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RADIATION HAZARDS TO SYNCHRONOUS SATELLITES:

THE IUE (SAS-D) MISSION

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GODDARD SPACE FLIGHT CENTER
GREENBELT, MARYLAND

RADIATION HAZARDS TO SYNCHRONOUS SATELLITES:

The IUE (SAS-D) Mission

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National Space Science Data Center

September 1973

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Foreword

A special study was conducted to determine the ambient trapped particle fluxes incident on the IUE (SAS-D) satellite. Several synchronous elliptical and circular flight paths were evaluated and the effect of inclination, eccentricity, and parking longitude on vehicle encountered intensities was investigated. Temporal variations in the electron environment were considered and partially accounted for. Magnetic field calculations were performed with a current field model extrapolated to a later epoch with linear time terms. Orbital flux integrations were performed with the latest proton and electron environment models using new improved computational methods. The results are presented in graphical and tabular form; they are analyzed, explained, and discussed. Finally, estimates of energetic solar proton fluxes are given for a one year mission at selected integral energies ranging from 10 to 100 MeV, calculated for a year of maximum solar activity during the next solar cycle.

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Introduction

The objective of the present study is to evaluate the charged particle fluxes to be encountered by a spacecraft in a synchronous orbit, specifically as applied to the IUE (SAS-D) mission. Because synchronous orbits have certain characteristics entirely their own, some general observations are in order.

Circular geosynchronous (geostationary) trajectories are flight paths with a periodicity of exactly 24 hours; this fixes their altitude to about 5.6 earth radii. Satellites in such orbits are co-rotating with the geoid, as if rigidly attached. When the trajectories lie in the equatorial plane, the satellites appear to be stationary in geocentric space (over the equator) on a meridian which is determined by their injection conditions. This position is called the parking longitude. If the plane of the circular orbit is tilted away from the equator, the trace of all subsatellite points (geocentric projections) on the earth's surface form a figure "eight" with its node at the parking position and its axis of symmetry aligned horizontally in the north-south direction (normal to the equator) . When inclination is increased, the size of the projected trace (figure eight) becomes larger, probably reaching its maximum for polar orbits.

Of course, it is possible to have a synchronous trajectory which is elliptical rather than circular: in fact, the only requirement for any trajectory to be considered synchronous is that it have a period of exactly 24 hours. However, there are three important consequences associated with elliptical synchronous trajectories:

1. A wide range of altitudes is visited; perigee lies deeper in the high intensity regions of the outer zone trapped electron and low-energy proton belts, while apogee is nearer to the magnetospheric boundary of the trapping regions.

2. Spacecraft velocity is smaller at apogee and greater at perigee, causing the satellite to spend more time in regions of space lying above synchronous altitude, and

3. Because of these variations in velocity, a range of longitudes extending symmetrically about its parking meridian are covered.

The degree to which these events take place depends entirely on the eccentricity of the orbit. More eccentric orbits experience the described effects to a greater extent. Some relative quantitative evaluations will be given in subsequent sections of this report.

Incidentally, the surface traces of synchronous elliptical trajectories with inclination $i=0^\circ$ (equatorial orbits) are straight lines on the equator, whose lengths depend on the eccentricity of the orbit. For inclinations $i > 0^\circ$, the elliptical surface traces form again the familiar figure "eight" patterns, previously discussed for the circular orbits, with their nodes also at the parking positions, but in contrast to the circular cases, their symmetric axes are azimuthally tilted towards the equator. The tilt of the axes and the area enclosed by the traces are functions of orbit inclination and eccentricity.

In order to determine the effects of:

(a) eccentricity

(b) inclination, and

(c) parking position

on the mission integrated trapped particle fluxes encountered by synchronous satellites, three inclinations and three parking longitudes were selected for study, namely:

Inclinations - 0^{o}, 30^{o}, and 45^{o}

Longitudes - $110^{o}E$, $290^{o}E$, $310^{o}E$

For all combinations of these conditions, circular as well as elliptical trajectories were then investigated.

Some comments are necessary at this point in regards to the two new electron environment models used in the flux calculations: The AE5 for the inner zone ($1.1 < L < 2.8$) by Teague and Vette, 1972 and the AE4 for the outer zone ($2.8 < L < 11.$) by Singley and Vette, 1972.

Both are static models describing the environment as it existed back in October 1967, at about solar maximum conditions. In constructing these models it was possible to infer a change of the average quiet-time electron flux levels as a function of the solar cycle. However for the regions of space covered by the various orbits in this study there are no appreciable changes in the time averaged flux.

Additional static versions of the AE5-AE4 models for the 1964 solar minimum epoch have just been released and will be incorporated into the "Unified Orbital Flux Integration and Analysis System" for future applications (Stassinopoulos and Gregory, 1973).

The IUE launch date of 1975.5 will occur very near to solar minimum and the satellite will spend its early lifetime with a low probability of encountering large solar proton flares.

Another important feature of the synchronous electron environment is the strong local time dependence of the ambient particle fluxes. The local time variations for high energy electrons (1-3 MeV) at synchronous altitudes ($L \sim 5.6$ e.r.) exceed one order of magnitude. These variations are due to the distortion of the magnetosphere caused by the solar wind (compression at local noon, elongation at local midnight).

Theoretically, the new outer-zone AE4 recognized this dependence and accounted for it by incorporating an analytic function for its calculation. However, the version distributed in card deck form for practical application purposes provides fluxes which are averaged over local time. The reason behind this simplification is that most users employ the model in orbit- or time-integration processes to missions which have durations of 6 months or more and the local time effects would be averaged out anyway. Hence, in order to save time, core, and effort, a local time averaged value, which is nearly equivalent to the fluxes at the dawn meridian, was inserted into the model in place of the analytic function.

The consequence of this simplification on circular equatorial synchronous orbits (that is, orbits lying on constant L-shells) is insignificant as long as complete periods (= revolutions = 24-

hour intervals) are being considered. But when the circular synchronous orbits are inclined or when the synchronous orbits are elliptical (for any inclination, including equatorial), the results conceivably could be biased for very short term missions or for the flux encountered in a transfer orbit because the vehicle briefly passes through varying L-shells at different local times, without spending more than a fraction of its period at any shell; the averaged flux values yielded by the model for these transit positions may be off (up or down) by as much as a factor of 7, depending on the particular conditions. Since such trajectories have an effective L range from about 5.5 e.r. to about 22.0 e.r. and since the relative shell-related intensities over this L range vary by several orders of magnitude, a significant intrinsic uncertainty is associated with these results for short term missions. However, for long term missions where local times are encountered fairly uniformly, the local time averaged fluxes are appropriate. The effect of this possible error for short term missions is reflected in the uncertainty factor given for the electron data in Appendix A.

In contrast to the electrons, no special considerations are required for the proton results obtained from standard models long in use. Although they describe a static environment, this is a valid representation for these particles because experimental measurements have shown that no significant changes with time have occurred in the proton population. With the exception of the fringe areas of the proton belt, that is, at very low altitudes and at the outer edges of the trapping region, the possible error introduced by the static approximation lies well within the uncertainty factor attached to the models. Consequently, the proton data may be applied to any epoch without the need for an updating process.

We wish to emphasize that our calculations are only approximations although they are based on the best available data; as always, we strongly recommend that all persons receiving parts of this report be advised anout the uncertainty in the data, as discussed in Appendix A.

Appendix A also contains pertinent information on units, field models, trajectory generation and conversion, etc.

Finally, an explanation regarding the attribute "standard", frequently used in the reformatted OFI (Orbital Flux Integration) Study Reports. The term is applied as a modifier to parameters, constants, or variables in order to indicate or refer to some specific value of these quantities that had been used without change over extended periods of time. Although override possibilities do exist in the OFI system, a routinely submitted production run will, by default option, always use these "standard" values. The term is also used in reference to established forms, style, processes, or procedures, as for example, "standard tables", "standard plots", "standard production runs", etc. A list of some quantities, values, or expressions modified by "standard" is given in Table 1.

Results: Analysis and Discussion

The outcome of our calculations is summarized in Tables 3 to 92, which are all computer produced. The tables are arranged in four sets, where every set pertains to one specific type of table: the first set contains the "L-band" tables, the second the "Spectral Distribution and Exposure Index" tables, the third the tables of "Peaks"* and the fourth the "Exposure Analysis" summary and the "Time Account" breakdown. All sets except the last contain two similar members: one for low energy protons, and one for electrons, in that order. The last contains only one member. No high energy protons of the trapped particle variety exist in the regions of space visited by synchronous satellites, hence no tables. Further explanations on the tables and a more detailed description of their contents is given in Appendix B. Figure 2 is a guide to table arrangement, as produced by a standard production run of the Orbital Flux Integration (OFI) program UNIFLUX, for a single trajectory.

Some of the tabulated data is also computer plotted in Figures 3 to 74, with additional Figures 75-110 containing plots of flight path data. Finally, Figure 111 shows the unattenuated interplanetary solar proton spectrum at 1 A.U., applicable to all trajectories considered in this study. As with the tables, the plots are arranged in four sets, where each set pertains to one specific type of plot: the first set contains "Time and Flux Histograms", the second

* Ommitted: not applicable

"Spectral Profiles", the third "peaks per Orbit",* and the fourth trajectory "World Map Projections" and "B-L Space Tracings". Again, all sets except the last contain two similar members: one for each type of particle encountered. The last set contains two independent members. Appendix C describes and explains the plots. Figure 2 is a guide to plot arrangement, as produced by a standard production run for a single trajectory. The final, single, concluding plot (Figure 1) is explained in the section on "Energetic Solar Proton Fluxes".

* Ommitted: not applicable

I. Spectral Profiles

For tabulated data consult Tables 39-74.

For plotted data consult Figures 39-74.

The integral spectra presented in this report are orbit integrated, statistically averaged, trapped particle spectra, characteristic of the specific trajectories that produced them.

It should be noted that of the trapped particle species, only electrons and low energy protons exist at synchronous altitudes: that is, the synchronous environment is completely devoid of trapped high energy protons.

A comparison of the available data reveals that:

a) elliptical trajectories encounter more particles than circular ones; this is valid for all inclinations and parking positions considered,

b) equatorial orbits experience greater intensities than inclined orbits; this holds for all eccentricities and parking positions investigated, and

c) parking longitude has little effect on mission integrated fluxes; this is true for both circular and elliptical orbits and applies to all inclinations: the maximum difference in flux levels due to any parking longitude variation is not likely to exceed 30%. In regards to the electrons, the error introduced by neglecting this change is insignificant, in view of the very large uncertainties associated with the data (about a factor of 5).

These conclusions apply equally to electrons and protons and they include all energies.

A useful corrolary may be stated: the best synchronous trajectory in terms of radiation hazard is circular and inclined, the worst elliptical and equatorial. The difference between worst and best over the range of inclination and for the eccentricity used in the study, is about a factor of 4.

II. Trajectory Data

See Figures 75-92 for World Map Projections.

See Figures 93-110 for B-L Space Tracings.

A. World Maps

World map projections of trajectories are by definition the surface traces of their subsatellite points.

Projections of synchronous equatorial orbits, circular or elliptical, display no salient features; they appear on the equator as a point or a straight line, respectively. See Figures 75-77 for circular and Figures 84-86 for elliptical flight paths.

Inclined synchronous orbit projections display characteristic butterfly patterns, the figure "eight" tracings discussed in a previous section, whose axes are tilted for elliptical trajectories, and vertical for circular flight paths (Figures 87-92 and 78-83 respectively); for orbits with a prograde inclination, the tilt is in the SW to NE direction, forming an angle with the equator which, when measured in a counterclockwise sense, is zero degrees for the $i=0^{\circ}$ orbit, about 52° for the $i=30^{\circ}$ orbit, and about 56° for the $i=45^{\circ}$ orbit. Obviously the tilt of the axis is not a linear function of inclination, as shown in Figure 112.

The area enclosed by the surface traces increases perceptibly when orbit inclination is raised.

The "longitudinal spread" of a surface trace is the greatest longitudinal displacement about a central position(parking longitude) achieved during one complete revolution (=one period); it is a function of eccentricity and inclination; at a given eccentricity it is always minimum for equatorial trajectories and it increases when inclination is raised, probably reaching its maximum for polar orbits. This last assumption has not been tested.

Specifically, the total longitudinal displacement of the <u>circular</u> synchronous orbits is less than 3° for the equatorial trajectories, goes up to about 9° for the $i=30^{\circ}$ flight paths, and reaches almost 20° for the $i=45^{\circ}$ orbits. The displacement of the <u>elliptical</u> trajectories (generated with that special eccentricity) is much greater to begin with (about 43° for $i=0^{\circ}$), but over the inclination range considered in the study ($0^{\circ} \leq i \leq 45^{\circ}$), it displays almost the same variation as in the circular cases, that is, about 15°. Corresponding curves for circular and eccentric orbits are depicted in Figure 112.

The effect of parking position on either tilt, area enclosed, or longitudinal spread is imperceptible.

B. Magnetic Dipole Mapping

At the geocentric distances of synchronous orbits, the quantities B and L have no physical meaning any more because of the interaction between solar wind and magnetosphere.

The noon-midnight distortion of the magnetosphere, produced by that interaction (compression in the solar and elongation in the antisolar direction), causes a breakdown in the symmetry of the dipole magnetic shell parameter L and introduces significant external currents and fields, whose contributions substantially alter the apparent field strength B at a given synchronous position, that is presently obtained from the dipole terms of the internal field model applied in the calculations.

Therefore, in this study (as well as in every model of charged-particle radiation utilized), these variables are being employed only as ordering parameters.

The magnetic B-L-space tracings of the <u>equatorial</u> synchronous trajectories appear as small (circular orbits) or large(elliptical orbits) line segments on the plots (Figures 93-95 and 102-104, respectively), running parallel to the contour of the magnetic dipole equator, but removed from it by a finite distance corresponding to the magnetic latitude of the parking position.

This displacement occurs because the magnetic dipole axis is tilted to the earth's axis of rotation by an angle of about 11.4 degrees. Hence, positions on the geographic equator may be displaced from the geomagnetic equator by that angle, at most. If the parking longitude coincides with the nodes of the two equatorial planes, the trace should be tangent to the equatorial contour in the B-L plots.

The length of the traces is a measure of the B and L variations encountered on a particular trajectory. The relatively stationary circular orbit has the shortest trace, while the oscillating elliptical orbit indicates by the length of its trace that a substantial change in these parameters occurs during one revolution.

The selection of a different parking longitude has no effect on the magnitude of the L-interval covered by the trace but it changes slightly the B-interval (maximum variation between smallest and largest interval appears to be less than 10%) and shifts the position of the trace relative to the equatorial contour, both in B and in L.

Particularly interesting may be the apparent traversal of identical volumes of B-L space, with identical gradients, in the ascending as well as the descending portions of the elliptical flight paths; this is clearly indicated by the overlap of the corresponding tracing segments in Figures 102 and 103 for the two parking positions at 110^{o} and 290^{o} east longitude.

It appears that this symmetry does not prevail everywhere along the geographic equator, as is indicated by the separation of the respective tracing segments in Figure 140 for the 310^{o} east longitude position.

As would be expected, the tracings of inclined synchronous trajectories extend over large B and L ranges.

Incidentally, all inclined orbits (any eccentricity) cross the magnetic equator twice per period at the points where the tracings touch the equatorial contour.

The inclined circular orbits display a similar volume symmetry (flight path overlap) as that observed for the equatorial circular orbits, discussed above, in this case however it holds for all selected parking positions.

The inclined elliptical orbits strikingly reflect the local geomagnetic geometry conditions prevailing at each parking position. For example, clearly distinguishable is the portion of the flight path that lies south of the magnetic equator from the portion north of the equator; the former is the "inside" contour, the latter is the "outside" contour in Figures 105-110. A schematic presentation of geographic polar and geomagnetic dipole geometry, relating to inclined synchronous orbits (circular and elliptical), is given in Figure 113 .

Energetic Solar Proton Fluxes

Good measurements of solar cycle 20 interplanetary cosmic ray fluxes at about 1 A.U. are now available. These interplanetary particles are also observed over the high latitude polar cap regions. However, at other latitudes the geomagnetic field effectively shields the earth from some of these cosmic rays by deflecting the lower energy particles while only particles with increasingly higher energy penetrate to lower latitudes.

In order to consider the effect of geomagnetic shielding from cosmic rays on an orbiting spacecraft, the total time spent by the vehicle in regions of space accessible to these particles has to be calculated, as a function of particle energy, for the entire lifetime of the satellite. In other words, the exposure of a spacecraft to these particles is in essence a function of trajectory altitude and inclination, and mission duration. Of course, this applies only to the years of increased solar activity, and whether a satellite will "see" energetic solar protons or not, even in accessible regions of the magnetosphere, depends on the epoch within the solar cycle, at which the mission is to be flown. If it coincides with the period of low solar activity (years of solar minimum), it most likely will not encounter any significant number of energetic solar protons, and vice versa.

Having calculated a mission related exposure time for a specific trajectory, one can use experimentally determined low energy cosmic ray fluxes of solar origin from which the galactic background has been subtracted, to obtain vehicle encountered energetic solar proton intensities. In the present study, the annual mean of event and cycle integrated proton fluxes of cycle 20, given by Stassinopoulos and King (1973) for energies ranging from E > 10 Mev to E > 100 Mev, were used to estimate cycle 21 intensities on the IUE (SAS-D) mission.

However, no thorough statistical treatment has yet been worked out in regards to the probability of actual cycle 21 fluxes exceeding the predicted intensities. Crude model confidence levels only are available at this time. The importance of such statistics must be emphasized; it is best demonstrated by the occurrence of the August 4-7, 1972, event, which was the largest recorded in solar cycles 19 and 20, its fluxes exceeding the accumulative total of all other cycle 20 events by about a factor of 2 for the E > 10 Mev protons and by a factor of 4 for the E > 30 and E > 60 Mev particles. Therefore, caution is advisable when using the data presented in this report.

The probability that the estimated fluxes for the IUE (SAS-D) mission will be exceeded by an actual event, is about 33% for a one year mission duration.

Figure 111 shows the annual, omnidirectional, integral spectral profile of the vehicle encountered energetic solar proton fluxes in units of particles per square centimeter.

The reason only one curve appears on this graph is because all eighteen investigated trajectories remain completely outside the magnetic dipole shell of L=5 e.r. and, consequently, experience no magnetospheric shielding effects; that is, they all encounter the same 100% exposure to energetic solar protons.

Note : these fluxes apply only to missions planned for periods of increased solar activity. It is not expected that solar-min missions will encounter energetic solar protons of any significance: at least, it is very unlikely (but not impossible) to have a major event occurring during the years of minimum solar activity. The 1975.5 IUE mission will be launched during solar minimum but if the operating lifetime is a couple of years then the probability of encountering some solar protons is high.

The Local-time Drift of Synchronous Satellites

At any instant during a day, the parking position of a synchronous satellite can be temporally referenced by its "local time", where geographic local time LT of a position is defined as the sum of universal time UT and the position's longitude, converted to hours.

Now, when the local time of a synchronous spacecraft, LT_s, is compared to the local time of its parking position, LT_p, the satellite appears to oscillate in local time over the duration of a period, alternately advancing ahead of and falling behind the corresponding LT_p value by some finite amount of time, whose magnitude is a function of orbit eccentricity and inclination. At the completion of a period $LT_S = LT_p$.

Obviously, this cyclic phenomenon arises out of the difference in the rotational velocity of the spacecraft relative to the rotational speed of the geoid. This difference in velocity manifests itself also as "longitudinal spread", an equivalent concept discussed earlier in the study.

With the exception of circular equatorial orbits, all synchronous trajectories (whether circular, elliptical, equatorial, or inclined) are affected by this "local-time drift "(LTD). Values of LTD for the selected inclinations and eccentricities are given in Figure 114.

A final note: the LTD discussion applies equally to magnetic local time considerations. In fact, LT is a good approximation of magnetic local time for low latitudes ($<50^o$), assuming that the dipole axis is parallel to the axis of rotation.

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APPENDIX A

General Background Information

For the selected IUE(SAS-D)flight paths, orbit tapes were generated, with a constant integration stepsize of two minutes, and for a 24 hour flight duration each. Since all the orbits are geosynchronous, this time interval is adequate for a sufficient sampling of the ambient environment. (For more details see section: "Results, I. Trajectory Data.") For the following nine combinations of inclination and parking position, circular and elliptical trajectories were thus produced:

Incl.	Parking Longitude
0°)	110°E 290°E 310°
30°)	
45°)	

The orbits were subsequently converted from geocentric polar into magnetic B-L coordinates with McIlwain's INVAR Program of 1965 (Hassit and McIlwain, 1967) and with the field routine ALLMAG by Stassinopoulos and Mead (1972), utilizing the IGRF (1965) geomagnetic field model by Cain and Cain (1971), calculated for the epoch 1975.5.

Orbital flux integrations were performed with Vette's current models of the environment, the new AE5-AE4 for the inner and outer zone electrons, the AP6-AP7 for high energy protons, and the AP5 for low energy protons. All are static models which do not consider temporal variations; this includes the new electron models, at least as far as the present calculations are concerned. See text for further details on this matter.

The documents that describe these models are listed below:

Model	
AE4	Singley and Vette, 1972
AE5	Teague and Vette, 1972
AP5	King, 1967
AP6	Lavine and Vette, 1969
AP7	Lavine and Vette, 1970

The results, relating to omnidirectional, vehicle encountered, integral, trapped particle fluxes, are presented in graphical and tabular form with the following unit conventions:

1. Daily averages: total trajectory integrated flux averaged into particles/cm^2 day,
2. Average instantaneous: time integrated average, characteristic of the orbit, in particles/cm^2 sec,
3. Totals per orbit: non-averaged, single-orbit, integrated flux in particles/cm^2 orbit, and
4. Peaks per orbit: highest orbit-encountered instantaneous flux in particles/cm^2 sec,

where one orbit = one revolution.

Please note: we wish to emphasize the fact that the data presented in this report are only approximations. We do not believe the results to be any better than a factor of 2 for the protons and a factor of 5 for the electrons. It is advisable to inform all potential users about this uncertainty in the data.

APPENDIX B

Description of Tables

a) The L-band Table:

The table contains 36 L-bands L_i of equal size, covering the range from $L = 1.0$ to $L = 8.2$ earth radii in constant increments of .2 earth radii. For the L-intervals determined in this way, orbital spectral functions

$$N(>E,E_N;L_i) = \left[\sum_k J_k(>E;B)\right]_{L_i} \Big/ \left[\sum_k J_k(>E_N;B)\right]_{L_i} \qquad \begin{matrix} i=1,36 \\ L_i: L_i < L \leq L_{i+1} \end{matrix} \qquad (1)$$

are obtained at nine arbitrary energy levels such that the integral spectrum is equal to 1 for $E = E_N$, where E_N was taken to be .1, 5., and .5 Mev for low energy protons, the high energy protons, and the electrons, respectively. The notation L_i is used to indicate the L-band from L_i to L_{i+1}, while $J(>E;B)$ is the integral, omnidirectional flux yielded by the environment model used in the calculation. The spectral functions N are evaluated for the total flight time simulated in the study, where the summing index k selects all trajectory points lying in each L_i.

The corresponding orbital distribution functions, representing fluxes above energy E_N, are given by

$$F(E;L_i) = \Delta t\left[\sum_k J_k(>E;B)\right]_{L_i} \qquad (2)$$

where Δt is the constant time increment of orbit integration, whose standard value is 60 seconds. The distribution functions are fluxes accumulated in their respective L_i bands over the total flight period considered.

The orbital distribution functions are listed on the table at the bottom of each L-interval and are labeled "NORMFLUX". The nine integral energy levels selected for the low and high energy protons and for electrons are given below in units of "Mev" for all particles:

Protons Low	Protons High	Electrons
.1*	3.	.0
.5	5.*	.5*
.9	10.	1.0
1.1	15.	1.5
1.5	20.	2.0
2.0	25.	2.5
2.5	30.	3.0
3.0	50.	4.0
3.5	100.	5.0

where the normalization energy is indicated by a star (*).

b) <u>The Spectral Distribution and Exposure Index Table:</u>

This table has three parts:

I. The spectrum $\Psi_j(\Delta E)$ given in % for energy intervals that correspond to the energy levels of the previously discussed table (L-bands), with two special columns showing the total orbit integrated flux for these energy intervals averaged into instantaneous I_j^s and daily I_j^D intensities

$$\Psi_j(\Delta E) = 100 \, \frac{I_j^D(\Delta E)}{F(>E_1)} \qquad j=1,9 \qquad (3)$$

where

$$F(>E_1) = C \sum_{k=1}^{k_0} J_k(>E_1;B,L)\Delta t \qquad (4)$$

$$I_j^D(\Delta E) = C \sum_{k=1}^{k_0} \Delta t \left\{ J_k(>E_j;B,L) - J_k(>E_{j+1};B,L) \right\} \qquad (5)$$

$$I_j^s(\Delta E) = I_j^D(\Delta E)/86400 \qquad (6)$$

$$C = \frac{24}{T} \quad , \quad T = k_0 \Delta t \qquad i=1,36$$

and where k_0 is the upper limit of k. It is equal to the total number of time increments considered in the study.

II. The composite orbit spectrum for integral energies, giving the total vehicle encountered fluxes averaged into daily $S^D(>E_j)$ and per second $S^s(>E_j)$ intensities for 15 discrete energy levels:

$$S^D(>E_j) = c\Delta t \sum_{m=0}^{T} J_m(>E_j) \qquad j=1,15 \qquad (7)$$

$$S^s(>E_j) = S^D(>E_j)/86400 \qquad (8)$$

where the summation is performed for the entire simulated mission duration T and includes all fluxes with energies greater than E_j.

III. The exposure index, given (for the normalization energy used in the L-band table) at nine successive intensity ranges R_n one order of magnitude apart, in terms of exposure duration $\tau(R_n)$, converted to hours, and total number of particles $\phi(>E_N;R_n)$ accumulated while in that intensity range. The notation R_n is used to indicate the intensity range from r_n to r_{n+1}:

$$\phi(>E_N;R_n) = \tau(R_n)\ \theta(>E_N;R_n) \qquad \begin{matrix} n=1,9 \\ R_n \equiv r_n < r \le r_{n+1} \end{matrix} \tag{9}$$

$$\theta(>E_N;R_n) = \left[\sum_{\ell} J(>E_N;r)\right]_{R_n} \Big/ \zeta_n \tag{10}$$

$$\tau(R_n) = \Delta t\ \zeta_n \tag{11}$$

where ζ_n is the upper limit of ℓ in each R_n.

c) The Table of Peaks:*

In this table, the absolute instantaneous peak flux encountered during each successive orbit (revolution) is listed for the indicated energy range. There are nine columns on this table. Column 1 is an orbit counting device, based on the period of the orbit when the trajectory lies in the equatorial plane and is circular, on the physical perigee in all elliptical cases, and on the equatorial crossing for circular inclined trajectories. Column 2 gives the peak flux. Columns 3, 4, and 5

*Ommitted : Not applicable to synchronous orbits indicate the spacecraft position in geocentric coordinates at which the peak was encountered, while columns 6, 7, and 8 determine respectively the time and the magnetic B-L coordinates for this event. It should be noted that all simulated flight paths for the purpose of orbital radiation studies start at $t_0 = 0$ hours. Finally, the last column indicates the total flux encountered during that particular orbit. It is advisable to disregard the last line on this table because many times that orbit is incomplete and the fluxes or positions shown do not correspond to true peaks.

d) The Exposure Analysis Summary:

The summary is contained in the left half of this last table of each set as a semi-independent and separate table. It indicates what percent of its total lifetime T the satellite spends in "flux free" regions of space, what percent of T in "high intensity" regions, and while in the latter, what percent of its total daily 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 > .1, E > 5., and E > .5 Mev for the low energy protons, the high energy protons, and the electrons, respectively; by definition, this includes all regions outside the 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 frequently in substantial numbers.

Similarly, we define as "high intensity" those regions of space where the instantaneous, integral, omnidirectional, trapped-particle flux is greater than 10^3 protons with energies $E > .1$ or $E > 5.$ Mev, and greater than 10^8 electrons with energies $E > .5$ Mev.

The values given in this table are statistical averages, obtained over extended intervals of mission time. However, they may vary significantly from one orbit to the next, when individual orbits are considered.

e) The Time Account Breakdown:

The breakdown of orbit time is given in the right half of the last table of every set, in the same semi-independent form as the summary. The table shows the total lifetime spent by the vehicle in the inner zone T^i $(1.0 < L \leq 2.5)$ and the outer zone T^o $(2.5 < L \leq 7.0)$ of the trapped particle radiation belt, and also the percent duration spent outside that region $(L > 7.0)$, which is denoted by T^e (T-external), such that for any mission

$$T = T^i + T^o + T^e = 100\%.$$

The confinement of the outer zone within the boundary of the $L = 7.0$ volume is arbitrary and has no physical meaning. It is intended only as a simplification to facilitate our calculations. The region considered "external" $(L = 7.0)$ in this study is still partially a domain of the outer zone, at least as far out as $L = 11.0$ earth radii, according to the latest electron models (Singley and Votto, 1972).

A last item on this table: the inner zone time T^i may be subdivided into two parts: the percentage of time spent outside the region $(1.0 < L \leq 1.1)$ and inside the region $(1.1 < L \leq 2.5)$.

APPENDIX C

Description of Plots

a) The Time and Flux Histogram:

This plot shows two curves superimposed on the same graph, namely, one each for the variables "time" and "flux". Both are given as functions of the parameter L (earth radii) within the range $1 - L - 7$, on a semi-log scale. The plot depicts: (1) 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, over constant L-bands of .1 earth radius width, and (2) by a contour marked with symbols the percent of 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 curve 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 top of the graph lists some useful information about the trajectory.

b) The Spectral Profile:

A graphical presentation of the final spectral distribution, obtained from the orbital integration process. The plot is a semi-log graph, where the abscissa is a linear energy scale for integral particle energies

E_0 in Mev, and the ordinate is a logarithmic scale for the orbit integrated fluxes, given in daily averages for energies greater than E_0; the printed scale values are powers of 10.

c) Peaks per Orbit:*

Here the absolute peak intensities, encountered per period, are plotted for the duration of the total flight time considered (1 period = 1 revolution = 1 orbit). The logarithmic ordinate relates to instantaneous particle fluxes of the environment at the indicated energy threshold, while the abscissa is a linear orbit enumeration.

d) World Map Grid Projection of Orbits:

The trajectory is plotted for several revolutions on a global map produced by a Miller Cylindrical Projection. The contours of the continents have been omitted for clarity. The positions of either equatorial crossing, of physical perigee, or of period commencement are indicated by numbers identifying the orbits shown in this graph. For all trajectories, the distance between successive sequential numbers is a measure of the orbit precession.

e) B-L Trace of Orbits:

This plot shows a trace of the trajectory in B-L space on a semi-log scale. Several orbits are usually 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

* Ommitted : Not applicable to synchronous orbits

printed values are exponents of 10. L is given in earth radii on the linear abscissa.

TABLE 1

Partial Listing of
Parameters, Constants, Variables, or Expressions
designated as "standard" in the text

1. Standard Tables: set of tables as listed in Figure 2, in the regular format described in Appendix B.

2. Standard Plots: set of plots as listed in Figure 2A, in the regular format described in Appendix C.

3. Standard Production Run: a production run processed on default options.

4. Standard Integration Stepsize: constant time increment of orbit integration: 1'(60").

5. Standard Energies: low energy protons E > .1 Mev, high energy protons E > 5. Mev, and electrons E > .5 Mev.

6. Standard Procedure: established procedure normally followed vs. procedure followed in special cases.

TABLE 2

B and L Extrema of Synchronous Trajectories

Parking Longitude:	110°		290°		310°	
	B-Range (Gammas)	L-Range (e.r.)	B-Range (Gammas)	L-Range (e.r.)	B-Range (Gammas)	L-Range (e.r.)
Elliptical:						
0°/27952-43615	69-214	5.56-8.13	66-203	5.72-8.29	65-199	5.68-8.25
30°/27952-43615	67-238	5.40-11.23	64-277	5.53-11.21	64-219	5.54-10.13
45°/27952-43615	66-265	5.38-20.11	64-255	5.50-19.50	63-249	5.51-17.04
Circular:						
0°/35863	114-114	6.86-6.86	109-109	7.02-7.02	108-108	6.98-6.98
30°/35863	108-163	6.60-11.80	103-158	6.72-11.94	102-154	6.73-11.21
45°/35863	108-187	6.60-21.99	102-183	6.72-21.72	102-181	6.73-20.45

Table 3

** ORBITAL FLUX STUDY WITH COMPOSITE PARTICLE ENVIRONMENTS: VETTES AP5, AP6, AP7; AE4, AE5, FOR SOLAR MAXIMUM **** UNIFLX OF 1973 **
** ELECTRON FLUXES EXPONENTIALLY DECAYED TO 1970. 0 WITH LIFETIMES: E.G.STASSINOPOULOS&P.VERZARIU ** CUTOFF TIMES: **
** MAGNETIC COORDINATES B AND L COMPUTED BY INVARA OF 1972 WITH ALLMAG, MODEL 4: CAIN&SWEENEY 120-TERM POGO 8/69 * TIME= 1975.5 **
** VEHICLE : SAS-D (110) ** INCLINATION= 0DEG ** PERIGEE=35863KM ** APOGEE= 35863KM ** B/L ORBIT TAPE: TD7512 ** PERIOD= 24.000 **

LOW ENERGY PROTONS

** SPECTRAL DISTRIBUTION : NORMALIZED BY FLUX OF ENERGY GREATER THAN .100 MEV **

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*
.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
.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
.900	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1.10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1.50	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2.50	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3.50	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

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	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
.900	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1.10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1.50	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2.50	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3.50	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

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	0.0	0.0	0.0	0.0	0.0	1.00E 00	0.0	0.0	0.0	0.0	0.0	0.0
.500	0.0	0.0	0.0	0.0	0.0	3.53E-02	0.0	0.0	0.0	0.0	0.0	0.0
.900	0.0	0.0	0.0	0.0	0.0	1.25E-03	0.0	0.0	0.0	0.0	0.0	0.0
1.10	0.0	0.0	0.0	0.0	0.0	2.34E-04	0.0	0.0	0.0	0.0	0.0	0.0
1.50	0.0	0.0	0.0	0.0	0.0	6.35E-06	0.0	0.0	0.0	0.0	0.0	0.0
2.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2.50	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3.50	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	9.90E 10	0.0	0.0	0.0	0.0	0.0	0.0

Table 4

```
******************************************************************************************************************
** ORBITAL FLUX STUDY WITH COMPOSITE PARTICLE ENVIRONMENTS: VETTES AP5, AP6, AP7; AE4, AE5, FOR SOLAR MAXIMUM **** UNIFLX OF 1973 **
** ELECTRON FLUXES EXPONENTIALLY DECAYED TO 1970. 0 WITH LIFETIMES: E.G.STASSINOPOULOS&P.VERZARIU ** CUTOFF TIMES:           **
** MAGNETIC COORDINATES B AND L COMPUTED BY INVARA OF 1972 WITH ALLMAG, MODEL  4:  CAIN&SWEENEY 120-TERM POGO 8/69 * TIME= 1975.5 **
** VEHICLE : SAS-D (110)  ** INCLINATION=  0DEG ** PERIGEE=35863KM ** APOGEE= 35863KM ** B/L ORBIT TAPE: T07512 ** PERIOD= 24.000 **
******************************************************************************************************************
                    ****************************        ELECTRONS        ****************************
                    ** SPECTRAL DISTRIBUTION : NORMALIZED BY FLUX OF ENERGY GREATER THAN .500 MEV **
                    ****************************************************************************
```

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*
.0	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
1.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1.50	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2.50	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
4.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
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

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*
.0	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
1.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1.50	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2.50	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
4.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
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

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*
.0	0.0	0.0	0.0	0.0	0.0	1.56E 01	0.0	0.0	0.0	0.0	0.0	0.0
.500	0.0	0.0	0.0	0.0	0.0	1.00E 00	0.0	0.0	0.0	0.0	0.0	0.0
1.00	0.0	0.0	0.0	0.0	0.0	1.78E-01	0.0	0.0	0.0	0.0	0.0	0.0
1.50	0.0	0.0	0.0	0.0	0.0	4.10E-02	0.0	0.0	0.0	0.0	0.0	0.0
2.00	0.0	0.0	0.0	0.0	0.0	9.44E-03	0.0	0.0	0.0	0.0	0.0	0.0
2.50	0.0	0.0	0.0	0.0	0.0	2.06E-03	0.0	0.0	0.0	0.0	0.0	0.0
3.00	0.0	0.0	0.0	0.0	0.0	4.14E-04	0.0	0.0	0.0	0.0	0.0	0.0
4.00	0.0	0.0	0.0	0.0	0.0	7.89E-07	0.0	0.0	0.0	0.0	0.0	0.0
5.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NORMFLUX=	0.0	0.0	0.0	0.0	0.0	2.03E 11	0.0	0.0	0.0	0.0	0.0	0.0

Table T

```
** ORBITAL FLUX STUDY WITH COMPOSITE PARTICLE ENVIRONMENTS: VETTES AP5, AP6, AP7; AE4, AE5, FOR SOLAR MAXIMUM **** UNIFLX OF 1971 **
** ELECTRON FLUXES EXPONENTIALLY DECAYED TO 1970. 0 WITH LIFETIMES: E.G.STASSINOPOULOS&P.VERZARIU ** CUTOFF TIMES:            **
** MAGNETIC COORDINATES B AND L COMPUTED BY INVARA OF 1972 WITH ALLMAG, MODEL  4: CAIN&SWEENEY 120-TERM POGO 8/69 * TIME= 1975.5 **
** VEHICLE : SAS-D (293)  ** INCLINATION=  0DEG ** PERIGEE=35863KM ** APOGEE= 35863KM ** B/L ORBIT TAPE: T07267 ** PERIOD= 24.000 **
```

LOW ENERGY PROTONS

** SPECTRAL DISTRIBUTION : NORMALIZED BY FLUX OF ENERGY GREATER THAN .100 MEV **

ENERGY LEVELS >(MEV) — L-BANDS (MAGNETIC SHELL PARAMETER IN EARTH RADII) L-BANDS

ENERGY LEVELS >(MEV)	*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*
.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
.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
.900	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1.10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1.50	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2.50	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3.50	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

ENERGY LEVELS >(MEV) — L-BANDS (MAGNETIC SHELL PARAMETER IN EARTH RADII) L-BANDS

ENERGY LEVELS >(MEV)	*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	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
.900	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1.10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1.50	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2.50	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3.50	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

ENERGY LEVELS >(MEV) — L-BANDS (MAGNETIC SHELL PARAMETER IN EARTH RADII) L-BANDS

ENERGY LEVELS >(MEV)	*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	0.0		0.0	0.0	0.0	0.0	1.00E 00	0.0	0.0	0.0	0.0	0.0
.500	0.0	0.0	0.0	0.0	0.0	0.0	4.14E-02	0.0	0.0	0.0	0.0	0.0
.900	0.0	0.0	0.0	0.0	0.0	0.0	1.72E-03	0.0	0.0	0.0	0.0	0.0
1.10	0.0	0.0	0.0	0.0	0.0	0.0	3.49E-04	0.0	0.0	0.0	0.0	0.0
1.50	0.0	0.0	0.0	0.0	0.0	0.0	1.45E-05	0.0	0.0	0.0	0.0	0.0
2.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2.50	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3.50	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	4.86E 10	0.0	0.0	0.0	0.0	0.0

** ORBITAL FLUX STUDY WITH COMPOSITE PARTICLE ENVIRONMENTS: VETTES AP5, AP6, AP7; AE4, AE5, FOR SOLAR MAXIMUM **** UNIFLUX OF 1973 **
** ELECTRON FLUXES EXPONENTIALLY DECAYED TO 1970. 0 WITH LIFETIMES: E.G.STASSINOPOULOS&P.VERZARIU ** CUTOFF TIMES: **
** MAGNETIC COORDINATES B AND L COMPUTED BY INVARA OF 1972 WITH ALLMAG, MODEL 4: CAIN&SWEENEY 120-TERM POGO 8/69 * TIME= 1975.5 **
** VEHICLE : SAS-D (2/0) ** INCLINATION= 0DEG ** PERIGEE=35863KM ** APOGEE= 35863KM ** B/L ORBIT TAPE: TC7257 (PERIOD= 24.00C **

ELECTRONS

** SPECTRAL DISTRIBUTION : NORMALIZED BY FLUX OF ENERGY GREATER THAN .500 MEV **

ENERGY LEVELS >(MEV)	L - B A N D S (M A G N E T I C S H E L L P A R A M E T E R I N E A R T H R A D I I) L - B A N D S											
	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*
.0	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
1.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1.50	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2.50	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
4.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
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

ENERGY LEVELS >(MEV)	L - B A N D S (M A G N E T I C S H E L L P A R A M E T E R I N E A R T H R A D I I) L - B A N D S											
	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*
.0	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
1.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1.50	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2.50	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
4.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
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

ENERGY LEVELS >(MEV)	L - B A N D S (M A G N E T I C S H E L L P A R A M E T E R I N E A R T H R A D I I) L - B A N D S											
	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*
.0	0.0	0.0	0.0	0.0	0.0	0.0	1.83E 01	0.0	0.0	0.0	0.0	0.0
.500	0.0	0.0	0.0	0.0	0.0	0.0	1.00E 00	0.0	0.0	0.0	0.0	0.0
1.00	0.0	0.0	0.0	0.0	0.0	0.0	1.53E-01	0.0	0.0	0.0	0.0	0.0
1.50	0.0	0.0	0.0	0.0	0.0	0.0	3.32E-02	0.0	0.0	0.0	0.0	0.0
2.00	0.0	0.0	0.0	0.0	0.0	0.0	7.18E-03	0.0	0.0	0.0	0.0	0.0
2.50	0.0	0.0	0.0	0.0	0.0	0.0	1.52E-03	0.0	0.0	0.0	0.0	0.0
3.00	0.0	0.0	0.0	0.0	0.0	0.0	3.12E-04	0.0	0.0	0.0	0.0	0.0
4.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NORMFLUX=	0.0	0.0	0.0	0.0	0.0	0.0	1.70E 11	0.0	0.0	0.0	0.0	0.0

Table 7

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***************************************************************************************************************************
** ORBITAL FLUX STUDY WITH COMPOSITE PARTICLE ENVIRONMENTS: VETTES AP5, AP6, AP7; AE4, AL5, FOR SOLAR MAXIMUM **** UNIFLX OF 1973 **
** ELECTRON FLUXES EXPONENTIALLY DECAYED TO 1970. 0 WITH LIFETIMES: E.G.STASSINOPOULOS&P.VERZARIU ** CUTOFF TIMES:            . **
** MAGNETIC COORDINATES B AND L COMPUTED BY INVARA OF 1972 WITH ALLMAG. MODEL  4:  CAIN&SWEENEY 120-TERM POGO 8/69 * TIME= 1975.5 **
** VEHICLE : SAS-D (310)  ** INCLINATION=  0DEG ** PERIGEE=35863KM ** APOGEE= 35863KM ** B/L ORBIT TAPE: TO7407 ** PERIOD= 24.000 **
***************************************************************************************************************************
                              ***************************   LOW  ENERGY PROTONS    ***************************
                              ** SPECTRAL DISTRIBUTION : NORMALIZED BY FLUX OF ENERGY GREATER THAN .100 MEV **
                              ***************************************************************************************
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ENERGY LEVELS >(MEV)	L - B A N D S	(M A G N E T I C		S H E L L		P A R A M E T E R		I N	E A R T H	R A D I I)	L - B A N D S	
	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*
.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
.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
.900	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1.10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1.50	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2.50	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3.50	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

ENERGY LEVELS >(MEV)	L - B A N D S	(M A G N E T I C		S H E L L		P A R A M E T E R		I N	E A R T H	R A D I I)	L - B A N D S	
	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	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
.900	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1.10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1.50	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2.50	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3.50	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

ENERGY LEVELS >(MEV)	L - B A N D S	(M A G N E T I C		S H E L L		P A R A M E T E R		I N	E A R T H	R A D I I)	L - B A N D S	
	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	0.0	0.0	0.0	0.0	0.0	1.00E 00	0.0	0.0	0.0	0.0	0.0	0.0
.500	0.0	0.0	0.0	0.0	0.0	4.01E-02	0.0	0.0	0.0	0.0	0.0	0.0
.900	0.0	0.0	0.0	0.0	0.0	1.61E-03	0.0	0.0	0.0	0.0	0.0	0.0
1.10	0.0	0.0	0.0	0.0	0.0	3.22E-04	0.0	0.0	0.0	0.0	0.0	0.0
1.50	0.0	0.0	0.0	0.0	0.0	1.29E-05	0.0	0.0	0.0	0.0	0.0	0.0
2.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2.50	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3.50	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	5.81E 10	0.0	0.0	0.0	0.0	0.0	0.0

Table 8

** ORBITAL FLUX STUDY WITH COMPOSITE PARTICLE ENVIRONMENTS: VETTES AP5, AP6, AP7; AE4, AE5, FOR SOLAR MAXIMUM **** UNIFLX OF 1973 **
** ELECTRON FLUXES EXPONENTIALLY DECAYED TO 1970. 0 WITH LIFETIMES: C.G.STASSINOPOULOS&P.VERZARIU ** CUTOFF TIMES: **
** MAGNETIC COORDINATES B AND L COMPUTED BY INVARA OF 1972 WITH ALLMAG. MODEL 4: CAIN&SWEENEY 120-TERM POGO 8/69 * TIME= 1975.5 **
** VEHICLE : SAS-D (310) ** INCLINATION= 0DEG ** PERIGEE=35863KM ** APOGEE= 35863KM ** C/ ORBIT TAPE: TD7407 ** PERIOD= 24.000 **

ELECTRONS

** SPECTRAL DISTRIBUTION : NORMALIZED BY FLUX OF ENERGY GREATER THAN .500 MEV **

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*
.0	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
1.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1.50	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2.50	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
4.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
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

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*
.0	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
1.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1.50	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2.50	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
4.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
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

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*
.0	0.0	0.0	0.0	0.0	0.0	1.75E 01	0.0	0.0	0.0	0.0	0.0	0.0
.500	0.0	0.0	0.0	0.0	0.0	1.00E 00	0.0	0.0	0.0	0.0	0.0	0.0
1.00	0.0	0.0	0.0	0.0	0.0	1.58E-01	0.0	0.0	0.0	0.0	0.0	0.0
1.50	0.0	0.0	0.0	0.0	0.0	3.46E-02	0.0	0.0	0.0	0.0	0.0	0.0
2.00	0.0	0.0	0.0	0.0	0.0	7.58E-03	0.0	0.0	0.0	0.0	0.0	0.0
2.50	0.0	0.0	0.0	0.0	0.0	1.62E-03	0.0	0.0	0.0	0.0	0.0	0.0
3.00	0.0	0.0	0.0	0.0	0.0	3.32E-04	0.0	0.0	0.0	0.0	0.0	0.0
4.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NORMFLUX=	0.0	0.0	0.0	0.0	0.0	1.81E 11	0.0	0.0	0.0	0.0	0.0	0.0

** ORBITAL FLUX STUDY WITH COMPOSITE PARTICLE ENVIRONMENTS: VETTES AP5, AP6, AP7; AE4, AE5, FOR SOLAR MAXIMUM **** UNIFLX OF 1973 **
** ELECTRON FLUXES EXPONENTIALLY DECAYED TO 1970. 0 WITH LIFETIMES: E.G.STASSINOPOULOS&P.VERZARIU ** CUTOFF TIMES: **
** MAGNETIC COORDINATES B AND L COMPUTED BY INVARA OF 1972 WITH ALL4AG, MODEL 4: CAIN&SWEENEY 120-TERM POGO 8/69 * TIME= 1975.5 **
** VEHICLE : SAS-D (113) ** INCLINATION= 29DEG ** PERIGEE=35863KM ** APOGEE= 35863KM ** B/L ORBIT TAPE: TD7512 ** PERIOD= 24.000 **

LOW ENERGY PROTONS

** SPECTRAL DISTRIBUTION : NORMALIZED BY FLUX OF ENERGY GREATER THAN .100 MEV **

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*
.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
.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
.900	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1.10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1.50	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2.50	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3.50	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

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	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
.900	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1.10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1.50	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2.50	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3.50	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

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	0.0	0.0	0.0	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
.500	0.0	0.0	0.0	2.79E-02	2.94E-02	3.60E-02	4.32E-02	5.23E-02	6.17E-02	7.36E-02	8.65E-02	1.15E-01
.900	0.0	0.0	0.0	7.80E-04	8.68E-04	1.30E-03	1.87E-03	2.74E-03	3.82E-03	5.43E-03	7.50E-03	1.42E-02
1.10	0.0	0.0	0.0	1.30E-04	1.49E-04	2.47E-04	3.89E-04	6.28E-04	9.52E-04	1.48E-03	2.21E-03	5.26E-03
1.50	0.0	0.0	0.0	3.64E-06	4.42E-06	8.96E-06	1.69E-05	3.30E-05	5.92E-05	1.09E-04	1.92E-04	2.97E-04
2.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2.50	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3.50	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	2.70E 09	5.48E 10	9.49E 09	3.31E 09	1.85E 09	1.32E 08	4.31E 07	1.44E 07	1.10E 07

** ORBITAL FLUX STUDY WITH COMPOSITE PARTICLE ENVIRONMENTS: VETTES AP5, AP6, AP7; AE4, AE5, FOR SOLAR MAXIMUM **** UNIFLX OF 1973 **
** ELECTRON FLUXES EXPONENTIALLY DECAYED TO 1970. 0 WITH LIFETIMES: E.G.STASSINOPOULOS&P.VERZARIU ** CUTOFF TIMES: **
** MAGNETIC COORDINATES B AND L COMPUTED BY INVARA OF 1972 WITH ALLMAG. MODEL 4: CAIN&SWEENEY 120-TERM POGO 8/69 * TIME= 1975.5 **
** VEHICLE : SAS-D (110) ** INCLINATION= 29DEG ** PERIGEE=35863KM ** APOGEE= 35863KM ** B/L ORBIT TAPE: TD7512 ** PERIOD= 24.000 **

ELECTRONS

** SPECTRAL DISTRIBUTION : NORMALIZED BY FLUX OF ENERGY GREATER THAN .500 MEV **

ENERGY LEVELS >(MEV)	L - B A N D S (M A G N E T I C S H E L L P A R A M E T E R I N E A R T H R A D I I) L - B A N D S											
	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*
.0	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
1.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1.50	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2.50	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
4.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
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

ENERGY LEVELS >(MEV)	L - B A N D S (M A G N E T I C S H E L L P A R A M E T E R I N E A R T H R A D I I) L - B A N D S											
	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*
.0	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
1.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1.50	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2.50	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
4.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
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

ENERGY LEVELS >(MEV)	L - B A N D S (M A G N E T I C S H E L L P A R A M E T E R I N E A R T H R A D I I) L - B A N D S											
	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*
.0	0.0	0.0	0.0	1.22E 01	1.30E 01	1.61E 01	2.06E 01	2.84E 01	3.90E 01	6.68E 01	1.13E 02	1.47E 03
.500	0.0	0.0	0.0	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
1.00	0.0	0.0	0.0	2.30E-01	2.16E-01	1.73E-01	1.47E-01	1.30E-01	1.17E-01	1.03E-01	9.11E-02	6.14E-02
1.50	0.0	0.0	0.0	5.91E-02	5.40E-02	3.93E-02	3.14E-02	2.68E-02	2.33E-02	1.98E-02	1.69E-02	7.40E-03
2.00	0.0	0.0	0.0	1.52E-02	1.35E-02	8.95E-03	6.72E-03	5.54E-03	4.66E-03	3.80E-03	3.13E-03	1.01E-03
2.50	0.0	0.0	0.0	3.49E-03	3.07E-03	1.95E-03	1.41E-03	1.13E-03	9.27E-04	6.93E-04	5.21E-04	1.19E-04
3.00	0.0	0.0	0.0	6.68E-04	5.94E-04	3.92E-04	2.87E-04	2.24E-04	1.73E-04	9.58E-05	5.27E-05	1.70E-05
4.00	0.0	0.0	0.0	3.03E-06	2.24E-06	6.45E-07	0.0	0.0	0.0	0.0	0.0	0.0
5.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NORMFLUX=	0.0	0.0	0.0	2.37E 09	5.88E 10	2.13E 10	1.36E 10	1.33E 10	1.52E 09	7.25E 08	3.39E 08	4.49E 08

Table ...

** ORBITAL FLUX STUDY WITH COMPOSITE PARTICLE ENVIRONMENTS: VETTES AP5, AP6, AP7; AE4, AE5, FOR SOLAR MAXIMUM ** UNIFLX OF 1973 **
** ELECTRON FLUXES EXPONENTIALLY DECAYED TO 1970.0 WITH LIFETIMES: L.G.STASSINOPOULOS&P.VERZARIU ** CUTOFF TIMES:
** MAGNETIC COORDINATES B AND L COMPUTED BY INVARA OF 1972 WITH ALLMAG, MODEL 4: CAIN&SWEENEY 120-TERM POGO 8/69 ** TIME= 1975.5
** VEHICLE : SAS-D (2931 ** INCLINATION= 30DEG ** PERIGEE=35863KM ** APOGEE= 35863KM ** P/L ORBIT TAPE: T07207 ** [illegible] = 24.000 **

LOW ENERGY PROTONS

** SPECTRAL DISTRIBUTION : NORMALIZED BY FLUX OF ENERGY GREATER THAN .100 MEV **

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*
.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
.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
.900	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1.10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1.50	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2.50	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3.50	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

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	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
.900	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1.10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1.50	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2.50	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3.50	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

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	0.0	0.0	0.0	0.0	1.00E 00	1.00E 00	1.00E 00	1.00E 00	1.00E 00	1.00E 00	1.00E 00	1.00E 00
.500	0.0	0.0	0.0	0.0	3.24E-02	3.66E-02	4.41E-02	5.32E-02	6.01E-02	7.51E-02	8.80E-02	1.19E-01
.900	0.0	0.0	0.0	0.0	1.05E-03	1.35E-03	1.95E-03	2.83E-03	3.62E-03	5.64E-03	7.75E-03	1.51E-02
1.10	0.0	0.0	0.0	0.0	1.90E-04	2.58E-04	4.11E-04	6.55E-04	8.91E-04	1.55E-03	2.30E-03	5.62E-03
1.50	0.0	0.0	0.0	0.0	6.16E-06	9.52E-06	1.82E-05	3.50E-05	5.39E-05	1.17E-04	2.04E-04	3.72E-04
2.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2.50	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3.50	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	2.52E 10	1.27E 10	3.69E 09	1.69E 09	4.38E 08	4.50E 07	1.5[illegible] 07	1.12E 07

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** ORBITAL FLUX STUDY WITH COMPOSITE PARTICLE ENVIRONMENTS: VETTES AP5, AP6, AP7; AE4, AE5, FOR SOLAR MAXIMUM **** [illegible] **
** ELECTRON FLUXES EXPONENTIALLY DECAYED TO 1970. 0 WITH LIFETIMES: M.G.STASSINOPOULOS&P.VERZARIU ** CUTOFF TIME: [illegible] **
** MAGNETIC COORDINATES B AND L COMPUTED BY INVARA OF 1972 WITH ALLMAG, MODEL  A: CAIN&SWEENEY 120-TERM POGO 8/69 * TIME= 1975.5 **
** VEHICLE : SAS-D (290)  ** INCLINATION= 30DEG ** PERIGEE=35863KM ** APOGEE= 35863KM ** B/L ORBIT TAPE: T37757 ** RT-TIME= 24.000 **
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                         ****************************     ELECTRONS     ****************************
                         ** SPECTRAL DISTRIBUTION : NORMALIZED BY FLUX OF ENERGY GREATER THAN .500 MEV **
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ENERGY LEVELS >(MEV) — L - B A N D S (M A G N E T I C S H E L L P A R A M E T E R I N E A R T H R A D I I) L - B A N D S

ENERGY LEVELS >(MEV)	*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*
.0	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
1.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1.50	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2.50	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
4.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
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

ENERGY LEVELS >(MEV) — L - B A N D S (M A G N E T I C S H E L L P A R A M E T E R I N E A R T H R A D I I) L - B A N D S

ENERGY LEVELS >(MEV)	*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*
.0	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
1.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1.50	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2.50	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
4.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
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

ENERGY LEVELS >(MEV) — L - B A N D S (M A G N E T I C S H E L L P A R A M E T E R I N E A R T H R A D I I) L - B A N D S

ENERGY LEVELS >(MEV)	*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*
.0	0.0	0.0	0.0	0.0	1.40E 01	1.61E 01	2.06E 01	2.80E 01	3.49E 01	6.56E 01	1.11E 02	1.42E 03
.500	0.0	0.0	0.0	0.0	1.00E 00	1.00E 00	1.00E 00	1.00E 00	1.00E 00	1.00E 00	1.00E 00	1.00E 00
1.00	0.0	0.0	0.0	0.0	1.99E-01	1.73E-01	1.47E-01	1.31E-01	1.21E-01	1.03E-01	9.17E-02	6.00E-02
1.50	0.0	0.0	0.0	0.0	4.81E-02	3.94E-02	3.14E-02	2.70E-02	2.44E-02	1.99E-02	1.70E-02	7.14E-03
2.00	0.0	0.0	0.0	0.0	1.16E-02	8.98E-03	6.71E-03	5.57E-03	4.92E-03	3.83E-03	3.16E-03	9.49E-04
2.50	0.0	0.0	0.0	0.0	2.59E-03	1.95E-03	1.41E-03	1.14E-03	9.90E-04	6.99E-04	5.29E-04	1.07E-04
3.00	0.0	0.0	0.0	0.0	5.09E-04	3.93E-04	2.87E-04	2.26E-04	1.90E-04	9.75E-05	5.42E-05	1.64E-05
4.00	0.0	0.0	0.0	0.0	1.42E-06	6.59E-07	0.0	0.0	0.0	0.0	0.0	0.0
5.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NORMFLUX=	0.0	0.0	0.0	0.0	3.66E 10	2.88E 10	1.55E 10	1.23E 10	4.51E 09	7.70E 08	4.52E 08	4.77E 08

Table 13

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**************************************************************************************************************************
** ORBITAL FLUX STUDY WITH COMPOSITE PARTICLE ENVIRONMENTS: VETTES AP5, AP6, AP7; AE4, AE5, FOR SOLAR MAXIMUM **** UNIFLX OF 1973 **
** ELECTRON FLUXES EXPONENTIALLY DECAYED TO 1970. 0 WITH LIFETIMES: E.G.STASSINOPOULOS&P.VERZARIU ** CUTOFF TIMES:          **
** MAGNETIC COORDINATES B AND L COMPUTED BY INVARA OF 1972 WITH ALLMAG. MODEL  4:  CAINESWEENEY 120-TERM FOGO 8/69 * TIME= 1975.5 **
** VEHICLE : SAS-D (310)  ** INCLINATION= 29DEG ** PERIGEE=35863KM ** APOGEE= 35863KM ** B/L ORBIT TAPE: TD7407 ** PERIOD= 24.000 **
**************************************************************************************************************************
                    ****************************  LOW  ENERGY PROTONS  ****************************
                    ** SPECTRAL DISTRIBUTION : NORMALIZED BY FLUX OF ENERGY GREATER THAN .100 MEV **
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ENERGY LEVELS >(MEV) — L - B A N D S (M A G N E T I C S H E L L P A R A M E T E R I N E A R T H R A D I I) L - B A N D S

ENERGY LEVELS >(MEV)	*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*
.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
.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
.900	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1.10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1.50	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2.50	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3.50	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

ENERGY LEVELS >(MEV) — L - B A N D S (M A G N E T I C S H E L L P A R A M E T E R I N E A R T H R A D I I) L - B A N D S

ENERGY LEVELS >(MEV)	*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	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
.900	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1.10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1.50	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2.50	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3.50	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

ENERGY LEVELS >(MEV) — L - B A N D S (M A G N E T I C S H E L L P A R A M E T E R I N E A R T H R A D I I) L - B A N D S

ENERGY LEVELS >(MEV)	*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	0.0	0.0	0.0	0.0	1.00E 00	1.00E 00	1.00E 00	1.00E 00	1.00E 00	1.00E 00	1.00E 00	1.00E 00
.500	0.0	0.0	0.0	0.0	3.28E-02	3.67E-02	4.41E-02	5.31E-02	6.04E-02	7.51E-02	8.81E-02	1.18E-01
.900	0.0	0.0	0.0	0.0	1.08E-03	1.35E-03	1.95E-03	2.83E-03	3.65E-03	5.66E-03	7.78E-03	1.50E-02
1.10	0.0	0.0	0.0	0.0	1.95E-04	2.59E-04	4.10E-04	6.54E-04	8.98E-04	1.55E-03	2.31E-0[illegible]	3.58E-03
1.50	0.0	0.0	0.0	0.0	6.41E-06	9.55E-06	1.82E-05	3.50E-05	5.45E-05	1.17E-04	2.05E-04	3.75E-04
2.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2.50	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3.50	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	2.25E 10	1.37E 10	3.84E 09	1.80E 09	4.82E 08	4.99E 07	1.93E 07	1.26E 07

Table 14

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*********************************************************************************************************************************
** ORBITAL FLUX STUDY WITH COMPOSITE PARTICLE ENVIRONMENTS: VETTES AP5, AP6, AP7; AE4, AE5, FOR SOLAR MAXIMUM **** UNIFLX OF 1973 **
** ELECTRON FLUXES EXPONENTIALLY DECAYED TO 1970. 0 WITH LIFETIMES: E.G.STASSINOPOULOS&P.VERZARIU ** CUTOFF TIME:                 **
** MAGNETIC COORDINATES B AND L COMPUTED BY INVARA OF 1972 WITH ALLMAG. MODEL  4:  CAIN&SWEENEY 120-TERM POGO 8/69 * TIME= 1975.5 **
** VEHICLE : SAS-D (310)  ** INCLINATION= 29DEG ** PERIGEE=35863KM ** APOGEE= 35863KM ** G/C ORBIT TAPE: TD7407 ** PERIOD= 24,000 **
*********************************************************************************************************************************
                                   **************************          ELECTRONS          ****************************
                                   ** SPECTRAL DISTRIBUTION : NORMALIZED BY FLUX OF ENERGY GREATER THAN .500 MEV **
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ENERGY LEVELS >(MEV)	L - B A N D S	(M A G N E T I C		S H E L L		P A R A M E T E R		I N	E A R T H	R A D I I)	L - B A N D S	
	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*
.0	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
1.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1.50	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2.50	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
4.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
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

ENERGY LEVELS >(MEV)	L - B A N D S	(M A G N E T I C		S H E L L		P A R A M E T E R		I N	E A R T H	R A D I I)	L - B A N D S	
	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*
.0	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
1.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1.50	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2.50	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
4.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
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

ENERGY LEVELS >(MEV)	L - B A N D S	(M A G N E T I C		S H E L L		P A R A M E T E R		I N	E A R T H	R A D I I)	L - B A N D S	
	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*
.0	0.0	0.0	0.0	0.0	1.42E 01	1.61E 01	2.05E 01	2.79E 01	3.49E 01	6.53E 01	1.10E 02	1.71E 03
.500	0.0	0.0	0.0	0.0	1.00E 00	1.00E 00	1.00E 00	1.00E 00	1.00E 00	1.00E 00	1.00E 00	1.00E 00
1.00	0.0	0.0	0.0	0.0	1.97E-01	1.73E-01	1.47E-01	1.31E-01	1.21E-01	1.03E-01	9.18E-02	6.14E-02
1.50	0.0	0.0	0.0	0.0	4.74E-02	3.95E-02	3.15E-02	2.70E-02	2.44E-02	1.99E-02	1.71E-02	7.38E-03
2.00	0.0	0.0	0.0	0.0	1.14E-02	9.01E-03	6.74E-03	5.59E-03	4.92E-03	3.83E-03	3.17E-03	1.01E-03
2.50	0.0	0.0	0.0	0.0	2.54E-03	1.96E-03	1.42E-03	1.15E-03	9.90E-04	7.01E-04	5.31E-04	1.18E-04
3.00	0.0	0.0	0.0	0.0	5.00E-04	3.95E-04	2.88E-04	2.27E-04	1.90E-04	9.80E-05	5.44E-05	1.68E-05
4.00	0.0	0.0	0.0	0.0	1.35E-06	6.61E-07	0.0	0.0	0.0	0.0	0.0	0.0
5.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NORMFLUX=	0.0	0.0	0.0	0.0	3.37E 10	3.11E 10	1.60E 10	1.30E 10	4.99E 09	8.54E 08	4.57E 08	5.32E 08

Table 15

** ORBITAL FLUX STUDY WITH COMPOSITE PARTICLE ENVIRONMENTS: VETTES AP5, AP6, AP7; AE4, AE5, FOR SOLAR MAXIMUM **** UNIFLX OF 1973 **
** ELECTRON FLUXES EXPONENTIALLY DECAYED TO 1970. 0 WITH LIFETIMES: E.G.STASSINOPOULOS&P.VERZARIU ** CUTOFF TIMES: **
** MAGNETIC COORDINATES B AND L COMPUTED BY INVARA OF 1972 WITH ALLMAG, MODEL 4: CAIN&SWEENEY 120-TERM POGO 8/69 * TIME= 1975.5 **
** VEHICLE : SAS-D (110) ** INCLINATION= 45DEG ** PERIGEE=35863KM ** APOGEE= 35863KM ** B/L ORBIT TAPE: "D7512 ** PERIOD= 24.000 **

LOW ENERGY PROTONS

** SPECTRAL DISTRIBUTION : NORMALIZED BY FLUX OF ENERGY GREATER THAN .100 MEV **

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*
.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
.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
.900	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1.10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1.50	[illegible]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2.00	[illegible]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2.50	[illegible]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3.00	0.[illegible]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3.50	0.[illegible]	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

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	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
.900	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1.10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1.50	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2.50	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3.50	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

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	0.0	0.0	0.0	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
.500	0.0	0.0	0.0	2.79E-02	2.94E-02	3.59E-02	4.29E-02	5.17E-02	6.16E-02	7.23E-02	8.58E-02	1.17E-01
.900	0.0	0.0	0.0	7.8[illegible]E-04	8.68E-04	1.29E-03	1.86E-03	2.68E-03	3.80E-03	5.24E-03	7.38E-03	1.50E-02
1.10	0.0	0.0	0.0	1.30E-04	1.49E-04	2.45E-04	3.83E-04	6.10E-04	9.44E-04	1.41E-03	2.16E-03	5.72E-03
1.50	0.0	0.0	0.0	3.64E-06	4.42E-06	8.86E-06	1.[illegible]5E-05	3.17E-05	5.84E-05	1.03E-04	1.87E-04	2.76E-04
2.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2.50	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3.50	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	2.03E 09	3.60E 10	5.57E 09	1.85E 09	5.91E 08	1.80E 08	7.37E 07	2.80E 07	1.70E 07

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*********************************************************************************************************************************
** ORBITAL FLUX STUDY WITH COMPOSITE PARTICLE ENVIRONMENTS: VETTES AP5, AP6, AP7; AE4, AE5, FOR SOLAR MAXIMUM **** UNIFLX OF 1973 **
** ELECTRON FLUXES EXPONENTIALLY DECAYED TO 1970. 0 WITH LIFETIMES: E.G.STASSINOPOULOS&P.VERZARIU ** CUTOFF TIMES:              **
** MAGNETIC COORDINATES B AND L COMPUTED BY INVARA OF 1972 WITH ALLMAG, MODEL  4:  CAIN&SWEENEY 120-TERM POGO 8/69 * TIME= 1975.5 **
** VEHICLE : SAS-D (110)  ** INCLINATION= 45DEG ** PERIGEE=35863KM ** APOGEE= 35863KM ** B/L ORBIT TAPE: TD7512 ** PERIOD= 24.000 **
*********************************************************************************************************************************
                                   **************************        ELECTRONS         **************************
                                   ** SPECTRAL DISTRIBUTION : NORMALIZED BY FLUX OF ENERGY GREATER THAN .500 MEV **
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ENERGY LEVELS >(MEV) — L-BANDS (MAGNETIC SHELL PARAMETER IN EARTH RADII) L-BANDS

ENERGY LEVELS >(MEV)	*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*
.0	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
1.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1.50	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2.50	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
4.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
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

ENERGY LEVELS >(MEV) — L-BANDS (MAGNETIC SHELL PARAMETER IN EARTH RADII) L-BANDS

ENERGY LEVELS >(MEV)	*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*
.0	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
1.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1.50	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2.50	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
4.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
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

ENERGY LEVELS >(MEV) — L-BANDS (MAGNETIC SHELL PARAMETER IN EARTH RADII) L-BANDS

ENERGY LEVELS >(MEV)	*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*
.0	0.0	0.0	0.0	1.22E 01	1.30E 01	1.61E 01	2.04E 01	2.78E 01	3.83E 01	6.33E 01	1.11E 02	1.02E 03
.500	0.0	0.0	0.0	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
1.00	0.0	0.0	0.0	2.30E-01	2.16E-01	1.73E-01	1.48E-01	1.31E-01	1.17E-01	1.04E-01	9.16E-02	5.95E-02
1.50	0.0	0.0	0.0	5.91E-02	5.40E-02	3.95E-02	3.16E-02	2.71E-02	2.34E-02	2.01E-02	1.70E-02	6.91E-03
2.00	0.0	0.0	0.0	1.52E-02	1.35E-02	9.02E-03	6.76E-03	5.60E-03	4.68E-03	3.88E-03	3.16E-03	9.14E-04
2.50	0.0	0.0	0.0	3.49E-03	3.07E-03	1.96E-03	1.42E-03	1.15E-03	9.33E-04	7.14E-04	5.28E-04	1.03E-04
3.00	0.0	0.0	0.0	6.68E-04	5.94E-04	3.95E-04	2.90E-04	2.28E-04	1.75E-04	1.02E-04	5.43E-05	1.63E-05
4.00	0.0	0.0	0.0	3.04E-06	2.24E-06	6.62E-07	0.0	0.0	0.0	0.0	0.0	0.0
5.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NORMFLUX=	0.0	0.0	0.0	1.78E 09	3.86E 10	1.23E 10	7.47E 09	4.11E 09	2.06E 09	1.15E 09	6.47E 08	7.17E 08

Table 1

** ORBITAL FLUX STUDY WITH COMPOSITE PARTICLE ENVIRONMENTS: VETTES AP5, AP6, AP7; AE4, AE5, FOR SOLAR MAXIMUM *** UNIFLUX OF 1973 **
** ELECTRON FLUXES EXPONENTIALLY DECAYED TO 1970.0 WITH LIFETIMES: E.G. STASSINOPOULOS&P. VERZARIU ** CUTOFF TIME ST **
** MAGNETIC COORDINATES B AND L COMPUTED BY INVARA OF 1972 WITH ALLMAG, MODEL AT CAIN&SWEENEY 120-TERM POGO 8/69 * TIME= 1976.5 **
** VEHICLE : SAS-D (293) ** INCLINATION= 45DEG ** PERIGEE=35863KM ** APOGEE= 35863KM ** P/L ORBIT TAPE: 197757 ** PERIOD= 24.000 **

LOW ENERGY PROTONS

** SPECTRAL DISTRIBUTION : NORMALIZED BY FLUX OF ENERGY GREATER THAN .100 MEV **

L-BANDS (MAGNETIC SHELL PARAMETER IN EARTH RADII) L-BANDS

ENERGY LEVELS >(MEV)	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
.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
.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
.900	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1.10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1.50	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2.50	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3.50	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

L-BANDS (MAGNETIC SHELL PARAMETER IN EARTH RADII) L-BANDS

ENERGY LEVELS >(MEV)	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	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
.900	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1.10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1.50	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2.50	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3.50	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

L-BANDS (MAGNETIC SHELL PARAMETER IN EARTH RADII) L-BANDS

ENERGY LEVELS >(MEV)	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-OVER
.100	0.0	0.0	0.0	0.0	1.00E 00	1.00E 00	1.00E 00	1.00E 00	1.00E 00	1.00E 00	1.00E 00	1.00E 00
.500	0.0	0.0	0.0	0.0	3.25E-02	3.66E-02	4.39E-02	5.21E-02	6.27E-02	7.46E-02	9.85E-02	1.20E-01
.900	0.0	0.0	0.0	0.0	1.05E-03	1.35E-03	1.93E-03	2.73E-03	3.94E-03	5.58E-03	7.94E-03	1.56E-02
1.10	0.0	0.0	0.0	0.0	1.90E-04	2.58E-04	4.06E-04	6.24E-04	9.88E-04	1.53E-03	2.34E-03	5.92E-03
1.50	0.0	0.0	0.0	0.0	6.17E-06	9.53E-06	1.79E-05	3.28E-05	6.23E-05	1.15E-04	2.08E-04	3.77E-04
2.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2.50	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3.50	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	1.68E 10	7.81E 09	1.94E 09	7.02E 08	2.23E 08	8.37E 07	2.81E 07	1.90E 07

Table 18

** ORBITAL FLUX STUDY WITH COMPOSITE PARTICLE ENVIRONMENTS: VETTES AP5, AP6, AP7; AE4, AE5, FOR SOLAR MAXIMUM **** UNIFLX OF 1973 **
** ELECTRON FLUXES EXPONENTIALLY DECAYED TO 1970. 0 WITH LIFETIMES: S.G.STASSINOPOULOS & VERZARIU ** CUTOFF TIMES: **
** MAGNETIC COORDINATES B AND L COMPUTED BY INVARA OF 1972 WITH ALLMAG, MODEL 4: CAIN&SWEENEY 120-TERM POGO 8/69 * TIME= 1975.5 **
** VEHICLE : SAS-D (290) ** INCLINATION= 45DEG ** PERIGEE=35863KM ** APOGEE= 35863KM ** B/L ORBIT TAPE: TD7257 ** PERIOD= 24.000 **

ELECTRONS

** SPECTRAL DISTRIBUTION : NORMALIZED BY FLUX OF ENERGY GREATER THAN .500 MEV **

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*
.0	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
1.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1.50	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2.50	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
4.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
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

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*
.0	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
1.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1.50	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2.50	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
4.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
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

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*
.0	0.0	0.0	0.0	0.0	1.40E 01	1.61E 01	2.04E 01	2.72E 01	3.80E 01	6.45E 01	1.12E 02	9.22E 02
.500	0.0	0.0	0.0	0.0	1.00E 00	1.00E 00	1.00E 00	1.00E 00	1.00E 00	1.00E 00	1.00E 00	1.00E 00
1.00	0.0	0.0	0.0	0.0	1.99E-01	1.73E-01	1.47E-01	1.32E-01	1.18E-01	1.04E-01	9.14E-02	5.97E-02
1.50	0.0	0.0	0.0	0.0	4.80E-02	3.94E-02	3.15E-02	2.74E-02	2.35E-02	2.00E-02	1.70E-02	6.97E-03
2.00	0.0	0.0	0.0	0.0	1.16E-02	8.98E-03	6.75E-03	5.68E-03	4.71E-03	3.86E-03	3.15E-03	9.29E-04
2.50	0.0	0.0	0.0	0.0	2.59E-03	1.95E-03	1.42E-03	1.17E-03	9.39E-04	7.07E-04	5.26E-04	1.05E-04
3.00	0.0	0.0	0.0	0.0	5.09E-04	3.93E-04	2.89E-04	2.32E-04	1.77E-04	1.00E-04	5.33E-05	1.60E-05
4.00	0.0	0.0	0.0	0.0	1.42E-06	6.63E-07	0.0	0.0	0.0	0.0	0.0	0.0
5.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NORMFLUX=	0.0	0.0	0.0	0.0	2.43E 10	1.78E 10	8.03E 09	4.81E 09	2.58E 09	1.41E 09	6.72E 08	8.21E 08

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*************************************************************************************************************************************
** ORBITAL FLUX STUDY WITH COMPOSITE PARTICLE ENVIRONMENTS: VETTES AP5, AP6, AP7; AE4, AE5, FOR SOLAR MAXIMUM **** [illegible] 1973 **
** ELECTRON FLUXES EXPONENTIALLY DECAYED TO 1970.0 WITH LIFE TIMES: [illegible] ** CUTOFF TIMES:                                     **
** MAGNETIC COORDINATES B AND L COMPUTED BY INVARA OF 1972 WITH ALLMAG, MODEL 4: CAIN&SWEENEY 120-TERM (POGO 8/69) , TIME= 1975.5 **
** VEHICLE : SAS-D (310)  ** INCLINATION= 45DEG ** PERIGEE=35863KM ** APOGEE= 35863KM ** P/L ORBIT TAPE: TD7467 . PERIOD= 24.0[illegible]
*************************************************************************************************************************************
                              ****************************   LOW  ENERGY PROTONS   ****************************
                              ** SPECTRAL DISTRIBUTION : NORMALIZED BY FLUX OF ENERGY GREATER THAN .100 MEV **
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ENERGY LEVELS >(MEV) — L-BANDS (MAGNETIC SHELL PARAMETER IN EARTH RADII) L-BANDS

ENERGY LEVELS >(MEV)	*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*
.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
.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
.900	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1.10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1.50	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2.50	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3.50	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

ENERGY LEVELS >(MEV) — L-BANDS (MAGNETIC SHELL PARAMETER IN EARTH RADII) L-BANDS

ENERGY LEVELS >(MEV)	*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	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
.900	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1.10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1.50	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2.50	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3.50	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

ENERGY LEVELS >(MEV) — L-BANDS (MAGNETIC SHELL PARAMETER IN EARTH RADII) L-BANDS

ENERGY LEVELS >(MEV)	*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	0.0	0.0	0.0	0.0	1.00E 00	1.00E 00	1.00E 00	1.00E 00	1.00E 00	1.00E 00	1.00E 00	1.00E 00
.500	0.0	0.0	0.0	0.0	3.28E-02	3.65E-02	4.38E-02	5.27E-02	6.30E-02	7.54E-02	8.92E-02	1.20E-01
.900	0.0	0.0	0.0	0.0	1.06E-03	1.34E-03	1.92E-03	2.79E-03	3.98E-03	5.70E-03	7.97E-03	1.56E-02
1.10	0.0	0.0	0.0	0.0	1.95E-04	2.56E-04	4.03E-04	6.41E-04	1.00E-03	1.57E-03	2.38E-03	5.95E-03
1.50	0.0	0.0	0.0	0.0	6.41E-06	9.40E-06	1.78E-05	3.40E-05	6.35E-05	1.19E-04	2.14E-04	3.73E-04
2.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2.50	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3.50	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	1.44E 10	8.26E 09	2.28E 09	6.45E 08	2.32E 08	8.05E 07	2.56E 07	1.89E 07

Table 20

** ORBITAL FLUX STUDY WITH COMPOSITE PARTICLE ENVIRONMENTS: VETTE'S AP5, AP6, AP7; AE4, AE5, FOR SOLAR MAXIMUM **** UNIFLX OF 1973 **
** ELECTRON FLUXES EXPONENTIALLY DECAYED TO 1970. 0 WITH LIFETIMES: E.G.STASSINOPOULOS&P.VERZARIU ** CUTOFF TIMES: **
** MAGNETIC COORDINATES B AND L COMPUTED BY INVARA OF 1972 WITH ALLMAG, MODEL 4: CAIN&SWEENEY 120-TERM POGO 8/69 * TIME= 1975.5 **
** VEHICLE : SAS-D (310) ** INCLINATION= 45DEG ** PERIGEE=35863KM ** APOGEE= 35863KM ** B/L ORBIT TAPE: TP7A07 ** PERIOD= 24.000 **

ELECTRONS

** SPECTRAL DISTRIBUTION : NORMALIZED BY FLUX OF ENERGY GREATER THAN .500 MEV **

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#
.0	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
1.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1.50	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2.50	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
4.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
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

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#
.0	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
1.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1.50	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2.50	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
4.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
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

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#
.0	0.0	0.0	0.0	0.0	1.42E 01	1.60E 01	2.03E 01	2.75E 01	3.83E 01	6.61E 01	1.14E 02	9.77E 02
.500	0.0	0.0	0.0	0.0	1.00E 00	1.00E 00	1.00E 00	1.00E 00	1.00E 00	1.00E 00	1.00E 00	1.00E 00
1.00	0.0	0.0	0.0	0.0	1.97E-01	1.74E-01	1.48E-01	1.32E-01	1.17E-01	1.03E-01	9.11E-02	6.02E-02
1.50	0.0	0.0	0.0	0.0	4.74E-02	3.98E-02	3.17E-02	2.72E-02	2.35E-02	1.99E-02	1.69E-02	7.10E-03
2.00	0.0	0.0	0.0	0.0	1.14E-02	9.09E-03	6.78E-03	5.63E-03	4.70E-03	3.82E-03	3.13E-03	9.53E-04
2.50	0.0	0.0	0.0	0.0	2.54E-03	1.98E-03	1.43E-03	1.16E-03	9.35E-04	6.98E-04	5.21E-04	1.09E-04
3.00	0.0	0.0	0.0	0.0	5.00E-04	3.98E-04	2.91E-04	2.29E-04	1.75E-04	9.74E-05	5.23E-05	1.64E-05
4.00	0.0	0.0	0.0	0.0	1.35E-06	6.94E-07	0.0	0.0	0.0	0.0	0.0	0.0
5.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NORMFLUX=	0.0	0.0	0.0	0.0	2.16E 10	1.84E 10	9.37E 09	4.54E 09	2.70E 09	1.39E 09	6.22E 08	8.13E 08

Table 21

** ORBITAL FLUX STUDY WITH COMPOSITE PARTICLE ENVIRONMENTS: VETTES AP5, AP6, AP7; AE4, AE5, FOR SOLAR MAXIMUM **** UNIFLX OF 1973 **
** ELECTRON FLUXES EXPONENTIALLY DECAYED TO 1970.0 WITH LIFETIMES: G.G.STASSINOPOULOS&P.VERZARIU ** CUTOFF TIMES: **
** MAGNETIC COORDINATES B AND L COMPUTED BY INVAR OF 1972 WITH ALLMAG. MODEL 4: CAIN&SWEENEY 120-TERM POGO 8/69 * TIME= 1975.5 **
**.VEHICLE : SAS-D (110) ** INCLINATION= 0DEG ** PERIGEE=2705.KM ** APOGEE= 33615KM ** B/L ORBIT TAPE: TOP136 ** PERIOD= 24.000 **

LOW ENERGY ELECTRONS

** SPECTRAL DISTRIBUTION : NORMALIZED BY FLUX OF ENERGY GREATER THAN .100 MEV **

L-BANDS (MAGNETIC SHELL PARAMETER IN EARTH RADII) L-BANDS

ENERGY LEVELS >(MEV)	*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*
.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
.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
.900	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1.10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1.50	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2.50	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3.50	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

L-BANDS (MAGNETIC SHELL PARAMETER IN EARTH RADII) L-BANDS

ENERGY LEVELS >(MEV)	*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	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.00E 00	1.00E 00
.500	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.81E-02	2.72E-02
.900	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	7.88E-04	7.41E-04
1.10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.32E-04	1.22E-04
1.50	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.71E-06	3.33E-06
2.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2.50	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3.50	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	9.36E 10	1.19E 11

L-BANDS (MAGNETIC SHELL PARAMETER IN EARTH RADII) L-BANDS

ENERGY LEVELS >(MEV)	*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	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
.500	2.66E-02	2.65E-02	2.67E-02	2.63E-02	2.95E-02	3.66E-02	4.52E-02	5.57E-02	6.89E-02	8.50E-02	1.05E-01	1.28E-01
.900	7.00E-04	7.05E-04	7.15E-04	7.23E-04	9.72E-04	1.38E-03	2.05E-03	3.12E-03	4.76E-03	7.28E-03	1.11E-02	1.65E-02
1.10	1.14E-04	1.15E-04	1.17E-04	1.19E-04	1.50E-04	2.58E-04	4.37E-04	7.39E-04	1.25E-03	2.12E-03	3.61E-03	5.91E-03
1.50	3.01E-06	3.05E-06	3.13E-06	3.19E-06	4.47E-06	9.51E-06	1.99E-05	4.15E-05	8.70E-05	1.82E-04	3.84E-04	7.62E-04
2.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2.50	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3.50	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=	5.21E 10	4.17E 10	3.07E 10	1.87E 10	1.02E 10	4.28E 09	1.75E 09	8.07E 08	3.65E 08	1.74E 08	9.62E 07	6.90E 07

Table 2.2

** ORBITAL FLUX STUDY WITH COMPOSITE PARTICLE ENVIRONMENTS: VETTE AP5, AP6, AP7; AE4, AE5, FOR SOLAR MAXIMUM **** UNIFLX OF 1973 **
** ELECTRON FLUXES EXPONENTIALLY DECAYED TO 1970. 0 WITH LIFETIMES: E.G.STASSINOPOULOS&P.VERZARIU ** CUTOFF TIMES: **
** MAGNETIC COORDINATES B AND L COMPUTED BY INVARA OF 1972 WITH ALLMAG. MODEL 4: CAIN&SWEENEY 120-TERM POGO 8/69 * TIME= 1975.5 **
** VEHICLE : SAS-D (110) ** INCLINATION= 0DEG ** PERIGEE=27932KM ** APOGEE= 43615KM ** P/L ORBIT TAPE: TD*135 ** PERIOD= 24.000 **

ELECTRONS

** SPECTRAL DISTRIBUTION : NORMALIZED BY FLUX OF ENERGY GREATER THAN .500 MEV **

ENERGY LEVELS >(MEV)	*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*
	L-BANDS (MAGNETIC			SHELL		PARAMETER		IN	EARTH		RADII)	L-BANDS
.0	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
1.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1.50	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2.50	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
4.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
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

ENERGY LEVELS >(MEV)	*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*
	L-BANDS (MAGNETIC			SHELL		PARAMETER		IN	EARTH		RADII)	L-BANDS
.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	7.70E 00	7.65E 00
.500	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.00E 00	1.00E 00
1.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.08E-01	2.96E-01
1.50	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	9.53E-02	8.80E-02
2.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.98E-02	2.71E-02
2.50	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	9.29E-03	7.45E-03
3.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.03E-03	1.54E-03
4.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.93E-05	3.25E-05
5.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NORMFLUX=	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.21E 10	5.59E 10

ENERGY LEVELS >(MEV)	*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*
	L-BANDS (MAGNETIC			SHELL		PARAMETER		IN	EARTH		RADII)	L-BANDS
.0	7.57E 00	8.12E 00	9.55E 00	1.12E 01	1.34E 01	1.62E 01	2.07E 01	2.77E 01	3.84E 01	6.49E 01	1.14E 02	1.91E 02
.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
1.00	2.56E-01	2.40E-01	2.36E-01	2.32E-01	2.10E-01	1.72E-01	1.47E-01	1.31E-01	1.17E-01	1.04E-01	9.11E-02	7.63E-02
1.50	7.62E-02	6.88E-02	6.47E-02	6.10E-02	5.19E-02	3.89E-02	3.14E-02	2.71E-02	2.35E-02	2.00E-02	1.69E-02	1.12E-02
2.00	2.27E-02	1.97E-02	1.78E-02	1.60E-02	1.28E-02	8.84E-03	6.70E-03	5.61E-03	4.67E-03	3.85E-03	3.13E-03	1.47E-03
2.50	6.12E-03	5.15E-03	4.41E-03	3.78E-03	2.91E-03	1.92E-03	1.41E-03	1.15E-03	9.34E-04	7.04E-04	5.21E-04	1.98E-04
3.00	1.55E-03	1.26E-03	9.79E-04	7.62E-04	5.64E-04	3.87E-04	2.86E-04	2.28E-04	1.75E-04	9.93E-05	5.22E-05	2.72E-05
4.00	2.28E-05	1.45E-05	7.81E-06	4.22E-06	1.95E-06	6.12E-07	0.0	0.0	0.0	0.0	0.0	0.0
5.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NORMFLUX=	3.24E 10	2.33E 10	1.86E 10	1.42E 10	1.17E 10	9.92E 09	7.57E 09	6.07E 09	4.70E 09	3.39E 09	2.80E 09	2.88E 09

Table 23

** ORBITAL FLUX STUDY WITH COMPOSITE PARTICLE ENVIRONMENTS: VETTES AP5, AP6, AP7; AE4, AE5, FOR SOLAR MAXIMUM **** UNIFLX OF 1973 **
** ELECTRON FLUXES EXPONENTIALLY DECAYED TO 1970. 0 WITH LIFETIMES: F.G.STASSINOPOULOS&R.VERZARIU ** CUTOFF TIMES: **
** MAGNETIC COORDINATES B AND L COMPUTED BY INVARA OF 1972 WITH ALLMAG, MODEL #: CAINESWEENEY 120-TERM POGO 8/69 * TIME= 1975.5 **
** VEHICLE : SAS-D (250) ** INCLINATION= 0DEG ** PERIGEE=27952KM ** APOGEE= 43615KM ** B/L ORBIT TAPE: TD9050 ** PERIOD= 24.000 **

LOW ENERGY PROTONS

** SPECTRAL DISTRIBUTION : NORMALIZED BY FLUX OF ENERGY GREATER THAN .100 MEV **

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*
.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
.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
.900	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1.10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1.50	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2.50	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3.50	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

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	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.00E 00
.500	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.64E-02
.900	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	6.98E-04
1.10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.13E-04
1.50	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.00E-06
2.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2.50	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3.50	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	1.12E 11

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	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
.500	2.62E-02	2.63E-02	2.66E-02	2.68E-02	2.96E-02	3.67E-02	4.52E-02	5.57E-02	6.84E-02	8.47E-02	1.05E-01	1.39E-01
.900	6.85E-04	6.94E-04	7.09E-04	7.17E-04	9.77E-04	1.35E-03	2.05E-03	3.11E-03	4.70E-03	7.19E-03	1.10E-02	1.94E-02
1.10	1.11E-04	1.13E-04	1.15E-04	1.17E-04	1.81E-04	2.59E-04	4.37E-04	7.36E-04	1.23E-03	2.10E-03	3.56E-03	7.30E-03
1.50	2.90E-06	2.97E-06	3.07E-06	3.14E-06	4.52E-05	9.60E-06	1.99E-05	4.13E-05	8.52E-05	1.79E-04	3.75E-04	1.04E-03
2.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2.50	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3.50	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=	8.32E 10	4.74E 10	3.13E 10	1.92E 10	1.03E 10	3.98E 09	1.65E 09	7.11E 08	3.44E 08	1.49E 08	7.50E 07	6.80E 07

Table 24

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**************************************************************************************************************************
** ORBITAL FLUX STUDY WITH COMPOSITE PARTICLE ENVIRONMENTS: VETTES AP5, AP6, AP7; AE4, AE5, FOR SOLAR MAXIMUM **** UNIFLX OF 1973 **
** ELECTRON FLUXES EXPONENTIALLY DECAYED TO 1970. 0 WITH LIFETIMES: E.G.STASSINOPOULOS&P.VERZARIU ** CUTOFF TIMES:          **
** MAGNETIC COORDINATES B AND L COMPUTED BY INVARA OF 1972 WITH ALLMAG, MODEL  A:  CAIN&SWEENEY 120-TERM POGO 8/69 * TIME= 1975.5 **
** VEHICLE: SAS-D (290)  ** INCLINATION=  0DEG ** PERIGEE=27952KM ** APOGEE= 43615KM ** O/L ORBIT TAPE: TD8050 ** PERIOD= 24.000 **
**************************************************************************************************************************
                        ****************************      ELECTRONS        ******************************
                        ** SPECTRAL DISTRIBUTION : NORMALIZED BY FLUX OF ENERGY GREATER THAN .500 MEV **
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ENERGY L - B A N D S (M A G N E T I C S H E L L P A R A M E T E R I N E A R T H R A D I I) L - B A N D S

ENERGY LEVELS >(MEV)	*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*
.0	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
1.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1.50	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2.50	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
4.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
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

ENERGY L - B A N D S (M A G N E T I C S H E L L P A R A M E T E R I N E A R T H R A D I I) L - B A N D S

ENERGY LEVELS >(MEV)	*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*
.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	7.63E 00
.500	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.00E 00
1.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.77E-01
1.50	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	8.45E-02
2.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.57E-02
2.50	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	7.04E-03
3.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.75E-03
4.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.94E-05
5.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NORMFLUX=	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.43E 10

