 10	6.515E 01
3250E-0-159E 02	2.720E 07	9.961E 09	2.126E 07	5.923E 09	4.934E 01
3500E-0-120E 02	1.890E 07	5.740E 09	1.220E 07	6.563E 09	1.619E 01
3750E-0-1280E 02	1.192E 07	4.351E 09	4.224E 06	4.347E 09	2.988E 01
4000E-0-514E 01	7.890E 06	2.823E 09	7.212E 05	2.893E 09	1.865E 01
4250E-0-180E 01	1.890E 06	6.090E 08	0.0	6.090E 08	6.090E 00
5000E-0-222E 00	4.543E 06	1.047E 08	0.0	1.047E 08	1.289E 02
5500E-0-7-058E 01	6.617E 04	2.415E 07	0.0	2.415E 07	3.208E 03
6000E-0-0-0	0.0	0.0	0.0	0.0	0.0
6500E-0-0-0	0.0	0.0	0.0	0.0	0.0
7000E-0-0-0	0.0	0.0	0.0	0.0	0.0

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\*\* ORBITAL FLUX STUDY WITH COMPOSITE PARTICLE ENVIRONMENT: VETTES APB1 AEG AE17 FOR SOLAR MAXIMUM \*\*\* UNIFLUX OF 1979 \*\*  
 \*\* UNCERTAINTY FACTORS (UF) APPLIED FOR THIS RUN ARE: FOR PROTONS (APB) - UF= 1.0; FOR INNER ZONE ELECTRONS (AEG) - UF= 1.3  
 \*\* MAGNETIC COORDINATES B AND L COMPUTED BY INVARA OF 1972 WITH ALL MAG MODEL 21 BARRACLOUGH ET AL. 168-TERM 1975 \* TIME= 1980.0 \*\*  
 \*\* VEHICLE : IRAS 90 KM \*\* INCLINATION= 99DEG \*\* PERIGEE= 300KM \*\* APOGEE= 900KM \*\* B/L ORBIT TAPE: TD537L \*\* PERIOD= 1.716 \*\*  
 \*\*\*\*\* PROTONS \*\*\*\*\*  
 \*\*\*\*\* ELECTRONS \*\*\*\*\*

\*\*\*\*\* SPECTRUM IN PERCENT DELTA ENERGY \*\*\*\*\*      \*\*\*\*\* COMPOSITE ORBIT SPECTRUM \*\*\*\*\*      TAU= 1.00 YEAR(S)

SPECTRUM IN PERCENT DELTA ENERGY				COMPOSITE ORBIT SPECTRUM				
ENERGY RANGES	AVERAGED TOTAL FLUX #/CM**2/SEC	AVERAGED TOTAL FLUX #/CM**2/DAY	SPECTRUM PERCENT	ENERGY LEVELS	AVERAGED INTEG.FLUX #/CM**2/SEC	AVERAGED INTEG.FLUX #/CM**2/DAY	AVERAGED INTEG.FLUX #/CM**2/TAU	AVERAGED DIFFER.FLUX #/CM**2/SEC/KEV
1.00E-2-1.00E-1	1.222E 04	1.055E 07	60.242	4.000E-012.028E 04	1.752E 09	6.395E 11	9.945E 01	
1.00E-1-1.00E+0	1.288E 04	1.155E 07	7.888	1.000E+012.273E 04	1.100E 09	4.215E 11	1.173E 02	
1.00E+0-1.00E+1	5.475E 01	4.721E 06	0.122	1.000E+112.031E 03	1.754E 08	6.403E 10	1.269E 01	
1.00E+1-1.00E+2	6.732E 01	5.817E 06	0.332	1.000E+212.029E 02	8.051E 07	2.729E 10	7.507E-01	
1.00E+2-1.00E+3	4.366E 01	3.721E 06	0.212	2.000E+31.599E 02	4.457E 07	1.627E 10	4.036E-01	
1.00E+3-1.00E+4	5.383E 01	4.631E 06	0.265	3.000E+41.381E 03	3.200E 07	1.180E 10	5.601E-02	
1.00E+4-1.00E+5	8.587E 01	7.413E 06	0.423	4.000E+51.771E 02	3.253E 07	1.176E 10	5.577E-02	
1.00E+5-1.00E+6	2.721E 00	1.746E 05	0.010	5.000E+61.358E 02	2.902E 07	1.059E 10	3.194E-02	
TOTAL	1.273E 04	1.107E 07	62.785	6.000E+73.732E 02	2.707E 07	9.753E 09	2.347E-02	
8.000E+0-1.00E+1	2.475E 01	2.178E 06	0.122	7.000E+82.768E 02	2.531E 07	8.729E 09	1.491E-02	
1.00E+1-1.00E+2	6.732E 01	5.817E 06	0.332	8.000E+92.215E 02	2.178E 07	7.348E 09	9.811E-03	
1.00E+2-1.00E+3	4.366E 01	3.721E 06	0.212	9.000E+01.975E 02	1.707E 07	6.229E 09	3.501E-03	
1.00E+3-1.00E+4	5.383E 01	4.631E 06	0.265	1.000E+11.731E 02	1.495E 07	5.458E 09	2.724E-03	
1.00E+4-1.00E+5	8.587E 01	7.413E 06	0.423	1.000E+21.645E 02	1.421E 07	5.187E 09	1.724E-03	
1.00E+5-1.00E+6	2.721E 00	1.746E 05	0.010	1.000E+31.696E 02	1.351E 07	4.932E 09	1.600E-03	
1.00E+6-1.00E+7	0.0	0.0	0.0	1.000E+41.488E 02	1.248E 07	4.640E 09	1.400E-03	
1.00E+7-1.00E+8	0.0	0.0	0.0	1.000E+51.168E 02	1.224E 07	4.607E 09	1.587E-03	
1.00E+8-1.00E+9	0.0	0.0	0.0	1.000E+61.168E 02	1.111E 07	4.050E 09	1.302E-03	
1.00E+9-1.00E+10	0.0	0.0	0.0	1.000E+71.168E 02	1.111E 07	4.050E 09	1.302E-03	
1.00E+10-1.00E+11	0.0	0.0	0.0	1.000E+81.168E 02	1.111E 07	4.050E 09	1.302E-03	
1.00E+11-1.00E+12	0.0	0.0	0.0	1.000E+91.168E 02	1.111E 07	4.050E 09	1.302E-03	
1.00E+12-1.00E+13	0.0	0.0	0.0	1.000E+101.168E 02	1.111E 07	4.050E 09	1.302E-03	
1.00E+13-1.00E+14	0.0	0.0	0.0	1.000E+111.168E 02	1.111E 07	4.050E 09	1.302E-03	
1.00E+14-1.00E+15	0.0	0.0	0.0	1.000E+121.168E 02	1.111E 07	4.050E 09	1.302E-03	
1.00E+15-1.00E+16	0.0	0.0	0.0	1.000E+131.168E 02	1.111E 07	4.050E 09	1.302E-03	
1.00E+16-1.00E+17	0.0	0.0	0.0	1.000E+141.168E 02	1.111E 07	4.050E 09	1.302E-03	
1.00E+17-1.00E+18	0.0	0.0	0.0	1.000E+151.168E 02	1.111E 07	4.050E 09	1.302E-03	
TOTAL	47.967	5.799E 07		500.0	2.121E 08	1.746E 08	6.374E 07	1.333E-05

\*\*\*\*\* EXPOSURE INDEX: ENERGY>0.01 MEV \*\*\*\*\*  
 INTENSITY RANGES      EXPOSURE DURATION      TOTAL # OF PARTICLES  
 #/CM\*\*2/SEC      (HOURS)  
 Z30 FLUX      39.910      7.7      3.0  
 1.2E-14-1.1      1.487      3.98E-08      3.0  
 1.1E-14-1.0      1.533      2.41E-08      3.0  
 1.0E-14-0.9      1.533      2.41E-08      3.0  
 0.9E-14-0.8      1.533      2.41E-08      3.0  
 0.8E-14-0.7      1.533      2.41E-08      3.0  
 0.7E-14-0.6      1.533      2.41E-08      3.0  
 0.6E-14-0.5      1.533      2.41E-08      3.0  
 0.5E-14-0.4      1.533      2.41E-08      3.0  
 0.4E-14-0.3      1.533      2.41E-08      3.0  
 0.3E-14-0.2      1.533      2.41E-08      3.0  
 0.2E-14-0.1      1.533      2.41E-08      3.0  
 1.27-OVER      0.0      0.0      0.0  
 TOTAL      47.967      5.799E 07      3.0

\*\*\*\*\* SPECTRUM IN PERCENT DELTA ENERGY \*\*\*\*\*      \*\*\*\*\* COMPOSITE ORBIT SPECTRUM \*\*\*\*\*      TAU= 1.00 YEAR(S)

\*\*\*\*\* SPECTRUM IN PERCENT DELTA ENERGY \*\*\*\*\*      \*\*\*\*\* COMPOSITE ORBIT SPECTRUM \*\*\*\*\*      TAU= 1.00 YEAR(S)

SPECTRUM IN PERCENT DELTA ENERGY				COMPOSITE ORBIT SPECTRUM					
ENERGY RANGES	AVERAGED TOTAL FLUX #/CM**2/SEC	AVERAGED TOTAL FLUX #/CM**2/DAY	SPECTRUM PERCENT	ENERGY LEVELS	AVERAGED INTEG.FLUX #/CM**2/SEC	AVERAGED INTEG.FLUX #/CM**2/DAY	AVERAGED INTEG.FLUX #/CM**2/TAU	AVERAGED DIFFER.FLUX #/CM**2/SEC/KEV	
1.00E-2-1.00E-1	6.983E 05	6.023E 07	62.251	4.000E-011.122E 06	9.692E 10	3.538E 13	2.952E 13	5.051E 12	5.260E 03
1.00E-1-1.00E+0	2.654E 04	2.293E 06	2.388	1.000E+011.074E 05	7.846E 10	2.852E 13	2.395E 13	4.059E 12	7.292E 03
1.00E+0-1.00E+1	7.787E 03	6.738E 05	1.678	1.00E+1007.380E 05	6.376E 10	2.327E 13	1.952E 13	3.749E 12	6.037E 03
1.00E+1-1.00E+2	3.071E 03	2.633E 05	0.374	1.00E+20.711E 05	3.841E 10	1.404E 13	8.134E 12	3.337E 12	2.498E 03
1.00E+2-1.00E+3	1.567E 02	1.358E 05	0.187	1.00E+30.128E 05	1.288E 10	4.692E 12	2.221E 12	1.471E 12	1.078E 03
1.00E+3-1.00E+4	5.017E 02	4.853E 05	0.050	1.00E+40.721E 04	6.330E 09	2.274E 12	1.180E 12	1.095E 12	4.000E 02
1.00E+4-1.00E+5	1.278E 02	1.034E 05	0.011	1.00E+50.666E 04	3.428E 09	1.251E 12	4.331E 11	8.175E 11	1.929E 02
1.00E+5-1.00E+6	7.259E 01	6.272E 05	1.071	1.00E+60.984E 04	2.578E 09	9.411E 11	2.483E 11	6.029E 11	9.270E 01
1.00E+6-1.00E+7	0.0	0.0	0.0	1.00E+70.239E 04	2.122E 09	7.345E 11	1.845E 11	5.885E 11	5.424E 01
TOTAL	7.388E 05	6.376E 07	65.788	1.00E+80.847E 04	1.833E 09	5.562E 11	2.543E 11	3.077E 11	3.930E 01
1.00E+7-1.00E+8	0.0	0.0	0.0	1.00E+90.907E 04	1.357E 09	4.952E 11	6.836E 10	4.264E 11	3.412E 01
1.00E+8-1.00E+9	0.0	0.0	0.0	1.00E+100.314E 04	1.133E 09	4.136E 11	6.036E 10	3.628E 11	2.929E 01
1.00E+9-1.00E+10	0.0	0.0	0.0	1.00E+110.333E 03	7.376E 08	2.628E 11	2.968E 10	2.331E 10	1.474E 01
1.00E+10-1.00E+11	0.0	0.0	0.0	1.00E+120.328E 03	4.604E 08	1.690E 11	1.797E 10	1.531E 10	9.139E 00
1.00E+11-1.00E+12	0.0	0.0	0.0	1.00E+130.989E 02	2.998E 08	1.091E 11	1.192E 10	9.710E 09	6.717E 00
1.00E+12-1.00E+13	0.0	0.0	0.0	1.00E+140.257E 03	1.950E 08	7.118E 10	7.611E 09	6.327E 09	3.346E 00
1.00E+13-1.00E+14	0.0	0.0	0.0	1.00E+150.232E 03	1.554E 08	5.378E 10	5.333E 09	4.775E 09	2.119E 00
1.00E+14-1.00E+15	0.0	0.0	0.0	1.00E+160.263E 03	1.391E 08	3.903E 10	3.691E 09	3.623E 09	1.517E 00
1.00E+15-1.00E+16	0.0	0.0	0.0	1.00E+170.259E 02	7.974E 07	2.919E 10	1.640E 09	1.761E 09	1.189E 00
1.00E+16-1.00E+17	0.0	0.0	0.0	1.00E+180.400E 02	5.900E 07	2.178E 10	6.204E 08	2.113E 09	0.797E 01
1.00E+17-1.00E+18	0.0	0.0	0.0	1.00E+190.287E 02	2.872E 07	1.413E 10	1.953E 08	1.394E 09	7.182E 01
1.00E+18-1.00E+19	0.0	0.0	0.0	1.00E+200.230E 02	2.539E 07	9.260E 09	6.142E 07	4.207E 09	9.173E 01
1.00E+19-1.00E+20	0.0	0.0	0.0	1.00E+210.977E 02	1.074E 07	6.119E 09	1.966E 07	6.099E 09	4.197E 01
1.00E+20-1.00E+21	0.0	0.0	0.0	1.00E+220.281E 02	1.107E 07	4.039E 09	5.313E 06	4.034E 09	2.542E 01
1.00E+21-1.00E+22	0.0	0.0	0.0	1.00E+230.500E 01	3.650E 06	1.316E 09	9.618E 05	9.618E 08	6.545E 02
1.00E+22-1.00E+23	0.0	0.0	0.0	1.00E+240.259E 02	6.272E 05	2.189E 08	3.0	2.287E 08	1.797E 02
1.00E+23-1.00E+24	0.0	0.0	0.0	1.00E+250.500E 01	8.208E 04	2.996E 07	0.0	2.996E 07	4.280E 03
1.00E+24-1.00E+25	0.0	0.0	0.0	1.00E+260.0	0.0	0.0	0.0	0.0	0.0
1.00E+25-1.00E+26	0.0	0.0	0.0	1.00E+270.0	0.0	0.0	0.0	0.0	0.0
TOTAL	47.967	6.848E 07		7.000	3.0	0.0	0.0	0.0	0.0

\*\*\*\*\* EXPOSURE INDEX: ENERGY>0.01 MEV \*\*\*\*\*  
 INTENSITY RANGES      EXPOSURE DURATION      TOTAL # OF PARTICLES  
 #/CM\*\*2/SEC      (HOURS)  
 Z30 FLUX      38.920      7.7      3.0  
 1.2E-14-1.1      1.467      2.16E 08      3.0  
 1.1E-14-1.0      1.567      2.731E 08      3.0  
 1.0E-14-0.9      1.567      2.731E 08      3.0  
 0.9E-14-0.8      1.567      2.731E 08      3.0  
 0.8E-14-0.7      1.567      2.731E 08      3.0  
 0.7E-14-0.6      1.567      2.731E 08      3.0  
 0.6E-14-0.5      1.567      2.731E 08      3.0  
 0.5E-14-0.4      1.567      2.731E 08      3.0  
 0.4E-14-0.3      1.567      2.731E 08      3.0  
 0.3E-14-0.2      1.567      2.731E 08      3.0  
 0.2E-14-0.1      1.567      2.731E 08      3.0  
 1.27-OVER      0.0      0.0      0.0  
 TOTAL      47.967      6.848E 07      3.0

Table 14

\*\* VEHICLE: IAS 1200 KM \*\* INCLINATION: 80DEG \*\* PERIGEE: 1200KM \*\* APUGEE: 1200KM \*\* U/L DREIT TAPE: 105403 \*\* PERIOD: 1.824 \*\*

\*\*\*\* SPECTRUM IN PERCENT DELTA ENERGY \*\*\*\*

ENERGY RANGE	AVERAGED TOTAL FLUX #/(MLV)/SEC	AVERAGED TOTAL FLUX #/CM**2/SEC	AVERAGED TOTAL FLUX #/CM**2/DAY	SPECTRUM PERCENT
1.000-2.000	3.757E-04	3.247E-05	58.174	
2.000-3.000	5.421E-04	4.664E-05	8.840	
3.000-4.000	1.947E-02	1.682E-07	0.302	
4.000-5.000	3.552E-01	7.397E-06	0.133	
5.000-6.000	2.019E-02	2.065E-07	0.375	
6.000-7.000	1.329E-02	1.144E-07	0.204	
7.000-8.000	1.514E-02	1.351E-07	0.242	
8.000-9.000	2.440E-02	2.108E-07	0.378	
9.000-10.000	5.720E-02	4.951E-05	0.009	
TOTAL	3.913E-04	3.321E-05	60.959	

\*\*\*\* COMPOSITE ORBIT SPECTRUM \*\*\*\* TAU = 1.00 YEAR(S) \*\*\*\*

ENERGY LEVELS >(MEV)	AVERAGED #/CM**2/SEC	AVERAGED #/CM**2/DAY	AVERAGED #/CM**2/TAU	AVERAGED DIFFER.FLUX #/CM**2/SEC/KEV
4.000E-01	0.1645E-04	5.574E-03	2.035E-12	1.406E-02
5.000E-01	0.1857E-04	6.309E-03	1.573E-12	4.275E-02
6.000E-01	0.0391E-04	1.308E-03	1.234E-12	3.710E-02
7.000E-01	5.967E-03	2.010E-01	1.082E-11	3.683E-01
8.000E-01	2.021E-03	7.074E-02	2.665E-11	1.187E-01
9.000E-01	1.603E-03	5.509E-02	2.031E-11	1.234E-01
1.000E-00	1.175E-03	4.036E-02	1.415E-11	1.711E-01
1.500E-00	1.001E-03	3.403E-02	1.246E-11	5.937E-02
2.000E-00	7.727E-02	2.685E-01	3.085E-10	1.653E-02
3.000E-00	8.003E-02	2.740E-01	3.732E-10	5.123E-02
4.000E-00	6.087E-02	2.109E-01	2.169E-10	1.596E-02
5.000E-00	5.350E-02	1.837E-01	1.700E-10	4.480E-03
6.000E-00	5.007E-02	1.702E-01	1.374E-10	6.405E-03
7.000E-00	4.749E-02	1.610E-01	1.459E-10	5.276E-03
8.000E-00	4.506E-02	1.563E-01	1.421E-10	4.620E-03
9.000E-00	4.277E-02	1.495E-01	1.399E-10	4.545E-03
1.000E-01	4.001E-02	1.350E-01	1.281E-10	4.652E-03
1.500E-01	3.679E-02	1.270E-01	1.160E-10	3.792E-03
2.000E-01	3.427E-02	1.201E-01	1.044E-10	3.328E-03
3.000E-01	2.440E-02	8.377E-02	7.477E-11	2.254E-03
4.000E-01	1.524E-02	5.217E-02	4.800E-11	1.470E-03
5.000E-01	7.134E-02	2.511E-01	2.110E-10	6.609E-03
6.000E-01	5.847E-01	2.002E-00	1.644E-09	5.541E-04
7.000E-01	3.653E-01	1.245E-00	1.152E-09	3.599E-04
8.000E-01	2.272E-01	7.769E-02	7.147E-10	2.500E-04
9.000E-01	1.441E-01	4.951E-02	4.543E-10	1.107E-04
1.000E-00	7.730E-02	2.675E-02	2.406E-10	2.791E-05

\*\*\*\* EXPOSURE INDEX: ENERGY >= 0.000 MEV \*\*\*\*

INTENSITY RANGES #/CM**2/SEC	EXPOSURE DURATION (HOURS)	TOTAL # OF PARTICLES
1.0-2.0	16.300	0.0
2.0-3.0	4.000	13.395E-04
3.0-4.0	1.167	1.021E-05
4.0-5.0	2.167	1.571E-06
5.0-6.0	2.867	4.185E-07
6.0-7.0	4.367	4.527E-07
7.0-8.0	0.0	0.0
8.0-9.0	0.0	0.0
9.0-10.0	0.0	0.0
TOTAL	22.967	1.155E-07

\*\*\*\* COMPOSITE ORBIT SPECTRUM \*\*\*\* TAU = 1.00 YEAR(S) \*\*\*\*

ENERGY LEVELS >(MEV)	AVERAGED #/CM**2/SEC	AVERAGED #/CM**2/DAY	AVERAGED #/CM**2/TAU	AVERAGED DIFFER.FLUX #/CM**2/SEC/KEV
1.000E-01	0.1645E-04	5.574E-03	2.035E-12	1.406E-02
1.500E-01	0.1857E-04	6.309E-03	1.573E-12	4.275E-02
2.000E-01	0.0391E-04	1.308E-03	1.234E-12	3.710E-02
2.500E-01	5.967E-03	2.010E-01	1.082E-11	3.683E-01
3.000E-01	2.021E-03	7.074E-02	2.665E-11	1.187E-01
3.500E-01	1.603E-03	5.509E-02	2.031E-11	1.234E-01
4.000E-01	1.175E-03	4.036E-02	1.415E-11	1.711E-01
4.500E-01	1.001E-03	3.403E-02	1.246E-11	5.937E-02
5.000E-01	7.727E-02	2.685E-01	3.085E-10	1.653E-02
5.500E-01	8.003E-02	2.740E-01	3.732E-10	5.123E-02
6.000E-01	6.087E-02	2.109E-01	2.169E-10	1.596E-02
6.500E-01	5.350E-02	1.837E-01	1.700E-10	4.480E-03
7.000E-01	5.007E-02	1.702E-01	1.374E-10	6.405E-03
7.500E-01	4.749E-02	1.610E-01	1.459E-10	5.276E-03
8.000E-01	4.506E-02	1.563E-01	1.421E-10	4.620E-03
8.500E-01	4.277E-02	1.495E-01	1.399E-10	4.545E-03
9.000E-01	4.001E-02	1.350E-01	1.281E-10	4.652E-03
9.500E-01	3.679E-02	1.270E-01	1.160E-10	3.792E-03
1.000E-00	3.427E-02	1.201E-01	1.044E-10	3.328E-03
1.100E-00	2.440E-02	8.377E-02	7.477E-11	2.254E-03
1.200E-00	1.524E-02	5.217E-02	4.800E-11	1.470E-03
1.300E-00	7.134E-02	2.511E-01	2.110E-10	6.609E-03
1.400E-00	5.847E-01	2.002E-00	1.644E-09	5.541E-04
1.500E-00	3.653E-01	1.245E-00	1.152E-09	3.599E-04
1.600E-00	2.272E-01	7.769E-02	7.147E-10	2.500E-04
1.700E-00	1.441E-01	4.951E-02	4.543E-10	1.107E-04
1.800E-00	7.730E-02	2.675E-02	2.406E-10	2.791E-05

\*\*\*\*\* COMPOSITE ORBIT SPECTRUM \*\*\*\* TAU = 1.00 YRS) \*\*\*\*\*

\*\*\*\*\* AVERAGED INTEGRAL FLUENCE \*\*\*\*\*

\*\*\*\*\* AVERAGED DIFFER.FLUX \*\*\*\*\*

\*\*\*\*\* UNITS: #/CM\*\*2/SEC \*\*\*\*\*

\*\*\*\*\* UNITS: #/CM\*\*2/DAY \*\*\*\*\*

\*\*\*\*\* UNITS: #/CM\*\*2/TAU \*\*\*\*\*

\*\*\*\*\* UNITS: #/CM\*\*2/SEC/KEV \*\*\*\*\*

\*\*\*\*\* COMPOSITE ORBIT SPECTRUM \*\*\*\* TAU = 1.00 YRS) \*\*\*\*\*

\*\*\*\*\* AVERAGED INTEGRAL FLUENCE \*\*\*\*\*

\*\*\*\*\* AVERAGED DIFFER.FLUX \*\*\*\*\*

\*\*\*\*\* UNITS: #/CM\*\*2/SEC \*\*\*\*\*

\*\*\*\*\* UNITS: #/CM\*\*2/DAY \*\*\*\*\*

\*\*\*\*\* UNITS: #/CM\*\*2/TAU \*\*\*\*\*

\*\*\*\*\* UNITS: #/CM\*\*2/SEC/KEV \*\*\*\*\*

\*\*\*\* SPECTRUM IN PERCENT DELTA ENERGY \*\*\*\*

ENERGY RANGE	AVERAGED TOTAL FLUX #/(MLV)/SEC	AVERAGED TOTAL FLUX #/CM**2/SEC	AVERAGED TOTAL FLUX #/CM**2/DAY	SPECTRUM PERCENT
1.000-1.500	1.947E-04	1.682E-05	6.0.059	
1.500-2.000	5.567E-04	5.172E-05	1.330	
2.000-2.500	1.258E-04	1.067E-05	0.427	
2.500-3.000	4.712E-04	4.124E-05	0.162	
3.000-3.500	2.569E-03	2.222E-05	0.087	
3.500-4.000	7.913E-03	6.980E-07	0.027	
4.000-4.500	1.625E-02	1.812E-07	0.006	
4.500-5.000	4.771E-02	6.442E-05	0.000	
5.000-5.500	1.478E-03	1.277E-02	0.000	
TOTAL	2.029E-06	1.752E-11	68.777	

\*\*\*\*\* COMPOSITE ORBIT SPECTRUM \*\*\*\* TAU = 1.00 YRS) \*\*\*\*\*

ENERGY LEVELS >(MEV)	AVERAGED #/CM**2/SEC	AVERAGED #/CM**2/DAY	AVERAGED #/CM**2/TAU	AVERAGED DIFFER.FLUX #/CM**2/SEC/KEV
1.000E-01	0.12.949E-06	2.548E-11	9.301E-13	7.588E-12
1.500E-01	0.12.431E-06	2.109E-11	7.668E-13	6.351E-12
2.000E-01	0.02.027E-06	1.753E-11	6.357E-13	5.101E-12
2.500E-01	0.04.712E-06	4.124E-11	1.474E-12	1.187E-11
3.000E-01	0.02.569E-06	3.532E-11	1.285E-12	1.980E-12
3.500E-01	0.07.913E-06	1.499E-10	5.435E-12	1.477E-12
4.000E-01	0.01.625E-06	0.970E-09	2.547E-12	1.810E-12
4.500E-01	0.04.771E-06	4.656E-09	1.771E-11	6.374E-11
5.000E-01	0.01.478E-06	1.551E-09	1.285E-12	7.990E-11
6.000E-01	0.04.712E-06	4.124E-09	4.629E-11	6.771E-11
7.000E-01	0.02.569E-06	2.212E-09	8.024E-11	5.770E-11
8.000E-01	0.07.913E-06	1.890E-09	6.990E-11	4.924E-11
9.000E-01	0.01.625E-06	1.139E-09	4.141E-11	2.871E-11
1.000E-00	0.04.712E-06	7.143E-09	2.622E-11	2.025E-11
1.100E-00	0.02.569E-06	4.675E-09	1.766E-11	1.311E-11
1.200E-00	0.07.913E-06	1.499E-08	5.423E-11	4.000E-11
1.300E-00	0.01.625E-06	2.248E-08	8.225E-11	6.437E-11
1.400E-00	0.04.712E-06	1.054E-08	0.372E-10	4.674E-11
1.500E-00	0.01.625E-06	1.054E-08	1.154E-10	8.279E-11
1.600E-00	0.04.712E-06	4.124E-08	1.441E-10	1.016E-10
1.700E-00	0.02.569E-06	8.377E-08	3.057E-10	2.838E-10
1.800E-00	0.07.913E-06	1.499E-07	1.922E-10	1.875E-10
1.900E-00	0.01.625E-06	1.499E-07	5.741E-10	1.940E-10
2.000E-00	0.04.712E-06	2.267E-07	6.462E-09	6.210E-09
2.100E-00	0.01.625E-06	1.499E-07	0.463E-09	1.667E-07
2.200E-00	0.07.913E-06	1.499E-07	1.499E-09	6.444E-09
2.300E-00	0.01.625E-06	1.499E-07	1.499E-09	1.259E-09
2.400E-00	0.04.712E-06	8.444E-05	3.082E-08	3.082E-08
2.500E-00	0.01.625E-06	1.001E-05	3.653E-07	3.653E-07
2.600E-00	0.04.712E-06	1.499E-05	4.651E-04	4.651E-04
2.700E-00	0.00.000E-06	0.00.000E-06	0.00.000E-06	0.00.000E-06
2.800E-00	0.00.000E-06	0.00.000E-06	0.00.000E-06	0.00.000E-06
2.900E-00	0.00.000E-06	0.00.000E-06	0.00.000E-06	0.00.000E-06
TOTAL	23.467	1.568E-05	0.0	0.0

ORIGINAL PAGE IS OF POOR QUALITY

Table 15

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 \*\* ORBITAL FLUX STUDY WITH COMPOSITE PARTICLE ENVIRONMENTS: VETTES APB; ALB; AE17 FOR SOLAR MAXIMUM \*\*\* UNIFLUX OF 1979 \*\*  
 \*\* UNCERTAINTY FACTORS (UF) APPLIED FOR THIS RUN ARE: FOR PROTONS (APB) - UF= 2.0; FOR INNER ZONE ELECTRONS (AE6) - UF= 5.0 \*\*  
 \*\* MAGNETIC COORDINATES B AND L COMPUTED BY INVARA OF 1972 WITH ALLMAG MODEL 51; BARROUCH ET AL. 168-TERM 1975 \*\* TIME = 1980.0 \*\*  
 \*\* VEHICLE: IRAS 600 KM \*\* INCLINATION= EQU \*\* PERIGEE= 600KM \*\* APOGEE= 600KM \*\* B/L ORBIT TAPE: TD5362 \*\* PERIOD= 1.011 \*\*  
 \*\*\*\*\*  
 \*\*\*\*\*  
 \*\*\*\*\*

\*\*\*\*\* SPECTRUM IN PERCENT DELTA ENERGY \*\*\*\*\*

ENERGY RANGES	AVERAGED TOTAL FLUX #/CM**2/SEC	AVERAGED TOTAL FLUX #/CM**2/DAY	SPECTRUM PERCENT
0-1000	6.329E 03	5.295E 08	56.977
1000-2000	6.381E 06	5.461E 10	0.567
2000-3000	2.085E 01	1.802E 06	0.200
3000-4000	2.366E 01	2.209E 06	0.582
4000-5000	2.202E 01	1.903E 06	0.218
5000-6000	1.673E 01	1.448E 06	0.165
6000-7000	1.890E 01	1.675E 06	0.226
7000-8000	3.620E 01	3.134E 06	0.358
8000-9000	5.676E 01	5.706E 06	0.607
9000-OVER	0.000E 00	0.000E 00	0.000
TOTAL	6.222E 03	5.376E 08	61.488

\*\*\*\*\* EXPOSURE INDEX: ENERGY>5.000 MEV \*\*\*\*\*

INTENSITY RANGES #/CM**2/SEC	EXPOSURE DURATION (HOURS)	TOTAL # OF PARTICLES	% OF TOTAL
ZERO FLUX	21.767	0.0	0.0
1.E0-1.E1	0.007	1.625E 01	0.000
1.E1-1.E2	0.433	1.247E 04	0.000
1.E2-1.E3	0.700	1.859E 05	0.000
1.E3-1.E4	1.000	9.472E 06	0.000
1.E4-1.E5	0.0	0.0	0.0
1.E5-1.E6	0.0	0.0	0.0
1.E6-1.E7	0.0	0.0	0.0
1.E7-OVER	0.0	0.0	0.0
TOTAL	23.567	1.103E 07	0.000

\*\*\*\*\* COMPOSITE ORBIT SPECTRUM \*\*\*\*\* TAU= 1.00 YEAR(S)

ENERGY LEVELS (MEV)	AVERAGED INTEG. FLUX #/CM**2/SEC	AVERAGED INTEG. FLUX #/CM**2/DAY	AVERAGED INTEG. FLUX #/CM**2/TAU	AVERAGED DIFFER. FLUX #/CM**2/SEC/MEV
0.000E+00	0.112E+04	9.743E+08	3.191E+11	5.140E+01
0.010E+00	1.789E+06	1.546E+10	4.897E+09	1.100E+03
0.020E+00	2.222E+03	1.937E+08	1.962E+11	5.924E+01
0.030E+00	8.780E+02	7.580E+07	2.769E+10	5.990E+00
0.040E+00	3.394E+02	2.933E+07	1.070E+10	3.339E+01
0.050E+00	1.933E+02	1.670E+07	6.392E+09	1.630E+01
0.060E+00	1.618E+02	1.399E+07	5.092E+09	2.022E+02
0.070E+00	1.415E+02	1.222E+07	4.402E+09	2.079E+02
0.080E+00	1.278E+02	1.104E+07	4.033E+09	1.153E+02
0.090E+00	1.179E+02	1.018E+07	3.717E+09	8.386E+02
0.100E+00	1.090E+02	9.349E+06	3.249E+09	1.100E+03
0.120E+00	9.860E+01	8.519E+06	3.100E+09	3.247E+03
0.150E+00	8.876E+01	7.689E+06	2.795E+09	1.833E+03
0.200E+00	8.152E+01	7.032E+06	2.017E+09	1.171E+03
0.250E+00	7.657E+01	6.616E+06	2.416E+09	5.416E+04
0.300E+00	7.245E+01	6.260E+06	2.282E+09	7.012E+04
0.400E+00	6.875E+01	5.951E+06	2.015E+09	8.121E+04
0.500E+00	6.549E+01	5.618E+06	1.877E+09	6.773E+04
0.600E+00	6.244E+01	5.341E+06	1.770E+09	5.542E+04
0.700E+00	5.956E+01	5.135E+06	1.440E+09	4.947E+04
0.800E+00	5.681E+01	4.907E+06	1.405E+09	4.947E+04
1.000E+00	5.000E+01	4.350E+06	1.405E+09	4.947E+04
1.500E+00	3.850E+01	3.350E+06	1.405E+09	4.947E+04
2.000E+00	3.000E+01	2.600E+06	1.405E+09	4.947E+04
3.000E+00	2.100E+01	1.800E+06	1.405E+09	4.947E+04
4.000E+00	1.500E+01	1.300E+06	1.405E+09	4.947E+04
5.000E+00	1.100E+01	9.500E+05	1.405E+09	4.947E+04
6.000E+00	8.500E+00	7.300E+05	1.405E+09	4.947E+04
7.000E+00	6.500E+00	5.600E+05	1.405E+09	4.947E+04
8.000E+00	5.000E+00	4.300E+05	1.405E+09	4.947E+04
9.000E+00	3.800E+00	3.300E+05	1.405E+09	4.947E+04
10.000E+00	3.000E+00	2.600E+05	1.405E+09	4.947E+04
15.000E+00	2.100E+00	1.800E+05	1.405E+09	4.947E+04
20.000E+00	1.500E+00	1.300E+05	1.405E+09	4.947E+04
30.000E+00	1.100E+00	9.500E+04	1.405E+09	4.947E+04
40.000E+00	8.500E+00	7.300E+04	1.405E+09	4.947E+04
50.000E+00	6.500E+00	5.600E+04	1.405E+09	4.947E+04
60.000E+00	5.000E+00	4.300E+04	1.405E+09	4.947E+04
70.000E+00	3.800E+00	3.300E+04	1.405E+09	4.947E+04
80.000E+00	3.000E+00	2.600E+04	1.405E+09	4.947E+04
90.000E+00	2.100E+00	1.800E+04	1.405E+09	4.947E+04
100.000E+00	1.500E+00	1.300E+04	1.405E+09	4.947E+04
TOTAL	6.676E+01	5.768E+06	2.102E+09	4.752E+06

\*\*\*\*\*  
 \*\* ORBITAL FLUX STUDY WITH COMPOSITE PARTICLE ENVIRONMENTS: VETTES APB; ALB; AE17 FOR SOLAR MAXIMUM \*\*\* UNIFLUX OF 1979 \*\*  
 \*\* UNCERTAINTY FACTORS (UF) APPLIED FOR THIS RUN ARE: FOR PROTONS (APB) - UF= 2.0; FOR INNER ZONE ELECTRONS (AE6) - UF= 5.0 \*\*  
 \*\* MAGNETIC COORDINATES B AND L COMPUTED BY INVARA OF 1972 WITH ALLMAG MODEL 51; BARROUCH ET AL. 168-TERM 1975 \*\* TIME = 1980.0 \*\*  
 \*\* VEHICLE: IRAS 600 KM \*\* INCLINATION= EQU \*\* PERIGEE= 600KM \*\* APOGEE= 600KM \*\* B/L ORBIT TAPE: TD5362 \*\* PERIOD= 1.011 \*\*  
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\*\*\*\*\* SPECTRUM IN PERCENT DELTA ENERGY \*\*\*\*\*

ENERGY RANGES	AVERAGED TOTAL FLUX #/CM**2/SEC	AVERAGED TOTAL FLUX #/CM**2/DAY	SPECTRUM PERCENT
0-1000	6.413E 05	7.265E 10	59.465
1000-2000	2.349E 04	2.029E 09	1.661
2000-3000	8.981E 03	4.384E 08	0.352
3000-4000	2.320E 03	2.009E 08	0.164
4000-5000	1.708E 03	1.479E 08	0.121
5000-6000	6.871E 02	4.208E 07	0.034
6000-7000	2.640E 02	2.281E 07	0.019
7000-8000	7.997E 01	6.832E 06	0.006
8000-9000	7.720E 00	6.517E 05	0.001
9000-OVER	0.000E 00	0.000E 00	0.000
TOTAL	8.746E 05	7.557E 10	61.442

\*\*\*\*\* EXPOSURE INDEX: ENERGY>5.000 MEV \*\*\*\*\*

INTENSITY RANGES #/CM**2/SEC	EXPOSURE DURATION (HOURS)	TOTAL # OF PARTICLES	% OF TOTAL
ZERO FLUX	15.000	0.0	0.0
1.E0-1.E1	0.370	6.404E 03	0.000
1.E1-1.E2	3.467	7.933E 04	0.000
1.E2-1.E3	0.230	9.481E 03	0.000
1.E3-1.E4	1.331	1.631E 05	0.000
1.E4-1.E5	1.400	5.674E 06	0.000
1.E5-1.E6	2.067	2.168E 07	0.000
1.E6-1.E7	0.033	1.247E 06	0.000
1.E7-OVER	0.0	0.0	0.0
TOTAL	23.567	2.677E 06	0.000

\*\*\*\*\* COMPOSITE ORBIT SPECTRUM \*\*\*\*\* TAU= 1.00 YR(S)

ENERGY LEVELS (MEV)	AVERAGED INTEG. FLUX #/CM**2/SEC	AVERAGED INTEG. FLUX #/CM**2/DAY	AVERAGED INTEG. FLUX #/CM**2/TAU	AVERAGED DIFFER. FLUX #/CM**2/SEC/MEV
0.000E+00	0.112E+04	9.743E+08	3.191E+11	5.140E+01
0.010E+00	1.789E+06	1.546E+10	4.897E+09	1.100E+03
0.020E+00	2.222E+03	1.937E+08	1.962E+11	5.924E+01
0.030E+00	8.780E+02	7.580E+07	2.769E+10	5.990E+00
0.040E+00	3.394E+02	2.933E+07	1.070E+10	3.339E+01
0.050E+00	1.933E+02	1.670E+07	6.392E+09	1.630E+01
0.060E+00	1.618E+02	1.399E+07	5.092E+09	2.022E+02
0.070E+00	1.415E+02	1.222E+07	4.402E+09	2.079E+02
0.080E+00	1.278E+02	1.104E+07	4.033E+09	1.153E+02
0.090E+00	1.179E+02	1.018E+07	3.717E+09	8.386E+02
0.100E+00	1.090E+02	9.349E+06	3.249E+09	1.100E+03
0.120E+00	9.860E+01	8.519E+06	3.100E+09	3.247E+03
0.150E+00	8.876E+01	7.689E+06	2.795E+09	1.833E+03
0.200E+00	8.152E+01	7.032E+06	2.017E+09	1.171E+03
0.250E+00	7.657E+01	6.616E+06	2.416E+09	5.416E+04
0.300E+00	7.245E+01	6.260E+06	2.282E+09	7.012E+04
0.400E+00	6.875E+01	5.951E+06	2.015E+09	8.121E+04
0.500E+00	6.549E+01	5.618E+06	1.877E+09	6.773E+04
0.600E+00	6.244E+01	5.341E+06	1.770E+09	5.542E+04
0.700E+00	5.956E+01	5.135E+06	1.440E+09	4.947E+04
0.800E+00	5.681E+01	4.907E+06	1.405E+09	4.947E+04
1.000E+00	5.000E+01	4.350E+06	1.405E+09	4.947E+04
1.500E+00	3.850E+01	3.350E+06	1.405E+09	4.947E+04
2.000E+00	3.000E+01	2.600E+06	1.405E+09	4.947E+04
3.000E+00	2.100E+01	1.800E+06	1.405E+09	4.947E+04
4.000E+00	1.500E+01	1.300E+06	1.405E+09	4.947E+04
5.000E+00	1.100E+01	9.500E+05	1.405E+09	4.947E+04
6.000E+00	8.500E+00	7.300E+05	1.405E+09	4.947E+04
7.000E+00	6.500E+00	5.600E+05	1.405E+09	4.947E+04
8.000E+00	5.000E+00	4.300E+05	1.405E+09	4.947E+04
9.000E+00	3.800E+00	3.300E+05	1.405E+09	4.947E+04
10.000E+00	3.000E+00	2.600E+05	1.405E+09	4.947E+04
15.000E+00	2.100E+00	1.800E+05	1.405E+09	4.947E+04
20.000E+00	1.500E+00	1.300E+05	1.405E+09	4.947E+04
30.000E+00	1.100E+00	9.500E+04	1.405E+09	4.947E+04
40.000E+00	8.500E+00	7.300E+04	1.405E+09	4.947E+04
50.000E+00	6.500E+00	5.600E+04	1.405E+09	4.947E+04
60.000E+00	5.000E+00	4.300E+04	1.405E+09	4.947E+04
70.000E+00	3.800E+00	3.300E+04	1.405E+09	4.947E+04
80.000E+00	3.000E+00	2.600E+04	1.405E+09	4.947E+04
90.000E+00	2.100E+00	1.800E+04	1.405E+09	4.947E+04
100.000E+00	1.500E+00	1.300E+04	1.405E+09	4.947E+04
TOTAL	6.676E+01	5.768E+06	2.102E+09	4.752E+06

Table 16

ORBITAL FLUX STUDY WITH COMPOSITE PARTICLE ENVIRONMENTS: VETTES APR: AEG: AC17 FOR SOLAR MAXIMUM \*\*\* UNIFLUX OF 1979 \*\*\*  
 \*\* UNCERTAINTY FACTORS (U) APPLIED FOR THIS RUN ARE: FOR PROTONS (APU) U=2.0 FOR INNER ZONE ELECTRONS (AE0) U=5.0 \*\*  
 \*\* PARTICLES CALCULATED TO MID L CIRCLED BY INVAH OF 1.72 WITH ALL ANG. MODELS - 22 BARRACLOUGH ET AL. 168-TERM 1975 \*\* TIME= 1980.0 \*\*  
 \*\* VEHICLE: TMAS 900 KM \*\* INCLINATION: 90DEG \*\* PERIGEE: 900KM \*\* APURGE: 900KM \*\* U/L CRBIT TAPE: TD5376 \*\* PERIOD= 1.716 \*\*

\*\*\*\*\* SPECTRUM IN PERCENT DELTA ENERGY \*\*\*\*\*

ENERGY RANGES #/CM**2/SEC	AVERAGED TOTAL FLUX #/CM**2/SEC	AVERAGED TOTAL FLUX #/CM**2/SEC	SPECTRUM PERCENT	ENERGY LEVELS (MEV)	AVERAGED INTEGRAL FLUX #/CM**2/SEC	AVERAGED INTEGRAL FLUX #/CM**2/DAY	AVERAGED INTEGRAL FLUX #/CM**2/TAU	AVERAGED DIFFER FLUX #/CM**2/SEC/KEV
1.00E-03	2.44E 04	2.411E 04	0.227	1.00E-01	4.055E 04	3.534E 09	1.279E 12	1.890E 02
2.00E-03	3.00E 04	3.110E 04	0.683	2.00E-01	4.94E 04	4.275E 09	1.407E 12	4.20E 02
4.00E-03	4.14E 04	4.40E 04	1.621	4.00E-01	6.294E 04	5.200E 09	1.630E 12	2.347E 02
6.00E-03	4.74E 04	4.77E 04	0.152	6.00E-01	7.061E 04	5.507E 09	1.721E 12	2.537E 01
8.00E-03	5.07E 04	5.14E 04	0.200	8.00E-01	7.70E 04	5.744E 09	1.784E 12	1.517E 00
1.00E-02	5.24E 04	5.24E 04	0.000	1.00E-01	8.24E 04	5.944E 09	1.834E 12	8.07E-01
2.00E-02	5.41E 04	5.41E 04	0.000	2.00E-01	8.70E 04	6.114E 09	1.874E 12	1.100E-01
3.00E-02	5.49E 04	5.49E 04	0.000	3.00E-01	9.09E 04	6.264E 09	1.904E 12	1.11E-01
4.00E-02	5.54E 04	5.54E 04	0.000	4.00E-01	9.41E 04	6.394E 09	1.924E 12	6.38E-02
5.00E-02	5.58E 04	5.58E 04	0.000	5.00E-01	9.66E 04	6.504E 09	1.934E 12	2.98E-02
6.00E-02	5.61E 04	5.61E 04	0.000	6.00E-01	9.84E 04	6.594E 09	1.944E 12	1.96E-02
7.00E-02	5.63E 04	5.63E 04	0.000	7.00E-01	9.96E 04	6.664E 09	1.954E 12	1.49E-02
8.00E-02	5.64E 04	5.64E 04	0.000	8.00E-01	1.004E 05	6.724E 09	1.964E 12	1.06E-02
9.00E-02	5.65E 04	5.65E 04	0.000	9.00E-01	1.010E 05	6.774E 09	1.974E 12	7.00E-03
1.00E-01	5.65E 04	5.65E 04	0.000	1.00E+00	1.014E 05	6.814E 09	1.984E 12	5.330E-03
2.00E-01	5.65E 04	5.65E 04	0.000	2.00E+00	1.016E 05	6.834E 09	1.984E 12	4.04E-03
3.00E-01	5.65E 04	5.65E 04	0.000	3.00E+00	1.017E 05	6.844E 09	1.984E 12	3.44E-03
4.00E-01	5.65E 04	5.65E 04	0.000	4.00E+00	1.017E 05	6.844E 09	1.984E 12	3.200E-03
5.00E-01	5.65E 04	5.65E 04	0.000	5.00E+00	1.017E 05	6.844E 09	1.984E 12	3.17E-03
6.00E-01	5.65E 04	5.65E 04	0.000	6.00E+00	1.017E 05	6.844E 09	1.984E 12	3.160E-03
7.00E-01	5.65E 04	5.65E 04	0.000	7.00E+00	1.017E 05	6.844E 09	1.984E 12	2.60E-03
8.00E-01	5.65E 04	5.65E 04	0.000	8.00E+00	1.017E 05	6.844E 09	1.984E 12	2.30E-03
9.00E-01	5.65E 04	5.65E 04	0.000	9.00E+00	1.017E 05	6.844E 09	1.984E 12	1.75E-03
1.00E+00	5.65E 04	5.65E 04	0.000	1.00E+01	1.017E 05	6.844E 09	1.984E 12	1.08E-03
2.00E+00	5.65E 04	5.65E 04	0.000	2.00E+01	1.017E 05	6.844E 09	1.984E 12	6.22E-04
3.00E+00	5.65E 04	5.65E 04	0.000	3.00E+01	1.017E 05	6.844E 09	1.984E 12	4.32E-04
4.00E+00	5.65E 04	5.65E 04	0.000	4.00E+01	1.017E 05	6.844E 09	1.984E 12	2.74E-04
5.00E+00	5.65E 04	5.65E 04	0.000	5.00E+01	1.017E 05	6.844E 09	1.984E 12	1.64E-04
6.00E+00	5.65E 04	5.65E 04	0.000	6.00E+01	1.017E 05	6.844E 09	1.984E 12	1.13E-04
7.00E+00	5.65E 04	5.65E 04	0.000	7.00E+01	1.017E 05	6.844E 09	1.984E 12	7.50E-05
8.00E+00	5.65E 04	5.65E 04	0.000	8.00E+01	1.017E 05	6.844E 09	1.984E 12	5.00E-05
9.00E+00	5.65E 04	5.65E 04	0.000	9.00E+01	1.017E 05	6.844E 09	1.984E 12	3.40E-05
1.00E+01	5.65E 04	5.65E 04	0.000	1.00E+02	1.017E 05	6.844E 09	1.984E 12	2.66E-05

ORBITAL FLUX STUDY WITH COMPOSITE PARTICLE ENVIRONMENTS: VETTES APR: AEG: AC17 FOR SOLAR MAXIMUM \*\*\* UNIFLUX OF 1979 \*\*\*  
 \*\* UNCERTAINTY FACTORS (U) APPLIED FOR THIS RUN ARE: FOR PROTONS (APU) U=2.0 FOR INNER ZONE ELECTRONS (AE0) U=5.0 \*\*  
 \*\* PARTICLES CALCULATED TO MID L CIRCLED BY INVAH OF 1.72 WITH ALL ANG. MODELS - 22 BARRACLOUGH ET AL. 168-TERM 1975 \*\* TIME= 1980.0 \*\*  
 \*\* VEHICLE: TMAS 900 KM \*\* INCLINATION: 90DEG \*\* PERIGEE: 900KM \*\* APURGE: 900KM \*\* U/L CRBIT TAPE: TD5376 \*\* PERIOD= 1.716 \*\*

\*\*\*\*\* SPECTRUM IN PERCENT DELTA ENERGY \*\*\*\*\*

ENERGY RANGES #/CM**2/SEC	AVERAGED TOTAL FLUX #/CM**2/SEC	AVERAGED TOTAL FLUX #/CM**2/SEC	SPECTRUM PERCENT	ENERGY LEVELS (MEV)	AVERAGED INTEGRAL FLUX #/CM**2/SEC	AVERAGED INTEGRAL FLUX #/CM**2/DAY	AVERAGED INTEGRAL FLUX #/CM**2/TAU	AVERAGED DIFFER FLUX #/CM**2/SEC/KEV
1.00E-03	2.44E 04	2.41E 11	4.41E	1.00E-01	4.055E 04	4.234E 11	1.534E 14	1.77E 14
2.00E-03	3.00E 04	3.01E 11	1.04E	2.00E-01	4.94E 04	3.40E 11	1.244E 14	1.19E 14
4.00E-03	4.14E 04	4.16E 11	0.44E	4.00E-01	6.294E 04	2.77E 11	1.014E 14	9.76E 13
6.00E-03	4.74E 04	4.77E 11	0.00E	6.00E-01	7.061E 04	1.17E 11	4.28E 13	4.05E 13
8.00E-03	5.07E 04	5.14E 11	0.00E	8.00E-01	7.70E 04	9.70E 10	3.58E 13	2.337E 12
1.00E-02	5.24E 04	5.24E 11	0.00E	1.00E-01	8.24E 04	8.31E 10	3.04E 13	1.71E 12
2.00E-02	5.41E 04	5.41E 11	0.00E	2.00E-01	8.70E 04	7.30E 10	2.66E 13	1.471E 12
3.00E-02	5.49E 04	5.49E 11	0.01E	3.00E-01	9.09E 04	6.59E 10	2.39E 13	1.209E 12
4.00E-02	5.54E 04	5.54E 11	0.00E	4.00E-01	9.41E 04	5.93E 10	2.16E 13	1.017E 11
5.00E-02	5.58E 04	5.58E 11	0.00E	5.00E-01	9.66E 04	5.29E 10	1.93E 13	8.17E 11
6.00E-02	5.61E 04	5.61E 11	0.00E	6.00E-01	9.84E 04	4.70E 10	1.74E 13	6.92E 11
7.00E-02	5.63E 04	5.63E 11	0.00E	7.00E-01	9.96E 04	4.19E 10	1.58E 13	5.88E 11
8.00E-02	5.64E 04	5.64E 11	0.00E	8.00E-01	1.004E 05	3.72E 10	1.44E 13	5.00E 11
9.00E-02	5.65E 04	5.65E 11	0.00E	9.00E-01	1.010E 05	3.28E 10	1.29E 13	4.26E 11
1.00E-01	5.65E 04	5.65E 11	0.00E	1.00E+00	1.014E 05	2.87E 10	1.14E 13	3.59E 11
2.00E-01	5.65E 04	5.65E 11	0.00E	2.00E+00	1.016E 05	2.49E 10	9.00E 12	2.95E 11
3.00E-01	5.65E 04	5.65E 11	0.00E	3.00E+00	1.017E 05	2.14E 10	7.84E 12	2.47E 11
4.00E-01	5.65E 04	5.65E 11	0.00E	4.00E+00	1.017E 05	1.82E 10	6.66E 12	2.07E 11
5.00E-01	5.65E 04	5.65E 11	0.00E	5.00E+00	1.017E 05	1.53E 10	5.56E 12	1.74E 11
6.00E-01	5.65E 04	5.65E 11	0.00E	6.00E+00	1.017E 05	1.28E 10	4.64E 12	1.45E 11
7.00E-01	5.65E 04	5.65E 11	0.00E	7.00E+00	1.017E 05	1.07E 10	3.88E 12	1.19E 11
8.00E-01	5.65E 04	5.65E 11	0.00E	8.00E+00	1.017E 05	8.90E 09	3.26E 12	9.98E 10
9.00E-01	5.65E 04	5.65E 11	0.00E	9.00E+00	1.017E 05	7.30E 09	2.66E 12	8.26E 10
1.00E+00	5.65E 04	5.65E 11	0.00E	1.00E+01	1.017E 05	5.94E 09	2.16E 12	6.92E 10
2.00E+00	5.65E 04	5.65E 11	0.00E	2.00E+01	1.017E 05	4.70E 09	1.74E 12	5.56E 10
3.00E+00	5.65E 04	5.65E 11	0.00E	3.00E+01	1.017E 05	3.56E 09	1.39E 12	4.32E 10
4.00E+00	5.65E 04	5.65E 11	0.00E	4.00E+01	1.017E 05	2.50E 09	1.01E 12	3.20E 10
5.00E+00	5.65E 04	5.65E 11	0.00E	5.00E+01	1.017E 05	1.50E 09	5.40E 11	2.30E 10
6.00E+00	5.65E 04	5.65E 11	0.00E	6.00E+01	1.017E 05	9.00E 08	3.00E 11	1.60E 10
7.00E+00	5.65E 04	5.65E 11	0.00E	7.00E+01	1.017E 05	5.00E 08	1.60E 11	9.71E 09
8.00E+00	5.65E 04	5.65E 11	0.00E	8.00E+01	1.017E 05	3.00E 08	8.00E 10	6.07E 09
9.00E+00	5.65E 04	5.65E 11	0.00E	9.00E+01	1.017E 05	1.50E 08	4.00E 10	3.09E 09
1.00E+01	5.65E 04	5.65E 11	0.00E	1.00E+02	1.017E 05	7.50E 07	2.00E 10	1.55E 09
2.00E+01	5.65E 04	5.65E 11	0.00E	2.00E+02	1.017E 05	3.75E 07	1.00E 10	7.75E 08
3.00E+01	5.65E 04	5.65E 11	0.00E	3.00E+02	1.017E 05	2.00E 07	5.00E 09	3.88E 08
4.00E+01	5.65E 04	5.65E 11	0.00E	4.00E+02	1.017E 05	1.12E 07	2.50E 09	1.87E 08
5.00E+01	5.65E 04	5.65E 11	0.00E	5.00E+02	1.017E 05	6.00E 06	1.25E 09	9.37E 07
6.00E+01	5.65E 04	5.65E 11	0.00E	6.00E+02	1.017E 05	3.00E 06	6.25E 08	4.77E 07
7.00E+01	5.65E 04	5.65E 11	0.00E	7.00E+02	1.017E 05	1.50E 06	3.12E 08	2.38E 07
8.00E+01	5.65E 04	5.65E 11	0.00E	8.00E+02	1.017E 05	7.50E 05	1.56E 08	1.19E 07
9.00E+01	5.65E 04	5.65E 11	0.00E	9.00E+02	1.017E 05	3.75E 05	7.80E 07	5.96E 06
1.00E+02	5.65E 04	5.65E 11	0.00E	1.00E+03	1.017E 05	1.87E 05	3.90E 07	2.98E 06
TOTAL	47.007	1.03E 11	7.000	0.0	0.0	0.0	0.0	0.0

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Table 17

\*\*\*\*\* ORBITAL FLUX STUDY WITH COMPOSITE PARTICLE ENVIRONMENTS: VERTICES AND AEG: AEG17 FOR SOLAR MAXIMUM \*\*\* UNIFLUX OF 1979 \*\*\*  
 \*\* UNCERTAINTY FACTORS (UP) APPLIED FOR THIS RUN ARE: FOR PROTONS (AP) - UP= 2.0; FOR INNER ZONE ELECTRONS (AEG) - UP= 5.0 \*\*  
 \*\* MAGNETIC COORDINATES AND L COMPUTED BY JAVARA OF 1972 WITH ALLWAG MODEL BY BARRACLOUGH ET AL. 168-TERM 1975 TIME= 1980.D \*\*  
 \*\* VEHICLE: IRAS 1200 KM \*\* INCLINATION: 80 DEG \*\* PERIGEE: 1200KM \*\* APOGEE: 1233KM \*\* S/L ORBIT TAPE: TD5403 \*\* PERIOD= 1.826 \*\*  
 \*\*\*\*\* ELECTRONIC HI \*\*\*\*\*  
 \*\*\*\*\* PRETCNS \*\*\*\*\*

\*\*\*\*\* SPECTRUM IN PERCENT DELTA ENERGY \*\*\*\*\*

ENERGY RANGES	AVERAGED TOTAL FLUX	AVERAGED TOTAL FLUX	SPECTRUM PERCENT
#/MEV/SEC	#/CM**2/SEC	#/CM**2/DAY	
1.00E-2.00J	7.50E 04	6.485E 09	58.173
2.00E-5.00J	1.08E 03	5.237E 07	5.540
5.00E-10.0J	3.89E 02	3.257E 07	0.302
6.00E-10.0J	1.71E 02	1.478E 07	0.133
10.0E-25.0J	4.82E 02	4.178E 07	3.375
25.0E-50.0J	1.85E 03	2.247E 07	3.200
50.0E-100.0J	1.37E 02	2.702E 07	3.244
100.0E-250.0J	4.88E 02	4.217E 07	3.375
500.0E-OVER	1.14E 01	9.901E 05	0.145
TOTAL	7.827E 04	6.702E 09	60.658

\*\*\*\*\* EXPOSURE INDEX: ENERGY > 5.00 MEV \*\*\*\*\*

INTENSITY RANGES	EXPOSURE DURATION	TOTAL # OF PARTICLES
#/CM**2/SEC	(HOURS)	
ZERO FLUX	16.300	0.0
1.0E-1.0E	9.567	9.445E 04
1.0E-1.0E	1.000	1.432E 03
1.0E-1.0E	1.593	3.242E 03
1.0E-1.0E	1.630	1.050E 02
1.0E-1.0E	J=0	J=0
1.0E-1.0E	J=0	J=0
1.0E-1.0E	J=0	J=0
TOTAL	23.607	1.631E 08

\*\*\*\*\* COMPOSITE ORBIT SPECTRUM \*\*\*\*\* TAU= 1.00 YEAR(S)

ENERGY LEVELS	AVERAGED INTEG.FLUX	AVERAGED INTEG.FLUX	AVERAGED INTEG.FLUX	AVERAGED DIFFER.FLUX
>(MEV)	#/CM**2/SEC	#/CM**2/DAY	#/CM**2/TAU	#/CM**2/SEC/KEV
4.300E-011.200E 05	1.115E 10	4.059E 12	6.013E 02	1.375E 03
7.000E-019.975E 04	8.618E 09	3.144E 12	7.420E 02	3.760E 01
1.000E-007.827E 04	6.752E 09	2.448E 12	7.420E 02	3.760E 01
5.000E-01.094E 04	1.031E 09	3.764E 11	7.60E 01	4.376E 00
1.000E-05.242E 03	4.529E 08	1.653E 11	2.47E 00	1.47E 00
2.000E-03.205E 03	2.730E 08	1.017E 11	1.47E 00	1.47E 00
3.000E-02.318E 03	2.318E 08	8.456E 10	3.422E-01	1.607E-01
4.000E-02.350E 03	2.430E 08	7.411E 10	3.422E-01	1.607E-01
5.000E-02.422E 03	2.730E 08	6.692E 10	3.422E-01	1.607E-01
6.000E-01.980E 03	1.690E 08	6.170E 10	3.422E-01	1.607E-01
8.000E-01.732E 03	1.447E 08	5.464E 10	1.024E-01	6.645E-02
10.00E-01.337E 03	1.337E 08	4.218E 10	9.70E-02	6.645E-02
20.00E-01.163E 03	1.005E 08	3.667E 10	2.452E-02	1.712E-02
25.00E-01.078E 03	9.315E 07	3.440E 10	1.712E-02	1.055E-02
30.00E-01.001E 03	8.653E 07	2.593E 10	1.055E-02	9.814E-03
35.00E-01.049E 02	8.206E 07	2.593E 10	9.814E-03	9.814E-03
40.00E-01.054E 02	7.730E 07	2.607E 10	9.814E-03	9.814E-03
50.00E-01.012E 02	7.018E 07	2.561E 10	9.814E-03	9.814E-03
60.00E-01.038E 02	6.357E 07	2.320E 10	7.585E-03	6.057E-03
80.00E-01.078E 02	5.230E 07	1.900E 10	6.057E-03	3.010E-03
100.0E-01.078E 02	1.624E 07	6.217E 09	3.010E-03	1.763E-03
200.0E-01.167E 02	1.010E 07	3.680E 09	1.763E-03	1.066E-03
300.0E-01.309E 01	6.319E 06	2.307E 09	1.066E-03	7.017E-04
350.0E-01.352E 01	3.959E 06	1.445E 09	6.60E-04	4.60E-04
400.0E-01.2.681E 01	2.490E 06	9.007E 08	2.214E-04	2.214E-04
500.0E-01.1.140E 01	9.001E 05	3.014E 08	7.662E-05	7.662E-05

\*\*\*\*\* ORBITAL FLUX STUDY WITH COMPOSITE PARTICLE ENVIRONMENTS: VERTICES AND AEG: AEG17 FOR SOLAR MAXIMUM \*\*\* UNIFLUX OF 1979 \*\*\*  
 \*\* UNCERTAINTY FACTORS (UP) APPLIED FOR THIS RUN ARE: FOR PROTONS (AP) - UP= 2.0; FOR INNER ZONE ELECTRONS (AEG) - UP= 5.0 \*\*  
 \*\* MAGNETIC COORDINATES AND L COMPUTED BY JAVARA OF 1972 WITH ALLWAG MODEL BY BARRACLOUGH ET AL. 168-TERM 1975 TIME= 1980.D \*\*  
 \*\* VEHICLE: IRAS 1200 KM \*\* INCLINATION: 80 DEG \*\* PERIGEE: 1200KM \*\* APOGEE: 1233KM \*\* S/L ORBIT TAPE: TD5403 \*\* PERIOD= 1.826 \*\*  
 \*\*\*\*\* ELECTRONIC HI \*\*\*\*\*

\*\*\*\*\* SPECTRUM IN PERCENT DELTA ENERGY \*\*\*\*\*

ENERGY RANGES	AVERAGED TOTAL FLUX	AVERAGED TOTAL FLUX	SPECTRUM PERCENT
#/MEV/SEC	#/CM**2/SEC	#/CM**2/DAY	
1.00E-5.00J	5.232E 06	7.976E 11	67.223
5.00E-1.00J	2.21E 05	1.914E 10	1.613
1.00E-1.50J	2.492E 04	2.118E 09	3.179
1.50E-2.00J	9.065E 03	7.802E 08	6.566
2.00E-3.00J	6.595E 03	5.667E 08	5.640
3.00E-4.00J	1.224E 03	1.038E 08	0.819
4.00E-5.00J	6.588E 02	4.314E 07	6.034
5.00E-6.00J	1.472E 02	1.272E 07	3.031
6.00E-OVER	1.438E 01	1.243E 06	0.000
TOTAL	5.495E 06	6.204E 11	65.142

\*\*\*\*\* EXPOSURE INDEX: ENERGY > 5.00 MEV \*\*\*\*\*

INTENSITY RANGES	EXPOSURE DURATION	TOTAL # OF PARTICLES
#/CM**2/SEC	(HOURS)	
ZERO FLUX	6.157	0.0
1.0E-1.0E	5.267	5.705E 03
1.0E-1.0E	5.567	1.265E 03
1.0E-1.0E	1.200	1.818E 06
1.0E-1.0E	2.667	4.081E 07
1.0E-1.0E	5.563	5.673E 06
1.0E-1.0E	5.267	5.500E 06
1.0E-1.0E	1.567	1.604E 10
1.0E-OVER	0.0	0.0
TOTAL	23.607	2.274E 10

\*\*\*\*\* COMPOSITE ORBIT SPECTRUM \*\*\*\*\* TAU= 1.00 YEAR(S)

ENERGY LEVELS	AVERAGED INTEG.FLUX	AVERAGED INTEG.FLUX	AVERAGED INTEG.FLUX	AVERAGED DIFFER.FLUX	
>(MEV)	#/CM**2/SEC	#/CM**2/DAY	#/CM**2/TAU	#/CM**2/SEC/KEV	
4.300E-011.373E 07	1.187E 12	4.331E 14	4.251E 14	7.980E 12	5.666E 04
7.000E-011.140E 07	9.849E 11	3.895E 14	3.531E 14	6.381E 12	6.782E 04
1.000E-009.495E 06	8.264E 11	2.994E 14	2.994E 14	5.101E 12	7.485E 04
2.000E-04.314E 06	3.277E 11	1.369E 14	1.369E 14	3.858E 12	3.858E 04
3.000E-01.793E 05	1.549E 11	5.654E 13	5.456E 13	1.980E 12	1.538E 04
4.000E-06.743E 05	5.826E 10	2.126E 13	1.979E 13	1.477E 12	2.900E 03
5.000E-02.655E 05	2.277E 10	8.311E 12	7.204E 12	1.100E 12	2.081E 03
6.000E-01.620E 05	1.399E 10	5.108E 12	4.178E 12	9.374E 11	6.500E 02
7.000E-01.334E 05	8.933E 09	3.260E 12	2.444E 12	7.960E 11	4.196E 02
8.000E-07.201E 04	6.274E 09	2.900E 12	1.613E 12	6.771E 11	2.458E 02
9.000E-05.499E 04	4.751E 09	1.734E 12	1.157E 12	6.770E 11	1.650E 02
1.000E-4.203E 04	3.631E 09	1.325E 12	8.300E 11	4.924E 11	6.879E 01
1.250E-2.004E 04	2.327E 09	8.494E 11	4.976E 11	3.518E 11	6.808E 01
1.500E-1.751E 04	1.513E 09	5.521E 11	2.903E 11	2.754E 11	2.754E 01
1.750E-1.212E 04	1.047E 09	3.822E 11	1.977E 11	1.646E 11	1.798E 01
2.000E-9.443E 03	7.495E 08	2.635E 11	1.352E 11	1.172E 11	1.172E 01
2.250E-6.113E 03	5.279E 08	1.927E 11	6.838E 10	1.043E 11	6.562E 00
2.500E-4.655E 03	3.845E 08	1.403E 11	5.960E 10	6.065E 10	6.557E 00
2.750E-2.785E 03	2.495E 08	9.784E 10	4.042E 10	3.504E 10	6.504E 00
3.000E-1.885E 03	1.620E 08	5.944E 10	1.097E 10	4.847E 10	2.705E 00
3.250E-1.346E 03	1.163E 08	4.245E 10	3.770E 09	3.080E 10	1.649E 00
3.500E-1.013E 03	8.930E 07	3.269E 10	3.157E 09	2.110E 09	1.110E 00
3.750E-8.298E 02	7.492E 07	2.588E 10	3.248E 08	2.366E 10	9.522E-01
4.000E-6.004E 02	5.706E 07	2.083E 10	9.438E 07	2.073E 10	7.553E-01
4.250E-5.032E 02	4.814E 07	1.692E 10	1.157E 07	1.157E 10	4.800E-01
4.500E-1.516E 02	1.396E 07	5.095E 09	0.0	5.095E 09	2.705E-01
4.750E-4.818E 01	4.163E 06	1.519E 09	0.0	1.519E 09	1.243E-01
5.000E-1.438E 01	1.243E 06	4.538E 08	0.0	4.538E 08	3.158E-02
6.250E-1.393E 00	1.126E 05	4.188E 07	0.0	4.188E 07	7.109E-03
7.000E-0.0	0.0	0.0	0.0	0.0	0.0

\*\*\*\*\*  
 \*\* ORBITAL FLUX STUDY WITH COMPOSITE PARTICLE ENVIRONMENTS: VETTES AP8; AE6, AE17 FOR SOLAR MAXIMUM \*\*\* UNIFLUX OF 1979 \*\*  
 \*\* UNCERTAINTY FACTORS (UF) APPLIED FOR THIS RUN ARE: FOR PROTONS (AP8) - UF= 1.0; FOR INNER ZONE ELECTRONS (AE6) - UF= 1.0 \*\*  
 \*\* MAGNETIC COORDINATES B AND L COMPUTED BY INVARA OF 1972 WITH ALLMAG, MODEL 5; BARRACLOUGH ET. AL. 168-TERM 1975 TIME= 1980.0 \*\*  
 \*\* VEHICLE : IRAS 600 KM \*\* INCLINATION= 80DEG \*\* PERIGEE= 600KM \*\* APOGEE= 600KM \*\* B/L CREIT TAPE: 165362 \*\* PERIOD= 1.611 \*\*  
 \*\*\*\*\*  
 \*\*\*\*\* PROTONS \*\*\*\*\*  
 \*\* TABLE OF PEAK AND TOTAL FLUXES PER PERIOD : ENERGY >5.000MEV \*\*  
 \*\*\*\*\*

PERIOD NUMBER	PEAK FLUX ENCOUNTERED #/CM**2/SEC	POSITION AT WHICH ENCOUNTERED LONGITUDE (DEG)	LATITUDE (DEG)	ALTITUDE (KM)	ORBIT TIME (HOURS)	FIELD (E) (GAUSS)	LINE (L) (E.R.)	TOTAL FLUX PER ORBIT #/CM**2/OREIT
1	0.0	-98.929	7.37	594.28	0.03333	0.27094	1.19	0.0
2	0.0	-123.400	5.57	594.11	1.63333	0.25604	1.12	0.0
3	5.697E 02	25.253	-39.57	595.38	4.20000	0.24165	2.26	1.187E 05
4	1.206E 03	0.566	-37.86	594.64	5.80000	0.23333	1.06	4.849E 05
5	2.619E 03	-24.057	-36.03	593.98	7.40000	0.22711	1.60	1.091E 06
6	2.188E 03	-46.678	-34.26	593.48	9.00000	0.19558	1.37	9.762E 05
7	2.327E 02	-74.475	-23.15	590.83	10.56667	0.20371	1.20	7.000E 04
8	0.0	91.463	9.54	594.51	11.30000	0.30345	1.01	0.0
9	5.098E 01	36.422	-38.01	600.09	14.30000	0.25515	2.24	1.785E 04
10	1.150E 03	11.823	-39.78	600.59	15.90000	0.23070	2.15	2.771E 05
11	1.524E 03	-10.036	-26.97	597.35	17.56667	0.21363	1.53	7.004E 05
12	3.243E 03	-36.908	-36.04	598.73	19.13333	0.20040	1.40	1.150E 06
13	1.422E 03	-59.156	-30.52	598.44	20.76666	0.19357	1.28	6.141E 05
14	9.482E 00	-82.557	-24.99	597.33	22.39999	0.21404	1.19	2.102E 03

\*\*\*\*\*  
 \*\* ORBITAL FLUX STUDY WITH COMPOSITE PARTICLE ENVIRONMENTS: VETTES AP8; AE6, AE17 FOR SOLAR MAXIMUM \*\*\* UNIFLUX OF 1979 \*\*  
 \*\* UNCERTAINTY FACTORS (UF) APPLIED FOR THIS RUN ARE: FOR PROTONS (AP8) - UF= 1.0; FOR INNER ZONE ELECTRONS (AE6) - UF= 1.0 \*\*  
 \*\* MAGNETIC COORDINATES B AND L COMPUTED BY INVARA OF 1972 WITH ALLMAG, MODEL 5; BARRACLOUGH ET. AL. 168-TERM 1975 TIME= 1980.0 \*\*  
 \*\* VEHICLE : IRAS 600 KM \*\* INCLINATION= 80DEG \*\* PERIGEE= 600KM \*\* APOGEE= 600KM \*\* B/L CREIT TAPE: 165362 \*\* PERIOD= 1.611 \*\*  
 \*\*\*\*\*  
 \*\*\*\*\* ELECTRONS LO \*\*\*\*\*  
 \*\* TABLE OF PEAK AND TOTAL FLUXES PER PERIOD : ENERGY >5.000MEV \*\*  
 \*\*\*\*\*

PERIOD NUMBER	PEAK FLUX ENCOUNTERED #/CM**2/SEC	POSITION AT WHICH ENCOUNTERED LONGITUDE (DEG)	LATITUDE (DEG)	ALTITUDE (KM)	ORBIT TIME (HOURS)	FIELD (E) (GAUSS)	LINE (L) (E.R.)	TOTAL FLUX PER ORBIT #/CM**2/CREIT
1	1.649E 05	76.953	-50.33	599.46	1.03333	0.40512	4.56	7.438E 07
2	2.238E 05	55.023	-55.73	601.27	2.66667	0.34581	4.67	9.476E 07
3	2.845E 05	33.864	-61.06	602.92	4.30000	0.31561	4.61	1.184E 08
4	3.051E 05	14.346	-66.25	604.43	5.93333	0.31436	4.55	1.380E 08
5	2.438E 05	-2.734	-71.20	605.80	7.56667	0.33023	4.69	1.519E 08
6	1.836E 05	29.696	-69.66	606.54	9.16667	0.32067	3.69	1.240E 08
7	2.436E 05	-43.897	-74.29	606.82	10.80000	0.35224	4.21	9.474E 07
8	2.134E 05	57.123	-50.71	603.62	12.63333	0.33803	3.81	1.249E 08
9	3.444E 05	28.471	-59.54	605.73	14.20000	0.30002	4.12	1.938E 08
10	3.219E 05	-3.662	-68.04	607.38	15.76667	0.31255	4.09	1.949E 08
11	2.400E 05	-44.837	-75.62	608.31	17.33333	0.35965	4.51	1.422E 08
12	2.078E 05	-35.908	-36.04	599.73	19.13332	0.20040	1.49	1.539E 08
13	1.846E 05	-84.603	-72.67	608.13	20.56667	0.38139	3.92	9.599E 07
14	1.349E 05	-46.600	40.94	603.60	21.13332	0.40528	3.76	6.668E 07

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Table 19

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 \*\* ORBITAL FLUX STUDY WITH COMPOSITE PARTICLE ENVIRONMENTS: VETTES AP8; AE6, AE17 FOR SOLAR MAXIMUM \*\*\* UNIFLUX OF 1979 \*\*  
 \*\* UNCERTAINTY FACTORS (UF) APPLIED FOR THIS RUN ARE: FOR PROTONS (AP8) - UF= 1.0; FOR INNER ZONE ELECTRONS (AE6) - UF= 1.0 \*\*  
 \*\* MAGNETIC COORDINATES B AND L COMPUTED BY INVARA OF 1972 WITH ALLMAG, MODEL 2; BARRACLOUGH ET. AL. 168-TERM 1975 \*\*\* TIME= 1980.0 \*\*  
 \*\* VEHICLE : IRAS 90 KM \*\* INCLINATION= 99DEG \*\* PERIGEE= 900KM \*\* APOGEE= 900KM \*\* B/L ORBIT TAPE: TD5376 \*\* PERIOD= 1.716 \*\*  
 \*\*\*\*\*  
 \*\*\*\*\* PROTONS \*\*\*\*\*  
 \*\* TABLE OF PEAK AND TOTAL FLUXES PER PERIOD : ENERGY > 5.000MEV \*\*  
 \*\*\*\*\*

PERIOD NUMBER	PEAK FLUX ENCOUNTERED #/CM**2/SEC	POSITION AT WHICH ENCOUNTERED			ORBIT TIME (HOURS)	FIELD(B) (GAUSS)	LINE(L) (E.R.)	TOTAL FLUX PER ORBIT #/CM**2/ORBIT
		LONGITUDE (DEG)	LATITUDE (DEG)	ALTITUDE (KM)				
1	0.828E-03	-52.434	-26.34	913.81	0.73333	0.16895	1.30	4.833E-06
2	3.292E-03	-77.180	-30.83	918.09	2.43333	0.19074	1.30	1.887E-06
3	0.113E-01	-105.630	-19.97	911.46	4.20000	0.21069	1.21	1.709E-04
4	1.904E-02	47.219	-37.00	914.03	5.33333	0.25301	2.30	3.885E-04
5	2.873E-03	22.596	-33.32	912.37	7.03333	0.21414	1.98	1.071E-06
6	4.321E-03	-0.239	-22.75	907.98	8.70000	0.19654	1.52	2.841E-06
7	8.659E-03	-28.792	-32.81	912.01	10.46667	0.18086	1.53	5.034E-06
8	9.558E-03	-53.494	-29.13	910.40	12.16667	0.17151	1.33	4.132E-06
9	2.336E-03	-76.477	-18.55	906.35	13.83333	0.18100	1.30	9.508E-06
10	1.551E-02	-101.336	-14.84	905.12	15.53333	0.20264	1.17	3.546E-04
11	7.033E-01	48.737	-22.02	912.21	17.93330	0.23961	1.57	1.732E-04
12	2.258E-03	25.874	-32.58	916.10	19.99999	0.21624	1.90	8.935E-06
13	4.943E-03	-2.667	-22.53	912.44	21.36664	0.19417	1.51	2.741E-06
14	8.525E-03	-27.462	-26.22	913.80	23.06667	0.17646	1.42	5.874E-06

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 \*\* ORBITAL FLUX STUDY WITH COMPOSITE PARTICLE ENVIRONMENTS: VETTES AP8; AE6, AE17 FOR SOLAR MAXIMUM \*\*\* UNIFLUX OF 1979 \*\*  
 \*\* UNCERTAINTY FACTORS (UF) APPLIED FOR THIS RUN ARE: FOR PROTONS (AP8) - UF= 1.0; FOR INNER ZONE ELECTRONS (AE6) - UF= 1.0 \*\*  
 \*\* MAGNETIC COORDINATES B AND L COMPUTED BY INVARA OF 1972 WITH ALLMAG, MODEL 2; BARRACLOUGH ET. AL. 168-TERM 1975 \*\*\* TIME= 1980.0 \*\*  
 \*\* VEHICLE : IRAS 90 KM \*\* INCLINATION= 99DEG \*\* PERIGEE= 900KM \*\* APOGEE= 900KM \*\* B/L ORBIT TAPE: TD5376 \*\* PERIOD= 1.716 \*\*  
 \*\*\*\*\*  
 \*\*\*\*\* ELECTRONS LO \*\*\*\*\*  
 \*\* TABLE OF PEAK AND TOTAL FLUXES PER PERIOD : ENERGY > 5.000MEV \*\*  
 \*\*\*\*\*

PERIOD NUMBER	PEAK FLUX ENCOUNTERED #/CM**2/SEC	POSITION AT WHICH ENCOUNTERED			ORBIT TIME (HOURS)	FIELD(B) (GAUSS)	LINE(L) (E.R.)	TOTAL FLUX PER ORBIT #/CM**2/ORBIT
		LONGITUDE (DEG)	LATITUDE (DEG)	ALTITUDE (KM)				
1	7.126E-05	-50.483	-33.20	916.39	0.70000	0.17333	1.40	3.011E-08
2	2.94E-05	-39.546	-75.99	929.88	2.20000	0.32071	5.00	1.743E-08
3	2.842E-05	-72.847	-73.41	929.58	3.93333	0.32829	4.20	1.759E-08
4	3.812E-05	38.273	-57.34	922.99	5.43333	0.28066	4.36	2.426E-08
5	3.828E-05	4.253	-66.92	926.47	7.20000	0.28128	4.42	2.844E-08
6	3.398E-05	35.488	-60.84	927.31	8.03333	0.28000	3.92	2.605E-08
7	6.247E-05	-26.850	-25.94	909.14	10.43333	0.17701	1.42	3.629E-08
8	4.897E-05	-55.536	-35.99	913.38	12.20000	0.18165	1.42	3.194E-08
9	2.093E-05	-107.020	-72.22	926.04	14.10000	0.35936	4.69	1.348E-08
10	2.135E-05	45.773	63.83	912.85	16.63332	0.37068	4.25	1.187E-08
11	2.491E-05	57.699	-49.37	922.64	17.79999	0.30276	3.77	1.402E-08
12	2.955E-05	37.773	-59.68	926.24	19.46666	0.28690	4.77	1.694E-08
13	3.994E-05	14.841	-63.21	927.33	21.16664	0.27249	4.28	2.595E-08
14	6.321E-05	-27.462	-26.22	913.80	23.06667	0.17646	1.42	3.605E-08

Table 20



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 \*\* ORBITAL FLUX STUDY WITH COMPOSITE PARTICLE ENVIRONMENTS: VETTES AP8; AE6, AE17 FOR SOLAR MAXIMUM \*\*\* UNIFLUX OF 1979 \*\*  
 \*\* UNCERTAINTY FACTORS (UF) APPLIED FOR THIS RUN ARE: FOR PROTONS (AP8) - UF= 1.0; FOR INNER ZONE ELECTRONS (AE6) - UF= 1.0 \*\*  
 \*\* MAGNETIC COORDINATES B AND L COMPUTED BY INVARA OF 1972 WITH ALLMAG, MODEL 5: BARRACLOUGH ET. AL. 168-TERM 1975 \* TIME= 1980.0 \*\*  
 \*\* VEHICLE : IRAS 1200 KM \*\* INCLINATION= 80DEG \*\* PERIGEE= 1200KM \*\* APOGEE= 1200KM \*\* B/L OREIT TAPE: TC5402 \*\* PERIOD= 1.824 \*\*  
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\*\*\*\*\*  
 \*\* TABLE OF PEAK AND TOTAL FLUXES PER PERIOD : ENERGY >5.000MEV \*\*  
 \*\*\*\*\*

PERIOD NUMBER	PEAK FLUX ENCOUNTERED #/CM**2/SEC	POSITION AT WHICH ENCOUNTERED			ORBIT TIME (HOURS)	FIELD(E) (GAUSS)	LINE(L) (E.R.)	TOTAL FLUX PER OREIT #/CM**2/OREIT
		LONGITUDE (DEG)	LATITUDE (DEG)	ALTITUDE (KM)				
1	9.235E 02	-127.575	-3.94	1194.06	1.80000	0.18941	1.18	4.315E 05
2	2.806E 03	41.231	-20.07	1190.21	2.83333	0.20413	1.38	1.608E 06
3	7.326E 03	14.099	-22.60	1190.70	4.66667	0.18551	1.62	5.031E 06
4	1.423E 04	-13.013	-25.14	1191.28	6.50000	0.16816	1.56	1.078E 07
5	2.057E 04	-40.984	-21.19	1190.29	8.30000	0.15115	1.33	1.553E 07
6	1.409E 04	-68.108	-23.72	1190.99	10.13333	0.15747	1.29	9.281E 06
7	4.267E 03	96.212	-36.26	1191.76	11.96667	0.18682	1.31	2.456E 06
8	4.653E 03	36.876	-31.60	1198.54	14.40000	0.20610	2.01	2.526E 06
9	8.695E 03	8.726	-35.53	1199.59	16.20000	0.18610	2.05	5.539E 06
10	1.581E 04	-17.240	-26.55	1197.35	18.06667	0.16532	1.56	1.212E 07
11	2.107E 04	-43.538	-17.54	1195.62	19.93333	0.15024	1.30	1.580E 07
12	1.224E 04	-72.356	-27.96	1197.93	21.70000	0.16353	1.33	8.096E 06
13	3.612E 03	-99.446	-25.44	1197.45	23.53331	0.18896	1.30	1.549E 06

\*\*\*\*\*  
 \*\* ORBITAL FLUX STUDY WITH COMPOSITE PARTICLE ENVIRONMENTS: VETTES AP8; AE6, AE17 FOR SOLAR MAXIMUM \*\*\* UNIFLUX OF 1979 \*\*  
 \*\* UNCERTAINTY FACTORS (UF) APPLIED FOR THIS RUN ARE: FOR PROTONS (AP8) - UF= 1.0; FOR INNER ZONE ELECTRONS (AE6) - UF= 1.0 \*\*  
 \*\* MAGNETIC COORDINATES B AND L COMPUTED BY INVARA OF 1972 WITH ALLMAG, MODEL 5: BARRACLOUGH ET. AL. 168-TERM 1975 \* TIME= 1980.0 \*\*  
 \*\* VEHICLE : IRAS 1200 KM \*\* INCLINATION= 80DEG \*\* PERIGEE= 1200KM \*\* APOGEE= 1200KM \*\* B/L OREIT TAPE: TC5403 \*\* PERIOD= 1.824 \*\*  
 \*\*\*\*\*

\*\*\*\*\*  
 \*\* TABLE OF PEAK AND TOTAL FLUXES PER PERIOD : ENERGY >5.000MEV \*\*  
 \*\*\*\*\*

PERIOD NUMBER	PEAK FLUX ENCOUNTERED #/CM**2/SEC	POSITION AT WHICH ENCOUNTERED			ORBIT TIME (HOURS)	FIELD(E) (GAUSS)	LINE(L) (E.R.)	TOTAL FLUX PER OREIT #/CM**2/OREIT
		LONGITUDE (DEG)	LATITUDE (DEG)	ALTITUDE (KM)				
1	8.834E 05	141.410	61.64	1206.63	1.60000	0.33698	4.03	1.866E 08
2	4.426E 05	48.178	-52.23	1200.60	3.00000	0.25756	4.08	2.671E 08
3	4.507E 05	13.312	-16.11	1189.28	4.63333	0.18392	1.46	3.866E 08
4	1.018E 06	-13.844	-18.85	1189.71	6.46667	0.16566	1.43	6.490E 08
5	1.771E 06	-40.101	-27.67	1192.01	8.33333	0.15450	1.42	9.413E 08
6	1.091E 06	-67.165	-20.20	1192.85	10.16667	0.16233	1.36	6.756E 08
7	3.172E 05	58.587	-53.27	1204.58	12.46667	0.28056	4.73	3.217E 08
8	4.842E 05	29.294	-57.10	1205.49	14.26667	0.24042	4.15	4.046E 08
9	4.843E 05	41.638	-46.13	1198.34	16.30000	0.18228	1.46	5.272E 08
10	1.066E 06	-15.641	-13.59	1194.92	18.13332	0.16320	1.35	7.621E 08
11	1.834E 06	-45.295	-30.49	1198.39	19.86664	0.15566	1.43	9.739E 08
12	7.477E 05	-73.421	-34.42	1199.57	21.66664	0.17373	1.41	6.058E 08
13	2.611E 05	-119.206	-69.47	1208.28	23.29999	0.32467	4.65	2.229E 08

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Table 21

\*\*\*\*\*  
 \*\* ORBITAL FLUX STUDY WITH COMPOSITE PARTICLE ENVIRONMENTS: VETTES AP8; AE6, AE17 FOR SOLAR MAXIMUM \*\*\* UNIFLUX OF 1979 \*\*  
 \*\* UNCERTAINTY FACTORS (UF) APPLIED FOR THIS RUN ARE: FOR PROTONS (AP8) - UF= 2.0; FOR INNER ZONE ELECTRONS (AE6) - UF= 5.0 \*\*  
 \*\* MAGNETIC COORDINATES B AND L COMPUTED BY INVARA OF 1972 WITH ALLMAG, MODEL 5; BARRACLOUGH ET. AL. 168-TERM 1975 TIME= 1980.0 \*\*  
 \*\* VEHICLE : IRAS 600 KM \*\* INCLINATION= 80DEG \*\* PERIGEE= 600KM \*\* APOGEE= 600KM \*\* B/L ORBIT TAPE: TD3362 \*\* PERIOD= 1.611 \*\*  
 \*\*\*\*\*  
 \*\* TABLE OF PEAK AND TOTAL FLUXES PER PERIOD : ENERGY > 8.0004EV \*\*  
 \*\*\*\*\*

PERIOD NUMBER	PEAK FLUX ENCOUNTERED #/CM**2/SEC	POSITION AT WHICH ENCOUNTERED LONGITUDE (DEG)	LATITUDE (DEG)	ALTITUDE (KM)	ORBIT TIME (HOURS)	FIELD(B) (GAUSS)	LINE(L) (E.R.)	TOTAL FLUX PER ORBIT #/CM**2/ORBIT
1	0.0	-58.920	7.37	594.28	0.03333	0.27094	1.10	0.0
2	0.0	-123.400	5.57	594.11	1.63333	0.25604	1.12	0.0
3	1.139E 03	25.253	-39.57	595.38	4.20000	0.24165	2.26	2.374E 05
4	2.572E 03	0.585	-37.80	594.64	5.80000	0.22337	1.95	9.736E 05
5	5.237E 03	-24.057	-36.03	593.98	7.40000	0.20715	1.60	2.182E 06
6	4.376E 03	-48.678	-34.26	593.48	9.00000	0.18558	1.37	1.932E 06
7	4.654E 02	-74.475	-25.15	590.83	10.56667	0.20371	1.20	1.401E 05
8	0.0	51.403	9.54	594.51	11.30000	0.30349	1.01	0.0
9	1.010E 02	36.492	-38.01	600.89	14.30000	0.28519	2.24	3.870E 04
10	2.300E 03	11.823	-39.78	600.59	15.90000	0.23070	2.15	5.542E 05
11	3.048E 03	-10.036	-26.97	597.35	17.56667	0.21363	1.53	1.401E 06
12	6.626E 03	-35.908	-36.04	599.73	19.13332	0.20040	1.49	2.318E 06
13	2.844E 03	-59.156	-30.52	598.44	20.76666	0.19357	1.28	1.228E 06
14	1.896E 01	-82.557	-24.99	597.33	22.39999	0.21404	1.19	4.290E 03