ENERGY L - B A N D S (M A G N E T I C S H E L L P A R A M E T E R I N E A R T H R A D I I) L - B A N D S

ENERGY LEVELS >(MEV)	*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*
.0	7.57E 00	8.16E 00	9.59E 00	1.13E 01	1.34E 01	1.63E 01	2.07E 01	2.77E 01	3.92E 01	6.47E 01	1.14E 02	2.48E 02
.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
1.00	2.56E-01	2.40E-01	2.36E-01	2.32E-01	2.09E-01	1.71E-01	1.47E-01	1.31E-01	1.17E-01	1.04E-01	9.12E-02	6.83E-02
1.50	7.63E-02	6.87E-02	6.46E-02	6.00E-02	5.15E-02	3.86E-02	3.13E-02	2.71E-02	2.35E-02	2.00E-02	1.69E-02	8.31E-03
2.00	2.27E-02	1.97E-02	1.77E-02	1.60E-02	1.27E-02	8.74E-03	6.68E-03	5.61E-03	4.70E-03	3.85E-03	3.14E-03	1.08E-03
2.50	6.12E-03	5.13E-03	4.39E-03	3.77E-03	2.87E-03	1.90E-03	1.40E-03	1.15E-03	9.37E-04	7.06E-04	5.23E-04	1.12E-04
3.00	1.55E-03	1.25E-03	9.73E-04	7.58E-04	5.58E-04	3.83E-04	2.85E-04	2.28E-04	1.76E-04	9.95E-05	5.27E-05	2.04E-05
4.00	2.29E-05	1.42E-05	7.68E-06	4.18E-06	1.49E-06	5.93E-07	0.0	0.0	0.0	0.0	0.0	0.0
5.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NORMFLUX=	4.35E 10	2.65E 10	1.93E 10	1.46E 10	1.20E 10	9.39E 09	7.19E 09	5.36E 09	4.38E 09	2.90E 09	2.16E 09	3.23E 09

** ****************
** ORBITAL FLUX STUDY WITH COMPOSITE PARTICLE ENVIRONMENTS: VETTES AP5, AP6, AP7; AE4, AE5, FOR SOLAR MAXIMUM **** .FLX OF 1973 **
** ELECTRON FLUXES EXPONENTIALLY DECAYED TO 1970. 0 WITH LIFETIMES: E.G.STASSINOPOULOS&P.VERZARIU ** CUTOFF TIMES **
** MAGNETIC COORDINATES B AND L COMPUTED BY INVARA OF 1972 WITH ALLMAG. MODEL 4: CAIN&SWEENEY 120-TERM POGO 8/ . 2 TIME= 1975.5 **
** VEHICLE : SAS-D (310) ** INCLINATION= 0DEG ** PERIGEE=27952KM ** APOGEE= 43615KM ** B/L ORBIT TAPE: TD7670 PERIOD= 24.000 **
** ****************

*************************** LOW ENERGY PROTONS ***************************
** SPECTRAL DISTRIBUTION : NORMALIZED BY FLUX OF ENERGY GREATER THAN .100 MEV **
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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*
.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
.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
.900	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1.10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1.50	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2.50	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3.50	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

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	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.00E 00
.500	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.70E-02
.900	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	7.30E-04
1.10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.20E-04
1.50	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.24E-06
2.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2.50	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3.50	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	1.36E 11

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	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
.500	2.65E-02	2.66E-02	2.68E-02	2.70E-02	2.97E-02	3.66E-02	4.53E-02	5.59E-02	6.92E-02	8.56E-02	1.05E-01	1.37E-01
.900	7.04E-04	7.09E-04	7.18E-04	7.27E-04	8.83E-04	1.35E-03	2.06E-03	3.14E-03	4.80E-03	7.35E-03	1.11E-02	1.89E-02
1.10	1.15E-04	1.16E-04	1.17E-04	1.19E-04	1.52E-04	2.59E-04	4.39E-04	7.45E-04	1.27E-03	2.16E-03	3.63E-03	7.02E-03
1.50	3.04E-06	3.08E-06	3.15E-06	3.22E-06	4.56E-06	9.58E-06	2.00E-05	4.21E-05	8.86E-05	1.86E-04	3.86E-04	9.76E-04
2.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2.50	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3.50	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=	7.66E 10	4.65E 10	3.08E 10	2.03E 10	9.63E 09	4.28E 09	1.75E 09	7.46E 08	3.50E 08	1.52E 08	7.66E 07	7.07E 07

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**********************************************************************************************************************
** ORBITAL FLUX STUDY WITH COMPOSITE PARTICLE ENVIRONMENTS: VETTES AP5, AP6, AP7; AE4, AE5, FOR SOLAR MAXIMUM **** UNIFLX OF 1973 **
** ELECTRON FLUXES EXPONENTIALLY DECAYED TO 1970. 0 WITH LIFETIMES: E.G.STASSINOPOULOS&P.VERZARIU ** CUTOFF TIMES:            **
** MAGNETIC COORDINATES B AND L COMPUTED BY INVARA OF 1972 WITH ALLMAG, MODEL  4:  CAIN&SWEENEY 120-TERM POGO 8/69 * TIME= 1975.5 **
** VEHICLE : SAS-D (310)  ** INCLINATION=  0DEG ** PERIGEE=27952KM ** APOGEE= 43615KM ** B/L ORBIT TAPE: TD7678 ** PERIOD= 24.000 **
**********************************************************************************************************************
                    ****************************        ELECTRONS        ******************************            2
                    ** SPECTRAL DISTRIBUTION : NORMALIZED BY FLUX OF ENERGY GREATER THAN .500 MEV **
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ENERGY LEVELS >(MEV) — L-BANDS (MAGNETIC SHELL PARAMETER IN EARTH RADII) L-BANDS

ENERGY LEVELS >(MEV)	*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*
.0	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
1.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1.50	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2.50	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
4.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
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

ENERGY LEVELS >(MEV) — L-BANDS (MAGNETIC SHELL PARAMETER IN EARTH RADII) L-BANDS

ENERGY LEVELS >(MEV)	*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*
.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	7.64E 00
.500	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.00E 00
1.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.81E-01
1.50	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	8.60E-02
2.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.63E-02
2.50	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	7.21E-03
3.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.79E-03
4.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.07E-05
5.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NORMFLUX=	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	6.54E 10

ENERGY LEVELS >(MEV) — L-BANDS (MAGNETIC SHELL PARAMETER IN EARTH RADII) L-BANDS

ENERGY LEVELS >(MEV)	*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*
.0	7.57E 00	8.14E 00	9.56E 00	1.12E 01	1.34E 01	1.62E 01	2.06E 01	2.77E 01	3.86E 01	6.55E 01	1.14E 02	2.31E 02
.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
1.00	2.56E-01	2.40E-01	2.36E-01	2.32E-01	2.10E-01	1.72E-01	1.47E-01	1.31E-01	1.17E-01	1.03E-01	9.11E-02	7.02E-02
1.50	7.63E-02	6.87E-02	6.47E-02	6.09E-02	5.17E-02	3.89E-02	3.14E-02	2.71E-02	2.34E-02	1.99E-02	1.69E-02	8.93E-03
2.00	2.27E-02	1.97E-02	1.78E-02	1.60E-02	1.28E-02	8.83E-03	6.70E-03	5.61E-03	4.68E-03	3.83E-03	3.13E-03	1.19E-03
2.50	6.13E-03	5.14E-03	4.41E-03	3.78E-03	2.89E-03	1.92E-03	1.41E-03	1.15E-03	9.31E-04	7.01E-04	5.21E-04	1.26E-04
3.00	1.55E-03	1.26E-03	9.78E-04	7.60E-04	5.61E-04	3.87E-04	2.86E-04	2.28E-04	1.74E-04	9.81E-05	5.23E-05	2.19E-05
4.00	2.29E-05	1.44E-05	7.78E-06	4.21E-06	1.91E-06	6.11E-07	0.0	0.0	0.0	0.0	0.0	0.0
5.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NORMFLUX=	3.99E 10	2.61E 10	1.86E 10	1.54E 10	1.12E 10	9.95E 09	7.61E 09	5.63E 09	4.54E 09	2.99E 09	2.29E 09	3.26E 09

Table 27

** ORBITAL FLUX STUDY WITH COMPOSITE PARTICLE ENVIRONMENT : VETTE AP5, AP6, AP7; AE4, AE5, FOR SOLAR MAXIMUM **** UNIFLX OF 1973 **
** ELECTRON FLUXES EXPONENTIALLY DECAYED TO 1970. 0 WITH LIFETIMES: E.G.STASSINOPOULOS&P.VERZARIU ** CUTOFF TIMES: **
** MAGNETIC COORDINATES B AND L COMPUTED BY INVARA OF 1972 WITH ALLMAG. MODEL #: CAIN&SWEENEY 120-TERM POGO 8/69 * TIME= 1975.5 **
** VEHICLE : SAS-D (110) ** INCLINATION= 30DEG ** PERIGEE=27952KM ** APOGEE= 43615KM ** B/L ORBIT TAPE: TOP136 ** PERIOD= 24.000 **

LOW ENERGY PROTONS

** SPECTRAL DISTRIBUTION : NORMALIZED BY FLUX OF ENERGY GREATER THAN .100 MEV **

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*
.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
.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
.900	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1.10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1.50	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2.50	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3.50	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

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	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.00E 00	1.00E 00	1.00E 00
.500	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.16E-02	3.02E-02	2.72E-02
.900	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	9.94E-04	9.16E-04	7.43E-04
1.10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.76E-04	1.59E-04	1.23E-04
1.50	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.56E-06	4.88E-06	3.36E-06
2.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	7.39E-08	4.71E-08	0.0
2.50	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3.50	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	1.54E 10	1.13E 11	3.74E 10

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	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
.500	2.53E-02	2.49E-02	2.44E-02	2.42E-02	2.63E-02	3.19E-02	3.90E-02	4.89E-02	6.85E-02	8.46E-02	1.03E-01	1.37E-01
.900	6.41E-04	6.22E-04	5.57E-04	5.87E-04	6.96E-04	1.03E-03	1.54E-03	2.42E-03	4.75E-03	7.23E-03	1.09E-02	2.03E-02
1.10	[illegible].02E-04	9.94E-05	9.36E-05	9.16E-05	1.14E-04	1.86E-04	3.08E-04	5.39E-04	1.26E-03	2.12E-03	3.50E-03	8.06E-03
1.50	2.59E-06	2.47E-06	2.30E-06	2.24E-06	3.04E-06	5.07E-06	1.23E-05	2.70E-05	8.84E-05	1.81E-04	3.66E-04	1.12E-03
2.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2.50	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3.50	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=	2.45E 10	1.46E 10	9.88E 09	7.38E 09	3.93E 09	1.74E 09	7.7[illegible]E 0[illegible]	4.11E 08	7.66E 08	1.87E 08	4.04E 07	2.12E 07

Table 28

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** ORBITAL FLUX STUDY WITH COMPOSITE PARTICLE ENVIRONMENTS: VETTES AP6, AP4, AP7; AE4, AE5, FOR SOLAR MAXIMUM **** UNIFLUX OF 1973 **
** ELECTRON FLUXES EXPONENTIALLY DECAYED TO 1970. 0 WITH LIFETIMES: E.G.STASSINOPOULOS&P.VERZARIU ** CUTOFF TIMES: **
** MAGNETIC COORDINATES B AND L COMPUTED BY INVAR OF 1.72 WITH ALLIAGS, MODEL : CAINESWEENEY 120-TERM POGO 8/69 * TIME= 1975.5 **
** VEHICLE : SAS-D (110) ** INCLINATION= 30DEG ** PERIGEE=27952KM ** APOGEE= 43615KM ** B/L ORBIT TAPE: TD5136 ** PERIOD= 24.000 **
****

************************** ELECTRONS **************************
** SPECTRAL DISTRIBUTION : NORMALIZED BY FLUX OF ENERGY GREATER THAN .500 MEV **
****

ENERGY LEVELS >(MEV)	L - B A N D S *1.0-1.2*	(M A G N E T I C *1.2-1.4*	*1.4-1.6*	S H E L L *1.6-1.8*	*1.8-2.0*	P A R A M E T E R *2.0-2.2*	*2.2-2.4*	I N *2.4-2.6*	E A R T H *2.6-2.8*	*2.8-3.0*	R A D I I) *3.0-3.2*	L - B A N D S *3.2-3.4*
.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
.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
1.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1.50		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2.00	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2.50	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
4.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
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

ENERGY LEVELS >(MEV)	L - B A N D S *3.4-3.6*	(M A G N E T I C *3.6-3.8*	*3.8-4.0*	S H E L L *4.0-4.2*	*4.2-4.4*	P A R A M E T E R *4.4-4.6*	*4.6-4.8*	I N *4.8-5.0*	E A R T H *5.0-5.2*	*5.2-5.4*	R A D I I) *5.4-5.6*	L - B A N D S *5.6-5.8*
.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	7.65E 00	7.69E 00	7.55E 00
.500	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.00E 00	1.00E 00	1.00E 00
1.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.20E-01	3.15E-01	2.86E-01
1.50	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.04E-01	1.00E-01	8.78E-02
2.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.35E-02	3.20E-02	2.79E-02
2.50	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	9.76E-03	9.10E-03	7.42E-03
3.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.46E-03	2.24E-03	1.84E-03
4.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.17E-05	4.62E-05	3.23E-05
5.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NORMFLUX=	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.82E 09	4.59E 10	1.78E 10

ENERGY LEVELS >(MEV)	L - B A N D S *5.8-6.0*	(M A G N E T I C *6.0-6.2*	*6.2-6.4*	S H E L L *6.4-6.6*	*6.6-6.8*	P A R A M E T E R *6.8-7.0*	*7.0-7.2*	I N *7.2-7.4*	E A R T H *7.4-7.6*	*7.6-7.8*	R A D I I) *7.8-8.0*	L - B A N D S *8.0-OVR*
.0	7.57E 00	8.19E 00	9.61E 00	1.13E 01	1.35E 01	1.44E 01	2.08E 01	2.78E 01	4.15E 01	6.17E 01	1.09E 02	1.15E 03
.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
1.00	2.56E-01	2.39E-01	2.30E-01	2.32E-01	2.09E-01	1.70E-01	1.45E-01	1.31E-01	1.15E-01	1.05E-01	9.21E-02	6.22E-02
1.50	7.62E-02	6.86E-02	6.46E-02	6.08E-02	5.12E-02	3.85E-02	3.12E-02	2.71E-02	2.28E-02	2.03E-02	1.71E-02	7.44E-03
2.00	2.27E-02	1.96E-02	1.77E-02	1.60E-02	1.26E-02	8.72E-03	6.65E-03	5.61E-03	4.53E-03	3.92E-03	3.18E-03	1.01E-03
2.50	6.11E-03	5.11E-03	4.38E-03	3.76E-03	2.85E-03	1.89E-03	1.40E-03	1.15E-03	8.92E-04	7.23E-04	5.34E-04	1.15E-04
3.00	1.59E-03	1.25E-03	9.69E-04	7.55E-04	5.74E-04	3.82E-04	2.96E-04	2.29E-04	1.61E-04	1.05E-04	5.50E-05	1.71E-05
4.00	2.28E-05	1.41E-05	7.62E-06	4.15E-06	1.86E-06	5.96E-07	0.0	0.0	0.0	0.0	0.0	0.0
5.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NORMFLUX=	1.29E 10	8.15E 09	6.36E 09	5.15E 09	4.07E 09	3.55E 09	2.91E 09	2.71E 09	1.03E 10	3.60E 09	1.14E 09	1.05E 09

** ORBITAL FLUX STUDY WITH COMPOSITE PARTICLE ENVIRONMENTS: VETTE'S AP5, AP6, AP7; AE4, AE5, FOR SOLAR MAXIMUM **** UNIFLX OF 1973 **
** ELECTRON FLUXES EXPONENTIALLY DECAYED TO 1970. 0 WITH LIFETIMES: E.G.STASSINOPOULOS&P.VERZARIU ** CUTOFF TIMES: **
** MAGNETIC COORDINATES B AND L COMPUTED BY INVARA OF 1972 WITH ALLMAG, MODEL 4: CAIN&SWEENEY 120-TERM POGO 8/69 * TIME= 1975.5 **
** VEHICLE : SAS-D (230) ** INCLINATION= 30DEG ** PERIGEE=27052KM ** APOGEE= 43615KM ** B/L ORBIT TAPE: TOR050 ** PERIOD= 24.000 **

LOW ENERGY PROTONS

** SPECTRAL DISTRIBUTION : NORMALIZED BY FLUX OF ENERGY GREATER THAN .100 MEV **

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*
.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
.300	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
.900	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1.10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1.50	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2.50	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3.50	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

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	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.00E 00	1.00E 00
.300	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.98E-02	2.78E-02
.900	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	8.89E-04	7.73E-04
1.10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.53E-04	1.29E-04
1.50	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.58E-06	3.60E-06
2.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.21E-08	0.0
2.50	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3.50	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	6.62E 10	6.63E 10

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	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
.300	2.60E-02	2.53E-02	2.51E-02	2.45E-02	2.58E-02	3.24E-02	3.95E-02	4.92E-02	6.53E-02	8.32E-02	1.04E-01	1.40E-01
.900	6.80E-04	6.41E-04	6.31E-04	6.05E-04	7.25E-04	1.06E-03	1.58E-03	2.45E-03	4.32E-03	6.98E-03	1.09E-02	2.12E-02
1.10	1.10E-04	1.02E-04	1.00E-04	9.50E-05	1.20E-04	1.93E-04	3.15E-04	5.50E-04	1.12E-03	2.03E-03	3.57E-03	8.52E-03
1.50	2.57E-06	2.60E-06	2.53E-06	2.35E-06	3.26E-06	6.32E-06	1.29E-05	2.78E-05	7.46E-05	1.71E-04	3.77E-04	1.24E-03
2.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2.50	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3.50	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=	2.77E 10	1.51E 10	1.17E 10	6.28E 09	4.02E 09	1.82E 09	8.09E 08	4.39E 08	3.76E 08	3.39E 08	4.97E 07	2.25E 07

Table 2C

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*************************************************************************************************************
** ORBITAL FLUX STUDY WITH COMPOSITE PARTICLE ENVIRONMENTS: VETTE'S AP5, AP6, AP7; AE4, AE5, FOR SOLAR MAXIMUM **** [illegible] OF 1973 **
** ELECTRON FLUXES EXPONENTIALLY DECAYED TO 1970.0 WITH LIFETIMES: P.G.STASSINOPOULOS,VERZARIU ** CUTOFF TIMES:          **
** MAGNETIC COORDINATES B AND L COMPUTED BY [illegible] OF 1972 WITH [illegible] MODEL 4: CAIN&SWEENEY 120-TERM POGO 8/69 * TIME= 1978.5 **
** VEHICLE : [illegible] ** INCLINATION= [illegible] ** PERIGEE= 27082KM ** APOGEE= 43615KM ** H/L ORBIT TAPE: [illegible] ** PERIOD= 24.000 **
*************************************************************************************************************
                    ***************************     ELECTRONS     ***************************
                    ** SPECTRAL DISTRIBUTION : NORMALIZED BY FLUX OF ENERGY GREATER THAN .500 MEV **
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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
.0	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
1.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1.50	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2.50	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
4.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
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

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
.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	7.70E 00	7.65E 00
.500	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.00E 00	1.00E 00
1.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.07E-01	2.95E-01
1.50	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	9.64E-02	8.76E-02
2.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.02E-02	2.69E-02
2.50	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	8.42E-03	7.40E-03
3.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.05E-03	1.83E-03
4.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.05E-05	3.21E-05
5.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NORMFLUX	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.88E 10	2.86E 10

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
.0	7.47E 00	8.11E 00	9.93E 00	1.13E 01	1.34E 01	1.42E 01	2.06E 01	2.78E 01	4.07E 01	6.00E 01	1.11E 02	1.17E 03
.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
1.00	2.95E-01	2.43E-01	2.36E-01	2.32E-01	2.09E-01	1.72E-01	1.47E-01	1.31E-01	1.15E-01	1.05E-01	9.17E-02	6.19E-02
1.50	7.63E-02	6.88E-02	6.48E-02	6.09E-02	5.14E-02	3.85E-02	3.14E-02	2.71E-02	2.30E-02	2.04E-02	1.70E-02	7.33E-03
2.00	2.27E-02	1.98E-02	1.78E-02	1.60E-02	1.27E-02	9.93E-03	6.71E-03	5.60E-03	4.58E-03	3.95E-03	3.16E-03	9.80E-04
2.50	6.12E-03	5.16E-03	4.42E-03	3.77E-03	2.88E-03	1.62E-03	1.41E-03	1.15E-03	9.04E-04	7.34E-04	5.29E-04	1.09E-04
3.00	1.55E-03	1.26E-03	9.82E-04	7.59E-04	5.57E-04	3.87E-04	2.87E-04	2.28E-04	1.65E-04	1.08E-04	5.40E-05	1.68E-05
4.00	2.29E-05	1.46E-05	7.87E-06	4.10E-06	1.88E-06	6.03E-07	0.0	0.0	0.0	0.0	0.0	0.0
5.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NORMFLUX	1.43E 10	1.01E 10	7.37E 09	5.31E 09	4.23E 09	3.71E 09	3.04E 09	2.91E 09	4.72E 09	6.33E 09	1.42E 09	1.14E 09

** ORBITAL FLUX STUDY WITH COMPOSITE PARTICLE ENVIRONMENTS: VETTES AP5, AE5, AP7, AE4, AP5, FOR SOLAR MAXIMUM **** UNIFLX OF 1973 **
** ELECTRON FLUXES EXPONENTIALLY DECAYED TO 1970.0 WITH LIFETIMES: E.G.STASSINOPOULOS&P.VERZARIU ** CUTOFF TIMES: **
** MAGNETIC COORDINATES B AND L COMPUTED BY INVARA OF 1972 WITH ALLMAG, MODEL 4: CAIN&SWEENEY 120-TERM POGO 8/69 @ TIME= 1975.5 **
** VEHICLE : SAS-C (313) ** INCLINATION= 29.0 ** PERIGEE= 27932KM ** APOGEE= 43815KM ** B/L ORBIT TAPE: 107078 ** PERIOD= 24.600 **

LOW ENERGY PROTONS

** SPECTRAL DISTRIBUTION : NORMALIZED BY FLUX OF ENERGY GREATER THAN .100 MEV **

ENERGY LEVELS >(MEV)	L - B A N D S (M A G N E T I C				S H E L L		P A R A M E T E R		I N	E A R T H	R A D I I)	L - B A N D S
	*1.0-1.20	*1.2-1.40	*1.4-1.60	*1.6-1.80	*1.8-2.00	*2.0-2.20	*2.2-2.40	*2.4-2.60	*2.6-2.80	*2.8-3.00	*3.0-3.20	*3.2-3.40
.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
.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
.900	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1.10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1.50	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2.50	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3.50	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

ENERGY LEVELS >(MEV)	L - B A N D S (M A G N E T I C				S H E L L		P A R A M E T E R		I N	E A R T H	R A D I I)	L - B A N D S
	*3.4-3.60	*3.6-3.80	*3.8-4.00	*4.0-4.20	*4.2-4.40	*4.4-4.60	*4.6-4.80	*4.8-5.00	*5.0-5.20	*5.2-5.40	*5.4-5.60	*5.6-5.80
.100	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.00E 00	1.00E 00
.500	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.48E-02	2.79E-02
.900	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	8.47E-04	7.82E-04
1.10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.53E-04	1.31E-04
1.50	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.55E-06	3.67E-06
2.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.02E-08	0.0
2.50	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3.50	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	6.26E 10	6.46E 10

ENERGY LEVELS >(MEV)	L - B A N D S (M A G N E T I C				S H E L L		P A R A M E T E R		I N	E A R T H	R A D I I)	L - B A N D S
	*5.8-6.00	*6.0-6.20	*6.2-6.40	*6.4-6.60	*6.6-6.80	*6.8-7.00	*7.0-7.20	*7.2-7.40	*7.4-7.60	*7.6-7.80	*7.8-8.00	*8.0-OVR*
.100	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
.500	2.62E-02	2.54E-02	2.54E-02	2.48E-02	2.67E-02	3.30E-02	4.14E-02	5.19E-02	6.78E-02	8.44E-02	1.03E-01	1.42E-01
.900	6.87E-04	6.48E-04	6.45E-04	6.10E-04	7.19E-04	1.10E-03	1.73E-03	2.72E-03	4.65E-03	7.24E-03	1.08E-02	2.16E-02
1.10	1.11E-04	1.06E-04	1.03E-04	9.72E-05	1.18E-04	2.01E-04	3.54E-04	6.26E-04	1.22E-03	2.13E-03	3.52E-03	8.74E-03
1.50	2.92E-06	2.65E-06	2.62E-06	2.43E-06	3.22E-06	6.75E-06	1.50E-05	3.34E-05	8.51E-05	1.83E-04	3.67E-04	1.24E-03
2.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2.50	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3.50	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=	2.77E 10	2.13E 10	1.29E 10	8.42E 09	5.12E 09	2.13E 09	9.83E 08	5.66E 08	4.71E 08	2.05E 08	5.61E 07	2.78E 07

** ORBITAL FLUX STUDY WITH COMPOSITE PARTICLE ENVIRONMENTS: VETTES AP5, AP6, AP7; AZ4, AE5, FOR SOLAR MAXIMUM **** UNIFLX OF 1973 **
** ELECTRON FLUXES EXPONENTIALLY DECAYED TO 1970. 0 WITH LIFETIMES: E.G.STASSINOPOULOS&P.VERZARIU ** CUTOFF TIMES: **
** MAGNETIC COORDINATES B AND L COMPUTED BY INVARA OF 1972 WITH ALLMAG. MODEL 4: CAIN&SWEENEY 120-TERM POGO 8/69 * TIME= 1975.5 **
** VEHICLE : SAS-D (313) ** INCLINATION= 29DEG ** PERIGEE=27952KM ** APOGEE= 43615KM ** B/L ORBIT TAPE: TD7678 ** PERIOD= 24.000 **

ELECTRONS

** SPECTRAL DISTRIBUTION : NORMALIZED BY FLUX OF ENERGY GREATER THAN .500 MEV **

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*
.0	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
1.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1.50	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2.50	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
4.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
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

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*
.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	7.70E 00	7.65E 00
.500	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.00E 00	1.00E 00
1.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.06E-01	2.86E-01
1.50	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	9.6[illegible]E-02	8.78E-02
2.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.01E-02	2.70E-02
2.50	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	8.38E-03	7.42E-03
3.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.04E-03	1.[illegible]4E-03
4.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.01E-05	3.23E-05
5.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NORMFLUX=	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.71E 10	3.04E 10

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*
.0	7.[illegible]7E 00	8.09E 00	9.67E 00	1.12E 01	1.33E 01	1.63E 01	2.09E 01	2.82E 01	3.96E 01	6.27E 01	1.10E 02	8.2[illegible]E 02
.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
1.00	2.56E-01	2.40E-01	2.36E-01	2.32E-01	2.11E-01	1.71E-01	1.46E-01	1.30E-01	1.16E-01	1.04E-01	9.18E-02	6.[illegible]4E-02
1.50	7.63E-02	6.89E-02	6.47E-02	6.10E-02	5.23E-02	3.89E-02	3.11E-02	2.69E-02	2.32E-02	2.02E-02	1.71E-02	7.26E-03
2.00	2.27E-02	1.98E-02	1.78E-02	1.60E-02	1.29E-02	8.83E-03	6.64E-03	5.56E-03	4.62E-03	3.89E-03	3.17E-03	9.76E-04
2.50	6.13E-03	5.17E-03	4.40E-03	3.79E-03	2.93E-03	1.92E-03	1.39E-03	1.14E-03	9.17E-04	7.17E-04	5.31E-04	1.10E-04
3.00	1.55E-03	1.27E-03	9.77E-04	7.64E-04	5.69E-04	3.[illegible]E-04	2.83E-04	2.25E-04	1.70E-04	1.03E-04	5.44E 05	1.64E-05
4.00	2.29E-05	1.48E-05	7.76E-06	4.25E-06	2.00E-06	6.36E-07	0.0	0.0	0.0	0.0	0.0	0.0
5.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NORMFLUX=	1.45E 10	1.19E 10	8.15E 09	5.95E 09	5.22E 09	4.83E 09	3.93E 09	4.03E 09	6.10E 09	3.96E 09	1.60E 09	1.43E 09

Table 33

** ORBITAL FLUX STUDY WITH COMPOSITE PARTICLE ENVIRONMENTS: VETTE AP5, AP6, AP7; AE4, AE5, FOR SOLAR MAXIMUM **** UNIFLX OF 1973 **
** ELECTRON FLUXES EXPONENTIALLY DECAYED TO 1970.0 WITH LIFETIMES: E.G.STASSINOPOULOS&P.VERZARIU ** CUTOFF TIMES: **
** MAGNETIC COORDINATES B AND L COMPUTED BY INVARA OF 1972 WITH ALLMAG, MODEL #: CAIN&SWEENEY 120-TERM POGO 8/69 * TIME= 1975.5 **
** VEHICLE : GAS-D (110) ** INCLINATION= 65DEG ** PERIGEE=27552KM ** APOGEE= 43615KM ** B/L ORBIT TAPE: TO8136 ** PERIOD= 24.000 **

LOW ENERGY PROTONS

** SPECTRAL DISTRIBUTION : NORMALIZED BY FLUX OF ENERGY GREATER THAN .100 MEV **

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*
.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
.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
.900	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1.10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1.50	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2.50	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3.50	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

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	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.00E 00	1.00E 00	1.00E 00
.500	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.16E-02	2.99E-02	2.67E-02
.900	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.00E-03	8.93E-04	7.12E-04
1.10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.78E-04	1.55E-04	1.16E-04
1.50	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.63E-06	4.63E-06	3.11E-06
2.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	7.51E-08	3.81E-08	0.0
2.50	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3.50	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	3.53E 10	6.68E 10	2.42E 10

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	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
.500	2.47E-02	2.37E-02	2.34E-02	2.26E-02	2.42E-02	2.86E-02	3.40E-02	4.02E-02	4.61E-02	8.94E-02	1.00E-01	1.34E-01
.900	6.03E-04	5.62E-04	5.46E-04	5.12E-04	5.86E-04	8.19E-04	1.16E-03	1.62E-03	2.14E-03	8.14E-03	1.02E-02	1.92E-02
1.10	9.58E-05	8.66E-05	8.35E-05	7.72E-05	9.13E-05	1.39E-04	2.16E-04	3.26E-04	4.62E-04	2.47E-03	3.27E-03	7.64E-03
1.50	2.37E-06	2.06E-06	1.96E-06	1.75E-06	2.22E-06	4.00E-06	7.43E-06	1.32E-05	1.57E-05	2.27E-04	3.32E-04	9.10E-04
2.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2.50	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3.50	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=	1.64E 10	9.57E 09	4.37E 09	3.47E 09	1.93E 09	7.69E 08	2.89E 08	7.44E 07	5.41E 07	1.32E 08	7.60E 07	2.89E 07

Table 34

** ORBITAL FLUX STUDY WITH COMPOSITE PARTICLE ENVIRONMENTS: VETTE AP5, AP6, AP7; AE4, AE5, FOR SOLAR MAXIMUM *** UNIFLX OF 1973 **
** ELECTRON FLUXES EXPONENTIALLY DECAYED TO 1970.0 WITH LIFETIMES: E.G.STASSINOPOULOS&VERZARIU ** CUTOFF TIMES: **
** MAGNETIC COORDINATES B AND L COMPUTED BY INVAR OF 1972 WITH ALLMAG, MODEL 4: CAIN&SWEENEY 120-TERM POGO 8/69 * TIME= 1975.5 **
** VEHICLE : SAS-D (110) ** INCLINATION= 45DEG ** PERIGEE=27042KM ** APOGEE= 43615KM ** B/L ORBIT TAPE: TDB136 ** PERIOD= 24.000 **

ELECTRONS

** SPECTRAL DISTRIBUTION : NORMALIZED BY FLUX OF ENERGY GREATER THAN .500 MEV **

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*
.0	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
1.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.	0.0
1.50	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2.50	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
4.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
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

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*
.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	7.64E 00	7.69E 00	7.65E 00
.500	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.00E 00	1.00E 00	1.00E 00
1.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.20E-01	3.14E-01	2.86E-01
1.50	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.04E-01	9.99E-02	8.78E-02
2.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.38E-02	3.18E-02	2.70E-02
2.50	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	9.90E-03	9.01E-03	7.42E-03
3.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.48E-03	2.21E-03	1.84E-03
4.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.27E-05	4.54E-05	3.23E-05
5.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NORMFLUX=	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.31E 10	2.75E 10	1.16E 10

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*
.0	7.37E 00	8.26E 00	9.53E 00	1.13E 01	1.34E 01	1.42E 01	2.10E 01	2.75E 01	3.66E 01	7.49E 01	1.09E 02	7.58E 02
.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
1.00	2.56E-01	2.39E-01	2.35E-01	2.32E-01	2.10E-01	1.72E-01	1.44E-01	1.32E-01	1.19E-01	1.00E-01	9.22E-02	6.17E-02
1.50	7.61E-02	6.64E-02	6.46E-02	6.08E-02	5.17E-02	3.90E-02	3.11E-02	2.72E-02	2.33E-02	1.91E-02	1.71E-02	7.31E-03
2.00	2.27E-02	1.96E-02	1.77E-02	1.59E-02	1.28E-02	8.86E-03	6.53E-03	5.64E-03	4.31E-03	3.53E-03	3.19E-03	9.76E-04
2.50	6.10E-03	5.07E-03	4.39E-03	3.76E-03	2.83E-03	1.92E-03	1.39E-03	1.16E-03	9.64E-04	6.48E-04	5.36E-04	1.08E-04
3.00	1.54E-03	1.23E-03	9.71E-04	7.52E-04	3.41E-04	3.88E-04	2.83E-04	2.31E-04	1.93E-04	8.27E-05	5.54E-05	1.68E-05
4.00	2.29E-05	1.37E-05	7.62E-06	4.11E-06	1.95E-06	5.99E-07	0.0	0.0	0.0	0.0	0.0	0.0
5.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NORMFLUX=	6.65E 09	5.31E 09	3.00E 09	2.31E 09	1.79E 09	1.36E 09	9.60E 09	4.04E 08	4.65E 08	2.88E 09	2.08E 09	1.60E 09

Table 35

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*****************************************************************************************************************
** ORBITAL FLUX STUDY WITH COMPOSITE PARTICLE ENVIRONMENTS: VETTES AP5, AP6, AP7; AE4, AE5, FOR SOLAR MAXIMUM **** UNIFLX OF 1973 **
** ELECTRON FLUXES EXPONENTIALLY DECAYED TO 1970. 0 WITH LIFETIMES: E.G.STASSINOPOULOS&P.VERZARIU ** CUTOFF TIMES:                **
** MAGNETIC COORDINATES B AND L COMPUTED BY INVARA OF 1972 WITH ALLMAG, MODEL 4: CAINGSWEENEY 120-TERM POGO 8/69 * TIME= 1975.5 **
** VEHICLE 1 SAS-D (200) ** INCLINATION= 45DEG ** PERIGEE=27952KM ** APOGEE= 43615KM ** B/L ORBIT TAPE: TDR050 ** PERIOD= 24.000 **
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**************************** LOW ENERGY PROTONS ****************************

** SPECTRAL DISTRIBUTION : NORMALIZED BY FLUX OF ENERGY GREATER THAN .100 MEV **

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*
.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
.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
.900	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1.10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1.50	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2.50	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3.50	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

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	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.00E 00	1.00E 00
.500	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.99E-02	2.74E-02
.900	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	8.95E-04	7.52E-04
1.10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.55E-04	1.25E-04
1.50	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.63E-06	3.43E-06
2.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.84E-09	0.0
2.50	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3.50	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	5.78E 10	3.75E 10

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	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
.500	2.66E-02	2.48E-02	2.40E-02	2.35E-02	2.48E-02	3.01E-02	3.56E-02	4.26E-02	4.73E-02	5.74E-02	1.04E-01	1.34E-01
.900	6.53E-04	6.00E-04	5.79E-04	5.51E-04	6.21E-04	5.08E-04	1.27E-03	1.82E-03	2.26E-03	3.32E-03	1.10E-02	1.92E-02
1.10	1.04E-04	9.40E-05	8.89E-05	8.48E-05	9.83E-05	1.68E-04	2.41E-04	3.78E-04	4.95E-04	7.99E-04	3.59E-03	7.52E-03
1.50	2.67E-06	2.31E-06	2.17E-06	1.99E-06	2.48E-05	4.80E-06	8.68E-06	1.64E-05	2.01E-05	3.52E-05	3.80E-04	9.48E-04
2.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2.50	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3.50	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=	1.73E 10	1.17E 10	6.86E 09	4.36E 09	2.24E 09	7.14E 08	2.84E 08	9.46E 07	4.28E 07	2.12E 07	1.13E 08	3.52E 07

Tab' 36

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****************************************************************************************************************************
** ORBITAL FLUX STUDY WITH COMPOSITE PARTICLE ENVIRONMENTS: VETTES AP5, AP6, AP7; AE4, AE5, FOR SOLAR MAXIMUM **** UNIFLX OF 1973 **
** ELECTRON FLUXES EXPONENTIALLY DECAYED TO 1970. 0 WITH LIFETIMES: E.G.STASSINOPOULOS&P.VERZARIU ** CUTOFF TIMES:        **
** MAGNETIC COORDINATES B AND L COMPUTED BY INVARA OF 1972 WITH ALLMAG, MODEL  A:  CAIN&SWEENEY 120-TERM POGO 8/69 * TIME= 1975.5 **
**-VEHICLE 1-SAS-D (290)  ** INCLINATION= 48DEG ** PERIGEE=27952KM ** APOGEE= 43615KM ** S/L ORBIT TAPE, TD8050 ** PERIOD= 24.000 **
****************************************************************************************************************************
                    ****************************      ELECTRONS      ****************************
                    ** SPECTRAL DISTRIBUTION : NORMALIZED BY FLUX OF ENERGY GREATER THAN .500 MEV **
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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*
.0	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
1.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1.50	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2.50	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
4.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
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

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*
.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	7.71E 00	7.65E 00
.500	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.00E 00	1.00E 00
1.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.10E-01	2.84E-01
1.50	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	9.74E-02	8.72E-02
2.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.06E-02	2.68E-02
2.50	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	8.84E-03	7.36E-03
3.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.08E-03	1.82E-03
4.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.16E-06	3.18E-05
5.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NORMFLUX=	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.47E 10	1.78E 10

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*
.0	7.57E 00	8.08E 00	9.54E 00	1.13E 01	1.35E 01	1.65E 01	2.13E 01	2.83E 01	3.67E 01	6.15E 01	1.10E 02	6.91E 02
.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
1.00	2.56E-01	2.40E-01	2.36E-01	2.32E-01	2.07E-01	1.68E-01	1.45E-01	1.30E-01	1.19E-01	1.05E-01	9.18E-02	6.30E-02
1.50	7.63E-02	6.89E-02	6.44E-02	4.09E-02	5.09E-02	3.79E-02	3.08E-02	2.69E-02	2.38E-02	2.03E-03	1.71E-02	7.69E-03
2.00	2.27E-02	1.98E-02	1.78E-02	1.60E-02	1.25E-02	8.53E-03	6.38E-03	5.54E-03	4.78E-03	3.94E-03	3.17E-03	1.05E-03
2.50	6.13E-03	5.17E-03	4.42E-03	3.77E-03	2.82E-03	1.84E-03	1.38E-03	1.14E-03	9.56E-04	[illegible]	8.31E-04	1.21E-04
3.00	1.35E-03	1.27E-03	9.81E-04	7.57E-04	5.49E-04	3.74E-04	2.80E-04	2.25E-04	1.82E-04	1.09E-04	5.42E-05	1.77E-05
4.00	2.29E-05	1.48E-05	7.85E-06	4.14E-06	1.84E-06	5.34E-07	0.0	0.0	0.0	0.0	0.0	0.0
5.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NORMFLUX=	9.04E 09	6.49E 09	4.42E 09	2.95E 09	2.20E 09	1.40E 09	9.93E 08	5.54E 08	3.80E 08	2.86E 08	3.23E 09	1.49E 09

** ORBITAL FLUX STUDY WITH COMPOSITE PARTICLE ENVIRONMENTS: VETTES AP5, AP6, AP7; AE4, AE5, FOR SOLAR MAXIMUM **** UNIFLX OF 1973 **
** ELECTRON FLUXES EXPONENTIALLY DECAYED TO 1970. 0 WITH LIFETIMES: E.G.STASSINOPOULOS&P.VERZARIU ** CUTOFF TIMES: **
** MAGNETIC COORDINATES B AND L COMPUTED BY INVARA OF 1972 WITH ALLMAG, MODEL 4: CAIN&SWEENEY 120-TERM POGO 8/69 * TIME= 1975.5 **
** VEHICLE : SAS-D (310) ** INCLINATION= 45DEG ** PERIGEE=27952KM ** APOGEE= 43615KM ** B/L ORBIT TAPE: TD7678 ** PERIOD= 24.000 **

LOW ENERGY PROTONS

** SPECTRAL DISTRIBUTION : NORMALIZED BY FLUX OF ENERGY GREATER THAN .100 MEV **

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*
.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
.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
.900	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1.10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1.50	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2.50	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3.50	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

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	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.00E 00	1.00E 00
.500	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.99E-02	2.76E-02
.930	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	8.94E-04	7.60E-04
1.10	0.0	0.0	0.C	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.55E-04	1.26E-04
1.50	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.63E-06	3.49E-06
2.0C	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.00E-08	0.0
2.50	C.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3.50	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	5.43E 10	4.05E 10

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	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
.500	2.55E-02	2.46E-02	2.41E-02	2.33E-02	2.50E-02	2.95E-02	3.06E-02	4.10E-02	4.91E-02	5.93E-02	1.06E-01	1.38E-01
.900	6.49E-04	6.06E-04	5.82E-04	5.42E-04	6.26E-04	8.76E-04	1.21E-03	1.69E-03	2.43E-03	3.64E-03	1.13E-02	1.95E-02
1.10	1.04E-04	9.52E-05	9.04E-05	8.27E-05	9.92E-05	1.51E-04	2.26E-04	3.46E-04	5.43E-04	8.67E-04	3.72E-03	7.59E-03
1.50	2.64E-06	2.35E-06	2.18E-06	1.93E-06	2.50E-06	4.52E-06	7.98E-06	1.44E-05	2.38E-05	3.91E-05	3.97E-04	9.62E-04
2.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2.50	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0
3.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3.50	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=	1.88E 10	1.01E 10	6.89E 09	4.42E 09	2.46E 09	7.94E 08	3.28E 08	1.30E 08	4.94E 07	1.63E 07	1.13E 08	3.83E 07

Table 8

** ORBITAL FLUX STUDY WITH COMPOSITE PARTICLE ENVIRONMENTS: VETTES AP5, AP6, AP7; AE4, AE5, FOR SOLAR MAXIMUM **** UNIFLX OF 1973 **
** ELECTRON FLUXES EXPONENTIALLY DECAYED TO 1970. 0 WITH LIFETIMES: E.G.STASSINOPOULOS&P.VERZARIU ** CUTOFF TIMES: **
** MAGNETIC COORDINATES B AND L COMPUTED BY INVARA OF 1972 WITH ALLMAG, MODEL 4: CAIN&SWEENEY 120-TERM POGO 8/69 * TIME= 1975.5 **
** VEHICLE : SAS-D (310) ** INCLINATION= 45DEG ** PERIGEE=37952KM ** APOGEE= 43615KM ** B/L ORBIT TAPE: TD7678 ** PERIOD= 24.000 **

ELECTRONS

** SPECTRAL DISTRIBUTION : NORMALIZED BY FLUX OF ENERGY GREATER THAN .500 MEV **

ENERGY LEVELS >(MEV) — L-BANDS (MAGNETIC SHELL PARAMETER IN EARTH RADII) L-BANDS

ENERGY LEVELS >(MEV)	*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*
.0	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
1.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1.50	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2.50	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
4.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
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

ENERGY LEVELS >(MEV) — L-BANDS (MAGNETIC SHELL PARAMETER IN EARTH RADII) L-BANDS

ENERGY LEVELS >(MEV)	*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*
.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	7.71E 00	7.65E 00
.500	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.00E 00	1.00E 00
1.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.09E-01	2.85E-01
1.50	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	9.70E-02	8.75E-02
2.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.05E-02	2.69E-02
2.50	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	8.50E-03	7.38E-03
3.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.07E-03	1.83E-03
4.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.12E-05	3.20E-05
5.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NORMFLUX=	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.33E 10	1.92E 10

ENERGY LEVELS >(MEV) — L-BANDS (MAGNETIC SHELL PARAMETER IN EARTH RADII) L-BANDS

ENERGY LEVELS >(MEV)	*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*
.0	7.56E 00	8.15E 00	9.51E 00	1.12E 01	1.33E 01	1.62E 01	2.04E 01	2.74E 01	3.84E 01	6.74E 01	1.13E 02	6.59E 02
.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
1.00	2.54E-01	2.40E-01	2.36E-01	2.32E-01	2.11E-01	1.72E-01	1.47E-01	1.32E-01	1.17E-01	1.03E-01	9.11E-02	6.27E-02
1.50	7.47E-02	6.87E-02	6.49E-02	6.11E-02	5.22E-02	3.90E-02	3.16E-02	2.73E-02	2.35E-02	1.98E-02	1.69E-02	7.56E-03
2.00	2.25E-02	1.97E-02	1.78E-02	1.61E-02	1.29E-02	8.86E-03	6.76E-03	5.65E-03	4.69E-03	3.82E-03	3.13E-03	1.02E-03
2.50	6.06E-03	5.13E-03	4.43E-03	3.80E-03	2.93E-03	1.93E-03	1.42E-03	1.16E-03	9.35E-04	6.98E-04	5.21E-04	1.15E-04
3.00	1.53E-03	1.25E-03	9.86E-04	7.67E-04	5.68E-04	3.88E-04	2.90E-04	2.31E-04	1.76E-04	9.88E-05	5.21E-05	1.74E-05
4.00	2.25E-05	1.42E-05	7.94E-06	4.31E-06	2.00E-06	7.06E-07	0.0	0.0	0.0	0.0	0.0	0.0
5.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NORMFLUX=	9.93E 09	5.66E 09	4.46E 09	2.95E 09	2.32E 09	1.45E 09	1.05E 09	7.10E 08	4.61E 08	2.64E 08	3.32E 09	1.86E 09

Table 39

** ORBITAL FLUX STUDY WITH COMPOSITE PARTICLE ENVIRONMENTS: VETTES AP5, AP6, AP7; AE4, AE5, FOR SOLAR MAXIMUM **** UNIFLX OF 1973 **
** ELECTRON FLUXES EXPONENTIALLY DECAYED TO 1970. 0 WITH LIFETIMES: E.G.STASSINOPOULOS&P.VERZARIU ** CUTOFF TIMES: **
** MAGNETIC COORDINATES B AND L COMPUTED BY INVARA OF 1972 WITH ALLMAG, MODEL 4: CAIN&SWEENEY 120-TERM POGO 8/69 * TIME= 1975.5 **
** VEHICLE : SAS-D (110) ** INCLINATION= 0DEG ** PERIGEE=35863KM ** APOGEE= 35863KM ** B/L ORBIT TAPE: TD7512 ** PERIOD= 24.000 **

LOW ENERGY PROTONS

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

ENERGY RANGES (MEV)	AVERAGED TOTAL FLUX #/CM**2/SEC	AVERAGED TOTAL FLUX #/CM**2/DAY	SPECTRUM PER CENT
.100-.500	1.105E 06	9.548E 10	96.471
.500-.900	3.899E 04	3.369E 09	3.404
.900-1.10	1.158E 03	1.001E 08	0.101
1.10-1.50	2.585E 02	2.233E 07	0.023
1.50-2.00	9.455E 00	8.169E 05	0.001
2.00-2.50	0.0	0.0	0.0
2.50-3.00	0.0	0.0	0.0
3.00-3.50	0.0	0.0	0.0
3.50-OVER	0.0	0.0	0.0
TOTAL	1.145E 06	9.897E 10	100.000

*** COMPOSITE ORBIT SPECTRUM ***

ENERGY LEVELS >(MEV)	AVERAGED INTEG.FLUX #/CM**2/SEC	AVERAGED INTEG.FLUX #/CM**2/DAY
.100	1.145E 06	9.897E 10
.300	2.152E 05	1.039E 10
.500	4.042E 04	3.492E 09
.700	7.593E 03	6.560E 08
.900	1.426E 03	1.232E 08
1.10	2.679E 02	2.315E 07
1.30	5.033E 01	4.349E 06
1.50	9.455E 00	8.169E 05
1.75	1.169E 00	1.010E 05
2.00	0.0	0.0
2.25	0.0	0.0
2.50	0.0	0.0
2.75	0.0	0.0
3.00	0.0	0.0
3.50	0.0	0.0

* EXPOSURE INDEX:ENERGY >.100MEV *

INTENSITY RANGES #/CM**2/SEC	EXPOSURE DURATION (HOURS)	TOTAL # OF ACCUMULATED PARTICLES
ZERO FLUX	0.0	0.0
1.E0-1.E1	0.0	0.0
1.E1-1.E2	0.0	0.0
1.E2-1.E3	0.0	0.0
1.E3-1.E4	0.0	0.0
1.E4-1.E5	0.0	0.0
1.E5-1.E6	0.0	0.0
1.E6-1.E7	23.800	9.897E 10
1.E7-OVER	0.0	0.0
TOTAL	23.800	9.897E 10

** ORBITAL FLUX STUDY WITH COMPOSITE PARTICLE ENVIRONMENTS: VETTES AP5, AP6, AP7: AE4, AE5, FOR SOLAR MAXIMUM **** UNIFLX OF 1973 **
** ELECTRON FLUXES EXPONENTIALLY DECAYED TO 1970. 0 WITH LIFETIMES: E.G.STASSINOPOULOS&P.VERZARIU ** CUTOFF TIMES: **
** MAGNETIC COORDINATES B AND L COMPUTED BY INVARA OF 1972 WITH ALLMAG, MODEL 4: CAIN&SWEENEY 120-TERM POGO 8/69 * TIME= 1975.5 **
** VEHICLE : SAS-D (110) ** INCLINATION= 0DEG ** PERIGEE=35863KM ** APOGEE= 35863KM ** B/L ORBIT TAPE: TD7512 ** PERIOD= 24.000 **

************ ELECTRONS ************

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

ENERGY RANGES (MEV)	AVERAGED TOTAL FLUX #/CM**2/SEC	AVERAGED TOTAL FLUX #/CM**2/DAY	SPECTRUM PER CENT
.0 -.500	3.442E 07	2.574E 12	93.598
.500-1.00	1.935E 06	1.672E 11	5.262
1.00-1.50	3.227E 05	2.789E 10	0.878
1.50-2.00	7.430E 04	6.420E 09	0.202
2.00-2.50	1.737E 04	1.500E 09	0.047
2.50-3.00	3.883E 03	3.355E 08	0.011
3.00-4.00	9.719E 02	8.398E 07	0.003
4.00-5.00	1.858E 00	1.605E 05	0.000
5.00-OVER	0.0	0.0	0.0
TOTAL	3.678E 07	3.178E 12	100.000

*** COMPOSITE ORBIT SPECTRUM ***

ENERGY LEVELS >(MEV)	AVERAGED INTEG.FLUX #/CM**2/SEC	AVERAGED INTEG.FLUX #/CM**2/DAY
.0	3.678E 07	3.178E 12
.250	7.532E 06	6.508E 11
.500	2.354E 06	2.034E 11
.750	9.935E 05	8.584E 10
1.00	4.193E 05	3.622E 10
1.25	2.012E 05	1.738E 10
1.50	9.652E 04	8.340E 09
1.75	4.631E 04	4.002E 09
2.00	2.222E 04	1.920E 09
2.50	4.857E 03	4.197E 08
3.00	9.738E 02	8.414E 07
3.50	1.059E 02	9.150E 06
4.00	1.858E 00	1.605E 05
4.50	0.0	0.0
5.00	0.0	0.0

* EXPOSURE INDEX:ENERGY >.500MEV *

INTENSITY RANGES #/CM**2/SEC	EXPOSURE DURATION (HOURS)	TOTAL # OF ACCUMULATED PARTICLES
ZERO FLUX	0.0	0.0
1.E0-1.E1	0.0	0.0
1.E1-1.E2	0.0	0.0
1.E2-1.E3	0.0	0.0
1.E3-1.E4	0.0	0.0
1.E4-1.E5	0.0	0.0
1.E5-1.E6	0.0	0.0
1.E6-1.E7	23.800	2.034E 11
1.E7-OVER	0.0	0.0
TOTAL	23.800	2.034E 11

Table 4H

** ORBITAL FLUX STUDY WITH COMPOSITE PARTICLE ENVIRONMENTS: VETTES AP5, AP6, AP7; AE4, AE5, FOR SOLAR MAXIMUM **** UNIFLX OF 1973 **
** ELECTRON FLUXES EXPONENTIALLY DECAYED TO 1970. 0 WITH LIFETIMES: T.G.STASSINOPOULOS&P.VERZARIU ** CUTOFF TIMES: **
** MAGNETIC COORDINATES B AND L COMPUTED BY INVARA OF 1972 WITH ALLMAG, MODEL 4: CAINESWEENEY 120-TERM POGO 8/69 * TIME= 1975.5 **
** VEHICLE : SAS-D (200) ** INCLINATION= 0DEG ** PERIGEE=35863KM ** APOGEE= 35863KM ** B/L ORBIT TAPE: TD7257 ** PERIOD= 24.000 **

************ LOW ENERGY PROTONS ************

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

ENERGY RANGES (MEV)	AVERAGED TOTAL FLUX #/CM**2/SEC	AVERAGED TOTAL FLUX #/CM**2/DAY	SPECTRUM PER CENT
.100-.500	5.397E 05	4.663E 10	95.857
.500-.900	2.236E 04	1.932E 09	3.972
.900-1.10	7.698E 02	6.651E 07	0.137
1.10-1.50	1.886E 02	1.629E 07	0.033
1.50-2.00	8.151E 00	7.043E 05	0.001
2.00-2.50	0.0	0.0	0.0
2.50-3.00	0.0	0.0	0.0
3.00-3.50	0.0	0.0	0.0
3.50-OVER	0.0	0.0	0.0
TOTAL	5.630E 05	4.865E 10	100.000

*** COMPOSITE ORBIT SPECTRUM ***

ENERGY LEVELS >(MEV)	AVERAGED INTEG.FLUX #/CM**2/SEC	AVERAGED INTEG.FLUX #/CM**2/DAY
.100	5.630E 05	4.865E 10
.300	1.146E 05	9.902E 09
.500	2.333E 04	2.016E 09
.700	4.748E 03	4.102E 08
.900	9.665E 02	8.351E 07
1.10	1.967E 02	1.700E 07
1.30	4.005E 01	3.460E 06
1.50	8.151E 00	7.043E 05
1.75	1.114E 00	9.629E 04
2.00	0.0	0.0
2.25	0.0	0.0
2.50	0.0	0.0
2.75	0.0	0.0
3.00	0.0	0.0
3.50	0.0	0.0

* EXPOSURE INDEX:ENERGY >.100MEV *

INTENSITY RANGES #/CM**2/SEC	EXPOSURE DURATION (HOURS)	TOTAL # OF ACCUMULATED PARTICLES
ZERO FLUX	0.0	0.0
1.E0-1.E1	0.0	0.0
1.E1-1.E2	0.0	0.0
1.E2-1.E3	0.0	0.0
1.E3-1.E4	0.0	0.0
1.E4-1.E5	0.0	0.0
1.E5-1.E6	23.000	4.865E 10
1.E6-1.E7	0.0	0.0
1.E7-OVER	0.0	0.0
TOTAL	23.000	4.865E 10

Table #2

** ORBITAL FLUX STUDY WITH COMPOSITE PARTICLE ENVIRONMENTS: VETTES AP5, AP6, AP7; AE4, AE5, FOR SOLAR MAXIMUM **** UNIFLX OF 1973 **
** ELECTRON FLUXES EXPONENTIALLY DECAYED TO 1970. 0 WITH LIFETIMES: E.G.STASSINOPOULOS&P.VERZARIU ** CUTOFF TIMES: **
** MAGNETIC COORDINATES B AND L COMPUTED BY INVARA OF 1972 WITH ALLMAG, MODEL 4: CAIN&SWEENEY 120-TERM POGO 8/69 * TIME= 1975.5 **
** VEHICLE : SAS-D (290) ** INCLINATION= 0DEG ** PERIGEE=35863KM ** APOGEE= 35863KM ** B/L ORBIT TAPE: TD7257 ** PERIOD= 24.000 **

ELECTRONS

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

ENERGY RANGES (MEV)	AVERAGED TOTAL FLUX #/CM**2/SEC	AVERAGED TOTAL FLUX #/CM**2/DAY	SPECTRUM PER CENT
.0 -.500	3.402E 07	2.940E 12	94.546
.500-1.00	1.662E 06	1.436E 11	4.618
1.00-1.50	2.357E 05	2.037E 10	0.655
1.50-2.00	5.100E 04	4.407E 09	0.142
2.00-2.50	1.110E 04	9.590E 08	0.031
2.50-3.00	2.373E 03	2.050E 08	0.007
3.00-4.00	6.132E 02	5.298E 07	0.002
4.00-5.00	0.0	0.0	0.0
5.00-OVER	0.0	0.0	0.0
TOTAL	3.590E 07	3.109E 12	100.000

*** COMPOSITE ORBIT SPECTRUM ***

ENERGY LEVELS >(MEV)	AVERAGED INTEG.FLUX #/CM**2/SEC	AVERAGED INTEG.FLUX #/CM**2/DAY
.0	3.598E 07	3.109E 12
.250	6.604E 06	5.706E 11
.500	1.963E 06	1.696E 11
.750	7.683E 05	6.639E 10
1.00	3.008E 05	2.599E 10
1.25	1.399E 05	1.209E 10
1.50	6.509E 04	5.624E 09
1.75	3.028E 04	2.616E 09
2.00	1.409E 04	1.217E 09
2.50	2.986E 03	2.580E 08
3.00	6.132E 02	5.298E 07
3.50	5.784E 01	4.997E 06
4.00	0.0	0.0
4.50	0.0	0.0
5.00	0.0	0.0

* EXPOSURE INDEX:ENERGY >.500MEV *

INTENSITY RANGES #/CM**2/SEC	EXPOSURE DURATION (HOURS)	TOTAL # OF ACCUMULATED PARTICLES
ZERO FLUX	0.0	0.0
1.E0-1.E1	0.0	0.0
1.E1-1.E2	0.0	0.0
1.E2-1.E3	0.0	0.0
1.E3-1.E4	0.0	0.0
1.E4-1.E5	0.0	0.0
1.E5-1.E6	0.0	0.0
1.E6-1.E7	23.800	1.696E 11
1.E7-OVER	0.0	0.0
TOTAL	23.800	1.696E 11

Table 43

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** ORBITAL FLUX STUDY WITH COMPOSITE PARTICLE ENVIRONMENTS: VETTES AP5, AP6, AP7; AE4, AE5, FOR SOLAR MAXIMUM **** UNIFLX OF 1973 **
** ELECTRON FLUXES EXPONENTIALLY DECAYED TO 1970. 0 WITH LIFETIMES: E.G.STASSINOPOULOS&P.VERZARIU ** CUTOFF TIMES:              **
** MAGNETIC COORDINATES B AND L COMPUTED BY INVARA OF 1972 WITH ALLMAG, MODEL  4:  CAIN&SWEENEY 120-TERM POGO 8/69 * TIME= 1975.5 **
** VEHICLE : SAS-D (310)  ** INCLINATION=  0DEG ** PERIGEE=35863KM ** APOGEE= 35863KM ** B/L ORBIT TAPE: T07407 ** PERIOD= 24.000 **
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************ LOW ENERGY PROTONS ************

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

ENERGY RANGES (MEV)	AVERAGED TOTAL FLUX #/CM**2/SEC	AVERAGED TOTAL FLUX #/CM**2/DAY	SPECTRUM PER CENT
.100-.500	6.449E 05	5.572E 10	95.988
.500-.900	2.587E 04	2.236E 09	3.851
.900-1.10	8.648E 02	7.472E 07	0.129
1.10-1.50	2.079E 02	1.796E 07	0.031
1.50-2.00	8.689E 00	7.508E 05	0.001
2.00-2.50	0.0	0.0	0.0
2.50-3.00	0.0	0.0	0.0
3.00-3.50	0.0	0.0	0.0
3.50-OVER	0.0	0.0	0.0
TOTAL	6.719E 05	5.805E 10	100.000

*** COMPOSITE ORBIT SPECTRUM ***

ENERGY LEVELS >(MEV)	AVERAGED INTEG.FLUX #/CM**2/SEC	AVERAGED INTEG.FLUX #/CM**2/DAY
.100	6.719E 05	5.805E 10
.300	1.346E 05	1.163E 10
.500	2.696E 04	2.329E 09
.700	5.399E 03	4.665E 08
.900	1.081E 03	9.343E 07
1.10	2.166E 02	1.871E 07
1.30	4.338E 01	3.748E 06
1.50	8.689E 00	7.508E 05
1.75	1.164E 00	1.006E 05
2.00	0.0	0.0
2.25	0.0	0.0
2.50	0.0	0.0
2.75	0.0	0.0
3.00	0.0	0.0
3.50	0.0	0.0

* EXPOSURE INDEX:ENERGY >.100MEV *

INTENSITY RANGES #/CM**2/SEC	EXPOSURE DURATION (HOURS)	TOTAL # OF ACCUMULATED PARTICLES
ZERO FLUX	0.0	0.0
1.E0-1.E1	0.0	0.0
1.E1-1.E2	0.0	0.0
1.E2-1.E3	0.0	0.0
1.E3-1.E4	0.0	0.0
1.E4-1.E5	0.0	0.0
1.E5-1.E6	23.800	5.805E 10
1.E6-1.E7	0.0	0.0
1.E7-OVER	0.0	0.0
TOTAL	23.800	5.805E 10

Table 44

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** ORBITAL FLUX STUDY WITH COMPOSITE PARTICLE ENVIRONMENTS: VETTES AP5, AP6, AP7; AE4, AE5, FOR SOLAR MAXIMUM **** UNIFLX OF 1973 **
** ELECTRON FLUXES EXPONENTIALLY DECAYED TO 1970. 0 WITH LIFETIMES: E.G.STASSINOPOULOS&P.VERZARIU ** CUTOFF TIMES:          **
** MAGNETIC COORDINATES B AND L COMPUTED BY INVARA OF 1972 WITH ALLMAG, MODEL  4:  CAINGSWEENEY 120-TERM POGO 8/69 * TIME= 1975.5 **
** VEHICLE : SAS-D (310)  ** INCLINATION=  0DEG ** PERIGEE=35863KM ** APOGEE= 35863KM ** B/L ORBIT TAPE: TD7407 ** PERIOD= 24.000 **
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                                        ************        ELECTRONS        ************
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****** SPECTRUM IN PERCENT DELTA ENERGY ******

ENERGY RANGES (MEV)	AVERAGED TOTAL FLUX #/CM**2/SEC	AVERAGED TOTAL FLUX #/CM**2/DAY	SPECTRUM PER CENT
.0 -.500	3.458E 07	2.988E 12	94.293
.500-1.00	1.762E 06	1.522E 11	4.805
1.00-1.50	2.584E 05	2.233E 10	0.705
1.50-2.00	5.659E 04	4.890E 09	0.154
2.00-2.50	1.249E 04	1.079E 09	0.034
2.50-3.00	2.691E 03	2.325E 08	0.007
3.00-4.00	6.939E 02	5.995E 07	0.002
4.00-5.00	0.0	0.0	0.0
5.00-OVER	0.0	0.0	0.0
TOTAL	3.667E 07	3.169E 12	100.000

*** COMPOSITE ORBIT SPECTRUM ***

ENERGY LEVELS >(MEV)	AVERAGED INTEG.FLUX #/CM**2/SEC	AVERAGED INTEG.FLUX #/CM**2/DAY
.0	3.667E 07	3.169E 12
.250	6.095E 06	5.267E 11
.500	2.093E 06	1.808E 11
.750	8.322E 05	7.190E 10
1.00	3.309E 05	2.859E 10
1.25	1.548E 05	1.338E 10
1.50	7.246E 04	6.261E 09
1.75	3.391E 04	2.930E 09
2.00	1.587E 04	1.371E 09
2.50	3.388E 03	2.928E 08
3.00	6.939E 02	5.995E 07
3.50	6.691E 01	5.781E 06
4.00	0.0	0.0
4.50	0.0	0.0
5.00	0.0	0.0

* EXPOSURE INDEX(ENERGY >.500MEV) *

INTENSITY RANGES #/CM**2/SEC	EXPOSURE DURATION (HOURS)	TOTAL # OF ACCUMULATED PARTICLES
ZERO FLUX	0.0	0.0
1.E0-1.E1	0.0	0.0
1.E1-1.E2	0.0	0.0
1.E2-1.E3	0.0	0.0
1.E3-1.E4	0.0	0.0
1.E4-1.E5	0.0	0.0
1.E5-1.E6	0.0	0.0
1.E6-1.E7	23.800	1.808E 11
1.E7-OVER	0.0	0.0
TOTAL	23.800	1.808E 11

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** ORBITAL FLUX STUDY WITH COMPOSITE PARTICLE ENVIRONMENTS: VETTES AP5, AP6, AP7; AE4, AE5, FOR SOLAR MAXIMUM **** UNIFLX OF 1973 **
** ELECTRON FLUXES EXPONENTIALLY DECAYED TO 1970. 0 WITH LIFETIMES, [illegible]STASSINOPOULOS,VERZARIU ** CUTOFF TIMES:          **
** MAGNETIC COORDINATES B AND L COMPUTED BY INVARA OF 1972 WITH ALLMAG, MODEL 41 CAIN&SWEENEY 120-TERM POGO 8/69 * TIME= 1975.5 **
** VEHICLE : SAS-D (IIC) ** INCLINATION= 29DEG ** PERIGEE=35863KM ** APOGEE= 35863KM ** P/L ORBIT TAPE: TD7512 ** PERIOD= 24.000 **
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************ LOW ENERGY PROTONS ************

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

ENERGY RANGES (MEV)	AVERAGED TOTAL FLUX #/CM**2/SEC	AVERAGED TOTAL FLUX #/CM**2/DAY	SPECTRUM PER CENT
.100-.300	8.110E 05	7.007E 10	96.845
.300-.900	2.534E 04	2.204E 09	3.053
.900-1.10	7.020E 02	6.065E 07	0.084
1.10-1.50	1.519E 02	1.313E 07	0.018
1.50-2.00	5.059E 00	4.420E 05	0.001
2.00-2.50	0.0	0.0	0.0
2.50-3.00	0.0	0.0	0.0
3.00-3.50	0.0	0.0	0.0
3.50-OVER	0.0	0.0	0.0
TOTAL	8.375E 05	7.236E 10	100.000

*** COMPOSITE ORBIT SPECTRUM ***

ENERGY LEVELS >(MEV)	AVERAGED INTEG.FLUX #/CM**2/SEC	AVERAGED INTEG.FLUX #/CM**2/DAY
.100	8.375E 05	7.236E 10
.300	1.483E 05	1.281E 10
.500	2.642E 04	2.283E 09
.700	4.744E 03	4.099E 08
.900	8.594E 02	7.425E 07
1.10	1.574E 02	1.360E 07
1.30	2.920E 01	2.523E 06
1.50	5.469E 00	4.725E 05
1.75	4.661E-01	4.027E 04
2.00	0.0	0.0
2.25	0.0	0.0
2.50	0.0	0.0
2.75	0.0	0.0
3.00	0.0	0.0
3.50	0.0	0.0

* EXPOSURE INDEX:ENERGY >.100MEV *

INTENSITY RANGES #/CM**2/SEC	EXPOSURE DURATION (HOURS)	TOTAL # OF ACCUMULATED PARTICLES
ZERO FLUX	4.700	0.0
1.E0-1.E1	0.800	1.165E 04
1.E1-1.E2	0.900	1.212E 05
1.E2-1.E3	1.000	1.301E 06
1.E3-1.E4	1.100	1.535E 07
1.E4-1.E5	1.300	1.839E 08
1.E5-1.E6	7.150	9.017E 09
1.E6-1.E7	6.850	6.314E 10
1.E7-OVER	0.0	0.0
TOTAL	23.800	7.236E 10

Table 46

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** ORBITAL FLUX STUDY WITH COMPOSITE PARTICLE ENVIRONMENTS: VETIES AP5. AP6. AP7; AE4. AE5. FOR SOLAR MAXIMUM **** UNIFLX OF 1973 **
** ELECTRON FLUXES EXPONENTIALLY DECAYED TO 1970. 0 WITH LIFETIMES: E.G.STASSINOPOULOS&P.VERZARIU ** CUTOFF TIMES:              **
** MAGNETIC COORDINATES B AND L COMPUTED BY INVARA OF 1972 WITH ALLMAG. MODEL  4:  CAIN&SWEENEY 120-TERM POGO 8/69 * TIME= 1975.5 **
** VEHICLE : SAS-D (110)  ** INCLINATION= 29DEG ** PERIGEE=35863KM ** APOGEE= 35863KM ** B/L ORBIT TAPE: TD7512 ** PERIOD= 24.000 **
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                                     ************       ELECTRONS       ************
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****** SPECTRUM IN PERCENT DELTA ENERGY ******

ENERGY RANGES (MEV)	AVERAGED TOTAL FLUX #/CM**2/SEC	AVERAGED TOTAL FLUX #/CM**2/DAY	SPECTRUM PER CENT
.0 -.500	2.877E 07	2.486E 12	95.678
.500-1.00	1.057E 06	9.136E 10	3.516
1.00-1.50	1.847E 05	1.896E 10	0.614
1.50-2.00	4.393E 04	3.796E 09	0.146
2.00-2.50	1.076E 04	9.296E 08	0.036
2.50-3.00	2.484E 03	2.146E 08	0.008
3.00-4.00	6.008E 02	5.191E 07	0.002
4.00-5.00	1.767E 00	1.526E 05	0.000
5.00-OVER	0.0	0.0	0.0
TOTAL	3.007E 07	2.598E 12	100.000

*** COMPOSITE ORBIT SPECTRUM ***

ENERGY LEVELS >(MEV)	AVERAGED INTEG.FLUX #/CM**2/SEC	AVERAGED INTEG.FLUX #/CM**2/DAY
.0	3.007E 07	2.598E 12
.250	4.436E 06	3.833E 11
.500	1.300E 06	1.123E 11
.750	5.584E 05	4.824E 10
1.00	2.425E 05	2.095E 10
1.25	1.183E 05	1.022E 10
1.50	5.778E 04	4.992E 09
1.75	2.827E 04	2.442E 09
2.00	1.385E 04	1.196E 09
2.50	3.087E 03	2.667E 08
3.00	6.026E 02	5.206E 07
3.50	7.439E 01	6.428E 06
4.00	1.767E 00	1.526E 05
4.50	0.0	0.0
5.00	0.0	0.0

* EXPOSURE INDEX:ENERGY >.500MEV *

INTENSITY RANGES #/CM**2/SEC	EXPOSURE DURATION (HOURS)	TOTAL # OF ACCUMULATED PARTICLES
ZERO FLUX	3.800	0.0
1.E0-1.E1	0.350	4.972E 03
1.E1-1.E2	0.350	4.793E 04
1.E2-1.E3	0.800	1.316E 06
1.E3-1.E4	1.050	1.539E 07
1.E4-1.E5	1.550	2.294E 08
1.E5-1.E6	3.400	7.838E 09
1.E6-1.E7	12.500	1.042E 11
1.E7-OVER	0.0	0.0
TOTAL	23.800	1.123E 11

Table #7

** ORBITAL FLUX STUDY WITH COMPOSITE PARTICLE ENVIRONMENTS: VETTES AP5, AP6, AP7; AE4, AE5, FOR SOLAR MAXIMUM **** UNIFLY OF 1973 **
** ELECTRON FLUXES EXPONENTIALLY DECAYED TO 1970. 0 WITH LIFETIMES: S.G.STASSINOPOULOS&P.VERZARIU ** CUTOFF TIMES: **
** MAGNETIC COORDINATES B AND L COMPUTED BY INVARA OF 1972 WITH ALLMAG, MODEL 4: CAIN&SWEENEY 120-TERM POGO 8/69 * TIME= 1975.5 **
** VEHICLE : SAS-D (290) ** INCLINATION= 30DEG ** PERIGEE=35863KM ** APOGEE= 35863KM ** P/L ORBIT TAPE: TD7257 ** PERIOD= 24.000 **

************ LOW ENERGY PROTONS ************

SPECTRUM IN PERCENT DELTA ENERGY

ENERGY RANGES (MEV)	AVERAGED TOTAL FLUX #/CM**2/SEC	AVERAGED TOTAL FLUX #/CM**2/DAY	SPECTRUM PER CENT
.100-.500	4.893E 05	4.227E 10	96.420
.500-.900	1.750E 04	1.512E 09	3.448
.900-1.10	5.388E 02	4.655E 07	0.106
1.10-1.50	1.252E 02	1.082E 07	0.025
1.50-2.00	5.090E 00	4.398E 05	0.001
2.00-2.50	0.0	0.0	0.0
2.50-3.00	0.0	0.0	0.0
3.00-3.50	0.0	0.0	0.0
3.50-OVER	0.0	0.0	0.0
TOTAL	5.074E 05	4.384E 10	100.000

*** COMPOSITE ORBIT SPECTRUM ***

ENERGY LEVELS >(MEV)	AVERAGED INTEG.FLUX #/CM**2/SEC	AVERAGED INTEG.FLUX #/CM**2/DAY
.100	5.074E 05	4.384E 10
.300	9.572E 04	8.270E 09
.500	1.817E 04	1.569E 09
.700	3.472E 03	3.000E 08
.900	6.691E 02	5.781E 07
1.10	1.303E 02	1.126E 07
1.30	2.566E 01	2.217E 06
1.50	5.090E 00	4.398E 05
1.75	4.762E-01	4.115E 04
2.00	0.0	0.0
2.25	0.0	0.0
2.50	0.0	0.0
2.75	0.0	0.0
3.00	0.0	0.0
3.50	0.0	0.0

* EXPOSURE INDEX: ENERGY >.100MEV *

INTENSITY RANGES #/CM**2/SEC	EXPOSURE DURATION (HOURS)	TOTAL # OF ACCUMULATED PARTICLES
ZERO FLUX	4.950	0.0
1.E0-1.E1	0.850	1.204E 04
1.E1-1.E2	0.950	1.333E 05
1.E2-1.E3	1.050	1.458E 06
1.E3-1.E4	1.100	1.523E 07
1.E4-1.E5	2.350	5.141E 08
1.E5-1.E6	7.150	9.915E 09
1.E6-1.E7	5.400	3.379E 10
1.E7-OVER	0.0	0.0
TOTAL	23.800	4.384E 10

** ORBITAL FLUX STUDY WITH COMPOSITE PARTICLE ENVIRONMENTS: VETTES AP5, AP6, AP7; AE4, AE5, FOR SOLAR MAXIMUM **** UNIFLX OF 1973 **
** ELECTRON FLUXES EXPONENTIALLY DECAYED TO 1970. 0 WITH LIFETIMES: E.G.STASSINOPOULOS&P.VERZARIU ** CUTOFF TIMES: **
** MAGNETIC COORDINATES B AND L COMPUTED BY INVARA OF 1972 WITH ALLMAG, MODEL 4: CAIN&SWEENEY 120-TERM POGO 8/71 - TIME= 1975.5 **
** VEHICLE : SAS-D (290) ** INCLINATION= 30DEG ** PERIGEE=35863KM ** APOGEE= 35863KM ** B/L ORBIT TAPE: TD7257 ** PERIOD= 24.000 **

************ ELECTRONS ************

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

ENERGY RANGES (MEV)	AVERAGED TOTAL FLUX #/CM**2/SEC	AVERAGED TOTAL FLUX #/CM**2/DAY	SPECTRUM PER CENT
.0 -.500	2.865E 07	2.475E 12	96.141
.500-1.00	9.5[illegible]7E 05	8.250E 10	3.205
1.00-1.50	1.504E 05	1.300E 10	0.505
1.50-2.00	3.431E 04	2.965E 09	0.115
2.00-2.50	7.987E 03	6.901E 08	0.027
2.50-3.00	1.785E 03	1.542E 08	0.006
3.00-4.00	4.407E 02	3.807E 07	0.001
4.00-5.00	8.223E-01	7.105E 04	0.000
5.00-OVER	0.0	0.0	0.0
TOTAL	2.980E 07	2.574E 12	100.000

*** COMPOSITE ORBIT SPECTRUM ***

ENERGY LEVELS >(MEV)	AVERAGED INTEG.FLUX #/CM**2/SEC	AVERAGED INTEG.FLUX #/CM**2/DAY
.0	2.980E 07	2.574E 12
.250	4.084E 06	3.529E 11
.500	1.150E 06	9.935E 10
.750	4.715E 05	4.074E 10
1.00	1.949E 05	1.684E 10
1.25	9.311E 04	8.045E 09
1.50	4.453E 04	3.847E 09
1.75	2.131E 04	1.842E 09
2.00	1.021E 04	8.824E 08
2.50	2.226E 03	1.923E 08
3.00	4.415E 02	3.815E 07
3.50	4.909E 01	4.241E 06
4.00	8.223E-01	7.105E 04
4.50	0.0	0.0
5.00	0.0	0.0

* EXPOSURE INDEX: ENERGY >.500MEV *

INTENSITY RANGES #/CM**2/SEC	EXPOSURE DURATION (HOURS)	TOTAL # OF ACCUMULATED PARTICLES
ZERO FLUX	4.050	0.0
1.E0-1.E1	0.400	5.691E 03
1.E1-1.E2	0.350	5.491E 04
1.E2-1.E3	0.800	1.373E 06
1.E3-1.E4	1.050	1.525E 07
1.E4-1.E5	1.550	2.149E 08
1.E5-1.E6	3.800	8.750E 09
1.E6-1.E7	11.800	9.037E 10
1.E7-OVER	0.0	0.0
TOTAL	23.800	9.935E 10

Table 40

** ORBITAL FLUX STUDY WITH COMPOSITE PARTICLE ENVIRONMENTS: VETTES AP5, AP6, AP7; AE4, AE5, FOR SOLAR MAXIMUM **** UNTIL END OF 1973 **
** ELECTRON FLUXES EXPONENTIALLY DECAYED TO 1970. 0 WITH LIFETIMES: E.G.STASSINOPOULOS&P.VERZARIU ** CUTOFF TIMES: **
** MAGNETIC COORDINATES B AND L COMPUTED BY INVARA OF 1972 WITH ALLMAG. MODEL 4: CAINESWEENEY 120-TERM POGO 8/69 * TIME= 1975.5 **
** VEHICLE : SAS-D (310) ** INCLINATION= 29DEG ** PERIGEE=35863KM ** APOGEE= 35863KM ** P/L ORBIT TAPE: TD7407 ** PERIOD= 24.000 **

************ LOW ENERGY PROTONS ************

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

ENERGY RANGES (MEV)	AVERAGED TOTAL FLUX #/CM**2/SEC	AVERAGED TOTAL FLUX #/CM**2/DAY	SPECTRUM PER CENT
.100-.500	4.727E 05	4.084E 10	96.364
.500-.900	1.717E 04	1.484E 09	3.500
.900-1.10	5.364E 02	4.635E 07	0.109
1.10-1.50	1.258E 02	1.087E 07	0.026
1.50-2.00	5.195E 00	4.488E 05	0.001
2.00-2.50	0.0	0.0	0.0
2.50-3.00	0.0	0.0	0.0
3.00-3.50	0.0	0.0	0.0
3.50-OVER	0.0	0.0	0.0
TOTAL	4.906E 05	4.238E 10	100.000

*** COMPOSITE ORBIT SPECTRUM ***

ENERGY LEVELS >(MEV)	AVERAGED INTEG.FLUX #/CM**2/SEC	AVERAGED INTEG.FLUX #/CM**2/DAY
.100	4.906E 05	4.238E 10
.300	9.326E 04	8.058E 09
.500	1.784E 04	1.541E 09
.700	3.436E 03	2.969E 08
.900	6.674E 02	5.766E 07
1.10	1.310E 02	1.131E 07
1.30	2.599E 01	2.246E 06
1.50	5.195E 00	4.488E 05
1.75	4.914E-01	4.245E 04
2.00	0.0	0.0
2.25	0.0	0.0
2.50	0.0	0.0
2.75	0.0	0.0
3.00	0.0	0.0
3.50	0.0	0.0

* EXPOSURE INDEX:ENERGY >.100MEV *

INTENSITY RANGES #/CM**2/SEC	EXPOSURE DURATION (HOURS)	TOTAL # OF ACCUMULATED PARTICLES
ZERO FLUX	4.150	0.0
1.E0-1.E1	1.000	1.544E 04
1.E1-1.E2	1.000	1.397E 05
1.E2-1.E3	1.150	1.552E 06
1.E3-1.E4	1.200	1.671E 07
1.E4-1.E5	2.550	5.631E 08
1.E5-1.E6	7.450	1.050E 10
1.E6-1.E7	5.200	3.131E 10
1.E7-OVER	0.0	0.0
TOTAL	23.800	4.238E 10

** ORBITAL FLUX STUDY WITH COMPOSITE PARTICLE ENVIRONMENTS: VETTES AP5, AP6, AP7; AE4, AE5, FOR SOLAR MAXIMUM **** UNIFLX OF 1973 **
** ELECTRON FLUXES EXPONENTIALLY DECAYED TO 1970. 0 WITH LIFETIMES: E.G.STASSINOPOULOS&P.VERZARIU ** CUTOFF TIMES: **
** MAGNETIC COORDINATES B AND L COMPUTED BY INVARA OF 1972 WITH ALLMAG, MODEL 4: CAIN&SWEENEY 120-TERM POGO 8/69 * TIME= 1975.5 **
** VEHICLE : SAS-D (310) ** INCLINATION= 29DEG ** PERIGEE=35863KM ** APOGEE= 35863KM ** B/L ORBIT TAPE: TD7407 ** PERIOD= 24.000 **

ELECTRONS

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

ENERGY RANGES (MEV)	AVERAGED TOTAL FLUX #/CM**2/SEC	AVERAGED TOTAL FLUX #/CM**2/DAY	SPECTRUM PER CENT
.0 -.500	3.188E 07	2.755E 12	96.475
.500-1.00	9.699E 05	8.380E 10	2.935
1.00-1.50	1.508E 05	1.303E 10	0.456
1.50-2.00	3.423E 04	2.958E 09	0.104
2.00-2.50	7.920E 03	6.84[illegible]E 08	0.024
2.50-3.00	1.763E 03	1.523E 08	0.005
3.00-4.00	4.362E 02	3.769E 07	0.001
4.00-5.00	7.642E-01	6.602E 04	0.000
5.00-OVER	0.0	0.0	0.0
TOTAL	3.305E 07	2.855E 12	100.000

*** COMPOSITE ORBIT SPECTRUM ***

ENERGY LEVELS >(MEV)	AVERAGED INTEG.FLUX #/CM**2/SEC	AVERAGED INTEG.FLUX #/CM**2/DAY
.0	3.305E 07	2.855E 12
.250	4.165E 06	3.599E 11
.500	1.165E 06	1.007E 11
.750	4.750E 05	4.104E 10
1.00	1.952E 05	1.686E 10
1.25	9.299E 04	8.034E 09
1.50	4.435E 04	3.832E 09
1.75	2.118E 04	1.830E 09
2.00	1.012E 04	8.744E 08
2.50	2.200E 03	1.901E 08
3.00	4.370E 02	3.776E 07
3.50	4.800E 01	4.147E 06
4.00	7.642E-01	6.602E 04
4.50	0.0	0.0
5.00	0.0	0.0

* EXPOSURE INDEX:ENERGY >.500MEV *

INTENSITY RANGES #/CM**2/SEC	EXPOSURE DURATION (HOURS)	TOTAL # OF ACCUMULATED PARTICLES
ZERO FLUX	3.000	0.0
1.E0-1.E1	0.500	7.449E 03
1.E1-1.E2	0.400	5.712E 04
1.E2-1.E3	0.950	1.530E 06
1.E3-1.E4	1.200	1.685E 07
1.E4-1.E5	1.750	2.545E 08
1.E5-1.E6	3.950	9.162E 09
1.E6-1.E7	12.050	9.123E 10
1.E7-OVER	0.0	0.0
TOTAL	23.800	1.007E 11

** ORBITAL FLUX STUDY WITH COMPOSITE PARTICLE ENVIRONMENTS: VETTES AP5, AP6, AP7; AE4, AE5, FOR SOLAR MAXIMUM **** UNIFLX OF 1973 **
** ELECTRON FLUXES EXPONENTIALLY DECAYED TO 1970. 0 WITH LIFETIMES: E.G.STASSINOPOULOS&P.VERZARIU ** CUTOFF TIMES: **
** MAGNETIC COORDINATES B AND L COMPUTED BY INVARA OF 1972 WITH ALLMAG. MODEL 4: CAIN&SWEENEY 120-TERM POGO 8/69 * TIME= 1975.5 **
** VEHICLE : SA3-D (110) ** INCLINATION= 45DEG ** PERIGEE=35863KM ** APOGEE= 35863KM ** B/L ORBIT TAPE TD7512 ** PERIOD= 24.000 **

************ LOW ENERGY PROTONS ************

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

ENERGY RANGES (MEV)	AVERAGED TOTAL FLUX #/CM**2/SEC	AVERAGED TOTAL FLUX #/CM**2/DAY	SPECTRUM PER CENT
.100-.500	5.200E 05	4.493E 10	96.679
.500-.900	1.622E 04	1.401E 09	3.021
.900-1.10	4.406E 02	3.806E C7	0.082
1.10-1.50	9.504E 01	8.212E 06	0.018
1.50-2.00	3.392E 00	2.930E 05	0.001
2.00-2.50	0.0	0.0	0.0
2.50-3.00	0.0	0.0	0.0
3.00-3.50	0.0	0.0	0.0
3.50-OVER	0.0	0.0	0.0
TOTAL	5.368E 05	4.638E 10	100.000

*** COMPOSITE ORBIT SPECTRUM ***

ENERGY LEVELS >(MEV)	AVERAGED INTEG.FLUX #/CM**2/SEC	AVERAGED INTEG.FLUX #/CM**2/DAY
.100	5.368E 05	4.638E 10
.300	9.455E 04	8.169E 09
.500	1.675E 04	1.448E 09
.700	2.991E 03	2.584E 08
.900	5.390E 02	4.657E 07
1.10	9.843E 01	8.505E 06
1.30	1.824E 01	1.576E 06
1.50	3.392E 00	2.930E 05
1.75	3.003E-01	2.594E 04
2.00	0.0	0.0
2.25	0.0	0.0
2.50	0.0	0.0
2.75	0.0	0.0
3.00	0.0	0.0
3.50	0.0	0.0

* EXPOSURE INDEX:ENERGY >.100MEV *

INTENSITY RANGES #/CM**2/SEC	EXPOSURE DURATION (HOURS)	TOTAL # OF ACCUMULATED PARTICLES
ZERO FLUX	7.250	0.0
1.E0-1.E1	1.700	3.530E 04
1.E1-1.E2	1.050	2.653E 05
1.E2-1.E3	1.750	2.459E 06
1.E3-1.E4	1.750	2.605E 07
1.E4-1.E5	2.050	3.201E 08
1.E5-1.E6	2.850	4.401E 09
1.E6-1.E7	4.300	4.163E 10
1.E7-OVER	0.0	0.0
TOTAL	23.800	4.638E 10

Table E2

** ORBITAL FLUX STUDY WITH COMPOSITE PARTICLE ENVIRONMENTS: VETTES AP5, AP6, AP7; AE4, AE5, FOR SOLAR MAXIMUM **** UNIFLX OF 1973 **
** ELECTRON FLUXES EXPONENTIALLY DECAYED TO 1970. 0 WITH LIFETIMES: E.G.STASSINCPOULOSEP,VERZARIU ** CUTOFF TIMES: **
** MAGNETIC COORDINATES B AND L COMPUTED BY INVARA OF 1972 WITH ALLMAG. MODEL 4: CAIN&SWEENEY 120-TERM POGO 8/69 * TIME= 1975.5 **
** VEHICLE : SAS-D (110) ** INCLINATION= 45DEG ** PERIGEE=35863KM ** APOGEE= 35863KM ** B/L ORBIT TAPE: TD7512 ** PERIOD= 24.000 **

************ ELECTRONS ************

SPECTRUM IN PERCENT DELTA ENERGY

ENERGY RANGES (MEV)	AVERAGED TOTAL FLUX #/CM**2/SEC	AVERAGED TOTAL FLUX #/CM**2/DAY	SPECTRUM PER CENT
.0 -.500	2.166E 07	1.871E 12	96.449
.500-1.00	6.470E 05	5.590E 10	2.881
1.00-1.50	1.144E 05	9.887E 09	0.510
1.50-2.00	2.736E 04	2.364E 09	0.122
2.00-2.50	6.745E 03	5.828E 08	0.030
2.50-3.00	1.563E 03	1.350E 08	0.007
3.00-4.00	3.765E 02	3.253E 07	0.002
4.00-5.00	1.160E 00	1.002E 05	0.000
5.00-OVER	0.0	0.0	0.0
TOTAL	2.246E 07	1.940E 12	100.000

COMPOSITE ORBIT SPECTRUM

ENERGY LEVELS >(MEV)	AVERAGED INTEG.FLUX #/CM**2/SEC	AVERAGED INTEG.FLUX #/CM**2/DAY
.0	2.246E 07	1.940E 12
.250	2.758E 06	2.383E 11
.500	7.975E 05	6.890E 10
.750	3.442E 05	2.974E 10
1.00	1.505E 05	1.300E 10
1.25	7.358E 04	6.357E 09
1.50	3.604E 04	3.114E 09
1.75	1.768E 04	1.528E 09
2.00	8.686E 03	7.504E 08
2.50	1.941E 03	1.677E 08
3.00	3.777E 02	3.263E 07
3.50	4.713E 01	4.072E 06
4.00	1.160E 00	1.002E 05
4.50	0.0	0.0
5.00	0.0	0.0

EXPOSURE INDEX:ENERGY >.500MEV

INTENSITY RANGES #/CM**2/SEC	EXPOSURE DURATION (HOURS)	TOTAL # OF ACCUMULATED PARTICLES
ZERO FLUX	6.800	0.0
1.E0-1.E1	0.200	2.755E 03
1.E1-1.E2	0.150	2.453E 04
1.E2-1.E3	1.100	2.856E 06
1.E3-1.E4	2.550	3.464E 07
1.E4-1.E5	2.500	3.454E 08
1.E5-1.E6	3.350	5.371E 09
1.E6-1.E7	7.150	6.316E 10
1.E7-OVER	0.0	0.0
TOTAL	23.800	6.890E 10

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[illegible]AL FLUX STUDY WITH COMPOSITE PARTICLE ENVIRONMENTS: VETTES AP5, AP6, AP7; AE4, AE5, FOR SOLAR MAXIMUM **** UNIFLX OF 1973 **
** ELECTRON FLUXES EXPONENTIALLY DECAYED TO 1970. 0 WITH LIFETIMES: E.G.STASSINOPOULOS&P.VERZARIU ** CUTOFF TIMES: **
** MAGNETIC COORDINATES B AND L COMPUTED BY INVARA OF 1972 WITH ALLMAG, MODEL 4: CAINESWEENEY 120-TERM POGO 3/69 * TIME= 1975.5 **
** VEHICLE : SAS-D (290) ** INCLINATION= 45DEG ** PERIGEE=35863KM ** APOGEE= 35863KM ** B/L ORBIT TAPE: T07257 ** PERIOD= 24.000 **
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************ LOW ENERGY PROTONS ************

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

ENERGY RANGES (MEV)	AVERAGED TOTAL FLUX #/CM**2/SEC	AVERAGED TOTAL FLUX #/CM**2/DAY	SPECTRUM PER CENT
.100-.500	3.081E 05	2.662E 10	96.457
.500-.900	1.091E 04	9.422E 08	3.414
.900-1.10	3.330E 02	2.877E 07	0.104
1.10-1.50	7.738E 01	6.685E 06	0.024
1.50-2.00	3.151E 00	2.722E 05	0.001
2.00-2.50	0.0	0.0	0.0
2.50-3.00	0.0	0.0	0.0
3.00-3.50	0.0	0.0	0.0
3.50-OVER	0.0	0.0	0.0
TOTAL	3.194E 05	2.760E 10	100.000

*** COMPOSITE ORBIT SPECTRUM ***

ENERGY LEVELS >(MEV)	AVERAGED INTEG.FLUX #/CM**2/SEC	AVERAGED INTEG.FLUX #/CM**2/DAY
.100	3.194E 05	2.760E 10
.300	5.995E 04	[illegible].180E 09
.500	1.132E 04	9.779E 08
.700	2.153E 03	1.860E 08
.900	4.136E 02	3.573E 07
1.10	8.053E 01	6.957E 06
1.30	1.591E 01	1.375E 06
1.50	3.151E 00	2.722E 05
1.75	2.975E-01	2.570E 04
2.00	0.0	0.0
2.25	0.0	0.0
2.50	0.0	0.0
2.75	0.0	0.0
3.00	0.0	0.0
3.50	0.0	0.0

* EXPOSURE INDEX:ENERGY >.100MEV *

INTENSITY RANGES #/CM**2/SEC	EXPOSURE DURATION (HOURS)	TOTAL # OF ACCUMULATED PARTICLES
ZERO FLUX	7.400	0.0
1.E0-1.E1	1.000	2.517E 04
1.E1-1.E2	2.450	3.015E 05
1.E2-1.E3	1.900	2.574E 06
1.E3-1.E4	1.800	2.450E 07
1.E4-1.E5	2.300	3.266E 08
1.E5-1.E6	3.450	5.497E 09
1.E6-1.E7	3.500	2.175E 10
1.E7-OVER	0.0	0.0
TOTAL	23.800	2.760E 10

Table 5-[illegible]

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** ORBITAL FLUX STUDY WITH COMPOSITE PARTICLE ENVIRONMENTS: VETTES AP5, AP6, AP7; AE4, AE5, FOR SOLAR MAXIMUM **** UNIFLX OF 1973 **
** ELECTRON FLUXES EXPONENTIALLY DECAYED TO 1970. 0 WITH LIFETIMES: E.G.STASSINOPOULOS&P.VERZARIU ** CUTOFF TIMES:          **
** MAGNETIC COORDINATES B AND L COMPUTED BY INVARA OF 1972 WITH ALLMAG, MODEL  4:  CAIN&SWEENEY 120-TERM POGO 8/69 * TIME= 1975.5 **
** VEHICLE : SAS-D (290)  ** INCLINATION= 45DEG ** PERIGEE=35863KM ** APOGEE= 35863KM ** H/L ORBIT TAPE: TD7257 ** PERIOD= 24.000 **
****************************************************************************************************************************
                                   ************        ELECTRONS        ************
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****** SPECTRUM IN PERCENT DELTA ENERGY ******

ENERGY RANGES (MEV)	AVERAGED TOTAL FLUX #/CM**2/SEC	AVERAGED TOTAL FLUX #/CM**2/DAY	SPECTRUM PER CENT
.0 -.500	2.180E 07	1.883E 12	96.390
.500-1.00	5.804E 05	5.014E 10	2.580
1.00-1.50	9.190E 04	7.940E 09	0.409
1.50-2.00	2.103E 04	1.817E 09	0.093
2.00-2.50	4.919E 03	4.250E 08	0.022
2.50-3.00	1.102E 03	9.521E 07	0.005
3.00-4.00	2.709E 02	2.341E 07	0.001
4.00-5.00	5.364E-01	4.634E 04	0.000
5.00-OVER	0.0	0.0	0.0
TOTAL	2.249E 07	1.944E 12	100.000

*** COMPOSITE ORBIT SPECTRUM ***

ENERGY LEVELS >(MEV)	AVERAGED INTEG.FLUX #/CM**2/SEC	AVERAGED INTEG.FLUX #/CM**2/DAY
.0	2.249E 07	1.944E 12
.250	2.532E 06	2.188E 11
.500	6.996E 05	6.044E 10
.750	2.873E 05	2.482E 10
1.00	1.192E 05	1.030E 10
1.25	5.703E 04	4.927E 09
1.50	2.732E 04	2.361E 09
1.75	1.310E 04	1.132E 09
2.00	6.292E 03	5.437E 08
2.50	1.373E 03	1.187E 08
3.00	2.715E 02	2.346E 07
3.50	3.040E 01	2.627E 06
4.00	5.364E-01	4.634E 04
4.50	0.0	0.0
5.00	0.0	0.0

* EXPOSURE INDEX:ENERGY >.500MEV *

INTENSITY RANGES #/CM**2/SEC	EXPOSURE DURATION (HOURS)	TOTAL # OF ACCUMULATED PARTICLES
ZERO FLUX	6.900	0.0
1.E0-1.E1	0.200	2.147E 03
1.E1-1.E2	0.200	3.050E 04
1.E2-1.E3	0.400	6.534E 05
1.E3-1.E4	2.950	3.798E 07
1.E4-1.E5	2.850	4.016E 08
1.E5-1.E6	3.550	5.734E 09
1.E6-1.E7	6.750	5.427E 10
1.E7-OVER	0.0	0.0
TOTAL	23.800	6.044E 10

Fig. 5

** ORBITAL FLUX STUDY WITH COMPOSITE PARTICLE ENVIRONMENTS: VETTES AP5, AP6, AP7; AE4, AE5, FOR SOLAR MAXIMUM **** UNIFLX OF 1973 **
** ELECTRON FLUXES EXPONENTIALLY DECAYED TO 1970.0 WITH LIFETIMES: E.G.STASSINOPOULOS&P.VERZARIU ** CUTOFF TIMES: **
** MAGNETIC COORDINATES B AND L COMPUTED BY INVARA OF 1972 WITH ALLMAG, MODEL 4: CAINESWEENEY 120-TERM POGO 8/69 * TIME= 1975.5 **
** VEHICLE : SAS-D (310) ** INCLINATION= 45DEG ** PERIGEE=35863KM ** APOGEE= 35863KM ** B/L ORBIT TAPE: TD7407 ** PERIOD= 24.000 **

LOW ENERGY PROTONS

SPECTRUM IN PERCENT DELTA ENERGY

ENERGY RANGES (MEV)	AVERAGED TOTAL FLUX #/CM**2/SEC	AVERAGED TOTAL FLUX #/CM**2/DAY	SPECTRUM PER CENT
.100-.500	2.897E 05	2.503E 10	96.403
.500-.900	1.041E 04	8.996E 08	3.464
.900-1.10	3.224E 02	2.785E 07	0.107
1.10-1.50	7.555E 01	6.527E 06	0.025
1.50-2.00	3.120E 00	2.695E 05	0.001
2.00-2.50	0.0	0.0	0.0
2.50-3.00	0.0	0.0	0.0
3.00-3.50	0.0	0.0	0.0
3.50-OVER	0.0	0.0	0.0
TOTAL	3.006E 05	2.597E 10	100.000

COMPOSITE ORBIT SPECTRUM

ENERGY LEVELS >(MEV)	AVERAGED INTEG.FLUX #/CM**2/SEC	AVERAGED INTEG.FLUX #/CM**2/DAY
.100	3.006E 05	2.597E 10
.300	5.684E 04	4.911E 09
.500	1.081E 04	9.342E 08
.700	2.072E 03	1.790E 08
.900	4.010E 02	3.465E 07
1.10	7.867E 01	6.797E 06
1.30	1.565E 01	1.352E 06
1.50	3.120E 00	2.695E 05
1.75	2.994E-01	2.587E 04
2.00	0.0	0.0
2.25	0.0	0.0
2.50	0.0	0.0
2.75	0.0	0.0
3.00	0.0	0.0
3.50	0.0	0.0

EXPOSURE INDEX:ENERGY >.100MEV

INTENSITY RANGES #/CM**2/SEC	EXPOSURE DURATION (HOURS)	TOTAL # OF ACCUMULATED PARTICLES
ZERO FLUX	7.100	0.0
1.E0-1.E1	1.950	3.647E 04
1.E1-1.E2	1.900	2.483E 05
1.E2-1.E3	1.850	2.471E 06
1.E3-1.E4	1.800	2.465E 07
1.E4-1.E5	2.350	3.471E 08
1.E5-1.E6	3.500	5.706E 09
1.E6-1.E7	3.350	1.989E 10
1.E7-OVER	0.0	0.0
TOTAL	23.800	2.597E 10

Table 56

** ORBITAL FLUX STUDY WITH COMPOSITE PARTICLE ENVIRONMENTS' VETTES AP5, AP6, AP7; AE4, AE5, FOR SOLAR MAXIMUM **** UNIFLX OF 1973 **
** ELECTRON FLUXES EXPONENTIALLY DECAYED TO 1970.0 WITH LIFETIMES: E.G. STASSINOPOULOS&P.VERZARIU ** CUTOFF TIMES: **
** MAGNETIC COORDINATES B AND L COMPUTED BY 'NVARA OF 1972 WITH ALLMAG. MODEL 4: CAIN&SWEENEY 120-TERM POGO 8/69 * TIME= 1975.5 **
** VEHICLE : SAS-D (310) ** INCLINATION= 45DEG ** PERIGEE=35863KM ** APOGEE= 35863KM ** B/L ORBIT TAPE: TO7407 ** PERIOD= 24.000 **

************ ELECTRONS ************

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

ENERGY RANGES (MEV)	AVERAGED TOTAL FLUX #/CM**2/SEC	AVERAGED TOTAL FLUX #/CM**2/DAY	SPECTRUM PER CENT
.0 -.500	2.218E 07	1.917E 12	96.989
.500-1.00	5.726E 05	4.947E 10	2.504
1.00-1.50	8.967E 04	[illegible].739E 09	0.392
1.50-2.00	2.040E 04	1.[illegible]E 09	0.089
2.00-2.50	4.742E 03	4.097E 08	0.021
2.50-3.00	1.058E 03	9.143E 07	0.005
3.00-4.00	2.608E 02	2.253E 07	0.001
4.00-5.00	4.858E-01	4.197E 04	0.000
5.00-OVER	0.0	0.0	0.0
TOTAL	2.287E 07	1.974E 12	100.000

*** COMPOSITE ORBIT SPECTRUM ***

ENERGY LEVELS >(MEV)	AVERAGED INTEG.FLUX #/CM**2/SEC	AVERAGED INTEG.FLUX #/CM**2/DAY
.0	2.287E 07	1.976E 12
.250	2.504E 06	2.163E 11
.500	6.886E 05	5.950E 10
.750	2.812E 05	2.430E 10
1.00	1.160E 05	1.003E 10
1.25	5.537E 04	4.784E 09
1.50	2.646E 04	2.286E 09
1.75	1.266E 04	1.094E 09
2.00	6.042E 03	5.237E 08
2.50	1.319E 03	1.140E 08
3.00	2.613E 02	2.257E 07
3.50	2.890E 01	2.497E 06
4.00	4.858E-01	4.197E 04
4.50	0.0	0.0
5.00	0.0	0.0

* EXPOSURE INDEX:ENERGY >.500MEV *

INTENSITY RANGFS #/CM**2/SEC	EXPOSURE DURATION (HOURS)	TOTAL #-OF ACCUMULATED PARTICLES
ZERO FLUX	6.700	0.0
1.E0-1.E1	0.200	3.926E 03
1.E1-1.E2	0.100	1.131E 04
1.E2-1.E3	1.350	3.341E 06
1.E3-1.E4	2.500	3.383E 07
1.E4-1.E5	2.650	3.739E 08
1.E5-1.E6	3.600	5.802E 09
1.E6-1.E7	6.700	5.329E 10
1.E7-OVER	0.0	0.0
TOTAL	23.800	6.950E 10

Table 57

** ORBITAL FLUX STUDY WITH COMPOSITE PARTICLE ENVIRONMENTS: VETTES AP5, AE6, AP7, AE4, AE5, FOR SOLAR MAXIMUM **** UNIFLX OF 1973 **
** ELECTRON FLUXES EXPONENTIALLY DECAYED TO 1970, 0 WITH LIFETIMES: E.G.STASSINOPOULOS&P.VERZARIU ** CUTOFF TIMES: **
** MAGNETIC COORDINATES B AND L COMPUTED BY INVARA OF 1972 WITH ALLMAG, MODEL 4: CAIN&SWEENEY 120-TERM POGO 8/69 * TIME= 1975.5 **
** VEHICLE : SAS-D (110) ** INCLINATION= 0DEG ** PERIGEE=27952KM ** APOGEE= 43615KM ** B/L ORBIT TAPE: TD0136 ** PERIOD= 24.000 **

************ LOW ENERGY PROTONS ************

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

ENERGY RANGES (MEV)	AVERAGED TOTAL FLUX #/CM**2/SEC	AVERAGED TOTAL FLUX #/CM**2/DAY	SPECTRUM PER CENT
.100-.500	4.301E 06	3.716E 11	97.241
.500-.900	1.186E 05	1.025E 10	2.682
.900-1.10	2.839E 03	2.453E 08	0.064
1.10-1.50	5.612E 02	4.849E 07	0.013
1.50-2.00	1.756E 01	1.517E 06	0.000
2.00-2.50	0.0	0.0	0.0
2.50-3.00	0.0	0.0	0.0
3.00-3.50	0.0	0.0	0.0
3.50-OVER	0.0	0.0	0.0
TOTAL	4.423E 06	3.822E 11	100.000

*** COMPOSITE ORBIT SPECTRUM ***

ENERGY LEVELS >(MEV)	AVERAGED INTEG.FLUX #/CM**2/SEC	AVERAGED INTEG.FLUX #/CM**2/DAY
.100	4.423E 06	3.822E 11
.300	7.339E 05	6.341E 10
.500	1.220E 05	1.054E 10
.700	2.037E 04	1.760E 09
.900	3.418E 03	2.953E 08
1.10	5.788E 02	5.001E 07
1.30	9.952E 01	8.599E 06
1.50	1.756E 01	1.517E 06
1.75	2.139E 00	1.848E 05
2.00	0.0	0.0
2.25	0.0	0.0
2.50	0.0	0.0
2.75	0.0	0.0
3.00	0.0	0.0
3.50	0.0	0.0

* EXPOSURE INDEX:ENERGY >.100MEV *

INTENSITY RANGES #/CM**2/SEC	EXPOSURE DURATION (HOURS)	TOTAL # OF ACCUMULATED PARTICLES
ZERO FLUX	0.0	0.0
1.E0-1.E1	0.0	0.0
1.E1-1.E2	0.0	0.0
1.E2-1.E3	0.0	0.0
1.E3-1.E4	5.050	1.016E 08
1.E4-1.E5	4.550	5.853E 08
1.E5-1.E6	3.250	4.420E 09
1.E6-1.E7	5.500	1.073E 11
1.E7-OVER	5.450	2.697E 11
TOTAL	23.800	3.822E 11

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** ORBITAL FLUX STUDY WITH COMPOSITE PARTICLE ENVIRONMENTS: VETTES AP5, AP6, AP7; AE4, AE5, FOR SOLAR MAXIMUM **** UNIFLX OF 1973 **
** ELECTRON FLUXES EXPONENTIALLY DECAYED TO 1970.0 WITH LIFETIMES: E.G.STASSINOPOULOS&VERZARIU ** CUTOFF TIMES:                **
** MAGNETIC COORDINATES B AND L COMPUTED BY INVARA OF 1972 WITH ALLMAG, MODEL AI: CAIN&SWEENEY 120-TERM POGO 8/69 * TIME= 1975.5 **
** VEHICLE : SAS-D (110) ** INCLINATION= 0DEG ** PERIGEE=27942KM ** APOGEE= 43615KM ** S/L ORBIT TAPE: TO8136 ** PERIOD= 24.000 **
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************ ELECTRONS ************

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

ENERGY RANGES (MEV)	AVERAGED TOTAL FLUX #/CM**2/SEC	AVERAGED TOTAL FLUX #/CM**2/DAY	SPECTRUM PER CENT
.0 -.500	3.703E 07	3.199E 12	93.143
.500-1.00	2.057E 06	1.777E 11	5.174
1.00-1.50	4.756E 05	4.110E 10	1.197
1.50-2.00	1.369E 05	1.183E 10	0.344
2.00-2.50	4.159E 04	3.594E 09	0.105
2.50-3.00	1.161E 04	[illegible]	0.029
3.00-4.00	3.557E 03	3.073E 08	0.009
4.00-5.00	5.538E 01	4.785E 06	0.000
5.00-OVER	0.0	0.0	0.0
TOTAL	3.975E 07	3.435E 12	100.000

*** COMPOSITE ORBIT SPECTRUM ***

ENERGY LEVELS >(MEV)	AVERAGED INTEG.FLUX #/CM**2/SEC	AVERAGED INTEG.FLUX #/CM**2/DAY
.0	3.975E 07	3.435E 12
.250	7.367E 06	6.365E 11
.500	2.724E 06	2.355E 11
.750	1.339E 06	1.157E 11
1.00	6.692E 05	5.782E 10
1.25	3.593E 05	3.105E 10
1.50	1.936E 05	1.672E 10
1.75	1.046E 05	9.033E 09
2.00	5.662E 04	4.892E 09
2.50	1.503E 04	1.298E 09
3.00	3.612E 03	3.121E 08
3.50	7.046E 02	6.088E 07
4.00	5.538E 01	4.785E 06
4.50	0.0	0.0
5.00	0.0	0.0

* EXPOSURE INDEX:ENERGY >0.500MEV *

INTENSITY RANGES #/CM**2/SEC	EXPOSURE DURATION (HOURS)	TOTAL # OF ACCUMULATED PARTICLES
ZERO FLUX	0.0	0.0
1.E0-1.E1	0.0	0.0
1.E1-1.E2	0.0	0.0
1.E2-1.E3	0.0	0.0
1.E3-1.E4	0.0	0.0
1.E4-1.E5	0.0	0.0
1.E5-1.E6	9.450	1.303E 10
1.E6-1.E7	14.550	2.225E 11
1.E7-OVER	0.0	0.0
TOTAL	24.000	2.355E 11

Table 59

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****************************************************************************************************************************
** ORBITAL FLUX STUDY WITH COMPOSITE PARTICLE ENVIRONMENTS: VETTE'S AE5, AP6, AP7, AE4, AE6, FOR SOLAR MAXIMUM **** UNIFLUX OF 1973 **
** ELECTRON FLUXES EXPONENTIALLY DECAYED TO 1970.0 WITH LIFETIMES: E.G.STASSINOPOULOS,VERZARIU ** CUTOFF TIMES:              **
** MAGNETIC COORDINATES B AND L COMPUTED BY INVARA OF 1972 WITH ALLMAG, MODEL 4: CAIN+SWEENEY 120-TERM POGO 8/69 * TIME= 1975.5 **
** VEHICLE : SAS-D (290) ** INCLINATION= 0DEG ** PERIGEE=270KM ** APOGEE= 036KM ** B/L ORBIT TAPE: T0R090 ** PERIOD= 20.000 **
****************************************************************************************************************************
                                  ************  LOW ENERGY PROTONS  ************
                                  **********************************************
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****** SPECTRUM IN PERCENT DELTA ENERGY ******

ENERGY RANGES (MEV)	AVERAGED TOTAL FLUX #/CM**2/SEC	AVERAGED TOTAL FLUX #/CM**2 DAY	SPECTRUM PER CENT
.100-.500	3.491E 06	3.016E 11	97.310
.500-.900	9.388E 04	8.111E 09	2.617
.900-1.10	2.201E 03	1.901E 08	0.061
1.10-1.50	4.312E 02	3.725E 07	0.012
1.50-2.00	1.360E 01	1.175E 06	0.000
2.00-2.50	0.0	0.0	0.0
2.50-3.00	0.0	0.0	0.0
3.00-3.50	0.0	0.0	0.0
3.50-OVER	0.0	0.0	0.0
TOTAL	3.590E 06	3.100E 11	100.000

*** COMPOSITE ORBIT SPECTRUM ***

ENERGY LEVELS >(MEV)	AVERAGED INTEG.FLUX #/CM**2/SEC	AVERAGED INTEG.FLUX #/CM**2/DAY
.100	3.588E 06	3.100E 11
.300	5.877E 05	5.078E 10
.500	9.883E 04	8.540E 09
.700	1.552E 04	1.376E 09
.900	2.608E 03	2.256E 08
1.10	4.440E 02	3.836E 07
1.30	7.238E 01	6.254E 06
1.50	1.360E 01	1.175E 06
1.75	1.551E 00	1.340E 05
2.00	0.0	0.0
2.25	0.0	0.0
2.50	0.0	0.0
2.75	0.0	0.0
3.00	0.0	0.0
3.50	0.0	0.0

* EXPOSURE INDEX(ENERGY >0.100MEV) *

INTENSITY RANGES #/CM**2/SEC	EXPOSURE DURATION (HOURS)	TOTAL # OF ACCUMULATED PARTICLES
ZERO FLUX	0.0	0.0
1.E0-1.E1	0.0	0.0
1.E1-1.E2	0.0	0.0
1.E2-1.E3	0.0	0.0
1.E3-1.E4	6.500	8.095E 07
1.E4-1.E5	3.900	5.084E 08
1.E5-1.E6	3.150	6.368E 09
1.E6-1.E7	4.900	1.192E 11
1.E7-OVER	6.250	1.888E 11
TOTAL	24.000	3.100E 11

Table 60

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*************************************************************************************************************************
** ORBITAL FLUX STUDY WITH COMPOSITE PARTICLE ENVIRONMENTS: VETTE AE4, AE5, AE7, AE6, AE5, FOR SOLAR MAXIMUM **** UNIFLX OF 1973 **
** ELECTRON FLUXES EXPONENTIALLY DECAYED TO 1970. C WITH LIFETIMES: L.G.STASSINOPOULOS&P.VERZARIU ** CUTOFF TIMES:              **
** MAGNETIC COORDINATES B AND L COMPUTED BY INVAR? OF 1972 WITH ALLMAG, MODEL AT CAIN&SWEENEY 120-TERM POGO 8/69 * TIME= 1975.5 **
** VEHICLE : SAS-D (290) ** INCLINATION= 0DEG ** PERIGEE=27952KM ** APOGEE= 43615KM ** P/L ORBIT TAPE: T0S0S0 ** PERIOD= 24.000 **
*************************************************************************************************************************
                                  ************      ELECTRONS      ************
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****** SPECTRUM IN PERCENT DELTA ENERGY ******

ENERGY RANGES (MEV)	AVERAGED TOTAL FLUX #/CM**2/SEC	AVERAGED TOTAL FLUX #/CM**2/DAY	SPECTRUM PER CENT
.0 -.500	3.607E 07	3.117E 12	93.839
.500-1.00	1.816E 06	1.571E 11	4.730
1.00-1.50	3.948E 05	3.411E 10	1.027
1.50-2.00	1.110E 05	9.590E 09	0.289
2.00-2.50	3.281E 04	2.835E 09	0.085
2.50-3.00	8.785E 03	7.590E 08	0.023
3.00-4.00	2.743E 03	2.370E 08	0.007
4.00-5.00	3.707E 01	3.203E 06	0.000
5.00-OVER	0.0	0.0	0.0
TOTAL	3.844E 07	3.321E 12	100.000

*** COMPOSITE ORBIT SPECTRUM ***

ENERGY LEVELS >(MEV)	AVERAGED INTEG.FLUX #/CM**2/SEC	AVERAGED INTEG.FLUX #/CM**2/DAY
.0	3.844E 07	3.321E 12
.250	6.623E 06	5.728E 11
.500	2.368E 06	2.046E 11
.750	1.133E 06	[illegible].787E 10
1.00	5.502E 05	4.754E 10
1.25	2.919E 05	2.522E 10
1.50	1.554E 05	1.343E 10
1.75	8.294E 04	7.166E 09
2.00	4.438E 04	3.835E 09
2.50	1.157E 04	9.996E 08
3.00	2.780E 03	2.402E 08
3.50	5.183E 02	4.478E 07
4.00	3.707E 01	3.203E 06
4.50	0.0	0.0
5.00	0.0	0.0

* EXPOSURE INDEX:ENERGY >.500MEV *

INTENSITY RANGES #/CM**2/SEC	EXPOSURE DURATION (HOURS)	TOTAL # OF ACCUMULATED PARTICLES
ZERO FLUX	0.0	0.0
1.E0-1.E1	0.0	0.0
1.E1-1.E2	0.0	0.0
1.E2-1.E3	0.0	0.0
1.E3-1.E4	0.0	0.0
1.E4-1.E5	0.0	0.0
1.E5-1.E6	10.400	1.193E 10
1.E6-1.E7	13.400	1.927E 11
1.E7-OVER	0.0	0.0
TOTAL	23.800	2.046E 11

Table 61

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******************************************************************************************************************************************
** ORBITAL FLUX STUDY WITH COMPOSITE PARTICLE ENVIRONMENTS: VETTES AP5. AP6. AP7; AE4. AE5. FOR SOLAR MAXIMUM **** UNIFLX OF 1973 **
** ELECTRON FLUXES EXPONENTIALLY DECAYED TO 1970. 0 WITH LIFETIMES: E.G.STASSINOPOULOS&P.VERZARIU ** CUTOFF TIMES:                 **
** MAGNETIC COORDINATES B AND L COMPUTED BY INVARA OF 1972 WITH ALLMAG, MODEL 4: CAIN&SWEENEY 120-TERM POGO 8/69 * TIME= 1975.5 **
** VEHICLE : SAS-D (310) ** INCLINATION= 0DEG ** PERIGEE=27952KM ** APOGEE= 43615KM ** B/L ORBIT TAPE: TD7678 ** PERIOD= 24.000 **
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************ LOW ENERGY PROTONS ************

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

ENERGY RANGES (MEV)	AVERAGED TOTAL FLUX #/CM**2/SEC	AVERAGED TOTAL FLUX #/CM**2/DAY	SPECTRUM PER CENT
.100-.500	3.686E 06	3.184E 11	97.270
.500-.900	1.006E 05	8.689E 09	2.654
.900-1.10	2.388E 03	2.063E 08	0.063
1.10-1.50	4.710E 02	4.070E 07	0.012
1.50-2.00	1.493E 01	1.290E 06	0.000
2.00-2.50	0.0	0.0	0.0
2.50-3.00	0.0	0.0	0.0
3.00-3.50	0.0	0.0	0.0
3.50-OVER	0.0	0.0	0.0
TOTAL	3.789E 06	3.274E 11	100.000

*** COMPOSITE ORBIT SPECTRUM ***

ENERGY LEVELS >(MEV)	AVERAGED INTEG.FLUX #/CM**2/SEC	AVERAGED INTEG.FLUX #/CM**2/DAY
.100	3.789E 06	3.274E 11
.300	6.253E 05	5.402E 10
.500	1.034E 05	8.938E 09
.700	1.719E 04	1.485E 09
.900	2.874E 03	2.483E 08
1.10	4.860E 02	4.199E 07
1.30	8.377E 01	7.238E 06
1.50	1.493E 01	1.290E 06
1.75	1.878E 00	1.623E 05
2.00	0.0	0.0
2.25	0.0	0.0
2.50	0.0	0.0
2.75	0.0	0.0
3.00	0.0	0.0
3.50	0.0	0.0

* EXPOSURE INDEX:ENERGY >.100MEV *

INTENSITY RANGES #/CM**2/SEC	EXPOSURE DURATION (HOURS)	TOTAL # OF ACCUMULATED PARTICLES
ZERO FLUX	0.0	0.0
1.E0-1.E1	0.0	0.0
1.E1-1.E2	0.0	0.0
1.E2-1.E3	0.0	0.0
1.E3-1.E4	6.300	9.667E 07
1.E4-1.E5	4.050	5.365E 08
1.E5-1.E6	3.150	4.357E 09
1.E6-1.E7	5.650	1.114E 11
1.E7-OVER	4.650	2.109E 11
TOTAL	23.800	3.274E 11

Table 62

** ORBITAL FLUX STUDY WITH COMPOSITE PARTICLE ENVIRONMENTS: VETTES AP5, AP6, AP7; AE4, AE5, FOR SOLAR MAXIMUM **** UNIFLX OF 1973 **
** ELECTRON FLUXES EXPONENTIALLY DECAYED TO 1970. 0 WITH LIFETIMES: E.G.STASSINOPOULOS&P.VERZARIU ** CUTOFF TIMES: **
** MAGNETIC COORDINATES B AND L COMPUTED BY INVARA OF 1972 WITH ALLMAG, MODEL 4: CAIN&SWEENEY 120-TERM POGO 8/69 * TIME= 1975.5 **
** VEHICLE : SAS-D (310) ** INCLINATION= 0DEG ** PERIGEE=27952KM ** APOGEE= 43615KM ** B/L ORBIT TAPE: TD7678 ** PERIOD= 24.000 **

************ ELECTRONS ************

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

ENERGY RANGES (MEV)	AVERAGED TOTAL FLUX #/CM**2/SEC	AVERAGED TOTAL FLUX #/CM**2/DAY	SPECTRUM PER CENT
.0 -.500	3.661E 07	3.163E 12	93.693
.500-1.00	1.885E 06	1.629E 11	4.825
1.00-1.50	4.146E 05	3.582E 10	1.061
1.50-2.00	1.172E 05	1.012E 10	0.300
2.00-2.50	3.484E 04	3.010E 09	0.089
2.50-3.00	9.382E 03	8.106E 08	0.024
3.00-4.00	2.929E 03	2.531E 08	0.007
4.00-5.00	4.089E 01	3.533E 06	0.000
5.00-OVER	0.0	0.0	0.0
TOTAL	3.908E 07	3.376E 12	100.000

*** COMPOSITE ORBIT SPECTRUM ***

ENERGY LEVELS >(MEV)	AVERAGED INTEG.FLUX #/CM**2/SEC	AVERAGED INTEG.FLUX #/CM**2/DAY
.0	3.908E 07	3.376E 12
.250	6.851E 06	5.919E 11
.500	2.464E 06	2.129E 11
.750	1.185E 06	1.024E 11
1.00	5.790E 05	5.002E 10
1.25	3.080E 05	2.661E 10
1.50	1.644E 05	1.420E 10
1.75	8.796E 04	7.600E 09
2.00	4.719E 04	4.078E 09
2.50	1.235E 04	1.067E 09
3.00	2.970E 03	2.566E 08
3.50	5.594E 02	4.833E 07
4.00	4.089E 01	3.533E 06
4.50	0.0	0.0
5.00	0.0	0.0

* EXPOSURE INDEX:ENERGY >.500MEV *

INTENSITY RANGES #/CM**2/SEC	EXPOSURE DURATION (HOURS)	TOTAL # OF ACCUMULATED PARTICLES
ZERO FLUX	0.0	0.0
1.E0-1.E1	0.0	0.0
1.E1-1.E2	0.0	0.0
1.E2-1.E3	0.0	0.0
1.E3-1.E4	0.0	0.0
1.E4-1.E5	0.0	0.0
1.E5-1.E6	10.200	1.233E 10
1.E6-1.E7	13.600	2.006E 11
1.E7-OVER	0.0	0.0
TOTAL	23.800	2.129E 11

Table 63

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*****************************************************************************************************************************
** ORBITAL FLUX STUDY WITH COMPOSITE PARTICLE ENVIRONMENTS: VETTES AP5, AP6, AP7; AE5, AE6, FOR SOLAR MAXIMUM **** UNIFLX OF 1973 **
** ELECTRON FLUXES EXPONENTIALLY DECAYED TO 1970.0 WITH LIFETIMES: F.G.STASSINOPOULOS&P.VERZARIU ** CUTOFF TIMES:           **
** MAGNETIC COORDINATES B AND L COMPUTED BY INVAR4 OF 1972 WITH ALLMAG, MODEL 6: CAIN&SWEENEY 120-TERM POGO 8/69 * TIME= 1975.5 **
** VEHICLE : SAS-D (110) ** INCLINATION= 30DEG ** PERIGEE=27952KM ** APOGEE= 43615KM ** P/L ORBIT TAPE: TO9134 ** PERIOD= 24.000 **
*****************************************************************************************************************************
                                        ************   LOW ENERGY PROTONS   ************
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****** SPECTRUM IN PERCENT DELTA ENERGY ******

ENERGY RANGES (MEV)	AVERAGED TOTAL FLUX #/CM**2/SEC	AVERAGED TOTAL FLUX #/CM**2/DAY	SPECTRUM PER CENT
.100-.500	2.587E 06	2.235E 11	97.127
.500-.700	7.427E 04	6.417E 09	2.788
.900-1.10	1.857E 03	1.605E 08	0.070
1.10-1.30	3.785E 02	3.270E 07	0.014
1.50-2.00	1.243E 01	1.074E 06	0.000
2.00-2.50	7.484E-02	6.466E 03	0.000
2.50-3.00	0.0	0.0	0.0
3.00-3.50	0.0	0.0	0.0
3.50-OVER	0.0	0.0	0.0
TOTAL	2.664E 06	2.301E 11	100.000

*** COMPOSITE ORBIT SPECTRUM ***

ENERGY LEVELS >(MEV)	AVERAGED INTEG.FLUX #/CM**2/SEC	AVERAGED INTEG.FLUX #/CM**2/DAY
.100	2.664E 06	2.301E 11
.300	4.506E 05	3.893E 10
.500	7.422E 04	6.412E 09
.700	1.307E 04	1.129E 09
.900	2.249E 03	1.943E 08
1.10	3.910E 02	3.378E 07
1.30	6.911E 01	5.971E 06
1.50	1.250E 01	1.080E 06
1.75	1.365E 00	1.179E 05
2.00	7.484E-02	6.466E 03
2.25	0.0	0.0
2.50	0.0	0.0
2.75	0.0	0.0
3.00	0.0	0.0
3.50	0.0	0.0

* EXPOSURE INDEX:ENERGY >.100MEV *

INTENSITY RANGES #/CM**2/SEC	EXPOSURE DURATION (HOURS)	TOTAL # OF ACCUMULATED PARTICLES
ZERO FLUX	4.550	0.0
1.E0-1.E1	1.200	1.708E 04
1.E1-1.E2	1.350	1.899E 05
1.E2-1.E3	1.500	2.210E 06
1.E3-1.E4	1.950	2.949E 07
1.E4-1.E5	5.100	9.832E 08
1.E5-1.E6	1.700	2.102E 09
1.E6-1.E7	2.400	4.328E 10
1.E7-OVER	3.050	1.838E 11
TOTAL	23.800	2.301E 11

Table 64

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** ORBITAL FLUX STUDY WITH COMPOSITE PARTICLE ENVIRONMENTS: VETTES AP5, AP6, AP7; AE4, AE5, FOR SOLAR MAXIMUM **** UNIFLX OF 1973 **
** ELECTRON FLUXES EXPONENTIALLY DECAYED TO 1970. 0 WITH LIFETIMES: E.G.STASSINOPOULOS&P.VERZARIU ** CUTOFF TIMES:          **
** MAGNETIC COORDINATES B AND L COMPUTED BY INVARA OF 1972 WITH ALLMAG, MODEL  4:  CAIN&SWEENEY 120-TERM POGO 8/69 * TIME= 1975.5 **
** VEHICLE : SAS-D (110)  ** INCLINATION= 30DEG ** PERIGEE=27952KM ** APOGEE= 43615KM ** O/L ORBIT TAPE: TOR136 ** PERIOD= 24.000 **
********************************************************************************************************************
                                   ************          ELECTRONS          ************
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****** SPECTRUM IN PERCENT DELTA ENERGY ******

ENERGY RANGES (MEV)	AVERAGED TOTAL FLUX #/CM**2/SEC	AVERAGED TOTAL FLUX #/CM**2/DAY	SPECTRUM PER CENT
.0 -.500	3.371E 07	2.912E 12	95.685
.500-1.00	1.135E 06	9.803E 10	3.221
1.00-1.50	2.711E 05	2.342E 10	0.769
1.50-2.00	7.994E 04	6.907E 09	0.227
2.00-2.50	2.501E 04	2.161E 09	0.071
2.50-3.00	7.124E 03	6.155E 08	0.010
3.00-4.00	2.237E 03	1.933E 08	0.006
4.00-5.00	4.031E 01	3.483E 06	0.000
5.00-OVER	0.0	0.0	0.0
TOTAL	3.523E 07	3.044E 12	100.000

*** COMPOSITE ORBIT SPECTRUM ***

ENERGY LEVELS >(MEV)	AVERAGED INTEG.FLUX #/CM**2/SEC	AVERAGED INTEG.FLUX #/CM**2/DAY
.0	3.523E 07	3.044E 12
.250	4.243E 06	3.666E 11
.500	1.520E 06	1.313E 11
.750	7.556E 05	6.528E 10
1.00	3.854E 05	3.330E 10
1.25	2.095E 05	1.810E 10
1.50	1.143E 05	9.880E 09
1.75	6.263E 04	5.411E 09
2.00	3.441E 04	2.973E 09
2.50	9.402E 03	8.123E 08
3.00	2.278E 03	1.968E 08
3.50	4.658E 02	4.025E 07
4.00	4.031E 01	3.483E 06
4.50	0.0	0.0
5.00	0.0	0.0

* EXPOSURE INDEX:ENERGY >.500MEV *

INTENSITY RANGES #/CM**2/SEC	EXPOSURE DURATION (HOURS)	TOTAL # OF ACCUMULATED PARTICLES
ZERO FLUX	3.250	0.0
1.E0-1.E1	0.550	6.931E 03
1.E1-1.E2	0.500	6.611E 04
1.E2-1.E3	1.050	1.726E 06
1.E3-1.E4	1.450	1.945E 07
1.E4-1.E5	2.250	3.297E 08
1.E5-1.E6	8.050	1.717E 10
1.E6-1.E7	6.700	1.138E 11
1.E7-OVER	0.0	0.0
TOTAL	23.800	1.313E 11

Table 65

** ORBITAL FLUX STUDY WITH COMPOSITE PARTICLE ENVIRONMENTS: VETTES AP5, AP6, AP7; AE4, AE5, FOR SOLAR MAXIMUM **** UNIFLX OF 1973 **
** ELECTRON FLUXES EXPONENTIALLY DECAYED TO 1970. 0 WITH LIFETIMES: E.G.STASSINOPOULOS&P.VERZARIU ** CUTOFF TIMES: **
** MAGNETIC COORDINATES B AND L COMPUTED BY .NVARA OF 1972 WITH ALLMAG. MODEL 4: CAIN&SWEENEY 120-TERM POGO 8/69 * TIME= 1975.5 **
** VEHICLE : SAS-D (290) ** INCLINATION= 30DEG ** PERIGEE=27952KM ** APOGEE= 43615KM ** S/L ORBIT TAPE: TD8050 ** PERIOD= 24.000 **

************ LOW ENERGY PROTONS ************

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

ENERGY RANGES (MEV)	AVERAGED TOTAL FLUX #/CM**2/SEC	AVERAGED TOTAL FLUX #/CM**2/DAY	SPECTRUM PER CENT
.100-.500	2.204E 06	1.904E 11	97.198
.500-.900	4.171E 04	5.332E 09	2.721
.900-1.10	1.507E 03	1.302E 08	0.066
1.10-1.50	3.031E 02	2.619E 07	0.013
1.50-2.00	9.933E 00	8.582E 05	0.000
2.00-2.50	2.462E-02	2.127E 03	0.000
2.50-3.00	0.0	0.0	0.0
3.00-3.50	0.0	0.0	0.0
3.50-OVER	0.0	0.0	0.0
TOTAL	2.268E 06	1.959E 11	100.000

*** COMPOSITE ORBIT SPECTRUM ***

ENERGY LEVELS >(MEV)	AVERAGED INTEG.FLUX #/CM**2/SEC	AVERAGED INTEG.FLUX #/CM**2/DAY
.100	2.268E 06	1.959E 11
.300	3.788E 05	3.273E 10
.500	6.353E 04	5.489E 09
.700	1.071E 04	9.253E 08
.900	1.820E 03	1.572E 08
1.10	3.131E 02	2.705E 07
1.30	5.498E 01	4.750E 06
1.50	9.958E 00	8.603E 05
1.75	1.073E 00	9.274E 04
2.00	2.462E-02	2.127E 03
2.25	0.0	0.0
2.50	0.0	0.0
2.75	0.0	0.0
3.00	0.0	0.0
3.50	0.0	0.0

* EXPOSURE INDEX:ENERGY >.100MEV *

INTENSITY RANGES #/CM**2/SEC	EXPOSURE DURATION (HOURS)	TOTAL # OF ACCUMULATED PARTICLES
ZERO FLUX	4.750	0.0
1.E0-1.E1	1.300	1.828E 04
1.E1-1.E2	1.500	2.198E 05
1.E2-1.E3	1.500	2.123E 06
1.E3-1.E4	2.200	3.333E 07
1.E4-1.E5	5.600	7.679E 08
1.E5-1.E6	1.700	2.192E 09
1.E6-1.E7	2.550	4.805E 10
1.E7-OVER	2.700	1.449E 11
TOTAL	23.800	1.959E 11

Table 6A

** ORBITAL FLUX STUDY WITH COMPOSITE PARTICLE ENVIRONMENTS: VETTES AP5, AP6, AP7; AE4, AE5, FOR SOLAR MAXIMUM **** UNIFLX OF 1973 **
** ELECTRON FLUXES EXPONENTIALLY DECAYED TO 1970. 0 WITH LIFETIMES: E.G.STASSINOPOULOS&P.VERZARIU ** CUTOFF TIMES: **
** MAGNETIC COORDINATES B AND L COMPUTED BY INVARA OF 1972 WITH ALLMAG, MODEL 4: CAIN&SWEENEY 120-TERM POGO 8/69 * TIME= 1975.5 **
** VEHICLE 1 SAS-D (250) ** INCLINATION= 30DEG ** PERIGEE=27952KM ** APOGEE= 43615KM ** B/L ORBIT TAPE: TD0050 ** PERIOD= 24.000 **

************ ELECTRONS ************

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

ENERGY RANGES (MEV)	AVERAGED TOTAL FLUX #/CM**2/SEC	AVERAGED TOTAL FLUX #/CM**2/DAY	SPECTRUM PER CENT
.0 -.500	3.423E 07	2.957E 12	96.091
.500-1.00	1.053E 06	9.100E 10	2.957
1.00-1.50	2.407E 05	2.080E 10	0.676
1.50-2.00	6.953E 04	6.007E 09	0.195
2.00-2.50	2.125E 04	1.836E 09	0.060
2.50-3.00	5.875E 03	5.076E 08	0.016
3.00-4.00	1.833E 03	1.584E 08	0.005
4.00-5.00	2.987E 01	2.581E 06	0.000
5.00-OVER	0.0	0.0	0.0
TOTAL	3.562E 07	3.077E 12	100.000

*** COMPOSITE ORBIT SPECTRUM ***

ENERGY LEVELS >(MEV)	AVERAGED INTEG.FLUX #/CM**2/SEC	AVERAGED INTEG.FLUX #/CM**2/DAY
.0	3.562E 07	3.077E 12
.250	3.965E 06	3.426E 11
.500	1.392E 06	1.203E 11
.750	6.792E 05	5.868E 10
1.00	3.392E 05	2.931E 10
1.25	1.825E 05	1.576E 10
1.50	9.852E 04	8.512E 09
1.75	5.337E 04	4.611E 09
2.00	2.899E 04	2.505E 09
2.50	7.738E 03	6.685E 08
3.00	1.863E 03	1.609E 08
3.50	3.686E 02	3.185E 07
4.00	2.987E 01	2.581E 06
4.50	0.0	0.0
5.00	0.0	0.0

* EXPOSURE INDEX:ENERGY >.500MEV *

INTENSITY RANGES #/CM**2/SEC	EXPOSURE DURATION (HOURS)	TOTAL # OF ACCUMULATED PARTICLES
ZERO FLUX	3.350	0.0
1.E0-1.E1	0.600	7.528E 03
1.E1-1.E2	0.500	5.980E 04
1.E2-1.E3	1.200	2.031E 06
1.E3-1.E4	1.550	2.222E 07
1.E4-1.E5	2.350	3.491E 08
1.E5-1.E6	7.650	1.449E 10
1.E6-1.E7	6.600	1.054E 11
1.E7-OVER	0.0	0.0
TOTAL	23.800	1.203E 11

Table 57

** ORBITAL FLUX STUDY WITH COMPOSITE PARTICLE ENVIRONMENTS: VETTES AP5, AP6, AP7; AE4, AE5, FOR SOLAR MAXIMUM **** UNIFLX OF 1973
** ELECTRON FLUXES EXPONENTIALLY DECAYED TO 1970. 0 WITH LIFETIMES: E.G.STASSINOPOULOS&P.VERZARIU ** CUTOFF TIMES:
** MAGNETIC COORDINATES B AND L COMPUTED BY INVARA OF 1972 WITH ALLMAG, MODEL 4: CAIN&SWEENEY 120-TERM POGO 8/69 * TIME= 1975.5
** VEHICLE : SAS-D (310) ** INCLINATION= 29DEG ** PERIGEE=27952KM ** APOGEE= 43615KM ** B/L ORBIT TAPE: TD7678 ** PERIOD= 24.000

************ LOW ENERGY PROTONS ************

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

ENERGY RANGES (MEV)	AVERAGED TOTAL FLUX #/CM**2/SEC	AVERAGED TOTAL FLUX #/CM**2/DAY	SPECTRUM PER CENT
.100-.500	2.332E 06	2.015E 11	97.195
.500-.900	6.538E 04	5.649E 09	2.724
.900-1.10	1.597E 03	1.380E 08	0.067
1.10-1.50	3.216E 02	2.778E 07	0.013
1.50-2.00	1.054E 01	9.107E 05	0.000
2.00-2.50	2.190E-02	1.892E 03	0.000
2.50-3.00	0.0	0.0	0.0
3.00-3.50	0.0	0.0	0.0
3.50-OVER	0.0	0.0	0.0
TOTAL	2.400E 06	2.073E 11	100.000

*** COMPOSITE ORBIT SPECTRUM ***

ENERGY LEVELS >(MEV)	AVERAGED INTEG.FLUX #/CM**2/SEC	AVERAGED INTEG.FLUX #/CM**2/DAY
.100	2.400E 06	2.073E 11
.300	4.011E 05	3.466E 10
.500	6.731E 04	5.815E 09
.700	1.135E 04	9.808E 08
.900	1.930E 03	1.667E 08
1.10	3.321E 02	2.870E 07
1.30	5.833E 01	5.040E 06
1.50	1.056E 01	9.126E 05
1.75	1.156E 00	9.990E 04
2.00	2.190E-02	1.892E 03
2.25	0.0	0.0
2.50	0.0	0.0
2.75	0.0	0.0
3.00	0.0	0.0
3.50	0.0	0.0

* EXPOSURE INDEX:ENERGY >.100MEV

INTENSITY RANGES #/CM**2/SEC	EXPOSURE DURATION (HOURS)	TOTAL # ACCUMULA PARTICLE
ZERO FLUX	1.900	0.0
1.E0-1.E1	2.300	3.047E
1.E1-1.E2	2.100	2.875E
1.E2-1.E3	2.100	3.002E
1.E3-1.E4	2.600	3.913E
1.E4-1.E5	4.900	7.174E
1.E5-1.E6	2.250	2.770E
1.E6-1.E7	2.800	5.234E
1.E7-OVER	2.850	1.515F
TOTAL	23.800	2.073E

Table 35

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** ORBITAL FLUX STUDY WITH COMPOSITE PARTICLE ENVIRONMENTS: VETTES AP5, AP6, AP7; AE4, AE5, FOR SOLAR MAXIMUM **** UNIFLX OF 1973
** ELECTRON FLUXES EXPONENTIALLY DECAYED TO 1970. 0 WITH LIFETIMES: E.G.STASSINOPOULOS&P.VERZARIU ** CUTOFF TIMES:
** MAGNETIC COORDINATES B AND L COMPUTED BY INVARA OF 1972 WITH ALLMAG, MODEL 4: CAIN&SWEENEY 120-TERM POGO 8/69 * TIME= 1975.5
** VEHICLE : SAS-D (310) ** INCLINATION= 29DEG ** PERIGEE=27952KM ** APOGEE= 43615KM ** B/L ORBIT TAPE: T07678 ** PERIOD= 24.000
****

************ ELECTRONS ************

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

ENERGY RANGES (MEV)	AVERAGED TOTAL FLUX #/CM**2/SEC	AVERAGED TOTAL FLUX #/CM**2/DAY	SPECTRUM PER CENT
.0 -.500	3.305E 07	2.856E 12	95.674
.500-1.00	1.133E 06	9.787E 10	3.279
1.00-1.50	2.571E 05	2.221E 10	0.744
1.50-2.00	7.395E 04	6.390E 09	0.214
2.00-2.50	2.251E 04	1.945E 09	0.065
2.50-3.00	6.202E 03	5.359E 08	0.018
3.00-4.00	1.934E 03	1.671E 08	0.006
4.00-5.00	3.102E 01	2.680E 06	0.000
5.00-OVER	0.0	0.0	0.0
TOTAL	3.455E 07	2.985E 12	100.000

*** COMPOSITE ORBIT SPECTRUM ***

ENERGY LEVELS >(MEV)	AVERAGED INTEG.FLUX #/CM**2/SEC	AVERAGED INTEG.FLUX #/CM**2/DAY
.0	3.455E 07	2.985E 12
.250	4.249E 06	3.671E 11
.500	1.494E 06	1.291E 11
.750	7.268E 05	6.279E 10
1.00	3.617E 05	3.125E 10
1.25	1.942E 05	1.677E 10
1.50	1.046E 05	9.040E 09
1.75	5.657E 04	4.888E 09
2.00	3.068E 04	2.651E 09
2.50	8.167E 03	7.057E 08
3.00	1.965E 03	1.698E 08
3.50	3.866E 02	3.341E 07
4.00	3.102E 01	2.680E 06
4.50	0.0	0.0
5.00	0.0	0.0

* EXPOSURE INDEX:ENERGY >.500MEV

INTENSITY RANGES #/CM**2/SEC	EXPOSURE DURATION (HOURS)	TOTAL # ACCUMULA PARTICLE
ZERO FLUX	0.0	0.0
1.E0-1.E1	0.0	0.0
1.E1-1.E2	1.100	2.674E
1.E2-1.E3	2.500	3.754E
1.E3-1.E4	2.300	3.210E
1.E4-1.E5	3.050	4.429E
1.E5-1.E6	7.250	1.352E
1.E6-1.E7	7.600	1.151E
1.E7-OVER	0.0	0.0
TOTAL	23.800	1.291E

Table 69

** ORBITAL FLUX STUDY WITH COMPOSITE PARTICLE ENVIRONMENTS: VETTES AP5, AP6, AP7; AE4, AE5, FOR SOLAR MAXIMUM **** UNIFLX OF 1973 **
** ELECTRON FLUXES EXPONENTIALLY DECAYED TO 1970. 0 WITH LIFETIMES: E.G.STASSINOPOULOS&P.VERZARIU ** CUTOFF TIMES: **
** MAGNETIC COORDINATES B AND L COMPUTED BY INVARA OF 1972 WITH ALLMAG, MODEL 4: CAIN&SWEENEY 120-TERM POGO 8/69 * TIME= 1975.5 **
** VEHICLE : SAS-D (110) ** INCLINATION= 45DEG ** PERIGEE=27952KM ** APOGEE= 43615KM ** B/L ORBIT TAPE: T06130 ** PERIOD= 24.000 **

************ LOW ENERGY PROTONS ************

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

ENERGY RANGES (MEV)	AVERAGED TOTAL FLUX #/CM**2/SEC	AVERAGED TOTAL FLUX #/CM**2/DAY	SPECTRUM PER CENT
.100-.500	1.836E 06	1.586E 11	97.139
.500-.900	5.255E 04	4.540E 09	2.777
.900-1.10	1.306E 03	1.129E 08	0.069
1.10-1.50	2.650E 02	2.289E 07	0.014
1.50-2.00	8.615E 00	7.444E 05	0.000
2.00-2.50	6.014E-02	5.196E 03	0.000
2.50-3.00	0.0	0.0	0.0
3.00-3.50	0.0	0.0	0.0
3.50-OVER	0.0	0.0	0.0
TOTAL	1.892E 06	1.635E 11	100.000

*** COMPOSITE ORBIT SPECTRUM ***

ENERGY LEVELS >(MEV)	AVERAGED INTEG.FLUX #/CM**2/SEC	AVERAGED INTEG.FLUX #/CM**2/DAY
.100	1.892E 06	1.635E 11
.300	3.194E 05	2.760E 10
.500	5.413E 04	4.677E 09
.700	9.217E 03	7.964E 08
.900	1.580E 03	1.365E 08
1.10	2.736E 02	2.364E 07
1.30	4.818E 01	4.163E 06
1.50	8.675E 00	7.496E 05
1.75	9.808E-01	8.474E 04
2.00	6.014E-02	5.196E 03
2.25	0.0	0.0
2.50	0.0	0.0
2.75	0.0	0.0
3.00	0.0	0.0
3.50	0.0	0.0

* EXPOSURE INDEX:ENERGY >.100MEV *

INTENSITY RANGES #/CM**2/SEC	EXPOSURE DURATION (HOURS)	TOTAL # OF ACCUMULATED PARTICLES
ZERO FLUX	7.450	0.0
1.E0-1.E1	1.500	3.349E 04
1.E1-1.E2	2.450	3.103E 05
1.E2-1.E3	2.200	3.007E 06
1.E3-1.E4	2.900	4.259E 07
1.E4-1.E5	3.150	2.454E 08
1.E5-1.E6	0.600	9.159E 08
1.E6-1.E7	1.350	2.619E 10
1.E7-OVER	2.200	1.361E 11
TOTAL	23.800	1.635E 11

Table 70

** ORBITAL FLUX STUDY WITH COMPOSITE PARTICLE ENVIRONMENTS: VETTE'S AP5, AP6, AP7; AE4, AE5, FOR SOLAR MAXIMUM ***- UNIFLX OF 1973 **
** ELECTRON FLUXES EXPONENTIALLY DECAYED TO 1970.0 WITH LIFETIMES: E.G.STASSINOPOULOS&P.VERZARIU ** CUTOFF TIMES: **
** MAGNETIC COORDINATES B AND L COMPUTED BY INVARA OF 1972 WITH ALLMAG, MODEL 61: CAIN&SWEENEY 120-TERM POGO 8/69 * TIME= 1975.5 **
** VEHICLE : SAS-D (110) ** INCLINATION= [illegible]DEG ** PERIGEE=270[illegible]KM ** APOGEE= 43[illegible]15KM ** B/L ORBIT TAPE: TD8136 ** PERIOD= 24.000 **

ELECTRONS

SPECTRUM IN PERCENT DELTA ENERGY

ENERGY RANGES (MEV)	AVERAGED TOTAL FLUX #/CM**2/SEC	AVERAGED TOTAL FLUX #/CM**2/DAY	SPECTRUM PER CENT
.0 -.500	2.403E 07	2.075E 12	96.163
.500-1.00	7.0[illegible]E 05	6.083E 10	2.903
1.00-1.50	1.797E 05	1.552E 10	0.719
1.50-2.00	5.442E 04	4.702E 09	0.218
2.00-2.50	1.743E 04	1.506E 09	0.070
2.50-3.00	5.060E 03	4.372E 08	0.020
3.00-4.00	1.607E 03	1.388E 08	0.006
4.00-5.00	3.033E 01	2.621E 06	0.000
5.00-OVER	0.0	0.0	0.0
TOTAL	2.499E 07	2.159E 12	100.000

*** COMPOSITE ORBIT SPECTRUM ***

ENERGY LEVELS >(MEV)	AVERAGED INTEG.FLUX #/CM**2/SEC	AVERAGED INTEG.FLUX #/CM**2/DAY
.0	2.499E 07	2.159E 12
.250	2.542E 06	2.196E 11
.500	[illegible]E 05	9.2[illegible]E 10
.750	4.923E 05	4.2[illegible]3E 10
1.00	2.582E 05	2.231E 10
1.25	1.422E 05	1.229E 10
1.50	7.855E 04	6.786E 09
1.75	4.369E 04	3.775E 09
2.00	2.413E 04	2.085E 09
2.50	6.697E 03	5.786E 08
3.00	1.638E 03	1.415E 08
3.50	3.416E 02	2.951E 07
4.00	3.033E 01	2.621E 06
4.50	0.0	0.0
5.00	0.0	0.0

* EXPOSURE INDEX:ENERGY >.500MEV *

INTENSITY RANGES #/CM**2/SEC	EXPOSURE DURATION (HOURS)	TOTAL # OF ACCUMULATED PARTICLES
ZERO FLUX	6.850	0.0
1.E0-1.E1	0.250	3.392E 03
1.E1-1.E2	0.200	2.705E 04
1.E2-1.E3	0.500	8.244E 05
1.E3-1.E4	3.400	4.179E 07
1.E4-1.E5	3.250	4.891E 08
1.E5-1.E6	5.450	7.024E 09
1.E6-1.E7	3.900	7.529E 10
1.E7-OVER	0.0	0.0
TOTAL	23.800	8.285E 10

Table 71

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****************************************************************************************************************
** ORBITAL FLUX STUDY WITH COMPOSITE PARTICLE ENVIRONMENTS: VETTES AP5, AP6, AP7; AE4, AE5, FOR SOLAR MAXIMUM **** UNIFLX OF 1973 **
** ELECTRON FLUXES EXPONENTIALLY DECAYED TO 1970. 0 WITH LIFETIMES: E.G.STASSINOPOULOS&P.VERZARIU ** CUTOFF TIMES:                **
** MAGNETIC COORDINATES B AND L COMPUTED BY INVARA OF 1972 WITH ALLMAG, MODEL  4:  CAIN&SWEENEY 120-TERM POGO 8/69 * TIME= 1975.5 **
** VEHICLE 1 SAS-D (290) ** INCLINATION= 45DEG ** PERIGEE=27952KM ** APOGEE= 43515KM ** O/L ORBIT TAPE: TO8050 ** PERIOD= 24.000 **
****************************************************************************************************************
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************ LOW ENERGY PROTONS ************

****

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

ENERGY RANGES (MEV)	AVERAGED TOTAL FLUX #/CM**2/SEC	AVERAGED TOTAL FLUX #/CM**2/DAY	SPECTRUM PER CENT
.100-.500	1.555E 06	1.352E 11	97.222
.500-.900	4.345E 04	3.754E 09	2.699
.900-1.10	1.049E 03	9.062E 07	0.065
1.10-1.50	2.092E 02	1.808E 07	0.013
1.50-2.00	6.733E 00	5.818E 05	0.000
2.00-2.50	2.569E-02	2.220E 03	0.000
2.50-3.00	0.0	0.0	0.0
3.00-3.50	0.0	0.0	0.0
3.50-OVER	0.0	0.0	0.0
TOTAL	1.610E 06	1.391E 11	100.000

*** COMPOSITE ORBIT SPECTRUM ***

ENERGY LEVELS >(MEV)	AVERAGED INTEG.FLUX #/CM**2/SEC	AVERAGED INTEG.FLUX #/CM**2/DAY
.100	1.610E 06	1.391E 11
.300	2.579E 05	2.314E 10
.500	4.471E 04	3.863E 09
.700	7.496E 03	6.476E 08
.900	1.265E 03	1.093E 08
1.10	2.160E 02	1.866E 07
1.30	3.764E 01	3.252E 06
1.50	6.789E 00	5.840E 05
1.75	7.545E-01	6.519E 04
2.00	2.569E-02	2.220E 03
2.25	0.0	0.0
2.50	0.0	0.0
2.75	0.0	0.0
3.00	0.0	0.0
3.50	0.0	0.0

* EXPOSURE INDEX:ENERGY >.100MEV *

INTENSITY RANGES #/CM**2/SEC	EXPOSURE DURATION (HOURS)	TOTAL # OF ACCUMULATED PARTICLES
ZERO FLUX	7.550	0.0
1.E0-1.E1	0.650	8.897E 03
1.E1-1.E2	3.350	3.924E 05
1.E2-1.E3	2.350	3.369E 06
1.E3-1.E4	3.450	5.587E 07
1.E4-1.E5	2.350	1.687E 08
1.E5-1.E6	0.600	8.772E 08
1.E6-1.E7	1.550	3.052E 10
1.E7-OVER	1.950	1.074E 11
TOTAL	23.800	1.391E 11

Table 72

** ORBITAL FLUX STUDY WITH COMPOSITE PARTICLE ENVIRONMENTS: VETTE AE5, AE6, AE7; AE4, AP5, FOR SOLAR MAXIMUM **** UNIFLUX OF 1973 **
** ELECTRON FLUXES EXPONENTIALLY DECAYED TO 1970.0 WITH LIFETIMES: E.G.STASSINOPOULOS&P.VERZARIU ** CUTOFF TIMES: **
** MAGNETIC COORDINATES B AND L COMPUTED BY INVARA OF 1972 WITH ALLMAG, MODEL 4: CAIN&SWEENEY 120-TERM POGO 8/69 * TIME= 1975.5 **
** VEHICLE : BASED (250) ** INCLINATION= 45DEG ** PERIGEE=27952KM ** APOGEE= 33815KM ** B/L ORBIT TAPE: T08050 ** PERIOD= 24.033 **

ELECTRONS

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

ENERGY RANGES (MEV)	AVERAGED TOTAL FLUX #/CM**2/SEC	AVERAGED TOTAL FLUX #/CM**2/DAY	SPECTRUM PER CENT
.0 -.500	2.417E 07	2.089E 12	96.491
.500-1.00	6.535E 05	5.647E 10	2.609
1.00-1.50	1.603E 05	1.385E 10	0.640
1.50-2.00	4.766E 04	4.100E 09	0.189
2.00-2.50	1.496E 04	1.293E 09	0.059
2.50-3.00	4.146E 03	3.599E 08	0.017
3.00-4.00	1.310E 03	1.132E 08	0.005
4.00-5.00	2.255E 01	1.948E 06	0.000
5.00-OVER	0.0	0.0	0.0
TOTAL	2.506E 07	2.165E 12	100.000

*** COMPOSITE ORBIT SPECTRUM ***

ENERGY LEVELS >(MEV)	AVERAGED INTEG.FLUX #/CM**2/SEC	AVERAGED INTEG.FLUX #/CM**2/DAY
.0	2.506E 07	2.165E 12
.250	2.386E 06	2.061E 11
.500	8.816E 05	7.617E 10
.750	4.439E 05	3.835E 10
1.00	2.281E 05	1.971E 10
1.25	1.242E 05	1.073E 10
1.50	6.789E 04	5.866E 09
1.75	3.710E 04	3.205E 09
2.00	2.038E 04	1.758E 09
2.50	5.609E 03	4.751E 08
3.00	1.333E 03	1.152E 08
3.50	2.696E 02	2.329E 07
4.00	2.255E 01	1.948E 06
4.50	0.0	0.0
5.00	0.0	0.0

* EXPOSURE INDEX(ENERGY >0.500MEV *

INTENSITY RANGES #/CM**2/SEC	EXPOSURE DURATION (HOURS)	TOTAL # OF ACCUMULATED PARTICLES
ZERO FLUX	6.950	0.0
1.E0-1.E1	0.250	3.010E 03
1.E1-1.E2	0.200	2.001E 04
1.E2-1.E3	0.600	1.038E 05
1.E3-1.E4	3.200	4.444E 07
1.E4-1.E5	3.500	5.193E 08
1.E5-1.E6	5.200	5.728E 09
1.E6-1.E7	3.900	6.999E 10
1.E7-OVER	0.0	0.0
TOTAL	23.800	7.617E 10

Table 73

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*************************************************************************************************************************
** ORBITAL FLUX STUDY WITH COMPOSITE PARTICLE ENVIRONMENTS: VETTES AP5, AP6, AP7; AE4, AE5, FOR SOLAR MAXIMUM **** UNIFLX OF 1973 **
** ELECTRON FLUXES EXPONENTIALLY DECAYED TO 1970. 0 WITH LIFETIMES: E.G.STASSINOPOULOS&P.VERZARIU ** CUTOFF TIMES:                 **
** MAGNETIC COORDINATES B AND L COMPUTED BY INVARA OF 1972 WITH ALLMAG, MODEL  4:  CAIN&SWEENEY 120-TERM POGO 8/69 * TIME= 1975.5 **
** VEHICLE : SAS-D (310)  ** INCLINATION= 45DEG ** PERIGEE=27952KM ** APOGEE= 43615KM ** B/L ORBIT TAPE: TD7678 ** PERIOD= 24.000 **
*************************************************************************************************************************
                                  ************   LOW  ENERGY PROTONS   ************
                                  ***********************************************
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****** SPECTRUM IN PERCENT DELTA ENERGY ******

ENERGY RANGES (MEV)	AVERAGED TOTAL FLUX #/CM**2/SEC	AVERAGED TOTAL FLUX #/CM**2/DAY	SPECTRUM PER CENT
.100-.500	1.564E 06	1.352E 11	97.223
.500-.900	4.341E 04	3.751E 09	2.698
.900-1.10	1.048E 03	9.053E 07	0.065
1.10-1.50	2.091E 02	1.807E 07	0.013
1.50-2.00	6.777E 00	5.855E 05	0.000
2.00-2.50	2.519E-02	2.176E 03	0.000
2.50-3.00	0.0	0.0	0.0
3.00-3.50	0.0	0.0	0.0
3.50-OVER	0.0	0.0	0.0
TOTAL	1.609E 06	1.390E 11	100.000

*** COMPOSITE ORBIT SPECTRUM ***

ENERGY LEVELS >(MEV)	AVERAGED INTEG.FLUX #/CM**2/SEC	AVERAGED INTEG.FLUX #/CM**2/DAY
.100	1.609E 06	1.390E 11
.300	2.677E 05	2.313E 10
.500	4.468E 04	3.860E 09
.700	7.488E 03	6.470E 08
.900	1.264E 03	1.092E 08
1.10	2.159E 02	1.866E 07
1.30	3.774E 01	3.261E 06
1.50	6.802E 00	5.877E 05
1.75	7.661E-01	6.619E 04
2.00	2.519E-02	2.176E 03
2.25	0.0	0.0
2.50	0.0	0.0
2.75	0.0	0.0
3.00	0.0	0.0
3.50	0.0	0.0

* EXPOSURE INDEX:ENERGY >.100MEV *

INTENSITY RANGES #/CM**2/SEC	EXPOSURE DURATION (HOURS)	TOTAL # OF ACCUMULATED PARTICLES
ZERO FLUX	6.950	0.0
1.E0-1.E1	0.750	1.038E 04
1.E1-1.E2	3.000	4.443E 05
1.E2-1.E3	2.700	3.805E 06
1.E3-1.E4	3.850	6.263E 07
1.E4-1.E5	2.400	1.700E 08
1.E5-1.E6	0.600	8.326E 08
1.E6-1.E7	1.850	2.938E 10
1.E7-OVER	2.000	1.086E 11
TOTAL	23.800	1.390E 11

** ORBITAL FLUX STUDY WITH COMPOSITE PARTICLE ENVIRONMENTS: VETTES AP5, AP6, AP7; AE4, AE5, FOR SOLAR MAXIMUM **** UNIFLX OF 1973 **
** ELECTRON FLUXES EXPONENTIALLY DECAYED TO 1970. 0 WITH LIFETIMES: E.G.STASSINOPOULOS&P.VERZARIU ** CUTOFF TIMES: **
** MAGNETIC COORDINATES B AND L COMPUTED BY INVARA OF 1972 WITH ALLMAG, MODEL 4: CAIN&SWEENEY 120-TERM POGO 8/69 * TIME= 1975.5 **
** VEHICLE : SAS-D (310) ** INCLINATION= 45DEG ** PERIGEE=27952KM ** APOGEE= 43615KM ** P/L ORBIT TAPE: TD7678 ** PERIOD= 24.000 **

************ ELECTRONS ************

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

ENERGY RANGES (MEV)	AVERAGED TOTAL FLUX #/CM**2/SEC	AVERAGED TOTAL FLUX #/CM**2/DAY	SPECTRUM PER CENT
.0 -.500	2.523E 07	2.180E 12	96.593
.500-1.00	6.613E 05	5.713E 10	2.531
1.00-1.50	1.609E 05	1.390E 10	0.616
1.50-2.00	4.752E 04	4.106E 09	0.182
2.00-2.50	1.484E 04	1.282E 09	0.057
2.50-3.00	4.156E 03	3.591E 08	0.016
3.00-4.00	1.308E 03	1.130E 08	0.005
4.00-5.00	2.233E 01	1.929E 06	0.000
5.00-OVER	0.0	0.0	0.0
TOTAL	2.612E 07	2.257E 12	100.000

*** COMPOSITE ORBIT SPECTRUM ***

ENERGY LEVELS >(MEV)	AVERAGED INTEG.FLUX #/CM**2/SEC	AVERAGED INTEG.FLUX #/CM**2/DAY
.0	2.612E 07	2.257E 12
.250	2.436E 06	2.105E 11
.500	8.900E 05	7.689E 10
.750	4.464E 05	3.857E 10
1.00	2.287E 05	1.976E 10
1.25	1.244E 05	1.075E 10
1.50	6.785E 04	5.862E 09
1.75	3.710E 04	3.205E 09
2.00	2.032E 04	1.756E 09
2.50	5.486E 03	4.740E 08
3.00	1.330E 03	1.149E 08
3.50	2.683E 02	2.318E 07
4.00	2.233E 01	1.929E 06
4.50	0.0	0.0
5.00	0.0	0.0

* EXPOSURE INDEX:ENERGY >.500MEV *

INTENSITY RANGES #/CM**2/SEC	EXPOSURE DURATION (HOURS)	TOTAL # OF ACCUMULATED PARTICLES
ZERO FLUX	6.300	0.0
1.E0-1.E1	0.300	4.336E 03
1.E1-1.E2	0.250	3.804E 04
1.E2-1.E3	0.600	1.088E 06
1.E3-1.E4	2.900	5.103E 07
1.E4-1.E5	3.900	5.701E 08
1.E5-1.E6	5.650	6.169E 09
1.E6-1.E7	3.900	7.010E 10
1.E7-OVER	0.0	0.0
TOTAL	23.800	7.689E 10

TABLE _

SAS-D (110)

CIRCULAR

INCLINATION: 0 DEG

PERIGEE: 35863 KM

APOGEE: 35863 KM

DECAY DATE: 1970. 0.

**** EXPOSURE ANALYSIS ****

	PROTONS-LOW (E>.100MEV)	PROTONS-HIGH (E>5.00MEV)	ELECTRONS (E>.500MEV)
PERCENT OF TOTAL LIFE-TIME SPENT IN FLUX-FREE REGIONS* OF SPACE :	0.0 %	100.00 %	0.0 %
PERCENT OF TOTAL LIFE-TIME SPENT IN HIGH-INTENSITY REGIONS+ OF VAN ALLEN BELTS :	100.00 %	0.0 %	100.00 %
PERCENT OF TOTAL DAILY FLUX ACCUMULATED IN HIGH-INTENSITY REGIONS:	100.00 %	0.0 %	100.00 %

****

* <1 PARTICLE/CM**2/SEC

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

TABLE 75

SAS-D (110)

CIRCULAR

INCLINATION: 0 DEG

PERIGEE: 35863 KM

APOGEE: 35863 KM

DECAY DATE: 1970. 0.

* PERCENT OF TOTAL LIFETIME SPENT INSIDE AND *

* OUTSIDE THE TRAPPED-PARTICLE RADIATION BELT *

INNER ZONE -TI-* (1.0 < L < 2.8)	:	0.0 %
OUTER ZONE -TO- (2.8 < L < 11.0)	:	99.17 %
EXTERNAL -TE- (L > 11.0)	:	0.83 %
TOTAL	:	100.00 %

*TIME IN INNER ZONE MAY BE SUBDIVIDED AS FOLLOWS:

OUTSIDE TRAPPING REGION (1.0 < L < 1.1)	:	0.0 %
INSIDE TRAPPING REGION (1.1 < L < 2.8)	:	0.0 %

SAS-D (290)

CIRCULAR

INCLINATION: 0 DEG

PERIGEE: 35863 KM

APOGEE: 35863 KM

DECAY DATE: 1970. 0.

**** EXPOSURE ANALYSIS ****

	PROTONS-LOW (E>.100MEV)	PROTONS-HIGH (E>5.00MEV)	ELECTRONS (E>.500MEV)
PERCENT OF TOTAL LIFE-TIME SPENT IN FLUX-FREE REGIONS* OF SPACE :	0.0 %	100.00 %	0.0 %
PERCENT OF TOTAL LIFE-TIME SPENT IN HIGH-INTENSITY REGIONS+ OF VAN ALLEN BELTS :	100.00 %	0.0 %	100.00 %
PERCENT OF TOTAL DAILY FLUX ACCUMULATED IN HIGH-INTENSITY REGIONS:	100.00 %	0.0 %	100.00 %

****

* <1 PARTICLE/CM**2/SEC

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

SAS-D (290)

CIRCULAR

INCLINATION: 0 DEG

PERIGEE: 35863 KM

APOGEE: 35863 KM

DECAY DATE: 1970. 0.

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

INNER ZONE -TI-* (1.0 < L < 2.8)	:	0.0 %
OUTER ZONE -TO- (2.8 < L < 11.0)	:	99.17 %
EXTERNAL -TE- (L > 11.0)	:	0.83 %
TOTAL	:	100.00 %

*TIME IN INNER ZONE MAY BE SUBDIVIDED AS FOLLOWS:

OUTSIDE TRAPPING REGION (1.0 < L < 1.1)	:	0.0 %
INSIDE TRAPPING REGION (1.1 < L < 2.8)	:	0.0 %

TABLE _

SAS-D (310)

CIRCULAR

INCLINATION: 0 DEG

PERIGEE: 35863 KM

APOGEE: 35863 KM

DECAY DATE: 1970. 0.

**** EXPOSURE ANALYSIS ****

	PROTONS-LOW (E>.100MEV)	PROTONS-HIGH (E>5.00MEV)	ELECTRONS (E>.500MEV)
PERCENT OF TOTAL LIFE-TIME SPENT IN FLUX-FREE REGIONS* OF SPACE :	0.0 %	100.00 %	0.0 %
PERCENT OF TOTAL LIFE-TIME SPENT IN HIGH-INTENSITY REGIONS+ OF VAN ALLEN BELTS :	100.00 %	0.0 %	100.00 %
PERCENT OF TOTAL DAILY FLUX ACCUMULATED IN HIGH-INTENSITY REGIONS:	100.00 %	0.0 %	100.00 %

****

* <1 PARTICLE/CM**2/SEC

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

TABLE 7

SAS-D (310)

CIRCULAR

INCLINATION: 0 DEG

PERIGEE: 35863 KM

APOGEE: 35863 KM

DECAY DATE: 1970. 0.

* PERCENT OF TOTAL LIFETIME SPENT INSIDE AND *

* OUTSIDE THE TRAPPED-PARTICLE RADIATION BELT *

INNER ZONE -TI-* (1.0 < L < 2.8)	:	0.0 %
OUTER ZONE -TO- (2.8 < L < 11.0)	:	99.17 %
EXTERNAL -TE- (L > 11.0)	:	0.83 %
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 : 0.0 %
(1.1 < L < 2.8)

TABLE _

SAS-D (110)

CIRCULAR

INCLINATION: 29 DEG

PERIGEE: 35363 KM

APOGEE: 35863 KM

DECAY DATE: 1970. 0.

**** EXPOSURE ANALYSIS ****

	PROTONS-LOW (E>.100MEV)	PROTONS-HIGH (E>5.00MEV)	ELECTRONS (E>.500MEV)
PERCENT OF TOTAL LIFE-TIME SPENT IN FLUX-FREE REGIONS* OF SPACE :	19.75 %	100.00 %	15.97 %
PERCENT OF TOTAL LIFE-TIME SPENT IN HIGH-INTENSITY REGIONS+ OF VAN ALLEN BELTS :	68.91 %	0.0 %	66.81 %
PERCENT OF TOTAL DAILY FLUX ACCUMULATED IN HIGH-INTENSITY REGIONS:	100.00 %	0.0 %	99.78 %

****

* <1 PARTICLE/CM**2/SEC

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

TABLE 2

SAS-D (110)

CIRCULAR

INCLINATION: 29 DEG

PERIGEE: 35863 KM

APOGEE: 35863 KM

DECAY DATE: 1970. 0.

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

INNER ZONE (1.0 < L < 2.8)	-TI-*	:	0.0 %
OUTER ZONE (2.8 < L < 11.0)	-TO-	:	87.29 %
EXTERNAL (L > 11.0)	-TE-	:	12.71 %
TOTAL		:	100.00 %

*TIME IN INNER ZONE MAY BE SUBDIVIDED AS FOLLOWS:

OUTSIDE TRAPPING REGION (1.0 < L < 1.1)	:	0.0 %
INSIDE TRAPPING REGION (1.1 < L < 2.8)	:	0.0 %

TABLE _

SAS-D (290)

CIRCULAR

INCLINATION: 30 DEG

PERIGEE: 35863 KM

APOGEE: 35863 KM

DECAY DATE: 1970. 0.

**** EXPOSURE ANALYSIS ****

	PROTONS-LOW (E>.100MEV)	PROTONS-HIGH (E>5.00MEV)	ELECTRONS (E>.500MEV)
PERCENT OF TOTAL LIFE-TIME SPENT IN FLUX-FREE REGIONS* OF SPACE :	20.80 %	100.00 %	17.02 %
PERCENT OF TOTAL LIFE-TIME SPENT IN HIGH-INTENSITY REGIONS+ OF VAN ALLEN BELTS :	67.23 %	0.0 %	65.55 %
PERCENT OF TOTAL DAILY FLUX ACCUMULATED IN HIGH-INTENSITY REGIONS:	100.00 %	0.0 %	99.77 %

****

* <1 PARTICLE/CM**2/SEC

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

TABLE 79

SAS-D (290)

CIRCULAR

INCLINATION: 30 DEG

PERIGEE: 35863 KM

APOGEE: 35863 KM

DECAY DATE: 1970. 0.

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

INNER ZONE (1.0 < L < 2.8)	-TI-* :	0.0 %
OUTER ZONE (2.8 < L < 11.0)	-TO- :	86.04 %
EXTERNAL (L > 11.0)	-TE- :	13.96 %
TOTAL	:	100.00 %

*TIME IN INNER ZONE MAY BE SUBDIVIDED AS FOLLOWS:

OUTSIDE TRAPPING REGION : (1.0 < L < 1.1)	0.0 %
INSIDE TRAPPING REGION : (1.1 < L < 2.8)	0.0 %

TABLE _

SAS-D (310)

CIRCULAR

INCLINATION: 29 DEG

PERIGEE: 35863 KM

APOGEE: 35863 KM

DECAY DATE: 1970. 0.

**** EXPOSURE ANALYSIS ****

	PROTONS-LOW (E>.100MEV)	PROTONS-HIGH (E>5.00MEV)	ELECTRONS (E>.500MEV)
PERCENT OF TOTAL LIFE-TIME SPENT IN FLUX-FREE REGIONS* OF SPACE :	17.44 %	100.00 %	12.61 %
PERCENT OF TOTAL LIFE-TIME SPENT IN HIGH-INTENSITY REGIONS+ OF VAN ALLEN BELTS :	69.33 %	0.0 %	67.23 %
PERCENT OF TOTAL DAILY FLUX ACCUMULATED IN HIGH-INTENSITY REGIONS:	100.00 %	0.0 %	99.73 %

****

* <1 PARTICLE/CM**2/SEC

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

TABLE 80

SAS-D (310)

CIRCULAR

INCLINATION: 29 DEG

PERIGEE: 35863 KM

APOGEE: 35863 KM

DECAY DATE: 1970. 0.

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

INNER ZONE -TI-* (1.0 < L < 2.8)	:	0.0 %
OUTER ZONE -TO- (2.8 < L < 11.0)	:	92.92 %
EXTERNAL -TE- (L > 11.0)	:	7.08 %
TOTAL	:	100.00 %

*TIME IN INNER ZONE MAY BE SUBDIVIDED AS FOLLOWS:

OUTSIDE TRAPPING REGION (1.0 < L < 1.1)	:	0.0 %
INSIDE TRAPPING REGION (1.1 < L < 2.8)	:	0.0 %

TABLE _

SAS-D (110)

CIRCULAR

INCLINATION: 45 DEG

PERIGEE: 35863 KM

APOGEE: 35863 KM

DECAY DATE: 1970. 0.

**** EXPOSURE ANALYSIS ****

	PROTONS-LOW (E>.100MEV)	PROTONS-HIGH (E>5.00MEV)	ELECTRONS (E>.500MEV)
PERCENT OF TOTAL LIFE-TIME SPENT IN FLUX-FREE REGIONS* OF SPACE :	30.46 %	100.00 %	28.57 %
PERCENT OF TOTAL LIFE-TIME SPENT IN HIGH-INTENSITY REGIONS+ OF VAN ALLEN BELTS :	46.85 %	0.0 %	44.12 %
PERCENT OF TOTAL DAILY FLUX ACCUMULATED IN HIGH-INTENSITY REGIONS:	99.99 %	0.0 %	99.44 %

****

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

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

TABLE 4

SAS-D (110)

CIRCULAR

INCLINATION: 45 DEG

PERIGEE: 35863 KM

APOGEE: 35863 KM

DECAY DATE: 1970. 0.

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

INNER ZONE -TI-* (1.0 < L < 2.8)	:	0.0 %
OUTER ZONE -TO- (2.8 < L < 11.0)	:	72.29 %
EXTERNAL -TE- (L > 11.0)	:	27.71 %
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 : 0.0 %
(1.1 < L < 2.8)

TABLE _

SAS-D (290)

CIRCULAR

INCLINATION: 45 DEG

PERIGEE: 35863 KM

APOGEE: 35863 KM

DECAY DATE: 1970. 0.

**** EXPOSURE ANALYSIS ****

	PROTONS-LOW (E>.100MEV)	PROTONS-HIGH (E>5.00MEV)	ELECTRONS (E>.500MEV)
PERCENT OF TOTAL LIFE-TIME SPENT IN FLUX-FREE REGIONS* OF SPACE :	31.09 %	100.00 %	28.99 %
PERCENT OF TOTAL LIFE-TIME SPENT IN HIGH-INTENSITY REGIONS+ OF VAN ALLEN BELTS :	46.43 %	0.0 %	43.28 %
PERCENT OF TOTAL DAILY FLUX ACCUMULATED IN HIGH-INTENSITY REGIONS:	99.99 %	0.0 %	99.27 %

****

* <1 PARTICLE/CM**2/SEC

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

TABLE 82

SAS-D (290)

CIRCULAR

INCLINATION: 45 DEG

PERIGEE: 35863 KM

APOGEE: 35863 KM

DECAY DATE: 1970. 0.

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

INNER ZONE -TI-* (1.0 < L < 2.8)	:	0.0 %
OUTER ZONE -TO- (2.8 < L < 11.0)	:	71.87 %
EXTERNAL -TE- (L > 11.0)	:	28.13 %
TOTAL	:	100.00 %

*TIME IN INNER ZONE MAY BE SUBDIVIDED AS FOLLOWS:

OUTSIDE TRAPPING REGION (1.0 < L < 1.1)	:	0.0 %
INSIDE TRAPPING REGION (1.1 < L < 2.8)	:	0.0 %

TABLE _

SAS-D (310)

CIRCULAR

INCLINATION: 45 DEG

PERIGEE: 35863 KM

APOGEE: 35863 KM

DECAY DATE: 1970. 0.

**** EXPOSURE ANALYSIS ****

	PROTONS-LOW (E>.100MEV)	PROTONS-HIGH (E>5.00MEV)	ELECTRONS (E>.500MEV)
PERCENT OF TOTAL LIFE-TIME SPENT IN FLUX-FREE REGIONS* OF SPACE :	29.83 %	100.00 %	28.15 %
PERCENT OF TOTAL LIFE-TIME SPENT IN HIGH-INTENSITY REGIONS+ OF VAN ALLEN BELTS :	46.22 %	0.0 %	43.28 %
PERCENT OF TOTAL DAILY FLUX ACCUMULATED IN HIGH-INTENSITY REGIONS:	99.99 %	0.0 %	99.31 %

****

* <1 PARTICLE/CM**2/SEC

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

TABLE 83

SAS-D (310)

CIRCULAR

INCLINATION: 45 DEG

PERIGEE: 35863 KM

APOGEE: 35863 KM

DECAY DATE: 1970. 0.

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

INNER ZONE -TI-* (1.0 < L < 2.8)	:	0.0 %
OUTER ZONE -TO- (2.8 < L < 11.0)	:	72.92 %
EXTERNAL -TE- (L > 11.0)	:	27.08 %
TOTAL	:	100.00 %

*TIME IN INNER ZONE MAY BE SUBDIVIDED AS FOLLOWS:

OUTSIDE TRAPPING REGION (1.0 < L < 1.1)	:	0.0 %
INSIDE TRAPPING REGION (1.1 < L < 2.8)	:	0.0 %

TABLE _

SAS-D (110)

ELLIPTCL

INCLINATION: 0 DEG

PERIGEE: 27952 KM

APOGEE: 43615 KM

DECAY DATE: 1970. 0.

**** EXPOSURE ANALYSIS ****

	PROTONS-LOW (E>.100MEV)	PROTONS-HIGH (E>5.00MEV)	ELECTRONS (E>.500MEV)
PERCENT OF TOTAL LIFE-TIME SPENT IN FLUX-FREE REGIONS* OF SPACE :	0.0 %	100.00 %	0.0 %
PERCENT OF TOTAL LIFE-TIME SPENT IN HIGH-INTENSITY REGIONS+ OF VAN ALLEN BELTS :	100.00 %	0.0 %	100.00 %
PERCENT OF TOTAL DAILY FLUX ACCUMULATED IN HIGH-INTENSITY REGIONS:	100.00 %	0.0 %	100.00 %

* <1 PARTICLE/CM**2/SEC

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

TABLE 24

SAS-D (110)

ELLIPTCL

INCLINATION: 0 DEG

PERIGEE: 27952 KM

APOGEE: 43615 KM

DECAY DATE: 1970. 0.

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

INNER ZONE -TI-* (1.0 < L < 2.8)	:	0.0 %
OUTER ZONE -TO- (2.8 < L < 11.0)	:	99.17 %
EXTERNAL -TE- (L > 11.0)	:	0.83 %
TOTAL	:	100.00 %

*TIME IN INNER ZONE MAY BE SUBDIVIDED AS FOLLOWS:

OUTSIDE TRAPPING REGION (1.0 < L < 1.1)	:	0.0 %
INSIDE TRAPPING REGION (1.1 < L < 2.8)	:	0.0 %

TABLE _

SAS-D (290)

ELLIPTCL

INCLINATION: 0 DEG

PERIGEE: 27952 KM

APOGEE: 63615 KM

DECAY DATE: 1970. 0.

**** EXPOSURE ANALYSIS ****

	PROTONS-LOW (E>.100MEV)	PROTONS-HIGH (E>5.00MEV)	ELECTRONS (E>.500MEV)
PERCENT OF TOTAL LIFE-TIME SPENT IN FLUX-FREE REGIONS* OF SPACE :	0.0 %	100.00 %	0.0 %
PERCENT OF TOTAL LIFE-TIME SPENT IN HIGH-INTENSITY REGIONS+ OF VAN ALLEN BELTS :	100.00 %	0.0 %	100.00 %
PERCENT OF TOTAL DAILY FLUX ACCUMULATED IN HIGH-INTENSITY REGIONS:	100.00 %	0.0 %	100.00 %

****

* <1 PARTICLE/CM**2/SEC

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

TABLE 85

SAS-D (290)

ELLIPTCL

INCLINATION: 0 DEG

PERIGEE: 27952 KM

APOGEE: 63615 KM

DECAY DATE: 1970. 0.

* PERCENT OF TOTAL LIFETIME SPENT INSIDE AND *

* OUTSIDE THE TRAPPED-PARTICLE RADIATION BELT *

INNER ZONE -TI-* (1.0 < L < 2.8)	:	0.0 %
OUTER ZONE -TO- (2.8 < L < 11.0)	:	99.17 %
EXTERNAL -TE- (L > 11.0)	:	0.83 %
TOTAL	:	100.00 %

*TIME IN INNER ZONE MAY BE SUBDIVIDED AS FOLLOWS:

OUTSIDE TRAPPING REGION (1.0 < L < 1.1)	:	0.0 %
INSIDE TRAPPING REGION (1.1 < L < 2.8)	:	0.0 %

TABLE _

SAS-D (310)

ELLIPTCL

INCLINATION: 0 DEG

PERIGEE: 27952 KM

APOGEE: 43615 KM

DECAY DATE: 1970. 0.

**** EXPOSURE ANALYSIS ****

	PROTONS-LOW (E>.100MEV)	PROTONS-HIGH (E>5.00MEV)	ELECTRONS (E>.500MEV)
PERCENT OF TOTAL LIFE-TIME SPENT IN FLUX-FREE REGIONS* OF SPACE :	0.0 %	100.00 %	0.0 %
PERCENT OF TOTAL LIFE-TIME SPENT IN HIGH-INTENSITY REGIONS+ OF VAN ALLEN BELTS :	100.00 %	0.0 %	100.00 %
PERCENT OF TOTAL DAILY FLUX ACCUMULATED IN HIGH-INTENSITY REGIONS:	100.00 %	0.0 %	100.00 %

****

* <1 PARTICLE/CM**2/SEC

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

TABLE 6

SAS-D (310)

ELLIPTCL

INCLINATION: 0 DEG

PERIGEE: 27952 KM

APOGEE: 43615 KM

DECAY DATE: 1970. 0.

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

INNER ZONE -TI-* (1.0 < L < 2.8)	:	0.0 %
OUTER ZONE -TO- (2.8 < L < 11.0)	:	99.17 %
EXTERNAL -TE- (L > 11.0)	:	0.83 %
TOTAL	:	100.00 %

*TIME IN INNER ZONE MAY BE SUBDIVIDED AS FOLLOWS:

OUTSIDE TRAPPING REGION (1.0 < L < 1.1)	:	0.0 %
INSIDE TRAPPING REGION (1.1 < L < 2.8)	:	0.0 %

TABLE

SAS-D (110)

ELLIPTCL

INCLINATION: 30 DEG

PERIGEE: 27952 KM

APOGEE: 43615 KM

DECAY DATE: 1970. 0.

**** EXPOSURE ANALYSIS ****

	PROTONS-LOW (P>.100MEV)	PROTONS-HIGH (P>5.00MEV)	ELECTRONS (E>.500MEV)
PERCENT OF TOTAL LIFE-TIME SPENT IN FLUX-FREE REGIONS* OF SPACE :	19.12 %	100.00 %	13.66 %
PERCENT OF TOTAL LIFE-TIME SPENT IN HIGH-INTENSITY REGIONS+ OF VAN ALLEN BELTS :	43.87 %	0.0 %	61.37 %
PERCENT OF TOTAL DAILY FLUX ACCUMULATED IN HIGH-INTENSITY REGIONS:	100.00 %	0.0 %	99.73 %

****

* <1 PARTICLE/CM**2/SEC

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

TABLE 87

SAS-D (110)

ELLIPTCL

INCLINATION: 30 DEG

PERIGEE: 27952 KM

APOGEE: 43615 KM

DECAY DATE: 1970. 0.

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

INNER ZONE -TI-* : 0.0 %
(1.0 < L < 2.8)

OUTER ZONE -TO- : 92.08 %
(2.8 < L < 11.0)

EXTERNAL -TE- : 7.92 %
(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 : 0.0 %
(1.1 < L < 2.8)

TABLE _

SAS-D (290)

ELLIPTCL

INCLINATION: 30 DEG

PERIGEE: 27952 KM

APOGEE: 43615 KM

DECAY DATE: 1970. 0.