\*\*\*\*\*  
 \*\* ORBITAL FLUX STUDY WITH COMPOSITE PARTICLE ENVIRONMENTS: VETTES AP8; AE6, AE17 FOR SOLAR MAXIMUM \*\*\* UNIFLUX OF 1979 \*\*  
 \*\* UNCERTAINTY FACTORS (UF) APPLIED FOR THIS RUN ARE: FOR PROTONS (AP8) - UF= 2.0; FOR INNER ZONE ELECTRONS (AE6) - UF= 5.0 \*\*  
 \*\* MAGNETIC COORDINATES B AND L COMPUTED BY INVARA OF 1972 WITH ALLMAG, MODEL 5; BARRACLOUGH ET. AL. 168-TERM 1975 TIME= 1981.0 \*\*  
 \*\* VEHICLE : IRAS 600 KM \*\* INCLINATION= 80DEG \*\* PERIGEE= 600KM \*\* APOGEE= 600KM \*\* B/L ORBIT TAPE: TD3362 \*\* PERIOD= 1.811 \*\*  
 \*\*\*\*\*  
 \*\* TABLE OF PEAK AND TOTAL FLUXES PER PERIOD : ENERGY > 5.0004EV \*\*  
 \*\*\*\*\*

PERIOD NUMBER	PEAK FLUX ENCOUNTERED #/CM**2/SEC	POSITION AT WHICH ENCOUNTERED LONGITUDE (DEG)	LATITUDE (DEG)	ALTITUDE (KM)	ORBIT TIME (HOURS)	FIELD(B) (GAUSS)	LINE(L) (E.R.)	TOTAL FLUX PER ORBIT #/CM**2/ORBIT
1	1.660E 05	76.953	-50.33	599.44	1.03333	0.40512	4.56	7.456E 07
2	2.238E 05	55.023	-55.73	601.27	2.66667	0.34581	4.67	9.512E 07
3	2.845E 05	33.964	-61.06	602.92	4.30000	0.31561	4.61	1.462E 08
4	4.309E 05	0.813	-30.50	602.25	5.96667	0.25111	1.60	2.349E 08
5	8.749E 05	-25.379	-28.72	591.65	7.36666	0.20114	1.44	3.636E 08
6	6.299E 05	-47.089	-41.54	596.01	9.03333	0.20968	1.52	2.882E 08
7	2.436E 05	-43.857	-74.29	605.82	10.80000	0.39224	4.21	1.030E 06
8	2.134E 05	57.123	-50.71	603.62	12.63333	0.33803	3.81	1.245E 08
9	3.444E 05	28.471	-59.58	605.73	15.20000	0.30002	4.12	2.012E 08
10	3.219E 05	-3.662	-68.04	607.38	15.76667	0.31255	4.09	2.012E 08
11	5.906E 05	-11.267	-34.27	599.16	17.53331	0.21389	1.70	2.392E 08
12	1.839E 06	-35.968	-36.04	600.73	19.13332	0.20040	1.49	3.135E 08
13	3.107E 05	-60.551	-37.81	600.33	20.73331	0.20701	1.38	1.563E 08
14	1.249E 05	-46.669	49.94	603.59	21.13332	0.40528	3.76	6.974E 07

Table 22

\*\*\*\*\*  
 \*\* ORBITAL FLUX STUDY WITH COMPOSITE PARTICLE ENVIRONMENTS: VETTES AP8; AE6, AE17 FOR SOLAR MAXIMUM \*\*\* UNIFLUX OF 1979 \*\*  
 \*\* UNCERTAINTY FACTORS (UF) APPLIED FOR THIS RUN ARE: FOR PROTONS (AP8) - UF= 2.0; FOR INNER ZONE ELECTRONS (AE6) - UF= 5.0 \*\*  
 \*\* MAGNETIC COORDINATES B AND L COMPUTED BY INVARA JF 1972 WITH ALLMAG, MODEL 2: BARRACLOUGH ET. AL. 168-TERM 1975 \* TIME= 1980.0 \*\*  
 \*\* VEHICLE : IRAS 900 K4 \*\* INCLINATION= 99DEG \*\* PERIGEE= 900KM \*\* APOGEE= 900KM \*\* B/L ORBIT TAPE: TD5376 \*\* PERIOD= 1.716 \*\*  
 \*\*\*\*\*  
 \*\*\*\*\* PROTONS \*\*\*\*\*  
 \*\* TABLE OF PEAK AND TOTAL FLUXES PER PERIOD : ENERGY >5.000MEV \*\*  
 \*\*\*\*\*

PERIOD NUMBER	PEAK FLUX ENCOUNTERED #/CM**27SEC	POSITION AT WHICH ENCOUNTERED			ORBIT TIME (HOURS)	FIELD (B) (GAUSS)	LINE (L) (E.R.)	TOTAL FLUX PER ORBIT #/CM**2/ORBIT
		LONGITUDE (DEG)	LATITUDE (DEG)	ALTITUDE (KM)				
1	1.966E 04	-52.434	-26.34	913.81	0.73333	0.16885	1.30	9.646E 06
2	5.583E 03	-77.180	-30.02	915.09	2.43333	0.19074	1.30	2.693E 06
3	1.223E 02	-105.630	-19.97	911.46	4.20000	0.21069	1.21	3.418E 04
4	3.802E 02	47.214	-37.00	914.03	5.33333	0.25301	2.30	7.328E 04
5	5.747E 03	22.590	-33.32	912.37	7.03333	0.21414	1.98	2.142E 06
6	8.643E 03	-0.239	-22.75	907.98	8.70000	0.19654	1.52	5.683E 06
7	1.730E 04	58.792	33.81	912.01	10.46667	0.18086	1.53	1.007E 07
8	1.714E 04	-53.494	-29.13	910.40	12.16567	0.17151	1.33	8.264E 06
9	4.472E 03	-76.477	-18.55	906.35	13.83333	0.18190	1.20	1.920E 06
10	3.121E 02	-101.336	-14.84	905.12	15.53333	0.20284	1.17	0.692E 04
11	1.407E 02	48.737	-22.02	912.21	17.93330	0.23961	1.57	3.465E 04
12	4.516E 03	25.874	-32.58	916.10	19.59999	0.21624	1.96	1.787E 06
13	9.885E 03	-2.667	-22.53	912.44	21.36664	0.19417	1.51	5.482E 06
14	1.705E 04	-27.462	-26.22	913.80	23.06667	0.17646	1.42	1.055E 07

\*\*\*\*\*  
 \*\* ORBITAL FLUX STUDY WITH COMPOSITE PARTICLE ENVIRONMENTS: VETTES AP8; AE6, AE17 FOR SOLAR MAXIMUM \*\*\* UNIFLUX OF 1979 \*\*  
 \*\* UNCERTAINTY FACTORS (UF) APPLIED FOR THIS RUN ARE: FOR PROTONS (AP8) - UF= 2.0; FOR INNER ZONE ELECTRONS (AE6) - UF= 5.0 \*\*  
 \*\* MAGNETIC COORDINATES B AND L COMPUTED BY INVARA JF 1972 WITH ALLMAG, MODEL 2: BARRACLOUGH ET. AL. 168-TERM 1975 \* TIME= 1980.0 \*\*  
 \*\* VEHICLE : IRAS 900 K4 \*\* INCLINATION= 99DEG \*\* PERIGEE= 900KM \*\* APOGEE= 900KM \*\* B/L ORBIT TAPE: TD5376 \*\* PERIOD= 1.716 \*\*  
 \*\*\*\*\*  
 \*\*\*\*\* ELECTRONS HI \*\*\*\*\*  
 \*\* TABLE OF PEAK AND TOTAL FLUXES PER PERIOD : ENERGY >.5000MEV \*\*  
 \*\*\*\*\*

PERIOD NUMBER	PEAK FLUX ENCOUNTERED #/CM**27SEC	POSITION AT WHICH ENCOUNTERED			ORBIT TIME (HOURS)	FIELD (B) (GAUSS)	LINE (L) (E.R.)	TOTAL FLUX PER ORBIT #/CM**2/ORBIT
		LONGITUDE (DEG)	LATITUDE (DEG)	ALTITUDE (KM)				
1	3.563E 06	-50.483	-33.20	916.39	0.70000	0.17553	1.40	1.263E 09
2	7.624E 05	-75.169	-35.86	917.75	2.40000	0.20107	1.41	3.531E 08
3	2.842E 05	-72.840	-73.41	929.58	3.93333	0.32829	4.20	1.763E 08
4	3.312E 05	38.273	-57.34	922.99	5.43333	0.28066	4.36	2.565E 08
5	8.663E 06	24.563	-36.45	900.47	7.00000	0.21427	1.72	4.250E 08
6	1.179E 06	-0.239	-22.75	907.98	8.70000	0.19654	1.52	6.647E 08
7	3.123E 06	-26.850	-25.94	909.14	10.43333	0.17701	1.42	1.305E 09
8	2.448E 06	-55.536	-35.99	913.38	12.20000	0.18165	1.42	1.079E 09
9	3.324E 05	-82.340	-39.16	914.83	13.93333	0.21783	1.46	2.219E 08
10	4.135E 05	45.773	63.83	912.85	16.63332	0.37068	4.25	1.190E 08
11	2.491E 05	57.699	-49.37	922.64	17.79999	0.30276	3.77	1.536E 08
12	5.708E 05	23.940	-25.72	913.51	19.63332	0.21349	1.69	3.297E 08
13	1.381E 06	-2.667	-22.53	912.44	21.36664	0.19417	1.51	6.463E 08
14	3.195E 06	-27.462	-26.22	913.80	23.06667	0.17646	1.42	1.214E 09

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Table 23

\*\*\*\*\*  
 \*\* ORBITAL FLUX STUDY WITH COMPOSITE PARTICLE ENVIRONMENTS: VETTES AP8; AE6, AE17 FOR SOLAR MAXIMUM \*\*\* UNIFLUX OF 1979 \*\*  
 \*\* UNCERTAINTY FACTORS (UF) APPLIED FOR THIS RUN ARE: FOR PROTONS (AP8) - UF= 2.0; FOR INNER ZONE ELECTRONS (AE6) - UF= 5.0 \*\*  
 \*\* MAGNETIC COORDINATES B AND L COMPUTED BY INVARA OF 1972 WITH ALLMAG MODEL 5; BARACLOUGH ET. AL. 168-TERM 1975 \* TIME= 198000 \*\*  
 \*\* VEHICLE : IRAS 1200 KM \*\* INCLINATION= 80DEG \*\* PERIGEE= 1200KM \*\* APOGEE= 1200KM \*\* B/L ORBIT TAPE: TD5403 \*\* PERIOD= 1.824 \*\*  
 \*\*\*\*\*  
 \*\*\*\*\* ELECTRONS HI \*\*\*\*\*  
 \*\* TABLE OF PEAK AND TOTAL FLUXES PER PERIOD : ENERGY >5.000MEV \*\*  
 \*\*\*\*\*

PERIOD NUMBER	PEAK FLUX ENCOUNTERED #/CM**2/SEC	POSITION AT WHICH ENCOUNTERED LONGITUDE (DEG)	LATITUDE (DEG)	ALTITUDE (KM)	ORBIT TIME (HOURS)	FIELD(B) (GAUSS)	LINE(L) (E.R.)	TOTAL FLUX PER ORBIT #/CM**2/ORBIT
1	1.847E 03	-127.575	-3.94	1194.06	1.80000	0.18941	1.18	8.630E 06
2	5.613E 03	41.231	-20.07	1190.21	2.83333	0.20413	1.56	3.210E 06
3	1.468E 04	14.059	-22.60	1190.70	4.66667	0.18551	1.62	1.006E 07
4	2.846E 04	-13.013	-25.14	1191.28	6.50000	0.16816	1.56	2.156E 07
5	4.114E 04	-40.584	-21.19	1190.29	8.30000	0.15115	1.33	3.100E 07
6	2.819E 04	-66.108	-23.72	1190.99	10.13333	0.15747	1.29	1.856E 07
7	5.633E 03	-66.212	-26.26	1191.74	11.96667	0.16562	1.31	4.011E 06
8	9.306E 03	36.876	-31.60	1198.54	14.40000	0.20610	2.01	5.051E 06
9	1.739E 04	8.726	-35.53	1199.59	16.20000	0.18610	2.05	1.166E 07
10	3.151E 04	-17.246	-26.55	1197.35	18.06667	0.16552	1.56	2.423E 07
11	4.214E 04	-43.538	-17.54	1195.62	19.93330	0.15024	1.30	3.161E 07
12	2.448E 04	-72.156	-27.96	1197.93	21.70000	0.16353	1.33	1.619E 07
13	7.224E 03	-55.446	-25.44	1197.45	23.53331	0.18896	1.30	3.897E 06

\*\*\*\*\*  
 \*\* ORBITAL FLUX STUDY WITH COMPOSITE PARTICLE ENVIRONMENTS: VETTES AP8; AE6, AE17 FOR SOLAR MAXIMUM \*\*\* UNIFLUX OF 1979 \*\*  
 \*\* UNCERTAINTY FACTORS (UF) APPLIED FOR THIS RUN ARE: FOR PROTONS (AP8) - UF= 2.0; FOR INNER ZONE ELECTRONS (AE6) - UF= 5.0 \*\*  
 \*\* MAGNETIC COORDINATES B AND L COMPUTED BY INVARA OF 1972 WITH ALLMAG MODEL 5; BARACLOUGH ET. AL. 168-TERM 1975 \* TIME= 198000 \*\*  
 \*\* VEHICLE : IRAS 1200 KM \*\* INCLINATION= 80DEG \*\* PERIGEE= 1200KM \*\* APOGEE= 1200KM \*\* B/L ORBIT TAPE: TD5403 \*\* PERIOD= 1.824 \*\*  
 \*\*\*\*\*  
 \*\*\*\*\* ELECTRONS HI \*\*\*\*\*  
 \*\* TABLE OF PEAK AND TOTAL FLUXES PER PERIOD : ENERGY >5.000MEV \*\*  
 \*\*\*\*\*

PERIOD NUMBER	PEAK FLUX ENCOUNTERED #/CM**2/SEC	POSITION AT WHICH ENCOUNTERED LONGITUDE (DEG)	LATITUDE (DEG)	ALTITUDE (KM)	ORBIT TIME (HOURS)	FIELD(B) (GAUSS)	LINE(L) (E.R.)	TOTAL FLUX PER ORBIT #/CM**2/ORBIT
1	2.834E 05	-141.418	-61.64	1206.63	1.50000	0.33598	4.03	2.031E 08
2	7.763E 05	41.231	-20.07	1190.21	2.83333	0.20413	1.56	4.850E 06
3	2.253E 06	13.312	-16.11	1189.28	4.63333	0.18392	1.46	1.041E 09
4	5.089E 06	-13.844	-18.65	1189.71	6.46667	0.14544	1.43	3.301E 09
5	8.854E 06	-40.101	-27.67	1192.01	8.33333	0.15450	1.42	3.904E 09
6	5.456E 06	-67.165	-30.20	1192.85	10.16667	0.14233	1.36	2.549E 09
7	1.058E 06	-54.159	-32.71	1193.72	12.00000	0.15649	1.40	5.523E 08
8	1.016E 06	38.684	-18.66	1195.66	14.46667	0.20053	1.52	6.880E 08
9	2.422E 06	11.528	-16.13	1195.24	16.29999	0.18238	1.46	1.260E 09
10	5.329E 06	-15.641	-13.59	1194.92	18.13332	0.14320	1.35	2.780E 09
11	7.672E 06	-45.255	-30.49	1198.39	19.86664	0.15566	1.43	4.020E 09
12	3.730E 06	-73.421	-34.42	1199.67	21.66664	0.17376	1.41	2.272E 09
13	6.637E 05	-100.433	-31.91	1199.02	23.49998	0.20281	1.40	4.320E 08

Table 24

TABLE \_

TABLE \_

IRAS 600 KM

IRAS 600 KM

CIRCULAR

CIRCULAR

INCLINATION: 80 DEG

INCLINATION: 80 DEG

PERIGEE: 600 KM

PERIGEE: 600 KM

APOGEE: 600 KM

APOGEE: 600 KM

\*\*\*\* EXPOSURE ANALYSIS \*\*\*\*

\* PERCENT OF TOTAL LIFETIME SPENT INSIDE AND \*

\* OUTSIDE THE TRAPPED-PARTICLE RADIATION BELT \*

PROTONS

ELECTRONS LO

(E>6.000MEV)

(E>.5000MEV)

INNER ZONE -TI- : 58.41 %

(1.0 < L < 2.8)

PERCENT OF TOTAL LIFE-

TIME SPENT IN FLUX-FREE

OUTER ZONE -TO- : 27.54 %

REGIONS OF SPACE :

90.82 %

62.59 %

(2.8 < L < 11.0)

PERCENT OF TOTAL LIFE-

TIME SPENT IN HIGH-

EXTERNAL -TE- : 14.05 %

INTENSITY REGIONS OF

(L > 11.0)

VAN ALLEN BELTS :

3.06 %

6.76 %

TOTAL : 100.00 %

PERCENT OF TOTAL DAILY

FLUX ACCUMULATED IN

\*TIME IN INNER ZONE MAY BE SUBDIVIDED AS FOLLOWS:

HIGH-INTENSITY REGIONS:

75.19 %

66.63 %

OUTSIDE TRAPPING REGION : 7.93 %

(1.0 < L < 1.1)

INSIDE TRAPPING REGION : 50.49 %

(1.1 < L < 2.8)

\*\*\*\*\*

\* <1 PARTICLE/CM\*\*2/SEC

\* >1.E5 EL/CM\*\*2/SEC OR 1.E3 PR/CM\*\*2/SEC

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Table 25

TABLE		TABLE	
IRAS 900 KM		IRAS 900 KM	
CIRCULAR		CIRCULAR	
INCLINATION: 99 DEG		INCLINATION: 99 DEG	
PERIGEE: 900 KM		PERIGEE: 900 KM	
APOGEE: 900 KM		APOGEE: 900 KM	
**** EXPOSURE ANALYSIS ****		* PERCENT OF TOTAL LIFETIME SPENT INSIDE AND *	
		* OUTSIDE THE TRAPPED-PARTICLE RADIATION BELT *	
PROTONS	ELECTRONS L0		
(E>5.00MEV)	(E>5000MEV)	INNER ZONE -TI-* :	56.78 %
PERCENT OF TOTAL LIFE-		(1.0 < L < 2.8)	
TIME SPENT IN FLUX-FREE		OUTER ZONE -TO- :	27.52 %
REGIONS* OF SPACE :	83.18 %	53.79 %	(2.8 < L < 11.0)
PERCENT OF TOTAL LIFE-		EXTERNAL -TE- :	15.50 %
TIME SPENT IN HIGH-		(L > 11.0)	
INTENSITY REGIONS* OF		TOTAL :	100.00 %
VAN ALLEN BELTS :	8.62 %	15.29 %	
PERCENT OF TOTAL DAILY		*TIME IN INNER ZONE MAY BE SUBDIVIDED AS FOLLOWS:	
FLUX ACCUMULATED IN		OUTSIDE TRAPPING REGION :	2.36 %
HIGH-INTENSITY REGIONS:	95.66 %	(1.0 < L < 1.1)	
	83.12 %	INSIDE TRAPPING REGION :	54.62 %
*****		(1.1 < L < 2.8)	
* <1 PARTICLE/CM**2/SEC			
+ >1.E5 EL/CM**2/SEC OR 1.E3 PR/CM**2/SEC			

Table 26

IRAS 1200 KM	IRAS 1200 KM
CIRCULAR	CIRCULAR
INCLINATION: 60 DEG	INCLINATION: 80 DEG
PERIGEE: 1200 KM	PERIGEE: 1200 KM
APOGEE: 1200 KM	APOGEE: 1200 KM

\*\*\*\* EXPOSURE ANALYSIS \*\*\*\*

\* PERCENT OF TOTAL LIFETIME SPENT INSIDE AND \*  
\* OUTSIDE THE TRAPPED PARTICLE RADIATION BELT \*

	FROTCNS (E>5.000MEV)	ELECTFCAS LO (E>.5000MEV)		
PERCENT OF TOTAL LIFE- TIME SPENT IN FLUX-FREE REGIONS* OF SPACE :	66.01 %	34.08 %	INNER ZONE -TI-*	56.19 % (1.0 < L < 2.8)
PERCENT OF TOTAL LIFE- TIME SPENT IN HIGH INTENSITY REGIONS* OF VAN ALLEN BELTS :	14.33 %	23.64 %	OUTER ZONE -TO-	28.51 % (2.8 < L < 11.0)
PERCENT OF TOTAL DAILY FLUX ACCUMULATED IN HIGH-INTENSITY REGIONS:	95.86 %	91.74 %	EXTERNAL -TE-	15.30 % (L > 11.0)
			TOTAL	100.00 %
			*TIME IN INNER ZONE MAY BE SUBDIVIDED AS FOLLOWS:	
			OUTSIDE TRAPPING REGION :	0.0 % (1.0 < L < 1.1)
			INSIDE TRAPPING REGION :	56.19 % (1.1 < L < 2.8)

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\* <1 PARTICLE/CM\*\*2/SEC  
\* >1.E5 EL/CM\*\*2/SEC OR 1.E3 FF/CM\*\*2/SEC

Table 27

\*\*\*\*\*  
 \*\* ORBITAL FLUX STUDY WITH COMPOSITE PARTICLE ENVIRONMENTS: VETTES AP8; AEG, AE17 FOR SOLAR MAXIMUM \*\*\* UNIFLUX OF 1979 \*\*  
 \*\* UNCERTAINTY FACTORS (UF) APPLIED FOR THIS RUN ARE: FOR PROTONS (AP8) - UF= 1.0; FOR INNER ZONE ELECTRONS (AE6) - UF= 1.0 \*\*  
 \*\* MAGNETIC COORDINATES B AND L COMPUTED BY INVAFA OF 1978 WITH ALLMAG, MODEL G1 BARRACLOUGH ET. AL. 168-TERM 1975 \* TIME= 1980.0 \*\*  
 \*\* VEHICLE : IRAS 600 KM \*\* INCLINATION= 80CEG \*\* PERIGEE= 600KM \*\* APOGEE= 600KM \*\* B/L CREIT TAPE: TC5362 \*\* PERIOD= 1.611 \*\*  
 \*\*\*\*\*  
 \*\*\*\*\* ENERGETIC SOLAR PROTON FLUENCE \*\*\*\*\*  
 \*\*\*\*\* FOR CUTOFF DIPOLE SHELL L=5 ER \*\*\*\*\*  
 \*\*\*\*\* (PARTICLES/CM\*\*2)\*\*\*\*\*  
 \*\*\*\*\*

ENERGY LEVELS >(MEV)	*****MISSION DURATION T=12. MONTHS ***** CONFIDENCE LEVEL Q(X)					GEOMAGNETIC SHIELDING	
	80	85	90	95	99	DIPOLE CUTOFF SHELL	PERCENT EXPOSURE TIME
10.0	4.604E 09	4.604E 09	4.604E 09	4.604E 09	9.208E 09	L>4	32.27
20.0	3.157E 09	3.157E 09	3.157E 09	3.157E 09	6.314E 09	L>5	27.40
30.0	2.165E 09	2.165E 09	2.165E 09	2.165E 09	4.329E 09	L>6	23.50
40.0	1.484E 09	1.484E 09	1.484E 09	1.484E 09	2.966E 09	L>7	20.58
50.0	1.018E 09	1.018E 09	1.018E 09	1.018E 09	2.035E 09		
60.0	6.978E 08	6.978E 08	6.978E 08	6.978E 08	1.356E 09		
70.0	4.784E 08	4.784E 08	4.784E 08	4.784E 08	9.565E 08		
80.0	3.280E 08	3.280E 08	3.280E 08	3.280E 08	6.561E 08		
90.0	2.249E 08	2.249E 08	2.249E 08	2.249E 08	4.499E 08		
100.0	1.542E 08	1.542E 08	1.542E 08	1.542E 08	3.065E 08		
110.0	1.058E 08	1.058E 08	1.058E 08	1.058E 08	2.115E 08		
120.0	7.251E 07	7.251E 07	7.251E 07	7.251E 07	1.450E 08		
130.0	4.972E 07	4.972E 07	4.972E 07	4.972E 07	9.944E 07		
140.0	3.409E 07	3.409E 07	3.409E 07	3.409E 07	6.816E 07		
150.0	2.337E 07	2.337E 07	2.337E 07	2.337E 07	4.675E 07		
160.0	1.663E 07	1.663E 07	1.663E 07	1.663E 07	3.206E 07		
170.0	1.099E 07	1.099E 07	1.099E 07	1.099E 07	2.152E 07		
180.0	7.535E 06	7.535E 06	7.535E 06	7.535E 06	1.507E 07		
190.0	5.167E 06	5.167E 06	5.167E 06	5.167E 06	1.033E 07		
200.0	3.543E 06	3.543E 06	3.543E 06	3.543E 06	7.065E 06		

Table 28



\*\*\*\*\*  
 \*\* ORBITAL FLUX STUDY WITH COMPOSITE PARTICLE ENVIRONMENTS: VETTES AP8, AE6, AE17 FOR SOLAR MAXIMUM \*\*\* UNIFLUX OF 1979 \*\*  
 \*\* UNCERTAINTY FACTORS (UF) APPLIED FOR THIS RUN ARE: FOR PROTONS (AP8) - UF= 1.0; FOR INNER ZONE ELECTRONS (AE6) - UF= 1.0 \*\*  
 \*\* MAGNETIC COORDINATES B AND L COMPUTED BY INVARA OF 1972 WITH ALL MAG. MODEL 2; BARRACLOUGH ET. AL. 168-TERM 1975 \* TIME= 1980.0 \*\*  
 \*\* VEHICLE : IRAS 900 KM \*\* INCLINATION= 99DEG \*\* PERIGEE= 900KM \*\* APOGEE= 900KM \*\* B/L ORBIT TAPE: T05376 \*\* PERIOD= 1.716 \*\*  
 \*\*\*\*\*  
 \*\*\*\*\* ENERGETIC SOLAR PROTON FLUENCE \*\*\*\*\*  
 \*\*\*\*\* FOR CUTOFF DIPOLE SHELL L=5 ER \*\*\*\*\*  
 \*\*\*\*\* (PARTICLES/CM\*\*2)\*\*\*\*\*  
 \*\*\*\*\*

ENERGY LEVELS >(MEV)	*****MISSION DURATION T=12. MONTHS ***** CONFIDENCE LEVEL Q (%)					GEOMAGNETIC DIPOLE CUTOFF SHELL	SHIELDING PERCENT EXPOSURE TIME
	80	85	90	95	99		
10.0	4.834E 09	4.834E 09	4.834E 09	4.834E 09	9.669E 09	L>4	33.56
20.0	3.315E 09	3.315E 09	3.315E 09	3.315E 09	6.629E 09	L>5	28.77
30.0	2.373E 09	2.373E 09	2.373E 09	2.373E 09	4.546E 09	L>6	25.02
40.0	1.558E 09	1.558E 09	1.558E 09	1.558E 09	3.117E 09	L>7	22.24
50.0	1.069E 09	1.069E 09	1.069E 09	1.069E 09	2.137E 09		
60.0	7.327E 08	7.327E 08	7.327E 08	7.327E 08	1.465E 09		
70.0	5.024E 08	5.024E 08	5.024E 08	5.024E 08	1.005E 09		
80.0	3.445E 08	3.445E 08	3.445E 08	3.445E 08	6.889E 08		
90.0	2.362E 08	2.362E 08	2.362E 08	2.362E 08	4.724E 08		
100.0	1.619E 08	1.619E 08	1.619E 08	1.619E 08	3.239E 08		
110.0	1.110E 08	1.110E 08	1.110E 08	1.110E 08	2.221E 08		
120.0	7.614E 07	7.614E 07	7.614E 07	7.614E 07	1.523E 08		
130.0	5.221E 07	5.221E 07	5.221E 07	5.221E 07	1.044E 08		
140.0	3.580E 07	3.580E 07	3.580E 07	3.580E 07	7.159E 07		
150.0	2.454E 07	2.454E 07	2.454E 07	2.454E 07	4.909E 07		
160.0	1.583E 07	1.583E 07	1.583E 07	1.583E 07	3.366E 07		
170.0	1.154E 07	1.154E 07	1.154E 07	1.154E 07	2.308E 07		
180.0	7.912E 06	7.912E 06	7.912E 06	7.912E 06	1.582E 07		
190.0	5.425E 06	5.425E 06	5.425E 06	5.425E 06	1.085E 07		
200.0	3.720E 06	3.720E 06	3.720E 06	3.720E 06	7.440E 06		

Table 29

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\*\*\*\*\*  
 \*\* ORBITAL FLUX STUDY WITH COMPOSITE PARTICLE ENVIRONMENTS: VETTES AP8; AE6, AE17 FOR SOLAR MAXIMUM \*\*\* UNIFLUX OF 1979 \*\*  
 \*\* UNCERTAINTY FACTORS (UF) APPLIED FOR THIS RUN ARE: FOR PROTONS (AP8) -- UF= 1.0; FOR INNER ZONE ELECTRONS (AE6) -- UF= 1.0 \*\*  
 \*\* MAGNETIC COORDINATES B AND L COMPUTED BY INVARA CF 1972 WITH ALLMAG, MODEL 5: BARRACLOUGH ET. AL. 168-TERM 1975 \* TIME= 1980.0 \*\*  
 \*\* VEHICLE : IRAS 1200 KM \*\* INCLINATION= 80DF \*\* PERICEE= 1200KM \*\* APOGEE= 1200KM \*\* B/L ORBIT TAP: TC5403 \*\* PERIOD= 1.824 \*\*  
 \*\*\*\*\*  
 \*\*\*\*\* ENERGETIC SOLAR PROTON FLUENCE \*\*\*\*\*  
 \*\*\*\*\* FOR CUTOFF DIPOLE SHELL L=6 ER \*\*\*\*\*  
 \*\*\*\*\* (PARTICLES/CM\*\*2)\*\*\*\*\*  
 \*\*\*\*\*

ENERGY LEVELS (MEV)	*****MISSION DURATION T=12 MONTHS *****					*****GEOMAGNETIC SHIELDING*****	
	8C	85	90	95	99	DIPOLE CUTOFF SHELL	PERCENT EXPOSURE TIME
10.0	4.90EF 09	4.90BF 09	4.50FF 09	4.90BF 09	9.81FF 09	L>4	34.21
20.0	3.36EE 09	3.365E 09	3.365E 09	3.365E 09	6.730E 09	L>5	29.21
30.0	2.307E 09	2.307E 09	2.307E 09	2.307E 09	4.615E 09	L>6	25.17
40.0	1.502E 09	1.502E 09	1.502E 09	1.502E 09	3.164E 09	L>7	21.04
50.0	1.085E 09	1.085E 09	1.085E 09	1.085E 09	2.17CE 09		
60.0	7.438E 08	7.438E 08	7.438E 08	7.438E 08	1.488E 09		
70.0	5.100E 08	5.100E 08	5.100E 08	5.100E 08	1.020E 09		
80.0	3.497E 08	3.497E 08	3.497E 08	3.497E 08	6.954E 08		
90.0	2.398E 08	2.398E 08	2.398E 08	2.398E 08	4.756E 08		
100.0	1.644E 08	1.644E 08	1.644E 08	1.644E 08	3.288E 08		
110.0	1.127E 08	1.127E 08	1.127E 08	1.127E 08	2.255E 08		
120.0	7.730E 07	7.730E 07	7.730E 07	7.730E 07	1.546E 08		
130.0	5.300E 07	5.300E 07	5.300E 07	5.300E 07	1.066E 08		
140.0	3.634E 07	3.634E 07	3.634E 07	3.634E 07	7.268E 07		
150.0	2.492E 07	2.492E 07	2.492E 07	2.492E 07	4.983E 07		
160.0	1.708E 07	1.708E 07	1.708E 07	1.708E 07	3.417E 07		
170.0	1.171E 07	1.171E 07	1.171E 07	1.171E 07	2.343E 07		
180.0	8.032E 06	8.032E 06	8.032E 06	8.032E 06	1.606E 07		
190.0	5.508E 06	5.508E 06	5.508E 06	5.508E 06	1.102E 07		
200.0	3.776E 06	3.776E 06	3.776E 06	3.776E 06	7.658E 06		

Table 30

\*\*\*\*\*  
 \*\* ORBITAL FLUX STLOY WITH COMPOSITE PARTICLE ENVIRNMENTS: VETTES AP8; AEG, AE17 FOR SOLAR MAXIMM \*\*\* UNIFLUX OF 1978 \*\*  
 \*\* UNCERTAINTY FACTORS (UP) APPLIED FOR THIS RUN ARE: FOR PROTONS (AP8) UP=1.0; FOR INNER ZONE ELECTRONS (AEG) UP=1.0 \*\*  
 \*\* MAGNETIC COORDINATES B AND L COMPUTED BY INVAVA OF 1972 WITH ALLMAG. MODEL 5; BARRACLOUGH ET. AL. 168-TERM 1975 TIME= 1980.0 \*\*  
 \*\* VEHICLE : IRAS 600 KM \*\* INCLINATION= 80DEG \*\* PERIGEE= 600KM \*\* APOGEE= 600KM \*\* B/L CREIT TAPE: TC5362 \*\* PERIOD= 1.611 \*\*  
 \*\*\*\*\*

\*\*\*\*\* ALUMINUM DOSE FOR MISSION DURATION OF: 1.00 YEAR(S) \*\*\*\*\*  
 \*\*\*\*\*

SHIELD THICKNESS (ALUMINUM)			ELECTRONS*			BREMSSTR- AFLUNG	PROTONS			TOTAL DOSE
Z	T	T	INNER ZN.	OUTER ZN.	TOTAL	TOTAL	TRAPPED**	SOLAR*	TOTAL	ALL SOURCES
(GM/CM**2)	(PP)	(MILS)	(RACS-AL)	(RACS-AL)	(RACS-AL)	(RADS-AL)	(RADS-AL)	(RADS-AL)	(RACS-AL)	(RADS-AL)
0.01	0.04	1	8.516E 04	5.023E 04	1.354E 05	0.0	1.136E C3	4.151E 02	1.552E 03	1.369E 05
0.02	0.07	3	4.247E 04	3.238E 04	7.485E 04	1.193E 00	3.989E C2	3.892E 02	7.881E 02	7.564E 04
0.03	0.11	4	2.516E 04	2.425E 04	4.941E 04	1.037E 00	3.152E C2	3.652E 02	6.884E 02	5.016E 04
0.04	0.15	6	1.615E 04	1.945E 04	3.561E 04	9.542E-01	2.448E 02	3.552E 02	5.956E 02	3.621E 04
0.05	0.19	7	1.090E 04	1.624E 04	2.714E 04	3.411E 00	1.968E 02	3.422E 02	5.420E 02	2.768E 04
0.06	0.22	9	7.642E 03	1.302E 04	2.163E 04	3.680E 00	1.719E 02	3.335E 02	5.051E 02	2.304E 04
0.07	0.26	10	5.457E 03	1.216E 04	1.762E 04	2.895E 00	1.534E 02	3.250E 02	4.784E 02	1.810E 04
0.08	0.30	12	3.996E 03	1.077E 04	1.477E 04	2.755E 00	1.385E 02	3.173E 02	4.558E 02	1.523E 04
0.09	0.33	13	2.581E 03	9.631E 03	1.263E 04	2.644E 00	1.270E 02	3.107E 02	4.377E 02	1.307E 04
0.10	0.37	15	2.261E 03	8.724E 03	1.099E 04	2.553E 00	1.171E 02	3.043E 02	4.215E 02	1.141E 04
0.20	0.74	29	3.206E 02	4.253E 03	4.573E 03	2.058E 00	7.417E C1	2.555E 02	3.337E 02	4.905E 03
0.30	1.11	44	1.109E 02	2.461E 03	2.571E 03	1.617E 00	5.878E C1	2.300E 02	2.888E 02	2.862E 03
0.40	1.48	58	5.531E 01	1.480E 03	1.535E 03	1.658E 00	5.038E C1	2.000E 02	2.000E 02	1.795E 03
0.60	1.66	73	3.331E 01	0.283E 02	0.605E 02	1.542E 00	4.500E C1	1.858E 02	2.348E 02	1.197E 03
0.60	2.22	87	2.014E 01	6.045E 02	6.247E 02	1.451E 00	4.152E C1	1.741E 02	2.156E 02	6.417E 02
0.80	2.96	117	8.231E 00	2.842E 02	2.924E 02	1.314E 00	3.654E C1	1.465E 02	1.654E 02	4.791E 02
1.00	3.70	146	3.154E 00	1.477E 02	1.560E 02	1.212E 00	3.379E C1	1.207E 02	1.625E 02	3.145E 02
1.25	4.63	182	7.568E-01	6.645E 01	6.761E 01	1.115E 00	3.117E C1	1.089E 02	1.401E 02	2.088E 02
1.50	5.56	219	1.392E-01	2.837E 01	2.851E 01	1.038E 00	2.935E C1	9.324E C1	1.226E 02	1.521E 02
1.75	6.48	255	2.153E-02	1.090E 01	1.092E 01	5.747E-01	2.800E C1	8.062E 01	1.688E 02	1.207E 02
2.00	7.41	292	3.074E-03	3.778E 00	3.781E 00	9.209E-01	2.654E C1	7.071E 01	9.765E 01	1.024E 02
2.50	9.26	365	6.427E-06	3.622E 01	3.623E 01	8.337E-01	2.504E C1	6.633E C1	8.033E 01	6.163E 01
3.00	11.11	437	1.576E-06	3.281E-02	3.281E-02	7.619E-01	2.305E C1	4.438E 01	6.743E 01	6.823E 01
3.50	12.96	510	4.373E-08	3.236E-03	3.236E-03	7.026E-01	2.137E C1	3.626E 01	5.762E 01	5.833E 01
4.00	14.81	583	1.323E-09	3.354E-04	3.354E-04	6.515E-01	2.004E C1	3.004E C1	5.007E 01	5.072E 01
5.00	18.52	729	1.388E-12	3.704E-06	3.704E-06	5.665E-01	1.802E C1	2.128E 01	3.930E 01	3.987E 01
6.00	22.22	875	1.434E-15	3.640E-08	3.640E-08	4.572E-01	1.631E C1	1.558E 01	3.186E 01	3.236E 01
8.00	29.63	1167	7.289E-22	2.012E-12	2.012E-12	3.892E-01	1.341E C1	1.526E 00	2.234E 01	2.273E 01
10.00	37.04	1458	1.737E-28	6.293E-17	6.293E-17	3.080E-01	1.133E C1	1.445E 00	1.678E 01	1.709E 01

\* ELECTRON MODELS:

† SOLAR PROTON MODEL:

AEG: INNER ZONE-SOLAR MAX  
 NO UNCERTAINTY FACTOR WAS APPLIED TO THE MODEL DATA.

SOLPRC: SOLAR FLARE PROTONS AT 1 AU  
 (UNATTENUATED, INTERPLANETARY)  
 FOR CUTOFF DIPOLE SHELL OF 5 E.R.

AE17: OUTER ZONE-INTERIM MODEL WITHOUT SOLAR CYCLE DEPENDENCE.  
 FOR ENERGIES ABOVE 1.5 MEV, THIS MODEL CONTAINS UPPER &  
 LOWER LIMIT VALUES TO ACCOUNT FOR DISCREPANCY BETWEEN  
 EXISTING DATA SETS. THE AE17-HI FAVORS VAMFCLA'S FIT  
 TO GVI-19 DATA WHILE AE17-LO IS MORE REPRESENTATIVE OF  
 ALL THE DATA SETS PRESENTLY AVAILABLE TO NSSC.

FOR FAC=12, MO=10, SUX=1 # OF AL EVENTS=1  
 72.603 GEOMAGNETIC SHIELDING APPLIED

NOTE: Q DENOTES THE DEGREE OF CONFIDENCE ONE WISHES  
 TO ASSIGN TO RESULTS, NAMELY THAT FOR THE  
 SPECIFIC MISSION DURATION THE CALCULATED  
 FLUENCES ARE THE SMALLEST VALUES WHICH WILL  
 NOT BE EXCEEDED BY ACTUALLY ENCOUNTERED  
 INTENSITIES.

>> THE AE17-LO VERSION WAS USED FOR THESE CALCULATIONS <<

\*\* PROTON MODEL:

AP8 MAG: TRAPPED PROTONS SOLAR MAX  
 NO UNCERTAINTY FACTOR WAS APPLIED TO THE MODEL DATA.

IT IS NOT ADVISABLE TO EXTRAPOLATE THE SOLAR  
 PROTON SPECTRA EITHER TOWARDS LOWER NOR  
 TOWARDS HIGHER ENERGIES BECAUSE THE DATA SETS  
 USED IN THE CONSTRUCTION OF THE MODEL (SATEL-  
 LITE MEASUREMENTS MADE DURING THE 20TH SOLAR  
 CYCLE: 15(4-1575) DO NOT CONTAIN INFORMATION  
 FOR 6.00 AND 6.200 MEV.

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Table 31

\*\*\*\*\*  
 \*\* ORBITAL FLUX STUDY WITH COMPOSITE PARTICLE ENVIRONMENTS: VETTES AP8; AE6, AE17 FOR SOLAR MAXIMUM \*\*\* UNIFLUX OF 1970 \*\*  
 \*\* UNCERTAINTY FACTORS (UF) APPLIED FOR THIS RUN ARE: FOR PROTONS (AP8) - UF= 1.0; FOR INNER ZONE ELECTRONS (AE6) - UF= 1.0 \*\*  
 \*\* MAGNETIC COORDINATES (B AND L) COMPUTED BY INVARA OF 1972 WITH ALLMAG, MODEL 2 - BARRACLOUGH ET AL, 168-TERM 1975 \* TIMES= 1880.0 \*\*  
 \*\* VEHICLE : IRAS 900 KM \*\* INCLINATION= 99DEG \*\* PERIGEE= 900KM \*\* APOGEE= 900KM \*\* S/L ORBIT TYPE: TD5376 \*\* PERIOD= 1.716 \*\*  
 \*\*\*\*\*

\*\*\*\*\*  
 \*\*\*\*\* ALUMINUM DOSE FOR MISSION DURATION OF: 1.00 YEAR(3) \*\*\*\*\*  
 \*\*\*\*\*

SHIELD THICKNESS (ALUMINUM)			ELECTRONS*			BREMSSTR- AHLUNG		PROTONS			TOTAL DOSE
Z	T	T	INNER ZN.	OUTER ZN.	TOTAL	TOTAL	TRAPPED**	SOLAR+	TOTAL	ALL SOURCES	
(3M/CM**2)	(MM)	(MILS)	(RADS-AL)	(RADS-AL)	(RADS-AL)	(RADS-AL)	(RADS-AL)	(RADS-AL)	(RADS-AL)	(RADS-AL)	
0.01	0.04	1	3.402E-05	7.021E-04	4.104E-05	0.0	5.878E-03	4.400E-02	6.318E-03	4.167E-05	
0.02	0.07	3	1.797E-05	4.537E-04	2.250E-05	5.401E-00	2.189E-03	4.087E-02	2.597E-03	2.276E-05	
0.03	0.11	4	1.104E-05	3.401E-04	1.444E-05	4.586E-00	1.759E-03	3.877E-02	2.147E-03	1.465E-05	
0.04	0.15	6	7.262E-04	2.720E-04	0.901E-04	4.105E-00	1.364E-03	3.730E-02	1.737E-03	1.017E-05	
0.05	0.19	7	4.984E-04	2.277E-04	7.261E-04	7.470E-00	1.117E-03	3.604E-02	1.478E-03	7.409E-04	
0.06	0.22	9	3.519E-04	1.951E-04	5.471E-04	6.879E-00	9.707E-02	3.499E-02	1.321E-03	5.603E-04	
0.07	0.26	11	2.541E-04	1.703E-04	4.244E-04	6.509E-00	8.702E-02	3.413E-02	1.211E-03	4.300E-04	
0.08	0.3	12	1.870E-04	1.507E-04	3.377E-04	6.215E-00	7.884E-02	3.331E-02	1.122E-03	3.490E-04	
0.09	0.33	13	1.400E-04	1.349E-04	2.749E-04	5.986E-00	7.247E-02	3.263E-02	1.051E-03	2.855E-04	
0.10	0.37	15	1.065E-04	1.210E-04	2.288E-04	5.798E-00	6.690E-02	3.196E-02	9.886E-02	2.385E-04	
0.20	0.74	29	1.577E-03	5.913E-03	7.489E-03	4.711E-00	4.172E-02	2.725E-02	6.897E-02	8.104E-03	
0.30	1.11	44	5.601E-02	3.418E-03	3.978E-03	4.167E-00	3.234E-02	2.415E-02	6.649E-02	4.547E-03	
0.4	1.43	68	3.704E-02	3.067E-03	3.336E-03	3.800E-00	2.713E-02	2.184E-02	4.807E-02	3.830E-03	
0.50	1.85	73	1.623E-02	1.291E-03	1.454E-03	3.544E-00	2.377E-02	1.993E-02	4.371E-02	1.894E-03	
0.60	2.22	87	1.008E-02	8.420E-02	9.427E-02	3.336E-00	2.156E-02	1.828E-02	3.984E-02	1.345E-03	
0.8	2.96	117	4.115E-01	3.969E-02	4.380E-02	3.023E-00	1.857E-02	1.939E-02	3.423E-02	7.830E-02	
1.00	3.70	146	1.588E-01	2.068E-02	2.227E-02	2.790E-00	1.673E-02	1.351E-02	3.024E-02	5.279E-02	
1.25	4.53	182	3.875E-01	9.382E-01	9.769E-01	2.567E-00	1.518E-02	1.143E-02	2.662E-02	3.664E-02	
1.50	5.56	219	7.186E-01	3.983E-01	4.055E-01	2.390E-00	1.415E-02	9.791E-01	2.395E-02	2.824E-02	
1.75	6.48	255	1.111E-01	1.529E-01	1.540E-01	2.244E-00	1.342E-02	8.487E-01	2.191E-02	2.367E-02	
2.0	7.41	292	1.642E-02	6.283E-02	5.382E-02	2.100E-00	1.286E-02	7.426E-01	2.038E-02	3.103E-02	
2.50	9.26	365	4.445E-04	4.966E-01	4.970E-01	1.916E-00	1.184E-02	5.809E-01	1.765E-02	1.789E-02	
3.00	11.11	437	1.489E-05	4.289E-02	4.291E-02	1.751E-00	1.085E-02	4.660E-01	1.551E-02	1.569E-02	
3.5	12.96	510	5.578E-07	3.993E-03	3.993E-03	1.613E-00	1.003E-02	3.807E-01	1.384E-02	1.400E-02	
4.00	14.81	583	2.256E-08	3.910E-04	3.910E-04	1.494E-00	9.391E-01	3.154E-01	1.254E-02	1.269E-02	
5.00	18.52	729	4.123E-11	3.873E-06	3.873E-06	1.295E-00	8.435E-01	2.235E-01	1.067E-02	1.089E-02	
6.00	22.22	875	7.220E-14	3.426E-08	3.426E-08	1.132E-00	7.629E-01	1.635E-01	9.264E-01	9.378E-01	
8.00	29.63	1167	1.076E-19	1.515E-12	1.515E-12	8.787E-01	6.280E-01	9.372E-00	7.217E-01	7.305E-01	
10.00	37.04	1460	9.042E-26	3.789E-17	3.789E-17	6.888E-01	5.316E-01	6.717E-00	6.887E-01	6.966E-01	

\* ELECTRON MODELS:

AE6: INNER ZONE SOLAR MAX  
 NO UNCERTAINTY FACTOR WAS APPLIED TO THE MODEL DATA.

AE17: OUTER ZONE-INTERIM MODEL WITHOUT SOLAR CYCLE DEPENDENCE.  
 FOR ENERGIES ABOVE 1.5 MEV, THIS MODEL CONTAINS UPPER &  
 LOWER LIMIT VALUES TO ACCOUNT FOR DISCREPANCY BETWEEN  
 EXISTING DATA SETS. THE AE17-HI FAVORS VAMPOLA'S FIT  
 TO OVI-19 DATA WHILE AE17-LO IS MORE REPRESENTATIVE OF  
 ALL THE DATA SETS PRESENTLY AVAILABLE TO NSSDC.

>> THE AE17-LO VERSION WAS USED FOR THESE CALCULATIONS <<

+ SOLAR PROTON MODEL:

SOLPRO: SOLAR FLARE PROTONS AT 1 AU  
 (UNATTENUATED, INTERPLANETARY)  
 FOR CUTOFF DIPOLE SHELL OF 5 E.R.

FOR TAU=12.MO., Q=90%: # OF AL EVENTS=1  
 71.23% GEOMAGNETIC SHIELDING APPLIED

NOTE: Q DENOTES THE DEGREE OF CONFIDENCE ONE WISHES  
 TO ASSIGN TO RESULTS, NAMELY THAT FOR THE  
 SPECIFIC MISSION DURATION THE CALCULATED  
 FLUENCES ARE THE SMALLEST VALUES WHICH WILL  
 NOT BE EXCEEDED BY ACTUALLY ENCOUNTERED  
 INTENSITIES.

\*\* PROTON MODEL:

AP8-MAC: TRAPPED PROTONS-SOLAR MAX  
 NO UNCERTAINTY FACTOR WAS APPLIED TO THE MODEL DATA.

IT IS NOT ADVISABLE TO EXTRAPOLATE THE SOLAR  
 PROTON SPECTRA NEITHER TOWARDS LOWER NOR  
 TOWARDS HIGHER ENERGIES BECAUSE THE DATA SETS  
 USED IN THE CONSTRUCTION OF THE MODEL (SATEL-  
 LITE MEASUREMENTS MADE DURING THE 20TH SOLAR  
 CYCLE: 1968-1973) DO NOT CONTAIN INFORMATION  
 FOR E<10 AND E>200 MEV.

Table 32.

\*\*\*\*\*  
 \*\* ORBITAL FLUX STILLY WITH COMPOSITE PARTICLE ENVIRONMENT: VETTES AP8: AE6: AE17 FOR SOLAR MAXIMUM \*\*\* UNIFLUX OF 1978 \*\*  
 \*\* UNCERTAINTY FACTORS (UF) APPLIED FOR THIS RUN ARE: FOR PROTONS (AP8) UF= 1.0; FOR INNER ZONE ELECTRONS (AE6) UF= 1.0 \*\*  
 \*\* MAGNETIC COORDINATES B AND L COMPUTED BY INVARA OF 1972 WITH ALLMAG. MODEL 5: BARRACLOUGH ET AL. 168-TERM 1975 \*\* TIME= 1980.0 \*\*  
 \*\* VEHICLE: TRANS-1200 KM \*\* INCLINATION: 90DEG \*\* PERIGEE: 1200KM \*\* APOGEE: 1200KM \*\* SATELLITE: TRANS-1200 \*\* PERIOD: 1.824 \*\*  
 \*\*\*\*\*

\*\*\*\*\*  
 \*\*\*\* ALUMINUM DOSE FOR MISSION DURATION OF: 1.00 YEAR(S) \*\*\*\*  
 \*\*\*\*\*

SHIELD THICKNESS (ALUMINUM)			ELECTRONS*			BREMSSTR- AHLUNG		PROTONS			TOTAL DOSE
Z	T	T	INNER ZN.	OUTER ZN.	TOTAL	TOTAL	TRAPPED**	SOLARY	TOTAL	ALL SOURCES	
(GM/CM**2)	(MM)	(MILS)	(RADS-AL)	(RACS-AL)	(RACS-AL)	(RADS-AL)	(RADS-AL)	(RADS-AL)	(RADS-AL)	(RADS-AL)	
0.01	0.04	1	1.035E 06	9.547E 04	1.131E 06	0.0	1.786E C4	4.467E 02	1.831E 04	1.149E 06	
0.02	0.07	3	5.665E 05	6.151E 04	6.281E 05	1.807E 01	6.767E 03	4.149E 02	7.182E 03	6.353E 05	
0.03	0.11	4	3.666E 06	4.603E 04	4.016E 06	1.498E 01	6.692E 02	3.536E 02	6.998E 02	4.074E 08	
0.04	0.15	6	2.374E 05	3.689E 04	2.743E 05	1.363E 01	4.409E 03	3.786E 02	4.767E 03	2.791E 05	
0.05	0.19	7	1.645E 05	3.076E 04	1.953E 05	1.751E 01	3.664E 03	3.659E 02	4.030E 03	1.992E 05	
0.06	0.22	9	1.189E 05	2.639E 04	1.422E 05	1.634E 01	3.220E 03	3.222E 02	3.576E 03	1.408E 05	
0.07	0.26	10	8.470E 04	2.300E 04	1.077E 05	1.553E 01	2.909E 03	3.464E 02	3.255E 03	1.110E 05	
0.08	0.34	12	6.246E 04	2.036E 04	8.282E 04	1.491E 01	2.649E 03	3.382E 02	2.987E 03	8.382E 04	
0.09	0.37	13	4.682E 04	1.823E 04	6.505E 04	1.439E 01	2.445E 03	3.312E 02	2.776E 03	6.784E 04	
0.10	0.37	15	3.566E 04	1.647E 04	5.213E 04	1.395E 01	2.263E 03	3.244E 02	2.586E 03	5.473E 04	
0.20	0.74	30	5.304E 03	2.008E 03	1.330E 04	1.141E 01	1.403E 03	2.766E 02	1.679E 03	1.498E 04	
0.30	1.11	44	1.887E 03	4.621E 03	6.509E 03	1.011E 01	1.069E 03	2.452E 02	1.314E 03	7.833E 03	
0.40	1.48	58	9.377E 02	2.780E 03	3.718E 03	9.248E 00	8.800E 02	2.217E 02	1.102E 03	4.829E 03	
0.50	1.75	73	5.423E 02	1.745E 03	2.288E 03	8.611E 00	7.588E 02	2.023E 02	9.604E 02	3.257E 03	
0.60	2.22	87	3.356E 02	1.139E 03	1.474E 03	8.108E 00	6.770E 02	1.856E 02	8.626E 02	2.345E 03	
0.80	2.56	117	1.369E 02	5.373E 02	6.743E 02	7.349E 00	5.716E 02	1.582E 02	7.298E 02	1.411E 03	
1.00	3.70	146	5.316E 01	2.805E 02	3.337E 02	6.786E 00	5.033E 02	1.372E 02	6.404E 02	9.809E 02	
1.25	4.63	182	1.314E 01	1.279E 02	1.410E 02	6.245E 00	4.506E 02	1.161E 02	5.667E 02	7.139E 02	
1.60	6.66	219	3.474E 00	5.482E 01	5.730E 01	5.816E 00	4.167E 02	5.640E 01	5.161E 02	5.793E 02	
1.75	6.48	255	3.768E 01	2.136E 01	2.174E 01	5.461E 00	3.934E 02	8.616E 01	4.796E 02	5.068E 02	
2.00	7.41	292	4.551E 02	7.483E 00	7.522E 00	5.159E 00	3.755E 02	7.538E 01	4.509E 02	4.635E 02	
2.50	9.26	365	7.683E 04	6.394E 01	6.402E 01	4.662E 00	3.440E 02	5.257E 01	4.030E 02	4.083E 02	
3.00	11.11	437	1.750E 05	2.825E 02	2.826E 02	4.262E 00	3.149E 02	4.731E 01	3.615E 02	3.658E 02	
3.50	12.96	510	4.738E 07	5.931E 04	5.436E 04	3.924E 00	2.897E 02	3.865E 01	3.284E 02	3.923E 02	
4.00	14.81	583	1.401E 08	5.351E 06	5.356E 06	3.632E 00	2.708E 02	3.202E 01	3.026E 02	3.064E 02	
5.00	18.52	729	1.405E 11	3.077E 10	3.217E 10	3.144E 00	2.428E 02	2.269E 01	2.655E 02	2.686E 02	
6.00	22.23	876	1.392E 14	1.907E 14	3.399E 14	3.744E 00	3.193E 02	1.660E 01	3.358E 02	3.388E 02	
8.00	29.63	1167	6.494E 21	3.902E 23	6.533E 21	2.120E 00	1.800E 02	9.514E 00	1.855E 02	1.916E 02	
10.00	37.64	1458	1.412E 27	2.366E 32	1.412E 27	1.653E 00	1.520E 02	5.814E 00	1.578E 02	1.595E 02	

\* ELECTRON MODELS:

AE6: INNER ZONE-SOLAR MAX  
 NO UNCERTAINTY FACTOR WAS APPLIED TO THE MODEL DATA.

AE17: OUTER ZONE-INTERIM MODEL WITHOUT SOLAR CYCLE DEPENDENCE.  
 FOR ENERGIES ABOVE 1.5 MEV, THIS MODEL CONTAINS UPPER &  
 LOWER LIMIT VALUES TO ACCOUNT FOR DISCREPANCY BETWEEN  
 EXISTING DATA SETS. THE AE17-HI FAVORS VANFELT'S FIT  
 TO GVI-19 DATA WHILE AE17-LO IS MORE REPRESENTATIVE OF  
 ALL THE DATA SETS PRESENTLY AVAILABLE TO NSSDC.

>> THE AE17-LO VERSION WAS USED FOR THESE CALCULATIONS <<

\*\* PROTON MODEL:

AP8-MAC: TRAPPED PROTONS-SOLAR MAX  
 NO UNCERTAINTY FACTOR WAS APPLIED TO THE MODEL DATA.

SOLAR PROTON MODEL:

SOLPRC: SOLAR FLARE PROTONS AT 1 AU  
 (UNATTENUATED, INTERPLANETARY)  
 FOR CUTOFF DIPOLE SHELL OF S.E.R.

FOR 1AU=12. NC. 0.50X: # OF AL EVENTS=1  
 70.7% GEOMAGNETIC SHIELDING APPLIED.

NOTE: Q DENOTES THE DEGREE OF CONFIDENCE ONE WISHES  
 TO ASSIGN TO RESULTS, NAMELY THAT FOR THE  
 SPECIFIC MISSION DURATION THE CALCULATED  
 FLUENCES ARE THE SMALLEST VALUES WHICH WILL  
 NOT BE EXCEEDED BY ACTUALLY ENCOUNTERED  
 INTENSITIES.

IT IS NOT ADVISABLE TO EXTRAPOLATE THE SOLAR  
 PROTON SPECTRA NEITHER TOWARDS LOWER NOR  
 TOWARDS HIGHER ENERGIES BECAUSE THE DATA SETS  
 USED IN THE CONSTRUCTION OF THE MODEL (SATEL-  
 LITE MEASUREMENTS MADE DURING THE 20TH SOLAR  
 CYCLE: 1964-1975) DO NOT CONTAIN INFORMATION  
 FOR E<10 AND E>200 MEV.

ORIGINAL PAGE IS  
 OF POOR QUALITY

Table 33

\*\* ORBITAL FLUX STUDY WITH COMPOSITE PARTICLE ENVIRONMENTS: VETTES AP8; AE6, AE17 FOR SOLAR MAXIMUM \*\*\* UNIFLUX OF 1978 \*\*  
 \*\* UNCERTAINTY FACTORS (UF) APPLIED FOR THIS RUN ARE: FOR PROTONS (AP8) UF=2.01 FOR INNER ZONE ELECTRONS (AE6) UF=5.0 \*\*  
 \*\* MAGNETIC COORDINATES B AND L COMPUTED BY INVARA OF 1972 WITH ALLMAG, MODEL 5; BARRACLOUGH ET AL. 168-TERM 1975 \* TIME= 1980.0:00  
 \*\* VEHICLE: IRAS 600 KM \*\* INCLINATION= 80DEG \*\* PERIGEE= 600KM \*\* APOGEE= 600KM \*\* B/L ORBIT TAPE: YD5362 \*\* PERIOD= 1.611 \*\*

\*\*\*\*\*  
 \*\*\*\*\* ALUMINUM DOSE FOR MISSION DURATION OF: 1.00 YEAR(S) \*\*\*\*\*  
 \*\*\*\*\*

SHIELD THICKNESS (ALUMINUM)			ELECTRONS*			BREMSSTRAHLUNG		PROTONS			TOTAL DOSE
Z	T	T	INNER ZN	CUTER ZN	TOTAL	TOTAL	TRAPPED**	SOLAR+	TOTAL	ALL SOURCES	
(GM/CM**2)	(MM)	(MILS)	(RADS-AL)	(RADS-AL)	(RADS-AL)	(RADS-AL)	(RADS-AL)	(RADS-AL)	(RADS-AL)	(RADS-AL)	
0.01	0.04	1	4.268E-05	8.022E-04	4.760E-06	0.0	2.272E-03	4.101E-02	2.601E-03	4.787E-05	
0.02	0.07	3	2.124E-05	3.237E-04	2.447E-05	5.968E-00	7.977E-02	3.892E-02	1.187E-03	2.455E-05	
0.03	0.11	4	1.258E-05	2.424E-04	1.500E-05	5.185E-00	6.383E-02	3.692E-02	1.000E-03	1.511E-05	
0.04	0.15	6	8.076E-06	1.545E-04	1.002E-05	4.771E-00	4.892E-02	3.552E-02	8.44E-04	1.011E-05	
0.05	0.19	7	5.449E-06	1.024E-04	7.072E-06	4.200E-00	3.975E-02	3.432E-02	7.408E-04	7.147E-06	
0.06	0.22	9	3.806E-06	7.393E-05	5.198E-06	3.808E-00	3.437E-02	3.332E-02	6.769E-04	5.267E-06	
0.07	0.26	10	2.726E-06	5.217E-05	3.946E-06	3.436E-00	3.069E-02	3.250E-02	6.319E-04	4.009E-06	
0.08	0.30	12	1.598E-06	3.079E-05	3.076E-06	3.158E-00	2.771E-02	3.173E-02	5.943E-04	3.137E-06	
0.09	0.33	13	1.409E-06	2.668E-05	2.467E-06	2.935E-00	2.641E-02	3.107E-02	5.648E-04	2.644E-06	
0.10	0.37	15	1.130E-06	2.130E-05	2.005E-06	2.747E-00	2.342E-02	3.043E-02	5.386E-04	2.060E-06	
0.20	0.74	29	1.603E-06	4.335E-05	5.937E-06	4.683E-00	1.483E-02	2.595E-02	4.079E-04	6.350E-06	
0.30	1.11	44	5.546E-07	2.625E-05	3.179E-06	4.145E-00	1.176E-02	2.300E-02	3.470E-04	3.531E-06	
0.40	1.48	58	2.766E-07	1.709E-05	1.986E-06	3.789E-00	1.008E-02	2.080E-02	3.087E-04	2.299E-06	
0.50	1.85	73	1.616E-07	1.176E-05	1.337E-06	3.526E-00	9.001E-03	1.898E-02	2.799E-04	1.621E-06	
0.60	2.22	87	1.007E-07	8.371E-06	9.378E-07	3.319E-00	8.304E-03	1.741E-02	2.571E-04	1.198E-06	
0.80	2.56	117	4.110E-08	4.550E-06	4.962E-07	3.006E-00	7.388E-03	1.485E-02	2.223E-04	7.215E-07	
1.00	3.79	146	1.577E-08	2.648E-06	2.906E-07	2.774E-00	6.750E-03	1.267E-02	1.963E-04	4.796E-07	
1.25	4.43	182	3.784E-09	1.422E-06	1.459E-07	2.551E-00	6.235E-03	1.089E-02	1.712E-04	3.197E-07	
1.50	5.56	219	6.963E-10	7.755E-07	7.824E-08	2.374E-00	5.671E-03	9.324E-03	1.519E-04	2.326E-07	
1.75	6.48	255	1.077E-10	4.108E-07	4.719E-08	2.228E-00	5.000E-03	8.052E-03	1.388E-04	1.802E-07	
2.00	7.41	292	1.537E-11	2.049E-07	2.050E-08	2.104E-00	5.388E-03	7.071E-03	1.246E-04	1.472E-07	
2.50	9.26	363	3.214E-12	4.048E-08	4.048E-09	1.900E-00	5.003E-03	5.532E-03	1.033E-04	1.113E-07	
3.00	11.11	437	7.682E-13	8.726E-09	5.726E-10	1.735E-00	4.611E-03	4.438E-03	9.049E-05	9.279E-08	
3.50	12.96	510	2.187E-13	6.092E-09	6.092E-10	1.596E-00	4.273E-03	3.626E-03	7.899E-05	8.064E-08	
4.00	14.81	583	4.617E-14	5.717E-09	5.717E-10	1.476E-00	4.007E-03	3.004E-03	7.011E-05	7.159E-08	
5.00	18.52	729	6.939E-15	4.855E-09	4.855E-10	1.275E-00	3.604E-03	2.128E-03	5.732E-05	5.859E-08	
6.00	22.22	875	7.172E-16	3.691E-09	3.691E-10	1.111E-00	3.261E-03	1.558E-03	4.819E-05	4.930E-08	
8.00	29.53	1167	3.644E-17	1.183E-11	1.183E-11	8.382E-01	2.683E-03	8.926E-04	3.870E-05	3.601E-08	
10.00	37.04	1458	8.682E-18	2.140E-16	2.140E-16	6.663E-01	2.267E-03	5.445E-04	2.811E-05	2.878E-08	

\* ELECTRON MODELS:

AE6: INNER ZONE-SOLAR MAX TO PROVIDE WORST CASE ESTIMATES. UNCERTAINTY FACTOR OF X 5.0 (AVERAGE FOR AE6 MODEL) WAS APPLIED TO THE MODEL DATA.  
 AE17: OUTER ZONE-INTERIM MODEL #1 THRU SOLAR CYCLE DEPENDENCE. FOR ENERGIES ABOVE 1.5 MEV, THIS MODEL CONTAINS UPPER & LOWER LIMIT VALUES TO ACCOUNT FOR DISCREPANCY BETWEEN EXISTING DATA SETS. THE AE17-HI FAVORS VAMPOLATS FIT TO OV1-19 DATA WHILE AE17-LC IS MORE REPRESENTATIVE OF ALL THE DATA SETS PRESENTLY AVAILABLE TO NSSDC.

>> THE AE17-HI VERSION WAS USED FOR THESE CALCULATIONS <<

\*\* PROTON MODEL:

AP8-MAC: TRAPPED PROTONS-SOLAR MAX TO PROVIDE WORST CASE ESTIMATES. UNCERTAINTY FACTOR OF X 2.0 WAS APPLIED TO THE MODEL DATA.

+ SOLAR PROTON MODEL:

SOLPRO: SOLAR FLARE PROTONS AT 1 AU (UNATTENUATED, INTERPLANETARY) FOR CUTOFF DIPOLE SHELL OF 5 F.R.

FOR TAU=12 MO. Q=90%: # OF AL EVENTS=1  
 72.60% GEOMAGNETIC SHIELDING APPLIED

NOTE: Q DENOTES THE DEGREE OF CONFIDENCE ONE WISHES TO ASSIGN TO RESULTS. NAMELY THAT FOR THE SPECIFIC MISSION DURATION THE CALCULATED FLUENCES ARE THE SMALLEST VALUES WHICH WILL NOT BE EXCEEDED BY ACTUALLY ENCOUNTERED INTENSITIES.

IT IS NOT ADVISABLE TO EXTRAPOLATE THE SOLAR PROTON SPECTRA NEITHER TOWARDS LOWER NOR TOWARDS HIGHER ENERGIES BECAUSE THE DATA SETS USED IN THE CONSTRUCTION OF THE MODEL (SATELLITE MEASUREMENTS MADE DURING THE 20TH SOLAR CYCLE: 1964-1975) DO NOT CONTAIN INFORMATION FOR E<10 AND E>200 MEV.

\*\* ORBITAL FLUX STUDY WITH COMPOSITE PARTICLE ENVIRONMENTS: VEITES APP: A66, AE17 FOR SOLAR MAXIMUM \*\*\* UNIFLUX OF 1970 \*\*  
 \*\* UNCERTAINTY FACTORS (UF) APPLIED FOR THIS RUN ARE: FOR PROTONS (AP8) - UF= 2.0; FOR INNER ZONE ELECTRO45 (AE6) - UF= 5.0 \*\*  
 \*\* MAGNETIC COORDINATES B AND L COMPUTED BY INVVARA OF 1972 WITH ALLMAG, MODEL 2: BARRACLOUGH ET. AL, 168-TERM 1975 \* TIME= 1980.0 \*\*  
 \*\* VEHICLE : IRAS 900 KM \*\* INCLINATION= 99DEG \*\* PERIGEE= 900KM \*\* APOGEE= 900KM \*\* 5/1 CIRCIT TAPE: TDS376 \*\* PERIOD= 1.716 \*\*  
 \*\*\*\*\*

\*\*\*\*\*  
 \*\*\*\*\* ALUMINUM DOSE FOR MISSION DURATION OF: 1.00 YEAR(S) \*\*\*\*\*  
 \*\*\*\*\*

SHIELD THICKNESS (ALUMINUM)			ELECTRONS*			BREMSSTR- AHLUNG	PROTONS			TOTAL DOSE
Z (GM/CM**2)	T (MM)	T (MILS)	INNER ZN. (RADS-AL)	UTER ZN. (RADS-AL)	TOTAL (RADS-AL)	TOTAL (RADS-AL)	TRAPPED** (RADS-AL)	SOLAR+ (RADS-AL)	TOTAL (RADS-AL)	ALL SOURCES (RADS-AL)
0.01	0.04	1	1.701E 06	7.019E 04	1.771E 06	0.0	1.176E 04	4.400E 02	1.220E 04	1.783E 06
0.02	0.07	3	8.984E 05	4.535E 04	9.437E 05	2.701E 01	4.377E 03	4.087E 02	4.786E 03	9.485E 05
0.03	0.11	4	5.513E 05	3.400E 04	5.856E 05	2.293E 01	3.510E 03	3.877E 02	3.906E 03	5.897E 05
0.04	0.15	6	3.631E 05	2.728E 04	3.904E 05	2.097E 01	2.728E 03	3.730E 02	3.101E 03	3.935E 05
0.05	0.19	7	2.452E 05	2.277E 04	2.720E 05	2.382E 01	2.235E 03	3.604E 02	2.595E 03	2.746E 05
0.06	0.22	9	1.760E 05	1.952E 04	1.955E 05	2.228E 01	1.941E 03	3.499E 02	2.291E 03	1.978E 05
0.07	0.26	10	1.271E 05	1.704E 04	1.441E 05	2.123E 01	1.740E 03	3.413E 02	2.082E 03	1.462E 05
0.08	0.30	12	9.364E 04	1.500E 04	1.086E 05	2.040E 01	1.577E 03	3.331E 02	1.910E 03	1.105E 05
0.09	0.33	13	7.000E 04	1.352E 04	8.352E 04	1.972E 01	1.449E 03	3.263E 02	1.776E 03	8.531E 04
0.10	0.37	15	5.328E 04	1.222E 04	6.550E 04	1.913E 01	1.338E 03	3.196E 02	1.658E 03	6.717E 04
0.20	0.74	29	7.883E 03	6.029E 03	1.391E 04	1.570E 01	8.344E 02	2.725E 02	1.107E 03	1.504E 04
0.30	1.11	44	2.800E 03	3.651E 03	6.451E 03	1.392E 01	6.468E 02	2.415E 02	8.883E 02	7.353E 03
0.40	1.48	58	1.357E 03	2.383E 03	3.780E 03	1.274E 01	5.427E 02	2.184E 02	7.611E 02	4.554E 03
0.50	1.85	73	8.117E 02	1.644E 03	2.455E 03	1.186E 01	4.755E 02	1.993E 02	6.748E 02	3.142E 03
0.60	2.22	87	5.034E 02	1.174E 03	1.677E 03	1.117E 01	4.313E 02	1.828E 02	6.141E 02	2.303E 03
0.80	3.48	117	3.057E 02	6.406E 02	8.453E 02	1.012E 01	3.731E 02	1.550E 02	4.292E 02	1.188E 03
1.00	3.70	146	7.942E 01	3.738E 02	4.532E 02	9.347E 00	3.346E 02	1.351E 02	4.697E 02	9.323E 02
1.25	4.63	182	1.935E 01	2.013E 02	2.207E 02	8.599E 00	2.037E 02	1.143E 02	4.180E 02	6.473E 02
1.50	5.56	219	3.544E 00	1.192E 02	1.150E 02	8.046E 00	2.331E 02	9.791E 01	3.810E 02	5.028E 02
1.75	6.48	255	5.560E 00	5.853E 01	5.909E 01	7.515E 00	2.684E 02	8.487E 01	3.533E 02	4.199E 02
2.00	7.41	292	8.210E 00	2.920E 01	2.928E 01	7.097E 00	2.571E 02	7.425E 01	3.313E 02	3.677E 02
2.50	9.26	365	2.222E 00	5.750E 00	5.753E 00	6.408E 00	2.368E 02	5.809E 01	2.949E 02	3.070E 02
3.00	11.11	437	7.445E 00	4.092E 01	4.093E 01	5.851E 00	2.171E 02	4.660E 01	2.637E 02	2.703E 02
3.50	12.96	510	2.789E 00	4.569E 00	4.569E 00	5.382E 00	2.006E 02	3.807E 01	2.387E 02	2.442E 02
4.00	14.81	583	1.128E 00	4.014E 00	4.014E 00	4.975E 00	1.878E 02	3.154E 01	2.194E 02	2.243E 02
5.00	18.52	729	2.060E 00	6.765E 00	6.766E 00	4.294E 00	1.687E 02	2.235E 01	1.910E 02	1.953E 02
6.00	22.22	875	3.810E 00	5.115E 00	5.115E 00	3.737E 00	1.526E 02	1.635E 01	1.689E 02	1.727E 02
8.00	29.63	1167	5.379E 00	1.621E 00	1.621E 00	2.867E 00	1.256E 02	9.372E 00	1.350E 02	1.350E 02
10.00	37.04	1458	4.021E 00	2.898E 00	2.898E 00	2.220E 00	1.063E 02	5.717E 00	1.120E 02	1.142E 02

\* ELECTRON MODELS:

AE6: INNER ZONE-SOLAR MAX  
 TO PROVIDE WORST CASE ESTIMATES, UNCERTAINTY FACTOR  
 OF X 5.0 (AVERAGE FOR AE6 MODEL) WAS APPLIED TO THE  
 MODEL DATA.

AE17: OUTER ZONE-INTERIM MODEL WITHOUT SOLAR CYCLE DEPENDENCE.  
 FOR ENERGIES ABOVE 1.5 MEV, THIS MODEL CONTAINS UPPER &  
 LOWER LIMIT VALUES TO ACCOUNT FOR DISCREPANCY BETWEEN  
 EXISTING DATA SETS. THE AE17-HI FAVORS VAMPOLA'S FIT  
 TO UVI-19 DATA WHILE AE17-LO IS MORE REPRESENTATIVE OF  
 ALL THE DATA SETS PRESENTLY AVAILABLE TO NSSDC.

>> THE AE17-HI VERSION WAS USED FOR THESE CALCULATIONS <<

\*\* PROTON MODEL:

AP8-MAC: TRAPPED PROTONS-SOLAR MAX  
 TO PROVIDE WORST CASE ESTIMATES, UNCERTAINTY FACTOR  
 OF X 2.0 WAS APPLIED TO THE MODEL DATA.

\* SOLAR PROTON MODEL:

SOLPRC: SOLAR FLARE PROTONS AT 1 AU  
 (UNATTENUATED, INTERPLANETARY)  
 FOR CUTOFF DIPOLE SHELL OF 5 E.R.

FOR TAU=12 MO., Q=90X: # OF AL EVENTS=1  
 71.23% GEOMAGNETIC SHIELDING APPLIED

NOTE: Q DENOTES THE DEGREE OF CONFIDENCE ONE WISHES  
 TO ASSIGN TO RESULTS, NAMELY THAT FOR THE  
 SPECIFIC MISSION DURATION THE CALCULATED  
 FLUENCES ARE THE SMALLEST VALUES WHICH WILL  
 NOT BE EXCEEDED BY ACTUALLY ENCOUNTERED  
 INTENSITIES.

IT IS NOT ADVISABLE TO EXTRAPOLATE THE SOLAR  
 PROTON SPECTRA NEITHER TOWARDS LOWER NOR  
 TOWARDS HIGHER ENERGIES BECAUSE THE DATA SETS  
 USED IN THE CONSTRUCTION OF THE MODEL (SATEL-  
 LITE MEASUREMENTS MADE DURING THE 20TH SOLAR  
 CYCLE: 1964-1975) DO NOT CONTAIN INFORMATION  
 FOR 5-10 AND 5-200 MEV.

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Table 35

\*\*\*\*\*  
 \*\* ORBITAL FLUX STUDY WITH COMPOSITE PARTICLE ENVIRONMENTS: VETTES AP8; AE6, AE17 FOR SOLAR MAXIMUM \*\*\* UNIFLUX OF 1979 \*\*  
 \*\* UNCERTAINTY FACTORS (UF) APPLIED FOR THIS RUN ARE: FOR PROTONS (AP8) UF=2.0; FOR INNER ZONE ELECTRONS (AE6) UF=5.0 \*\*  
 \*\* MAGNETIC COORDINATES B AND L COMPLETED BY INVARA OF 1972 WITH ALLMAG, MODEL 6; BARRACLOUGH ET AL, 198-TERM 1975 \* TIME=1980.0 \*\*  
 \*\* VEHICLE: IRAS 1200 KM \*\* INCLINATION=80DEG \*\* PERIGEE=1200KM \*\* APOGEE=1200KM \*\* B/L ORBIT TAPE: TD640 \*\* PERIGEE=1.824 \*\*  
 \*\*\*\*\*

\*\*\*\*\*  
 \*\*\*\*\* ALUMINUM DOSE FOR MISSION DURATION OF: 1.00 YEAR(S) \*\*\*\*\*  
 \*\*\*\*\*

SHIELD THICKNESS (ALUMINUM)			ELECTRONS*			BREMSSTR AHLUNG TOTAL	PROTONS			TOTAL DOSE
Z	T	T	INNER ZN	OUTER ZN	TOTAL	(RADS-AL)	TRAPPED**	SOLAR+	TOTAL	ALL SOURCES
(GM/CM**2)	(MM)	(MILS)	(RADS-AL)	(RADS-AL)	(RADS-AL)	(RADS-AL)	(RADS-AL)	(RADS-AL)	(RADS-AL)	(RADS-AL)
0.01	0.04	1	5.177E-06	6.844E-04	5.272E-06	0.0	3.673E-04	4.467E-03	3.617E-04	8.308E-06
0.02	0.07	3	2.833E-06	6.148E-04	2.894E-06	9.033E-01	1.353E-04	4.149E-02	1.395E-04	2.908E-06
0.03	0.11	4	1.778E-06	6.401E-04	1.824E-06	7.490E-01	1.118E-04	3.936E-02	1.156E-04	1.836E-06
0.04	0.15	6	1.187E-06	3.607E-04	1.224E-06	6.816E-01	8.817E-03	3.786E-02	9.190E-03	1.233E-06
0.05	0.19	7	8.227E-05	3.075E-04	8.534E-05	6.931E-01	7.328E-03	3.659E-02	7.694E-03	8.612E-05
0.06	0.22	9	5.844E-05	2.435E-04	6.108E-05	6.537E-01	6.441E-03	3.552E-02	6.796E-03	6.176E-05
0.07	0.26	10	4.235E-05	2.301E-04	4.465E-05	6.247E-01	5.817E-03	3.464E-02	6.163E-03	4.828E-05
0.08	0.30	12	3.123E-05	2.038E-04	3.327E-05	6.013E-01	5.298E-03	3.382E-02	5.630E-03	3.584E-05
0.09	0.33	13	2.341E-05	1.826E-04	2.623E-05	6.817E-01	4.888E-03	3.313E-02	5.220E-03	2.874E-05
0.10	0.37	15	1.783E-05	1.650E-04	1.948E-05	5.648E-01	4.527E-03	3.244E-02	4.851E-03	1.997E-05
0.20	0.74	29	2.652E-04	8.147E-03	3.467E-04	4.645E-01	2.805E-03	2.766E-02	3.082E-03	3.779E-04
0.30	1.11	44	9.437E-03	4.922E-03	1.436E-04	4.122E-01	2.137E-03	2.492E-02	2.382E-03	1.678E-04
0.40	1.48	58	4.689E-03	3.202E-03	7.890E-03	3.772E-01	1.760E-03	2.217E-02	1.982E-03	9.910E-03
0.50	1.85	73	2.711E-03	2.201E-03	4.212E-03	3.514E-01	1.516E-03	2.023E-02	1.719E-03	6.666E-03
0.60	2.22	87	1.678E-03	1.566E-03	3.244E-03	3.309E-01	1.354E-03	1.856E-02	1.540E-03	4.817E-03
0.80	2.96	117	6.847E-02	8.515E-02	1.536E-03	3.001E-01	1.143E-03	1.582E-02	1.301E-03	2.866E-03
1.00	3.70	146	2.460E-02	4.567E-02	7.616E-02	2.771E-01	1.007E-03	1.372E-02	1.144E-03	1.023E-02
1.25	4.63	182	6.570E-01	2.663E-02	3.320E-02	2.550E-01	9.012E-02	1.161E-02	1.017E-03	1.379E-03
1.50	5.56	219	1.237E-01	1.452E-02	1.576E-02	2.375E-01	8.335E-02	9.940E-01	9.320E-02	1.114E-03
1.75	6.48	255	1.884E-00	7.688E-01	7.876E-01	2.230E-01	7.868E-02	8.816E-01	8.730E-02	9.780E-02
2.00	7.41	292	2.476E-01	3.828E-01	3.853E-01	2.107E-01	7.510E-02	7.538E-01	8.263E-02	8.859E-02
2.50	9.24	365	3.821E-03	7.549E-00	7.553E-00	1.903E-01	6.881E-02	8.697E-01	7.471E-02	7.471E-02
3.00	11.11	437	8.749E-05	1.068E-00	1.068E-00	1.738E-01	6.285E-02	4.731E-01	6.750E-02	6.942E-02
3.50	12.98	510	2.369E-06	1.142E-01	1.142E-01	1.599E-01	5.794E-02	3.868E-01	6.181E-02	6.342E-02
4.00	14.84	593	7.094E-06	1.680E-02	1.680E-02	1.479E-01	5.416E-02	3.202E-01	8.734E-02	8.844E-02
5.00	18.52	729	7.026E-11	9.348E-05	9.348E-05	1.277E-01	4.856E-02	2.269E-01	5.082E-02	5.210E-02
6.00	22.22	875	6.961E-14	7.238E-07	7.238E-07	1.112E-01	4.385E-02	1.660E-01	4.581E-02	4.662E-02
8.00	29.43	1167	3.247E-20	2.412E-11	2.412E-11	6.537E-00	3.600E-02	9.514E-00	3.690E-02	3.780E-02
10.00	37.04	1458	7.060E-27	4.839E-16	4.839E-16	6.610E-00	3.040E-02	5.804E-00	3.090E-02	3.164E-02

\* ELECTRON MODEL S:

AE6: INNER ZONE-SOLAR MAX  
 TO PROVIDE WORST CASE ESTIMATES, UNCERTAINTY FACTOR  
 OF X 5.0 (AVERAGE FOR AE6 MODEL) WAS APPLIED TO THE  
 MODEL DATA.

AE17: OUTER ZONE-INTERIM MODEL WITHOUT SOLAR CYCLE DEPENDENCE.  
 FOR ENERGIES ABOVE 15 MEV, THIS MODEL CONTAINS UPPER  
 LOWER LIMIT VALUES TO ACCOUNT FOR DISCREPANCIES BETWEEN  
 EXISTING DATA SETS. THE AE17-HI FAVORS VAMPOLTA'S FIT  
 TO OV1-19 DATA WHILE AE17-LC IS MORE REPRESENTATIVE OF  
 ALL THE DATA SETS PRESENTLY AVAILABLE TO NSSDC.

>> THE AE17-HI VERSION WAS USED FOR THESE CALCULATIONS <<

\*\* PROTON MODEL:

AP8-MAC: TRAPPED PROTONS-SOLAR MAX  
 TO PROVIDE WORST CASE ESTIMATES, UNCERTAINTY FACTOR  
 OF X 2.0 WAS APPLIED TO THE MODEL DATA.

+ SOLAR PROTON MODEL:

SOLPRO: SOLAR FLARE PROTONS AT 1 AU  
 (UNATTENUATED, INTERPLANETARY)  
 FOR CUTOFF DIPOLE SHELL OF 5 E.R.  
 FOR TAU=12 MO., 0.090X; 8 OF ALL EVENTS=1  
 70.79% GEOMAGNETIC SHIELDING APPLIED

NOTE: 0 DENOTES THE DEGREE OF CONFIDENCE ONE WISHES  
 TO ASSIGN TO RESULTS, NAMELY THAT FOR THE  
 SPECIFIC MISSION DURATION THE CALCULATED  
 FLUENCES ARE THE SMALLEST VALUES WHICH WILL  
 NOT BE EXCEEDED BY ACTUALLY ENCOUNTERED  
 INTENSITIES.

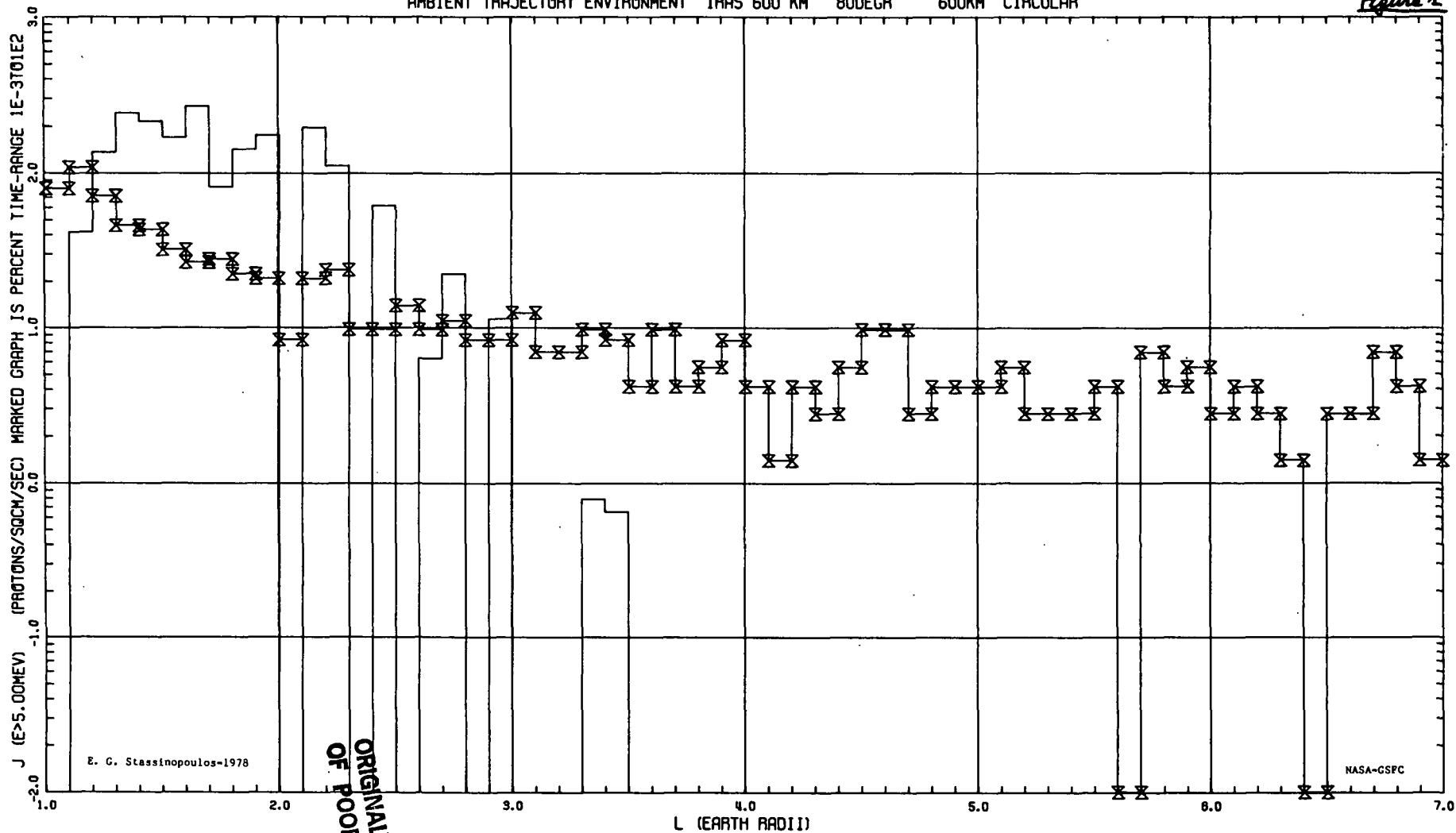
IT IS NOT ADVISABLE TO EXTRAPOLATE THE SOLAR  
 PROTON SPECTRA NEITHER TOWARDS LOWER ENER-  
 TOWARDS HIGHER ENERGIES BECAUSE THE DATA SETS  
 USED IN THE CONSTRUCTION OF THE MODEL (SATEL-  
 LITE MEASUREMENTS MADE DURING THE 20TH SOLAR  
 CYCLE: 1964-1975) DO NOT CONTAIN INFORMATION  
 FOR E<10 AND E>200 MEV.