**** EXPOSURE ANALYSIS ****

	PROTONS-LOW (E>.100MEV)	PROTONS-HIGH (E>5.00MEV)	ELECTRONS (E>.500MEV)
PERCENT OF TOTAL LIFE-TIME SPENT IN FLUX-FREE REGIONS* OF SPACE :	19.96 %	100.00 %	14.08 %
PERCENT OF TOTAL LIFE-TIME SPENT IN HIGH-INTENSITY REGIONS+ OF VAN ALLEN BELTS :	61.97 %	0.0 %	59.97 %
PERCENT OF TOTAL DAILY FLUX ACCUMULATED IN HIGH-INTENSITY REGIONS:	100.00 %	0.0 %	99.69 %

* <1 PARTICLE/CM**2/SEC

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

TABLE 88

SAS-D (290)

ELLIPTCL

INCLINATION: 30 DEG

PERIGEE: 27952 KM

APOGEE: 43615 KM

DECAY DATE: 1970. 0.

* PERCENT OF TOTAL LIFETIME SPENT INSIDE AND *

* OUTSIDE THE TRAPPED-PARTICLE RADIATION BELT *

INNER ZONE (1.0 < L < 2.8)	-TI-*	:	0.0 %
OUTER ZONE (2.8 < L < 11.0)	-TO-	:	92.08 %
EXTERNAL (L > 11.0)	-TE-	:	7.92 %
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 : 0.0 %
(1.1 < L < 2.8)

TABLE _

SAS-D (310)

ELLIPTCL

INCLINATION: 29 DEG

PERIGEE: 27952 KM

APOGEE: 43615 KM

DECAY DATE: 1970. 0.

**** EXPOSURE ANALYSIS ****

	PROTONS-LOW (E>.100MEV)	PROTONS-HIGH (E>5.00MEV)	ELECTRONS (E>.500MEV)
PERCENT OF TOTAL LIFE-TIME SPENT IN FLUX-FREE REGIONS* OF SPACE :	7.98 %	100.00 %	0.0 %
PERCENT OF TOTAL LIFE-TIME SPENT IN HIGH-INTENSITY REGIONS+ OF VAN ALLEN BELTS :	64.71 %	0.0 %	62.39 %
PERCENT OF TOTAL DAILY FLUX ACCUMULATED IN HIGH-INTENSITY REGIONS:	100.00 %	0.0 %	99.63 %

****

* <1 PARTICLE/CM**2/SEC

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

TABLE 81

SAS-D (310)

ELLIPTCL

INCLINATION: 29 DEG

PERIGEE: 27952 KM

APOGEE: 43615 KM

DECAY DATE: 1970. 0.

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

INNER ZONE -TI-* (1.0 < L < 2.8)	:	0.0 %
OUTER ZONE -TO- (2.8 < L < 11.0)	:	99.17 %
EXTERNAL -TE- (L > 11.0)	:	0.83 %
TOTAL	:	100.00 %

*TIME IN INNER ZONE MAY BE SUBDIVIDED AS FOLLOWS:

OUTSIDE TRAPPING REGION (1.0 < L < 1.1)	:	0.0 %
INSIDE TRAPPING REGION (1.1 < L < 2.8)	:	0.0 %

TABLE 90

SAS-D (110)	SAS-D (110)
ELLIPTCL	ELLIPTCL
INCLINATION: 45 DEG	INCLINATION: 45 DEG
PERIGEE: 27952 KM	PERIGEE: 27952 KM
APOGEE: 43815 KM	APOGEE: 43815 KM
DECAY DATE: 1970. 0.	DECAY DATE: 1970. 0.

**** EXPOSURE ANALYSIS ****

	PROTONS-LOW (E>.100MEV)	PROTONS-HIGH (E>5.00MEV)	ELECTRONS (E>.500MEV)
PERCENT OF TOTAL LIFE-TIME SPENT IN FLUX-FREE REGIONS* OF SPACE :	31.30 %	100.00 %	28.78 %
PERCENT OF TOTAL LIFE-TIME SPENT IN HIGH-INTENSITY REGIONS+ OF VAN ALLEN BELTS :	42.00 %	0.0 %	39.29 %
PERCENT OF TOTAL DAILY FLUX ACCUMULATED IN HIGH-INTENSITY REGIONS:	100.00 %	0.0 %	99.38 %

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

INNER ZONE (1.0 < L < 2.8)	-TI-*	:	0.0 %
OUTER ZONE (2.8 < L < 11.0)	-TO-	:	72.50 %
EXTERNAL (L > 11.0)	-TE-	:	27.50 %
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 : 0.0 %
(1.1 < L < 2.8)

****

* <1 PARTICLE/CM**2/SEC
+ >1.E5 EL/CM**2/SEC OR 1.E3 PR/CM**2/SEC

TABLE _

SAS-D (290)

ELLIPTCL

INCLINATION: 45 DEG

PERIGEE: 27952 KM

APOGEE: 43615 KM

DECAY DATE: 1970. 0.

**** EXPOSURE ANALYSIS ****

	PROTONS-LOW (E>.100MEV)	PROTONS-HIGH (E>5.00MEV)	ELECTRONS (E>.500MEV)
PERCENT OF TOTAL LIFE-TIME SPENT IN FLUX-FREE REGIONS* OF SPACE :	31.72 %	100.00 %	29.20 %
PERCENT OF TOTAL LIFE-TIME SPENT IN HIGH-INTENSITY REGIONS+ OF VAN ALLEN BELTS :	41.60 %	0.0 %	38.24 %
PERCENT OF TOTAL DAILY FLUX ACCUMULATED IN HIGH-INTENSITY REGIONS:	100.00 %	0.0 %	99.26 %

****

* <1 PARTICLE/CM**2/SEC

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

TABLE 91

SAS-D (290)

ELLIPTCL

INCLINATION: 45 DEG

PERIGEE: 27952 KM

APOGEE: 43615 KM

DECAY DATE: 1970. 0.

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

INNER ZONE -TI-* (1.0 < L < 2.8)	:	0.0 %
OUTER ZONE -TO- (2.8 < L < 11.0)	:	72.08 %
EXTERNAL -TE- (L > 11.0)	:	27.92 %
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 : 0.0 %
(1.1 < L < 2.8)

TABLE _

SAS-D (310)

ELLIPTCL

INCLINATION: 45 DEG

PERIGEE: 27952 KM

APOGEE: 43615 KM

DECAY DATE: 1970. 0.

**** EXPOSURE ANALYSIS ****

	PROTONS-LOW (E>.100MEV)	PROTONS-HIGH (E>5.00MEV)	ELECTRONS (E>.500MEV)
PERCENT OF TOTAL LIFE- TIME SPENT IN FLUX-FREE REGIONS* OF SPACE :	29.20 %	100.00 %	26.47 %
PERCENT OF TOTAL LIFE- TIME SPENT IN HIGH- INTENSITY REGIONS+ OF VAN ALLEN BELTS :	43.70 %	0.0 %	40.13 %
PERCENT OF TOTAL DAILY FLUX ACCUMULATED IN HIGH-INTENSITY REGIONS:	100.00 %	0.0 %	99.19 %

****

* <1 PARTICLE/CM**2/SEC

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

TABLE 12

SAS-D (310)

ELLIPTCL

INCLINATION: 45 DEG

PERIGEE: 27952 KM

APOGEE: 43615 KM

DECAY DATE: 1970. 0.

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

INNER ZONE -TI-* (1.0 < L < 2.8)	:	0.0 %
OUTER ZONE -TO- (2.8 < L < 11.0)	:	75.00 %
EXTERNAL -TE- (L > 11.0)	:	25.00 %
TOTAL	:	100.00 %

*TIME IN INNER ZONE MAY BE SUBDIVIDED AS FOLLOWS:

OUTSIDE TRAPPING REGION (1.0 < L < 1.1)	:	0.0 %
INSIDE TRAPPING REGION (1.1 < L < 2.8)	:	0.0 %

TABLE ARRANGEMENT

Computer Produced Output Tables for Orbital Flux Integrations.

Standard Production Runs with UNIFLUX Program.

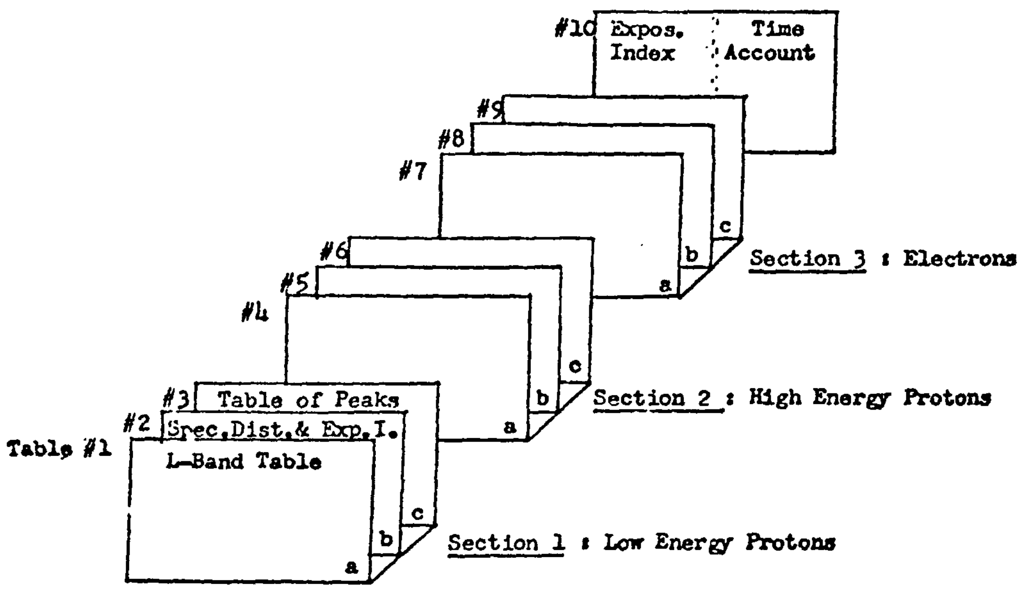

Figure 1 : Set of tables produced for every trajectory considered in a trapped particle radiation study.

PLOT ARRANGEMENT

Computer Produced Plots for Orbital Flux Integrations.

Standard Production Runs with UNIFLUX Program.

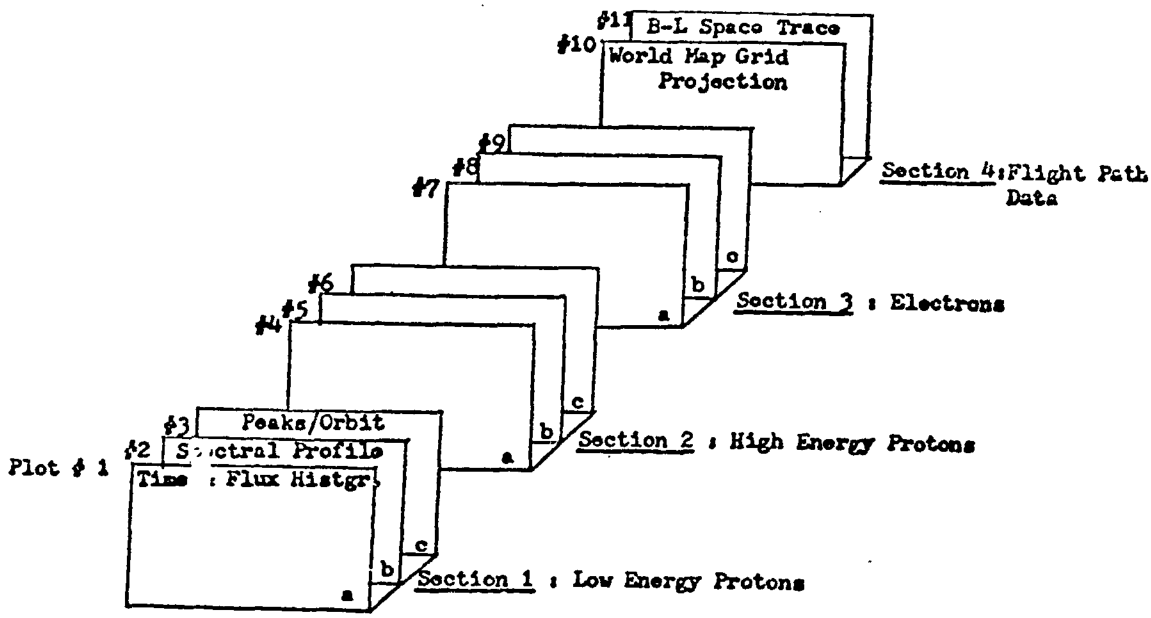

Figure 2 : Set of plots produced for every trajectory considered in a trapped particle radiation study.

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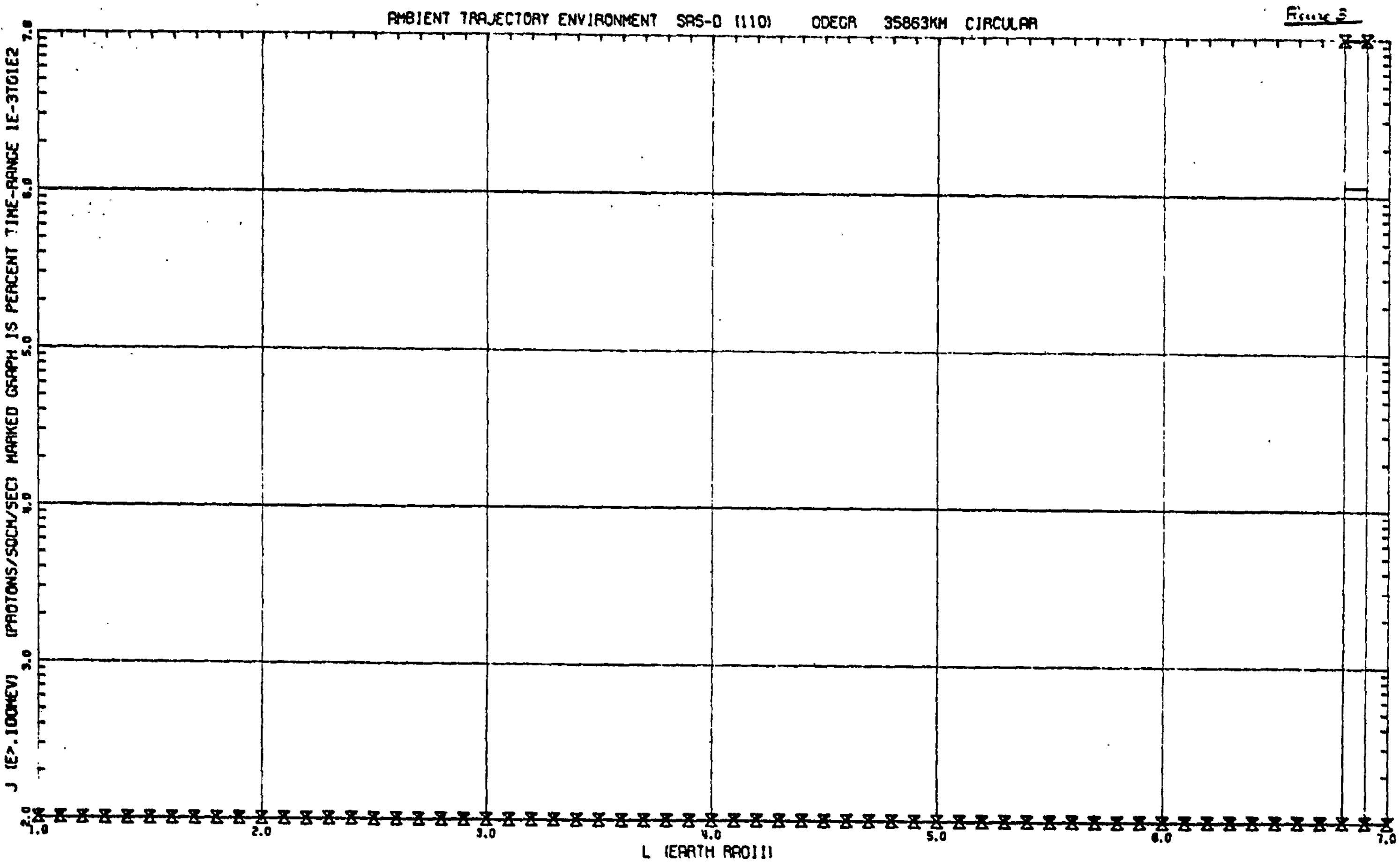
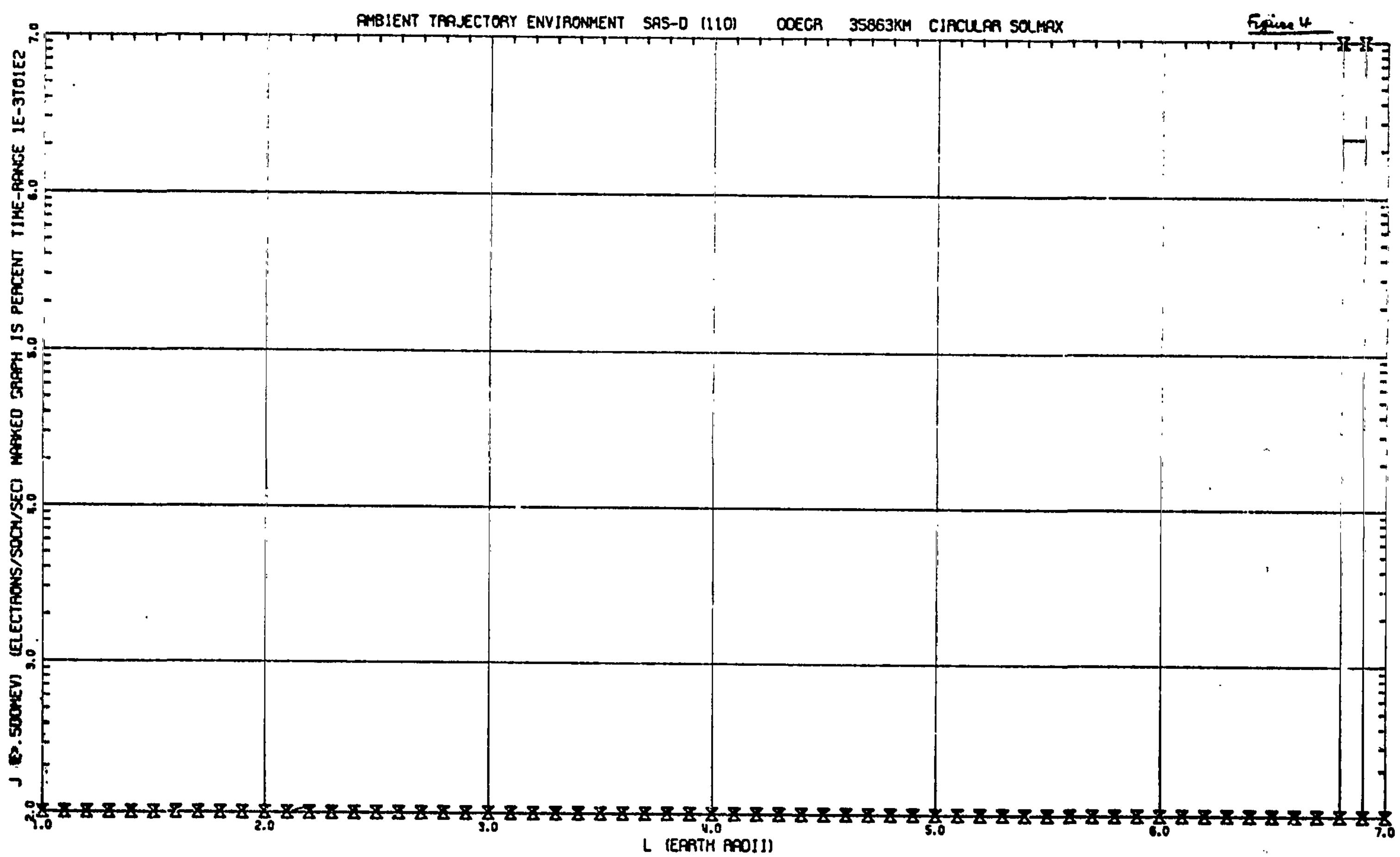

AMBIENT TRAJECTORY ENVIRONMENT SAS-D (110) ODEGR 35863KM CIRCULAR
J (E>.100MEV) (PROTONS/SQCM/SEC) MARKED GRAPH IS PERCENT TIME-RANGE 1E-3TO1E2
2.0
3.0
4.0
5.0
6.0
7.0
1.0
2.0
3.0
4.0
5.0
6.0
7.0
L (EARTH RADII)


AMBIENT TRAJECTORY ENVIRONMENT SAS-D (110) ODEGR 35863KM CIRCULAR SOLMAX
Figure 4
J (E>.500MEV) (ELECTRONS/SQCM/SEC) MARKED GRAPH IS PERCENT TIME-RANGE 1E-3TO1E2
L (EARTH RADII)
1.0
2.0
3.0
4.0
5.0
6.0
7.0

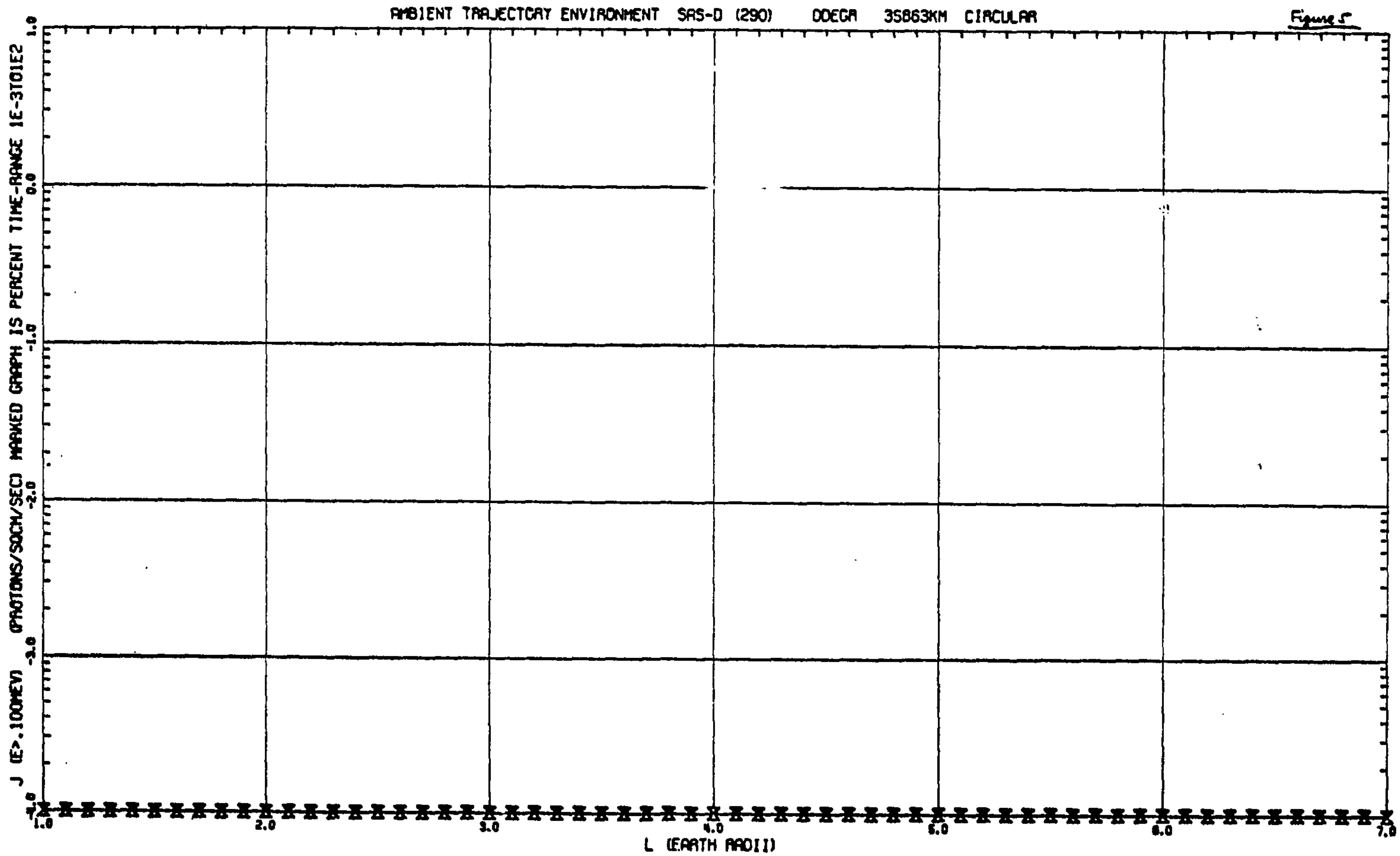
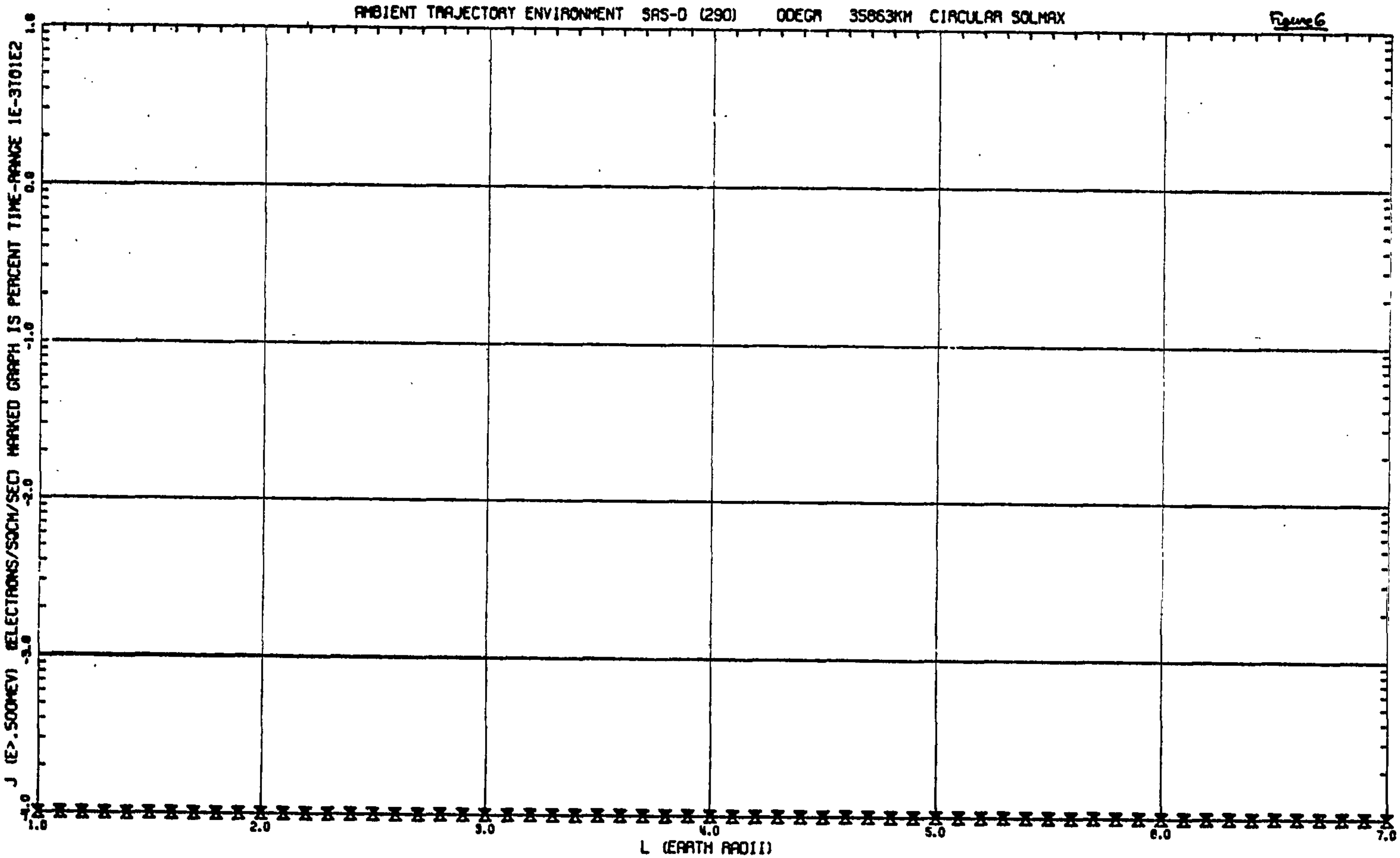
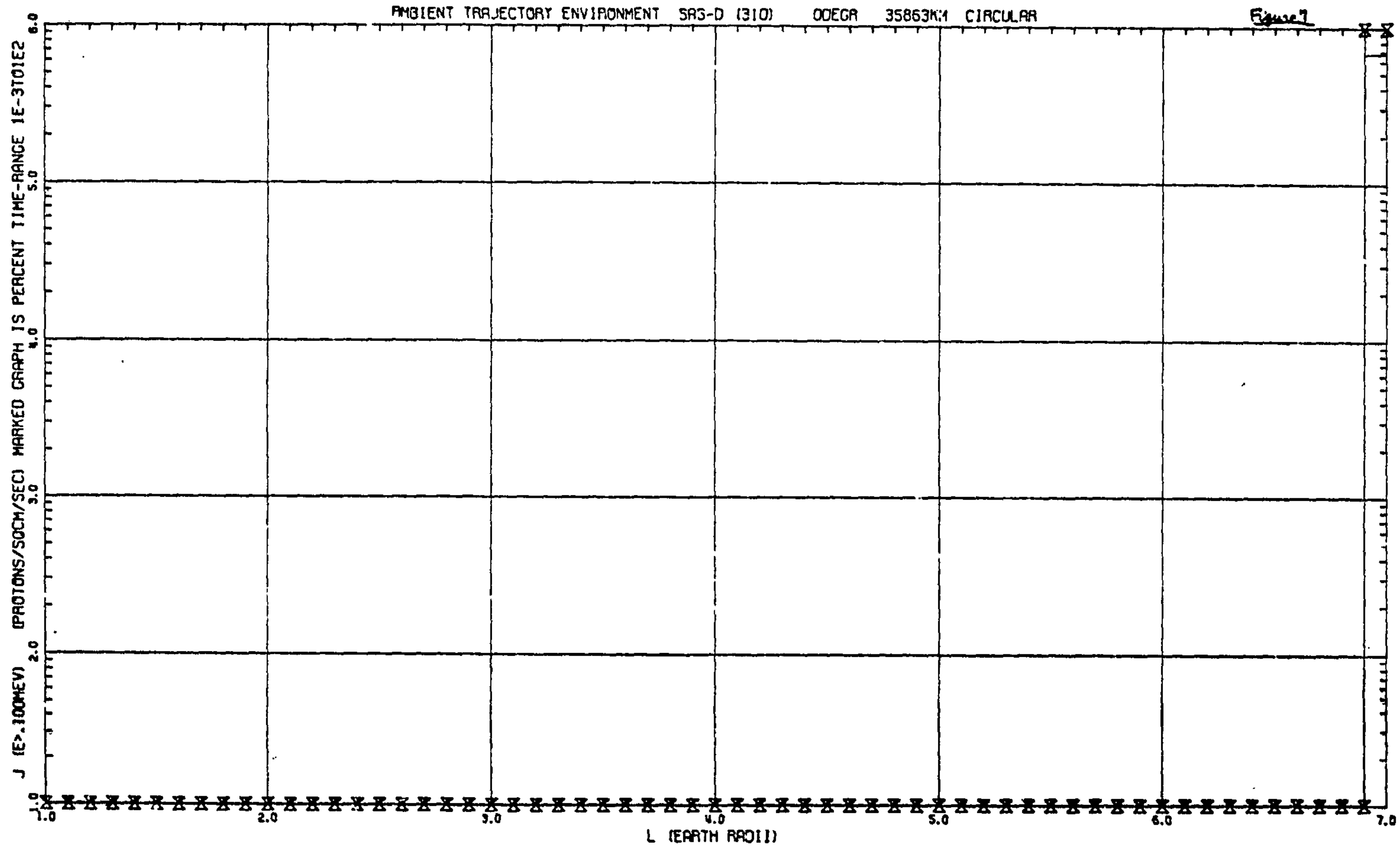

AMBIENT TRAJECTORY ENVIRONMENT SAS-D (290) ODEGR 35863KM CIRCULAR
Figure 5
J (E>.100MEV) (PROTONS/SQCM/SEC) MARKED GRAPH IS PERCENT TIME-RANGE 1E-3TO1E2
1.0
0.0
-1.0
-2.0
-3.0
-4.0
1.0
2.0
3.0
4.0
5.0
6.0
7.0
L (EARTH RADII)

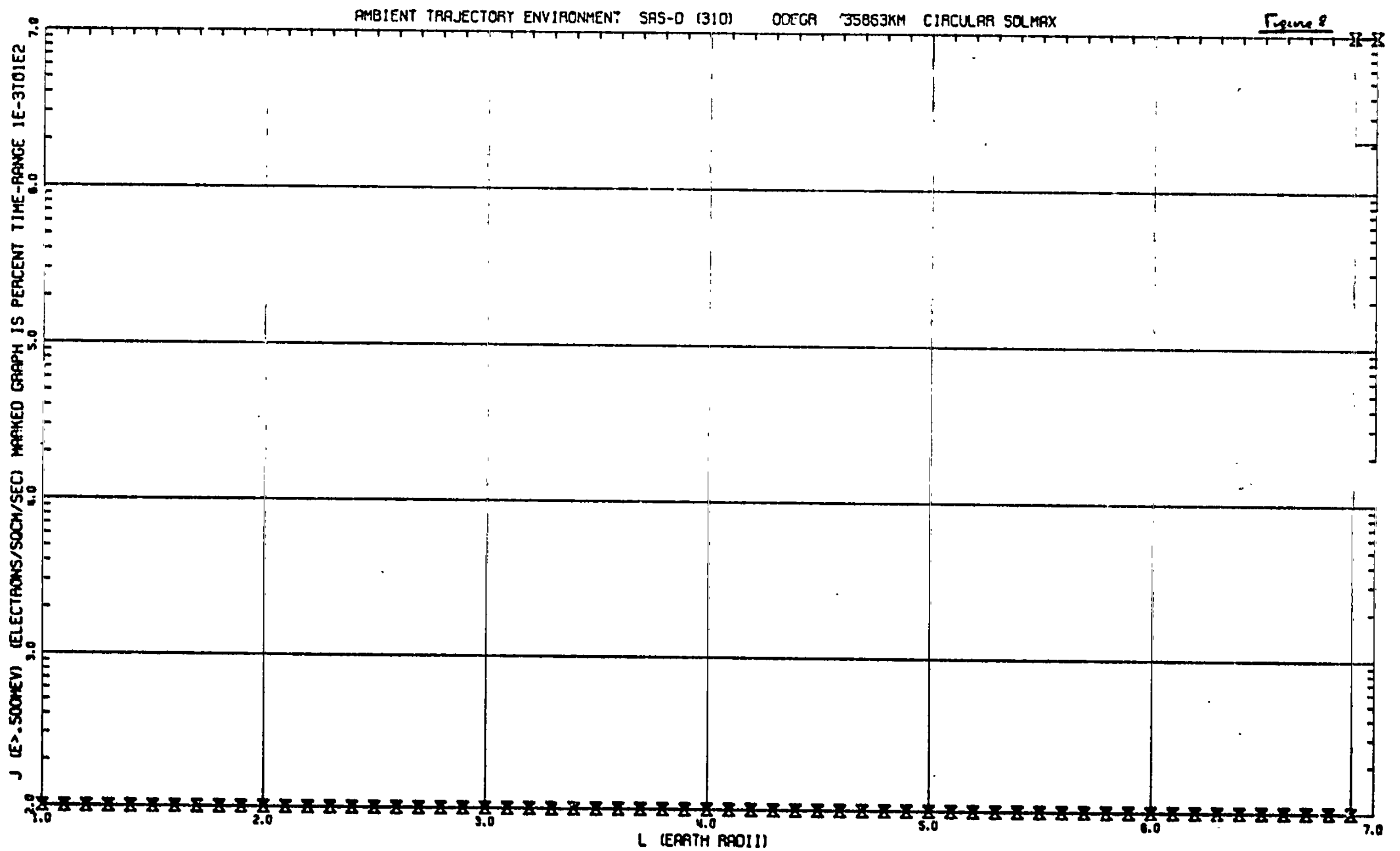
Figure 6



AMBIENT TRAJECTORY ENVIRONMENT SAS-D (290) 0DEGR 35863KM CIRCULAR SOLMAX
J (E>.500MEV) (ELECTRONS/SQCM/SEC) MARKED GRAPH IS PERCENT TIME-RANGE 1E-3TO1E2
1.0
0.0
-1.0
-2.0
-3.0
-4.0
1.0
2.0
3.0
4.0
5.0
6.0
7.0
L (EARTH RADII)



AMBIENT TRAJECTORY ENVIRONMENT SAS-D (310) 0DEGR 35863KM CIRCULAR
Figure 7
J (E>.100MEV) (PROTONS/SQCM/SEC) MARKED GRAPH IS PERCENT TIME-RANGE 1E-3TO1E2
0.0
2.0
3.0
4.0
5.0
6.0
1.0
2.0
3.0
4.0
5.0
6.0
7.0
L (EARTH RADII)


AMBIENT TRAJECTORY ENVIRONMENT SAS-D (310) 0DEGR 35863KM CIRCULAR SOLMAX
Figure 8
J (E>.500MEV) (ELECTRONS/SQCM/SEC) MARKED GRAPH IS PERCENT TIME-RANGE 1E-3TO1E2
2.0
3.0
4.0
5.0
6.0
7.0
1.0
2.0
3.0
4.0
5.0
6.0
7.0
L (EARTH RADII)

AMBIENT TRAJECTORY ENVIRONMENT SAS-D (110) 29DEGR 35863KM CIRCULAR

Figure 9

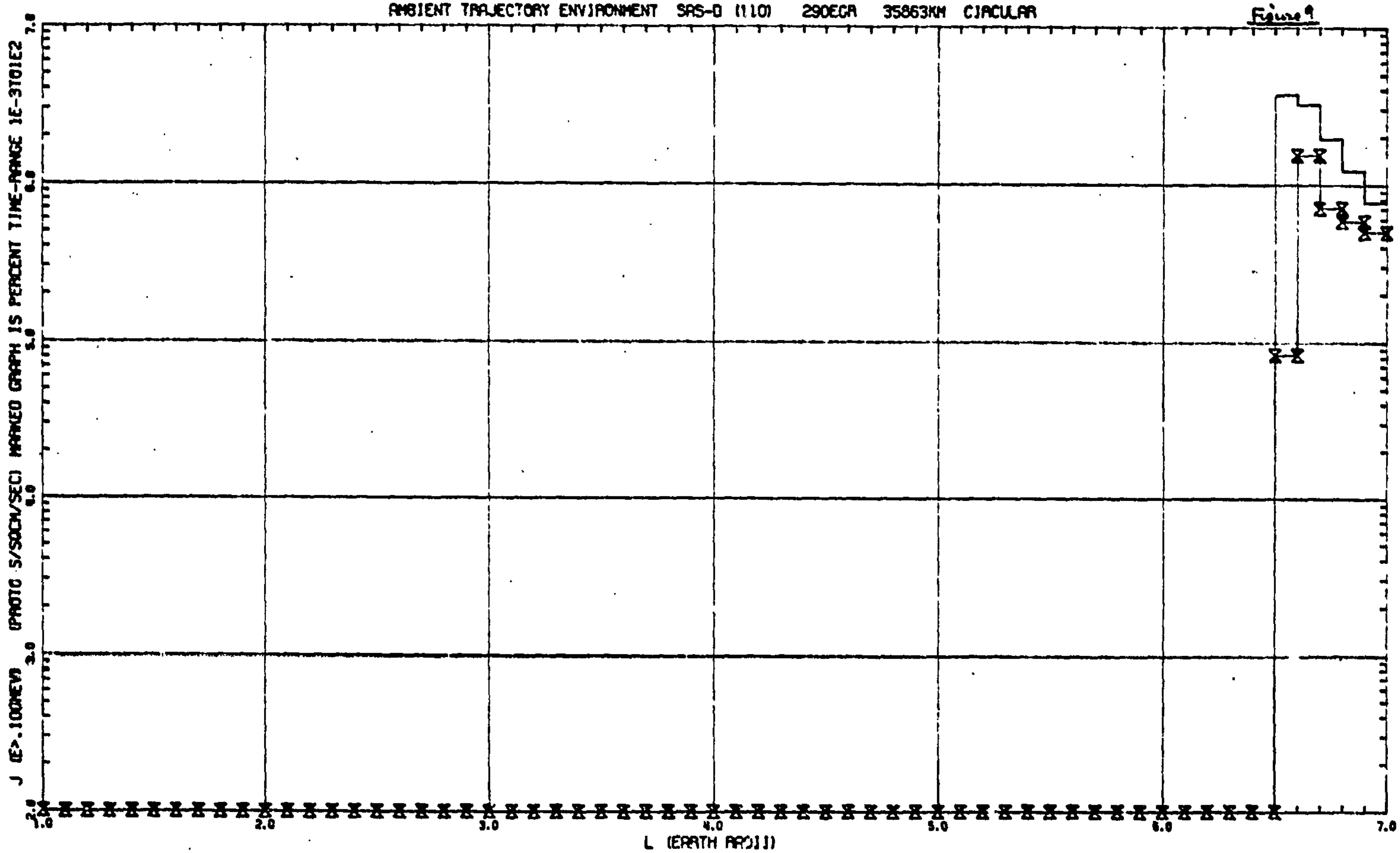
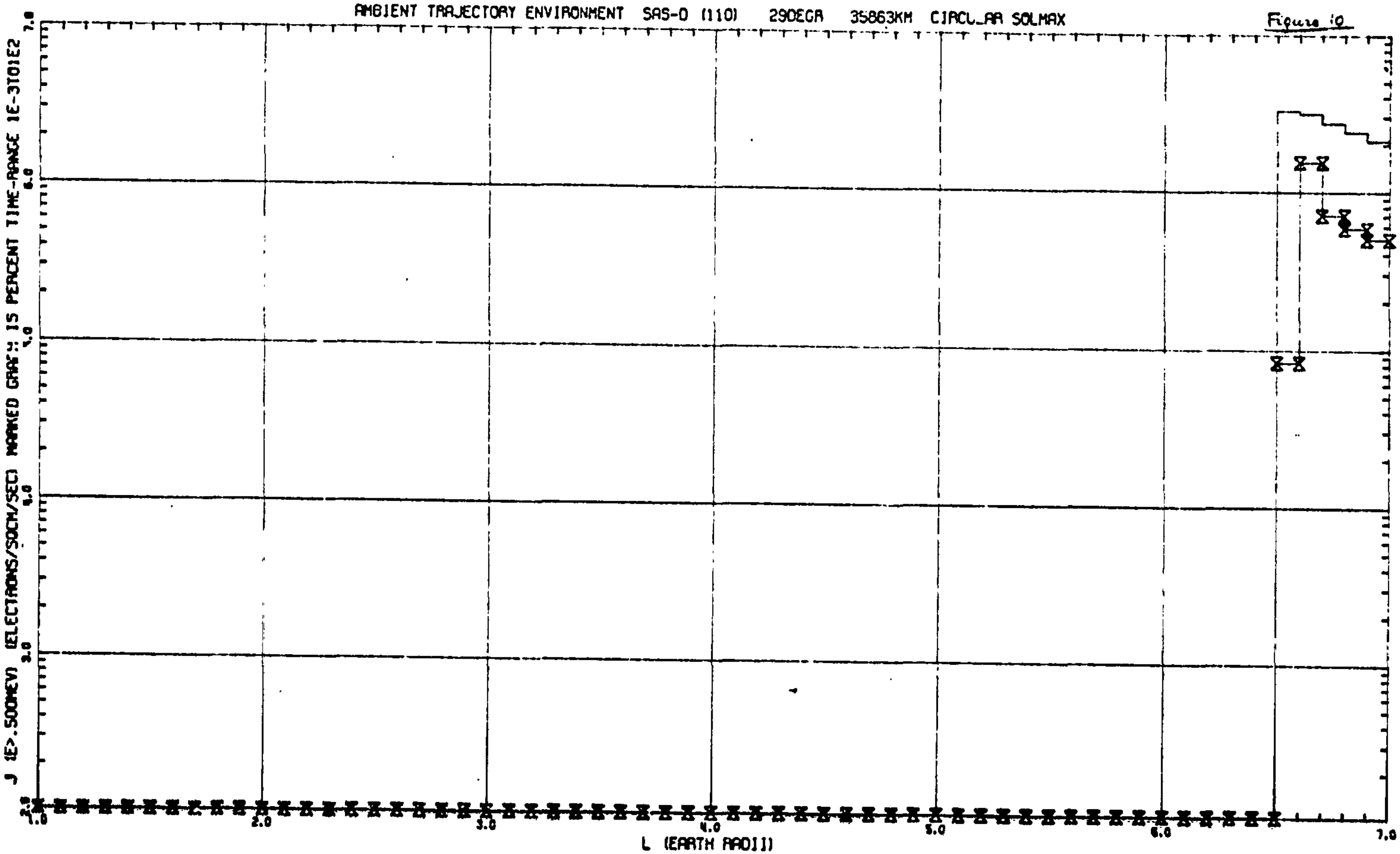
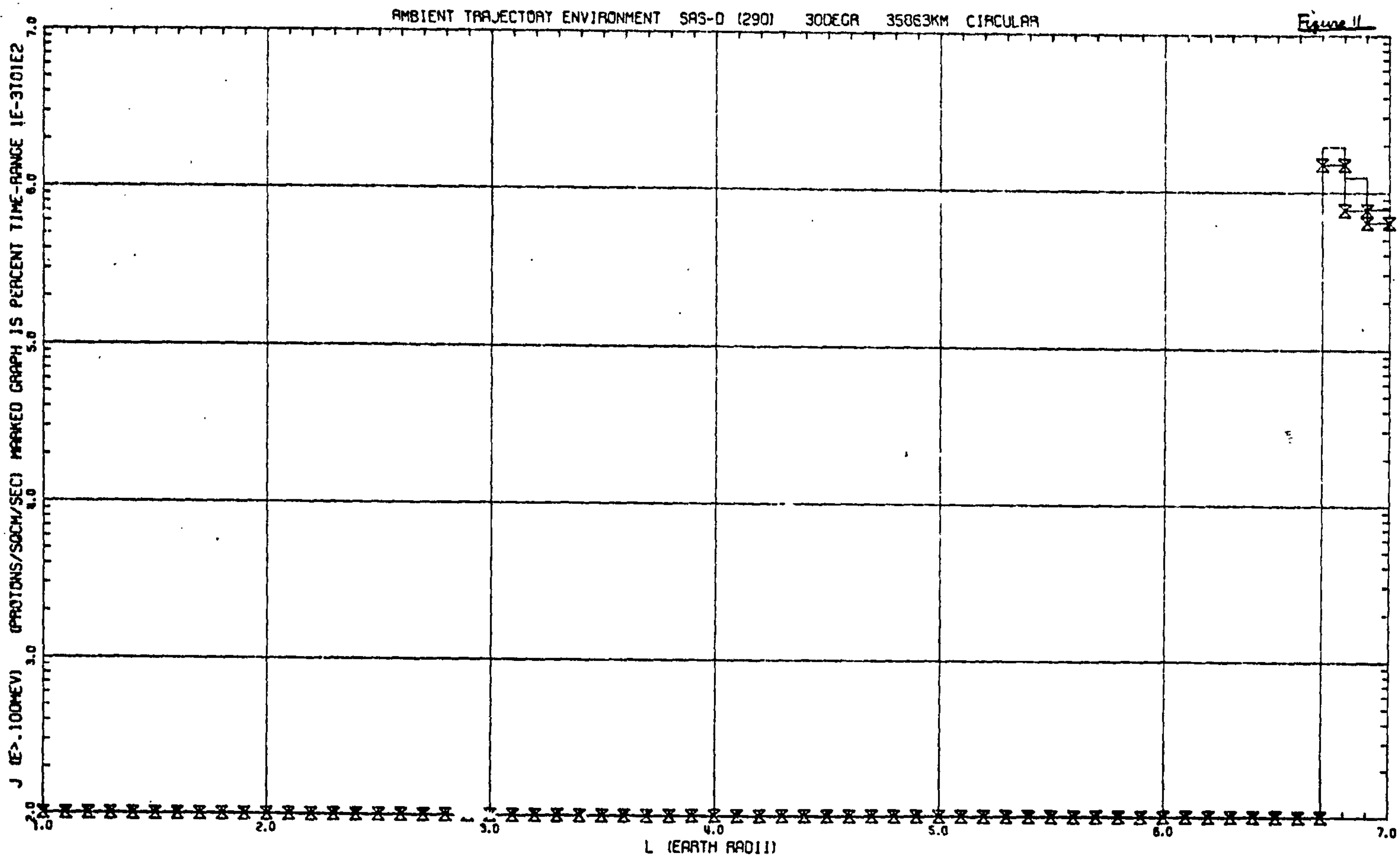


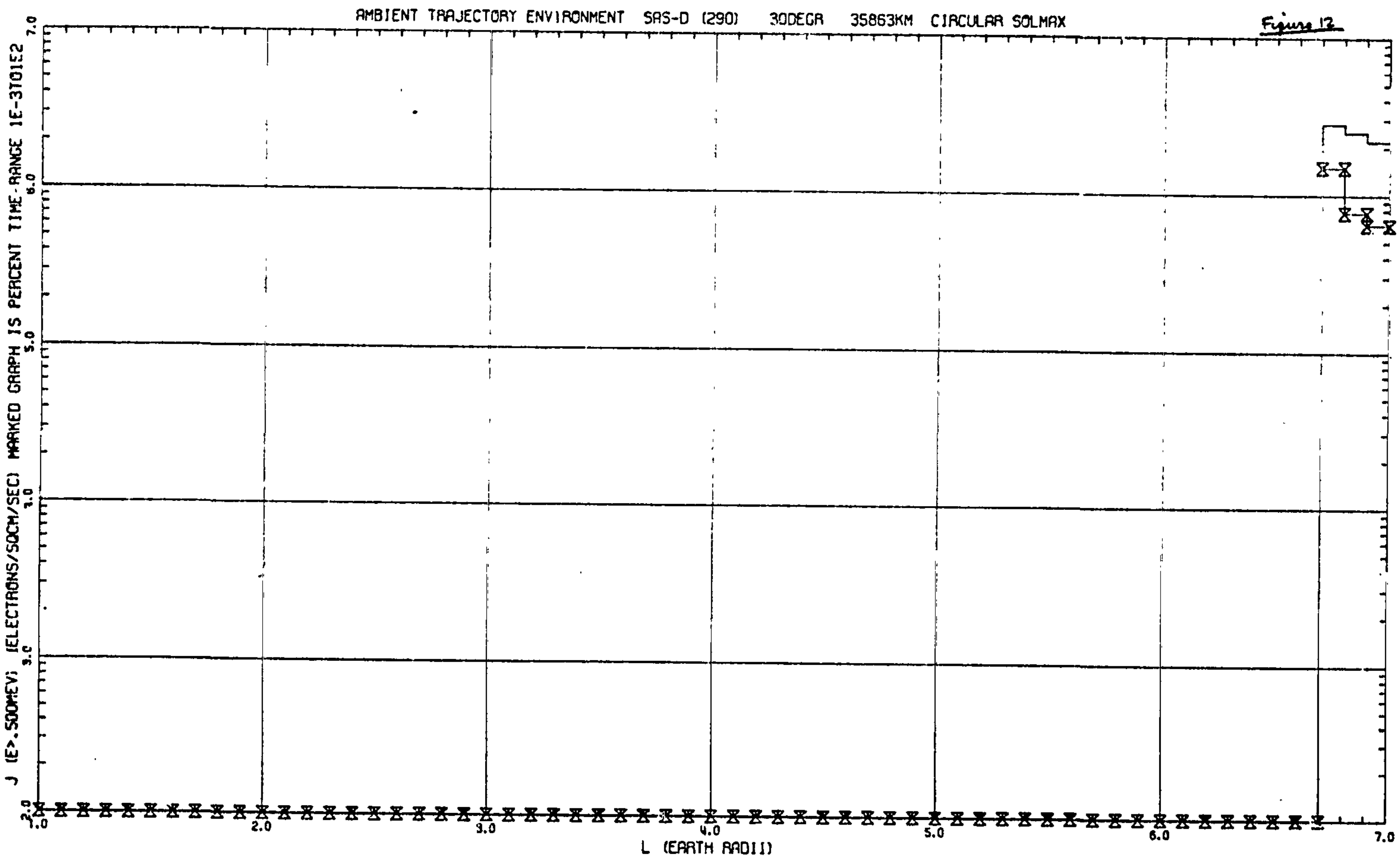
Figure 10



AMBIENT TRAJECTORY ENVIRONMENT SAS-D (110) 29DEGR 35863KM CIRCULAR SOLMAX
J (E>.500MEV) (ELECTRONS/SQCM/SEC) MARKED GRAPH IS PERCENT TIME-RANGE 1E-3TO1E2
L (EARTH RADII)
1.0
2.0
3.0
4.0
5.0
6.0
7.0



AMBIENT TRAJECTORY ENVIRONMENT SAS-D (290) 30DEGR 35863KM CIRCULAR
Figure 11
J (E>.100MEV) (PROTONS/SQCM/SEC) MARKED GRAPH IS PERCENT TIME-RANGE 1E-3TO1E2
2.0
3.0
4.0
5.0
6.0
7.0
1.0
2.0
3.0
4.0
5.0
6.0
7.0
L (EARTH RADII)


AMBIENT TRAJECTORY ENVIRONMENT SAS-D (290) 30DEGR 35863KM CIRCULAR SOLMAX
Figure 12
J (E>.500MEV) (ELECTRONS/SQCM/SEC) MARKED GRAPH IS PERCENT TIME-RANGE 1E-3TO1E2
L (EARTH RADII)
7.0
6.0
5.0
4.0
3.0
2.0
1.0
2.0
3.0
4.0
5.0
6.0
7.0

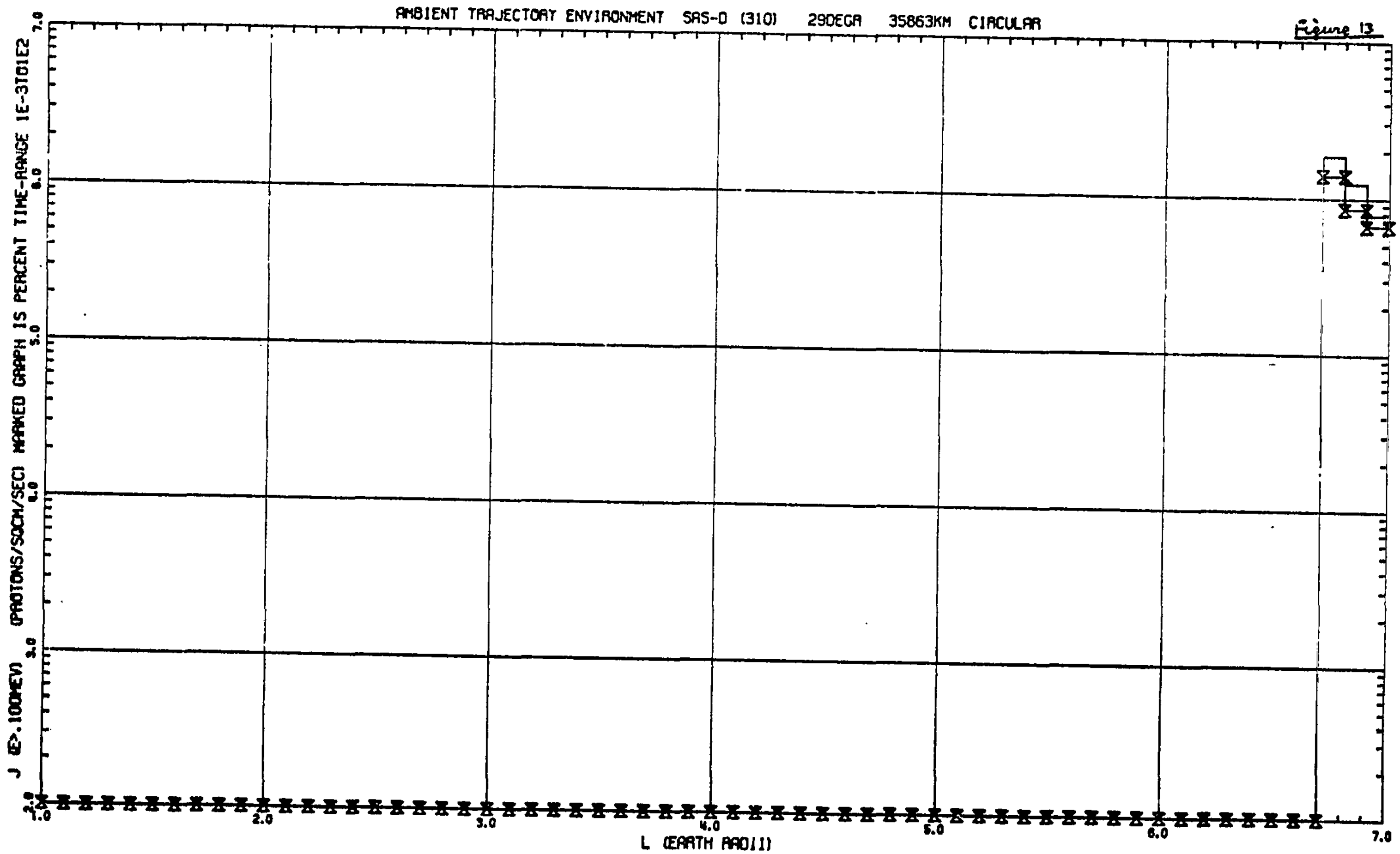
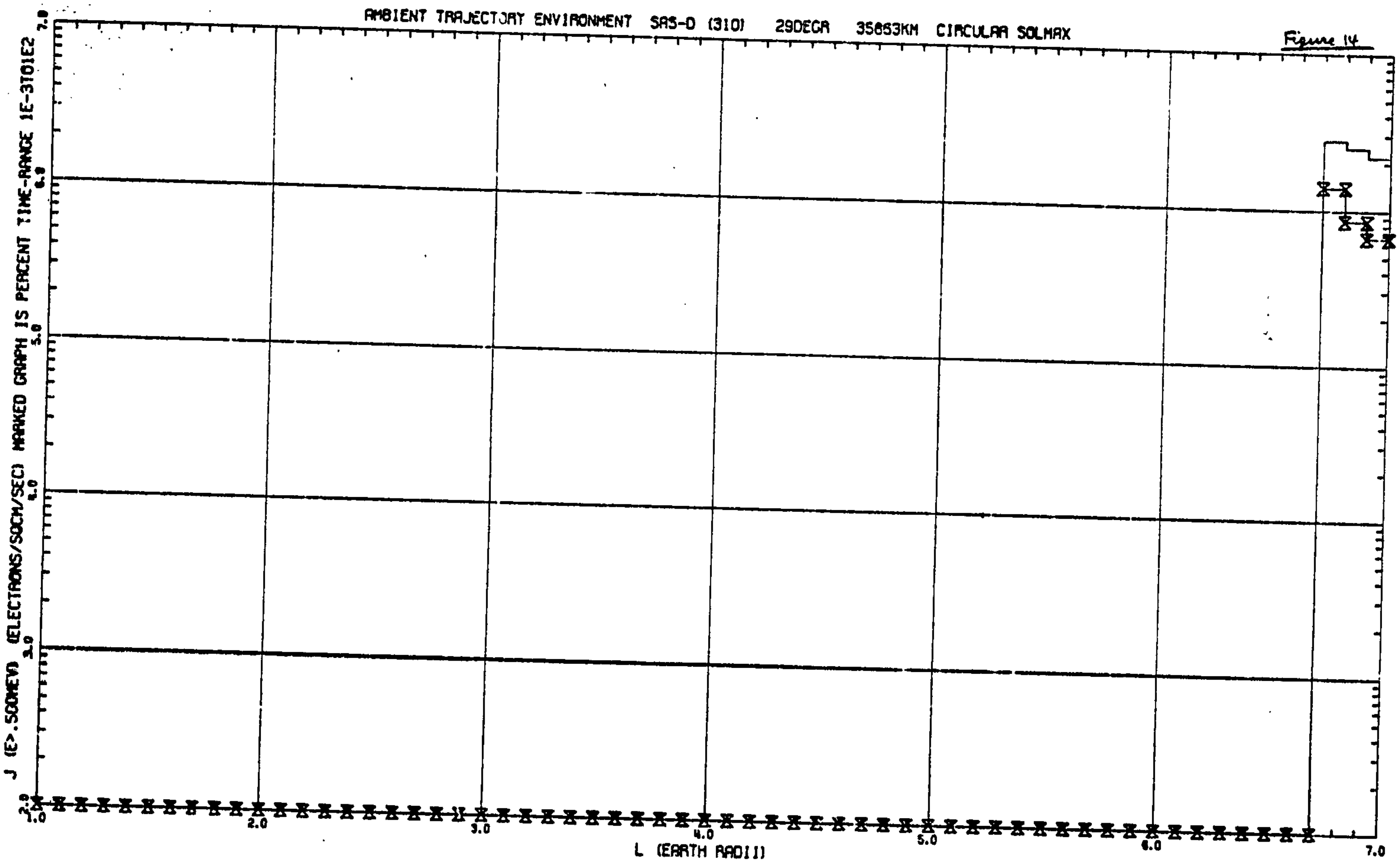

AMBIENT TRAJECTORY ENVIRONMENT SAS-D (310) 29DEGR 35863KM CIRCULAR
Figure 13
J (E>.100MEV) (PROTONS/SQCM/SEC) MARKED GRAPH IS PERCENT TIME-RANGE 1E-3TO1E2
L (EARTH RADII)

Figure 14



AMBIENT TRAJECTORY ENVIRONMENT SAS-D (310) 29DEGR 35863KM CIRCULAR SOLMAX
J (E>.50MEV) (ELECTRONS/SQCM/SEC) MARKED GRAPH IS PERCENT TIME-RANGE 1E-3TO1E2
L (EARTH RADII)
1.0
2.0
3.0
4.0
5.0
6.0
7.0

Figure 5

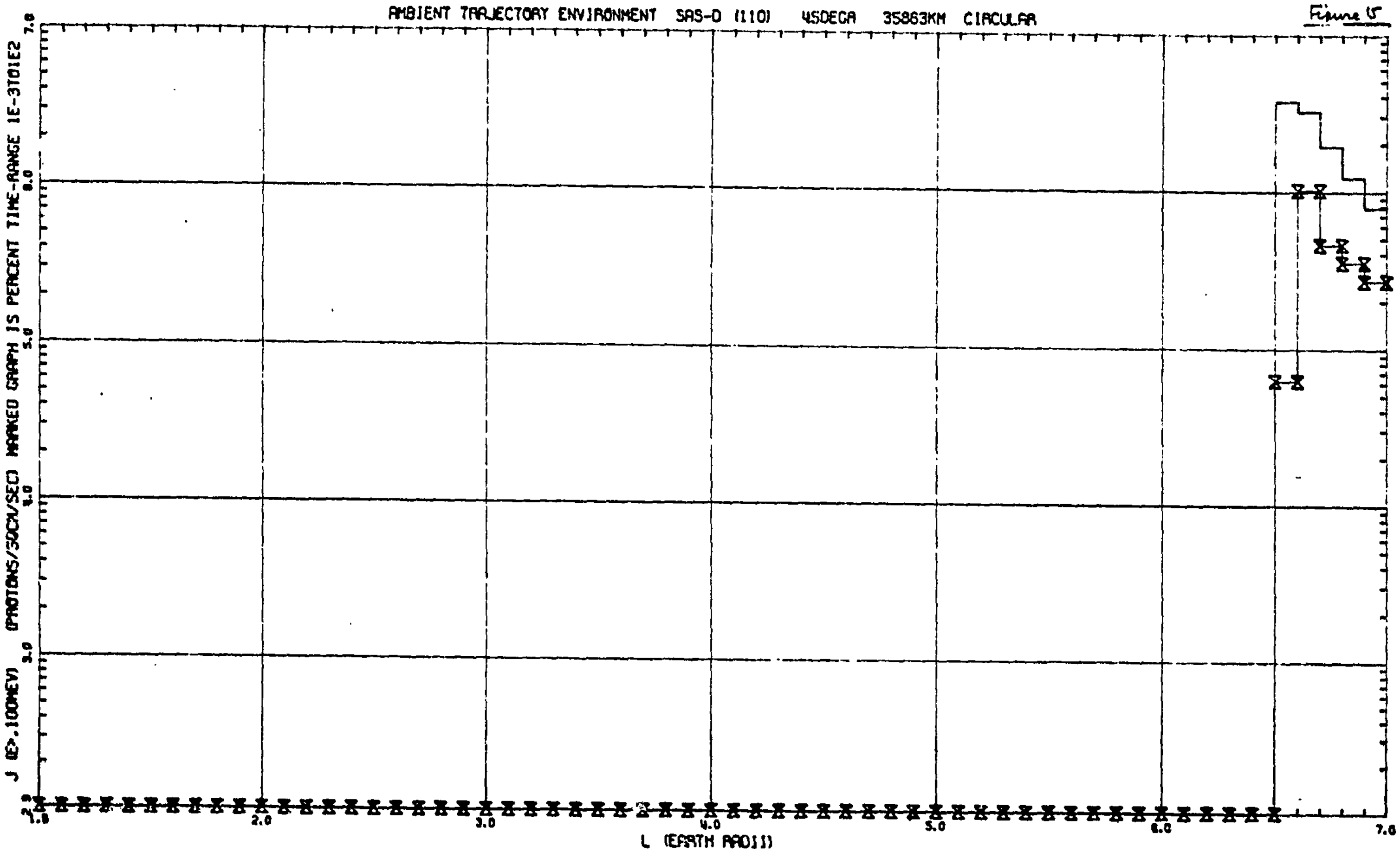
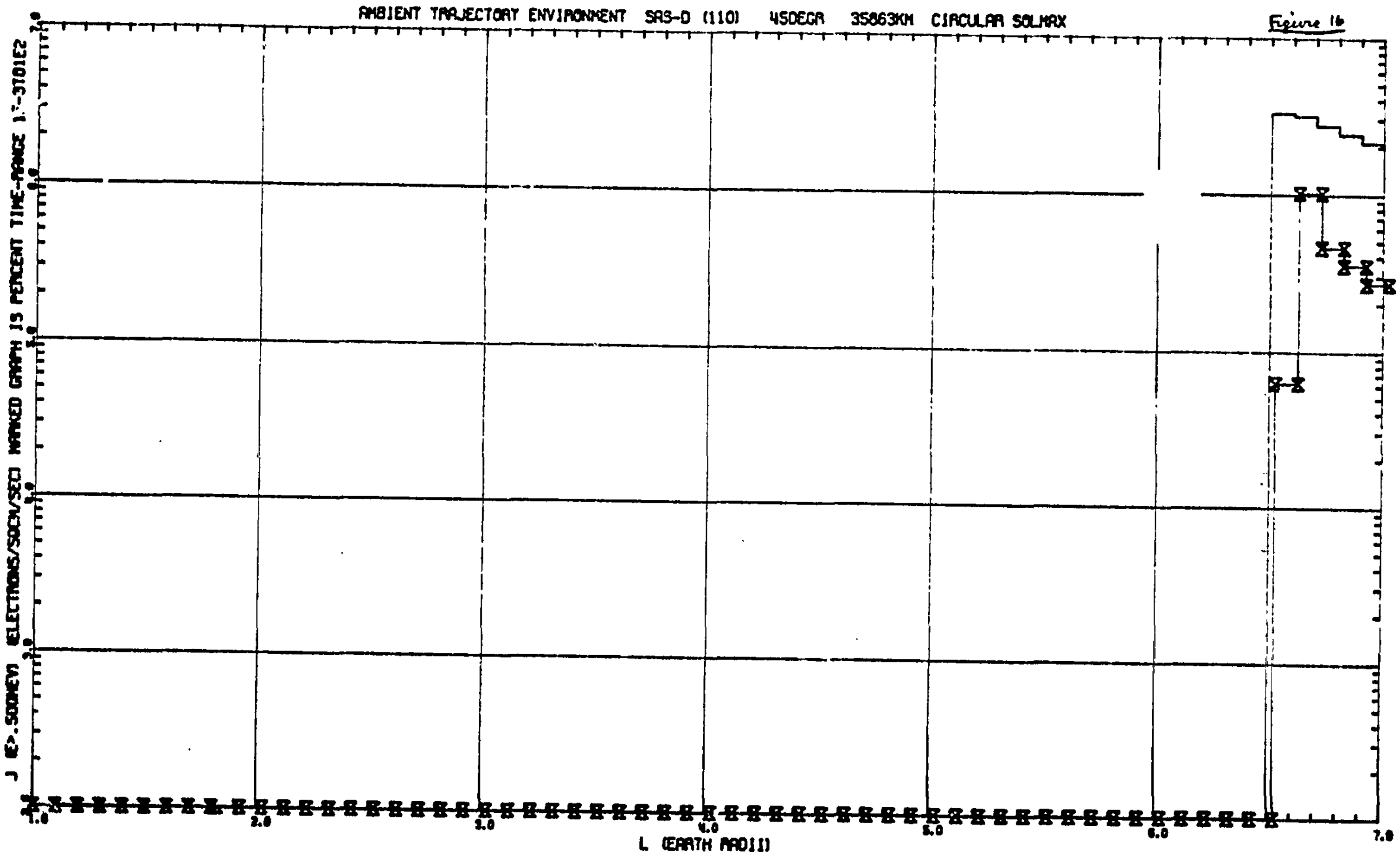
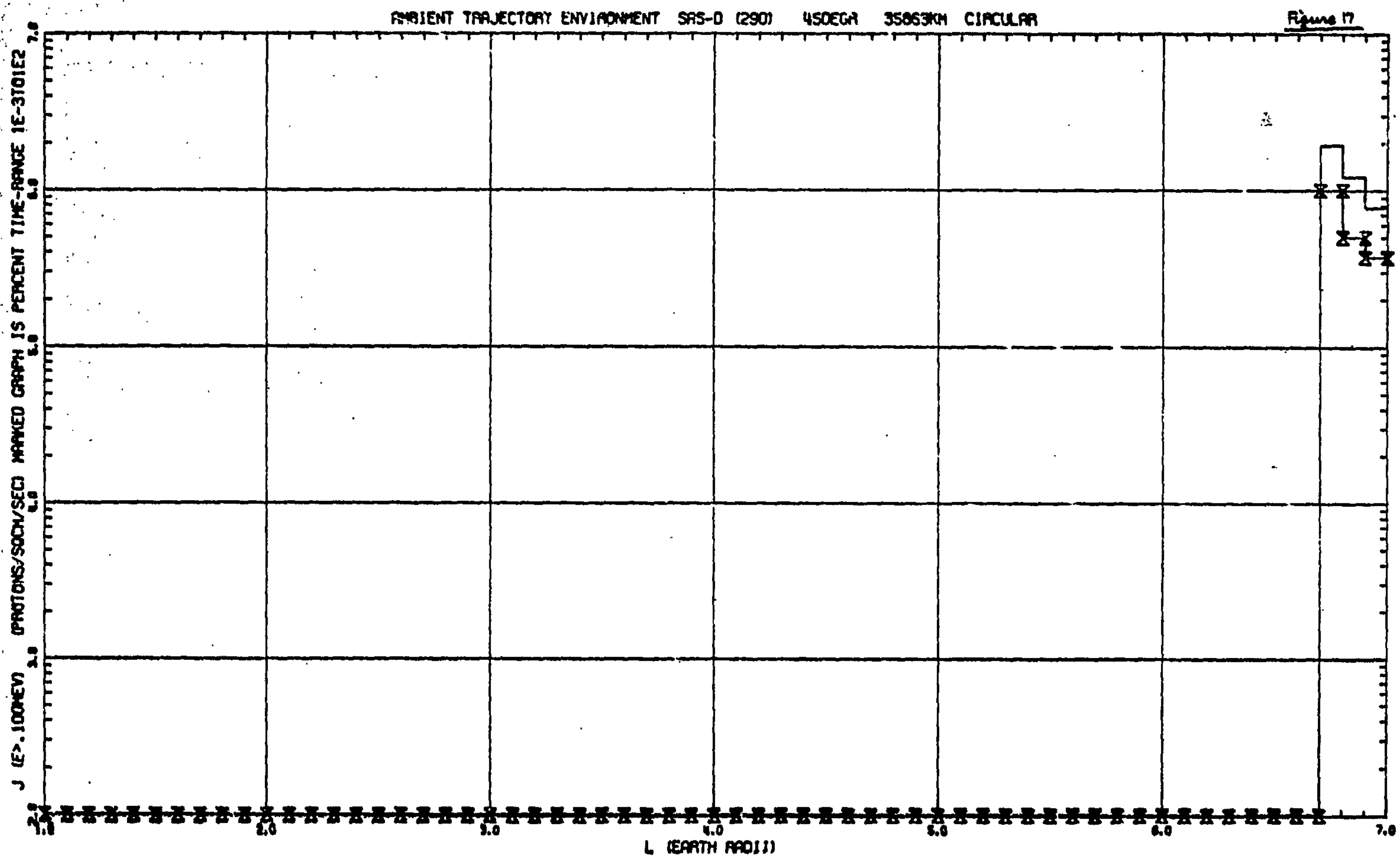

AMBIENT TRAJECTORY ENVIRONMENT SAS-D (110) 45DEGA 35863KM CIRCULAR
J (E>.100MEV) (PROTONS/SQCM/SEC) MARKED GRAPH IS PERCENT TIME-RANGE 1E-3TO1E2
L (EARTH RADII)
1.0
2.0
3.0
4.0
5.0
6.0
7.0

Figure 16



AMBIENT TRAJECTORY ENVIRONMENT SAS-D (110) 45DEGR 35863KM CIRCULAR SOLMAX
J (E>.500MEV) (ELECTRONS/SQCM/SEC) MARKED GRAPH IS PERCENT TIME-RANGE 1.-3T01E2
L (EARTH RADII)
1.0
2.0
3.0
4.0
5.0
6.0
7.0

Figure 17



AMBIENT TRAJECTORY ENVIRONMENT SAS-D (290) 45DEGR 35863KM CIRCULAR
J (E>.100MEV) (PROTONS/SQCM/SEC) MARKED GRAPH IS PERCENT TIME-RANGE 1E-3TO1E2
L (EARTH RADII)
1.0
2.0
3.0
4.0
5.0
6.0
7.0

Figure 18

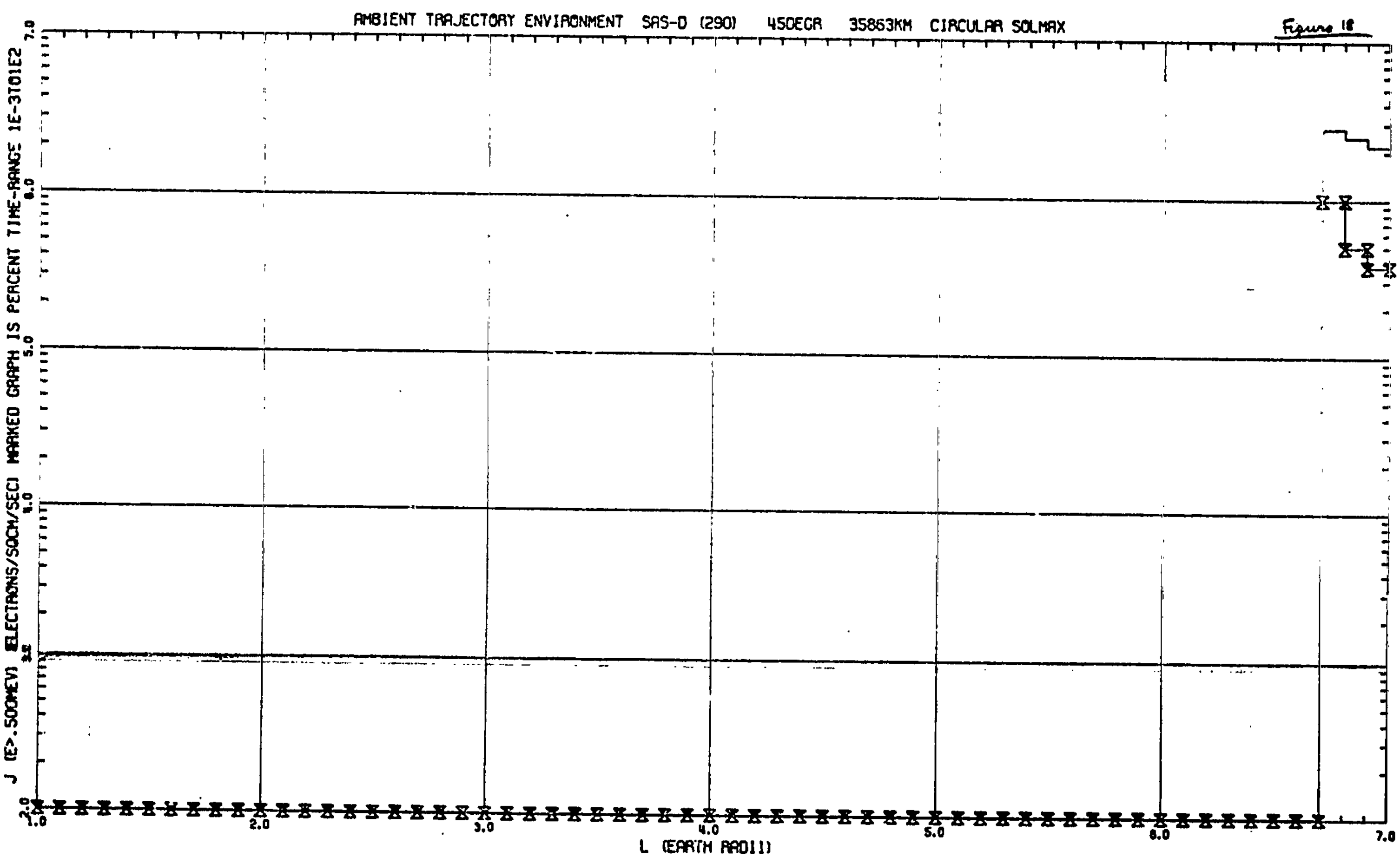
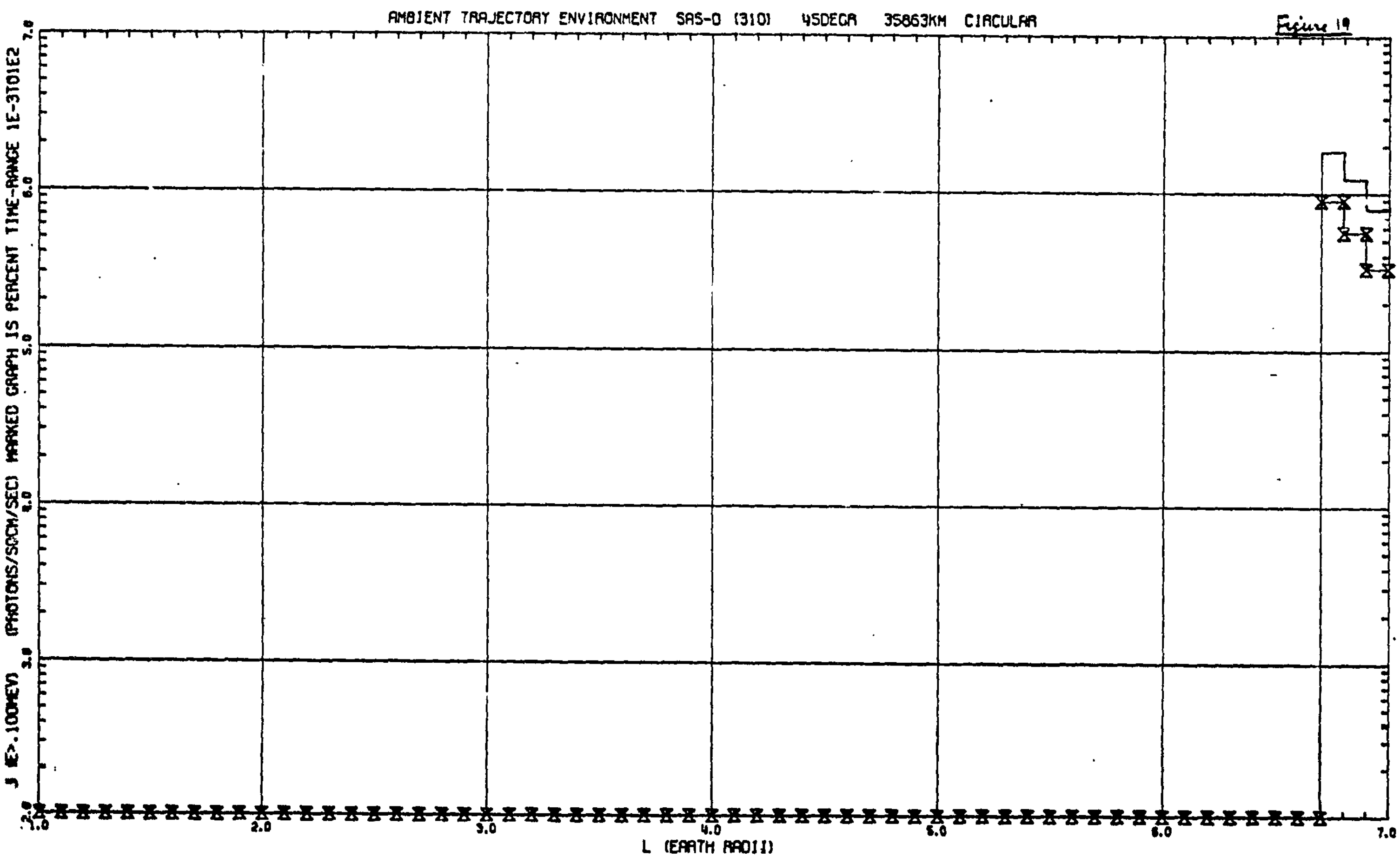

AMBIENT TRAJECTORY ENVIRONMENT SAS-D (290) 45DEGR 35863KM CIRCULAR SOLMAX
J (E>.500MEV) ELECTRONS/SQCM/SEC) MARKED GRAPH IS PERCENT TIME-RANGE 1E-3TO1E2
7.0
6.0
5.0
4.0
3.0
2.0
1.0
2.0
3.0
4.0
5.0
6.0
7.0
L (EARTH RADII)

Figure 19



AMBIENT TRAJECTORY ENVIRONMENT SAS-D (310) 45DEGR 35863KM CIRCULAR
J (E>.100MEV) (PHOTONS/SQCM/SEC) MARKED GRAPH IS PERCENT TIME-RANGE 1E-3TO1E2
7.0
6.0
5.0
4.0
3.0
2.0
1.0
2.0
3.0
4.0
5.0
6.0
7.0
L (EARTH RADII)

Figure 20

AMBIENT TRAJECTORY ENVIRONMENT SAS-D (310) 45DEGR 35863KM CIRCULAR SOLMAX

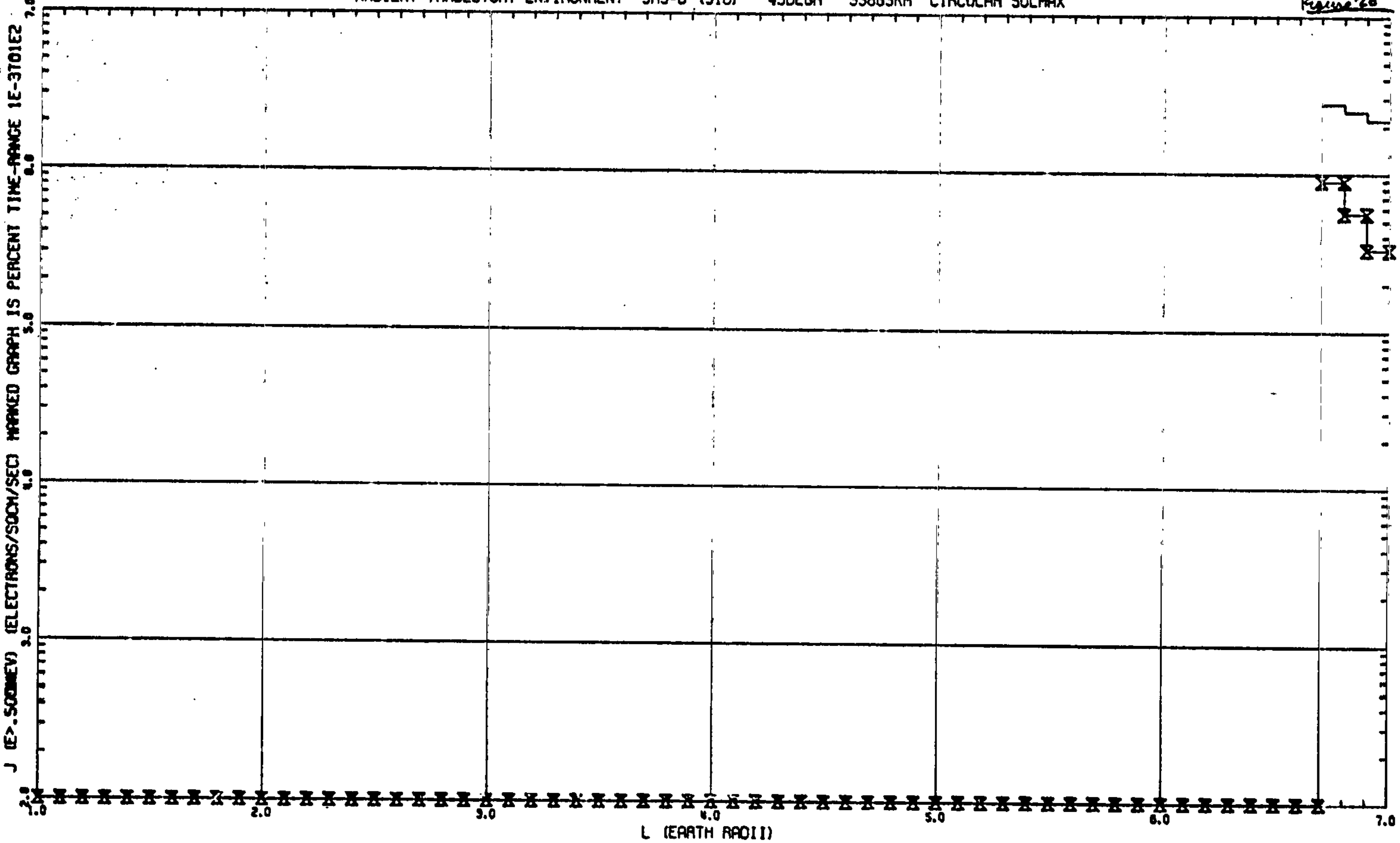
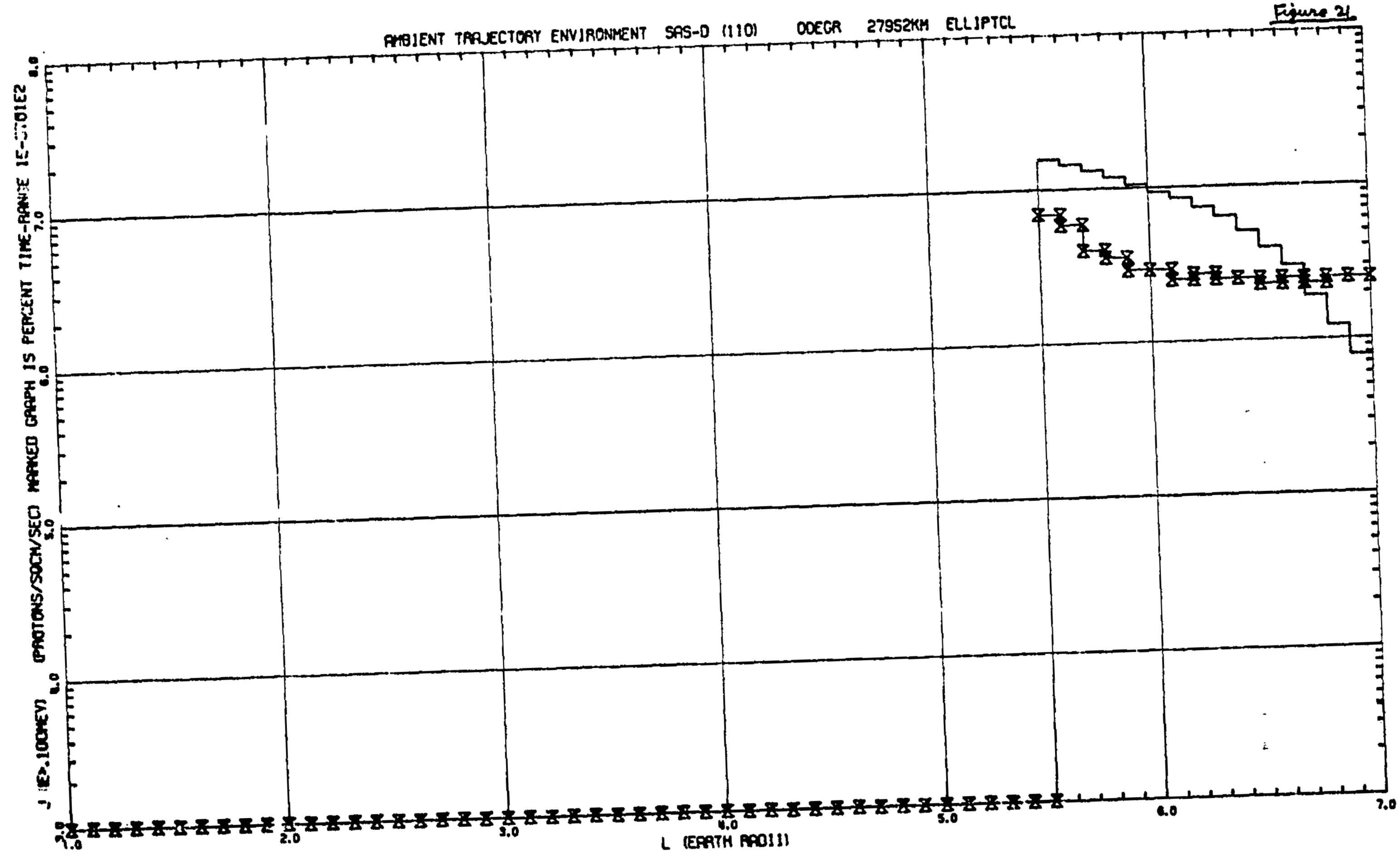
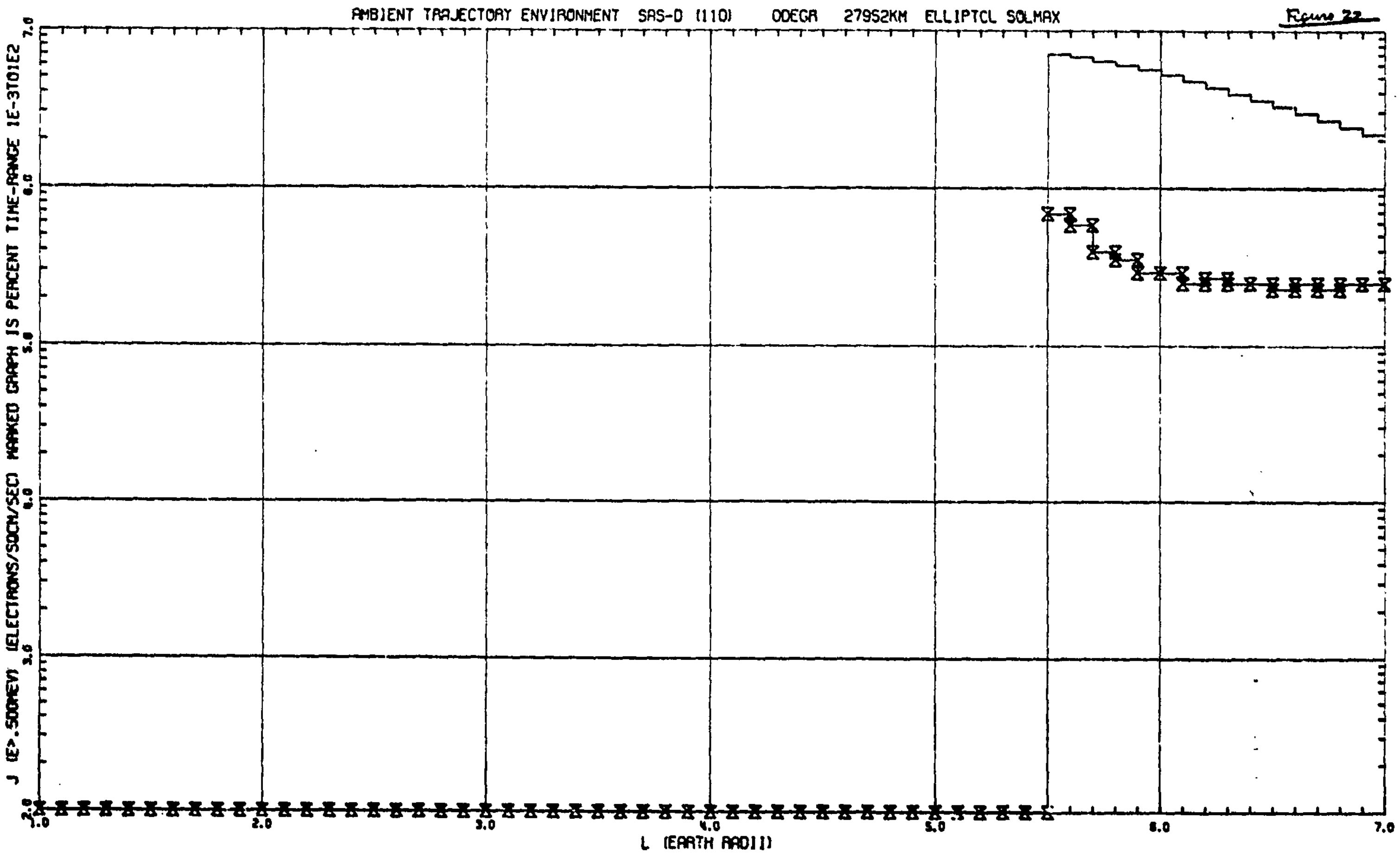
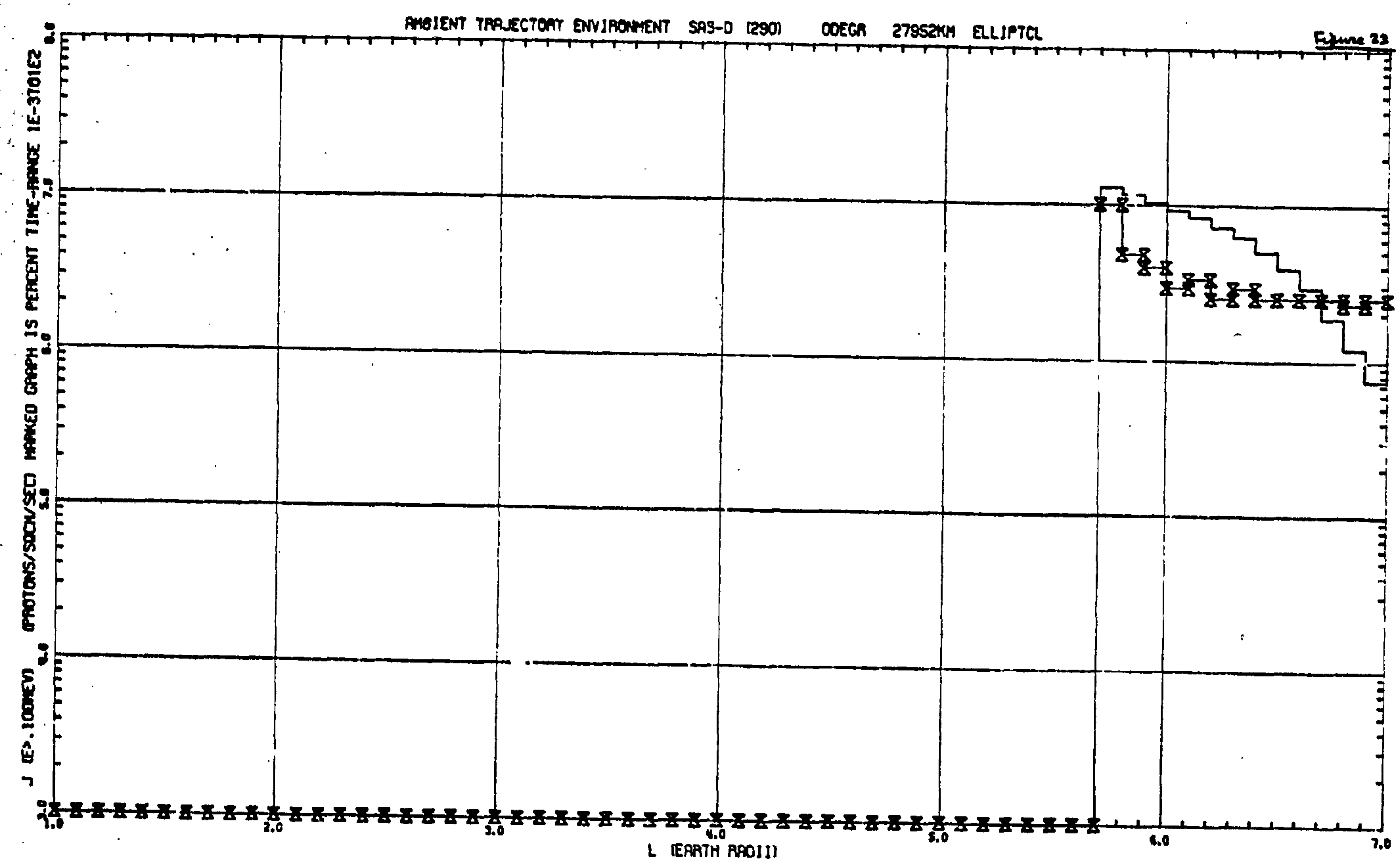


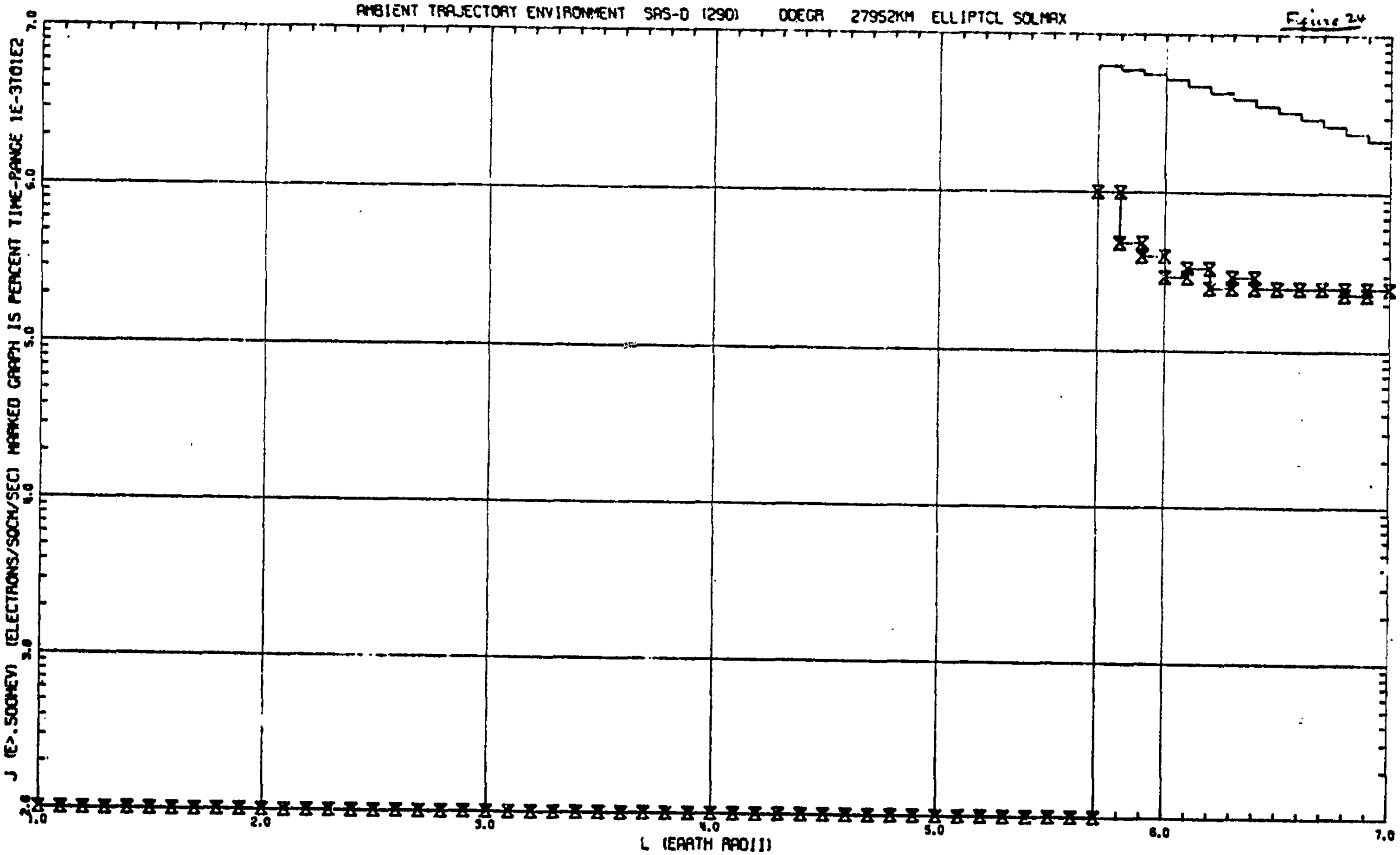
Figure 21


AMBIENT TRAJECTORY ENVIRONMENT SAS-D (110) 0DEGR 27952KM ELLIPTCL
J (E>.100MEV) (PROTONS/SQCM/SEC) MARKED GRAPH IS PERCENT TIME-RANGE 1E-0TO1E2
L (EARTH RADII)
1.0
2.0
3.0
4.0
5.0
6.0
7.0
8.0


AMBIENT TRAJECTORY ENVIRONMENT SAS-D (110) ODEGR 27952KM ELLIPTCL SOLMAX
Figure 22
J (E>.500MEV) (ELECTRONS/SQCM/SEC) MARKED GRAPH IS PERCENT TIME-RANGE 1E-3TO1E2
L (EARTH RADII)
1.0
2.0
3.0
4.0
5.0
6.0
7.0



AMBIENT TRAJECTORY ENVIRONMENT SAS-D (290) 0DEGR 27852KM ELLIPTCL
Figure 23
J (E>.100MEV) (PROTONS/SQCM/SEC) MARKED GRAPH IS PERCENT TIME-RANGE 1E-3TO1E2
L (EARTH RADII)


AMBIENT TRAJECTORY ENVIRONMENT SAS-D (290) 0DEGR 27952KM ELLIPTCL SOLMAX
Figure 24
J (E>.500MEV) (ELECTRONS/SQCM/SEC) MARKED GRAPH IS PERCENT TIME-RANGE 1E-3TO1E2
L (EARTH RADII)
1.0
2.0
3.0
4.0
5.0
6.0
7.0

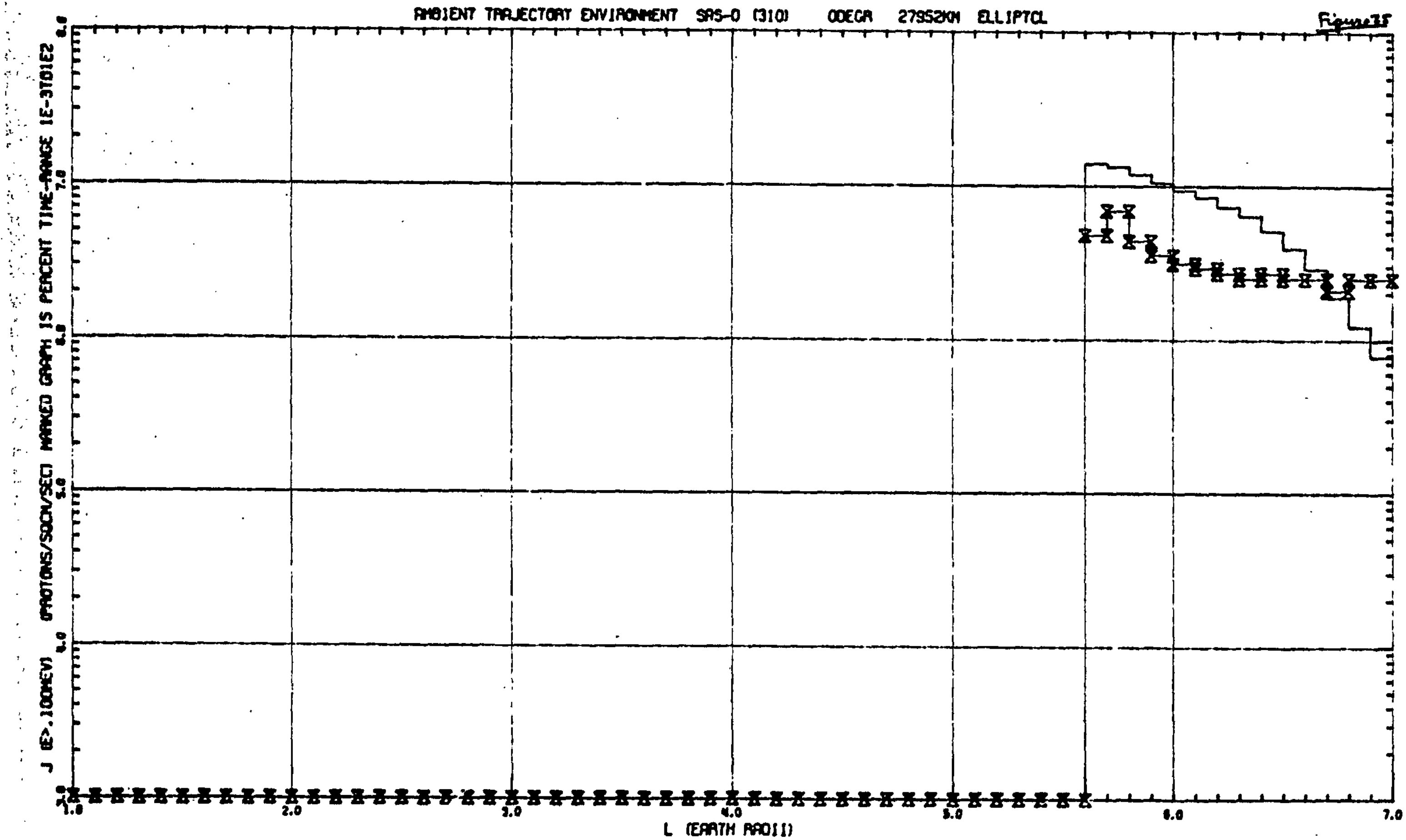


Figure 35
AMBIENT TRAJECTORY ENVIRONMENT SAS-D (310) ODEGA 27952KM ELLIPTCL
J (E>.100MEV) (PROTONS/SQCM/SEC) MARKED GRAPH IS PERCENT TIME-RANGE (E-3TO1E2
L (EARTH RADII)
1.0
2.0
3.0
4.0
5.0
6.0
7.0

Figure 26

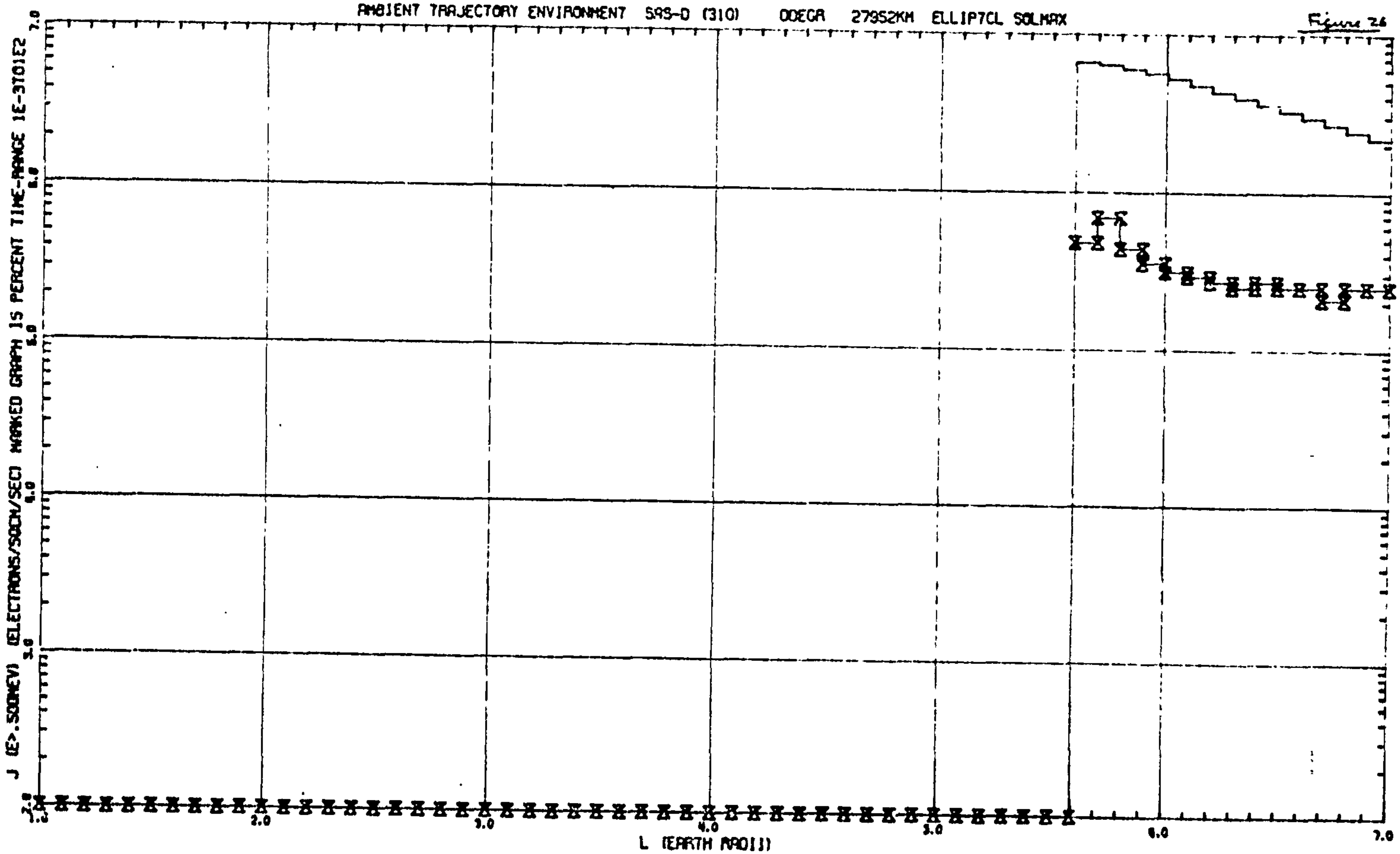
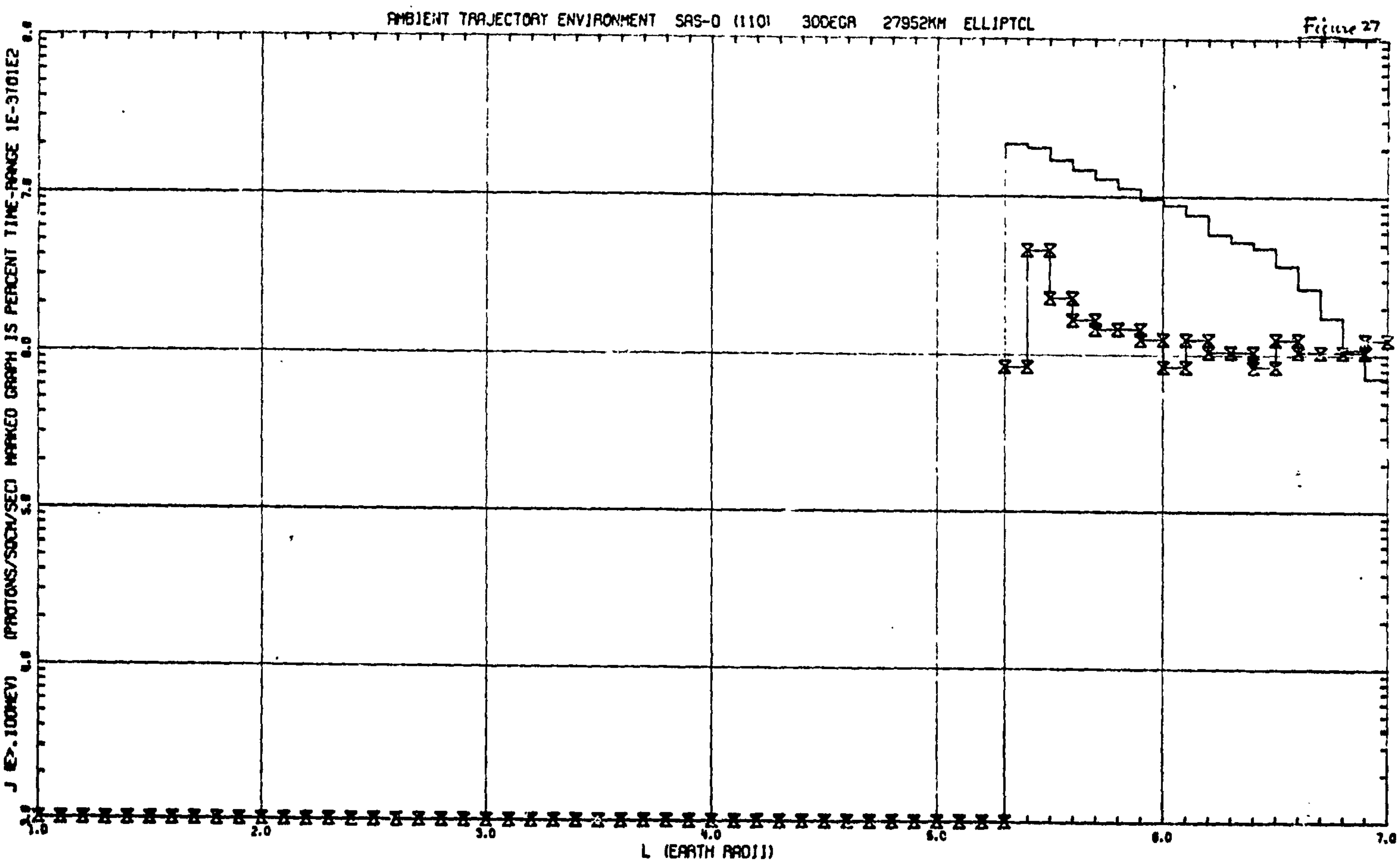
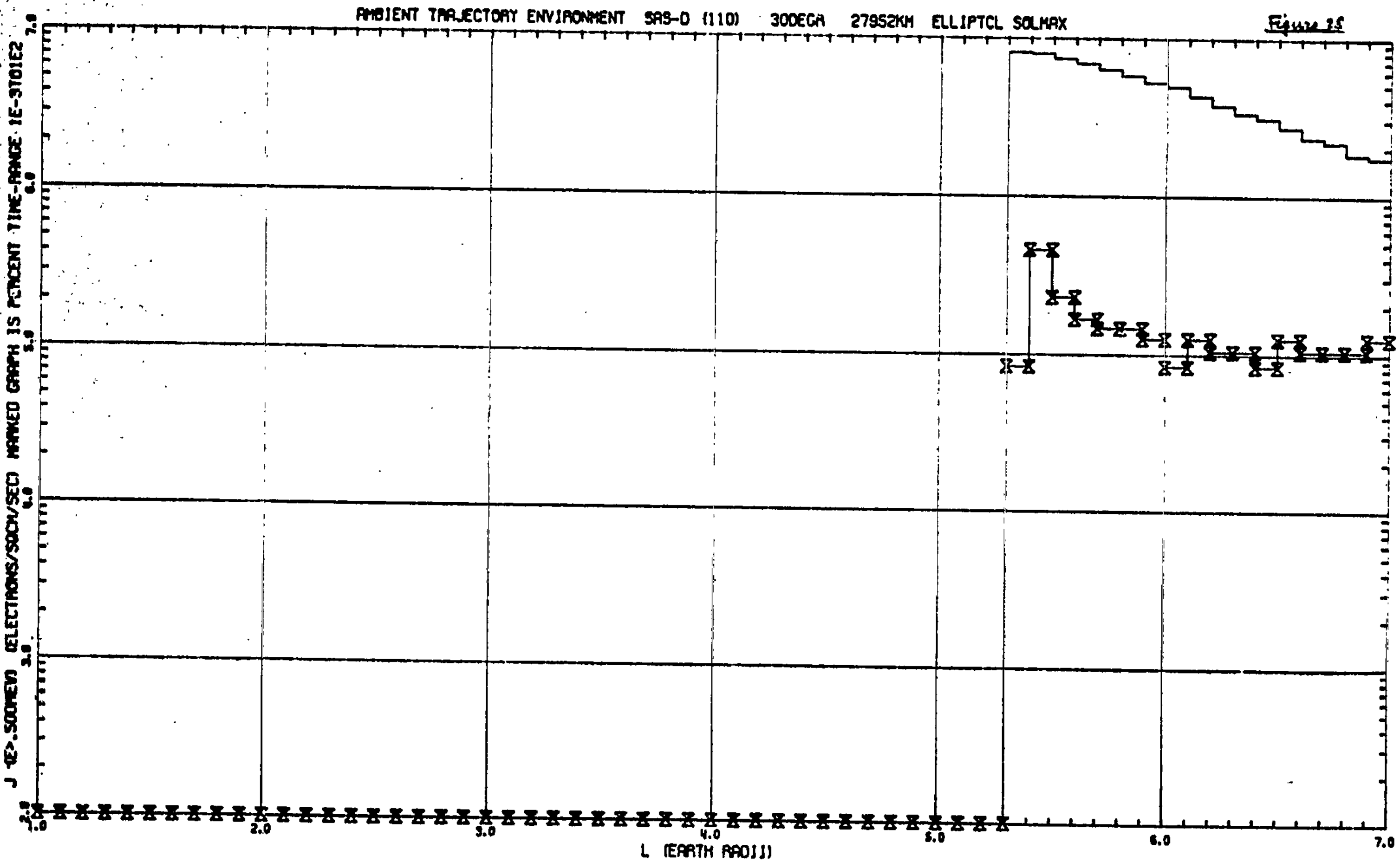
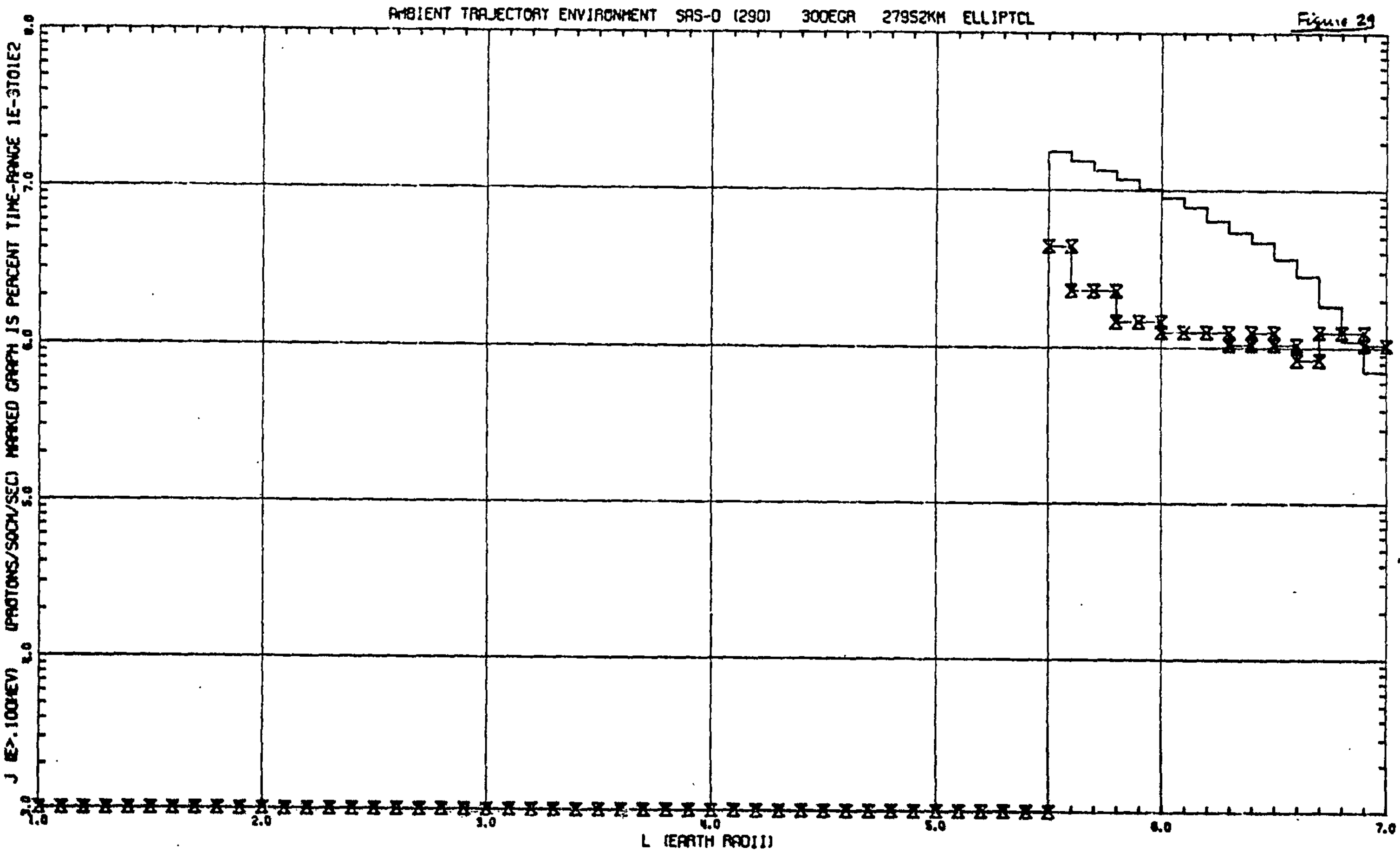

AMBIENT TRAJECTORY ENVIRONMENT SAS-D (310) OOEGA 27952KM ELLIP7CL SOLMAX
J (E>.500MEV) (ELECTRONS/SQCM/SEC) MARKED GRAPH IS PERCENT TIME-RANGE 1E-3TO1E2
L (EARTH RADII)
7.0
6.0
5.0
4.0
3.0
2.0
1.0

Figure 27

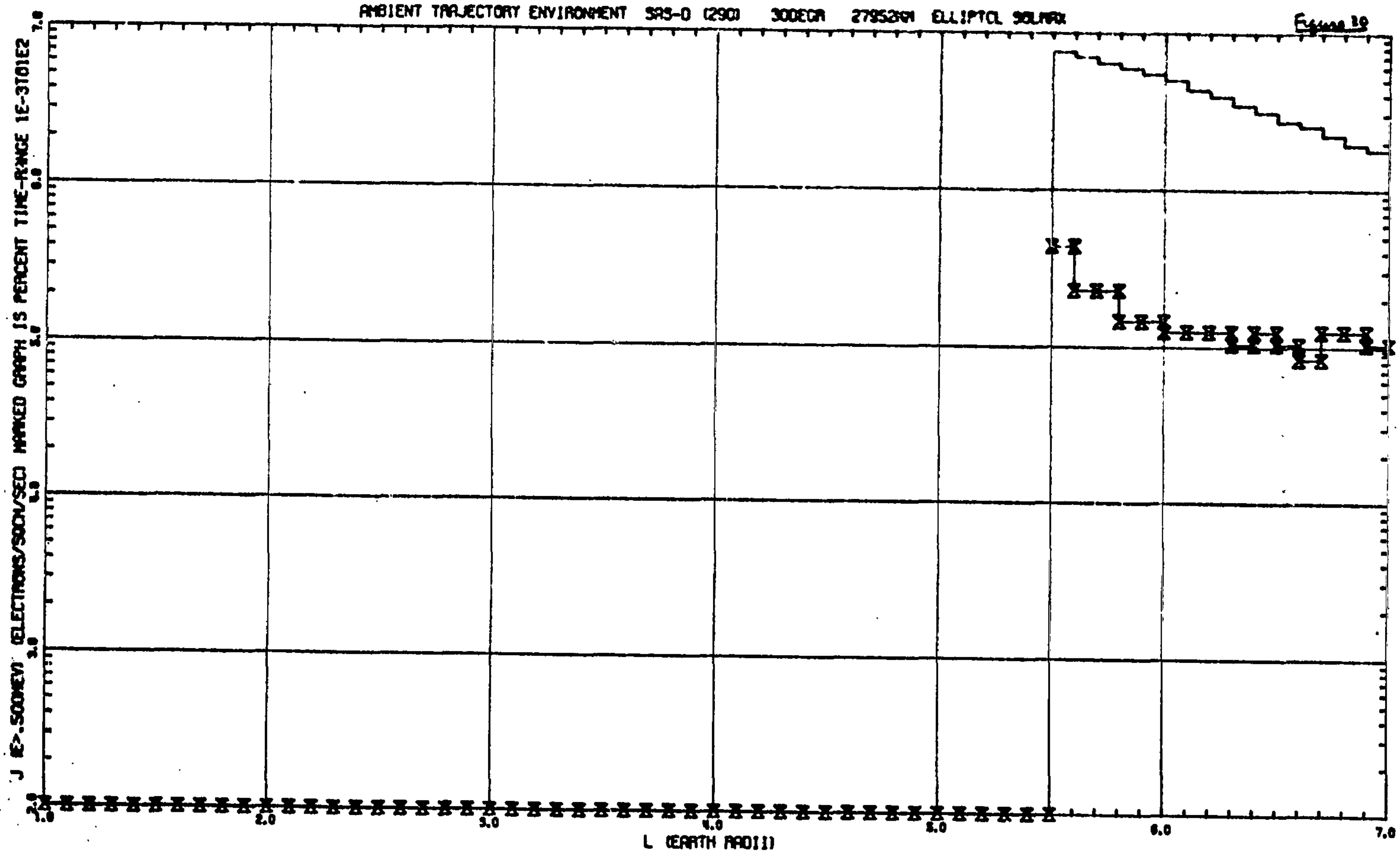

AMBIENT TRAJECTORY ENVIRONMENT SAS-D (110) 30DEGR 27952KM ELLIPTCL
J (E>.100MEV) (PROTONS/SQCM/SEC) MARKED GRAPH IS PERCENT TIME-RANGE 1E-3TO1E2
L (EARTH RADII)
1.0
2.0
3.0
4.0
5.0
6.0
7.0

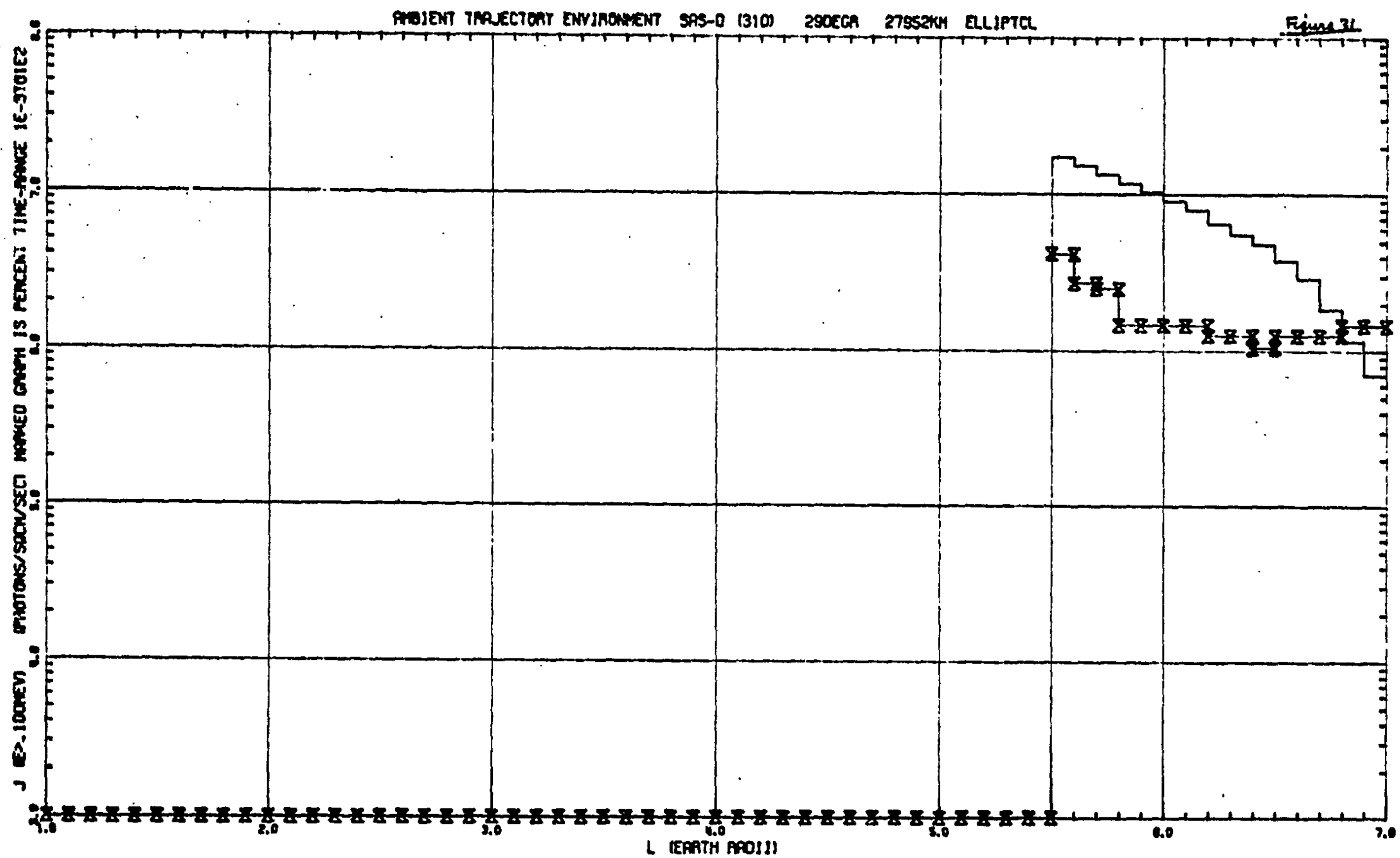


AMBIENT TRAJECTORY ENVIRONMENT SAS-D (110) 30DEGA 27952KM ELLIPTCL SOLMAX
Figure 25
J <E>.500MEV) (ELECTRONS/SQCM/SEC) MARKED GRAPH IS PERCENT TIME-RANGE 1E-3TO1E2
2.0
3.0
4.0
5.0
6.0
7.0
1.0
2.0
3.0
4.0
5.0
6.0
7.0
L (EARTH RADII)

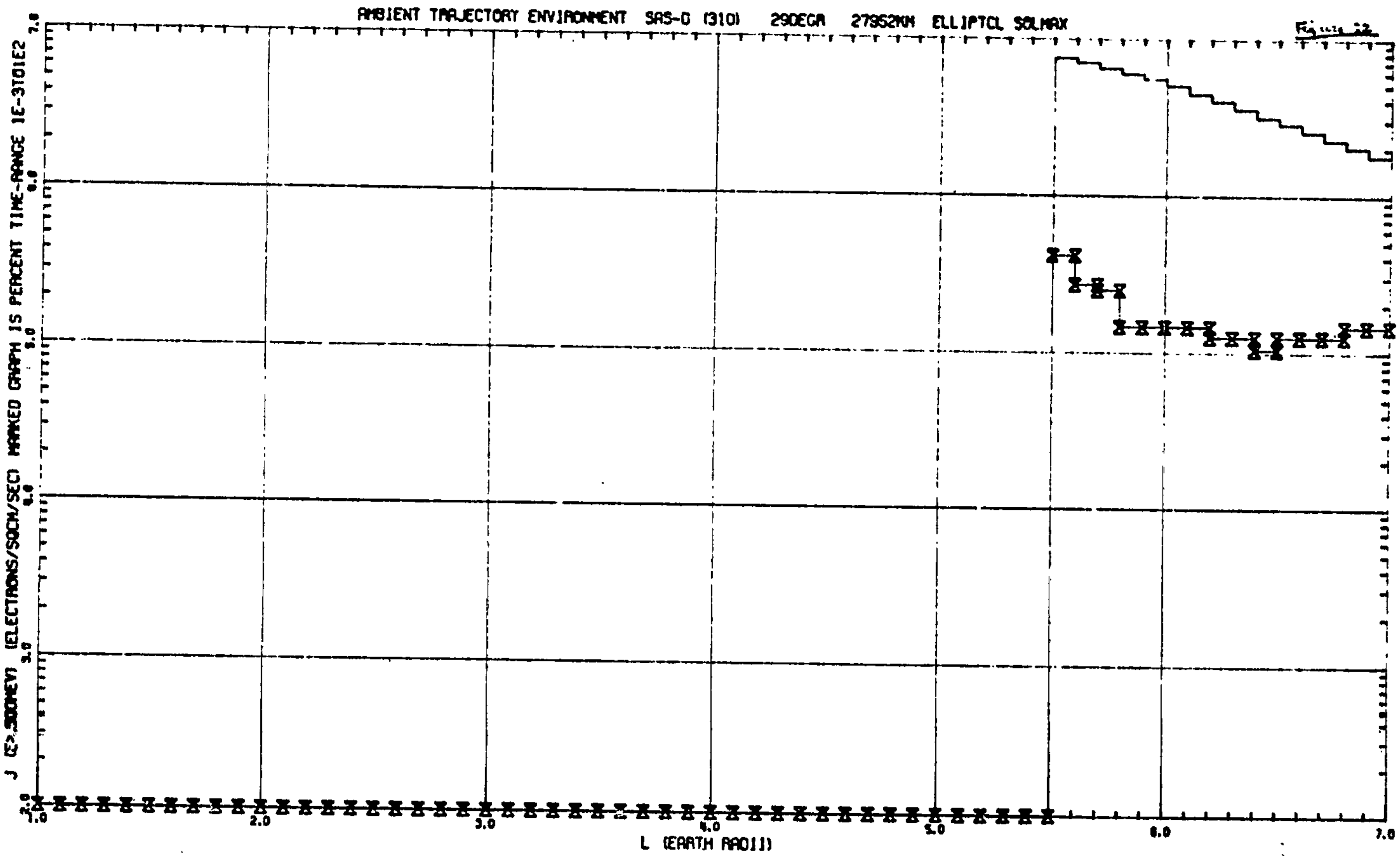


AMBIENT TRAJECTORY ENVIRONMENT SAS-D (290) 30DEGR 27952KM ELLIPTCL
Figure 29
J (E>.100MEV) (PROTONS/SQCM/SEC) MARKED GRAPH IS PERCENT TIME-RANGE 1E-3TO1E2
8.0
7.0
6.0
5.0
4.0
3.0
1.0
2.0
3.0
4.0
5.0
6.0
7.0
L (EARTH RADII)

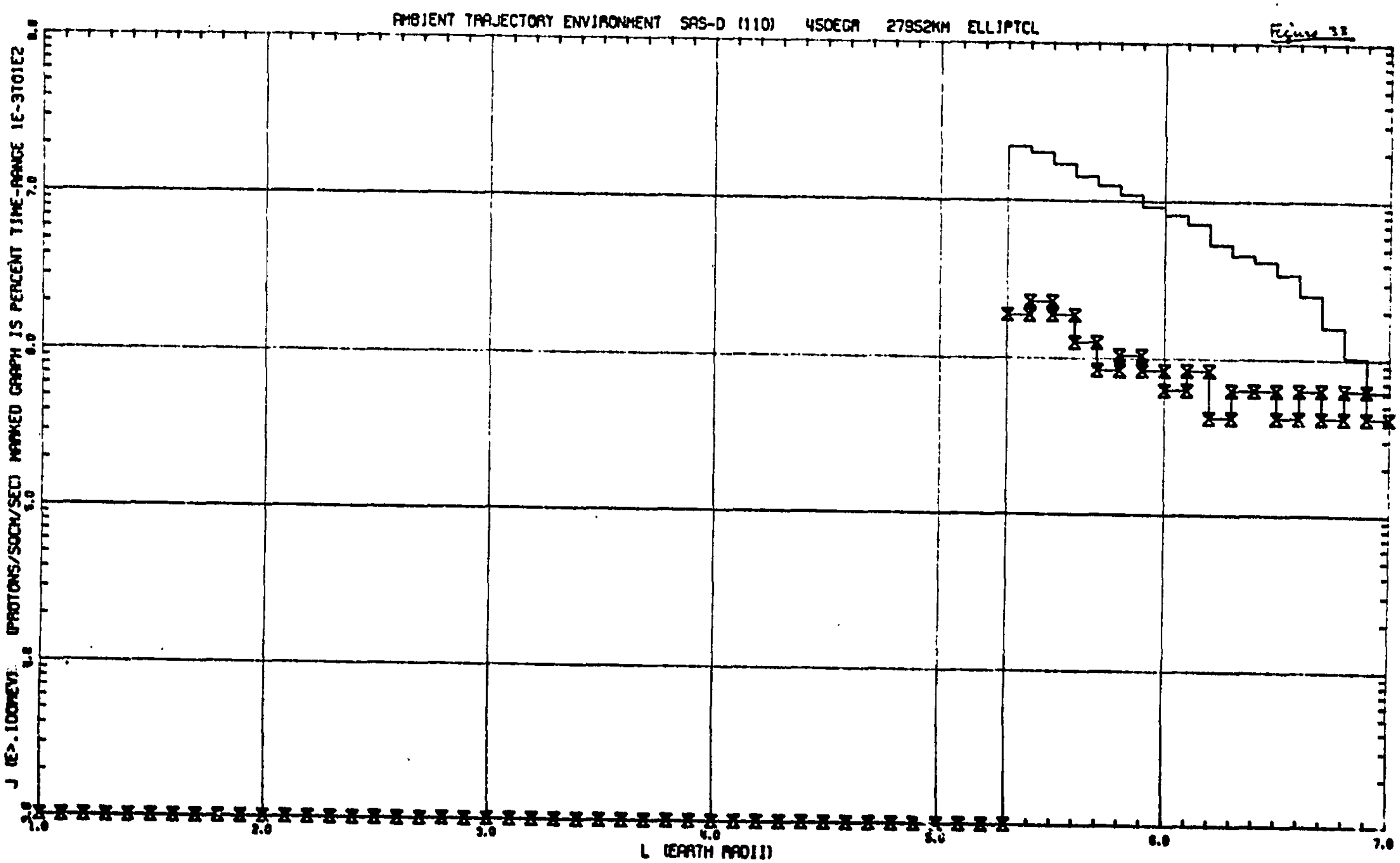

AMBIENT TRAJECTORY ENVIRONMENT SAS-D (29O) 30DEGR 27952KM ELLIPTCL SOLMAX
Figure 19
J (E>.500MEV) (ELECTRONS/SQCM/SEC) MARKED GRAPH IS PERCENT TIME-RANGE 1E-3TO1E2
L (EARTH RADII)
1.0
2.0
3.0
4.0
5.0
6.0
7.0

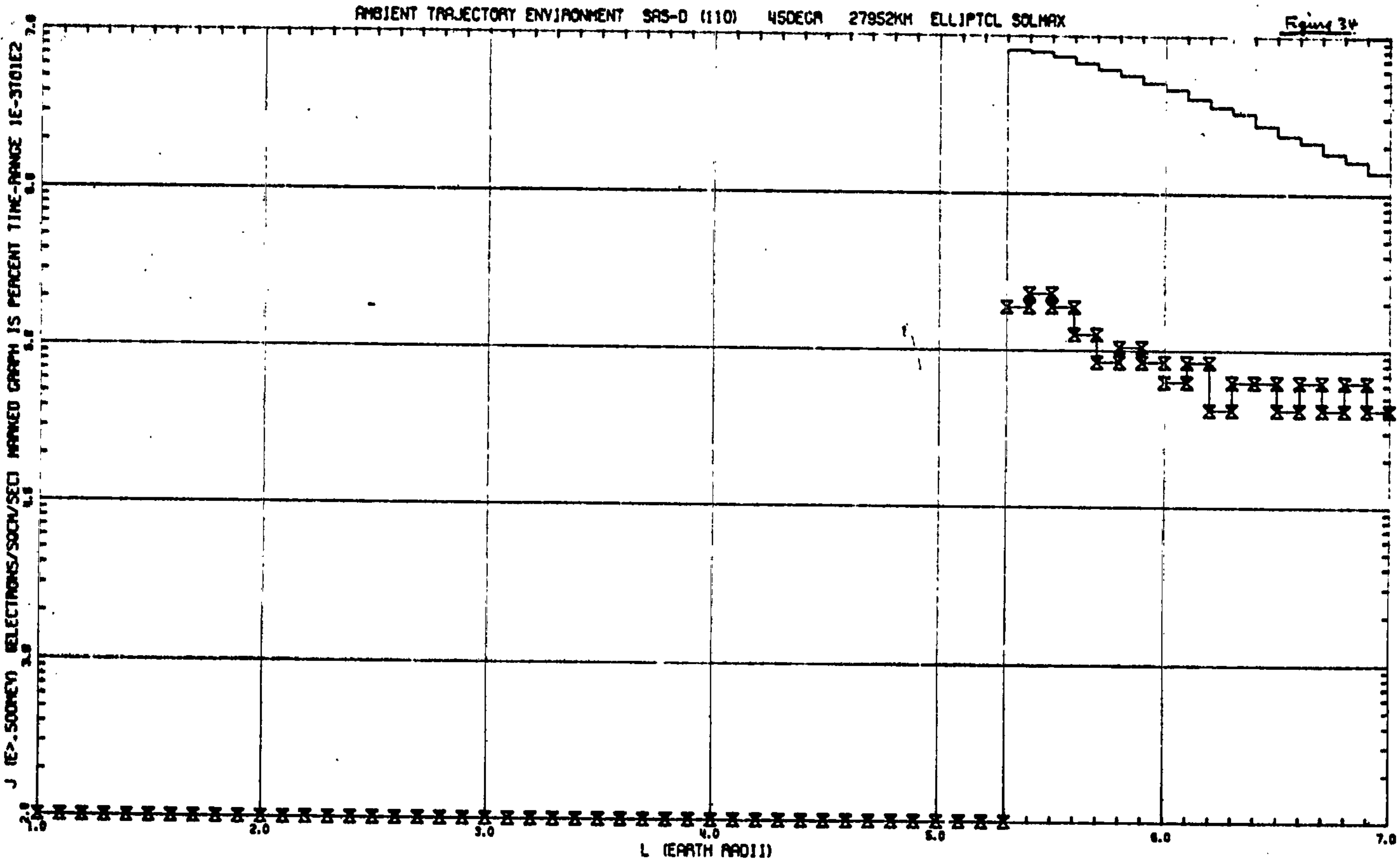


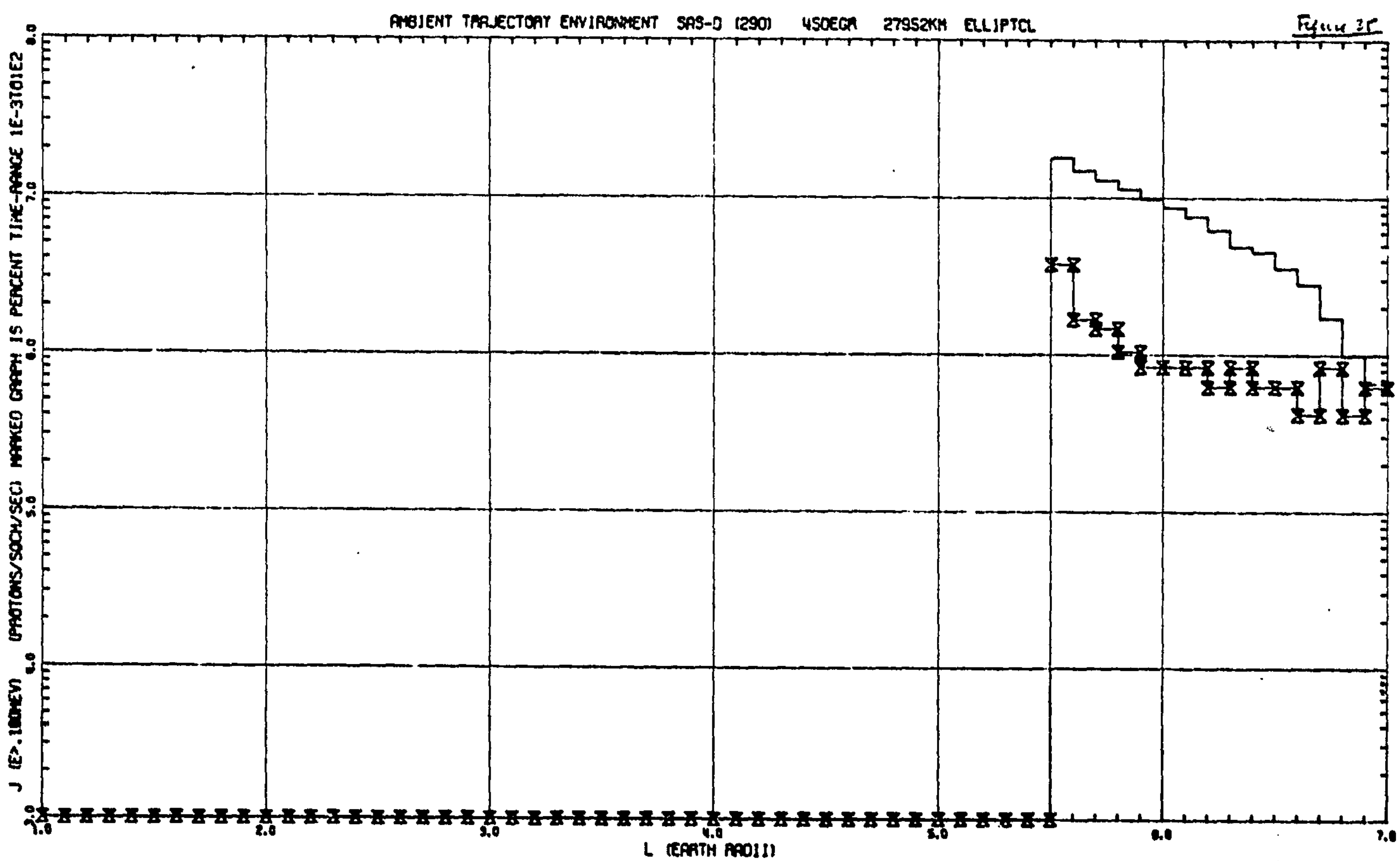
AMBIENT TRAJECTORY ENVIRONMENT SAS-D (310) 29DEGA 27952KM ELLIPTCL
Figure 31
J (E>.100MEV) (PROTONS/SQCM/SEC) MARKED GRAPH IS PERCENT TIME-RANGE 1E-3TO1E2
L (EARTH RADII)
1.0
2.0
3.0
4.0
5.0
6.0
7.0



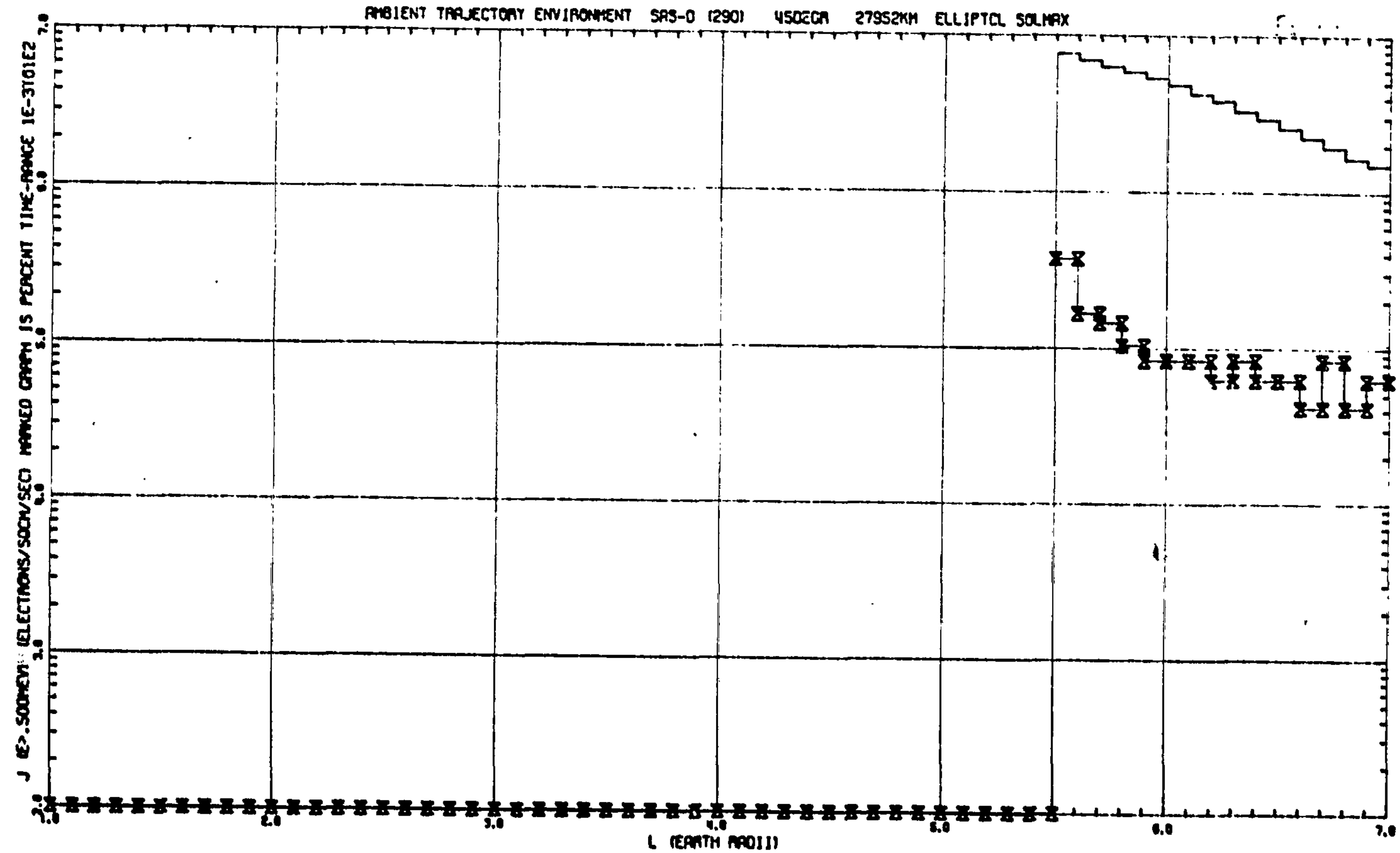
AMBIENT TRAJECTORY ENVIRONMENT SAS-D (310) 29DEGR 27952KM ELLIPTCL SOLMAX
J (E>.500MEV) (ELECTRONS/SQCM/SEC) MARKED GRAPH IS PERCENT TIME-RANGE 1E-3TO1E2
L (EARTH RADII)
1.0
2.0
3.0
4.0
5.0
7.0


AMBIENT TRAJECTORY ENVIRONMENT SAS-D (110) 45DEGR 27952KM ELLIPTCL
Figure 33
J (E>.100MEV) (PROTONS/SQCM/SEC) MARKED GRAPH IS PERCENT TIME-RANGE 1E-3TO1E2
L (EARTH RADII)
1.0
2.0
3.0
4.0
5.0
6.0
7.0


AMBIENT TRAJECTORY ENVIRONMENT SAS-D (110) 45DEGA 27952KM ELLIPTCL SOLMAX
Figure 34
J (E>.500MEV) (ELECTRONS/SQCM/SEC) MARKED GRAPH IS PERCENT TIME-RANGE 1E-3TO1E2
L (EARTH RADII)
1.0
2.0
3.0
4.0
5.0
6.0
7.0



AMBIENT TRAJECTORY ENVIRONMENT SAS-D (290) 45DEGR 27952KM ELLIPTCL
Figure 2C
J (E>.100MEV) (PROTONS/SQCM/SEC) MARKED GRAPH IS PERCENT TIME-RANGE 1E-3TO1E2
L (EARTH RADII)


AMBIENT TRAJECTORY ENVIRONMENT SAS-D (290) 450EGA 27952KM ELLIPTCL SOLMAX
J (E>.500MEV) (ELECTRONS/SQCM/SEC) MARKED GRAPH IS PERCENT TIME-RANGE 1E-3TO1E2
L (EARTH RADII)
1.0
2.0
3.0
4.0
5.0
6.0
7.0

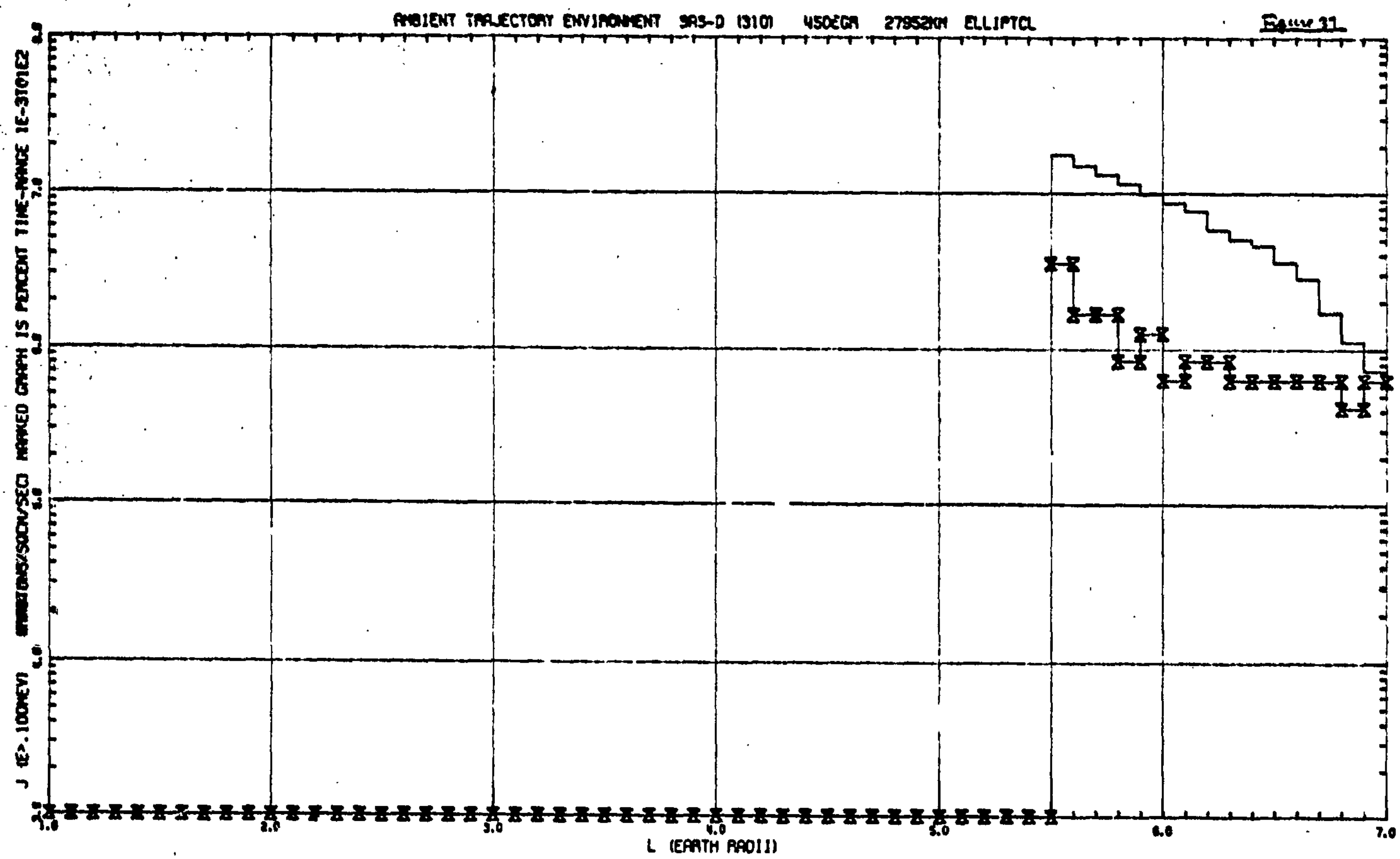
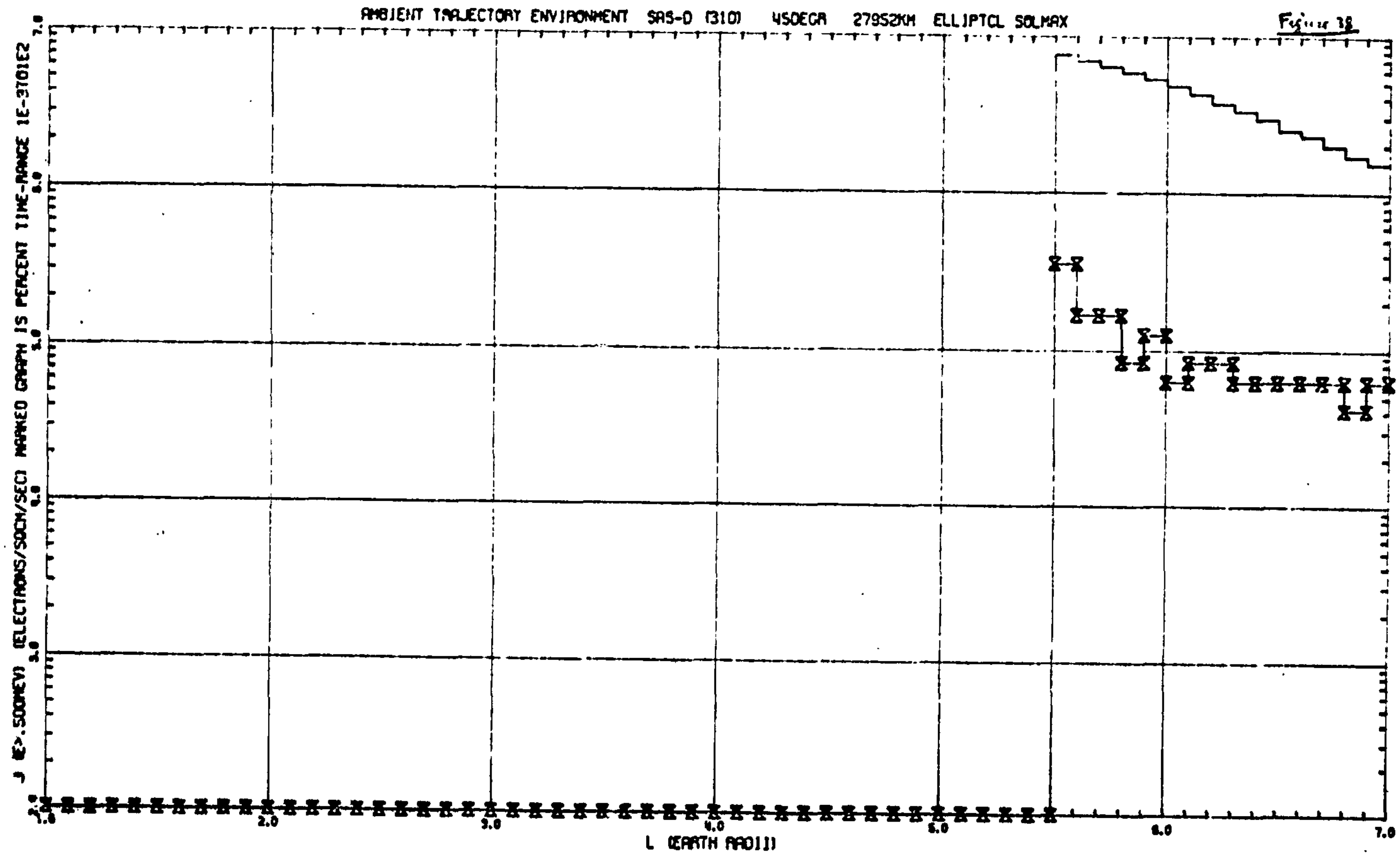
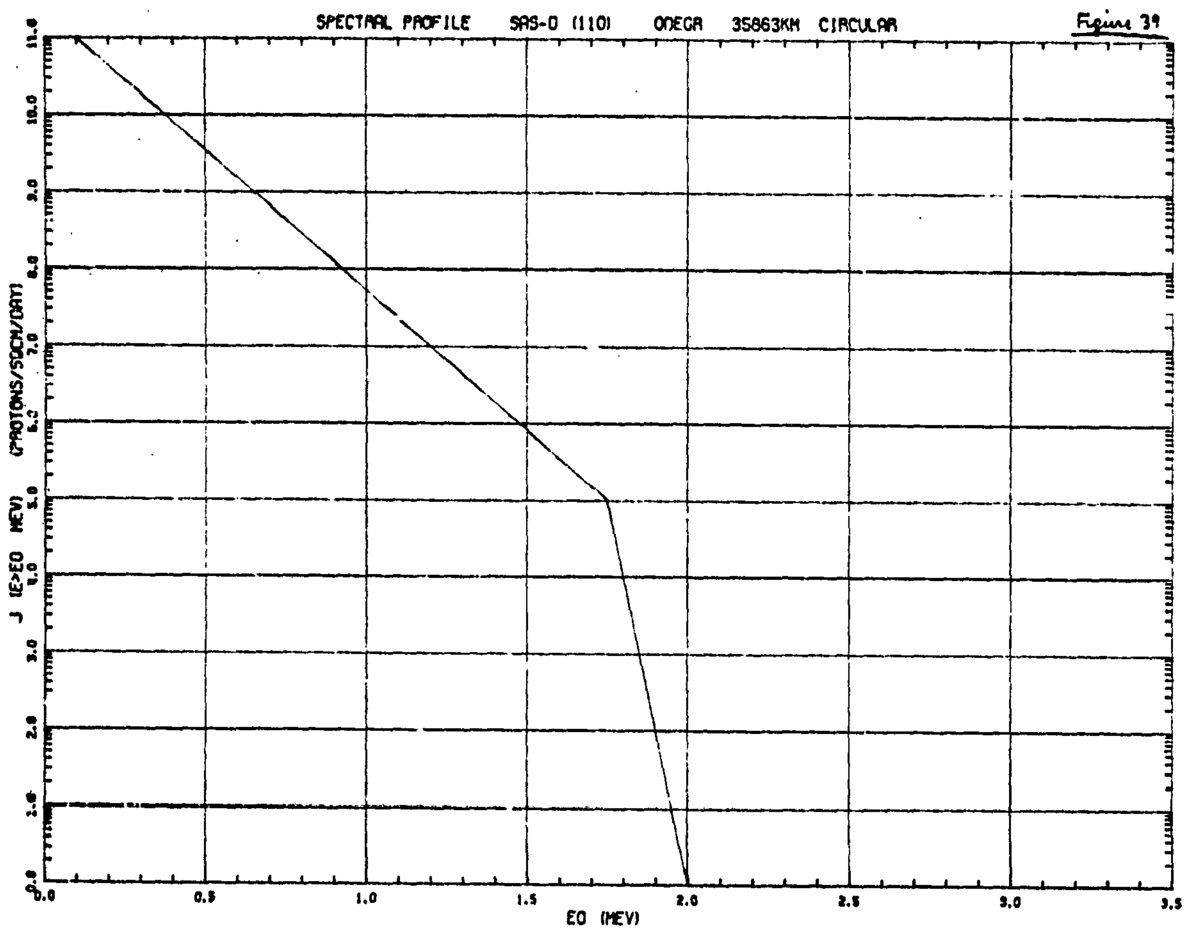
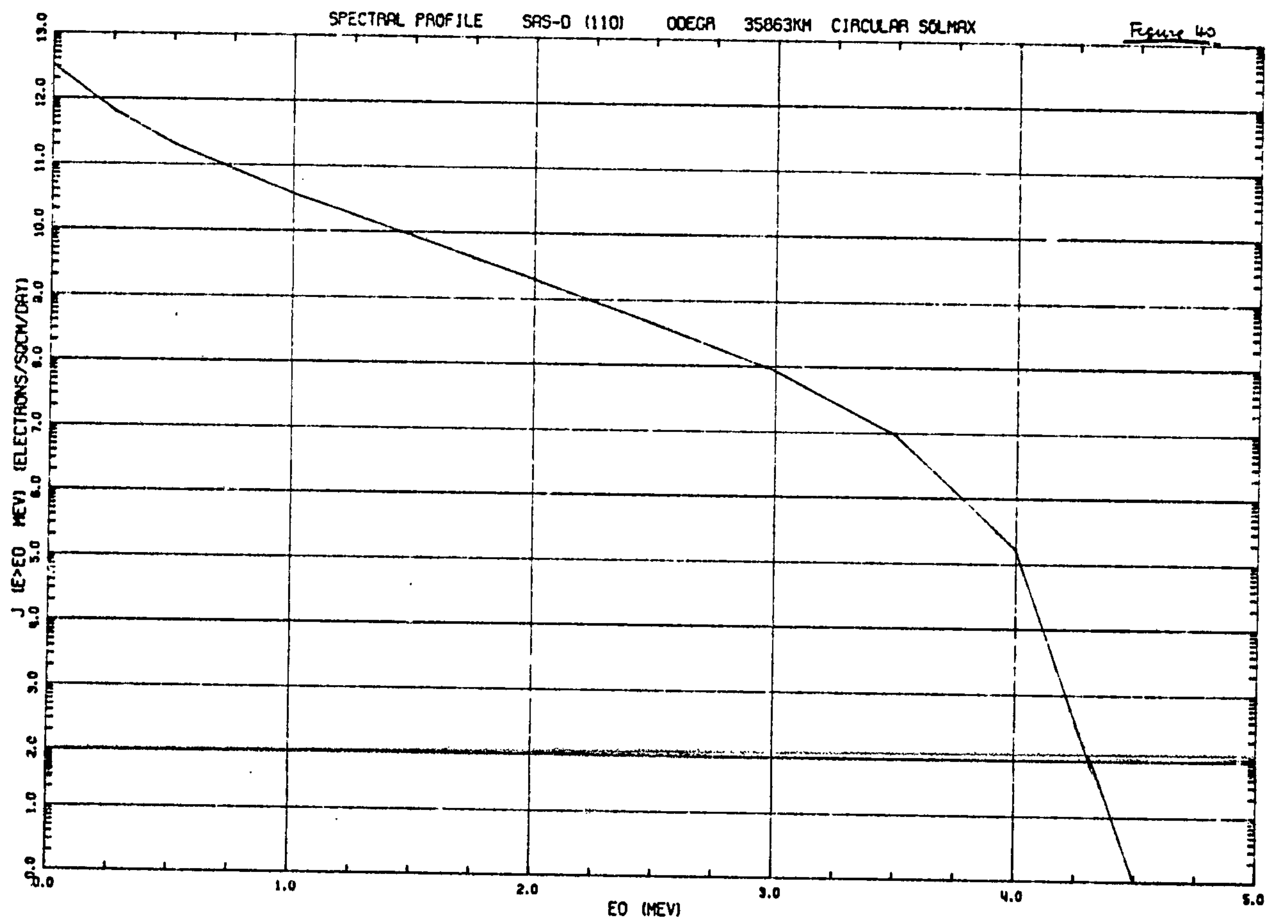

AMBIENT TRAJECTORY ENVIRONMENT SAS-D (310) 45DEGR 27952KM ELLIPTCL
J (E>.100MEV)
/SQCM/SEC) MARKED GRAPH IS PERCENT TIME-RANGE 1E-3TO1E2
L (EARTH RADII)
1.0
2.0
3.0
4.0
5.0
6.0
7.0

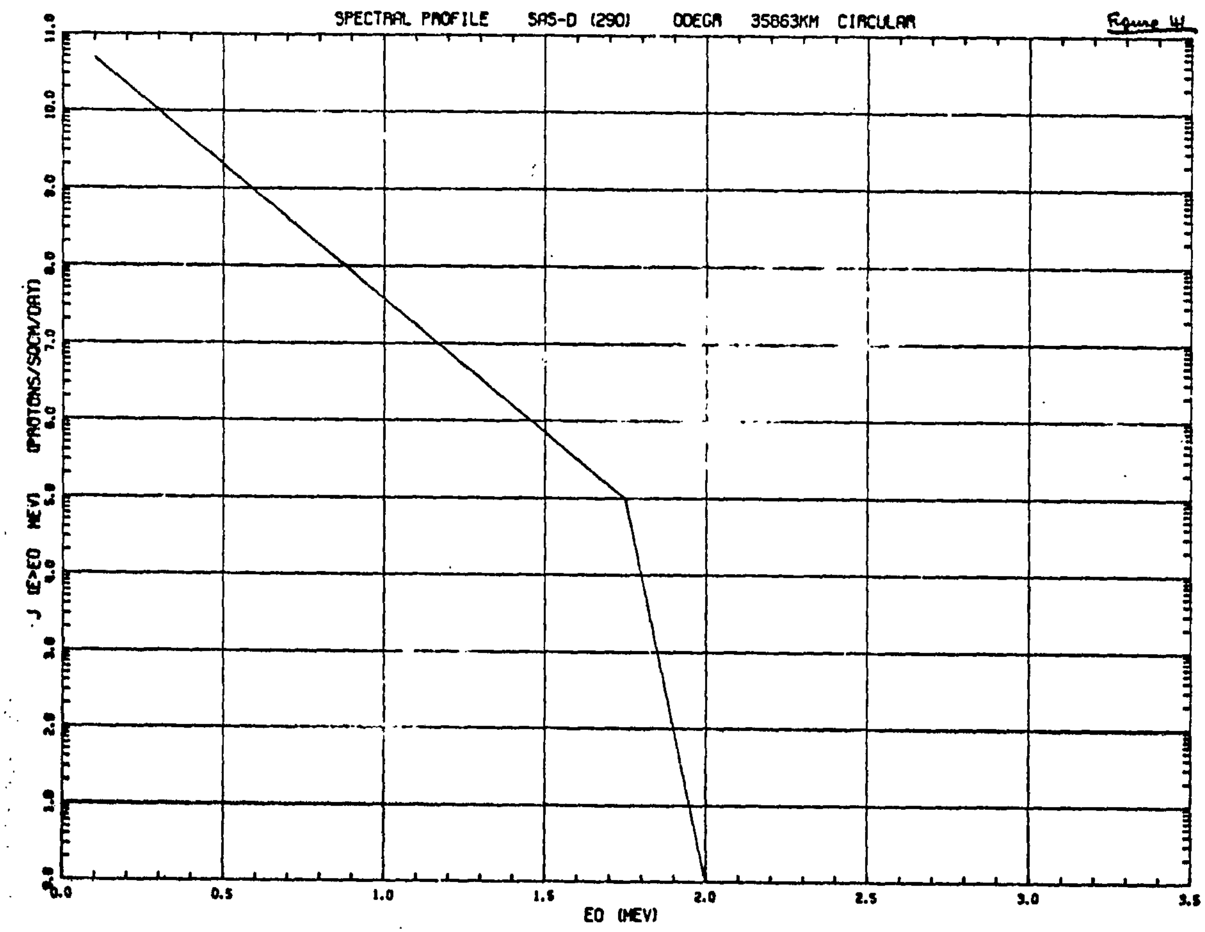
Figure 31


AMBIENT TRAJECTORY ENVIRONMENT SAS-D (310) 45DEGR 27952KM ELLIPTCL SOLMAX
Figure 38
J (E>.500MEV) (ELECTRONS/SQCM/SEC) MARKED GRAPH IS PERCENT TIME-RANGE 1E-3TO1E2
L (EARTH RADII)
1.0
2.0
3.0
4.0
5.0
6.0
7.0


SPECTRAL PROFILE SAS-D (110) OMEGA 35863KM CIRCULAR
Figure 39
J (E>EO MEV) (PROTONS/SQCM/DAY)
EO (MEV)
0.0
1.0
2.0
3.0
4.0
5.0
6.0
7.0
8.0
9.0
10.0
11.0
0.5
1.5
2.5
3.5



SPECTRAL PROFILE SAS-D (110) ODEGA 35863KM CIRCULAR SOLMAX
Figure 40
J (E>EO MEV) (ELECTRONS/SQCM/DAY)
13.0
12.0
11.0
10.0
9.0
8.0
7.0
6.0
5.0
4.0
3.0
2.0
1.0
0.0
0.0
1.0
2.0
3.0
4.0
5.0
EO (MEV)


SPECTRAL PROFILE SAS-D (290) ODEGA 35863KM CIRCULAR
Figure 4
J (E>EO MEV) (PROTONS/SQCM/DAY)
0.0
1.0
2.0
3.0
4.0
5.0
6.0
7.0
8.0
9.0
10.0
11.0
0.0
0.5
1.0
1.5
2.0
2.5
3.0
3.5
EO (MEV)

SPECTRAL PROFILE SAS-D (290) ODEGR 35863KM CIRCULAR SOLMAX

Figure 42

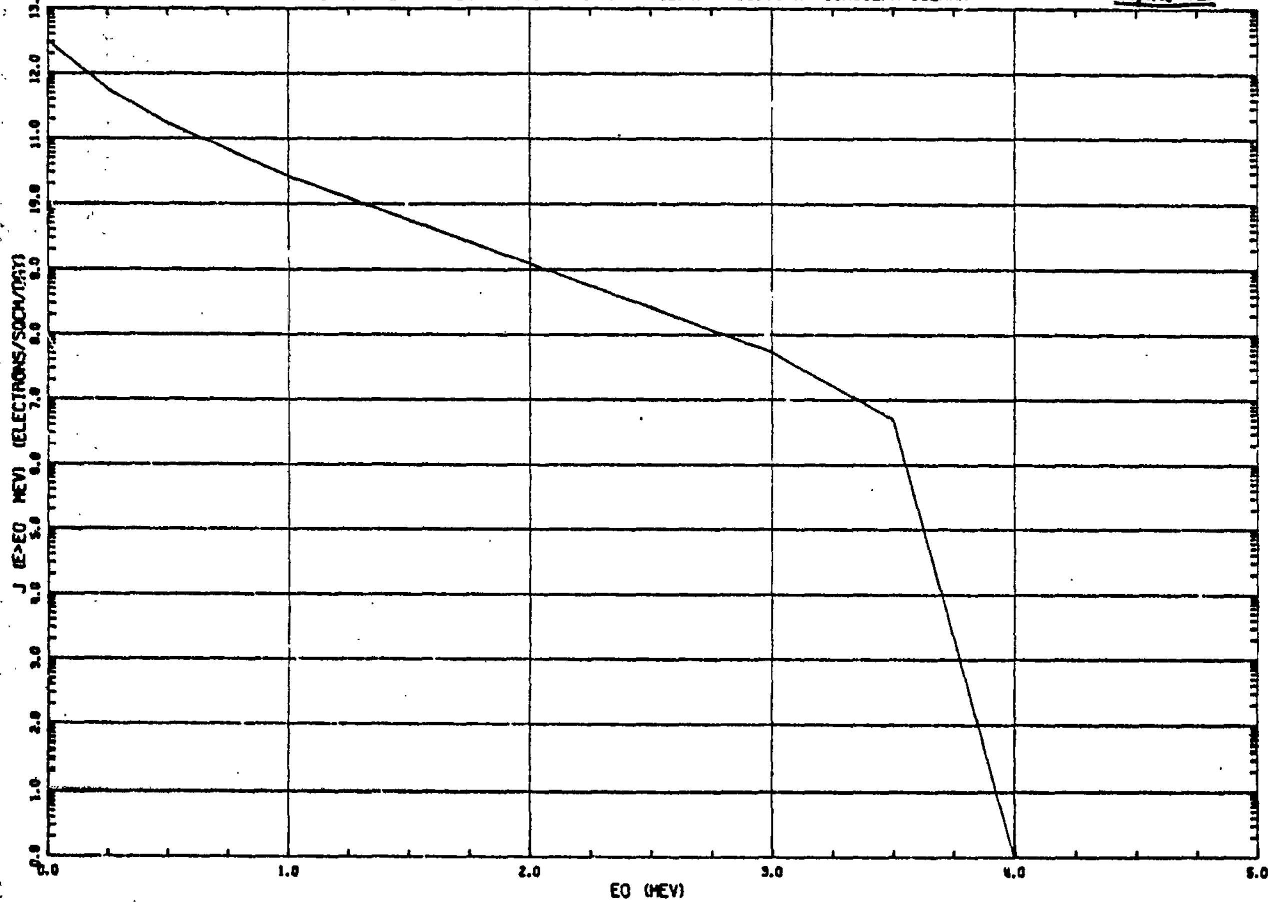


Figure 43

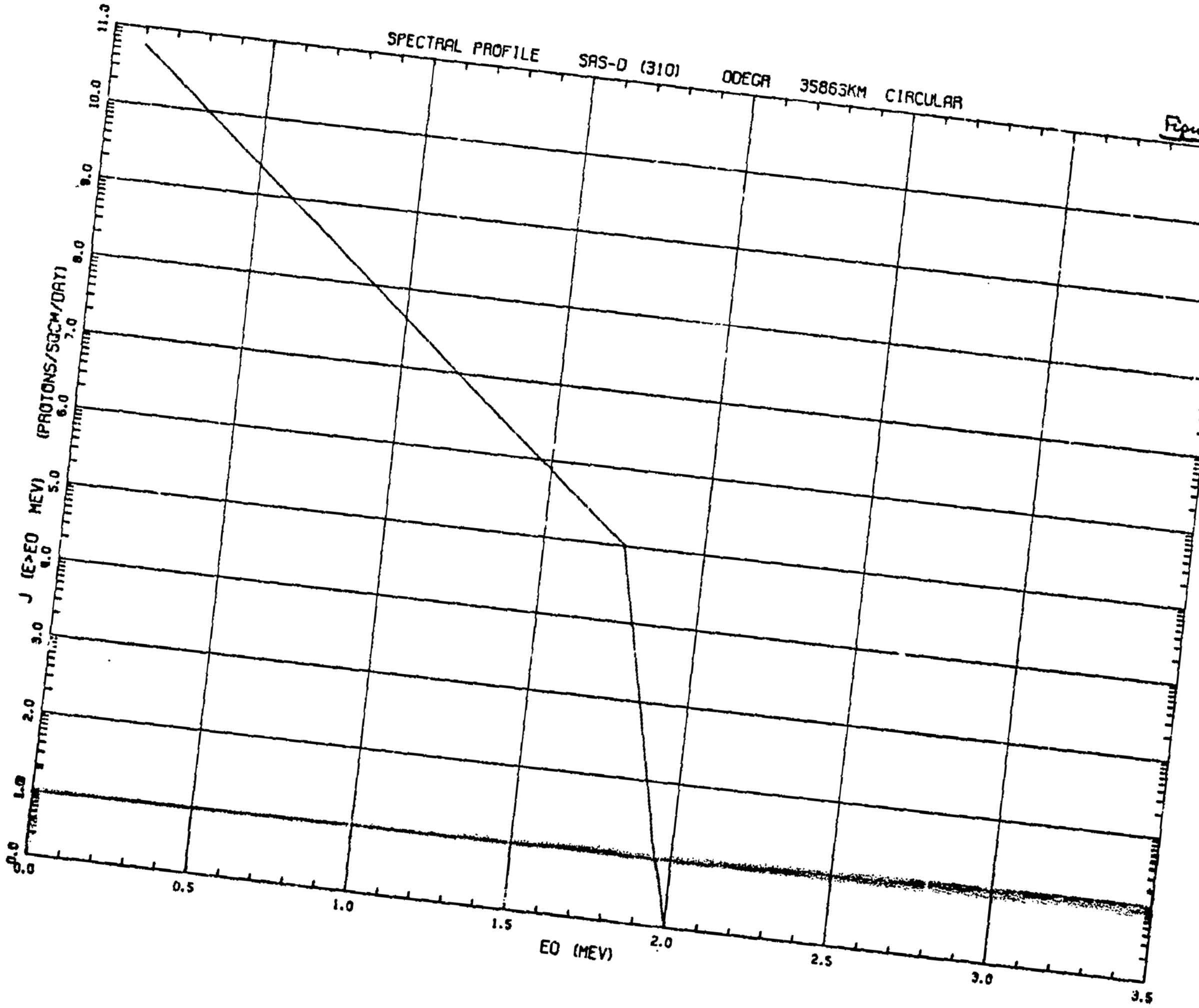
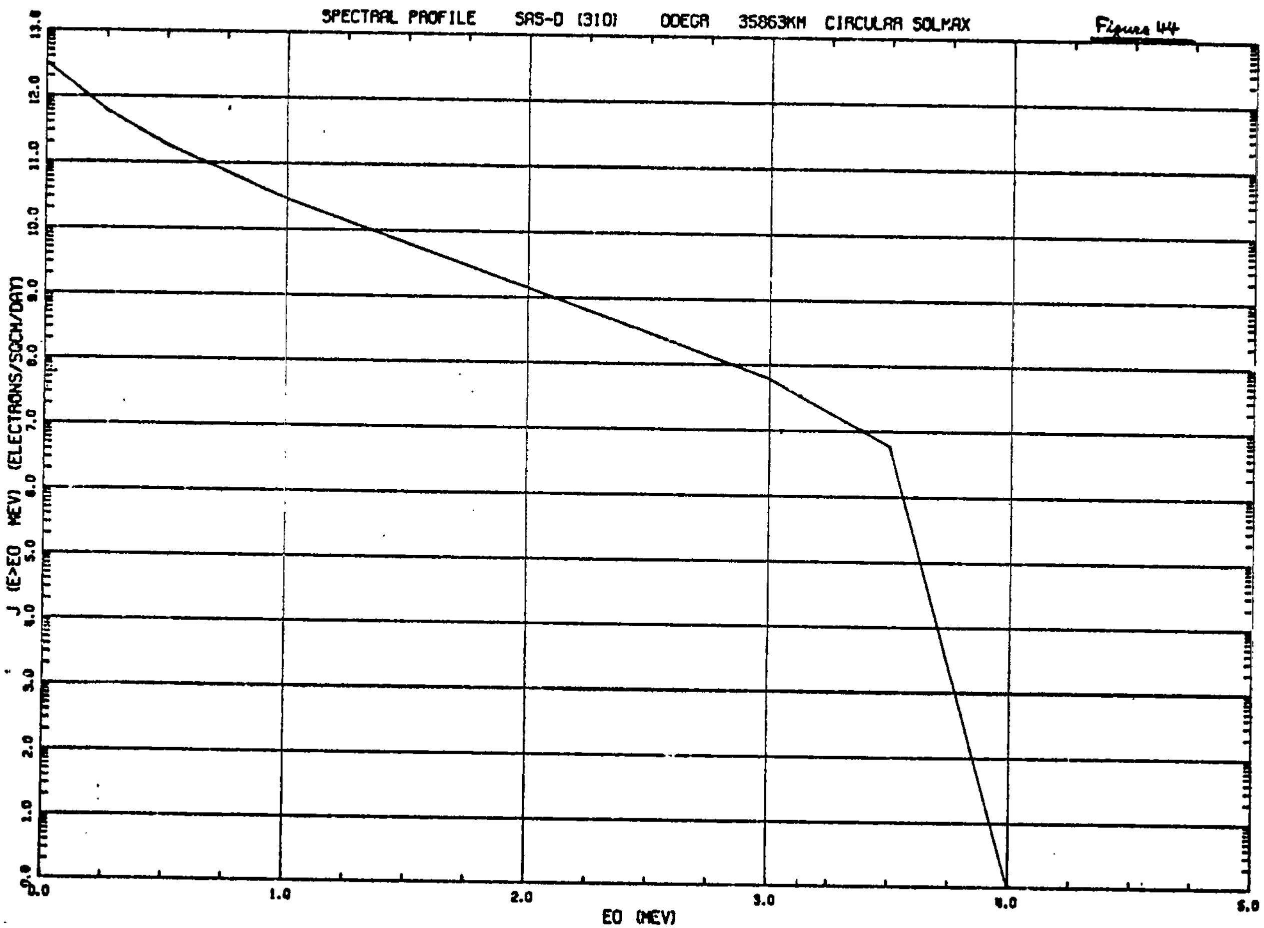
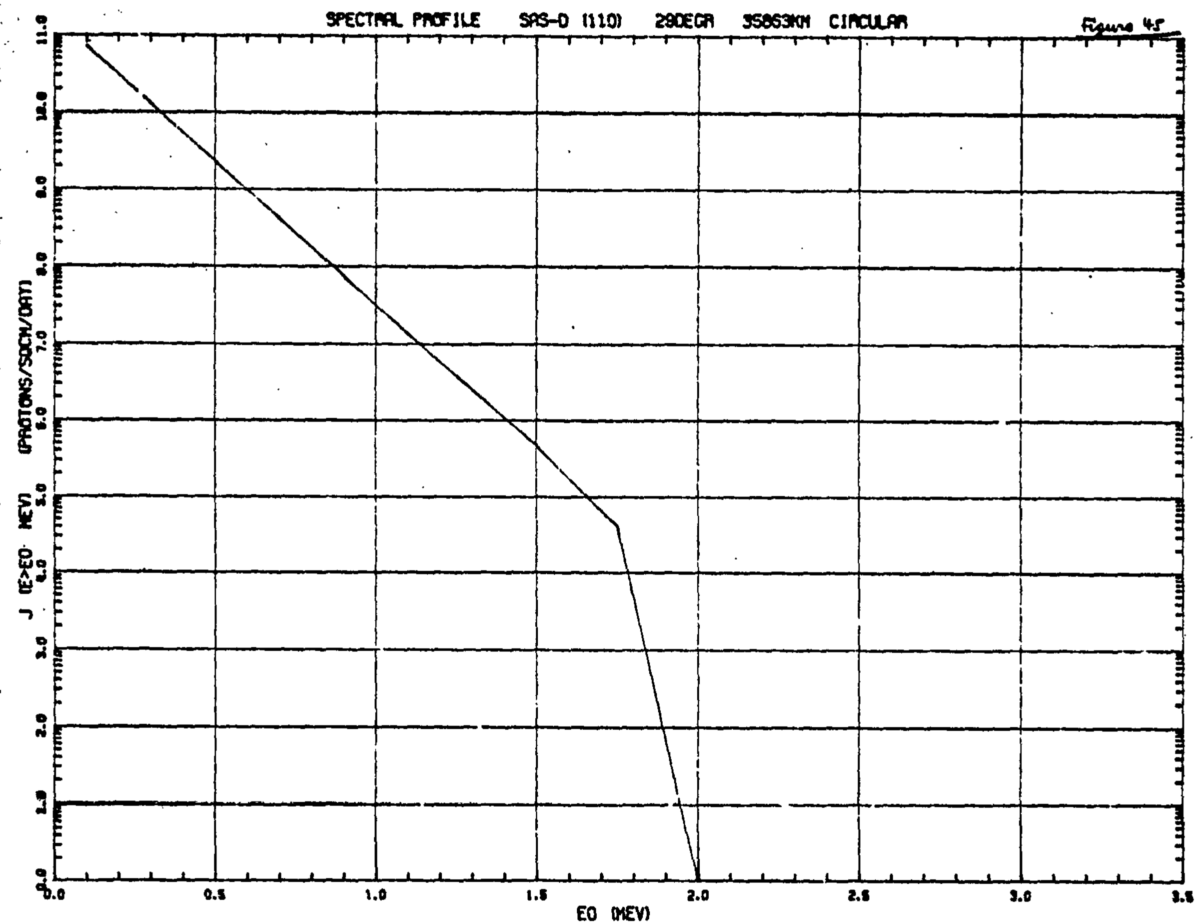