Table 36



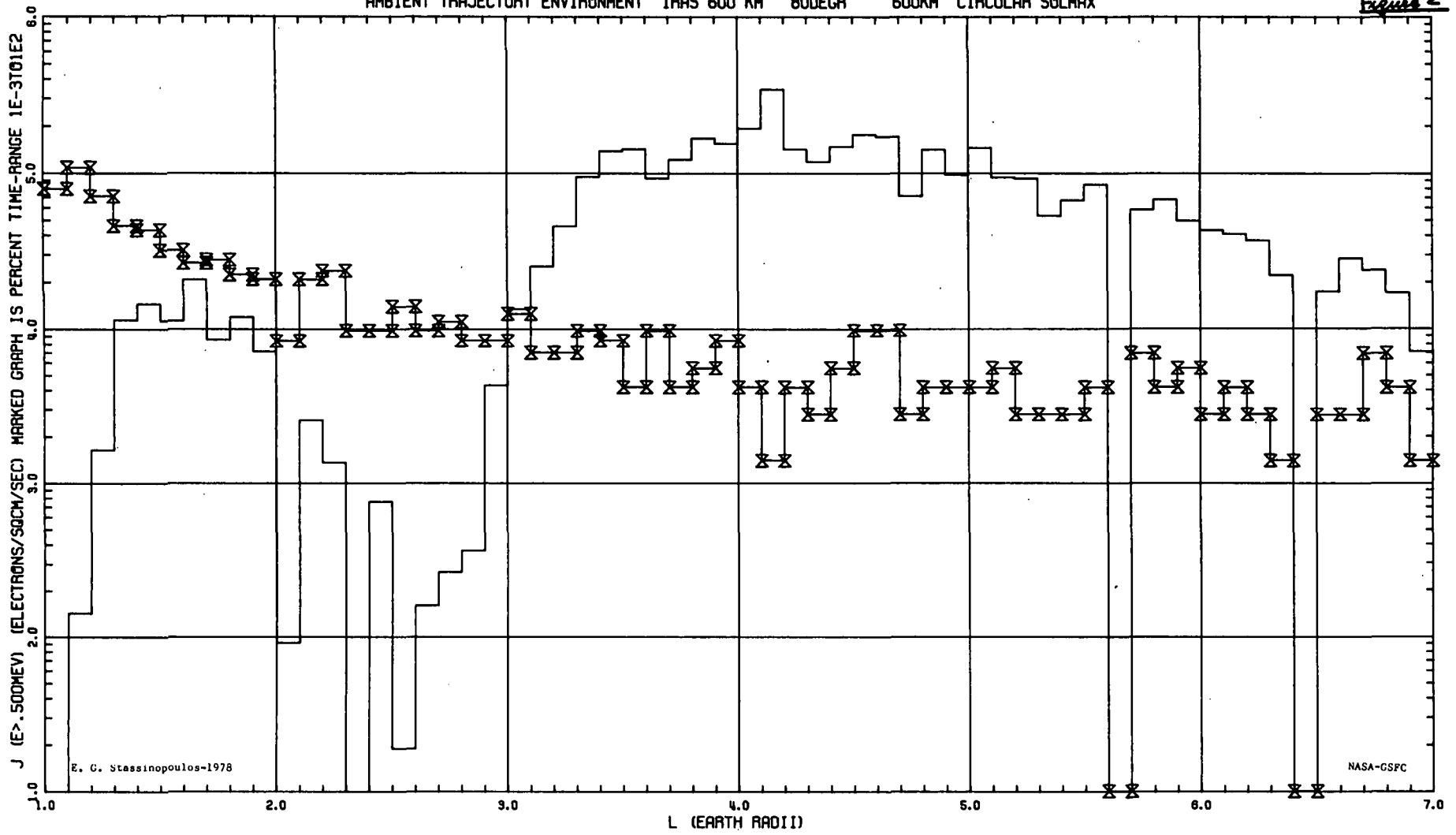
AMBIENT TRAJECTORY ENVIRONMENT IRAS 600 KM 80DEGR 600KM CIRCULAR

Figure 1



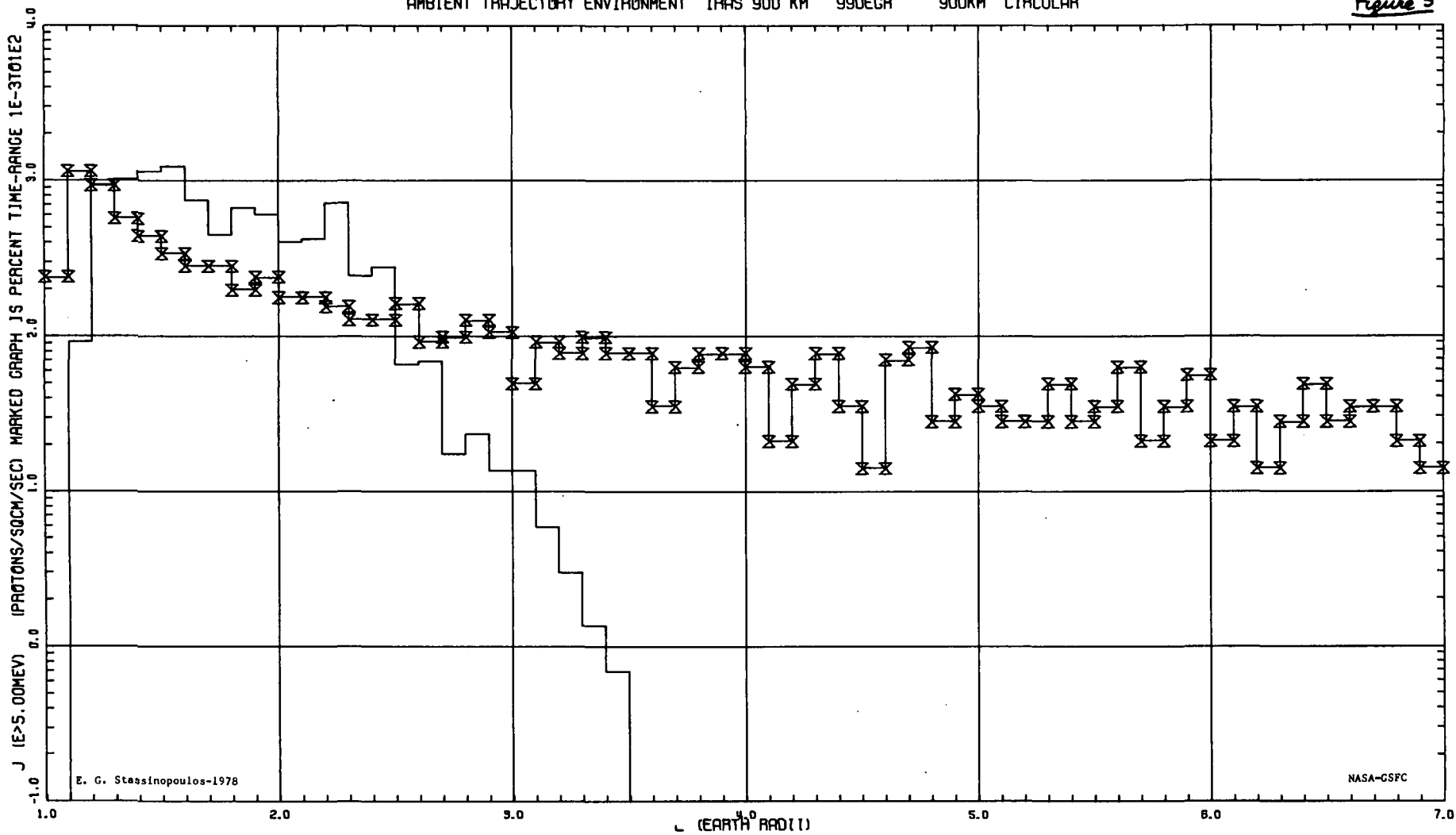
AMBIENT TRAJECTORY ENVIRONMENT IRAS 600 KM 80DEGR 600KM CIRCULAR SOLMAX

Figure 2



AMBIENT TRAJECTORY ENVIRONMENT IRAS 900 KM 99DEGR 900KM CIRCULAR

Figure 3



AMBIENT TRAJECTORY ENVIRONMENT IRAS 900 KM 99DEGR 900KM CIRCULAR SOLMAX

Figure 4

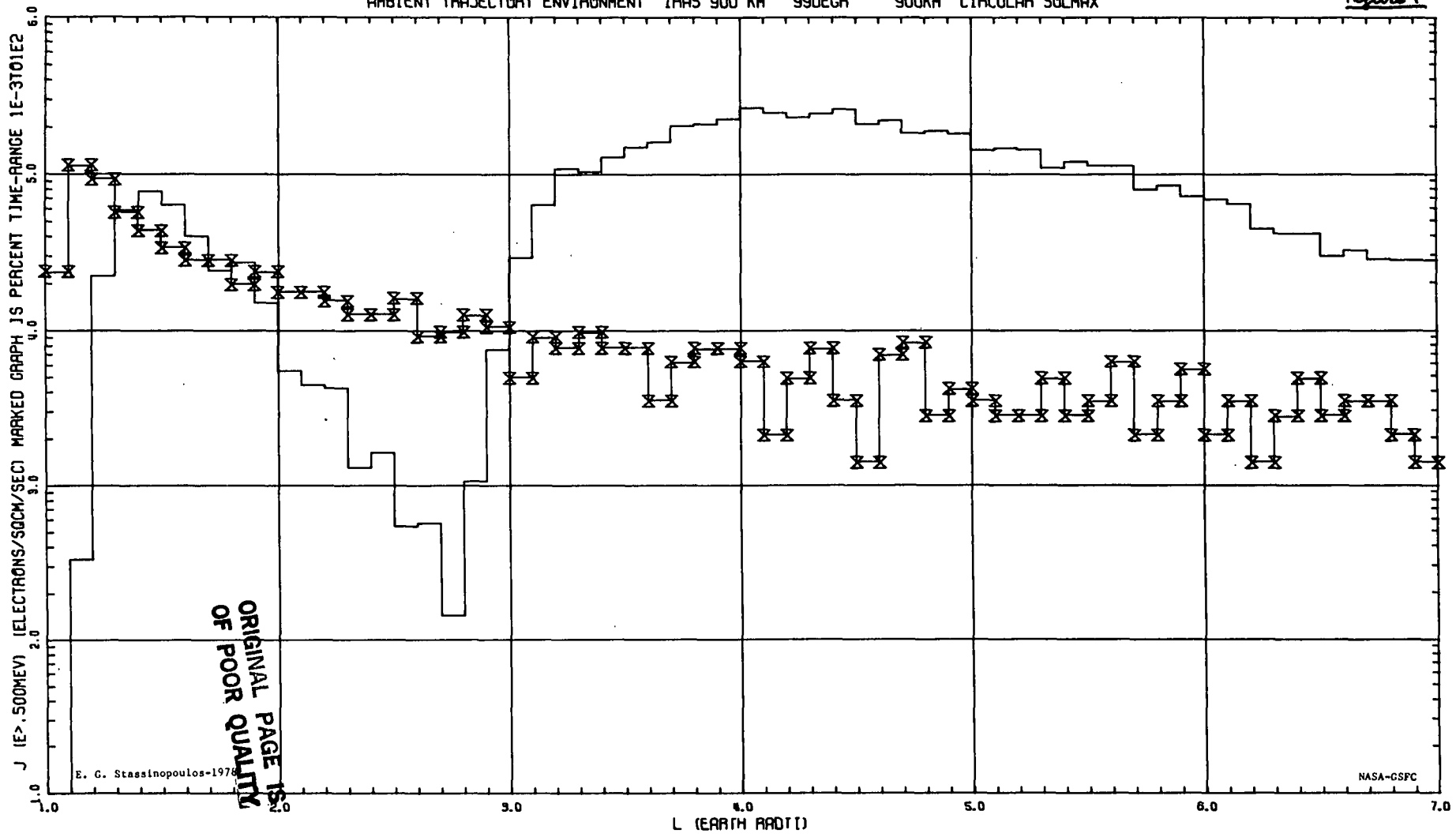


Figure 5

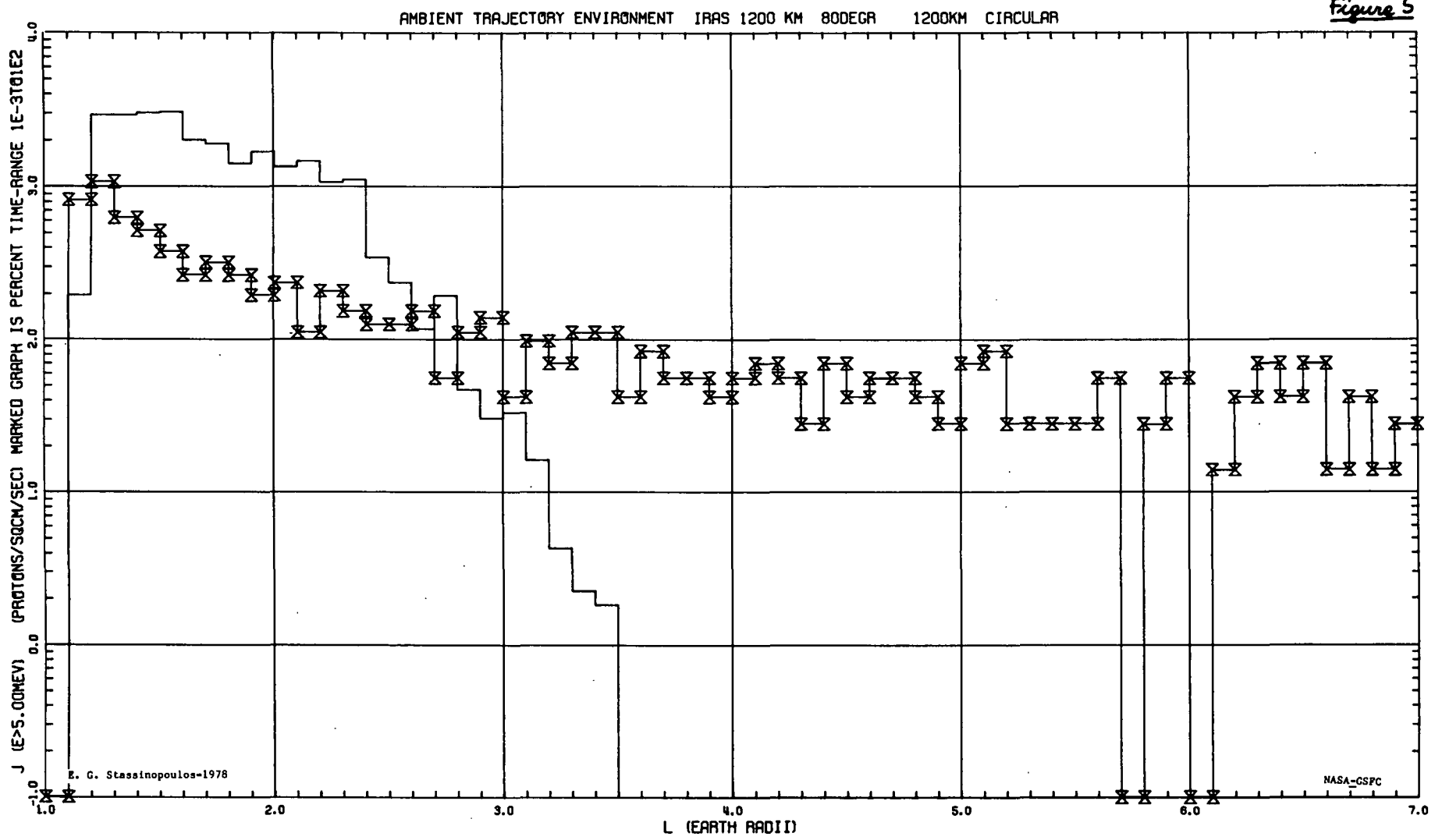
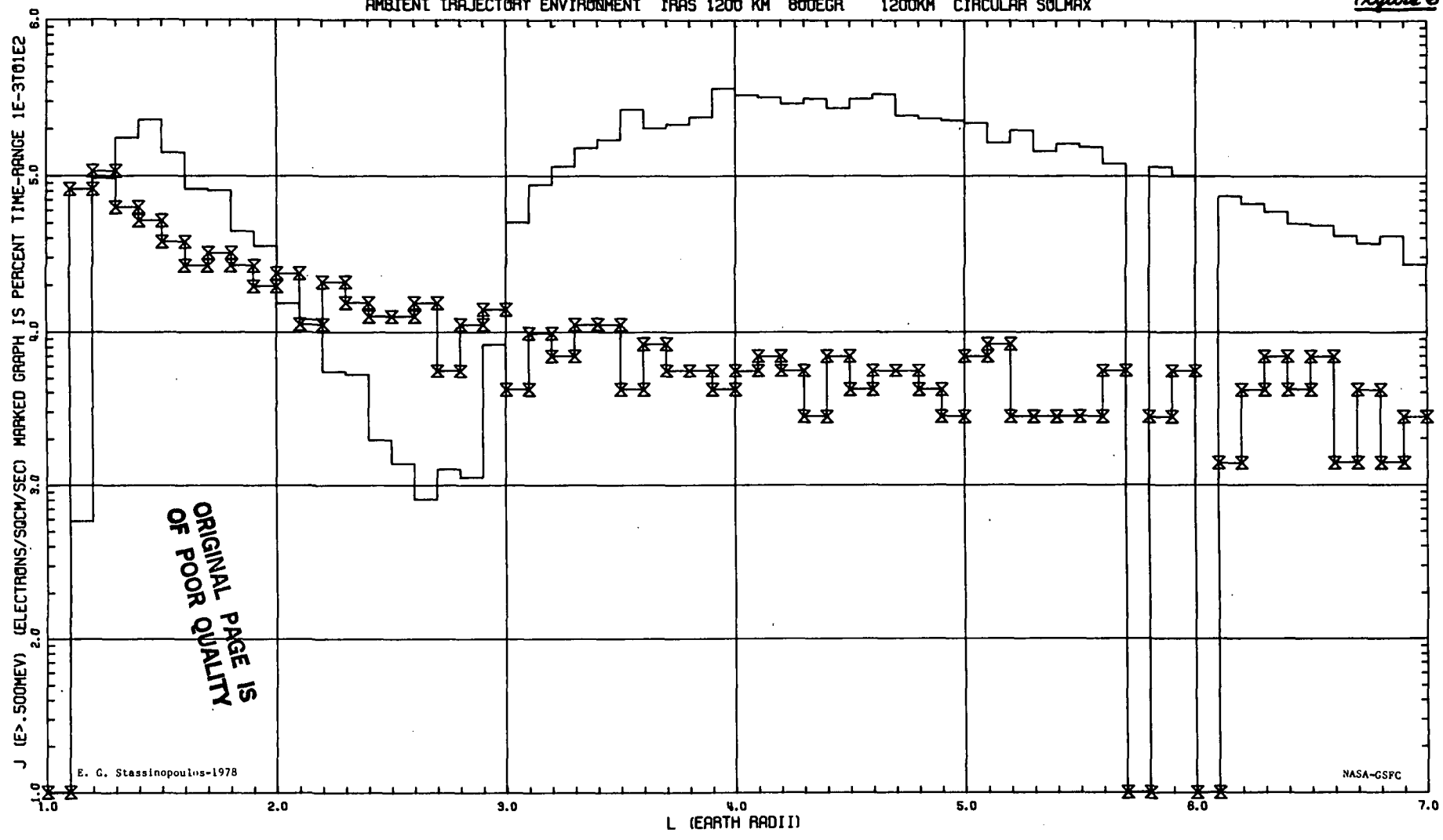
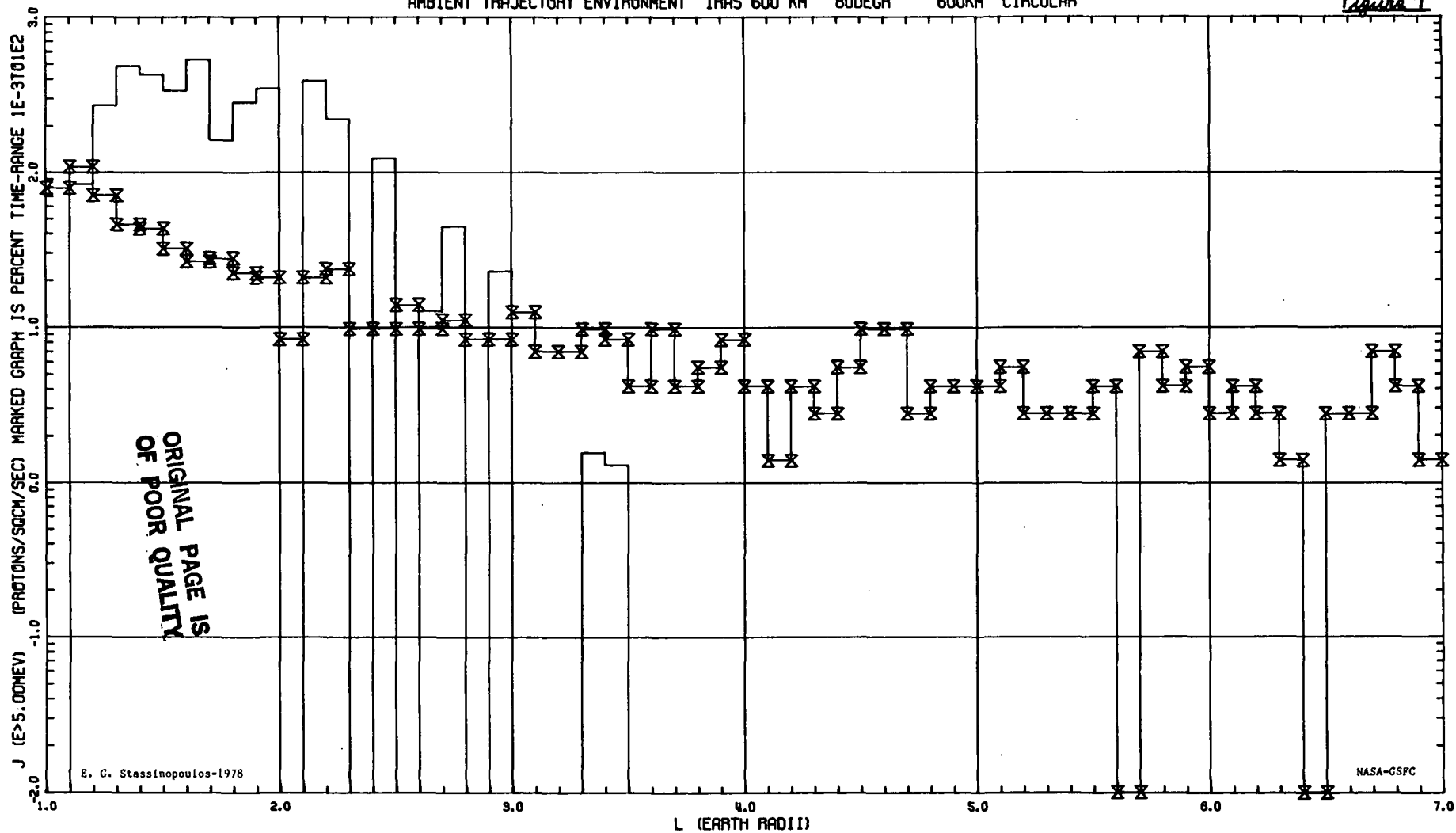


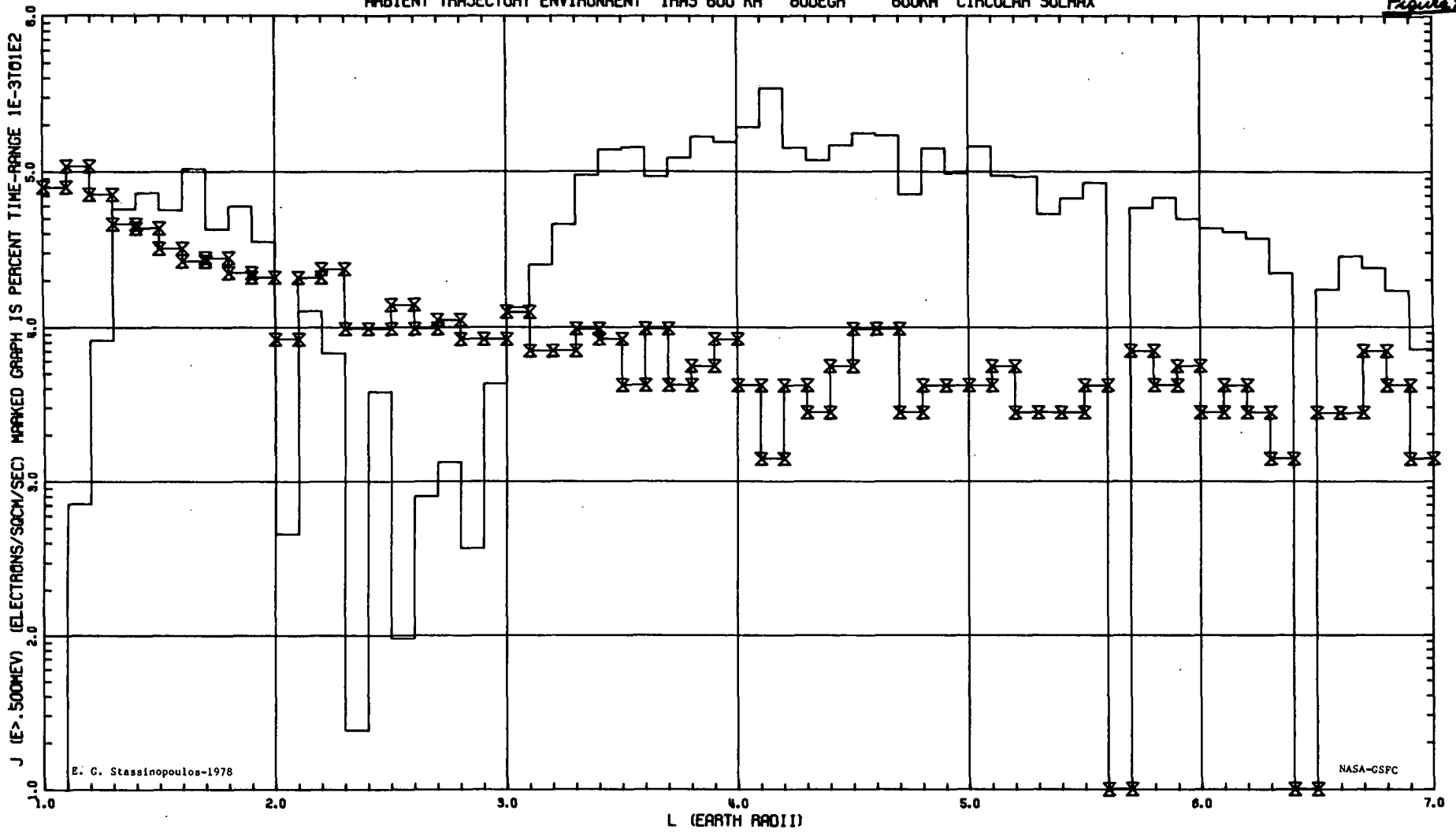
Figure 6





AMBIENT TRAJECTORY ENVIRONMENT IRAS 600 KM 80DEGA 600KM CIRCULAR SOLMAX

Figure 2





AMBIENT TRAJECTORY ENVIRONMENT IARS 900 KM 99DEGR 900KM CIRCULAR

Figure 9

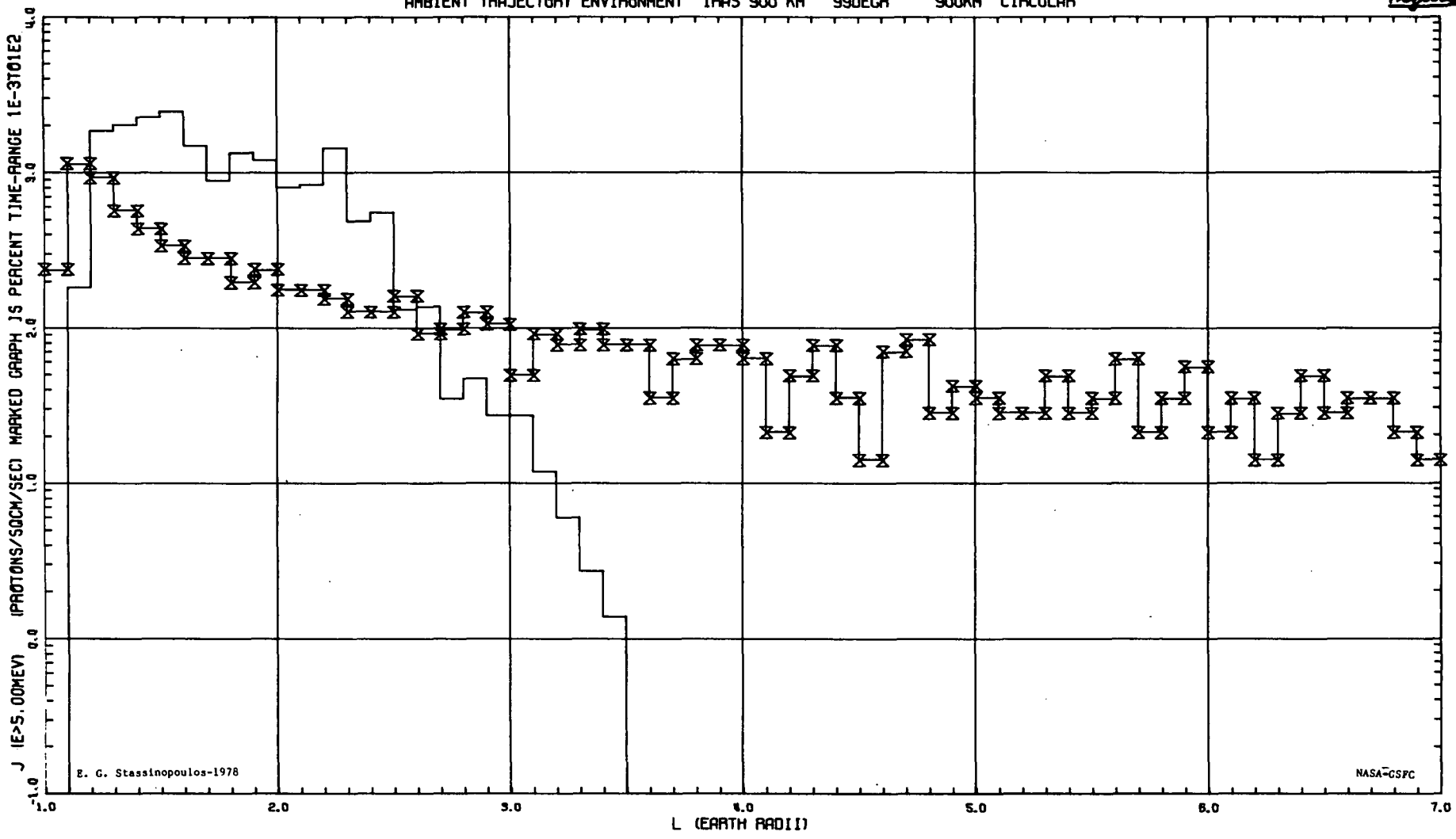
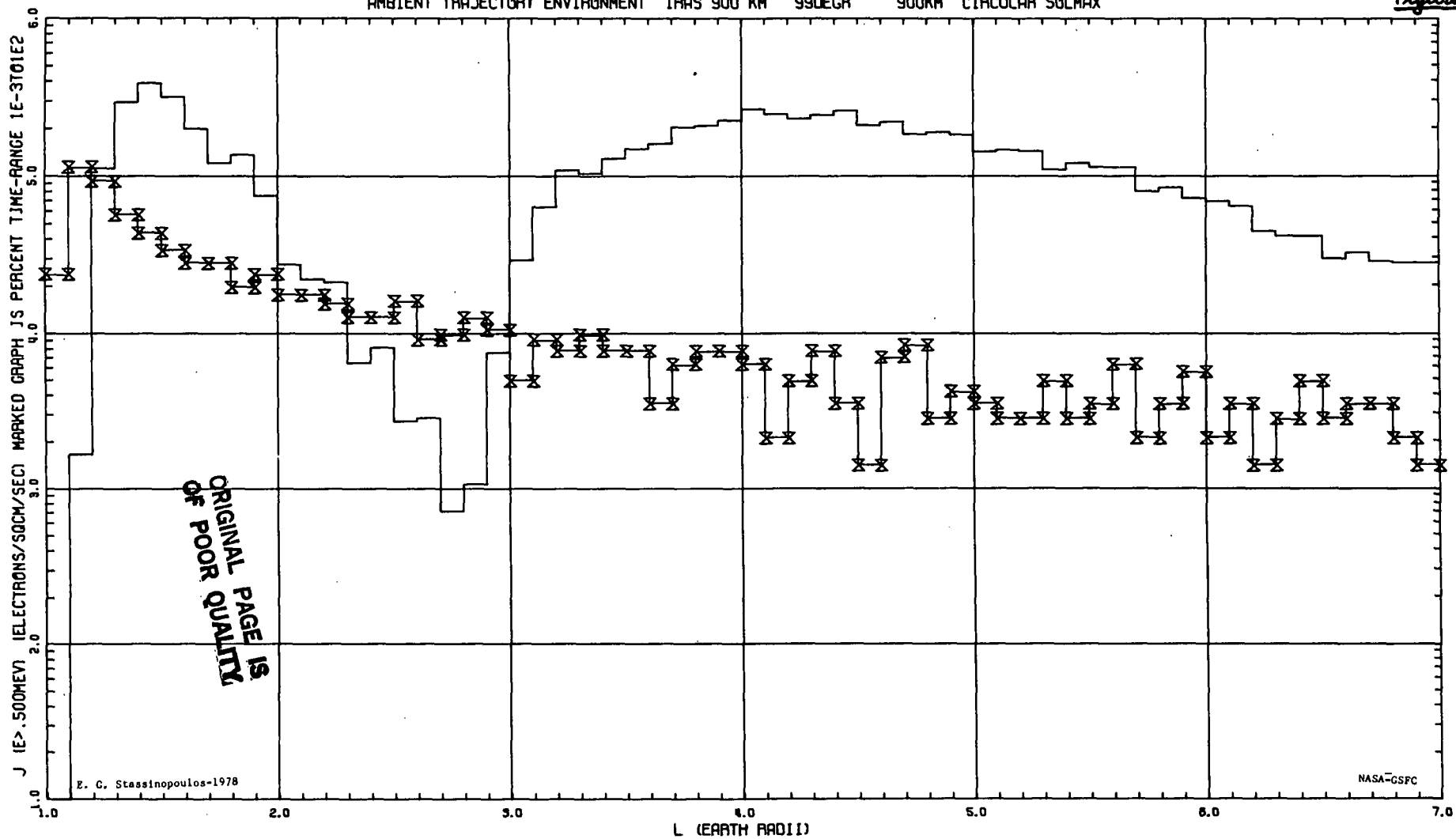
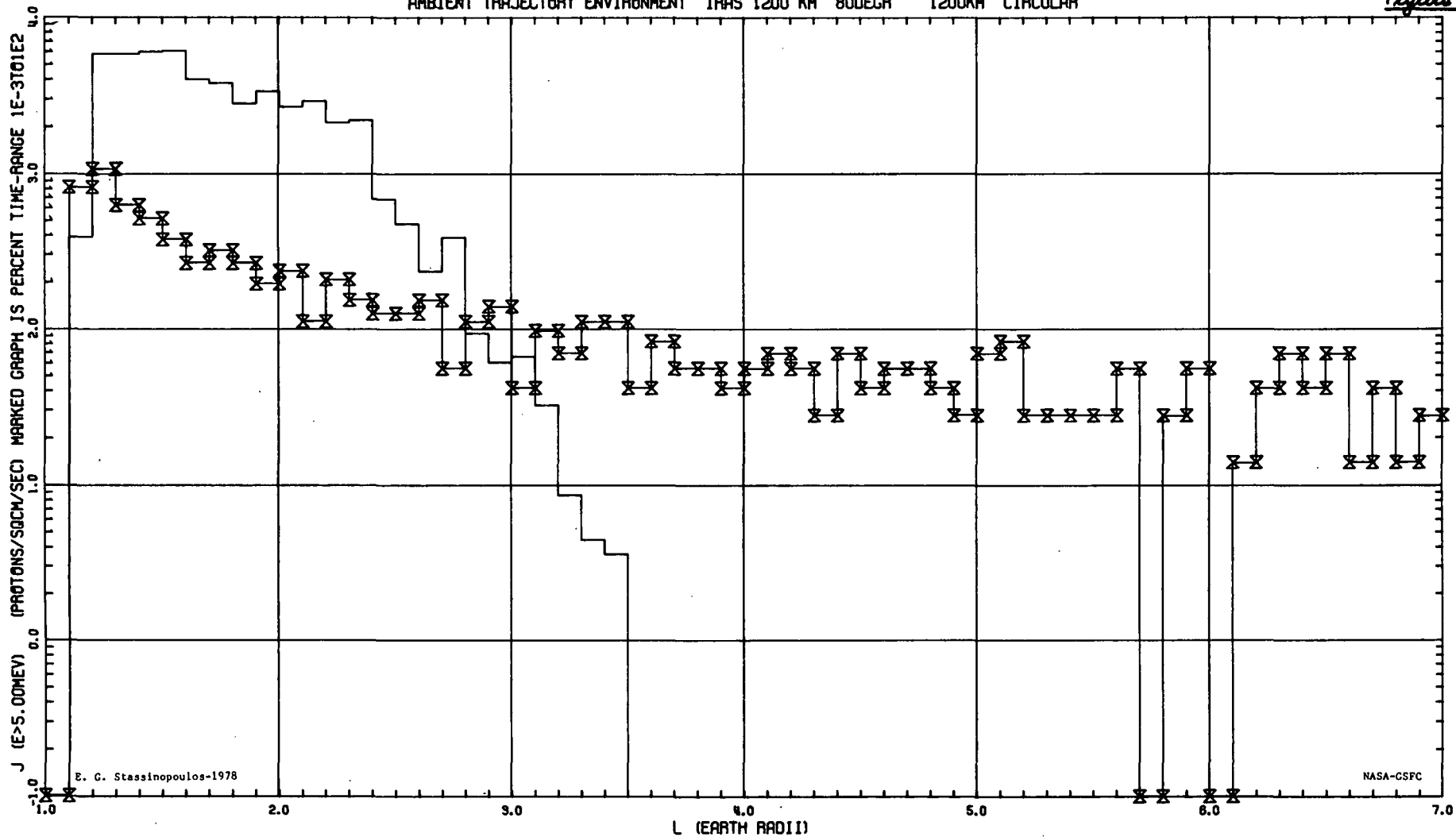


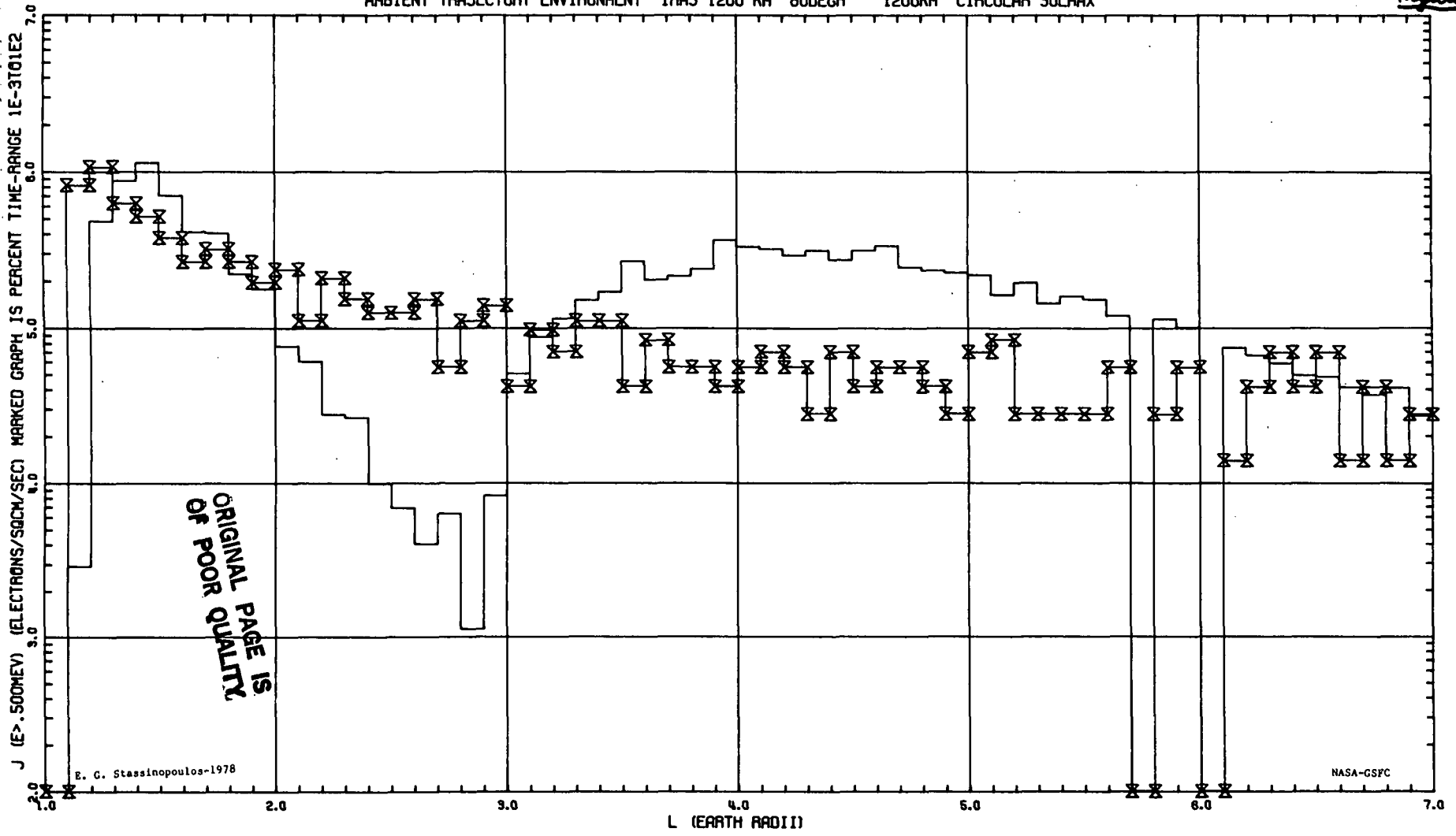
Figure 10



AMBIENT TRAJECTORY ENVIRONMENT IRAS 1200 KM 80DEGR 1200KM CIRCULAR

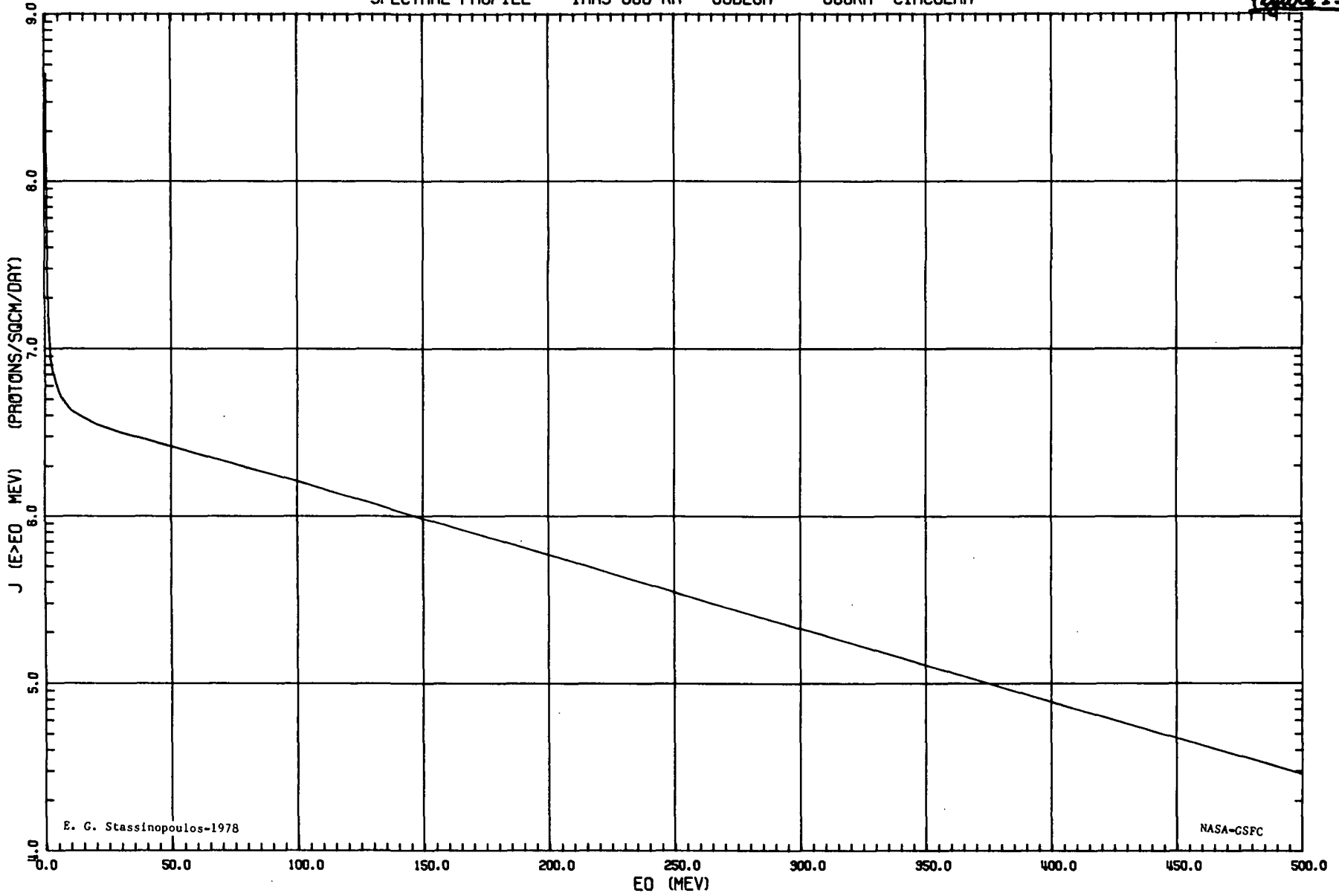
Figure 11





SPECTRAL PROFILE IRAS 600 KM 80DEGR 600KM CIRCULAR

Figure 13

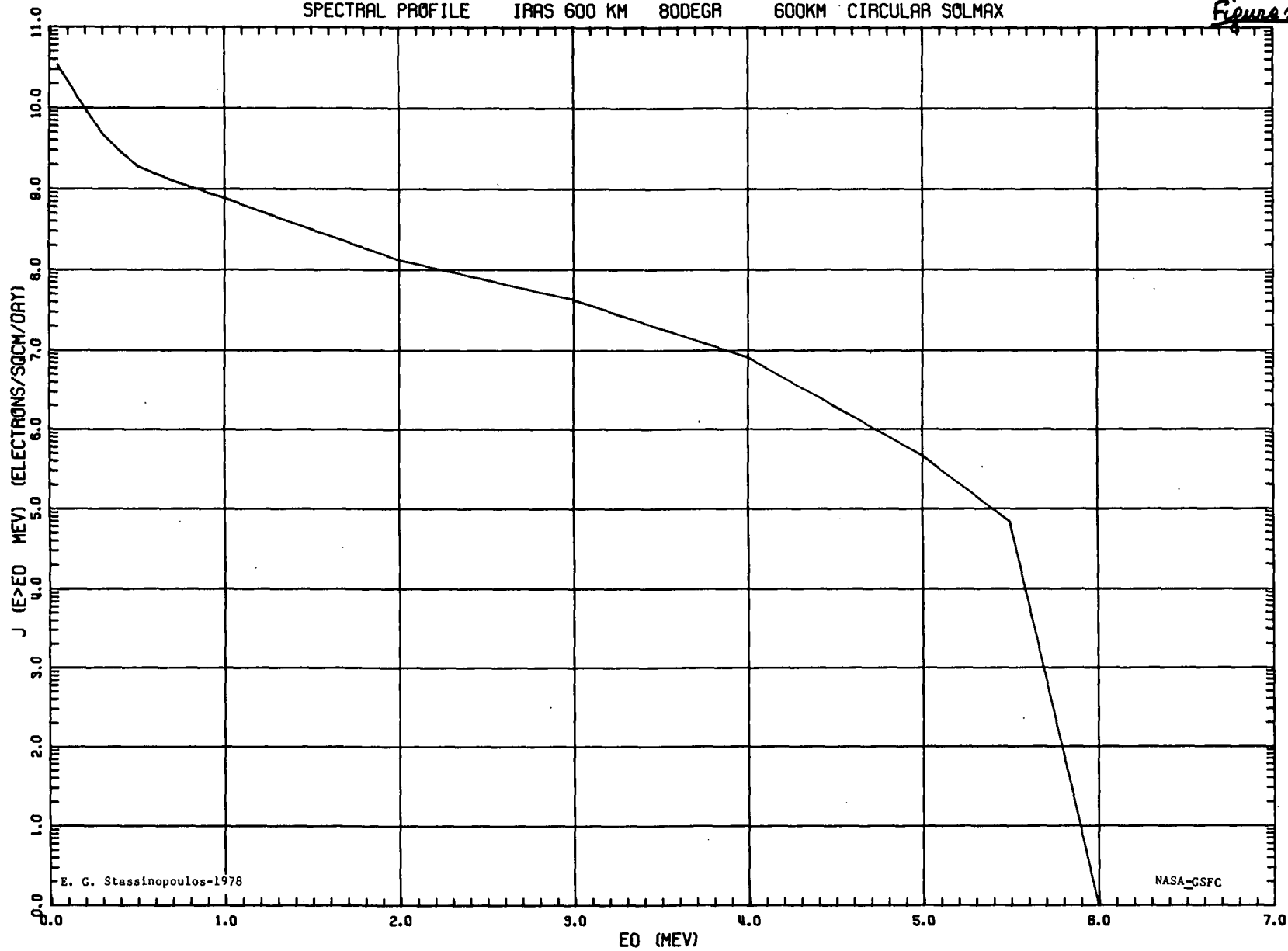


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SPECTRAL PROFILE IRAS 600 KM 80DEGR 600KM CIRCULAR SOLMAX

Figure 14

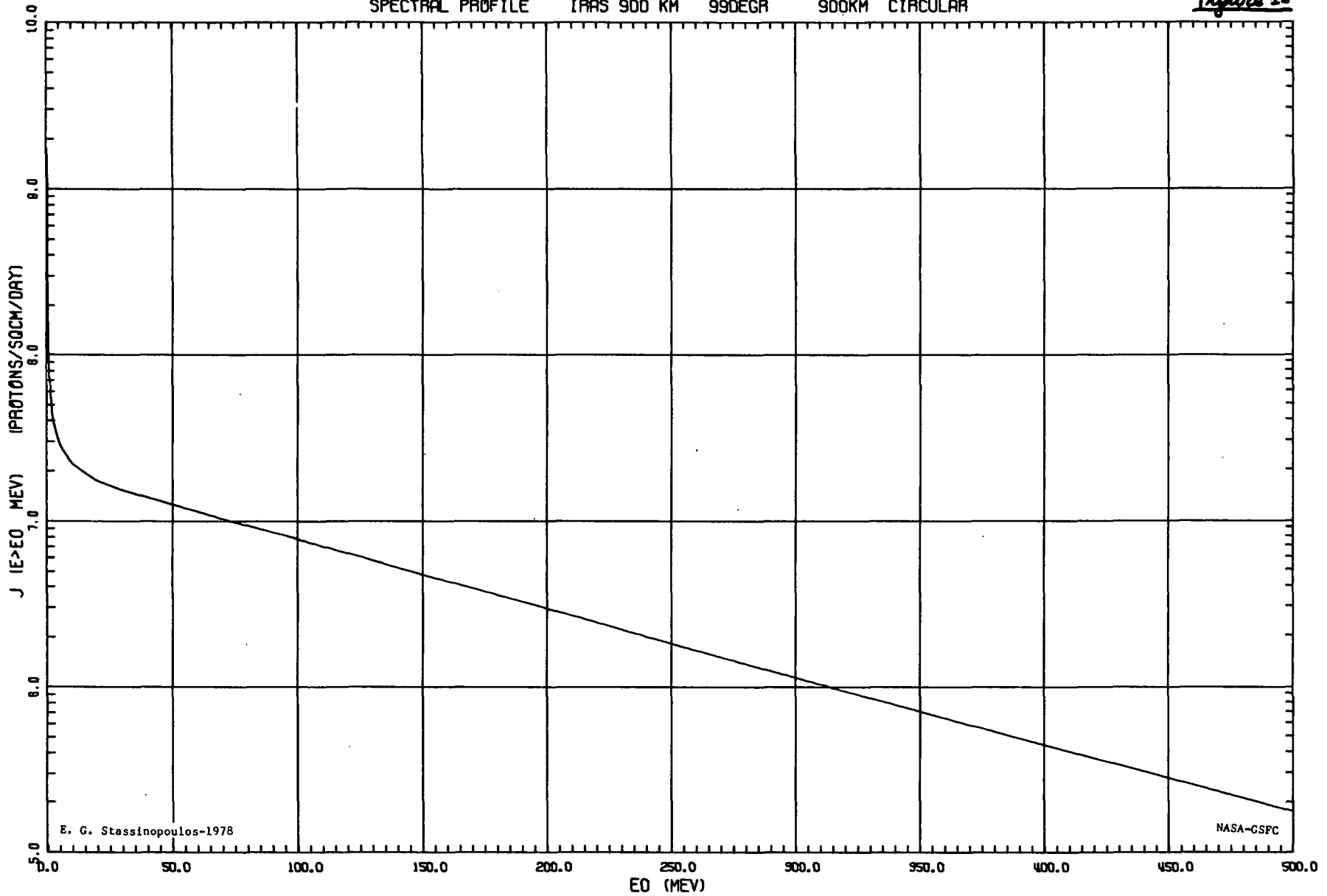


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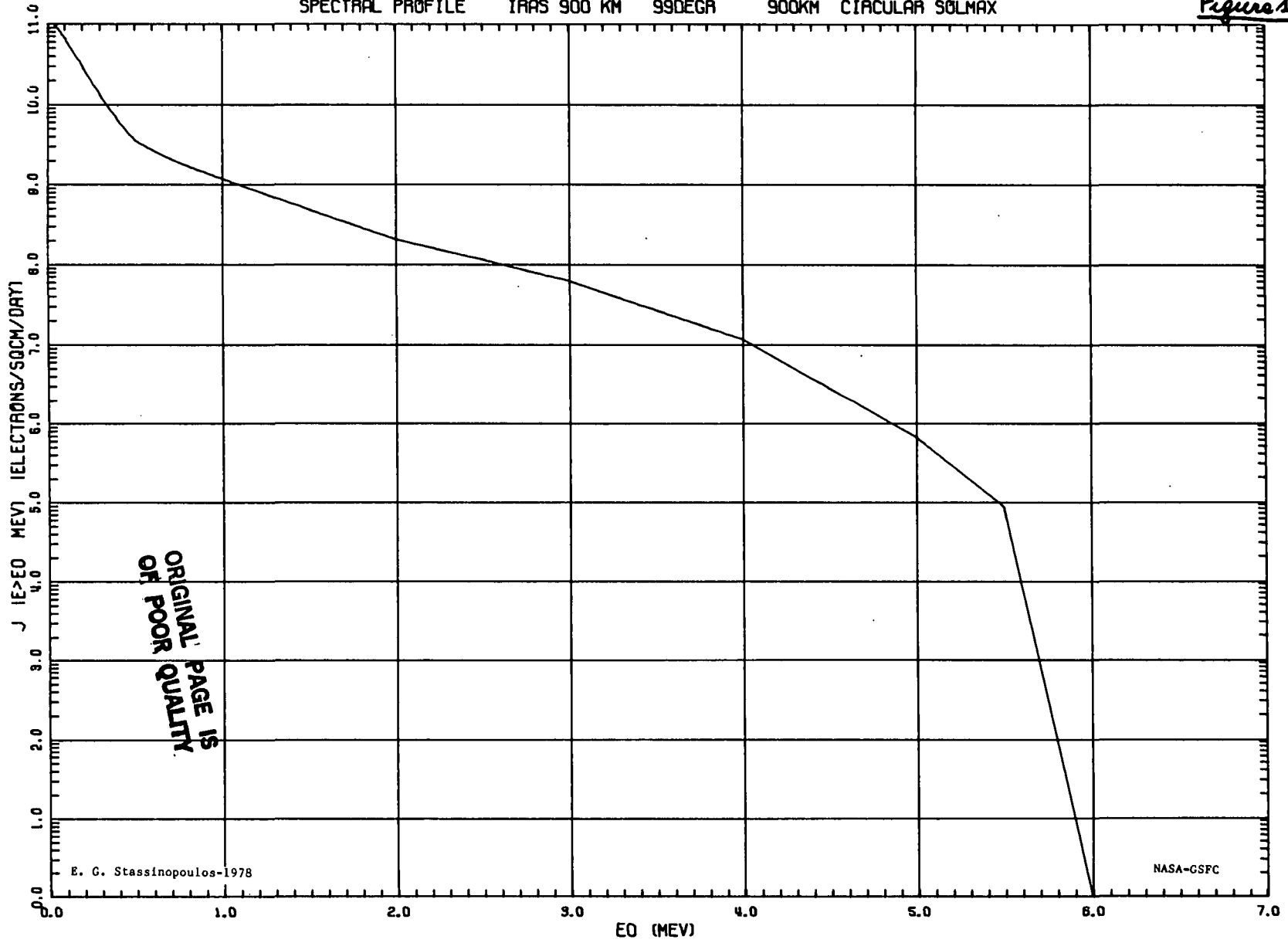
SPECTRAL PROFILE IRAS 900 KM 99DEGR 900KM CIRCULAR

*Figure 15*



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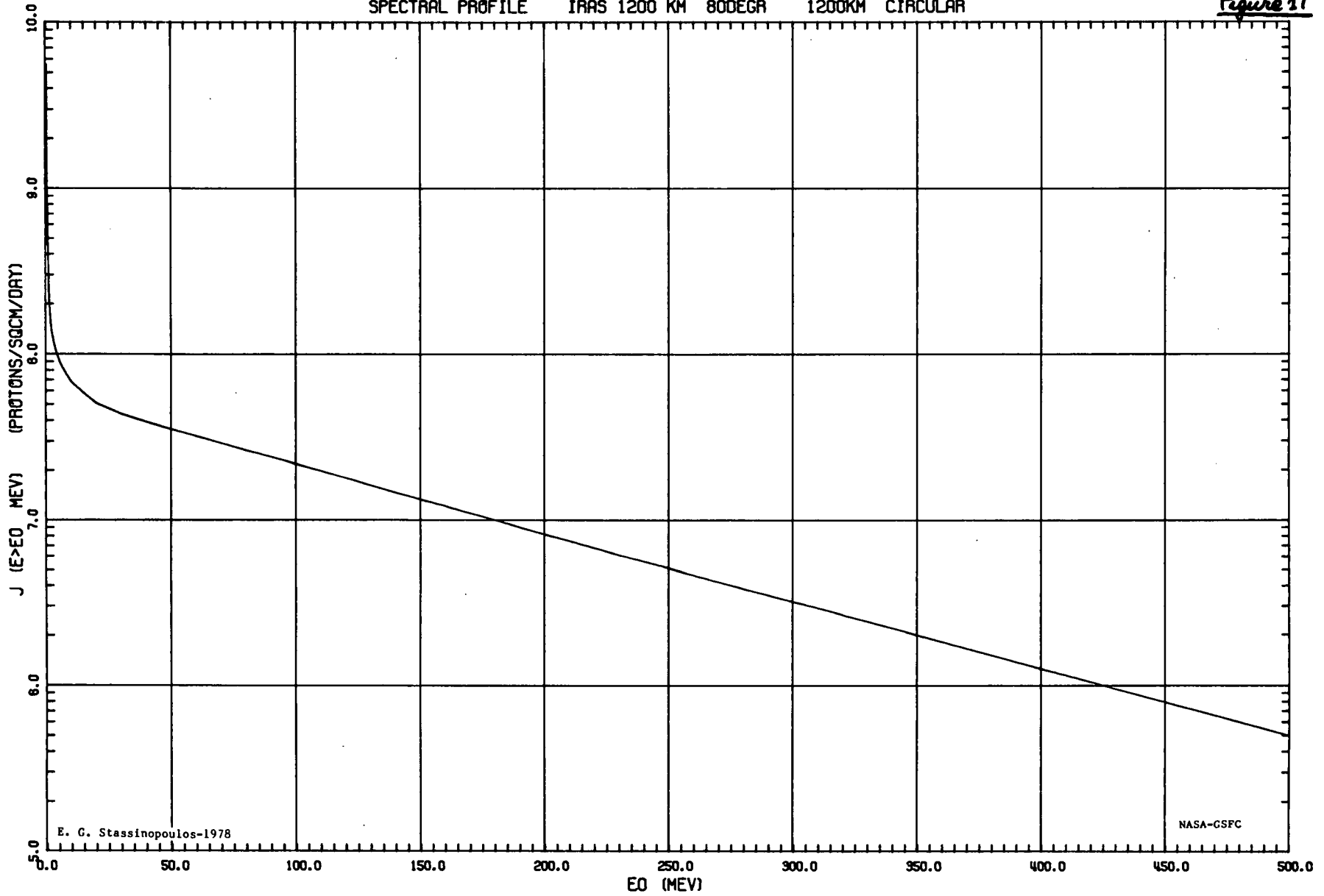
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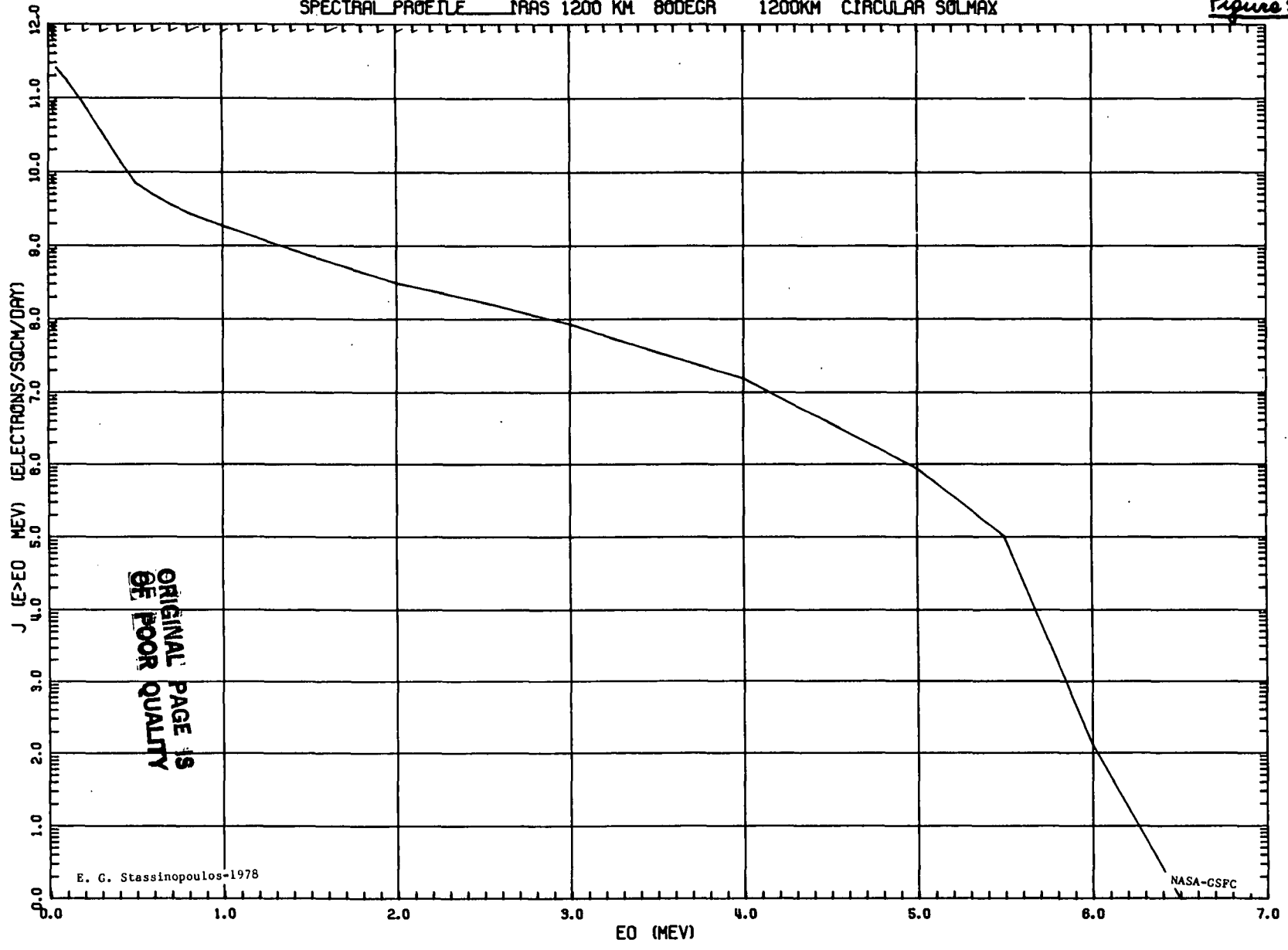
SPECTRAL PROFILE IRAS 1200 KM 80DEGR 1200KM CIRCULAR

Figure 17



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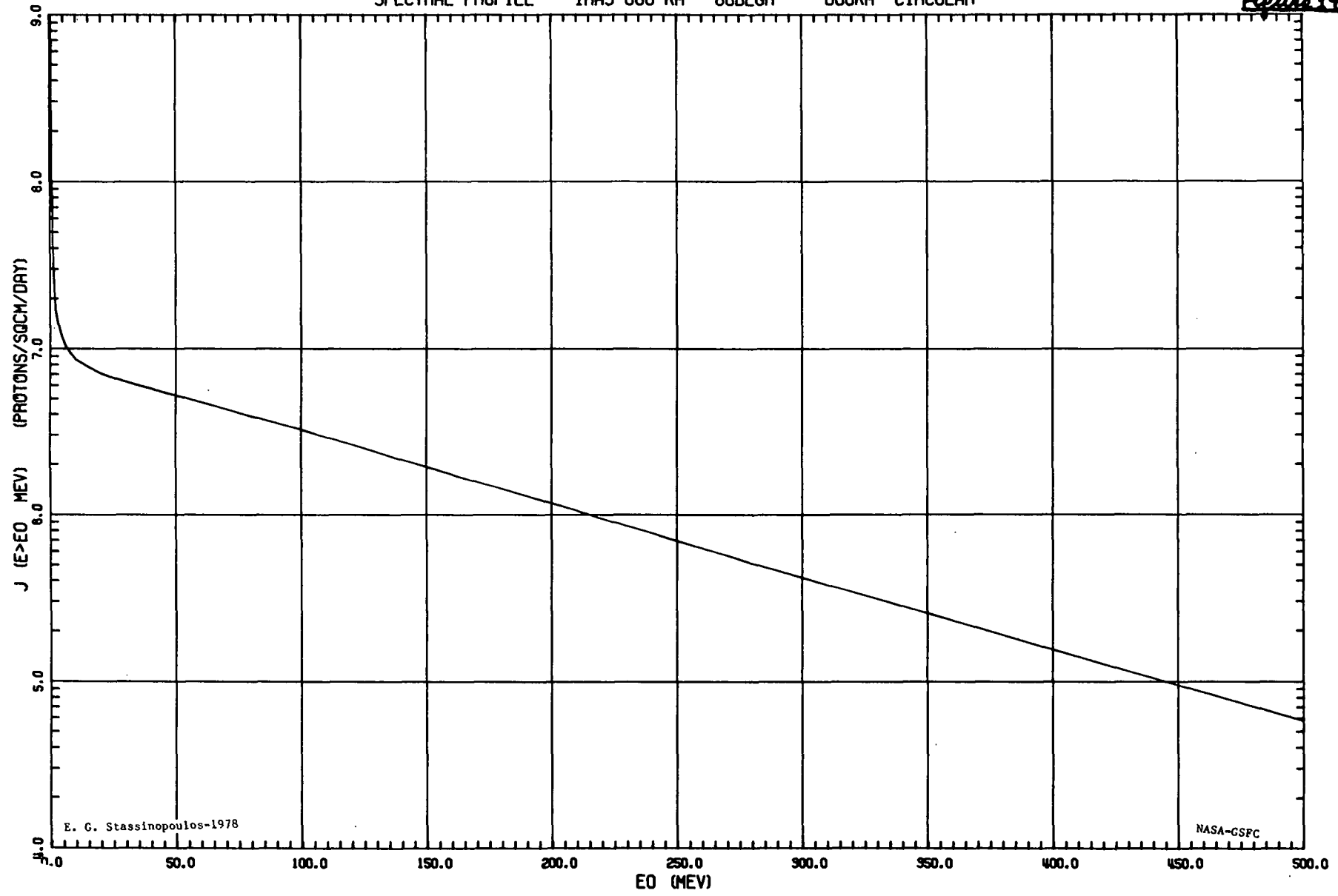
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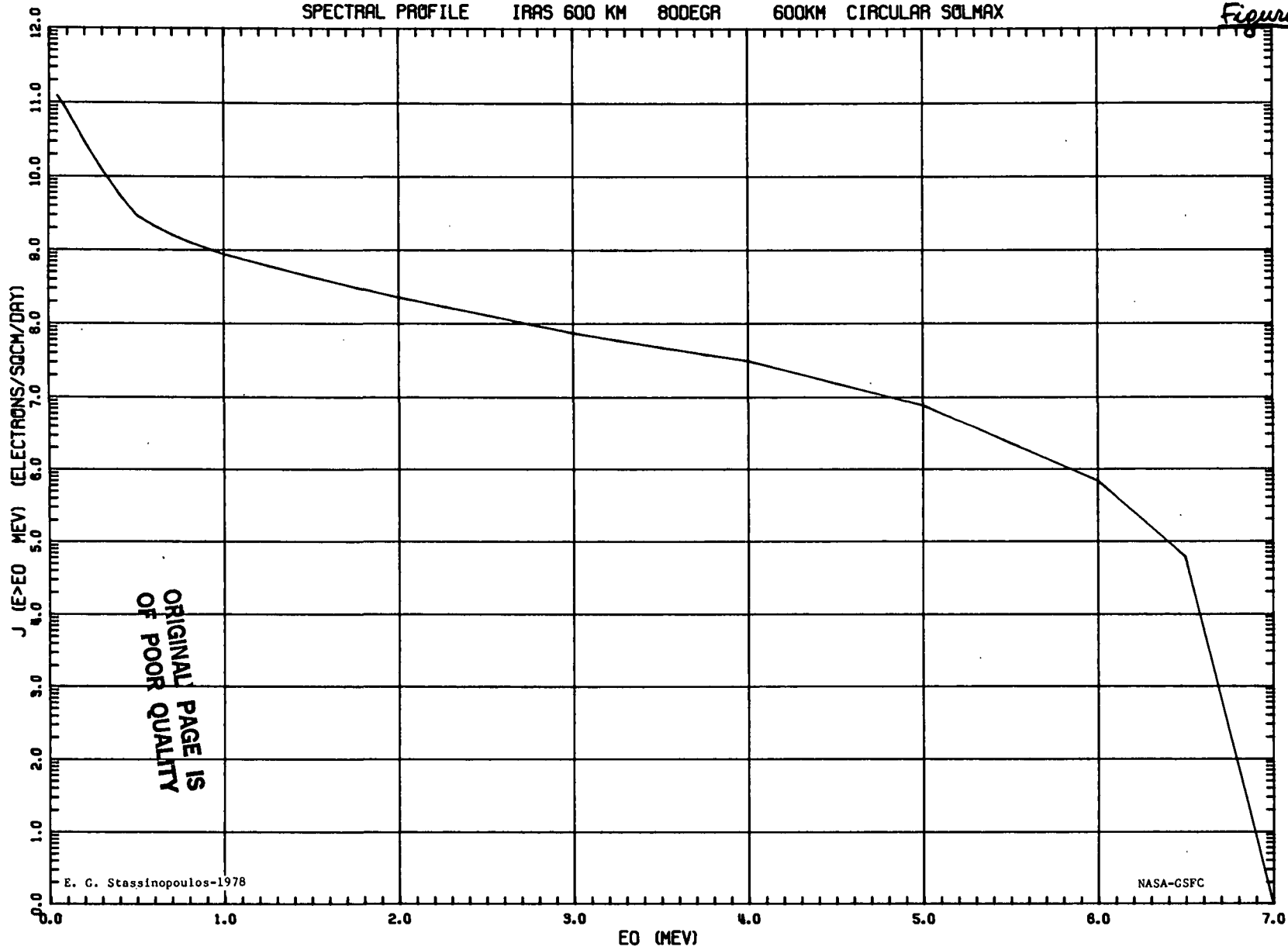
SPECTRAL PROFILE IRAS 600 KM 80DEGA 600KM CIRCULAR

Figure 19



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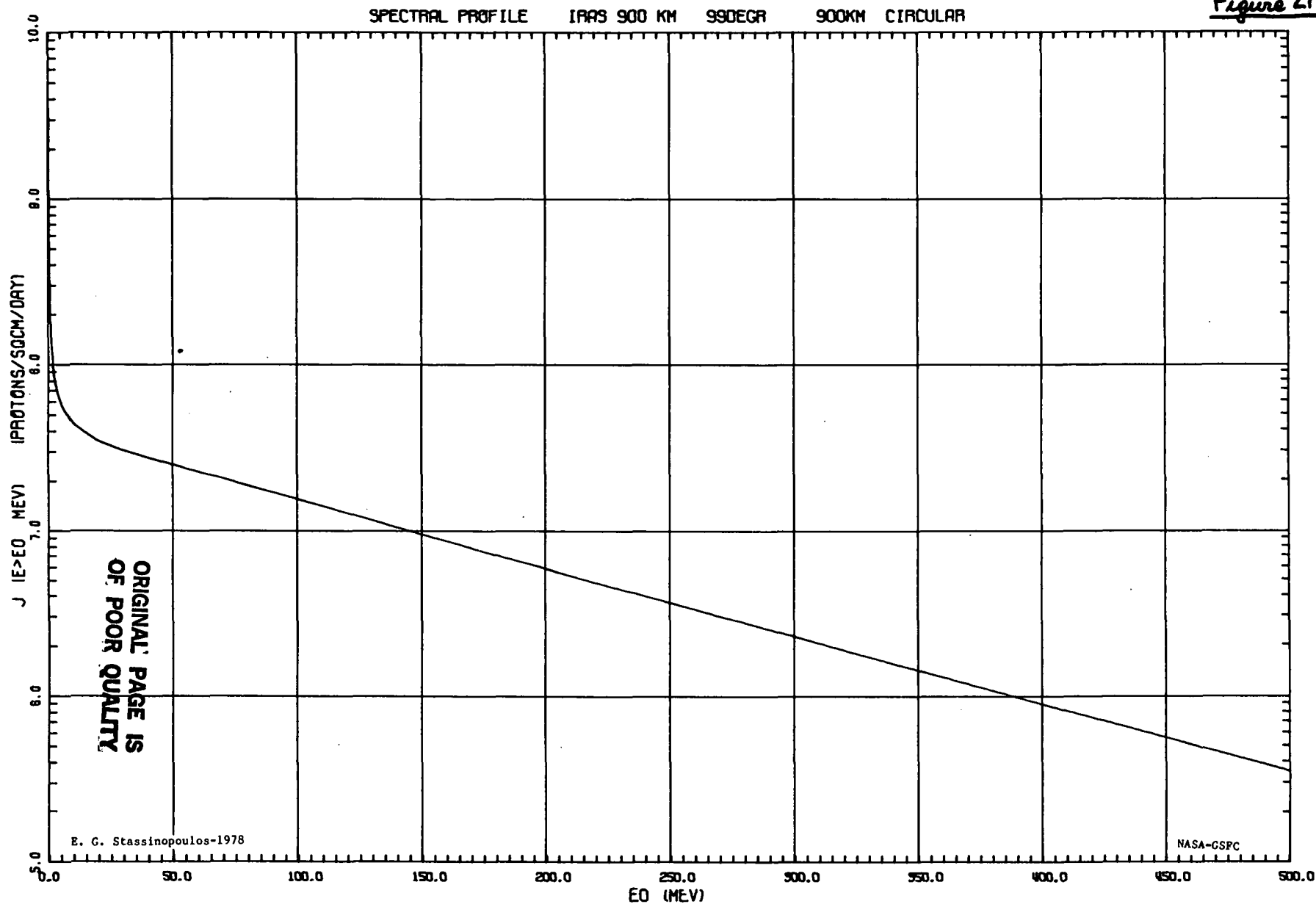


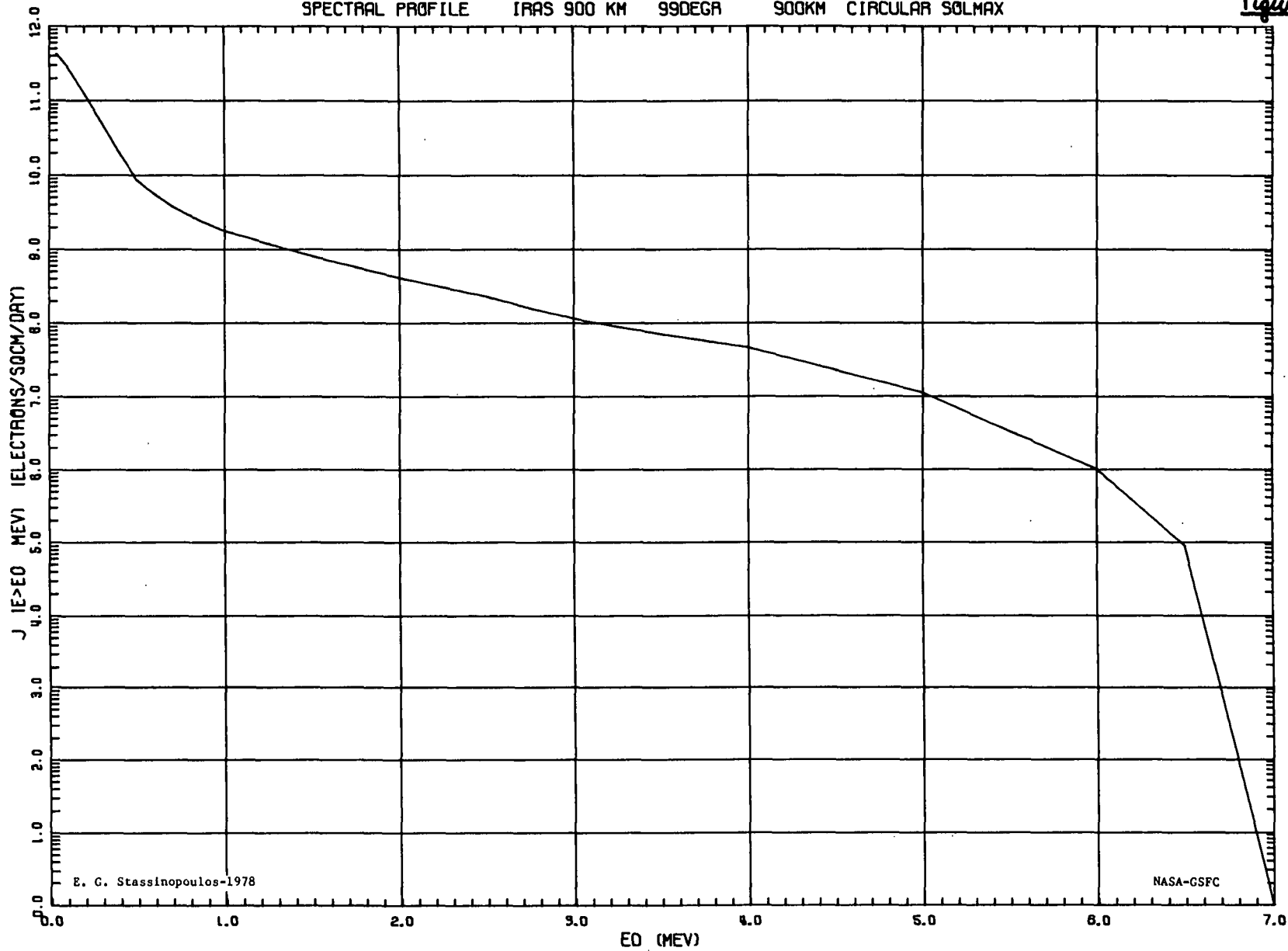
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OF POOR  
QUALITY

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Figure 21



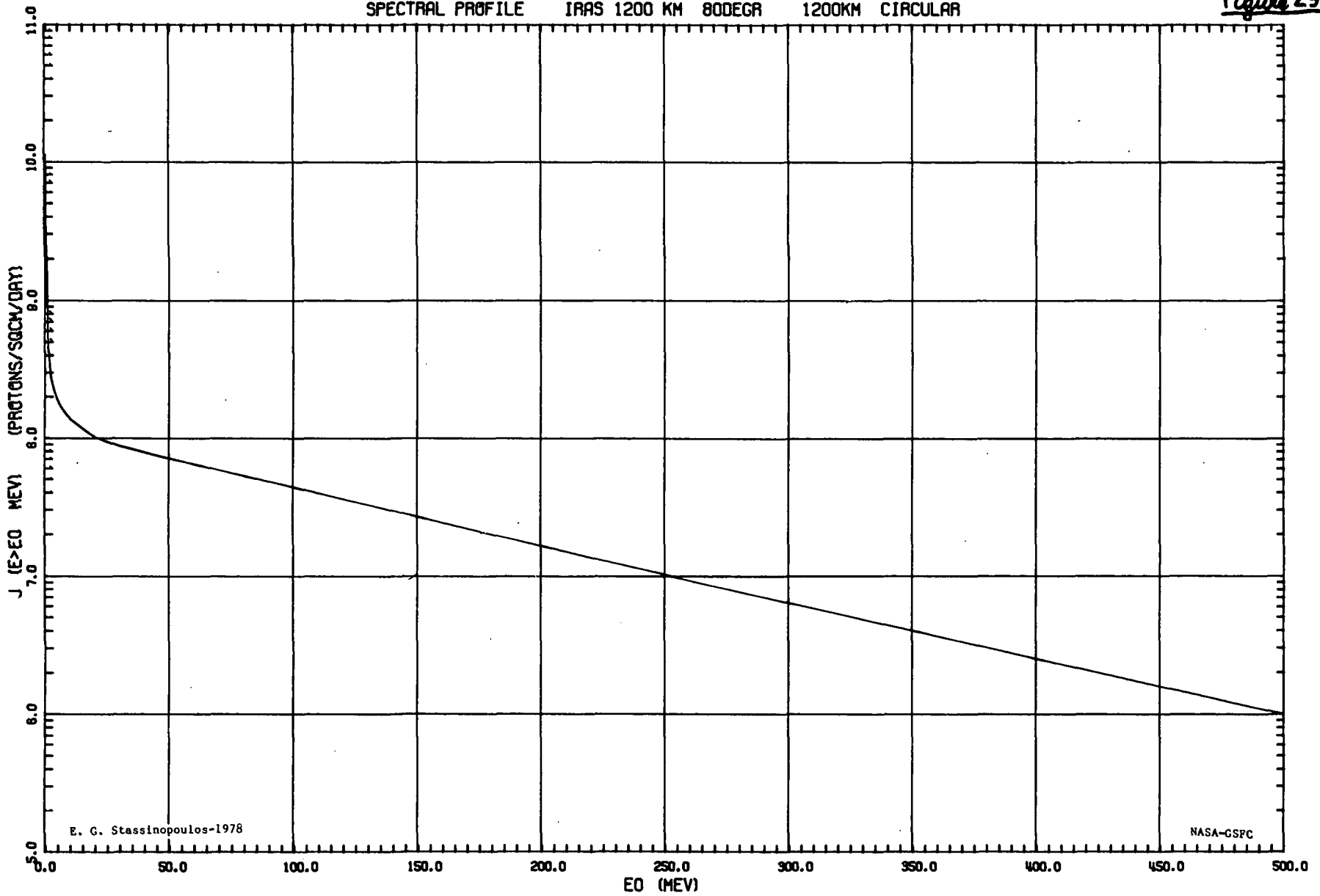


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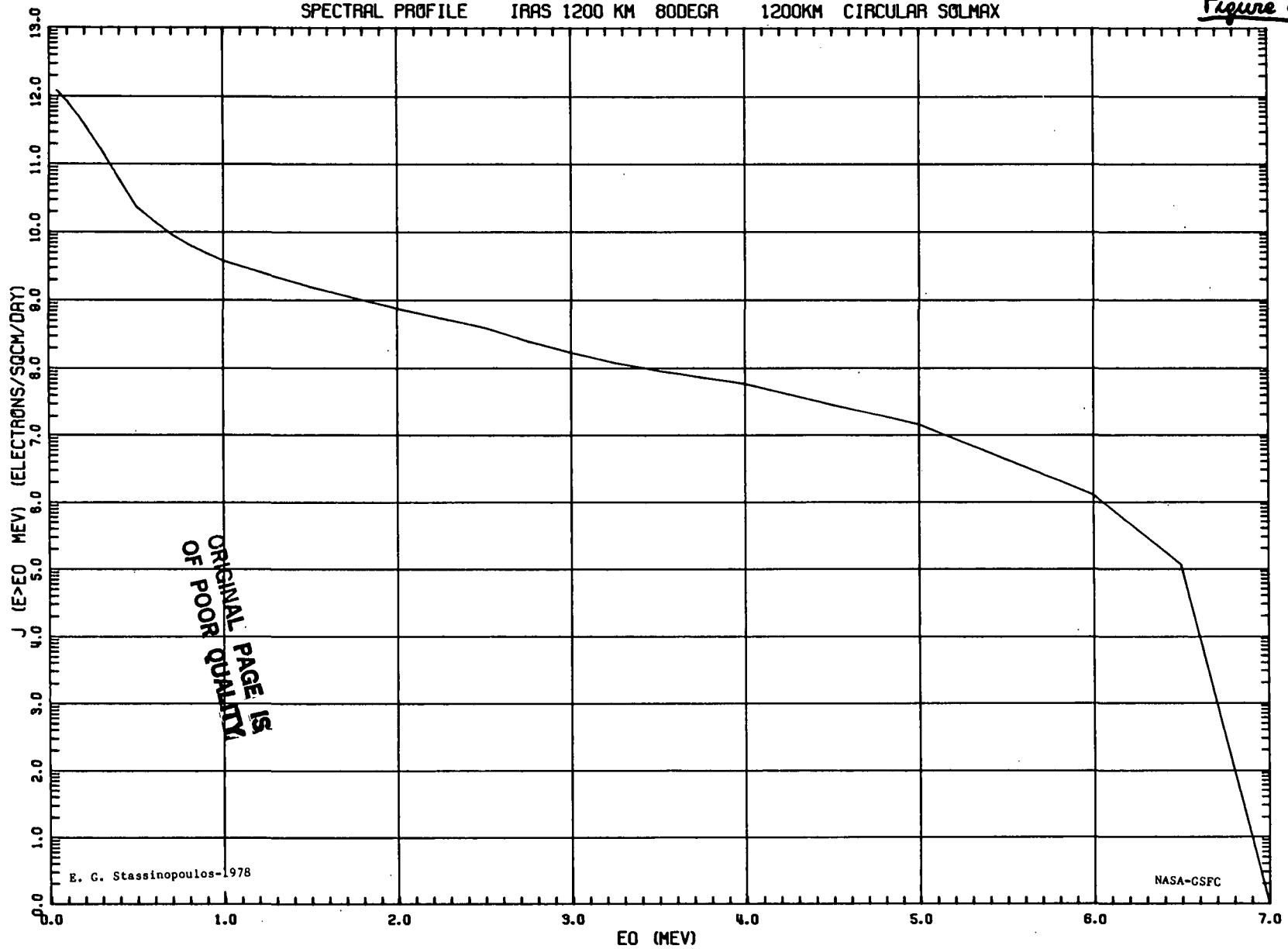
SPECTRAL PROFILE IRAS 1200 KM 80DEGR 1200KM CIRCULAR

Figure 23



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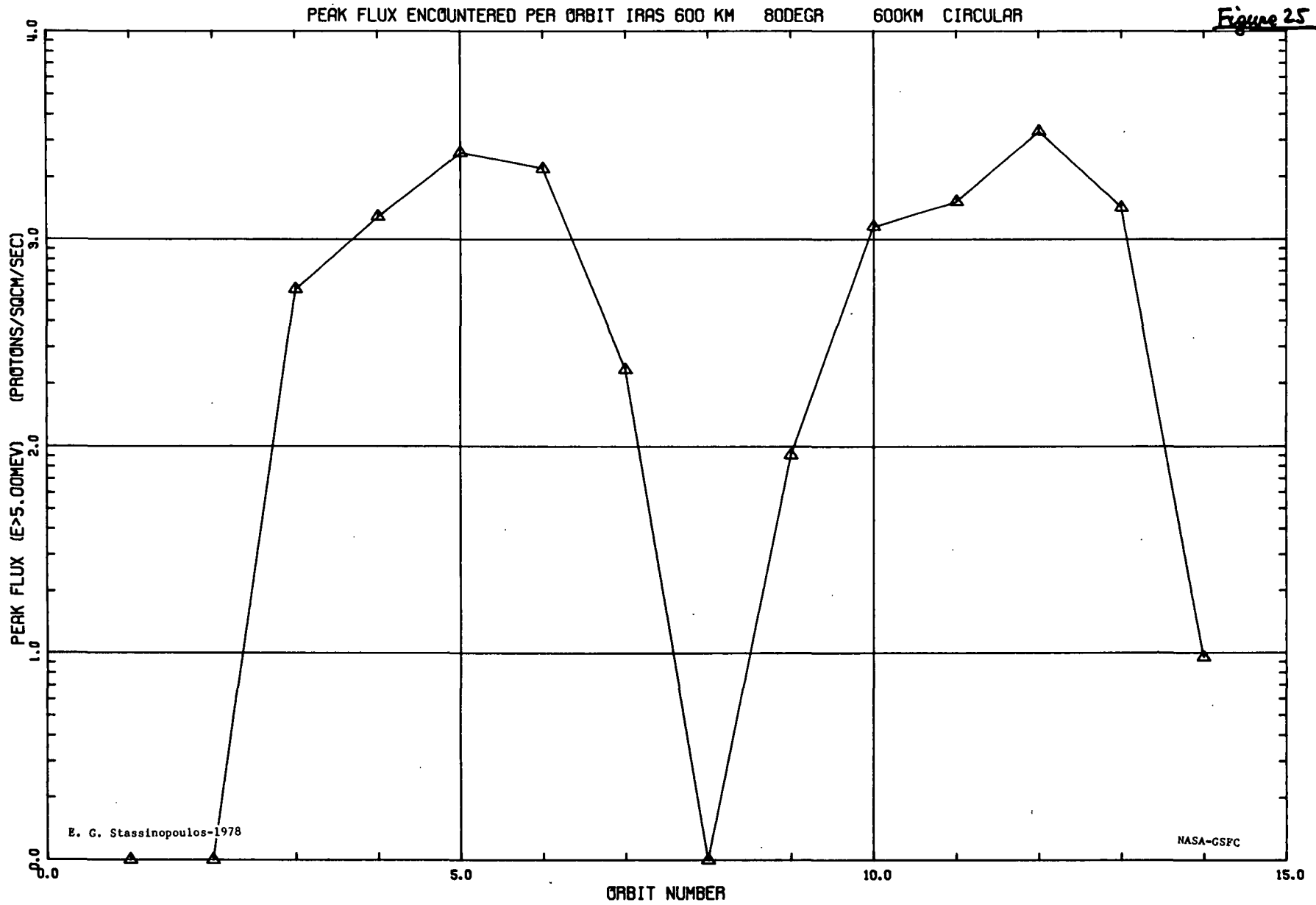