SPECTRAL PROFILE SAS-D (310) ODEGA 35863KM CIRCULAR
J (E>EO MEV) (PROTONS/SQCM/DAY)
EO (MEV)
0.0
1.0
2.0
3.0
4.0
5.0
6.0
7.0
8.0
9.0
10.0
11.0
0.5
1.5
2.5
3.5

Figure 44



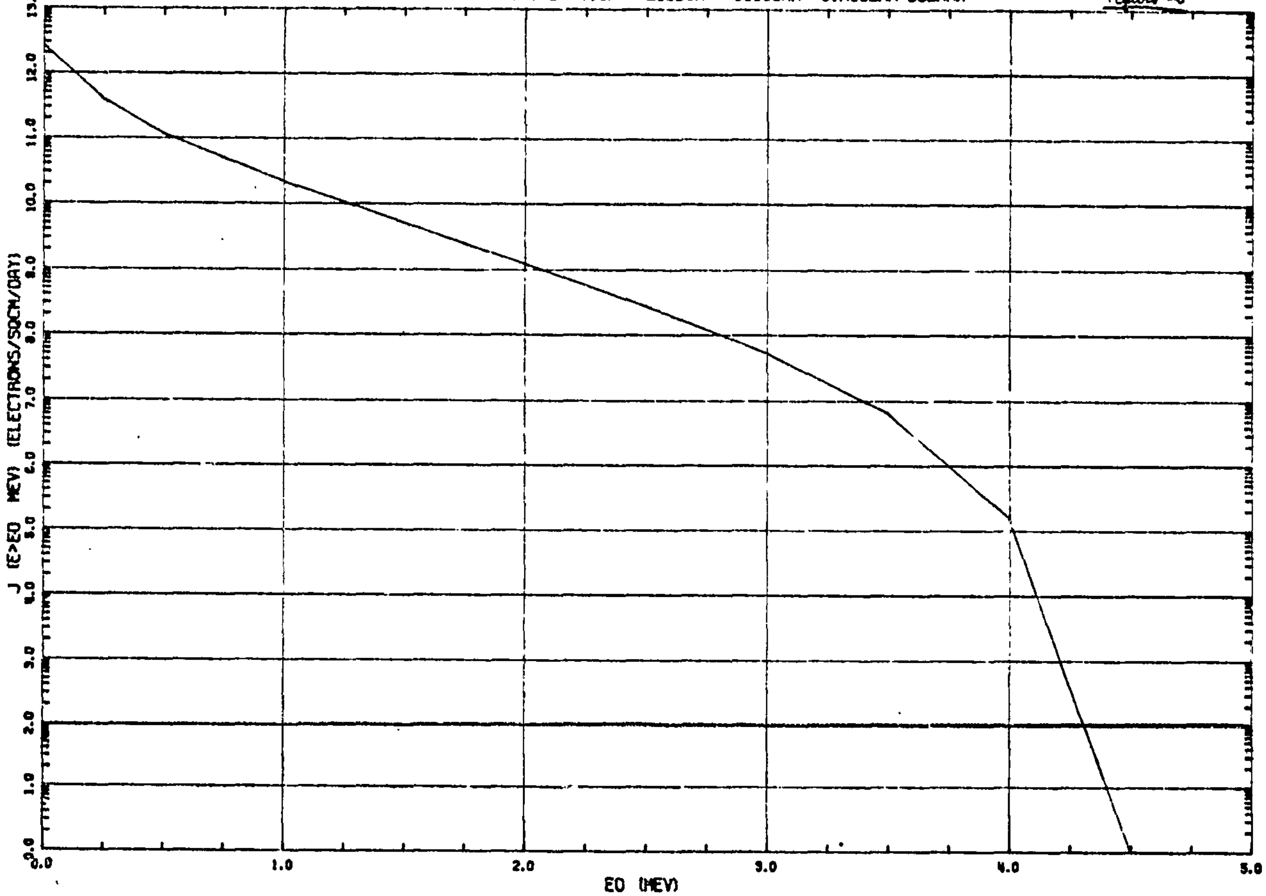
SPECTRAL PROFILE SAS-D (310) ODEGA 35863KM CIRCULAR SOLMAX
J (E>EO MEV) (ELECTRONS/SQCM/DAY)
EO (MEV)
0.0
1.0
2.0
3.0
4.0
5.0
6.0
7.0
8.0
9.0
10.0
11.0
12.0
13.0

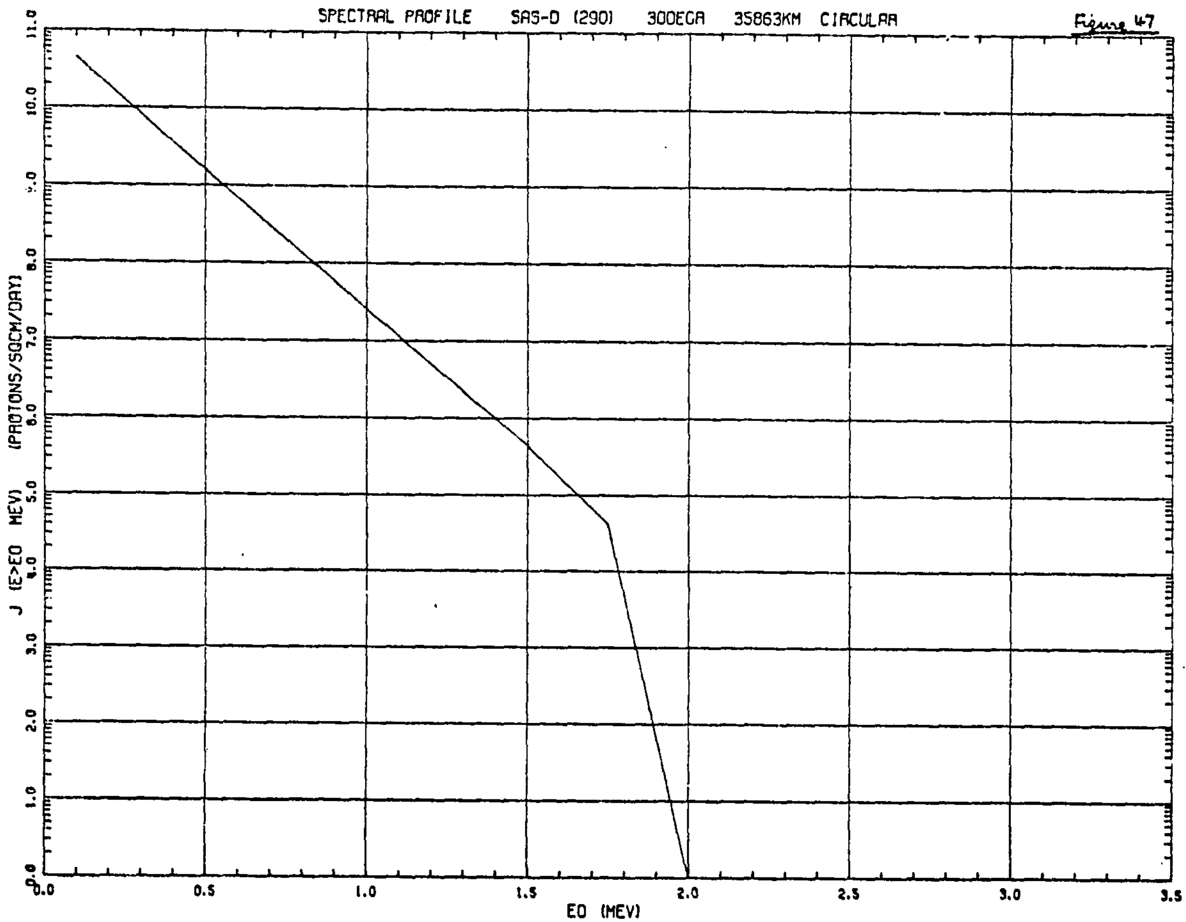


SPECTRAL PROFILE SAS-D (110) 28DEGR 35863KM CIRCULAR
Figure 45
J (E>EO MEV) (PROTONS/SQCM/DAY)
0.0
1.0
2.0
3.0
4.0
5.0
6.0
7.0
8.0
9.0
10.0
11.0
EO (MEV)
0.0
0.5
1.0
1.5
2.0
2.5
3.0
3.5

SPECTRAL PROFILE SAS-D (110) 28DEGR 35863KM CIRCULAR SOLMAX

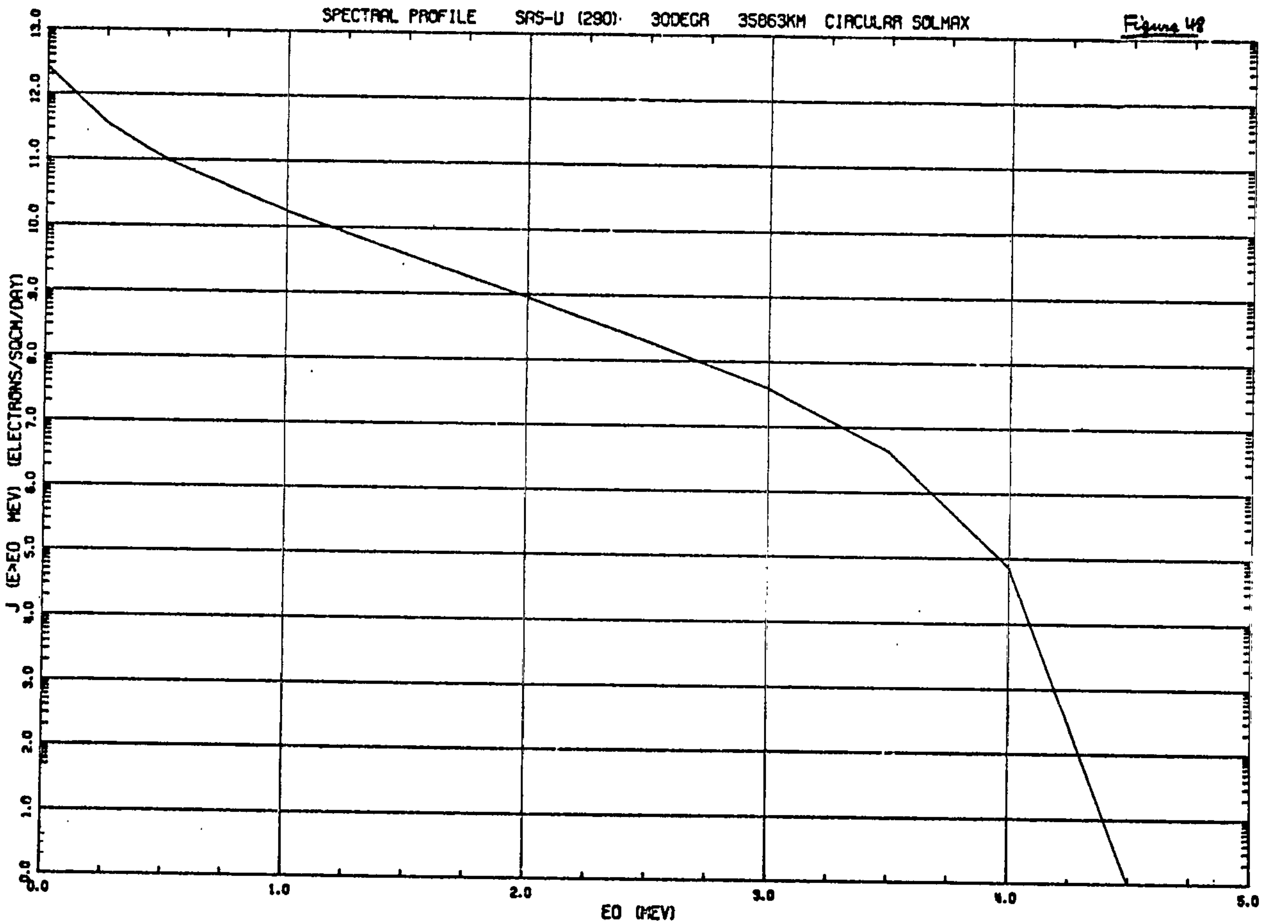
Figure 46





SPECTRAL PROFILE SAS-D (290) 30DEGA 35863KM CIRCULAR
J (E>EO MEV) (PROTONS/SQCM/DAY)
EO (MEV)
0.0
0.5
1.0
1.5
2.0
2.5
3.0
3.5
1.0
2.0
3.0
4.0
5.0
6.0
7.0
8.0
9.0
10.0
11.0

Figure 47


SPECTRAL PROFILE SAS-U (290) 30DEGR 35863KM CIRCULAR SOLMAX
Figure 48
J (E>EO MEV) (ELECTRONS/SQCM/DAY)
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
EO (MEV)

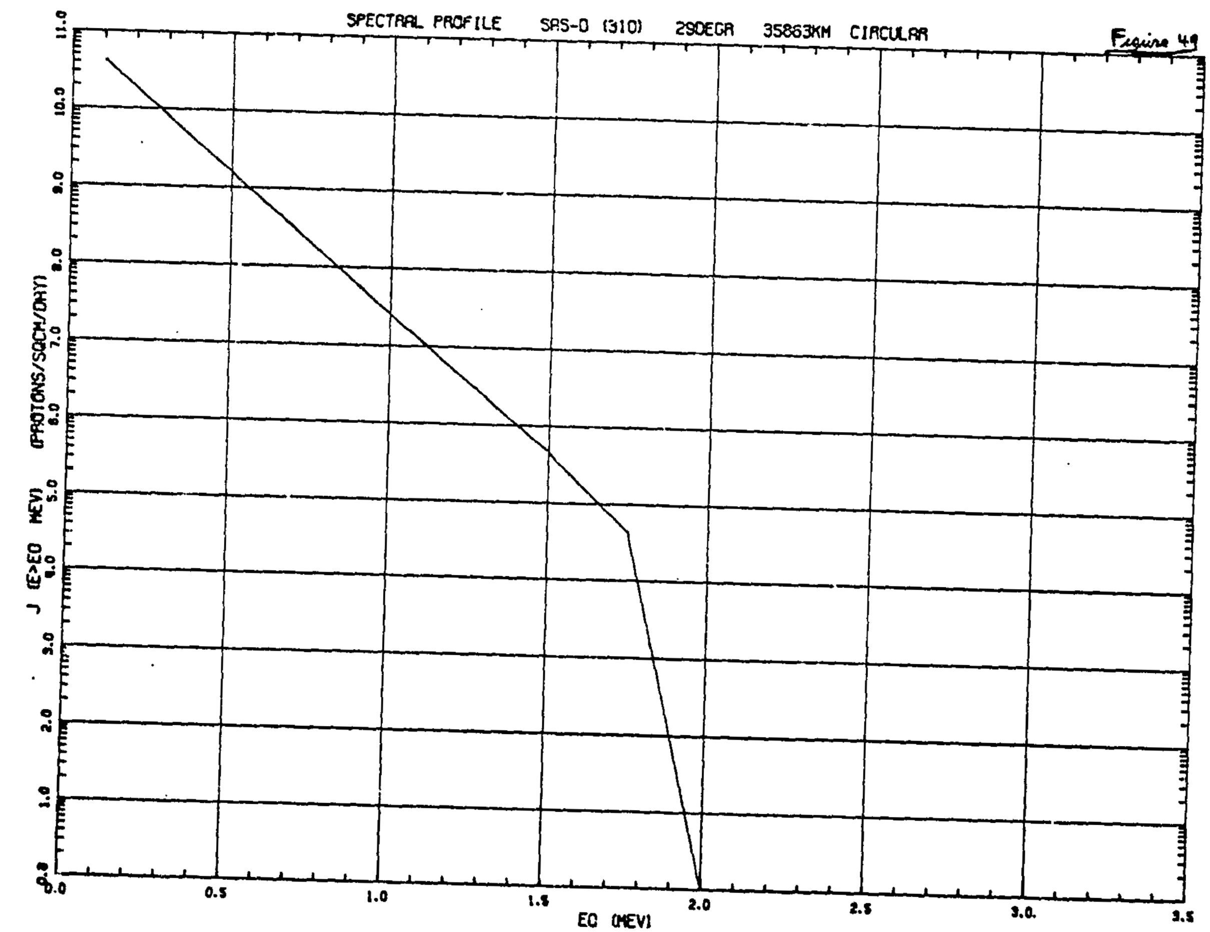
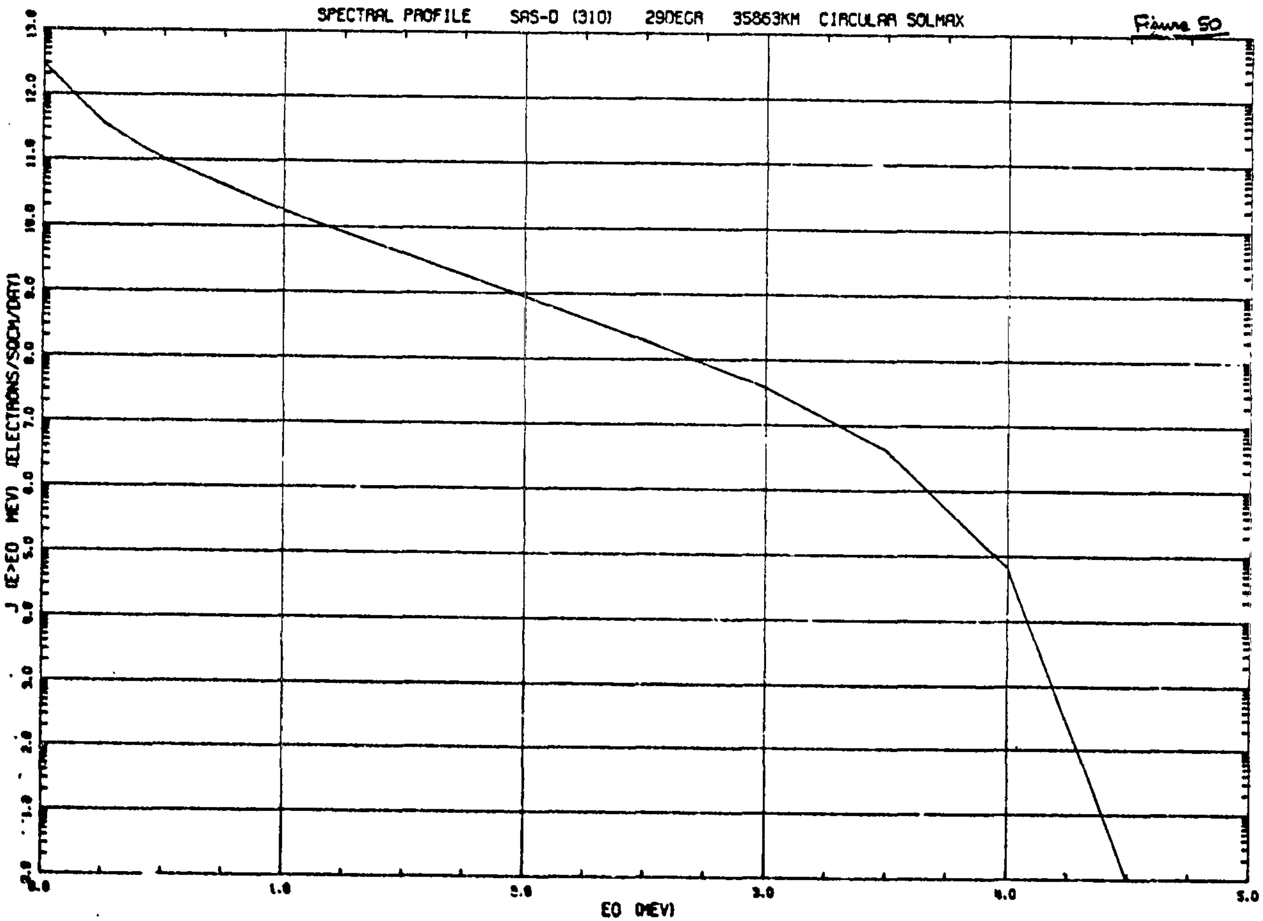

SPECTRAL PROFILE SAS-D (310) 2SDEGR 35863KM CIRCULAR
Figure 49
J (E>EO MEV) (PROTONS/SQCM/DAY)
0.0
1.0
2.0
3.0
4.0
5.0
6.0
7.0
8.0
9.0
10.0
11.0
0.0
0.5
1.0
1.5
2.0
2.5
3.0
3.5
EO (MEV)

Figure 50


SPECTRAL PROFILE SAS-D (310) 29DEGR 35863KM CIRCULAR SOLMAX
J (E>EO MEV) (ELECTRONS/SQCM/DAY)
EO (MEV)
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

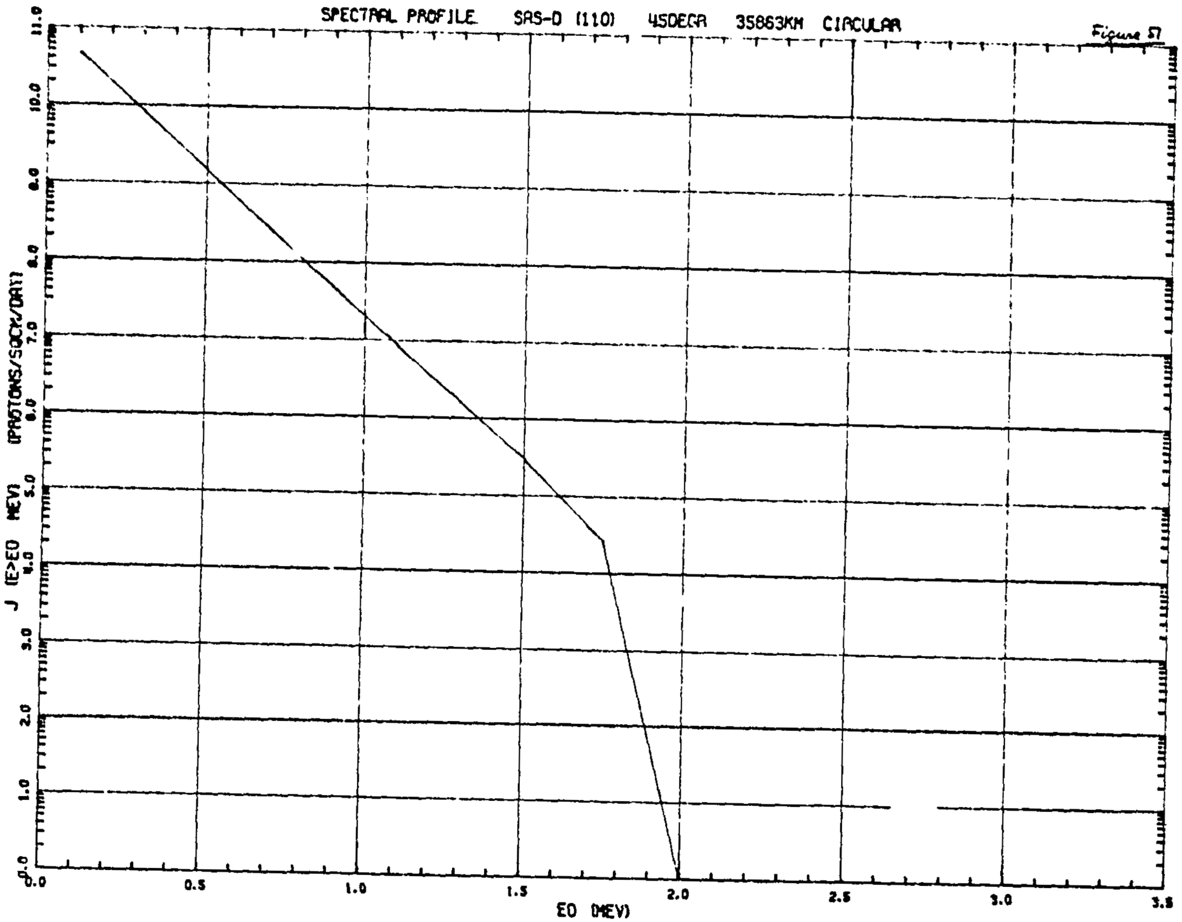
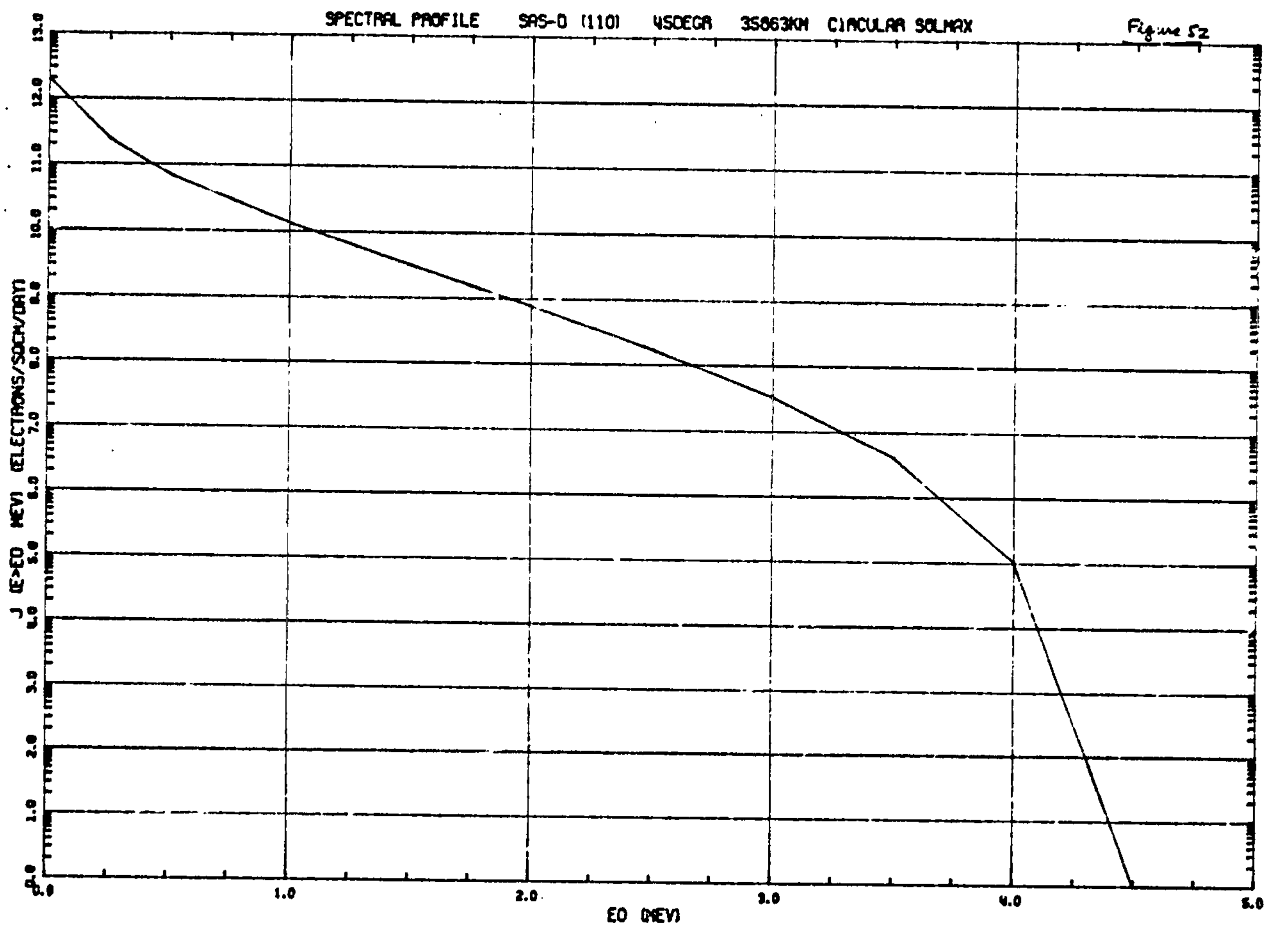
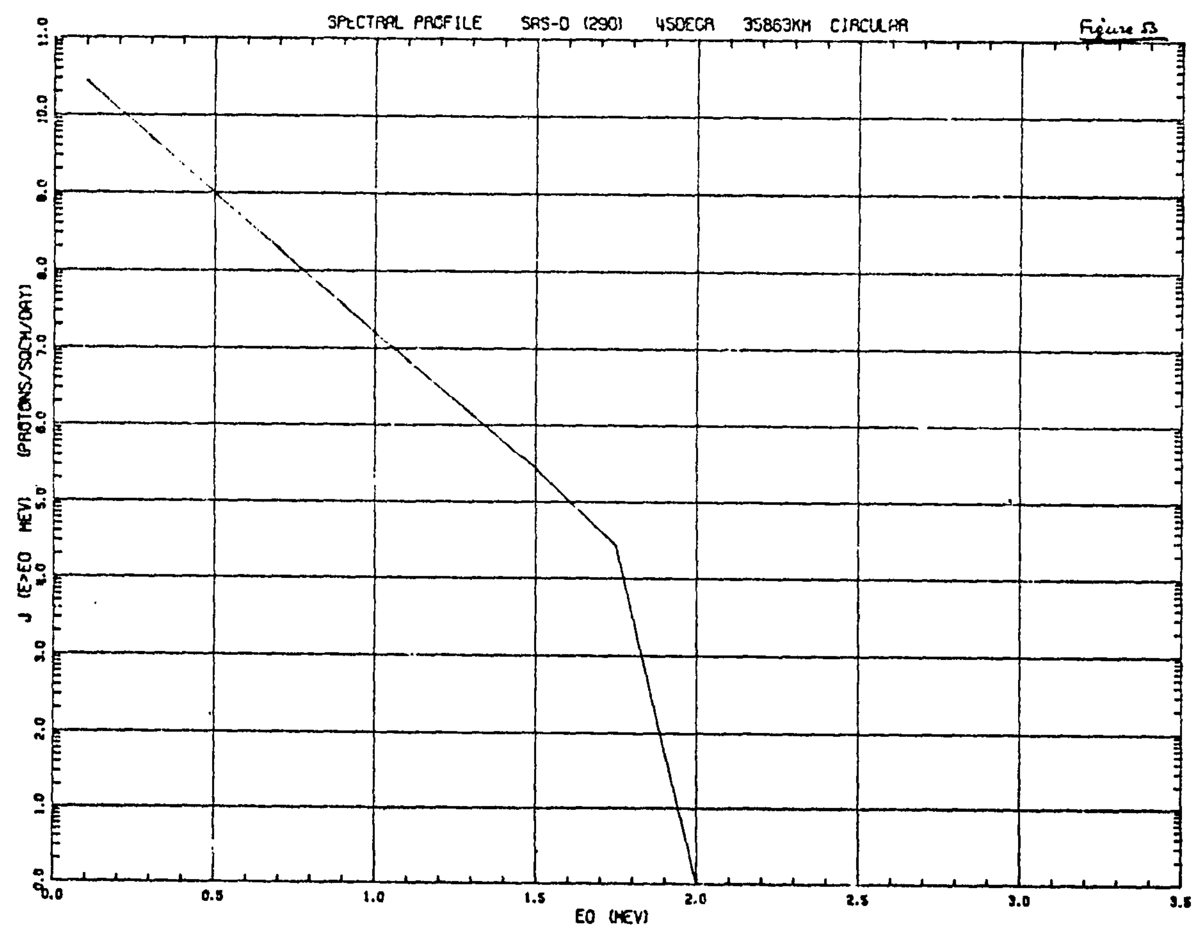
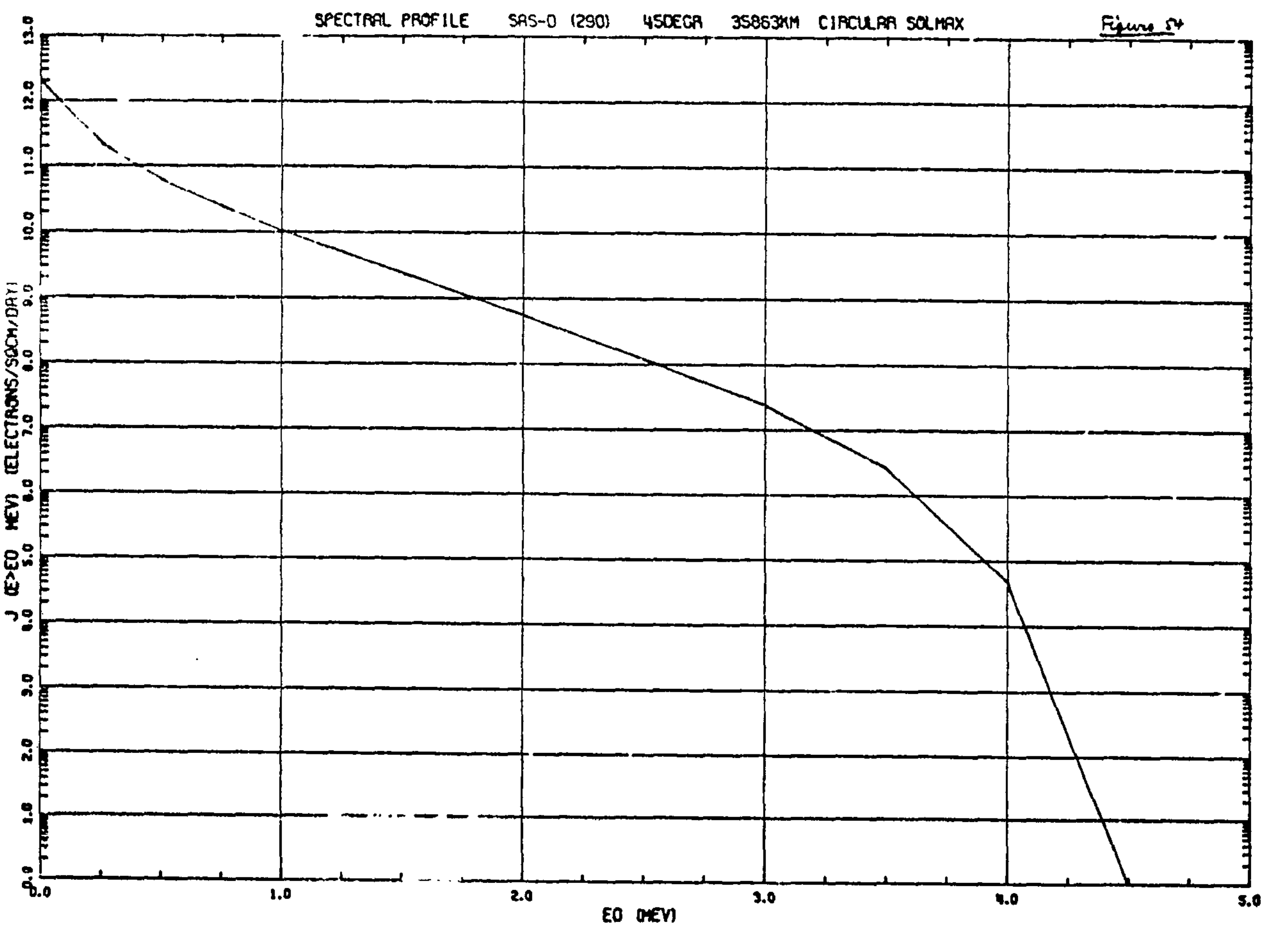
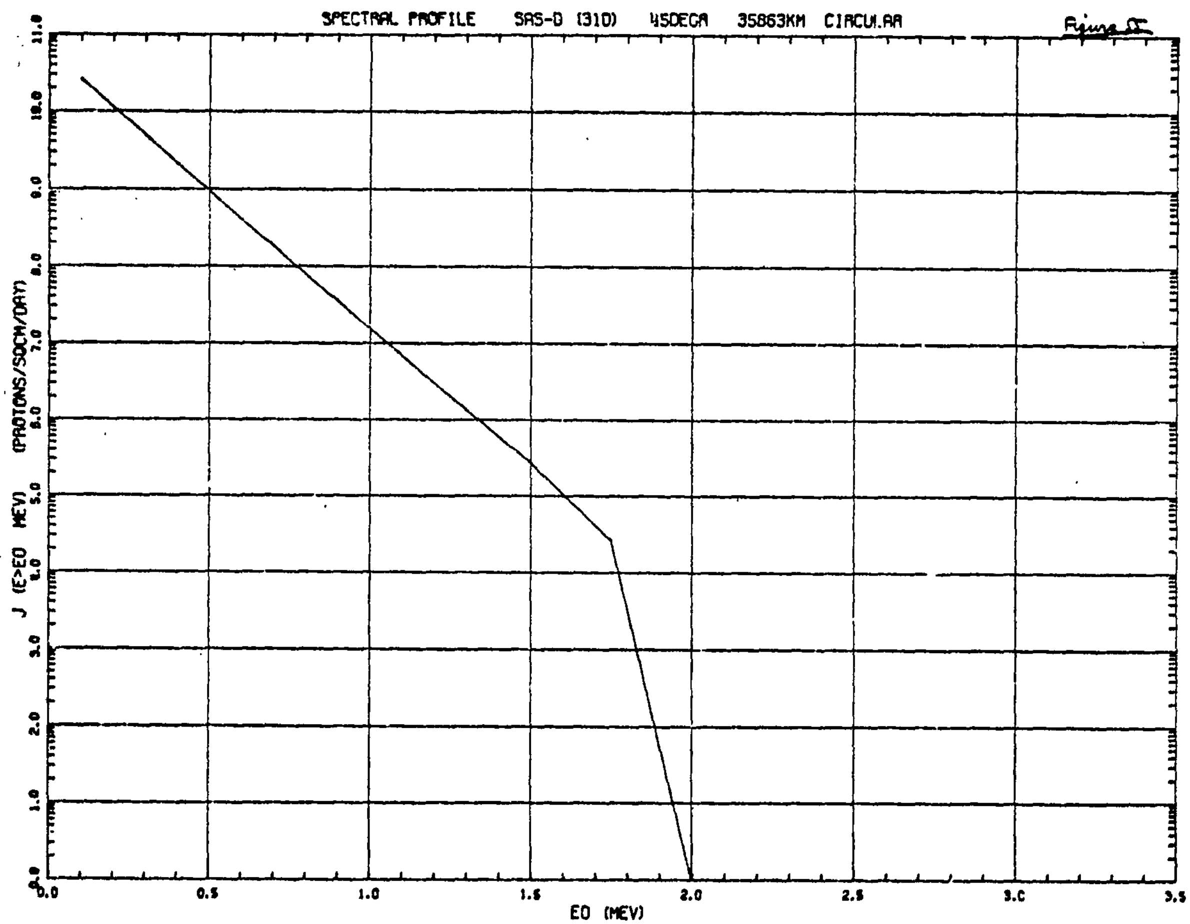

SPECTRAL PROFILE SAS-D (110) 45DEGR 35863KM CIRCULAR
Figure 57
J (E>EO MEV) (PROTONS/SQCM/DAY)
EO (MEV)
0.0
0.5
1.0
1.5
2.0
2.5
3.0
3.5
1.0
2.0
3.0
4.0
5.0
6.0
7.0
8.0
9.0
10.0
11.0

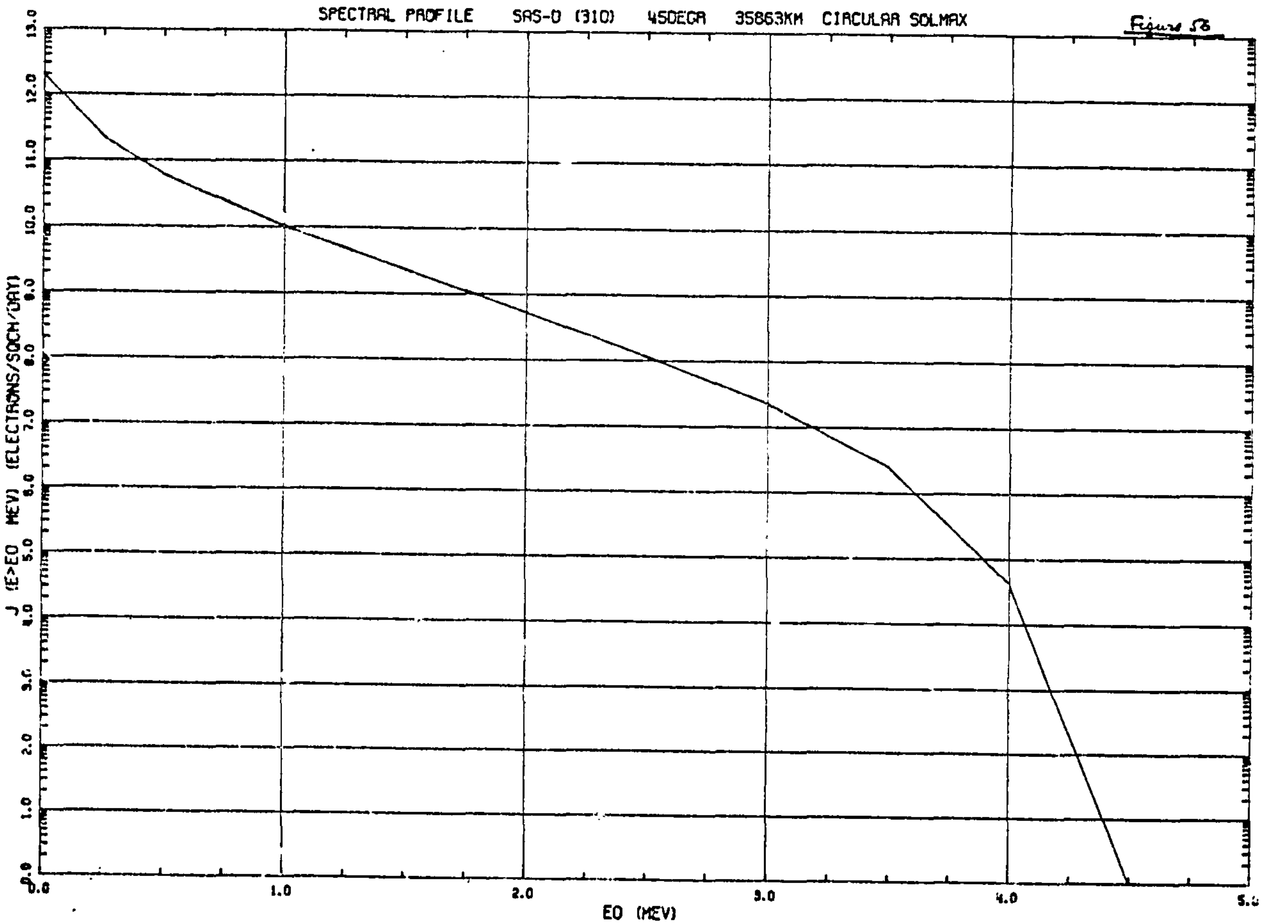
Figure 52


SPECTRAL PROFILE SAS-D (110) 45DEGR 35863KM CIRCULAR SOLMAX
J (E>EO MEV) (ELECTRONS/SQCM/DAY)
EO (MEV)
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

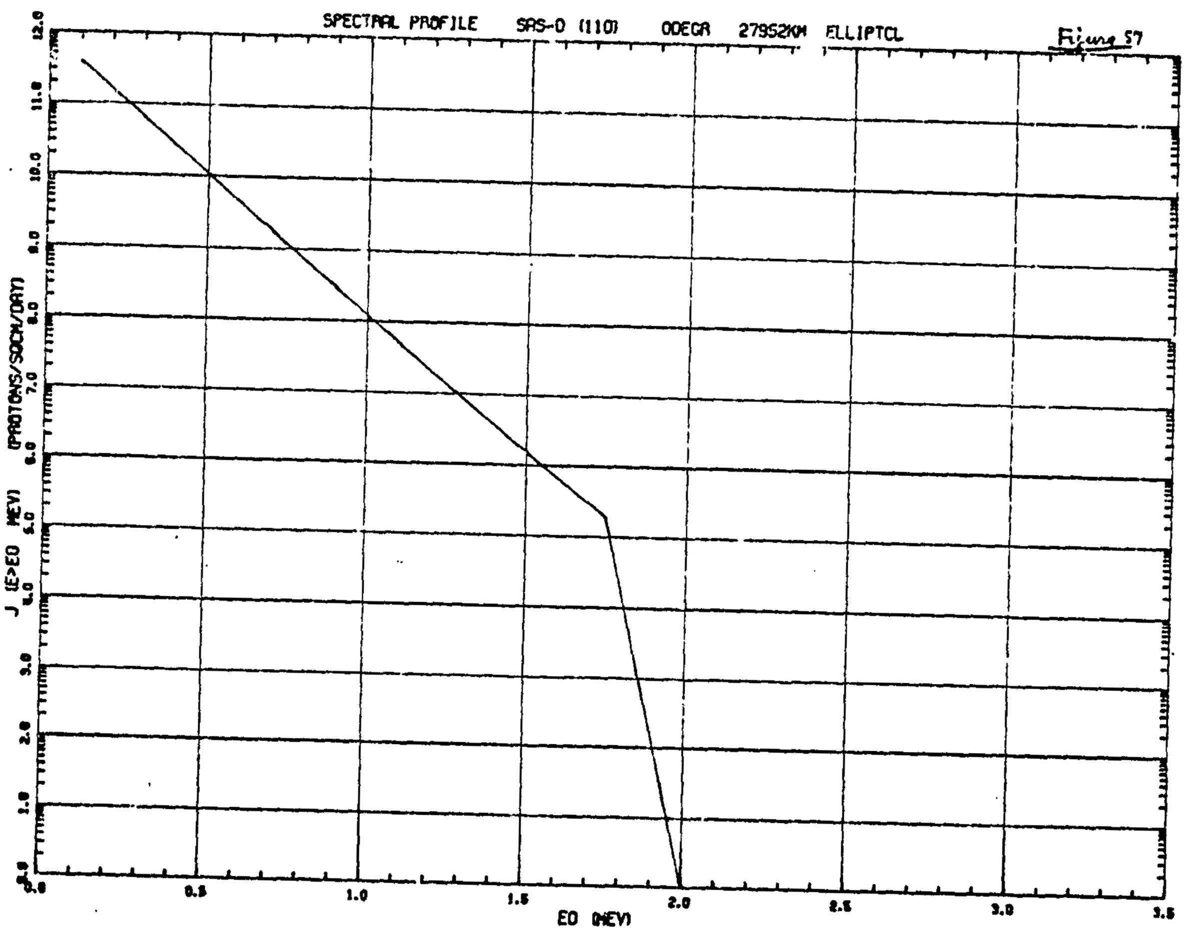

SPECTRAL PROFILE SRS-D (290) 45DEGR 35863KM CIRCULAR
Figure 53
J (E>EO MEV) (PROTONS/SQCM/DAY)
EO (MEV)
0.0
0.5
1.0
1.5
2.0
2.5
3.0
3.5
1.0
2.0
3.0
4.0
5.0
6.0
7.0
8.0
9.0
10.0
11.0


SPECTRAL PROFILE SAS-D (290) 45DEGR 35863KM CIRCULAR SOLMAX
Figure 54
J (E>EO MEV) (ELECTRONS/SQCM/DAY)
EO (MEV)
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


SPECTRAL PROFILE SAS-D (310) 45DEGA 35863KM CIRCULAR
J (E>EO MEV) (PROTONS/SQCM/DAY)
EO (MEV)
0.0
0.5
1.0
1.5
2.0
2.5
3.0
3.5
1.0
2.0
3.0
4.0
5.0
6.0
7.0
8.0
9.0
10.0
11.0



SPECTRAL PROFILE SAS-D (310) 45DEGR 35863KM CIRCULAR SOLMAX
Figure 56
J (E>EO MEV) (ELECTRONS/SQCM/DAY)
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
EO (MEV)



SPECTRAL PROFILE SAS-D (110) 0DEGR 27952KM ELLIPTCL
Figure 57
J (E>EO MEV) (PROTONS/SQCM/DAY)
EO (MEV)
0.0
0.5
1.0
1.5
2.0
2.5
3.0
3.5
1.0
2.0
3.0
4.0
5.0
6.0
7.0
8.0
9.0
10.0
11.0
12.0

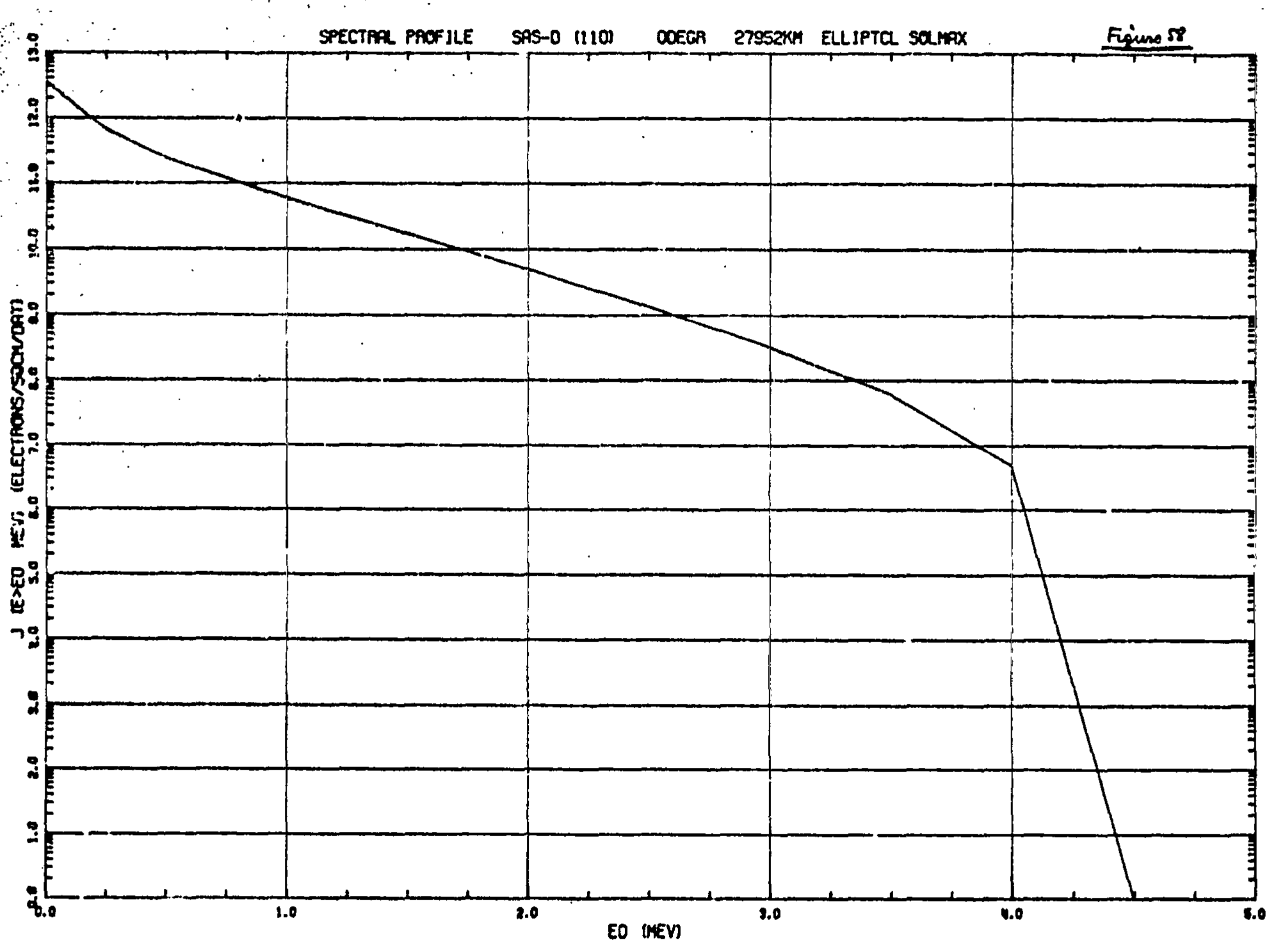
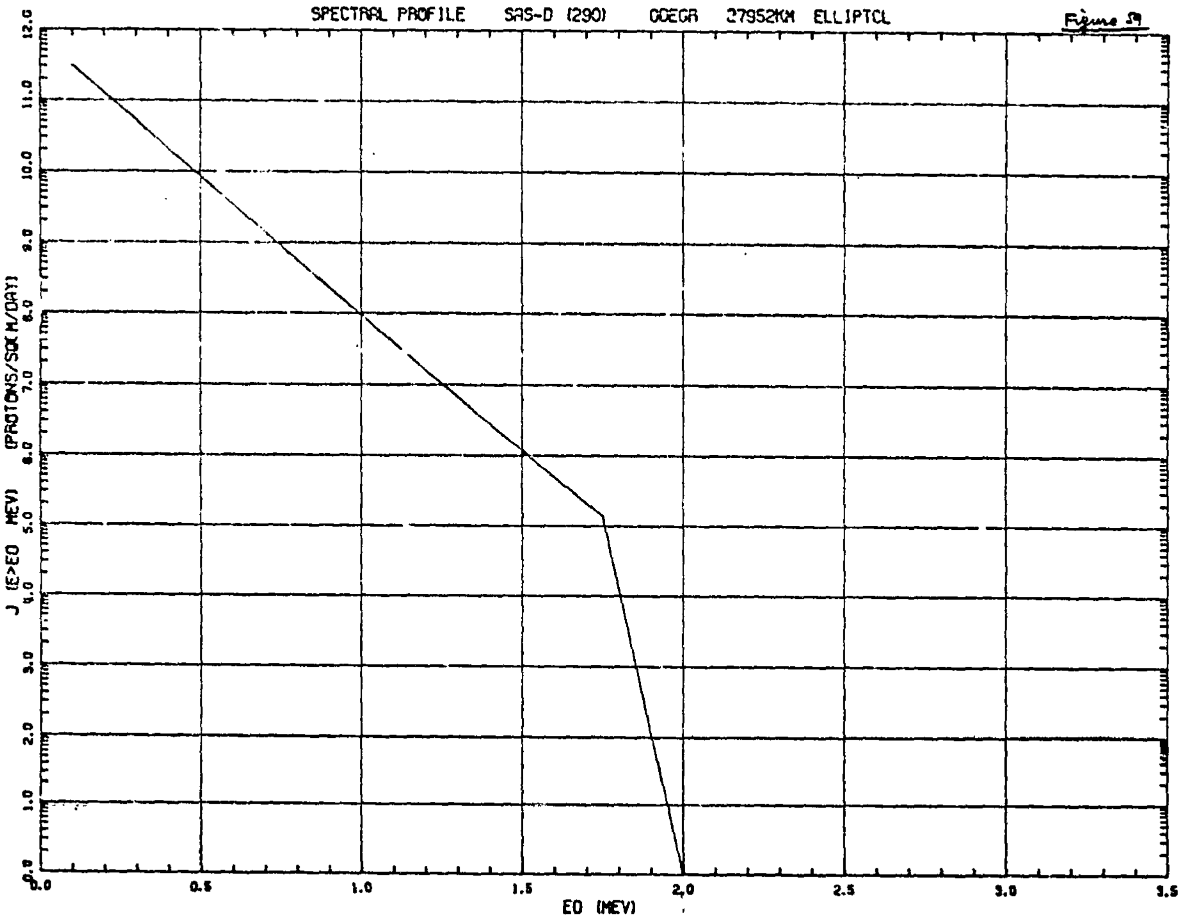
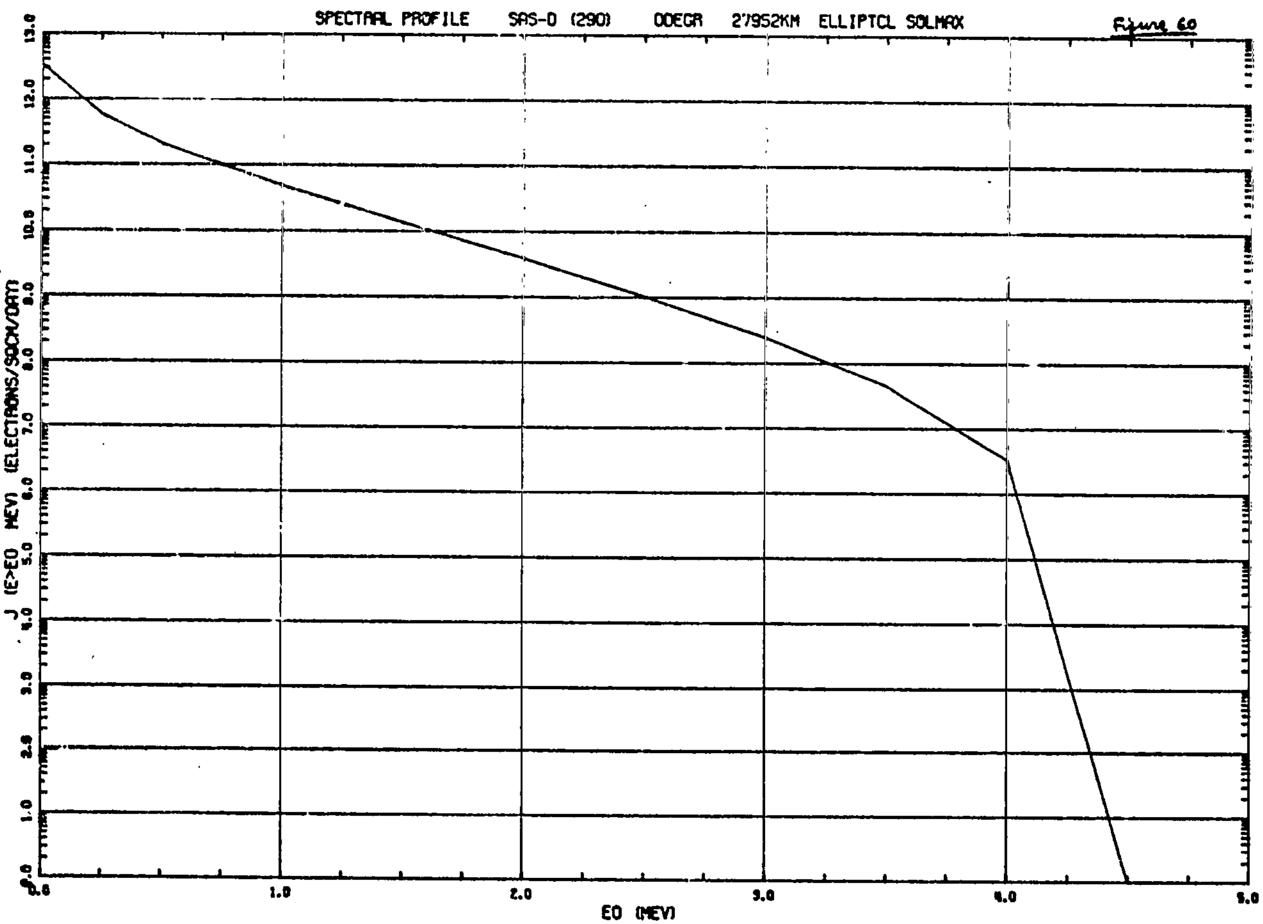
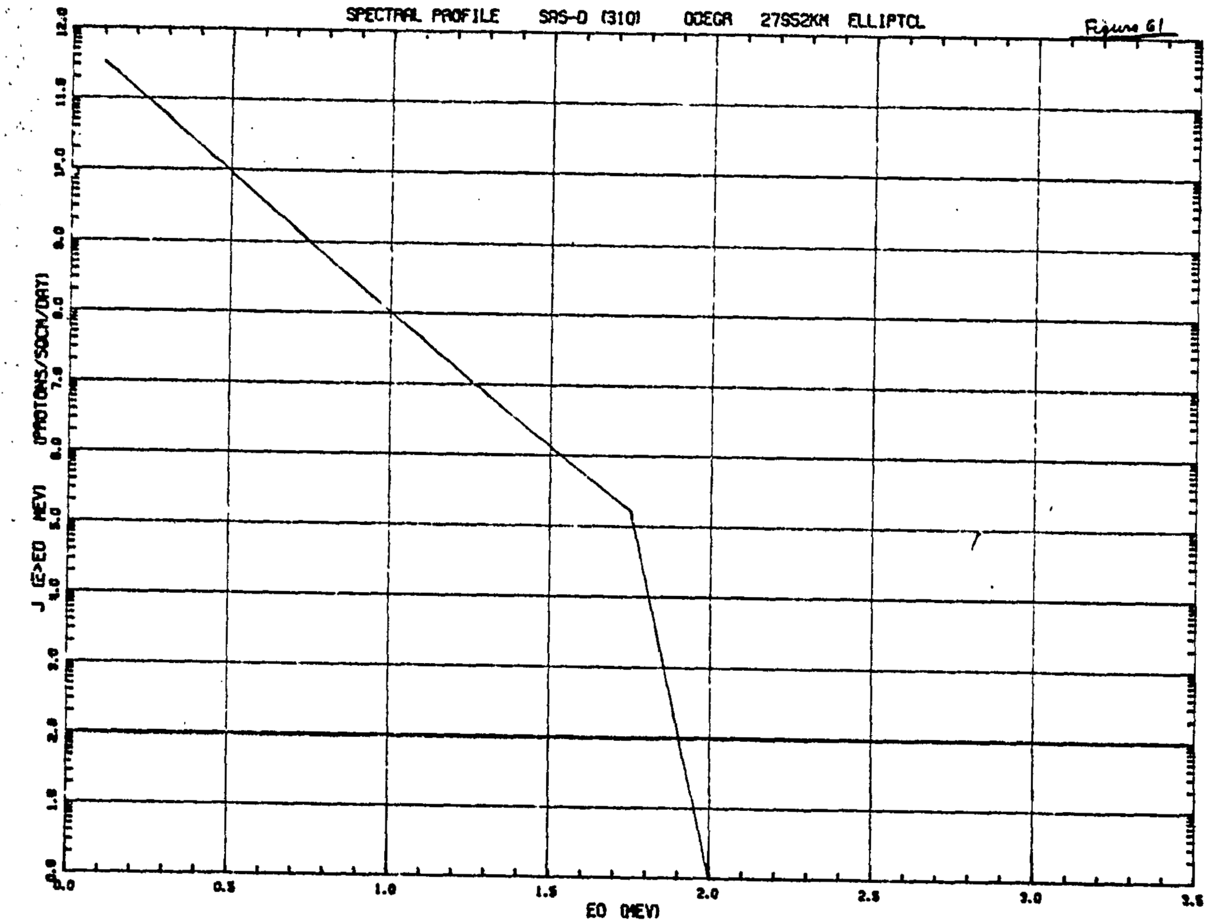

SPECTRAL PROFILE SAS-D (110) ODEGR 27952KM ELLIPTCL SOLMAX
Figure 58
J (E>EO MEV) (ELECTRONS/SQCM/DAY)
EO (MEV)
0.0
1.0
2.0
3.0
4.0
5.0
6.0
7.0
8.0
9.0
10.0
11.0
12.0
13.0

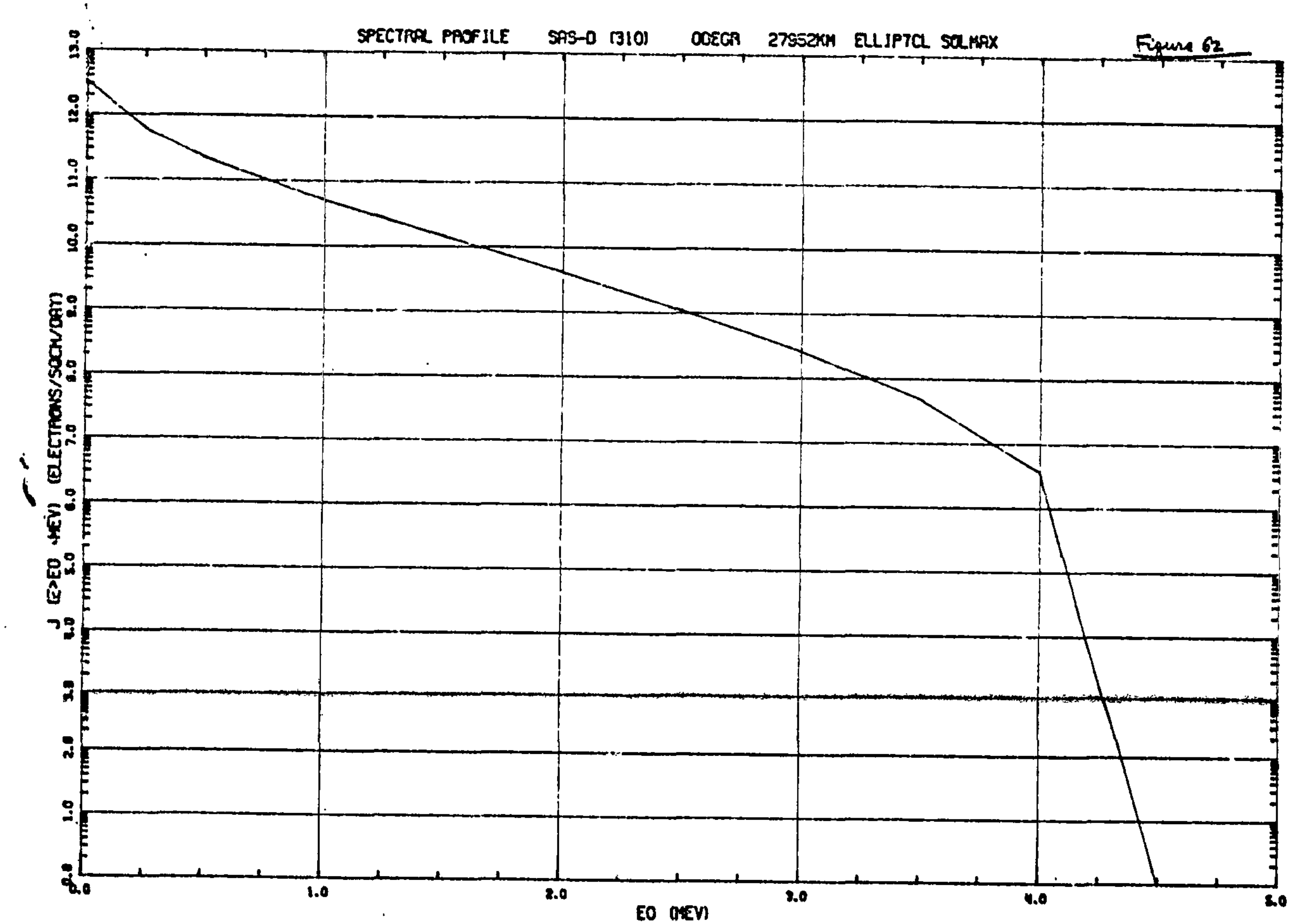
Figure 59

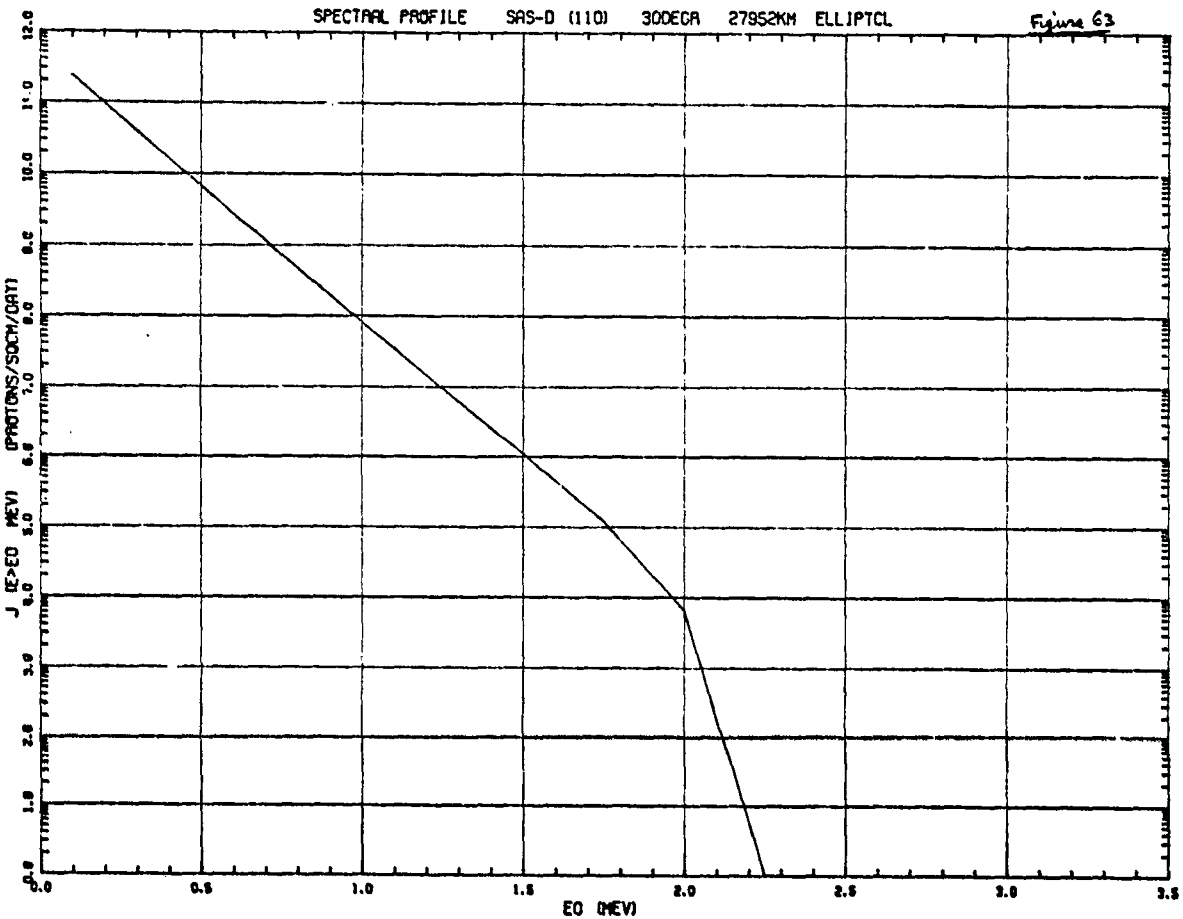

SPECTRAL PROFILE SAS-D (290) 0DEGR 27952KM ELLIPTCL
J (E>EO MEV) (PROTONS/SQ(M/DAY)
EO (MEV)
0.0
1.0
2.0
3.0
4.0
5.0
6.0
7.0
8.0
9.0
10.0
11.0
12.0
0.5
1.5
2.5
3.0
3.5

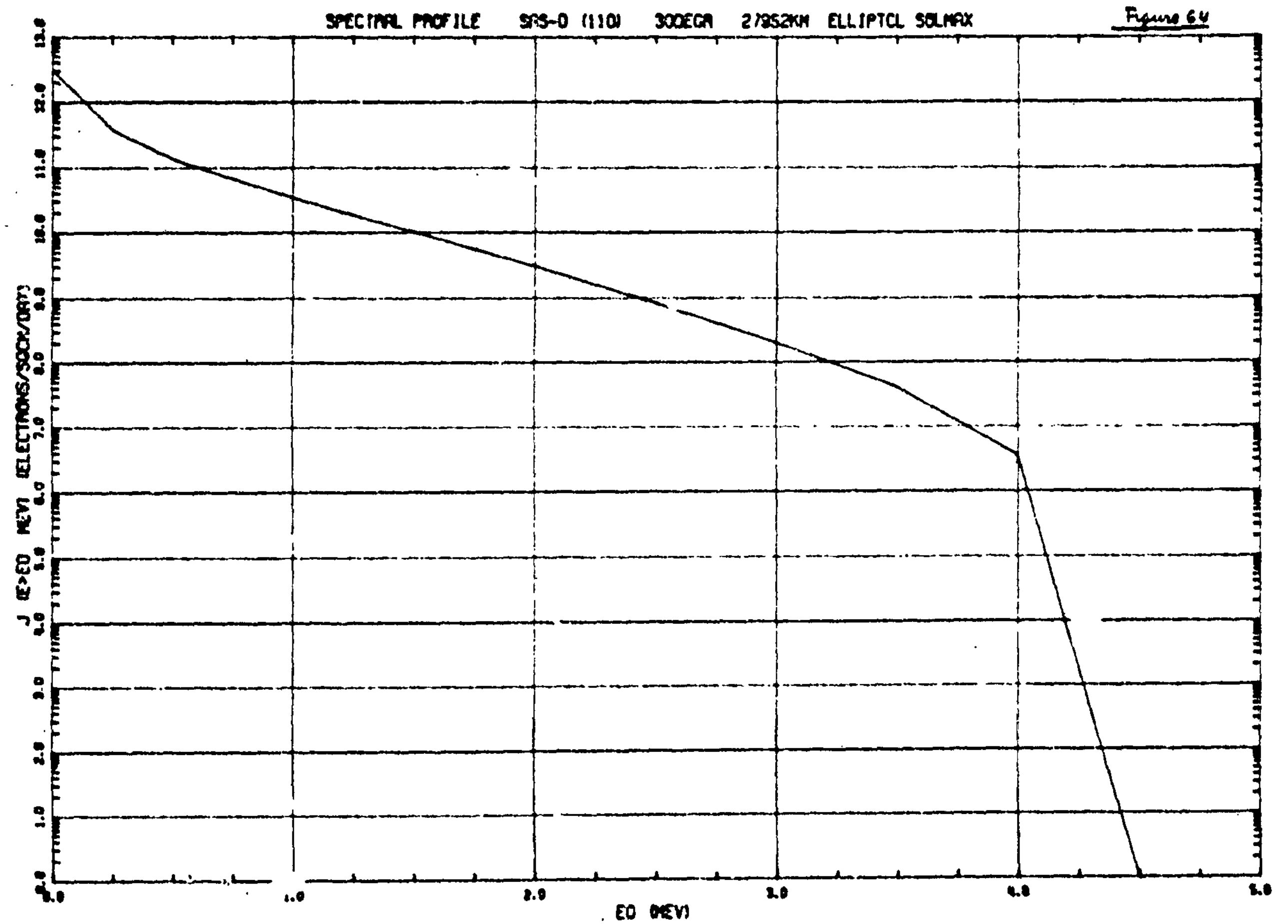


SPECTRAL PROFILE SAS-D (290) 0DEGR 27952KM ELLIPTCL SOLMAX
Figure 60
J (E>EO MEV) (ELECTRONS/SQCM/DAY)
EO (MEV)
0.0
1.0
2.0
3.0
4.0
5.0
6.0
7.0
8.0
9.0
10.0
11.0
12.0
13.0


SPECTRAL PROFILE SAS-D (310) ODEGR 27552KM ELLIPTCL
Figure 61
J (E>EO MEV) (PROTONS/SQCM/DAY)
EO (MEV)
0.0
0.5
1.0
1.5
2.0
2.5
3.0
3.5
1.0
2.0
3.0
4.0
5.0
6.0
7.0
8.0
9.0
10.0
11.0
12.0


SPECTRAL PROFILE SAS-D (310) 0DEGR 27952KM ELLIPTCL SOLMAX
Figure 62
J (E>EO MEV) (ELECTRONS/SQCM/DAY)
EO (MEV)
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


SPECTRAL PROFILE SAS-D (110) 30DEGR 27952KM ELLIPTCL
Figure 63
J (E>EO MEV) (PROTONS/SQCM/DAY)
EO (MEV)
0.0
0.5
1.0
1.5
2.0
2.5
3.0
3.5
1.0
2.0
3.0
4.0
5.0
6.0
7.0
8.0
9.0
10.0
11.0
12.0


SPECTRAL PROFILE SAS-D (110) 30DEGR 27952KM ELLIPTCL SOLMAX
Figure 64
J (E>E0 MEV) (ELECTRONS/SQCM/DAY)
E0 (MEV)
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

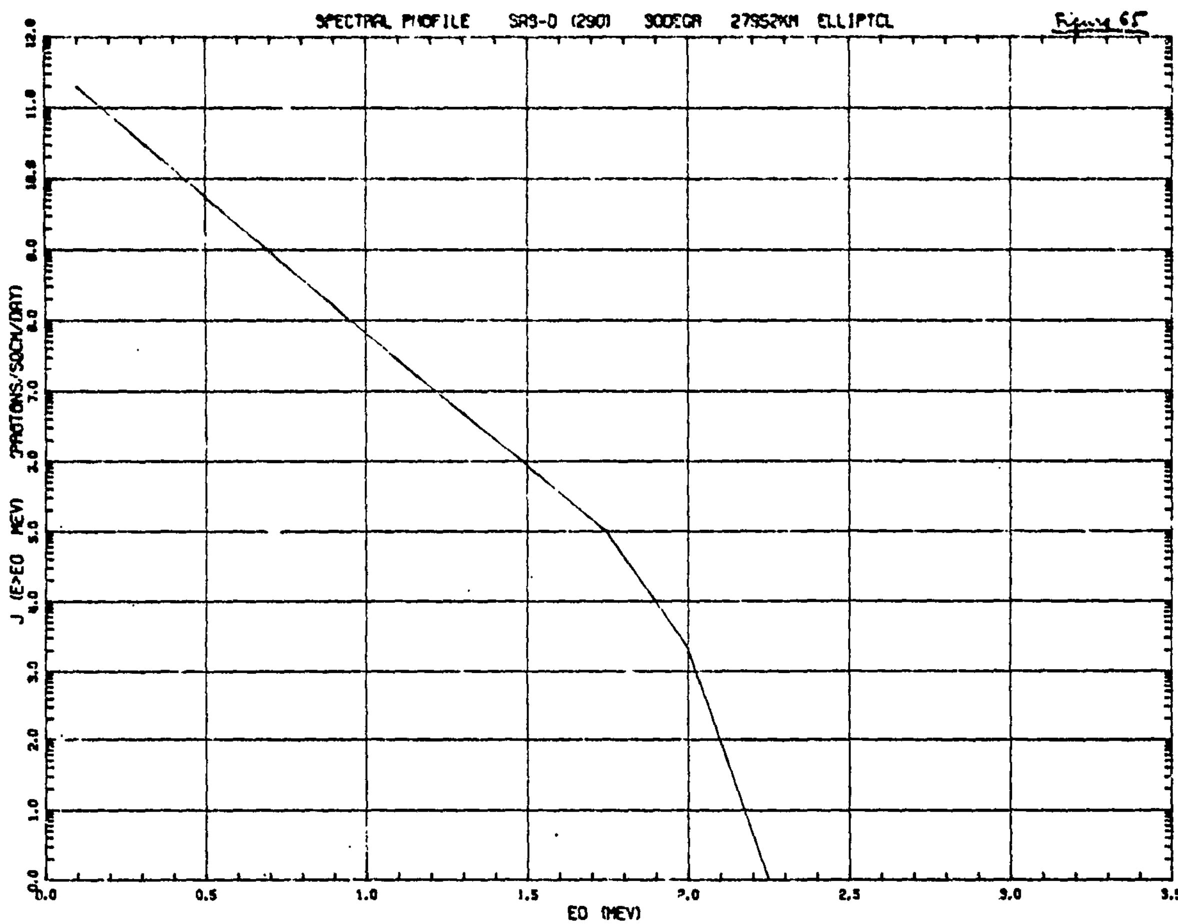
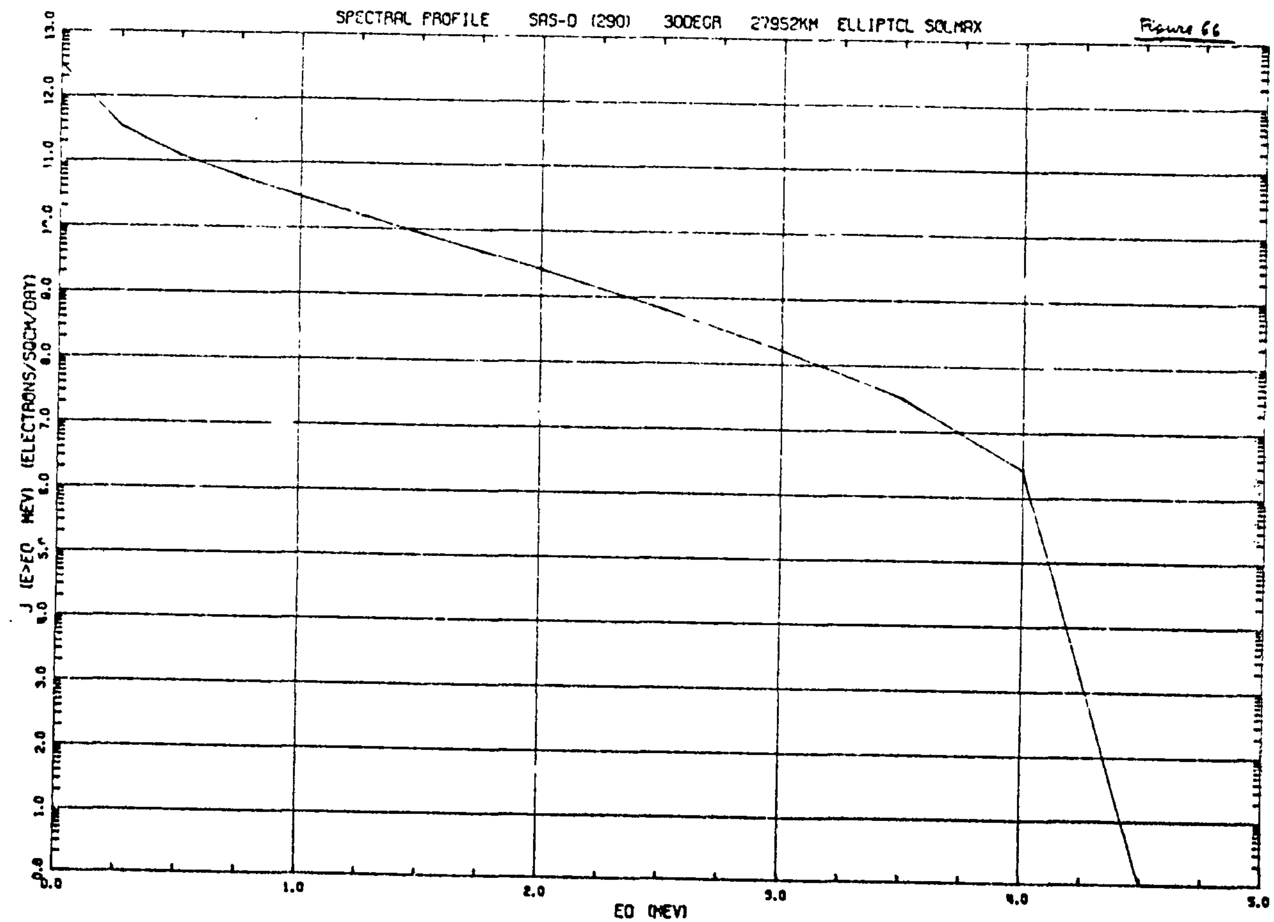
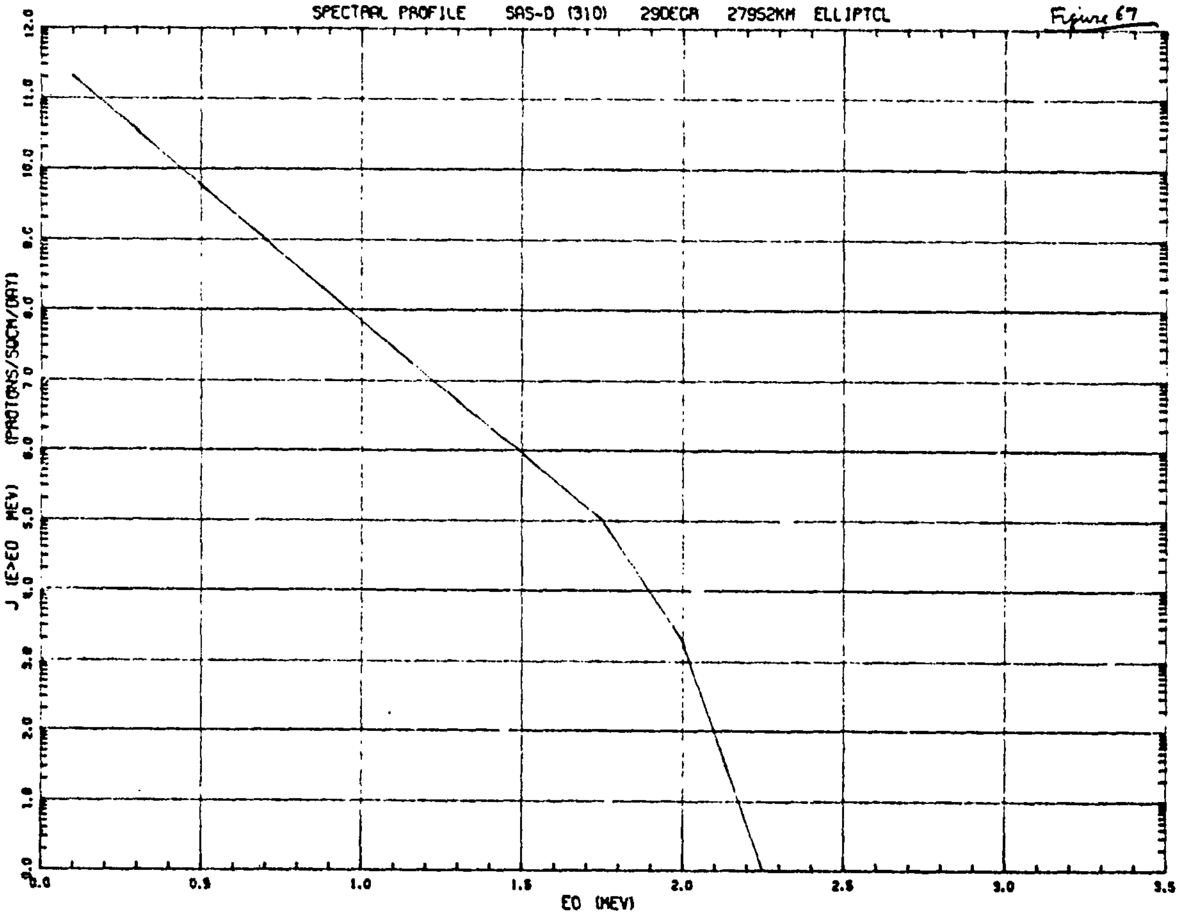

SPECTRAL PROFILE SR3-D (290) 900EGR 27952KM ELLIPTCL
Figure 65
J (E>EO MEV) PROTONS/SQCM/DAY
EO (MEV)
0.0
0.5
1.0
1.5
2.0
2.5
3.0
3.5
1.0
2.0
3.0
4.0
5.0
6.0
7.0
8.0
9.0
10.0
11.0
12.0

Figure 66

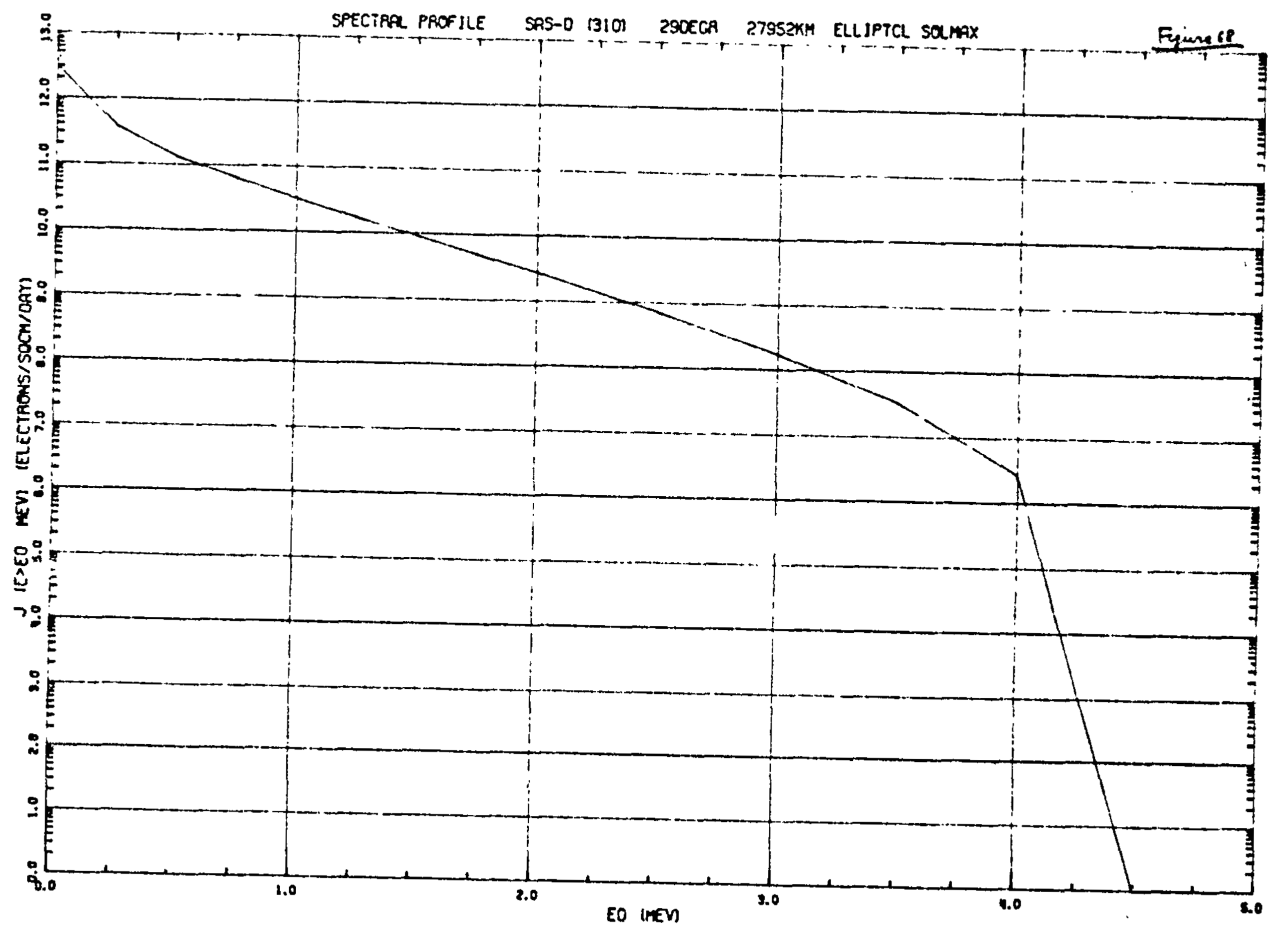


SPECTRAL PROFILE SAS-D (290) 30DEGR 27952KM ELLIPTCL SOLMAX
J (E>EO MEV) (ELECTRONS/SQCM/DAY)
EO (MEV)
0.0
1.0
2.0
3.0
4.0
5.0
6.0
7.0
8.0
9.0
11.0
12.0
13.0

Figure 67

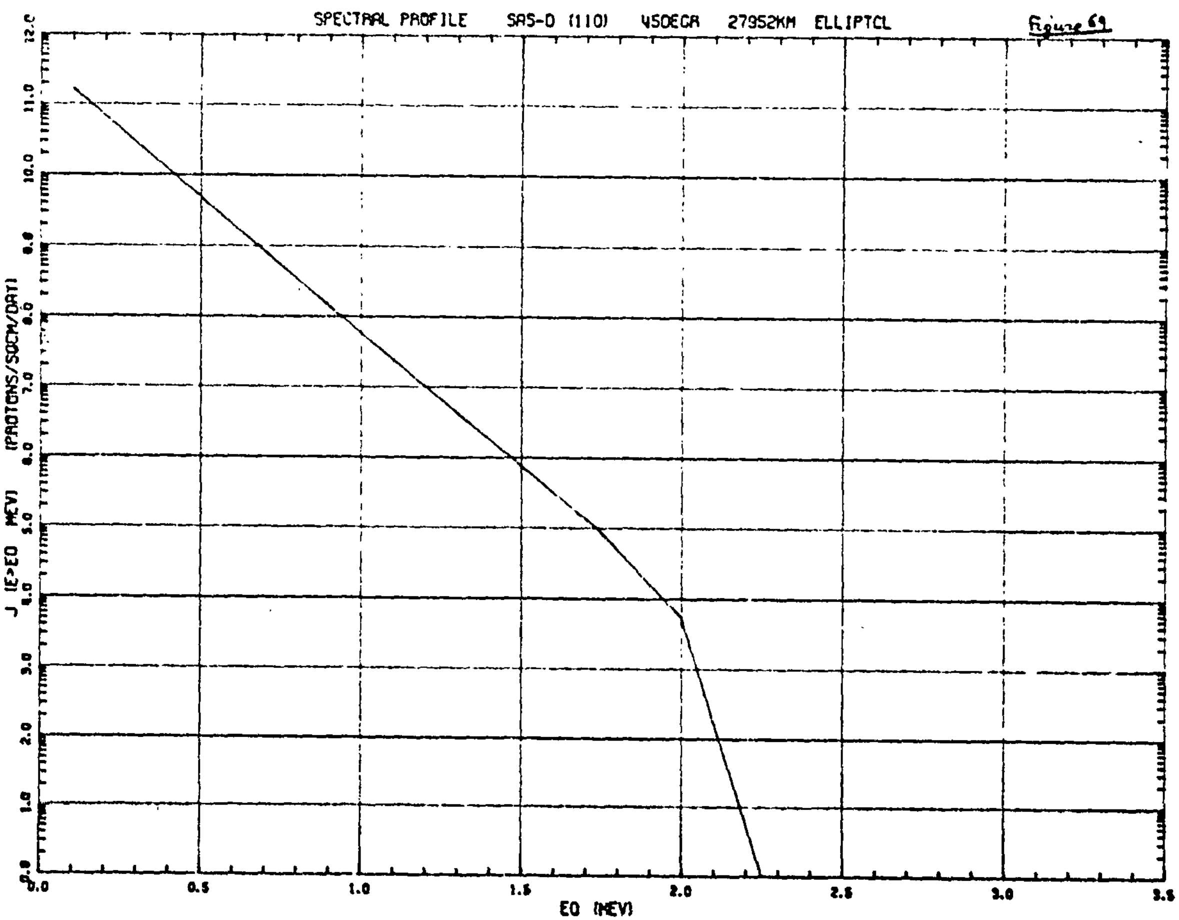


SPECTRAL PROFILE SAS-D (310) 29DEGR 27952KM ELLIPTCL
J (E>EO MEV) (PROTONS/SQCM/DAY)
EO (MEV)
0.0
1.0
2.0
3.0
4.0
5.0
6.0
7.0
8.0
9.0
10.0
11.0
12.0
0.5
1.5
2.5
3.5



SPECTRAL PROFILE SAS-D (310) 29DEGA 27952KM ELLIPTCL SOLMAX
J (E>EO MEV) (ELECTRONS/SQCM/DAY)
EO (MEV)
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

Figure 68


SPECTRAL PROFILE SAS-D (110) 45DEGR 27952KM ELLIPTCL
Figure 69
J (E>EO MEV) (PROTONS/SQCM/DAY)
EO (MEV)
0.0
0.5
1.0
1.5
2.0
2.5
3.0
3.5
1.0
2.0
3.0
4.0
5.0
6.0
7.0
8.0
9.0
10.0
11.0
12.0

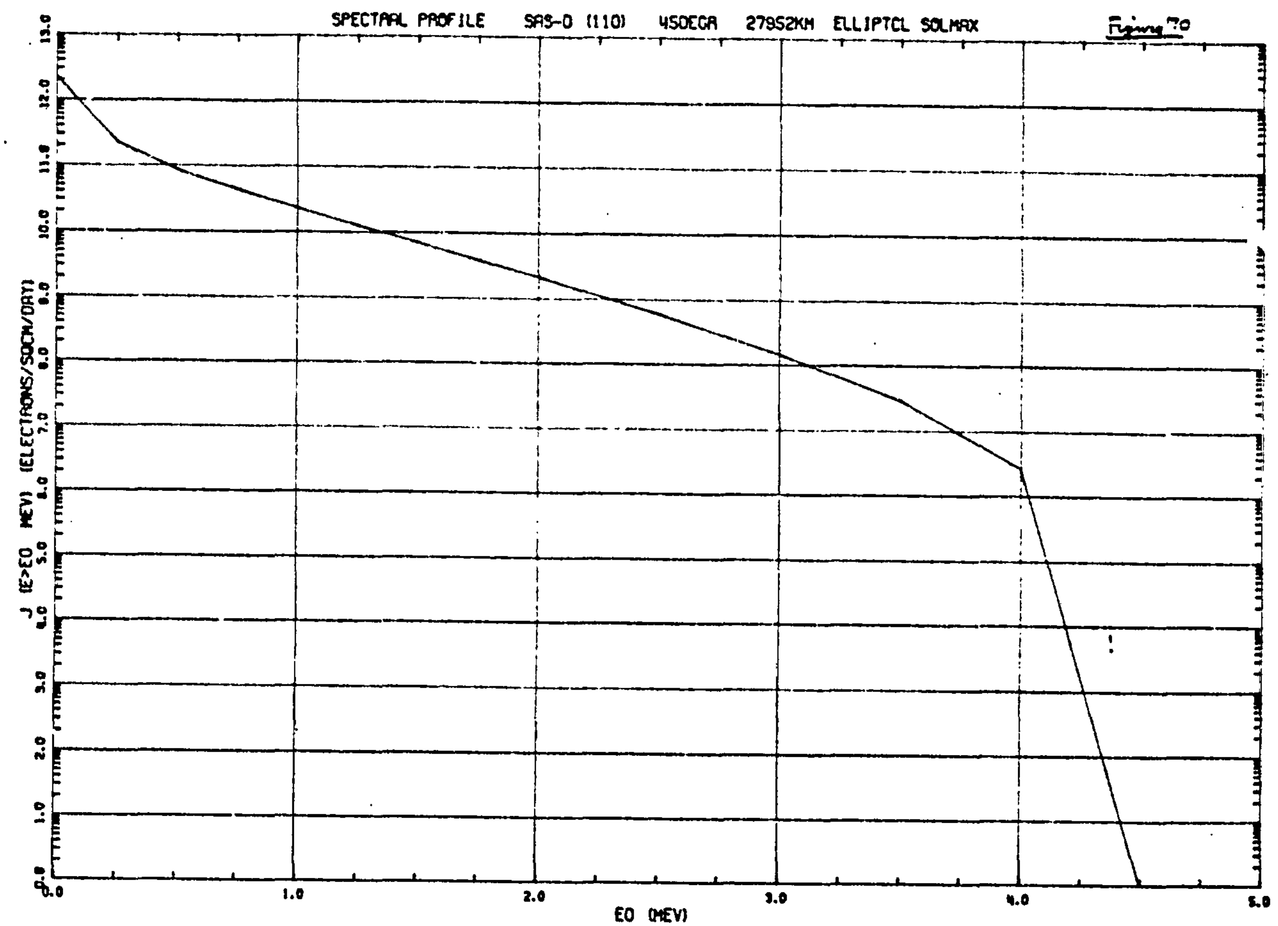

SPECTRAL PROFILE SAS-D (110) 45DEGR 27952KM ELLIPTCL SOLMAX
Figure 70
J (E>EO MEV) (ELECTRONS/SQCM/DAY)
EO (MEV)
0.0
1.0
2.0
3.0
4.0
5.0
6.0
7.0
8.0
9.0
10.0
11.0
12.0
13.0

Figure 71

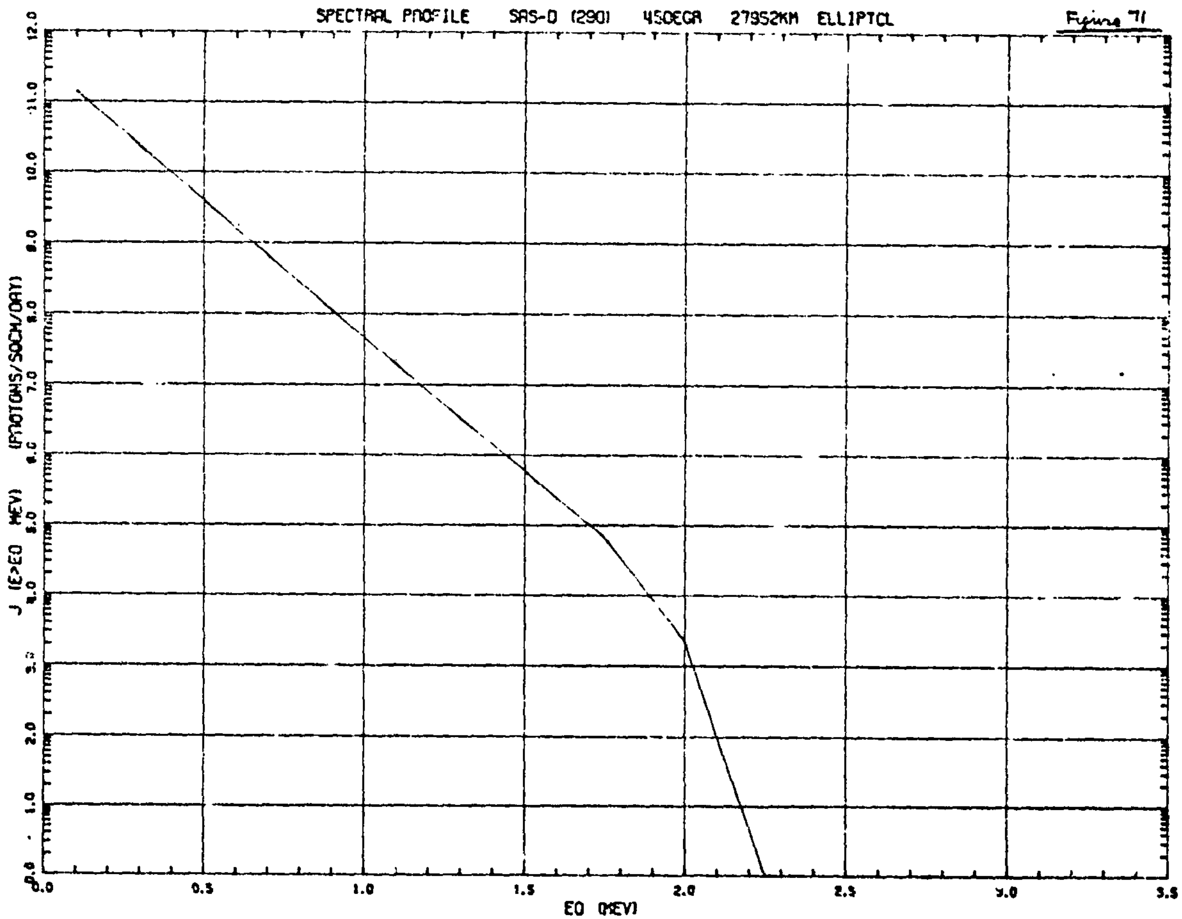
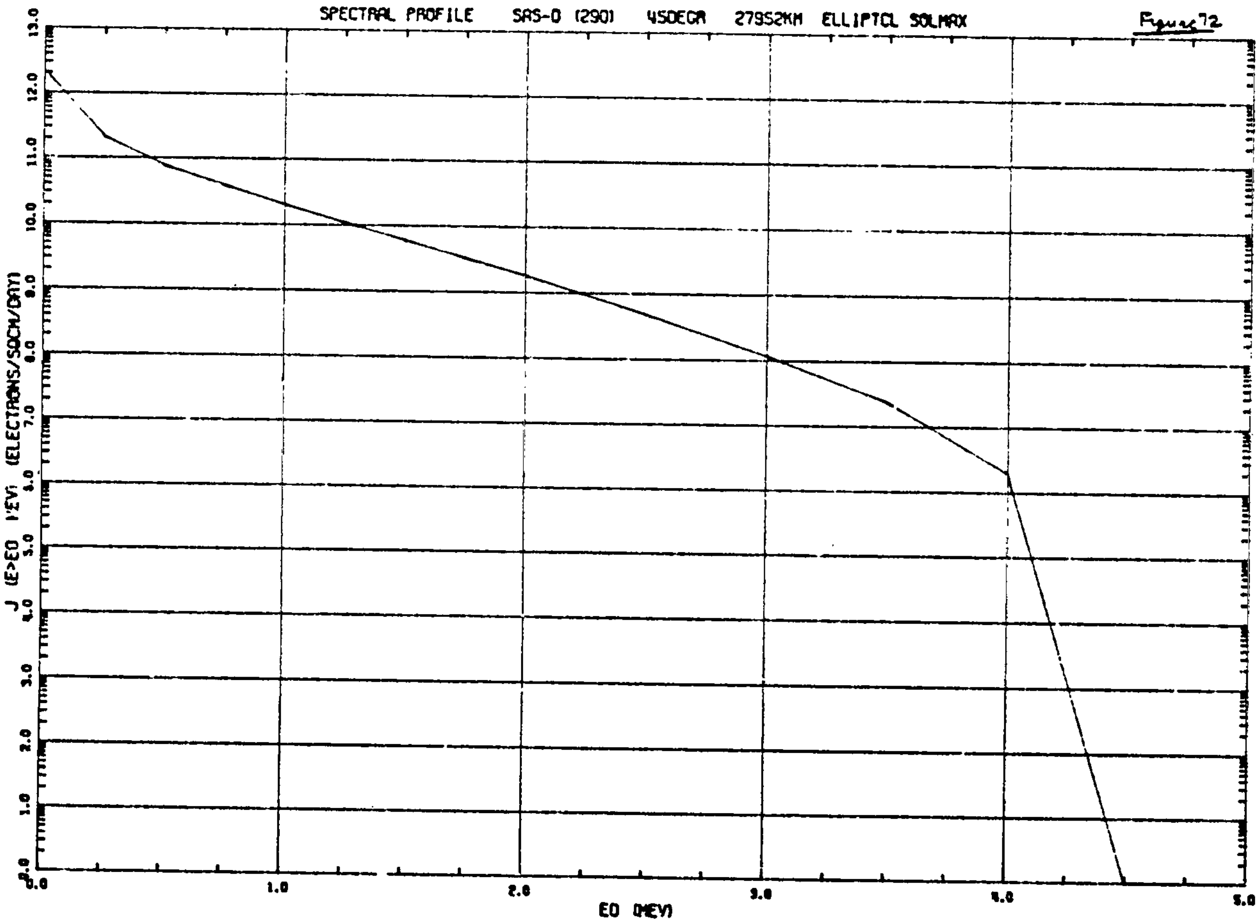
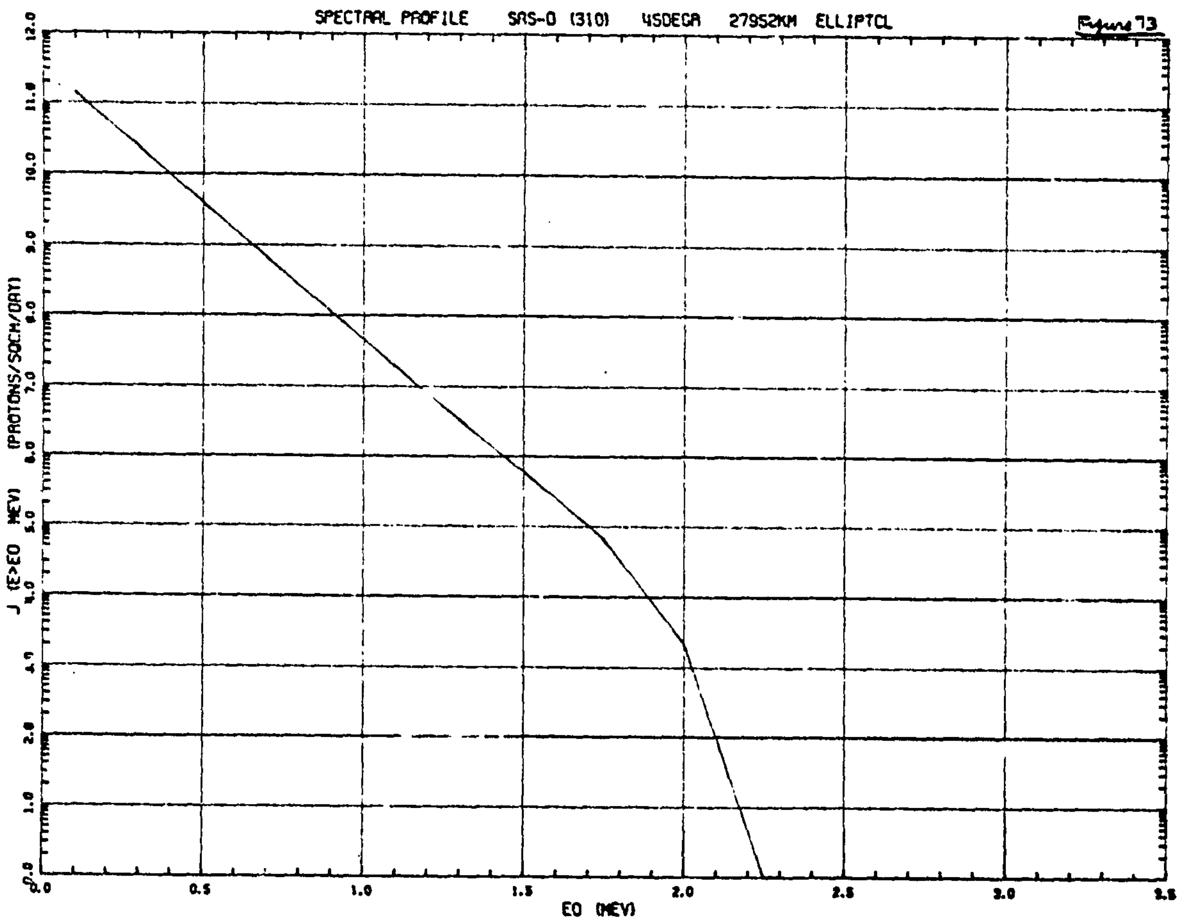
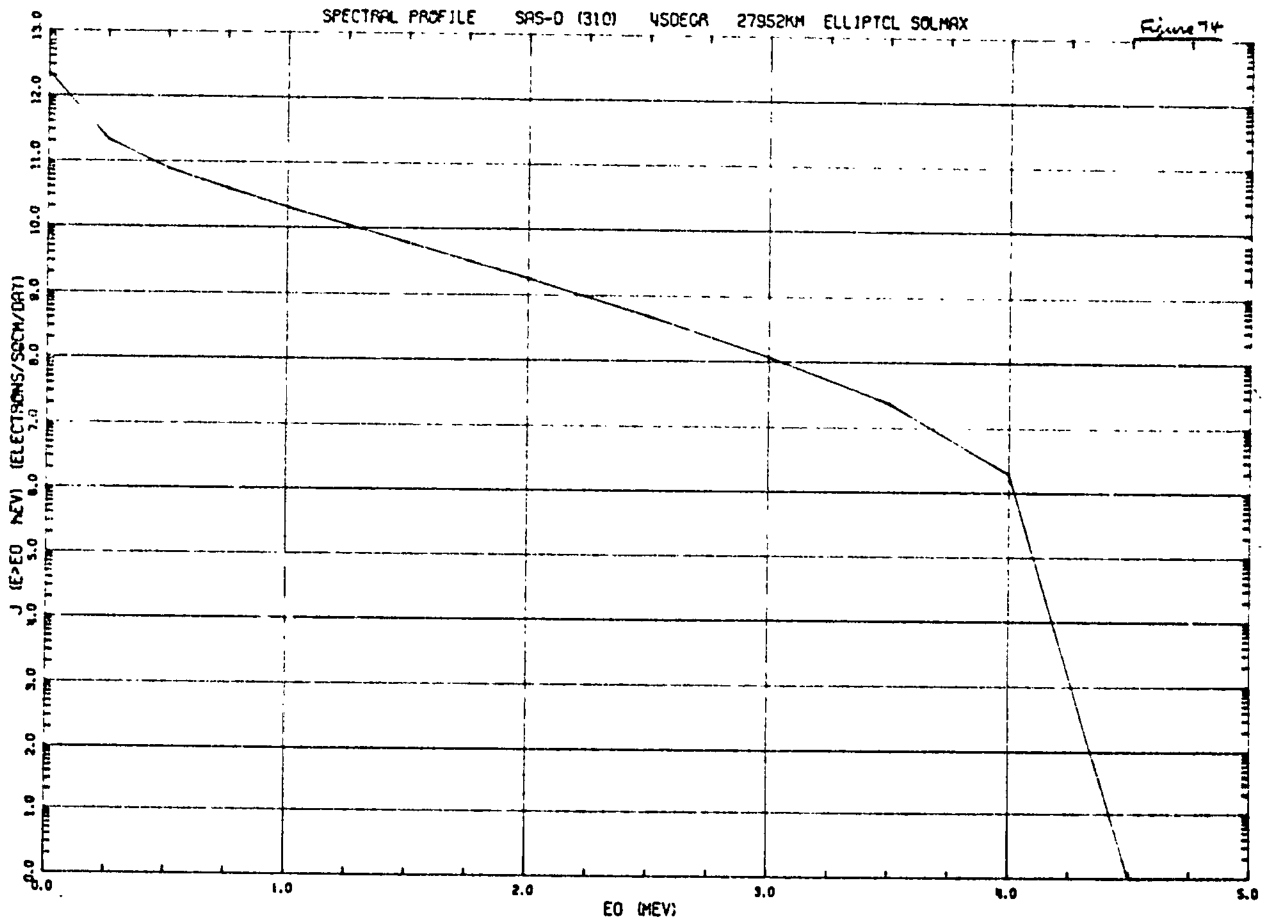

SPECTRAL PROFILE SAS-D (290) 45DEGR 27952KM ELLIPTCL
J (E>EO MEV) (PROTONS/SQCM/DAY)
EO (MEV)
0.0
0.5
1.0
1.5
2.0
2.5
3.0
3.5
1.0
2.0
3.0
4.0
5.0
6.0
7.0
8.0
9.0
10.0
11.0
12.0

Figure 72

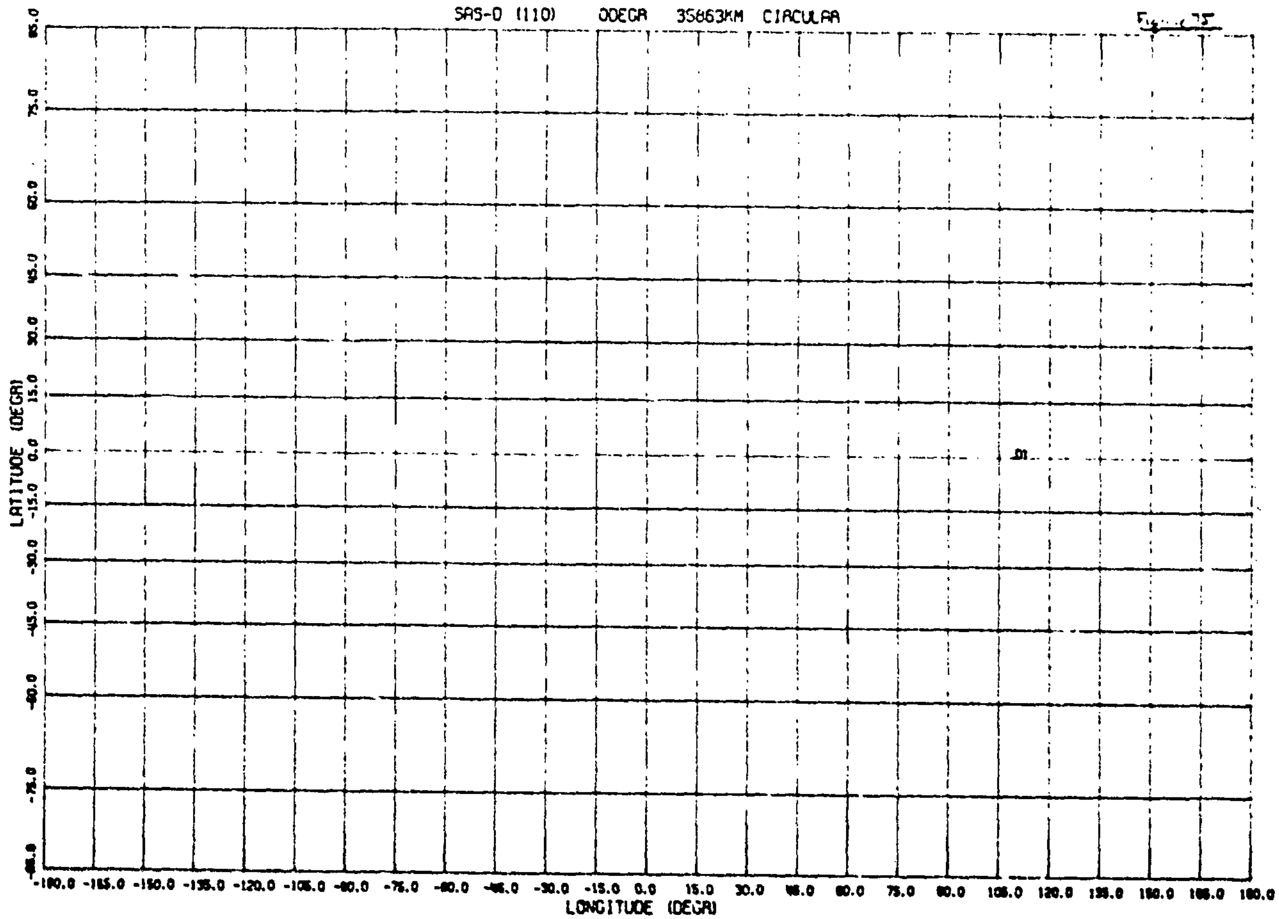


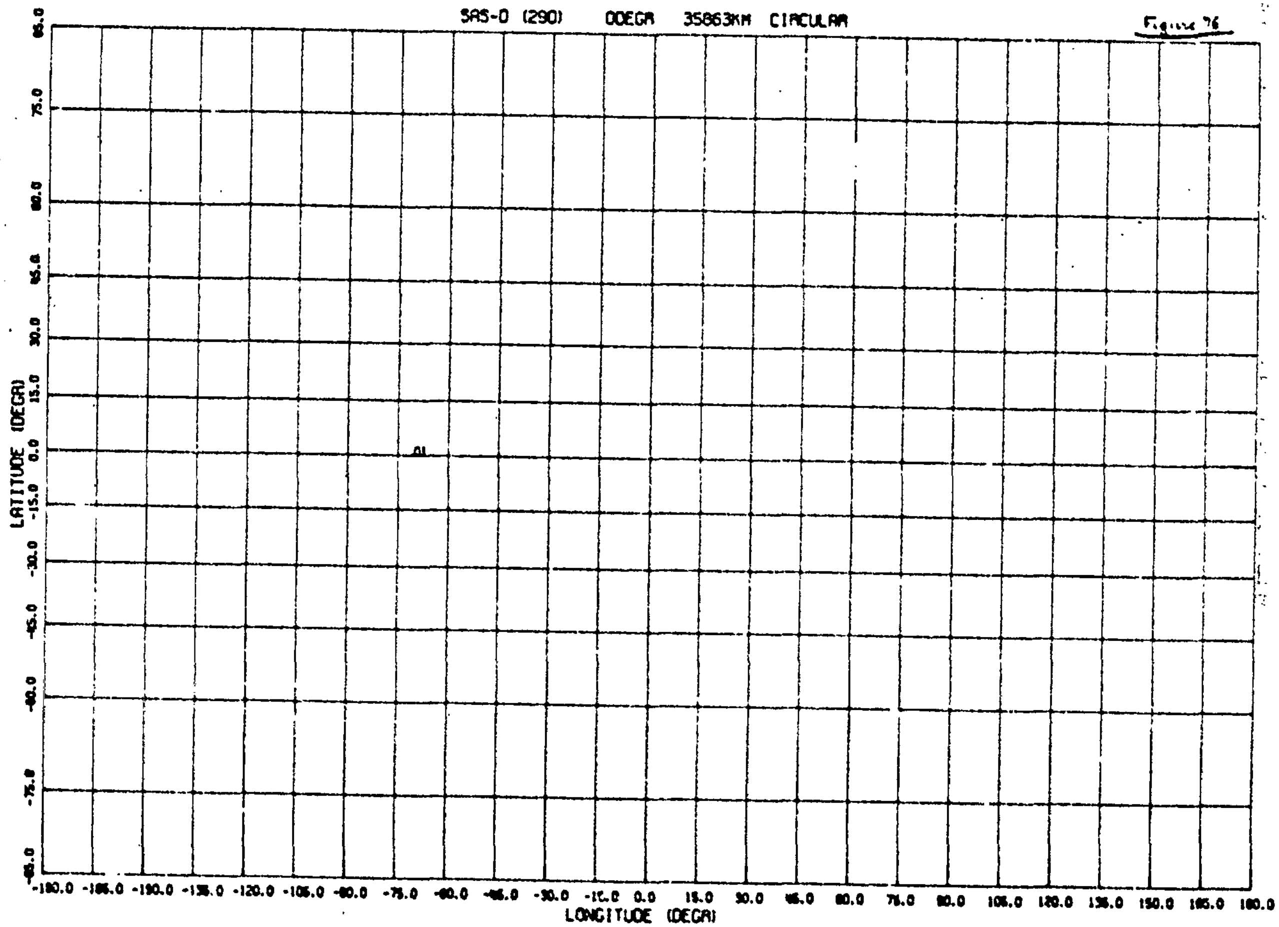
SPECTRAL PROFILE SAS-D (290) 45DEGR 27952KM ELLIPTCL SOLMAX
J (E>EO MEV) (ELECTRONS/SQCM/DAY)
0.0
1.0
2.0
3.0
4.0
5.0
6.0
7.0
8.0
9.0
10.0
11.0
12.0
13.0
EO (MEV)


SPECTRAL PROFILE SAS-D (310) 45DEGA 27952KM ELLIPTCL
Figure 73
J (E>EO MEV) (PROTONS/SQCM/DAY)
EO (MEV)
0.0
0.5
1.0
1.5
2.0
2.5
3.0
3.5
1.0
2.0
4.0
5.0
6.0
7.0
8.0
9.0
10.0
11.0
12.0



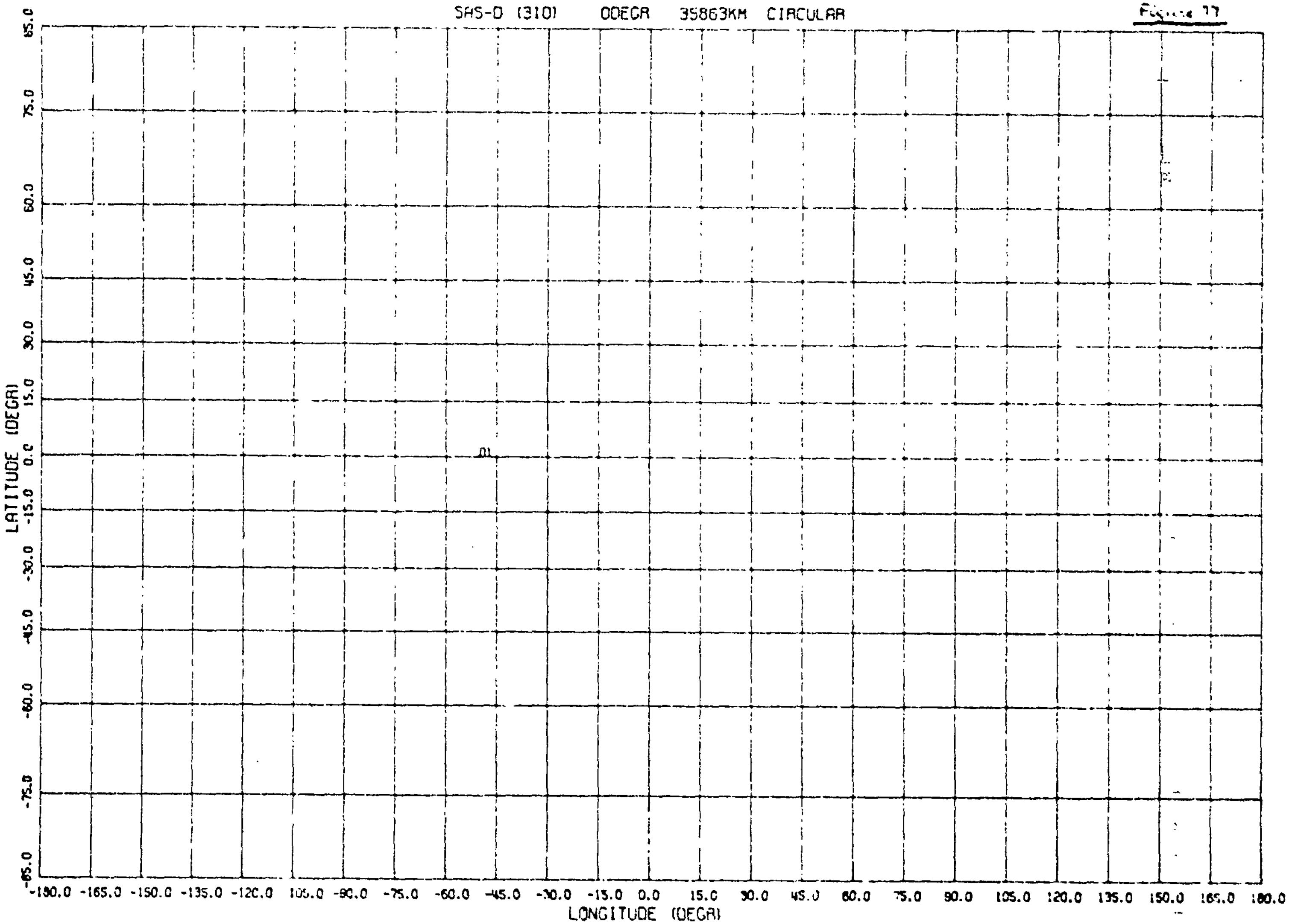
SPECTRAL PROFILE SAS-D (310) 45DEGR 27952KM ELLIPTCL SOLMAX
Figure 74
J (E>EO MEV) (ELECTRONS/SQCM/DAY)
EO (MEV)
0.0
1.0
2.0
3.0
4.0
5.0
6.0
7.0
8.0
9.0
10.0
11.0
12.0
13.0

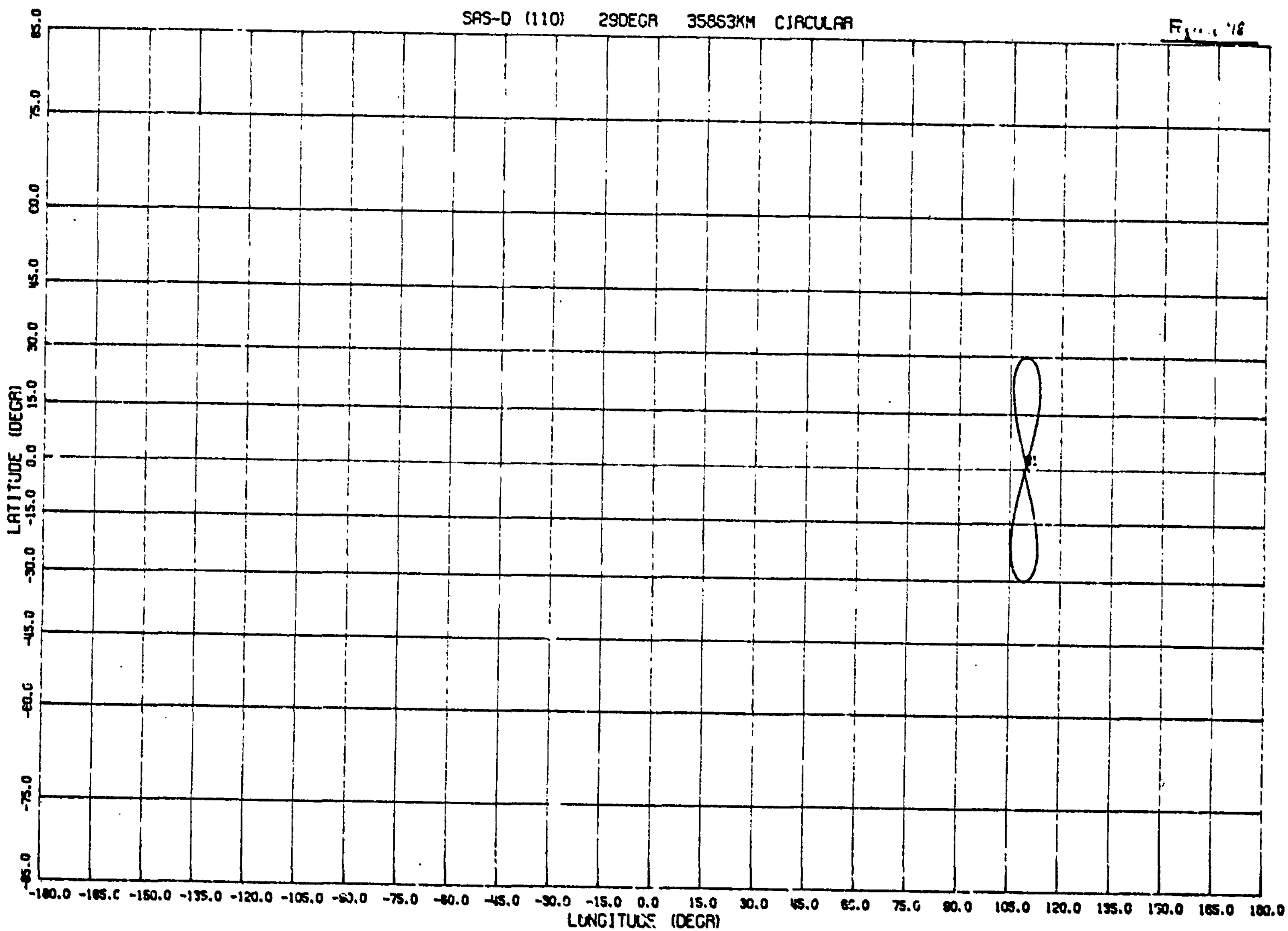

SAS-D (110) 0DEGR 35863KM CIRCULAR
Fig. 75
LATITUDE (DEGR)
LONGITUDE (DEGR)
D1

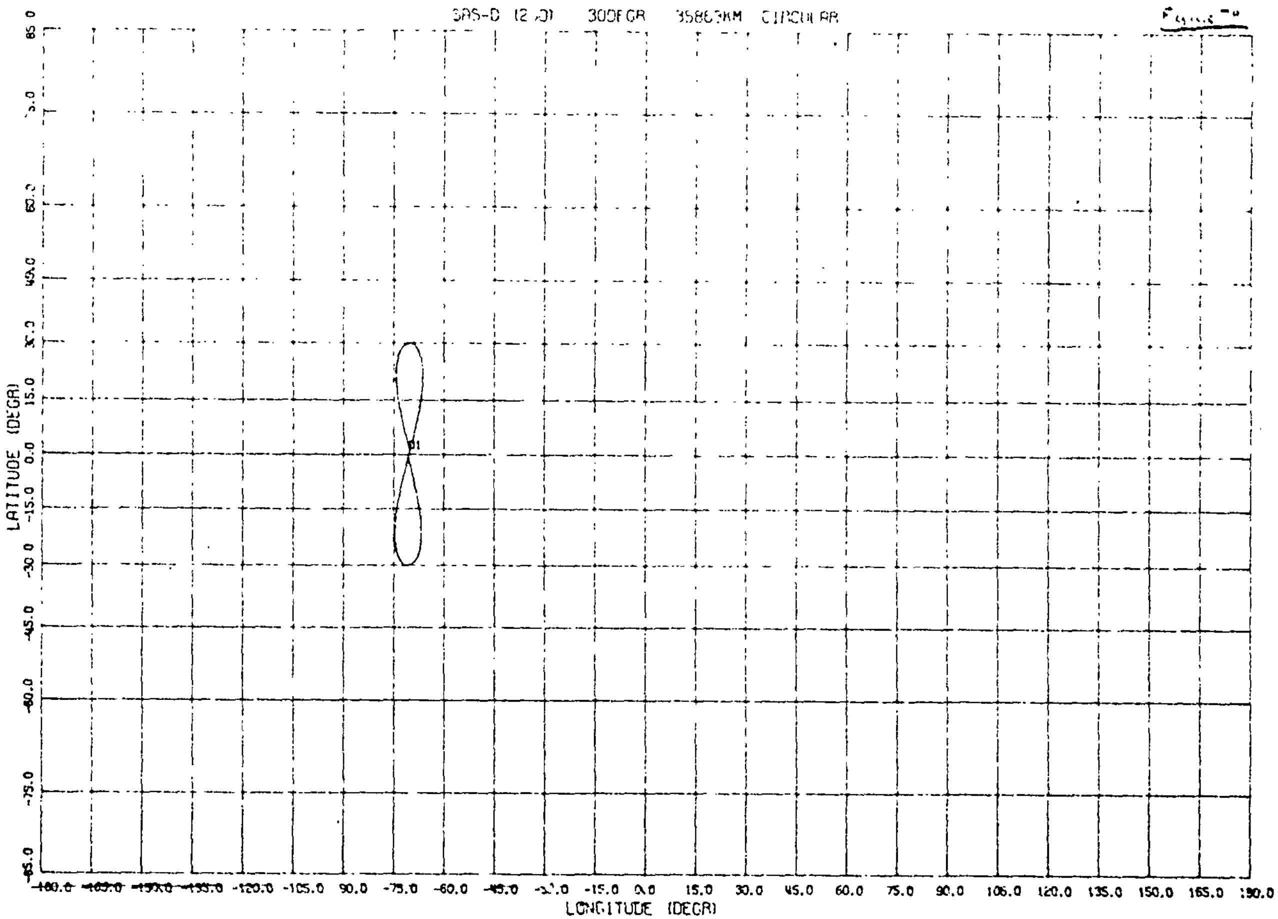


SAS-D (290) 0DEGR 35863KM CIRCULAR
Figure 76
LATITUDE (DEGR)
90.0
75.0
60.0
45.0
30.0
15.0
0.0
-15.0
-30.0
-45.0
-60.0
-75.0
-90.0
-180.0 -165.0 -150.0 -135.0 -120.0 -105.0 -90.0 -75.0 -60.0 -45.0 -30.0 -15.0 0.0 15.0 30.0 45.0 60.0 75.0 90.0 105.0 120.0 135.0 150.0 165.0 180.0
LONGITUDE (DEGR)

Figure 17


SAS-D (310) 0DEGR 35863KM CIRCULAR
LATITUDE (DEGR)
85.0
75.0
60.0
45.0
30.0
15.0
0.0
-15.0
-30.0
-45.0
-60.0
-75.0
-85.0
01
-180.0 -165.0 -150.0 -135.0 -120.0 -105.0 -90.0 -75.0 -60.0 -45.0 -30.0 -15.0 0.0 15.0 30.0 45.0 60.0 75.0 90.0 105.0 120.0 135.0 150.0 165.0 180.0
LONGITUDE (DEGR)


SAS-D (110) 29DEGR 35863KM CIRCULAR
LATITUDE (DEGR)
LONGITUDE (DEGR)



SAS-D (2 J1) 30DEGR 35863KM CIRCULAR
LATITUDE (DEGR)
85.0
60.0
45.0
30.0
15.0
0.0
-15.0
-30.0
-45.0
-60.0
-75.0
-85.0
-180.0 -120.0 -105.0 90.0 -75.0 -60.0 -45.0 -15.0 0.0 15.0 30.0 45.0 60.0 75.0 90.0 106.0 120.0 135.0 150.0 165.0 180.0
LONGITUDE (DEGR)

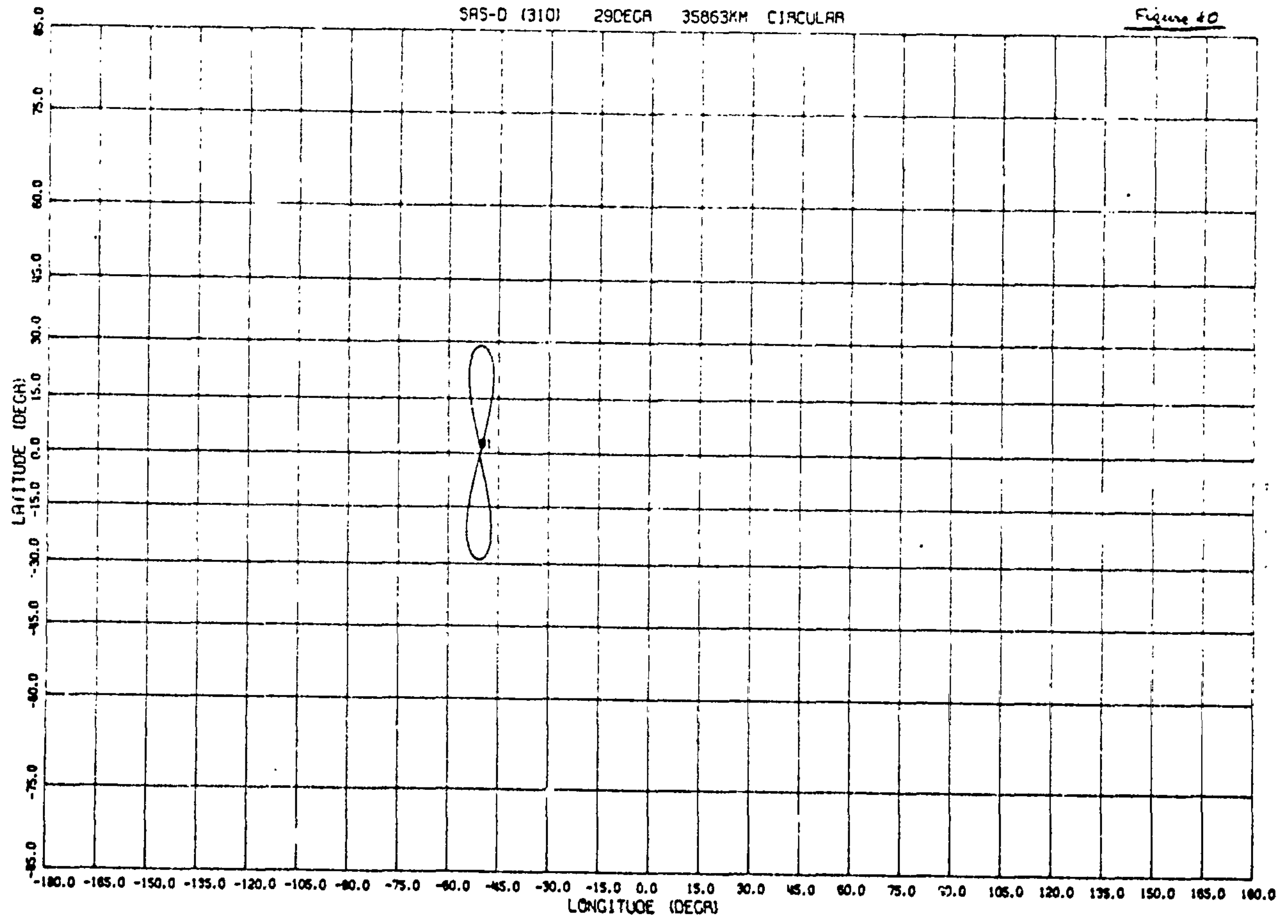
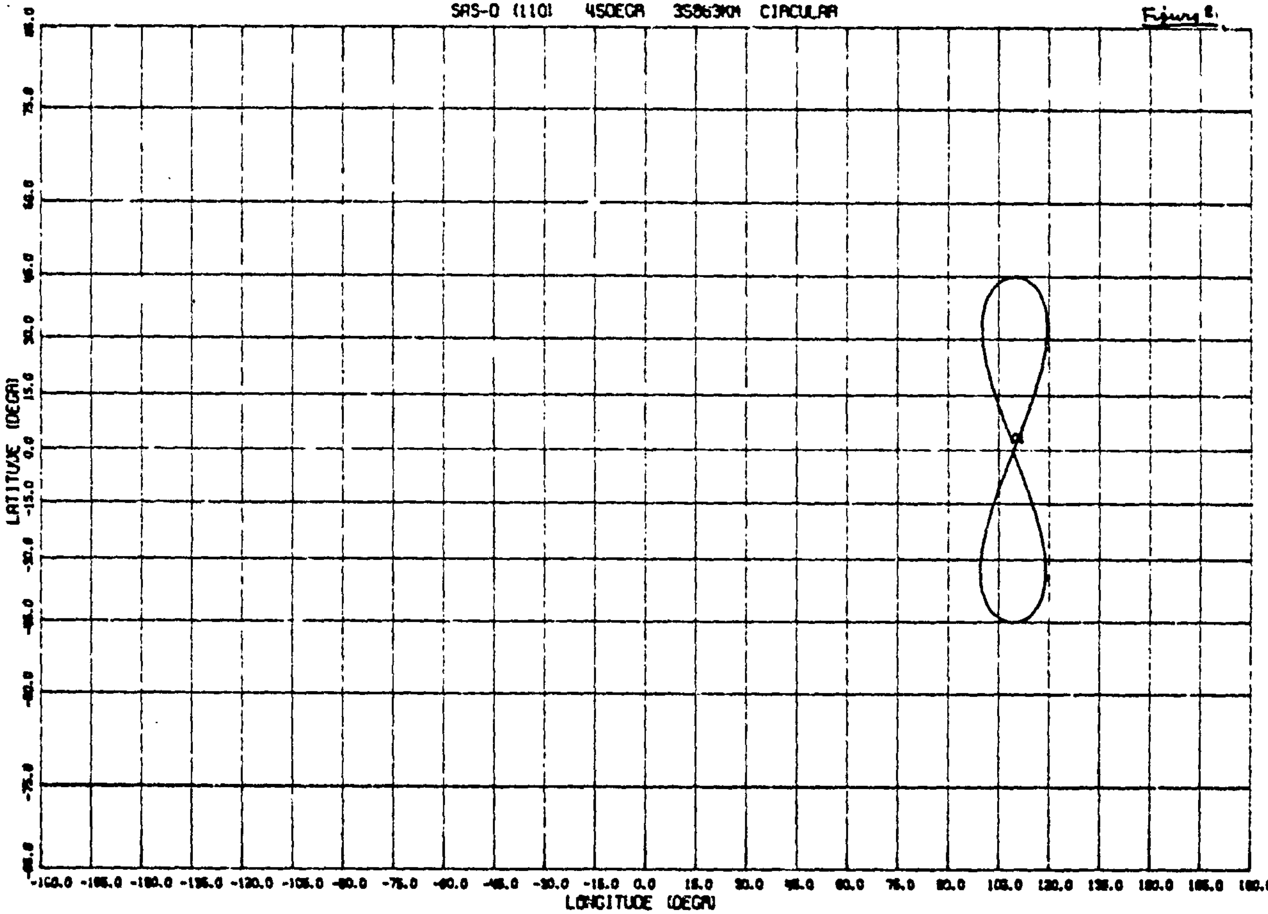

SAS-D (310) 29DEGR 35863KM CIRCULAR
LATITUDE (DEGR)
85.0
75.0
60.0
45.0
30.0
15.0
0.0
-15.0
-30.0
-45.0
-60.0
-75.0
-85.0
-180.0 -165.0 -150.0 -135.0 -120.0 -105.0 -90.0 -75.0 -60.0 -45.0 -30.0 -15.0 0.0 15.0 30.0 45.0 60.0 75.0 90.0 105.0 120.0 135.0 150.0 165.0 180.0
LONGITUDE (DEGR)

Figure 40

Figure 8.

SAS-D (110) 45DEGR 35863KM CIRCULAR



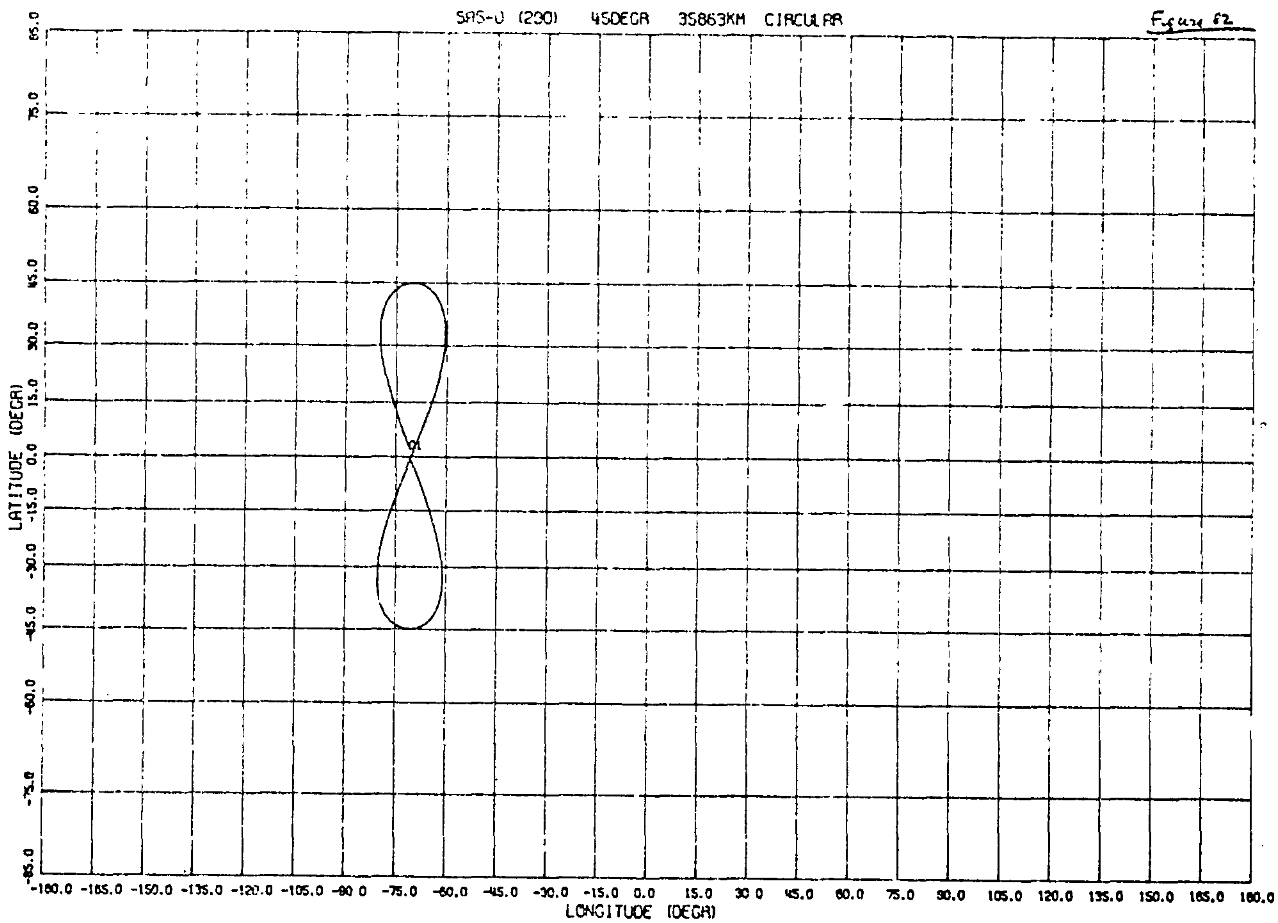


Figure 62
SAS-U (230) 45DEGR 35863KM CIRCULAR
LATITUDE (DEGR)
85.0
75.0
60.0
45.0
30.0
15.0
0.0
-15.0
-30.0
-45.0
-60.0
-75.0
-85.0
-180.0 -165.0 -150.0 -135.0 -120.0 -105.0 -90.0 -75.0 -60.0 -45.0 -30.0 -15.0 0.0 15.0 30.0 45.0 60.0 75.0 90.0 105.0 120.0 135.0 150.0 165.0 180.0
LONGITUDE (DEGR)

Figure 83

SAS-D (310) 45DEGR 35863KM CIRCULAR

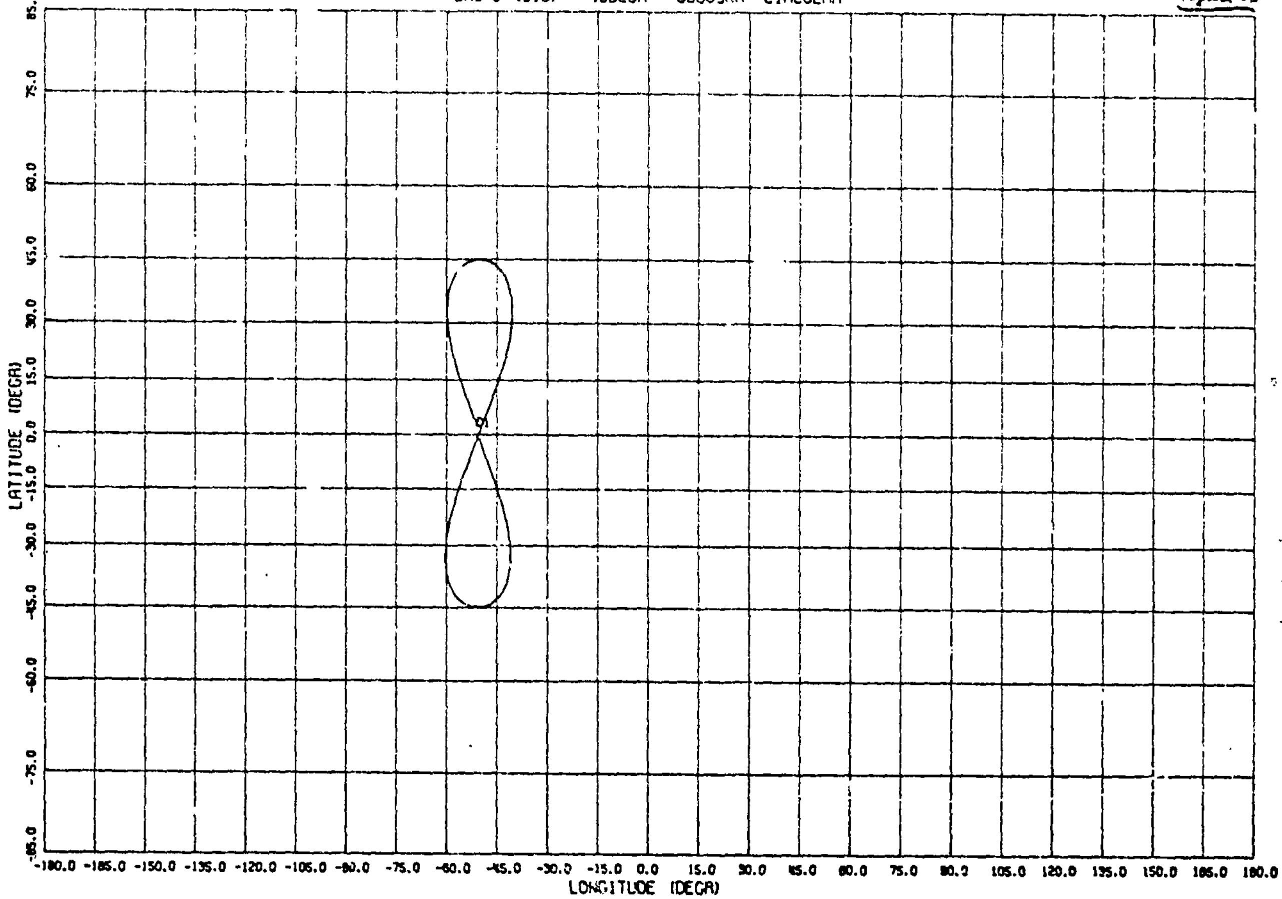
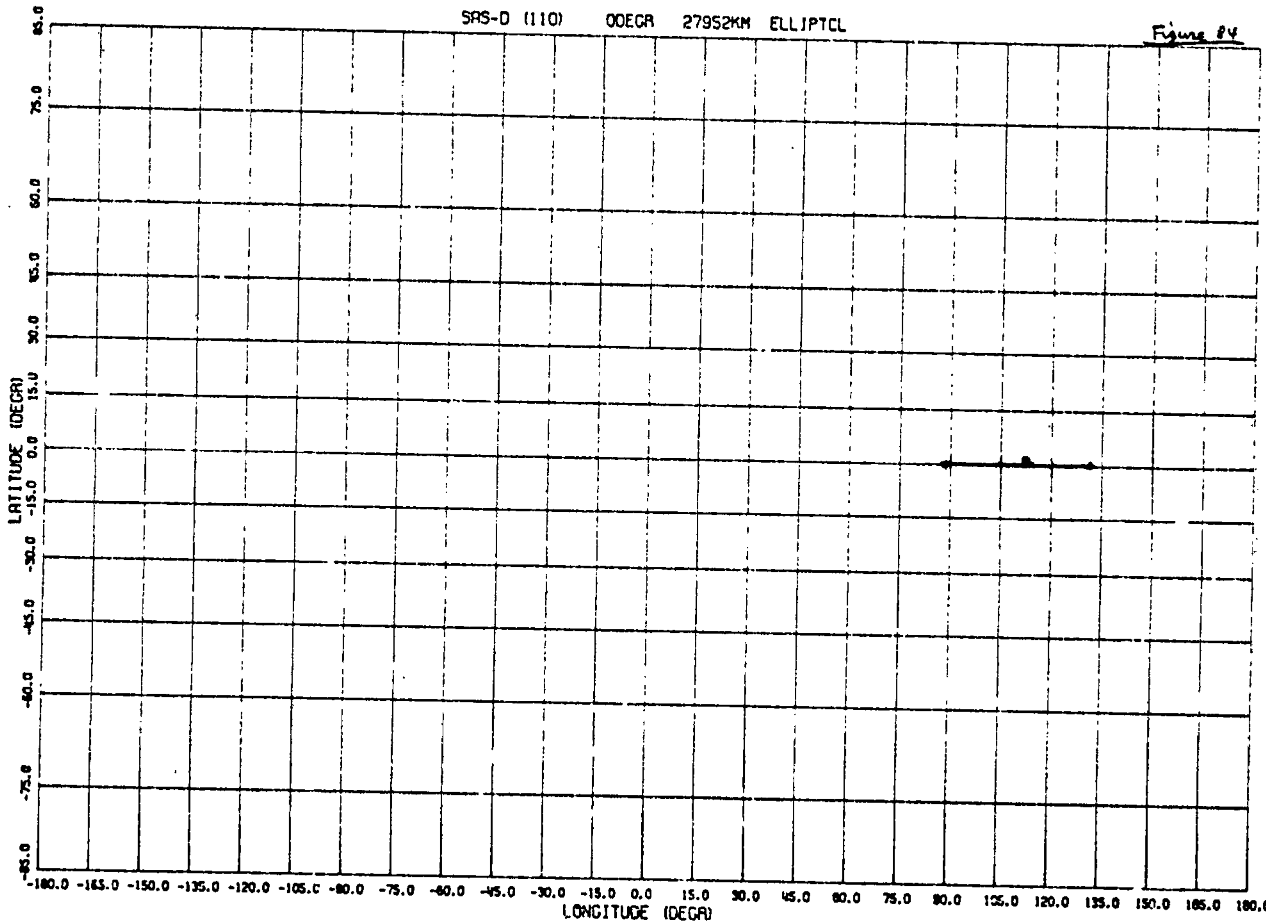
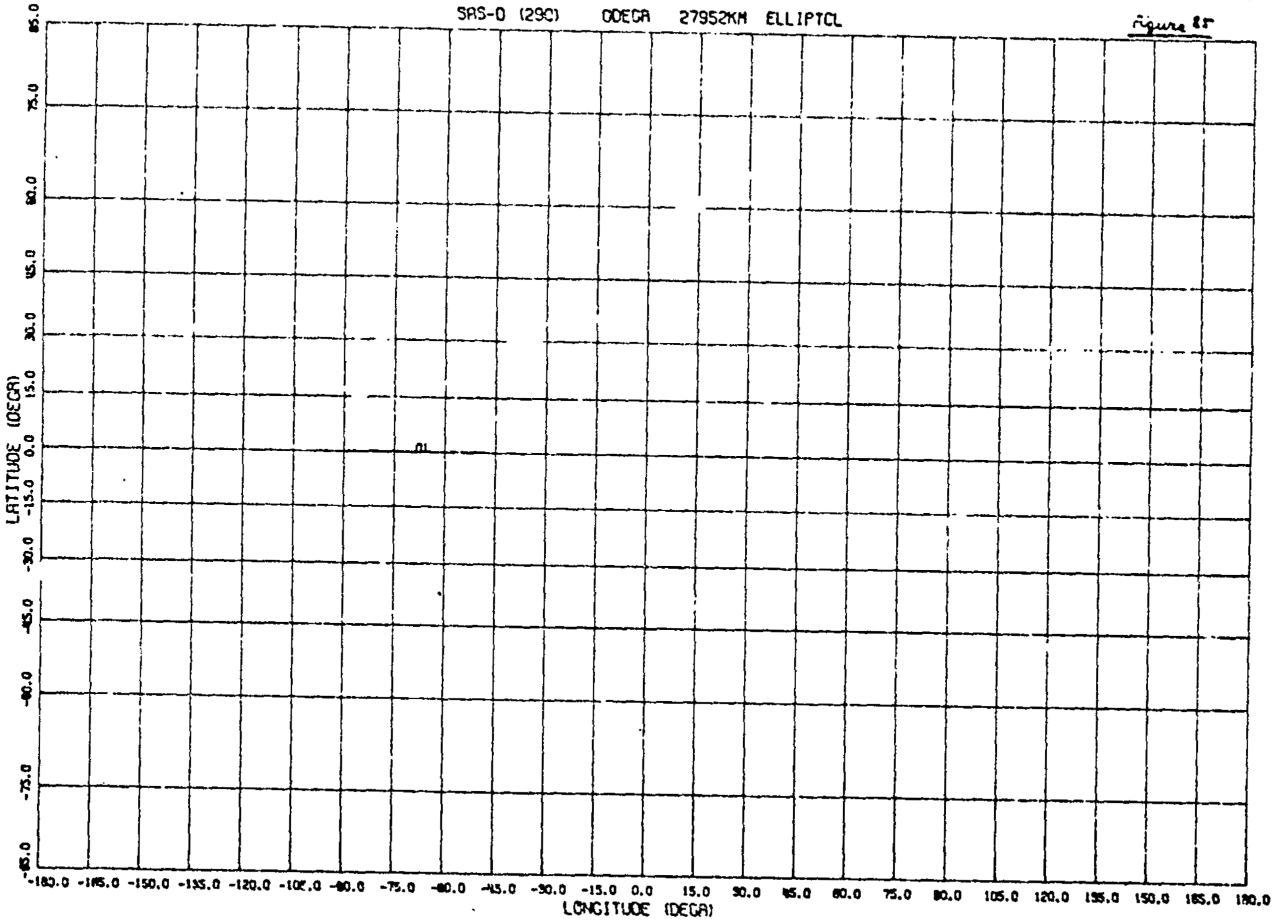


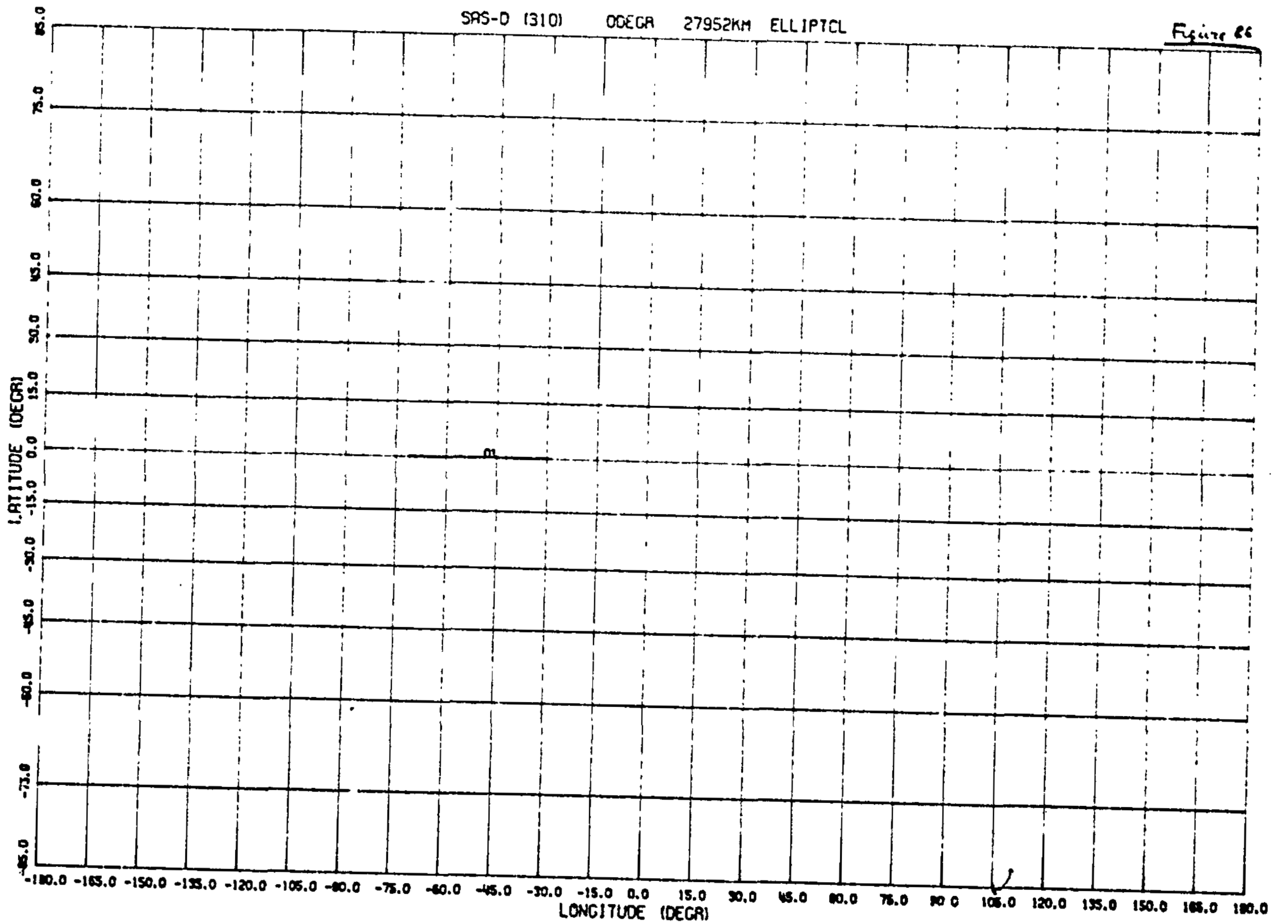
Figure 84


SAS-D (110) 0DEGR 27952KM ELLIPTCL
LATITUDE (DEGR)
LONGITUDE (DEGR)
85.0
75.0
60.0
45.0
30.0
15.0
0.0
-15.0
-30.0
-45.0
-60.0
-75.0
-85.0
-180.0 -165.0 -150.0 -135.0 -120.0 -105.0 -90.0 -75.0 -60.0 -45.0 -30.0 -15.0 0.0 15.0 30.0 45.0 60.0 75.0 90.0 105.0 120.0 135.0 150.0 165.0 180.0

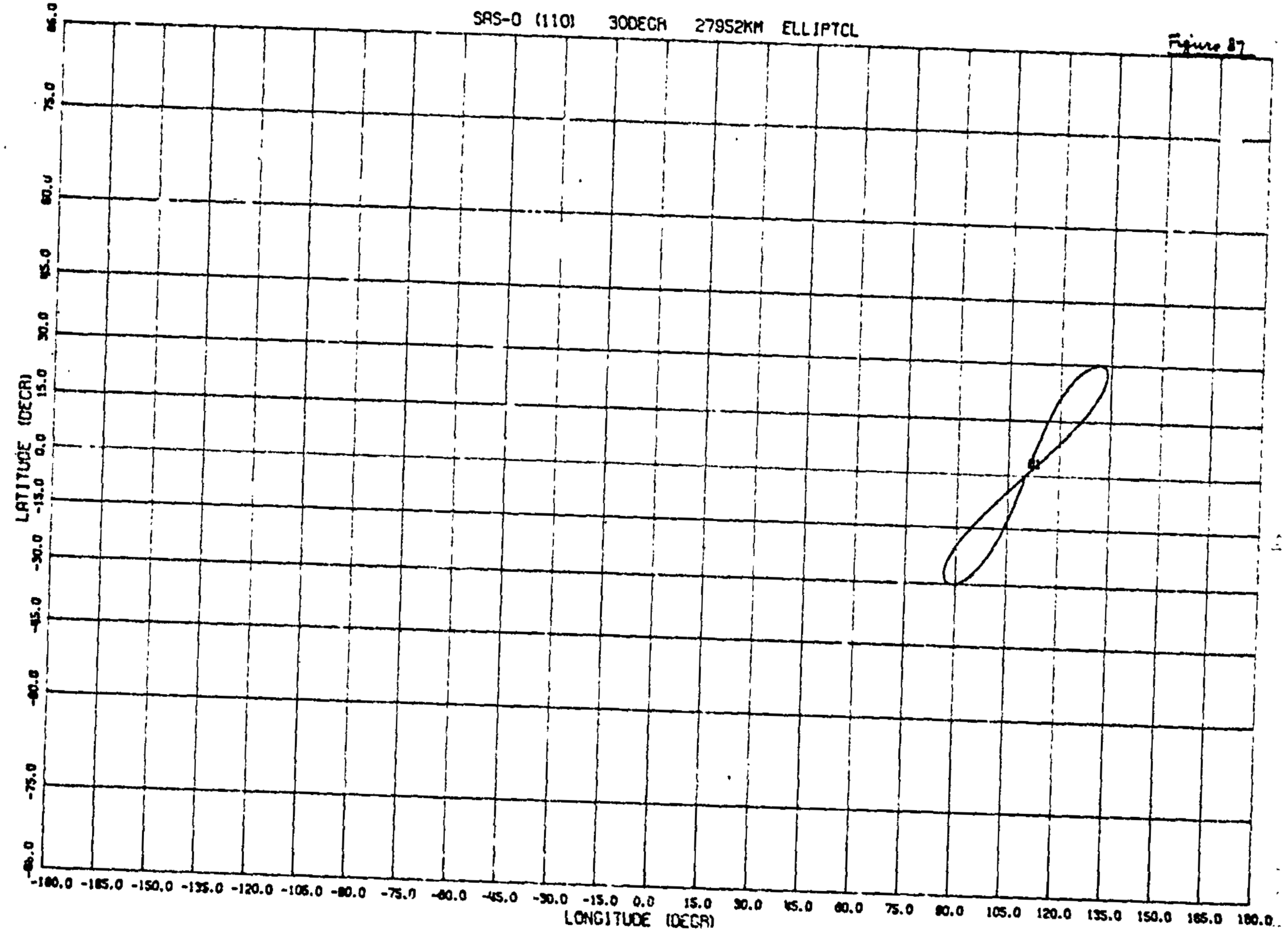
SAS-D (29C) ODEGA 27952KM ELLIPTCL

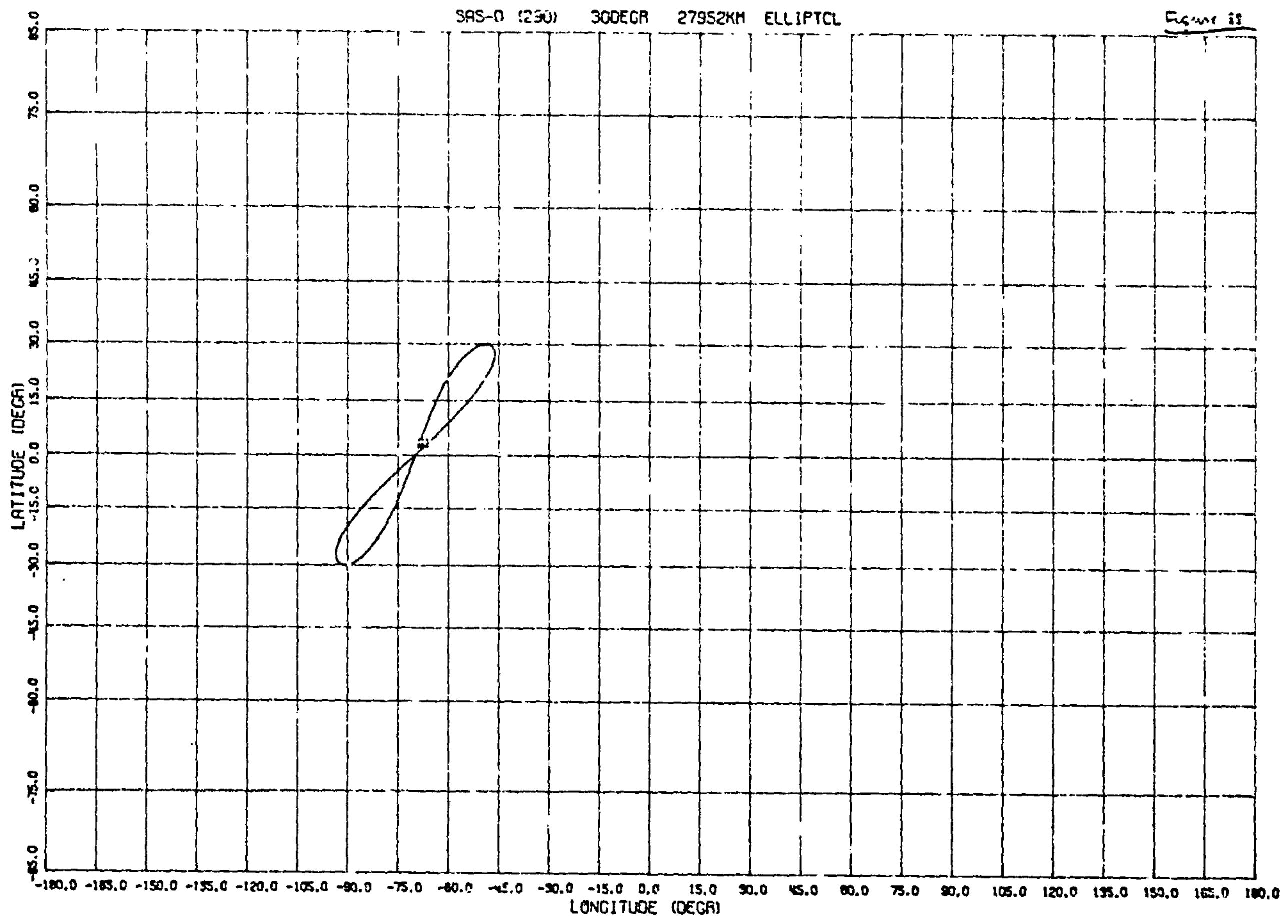
Figure 85

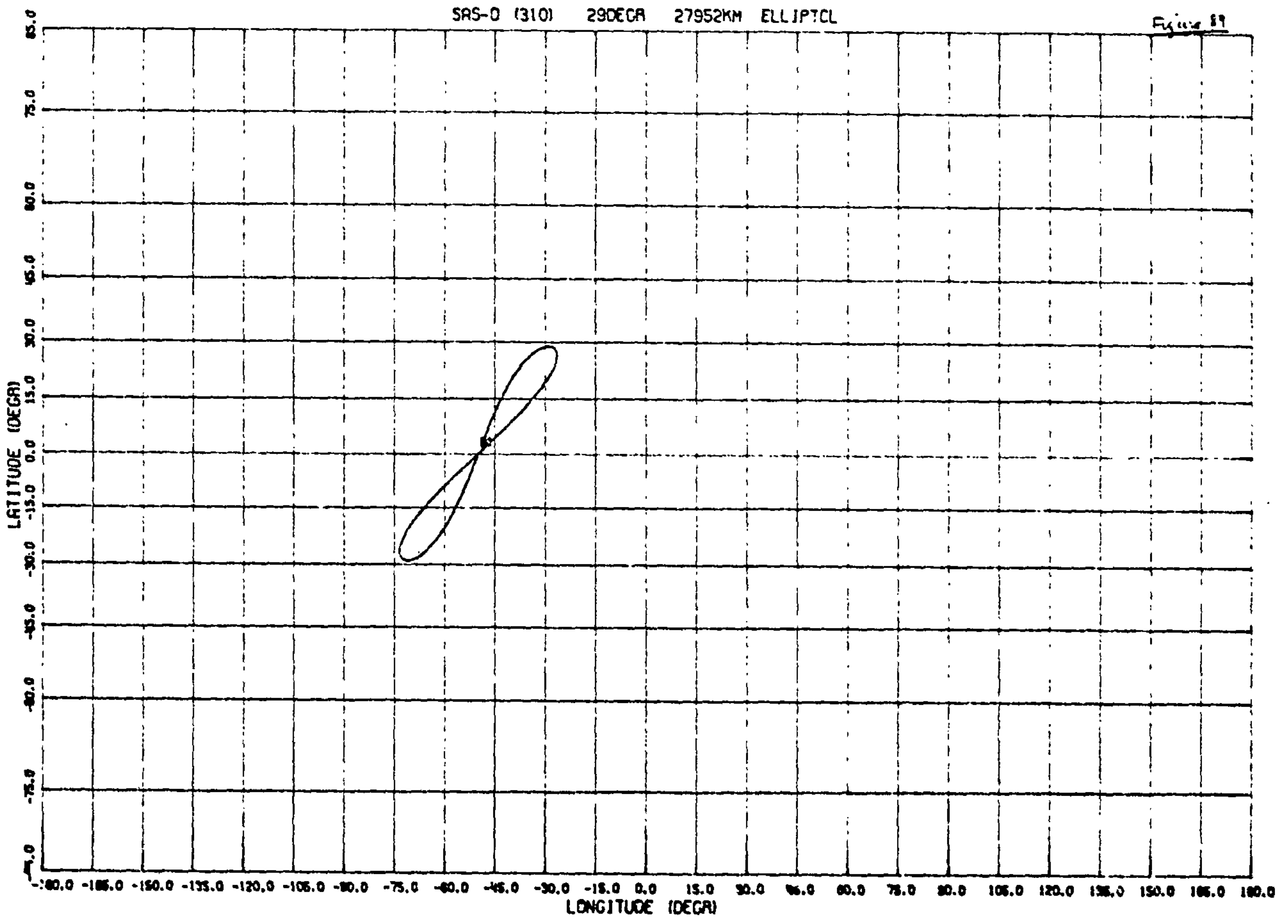




SAS-D (310) ODEGR 27952KM ELLIPTCL
Figure 86
LATITUDE (DEGR)
LONGITUDE (DEGR)

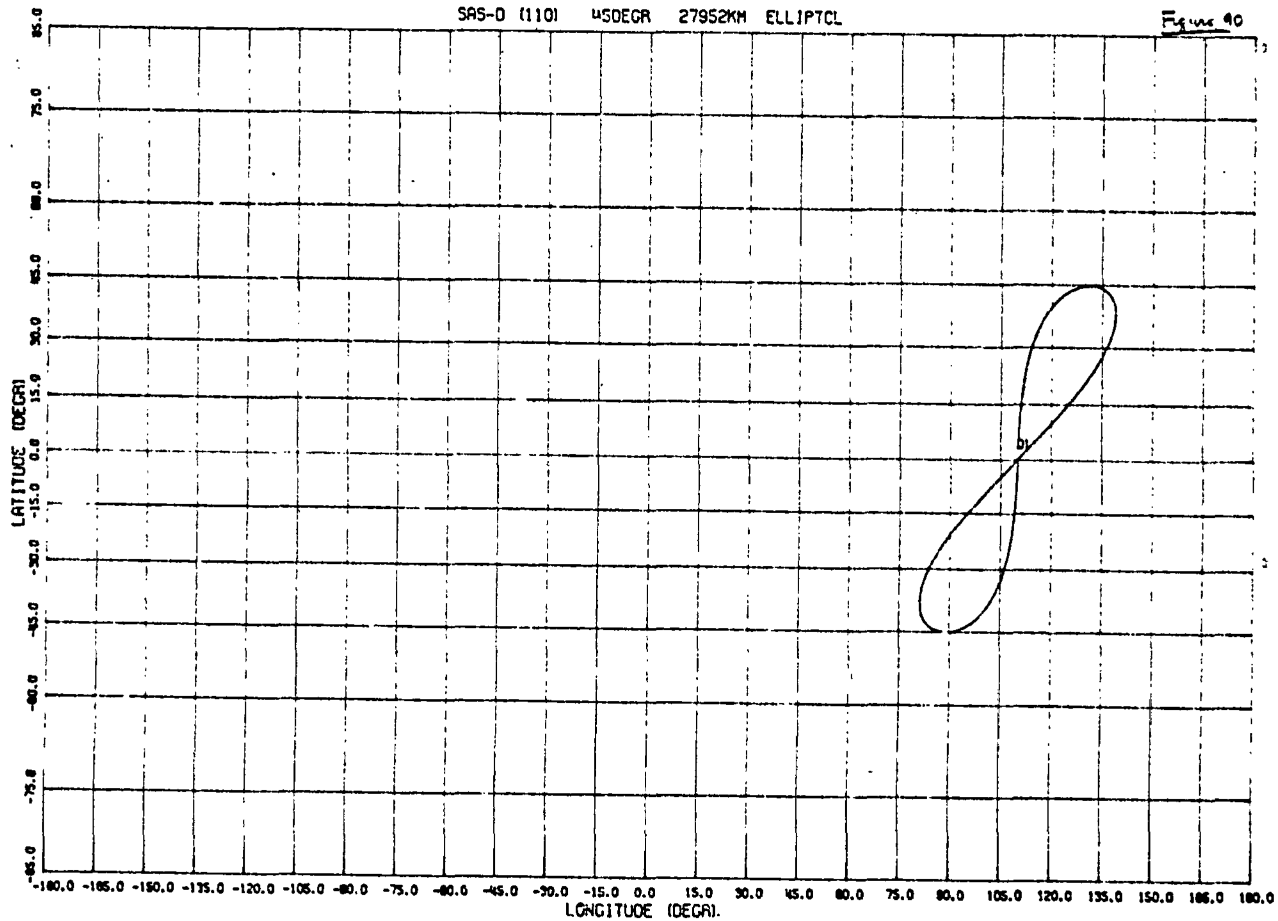

SAS-D (110) 30DEGR 27952KM ELLIPTCL
Figure 87
LATITUDE (DEGR)
LONGITUDE (DEGR)


SAS-D (230) 30DEGR 27952KM ELLIPTCL
LATITUDE (DEGR)
LONGITUDE (DEGR)



SAS-D (310) 29DEGR 27952KM ELLIPTCL
Figure 89
LATITUDE (DEGR)
85.0
75.0
60.0
45.0
30.0
15.0
0.0
-15.0
-30.0
-45.0
-60.0
-75.0
-180.0 -165.0 -150.0 -135.0 -120.0 -105.0 -90.0 -75.0 -60.0 -45.0 -30.0 -15.0 0.0 15.0 30.0 45.0 60.0 75.0 90.0 105.0 120.0 135.0 150.0 165.0 180.0
LONGITUDE (DEGR)

Figure 40


SAS-D (110) 45DEGR 27952KM ELLIPTCL
LATITUDE (DEGR)
LONGITUDE (DEGR).
D1

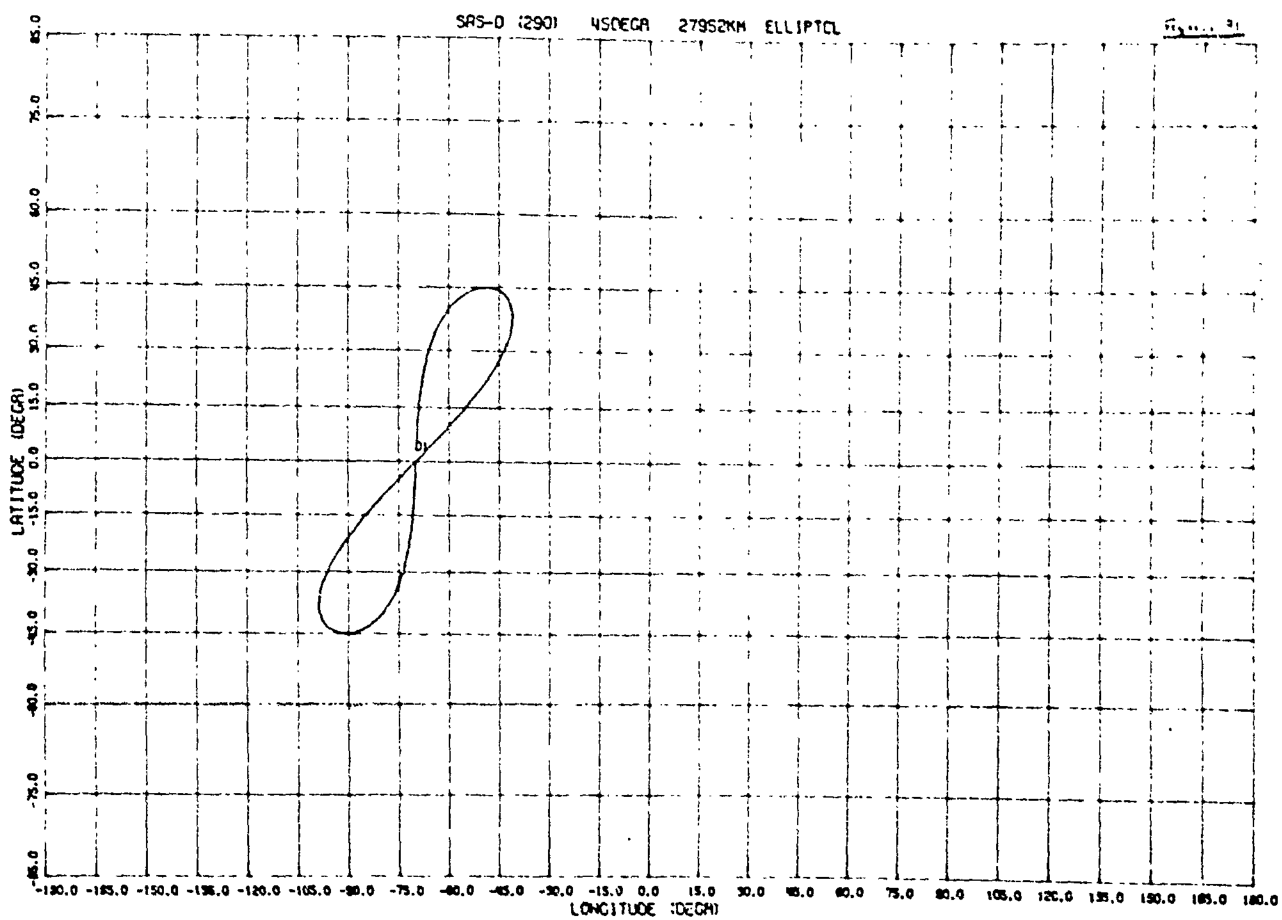

SAS-D (290) 45DEGR 27952KM ELLIPTCL
LATITUDE (DEGR)
85.0
75.0
60.0
45.0
30.0
15.0
0.0
-15.0
-30.0
-45.0
-60.0
-75.0
-85.0
LONGITUDE (DEGR)
-180.0 -165.0 -150.0 -135.0 -120.0 -105.0 -90.0 -75.0 -60.0 -45.0 -30.0 -15.0 0.0 15.0 30.0 45.0 60.0 75.0 90.0 105.0 120.0 135.0 150.0 165.0 180.0