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PEAK FLUX ENCOUNTERED PER ORBIT IARS 600 KM 80DEGR 600KM CIRCULAR SOLMAX

Figure 26

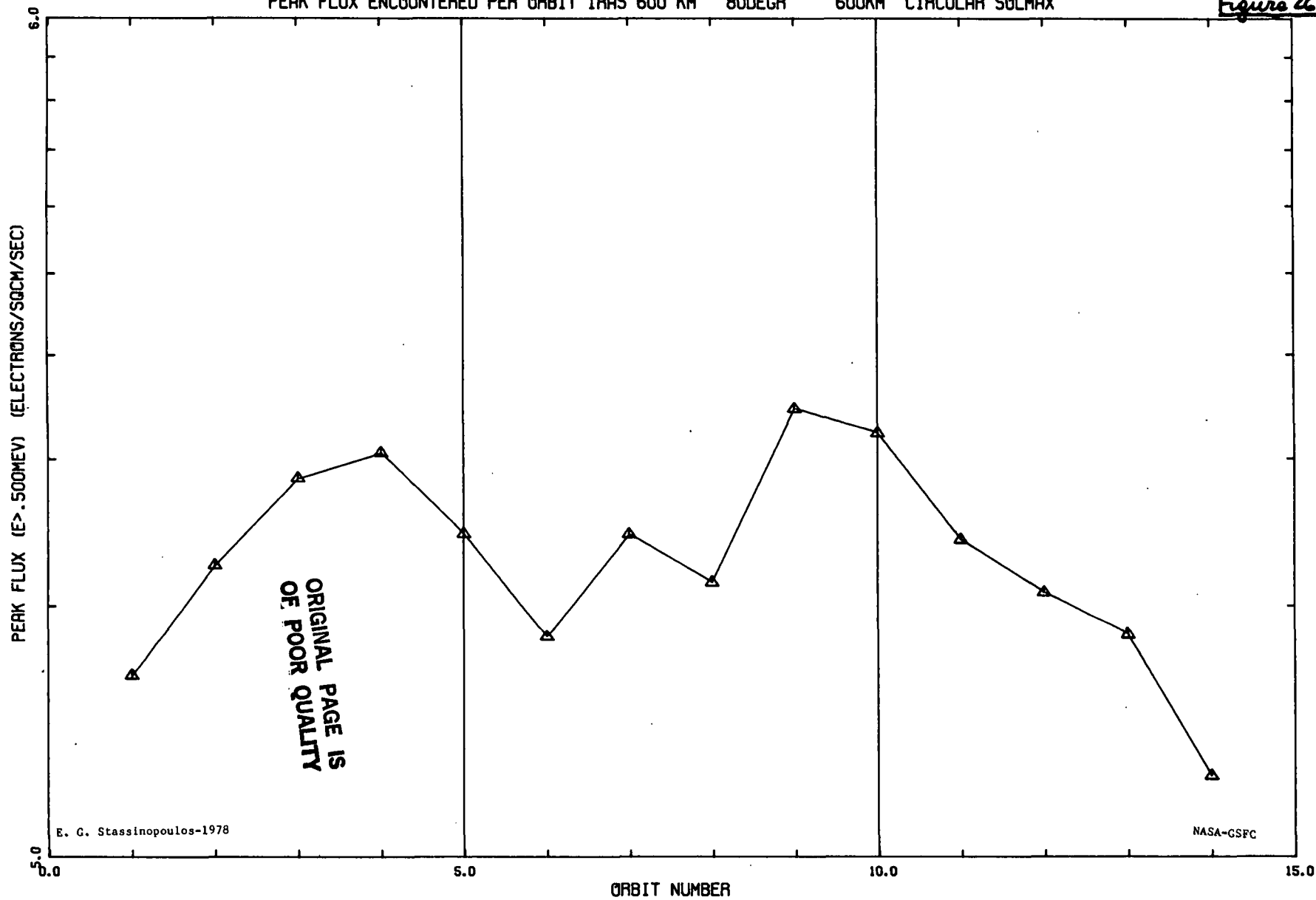
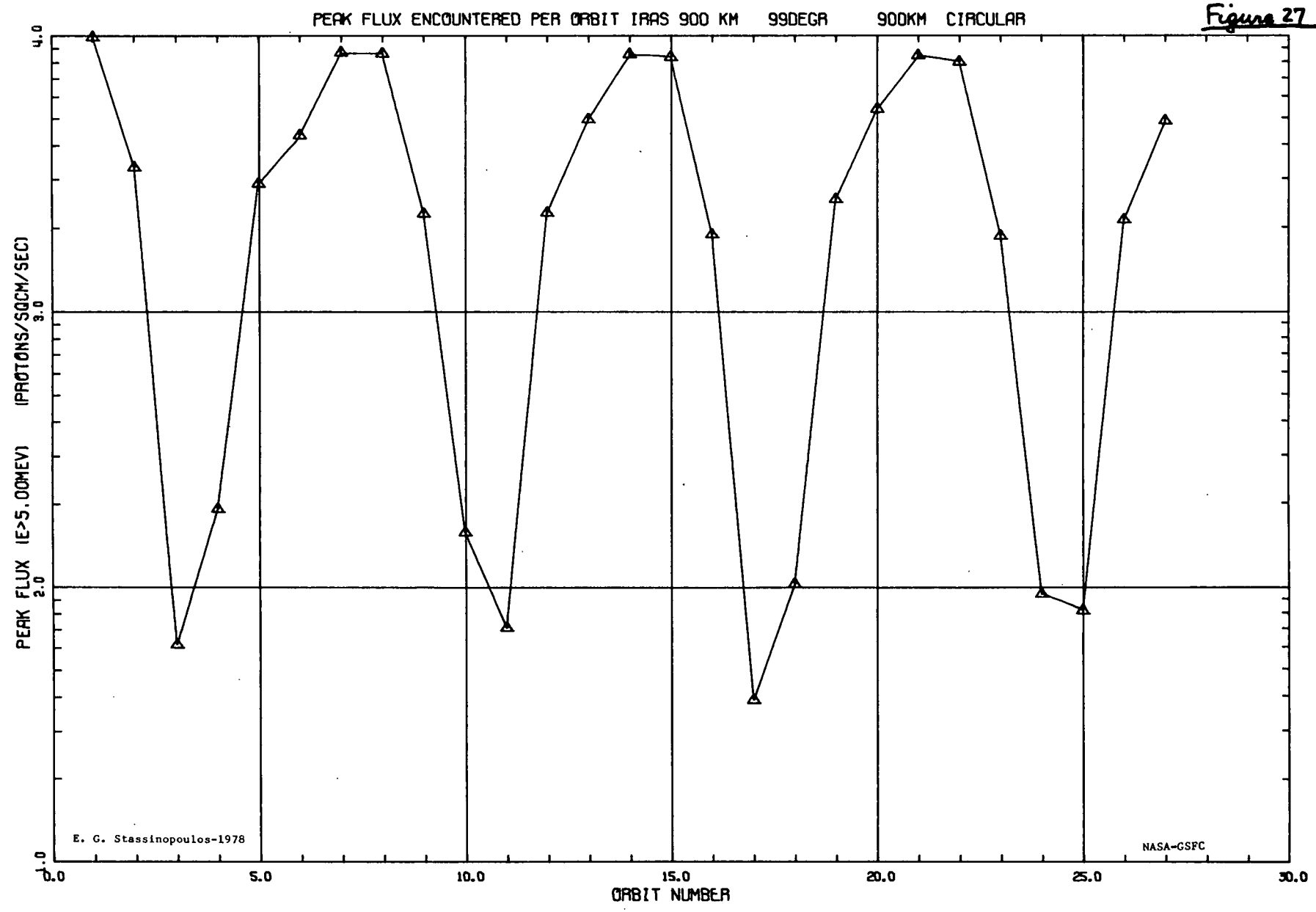
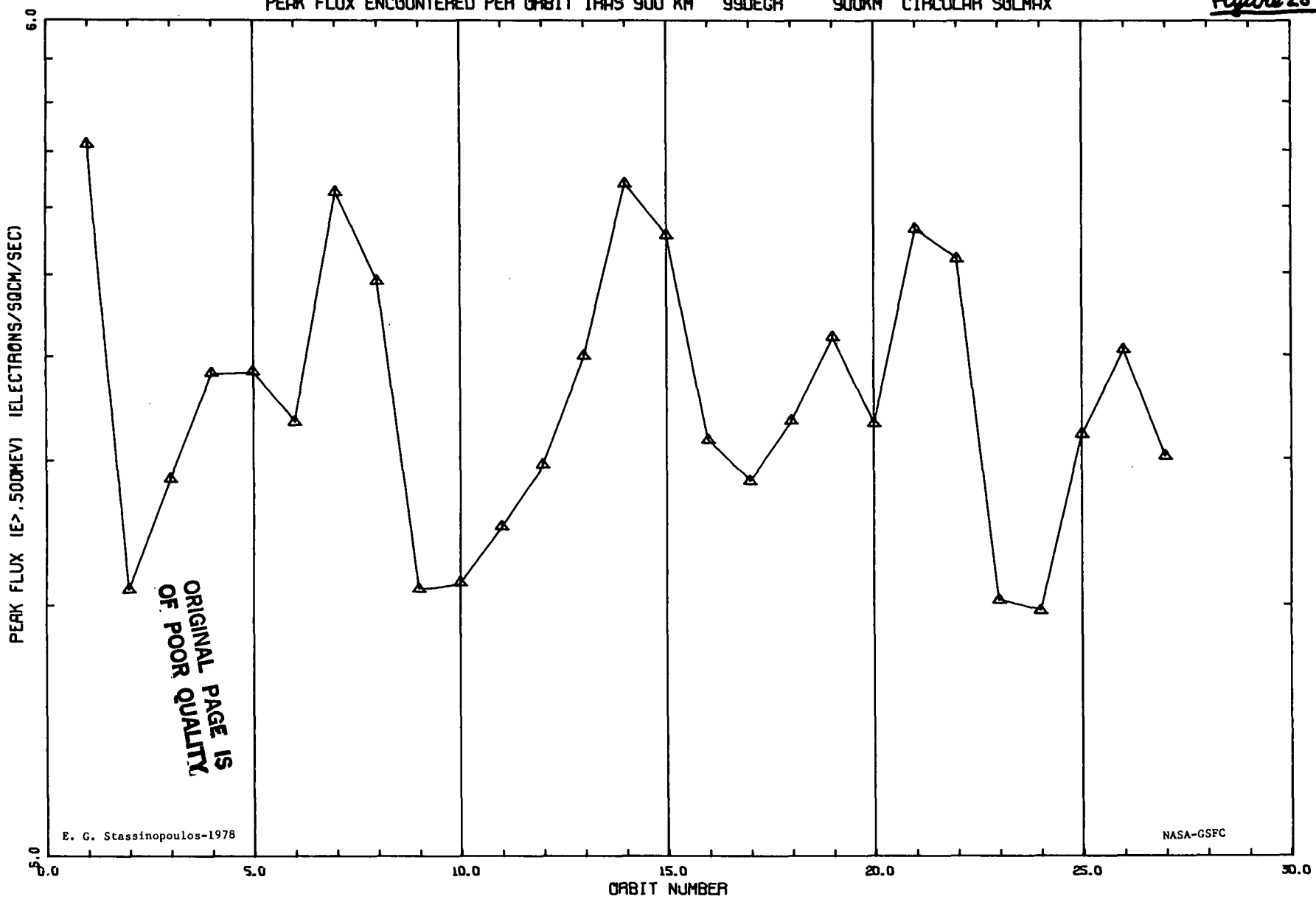


Figure 27



PEAK FLUX ENCOUNTERED PER ORBIT IRAS 900 KM 99DEGR 900KM CIRCULAR SOLMAX

Figure 28

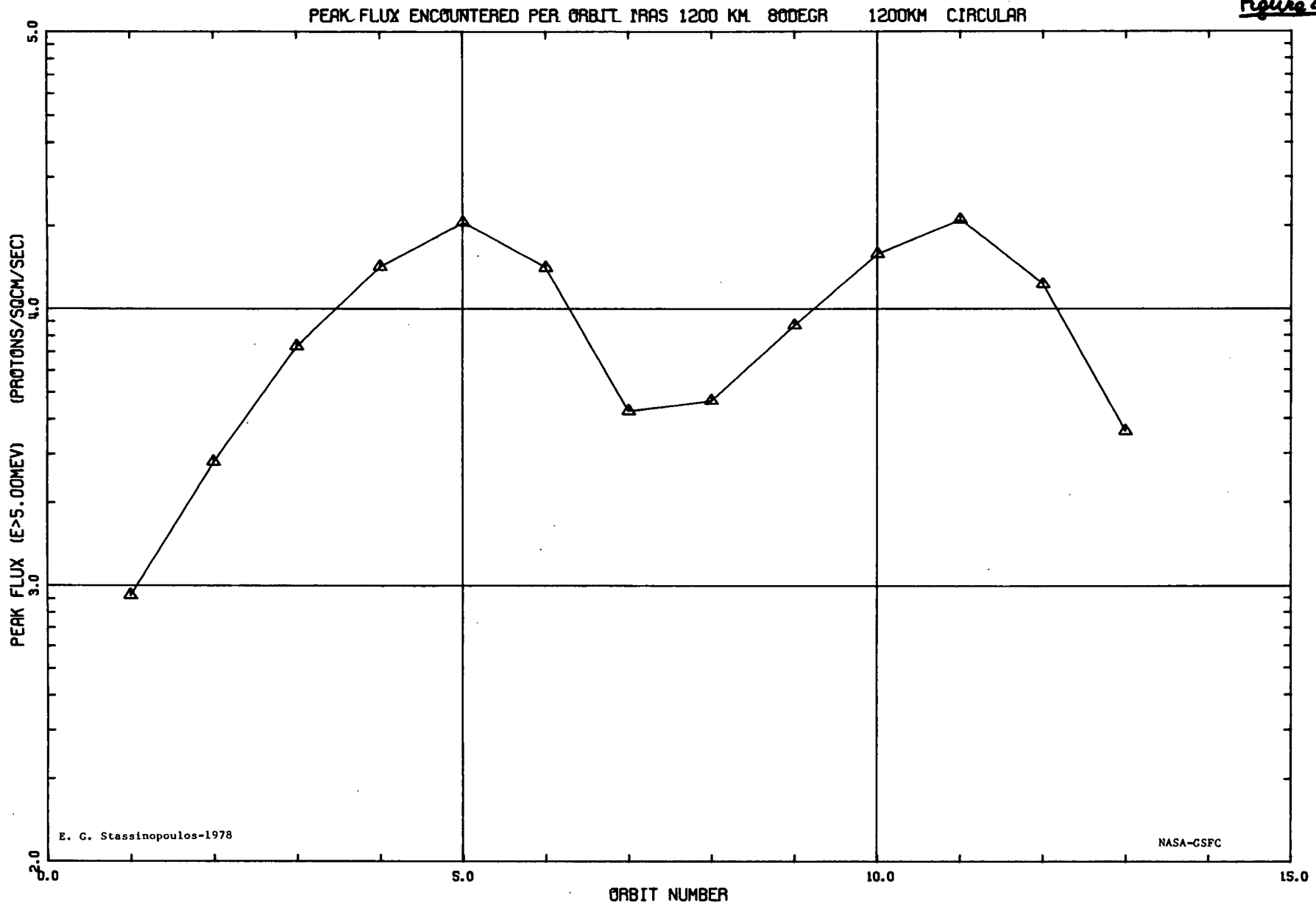


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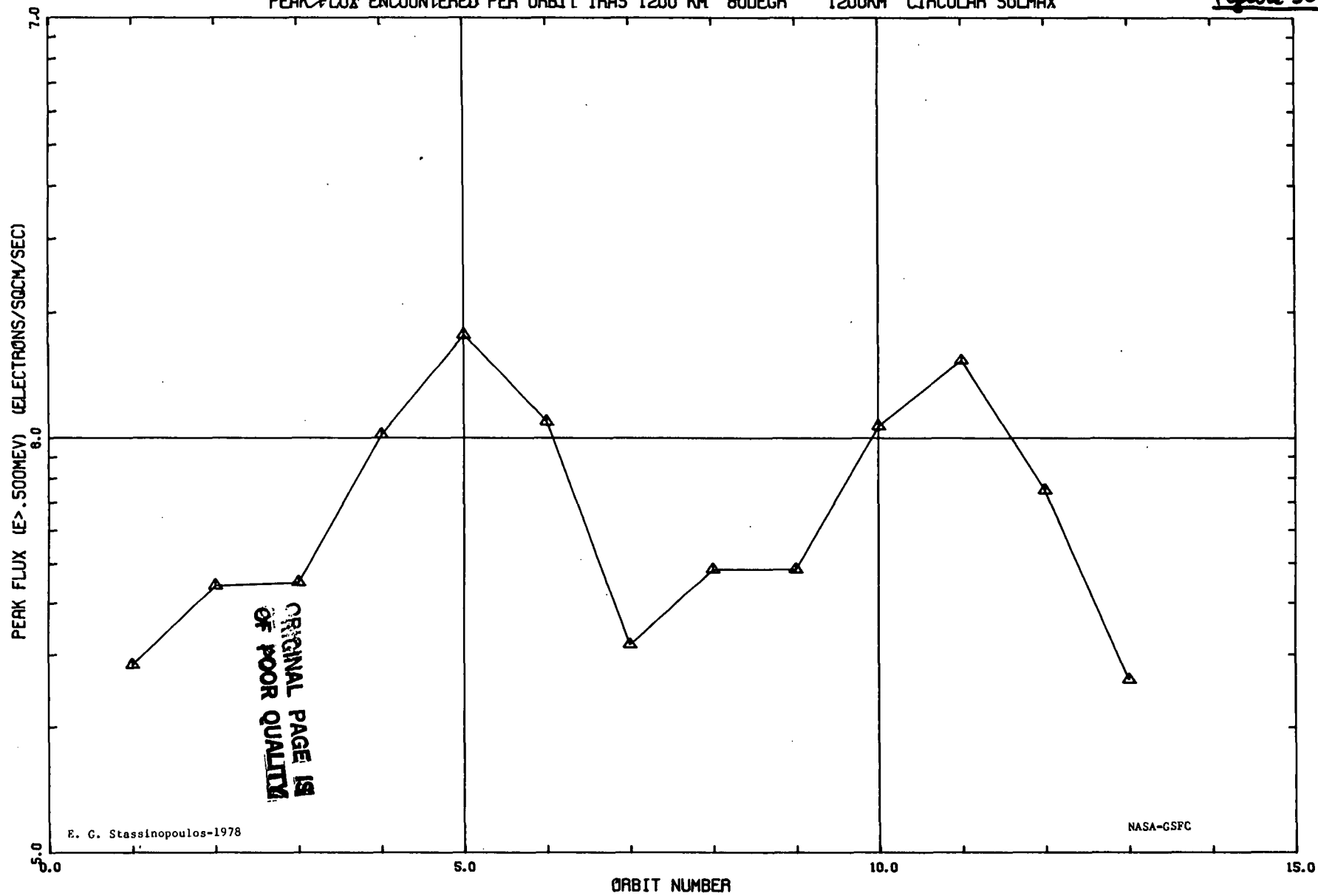
NASA-GSFC

Figure 29



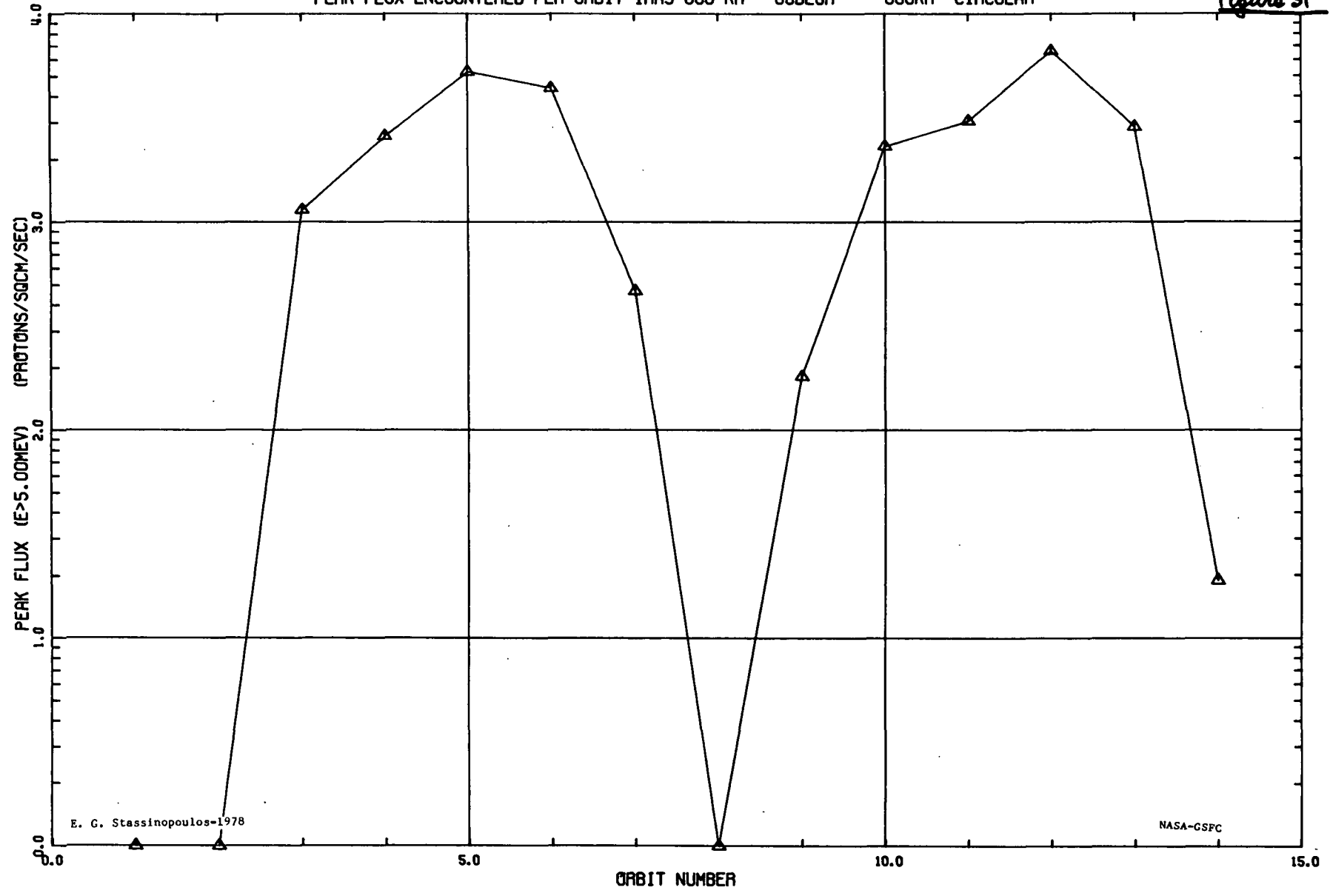
PEAK FLUX ENCOUNTERED PER ORBIT IRAS 1200 KM 80DEGR 1200KM CIRCULAR SOLMAX

Figure 30



PEAK FLUX ENCOUNTERED PER ORBIT IRAS 600 KM 80DEGR 600KM CIRCULAR

Figure 31

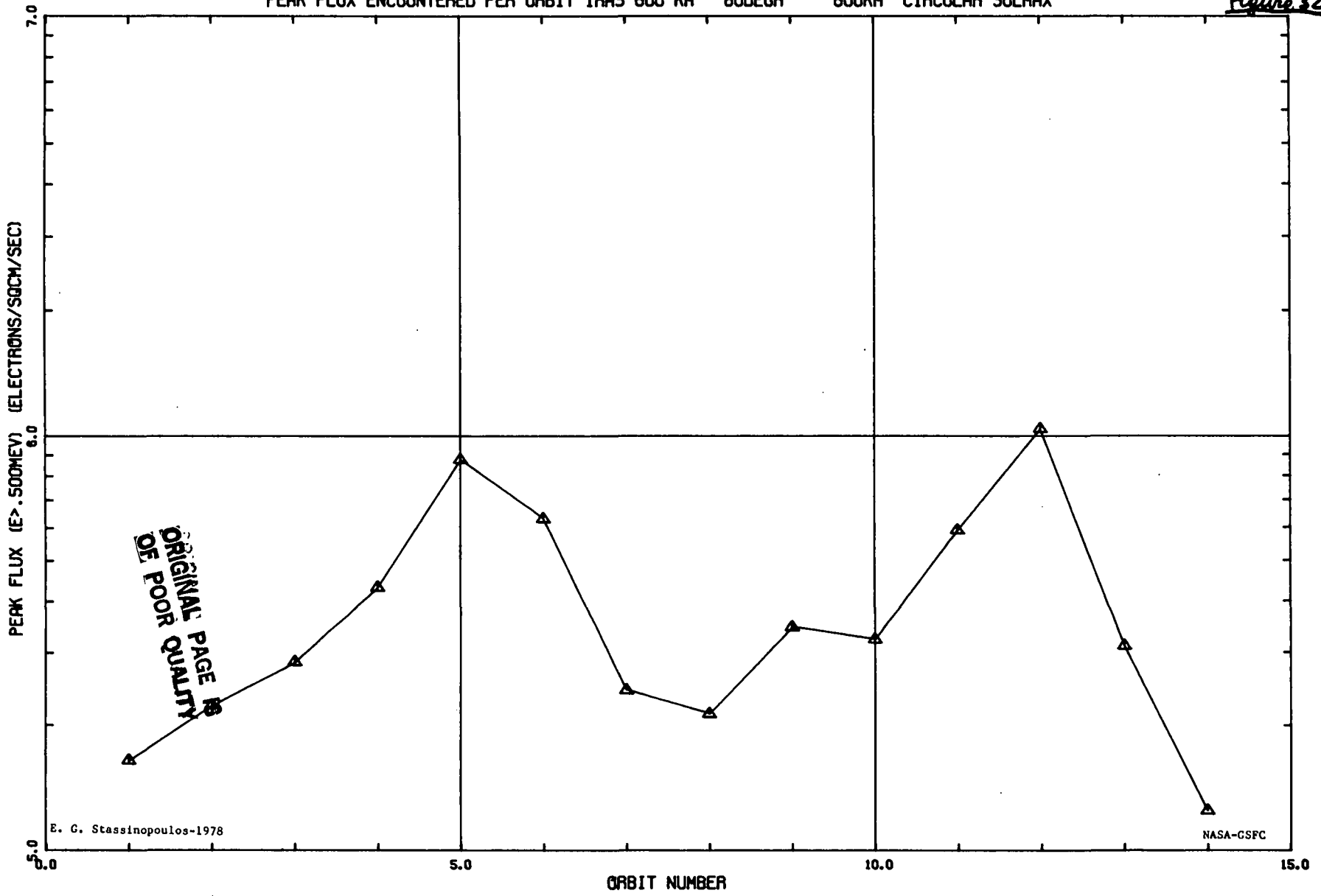


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PEAK FLUX ENCOUNTERED PER ORBIT IRAS 600 KM 80DEGR 600KM CIRCULAR SOLMAX

Figure 32



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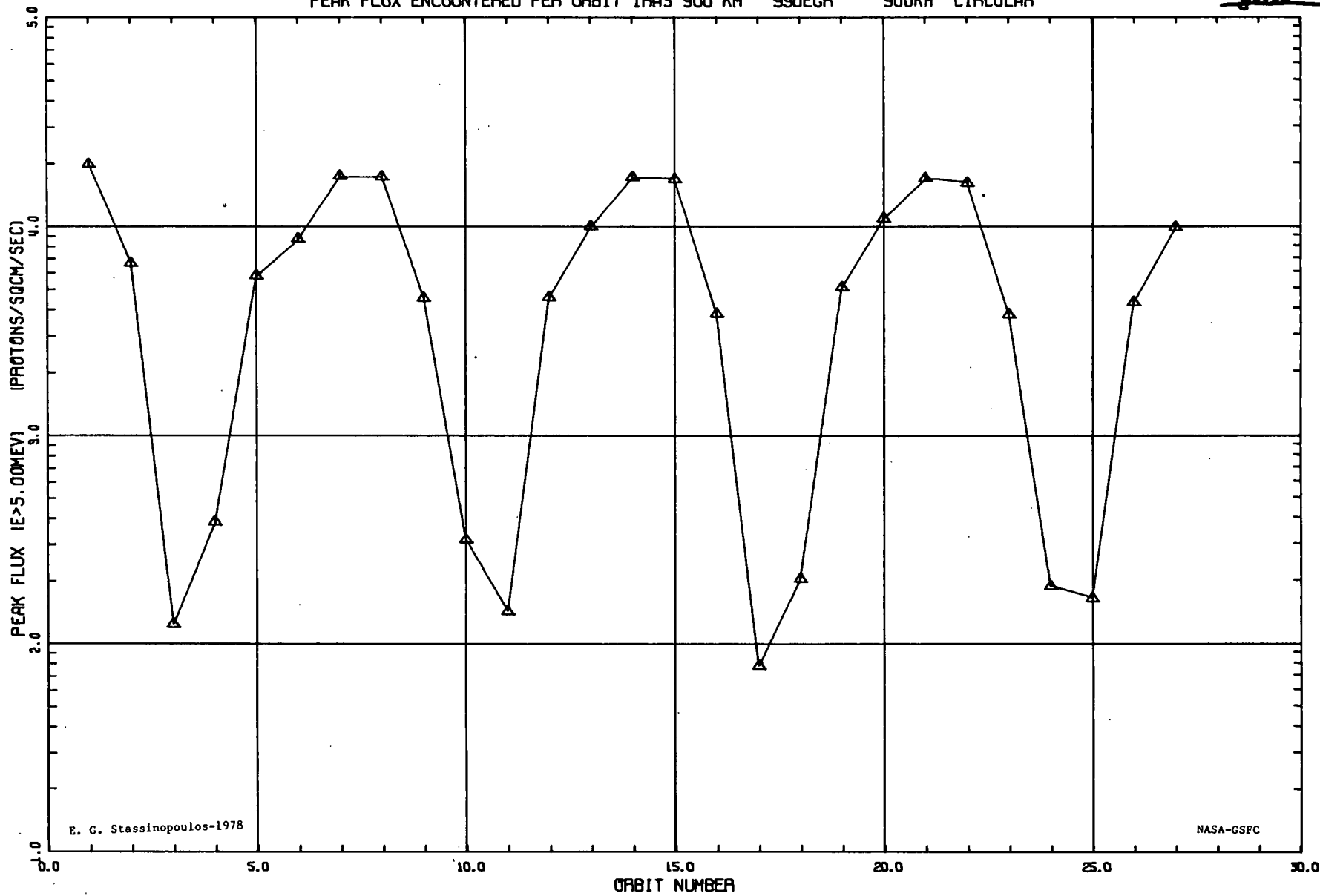
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PEAK FLUX ENCOUNTERED PER ORBIT IRAS 900 KM 99DEGR 900KM CIRCULAR

Figure 33

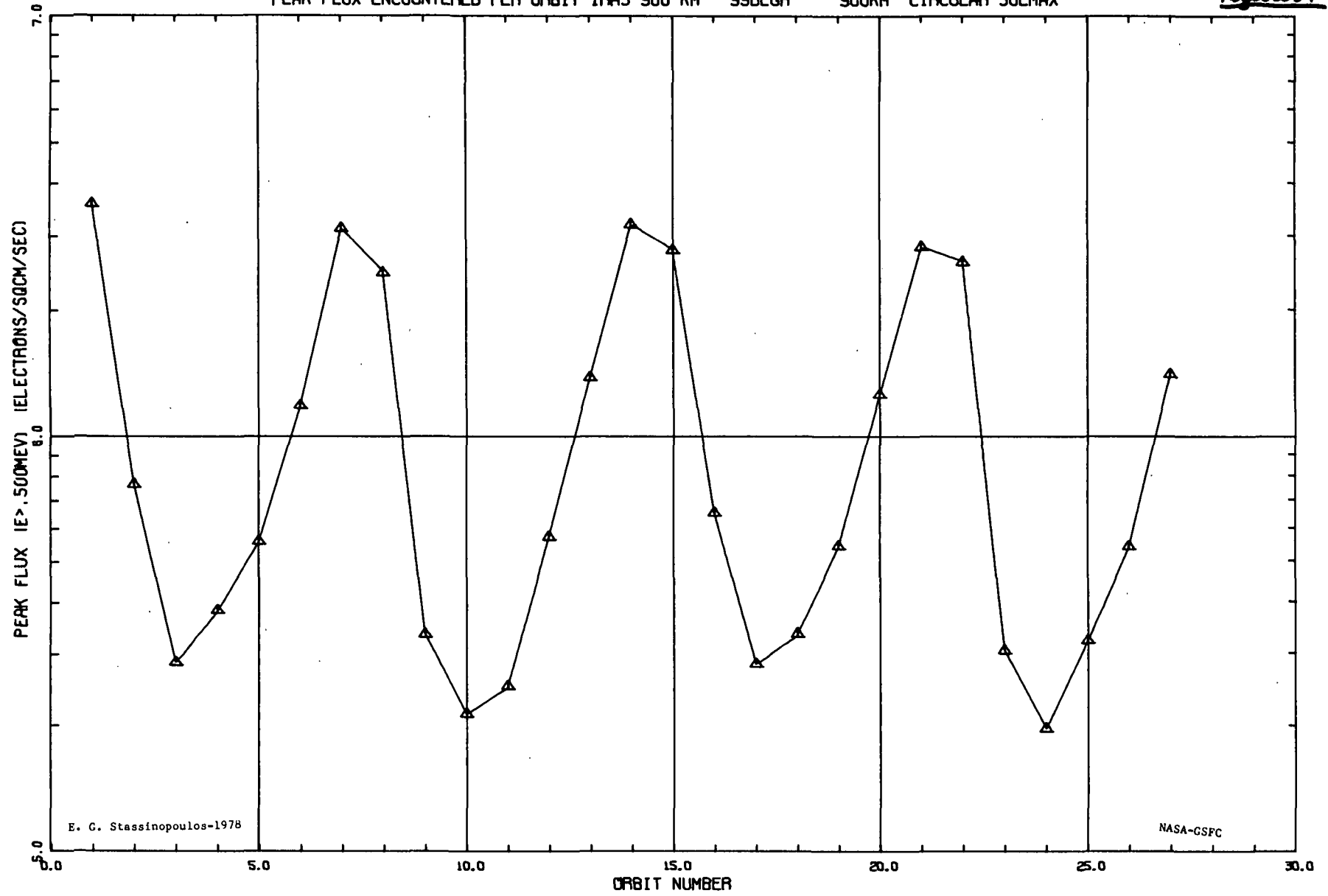


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PEAK FLUX ENCOUNTERED PER ORBIT IRAS 900 KM 99DEGR 900KM CIRCULAR SOLMAX

Figure 34



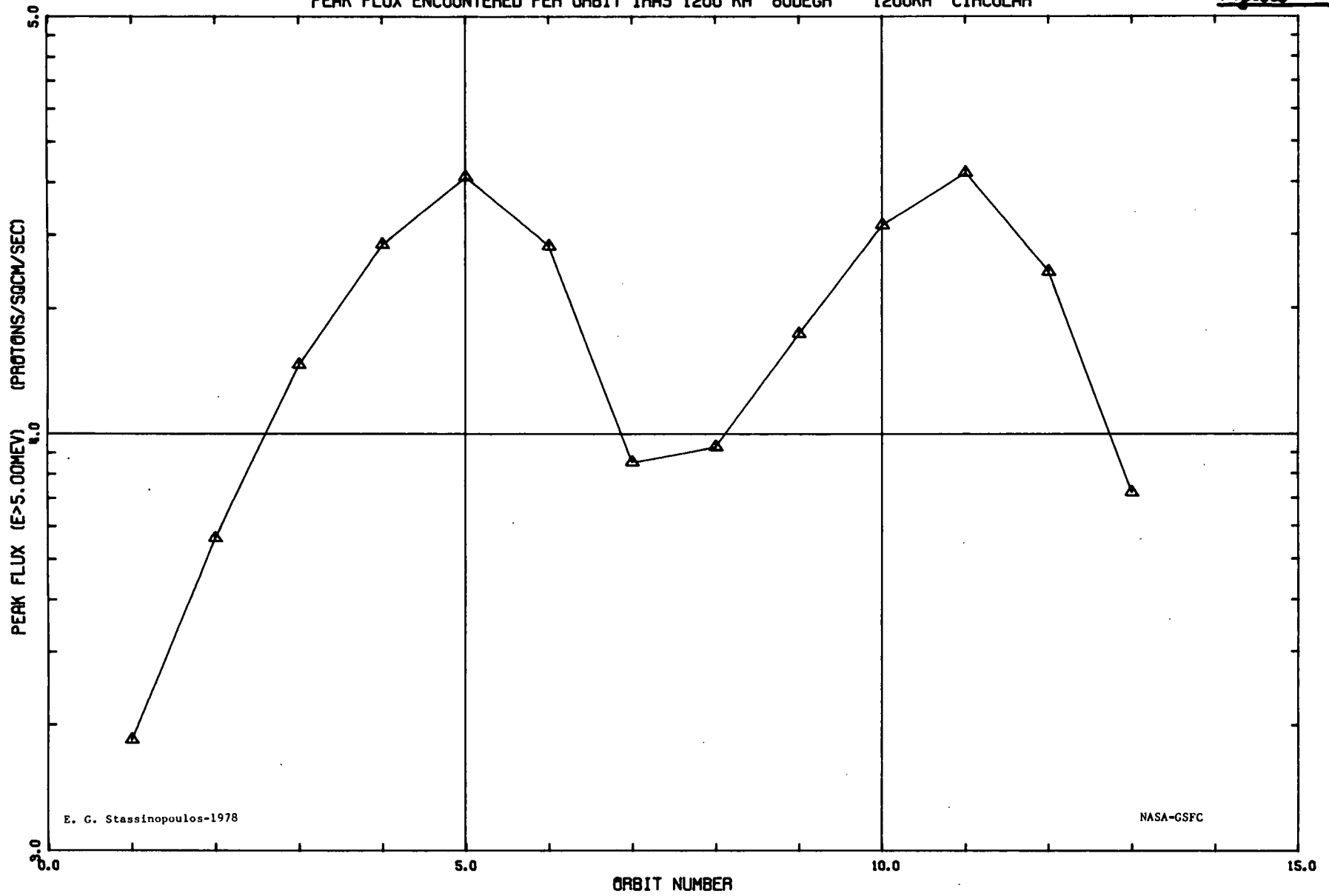
E. C. Stassinopoulos-1978

NASA-GSFC

C. 2

PEAK FLUX ENCOUNTERED PER ORBIT IRAS 1200 KM 80DEGR 1200KM CIRCULAR

Figure 35

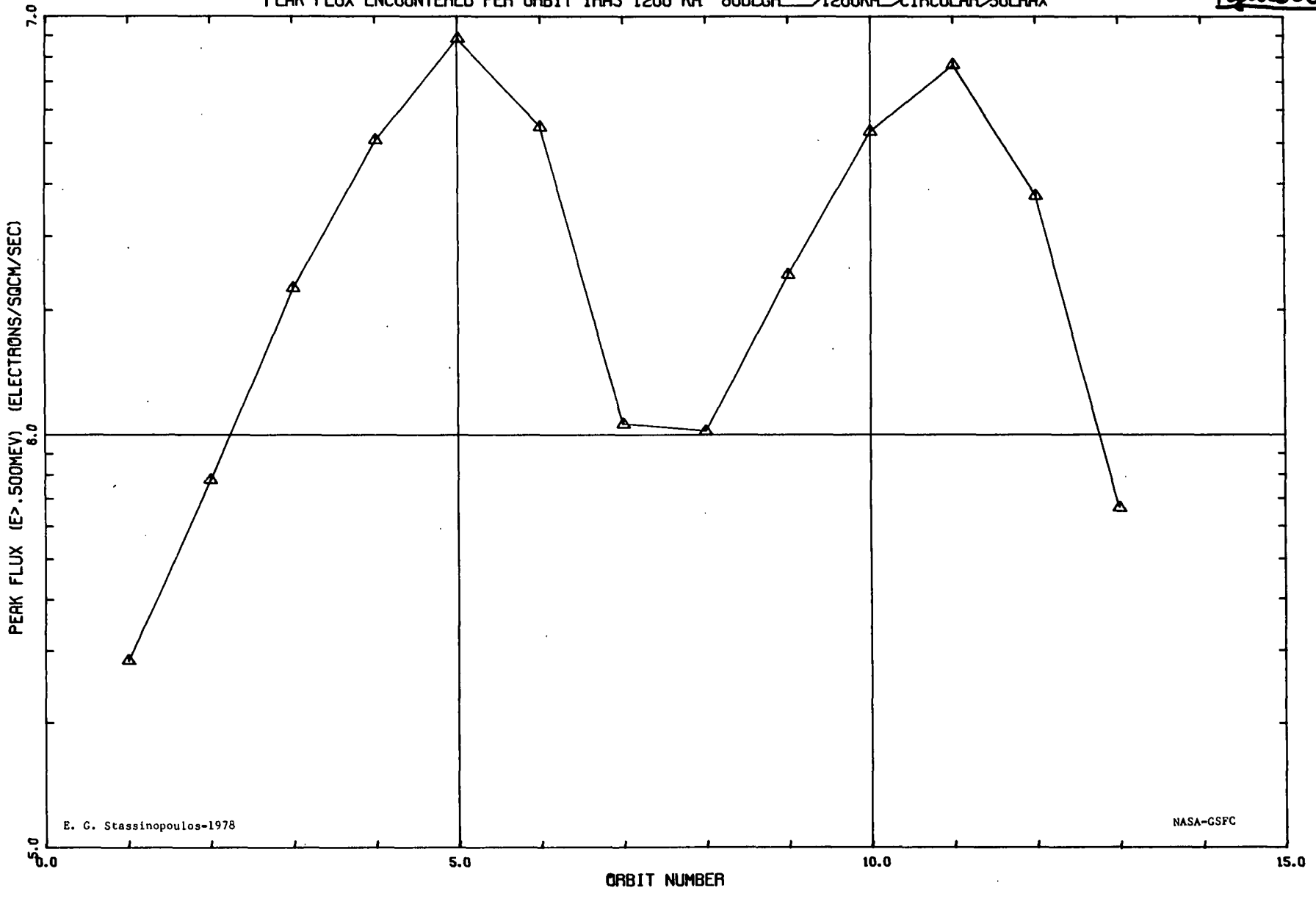


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PEAK FLUX ENCOUNTERED PER ORBIT IRAS 1200 KM 80DEGR 1200KM CIRCULAR 80LMAX

Figure 36

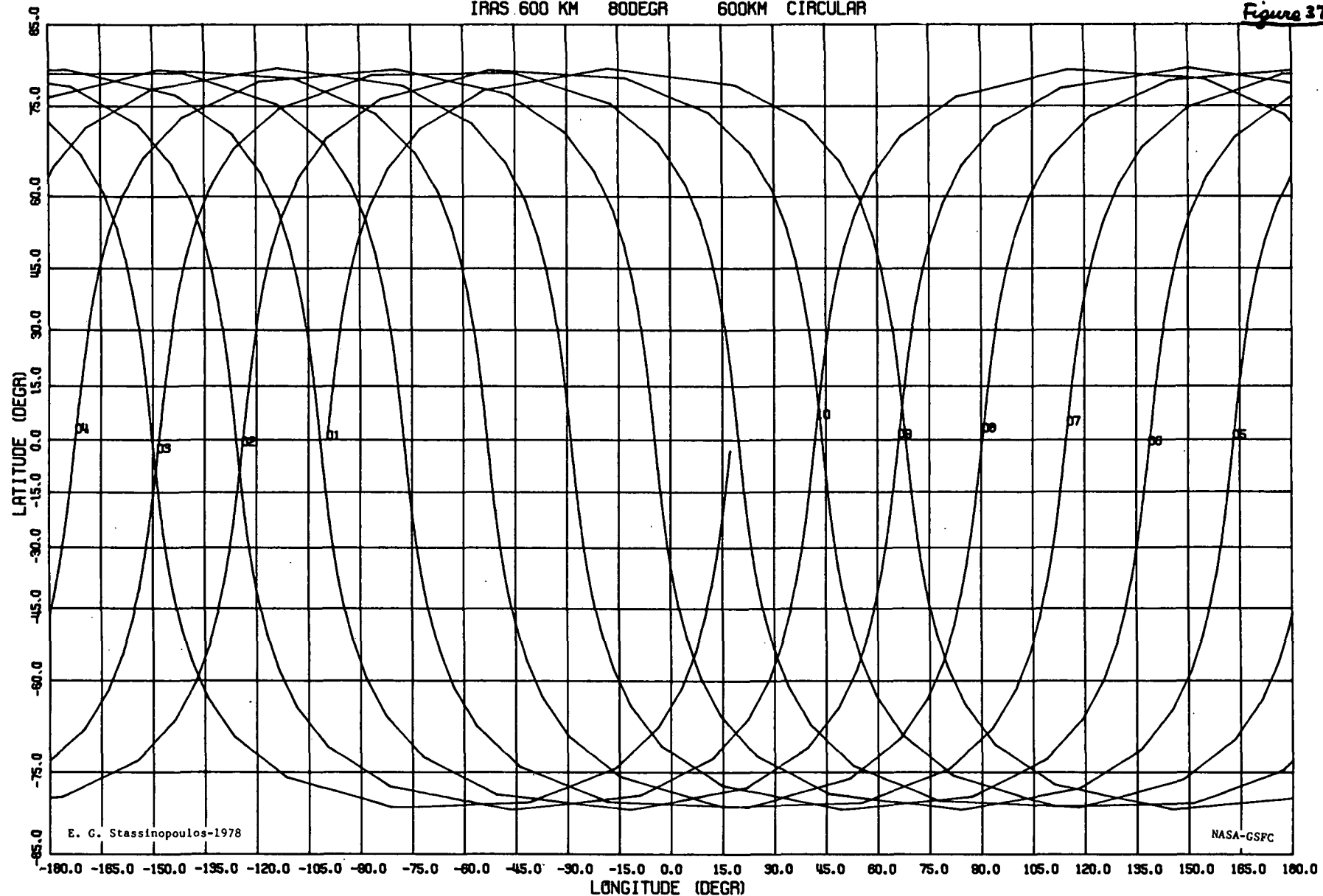


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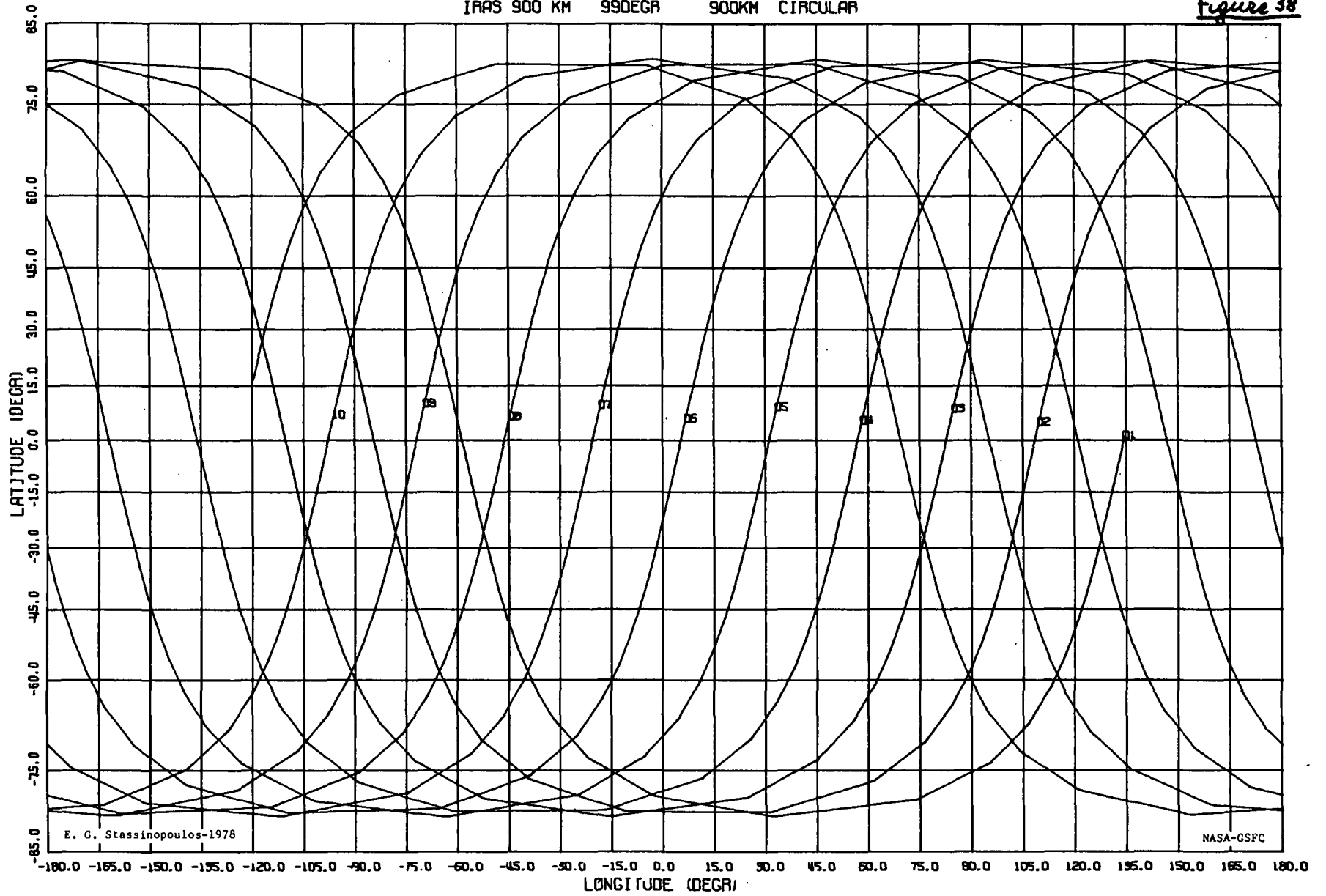
IRAS 600 KM 80DEGR 600KM CIRCULAR

Figure 37



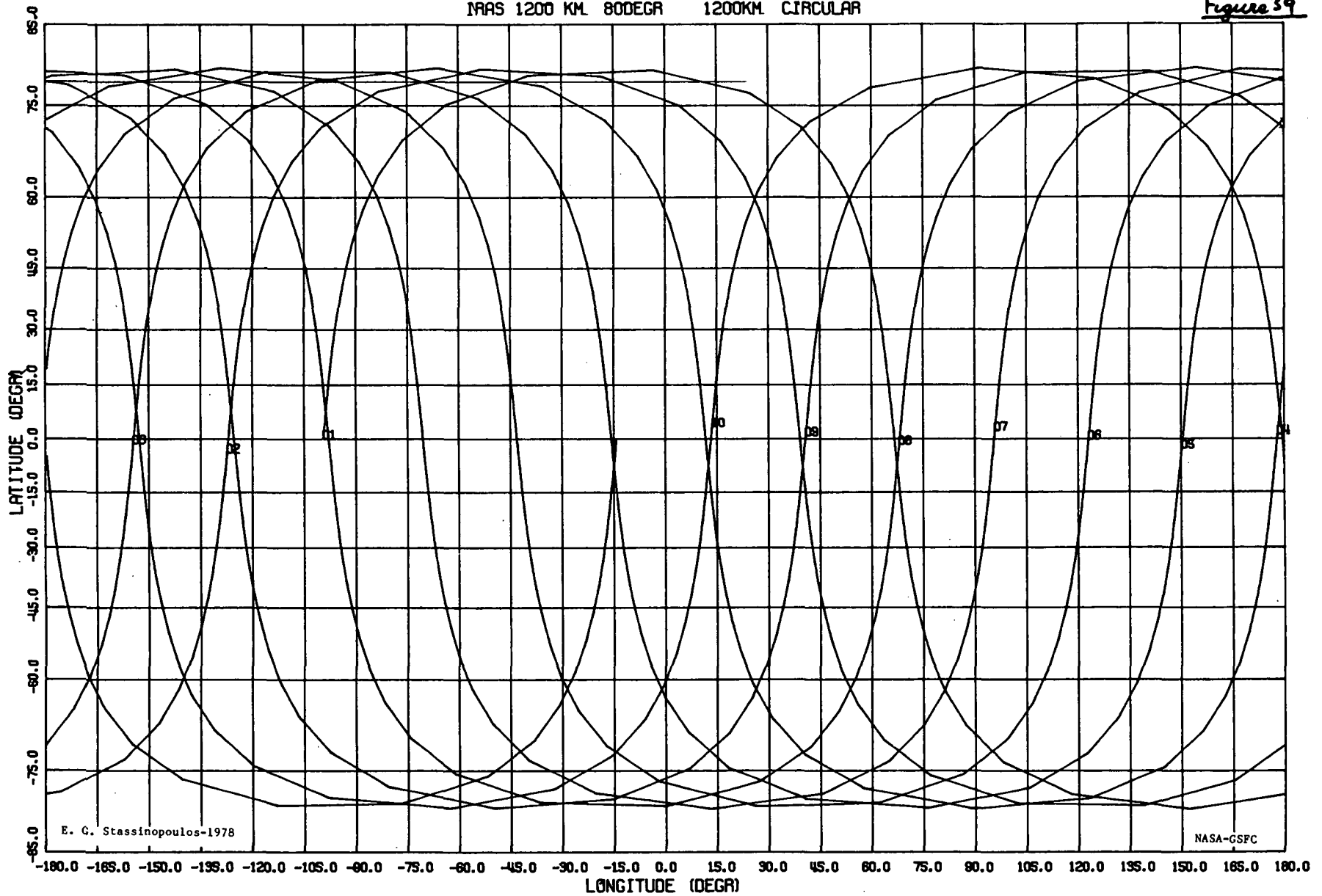
IRAS 900 KM 99DEGR 900KM CIRCULAR

Figure 38



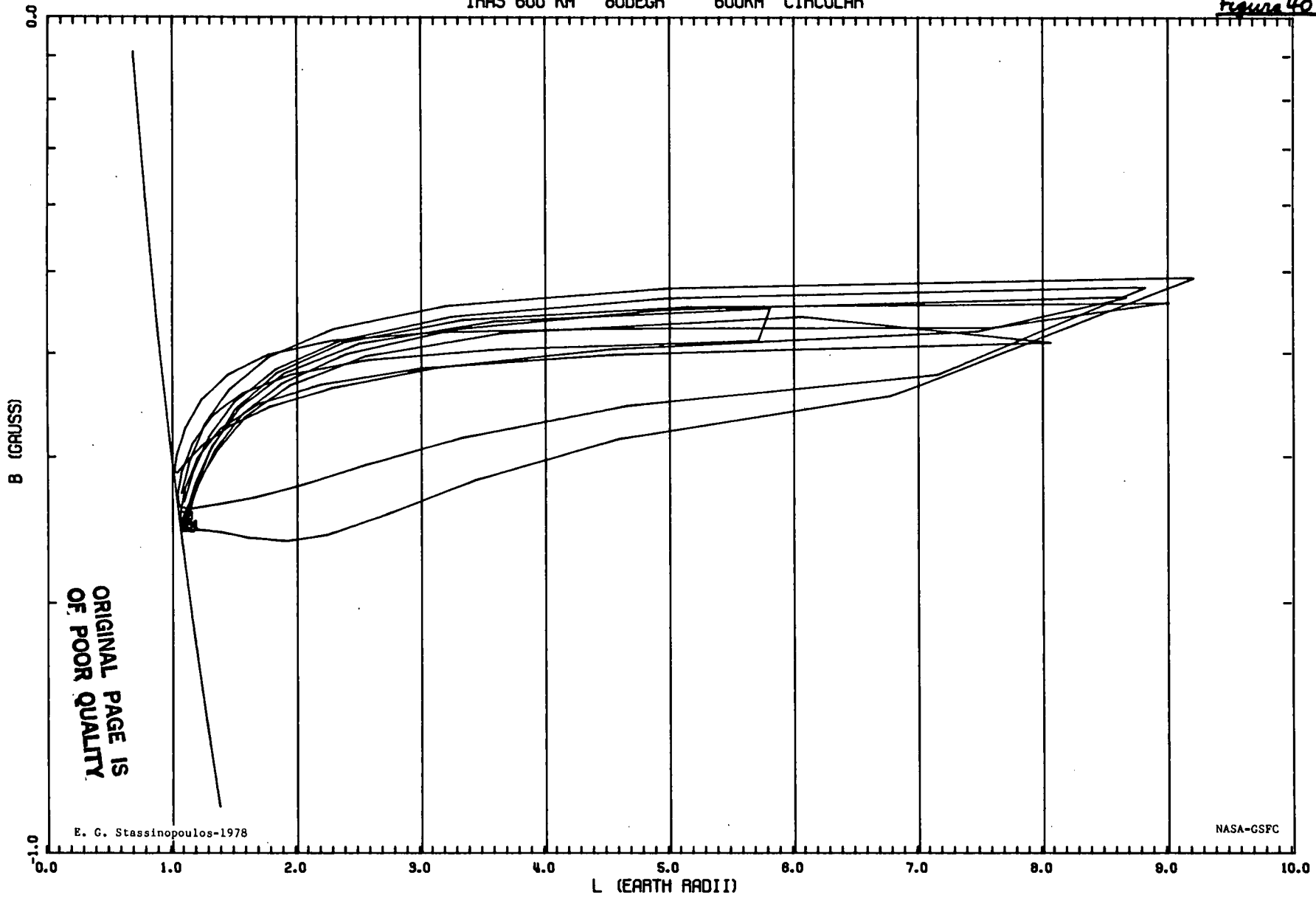
IRAS 1200 KM 80DEGR 1200KM CIRCULAR

Figure 39



IRAS 600 KM 80DEGR 600KM CIRCULAR

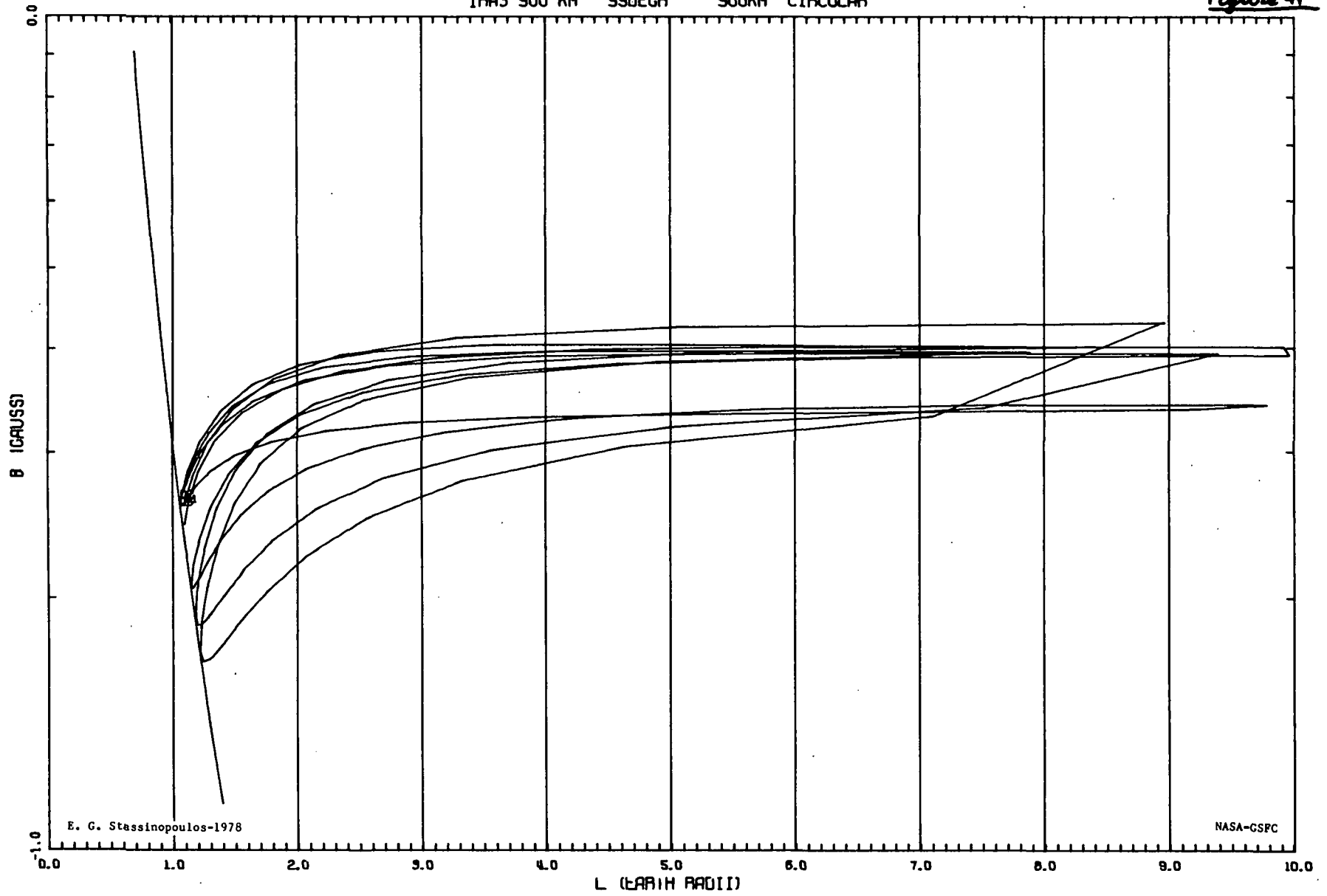
Figure 40





IRAS 900 KM 99DEGR 900KM CIRCULAR

Figure 41



IRAS 1200 KM 80DEGR 1200KM CIRCULAR

Figure 42

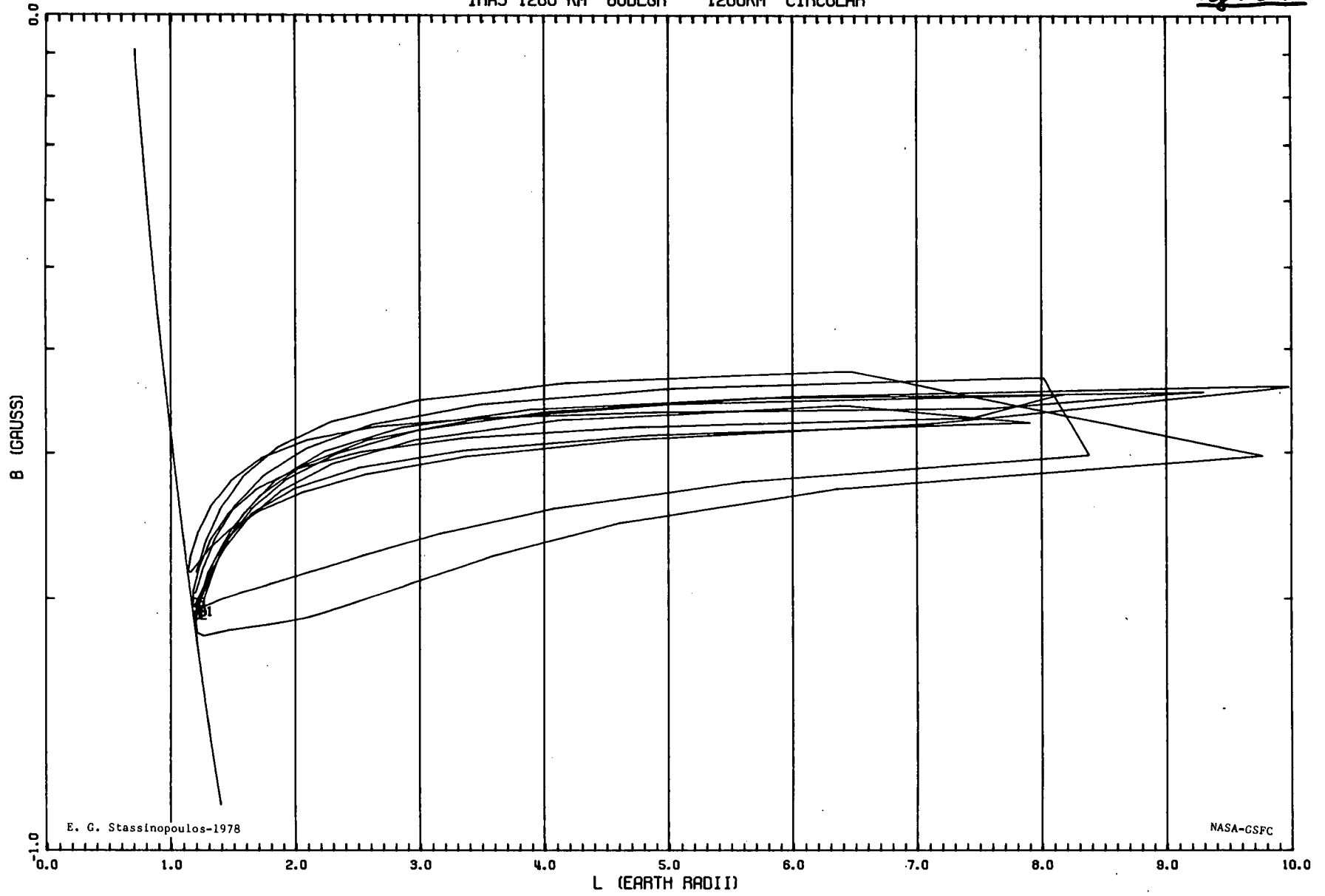


Figure 43

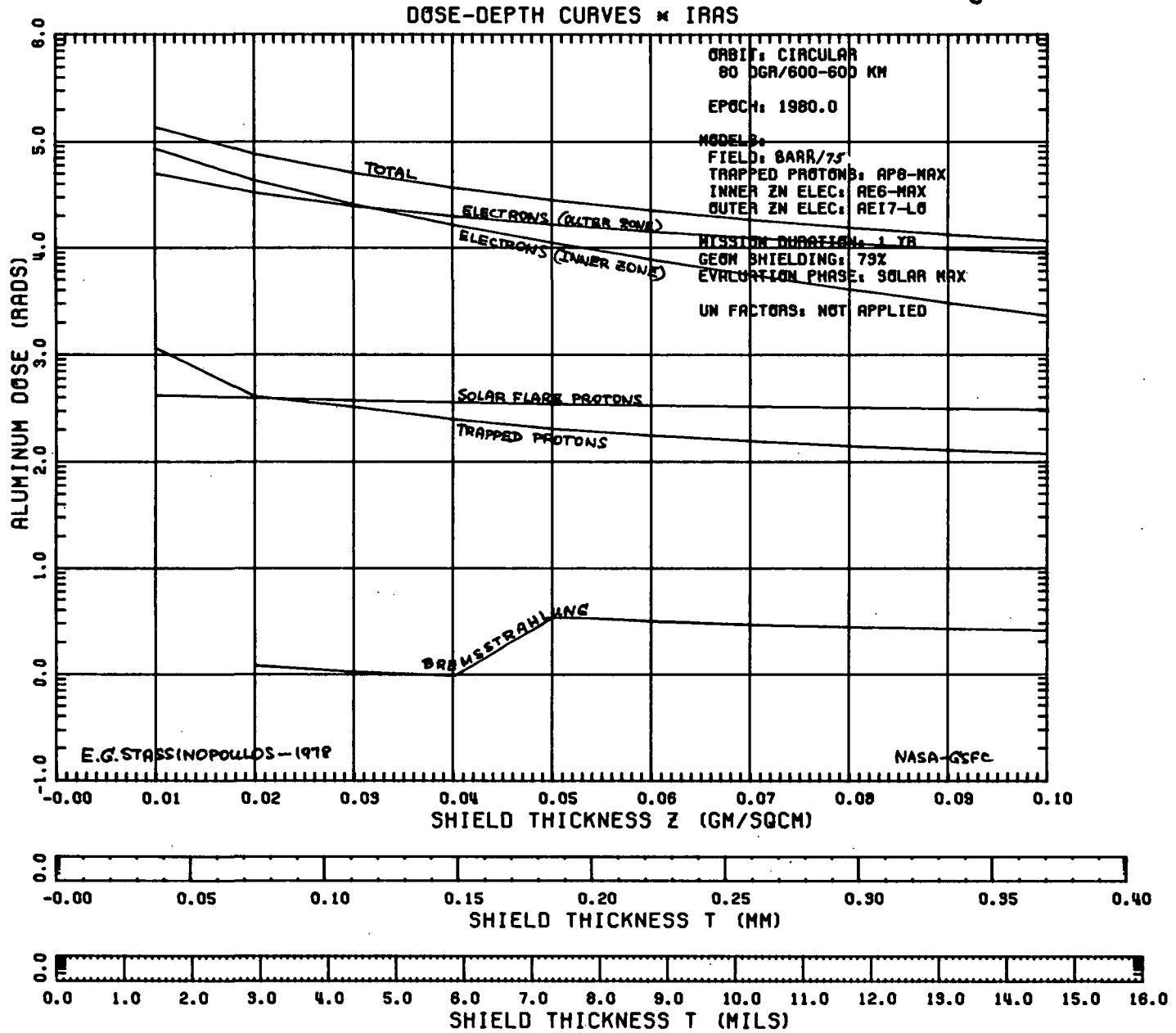
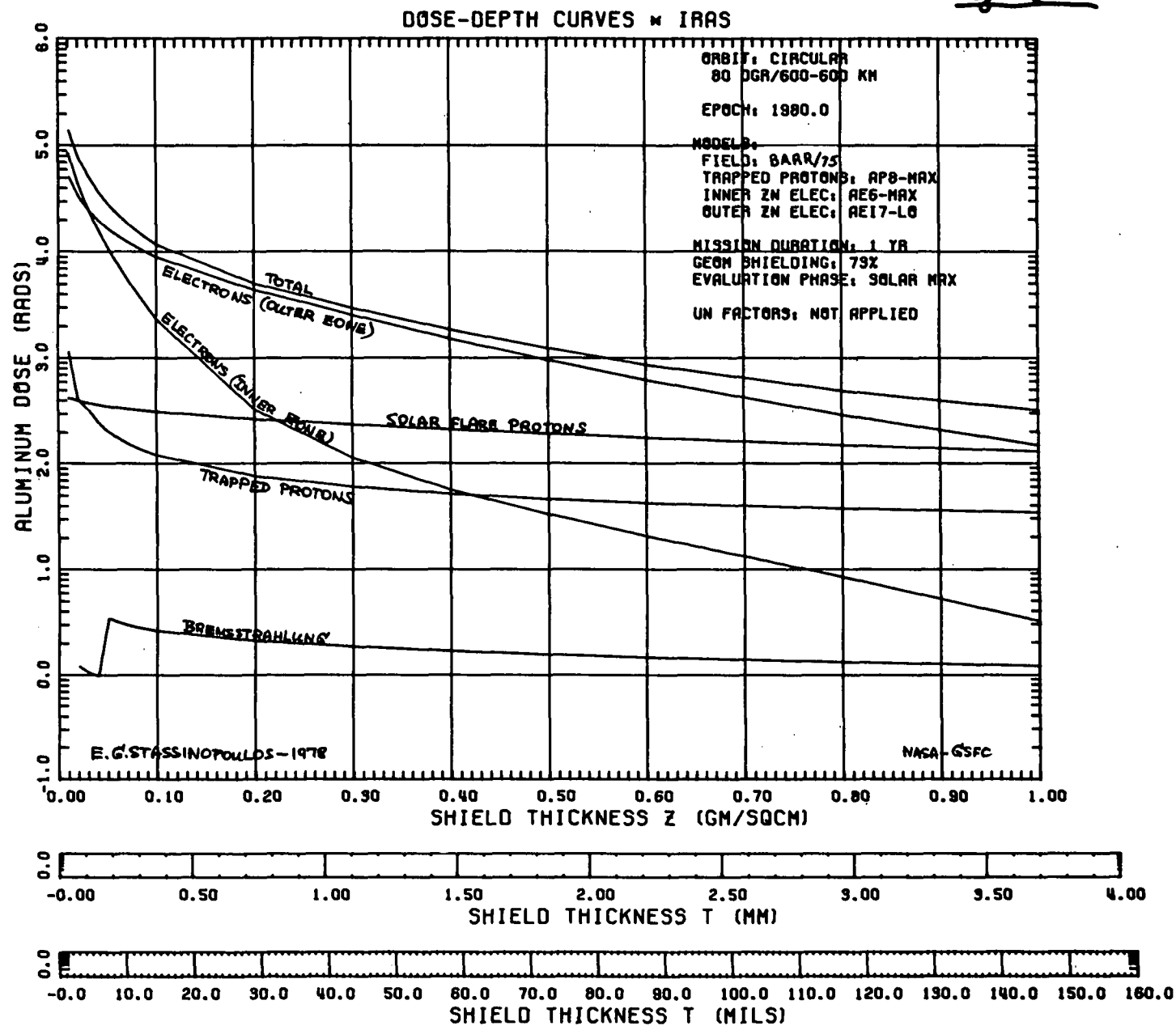


Figure 44



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Figure 45

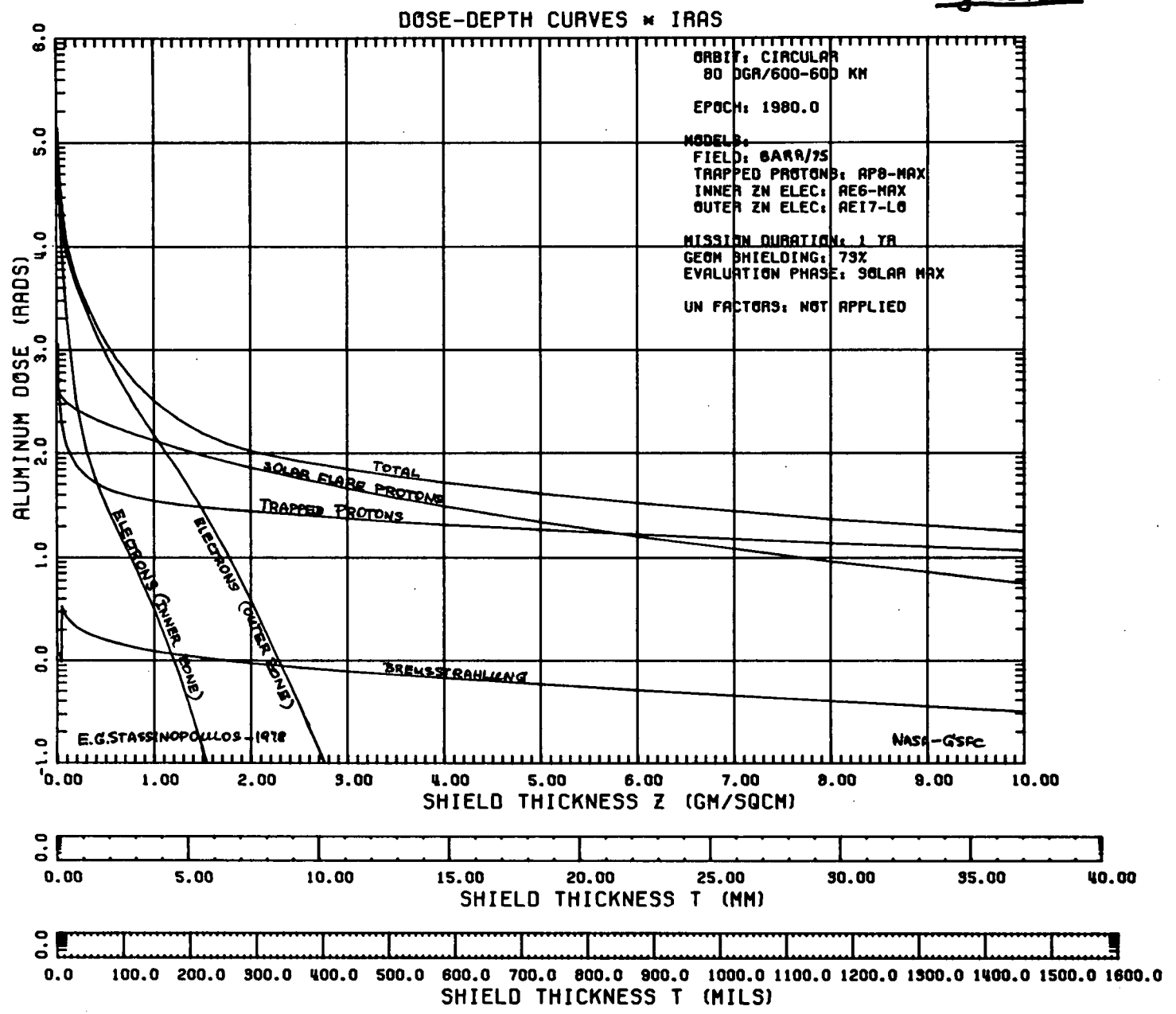
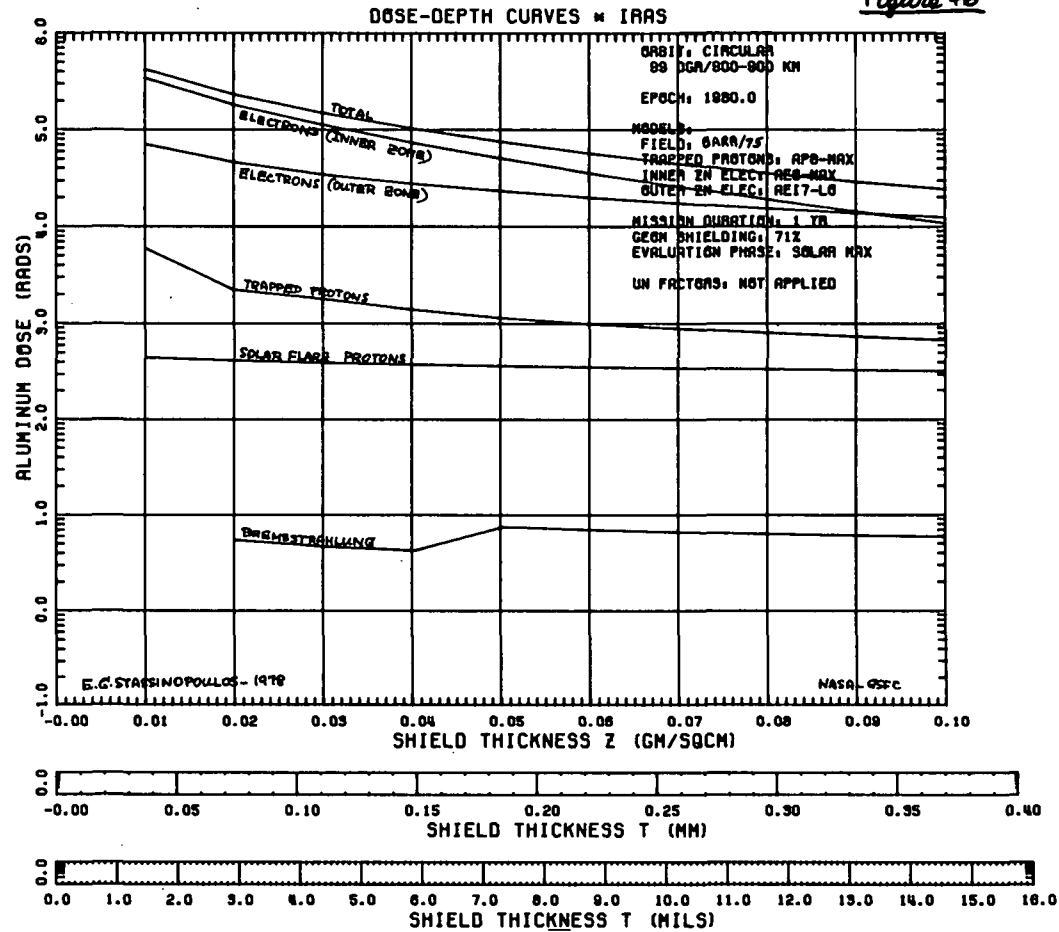
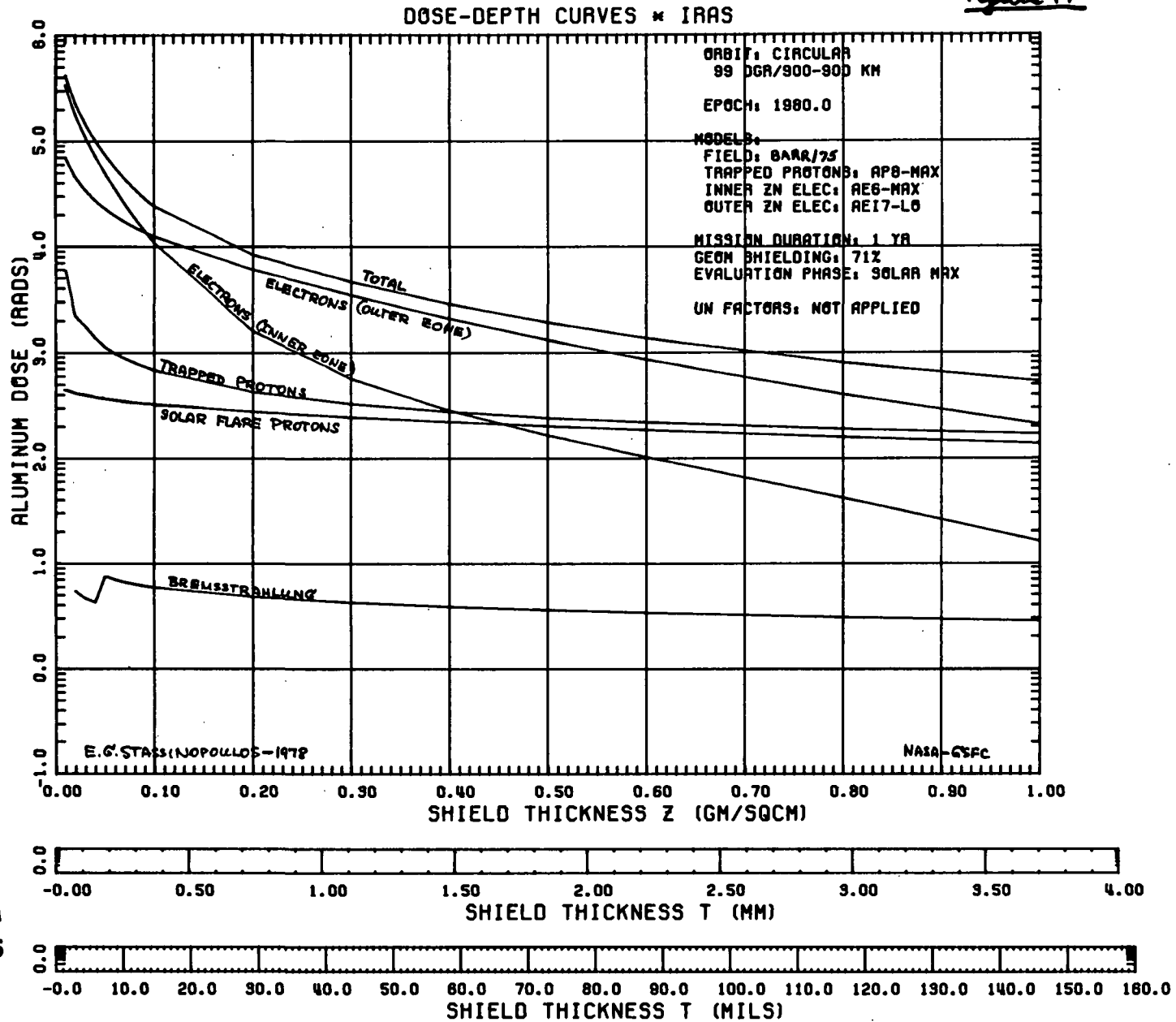


Figure 46



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Figure 47



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Figure 48

DOSE-DEPTH CURVES \* IRAS

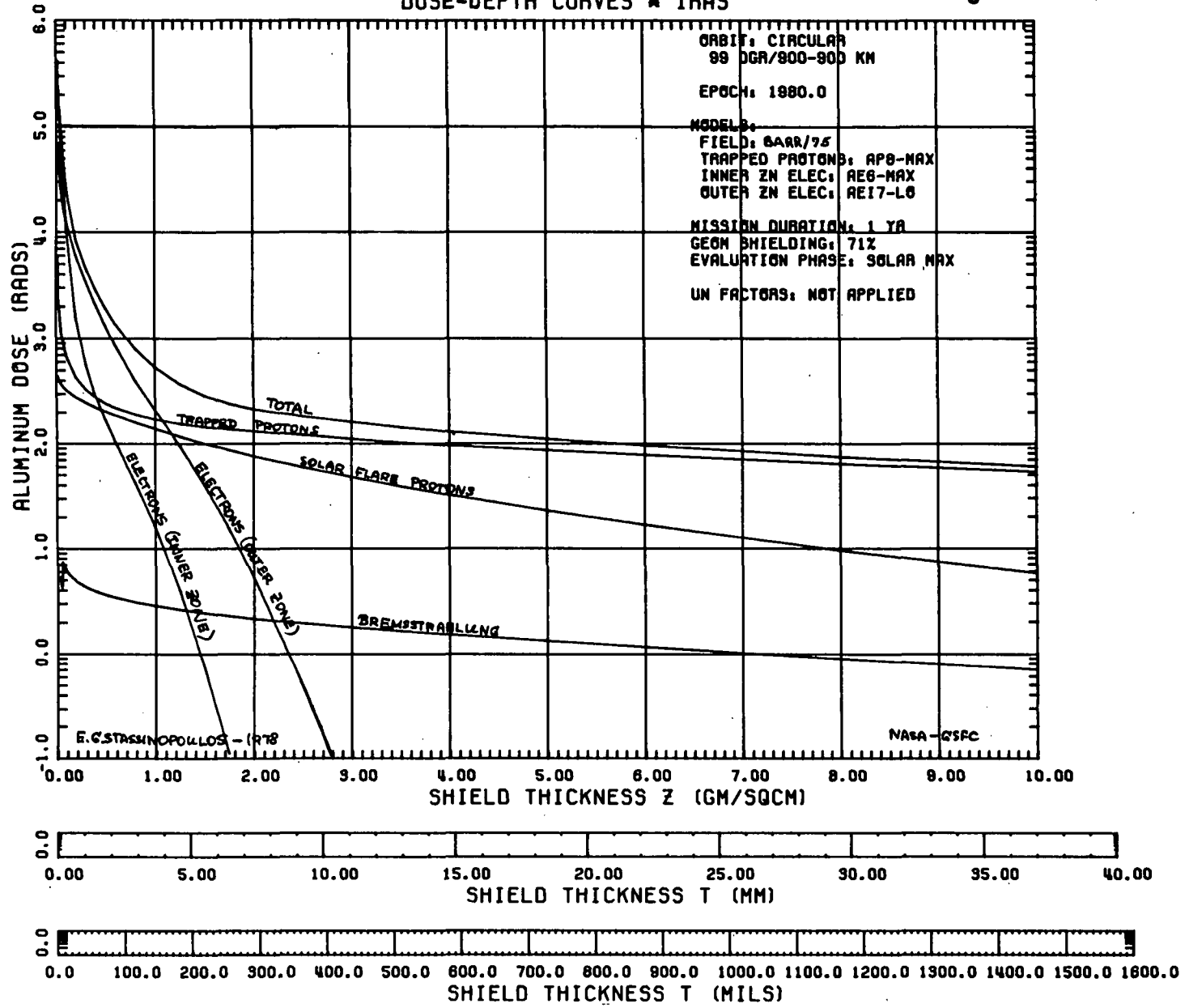




Figure 49

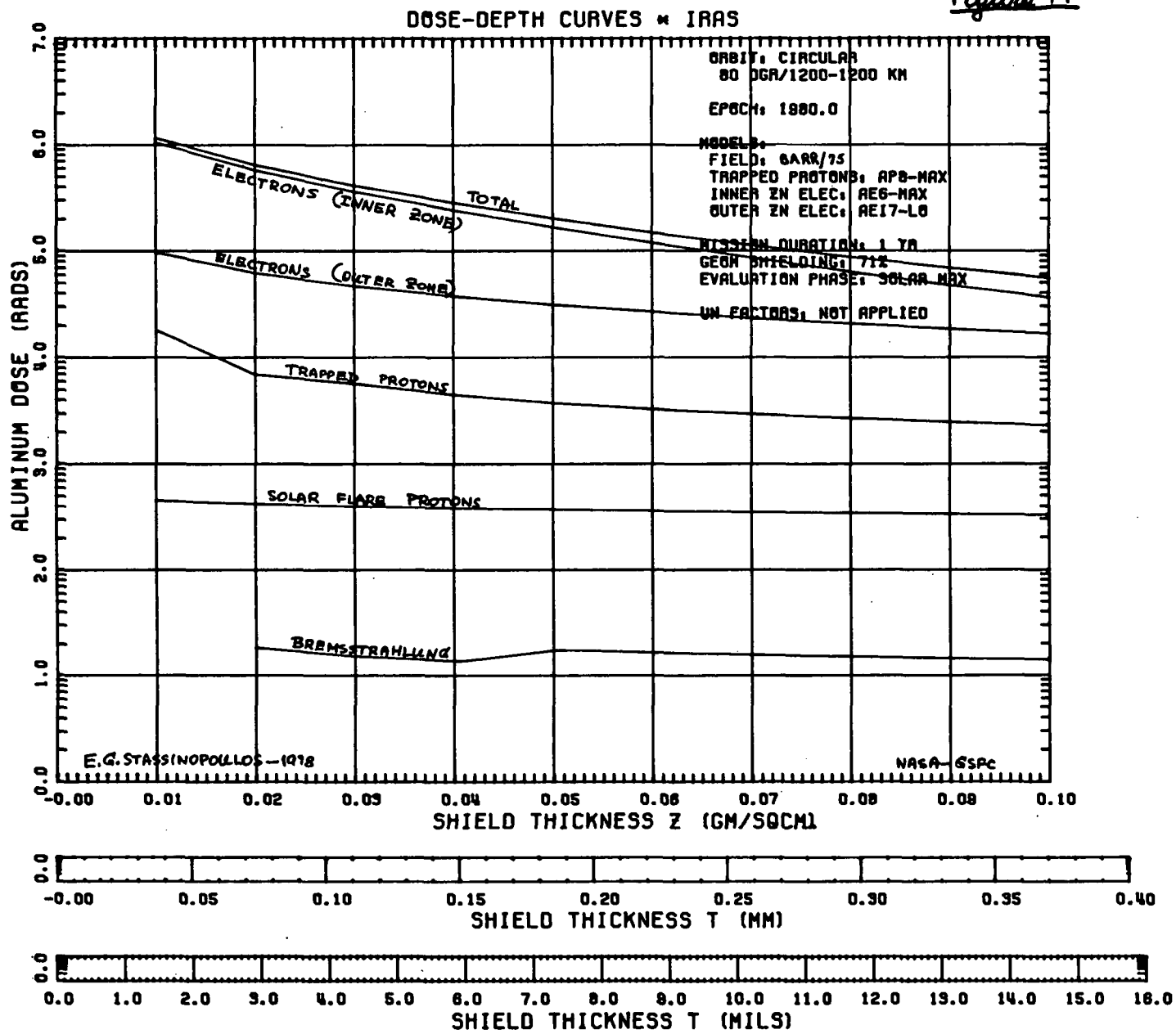


Figure 50

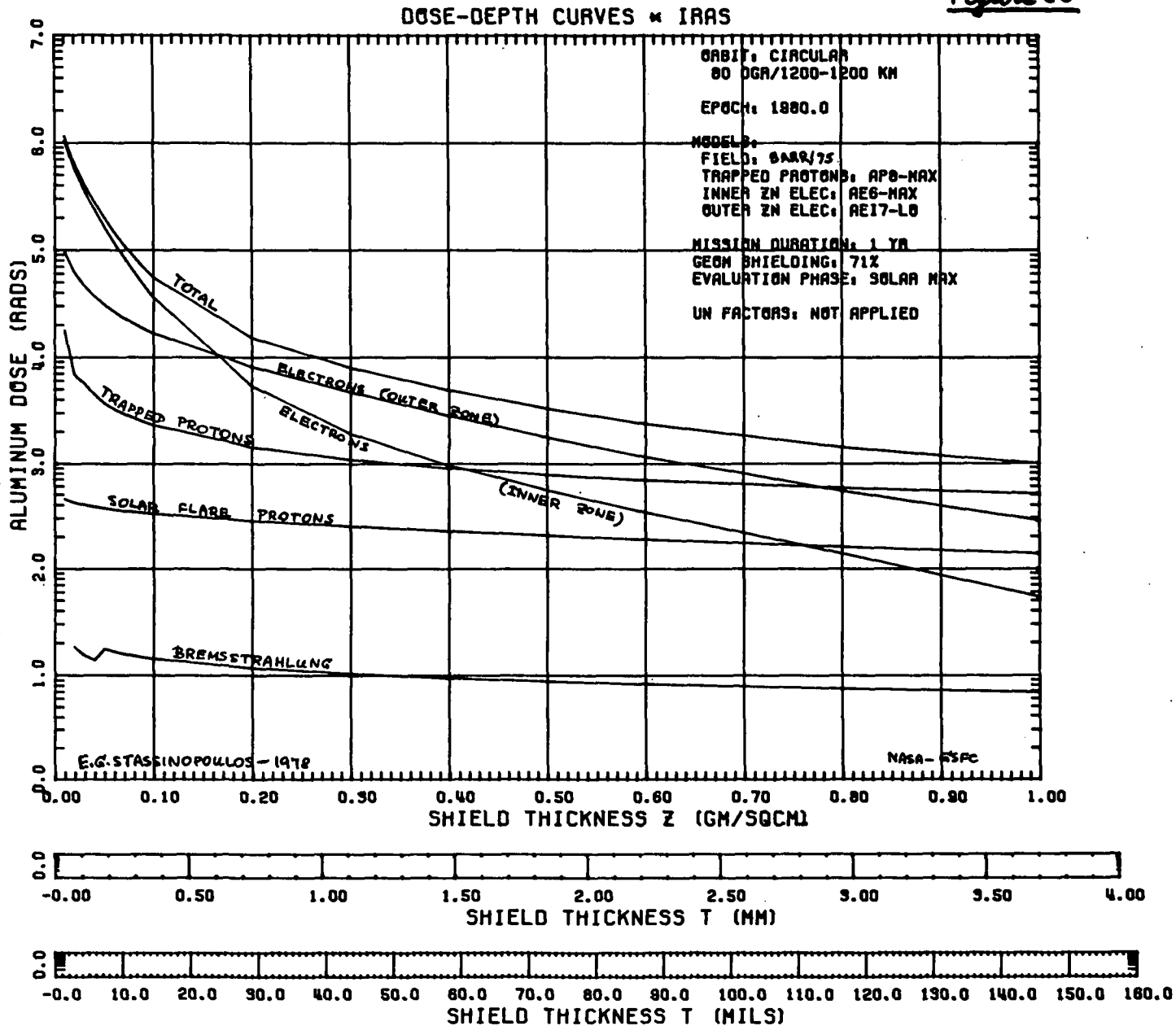
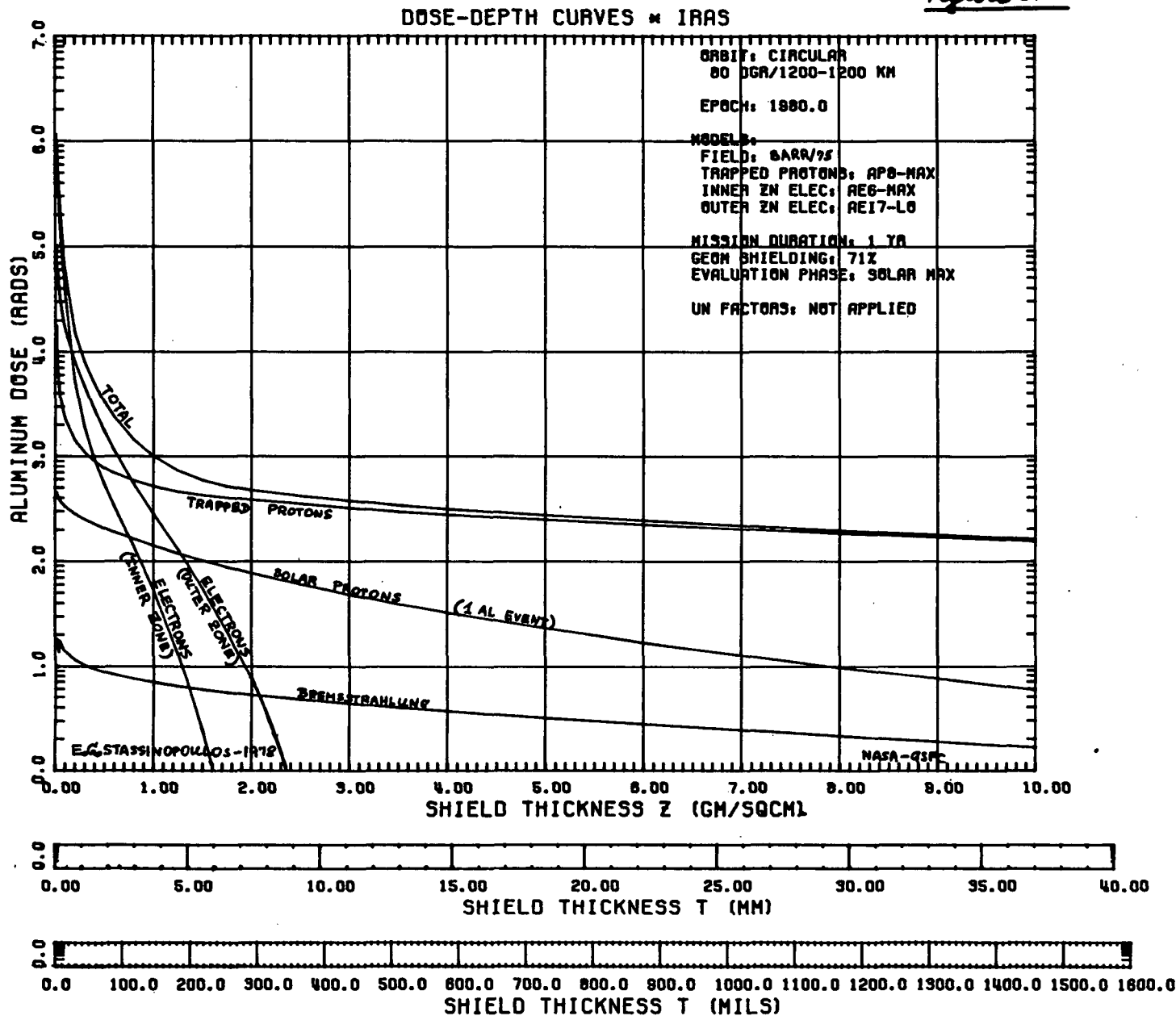


Figure 51



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Figure 52

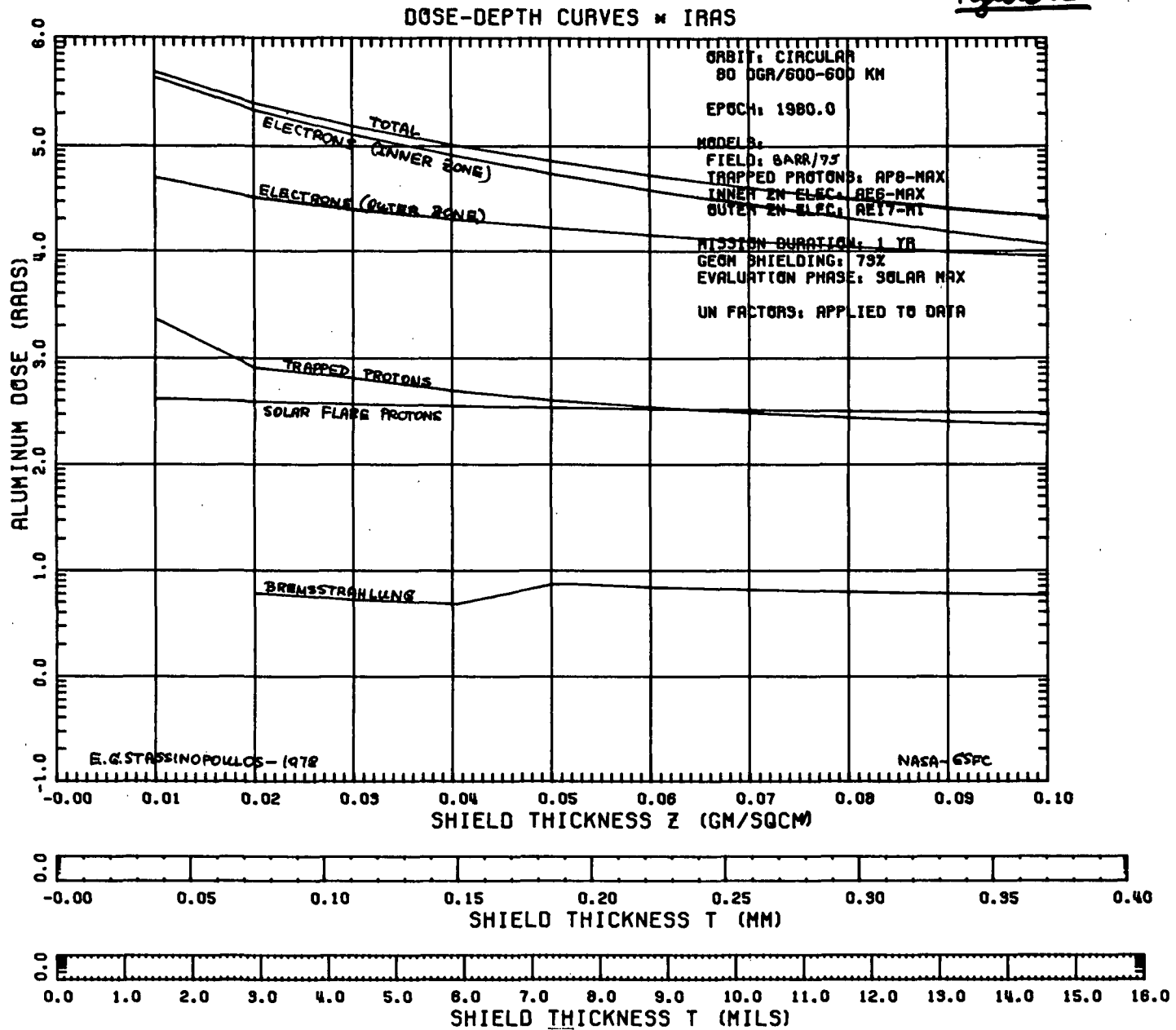


Figure B3

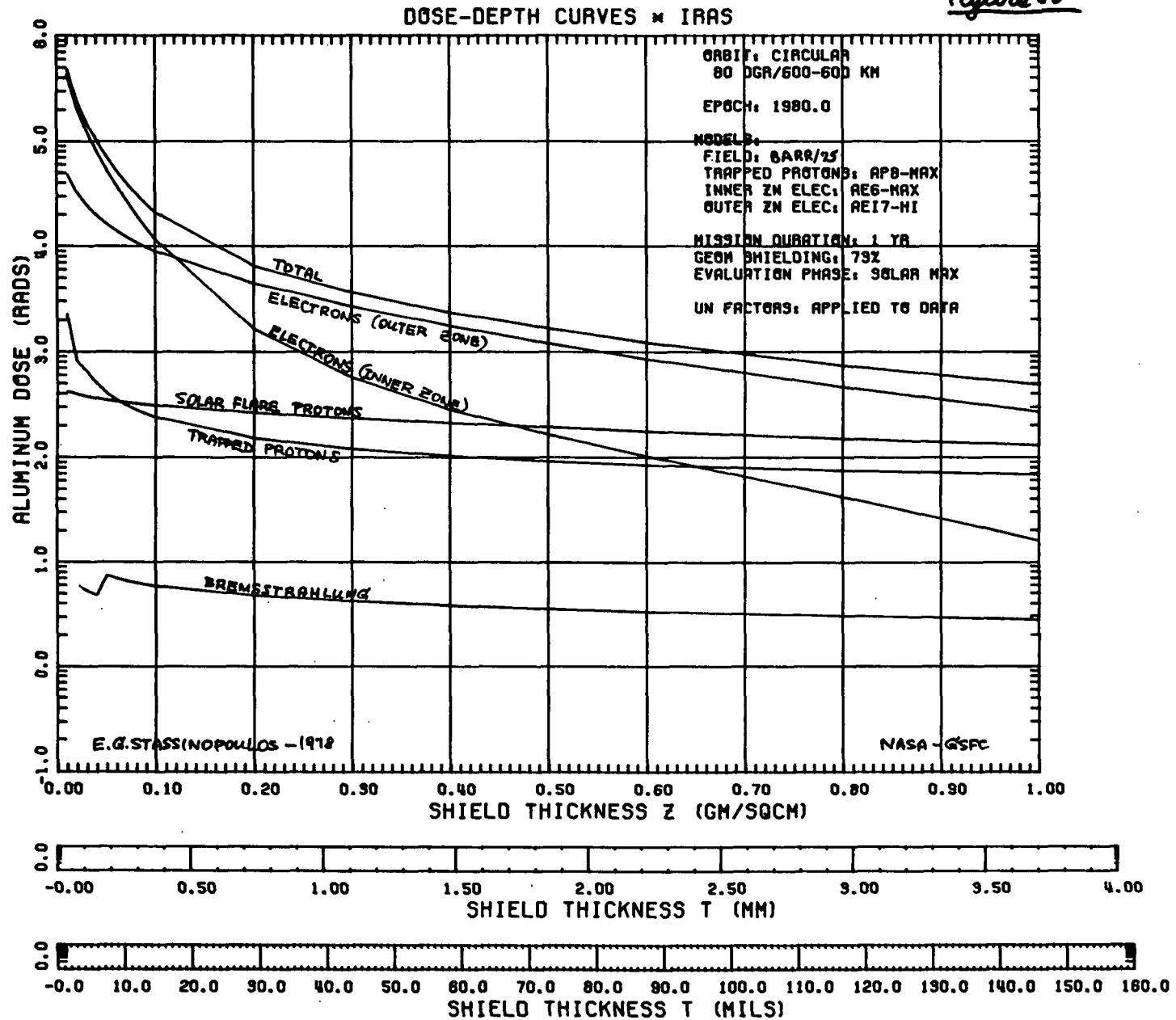
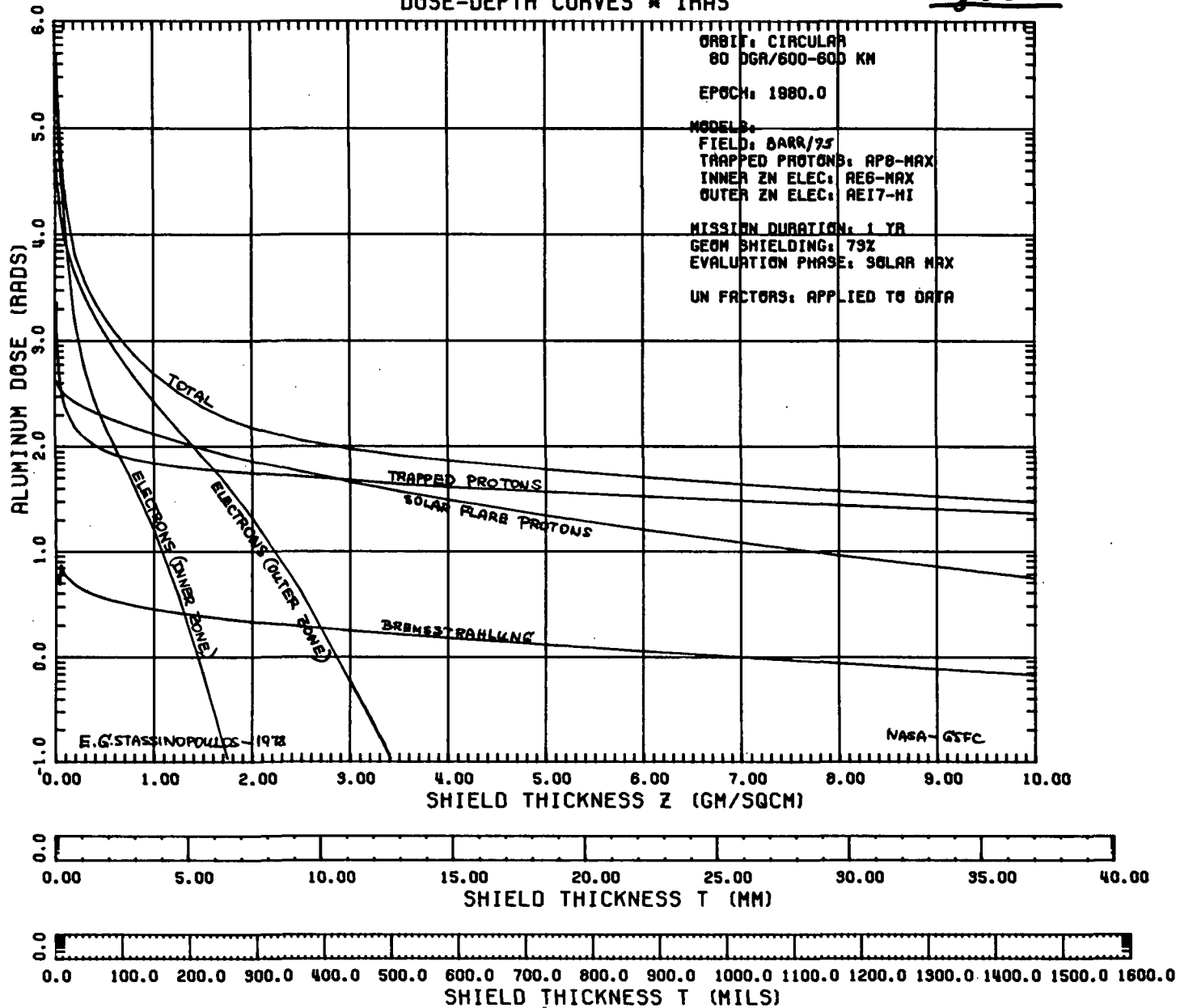


Figure 24

DOSE-DEPTH CURVES \* IRAS



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Figure 55

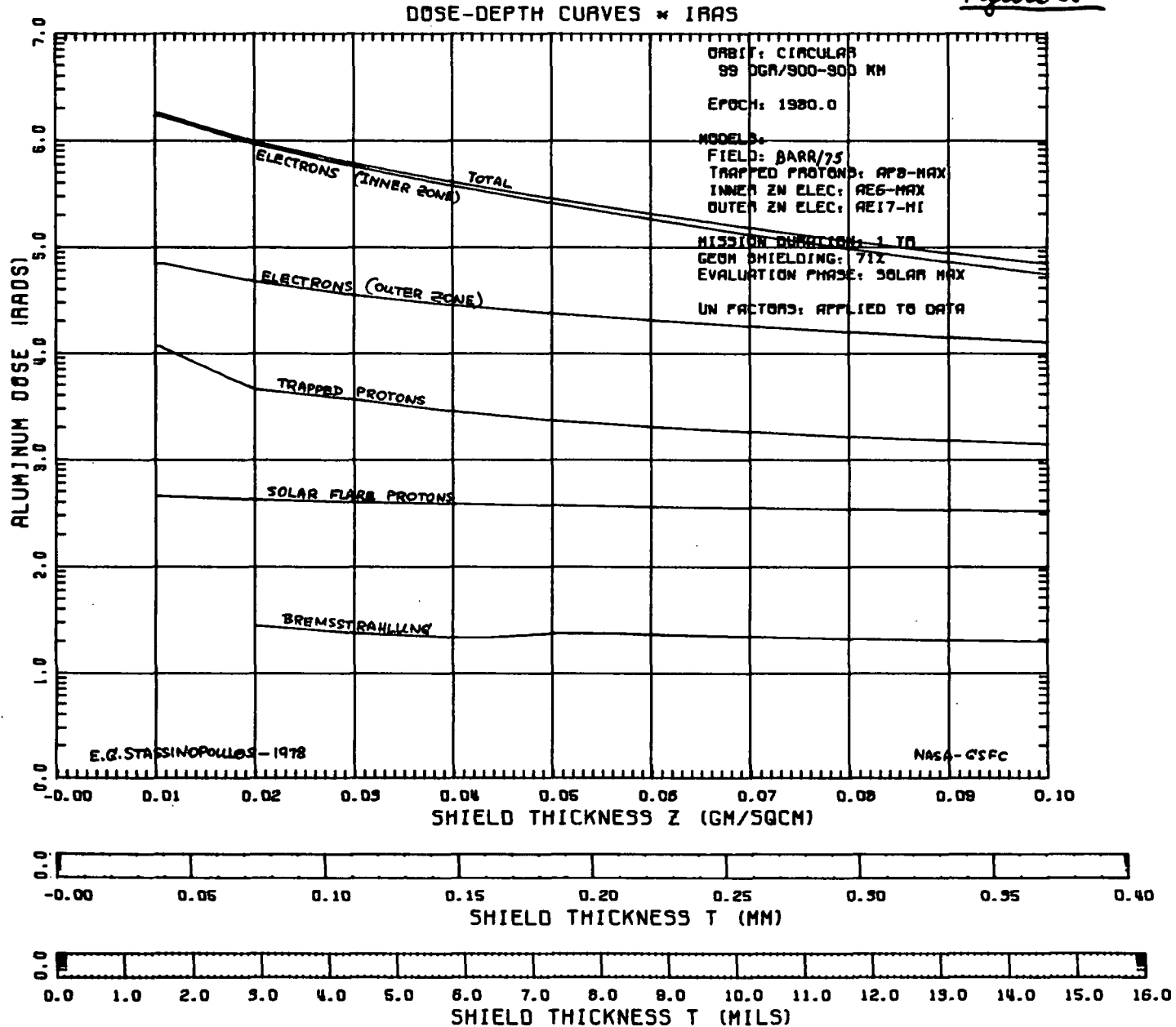


Figure 56

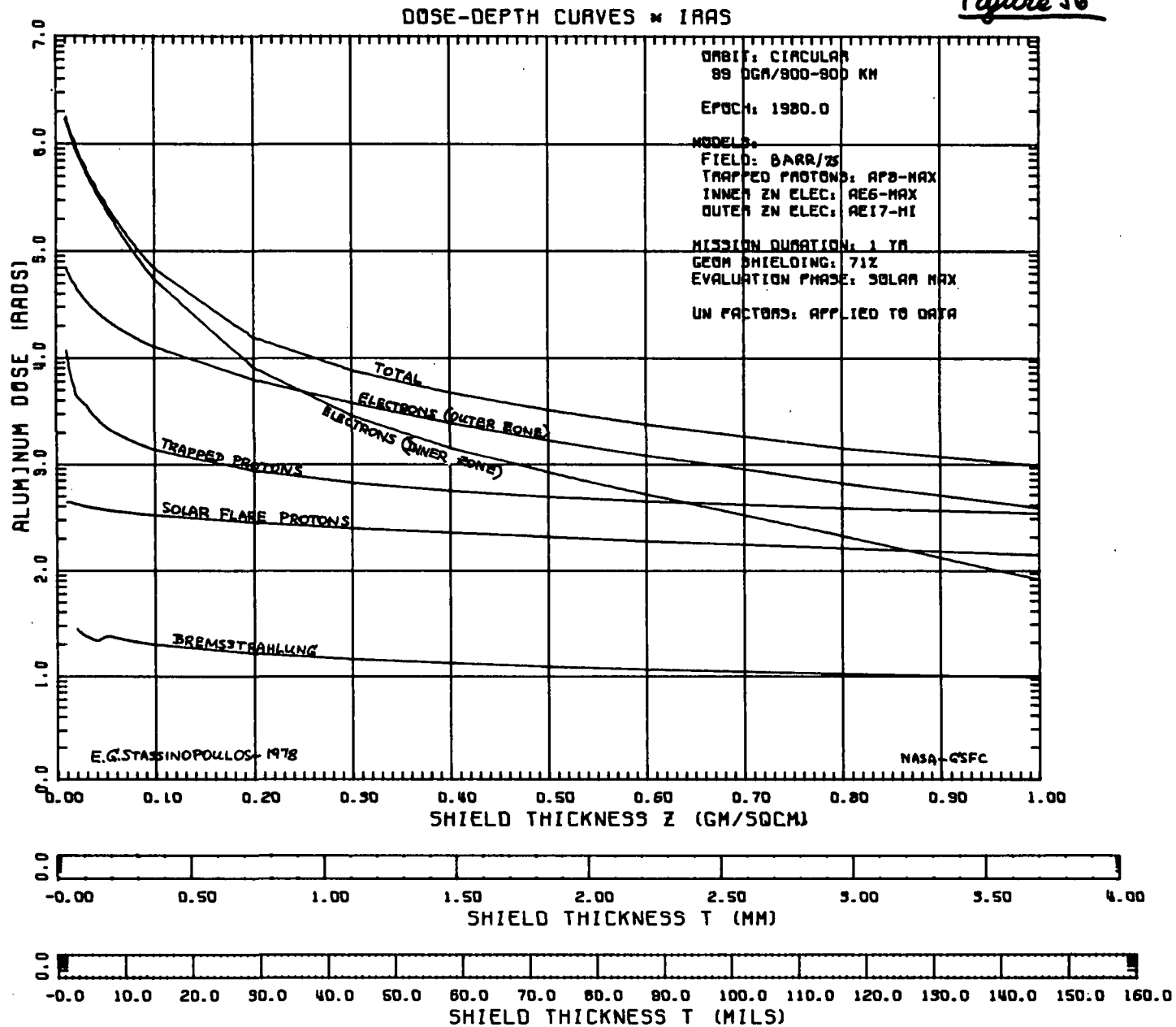




Figure 57

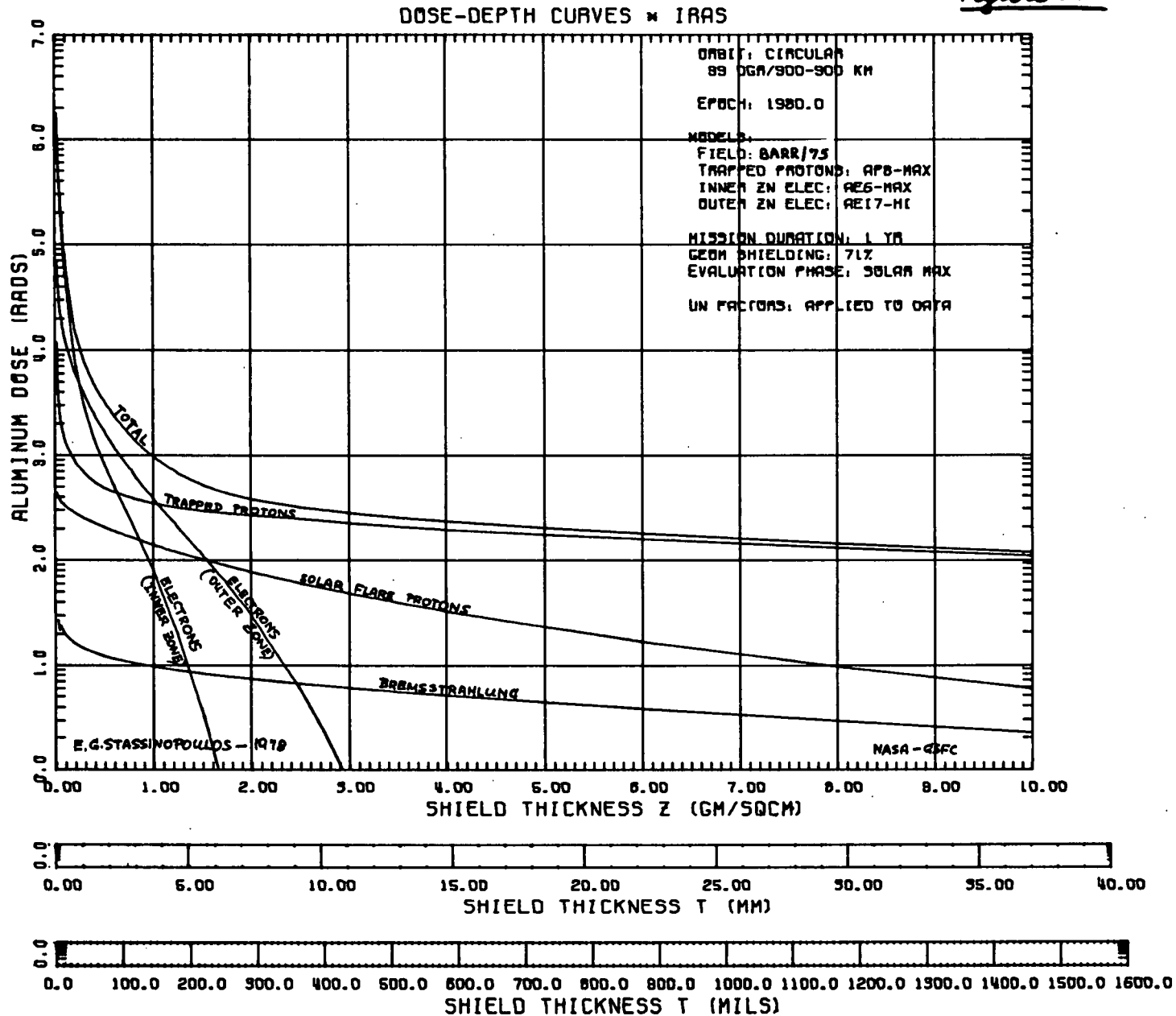
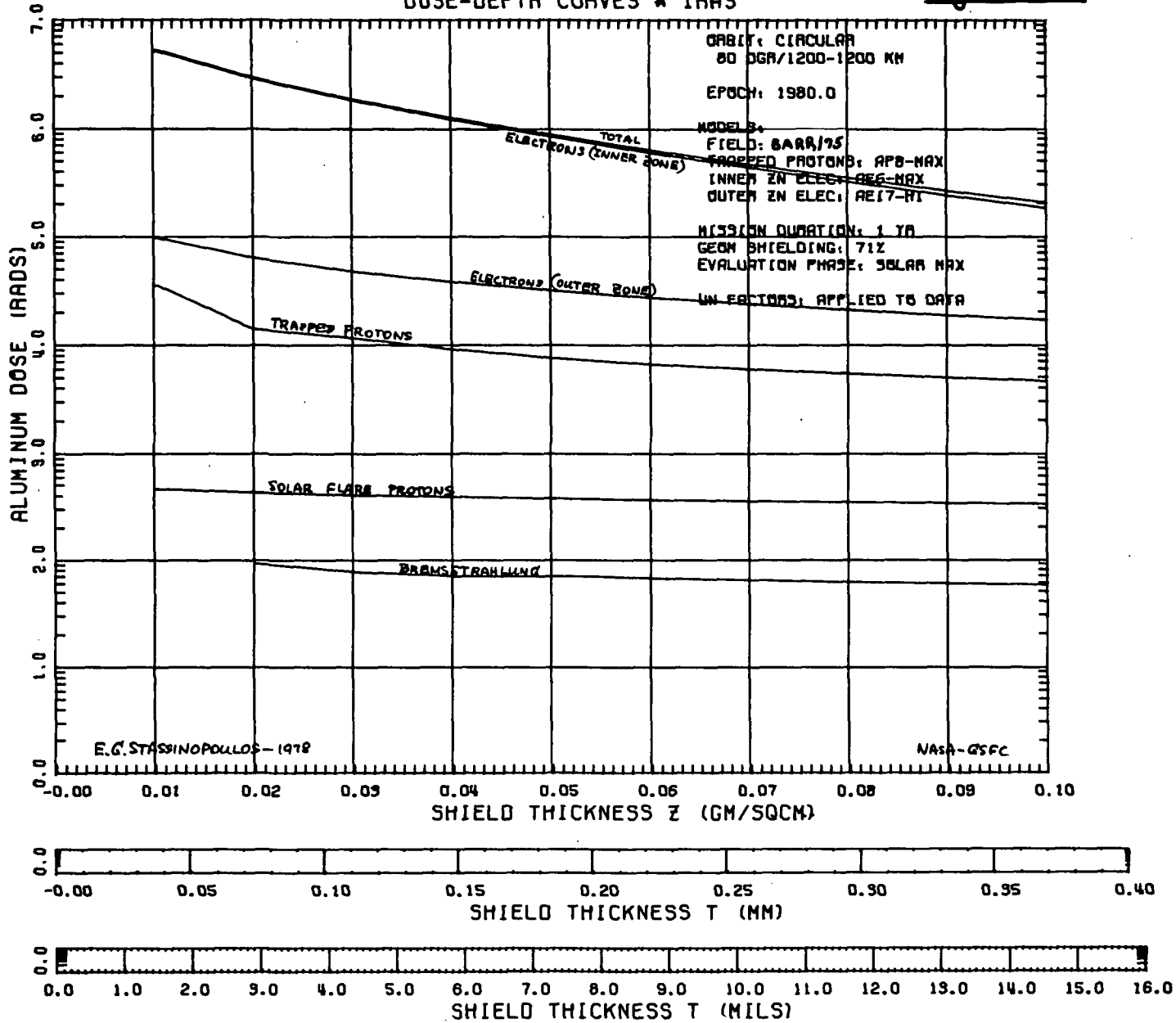


Figure 58

DOSE-DEPTH CURVES \* IRAS



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Figure 59

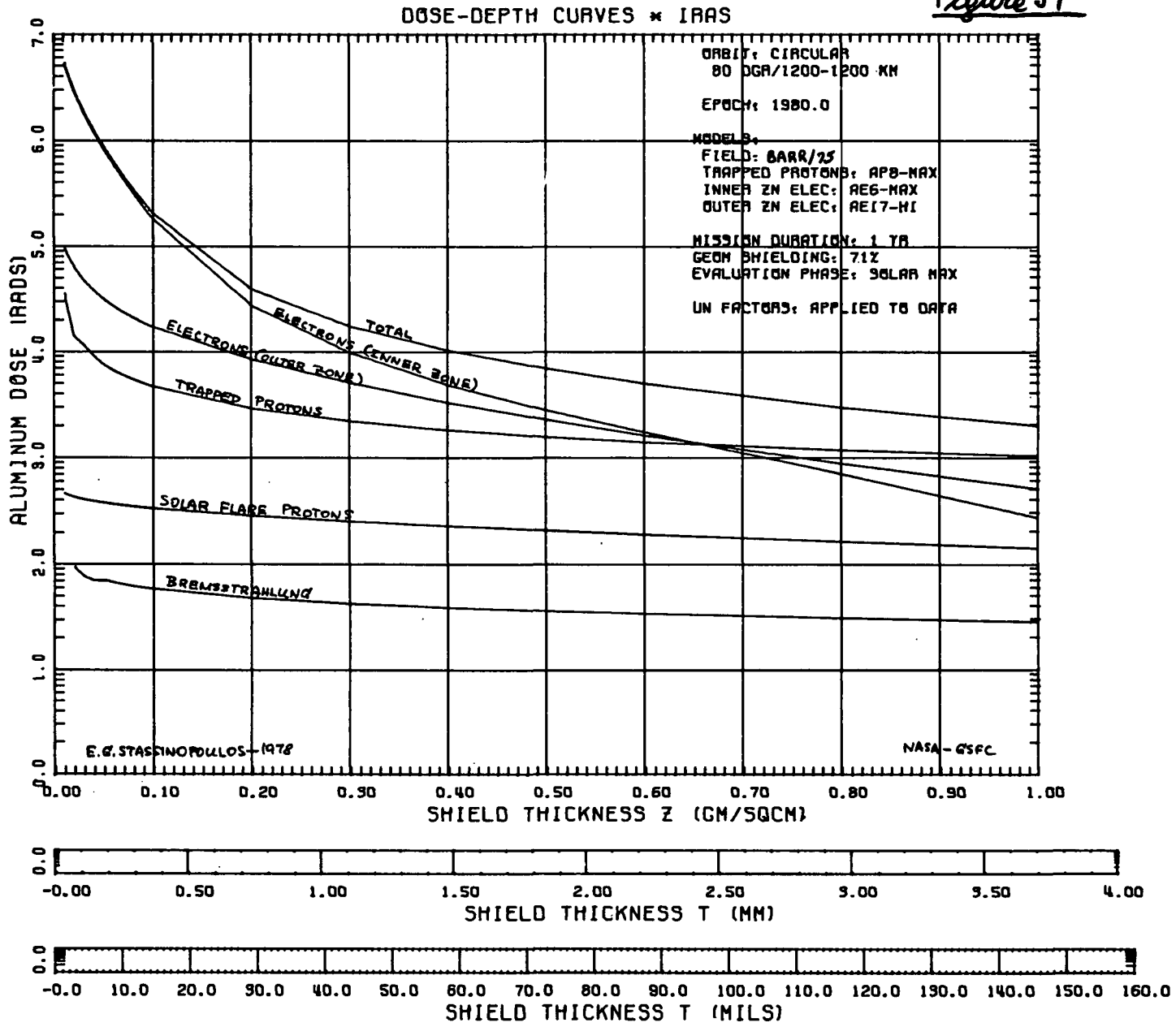
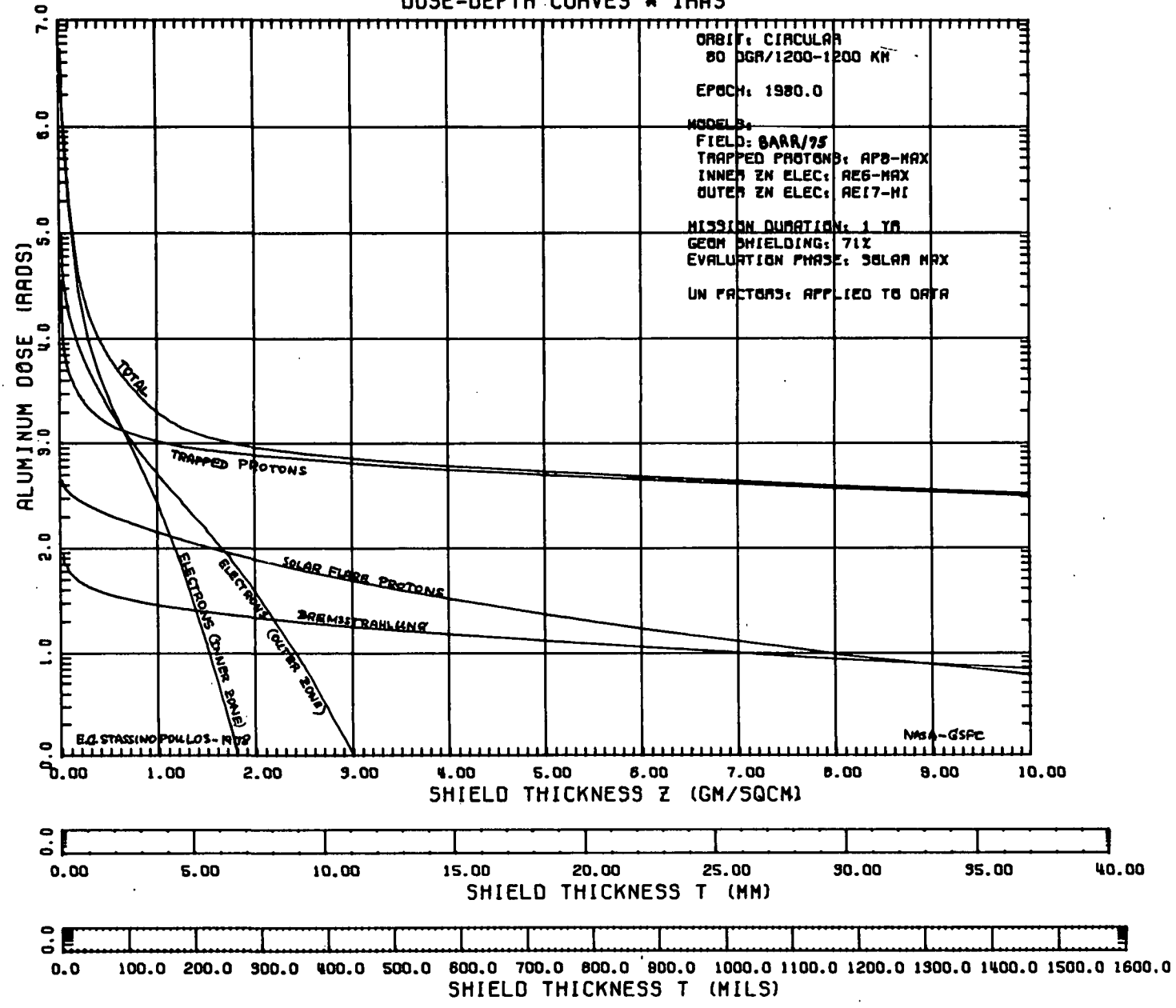


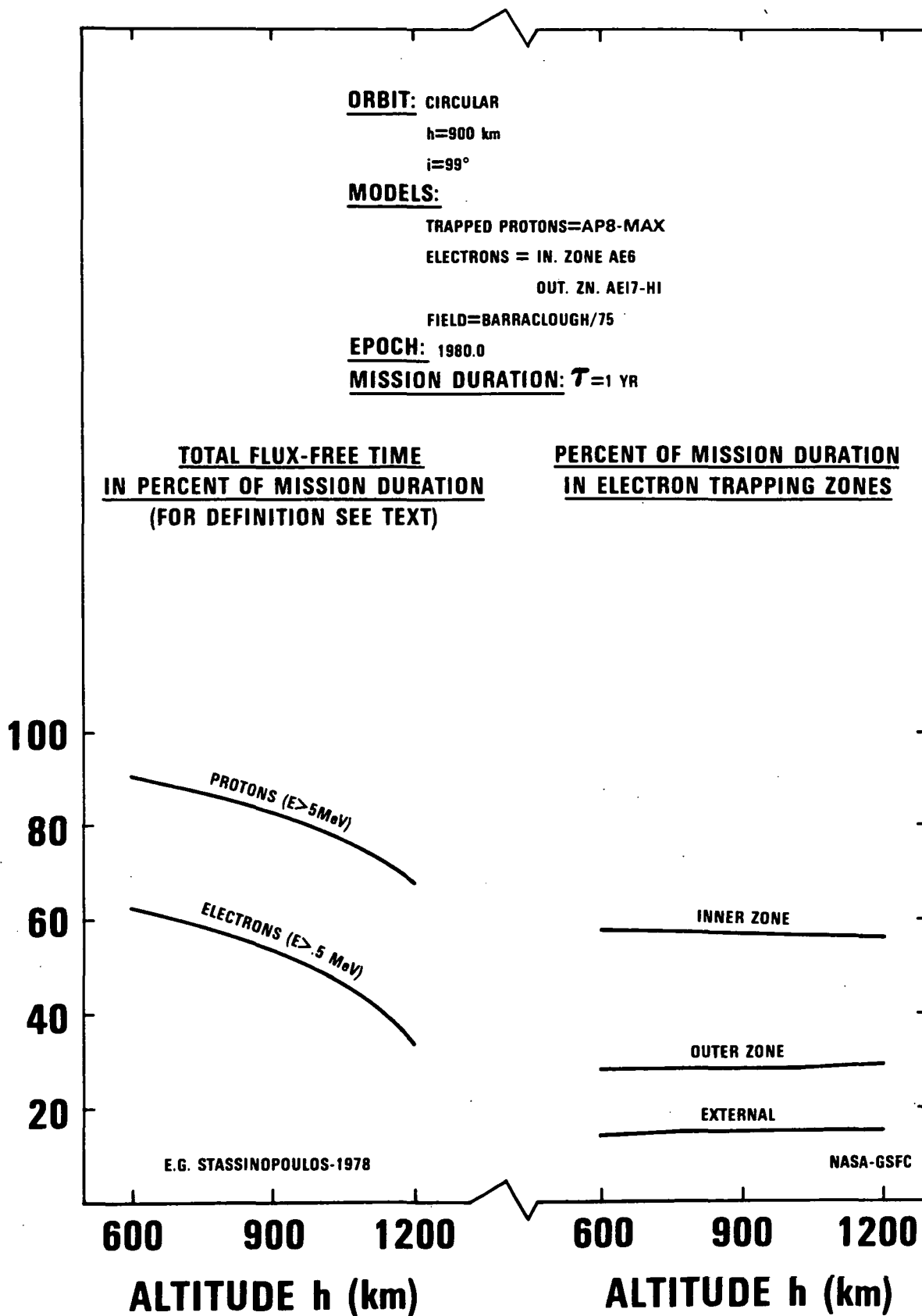
Figure 60

DOSE-DEPTH CURVES \* IAAS

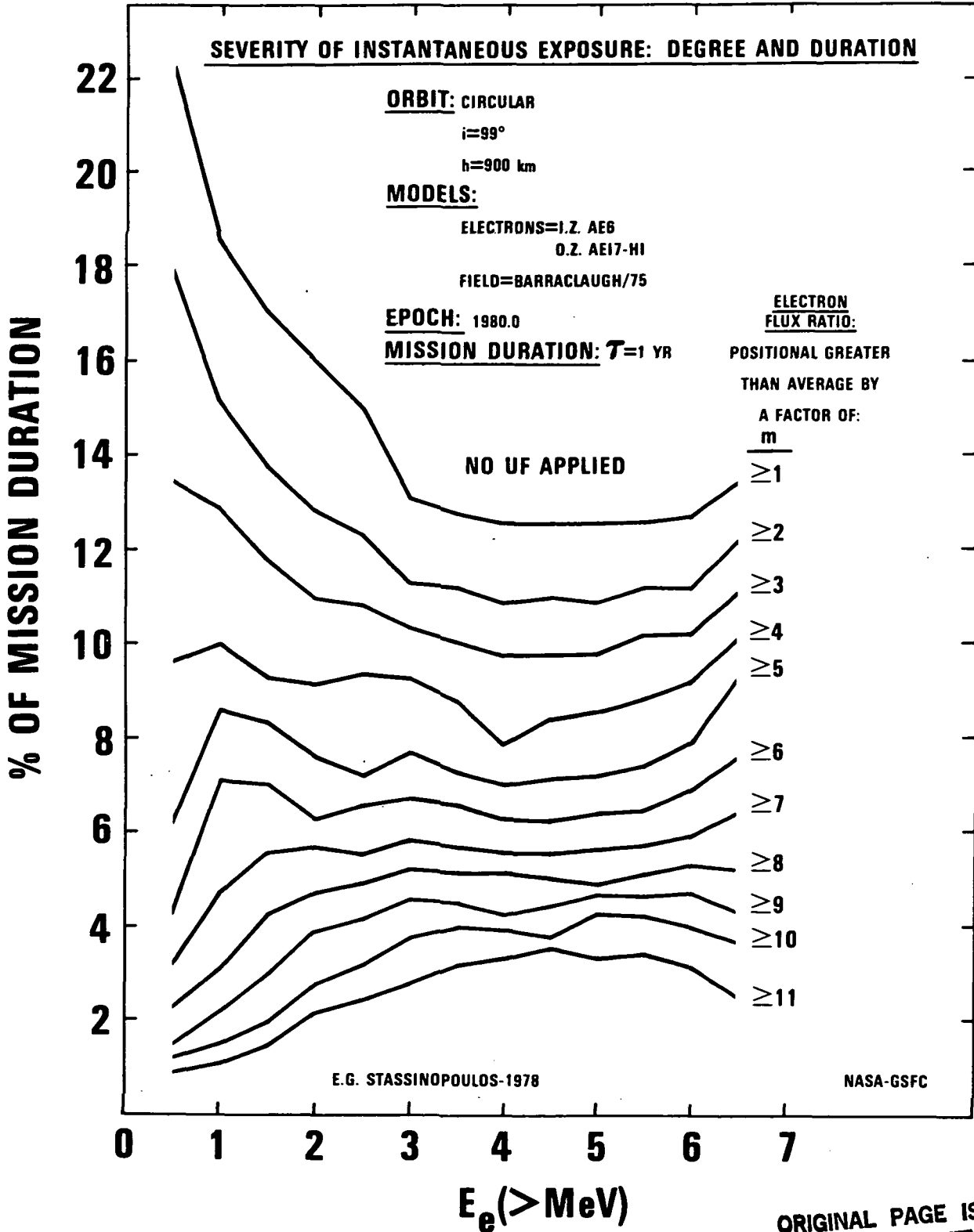


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# THE IRAS RADIATION ENVIRONMENT

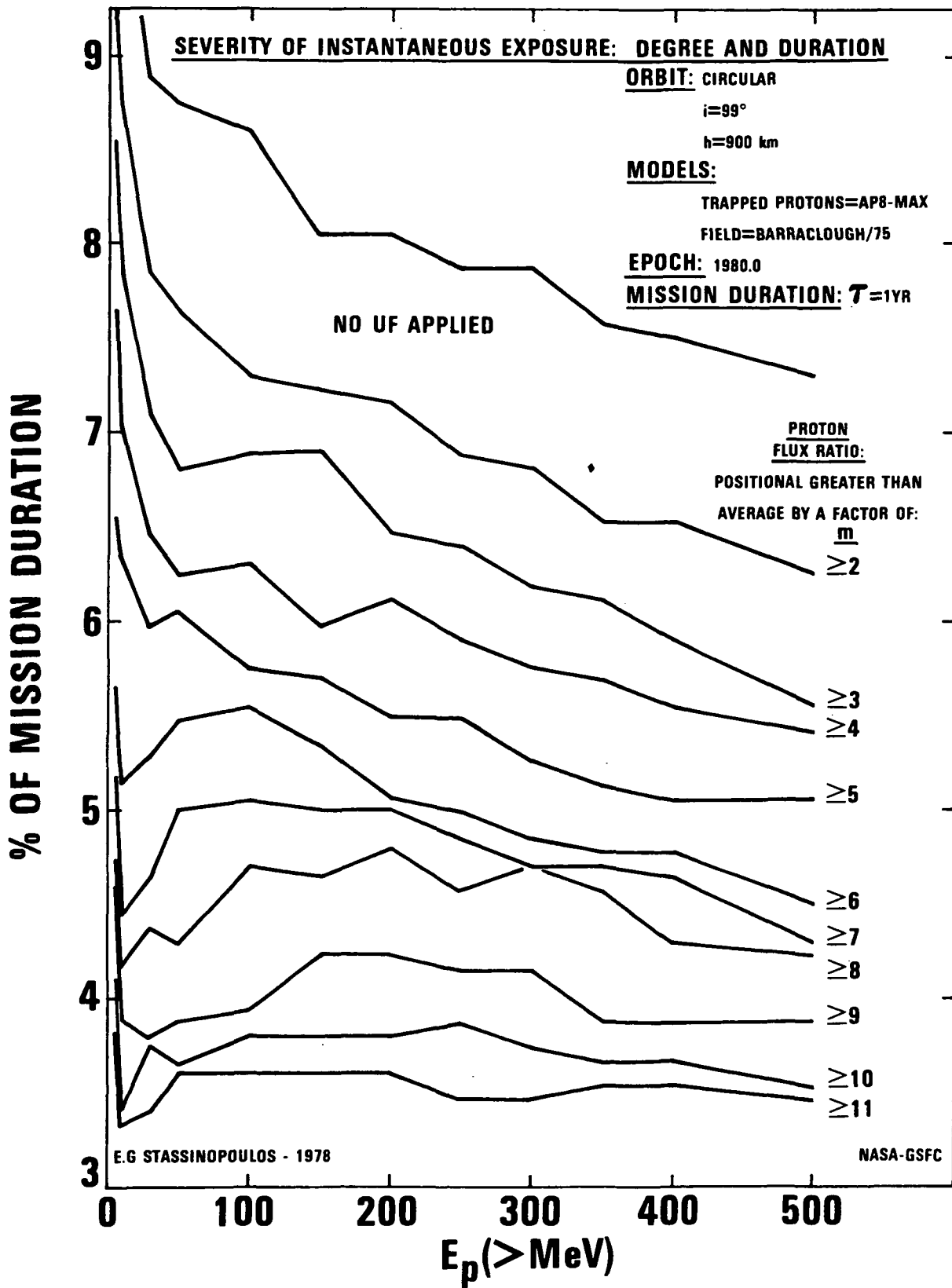


# THE IRAS RADIATION ENVIRONMENT



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# THE IRAS RADIATION ENVIRONMENT



# THE IRAS RADIATION ENVIRONMENT

MOST SEVERE PASS THROUGH THE SOUTH ATLANTIC ANOMALY  
INSTANTANEOUS, INTEGRAL, OMNIDIRECTIONAL, TRAPPED, ELECTRONS\*

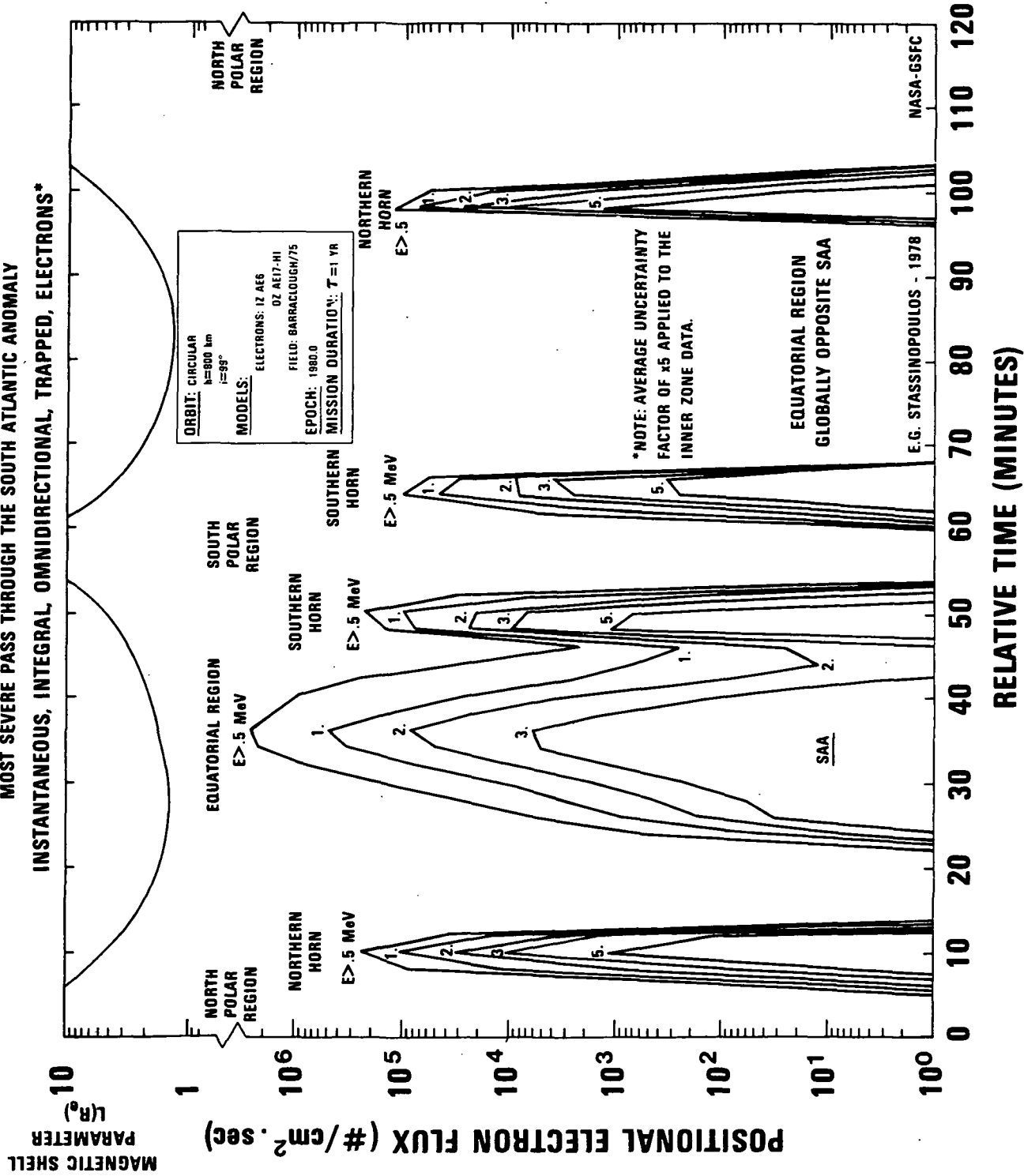


FIGURE 6

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# THE IRAS RADIATION ENVIRONMENT

MOST SEVERE PASS THROUGH THE SOUTH ATLANTIC ANOMALY

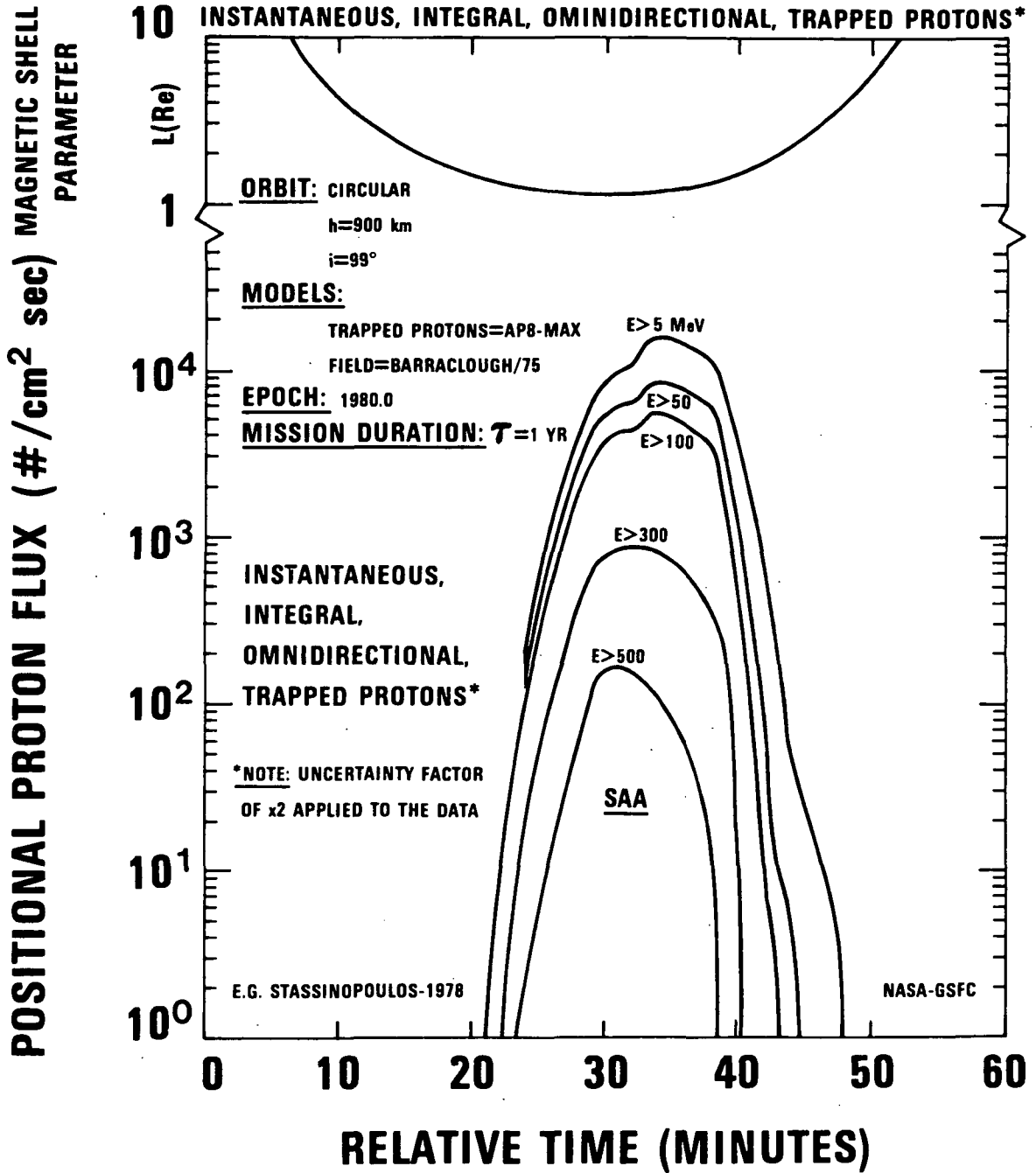
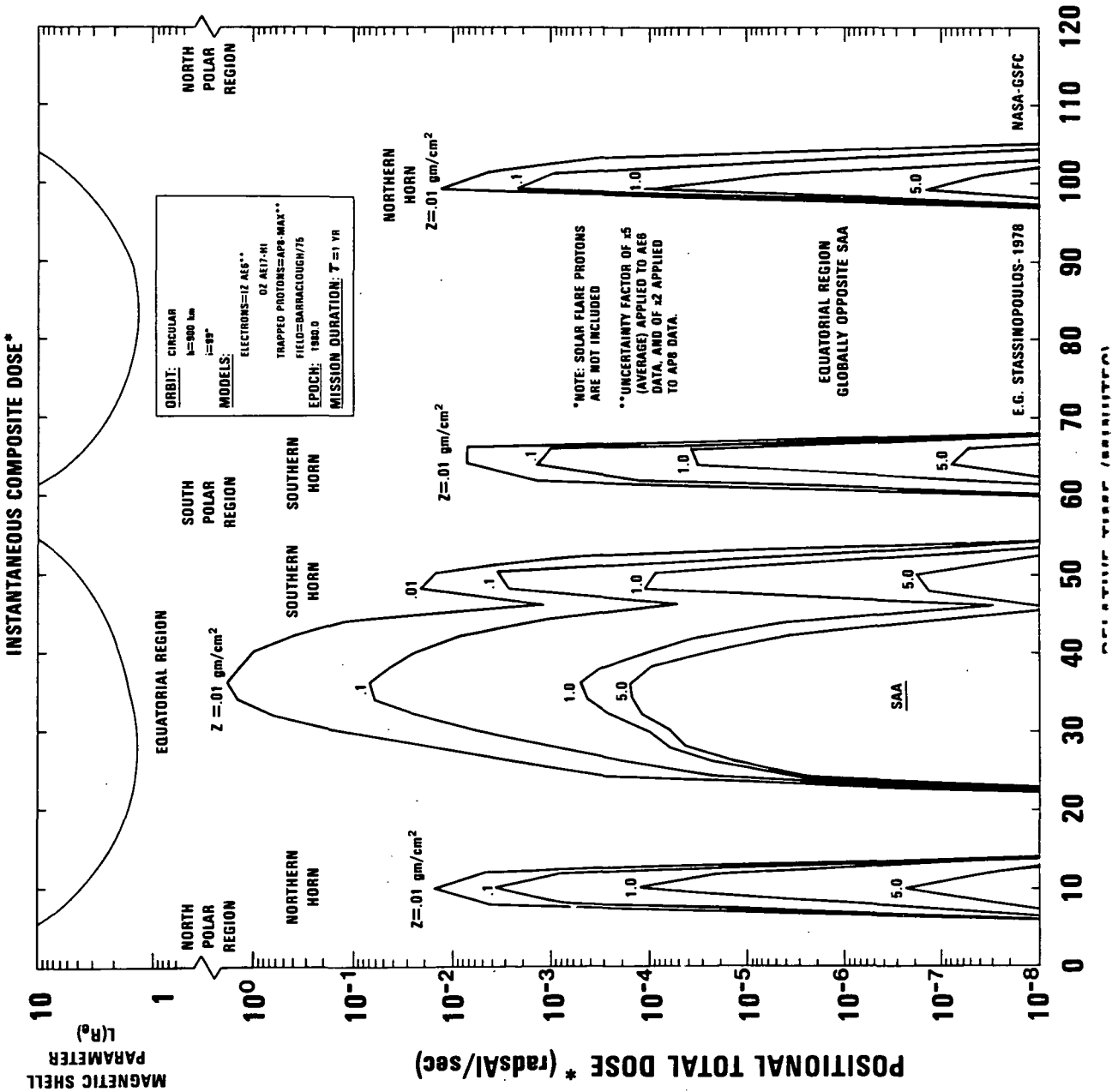


FIGURE 66

# THE IRAS RADIATION ENVIRONMENT

MOST SEVERE PASS THROUGH THE SOUTH ATLANTIC ANOMALY



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ALTITUDE: 900 KM

ELECTRONS: E > .04 MEV

INNER ZONE MODEL: AE6 (SOLAR MAX)

OUTER ZONE MODEL: AE17-HI

ALTITUDE= 500.0

ENERGY= 0.040

ELECTRONS

	-180.0	-177.0	-174.0	-171.0	-168.0	-165.0	-162.0	-159.0	-156.0	-153.0	-150.0	-147.0	-144.0	-141.0	-138.0
81.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
80.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
79.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
78.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
77.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
76.0	170799	26380	1	1	1	1	1	1	1	1	1	1	1	1	1
75.0	99088	111016	131196	167712	14930	1	1	1	1	1	1	1	1	1	1
74.0	90435	90530	90935	98782	113569	141644	155160	1	1	1	1	1	1	1	1
73.0	135543	114290	99938	91175	91165	92947	105798	130690	182455	1	1	1	1	1	1
72.0	188013	171362	154910	137461	111752	95599	91089	91529	403511	129350	188698	1	1	1	1
71.0	252406	232070	207707	189431	168375	151492	120935	99621	91123	91301	105031	136644	62840	1	1
70.0	309624	300609	281026	253763	226043	199585	176640	153692	124132	98900	90717	52239	110635	155224	1
69.0	408018	375006	339122	311075	302137	267094	238600	204377	178147	152959	118606	54520	90350	96280	123174
68.0	621163	555156	473603	407571	368516	324343	303551	272970	240768	201803	173236	147860	109273	89983	89175
67.0	750773	657065	552627	462684	527146	434226	380650	328653	303029	268900	230097	193465	142723	131825	97698
66.0	878016	846081	831400	745398	685076	634664	584232	444002	378258	323497	300097	257216	215375	181773	149440
65.0	1093728	1049442	949595	878975	843242	783030	697284	637044	550037	428787	366161	309975	287822	240370	196215
64.0	1134221	1050222	1081909	1120627	1069884	903391	849433	786897	691903	628495	516549	402445	338651	297623	259557
63.0	1295334	1242294	1184918	1131363	1068770	1104519	1033112	904598	842590	763899	671933	616352	463980	374018	310121
62.0	1408048	1408072	1346527	1299501	1218412	1157955	1092478	1101080	1014205	882362	828860	721486	632656	540918	408197
61.0	1340914	1400964	1406518	1436430	1380402	1314572	1227497	1154350	1083267	1105371	659604	849901	791445	673060	605114
60.0	1103889	1236076	1297306	1392002	1408236	1430954	1386517	1308900	1209856	1121833	1065839	1059543	894653	816580	715541
59.0	660025	788174	970075	1223463	1278699	1371212	1406663	1427794	1366528	1285272	1172815	1078474	1066534	966061	835114
58.0	255596	359025	530422	723521	905721	1163631	1272298	1373836	1398305	1425510	1324435	1224899	1124142	1044474	1048901
57.0	23711	87603	213823	308709	409216	699634	887436	1191383	1278900	1393420	1391849	1374751	1272139	1158441	1051844
56.0	1	664	10038	51129	155805	292409	464997	714811	940753	1220583	1301465	1172037	1381591	1303248	1201249
55.0	1	1	1	89	6042	41453	195216	306820	517684	762768	1031667	1227238	1331153	1353421	1344245
54.0	1	1	1	1	1	1	6417	53756	21387	351326	626188	847462	1174911	1253233	1332507
53.0	1	1	1	1	1	1	1	225	11428	93471	248993	432790	706603	966679	1187608
52.0	1	1	1	1	1	1	1	1	1	1261	25286	182584	308657	570915	809235
51.0	1	1	1	1	1	1	1	1	1	1	5475	62967	62967	226128	407865
50.0	1	1	1	1	1	1	1	1	1	1	1	434	18295	169019	3941
49.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
48.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
47.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
46.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
45.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
44.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
43.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
42.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
41.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
40.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
39.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
38.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
37.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
36.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
35.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
34.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
33.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
32.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
31.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
30.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
29.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
28.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
27.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
26.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
25.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
24.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
23.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
22.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
21.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
20.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
19.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
18.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
17.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
16.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
15.0	4	5	6	3	1	1	1	1	1	1	1	1	1	1	1
14.0	10	10	6	3	6	2	1	1	1	1	1	1	1	1	1
13.0	24	24	44	23	17	11	6	2	1	1	1	1	1	1	1
12.0	23	20	30	30	29	23	18	12	5	1	1	1	1	1	1
11.0	22	20	30	33	26	33	29	24	17	11	5	1	1	1	1
10.0	18	23	27	33	36	38	39	39	33	25	17	10	4	1	1
9.0	15	19	25	30	35	39	43	46	44	41	35	26	18	9	3
8.0	12	10	20	24	30	36	40	47	50	50	48	45	39	29	18
7.0	10	14	17	20	25	32	37	42	46	52	55	50	53	50	39
6.0	8	11	13	17	21	27	31	37	43	50	56	62	62	63	59
5.0	7	8	11	14	18	22	27	32	37	48	53	61	68	70	75
4.0	6	7	9	11	14	18	24	28	35	42	49	54	64	74	78
3.0	6	6	8	10	12	16	19	23	29	37	42	51	59	70	76
2.0	6	6	8	11	13	16	20	24	30	38	45	55	62	72	77
1.0	4	5	7	9	10	12	15	18	22	27	32	40	49	59	72

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ALTITUDE= 900.0 ENERGY= 0.040

ELECTRONS

	-135.0	-132.0	-129.0	-126.0	-123.0	-120.0	-117.0	-114.0	-111.0	-108.0	-105.0	-102.0	-99.0	-96.0	-93.0
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6.0	55	47	37	24	14	5	1	1	1	1	1	1	1	1	1
5.0	77	71	65	59	45	33	21	10	3	1	1	1	1	3	6
4.0	84	90	91	97	88	78	63	49	33	18	8	12	20	33	83
3.0	89	96	107	122	121	127	123	124	109	60	65	46	67	132	246
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-2.0	66	86	137	141	183	219	291	365	451	581	794	1117	1485	2236	3194
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	ALTIUDE= 900.0				ENERGY= 0.040				ELECTRONS											
	-90.0	-87.0	-84.0	-81.0	-78.0	-75.0	-72.0	-69.0	-66.0	-63.0	-60.0	-57.0	-54.0	-51.0	-48.0					
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75.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1					
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70.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1					
69.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1					
68.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1					
67.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1					
66.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1					
65.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1					
64.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1					
63.0	1	1	1	1	1	1	1	1	1	1	1	1	1	3686	160151					
62.0	1	1	1	1	1	1	1	1	1	1	1	1	1	177335	125929					
61.0	1	1	1	1	1	1	1	1	1	1	1	1	1	105291	96680					
60.0	127786	146469	159648	164131	158608	144681	127233	111214	98935	91267	42245	101803	130657	165678	201502					
59.0	84703	69325	92670	94347	93900	91426	88127	86282	84753	82705	121200	155947	183792	217955	265984					
58.0	84289	63002	83445	84845	85320	86452	91360	102969	123343	151316	173800	203203	243690	287625	325324					
57.0	132795	118730	112591	111732	116160	126876	143358	153321	173691	190498	226610	267166	312337	343275	408859					
56.0	171231	166315	161299	160916	165671	174221	183478	201362	228639	258427	302175	320339	376292	450098	592461					
55.0	225742	217307	211709	211095	216724	227386	241590	264127	293219	306856	354841	410474	521667	659053	734089					
54.0	274343	269109	268319	270723	274768	282166	291546	311222	352088	394921	480754	613808	665520	782952	891319					
53.0	349846	337420	324352	323103	331514	350664	370618	406518	481255	580317	645528	724094	858443	907575	1058672					
52.0	518962	474127	446922	441469	454823	490267	541412	556690	630411	695554	797355	860573	955473	1126761	1144848					
51.0	620682	552080	580487	582018	553109	616741	654678	702907	780574	829241	856845	1043268	1117883	1150518	1252506					
50.0	732611	727506	735218	733058	747900	762243	782935	818571	877009	989705	1097925	1053239	1180915	1290025	1412253					
49.0	881479	838300	819701	817711	831528	862246	917924	1013840	1056189	1054312	1115476	1210050	1331790	1442144	1479636					
48.0	936927	944436	901987	980189	988954	994249	1003406	1024986	1082025	1163208	1265647	1358397	1460693	1452621	1393314					
47.0	1054300	1020646	1002679	1003261	1018910	1051786	1101091	1154357	1235880	1305812	1407527	1415087	1430693	1317467	1147982					
46.0	1180161	1159869	1151243	1157963	1175118	1206926	1232863	1288765	1372444	1373456	1385437	1332066	1258201	970748	709724					
45.0	1216554	1233611	1253395	1273103	1289434	1300815	1310123	1322222	1341556	1303841	1235624	1098162	818343	556642	302605					
44.0	1122540	1168843	1214355	1249789	1265133	1267650	1253032	1226836	1195500	1116395	881188	687308	411502	238224	51432					
43.0	859195	957166	1073463	1096082	1111257	1119524	1100117	577570	437499	695423	485365	300263	172288	20545	331					
42.0	506303	610700	676428	718912	736249	723722	680580	617538	458402	310250	213266	60751	6112	1	1					
41.0	198400	255911	310774	353552	368472	353752	312254	257310	199021	82492	15714	753	1	1	1					
40.0	13483	42755	90171	138846	159183	136708	89460	41013	12716	1631	1	1	1	1	1					
39.0	1	26	1071	2879	4054	3372	1521	157	1	1	1	1	1	1	1					
38.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1					
37.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1					
36.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1					
35.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1					
34.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1					
33.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1					
32.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1					
31.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1					
30.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1					
29.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1					
28.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1					
27.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1					
26.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1					
25.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1					
24.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1					
23.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1					
22.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1					
21.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1					
20.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1					
19.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1					
18.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1					
17.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1					
16.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1					
15.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	3563					
14.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	16884					
13.0	1	1	1	1	1	1	1	1	1	1	1	598	17068	32666	29489					
12.0	1	1	1	1	1	1	1	1	1	1	1	3344	24549	47393	45308					
11.0	1	1	1	1	1	1	1	1	1	1	1	26696	58645	68931	70527					
10.0	1	1	1	1	1	1	1	1	1	1	1	2820	27081	57049	79407					
9.0	1	1	1	1	1	1	1	1	1	1	1	3059	80524	107165	126304					
8.0	1	1	1	1	1	1	1	1	1	1	1	2321	19316	48510	119689					
7.0	1	1	1	1	1	1	1	1	1	1	1	972	11209	33586	71217					
6.0	1	1	1	1	1	1	1	1	1	1	1	5341	22063	53039	103617					
5.0	21	76	296	989	3756	10742	29864	62561	105865	167805	222789	268343	313434	256840	245823					
4.0	156	484	1228	3470	8343	20858	47769	86555	142813	210883	289935	363496	337618	311816	299397					
3.0	515	1214	2819	6089	14445	32858	67097	128553	206929	289180	372661	359705	376547	356943	388344					
2.0	947	2169	4991	11054	22025	43578	84711	144707	227654	333003	384724	409618	431285	456332	427186					
1.0	1536	3242	6736	16395	30211	55637	95254	167985	250492	355472	416676	467723	517097	575426	457934					





	ALTIMUDE= 900.0		ENERGY= 3.043		ELECTRONS										
	-45.0	-42.0	-39.0	-36.0	-33.0	-30.0	-27.0	-24.0	-21.0	-18.0	-15.0	-12.0	-9.0	-6.0	-3.0
81.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
80.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
79.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
78.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
77.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
76.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
75.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
74.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
73.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
72.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
71.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
70.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
69.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
68.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
67.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
66.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
65.0	115842	143304	110761	101360	105702	131607	172429	201922	235682	282153	318690	349975	381100	422877	476262
64.0	118419	100761	100518	119369	158899	151860	228169	273562	315774	349754	387971	435913	508917	607131	727663
63.0	98039	107553	141923	178985	216285	257089	303238	345507	384565	437842	521861	638580	742893	788339	865404
62.0	123558	166047	199234	237204	286474	339802	370017	427717	515951	644161	748488	806535	908783	967613	1014223
61.0	180721	218129	269030	319451	350620	407594	488443	620718	741960	807095	926450	976309	1048981	1156029	1267475
60.0	239374	288143	333866	381830	449813	575050	722773	789537	914123	974565	1063115	1185339	1264947	1265033	1303586
59.0	322197	348828	413706	516665	681231	758683	871805	960650	1049781	1186475	1258176	1276692	1323491	1391682	1484891
58.0	378726	453234	594549	722855	813345	941997	1011232	1156158	1252977	1273369	1329771	1415805	1508828	1571486	1639108
57.0	517335	683855	754333	894316	962500	1102174	1252880	1252426	1317245	1413237	1513002	1599580	1620272	1601555	1580277
56.0	705072	804373	921534	1016729	1186842	1224810	1289099	1382878	1500141	1596175	1611747	1683363	1534480	1442378	1388647
55.0	875945	941038	1094054	1211228	1245915	1330703	1466665	1559105	1608813	1602750	1517128	1429162	1258541	989136	807334
54.0	986144	1164976	1191710	1271454	1390482	1504340	1616935	1585379	1523019	1424011	1215819	922575	751743	488912	339143
53.0	1169567	1264669	1304235	1442777	1565173	1567351	1561315	1428986	1254491	931442	712024	442475	253232	169163	47918
52.0	1229301	1349257	1471075	1569596	1559528	1452630	1377166	986650	753717	443585	281760	122064	22668	4102	1
51.0	1389776	1512536	1527635	1508809	1387165	1109496	808779	500107	297335	125466	21894	2115	1	1	1
50.0	1523725	1510755	1418574	1317422	910902	631611	349041	191671	29598	2445	1	1	1	1	1
49.0	1484513	1354518	1105343	786712	453746	258984	58846	5461	1	1	1	1	1	1	1
48.0	1308631	460811	653757	343644	158357	17397	242	1	1	1	1	1	1	1	1
47.0	613141	466753	268461	63766	4323	1	1	1	1	1	1	1	1	1	1
46.0	384573	216065	25630	497	1	1	1	1	1	1	1	1	1	1	1
45.0	114589	9427	1	1	1	1	1	1	1	1	1	1	1	1	1
44.0	2755	1	1	1	1	1	1	1	1	1	1	1	1	1	1
43.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
42.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
41.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
40.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
39.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
38.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
37.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
36.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
35.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
34.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
33.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
32.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
31.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
30.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
29.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
28.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
27.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
26.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
25.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
24.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
23.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
22.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
21.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
20.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
19.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
18.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
17.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
16.0	1131	1985	2748	3637	3767	3388	2617	1698	1151	625	378	348	312	239	175
15.0	7065	6622	7638	8047	6697	5400	4336	2630	1621	1014	812	727	537	412	296
14.0	14290	15665	15674	13562	10548	8738	5279	3588	2282	1774	1463	1144	655	590	419
13.0	28571	25029	23573	19283	16229	10880	6670	4561	3624	2978	2138	1555	1114	766	509
12.0	42496	41155	32636	27514	21705	13066	6585	6516	5457	3951	2825	1980	1386	947	608
11.0	58494	54706	44332	39103	25154	15773	11309	10042	7411	5273	3613	2435	1618	1114	722
10.0	86664	70396	45665	29085	19745	16377	13185	9491	6411	4561	3091	2038	1364	910	978
9.0	104568	81337	78628	51449	35037	26794	24197	16718	12124	7956	5573	3787	2456	1567	978
8.0	119756	109581	91555	57346	42236	35585	30975	21261	14865	10169	7038	4389	2817	1758	1148
7.0	147107	140828	94205	66560	54634	50254	37236	27830	18656	12200	7689	4961	3309	2154	1474
6.0	185896	159410	108180	84175	74492	68962	48807	35576	22074	14135	9192	6138	4255	2890	1937
5.0	241335	173354	124968	105405	100387	66539	63632	41681	25547	16811	12044	8327	5612	3975	2788
4.0	279724	156342	146649	134358	135160	108346	76614	48518	32481	21552	16222	11608	8126	5998	4398
3.0	298413	216088	183071	179371	184183	138115	84690	58005	42476	29504	22478	16641	12921	9296	7126
2.0	323259	265786	241952	246520	245414	154856	102184	76336	57247	43652	34283	26241	21143	15811	11311
1.0	357778	317596	307473	326466	276465	189313	135859	103618	79572	66620	53891	42651	35584	29116	18964



ALTITUDE= 900.0 ENERGY= 0.040

ELECTRONS

	0.0	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	33.0	36.0	39.0	42.0
81.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
80.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
79.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
78.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
77.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
76.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
75.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
74.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
73.0	4483	193571	151839	128052	112474	103953	101308	100128	105740	107150	115236	125513	138181	149595	159538
72.0	133576	114442	105031	102299	102385	108132	118535	135139	149141	165433	172154	182215	192501	201688	208178
71.0	133670	114680	111243	125367	145182	166629	178365	191528	207364	217208	228743	241752	257921	266666	273943
70.0	123406	146487	172362	186525	204950	221302	236869	256841	275918	287370	305076	324432	322458	324666	330142
69.0	185455	227715	228362	249200	278167	293542	315076	334286	338081	346754	365347	381754	396511	409764	424768
68.0	247535	282698	304369	336953	344300	358891	382318	404225	428988	453294	489308	526724	564126	602626	642950
67.0	335205	346587	372123	401051	431436	467569	514657	571599	629593	686576	694084	708949	721217	735555	752918
66.0	401122	436623	492839	558020	632100	709063	728331	748213	774762	806731	848295	852442	884899	884346	885499
65.0	555562	680278	728341	755691	791087	843812	903363	926839	943804	946092	966402	990002	1033917	1068200	1090994
64.0	761037	869439	881638	948701	955581	983675	1028027	1085750	1130290	1176026	1181718	1183360	1135852	1126481	1121250
63.0	958831	974250	1022151	1093507	1158189	1226397	1214677	1199038	1199473	1212766	1223240	1229167	1237663	1247072	1256900
62.0	1103176	1189073	1256632	1233969	1242090	1242366	1281020	1303382	1330540	1360363	1382541	1387279	1353985	1398734	1405240
61.0	1250860	1270550	1298594	1331256	1374853	1426006	1453494	1471157	1495029	1527779	1514998	1482860	1451073	1424703	1403907
60.0	1347479	1411428	1476531	1505847	1548311	1602023	1559310	1527086	1509673	1502193	1461864	1401000	1343788	1295305	1252814
59.0	1525643	1592223	1613144	1575691	1562255	1563566	1475377	1407735	1356666	1315583	1284490	1158044	1042219	946115	864514
58.0	1595842	1593906	1547146	1458022	1399512	1358853	1221962	1063848	939296	838806	759364	691979	602190	509911	437604
57.0	1475215	1413366	1336842	1110022	845502	822942	727455	590497	475034	390757	326662	276321	237627	205081	179338
56.0	1112844	921354	782901	618898	466658	363694	290384	238290	193265	104425	57120	31091	16964	8768	4108
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14.0	291	151	127	87	61	41	28	20	13	6	3	1	1	1	1
13.0	343	235	152	102	70	51	36	24	17	13	9	6	4	2	1
12.0	420	275	146	123	65	61	41	30	22	16	12	9	6	4	2
11.0	487	334	223	145	99	71	50	35	26	19	14	10	8	6	4
10.0	566	371	236	164	111	80	58	41	29	22	17	12	9	7	5
9.0	640	442	263	192	130	93	63	48	34	26	19	15	11	8	6
8.0	790	538	341	230	165	111	79	57	41	31	22	17	13	9	7
7.0	997	670	449	321	215	144	103	74	53	38	29	21	16	11	8
6.0	1377	912	646	428	304	203	145	104	75	54	39	28	20	14	10
5.0	1546	1358	930	667	441	313	223	150	108	78	57	42	30	20	15
4.0	3014	2071	1529	995	698	481	336	223	160	117	80	60	44	31	21
3.0	5125	3465	2424	1583	1055	718	466	330	239	164	122	86	60	42	29
2.0	8301	5568	3678	2357	1545	1037	714	505	343	238	160	128	92	61	43
1.0	12591	8560	5628	3766	2532	1661	1131	798	542	375	272	185	138	88	60

















ALTITUDE: 900 KM

ELECTRONS: E > .25 MEV

INNER ZONE MODEL: AE6 (SOLAR MAX)

OUTER ZONE MODEL: AE17-HI

ALTITUDE= 900.0 ENERGY= 0.250

ELECTRONS

	-180.0	-177.0	-174.0	-171.0	-168.0	-165.0	-162.0	-159.0	-156.0	-153.0	-150.0	-147.0	-144.0	-141.0	-138.0
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76.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
75.0	410	207	1	1	1	1	1	1	1	1	1	1	1	1	1
74.0	2184	1381	742	427	166	1	1	1	1	1	1	1	1	1	1
73.0	10055	5924	3497	2226	1250	599	344	1	1	1	1	1	1	1	1
72.0	37475	26286	16929	10411	5391	2886	1737	730	367	1	1	1	1	1	1
71.0	68419	57268	46217	37649	23863	14395	6963	3382	1895	736	346	1	1	1	1
70.0	106111	97051	84145	68427	54217	42116	28927	15880	7564	3302	1724	605	210	1	1
69.0	155743	145588	123432	105964	96001	75946	59763	44422	30322	15642	6635	2825	1257	449	27
68.0	215374	197198	174801	156123	140445	114292	98678	79341	60815	43415	27307	13394	5158	2197	790
67.0	259013	240949	226112	217353	189745	163598	148059	116537	98725	77419	56683	39914	21267	9378	3365
66.0	312628	296655	286520	257262	236984	220031	197309	166336	146778	114240	95973	71068	50072	34149	15232
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63.0	506587	500379	469505	440148	415650	412974	377938	323525	293926	263478	232403	213825	171244	146180	108560
62.0	424297	456957	484838	524148	486758	453638	418453	411793	370331	314107	287372	249109	219248	192363	153641
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59.0	202654	221687	248259	282201	310946	352879	390678	434116	474072	521173	464951	416104	359900	352045	295543
58.0	62102	56543	157102	213142	239716	274589	308360	355125	394094	443683	481537	453461	440563	357861	387943
57.0	5232	19093	48667	79001	134568	209966	236351	277604	313699	366704	404862	451661	496923	461062	406356
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-61.0	70523	121534	151527	176521	211521	238264	284744	345081	352428	408657	439078	399823	354931	314490	270600
-62.0	64905	84547	119534	142186	176410	205232	236422	275485	347910	351962	394229	458558	417750	376240	341138
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ORIGINAL PAGE IS  
OF POOR QUALITY

ALTITUDE= 900.0 ENERGY= 0.250

ELECTRONS

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-86.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1