Figure 92

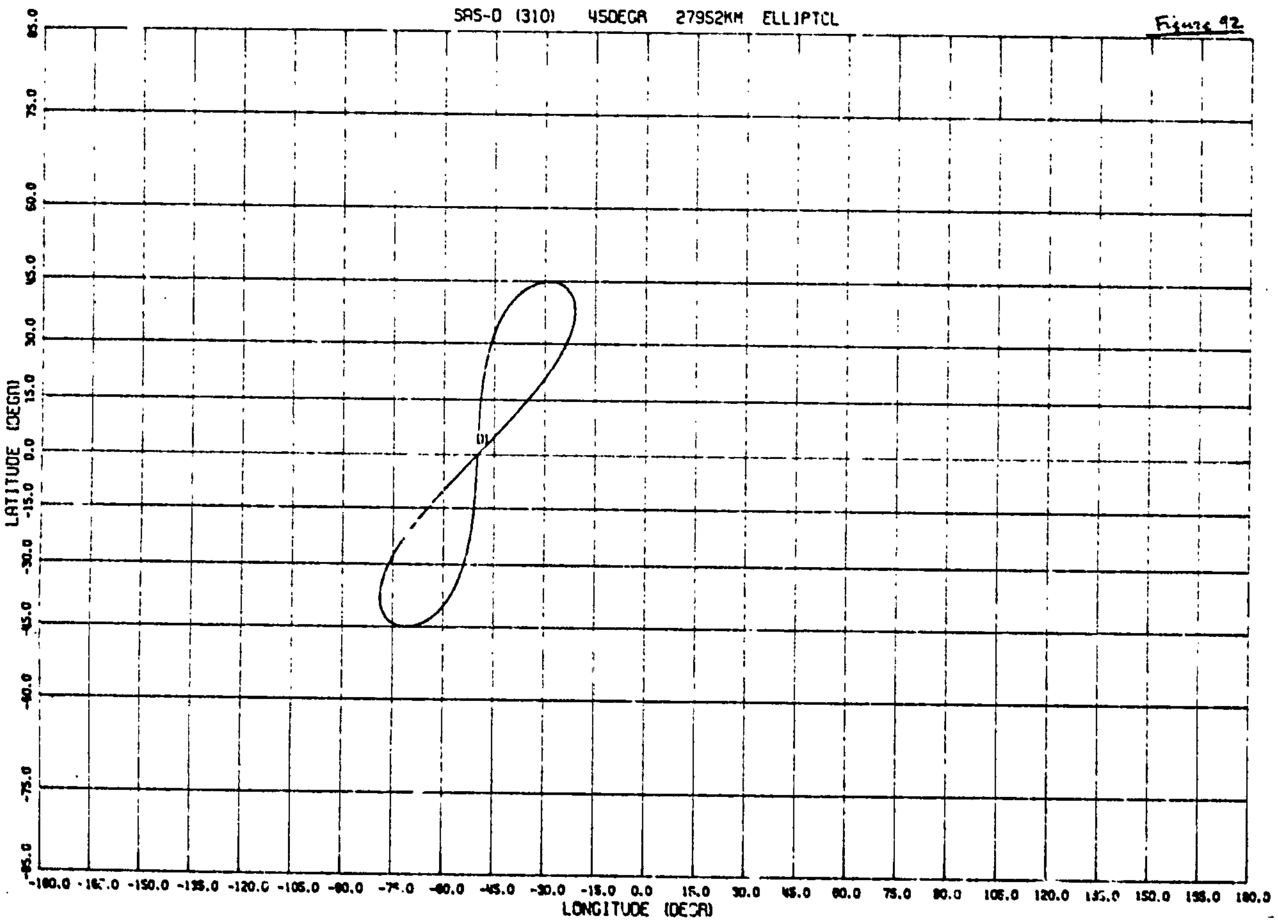
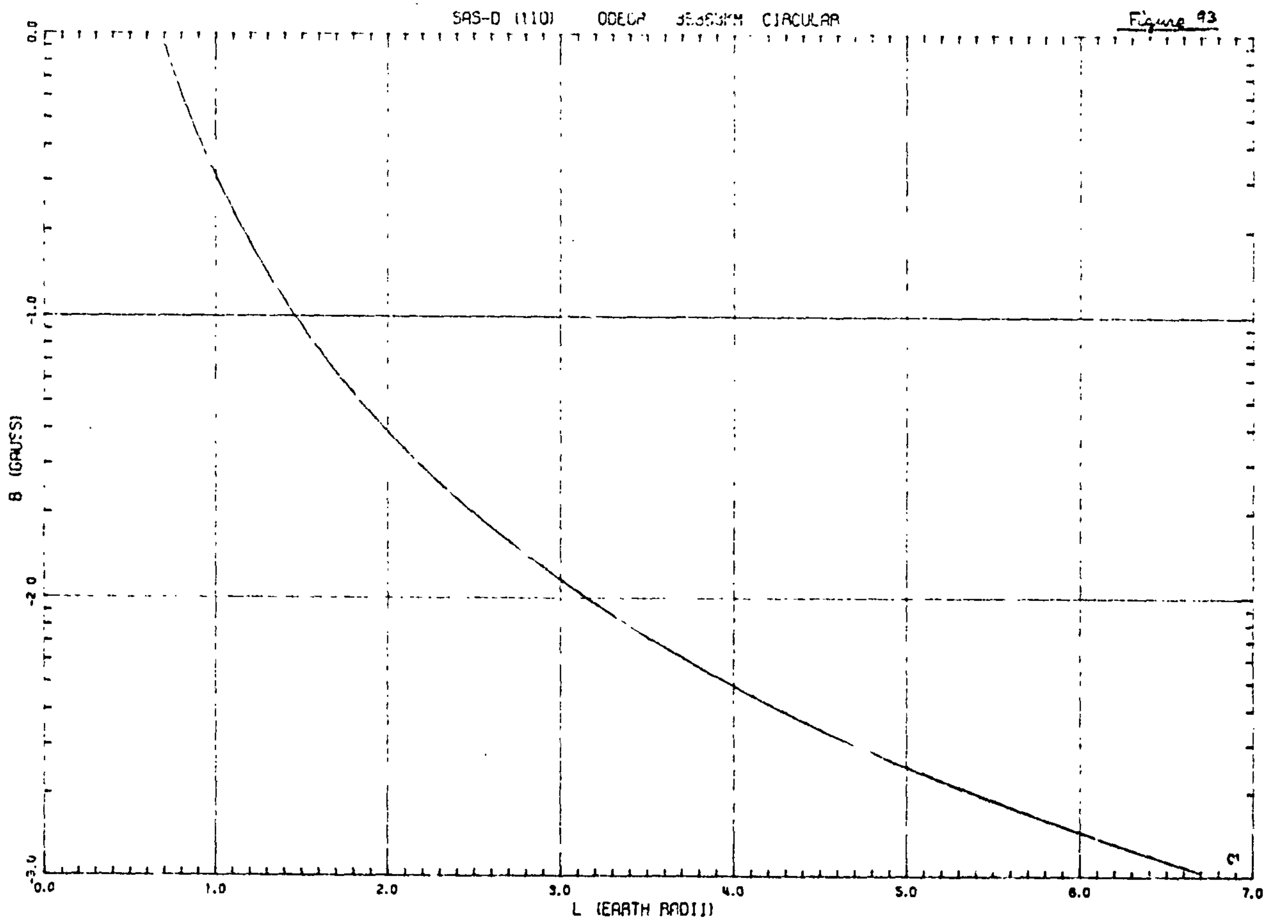

SAS-D (310) 45DEGR 27952KM ELLIPTCL
LATITUDE (DEGN)
LONGITUDE (DEGR)
D1

Figure 93



SAS-D (110) ODEGP CIRCULAR
B (GAUSS)
L (EARTH RADII)
0.0
-1.0
-2.0
-3.0
1.0
2.0
3.0
4.0
5.0
6.0
7.0

Figure 94

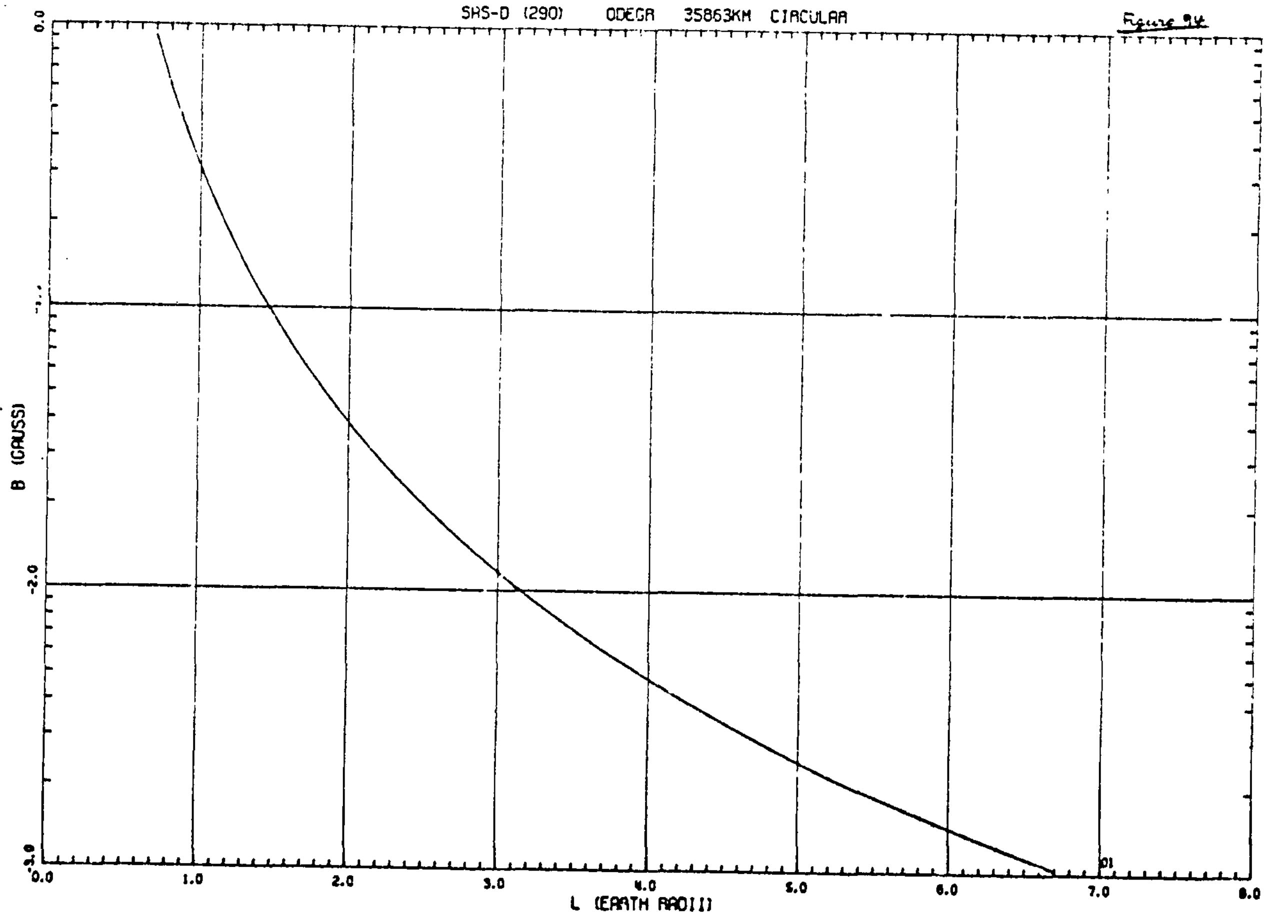
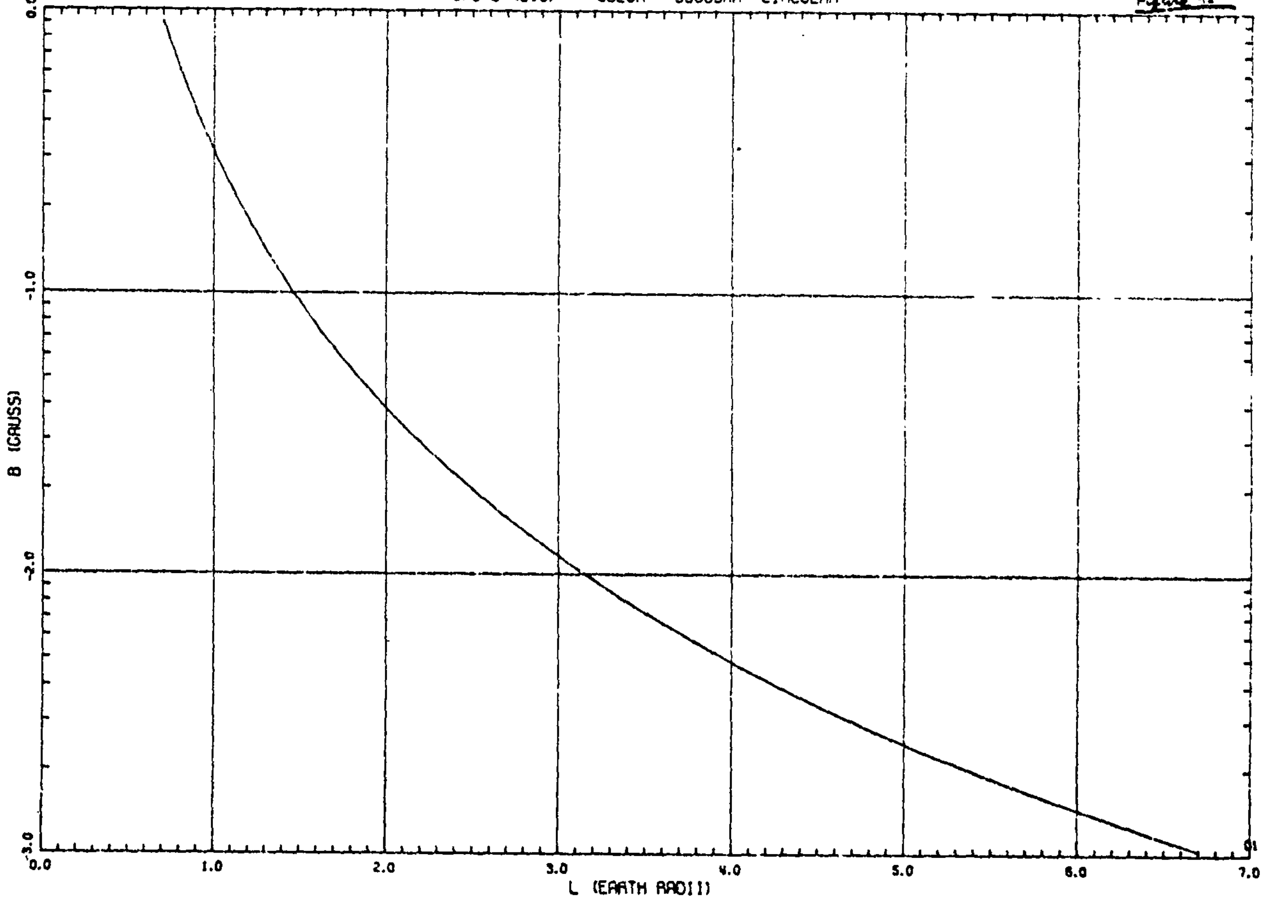
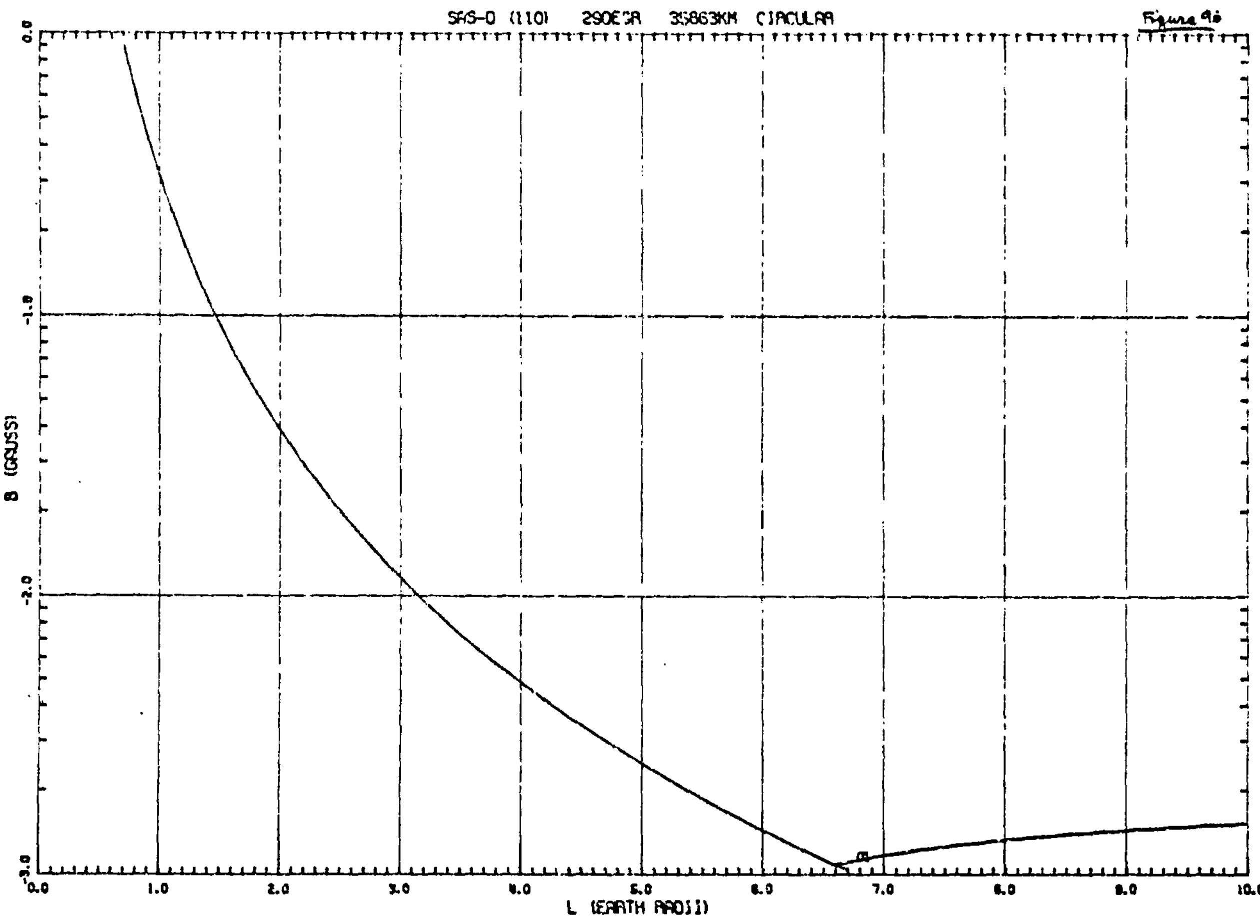
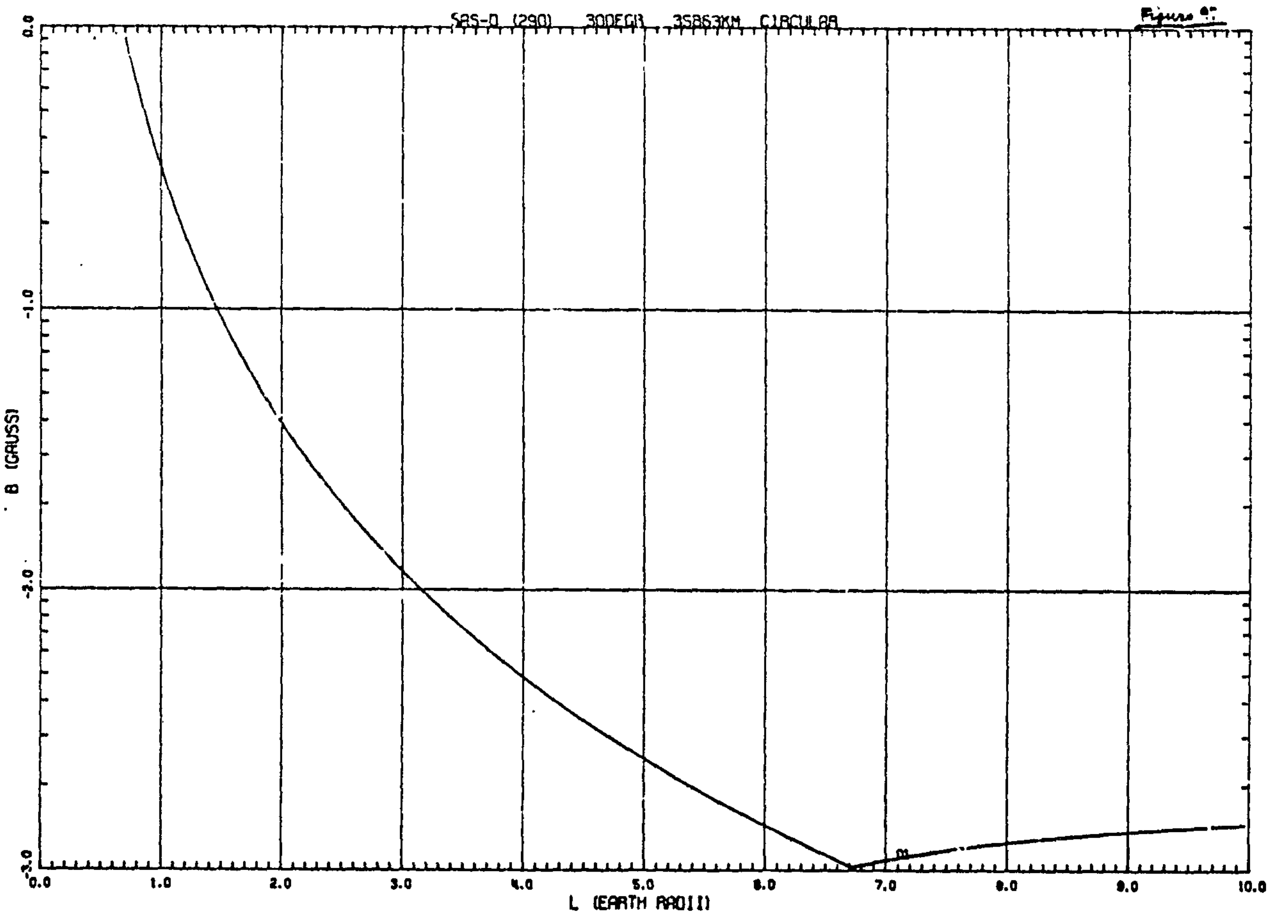

SHS-D (290) ODEGA 35863KM CIRCULAR
B (GAUSS)
0.0
-2.0
-3.0
L (EARTH RADII)
0.0
1.0
2.0
3.0
4.0
5.0
6.0
7.0
8.0

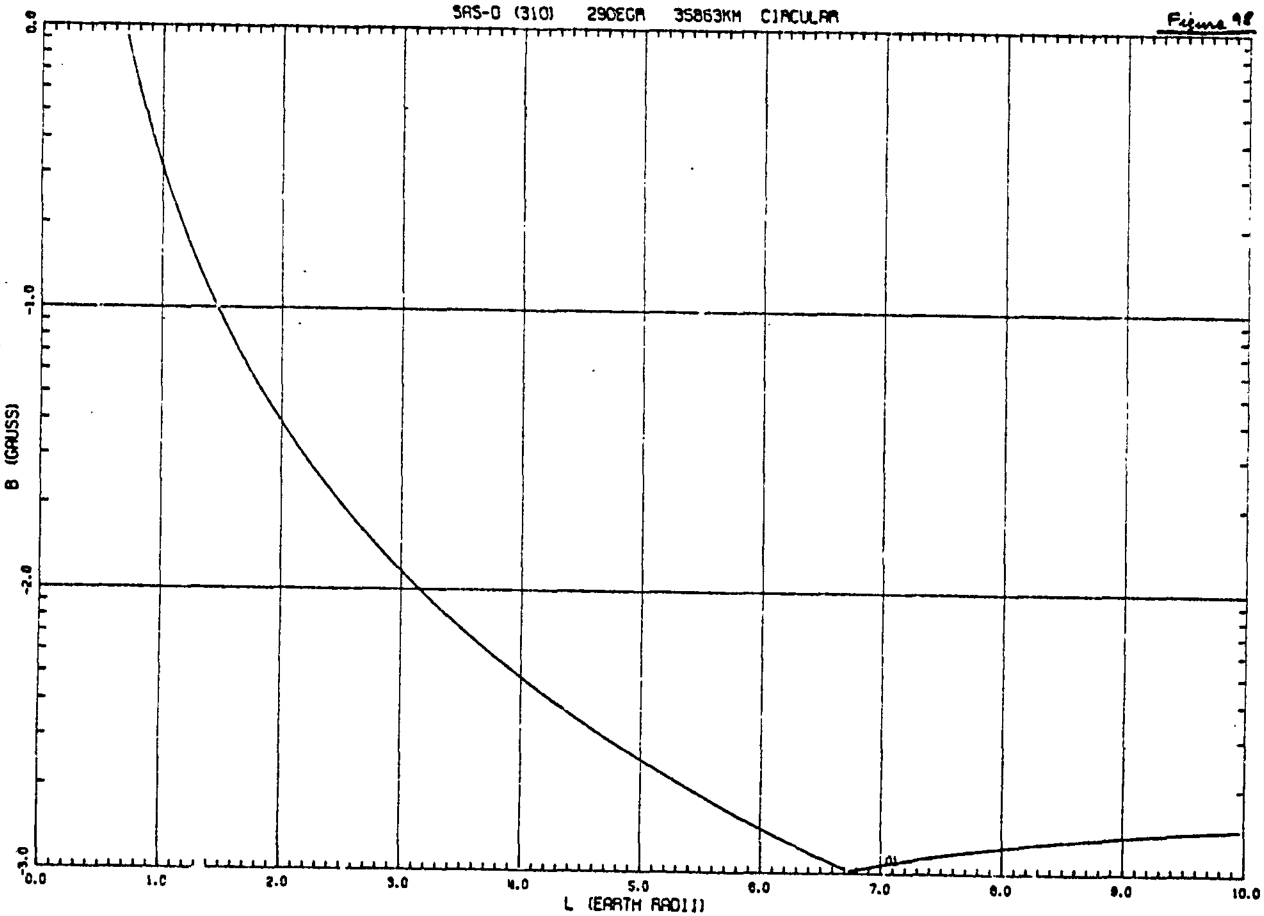
Figure 95

SAS-D (310) ODEGA 35863KM CIRCULAR




SAS-D (110)
35863KM CIRCULAR
Figure 9b
B (GAUSS)
0.0
-1.0
-2.0
-3.0
L (EARTH RADII)
0.0
1.0
2.0
3.0
4.0
5.0
6.0
7.0
8.0
9.0
10.0


SAS-D (290) 30DEGR 35863KM CIRCULAR
Figure 4
B (GAUSS)
0.0
-1.0
-2.0
-3.0
L (EARTH RADII)
0.0
1.0
2.0
3.0
4.0
5.0
6.0
7.0
8.0
9.0
10.0


SAS-D (310) 29DEGR 35863KM CIRCULAR
Figure 48
B (GAUSS)
0.0
-1.0
-2.0
-3.0
L (EARTH RADII)
0.0
1.0
2.0
3.0
4.0
5.0
6.0
7.0
8.0
9.0
10.0

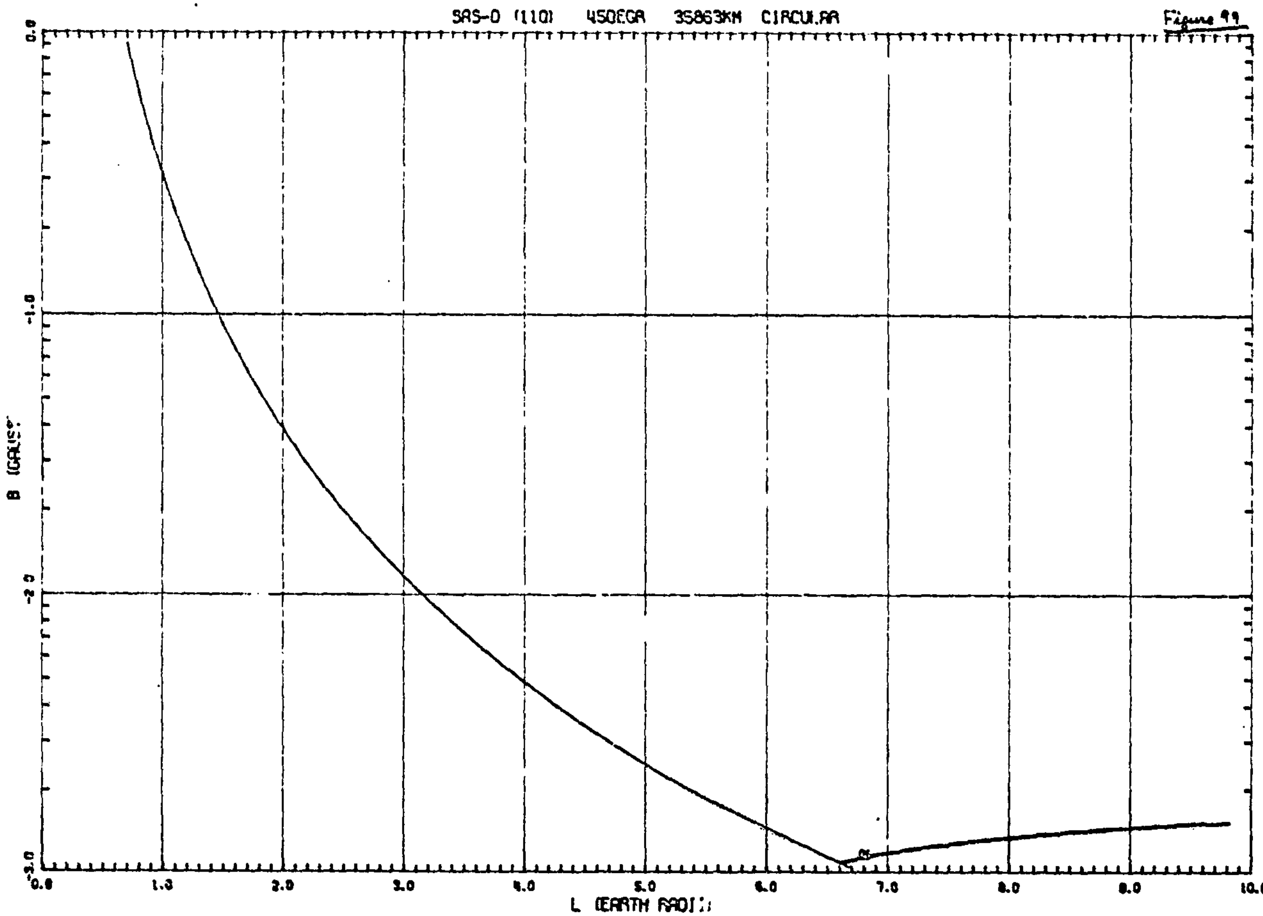
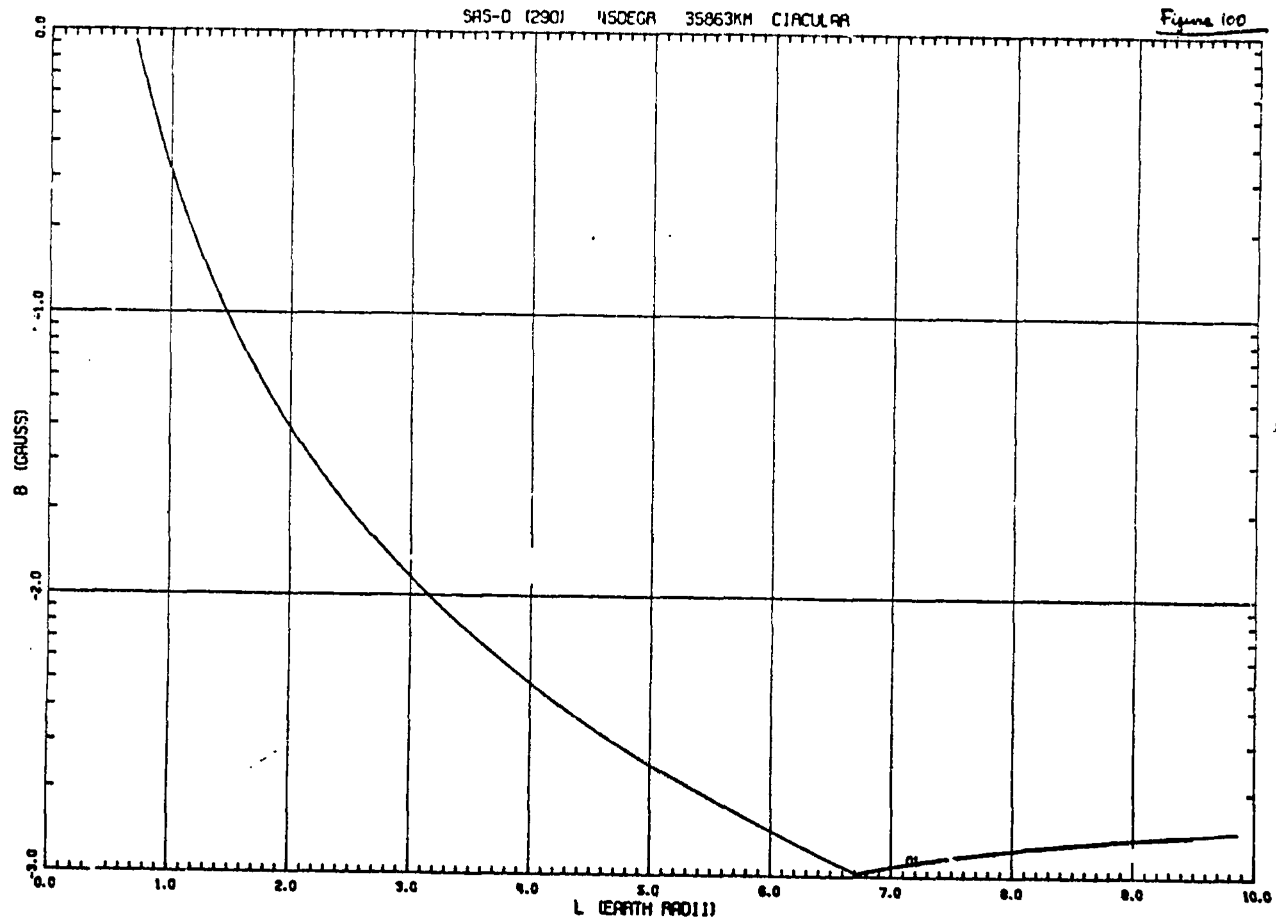

SAS-D (110) 45DEGR 35863KM CIRCULAR
B (GAUSS)
L (EARTH RADII)
0.0
-1.0
-2.0
-3.0
1.0
2.0
3.0
4.0
5.0
6.0
7.0
8.0
10.0

Figure 99



SAS-D (290) 45DEGR 35863KM CIRCULAR
Figure 100
B (GAUSS)
0.0
-1.0
-2.0
-3.0
0.0
1.0
2.0
3.0
4.0
5.0
6.0
7.0
8.0
9.0
10.0
L (EARTH RADII)

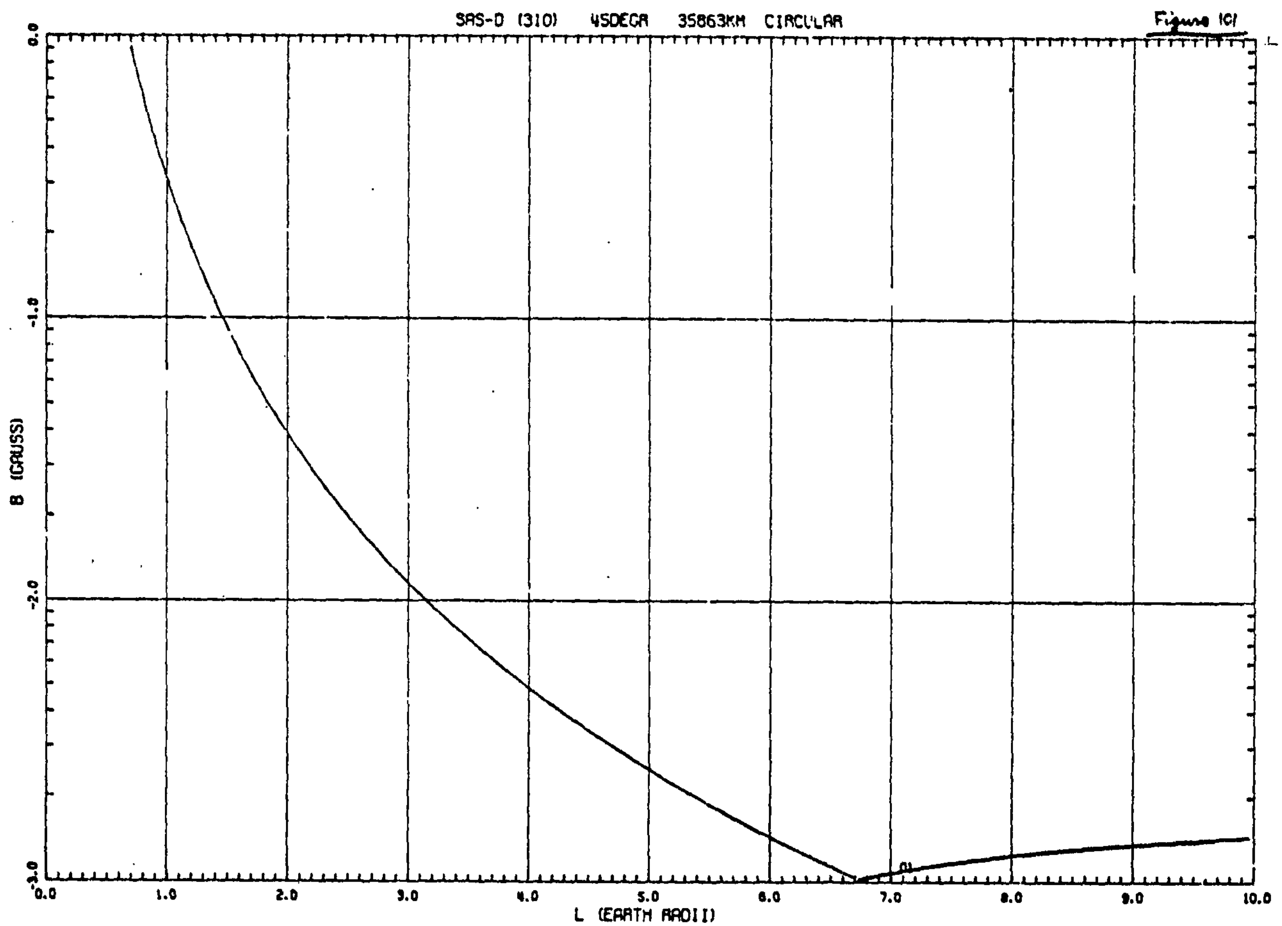
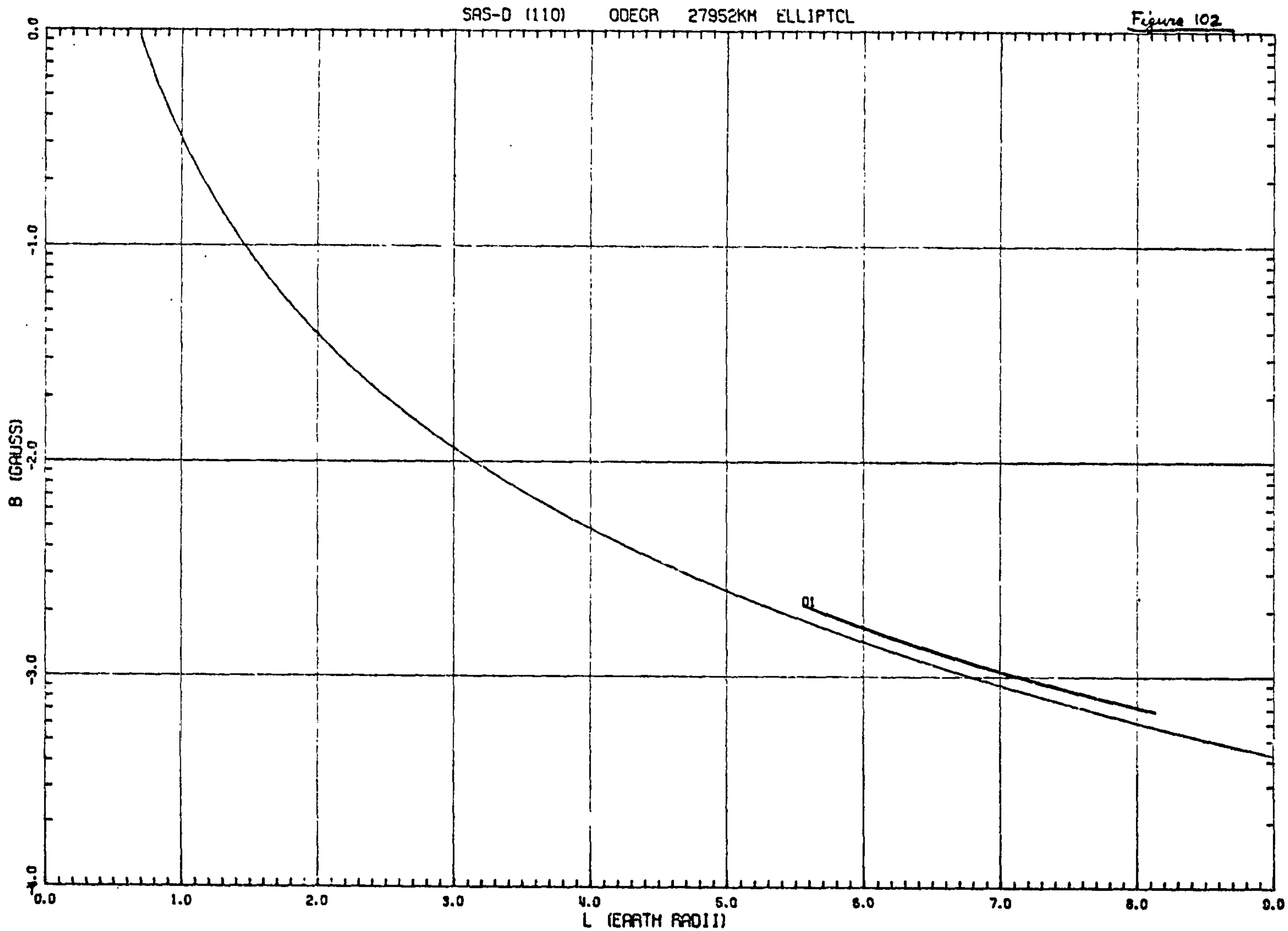
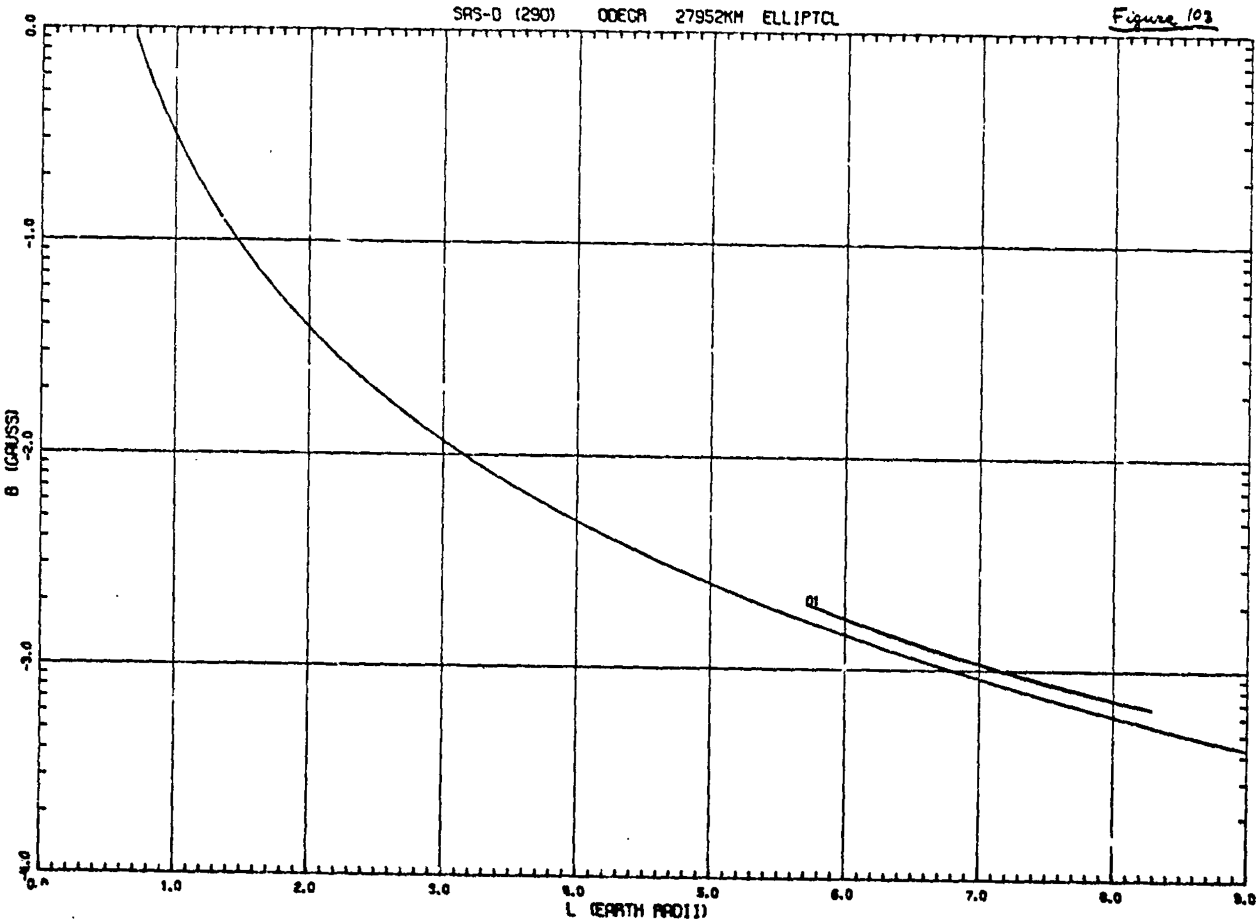

SAS-D (310) 45DEGR 35863KM CIRCULAR
Figure 1(c)
B (GAUSS)
0.0
-1.0
-2.0
-3.0
L (EARTH RADII)
0.0
1.0
2.0
3.0
4.0
5.0
6.0
7.0
8.0
9.0
10.0

Figure 102


SAS-D (110) ODEGR 27952KM ELLIPTCL
B (GAUSS)
0.0
-1.0
-2.0
-3.0
-4.0
L (EARTH RADII)
0.0
1.0
2.0
3.0
4.0
5.0
6.0
7.0
8.0
9.0
01


SAS-D (290) ODEGA 27952KM ELLIPTCL
Figure 103
0.0
-1.0
-2.0
-3.0
-4.0
B (GAUSS)
1.0
2.0
3.0
4.0
5.0
6.0
7.0
8.0
9.0
L (EARTH RADII)
01

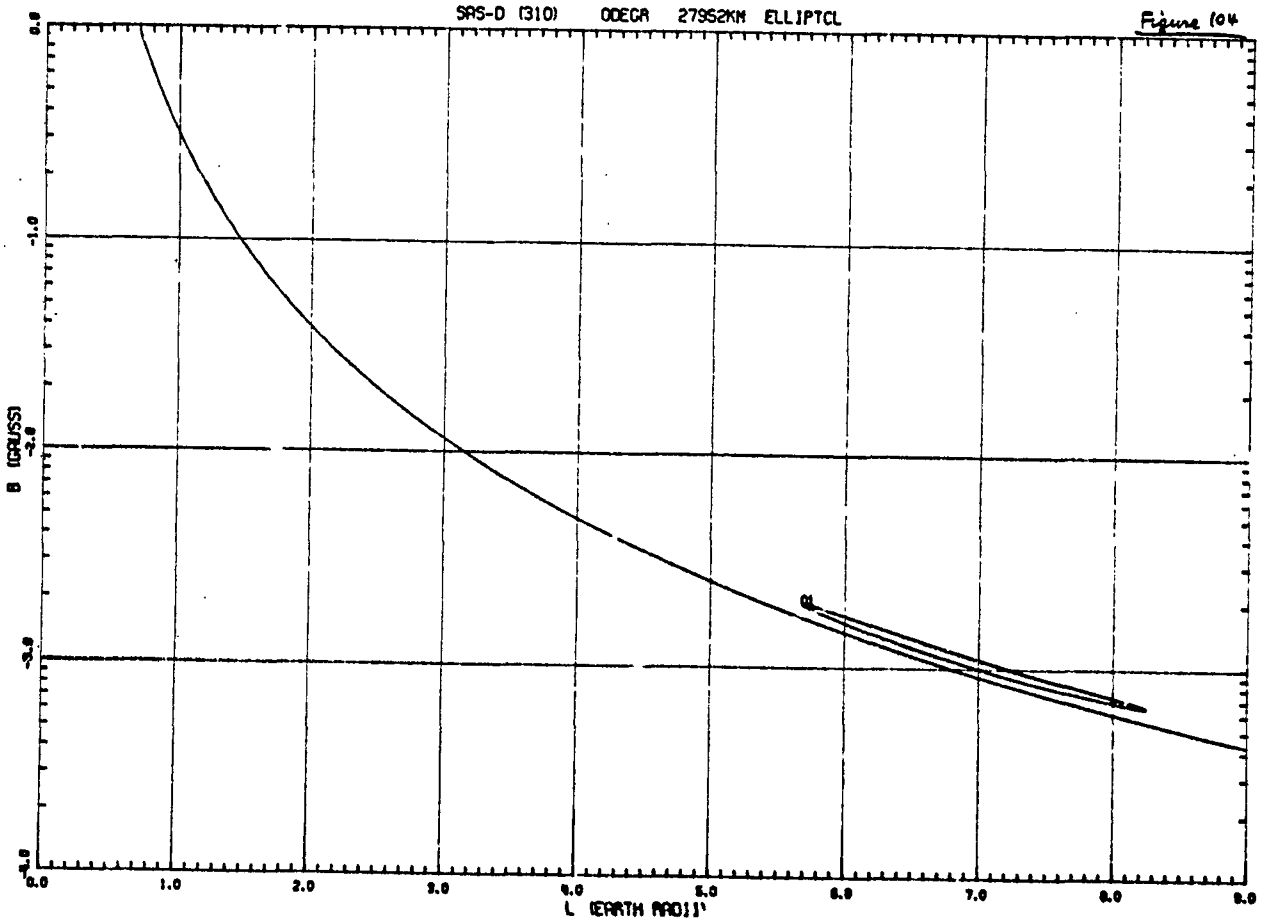
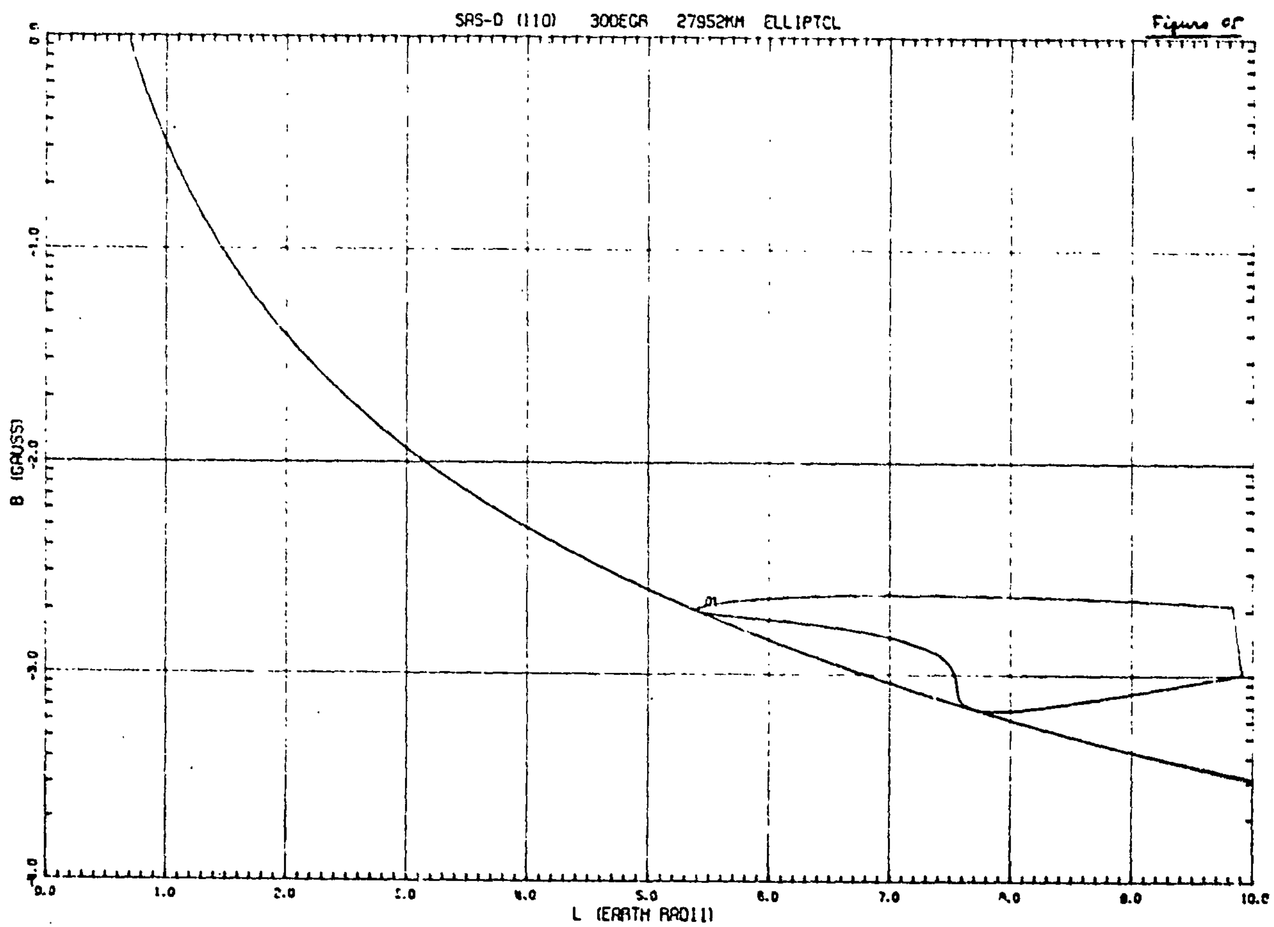

SAS-D (310) ODEGA 27952KM ELLIPTCL
B (GAUSS)
0.0
-1.0
-2.0
-3.0
-4.0
L (EARTH RADII)
0.0
1.0
2.0
3.0
4.0
5.0
6.0
7.0
8.0
9.0

Figure 104


SAS-D (110) 300DEGR 27952KM ELLIPTCL
B (GAUSS)
0.0
-1.0
-2.0
-3.0
-4.0
L (EARTH RADII)
0.0
1.0
2.0
3.0
4.0
5.0
6.0
7.0
8.0
9.0
10.0

SAS-? (290) 300EGR 27952KM ELLIPTCL

Figure 10b

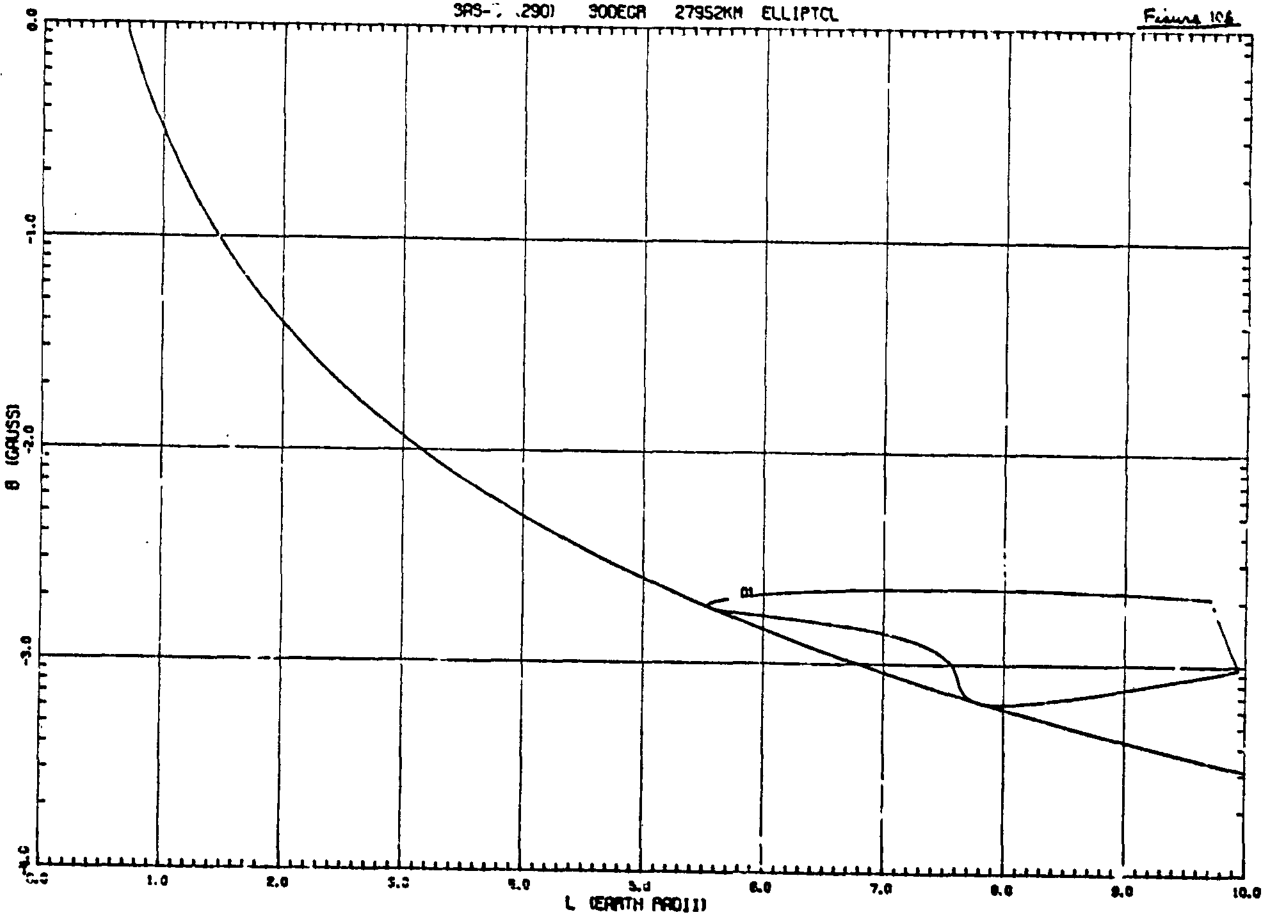
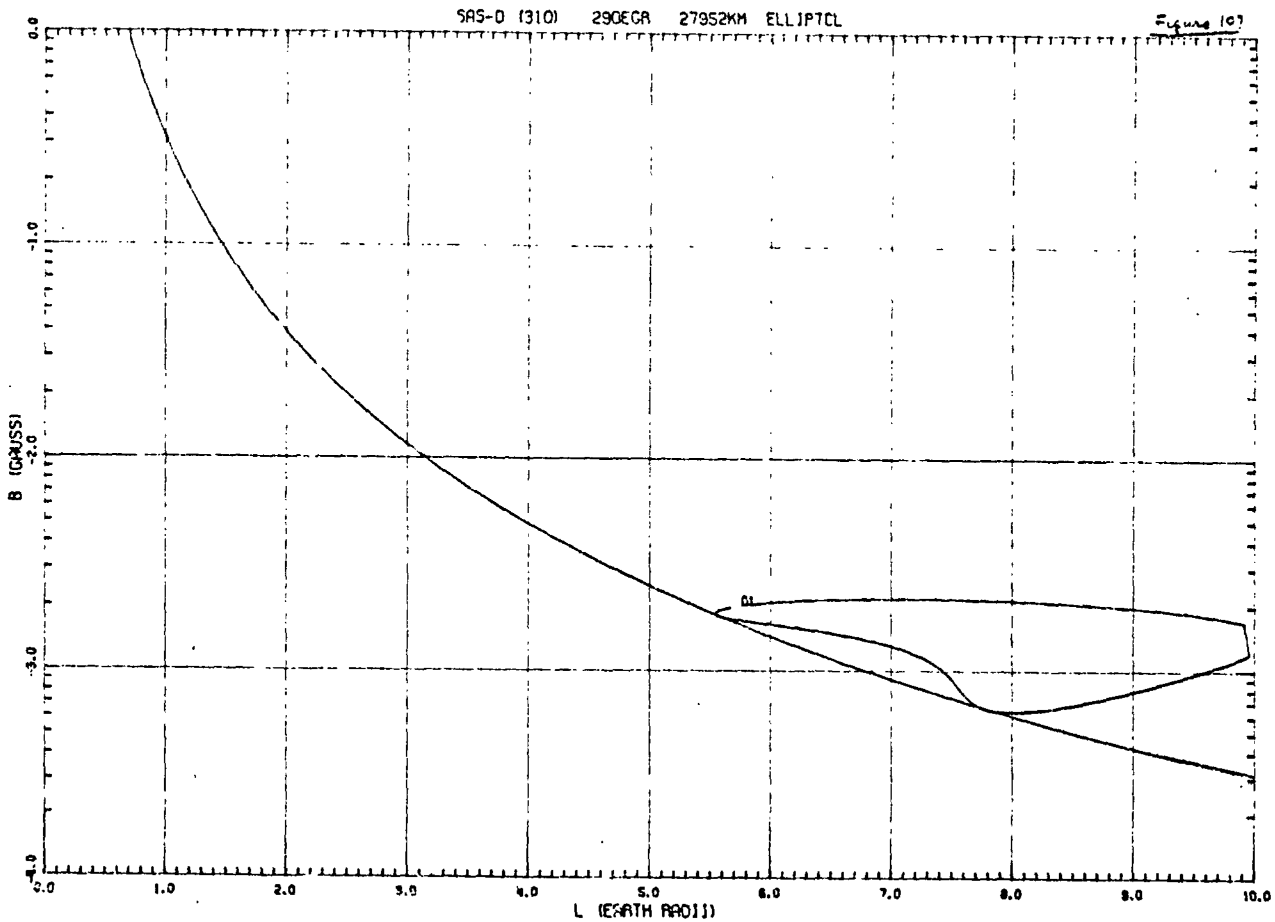
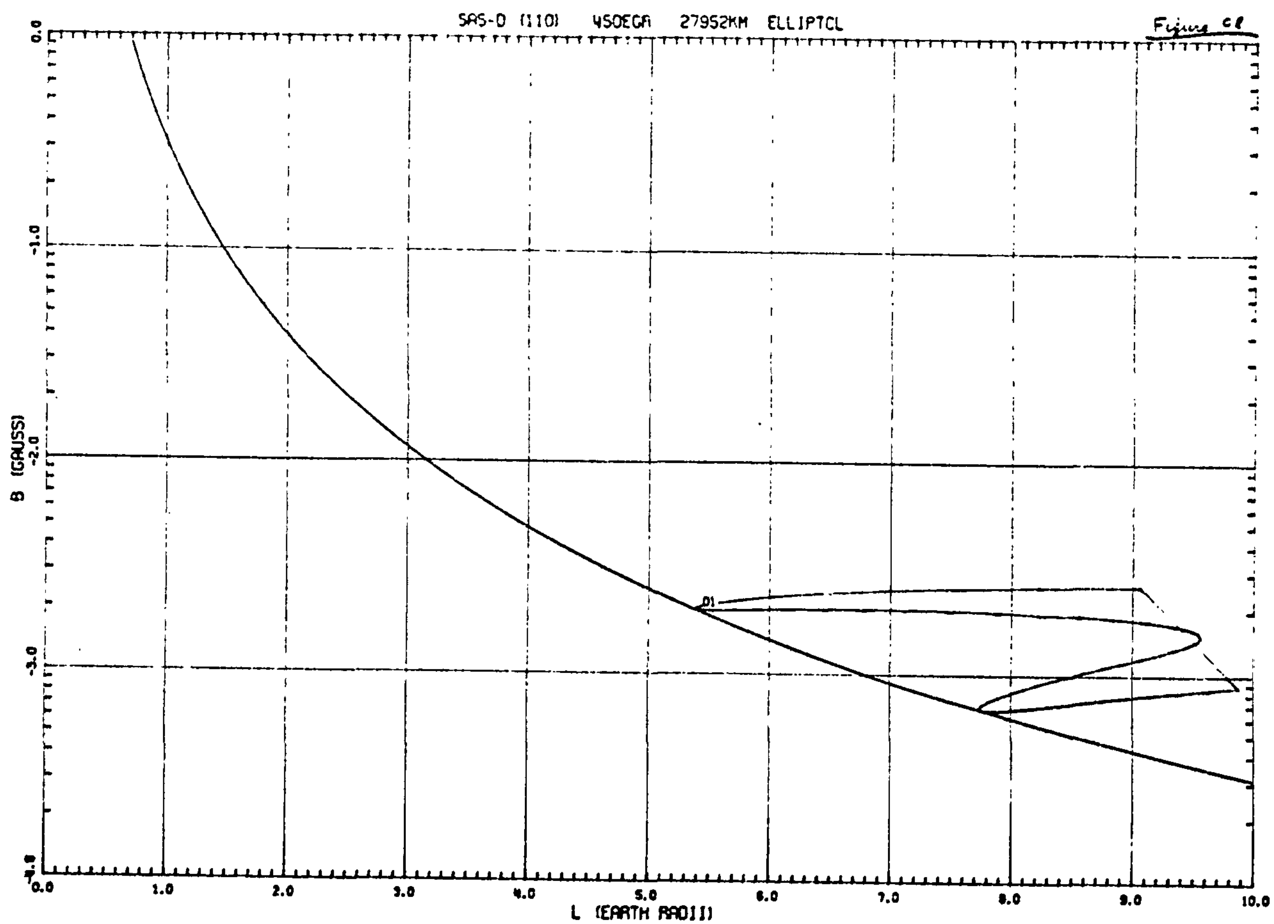


Figure 10?


SAS-D (310) 29DEGR 27952KM ELLIPTCL
B (GAUSS)
L (EARTH RADII)
0.0
-1.0
-2.0
-3.0
-4.0
1.0
2.0
3.0
4.0
5.0
6.0
7.0
8.0
9.0
10.0


SAS-D (110) 45DEGA 27952KM ELLIPTCL
B (GAUSS)
0.0
-1.0
-2.0
-3.0
L (EARTH RADII)
1.0
2.0
3.0
4.0
5.0
6.0
7.0
8.0
9.0
10.0
D1

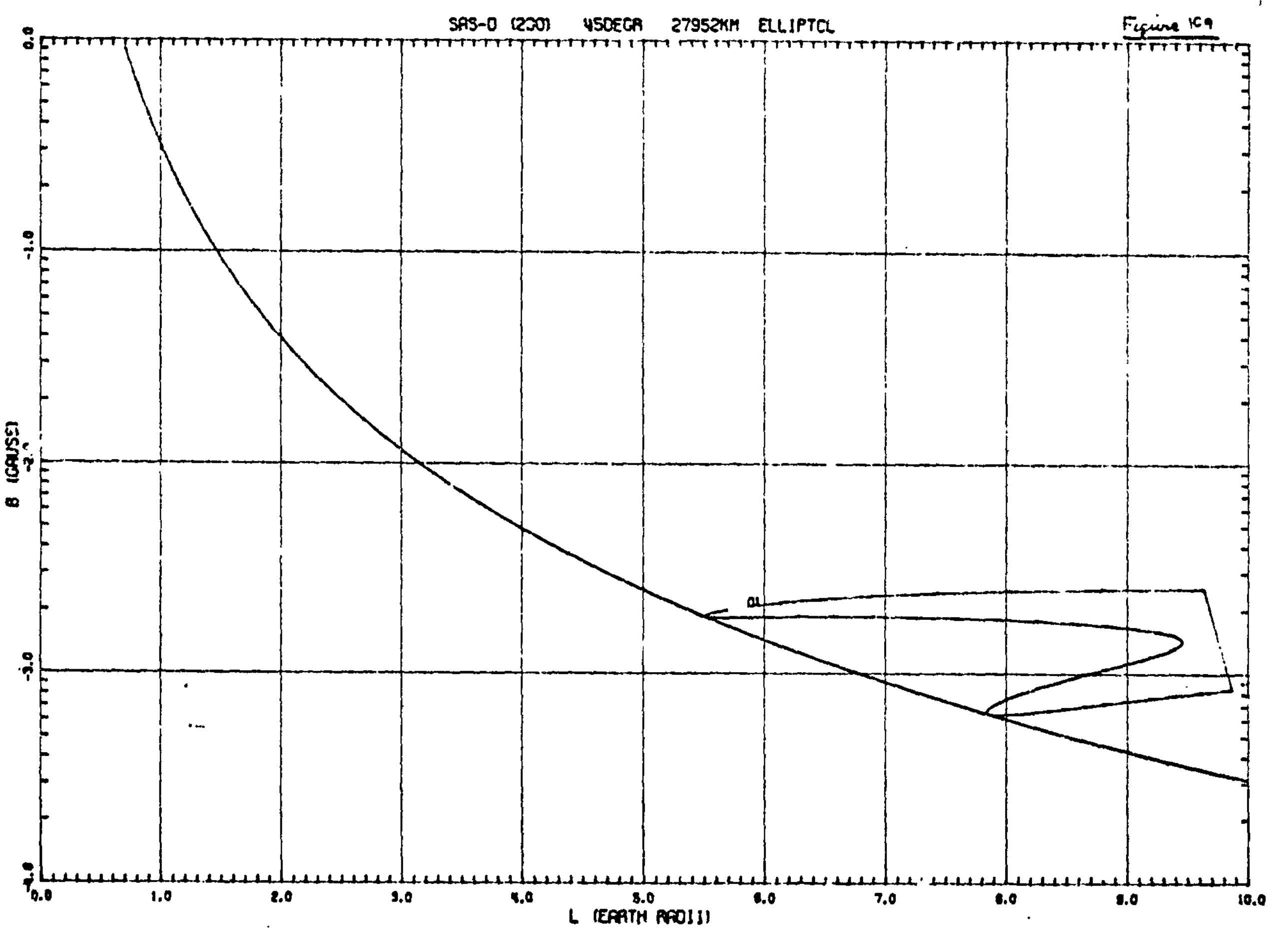

SAS-D (230) 45DEGR 27952KM ELLIPTCL
Figure 1c9
B (GAUSS)
L (EARTH RADII)
0.0
1.0
2.0
3.0
4.0
5.0
6.0
7.0
8.0
9.0
10.0

Figure 110

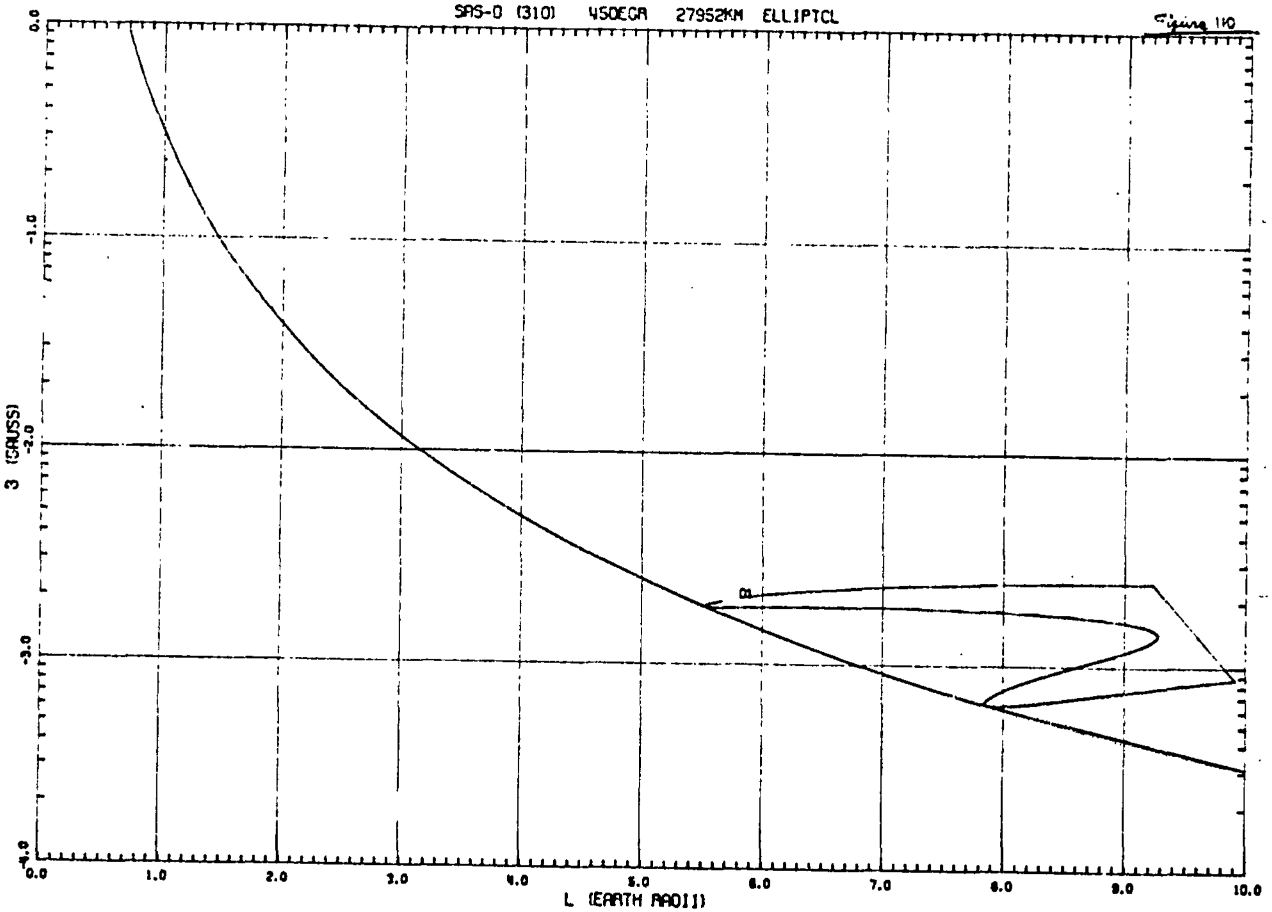
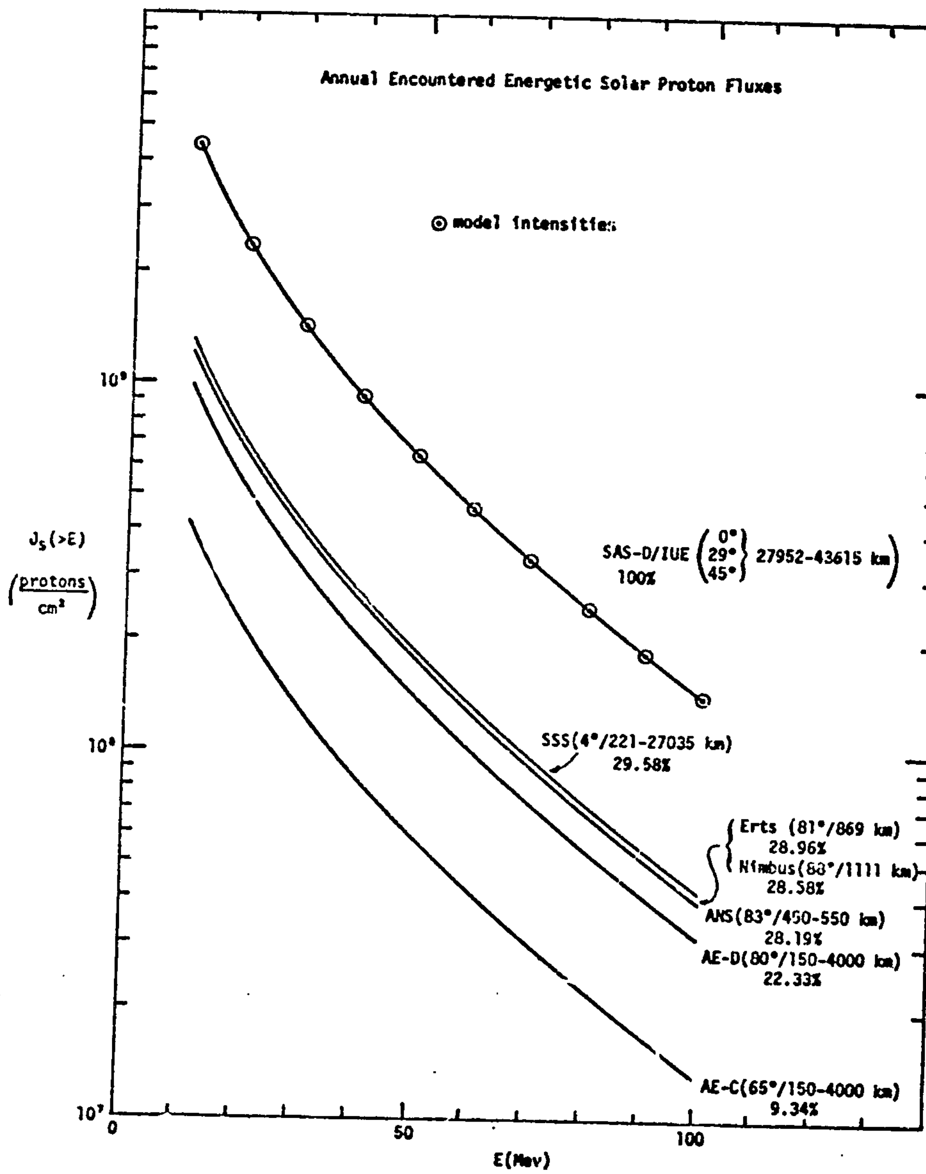

SAS-D (310) 45DEGR 27952KM ELLIPTCL
B (GAUSS)
0.0
-1.0
-2.0
-3.0
-4.0
0.0
1.0
2.0
3.0
4.0
5.0
6.0
7.0
8.0
9.0
10.0
L (EARTH RADII)

Figure 111



Annual Encountered Energetic Solar Proton Fluxes
model intensities
$J_S(>E)$
(protons / cm²)
10⁹
10⁸
10⁷
0
50
100
E(Mev)
SAS-D/IUE (0° 29° 45° 27952-43615 km) 100%
SSS(4°/221-27035 km) 29.58%
Erts (81°/869 km) 28.96%
Nimbus(80°/1111 km) 28.58%
ANS(83°/450-550 km) 28.19%
AE-D(80°/150-4000 km) 22.33%
AE-C(65°/150-4000 km) 9.34%

Figure 112

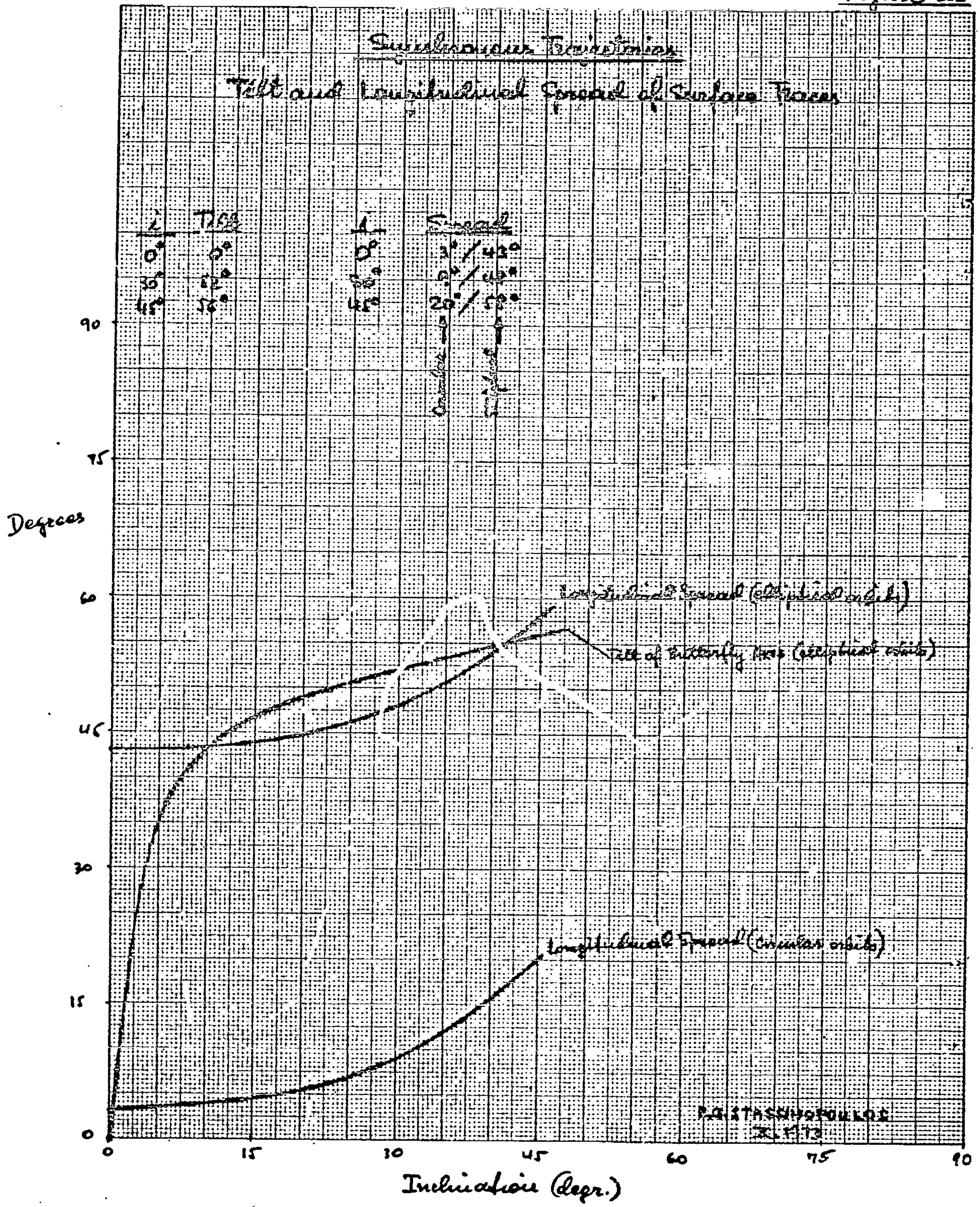
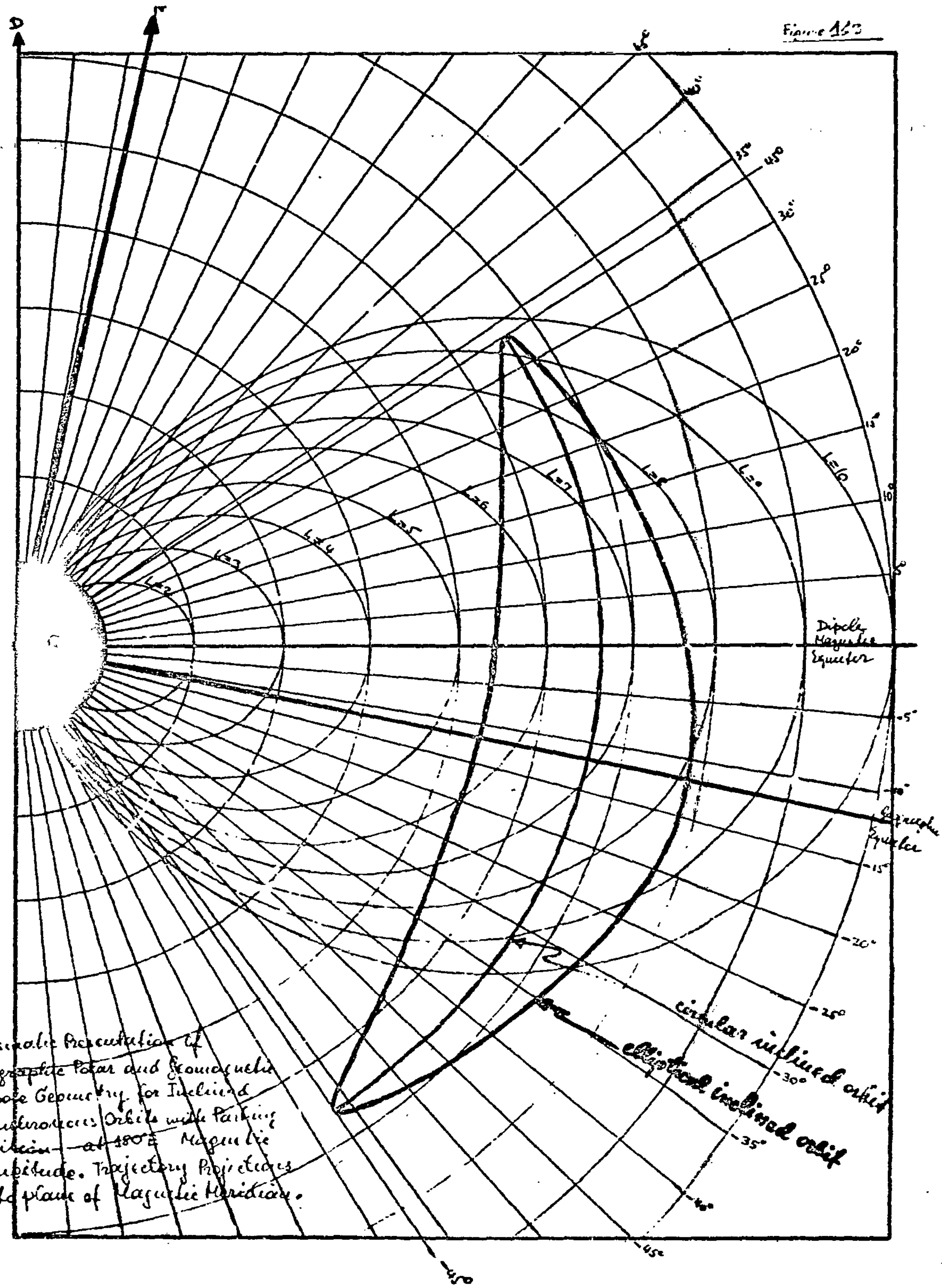

Tilt and Longitudinal Spread of Surface Traces
Degrees
Inclination (degr.)
Longitudinal Spread (circular orbits)
0
15
30
45
60
75
90
P.G. STASSINOPOULOS

Figure 163



Schematic Presentation of Geographic Polar and Geomagnetic Dipole Geometry for Inclined Synchronous Orbits with Parking Position at 180° E Magnetic Longitude. Trajectory Projections onto plane of Magnetic Meridian.

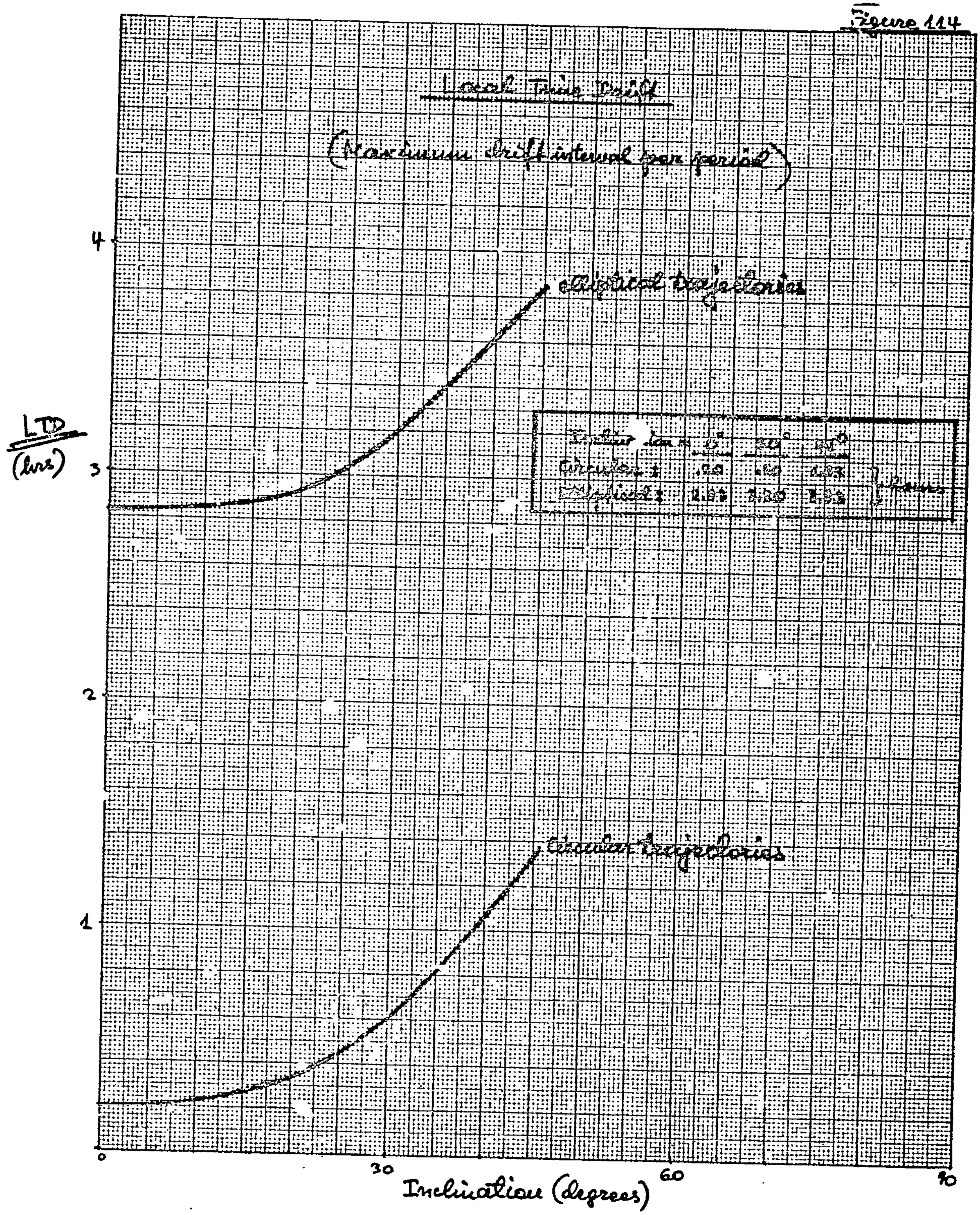


Figure 114
Local True Drift
(Maximum drift interval per period)
elliptical trajectories
circular trajectories
LTD
(hrs)
4
3
2
1
0
30
60
90
Inclination (degrees)

END

DATE

FILMED

DEC 28 1973