ORIGINAL PAGE IS  
OF POOR QUALITY



ALTIMUDE=	90C.0				ENERGY= 0.250				ELECTRONS											
	-90.0	-87.0	-84.0	-81.0	-78.0	-75.0	-72.0	-69.0	-66.0	-63.0	-60.0	-57.0	-54.0	-51.0	-48.0					
81.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1					
80.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1					
79.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1					
78.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1					
77.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1					
76.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1					
75.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1					
74.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1					
73.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1					
72.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1					
71.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1					
70.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1					
69.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1					
68.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1					
67.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1					
66.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1					
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64.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1					
63.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1					
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60.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1					
59.0	542	416	367	358	365	461	649	1095	2042	3287	4837	15291	30275	47935	69735					
58.0	2435	2021	1863	1856	1943	2187	2823	4362	7761	14846	26506	42690	60293	83669	107983					
57.0	11618	8330	6962	6674	7342	9256	13211	18179	28965	41115	55073	74377	99936	121426	159851					
56.0	34760	36800	26797	25859	27725	32953	37629	44997	56598	71724	95242	110130	142572	170086	210499					
55.0	61143	55656	52439	51739	53816	58480	65816	77636	93695	105899	131830	157715	189474	228498	253915					
54.0	92538	87872	85941	86107	88006	92083	98708	110470	132708	152084	176959	214371	237254	270186	310621					
53.0	135681	130489	122722	121343	125304	135443	143709	153627	175785	205352	223700	250158	255697	321306	385406					
52.0	182386	170396	162705	161463	165758	176271	190988	206963	218420	240352	274779	301850	343749	416434	435345					
51.0	214478	245009	201122	201690	205499	213567	226309	242631	270955	290160	320684	381829	419789	443944	497195					
50.0	256496	252222	253306	252509	257580	263582	273085	289074	314504	361440	409471	417630	462949	519196	512824					
49.0	322363	303631	295056	293529	298790	311268	334111	373374	394962	401742	434012	482023	526133	481007	432347					
48.0	358027	357172	361430	367170	370758	374356	381067	393864	422012	462071	513051	465239	450263	402254	351877					
47.0	420536	402882	393205	392118	398470	413048	436079	462266	501996	475228	450352	410788	376038	321003	279084					
46.0	415229	435259	452364	464481	468789	467003	456192	446216	433683	403667	375443	335417	254830	251862	216155					
45.0	347891	367384	384551	395963	401126	398409	389677	376543	361032	331821	297730	265639	228356	165228	75723					
44.0	278694	299747	317497	330328	334678	332267	321559	305251	285895	263659	234153	207699	113677	55483	11148					
43.0	215231	235618	249528	258114	262144	261624	255909	241201	224289	205367	142662	76305	37394	4478	72					
42.0	154901	181750	192378	199529	203319	203040	199756	190451	132737	62654	48930	13264	1344	1	1					
41.0	47366	65686	83736	98176	102938	97410	82761	64100	45307	18142	3452	174	1	1	1					
40.0	3113	9573	19796	30167	34575	29750	15601	9090	2845	361	1	1	1	1	1					
39.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1					
38.0	1	4	269	653	964	800	369	37	1	1	1	1	1	1	1					
37.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1					
36.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1					
35.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1					
34.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1					
33.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1					
32.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1					
31.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1					
30.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1					
29.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1					
28.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1					
27.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1					
26.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1					
25.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1					
24.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1					
23.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1					
22.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1					
21.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1					
20.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1					
19.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1					
18.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1					
17.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1					
16.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1					
15.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1					
14.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1					
13.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1					
12.0	1	1	1	1	1	1	1	1	1	1	1	105	3384	7027	3636					
11.0	1	1	1	1	1	1	1	1	1	1	1	605	9858	9528	4795					
10.0	1	1	1	1	1	1	1	1	1	1	1	5148	12134	14874	15659					
9.0	1	1	1	1	1	1	1	1	1	1	1	5451	12061	17216	20899					
8.0	1	1	1	1	1	1	1	1	1	1	1	17812	24017	28486	22577					
7.0	1	1	1	1	1	1	1	1	1	1	1	24017	28486	28777	29029					
6.0	1	1	1	1	1	1	1	1	1	1	1	15925	24061	34070	35485					
5.0	5	21	75	243	886	2550	7170	14983	25555	40855	54720	65976	79120	75415	72612					
4.0	47	144	342	922	2097	5010	11477	21173	35009	51638	71626	90992	90240	89576	92480					
3.0	166	372	838	1737	3901	8533	16584	31476	50453	71148	94042	105850	106287	107575	125470					
2.0	320	709	1509	3321	6342	12087	22638	37608	59169	86739	103133	115094	127835	143341	143728					
1.0	540	1108	2214	5188	9233	16309	28137	46766	66916	98735	118168	138062	160147	188475	158165					

ORIGINAL PAGE IS  
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-1.0	1128	1515	3677	7370	15487	30740	50291	74700	105667	144745	179237	217379	259229	299211	237521	203729
-2.0	1843	2775	4742	8500	16552	33161	60810	96616	136301	196357	282551	389726	525709	662445	638155	626117
-3.0	2639	3913	6549	10769	18855	36399	65494	112103	166319	228004	327185	450384	603323	799885	638253	294740
-4.0	3511	5370	8500	13415	23152	41161	71595	118381	180250	240871	329987	450384	603323	799885	638253	294740
-5.0	4228	6696	11505	18218	28640	46291	78931	127487	188595	257375	324576	436303	589885	432077	439383	
-6.0	4912	8157	14291	24497	37502	56810	89133	139871	211738	282482	364298	428999	482317	505217	515242	
-7.0	6082	9629	16888	30768	47429	73296	111913	163713	241358	327866	413631	495905	568428	608437	557265	
-8.0	6426	11817	20262	34998	64916	90335	136301	196357	282551	389726	450384	525709	662445	638155	626117	
-9.0	6656	11663	23475	43086	77663	118228	167559	244897	344692	458671	569107	674138	658073	697258	705693	
-10.0	7318	12083	23104	44072	88129	155065	213948	293641	398063	529474	639199	708556	739355	790368	800414	
-11.0	7551	12376	24777	45340	87864	166561	237582	326549	431891	584778	645904	749372	812392	872650	912783	
-12.0	8822	15117	27054	47721	94486	175885	251120	344514	467994	567452	702514	821707	925156	1001570	1047017	
-13.0	10529	17442	33100	54590	103939	197091	273357	374609	505568	628401	764687	906678	1033774	1156067	1253312	
-14.0	12834	20563	36545	63778	116786	212221	307173	407773	547724	698488	864684	1004795	1156067	1301531	1467980	
-15.0	16993	26345	42522	76141	134087	241193	331910	457520	593656	774282	948176	1155793	1344865	1580512	1709865	
-16.0	21592	34442	57198	92865	116735	273067	368679	495196	664141	861636	1078273	1337247	1579360	1881070	2256772	
-17.0	31537	46118	73820	123037	213344	257669	400070	552911	743536	961300	1232688	1560852	1762523	2262569	2971131	
-18.0	38272	66041	103751	166286	242653	334774	466570	638890	835000	1114538	1420663	1841927	2271786	3005990	3794659	
-19.0	44348	82391	137713	196645	269188	377550	535268	717071	974794	1302710	1711204	2217413	2981614	3833012	4344213	
-20.0	49693	82393	133955	219724	319176	444132	622552	844300	1156465	1550553	2100199	2891676	3750593	4331414	4568057	
-21.0	49775	80668	135074	222648	349322	528902	753940	1033121	1428221	1996251	2730629	3655066	4265717	4550313	4387740	
-22.0	51141	86524	143220	238546	368119	601768	875821	1285493	1818506	2482016	3541919	4131054	4386670	4344710	4585503	
-23.0	58125	96527	163157	269557	428332	691027	1082382	1632019	2358860	3914364	4046264	4233244	4586387	5404079		
-24.0	69341	117659	196454	313995	512646	813049	1295111	2007347	2798470	3180541	3561419	3903754	4394839	5266544	6874381	
-25.0	91011	151021	244539	383442	640812	983446	1566593	2002274	2515264	2960242	3524757	4180515	4061237	6767563	7145371	
-26.0	115343	187753	309630	485757	725517	1044004	1451963	1939611	2462774	3084495	3876830	4891910	6230892	6981350	6789283	
-27.0	108967	162555	300844	464587	704907	1037540	1490928	2018379	2670474	3556602	4543124	5778620	6484505	6500473	6924610	
-28.0	115570	188011	302195	479953	720317	1079515	1534306	2180235	2935721	4001130	5245409	5767994	6111430	6624803	7308065	
-29.0	133562	214435	338173	540185	815982	1209373	1747138	2456963	3381702	4367932	4910850	5524788	6114596	7065308	8215848	
-30.0	160067	268579	429235	646342	952159	1428045	2076153	2866567	3318496	3999760	4745391	5523724	6515903	7765364	7769593	
-31.0	156743	258458	422536	655551	975757	1394148	1887757	2533342	3222525	3988778	4900899	6010333	6590124	7304665	7824731	
-32.0	171934	278281	424475	643858	938111	1345247	1891259	2539931	3268422	4248179	5371282	6134934	6669292	7314424	8477779	
-33.0	208238	320733	530947	730030	1029056	1491708	2048366	2718422	3659241	4521590	5182755	5871792	6717620	7965777	7801622	
-34.0	217476	361325	562729	849443	1254643	1711188	2227878	2873270	3682156	4325404	5123720	6143360	7136044	7261711	6901368	
-35.0	255582	386662	570308	834853	1193029	1615475	2158863	2481545	3603066	4470604	5458844	6396648	6332413	6433159	6683656	
-36.0	345077	488443	885349	966040	1222634	1782668	2368337	3113677	3903596	4828860	5164385	5509572	5821466	6300349	5943710	
-37.0	310493	491853	750108	1092018	1518404	2027316	2521439	3089617	3625108	4144135	4605848	5158177	5634072	5462063	5362044	
-38.0	367825	533555	735733	1018054	1381554	1788534	2275221	2765544	3352833	3967739	4665129	4780531	4652707	4966549	4934633	
-39.0	360836	577764	881101	1174160	1486743	1895800	2384777	2918545	3366493	3780925	3962653	4219729	4463661	4460564	4293798	
-40.0	359988	524622	742645	1016414	1346633	1727483	2118784	2523452	2903052	3266468	3663679	3964435	3939234	3813971	3725304	
-41.0	296242	520422	811892	1027762	1305471	1632536	1948814	2381679	2805953	3063409	3205896	3270461	3316136	3373009	3436346	
-42.0	178550	340869	558838	831341	1125310	1428546	1737969	2037438	2292473	2507962	2666070	2765155	2942743	3088100	3279953	
-43.0	160602	254493	399449	588796	824614	1094668	1356351	1610658	1875807	2101362	2310872	2515463	2795448	2922625	2868534	
-44.0	196872	263822	390413	525185	714864	911197	1142460	1396378	1654332	1944131	2235659	2436911	2469663	2512881	2600064	
-45.0	122579	237579	402557	597025	807277	977993	1192097	1467476	1640816	1808152	1946556	2069598	2175109	2316549	2523409	
-46.0	109844	181266	282070	424840	591075	776332	963185	1159260	1340364	1504360	1672229	1853663	2048366	2270671	2140105	
-47.0	140564	203546	275338	375757	506452	650395	813763	998803	1196324	1360741	1614552	1875231	1640558	1774856	1728500	
-48.0	74268	156565	275935	427378	580721	701195	875906	1044399	1210223	1305161	1371122	1413370	1445092	1477500	1529245	
-49.0	65389	108808	172222	266611	378856	510700	636396	764725	875567	974905	1063608	1146280	1234433	1256917	1157998	
-50.0	45118	111667	169340	234939	303328	397853	497796	601218	721418	839154	962144	970249	544361	910108	892331	
-51.0	29784	57349	103391	167096	250322	338232	425355	546465	673992	826045	667803	654618	717758	742283	732265	
-52.0	23233	54521	82104	118113	166384	222248	281388	349258	407623	463747	517801	577344	589867	586267	590769	
-53.0	17675	35091	61536	102290	145167	197770	248757	302041	344580	380684	410086	428620	463417	493346	492298	
-54.0	10155	35986	55765	79315	105413	140946	177457	216550	257382	302224	342736	389088	375144	337274	301927	
-55.0	4913	9573	21804	46570	81513	117640	154162	183387	206578	221288	225546	221992	212818	202518	191612	
-56.0	5155	8653	13391	20068	30244	46010	63743	81611	98479	112452	122510	129186	135273	142808	154501	
-57.0	5302	10251	15143	230102	25874	33687	42915	53182	64885	77253	90799	105859	122904	131066	114590	
-58.0	2449	4629	9541	18625	30626	41421	50118	59834	72586	81277	83240	82334	79361	75728	72317	
-59.0	2702	4265	6330	8540	12267	17518	23999	29868	35785	40877	44627	47356	49504	51944	50609	
-60.0	925	4514	7038	8882	11327	13887	17176	20783	24838	29063	33803	38690	44780	38628	29320	
-61.0	374	634	1198	2588	5278	8954	12766	16111	18411	19129	18503	16640	14313	11965	9745	
-62.0	230	515	733	964	1332	1877	2585	3405	4137	4712	5071	5233	5249	5269	4941	
-63.0	63	128	204	563	875	1233	1636	1947	2295	2509	2592	2554	2444	2276	2098	
-64.0	316	72	116	179	268	387	539	709	842	967	1054	1113	1139	1140	1	
-65.0	14701	7039	3543	1894	1118	727	568	1	555	1579	2743	4848	8901	16731	1	
-66.0	89696	70913	50844	35166	24458	18974	16041	15209	15947	18041	23528	32602	49047	78908	100812	
-67.0	257331	157428	157317	131107	114625	104447	99043	97613	99514	105563	116178	131587	154529	189235	236203	
-68.0	319927	304255	294723	289363	286162	285139	275790	266242	268670	281844	3085					

	ALTITUDE= 900.0				ENERGY= 0.250				ELECTRONS											
	-45.0	-42.0	-39.0	-36.0	-33.0	-30.0	-27.0	-24.0	-21.0	-18.0	-15.0	-12.0	-9.0	-6.0	-3.0					
81.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1					
80.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1					
79.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1					
78.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1					
77.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1					
76.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1					
75.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1					
74.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1					
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3.0	102381	77424	68070	68063	72264	58505	37600	26889	20254	14465	11225	8462	6659	4877	3789					
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ALTITUDE= 900.0 ENERGY= 0.250

ELECTRONS

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67.0	102310	114537	130128	148680	168495	178573	192473	206921	222561	238040	240578	245410	249497	254233	260004
66.0	147554	172204	186573	204290	224614	245836	262248	258893	267757	279154	292466	307341	307341	309378	311944
65.0	204175	230371	252532	261602	273444	290187	311300	321028	325944	334626	346064	359714	375253	389966	401801
64.0	263490	275737	304062	327154	334198	348480	368575	393584	414178	435032	441075	434250	431007	420601	431573
63.0	330298	341463	363963	394907	424055	454542	455674	454772	459658	469163	477730	483937	490917	498122	505327
62.0	398049	436462	468277	466481	475818	490712	502905	517119	533051	549881	552377	526519	504667	485175	467831
61.0	472626	466239	506747	526668	550904	578490	558963	530145	506497	488671	465680	442082	420871	402467	386579
60.0	533087	567303	588136	550930	522233	501827	467757	439946	418952	402257	380866	357211	336018	317823	301913
59.0	557484	525665	493772	457521	431059	411991	377094	349704	327972	313293	295955	277393	260026	245059	231716
58.0	462213	433764	400740	363600	336703	316095	293118	269872	250904	235087	222292	211059	183202	149783	124349
57.0	367038	336424	312449	280207	256019	237601	222867	176049	134768	105474	84160	68053	56092	46408	33992
56.0	282507	254911	234636	184912	129953	94718	70838	54669	41931	22656	12432	6009	3761	1957	947
55.0	181288	118758	80858	56996	34539	15062	6627	2816	1087	326	1	1	1	1	1
54.0	55969	26222	8970	2871	749	87	1	1	1	1	1	1	1	1	1
53.0	2580	424	1	1	1	1	1	1	1	1	1	1	1	1	1
52.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
51.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
50.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
49.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
48.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
47.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
46.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
45.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
44.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
43.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
42.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
41.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
40.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
39.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
38.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
37.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
36.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
35.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
34.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
33.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
32.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
31.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
30.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
29.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
28.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
27.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
26.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
25.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
24.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
23.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
22.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
21.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
20.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
19.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
18.0	5	3	2	1	1	1	1	1	1	1	1	1	1	1	1
17.0	26	20	13	9	5	3	1	1	1	1	1	1	1	1	1
16.0	64	48	34	22	15	9	5	3	1	1	1	1	1	1	1
15.0	107	81	57	40	26	19	13	8	5	2	1	1	1	1	1
14.0	161	111	77	54	39	27	19	13	9	6	4	2	1	1	1
13.0	201	143	96	66	47	35	25	18	13	9	7	5	3	1	1
12.0	254	173	121	83	59	43	29	22	17	12	9	7	5	3	2
11.0	303	215	148	99	70	51	37	27	20	15	11	8	6	4	3
10.0	358	242	172	114	79	59	43	31	23	17	14	10	8	5	4
9.0	406	288	190	133	92	68	47	36	26	20	16	12	9	7	5
8.0	466	328	227	158	116	80	59	43	31	24	18	14	10	8	6
7.0	618	427	294	215	148	102	74	54	40	29	23	17	13	9	7
6.0	834	568	411	280	204	140	102	75	55	41	30	22	16	12	9
5.0	1146	808	545	421	285	207	151	104	77	57	43	32	24	16	12
4.0	1710	1202	944	604	433	305	218	148	109	81	58	44	33	24	17
3.0	2774	1907	1300	907	617	430	286	206	153	108	83	60	43	31	22
2.0	4243	2908	1908	1268	849	582	410	297	207	149	114	84	62	42	31
1.0	6440	4468	2852	1871	1278	655	596	430	300	215	150	112	86	57	40

ORIGINAL PAGE IS  
OF POOR QUALITY



ALTITUDE= 900.0 ENERGY= 0.250

ELECTRONS

	45.0	46.0	51.0	54.0	57.0	60.0	63.0	66.0	69.0	72.0	75.0	78.0	81.0	84.0	87.0
81.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
80.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
79.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
78.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
77.0	1	1	1	1	1	1	49	121	222	331	361	395	434	477	526
76.0	121	301	364	451	544	666	815	994	1188	1443	1703	1959	2062	2193	2340
75.0	1046	1419	1858	2192	2421	2871	3351	3917	4573	5319	6086	6946	7894	8928	10174
74.0	4344	5514	6912	8648	10768	12937	14842	16642	18369	20589	23181	25853	28601	31372	34197
73.0	18290	22109	26504	31282	36706	38569	43043	42994	45166	47400	49655	51923	54328	56633	58146
72.0	47429	51373	55644	60340	63950	67496	70321	73629	77162	81005	85133	87582	86092	89019	90117
71.0	82204	89446	96420	97657	99514	101564	102905	106658	109622	112873	116352	120055	123993	128168	133165
70.0	119672	126453	134133	140397	146422	148377	148984	150193	151828	153792	156377	159270	162458	166108	170389
69.0	167447	173294	179685	185081	190449	195808	201141	205576	203103	201423	200454	199979	200163	200906	202351
68.0	224394	224897	226676	229450	231265	232382	234317	236040	238215	240608	243377	246350	249678	248304	246441
67.0	266447	273329	280613	282787	281794	281219	280986	281595	282560	283278	284526	286080	286028	290494	292487
66.0	316112	321270	326941	333043	339371	346483	353614	360817	368319	373550	367176	359015	351540	345531	340919
65.0	413437	411833	403395	396853	391480	386819	383022	380184	377916	376565	375558	375517	375962	377191	379131
64.0	434667	437759	441842	443870	445109	445955	447179	448178	449618	451348	453355	441292	427005	415403	405139
63.0	512159	517680	496476	477339	460428	449665	430710	417680	405737	394439	382627	368514	355926	345242	335458
62.0	452554	435863	417238	399904	384693	369644	356681	344298	332637	322302	312851	299752	287032	275773	265358
61.0	372380	358136	339800	323175	307453	293521	280742	269123	258179	248416	239373	230616	221653	211929	202408
60.0	288519	275876	264143	249421	236205	224755	214019	204448	195909	187812	180455	173512	166960	160956	155524
59.0	219468	208577	199228	190449	182023	155703	132769	114171	98507	86152	74577	64838	56636	49734	43571
58.0	103434	86513	73208	62369	53206	45718	39375	34196	27885	19283	13377	9035	6083	4003	2612
57.0	25333	16228	10376	6606	4057	2418	1388	714	358	121	13	1	1	1	1
56.0	394	118	3	1	1	1	1	1	1	1	1	1	1	1	1
55.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
54.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
53.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
52.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
51.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
50.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
49.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
48.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
47.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
46.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
45.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
44.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
43.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
42.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
41.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
40.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
39.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
38.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
37.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
36.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
35.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
34.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
33.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
32.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
31.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
30.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
29.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
28.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
27.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
26.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
25.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
24.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
23.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
22.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
21.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
20.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
19.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
18.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
17.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
16.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
15.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
14.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
13.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
12.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
11.0	2	2	1	1	1	1	1	1	1	1	1	1	1	1	1
10.0	3	2	2	1	1	1	1	1	1	1	1	1	1	1	1
9.0	4	2	2	1	1	1	1	1	1	1	1	1	1	1	1
8.0	4	3	2	2	1	1	1	1	1	1	1	1	1	1	1
7.0	5	3	3	2	1	1	1	1	1	1	1	1	1	1	1
6.0	6	4	4	3	2	1	1	1	1	1	1	1	1	1	1
5.0	8	6	5	4	3	2	1	1	1	1	1	1	1	1	1
4.0	12	8	5	5	4	3	2	1	1	1	1	1	1	1	1
3.0	16	10	6	6	5	4	3	2	1	1	1	1	1	1	1
2.0	21	13	8	6	5	4	3	2	1	1	1	1	1	1	1
1.0	27	16	10	6	5	4	3	2	1	1	1	1	1	1	1













ALTITUDE: 900 KM

ELECTRONS:  $E > .5$  MEV

INNER ZONE MODEL: AE6 SOLAR MAX)

OUTER ZONE MODEL: AEI7-HI

ALTITUDE= 900.0 ENERGY= 0.500

ELECTRONS

	-180.0	-177.0	-174.0	-171.0	-168.0	-165.0	-162.0	-159.0	-156.0	-153.0	-150.0	-147.0	-144.0	-141.0	-138.0
81.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
80.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
79.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
78.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
77.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
76.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
75.0	8	3	1	1	1	1	1	1	1	1	1	1	1	1	1
74.0	132	63	22	9	1	1	1	1	1	1	1	1	1	1	1
73.0	1102	533	249	135	54	15	7	1	1	1	1	1	1	1	1
72.0	7281	4312	2299	1152	457	190	93	21	7	1	1	1	1	1	1
71.0	21313	16465	10384	7278	3720	1814	664	237	107	21	7	1	1	1	1
70.0	39399	33476	27435	21264	14804	9050	4913	2093	744	229	93	15	3	1	1
69.0	69959	62994	49336	39751	32475	24179	17686	10090	5182	2050	622	185	55	9	1
68.0	105828	84494	60339	69900	55508	43924	34288	25517	18281	9637	4544	1646	428	133	24
67.0	132136	121434	112427	106566	89236	74364	64343	45482	34386	24786	16160	8252	3183	1006	237
66.0	164179	154515	147835	130918	118809	108521	94352	75997	63596	44019	32727	22323	12902	6265	1993
65.0	217725	206000	181633	163565	152314	138217	121303	109106	93746	73444	56225	39613	29300	19029	9228
64.0	213715	209603	212075	223717	195859	169835	154356	138952	120281	107390	88052	69022	50212	34714	23576
63.0	218414	224763	219006	214468	211309	219327	201379	170309	152673	134605	116338	104665	79292	63906	41379
62.0	162666	178693	200225	229638	222809	217094	211192	218602	197128	164537	148772	126462	108811	92077	69284
61.0	130513	143180	154466	170132	190885	220252	223752	216514	219143	220397	184528	156819	140214	117015	103043
60.0	102761	111655	122534	137678	150067	166040	188775	221698	221373	212532	209193	209272	169321	147730	125682
59.0	83994	89769	98032	108315	118808	134118	148791	166548	191943	228967	216628	206662	211322	187193	154699
58.0	23730	38215	64297	87433	95501	106043	117352	134917	150535	170529	199886	221564	210924	203279	207931
57.0	2048	7167	18148	30756	4266	55500	66499	85047	106849	119777	139073	154770	177808	214115	212897
56.0	1	85	803	15864	544	15864	28477	53996	86631	95502	109093	124404	142639	161160	190229
55.0	1	1	1	54	1	1	3487	15816	30570	62333	86319	95480	112698	131026	148348
54.0	1	1	1	1	1	1	1	577	4481	16186	37056	80280	91318	104108	118839
53.0	1	1	1	1	1	1	1	1	21	1007	7031	22574	49553	84495	55150
52.0	1	1	1	1	1	1	1	1	1	1	124	2186	14649	31427	71878
51.0	1	1	1	1	1	1	1	1	1	1	1	508	5242	20372	46371
50.0	1	1	1	1	1	1	1	1	1	1	1	1	45	1613	13435
49.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	381
48.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
47.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
46.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
45.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
44.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
43.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
42.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
41.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
40.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
39.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
38.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
37.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
36.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
35.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
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ORIGINAL PAGE IS  
OF POOR QUALITY

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ELECTRONS

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ORIGINAL PAGE IS  
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-65.0	199266	212726	202737	174090	155166	142715	126271	115719	106042	98240	85230	51939	33581	22781	12281
-66.0	201795	199844	212154	227140	193394	179527	154918	142654	128062	119802	110346	103635	100217	68511	47313
-67.0	171350	213845	203532	212887	224002	218251	190312	171971	158483	147072	132911	126615	118192	112307	108500
-68.0	142502	163118	200375	211241	211709	222521	235805	218372	193702	177301	165479	156695	143958	136771	131630
-69.0	117307	141560	156081	183617	222758	215694	222958	231782	246085	225839	203747	189160	176880	170751	162777
-70.0	101071	112906	132078	151337	176571	204736	227194	223403	231330	239571	253364	242972	220888	206747	194348
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-72.0	49049	66857	84159	106186	117427	133667	155978	168267	190354	219842	244327	240860	246032	251158	258739
-73.0	31728	42588	62134	74865	94513	111286	123557	139462	160606	171761	190980	216449	241362	253498	253240
-74.0	19166	28030	37333	51381	68588	82350	100611	115622	126937	141543	161621	171578	184909	203557	224116
-75.0	8319	15537	23415	32931	41947	57607	71897	85354	101715	117715	127015	137909	152658	169387	177574
-76.0	2587	6533	11434	19533	26809	35197	44375	58903	72691	83646	97333	113818	124577	132161	141080
-77.0	583	1766	3992	8204	13569	21091	27899	35709	43440	55602	68926	78365	88775	99895	112378
-78.0	140	337	960	2322	4545	8864	13888	21039	26635	34430	39777	47541	57831	68525	77940
-79.0	23	96	145	472	1155	2461	4823	8355	12327	18155	23252	28382	34903	39346	44742
-80.0	5	12	40	125	221	424	888	1080	2140	3768	6414	9269	12674	17161	22193
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-82.0	1	1	1	1	7	13	31	79	144	220	364	613	1008	1571	2217
-83.0	1	1	1	1	1	1	1	4	15	31	63	119	162	224	312
-84.0	1	1	1	1	1	1	1	1	1	2	7	10	15	24	41
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ALTITUDE= 900.0 ENERGY= 3.500

ELECTRONS

	-90.0	-87.0	-84.0	-81.0	-78.0	-75.0	-72.0	-69.0	-66.0	-63.0	-60.0	-57.0	-54.0	-51.0	-48.0
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58.0	156	122	111	108	115	134	188	342	777	1903	644	1961	5160	11142	21393
57.0	1397	886	693	649	737	1006	1639	2580	4970	8721	15161	23451	34098	46897	70202
56.0	9979	5608	4595	4332	4781	6073	7995	10786	16367	22543	31917	41052	53673	77095	100840
55.0	19039	16910	15233	14706	15672	17783	20549	25098	31922	39336	54104	70412	89978	112358	127633
54.0	33611	27332	29303	29172	30068	32177	36103	42838	55450	67752	82136	104302	118291	137583	161249
53.0	60095	56298	51516	53472	52338	58350	63618	69648	82159	96658	111009	126506	152535	168217	204818
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49.0	171740	160525	155861	154826	157685	164680	177546	199662	209940	205108	211452	222115	228036	190868	165372
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43.0	84507	90746	95630	98864	100396	100261	98406	94308	89628	84224	58097	29632	13740	1757	29
42.0	63998	74701	78123	80459	81520	82153	80931	79029	53936	32422	16301	5039	546	1	1
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12.0	1	1	1	1	1	1	1	1	1	1	1	433	894	907	796
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9.0	1	1	1	1	1	1	1	44	370	451	1636	2136	2345	2329	2092
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7.0	1	1	1	1	1	11	99	414	1010	1923	2976	3412	3536	3496	3127
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4.0	2	8	20	59	139	329	829	1582	2642	3856	5118	6054	6023	5769	5546
3.0	9	21	49	110	258	567	1099	2091	3440	4781	6265	7061	6927	6649	7183
2.0	20	43	86	196	409	797	1515	2514	3966	5777	6851	7517	8044	8494	8257
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ORIGINAL PAGE IS  
OF POOR QUALITY

0.0	51	99	138	388	755	1314	2285	3684	5416	7100	6174	10479	12131	12333	10936
-1.0	76	132	248	474	936	1741	2924	4501	6862	8843	13701	12644	14675	13671	12637
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-3.0	229	274	442	724	1233	2280	3932	6486	9426	12861	15746	17376	18227	18067	18664
-4.0	346	431	574	904	1531	2643	4445	7126	10624	14123	17666	19415	20744	22478	23358
-5.0	465	609	843	1228	1907	3018	5004	7889	11463	15529	19552	22176	24784	27227	29366
-6.0	595	817	1169	1658	2508	3738	5746	8627	13130	17388	22383	26531	30177	32326	33050
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-8.0	882	1360	1939	2836	4405	6032	8937	12673	17982	24568	31168	37015	41967	40694	40240
-9.0	938	1443	2399	3653	5581	7584	11090	15934	22136	29429	36297	42580	44286	44508	45253
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-14.0	1626	2372	3737	5780	9255	14707	20642	26977	35671	44829	55039	63502	72547	81110	90654
-15.0	1986	2842	4176	6628	10346	16465	22264	30157	38586	49625	60131	72530	83665	97315	109698
-16.0	2328	3429	5143	7661	12235	18510	24600	32525	42938	54930	67906	83194	97244	114437	135412
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ELECTRONS

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ORIGINAL PAGE IS  
OF POOR QUALITY.

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-56.0	59845	106885	172414	201740	218497	237923	259449	285907	307211	331744	366996	413758	422670	407061	390409
-57.0	106565	186061	202979	221344	242197	266113	293969	316927	345168	388518	442068	422670	407061	390409	333658
-58.0	188151	203802	223199	245364	271687	299421	324910	359340	407819	440198	423131	410061	401419	391374	333658
-59.0	204060	224696	247909	276759	303552	331651	372403	426056	437773	422915	412478	406550	379023	323588	278775
-60.0	225774	250120	280556	306747	337965	383314	442898	434681	422021	414228	411526	367531	314682	273396	237635
-61.0	252451	263618	310182	303526	393346	445935	430844	420253	414768	414768	356446	306582	266621	232120	200609
-62.0	284879	350325	432336	432336	439453	426384	417944	414464	399899	345341	298953	264052	227055	197759	169247
-63.0	316318	357385	414658	432336	421036	412478	413504	386255	334025	291222	257020	221977	194041	163513	128774
-64.0	365808	425681	424089	415098	411150	412485	372489	276101	242305	242305	217035	161972	140802	124622	94723
-65.0	426579	415554	406546	410753	357715	311515	276101	242305	206420	183934	146530	117692	152147	121118	80415
-66.0	406471	402036	401514	351251	341723	296568	267320	234246	206420	183934	146530	117692	152147	121118	80415
-67.0	395039	370744	370725	324733	287319	257633	225724	203446	175228	140628	114342	82005	58689	40528	25374
-68.0	394533	348066	306635	274409	245430	216681	194198	162134	138236	109256	77621	56333	38789	23942	12143
-69.0	323494	288406	261139	232424	207116	187420	156494	127392	102080	73099	53830	36985	22423	11607	4201
-70.0	270216	245761	218700	197072	178436	146257	120246	94111	68306	51082	34958	20811	11026	3446	1248
-71.0	227202	204809	186773	163389	135052	113053	85504	63357	46984	32759	19029	9909	3655	1182	344
-72.0	190552	176678	147737	123430	102570	76581	58056	42826	30405	17121	8700	3330	1092	331	95
-73.0	155926	131530	112243	89219	67817	52422	38276	26482	14977	7401	2954	978	311	92	17
-74.0	115645	98433	75705	59104	45881	33599	21970	12772	5982	2498	849	284	86	7	1
-75.0	79823	63334	53693	38597	28920	17662	10635	4630	194						







	ALTIUDE= 900.0				ENERGY= 0.500				ELECTRONS											
	90.0	92.0	95.0	99.0	102.0	105.0	108.0	111.0	114.0	117.0	120.0	123.0	126.0	129.0	132.0					
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79.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1					
78.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1					
77.0	14	17	20	23	26	29	32	35	37	38	37	36	34	30	27					
76.0	161	178	195	214	233	252	270	285	297	302	302	299	284	263						
75.0	1337	1523	1662	1801	1927	2057	2168	2254	2339	2399	2437	2439	2405	2340	2239					
74.0	6784	7163	7558	7955	8374	8780	9193	9576	9909	10173	10345	10405	10352	10353	9960					
73.0	18542	19244	19925	20609	21294	21952	22541	23098	23617	24082	24440	24657	24658	24632	24503					
72.0	32412	32320	34331	35444	36409	37395	38366	39279	40116	40848	41518	42075	42550	42770	42690					
71.0	59391	56623	60393	60673	61219	62080	62913	63818	64754	65688	66553	67365	68022	68414	68309					
70.0	82892	84918	87099	89484	91736	93575	95003	96178	97011	97489	97552	97558	94491	95204	95851					
69.0	102348	103755	105518	107093	108233	109604	111028	112647	114273	115723	117660	119334	121087	122420	123141					
68.0	127248	127314	127017	128844	130212	131782	133446	135299	137662	140018	141940	143920	145821	147540	149039					
67.0	157166	160244	163214	166774	169546	173682	177949	183669	183777	182586	181874	181131	181048	181724	182920					
66.0	174543	172322	170593	168914	167855	167161	167112	167452	168242	169332	170884	172795	174793	177158	179536					
65.0	178575	179005	179724	180656	181885	181836	182676	184047	185545	181970	178958	177085	176269	175975	176496					
64.0	164601	159238	154139	149550	145587	142283	139151	136348	133850	132048	130515	130195	130395	130989	131672					
63.0	124891	121738	118703	116118	113811	111800	110295	109086	107163	105248	103935	103023	102685	102891	103300					
62.0	97906	94856	92335	90458	88216	86480	84923	83624	82620	81799	80654	79978	79680	79559	79766					
61.0	75981	73446	71463	69470	67585	66732	65849	65083	64681	64579	64635	64573	64710	62520	60173					
60.0	58455	51050	44803	39249	34522	30998	27580	24724	22322	20296	18717	17318	16326	15544	14825					
59.0	14662	12651	11253	9944	8247	6859	4492	3360	2497	1896	1450	1118	895	711	594					
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	135.0	138.0	141.0	144.0	147.0	150.0	153.0	156.0	159.0	162.0	165.0	168.0	171.0	174.0	177.0
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76.0	239	214	149	164	142	125	107	68	41	22	13	8	6	3	1
75.0	2110	1549	1777	1574	1291	1003	755	556	383	263	180	131	86	38	16
74.0	9606	9130	851	7903	7319	6677	5529	4354	3249	2411	1794	1153	670	367	207
73.0	24145	23558	22845	21978	20870	19659	18193	16297	13739	11338	9092	7301	5192	3237	2021
72.0	42280	41552	40545	39279	37841	36239	34411	32560	30769	27719	24331	21252	18419	13878	10118
71.0	68296	68012	67533	66727	65697	64484	63345	62143	56940	50532	44606	39177	35007	31473	26008
70.0	96396	96661	97200	97512	97797	98346	95729	91139	86203	80643	74534	69370	65490	57609	47201
69.0	124233	124439	124100	123320	122285	120558	118012	115648	113224	109462	105838	103722	98952	88806	78528
68.0	150135	150663	150973	150893	150598	149419	148142	146004	143854	141727	139450	130991	123396	117158	110294
67.0	184782	186755	189328	192975	197526	203004	203063	196867	188663	179740	170366	162230	155588	149756	145621
66.0	181893	184079	185969	187818	189403	190735	191849	193435	195277	198362	202512	209445	212038	195909	178212
65.0	177580	179578	183442	186878	193372	200516	209421	210476	209754	209257	208860	208435	205512	205187	208791
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63.0	103906	105644	107673	110068	112854	116695	121419	126941	132572	138145	145122	153483	164166	177832	195358
62.0	80562	81641	82795	84890	87456	90460	94030	98286	102476	107487	114150	121994	131643	140884	150486
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59.0	533	504	526	613	755	1108	1630	2557	4253	7435	13683	18402	25711	37156	56075
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2.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
1.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1

ORIGINAL PAGE IS  
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ALTITUDE: 900 KM

ELECTRONS: E > 1.0 MEV

INNER ZONE MODEL: AE6 (SOLAR MAX)

OUTER ZONE MODEL: AE17-H1

ALTITUDE= 900.0 ENERGY= 1.000

ELECTRONS

	-180.0	-177.0	-174.0	-171.0	-168.0	-165.0	-162.0	-159.0	-156.0	-153.0	-150.0	-147.0	-144.0	-141.0	-138.0
81.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
80.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
79.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
78.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
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ORIGINAL PAGE IS  
OF POOR QUALITY

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ALTITUDE= 900.0 ENERGY= 1.000

ELECTRONS

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57.0	99334	63657	66593	54954	38950	30355	20491	15459	5981	3476	1823	877	419	207	20
56.0	100422	95932	95181	71750	59661	44785	33080	25144	17884	12366	7774	5560	3537	2226	1275
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42.0	1	1	1	1	1	1	1	1	1	1	136	1199	4681	8889	16254
41.0	1	1	1	1	1	1	1	1	1	1	1	1	170	1064	3790
40.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	87
39.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
38.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
37.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
36.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
35.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
34.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
33.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
32.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
31.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
30.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
29.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
28.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
27.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
26.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
25.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
24.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
23.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
22.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
21.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
20.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
19.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
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17.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
16.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
15.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
14.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
13.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
12.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
11.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
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9.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
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7.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
6.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
5.0	2	2	3	3	3	3	3	3	3	3	3	3	3	3	3
4.0	3	3	4	4	4	4	4	4	4	4	4	4	4	4	4
3.0	5	5	6	6	6	6	6	6	6	6	6	6	6	6	6
2.0	6	6	8	8	8	8	8	8	8	8	8	8	8	8	8
1.0	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8

ORIGINAL PAGE IS  
OF POOR QUALITY



ALTITUDE= 900.0 ENERGY= 1.000

ELECTRONS

	-90.0	-87.0	-84.0	-81.0	-78.0	-75.0	-72.0	-69.0	-66.0	-63.0	-60.0	-57.0	-54.0	-51.0	-48.0
81.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
80.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
79.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
78.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
77.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
76.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
75.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
74.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
73.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
72.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
71.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
70.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
69.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
68.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
67.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
66.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
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64.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
63.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
62.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	3
61.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	91
60.0	1	1	1	1	1	1	1	1	1	1	1	5	44	246	876
59.0	1	1	1	1	1	1	1	1	2	5	30	183	569	1535	3776
58.0	3	2	2	2	2	2	4	9	44	177	403	1167	2869	5283	8709
57.0	119	58	37	32	41	69	149	255	550	1118	2396	4398	7395	11372	13183
56.0	857	643	505	469	530	702	959	1510	2698	4222	6815	9644	15741	21970	30954
55.0	3461	2916	2513	2345	2562	3077	3772	4980	6917	9212	13876	19665	26592	36327	47153
54.0	7701	6817	6379	6290	6532	7130	8322	10431	14458	18872	24159	32691	41439	54865	70671
53.0	16603	15122	13490	13106	13744	15654	17569	19854	24392	31128	37816	48359	65810	75449	95688
52.0	27447	24469	22750	22355	23112	25279	28513	32762	37587	46038	56251	69590	83344	106588	108529
51.0	40532	36896	35019	34654	35618	38052	42523	48823	59449	66543	76804	85829	106882	107807	114221
50.0	58892	56629	56399	55525	56999	59097	62252	67540	75759	90307	105473	103011	108866	116177	110591
49.0	80765	74609	71695	70842	72257	75981	82919	64878	101404	99852	103802	110011	115007	102307	87858
48.0	88620	90337	92275	94105	94919	95252	95291	96460	100495	106026	113231	104363	93897	79643	66504
47.0	95734	93782	92714	93054	94444	97092	100619	104454	110355	102546	95103	83157	72452	59586	49944
46.0	89087	84370	88814	101792	102687	101882	99185	95480	100390	82237	73466	63275	53631	45043	38132
45.0	69910	75337	79906	82925	84012	82827	79856	75523	70397	62929	54862	47714	40604	27863	13767
44.0	52198	57064	61346	63818	64689	63947	61236	57243	52562	47401	41772	36666	17866	7319	1474
43.0	38627	42313	45203	47077	47855	47525	46080	43319	39989	36336	23642	11025	4599	624	10
42.0	26781	32127	34135	35475	36163	36067	35090	33557	21855	12241	6352	1739	200	1	1
41.0	6418	9555	12864	15516	16370	15268	12485	9077	5834	2330	453	27	1	1	1
40.0	452	1281	2514	3721	4230	3679	2500	1223	410	60	1	1	1	1	1
39.0	1	1	45	111	150	125	59	4	1	1	1	1	1	1	1
38.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
37.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
36.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
35.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
34.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
33.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
32.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
31.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
30.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
29.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
28.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
27.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
26.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
25.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
24.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
23.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
22.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
21.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
20.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
19.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
18.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
17.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
16.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
15.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
14.0	1	1	1	1	1	1	1	1	1	1	1	1	1	38	11
13.0	1	1	1	1	1	1	1	1	1	1	1	1	1	38	51
12.0	1	1	1	1	1	1	1	1	1	1	1	1	1	105	86
11.0	1	1	1	1	1	1	1	1	1	1	1	1	1	154	102
10.0	1	1	1	1	1	1	1	1	1	1	1	1	1	220	188
9.0	1	1	1	1	1	1	1	1	1	1	1	1	1	257	188
8.0	1	1	1	1	1	1	1	1	1	1	1	1	1	271	193
7.0	1	1	1	1	1	1	1	1	1	1	1	1	1	300	213
6.0	1	1	1	1	1	1	1	1	1	1	1	1	1	351	248
5.0	1	1	1	1	1	1	1	1	1	1	1	1	1	400	274
4.0	1	1	1	1	1	1	1	1	1	1	1	1	1	463	395
3.0	1	1	1	1	1	1	1	1	1	1	1	1	1	495	435
2.0	1	3	5	14	32	66	131	223	352	515	603	640	643	615	554
1.0	2	5	9	19	39	81	151	263	392	557	644	701	723	718	650

ORIGINAL PAGE IS  
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0.0	J	7	14	27	50	94	175	295	425	574	727	790	843	829	770
-1.0	5	10	19	35	66	116	205	334	473	670	790	883	969	944	931
-2.0	11	21	41	78	141	233	371	559	735	928	1074	1111	1111	1117	1074
-3.0	21	37	69	127	226	371	559	735	928	1074	1111	1111	1111	1117	1074
-4.0	37	69	127	226	371	559	735	928	1074	1111	1111	1111	1111	1117	1074
-5.0	55	60	67	69	69	69	69	69	69	69	69	69	69	69	69
-6.0	77	88	104	123	188	279	423	639	935	1227	1575	1870	2137	2331	2357
-7.0	106	122	148	181	238	360	535	760	1089	1453	1823	2196	2594	2726	2557
-8.0	128	167	204	249	327	446	656	921	1293	1751	2213	2655	2962	2867	2867
-9.0	140	187	263	342	436	591	814	1159	1594	2129	2606	3005	3131	3157	3216
-10.0	152	201	231	389	552	780	1055	1418	1861	2427	2872	3177	3328	3561	3622
-11.0	164	223	309	422	596	843	1165	1558	2014	2516	2946	3372	3650	3915	4092
-12.0	181	245	337	457	659	917	1240	1654	2189	2699	3187	3691	4144	4450	4641
-13.0	200	268	366	509	725	1028	1354	1802	2368	2889	3465	4055	4579	5074	5454
-14.0	219	292	410	564	793	1107	1515	1959	2562	3192	3889	4464	5074	5646	6275
-15.0	248	328	440	622	864	1222	1632	2184	2767	3523	4237	5073	5817	6719	7523
-16.0	269	366	506	683	970	1367	1796	2349	3067	3885	4761	5784	6714	7838	9189
-17.0	309	407	557	772	1084	1473	1965	2592	3394	4285	5266	6637	7818	9292	11702
-18.0	295	460	634	867	1208	1628	2209	2945	3756	4884	6080	7677	9249	11838	14479
-19.0	262	439	696	977	1315	1802	2487	3252	4303	5598	7159	9031	11743	14625	17153
-20.0	249	411	607	1081	1520	2070	2831	3746	4993	6515	8560	11392	14463	17013	19496
-21.0	247	357	654	1064	1662	2425	3337	4460	5995	8121	10763	13947	17555	19251	20500
-22.0	250	417	679	1107	1766	2731	3858	5485	7442	9841	13498	16314	18773	20187	23452
-23.0	277	451	747	1210	1862	2961	4517	6692	9312	12912	15694	17437	19804	23457	30296
-24.0	311	422	854	1343	2145	3322	5137	7710	10701	12946	15581	18426	22523	29411	40908
-25.0	368	612	987	1534	2506	3774	5895	7917	10603	13253	17000	21744	28332	40275	47344
-26.0	429	715	1130	1865	2828	4177	6375	8642	11554	15361	20617	27732	37091	46262	52571
-27.0	507	819	1332	2034	3102	4683	6932	9724	13453	18477	25714	34823	43289	50053	60045
-28.0	617	970	1525	2402	3571	5441	7875	11669	16343	23386	32241	39483	47582	57463	72584
-29.0	781	1224	1896	3009	4545	6752	9957	14344	20402	28092	34812	43300	53759	70567	92274
-30.0	988	1623	2534	3876	5717	8645	12705	17419	22929	29931	39001	50128	65770	87550	98731
-31.0	1262	1939	3041	4643	6851	9895	13753	19055	26151	34810	46365	62196	74827	93211	112285
-32.0	1451	2556	3722	5508	7927	11361	16445	22827	30783	42722	57972	72268	86641	105138	135165
-33.0	2201	3339	5036	7282	10161	14720	20621	28007	39364	51716	63964	78467	98005	127823	129790
-34.0	2627	4366	6484	9537	13814	19259	25502	34060	44368	56679	71706	82376	119983	119875	117186
-35.0	3860	5579	7894	11259	15749	21238	28903	38733	51085	66622	86365	104994	105757	109043	114567
-36.0	5465	7684	10841	14807	20104	26820	35803	48184	62431	78891	85560	92383	95402	107928	94583
-37.0	6387	8281	12332	17849	24708	32974	41926	50849	63146	69427	77496	87976	94826	85236	77325
-38.0	6381	9276	12638	17375	23279	30231	38276	46923	56708	67524	79337	77497	73649	70077	63927
-39.0	5720	9433	14660	19730	25264	32104	40297	49589	56172	59706	61186	61774	61639	56797	48753
-40.0	5107	7734	11232	15629	20958	26832	33088	38751	43561	47454	51063	52316	47731	42245	37351
-41.0	3682	6590	10761	14179	18052	22988	27797	32737	37617	39729	39264	37611	35285	32536	30017
-42.0	2087	3681	6523	9878	13497	17521	21084	24263	26543	27917	28290	27879	27186	26186	24990
-43.0	1637	2655	4100	6226	8722	11568	14359	16738	18896	20404	21352	21909	22605	20956	17937
-44.0	1542	2417	3518	4856	6578	8510	10540	12576	14452	16206	17782	17957	16515	14989	13411
-45.0	833	1645	2879	4488	6170	7691	9284	11236	12292	12860	12383	12467	11464	11236	10723
-46.0	617	1060	1684	2584	3661	4953	6065	7132	8049	8632	8956	9101	6154	9090	7305
-47.0	570	915	1342	1915	2564	3370	4188	5001	5805	6444	7057	7513	6547	5589	4714
-48.0	260	550	1038	1654	2328	2895	3561	4256	4793	4887	4757	4438	4059	3663	3324
-49.0	172	318	519	806	1179	1605	2019	2368	2646	2805	2860	2831	2778	2495	1975
-50.0	91	223	378	550	753	983	1251	1482	1703	1881	2021	1879	1658	1421	1218
-51.0	49	101	163	305	462	635	812	957	1050	1055	1031	1047	979	913	822
-52.0	28	68	114	172	244	325	419	505	581	636	671	688	650	603	557
-53.0	19	41	71	112	165	226	285	338	385	416	432	437	435	430	400
-54.0	11	29	50	76	108	140	178	214	246	277	300	320	301	267	229
-55.0	5	14	25	43	67	95	124	150	166	176	179	175	167	154	143
-56.0	3	10	16	24	34	46	59	72	84	93	99	103	105	106	106
-57.0	3	7	12	18	24	31	39	48	56	62	65	75	80	82	78
-58.0	3	5	8	13	18	25	31	38	44	49	52	54	55	55	55
-59.0	3	4	7	9	13	16	20	25	29	32	35	38	40	42	43
-60.0	2	3	5	7	10	13	16	19	22	25	28	31	33	36	40
-61.0	2	3	5	6	8	11	13	16	19	21	24	27	30	33	36
-62.0	1	3	4	6	7	9	11	14	16	19	22	25	27	30	35
-63.0	2	3	5	6	7	8	10	11	13	16	19	20	25	31	36
-64.0	39	3	5	7	9	11	13	16	19	23	28	34	41	50	1
-65.0	1895	918	404	242	137	83	59	1	1	56	173	311	572	1070	2039
-66.0	12541	5202	6348	4389	3087	2400	2028	1916	2001	2327	2925	4035	6741	9650	13031
-67.0	45324	22872	24825	19724	16575	14641	13587	13237	13406	14418	16179	18829	22923	29180	38472
-68.0	57405	54362	52433	51289	50543	50249	48141	45965	46279	48835	54245	56678	59368	62779	66740
-69.0	75183	71431	68685	66687	64645	63630	63230	63518	64317	65886	68140	70923	74744	79207	86179
-70.0	98880	54889	91660	87362	84660	83289	82722	82921	83767	85434	87868	91237	95749	101477	108687
-71.0	124210	121308	117877	113198	110544	108892	108115	108071	109110	111060	113889	117581	122547	128313	135853
-72.0	133075	139203	143594	139417	137247	136329	136001	136284	137575	139666	142306	146123	150689	156096	162929
-73.0	125708	128327	131421	134943	138738	142587	146245	149696	152550	154685	156431	157906	158945	159603	159759
-74.0	115413	126907	129790	130923	133096	135072	137146	139097	141144	143129	144959	146799	148554	150371	152384
-75.0	83474	50422	98263	105254	111870	117971	123402	127994	131505	134709	134559	134559	133220	130881	127455
-76.0	59041	66896	74141	79301	82499	85833	89035	91922	94315	96053	97679	97431	96882	95824	94330
-77.0	39978	43619	47321	50680	54414	58221	61559	64339	66339	68339	68227	68655	67849	66432	64197
-78.0	23990	26841	29633	32459	35289	37970	40461	42587	44139	44903	45344	45431	45041	43976	42331
-79.0	12334	14642	16849	19194	21522	22909	24073	25115	25933	26532	26864	26934	26741	26258	25615
-80.0	5773	7004	8080	8853	9744	10613	11447	12194	12787	13212	13431	13437	13268	12870	12295
-81.0	1709	2249	2908	3640	4466	4555	4953	5315	5608	5819	5927	5933	5837	5640	5364
-82.0	299	419	503	739	944	1096	1238	1376	1477	1551	1579	1581	1545	1477	1380
-83.0	13	25	44	67	98	130	167	201	218	231	238	2			

ALTITUDE= 900.0 ENERGY= 1.000

ELECTRONS

	-45.0	-42.0	-39.0	-36.0	-33.0	-30.0	-27.0	-24.0	-21.0	-18.0	-15.0	-12.0	-9.0	-6.0	-3.0
81.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
80.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
79.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
78.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
77.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
76.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
75.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
74.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
73.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
72.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
71.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
70.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	4
69.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	2
68.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	5
67.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	203
66.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	44
65.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	631
64.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	232
63.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	674
62.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1581
61.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	3472
60.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	8767
59.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	12435
58.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	5437
57.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	17974
56.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	8154
55.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	10881
54.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	22932
53.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	39322
52.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	60243
51.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	84664
50.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	121417
49.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	121027
48.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	132516
47.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	105951
46.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	79062
45.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	57833
44.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	42376
43.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	12161
42.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1348
41.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
40.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
39.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
38.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
37.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
36.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
35.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
34.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
33.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
32.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
31.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
30.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
29.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
28.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
27.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
26.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
25.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
24.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
23.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
22.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
21.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
20.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
19.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
18.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
17.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
16.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
15.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
14.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
13.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
12.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
11.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
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9.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
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6.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
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4.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
3.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
2.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
1.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1

ORIGINAL PAGE IS  
OF POOR QUALITY

0.0	712	716	797	851	761	676	617	564	504	440	383	333	272	199	147
-1.0	660	960	1040	980	866	804	750	678	623	549	484	434	294	204	141
-2.0	1140	1235	1139	1118	1071	991	914	847	772	698	632	426	303	210	149
-3.0	1470	1490	1378	1311	1233	1184	1117	1020	945	875	805	655	495	359	258
-4.0	1815	1690	1545	1533	1422	1415	1318	1237	1184	1013	779	597	451	331	240
-5.0	2016	1911	1835	1787	1726	1648	1623	1567	1424	1179	959	763	589	468	346
-6.0	2240	2160	2099	2084	2046	1998	1964	2003	1790	1486	1194	1012	840	684	522
-7.0	2480	2447	2416	2436	2445	2465	2520	2446	2125	1882	1679	1465	1238	1022	801
-8.0	2844	2860	2874	2874	2874	2874	3177	3125	2829	2572	2357	2069	1730	1441	1179
-9.0	3268	3254	3338	3424	3653	4000	4139	3884	3765	3537	3131	2780	2424	2142	1912
-10.0	3765	3833	4033	4279	4553	5192	5253	5256	4817	4455	4097	3848	3525	3310	2883
-11.0	4359	4552	4790	5419	5999	6857	6476	6285	6102	5856	5764	5674	5685	5196	4451
-12.0	5080	5469	5903	6884	8135	8739	7977	7816	7924	8113	8559	8717	8047	7484	6718
-13.0	5980	6681	7536	8973	10720	9638	9849	10149	11014	12127	12321	11557	11311	11133	10861
-14.0	7130	8274	9674	12447	11599	11311	12398	13857	15953	15704	15914	16472	17103	17455	16611
-15.0	8670	10562	13424	13576	13009	14828	16412	19365	19700	20340	21665	24195	25184	24234	23044
-16.0	11027	13884	15534	14488	16421	18886	22559	24055	25513	27907	31732	32398	32925	33331	34325
-17.0	14092	16446	16352	17344	21154	26155	28174	29450	33048	39737	40758	41712	45758	50338	43618
-18.0	16926	17732	18625	22802	28062	31899	33595	39030	47366	48423	51626	58204	59699	51463	46269
-19.0	18600	19275	23234	29953	36051	37512	43308	52760	55999	60332	70260	69045	59745	56179	54896
-20.0	19977	23449	31322	39114	40925	46642	56620	67388	69436	80516	78010	68715	65639	58406	47458
-21.0	23756	31260	41477	43926	49070	61077	65536	76437	90379	88321	77792	75539	62637	51033	44468
-22.0	30304	41710	49841	50967	61761	76227	82425	94846	99113	86564	84344	67917	55296	48913	37962
-23.0	41646	46600	53144	63291	81849	85746	100683	111829	96174	91901	74482	60371	51747	39103	30769
-24.0	47544	53308	63311	83051	90488	103262	124417	104914	98933	62570	65644	55021	41257	32230	25896
-25.0	53508	63142	81343	92779	105522	130413	114634	105976	91757	71406	55370	44310	34142	27321	23333
-26.0	63159	78243	96391	106018	128421	125476	112634	102156	78308	64842	48223	36557	29150	24973	20463
-27.0	77273	96414	106308	127448	135603	118738	114236	85740	70839	53112	35550	31309	26633	21007	16243
-28.0	95493	104339	125719	144440	124990	129512	94741	76294	58139	43091	33823	28370	22103	16812	13505
-29.0	101674	121481	152575	131245	123859	103612	81925	64013	47452	36700	30187	23578	17648	14080	11901
-30.0	116766	147471	135344	126650	112806	87757	70531	52434	39644	32304	25335	18803	14840	10452	9102
-31.0	142318	137754	127491	129947	63572	77287	57371	43016	34588	27538	20216	15712	13102	9258	6653
-32.0	135236	126417	127209	58913	81855	61955	46656	36873	30388	21964	16744	13823	9648	6818	5148
-33.0	142306	125636	102109	64566	66332	50413	39134	32885	23962	17874	14522	10248	7122	5203	3845
-34.0	121496	103021	85795	69885	53377	41439	34450	25648	19200	15286	11068	7576	5498	3912	2675
-35.0	100608	65277	71913	55981	43416	35845	27943	20596	16130	12165	8162	5784	4083	2725	1926
-36.0	82549	71745	56375	44602	36787	26749	22029	16990	13320	8820	6140	4357	2834	1966	1477
-37.0	69114	56132	44470	31168	31212	23304	17786	14658	9540	6554	4727	2955	2039	1505	1141
-38.0	53557	43732	36309	32023	24163	18434	15135	10300	7016	5124	3204	2141	1551	1163	928
-39.0	41134	35543	31663	24458	16807	15359	11026	7482	5403	3449	2270	1615	1195	943	707
-40.0	33258	30279	24361	18772	15350	11609	7905	5637	3717	2416	1649	1237	960	717	513
-41.0	28361	22774	18190	15130	11523	8203	5323	3578	2562	1766	1244	982	736	519	381
-42.0	20656	17079	14540	11844	8308	5914	4195	2691	1832	1330	1065	762	529	384	296
-43.0	15531	13540	11318	8116	5866	4314	2778	1884	1371	1025	789	542	385	297	244
-44.0	12233	10331	7598	5648	4256	2801	1906	1395	1037	813	556	395	298	244	198
-45.0	8991	6793	5257	4105	2738	1887	1395	1039	630	567	400	300	243	197	162
-46.0	5794	4689	3728	2572	1813	1364	1023	828	572	403	300	241	196	160	135
-47.0	4009	3212	2293	1682	1290	985	803	567	400	297	238	194	158	133	117
-48.0	2625	1545	1496	1177	924	767	549	390	291	233	191	156	130	115	117
-49.0	1579	1289	1035	841	710	517	371	279	226	186	152	127	112	114	119
-50.0	1058	877	737	643	471	343	262	215	179	147	123	109	110	116	122
-51.0	711	626	543	407	306	239	200	169	139	117	105	111	118	129	129
-52.0	519	437	335	262	212	182	156	129	111	99	100	106	113	126	170
-53.0	324	264	215	184	163	141	118	103	93	84	101	107	121	165	222
-54.0	196	172	134	144	123	105	94	86	89	85	101	115	159	215	612
-55.0	134	128	119	103	93	83	78	83	89	94	111	152	205	653	2490
-56.0	105	94	85	68	73	71	77	82	88	106	145	194	708	2679	8683
-57.0	68	68	65	64	66	64	71	87	101	138	187	784	2945	9705	22129
-58.0	54	58	55	59	64	68	73	97	133	175	919	3363	11054	23575	44385
-59.0	45	49	53	57	61	71	77	128	171	1154	4054	13157	25498	48227	80458
-60.0	43	46	53	54	71	84	125	176	1561	5225	15350	28217	53958	60849	92146
-61.0	40	43	53	72	94	123	162	2351	7424	17722	32380	62020	81653	93330	107686
-62.0	45	57	73	64	347	1285	3365	11400	21465	39166	73291	82795	94845	109503	126584
-63.0	60	75	261	951	2718	7417	15952	27704	50340	74777	84566	67398	111725	129574	148858
-64.0	419	1056	2507	6543	13770	22554	38609	68440	77124	87467	100526	115144	134088	152139	174274
-65.0	4078	8334	14116	21885	34999	58716	72093	80790	92016	104613	120098	138244	156707	178591	195913
-66.0	18006	25859	38635	60453	92278	76844	86409	97653	113668	127392	143430	162875	181474	200000	206253
-67.0	53270	63592	69012	75745	84085	91934	105108	119538	136411	151059	170670	186087	205854	199684	195188
-68.0	17889	77877	85409	93655	103802	116548	129561	144068	161679	176287	193184	197712	193080	190055	188178
-69.0	90385	67967	107107	118369	128723	141716	157911	173279	185921	193354	189735	186591	164570	184992	173591
-70.0	115609	123390	133305	145170	157056	168204	181499	187950	184651	182088	180114	179985	179517	156116	135663
-71.0	145019	152032	160720	171085	182627	180045	177914	176297	174627	174568	176276	157753	138400	122392	109360
-72.0	171358	172765	171709	170791	169862	168514	168397	169969	171618	153309	136178	121859	106785	95639	79550
-73.0	159754	155652	160147	161197	163097	166288	156132	141804	128690	117182	106924	95022	80369	68065	57791
-74.0	154788	157423	155200	145487	135509	125895	116438	108370	100700	89233	77021	66521	57380	48784	39943
-75.0	123326	116441	113222	107821	102268	97043	88220	78873	69843	61442	54438	46853	39150	32733	27575
-76.0	90619	84709	78511	72117	65858	59565	54141	48872	42241	35999	30944	26290	19885	15079	11449
-77.0	61391	58414	55308	52225	49338	44802	39922	35160	31154	27756	22693	17868	14059	11015	8280
-78.0	40306	37491	35442	32912	30443	28101	25650	21404	17726	14606	11920	9785	7369	5465	3688
-79.0	24783	23204	21073	18861	16675	14575	12609	10803	9313	7385	5803	4532	2916	1814	



ORIGINAL PAGE IS  
OF POOR QUALITY

0.0	102	70	50	37	28	21	16	13	11	9	7	6	5	4	3
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-3.0	129	89	57	38	25	15	9	6	4	3	2	1	1	1	1
-4.0	178	122	85	57	37	24	16	10	6	4	3	2	1	1	1
-5.0	254	189	131	89	61	38	25	16	10	7	4	2	1	1	1
-6.0	389	297	234	146	98	65	43	26	18	12	7	4	2	2	2
-7.0	604	455	334	237	159	112	73	50	32	21	14	9	5	3	2
-8.0	926	728	553	392	278	207	138	97	63	43	27	16	10	6	4
-9.0	1463	1188	917	691	510	376	263	185	131	85	58	35	20	13	10
-10.0	2502	2047	1649	1239	930	712	526	374	251	180	119	75	45	23	22
-11.0	3881	3277	2693	2201	1691	1330	1002	729	537	365	258	159	96	52	22
-12.0	6025	5350	4798	3953	3208	2517	2000	1535	1119	823	558	386	245	123	56
-13.0	10261	8619	8069	6863	5763	4658	3876	3109	2452	1821	1330	892	557	324	151
-14.0	15157	13661	12299	10932	9659	8471	7050	5833	4732	3679	2812	1990	1340	757	363
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ALTITUDE: 900KM

ELECTRONS: E>2.0 MEV

INNER ZONE MODEL: AE6 (SOLAR MAX)

OUTER ZONE MODEL: AE17-H1





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ORIGINAL PAGE IS  
OF POOR QUALITY







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-46.0	89	156	288	381	543	736	900	1051	1169	1231	1246	1249	1195	1130	807
-47.0	73	122	183	264	358	467	579	685	785	856	915	944	750	579	435
-48.0	59	117	202	254	369	454	540	624	693	775	825	857	386	319	231
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-65.0	525	262	135	71	40	23	16	11	1	26	47	87	159	297	558
-66.0	3355	2423	1800	1170	837	658	559	529	552	638	795	1084	1598	2502	3426
-67.0	12605	9064	6722	5354	4466	3921	3622	3519	3578	3839	4325	5060	6201	7953	10567
-68.0	18448	16825	15700	14927	14355	14033	13349	12729	12812	13525	15454	15925	17002	18433	20148
-69.0	26383	24645	23303	22375	21237	20560	20177	20118	20309	20787	21768	22932	24602	26585	29593
-70.0	37522	35134	33203	31265	30023	29313	28924	28899	29150	29568	30689	32027	33859	36223	39232
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-72.0	44984	49484	53155	52378	52155	52360	52634	53012	53635	54429	55343	56520	57862	59382	61249
-73.0	34392	36998	39601	42303	44850	47272	49445	51272	52652	53465	53828	53719	53143	52068	50677
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-75.0	15325	17339	19569	21868	23821	25721	27365	28785	29819	30384	30504	30242	29572	28572	27216
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-77.0	5205	5864	6335	7239	7957	8691	9332	9860	10284	10561	10637	10612	10393	10039	9540
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-79.0	887	1145	1417	1716	2031	2280	2481	2522	2539	2724	2762	2758	2714	2623	2511
-80.0	289	375	456	527	607	688	768	839	897	937	956	952	930	885	823
-81.0	65	88	119	157	182	206	230	253	271	284	290	289	282	269	251
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ALTITUDE= 900.0 ENERGY= 2.500

ELECTRONS

	-45.0	-42.0	-39.0	-36.0	-33.0	-30.0	-27.0	-24.0	-21.0	-18.0	-15.0	-12.0	-9.0	-6.0	-3.0
81.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
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61.0	12	46	149	335	670	1444	2455	3863	5711	7756	11125	13990	17580	22650	28504
60.0	30	233	594	1076	2121	3385	5307	7599	10861	14073	18249	24141	29462	31982	35730
59.0	386	758	1713	2802	4641	6649	9039	13522	17944	24328	29678	32968	37376	42584	48938
58.0	1193	2225	3607	5726	8612	12507	16460	23049	29369	32956	38015	44225	47810	46897	41959
57.0	2905	4838	6979	10845	14555	20649	28634	31925	37387	44276	47235	44432	39118	33061	28426
56.0	5742	8632	12698	17433	25344	30180	35632	42580	47288	44276	38050	31637	26478	22243	19339
55.0	10849	14570	21240	28392	32894	39559	47904	44282	38051	31641	25777	21383	17785	14450	12115
54.0	17085	25246	29778	35933	44181	44888	41172	32548	26230	21251	17264	13734	11396	5930	3265
53.0	27480	31990	39136	46321	42817	34787	28350	22338	17724	13715	10560	5043	2527	1197	379
52.0	34654	42672	43536	38780	33666	23777	19166	14402	11375	5075	2352	888	218	37	1
51.0	44714	41565	33793	26706	20757	15913	12117	6174	2602	911	184	19	1	1	1
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49.0	26829	20646	15805	11765	5370	2053	458	50	1	1	1	1	1	1	1
48.0	18538	13735	9523	3434	1123	151	1	1	1	1	1	1	1	1	1
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46.0	4261	1545	218	4	1	1	1	1	1	1	1	1	1	1	1
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10.0	17	14	9	6	6	4	4	4	5	5	11	11	11	11	13
9.0	21	15	11	9	9	6	6	8	12	14	16	16	15	14	12
8.0	24	18	13	12	10	8	8	10	14	18	22	22	18	15	13
7.0	28	20	14	15	13	12	12	16	22	26	25	22	20	17	15
6.0	31	23	16	16	14	13	13	22	27	34	32	29	23	20	17
5.0	35	26	18	17	15	14	14	29	39	40	36	26	25	22	19
4.0	41	30	21	19	17	16	16	44	52	47	42	33	30	25	22
3.0	43	32	22	20	18	17	17	52	60	54	48	38	34	28	24
2.0	51	38	26	23	21	20	20	67	77	67	58	48	38	33	28
1.0	61	45	32	28	26	25	25	87	102	82	69	55	43	31	26
0.0	72	50	37	31	29	28	28	110	122	93	76	64	48	35	26

ORIGINAL PAGE IS  
OF POOR QUALITY

0.0	89	90	100	106	101	97	93	88	80	72	62	54	42	34	26
-1.0	109	120	131	123	116	112	108	99	91	80	70	58	42	29	20
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-3.0	183	184	171	164	155	149	140	128	116	109	82	62	45	33	23
-4.0	225	208	197	191	183	177	164	154	147	127	98	75	57	42	30
-5.0	247	235	226	221	214	204	201	193	179	147	119	95	73	58	43
-6.0	274	265	259	257	252	246	241	245	220	183	147	123	101	81	62
-7.0	303	300	296	299	299	301	306	303	258	227	200	171	142	116	93
-8.0	346	349	350	350	350	372	389	376	336	301	269	239	202	175	147
-9.0	396	355	435	414	439	478	454	457	434	405	372	340	306	276	236
-10.0	455	422	435	513	547	622	615	601	559	536	511	495	461	441	386
-11.0	524	546	572	643	725	799	782	735	744	743	747	752	763	705	617
-12.0	607	651	738	807	950	992	944	954	1001	1059	1142	1180	1121	1069	979
-13.0	709	788	887	1039	1217	1137	1201	1290	1443	1624	1653	1632	1642	1638	1615
-14.0	839	966	1118	1414	1364	1399	1571	1812	2141	2168	2272	2439	2527	2599	2508
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-16.0	1271	1577	1810	1764	2101	2459	3019	3333	3847	4396	4718	4917	5096	5240	5431
-17.0	1603	1901	2196	2736	3495	3387	4210	4846	5906	6210	6485	7226	7963	7151	6722
-18.0	1953	2131	2342	2784	3731	4373	4785	5699	7044	7380	8045	9163	9622	8660	8072
-19.0	2221	2402	3017	3959	4924	5302	6298	7636	8523	9415	11090	11261	10216	9985	9998
-20.0	2474	3021	4114	5253	5744	6775	8382	9694	10793	12705	12782	11859	11788	10788	9003
-21.0	3048	4140	5532	6181	7069	9010	10498	11846	14262	14478	13473	13631	11674	9791	8706
-22.0	3995	5589	6379	7283	9000	11444	12719	14615	16138	15031	15253	12716	10678	9652	7255
-23.0	5560	6431	7553	9266	12216	13162	15787	18024	16480	16582	13960	11697	10169	7372	5575
-24.0	6528	7612	9241	12342	13811	16125	19780	17813	17749	15431	12694	10764	7708	5758	4469
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-63.0	5	8	13	20	30	45	68	103	154	228	343	518	771	1131	1671
-64.0	114	302	728	1733	3602	6040	10546	18992	22865	27792	33977	40183	48350	57375	69916
-65.0	1094	2185	3721	5868	9545	16249	23948	25007	30426	35924	42532	50711	60171	70992	74851
-66.0	4805	6596	10500	16758	20111	23606	28154	33230	36737	45911	53816	63849	70977	75240	72219
-67.0	14745	18118	20522	23607	27553	31942	36645	42795	49773	58248	67655	71376	75999	67013	59318
-68.0	22445	25210	28737	32148	36388	41806	47897	55230	64413	68373	72380	69166	61606	55028	49210
-69.0	31140	34288	38165	42955	48126	54673	62923	66174	69709	69336	62313	56069	50413	45256	39244
-70.0	42453	46244	51178	57160	62082	64794	68052	66972	61021	55514	50298	46012	41922	33550	26722
-71.0	57886	59697	61923	64541	67146	62236	57601	53044	48659	45320	42233	34617	28325	22803	18690
-72.0	63494	61857	58735	55555	52139	48647	45582	42667	40267	33541	27766	23035	19177	15504	11203
-73.0	49028	47173	45198	43284	41499	39914	35441	30286	25798	21983	18654	15507	12307	9742	7708
-74.0	38842	38095	36375	32468	28871	25522	22440	19643	17147	14376	11713	9507	7707	6067	4502
-75.0	25655	23873	22030	20159	18245	16533	14469	12262	10354	8604	7222	5781	4422	3381	2587
-76.0	15926	15174	13897	12353	10951	9533	8360	7275	6237	5012	3558	2432	1601	1048	633
-77.0	8551	8325	7631	7046	6447	5579	4678	3885	3229	2691	1982	1378	951	650	433
-78.0	4900	4480	4032	3597	3185	2803	2427	1846	1384	1026	744	549	372	247	152
-79.0	2377	2144	1849	1558	1287	1044	826	612	517	377	270	193	115	74	40
-80.0	749	674	597	525	440	356	281	219	163	108	79	56	37	26	13
-81.0	230	207	183	150	116	88	65	48	34	20	12	7	4	2	1
-82.0	45	40	33	25	19	14	10	7	5	3	2	1	1	1	1
-83.0	4	3	2	1	1	1	1	1	1	1	1	1	1	1	1
-84.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
-85.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
-86.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1

ALTITUDE= 900.0

ENERGY= 2.000

ELECTRONS

	0.0	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	33.0	36.0	39.0	42.0
81.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
80.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
79.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
78.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
77.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
76.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
75.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
74.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
73.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
72.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
71.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
70.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
69.0	10	24	5	11	24	43	70	115	171	227	304	404	529	688	888
68.0	80	162	48	87	158	225	328	448	572	743	967	1261	1584	1862	2047
67.0	374	556	847	1290	1884	2282	2806	3398	4089	4847	5530	6532	7170	7860	8445
66.0	1233	1957	2942	3174	4026	5026	5770	6620	7584	8700	9968	11390	11979	12660	13389
65.0	3120	4189	5313	6351	7665	9128	10989	12364	13868	14741	16162	17811	15583	21451	23138
64.0	6347	7910	10010	12279	13700	15515	17743	20392	23070	25792	27316	27623	28090	28715	29410
63.0	12320	14152	16795	19947	23495	27295	28649	29597	30895	32463	34109	35445	36819	38201	39567
62.0	19990	24587	28834	30049	31945	34365	35533	38817	41271	43806	44909	43139	41634	40288	39064
61.0	30397	33069	36047	39174	42677	46533	45707	43786	42192	41016	38243	35164	32551	30264	28279
60.0	34652	44384	47849	45402	43528	42055	37490	33781	30699	28551	26251	24067	22207	20587	19183
59.0	45550	43939	40437	35423	31600	28728	25494	22949	20917	19257	17903	16314	14871	13654	12604
58.0	35691	31326	27470	23958	21359	19320	17221	15280	13702	12402	11357	10455	8765	6903	5526
57.0	24125	21088	18645	15917	13845	12263	11003	8237	5962	4417	3336	2552	1993	1559	1239
56.0	15685	13572	11778	8667	5621	3792	2620	1869	1335	773	454	267	156	87	45
55.0	8423	4654	3062	1937	1130	539	259	119	50	16	1	1	1	1	1
54.0	1875	886	338	120	34	3	1	1	1	1	1	1	1	1	1
53.0	108	19	1	1	1	1	1	1	1	1	1	1	1	1	1
52.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
51.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
50.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
49.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
48.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
47.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
46.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
45.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
44.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
43.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
42.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
41.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
40.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
39.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
38.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
37.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
36.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
35.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
34.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
33.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
32.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
31.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
30.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
29.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
28.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
27.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
26.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
25.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
24.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
23.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
22.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
21.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
20.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
19.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
18.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
17.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
16.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
15.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
14.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
13.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
12.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
11.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
10.0	10	6	6	6	6	6	6	6	6	6	6	6	6	6	6
9.0	12	10	8	7	7	7	7	7	7	7	7	7	7	7	7
8.0	13	10	8	8	8	8	8	8	8	8	8	8	8	8	8
7.0	15	12	11	11	11	11	11	11	11	11	11	11	11	11	11
6.0	16	14	12	12	12	12	12	12	12	12	12	12	12	12	12
5.0	18	15	13	13	13	13	13	13	13	13	13	13	13	13	13
4.0	20	17	14	14	14	14	14	14	14	14	14	14	14	14	14
3.0	21	16	13	13	13	13	13	13	13	13	13	13	13	13	13
2.0	11	10	10	10	10	10	10	10	10	10	10	10	10	10	10
1.0	14	14	11	11	11	11	11	11	11	11	11	11	11	11	11

ORIGINAL PAGE IS  
OF POOR QUALITY













ALTIMUDE= 900.C ENERGY= 2.900

ELECTRONS

	135.0	138.0	141.0	144.0	147.0	150.0	153.0	156.0	159.0	162.0	165.0	168.0	171.0	174.0	177.0
81.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
80.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
79.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
78.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
77.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
76.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
75.0	6	5	5	4	4	1	1	1	1	1	1	1	1	1	1
74.0	49	45	41	36	32	28	21	15	10	7	5	1	1	1	1
73.0	248	235	220	203	183	161	138	113	86	62	44	31	19	10	5
72.0	800	768	726	676	615	551	490	433	380	307	238	182	136	86	51
71.0	2128	2097	2052	1985	1903	1806	1704	1601	1532	1060	829	632	486	384	265
70.0	4453	4434	4355	4305	4184	4076	3927	3472	3111	2712	2338	2015	1746	1325	904
69.0	8597	8537	8392	8178	7917	7549	7054	6586	6097	5490	4940	4480	3920	3194	2514
68.0	13831	13625	13691	13519	13306	12892	12383	11810	11199	10600	9924	8559	7332	6283	5259
67.0	22190	22391	22599	22992	23295	22748	22748	21295	19848	17902	16077	14449	13035	11629	10529
66.0	27996	28279	28494	28447	28324	28008	27490	26943	26381	25706	25158	24689	23592	20243	17006
65.0	34484	34622	34630	35084	36804	37677	38697	37875	36494	35025	33543	31577	29370	27537	26141
64.0	47360	47406	48117	48823	49849	50988	52748	54768	56680	56711	57969	59472	61316	63052	64862
63.0	18185	18457	18539	19328	19633	20606	21938	23269	24885	26644	28860	31644	35268	37725	39253
62.0	11905	12040	12211	12582	13110	13756	14563	15557	16556	17765	19369	21349	23834	26618	29916
61.0	6902	6841	6996	7361	7898	8671	9180	9775	10494	11407	12603	14044	15990	17868	20228
60.0	1346	1349	1434	1484	1610	1808	2105	2540	3211	4223	5711	8054	10993	11467	13259
59.0	62	59	61	70	89	121	171	257	411	681	1188	1704	2540	3906	6265
58.0	1	1	1	1	1	1	1	1	1	7	34	97	245	599	1360
57.0	1	1	1	1	1	1	1	1	1	1	1	1	1	5	54
56.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
55.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
54.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
53.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
52.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
51.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
50.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
49.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
48.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
47.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
46.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
45.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
44.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
43.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
42.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
41.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
40.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
39.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
38.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
37.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
36.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
35.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
34.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
33.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
32.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
31.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
30.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
29.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
28.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
27.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
26.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
25.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
24.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
23.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
22.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
21.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
20.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
19.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
18.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
17.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
16.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
15.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
14.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
13.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
12.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
11.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
10.0	1	1	1	1	1	1	1	1	1	1	1	1	1	2	2
9.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
8.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
7.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
6.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
5.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
4.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
3.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
2.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
1.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1

ORIGINAL PAGE IS  
OF POOR QUALITY



ALTITUDE: 900KM

ELECTRONS:  $E > 3.0$  MEV

INNER ZONE MODEL: AE6 (SOLAR MAX)

OUTER ZONE MODEL: AE17-HI











ALTITUDE= 900.0 ENERGY= 3.003

ELECTRONS

	-90.0	-87.0	-84.0	-81.0	-78.0	-75.0	-72.0	-69.0	-66.0	-63.0	-60.0	-57.0	-54.0	-51.0	-48.0
75.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
74.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
73.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
72.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
71.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
70.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
69.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
68.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
67.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
66.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
65.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
64.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
63.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
62.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
61.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
60.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
59.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
58.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
57.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
56.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
55.0	8	6	4	4	4	6	9	16	31	55	127	266	539	933	1643
54.0	42	33	29	28	29	34	46	76	143	251	426	810	1292	2218	3570
53.0	213	171	136	127	137	175	224	294	451	757	1127	1800	3110	4240	6508
52.0	653	502	431	411	434	512	661	879	1153	1688	2651	3657	5225	8057	9804
51.0	1464	1216	1095	1063	1105	1234	1497	1944	2740	3453	4618	5741	7432	10690	13683
50.0	3069	2790	2668	2569	2665	2857	3171	3703	4645	6276	8445	10604	12017	15245	15630
49.0	5664	4894	4501	4370	4488	4873	5629	6990	8242	9132	10860	13484	16151	19597	12685
48.0	8243	7835	7701	7720	7923	8052	8531	9304	10679	12758	15585	14767	13438	11533	9567
47.0	11835	10782	10205	10010	10210	10792	11870	13255	15399	14489	13555	12011	10576	8448	6728
46.0	12619	13306	13885	14279	14407	14323	13995	13539	13034	11955	10712	9084	7474	5446	4543
45.0	10119	10840	11458	11853	12007	11866	11492	10937	10273	9073	7731	6432	5033	3277	1236
44.0	7451	8246	8828	9331	9457	9323	8958	8179	7393	6478	5361	4388	2938	145	193
43.0	5131	5787	6277	6573	6688	6616	6341	5778	5111	4400	2780	1272	510	33	1
42.0	3156	3876	4224	4448	4547	4496	4288	3909	2560	1426	712	212	20	1	1
41.0	730	1111	1502	1819	1920	1787	1453	1043	683	275	67	3	1	1	1
40.0	62	158	291	413	465	41	291	154	56	0	1	1	1	1	1
39.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
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19.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
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33.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
34.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
35.0	1	1	1	1											









ALTITUDE= 900.0

ENERGY= 3.000

ELECTRONS

	0.0	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	33.0	36.0	39.0	42.0
75.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
74.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
73.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
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71.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
70.0	1	1	1	1	1	1	2	4	8	12	20	31	39	48	62
69.0	1	7	14	20	27	35	44	54	66	80	98	120	144	171	201
68.0	2	45	81	115	142	170	200	232	268	308	354	406	465	531	603
67.0	26	249	455	665	888	1122	1366	1620	1884	2258	2642	3036	3540	4054	4678
66.0	132	700	1105	1413	1814	2335	3004	3823	4802	5951	7280	8790	10482	12356	14414
65.0	499	2629	3471	4434	5518	6733	8080	9569	11202	12980	14904	16974	19190	21552	24061
64.0	1392	7943	9625	12228	15083	18164	21472	25017	28800	32822	37084	41586	46329	51314	56541
63.0	3475	19055	22629	28113	34644	42275	51056	60937	71970	84214	97740	112530	128665	146136	165034
62.0	6214	34755	41445	50660	62113	75544	90917	108282	127690	149194	172845	198604	226531	256696	289161
61.0	10337	56555	66666	80666	97666	116666	137666	160666	185666	212666	241666	272666	305666	340666	378666
60.0	14440	78555	93666	111666	132666	156666	183666	213666	246666	282666	321666	363666	408666	456666	507666
59.0	17013	93666	111666	132666	156666	183666	213666	246666	282666	321666	363666	408666	456666	507666	561666
58.0	13517	72395	86666	103666	123666	146666	173666	204666	239666	278666	321666	368666	419666	474666	533666
57.0	9845	53666	63666	76666	92666	110666	131666	156666	185666	218666	255666	296666	341666	390666	443666
56.0	6661	35703	42666	50666	60666	72666	86666	103666	123666	146666	173666	204666	239666	278666	321666
55.0	3584	2130	25666	30666	36666	43666	51666	61666	73666	87666	103666	121666	141666	163666	188666
54.0	796	383	45666	54666	64666	76666	90666	107666	127666	150666	176666	205666	237666	272666	310666
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52.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
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50.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
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48.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
47.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
46.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
45.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
44.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
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42.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
41.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
40.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
39.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
38.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
37.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
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27.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
26.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
25.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
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1.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
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ORIGINAL PAGE IS  
OF POOR QUALITY.



ALTITUDE= 900.0 ENERGY= 3.000

CLECTFONS

	45.0	48.0	51.0	54.0	57.0	60.0	63.0	66.0	69.0	72.0	75.0	78.0	81.0	84.0	87.0
75.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
74.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
73.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
72.0	1	2	3	5	7	10	13	17	22	27	33	39	45	52	60
71.0	16	22	29	37	45	53	63	75	87	101	117	134	154	174	199
70.0	81	103	131	165	202	226	246	269	322	357	385	420	459	504	554
69.0	326	390	440	512	588	665	749	833	915	965	1017	1071	1133	1196	1271
68.0	976	1070	1174	1289	1416	1533	1669	1804	1943	2093	2250	2417	2591	2663	2719
67.0	2232	2522	2835	3045	3165	3280	3403	3531	3577	3665	3710	3799	3871	3936	4092
66.0	4247	4558	4884	5224	5576	5955	6337	6731	7137	7510	7552	7499	7471	7436	7483
65.0	8203	8491	8532	8605	8701	8794	8498	8016	7137	6277	5424	4589	3767	3050	10185
64.0	10642	11031	11431	11819	12121	12419	12717	13002	13276	13505	13700	13569	13114	12359	12386
63.0	15376	15904	15230	14603	14046	13537	13068	12638	12243	11868	11490	11018	10631	10259	9877
62.0	13635	13044	12400	11804	11282	10769	10326	9904	9516	9161	8840	8411	7994	7521	7272
61.0	10505	10030	9443	8867	8431	7850	7430	7042	5631	6360	6063	5779	5498	5238	4919
60.0	7399	6461	6565	6111	5702	5346	5015	4719	4456	4206	3978	3772	3579	3434	3244
59.0	4905	4584	4290	4025	3778	3156	2626	2204	1854	1583	1333	1127	955	812	690
58.0	1892	1524	1243	1019	836	690	570	474	383	280	205	148	107	70	52
57.0	363	249	171	116	77	50	30	17	9	2	1	1	1	1	1
56.0	9	2	1	1	1	1	1	1	1	1	1	1	1	1	1
55.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
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34.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
33.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
32.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
31.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
30.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
29.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
28.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
27.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
26.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
25.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
24.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
23.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
22.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
21.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
20.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
19.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
18.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
17.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
16.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
15.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
14.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
13.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
12.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
11.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
10.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
9.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
8.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
7.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
6.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
5.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
4.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
3.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
2.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
1.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
0.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
75.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1

ORIGINAL PAGE IS  
OF POOR QUALITY



ALTITUDE= 900.0 ENERGY= 3.000

ELECTRONS

	90.0	93.0	96.0	99.0	102.0	105.0	108.0	111.0	114.0	117.0	120.0	123.0	126.0	129.0	132.0
75.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
74.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
73.0	7	8	9	10	11	12	13	14	15	16	17	17	17	17	17
72.0	37	41	45	49	54	58	63	67	73	77	81	83	83	83	84
71.0	198	207	217	227	239	251	265	278	292	304	315	323	329	331	326
70.0	548	598	645	700	752	774	796	819	844	868	891	914	933	947	953
69.0	1266	1342	1422	1534	1619	1710	1796	1898	1972	2041	2138	2210	2285	2330	2337
68.0	2785	2855	2945	3044	3150	3245	3356	3469	3599	3735	3872	4004	4131	4170	4229
67.0	4896	5153	5400	5674	5900	6195	6502	6825	7051	7281	7441	7597	7752	7877	7415
66.0	7518	7591	7696	7823	7985	8122	8286	8449	8659	8865	9097	9332	9520	9706	9951
65.0	10453	10736	11052	11400	11702	12006	12288	12639	12940	12827	12706	12650	12604	12633	12753
64.0	12079	11796	11526	11222	11000	10929	10781	10643	10430	10200	10150	11101	13079	13333	13125
63.0	9562	9286	9027	8790	8581	8396	8252	8132	7945	7751	7606	7494	7429	7412	7410
62.0	6980	6695	6464	6234	6011	5826	5666	5525	5407	5304	5166	5070	5003	4949	4923
61.0	4670	4438	4250	4059	3902	3765	3652	3542	3457	3391	3325	3275	3243	3107	2975
60.0	2896	2499	2156	1867	1635	1428	1248	1100	976	871	790	719	668	628	591
59.0	590	504	431	372	307	236	183	143	111	88	50	55	45	37	32
58.0	35	22	13	7	2										
57.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
56.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
55.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
54.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
53.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
52.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
51.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
50.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
49.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
48.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
47.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
46.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
45.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
44.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
43.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
42.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
41.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
40.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
39.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
38.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
37.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
36.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
35.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
34.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
33.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
32.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
31.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
30.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
29.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
28.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
27.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
26.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
25.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
24.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
23.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
22.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
21.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
20.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
19.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
18.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
17.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
16.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
15.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
14.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
13.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
12.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
11.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
10.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
9.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
8.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
7.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
6.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
5.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
4.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
3.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
2.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
1.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
0.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
1.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
2.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
3.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
4.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1

ORIGINAL PAGE IS  
OF POOR QUALITY









ALTITUDE: 900 KM

ELECTRONS: E > 4.0 MEV

INNER ZONE MODEL: AE6 (SOLAR MAX)

OUTER ZONE MODEL: AE17-HI

ALTITUDE= 900.0 ENERGY= 4.00J

ELECTRONS

	-180.0	-177.0	-174.0	-171.0	-168.0	-165.0	-162.0	-159.0	-156.0	-153.0	-150.0	-147.0	-144.0	-141.0	-138.0
75.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
74.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
73.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
72.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
71.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
70.0	17	10	5	1	1	1	1	1	1	1	1	1	1	1	1
69.0	102	70	34	16	9	3	1	1	1	1	1	1	1	1	1
68.0	351	244	124	65	35	23	10	3	1	1	1	1	1	1	1
67.0	441	321	152	74	40	23	10	3	1	1	1	1	1	1	1
66.0	1756	1200	556	277	149	82	39	12	7	3	1	1	1	1	1
65.0	3747	2605	1156	527	282	150	63	26	11	3	1	1	1	1	1
64.0	5656	4748	2147	1071	571	312	182	96	37	5	1	1	1	1	1
63.0	8174	6000	3047	1527	797	447	284	132	58	17	1	1	1	1	1
62.0	9392	6365	3437	1785	925	582	381	176	73	22	1	1	1	1	1
61.0	10374	7041	3790	2023	1054	641	432	195	87	27	1	1	1	1	1
60.0	11113	7511	4004	2172	1154	685	461	212	94	29	1	1	1	1	1
59.0	11613	7852	4181	2286	1226	720	489	226	99	31	1	1	1	1	1
58.0	12087	8175	4343	2385	1286	756	516	239	104	33	1	1	1	1	1
57.0	12530	8481	4491	2479	1339	786	541	251	108	34	1	1	1	1	1
56.0	12943	8771	4626	2568	1386	811	564	262	111	35	1	1	1	1	1
55.0	13327	9045	4749	2652	1428	831	584	272	114	36	1	1	1	1	1
54.0	13682	9304	4861	2731	1465	848	601	281	116	37	1	1	1	1	1
53.0	14009	9548	4963	2805	1498	862	616	289	118	38	1	1	1	1	1
52.0	14318	9778	5056	2874	1527	871	624	296	119	39	1	1	1	1	1
51.0	14609	9994	5141	2938	1552	878	631	302	120	40	1	1	1	1	1
50.0	14882	10196	5218	3000	1574	884	637	307	121	40	1	1	1	1	1
49.0	15137	10385	5288	3059	1593	889	642	311	122	41	1	1	1	1	1
48.0	15375	10561	5351	3116	1610	893	646	315	123	41	1	1	1	1	1
47.0	15596	10724	5408	3171	1625	896	649	318	124	42	1	1	1	1	1
46.0	15800	10874	5460	3224	1639	899	652	321	125	42	1	1	1	1	1
45.0	16000	11011	5507	3275	1651	901	654	323	126	43	1	1	1	1	1
44.0	16195	11136	5550	3324	1662	903	656	325	127	43	1	1	1	1	1
43.0	16386	11258	5598	3371	1672	904	657	326	128	44	1	1	1	1	1
42.0	16573	11368	5642	3416	1681	905	658	327	129	44	1	1	1	1	1
41.0	16756	11466	5682	3459	1689	906	659	328	130	45	1	1	1	1	1
40.0	16935	11553	5719	3500	1696	906	659	328	131	45	1	1	1	1	1
39.0	17110	11628	5752	3539	1702	906	659	328	132	46	1	1	1	1	1
38.0	17281	11691	5781	3576	1707	906	659	328	133	46	1	1	1	1	1
37.0	17448	11743	5807	3611	1711	906	659	328	134	47	1	1	1	1	1
36.0	17611	11784	5829	3644	1715	906	659	328	135	47	1	1	1	1	1
35.0	17770	11814	5848	3675	1718	906	659	328	136	48	1	1	1	1	1
34.0	17925	11833	5864	3704	1720	906	659	328	137	48	1	1	1	1	1
33.0	18076	11841	5877	3731	1721	906	659	328	138	49	1	1	1	1	1
32.0	18223	11838	5887	3756	1722	906	659	328	139	49	1	1	1	1	1
31.0	18366	11824	5894	3779	1722	906	659	328	140	50	1	1	1	1	1
30.0	18505	11799	5898	3800	1721	906	659	328	141	50	1	1	1	1	1
29.0	18640	11763	5899	3819	1720	906	659	328	142	51	1	1	1	1	1
28.0	18771	11716	5897	3836	1718	906	659	328	143	51	1	1	1	1	1
27.0	18898	11659	5892	3851	1716	906	659	328	144	52	1	1	1	1	1
26.0	19021	11592	5884	3864	1713	906	659	328	145	52	1	1	1	1	1
25.0	19140	11515	5873	3875	1710	906	659	328	146	53	1	1	1	1	1
24.0	19255	11428	5859	3884	1706	906	659	328	147	53	1	1	1	1	1
23.0	19366	11331	5842	3891	1702	906	659	328	148	54	1	1	1	1	1
22.0	19473	11224	5822	3896	1700	906	659	328	149	54	1	1	1	1	1
21.0	19576	11107	5800	3900	1697	906	659	328	150	55	1	1	1	1	1
20.0	19675	10980	5775	3902	1694	906	659	328	151	55	1	1	1	1	1
19.0	19770	10843	5748	3902	1691	906	659	328	152	56	1	1	1	1	1
18.0	19861	10696	5719	3900	1687	906	659	328	153	56	1	1	1	1	1
17.0	19948	10540	5688	3896	1684	906	659	328	154	57	1	1	1	1	1
16.0	20031	10375	5655	3890	1680	906	659	328	155	57	1	1	1	1	1
15.0	20110	10201	5620	3882	1676	906	659	328	156	58	1	1	1	1	1
14.0	20185	10018	5583	3872	1671	906	659	328	157	58	1	1	1	1	1
13.0	20256	9826	5544	3860	1666	906	659	328	158	59	1	1	1	1	1
12.0	20323	9625	5503	3846	1660	906	659	328	159	59	1	1	1	1	1
11.0	20386	9415	5460	3830	1654	906	659	328	160	60	1	1	1	1	1
10.0	20445	9196	5415	3812	1647	906	659	328	161	60	1	1	1	1	1
9.0	20500	8968	5368	3792	1640	906	659	328	162	61	1	1	1	1	1
8.0	20551	8731	5319	3770	1632	906	659	328	163	61	1	1	1	1	1
7.0	20600	8485	5268	3746	1624	906	659	328	164	62	1	1	1	1	1
6.0	20645	8230	5215	3720	1615	906	659	328	165	62	1	1	1	1	1
5.0	20687	7966	5160	3692	1606	906	659	328	166	63	1	1	1	1	1
4.0	20726	7693	5103	3671	1596	906	659	328	167	63	1	1	1	1	1
3.0	20761	7411	5044	3648	1585	906	659	328	168	64	1	1	1	1	1
2.0	20793	7120	4983	3622	1574	906	659	328	169	64	1	1	1	1	1
1.0	20822	6821	4920	3594	1562	906	659	328	170	65	1	1	1	1	1
0.0	20848	6514	4855	3564	1550	906	659	328	171	65	1	1	1	1	1
-1.0	20871	6200	4788	3532	1537	906	659	328	172	66	1	1	1	1	1
-2.0	20891	5879	4719	3500	1524	906	659	328	173	66	1	1	1	1	1
-3.0	20908	5551	4648	3466	1510	906	659	328	174	67	1	1	1	1	1
-4.0	20922	5216	4575	3431	1496	906	659	328	175	67	1	1	1	1	1

ORIGINAL PAGE IS  
OF POOR QUALITY



	-135.0	-132.0	-129.0	-126.0	-123.0	-120.0	-117.0	-114.0	-111.0	-108.0	-105.0	-102.0	-99.0	-96.0	-93.0
75.0															
74.0															
73.0															
72.0															
71.0															
70.0															
69.0															
68.0															
67.0															
66.0															
65.0															
64.0															
63.0															
62.0															
61.0															
60.0	40	11	2												
59.0	150	75	18	5											
58.0	422	225	52	34	10										
57.0	1024	545	139	63	16										
56.0	1916	1227	320	139	49										
55.0	3651	2403	614	284	102										
54.0	5534	4046	1007	484	189										
53.0	7750	5444	1450	741	299										
52.0	9851	6889	1916	1009	370										
51.0	12159	8414	2471	1319	489										
50.0	1555	1054	3022	1790	656										
49.0	400	238	384	2126	2840										
48.0	51	24	137	399	1514										
47.0			6	61	647										
46.0					234										
45.0					22										
44.0															
43.0															
42.0															
41.0															
40.0															
39.0															
38.0															
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OF POOR QUALITY













ALTITUDE= 900.0 ENERGY= 30.00

ELECTRONS

	0.0	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	33.0	36.0	39.0	42.0
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73.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
72.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
71.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
70.0	1	1	1	1	1	1	1	1	1	2	5	9	11	14	19
69.0	1	1	1	1	1	2	5	10	14	21	32	49	59	88	103
68.0	1	1	3	4	13	21	36	61	91	113	143	181	227	278	337
67.0	7	13	26	44	87	116	159	216	288	374	429	496	575	659	751
66.0	45	71	131	193	273	349	471	570	699	846	1020	1223	1324	1436	1563
65.0	186	293	424	541	674	822	1147	1357	1537	1754	2000	2278	2539	2925	3259
64.0	513	722	1004	1329	1599	1858	2230	2634	3182	3701	4056	4243	4446	4678	4925
63.0	1329	1631	2044	2584	3230	3949	4338	4677	5095	5554	6072	6536	7035	7434	7958
62.0	2580	3416	4263	4683	5251	5950	6653	7324	8189	9027	9306	8472	7779	7134	6678
61.0	4734	5498	6415	7373	8475	9713	9101	9141	7353	6717	6092	5527	5057	4632	4291
60.0	7463	8029	9483	8586	7549	6748	5914	5237	4710	4280	3877	3507	3198	2933	2701
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-3.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
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ORIGINAL PAGE IS  
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ALTITUDE: 400 KM

ELECTRONS: E > 5.0 MEV

INNER ZONE MODEL: AE6 (SOLAR MAX)

OUTER ZONE MODEL: AE17-HI

ALTITUDE= 900.0 ENERGY= 5.000

ELECTRONS

	-180.0	-177.0	-174.0	-171.0	-168.0	-165.0	-162.0	-159.0	-156.0	-153.0	-150.0	-147.0	-144.0	-141.0	-138.0
-75.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
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73.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
72.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
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70.0	3	2	1	1	1	1	1	1	1	1	1	1	1	1	1
69.0	22	15	7	3	1	1	1	1	1	1	1	1	1	1	1
68.0	81	55	34	21	12	4	2	1	1	1	1	1	1	1	1
67.0	206	149	106	79	47	26	16	5	2	1	1	1	1	1	1
66.0	414	341	248	194	130	89	54	28	15	4	1	1	1	1	1
65.0	819	681	518	403	320	231	144	92	54	26	12	3	1	1	1
64.0	1224	1040	905	812	604	441	334	235	140	87	44	21	7	2	1
63.0	1866	1718	1432	1175	974	840	638	446	326	215	123	76	33	16	4
62.0	1508	1712	1801	1923	1575	1267	1003	833	615	416	303	179	97	53	23
61.0	975	1152	1351	1622	1763	1886	1619	1259	972	814	542	367	255	133	78
60.0	608	729	967	1057	1270	1547	1759	1390	1558	1170	910	716	456	313	196
59.0	353	429	533	675	818	1010	1248	1561	1766	1911	1424	1049	829	574	370
58.0	69	131	251	391	496	642	807	1023	1283	1644	1747	1696	1239	919	726
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53.0	1	1	1	1	1	1	1	4	21	67	184	382	532	727	1039
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-4.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1

ORIGINAL PAGE IS  
OF POOR QUALITY



ALTITUDE= 900.0 ENERGY= 5.000

ELECTRONS

	-135.0	-132.0	-129.0	-126.0	-123.0	-120.0	-117.0	-114.0	-111.0	-108.0	-105.0	-102.0	-99.0	-96.0	-93.0
75.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
74.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
73.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
72.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
71.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
70.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
69.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
68.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
67.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
66.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
65.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
64.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
63.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
62.0	8	2	1	1	1	1	1	1	1	1	1	1	1	1	1
61.0	33	16	3	1	1	1	1	1	1	1	1	1	1	1	1
60.0	99	51	21	7	2	1	1	1	1	1	1	1	1	1	1
59.0	254	130	74	30	13	3	1	1	1	1	1	1	1	1	1
58.0	445	301	173	91	45	19	6	1	1	1	1	1	1	1	1
57.0	907	545	349	233	117	60	28	13	3	1	1	1	1	1	1
56.0	1197	882	683	416	283	159	86	44	20	8	2	1	1	1	1
55.0	1775	1388	982	773	505	328	218	116	71	33	17	1	1	1	1
54.0	1470	1676	1502	1119	835	633	394	275	166	94	59	29	17	9	4
53.0	966	1272	1594	1738	1314	932	748	499	332	248	141	88	50	34	22
52.0	627	828	1106	1455	1635	1520	1073	815	656	426	303	225	141	96	74
51.0	370	520	714	958	1253	1551	1688	1245	937	754	574	399	302	249	177
50.0	100	289	435	618	818	1084	1414	1546	1537	1126	868	574	352	267	341
49.0	14	57	172	363	514	697	930	1200	1498	1613	1414	1069	756	701	679
48.0	1	6	31	101	294	424	596	778	1019	1290	1512	1627	1408	1119	944
47.0	1	1	1	14	56	168	340	436	654	847	1075	1330	1598	1553	1549
46.0	1	1	1	1	5	30	93	262	394	540	693	890	1077	1294	1481
45.0	1	1	1	1	1	1	13	49	140	316	425	565	697	851	1008
44.0	1	1	1	1	1	1	1	4	23	69	141	331	428	540	653
43.0	1	1	1	1	1	1	1	1	1	1	31	82	198	322	396
42.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
41.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
40.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
39.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
38.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
37.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
36.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
35.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
34.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
33.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
32.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
31.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
30.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
29.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
28.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
27.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
26.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
25.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
24.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
23.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
22.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
21.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
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19.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
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17.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
16.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
15.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
14.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
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12.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
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10.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
9.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
8.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
7.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
6.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
5.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
4.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
3.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
2.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
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-1.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
-2.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
-3.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
-4.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1

ORIGINAL PAGE IS  
OF POOR QUALITY



ALTITUDE= 900.0 ENERGY= 5.000

ELECTRONS

	-90.0	-87.0	-84.0	-81.0	-78.0	-75.0	-72.0	-69.0	-66.0	-63.0	-60.0	-57.0	-54.0	-51.0	-48.0
75.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
74.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
73.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
72.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
71.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
70.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
69.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
68.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
67.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
66.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
65.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
64.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
63.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
62.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
61.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
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58.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	2
57.0	1	1	1	1	1	1	1	1	1	1	1	3	12	3	19
56.0	1	1	1	1	1	1	1	1	1	1	1	3	12	27	59
55.0	1	1	1	1	1	1	1	1	1	1	1	9	21	37	150
54.0	2	1	1	1	1	2	2	4	10	20	35	71	116	200	341
53.0	17	13	10	7	10	13	18	24	37	66	101	166	276	435	623
52.0	57	42	36	34	36	43	57	74	104	155	250	349	499	774	993
51.0	134	110	99	96	100	112	136	181	260	330	441	548	778	1120	1537
50.0	293	266	254	244	253	272	303	353	444	601	810	943	1306	1772	1903
49.0	543	463	430	418	429	466	534	671	804	930	1160	1523	1935	1799	1479
48.0	942	794	759	756	767	798	860	965	1147	1435	1844	1803	1693	1293	939
47.0	1345	1192	1111	1082	1104	1179	1325	1521	1832	1763	1688	1388	1113	847	632
46.0	1546	1610	1666	1706	1722	1720	1697	1663	1627	1387	1157	825	729	533	391
45.0	1154	1286	1397	1464	1484	1446	1362	1242	1103	934	767	605	447	255	39
44.0	755	852	931	943	907	917	917	830	731	616	432	369	269	162	13
43.0	476	552	608	642	654	607	538	458	376	289	229	163	92	35	1
42.0	259	329	367	392	401	394	368	340	296	197	149	115	62	2	1
41.0	51	82	116	143	151	139	111	76	43	19	11	1	1	1	1
40.0	5	11	19	25	26	26	20	11	4	1	1	1	1	1	1
39.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
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37.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
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33.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
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29.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
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27.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
26.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
25.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
24.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
23.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
22.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
21.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
20.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
19.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
18.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
17.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
16.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
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14.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
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12.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
11.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
10.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
9.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
8.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
7.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
6.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
5.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
4.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
3.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
2.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
1.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
0.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
-1.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
-2.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
-3.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
-4.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1

ORIGINAL PAGE IS  
OF POOR QUALITY





ALTITUDE= 900.0 ENERGY= 5.000

DIRECTIONS

	-45.0	-42.0	-39.0	-36.0	-33.0	-30.0	-27.0	-24.0	-21.0	-18.0	-15.0	-12.0	-9.0	-6.0	-3.0
75.0	1		1	1	1	1	1	1	1	1	1	1	1	1	1
74.0	1		1	1	1	1	1	1	1	1	1	1	1	1	1
73.0	1		1	1	1	1	1	1	1	1	1	1	1	1	1
72.0	1		1	1	1	1	1	1	1	1	1	1	1	1	1
71.0	1		1	1	1	1	1	1	1	1	1	1	1	1	1
70.0	1		1	1	1	1	1	1	1	1	1	1	1	1	1
69.0	1		1	1	1	1	1	1	1	1	1	1	1	1	1
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65.0	1		1	1	1	1	1	1	1	1	1	1	1	1	1
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63.0	1		1	1	1	1	1	1	1	1	1	1	1	1	1
62.0	1		1	1	1	1	1	1	1	1	1	1	1	1	1
61.0	1		1	1	1	1	1	1	1	1	1	1	1	1	1
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58.0	9	25	16	35	80	136	241	373	520	687	873	1079	1304	1548	1811
57.0	38	86	148	239	411	619	921	1132	1466	1906	2432	3045	3747	4538	5419
56.0	111	203	348	509	794	1038	1363	1703	2133	2650	3255	3949	4734	5611	6581
55.0	284	413	643	934	1294	1620	2165	2837	3611	4579	5744	7107	8679	10461	12454
54.0	501	705	1037	1403	1928	2021	1625	1409	1101	863	672	510	370	253	161
53.0	906	1175	1619	2078	2515	1522	1187	901	693	510	370	253	161	101	51
52.0	1350	1871	1961	1717	1308	982	760	542	401	264	168	69	26	11	4
51.0	2019	1862	1478	1127	841	612	437	307	201	126	69	26	11	4	1
50.0	1703	1263	967	725	504	309	108	74	49	26	11	4	1	1	1
49.0	1136	841	609	425	278	159	59	32	1	1	1	1	1	1	1
48.0	739	517	332	208	131	5	1	1	1	1	1	1	1	1	1
47.0	443	213	67	16	1	1	1	1	1	1	1	1	1	1	1
46.0	138	42	8	1	1	1	1	1	1	1	1	1	1	1	1
45.0	24	3	1	1	1	1	1	1	1	1	1	1	1	1	1
44.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
43.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
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22.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
21.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
20.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
19.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
18.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
17.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
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4.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
3.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
2.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
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-4.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1

ORIGINAL PAGE IS  
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ALTITUDE: 900 KM

ELECTRONS: E > 6.0 MEV

INNER ZONE MODEL: AE6 (SOLAR MAX)

OUTER ZONE MODEL: AE17-HI

ALTITUDE= 930.0 ENERGY= 6.000

ELECTRONS

	-180.0	-177.0	-174.0	-171.0	-168.0	-165.0	-162.0	-159.0	-156.0	-153.0	-150.0	-147.0	-144.0	-141.0	-138.0
75.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
74.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
73.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
72.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
71.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
70.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
69.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
68.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
67.0	19	14	10	7	4	2	1	1	1	1	1	1	1	1	1
66.0	38	32	27	19	12	8	5	2	1	1	1	1	1	1	1
65.0	74	62	47	37	30	21	13	9	5	2	1	1	1	1	1
64.0	102	89	60	73	55	40	31	22	13	8	4	2	1	1	1
63.0	147	134	116	99	75	58	58	41	30	20	11	7	3	1	1
62.0	126	136	141	148	125	105	87	75	56	38	28	17	9	5	2
61.0	24	107	118	132	143	146	128	104	84	73	49	34	24	12	7
60.0	63	74	86	101	114	128	139	146	124	98	70	65	42	29	17
59.0	37	45	56	70	82	97	113	129	139	147	115	89	74	52	34
58.0	7	14	27	41	52	66	81	98	115	132	140	133	103	80	65
57.0	1	2	4	10	22	40	51	68	83	103	118	134	142	116	88
56.0	1	1	1	1	3	9	21	41	54	72	88	107	125	115	132
55.0	1	1	1	1	1	1	3	10	26	44	59	77	96	113	130
54.0	1	1	1	1	1	1	1	1	4	13	35	49	67	84	103
53.0	1	1	1	1	1	1	1	1	1	2	7	20	30	40	73
52.0	1	1	1	1	1	1	1	1	1	1	1	3	11	11	46
51.0	1	1	1	1	1	1	1	1	1	1	1	1	1	5	18
50.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	3
49.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
48.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
47.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
46.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
45.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
44.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
43.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
42.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
41.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
40.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
39.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
38.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
37.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
36.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
35.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
34.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
33.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
32.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
31.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
30.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
29.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
28.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
27.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
26.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
25.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
24.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
23.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
22.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
21.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
20.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
19.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
18.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
17.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
16.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
15.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
14.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
13.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
12.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
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9.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
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7.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
6.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
5.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
4.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
3.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
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-2.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
-3.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
-4.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1

ORIGINAL PAGE IS  
OF POOR QUALITY



ALTITUDE= 900.0 ENERGY= 0.000

ELECTRONS

	-135.0	-132.0	-129.0	-126.0	-123.0	-120.0	-117.0	-114.0	-111.0	-108.0	-105.0	-102.0	-99.0	-96.0	-93.0
75.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
74.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
73.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
72.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
71.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
70.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
69.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
68.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
67.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
66.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
65.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
64.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
63.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
62.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
61.0	3	1	1	1	1	1	1	1	1	1	1	1	1	1	1
60.0	9	5	2	1	1	1	1	1	1	1	1	1	1	1	1
59.0	24	12	7	3	4	1	1	1	1	1	1	1	1	1	1
58.0	41	23	16	8	4	2	1	1	1	1	1	1	1	1	1
57.0	72	40	32	22	11	6	2	1	1	1	1	1	1	1	1
56.0	99	77	62	39	26	15	8	4	2	1	1	1	1	1	1
55.0	138	111	84	57	30	20	11	5	3	1	1	1	1	1	1
54.0	121	132	125	73	74	57	26	15	9	5	2	1	1	1	1
53.0	93	111	120	104	106	90	67	45	23	13	8	5	3	2	1
52.0	65	81	101	72	108	89	72	50	30	20	13	8	5	3	2
51.0	39	54	72	51	108	119	89	72	50	30	20	13	8	5	3
50.0	10	30	46	35	100	99	70	51	33	23	15	10	7	5	4
49.0		5	18	10	53	70	44	37	29	19	12	8	5	4	3
48.0			3		31	18	11	1	1	1	1	1	1	1	1
47.0					5	3	1	1	1	1	1	1	1	1	1
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ORIGINAL PAGE IS  
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ALTITUDE= 900.0 ENERGY= 6.000

ELECTRONS

	-90.0	-87.0	-84.0	-81.0	-78.0	-75.0	-72.0	-69.0	-66.0	-63.0	-60.0	-57.0	-54.0	-51.0	-48.0
75.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
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ORIGINAL PAGE IS  
OF POOR QUALITY





	ALTITUDE= 900.0		ENERGY= 6.000		ELECTRONS										
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ORIGINAL PAGE IS  
OF POOR QUALITY



ALTITUDE= 900.0 ENERGY= 6.000

LECTIONS

	0.0	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	33.0	36.0	39.0	42.0
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61.0	54	69	84	100	109	120	133	148	164	182	201	221	243	267	293
60.0	91	102	115	129	144	161	180	200	221	244	269	295	323	353	385
59.0	130	151	167	183	198	215	234	255	278	303	329	357	387	419	453
58.0	162	185	197	213	228	245	264	285	308	333	359	387	417	449	483
57.0	136	124	111	98	84	71	59	48	38	29	21	14	8	3	0
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6.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
5.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
4.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
3.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
2.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
1.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
0.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1

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ALTITUDE: 900 KM

PROTONS:  $E > .04$  MEV

TRAPPED PROTON MODEL: AP8 (SOLAR MAX)

ALTITUDE= 900.0 ENERGY= 0.040

PRCTNS

	-180.0	-177.0	-174.0	-171.0	-168.0	-165.0	-162.0	-159.0	-156.0	-153.0	-150.0	-147.0	-144.0	-141.0	-138.0
76.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
74.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
73.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
72.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
71.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
70.0	154	179	55	1	1	1	1	1	1	1	1	1	1	1	1
69.0	144	123	143	168	154	12	1	1	1	1	1	1	1	1	1
68.0	451	310	213	154	135	160	188	26	1	1	1	1	1	1	1
67.0	670	643	543	503	284	184	131	155	144	1	1	1	1	1	1
66.0	247	455	732	761	661	567	334	191	129	153	182	3	1	1	1
65.0	77	75	149	328	620	813	714	566	318	171	126	152	111	1	1
64.0	51	69	86	52	102	263	553	804	670	511	250	137	125	152	9
63.0	64	67	64	67	86	95	89	246	557	728	575	410	178	101	126
62.0	63	74	32	61	73	63	84	92	88	266	598	601	447	241	119
61.0	22	42	09	54	93	85	74	60	79	82	110	310	597	461	327
60.0	2	6	16	38	69	96	93	80	66	56	71	66	146	385	450
59.0	3	4	4	3	14	34	64	87	80	66	63	66	60	60	208
58.0	1	2	1	5	6	4	13	32	58	73	62	51	38	48	45
57.0	1	1	1	2	4	5	5	3	13	31	50	51	45	36	35
56.0	1	1	1	1	1	1	4	3	4	3	14	29	37	36	32
55.0	1	1	1	1	1	1	1	1	3	2	2	5	14	24	25
54.0	1	1	1	1	1	1	1	1	1	1	2	1	1	6	13
53.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
52.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
51.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
50.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
49.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
48.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
47.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
46.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
45.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
44.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
43.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
42.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
41.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
40.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
39.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
38.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
37.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
36.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
35.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
34.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
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29.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
28.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
27.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
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25.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
24.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
23.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
22.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
21.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
20.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
19.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
18.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
17.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
16.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
15.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
14.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
13.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
12.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
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7.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
6.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
5.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
4.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
3.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
2.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
1.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
0.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
-1.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
-2.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
-3.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
-4.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1

ORIGINAL PAGE IS  
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ALTITUDE= 500.0 ENERGY= 0.040

PRCTONS

	-135.0	-132.0	-129.0	-126.0	-123.0	-120.0	-117.0	-114.0	-111.0	-108.0	-105.0	-102.0	-99.0	-96.0	-93.0
75.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
74.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
73.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
72.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
71.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
70.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
69.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
68.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
67.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
66.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
65.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
64.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
63.0	141	1	1	1	1	1	1	1	1	1	1	1	1	1	1
62.0	101	129	1	1	1	1	1	1	1	1	1	1	1	1	1
61.0	143	180	105	1	1	1	1	1	1	1	1	1	1	1	1
60.0	328	176	109	78	109	1	1	1	1	1	1	1	1	1	1
59.0	421	177	64	64	64	1	1	1	1	1	1	1	1	1	1
58.0	97	117	22	109	109	87	47	1	1	1	1	1	1	1	1
57.0	38	40	143	221	221	64	68	90	3	1	1	1	1	1	1
56.0	24	30	27	232	232	152	74	49	70	90	1	1	1	1	1
55.0	26	22	27	186	186	197	154	90	53	52	71	61	1	1	1
54.0	16	18	18	28	28	98	177	150	118	65	44	51	68	82	9
53.0	6	10	11	19	19	16	46	122	141	122	90	57	42	46	50
52.0	1	1	5	14	13	14	14	17	60	122	121	109	86	61	49
51.0	1	1	1	2	4	5	8	8	9	24	67	114	114	110	103
50.0	1	1	1	1	1	1	1	1	1	6	8	36	42	100	118
49.0	1	1	1	1	1	1	1	1	1	5	6	9	8	20	44
48.0	1	1	1	1	1	1	1	1	1	7	8	9	8	9	9
47.0	1	1	1	1	1	1	1	1	1	1	2	4	5	5	7
46.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
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42.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
41.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
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37.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
36.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
35.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
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14.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
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5.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
4.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
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1.0	1	1	1	1	1	1	1	1	1	1	1	1	1	3	7
0.0	1	1	1	1	1	2	2	1	1	1	1	1	1	9	20
-1.0	1	1	1	1	1	1	5	5	3	2	1	1	6	17	43
-2.0	1	1	1	1	1	1	9	8	10	10	9	6	11	23	50
-3.0	1	1	1	1	1	1	3	8	16	19	25	30	29	41	65
-4.0	1	1	1	1	1	1	3	7	19	26	36	47	67	84	99

-3.0	1	1	1	1	1	3	7	16	33	42	59	66	131	187
-6.0	1	1	1	1	1	4	8	17	40	53	69	99	157	210
-7.0	1	1	1	1	1	4	10	20	49	64	87	121	182	267
-8.0	1	1	1	1	2	7	13	29	63	73	97	135	206	330
-9.0	1	1	1	1	3	6	11	23	45	62	81	115	156	230
-10.0	1	1	1	1	6	1	23	34	47	65	91	129	184	270
-11.0	1	1	1	1	7	1	21	34	52	71	99	151	216	312
-12.0	1	1	1	1	10	1	20	36	55	78	115	162	248	358
-13.0	1	1	1	1	13	1	13	35	57	88	135	191	285	436
-14.0	1	1	1	1	1	4	23	56	97	161	233	353	452	584
-15.0	1	1	1	1	1	1	9	40	90	158	233	333	462	608
-16.0	1	1	1	1	1	2	10	31	68	136	217	314	449	689
-17.0	1	1	1	1	1	2	15	36	66	120	197	312	439	631
-18.0	1	1	1	1	1	2	19	46	79	125	205	318	478	661
-19.0	1	1	1	1	1	1	16	55	108	165	241	356	517	737
-20.0	1	1	1	1	1	1	9	31	76	144	242	366	538	748
-21.0	1	1	1	1	1	1	5	19	50	104	181	297	443	636
-22.0	1	1	1	1	1	1	2	14	37	79	146	243	372	551
-23.0	1	1	1	1	1	1	1	9	31	67	122	208	325	489
-24.0	1	1	1	1	1	1	1	5	26	58	112	188	302	488
-25.0	1	1	1	1	1	1	1	2	18	49	103	182	293	443
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ALTITUDE= 900.0 ENERGY= J.040

PROTCNS

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-69.0	1980	2167	2642	3532	7315	14431	25782	42736	64353	87553	117124	153399	192601	235265	286144
-70.0	4903	5129	5555	6214	7358	9139	12554	17963	25534	35498	46856	60169	74645	90551	108807
-71.0	5061	6050	11352	12892	13856	15972	18320	21443	26252	32840	41604	52357	66643	83680	105750
-72.0	1927	2201	5314	9305	11956	16409	21504	27671	37000	50270	64399	83358	106646	138229	172777
-73.0	1453	1760	2137	3074	4556	6689	9558	12939	16796	22780	25352	30040	34431	38874	42733
-74.0	1583	1963	2425	2963	3620	4587	5718	7068	8758	10832	13247	16155	19653	23527	27715
-75.0	8991	8051	6799	5873	5160	4733	5306	6458	7896	9652	11692	14013	16849	21262	30053
-76.0	8675	14300	24981	39435	38566	38285	36582	41313	43370	47278	54654	65744	82623	105532	136458
-77.0	876	6441	8445	11170	14965	19898	26672	32970	40869	49490	58043	64969	69854	71842	72630
-78.0	840	1247	1894	2854	4391	6501	9463	13259	16980	19969	23204	26474	27730	26041	23312
-79.0	539	589	637	741	859	1120	1393	1708	2046	2388	2701	2953	3103	3151	3123
-80.0	68	278	654	689	724	786	849	909	979	1055	1132	1214	1294	1370	1442
-81.0	1	1	1	1	2	8	21	36	54	72	83	84	74	56	38
-82.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
-83.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
-84.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1

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ALTITUDE= 900.C ENERGY= 0.040

PROTONS

	-45.0	-42.0	-39.0	-36.0	-33.0	-30.0	-27.0	-24.0	-21.0	-18.0	-15.0	-12.0	-9.0	-6.0	-3.0
75.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
74.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
73.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
72.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
71.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
70.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
69.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
68.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
67.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
66.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
65.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
64.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
63.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
62.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
61.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
60.0	1	18	369	355	448	1037	3058	4279	6856	5650	2323	904	869	760	617
59.0	271	313	321	628	2004	3334	5120	5493	2220	848	834	732	588	767	1021
58.0	266	373	546	2402	3550	5472	2366	791	765	682	582	837	1223	1808	2240
57.0	482	1865	2427	3916	2856	552	670	628	518	793	1260	2035	2070	1333	748
56.0	1565	2312	2805	1154	539	854	465	641	1088	1536	1916	1186	625	273	98
55.0	2246	1356	498	452	415	455	785	1483	1773	1054	551	217	117	137	141
54.0	438	325	353	252	500	959	1641	1059	540	200	121	149	160	147	118
53.0	263	254	297	534	1136	1053	565	222	102	135	160	157	125	60	11
52.0	169	266	559	964	615	267	72	113	139	145	122	43	7	1	1
51.0	265	877	636	326	105	77	107	124	111	43	6	1	1	1	1
50.0	467	370	150	43	72	91	91	55	7	1	1	1	1	1	1
49.0	170	61	39	46	69	57	11	1	1	1	1	1	1	1	1
48.0	22	33	46	22	2	1	1	1	1	1	1	1	1	1	1
47.0	18	31	6	1	1	1	1	1	1	1	1	1	1	1	1
46.0	1	10	1	1	1	1	1	1	1	1	1	1	1	1	1
45.0	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1
44.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
43.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
42.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
41.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
40.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
39.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
38.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
37.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
36.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
35.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
34.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
33.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
32.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
31.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
30.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
29.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
28.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
27.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
26.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
25.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
24.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
23.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
22.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
21.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
20.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
19.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
18.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
17.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
16.0	1	1	1	1	1	4	6	7	6	3	1	1	1	1	1
15.0	1	1	3	4	11	18	19	18	16	16	9	1	1	1	1
14.0	2	7	10	22	33	35	34	35	40	39	16	6	1	1	1
13.0	13	21	32	53	57	58	59	67	91	51	25	13	3	4	4
12.0	41	48	78	85	87	88	102	130	112	64	43	30	29	21	14
11.0	69	104	125	124	122	135	167	211	127	66	84	78	55	37	26
10.0	141	165	168	167	175	211	265	224	174	156	148	119	80	51	36
9.0	217	220	220	217	245	308	388	277	255	226	214	154	103	71	49
8.0	296	284	268	254	348	431	433	365	333	314	255	203	135	99	70
7.0	363	342	349	403	475	606	535	447	434	416	356	254	183	130	89
6.0	429	414	448	523	642	746	627	567	549	501	451	328	243	173	122
5.0	503	503	576	588	846	854	773	718	662	621	565	444	312	226	163
4.0	576	641	732	885	1079	987	917	833	786	735	657	577	428	315	214
3.0	716	789	644	1135	1328	1150	1063	1013	932	862	740	664	642	440	326
2.0	855	980	1176	1457	1336	1252	1252	1161	1076	960	844	729	602	484	385
1.0	1037	1230	1435	1675	1723	1576	1488	1359	1257	1101	976	817	666	543	427
0.0	1280	1519	1753	1928	1965	1822	1690	1588	1447	1284	1100	944	791	636	477
-1.0	1555	1804	2052	2201	2230	2107	1955	1814	1668	1475	1305	1122	960	767	603
-2.0	1862	2125	2311	2466	2532	2406	2268	2114	1944	1770	1640	1415	1177	968	782
-3.0	2196	2440	2629	2734	2807	2773	2617	2421	2187	1948	1660	1388	1151	914	721
-4.0	2554	2758	2920	3006	3025	2913	2753	2495	2248	1972	1657	1379	1114	902	711

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ALTITUDE= 900.0		ENERGY= 0.040		PROTONS														
	0.0	2.0	4.0	6.0	8.0	10.0	12.0	14.0	16.0	18.0	20.0	24.0	27.0	30.0	33.0	36.0	39.0	42.0
75.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
74.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
73.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
72.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
71.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	6
70.0	1	1	1	1	1	1	1	1	1	1	1	1	15	80	328	292	259	229
69.0	1	1	1	1	1	1	15	128	403	361	324	291	262	234	223	231		
68.0	1	1	30	349	444	407	374	348	339	364	440	502	579	668	778			
67.0	261	490	434	430	422	521	669	881	1212	1652	1617	1546	1427	1300	1165			
66.0	475	463	630	682	1572	2544	2656	2658	2556	2453	2321	2199	1505	986	650			
65.0	1065	2010	3339	3627	3809	4065	4417	3765	2347	1412	843	487	280	160	132			
64.0	4194	4822	5766	7075	4199	2344	1269	674	382	333	277	225	179	137	104			
63.0	9247	5098	2530	1264	628	564	469	401	320	242	178	147	130	111	91			
62.0	1602	757	730	627	517	402	316	313	301	281	247	215	179	141	106			
61.0	769	630	496	457	534	559	575	579	574	543	400	268	160	97	56			
60.0	1341	740	331	1015	1180	1281	983	601	382	230	128	69	35	18	8			
59.0	1515	653	343	1174	758	455	256	132	63	28	12	9	7	3	2			
58.0	377	187	74	265	136	57	38	33	27	20	14	9	6	3	1			
57.0	112	110	101	87	68	44	44	32	21	12	6	2	1	1	1			
56.0	131	106	73	41	16	4	1	1	1	1	1	1	1	1	1			
55.0	75	25	6	1	1	1	1	1	1	1	1	1	1	1	1			
54.0	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1			
53.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1			
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49.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1			
48.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1			
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46.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1			
45.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1			
44.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1			
43.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1			
42.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1			
41.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1			
40.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1			
39.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1			
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37.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1			
36.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1			
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32.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1			
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27.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1			
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22.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1			
21.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1			
20.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1			
19.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1			
18.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1			
17.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1			
16.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1			
15.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1			
14.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1			
13.0	3	2	1	1	1	1	1	1	1	1	1	1	1	1	1			
12.0	10	4	1	1	1	1	1	1	1	1	1	1	1	1	1			
11.0	16	6	1	1	1	1	1	1	1	1	1	1	1	1	1			
10.0	21	7	2	1	1	1	1	1	1	1	1	1	1	1	1			
9.0	31	9	3	1	1	1	1	1	1	1	1	1	1	1	1			
8.0	49	16	5	2	1	1	1	1	1	1	1	1	1	1	1			
7.0	64	35	12	4	1	1	1	1	1	1	1	1	1	1	1			
6.0	84	56	22	10	4	1	1	1	1	1	1	1	1	1	1			
5.0	113	74	31	34	11	4	1	1	1	1	1	1	1	1	1			
4.0	153	105	58	44	27	14	5	7	1	1	1	1	1	1	1			
3.0	213	147	91	58	37	24	15	7	2	1	1	1	1	1	1			
2.0	290	224	143	67	33	31	19	10	6	4	1	1	1	1	1			
1.0	318	225	165	111	68	33	16	6	4	2	1	1	1	1	1			
0.0	363	268	137	121	66	36	15	3	1	1	1	1	1	1	1			
-1.0	464	355	230	162	104	58	31	12	4	1	1	1	1	1	1			
-2.0	612	476	374	264	171	84	44	17	6	1	1	1	1	1	1			
-3.0	871	648	518	365	249	149	64	36	17	6	1	1	1	1	1			
-4.0	1258	939	745	560	427	244	118	86	49	24	9	1	1	1	1			



-5.0	586	467	355	270	197	149	112	82	59	40	29	17	8	1	1
-6.0	660	517	414	318	237	180	132	85	59	52	35	23	13	5	1
-7.0	794	654	524	412	326	239	174	127	97	70	48	34	21	10	2
-8.0	1051	853	731	569	431	323	247	180	137	99	71	50	31	16	5
-9.0	1445	1252	1035	811	630	483	366	270	196	149	106	72	48	28	10
-10.0	2073	1854	1395	1064	908	619	486	389	299	215	155	106	67	38	16
-11.0	2871	1588	1191	926	734	573	458	378	301	237	193	146	99	55	21
-12.0	3869	1470	1102	960	772	636	534	441	361	298	238	189	130	74	35
-13.0	5153	1557	1326	1123	973	824	711	611	508	424	351	265	191	121	65
-14.0	6879	1871	1632	1489	1334	1190	1046	917	792	644	503	389	291	187	108
-15.0	9216	2436	2301	2169	1965	1802	1601	1416	1168	985	779	617	445	293	172
-16.0	12409	3409	3063	2824	2661	2476	2303	2138	1935	1802	1649	1467	1266	992	601
-17.0	17006	3506	3101	2761	2388	2064	1848	1677	1505	1377	1205	1072	921	781	629
-18.0	23366	3666	3324	2886	2567	2279	2074	1855	1682	1482	1317	1130	957	780	633
-19.0	31959	3692	3293	3000	2843	2632	2395	2206	1985	1761	1566	1302	1025	760	574
-20.0	44223	4182	3881	3475	3044	2736	2486	2219	2005	1779	1578	1405	1183	934	695
-21.0	6034	4382	3875	3471	3146	2826	2514	2291	2094	1887	1667	1414	1174	916	659
-22.0	8477	4446	4010	3691	3343	3041	2735	2464	2335	2051	1826	1534	1273	971	703
-23.0	11586	4710	4384	4038	3829	3439	3011	2709	2430	2162	1890	1627	1360	1069	785
-24.0	15820	5129	4782	4331	3786	3344	2993	2672	2354	2065	1806	1525	1244	960	692
-25.0	21553	5346	4853	4327	3941	3412	3036	2658	2374	2088	1786	1492	1212	919	651
-26.0	29366	5537	4940	4388	3952	3476	3057	2728	2400	2133	1853	1534	1237	938	659
-27.0	39821	5826	5115	4447	3914	3497	3176	2923	2631	2321	2017	1706	1355	1033	719
-28.0	54065	5721	4977	4453	4090	3828	3633	3296	3029	2710	2344	1942	1539	1148	799
-29.0	73488	5522	5108	4824	4650	4491	4439	4281	4116	3759	3276	2729	2155	1545	1026
-30.0	101196	5850	5619	3789	5980	6188	6248	6166	6009	5358	4643	3844	2907	2062	1331
-31.0	139388	6467	7159	7862	8364	8726	9132	9051	8280	7607	6625	5495	4367	3145	2012
-32.0	19094	8603	9674	10764	11871	12179	12356	12159	11846	11163	10253	8842	7135	5124	3374
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ORIGINAL PAGE IS  
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M-77















ALTITUDE: 900 KM

PROTONS: E > .5 MEV

TRAPPED PROTON MODEL: AP8 (SOLAR MAX)

ORIGINAL PAGE IS  
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ALTITUDE= 900.C ENERGY= 0.500

PROTONS

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ORIGINAL PAGE IS  
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174

ALTITUDE= 900.0 ENERGY= 0.500

PROTONS

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ORIGINAL PAGE IS OF POOR QUALITY

ALTIUDE= 90C.0 ENERGY= J.500

PROTONS

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-35.0	586	870	1149	1534	2006	2619	3337	4159	5068	6038	7176	8192	9604	9854	9485
-36.0	614	866	1366	1743	2242	2827	3621	4425	5416	6421	7075	7679	8189	8727	9282
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-48.0	13	42	94	168	262	443	659	921	1220	1594	1952	2346	2791	3317	3898
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-51.0	1	4	18	52	114	201	329	512	766	1085	1507	2034	2789	3693	5187
-52.0	1	2	5	19	57	137	256	443	678	988	1406	1963	2941	4392	6426
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-54.0	1	1	2	6	18	52	130	278	535	1023	1733	2794	3750	4548	5476
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-65.0	170	133	109	64	56	107	153	248	460	918	1747	3082	5274	8750	14289
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-70.0	278	283	298	327	388	480	638	894	1247	1717	2301	3013	3774	4593	5519
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ALTITUDE= 900.0 ENERGY= 0.530

	PROTONS														
	-45.0	-42.0	-39.0	-36.0	-33.0	-30.0	-27.0	-24.0	-21.0	-18.0	-15.0	-12.0	-9.0	-6.0	-3.0
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53.0	27	30	36	54	47	82	81	112	105	57	119	142	122	72	136
52.0	21	32	47	55	29	58	24	6	2	5	7	5	6	7	7
51.0	27	37	30	12	2	9	1	3	6	4	8	9	4	1	1
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19.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
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17.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
16.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
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14.0	2	6	9	3	10	16	17	17	15	14	8	1	1	1	1
13.0	12	19	24	19	29	33	32	32	36	35	15	5	1	1	1
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11.0	64	58	114	80	82	83	96	122	107	61	42	29	28	20	13
10.0	133	156	160	117	115	128	157	201	123	63	82	76	54	48	26
9.0	295	209	239	208	233	200	253	217	170	153	144	115	77	49	34
8.0	285	271	257	262	234	295	375	270	250	220	209	150	99	68	46
7.0	347	329	336	387	416	423	423	358	325	306	288	197	129	95	87
6.0	414	396	439	458	458	591	524	436	423	406	347	246	176	125	85
5.0	487	485	555	654	654	731	612	553	526	485	440	318	235	157	118
4.0	557	618	707	864	858	834	752	701	647	607	551	432	302	217	157
3.0	691	761	916	1112	1056	959	996	815	769	719	642	563	416	306	207
2.0	825	646	1149	1459	1459	1122	1041	993	913	834	724	636	620	428	318
1.0	1002	1199	1403	1626	1685	1547	1462	1335	1235	1079	957	799	651	530	416
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-2.0	1818	2064	2260	2444	2457	2374	2237	2082	1909	1733	1599	1375	1149	947	745
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-4.0	2488	2702	2874	2966	2968	2876	2711	2448	2196	1916	1617	1350	1086	875	687

-5.0	2804	3037	3178	3210	3199	3022	2788	2527	2265	1903	1631	1328	1095	868	708
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-9.0	4132	4230	4160	4042	3827	3526	3182	2923	2565	2359	2159	1993	1906	1753	1583
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-60.0	8023	11379	14239	17856	20851	25701	35396	46060	53677	74138	106361	63349	87392	87668	97090
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-62.0	7810	11161	15239	19171	23158	31912	48613	80013	76897	71497	71126	74984	88757	78187	86899
-63.0	9116	10542	13392	20854	33473	55145	69265	63790	61919	64610	73290	85878	61712	46489	41735
-64.0	8894	15192	24557	42122	58184	54285	82798	54177	60078	65297	66560	67898	38815	37413	42894
-65.0	23279	38081	44574	43043	42716	44674	48058	52358	59758	46882	35499	32078	34615	36685	23689
-66.0	30567	31524	33225	34801	37201	41100	45421	40808	30629	26850	28059	31675	26161	18609	16706
-67.0	2781	25048	27346	30256	34495	29286	23296	21371	22483	24834	27312	18422	15090	15581	15456
-68.0	17685	18727	20740	17032	15814	16995	16976	19357	23038	16728	13393	13312	15291	10360	8368
-69.0	9049	6435	10075	11153	12694	14726	17827	13106	11173	11225	12583	11527	5742	3243	3586
-70.0	6529	7764	9243	11043	10751	9079	8797	9441	10288	10764	10764	3627	3627	3215	1801
-71.0	6479	6232	6182	6465	6865	7487	8329	7309	4049	3054	2788	2528	1487	1108	987
-72.0	4281	4745	5153	5511	6825	3515	2880	2385	2189	2049	1266	995	866	586	844
-73.0	2805	2322	2020	1871	1741	1662	1621	1308	972	824	752	510	254	132	63
-74.0	1034	1056	1067	1085	626	776	692	644	587	350	192	104	51	27	14
-75.0	541	525	508	457	468	440	307	181	107	58	32	19	10	6	1
-76.0	271	267	157	138	54	63	37	24	16	10	6	2	1	1	1
-77.0	24	21	17	14	11	8	6	2	2	1	1	1	1	1	1
-78.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
-79.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
-80.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
-81.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
-82.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
-83.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
-84.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1

ORIGINAL PAGE IS  
OF POOR QUALITY

ALTITUDE= 900.C

ENERGY= 0.500

PRCTONS

	0.0	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	33.0	36.0	39.0	42.0
75.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
74.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
73.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
72.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
71.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
70.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
69.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
68.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
67.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
66.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
65.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
64.0	1	1	1	1	1	1	1	1	4	7	10	12	13	14	12
63.0	1	15	24	42	60	154	250	43	35	28	28	24	19	13	12
62.0	49	71	67	63	63	47	50	38	35	31	22	18	15	13	10
61.0	73	67	60	60	60	46	50	38	41	31	25	20	15	10	7
60.0	78	65	59	60	60	47	50	49	41	31	25	20	15	10	7
59.0	117	122	131	66	66	19	9	30	17	6	4	2	2	1	1
58.0	86	45	23	9	9	1	1	4	1	1	1	1	1	1	1
57.0	13	4	1	2	2	2	2	1	1	1	1	1	1	1	1
56.0	3	3	3	3	3	3	3	1	1	1	1	1	1	1	1
55.0	6	6	4	3	3	1	1	1	1	1	1	1	1	1	1
54.0	6	6	1	1	1	1	1	1	1	1	1	1	1	1	1
53.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
52.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
51.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
50.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
49.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
48.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
47.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
46.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
45.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
44.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
43.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
42.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
41.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
40.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
39.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
38.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
37.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
36.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
35.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
34.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
33.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
32.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
31.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
30.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
29.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
28.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
27.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
26.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
25.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
24.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
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19.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
18.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
17.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
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15.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
14.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
13.0	3	2	1	1	1	1	1	1	1	1	1	1	1	1	1
12.0	9	4	1	1	1	1	1	1	1	1	1	1	1	1	1
11.0	15	5	1	1	1	1	1	1	1	1	1	1	1	1	1
10.0	20	7	1	1	1	1	1	1	1	1	1	1	1	1	1
9.0	29	8	3	1	1	1	1	1	1	1	1	1	1	1	1
8.0	46	15	5	1	1	1	1	1	1	1	1	1	1	1	1
7.0	69	32	3	3	3	1	1	1	1	1	1	1	1	1	1
6.0	80	50	3	3	3	1	1	1	1	1	1	1	1	1	1
5.0	103	70	16	22	10	4	1	1	1	1	1	1	1	1	1
4.0	147	96	35	42	25	5	1	1	1	1	1	1	1	1	1
3.0	207	142	68	66	50	12	14	22	18	11	1	1	1	1	1
2.0	282	218	119	85	70	30	30	37	25	15	8	1	1	1	1
1.0	310	244	151	108	87	32	32	44	28	15	8	1	1	1	1
0.0	355	282	183	114	65	35	35	44	28	15	8	1	1	1	1
-1.0	454	400	243	157	101	56	30	4	1	1	1	1	1	1	1
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-4.0	537	421	329	248	178	135	97	50	35	23	10	1	1	1	1

-6.0	637	500	399	306	227	171	124	90	65	49	33	22	12	4	1
-7.0	764	635	537	457	311	228	165	120	92	66	46	32	19	8	4
-8.0	1026	830	708	547	413	308	235	170	130	94	67	48	28	14	7
-9.0	1412	1218	1018	780	602	462	349	257	186	141	100	67	45	25	13
-10.0	2025	1823	1548	1021	776	591	463	371	282	203	147	99	62	34	18
-11.0	2808	2539	2153	1554	1099	854	617	441	363	289	226	183	138	91	50
-12.0	3817	3430	2933	2149	1554	1099	854	617	441	363	289	226	183	138	91
-13.0	5092	4592	3933	2847	2064	1453	1099	854	617	441	363	289	226	183	91
-14.0	6735	6035	5178	4063	2847	2064	1453	1099	854	617	441	363	289	226	183
-15.0	8908	7935	6833	5847	3933	3111	2281	1654	1209	926	667	488	329	215	115
-16.0	11735	10435	8933	7847	5178	4063	2847	2064	1453	1099	854	617	441	363	289
-17.0	15308	13635	11733	10178	7847	5178	4063	2847	2064	1453	1099	854	617	441	363
-18.0	20000	17835	15333	13178	10178	7847	5178	4063	2847	2064	1453	1099	854	617	441
-19.0	26300	23535	20033	17478	13178	10178	7847	5178	4063	2847	2064	1453	1099	854	617
-20.0	34600	30835	26033	22978	17478	13178	10178	7847	5178	4063	2847	2064	1453	1099	854
-21.0	45400	40535	34333	30478	22978	17478	13178	10178	7847	5178	4063	2847	2064	1453	1099
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-23.0	77400	69535	59333	54478	40478	30478	22978	17478	13178	10178	7847	5178	4063	2847	2064
-24.0	101400	91535	78333	73478	54478	40478	30478	22978	17478	13178	10178	7847	5178	4063	2847
-25.0	133400	120535	103333	98478	73478	54478	40478	30478	22978	17478	13178	10178	7847	5178	4063
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-30.0	534400	475535	413333	413478	320478	243478	183478	133478	98478	73478	54478	40478	30478	22978	17478
-31.0	699400	633535	550333	550478	413478	320478	243478	183478	133478	98478	73478	54478	40478	30478	22978
-32.0	914400	833535	720333	720478	550478	413478	320478	243478	183478	133478	98478	73478	54478	40478	30478
-33.0	1194400	1093535	930333	930478	720478	550478	413478	320478	243478	183478	133478	98478	73478	54478	40478
-34.0	1564400	1443535	1230333	1230478	930478	720478	550478	413478	320478	243478	183478	133478	98478	73478	54478
-35.0	2044400	1903535	1630333	1630478	1230478	930478	720478	550478	413478	320478	243478	183478	133478	98478	73478
-36.0	2684400	2483535	2130333	2130478	1630478	1230478	930478	720478	550478	413478	320478	243478	183478	133478	98478
-37.0	3544400	3283535	2830333	2830478	2130478	1630478	1230478	930478	720478	550478	413478	320478	243478	183478	98478
-38.0	4684400	4333535	3730333	3730478	2830478	2130478	1630478	1230478	930478	720478	550478	413478	320478	243478	98478
-39.0	6164400	5733535	4930333	4930478	3730478	2830478	2130478	1630478	1230478	930478	720478	550478	413478	320478	98478
-40.0	8064400	7583535	6530333	6530478	4930478	3730478	2830478	2130478	1630478	1230478	930478	720478	550478	413478	98478
-41.0	10464400	10033535	8630333	8630478	6530478	4930478	3730478	2830478	2130478	1630478	1230478	930478	720478	550478	98478
-42.0	13664400	13233535	11330333	11330478	8630478	6530478	4930478	3730478	2830478	2130478	1630478	1230478	930478	720478	98478
-43.0	17964400	17733535	15130333	15130478	11330478	8630478	6530478	4930478	3730478	2830478	2130478	1630478	1230478	930478	98478
-44.0	23664400	23633535	20130333	20130478	15130478	11330478	8630478	6530478	4930478	3730478	2830478	2130478	1630478	1230478	98478
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-46.0	40164400	40133535	34330333	34330478	26430478	20130478	15130478	8630478	6530478	4930478	3730478	2830478	2130478	1630478	98478
-47.0	52164400	52133535	45030333	45030478	34330478	26430478	20130478	15130478	8630478	6530478	4930478	3730478	2830478	2130478	98478
-48.0	67664400	67633535	59330333	59330478	45030478	34330478	26430478	20130478	15130478	8630478	6530478	4930478	3730478	2830478	98478
-49.0	88164400	88133535	78330333	78330478	59330478	45030478	34330478	26430478	20130478	15130478	8630478	6530478	4930478	3730478	98478
-50.0	115664400	115633535	10330333	10330478	78330478	59330478	45030478	34330478	26430478	20130478	15130478	8630478	6530478	4930478	98478
-51.0	150664400	150633535	13830333	13830478	10330478	78330478	59330478	45030478	34330478	26430478	20130478	15130478	8630478	6530478	98478
-52.0	196664400	196633535	18830333	18830478	13830478	10330478	78330478	59330478	45030478	34330478	26430478	20130478	15130478	8630478	98478
-53.0	257664400	257633535	25330333	25330478	18830478	13830478	10330478	78330478	59330478	45030478	34330478	26430478	20130478	15130478	98478
-54.0	338664400	338633535	34330333	34330478	25330478	18830478	13830478	10330478	78330478	59330478	45030478	34330478	26430478	20130478	98478
-55.0	446664400	446633535	45330333	45330478	34330478	25330478	18830478	13830478	10330478	78330478	59330478	45030478	34330478	26430478	98478
-56.0	594664400	594633535	60330333	60330478	45330478	34330478	25330478	18830478	13830478	10330478	78330478	59330478	45030478	34330478	98478
-57.0	788664400	788633535	81330333	81330478	60330478	45330478	34330478	25330478	18830478	13830478	10330478	78330478	59330478	45030478	98478
-58.0	1046664400	1046633535	10830333	10830478	81330478	60330478	45330478	34330478	25330478	18830478	13830478	10330478	78330478	59330478	98478
-59.0	1396664400	1396633535	14330333	14330478	10830478	81330478	60330478	45330478	34330478	25330478	18830478	13830478	10330478	78330478	98478
-60.0	1866664400	1866633535	19330333	19330478	14330478	10830478	81330478	60330478	45330478	34330478	25330478	18830478	13830478	10330478	98478
-61.0	2486664400	2486633535	26330333	26330478	19330478	14330478	10830478	81330478	60330478	45330478	34330478	25330478	18830478	13830478	98478
-62.0	3306664400	3306633535	35330333	35330478	26330478	19330478	14330478	10830478	81330478	60330478	45330478	34330478	25330478	18830478	98478
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-64.0	5746664400	5746633535	63330333	63330478	47330478	35330478	26330478	19330478	14330478	10830478	81330478	60330478	45330478	34330478	98478
-65.0	7566664400	7566633535	84330333	84330478	63330478	47330478	35330478	26330478	19330478	14330478	10830478	81330478	60330478	45330478	98478
-66.0	1006664400	1006633535	111330333	111330478	84330478	63330478	47330478	35330478	26330478	19330478	14330478	10830478	81330478	60330478	98478
-67.0	1346664400	1346633535	148330333	148330478	111330478	84330478	63330478	47330478	35330478	26330478	19330478	14330478	10830478	81330478	98478
-68.0	1796664400	1796633535	201330333	201330478	148330478	111330478	84330478	63330478	47330478	35330478	26330478	19330478	14330478	10830478	98478
-69.0	2396664400	2396633535	264330333	264330478	201330478	148330478	111330478	84330478	63330478	47330478	35330478	26330478	19330478	14330478	98478
-70.0	3196664400	3196633535	353330333	353330478	264330478	201330478	148330478	111330478	84330478	63330478	47330478	35330478	26330478	19330478	98478
-71.0	4246664400	4246633535	473330333	473330478	353330478	264330478	201330478	148330478	111330478	84330478	63330478	47330478	35330478	26330478	98478
-72.0	5646664400	5646633535	633330333	633330478	473330478	353330478	264330478	201330478	148330478	111330478	84330478	63330478	47330478	35330478	98478
-73.0	7496664400	7496633535	853330333	853330478	633330478	473330478	353330478	264330478	201330478	148330478	111330478				















ALTITUDE: 900 KM

PROTONS: E > 1.0 MEV

TRAPPED PROTON MODEL: AP8 (SOLAR MAX)

ORIGINAL PAGE IS  
OF POOR QUALITY

AL TITUDE= 930.0 ENERGY= 1.000

PROTONS

	-135.0	-132.0	-129.0	-126.0	-123.0	-120.0	-117.0	-114.0	-111.0	-108.0	-105.0	-102.0	-99.0	-96.0	-93.0
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-2.0	1	1	1	1	1	3	1	6	10	6	1	1	11	21	37
-3.0	1	1	1	1	1	2	1	7	15	18	8	2	16	28	46
-4.0	1	1	1	1	1	1	2	6	17	24	18	13	28	39	61
-5.0	1	1	1	1	1	1	1	6	17	24	33	24	44	64	94





ALTITUDE= 900.C		ENERGY= 1.000		PROTONS											
	-90.0	-87.0	-84.0	-81.0	-78.0	-75.0	-72.0	-69.0	-66.0	-63.0	-60.0	-57.0	-54.0	-51.0	-48.0
75.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
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9.0	1	1	1	1	1	1	1	1	1	1	1	49	87	111	139
8.0	1	1	1	1	1	1	1	1	1	1	1	55	95	128	159
7.0	1	1	1	1	1	1	1	1	1	1	1	63	105	145	186
6.0	1	1	1	1	1	1	1	1	1	1	1	105	154	204	292
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-4.0	136	209	236	261	311	391	494	621	760	924	1109	1265	1461	1653	2163

-5.0	191	256	400	505	545	628	753	901	1070	1264	1489	1707	1973	2253	2526
-6.0	248	322	437	620	717	806	933	1093	1298	1502	1760	2049	2313	2588	2889
-7.0	313	393	525	758	940	1033	1162	1331	1555	1807	2087	2356	2679	2960	3235
-8.0	398	474	614	849	1138	1255	1418	1624	1854	2129	2406	2713	3019	3323	3549
-9.0	457	567	707	934	1306	1508	1660	1875	2156	2452	2782	3070	3376	3701	3903
-10.0	529	645	818	1042	1366	1766	1966	2187	2456	2772	3058	3414	3757	4037	4244
-11.0	603	719	899	1163	1505	2001	2191	2471	2759	3086	3453	3800	4118	4412	4592
-12.0	648	804	999	1275	1677	2215	2460	2738	3085	3400	3783	4165	4442	4681	4854
-13.0	694	866	1115	1445	1828	2386	2695	3006	3376	3738	4103	4493	4740	4976	5142
-14.0	723	923	1166	1542	1990	2605	2955	3242	3631	4013	4403	4767	5038	5236	5336
-15.0	753	957	1272	1655	2170	2744	3086	3473	3836	4233	4677	4976	5301	5531	5571
-16.0	787	1045	1372	1803	2360	2829	3224	3605	4030	4455	4914	5267	5591	5792	5766
-17.0	811	1095	1449	1954	2517	2945	3304	3719	4185	4655	5086	5404	5673	5931	6014
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-19.0	969	1308	1631	2047	2446	2882	3364	3871	4373	4831	5287	5679	6014	6297	6520
-20.0	963	1246	1579	1982	2385	2826	3342	3879	4395	4874	5416	5814	6209	6520	6852
-21.0	925	1124	1479	1865	2327	2811	3285	3847	4378	4971	5485	5955	6396	6780	7298
-22.0	733	96	1338	1763	2204	2709	3238	3848	4423	5024	5619	6128	6630	7215	7852
-23.0	654	907	1250	1623	2109	2604	3172	3752	4436	5052	5741	6323	7008	7852	8787
-24.0	623	851	1158	1546	1999	2528	3133	3758	4475	5143	5892	6739	7571	8666	10140
-25.0	631	831	1118	1489	1944	2487	3124	3832	4538	5360	6265	7226	8411	10041	11040
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-31.0	623	1045	1631	2462	3262	4138	4959	5751	6525	7163	7764	8286	8637	8964	9443
-32.0	497	818	1298	1891	2697	3496	4296	5118	5920	6628	7277	7772	8271	8907	9666
-33.0	492	737	1099	1583	2182	2935	3774	4549	5318	6062	6761	7521	8381	9150	9982
-34.0	526	744	1043	1464	1981	2615	3353	4133	4951	5773	6681	7660	8943	9385	9588
-35.0	573	849	1153	1583	1984	2589	3300	4115	5019	5962	7124	8136	8520	8941	9348
-36.0	602	964	1356	1716	2234	2800	3587	4387	5374	6373	7010	7594	8084	8609	9142
-37.0	423	779	1334	1865	2443	3095	3761	4505	5210	5906	6540	7150	7765	8447	9334
-38.0	342	612	1033	1522	2156	2714	3368	4067	4727	5431	6176	6870	7709	8670	9445
-39.0	307	546	875	1279	1819	2417	3099	3789	4479	5251	6062	6947	8001	8473	8674
-40.0	290	538	855	1215	1661	2208	2903	3574	4318	5176	6054	6986	7407	7758	7961
-41.0	227	505	843	1263	1725	2239	2851	3574	4469	5173	5735	6218	6648	7057	7570
-42.0	153	331	634	1045	1525	2073	2603	3213	3837	4412	4986	5557	6128	6697	7396
-43.0	120	253	457	769	1191	1677	2182	2773	3344	3910	4532	5177	5950	6486	7269
-44.0	49	201	372	619	956	1386	1943	2458	3032	3666	4370	4948	5373	5790	6176
-45.0	54	133	281	522	809	1179	1680	2229	2752	3254	3760	4209	4636	5051	5393
-46.0	37	86	174	325	542	847	1182	1577	2038	2457	2936	3412	3844	4224	4382
-47.0	22	65	122	227	381	587	850	1169	1537	1915	2301	2720	3085	3468	3841
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-49.0	1	14	41	120	212	326	510	711	957	1269	1590	1971	2404	2966	3783
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ORIGINAL PAGE IS  
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ORIGINAL PAGE IS  
OF POOR QUALITY







ALTITUDE: 900 KM

PROTONS: E > 5.0 MEV

TRAPPED PROTON MODEL: AP8 (SOLAR MAX)

ORIGINAL PAGE IS  
OF POOR QUALITY

A.TITUDE= 900.0 ENERGY= 5.000

PRCTONS

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-4.0	1	1	1	1	1	1	2	7	13	17	22	27	27	38	59
							2	5	16	22	31	42	61	78	91



ALTITUDE= 900.0 ENERGY= 5.000

PROTONS

	-90.0	-87.0	-84.0	-81.0	-78.0	-75.0	-72.0	-69.0	-66.0	-63.0	-60.0	-57.0	-54.0	-51.0	-48.0
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-3.0	102	157	221	247	322	368	468	601	760	919	1058	1202	1343	1531	1793
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-8.0	385	459	597	730	860	995	1125	1360	1576	1796	2059	2323	2616	2906	3206
-9.0	441	546	637	791	911	1028	1178	1360	1620	2087	2369	2683	2960	3255	3571
-10.0	510	624	795	1015	1155	1277	1470	1616	1820	2122	2377	2678	2989	3292	3693
-11.0	582	656	873	1133	1277	1470	1960	2138	2401	2673	2984	3333	3663	3969	4424
-12.0	626	778	970	1242	1639	2171	2401	2663	2991	3288	3650	4014	4278	4506	4667
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-21.0	803	1096	1439	1811	2253	2715	3164	3693	4189	4740	5215	5647	6053	6413	6805
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-23.0	631	878	1238	1569	2038	2508	3045	3591	4232	4807	5449	5993	6636	7432	8329
-24.0	595	619	1119	1490	1925	2431	3007	3596	4269	4895	5596	6369	7173	8166	9642
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-26.0	570	806	1119	1477	1901	2399	3065	3768	4531	5387	6382	7602	9311	10312	10080
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-30.0	850	1321	1938	2610	3252	4145	5313	6024	6697	7264	7774	8180	8385	8548	8758
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-34.0	491	712	1007	1399	1887	2479	3157	3695	4663	5425	6256	7140	8289	8533	8628
-35.0	544	800	1066	1461	1895	2462	3132	3880	4694	5564	6504	7526	8119	8119	8243
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-45.0	50	123	258	471	738	1050	1449	1894	2281	2624	2908	3165	3344	3443	3533
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-59.0	1	1	1	1	1	4	10	22	45	82	131	196	252	308	366
-60.0	1	1	1	1	1	2	6	14	26	43	63	85	109	129	148
-61.0	1	1	1	1	1	1	3	7	13	22	33	47	62	78	95
-62.0	1	1	1	1	1	1	1	3	7	12	18	26	34	44	56
-63.0	1	1	1	1	1	1	1	1	2	3	9	15	21	26	31
-64.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
-65.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
-66.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
-67.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
-68.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
-69.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
-70.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
-71.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
-72.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
-73.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
-74.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
-75.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
-76.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
-77.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
-78.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
-79.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
-80.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
-81.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
-82.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
-83.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
-84.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1

ORIGINAL PAGE IS  
OF POOR QUALITY

A-95

ALTITUDE= 900.0 ENERGY= 5.000

PRCTONS

	-45.0	-42.0	-39.0	-36.0	-33.0	-30.0	-27.0	-24.0	-21.0	-18.0	-15.0	-12.0	-9.0	-6.0	-3.0
75.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
74.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
73.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
72.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
71.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
70.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
69.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
68.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
67.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
66.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
65.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
64.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
63.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
62.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
61.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
60.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
59.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
58.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
57.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
56.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
55.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
54.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
53.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
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51.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
50.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
49.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
48.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
47.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
46.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
45.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
44.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
43.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
42.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
41.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
40.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
39.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
38.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
37.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
36.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
35.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
34.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
33.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
32.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
31.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
30.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
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28.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
27.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
26.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
25.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
24.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
23.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
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21.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
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19.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
18.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
17.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
16.0	1	1	1	1	1	2	4	5	3	1	1	1	1	1	1
15.0	1	1	2	3	8	13	14	15	12	10	5	1	1	1	1
14.0	2	5	7	16	25	28	27	28	31	25	13	4	1	1	1
13.0	10	16	24	42	48	49	48	54	72	44	22	11	3	3	3
12.0	33	38	65	73	74	74	85	110	100	58	40	27	26	19	12
11.0	57	87	108	106	105	116	143	187	115	88	78	72	50	32	22
10.0	120	143	147	145	152	183	236	203	161	145	136	108	72	45	31
9.0	189	192	193	190	213	275	350	255	237	205	198	140	92	62	42
8.0	261	281	237	257	311	389	399	339	309	291	272	184	120	86	60
7.0	322	305	338	358	428	556	498	415	402	385	328	230	163	114	77
6.0	385	268	336	469	584	693	584	527	511	464	416	298	218	153	106
5.0	453	447	516	622	782	797	718	669	616	577	522	407	282	205	144
4.0	514	575	660	813	1007	917	858	778	733	684	609	534	392	286	192
3.0	638	711	861	1057	1237	1077	998	950	872	756	688	607	502	407	306
2.0	768	885	1083	1255	1402	1257	1179	1091	1010	899	788	679	560	449	356
1.0	934	1125	1333	1525	1624	1490	1406	1282	1184	1033	915	763	621	505	396
0.0	1165	1408	1625	1809	1804	1729	1602	1504	1366	1210	1033	884	738	591	488
-1.0	1428	1670	1912	2060	2123	2007	1860	1722	1579	1392	1228	1049	893	715	563
-2.0	1722	1964	2168	2369	2421	2300	2165	2013	1843	1670	1538	1317	1098	903	704
-3.0	2027	2274	2480	2604	2686	2658	2504	2304	2066	1824	1540	1290	1068	840	657
-4.0	2367	2586	2765	2865	2850	2782	2617	2355	2103	1825	1536	1274	1020	816	641

ORIGINAL PAGE IS  
OF POOR QUALITY

-5.0	2673	2906	3058	3106	3086	2911	2678	2416	2153	1805	1541	1245	1020	810	656
-6.0	3011	3191	3315	3337	3233	3018	2745	2478	2151	1846	1538	1283	1062	882	721
-7.0	3357	3477	3543	3521	3374	3130	2830	2524	2196	1885	1609	1372	1189	1026	865
-8.0	3652	3785	3807	3674	3474	3243	2936	2622	2303	1971	1760	1564	1361	1236	1074
-9.0	3548	4042	3973	3849	3630	3332	2995	2743	2391	2192	2008	1849	1763	1627	1472
-10.0	4241	4243	4158	3983	3723	3450	3136	2846	2624	2465	2393	2347	2294	2255	2126
-11.0	4503	4462	4348	4175	3924	3580	3369	3138	2984	2921	3080	3123	3221	3122	2422
-12.0	4706	4632	4530	4315	4099	3834	3605	3525	3551	3760	4065	4204	3539	2794	2168
-13.0	4565	4872	4673	4567	4272	4089	4051	4123	4393	5002	4758	4023	3216	2607	2088
-14.0	5118	5027	4933	4713	4603	4494	4639	5000	5821	5404	4590	3761	3100	2567	2188
-15.0	5354	5154	5101	5031	5015	5146	5633	6436	6141	5161	4381	3692	3134	2794	2550
-16.0	5523	5430	5439	5439	5610	6108	6946	6838	5864	5110	4350	3715	3429	3265	3284
-17.0	5725	5785	5738	592	6484	7516	7465	6613	5743	4997	4395	4113	4067	4216	3691
-18.0	6028	6058	6382	6740	7789	8213	7346	6451	5648	5124	4795	4911	4790	4216	3652
-19.0	6353	6557	7050	8040	8883	8011	7124	6372	5811	5409	5652	5369	4758	4204	3800
-20.0	6764	7259	8206	9639	8658	7810	7049	6406	6102	6264	6009	5330	4793	4394	4086
-21.0	7442	8264	9886	9251	8451	7664	7012	6671	6783	6622	5941	5383	5024	4796	4624
-22.0	8381	9833	9795	9064	8296	7683	7206	7276	7288	6534	6023	5636	5449	5444	4772
-23.0	9749	10243	9434	8889	8158	7746	7717	7932	7159	6642	6255	6137	6040	5283	4669
-24.0	10480	9806	9301	8663	8237	8112	8517	7765	7196	6840	6719	6644	5823	5164	4702
-25.0	10883	9586	9036	8604	8460	8909	8366	7667	7319	7241	7227	6392	5714	5208	4836
-26.0	9689	9232	8927	8766	9072	8923	8175	7831	7707	7845	6960	6247	5782	5426	4897
-27.0	9415	9057	8921	9265	9313	8726	8226	8139	8388	7541	6823	6294	5986	5325	4823
-28.0	9060	9243	9738	9160	8599	8449	8665	8109	8109	7315	6759	6509	5775	5083	4487
-29.0	9029	9201	9655	9404	8921	8742	8916	8648	7640	7254	6838	6242	5521	4885	4278
-30.0	9045	9511	9554	9162	8504	9127	9155	8335	7711	7366	6763	6005	5326	4718	4005
-31.0	9523	9588	9308	9067	9184	9559	8755	8074	7663	7266	6426	5720	5121	4373	3907
-32.0	9442	9288	9056	9188	9684	9072	8399	8030	7712	6788	6140	5578	4726	4256	3886
-33.0	9056	8964	9077	9553	9328	8694	8248	8098	7171	6512	5894	5086	4572	4414	4229
-34.0	8672	8894	9381	9406	8852	8397	8223	7536	6846	6224	5452	4842	4667	4470	4048
-35.0	8572	9084	9356	8858	8488	8303	7853	7094	6469	5751	5080	4855	4717	4277	4252
-36.0	8717	9147	8749	8411	8272	8032	7237	6670	6087	5298	5026	4917	4483	4443	4624
-37.0	8720	8446	8194	8132	8068	7316	6812	6346	5485	5133	5086	4645	4583	4788	5168
-38.0	7992	7653	7812	7958	7338	6817	6376	5609	5207	5242	4784	4674	4924	5330	6105
-39.0	7353	7434	7709	7182	6741	6324	5676	5196	5198	4887	4688	4968	5393	6240	5837
-40.0	6905	7260	6811	6524	6179	5631	5135	5118	4916	4024	4949	5369	6263	5950	5086
-41.0	6703	6368	6143	5902	5472	5002	4936	4882	4627	4877	5262	6160	6051	5147	4624
-42.0	5782	5624	5474	5154	4757	4730	4781	4508	4712	5119	5971	6118	5201	4650	4553
-43.0	5011	4686	4720	4437	4446	4621	4343	4516	4901	5714	6178	5209	4646	4825	4993
-44.0	4288	4154	4000	4100	4345	4091	4250	4676	5412	6159	5195	4599	4475	4966	4337
-45.0	3517	3495	3710	4013	3804	3984	4371	5110	6092	5111	4489	4363	4849	4310	3597
-46.0	2996	2668	3530	3440	3674	4088	4754	5779	4964	4341	4212	4649	4267	3534	3169
-47.0	2794	2651	3044	3310	3717	4342	5363	4703	4111	3984	4438	4203	3461	3130	2995
-48.0	2431	2624	2930	3378	3927	4917	4374	3859	3766	4173	4115	3357	3036	2931	2313
-49.0	2245	2561	2586	3518	4469	3927	3533	3442	3896	3975	3218	2953	2833	2238	1497
-50.0	2156	2526	3125	4004	3399	3148	3119	3591	3789	3053	2808	2719	2144	1414	971
-51.0	2720	3131	2823	2662	2772	3323	3549	2837	2624	2589	2021	1322	912	719	
-52.0	2324	2383	2243	2206	2430	3063	3113	2594	2419	2432	1870	1217	850	672	413
-53.0	1678	1690	1760	2168	2881	2599	2310	2195	2274	1681	1099	780	611	378	337
-54.0	1203	1476	1919	2517	2123	2000	1975	2110	1458	962	704	545	344	316	326
-55.0	1215	1630	1825	1668	1729	1732	1829	1165	802	615	473	307	296	293	166
-56.0	1293	1256	1312	1406	1445	1400	888	640	527	396	266	277	231	149	119
-57.0	876	1023	1363	1124	906	622	494	438	315	219	259	209	132	110	71
-58.0	670	738	767	510	424	372	358	241	191	232	167	115	102	61	34
-59.0	404	319	292	280	275	244	173	165	203	129	99	94	52	29	20
-60.0	165	178	189	205	181	117	143	151	99	86	79	42	25	18	13
-61.0	143	131	137	88	119	65	64	77	76	66	33	25	13	11	5
-62.0	58	56	53	79	77	65	64	69	42	25	17	11	11	11	11
-63.0	38	47	50	49	52	57	47	28	19	14	11	11	11	11	11
-64.0	30	35	49	47	44	27	19	14	11	9	11	11	11	11	11
-65.0	33	39	32	22	16	12	10	9	8	11	11	11	11	11	11
-66.0	18	14	12	10	9	8	7	11	11	11	11	11	11	11	11
-67.0	8	7	6	6	6	6	11	11	11	11	11	11	11	11	11
-68.0	4	4	3	3	3	3	11	11	11	11	11	11	11	11	11
-69.0	1	1	1	1	1	1	11	11	11	11	11	11	11	11	11
-70.0	1	1	1	1	1	1	11	11	11	11	11	11	11	11	11
-71.0	1	1	1	1	1	1	11	11	11	11	11	11	11	11	11
-72.0	1	1	1	1	1	1	11	11	11	11	11	11	11	11	11
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-74.0	1	1	1	1	1	1	11	11	11	11	11	11	11	11	11
-75.0	1	1	1	1	1	1	11	11	11	11	11	11	11	11	11
-76.0	1	1	1	1	1	1	11	11	11	11	11	11	11	11	11
-77.0	1	1	1	1	1	1	11	11	11	11	11	11	11	11	11
-78.0	1	1	1	1	1	1	11	11	11	11	11	11	11	11	11
-79.0	1	1	1	1	1	1	11	11	11	11	11	11	11	11	11
-80.0	1	1	1	1	1	1	11	11	11	11	11	11	11	11	11
-81.0	1	1	1	1	1	1	11	11	11	11	11	11	11	11	11
-82.0	1	1	1	1	1	1	11	11	11	11	11	11	11	11	11
-83.0	1	1	1	1	1	1	11	11	11	11	11	11	11	11	11
-84.0	1	1	1	1	1	1	11	11	11	11	11	11	11	11	11

ORIGINAL PAGE IS  
OF POOR QUALITY

ALTITUDE= 900.0 ENERGY= 3.000

PRCTONS

	0.0	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	33.0	36.0	39.0	42.0
75.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
74.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
73.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
72.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
71.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
70.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
69.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
68.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
67.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
66.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
65.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
64.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
63.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
62.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
61.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
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39.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
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32.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
31.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
30.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
29.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
28.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
27.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
26.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
25.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
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23.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
22.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
21.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
20.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
19.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
18.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
17.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
16.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
15.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
14.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
13.0	3	2	1	1	1	1	1	1	1	1	1	1	1	1	1
12.0	A	3	1	1	1	1	1	1	1	1	1	1	1	1	1
11.0	13	5	1	1	1	1	1	1	1	1	1	1	1	1	1
10.0	15	5	1	1	1	1	1	1	1	1	1	1	1	1	1
9.0	26	8	2	1	1	1	1	1	1	1	1	1	1	1	1
8.0	41	14	4	1	1	1	1	1	1	1	1	1	1	1	1
7.0	54	29	10	3	1	1	1	1	1	1	1	1	1	1	1
6.0	72	48	27	A	3	1	1	1	1	1	1	1	1	1	1
5.0	99	64	41	29	9	3	1	1	1	1	1	1	1	1	1
4.0	136	61	39	38	23	12	4	1	1	1	1	1	1	1	1
3.0	194	133	82	51	32	20	12	6	2	1	1	1	1	1	1
2.0	268	207	131	79	48	28	17	8	5	3	1	1	1	1	1
1.0	295	212	133	102	63	30	14	6	3	1	1	1	1	1	1
0.0	338	242	173	112	61	33	14	3	1	1	1	1	1	1	1
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-2.0	562	432	338	236	153	100	55	30	14	4	1	1	1	1	1
-3.0	516	404	311	235	180	127	99	68	38	10	5	1	1	1	1
-4.0	500	362	307	227	170	121	87	62	34	20	18	6	1	1	1



ORIGINAL PAGE IS  
OF POOR QUALITY

-75.0	525	413	313	230	171	128	75	82	58	43	28	12	9	1	1
-76.0	588	367	262	209	158	113	109	83	59	40	28	18	9	3	1
-77.0	706	587	472	252	211	151	109	83	59	40	28	18	9	3	1
-78.0	552	777	662	517	385	285	157	119	65	60	42	24	12	6	3
-79.0	1329	1144	971	733	563	430	324	238	171	129	91	61	39	21	7
-10.0	1508	1736	1258	959	726	555	432	343	261	187	134	90	55	29	12
-11.0	1902	1435	1030	841	664	518	414	340	269	210	169	125	81	43	16
-12.0	1696	1341	1040	878	711	582	487	402	326	265	208	163	112	62	28
-13.0	1698	1428	1226	1042	857	759	655	553	452	372	309	236	169	107	54
-14.0	1913	1740	1541	1379	1237	1098	944	814	693	578	455	350	260	167	93
-15.0	2439	2285	2138	2020	1814	1621	1408	1259	1068	897	705	556	410	263	148
-16.0	3214	2816	2431	2070	1828	1562	1347	1172	1032	904	780	664	546	443	237
-17.0	5180	2779	2413	2130	1832	1599	1408	1251	1088	965	832	705	562	415	267
-18.0	3233	2884	2551	2268	2056	1875	1665	1503	1340	1192	1022	856	689	519	339
-19.0	3438	3162	2915	2706	2552	2364	2168	2007	1812	1581	1389	1154	924	693	488
-20.0	3863	3669	3474	3035	2664	2377	2110	1881	1715	1540	1377	1227	1034	834	636
-21.0	4363	3779	3305	2948	2584	2323	2081	1880	1707	1543	1379	1194	1003	786	574
-22.0	4202	3710	3234	2951	2689	2416	2229	2075	1892	1690	1505	1270	1067	826	599
-23.0	4163	3764	3443	3161	2650	2632	2330	2074	1853	1666	1480	1297	1098	886	680
-24.0	4263	3567	3613	3142	2744	2368	2097	1864	1634	1436	1268	1092	905	714	533
-25.0	4503	3874	3393	2938	2538	2212	1937	1691	1510	1331	1152	979	812	642	478
-26.0	4235	3731	3131	2755	2391	2079	1835	1655	1471	1313	1152	982	817	650	482
-27.0	4070	3455	3064	2611	2312	2086	1903	1736	1567	1403	1235	1060	874	691	505
-28.0	3991	3345	2898	2599	2430	2228	2068	1905	1748	1565	1383	1183	952	742	529
-29.0	3683	3224	2953	2820	2628	2457	2219	2016	1854	1669	1462	1248	1016	761	535
-30.0	3554	3353	3239	2964	2666	2511	2357	2199	2047	1870	1607	1347	1075	802	553
-31.0	3740	3676	3233	3014	2879	2762	2673	2567	2327	2110	1855	1565	1268	965	656
-32.0	3633	3523	3228	3250	3179	3091	2977	2977	2827	2624	2394	2022	1647	1221	846
-33.0	3796	3674	3703	3776	3757	3771	3760	3760	3635	3209	2664	2134	1643	1187	769
-34.0	4005	4075	4144	4333	4518	4717	4251	3602	3097	2650	2202	1788	1390	1007	663
-35.0	4564	4555	4890	5312	4852	4115	3572	3176	2774	2410	2100	1795	1533	1169	847
-36.0	4909	5423	5636	4800	4116	3682	3340	3063	2883	2705	2582	2379	1997	1614	1103
-37.0	5786	5666	4822	4205	3853	3586	3509	3405	3535	3464	2765	2191	1694	1281	918
-38.0	5736	4905	4344	4067	3924	4035	4254	3718	3065	2579	2215	1879	1585	1229	866
-39.0	4998	4469	4242	4258	4573	4071	3460	2939	2649	2322	2042	1794	1485	1121	772
-40.0	4548	4382	4564	4596	3939	3307	2984	2668	2414	2257	2139	1909	1603	1297	944
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-42.0	4561	4408	3738	3278	3002	2836	2566	1870	1368	1000	720	541	411	310	183
-43.0	4370	3674	3273	3025	2957	2271	1630	1185	868	685	557	383	253	161	106
-44.0	3629	3258	3049	2760	1991	1457	1051	812	687	458	314	218	188	158	125
-45.0	3231	3655	2589	1828	1338	965	794	553	382	287	261	247	189	108	71
-46.0	3040	2473	1729	1202	916	715	476	341	315	311	237	144	99	78	67
-47.0	2384	1649	1129	884	626	422	352	344	306	184	127	100	86	55	31
-48.0	1576	1075	858	563	365	363	374	240	157	121	103	66	39	24	16
-49.0	1027	816	515	379	373	331	204	143	119	83	49	30	20	14	10
-50.0	766	480	373	380	286	179	136	113	64	38	25	18	13	10	6
-51.0	447	363	381	252	164	132	90	51	32	22	16	12	10	1	1
-52.0	352	374	226	152	128	75	43	27	20	15	12	5	1	1	1
-53.0	355	205	143	120	64	37	25	18	14	9	1	1	1	1	1
-54.0	185	135	105	55	33	22	17	13	6	1	1	1	1	1	1
-55.0	125	55	49	29	16	13	13	1	1	1	1	1	1	1	1
-56.0	82	44	27	19	7	10	1	1	1	1	1	1	1	1	1
-57.0	52	24	18	14	7	1	1	1	1	1	1	1	1	1	1
-58.0	25	16	13	5	1	1	1	1	1	1	1	1	1	1	1
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-62.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
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-66.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
-67.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
-68.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
-69.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
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-79.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
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-83.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
-84.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1

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ALTITUDE= 930.0 ENERGY= 5.000

	45.0	46.0	51.0	54.0	57.0	60.0
75.0	1	1	1	1	1	1
74.0	1	1	1	1	1	1
73.0	1	1	1	1	1	1
72.0	1	1	1	1	1	1
71.0	1	1	1	1	1	1
70.0	1	1	1	1	1	1
69.0	1	1	1	1	1	1
68.0	1	1	1	1	1	1
67.0	1	1	1	1	1	1
66.0	1	1	1	1	1	1
65.0	1	1	1	1	1	1
64.0	1	1	1	1	1	1
63.0	1	1	1	1	1	1
62.0	1	1	1	1	1	1
61.0	1	1	1	1	1	1
60.0	1	1	1	1	1	1
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57.0	1	1	1	1	1	1
56.0	1	1	1	1	1	1
55.0	1	1	1	1	1	1
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51.0	1	1	1	1	1	1
50.0	1	1	1	1	1	1
49.0	1	1	1	1	1	1
48.0	1	1	1	1	1	1
47.0	1	1	1	1	1	1
46.0	1	1	1	1	1	1
45.0	1	1	1	1	1	1
44.0	1	1	1	1	1	1
43.0	1	1	1	1	1	1
42.0	1	1	1	1	1	1
41.0	1	1	1	1	1	1
40.0	1	1	1	1	1	1
39.0	1	1	1	1	1	1
38.0	1	1	1	1	1	1
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36.0	1	1	1	1	1	1
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34.0	1	1	1	1	1	1
33.0	1	1	1	1	1	1
32.0	1	1	1	1	1	1
31.0	1	1	1	1	1	1
30.0	1	1	1	1	1	1
29.0	1	1	1	1	1	1
28.0	1	1	1	1	1	1
27.0	1	1	1	1	1	1
26.0	1	1	1	1	1	1
25.0	1	1	1	1	1	1
24.0	1	1	1	1	1	1
23.0	1	1	1	1	1	1
22.0	1	1	1	1	1	1
21.0	1	1	1	1	1	1
20.0	1	1	1	1	1	1
19.0	1	1	1	1	1	1
18.0	1	1	1	1	1	1
17.0	1	1	1	1	1	1
16.0	1	1	1	1	1	1
15.0	1	1	1	1	1	1
14.0	1	1	1	1	1	1
13.0	1	1	1	1	1	1
12.0	1	1	1	1	1	1
11.0	1	1	1	1	1	1
10.0	1	1	1	1	1	1
9.0	1	1	1	1	1	1
8.0	1	1	1	1	1	1
7.0	1	1	1	1	1	1
6.0	1	1	1	1	1	1
5.0	1	1	1	1	1	1
4.0	1	1	1	1	1	1
3.0	1	1	1	1	1	1
2.0	1	1	1	1	1	1
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0.0	1	1	1	1	1	1
-1.0	1	1	1	1	1	1
-2.0	1	1	1	1	1	1
-3.0	1	1	1	1	1	1
-4.0	1	1	1	1	1	1

PROTONS

	63.0	66.0	69.0	72.0	75.0	78.0	81.0	84.0	87.0
75.0	1	1	1	1	1	1	1	1	1
74.0	1	1	1	1	1	1	1	1	1
73.0	1	1	1	1	1	1	1	1	1
72.0	1	1	1	1	1	1	1	1	1
71.0	1	1	1	1	1	1	1	1	1
70.0	1	1	1	1	1	1	1	1	1
69.0	1	1	1	1	1	1	1	1	1
68.0	1	1	1	1	1	1	1	1	1
67.0	1	1	1	1	1	1	1	1	1
66.0	1	1	1	1	1	1	1	1	1
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64.0	1	1	1	1	1	1	1	1	1
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62.0	1	1	1	1	1	1	1	1	1
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48.0	1	1	1	1	1	1	1	1	1
47.0	1	1	1	1	1	1	1	1	1
46.0	1	1	1	1	1	1	1	1	1
45.0	1	1	1	1	1	1	1	1	1
44.0	1	1	1	1	1	1	1	1	1
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42.0	1	1	1	1	1	1	1	1	1
41.0	1	1	1	1	1	1	1	1	1
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39.0	1	1	1	1	1	1	1	1	1
38.0	1	1	1	1	1	1	1	1	1
37.0	1	1	1	1	1	1	1	1	1
36.0	1	1	1	1	1	1	1	1	1
35.0	1	1	1	1	1	1	1	1	1
34.0	1	1	1	1	1	1	1	1	1
33.0	1	1	1	1	1	1	1	1	1
32.0	1	1	1	1	1	1	1	1	1
31.0	1	1	1	1	1	1	1	1	1
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-4.0	1	1	1	1	1	1	1	1	1

1 0 0 0 1



ALTITUDE: 900 KM

PROTONS: E > 15. MEV

TRAPPED PROTON MODEL: AP8 (SOLAR MAX)

ORIGINAL PAGE IS  
OF POOR QUALITY





ALTITUDE= 900.0 ENERGY= 15.000

PROTONS

	-90.0	-87.0	-84.0	-81.0	-78.0	-75.0	-72.0	-69.0	-66.0	-63.0	-60.0	-57.0	-54.0	-51.0	-48.0
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-1.0	55	62	77	104	147	214	305	361	488	605	722	759	783	815	907
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-3.0	97	186	236	295	364	451	536	622	722	812	898	938	1017	1152	1335
-4.0	126	154	309	325	363	426	533	649	787	948	1087	1255	1425	1656	1899

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-6.0	229	298	428	634	655	722	826	957	1127	1303	1519	1774	2006	2259	2521
-7.0	287	363	468	708	871	939	1038	1174	1359	1572	1809	2042	2326	2570	2812
-8.0	365	436	559	791	1061	1149	1276	1441	1629	1857	2090	2355	2613	2873	3074
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-10.0	483	590	730	957	1279	1622	1778	1953	2167	2420	2684	2944	3226	3460	3635
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-12.0	592	734	912	1164	1532	2027	2218	2435	2707	2954	3255	3558	3779	3969	4100
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-14.0	660	860	1031	1405	1811	2370	2596	2865	3165	3459	3757	4034	4236	4378	4439
-15.0	688	911	1160	1507	1974	2486	2755	3054	3333	3657	3968	4190	4426	4585	4594
-16.0	721	956	1253	1643	2147	2553	2864	3158	3483	3799	4145	4385	4585	4692	4714
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-18.0	811	1065	1446	1937	2241	2594	2957	3308	3676	4019	4305	4601	4814	4914	4988
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-20.0	892	1149	1448	1790	2126	2486	2896	3312	3701	4053	4442	4718	4988	5199	5408
-21.0	752	1026	1335	1672	2064	2451	2826	3261	3661	4099	4468	4798	5104	5357	5714
-22.0	656	889	1212	1559	1930	2347	2771	3238	3672	4115	4550	4901	5246	5656	6122
-23.0	576	799	1035	1419	1826	2230	2684	3135	3654	4108	4605	5018	5506	6122	6820
-24.0	534	740	1005	1331	1710	2145	2625	3110	3653	4148	4695	5214	5919	6688	7666
-25.0	508	705	959	1274	1651	2086	2592	3144	3682	4296	4963	5671	6555	7801	8531
-26.0	510	714	936	1304	1664	2084	2636	3211	3828	4511	5299	6265	7624	8392	8175
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-31.0	552	622	1482	2067	2735	3350	4003	4592	5124	5559	5974	6317	6543	6845	7233
-32.0	440	716	1117	1610	2234	2896	3507	4081	4630	5137	5603	6007	6391	6856	7645
-33.0	430	649	951	1352	1829	2437	3057	3652	4249	4807	5302	5847	6516	7306	7288
-34.0	443	651	914	1256	1672	2172	2739	3357	3982	4603	5284	6017	6959	6839	6660
-35.0	500	733	946	1320	1662	2177	2723	3338	4007	4723	5571	6234	6248	6236	6236
-36.0	524	823	1155	1493	1947	2371	2984	3626	4381	5088	5377	5579	5677	5798	5992
-37.0	340	661	1086	1575	2078	2667	3141	3635	4065	4451	4765	5042	5311	5601	6000
-38.0	288	610	833	1242	1663	2157	2647	3148	3596	4011	4405	4738	5139	5633	5876
-39.0	266	458	728	1046	1436	1864	2315	2807	3245	3711	4178	4676	5294	5325	5028
-40.0	256	461	708	1003	1322	1738	2217	2661	3129	3666	4245	4733	4604	4478	4248
-41.0	190	427	748	1056	1411	1794	2231	2740	3334	3668	3807	3856	3821	3781	3701
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-44.0	79	173	293	467	673	921	1214	1497	1777	2062	2360	2461	2346	2164	2009
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ORIGINAL PAGE IS  
OF POOR QUALITY



ALTITUDE= 900.0 ENERGY= 15.000

PRCTONS

	-45.0	-42.0	-39.0	-36.0	-33.0	-30.0	-27.0	-24.0	-21.0	-18.0	-15.0	-12.0	-9.0	-6.0	-3.0
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74.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
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9.0	176	178	175	171	193	254	324	243	226	199	188	131	85	57	37
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7.0	294	275	277	324	398	529	476	395	382	365	310	214	151	104	69
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5.0	403	401	439	577	742	760	683	633	582	546	495	384	264	190	132
4.0	461	517	635	759	956	875	811	734	692	646	577	506	369	268	179
3.0	568	646	793	951	1180	1018	939	893	821	750	660	676	476	366	253
2.0	692	808	1030	1219	1328	1182	1107	1024	949	846	743	641	530	425	338
1.0	845	1022	1241	1479	1528	1396	1316	1201	1110	971	861	720	587	479	377
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-4.0	2141	2273	2541	2690	2684	2660	2411	2174	1947	1699	1423	1170	941	741	580

ORIGINAL PAGE IS  
OF POOR QUALITY

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-11.0	3132	3132	3133	3171	3039	2821	2553	2278	1970	1684	1430	1218	1056	906	765
-12.0	3271	3369	3408	3290	3110	2900	2631	2334	2042	1737	1549	1378	1212	1084	957
-13.0	3518	3558	3537	3422	3224	2960	2553	2410	2094	1913	1756	1613	1531	1438	1297
-14.0	3758	3758	3673	3519	3265	3041	2744	2477	2274	2142	2078	2026	2011	1981	1877
-15.0	3968	3528	3820	3658	3423	3119	2917	2700	2567	2576	2645	2708	2829	2707	2552
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-17.0	4431	4231	4047	3898	3666	3490	3439	3502	3755	4307	3912	3260	2684	2278	1822
-18.0	4603	4431	4217	4033	3909	3800	3916	4250	4925	4607	4365	3912	2720	2436	2264
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-20.0	4861	4876	4834	4661	4589	4281	6215	5526	4811	4235	3766	3529	3538	3677	3196
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-22.0	5304	5475	5823	6629	7365	6570	5931	5289	4863	4608	4754	4548	3917	3438	3074
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ALTTITUDE= 900.C ENERGY= 13.000

PROTONS

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-1.0	412	312	218	141	90	50	26	10	3	1	1	1	1	1	1
-2.0	534	411	322	224	144	94	51	27	12	3	1	1	1	1	1
-3.0	481	376	230	217	165	116	90	61	34	16	4	1	1	1	1
-4.0	459	358	274	206	145	109	78	56	39	24	15	4	1	1	1

ORIGINAL PAGE IS  
OF POOR QUALITY

-5.0	473	371	253	212	154	115	85	61	42	28	19	10	3	1	1
-6.0	524	414	329	254	189	141	102	74	53	39	25	16	8	2	1
-7.0	632	523	424	332	260	191	138	101	76	54	37	25	14	5	1
-8.0	642	696	595	462	351	262	202	144	110	78	55	38	21	10	2
-9.0	1185	1029	858	668	517	402	300	222	159	119	83	54	35	18	5
-10.0	1719	1524	1153	881	678	515	405	322	244	173	121	81	48	25	10
-11.0	1684	1288	985	767	611	474	381	314	245	190	152	111	71	38	13
-12.0	1509	1207	979	796	647	536	445	365	296	241	188	147	101	56	24
-13.0	1511	1284	1098	945	826	692	590	503	414	337	277	213	155	96	48
-14.0	1706	1546	1393	1267	1118	988	862	743	621	514	410	322	235	153	83
-15.0	2151	2050	1962	1818	1630	1478	1267	1145	942	808	651	506	367	242	134
-16.0	2856	2815	2100	1812	1546	1341	1188	1033	904	791	689	596	497	370	210
-17.0	2729	2345	2012	1780	1579	1372	1209	1083	950	845	731	621	497	363	236
-18.0	2670	2373	2126	1935	1740	1597	1435	1307	1167	1041	886	742	601	459	302
-19.0	2776	2610	2437	2263	2162	2035	1872	1726	1543	1359	1204	1011	818	612	424
-20.0	3150	3041	2836	2450	2099	1831	1639	1470	1352	1222	1105	1005	871	726	560
-21.0	3494	3601	2472	2133	1874	1690	1518	1393	1286	1175	1054	922	791	637	474
-22.0	3054	2616	2205	2037	1866	1715	1600	1485	1367	1232	1115	961	821	652	489
-23.0	2807	2493	2293	2138	2045	1746	1511	1350	1216	1110	1011	916	811	689	552
-24.0	2735	2572	2313	1897	1584	1359	1204	1081	975	879	798	711	614	507	396
-25.0	2785	2268	1854	1550	1330	1179	1059	957	877	798	715	631	547	455	349
-26.0	2292	1880	1567	1361	1216	1106	980	884	800	732	662	586	506	421	333
-27.0	1939	1626	1440	1254	1094	975	889	816	748	683	617	545	467	386	302
-28.0	1722	1458	1231	1120	1017	933	871	810	750	683	617	546	468	381	295
-29.0	1554	1330	1086	1086	1010	943	828	741	678	616	552	484	415	337	258
-30.0	1392	1248	1164	1059	913	818	753	693	645	586	526	460	388	312	234
-31.0	1325	1246	1060	925	845	787	748	692	624	560	497	432	365	294	217
-32.0	1269	1078	949	827	747	757	689	634	588	544	493	430	363	288	215
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-34.0	1031	877	865	753	754	742	657	547	470	367	335	280	226	178	127
-35.0	995	865	824	804	721	587	502	431	372	325	276	232	195	152	115
-36.0	909	856	815	675	555	480	411	357	316	281	256	221	182	145	103
-37.0	883	805	649	543	465	395	354	324	304	275	210	179	144	114	86
-38.0	803	640	542	449	393	362	344	288	235	202	176	154	130	101	73
-39.0	639	541	444	366	373	316	259	223	202	173	146	123	102	77	57
-40.0	538	443	432	361	294	246	221	187	161	140	123	90	65	39	25
-41.0	444	407	345	280	242	206	178	155	130	93	68	47	32	19	11
-42.0	410	336	272	234	196	172	141	101	75	54	34	23	15	10	5
-43.0	331	221	226	191	168	120	85	62	39	26	18	11	6	4	3
-44.0	264	187	187	151	103	76	48	31	22	12	8	5	4	4	3
-45.0	216	139	139	103	65	34	27	15	6	4	3	2	1	1	1
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ALTITUDE: 900 KM

PROTONS: E > 30. MEV

TRAPPED PROTON MODEL: AP8 (SOLAR MAX)

ORIGINAL PAGE IS  
OF POOR QUALITY





-5.0	1	1	1	1	1	2	4	10	21	28	43	65	107	130
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-7.0	1	1	1	1	1	4	6	12	31	42	60	88	141	236
-8.0	1	1	1	1	1	7	8	16	34	48	67	97	158	269
-9.0	1	1	1	1	1	14	14	28	40	53	75	112	175	331
-10.0	1	1	1	2	3	14	21	30	43	62	90	134	206	381
-11.0	1	1	1	1	1	14	23	35	49	69	105	161	241	381
-12.0	1	1	1	1	1	14	25	39	56	84	120	189	282	464
-13.0	1	1	1	1	1	9	26	43	66	103	142	225	355	472
-14.0	1	1	1	1	1	3	18	44	77	129	189	291	372	479
-15.0	1	1	1	1	1	1	7	34	75	131	192	274	378	494
-16.0	1	1	1	1	1	1	8	26	58	114	180	258	367	496
-17.0	1	1	1	1	1	1	10	28	55	101	165	258	360	513
-18.0	1	1	1	1	1	1	10	32	63	103	173	267	396	541
-19.0	1	1	1	1	1	1	7	33	77	130	199	299	435	610
-20.0	1	1	1	1	1	1	4	18	50	103	188	299	444	620
-21.0	1	1	1	1	1	1	2	12	31	70	129	225	348	511
-22.0	1	1	1	1	1	1	1	8	25	54	101	173	276	420
-23.0	1	1	1	1	1	1	1	4	21	46	84	145	231	356
-24.0	1	1	1	1	1	1	1	2	16	42	79	132	212	320
-25.0	1	1	1	1	1	1	1	1	10	34	75	130	207	313
-26.0	1	1	1	1	1	1	1	1	4	27	72	129	211	313
-27.0	1	1	1	1	1	1	1	1	1	14	60	130	222	342
-28.0	1	1	1	1	1	1	1	1	1	6	44	128	242	361
-29.0	1	1	1	1	1	1	1	1	1	3	26	103	250	416
-30.0	1	1	1	1	1	1	1	1	1	2	20	75	161	363
-31.0	1	1	1	1	1	1	1	1	1	1	14	67	150	281
-32.0	1	1	1	1	1	1	1	1	1	7	54	139	246	363
-33.0	1	1	1	1	1	1	1	1	1	2	38	134	252	352
-34.0	1	1	1	1	1	1	1	1	1	1	15	116	269	369
-35.0	1	1	1	1	1	1	1	1	1	1	4	76	254	354
-36.0	1	1	1	1	1	1	1	1	1	1	6	51	196	316
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-38.0	1	1	1	1	1	1	1	1	1	1	2	38	126	246
-39.0	1	1	1	1	1	1	1	1	1	1	1	28	115	215
-40.0	1	1	1	1	1	1	1	1	1	1	1	15	99	174
-41.0	1	1	1	1	1	1	1	1	1	1	1	14	61	111
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-43.0	1	1	1	1	1	1	1	1	1	1	1	6	33	55
-44.0	1	1	1	1	1	1	1	1	1	1	1	3	21	36
-45.0	1	1	1	1	1	1	1	1	1	1	1	1	12	18
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M-104

ALTITUDE= 900.0 ENERGY= 30.000

PRCTONS

	-90.0	-87.0	-84.0	-81.0	-78.0	-75.0	-72.0	-69.0	-66.0	-63.0	-60.0	-57.0	-54.0	-51.0	-48.0
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7.0	1	1	1	1	1	1	1	1	13	46	85	117	149	235	280
6.0	1	1	1	1	1	1	1	1	15	44	85	124	164	242	325
5.0	1	1	1	1	1	1	1	1	41	81	123	179	261	413	400
4.0	1	1	1	1	1	1	1	1	77	127	152	286	445	474	456
3.0	1	1	1	1	1	1	1	1	147	229	348	466	613	620	497
2.0	1	1	1	1	1	1	1	1	184	328	449	529	571	571	556
1.0	1	1	1	1	1	1	1	1	277	390	451	581	605	610	618
0.0	18	27	43	25	19	4	4	15	13	44	85	117	149	235	280
-1.0	50	56	99	65	101	156	223	317	423	532	618	665	676	709	801
-2.0	79	111	114	134	169	228	310	409	526	625	719	807	887	1021	1192
-3.0	93	174	150	205	237	294	369	468	584	704	813	931	1056	1220	1431
-4.0	122	187	245	304	331	382	472	570	688	826	947	1104	1259	1462	1660

-5.0	166	227	356	444	459	509	594	696	817	962	1133	1297	1509	1709	1928
-6.0	214	276	406	602	613	667	756	866	1008	1156	1342	1561	1744	1952	2173
-7.0	268	337	452	656	805	866	947	1059	1214	1394	1582	1774	2005	2207	2416
-8.0	341	404	524	725	971	1042	1146	1263	1437	1623	1813	2029	2239	2459	2634
-9.0	391	462	597	787	1105	1249	1341	1479	1663	1861	2084	2274	2488	2718	2870
-10.0	452	547	639	872	1154	1449	1572	1711	1882	2087	2301	2514	2747	2942	3089
-11.0	515	610	735	969	1245	1638	1751	1925	2106	2314	2551	2776	2987	3180	3299
-12.0	554	680	837	1058	1379	1807	1956	2126	2341	2537	2776	3018	3196	3347	3449
-13.0	590	730	931	1170	1505	1936	2133	2322	2547	2767	2990	3229	3380	3517	3602
-14.0	613	752	988	1271	1624	2103	2280	2489	2724	2953	3184	3398	3551	3656	3693
-15.0	636	835	1036	1360	1764	2200	2411	2644	2860	3111	3349	3517	3692	3805	3799
-16.0	663	875	1136	1477	1912	2251	2498	2728	2978	3221	3483	3638	3805	3874	3876
-17.0	683	915	1192	1556	2032	2280	2537	2789	3064	3330	3567	3731	3856	3970	3978
-18.0	741	984	1301	1729	1981	2268	2527	2832	3116	3375	3587	3803	3952	4012	4054
-19.0	830	1108	1390	1854	1935	2222	2483	2809	3108	3374	3662	3861	4054	4208	4208
-20.0	822	1044	1298	1581	1860	2153	2463	2809	3081	3363	3668	3909	4136	4327	4407
-21.0	700	957	1197	1478	1800	2111	2412	2753	3051	3392	3720	3984	4245	4561	4934
-22.0	608	814	1058	1280	1685	2021	2358	2722	3055	3392	3720	3984	4245	4561	4934
-23.0	519	726	894	1266	1566	1923	2284	2638	3038	3385	3763	4077	4451	4934	5445
-24.0	473	657	834	1177	1499	1860	2236	2618	3039	3420	3839	4313	4785	5348	6200
-25.0	445	616	838	1110	1438	1795	2208	2651	3071	3546	4059	4588	5240	6148	6644
-26.0	451	618	830	1119	1419	1772	2226	2682	3166	3693	4290	5010	6009	6543	6388
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-28.0	550	767	1006	1286	1624	2057	2568	3115	3811	4660	5607	5961	6014	5935	5872
-29.0	639	910	1187	1566	1920	2384	2948	3704	4518	5255	5469	5577	5645	5667	5733
-30.0	696	1056	1496	1908	2453	2995	3590	4110	4498	4803	5059	5273	5443	5604	5649
-31.0	507	615	1250	1758	2265	2801	3370	3775	4163	4487	4804	5104	5229	5427	5793
-32.0	406	654	987	1357	1872	2410	2970	3327	3768	4156	4498	4790	5112	5522	6206
-33.0	401	555	865	1198	1587	2059	2538	3019	3484	3906	4311	4740	5289	6066	5901
-34.0	412	668	832	1143	1481	1887	2355	2836	3316	3805	4363	4992	5845	5623	5342
-35.0	457	667	918	1193	1536	1925	2376	2879	3431	4025	4733	5249	5140	5036	4957
-36.0	493	754	1048	1380	1742	2144	2664	3169	3793	4360	4515	4598	4623	4608	4651
-37.0	308	663	587	1404	1902	2338	2762	3181	3517	3783	3959	4087	4213	4370	4643
-38.0	255	441	738	1057	1458	1872	2299	2684	2995	3287	3558	3787	4057	4417	4564
-39.0	240	365	619	908	1254	1643	2000	2356	2691	3036	3380	3750	4233	4208	3739
-40.0	234	412	633	840	1158	1478	1881	2290	2663	3096	3555	3927	3653	3271	2995
-41.0	174	390	668	888	1170	1482	1973	2270	2748	2960	2967	2893	2786	2670	2630
-42.0	115	236	426	674	549	1241	1523	1786	1999	2147	2238	2295	2331	2370	2349
-43.0	92	162	337	474	684	932	1142	1349	1548	1711	1856	1985	2144	2008	1878
-44.0	74	154	256	390	555	742	949	1154	1380	1572	1770	1786	1564	1361	1194
-45.0	46	96	192	335	502	669	865	1066	1157	1188	1187	1139	1057	995	937
-46.0	26	61	115	183	276	394	501	607	698	754	782	795	796	791	717
-47.0	15	41	80	134	193	266	338	415	492	554	603	650	615	582	549
-48.0	8	26	35	97	154	213	273	339	391	425	444	453	455	456	462
-49.0	3	16	19	60	95	137	181	225	267	302	330	352	369	356	322
-50.0	1	8	8	43	69	97	130	163	200	233	263	268	261	257	251
-51.0	1	1	8	23	44	68	94	119	147	162	175	188	192	184	188
-52.0	1	1	2	7	20	38	56	75	92	108	123	135	137	139	138
-53.0	1	1	2	7	16	30	45	62	78	94	108	123	135	137	138
-54.0	1	1	1	3	9	17	28	39	51	61	71	81	87	89	81
-55.0	1	1	1	1	3	9	15	22	27	30	32	32	32	32	31
-56.0	1	1	1	1	1	3	6	10	13	16	18	19	19	19	19
-57.0	1	1	1	1	1	1	2	4	5	7	8	8	8	9	11
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-59.0	1	1	1	1	1	1	1	1	1	2	3	4	4	5	5
-60.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
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ORIGINAL PAGE IS  
OF POOR QUALITY

ALTITUDE= 900.0 ENERGY= 33.000

PRCTONS

	-45.0	-42.0	-39.0	-36.0	-33.0	-30.0	-27.0	-24.0	-21.0	-18.0	-15.0	-12.0	-9.0	-6.0	-3.0
75.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
74.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
73.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
72.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
71.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
70.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
69.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
68.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
67.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
66.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
65.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
64.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
63.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
62.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
61.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
60.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
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56.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
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53.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
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51.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
50.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
49.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
48.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
47.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
46.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
45.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
44.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
43.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
42.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
41.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
40.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
39.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
38.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
37.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
36.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
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34.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
33.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
32.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
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29.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
28.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
27.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
26.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
25.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
24.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
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21.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
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19.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
18.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
17.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
16.0	1	1	1	1	1	2	3	3	2	1	1	1	1	1	1
15.0	1	1	2	6	10	11	11	9	8	3	1	1	1	1	1
14.0	7	4	5	12	21	24	22	24	23	10	3	1	1	1	1
13.0		12	18	35	41	41	39	43	60	38	19	10	2	2	2
12.0	26	31	34	63	62	60	69	92	88	52	36	25	23	15	9
11.0	48	74	74	91	85	93	119	168	105	81	70	64	43	26	17
10.0	101	125	125	117	122	150	207	187	147	130	122	94	60	36	24
9.0	165	163	157	162	173	235	323	232	213	186	176	121	76	50	32
8.0	233	233	199	238	258	347	364	304	274	258	232	158	98	69	47
7.0	283	243	347	291	370	503	445	367	355	342	290	196	135	92	60
6.0	302	290	315	366	617	626	514	462	449	412	370	257	183	125	85
5.0	351	353	422	538	657	700	526	583	540	509	465	357	241	171	118
4.0	405	458	533	706	879	799	741	675	640	601	540	476	344	247	163
3.0	500	579	729	906	1074	924	457	819	757	664	606	537	446	363	244
2.0	612	737	923	1104	1157	1070	1007	936	871	780	687	594	493	397	316
1.0	757	937	1118	1319	1373	1259	1192	1093	1013	885	790	663	542	443	350
0.0	951	1155	1352	1513	1514	1451	1350	1271	1160	1032	886	762	640	518	392
-1.0	1172	1368	1572	1725	1766	1672	1555	1446	1331	1180	1046	902	778	628	499
-2.0	1392	1601	1773	1936	1998	1902	1796	1677	1544	1410	1309	1139	955	792	635
-3.0	1628	1829	2005	2120	2194	2178	2064	1904	1714	1515	1300	1094	915	731	574
-4.0	1879	2061	2215	2308	2333	2254	2124	1918	1717	1505	1271	1066	860	692	539

ORIGINAL PAGE IS  
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-5.0	2106	2298	2426	2474	2459	2326	2145	1936	1733	1463	1222	1023	841	694	562
-6.0	2353	2500	2633	2623	2544	2378	2166	1555	1707	1468	1234	1029	840	694	562
-7.0	2598	2700	2754	2735	2619	2430	2198	1967	1714	1482	1258	1062	915	782	641
-8.0	2804	2505	2421	2819	2642	2477	2250	2007	1778	1512	1336	1180	1036	926	827
-9.0	3001	3067	3015	2911	2738	2512	2261	2065	1806	1638	1487	1366	1294	1228	1116
-10.0	3189	3187	3113	2973	2771	2567	2331	2122	1939	1798	1747	1698	1697	1706	1573
-11.0	3349	3310	3211	3066	2873	2624	2475	2283	2145	2140	2197	2254	2426	2259	1827
-12.0	3462	3394	3298	3128	2963	2766	2600	2509	2508	2658	2856	3088	2525	2071	1617
-13.0	3603	3517	3359	3228	3047	2922	2856	2667	3083	3470	3407	2848	2348	1919	1498
-14.0	3673	3563	3474	3328	3238	3148	3203	3448	4007	3764	3246	2690	2243	1938	1696
-15.0	3789	3658	3575	3504	3490	3534	3816	4410	4154	3663	3067	2613	2339	2125	2009
-16.0	3861	3614	3750	3752	3827	4103	4695	4582	4063	3496	3042	2736	2567	2522	2562
-17.0	3957	3566	3959	4049	4340	4986	4985	4447	3919	3479	3152	3034	3081	3309	2784
-18.0	4117	4138	4305	4501	5116	5455	4821	4428	3850	3572	3495	3645	3620	3035	2616
-19.0	4290	4434	4695	5264	5608	5227	4764	4250	3972	3899	4116	3914	3307	2890	2563
-20.0	4526	4629	5365	6202	5632	5085	4711	4338	4273	4511	4251	3616	3181	2875	2746
-21.0	4942	4972	6350	5999	5424	5098	4657	4542	4849	4596	3574	3478	3195	3133	3146
-22.0	5473	6213	6259	5787	5365	5035	4837	5110	5000	4333	3803	3506	3462	3671	2850
-23.0	6262	6487	6358	5645	5294	5124	5275	5462	4672	4124	3820	3781	3888	2975	2415
-24.0	6620	6250	5867	5637	5361	5419	5955	5021	4457	4096	4031	4079	3154	2546	2196
-25.0	6388	6035	5771	5572	5561	6125	5413	4769	4340	4246	4310	3390	2722	2345	2145
-26.0	6105	5904	5732	5720	6104	5837	5057	4607	4447	4584	3686	2909	2525	2314	1969
-27.0	5928	5889	5771	6125	6220	5374	4862	4639	4820	4054	3128	2687	2468	1997	1487
-28.0	5871	5840	6071	6509	5676	5115	4799	4879	4323	3376	2840	2614	2069	1532	1197
-29.0	5805	6025	6099	6099	5311	4960	4951	4608	3681	3030	2750	2180	1610	1243	1045
-30.0	5922	6113	6113	5947	5090	5036	4911	4033	3217	2901	2337	1724	1307	1007	668
-31.0	6385	6211	5934	5255	5066	5209	4329	3422	3001	2532	1877	1380	1150	896	748
-32.0	6184	6020	5275	5056	5280	4551	3660	3130	2764	2044	1474	1202	935	776	677
-33.0	5543	5060	5074	5220	4753	3910	3253	3025	2174	1587	1257	985	806	704	576
-34.0	5147	5111	5132	4867	4139	3367	3103	2352	1721	1326	1048	839	734	590	464
-35.0	4875	4913	4931	4271	3480	3138	2537	1878	1400	1121	878	756	613	477	398
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PROTONS

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-65.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
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-83.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
-84.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1

ORIGINAL PAGE IS  
OF POOR QUALITY







ALTITUDE: 900 KM

PROTONS: E > 50. MEV

TRAPPED PROTON MODEL: AP8 (SOLAR MAX)

ALTITUDE= 900.0 ENERGY= 50.000

PRCTONS

	-135.0	-132.0	-129.0	-126.0	-123.0	-120.0	-117.0	-114.0	-111.0	-108.0	-105.0	-102.0	-99.0	-96.0	-93.0
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72.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
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69.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
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-1.0	1	1	1	1	1	1	2	2	1	1	1	1	3	11	27
-2.0	1	1	1	1	1	1	1	4	5	5	8	8	17	37	51
-3.0	1	1	1	1	1	1	1	7	10	14	18	22	32	51	74
-4.0	1	1	1	1	1	1	1	10	14	22	30	44	63	94	133



ALTITUDE= 900.C ENERGY= 50.000

PRCTONS

	-90.0	-87.0	-84.0	-81.0	-78.0	-75.0	-72.0	-69.0	-66.0	-63.0	-60.0	-57.0	-54.0	-51.0	-48.0
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11.0	1	1	1	1	1	1	1	1	1	1	1	1	1	4	38
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9.0	1	1	1	1	1	1	1	1	1	1	8	33	65	83	104
8.0	1	1	1	1	1	1	1	1	2	9	38	72	96	126	202
7.0	1	1	1	1	1	1	1	3	13	44	79	108	137	221	252
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4.0	1	1	1	1	3	11	33	73	118	179	267	398	416	398	363
3.0	1	1	3	7	18	42	78	140	216	316	409	460	462	430	424
2.0	1	4	12	24	44	79	134	206	295	354	461	496	492	461	465
1.0	7	14	26	41	67	112	170	245	344	427	506	521	526	536	581
-1.0	17	25	37	59	91	140	197	278	370	460	531	571	585	623	714
-2.0	48	53	64	85	118	170	238	320	406	457	573	616	672	748	877
-3.0	77	106	136	123	153	204	274	357	455	541	624	704	783	906	1050
-4.0	114	174	229	191	216	264	327	412	511	613	712	821	934	1074	1254
		177	280	285	307	348	423	506	609	731	836	975	1106	1276	1463

-5.0	152	206	329	411	424	466	537	625	728	853	1000	1158	1317	1500	
-6.0	193	252	368	548	558	604	679	774	893	1019	1176	1358	1526	1722	1909
-7.0	243	305	439	592	721	775	843	938	1069	1221	1380	1553	1764	1937	2115
-8.0	307	364	474	657	877	932	1018	1132	1262	1423	1591	1785	1963	2150	2308
-9.0	353	435	537	708	966	1125	1159	1314	1470	1641	1834	1992	2174	2368	2496
-10.0	408	492	618	781	1034	1296	1400	1518	1663	1835	2016	2196	2392	2556	2679
-11.0	465	548	676	865	1110	1458	1554	1701	1854	2029	2227	2416	2593	2755	2854
-12.0	499	610	748	943	1225	1601	1728	1871	2052	2216	2417	2619	2768	2894	2978
-13.0	531	655	831	1040	1333	1709	1877	2036	2226	2410	2596	2795	2921	3035	3106
-14.0	551	705	881	1129	1435	1852	2001	2177	2374	2565	2758	2936	3063	3150	3180
-15.0	571	747	941	1206	1557	1934	2112	2307	2488	2697	2896	3035	3180	3272	3266
-16.0	595	781	1011	1309	1686	1977	2185	2377	2567	2785	3006	3135	3272	3329	3327
-17.0	614	819	1067	1417	1752	2001	2218	2429	2658	2879	3076	3211	3313	3405	3407
-18.0	669	883	1132	1535	1749	1991	2235	2464	2701	2917	3092	3269	3390	3435	3463
-19.0	751	1004	1246	1471	1710	1952	2209	2467	2710	2920	3121	3283	3407	3505	3582
-20.0	738	938	1167	1408	1645	1893	2170	2443	2692	2912	3148	3309	3463	3582	3687
-21.0	632	824	1066	1316	1555	1856	2109	2394	2650	2924	3148	3342	3524	3657	3656
-22.0	556	730	972	1216	1483	1776	2066	2364	2641	2918	3186	3393	3587	3820	4006
-23.0	473	650	875	1113	1391	1674	1983	2281	2614	2857	3198	3441	3726	4096	4484
-24.0	423	590	797	1036	1307	1609	1922	2242	2590	2900	3233	3605	3975	4405	4850
-25.0	392	543	743	976	1253	1551	1893	2257	2600	2984	3393	3810	4317	5014	5369
-26.0	393	538	738	976	1230	1528	1901	2274	2667	3090	3563	4127	4899	5288	5135
-27.0	428	565	757	982	1281	1600	1944	2365	2801	3345	3981	4684	5097	5023	4859
-28.0	479	655	851	1088	1368	1729	2151	2593	3149	3818	4553	4814	4833	4750	4682
-29.0	552	775	1000	1296	1556	1975	2431	3037	3622	4256	4811	4882	4520	4544	4505
-30.0	605	904	1236	1584	2010	2446	3002	3334	3639	3873	4066	4223	4343	4457	4513
-31.0	649	1039	1484	1871	2292	2731	3051	3356	3606	3847	4073	4186	4341	4417	4417
-32.0	365	572	843	1172	1565	1987	2350	2708	3052	3356	3622	3840	4086	4409	4945
-33.0	356	529	747	1015	1332	1703	2091	2477	2831	3160	3474	3809	4220	4803	4770
-34.0	367	527	733	976	1251	1576	1941	2312	2690	3071	3501	3980	4625	4523	4315
-35.0	420	584	779	1036	1301	1611	1969	2370	2808	3277	3834	4237	4154	4081	4037
-36.0	452	654	905	1154	1489	1830	2206	2607	3100	3546	3669	3738	3765	3817	3841
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-39.0	209	346	530	757	1046	1369	1674	2001	2308	2613	2911	3196	3523	3295	2855
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ORIGINAL PAGE IS  
 OF POOR QUALITY

A.TITUDE= 900.0 ENERGY= 50.000

PRCTONS

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70.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
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7.0	233	215	211	264	345	462	401	332	320	308	260	168	111	72	45
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ORIGINAL PAGE IS  
OF POOR  
QUALITY





ALTITUDE: 900 KM

PROTONS: E > 100. MEV

TRAPPED PROTON MODEL: AP8 (SOLAR MAX)

ORIGINAL PAGE IS  
OF POOR QUALITY

244

ALTITUDE= 900.0 ENERGY=100.000

PROTONS

	-135.0	-132.0	-129.0	-126.0	-123.0	-120.0	-117.0	-114.0	-111.0	-108.0	-105.0	-102.0	-99.0	-96.0	-93.0
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-4.0	1	1	1	1	1	1	1	1	3	6	10	17	30	46	58



ALTITUDE= 990.0 ENERGY=100.000

PROTONS

	-90.0	-87.0	-84.0	-81.0	-78.0	-75.0	-72.0	-69.0	-66.0	-63.0	-60.0	-57.0	-54.0	-51.0	-48.0
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-2.0	65	63	88	99	121	157	206	265	330	390	452	506	559	647	757
-3.0	72	139	145	152	174	205	248	307	377	444	512	554	665	768	899
-4.0	RR	130	210	220	238	265	317	374	443	525	595	692	787	910	1045



ORIGINAL PAGE IS  
OF POOR QUALITY

-5.0	114	159	253	312	321	348	396	455	525	610	708	809	935	1066	1207
-6.0	141	187	278	420	420	448	497	559	640	727	838	962	1082	1267	1352
-7.0	175	223	304	445	541	578	621	683	771	875	980	1099	1247	1367	1495
-8.0	221	264	348	487	655	689	744	819	906	1014	1128	1261	1382	1514	1621
-9.0	253	313	390	510	736	829	915	949	1052	1166	1293	1402	1529	1664	1755
-10.0	293	354	447	569	738	849	949	1015	1127	1221	1321	1436	1544	1678	1878
-11.0	333	394	447	627	809	966	1066	1127	1221	1321	1436	1544	1678	1878	1992
-12.0	357	434	539	662	850	1170	1250	1342	1459	1567	1698	1833	1932	2016	2070
-13.0	381	470	599	752	967	1245	1356	1458	1580	1699	1820	1951	2033	2106	2148
-14.0	396	510	635	816	1040	1347	1443	1556	1682	1805	1929	2043	2124	2177	2190
-15.0	411	539	674	873	1129	1402	1518	1643	1759	1893	2019	2106	2195	2248	2236
-16.0	430	565	732	949	1225	1430	1566	1690	1823	1951	2088	2166	2248	2276	2263
-17.0	447	595	776	1031	1304	1443	1585	1721	1867	2006	2128	2209	2266	2313	2300
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-19.0	561	742	915	1071	1234	1397	1565	1732	1887	2017	2139	2234	2300	2348	2380
-20.0	554	656	837	1020	1162	1348	1531	1707	1866	2001	2144	2236	2321	2381	2431
-21.0	475	617	779	952	1139	1313	1479	1664	1825	1996	2131	2243	2347	2413	2517
-22.0	411	535	708	876	1058	1253	1440	1633	1807	1978	2140	2261	2368	2496	2648
-23.0	351	481	634	802	987	1175	1378	1569	1779	1953	2134	2274	2437	2648	2864
-24.0	317	430	574	737	923	1125	1326	1531	1750	1940	2140	2358	2572	2817	3182
-25.0	295	399	532	690	873	1073	1268	1531	1746	1981	2224	2470	2761	3157	3347
-26.0	288	393	529	665	852	1047	1266	1524	1769	2027	2309	2639	3085	3299	3190
-27.0	308	416	537	688	861	1084	1304	1567	1836	2165	2543	2952	3183	3124	3023
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-31.0	321	453	723	976	1227	1501	1734	1929	2110	2255	2389	2510	2588	2657	2785
-32.0	262	366	577	765	1042	1281	1510	1732	1938	2113	2263	2379	2503	2666	2924
-33.0	249	365	572	676	880	1109	1322	1568	1773	1964	2140	2331	2552	2854	2821
-34.0	249	365	488	636	810	1021	1237	1458	1681	1900	2139	2398	2742	2692	2544
-35.0	286	382	503	667	820	1015	1234	1479	1732	1991	2299	2531	2463	2400	2350
-36.0	298	438	572	718	924	1122	1339	1576	1859	2110	2175	2204	2204	2215	2219
-37.0	183	245	348	468	553	717	893	1089	1266	1441	1617	1797	1997	2033	2223
-38.0	152	201	281	381	468	607	767	937	1111	1322	1472	1607	1828	1959	2039
-39.0	135	179	252	344	431	562	710	867	1033	1228	1404	1581	1809	1966	1762
-40.0	127	162	212	281	354	464	596	731	891	1063	1248	1404	1581	1767	1478
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-44.0	40	76	123	181	236	304	376	442	508	568	624	606	527	451	378
-45.0	15	38	62	150	218	276	337	402	430	433	415	383	343	300	259
-46.0	9	19	35	62	90	144	184	217	242	252	250	240	226	204	159
-47.0	5	12	21	35	63	75	99	121	140	152	159	160	140	120	105
-48.0	1	6	13	23	35	48	64	79	90	96	96	92	87	80	75
-49.0	1	2	6	11	18	27	35	44	51	56	59	60	60	53	42
-50.0	1	2	2	5	10	16	21	27	32	37	40	38	33	30	26
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-70.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
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-83.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
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ALTITUDE= 900.0 ENERGY=100.000

PROTONS

	-45.0	-42.0	-39.0	-36.0	-33.0	-30.0	-27.0	-24.0	-21.0	-18.0	-15.0	-12.0	-9.0	-6.0	-3.0
75.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
74.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
73.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
72.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
71.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
70.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
69.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
68.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
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66.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
65.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
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63.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
62.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
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40.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
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16.0	1	1	1	1	1	1	2	2	1	1	1	1	1	1	1
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14.0	1	3	4	10	17	20	16	17	16	8	2	1	1	1	1
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12.0	21	25	40	88	137	176	104	104	88	41	27	17	12	6	3
11.0	39	62	97	168	252	354	205	181	168	88	47	39	22	11	6
10.0	84	92	87	82	61	115	160	139	104	58	79	55	25	15	8
9.0	121	113	137	105	127	176	239	163	143	122	114	67	35	20	11
8.0	150	137	147	147	188	252	257	205	181	168	154	86	45	28	16
7.0	173	159	109	205	243	354	302	245	232	221	181	106	64	38	22
6.0	197	154	222	276	358	427	345	304	291	266	235	144	92	56	34
5.0	228	239	292	371	479	473	414	380	349	329	300	215	130	84	53
4.0	264	307	375	478	553	535	484	438	413	388	348	307	207	138	83
3.0	328	346	485	602	725	608	557	529	488	447	391	346	288	236	162
2.0	404	487	611	733	793	697	650	603	560	502	443	384	319	257	205
1.0	495	612	732	869	868	815	767	702	651	573	510	429	352	289	229
0.0	613	746	884	988	983	934	866	816	746	666	575	497	421	344	262
-1.0	752	882	1016	1116	1139	1072	996	928	858	765	683	596	522	424	338
-2.0	886	1030	1136	1243	1282	1217	1150	1078	1000	921	865	767	644	536	441
-3.0	1037	1163	1270	1351	1398	1390	1323	1226	1110	990	860	723	605	494	392
-4.0	1185	1302	1399	1459	1475	1430	1351	1227	1104	976	825	691	568	460	367

ORIGINAL PAGE IS  
 OF POOR QUALITY

-5.0	1321	1440	1521	1522	1544	1465	1356	1227	1102	936	757	660	545	436	356
-6.0	1465	1557	1621	1633	1566	1487	1358	1228	1077	920	780	651	539	451	366
-7.0	1606	1670	1704	1691	1622	1507	1365	1227	1061	920	779	662	574	490	417
-8.0	1723	1784	1793	1732	1636	1521	1382	1228	1080	920	814	718	629	563	496
-9.0	1833	1870	1839	1774	1667	1529	1374	1238	1083	979	882	808	760	709	658
-10.0	1935	1932	1885	1758	1672	1549	1389	1257	1137	1048	1007	969	950	952	887
-11.0	2019	1992	1928	1835	1713	1556	1443	1323	1233	1212	1223	1231	1292	1235	1002
-12.0	2074	2028	1964	1854	1747	1606	1497	1426	1400	1460	1529	1611	1361	1119	904
-13.0	2141	2082	1940	1851	1765	1672	1607	1586	1606	1832	1766	1516	1250	1047	887
-14.0	2167	2104	2026	1923	1837	1765	1763	1652	2098	1940	1709	1414	1202	1047	916
-15.0	2216	2127	2054	1986	1947	1934	2039	2295	2133	1874	1596	1381	1229	1122	1050
-16.0	2236	2189	2124	2083	2051	2190	2431	2347	2058	1805	1585	1407	1332	1287	1299
-17.0	2268	2247	2200	2214	2316	2580	2551	2248	2009	1769	1604	1555	1543	1614	1406
-18.0	2331	2302	2348	2466	2656	2766	2437	2212	1950	1805	1754	1802	1755	1520	1288
-19.0	2387	2417	2513	2741	2944	2642	2376	2146	1998	1520	2022	1892	1649	1417	1286
-20.0	2471	2589	2801	3142	2949	2539	2365	2156	2098	2212	2051	1789	1554	1436	1290
-21.0	2647	2663	3225	3013	2712	2512	2315	2233	2336	2214	1929	1694	1584	1463	1382
-22.0	2873	3221	3146	2896	2667	2501	2373	2444	2407	2075	1849	1716	1624	1567	1194
-23.0	3207	3263	3036	2791	2650	2504	2534	2617	2435	2009	1844	1800	1657	1222	952
-24.0	3331	3117	2905	2751	2620	2616	2788	2402	2145	1969	1960	1758	1279	985	821
-25.0	3187	2555	2824	2735	2667	2876	2587	2268	2083	2053	1907	1368	1037	861	781
-26.0	3035	2895	2828	2768	2887	2773	2496	2218	2128	2107	1476	1104	913	827	669
-27.0	2912	2651	2903	2914	2951	2558	2321	2209	2313	1613	1191	967	869	671	488
-28.0	2848	2643	2900	3023	2700	2421	2282	2334	1787	1294	1028	911	696	495	376
-29.0	2832	2884	3124	2818	2517	2368	2353	1999	1425	1095	951	742	514	386	289
-30.0	2643	3081	2881	2603	2423	2384	2251	1561	1181	998	799	544	402	300	205
-31.0	3004	2910	2835	2474	2396	2464	1717	1273	1045	861	588	425	316	209	148
-32.0	2897	2870	2892	2482	2504	1882	1379	1194	935	644	455	337	220	152	120
-33.0	2636	2487	2412	2470	2051	1437	1163	1018	715	490	363	235	156	123	88
-34.0	2436	2386	2438	2194	1563	1225	1059	789	531	365	255	169	128	90	60
-35.0	3325	2376	2231	2184	1569	1280	351	578	420	282	182	134	94	61	44
-36.0	3312	2307	1317	1101	910	629	477	448	315	197	141	101	64	45	34
-37.0	2222	1864	1326	1111	960	679	477	353	217	149	112	68	47	35	27
-38.0	1600	1296	1100	953	719	501	378	235	158	123	73	49	36	28	24
-39.0	1229	1069	995	741	519	395	253	167	128	78	52	38	28	24	16
-40.0	1012	963	735	524	400	269	176	132	85	55	40	29	24	16	10
-41.0	917	658	514	359	278	182	134	91	58	41	30	25	17	10	6
-42.0	632	485	384	277	164	136	67	61	43	31	25	18	10	6	3
-43.0	439	352	263	180	134	100	63	44	32	25	19	11	6	3	2
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-46.0	128	108	65	57	41	32	25	21	12	7	4	2	1	1	1
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-50.0	23	20	18	16	9	6	3	2	1	1	1	1	1	1	1
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ALTITUDE= 900.0 ENERGY=100.000

PRCTONS

	0.0	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	33.0	36.0	39.0	42.0
75.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
74.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
73.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
72.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
71.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
70.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
69.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
68.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
67.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
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42.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
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ALTITUDE: 900 KM

PROTONS: E > 300. MEV

TRAPPED PROTON MODEL: AP8 (SOLAR MAX)







ALTIMUDE= 900.C ENERGY=300.000

PRCTONS

	-90.0	-87.0	-84.0	-81.0	-78.0	-75.0	-72.0	-69.0	-66.0	-63.0	-60.0	-57.0	-54.0	-51.0	-48.0
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ORIGINAL PAGE IS  
OF POOR QUALITY

ALTITUDE= 900.0 ENERGY=300.000

PRCTCNS

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5-D

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PRINTED AT THE  
 NATIONAL BUREAU OF STANDARDS  
 WASHINGTON, D. C. 20540

ALTITUDE= 900.0 ENERGY=300.000

PROTONS

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70.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
69.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
68.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
67.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
66.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
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62.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
61.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
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56.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
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54.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
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51.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
50.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
49.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
48.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
47.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
46.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
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41.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
40.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
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35.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
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32.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
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29.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
28.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
27.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
26.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
25.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
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21.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
20.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
19.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
18.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
17.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
16.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
15.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
14.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
13.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
12.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
11.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
10.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
9.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
8.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
7.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
6.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
5.0	3	6	1	1	1	1	1	1	1	1	1	1	1	1	1
4.0	6	13	3	1	1	1	1	1	1	1	1	1	1	1	1
3.0	13	26	7	1	1	1	1	1	1	1	1	1	1	1	1
2.0	26	52	14	1	2	1	1	1	1	1	1	1	1	1	1
1.0	52	104	28	1	4	2	1	1	1	1	1	1	1	1	1
0.0	104	208	56	2	8	4	1	1	1	1	1	1	1	1	1
-1.0	208	416	112	4	16	8	2	1	1	1	1	1	1	1	1
-2.0	416	832	224	8	32	16	4	2	1	1	1	1	1	1	1
-3.0	832	1664	448	16	64	32	8	4	2	1	1	1	1	1	1
-4.0	1664	3328	896	32	128	64	16	8	4	2	1	1	1	1	1









ALTITUDE: 900 KM

ELECTRONS:  $E > 5$  MEV

INNER ZONE MODEL: A65 (SOLAR MAX)

OUTER ZONE MODEL: AE17-HI

ORIGINAL PAGE IS  
OF POOR QUALITY





















M.129

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-79.00  
-80.00  
-81.00  
-82.00  
-83.00  
-84.00  
-85.00

ORIGINAL PAGE IS  
OF POOR QUALITY

517











1 2 3 4 5 6 7 8 9 10

1 2 3 4 5 6 7 8 9 10

ALTITUDE: 900 KM

ELECTRONS:  $E > 1.0$  MEV

INNER ZONE MODEL: AEG (SOLAR MAX)  
OUTER ZONE MODEL: AE17-HI

ORIGINAL PAGE IS  
OF POOR QUALITY





































1 2 3 4 5 6 7 8 9 10

1 2 3 4 5 6 7 8 9 10

ALTITUDE: 900 KM

ELECTRONS: E > 2.0 MEV

INNER ZONE MODEL: AE6 (SOLAR MAX)

OUTER ZONE MODEL: AE17-HI



















ALTITUDE= 900.0

ENERGY= 2.000 AVFLUX/SEC= 3.481E 03

ELECTRONS

	0.0	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	33.0	36.0	39.0	42.0
81.0	0	0	0	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	0	0	0	0
79.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
78.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
77.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
76.0	0	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	0	0
74.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
73.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
72.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
71.0	0	0	0	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	0	0	0	0
69.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
68.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
67.0	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1
66.0	0	0	0	0	0	0	0	0	2	2	2	2	2	2	2
65.0	0	0	0	0	0	0	0	0	3	3	3	3	3	3	3
64.0	1	2	4	5	6	7	8	9	8	7	7	7	6	5	4
63.0	3	4	4	3	3	3	3	3	3	3	3	3	3	3	3
62.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
61.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
60.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
59.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
58.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
57.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
56.0	2	3	3	2	1	1	1	0	0	0	0	0	0	0	0
55.0	2	3	3	2	1	1	1	0	0	0	0	0	0	0	0
54.0	2	3	3	2	1	1	1	0	0	0	0	0	0	0	0
53.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
52.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
51.0	0	0	0	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	0	0	0	0
49.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
48.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
47.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
46.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
45.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
44.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
43.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
42.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
41.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
40.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
39.0	0	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	0	0
37.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
36.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
35.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
34.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
33.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
32.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
31.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
30.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
29.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
28.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
27.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
26.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
25.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
24.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
23.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
22.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
21.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
20.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
19.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
18.0	0	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
16.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
14.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
13.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7.0	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	0
5.0	0	0	0	0	0	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
3.0	0	0	0	0	0	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

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

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

















ALTIMUDE: 900 KM

ELECTRONS: E>3.0 MEV

INNER ZONE MODEL: AE6 (SOLAR MAX)

OUTER ZONE MODEL: AE17-HI

ORIGINAL PAGE IS  
OF POOR QUALITY



























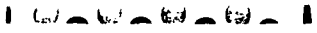












ALTITUDE: 900 KM

ELECTRONS: E > 4.0 MEV

INNER ZONE MODEL: AE6 (SOLAR MAX)

OUTER ZONE MODEL: AE17-HI

ORIGINAL PAGE IS  
OF POOR QUALITY





























346

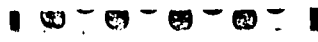
ALTITUDE= 500.0

ENERGY= 4.000

AVFLUX/SEC= 5.035E 02

ELECTRONS

	90.0	93.0	96.0	99.0	102.0	105.0	108.0	111.0	114.0	117.0	120.0	123.0	126.0	129.0	132.0
81.0	0	0	0	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	0	0	0	0
79.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
78.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
77.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
76.0	0	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	0	0
74.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
73.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
72.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
71.0	0	0	0	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	0	0	0	0
69.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
68.0	2	2	2	1	1	1	1	2	2	1	1	1	1	1	1
67.0	4	4	4	4	4	4	4	6	6	3	3	3	3	3	3
66.0	7	7	7	7	7	7	7	8	8	6	6	6	6	6	6
65.0	10	10	10	10	10	10	10	11	11	9	9	9	9	9	9
64.0	12	11	11	10	10	10	10	9	9	7	7	7	7	7	7
63.0	7	7	7	6	6	6	6	5	5	4	4	4	4	4	4
62.0	4	4	4	4	4	4	4	3	3	3	3	3	3	3	3
61.0	3	2	2	2	2	2	2	2	2	2	2	2	2	2	2
60.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
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53.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
52.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
51.0	0	0	0	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	0	0	0	0
49.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
48.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
47.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
46.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
45.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
44.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
43.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
42.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
41.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
40.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
39.0	0	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	0	0
37.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
36.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
35.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
34.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
33.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
32.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
31.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
30.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
29.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
28.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
27.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
26.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
25.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
24.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
23.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
22.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
21.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
20.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
19.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
18.0	0	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
16.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
14.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
13.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7.0	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	0
5.0	0	0	0	0	0	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
3.0	0	0	0	0	0	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







M-16B

1.0  
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- 85.0  
- 86.0

ORIGINAL PAGE IS  
OF POOR QUALITY

ALTIUDE: 900 KM

ELECTRONS: E > 5.0 MEV

INNER ZONE MODEL: AE6 (SOLAR MAX)

OUTER ZONE MODEL: AE17-HI

ORIGINAL PAGE IS  
OF POOR QUALITY











ALTIUDE= 900.0 ENERGY= 5.000 AVFLUX/SEC= 1.233E 02

ELECTRONS

	-90.0	-87.0	-84.0	-81.0	-78.0	-75.0	-72.0	-69.0	-66.0	-63.0	-60.0	-57.0	-54.0	-51.0	-48.0
81.0	0	0	0	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	0	0	0	0
79.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
78.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
77.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
76.0	0	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	0	0
74.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
73.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
72.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
71.0	0	0	0	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	0	0	0	0
69.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
68.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
67.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
66.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
65.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
64.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
63.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
62.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
61.0	0	0	0	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	0	0	0	0
59.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
58.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
57.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
56.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
55.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
54.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
53.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
52.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
51.0	1	0	0	0	0	0	1	1	2	2	2	2	4	6	11
50.0	2	2	2	1	2	2	2	2	3	4	5	7	10	14	18
49.0	3	3	3	2	3	3	3	3	4	5	6	8	11	15	20
48.0	4	4	4	3	4	4	4	4	5	6	7	9	12	16	21
47.0	5	5	5	4	5	5	5	5	6	7	8	10	13	17	22
46.0	6	6	6	5	6	6	6	6	7	8	9	11	14	18	23
45.0	7	7	7	6	7	7	7	7	8	9	10	12	15	19	24
44.0	8	8	8	7	8	8	8	8	9	10	11	13	16	20	25
43.0	9	9	9	8	9	9	9	9	10	11	12	14	17	21	26
42.0	10	10	10	9	10	10	10	10	11	12	13	15	18	22	27
41.0	11	11	11	10	11	11	11	11	12	13	14	16	19	23	28
40.0	12	12	12	11	12	12	12	12	13	14	15	17	20	24	29
39.0	13	13	13	12	13	13	13	13	14	15	16	18	21	25	30
38.0	14	14	14	13	14	14	14	14	15	16	17	19	22	26	31
37.0	15	15	15	14	15	15	15	15	16	17	18	20	23	27	32
36.0	16	16	16	15	16	16	16	16	17	18	19	21	24	28	33
35.0	17	17	17	16	17	17	17	17	18	19	20	22	25	29	34
34.0	18	18	18	17	18	18	18	18	19	20	21	23	26	30	35
33.0	19	19	19	18	19	19	19	19	20	21	22	24	27	31	36
32.0	20	20	20	19	20	20	20	20	21	22	23	25	28	32	37
31.0	21	21	21	20	21	21	21	21	22	23	24	26	29	33	38
30.0	22	22	22	21	22	22	22	22	23	24	25	27	30	34	39
29.0	23	23	23	22	23	23	23	23	24	25	26	28	31	35	40
28.0	24	24	24	23	24	24	24	24	25	26	27	29	32	36	41
27.0	25	25	25	24	25	25	25	25	26	27	28	30	33	37	42
26.0	26	26	26	25	26	26	26	26	27	28	29	31	34	38	43
25.0	27	27	27	26	27	27	27	27	28	29	30	32	35	39	44
24.0	28	28	28	27	28	28	28	28	29	30	31	33	36	40	45
23.0	29	29	29	28	29	29	29	29	30	31	32	34	37	41	46
22.0	30	30	30	29	30	30	30	30	31	32	33	35	38	42	47
21.0	31	31	31	30	31	31	31	31	32	33	34	36	39	43	48
20.0	32	32	32	31	32	32	32	32	33	34	35	37	40	44	49
19.0	33	33	33	32	33	33	33	33	34	35	36	38	41	45	50
18.0	34	34	34	33	34	34	34	34	35	36	37	39	42	46	51
17.0	35	35	35	34	35	35	35	35	36	37	38	40	43	47	52
16.0	36	36	36	35	36	36	36	36	37	38	39	41	44	48	53
15.0	37	37	37	36	37	37	37	37	38	39	40	42	45	49	54
14.0	38	38	38	37	38	38	38	38	39	40	41	43	46	50	55
13.0	39	39	39	38	39	39	39	39	40	41	42	44	47	51	56
12.0	40	40	40	39	40	40	40	40	41	42	43	45	48	52	57
11.0	41	41	41	40	41	41	41	41	42	43	44	46	49	53	58
10.0	42	42	42	41	42	42	42	42	43	44	45	47	50	54	59
9.0	43	43	43	42	43	43	43	43	44	45	46	48	51	55	60
8.0	44	44	44	43	44	44	44	44	45	46	47	49	52	56	61
7.0	45	45	45	44	45	45	45	45	46	47	48	50	53	57	62
6.0	46	46	46	45	46	46	46	46	47	48	49	51	54	58	63
5.0	47	47	47	46	47	47	47	47	48	49	50	52	55	59	64
4.0	48	48	48	47	48	48	48	48	49	50	51	53	56	60	65
3.0	49	49	49	48	49	49	49	49	50	51	52	54	57	61	66
2.0	50	50	50	49	50	50	50	50	51	52	53	55	58	62	67

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





















ALTITUDE= 500.0 ENERGY= 5.00C AVFLUX/SEC= 1.233E 02

ELECTRONS

	135.0	138.0	141.0	144.0	147.0	150.0	153.0	156.0	159.0	162.0	165.0	168.0	171.0	174.0	177.0
81.0	0	0	0	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	0	0	0	0
75.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
78.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
77.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
76.0	0	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	0	0
74.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
73.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
72.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
71.0	0	0	0	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	0	0	0	0
69.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
68.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
67.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
66.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
65.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
64.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
63.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
62.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
61.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
60.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
59.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
58.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
57.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
56.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
55.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
54.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
53.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
52.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
51.0	0	0	0	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	0	0	0	0
49.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
48.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
47.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
46.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
45.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
44.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
43.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
42.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
41.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
40.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
39.0	0	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	0	0
37.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
36.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
35.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
34.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
33.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
32.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
31.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
30.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
29.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
28.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
27.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
26.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
25.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
24.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
23.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
22.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
21.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
20.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
19.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
18.0	0	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
16.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
14.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
13.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7.0	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	0
5.0	0	0	0	0	0	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
3.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40



ALTITUDE: 900 KM

ELECTRONS:  $E > 6.0$  MEV

INNER ZONE MODEL: AE6 (SOLAR MAX)

OUTER ZONE MODEL: AE17-H1

ORIGINAL PAGE IS  
OF POOR QUALITY

107















374

ALTITUDE= 900.0

ENERGY= 6.000 AVFLUX/SEC= 1.084E 01

ELECTRONS

	-45.0	-42.0	-39.0	-36.0	-33.0	-30.0	-27.0	-24.0	-21.0	-18.0	-15.0	-12.0	-9.0	-6.0	-3.0
81.0	0	0	0	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	0	0	0	0
79.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
78.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
77.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
76.0	0	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	0	0
74.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
73.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
72.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
71.0	0	0	0	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	0	0	0	0
69.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
68.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
67.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
66.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
65.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
64.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
63.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
62.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
61.0	0	0	0	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	0	0	0	0
59.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
58.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
57.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
56.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
55.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
54.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
53.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
52.0	10	11	11	11	11	11	11	11	11	11	11	11	11	11	11
51.0	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14
50.0	12	10	11	11	11	11	11	11	11	11	11	11	11	11	11
49.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
48.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
47.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
46.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
45.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
44.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
43.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
42.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
41.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
40.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
39.0	0	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	0	0
37.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
36.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
35.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
34.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
33.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
32.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
31.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
30.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
29.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
28.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
27.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
26.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
25.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
24.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
23.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
22.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
21.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
20.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
19.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
18.0	0	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
16.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
14.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
13.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7.0	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	0
5.0	0	0	0	0	0	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
3.0	0	0	0	0	0	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

U U U U U

U U U U U

















ALTITUDE= 500.0 ENERGY= 6.000 AVFLUX/SEC= 1.084E 01

ELECTRONS

	135.0	138.0	141.0	144.0	147.0	150.0	153.0	156.0	159.0	162.0	165.0	168.0	171.0	174.0	177.0
81.0	0	0	0	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	0	0	0	0
79.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
78.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
77.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
76.0	0	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	0	0
74.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
73.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
72.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
71.0	0	0	0	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	0	0	0	0
69.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
68.0	3	3	3	3	3	3	3	3	2	2	2	2	2	2	2
67.0	6	6	6	6	6	6	6	5	5	4	4	4	4	4	4
66.0	8	8	8	8	8	8	8	7	7	6	6	6	6	6	6
65.0	11	11	11	11	11	11	11	10	10	9	9	9	9	9	9
64.0	15	15	15	15	15	15	15	14	14	13	13	13	13	13	13
63.0	20	20	20	20	20	20	20	19	19	18	18	18	18	18	18
62.0	25	25	25	25	25	25	25	24	24	23	23	23	23	23	23
61.0	30	30	30	30	30	30	30	29	29	28	28	28	28	28	28
60.0	35	35	35	35	35	35	35	34	34	33	33	33	33	33	33
59.0	40	40	40	40	40	40	40	39	39	38	38	38	38	38	38
58.0	45	45	45	45	45	45	45	44	44	43	43	43	43	43	43
57.0	50	50	50	50	50	50	50	49	49	48	48	48	48	48	48
56.0	55	55	55	55	55	55	55	54	54	53	53	53	53	53	53
55.0	60	60	60	60	60	60	60	59	59	58	58	58	58	58	58
54.0	65	65	65	65	65	65	65	64	64	63	63	63	63	63	63
53.0	70	70	70	70	70	70	70	69	69	68	68	68	68	68	68
52.0	75	75	75	75	75	75	75	74	74	73	73	73	73	73	73
51.0	80	80	80	80	80	80	80	79	79	78	78	78	78	78	78
50.0	85	85	85	85	85	85	85	84	84	83	83	83	83	83	83
49.0	90	90	90	90	90	90	90	89	89	88	88	88	88	88	88
48.0	95	95	95	95	95	95	95	94	94	93	93	93	93	93	93
47.0	100	100	100	100	100	100	100	99	99	98	98	98	98	98	98
46.0	105	105	105	105	105	105	105	104	104	103	103	103	103	103	103
45.0	110	110	110	110	110	110	110	109	109	108	108	108	108	108	108
44.0	115	115	115	115	115	115	115	114	114	113	113	113	113	113	113
43.0	120	120	120	120	120	120	120	119	119	118	118	118	118	118	118
42.0	125	125	125	125	125	125	125	124	124	123	123	123	123	123	123
41.0	130	130	130	130	130	130	130	129	129	128	128	128	128	128	128
40.0	135	135	135	135	135	135	135	134	134	133	133	133	133	133	133
39.0	140	140	140	140	140	140	140	139	139	138	138	138	138	138	138
38.0	145	145	145	145	145	145	145	144	144	143	143	143	143	143	143
37.0	150	150	150	150	150	150	150	149	149	148	148	148	148	148	148
36.0	155	155	155	155	155	155	155	154	154	153	153	153	153	153	153
35.0	160	160	160	160	160	160	160	159	159	158	158	158	158	158	158
34.0	165	165	165	165	165	165	165	164	164	163	163	163	163	163	163
33.0	170	170	170	170	170	170	170	169	169	168	168	168	168	168	168
32.0	175	175	175	175	175	175	175	174	174	173	173	173	173	173	173
31.0	180	180	180	180	180	180	180	179	179	178	178	178	178	178	178
30.0	185	185	185	185	185	185	185	184	184	183	183	183	183	183	183
29.0	190	190	190	190	190	190	190	189	189	188	188	188	188	188	188
28.0	195	195	195	195	195	195	195	194	194	193	193	193	193	193	193
27.0	200	200	200	200	200	200	200	199	199	198	198	198	198	198	198
26.0	205	205	205	205	205	205	205	204	204	203	203	203	203	203	203
25.0	210	210	210	210	210	210	210	209	209	208	208	208	208	208	208
24.0	215	215	215	215	215	215	215	214	214	213	213	213	213	213	213
23.0	220	220	220	220	220	220	220	219	219	218	218	218	218	218	218
22.0	225	225	225	225	225	225	225	224	224	223	223	223	223	223	223
21.0	230	230	230	230	230	230	230	229	229	228	228	228	228	228	228
20.0	235	235	235	235	235	235	235	234	234	233	233	233	233	233	233
19.0	240	240	240	240	240	240	240	239	239	238	238	238	238	238	238
18.0	245	245	245	245	245	245	245	244	244	243	243	243	243	243	243
17.0	250	250	250	250	250	250	250	249	249	248	248	248	248	248	248
16.0	255	255	255	255	255	255	255	254	254	253	253	253	253	253	253
15.0	260	260	260	260	260	260	260	259	259	258	258	258	258	258	258
14.0	265	265	265	265	265	265	265	264	264	263	263	263	263	263	263
13.0	270	270	270	270	270	270	270	269	269	268	268	268	268	268	268
12.0	275	275	275	275	275	275	275	274	274	273	273	273	273	273	273
11.0	280	280	280	280	280	280	280	279	279	278	278	278	278	278	278
10.0	285	285	285	285	285	285	285	284	284	283	283	283	283	283	283
9.0	290	290	290	290	290	290	290	289	289	288	288	288	288	288	288
8.0	295	295	295	295	295	295	295	294	294	293	293	293	293	293	293
7.0	300	300	300	300	300	300	300	299	299	298	298	298	298	298	298
6.0	305	305	305	305	305	305	305	304	304	303	303	303	303	303	303
5.0	310	310	310	310	310	310	310	309	309	308	308	308	308	308	308
4.0	315	315	315	315	315	315	315	314	314	313	313	313	313	313	313
3.0	320	320	320	320	320	320	320	319	319	318	318	318	318	318	318
2.0	325	325	325	325	325	325	325	324	324	323	323	323	323	323	323







ALTITUDE: 900 KM

PROTONS: E > 5.0 MEV

TRAPPED PROTON MODEL: AP8 (SOLAR MAX)

ORIGINAL PAGE IS  
OF POOR QUALITY

485

ALTITUDE= 900.0 ENERGY= 5.000 AVFLUX/SEC= 3.358E 02

PROTONS

	-135.0	-132.0	-129.0	-126.0	-123.0	-120.0	-117.0	-114.0	-111.0	-108.0	-105.0	-102.0	-99.0	-96.0	-93.0
81.0	0	0	0	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	0	0	0	0
79.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
78.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
77.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
76.0	0	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	0	0
74.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
73.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
72.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
71.0	0	0	0	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	0	0	0	0
69.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
68.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
67.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
66.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
65.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
64.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
63.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
62.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
61.0	0	0	0	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	0	0	0	0
59.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
58.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
57.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
56.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
55.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
54.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
53.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
52.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
51.0	0	0	0	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	0	0	0	0
49.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
48.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
47.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
46.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
45.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
44.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
43.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
42.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
41.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
40.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
39.0	0	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	0	0
37.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
36.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
35.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
34.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
33.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
32.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
31.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
30.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
29.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
28.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
27.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
26.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
25.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
24.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
23.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
22.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
21.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
20.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
19.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
18.0	0	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
16.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
14.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
13.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7.0	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	0
5.0	0	0	0	0	0	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
3.0	0	0	0	0	0	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

■ C 3 2 ■ ■ C 3 4 5 6 7 8 9





















ALTIUDE: 900 KM

PROTONS: E > 10.0 MEV

TRAPPED PROTON MODEL: AP8 (SOLAR MAX)

ORIGINAL PAGE IS  
OF POOR QUALITY











A.TITUDE= 900.0 ENERGY= 10.000 AVFLUX/SEC= 2.520E 02

PROTONS

460

	-45.0	-42.0	-39.0	-36.0	-33.0	-30.0	-27.0	-24.0	-21.0	-18.0	-15.0	-12.0	-9.0	-6.0	-3.0
81.0	0	0	0	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	0	0	0	0
79.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
78.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
77.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
76.0	0	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	0	0
74.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
73.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
72.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
71.0	0	0	0	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	0	0	0	0
69.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
68.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
67.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
66.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
65.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
64.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
63.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
62.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
61.0	0	0	0	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	0	0	0	0
59.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
58.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
57.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
56.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
55.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
54.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
53.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
52.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
51.0	0	0	0	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	0	0	0	0
49.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
48.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
47.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
46.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
45.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
44.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
43.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
42.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
41.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
40.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
39.0	0	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	0	0
37.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
36.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
35.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
34.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
33.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
32.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
31.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
30.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
29.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
28.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
27.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
26.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
25.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
24.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
23.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
22.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
21.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
20.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
19.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
18.0	0	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
16.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
14.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
13.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
6.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
5.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
4.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
3.0	2	2	3	4	4	4	3	3	3	2	2	2	1	1	1











ALTITUDE: 900 KM

PROTONS: E > 30.0 MEV

TRAPPED PROTON MODEL: AP8 (SOLAR MAX)

ORIGINAL PAGE IS  
OF POOR QUALITY











ORIGINAL PAGE IS  
OF POOR QUALITY

0.0	4	5	6	7	7	7	5	5	5	5	4	3	3	2	2
1.0	8	9	7	8	8	8	8	8	8	8	5	6	6	6	6
2.0	9	9	7	9	9	9	9	9	9	9	6	6	6	6	6
3.0	9	10	10	11	10	10	10	10	10	10	7	7	7	7	7
4.0	10	11	11	12	11	11	11	11	11	11	7	7	7	7	7
5.0	12	13	13	14	13	13	13	13	13	13	8	8	8	8	8
6.0	13	14	14	15	14	14	14	14	14	14	8	8	8	8	8
7.0	13	15	15	16	15	15	15	15	15	15	8	8	8	8	8
8.0	16	16	16	17	16	16	16	16	16	16	9	9	9	9	9
9.0	17	17	17	18	17	17	17	17	17	17	9	9	9	9	9
10.0	18	18	17	17	16	16	16	16	16	16	10	10	10	10	10
11.0	19	19	18	17	16	16	16	16	16	16	12	12	12	12	12
12.0	20	19	19	18	17	17	17	17	17	17	12	12	12	12	12
13.0	20	20	19	18	17	17	17	17	17	17	15	15	15	15	15
14.0	21	20	20	19	18	18	18	18	18	18	15	15	15	15	15
15.0	21	21	20	20	20	20	20	20	20	20	17	17	17	17	17
16.0	22	22	21	21	22	22	22	22	22	22	17	17	17	17	17
17.0	22	22	22	23	23	23	23	23	23	23	18	18	18	18	18
18.0	23	23	23	24	24	24	24	24	24	24	18	18	18	18	18
19.0	24	25	24	25	25	25	25	25	25	25	20	20	20	20	20
20.0	26	27	26	27	27	27	27	27	27	27	20	20	20	20	20
21.0	28	31	30	31	31	31	31	31	31	31	22	22	22	22	22
22.0	31	36	35	36	36	36	36	36	36	36	22	22	22	22	22
23.0	36	37	36	37	37	37	37	37	37	37	23	23	23	23	23
24.0	38	36	35	36	36	36	36	36	36	36	23	23	23	23	23
25.0	38	36	35	36	36	36	36	36	36	36	23	23	23	23	23
26.0	38	36	35	36	36	36	36	36	36	36	23	23	23	23	23
27.0	35	34	33	34	34	34	34	34	34	34	25	25	25	25	25
28.0	35	34	33	34	34	34	34	34	34	34	25	25	25	25	25
29.0	35	34	33	34	34	34	34	34	34	34	25	25	25	25	25
30.0	35	34	33	34	34	34	34	34	34	34	25	25	25	25	25
31.0	35	34	33	34	34	34	34	34	34	34	25	25	25	25	25
32.0	35	34	33	34	34	34	34	34	34	34	25	25	25	25	25
33.0	35	34	33	34	34	34	34	34	34	34	25	25	25	25	25
34.0	35	34	33	34	34	34	34	34	34	34	25	25	25	25	25
35.0	35	34	33	34	34	34	34	34	34	34	25	25	25	25	25
36.0	35	34	33	34	34	34	34	34	34	34	25	25	25	25	25
37.0	35	34	33	34	34	34	34	34	34	34	25	25	25	25	25
38.0	35	34	33	34	34	34	34	34	34	34	25	25	25	25	25
39.0	35	34	33	34	34	34	34	34	34	34	25	25	25	25	25
40.0	35	34	33	34	34	34	34	34	34	34	25	25	25	25	25
41.0	35	34	33	34	34	34	34	34	34	34	25	25	25	25	25
42.0	11	7	6	6	5	5	4	4	4	4	2	2	2	2	2
43.0	11	7	6	6	5	5	4	4	4	4	2	2	2	2	2
44.0	11	7	6	6	5	5	4	4	4	4	2	2	2	2	2
45.0	4	4	3	3	3	3	2	2	2	2	1	1	1	1	1
46.0	4	4	3	3	3	3	2	2	2	2	1	1	1	1	1
47.0	4	4	3	3	3	3	2	2	2	2	1	1	1	1	1
48.0	4	4	3	3	3	3	2	2	2	2	1	1	1	1	1
49.0	4	4	3	3	3	3	2	2	2	2	1	1	1	1	1
50.0	4	4	3	3	3	3	2	2	2	2	1	1	1	1	1
51.0	4	4	3	3	3	3	2	2	2	2	1	1	1	1	1
52.0	4	4	3	3	3	3	2	2	2	2	1	1	1	1	1
53.0	4	4	3	3	3	3	2	2	2	2	1	1	1	1	1
54.0	4	4	3	3	3	3	2	2	2	2	1	1	1	1	1
55.0	4	4	3	3	3	3	2	2	2	2	1	1	1	1	1
56.0	4	4	3	3	3	3	2	2	2	2	1	1	1	1	1
57.0	4	4	3	3	3	3	2	2	2	2	1	1	1	1	1
58.0	4	4	3	3	3	3	2	2	2	2	1	1	1	1	1
59.0	4	4	3	3	3	3	2	2	2	2	1	1	1	1	1
60.0	4	4	3	3	3	3	2	2	2	2	1	1	1	1	1
61.0	4	4	3	3	3	3	2	2	2	2	1	1	1	1	1
62.0	4	4	3	3	3	3	2	2	2	2	1	1	1	1	1
63.0	4	4	3	3	3	3	2	2	2	2	1	1	1	1	1
64.0	4	4	3	3	3	3	2	2	2	2	1	1	1	1	1
65.0	4	4	3	3	3	3	2	2	2	2	1	1	1	1	1
66.0	4	4	3	3	3	3	2	2	2	2	1	1	1	1	1
67.0	4	4	3	3	3	3	2	2	2	2	1	1	1	1	1
68.0	4	4	3	3	3	3	2	2	2	2	1	1	1	1	1
69.0	4	4	3	3	3	3	2	2	2	2	1	1	1	1	1
70.0	4	4	3	3	3	3	2	2	2	2	1	1	1	1	1
71.0	4	4	3	3	3	3	2	2	2	2	1	1	1	1	1
72.0	4	4	3	3	3	3	2	2	2	2	1	1	1	1	1
73.0	4	4	3	3	3	3	2	2	2	2	1	1	1	1	1
74.0	4	4	3	3	3	3	2	2	2	2	1	1	1	1	1
75.0	4	4	3	3	3	3	2	2	2	2	1	1	1	1	1
76.0	4	4	3	3	3	3	2	2	2	2	1	1	1	1	1
77.0	4	4	3	3	3	3	2	2	2	2	1	1	1	1	1
78.0	4	4	3	3	3	3	2	2	2	2	1	1	1	1	1
79.0	4	4	3	3	3	3	2	2	2	2	1	1	1	1	1
80.0	4	4	3	3	3	3	2	2	2	2	1	1	1	1	1
81.0	4	4	3	3	3	3	2	2	2	2	1	1	1	1	1
82.0	4	4	3	3	3	3	2	2	2	2	1	1	1	1	1
83.0	4	4	3	3	3	3	2	2	2	2	1	1	1	1	1
84.0	4	4	3	3	3	3	2	2	2	2	1	1	1	1	1
85.0	4	4	3	3	3	3	2	2	2	2	1	1	1	1	1

M-192





A.TITUDE= 900.0 ENERGY= 30.000 AVFLUX/SEC= 1.731E 02

PROTONS

413

	0.0	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	33.0	36.0	39.0	42.0
81.0	0	0	0	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	0	0	0	0
79.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
78.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
77.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
76.0	0	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	0	0
74.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
73.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
72.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
71.0	0	0	0	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	0	0	0	0
69.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
68.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
67.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
66.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
65.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
64.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
63.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
62.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
61.0	0	0	0	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	0	0	0	0
59.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
58.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
57.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
56.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
55.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
54.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
53.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
52.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
51.0	0	0	0	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	0	0	0	0
49.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
48.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
47.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
46.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
45.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
44.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
43.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
42.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
41.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
40.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
39.0	0	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	0	0
37.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
36.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
35.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
34.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
33.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
32.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
31.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
30.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
29.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
28.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
27.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
26.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
25.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
24.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
23.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
22.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
21.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
20.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
19.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
18.0	0	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
16.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
14.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
13.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7.0	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	0
5.0	0	0	0	0	0	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
3.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2.0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0

9  
8  
7  
6  
5

■ 4.0 3.0 2.0 1.0







ALTITUDE: 900 KM

PROTONS:  $E > 50.0$  MEV

TRAPPED PROTON MODEL: AP8 (SOLAR MAX)

ORIGINAL PAGE IS  
OF POOR QUALITY

M-195

1.0  
 0.0  
 -1.0  
 -2.0  
 -3.0  
 -4.0  
 -5.0  
 -6.0  
 -7.0  
 -8.0  
 -9.0  
 -10.0  
 -11.0  
 -12.0  
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 -14.0  
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 -74.0  
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 -77.0  
 -78.0  
 -79.0  
 -80.0  
 -81.0  
 -82.0  
 -83.0  
 -84.0  
 -85.0  
 -86.0

419

ORIGINAL PAGE IS  
OF POOR QUALITY

















ORIGINAL PAGE IS  
OF POOR QUALITY

1.0  
0.0  
-1.0  
-2.0  
-3.0  
-4.0  
-5.0  
-6.0  
-7.0  
-8.0  
-9.0  
-10.0  
-11.0  
-12.0  
-13.0  
-14.0  
-15.0  
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-80.0  
-81.0  
-82.0  
-83.0  
-84.0  
-85.0  
-86.0  
-87.0  
-88.0  
-89.0  
-90.0  
-91.0  
-92.0  
-93.0  
-94.0  
-95.0  
-96.0  
-97.0  
-98.0  
-99.0  
-100.0

107

M-199



ALTITUDE: 900 KM

PROTONS: E > 100. MEV

TRAPPED PROTON MODEL: AP8 (SOLAR MAX)

ORIGINAL PAGE IS  
OF POOR QUALITY



ALTITUDE= 900.0 ENERGY=100.000 AVFLUX/SEC= 8.782E 01

PROTONS

-135.0 -132.0 -129.0 -126.0 -123.0 -120.0 -117.0 -114.0 -111.0 -108.0 -105.0 -102.0 -99.0 -96.0 -93.0

407

81.0	0	0	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	0	0	0
79.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
78.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
77.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
76.0	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	0
74.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
73.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
72.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
71.0	0	0	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	0	0	0
69.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
68.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
67.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
66.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
65.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
64.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
63.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
62.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
61.0	0	0	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	0	0	0
59.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
58.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
57.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
56.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
55.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
54.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
53.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
52.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
51.0	0	0	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	0	0	0
49.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
48.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
47.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
46.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
45.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
44.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
43.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
42.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
41.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
40.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
39.0	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	0
37.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
36.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
35.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
34.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
33.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
32.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
31.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
30.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
29.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
28.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
27.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
26.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
25.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
24.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
23.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
22.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
21.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
20.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
19.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
18.0	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
16.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
14.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
13.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7.0	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
4.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3.0	0	0	0	0	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

■ (a) (b) (c) (d) (e) (f) (g) (h) (i) (j) (k) (l) (m) (n) (o) (p) (q) (r) (s) (t) (u) (v) (w) (x) (y) (z)

■ (a) (b) (c) (d) (e) (f) (g) (h) (i) (j) (k) (l) (m) (n) (o) (p) (q) (r) (s) (t) (u) (v) (w) (x) (y) (z)





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ALTITUDE= 900.0 ENERGY=100.000 AVFLUX/SEC= 6.782E 01

PROTONS

	-90.0	-87.0	-84.0	-81.0	-78.0	-75.0	-72.0	-69.0	-66.0	-63.0	-60.0	-57.0	-54.0	-51.0	-48.0
81.0	0	0	0	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	0	0	0	0
79.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
78.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
77.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
76.0	0	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	0	0
74.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
73.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
72.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
71.0	0	0	0	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	0	0	0	0
69.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
68.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
67.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
66.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
65.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
64.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
63.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
62.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
61.0	0	0	0	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	0	0	0	0
59.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
58.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
57.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
56.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
55.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
54.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
53.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
52.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
51.0	0	0	0	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	0	0	0	0
49.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
48.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
47.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
46.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
45.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
44.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
43.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
42.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
41.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
40.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
39.0	0	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	0	0
37.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
36.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
35.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
34.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
33.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
32.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
31.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
30.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
29.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
28.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
27.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
26.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
25.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
24.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
23.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
22.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
21.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
20.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
19.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
18.0	0	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
16.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
14.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
13.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7.0	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	0
5.0	0	0	0	0	0	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
3.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2.0	0	0	0	0	0	0	1	1	2	3	3	4	5	5	4

ORIGINAL PAGE IS  
OF POOR QUALITY

-10.0	6	8	10	11	11	11	10	9	9	8	7	6	5	4	3	2
-11.0	8	10	11	12	12	12	12	11	10	9	8	7	6	5	4	3
-12.0	10	11	12	13	13	13	12	11	10	9	8	7	6	5	4	3
-13.0	11	13	14	15	15	15	14	13	12	11	10	9	8	7	6	5
-14.0	13	14	15	16	16	16	15	14	13	12	11	10	9	8	7	6
-15.0	15	16	17	17	17	17	16	15	14	13	12	11	10	9	8	7
-16.0	16	17	17	18	18	18	17	16	15	14	13	12	11	10	9	8
-17.0	18	19	19	19	19	19	18	17	16	15	14	13	12	11	10	9
-18.0	19	20	20	20	20	20	19	18	17	16	15	14	13	12	11	10
-19.0	20	21	21	21	21	21	20	19	18	17	16	15	14	13	12	11
-20.0	22	22	22	22	22	22	21	20	19	18	17	16	15	14	13	12
-21.0	22	23	23	23	23	23	22	21	20	19	18	17	16	15	14	13
-22.0	23	24	24	24	24	24	23	22	21	20	19	18	17	16	15	14
-23.0	24	24	24	24	24	24	23	22	21	20	19	18	17	16	15	14
-24.0	25	25	25	25	25	25	24	23	22	21	20	19	18	17	16	15
-25.0	25	26	26	26	26	26	25	24	23	22	21	20	19	18	17	16
-26.0	26	27	27	27	27	27	26	25	24	23	22	21	20	19	18	17
-27.0	27	28	28	28	28	28	27	26	25	24	23	22	21	20	19	18
-28.0	28	30	30	30	30	30	29	28	27	26	25	24	23	22	21	20
-29.0	30	32	32	32	32	32	31	30	29	28	27	26	25	24	23	22
-30.0	32	35	35	35	35	35	34	33	32	31	30	29	28	27	26	25
-31.0	34	37	37	37	37	37	36	35	34	33	32	31	30	29	28	27
-32.0	32	33	33	33	33	33	32	31	30	29	28	27	26	25	24	23
-33.0	30	33	33	33	33	33	32	31	30	29	28	27	26	25	24	23
-34.0	27	27	27	27	27	27	26	25	24	23	22	21	20	19	18	17
-35.0	26	27	27	27	27	27	26	25	24	23	22	21	20	19	18	17
-36.0	26	26	26	26	26	26	25	24	23	22	21	20	19	18	17	16
-37.0	25	19	19	19	19	19	18	17	16	15	14	13	12	11	10	9
-38.0	18	14	14	14	14	14	13	12	11	10	9	8	7	6	5	4
-39.0	13	12	12	12	12	12	11	10	9	8	7	6	5	4	3	2
-40.0	11	10	10	10	10	10	9	8	7	6	5	4	3	2	1	1
-41.0	10	7	7	7	7	7	6	5	4	3	2	1	1	1	1	1
-42.0	7	5	5	5	5	5	4	3	2	1	1	1	1	1	1	1
-43.0	4	4	4	4	4	4	3	2	1	1	1	1	1	1	1	1
-44.0	3	2	2	2	2	2	1	1	1	1	1	1	1	1	1	1
-45.0	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
-46.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
-47.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
-48.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
-49.0	0	0	0	0	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	0	0	0	0	0
-51.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
-52.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
-53.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
-54.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
-55.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
-56.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
-57.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
-58.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
-59.0	0	0	0	0	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	0	0	0	0	0
-61.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
-62.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
-63.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
-64.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
-65.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
-66.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
-67.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
-68.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
-69.0	0	0	0	0	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	0	0	0	0	0
-71.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
-72.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
-73.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
-74.0	0	0	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	0	0	0
-76.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
-77.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
-78.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
-79.0	0	0	0	0	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	0	0	0	0	0
-81.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
-82.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
-83.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
-84.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
-85.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
-86.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

M-202

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ALTITUDE= 900.0 ENERGY=100.000 AVFLUX/SEC= 8.782E 01

PROTONS

	-45.0	-42.0	-39.0	-36.0	-33.0	-30.0	-27.0	-24.0	-21.0	-18.0	-15.0	-12.0	-9.0	-6.0	-3.0
81.0	0	0	0	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	0	0	0	0
79.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
78.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
77.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
76.0	0	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	0	0
74.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
73.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
72.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
71.0	0	0	0	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	0	0	0	0
69.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
68.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
67.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
66.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
65.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
64.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
63.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
62.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
61.0	0	0	0	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	0	0	0	0
59.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
58.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
57.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
56.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
55.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
54.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
53.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
52.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
51.0	0	0	0	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	0	0	0	0
49.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
48.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
47.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
46.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
45.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
44.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
43.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
42.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
41.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
40.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
39.0	0	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	0	0
37.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
36.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
35.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
34.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
33.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
32.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
31.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
30.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
29.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
28.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
27.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
26.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
25.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
24.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
23.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
22.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
21.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
20.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
19.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
18.0	0	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
16.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
14.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
13.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10.0	0	1	0	0	0	1	1	1	1	1	1	0	0	0	0
9.0	1	1	1	1	1	2	2	2	2	2	2	0	0	0	0
8.0	1	1	1	1	1	2	2	2	2	2	2	0	0	0	0
7.0	1	1	1	2	2	2	3	3	3	3	3	1	0	0	0
6.0	2	2	2	3	3	4	4	4	4	4	4	2	0	0	0
5.0	2	2	3	3	4	5	5	5	5	5	5	2	1	0	0
4.0	3	3	4	5	5	5	5	5	5	5	5	3	2	0	0
3.0	3	3	4	5	5	5	5	5	5	5	5	3	2	1	0
2.0	4	5	6	7	7	7	7	6	6	5	5	4	3	2	2



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ALTITUDE= 900.0 ENERGY=100.000 AVFLUX/SEC= A.782E 01 PROTONS

	0.0	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	27.0	30.0	33.0	36.0	39.0	42.0
81.0	0	0	0	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	0	0	0	0
79.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
78.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
77.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
76.0	0	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	0	0
74.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
73.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
72.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
71.0	0	0	0	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	0	0	0	0
69.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
68.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
67.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
66.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
65.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
64.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
63.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
62.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
61.0	0	0	0	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	0	0	0	0
59.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
58.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
57.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
56.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
55.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
54.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
53.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
52.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
51.0	0	0	0	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	0	0	0	0
49.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
48.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
47.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
46.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
45.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
44.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
43.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
42.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
41.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
40.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
39.0	0	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	0	0
37.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
36.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
35.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
34.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
33.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
32.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
31.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
30.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
29.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
28.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
27.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
26.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
25.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
24.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
23.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
22.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
21.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
20.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
19.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
18.0	0	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
16.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
14.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
13.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7.0	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	0
5.0	0	0	0	0	0	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
3.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2.0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0

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





ALTITUDE: 900 KM

PROTONS: E > 200. MEV

TRAPPED PROTON MODEL: AP8 (SOLAR MAX)

ORIGINAL PAGE IS  
OF POOR QUALITY









4412

ALTITUDE= 900.0 ENERGY=200.000 AVFLUX/SEC= 3.334E 01

PHOTONS

	-90.0	-87.0	-84.0	-81.0	-78.0	-75.0	-72.0	-69.0	-66.0	-63.0	-60.0	-57.0	-54.0	-51.0	-48.0
81.0	0	0	0	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	0	0	0	0
79.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
78.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
77.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
76.0	0	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	0	0
74.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
73.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
72.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
71.0	0	0	0	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	0	0	0	0
69.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
68.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
67.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
66.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
65.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
64.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
63.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
62.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
61.0	0	0	0	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	0	0	0	0
59.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
58.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
57.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
56.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
55.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
54.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
53.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
52.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
51.0	0	0	0	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	0	0	0	0
49.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
48.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
47.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
46.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
45.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
44.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
43.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
42.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
41.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
40.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
39.0	0	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	0	0
37.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
36.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
35.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
34.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
33.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
32.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
31.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
30.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
29.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
28.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
27.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
26.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
25.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
24.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
23.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
22.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
21.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
20.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
19.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
18.0	0	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
16.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
14.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
13.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7.0	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	0
5.0	0	0	0	0	0	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
3.0	0	0	0	0	0	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

1 2 3 4 5 6 7 8 9 10

1 2 3 4 5 6 7 8 9 10















■ 7.3 6.0 5.1 4.1 ■

1 2 3 4 5 ■

ALTITUDE: 900 KM

PROTONS: E > 500 MEV

TRAPPED PROTON MODEL: AP8 (SOLAR MAX)







ALTITUDE= 900.0 ENERGY=500.000 AVFLUX/SEC= 2.021E 00

PROTONS

	-90.0	-87.0	-84.0	-81.0	-78.0	-75.0	-72.0	-69.0	-66.0	-63.0	-60.0	-57.0	-54.0	-51.0	-48.0
81.0	0	0	0	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	0	0	0	0
79.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
78.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
77.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
76.0	0	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	0	0
74.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
73.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
72.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
71.0	0	0	0	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	0	0	0	0
69.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
68.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
67.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
66.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
65.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
64.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
63.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
62.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
61.0	0	0	0	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	0	0	0	0
59.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
58.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
57.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
56.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
55.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
54.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
53.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
52.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
51.0	0	0	0	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	0	0	0	0
49.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
48.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
47.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
46.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
45.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
44.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
43.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
42.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
41.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
40.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
39.0	0	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	0	0
37.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
36.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
35.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
34.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
33.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
32.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
31.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
30.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
29.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
28.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
27.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
26.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
25.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
24.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
23.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
22.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
21.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
20.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
19.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
18.0	0	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
16.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
14.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
13.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7.0	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	0
5.0	0	0	0	0	0	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
3.0	0	0	0	0	0	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

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ORIGINAL PAGE IS  
OF POOR QUALITY

-0.0	9	16	20	21	19	16	15	13	11	10	8	7	5	4
-1.0	15	19	24	25	22	20	18	16	14	13	11	9	7	5
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M-212







ORIGINAL PAGE IS  
OF POOR QUALITY

1 2 3 4 5 6 7 8 9 10

1 2 3 4 5 6 7 8 9 10